1. INTRODUCTION

Driving a motor vehicle is not a right. Rather, it is a privilege and this privilege comes with many responsibilities. In order to enjoy the privilege of driving, it is important that you should know what laws, rules and regulations exist for safe driving and must follow them at all times. As the driver of a vehicle, your aim should be to make driving a safe and enjoyable experience for yourself, for the passengers in your vehicle, as well as for other drivers sharing the road.

Driving is a complex task and complicated situations can arise at any point of time. How you react to such situations depends upon your training, alertness and your attitude while driving.

1.1. Purpose of the Driving Manual

This driving manual has been prepared to help new drivers grasp the principles of safe and responsible driving. We have tried to present traffic rules and regulations along with examples and diagrams to create awareness among drivers and vehicle owners. Please bear in mind that this manual should be used only as a guide and not as a substitute to the existing traffic laws and statutes.

If you are applying for a license, this manual will help you prepare for Haryana State's preliminary test and the driving test. If you already have a license, the information contained in this manual will still be useful to improve your understanding of the rules of the road.

Please note that the information provided in this document is subject to change on account of amendments in laws, statutes, rules and road signs.

2. THE DRIVING LICENSE

As per Section 3(1) of the Motor Vehicles Act 1988, an effective driving license is required to drive any motor vehicle on public roads. No person is permitted to drive a vehicle in any public place unless he or she holds a valid driving licence issued to him (or her) authorising him (or her) to drive the category of vehicle for which the licence was issued.

Driving licence is issued by the local licensing authority. Each SubDivisional Officer (Civil) in the state of Haryana has been designated as the licensing authority for a motor vehicle other than a transport vehicle or an omnibus within the area of his or her jurisdiction. In other words, SDMs issue driving licences for light motor vehicles and toe wheelers. For transport vehicles, the Regional Transport Officer and Assistant District Transport Officer, or any other person as appointed by the State Government is the licensing authority to issue licenses to persons residing within their area of jurisdiction.

2.1. Age Eligibility

A person cannot be issued a driving licence unless he (or she) meets the age criterion for the class of vehicle for which he (or she) applies for a licence. Following is the age eligibility criterion for driving a motor vehicle in India.

16 years – For motor cycles with engine capacity not exceeding 50cc.

 20 years - For transport vehicles (public service vehicles, goods carriages, educational institution bus or a private service vehicle) that are used for hire or reward, or for transporting goods.

18 years – Any other vehicle.

Moreover, it is the responsibility of the owner or person in charge of the vehicle to not permit any person who does not have a valid licence or does not satisfy the age requirements, to drive the vehicle. If he do so then he is doing an offence under section 180 of motor vehicle act, for this there if proving of 3 months jail or Rs. 1000/_ or both.

2.2. Types of Driving Licenses

Following types of licenses are issued by the licensing authority in India.

Learner's licence

Every new driver must acquire a learner's license for learning to drive a motor vehicle of the class for which learner's licence is intended. Learner's licence is issued after passing a preliminary test and is valid for six months from the date it is issued.

A person holding a learner's license is allowed to drive while receiving instructions or for gaining experience in driving provided he or she is accompanied by an instructor holding an effective driving license for that category of the vehicle and the instructor is sitting in such a position to control or stop the vehicle, if needed.

The vehicle driven by a person holding learner's license must also have 'L' sign (see Diagram 1) displayed (painted or attached) on the vehicle in the front and the rear, in red on a white background. The dimensions of the letter 'L' must be at least ten centimetres in height, two centimetres in thickness, and nine centimetres in width at the bottom.

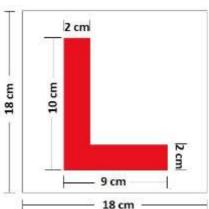


Diagram 1 Driving Licence

Driving licence is issued to eligible persons, Indian citizens or foreign nationals, allowing them to drive a motor vehicle in India. The holder of the driving license is permitted to drive a vehicle of the class as mentioned on his or her driving license. The driving licence is valid in any part of India. Applicant is eligible to apply for the driving licence after thirty days from the date of issue of the learner's license but before the expiry of the learner's licence.

Driving licence for vehicles other than transport vehicles is issued for a period of twenty years from the date of issue, or until the date on which the person being issued the licence attains the age of fifty years, whichever is earlier. For a person who has attained the age of fifty years on or before the date of issue of licence, the licence is issued for a period of five years from the date of issue or renewal.

License for transport vehicles is issued or renewed for a period of three years. However, the licence is issued or renewed for a period of one year only in case the licence is to drive a transport vehicle carrying goods of dangerous or hazardous nature.

☐ International Driving Permit (IDP)

The licensing authority is also competent to issue International Driving Permit to Indian nationals to drive vehicles in countries other than India but excluding the countries with which there are no diplomatic relations. However, driving a motor vehicle in another country must be in compliance with the laws and regulations of that country. IDP is valid for a period of not more than one year from the date of issue or till the validity of the driving licence, whichever is earlier.

2.3. Categories of Driving Licences

The driving licences in India are issued for some broad classes of vehicles. Moreover, a driving licence is issued under a specific category – Non- Transport, or Transport - for every class of vehicle based on the purpose of use.

Different classes of vehicles for which licences are issued are:

☐ Motorcycle Without Gears

A licence for Motorcycle Without Gears class of vehicles is issued for driving only two-wheelers without gears. A person holding such a licence cannot drive a two-wheeler with gears or a vehicle which does not fall in the class of a motorcycle. (no categories for Transport and non-transport2 wheelers??)

□ Motorcycle With Gears

Licence for Motorcycle With Gears is issued for driving only two- wheelers like motorcycle, scooter etc. A person with a Motorcycle with Gears licence can drive any two-wheeler with or without gears but cannot drive a vehicle that does not fall in the class of a motorcycle. (no categories for Transport and non-transport2 wheelers??)

Light Motor Vehicle

The licence for the Light Motor Vehicle class of vehicles is issued for driving motor vehicles like motor car, jeep, tractor, tempo etc. A licence for a Light Motor Vehicle is further restricted based on the purpose of use and the type of vehicle.

• Transport Vehicle

Transport Vehicles heavy include vehicles like trucks, buses, tourist coaches, tractor trailers, goods vehicles etc. Such vehicles are either passenger vehicles used for hire or reward, or goods vehicles. A separate driving licence is required to drive this class of vehicles.

□ Invalid Carriage

This is a class of motor vehicles which are 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.

□ Road Roller

This is a special class of vehicles which are used for the construction of roads or compacting purpose.

☐ Motor Vehicle of a Specified Description

A licence can also be issued to entitle the holder to drive a motor vehicle of a specified description. Some example of this class of vehicles are loaders and excavators, cranes, fork-lifts, boring rigs, and other construction equipment.

2.4. Getting Your Learner's Licence

Following documents are required to apply for learner's licence:

- properly filled in application form (Form 2),
- requisite fee,
- proof of Residence,
- proof of age,
- three recent passport size photographs,
- self-declaration (Form 1). A medical certificate (Form 1-A) is needed in case the application is for getting the learner's licence for a transport vehicle or if the person has attained the age of forty years.
- the driving license currently held by the applicant in case the application is for transport vehicle, and
- consent of parent or guardian in case the applicant is a minor.

Preliminary Test

Once the applicant has submitted the application form along with documents as mentioned above, the applicant is required to appear for a test of knowledge. This test is conducted to satisfy the licensing authority that the applicant possesses adequate knowledge of:

- traffic signs, signals, and rules of the road regulations,
- duties of a driver when his or her vehicle is involved in an accident,
- precautions to be taken while passing an unmanned railway crossing, and

 documents that the driver should carry with him or her while driving a motor vehicle.

The applicant is required to correctly answer at least 60 percent of the questions in the test.

2.5. Getting Your Driving License

An applicant can apply for the driving license after 30 days from the date of issue of learner's licence. Following documents are needed to apply for the driving licence.

- duly filled in application (Form 4),
- effective learner's licence to drive the vehicle of class to which this application relates,
- appropriate fee,
- three recent passport size photographs,
- Self declaration (Form 1). A medical certificate (Form 1-A) is needed in case the application is for the driving licence for a transport vehicle or if the person has attained the age of forty years
- proof of residence,
- proof of age, and
- driving certificate in Form 5 issued by the driving school from where the applicant received training, if any. Driving certificate is required if the application is for the issue of driving licence for a transport vehicle.

Driving Test

After the application is submitted for the driving licence to the licencing authority, the applicant is required to appear for a driving test. The driving test is conducted in a vehicle of the type for which the licence is sought by the applicant. The applicant is tested for driving skills, understanding of the vehicle, knowledge of traffic laws, rules and regulations, signs, signals, and general attitude while driving:

- taking suitable precautions before starting the engine including adjusting rear-view mirror(s),
- moving away safely and smoothly straight ahead,
- regulating speed and adjusting gears properly when the traffic conditions or road conditions warrant reduction in speed,

- stopping, parking, starting the vehicle and moving away on a hill road or slope with proper use of hand brakes, throttle and or foot brake without any rolling back,
- turning left and right at corners with proper use of rear-view mirror(s) before signaling,
- overtaking with proper use of rear-view mirror(s) and signals, or allow to be overtaken properly,
- using appropriate turn signals in a clear and unmistakable manner by hand or by electrical indicators,
- changing lanes with proper signals and with due care,
- stopping the vehicle in emergency or otherwise. If not an emergency, bring the vehicle to rest at an appropriate course on the road safely giving appropriate signals,
- in case of vehicle having reverse gear, driving the vehicle backwards, reversing it into a limited opening either to the right or to the left under control and with reasonable accuracy,
- causing the vehicle to face in the opposite direction by using forward or reverse gears,
- taking correct and prompt action on signals given by traffic signs, traffic lights, or traffic police and other road users,
- acting correctly at pedestrian crossings which are not regulated by traffic lights or traffic police to give preference to the pesons crossing the road,
- demonstrating general control of the vehicle by confident steering and smooth gear changing and braking as and when necessary,
- using proper lane or side when moving straight, turning left or right and at junction of the road,
- anticipating actions of the pedestrians, drivers of other vehicles and cyclists,
- taking precautions at cross roads and on road junctions by adjusting speed on approach, using rear-view mirrors, correct positioning of the vehicle and avoiding cutting corners for right turn,
- concentrating in driving without getting being distracted and demonstrating his or her presence of mind,
- showing courtesy and consideration for the safety and convenience of other road users such as pedestrians, drivers of other vehicles or cyclists.

In case the applicant fails the test, he or she is allowed to reappear for the driving test after seven days. If the applicant fails to pass the test in three attempts, he (or she) will have to wait for another sixty days from the date of the last test before reappearing for the driving test.

A person can be exempted from the driving test, if the applicant,

- has already held a driving licence of the same class for which the application has been made and the period between the expiry date of that licence and the date of application does not exceed five years, or
- already holds or has held a driving licence to drive a motor vehicle of the same class belonging to the Central Government, or
- holds a valid driving licence to drive a motor vehicle of the same class issued by a competent authority of any other country outside India.

A person may also be exempted from the driving test by the licensing authority if the applicant possesses a driving certificate issued by any institution recognised in this behalf by the State Government.

2.6. Getting Your International Driving Permit (IDP)

The application for an IDP must submit the following:

- form 4-A duly filled in,
- effective driving licence issued by the licencing authority,
- appropriate fee,
- three recent passport size photographs,
- medical certificate (Form 1-A),
- valid Indian passport, and
- valid proof of visa, wherever applicable.

2.7. Additions to the Driving Licence

In case a person has driving licence for a particular class of vehicles and desires to add another class of motor vehicles to the driving licence already issued, an application should be submitted to the licencing authority along with the following documents:

- appropriate application form duly filled in (Form 8),
- appropriate fee,
- effective learner's licence or driving licence to which the addition is sought, and
- driving certificate in Form 5 in case of application for addition of a transport vehicle.

Any provisions applicable for the grant of a driving licence for a particular class or description of vehicle will also be applicable when an application is made to add that class or description to the existing licence.

2.8. Renewal of a Driving License

An application for the renewal of licence has to be made to the licensing authority having the jurisdiction over the area where the applicant ordinarily resides or carries on business.

Documents required for the renewal of driving license are:

- appropriate application form duly filled in (Form 9),
- appropriate fee,
- three copies of applicant's recent passport size photograph (5 cm x 6 cm),
- driving license currently held or last held, and
- self-declaration (Form 1). A medical certificate (Form 1-A) is needed in case the application is for renewal of licence for a transport vehicle or if the person has attained the age of forty years.

If the application for renewal of a licence is submitted more than 30 (thirty) days from the date of its expiry, the driving licence is renewed with effect from the date of its renewal.

If the application for renewal is made more than five years after the driving licence has seized to be effective, the applicant is required to pass the test of competence again.

2.9. Duplicate Driving License

In case of loss, theft, or mutilation of the existing driving licence, a duplicate driving license may be issued. Following documents are needed to apply for a duplicate license:

- appropriate application form duly filled in (Form HR No. 1),
- appropriate fee (No fee is charged in case the licence was lost while in the custody of a Court or an authority to which it was submitted or surrendered),
- two copies of the applicant's recent passport size photographs, and
- an affidavit that the licence is not with the challan with any authority of India, in case the licence is lost or destroyed.

3. KNOW YOUR VEHICLE

It is important to know your vehicle thoroughly. You should be aware of the controls, safety features, indicators, various lights and alarms fitted in your vehicle as shown in the diagram 2. Read the vehicle's user guide and get yourself familiar with various functions and warning indications. Regularly check the lights, horn, brakes, tyres and other controls to make sure they are in working condition.

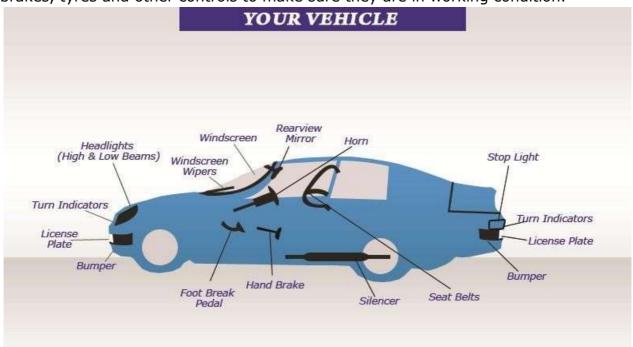


Diagram 2

3.1. Brakes

Every motor vehicle must be equipped with two independent and efficient braking systems, namely, the hand operated parking brake and foot operated service brake (see Diagram 3). The braking system shall be of adequate strength to stop the vehicle within the prescribed distance and hold it at rest in all conditions.

