Owner's Manual

Mahindra Pick-up

ISSUED: JUNE 2007

MAHINDRA & MAHINDRA LTD.
GATEWAY BUILDING, APOLLO BUNDER,
MUMBAI 400039, INDIA

Congratulations! On purchasing the MAHINDRA GOA PICK-UP.

Your MAHINDRA is a dynamic blend of comfort, ruggedness and utility.

Before you start driving your MAHINDRA, we strongly suggest you to spend some time understanding it better. A good way to do this would be to read this manual while simultaneously exploring your MAHINDRA physically.

We'll be delighted to know about your experience with the your MAHINDRA. We wish you happy & safe motoring in your new vehicle.

1

Introduction

Warning

A WARNING indicates a situation in which serious or fatal injury could result if the warning is ignored.

Caution

A CAUTION indicates a hazardous situation which, if not avoided may result in minor (or) moderate injuries, damage to your vehicle or other properties.

Note

A NOTE provides information and sometimes suggests how to make better use of your vehicle.

Note

In view of policy of continuously improving our products, we reserve the right to alter specifications or designs without prior notice and without liability / Obligation. Illustrations do not show the vehicle in the standard form. Please be aware that this manual applies to all models and options. As a result you may find some explanations for equipment not installed on your vehicle. All the information, illustration, and specifications in this manual are based on the latest product information available at the time of publication. Due to improvements and changes in design & specifications there may be differences between your vehicle and the information on this manual.

An Authorised Mahindra Dealer knows your vehicle best. So when maintenance or service is necessary, that's the place to go.

Caution

Any unauthorised add-on electrical / electronic installation (or) installing a mobile two-way communication system in your Mahindra vehicle could affect electronically controlled fuel injection system (CRDe / MPFI), ABS and other electronic units. Before installing such system / equipment contact your Mahindra Authorised dealer.

Modification of your Mahindra

This vehicle should not be modified with non-genuine products. Modification with non-genuine parts / products could affect performance, durability & safety of the vehicle, and may even violate governmental regulations. In addition, performance problems or damage resulting due to the unauthorised modification may not be covered under warranty.

Keep this manual in the vehicle as a reference for safe & enjoyable driving of your Mahindra. This should be given along with the vehicle to the next owner when the vehicle is sold to the next owner.

Environmental Caring

Your vehicle has been designed with the aim of caring for the environment. A number of features have been incorporated in your vehicle to ensure environmental compatibility throughout their life cycle.

As a user, you too can contribute to protect the environment by operating your vehicle in a proactive manner. It is mostly depends on your driving style and the way you maintain your vehicle. Do not dispose of parts replaced in the course of regular vehicle maintenance (like battery, oil filter, air filter, etc.) and oil containers (empty or with used oil, etc.) with house hold waste. Dispose of them through specialist organizations. In all cases, comply with state, territory and/or local bye-laws.

Graphic Symbols on your vehicle

Some of the following symbols are used to identify controls & display on your vehicle.

						
LIGHTS	WATER IN FUEL FILTER	HEADLIGHT LOW BEAM	PARKING LIGHTS	HAZARD WARNING FLASHER	REAR WINDOW DEFROSTER	LOW BRAKE FLUID
				AC HI	AC LO	
HORN	WINDSCREEN WIPER	WINDSCREEN WIPER & WASHER	VENTILATOR FAN	AC HIGH COOL	AC LOW COOL	PARKING BRAKE
						
AC FACE MODE	AC FACE/FLOOR MODE	AC FLOOR MODE	AC FLOOR & DEFROSTING MODE	DEFROSTER MODE	AIR RECIRCULATION	

Some of indicators & warning lights in instrument cluster

	Security System Status		Turn signal warning light
	Battery Discharge Warning Light		Head light beam
	Low Engine Oil Pressure Warning Light		Engine pre-heater/glow-plug light
ABS	Anti-Lock Brake System Warning Light	4WD LOW	4WD Low indicator light
	Door Ajar Warning Light		4WD high indicator light
	Engine Mallfunction Light		Check Engine Warning Light
	Seat Belt Warning Light		Rear Fog Light
	Fuel		Temperature

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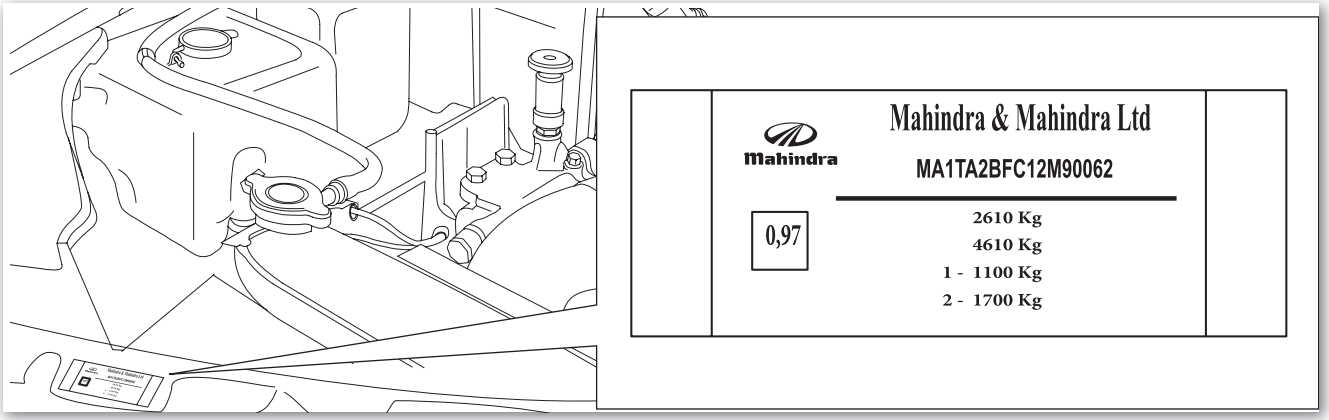
Identification Numbers

Vehicle Identification Number (VIN)/ Vehicle Serial Number

The vehicle serial number / VIN is the legal identity of your vehicle. It is used in registering the ownership. To locate the vehicle serial number and the engine number, open the bonnet. You will find both the numbers on a label near the bonnet release lever.



Chassis Number

The chassis number is punched on the right side of the chassis close to the front right wheel, as shown in diagram given alongside.

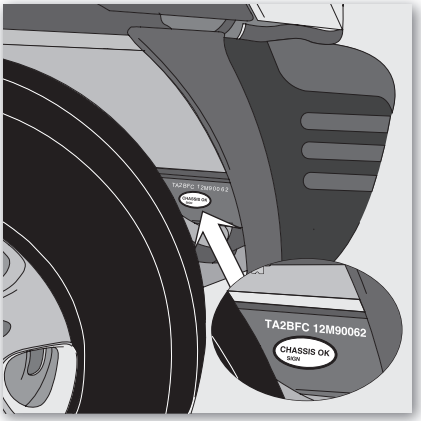
Engine Number

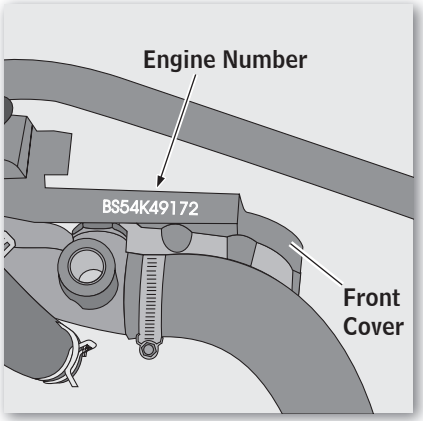
The engine number is punched on left-hand side top face of the engine

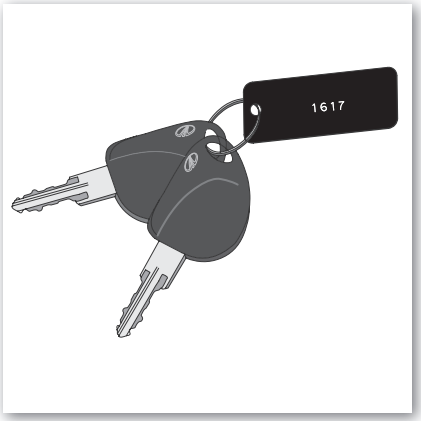
Keys and Door Locks

Keys

Your Mahindra comes with a set of two identical keys. The keys operate all locks in your Mahindra including those of the doors, ignition cum steering and fuel lid (if applicable). We advise you to keep one of these keys at a safe place for emergency use (but not in the vehicle).







