GANESH INSTITUTE OF ENGINEERING & TECHNOLOGY, POLYTECHNIC, BBSR

DEPARTMENT OF AUTOMOBILE ENGINEERING

LECTURE NOTES ON VEHICLE MAINTENANCEAND MOTOR VEHICLE ACT

DIPLOMA in 6TH SEMETSER
[As per SCTE&VT Syllabus]

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UNIT I

MAINTENANCE, WORKSHOP PRACTICES SAFETY AND TOOLS

IMPORTANCE OF MAINTENANCE

Maintenance is the routine repairing work, required to keep the vehicle in good condition so that it can be Utilized for designed capacity and efficiency.

Repair is the restoration of the vehicle to a condition substantially equal to its original condition by changing Parts (or) by reconditioning it.

Objectives of maintenance system

* To keep the vehicle available for protective work for maximum period.

* To extract optimum life for the vehicle.

* To get maximum utilization of vehicle at minimum cost.

PREVENTIVE (SCHEDULED) AND BREAK DOWN (UNSCHEDULED) MAINTENANCE

Scheduled maintenance system:-

In this system, servicing of the vehicle is done at pre determined time interval, in order to avoid breakdown of the vehicle

Un Scheduled maintenance:-

In this system, servicing or repairing work is done only after the vehicle breakdown.

Advantages of scheduled maintenance:-

It reduces cost of operation It renders work scheduling easy. It reduces starting problem. Control of store inventory easy

LAYOUT OF AN AUTOMOBILE REPAIR, SERVICE AND MAINTENA NCE SHOP.

SERVICE STATION:

A service is a place where in addition to care of the motor vehicle like mechanical service and minor repairs, petrol is supplied, cars are lubricated, and cleaned, washed and other types pf simpler services that are required daily are performed. In general it includes a number of sections like garage general services, mechanical service, major repair shop, tyre shop, paint shop, body shop etc.

A service station is addition to the equipment available is garage is usually run in conjunction with a sales agency for a particular type of motor vehicle to provide comprehensive repair service for that particular vehicle.

The equipment available, in general garage will be added with specialized equipment like lifting tackle, and different types of jigs, fixtures and tools specially designed for checking, adjusting and repair of particular type and make of vehicle. A service station may consist of a machine shop having a lathe, drilling machine etc.

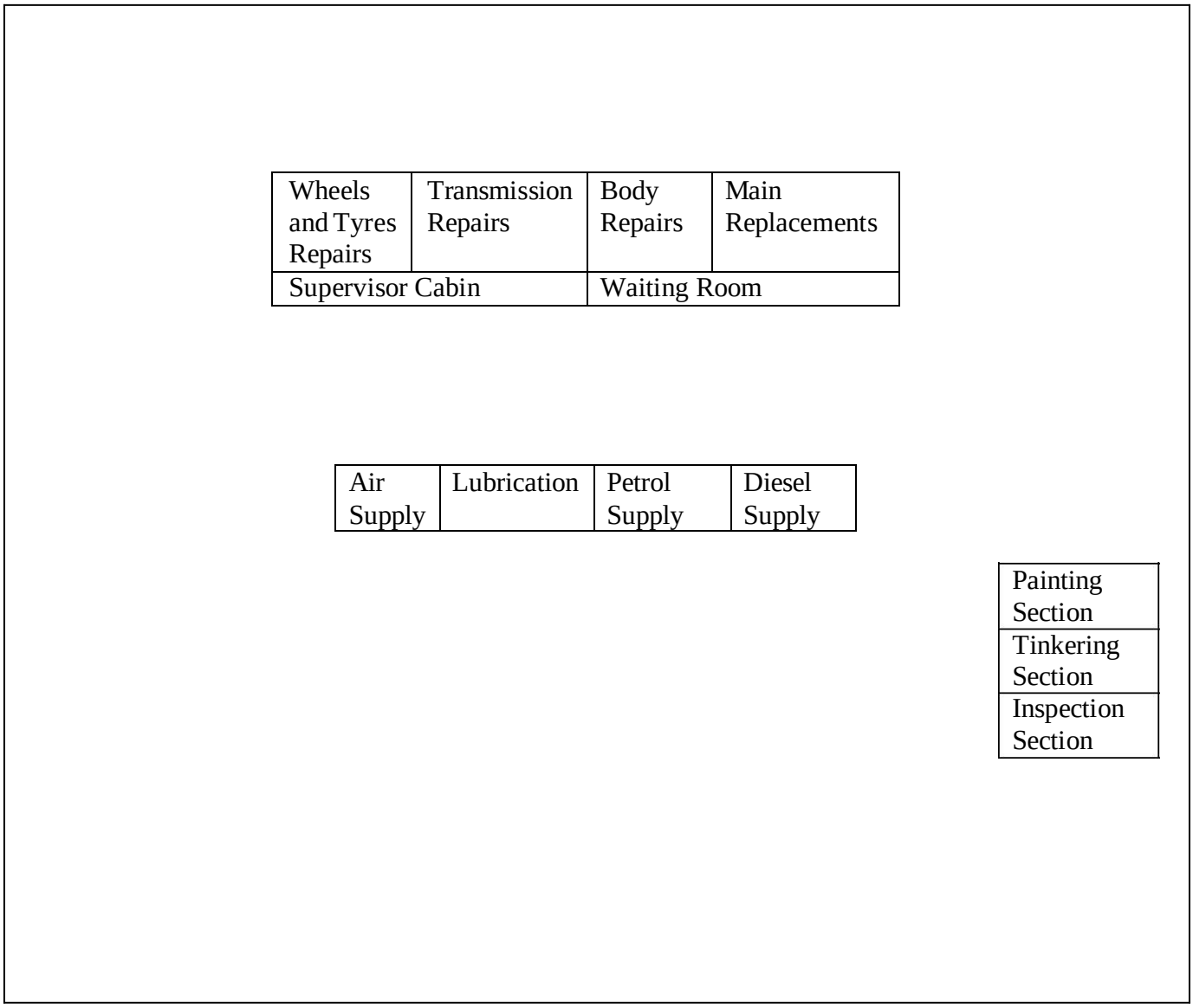
In case of big service station special types of machines like crankshaft grinding machine, valve refacer, surface grinder, reboring and boring machine, brake drum lathe also will be used. In service station fuel filling and water servicing facilities are available. It has a small workshop to provide repair for

particular make of vehicle. It may have sales agency for a particular type of vehicle. All the equipment in the garage plus small workshop tools: viz, lathe, drilling machine, jigs, fixtures are available.

LAYOUT OF GARAGES AND SERVICE STATION :

The internal layout of a garage should be such as to make it water proof, clean and spacious to provide sufficient space for small workbenches to storage and repair benches. Following considerations should be made in the layout of garage and service stations:

- To provide light to the workbenches, openings the windows should be provided at the proper place.
- To keep the floor cleanable, it should be a smooth concrete floor with a surface-scaling compound.
- The doors are provided as many members as required for easy flow of men and materials.
- The electrical control should be accessible to the operators.
- To form a neat storage for hanging tools, hooks or screw eyes should be provided on the pegboards.
- To provide a deposit of waste material.



Repair :
Engine oil changed at :
Gear box overhauled at :

Maintenance Checklist:-

1. Check the oil level in the sump
2. Check the replacement of engine oil period
3. Check the oil level in the fuel injection pump
4. Check the steering gear box.
5. Check the condition of the rubber sleeve on cylinder head cover.
6. Check the belt tension of the cooling fan.
7. Check and adjust clutch free pedal play.
8. Check the wheel alignment parameters.
9. Check the level of battery electrolyte level.
10. Check all the lighting system.
11. Check the sock observers.
12. Check the brake shoe pins and holes.
13. Check the tyre inflation pressure.
14. Check the level of fluid in fluid coupling.
15. Check all the instruments working in dashboard.

GENERAL LUBRICATION SERVICE

It is recommended that general lubrication service is rendered at an in revel of 5000km.

1. Fuel injection pump.
2. Gear box
3. Steering gear box.
4. Front and rear wheel bearing.
5. Steering linkage.
6. Lubricants used – Engine oil, Transmission oil, General grease, Bearing grease.

Periodic Maintenance Check Sheet

Dealer: Place: Date of Sale: SERVICE TYPE			Ro No: Mileage: Kms:			Ro Date: Engine No. Fraame No:		
Mileage(Kms)	10000	30000	50000	70000	90000	110000	130000	150000
Service type								
Mileage(Kms)	170000	190000	210000	230000	250000	270000	290000	310000
Service type								
Mileage(Kms)	330000	350000	370000	390000	410000	430000	450000	470000
Service type								
Mileage(Kms)	490000	510000	530000	550000	570000	590000	610000	630000
Service type								

S. No	CHECK ITEM	CHECK	STATUS	REMARKS
1	BASIC ENGINE COMPONENETS Engine Oil Engine oil filter	 R R		
2	IGNITION SYSTEM Battery	 T		
3	FUEL AND EMISSION CONTROL Pre-filter Water sediment filter	 R CA		

	Air cleaner filter	C		
4	CHASSIS AND BODY Brake pedal, Parking brake Brake pads and discs Brake linings and Brake drums Brake line pipes and hoses Brake fluid Clutch Power steering fluid Ball Joints and dust covers Tyres and inflation pressures Lights, horns, wipers Steering wheel linkage and gear box oil Front and rear suspension Tightening of bolts and nuts	 CA CA CA CR R CA CR CR CA CA CA CA T		
5	AC / Cooler Refrigerant	NA		
C → Clean; R → Replace; CA → Check& Adjust; CR → Check & Replace; T → Tighten				
ADDITIONAL JOB:				
MILEAGE	1.50,000	4,50,000		
TIMING BELT	Replace	Replace		
Name of the Inspector		Signature		

Periodic maintenance check sheet

The periodic maintenance check sheet is used to record the inspection status made during the maintenance check operation. It contains various details such as the dealer name, place, date of sale, manufacturers name, mileage, frame number, chassis number etc. the mileage and service type are indicated in the various cells of the check sheet. The check sheet also contains the check item name, status and remarks.

The check items include the following:

- Basic engine components.
- Engine oil
- Engine oil filter
- Ignition system
- Battery
- Fuel and Emission Control
- Pre- Filter
- Water sediment filter
- Air cleaner filter
- Chassis and Body
- Brake pedal, parking brake
- Brake pads and discs
- Brake linings & brake drums
- Clutch
- Power steering fluid
- Ball joints and dust covers
- Tyres and inflation pressures
- Lights, horns, wipers
- Steering wheel linkage & gear box oil etc.

The status and remarks for all the items mentioned above are indicated on the check sheet during the maintenance operation.

Vehicle Reg No: Job No :
Chassis No : Date :

Test Report / Inspections Forms

S.No	Parameter to check	Before work	After work
1	Front side abnormal noise		
2	Rear side abnormal noise		
3	Front/rear suspension noise		
4	Steering noise		
5	Brake caliper noise		
6	Misfiring / starting		
7	Hunting problems / Stopping problems		
8	Underbody noise		
9	Abnormal noise from doors / glasses and body		
10	Overheating of engine on AC and Non AC operation		
11	Brakes poor / Weak line effective / noisy		
12	Wheel bearings noisy		
13	Drive shaft noise / vibration		
14	Vehicle pulling to one side		
15	Poor pick up of vehicle (with AAAC and without AC)		

Table 2.3 TRIP SHEET

<table>
<tr><td colspan="2">Name and Address of the Agency</td><td colspan="2">REPORT TO
Mr. / Mrs. ----------

----------</td></tr>
<tr><td colspan="4">Engaged by Arranged by ---------- No. ---------- Date: ----------
Vehicle Number ----------
Driver Name ----------</td></tr>
<tr><td>Closing Time----------
Starting Time----------
TOTAL Time

Signature of the Customer</td><td>Hire Charges
Charge Per km
Driver Batta
Excess Hours
Excess Kms
Service Tax
Permit Charges</td><td>Rupees</td><td>Paise</td></tr>
<tr><td colspan="2">Advance Rs. ----------

Driver‟s Signature</td><td colspan="2">TOTAL

For Agency</td></tr>
</table>

ROAD TEST REPORT:

1. The road test inspector or the machine makes the road test report after the completion of the maintenance operation.
2. This report contains the vehicle reg number, chassis number, job no, date of test etc.
3. The parameters to be checked include the following:
   - Front side and rear side abnormal noise.
   - Steering and brake caliper noise.
   - Ilunting, misfiring, sudden stoppage of vehicle.
   - Brake condition.
   - Wheel and bearing check.
   - Pick up of the vehicle.
   - Mileage of the vehicle etc.

The road test report gives a fare idea of the condition of the vehicle before and after the maintenance operation.

TRIP SHEET :

The trip sheet gives the entire details of the vehicle be fore and after a trip. The starting km and ending km, time of start and closing of the journey time and the charges per km and also the overall cost of trip is described in the trip sheet.

LOGBOOK :

The logbook of a vehicle gives the details of the vehicle, which will be useful not only for the owner of the vehicle but also to the mechanic who might take the job of vehicle maintenance latter.

The logbook contains the following details:

- Distance covered
- Fuel consumption
- Average fuel consumption
- Best and worst mileage
- Total maintenance cost
- Running costs
- Faults in the vehicle
- Likes and dislikes

DATE OF THE PREVIOUS MAINTENANCE REPORT

Vehicle Log Book

vehicle reg..... gas ..... Diesel..... Miles ..... Kms.....

week beginning..... vehicle Name.....

	Start millage	Finish millage	How may journey?	Daily total	signature
MONDAY					
TUESDAY					
WEDNESDAY					
THURSDAY					
FRIDAY					

SATURDAY					
SUNDAY					
			Weekly total		

Gas/Diesel and engine oil

	Odo reading	Fuel in liters	Product (gas or diesel or oil)	Cost of fuel
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				
SUNDAY				
	total		total	

Other Maintenance Record Forms

Vehicle service form

Vehicle name ..... vehicle reg.....

Date of service ..... mileage.....

service to be carried out every three months/periodically

Unit	Yes	No	comments
oil			
Air filter			
Distributor cap			
Oil spindle			
Ignition leads			
Check spark plug gap			
Check and adjust fan belt			
Check and adjusting power steering belt			
Check OHC belt			
Check and replace broken bulbs			
Check front brakes			
Check Rear brakes			
Adjust hand brake			
Renew brake fluid			
Check battery water level			
Check and clean battery			
Grease steering			

VEHICLE REPAIR FORM

Vehicle reg..... vehicle mileage.....

Drive ..... date.....

Description of repairs carried out:.....
.....
.....

Why were repairs necessary?

.....

Total cost of repair.....

Details of person / company who carried out repairs:

Name..... Phone.....

Address.....

Were repairs supervised.....

Quality of repairs.....

poor..... satisfactory..... Good..... Excellent.....

supervisor..... Date.....

VEHICLE ACCIDENT REPORT FORM

Employee ..... Age..... Sex.....

Department..... Supervisor.....

Date of accident.....

Nature of injuries .....

Causes of accident.....

If employee left work.....

If employee returned to work.....

Name & address of physician:

If hospitalized name and address of hospital.....

Actions taken to avoid similar incident.....

Comments.....

DRIVERS INSPECTION REPORT

checks defects only..... Explain under remarks.....

Location/ Department..... Date.....

vehicle description: Year..... Make..... Model.....

Serial NO..... Mileage.....

General condition	Interior	Exterior
cab/door/windows	gauges / warning indicators	lights
body /doors	windshield wiper	Reflectors
oil leak	horn	suspension
Grease leak	Heater	tires
coolant leak	Mirrors	Wheels / Rims / tubes
Fuel tank	Steering	Battery
oil level	Emergency brakes	spare tire
coolant level	Fire extinguisher	Other coupling

Protection

seat belt.....

Remarks.....

Reporting driver..... Date.....

Reviewing driver..... Date.....

Maintenance action..... Repair made..... No repair.....

Work order/ purchase order no.....

Repaired by.....

SCHEDULED AND UNSCHEDULED MAINTENANCE

Scheduled Maintenance

In this system, servicing of the vehicle is done at pre-determined time interval, in order to avoid breakdown of the vehicle, this type of maintenance is also called as preventive, periodic and operative maintenance

- Maintenance scheduled for car
- Wash and lubricate chassis, do not spray under chassis
- Drain drum, gear box and axle, flush and refill with proper lubricants.
- Check under chassis for evidence of water, oil, brake fluid, shock absorber and petrol leaks
- Tighten engine, steering joints, U bolts and chassis bolts to torque specifications.
- Lubricate rear axle bearing. Tighten rear axle shaft nuts to torque specification.
- Check operation of body hardware, doors, glasses, locks and keys
- Check and fill battery, clean and tighten terminals
- Check operation of all instruments, lights horns and accessories
- Check and adjust fan belt tension
- Check clutch pedal free travel and linkage
- Adjust brakes. Check and adjust pedal free travel.
- Check master cylinder fluids
- Check wheel alignment
- Aim headlights
- Tune engine, including adjustment tappets
- Adjust ignition timing and carburetor
- Clean body rim and tires
- Carry out daily and weekly maintenance

Un scheduled maintenance

In this system, servicing or repairing work is done only after the vehicle brakedown. This type of maintenance is also called as breakdown maintenance.

Placing an emergency vehicle out of service

1. Braking system
    - Air line leak or bulge
    - Loose compreeor mounding bolts
    - Evidence of oil seepage
    - Cracked brake drums

- Inoperative low air warning device
- Master cylinder leakage

2. Steering system
    - Excessive free play
    - Worn or faulty universal joints
    - Steering wheel not properly secured
    - Loose tire rod ends
    - Any conditions that interferes with free movements
3. Exhaust system
    - Exhaust leak forward or below the gas
4. Frame
    - Cracked loose, or broken frame member
5. Fuel system
    - Visible fuel leak
    - Fuel tank not securely attached
6. Spring and suspension
    - Cracked, loose or missing U bolt or other spring to axle clamp
    - Any broken main leaf in the leaf spring
    - Any displaced leaf that could result in contact with tire
    - Broken or missing shocks
    - Missing or broken axle bolts
7. Windshield / Wipers
    - Visuals cracks or distortion that impair or inoperative
    - Both brake lights missing or inoperative
    - Both tail lights missing or inoperative
    - Any turn signal missing or inoperative
    - Inoperative siren
    - Emergency lighting not visible from all sides
8. Drive train
    - Engine overheating
    - Motor oil in engine
    - Engine coolant in motor oil
9. Broken or missing fan belts
    - Coolant leak at water pump
    - Any major coolant leak
    - Automatic transmission overheating
    - Defective clutch components
    - Defective foot throttle
    - Defective charging system
10. Cab / Body components

- Missing or broken mirrors that obstruct or limit the driver view
- Defective door latches

Classification of maintenance

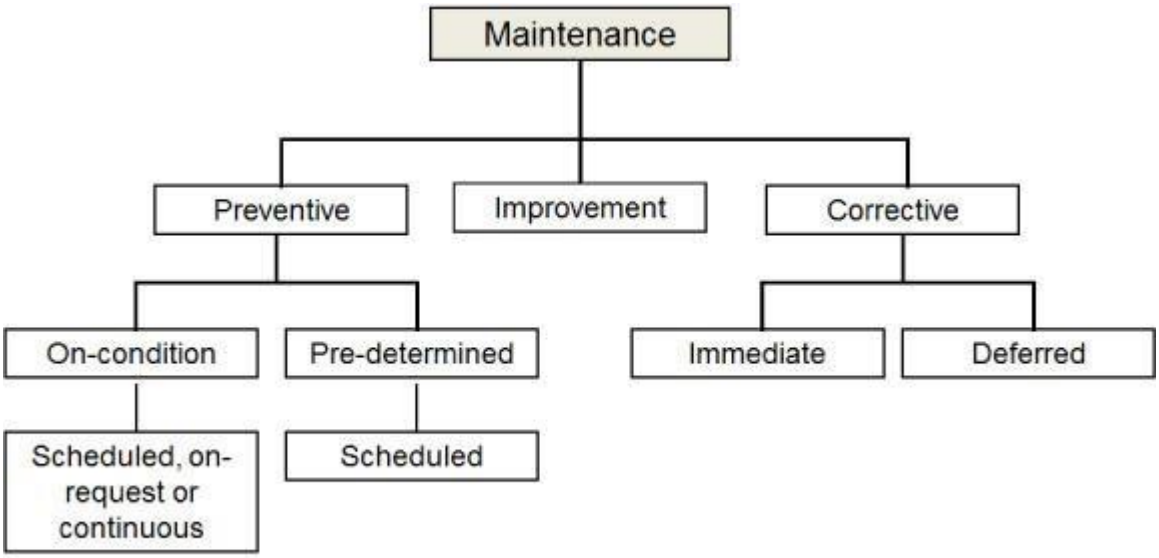


Figure 2: Major maintenance types or tactics (Adapted from BS 13306 [11])

Vehicle insurance.

Vehicle insurance (also known as car insurance, motor insurance or auto insurance) is insurance for cars, trucks, motorcycles, and other road vehicles. Its primary use is to provide financial protection against physical damage or bodily injury resulting from traffic collisions and against liability that could also arise there from. Vehicle insurance may additionally offer financial protection against as theft of the vehicle, and against damage to the vehicle sustained from events other than traffic collisions, such as keying and damage sustained by colliding with stationary objects. The specific terms of vehicle insurance vary with legal regulations in each region.

Automotive service procedure.

- Check Service Log Book for history & other work due
- Check if vehicle is registered, so it can be test driven legally
- Check to see how many KM since last oil change
- If over 7,000km recommend engine flush to Service Adviser
- Test drive vehicle and report
- Carry out Safe T Stop test, dynamically testing steering, suspension and brakes
- Checks for lights, wiper, washer and horn (report)
- Check cooling system hoses (report)
- Check and test brake fluid (report)
- Check air filter and clean if not replaced (report)

- Check radiator condition (report)
- Test coolant / inhibitor condition with test strips (report)
- Connect cooling system pressure tester
- Check power steering fluid level and condition (report)
- Check automatic transmission level and condition (report)
- Visual check over the whole engine bay (report)
- Audible check for anything unusual (report)
- Check accessory belts with testers, check tensioner and tensions (report)
- Test battery, alternator output, print report, attach to job card ü Disconnect pressure tester (report)
- Raise vehicle and drain engine oil ü Perform 65 point check under vehicle (report)
- Check all diff levels, Transfer case levels and Gearbox levels
- Grease all grease nipples, look for blanking plugs where grease nipple need to be fitted (report) Grease steering stops
- Measure brake pad wear, remove wheels if needed (report)
- Drum brakes, remove drums wipe down shoes, check brake wheel cylinders for leaks 'pulling back rubbers' & (report)
- Measure tyre tread depth (report)
- Check flexible brake hoses for cracks (report)
- Check shock absorbers for leaks (report) ü Check oil leaks (report)
- Check all mounts and rubbers (report) ü Remove oil filter if accessible under vehicle and fit new filter Adjust brakes and it wheels
- Check tyre pressures
- Fit sump plug & clean around oil filter area and sump plug area
- Fill engine oil, start engine and recheck ü Wipe down under bonnet
- Fill out new service sticker
- Clean off old service sticker & residue & fit new service sticker
- Lube door strikers
- Wash and chammy vehicle & apply tyre shine
- Test drive ü Park vehicle & give keys to Service adviser to check.

MOTOR VEHICLE WORKSHOP OPERATION

A motor vehicle workshop operation consists of operating a workshop on a commercial basis involving any of the following relating to motor vehicles:

- Maintaining mechanical components, engine cooling radiators or body panels; • Spray painting body panels; or
- Detailing or washing. A motor vehicle workshop for the purposes of this legislation does not include:
- Operating a workshop for the purposes of a farming, gas, mining or petroleum activity
- A fleet vehicle workshop to maintain or repair fewer than 10 vehicles;

- Washing motor vehicles if all the water used is discharged to a sewerage infrastructure under a trade waste approval or the washing is required under a law of the State for weed or pest control;
- Operating a workshop to maintain or repair:- – auto electrical, exhaust, suspension or air conditioning components of motor vehicles; or – wheels or tyres of motor vehicles, including wheel alignments; or – minor scratches, chips or dents using a brush, air brush or paintless method; or – motor vehicle hoses.
- operating a mobile and temporary workshop

SAFETY RULES FOR AUTOMOTIVE MAINTENANCE

- Eye protection is mandatory for all operations which produce sparks, chips, flying objects or involve use of corrosive chemicals. Face shields shall be worn for all operations that involve use of a high-pressure steam system. Appropriate gloves and protective clothing shall also be worn.
- Mechanics shall not wear loose clothing around rotating equipment. Clothes saturated with oil, grease, or solvents shall not be worn.
- Compressed air shall not be used to clean clothing.
- Shop floors will be kept free of grease, oil, gasoline, or other slipping hazards.
- Employees shall not use defective electrical or mechanical shop equipment or hand tools. All automotive shop machinery shall be grounded.
- Vehicles shall not be towed unless appropriate tow bars or other approved equipment is used.
- Jacks, hoists, or other lifting devices shall not be used beyond the safe load capacity recommended by the manufacturer. Employees shall not remain in vehicles being lifted by hydraulic lifts or jacks.
- Mechanics shall not work under vehicles that are not properly supported with approved stands. Makeshift stands made of wood, cement blocks, or boxes shall not be used.
- Gasoline, acetone, kerosene, or similar solvents shall not be used to clean hands, floors, walls, or other surfaces. Parts shall be cleaned only in approved containers using appropriate solvents.
- Employees shall not use standard sanitary sewer drains for the disposal of gasoline, oil, or solvents. Contact EH&S for disposal guidelines.
- Tanks or containers that are used for gasoline or other flammable solvents shall not be mechanically opened or repaired by welding without purging and cleaning.
- Do not begin tire inflation before the rim is properly seated. It is dangerous to attempt adjustment with a hammer when the tire is being inflated.
- Do not place hands or arms between mounted dual tires during inflation. Always use a long air chuck for inflation.

- Do not change tires on the road unless wheel chocks and warning devices are used. Flares should be used to warn others whenever a vehicle tire is changed while on a heavily used road.
- Changing of tires on split-rim wheels will be performed only by individuals with proper training and using only appropriate equipment.

VEHICLE SAFETY EQUIPMENT'S

Service technicians help ensure that each vehicle has the following safety equipment:

- Portable Fire Extinguishers – proper type, size, and rating
- Emergency Reflective Triangles – warning devices for stopped vehicles
- Wheel Chocks – prevent accidental movement of vehicle while parked
- First Aid Kits – to match the maximum capacity of persons per vehicle

The US Department of Transportation and the Federal Motor Carrier Safety Administration (FMCSA), regulate the safety of commercial motor vehicles used on highways for transporting passengers or property.

FMCSA regulation 49 CFR Part 393.95 requires safety equipment on all of the following trucks, truck tractors, and buses:

Vehicles with GVWR, GCWR, or gross vehicle weight over 10,000 lb

Buses for compensation with over 8 persons and non-compensation buses with over 15

Vehicles transporting hazardous material requiring placards

FIRE EXTINGUISHERS

All buses, trucks, and tractors require a portable fire extinguishers for compliance with FMCSA. A 10-B:C unit is required for vehicles with hazardous materials and 5-B:C for all others. An extinguishing agent that doesn't freeze is required, and each unit must be secured in a manner that prevents sliding, rolling, and vertical movement. Most installations include a extinguisher in a vehicle bracket..

EMERGENCY REFLECTIVE TRIANGLES

The FMCSA requires warning devices for stopped vehicles. Although flares are acceptable, the following equipment is most commonly carried on each vehicle, as a minimum, for compliance:

At least 3 bidirectional emergency reflective triangles (P/N TKB1)

WHEEL CHOCKS

Wheel chocks (P/N HDLWC) are typically carried on all commercial motor vehicles to prevent accidental movement while vehicles are parked and during loading and unloading. Chocks are used against the rear tires in the direction of grade. On even surfaces, chocks are placed on both sides of tires. Chocks should always be used in pairs.

FIRST AID KITS

Be sure to check existing first aid kits for proper contents and replace depleted kits after getting the owner's consent. Every commercial motor vehicle should carry a complement of the right safety equipment. Others will appreciate your knowledge of the federal safety requirements and your recommendations for products and equipment that will help ensure the safety of vehicles, passengers, and drivers.

UNIT – II

ENGINE AND ENGINE SUBSYSTEM MAINTENANCE

TOOLS AND SPECIAL INSTRUMENTS REQUIRED:

1. Double spanner
2. Ball-peen hammer
3. Pliers
4. Feeler gauge
5. Hydrometer
6. Battery charger
7. Files
8. Socket Spanner
9. Cell tester
10. Wrenches
11. Screwdriver
12. Dial indicator
13. Piston ring expander
14. Piston ring compressor
15. Valve spring compressor
16. Puller

DESCRIPTION :

Double end spanner

These are the most commonly used types of spanner. The opening should be the right size to fit the nut or bolt. If the spanner opening is too large it could round off the corners of the hex. This makes the use of the proper spanner more difficult. These spanners are available in different size ranging from 6 to 32 mm.

Hammers

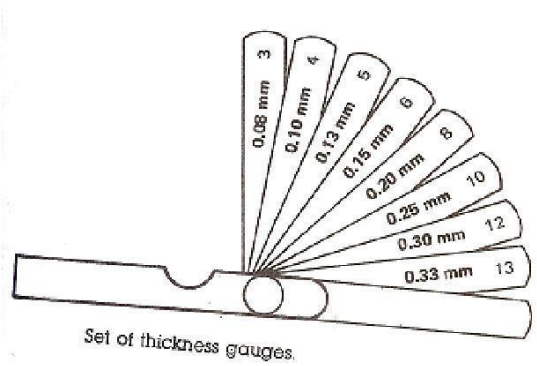
The ball-peen hammer should be gripped on the end of the handle. When you swing the hammer the face should strike the object squarely, and not at an angle. Rawhide, plastic-tip, brass and rubber hammers are used to strike easily marred surfaces.

Pliers

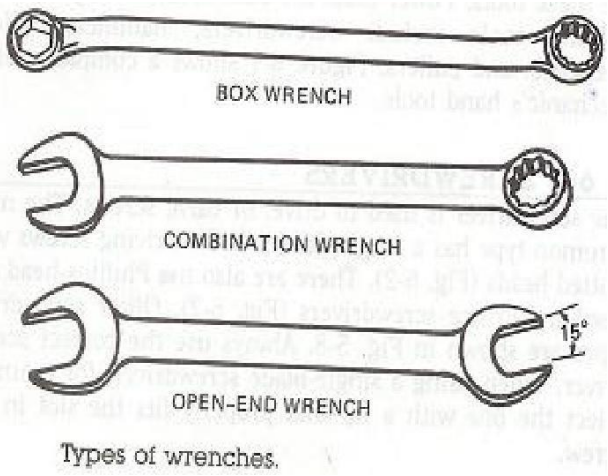
Pliers are special types of adjustable wrench. The two legs move on a pivot so that item of various sizes can be gripped. There are two basic types, gripping pliers and cutting pliers.

Feeler gauge

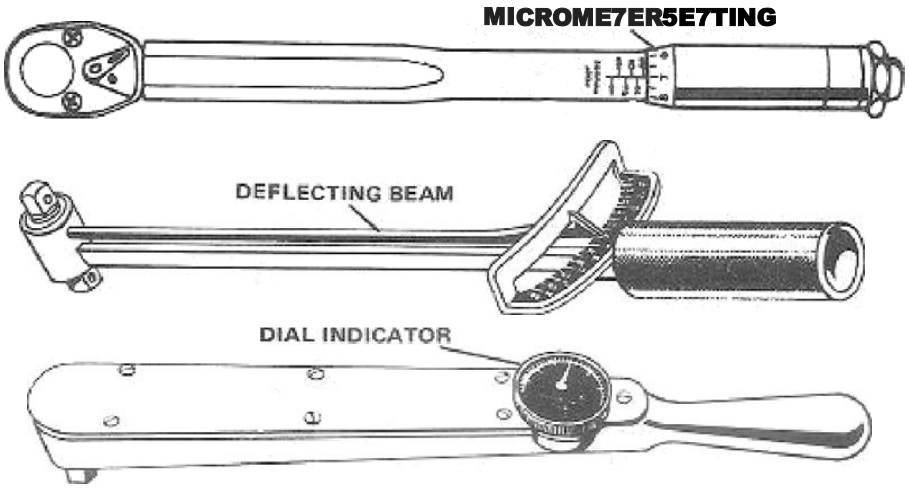
Thickness gauges or "feeler" gauges are strips or blades of metal of various thicknesses. Many thickness gauges are dual-dimensioned. For example, the 3 and 0.08mm on the first blade means it is 0.003 inch (or 0.08mm) thick. Some thickness gauges are stepped. The tip is thinner than the rest of the blade. Thickness gauges are used to measure small distance such as the clearance



Set of thickness gauges.



Types of wrenches.



Torque wrenches.

Snap ring plier (closing type)

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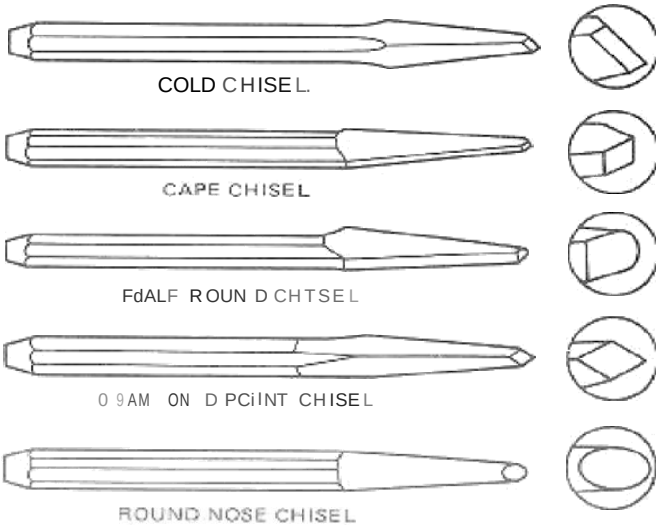

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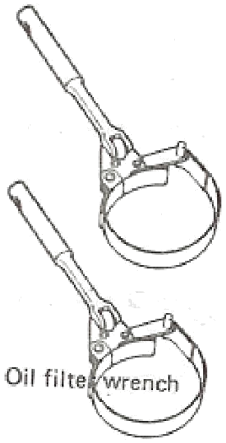
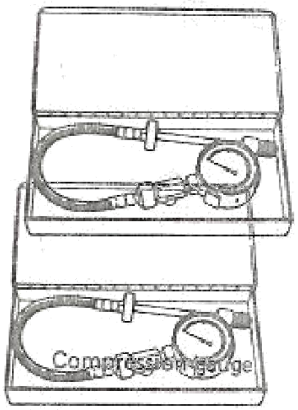
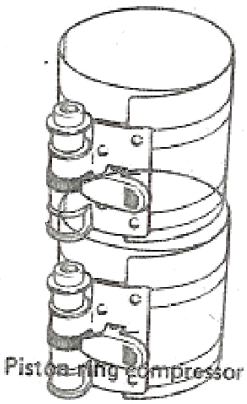
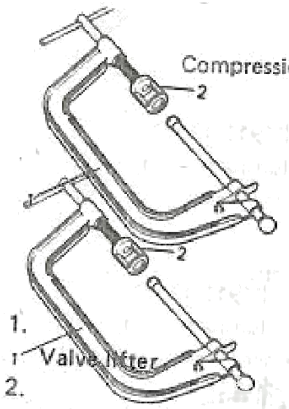




Oil filter wrench



Piston ring compressor



1. Valve lifter
2. Valve lifter attachment

between two parts. It is used to check the clearance between the rocker arm and valve stem in an engine.

Hydrometer

The float-type hydrometer has a float with a stem that sticks up above the electrolyte level in the tube. The float stem is marked to indicate the specific gravity of the electrolyte. The height of the stem above the electrolyte indicates the battery state of the charge. It varies from a high 1,280 in a fully charged (good condition) battery to a low 1.125 in a completely discharged (bad condition) battery.

Socket spanners

These types of spanners are useful in restricted spaces where common types of spanners cannot be used. They consist of sockets of different sizes, which can be used with various types of handles. The handle has projections at one end around which the sockets fit.

Wrenches

The wrenches are used to fit nut or bolt. The combination wrench has a box on one end and

an open end on the other.

Screwdrivers

It is used to drive, or turn screws. The most common type has a single flat blade for driving screws with slotted heads.

Dial indicator

It is a guage that uses a dial face and a needle to register measurements. It can be us ed to measure the endplay in shafts or gears. Also, it can be used to measure taper in engine cylinders.

Pullers

Pullers are used to remove the wheels, gears and bearing from shafts or to remove shafts from housings.

Torque wrench

It is a specialized form of socket spanners. Important nuts and bolts in automobile work have to be tightened with a specified amount of torque, because excessive torque may result in their breakage while less torque, they will remain loose. This is made possible by torque wrench.

Piston ring expander

It is generally used to expand and remove the piston rings from their grooves without breaking it.

Piston ring compressor

Piston ring compressors are places around the piston covering the rings. As the compressor is tightened, it compresses the piston rings into their grooves on the piston. Then the piston and rod assembly is installed into the cylinder.

Valve spring compressor

Valve spring compressor or lifters are used to compress the valve spring to facilitate the removal of the valve retain lock or keeper from the valve stem

ASSEMBLY OF ENGINE FROM VEHICLE – REPAIR AND OVERHAULING

PETROL ENGINE TUNE-UP :

Ridge in cylinder liner:

The wear starts in the linear from the height of ring travel i.e., on top of liner; there is practically no wear. Since this portion does not come in contact with the rings. In worn out engine you can feel this area by your finger running up and down in the liner. In case with worn out liner when rings have to be changed to check up this ridge, in case it is prominent it should be cut with ridge cutter. Then only new set of rings can be placed, otherwise there are chances of new rings being thicker in width then the used worn out rings may strike the ridge and break. Secondly, the piston assembly can easily slide in Boring and honing of cylinder liners.

The cylinder bores do wear out after some use. The amount of wear can be controlled to some extent by cleaning the air cleaner, keeping watch on proper working of cooling system and lubrica tion system, in spite of all this care after 40 to 50 thousand kms in diesel engine and in petrol engine 60 to 70 thousand kms wear is predominant in the liner which you can see when you dismantle the engine for overhauling. From the worn out cylinder bores few more life can be taken by boring the same with boring machine. When using the

boring machine, the boring tool will leave very fine line on the bore, which cannot be seen by naked eyes. Presence of these lines of honing is not desirable. To rub these lines, bores are honed, i.e., polished with the help of honing stone fixed in the cylinder hone head. These hones are driven with portable electric hand drill and while working quickly up and down motion are given.

Maintenance of flywheel:

Flywheel does not require much maintenance except that is mounting bolts with crankshaft should be tightened with proper torque, the face where the clutch plate is fixed sometimes gets scored because of loose rivals or rivets touching the face when lining is worn out. Under such circumstances the face of flywheel should be got skimmed. The face of flywheel should be examined at each overhaul and while changing clutch plates this face should be rubbed with emery paper to remove the glaze. The flywheel after fitting should be checked that it is running true. For checking run out, place the crankshaft with the flywheel mounted on V-block to avoid scoring of crankshaft main journal place paper in the V of V block. Fix up dial gauge. With its point resting on clutch plate mating surface, remove the crankshaft and note the run out. It should not be more than 0.2 mm.

VALVE SERVICING:

The valve is subjected to very high temperature, runs at high speed and is one of the critical parts which requires careful examination at the time of overhaul while inspecting the valve, take care of the following points:

Head:

Check the head for crack, burning, valve seat and radial run out. It should not have knife edge warped and should have good margin. For checking radial runs out place the valve in V block, fix up the pointer of dial guage on edge of valve head. Revolve the valve and note the reading if run out is more than 0.33 mm. Discord the valve.

Valve system :

Valve system should be straight without scoring. If it is slightly bent it can be straightened, but in case it is bent too much, valve should be replaced.

Refacing of valve:

Valve after dismantling from the head should be examined, if there is a good margin still left over, it can be refaced and reused. It is desirable to mark each valve as it is removed from the guide so that it may be put back to its original position. This may save quite a lot of time in adjusting tappet clearance when the engine is reassembled. Moreover, fitting valve back to its own-guide will ensure proper working clearance. For refacing valve, refacing machine is used. It has a grinding wheel and a revolving chuck to hold the valve. The post on which revolving chuck is fixed is movable, angle of which can be set and locked in any specific angle.

Before starting grinding, check up that valve head is running true and valve head is not protruding out much from the chuck. Otherwise it will not give desired finish, then start the coolant supply directing it jet on grinding stone, bring the valve closer to the regular hammering action, the tip of the valve also gets damaged, provision is also made in the valve-refacing machine to reface

GASOLINE ENGINE TUNE UP :

Battery

- Clean the battery terminals
- Check the loose connections.
- Check the battery for fixing in box or cradle.
- Check up electrolyte level in the battery.
- Check up the capacity of battery.

Charging System

- Visually inspect the dynamo for any wear
- Check up for any loose connections
- Check the belt from which dynamo gets power
- Check the charging rate.

Starting System

- Visually inspect the self-starter, cable and switch
- Check the working switch for any loose connections
- Check the consumption of current by starter motor.

Ignition System

- Check the cable connections from distributor to spark plugs
- Check the distributor shaft bushes for any looseness
- Check the contact breaker point
- Check the wear on distributor cam.
- Check the wear in distributor cap
- Check the ignition system with oscilloscope

Fuel System

- Visually inspect for any leak
- Clean the air cleaner
- Check the functioning of choke
- Check the fuel pump pressure
- Check the plunger assembly

Carburettor

- Check the fuel line from fuel pump to float chamber
- Check the butterfly of the carburetor
- Adjust the height of the float
- Adjust the jet needle and needle jet
- After assembling, adjust the idle and high-speed adjustments

Lubrication System

- Check the level of lubrication oil in the crankcase
- Check the lubrication oil filter, if clogged replace it with new one
- If the oil is bad, remove the oil and introduce new oil of the correct grade

Cooling System

- Check the radiator for any damage and blocks
- Check the hoses that connect radiator and engine
- Check for any leakage
- Check the fan belt
- Use clean water in the radiation

Transmission Line

- Visually inspect the transmission line for damages, cracks etc.

- Check the propeller shaft
- Check the differential assembly
- Check the state of lubrication oil in the differential assembly

DIESEL ENGINE TUNE UP

Fuel Injection Pump

- Visually inspect the flow lines from tank to pump and to injector
- Check the injection pressure
- Check for any wear and tear in the fuel injection pump
- Check the entire components of the fuel pump

Fuel Injector

- Check the injector nozzle for any block and clean it thoroughly
- Check the pressure at which the nozzle sprays the fuel droplets
- Adjust the screw for correct pressure

Heater Plug

- Check the heater plug by connecting it with battery terminal
- Check the heater plug for any dirt deposition
- Replace it after cleaning ii thoroughly

Also check the air induction system, fuel feed system and other important components have to be checked for performing the tune up operations.

ELECTRICAL IGNITION SYSTEM

The function of ignition system is to produce a spark in the engine cylinder towards the end of the compression stroke. In 4-S engine a spark should occur in each cylinder after two revolutions of the crankshaft whereas in a 2-S engine a spark in each cylinder is required every revolution of the crankshaft.

- Spark at the plug electrodes must be regularly timed with respect to the cylinder piston position at all speeds and loads.
- The spark should be sufficiently strong so as to start ignition of the charge.
- It should be light and compact
- The system must be easy to maintain
- It should not cause radio interference.

GASOLINE FUEL SYSTEM

The basic fuel supply system in an automobile with petrol engine consists of a fuel tank, fuel lines, fuel pump, fuel filters, air cleaners, carburetor, inlet manifold, and supply and return lines.

Fuel tank

It is made of steel or aluminum alloy steel. The tank is usually coated on the inside with a lead-tin alloy to protect against corrosion. It is placed in the vehicle at any suitable location. The fuel tank is divided into compartments by means of baffle plates to reduce surging of fuel during sudden braking or acceleration.

Fuel pump

The fuel pump is used to deliver the fuel at the correct of pressure to the carburetor.

Fuel filters

Fuel filters are usually used to filter the fuel before it e nters the fuel pump. It may be a plastic or ceramic fuel filter.

Air cleaners

The air cleaners are usually used to remove the dust particles that enter into the combustion chamber. It is connected to the intake manifold

TROUBLE SHOOTING OF GASOLINE FUEL SYSTEM

S.No	Troubles	Causes	Remedies
1.	High fuel consumption	Air cleaner may be choked Fuel may be leaking Wrong idle adjustment	Clean Inspect the plug and the leak Adjust
2	Difficult starting	Carburetor jet may be clogged Fuel filter clogged Fuel pump pressure not constant	Service carburetor Clean the filter Check the pressure and rectify the defect
3.	Poor acceleration	Fuel line clogged Fuel filter clogged	Check the fuel line Clean the filter
4.	Lack of power	Incorrect carburetor setting Faulty inlet manifold	Adjust Replace

TROUBLE SHOOTING OF DIESEL FUEL IGNITION SYSTEM

S.No	Troubles	Causes	Remedies
1.	Engine cranks normally but will not start	Incorrect or dirty fuel No fuel to nozzle or injection pump Plugged fuel return	Flush system use correct fuel Check for fuel to nozzles
2.	Rough idle with abnormal noise and smoke	Injection pump timing off Nozzle trouble	Check return, clean Retime Check in sequence
3	Idle correct, but misfires as throttle opens	Plugged fuel filter Injection-pump timing off Incorrect or dirty fuel	Replace filter Retime Flush system-use correct fuel
4	Combustion noise with excessive black smoke	Timing off Injection-pump trouble Nozzle sticking open Internal engine problems	Reset Replace the pump Clean or replace

DIESEL FUEL SYSTEM :

Fuel supply system in a diesel engine has to perform certain functions. These functions along with the names of the components, which perform the same, are given.

Filtering

Water and dirt must be removed from diesel for which two filters are employed. Primary filter is usually in the form of coarse wire gauge. It prevents large solid particles and water. The secondary filter is used after the fuel feed pump and is meant to remove fine particles of dust, dirt, etc.

Delivery of fuel to injection pump

From the fuel tank the fuel is delivered to the fuel injection pump by means of fuel feed pump. The rate of fuel delivery depends upon the engine requirements.

Controlling the speed:

Diesel engine speeds tend to overshoot to dangerous values on reduction of load. This is controlled by means of a governor, which besides limiting the maximum speed, also regulate the fuel supply under all conditions

CLEANING METHODS

A layer of oil, grease and dirt gets coated to motor vehicle and its parts with passage of time and usage. Before performing servicing of the vehicle the unwanted layer should remove. This can be done by hand cleaning or by means of certain cleaning methods, hand cleaning which seems to be quite cheap and easy is actually most expansive process.

The cleaner equipment selected the method application used greatly influence the speed, thoroughness and economy of the cleaning operation. Most commonly used methods of cleaning operation. **Most commonly used methods of automobiles and its parts are steam cleaning, water pressure cleaning, solution cleaning and vapour bath cleaning**. To clean engine dirt, grease etc, spray method with compressed air used , for this purpose a kerosene spray under pressure is sprayed on engine.

For cleaning engine exhaust system. Take them apart and soak them kerosene oil overnight. A pack of kerosene soaked waste attached to along wire may be drawn through it cleaning the pipe and manifold.

Visual inspections

- After dismantling all the parts are inspect them carefully and replace the defective parts.
- All parts should be clean with kerosene and dry them with the compressed air.
- They cylinder walls may be inspected for scoring. The cylinder may require reboring or rehoning if scores are present
- To inspect piston for scores, remove the ring without braking them.
- Inspect the piston ring for damage or wear. If these are defective replace them.
- Inspect the conncting rod small end bearings. If these are scored or pitted. Service with rebbitting.
- Check the valve face and seat. If any part is defective service the valve face with the help of valve seat for correct seating of valves.

Minor and major tune up

Tune up includes testing the various components and necessary systems involved in engine operation. It also includes readjusting or replacing parts as required restoring engine performance. Therefore to retain peak performance and reliability. An engine tune up should be carried out every 12000 km or at the end of each 500 hours of off the road use.

RECONDITION METHODS OF ENGINE COMPONENTS

Degreasing plant

A layer of oil, grease and dirt gets coated to the engine parts with passage of time and usage, befor performing servicing of the engine, the unwanted layer should be removed. This can be done by hand cleaning or by means of certain cleaning methods.
The parts being brushed or scrubbed with stiff bristle brush to get rid of hard deposits. For the larger components is usual in small workshop to use a hot caustic soda bath or steam bath. The caustic soda should not be used for aluminum alloy since it has a masked chemical action paraffin or steam bath is recommended instead

Decarbonizing

Carbon is deposited in cylinder due to rich mixture supply, use of wrong grade oil, unnecessary idling, too much oil, unnecessary idling, too much oil, poor filled piston and piston rings.
There are in general three methods of decarbonizing or decoding

1. Scrapping method
2. Oxygen decarbonizing method
3. Chemical method of decarbonizing
4. Scrapping method

This is done usually by hand scraping with help of tools. To remove the carbon from the piston, separate the piston from the cylinder, now the carbon removing brushes may be fixed in the chuck of an electric portable drill, to clean valve guider. Valve stems etc, special wire brushers may also use.

Oxygen Decarbonizing Method

It is the process of removing carbon the inside of the cylinder and head of the piston without removing cylinder head by means of oxygen flame. The equipment consists of an oxygen tank fitted at an initial pressure of 156 kg/ cm^2 and an adjustable reducing valve for bring the pressure down to 0.7 to 1,4 kg / m^2

Chemical Method Of Decarbonizing

In this method decarbonizing is done by injecting a special chemical in liquid from to that cylinder head through spark plug hole. The engine should be in a warm condition so that the liquid can act more efficiently after keeping the engine stopped for 12 hours the carbon deposits will be loosened, while starting up the engine deposits will be out through exhaust pipe.

Reconditioning Of Cylinder

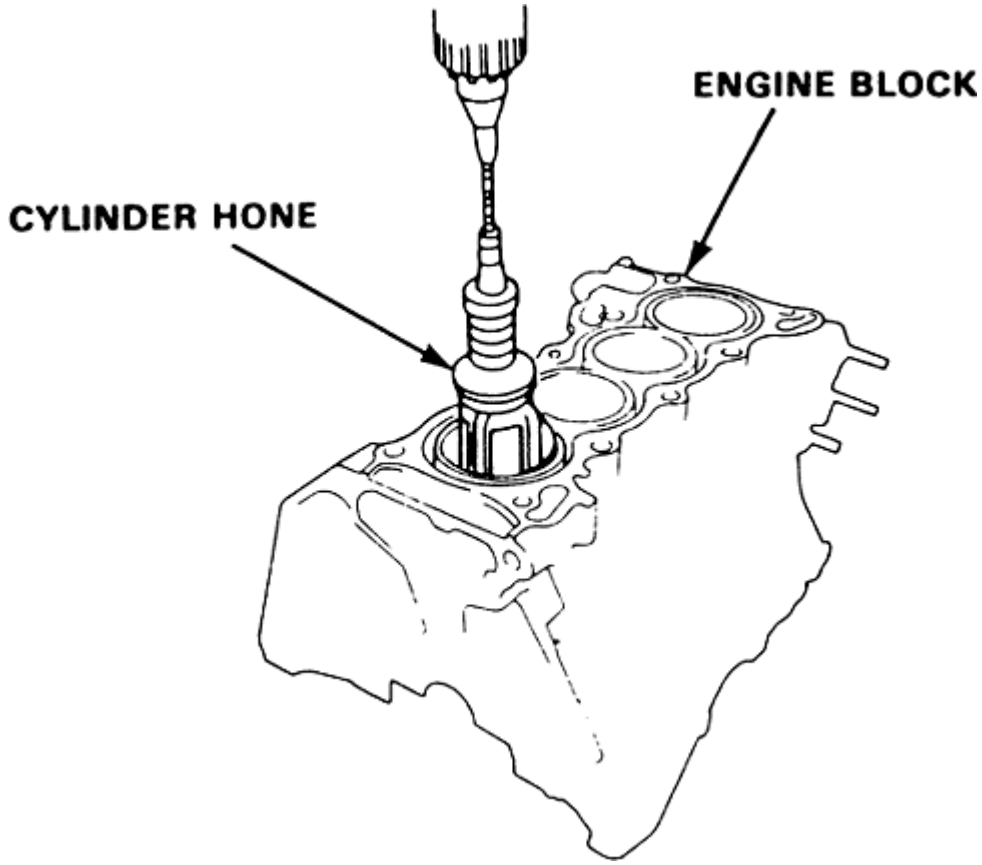
When the engine is operated for 40000 to 60000 kms, it will get maximum taper wear and ovality and taper, shop manual is consulted to find out whether reboring the cylinder is necessary or honing only will be sufficient

Generally the maximum permissible ovality is specified as 0.01 mm and the tapper as 0.25 mm, depending upon the wear of the cylinder bore next over. Size is selected so as to remove all ovality and taper. The oversizes generally specified are 0.01, 0.02, 0.03. 0.04, 0.06 inch. Corresponding oversize piston has also to be fitted in such a case.
Cylinder bores with less than 0.01 mm ovality need not be rebored. They can be rectified by honing only

CYLINDER REBORING METHOD

In recent practice the method worn cylinders with the being bar has become widely on account of its rapidity and precision. Reboring is done on special machines, it‟s shown in figure
In this machine uses a single point tool cuter which is set to the exact diameter required with special micrometer. The cutting edge is sharpened on are revolving disk, using a mixture of diamond dirt and oil. The cutter blade shaft is mounted inside a column which moves up and down of its housing in the fixed part of the fixed part of the machine for tool feeding purpose. The cutter is driven at low speed by an electric motor mounted on the machine.
The top surface of the cylinder block is thoroughly cleaned and the boring bar set at one of the cylinder bores. The bar is centered set to the desired depth of cut and the machine started. The cutter will bore progressively to the other end, and the machine stops when the boring complete. Aftere the job is complete again the cylinder must be washed thoroughly to remove all abrasive particles
Before starting reboring operation it is very important to preventive the entry of metal or abrasive practices in the oil galleries. It is a good practice to warp insulation tapes on crank pins to cover other parts as is possible.

CYLINDER HONING METHOD



Honing the cylinder walls is necessary after reboring, or to remove minor imperfections and glaze. A hone consists of four or six narrow, fine graded grinding stones mounted in cage around a spindle which is rotated by an electrical motor.

In the fixed machine shop type hone, the cylinder block is of the hone up and down the bore often effected automatically. Portable hones, designed to be driven by a heavy duty electric drill. Mounted on a stroking stand are also widely used, especially in conjection with a portable boring bar, in these cases the stroking action is effected manually.

Place the hone in the cylinder and expand the stones until the assembly can just be turned by hand and machine started. Home drive at drill speed while moving the hone up and down the entire length of the cylinder until the hone begins to run free. During this operation a liberal amount of kerosene. Or other suitable cutting fluid, should be used to keep the stones clean move the hone up and down slowly with the first cut rough stones, but more rapidly with first cut rough stones, the cylinder walls and repeat honing operation until the desired bore diameter is obtained. After the honing is completed, all abrasive particles must be removed from the engine parts. Hot water and soap is recommended to clean cylinder walls.

Cooling system-

The main purpose of cooling system is to keep the engine at its most efficient operating temperature at all speed and under all operating condition.

TYPES OF COOLING:-

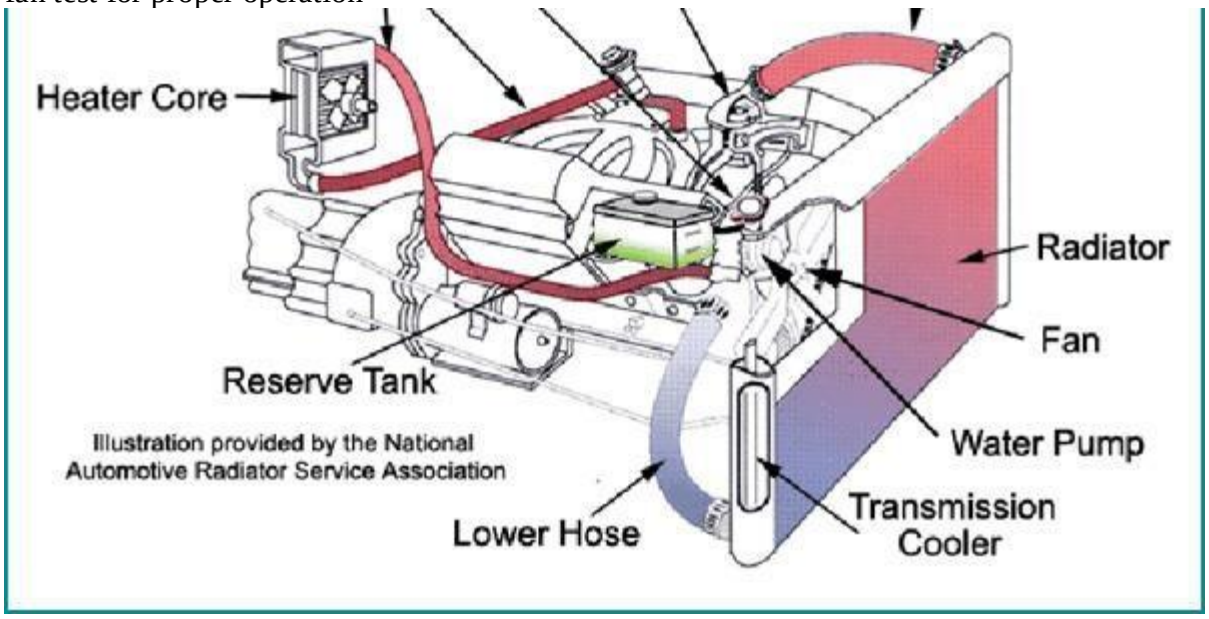
1. Air cooling – Here there are metal fins on the heads and cylinder to dissipate heat from the engine. Even fans are used on some air – cooled engine to improve air circulation around the cylinder and heads.