3.2. Clutch and Accelerator

The clutch is used to disengage transmission from the engine at the time of change of gear or while stopping the vehicle. Accelerator, as the name suggests, is used to increase/decrease speed of the vehicle (see Diagram 3).



Diagram 3

3.3. Steering Wheel

Steering wheel, sometimes also called driving wheel, is part of the steering system that allows the driver to control the steering of the vehicle.

The correct way of holding the steering wheel, as far as possible, is with both the hands at "Quarter to three" or "ten to two" positions as shown in the diagram 4 below. You should hold the steering wheel at all times and never leave it unattended. Further, you should never cross hands while rotating the steering wheel. Also, never operate any vehicle control by inserting your hand through the steering wheel. Some examples of incorrect maneuvering of the steering wheel are given below (see Diagrams 5-9).



Diagram 4



Diagram 6



Diagram 5



Diagram 7





Diagram 8

Diagram 9

3.4. Horn

Every vehicle must be fitted with a working horn to provide sufficient audible warning of the approach or location of the vehicle. Bells and sirens are NOT horns. Use your horn only when necessary to avoid a crash. Also, no vehicle other than emergency vehicles such as ambulance, fire engines, police vehicles or as approved by the registering authority shall be fitted with multi-toned horn that gives a succession of different sounds or produces an unduly harsh, shrill, loud or alarming noise.

Please note that the use of horn is also governed by environmental regulations. As a general rule, you should not:

- needlessly and continuously blow horn or more than necessary to ensure safety,
- blow horn in silence zone,
- make use of a cut-out by which exhaust gases are released other than through the silencer,
- fit or use any multi-toned horn giving a harsh, shrill, loud or alarming noise,
- drive a vehicle creating undue noise when in motion,
- drive a vehicle using a muffler (silencer) causing alarming noise.

3.5. Licence Plate

A registration mark (also known as licence or number plate) must be displayed clearly and legibly both at the front and at the rear of all motor vehicles. A white light bulb or rear lamp must properly illuminate the entire registration mark area.

The letters of the registration mark must be in English and numbers in Arabic numerals in black colour on yellow background for transport vehicles and in all

other cases, in black colour on white background. Nothing else should be written, displayed or painted on the licence plate other than the registration number. The size of letters and numerals on the licence plate must conform to the following dimensions:

Size of the number plate for different classes of vehicles should be as under:

Class of vehicle	Side	Height (mm)	Thickne ss (mm)	Space betwe en
All motor cycles and threewheeled invalid carriages	Rear letters	35	7	5
All motor cycles and threewheeled invalid carriages	Rear numerals	40	7	5
Motor cycles with engine capacity less than 70cc	Front letters & numerals	15	2.5	2.5
Other motor cycles	Front letters & numerals	30	5	5
Three wheelers of engine capacity not exceeding 500cc	Rear and front letters & numerals	35	7	5
Three wheelers of engine capacity exceeding 500cc	Rear and front letters & numerals	40	7	5
All motor vehicles	Rear and front letters & numerals	65	10	10

Two and Three wheelers	200×100 mm (a size of 285 x 45 mm in the front is also permitted for motor cycles)
Passenger cars	500 x 120 mm
Light Motor Vehicles (other than cars)	340 x200 mm
Agricultural tractors	285 x 45 mm (front) 200 x 100 mm (rear)

3.6. Silencer

All motor vehicles must be fitted with silencers that reduce the noise from the escaping exhaust gases as far as practicable. Check the silencers regularly for any leaks.

3.7. Tyres

The tyres should be kept properly inflated and in sound working condition. Inspect them regularly for cuts, cracks, uneven wear, bald spots, bulges, and punctures. Also, carry a good spare tyre and check its pressure periodically.

3.8. Windscreen and Windows

Front windscreen of every motor vehicle must be made of laminated safety glass and the side windows and the rear window must be made of safety glass. These types of glasses prevent pieces from flying in the event of cracking or breaking of the window glass.

Ensure that your view through the windscreen and rear window (through the inside rear view mirror) is not obstructed by cracks, dirt, steam, water, ice or other objects placed or suspended between the driver and the windscreen.

In addition, as per Rule 100(2) of the Central Motor Vehicles Rules, 1989, the glass of the windscreen and the rear window of every motor vehicle must be maintained such that the visual transmission of light (VTL) is not less than 70%. For the side windows, the visual transmission of light must not be less than 50%. The Hon'ble Supreme court has banned the use of black film of any kind and of any VTL percentage on the windscreens or on the side windows of the vehicles and made the same an offence.

3.9. Windscreen Wiper

Every motor vehicle other than a motor cycle or an invalid carriage, having a windscreen, must be fitted with a power-operated windscreen wiping system. Regularly maintain the wipers in good condition for proper wiping of water from the windscreen while driving in rain.

3.10. Direction Indicators and Stop Lights

Every motor vehicle must be fitted with amber coloured, electrically operated blinking lights to indicate the driver's intent to turn to the right or to the left. The lights must

be fitted on the right and left sides of the vehicle and must be clearly visible from both front and rear.

All motor vehicles other than motor cycles must be fitted with red coloured stop lamps both on the rear left and right side of the vehicle. These lamps must light up when the foot operated service brake is used indicating the intention to slow down or stop. Motor cycles must be fitted with one such stop light in the rear.

Also, every motor vehicle must be fitted with at least one lamp in the rear that gets automatically operated throwing white light in the rear, when the vehicle is being driven in the reverse gear.

In addition, all vehicles other than motor cycles, must be equipped with a device to make all the directional indicators flash together when the vehicle is stationary or immobilized on the road giving hazard warning to other vehicles.

Check regularly to ensure that these lamps are in working condition.

3.11. Reflectors

Every motor vehicle other than motor cycles and three-wheelers must be fitted with two red reflectors, one each on both sides at the rear. Motor cycles must be fitted with at least one red reflex reflector at the rear. In order to better understand the requirement of reflectors, it is desirable to know various categories of goods & passenger vehicles as under:

Category M: means a motor vehicle with at least four wheels used for the carriage of passengers and their luggage.

- Category M-1: means a motor vehicle used for the carriage of passengers and their luggage and comprising no more than eight seats in addition to the driver's seat.
- Category M-2: means a motor vehicle used for the carriage of passengers and their luggage and comprising more than eight seats in addition to the driver's seat and having a maximum mass not exceeding 5 tonnes.
- Category M-3: means a motor vehicle used for the carriage of passengers and their luggage and comprising more than eight seats in addition to the driver's seat and having a maximum mass exceeding 5 tonnes.

Category N: means a motor vehicle with at least four wheels used for the carriage of goods.

- Category N-1: means a motor vehicle used for the carriage of goods and having a maximum mass not exceeding 3.5 tonnes.
- Category N-2: means a motor vehicle used for the carriage of goods and having a maximum mass exceeding 3.5 tonnes but not exceeding 12 tonnes.

• Category N-3: means a motor vehicle used for the carriage of goods and having a maximum mass exceeding 12 tonnes.

The size and dimensions of the reflectors must be as follows:

- Goods carriers of categories N-1 and N-2 with gross vehicle weight of 3.5 tonnes or above but less than 7.5 tonnes, manufactured on or after April 1, 2009, must be affixed with a white reflective tape in the front, and a red reflective tape at the rear of the body. The width of both the tapes must be at least 20 mm and it must run across the entire width of the vehicle body.
- Goods carriers of categories N-2 and N-3 with gross vehicle weight of 7.5 tonnes or more, manufactured on or after April 1, 2009, must be affixed with a white reflective tape, 50 mm wide, in the front and a red reflective tape, 50 mm wide, in the rear. Both the tapes must be running across the entire width of the vehicle body.
- Trailers and semi-trailers falling in category N-2 and N-3 with gross vehicle weight over 7.5 tonnes, manufactured on or after April 1, 2009, must be affixed with reflective contour markings at the four corners in the rear and both sides. The side markings must be at least 50 mm thick and must be of yellow colour whereas the rear markings must be at least 50 mm thick and of red colour. A white reflective tape of at least 30mm thickness must also be affixed in the front of the vehicle (Diagram 10).

Diagram 10

 All the vehicles of categories M-2 and M-3, manufactured on or after October 1, 2009, must be affixed with reflective tapes of at least 50 mm thickness with white tape in the front and red tape in the rear.

The tapes must run across the entire width of the vehicle body. Moreover, all the vehicles in M-3 category must be affixed with a yellow reflective tape of 50 mm thickness, running across the entire length of the vehicle body.

3.12. Head Lamps And Rear Lamps

Every motor vehicle must be fitted with head lamps and rear lamps that can be used to illuminate the road in front as well as in the rear.

The head lamps must be illuminated half an hour after sunset or in situations when there is no sufficient light. The head lamps must clearly render objects, vehicles and persons visible at a distance of one hundred and fifty five meters ahead on the road. Moreover, the head lamps must be fitted with a mechanism to deflect light downwards (low beam or dipped light) so that the light does not dazzle any person or other drivers.

It is a good and safe practice to use low-beam (dipped) headlights while driving in the city or other populated areas where the roads are generally lit with streetlight. High beams are recommended in those areas where there are no streetlights on the road and the overall traffic is sparse. If you are travelling on a highway and using high-beam headlights, switch to lowbeam headlights for an oncoming vehicle. Also, switch to low-beam headlights when you are behind another vehicle.

Keep your headlights clean and get them adjusted regularly so that they aim properly.

3.13. Parking Lights

Every motor vehicle other than motor cycle or three-wheeled invalid carriage must be fitted with one white or amber parking light on each side in the front, and two red parking lights one on each side in the rear of the vehicle. These front and rear parking lights remain lit when the vehicle is kept stationary on the road.

3.14. Use of Red, White, Blue Lights or Spotlights

The use of blue light, red light, flashing light, and strobe lamps is restricted by law for vehicles that serve specific purpose. No motor vehicle must show a red light to the front and no light other than red in the rear of the vehicle except for a white light to illuminate the registration mark, a white light used while reversing the vehicle, or amber coloured directional indicator lights.

Use of red, blue, white or flashing lights is restricted to:

- a blinker type red light with purple glass for ambulances,
- a blue light with flasher as determined and notified by the State Government,
- a red light with or without a flasher on the vehicles carrying high dignitaries as notified by the Central or State Government.
- a blue light with or without flasher on vehicles escorting high dignitaries,
- multi-coloured red, blue, or white lights on vehicles used for emergency purposes as notified by the State Government,

 light on vehicles used by the officers of the police department,
- blue lights on fire tenders, fire trucks, or other emergency vehicles.

Furthermore, vehicles cannot carry a spot light or search light on the front except in exceptional conditions as approved by the registering authority.

3.15. Rear-view Mirror

As per Rule 123 of the Haryana Motor Vehicles Rules, 1993, every motor vehicle other than a road-roller, must be fitted, either internally or externally, with a rear-view mirror so placed as to enable the driver of the vehicle to see or become aware of any other vehicle in the rear.

It is recommended to use day/night type of inside rear-view mirror that has two modes of operation. The 'night' mode reduces the glare from the headlight of the following vehicles reflected in the rear-view mirror during night driving.

Most of the newer motor vehicles come with side-view mirrors, one on each side to assist the driver in getting the side views of the road on both sides of the vehicle.

It is a good practice to make use of the side-view mirrors (also called wing mirrors) on both sides of the vehicle rather than keeping them folded. Keep the mirrors clean and without any cracks for a proper view around the vehicle. Adjust your rear-view mirrors before starting off, and know your blind spots.

3.16. Seatbelts and Airbags

A seatbelts is an important device which can prevent injury or death in case of an accident.

For the vehicles fitted with seatbelts, it is mandatory, as per the Central Motor vehicles rules, 1989, for the driver of the vehicle and the person seated in the front seat to wear seatbelts at all times while the vehicle is in motion. In addition, in case of M1 category of passenger vehicle (i.e. vehicles having capacity of 8 or less seats other than the driver), persons occupying front facing rear seat are also required to wear seat belts at all times while the vehicle is moving.

Seatbelts are for your own safety. Your chances of surviving a motor vehicle accident improve significantly, if you wear a seatbelt.

- Seatbelt keeps you behind the wheel and in control of the vehicle in case of a collision.
- Seatbelt keeps your head and body from hitting the inside of the vehicle.
- Seatbelt keeps you inside the vehicle in a collision. A person who is thrown out of the vehicle during the collision has a higher chance of getting serious injury.

It is very important to wear the seatbelts properly. Always put the shoulder strap over your shoulder, never under your arm. The lap-belt should be put low over the hips, not over the stomach.

Airbags are the supplemental devices to help prevent serious bodily injury or death. You must wear a seatbelt even if your vehicle is equipped with airbags. Airbags are helpful in preventing injury only when a seatbelt is worn. In fact, if you are not wearing a seatbelt, airbags can cause bodily injury.

3.17. Pollution Control

Every motor vehicle must carry a "Pollution Under Control" certificate which is valid for six months. The new motor vehicles must be re-certified for "Pollution Under Control" after the expiry of one year from the date of first registration. The certificate must always be carried in the vehicle at all times.

Maintaining your vehicle in good condition, and following some good driving practices not only helps reduce air pollution but also saves fuel costs.

- Keep your engine properly tuned, and tyres properly inflated.
- · Observe road signs and traffic laws.
- Avoid speeding.
- Avoid frequent acceleration and braking.
- Remove access weight and avoid keeping heavy items in your vehicles.
- Use car-pooling, public transport, bike or walking wherever possible.
- Plan or combine errands into a single trip.
- Turn off the ignition at long traffic stops, or other long hold-ups.

3.18. What Must NOT be on My Vehicle?

- Any red or blue lights showing to the front, flashing or blinking lights,
- Any spotlights or search-lights,
- Any multi-toned horn or siren that gives a succession of different sounds,
- make use of a cut-out by which exhaust gases are released other than through the silencer,
- Tinted glass windows in violation of the Rule 100(2) of Central Motor Vehicles Rules, 1989,
- Black film on windows,
- Vehicle painted olive-green which is reserved for vehicle of defence department, or painted yellow with dark blue lines which is reserved for the vehicles of educational institutions carrying students, and
- Motor cycles i n yellow colour, which is reserved for the police department.