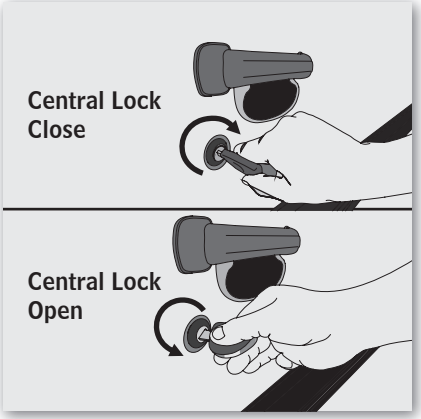
NOTE

A new pair of keys can be acquired through Mahindra Authorised Dealer by stating the key number provided on the tag.

WARNING

Do not leave the ignition key in your vehicle especially when children are in the vehicle.

Never leave children & pet animals unattended inside the vehicle



Door locks

Both the front doors can be locked from both the inside and the outside, using either the door-lock lever or the key when the door is closed. The upper door-lock levers needs to be depressed individually to lock doors from the inside. The driver's door can be locked only from the outside with the key. This ensures you will never be stranded outside, even if the keys are left inside the vehicle.

The rear doors (of double cab models) can be unlocked from inside only.

Central Door Locking

The central door locking system can be operated only from the driver's door and only when the door is closed. It can be activated from the outside with the key or from the inside with the door-locking lever. In case of failure in the vehicle's electrical system, both the front doors can be opened with the key. The driver upper door-lock lever needs to be depressed to lock all doors simultaneously, from inside.

For Remote locking / car security system activation, if installed, please refer security system manual, supplied with the vehicle.

CAUTION

If you have decided to keep the doors locked when you are driving, remember that it may become more difficult for those assisting you to get access to your vehicle in case of emergency.

WARNING

Before opening the door, always look for and avoid oncoming traffic.

Opening the Doors

From outside

Unlock the door using the remote or key as applicable.

Place your hand behind the handle.

Press the inner lever towards you & pull the door.

Opening the door from inside

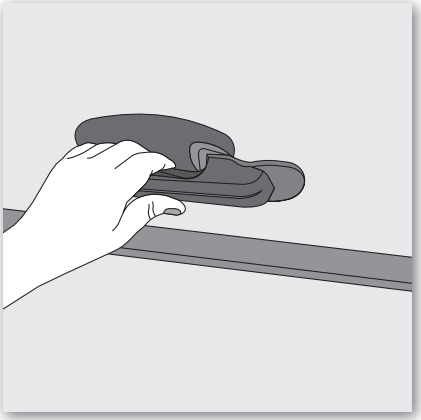
Pull the lever as shown in the picture & push the door.

Cargo Box

Tail Gate

To open the tail gate, place your hand behind the handle and pull the handle up. The support cable will hold the tailgate horizontally as shown in the picture. The tailgate will get locked automatically while closing it. After closing the tailgate, make sure that the latches are securely locked.

The weight of the cargo load must be evenly distributed. All cargo should be securely fastened with ropes or straps to prevent it from shifting or sliding within the vehicle.



Caution

- In a sudden stop or collision, unsecured cargo could cause personal injury.
- Avoid driving the vehicle with tail gate open condition.

To lower the tailgate fully, release the support brackets of the cable, from the lugs.

Note

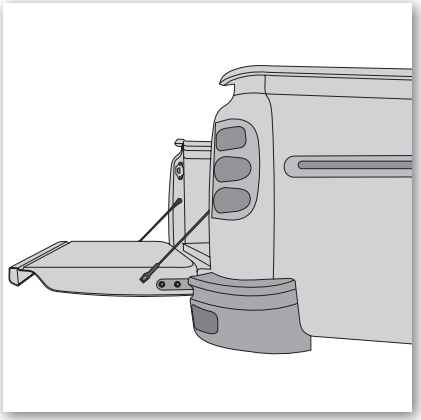
Lower the tailgate gently when it is unhooked. Make sure the tailgate is securely attached to the lugs before closing the tailgate.

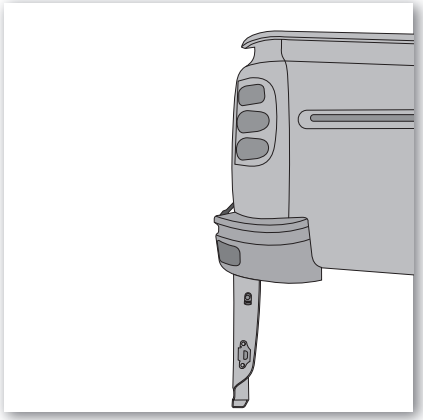
Caution

If the open tailgate hides the tail/ stop, rear turn indicators or reflectors while you are parked, other road users must be warned of the presence of your vehicle by a warning triangle or other suitable methods. Do not drive the vehicle with the tailgate open / down.

Warning

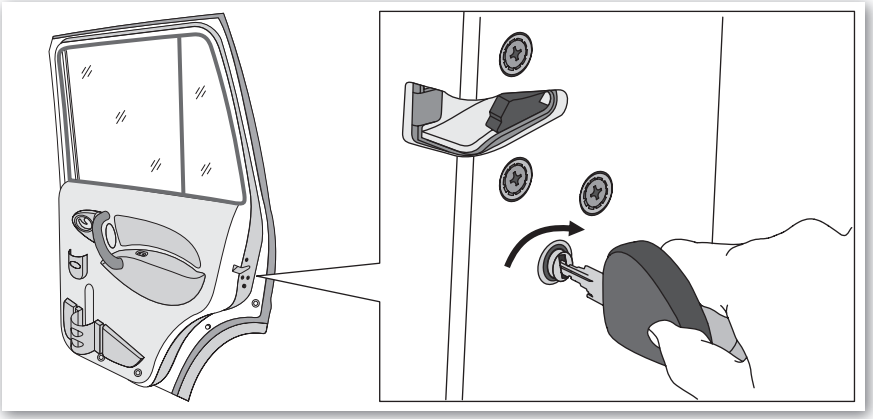
Don't travel on the cargo box. Travelling outside the cockpit causes serious danger conditions.





Child-proof Lock (on Double Cab Models)

The rear doors are equipped with child-proof locks, on double cab models only. To activate the locks, use the key and turn the red knob located on each door (close to the latch) clockwise before closing the doors.



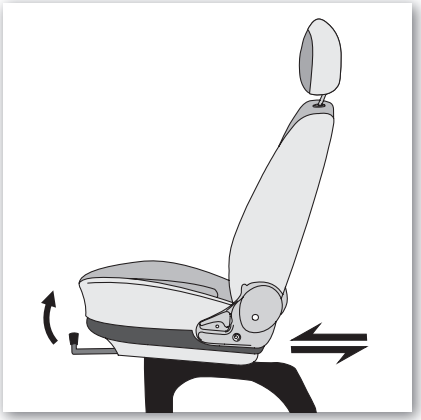
Seating Adjustments

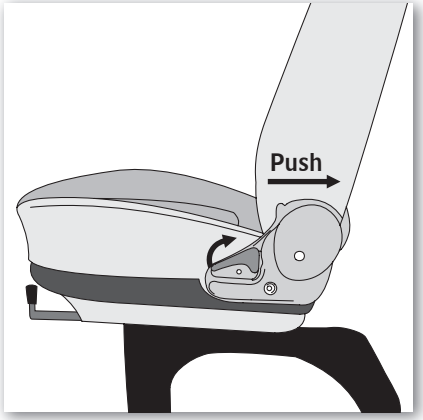
Moving the Front Seats Forward or Backward

To adjust the position of a front seat, pull up the lever underneath the front edge of the seat and slide either forward or backward. When you reach the desired position, release the lever. Rock the seat a little to ensure that its latch is secured properly.