2. Liquid cooling – Here the liquid is circulated around the cylinder to observe from the cylinder walls. The liquid used is water, but even antifreeze solutions are used as coolant to prevent freezing is cooled weather.

COOLING SYSTEM

- Check the radiator for any damage and blocks
- Check the hoses that connect radiator and engine
- Check for any leakage
- Check the fan belt
- Use clean water in the radiation

COOLING SYSTEM AUTO MAINTENANCE

- a visual inspection of all cooling system components, including belts and hoses
- a radiator cap pressure test to check for the recommended system pressure level
- a thermostat check for proper opening and closing
- a pressure test to identify any external leaks to the cooling system parts; including the radiator, water pump, engine coolant passages, radiator and heater hoses and heater core
- an internal leak test to check for combustion gas leakage into the cooling system an engine cooling fan test for proper operation
- 

- **Antifreeze/Coolant**
- The main function of the Cooling System is to carry heat away from the engine and maintain the desired operating temperature. This is accomplished by circulating antifreeze/coolant through the engine, where heat is generated, and carrying it to the radiator to be cooled.
- Modern automobiles operate in a wide variety of ambient temperatures, from well below freezing to well over 100 F. The fluid used to cool the engine must have a very low freezing point, a high boiling point, and it must have the ability to transfer heat.

  An adequate amount of an antifreeze/coolant and water mixture is necessary to reduce the possibility of engine overheating and freezing, and contain additives to prevent rust and corrosion

in the cooling system. Water is one of the most effective fluids for holding heat, but water freezes at too high a temperature to be used in automobile engines alone.

- The fluid used in most vehicles is a mixture of water and ethylene glycol, also known as "antifreeze" or "coolant". By adding antifreeze to water, the boiling and freezing points are improved significantly.
- The temperature of the coolant can sometimes reach 250 to 275 F (121 to 135 C). Even with antifreeze added, these temperatures would boil the coolant. To prevent this, the cooling system is pressurized, which further raises the boiling point of the coolant. Most systems have around 14 to 15 pounds per square inch (psi), which raises the boiling point approximately 45 F so the coolant can endure the high temperatures produced in the engine.
- **Coolant Hoses**
- The radiator hoses and heater hoses are easily inspected by opening the hood and looking. You want to be sure that the hoses have no cracking or splitting and that there is no bulging or swelling at the ends.
- If there are any signs of problems, the hose should be replaced with the correct part number for the year, make, model and engine of the vehicle. Never use a universal hose unless it is an emergency and a proper molded hose is not available. For either the radiator hoses or the heater hoses, make sure that you route the replacement hose in the same way that the original hose was running. Position the hose away from any obstruction that can possibly damage it and always use new hose clamps. After the cooling system is refilled with the proper coolant mixture, a pressure test should be performed to ensure that there are no leaks.
- **Belts**
- On older vehicles, the water pump is driven by either a V belt or serpentine belt on the front of the engine that is also responsible for driving the alternator, power steering pump and air conditioner compressor. These types of belts are easy to inspect and replace if they are worn. Check for dry cracking on the inside surface of the belt.
- On newer vehicles, the water pump is often driven by the timing belt. This belt usually has a specific life expectancy at which time it must be replaced to insure that it does not fail. Since the timing belt is inside the engine and will require partial engine disassembly to inspect, it is very important to replace the timing belt at the scheduled interval.

LUBRICATING SYSTEM SERVICING (AUTOMOBILE)

COMMON PROBLEMS

Higher Oil Consumption.

The main factors affecting oil consumption are engine speed and engine wear. engine temperature increases at high speed due to which the oil viscosity decreases. the low viscosity oil can pass at higher rate through piston rings into the combustion chamber where it is burned. high speed can cause ring shimmy or ring float. under this condition the oil control rings cannot function effectively. crankcase ventilation at higher speeds causes more air to pass through the crankcase due to which more oil is lost in the form of mist. at high speeds more oil is fed through the crankcase to the connecting rod journals. oil consumption increases with engine parts wear. worn bearings throw more oil on the cylinder walls. oil control rings do not perform perfectly on the worn cylinder wall and hence more oil is admitted into the combustion chamber where it burns and fouls spark plugs, valves, rings, and pistons. worn intake-valve

and exhaust-valve guides increase oil consumption. therefore worn parts are to be repaired or replaced accordingly to bring down the oil consumption to the recommended level.

Erratic Oil Pressure Indication.

if sometime light glows, or the gauge shows low pressure reading, then either there is less oil in the crankcase or the oil pickup is inconsistent. if light stays on all the time, or the pressure gauge constantly reads low, then the causes may be

(t) a weak relief-valve spring,

(ii) a defective sender unit or oil pressure indicator,

(hi) a worn oil pump,

(iv) obstructed or cracked or broken oil lines,

(u) insufficient or excessively thin oil, and/or

(vi) worn bearings, which pass more oil than the pump can deliver.

Excessive Oil Pressure Indication May Be Due To

(i) a clogged oil line,

(ii) excessively viscous oil, (hi) stuck relief valve, and/or

(iv) excessively strong valve spring.

SYSTEM MAINTENANCE

Checking Oil Level.

While checking the oil level, the vehicle should be on a level surface and the engine should be stopped. if the engine has just been shut off, then some time should be allowed for the oil to drain back into the oil pan. The appearance of oil should be noticed to check whether it is dirty, thin or thick. the oil is rubbed between the thumb and finger to check for dirt. if oil is dirty or thin it should be drained and clean oil should be filled. if oil level is less, oil should be added to the required level.

Changing Oil.

The oil additives become depleted as the vehicle is driven. The antioxidant additive is used up which may cause thick tar-like deposits in the engine. The corrosion and rust inhibitors become depleted, and corrosion begins to take place on the bearing surfaces. The oil in slowly contaminated with carbon. In some cases moisture gradually forms sludge in the oil.

Oil change intervals are based on the time or mileage, whichever occurs first. it is very important to change the oil at the manufacturers‟ recommended intervals to maintain engine internal cleanliness and long engine life. Older vehicles usually have shorter recommended oil change intervals. When the oil is changed it is very important to follow the manufacturers‟ recommended oil classification and viscosity rating. The engine should be at normal operating temperature before oil is drained from the crankcase. This helps for complete drainage of oil with contaminates. to change the engine oil, the vehicle is put on a lift. An oil drain pan is placed in position and the drain plug is removed from the oil pan. After oil is drained, the plug is installed and the vehicle is lowered. then oil is filled in the crankcase.

Servicing the Oil Filter.

As per the recommendation of the manufacturer the oil filter should be serviced or replaced regularly for long life of the engine. Normally oil filter is serviced with the first oil change and then after every other oil change. Some filters have replaceable elements, and with full-flow oil filters, which are commonly used, the filter element and container are replaced as a unit. a new filter should always start out with new oil.

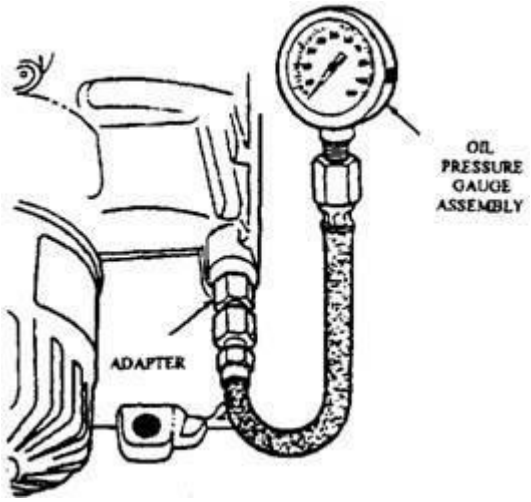
With the old filter off, the recess and sealing face of the filter bracket should be wiped with a clean shop towel. Then, the sealing gasket of the new filter should be coated with oil. The seal on the new oil filter should be lubricated with a small amount of clean engine oil before the filter is installed. When the new oil filter is installed, it should be tightened by rotating it about one half-turn after the seal makes contact with the mounting plate.

Servicing Oil Pump and Relief Valve.

Oil pumps require very little service in normal operation. If pump is badly worn, the pump is to be removed and disassembled. The pressure relief valve should be removed and checked to make sure that it is moving freely. Springs of different tension may be required to be installed to change the regulating pressure in the relief valve.

if the rotor or the pump housing is worn to the point where the end play exceeds specifications, one or the other must be replaced. The clearance between the inner and outer rotors, and that between the outer rotor and the pump housing should be measured and if the clearance exceeds the specification replacement of specific part or the total pump is necessary.

similar is the case with the gear-type pump. The oil pump pickup should be checked for a plugged screen and air leaks.



Servicing Oil Pressure Indicators.

If the oil indicator light does not come on when the ignition switch is turned on, the wire at the pressure switch should be removed and grounded. If the bulb does not come on, the bulb, fuse, or connecting wires have an open circuit. When the oil indicator bulb is illuminated with the pressure switch wire grounded, but does not come on with the wire connected to the switch, the pressure switch is defective. When the oil

indicator light is on with the engine running, the engine should be stopped and the oil level in the crankcase should be checked. If the crankcase oil level is correct, the oil pressure should be tested by removing the pressure switch and installing a pressure gauge in place of the switch, as shown in fig. If the oil pressure equals or exceeds the manufacturer‟s specifications, a defective oil pressure switch must be the cause of the illuminated oil light. a low oil pressure reading indicates a defect within the engine and the oil pump should be checked first.

MAINTENANCE AND FAULT DIAGNOSIS OF ENGINE MANAGEMENT SYSTEMS (AUTOMOBILE)

Maintenance and Fault Diagnosis of Engine Management Systems

Modern engine-control systems incorporate many sensors to communicate operational data to the ECU to control the engine effectively. Cables from these sensors and associated circuitry use many multi-pin connectors.

Connector Problems

Under ideal conditions the connectors used on automobiles normally perform satisfactorily but when they are exposed to an under-bonnet high temperature environment, to water, salt, oil and dirt, these are likely to develop problems. Although to minimize these problems, some form of flexible cover is provided to prevent the ingress of contaminates, but the possibility of even partial failure cannot be eliminated, especially after the connector has aged.

During routine maintenance, and when a fault is being diagnosed, attention should be given to the condition of the connectors, specifically the plugs located in exposed conditions. Security and assessment of the condition of the connectors plug requires two important routine checks. Where an intermittent fault is experienced, it is often impossible to locate a cable connector

fault by normal meter tests. In these cases the contact pins of all connectors in the circuit that have the problem, should be cleaned.

Some manufacturers recommend the actual method for cleaning the contact surfaces. These methods range from the use of an ink eraser for spraying the surfaces with a special cleaning fluid. Emery cloth should not be used, because it removes the contact surface and is likely to create a short-circuit due to the electrical conductivity of the emery dust.

Self-diagnosing Systems

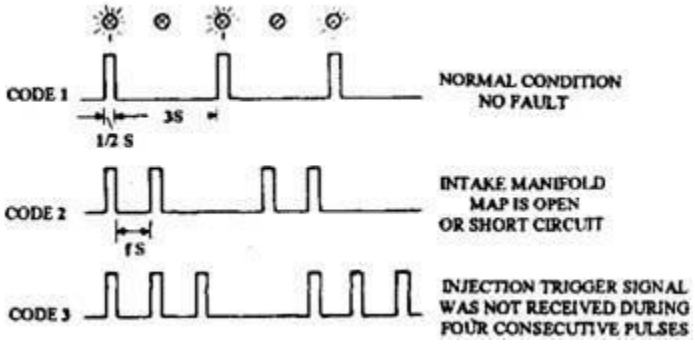
It is expected that in due course of time most management systems will incorporate their own fault-diagnosis circuit. Already these systems in use have a monitoring circuit, which either signals the driver when a fault occurs, or controls the system in such a way that the fault does not seriously damage the engine. In such a case the ECU resets the control system to enable the vehicle to „limp home“ and be driven to the garage for repair.

Some engine management computers incorporate a built-in self-diagnosing feature, which displays, when instructed by a diagnostician, the faulty area. Systems of more advanced design use a facility, which permits the transmission of information relating to a fault to a larger computer installed in the workshop.

Self-diagnosis by Light Signal.

The Toyota computer controlled system (TCCS) uses a coded light signal to indicate the cause of a malfunction in the system. When a fault develops, the ECU registers the sub-system in which the fault is present, into its memory. This information is stored in the memory even after the engine is switched-off. The possible faults are monitored by the system. Some of these faults are capable of producing an engine stall, so in such a case a warning light on the instrument panel indicates the driver to check engine. When the malfunction is corrected the warning light goes out, but the ECU still holds the information in its memory. This is specifically helpfull to the diagnostician when an intermittent fault recurs.

Access to the memory data is obtained by short-circuiting a test terminal. This causes the panel lamp to flash at a rate, which indicates a particular fault that can be identified by referring to the code shown in the repair manual. Figure 18.28 illustrates the lamp behavior for three examples and the fault associated with each one of them.



In addition to this memory feature, this computer also incorporates a fail-safe function that avoids an engine stall due to faulty operation of MAP, coolant temperature and intake air temperature sensors. Malfunctions in one or more of these areas cause the computer to make the following adjustments.

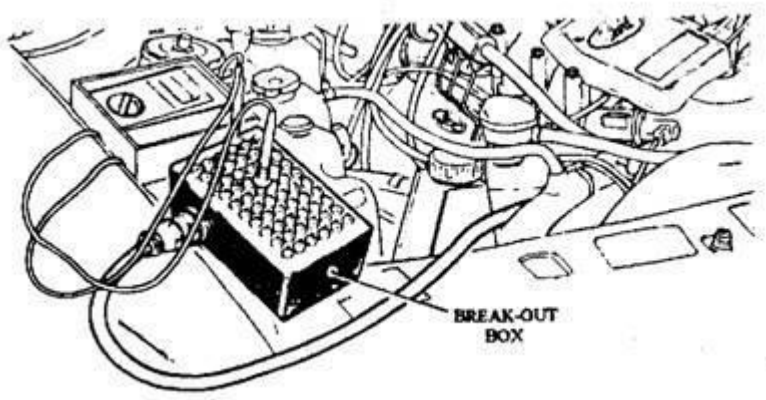
MAP : Sets the ignition timing to 10 degrees before TDC and maintains a constant injection duration.

Coolant temperature : Sets injection duration by assuming a temperature of 353 K.

Air temperature : Sets injection duration by assuming a temperature of 293 K.

Breakout Box Tests.

A breakout box provides a series of contact plug sockets that allows test meters to be connected into the various circuits to carryout fault diagnosis. A breakout box used on Ford vehicles is shown in Fig. This box has 60 sockets and a provision for the connection of these sockets to the multi-plug, which normally fits into the ECU.



Tests conducted with the aid of this box cover many sub-sections. The use of the box minimizes the problems of connecting test equipment to the wrong pin and making ineffective connections to the test meters.

Each socket is numbered, which simplifies the test procedure when used in conjunction with a fault-diagnosis chart. As with many other tests of electronic equipment, proper care must be taken when a multi-meter is used to measure resistance. This is because the current supplied by the meter can damage many of the components in an electronic control unit.

EMISSION CONTROL SYSTEM SERVICE

Objectives

- Determine the causes of various emission system problems
- Perform service on the emission control system
- Repair or replace defective emission control parts
- Diagnose emission problems using an exhaust gas analyzer

Inspecting Emission Control Systems

- Many states require periodic emission inspections
- Visual inspection
- Look at hoses and wires
- Check that all parts are in place
- Run engine and listen for air leaks
- Check condition and tension of the pump drive belt
- Inspect the air cleaner

Computer-Controlled Emission Service

- New cars have sophisticated emission systems
- Controlled by a computer, sensors, and actuators
- May have emission maintenance reminder lights

- Many ways of testing devices and resetting the light

Crankcase Ventilation System Service

- Crankcase system must be air tight
- Engine running and OCV valve installed
- Should be a vacuum at oil filter opening when Leak in the crankcase ventilation system
- Not always readily apparent
    - Testing PCV valve
        - Pull PCV valve from its grommet
        - With engine stopped, remove and shake valve
        - With engine running, cover valve end
        - Pull fresh air hose from air cleaner
    - Check the breather hose to the air cleaner
        - Kinks
        - Restriction

Evaporative Control System Service

- Fuel evaporation
    - Major cause of air pollution
- Evaporative emission controls
    - Installed on gasoline filler nozzles
    - Vehicles have their own on-board evaporative systems
    - Often neglected until driveability problem occurs

Evaporative System Maintenance

- Fresh air is drawn into the canister during purging
    - Some canisters have a replaceable filter
- Service interval is usually every two years
    - More often in dusty conditions
- Check condition of all system hoses
    - Use fuel hose or hose designed to be used with fuel vapours

Evaporative System Problem Diagnosis

- Leaking evaporative systems allow gasoline vapors to escape into the air
- Check liquid/vapor separator if there is liquid fuel in charcoal canister
- Loud rush of air entering the tank when cap is pulled indicates a venting problem
- EVAP systems on OBD II vehicles self-test for leaks

Air Injection System Service

- Visual inspection
  - Look for rusty check valves and air manifolds
  - Check condition of hoses mounted near exhaust parts
  - Inspect air pump drive belt
- Several problems in an air injection system
  - Exhaust noise under the hood
  - Backfiring on deceleration
  - Air pump noisy or frozen
  - Emission test failure

Catalytic Converter Service

- Common failure of OBD II vehicles
  - Overheating caused by a misfiring cylinder
- Plugged converter
  - Restricts engine exhaust flow
- Do not just replace the converter
  - Determine whether there is another problem

Converter Testing

- Cat must be heated: at least 600°F
  - Converter light off: converter begins to oxidize
  - Temperature is measured with a high-temperature pyrometer
  - Best test for a converter: emission analyser

Catalytic Converter Replacement

- Replacement converter
  - Often bolted on with new gaskets
  - Some require welding
  - Use an EPA-approved equivalent replacement
  - Installation of a used converter is illegal unless it has been tested and certified

UNIT III

TRANSMISSION AND DRIVELINE MAINTENANCE

DIFFERENTIAL TROUBLE DIAGNOSIS:

The first sign of differential trouble is usually noise.

1. HUMMING:

- A humming noise is often due to incorrect internal adjustment of drive pinion or the ring gear.
- Incorrect adjustment causes rapid tooth wear or even failure of differential.
- This humming noise will take on a growling noise as wear progresses.

2. NOISE OR ACCELERATION:

- Noise from differential is louder when the car is accelerating since there is heavy contact on the ends of the gear teeth.
- Noise is louder when the car is coasting since there is heavy toe contact and both these conditions must be corrected.

NOISE ON CURVES:

- If the noise is heard only when the car is going around a curve , the trouble is inside the differential case.
- Pinion gears tight on the pinion shaft, damaged gears or pinions, too much backlash between gears could be cause for this problem.
- When the car turns along a curve, the parts inside the differential case more relative to each other.

1. LIMITED-SLIP DIFFERENTIAL:
   - The limited slip differential requires a special type of lubricant. The wrong lubricant can cause clutch surfaces to grab. This may produce chattering noise during a turn.
   - The remedy is to drain the old lubricant and fill specified lubricant designed for limited-slip differential. In such cases wheel spin can also occur, even though

UNIVERSAL JOINT AND PROPELLER SHAFT MAINTENANCE:

- Universal joints and propeller shaft do not require maintenance in normal use.
- Some universal joints and pre-lubricated for life during original assembly. When wear (or) noise occurs, the universal joints have to be replaced. However,
- some manufacturers recommend lubricating the universal joints every time a chassis lubrication is performed.

- The drive shaft and universal joints are carefully balanced during original assembly. Always mark the position and alignment of the parts before dismantling. Then after reassembly and installation, they should be still in balance. A drive shaft can often be balanced by installation of two worm-type hose clamps

REMOVAL OF MANUAL TRANSMISSION:

- Raise the vehicle on a lift.
- Mark rear axle flange and drive shaft so that the drive shaft is reinstalled in the same manner.
- Drain the lubricants present in transmission unit.
- Disconnect the speedometer cable.
- Disconnect the wiring to the backup light.
- Disconnect the drive shaft.
- Support the engine with jack or engine support.
- Remove the bolts attaching the transmission support to the cross member. Then remove bolts attaching cross member to the body frame and remove the cross member.
- Remove the upper bolts attaching the transmission to the clutch housing and install guide pin in the hole.
- Remove the other transmission attaching bolts. Then slide the transmission until the clutch shaft comes clear of the clutch.

INSTALLATION OF GEAR BOX:

- Installation is the reverse of removal. Just before installation, shift the transmission in to each gear and turn the input shaft to check whether the transmission works or not.
- Place a small amount of lubricant on the spline of input shaft.
- Pre-align the spline on the input shaft and the friction disc hub by turning the input shafts so that the splines line up.
- Install guide pins and slide the transmission in to position.
- Turn the shaft if necessary to secure alignment of the shaft and hub splines.
- Then fix the bolts and tighten them along the guide pins.

CLUTCH TROUBLE SHOOTING CHARTS:

COMPLAINT	POSSIBLE CAUSES	CHECK(OR)CORRECTION
1. Clutch slips while engaged	□ Broken or weak pressure springs □ Broken engine mount □ Warped clutch disc □ Grease or oil on disk facing	□ Replace □ Replace □ Replace □ Replace facing or disk
2. Clutch chatters when engaged	□ Warped clutch disc □ Broken engine mount	□ Replace □ Replace

	Binding in clutch release linkage	Adjust and lubricate
3. Clutch noises	Misalignment of engine and transmission Friction disc hub loose on the clutch shaft Release lever not properly adjusted	Realign Replace worn parts Readjust(or)Replace the assembly
4. Clutch pedal pulsations	Engine and transmission not aligned Flywheel not seated on the crankshaft flange	Realign Seat properly
5. Friction disc facing wear	Driver rides clutch Excessive and incorrect use of clutch Crack in flywheel	Keep foot off clutch except when necessary Reduce use Replace
6. Clutch pedal stiff	Clutch linkage lacks lubricant Misaligned linkage plate Bent clutch pedal	Lubricate Realign Replace

MANUAL TRRANSMISSION TROUBLESHOOTING:

COMPLAINT	POSSIBLE CAUSES	CHECK(OR)CORRECTION
1. Hard shifting into gear	Gear shift linkage out of adjustment Gear shift lacks lubricants Excessive clutch free-pedal play	Adjust Lubricate Adjust
2. Transmission sticks in gear	Gear shift linkage out of adjustment Gear shift lacks lubrication Synchronizing unit stuck	Adjust Lubricate Replace damaged parts
3. No power through transmission	Clutch slipping	Adjust
	Gear broken Misalignment of transmission with engine	Replace Realign
4. Transmission noisy in neutral	Gears worn or teeth broken Bearings worn away Transmission misalignment with engine	Replace gears Replace and lubricate Realign
5. Transmission noisy in gear	Insufficient lubrication Gears loose on mainshaft	Properly lubricate with correct lube. Replace worn parts

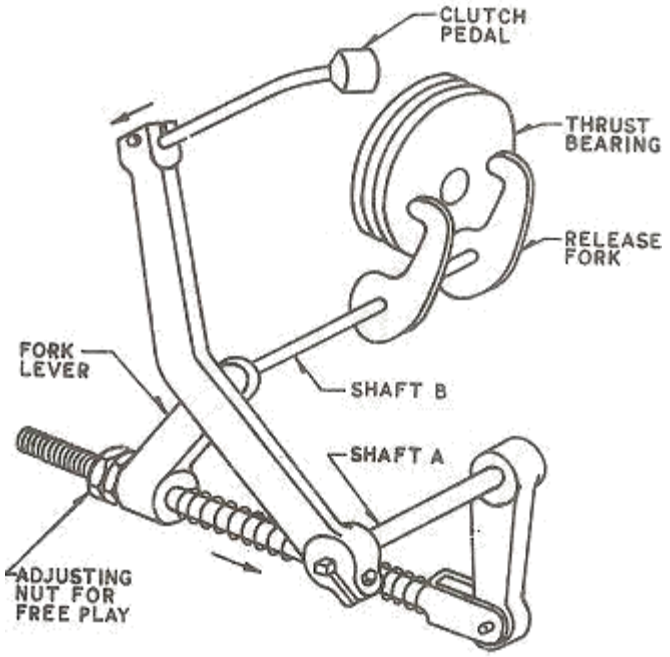
		□ Synchronisers worn	□ Replace worn parts
6.	Gears clash while shifting	□ Synchronisers defective □ Incorrect lubricant □ Idle speed excessive □ Incorrect free-pedal play	□ Repair or replace □ Replace with correct lubricant □ Readjust □ Adjust
7.	Transmission noisy in reverse	□ Reverse idler gear damaged □ Shift mechanism damaged	□ Replace □ Repair, replace, readjust defective parts
8.	Oil leaks	□ Foaming due to incorrect lubrication □ Oil level too high □ Oil seals damaged □ Drain plug loose	□ Replace with correct lubricant □ Use proper amount, not more □ Replace □ Tighten the plug

Adjustment of pedal play

Clutch pedal play adjustment

Clutch pedal free play (2 to 4 mm) is adjusted from clutch release arm with clutch operating flexible cable coming from clutch pedal.

While fitting clutch release arm on the clutch release shaft, fix up the arm such that the punched mark on the clutch release is shifted towards the front side but one notch from the punched mark on the clutch release shaft, after tightening the arm fix up the cable and adjust clutch pedal free play through adjuster nut 1. It is not possible to get the desired play then adjust with adjuster nut 2.



Clutch Repairs and Inspection

1. Clutch facing and service limit
2. Loose holding down rivets
3. Check up the torque spring
4. Check for distortion or crack on clutch
5. Check for flat run out (<0.4 mm)
6. Check for lateral run out (<0.7 mm)

Brake pedal play adjustment

The free pedal play should be at least 12.7 mm or as recommended by the company. The procedure for brake pedal play adjustment is as follows

Raise the vehicle until the wheels are off the road.

- With a wrench loosen the locknut for the forward brake shoe and hold it.
- With another wrench turn the eccentric towards the front of the vehicle until brake shoe strike the drum.
- While turning the wheel with one hand, release the eccentric until the wheel turn freely.
- Hold the eccentric in position and fasten the locknut.
- Repeat this procedure to adjust the reverse shoe. But, turn the eccentric towards the back of the vehicle.
- Repeat this on all the four brakes.
- Check the fluid level in the master cylinder
- When the pedal goes down, close the vent screw.
- Again repeat the procedure until all the bubbles are removed.

DIFFERENTIAL SERVICE AND MAINTENANCE

Differentials in a properly operated vehicle seldom cause any maintenance problems. With the maintenance of the proper lubrication level and occasional changing of a seal or gasket, the assembly will normally last as long as the vehicle. The first hint of existing trouble is generally an unusual noise in the axle housing. what operating conditions the noise is most pronounced. Defective universal joints, rough wheel bearings, or tire noises may be improperly diagnosed by an inexperienced mechanic as differential trouble. Some clue may be gained as to the cause of trouble by noting whether the noise is a growl, hum, or knock; whether it is heard when the vehicle is operating on a straight road, or on turns only; and whether the noise is most noticeable when the engine is driving the vehicle or when it is coasting with the vehicle driving the engine.

A humming noise in the differential generally means the ring gear or pinion needs an adjustment. An improperly adjusted ring gear or pinion prevents normal tooth contact between the gears and therefore produces rapid tooth wear. If the trouble is not corrected immediately, the humming noise will gradually take on a growling sound, and the ring and pinion will probably have to be replaced. It is very easy to mistake tire noise for differential noise. Tire noise will vary according to the type of pavement the vehicle is being operated on, while differential noise will not.

To confirm a doubt as to whether the noise is caused by tire or differential, drive the vehicle over various

pavement surfaces. If the noise is present in the differential only when the vehicle is rounding a comer, the trouble is likely to be in the differential case.

If the backlash (clearance) between the ring and pinion is too great, a clunking sound is produced by the gears. For example, when an automatic transmission is shifted into drive, the abrupt rotation of the drive shaft can bring the gears together with a loud thump. The ring and pinion gears can become worn, scored, out of adjustment, or damaged.

The problems can result from prolonged service, fatigue, and lack of lubricant. You need to inspect the differential to determine whether adjustment or part replacement is required. A differential identification (ID) number is provided to show the exact type of differential for ordering parts and looking up specifications. The number may be on a tag under one of the carrier or inspection cover bolts; it also may be stamped on the housing or carrier. Use the ID number to find the axle type, axle ratio, make of the unit, and other information located in the service manual.

Differential Lubricant Service

Many vehicle manufacturers recommend that the differential fluid be checked and replaced at specific intervals. To check the fluid level in a differential, remove the filler plug, which is located either in the front or rear of the assembly. The lubricant should be even with the fill hole when hot and slightly below the hole when cold. When the manufacturer recommends that the differential fluid be replaced, remove the drain plug located on the bottom of the differential housing. Some differentials require the removal of the inspection cover to drain the lubricant. With all the fluid drained, replace the drain plug or inspection cover and refill with the proper lubricant.

Always install the correct type of differential lubricant. Limited slip differentials often require a special type of lubricant for the friction clutches.

REAR AXLE SERVICE

Rear axle service is needed when an axle bearing is noisy, when an axle is broken, bent, or damaged, or when an axle seal is leaking. The rear axles must be removed to allow removal and repair of the differential assembly.

Axle Bearing Service

Worn or damaged bearings in the carrier or on the axles produce a constant whirring orhumming sound. When bad, these bearings make about the same sound whether accelerating, decelerating, or coasting. When diagnosing and repairing bearing failures, do the following:

• Check the general condition of all parts during disassembly, not just the most badly worn or damaged parts.

• Compare the failure to any added information in the service manual and your knowledge of the component’s operation.

• Determine the cause of the part failure. This helps in assuring that the problems do NOT reoccur.

• Perform all repairs following the manufacturer’s recommendations and specifications. When an axle bearing is faulty, it must be removed from the axle or housing carefully and a new one installed. The type of axle configuration determines how the bearing is to be removed and replaced. Always refer to the manufacturer's service manual for instructions for the removal and installation of the bearing. The procedures we will discuss are for a semi-floating axle with the bearing and collar pressed on. With the

axle removed from the vehicle, proceed as follows:

NOTE

Procedures for axle removal may be found in the service manual for the applicable vehicle.

- Carefully cut off the collar with a grinder and a sharp chisel.
- With the collar off, place the axle in a hydraulic press. The driving tool should be positioned so that it contacts the inner bearing race. Use the press to push the axle through the bearing.
- To install the new bearing, slide the bearing onto the axle. Make sure that the bearing is facing the right direction. Some bearings have a chamfered edge on the inner bearing race which must face the axle flange.
- Applying force on the inner bearing race, press the bearing into place by pressing the axle back through the bearing. Then press the collar or retaining ring onto the

Axle Seal Service

Rear axle lubricant leaks can occur at numerous spots, such as at the pinion gear seal, carrier or inspection cover gaskets, and two axle seals. The leak will show up as a darkened, oily, dirty area below the pinion gear or carrier, or on the inside of the wheel and brake assembly. Always make sure that a possible axle seal leak is not a brake fluid leak. Touch and smell the wet area to determine the type of leak.

Anytime the axle is removed for service, it is wise to install a new axle seal. This action ensures that the seal between the axle and axle seal is tight. The axle seal is normally force-fitted in the end of the axle housing. To remove a housing-mounted seal, use a slide hammer puller equipped with a hooknose. Place the hook on the metal part of the seal. With an outward jerk on the puller slide, pop out the seal. If a slide hammer puller is not available, a large screwdriver will also work.

CONSTANT VELOCITY JOINT SERVICE

Constant velocity joint service requires disassembly of the joint. Refer to the service manual for the vehicle when servicing a CV joint. The manual will give special detailed directions that are required depending on the type of joint.

Once the CV joint is disassembled, obtain a CV joint repair kit (usually includes new joint components, grease, boot, and bootstraps). When the joint is being assembled, refer back to the service manual for detailed directions.

Always use the recommended type of grease on a CV joint. The wrong type of grease will cause boot deterioration and joint failure. CV joint kits provide the correct type and amount of grease required.

After reassembling the CV joint, fit the boot over the joint. Make sure the boot ends fit into their grooves. Install the bootstraps. Do not over tighten the straps, as they may cut the boot or break.

UNIVERSAL JOINT SERVICE

The universal joints on many automotive vehicles are factory lubricated. However, construction equipment has universal joints that have lubrication fittings that should be lubricated at regular intervals. Service to universal joints that are factory lubricated is limited to replacement when signs of excessive wear are present. The universal joints provided with lubrication fittings are lubricated only with a hand operated low-pressure grease gun. Use of a high-pressure grease gun will damage the seals, resulting in early failure of the universal joint.

Another area to be concerned with when servicing the universal joints is the slip yoke (joint). Slip yokes may be lubricated from the transmission or through a lubrication fitting.

A worn universal joint is the most common drive line problem, causing squeaking, grinding, clunking, or clicking sounds. The grease inside the joint can dry out. The roller bearings will wear small indentations in the cross. When the bearings try to roll over these dents, a loud metal-on-metal grinding or chirp sound can result. Quite often, a worn U-joint is discovered when the transmission is placed in reverse.

When the vehicle is backed up, the roller bearing is forced over the wear indentation against normal rotation. When this occurs, the rollers will catch on the sharp edges in the worn joint, causing even a louder sound. The universal joint may require removal and disassembly to enable you to check the condition of the join physically. Steps for the removal and disassembly of a U-joint are as follows:

1. Raise the vehicle and place it on jack stands.
2. Scribe the alignment marks on the differential yoke and universal joint so drive shaft balance is ensured upon reassembly.
3. Unbolt the rear joint from the differential. If used, also unbolt the center support bearing. Pry the shaft forward and lower the shaft slightly.
4. Wrap the tape around the caps to prevent them from falling off and spilling the roller bearings.
5. Slide the drive shaft out of the transmission. If the transmission lubricant begins to leak, install a plastic plug into the extension housing.
6. Before disassembling the universal joint, especially constant velocity joints, scribe mark each component. The marks will show you how to reassemble the joint.
7. Clamp the drive shaft yoke in a vise. Do **NOT** clamp the weaker center section of the drive shaft or it will bend. If used, remove the snap rings, using a screwdriver, snap-ring pliers, or needle nose pliers.
8. Use two sockets—one larger than the bearing cap and one smaller than the bearing cap. Place the smaller socket on the bearing cap of the universal joint. The larger socket is to be placed over the outside diameter of the bearing cap on the opposite side of the joint.
9. With both sockets and the universal inside the vise, slowly tighten the vise to force the bearing caps out of the yoke. Use the same procedure on the remaining bearing caps, as required.

Normally, a universal joint is replaced anytime it is disassembled. However, if the joint is relatively new, you can inspect, lubricate, and reassemble it. During the inspection, clean the roller bearings and other parts in solvent. Then check the cross and rollers for signs of wear. If you find the slightest sign of roughness or wear on any part, replace the U-joint.

Once you have cleaned, inspected, and found the U-joint to be in a serviceable condition, you must reassemble it. Steps for reassembling a U-joint are as follows:

1. Pack the roller bearings in high-temperature grease. A good method of keeping the bearing in place is to fill the bearing cap with grease.
2. Position the cross inside the yoke. Align your marks. Then fit the bearing caps into each end of the yoke.
3. Center the cross partially into each cap to keep the roller bearing from falling.
4. Place the assembly in a vise. Tighten the vise so that the bearing caps are forced into the yoke.
5. Press the caps fully into position by placing a small socket on one bearing cap.

Tighten the vise until the cap is pushed in far enough to install the snap ring. With one snap ring in place, use the socket to force the other cap into position. Install its snap ring.

6. Repeat this procedure on the other universal joint, if needed.

After assembly, check the action of the U-joint. Swing it back and forth into various positions. The joint should move freely, without binding.

Double check that all snap rings have been installed properly. Once the U-joint has been checked and is working properly, reinstall the drive shaft back into the vehicle as follows:

1. Wipe off the outside slip yoke and place a small amount of grease on the internal splines. Align the marks and slide the yoke into the rear of the transmission.
2. Push the slip yoke all the way into the extension housing and position the rear Ujoint at the differential.
3. Pull back on the drive shaft and center the rear universal properly. Check your rear alignment marks.
4. Install the U-bolts, bearing caps, or yoke bolts to secure the rear universal joint.
5. With the rear universal joint secured, lower the vehicle to the ground.
6. Test drives the vehicle for proper operation. Check for unusual noises, vibration, and other abnormalities.

REMOVAL AND INSTALLATION PROCEDURE OF PROPELLER SHAFT

Front Propeller Shaft

1. Raise and suitably support the vehicle.
2. Remove the front propeller shaft-to-front axle assembly bolts.

Tightening Torque 7.0 - 8.5 kg•m

• Make alignment marks on the front propeller shaft and front axle housing.

3. Remove the front propeller shaft-to-transfer case bolts.

Tightening Torque 8.1 - 8.9 kg•m

4. Remove the front propeller shaft.
5. Installation should follow the removal procedure in the reverse order.

Rear Propeller Shaft

1. Raise and suitably support the vehicle.
2. Remove the rear propeller shaft-to-rear axle assembly bolts.

Tightening Torque 7.0 - 8.5 kg•m

• Make alignment marks on the rear propeller shaft and rear axle housing.

3. Remove the rear propeller shaft-to-transfer case bolts.

Tightening Torque 8.1 - 8.9 kg•m

4. Remove the rear propeller shaft.
5. Installation should follow the removal procedure in the reverse order**.**

CLUTCH MAINTENANCE AND REPLACEMENT

The clutch acts as the transfer of energy between the engine and gearbox, undergoing significant stress each time a gear is selected, particularly whenever a gear is missed or the clutch is released too sharply. As an active component the clutch of your vehicle will fail at some stage as the car ages, and is designed

to fail rather than cause more serious damage to other components in the drive system. Automatic vehicles do not use a clutch mechanism.

Possible Symptoms of clutch failure

- Engine revs increasing but little power
- Poor performance with increased fuel consumption
- Burning smell
- loss of drive
- Unable to engage gear while engine Running
- Possible Symptoms of dual mass fly wheel failure
- Car is "juddering" when setting off or changing gear
- Chattering sound when starting car

Loss of drive

If you are experiencing any of these symptoms, or generally poor performance then your clutch or dual mass flywheel may need attention and should be checked. If you leave a failing clutch too long before having it checked, this could cause further damage to the vehicle, including damaging the flywheel itself, which is a significantly more expensive repair procedure.

Clutch Replacement

The clutch assembly is made up of multiple components, depending on the make and model of your vehicle and together with the clutch plate there is often a "dual mass flywheel" in modern vehicles that can also fail.

Clutch components are large items tightly coupled with the engine and therefore time consuming to replace. A typical clutch replacement service can take anywhere from 3 to 6 hours (possibly more) depending on the vehicle model and specification. For this reason during any clutch related service all components including the dual mass flywheel would also be checked to ensure they are in good working order before reassembling the clutch casing.

UNIT IV

STEERING, BRAKE, SUSPENSION, WHEEL MAINTENANCE

HYDRAULIC BRAKE:

PRECAUTIONS:

- Always keep the brakes properly adjusted.
- Never allow the brake linings to wear down.
- Regularly inspect the fluid level in the reservoir and top up with brake fluid if necessary.
- Always exercise cleanliness when dealing with any part of hydraulic system.
- Never handle the internal hydraulic brake parts with greasy hands.
- Always use fresh brake fluid or alcohol for cleaning internal parts of the hydraulic system.
- One form of brake trouble that occurs frequently due to mineral oil contamination and it is usually caused by topping up the hydraulic system with superior fluids (or) cleaning cylinders with petrol during servicing.
- If the brake system has been contaminated, it is a dangerous condition and immediate attempt has to be made to flush off all the brake fluid from the system and then refill with appropriate fluid.

BLEEDING OF HYDRAULIC SYSTEM:

- The process of removing the brake fluid from the hydraulic pipe line and cylinder is known as bleeding. It is necessary whenever any part of the system is disconnected (or) fluid in the supply tank exceeds the limit.
- Whenever seats are worn out it is possible for air to enter into the wheel cylinder without any sign of leakage causing spongy pedal and it is the usual indication of air in the system.
- Never, under any circumstances use the fluid which has been bled from the system to top up the supply tank because it may be aerated, have too much moisture content (or) be contaminated.

BLEEDING PROCEDURE:

- Before starting to bleed, follow the essential steps:
- Before commencing bleeding at each bleed screw, remove the dust cover and clean thoroughly. If the master cylinder is fitted with bleeding screw, bleed the master cylinder first.
- Attach the bleed tube to wheel cylinder and then from the master cylinder to the glass jar containing brake fluid.
- Open the bleed screw to 3/4th of a turn sufficient to the brake fluid to flow freely. Depress the foot pedal slowly throughout full stroke of the pedal and allow it to return to its position slowly.
- There would be an interval of 3 to 4 seconds before making the next stroke.
- Repeat this action until the air bubbles seizes and then close the bleed screw immediately.
- While the pedal is thus held, securely tighten the bleed screw and remove the tube. Replace the dust cover on the bleed screw. Repeat the same procedure on all the wheel cylinders.
- After the bleeding operation, top up the master cylinder reservoir with appropriate brake fluid to a level of of 3/4th the reservoir and replace the filler cap.

BRAKE TESTERS:

- There are two types of brake testers, namely static and dynamic.
- Static tester has four tread plates and registering columns.

- To remove the tests, the car is driven on to the tread plates at specified speed and the brakes are applied hard.
- The stopping force at each wheel is registered on four columns. If the readings are too low, brake service is needed.
- The dynamic brake tester has rollers in the floor. The two wheels for which brakes are to be tested are placed on the rollers. If these are the drive wheels, the wheels are spun at specified speed by vehicle engine. For non- driving wheels, the rollers and wheels are spun by electric motor. Then the electric motor is switched off and the brakes are applied. The braking force at each wheel registers on meters and based on the readings, service is performed

BRAKE SERVICE:

- Any complaint of faulty braking action, immediate measures have to be taken.
- Brake service includes:
  - Addition of brake fluid
  - Bleeding the hydraulic system to remove air
  - Repair or replacement of master cylinder, wheel cylinders, etc.
  - Replacement of brake linings Refinishing of brake drums

Overhauling of power-brake units.

WHEEL ALIGNMENT:

SERVICING STEERING LINKAGES AND SUSPENSION:

- If any defects are found, the causes must be determined and corresponding corrections must be made before aligning the wheels.
- Servicing steering and suspension includes removal, replacement, adjustment of tie rods, removal and replacement of other linkage parts.
- All of these services, if needed must be performed before aligning the wheels.

WHEEL ALIGNMENT:

- There are many types of wheel aligners. Some are mechanical types that attach to the wheel spindles. Some have light beams that display the measurements on a screen in front of the car.
- When doing front wheel alignment, you should first check castor, camber, toe, turning radius, etc. These are not adjustable. If they are out of specification it means parts are damaged and must be replaced.
- Before you make alignment checks, the following pre-alignment inspections must be first made.
  - Check and correct tyre pressure.
- Check and adjust wheel bearings.
- Check and adjust wheel run out.
- Check ball joints, if they are too loose, replace them.
- Check wheel balance, correct if necessary.
- Check front suspension height.
- Check shock absorbers and replace them if they are defective.
- Check wheel tracking.

- This means whether rear wheels follow the front wheels. If the wheels are off the track, it usually means frame is bent and it should be straightened

WHEEL BALANCE:

- The wheel may be checked for balance on or off the car.
- This is done in either of two ways: static or dynamic.
- In static balancing, the wheel is taken off the car and put on a ―bubble‖ balancer to detect any imbalance.
- A wheel that is out of balance is heavier in one section. This will cause the bubble in the centre of the balancer to move off the centre. To balance the wheel, weights are added to the wheel rim until the bubble returns to centre.
- In dynamic balancing, the wheel is spun either on (or) off the car. An electronic wheel balancer is used to balance a wheel on a car. Lack of balance shows up as a tendency for the wheel to move off the centre (or) out of line as it spins. If the wheel is out of balance, one or more weights are installed on the wheel rim.

ADJUSTING CAMBER AND CASTOR:

- By installing (or) removing shims.
- By turning a cam.
- By shifting inner shaft.
- By changing length of strut rod

ADJUSTING TOE:

After correcting camber and castor, toe is adjusted. Place the front wheels in straight-ahead position. Then check the positions of the spokes in the steering wheel. If they are not centered, they can be properly positioned when toe is set

TYRE MAINTENANCE:

The main purpose of tyres is that they have air-filled cushions that absorb most of the shocks caused by road irregularities and secondly they grip the road to provide good traction. Good traction enables the car to accelerate, brake, make turns without skidding. The main steps involved in tyre maintenance are: Always maintain the recommended tyre inflation pressure.

- Do not overload the vehicle beyond the capacity prescribed by manufacturer.
- Avoid frequent sudden acceleration followed by sudden braking.
- Do regular checks like wheel alignment, condition of brakes, springs, wheels, etc.
- Regularly inspect the tread condition very closely since it is equally important like other components.
- Retread the tyres promptly before they are completely defected.
- Replace the tyre before the tyre surface becomes smooth

CAUSES OF TYRE WEAR:

1. INFLATION PRESSURE:
    - Over inflation or under inflation will cause rapid tyre wear. Over inflation results in wear of the centre portion and under inflation results in wear of the shoulder.

2. TOE-IN OR TOE-OUT:
   - The excessive toe-in shows feathered edges on inside edges.
   - The excessive toe-out results in feathered edge wear on outside edges.
3. CAMBER:
   - Too much positive camber results in excessive wear on the outer shoulders of the tyres. Too much negative camber results in tyre wear of the inner shoulders
4. CASTOR:
   - Excessive castor causes the spotting wear of tyres. Unequal castor causes the wheel to pull to one side resulting in excessive and uneven wear.

TYRE FAILURE:

- The amount of wear a tyre gets depends upon its location of the car. For example on a car with rear wheel drive, the right tyre wears twice as much as the left tyre. This is because many roads are slightly crowned (higher in the centre) and also the right tyre is driving. The crown causes the car to lean out a little so that the right tyre carries more weight.
- To equalize the wear as much as possible tyres should be rotated any time, uneven wear is noticed as the distance specified by the manufacturer.
- One manufacturer recommends rotating radial tyres after 12000kms and then after every 24000kms. Bias tyres should be rotated every 12000kms.
- The amount of wear the tyre experiences depends upon its rotation on the car.
- On a car with rear wheel drive, the rear right tyre wears about twice as that of the rear left wheel.
- To equalize wear as much as possible, tyres should be rotated any time whenever eneven wear is noticed and at the distance specified by the manufacturer.

TYPES OF TYRE WEAR:

1. TOE-IN OR TOE-OUT WEAR:
   Excessive toe-in or toe-out on turns causes the tyre to be dragged sideways as it moves forward and this scraps off rubber.
   If both tyres show this type of wear, then toe is correct. But if only one tyre shows this type of wear, steering arm should have been bent.
2. CAMBER WEAR:
   If the wheel has excessive camber, the tire runs more on one shoulder than the other.
3. CORNERING WEAR:
   This is caused by taking curves at high speeds producing diagonal type of wear.
4. UNEVEN TIRE WEAR:
   It occurs due to various mechanical problems. These include misaligned wheels, over inflation of tyres, unbalanced wheels, etc.
5. HIGH-SPEED WEAR:
   Tyres wear more rapidly at high speed than at low speed. Tyres driven at 110-130km/hr will experience only half the life of tyres driven at 50-60km/hr

TYRE INSPECTION:

- The purpose of inspecting the tyres is to determine whether they are safe for further use. When an improper wear pattern is found, technician must know the cause for abnormal wear and should correct the problem.
- If the tyres are in good condition they can be rotated

- While inspecting a tyre, check for bulges in the side walls. A bulge is a danger signal. It can mean that plies are separated or broken and the tyre is likely to go flat. A tyre with bulge should be removed.
- To make complete tyre inspection, remove all the stones from the tread. This is to ensure that no tire damage is hidden by the stones.
- A quick way to check tread wear is with a Lincoln penny inserted in the tread grooves. Tread of atleast 0.79mm is needed.
- A tyre can look okay from outside but it may have internal damage. To completely inspect a tire it should be removed from the rim and then examine it closely, inside and out.

REMOVAL AND FITTING OF TYRE AND TUBE :

The procedure for the removal and fitting of tyre and tube is as below:

1) Loosen the wheel nuts of tyre to be removed.

2) Place the wedge before and after resting the three wheels to prevent vehicle from rolling.

3) Fix up jack and lift the vehicle to the extent that wheel is free from ground.

4) Remove the wheel after removing the wheel nuts.

5) Keep the wheel flat on ground and deflate it after removing valve with valve die.

6) Hammer the tyre at shoulder so that its bead is free from rim on both sides.

7) Press tyre lever between bead of tyre and rim flange.

8) Take another tyre lever; press it in the same way a little apart from the first lever.

9) Now press both levers down. By doing so some portion of tyre bead will come out of rim.

10) Pull out first lever and insert it again at some distance away from the second lever. Press it down.

11) Now go on changing the lever till tyre is out of the rim completely.

12) When one bead of tyre is out take out the tube after unscrewing valve body securing nut.

13) If tyre is to be completely replaced, proceed in the same way to remove the second bead.

14) In case, only tube is to be replaced, fix up the new tube.

15) Finally replace the tyre with caution using the levers and inflate it to correct pressure.

STEERING SYSTEM TROUBLE SHOOTING:

COMPLAINTS	POSSIBLE CAUSES	CHECK(OR) CORRECTION
1. Excessive play in steering system	□ Looseness in steering gear □ Looseness in linkage □ Loose wheel bearing	□ Readjust, replace worn parts □ Readjust, replace worn parts □ Readjust
2. Hard steering	□ Low tyre pressure	□ Inflate to correct tyre

	Friction in steering gear	pressure Lubricate, readjust, replace worn parts
	Friction in linkage	Lubricate, readjust, replace worn parts
3. Car wander	Low or uneven tyre pressure	Inflate to correct tyre pressure
	Steering gear binding	Readjust, lubricate, replace worn parts
	Linkage binding	Readjust, lubricate, replace worn parts
	Incorrect wheel alignment	Check alignment and readjust
4. Car pulls to one side during normal driving	Uneven tyre pressure	Inflate to correct tyre pressure
	Uneven castor or camber	Check alignment, adjust
	Wheel not tracking	Check tracking, replace defective parts
5. Car pulls to one side while braking	Brakes grab	Readjust, replace brake lining
	Uneven tyre pressure	Inflate to correct tyre pressure
	Uneven castor or camber	Check alignment, adjust
6. Front wheel shimmy at low pressure	Uneven tyre pressure	Inflate to correct tyre pressure
	Loose linkage	Readjust, replace worn parts
	Loose ball joints	Replace worn parts
	Dynamic imbalance	Balance the wheels
7. Steering shakes	Uneven tyre pressure	Inflate to correct tyre pressure
	Looseness in linkage	Readjust, replace worn parts
	Looseness in steering gear	Readjust, replace worn parts
	Shock absorber defective	Repair or replace
8. Tyres squeal on turns(skids)	Excessive speed on curves	Take curves at slow speed
	Uneven tyre pressure	Inflate to correct tyre pressure
	Front alignment incorrect	Check and adjust
	Worn tyres	Replace tyres

SUSPENSION SYSTEM TROUBLE SHOOTING:

COMPLAINT	POSSIBLE CAUSES	CHECK(OR) CORRECTION
1. Hard or rough ride	Excessive tyre pressure	Readjust to correct pressure
	Defective shock absorber	Repair (or) replace
	Excessive friction in suspension spring	Lubricate, realign parts
2. Sway on turns	Loose stabilizer bar	Tighten it
	Sagging springs	Repair or replace
	Castor incorrect	Adjust
3. Spring breakage	Overloading	Avoid overloading
	Defective shock absorber	Repair or replace

	☐ Loose U-bolts	☐ Keep bolts tight
4. Sagging springs	☐ Broken leaf ☐ Spring weak ☐ Defective shock absorber	☐ Replace ☐ Replace ☐ Repair or replace
5. noises	Could co me fro m any loose, worn(or) unlubricated part in the suspension(or) steering system	

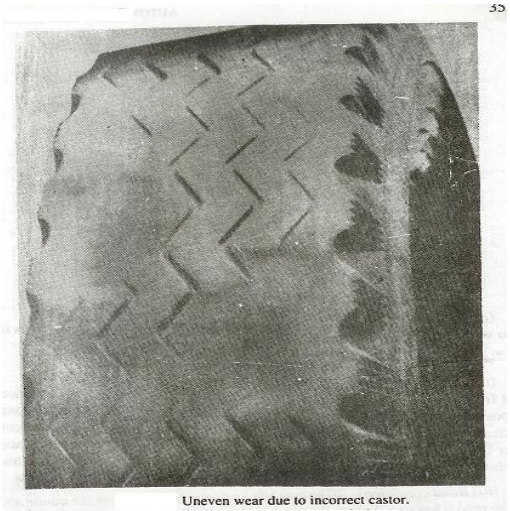
DESCRIPTION:

The wheel alignment refers to the positioning of the front wheels and steering mechanism that gives the vehicle directional stability, promotes case of steering and reduces tyre wear to a minimum. A vehicle is said to have directional stability or control if it can run straight down a road, enter and leave a turn easily and resist road shocks. The front wheel alignment depends upon the following terms – Camber, Caster, Kingpin inclination, toe- in and toe-out on turns. The front wheel geometry or steering geometry refers to the angular relationship between the front wheels, the front wheel attaching parts and the vehicle frame. All the above terms are included in the front wheel geometry. The various factors that affect the wheel alignment of the vehicles are given below

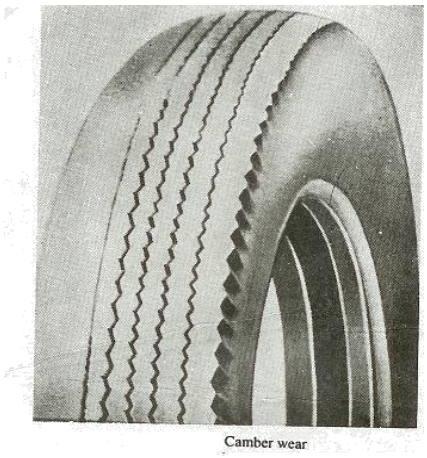
1. Factors pertaining to wheel
    a. Balance of wheels
    b. Inflation of tyres
    c. Brake adjustment
2. Steering Geometry
    a. Camber
    b. Caster
    c. Kingpin inclination
    d. Toe- in and Toe-out
3. Steering linkages
4. Suspension System

Camber

The angle between the centerline of the tyre and the vertical line when viewed from the front of the vehicle is known as camber. When the angle is turned outward, so that the wheels are farther apart at the top than at the bottom, the camber is positive. When the angle is inward, so that the wheels are closer together at the top than at the bottom, the camber is negative. Any amount of camber, positive or negative, tends to cause uneven or more tyre wear on one side that on the other side. Camber should not Exceed $2^{0.}$



Uneven wear due to incorrect castor.



Camber wear

Procedure

(i) Turn the wheel to 30^0 LHS
(ii) Adjust the sprit level such that the bubble occupies the center position.
(iii) Note the reading of the 60^0 scale.
(iv) Turn the wheel to 30^0 RHS and the above procedure is repeated and the value is noted.
(v) The difference between the two readings gives the camber angle.