3.19. Check Your Vehicle

Quickly check your vehicle daily before you begin driving for the following:

- Windscreen and windows for any cracks.
- Windscreen wipers are in good condition.
- Look for proof of water or oil under the vehicle that might indicate a leak.
- Check for wear and tear of tyres and proper tyre pressure.
- Make sure the gauges are working properly.
- All lamps and lights are working properly especially during night.
- Licence plates are intact and registration mark on them is properly visible.
- Mirrors are clean and adjusted properly.
- "Pollution Under Control" certificate is valid.

It is also a good practice to regularly do the following, especially before going on a long trip:

- Check that the battery is in good condition and the connections are proper.
- Check that the engine oil, engine coolant, brake oil and windscreen wiper fluid levels are above the minimum level as specified.
- Check that the lights including headlights (high beam and dipped beam) and stop/brake lights are working properly.
- Check for any leaks in the exhaust system.
- Keep a spare tyre that is in good condition.
- Keep a first aid kit, a flashlight, tools needed to replace a tyre and if possible, a
 portable fire extinguisher.

4. TRAFFIC SIGNS, SIGNALS AND ROAD MARKINGS

Traffic signs, signals and markings on the roads and pavements are meant to provide clear guidance to help the drivers drive safely, regulate traffic, cautioning the drivers of dangers ahead, and informing the drivers of facilities available en-route. They convey a clear, visual and precise meaning in a simple form. Every prospective driver,

therefore, must know all road signs, signals and markings found on the public roads and highways and follow them at all times.

4.1 Signs

Road signs are published by Indian Road Congress (IRC) and use symbols and pictures. These are uniformly followed across the country. They are shape and color coded to give you a quick idea about what the sign says even before you are close enough to read it. Road signs are of three types:

- Mandatory Signs
- Cautionary Signs
 Informatory Signs

Mandatory Signs

These signs are mandatory and must be followed at all times. Mandatory signs are circular, except the 'Stop' sign and the 'Give Way' sign. Mandatory signs are reproduced below for your quick reference.



STOP SIGN

This sign is used on roadways where traffic is required to stop before entering a major road or intersection.



GIVE WAY SIGN

You must give way to the other traffic having the right-of-way.



NO ENTRY

This sign is located at places where the entry of all vehicles in prohibited.



STRAIGHT PROHIBITED OR NO ENTRY

This sign is located at places where the vehicles are not allowed to enter or go straight.



ONE WAY SIGN

Vehicles prohibited in one direction. Indicates that traffic going forward is prohibited.



ONE WAY SIGN

Vehicles prohibited in one direction. Indicates that traffic going in the other direction is prohibited.



VEHICLES PROHIBITED IN BOTH DIRECTIONS

This sign is used where entry to all types of vehicular traffic is prohibited.







ALL MOTOR VEHICLES PROHIBITED

BULLOCK CARTS

PROHIBITED

CYCLES PROHIBITED

TRUCKS PROHIBITED



TONGAS PROHIBITED



PEDESTRIANS PROHIBITED

BULLOCK CARTS AND HAND CARTS PROHIBITED



HAND CARTS PROHIBITED



RIGHT TURN PROHIBITED









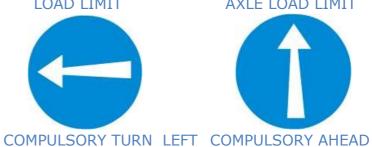


COMPULSORY TURN

RIGHT













OVER TAKING PROHIBITED



NO STOPING OR STANDING



HEIGHT LIMIT



AXLE LOAD LIMIT



ONLY



AHEAD OR TURN LEFT

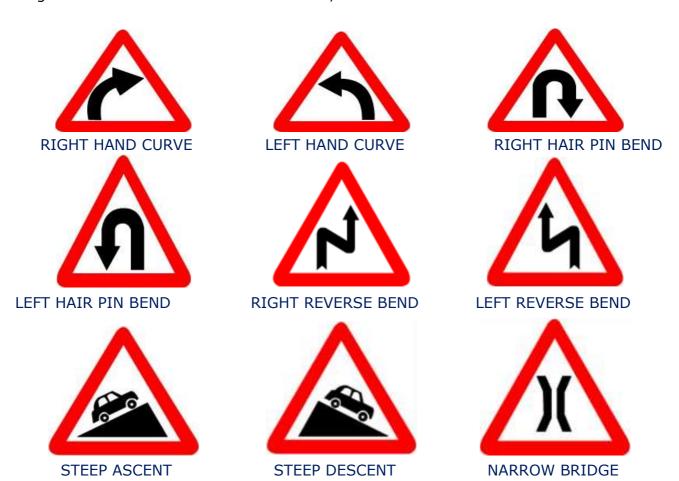




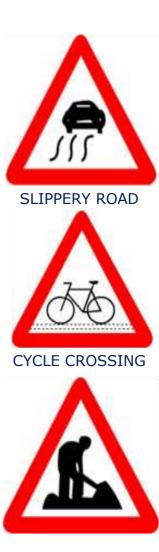


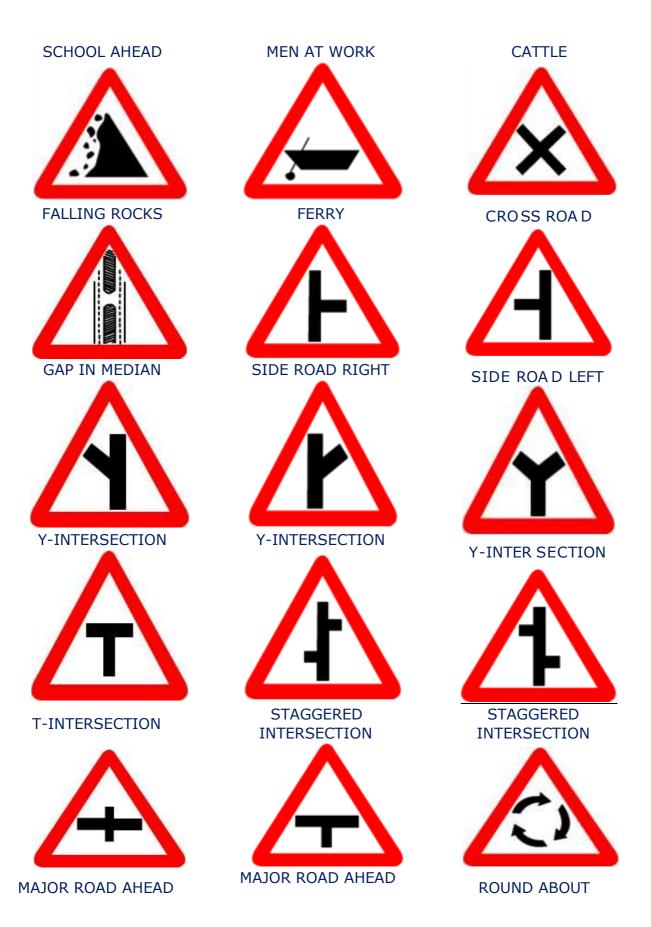
Cautionary Signs

Cautionary signs are meant to warn the drivers about the hazardous or abnormal conditions lying ahead. These signs are triangular in shape. The following cautionary sings are included in the motor vehicle act, 1988:















RUMBLE STRIP







SPEED BREAKER

BARRIER AHEAD

SERIES OF BENDS





CARRIAGEWAY



QUAYSIDE OR RIVER BANK

###



UNREGULATED LEVEL **CROSSING**

GUARDED LEVEL CROSSING

LANE CLOSED (ON A TWO LANE ROAD)

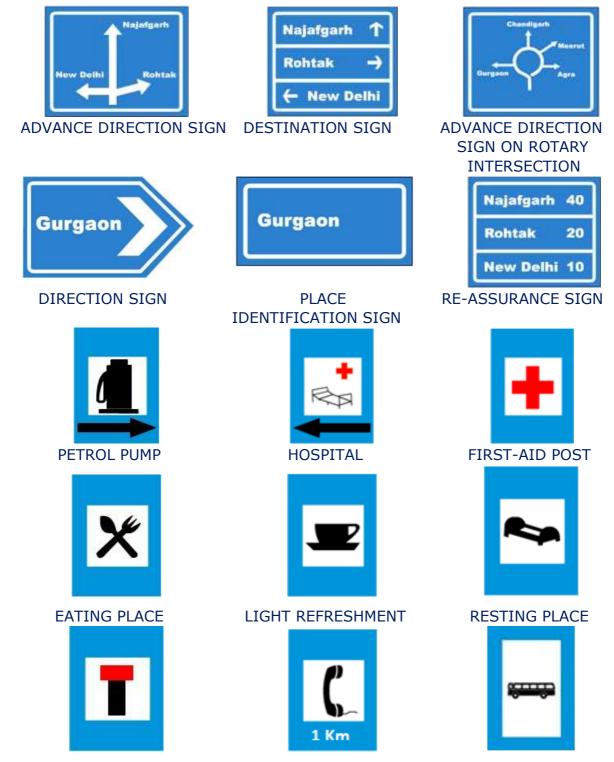


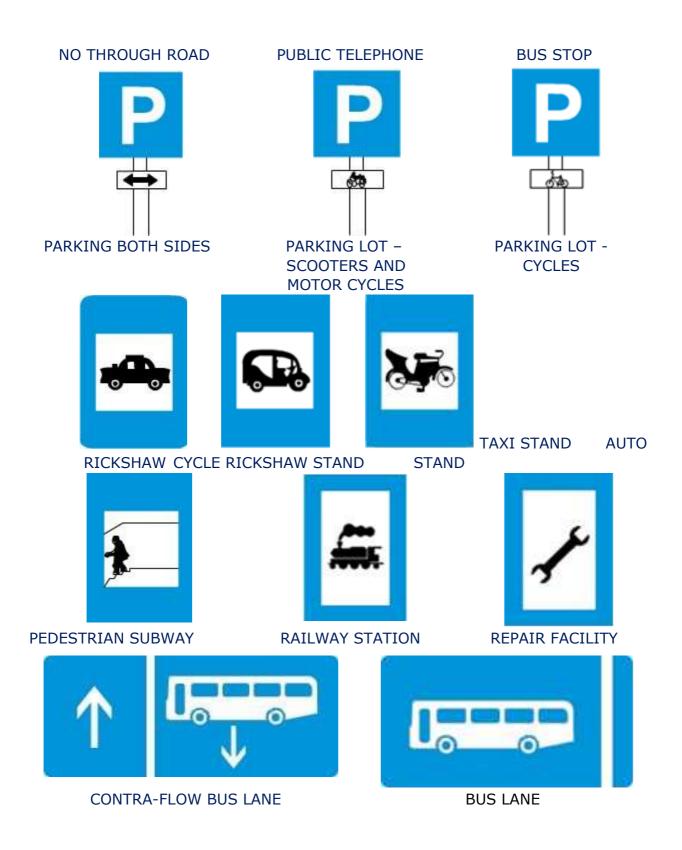


TRAFFIC SIGNAL

Informatory Signs

Informatory signs provide information on direction, destination, roadside facilities etc. to the drivers. These signs are square or rectangular in shape.





4.2 Signals (Traffic lights)

Traffic lights are used to control traffic at intersections. Apart from traffic lights, many intersections have lighted arrows for traffic control. Arrows control the flow of traffic in the direction of the arrow.

Red

If you see red light as shown in diagram 11, come to a complete stop before entering the intersection and before the stop line, or pedestrian or zebra crossing, if any. You must wait until the red light turns green. A red arrow



means no turning in the direction of the arrow.

Diagram 11

Amber

If you see amber light as shown in diagram 12, before you enter the intersection, stop your vehicle behind the stop line or cross walk (pedestrian crossing). If you have already entered the intersection and the light turns amber, continue moving on, but with caution. A yellow arrow means proceed with caution in the direction of



the arrow.

Diagram 12

Green

Green light as shown in diagram 13 means you continue moving through the intersection carefully giving way to the pedestrians and other vehicles already in the intersection. A green arrow indicates that you may proceed in the direction of the arrow if you are in the



proper lane. **Diagram 13**

Flashing Signals

Flashing red signal as shown in diagram 14 means you must come to a complete stop behind the stop line or pedestrian crossing, and move through the intersection only when it is safe to do so. Flashing amber signal warns drivers to slow down and drive with caution.

Diagram 14



Pedestrian Crossing signals

These signals help pedestrians cross the road safely. As a pedestrian, you can cross the road if you face a green 'walk' sign as shown in diagram 15.

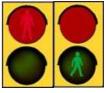
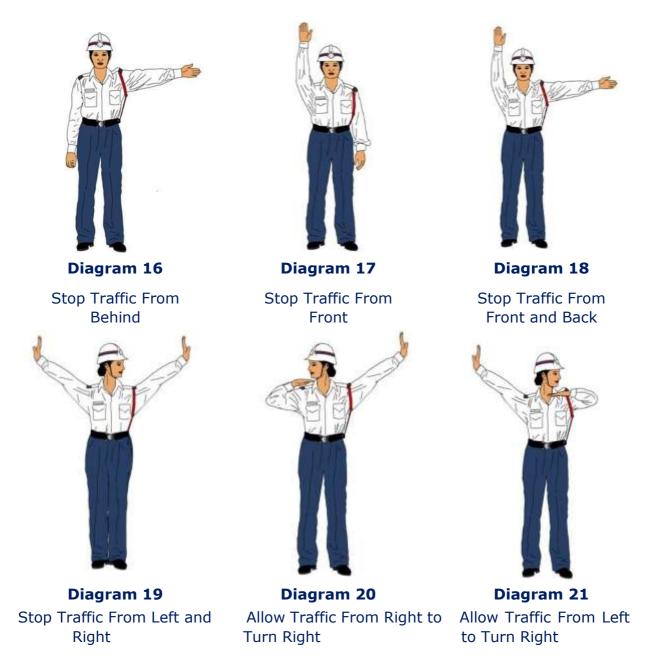


Diagram 15

Never try to "beat the light." If the light turns yellow and you have enough space to stop safely, please stop.