CAUTION

Adjustable seats and seat-backs that are not securely latched are dangerous. In a sudden stop or collision, the seat or seat-back could move causing injury. Make sure the adjustable components of the seat are locked properly.





CAUTION

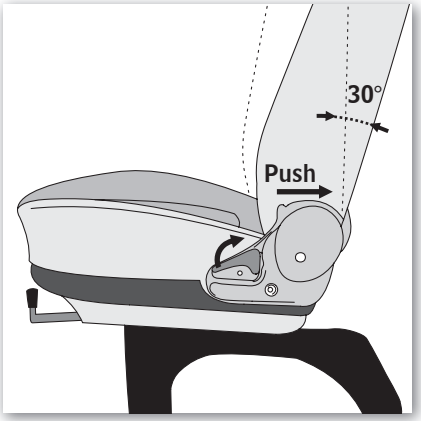
Do not drive the vehicle unless the occupants are properly seated. Persons not properly seated and/or properly restrained by seat belts can be severely injured in the case of emergency braking or a collision.

Adjusting the Angle of the Seat-back/ Reclination

To adjust the angle of the seat-back, pull up the lever at the side of the seat and push the seat-back. When you reach the desired angle, release the lever. To return to the original position, pull up the lever and lean forward.

CAUTION

The belts provide maximum protection when seats are in their normal upright position. So, do not recline your seats steeply. During the sudden braking or a collision, you can slide under the lap belt, if your seat is reclined to the unsafe level, and suffer serious internal injuries.



CAUTION

After adjustment, gently rock the seat to make sure it is securely locked. Unlocked / improperly locked seat back is dangerous as it can eject/throw the passenger during the sudden braking or collision.

WARNING

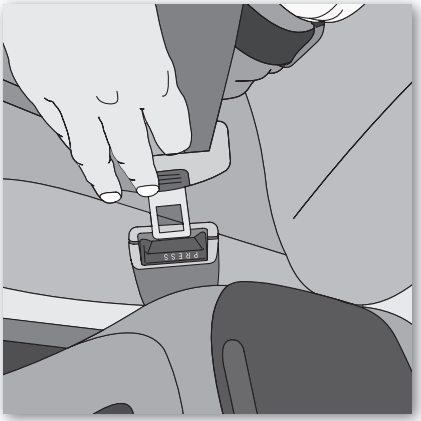
Adjusting the driver's seat while the vehicle is moving is dangerous. The driver could lose the control of the vehicle and have and accident. Adjust the driver's seat only when the vehicle is stopped.

Correct Seating Posture/Arrangement

The driver should be able to hold the steering with slightly bent arms. The driver's feet should also be slightly bent so that the pedals can be pressed fully to the floor. The driver should sit with the backrest at an angle not more than 30 degrees.

Seat Belts

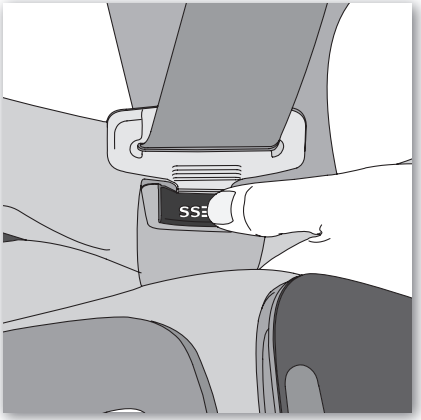
For your own safety, we strongly urge you to strap on your seat belts while driving. Do not use one seat belt for more than one person. Ensure that the seat belts are not slack or twisted when strapped across. Before driving off, first ensure that your driving position is correct and then adjust your seat belt to provide maximum protection.



Fastening Seat Belts

Pull the seat belt over your shoulder and across the chest. Insert the metal tongue plate into the buckle. An audible click indicates that the belt is locked securely. Make sure that each belt uses the correct buckle meant for each seat.

To release the belt, depress the red button on the buckle, and let the belt rewind into its reel smoothly and completely.



Caution

Feed the belt back into the retractor by hand to avoid twisting and snagging.

Always wear your seat belt while traveling in vehicle and make sure all the occupants are properly restrained. Not wearing the seat belt while driving is extremely dangerous.

- Do not use the seat with malfunctioning/ improper seat belts system. it can not protect the occupant from injury. Get the seat belt problem fixed by Mahindra authorised dealer immediately. Used/ damaged seat belt system cannot provide the adequate protection in the event of collision/accident. Do not use the twisted seat belts. Twisted seat belt may injure the user.

Warning

Seatbelts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

- Seatbelts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.
- Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.
- It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

• Belts should not be worn with straps twisted.

• Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

WARNING

No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

CAUTION

Be careful do not damage the seat belt webbing or hardware. Take care that they do not get caught or pinched in the seat or doors. Never use one seat belt for more than a person at a time.

• Pull the belt from its reel steadily. It may get locked if wrenched from the reel. The belts provide maximum protection when seats are in their normal upright position. So, do not recline your seats steeply. During the sudden braking or a collision, you can slide under the lap belt, if your seat is reclined to the unsafe level, and suffer serious internal injuries.

WARNING

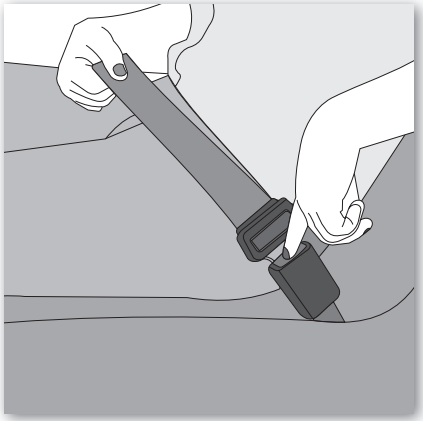
Wear the lap seat belt snugly and as low as possible. A lap belt worn too high can be dangerous. In the event of collision/accident, this may concentrate the impact force on the abdominal area causing serious injury.

Checking seat Belt operation

Your seat belt retractors are designed to lock belt movement in the following conditions.

- When the belt is pulled quickly from the retractor.
- When the vehicle slows down rapidly.

To check the condition of seat belt operation, grasp the shoulder belt and pull quickly forward. The retractor should lock and restrict further belt movement. If the seat belt does not lock during these checks or if you have any question on seat belt operation, contact Mahindra Authorised dealer.



2-Point Lap Seat Belts (2nd Row on Double Cab Models)

WARNING

Remember that, in the event of a violent impact, the passengers on the rear seats that are not wearing the seat belts are not only subject to personal injuries but they also represent a danger for passengers sitting in the front seats.

To fasten the seat belt.

Insert the tongue into the buckle until it snaps.

To lengthen, hold the tongue at a right angle to the belt and pull on the belt. To shorten, pull the free end of the belt away from the tongue.

Position the lap belt on the hips as low as possible.

To unfasten

To unfasten the belt, press the button on the buckle.

CAUTION

Use a child restraint system only if the child is not big enough to properly wear the seat belts. Else, use the regular seat belt instead of the child restraint system. In models with rear seat belts - seat the child in the rear seat and use the seat belt. According to accident statistics, children are safer when properly restrained in the rear seat than in the front seat. Always secure a child in a proper child restraint system in accordance with age and size of the child as recommended by the child restraint system manufacturer.