Caster

The angle between the vertical line and the kingpin centerline in the plane of the wheel (when viewed from the side) is called the Caster angle. When the top of the king pin is backward, the caster angle is positive and when it is forward the caster angle is negative. The caster angle in modern vehicles range from 2 to 8 degrees.

Procedure

(i) Park the car on the turning table
(ii) Turn the wheel alignment gauge to 900.
(iii) Fix the wheel alignment gauge on the wheel.
(iv) Turn the wheel to 250 in RHS.

(v) Adjust the bubble to its original position

(vi) Note the reading on the 50-degree scale and the noted value will give the caster angle.

Kingpin inclination

The angle between the vertical line and center of the kingpin or steering axle, when viewed from the front of the vehicle is known as kingpin inclination or steering axle inclination. The kingpin inclination in combination with caster is used to provide directional stability in modern cars, by tending to return the wheels to the straight-ahead position after any turn. It also reduces steering effort particularly when the vehicle is stationary. It reduces tyre wear also. The kingpin inclination in modern vehicles range from 4 to 8 degrees.

Procedure

(i) Park the car on the turntable.

(ii) Fix the wheel alignment gauge on the wheels.

(iii) Turn the wheel to 300 RHS and adjust the spirit level such that the bubble occupies center position.

(iv) Note the value on the 600 scale and the value gives the kingpin inclination.

Toe- in and Toe-out

The front wheels are usually turned in slightly in front so that the distance between the front ends

(A) is slightly less than the difference between the back ends (B), when viewed from the top. The difference between these distances is called toe- in. The amount of toe- in usually 3 to 5 mm. The toe-in is provided to ensure parallel rolling of the front wheels, to stabilize steering and prevent side slipping and excessive tyre wear.

Toe-out is the difference in angle between the two front wheels and the car frame during turns. The steering system is designed to turn the inside wheel through a larger angle tha n the outside wheel when making a turn. The condition causes the wheels to toe-out on turns, due to difference in their turning angles. The toe-out is secured by providing the proper relationship between the steering knuckle, tie-rods and pitman arm.

Procedure

(i) The toe-out bar is positioned from the front of the vehicle such that the pointer touches the wheel and the distance between the wheels is found from the scale on the bar. Keep is as (A).

(ii) Similarly the distance between the front wheels on the rear side is noted. Keep it as (B).

(iii) From the readings we can find out toe- in or toe-out. If A > B, then it is toe-out and if B > A, then it is toe- in.

Toe-out on turns

(i) Park the car on the turn table.

(ii) Turn the wheel to extreme left.

(iii) The readings in both the turntable are noted. The difference in the reading will give the toe-out on left turn.

(iv) Similarly the values are calculated for the right turn.

Wheel Bearing Tightening and Adjustment

Hoist the vehicle and remove the rear wheel.

- Remove spindle cap by hammering at 3 or 4 locations.
- Remove the split pin, castle nut and washer.
- Check to ensure that the parking brake lever is not pulled up.
- Remove the back plate plug attached to the backside of brake plate, so as to increase clearance between brake shoe and brake drum.
- Remove the wheel bearings.
- Insert the new stud in drum hole after rotating the stud slowly to assure the serrations are aligned with these made by original bolt.

Ensure that all the nuts are tightened properly

BRAKE MAINTENANCE & REPAIR

Automobile braking systems are engineered to deliver precise movements to slow or stop your vehicle on demand. When you apply the brake pedal, the master cylinder generates pressure through hydraulic brake lines triggering brake pads or shoes to press against discs and/or drums that slow and stop your vehicle. The friction and heat generated wears down brake shoes, pads, calipers, rotors and other brake components.

Brake Rotor Maintenance and/or Replacement

Brake rotors and brake pads are the two most renowned items in your vehicle's braking system. The rotors are iron discs mounted to your wheel hubs which are gripped by brake pads or shoes encased in a caliper system. Slots or circular holes may be found on your brake pads or on the rotors themselves which are incorporated to circulate air to cool the brake system providing more effective braking while extending rotor longevity.

Disc Brake Repair

Most modern-day vehicles are equipped with disc brakes in both the front and rear. Disc brake systems are comprised of brake pads, calipers, rotors, and hydraulic components. Calipers squeeze brake pads against rotors to slow or bring the vehicle to a stop in disc brake assemblies. Ventilation holes or slots may be present on the rotors in order to help dissipate heat and cool the brake system. Although brake pads and rotors require the most maintenance, any portion of the disc brake assembly may need attention from time-to-time.

Drum Brake Repair

Certain vehicles are manufactured with rear drum brakes in place of rear disc brakes. Drum brake assemblies consist of brake drums, shoes, wheel cylinders, springs and self-adjusters. Brake shoes rest against the "drum" until the brakes are pressed sending brake fluid through the wheel cylinders against the brake shoes which squeeze against the drum and creates stopping power. Upon release of the brake pedal, the springs return the brake shoes back to their starting position. This self-adjusting system helps keep the brake shoes in position when the brakes are not applied. As the brake shoes wear, a self-adjuster compensates for the gap by moving the brake shoe closer to the brake drum.

Parking Brake Repair

A parking brake's sole function is to keep your vehicle stationary when parked, especially when parked on steeper grades. Parking brakes are typically synonymous with "emergency brakes" since their use can be for sudden stops to prevent accidents and operate mutually exclusive of the main braking system. A parking brake check should be part of any routine brake inspection.

SUSPENSION SYSTEM SERVICE

A suspension system undergoes tremendous abuse during normal vehicle operation. Bumps and potholes in the road surface cause constant movement, fatigue, and wear of the shock absorbers, or struts, ball joints, bushings, springs, and other components.

Suspension system problems usually show up as abnormal noises (pops, squeaks, and clunks), tire wear, steering wheel pull, or front end shimmy (side-to-side vibration). Suspension system wear can upset the operation of the steering system and change wheel alignment angles. Proper service and maintenance of these components greatly increase reliability and vehicle life.

Macpherson Strut Service

- Macpherson strut shock fails
  - Common repair procedures
    - Replace entire assembly
    - Install a strut cartridge
- Some struts are easily removed at the bottom by removing two bolts
  - Spring compressor is used to compress the coil spring
  - Some struts can be serviced with a shock cartridge
- Inspect the upper strut bearing
  - Inspect condition of upper strut bearing while strut is disassembled

- Install the coil spring
  - Install coil spring and tighten locknut
  - Be sure both ends of spring are correctly seated before removing compressor
- Reinstall in same position as before
  - Wheel alignment may be needed after strut replacement
  - Brakes will need to be bled if brake caliper was disconnected

Coil Spring Service

- Characteristics
  - Coil spring will rarely break unless it has been constantly overloaded or has a stress raiser
  - Incorrect ride height affects wheel alignment angles, camber, toe, SAI, and scrub radius
  - A vehicle that is too low cannot be aligned properly
- Adjusting spring height
  - Correct ride height must be restored prior to alignment
  - Coil springs must be replaced when they have sagged beyond specifications
- Coil spring replacement
  - Replaced in front or rear pairs
  - Replacement springs must be of the same kind
- Major considerations
  - During a coil spring replacement: only lower ball joint needs to be removed
  - Spring seats must be accurately aligned
  - Torsion bar adjusting bolt must be loosened before removing torsion bar
  - Leaf spring problems include broken leaves, spring sag, and differences in ride height

Leaf spring service

Leaf springs are likely to wear because they have several moving parts. They should be inspected at intervals specified by the car manufacturer, or at major service intervals - usually every 12,000 miles (20,000 km).

The standard leaf spring is made from several thin strips of sprung steel of different lengths and held together by clamps. It is subject to wear as the leaves rub against each other during suspension movement. To overcome this, a tapered-profile single leaf spring is fitted on some vehicles. Dirt particles between separate leaves accentuate wear and rust. The springs should be kept fairly clean in order to extend their useful life. The intervals at which this is done will be given in your car handbook. Modern leaf springs do not need lubricating with oil — which may damage any anti-friction material between leaves. Spray them instead with a silicone-based lubricant.

STEERING SYSTEM MAINTENANCE

Maintenance of the steering system consists of regular inspection, lubrication, and adjusting components to compensate for wear. When inspecting the steering system, you will need someone to assist you by turning the steering wheel back and forth through the free play while you check the steering linkage and connections. You will also be able to determine if the steering mechanism is securely fastened to the frame.

As light amount of free play may seem insignificant, but if allowed to remain, the free play will quickly increase, resulting in poor steering control after prolonged use, steering components can fail. t is important that the steering system be kept in good working condition for obvious safety reasons. It is your job to find and correct any system malfunctions quickly and properly

Steering Linkage Service

Any area containing a ball-and-socket joint is subjected to extreme movements and dirt. The combination of these two will cause the ball-and-socket joint to wear. When your inspection finds sworn steering linkage components, they must be replaced with new components. Two areas of concern are the idler arm and the tie-rod ends.

IDLER ARM SERVICE

A worn idler arm causes play in the steering wheel. The front wheels, mostly the right wheel, can turn without causing movement of the steering wheel. This is a very common wear point in the steering linkage and should be checked care fully. To check an idler arm for wear, grab the outer end of the arm (end opposite the frame) and force it up and down by hand. Note the amount of movement at

the end of the arm and compare it to the manufacturer's specifications. Typically, an idler arm should NOT move up and down more than 1/4 inch. The replacement of a worn idler arm is as follows: Separate the outer end of the arm from the center link. A ball joint fork or puller can be used to force the idler arms joint from the center link.

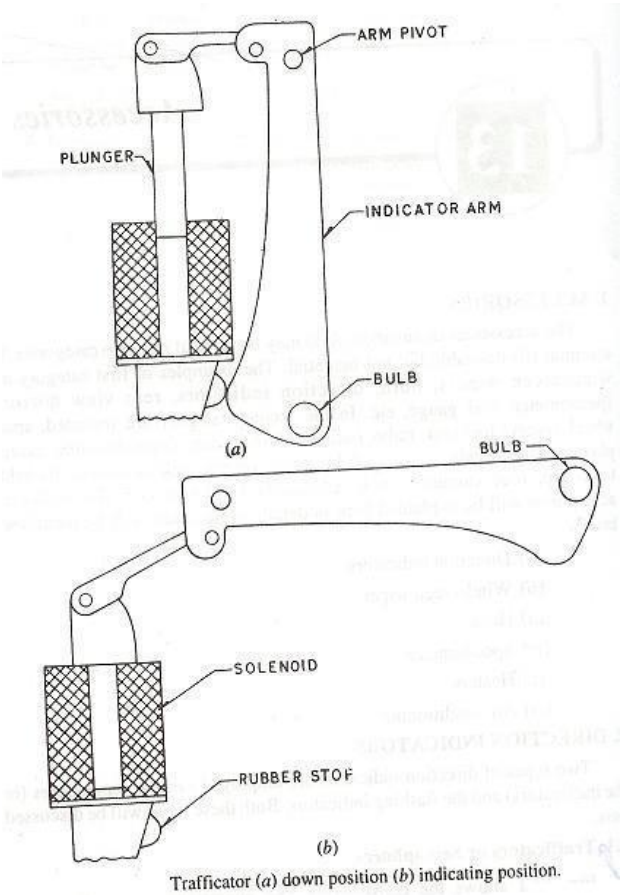
With the outer end removed from the center link, unbolt and remove the idler arm from the frame. Install the new idler arm in reverse order of removal. Make sure that all fasteners are torqued to manufacturer's specifications. Install a new cotter pin and bend it properly.

MANUAL STEERING SYSTEM SERVICE

Steering system service normally involves the adjusting or replacement of worn parts. Service is required when the worm shaft rotates back and forth without normal pitman arm shaft movement. This would indicate that there is play inside the gearbox. If excess clearance is not corrected after the adjustments, the steering gearbox must be replaced or rebuilt.

HORN SYSTEM

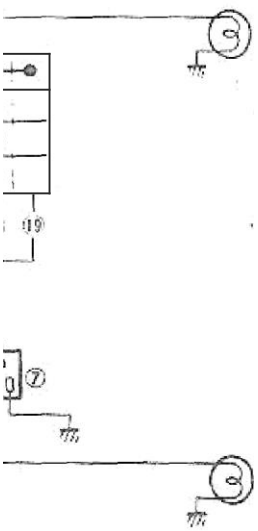
The electrically operated horn system consists of a diaphragm and an armature inside a field coil. The contacts are shown closed, which is the position when the horn switch is in the off position. When the driver pushes the horn switch the circuit is completed and the field coil produces an emf, which causes the armature along with it the diaphragm too move down, the contacts separate opening the electrical circuit. The field coil is then de energized and again the armature moves up on account of the force of a mechanical spring, which keeps it into the upper most position. This motion causes the diaphragm to vibrate in up and down motion causing the vibrations of air column below it. These vibrations of air column subsequently produce the horn sound, which depends upon the frequency of diaphragm. The horn system is used to alert the pass4ngers on the road or the other vehicles to move away.



Trafficator (*a*) down position (*b*) indicating position.

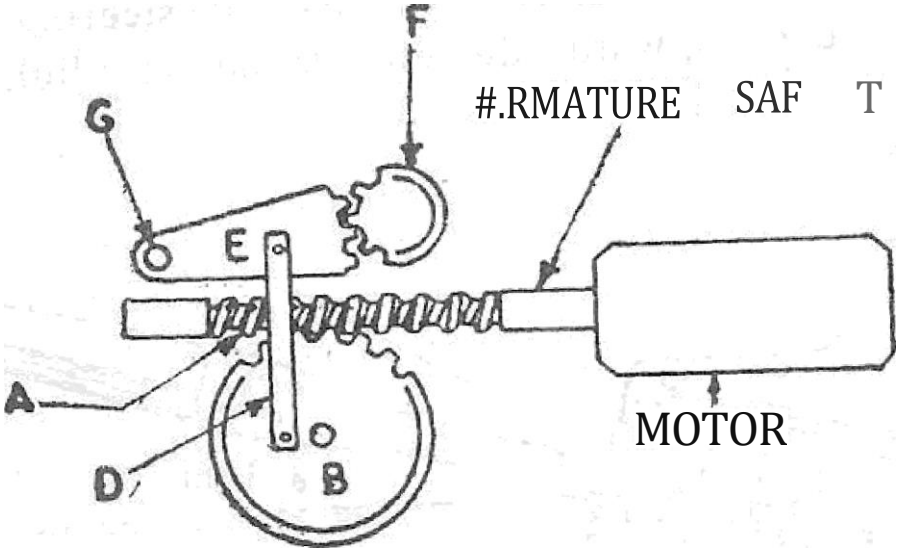
TURN SIGNAL LIGHT AND HAZARD WARNING LIGHT

CIRCUIT DESCRIPTION

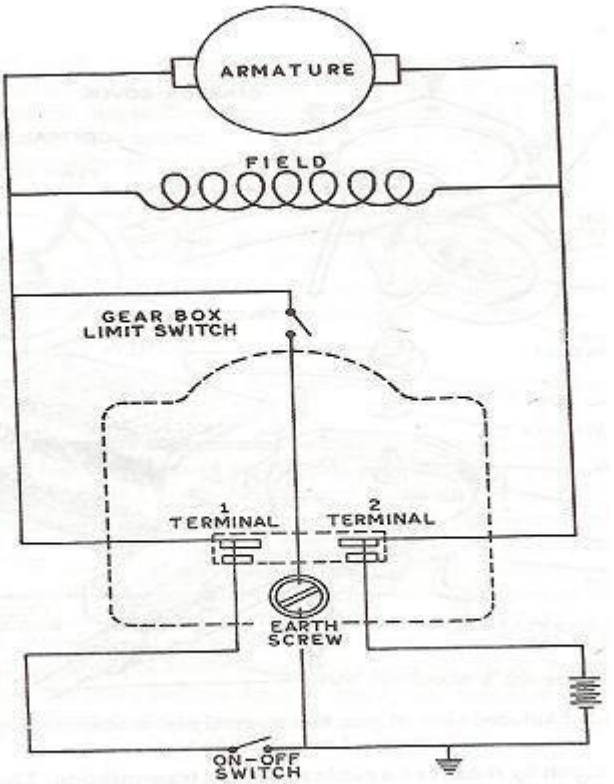


1
2.
gh1 (Right)
gh1 (Left)

Battery	10. Yellow	17. Side turn signal (Right)
Main switch	11. Yellow/Blue	18. Side turn signal (Left)
Fuse	12. Green	19. White/Green
Turn signal and hazard warning switch	13. Black/Blue	
Turn signal and hazard warning relay	14. Green/Red	



Wiildscrecn wiper.



Circuit diagram for the Lucas windscreen wipe

Charging system

The function of the charging system in an automobile is to generate, regulate and supply the electrical energy for charging the battery. The charging system consists of a generator for converting mechanical energy from the engine to electrical energy, a regulator to control the amount of electrical energy so produced, a relay to regulate the flow of the charging current from the generator to the battery relevant to the state of the charge of the battery and an ammeter or indicating lamp to indicate whether the system is operating or not.

UNIT **V**

AUTO ELECTRICAL AND AIR CONDITIONING MAINTENANCE

BATTERIES:

TESTS CONDUCTED ON BATTERIES:

ROUTINE OR LABORATORY TEST:

- Hydraulic test – To measure specific gravity of electrolyte.
- High discharge test – To measure discharging current.
- Individual cell tests – Cell voltage can be measured.
- Cadmium test – Cell voltage can be measured.

1. SPECIFIC GRAVITY TEST (HYDORMETER TEST)
    - Specific gravity is the rate of density of given fluid to density of water.
    - Specific gravity test is performed to know the condition of the battery.

    There are two types of hydrometers.

➢ Ball type Hydrometer:

To use this hydrometer stick the rubber tube to the cell electrolyte, then squeeze and release the bulb. This draws electrolyte in to the glass tube, the no. Of balls that float indicates the batteries state of change. If all the balls float, then the battery is fully charged. If no balls float, then the battery is fully discharged.

➢ Float type hydrometer:

This has float with stem that sticks up above the electrolyte level in the tube. The float stem s marked to indicate the specific gravity of the electrolyte. The height of the stem above the electrolyte indicates batteries state of change.

2. CADMIUM TEST:
    - ➢ This test is performed to know the chemical condition of plates and it is performed when the battery is either on-charge or discharge.
    - ➢ A cadmium rod is enclosed in a perforated ebonite tube and is immersed in electrolyte. Then the rod is connected to the negative terminal of voltmeter and the positive terminal of voltmeter is connected alternatively to positive and negative terminals of the battery cell.
    - ➢ The voltmeter shows reading for both positive and negative terminals .The 2 readings are then added to obtain potential difference between the plates. The plate in good condition will show potential difference of above 0 for positive plate and below 0 for negative plates.

3. HIGH RATE DISCHARGE TEST:
    - This test determines actual capacity of the battery that converts chemical energy into electrical energy.
    - This test should be conducted only if specific gravity of the electrolyte is more than 1.215.
    - The prods of the tester are placed on the cell terminals and the voltmeter indicates the cell voltage. The duration the test is very small since high current of 100A – 200A flows across resistance.
    - For a 12V battery, if the cell is fully charged, the test should show a battery voltage not less than 10V and other cells should show the same reading.
    - Lower voltage readings indicate faulty cells or cell is not in proper position to hold full charge.
4. OPEN VOLT TEST:
    - To conduct this test, very accurate and sensitive voltmeter is required.
    - For a 2V cell, if a battery cell is in good condition and fully charged, it must have a open circuit voltage of 2.15V.
    - The batteries which have been just charged should not be tested since gases on the plates would cause high reading. These gases should be eliminated by subjecting the battery to high discharge for few moments and we have to measure the open circuit voltage.
    - If the voltage is 2.15V for 2V battery cell, then it indicates it is fully charged. Here 0.01 volt of open circuit voltage = 0.01 specific gravity of electrolyte. Therefore, voltage of the cell = specific gravity + 0.840.

INSTALLING THE BATTERY:

- Batteries should be fitted in easy accessible position.
- Battery connecting cables should be flexible ad sufficiently long to prevent strain on battery.

ELECTTROLYTE LEVEL:

- Check the level of the electrolyte periodically once in forth night or every 800 km.
- Add pure distilled water as necessary.
- Electrolyte level should be 1/4th above the top of separator.

TERMINAL CONNECTION:

- Clamp connections to the terminal post must fit well to avoid contact resistance.
- All the corrosion products should be removed.
- Terminals should be washed, dried and covered with vasoline.

VENT PLUG:

- Keep vent holes free from dust disposition.

BATTERY CHARGING:

- Batteries must be fully charged to have uniformity of the specific gravity readings and voltage of the cells.

TEMPERATURE OF THE ELECTROLYTE:

- The temperature of the electrolyte must not exceed 50℃ during charging.
- Over charging, undercharging and over-discharging must be avoided.
- If the specific gravity of the electrolyte is 1.28, it indicates the battery is fully charged. If the specific gravity of the electrolyte is 1.125, it indicates that battery is fully discharged and it is corrected to 27℃.

MAINTENANCE OF STARTER MOTOR:

- Starter motor needs lubrication only during overhaul or it requires lubrication every 5000 miles or 300 hours of operation.

Trouble Shooting:

- Visual and electrical checks should be made.
- Check the battery voltage and specific gravity.
- Inspect the wiring for proper insulation.
- Make sure all ground connections are clear and tight.

There are 4 common symptoms that indicates defect in the starter systems.

- Starter springs freely.
- Engine cranks noisily.
- Engine cranks slowly.
- Engine does not crank.

Inspection and Repair:

The various parts line brushes , brush holder, armature and the field coils should be inspected and repaired.

MAINTENANCE OF GENERATORS:

- The maintenance of generator infact includes mainly its lubrication, brush wear inspection and adjustment of belt.

- Certain generators do not need lubrication as their bearings are pre-packed with grease whereas other models should be lubricated at the appropriate holes provided for this purpose after intervals of 10,000 Km.
- The brushes should be inspected after every 30,000km and should be replaced if their wear is found to be more than specified value.
- This inspection should be done on and off to see that there is enough tension.
- The sagging when present at the middle of the belt should be about 12mm.
- If the belt is too tight, it is liable to damage the water pump gland and generator bearings.
- On the other hand a very loose belt will not drive the generator efficiently and also ensure that generator pulley does not become oily as this will cause the belt to slip.

TESTING OF GENERATOR – REGULATOR SYSTEM:

- An accurate ammeter is connected in series in the battery circuit. The reading on the ammeter gives the charging rate.
- The state of the battery is tested with the hydrometer.
- From the above two observations any of the four conditions is found to exist.

a) Discharged battery and a high charging rate.

b) Charged battery and low charging rate.

c) Charged battery and high charging rate.

d) Discharged battery and a low charging rate.

Out of these (a) and (b) are the normal conditions and the remaining 2 conditions may be investigated to locate the source of the trouble.

c) →Investigation of charged battery and high charging rate:

- Run the generator at medium speed.
- Disconnect the F load at the regular terminals, thereby opening the generator field circuit. I
- f this causes the generator output to drop, it indicates that generator is alright and so took for the trouble in the regulator.

d) → Investigation of discharged battery and low charging rate: \

- The possible for this may be - Defective wiring or loose connection.
- If on inspection, the connections are found to be correct and this leads to good condition short cut the generator field circuit in the regulator.
- With the generator running at medium speed and the generator field circuit shorted.
- If the output increases, the fault lies in the regulator.
- If the output does'nt increase, it indicates a faulty generator.

GENERATOR FAULTS AND THEIR DIAGNOSIS;

1. No ouput:

a) Visual inspection:

- If the generator is not giving any output, the first step is to remove the cover band and have visual inspection.
- Check for sticking brushes , burnt commutator and loose connections.
- If everything looks alright, disconnect the generator leads and proceed with further tests with the help of test-lamp.

b) Ground test:

- Insert some paper or some other insulation between commentator and the grounded brush.
- Check for the ground with test lamp between generator brush and the frame.

c) Open field test:

- Place the test lamp between the armature and generator field terminal.
- If the lamp does'nt light, the field circuit is open.

d) Short field test:

- Connect a battery of the specified voltage and ammeter in series with the field circuit.
- If the current flow is higher than the specified value by the manufacturer, the field coils are shorted and replaced.

2. Low or unsteady output:

- The following are the causes for it.
- Generator drive belt may be loose and be slipping.
- Worn out brushes.
- Defective brush spring.
- Dirty or worn out commutators

3. Excessive output:

- In the externally grounded field type of generator, excessive output is caused because of internal grounding of the field circuit, which prevents excessive regulation.
- This may be tested by connecting the test lamp between 'F' terminal and the generator frame, with the 'F' leads disconnected and some insulation is placed between the commutator and field brush.
- If the test lamp lights the field is internally grounded.

4. Excessive noise: Excessive generator noise may be due to:

- Loose drive pulley.
- Worn out bearings.
- Worn out commutator.
- Improperly seated brushes.

ALTERNATOR MAINTENANCE:

An alternator in an AC generator producing alternating current instead of direct current.

- At regular intervals , inspect the terminals for corrosion and loose connection.

- Check for mounting bolts, nuts and belts.

- Adjust the belt tension according to the recommendation of manufacturer of engine.

- Check for noisy operation that may be due to worn out bearings.

On car test:

- Some tests can be made on charging system without disconnecting or removing any part from the car. Tests are for voltage and are made with a voltmeter.
- Begin with a charged battery and ignition off, clip meter probe to the positive terminal of the car battery, other to negative terminal. Read the voltage which will be about 12V. This is battery reference voltage.
- Now run the engine at fairly high speed with lights and all accessories off. Read the voltage on meter again and compare it to reference voltage.
- If the voltage has not changed, the alternator is probably defective. To test the alternator, if voltage is 2 or more volts higher the reference voltage, regulator is defective and should be replaced. If the voltage increase fall between 0 and 2V, then make the next test.
- Now run the engine at high speed with all the lights and accessories switched on. If the voltage increases by ½ volt or above reference voltage, then alternator and voltage regulator are ok. If the voltage s increased by less than ½ volt, then proceed with the test.
- Now run the engine off, then disconnect probe s of the voltmeter. Reclip one of the probes to the alternator terminal (BAT) and other probe to the ground. Restart the engine with lights and accessories on at high speed again. If the voltage does not increase more than ½ reference voltage, turn off the engine and check alternator for the defects. If the voltage increases by more than ½V then the regulator is defective.

- <u>ALTERNATOR TESTS:</u>
- 1) Rotor test:

Connection:	Reading:	Result:
Ohm meter from slip ring to shaft.	Very low.	Grounded.
110V test lamp from slip ring to	Lamp glows.	Grounded.

shaft.		
Ohm meter across slip rings.	Very high.	Open.
110V lamp across slip rings.	No light.	Open.

2) Stator test:

Connection:	Reading:	Result:
Ohm meter from load to frame.	Very low.	Grounded.
110V test lamp from load to frame.	Lamp glows.	Grounded.
Ohm meter across each pair of leads.	Very high.	Open.
110V lamp across each pair of leads.	No light.	Open.

3) Diode test:

Connection:	Reading:	Result:
Ohm meter across diode then reverse connections.	a) Both readings very low. b) Both readings very high.	Shorted. Open.
12V test lamp across diode and then reverse connections.	a) No light in both checks. b) Lamp lights in both checks.	Open. Shorted.

REGULATOR MAINTENANCE:

- Inspect for burning of various regulator contacts. The contacts are burnt due to excessive current caused by faulty connections.
- Even during normal operation, a small arc occurs during each time the regular contacts open and oxide formation takes place in the contacts and hence cleaning or replacement is required. If oxide formation is small, contacts must be cleaned and if there are large oxide deposits then the points may be.

IGNITION SERVICE:

CAUSES FOR IGNITION FAILURE:

1. Loss of energy in primary circuit: This may be due to:
   - Improper point setting
   - Discharged battery.
   - Defective generator.
   - Defective condenser.
   - Grounded primary circuit.
2. Loss of energy in secondary circuit: This may be due to:
   - Fouled plugs.

- Defective high tension winding.
- Defective connection in the high tension circuit.
- High tension leakage across coil head , rotor.

3. out of time:

   This may be due to:
   - Improper ignition timing.
   - Defective vaccum advance mechanism.
   - Defective centrifugal advance mechanism.
   - Worn distributor shaft.
   - Pre-ignition due to fouled plugs.

IGNITION TIME-UP:

- Test the battery and cables.
- Test the ignition coils and condenser.
- Test the distributor.
- Select the high tension wiring.
- Check the contact points.
- Check the spark plugs.

MAINTENANCE OF LIGHTING SYSTEM:

Adjusting Head light:

- It is necessary to focus the bulb before aiming.
- Adjustment of the bulb can be made by moving the bulb back and forth with respect to reflector.
- Aim the head lights such that it points correctly both horizontally as well as vertically.

Head light Aiming:

There are two aiming devices in use:

1. Screen.
2. Prism and reflector.

1. Screen test:

- A screen on which the head light pattern can be studied with the vehicle located 25 feet infront of the screen.
- Draw 3 lines A,B,C. Distance AB should be centre distance of headlights and distance C should be headlight centre height from the ground. Now switch on the light. The majority of light should fall on the lower portion of screen and if the light rays are not focussed properly, then it has to be adjusted.

2. Prism and reflectors:

- This does not require so much room. This method consists of series of prisms and reflectors that show an accurate miniature pattern of the head light beam and miniature screen.
- Adjusting screw and mounting bracket nuts must be turned or loosened to permit swinging of light up or down or from one side to others.

ELECTRIC HORN CIRCUIT:

HORN POSSIBLE CAUSES AND REMEDIES:

Producing weak signal:

- Check whether the voltage is less than 5.25V (11 volts mormally) and test fro battery.
- Use jumper lead to check relay as the cause for drop.

No sound:

- Check for open circuit.
- Remove shell and inspect contact points.

Worn out parts.

- Otherwise winding may be open, so replace it.

GAUGES:

ENGINE TEMPERATURE GAUGE:

- The engine temperature gauge is mounted on the intake manifold or at cylinder head.
- This type of fuel gauge checks the temperature of engine cooling system. It cautions the driver by indicating engine is over heated and this may lead to damage of engine parts, especially piston.
- In this figure, the operating current is supplied from battery through the ignition switch to both dash unit as well as engine unit.
- Throughout the operation of the gauge, the current flowing through the left coil is constant whereas the current flowing through the right coil changes depending on the water temperature.
- When the water is cold, the battery current flows to the earth through the left coil. This causes armature with pointer to move to left and indicating that it is cold.
- When is gets heated up, the resistance decreases and more amount of current flows to the right coil. This results in stronger magnetic field in the right coil. Hence the armature with the pointer indicates that it is hotter.

Testing:

Check the wire connection from ignition switch to the gauge for faults. During starting blue - light glows indicating cold condition.

At 125°F – Again blue light glows indicating cold condition. At 245°F – Red light glows indicating hot condition.

If the bulb does not light:

- Disconnect and check for bulb.
- Grounding of switching is checked.
- If necessary replace temperature switch.

FUEL GAUGE:

- This mainly consists of 2 units, dash unit and tank unit. These both are connected in series with suitable wire.
- When the ignition switch is switched on, the current flows from battery to both units.
- The tank consists of a float connected to the one end of hinged arm and other end is connected to sliding content.

- The sliding contact moves along resistance. The float moves up or down according to the fuel level in the tank.
- When the fuel level in the tank is empty then, the sliding contact moves to the left and thus more current flows to the left coil in the dash unit and only little pass through the right hand coil. The armature along with pointer moves to the left indicating the fuel level in the tank.
- Similarly when the fuel level in the tank is high, then the float moves up and the sliding contact moves to the right and thus more current flows to the right coil in the dash unit than the left coil. Now the right coil is magnetically stronger than the left coil. The armature with the pointer moves to the right indicating fuel level is high.

Testing :

- If the gauges are inaccurate, then calibrate it.
- If the voltage reading is steady, then change the regulator.
- If the resistance is around 8 to 12 ohms, float will be in upward position.
- If the resistance is around 60 to 80 ohms, float will be in downward position.

ELECTRIC FUEL PUMP:

TROUBLE SHOOTING:

1. INSUFFICIENT FUEL DELIVERY:

Causes:

- Clogged filter screen in the pump.
- Restriction in fuel line.
- Incorrect float lever, malfunctioning of inlet needle in carburetter.
- Vapour trapped in fuel.
- Air leak on inlet side of fuel pump.

Remedies:

- Clean or replace filter.
- Repair fuel line or remove restriction.
- Check the vapour lock.
- Tighten and clean all connection of the pump.
- Clean gas cap or tank vent.

2. PUMP NOT OPERATING:

Causes:

- Damaged wiring.
- Loss of ground.

Remedies:

- Inspect mountings and all the wirings.
- Clean frame on which pump is mounted.
- Replace fuse.

3. CARBURETTOR FLOODING:

Causes:

- Worn needle and seat assembly in carburettor.

- Too much pressure due to wrong model fuel pump.
- Air leak on inlet side of fuel pump.
- Increased pressure due to fuel pump.

Remedies:

- Replace the worn needle.
- Reduce the pressure.

Headlights, Trafficator lights and Parking lights

The requirements of headlights for automobile are that this should illuminate the road ahead at the reasonable distance with sufficient intensity.

The trafficator are shown in the diagram. A solenoid contains a plunger, which is further connected with the pivoted indicator arm. When the vehicle has to take a turn, the driver operates the trafficator switch. This energies the solenoid which pulls the plunger down so that the indicating arm is lifted up to the horizontal position. The direction of the vehicle about to turn is indicated by it.

Windscreen wiper

Windscreen wiper is operated by mea ns of a small motor. The motor drives the worm „A" which rotates the wheel „B", the sector „E" reciprocates about the fulcrum. This motion is then imparted to a similar sector „F" on the spindle on which it is mounted the wiper arm. Wiper blade is attached to the wiper arm by means of a spring lock. A rubber-wiping element is held in place in the wiper blade. When the motor rotates the wiper blade wipes off the glass.

Description :

Soldering

Soldering is the process of joining two or more pieces of metal by means of fusible alloy or metal called solder, applied in the molten state.

Soldering is basically of two types.

1. Soft soldering
2. Hard soldering

Soft soldering

It is used extensively in sheet metal work for joining parts that are not exposed to the action of high temperatures and are not subjected to exclusive loads and forced.

Hard soldering

- It employs solders which melt at high temperatures and are stronger than those used in

soft soldering.

- Silver soldering is hard soldering method and silver alloyed either tin uses a solder. The temperature of
- various hard solders varies from 600 to 900 degrees. The fluxes are mostly in the form of paste and are
- applied to joint with a brush before heating.

Denting

- The process of body repairing and refinishing is called denting. It mainly involves sheet metal works in
- which the damaged body panels and fenders are straightened or given profiles to make them look like the original item.

The need for denting of a vehicle arises when,

- The fenders, doors or panels are junked.
- Panels are twisted after collision.
- A series of ridges are seen on certain area.
- A damaged wrinkled panel is to be straightened.
- A protruding sheet metal is to be pressed back into position.
- The patches or scratches have come up and the original colour has faded.

The denting is also called as dinging process which involves number of processes such as bending, flattening, shearing, filling, painting, colour matching etc. These processes are performed with the help of modern tools are equipments most of which are described. Some tools are very common and essential for the denting and are generally referred as denting tools. These are fender-straightening hand tools, center punches, metal shears, pull rods, dolly blocks, dinging hammers et.

Window rising mechanism

Windows are provided in the upper part of the doors. They are used to admit natural light when closed and allow inflow of air when open. To provide additional passenger space without increasing the overall vehicle width, the window glasses are curved at passenger shoulder level. They are made of one-piece safety glass of bout 5 – 6 mm thickness. Like windshield glass they are also made of toughened (tempered) or laminated glass. The window can be raised or lowered by means of a window lever through mechanism. A rack and pinion mechanism is employed for

this purpose.

Door locking mechanism:

To open form outside

As soon as the push button is pressed, the catch is raised upwards and the slotted disc rotates and free from the U- fitting. When the catch is raised up, locking bar is also raised up with the catch. When the U-fitting is free from slotted disc, the door is opened.

To open from inside

To unlock the door from inside, the locking bar is raised initially and then inside opening lever is pulled up. If this inside opening lever is pulled up the catch is raised and the slotted disc rotated and fee from the U- fitting.

Door in closed position

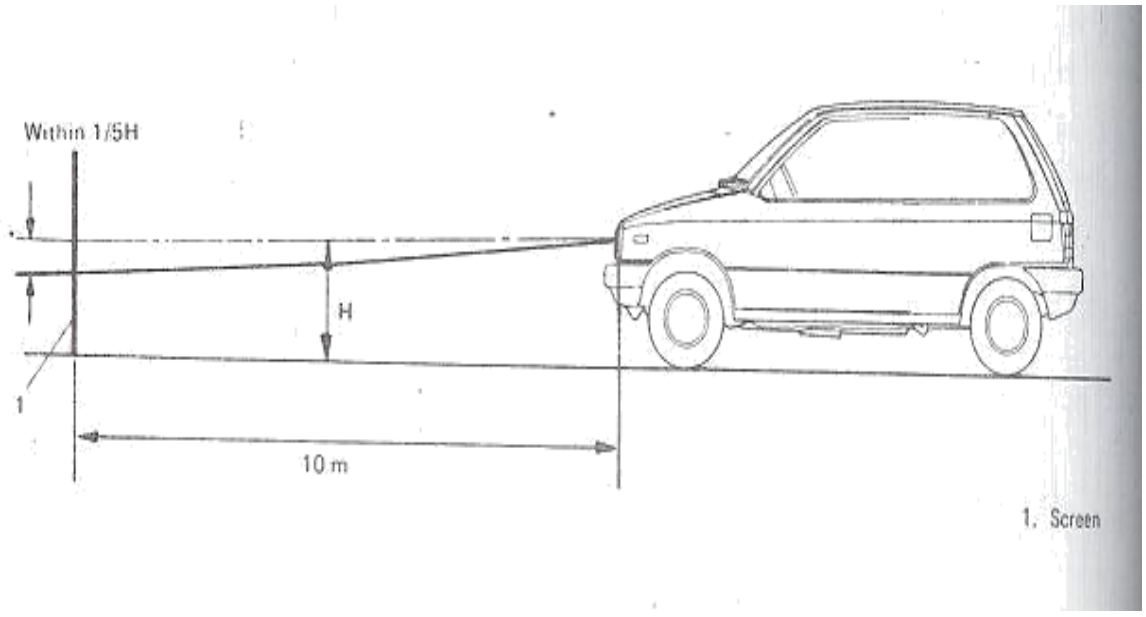
When the door is closed the slotted disc rotates and fastens into the V- fitting. During this operation the catch with locking bar is also selected into the slot. Once the slotted side fastens the V- fitting, the door is locked

Adjustment of head light beam :

The headlights of a vehicle have to be focused to ensure that light falls at proper angle on the road. To adjust these proceed as follows

Park the vehicle on level ground 25 feet away from a white wall. Draw three lines A, B and C. Distance AB should be center distance of headlights and distance C should be headlight center height from the ground. Now switch on the light. The majority of light rays should fall on circular area as shown. If one light ray goes up, down or sidewise, it should be adjusted through adjusting screws fixed in the headlamp body as shown

Finally replace the tyre with caution using the levers and inflate it to correct pressure



ROUTINE MAINTENANCE SCHEDULE -AIR CONDITIONING

3, 6, 9 monthly

- Inspect & clean air filter as per unit maintenance manual.
- Check unit heats & cools.
- Check unit for noise and vibration (both indoor and outdoor units).
- Check refrigerant pipe connection for signs of leakage.
- Remove rubbish & dust accumulation from outdoor coil fins.
- Check and clean indoor unit condensate tray and drain

12 monthly

- Carry out 3 monthly tasks.
- Check all electrical connections, controls and safety functions.
- Clean coil and straighten damaged fins on both the indoor and outdoor units.
- Check suction & discharge operating pressure.
- Check operation of de-ice controls, HP, LP safety controls & compressor contactor.

AIR CONDITIONING SERVICE COMPONENTS

1. **Compressor:**

An air conditioning compressor is a pump that moves the refrigerant thru the whole system. Some units have a two-speed compressor or two separate compressors on the same units. This feature allows the system to work on a low and high speed, low speed for mild temperature days and high speed for very hot or cool days.

2. Blower motor:

It's the motor that pushes the air flow from your air handler system thru your duct work and vents. Some AC systems have a multi-speed blower motor and others have a variable speed blower motor. The multi-speed motors have a low, medium and high setting which is set during the installation process. The variable-speed motor changes on its own from low to high speed - making the system work on a low profile and thus more efficient. Variable speed motors are great for humidity control.

3. Evaporator Coil:

The Evaporator coil is located in the air handler unit and is part of the system that removes the heat or cool from the conditioner space. While the compressor is moving refrigerant thru the Evaporator coil during the cool temperature setting, the hot air from the conditioner space gets stuck on the evaporator coil and is removed outside the area. The process is reversed when the HVAC system is running on heat mode.

4. Condenser Coil:

The Condenser Coil is located on the outdoor unit or heat pump system. When the refrigerant comes back from the evaporator coil it travels thru the condenser coil at hot temperatures, dissipating the heat from the conditioner space. The same process is true in the winter, only cold temperatures are dissipated in this way. That's why if you put your hand on top of the outdoor unit you will feel hot air coming out when the AC is on or cool air if system is running on heat mode.

5. Filtration:

Every air handler has a filtration system of some kind. These filters come in a variety of sizes and types. The most common is the standard 1" air filter, but other systems may use a 5" air filter, a media filter or an electronic filter. Each of these filtration methods requires some type of maintenance to be performed either monthly or every couple of months.

TEXT / REFERENCE BOOKS

1. Ed May, “Automotive Mechanics”, Volume 1 and 2 , McGraw Hill Publications, 2003

2. Vehicle Service Manuals of reputed manufacturers

3. Bosch Automotive Handbook, Sixth Edition,2004

4. John Doke, “Fleet Management”, McGraw Hill Co., 1984

THE MOTOR VEHICLES ACT, 1988

ACT NO. 59 OF 1988

[14*th October*, 1988.]

An Act to consolidate and amend the law relating to motor vehicles.

BE it enacted by Parliament in the Thirty-ninth Year of the Republic of India as follows:—

CHAPTER I

PRELIMINARY

1. Short title, extent and commencement.—(*1*) This Act may be called the Motor Vehicles Act, 1988.

(2) It extends to the whole of India.

(3) It shall come into force on such date[1] as the Central Government may, by notification in the Official Gazette, appoint; and different dates may be appointed for different State and any reference in this Act to the commencement of this Act shall, in relation to a State, be construed as a reference to the coming into force of this Act in that State.

2. Definitions.—In this Act, unless the context otherwise requires,—

(1) "area", in relation to any provision of this Act, means such area as the State Government may, having regard to the requirements of that provision, specify by notification in the Official Gazette;

(2) "articulated vehicle" means a motor vehicle to which a semitrailer is attached;

(3) "axle weight" means in relation to an axle of a vehicle the total weight transmitted by the several wheels attached to that axle to the surface on which the vehicle rests;

(4) "certificate of registration" means the certificate issued by a competent authority to the effect that a motor vehicle has been duly registered in accordance with the provisions of Chapter IV;

(5) "conductor", in relation to a stage carriage, means a person engaged in collecting fares from passengers, regulating their entrance into, or exit from, the stage carriage and performing such other functions as may be prescribed;

(6) "conductor's licence" means the licence issued by a competent authority under Chapter III authorising the person specified therein to act as a conductor;

(7) "contract carriage" means a motor vehicle which carries a passenger or passenger or passengers for hire or reward and is engaged under a contract, whether expressed or implied, for the use of such vehicle as a whole for the carriage of passengers mentioned therein and entered into by a person with a holder of a permit in relation to such vehicle or any person authorised by him in this behalf on a fixed or an agreed rate or sum—

(a) on a time basis, whether or not with reference to any route or distance; or

(b) from one point to another,

and in either case, without stopping to pick up or set down passengers not included in the contract anywhere during the journey, and includes—

(i) a maxicab; and

(ii) a motor cab notwithstanding that separate fares are charged for its passengers;

(8) "dealer" includes a person who is engaged—

[2]* * * * *

(b) in building bodies for attachment to chassis; or

1.1st July, 1989, *vide* notification No. S.O. 368(E), dated 22nd May, 1989, *see* Gazette of India, Extraordinary, Part II, sec. 3(*ii*).
2.Sub-clause (*a*) omitted by Act 54 of 1994, s. 2 (w.e.f. 14-11-1994).

(c) in the repair of motor vehicles; or

(d) in the business of hypothecation, leasing or hire-purchase of motor vehicle;

(9) "driver" includes, in relation to a motor vehicle which is drawn by another motor vehicle, the person who acts as a steersman of the drawn vehicle;

(10) "driving licence" means the licence issued by a competent authority under Chapter II authorising the person specified therein to drive, otherwise than as a learner, a motor vehicle or a motor vehicle of any specified class or description;

(11) "educational institution bus" means an omnibus, which is owned by a college, school or other educational institution and used solely for the purpose of transporting students or staff of the educational institution in connection with any of its activities;

(12) "fares" includes sums payable for a season ticket or in respect of the hire of a contract carriage;

(13) "goods" includes live-stock, and anything (other than equipment ordinarily used with the vehicle) carried by a vehicle except living persons, but does not include luggage or personal effects carried in a motor car or in a trailer attached to a motor car or the personal luggage of passengers travelling in the vehicle;

(14) "goods carriage" means any motor vehicle constructed or adapted for use solely for the carriage of goods, or any motor vehicle not so constructed or adapted when used for the carriage of goods;

(15) "gross vehicle weight" means in respect of any vehicle the total weight of the vehicle and load certified and registered by the registering authority as permissible for that vehicle;

(16) "heavy goods vehicle" means any goods carriage the gross vehicle weight of which, or a tractor or a road-roller the unladen weight of either of which, exceeds 12,000 kilograms;

(17) "heavy passenger motor vehicle" means any public service vehicle or private service vehicle or educational institution bus or omnibus the gross vehicle weight of any of which, or a motor car the unladen weight of which, exceeds 12,000 kilograms;

(18) "invalid carriage" means a motor vehicle specially designed and constructed, and not merely, adapted, for the use of a person suffering from some physical defect or disability, and used solely by or for such a person;

(19) "learner's licence" means the licence issued by a competent authority under Chapter II authorising the person specified therein to drive as a learner, a motor vehicle or a motor vehicle of any specified class or description;

(20) "licensing authority" means an authority empowered to issue licences under Chapter II or, as the case may be, Chapter III;

(21) "light motor vehicle" means a transport vehicle or omnibus the gross vehicle weight of either of which or a motor car or tractor or road-roller the unladen weight of any of which, does not exceed [1][7500] kilograms;

[2][(*21A*) "manufacturer" means a person who is engaged in the manufacture of motor vehicles;]

(22) "maxicab" means any motor vehicle constructed or adapted to carry more than six passengers, but not more than twelve passengers, excluding the driver, for hire or reward;

(23) "medium goods vehicle" means any goods carriage other than a light motor vehicle or a heavy goods vehicle;

(24) "medium passenger motor vehicle" means any public service vehicle or private service vehicle, or educational institution bus other than a motor cycle, invalid carriage, light motor vehicle or heavy passenger motor vehicle;

1. Subs. by Act 54 of 1994, s. 2, for "6000" (w.e.f. 14-11-1994).
2. Ins. by s. 2, *ibid*. (w.e.f. 14-11-1994).

(25) "motorcab" means any motor vehicle constructed or adapted to carry not more than six passengers excluding the driver for hire or reward;

(26) "motor car" means any motor vehicle other than a transport vehicle, omnibus, road-roller, tractor, motor cycle or invalid carriage;

(27) "motor cycle" means a two-wheeled motor vehicle, inclusive of any detachable side-car having an extra wheel, attached to the motor vehicle;

(28) "motor vehicle" or "vehicle" means any mechanically propelled vehicle adapted for use upon roads whether the power of propulsion is transmitted thereto from an external or internal source and includes a chassis to which a body has not been attached and a trailer; but does not include a vehicle running upon fixed rails or a vehicle of a special type adapted for use only in a factory or in any other enclosed premises or a vehicle having less than four wheels fitted with engine capacity of not exceeding[1][twenty-five cubic centimetres];

(29) "omnibus" means any motor vehicle constructed or adapted to carry more than six persons excluding the driver;

(30) "owner" means a person in whose name a motor vehicle stands registered, and where such person is a minor, the guardian of such minor, and in relation to a motor vehicle which is the subject of a hire-purchase, agreement, or an agreement of lease or an agreement of hypothecation, the person in possession of the vehicle under that agreement;

(31) "permit" means a permit issued by a State or Regional Transport Authority or an authority prescribed in this behalf under this Act authorising the use of a motor vehicle as a transport vehicle;

(32) "prescribed" means prescribed by rules made under this Act;

(33) "private service vehicle" means a motor vehicle constructed or adapted to carry more than six persons excluding the driver and ordinarily used by or on behalf of the owner of such vehicle for the purpose of carrying persons for, or in connection with, his trade or business otherwise than for hire or reward but does not include a motor vehicle used for public purposes;

(34) "public place" means a road, street, way or other place, whether a thoroughfare or not, to which the public have a right of access, and includes any place or stand at which passengers are picked up or set down by a stage carriage;

(35) "public service vehicle" means any motor vehicle used or adapted to be used for the carriage of passengers for hire or reward, and includes a maxicab, a motorcab, contract carriage, and stage carriage;

(36) "registered axle weight" means in respect of the axle of any vehicle, the axle weight certified and registered by the registering authority as permissible for that axle;

(37) "registering authority" means an authority empowered to register motor vehicles under Chapter IV;

(38) "route" means a line of travel which specifies the highway which may be traversed by a motor vehicle between one terminus and another;

[2][(*39*) "semi-trailer" means a vehicle not mechanically propelled (other than a trailer), which is intended to be connected to a motor vehicle and which is so constructed that a portion of it issuper- imposed on, and a part of whose weight is borne by, thatmotor vehicle;]

(40) "stage carriage" means a motor vehicle constructed or adapted to carry more than six passengers excluding the driver for hire or reward at separate fares paid by or for individual passengers, either for the whole journey or for stages of the journey;

(41) "State Government" in relation to a Union territory means the Administrator thereof appointed under article 239 of the Constitution;

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1. Subs. by Act 54 of 1994, s. 2, for "thirty-five cubic centimetres" (w.e.f. 14-11-1994).
2. Subs. by s. 2, *ibid*., for clause (*39*) (w.e.f. 14-11-1994).

(42) "State transport undertaking" means any undertaking providing road transport service, where such undertaking is carried on by,—

(i) the Central Government or a State Government;

(ii) any Road Transport Corporation established under section 3 of the Road Transport Corporations Act, 1950 (64 of 1950);

(iii) any municipality or any corporation or company owned or controlled by the Central Government or one or more State Governments, or by the Central Government and one or more State Governments;

[1][(*iv*) Zilla Parishad or any other similar local authority.]

Explanation.—For the purposes of this clause, "road transport service" means a service of motor vehicles carrying passengers or goods or both by road for hire or reward;

(43) "tourist vehicle" means a contract carriage constructed or adapted and equipped and maintained in accordance with such specifications as may be prescribed in this behalf;

(44) "tractor" means a motor vehicle which is not itself constructed to carry any load (other than equipment used for the purpose of propulsion); but excludes a road-roller;

(45) "traffic signs" includes all signals, warning sign posts, direction posts, markings on the road or other devices for the information, guidance or direction of drivers of motor vehicles;

(46) "trailer" means any vehicle, other than a semi-trailer and a side-car, drawn or intended to be drawn by a motor vehicle;

(47) "transport vehicle" means a public service vehicle, a goods carriage, an educational institution bus or a private service vehicle;

(48) "unladen weight" means the weight of a vehicle or trailer including all equipment ordinarily used with the vehicle or trailer when working, but excluding the weight of a driver or attendant; and where alternative parts or bodies are used the unladen weight of the vehicle means the weight of the vehicle with the heaviest such alternative part or body;

(49) "weight" means the total weight transmitted for the time being by the wheels of a vehicle to the surface on which the vehicle rests.

[2][**2A. e-cart and e-rickshaw.**—(*1*) Save as otherwise provided in the proviso to sub-section (*1*) of section 7 and sub-section (*10*) of section 9, the provisions of this Act shall apply to e-cart and e-rickshaw.

(*2*) For the purposes of this section, "e-cart or e-rickshaw" means a special purpose battery powered vehicle of power not exceeding 4000 watts, having three wheels for carrying goods or passengers, as the case may be, for hire or reward, manufactured, constructed or adapted, equipped and maintained in accordance with such specifications, as may be prescribed in this behalf.]

CHAPTER II

LICENSING OF DRIVERS OF MOTOR VEHICLES

3. Necessity for driving licence.—(*1*) No person shall drive a motor vehicle in any public place unless he holds an effective driving licence issued to him authorising him to drive the vehicle; and no person shall so drive a transport vehicle [other than [3][a motor cab or motor cycle] hired for his own use or rented under any scheme made under sub-section (*2*) of section 75] unless his driving licence specifically entitles him so to do.

(*2*) The conditions subject to which sub-section (*1*) shall not apply to a person receiving instructions in driving a motor vehicle shall be such as may be prescribed by the Central Government.

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1. Ins. by Act 54 of 1988, s. 2 (w.e.f. 14-11-1994).
2. Ins. by Act 3 of 2015, s. 2 (w.e.f. 7-1-2015).
3. Subs. by s. 3, *ibid*., for "a motor cab" (w.e.f. 14-11-1994).

4. Age limit in connection with driving of motor vehicles.—(*1*) No person under the age of eighteen years shall drive a motor vehicle in any public place:

Provided that [1][a motor cycle with engine capacity not exceeding 50cc] out gear may be driven in a public place by a person after attaining the age of sixteen years.

(2) Subject to the provisions of section 18, no person under the age of twenty years shall drive a transport vehicle in any public place.

(3) No learner's licence or driving licence shall be issued to any person to drive a vehicle of the class to which he has made an application unless he is eligible to drive that class of vehicle under this section.

5. Responsibility of owners of motor vehicles for contravention of sections 3 and 4.—No owner or person in charge of a motor vehicle shall cause or permit any person who does not satisfy the provisions of section 3 or section 4 to drive the vehicle.

6. Restrictions on the holding of driving licences.—(*1*) No person shall, while he holds any driving licence for the time being in force, hold any other driving licence except a learner's licence or a driving licence issued in accordance with the provisions of section 18 or a document authorising, in accordance with the rules made under section 139, the person specified therein to drive a motor vehicle.

(2) No holder of a driving licence or a learner's licence shall permit it to be used by any other person.

(3) Nothing in this section shall prevent a licensing authority having the jurisdiction referred to in sub-section (*1*) of section 9 from adding to the classes of vehicles which the driving licence authorises the holder to drive.

7. Restrictions on the granting of learner's licences for certain vehicles.—[2][*(1)* No person shall be granted a learner's licence to drive a transport vehicle unless he has held a driving licence to drive a light motor vehicle for at least one year:]

[3][Provided that nothing contained in this sub-section shall apply to an e-cart or e-rickshaw.]

(*2*) No person under the age of eighteen years shall be granted a learner's licence to drive a motor cycle without gear except with the consent in writing of the person having the care of the person desiring the learner's licence.

8. Grant of learner's licence.—(*1*) Any person who is not disqualified under section 4 for driving a motor vehicle and who is not for the time being disqualified for holding or obtaining a driving licence may, subject to the provisions of section 7, apply to the licensing authority having jurisdiction in the area—

(i) in which he ordinarily resides or carries on business, or

(ii) in which the school or establishment referred to in section 12 from where he intends to receive instruction in driving a motor vehicle is situate,

for the issue to him of a learner's licence.

(2) Every application under sub-section (*1*) shall be in such form and shall be accompanied by such documents and with such fee as may be prescribed by the Central Government.

(3) Every application under sub-section (*1*) shall be accompanied by a medical certificate in such form as may be prescribed by the Central Government and signed by such registered medical practitioner, as the State Government or any person authorised in this behalf by the State Government may, by notification in the Official Gazette, appoint for this purpose:

[4][Provided that no such medical certificate is required for licence to drive a vehicle other than a transport vehicle.]

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1. Subs. by Act 54 of 1988, s. 4, for "a motor cycle without gear" (w.e.f. 14-11-1994).
2. Subs. by s. 5, *ibid*., for sub-section (*1*) (w.e.f. 14-11-1994).
3. Ins. by Act 3 of 2015, s. 3 (w.e.f. 7-1-2015).
4. Ins. by Act 54 of 1988, s. 6 (w.e.f. 14-11-1994).