4.3 Traffic Police Hand Signals

If the traffic is being controlled and directed by the traffic police personnel, follow their hand signals even if they are different from traffic lights or signals as there may be an emergency situation on the road. Following pictures illustrate different hand signals used by the traffic police as shown in the diagrams from 16 to 21.



Multiple hand signals may be used together in succession to provide better traffic management.

4.4 Road Markings

Road markings play a very useful role in traffic management. They help guide and control the flow of traffic, and promote road safety. It is very important for the drivers to understand road markings and follow them. Below are some of the important road markings as shown in diagrams from 22 to 41 that you will occasionally come across.



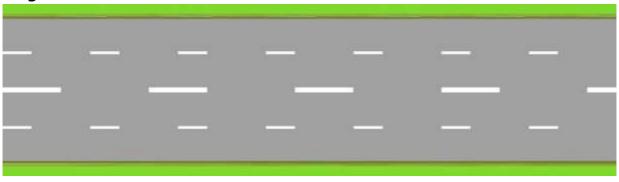


Diagram 22

Central line marking with broken white line separates two opposing streams of traffic. It is permitted to cross to the other side of a single broken line for overtaking when it is safe to do so. It is noteworthy that the central line markings are longer than the lane line markings. These are 3 metres long, where as broken line markings dividing lanes are shorter in length.



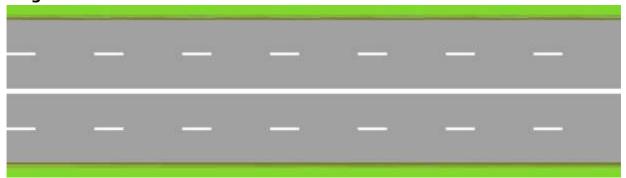


Diagram 23

Solid central line indicates that it is not allowed to cross to the other side for overtaking except for entry or exit from a side road or a premises or to avoid a stationary obstruction. Solid centre line is normally white in colour but can optionally be yellow also.

Double Solid Line

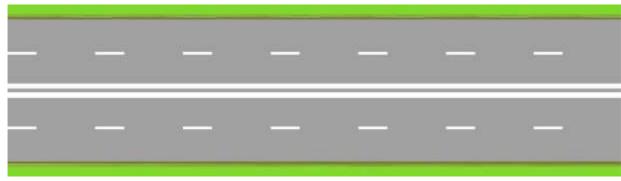


Diagram 24

Double solid central line indicates that it is not allowed to cross to the other side for overtaking except in emergency situations.

Combination of Broken and Solid lines

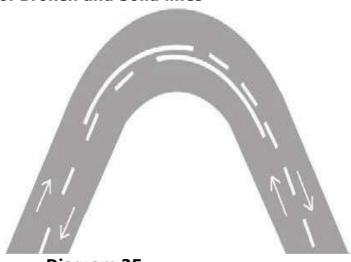


Diagram 25

If the line on your side is broken, you may cross or straddle it for overtaking if it is safe to do so. If the line on your side is solid, you must not cross or straddle it. This road marking is usually used where the visibility ahead is less due to a curve or the landscape. Parking is prohibited on these stretches of the road.

Parking is also prohibited where a yellow line is marked on the edge of the road.

Stop Line



Diagram 26

Stop line with 'STOP' word marked on the road as shown in diagram 26 indicates where you are required to stop before an intersection and give way to vehicles on the major road you are approaching. You should proceed only after ensuring that it is

safe to do so. Where a pedestrian crossing is provided, the stop line is marked before the pedestrian crossing.

Give Way Line



Diagram 27

The give way line is usually a double dotted line marked transversely at junctions. These lines are generally supplemented by a reverse triangle 'give way' sign painted on the road surface before the dotted lines or by a road sign installed beside the marking. Give way line indicates that you should give way to traffic on the main approaching road.

Zebra Crossing

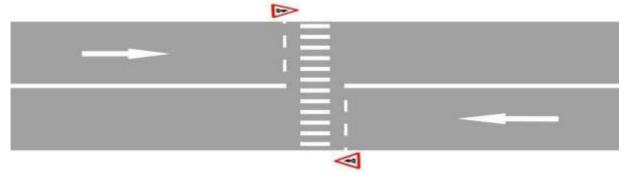


Diagram 28

Zebra crossing is a succession of alternate black and white stripes painted parallel to the road. These are provided for the pedestrians to safely cross the road. Pedestrians have the right of way at these crossings. Zebra crossings are usually accompanied by 'Pedestrian Crossing' road signs.

Bicycle Lane

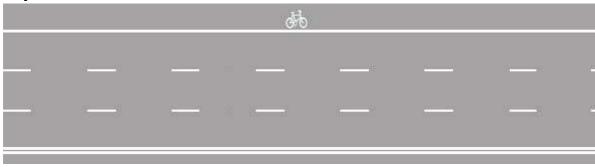


Diagram 29

Bicycle lane marking indicates a lane exclusively for the cyclists. Motor vehicles are not allowed to enter this lane.

Typical Intersection

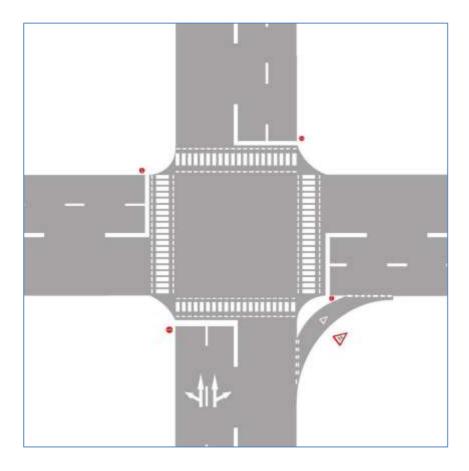


Diagram 30

A typical Intersection with Traffic Lights, stop lines and stop signs, zebra crossings for pedestrians, slip lane with 'Give Way' sign and marking, and directional arrows is shown in the adjoining diagram.

Box Junction

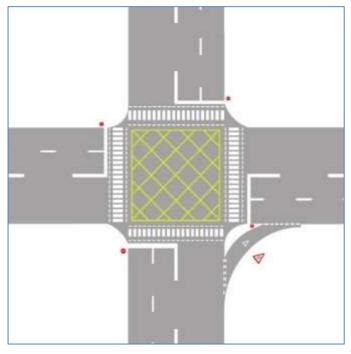


Diagram 31

These are yellow crossed diagonal lines within the box. The vehicles should enter the box junction only if their exit road is clear. Vehicles must not stop even briefly in the box junction area.

Keep Clear



Diagram 32

This road marking is used to indicate that there must not be any stationary vehicles in the area of the marking. This is used at intersections where queuing vehicle may otherwise block cross traffic or a side road.

Edge Line

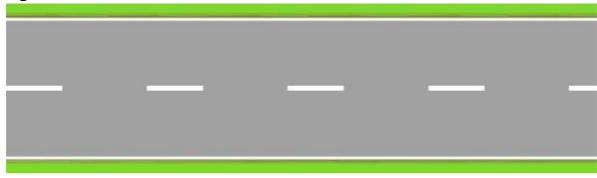


Diagram 33

Edge line on a road is a solid white (or yellow) line indicating the edge of the drivable road. A white edge line can also be used to indicate roadside parking,

bicycle lanes. A yellow edge line restricts the kerb-side parking.

Cycle Track Crossing

This road marking provides for the area for crossing of the road by the cyclists. This is provided where the cycle track crosses the road, and is usually next to the pedestrian crossing.

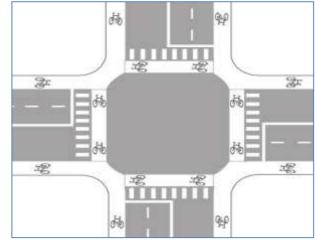


Diagram 34

Acceleration Marking

Acceleration markings are used for entry to the highways.

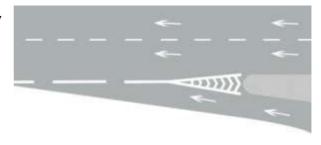


Diagram 35

Deceleration Marking

Deceleration markings are used for highway exits.

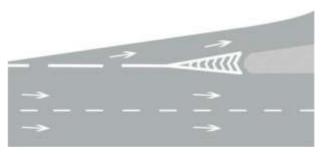


Diagram 36

Object Painting near Kerb

Many times, there are objects that are so near the edge of the

road or highway as to constitute a

hazard. Such objects are painted alternate black and white or staggered black and white.



_ ...g.

Alternate Black and White



Diagram 38

Staggered Black and White

No Parking

No parking sign is usually accompanied by a kerb side yellow solid line near the edge of the road to indicate no parking at any time.



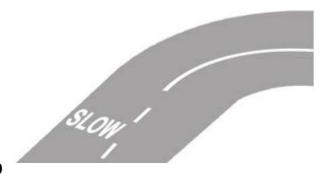
Diagram 39

Slow

'Slow' road marking provides
advance warning to the drivers to slow
down on approach to a hazard,
intersection, a curve,

narrow bridge or a condition that warrants driving at a lower speed.

Diagram 40



Bus Stop

A rectangular box with broken lines with a message 'BUS STOP' is for the area reserved as a bus stop only and is used for boarding or



5. BASICS OF DRIVING

As a driver of a motor vehicle, it is important to have good understanding of certain concepts and aspects of driving in order to be able to drive safely.

5.1 Qualities of a Good Driver

Driving requires good hand-eye coordination and quick reflexes. Three important traits of a good driver are –

Anticipation: Be aware of traffic around you and what are the signals or tendencies of the fellow drivers. It is easy to anticipate that a child or a toddler is likely to run across a road without any indication. Plan ahead for the unexpected.

Concentration: Keep your focus on the road and actively scan for possible obstructions. The driver should be well rested, calm and not under the influence of

alighting of passengers. A kerbside solid yellow line on the edge of the road restricts parking or stopping any other vehicles in that area. Diagram 41 alcohol or other drugs at any time.

Positive Attitude:

Positive attitude is very essential while driving. Be a responsible driver. Show courtesy to other road

users. Aggressive driving is not conducive to safe and responsible driving. Stay calm in all situations. Give space to an aggressive driver rather than competing with him or getting angry.

5.2 Driving Checklist

Before Boarding Your Vehicle

- Wear comfortable clothes while driving. It is advisable to wear shoes while driving, instead of slippers or chappals, to have proper grip on the foot pedals.
- Do not drive if you are not feeling well mentally or physically or are feeling tired and sleepy.
- Do not drive if you have taken medicine that can affect your ability to safely control or drive a vehicle, or have consumed alcoholic beverages. Drunken driving is an offense under section 185 of the Motor Vehicles Act, 1988, which is punishable up to six months of imprisonments or fine up to Rs. 2000/- or both, in the first instance.
- Walk around your vehicle for any sign of problems like a flat tyre, oil leak, open trunk etc.

Boarding Your Vehicle

- Know the inside of your vehicle to get comfortable with controls and other features.
- Check that your view is not hampered due to dirty windscreen or scratches thereon.
- Adjust your rear-view mirror and side mirrors for a good view of the surroundings.
- Check that you can comfortably reach the foot pedals. Push the clutch pedal
 on the far left down to the floor. You should be able to do this without

- stretching. If needed, adjust your seat and steering wheel that will help you maintain a comfortable posture.
- Put on the seat belt and request all the passengers to do the same. It is required by law that even the passengers sitting on the front facing rear seats of the car should wear seat belts, if provided.
- Make sure that all the doors are properly locked, and
- before you start the engine, check that the handbrake is on and the gear lever is in neutral position for a manual transmission vehicle. For automatic transmission vehicle, the gear lever must be in 'P' or 'N' positions.

Starting Your Vehicle and Moving off

- Check for any warning or alerts on the car's dashboard. Normally, these warning signs go off once the engine starts.
- Use the proper turn signal, if needed, to merge into the traffic.
- Check for pedestrians, cyclists or other vehicles before merging into the traffic and merge only when it is safe to do so.

5.3 Guiding Rules of Safe Driving

This section explains some important rules of safe driving.

Following Distance

It is a good and safe driving practice to maintain a reasonable following distance between your vehicle and the vehicle in front of you. This gives you enough space to slow down or change your path safely, in case the vehicle in front applies brakes or slows down. Traffic, speed, weather conditions, visibility can impact the safe following distance between vehicles. As a rule of thumb, use the '2 second rule'

in normal conditions (see Diagram 42).

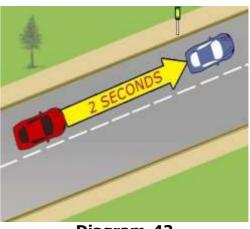


Diagram-42

Two Seconds Rule means that you should keep the following distance from the vehicle in front of you such that it takes your vehicle to reach the vehicle in the front at least 2 seconds assuming that the front vehicle is stationary.

To measure the following distance, pick a fixed object like a sign post, telephone pole, a bridge or a tree ahead of you and the vehicle you are following. As the vehicle in front of you passes that object, begin to count seconds by saying 'one-thousandone, one-thousand-two, one-thousand-three' and so on until your vehicle reaches that object. If you reach the object before you have counted one-thousand-two, it means that your following distance is too less to be safe; slow down and try the above steps again until you are at a safe following distance.

You should further increase the safe following distance during adverse weather conditions like rain, fog, snow or during night.

Tyre and tarmac rule

When stopped behind another vehicle, maintain distance in such a way that you can see the road under the rear wheels of the vehicle in the front as shown in diagram 43. This translates into a distance of 4-5 feet from the vehicle in front. This space will allow you to move around the vehicle, or will give you some cushion of time of react (for example, to blow the horn), if the other vehicle is parked uphill and accidentally rolls back. Similarly, this stopping distance gives the time to react to the driver of the vehicle parked downhill in front of your vehicle, if your vehicle accidentally rolls forward while parked.

The third advantage of following the Tyre and Tarmac rule is that in case of a traffic jam, drivers get space to move their vehicles to one side for giving passage to emergency vehicles. Important tip: If you can see the headlights of the vehicle stopped behind you, it means its stopping distance from your vehicle is correct.

Diagram 43

Advantage of Tyre and Tarmac Rule

Advantage of Tyre and Tarmac Rule

Diagram 45

Advantages of Tyre and Tarmac Rule:

Allows you to yelld Diagram(e46/ellow)

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MSM Rule

MSM rule is one of the most important rules of safe driving. This rule applies to most actions of a driver, viz. moving off, changing lanes, taking a turn, overtaking or pulling up. MSM stands for Mirrors, Signal and Manoeuvre.