CAUTION

If child restraint system regulations exist in the country where you reside, please contact nearest Mahindra dealer for the installation of the child restraint system in the front seat. Make sure that you have complied with all the installation instructions provided by the child restraint system manufacturer and that the system is properly secured.

WARNING

Do not allow children to stand up or kneel on either the rear or the front seats. An unrestrained child could suffer serious injuries during emergency braking or collision. Also, do not allow children to sit on your lap as it does not provide sufficient restraint.

Pregnant women and injured persons need to consult their doctor for specific instructions on how to wear the seat belt.

Head Restraint

To increase height of the head restraint, pull it out to the desired position. To lower the head restraint, depress the locking button and push the restraint down. After adjustments, ensure that the head restraint is locked in place.

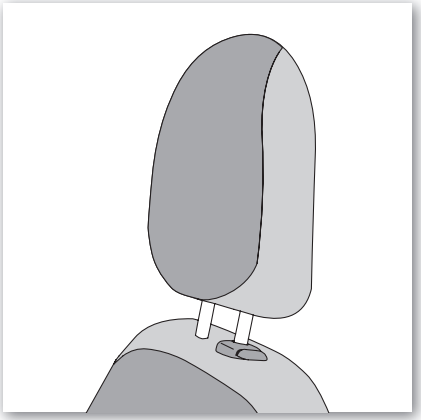
Adjust the head restraint so that it is at the same level as your head. Never adjust the head restraint to the level of your neck.

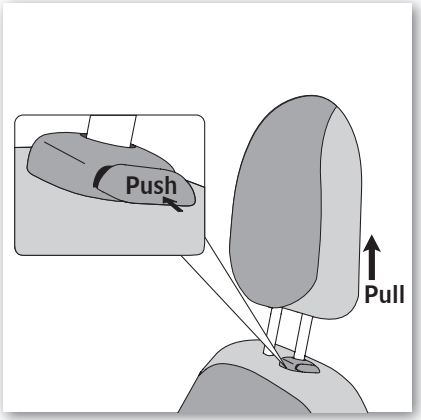
CAUTION

Do not adjust the head restraint while driving the vehicle. With no support behind your head, your neck could be seriously injured in a collision. Always drive with the head restraints properly inserted.

Head Restraint Removal

The head restraint can be pulled out completely by depressing the locking button while pulling the restraint out.





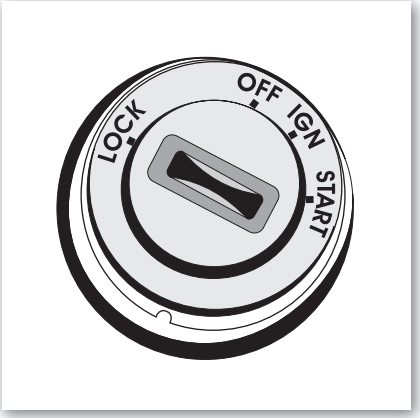
Ignition Switch cum Steering Lock

Ignition Switch cum Steering Lock

It has the following four key positions

LOCK : Ignition OFF; Steering is locked after the key is removed

OFF : Steering unlocked; Ignition and all other main electrical circuits are disabled



IGN : Ignition ON; All electrical circuits enabled. Look for the illuminated warning lights before engine is started.

NOTE

Preferably select this position even when the vehicle is being towed.

START: This is a momentary position in which the switch cranks the engine. Release the key as soon as the engine starts. Holding in to this position more than necessary will result in damage to starter and other engine components.

NOTE

If turning the key is difficult, jiggle the steering wheel from side to side.

• The key can be removed only in the LOCK position. When the key is removed, the steering column lock is activated and the steering wheel cannot be turned.

WARNING

Apply the handbrake, put it into gear 1st facing up a hill or reverse facing down.

WARNING

Never leave children unattended in the vehicle.

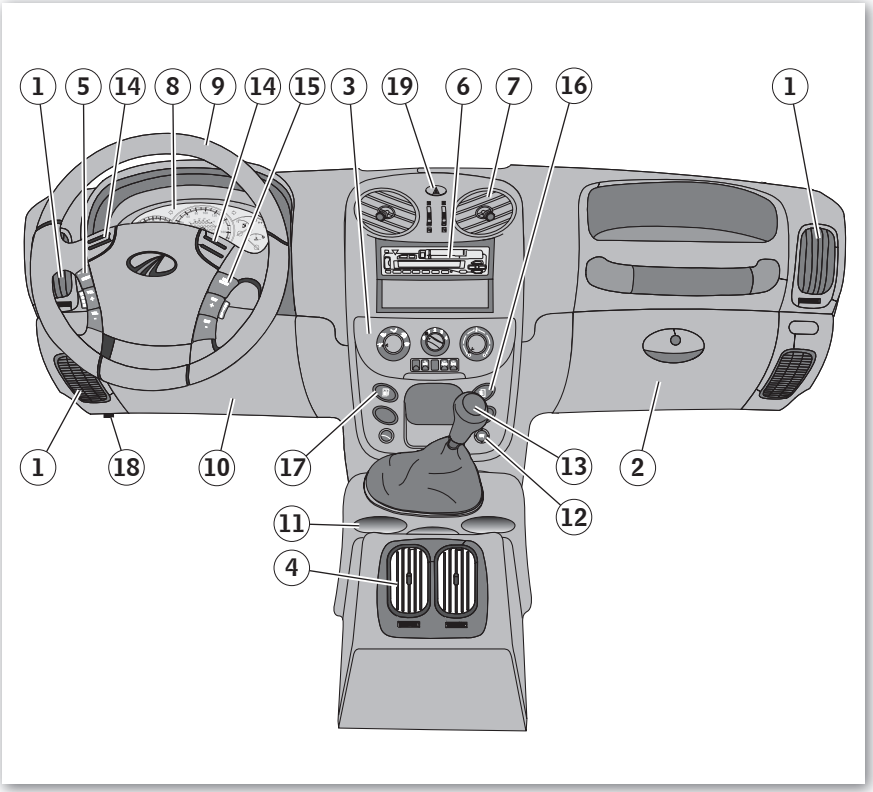
WARNING

Never return the key to the LOCK position or try to remove the key, when the vehicle is in motion. Removing the key allow the steering wheel to lock. You will loose the control of the vehicle and may cause serious accident. Remove the key only when the vehicle is parked.

On some models, an illuminator ring is provided on the face of ignition-cum-lock to locate and insert the key into it during night time. The ring will illuminate the moment the driver door is opened and will remain glowing till the door is closed. Once all the doors are closed properly, the lights will start dimming and will go off after few seconds.

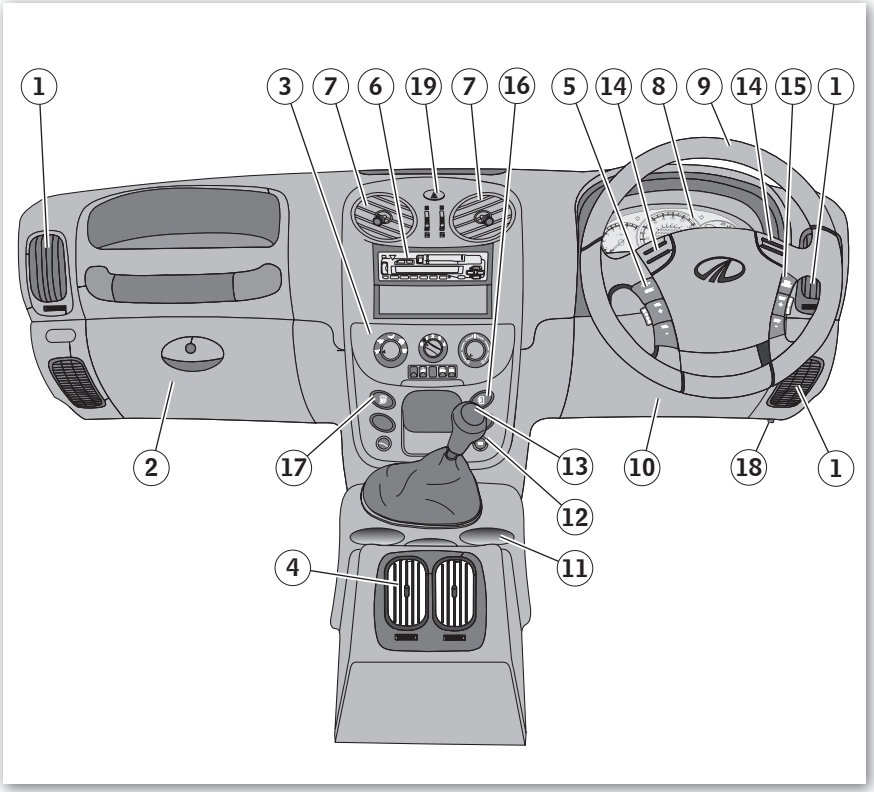
On some models, the ring will illuminate the moment the driver door is opened and will remain glowing till the door is closed.