(4) If, from the application or from the medical certificate referred to in sub-section (*3*), it appears that the applicant is suffering from any disease or disability which is likely to cause the driving by him of a motor vehicle of the class which he would be authorised by the learner's licence applied for to drive to be a source of danger to the public or to the passengers, the licensing authority shall refuse to issue the learner's licence:

Provided that a learner's licence limited to driving an invalid carriage may be issued to the applicant, if the licensing authority is satisfied that he is fit to drive such a carriage.

(5) No learner's licence shall be issued to any applicant unless he passes to the satisfaction of the licensing authority such test as may be prescribed by the Central Government.

(6) When an application has been duly made to the appropriate licensing authority and the applicant has satisfied such authority of his physical fitness under sub-section (*3*) and has passed to the satisfaction of the licensing authority the test referred to in sub-section (*5*), the licensing authority shall, subject to the provisions of section 7, issue the applicant a learner's licence unless the applicant is disqualified under section 4 for driving a motor vehicle or is for the time being disqualified for holding or obtaining a licence to drive a motor vehicle:

Provided that a licensing authority may issue a learner's licence to drive a motor cycle or a light motor vehicle notwithstanding that it is not the appropriate licensing authority, if such authority is satisfied that there is good reason for the applicant's inability to apply to the appropriate licensing authority.

(7) Where the Central Government is satisfied that it is necessary or expedient so to do, it may, by rules made in this behalf, exempt generally, either absolutely or subject to such conditions as may be specified in the rules, any class of persons from the provisions of sub-section (*3*), or sub-section (*5*), or both.

(8) Any learner's licence for driving a motor cycle in force immediately before the commencement of this Act shall, after such commencement, be deemed to be effective for driving a motor cycle with or without gear.

9. Grant of driving licence—(*1*) Any person who is not for the time being disqualified for holding or obtaining a driving licence may apply to the licensing authority having jurisdiction in the area—

(i) in which he ordinarily resides or carries on business, or

(ii) in which the school or establishment referred to in section 12 from where he is receiving or has received instruction in driving a motor vehicle is situated,

for the issue to him of a driving licence.

(*2*) Every application under sub-section (*1*) shall be in such form and shall be accompanied by such fee and such documents as may be prescribed by the Central Government.

[1][(*3*) If the applicant passes such test as may be prescribed by the Central Government, he shall be issued the driving licence:

Provided that no such test shall be necessary where the applicant produces proof to show that—

(*a*) (*i*) the applicant has previously held a driving licenceto drive such class of vehicle and that the period between thedata of expiry of that licence and the date of the applicationdoes not exceed five years, or

(ii) the applicant holds or has previously held a driving licence to drive such class of vehicle issued under section 18, or

(iii) the applicant holds a driving licence to drive such class of vehicle issued by a competent authority of any country outside India, subject to the condition that the applicant complies with the provisions of sub-section (*3*) of section 8,

1. Subs. by Act 54 of 1994, s. 7, for sub-section (*3*) (w.e.f. 14-11-1994).

(*b*)the applicant is not suffering from any disabilitywhich is likely to cause the driving by him to be a source ofdanger to the public; and the licensing authority may, for that purpose, require the applicant to produce a medical certificate in the same form and in the same manner as is referred to in sub-section (*3*) of section 8:

Provided further that where the application is for a driving licence to drive a motor vehicle (not being a transportvehicle), the licensing authority may exempt the applicant from the test of competence to drive a vehicle prescribed under this sub-section, if the applicant possesses a driving certificate issued by any institution recognised in this behalf bythe State Government.]

(4) Where the application is for a licence to drive a transport vehicle, no such authorisation shall be granted to any applicant unless he possesses such minimum educational qualification as may be prescribed by the Central Government and a driving certificate issued by a school or establishment referred to in section 12.

[1][(*5*) Where the applicant does not pass the test; he may be permitted to re-appear for the test after a period of seven days:

Provided that where the applicant does not pass the test even after three appearances, he shall not be qualified to re-appear for such test before the expiry of a period of sixty days from the date of last such test.]

(6) The test of competence to drive shall be carried out in a vehicle of the type to which the application refers:

Provided that a person who passed a test in driving a motor cycle with gear shall be deemed also to have passed a test in driving a motor cycle without gear.

(7) When any application has been duly made to the appropriate licensing authority and the applicant has satisfied such authority of his competence to drive, the licensing authority shall issue the applicant a driving licence unless the applicant is for the time being disqualified for holding or obtaining a driving licence:

Provided that a licensing authority may issue a driving licence to drive a motor cycle or a light motor vehicle notwithstanding that it is not the appropriate licensing authority, if the licensing authority is satisfied that there is good and sufficient reason for the applicant's inability to apply to the appropriate licensing authority:

Provided further that the licensing authority shall not issue a new driving licence to the applicant, if he had previously held a driving licence, unless it is satisfied that there is good and sufficient reason for his inability to obtain a duplicate copy of his former licence.

(8) If the licensing authority is satisfied, after giving the applicant an opportunity of being heard, that he—

(a) is a habitual criminal or a habitual drunkard; or

(b) is a habitual addict to any narcotic drug or psychotropic substance within the meaning of the Narcotic Drugs and Psychotropic Substances Act, 1985 (61 of 1985); or

(c) is a person whose licence to drive any motor vehicle has, at any time earlier, been revoked,

it may, for reasons to be recorded tin writing, make an order refusing to issue a driving licence to such person and any person aggrieved by 586 an order made by a licensing authority under this sub-section may, within thirty days of the receipt of the order, appeal to the prescribed authority.

(9) Any driving licence for driving a motor cycle in force immediately before the commencement of this Act shall, after such commencement, be deemed to be effective for driving a motor cycle with or without gear.

1. Subs. by Act 54 of 1994, s. 7, for sub-section (*3*) (w.e.f. 14-11-1994).

[1][(*10*) Notwithstanding anything contained in this section, the driving licence to drive e-cart or e-rickshaw shall be issued in such manner and subject to such conditions, as may be prescribed.]

10. Form and contents of licences to drive.—(*1*) Every learner's licence and driving licence, except a driving licence issued under section 18, shall be in such form and shall contain such information as may be prescribed by the Central Government.

(*2*) A learner's licence or, as the case may be, driving licence shall also be expressed as entitling the holder to drive a motor vehicle of one or more of the following classes, namely:—

(a) motor cycle without gear;

(b) motor cycle with gear;

(c) invalid carriage;

(d) light motor vehicle;

[2][(*e*) transport vehicle;]

(i) road-roller;

(j) motor vehicle of a specified description.

11. Additions to driving licence.—(*1*) Any person holding a driving licence to drive any class or description of motor vehicles, who is not for the time being disqualified for holding or obtaining a driving licence to drive any other class or description of motor vehicles, may apply to the licensing authority having jurisdiction in the area in which he resides or carries on his business in such form and accompanied by such documents and with such fees as may be prescribed by the Central Government for the addition of such other class or description of motor vehicles to the licence.

(*2*) Subject to such rules as may be prescribed by the Central Government, the provisions of section 9 shall apply to an application under this section as if the said application were for the grant of a licence under that section to drive the class or description of motor vehicles which the applicant desires to be added to his licence.

12. Licensing and regulation of schools or establishments for imparting instruction in driving of motor vehicles.—(*1*) The Central Government may make rules for the purpose of licensing and regulating, by the State Governments, schools or establishments (by whatever name called) for imparting instruction in driving of motor vehicles and matters connected therewith.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) licensing of such schools or establishments including grant, renewal and revocation of such licences;

(b) supervision of such schools or establishments;

(c) the form of application and the form of licence and the particulars to be contained therein;

(d) fee to be paid with the application for such licences;

(e) conditions subject to which such licences may be granted;

(f) appeals against the orders of refusal to grant or renew such licences and appeals against the orders revoking such licences;

(g) conditions subject to which a person may establish and maintain any such school or establishment for imparting instruction in driving of motor vehicles;

(h) nature, syllabus and duration of course or courses for efficient instruction in driving any motor vehicle;

1. Ins. by Act 3 of 2015, s. 4 (w.e.f. 7-1-2015).
2. Subs. by Act 54 of 1994, s. 8, for clauses (*e*) to (*h*) (w.e.f. 14-11-1994).

(i) apparatus and equipments (including motor vehicles fitted with dual control) required for the purpose of imparting such instruction;

(j) suitability of the premises at which such schools or establishments may be established or maintained and facilities to be provided therein;

(k) qualifications, both educational and professional (including experience), which a person imparting instruction in driving a motor vehicle shall possess;

(l) inspection of such schools and establishments (including the services rendered by them and the apparatus, equipments and motor vehicles maintained by them for imparting such instruction);

(m) maintenance of records by such schools or establishments;

(n) financial stability of such schools or establishments;

(o) the driving certificates, if any, to be issued by such schools or establishments and the form in which such driving certificates shall be issued and the requirements to be complied with for the purposes of issuing such certificates;

(p) such other matters as may be necessary to carry out the purposes of this section.

(3) Where the Central Government is satisfied that it is necessary or expedient so to do, it may, by rules made in this behalf, exempt generally, either absolutely or subject to such conditions as may be specified in the rules, any class of schools or establishments imparting instruction in driving of motor vehicles or matters connected therewith from the provisions of this section.

(4) A school or establishment imparting instruction in driving of motor vehicles or matters connected therewith immediately before the commencement of this Act whether under a licence or not, may continue to impart such instruction without a licence issued under this Act for a period of one month from such commencement, and if it has made an application for such licence under this Act within the said period of one month and such application is in the prescribed form, contains the prescribed particulars and is accompanied by the prescribed fee, till the disposal of such application by the licensing authority.

13. Extent of effectiveness of licences, to drive motor vehicles.—A learner's licence or a driving licence issued under this Act shall be effective throughout India.

14. Currency of licences to drive motor vehicles.—(*1*) A learner's licence issued under this Act shall, subject to the other provisions of this Act, be effective for a period of six months from the date of issue of the licence.

(*2*) A driving licence issued or renewed under this Act shall,—

(a) in the case of a licence to drive a transport vehicle, be effective for a period of three years:

[1]***

[2][Provided that in the case of licence to drive a transport vehicle carrying goods of dangerous or hazardous nature be effective for a period of one year and renewal thereof shall be subject to the condition that the driver undergoes one day refresher course of the prescribed syllabus; and;]

(b) in the case of any other licence,—

(i) if the person obtaining the licence, either originally or on renewal thereof, has not attained the age of [3][fifty years] on the date of issue or, as the case may be, renewal thereof,—

(A) be effective for a period of twenty years from the date of such issue or renewal;or

(B) until the date on which such person attains the age of [3][fifty years],

whichever is earlier;

1. The word "and" omitted by Act 54 of 1994, s. 9 (w.e.f. 14-11-1994).
2. Ins. by s. 9, *ibid*. (w.e.f. 14-11-1994).
3. Subs. by s. 9, *ibid*., for "forty years" (w.e.f. 14-11-1994).

[1][(*ii*) if the person referred to in sub-clause (*i*), has attained the age of fifty years on the date of issue or as the case may be. renewal thereof, be effective, on payment of such fee as may be prescribed, for a period of five years from the date of such issue or renewal:]

Provided that every driving licence shall, notwithstanding its expiry under this sub-section, continue to be effective for a period of thirty days from such expiry.

15. Renewal of driving licences.—(*1*) Any licensing authority may, on application made to it, renew a driving licence issued under the provisions of this Act with effect from the date of its expiry:

Provided that in any case where the application for the renewal of a licence is made more than thirty days after the date of its expiry, the driving licence shall be renewed with effect from the date of its renewal: Provided further that where the application is for the renewal of a licence to drive a transport vehicle or where in any other case the applicant has attained the age of forty years, the same shall be accompanied by a medical certificate in the same form and in the same manner as is referred to in sub-section (*3*) of section 8, and the provisions of sub-section (*4*) of section 8 shall, so far as may be, apply in relation to every such case as they apply in relation to a learner's licence.

(2) An application for the renewal of a driving licence shall be made in such form and accompanied by such documents as may be prescribed by the Central Government.

(3) Where an application for the renewal of a driving licence is made previous to, or not more than thirty days after the date of its expiry, the fee payable for such renewal shall be such as may be prescribed by the Central Government in this behalf.

(4) Where an application for the renewal of a driving licence is made more than thirty days after the date of its expiry, the fee payable for such renewal shall be such amount as may be prescribed by the Central Government:

Provided that the fee referred to in sub-section (*3*) may be accepted by the licensing authority in respect of an application for the renewal of a driving licence made under this sub-section if it is satisfied that the applicant was prevented by good and sufficient cause from applying within the time specified in sub-section (*3*):

Provided further that if the application is made more than five years after the driving licence has ceased to be effective, the licensing authority may refuse to renew the driving licence, unless the applicant undergoes and passes to its satisfaction the test of competence to drive referred to in sub-section (*3*) of section 9.

(5) Where the application for renewal has been rejected, the fee paid shall be refunded to such extent and in such manner as may be prescribed by the Central Government.

(6) Where the authority renewing the driving licence is not the authority which issued the driving licence it shall intimate the fact of renewal to the authority which issued the driving licence.

16. Revocation of driving licence on grounds of disease or disability.—Notwithstanding anything contained in the foregoing sections, any licensing authority may at any time revoke a driving licence or may require, as a condition of continuing to hold such driving licence, the holder thereof to produce a medical certificate in the same form and in the same manner as is referred to in sub-section (*3*) of section 8, if the licensing authority has reasonable grounds to belive that the holder of the driving licence is, by virtue of any disease or disability, unfit to drive a motor vehicle and where the authority revoking a driving licence is not the authority which issued the same, it shall intimate the fact of revocation to the authority which issued that licence.

17. Orders refusing or revoking driving licences and appeals therefrom—(*1*) Where a licensing authority refuses to issue any learner's licence or to issue or renew, or revokes, any driving licence, or

1. Subs. by Act 54 of 1994, s. 9, for sub-clause (*ii*) (w.e.f. 14-11-1994).

refuses to add a class or description of motor vehicle to any driving licence, it shall do so by an order communicated to the applicant or the holder, as the case may be, giving the reasons in writing for such refusal or revocation.

(*2*) Any person aggrieved by an order made under sub-section (*1*) may, within thirty days of the service on him of the order, appeal to the prescribed authority which shall decide the appeal after giving such person and the authority which made the order an opportunity of being heard and the decision of the appellate authority shall be binding on the authority which made the order.

18. Driving licences to drive motor vehicles, belonging to the Central Government.—(*1*) Such authority as may be prescribed by the Central Government may issue driving licence valid throughout India to persons who have completed their eighteenth year to drive motor vehicles which are the property or for the time being under the exclusive control of the Central Government and are used for Government purposes relating to the defence of the country and unconnected with any commercial enterprise.

(2) A driving licence issued under this section shall specify the class or description of vehicle which the holder is entitled to drive and the period for which he is so entitled.

(3) A driving licence issued under this section shall not entitle the holder to drive any motor vehicle except a motor vehicle referred to in sub-section (*1*).

(4) The authority issuing any driving licence under this section shall, at the request of any State Government, furnish such information respecting any person to whom a driving licence is issued as that Government may at any time require.

19. Power of licensing authority to disqualify from holding a driving licence or revoke such licence.—(*1*) If a licensing authority is satisfied, after giving the holder of a driving licence an opportunity of being heard, that he—

(a) is a habitual criminal or a habitual drunkard; or

(b) is a habitual addict to any narcotic drug or psychotropic substance within the meaning of the Narcotic Drugs and Psychotropic Substances Act, 1985 (61 of 1985); or

(c) is using or has used a motor vehicle in the commission of a cognizable offence; or

(d) has by his previous conduct as driver of a motor vehicle shown that his driving is likely to be attended with danger to the public; or

(e) has obtained any driving licence or a licence to drive a particular class or description of motor vehicle by fraud or misrepresentation; or

(f) has committed any such act which is likely to cause nuisance or danger to the public, as may be prescribed by the Central Government, having regard to the objects of this Act; or

(g) has failed to submit to, or has not passed, the tests referred to in the proviso to sub-section (*3*) of section 22; or

(h) being a person under the age of eighteen years who has been granted a learner's licence or a driving licence with the consent in writing of the person having the care of the holder of the licence and has ceased to be in such care,

it may, for reasons to be recorded in writing, make an order—

(i) disqualifying that person for a specified period for holding or obtaining any driving licence to drive all or any classes or descriptions of vehicles specified in the licence; or

(ii) revoke any such licence.

(2) Where an order under sub-section (*1*) is made, the holder of a driving licence shall forthwith surrender his driving licence to the licensing authority making the order, if the driving licence has not already been surrendered, and the licensing authority shall,—

(a) if the driving licence is a driving licence issued under this Act, keep it until the disqualification has expired or has been removed; or

(b) if it is not a driving licence issued under this Act, endorse the disqualification upon it and send it to the licensing authority by which it was issued; or

(c) in the case of revocation of any licence, endorse the revocation upon it and if it is not the authority which issued the same, intimate the fact of revocation to the authority which issued that licence:

Provided that where the driving licence of a person authorises him to drive more than one class or description of motor vehicles and the order, made under sub-section (*1*), disqualifies him from driving any specified class or description of motor vehicles, the licensing authority shall endorse the disqualification upon the driving licence and return the same to the holder.

(3) Any person aggrieved by an order made by a licensing authority under sub-section (*1*) may, within thirty days of the receipt of the order, appeal to the prescribed authority, and such appellate authority shall give notice to the licensing authority and hear either party if so required by that party and may pass such order as it thinks fit and an order passed by any such appellate authority shall be final.

20. Power of Court to disqualify.—(*1*) Where a person is convicted of an offence under this Act or of an offence in the commission of which a motor vehicle was used, the Court by which such person is convicted may, subject to the provisions of this Act, in addition to imposing any other punishment authorised by law, declare the persons so convicted to be disqualified, for such period as the Court may specify, from holding any driving licence to drive all classes or description of vehicles, or any particular class or description of such vehicles, as are specified in such licence:

Provided that in respect of an offence punishable under section 183 no such order shall be made for the first or second offence.

(2) Where a person is convicted of an offence under clause (*c*) of sub-section (*1*) of section 132, section 134 or section 185, the Court convicting any person of any such offence shall order the disqualification under sub-section (*1*), and if the offence is relatable to clause (*c*) of sub-section(*1*) of section 132 or section 134, such disqualification shall be for a period of not less than one month, and if the offence is relatable to section 185, such disqualification shall be for a period of not less than six months.

(3) A Court shall, unless for special reasons to be recorded in writing it thinks fit to order otherwise, order the disqualification of a person—

(a) who having been convicted of an offence punishable under section 184 is again convicted of an offence punishable under that section,

(b) who is convicted of an offence punishable under section 189, or

(c) who is convicted of an offence punishable under section 192:

Provided that the period of disqualification shall not exceed, in the case referred to in clause (*a*), five years, or, in the case referred to in clause (*b*), two years or, in the case referred to in clause (*c*), one year.

(4) A Court ordering the disqualification of a person convicted of an offence punishable under section 184 may direct that such person shall, whether he has previously passed the test of competence to drive as referred to in sub-section (*3*) of section 9 or not, remain disqualified until he has subsequent to the making of the order of disqualification passed that test to the satisfaction of the licensing authority.

(5) The Court to which an appeal would ordinarily lie from any conviction of an offence of the nature specified in sub-section (*1*) may set aside or vary any order of disqualification made under that sub-section notwithstanding that no appeal would lie against the conviction as a result of which such order of disqualification was made.

21. Suspension of driving licence in certain cases.—(*1*) Where, in relation to a person who had been previously convicted of an offence punishable under section 184, a case is registered by a police officer on the allegation that such person has, by such dangerous driving as is referred to in the said section 184, of any class or description of motor vehicle caused the death of, or grievous hurt to, one or

more persons, the driving licence held by such person shall in relation to such class or description of motor vehicle become suspended—

(a) for a period of six months from the date on which the case is registered, or

(b) if such person is discharged or acquitted before the expiry of the period aforesaid, until such discharge or acquittal, as the case may be.

(2) Where by virtue of the provisions of sub-section (*1*), the driving licence held by a person becomes suspended, the police officer, by whom the case referred to in sub-section (*1*) is registered, shall bring such suspension to the notice of the Court competent to take cognizance of such offence, and thereupon, such Court shall take possession of the driving licence, endorse the suspension thereon and intimate the fact of such endorsement to the licensing authority by which the licence was granted or last renewed.

(3) Where the person referred to in sub-section (*1*) is acquitted or discharged, the Court shall cancel the endorsement on such driving licence with regard to the suspension thereof.

(4) If a driving licence in relation to a particular class or description of motor vehicles is suspended under sub-section (*1*), the person holding such licence shall be debarred from holding or obtaining any licence to drive such particular class or description of motor vehicles so long as the suspension of the driving licence remains in force.

22. Suspension or cancellation of driving licence on conviction.—(*1*) Without prejudice to the provisions of sub-section (*3*) of section 20 where a person, referred to in sub-section (*1*) of section 21 is convicted of an offence of causing, by such dangerous driving as is referred to in section 184 of any class or description of motor vehicle the death of, or grievous hurt to, one or more persons, the Court by which such person is convicted may cancel, or suspend for such period as it may think fit, the driving licence held by such person in so far as it relates to that class or description of motor vehicle.

(2) Without prejudice to the provisions of sub-section (*2*) of section 20, if a person, having been previously convicted of an offence punishable under section 185 is again convicted of an offence punishable under that section, the Court, making such subsequent conviction, shall, by order, cancel the driving licence held by such person.

(3) If a driving licence is cancelled or suspended under this section, the Court shall take the driving licence in its custody, endorse the cancellation or, as the case may be, suspension, thereon and send the driving licence so endorsed to the authority by which the licence was issued or last renewed and such authority shall, on receipt of the licence, keep the licence in its safe custody, and in the case of a suspended licence, return the licence to the holder thereof after the expiry of the period of suspension on an application made by him for such return:

Provided that no such licence shall be returned unless the holder thereof has, after the expiry of the period of suspension, undergone and passed, to the satisfaction of the licensing authority by which the licence was issued or last renewed, a fresh test of competence to drive referred to in sub-section (*3*) of section 9 and produced a medical certificate in the same form and in the same manner as is referred to in sub-section (*3*) of section 8.

(4) If a licence to drive a particular class or description of motor vehicles is cancelled or suspended under this section, the person holding such a licence shall be debarred from holding, or obtaining, any licence to drive such particular class or description of motor vehicles so long as the cancellation or suspension of the driving licence remains in force.

23. Effect of disqualification order.—(*1*) A person in respect of whom any disqualification order is made under section 19 or section 20 shall be debarred to the extent and for the period specified in such order from holding or obtaining a driving licence and the driving licence, if any, held by such person at the date of the order shall cease to be effective to such extent and during such period.

(2) The operation of a disqualification order made under section 20 shall not be suspended or postponed while an appeal is pending against such order or against the conviction as a result of which such order is made, unless the appellate court so directs.

(3) Any person in respect of whom any disqualification order has been made may at any time after the expiry of six months from the date of the order apply to the Court or other authority by which the order was made, to remove the disqualification; and the Court or authority, as the case may be, may, having regard to all the circumstances, either cancel or vary the disqualification order:

Provided that where the Court or other authority refuses to cancel or vary any disqualification order under this section, a second application thereunder shall not be entertained before the expiry of a period of three months from the date of such refusal.

24. Endorsement.—(*1*) The Court or authority making an order of disqualification shall endorse or cause to be endorsed upon the driving licence if any, held by the person disqualified, particulars of the order of disqualification and of any conviction of an offence in respect of which an order of disqualification is made; and particulars of any cancellation or variation of an order of disqualification made under sub-section (*3*) of section 23 shall be similarly so endorsed.

(2) A Court by which any person is convicted of an offence under this Act as may be prescribed by the Central Government, having regard to the objects of this Act, shall, whether or not a disqualification order is made in respect of such conviction, endorse or cause to be endorsed particulars of such conviction on any driving licence held by the person convicted.

(3) Any person accused of an offence prescribed under sub-section (*2*) shall when attending the Court bring with him his driving licence if it is in his possession.

(4) Where any person is convicted of any offence under this Act and sentenced to imprisonment for a period exceeding three months the Court awarding the sentence shall endorse the fact of such sentence upon the driving licence of the person concerned and the prosecuting authority shall intimate the fact of such endorsement to the authority by which the driving licence was granted or last renewed.

(5) When the driving licence is endorsed or caused to be endorsed by any Court, such Court shall send the particulars of the endorsement to the licensing authority by which the driving licence was granted or last renewed.

(6) Where on an appeal against any conviction or order of a Court, which has been endorsed on a driving licence, the appellate court varies or sets aside the conviction or order, the appellate court shall inform the licensing authority by which the driving licence was granted or last renewed and such authority shall amend or cause to be amended the endorsement.

25. Transfer of endorsement and issue of driving licence free from endorsement.—(*1*) An endorsement on any driving licence shall be transferred to any new or duplicate driving licence obtained by the holder thereof until the holder becomes entitled under the provisions of this section to have a driving licence issued to him free from endorsement.

(2) Where a driving licence is required to be endorsed and the driving licence is not in the possession of the Court or authority by which the endorsement is to be made, then—

(a) if the person in respect of whom the endorsement is to be made is at the time the holder of a driving licence, he shall produce the driving licence to the Court or authority within five days, or such longer time as the Court or authority may fix; or

(b) if, not being then the holder of a driving licence, he subsequently obtains a driving licence, he shall within five days after obtaining the driving licence produce it to the Court or authority,

and if the driving licence is not produced within the time specified, it shall, on the expiration of such time, be of no effect until it is produced for the purpose of endorsement.

(3) A person whose driving licence has been endorsed shall, if during a continuous period of three years after such endorsement no further endorsement has been made against him, be entitled on surrendering his driving licence and on payment of a fee of five rupees, to receive a new driving licence free from all endorsements:

Provided that if the endorsement is only in respect of an offence contravening the speed limits referred to in section 112, such person shall be entitled to receive a new driving licence free from such endorsements on the expiration of one year of the date of the endorsement:

Provided further that in reckoning the said period of three years and one year, respectively, any period during which the said person was disqualified for holding or obtaining a driving licence shall be excluded.

26. Maintenance of State Registers of Driving Licences.—(*1*) Each State Government shall maintain, in such form as may be prescribed by the Central Government, a register to be known as the State Register of Driving Licences, in respect of driving licences issued and renewed by the licensing authorities of the State Government, containing the following particulars, namely:—

(a) names and addresses of holders of driving licences;

(b) licence numbers;

(c) dates of issue or renewal of licences;

(d) dates of expiry of licences;

(e) classes and types of vehicles authorised to be driven; and

(f) such other particulars as the Central Government may prescribe.

(2) Each State Government shall supply to the Central Government a [1][printed copy or copy in such other form as the Central Government may require] of the State Register of Driving Licences and shall inform the Central Government without delay of all additions to and other amendments in such register made from time to time.

(3) The State Register of Driving Licences shall be maintained in such manner as may be prescribed by the State Government.

27. Power of Central Government to make rules.—The Central Government may make rules—

[2][(*a*) specifications relating to e-cart and e-rickshaw under sub-section (2) of section 2A;]

[3][(*aa*)] regarding conditions referred to in sub-section (*2*) of section 3;

(b) providing for the form in which the application for learner's licence may be made, the information it shall contain and the documents to be submitted with the application referred to in sub-section (*2*) of section 8;

(c) providing for the form of medical certificate referred to in sub-section (*3*) of section 8;

(d) providing for the particulars for the test referred to in sub-section (*5*) of section 8;

(e) providing for the form in which the application for driving licence may be made, the information it shall contain and the documents to be submitted with the application referred to in sub-section (*2*) of section 9;

(f) providing for the particulars regarding test of competence to drive, referred to in sub-section (*3*) of section 9;

[2][(*ff*) the manner and the conditions subject to which the driving licence may be issued under sub-section (10) of section 9;]

(g) specifying the minimum educational qualifications of persons to whom licences to drive transport vehicles may be issued under this Act and the time within which such qualifications are to be acquired by such persons;

(h) providing for the form and contents of the licences referred to in sub-section (*1*) of section 10;

(i) providing for the form and contents of the application referred to in sub-section (*1*) of section 11 and documents to be submitted with the application and the fee to be charged;

(j) providing for the conditions subject to which section 9 shall apply to an application made under section 11;

1. Subs. by Act 54 of 1994, s. 10, for "printed copy" (w.e.f. 14-11-1994).
2. Ins. by Act 3 of 2015, s. 5 (w.e.f. 7-1-2015).
3. Clause (*a*) renumbered as clause (*aa*) thereof by s. 5, *ibid*. (w.e.f. 7-1-2015).

(k) providing for the form and contents of the application referred to in sub-section (*1*) of section 15 and the documents to accompany such application under sub-section (*2*) of section 15;

(l) providing for the authority to grant licences under sub-section (*1*) of section 18;

(m) specifying the fees payable under sub-section (*2*) of section 8, sub-section (*2*) of section 9 and sub-sections (*3*) and (*4*) of section 15 for the grant of learner's licences, and for the grant and renewal of driving licences and licences for the purpose of regulating the schools or establishment for imparting instructions in driving motor vehicles;

(n) specifying the acts for the purposes of clause (*f*) of sub-section (*1*) of section 19;

(o) specifying the offences under this Act for the purposes of sub-section (*2*) of section 24;

(p) to provide for all or any of the matters referred to in sub-section (*1*) of section 26;

(q) any other matter which is, or has to be, prescribed by the Central Government.

28. Power of State Government to make rules.—(*1*) A State Government may make rules for the purpose of carrying into effect the provisions of this Chapter other than the matters specified in section 27.

(*2*) Without prejudice to the generality of the foregoing power, such rules may provide for—

(a) the appointment, jurisdiction, control and functions of licensing authorities and other prescribed authorities;

(b) the conduct and hearing of appeals that may be preferred under this Chapter, the fees to be paid in respect of such appeals and the refund of such fees:

Provided that no fee so fixed shall exceed twenty-five rupees;

(c) the issue of duplicate licences to replace licences lost, destroyed or mutilated, the replacement of photographs which have become obsolete and the fees to be charged therefor;

(d) the badges and uniform to be worn by drivers of transport vehicles and the fees to be paid in respect of badges;

(e) the fee payable for the issue of a medical certificate under sub-section (*3*) of section 8;

(f) the exemption of prescribed persons, or prescribed classes of persons, from payment of all or any portion of the fees payable under this Chapter;

(g) the communication of particulars of licences granted by one licensing authority to other licensing authorities;

(h) the duties, functions and conduct of such persons to whom licences to drive transport vehicles are issued;

(i) the exemption of drivers of road-rollers from all or any of the provisions of this Chapter or of the rules made thereunder;

(j) the manner in which the State Register of Driving Licences shall be maintained under section 26;

(k) any other matter which is to be, or may be, prescribed.

CHAPTER III

LICENSING OF CONDUCTORS OF STAGE CARRIAGES

29. Necessity for conductor's licence.—(*1*) No person shall act as a conductor of a stage carriage unless he holds an effective conductor's licence issued to him authorising him to act as such conductor; and no person shall employ or permit any person who is not so licensed to act as a conductor of a stage carriage.

(*2*) A State Government may prescribe the conditions subject to which sub-section (*1*) shall not apply to a driver of a stage carriage performing the functions of a conductor or to a person employed to act as a conductor for a period not exceeding one month.

30. Grant of conductor's licence.—(*1*) Any person who possesses such minimum educational qualification as may be prescribed by the State Government and is not disqualified under sub-section (*1*) of section 31 and who is not for the time being disqualified for holding or obtaining a conductor's licence may apply to the licensing authority having jurisdiction in the area in which he ordinarily resides or carries on business for the issue to him of a conductor's licence.

(2) Every application under sub-section (*1*) shall be in such form and shall contain such information as may be prescribed.

(3) Every application for a conductor's licence shall be accompanied by a medical certificate in such form as may be prescribed, signed by a registered medical practitioner and shall also be accompanied by two clear copies of a recent photograph of the applicant.

(4) A conductor's licence issued under this Chapter shall be in such form and contain such particulars as may be prescribed and shall be effective throughout the State in which it is issued.

(5) The fee for a conductor's licence and for each renewal thereof shall be one-half of that for a driving licence.

31. Disqualifications for the grant of conductor's licence.—(*1*) No person under the age of eighteen years shall hold, or be granted, a conductor's licence.

(*2*) The licensing authority may refuse to issue a conductor's licence—

(a) if the applicant does not possess the minimum educational qualification;

(b) if the medical certificate produced by the applicant discloses that he is physically unfit to act as a conductor; and

(c) if any previous conductor's licence held by the applicant was revoked.

32. Revocation of a conductor's licence on grounds of disease or disability.—A conductor's licence may at any time be revoked by any licensing authority if that authority has reasonable grounds to believe that the holder of the licence is suffering from any disease or disability which is likely to render him permanently unfit to hold such a licence and where the authority revoking a conductor's licence is not the authority which issued the same, it shall intimate the fact of such revocation to the authority which issued that licence:

Provided that before revoking any licence, the licensing authority shall give the person holding such licence a reasonable opportunity of being heard.

33. Orders refusing, etc., conductor's licences and appeals therefrom.—(*1*) Where a licensing authority refuses to issue or renew, or revokes any conductor's licence, it shall do so by an order communicated to the applicant or the holder, as the case may be, giving the reasons in writing for such refusal or revocation.

(*2*) Any person aggrieved by an order made under sub-section (*1*) may, within thirty days of the service on him of the order, appeal to the prescribed authority which shall decide the appeal after giving such person and the authority which made the order an opportunity of being heard and the decision of the appellate authority shall be binding on the authority which made the order.

34. Power of licensing authority to disqualify.—(*1*) If any licensing authority is of opinion that it is necessary to disqualify the holder of a conductor's licence for holding or obtaining such a licence on account of his previous conduct as a conductor, it may, for reasons to be recorded, make an order disqualifying that person for a specified period, not exceeding one year, for holding or obtaining a conductor's licence:

Provided that before disqualifying the holder of a licence, the licensing authority shall give the person holding such licence a reasonable opportunity of being heard.

(2) Upon the issue of any such order, the holder of the conductor's licence shall forthwith surrender the licence to the authority making the order, if the licence has not already been surrendered, and the authority shall keep the licence until the disqualification has expired or has been removed.

(3) Where the authority disqualifying the holder of a conductor's licence under this section is not the authority which issued the licence, it shall intimate the fact of such disqualification to the authority which issued the same.

(4) Any person aggrieved by an order made under sub-section (*1*) may, within thirty days of the service on him of the order, appeal to the prescribed authority which shall decide the appeal after giving such person and the authority which made the order an opportunity of being heard and the decision of the appellate authority shall be binding on the authority which made the order.

35. Power of Court to disqualify.—(*1*) Where any person holding a conductor's licence is convicted of an offence under this Act, the Court by which such person is convicted may, in addition to imposing any other punishment authorised by law, declare the person so convicted to be disqualified for such period as the Court may specify for holding a conductor's licence.

(*2*) The Court to which an appeal lies from any conviction of an offence under this Act may set aside or vary any order of disqualification made by the Court below, and the Court to which appeals ordinarily lie from such Court, may set aside or vary any order of disqualification made by that Court, notwithstanding that no appeal lies against the conviction in connection with which such order was made.

36. Certain provisions of Chapter II to apply to conductor's licence.—The provisions of sub-section (*2*) of section 6, sections 14, 15 and 23, sub-section (*1*) of section 24 and section 25 shall, so far as may be, apply in relation to a conductor's licence, as they apply in relation to a driving licence.

37. Savings.—If any licence to act as a conductor of a stage carriage (by whatever name called) has been issued in any State and is effective immediately before the commencement of this Act, it shall continue to be effective, notwithstanding such commencement, for the period for which it would have been effective, if this Act had not been passed, and every such licence shall be deemed to be a licence issued under this Chapter as if this Chapter had been in force on the date on which that licence was granted.

38. Power of State Government to make rules.—(*1*) A State Government may make rules for the purpose of carrying into effect the provisions of this Chapter.

(*2*) Without prejudice to the generality of the foregoing power, such rules may provide for—

(a) the appointment, jurisdiction, control and functions of licensing authorities and other prescribed authorities under this Chapter;

(b) the conditions subject to which drivers of stage carriages performing the functions of a conductor and persons temporarily employed to act as conductors may be exempted from the provisions of sub-section (*1*) of section 29;

(c) the minimum educational qualifications of conductors; their duties and functions and the conduct of persons to whom conductor's licences are issued;

(d) the form of application for conductor's licences or for renewal of such licences and the particulars it may contain;

(e) the form in which conductor's licences may be issued or renewed and the particulars it may contain;

(f) the issue of duplicate licences to replace licences lost, destroyed or mutilated, the replacement of photographs which have become obsolete and the fees to be charged therefor;

(g) the conduct and hearing of appeals that may be preferred under this Chapter, the fees to be paid in respect of such appeals and the refund of such fees:

Provided that no fee so fixed shall exceed twenty-five rupees;

(h) the badges and uniform to be worn by conductors of stage carriages and the fees to be paid in respect of such badges;

(i) the grant of the certificates referred to in sub-section (*3*) of section 30 by registered medical practitioners and the form of such certificates;

(j) the conditions subject to which, and the extent to which, a conductor's licence issued in another State shall be effective in the State;

(k) the communication of particulars of conductor's licences from one authority to other authorities; and

(l) any other matter which is to be, or may be, prescribed.

CHAPTER IV

REGISTRATION OF MOTOR VEHICLES

39. Necessity for registration.—No person shall drive any motor vehicle and no owner of a motor vehicle shall cause or permit the vehicle to be driven in any public place or in any other place unless the vehicle is registered in accordance with this Chapter and the certificate of registration of the vehicle has not been suspended or cancelled and the vehicle carries a registration mark displayed in the prescribed manner:

Provided that nothing in this section shall apply to a motor vehicle in possession of a dealer subject to such conditions as may be prescribed by the Central Government.

40. Registration, where to be made.—Subject to the provisions of section 42, section 43 and section 60, every owner of a motor vehicle shall cause the vehicle to be registered by a registering authority in whose jurisdiction he has the residence or place of business where the vehicle is normally kept.

41. Registration, how to be made.—(*1*) An application by or on behalf of the owner of a motor vehicle for registration shall be in such form and shall be accompanied by such documents, particulars and information and shall be made within such period as may be prescribed by the Central Government:

Provided that where a motor vehicle is jointly owned by more persons than one, the application shall be made by one of them on behalf of all the owners and such applicant shall be deemed to be the owner of the motor vehicle for the purposes of this Act.

(2) An application referred to in sub-section (*1*) shall be accompanied by such fee as may be prescribed by the Central Government.

(3) The registering authority shall issue to the owner of a motor vehicle registered by it a certificate of registration in such form and containing such particulars and information and in such manner as may be prescribed by the Central Government.

(4) In addition to the other particulars required to be included in the certificate of registration, it shall also specify the type of the motor vehicle, being a type as the Central Government may, having regard to the design, construction and use of the motor vehicle, by notification in the Official Gazette, specify.

(5) The registering authority shall enter the particulars of the certificate referred to in sub-section (*3*) in a register to be maintained in such form and manner as may be prescribed by the Central Government.

(6) The registering authority shall assign to the vehicle, for display thereon, a distinguishing mark (in this Act referred to as the registration mark) consisting of one of the groups of such of those letters and followed by such letters and figures as are allotted to the State by the Central Government from time to time by notification in the Official Gazette, and displayed and shown on the motor vehicle in such form and in such manner as may be prescribed by the Central Government.

(7) A certificate of registration issued under sub-section (*3*), whether before or after the commencement of this Act, in respect of a motor vehicle, other than a transport vehicle, shall, subject to the provisions contained in this Act, be valid only for a period of fifteen years from the date of issue of such certificate and shall be renewable.

(8) An application by or on behalf of the owner of a motor vehicle, other than a transport vehicle, for the renewal of a certificate of registration shall be made within such period and in such form, containing such particulars and information as may be prescribed by the Central Government.

(9) An application referred to in sub-section (*8*) shall be accompanied by such fee as may be prescribed by the Central Government.

(10) Subject to the provisions of section 56, the registering authority may, on receipt of an application under sub-section (*8*), renew the certificate of registration for a period of five years and intimate the fact to the original registering authority, if it is not the original registering authority.

(11) If the owner fails to make an application under sub-section (*1*), or, as the case may be, under sub-section (*8*) within the period prescribed, the registering authority may, having regard to the circumstances of the case, require the owner to pay, in lieu of any action that may be taken against him under section 177, such amount not exceeding one hundred rupees as may be prescribed under sub- section (*13*):

Provided that action under section 177 shall be taken against the owner where the owner fails to pay the said amount.

(12) Where the owner has paid the amount under sub-section (*11*), no action shall be taken against him under section 177.

(13) For the purposes of sub-section (*11*), the State Government may prescribe different amounts having regard to the period of delay on the part of the owner in making an application under sub-section (*1*) or sub-section (*8*).

(14) An application for the issue of a duplicate certificate of registration shall be made to the [1][last registering authority] in such form, containing such particulars and information along with such fee as may be prescribed by the Central Government.

42. Special provision for registration of motor vehicles of diplomatic officers, etc.—(*1*) Where an application for registration of a motor vehicle is made under sub-section (*1*) of section 41 by or on behalf of any diplomatic officer or consular officer, then, notwithstanding anything contained in sub-section (*3*) or sub-section (*6*) of that section, the registering authority shall register the vehicle in such manner and in accordance with such procedure as may be provided by rules made in this behalf by the Central Government under sub-section (*3*) and shall assign to the vehicle for display thereon a special registration mark in accordance with the provisions contained in those rules and shall issue a certificate (hereafter in this section referred to as the certificate of registration) that the vehicle has been registered under this section; and any vehicle so registered shall not, so long as it remains the property of any diplomatic officer or consular officer, require to be registered otherwise under this Act.

(2) If any vehicle registered under this section ceases to be the property of any diplomatic officer or consular officer, the certificate of registration issued under this section shall also cease to be effective, and the provisions of sections 39 and 40 shall thereupon apply.

(3) The Central Government may make rules for the registration of motor vehicles belonging to diplomatic officers and consular officers regarding the procedure to be followed by the registering authority for registering such vehicles, the form in which the certificates of registration of such vehicles are to be issued, the manner in which such certificates of registration are to be sent to the owners of the vehicles and the special registration marks to be assigned to such vehicles.

(4) For the purposes of this section, "diplomatic officer" or "consular officer" means any person who is recognised as such by the Central Government and if any question arises as to whether a person is or is not such an officer, the decision of the Central Government thereon shall be final.

43. Temporary registration.—(*1*) Notwithstanding anything contained in section 40 the owner of a motor vehicle may apply to any registering authority or other prescribed authority to have the vehicle

1. Subs. by Act 54 of 1994, s. 11, for "original registering authority" (w.e.f. 14-11-1994).

temporarily registered in the prescribed manner and for the issue in the prescribed manner of a temporary certificate of registration and a temporary registration mark.

(*2*) A registration made under this section shall be valid only for a period not exceeding one month, and shall not be renewable:

Provided that where a motor vehicle so registered is a chassis to which a body has not been attached and the same is detained in a workshop beyond the said period of one month for being fitted [1][with a body or any unforeseen circumstances beyond the control of the owner], the period may, on payment of such fees, if any, as may be prescribed, be extended by such further period or periods as the registering authority or other prescribed authority, as the case may be, may allow.

[2][(*3*) In a case where the motor vehicle is held under hire-purchase agreement, lease or hypothecation, the registering authority or other prescribed authority shall issue a temporary certificate of registration of such vehicle, which shall incorporate legibly and prominently the full name and address of the person with whom such agreement has been entered into by the owner.]

44. Production of vehicle at the time of registration.—The registering authority shall before proceeding to register a motor vehicle or renew the certificate of registration in respect of a motor vehicle, other than a transport vehicle, require the person applying for registration of the vehicle or, as the case may be, for renewing the certificate of registration to produce the vehicle either before itself or such authority as the State Government may by order appoint in order that the registering authority may satisfy itself that the particulars contained in the application are true and that the vehicle complies with the requirements of this Act and of the rules made thereunder.

45. Refusal of registration or renewal of the certificate of registration.—The registering authority may, by order, refuse to register any motor vehicle, or renew the certificate of registration in respect of a motor vehicle (other than a transport vehicle), if in either case, the registering authority has reason to believe that it is a stolen motor vehicle or the vehicle is mechanically defective or fails to comply with the requirements of this Act or of the rules made thereunder, or if the applicant fails to furnish particulars of any previous registration of the vehicle or furnishes inaccurate particulars in the application for registration of the vehicle or, as the case may be, for renewal of the certificate or registration thereof and the registering authority shall furnish the applicant whose vehicle is refused registration, or whose application for renewal of the certificate of registration is refused, a copy of such order, together with the reasons for such refusal.

46. Effectiveness in India of registration.—Subject to the provisions of section 47, a motor vehicle registered in accordance with this Chapter in any State shall not require to be registered elsewhere in India and a certificate of registration issued or in force under this Act in respect of such vehicle shall be effective throughout India.

47. Assignment of new registration mark on removal to another State.—(*1*) When a motor vehicle registered in one State has been kept in another State, for a period exceeding twelve months, the owner of the vehicle shall, within such period and in such form containing such particulars as may be prescribed by the Central Government, apply to the registering authority, within whose jurisdiction the vehicle then is, for the assignment of a new registration mark and shall present the certificate of registration to that registering authority:

Provided that an application under this sub-section shall be accompanied—

(i) by the no objection certificate obtained under section 48, or

(ii) in a case where no such certificate has been obtained, by—

(a) the receipt obtained under sub-section (*2*) of section 48; or

1. Subs. by Act 54 of 1994, s. 12, for "with a body" (w.e.f. 14-11-1994).
2. Ins. by s. 12, *ibid*. (w.e.f. 14-11-1994).

(b) the postal acknowledgement received by the owner of the vehicle if he has sent an application in this behalf by registered post acknowledgement due to the registering authority referred to in section 48,

together with a declaration that he has not received any communication from such authority refusing to grant such certificate or requiring him to comply with any direction subject to which such certificate may be granted:

Provided further that, in a case where a motor vehicle is held under a hire-purchase, lease or hypothecation agreement, an application under this sub-section shall be accompanied by a no objection certificate from the person with whom such agreement has been entered into, and the provisions of section 51, so far as may be, regarding obtaining of such certificate from the person with whom such agreement has been entered into, shall apply.

(2) The registering authority, to which application is made under sub-section (*1*), shall after making such verification, as it thinks fit, of the returns, if any, received under section 62, assign the vehicle a registration mark as specified in sub-section (*6*) of section 41 to be displayed and shown thereafter on the vehicle and shall enter the mark upon the certificate of registration before returning it to the applicant and shall, in communication with the registering authority by whom the vehicle was previously registered, arrange for the transfer of the registration of the vehicle from the records of that registering authority to its own records.

(3) Where a motor vehicle is held under a hire-purchase or lease or hypothecation agreement, the registering authority shall, after assigning the vehicle a registration mark under sub-section (*2*), inform the person whose name has been specified in the certificate of registration as the person with whom the registered owner has entered into the hire-purchase or lease or hypothecation agreement (by sending to such person a notice by registered post acknowledgement due at the address of such person entered in the certificate of registration the fact of assignment of the said registration mark).

(4) A State Government may make rules under section 65 requiring the owner of a motor vehicle not registered within the State, which is brought into or is for the time being in the State, to furnish to the prescribed authority in the State such information with respect to the motor vehicle and its registration as may be prescribed.

(5) If the owner fails to make an application under sub-section (*1*) within the period prescribed, the registering authority may, having regard to the circumstances of the case, require the owner to pay, in lieu of any action that may be taken against him under section 177, such amount not exceeding one hundred rupees as may be prescribed under sub-section (*7*):

Provided that action under section 177 shall be taken against the owner where the owner fails to pay the said amount.

(6) Where the owner has paid the amount under sub-section (*5*), no action shall be taken against him under section 177.

(7) For the purposes of sub-section (*5*), the State Government may prescribe different amounts having regard to the period of delay on the part of the owner in making an application under sub-section (*1*).

48. No objection certificate.—(*1*) The owner of a motor vehicle when applying for the assignment of a new registration mark under sub-section (*1*) of section 47, or where the transfer of a motor vehicle is to be effected in a State other than the State of its registration, the transferor of such vehicle when reporting the transfer under sub-section (*1*) of section 50, shall make an application in such form and in such manner as may be prescribed by the Central Government to the registering authority by which the vehicle was registered for the issue of a certificate (hereafter in this section referred to as the no objection certificate), to the effect that the registering authority has no objection for assigning a new registration mark to the vehicle or, as the case may be, for entering the particulars of the transfer of ownership in the certificate of registration.

(2) The registering authority shall, on receipt of an application under sub-section (*1*), issue a receipt in such form as may be prescribed by the Central Government.

(3) On receipt of an application under sub-section (*1*), the registering authority may, after making such inquiry and requiring the applicant to comply with such directions as it deems fit and within thirty days of the receipt thereof, by order in writing, communicate to the applicant that it has granted or refused to grant the no objection certificate:

Provided that a registering authority shall not refuse to grant the no objection certificate unless it has recorded in writing the reasons for doing so and a copy of the same has been communicated to the applicant.

(4) Where within a period of thirty days referred to in sub-section (*3*), the registering authority does not refuse to grant the no objection certificate or does not communicate the refusal to the applicant, the registering authority shall be deemed to have granted the no objection certificate.

(5) Before granting or refusing to grant the no objection certificate, the registering authority shall obtain a report in writing from the police that no case relating to the theft of the motor vehicle concerned has been reported or is pending, verify whether all the amounts due to Government including road tax in respect of that motor vehicle have been paid and take into account such other factors as may be prescribed by the Central Government.

[1][(*6*)The owner of the vehicle shall also inform at the earliest, in writing, the registering authority about the theft of his vehicle together with the name of the police station where the theft report was lodged, and the registering authority shall take into account such report while disposing of any application for no objection certification, registration, transfer of ownership or issue of duplicate registration certificate.]

49. Change of residence or place of business.—(*1*) If the owner of a motor vehicle ceases to reside or have his place of business at the address recorded in the certificate of registration of the vehicle, he shall, within thirty days of any such change of address, intimate in such form accompanied by such documents as may be prescribed by the Central Government, his new address, to the registering authority by which the certificate of registration was issued, or, if the new address is within the jurisdiction of another registering authority, to that other registering authority, and shall at the same time forward the certificate of registration to the registering authority or, as the case may be, to the other registering authority in order that the new address may be entered therein.

(2) If the owner of a motor vehicle fails to intimate his new address to the concerned registering authority within the period specified in sub-section (*1*), the registering authority may, having regard to the circumstances of the case, require the owner to pay, in lieu of any action that may be taken against him under section 177 such amount not exceeding one hundred rupees as may be prescribed under sub-section (*4*):

Provided that action under section 177 shall be taken against the owner where he fails to pay the said amount.

(3) Where a person has paid the amount under sub-section (*2*), no action shall be taken against him under section 177.

(4) For the purposes of sub-section (*2*), a State Government may prescribe different amounts having regard to the period of delay in intimating his new address.

(5) On receipt of intimation under sub-section (*1*), the registering authority may, after making such verification as it may think fit, cause the new address to be entered in the certificate of registration.

(6) A registering authority other than the original registering authority making any such entry shall communicate the altered address to the original registering authority.

(7) Nothing in sub-section (*1*) shall apply where the change of the address recorded in the certificate of registration is due to a temporary absence not intended to exceed six months in duration or where the motor vehicle is neither used nor removed from the address recorded in the certificate of registration.

1. Ins. by Act 54 of 1994, s. 13 (w.e.f. 14-11-1994).

50. Transfer of ownership.—(*1*) Where the ownership of any motor vehicle registered under this Chapter is transferred,—

(a) the transferor shall,—

(i) in the case of a vehicle registered within the same State, within fourteen days of the transfer, report the fact of transfer, in such form with such documents and in such manner, as may be prescribed by the Central Government to the registering authority within whose jurisdiction the transfer is to be effected and shall simultaneously send a copy of the said report to the transferee; and

(ii) in the case of a vehicle registered outside the State, within forty-five days of the transfer, forward to the registering authority referred to in sub-clause (*i*)—

(A) the no objection certificate obtained under section 48; or

(B) in a case where no such certificate has been obtained,—

(I) the receipt obtained under sub-section (*2*) of section 48; or

(II) the postal acknowledgement received by the transferred if he has sent an application in this behalf by registered post acknowledgement due to the registering authority referred to in section 48,

together with a declaration that he has not received any communication from such authority refusing to grant such certificate or requiring him to comply with any direction subject to which such certificate may be granted;

(b) the transferee shall, within thirty days of the transfer, report the transfer to the registering authority within whose jurisdiction he has the residence or place of business where the vehicle is normally kept, as the case may be, and shall forward the certificate of registration to that registering authority together with the prescribed fee and a copy of the report received by him from the transferor in order that particulars of the transfer of ownership may be entered in the certificate of registration.

(2) Where—

(a) the person in whose name a motor vehicle stands registered dies, or

(b) a motor vehicle has been purchased or acquired at a public auction conducted by, or on behalf of, Government,

the person succeeding to the possession of the vehicle or, as the case may be, who has purchased or acquired the motor vehicle, shall make an application for the purpose of transferring the ownership of the vehicle in his name, to the registering authority in whose jurisdiction he has the residence or place of business where the vehicle is normally kept, as the case may be, in such manner, accompanied with such fee, and within such period as may be prescribed by the Central Government.

(3) If the transferor or the transferee fails to report to the registering authority the fact of transfer within the period specified in clause (*a*) or clause (*b*) of sub-section (*1*), as the case may be, or if the person who is required to make an application under sub-section (*2*) (hereafter in this section referred to as the other person) fails to make such application within the period prescribed, the registering authority may, having regard to the circumstances of the case, require the transferor or the transferee, or the other person, as the case may be, to pay, in lieu of any action that may be taken against him under section 177 such amount not exceeding one hundred rupees as may be prescribed under sub-section (*5*):

Provided that action under section 177 shall be taken against the transferor or the transferee or the other person, as the case may be, where he fails to pay the said amount.

(4) Where a person has paid the amount under sub-section (*3*), no action shall be taken against him under section 177.

(5) For the purposes of sub-section (*3*), a State Government may prescribe different amounts having regard to the period of delay on the part of the transferor or the transferee in reporting the fact of transfer of ownership of the motor vehicle or of the other person in making the application under sub-section (*2*).

(6) On receipt of a report under sub-section (*1*), or an application under sub-section (*2*), the registering authority may cause the transfer of ownership to be entered in the certificate of registration.

(7) A registering authority making any such entry shall communicate the transfer of ownership to the transferor and to the original registering authority, if it is not the original registering authority.

51. Special provisions regarding motor vehicle subject to hire-purchase agreement, etc.—(*1*) Where an application for registration of a motor vehicle which is held under a hire-purchase, lease or hypothecation agreement (hereafter in this section referred to as the said agreement) is made, the registering authority shall make an entry in the certificate of registration regarding the existence of the said agreement.

(2) Where the ownership of any motor vehicle registered under this Chapter is transferred and the transferee enters into the said agreement with any person, the [1][last registering authority] shall, on receipt of an application in such form as the Central Government may prescribe from the parties to the said agreement, make an entry as to the existence of the said agreement in the certificate of registration [2][and an intimation in this behalf shall be sent to the original registering authority if the last registering authority is not the original registering authority].

(3) Any entry made under sub-section (*1*) or sub-section (*2*), may be cancelled by the [1][last registering authority] on proof of the termination of the said agreement by the parties concerned on an application being made in such form as the Central Government may prescribe[2][and an intimation in this behalf shall be sent to the original registering authority if the last registering authority is not the original registering authority].

(4) No entry regarding the transfer of ownership of any motor vehicle which is held under the said agreement shall be made in the certificate of registration except with the written consent of the person whose name has been specified in the certificate of registration as the person with whom the registered owner has entered into the said agreement.

(5) Where the person whose name has been specified in the certificate of registration as the person with whom the registered owner has entered into the said agreement, satisfies the registering authority that he has taken possession of the vehicle[3][from the registered owner] owing to the default of the registered owner under the provisions of the said agreement and that the registered owner refuses to deliver the certificate of registration or has absconded, such authority may, after giving the registered owner an opportunity to make such representation as he may wish to make (by sending to him a notice by registered post acknowledgement due at his address entered in the certificate of registration) and notwithstanding that the certificate of registration is not produced before it, cancel the certificate and issuea fresh certificate of registration in the name of the person with whom the registered owner has entered into the said agreement:

Provided that a fresh certificate of registration shall not be issued in respect of a motor vehicle, unless such person pays the prescribed fee:

Provided further that a fresh certificate of registration issued in respect of a motor vehicle, other than a transport vehicle, shall be valid only for the remaining period for which the certificate cancelled under this sub-section would have been in force.