Use of Mirrors is the first phase of the MSM rule. It is important to regularly scan road with the inside rear-view mirror and the side-mirrors on the left and right side of the vehicle. This helps to create a mental picture of what is on the road around you.

Actively observe the traffic in the mirrors well before you plan to change your position on the road or direction to have an idea about the position of other vehicles, their speed, and to know if any of the other vehicles has given any indication to change their position too. Look at the inside rear-view mirror first to have an idea about the traffic behind you before checking the side-mirrors for any vehicle on the side.

It is important to know that the inside rear-view mirror is flat but the two side mirrors (wing mirrors) are convex. As a result, vehicle at a distance appear small and gradually increases in size as they come closer. In other words, the vehicles and objects in mirror are actually closer than they appear.

Signal to turn is the second phase of the MSM routine. Once you have checked the mirrors and the road looks clear to change your direction, give appropriate turn signal - by either using the vehicle's turn indicator, or a hand signal, or both - to show your intent clearly to change direction to other road users.

Manoeuvre phase is when you actually take the action of changing the direction. This phase can be further divided into the four sub-phases – Position, Speed, Look for blind spots and Act.

Position phase is used to bring the vehicle in a position from where the vehicle can be manoeuvred easily into the desired position. It is not always necessary to alter the position of the vehicle if you are already in a good position for the manoeuvre.

Speed change is the next step after positioning the vehicle. Make sure that your speed is appropriate to carry out the manoeuvre, which, in some situations, may mean that you increase your speed, reduce it or even come to a complete stop. It may also be necessary to change the gears during this manoeuvre to maintain control of the vehicle.

Look for blind spots. This phase adds a final check to assess the situation to decide whether to go ahead with the manoeuvre or wait. Even though you keep looking ahead and assessing the situation throughout the entire MSM routine, this is where a decision to proceed or wait has to be made. This is the time when you look over your shoulder to the side for any vehicles. This takes care of any blind spots which are not covered by your side-mirror.

Act to complete the manoeuvre.

Example below illustrates the MSM rule for lane change manoeuvre from middle lane to the right most lane (faster lane):



Mirrors

The driver first checks the mirrors- inside rear view mirror and the two wing mirrors to create a mental picture of the traffic around.

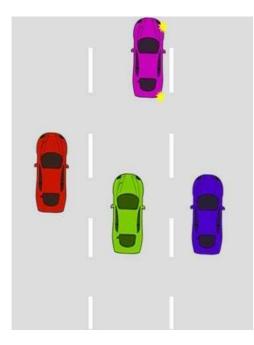
Diagram 47



Signal

Driver gives the right indicator to indicate the intent to change direction (lane in this example). It is a good practice to start signaling well in advance to give enough time to the other drivers to know and adjust for your safe manoeuvre.





Manoeuvre

Position

Position the vehicle for the manoeuvre. This step may not be needed if you are already in a good position. In this example, the driver moves the vehicle closer to the lane edge while still staying well within the lane.

Diagram 49



Speed

This step is to adjust the speed and gear of your vehicle for a safe and smooth manoeuvre. In this example, the change of lane is to the right side which is usually a faster lane. The driver increases the speed of the vehicle to reach at the speed of the moving traffic in the right most lane. Note that vehicle speed needs to be increased only if it is safe to do so. The driver then maintains that speed and position until the manoeuvre is completed.

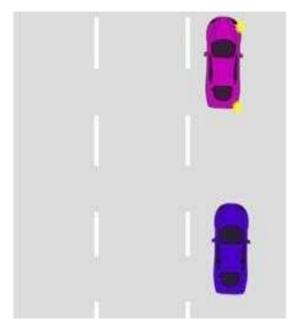
step before the change of manoeuvre is carried out. For to the right lane, the driver and looks over his or her right check the blind spot. This needed to assess whether it out the manoeuvre.



Diagram
50
Look
This is the final lane
a lane change looks around shoulder to final check is

is safe to carry

Diagram 51



Act

Once the driver decides that it is safe to change lane, he safely moves to the right lane completing the lane change manoeuvre.

Diagram 52

Right-of-Way

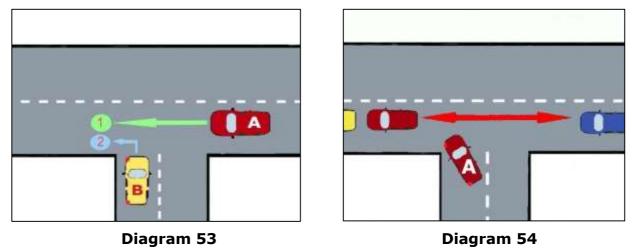
Right of way is a very important concept while sharing the road with other road users. It determines which vehicle gets to go first in different situations. It is the responsibility of the drivers and the pedestrians to obey this rule for smooth flow of traffic. This rule is based on courtesy and common sense.

Here are some of the common situations described for understanding the right-ofway rule:

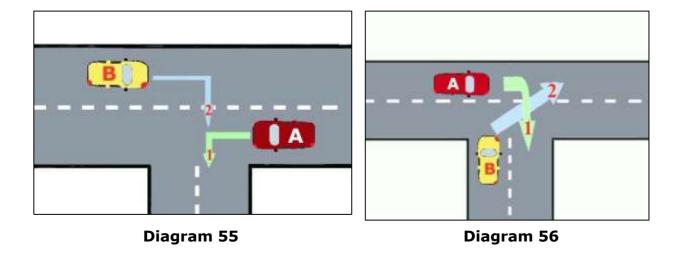
- Emergency vehicles like ambulances, fire tenders, police vehicles with flashing lights always have the right-of-way in all conditions.
- Zebra crossings belong to the pedestrians. Pedestrians have the right of way
 at the zebra crossings and at uncontrolled pedestrian crossings. When entering
 an intersection or facing a zebra crossing, slow down and give way to any
 pedestrians crossing the road.
- If you are about to enter the roundabout, the vehicles already in the circle have right of way.
- Vehicles merging with the traffic after turning left using slip lanes must give way to any vehicle on the road.
- In case of a Stop sign, the driver must stop at the Stop line and if there is no Stop line, before entering the intersection, and give right of way to vehicles already in the intersection.
- If two vehicles reach an uncontrolled intersection at the same time, the vehicle on the right has the right of way.

- When turning right, give right of way to the oncoming vehicles going straight or turning left.
- If all the sides at an intersection do not have Stop sign or stop line, then the vehicles on stop lines must give right of way to the vehicles coming from sides without stop line.
- When a vehicle enters the uncontrolled T-Section, the vehicle that is making a turn must give right of way to the through traffic.
- Drivers on a minor road must give way to the vehicles on the main road at an intersection.

The following examples will further clarify the above rules-



Vehicle **A** gets priority being on the Vehicle **A** can merge with the traffic main road. Vehicle **B** will give way only when a safe gap appears in before merging on the main road, traffic on the main road.



Vehicle **B** will give way to vehicle **A** as Vehicle **A** leaving the main road has vehicle **A** is turning on the side road the right of way over vehicle **B** on the same side and vehicle **B** is wishing to join the main road. turning on the opposite side of the road.

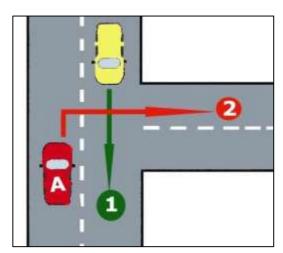


Diagram 57

For turning right, vehicle **A** will give way to oncoming traffic and will turn only when a safe gap appears in traffic.

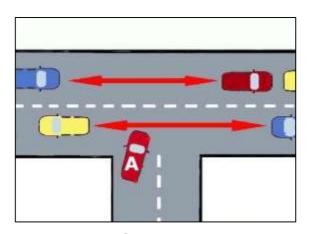


Diagram 59

5.4 Cutting Corners

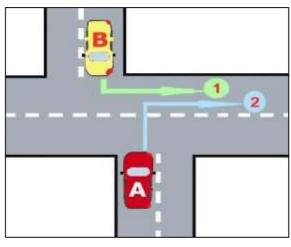
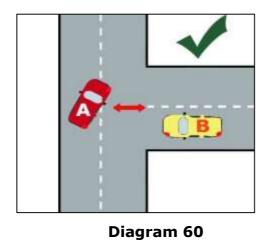


Diagram 58

Vehicle **B** is joining the same side and Vehicle **A** is joining the opposite side of the road. Vehicle **A** has to give way to vehicle **B**.

In diagram 59, vehicle **A** is turning right. Since it is merging with traffic on the opposite side, join only when a clear gap appears on both sides as shown.

Cutting corners is a very common problem on Indian roads. Most drivers are not aware of the correct way of taking a right turn and indulge in cutting corners, posing a threat to their own safety as well as that of others. The correct method of turning right is to move your car straight and start turning when the dividing line of the side road meets your car approximately in the middle as shown in the diagram 60 below. This will ensure that your vehicle on completing the turn will enter the correct lane on the side road. Any attempt to take turn at an earlier point in time, may result in collision with a vehicle coming from the side road. Correct turning also helps the approaching driver from the side road get a clear view of the vehicle turning right.



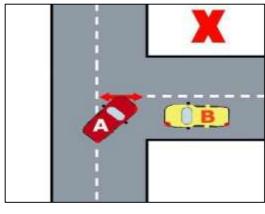


Diagram 61

This rule also applies to the vehicles on the side road turning right for merging on the opposite side of the main road as shown below.

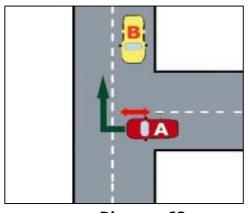


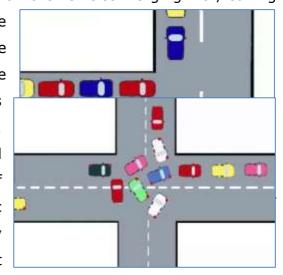
Diagram 62

Driver of the Vehicle **A** should go straight until the front of his car reaches approximately middle of the road and then turn right. Failure to do so can lead to potential collision with the vehicle coming from the right.

5.5 Courtesy on the Roads

While the rules governing the right of way as described in the previous section apply in general, it is equally important for drivers on the main road having the right of way to show courtesy and stop to allow the vehicles merging with/leaving

the main road to go first whenever the volume of traffic is high, otherwise the waiting time for the vehicles on the side road becomes agonizingly high. This is particularly true during the rush hours. Failure to Diagram 63 show such courtesy will lead to traffic jam on the side road. Lack of courtesy on the road often leads to traffic jam as shown in Diagram-63. At any crossing whenever traffic lights become out



of order, then it is a common picture as shown in diagram 64. It happens only because of lack of courtesy. Courtesy also

means leaving access to pedestrians

on Zebra crossings free during traffic congestion. Similarly, at an intersection,
even if the signal is green but the road ahead of the intersection is not clear, a
courteous driver stops before the intersection, leaving the junction box.

Another common occurrence is on manned railway crossings where cars and two wheelers often occupy the lanes meant for oncoming traffic causing traffic jam as shown in



Diagram 65 Diagram-65.

5.6 Tips for Safe Driving

Safe or defensive driving, as per the National Safety Council, USA, is getting to the destination safely –no traffic fines or tickets, no accidents, no harm or injury, with no hassle to the others on the road. In other words, it simply means driving responsibly and with common-sense. Driving does not just mean getting your driving license. It also means imbibing good driving habits. Below are some of the important tips that will help you to be a safe and responsible driver.

- Observe and obey traffic signs and signals all the time. That means no rolling stop. Stop completely at the stop line or when you see a stop sign.
- Check mirrors and cover your blind spots by looking over the shoulder.
 Always be aware of the blind spot of other vehicles especially the big trucks. Stay out of other vehicles' blind spots.
- Use turn signals appropriately while turning or changing lanes.
- Stay alert and scan the road frequently for hazards.
- Do not drive while under the influence of alcohol or drugs or if you are feeling sleepy or drowsy.
- Distracted driving is dangerous and illegal. No multi-tasking texting, talking on the phone, eating, reading, watching a movie, adjusting radio/CD player/GPS, shaving, putting a makeup etc. - while driving.

- Adjust driving speed to road, weather and other conditions.
- No tailgating. Leave a safe following distance from the vehicle in the front.
- Keep your vehicle in good condition. Keep windscreen, windows and mirrors clean and keep the tyres properly inflated.
- Share the road with trucks, bikes, pedestrians, motorcycles and other users of the road.
- Be courteous and do not drive aggressively. Driving is not a contest and it is not about 'winning'. It is about reaching your destination safely.
- Use seat-belts for all occupants of the vehicle. It is much safer for the children and kids to be in the rear seat of the vehicle.
- Keep a first-aid kit in the vehicle.
- Watch for rough and uneven shoulder of the road which may be lower than the road.
- Watch for animals and slow-moving vehicles. Slow down and cross them when it is safe to do so.
- Give way to emergency vehicles and do not follow them. Move over to the lane away from the emergency vehicle. If you cannot move over, slow down.
- Wear helmets while riding a two-wheeler.
- Be watchful while crossing unmanned railway tracks. Cross only at designated crossings and do not try to beat the train. Trains are generally travelling much faster than they seem to.
- As a parent, it is your responsibility to make your kids, especially the young adults, aware of safe driving. Encourage good driving habits in them. It is but obvious that parents who do not follow safe driving practices have teens who follow their example.
- After certain age, physical and mental changes like vision changes, strength and flexibility, reaction times, can affect driving. Have your eyes checked regularly. Learn the effects of medication on your driving skills and vision.
- Children need to be made aware of the dangers of playing in or around the vehicles or the dangers of climbing into a vehicle trunk (boot space).
 When a child is missing, make sure to check in the vehicles and their trunks quickly.

- Do not leave children or pets alone in the vehicle any time, even when going for a quick errand.
- Stop for pedestrians. Be alert for children, especially around schools, residential areas or school buses.

5.7 Turn Signals

Other drivers expect you to go straight. Therefore, if you intend to slow down, stop or turn, you must indicate. Give the other road users ample time to react to your move. You should use signals before you:

- Change lanes,
- · Slow down or stop,
- Turn at the intersection
- Enter or exit a highway
- Move away from the kerb to merge in the traffic when you start off.
- Move to the side of the road or stop over to the side of the road.