Dash Board - LHD



1. Side AC Vents
2. Glove Box
3. AC Control Switches/Knobs
4. Floor Console Vents
5. Audio Controls
6. Audio System
7. A/C Center Vents
8. Instrument Cluster
9. Steering Wheel
10. Fuse Box
11. Ashtray (Floor Console)
12. 12V Power Output
13. Gear Lever Knob
14. Horn Pad
15. Cruise Control switches
16. Rear Demister Switch
17. Remote Fuel Lid Open Switch
18. Bonnet Lock Release Lever
19. Hazard Warning Light Switch

Dash Board - RHD



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15. Cruise Control switches
16. Rear Demister Switch
17. Remote Fuel Lid Open Switch
18. Bonnet Lock Release Lever
19. Hazard Warning Light Switch

Combination Levers

Combination Lighting Switches

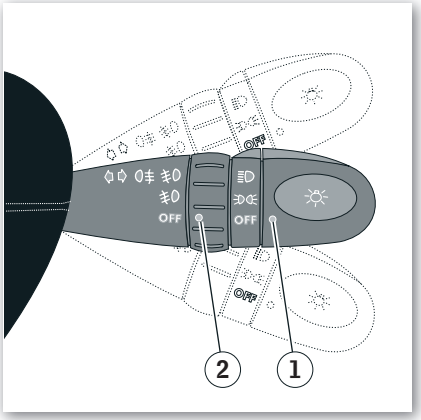
WARNING

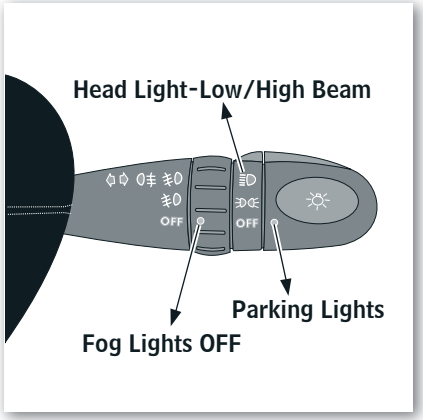
The responsibility for switching on the lights, depending on the daylight and the regulations in force in the country of use, always lies with the driver.

Lighting Control Lever

Head lights & Parking Lights

- **Lights Off:** Stalk end switch **1** is in neutral position
- **Parking Lights:** Turn the stalk end switch 1 upwards to the first position until the is aligned opposite mark **1**
- **Headlight Low Beam:** Turn the stalk end switch1 upwards to the second position until the is aligned opposite mark **1**
- **Headlight High Beam:** With the stalk end switch **1** in the second position, simply push the control lever downwards. Headlight High Beam Indicator in the instrument cluster is illuminated when headlights are on high beam.





- **Headlight Flash:** Pull the stalk up towards the steering wheel. Flash will work even when the headlight is not on. Headlight High Beam Indicator in the instrument cluster is illuminated when headlight flash is used.

CAUTION

Using bulbs with units of higher output capacity/ wattage is illegal and may damage your vehicle electrical system.

Front & Rear Fog Lights (If equipped)

- Lights Off: Inner rotary switch 2 is in neutral position.
- Front Fog Light(s): Turn the inner rotary switch 2 upwards to the first position until the ⇞O is aligned opposite mark 2.
- Rear Fog light(s): Turn the inner rotary switch 2 upwards to the second position until the O⇞ ⇞O is aligned opposite mark 2. Now both front & rear fog lights glows simultaneously.

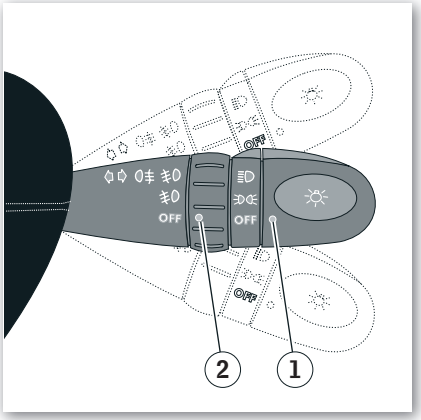
Operation of the fog lights depends on the parking or headlights selected and an indicator will light up in the instrument cluster

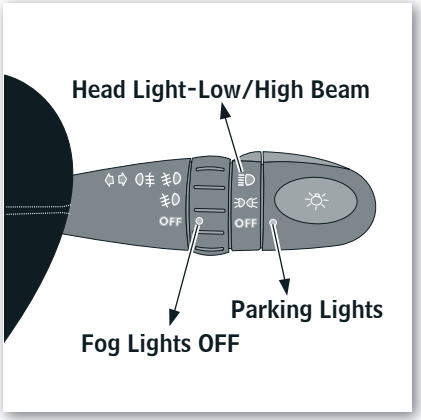
NOTE

The rear fog light will get switched on only when the parking / headlights are on.

NOTE

Use the fog lights only in low visibility conditions. Remember to switch off the rear fog light when it is no longer needed to avoid inconvenience to other road users.





Turn Indicators

RHD Models

- Right Direction Indicator: Push the lighting control stalk downwards till you hear an audible click
- Left Direction Indicator: Push the lighting control stalk upwards till you hear an audible click

LHD Models

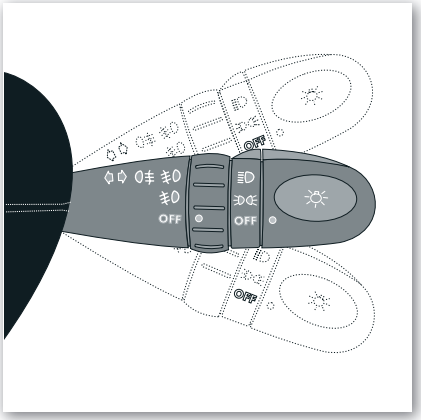
- Right Direction Indicator: Push the lighting control stalk upwards till you hear an audible click
- Left Direction Indicator: Push the lighting control stalk downwards till you hear an audible click

The stalk automatically returns after you make a turn. But after lane change you may have to do it manually. If the indicator light continues to flash after a turn, manually return the stalk to its original position.

If the turn signal indicator lights in the instrument panel flashes faster than normal, it indicates a turned indicator bulb is burned out.

NOTE

To prevent the battery from being discharged, do not leave the lights ON for a long time when the engine is not running.