(6) The registered owner shall, before applying to the appropriate authority, for the renewal of a permit under section 81 or for the issue of duplicate certificate of registration under sub-section (*14*) of section 41, or for the assignment of a new registration mark [4][under section 47, or removal of the vehicle to another State, or at the time of conversion of the vehicle from one class to another, or for issue of no objection certificate under section 48, or for change of residence or place of business under section 49, or for the alteration of the vehicle under section 52, make an application] to the person with whom the registered owner has entered into the said agreement (such person being hereafter in this section referred

1. Subs. by Act 54 of 1994, s. 14, for "original registering authority" (w.e.f. 14-11-1994).
2. Added. by s. 14, *ibid*. (w.e.f. 14-11-1994).
3. Ins. by s. 14, *ibid*. (w.e.f. 14-11-1994).
4. Subs. by s. 14, *ibid*., for "under section 47, make an application" (w.e.f. 14-11-1994).

to as the financier) for the issue of a no objection certificate (hereafter in this section referred to as the certificate).

Explanation.—For the purposes of this sub-section and sub-sections (*8*) and (*9*), "appropriate authority" in relation to any permit means the authority which is authorised by this Act to renew such permit and, in relation to registration, means the authority which is authorised by this Act to issue duplicate certificate of registration or to assign a new registration mark.

(7) Within seven days of the receipt of an application under sub-section (*6*), the financier may issue, or refuse for reasons which shall be recorded in writing and communicated to the applicant, to issue, the certificate applied for and where the financier fails to issue the certificate and also fails to communicate the reasons for refusal to issue the certificate to the applicant within the said period of seven days, the certificate applied for shall be deemed to have been issued by the financier.

(8) The registered owner shall, while applying to the appropriate authority for the renewal of any permit under section 81, or for the issue of a duplicate certificate of registration under sub-section (*14*) of section 41, or while applying for assignment of a new registration mark under section 47, submit with such application the certificate, if any, obtained under sub-section (*7*) or, where no such certificate has been obtained, the communication received from the financier under that sub-section, or, as the case may be a declaration that he has not received any communication from the financier within the period of seven days specified in that sub-section.

(9) On receipt of an application for the renewal of any permit or for the issue of duplicate certificate of registration or for assignment of a new registration mark in respect of a vehicle which is held under the said agreement, the appropriate authority may, subject to the other provisions of this Act,—

(a) in a case where the financier has refused to issue the certificate applied for, after giving the applicant an opportunity of being heard, either—

(i) renew or refuse to renew the permit, or

(ii) issue or refuse to issue the duplicate certificate of registration, or

(iii) assign or refuse to assign a new registration mark;

(b) in any other case,—

(i) renew the permit, or

(ii) issue duplicate certificate of registration, or

(iii) assign a new registration mark.

(10) A registering authority making an entry in the certificate of registration regarding—

(a) hire-purchase, lease or hypothecation agreement of a motor vehicle, or

(b) the cancellation under sub-section (*3*) of an entry, or

(c) recording transfer of ownership of motor vehicle, or

(d) any alteration in a motor vehicle, or

(e) suspension or cancellation of registration of a motor vehicle, or

(f) change of address,

shall communicate[1][by registered post acknowledgment due] to the financier that such entry has been made.

[2][(*11*) A registering authority registering the new vehicle, or issuing the duplicate certificate of registration or a no objectioncertificate or a temporary certificate of registration, or issuing or renewing, a fitness certificate or substituting entries relating toanother motor vehicle in the permit, shall intimate the financierof such transaction.

1. Ins. by Act 54 of 1994, s.14 (w.e.f. 14-11-1994).
2. Subs. by s.14, *ibid*., for sub-section (*11*) (w.e.f. 14-11-1994).

(*12*)The registering authority where it is not the original registering authority, when making entry under sub-section (*1*)or sub-section (*2*),or cancelling the said entry under sub-section (*3*) or issuing the fresh certificate of registration under sub-section (*5*) shall communicate the same to the original registering authority.]

[1][**52. Alteration in motor vehicle**.— (*1*) No owner of a motor vehicle shall so alter the vehicle that the particulars contained in the certificate of registration are at variance with those originally specified by the manufacturer:

Provided that where the owner of a motor vehicle makes modification of the engine, or any part thereof, of a vehicle for facilitating its operation by different type of fuel or source of energy including battery, compressed natural gas, solar power, liquid petroleum gas or any other fuel or source of energy, by fitment of a conversion kit, such modification shall be carried out subject to such conditions as may be prescribed:

Provided further that the Central Government may prescribe specifications, conditions for approval, retrofitment and other related matters for such conversion kits:

Provided also that the Central Government may grant exemption for alteration of vehicles in a manner other than specified above, for any specific purpose.

(2) Notwithstanding anything contained in sub-section (*1*), a State Government may, by notification in the Official Gazette, authorise, subject to such conditions as may be specified in the notification, and permit any person owning not less than ten transport vehicles to alter any vehicle owned by him so as to replace the engine thereof with engine of the same make and type, without the approval of registering authority.

(3) Where any alteration has been made in motor vehicle without the approval of registering authority or by reason of replacement of its engine without such approval under sub-section (*2*), the owner of the vehicle shall, within fourteen days of the making of the alteration, report the alteration to the registering authority within whose jurisdiction he resides and shall forward the certificate of registration to that authority together with the prescribed fee in order that particulars of registration may be entered therein.

(4) A registering authority other than the original registering authority making any such entry shall communicate the details of the entry to the original registering authority.

(5) Subject to the provisions made under sub-sections (*1*), (*2*), (*3*) and (*4*), no person holding a vehicle under a hire-purchase agreement shall make any alteration to the vehicle except with the written consent of the registered owner.

Explanation.—For the purposes of this section, "alteration" means a change in the structure of a vehicle which results in a change in its basic feature.]

53. Suspension of registration.—(*1*) If any registering authority or other prescribed authority has reason to believe that any motor vehicle within its jurisdiction—

(a) is in such a condition that its use in a public place would constitute a danger to the public, or that it fails to comply with the requirements of this Act or of the rules made thereunder, or

(b) has been, or is being, used for hire or reward without a valid permit for being used as such,

the authority may, after giving the owner an opportunity of making any representation he may wish to make (by sending to the owner a notice by registered post acknowledgement due at his address entered in the certificate of registration), for reasons to be recorded in writing, suspend the certificate of registration of the vehicle—

(i) in any case falling under clause (*a*), until the defects are rectified to its satisfaction; and

(ii) in any case falling under clause (*b*), for a period not exceeding four months.

1. Subs. by Act 27 of 2000, s. 2, for section 52 (w.e.f. 11-8-2000).

(2) An authority other than a registering authority shall, when making a suspension order under sub-section (*1*), intimate in writing the fact of such suspension and the reasons therefor to the registering authority within whose jurisdiction the vehicle is at the time of the suspension.

(3) Where the registeration of a motor vehicle has been suspended under sub-section (*1*), for a continuous period of not less than one month, the registering authority, within whose jurisdiction the vehicle was when the registration was suspended, shall, if it is not the original registering authority, inform that authority of the suspension.

(4) The owner of a motor vehicle shall, on the demand of a registering authority or other prescribed authority which has suspended the certificate of registration of the vehicle under this section, surrender the certificate of registration.

(5) A certificate of registration surrendered under sub-section (*4*) shall be returned to the owner when the order suspending registration has been rescinded and not before.

54. Cancellation of registration suspended under section 53.—Where the suspension of registration of a vehicle under section 53 has continued without interruption for a period of not less than six months, the registering authority within whose jurisdiction the vehicle was when the registration was suspended, may, if it is the original registering authority, cancel the registration, and if it is not the original registering authority, shall forward the certificate of registration to that authority which may cancel the registration.

55. Cancellation of registration.—(*1*) If a motor vehicle has been destroyed or has been rendered permanently incapable of use, the owner shall, within fourteen days or as soon as may be, report the fact to the registering authority within whose jurisdiction he has the residence or place of business where the vehicle is normally kept, as the case may be, and shall forward to that authority the certificate of registration of the vehicle.

(2) The registering authority shall, if it is the original registering authority, cancel the registration and the certificate of registration, or, if it is not, shall forward the report and the certificate of registration to the original registering authority and that authority shall cancel the registration.

(3) Any registering authority may order the examination of a motor vehicle within its jurisdiction by such authority as the State Government may by order appoint and, if, upon such examination and after giving the owner an opportunity to make any representation he may wish to make (by sending to the owner a notice by registered post acknowledgement due at his address entered in the certificate of registration), it is satisfied that the vehicle is in such a condition that it is incapable of being used or its use in a public place would constitute a danger to the public and that it is beyond reasonable repair, may cancel the registration.

(4) If a registering authority is satisfied that a motor vehicle has been permanently removed out of India, the registering authority shall cancel the registration.

(5) If a registering authority is satisfied that the registration of a motor vehicle has been obtained on the basis of documents which were, or by representation of facts which was, false in any material particular, or the engine number or the chassis number embossed thereon are different from such number entered in the certificate of registration, the registering authority shall after giving the owner an opportunity to make such representation as he may wish to make (by sending to the owner a notice by registered post acknowledgement due at his address entered in the certificate of registration), and for reasons to be recorded in writing cancel the registration.

(6) A registering authority cancelling the registration of a motor vehicle under section 54 or under this section shall communicate such fact in writing to the owner of the vehicle, and the owner of the vehicle shall forthwith surrender to that authority the certificate of registration of the vehicle.

(7) A registering authority making an order of cancellation under section 54 or under this section shall, if it is the original registering authority, cancel the certificate of registration and the entry relating to the vehicle in its records, and, if it is not the original registering authority, forward the certificate of

registration to that authority, and that authority shall cancel the certificate of registration and the entry relating to the motor vehicle in its records.

(8) The expression "original registering authority" in this section and in sections 41, 49, 50, 51, 52, 53 and 54 means the registering authority in whose records the registration of the vehicle is recorded.

(9) In this section, "certificate of registration" includes a certificate of registration renewed under the provisions of this Act.

56. Certificate of fitness of transport vehicles.—(*1*) Subject to the provisions of sections 59 and 60, a transport vehicle shall not be deemed to be validly registered for the purposes of section 39, unless it carries a certificate of fitness in such form containing such particulars and information as may be prescribed by the Central Government, issued by the prescribed authority, or by an authorised testing station mentioned in sub-section (*2*), to the effect that the vehicle complies for the time being with all the requirements of this Act and the rules made thereunder:

Provided that where the prescribed authority or the authorised testing station refuses is issue such certificate, it shall supply the owner of the vehicle with its reasons in writing for such refusal.

(2) The "authorised testing station" referred to in sub-section (*1*) means a vehicle service station or public or private garage which the State Government, having regard to the experience, training and ability of the operator of such station or garage and the testing equipment and the testing personnel therein, may specify in accordance with the rules made by the Central Government for regulation and control of such stations or garages.

(3) Subject to the provisions of sub-section (*4*), a certificate of fitness shall remain effective for such period as may be prescribed by the Central Government having regard to the objects of this Act.

(4) The prescribed authority may for reasons to be recorded in writing cancel a certificate of fitness at any time, if satisfied that the vehicle to which it relates no longer complies with all the requirements of this Act and the rules made thereunder; and on such cancellation the certificate of registration of the vehicle and any permit granted in respect of the vehicle under Chapter V shall be deemed to be suspended until a new certificate of fitness has been obtained:

[1][Provided that no such cancellation shall be made by the prescribed authority unless such prescribed authority holds such technical qualification as may be prescribed or where the prescribed authority does not hold such technical qualification on the basis of the report of an officer having such qualifications.]

(5) A certificate of fitness issued under this Act shall, while it remains effective, be valid throughout India.

57. Appeals.—[2][(*1*) Any person aggrieved by an order of the registering authority under section 41, 42, 43, 45, 47, 48, 49, 50, 52, 53, 55 or 56 may, within thirty days of the date on which he has received notice of such order, appeal against the order to the prescribed authority.]

(*2*) The appellate authority shall give notice of the appeal to the original authority and after giving an opportunity to the original authority and the appellant to be heard in the appeal pass such orders as it thinks fit.

58. Special provisions in regard to transport vehicles.—(*1*) The Central Government may, having regard to the number, nature and size of the tyres attached to the wheels of a transport vehicle, (other than a motorcab), and its make and model and other relevant considerations, by notification in the Official Gazette, specify, in relation to each make and model of a transport vehicle, the [3][maximum gross vehicle weight] of such vehicle and the maximum safe axle weight of each axle of such vehicle.

(2) A registering authority, when registering a transport vehicle, other than a motorcab, shall enter in the record of registration and shall also enter in the certificate of registration of the vehicle the following particulars, namely:—

(a) the unladen weight of the vehicle;

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1. Ins. by Act 54 of 1994, s. 16 (w.e.f. 14-11-1994).
2. Subs. by s.17, *ibid*., for sub-section (*1*) (w.e.f. 14-11-1994).
3. Subs. by s. 18, *ibid*., for "maximum safe laden weight" (w.e.f. 14-11-1994).

(b) the number, nature and size of the tyres attached to each wheel;

(c) the gross vehicle weight of the vehicle and the registered axle weights pertaining to the several axles thereof; and

(d) if the vehicle is used or adapted to be used for the carriage of passengers solely or in addition to goods, the number of passengers for whom accommodation is provided,

and the owner of the vehicle shall have the same particulars exhibited in the prescribed manner on the vehicle.

(3) There shall not be entered in the certificate of registration of any such vehicle any gross vehicle weight or a registered axle weight of any of the axles different from that specified in the notification under sub-section (*1*) in relation to the make and model of such vehicle and to the number, nature and size of the tyres attached to its wheels:

Provided that where it appears to the Central Government that heavier weights than those specified in the notification under sub-section (*1*) may be permitted in a particular locality for vehicles of a particular type, the Central Government may, by order in the Official Gazette direct that the provisions of this sub-section shall apply with such modifications as may be specified in the order.

[1]* * * * *

(*5*) In order that the gross vehicle weight entered in the certificate of registration of a vehicle may be revised in accordance with the provisions of sub-section (*3*), the registering authority may require the owner of transport vehicle in accordance with such procedure as may be prescribed to produce the certificate of registration within such time as may be specified by the registering authority.

59. Power to fix the age limit of motor vehicle.—(*1*) The Central Government may, having regard to the public safety, convenience and objects of this Act, by notification in the Official Gazette, specify the life of a motor vehicle reckoned from the date of its manufacture, after the expiry of which the motor vehicle shall not be deemed to comply with the requirements of this Act and the rules made thereunder:

Provided that the Central Government may specify different ages for different classes or different types of motor vehicles.

(2) Notwithstanding anything contained in sub-section (*1*), the Central Government may, having regard to the purpose of a motor vehicle, such as, display or use for the purposes of a demonstration in any exhibition, use for the purposes of technical research or taking part in a vintage car rally, by notification in the Official Gazette, exempt, by a general or special order, subject to such conditions as may be specified in such notification, any class or type of motor vehicle from the operation of sub-section (*1*) for the purpose to be stated in the notification.

(3) Notwithstanding anything contained in section 56, no prescribed authority or authorised testing station shall grant a certificate of fitness to a motor vehicle in contravention of the provisions of any notification issued under sub-section (*1*).

60. Registration of vehicles belonging to the Central Government.—(*1*) Such authority as the Central Government may, by notification in the Official Gazette, specify, may register any motor vehicle which is the property or for the time being under the exclusive control of the Central Government and is used for Government purposes relating to the defence of the country and unconnected with any commercial enterprise and any vehicle so registered shall not, so long as it remains the property or under the exclusive control of the Central Government, require to be registered otherwise under this Act.

(2) The authority registering a vehicle under sub-section (*1*) shall assign a registration mark in accordance with the provisions contained in the rules made in this behalf by the Central Government and shall issue a certificate in respect of that vehicle to the effect that such vehicle complies for the time being with all the requirements of this Act and the rules made thereunder and that the vehicle has been registered under this section.

(3) A vehicle registered under this section shall carry the certificate issued under sub-section (*2*).

1. Sub-section (*4*) omitted by Act 27 of 2000, s. 3 (w.e.f. 11-8-2000).

(4) If a vehicle registered under this section ceases to be the property or under the exclusive control of the Central Government, the provisions of sections 39 and 40 shall thereupon apply.

(5) The authority registering a vehicle under sub-section (*1*) shall furnish to any State Government all such information regarding the general nature, overall dimensions and axle weights of the vehicle as the State Government may at any time require.

61. Application of Chapter to trailers.—(*1*) The provisions of this Chapter shall apply to the registration of trailers as they apply to the registration of any other motor vehicle.

(2) The registration mark assigned to a trailer shall be displayed in such manner on the side of the drawing vehicle, as may be prescribed by the Central Government.

(3) No person shall drive a motor vehicle to which a trailer is or trailers are attached unless the registration mark of the motor vehicle so driven is displayed on the trailer or on the last trailer in the train, as the case may be, in such manner as may be prescribed by the Central Government.

62. Information regarding stolen and recovered motor vehicles to be furnished by the police to the State Transport Authority.—The State Government may, if it thinks necessary or expedient so to do in the public interest, direct the submission by the Inspector General of Police (by whatever designation called) and such other police officers as the State Government may specify in this behalf, of such returns containing the information regarding vehicles which have been stolen and stolen vehicles which have been recovered of which the police are aware, to the State Transport Authority, and may prescribe the form in which and the period within which such returns shall be made.

63. Maintenance of State Registers of Motor Vehicles.—(*1*) Each State Government shall maintain in such form as may be prescribed by the Central Government a register to be known as the State Register of Motor Vehicle, in respect of the motor vehicles in that State, containing the following particulars, namely:—

(a) registration numbers;

(b) years of manufacture;

(c) classes and types;

(d) names and addresses of registered owners; and

(e) such other particulars as may be prescribed by the Central Government.

(2) Each State Government shall supply to the Central Government[1][if so desired by it] a printed copy of the State Register of Motor Vehicles and shall also inform the Central Government without delay of all additions to and other amendments in such register made from time to time.

(3) The State Register of Motor Vehicles shall be maintained in such manner as may be prescribed by the State Government.

64. Power of Central Government to make rules.—The Central Government may make rules to provide for all or any of the following matters, namely:—

(a) the period within which and the form in which an application shall be made and the documents, particulars and information it shall accompany under sub-section (*1*) of section 41;

(b) the form in which the certificate of registration shall be made and the particulars and information it shall contain and the manner in which it shall be issued under sub-section (*3*) of section 41;

(c) the form and manner in which the particulars of the certificate of registration shall be entered in the records of the registering authority under sub-section (*5*) of section 41;

(d) the manner in which and the form in which the registration mark, the letters and figures and other particulars referred to in sub-section (*6*) of section 41 shall be displayed and shown;

1. Ins. by Act 54 of 1994, s. 19 (w.e.f. 14-11-1994).

(e) the period within which and the form in which the application shall be made and the particulars and information it shall contain under sub-section (*8*) of section 41;

(f) the form in which the application referred to in sub-section (*14*) of section 41 shall be made, the particulars and information it shall contain and the fee to be charged;

(g) the form in which the period within which the application referred to in sub-section (*1*) of section 47 shall be made and the particulars it shall contain;

(h) the form in which and the manner in which the application for "No Objection Certificate" shall be made under sub-section (*1*) of section 48 and the form of receipt to be issued under sub-section (*2*) of section 48;

(i) the matters that are to be complied with by an applicant before no objection certificate may be issued under section 48;

(j) the form in which the intimation of change of address shall be made under sub-section (*1*) of section 49 and the documents to be submitted along with the application;

(k) the form in which and the manner in which the intimation of transfer of ownership shall be made under sub-section (*1*) of section 50 or under sub-section (*2*) of section 50 and the document to be submitted along with the application;

(l) the form in which the application under sub-section (*2*) or sub-section (*3*) of section 51 shall be made;

(m) the form in which the certificate of fitness shall be issued under sub-section (*1*) of section 56 and the particulars and information it shall contain;

(n) the period for which the certificate of fitness granted or renewed under section 56 shall be effective;

(o) the fees to be charged for the issue or renewal or alteration of certificates of registration, for making an entry regarding transfer of ownership on a certificate of registration, for making or cancelling an endorsement in respect of agreement of hire-purchase or lease or hypothecation on a certificate of registration, for certificates of fitness for registration marks, and for the examination or inspection of motor vehicles, and the refund of such fees.

(p) any other matter which is to be, or may be, prescribed by the Central Government.

65. Power of State Government to make rules.—(*1*) A State Government may make rules for the purpose of carrying into effect the provisions of this Chapter other than the matters specified in section 64.

(*2*) Without prejudice to the generality of the foregoing power, such rules may provide for—

(a) the conduct and hearing of appeals that may be preferred under this Chapter (the fees to be paid in respect of such appeals and the refund of such fees);

(b) the appointment, functions and jurisdiction of registering and other prescribed authorities;

(c) the exemption of road-rollers, graders and other vehicles designed and used solely for the construction, repair and cleaning of roads from all or any of the provisions of this Chapter and the rules made thereunder and the conditions governing such exemption;

(d) the issue or renewal of certificates of registration and fitness and duplicates of such certificates to replace the certificates lost, destroyed or mutilated;

(e) the production of certificates of registration before the registering authority for the revision of entries therein of particulars relating to the gross vehicle weight;

(f) the temporary registration of motor vehicles, and the issue of temporary certificate of registration and marks;

(g) the manner in which the particulars referred to in sub-section (*2*) of section 58 and other prescribed particulars shall be exhibited;

(h) the exemption of prescribed persons or prescribed classes of persons from payment of all or any portion of the fees payable under this Chapter;

(i) the forms, other than those prescribed by the Central Government, to be used for the purpose of this Chapter;

(j) the communication between registering authorities of particulars of certificates of registration and by owners of vehicles registered outside the State of particulars of such vehicles and of their registration;

(k) the amount or amounts under sub-section (*13*) of section 41 or sub-section (*7*) of section 47 or sub-section (*4*) of section 49 or sub-section (*5*) of section 50;

(l) the extension of the validity of certificates of fitness pending consideration of applications for their renewal;

(m) the exemption from the provisions of this Chapter, and the conditions and fees for exemption, of motor vehicles in the possession of dealers;

(n) the form in which and the period within which the return under section 62 shall be sent;

(o) the manner in which the State Register of Motor Vehicles shall be maintained under section 63;

(p) any other matter which is to be or may be prescribed.

CHAPTER V

CONTROL OF TRANSPORT VEHICLES

66. Necessity for permits.—(*1*) No owner of a motor vehicle shall use or permit the use of the vehicle as a transport vehicle in any public place whether or not such vehicle is actually carrying any passengers or goods save in accordance with the conditions of a permit granted or countersigned by a Regional or State Transport Authority or any prescribed authority authorising him the use of the vehicle in that place in the manner in which the vehicle is being used:

Provided that a stage carriage permit shall, subject to any conditions that may be specified in the permit, authorise the use of the vehicle as a contract carriage:

Provided further that a stage carriage permit may, subject to any conditions that may be specified in the permit, authorise the use of the vehicle as a goods carriage either when carrying passengers or not:
Provided also that a goods carriage permit shall, subject to any conditions that may be specified in the permit, authorise the use of the vehicle for the carriage of goods for or in connection with a trade or business carried on by him.

(2) The holder of a goods carriage permit may use the vehicle, for the drawing of any public or semi-trailer not owned by him, subject to such conditions as may be prescribed.

[1][Provided that the holder of a permit of any articulated vehicle may use the prime-mover of that articulated vehicle for any other semi-trailor:]

(3) The provisions of sub-section (*1*) shall not apply—

(a) to any transport vehicle owned by the Central Government or a State Government and used for Government purposes unconnected with any commercial enterprise;

(b) to any transport vehicle owned by a local authority or by a person acting under contract with a local authority and used solely for road cleansing, road watering or conservancy purposes;

(c) to any transport vehicle used solely for police, fire brigade or ambulance purposes;

1. Added by Act 54 of 1994, s. 20 (w.e.f. 14-11-1994).

(d) to any transport vehicle used solely for the conveyance of corpses and the mourners accompanying the corpses;

(e) to any transport vehicle used for towing a disabled vehicle or for removing goods from a disabled vehicle to a place of safety;

(f) to any transport vehicle used for any other public purpose as may be prescribed by the State Government in this behalf;

(g) to any transport vehicle used by a person who manufactures or deals in motor vehicles or builds bodies for attachment to chassis, solely for such purposes and in accordance with such conditions as the Central Government may, by notification in the Official Gazette, specify in this behalf;

[1]* * * * *

(i) to any goods vehicle, the gross vehicle weight of which does not exceed 3,000 kilograms;

(j) subject to such conditions as the Central Government may, by notification in the Official Gazette, specify, to any transport vehicle purchased in one State and proceeding to a place, situated in that State or in any other State, without carrying any passenger or goods;

(k) to any transport vehicle which has been temporarily registered under section 43 while proceeding empty to any place for the purpose of registration of the vehicle;

[2]* * * * *

(m) to any transport vehicle which, owing to flood, earthquake or any other natural calamity, obstruction on road, or unforeseen circumstances is required to be diverted through any other route, whether within or outside the State, with a view to enabling it to reach its destination;

(n) to any transport vehicle used for such purposes as the Central or State Government may, by order, specify;

(o) to any transport vehicle which is subject to a hire-purchase, lease or hypothecation agreement and which owing to the default of the owner has been taken possession of by or on behalf of, the person with whom the owner has entered into such agreement, to enable such motor vehicle to reach its destination; or

(p) to any transport vehicle while proceeding empty to any place for purpose of repair.

(4) Subject to the provisions of sub-section (*3*), sub-section (*1*) shall if the State Government by rule made under section 96 so prescribes, apply to any motor vehicle adapted to carry more than nine persons excluding the driver.

67. Power to State Government to control road transport.—(*1*) A State Government, having regard to—

(a) the advantages offered to the public, trade and industry by the development of motor transport,

(b) the desirability of co-ordinating road and rail transport,

(c) the desirability of preventing the deterioration of the road system, and

(d) the desirability of preventing uneconomic competition among holders of permits,

may, from time to time, by notification in the Official Gazette, issue directions both to the State Transport Authority and Regional Transport Authority—

(i) regarding the fixing of fares and freights (including the maximum and minimum in respect thereof) for stage carriages, contract carriages and goods carriages;

1. Clause (*h*) omitted by Act 27 of 2000, s. 4 (w.e.f. 11-8-2000).
2. Clause (*l*) omitted by Act 39 of 2001, s. 2 (w.e.f. 27-9-2001).

[1]* * * * *

(ii) regarding the prohibition or restriction, subject to such conditions as may be specified in the directions, of the conveying of long distance goods traffic generally, or of specified classes of goods by goods carriages;

(iii) regarding any other matter which may appear to the State Government necessary or expedient for giving effect to any agreement entered into with the Central Government or any other State Government or the Government of any other country relating to the regulation of motor transport generally, and in particular to its coordination with other means of transport and the conveying of long distance goods traffic:

Provided that no such notification in respect of the matters referred to in clause (*ii*) or clause (*iii*) shall be issued unless a draft of the proposed directions is published in the Official Gazette specifying therein a date being not less than one month after such publication, on or after which the draft will be taken into consideration and any objection or suggestion which may be received has, in consultation with the State Transport Authority, been considered after giving the representatives of the interests affected an opportunity of being heard.

(*2*) Any direction under sub-section (*1*) regarding the fixing of fares and freights for stage carriages, contract carriages and goods carriages may provide that such fares or freights shall be inclusive of the tax payable by the passengers or the consignors of the goods, as the case may be, to the operators of the stage carriages, contract carriages or goods carriages under any law for the time being in force relating to tax on passengers and goods.

68. Transport Authorities.—(*1*) The State Government shall, by notification in the Official Gazette, constitute for the State a State Transport Authority to exercise and discharge the powers and functions specified in sub-section (*3*), and shall in like manner constitute Regional Transport Authorities to exercise and discharge throughout such areas (in this Chapter referred to as regions) as may be specified in the notification, in respect of each Regional Transport Authority; the powers and functions conferred by or under this Chapter on such Authorities:

Provided that in the Union territories, the Administrator may abstain from constituting any Regional Transport Authority.

(2) A State Transport Authority or a Regional Transport Authority shall consist of a Chairman who has had judicial experience or experience as an appellate or a revisional authority or as an adjudicating authority competent to pass any order or take any decision under any law and in the case of a State Transport Authority, such other persons (whether officials or not), not being more than four and, in the case of a Regional Transport Authority, such other persons (whether officials or not), not being more than two, as the State Government may think fit to appoint; but no person who has any financial interest whether as proprietor, employee or otherwise in any transport undertaking shall be appointed, or continue to be, a member of a State or Regional Transport Authority, and, if any person being a member of any such Authority acquires a financial interest in any transport undertaking, he shall within four weeks of so doing, give notice in writing to the State Government of the acquisition of such interest and shall vacate office:

Provided that nothing in this sub-section shall prevent any of the members of the State Transport Authority or a Regional Transport Authority, as the case may be, to preside over a meeting of such Authority during the absence of the Chairman, notwithstanding that such member does not possess judicial experience or experience as an appellate or a revisional authority or as an adjudicating authority competent to pass any order or take any decision under any law:

Provided further that the State Government may,—

(i) where it considers necessary or expedient so to do, constitute the State Transport Authority or a Regional Transport Authority for any region so as to consist of only one member who shall be an

1. The proviso omitted by Act 39 of 2001, s. 3 (w.e.f. 27-9-2001).

official with judicial experience or experience as an appellate or a revisional authority or as an adjudicating authority competent to pass any order or take any decision under any law;

(ii) by rules made in this behalf, provide for the transaction of business of such authorities in the absence of the Chairman or any other member and specify the circumstances under which, and the manner in which, such business could be so transacted:

Provided also that nothing in this sub-section shall be construed as debarring an official (other than an official connected directly with the management or operation of a transport undertaking) from being appointed or continuing as a member of any such authority merely by reason of the fact that the Government employing the official has, or acquires, any financial interest in a transport undertaking.

(3) The State Transport Authority and every Regional Transport Authority shall give effect to any directions issued under section 67 and the State Transport Authority shall, subject to such directions and save as otherwise provided by or under this Act, exercise and discharge throughout the State the following powers and functions, namely:—

(a) to co-ordinate and regulate the activities and policies of the Regional Transport Authorities, if any, of the State;

(b) to perform the duties of a Regional Transport Authority where there is no such Authority and, if it thinks fit or if so required by a Regional Transport Authority, to perform those duties in respect of any route common to two or more regions;

(c) to settle all disputes and decide all matters on which differences of opinion arise between Regional Transport Authorities; and

[1][(*ca*) Government to formulate routes for plying stage carriages;]

(d) to discharge such other functions as may be prescribed.

(4) For the purpose of exercising and discharging the powers and functions specified in sub-section (*3*), a State Transport Authority may, subject to such conditions as may be prescribed, issue directions to any Regional Transport Authority, and the Regional Transport Authority shall, in the discharge of its functions under this Act, give effect to and be guided by such directions.

(5) The State Transport Authority and any Regional Transport Authority, if authorised in this behalf by rules made under section 96, may delegate such of its powers and functions to such authority or person subject to such restrictions, limitations and conditions as may be prescribed by the said rules.

69. General provision as to applications for permits.—(*1*) Every application for a permit shall be made to the Regional Transport Authority of the region in which it is proposed to use the vehicle or vehicles:

Provided that if it is proposed to use the vehicle or vehicles in two or more regions lying within the same State, the application shall be made to the Regional Transport Authority of the region in which the major portion of the proposed route or area lies, and in case the portion of the proposed route or area in each of the regions is approximately equal, to the Regional Transport Authority of the region in which it is proposed to keep the vehicle or vehicles:

Provided further that if it is proposed to use the vehicle or vehicles in two or more regions lying in different States, the application shall be made to the Regional Transport Authority of the region in which the applicant resides or has his principal place of business.

(*2*) Notwithstanding anything contained in sub-section (*1*), the State Government may, by notification in the Official Gazette, direct that in the case of any vehicle or vehicles proposed to be used in two or more regions lying in different States, the application under that sub-section shall be made to the State Transport Authority of the region in which the applicant resides or has his principal place of business.

1. Ins. by Act 54 of 1994, s. 22 (w.e.f. 14-11-1994).

70. Application for stage carriage permit.—(*1*) An application for a permit in respect of a stage carriage (in this Chapter referred to as a stage carriage permit) or as a reserve stage carriage shall, as far as may be, contain the following particulars, namely:—

(a) the route or routes or the area or areas to which the application relates;

(b) the type and seating capacity of each such vehicle;

(c) the minimum and maximum number of daily trips proposed to be provided and the time-table of the normal trips.

Explanation.—For the purposes of this section, section 72, section 80 and section 102, "trip" means a single journey from one point to another, and every return journey shall be deemed to be a separate trip;

(d) the number of vehicles intended to be kept in reserve to maintain the service and to provide for special occasions;

(e) the arrangements intended to be made for the housing, maintenance and repair of the vehicles, for the comfort and convenience of passengers and for the storage and safe custody of luggage;

(f) such other matters as may be prescribed.

(*2*) An application referred to in sub-section (*1*) shall be accompanied by such documents as may be prescribed.

71. Procedure of Regional Transport Authority in considering application for stage carriage permit.— (*1*) A Regional Transport Authority shall, while considering an application for a stage carriage permit, have regard to the objects of this Act:

[1]* * * * *

(2) A Regional Transport Authority shall refuse to grant a stage carriage permit if it appears from any time-table furnished that the provisions of this Act relating to the speed at which vehicles may be driven are likely to be contravened:

Provided that before such refusal an opportunity shall be given to the applicant to amend the time- table so as to conform to the said provisions.

(3) (*a*) The State Government shall, if so directed by the Central Government having regard to the number of vehicles, road conditions and other relevant matters, by notification in the Official Gazette, direct a State Transport Authority and a Regional Transport Authority to limit the number of stage carriages generally or of any specified type, as may be fixed and specified in the notification, operating on city routes in towns with a population of not less than five lakhs.

(b) Where the number of stage carriages are fixed under clause (*a*), the Government of the State shall reserve in the State certain percentage of stage carriage permits for the scheduled castes and the scheduled tribes in the same ratio as in the case of appointments made by direct recruitment to public services in the State.

(c) Where the number of stage carriages are fixed under clause (*a*), the Regional Transport Authority shall reserve such number of permits for the scheduled castes and the scheduled tribes as may be fixed by the State Government under sub-clause (*b*).

(d) After reserving such number of permits as is referred to in clause (*c*), the Regional Transport Authority shall in considering an application have regard to the following matters, namely:—

(i) financial stability of the applicant;

(ii) satisfactory performance as a stage carriage operator including payment of tax if the applicant is or has been an operator of stage carriage service; and

(iii) such other matters as may be prescribed by the State Government:

1. Proviso omitted by Act 54 of 1994, s. 23 (w.e.f. 14-11-1994).

Provided that, other conditions being equal, preference shall be given to applications for permits from—

(i) State transport undertakings;

(ii) co-operative societies registered or deemed to have been registered under any enactment for the time being in force; [1]***

(iii) ex-servicemen; [2][or]

[2][(*iv*) any other class or category of persons, as the State government may, for reasons to be recorded in writing consider necessary;]

[3]* * * * *

Explanation.—For the purposes of this section "company" means any body corporate, and includes a firm or other association of individuals; and "director", in relation to a firm, means a partner in the firm.

72. Grant of stage carriage permits.—(*1*) Subject to the provisions of section 71, a Regional Transport Authority may, on an application made to it under section 70, grant a stage carriage permit in accordance with the application or with such modifications as it deems fit or refuse to grant such a permit:

Provided that no such permit shall be granted in respect of any route or area not specified in the application.

(2) The Regional Transport Authority, if it decides to grant a stage carriage permit, may grant the permit for a stage carriage of a specified description and may, subject to any rules that may be made under this Act, attach to the permit any one or more of the following conditions, namely:—

(i) that the vehicles shall be used only in a specified area, or on a specified route or routes;

(ii) that the operation of the stage carriage shall be commenced with effect from a specified date;

(iii) the minimum and maximum number of daily trips to be provided in relation to any route or area generally or on specified days and occasions;

(iv) that copies of the time-table of the stage carriage approved by the Regional Transport Authority shall be exhibited on the vehicles and at specified stands and halts on the route or within the area;

(v) that the stage carriage shall be operated within such margins of deviation from the approved time-table as the Regional Transport Authority may from time to time specify;

(vi) that within municipal limits and such other areas and places as may be prescribed, passengers or goods shall not be taken up or set down except at specified points;

(vii) the maximum number of passengers and the maximum weight of luggage that may be carried on the stage carriage, either generally or on specified occasions or at specified times and seasons;

(viii) the weight and nature of passengers' luggage that shall be carried free of charge, the total weight of luggage that may be carried in relation to each passenger, and the arrangements that shall be made for the carriage of luggage without causing inconvenience to passengers;

(ix) the rate of charge that may be levied for passengers' luggage in excess of the free allowance;

(x) that vehicles of a specified type fitted with body conforming to approved specifications shall be used:

Provided that the attachment of this condition to a permit shall not prevent the continued use, for a period of two years from the date of publication of the approved specifications, of any vehicle operating on that date;

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1. The word "or" omitted by Act 54 of 1994, s. 23 (w.e.f. 14-11-1994).
2. Ins.by s.23, *ibid*. (w.e.f. 14-11-1994).
3. Sub-sections (*4*) and (*5*) omitted by s. 23, *ibid*. (w.e.f. 14-11-1994).

(xi) that specified standards of comfort and cleanliness shall be maintained in the vehicles;

(xii) the conditions subject to which goods may be carried in the stage carriage in addition to or to the exclusion of passengers;

(xiii) that fares shall be charged in accordance with the approved fare table;

(xiv) that a copy of, or extract from, the fare table approved by the Regional Transport Authority and particulars of any special fares or rates of fares so approved for particular occasions shall be exhibited on the stage carriage and at specified stands and halts;

(xv) that tickets bearing specified particulars shall be issued to passengers and shall show the fares actually charged and that records of tickets issued shall be kept in a specified manner;

(xvi) that mails shall be carried on the vehicle subject to such conditions (including conditions as to the time in which mails are to be carried and the charges which may be levied) as may be specified;

(xvii) the vehicles to be kept as reserve by the holder of the permit to maintain the operation and to provide for special occasions;

(xviii) the conditions subject to which vehicle may be used as a contract carriage;

(xix) that specified arrangements shall be made for the housing, maintenance and repair of vehicle;

(xx) that any specified bus station or shelter maintained by Government or a local authority shall be used and that any specified rent or fee shall be paid for such use;

(xxi) that the conditions of the permit shall not be departed from, save with the approval of the Regional Transport Authority;

(xxii) that the Regional Transport Authority may, after giving notice of not less than one month,—

(a) vary the conditions of the permit;

(b) attach to the permit further conditions:

Provided that the conditions specified in pursuance of clause (*i*) shall not be varied so as to alter the distance covered by the original route by more than 24 kilometers, and any variation within such limits shall be made only after the Regional Transport Authority is satisfied that such variation will serve the convenience of the public and that it is not expedient to grant a separate permit in respect of the original route as so varied or any part thereof;

(xxiii) that the holder of a permit shall furnish to the Regional Transport Authority such periodical returns, statistics and other information as the State Government may from time to time prescribe;

(xxiv) any other conditions which may be prescribed.

73. Application for contract carriage permit.—An application for a permit in respect of a contract carriage (in this Chapter referred to as a contract carriage permit) shall contain the following particulars, namely:—

(a) the type and seating capacity of the vehicle;

(b) the area for which the permit is required;

(c) any other particulars which may be prescribed.

74. Grant of contract carriage permit.—(*1*) Subject to the provisions of sub-section (*3*), a Regional Transport Authority may, on an application made to it under section 73, grant a contract carriage permit in accordance with the application or with such modifications as it deems fit or refuse to grant such a permit:

Provided that no such permit shall be granted in respect of any area not specified in the application.

(2) The Regional Transport Authority, if it decides to grant a contract carriage permit, may, subject to any rules that may be made under this Act, attach to the permit any one or more of the following conditions, namely:—

(i) that the vehicles shall be used only in a specified area or on a specified route or routes;

(ii) that except in accordance with specified conditions, no contract of hiring, other than an extension or modification of a subsisting contract, may be entered into outside the specified area;

(iii) the maximum number of passengers and the maximum weight of luggage that may be carried on the vehicles, either generally or on specified occasions or at specified times and seasons;

(iv) the conditions subject to which goods may be carried in any contract carriage in addition to, or to the exclusion of, passengers;

(v) that, in the case of motor cabs, specified fares or rates of fares shall be charged and a copy of the fare table shall be exhibited on the vehicle;

(vi) that, in the case of vehicles other than motor cabs, specified rates of hiring not exceeding specified maximum shall be charged;

(vii) that, in the case of motor cabs, a special weight of passengers' luggage shall be carried free of charge, and that the charge, if any, for any luggage in excess thereof shall be at a specified rate;

(viii) that, in the case of motor cabs, a taximeter shall be fitted and maintained in proper working order, if prescribed;

(ix) that the Regional Transport Authority may, after giving notice of not less than one month,—

(a) vary the conditions of the permit;

(b) attach to the permit further conditions;

(x) that the conditions of permit shall not be departed from save with the approval of the Regional Transport Authority;

(xi) that specified standards of comfort and cleanliness shall be maintained in the vehicles;

(xii) that, except in the circumstances of exceptional nature, the plying of the vehicle or carrying of the passengers shall not be refused;

(xiii) any other conditions which may be prescribed.

(3) (*a*) The State Government shall, if so directed by the Central Government, having regard to the number of vehicles, road conditions and other relevant matters, by notification in the Official Gazette, direct a State Transport Authority and a Regional Transport Authority to limit the number of contract carriages generally or of any specified type, as may be fixed and specified in the notification, operating on city routes in towns with a population of not less than five lakhs.

(b) Where the number of contract carriages are fixed under clause (*a*), the Regional Transport Authority shall, in considering an application for the grant of permit in respect of any such contract carriage, have regard to the following matters, namely:—

(i) financial stability of the applicant;

(ii) satisfactory performance as a contract carriage operator including payment of tax if the applicant is or has been an operator of contract carriages; and

(iii) such other matters as may be prescribed by the State Government:

Provided that, other conditions being equal, preference shall be given to applications for permits from—

(i) the India Tourism Development Corporation;

(ii) State Tourism Development Corporations;

(iii) State Tourism Departments;

(iv) State transport undertakings;

(v) co-operative societies registered or deemed to have been registered under any enactment for the time being in force;

(vi) ex-servicemen.

75. Scheme for renting of motor cabs.—(*1*) The Central Government may, by notification in the Official Gazette, make a scheme for the purpose of regulating the business of renting of [1][motor cabs or motor cycles to persons desiring to drive either by themselves or through drivers, motor cabs or motor cycles] for their own use and for matters connected therewith.

(2) A scheme made under sub-section (*1*) may provide for all or any of the following matters, namely:—

(a) licensing of operators under the scheme including grant, renewal and revocation of such licences;

(b) form of application and form of licences and the particulars to be contained therein;

(c) fee to be paid with the application for such licences;

(d) the authorities to which the application shall be made;

(e) condition subject to which such licences may be granted, renewed or revoked;

(f) appeals against orders of refusal to grant or renew such licences and appeals against orders revoking such licences;

(g) conditions subject to which motor cabs may be rented;

(h) maintenance of records and inspection of such records;

(i) such other matters as may be necessary to carry out the purposes of this section.

76. Application for private service vehicle permit.—(*1*) A Regional Transport Authority may, on an application made to it, grant a private service vehicle permit in accordance with the application or with such modification as it deems fit or refuse to grant such permit:

Provided that no such permit shall be granted in respect of any area or route not specified in the application.

(2) An application for a permit to use a motor vehicle as a private service vehicle shall contain the following particulars, namely:—

(a) type and seating capacity of the vehicle;

(b) the area or the route or routes to which the application relates;

(c) the manner in which it is claimed that the purpose of carrying persons otherwise than for hire or reward or in connection with the trade or business carried on by the applicant will be served by the vehicle; and

(d) any other particulars which may be prescribed.

(3) The Regional Transport Authority if it decides to grant the permit may, subject to any rules that may be made under this Act, attach to the permit any one or more of the following conditions, namely:—

(i) that the vehicle be used only in a specified area or on a specified route or routes;

(ii) the maximum number of persons and the maximum weight of luggage that may be carried;

(iii) that the Regional Transport Authority may, after giving notice of not less than one month—

(a) vary the conditions of the permit;

1. Subs. by Act 54 of 1994, s. 24, for "motor cabs to persons desiring to drive the cabs" (w.e.f. 14-11-1994).

(b) attach to the permit further conditions;

(iv) that the conditions of permit shall not be departed from, save with the approval of the Regional Transport Authority;

(v) that specified standards of comforts and cleanliness shall be maintained in the vehicle;

(vi) that the holder of the permit shall furnish to the Regional Transport Authority such periodical returns, statistics and other information as the State Government may, from time to time, specify; and

(vii) such other conditions as may be prescribed.

77. Application for goods carriage permit.—An application for a permit to use a motor vehicle for the carriage of goods for hire or reward or for the carriage of goods for or in connection with a trade or business carried on by the applicant (in this Chapter referred to as a goods carriage permit) shall, as far as may be, contain the following particulars, namely:—

(a) the area or the route or routes to which the application relates;

(b) the type and capacity of the vehicle;

(c) the nature of the goods it is proposed to carry;

(d) the arrangements intended to be made for the housing, maintenance and repair of the vehicle and for the storage and safe custody of the goods;

(e) such particulars as the Regional Transport Authority may require with respect to any business as a carrier of goods for hire or reward carried on by the applicant at any time before the making of the application, and of the rates charged by the applicant;

(f) particulars of any agreement, or arrangement, affecting in any material respect the provision within the region of the Regional Transport Authority of facilities for the transport of goods for hire or reward, entered into by the applicant with any other person by whom such facilities are provided, whether within or without the region;

(g) any other particulars which may be prescribed.

78. Consideration of application for goods carriage permit.—A Regional Transport Authority shall, in considering an application for a goods carriage permit, have regard to the following matters, namely:—

(a) the nature of the goods to be carried with special reference to their dangerous or hazardous nature to human life;

(b) the nature of the chemicals or explosives to be carried with special reference to the safety to human life.

79. Grant of goods carriage permit.—(*1*) A Regional Transport Authority may, on an application made to it under section 77, grant a goods carriage permit to be valid throughout the State or in accordance with the application or with such modifications as it deems fit or refuse to grant such a permit:

Provided that no such permit shall be granted in respect of any area or route not specified in the application.

(2) The Regional Transport Authority, if it decides to grant a goods carriage permit, may grant the permit and may, subject to any rules that may be made under this Act, attach to the permit any one or more of the following conditions, namely:—

(i) that the vehicle shall be used only in a specified area or on a specified route or routes;

(ii) that the gross vehicle weight of any vehicle used shall not exceed a specified maximum;

(iii) that goods of a specified nature shall not be carried;

(iv) that goods shall be carried at specified rates;

(v) that specified arrangement shall be made for the housing, maintenance and repair of the vehicle and the storage and safe custody of the goods carried;

(vi) that the holder of the permit shall furnish to the Regional Transport Authority such periodical returns, statistics and other information as the State Government may, from time to time, prescribe;

(vii) that the Regional Transport Authority may, after giving notice of not less than one month,—

(a) vary the conditions of the permit;

(b) attach to the permit further conditions;

(viii) that the conditions of the permit shall not be departed from, save with the approval of the Regional Transport Authority;

(ix) any other conditions which may be prescribed.

(3) The conditions referred to in sub-section (*2*) may include conditions relating to the packaging and carriage of goods of dangerous or hazardous nature to human life.

80. Procedure in applying for and granting permits.—(*1*) An application for a permit of any kind may be made at any time.

(2) A [1][Regional Transport Authority, State Transport Authority or any prescribed authority referred to in sub-section (*1*) of section 66] shall not ordinarily refuse to grant an application for permit of any kind made at any time under this Act:

Provided that the [1][Regional Transport Authority, State Transport Authority or any prescribed authority referred to in sub-section (*1*) of section 66] may summarily refuse the application if the grant of any permit in accordance with the application would have the effect of increasing the number of stage carriages as fixed and specified in a notification in the Official Gazette under clause (*a*) of sub-section (*3*) of section 71 or of contract carriages as fixed and specified in a notification in the Official Gazette under clause (*a*) of sub-section (*3*) of section 74:

Provided further that where a [1][Regional Transport Authority, State Transport Authority or any prescribed authority referred to in sub-section (*1*) of section 66] refuses an application for the grant of a permit of any kind under this Act, it shall give to the applicant in writing its reasons for the refusal of the same and an opportunity of being heard in the matter.

(3) An application to vary the conditions of any permit, other than a temporary permit, by the inclusion of a new route or routes or a new area or by altering the route or routes or area covered by it, or in the case of a stage carriage permit by increasing the number of trips above the specified maximum or by the variation, extension or curtailment of the route or routes or the area specified in the permit shall be treated as an application for the grant of a new permit:

Provided that it shall not be necessary so to treat an application made by the holder of stage carriage permit who provides the only service on any route to increase the frequency of the service so provided without any increase in the number of vehicles:

Provided further that,—

(i) in the case of variation, the termini shall not be altered and the distance covered by the variation shall not exceed twenty-four kilometres;

(ii) in the case of extension, the distance covered by extension shall not exceed twenty-four kilometres from the termini,

and any such variation or extension within such limits shall be made only after the transport authority is satisfied that such variation will serve the convenience of the public and that it is not expedient to grant a separate permit in respect of the original route as so varied or extended or any part thereof.

1. Subs. by Act 54 of 1994, s. 25, for "Regional Transport Authority" (w.e.f. 14-11-1994).

(4) A [1][Regional Transport Authority, State Transport Authority or any prescribed authority referred to in sub-section (*1*) of section 66] may, before such date as may be specified by it in this behalf, replace any permit granted by it before the said date by a fresh permit conforming to the provisions of section 72 or section 74 or section 76 or section 79, as the case may be, and the fresh permit shall be valid for the same route or routes or the same area for which the replaced permit was valid:

Provided that no condition other than a condition which was already attached to the replaced permit or which could have been attached thereto under the law in force when that permit was granted shall be attached to the fresh permit except with the consent in writing of the holder of the permit.

(5) Notwithstanding anything contained in section 81, a permit issued under the provisions of sub-section (*4*) shall be effective without renewal for the remainder of the period during which the replaced permit would have been so effective.

81. Duration and renewal of permits.—(*1*) A permit other than a temporary permit issued under section 87 or a special permit issued under sub-section (*8*) of section 88 shall be effective [2][from the date of issuance or renewal thereof] for a period of five years:

Provided that where the permit is countersigned under sub-section (*1*) of section 88, such countersignature shall remain effective without renewal for such period so as to synchronise with the validity of the primary permit.

(2) A permit may be renewed on an application made not less than fifteen days before the date of its expiry.

(3) Notwithstanding anything contained in sub-section (*2*), the Regional Transport Authority or the State Transport Authority, as the case may be, may entertain an application for the renewal of a permit after the last date specified in that sub-section if it is satisfied that the applicant was prevented by good and sufficient cause from making an application within the time specified.

(4) The Regional Transport Authority or the State Transport Authority, as the case may be, may reject an application for the renewal of a permit on one or more of the following grounds, namely:—

(a) the financial condition of the applicant as evidenced by insolvency, or decrees for payment of debts remaining unsatisfied for a period of thirty days, prior to the date of consideration of the application;

(b) the applicant had been punished twice or more for any of the following offences within twelve months reckoned from fifteen days prior to the date of consideration of the application committed as a result of the operation of a stage carriage service by the applicant, namely:—

(i) plying any vehicle—

(1) without payment of tax due on such vehicle;

(2) without payment of tax during the grace period allowed for payment of such tax and then stop the plying of such vehicle;

(3) on any unauthorised route;

(ii) making unauthorised trips:

Provided that in computing the number of punishments for the purpose of clause (*b*), any punishment stayed by the order of an appellate authority shall not be taken into account:
Provided further that no application under this sub-section shall be rejected unless an opportunity of being heard is given to the applicant.

(5) Where a permit has been renewed under this section after the expiry of the period thereof, such renewal shall have effect from the date of such expiry irrespective of whether or not a temporary permit

1. Subs. by Act 54 of 1994, s. 25, for "Regional Transport Authority" (w.e.f. 14-11-1994).
2. Subs. by s. 26, *ibid*., for "without renewal" (w.e.f. 14-11-1994).

has been granted under clause (*d*) of section 87, and where a temporary permit has been granted, the fee paid in respect of such temporary permit shall be refunded.

82. Transfer of permit.—(*1*) Save as provided in sub-section (*2*), a permit shall not be transferable from one person to another except with the permission of the transport authority which granted the permit and shall not, without such permission, operate to confer on any person to whom a vehicle covered by the permit is transferred any right to use that vehicle in the manner authorised by the permit.

(2) Where the holder of a permit dies, the person succeeding to the possession of the vehicle covered by the permit may, for a period of three months, use the permit as if it had been granted to himself:

Provided that such person has, within thirty days of the death of the holder, informed the transport authority which granted the permit of the death of the holder and of his own intention to use the permit:
Provided further that no permit shall be so used after the date on which it would have ceased to be effective without renewal in the hands of the deceased holder.

(3) The transport authority may, on application made to it within three months of the death of the holder of a permit, transfer the permit to the person succeeding to the possession of the vehicles covered by the permit:

Provided that the transport authority may entertain an application made after the expiry of the said period of three months if it is satisfied that the applicant was prevented by good and sufficient cause from making an application within the time specified.

83. Replacement of vehicles.—The holder of a permit may, with the permission of the authority by which the permit was granted, replace any vehicle covered by the permit by any other vehicle of the same nature.

84. General conditions attaching to all permits.—The following shall be conditions of every permit—

(a) that the vehicle to which the permit relates carries valid certificate of fitness issued under section 56 and is at all times so maintained as to comply with the requirements of this Act and the rules made thereunder;

(b) that the vehicle to which the permit relates is not driven at a speed exceeding the speed permitted under this Act;

(c) that any prohibition or restriction imposed and any fares or freight fixed by notification made under section 67 are observed in connection with the vehicle to which the permit relates;

(d) that the vehicle to which the permit relates is not driven in contravention of the provisions of section 5 or section 113;

(e) that the provisions of this Act limiting the hours of work of drivers are observed in connection with any vehicle or vehicles to which the permit relates;

(f) that the provisions of Chapters X, XI and XII so far as they apply to the holder of the permit are observed; and

(g) that the name and address of the operator shall be painted or otherwise firmly affixed to every vehicle to which the permit relates on the exterior of the body of that vehicle on both sides thereof in a colour or colours vividly contrasting to the colour of the vehicle centered as high as practicable below the window line in bold letters.

85. General form of permits.—Every permit issued under this Act shall be complete in itself and shall contain all the necessary particulars of the permit and the conditions attached thereto.

86. Cancellation and suspension of permits.—(*1*) The transport authority which granted a permit may cancel the permit or may suspend it for such period as it thinks fit—

(a) on the breach of any condition specified in section 84 or of any condition contained in the permit, or

(b) if the holder of the permit uses or causes or allows a vehicle to be used in any manner not authorised by the permit, or

(c) if the holder of the permit ceases to own the vehicle covered by the permit, or

(d) if the holder of the permit has obtained the permit by fraud or misrepresentation, or

(e) if the holder of the goods carriage permit, fails without reasonable cause, to use the vehicle for the purposes for which the permit was granted, or

(f) if the holder of the permit acquires the citizenship of any foreign country:

Provided that no permit shall be suspended or cancelled unless an opportunity has been given to the holder of the permit to furnish his explanation.

(2) The transport authority may exercise the powers conferred on it under sub-section (*1*) in relation to a permit granted by any authority or person to whom power in this behalf has been delegated under sub-section (*5*) of section 68 as if the said permit was a permit granted by the transport authority.

(3) Where a transport authority cancels or suspends a permit, it shall give to the holder in writing its reasons for the action taken.

(4) The powers exercisable under sub-section (*1*) (other than the power to cancel a permit) by the transport authority which granted the permit may be exercised by any authority or person to whom such powers have been delegated under sub-section (*5*) of section 68.

(5) Where a permit is liable to be cancelled or suspended under clause (*a*) or clause (*b*) or clause (*e*) of sub-section (*1*) and the transport authority is of opinion that having regard to the circumstances of the case, it would not be necessary or expedient so to cancel or suspend the permit if the holder of the permit agrees to pay a certain sum of money, then, notwithstanding anything contained in sub-section (*1*), the transport authority may, instead of cancelling or suspending the permit, as the case may be, recover from the holder of the permit the sum of money agreed upon.