It is a good habit to signal whenever you change direction. Signal even when you do not see a vehicle. Signal as early as you can and when it is appropriate to do so but do not start signaling too early. You should indicate your intention to turn only when yours is the next available turn.

During daylight hours when the visibility is normal, you may use hand and arm signals in addition to, or instead of, using your vehicle's electrical turn indicators. You may not use hand signals at night or in situations where your hand signals may not be visible to others. Diagrams from 66 to 70 illustrate the hand signals that may be used by the drivers to indicate their intentions:



Diagram 70

Slowing Down

Car Following the Other

Car can Overtake

5.8 Speed

Speeding is a major factor in many motor vehicle accidents. You must obey the speed limits as specified on the roads or highways. Driving faster than the posted speed limit on the road or highway is illegal.

As a general rule you must not drive at a speed faster than it is safe and reasonable under existing conditions on the road. Your safe speed depends upon:

- Road conditions curves, narrow bridges, wet and slippery conditions, loose gravel, bumpy roads mean driving at reduced speed.
- **Visibility** darkness, rain, fog, smog, snow, intersections, hills, curves can result in low visibility and call for reduced speed.
- Traffic Heavy road traffic means added dangers.
- Traffic Speed Safe speed in a traffic condition is the average speed at which the other traffic is moving provided that it is not more than the posted speed. Travelling faster or slower than other vehicles may increase the danger of an accident.
- **Vehicle Condition** Condition of a vehicle including the condition of tyres and braking system may also affect the control you may have on the vehicle. For an older vehicle, with worn out tyres and less than efficient braking system, it is advisable to drive slowly.
- Your physical or mental condition Your mental and physical condition may also adversely affect your alertness while driving resulting in less control on the vehicle.

The faster your speed is, lesser the time that you may have to react and also requires longer distance to stop or slow down. Travelling at faster speeds increases the likelihood of accidents. And when an accident occurs at excessive speeds, the injuries also tend to be more serious.

Speed Limit

Speed limit is the maximum speed at which you can drive a vehicle under ideal condition. If the conditions are less than ideal, you must slow down to a safe speed which is less than the speed limit.

Section 112 of Motor Vehicles Act 1988 stipulates that '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 the Act or by any other law for the time being in force.'

Your speed must not be more than 25 km/h, if you are passing a procession, troops or police on the march or when passing workmen engaged in road repair work.

Following table lists the specified speed limits for different categories of vehicles:

Type of Vehicle	National Highway (km/h)	State Highway (km/h)	Other Main Roads (km/h)
Bus/Truck	65	65	60
Car/Jeep	90	80	70
Motorcycle/Scooter	50	50	45

6. SHARING THE ROAD

It is our responsibility as a driver of the motor vehicle that we focus on the task at hand and be aware of our surroundings. Many road accidents can be prevented by simply obeying traffic rules and by extending simple courtesy to other drivers. Remember that the public roads and highways must be shared with other drivers and users of the road.

This section has been derived from the "Rules of the Road Regulations, 1989" which serve as the basic guide for rules that have to be followed while driving on the road. It deals with basic facts such as right of way, overtaking, turns, parking etc.

6.1. Keeping Left

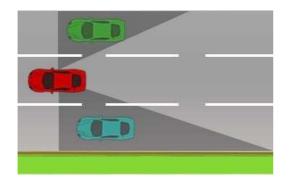
In India, vehicles drive on the left hand side of the road. It is important to keep to the left and let the traffic coming from the opposite direction to pass on your right. Keep to your left as much as possible to avoid head- on collision. When driving on a channelized road marked with lanes, drive with in the lane, and stay close to the left of the lane.

6.2. Changing Lanes

Changing lanes can be dangerous and must be done with caution. Follow MSM rule to change lanes. Make sure you have safe clearance to the side, behind or ahead before moving to another lane. Never change lanes at intersections.

Blind Spots are areas around your vehicle where your view is obstructed as shown in diagrams 71 & 72. These areas are not visible in the rearview and side-view mirrors. Any pedestrian, vehicles or other objects in the blind spots may not be visible to you. It is important to know your blind spots. Quickly look over your shoulder to the side of the turn for vehicles or pedestrians in the blind spots before

you turn or change lane. Also, avoid driving into other drivers' blind spots. Commercial vehicles, due to their size and design have larger areas in their blind spots as shown in diagram 72.



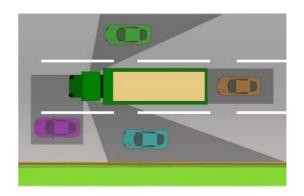


Diagram 72

Blind spots (shaded areas) of Blind spots (shaded areas) of a car a commercial vehicle

6.3. Turning

Turning improperly or without adequate indication may result in a traffic accident. Move safely to the proper lane well ahead of your turn. Always follow MSM rule while changing to the turn lane and while making a turn. Turn only when it is safe to do so. While turning left, look for the merging traffic from the right side. Look for oncoming traffic while turning right. Finish the turn in the proper lane. If you need to move to another lane, do so only after completing you turn and then change the lane following the MSM rule. If the intersection is controlled by the traffic lights or by the traffic police personnel turn only when your lane is given the proper signal to turn (see Diagrams from 71 to 84).

Correct Way to Turn

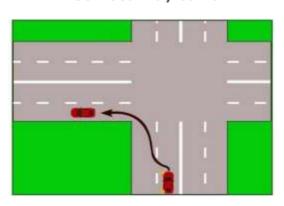


Diagram 73

Left Turn: If the lanes are not marked with turn arrows, then move to the left most lane well ahead in time after checking the traffic behind you and signaling your intent. Use left turn indication to let other users of the road know about your intention to turn left. Cautiously turn into the left most lane next to the kerb when it is safe to do so. Give way to pedestrians and other vehicles already in the intersection. Watch for through traffic.

Wrong Way to Turn

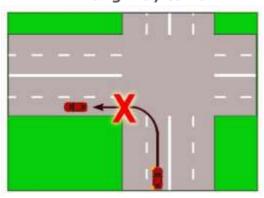
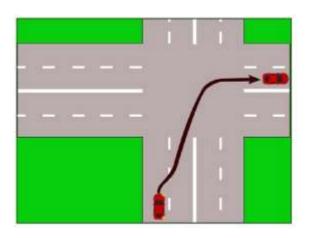


Diagram 74

Wrong Left Turn: Do not jump lanes when turning. If the turn arrows are not marked, then make a left turn only from the left most lane



Right Turn: After checking the traffic behind you and signaling your intent, move to the lane closest to the centre-line well ahead in time before making the right turn. Use right turn indication to let other users of the road know about your intention to turn right. Cautiously turn to the first lane left of the center-line by staying in your lane. Watch for the through traffic and oncoming traffic while making your turn.

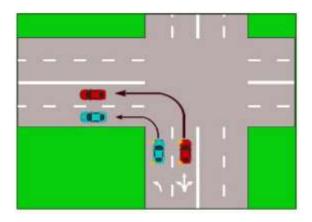


Diagram 77

Multilane Left Turn: If the lanes are marked with turn arrows, then move to one of the left turn lanes well ahead in time after checking the traffic behind you and signaling your intent. Use left turn indication to let other users of the road know about your intention to turn left. Cautiously turn left when it is safe to do so. Stay in your lane during the turn. Give way to pedestrians and other vehicles already in the intersection.

your lane to avoid any accidents.

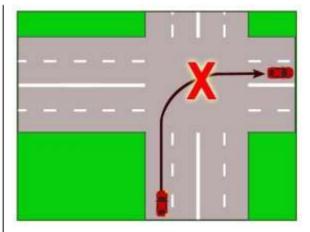


Diagram 76

Wrong Right Turn: Do not take a right turn from the wrong lane. Move to the lane closest to the centre-line. Do not jump lanes when turning.

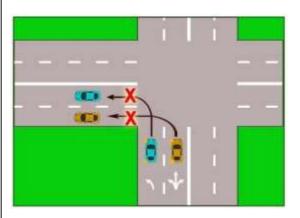
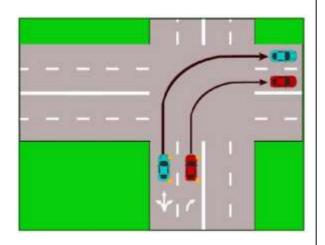


Diagram 78

Wrong Multilane Left Turn: Do not jump lanes or turn in to the wrong lane. Stay in



Multilane Right Turn: If the lanes are marked with turn arrows, then move to one of the right turn lanes well ahead in time after checking the traffic behind you and signaling your intent. Use right turn indication to let other users of the road know about your intention to turn right. Cautiously turn right when it is safe to do so. Stay in your lane during the turn. Give way to pedestrians and other vehicles already in the intersection. Watch for the through traffic and oncoming traffic while making your turn.

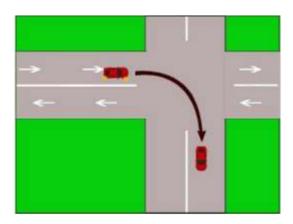


Diagram 81

Proper Right Turn: Enter the intersection straight around quarter of the way before turning the wheels to the right for a turn. Make a sharp and quick turn.

traffic trying to turn left.

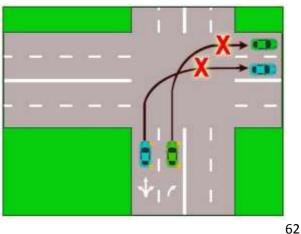


Diagram 80

Wrong Multilane Right Turn: Do not jump lanes or turn in to the wrong lane. Stay in your lane to avoid any accidents.

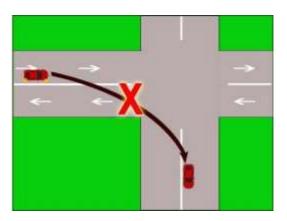


Diagram 82

Wrong Right Turn: Do not start your turn before you enter the intersection. Never cross the central dividing line. This results in the vehicle staying in the line of the oncoming traffic for much longer. It also blocks the

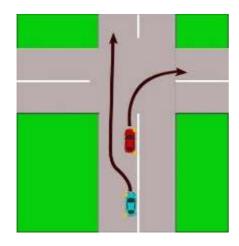


Diagram 83

Correct Way to Overtake A Vehicle That is Indicating to Turn Right: Proper way to overtake a stationary vehicle that is intending to turn right is, from the left side. Indicate to move to the left lane for overtaking using MSM rule.



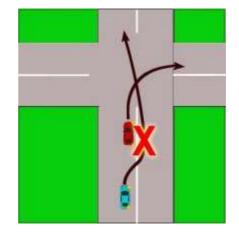


Diagram 84

Wrong Way to Overtake A Vehicle That is Indicating to Turn Right: You must not overtake a vehicle on the right if that vehicle is waiting to turn right.

Overtaking another vehicle requires caution. Overtake only when it is safe to do so. Before overtaking, make sure there is safe distance between your vehicle and the vehicle ahead. Change lanes by following the MSM rule. Always overtake on the right unless the vehicle to be overtaken is indicating to turn right.

If you need to overtake the vehicle ahead on a single lane road, do so only if it is permitted and there is a safe distance between you and the oncoming traffic. Immediately return to your side of the traffic after overtaking.

Do not overtake:

- if overtaking is prohibited,
- · when you are near the intersection or in the intersection,
- on a curve when you cannot clearly see the road ahead,
- in the tunnel or near or on the railway crossing,
- when oncoming vehicles is too close for safe overtaking.

If you are being overtaken by another vehicle, you should help the driver who is overtaking you by reducing your speed and keeping to the left of the lane or road.

6.5. Roundabouts

A roundabout is a circle at a T-junction or an intersection,- that requires the vehicles to travel in one direction, clock-wise, around a central island as shown in diagram 85. Vehicles entering the roundabout must give way to all other traffic and pedestrians. It is very important to follow MSM rule while entering and exiting the roundabout. Basic rules to negotiate a roundabout safely and effectively are as under:

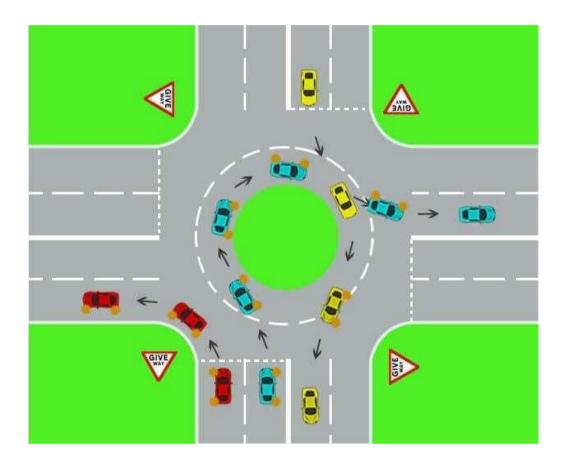


Diagram 85

- 1. Always move in a clock-wise direction.
- 2. Always give way to traffic on your right.
- 3. Give correct indicator.
- 4. Follow MSM rule while entering and exiting the roundabout.

Left Turn

As indicated by the red vehicle in the picture above:

- 1. Signal left and approach in the left most lane.
- 2. Give way to any traffic already in the roundabout. Pedestrians have the right-of-way at the crossings.

- 3. If it is safe to enter the roundabout, cautiously move forward in the left most lane. Continue signaling for the left turn.
- 4. Keep to the left on the roundabout and continue signaling left to leave in the left most lane.

Go Straight

Yellow vehicle in the above picture shows the proper way to go straight at the roundabout.

- 1. Select the appropriate lane on approach to and on the roundabout. If no marking on the road it is usually safest to keep to the right lane.
- 2. Approach without signaling as you have to go straight.
- 3. Give way to any traffic already in the roundabout. Pedestrians have the right-of-way at the crossings.
- 4. Keep to the right on the roundabout until you need to change lanes to exit the roundabout.
- 5. Signal left after you have passed the exit before the one you want, and exit safely.

Right/U Turn

Blue vehicle in the above picture shows the proper way to make a right turn at the roundabout.

- 1. Signal right and approach in the right-hand lane.
- 2. Enter cautiously giving right-of-way to pedestrians and other vehicles already in the roundabout.
- 3. Keep to the right on the roundabout until you need to change lanes to exit the roundabout.
- 4. Signal left after you have passed the exit before the one you want, and exit safely.