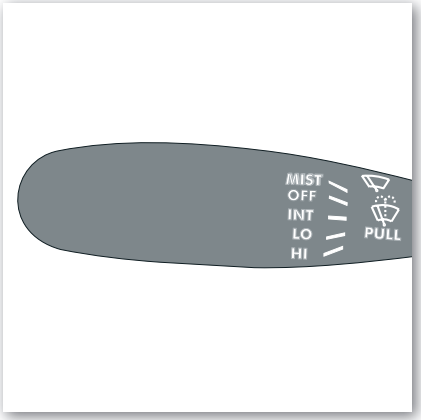


Wiper & Washer control Lever

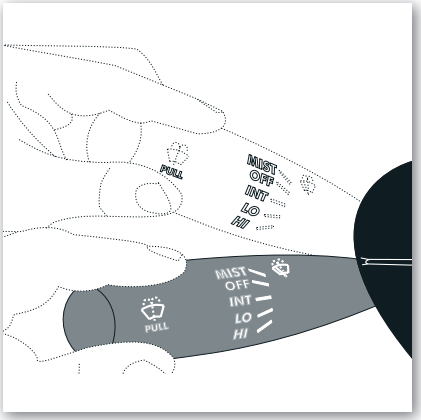
Front wipe / Wash

Wiper/Washer Control Lever: Wash/Wipe functions can be activated with the ignition key at the IGN position.

- Flick-wipe (MIST): Push the stalk up from the normal position for wipe only and it operates as long as stalk is in that position.



- OFF: stalk is in normal position
- Intermittent Wiping (INT): Push the stalk down to the first position
- Low Speed Wiping (LO): Push the stalk further down to the second position
- High Speed Wiping (HI): Push the stalk again down to the third position



- Wash /Wipe (PULL &): The windshield washer & wiper operates as long as the stalk is pulled on toward the steering wheel. Wiping is done after few seconds of washer fluid spraying and wiping will continue for few seconds after releasing the switch. The washer will work on all positions of stalk. After few seconds of the post wipe, the wiper will operate once to dribble down the washer fluid remains.

Adjustable Intermittent Wiping (if Installed)

The intermittent wiping operation timing can be adjusted according to the requirement based on the intensity of rain & drizzling. Follow the below procedure to adjust and set the time between one wipe operation to next wipe operation.

To set the time delay:

- Switch ON the intermittent wiper and switch it OFF during (or) after wiper movement. And again switch ON the intermittent wiper to set the delay time according to the requirement. The time between the switch OFF and ON (to intermittent) will get registered as the wiper operating cycle time.
- The time delay can be set anywhere between 1 second to 60 seconds
- The wiper movement time will remain same in all time settings. Only the delay can be varied from 1 second to 60 seconds.

To set the default time:

It will return to the normal (default) time setting, if the wiper is not operated for 5 minutes (or) the delay time is more than 60 seconds or if the ignition is switched OFF.

If you switch off the ignition before switching off the wind screen wiper the blades will stop at random on the wind screen. Switch on the ignition and just move wiper stalk to 'MIST' position to return the wipers to the park position.

NOTE

Do not operate the wipers when the wind shield is dry. It may scratch the glass.

NOTE

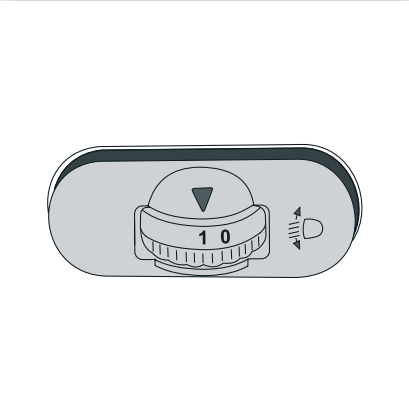
To prevent the battery from being discharged, do not leave the lights ON for a long time when the engine is not running.

Combination Levers / Guiding Light

Headlight Leveling System

When Vehicle is fully or either partially loaded, it will have upward inclination disturbing the headlight aiming. To bring the low-beam back to its original position we can use this system. The correct headlight setting provides the best possible visibility to the driver with out dazzling other road users.

The headlights can only be adjusted when the low beam is switched on.



Headlight low beam can be adjusted from driver seat with the help of switch shown in above picture. This switch is located on driver side instrument panel just below side A/C vent. This switch has Two positions marked as 0 & 1.

Please select the suitable switch position as per following table.

Switch Position	Vehicle loading condition
0	Driver or Driver with front passenger
1	Driver + Front passenger + Luggage in cargo box

Guiding Lights

Dimming Interior light & illumination Ring on Ignition Key ring (if applicable)

The guiding lights feature helps you when you try to enter or exit the vehicle.

Illuminator ring is provided on the face of ignition-cum-lock to locate and insert the key into it during night time.

The front interior lamp will also get activated along with the above lights during this cycle.

During Remote Unlocking:

The interior light & Illumination ring will glow instantaneously with full intensity for few seconds, the moment vehicle doors are unlocked through remote key, then all lights starts dimming and goes OFF.

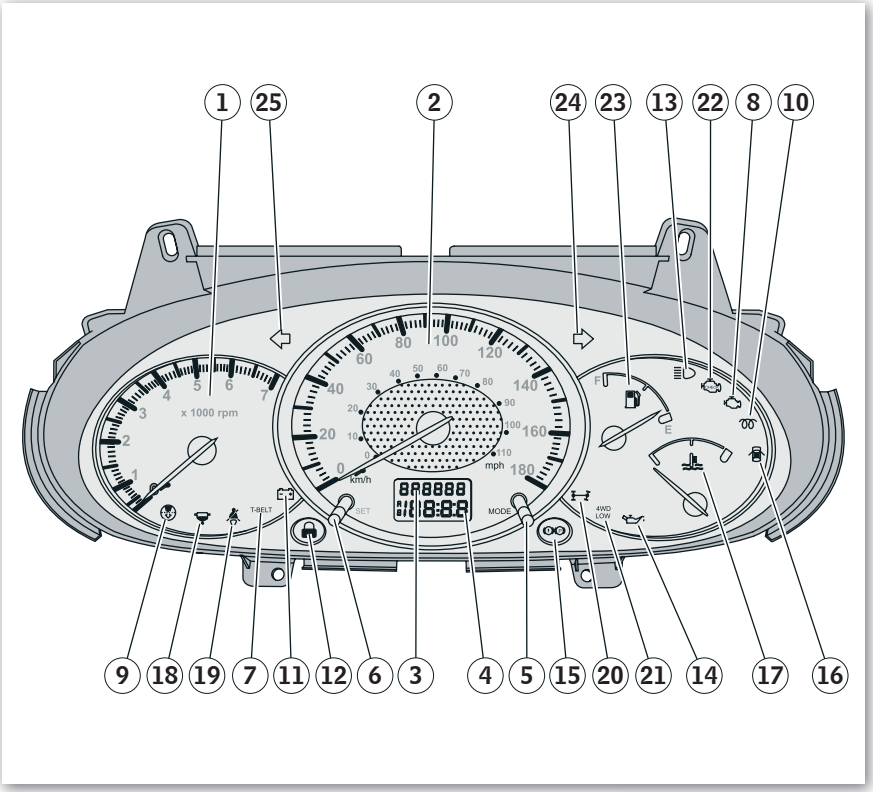
During getting in / out of vehicle:

The interior light & Illumination ring will glow the moment any of the doors is opened and will remain glowing till the door(s) is closed. Once all the doors are closed properly, the lights will start dimming after few seconds and go OFF.

Front interior roof light will light-up when the switch is in door-mode.