(6) The powers exercisable by the transport authority under sub-section (*5*) may, where an appeal has been preferred under section 89, be exercised also by the appellate authority.

(7) In relation to a permit referred to in sub-section (*9*) of section 88, the powers exercisable under sub-section (*1*) (other than the power to cancel a permit) by the transport authority which granted the permit, may be exercised by any transport authority and any authority or persons to whom power in this behalf has been delegated under sub-section (*5*) of section 68, as if the said permit was a permit granted by any such authority or persons.

87. Temporary permits.—(*1*) A Regional Transport Authority and the State Transport Authority may without following the procedure laid down in section 80, grant permits, to be effective for a limited period which shall, not in any case exceed four months, to authorise the use of a transport vehicle temporarily—

(a) for the conveyance of passengers on special occasions such as to and from fairs and religious gatherings, or

(b) for the purposes of a seasonal business, or

(c) to meet a particular temporary need, or

(d) pending decision on an application for the renewal of a permit,

and may attach to any such permit such condition as it may think fit:

Provided that a Regional Transport Authority or, as the case may be, State Transport Authority may, in the case of goods carriages, under the circumstances of an exceptional nature, and for reasons to be recorded in writing, grant a permit for a period exceeding four months, but not exceeding one year.

(2) Notwithstanding anything contained in sub-section (*1*), a temporary permit may be granted thereunder in respect of any route or area where—

(i) no permit could be issued under section 72 or section 74 or section 76 or section 79 in respect of that route or area by reason of an order of a court or other competent authority restraining the issue

of the same, for a period not exceeding the period for which the issue of the permit has been so restrained; or

(ii) as a result of the suspension by a court or other competent authority of the permit of any vehicle in respect of that route or area, there is no transport vehicle of the same class with a valid permit in respect of that route or area, or there is no adequate number of such vehicles in respect of that route or area, for a period not exceeding the period of such suspension.

Provided that the number of transport vehicles in respect of which temporary permits are so granted shall not exceed the number of vehicles in respect of which the issue of the permits have been restrained or, as the case may be, the permit has been suspended.

88. Validation of permits for use outside region in which granted.—(*1*) Except as may be otherwise prescribed, a permit granted by the Regional Transport Authority of any one region shall not be valid in any other region, unless the permit has been countersigned by the Regional Transport Authority of that other rigion, and a permit granted in any one State shall not be valid in any other State unless countersigned by the State Transport Authority of that other State or by the Regional Transport Authority concerned:

Provided that a goods carriage permit, granted by the Regional Transport Authority of any one region, for any area in any other region or regions within the same State shall be valid in that area without the countersignature of the Regional Transport Authority of the other region or of each of the other regions concerned:

Provided further that where both the starting point and the terminal point of a route are situate within the same State, but part of such route lies in any other State and the length of such part does not exceed sixteen kilometres, the permit shall be valid in the other State in respect of that part of the route which is in that other State notwithstanding that such permit has not been countersigned by the State Transport Authority or the Regional Transport Authority of that other State:

Provided also that—

(a) where a motor vehicle covered by a permit granted in one State is to be used for the purposes of defence in any other State, such vehicle shall display a certificate, in such form, and issued by such Authority, as the Central Government may, by notification in the Official Gazette, specify, to the effect that the vehicle shall be used for the period specified therein exclusively for the purposes of defence; and

(b) any such permit shall be valid in that other State notwithstanding that such permit has not been countersigned by the State Transport Authority or the Regional Transport Authority of that other State.

(2) Notwithstanding anything contained in sub-section (*1*), a permit granted or countersigned by a State Transport Authority shall be valid in the whole State or in such regions within the State as may be specified in the permit.

(3) A Regional Transport Authority when countersigning the permit may attach to the permit any condition which it might have imposed if it had granted the permit and may likewise vary any condition attached to the permit by the authority by which the permit was granted.

(4) The provisions of this Chapter relating to the grant, revocation and suspension of permits shall apply to the grant, revocation and suspension of countersignatures of permits:

Provided that it shall not be necessary to follow the procedure laid down in section 80 for the grant of countersignatures of permits, where the permits granted in any one State are required to be countersigned by the State Transport Authority of another State or by the Regional Transport Authority concerned as a result of any agreement arrived at between the States after complying with the requirements of sub-section (*5*).

(5) Every proposal to enter into an agreement between the States to fix the number of permits which is proposed to be granted or countersigned in respect of each route or area, shall be published by each of the State Governments concerned in the Official Gazette and in any one or more of the newspapers in regional language circulating in the area or route proposed to be covered by the agreement together with a notice of the date before which representations in connection therewith may be submitted, and the date not being less than thirty days from the date of publication in the Official Gazette, on which, and the authority by which, and the time and place at which, the proposal and any representation received in connection therewith will be considered.

(6) Every agreement arrived at between the States shall, in so far as it relates to the grant of countersignature of permits, be published by each of the State Governments concerned in the Official Gazette and in any one or more of the newspapers in the regional language circulating in the area or route covered by the agreement and the State Transport Authority of the State and the Regional Transport Authority concerned shall give effect to it.

(7) Notwithstanding anything contained in sub-section (*1*), a Regional Transport Authority of one region may issue a temporary permit under section 87 to be valid in another region or State with the concurrence, given generally or for the particular occasion, of the Regional Transport Authority of that other region or of the State Transport Authority of that other State, as the case may be.

(8) Notwithstanding anything contained in sub-section (*1*), but subject to any rules that may be made under this Act by the Central Government, the Regional Transport Authority of any one region or, as the case may be, the State Transport Authority, may, for the convenience of the public, [1][grant a special permit to any public service vehicle including any vehicle covered] by a permit issued under section 72 (including a reserve stage carriage) or under section 74 or under sub-section (*9*) of this section for carrying a passenger or passengers for hire or reward under a contract, express or implied, for the use of the vehicle as a whole without stopping to pick up or set down along the line of route passengers not included in the contract, and in every case where such special permit is granted, the Regional Transport Authority shall assign to the vehicle, for display thereon, a special distinguishing mark in the form and manner specified by the Central Government and such special permit shall be valid in any other region or State without the countersignature of the Regional Transport Authority of the other region or of the State Transport Authority of the other State, as the case may be.

(9) Notwithstanding anything contained in sub-section (*1*) but subject to any rules that may be made by the Central Government under sub-section (*14*), any State Transport Authority may, for the purpose of promoting tourism, grant permits in respect of tourist vehicles valid for the whole of India, or in such contiguous States not being less than three in number including the State in which the permit is issued as may be specified in such permit in accordance with the choice indicated in the application and the provisions of sections 73, 74, 80, 81, 82, 83, 84, 85, 86[2][clause (*d*) of sub-section (*1*) of section 87 and section 89] shall, as far as may be, apply in relation to such permits.

[3]* * * * *

(*11*) The following shall be conditions of every permit granted under sub-section (*9*), namely:—

(i) every motor vehicle in respect of which such permit is granted shall conform to such description, requirement regarding the seating capacity, standards of comforts, amenities and other matters, as the Central Government may specify in this behalf;

(ii) every such motor vehicle shall be driven by a person having such qualifications and satisfying such conditions as may be specified by the Central Government; and

(iii) such other conditions as may be prescribed by the Central Government.

(*12*) Notwithstanding anything contained in sub-section (*1*), but, subject to the rules that may be made by the Central Government under sub-section (*14*), the appropriate authority may, for the purpose of

1. Subs. by Act 54 of 1994, s. 27, for "grant a special permit in relation to a vehicle covered" (w.e.f. 14-11-1994).
2. Subs. by s. 27, *ibid*, for "and 89" (w.e.f. 14-11-1994).
3. Sub-section (*10*) omitted by s. 27, *ibid*. (w.e.f. 14-11-1994).

encouraging long distance inter-State road transport, grant in a State, national permits in respect of goods carriages and the provisions of sections 69, 77, 79, 80, 81, 82, 83, 84, 85, 86 [1][clause (*d*) of sub-section (*1*) of section 87 and section 89] shall, as far as may be, apply to or in relation to the grant of national permits.

[2]* * * * *

(14) (*a*) The Central Government may make rules for carrying out the provisions of this section.

(b) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(i) the authorisation fee payable for the issue of a permit referred to in sub-sections (*9*) and (*12*);

(ii) the fixation of the laden weight of the motor vehicle;

(iii) the distinguishing particulars or marks to be carried or exhibited in or on the motor vehicle;

(iv) the colour or colours in which the motor vehicle is to be painted;

(v) such other matters as the appropriate authority shall consider in granting a national permit.

Explanation.—In this section,—

(a) "appropriate authority", in relation to a national permit, means the authority which is authorised under this Act to grant a goods carriage permit;

(b) "authorisation fee" means the annual fee, not exceeding one thousand rupees, which may be charged by the appropriate authority of a State to enable a motor vehicle, covered by the permit referred to in sub-sections (*9*) and (*12*) to be used in other States subject to the payment of taxes or fees, if any, levied by the States concerned;

(c) "national permit" means a permit granted by the appropriate authority to goods carriages to operate throughout the territory of India or in such contiguous States, not being less than four in number, including the State in which the permit is issued as may be specified in such permit in accordance with the choice indicated in the application.

89. Appeals.—(*1*) Any person—

(a) aggrieved by the refusal of the State or a Regional Transport Authority to grant a permit, or by any condition attached to a permit granted to him, or

(b) aggrieved by the revocation or suspension of the permit or by any variation of the conditions thereof, or

(c) aggrieved by the refusal to transfer the permit under section 82, or

(d) aggrieved by the refusal of the State or a Regional Transport Authority to countersign a permit, or by any condition attached to such countersignature, or

(e) aggrieved by the refusal of renewal of a permit, or

(f) aggrieved by the refusal to grant permission under section 83, or

(g) aggrieved by any other order which may be prescribed, may, within the prescribed time and in the prescribed manner, appeal to the State Transport Appellate Tribunal constituted under sub-section (*2*), who shall, after giving such person and the original authority an opportunity of being heard, give a decision thereon which shall be final.

[3][(*2*) The State Government shall constitute such number of Transport Appellate Tribunals as it thinks fit and each such Tribunal shall consist of a judicial officer who *is* not below the rank of a

1. Subs. by Act 54 of 1994, s. 27, for "and 89" (w.e.f. 14-11-1994).
2. Sub-section (*13*) omitted by s. 27, *ibid*. (w.e.f. 14-11-1994).
3. Subs. by s. 28, *ibid*., for sub-section (*2*) (w.e.f. 14-11-1994).

District Judge or who is qualified to be a Judge of the High Court and it shall exercise jurisdiction within such area as may be notified by that Government.]

(3) Notwithstanding anything contained in sub-section (*1*) or sub- section (*2*), every appeal pending at the commencement of this Act, shall continue to be proceeded with and disposed of as if this Act had not been passed.

Explanation.—For the removal of doubts, it is hereby declared that when any order is made by the State Transport Authority or the Regional Transport Authority in pursuance of a direction issued by the Inter-State Transport Commission under clause (*c*) of sub-section (*2*) of section 63A of the Motor Vehicles Act, 1939 (4 of 1939),as it stood immediately before the commencement of this Act, and any person feels aggrieved by such order on the ground that it is not in consonance with such direction, he may appeal under sub-section (*1*) to the State Transport Appellate Tribunal against such order but not against the direction so issued.

90. Revision.—The State Transport Appellate Tribunal may, on an application made to it, call for the record of any case in which an order has been made by a State Transport Authority or Regional Transport Authority against which no appeal lies, and if it appears to the State Transport Appellate Tribunal that the order made by the State Transport Authority or Regional Transport Authority is improper or illegal, the State Transport Appellate Tribunal may pass such order in relation to the case as it deems fit and every such order shall be final:

Provided that the State Transport Appellate Tribunal shall not entertain any application from a person aggrieved by an order of a State Transport Authority or Regional Transport Authority, unless the application is made within thirty days from the date of the order:

Provided further that the State Transport Appellate Tribunal may entertain the application after the expiry of the said period of thirty days, if it is satisfied that the applicant was prevented by good and sufficient cause from making the application in time:

Provided also that the State Transport Appellate Tribunal shall not pass an order under this section prejudicial to any person without giving him a reasonable opportunity of being heard.

91. Restriction of hours of work of drivers.—[1][(*1*) The hours of work of any person engaged for operating a transport vehicle shall be such as provided in the Motor Transport Workers Act, 1961 (27 of 1961).]

(2) A State Government may, by notification in the Official Gazette, grant such exemptions from the provisions of sub-section (*1*) as it thinks fit, to meet cases of emergency or of delays by reason of circumstances which could not be foreseen.

(3) A State Government or, if authorised in this behalf by the State Government by rules made under section 96, the State or a Regional Transport Authority may require persons employing any person whose work is subject to any of the provisions of sub-section (*1*) to fix beforehand the hours of work of such persons so as to conform to those provisions, and may provide for the recording of the hours so fixed.

(4) No person shall work or shall cause or allow any other person to work outside the hours fixed or recorded for the work of such persons under sub-section (*3*).

(5) A State Government may prescribe the circumstances under which and the period during which the driver of a vehicle although not engaged in work is required to remain on or near the vehicle may be deemed to be an interval for rest within the meaning of sub-section (*1*).

92. Voidance of contracts restrictive of liability.—Any contract for the conveyance of a passenger in a stage carriage or contract carriage, in respect of which a permit has been issued under this Chapter, shall, so far as it purports to negative or restrict the liability of any person in respect of any claim made against that person in respect of the death of, or bodily injury to, the passenger while being carried in, entering or alighting from the vehicle, or purports to impose any conditions with respect to the enforcement of any such liability, be void.

1. Subs. by Act 54 of 1994, s. 29, for sub-section (*1*) (w.e.f. 14-11-1994).

93. Agent or canvasser to obtain licence.—(*1*) No person shall engage himself—

(i) as an agent or a canvasser, in the sale of tickets for travel by public service vehicles or in otherwise soliciting custom for such vehicles, or

(ii) as an agent in the business of collecting, forwarding or distributing goods carried by goods carriages,

unless he has obtained a licence from such authority and subject to such conditions as may be prescribed by the State Government.

(2) The conditions referred to in sub-section (*1*) may include all or any of the following matters, namely:—

(a) the period for which a licence may be granted or renewed;

(b) the fee payable for the issue or renewal of the licence;

(c) the deposit of security—

(i) of a sum not exceeding rupees fifty thousand in the case of an agent in the business of collecting, forwarding or distributing goods carried by goods carriages;

(ii) of a sum not exceeding rupees five thousand in the case of any other agent or canvasser, and the circumstances under which the security may be forfeited;

(d) the provisions by the agent of insurance of goods in transit;

(e) the authority by which and the circumstances under which the licence may be suspended or revoked;

(f) such other conditions as may be prescribed by the State Government.

(3) It shall be a condition of every licence that no agent or canvasser to whom the licence is granted shall advertise in any newspaper, book, list, classified directory or other publication unless there is contained in such advertisement appearing in such newspaper, book, list, classified directory or other publication the licence number, the date of expiry of licence and the particulars of the authority which granted the licence.

94. Bar on jurisdiction of Civil Courts.—No Civil Court shall have jurisdiction to entertain any question relating to the grant of a permit under this Act, and no injunction in respect of any action taken or to be taken by the duly constituted authorities under this Act with regard to the grant of a permit, shall be entertained by any Civil Court.

95. Power of State Government to make rules as to stage carriages and contract carriages.—(*1*) A State Government may make rules to regulate, in respect of stage carriages and contract carriages and the conduct of passengers in such vehicles.

(*2*) Without prejudice to the generality of the foregoing provision, such rules may—

(a) authorise the removal from such vehicle of any person contravening the rules by the driver or conductor of the vehicle, or, on the request of the driver or conductor, or any passenger, by any police officer;

(b) require a passenger who is reasonably suspected by the driver or conductor of contraventing the rules to give his name and address to a police officer or to the driver or conductor on demand;

(c) require a passenger to declare, if so demanded by the driver or conductor, the journey he intends to take or has taken in the vehicle and to pay the fare for the whole of such journey and to accept any ticket issued therefor;

(d) require, on demand being made for the purpose by the driver or conductor or other person authorised by the owners of the vehicle, production during the journey and surrender at the end of the journey by the holder thereof of any ticket issued to him;

(e) require a passenger, if so requested by the driver or conductor, to leave the vehicle on the completion of the journey the fare for which he has paid;

(f) require the surrender by the holder thereof on the expiry of the period for which it is issued of a ticket issued to him;

(g) require a passenger to abstain from doing anything which is likely to obstruct or interfere with the working of the vehicle or to cause damage to any part of the vehicle or its equipment or to cause injury or discomfort to any other passenger;

(h) require a passenger not to smoke in any vehicle on which a notice prohibiting smoking is exhibited;

(i) require the maintenance of complaint books in stage carriages and prescribe the conditions under which passengers can record any complaints in the same.

96. Power of State Government to make rules for the purposes of this Chapter.—(*1*) A State Government may make rules for the purpose of carrying into effect the provisions of this Chapter.

(*2*) Without prejudice to the generality of the foregoing power, rules under this section may be made with respect to all or any of the following matters, namely:—

(i) the period of appointment and the terms of appointment of and the conduct of business by Regional and State Transport Authorities and the reports to be furnished by them;

(ii) the conduct of business by any such authority in the absence of any member (including the Chairman) thereof and the nature of business which, the circumstances under which and the manner in which, business could be so conducted;

(iii) the conduct and hearing of appeals that may be preferred under this Chapter, the fees to be paid in respect of such appeals and the refund of such fees;

(iv) the forms to be used for the purposes of this Chapter, including the forms of permits;

(v) the issue of copies of permits in place of permits lost, destroyed or multilated;

(vi) the documents, plates and marks to be carried by transport vehicles, the manner in which they are to be carried and the languages in which any such documents are to be expressed;

(vii) the fees to be paid in respect of applications for permits,duplicate permits and plates;

(*vii*) the exemption of prescribed persons or prescribed classes of persons from payment of all or any or any portion of the fees payable under this Chapter;

(ix) the custody, production and cancellation on revocation or expiration of permits, and the return of permits which have been cancelled;

(x) the conditions subject to which, and the extent to which, a permit granted in another State shall be valid in the State without countersignature;

(xi) the conditions subject to which, and the extent to which, a permit granted in one region shall be valid in another region within the State without countersignature;

(xii) the conditions to be attached to permits for the purpose of giving effect to any agreement such as is referred to in clause (*iii*) of sub-section (*1*) of section 67;

(xiii) the authorities to whom, the time within which and the manner in which appeals may be made;

(xiv) the construction and fittings of, and the equipment to be carried by, stage and contract carriage, whether generally or in specified areas;

(xv) the determination of the number of passengers a stage or contract carriage is adapted to carry and the number which may be carried;

(xvi) the conditions subject to which goods may be carried on stage and contract carriages partly or wholly in lieu of passengers;

(xvii) the safe custody and disposal of property left in a stage or contract carriage;

(xviii) regulating the painting or marking of transport vehicles and the display of advertising matter thereon, and in particular prohibiting the painting or marking of transport vehicles in such colour or manner as to induce any person to believe that the vehicle is used for the transport of mails;

(xix) the conveyance in stage or contract carriages of corpses or persons suffering from any infectious or contagious disease or goods likely to cause discomfort or injury to passengers and the inspection and disinfection of such carriage; if used for such purposes;

(xx) the provision of taxi meters on motor cabs requiring approval or standard types of taxi meters to be used and examining testing and sealing taxi meters;

(xxi) prohibiting the picking up or setting down of passengers by stage or contract carriages at specified places or in specified areas or at places other than duly notified stands or halting places and requiring the driver of a stage carriage to stop and remain stationary for a reasonable time when so required by a passenger desiring to board or alight from the vehicle at a notified halting place;

(xxii) the requirements which shall be complied with in the construction or use of any duly notified stand or halting place, including the provision of adequate equipment and facilities for the convenience of all users thereof; the fees, if any, which may be charged for the use of such facilities, the records which shall be maintained at such stands or places, the staff to be employed thereat, and the duties and conduct of such staff, and generally for maintaining such stands and places in a serviceable and clean condition;

(xxiii) the regulation of motor cab ranks;

(xxiv) requiring the owners of transport vehicles to notify any change of address or to report the failure of or damage to any vehicle used for the conveyance of passengers for hire or reward;

(xxv) authorising specified persons to enter at all reasonable times and inspect all premises used by permit holders for the purposes of their business;

(xxvi) requiring the person in charge of a stage carriage to carry any person tendering the legal or customary fare;

(xxvii) the conditions under which and the types of containers or vehicles in which animals or birds may be carried and the seasons during which animals or birds may or may not be carried;

(xxviii) the licensing of and the regulation of the conduct of agents or canvassers who engage in the sale of tickets for travel by public service vehicles or otherwise solicit custom for such vehicles;

(xxix) the licensing of agents engaged in the business of collecting for forwarding and distributing goods carried by goods carriages;

(xxx) the inspection of transport vehicles and their contents and of the permits relating to them;

(xxxi) the carriage of persons other than the driver in goods carriages;

(xxxii) the records to be maintained and the returns to be furnished by the owners of transport vehicles; and

(xxxiii) any other matter which is to be or may be prescribed.

CHAPTER VI

SPECIAL PROVISIONS RELATING TO STATE TRANSPORT UNDERTAKINGS

97. Definition.—In this Chapter, unless the context otherwise requires, "road transport service" means a service of motor vehicles carrying passengers or goods or both by road for hire or reward.

98. Chapter to override Chapter V and other laws.—The provisions of this Chapter and the rules and orders made thereunder shall have effect notwithstanding anything inconsistent therewith contained in Chapter V or in any other law for the time being in force or in any instrument having effect by virtue of any such law.

99. Preparation and publication of proposal regarding road transport service of a State transport undertaking.—[1][(*1*)]Where any State Government is of opinion that for the purpose of providing an efficient, adequate, economical and properly co-ordinated road transport service, it is necessary in the public interest that road transport services in general or any particular class of such service in relation to any area or route or portion thereof should be run and operated by the State transport undertaking, whether to the exclusion, complete or partial, of other persons or otherwise, the State Government may formulate a proposal regarding a scheme giving particulars of the nature of the services proposed to be rendered, the area or route proposed to be covered and other relevant particulars respecting thereto and shall publish such proposal in the Official Gazette of the State formulating such proposal and in not less than one newspaper in the regional language circulating in the area or route proposed to be covered by such scheme and also in such other manner as the State Government formulating such proposal deem fit.

[2][(*2*) Notwithstanding anything contained in sub-section (*1*), when a proposal is published under that sub-section, then from the date of publication of such proposal, no permit shall be granted to any person, except a temporary permit during the pendency of the proposal and such temporary permit shall be valid only for a period of one year from the date of its issue of till the date of final publication of the scheme under section 100, whichever is earlier.]

100. Objection to the proposal.—(*1*) On the publication of any proposal regarding a scheme in the Official Gazette and in not less than one newspaper in the regional language circulating in the area or route which is to be covered by such proposal any person may, within thirty days from the date of its publication in the Official Gazette, file objections to it before the State Government.

(2) The State Government may, after considering the objections and after giving an opportunity to the objector or his representatives and the representatives of the State transport undertaking to be heard in the matter, if they so desire, approve or modify such proposal.

(3) The scheme relating to the proposal as approved or modified under sub-section (*2*) shall then be published in the Official Gazette by the State Government making such scheme and in not less than one newspaper in the regional language circulating in the area or route covered by such scheme and the same shall thereupon become final on the date of its publication in the Official Gazette and shall be called the approved scheme and the area or route to which it relates shall be called the notified area or notified route:

Provided that no such scheme which relates to any inter-State route shall be deemed to be an approved scheme unless it has the previous approval of the Central Government.

(4) Notwithstanding anything contained in this section, where a scheme is not published as an approved scheme under sub-section (*3*) in the Official Gazette within a period of one year from the date of publication of the proposal regarding the scheme in the Official Gazette under sub-section (*1*), the proposal shall be deemed to have lapsed.

Explanation.—In computing the period of one year referred to in this sub-section, any period or periods during which the publication of the approved scheme under sub-section (*3*) was held up on account of any stay or injunction by the order of any court shall be excluded.

101. Operation of additional services by a State transport undertaking in certain circumstances.— Notwithstanding anything contained in section 87, a State transport undertaking may, in the public interest operate additional services for the conveyance of the passengers on special occasions such as to and from fairs and religious gatherings:

Provided that the State transport undertaking shall inform about the operation of such additional services to the concerned Transport Authority without delay.

1. Section 99 renumbered as sub-section (*1*) thereof by Act of 54 of 1994, s. 30 (w.e.f. 14-11-1994).

2. Ins. by s. 30, *ibid*. (w.e.f. 14-11-1994).

102. Cancellation or modification of scheme.—(*1*) The State Government may, at any time, if it considers necessary, in the public interest so to do, modify any approved scheme after giving—

(i) the State transport undertaking; and

(ii) any other person who, in the opinion of the State Government, is likely to be affected by the proposed modification,

an opportunity of being heard in respect of the proposed modification.

(*2*) The State Government shall publish any modification proposed under sub-section (*1*) in the Official Gazette and in one of the newspapers in the regional languages circulating in the area in which it is proposed to be covered by such modification, together with the date, not being less than thirty days from such publication in the Official Gazette, and the time and place at which any representation received in this behalf will be heard by the State Government.

103. Issue of permits to State transport undertakings.—(*1*) Where, in pursuance of an approved scheme, any State transport undertaking applies in such manner as may be prescribed by the State Government in this behalf for a stage carriage permit or a goods carriage permit or a contract carriage permit in respect of a notified area or notified route, the State Transport Authority in any case where the said area or route lies in more than one region and the Regional Transport Authority in any other case shall issue such permit to the State transport undertaking, notwithstanding anything to the contrary contained in Chapter V.

(2) For the purpose of giving effect to the approved scheme in respect of a notified area or notified route, the State Transport Authority or, as the case may be, the Regional Transport Authority concerned may, by order,—

(a) refuse to entertain any application for the grant or renewal of any other permit or reject any such application as may be pending;

(b) cancel any existing permit;

(c) modify the terms of any existing permit so as to—

(i) render the permit ineffective beyond a specified date;

(ii) reduce the number of vehicles authorised to be used under the permit;

(iii) curtail the area or route covered by the permit in so far as such permit relates to the notified area or notified route.

(3) For the removal of doubts, it is hereby declared that no appeal shall lie against any action taken, or order passed, by the State Transport Authority or any Regional Transport Authority under sub-section (*1*) or sub-section (*2*).

104. Restriction on grant of permits in respect of a notified area or notified route.—Where a scheme has been published under sub-section (*3*) of section 100 in respect of any notified area or notified route, the State Transport Authority or the Regional Transport Authority, as the case may be, shall not grant any permit except in accordance with the provisions of the scheme:

Provided that where no application for a permit has been made by the State transport undertaking in respect of any notified area or notified route in pursuance of an approved scheme, the State Transport Authority or the Regional Transport Authority, as the case may be, may grant temporary permits to any person in respect of such notified area or notified route subject to the condition that such permit shall cease to be effective on the issue of a permit to the State transport undertaking in respect of that area or route.

105. Principles and method of determining compensation and payment thereof.—(*1*) Where, in exercise of the powers conferred by clause (*b*) or clause (*c*) of sub-section (*2*) of section 103, any existing permit is cancelled or the terms thereof are modified, there shall be paid by the State transport undertaking to the holder of the permit, compensation, the amount of which shall be determined in accordance with the provisions of sub-section (*4*) or sub-section (*5*), as the case may be.

(2) Notwithstanding anything contained in sub-section (*1*), no compensation shall be payable on account of the cancellation of any existing permit or any modification of the terms thereof, when a permit

for an alternative route or area in lieu thereof has been offered by the State Transport Authority or the Regional Transport Authority, as the case may be and accepted by the holder of the permit.

(3) For the removal of doubts, it is hereby declared that no compensation shall be payable on account of the refusal to renew a permit under clause (*a*) of sub-section (*2*) of section 103.

(4) Where, in exercise of the powers conferred by clause (*b*) or sub-clause (*i*) or sub-clause (*ii*) of clause (*c*) of sub-section (*2*) of section 103, any existing permit is cancelled or the terms thereof are modified so as to prevent the holder of the permit from using any vehicle authorised to be used thereunder for the full period from which the permit, would otherwise have been effective, the compensation payableto the holder of the permit for each vehicle affected by such cancellation or modification shall be computed as follows:—

(a) for every complete month or part of a month exceeding fifteen days of the unexpired period of the permit	Two hundred rupees;
(b) for part of a month not exceeding fifteen days of the unexpired period of the permit	One hundred rupees:

Provided that the amount of compensation shall, in no case, be less than four hundred rupees.

(5) Where, in exercise of the powers conferred by sub-clause (*iii*) of clause (*c*) of sub-section (*2*) of section 103, the terms of an existing permit are modified so as to curtail the area or route of any vehicle authorised to be used thereunder, the compensation payable to the holder of the permit on account of such curtailment shall be an amount computed in accordance with the following formula, namely:—

$$\frac{Y \times A}{R}$$

Explanation.—In this formula,—

(i) "Y" means the length or area by which the route or area covered by the permit is curtailed;

(ii) "A" means the amount computed in accordance with sub-section (*4*);

(iii) "R" means the total length of the route or the total area covered by the permit.

(6) The amount of compensation payable under this section shall be paid by the State transport undertaking to the person or persons entitled thereto within one month from the date on which the cancellation or modification of the permit becomes effective:

Provided that where the State transport undertaking fails to make the payment within the said period of one month, it shall pay interest at the rate of seven per cent. per annum from the date on which it falls due.

106. Disposal of article found in vehicles.—Where any article found in any transport vehicle operated by the State transport undertaking is not claimed by its owner within the prescribed period, the State transport undertaking may sell the article in the prescribed manner and the sale proceeds thereof, after deducting the costs incidental to sale, shall be paid to the owner on demand.

107. Power of State Government to make rules.—(*1*) The State Government may make rules for the purpose of carrying into effect the provisions of this Chapter.

(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) the form in which any proposal regarding a scheme may be published under section 99;

(b) the manner in which objections may be filed under sub-section (*1*) of section 100;

(c) the manner in which objections may be considered and disposed of under sub-section (*2*) of section 100;

(d) the form in which any approved scheme may be published under sub-section (*3*) of

section 100;

(e) the manner in which application under sub-section (*1*) of section 103 may be made;

(f) the period within which the owner may claim any article found left in any transport vehicle under section 106 and the manner of sale of such article;

(g) the manner of service of orders under this Chapter;

(h) any other matter which has to be, or may be, prescribed.

108. Certain powers of State Government exercisable by the Central Government.—The powers conferred on the State Government under this Chapter shall, in relation to a corporation or company owned or controlled by the Central Government or by the Central Government and one or more State Governments, be exercisable only by the Central Government in relation to an inter-State route or area.

CHAPTER VII

CONSTRUCTION, EQUIPMENT AND MAINTENANCE OF MOTOR VEHICLES

109. General provision regarding construction and maintenance of vehicles.—(*1*) Every motor vehicle shall be so constructed and so maintained as to be at all times under the effective control of the person driving the vehicle.

(*2*) Every motor vehicle shall be so constructed as to have right hand steering control unless it is equipped with a mechanical or electrical signalling device of a prescribed nature.

[1][(*3*) If the Central Government is of the opinion that it is necessary or expedient so to do in the public interest, it may by order published in the Official Gazette, notify that any article or process used by a manufacturer shall conform to such standard as may be specified in that order.]

110. Power of Central Government to make rules.—(*1*) The Central Government may make rules regulating the construction, equipment and maintenance of motor vehicles and trailers with respect to all or any of the following matters, namely:—

(a) the width, height, length and overhang of vehicles and of the loads carried;

[2][(*b*) the size, nature, maximum retail price and condition of tyres, including embossing thereon of date and year of manufacture and the maximum load carrying capacity;]

(c) brakes and steering gear;

(d) the use of safety glasses including prohibition of the use of tinted safety glasses;

(e) signalling appliances, lamps and reflectors;

(f) speed governors;

(g) the emission of smoke, visible vapour, sparks, ashes, grit or oil;

(h) the reduction of noise emitted by or caused by vehicles;

(i) the embossment of chassis number and engine number and the date of manufacture;

(j) safety belts, handle bars of motor cycles, auto-dippers and other equipments essential for safety of drivers, passengers and other road users;

(k) standards of the components used in the vehicle as inbuilt safety devices;

(l) provision for transportation of goods of dangerous or hazardous nature to human life;

(m) standards for emission of air pollutants;

[3][(*n*) installation of catalytic convertors in the class of vehicles to be prescribed;

(*o*) the placement of audio-visual or radio or tape recorder type of device in public vehicles;

1. Ins. by Act 54 of 1994, s. 31 (w.e.f. 14-11-1994).
2. Subs. by s. 32, *ibid*., for clause (*b*) (w.e.f. 14-11-1994).
3. Ins. by s. 32, *ibid*. (w.e.f. 14-11-1994).

(*p*) warranty after sale of vehicle and norms therefor:]

Provided that any rules relating to the matters dealing with the protection of environment, so far as may be, shall be made after consultation with the Ministry of the Government of India dealing with environment.

(2) Rules may be made under sub-section (*1*) governing the matters mentioned therein, including the manner of ensuring the compliance with such matters and the maintenance of motor vehicles in respect of such matters, either generally in respect of motor vehicles or trailers or in respect of motor vehicles or trailers of a particular class or in particular circumstances.

(3) Notwithstanding anything contained in this section,—

(a) the Central Government may exempt any class of motor vehicles from the provisions of this Chapter;

(b) a State Government may exempt any motor vehicle or any class or description of motor vehicles from the rules made under sub-section (*1*) subject to such conditions as may be prescribed by the Central Government.

111. Power of State Government to make rules.—(*1*) A State Government may make rules regulating the construction, equipment and maintenance of motor vehicles and trailers with respect to all matters other than the matters specified in sub-section (*1*) of section 110.

(*2*) Without prejudice to the generality of the foregoing power, rules may be made under this section governing all or any of the following matters either generally in respect of motor vehicles or trailers or in respect of motor vehicles or trailers of a particular class or description or in particular circumstances, namely:—

(a) seating arrangements in public service vehicles and the protection of passengers against the weather;

(b) prohibiting or restricting the use of audible signals at certain times or in certain places;

(c) prohibiting the carrying of appliances likely to cause annoyance or danger;

(d) the periodical testing and inspection of vehicles by prescribed authorities[1][and fees to be charged for such test];

(e) the particulars other than registration marks to be exhibited by vehicles and the manner in which they shall be exhibited;

(f) the use of trailers with motor vehicles; and

[2]* * * * *

CHAPTER VIII

CONTROL OF TRAFFIC

112. Limits of speed.—(*1*) No person shall drive a motor vehicle or cause or allow a motor vehicle to be driven in any public place at a speed exceeding the maximum speed or below the minimum speed fixed for the vehicle under this Act or by or under any other law for the time being in force:

Provided that such maximum speed shall in no case exceed the maximum fixed for any motor vehicle or class or description of motor vehicles by the Central Government by notification in the Official Gazette.

(*2*) The State Government or any authority authorised in this behalf by the State Government may, if satisfied that it is necessary to restrict the speed of motor vehicles in the interest of public safety or convenience or because of the nature of any road or bridge, by notification in the Official Gazette, and by causing appropriate traffic signs to be placed or erected under section 116 at suitable places, fix such

1. Ins. by Act 54 of 1994, s. 33 (w.e.f. 14-11-1994).
2. Clause (*g*) omitted by s. 33, *ibid*. (w.e.f. 14-11-1994).

maximum speed limits or minimum speed limits as it thinks fit for motor vehicles or any specified class or description of motor vehicles or for motor vehicles to which a trailer is attached, either generally or in a particular area or on a particular road or roads:

Provided that no such notification is necessary if any restriction under this section is to remain in force for not more than one month.

(*3*) Nothing in this section shall apply to any vehicle registered under section 60 while it is being used in the execution of military manoeuvres within the area and during the period specified in the notification under sub-section (*1*) of section 2 of the Manoeuvres, Field Firing and Artillery Practice Act, 1938 (5 of 1938).

113. Limits of weight and limitations on use.—(*1*) The State Government may prescribe the conditions for the issue of permits for [1][transport vehicles] by the State or Regional Transport Authorities and may prohibit or restrict the use of such vehicles in any area or route.

(2) Except as may be otherwise prescribed, no person shall drive or cause or allow to be driven in any public place any motor vehicle which is not fitted with pneumatic tyres.

(3) No person shall drive or cause or allow to be driven in any public place any motor vehicle or trailer—

(a) the unladen weight of which exceeds the unladen weight specified in the certificate of registration of the vehicle, or

(b) the laden weight of which exceeds the gross vehicle weight specified in the certificate of registration.

(4) Where the driver or person in charge of a motor vehicle or trailer driven in contravention of sub-section (*2*) or clause (*a*) of sub-section (*3*) is not the owner, a Court may presume that the offence was committed with the knowledge of or under the orders of the owner of the motor vehicle or trailer.

114. Power to have vehicle weighed.—(*1*) [2][Any officer of the Motor Vehicles Department authorized in this behalf by the State Government shall, if he has reason to believe that a goods vehicle or trailor is being used in contravention of section 113] require the driver to convey the vehicle to a weighing device, if any, within a distance of ten kilometres from any point on the forward route or within a distance of twenty kilometres from the destination of the vehicle for weighment; and if on such weighment the vehicle is found to contravene in any respect the provisions of section 113 regarding weight, he may, by order in writing, direct the driver to off-load the excess weight at his own risk and not to remove the vehicle or trailer from that place until the laden weight has been reduced or the vehicle or trailer has otherwise been dealt with so that it complies with section 113 and on receipt of such notice, the driver shall comply with such directions.

(*2*) Where the person authorised under sub-section (*1*) makes the said order in writing, he shall also endorse the relevant details of the overloading on the goods carriage permit and also intimate the fact of such endorsement to the authority which issued that permit.

115. Power to restrict the use of vehicles.—The State Government or any authority authorised in this behalf by the State Government, if satisfied that it is necessary in the interest of public safety or convenience, or because of the nature of any road or bridge, may by notification in the Official Gazette, prohibit or restrict, subject to such exceptions and conditions as may be specified in notification, the driving of motor vehicles or of any specified class or description of motor vehicles or the use of trailers either generally in a specified area or on a specified road and when any such prohibition or restriction is imposed, shall cause appropriate traffic signs to be placed or erected under section 116 at suitable places:

Provided that where any prohibition or restriction under this section is to remain in force for not more than one month, notification thereof in the Official Gazette shall not be necessary, but such local publicity as the circumstances may permit, shall be given of such prohibition or restriction.

1. Subs. by Act 54 of 1994, s. 34, for "heavy goods vehicles or heavy passenger motor vehicles" (w.e.f. 14-11-1994).
2. Subs. by s. 35, *ibid*., for certain words and figures (w.e.f. 14-11-1994).

116. Power to erect traffic signs.—(*1*) (*a*) The State Government or any authority authorised in this behalf by the State Government may cause or permit traffic signs to be placed or erected in any public place for the purpose of bringing to public notice any speed limits fixed under sub-section (*2*) of section 112 or any prohibitions or restrictions imposed under section 115 or generally for the purpose of regulating motor vehicle traffic.

(*b*) A State Government or any authority authorised in this behalf by the State Government may, by notification in the Official Gazette or by the erection at suitable places of the appropriate traffic sign referred to in Part A of the Schedule, designate certain roads as main roads for the purposes of the driving regulations made by the Central Government.

(2) Traffic signs placed or erected under sub-section (*1*) for any purpose for which provision is made in the Schedule shall be of the size, colour and type and shall have the meanings set forth in the Schedule, but the State Government or any authority empowered in this behalf by the State Government may make or authorise the addition to any sign set forth in the said Schedule, of transcriptions of the words, letters or figures thereon in such script as the State Government may think fit, provided that the transcriptions shall be of similar size and colour to the words, letters or figures set forth in the Schedule.

(3) Except as provided by sub-section (*1*), no traffic sign shall, after the commencement of this Act, be placed or erected on or near any road; but all traffic signs placed or erected prior to the commencement of this Act by any competent authority shall for the purpose of this Act be deemed to be traffic signs placed or erected under the provisions of sub-section (*1*).

(4) A State Government may, by notification in the Official Gazette, empower any police officer not below the rank of a Superintendent of Police to remove or cause to be removed any sign or advertisement which is so placed in his opinion as to obscure any traffic sign from view or any sign or advertisement which is in his opinion so similar in appearance to a traffic sign as to be misleading or which in his opinion is likely to distract the attention or concentration of the driver.

(5) No person shall wilfully remove, alter, deface, or in any way tamper with, any traffic signs placed or erected under this section.

(6) If any person accidentally causes such damage to a traffic sign as renders it useless for the purpose for which it is placed or erected under this section, he shall report the circumstances of the occurrence to a police officer or at a police station as soon as possible, and in any case within twenty-four hours of the occurrence.

(7) For the purpose of bringing the signs set forth in [1][the First Schedule] in conformity with any International Convention relating to motor traffic to which the Central Government is for the time being a party, the Central Government may, by notification in the Official Gazette, make any addition or alteration to any such sign and on the issue of any such notification, [1][the First Schedule] shall be deemed to be amended accordingly.

117. Parking places and halting stations.—The State Government or any authority authorised in this behalf by the State Government may, in consultation with the local authority having jurisdiction in the area concerned, determine places at which motor vehicles may stand either indefinitely or for a specified period of time, and may determine the places at which public service vehicles may stop for a longer time than is necessary for the taking up and setting down of passengers.

118. Driving regulations.—The Central Government may, by notification in the Official Gazette, make regulations for the driving of motor vehicles.

119. Duty to obey traffic signs.—(*1*) Every driver of a motor vehicle shall drive the vehicle in conformity with any indication given by mandatory traffic sign and in conformity with the driving regulations made by the Central Government, and shall comply with all directions given to him by any police officer for the time being engaged in the regulation of traffic in any public place.

(*2*) In this section "mandatory traffic sign" means a traffic sign included in Part A of the Schedule, or any traffic sign of similar form (that is to say, consisting of or including a circular disc diplaying a device,

1. Subs. by Act 54 of 1994, s. 36, for "the Schedule" (w.e.f. 14-11-1994).

word or figure and having a red ground or border) placed or erected for the purpose of regulating motor vehicle traffic under sub-section (*1*) of section 116.

120. Vehicles with left hand control.—No person shall drive or cause or allow to be driven in any public place any motor vehicle with a left-hand steering control unless it is equipped with a mechanical or electrical signalling device of a prescribed nature and in working order.

121. Signals and signalling devices.—The driver of a motor vehicle shall make such signals and on such occasions as may be prescribed by the Central Government:

Provided that the signal of an intention to turn to the right or left or to stop—

(a) in the case of a motor vehicle with a right-hand steering control, may be given by a mechanical or electrical device of a prescribed nature affixed to the vehicle; and

(b) in the case of a motor vehicle with a left hand steering control, shall be given by a mechanical or electrical device of a prescribed nature affixed to the vehicle:

Provided further that the State Government may, having regard to the width and condition of the roads in any area or route, by notification in the Official Gazette, exempt subject to such conditions as may be specified therein any motor vehicle or class or description of motor vehicles from the operation of this section for the purpose of plying in that area or route.

122. Leaving vehicle in dangerous position.—No person in charge of a motor vehicle shall cause or allow the vehicle or any trailer to be abandoned or to remain at rest on any public place in such a position or in such a condition or in such circumstances as to cause or likely to cause danger, obstruction or undue inconvenience to other users of the public place or to the passengers.

123. Riding on running board, etc.—(*1*) No person driving or in charge of a motor vehicle shall carry any person or permit any person to be carried on the running board or otherwise than within the body of the vehicle.

(*2*) No person shall travel on the running board or on the top or on the bonnet of a motor vehicle.

124. Prohibition against travelling without pass or ticket.—No person shall enter or remain in any stage carriage for the purposes of travelling therein unless he has with him a proper pass or ticket:

Provided that where arrangements for the supply of tickets are made in the stage carriage by which a person has to travel, a person may enter such stage carriage but as soon as may be after his entry therein, be shall make the payment of his fare to the conductor or the driver who performs the functions of a conductor and obtain from such conductor or driver, as the case may be, a ticket for his journey.

Explanation.—In this section,—

(a) "pass" means a duty, privilege or courtesy pass entitling the person to whom it is given to travel in a stage carriage gratuitously and includes a pass issued on payment for travel in a stage carriage for the period specified therein;

(b) "ticket" includes a single ticket, a return ticket or a season ticket.

125. Obstruction of driver.—No person driving a motor vehicle shall allow any person to stand or sit or to place anything in such a manner or position as to hamper the driver in his control of the vehicle.

126. Stationary vehicles.—No person driving or in charge of a motor vehicle shall cause or allow the vehicle to remain stationary in any public place, unless there is in the driver's seat a person duly licensed to drive the vehicle or unless the mechanism has been stopped and a brake or brakes applied or such other measures taken as to ensure that the vehicle cannot accidentally be put in motion in the absence of the driver.

127. Removal of motor vehicles abandoned or left unattended on a public place.—[1][(*1*) Where any motor vehicle is abandoned, or left unattended, on a public place for ten hours or more or is parked in

1. Subs. by Act 54 of 1994, s. 37, for sub-section (*1*) (w.e.f. 14-11-1994).

a place where parking is legally prohibited, its removal by a towing service or its immobilisations by any means including wheel clamping may be authorised by a police officer in uniform having jurisdiction.]

(2) Where an abandoned, unattended, wrecked, burnt or partially dismantled vehicle is creating a traffic hazard, because of its position in relation to the [1][public place], or its physical appearance is causing the impediment to the traffic, its immediate removal from the[1][public place] by a towing service may be authorised by a police officer having jurisdiction.

(3) Where a vehicle is authorised to be removed under sub-section (*1*) or sub-section (*2*) by a police officer, the owner of the vehicle shall be responsible for all towing costs, besides any other penalty.

128. Safety measures for drivers and pillion riders.—(*1*) No driver of a two-wheeled motor cycle shall carry more than one person in addition to himself on the motor cycle and no such person shall be carried otherwise than sitting on a proper seat securely fixed to the motor cycle behind the driver's seat with appropriate safety measures.

(*2*) In addition to the safety measures mentioned in sub-section (*1*), the Central Government may, prescribe other safety measures for the drivers of two-wheeled motor cycles and pillion riders thereon.

129. Wearing of protective headgear.—Every person driving or riding (otherwise than in a side car, on a motor cycle of any class or description) shall, while in a public place, wear [2][protective headgear conforming to the standards of Bureau of Indian Standards]:

Provided that the provisions of this section shall not apply to a person who is a Sikh, if he is, while driving or riding on the motor cycle, in a public place, wearing a turban:

Provided further that the State Government may, by such rules, provide for such exceptions as it may think fit.

Explanation.—"Protective headgear" means a helmet which,—

(a) by virtue of its shape, material and construction, could reasonably be expected to afford to the person driving or riding on a motor cycle a degree of protection from injury in the event of an accident; and

(b) is securely fastened to the head of the wearer by means of straps or other fastenings provided on the headgear.

130. Duty to produce licence and certificate of registration.—(*1*) The driver of a motor vehicle in any public place shall, on demand by any police officer in uniform, produce his licence for examination:

Provided that the driver may, if his licence has been submitted to, or has been seized by, any officer or authority under this or any other Act, produce in lieu of the licence a receipt or other acknowledgment issued by such officer or authority in respect thereof and thereafter produce the licence within such period, in such manner as the Central Government may prescribe to the police officer making the demand.

[3][(*2*) The conductor, if any, of a motor vehicle on any public place shall on demand by any officer of the Motor Vehicles Department authorised in this behalf, produce the licence for examination.]

[4][(*3*) The owner of a motor vehicle (other than a vehicle registered under section 60), or in his absence the driver or other person in charge of the vehicle, shall, on demand by a registering authority or any other officer of the Motor Vehicles Department duly authorised in this behalf, produce the certificate of insurance of the vehicle and, where the vehicle is a transport vehicle, also the certificate of fitness referred to in section 56 and the permit; and if any or all of the certificates or the permit are not in his possession, he shall, within fifteen days from the date of demand, submit photo copies of the same, duly attested in person or send the same by registered post to the officer who demanded it.

1. Subs. by Act 54 of 1994, s. 37, for "highway" (w.e.f. 14-11-1994).
2. Subs. by s. 38, *ibid*., for certain words (w.e.f. 14-11-1994).
3. Subs. by s. 39, *ibid*., for sub-section (*2*) (w.e.f. 14-11-1994).

4. Subs. by s. 39, *ibid*., for sub-section (*3*) (w.e.f. 14-11-1994).

Explanation.—For the purposes of this sub-section, "certificate of insurance" means the certificate issued under sub-section (*3*) of section 147.]

(4) If the licence referred to in sub-section (*2*) or the certificates or permit referred to in sub-section (*3*), as the case may be, are not at the time in the possession of the person to whom demand is made, it shall be a sufficient compliance with this section if such person produces the licence or certificates or permit within such period in such manner as the Central Government may prescribe, to the police officer or authority making the demand:

Provided that, except to such extent and with such modifications as may be prescribed, the provisions of this sub-section shall not apply to any person required to produce the certificate of registration or the certificate of fitness of a transport vehicle.

131. Duty of the driver to take certain precautions at unguarded railway level crossing.—Every driver of a motor vehicle at the approach of any unguarded railway level crossing shall cause the vehicle to stop and the driver of the vehicle shall cause the conductor or cleaner or attendant or any other person in the vehicle to walk up to the level crossing and ensure that no train or trolley is approaching from either side and then pilot the motor vehicle across such level crossing, and where no conductor or cleaner or attendant or any other person is available in the vehicle, the driver of the vehicle shall get down from the vehicle himself to ensure that no train or trolley is approaching from either side before the railway track is crossed.

132. Duty of driver to stop in certain cases.—(*1*) The driver of a motor vehicle shall cause the vehicle to stop and remain stationary so long as [1][may for such reasonable time as may be necessary, but not exceeding twenty-four hours]—

[2][(*a*) when required to do so by any police officer not below the rank of a Sub-Inspector in uniform, in the event of the vehicle being involved in the occurrence of an accident to a person, animal or vehicle or of damage to property, or]

(*b*) when required to do so by any person in charge of an animal if such person apprehends that the animal is, or being alarmed by the vehicle will become, unmanageable, or

[3]* * * * *

and he shall give his name and address and the name and address of the owner of the vehicle to any person affected by any such accident or damage who demands it provided such person also furnishes his name and address.

(2) The driver of a motor vehicle shall, on demand by a person giving his own name and address and alleging that the driver has committed an offence punishable under section 184 give his name and address to that person.

(3) In this section the expression "animal" means any horse, cattle, elephant, camel, ass, mule, sheep or goat.

133. Duty of owner of motor vehicle to give information.—The owner of a motor vehicle, the driver or conductor of which is accused of any offence under this Act shall, on the demand of any police officer authorised in this behalf by the State Government, give all information regarding the name and address of, and the licence held by, the driver or conductor which is in his possession or could by reasonable diligence be ascertained by him.

134. Duty of driver in case of accident and injury to a person.—When any person is injured or any property of a third party is damaged, as a result of an accident in which a motor vehicle is involved, the driver of the vehicle or other person in charge of the vehicle shall—

(a) unless it is not practicable to do so on account of mob fury or any other reason beyond his control, take all reasonable steps to secure medical attention for the injured person, [4][by conveying him to the nearest medical practitioner or hospital, and it shall be the duty of every registered medical practitioner or the doctor on the duty in the hospital immediately to attend to the injured person and

1. Subs. by Act 54 of 1994, s. 40, for "may reasonably be necessary" (w.e.f. 14-11-1994).
2. Subs. by s. 40, *ibid*., for clause (*a*) (w.e.f. 14-11-1994).

3. Clause (*c*) omitted by s. 40, *ibid*. (w.e.f. 14-11-1994).
4. Subs. by s. 41, *ibid*., for "and if necessary, convey him to the nearest hospital" (w.e.f. 14-11-1994).

render medical aid or treatment without waiting for any procedural formalities], unless the injured person or his guardian, in case he is a minor, desires otherwise;

(b) give on demand by a police officer any information required by him, or, if no police officer is present, report the circumstances of the occurrence, including the circumstances, if any, for not taking reasonable steps to secure medical attention as required under clause (*a*), at the nearest police station as soon as possible, and in any case within twenty-four hours of the occurrence.

[1][(*c*) give the following information in writing to the insurer, who has issued the certificates of insurance, about the occurrence of the accident, namely:—

(i) insurance policy number and period of its validity;

(ii) date, time and place of accident;

(iii) particulars of the persons injured or killed in the accident;

(iv) name of the driver and the particulars of his driving licence.

Explanation.—For the purposes of this section the expression "driver" includes the owner of the vehicle.]

135. Schemes to be framed for the investigation of accident cases and wayside amenities, etc.—

(1) The State Government may, by notification in the Official Gazette, make one or more schemes to provide for—

(a) an in depth study on causes and analysis of motor vehicle accidents;

(b) wayside amenities on highways;

(c) traffic aid posts on highways; and

(d) truck parking complexes along highways.

(2) Every scheme made under this section by any State Government shall be laid, as soon as may be after it is made, before the State Legislature.

136. Inspection of vehicle involved in accident.—When any accident occurs in which a motor vehicle is involved, any person authorised in this behalf by the State Government may, on production if so required of his authority, inspect the vehicle and for that purpose may enter at any reasonable time any premises where the vehicle may be, and may remove the vehicle for examination:

Provided that the place to which the vehicle is so removed shall be intimated to the owner of the vehicle and the vehicle shall be returned [2][after completion of the formalities to the owner, driver or the person in charge of the vehicle within twenty-four hours].

137. Power of Central Government to make rules.—The Central Government may make rules to provide for all or any of the following matters, namely:—

(a) the occasions on which signals shall be made by drivers of motor vehicles and such signals under section 121;

(b) the manner in which the licences and certificates may be produced to the police officer under section 130.

138. Power of State Government to make rules.—(*1*) The State Government may make rules for the purpose of carrying into effect the provisions of this Chapter other than the matters specified in section 137.

(*2*) Without prejudice to the generality of the foregoing power, such rules may provide for—

(a) the removal and the safe custody of vehicles including their loads which have broken down or which have been left standing or have been abandoned on roads;

1. Ins. by Act 54 of 1994, s. 41 (w.e.f. 14-11-1994).
2. Subs. by s. 42, *ibid*., for "without unnecessary delay" (w.e.f. 14-11-1994).

(b) the installation and use of weighing devices;

(c) the maintenance and management of wayside amenities complexes;

(d) the exemption from all or any of the provisions of this Chapter of fire brigade vehicles, ambulances and other special classes or descriptions of vehicle, subject to such conditions as may be prescribed;

(e) the maintenance and management of parking places and stands and the fees, if any, which may be charged for their use;

(f) prohibiting the driving downhill of a motor vehicle with the gear disengaged either generally or in a specified place;

(g) prohibiting the taking hold of or mounting of a motor vehicle in motion;

(h) prohibiting the use of foot-paths or pavements by motor vehicles;

(i) generally, the prevention of danger, injury or annoyance to the public or any person, or of danger or injury to property or of abstruction to traffic; and

(j) any other matter which is to be, or may be, prescribed.

CHAPTER IX

MOTOR VEHICLES TEMPORARILY LEAVING OR VISITING INDIA

139. Power of Central Government to make rules.—(*1*) The Central Government may, by notification in the Official Gazette, make rules for all or any of the following purposes, namely:—

(a) the grant and authentication of travelling passes, certificates or authorisations to persons temporarily taking motor vehicles out of India to any place outside India or to persons temporarily proceeding out of India to any place outside India and desiring to drive a motor vehicle during their absence from India;

(b) prescribing the conditions subject to which motor vehicles brought temporarily into India from outside India by persons intending to make a temporary stay in India may be possessed and used in India; and

(c) prescribing the conditions subject to which persons entering India from any place outside India for a temporary stay in India may drive motor vehicles in India.