Similar strategy can be used to make a U-turn. In this case, the vehicle continues to go around the central island (roundabout) with right turn signal blinking and then signal left after you have passed the exit before the one you want to take.

6.6. U-Turn

A U-turn is a 180-degree turn that reverses the direction of your vehicle. You should not make a U-turn where it is specifically prohibited or unless it is safe and you can do so without disrupting the traffic.

6.7. Reversing

Reversing or backing up a vehicle can be tricky and requires good practice and control. Before reversing, it is advisable to walk around your vehicle to make sure nothing is behind it. Look to the front, sides, and rear. Continue to look out of the rear window of your vehicle while reversing. While reversing out of your drive-way to the public road, reverse into the nearest lane slowly and cautiously. Reversing your vehicle is not allowed on highways unless you are instructed to do so by the traffic police personnel.

Your aim while reversing your vehicle must be to ensure:

- the safety of others behind your car,
- you have the vehicle under control,
- you make proper use of the accelerator, clutch, brakes and steering,
- you reverse without brushing any other vehicle or pedestrian, and □ you are aware of other road users.

6.8. Stopping

Indicate your intention to stop to other drivers before you stop or slow down, and do not brake suddenly.

Even when driver is alert and the road and vehicle conditions are ideal, it takes some distance to bring a vehicle to complete stop. You can prevent crashing into another vehicle with good judgment and understanding of stopping distances. To bring a vehicle to stop:

- You need to see the danger or the need to stop,
- You must press the brake paddle to stop the vehicle.

Time taken to perform the above steps is called the reaction time, which may further be affected by the road or weather conditions. The distance a vehicle travels during the reaction time is called the reaction distance. Once you apply brakes, the friction between tyres and the road comes into play to slow down and finally stop the vehicle. The vehicle may travel some distance before it comes to a complete stop. This is called the braking distance. Braking distance depends upon the condition of the road and tyres, tyre pressure, vehicle weight, and the effectiveness of the braking system. The total stopping distance is the sum of the reaction distance and the braking distance:

For example, a vehicle travelling at 50 km/h, it will take around 11 metres to react using an average reaction time of three-fourth of a second (0.75 secs) for a normal, attentive driver. The braking distance for a vehicle running at 50 Km/h is around 14 metres. Therefore,

Stopping distance = 11 + 14 = 25 metres.

A vehicle travelling at higher speed will cover substantially longer distance before coming to a stop. Following diagram gives a good idea of how much distance is needed to stop a vehicle at different speeds on a dry level pavement.

Vehicle speed (in Km per hour)	Reaction Distance (in metres)	Braking Distance (in metres)	Stopping Distance (in metres)
32	6	6	12
48	9	14	23
64	12	24	36
80	15	38	53
96	18	55	73
112	21	75	96

6.9. Parking

Parking is regulated to keep the parked vehicles from blocking the roads. Obey parking rules. Look for parking sign for parking.



Do not park your vehicles where:

- · it is prohibited or unsafe,
- within or close to the intersection or round-about,
- in front of entry or exit of hotels, schools, hospitals, and other building,
- · on or near pedestrian crossings,
- · on a footpath,
- · on the wrong side or the right side,
- where it may block the normal flow of traffic, and
- opposite another parked vehicle or as an obstruction to the other vehicle.

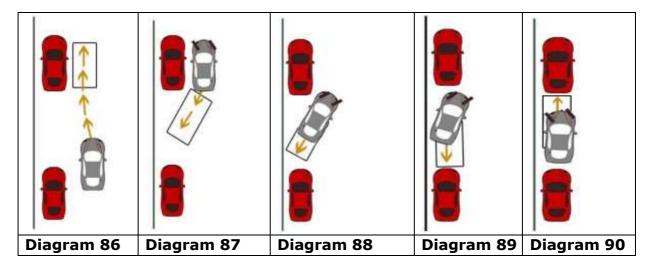
If you need to stop or leave your vehicle on a major road, move them away from the main traveled portion of the road onto the shoulder. Use emergency lights, parking lights, or low-beam headlights especially during nights when parking on the highways to alert other drivers.

Always apply the parking/hand brakes after parking the vehicle. Before moving from the parking position, always check for traffic, and indicate your intention with proper use of signals.

DO NOT leave children and pets unattended in the parked vehicle.

Parallel parking

This type of parking means parking vehicles in a line from front to rear. This is usually on the left edge of the road. Following steps as shown in diagrams from 86 to 90 can be used for parallel parking of your vehicle:



parallel to the car parked ahead in such a way that	the steering wheel by 360° in anti-clock wise direction and backup slowly until your left wing mirror is in line	by 360° in the clock wise direction. This will straighten your wheels. Now backup slowly, until you see your	turn the steering wheel by 360° in the clock wise direction and backup slowly until	your steering wheel to the left by 360° to straighten your wheels and move forward to position your
are in the	your left wing mirror is in line with the rear	backup slowly,	and backup	forward to

To exit from the parallel parking position,

- back up slowly and cautiously to avoid hitting the vehicle in the rear,
- follow the MSM rule to check for any traffic coming from behind in the rearview mirror, indicate your intention to come out of the parking by showing the right indicator, look over the shoulder to cover the blind spots,
- turn the wheels to the right sharply, and slowly move forward.

Angular Parking

In this case, the vehicles are parked at an angle to the kerb of the road as shown in diagram 91. Following steps can be used for angular parking:



Diagram 91

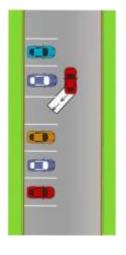
- 1. Look for the traffic in the mirrors, and over the shoulder.
- 2. Flash left indicator to signal that you intend to park the vehicle.
- 3. Steer into the parking space and straighten the wheels.
- 4. Apply the handbrakes, and shift into first gear.

To exit from the angular parking, look through the mirrors, and over the shoulder, and slowly reverse the vehicle if the road is clearly. Take extra care for cyclists, rickshaws or pedestrians.

Perpendicular Parking

In this case, the vehicle is part at right angle to the road. You reverse park your vehicle so that it is easy to exit as shown in diagrams from 90 to 92.





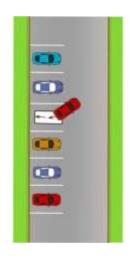


Diagram 92

Diagram 93

Diagram 94

Step 1: Go the car next to the **Step 2**: Turn steering to the **Step 3**: Once your vehicle is parking spot as shown left completely, change to parallel to the parked above. The distance reverse gear and slowly vehicles, straighten out the between your vehicle and the reverse your vehicle into the steering and continue parked vehicles must be at parking spot. Watch out for reversing until you have least 5-6 feet. The rear of people, cyclists, and other parked properly. your vehicle must have vehicles.

crossed the second line of your parking spot.

To exit from perpendicular parking:

- 1. indicate your intention to turn left or right by giving proper turn signal,
- 2. look out for through traffic, pedestrians, cyclists, and slowly and cautiously move ahead until your vehicle is almost out of parking,
- 3. turn your steering wheel in the direction you want to turn continuing to keep the turn signal blinking while steering your vehicle in the proper direction.

Parking on A Slope

While parking on a slope, you must ensure to apply parking brakes. Also, move the steering wheel of your vehicle to point the front wheels as indicated in the diagrams from 93 to 95 given below. This ensures that in case the parking brakes disengage and the vehicle rolls down the hill, it gets stopped by the kerb, if present. If the kerb is not present, the vehicle rolls away from the road.

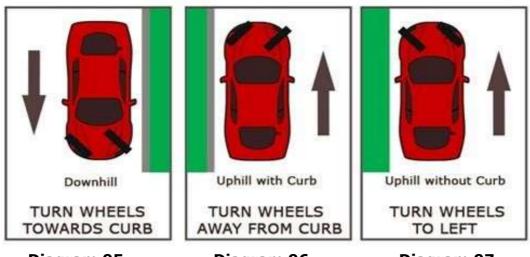


Diagram 95

Diagram 96

Diagram 97

6.10. Emergency Situations on the Road

There is always a chance for some kind of unexpected emergencies no matter how cautious you are driving or how well-maintained your vehicle is. This section discusses some of the common situations and some tips to handle them should they arise. You are advised to call for assistance in case of any emergency.

Brake failure

If you see a warning light about the brake problems, get them checked immediately at the authorized service centre. If you experience brake failure while driving, pump the brake pedals hard many times. This may build up enough brake pressure to stop the vehicle. If it does not work, slowly apply parking brakes to avoid skidding. If the conditions of the road allow you to slowly come to a stop, shift your vehicle into a lower gear and continue to do so as your vehicle slows down. Cautiously move the vehicle towards the edge of the road on your side, and pull over and stop. Wait for help and do not drive the vehicle to the nearest garage.

Steering Failure

Steering failure occurs when your vehicle stops responding to your turning of the steering wheel. If you experience a steering failure, slow down. Do not brake unless it is necessary to avoid an accident. If you must apply the brakes, do so slowly. Sudden application of brakes may throw the vehicle out of control.

You may also experience the stiffening of the power steering wheel if the engine dies. Try to start the vehicle quickly while continuing to drive (by pressing the clutch pedal and turning the key to start the vehicle for example). In case the vehicle does not start, you may have to stop the vehicle. In case your vehicle has power brakes, you may have to press the brakes hard to stop the vehicle.

Blowouts

Blowout is a burst tyre that can throw your vehicle out of control. If you experience a blowout, hold the steering wheel tightly, steer the vehicle straight ahead, and slowly release the accelerator pedal. Do not brake suddenly and only brake when the vehicle is under your control. Pull the vehicle completely off the road or highway cautiously watching out for other traffic.

Vehicle Approaching Your Lane

If you see a vehicle travelling towards you in your lane, slow down immediately by braking and move out of the oncoming vehicle's path towards the left edge. Avoid moving to the right side to avoid a collision as the other drive may try to return to the correct lane and will be in your path again. If the vehicle continues to move towards you, steer off the road to the left to avoid a crash or head-on collision. Blow horn or flash headlights to alert the driver in case he or she may be sleepy or distracted.

Running Off the Road

If your vehicle drifts off the road and on to the shoulder, do not try to swerve back onto the road immediately. Stay on the shoulder and slow down by release the accelerator pedal. After you have reduced the speed go back on the road when it is safe to do so and then speed up.

Headlight failure

If your headlights suddenly go out or stop working, try the headlight switch a few times or use the dimmer switch. If that does not help, try using parking lights or hazard warning lights as one of them may work and may provide you with enough light to warn other vehicle and guide you steer you vehicle off the road.

Sudden opening of the hood

If the hood of your vehicle suddenly opens while you are driving, slow down immediately by taking your foot off the accelerator and try to look under the hood to see the road ahead. If that does not help, put your head out of the window safely to look around the hood. You can use the lane markings as a guide. Steer your vehicle to the side of the road and stop.

Stuck Accelerator Pedal

If your vehicle's accelerator pedal gets stuck, you may be able to free it by hooking your toe/foot under the pedal and pushing it up to free it. Keep an eye on the road while trying to free the pedal. If it does not help, apply the brakes and shift the gear to neutral. Choose a safe path and steer your vehicle to the edge of the road. Use warning/hazard lights to warn other drivers.

Vehicle stuck on railway Tracks

If your vehicle gets stuck on the railway tracks and a train is approaching, you and your passengers must leave the vehicle immediately. Move away quickly from the railway tracks to a safe place in the direction from which the train is approaching to avoid being stuck by the debris from the collision. Do not try to stay on the tracks to remove your belongings from the vehicle.

Slippery, Flooded or Wet Road

Roads can become slippery when wet during rains, snow or ice. Driving on such roads at high speeds can be dangerous and can cause the vehicle to lose traction. If you come across such a situation while driving, gradually take your foot off the accelerator to slow down the vehicle. Braking suddenly on a wet or slippery road can make the vehicle go out of control. Tightly hold your steering wheel and try to keep the vehicle go straight ahead. Sudden and excessive turning of the steering wheel can also result in the vehicle going out of balance.

Fire or Overheating

If you see fire or smoke coming out of the vehicle, immediately steer the vehicle off the road, and stop. Turn off the ignition and get all the passengers away from the vehicle immediately. Maintain a safe distance from the vehicle to avoid getting injured in case of sudden burst of flames or explosion. Do not use water to put out the fire as that may actually spread the blaze. If you have fire extinguisher, use it on the flames by opening the hood only enough to direct it on the fire. If the fire is strong or if opening the hood might be dangerous, stand back and call for help.

In case there is an indication of engine overheating, switch off any unnecessary vehicle equipment like air conditioning. Pull over to the side of the road, stop the vehicle and turn the engine off immediately. Raise hood if it is safe to do so to allow the engine to cool down. Do not open the radiator cap. Driving the vehicle with an overheated cooling system can damage the engine.

Plunging Under Water

Most vehicles with windows and doors closed will float on the surface for a few seconds and may stay afloat for a couple of minutes. Make every effort to come out of the vehicle immediately. Use open windows to exit before the water reaches the level of the windows. If the vehicle becomes

submerged, the doors may not open until the pressure inside the vehicle and outside is equal. You may be able to open the doors once the vehicle is completely filled with water and there is no structural damage to the vehicle.

The vehicle usually sinks nose first due to the weight of the engine in the front. The air pocket in the rear passenger compartment provides you with some breathing time while you plan for an exit strategy. You may have to move to the rear to exit. If there are other passengers in the vehicle try to exit the vehicle together.

Avoiding a Collision

There are times when it looks that a collision may happen. There are mainly following options available to the driver to avoid a collision.

Brakes are the instinctive choice to slow down the vehicle and to bring it to stop quickly. However, if the vehicle is not equipped with anti-lock braking systems, sudden and hard braking can result in a skid. If the vehicle starts to skid, release the brake pedal, then push it down again.

Evasive Steering can also be used to go around the object or vehicle to avoid collision. It is important to consider the traffic and the movement of the vehicle you are avoiding.

Accelerating quickly is another manoeuvre that may be necessary at times to avoid collision when you are about to be hit from behind or from the side. For vehicles with manual transmissions, shift to the lower gear to accelerate quickly.

Protecting Yourself and Your Passengers in Collisions

There are times when you are not able to avoid a collision even after you try everything you can to avoid a collision. Your seatbelt is your best protection against serious injury or death in a collision. Here are some guidelines that will help you in situations if you cannot avoid a collision.