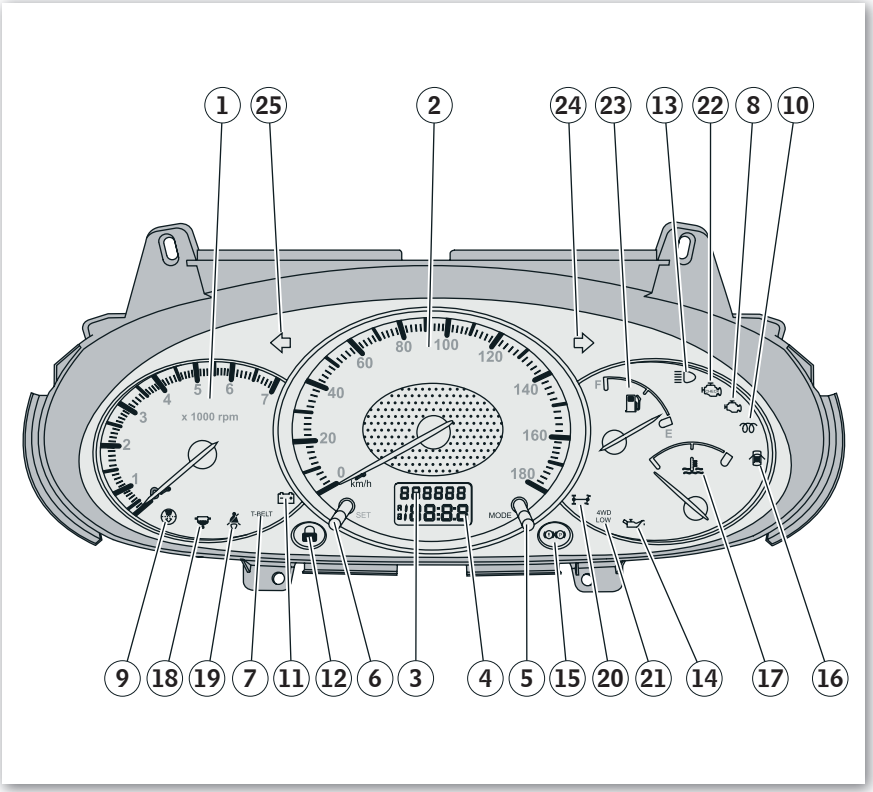
This feature cannot be permanently / temporarily disabled / enabled.

Instrument Cluster



1. Tachometer (if applicable)
2. Speedo Meter
3. Odometer
4. Trip Meter A, Trip Meter B & Clock
5. Knob, Mode selection - Trip Meter A, Trip Meter B & Clock
6. Knob, Set - Trip Meter A, Trip Meter B & Clock
7. Anti Lock Brake System
8. Check Engine malfunction (if applicable)
9. Rear Fog Lamp Indication
10. Glow plug indication (If applicable)
11. Battery Charging Warning Light
12. Car Security System Status (if applicable)
13. Head Lamp High Beam Status
14. Low Oil Pressure Warning light
15. Parking Brake ON & Low Brake Fluid warning lamp
16. Door Open warning Light
17. Engine Coolant Temperature Gauge & High Temperature Warning Light
18. Water in Fuel Indication (if applicable)
19. Driver Seat Belt Warning (if applicable)
20. Four Wheel Drive High
21. Four Wheel Drive Low
22. Check Engine Warning Lamp (if applicable)
23. Fuel Gauge
24. Right Turn Indicator
25. Left Turn Indicator

Instrument Cluster (Australia)



1. Tachometer (if applicable)
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19. Driver Seat Belt Warning (if applicable)
20. Four Wheel Drive High
21. Four Wheel Drive Low
22. Check Engine Warning Lamp (if applicable)
23. Fuel Gauge
24. Right Turn Indicator
25. Left Turn Indicator

If the indicator comes on	Do this
 Brake light	If parking brake is off, stop immediately, and check brake fluid level / contact Mahindra Authorised Dealer
 Battery	Stop and check
 Engine oil	Stop and check
 Engine Malfunction	Take the vehicle to Mahindra Authorised dealer
ABS	Take the vehicle to Mahindra Authorised dealer
 Door open	Close the doors
T-Belt	Take the vehicle to Mahindra Authorised dealer
 Fuel filter water	Drain the water

1. Tachometer (if applicable): Indicates Engine speed in thousands of revolutions per minute (RPM).

NOTE

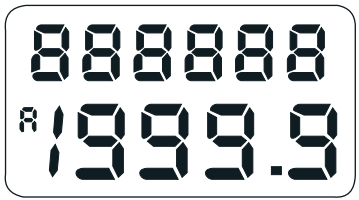
Do not over rev the engine. Operating the engine at high RPM may cause severe engine damage.

2. Speedo Meter: Indicates speed of the vehicle.

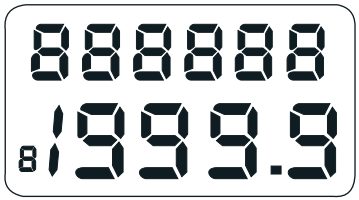
3. Odometer: Top row of LCD screen shows / records the distance traveled in kilometers at minimum unit of 1 km and it displays only when ignition key is on.

4. Trip meter & Clock: Second row of LCD screen shows the distance traveled, since the last time it was set to zero, either on individual journeys or between the fuel fillings depending upon the settings. Alternatively second row will show the clock in the 12 hour format.

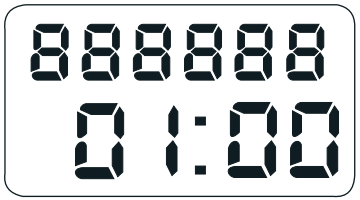
5. Knob, Mode selection - Trip Meter 'A', Trip Meter 'B' & Clock: The second row will show either the Trip meter 'A' or Trip meter 'B' (or) Clock at a time. The display from trip meter 'A' to trip meter 'B' to Clock can be changed by gently pressing the Mode selection knob once. When Trip meter is in display, alphabetical letter 'A' (for trip meter 'A') or 'B' (for trip meter 'B') will also be displayed accordingly (as shown in the picture). The trip meters can show up to 9999 kms.



Odometr & Trip meter 'A' Display



Odometr & Trip meter 'B' Display



Odometr & Digital Clock Display

6. Knob, Set - Trip Meter 'A', Trip Meter 'B' & Clock: Display Settings: Press the Set-knob for more than one second to set the zero on Trip meter 'A' & Trip meter 'B', when the particular Trip meter displayed. Clock Setting: When clock is displayed, pressing the SET knob for 3 seconds will cause the displayed time to flash, means it is in clock setting mode. While the clock data is flashing, pressing and releasing the SET will toggle between minutes & hours. While the numbers are flashing, pressing the MODE switch will advance the displayed number. While the numbers are flashing, if no button is pressed for 5 seconds the current values displayed are stored and the display stops flashing.

7. Anti-lock Brake System Warning Lamp (ABS) (if applicable): The ABS warning light comes on when the ignition key is turned to the IGN position, and goes off after a few seconds. When the ABS warning light is on / blinking continuously (and the brake system warning light is off), & contact the nearest Mahindra Authorised dealer.

8. Check Engine malfunction MIL (if applicable): When the lamp lights up and glows continuously indicates Engine Fault (other than EMS). Arrange for checking at the nearest Mahindra Authorised Dealer immediately.

9. Rear Fog Indicator: The lamp will glow when the rear fog lamps are ON.

10. Glow plug indication (if applicable): when 'ON' indicates that pre-heating is on. It goes out when the glow plug is warm. Do not crank the engine when Glow Plug is ON, to avoid excessive load on battery & ensure effective starting.

11. Battery Charging Warning Light: Lights up when the ignition switch is in the IGN position. Goes OFF as soon as the engine starts. If the light remains ON even after the engine has been started, it indicates that the battery is not being charged or malfunction of alternator.

In this case, park the vehicle safely at road side and check the drive belt for looseness / breakage. If drive belt is okay, switch off all unnecessary electrical equipment and contact a Mahindra Authorized Dealer immediately.

NOTE

Do not continue driving if the engine drive belt is broken or loose. This will cause engine overheat & poor braking.

12. Car Security System Indication lamp (if applicable): Will give status of the car security system on armed / unarmed / intrusion etc. by flashing at various intervals. For further details please refer the car-security system manual supplied with the vehicle.

13. Headlight High Beam Indication: Is illuminated when headlights are on high beam or when headlight flash-to-pass is used.