(2) For the purpose of facilitating and regulating the services of motor vehicles operating between India and any other country under any reciprocal arrangement and carrying passengers or goods or both by road for hire or reward, the Central Government may, by notification in the Official Gazette, make rules with respect to all or any of the following matters, namely:—

(a) the conditions subject to which motor vehicles carrying on such services may be brought into India from outside India and possessed and used in India;

(b) the conditions subject to which motor vehicles may be taken from any place in India to any place outside India;

(c) the conditions subject to which persons employed as drivers and conductors of such motor vehicles may enter or leave India;

(d) the grant and authentication of travelling passes, certificates or authorisations to persons employed as drivers and conductors of such motor vehicles;

(e) the particulars (other than registration marks) to be exhibited by such motor vehicles and the manner in which such particulars are to be exhibited;

(f) the use of trailers with such motor vehicles;

(g) the exemption of such motor vehicles and their drivers and conductors from all or any of the provisions of this Act [other than those referred to in sub-section (*4*)] or the rules made thereunder;

(h) the identification of the drivers and conductors of such motor vehicles;

(i) the replacement of the travelling passes, certificates or authorisations, permits, licences or any other prescribed documents lost or defaced, on payment of such fee as may be prescribed;

(j) the exemption from the provisions of such laws as relate to customs, police or health with a view to facilitate such road transport services;

(k) any other matter which is to be, or may be, prescribed.

(3) No rule made under this section shall operate to confer on any person any immunity in any State from the payment of any tax levied in that State on motor vehicles or their users.

(4) Nothing in this Act or in any rule made thereunder by a State Government relating to:—

(a) the registration and identification of motor vehicles, or

(b) the requirements as to construction, maintenance and equipment of motor vehicles, or

(c) the licensing and the qualifications of drivers and conductors of motor vehicles,

shall apply—

(i) to any motor vehicle to which or to any driver of a motor vehicle to whom any rules made under clause (*b*) or clause (*c*) of sub-section (*1*) or under sub-section (*2*) apply; or

(ii) to any conductor of a motor vehicle to whom any rules made under sub-section (*2*) apply.

CHAPTER X

LIABILITY WITHOUT FAULT IN CERTAIN CASES

140. Liability to pay compensation in certain cases on the principle of no fault.—(*1*) Where death or permanent disablement of any person has resulted from an accident arising out of the use of a motor vehicle or motor vehicles, the owner of the vehicle shall, or, as the case may be, the owners of the vehicles shall, jointly and severally, be liable to pay compensation in respect of such death or disablement in accordance with the provisions of this section.

(2) The amount of compensation which shall be payable under sub-section (*1*) in respect of the death of any person shall be a fixed sum of [1][fifty thousand rupees] and the amount of compensation payable under that sub-section in respect of the permanent disablement of any person shall be a fixed sum of [2][twenty-five thousand rupees].

(3) In any claim for compensation under sub-section (*1*), the claimant shall not be required to plead and establish that the death or permanent disablement in respect of which the claim has been made was due to any wrongful act, neglect or default of the owner or owners of the vehicle or vehicles concerned or of any other person.

(4) A claim for compensation under sub-section (*1*) shall not be defeated by reason of any wrongful act, neglect or default of the person in respect of whose death or permanent disablement the claim has been made nor shall the quantum of compensation recoverable in respect of such death or permanent disablement be reduced on the basis of the share of such person in the responsibility for such death or permanent disablement.

[3][(*5*) Notwithstanding anything contained in sub-section (*2*) regarding death or bodily injury to any person, for which the owner of the vehicle is liable to give compensation for relief, he is also liable to pay compensation under any other law for the time being in force:

Provided that the amount of such compensation to be given under any other law shall be reduced from the amount of compensation payable under this section or under section 163A.]

1. Subs. by Act 54 of 1994, s. 43, for "twenty-five thousand rupees" (w.e.f. 14-11-1994).
2. Subs. by s. 43, *ibid*., for "twelve thousand rupees" (w.e.f. 14-11-1994).
3. Ins. by s. 43, *ibid*. (w.e.f. 14-11-1994).

141. Provisions as to other right to claim compensation for death or permanent disablement.—

(1) The right to claim compensation under section 140 in respect of death or permanent disablement of any person shall be in addition to [1][any other right, except the right to claim under the scheme referred to in section 163A (such other right hereafter] in this section referred to as the right on the principle of fault) to claim compensation in respect thereof under any other provision of this Act or of any other law for the time being in force.

(2) A claim for compensation under section 140 in respect of death or permanent disablement of any person shall be disposed of as expeditiously as possible and where compensation is claimed in respect of such death or permanent disablement under section 140 and also in pursuance of any right on the principle of fault, the claim for compensation under section 140 shall be disposed of as aforesaid in the first place.

(3) Notwithstanding anything contained in sub-section (*1*), where in respect of the death or permanent disablement of any person, the person liable to pay compensation under section 140 is also liable to pay compensation in accordance with the right on the principle of fault, the person so liable shall pay the first-mentioned compensation and—

(a) if the amount of the first-mentioned compensation is less than the amount of the second-mentioned compensation, he shall be liable to pay (in addition to the first-mentioned compensation) only so much of the second-mentioned compensation as is equal to the amount by which it exceeds the first-mentioned compensation;

(b) if the amount of the first-mentioned compensation is equal to or more than the amount of the second-mentioned compensation, he shall not be liable to pay the second-mentioned compensation.

142. Permanent disablement.—For the purposes of this Chapter, permanent disablement of a person shall be deemed to have resulted from an accident of the nature referred to in sub-section (*1*) of section 140 if such person has suffered by reason of the accident, any injury or injuries involving—

(a) permanent privation of the sight of either eye or the hearing of either ear, or privation of any member or joint; or

(b) destruction or permanent impairing of the powers of any member or joint; or

(c) permanent disfiguration of the head or face.

143. Applicability of Chapter to certain claims under Act 8 of 1923.—The provisions of this Chapter shall also apply in relation to any claim for compensation in respect of death or permanent disablement of any person under the Workmen's Compensation Act, 1923 resulting from an accident of the nature referred to in sub-section (*1*) of section 140 and for this purpose, the said provisions shall, with necessary modifications, be deemed to form part of that Act.

144. Overriding effect.—The provisions of this Chapter shall have effect notwithstanding anything contained in any other provision of this Act or of any other law for the time being in force.

CHAPTER XI

INSURANCE OF MOTOR VEHICLES AGAINST THIRD PARTY RISKS

145. Definitions.—In this Chapter,—

(a) "authorised insurer" means an insurer for the time being carrying on general insurance business in India under the General Insurance Business (Nationalisation) Act, 1972, (57 of 1972) and any Government insurance fund authorised to do general insurance business under that Act;

(b) "certificate of insurance" means a certificate issued by an authorised insurer in pursuance of sub-section (*3*) of section 147 and includes a cover note complying with such requirements as may be prescribed, and where more than one certificate has been issued in connection with a policy, or where a copy of a certificate has been issued, all those certificates or that copy, as the case may be;

1. Subs. by Act 54 of 1994, s. 44, for "any other right (hereafter" (w.e.f. 14-11-1994).

(c) "liability", wherever used in relation to the death of or bodily injury to any person, includes liability in respect thereof under section 140;

(d) "policy of insurance" includes "certificate of insurance";

(e) "property" includes goods carried in the motor vehicle, roads, bridges, culverts, causeways, trees, posts and mile- stones;

(f) "reciprocating country" means any such country as may on the basis of reciprocity be notified by the Central Government in the Official Gazette to be a reciprocating country for the purposes of this Chapter;

(g) "third party" includes the Government.

146. Necessity for insurance against third party risk.—(*1*) No person shall use, except as a passenger, or cause or allow any other person to use, a motor vehicle in a public place, unless there is in force in relation to the use of the vehicle by that person or that other person, as the case may be, a policy of insurance complying with the requirements of this Chapter:

[1][Provided that in the case of a vehicle carrying, or meant to carry, dangerous or hazardous goods, there shall also be a policy of insurance under the Public Liability Insurance Act, 1991 (6 of 1991).]

Explanation.—A person driving a motor vehicle merely as a paid employee, while there is in force in relation to the use of the vehicle no such policy as is required by this sub-section, shall not be deemed to act in contravention of the sub-section unless he knows or has reason to believe that there is no such policy in force.

(2) Sub-section (*1*) shall not apply to any vehicle owned by the Central Government or a State Government and used for Government purposes unconnected with any commercial enterprise.

(3) The appropriate Government may, by order, exempt from the operation of sub-section (*1*) any vehicle owned by any of the following authorities, namely:—

(a) the Central Government or a State Government, if the vehicle is used for Government purposes connected with any commercial enterprise;

(b) any local authority;

(c) any State transport undertaking:

Provided that no such order shall be made in relation to any such authority unless a fund has been established and is maintained by that authority in accordance with the rules made in that behalf under this Act for meeting any liability arising out of the use of any vehicle of that authority which that authority or any person in its employment may incur to third parties.

Explanation.—For the purposes of this sub-section, "appropriate Government" means the Central Government or a State Government, as the case may be, and—

(i) in relation to any corporation or company owned by the Central Government or any State Government, means the Central Government or that State Government;

(ii) in relation to any corporation or company owned by the Central Government and one or more State Governments, means the Central Government;

(iii) in relation to any other State transport undertaking or any local authority, means that Government which has control over that undertaking or authority.

147. Requirements of policies and limits of liability.—(*1*) In order to comply with the requirements of this Chapter, a policy of insurance must be a policy which—

(a) is issued by a person who is an authorised insurer; and

1.Ins. by Act 54 of 1994, s. 45 (w.e.f. 14-11-1994).

(b) insures the person or classes of persons specified in the policy to the extent specified in sub-section (*2*)—

(i) against any liability which may be incurred by him in respect of the death of or bodily [1][injury to any person, including owner of the goods or his authorized representative carried in the vehicle]or damage to any property of a third party caused by or arising out of the use of the vehicle in a public place;

(ii) against the death of or bodily injury to any passenger of a public service vehicle caused by or arising out of the use of the vehicle in a public place:

Provided that a policy shall not be required—

(i) to cover liability in respect of the death, arising out of and in the course of his employment, of the employee of a person insured by the policy or in respect of bodily injury sustained by such an employee arising out of and in the course of his employment other than a liability arising under the Workmen's Compensation Act, 1923 (8 of 1923), in respect of the death of, or bodily injury to, any such employee—

(a) engaged in driving the vehicle, or

(b) if it is a public service vehicle engaged as a conductor of the vehicle or in examining tickets on the vehicle, or

(c) if it is a goods carriage, being carried in the vehicle, or

(ii) to cover any contractual liability.

Explanation.—For the removal of doubts, it is hereby declared that the death of or bodily injury to any person or damage to any property of a third party shall be deemed to have been caused by or to have arisen out of, the use of a vehicle in a public place notwithstanding that the person who is dead or injured or the property which is damaged was not in a public place at the time of the accident, if the act or omission which led to the accident occurred in a public place.

(2) Subject to the proviso to sub-section (*1*), a policy of insurance referred to in sub-section (*1*), shall cover any liability incurred in respect of any accident, up to the following limits, namely:—

(a) save as provided in clause (*b*), the amount of liability incurred;

(b) in respect of damage to any property of a third party, a limit of rupees six thousand:

Provided that any policy of insurance issued with any limited liability and in force, immediately before the commencement of this Act, shall continue to be effective for a period of four months after such commencement or till the date of expiry of such policy whichever is earlier.

(3) A policy shall be of no effect for the purposes of this Chapter unless and until there is issued by the insurer in favour of the person by whom the policy is effected a certificate of insurance in the prescribed form and containing the prescribed particulars of any condition subject to which the policy is issued and of any other prescribed matters; and different forms, particulars and matters may be prescribed in different cases.

(4) Where a cover note issued by the insurer under the provisions of this Chapter or the rules made thereunder is not followed by a policy of insurance within the prescribed time, the insurer shall, within seven days of the expiry of the period of the validity of the cover note, notify the fact to the registering authority in whose records the vehicle to which the cover note relates has been registered or to such other authority as the State Government may prescribe.

(5) Notwithstanding anything contained in any law for the time being in force, an insurer issuing a policy of insurance under this section shall be liable to indemnify the person or classes of persons specified in the policy in respect of any liability which the policy purports to cover in the case of that person or those classes of persons.

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1. Subs. by Act 54 of 1994, s. 46, for "injury to any person" (w.e.f. 14-11-1994).

148. Validity of policies of insurance issued in reciprocating countries.—Where, in pursuance of an arrangement between India and any reciprocating country, any motor vehicle registered in the reciprocating country operates on any route or within any area common to the two countries and there is in force in relation to the use of the vehicle in the reciprocating country, a policy of insurance complying with the requirements of the law of insurance in force in that country, then, notwithstanding anything contained in section 147 but subject to any rules which may be made under section 164, such policy of insurance shall be effective throughout the route or area in respect of which, the arrangement has been made, as if the policy of insurance had complied with the requirements of this Chapter.

149. Duty of insurers to satisfy judgments and awards against persons insured in respect of third party risks.—(*1*) If, after a certificate of insurance has been issued under sub-section (*3*) of section 147 in favour of the person by whom a policy has been effected, judgment or award in respect of any such liability as is required to be covered by a policy under clause (*b*) of sub-section (*1*) of section 147 (being a liability covered by the terms of the policy)[1][or under the provisions of section 163A] is obtained against any person insured by the policy, then, notwithstanding that the insurer may be entitled to avoid or cancel or may have avoided or cancelled the policy, the insurer shall, subject to the provisions of this section, pay to the person entitled to the benefit of the decree any sum not exceeding the sum assured payable thereunder, as if he were the judgment debtor, in respect of the liability, together with any amount payable in respect of costs and any sum payable in respect of interest on that sum by virtue of any enactment relating to interest on judgments.

(2) No sum shall be payable by an insurer under sub-section (*1*) in respect of any judgment or award unless, before the commencement of the proceedings in which the judgment or award is given the insurer had notice through the Court or, as the case may be, the Claims Tribunal of the bringing of the proceedings, or in respect of such judgment or award so long as execution is stayed thereon pending an appeal; and an insurer to whom notice of the bringing of any such proceedings is so given shall be entitled to be made a party thereto and to defend the action on any of the following grounds, namely:—

(a) that there has been a breach of a specified condition of the policy, being one of the following conditions, namely:—

(i) a condition excluding the use of the vehicle—

(a) for hire or reward, where the vehicle is on the date of the contract of insurance a vehicle not covered by a permit to ply for hire or reward, or

(b) for organised racing and speed testing, or

(c) for a purpose not allowed by the permit under which the vehicle is used, where the vehicle is a transport vehicle, or

(d) without side-car being attached where the vehicle is a motor cycle; or

(ii) a condition excluding driving by a named person or persons or by any person who is not duly licensed, or by any person who has been disqualified for holding or obtaining a driving licence during the period of disqualification; or

(iii) a condition excluding liability for injury caused or contributed to by conditions of war, civil war, riot or civil commotion; or

(b) that the policy is void on the ground that it was obtained by the non-disclosure of a material fact or by a representation of fact which was false in some material particular.

(3) Where any such judgment as is referred to in sub-section (*1*) is obtained from a Court in a reciprocating country and in the case of a foreign judgment is, by virtue of the provisions of section 13 of the Code of Civil Procedure, 1908 (5 of 1908) conclusive as to any matter adjudicated upon by it, the insurer (being an insurer registered under the Insurance Act, 1938 (4 of 1938) and whether or not he is registered under the corresponding law of the reciprocating country) shall be liable to the person entitled

1. Ins. by Act 54 of 1994, s. 47 (w.e.f. 14-11-1994).

to the benefit of the decree in the manner and to the extent specified in sub-section (*1*), as if the judgment were given by a Court in India:

Provided that no sum shall be payable by the insurer in respect of any such judgment unless, before the commencement of the proceedings in which the judgment is given, the insurer had notice through the Court concerned of the bringing of the proceedings and the insurer to whom notice is so given is entitled under the corresponding law of the reciprocating country, to be made a party to the proceedings and to defend the action on grounds similar to those specified in sub-section (*2*).

(4) Where a certificate of insurance has been issued under sub-section (*3*) of section 147 to the person by whom a policy has been effected, so much of the policy as purports to restrict the insurance of the persons insured thereby by reference to any conditions other than those in clause (*b*) of sub-section (*2*) shall, as respects such liabilities as are required to be covered by a policy under clause (*b*) of sub-section (*1*) of section 147, be of no effect:

Provided that any sum paid by the insurer in or towards the discharge of any liability of any person which is covered by the policy by virtue only of this sub-section shall be recoverable by the insurer from that person.

(5) If the amount which an insurer becomes liable under this section to pay in respect of a liability incurred by a person insured by a policy exceeds the amount for which the insurer would apart from the provisions of this section be liable under the policy in respect of that liability, the insurer shall be entitled to recover the excess from that person.

(6) In this section the expressions "material fact" and "material particular" means, respectively a fact or particular of such a nature as to influence the judgment of a prudent insurer in determining whether he will take the risk and, if so at what premium and on what conditions and the expression "liability covered by the terms of the policy" means a liability which is covered by the policy or which would be so covered but for the fact that the insurer is entitled to avoid or cancel or has avoided or cancelled the policy.

(7) No insurer to whom the notice referred to in sub-section (*2*) or sub-section (*3*) has been given shall be entitled to avoid his liability to any person entitled to the benefit of any such judgment or award as is referred to in sub-section (*1*) or in such judgment as is referred to in sub-section (*3*) otherwise than in the manner provided for in sub-section (*2*) or in the corresponding law of the reciprocating country, as the case may be.

Explanation.—For the purpose of this section, "Claims Tribunal" means a Claims Tribunal constituted under section 165 and "award" means an award made by that Tribunal under section 168.

150. Rights of third parties against insurers on insolvency of the insured.—(*1*) Where under any contract of insurance effected in accordance with the provisions of this Chapter, a person is insured against liabilities which he may incur to third parties, then—

(a) in the event of the person becoming insolvent or making a composition or arrangement with his creditors, or

(b) where the insured person is a company, in the event of a winding up order being made or a resolution for a voluntary winding up being passed with respect to the company or of a receiver or manager of the company's business or undertaking being duly appointed, or of possession being taken by or on behalf of the holders of any debentures secured by a floating charge of any property comprised in or subject to the charge,

if, either before or after that event, any such liability is incurred by the insured person, his rights against the insurer under the contract in respect of the liability shall, notwithstanding anything to the contrary in any provision of law, be transferred to and vest in the third party to whom the liability was so incurred.

(2) Where an order for the administration of the estate of a deceased debtor is made according to the law of insolvency, then, if any debt provable in insolvency is owing by the deceased in respect of a liability to a third party against which he was insured under a contract of insurance in accordance with the provisions of this Chapter, the deceased debtor's rights against the insurer in respect of that liability shall,

notwithstanding anything to the contrary in any provision of law, be transferred to and vest in the person to whom the debt is owing.

(3) Any condition in a policy issued for the purposes of this Chapter purporting either directly or indirectly to avoid the policy or to alter the rights of the parties thereunder upon the happening to the insured person of any of the events specified in clause (*a*) or clause (*b*) of sub-section (*1*) or upon the making of an order for the administration of the estate of a deceased debtor according to the law of insolvency shall be of no effect.

(4) Upon a transfer under sub-section (*1*) or sub-section (*2*), the insurer shall be under the same liability to the third party as he would have been to the insured person, but—

(a) if the liability of the insurer to the insured person exceeds the liability of the insured person to the third party, nothing in this Chapter shall affect the rights of the insured person against the insurer in respect of the excess, and

(b) if the liability of the insurer to the insured person is less than the liability of the insured person to the third party, nothing in this Chapter shall affect the rights of the third party against the insured person in respect of the balance.

151. Duty to give information as to insurance.—(*1*) No person against whom a claim is made in respect of any liability referred to in clause (*b*) of sub-section (*1*) of section 147 shall on demand by or on behalf of the person making the claim refuse to state whether or not he was insured in respect of that liability by any policy issued under the provisions of this Chapter, or would have been so insured if the insurer had not avoided or cancelled the policy, nor shall he refuse, if he was or would have been so insured, to give such particulars with respect to that policy as were specified in the certificate of insurance issued in respect thereof.

(2) In the event of any person becoming insolvent or making a composition or arrangement with his creditors or in the event of an order being made for the administration of the estate of a deceased person according to the law of insolvency, or in the event of a winding up order being made or a resolution for a voluntary winding up being passed with respect to any company or of a receiver or manager of the company's business or undertaking being duly appointed or of possession being taken by or on behalf of the holders of any debentures secured by a floating charge on any property comprised in or subject to the charge, it shall be the duty of the insolvent debtor, personal representative of the deceased debtor or company, as the case may be, or the official assignee or receiver in insolvency, trustee, liquidator, receiver or manager, or person in possession of the property to give at the request of any person claiming that the insolvent debtor, deceased debtor or company is under such liability to him as is covered by the provisions of this Chapter, such information as may reasonably be required by him for the purpose of ascertaining whether any rights have been transferred to and vested in him by section 150, and for the purpose of enforcing such rights, if any; and any such contract of insurance as purports whether directly or indirectly to avoid the contract or to alter the rights of the parties thereunder upon the giving of such information in the events aforesaid, or otherwise to prohibit or prevent the giving thereof in the said events, shall be of no effect.

(3) If, from the information given to any person in pursuance of sub-section (*2*) or otherwise, he has reasonable ground for supporting that there have or may have been transferred to him under this Chapter rights against any particular insurer, that insurer shall be subject to the same duty as is imposed by the said sub-section on the persons therein mentioned.

(4) The duty to give the information imposed by this section shall include a duty to allow all contracts of insurance, receipts for premiums, and other relevant documents in the possession or power of the person on whom the duty is so imposed to be inspected and copies thereof to be taken.

152. Settlement between insurers and insured persons.—(*1*) No settlement made by an insurer in respect of any claim which might be made by a third party in respect of any liability of the nature referred to in clause (*b*) of sub-section (*1*) of section 147 shall be valid unless such third party is a party to the settlement.

(*2*) Where a person who is insured under a policy issued for the purposes of this Chapter has become insolvent, or where, if such insured person is a company, a winding up order has been made or a resolutionfor a voluntary winding up has been passed with respect to the company, no agreement made between the insurer and the insured person after the liability has been incurred to a third party and after the commencement of the insolvency or winding up, as the case may be, nor any waiver, assignment or other disposition made by or payment made to the insured person after the commencement aforesaid shall be effective to defeat the rights transferred to the third party under this Chapter, but those rights shall be the same as if no such agreement, waiver, assignment or disposition or payment has been made.

153. Saving in respect of sections 150, 151 and 152.—(*1*) For the purposes of sections 150, 151 and 152 a reference to "liabilities to third parties" in relation to a person insured under any policy of insurance shall not include a reference to any liability of that person in the capacity of insurer under some other policy of insurance.

(*2*) The provisions of sections 150, 151 and 152 shall not apply where a company is wound up voluntarily merely for the purposes of reconstruction or of an amalgamation with another company.

154. Insolvency of insured persons not to affect liability of insured or claims by third parties.—Where a certificate of insurance has been issued to the person by whom a policy has been effected, the happening in relation to any person insured by the policy of any such event as is mentioned in sub-section (*1*) or sub-section (*2*) of section 150 shall, notwithstanding anything contained in this Chapter, not affect any liability of that person of the nature referred to in clause (*b*) of sub-section (*1*) of section 147; but nothing in this section shall affect any rights against the insurer conferred under the provisions of sections 150, 151 and 152 on the person to whom the liability was incurred.

155. Effect of death on certain causes of action.—Notwithstanding anything contained in section 306 of the Indian Succession Act, 1925 (39 of 1925), the death of a person in whose favour a certificate of insurance had been issued, if it occurs after the happening of an event which has given rise to a claim under the provisions of this Chapter, shall not be a bar to the survival of any cause of action arising out of the said event against his estate or against the insurer.

156. Effect of certificate of insurance.—When an insurer has issued a certificate of insurance in respect of a contract of insurance between the insurer and the insured person, then—

(a) if and so long as the policy described in the certificate has not been issued by the insurer to the insured, the insurer shall, as between himself and any other person except the insured, be deemed to have issued to the insured to the insured person a policy of insurance conforming in all respects with the description and particulars stated in such certificate; and

(b) if the insurer has issued to the insured the policy described in the certificate, but the actual terms of the policy are less favourable to persons claiming under or by virtue of the policy against the insurer either directly or through the insured than the particulars of the policy as stated in the certificate, the policy shall, as between the insurer and any other person except the insured, be deemed to be in terms conforming in all respects with the particulars stated in the said certificate

157. Transfer of certificate of insurance.—(*1*) Where a person in whose favour the certificate of insurance has been issued in accordance with the provisions of this Chapter transfers to another person the ownership of the motor vehicle in respect of which such insurance was taken together with the policy of insurance relating thereto, the certificate of insurance and the policy described in the certificate shall be deemed to have been transferred in favour of the person to whom the motor vehicle is transferred with effect from the date of its transfer.

[1][*Explanation*.—For the removal of doubts, it is hereby declared that such deemed transfer shall include transfer of rights and liabilities of the said certificate of insurance and policy of insurance.]

(*2*) The transferee shall apply within fourteen days from the date of transfer in the prescribed form to the insurer for making necessary changes in regard to the fact of transfer in the certificate of insurance

1. Ins. by Act 54 of 1994, s. 48 (w.e.f. 14-11-1994).

and the policy described in the certificate in his favour and the insurer shall make the necessary changes in the certificate and the policy of insurance in regard to the transfer of insurance.

158. Production of certain certificates, licence and permit in certain cases.—(*1*) Any person driving a motor vehicle in any public place shall, on being so required by a police officer in uniform authorised in this behalf by the State Government, produce—

(a) the certificate of insurance;

(b) the certificate of registration;

(c) the driving licence; and

(d) in the case of a transport vehicle, also the certificate of fitness referred to in section 56 and the permit, relating to the use of the vehicle.

(2) If, where owing to the presence of a motor vehicle in a public place an accident occurs involving death or bodily injury to another person, the driver of the vehicle does not at the time produce the certificates, driving licence and permit referred to in sub-section (*1*) to a police officer, he shall produce the said certificates, licence and permit at the police station at which he makes the report required by section 134.

(3) No person shall be liable to conviction under sub-section (*1*) or sub-section (*2*) by reason only of the failure to produce the certificate of insurance if, within seven days from the date on which its production was required under sub-section (*1*), or as the case may be, from the date of occurrence of the accident, he produces the certificate at such police station as may have been specified by him to the police officer who required its production or, as the case may be, to the police officer at the site of the accident or to the officer in charge of the police station at which he reported the accident:

Provided that except to such extent and with such modifications as may be prescribed, the provisions of this sub-section shall not apply to the driver of a transport vehicle.

(4) The owner of a motor vehicle shall give such information as he may be required by or on behalf of a police officer empowered in this behalf by the State Government to give for the purpose of determining whether the vehicle was or was not being driven in contravention of section 146 and on any occasion when the driver was required under this section to produce his certificate of insurance.

(5) In this section, the expression "produce his certificate of insurance" means produce for examination the relevant certificate of insurance or such other evidence as may be prescribed that the vehicle was not being driven in contravention of section 146.

[1][(*6*) As soon as any information regarding any accident involving death or bodily injury to any person is recorded or report under this section is completed by a police officer, the officer incharge of the police station shall forward a copy of the same within thirty days from the date of recording of information or, as the case may be, on completion of such report to the Claims Tribunal having jurisdiction and a copy thereof to the concerned insurer, and where a copy is made available to the owner, he shall also within thirty days of receipt of such report, forward the same to such Claims Tribunal and Insurer.]

159. Production of certificate of Insurance on application for authority to use vehicle.—A State Government may make rules requiring the owner of any motor vehicle when applying whether by payment of a tax or otherwise for authority to use the vehicle in a public place to produce such evidence as may be prescribed by those rules to the effect that either—

(a) on the date when the authority to use the vehicle comes into operation there will be in force the necessary policy of insurance in relation to the use of the vehicle by the applicant or by other persons on his order or with his permission, or

(b) the vehicle is a vehicle to which section 146 does not apply.

1. Subs. by Act 54 of 1994, s. 49, for sub-section (*6*) (w.e.f. 14-11-1994).

160. Duty to furnish particulars of vehicle involved in accident.—A registering authority or the officer in charge of a police station shall, if so required by a person who alleges that he is entitled to claim compensation in respect of an accident arising out of the use of a motor vehicle, or if so required by an insurer against whom a claim has been made in respect of any motor vehicle, furnish to that person or to that insurer, as the case may be, on payment of the prescribed fee any information at the disposal of the said authority or the said authority or the said police officer relating to the identification marks and other particulars of the vehicle and the name and address of the person who was using the vehicle at the time of the accident or was injured by it and the property, if any damaged in such form and within such time as the Central Government may prescribe.

161. Special provisions as to compensation in case of hit and run motor accident.—(*1*) For the purposes of this section, section 162 and section 163—

(a) "grievous hurt" shall have the same meaning as in the Indian Penal Code (45 of 1860);

(b) "hit and run motor accident" means an accident arising out of the use of a motor vehicle or motor vehicles the identity whereof cannot be ascertained in spite of reasonable efforts for the purpose;

(c) "scheme" means the scheme framed under section 163.

(2) Notwithstanding anything contained in the General Insurance Business (Nationalisation) Act, 1972 (57 of 1972) or any other law for the time being in force or any instrument having the force of law, the General Insurance Corporation of India formed under section 9 of the said Act and the insurance companies for the time being carrying on general insurance business in India shall provide for paying in accordance with the provisions of this Act and the scheme, compensation in respect of the death of, or grievous hurt to, persons resulting from hit and run motor accidents.

(3) Subject to the provisions of this Act and the scheme, there shall be paid as compensation—

(a) in respect of the death of any person resulting from a hit and run motor accident, a fixed sum of [1][twenty-five thousandrupees];

(b) in respect of grievous hurt to any person resulting from a hit and run motor accident, a fixed sum of [2][twelve thousand and five hundred rupees].

(4) The provisions of sub-section (*1*) of section 166 shall apply for the purpose of making applications for compensation under this section as they apply for the purpose of making applications for compensation referred to in that sub-section.

162. Refund in certain cases of compensation paid under section 161.—(*1*) The payment of compensation in respect of the death of, or grievous hurt to, any person under section 161 shall be subject to the condition that if any compensation (hereafter in this sub-section referred to as the other compensation) or other amount in lieu of or by way of satisfaction of a claim for compensation is awarded or paid in respect of such death or grievous hurt under any other provision of this Act or any other law or otherwise so much of the other compensation or other amount aforesaid as is equal to the compensation paid under section 161 shall be refunded to the insurer.

(*2*) Before awarding compensation in respect of an accident involving the death of, or bodily injury to, any person arising out of the use of a motor vehicle or motor vehicles under any provision of this Act (other than section 161) or any other law, the tribunal, court or other authority awarding such compensation shall verify as to whether in respect of such death or bodily injury compensation has already been paid under section 161 or an application for payment of compensation is pending under that section, and such tribunal, court or other authority shall,—

(a) if compensation has already been paid under section 161, direct the person liable to pay the compensation awarded by it to refund to the insurer, so much thereof as is required to be refunded in accordance with the provisions of sub-section (*1*);

1. Subs. by Act 54 of 1994, s. 50, for "eight thousand and five hundred rupees" (w.e.f. 14-11-1994).
2. Subs. by s. 50, *ibid*., for "two thousand rupees" (w.e.f. 14-11-1994).

(b) if an application for payment of compensation is pending under section 161 forward the particulars as to the compensation awarded by it to the insurer.

Explanation.—For the purposes of this sub-section, an application for compensation under section 161 shall be deemed to be pending—

(i) if such application has been rejected, till the date of the rejection of the application, and

(ii) in any other case, till the date of payment of compensation in pursuance of the application.

163. Scheme for payment of compensation in case of hit and run motor accidents.—(*1*) The Central Government may, by notification in the Official Gazette, make a scheme specifying, the manner in which the scheme shall be administered by the General Insurance Corporation, the form, manner and the time within which applications for compensation may be made, the officers or authorities to whom such applications may be made, the procedure to be followed by such officers or authorities for considering and passing orders on such applications, and all other matters connected with, or incidental to, the administration of the scheme and the payment of compensation.

(*2*) A scheme made under sub-section (*1*) may provide that—

(a) a contravention of any provision thereof shall be punishable with imprisonment for such term as may be specified but in no case exceeding three months, or with fine which may extend to such amount as may be specified but in no case exceeding five hundred rupees or with both;

(b) the powers, functions or duties conferred or imposed on any officer or authority by such scheme may be delegated with the prior approval in writing of the Central Government, by such officer or authority to any other officer or authority;

(c) any provision of such scheme may operate with retrospective effect from a date not earlier than the date of establishment of the Solatium Fund under the Motor Vehicles Act, 1939 (4 of 1939), as it stood immediately before the commencement of this Act:

Provided that no such retrospective effect shall be given so as to prejudicially affect the interests of any person who may be governed by such provision.

[1][163A. Special provisions as to payment of compensation on structured formula basis.—

(1) Notwithstanding anything contained in this Act or in any other law for the time being in force or instrument having the force of law, the owner of the motor vehicle of the authorised insurer shall be liable to pay in the case of death or permanent disablement due to accident arising out of the use of motor vehicle, compensation, as indicated in the Second Schedule, to the legal heirs or the victim, as the case may be.

Explanation.—For the purposes of this sub-section, "permanent disability" shall have the same meaning and extent as in the Workmen's Compensation Act, 1923 (8 of 1923).

(2) In any claim for compensation under sub-section (*1*), the claimant shall not be required to plead or establish that the death or permanent disablement in respect of which the claim has been made was due to any wrongful act or neglect or default of the owner of the vehicle or vehicles concerned or of any other person.

(3) The Central Government may, keeping in view the cost of living by notification in the Official Gazette, from time to time amend the Second Schedule.

163B. Option to file claim in certain cases.— Where a person is entitled to claim compensation under section 140 and section 163A, he shall file the claim under either of the said sections and not under both.]

164. Power of Central Government to make rules.—(*1*) The Central Government may make rules for the purpose of carrying into effect the provisions of this Chapter, other than the matters specified in section 159.

1. Ins. by Act 54 of 1994, s. 51 (w.e.f. 14-11-1994).

(2) Without prejudice to the generality of the foregoing power, such rules may provide for—

(a) the forms to be used for the purposes of this Chapter;

(b) the making of applications for and the issue of certificates of insurance;

(c) the issue of duplicates to replace certificates of insurance lost, destroyed or mutilated;

(d) the custody, production, cancellation and surrender of certificates of insurance;

(e) the records to be maintained by insurers of policies of insurance issued under this Chapter;

(f) the identification by certificates or otherwise of persons or vehicles exempted from the provisions of this Chapter;

(g) the furnishing of information respecting policies of insurance by insurers;

(h) adopting the provisions of this Chapter to vehicles brought into India by persons making only a temporary stay therein or to vehicles registered in a reciprocating country and operating on any route or within any area in India by applying those provisions with prescribed modifications;

(i) the form in which and the time limit within which the particulars referred to in section 160 may be furnished; and

(j) any other matter which is to be, or may be, prescribed.

CHAPTER XII

CLAIMS

TRIBUNALS

165. Claims Tribunals.—(*1*) A State Government may, by notification in the Official Gazette, constitute one or more Motor Accidents Claims Tribunals (hereafter in this Chapter referred to as Claims Tribunal) for such area as may be specified in the notification for the purpose of adjudicating upon claims for compensation in respect of accidents involving the death of, or bodily injury to, persons arising out of the use of motor vehicles, or damages to any property of a third party so arising, or both.

Explanation.—For the removal of doubts, it is hereby declared that the expression "claims for compensation in respect of accidents involving the death of or bodily injury to persons arising out of the use of motor vehicles" includes claims for compensation under section 140[1][and section 163A].

(2) A Claims Tribunal shall consist of such number of members as the State Government may think fit to appoint and where it consists of two or more members, one of them shall be appointed as the Chairman thereof.

(3) A person shall not be qualified for appointment as a member of a Claims Tribunal unless he—

(a) is, or has been, a Judge of a High Court, or

(b) is, or has been, a District Judge, or

(c) is qualified for appointment as a Judge of a High Court[1][or as a District Judge].

(4) Where two or more Claims Tribunals are constituted for any area, the State Government, may by general or special order, regulate the distribution of business among them.

166. Application for compensation.—(*1*) An application for compensation arising out of an accident of the nature specified in sub-section (*1*) of section 165 may be made—

(a) by the person who has sustained the injury; or

(b) by the owner of the property; or

(c) where death has resulted from the accident, by all or any of the legal representatives of the deceased; or

1. Added by Act 54 of 1994, s. 52 (w.e.f. 14-11-1994).

(d) by any agent duly authorised by the person injured or all or any of the legal representatives of the deceased, as the case may be:

Provided that where all the legal representatives of the deceased have not joined in any such application for compensation, the application shall be made on behalf of or for the benefit of all the legal representatives of the deceased and the legal representatives who have not so joined, shall be impleaded as respondents to the application.

[1][(*2*) Every application under sub-section (*1*) shall be made, at the option of the claimant, either to the Claims Tribunal having jurisdiction over the area in which the accident occurred or to the Claims Tribunal within the local limits of whose jurisdiction the claimant resides or carries on business or within the local limits of whose jurisdiction the defendant resides, and shall be in such form and contain such particulars as may be prescribed:

Provided that where no claim for compensation under section 140 is made in such application, the application shall contain a separate statement to that effect immediately before the signature of the applicant.]

[2]* * * * *

[3][(*4*) The Claims Tribunal shall treat any report of accidents forwarded to it under sub-section (*6*) of section 158 as an application for compensation under this Act.]

167. Option regarding claims for compensation in certain cases.—Notwithstanding anything contained in the Workmen's Compensation Act, 1923 (8 of 1923), where the death of, or bodily injury to, any person gives rise to a claim for compensation under this Act and also under the Workmen's Compensation Act, 1923, the person entitled to compensation may without prejudice to the provisions of Chapter X claim such compensation under either of those Acts but not under both.

168. Award of the Claims Tribunal.—(*1*) On receipt of an application for compensation made under section 166, the Claims Tribunal shall, after giving notice of the application to the insurer and after giving the parties (including the insurer) an opportunity of being heard, hold an inquiry into the claim or, as the case may be, each of the claims and, subject to the provisions of section 162 may make an award determining the amount of compensation which appears to it to be just and specifying the person or persons to whom compensation shall be paid and in making the award the Claims Tribunal shall specify the amount which shall be paid by the insurer or owner or driver of the vehicle involved in the accident or by all or any of them, as the case may be:

Provided that where such application makes a claim for compensation under section 140 in respect of the death or permanent disablement of any person, such claim and any other claim (whether made in such application or otherwise) for compensation in respect of such death or permanent disablement shall be disposed of in accordance with the provisions of Chapter X.

(2) The Claims Tribunal shall arrange to deliver copies of the award to the parties concerned expeditiously and in any case within a period of fifteen days from the date of the award.

(3) When an award is made under this section, the person who is required to pay any amount in terms of such award shall, within thirty days of the date of announcing the award by the Claims Tribunal, deposit the entire amount awarded in such manner as the Claims Tribunal may direct.

169. Procedure and powers of Claims Tribunals.—(*1*) In holding any inquiry under section 168, the Claims Tribunal may, subject to any rules that may be made in this behalf, follow such summary procedure as it thinks fit.

(*2*) The Claims Tribunal shall have all the powers of a Civil Court for the purpose of taking evidence on oath and of enforcing the attendance of witnesses and of compelling the discovery and production of documents and material objects and for such other purposes as may be prescribed; and the Claims

1. Subs. by Act 54 of 1994, s. 53, for sub-section (*2*) (w.e.f. 14-11-1994).
2. Sub-section (*3*) omitted by s. 53, *ibid*. (w.e.f. 14-11-1994).
3. Subs. by s. 53, *ibid*., for sub-section (*4*) (w.e.f. 14-11-1994).

Tribunal shall be deemed to be a Civil Court for all the purposes of section 195 and Chapter XXVI of the Code of Criminal Procedure, 1973 (2 of 1974).

(*3*) Subject to any rules that may be made in this behalf, the Claims Tribunal may, for the purpose of adjudicating upon any claim for compensation, choose one or more persons possessing special knowledge of any matter relevant to the inquiry to assist it in holding the inquiry.

170. Impleading insurer in certain cases.—Where in the course of any inquiry, the Claims Tribunal is satisfied that—

(a) there is collusion between the person making the claim and the person against whom the claim is made, or

(b) the person against whom the claim is made has failed to contest the claim,

it may, for reasons to be recorded in writing, direct that the insurer who may be liable in respect of such claim, shall be impleaded as a party to the proceeding and the insurer so impleaded shall thereupon have, without prejudice to the provisions contained in sub-section (*2*) of section 149, the right to contest the claim on all or any of the grounds that are available to the person against whom the claim has been made.

171. Award of interest where any claim is allowed.—Where any Claims Tribunal allows a claim for compensation made under this Act, such Tribunal may direct that in addition to the amount of compensation simple interest shall also be paid at such rate and from such date not earlier than the date of making the claim as it may specify in this behalf.

172. Award of compensatory costs in certain cases.—(*1*) Any Claims Tribunal adjudicating upon any claim for compensation under this Act, may in any case where it is satisfied for reasons to be recorded by it in writing that—

(a) the policy of insurance is void on the ground that it was obtained by representation of fact which was false in any material particular, or

(b) any party or insurer has put forward a false or vexatious claim or defence,

such Tribunal may make an order for the payment, by the party who is guilty of mis-representation or by whom such claim or defence has been put forward of special costs by way of compensation to the insurer or, as the case may be, to the party against whom such claim or defence has been put forward.

(2) No Claims Tribunal shall pass an order for special costs under sub-section (*1*) for any amount exceeding one thousand rupees.

(3) No person or insurer against whom an order has been made under this section shall, by reason thereof be exempted from any criminal liability in respect of such mis-representation, claim or defence as is referred to in sub-section (*1*).

(4) Any amount awarded by way of compensation under this section in respect of any mis-representation, claim or defence, shall be taken into account in any subsequent suit for damages for compensation in respect of such mis-representation, claim or defence.

173. Appeals.—(*1*) Subject to the provisions of sub-section (*2*), any person aggrieved by an award of a Claims Tribunal may, within ninety days from the date of the award, prefer an appeal to the High Court:

Provided that no appeal by the person who is required to pay any amount in terms of such award shall be entertained by the High Court unless he has deposited with it twenty-five thousand rupees or fifty per cent. of the amount so awarded, whichever is less, in the manner directed by the High Court:

Provided further that the High Court may entertain the appeal after the expiry of the said period of ninety days, if it is satisfied that the appellant was prevented by sufficient cause from preferring the appeal in time.

(*2*) No appeal shall lie against any award of a Claims Tribunal if the amount in dispute in the appeal is less than ten thousand rupees.

174. Recovery of money from insurer as arrear of land revenue.—Where any amount is due from any person under an award, the Claims Tribunal may, on an application made to it by the person entitled

to the amount, issue a certificate for the amount to the Collector and the Collector shall proceed to recover the same in the same manner as an arrear of land revenue.

175. Bar on jurisdiction of Civil Courts.—Where any Claims Tribunal has been constituted for any area, no Civil Court shall have jurisdiction to entertain any question relating to any claim for compensation which may be adjudicated upon by the Claims Tribunal for that area, and no injunction in respect of any action taken or to be taken by or before the Claims Tribunal in respect of the claim for compensation shall be granted by the Civil Court.

176. Power of State Government to make rules.—A State Government may make rules for the purpose of carrying into effect the provisions of sections 165 to 174, and in particular, such rules may provide for all or any of the following matters, namely:—

(a) the form of application for claims for compensation and the particulars it may contain, and the fees, if any, to be paid in respect of such applications;

(b) the procedure to be followed by a Claims Tribunal in holding an inquiry under this Chapter;

(c) the powers vested in a Civil Court which may be exercised by a Claims Tribunal;

(d) the form and the manner in which and the fees (if any) on payment of which an appeal may be preferred against an award of a Claims Tribunal; and

(e) any other matter which is to be, or may be, prescribed.

CHAPTER XIII

OFFENCES, PENALTIES AND PROCEDURE

177. General provision for punishment of offences.—Whoever contravenes any provision of this Act or of any rule, regulation or notification made thereunder shall, if no penalty is provided for the offence be punishable for the first offence with fine which may extend to one hundred rupees, and for any second or subsequent offence with fine which may extend to three hundred rupees.

178. Penalty for travelling without pass or ticket and for dereliction of duty on the part of conductor and refusal to ply contract carriage, etc.—(*1*) Whoever travels in a stage carriage without having a proper pass or ticket with him or being in or having alighted from a stage carriage fails or refuses to present for examination or to deliver up his pass or ticket immediately on a requisition being made therefor, shall be punishable with fine which may extend to five hundred rupees.

Explanation.—In this section, "pass" and "ticket" have the meanings respectively assigned to them in section 124.

(2) If the conductor of a stage carriage, or the driver of a stage carriage performing the functions of a conductor in such stage carriage, whose duty is—

(a) to supply a ticket to a person travelling in a stage carriage on payment of fare by such person, either wilfully or negligently,—

(i) fails or refuses to accept the fare when tendered, or

(ii) fails or refuses to supply a ticket, or

(iii) supplies an invalid ticket, or

(iv) supplies a ticket of a lesser value, or

(b) to check any pass or ticket, either wilfully or negligently fails or refuses to do so,

he shall be punishable with fine which may extend to five hundred rupees.

(3) If the holder of a permit or the driver of a contract carriage refuses, in contravention of the provisions of this Act or rules made thereunder, to ply the contract carriage or to carry the passengers, he shall,—

(a) in the case of two-wheeled or three-wheeled motor vehicles, be punishable with fine which may extend to fifty rupees; and

(b) in any other case, be punishable with fine which may extend to two hundred rupees.

179. Disobedience of orders, obstruction and refusal of information.—(*1*) Whoever wilfully disobeys any direction lawfully given by any person or authority empowered under this Act to give such direction, or obstructs any person or authority in the discharge of any functions which such person or authority is required or empowered under this Act to discharge, shall, if no other penalty is provided for the offence be punishable with fine which may extend to five hundred rupees.

(*2*) Whoever, being required by or under this Act to supply any information, wilfully withholds such information or gives information which he knows to be false or which he does not believe to be true, shall, if no other penalty is provided for the offence, be punishable with imprisonment for a term which may extend to one month, or with fine which may extend to five hundred rupees, or with both.

180. Allowing unauthorised persons to drive vehicles.—Whenever, being the owner or person in charge of a motor vehicle, causes, or permits, any other person who does not satisfy the provisions of section 3 or section 4 to drive the vehicle shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one thousand rupees, or with both.

181. Driving vehicles in contravention of section 3 or section 4.—Whoever, drives a motor vehicle in contravention of section 3 or section 4 shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to five hundred rupees, or with both.

182. Offences relating to licences.—(*1*) Whoever, being disqualified under this Act for holding or obtaining a driving licence drives a motor vehicle in a public place or in any other place, or applies for or obtains a driving licence or, not being entitled to have a driving licence issued to him free of endorsement, applies for or obtains a driving licence without disclosing the endorsement made on a driving licence previously held by him shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to five hundred rupees or with both, and any driving incence so obtained by him shall be of no effect.

(*2*) Whoever, being disqualified under this Act for holding or obtaining a conductor's licence, acts as a conductor of a stage carriage in a public place or applies for or obtains a conductor's licence or, not being entitled to have a conductor's licence issued to him free of endorsement, applies for or obtains a conductor's licence without disclosing the endorsements made on a conductor's licence previously held by him, shall be punishable with improsonment for a term which may extend to one month, or with fine which may extend to one hundred rupees, or with both, and any conductor's licence so obtained by him shall be of no effect.

[1][**182A. Punishment for offences relating to construction and maintenance of vehicles**.—Any person who contravenes the provisions of sub-section (*3*) of section 109, shall be punishable with a fine of five thousand rupees for any subsequent offence.]

183. Driving at excessive speed, etc.—(*1*) Whoever, drives a motor vehicle in contravention of the speed limits referred to in section 112 shall be punishable with fine which may extend to four hundred rupees, or, if having been previously convicted of an offence under this sub-section is again convicted of an offence under this sub- section, with fine which may extend to one thousand rupees.

(2) Whoever, causes any person who is employed by him or is subject to his control in driving to drive a motor vehicle in contravention of the speed limits referred to in section 112 shall be punishable with fine which may extend to three hundred rupees, or, if having been previously convicted of an offence under this sub-section, is again convicted of an offence under this sub-section, with fine which may extend to five hundred rupees.

(3) No person shall be convicted of an offence punishable under sub-section (*1*) solely on the evidence of one witness to the effect that in the opinion of the witness such person was driving at a speed which was unlawful, unless that opinion is shown to be based on an estimate obtained by the use of some mechanical device.

1. Ins. by Act 54 of 1994, s. 54 (w.e.f. 14-11-1994).

(4) The publication of a time table under which, or the giving of any direction that, any journey or part of a journey is to be completed within a specified time shall, if in the opinion of the Court it is not practicable in the circumstances of the case for that journey or part of a journey to be completed in the specified time without contravening the speed limits referred to in section 112 be *prima facie* evidence that the person who published the time table or gave the direction has committed an offence punishable under sub- section (*2*).

184. Driving dangerously.—Whoever, drives a motor vehicle at a speed or in a manner which is dangerous to the public, having regard to all the circumstances of case including the nature, condition and use of the place where the vehicle is driven and the amount of traffic which actually is at the time or which might reasonably be expected to be in the place, shall be punishable for the first offence with imprisonment for a term which may extend to six months, or with fine which may extend to one thousand rupees, and for any second or subsequent offence if committed within three years of the commission of a previous similar offence with imprisonment for a term which may extend to two years, or with fine which may extend to two thousand rupees, or with both.

185. Driving by a drunken person or by a person under the influence of drugs.—Whoever, while driving, or attempting to drive, a motor vehicle,—

[1][(*a*) has, in his blood, alcohol exceeding 30 mg. per 100 ml. of blood detected in a test by a breath analyser, or]

(*b*) is under the influence of a drug to such an extent as to be incapable of exercising proper control over the vehicle.

shall be punishable for the first offence with imprisonment for a term which may extend to six months, or with fine which may extend to two thousand rupees, or with both; and for a second or subsequent offence, if committed within three years of the commission of the previous similar offence, with imprisonment for term which may extend to two years, or with fine which may extend to three thousand rupees, or with both.

Explanation.—For the purposes of this section, the drug or drugs specified by the Central Government in this behalf, by notification in the Official Gazette, shall be deemed to render a person incapable of exercising proper control over a motor vehicle.

186. Driving when mentally or phycically unfit to drive.—Whoever drives a motor vehicle in any public place when he is to his knowledge suffering from any disease or disability calculated to cause his driving of the vehicle to be a source of danger to the public, shall be punishable for the first offence with fine which may extend to two hundred rupees and for a second or subsequent offence with fine which may extend to five hundred rupees.

187. Punishment for offences relating to accident.—Whoever fails to comply with the provisions of clause (*c*) of sub-section (*1*) of section 132 or section 133 or section 134 shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to five hundred rupees, or with both or, if having been previously convicted of an offence under this section, he is again convicted of an offence under this section, with imprisonment for a term which may extend to six months, or with fine which may extend to one thousand rupees, or with both.

188. Punishment for abetment of certain offences.—Whoever abets the commission of an offence under section 184, section 185 or section 186 shall be punishable with the punishment provided for the offence.

189. Racing and trails of speed.—Whoever without the written consent of the State Government permits or takes part in a race or trial of speed of any kind between motor vehicles in any public place shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to five hundred rupees, or with both.

190. Using vehicle in unsafe condition.—(*1*) Any person who drives or causes or allows to be driven in any public place a motor vehicle or trailer while the vehicle or trailer has any defect, which such person

1. Subs. by Act 54 of 1994, s. 55, for clause (*a*) (w.e.f. 14-11-1994).

knows of or could have discovered by the exercise of ordinary care and which is calculated to render the driving of the vehicle a source of danger to persons and vehicles using such place, shall be punishable with fine which may extend to two hundred and fifty rupees or, if as a result of such defect an accident is caused causing bodily injury or damage to property, with imprisonment for a term which may extend to three months or with fine which may extend to one thousand rupees, or with both.

(2) Any person who drives or causes or allows to be driven, in any public place a motor vehicle, which violates the standards prescribed in relation to road safety, control of noise and air- pollution, shall be punishable for the first offence with a fine of one thousand rupees and for any second or subsequent offence with a fine of two thousand rupees.

(3) Any person who drives or causes or allows to be driven, in any public place a motor vehicle which violates the provisions of this Act or the rules made thereunder relating to the carriage of goods which are of dangerous or hazardous nature to human life, shall be punishable for the first offence which may extend to three thousand rupees, or withimprisonment for a term which may extend to one year, or with both, and for any second or subsequent offence with fine which may extend to five thousand rupees, or with imprisonment for a term which may extend to three years, or with both.

191. Sale of vehicle in or alteration of vehicle to condition contravening this Act.—Whoever being an importer of or dealer in motor vehicles, sells or delivers or offers to sell or deliver a motor vehicle or traller in such condition that the use thereof in a public place would be in contravention of Chapter VII or any rule made thereunder or alters the motor vehicle or trailer so as to render its condition such that its use in a public place would be in contravention of Chapter VII or any rule made thereunder shall be punishable with fine which may extend to five hundred rupees:

Provided that no person shall be convicted under this section if he proves that he had reasonable cause to believe that the vehicle would not be used in a public place until it had been put into a condition in which it might lawfully be so used.

[1]**[192. Using vehicle without registration**.—(*1*) Whoever drives a motor vehicle or causes or allows a motor vehicle to be used in contravention of the provisions of section 39 shall be punishable for the first offence with a fine which may extend to five thousand rupees but shall not be less than two thousand rupees for a second or subsequent offence with imprisonment which may extend to one year or with fine which may extend to ten thousand rupees but shall not be less than five thousand rupees or with both:

Provided that the court may, for reasons to be recorded, impose a lesser punishment.

(2) Nothing in this section shall apply to the use of a motor vehicle in an emergency for the conveyance of persons suffering from sickness or injuries or for the transport of food or materials to relieve distress or of medical supplies for a like purpose:

Provided that the person using the vehicle reports about the same to the Regional Transport Authority within seven days from the date of such use.

(3) The court to which an appeal lies from any conviction in respect of an offence of the nature specified in sub-section (*1*), may set aside or vary any order made by the court below, notwithstanding that no appeal lies against the conviction in connection with which such order was made.

192A. Using vehicle without permit—(*1*) Whoever drives a motor vehicle or causes or allows a motor vehicle to be used in contravention of the provisions of sub-section (*1*) of section 66 or in contravention of any condition of a permit relating to the route on which or the area in which or the purpose for which the vehicle may be used, shall be punishable for the first offence with a fine which may extend to five thousand rupees but shall not be less than two thousand rupees and for any subsequent offence with imprisonment which may extend to one year but shall not be less than three months or with fine which may extend to ten thousand rupees but shall not be less than five thousand rupees or with both:

Provided that the court may for reasons to be recorded, impose a lesser punishment.

1. Subs. by Act 54 of 1994, s. 55, for section 192 (w.e.f. 14-11-1994).

(2) Nothing in this section shall apply to the use of a motor vehicle in an emergency for the conveyance of persons suffering from sickness or injury or for the transport of materials for repair or for the transport of food or materials to relieve distress or of medical supplies for a like purpose:

Provided that the person using the vehicle reports about the same to the Regional Transport Authority within seven days from the date of such use.

(3) The court to which an appeal lies from any conviction in respect of an offence of the nature specified in sub-section (*1*), may set aside or vary any order made by the court below, notwithstanding that no appeal lies against the conviction in connection with which such order was made.]

193. Punishment of agents and canvassers without proper authority.—Whoever engages himself as an agent or canvasser in contravention of the provisions of section 93 or of any rules made thereunder shall be punishable for the first offence with fine which may extend to one thousand rupees and for any second or subsequent offence with imprisonment which may extend to six months, or with fine which may extend to two thousand rupees, or with both.

194. Driving vehicle exceeding permissible weight.—[1][(*1*) Whoever drivers a motor vehicle or causes or allows a motor vehicle to be driven in contravention of the provisions of section 113 or section 114 or section 115 shall be punishable with minimum fine of two thousand rupees and an additional amount of one thousand rupees per tonne of excess load, together with the liability to pay charges for off-loading of the excess load.]

(*2*) Any driver of a vehicle who refuses to stop and submit his vehicle to weighing after being directed to do so by an officer authorised in this behalf under section 114 or removes or causes the removal of the load or part of it prior to weighing shall be punishable with fine which may extend to three thousand rupees.

195. Imposition of minimum fine under certain circumstances.—(*1*) Whoever having been convicted of an offence under this Act or the rules made thereunder commits a similar offence on a second or subsequent occasion within three years of the commission of the previous offence, no court shall, except for reasons to be recorded by it in writing, impose on him a fine of less than one-fourth of the maximum amount of the fine impossible for such offence.