Hit from the behind. If you are about to be hit from behind,

- Be ready to apply the brakes so that you will not be pushed into another vehicle in the front.
- Brace yourself between the steering wheel and back of the seat.
- Press your head firmly against the head restraint to avoid sudden jerks to your neck.

Hit from the side. If you are about to be hit from the side,

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• Try to take the hit, if it is at all possible, on the side or the area of the vehicle away from you and other passengers in the car.

- Brace yourself firmly with the steering wheel to prevent you being thrown against the side of the vehicle.
- Get ready to steer quickly to control the vehicle in case your vehicle goes into a spin when hit.

Hit from the front. If you are about to be hit from the front, the airbags get deployed that may shield you from the impact. However, if your vehicle is not equipped with the airbags,

- Use your hands and arms to protect your face.
- Throw yourself across the seat, to avoid getting hit by the steering column or the windshield.

7. HAZARDOUS DRIVING CONDITIONS

This chapter highlights some good driving practices that can be followed while driving in hazardous conditions.

7.1. Weather Conditions

Driving in difficult weather conditions like rain, snow, or fog presents its own hazards and requires extra driving skills. Such weather conditions can considerably reduce your ability to see the road, vehicles, and the surroundings.

Fog during winter times can reduce the visibility drastically as shown in diagram 98. The best rule during foggy conditions is to avoid driving. If you must drive, you should:

Lower your speed greatly according to the visibility.



Diagram 98

- Turn the headlights on. Use dipped lights (low beam) to prevent glare. Never drive with only your fog lights on.
- Use left edge markings on the road to guide you.
- It is advisable to use emergency blinking lights, if needed.
- If you are following a vehicle increase the distance between the vehicle in front of you.
- Use your windscreen wipers and defroster, if needed, for best vision.

Rain can reduce your visibility. Slow down at the first sign of rain. Use windscreen wipers, dipped headlights (low beam) and defroster. Rain and wet conditions can also turn the road slippery reducing the grip of your vehicle's tyres on the road. This can result in a condition called 'aquaplaning' or 'hydroplaning' as shown in diagram 99.

Aquaplaning, resulting from a combination of road conditions, water, and speed, makes the tyres glide on a thin layer of water losing all contact with the road. This means there is no friction when braking,



accelerating, or turning and can result Diagram 99 in skidding of the vehicle.

To prevent aquaplaning, reduce the speed of the vehicle when it starts raining, or you see standing water or puddle. Maintain proper tyre pressure and replace tyres when they become worn or lose treads.

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Snow, ice or sleet makes the roads wet and slippery. On slippery road, the key to driving is slowing down, braking or turning gently, and maintaining an increased distance from the vehicles in front of you.

Clear any snow and ice from your vehicle before driving, and use defroster. Watch out for shaded areas or under bridges as the ice melts slowly at such places. Keep

your vehicle's ventilation system in good condition, and check for any leaks in the exhaust system to prevent carbon monoxide poisoning.

You may need to use chains while driving during heavy snowfall. It is a good practice to carry blankets with you, in case you get stuck in heavy snow.

7.2. Driving in Hills

Driving in a mountainous or hilly region can be quite a challenge. Slow down when you come to a hill or a curve. Do not overtake another vehicle when a curve or hill is blocking your view as you cannot see far enough ahead to know if it is safe to

overtake. Keep your-vehicle to the left as the roads are usually narrow. You may use horn, if it is not prohibited, to warn other drivers. Also, keep an eye for falling rocks in landslide prone zones especially during or after rains.



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Diagram 100

7.3. Night Driving

Driving at night is a bigger challenge than many people may think. When driving at night, your ability to see ahead, and the ability of the other road users to see you, is reduced due to low visibility, glare, and fatigue. Make sure your vehicle lights are working properly. Clean your windscreen and rear window and ensure that they are free of defects.

Use headlights at sunset, in the night, or whenever there is no sufficient light on the road. It is advisable to reduce the speed of the vehicle at night as the visibility is reduced. Use dipped lights (low beam) well beforee

you see an oncoming vehicle or if you are following another vehicle to avoid dazzling other drivers with your headlights.

Glare from the oncoming vehicles, as well as the bright headlight reflected from the rear-view mirror can reduce your vision or may even blind you momentarily as shown in diagrams 101 & 102. To reduce the glare from oncoming vehicles, shift your eyes to the lower left side of the road, and concentrate on the left side markings on the road. To cut the glare from the rear, adjust your rear-view mirror.



Diagram 101



Diagram 102

Fatigue is another reason behind increased chances of a motor accident happening. Driving at night either after a long and tiring day or after driving for a long time can make you drowsy. Always try to be well rested before you start your trip. To reduce fatigue you should:

- Stop as often as you need. Come out of the vehicle and walk around to stretch and get some fresh air.
- Let someone else drive, or take turns driving.
- Have a cup of coffee or soft drink.
- Chew gum or eat candy □ Ask passengers to talk to you.
- Listen to the radio.
- If all this does not help, it is better to stop at a safe place (road side restaurant, motel, petrol station etc), turn off the engine, lock the doors, open the windows slightly for ventilation and sleep for a while.

8. DRIVING OFFENSES AND PENALTIES

The aim of enforcing the traffic laws, rules and regulations is to enhance road safety and reduce road accidents. These laws are enforced by issuing challans in the name of the offenders. Traffic challans and fines are meant to discourage irresponsible driving and instilling discipline on roads. Some of the important rules for driving offenses are explained below.

8.1. Drunken Driving

Drunken driving in India is an offense under Section 185 of Motor vehicles Act 1988. If any person, while driving or attempting to drive a motor vehicle, is liable to be charged for impaired driving, if:

- he or she is found to have alcohol exceeding 30 mg per 100 ml of blood in his or her blood is liable to be for impaired driving, or
- is being under the influence of a drug to such an extend as to be incapable of exercising proper control over the vehicle

Furthermore, any person who abets the commission of this offense can also be charged under section 188 of the Motor Vehicles Act 1988.

8.2. Over Speeding

Driving a motor vehicle in violation of section 112 of the Motor Vehicles Act, 1988 is an offence under section 183 of the Motor Vehicles Act 1988. Furthermore, whosoever causes any person, employed by him or her, or subject to his or her control in driving, to drive the vehicle in violation of the section 112 can also be charged under this section.

8.3. Driving Dangerously

Driving a motor vehicle in a manner which is dangerous to the public, having regard to all the circumstances of the case including the nature, condition and use of the place where the vehicle is driven and the amount of traffic which actually is there at the time or which might reasonably be expected to be in the place, is an offense punishable under section 184 of the Motor Vehicles Act 1988.

Furthermore, any person who abets the commission of this offense can also be charged under section 188 of the Motor Vehicles Act 1988.

8.4. Use of Helmets

As per rule 185 of the Haryana Motor Vehicles Rules, 1993, every person driving or riding a motor cycle of any class or description in a public place must wear protective head-gear (helmet) conforming to the standards of Bureau of Indian Standards. However, in addition to the persons exempted under section 129 of the Motor Vehicles Act, 1988, persons driving or riding a two-wheeler, who are medically advised by a Chief Medical Officer not to wear such headgear or a Sikh wearing a turban shall not be required to wear a headgear.

8.5. Use of Mobile Phone or Cellphones

Drivers of the motor vehicles must not use or talk on cellphone or mobile phones while driving a vehicle. This is an offense as per the Rule 21(25) of the Central Motor Vehicles Rules, 1989 and section 184 of the Motor Vehicles Act, 1988.

8.6. Smoking while Driving

Rule 21(14) of the Central Motor Vehicles Rules, 1989, together with section 184 of the Motor Vehicles Act, 1988, provide guidance regarding smoking while driving. The licensing authority can disqualify or revoke the driving licence of the driver. The hon'able Punjab and Haryana High Court has also directed in the case Nimit Kumar Vs. Chandigarh Administration that "no person while driving a vehicle of any kind including two-wheelers shall use cellular phone and also shall not smoke."

8.7. Racing or Trial of Speed

Any person who either permits or takes part in a race of trial of speed of any kind between motor vehicles in any public place without the written consent of the State Government can be charged under section 189 of Motor Vehicles Act 1988.

8.8. Using Vehicles without Registration or Insurance

It is a punishable offense under section 192 of the Motor Vehicles Act 1988 to drive or allow use of a vehicle without registration in violation of the provisions of section 39 of the Motor Vehicles Act 1988.

This will not 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 similar 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.

Also, it is a punishable offense under section 196 of the Motor Vehicles Act 1988 to drive or allow use of a vehicle without proper insurance in violation of the provisions of section 146 of the Motor Vehicles Act 1988.

8.9. Obstruction to free flow of traffic

Any person who keeps a motor vehicle on any public place in such a manner to cause impediment to the free flow traffic can be charged under section 201 of the Motor Vehicles Act 1988.

8.10. Emergency Vehicles

Rules of the Road Regulations 1989 states that every driver of a motor vehicle must give free passage to the fire service vehicles and ambulances by drawing to the side of the road.

On a two-way road, the drivers must stop as close as possible to the left side of the road. On a one-way road with more than two lanes, stop as close as possible to the nearest edge of the road and stay clear of any intersection. On multi-lane highways, do not block the shoulder of the road as many times an emergency vehicle will use the shoulder if all the lanes are blocked.

Do not apply brakes abruptly or pull over suddenly, but calmly and carefully steer your vehicle to the side by observing the traffic in the back, on the sides and ahead. Never try to follow or overtake an emergency vehicle.

8.11. Duty of a Driver in case of an Accident

Motor Vehicles Act 1988 was amended after the Hon'ble Supreme Court order in the case of Pt. Parmanand Katara vs Union of India in 1989 to make it mandatory on both the driver/owner of the vehicle to take the accident victim to the nearest doctor, and the doctor to treat the victim without waiting for any formalities. As per the section 134 of the Motor Vehicles Act 1988, 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:

 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, (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 render medical aid or treatment without waiting for any procedural formalities), unless the injured person or his guardian, in case he is a minor, desired otherwise,

- give on demand by a police officer any information required by him, or, if no police officer is present, report the circumstance 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,
- give the following information in writing to the insurer, who has issued the certificates of insurance, about the occurrence of the accident, namely:
 - insurance policy number and period of its validity,
 - date, time and place of accident,
 - particulars of the persons injured or killed in the accident,
 - name of the driver and the particulars of his driving licence.

9. COMMON DEFINITIONS

Following definitions have been taken from the Motor Vehicles Act 1988, and Central Motor vehicles Rules, 1989.

- Agricultural tractor: means any mechanically propelled 4-wheel vehicle designed to work with suitable implements for various field operations and/or trailers to transport agricultural materials. Agricultural tractor is a non-transport vehicle.
- 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.

□ Categories of Vehicles

- Category L-1: means a motorcycle as defined in sub-section (27) of section 2 of the Motor Vehicles Act, 1988, with maximum design speed not exceeding 45 km/hour and engine capacity not exceeding 50 cc, if fitted with a thermic engine.
- Category L-2: means a motor cycle as defined in sub-section (27) of section 2 of the Ac Motor Vehicles Act, 1988, with maximum design speed exceeding 45 km/hour and engine capacity exceeding 50 cc, if fitted with a thermic engine.
- **Category M:** means a motor vehicle with at least four wheels used for the carriage of passengers and their luggage.
 - Category M-1: means a motor vehicle used for the carriage of passengers and their luggage and comprising no more than eight seats in addition to the driver's seat.
 - Category M-2: means a motor vehicle used for the carriage of passengers and their luggage and comprising more than eight seats in addition to the driver's seat and having a maximum mass not exceeding 5 tonnes.
 - **Category M-3:** means a motor vehicle used for the carriage of passengers and their luggage and comprising more than eight seats in addition to the driver's seat and having a maximum mass exceeding 5 tonnes.
- **Category N:** means a motor vehicle with at least four wheels used for the carriage of goods.
 - **Category N-1:** means a motor vehicle used for the carriage of goods and having a maximum mass not exceeding 3.5 tonnes.
 - Category N-2: means a motor vehicle used for the carriage of goods and having a maximum mass exceeding 3.5 tonnes but not exceeding 12 tonnes.
 - Category N-3: means a motor vehicle used for the carriage of goods and having a maximum mass exceeding 12 tonnes.
 - **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.
 - Contract carriage: means a motor vehicle which carries a
 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 and includes a maxicab,
 and a motorcab.

- **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.
- **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.
- **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.
- Goods: includes livestock, 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.
- **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.
- **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.
- **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.
- 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.
- 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. 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.
- **Licensing Authority:** means an authority empowered to issue licence under Chapter II or, as the case may be, chapter III.
- **Light Motor Vehicle (LMV):** 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 2[7500] kilograms.
 - 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.

- **Medium goods vehicle:** means any goods carriage other than a light motor vehicle or a heavy goods vehicle.
- 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.
- Motorcab: means any motor vehicle constructed or adapted to carry not more than six passengers excluding the driver for hire or reward.
- Motor car: means any motor vehicle other than a transport vehicle, omnibus, road-roller, tractor, motor cycle or invalid carriage.
- Motor cycle: means a two-wheeled motor vehicle, inclusive of any detachable side-car having an extra wheel, attached to the motor vehicle.
- 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 twenty-five cubic centimetres.
- Tractor-trailer: A Division Bench of the Punjab and Haryana High Court in United India Insurance Company Ltd. v. Pritpal Singh (1996-2) 113 Punj. L.R. 49 held that even though trailer may be drawn by a motor vehicle if by if self is a motor vehicle and both the

Tractor & Trailer taken together would constitute a transport vehicle.

- **Omnibus:** means any motor vehicle constructed or adapted to carry more than six persons excluding the driver.
- 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.
- **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.
- **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.

- 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.
- **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.
- **Registering authority:** means an authority empowered to register motor vehicles under Chapter IV.
- 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 is superimposed on, and a part of whose weight is borne by, that motor vehicle.
- **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.
- 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.
- **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.
- **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.
- **Trailer:** means any vehicle, other than a semi-trailer and a sidecar, drawn or intended to be drawn by a motor vehicle.
- **Transport vehicle:** means a public service vehicle, a goods carriage, an educational institution bus or a private service vehicle.
- 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.
- **Weight:** means the total weight transmitted for the time being by the wheels of a vehicle to the surface on which the vehicle rests.