(*2*) Nothing in sub-section (*1*) shall be construed as restricting the power of the court from awarding such imprisonment as it considers necessary in the circumstances of the case not exceeding the maximum specified in this Act in respect of that offence.

196. Driving uninsured vehicle.—Whoever drives a motor vehicle or causes or allows a motor vehicle to be driven in contravention of the provisions of section 146 shall be punishable with imprisonment which may extend to three months, or with fine which may extend to one thousand rupees, or with both.

197. Taking vehicle without authority.—(*1*) Whoever takes and drives away any motor vehicle without having either the consent of the owner thereof or other lawful authority shall be punishable with imprisonment which may extend to three months or with fine which may extend to five hundred rupees, or with both.

Provided that no person shall be convicted under this section if the Court is satisfied that such person acted in the reasonable belief that he had lawful authority or in the reasonable belief that the owner would in the circumstances of the case have given his consent if he had been asked therefor.

(2) Whoever, unlawfully by force or threat of force or by any other form of intimidation, seizes or exercises control of a motor vehicle, shall be punishable with imprisonment which may extend to three months, or with fine which may extend to five hundred rupees, or with both.

(3) Whoever attempts to commit any of the acts referred to in sub-section (*1*) or sub-section (*2*) in relation to any motor vehicle, or abets the commission of any such act, shall also be deemed to have committed an offence under sub-section (*1*) or, as the case may be, sub-section (*2*).

1. Subs. by Act 54 of 1994, s. 57, for sub-section (*1*) (w.e.f. 14-11-1994).

198. Unauthorised interference with vehicle.—Whoever otherwise than with lawful authority or reasonable execuse enters or mounts any stationary motor vehicle or tampers with the brake or any part of the mechanism of a motor vehicle shall be punishable with fine which may extend to one hundred rupees.

199. Offences by companies.—(*1*) Where an offence under this Act has been committed by a company, every person who at the time the offence was committed, was in charge of, and was responsible to, the company, for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the contravention and shall be liable to be proceeded against and punished accordingly:

Provided that nothing in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(*2*) Notwithstanding anything contained in sub-section (*1*), where an offence under this Act has been committed by a company, and it is proved that the offence was committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation.—For the purposes of this section—

(a) "company" means any body corporate and includes a firm or other association of individuals; and

(b) "director", in relation to a firm, means a partner in the firm.

200. Composition of certain offences.—(*1*) Any offence whether committed before or after the commencement of this Act punishable under section 177, section 178, section 179, section 180, section 181, section 182, sub-section (*1*) or sub-section (*2*) of section 183, section 184, section 186,[1][section 189, sub-section (*2*) of section190]; section 191, section 192, section 194, section 196 or section 198 may either before or after the institution of the prosecution, be compounded by such officers or authorities and for such amount as the State Government may, by notification in the Official Gazette, specify in this behalf.

(*2*) Where an offence has been compounded under sub-section (*1*), the offender, if in custody, shall be discharged and no further proceedings shall be taken against him in respect of such offence.

201. Penalty for causing obstruction to free flow of traffic.—(*1*) Whoever keeps a disabled vehicle on any public place, in such a manner, so as to cause impediment to the free flow of traffic, shall be liable for penalty up to fifty rupees per hour, so long as it remains in that position:

Provided that the vehicle involved in accidents shall be liable for penalty only from the time of completion of inspection formalities under the law.

[2][Provided further that where the vehicle is removed by a Government agency, towing charges shall be recovered from the vehicle owner or person in-charge of such vehicle.]

[3][(*2*) Penalties or towing charges under this section shall be recovered by such officer or authority as the State Government may, by notification in the Official Gazette, authorise.]

202. Power to arrest without warrant.—(*1*) A police officer in uniform may arrest without warrant any person who in his presence commits an offence punishable under section 184 or section 185 or section 197:

Provided that any person so arrested in connection with an offence punishable under section 185 shall, within two hours of his arrest, be subjected to a medical examination referred to in sections 203 and 204 by a registered medical practitioner failing which he shall be released from custody.

1. Subs. by Act 54 of 1994, s. 58, for "section 189" (w.e.f. 14-11-1994).

3.Subs. by s. 59, *ibid*., for sub-section (*2*) (w.e.f. 14-11-1994).

2. Ins. by s. 59, *ibid*. (w.e.f. 14-11-1994).

3.Subs. by s. 59, *ibid*., for sub-section (*2*) (w.e.f. 14-11-1994).

[1][(*2*) A police officer in uniform may arrest without warrant any person, who has committed an offence under this Act, if such person refuses to give his name and address.]

(*3*) A police officer arresting without warrant the driver of a motor vehicle shall if the circumstances so require take or cause to be taken any steps he may consider proper for the temporary disposal of the vehicle.

203. Breath tests.—[2][(*1*) A police officer in uniform or an officer of the Motor Vehicles Department, as may be authorised in this behalf by that Department, may require any person driving or attempting to drive a motor vehicle in a public place to provide one or more specimens of breath for breath test there or nearby, if such police officer or officer has any reasonable cause to suspect him of having committed an offence under section 185:

Provided that requirement for breath test shall be made (unless, it is made) as soon as reasonably practicable after the commission of such offence.]

(2) If a motor vehicle is involved in an accident in a public place and a police officer in uniform has any reasonable cause to suspect that the person who was driving the motor vehicle at the time of the accident, had alcohol in his blood or that he was driving under the influence of a drug referred to in section 185 he may require the person so driving the motor vehicle, to provide a specimen of his breath for a breath test:—

(a) in the case of a person who is at a hospital as an indoor patient, at the hospital,

(b) in the case of any other person, either at or near the place where the requirement is made, or, if the police officer thinks fit, at a police station specified by the police officer:

Provided that a person shall not be required to provide such a specimen while at a hospital as an indoor patient if the registered medical practitioner in immediate charge of his case is not first notified of the proposal to make the requirement or objects to the provision of a specimen on the ground that its provision or the requirement to provide it would be prejudicial to the proper care or treatment of the patient.

(3) If it appears to a police officer in uniform, in consequence of a breath test carried out by him on any person under sub-section (*1*) or sub-section (*2*), that the device by means of which the test has been carried out indicates the presence of alcohol in the person's blood, the police officer may arrest that person without warrant except while that person is at a hospital as an indoor patient.

(4) If a person, required by a police officer under sub-section (*1*) or sub-section (*2*) to provide a specimen of breath for a breath test, refuses or fails to do so and the police officer has reasonable cause to suspect him of having alcohol in his blood, the police officer may arrest him without warrant except while he is at a hospital as an indoor patient.

(5) A person arrested under this section shall while at a police station, be given an opportunityto provide a specimen of breath for a breath test there.

(6) The results of a breath test made in pursuance of the provisions of this section shall be admissible in evidence.

Explanation.—For the purposes of this section, "breath test", means a test for the purpose of obtaining an indication of the presence of alcohol in a person's blood carried out, on one or more specimens of breath provided by that person, by means of a device of a type approved by the Central Government, by notification in the Official Gazette, for the purpose of such a test.

204. Laboratory test.—(*1*) A person, who has been arrested under section 203 may, while at a police station, be required by a police officer to provide to such registered medical practitioner as may be produced by such police officer, a specimen of his blood for a Laboratory test,—

(a) it appears to the police officer that the device, by means of which breath test was taken in relation to such person, indicates the presence of alcohol in the blood of such person, or

1. Subs. by Act 54 of 1994, s. 60, for sub-section (*2*) (w.e.f. 14-11-1994).
2. Subs. by s. 61, *ibid*., for sub-section (*1*) (w.e.f. 14-11-1994).

(b) such person, when given the opportunity to submit to a breath test, has refused, omitted or failed to do so:

Provided that where the person required to provide such specimen is a female and the registered medical practitioner produced by such police officer is a male medical practitioner, the specimen shall be taken only in the presence of a female, whether a medical practitioner or not.

(2) A person while at a hospital as an indoor patient may be required by a police officer to provide at the hospital a specimen of his blood for a laboratory test:—

(a) if it appears to the police officer that the device by means of which test is carried out in relation to the breath of such person indicates the presence of alcohol in the blood of such person, or

(b) if the person having been required, whether at the hospital or elsewhere, to provide a specimen of breath for a breath test, has refused, omitted or failed to do so and a police officer has reasonable cause to suspect him of having alcohol in his blood:

Provided that a person shall not be required to provide a specimen of his blood for a laboratory test under this sub-section if the registered medical practitioner in immediate charge of his case is not first notified of the proposal to make the requirement or objects to the provision of such specimen on the ground that its provision or the requirement to provide it would be prejudicial to the proper care or treatment of the patient.

(3) The results of a laboratory test made in pursuance of this section shall be admissible in evidence.

Explanation.—For the purposes of this section, "laboratory test" means the analysis of a specimen of blood made at a laboratory established, maintained or recognised by the Central Government or a State Government.

205. Presumption of unfitness to drive.—In any proceeding for an offence punishable under section 185 if it is proved that the accused, when requested by a police officer at any time so to do, had refused, omitted or failed to consent to the taking of or providing a specimen of his breath for a breath test or a specimen of his blood for a laboratory test, his refusal, omission or failure may, unless reasonable cause therefor is shown, be presumed to be a circumstance supporting any evidence given on behalf of the prosecution, or rebutting any evidence given on behalf of the defence, with respect to his condition at that time.

206. Power of police officer to impound document.—(*1*) Any police officer or other person authorised in this behalf by the State Government may, if he has reason to believe that any identification mark carried on a motor vehicle or any licence, permit, certificate of registration, certificate of insurance or other document produced to him by the driver or person in charge of a motor vehicle is a false document within the meaning of section 464 of the Indian Penal Code (45 of 1860), seize the mark or document and call upon the driver or owner of the vehicle to account for his possession of or the presence in the vehicle of such mark or document.

(2) Any police officer or other person authorised in this behalf by the State Government may, if he has reason to believe that the driver of amotor vehicle who is charged with any offence under this Act may abscond or otherwise avoid the service of a summons, seize any licence held by such driver and forward it to the Court taking cognizance of the offence and the said Court shall on the first appearance of such driver before it, return the licence to him in exchange for the temporary acknowledgment given under sub-section (3).

(3) A police officer or other person seizing a licence under sub-section (*2*) shall give to the person surrendering the licence a temporary acknowledgment therefor and such acknowledgment shall authorise the holder to drive until the licence has been returned to him or until such date as may be specified by the police officer or other person in the acknowledgment, whichever is earlier:

Provided that if any magistrate, police officer or other person authorised by the State Government in this behalf is, on an application made to him, satisfied that the licence cannot be, or has not been, returned

to the holder thereof before the date specified in the acknowledgment for any reason for which the holder is not responsible, the magistrate, police officer or other person, as the case may be, may extend the period of authorization to drive to such date as may be specified in the acknowledgment.

207. Power to detain vehicles used without certificate of registration permit, etc.—(*1*) Any police officer or other person authorised in this behalf by the State Government may, if he has reason to believe that a motor vehicle has been or is being used in contravention of the provisions of section 3 or section 4 or section 39 or without the permit required by sub-section (*1*) of section 66 or in contravention of any condition of such permit relating to the route on which or the area in which or the purpose for which the vehicle may be used, seize and detain the vehicle, in the prescribed manner and for this purpose take or cause to be taken any steps he may consider proper for the temporary safe custody of the vehicle:

Provided that where any such officer or person has reason to believe that a motor vehicle has been or is being used in contravention of section 3 or section 4 or without the permit required by sub-section (*1*) of section 66 he may, instead of seizing the vehicle, seize the certificate of registration of the vehicle and shall issue an acknowledgment in respect thereof.

(*2*) Where a motor vehicle has been seized and detained under sub-section (*1*), the owner or person in charge of the motor vehicle may apply to the transport authority or any officer authorised in this behalf by the State Government together with the relevant documents for the release of the vehicle and such authority or officer may, after verification of such documents, by order release the vehicle subject to such conditions as the authority or officer may deem fit to impose.

208. Summary disposal of cases.—(*1*) The Court taking cognizance of any offence (other than an offence which the Central Government may by rules specify in this behalf) under this Act,—

(i) may, if the offence is an offence punishable with imprisonment under this Act; and

(ii) shall, in any other case,

state upon the summons to be served on the accused person that he—

(a) may appear by pleader or in person; or

(b) may, by a specified date prior to the hearing of the charge, plead guilty to the charge and remit to the Court, by money order, such sum (not exceeding the maximum fine that may be imposed for the offence) as the Court may specify, and the plea of guilt indicated in the money order coupon itself:

Provided that the Court shall, in the case of any of the offences referred to in sub-section (*2*), state upon the summons that the accused person, if he pleads guilty, shall so plead in the manner specified in clause (*b*) and shall forward his driving licence to the Court with his letter containing such plea.

(2) Where the offence dealt with in accordance with sub-section (*1*) is an offence specified by the Central Government by rules for the purposes of this sub-section, the Court shall, if the accused person pleads guilty to the charge and forward his driving licence to the Court with the letter containing his plea, make an endorsement of such conviction on his driving licence.

(3) Where an accused person pleads guilty and remits the sum specified and has complied with the provisions of sub-section (*1*), or as the case may be, sub-sections (*1*) and (*2*), no further proceedings in respect of the offence shall be taken against him nor shall he be liable, notwithstanding anything to the contrary contained in this Act, to be disqualified for holding or obtaining a licence by reason of his having pleaded guilty.

209. Restriction on conviction.—No person prosecuted for an offence punishable under section 183 or section 184 shall be convicted unless—

(a) he was warned at the time the offence was committed that the question of prosecuting him would be taken into consideration, or

(b) within fourteen days from the commission of the offence, a notice specifying the nature of the offence and the time and place where it is alleged to have been committed was served on or sent by

registered post to him or the person registered as the owner of the vehicle at the time of the commission of the offence, or

(c) within twenty-eight days of the commission of the offence, a summons for the offence was served on him:

Provided that nothing, in this section shall apply where the Court is satisfied that—

(a) the failure to serve the notice or summons referred to in this sub-section was due to the fact that neither the name and address of the accused nor the name and address of the registered owner of the vehicle could with reasonable diligence have been ascertained in time, or

(b) such failure was brought about by the conduct of the accused.

210. Courts to send intimation about conviction.—Every Court by which any person holding a driving licence is convicted of an offence under this Act or of an offence in the commission of which a motor vehicle was used, shall send intimation to—

(a) the licensing authority which issued the driving licence, and

(b) the licensing authority by whom the licence was last renewed,

and every such intimation shall state the name and address of the holder of the licence, the licence number, the date of issue and renewal of the same, the nature of the offence, the punishment awarded for the same and such other particulars as may be prescribed.

CHAPTER XIV

MISCELLANEOUS

211. Power to levy fee.—Any rule which the Central Government or the State Government is empowered to make under this Act may, notwithstanding the absence of any express provision to that effect, provide for the levy of such fees in respect of applications, amendment of documents, issue of certificates, licences, permits, tests, endorsements, badges, plates, countersignatures, authorisation, supply of statistics or copies of documents or orders and for any other purpose or matter involving the rendering of any service by the officers or authorities under this Act or any rule made thereunder as may be considered necessary:

Provided that the Government may, if it considers necessary so to do, in the public interest, by general or special order, exempt any class of persons from the payment of any such fee either in part or in full.

212. Publication, commencement and laying of rules and notifications.—(*1*) The power to make rules under this Act is subject to the condition of the rules being made after previous publication.

(2) All rules made under this Act shall be published in the Official Gazette, and shall unless some later date is appointed, come into force on the date of such publication.

(3) Every rule made by any State Government shall be laid, as soon as may be after it is made before the State Legislature.

(4) Every rule made by the Central Government under this Act, every scheme made by the Central Government under sub-section (*1*) of section 75 and sub-section (*1*) of section 163 and every notification issued by the Central Government under sub-section (*4*) of section 41, sub-section (*1*) of section 58, sub-section (*1*) of section 59, the proviso to sub-section (*1*) of section 112, [1][sub-section (*4*) of section 163A]and sub-section (*4*) of section 213 shall be laid, as soon as may be after it is made, before each House of Parliament while it is in session for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule, scheme or notification or both Houses agree that the rule or scheme should not be made or the notification should not be issued, the rule, scheme or notification shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or

1. Ins. by Act 54 of 1994, s. 62 (w.e.f. 14-11-1994).

annulment shall be without prejudice to the validity of anything previously done under that rule, scheme or notification.

213. Appointment of motor vehicles officers.—(*1*) The State Government may, for the purpose of carrying into effect the provisions of this Act, establish a Motor Vehicles Department and appoint as officers thereof such persons as it thinks fit.

(2) Every such officer shall be deemed to be a public servant within the meaning of the Indian Penal Code (45 of 1860).

(3) The State Government may make rules to regulate the discharge by officers of the Motor Vehicles Department of their functions and in particular and without prejudice to the generality of the foregoing power to prescribe the uniform to be worn by them, the authorities to which they shall be subordinate, the duties to be performed by them, the powers (including the powers exercisable by police officers under this Act) to be exercised by them, and the conditions governing the exercise of such powers.

(4) The Central Government may, having regard to the objects of the Act, by notification in the Official Gazette, prescribe the minimum qualifications which the said officers or any class thereof shall possess for being appointed as such.

(5) In addition to the powers that may be conferred on any officer of the Motor Vehicles Department under sub-section (*3*), such officer as may be empowered by the State Government in this behalf shall also have the power to,—

(a) make such examination and inquiry as he thinks fit in order to ascertain whether the provisions of this Act and the rules made thereunder are being observed;

(b) with such assistance, if any, as he thinks fit, enter, inspect and search any premises which is in the occupation of a person who, he has reason to believe, has committed an offence under this Act or in which a motor vehicle in respect of which such offence has been committed is kept:

Provided that,—

(i) any such search without a warrant shall be made only by an officer of the rank of a gazetted officer;

(ii) where the offence is punishable with fine only the search shall not be made after sunset and before sunrise;

(iii) where the search is made without a warrant, the gazetted officer concerned shall record in writing the grounds for not obtaining a warrant and report to his immediate superior that such search has been made;

(c) examine any person and require the production of any register or other document maintained in pursuance of this Act, and take on the spot or otherwise statements of any person which he may consider necessary for carrying out the purposes of this Act;

(d) seize or take copies of any registers or documents or portions thereof as he may consider relevant in respect of an offence under this Act which he has reason to believe has been committed;

(e) launch prosecutions in respect of any offence under this Act and to take a bond for ensuring the attendance of the offender before any court;

(f) exercise such other powers as may be prescribed:

Provided that no person shall be compelled under this sub-section to answer any question or make any statement tending to incriminate himself.

(6) The provisions of the Code of Criminal Procedure, 1973 (2 of 1974) shall, so far as may be apply to any search or seizure under this section as they apply to any search or seizure under the authority of any warrant issued under section 94 of that Code.

214. Effect of appeal and revision on orders passed by original authority.—(*1*) Where an appeal has been preferred or an application for revision has been made against any order passed by an original

authority under this Act, the appeal or the application for revision shall not operate as a stay of the order passed by the original authority and such order shall remain in force pending the disposal of the appeal or the application for revision, as the case may be, unless the prescribed appellate authority or revisional authority otherwise directs.

(2) Notwithstanding anything contained in sub-section (*1*), if an application made by a person for the renewal of permit has been rejected by the original authority and such person has preferred an appeal or made an application for revision under this Act against such rejection, the appellate authority or, as the case may be, the revisional authority may by order direct that the permit shall, notwithstanding the expiration of the term specified therein, continue to be valid until the appeal or application for revision is disposed of.

(3) No order made by a competent authority under this Act shall be reversed or altered on appeal or revision on account of any error, omission or irregularity in the proceedings, unless it appears to the prescribed appellate authority or revisional authority, as the case may be, that such error, omission or irregularity has, in fact, occasioned a failure of justice.

215. Road Safety Councils and Committees.—(*1*) The Central Government may, by notification in the Official Gazette, constitute for the country a National Road Safety Council consisting of a Chairman and such other members as that Government considers necessary and on such terms and conditions as that Government may determine.

(2) A State Government may, by notification in the Official Gazette, constitute for the State a State Road Safety Council consisting of a Chairman and such other members as that Government considers necessary and on such terms and conditions as that Government may determine.

(3) A State Government may, by notification in the Official Gazette, constitute District Road Safety Committee for each district in the State consisting of a Chairman and such other members as that Government considers necessary and on such terms and conditions as that Government may determine.

(4) The Councils and Committees referred to in this section shall discharge such functions relating to the road safety programmes as the Central Government or the State Government, as the case may be, may, having regard to the objects of the Act, specify.

216. Power to remove difficulties.—(*1*) If any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order published in the Official Gazette, make such provisions, not inconsistent with the provisions of this Act as appear to it to be necessary or expedient for removing the difficulty:

Provided that no such order shall be made after the expiry of a period of three years from the date of commencement of this Act.

(*2*) Every order made under this section shall, as soon as may be after it is made, be laid before each House of Parliament.

217. Repeal and savings.—(*1*) The Motor Vehicles Act, 1939 (4 of 1939) and any law corresponding to that Act in force in any State immediately before the commencement of this Act in that State (hereafter in this section referred to as the repealed enactments) are hereby repealed.

(2) Notwithstanding the repeal by sub-section (*1*) of the repealed enactments,—

(a) any notification, rule, regulation, order or notice issued, or any appointment or declaration made, or exemption granted, or any confiscation made, or any penalty or fine imposed, any forfeiture, cancellation or any other thing done, or any other action taken under the repealed enactments, and in force immediately before such commencement shall, so far as it is not inconsistent with the provisions of this Act, be deemed to have been issued, made, granted, done or taken under the corresponding provision of this Act;

(b) any certificate of fitness or registration or licence or permit issued or granted under the repealed enactments shall continue to have effect after such commencement under the same conditions and for the same period as if this Act had not been passed;

(c) any document referring to any of the repealed enactments or the provisions thereof, shall be construed as referring to this Act or to the corresponding provision of this Act;

(d) the assignment of distinguishing marks by the registering authority and the manner of display on motor vehicles in accordance with the provision of the repealed enactments shall, after the commencement of this Act, continue to remain in force until a notification under sub-section (*6*) of section 41 of this Act is issued;

(e) any scheme made under section 68C of the Motor Vehicles Act, 1939 (4 of 1939) or under the corresponding law, if any, in force in any State and pending immediately before the commencement of this Act shall be disposed of in accordance with the provisions of section 100 of this Act;

(f) the permits issued under sub-section (*1A*) of section 68F of the Motor Vehicles Act, 1939 (4 of 1939), or under the corresponding provision, if any, in force in any State immediately before the commencement of this Act shall continue to remain in force until the approved scheme under Chapter VI of this Act is published.

(3) Any penalty payable under any of the repealed enactments may be recovered in the manner provided by or under this Act, but without prejudice to any action already taken for the recovery of such penalty under the repealed enactments.

(4) The mention of particular matters in this section shall not be held to prejudice or affect the general application of section 6 of the General Clauses Act, 1897 (10 of 1897), with regard to the effect of repeals.

[1][**217A. Renewal of permits, driving licences and registration granted under the Motor Vehicles Act, 1939**.—Notwithstanding the repeal by sub-section (*1*) of section 217 of the enactments referred to in that sub-section, any certificate of fitness or registration or licence or permit issued or granted under the said enactments may be renewed under this Act.]

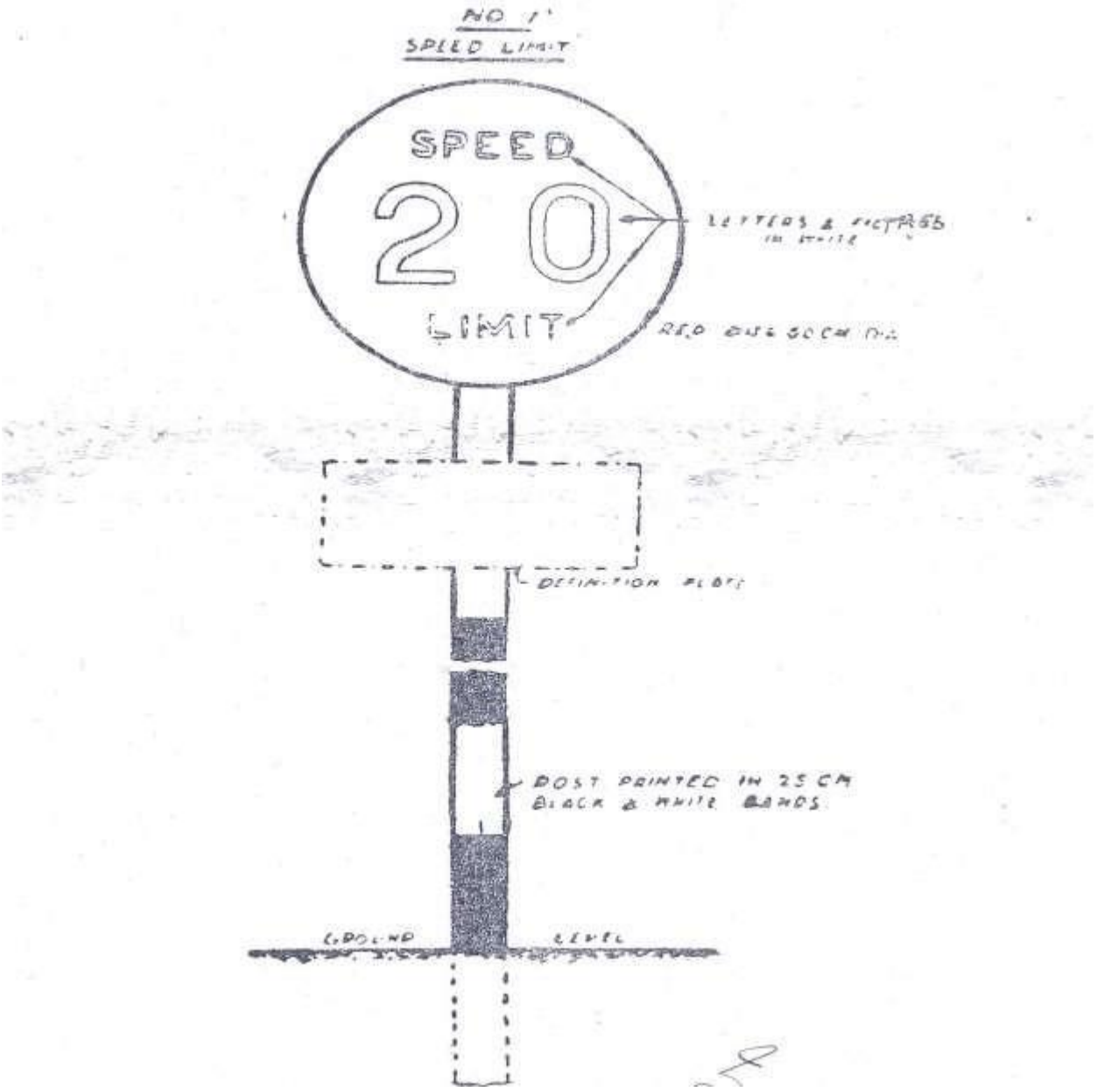
1. Ins. by Act 27 of 2000, s. 5 (w.e.f. 11-8-2000).

[1][THE FIRST SCHEDULE]

(*See* sections 116 and 119)

TRAFFIC SIGNS

Part A.—Mandatory Signs



Notes—(1) The figure 20 is given merely as an example. The actual figures will be as prescribed in each case where this sign is used.

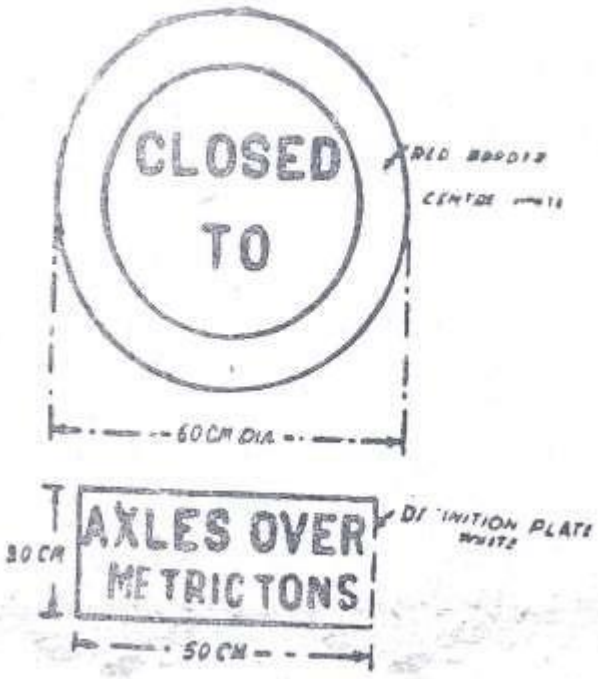
(2) The general design of the post is given for guidance.

(3) Where the speed limit is, or is to be, imposed only on a certain class or classes of motor vehicle, the class or classes will be specified on the "definition plate". Where in addition to a general speed limit applicable to other motor vehicles a special speed limit is or is to be imposed on vehicles of a certain class or classes, the general speed limit will be specified on the disc and the special speed limit together with the class or classes of vehicle to which it applies, will be specified on the "definition plate".

(4) The paints to be used on the traffic signs should be of reflecting kind.

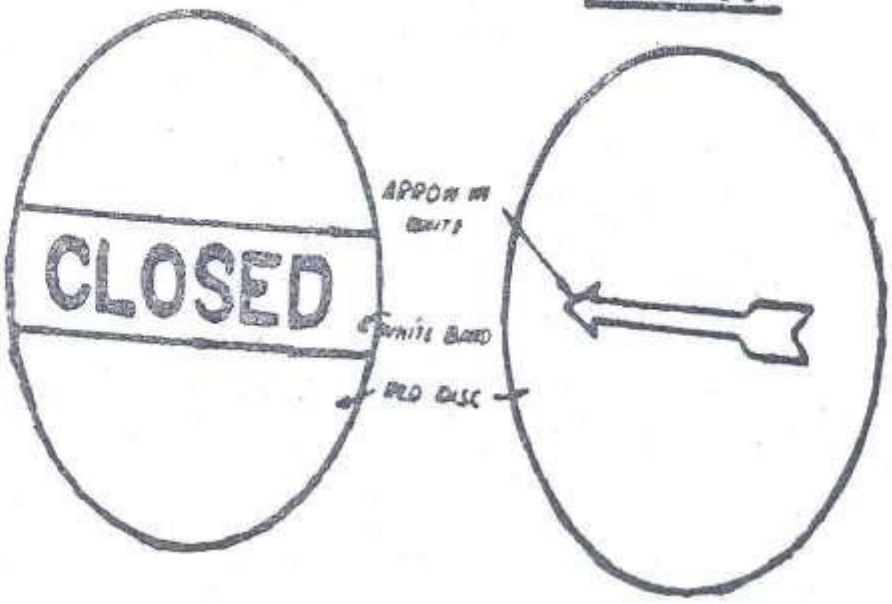
1. The Schedule renumbered as the First Schedule thereofby Act 54 of 1994, s. 63 (w.e.f. 14-11-1994).

NO 2
WEIGHT LIMIT



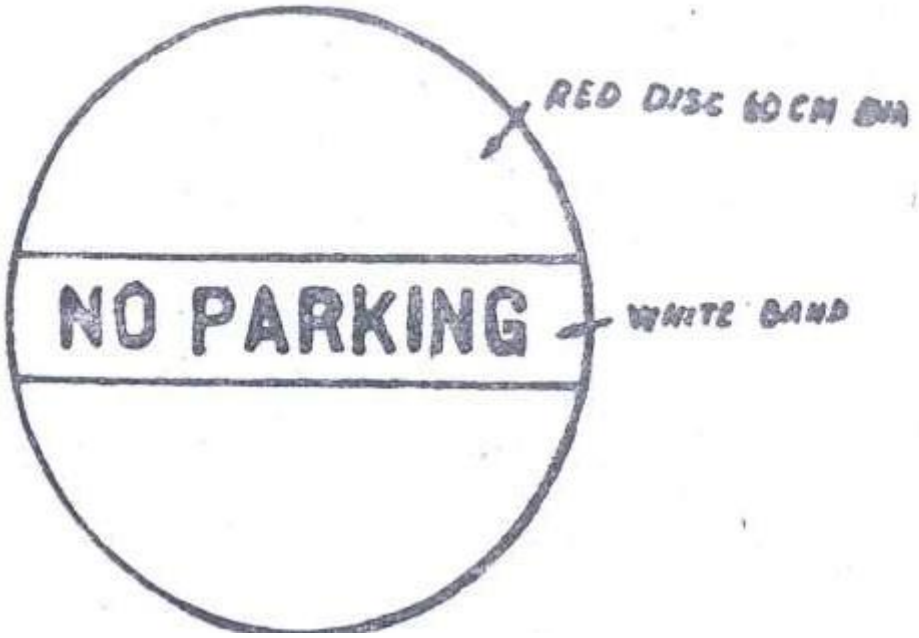
NO. 3
TOTAL PROHIBITION

NO. 4
DIRECTION SIGN



NO. 5[1]

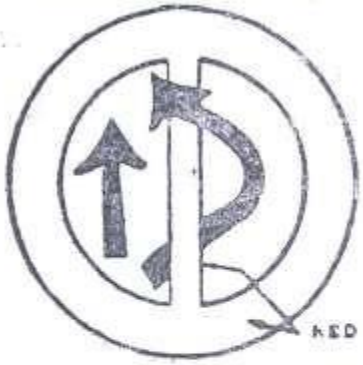
NO PARKING



Note.—Sign NO.5 as here set forth may be amplified by instructions inscribed upon a definition plate placed below it as in the general arrangement set forth in sign No. 1 of this Part. Upon the definition plate may be set forth the times during which parking is prohibited. In like manner an arrow-head inscribed on the definition plate will indicate that parking is prohibited on that part of the street or road lying to the side of the sign to which the arrow-head points.

NO. 6

OVERTAKING PROHIBITED



2 [NO.]

USE OF SOUND SIGNALS PROHIBITED

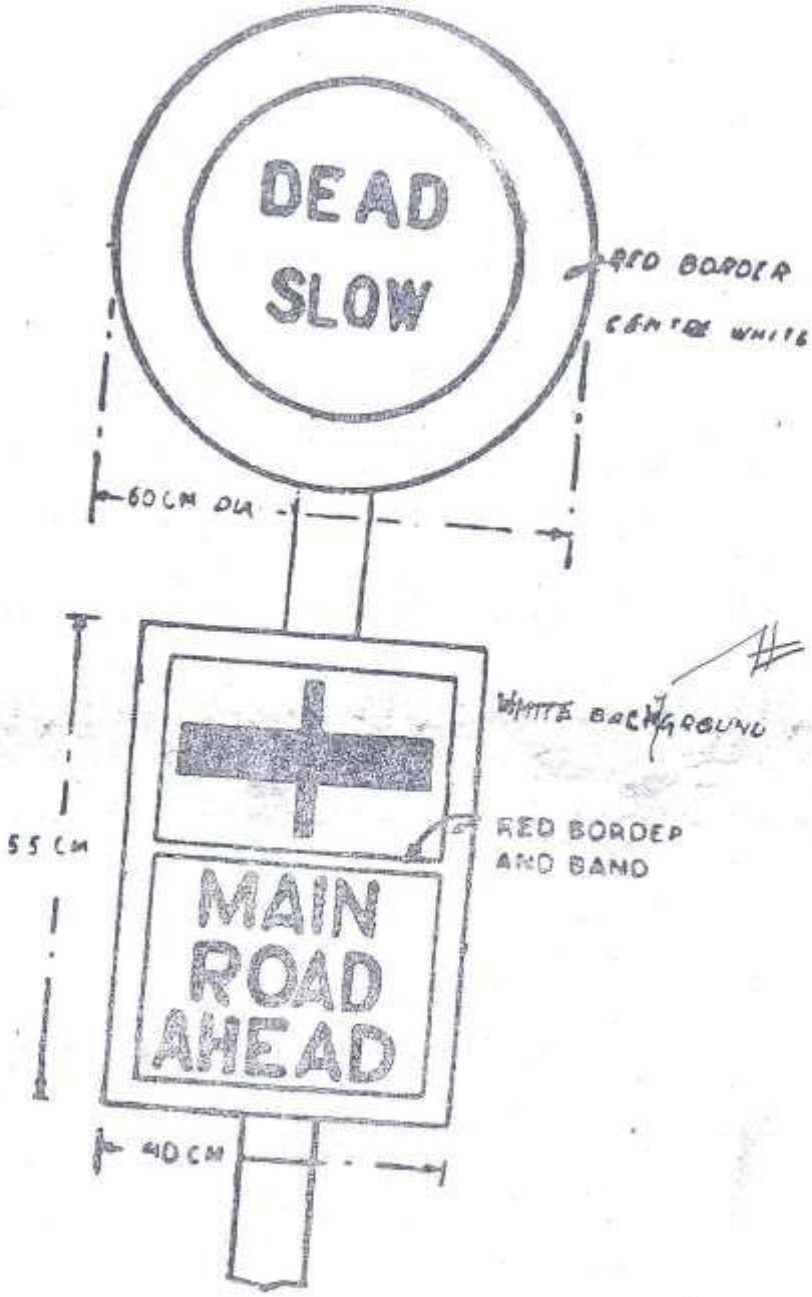
Cross and border—Red

Background—White

Device—Black.

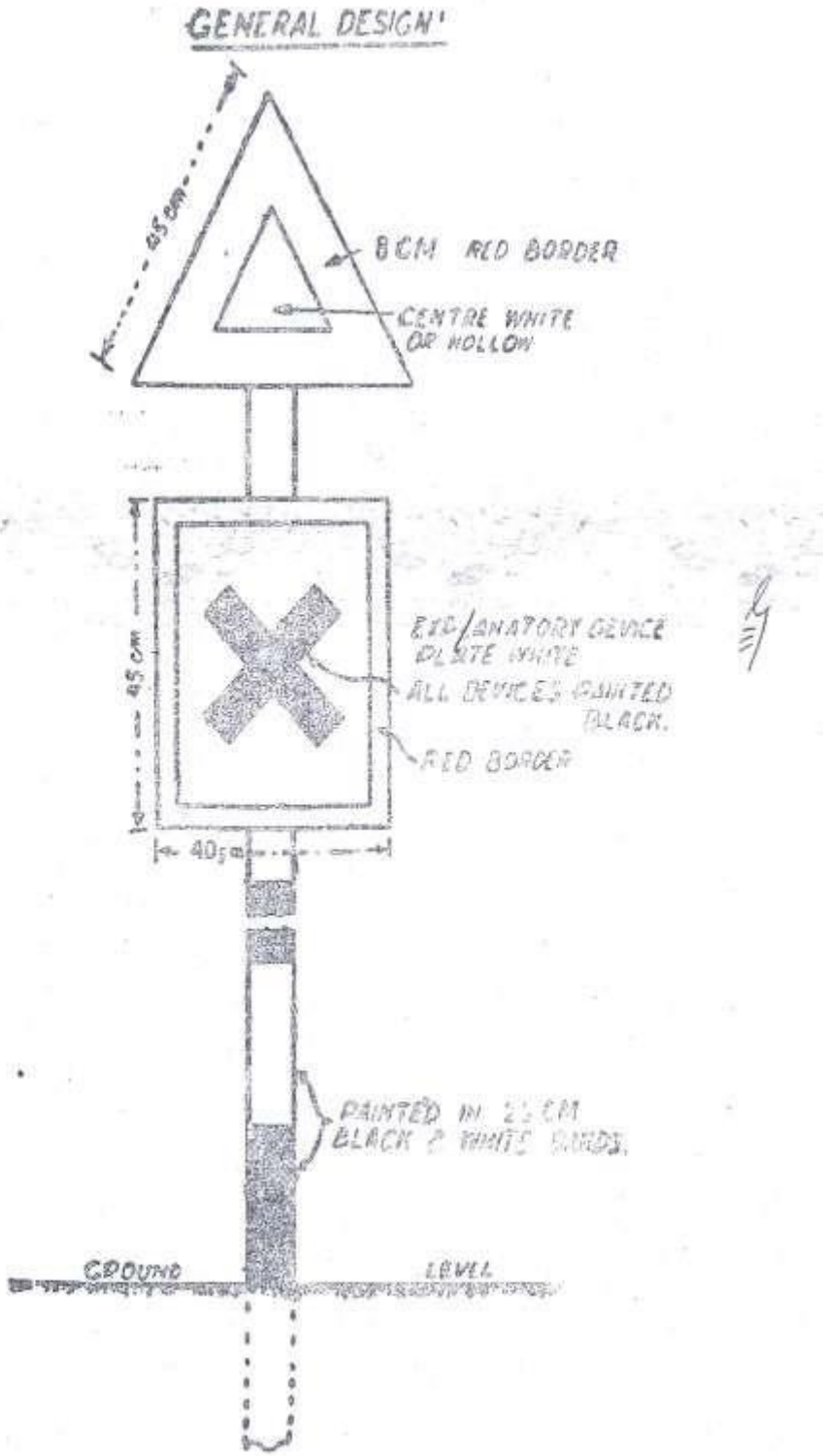
NO 8

MAIN ROAD AHEAD



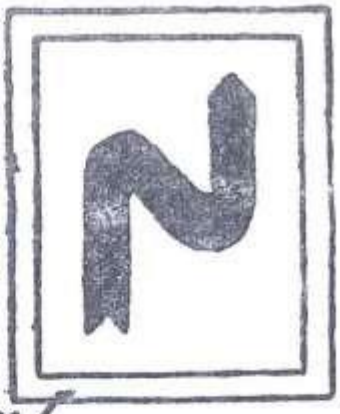
Part B.—Cautionary Signs

The signs of this Part shall be used in conjunction with a red triangular plate, the centre of which shall be either bollow or painted white, in the manner indicated in the general design reproduced below.



NO. 1
ROUGH ROAD

NO. 2
ZIG-ZAG (RIGHT)



RED BORDER

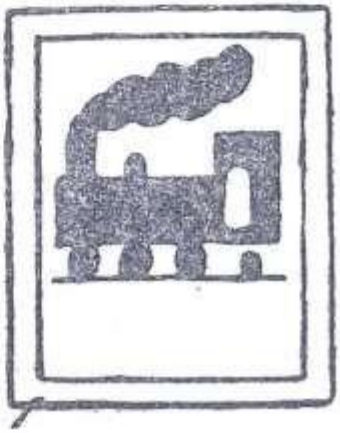
NO. 2
ZIG-ZAG (LEFT)

NO. 3
CROSS ROADS

RED BORDER

NO. 4
LEVEL CROSSING
(GUARDED)

NO. 5
LEVEL CROSSING
(UNGUARDED)



RED BORDER

NO. 5
RIGHT TURN

NO. 6
LEFT TURN

RED BORDER

NO. 7
SCHOOL

NO. 8
DEAD END CROSS ROAD

RED BORDER

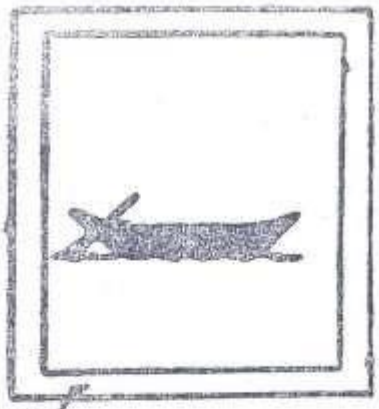
NO. 9
SIDE ROAD (RIGHT)

NO. 9
SIDE ROAD (LEFT)

RED BORDER

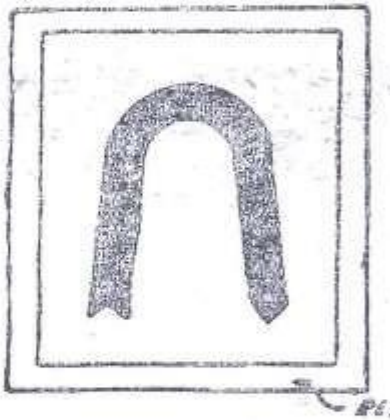
NO. 10
STEEP HILL

NO 11
FERRY



RED BORDER

NO. 12
HAIR PIN BEND (RIGHT)

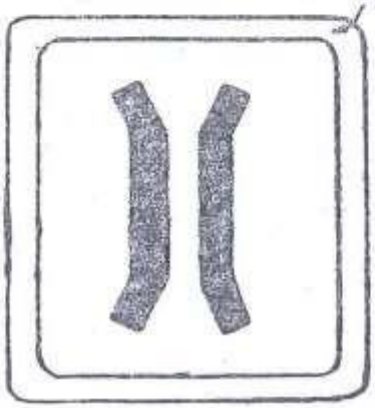


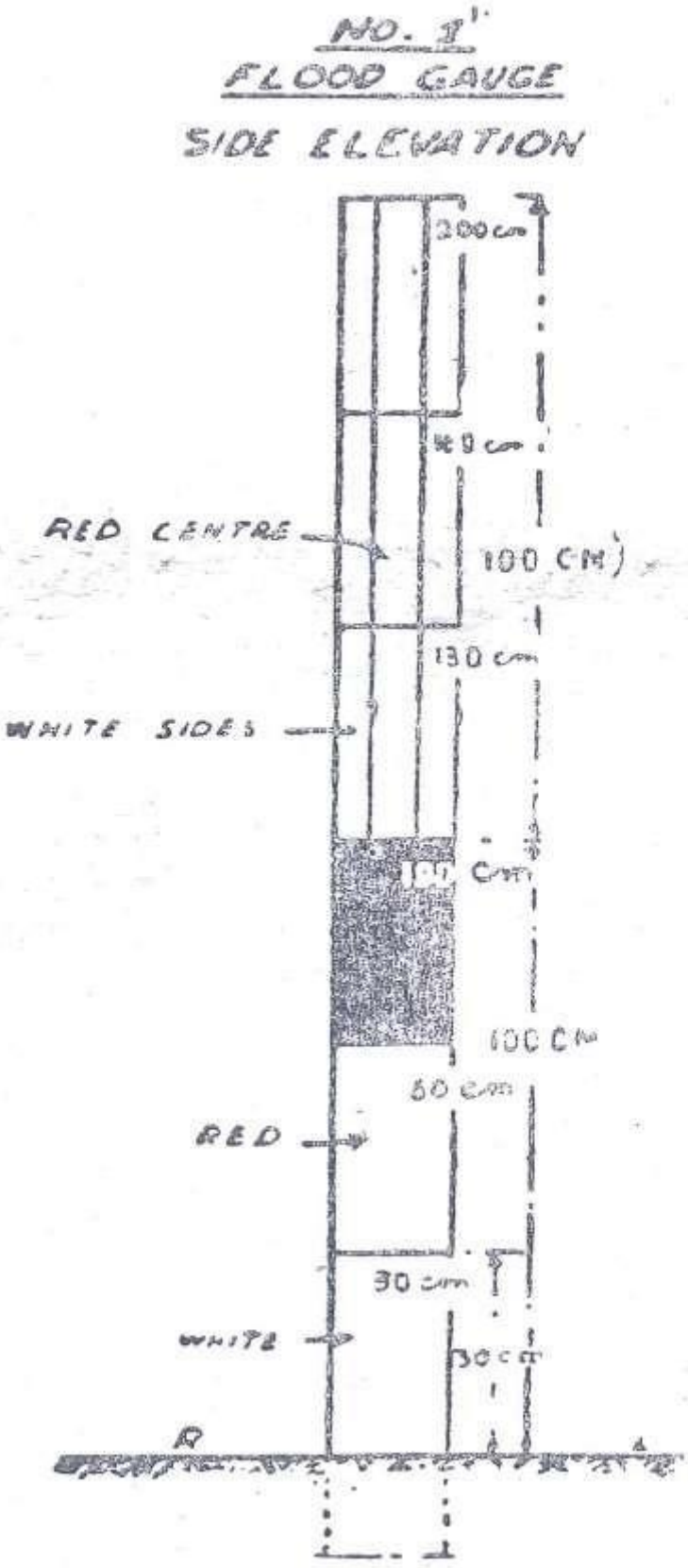
NO. 12
HAIR PIN BEND (LEFT)

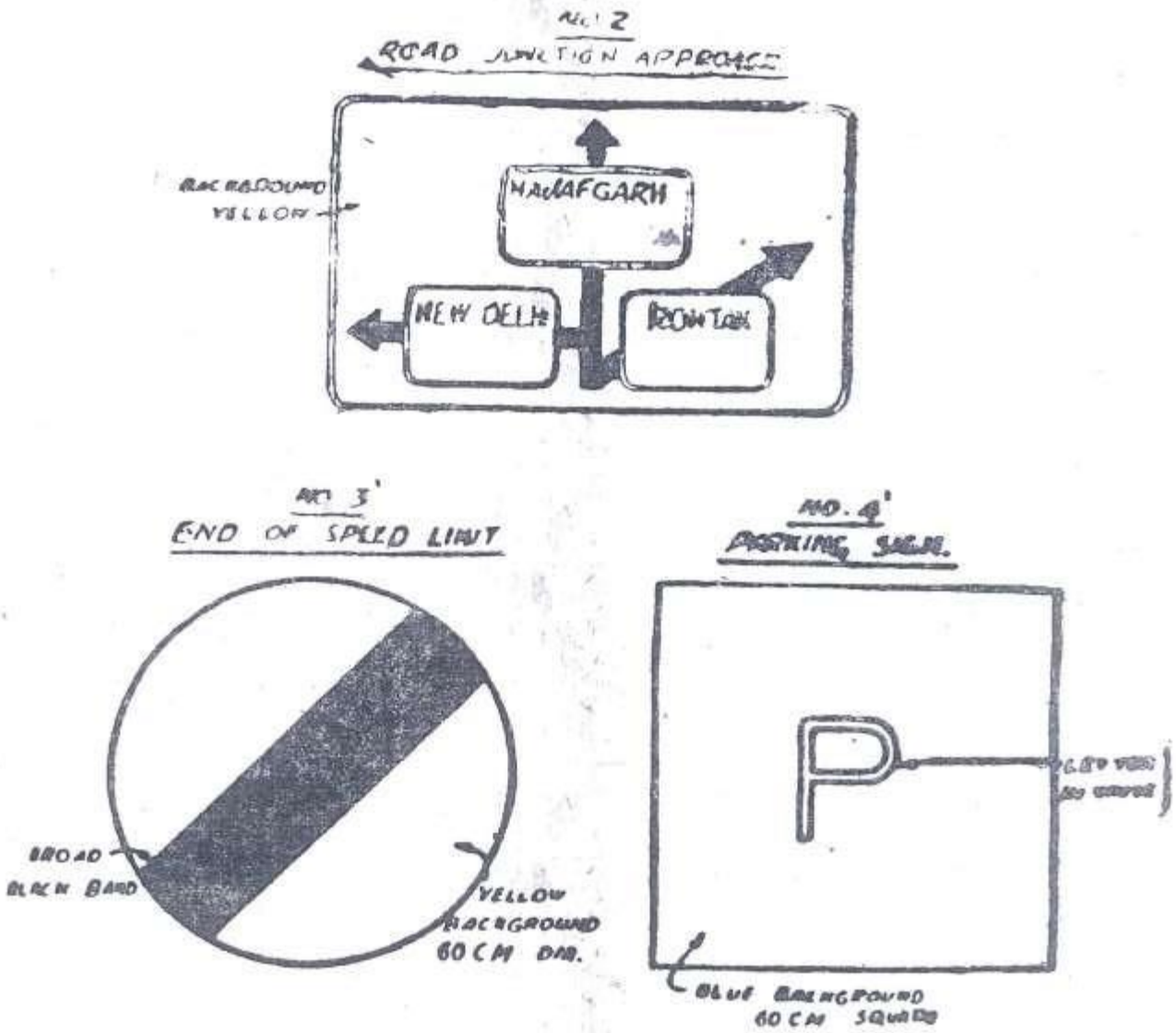
RED BORDER

NO 13
NARROW BRIDGE

RED BORDER




NO. 1
FLOOD GAUGE
SIDE ELEVATION
200 cm
90 cm
RED CENTRE
100 CM
130 cm
WHITE SIDES
100 CM
100 CM
50 cm
RED
30 cm
WHITE
30 cm


No. 2
ROAD JUNCTION APPROACH
BACKGROUND YELLOW
HARDWAR
NEW DELHI
DEHRADUN
No. 3
END OF SPEED LIMIT
BROAD BLACK BAND
YELLOW BACKGROUND
60 CM DIA.
No. 4
PARKING SIGN
P
BLUE BACKGROUND
60 CM SQUARE

[1][THE SECOND SCHEDULE

(*See* Section 163 A)

SCHEDULE FOR COMPENSATION FOR THIRD PART FATAL ACCIDENT/INJURY CASES CLAIMS

1. Fatal Accidents:

Annual Income		Rs. 3000	Rs. 4200	Rs. 5400	Rs. 6600	Rs. 7800	Rs. 9000	Rs. 10200	Rs. 11400	Rs. 12000	Rs. 18000	Rs. 24000	Rs. 36000	Rs. 40000
AGE OF VICTIM	MULTIPLIER	RUPEES IN THOUSANDS												
		compensation in case of death												
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Up to 15 yrs.	15	60	84	108	132	156	180	204	228	240	360	480	720	800
Above 15 yrs. but not exdg. 20 yrs.	16	57	79.8	102	125.4	148.2	171	193.8	216.6	228	342	456	684	760
Above 20 yrs. but not exdg. 25 yrs.	17	54	75.6	97.2	118.8	140.4	162	183.6	205.2	216	324	432	648	720
Above 25 yrs. but not exdg. 30 yrs.	18	51	71.4	91.8	112.2	132.6	153	173.4	193.8	204	306	408	612	680
Above 30 yrs. but not exdg. 35 yrs.	17	50	67.2	86.4	105.6	124.8	144	163.2	192.4	192	288	384	576	640
Above 35 yrs. but not exdg. 40 yrs.	16	50	63	81	99	117	135	153	171	180	270	360	540	600
Above 40 yrs. but not exdg. 45 yrs.	15	50	58.8	75.6	92.4	109.2	126	142.8	159.6	168	252	336	504	560
Above 45 yrs. but not exdg. 50 yrs.	13	50	50.4	64.8	79.2	93.6	108	122.4	136.8	144	216	286	432	480
Above 50 yrs. but not exdg. 55 yrs.	11	50	50	54	66	78	90	102	114	120	180	240	360	400
Above 55 yrs. but not exdg. 60 yrs.	 8	50	50	50	52.8	62.4	72	81.6	91.2	96	114	192	286	320
Above 60 yrs. but not exdg. 65 yrs.	5	50	50	50	50	50	54	61.2	68.4	72	108	144	216	240
Above 65 yrs.	5	50	50	50	50	50	50	51	57	60	90	120	180	200

NOTE: The amount of compensation so arrived at in the case of fatal accident claims shall be reduced by 1 /3rd in consideration of the expenses which the victim would have incurred towards maintaining himself had he been alive.

2. Amount of compensation shall not be less than Rs. 50,000.

3. General Damages (in case of death):

The following General Damages shall be payable in addition to compensations outlined above:

(i) Funeral expenses -- Rs. 2,000/-

(ii) Loss of Consortium, if beneficiary is the spouse -- Rs. 5,000/-

(iii) Loss of Estate -- Rs. 2,500/-

(iv) Medical Expenses—Actual expenses incurred before death supported by bills/vouchers but not exceeding -- Rs. 15, 000/-

4. General Damages in case of Injuries and Disabilities:

(i) Pain and Sufferings

(a) Grievous injuries -- Rs. 5,000/-

(b) Non-grievous injuries -- Rs. 1,000/-

1. Ins. by Act 54 of 1994, s. 64 (w.e.f. 14-11-1994).

(ii) Medical Expenses—Actual expenses incurred supported by bills/vouchers but not exceeding as one time payment -- Rs. 15,000/-

5. Disability in non-fatal accidents:

The following compensation shall be payable in case of disability to the victim arising out of non-fatal accidents:

Loss of income, if any, for actual period of disablement not exceeding fifty-two weeks.

PLUS either of the following:—

(a) In case of permanent total disablement the amount payable shall be arrived at by multiplying the annual loss of income by the Multiplier applicable to the age on the date of determining the compensation, or

(b) In case of permanent partial disablement such percentage of compensation which would have been payable in the case of permanent total disablement as specified under item (*a*) above.

Injuries deemed to result in Permanent Total Disablement /Permanent Partial Disablement and percentage of loss of earning capacity shall be as per Schedule I under Workmen's Compensation Act, 1923.

6. Notional income for compensation to those who had no income prior to accident:—

Fatal and disability in non-fatal accidents:—

(a) Non-earning persons —Rs. 15,000 p.a.

(b) Spouse —Rs. l/3rd of income of the earning/surviving spouse.

In case of other injuries only "general damage" as applicable.]