14. Low Engine Oil Pressure warning light: Lights up when the ignition switch is in the IGN position. Goes OFF as soon as the engine starts. If the light remains ON even after the engine has started, or comes ON while driving, stop immediately, and check the engine oil level. If low, add engine oil to the MAX level and check the light again. If still ON contact Mahindra Authorized Dealer Immediately.

NOTE

Do not run the engine with low engine oil pressure warning light ON. Otherwise it may damage the engine.

15. Parking Brake ON & Low Brake Fluid warning lamp: The parking light (P) and, the low brake fluid warning light (!), are illuminated as long as the parking brake is applied. If light (!) does not go off after releasing the parking brake, there may be problem with the vehicle braking system.

WARNING

Do not drive the vehicle if the light (P) is illuminated even after releasing the hand brake or if it illuminates while driving. Add brake fluid to bring the level up to the 'MAX' mark. If the problem still persists, avoid driving and have Mahindra Authorized Dealer check/correct the braking system as soon as possible.

16. Door Open warning Light (if applicable): Lights up when the any of the doors are open and ignition key is in IGN position. The lamp goes off when all the doors are closed properly.

17. Engine Coolant Temperature Gauge: Indicates the temperature of the engine's coolant. At normal operating temperature, the needle may point anywhere across the band. When the needle is continuously in the red zone of the temperature gauge / lamp glow continuously indicates engine overheating. In such a condition, switch off the AC and observe. If still the problem persists, pull over the Vehicle, switch OFF ignition and contact the nearest Mahindra Authorized Dealer.

NOTE

Do not continue driving with an overheated engine. It may cause damage to the engine. Refer the section IF THE ENGINE OVERHEATS.

18. Water in Fuel Indication (if applicable): when water accumulated in Fuel Filter reaches the maximum permissible limit, the indicator gives warning to remove water and clean the fuel filter. (Instruction for how to drain the water given in the Self Maintenance Section or contact a Mahindra Authorised Dealer.)

NOTE

Continued driving with water accumulation in the fuel filter will cause damage to the fuel pump/other fuel system components.

19. Seat Belt warning (if applicable): The light reminds you to fasten seat belts & it will light up when the driver has not worn the seat belt with the ignition key is IGN position/when vehicle is in motion. The lamp will remain illuminated until the seat belt is fastened properly.

20. Four Wheel Drive High (if installed): Indicates that the vehicle is driving in the 4-Wheel Drive Mode in high gear. Driving in this mode gives more traction while driving on cross-country Roads.

WARNING

Driving the vehicle in 4WD Low / High mode on dry, hard surface may cause damage to the driveline, excessive tyre wear, poor fuel economy & unnecessary noise, hence not recommended.

21. Four Wheel Drive Low: Indicates that the vehicle is running in the 4-Wheel Drive Mode in low gear. Driving in this mode gives maximum traction while driving on all adverse conditions.

CAUTION

Driving the vehicle in 4WD Low / High mode on dry, hard surface may cause damage to the driveline, excessive tyre wear, poor fuel economy & unnecessary noise, hence not recommended.

22. Check EMS 'Engine Management System' warning lamp: (if applicable): As soon as the ignition key is switched ON, the lamp lights up and goes OFF in few seconds indicating normal status. The lamp will blink / glow continuously indicating the presence of fault in EMS. The vehicle needs attention by Mahindra Authorised Dealer immediately.

23. Fuel Gauge: Indicates the approximate level of fuel in the tank. When the tank is nearly full, the needle will be at 'F' and when the tank is nearly empty, the needle will be at 'E'. When needle touches the RED mark, it indicates that there is minimum quantity of fuel left in the fuel tank. Refuel as soon as the needle touches the RED mark. It is a good idea to keep the tank over 1/4 full.

NOTE

On inclines or curves, due to movement of the fuel in tank, the fuel gauge needle may show slightly low or high levels than usual.

24/25. Turn Indicator: Flashes when the indicator lamps are operated or hazard switch is turned on. A sudden increase in the rate of flashing indicates failure of one of the indicator bulbs.

Hazard Warning Switch: Press the switch (located on the instrument panel) to activate all turn-indicators simultaneously. Use this only in case of an emergency to warn the traffic about any hazardous condition of your vehicle. It functions even without the ignition switch being turned ON.

NOTE

The direction indicators do not work when the hazard warning is activated. Check local regulations about use of hazard warning lights while the vehicle is being towed or while driving.

Horn: Horn can be operated independent of the ignition switch. To sound the horn, depress the pad in the center of the steering wheel.

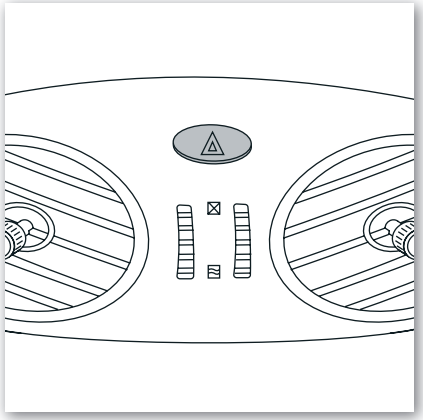
Rear Demist Switch (if installed): Press the switch (located on the IP centre bezel) to (turns the heater ON) clear the frost from the rear door glass. Switch OFF as soon as the frost is cleared. If the switch is ON continuously, a timer switches the demister OFF automatically after 12 minutes of operation.

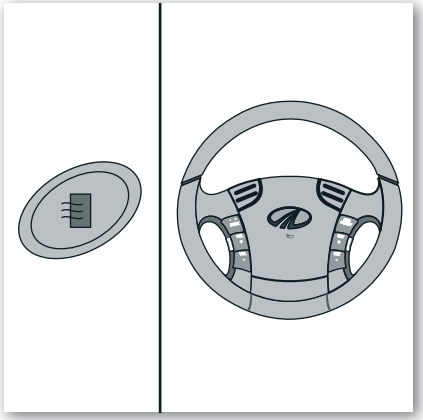
NOTE

The demister is not designed for drying rain water or for melting snow. If there is an accumulation, remove the excess ice/water before switch on the demister

NOTE

When cleaning the inside of the rear glass, be careful not to scratch the heater wires or connectors.





Parking Brake: To activate the parking brake, pull the lever upwards fully. Warning light (Red colour) on the instrument cluster will light up when the hand brake is applied.

To release it, pull the lever upwards slightly, depress the locking button and push the lever downwards. Red warning light on the instrument cluster will light up if you are driving with an incorrectly released hand brake.

WARNING

Driving with the parking brake, even if it is set partially, can overheat or damage the brakes and will result in poor braking.

CAUTION

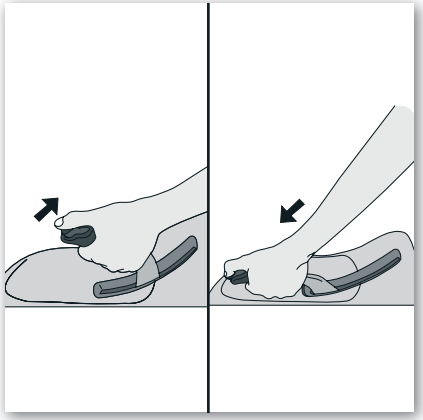
Before driving, be sure the parking brake is fully released and the brake indicator light is OFF.

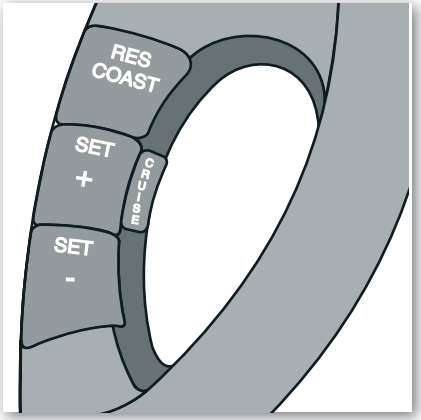
Depending on the slope and/or vehicle load, it may be necessary to apply the hand brake by two additional notches and select a gear (preferably 1st or reverse).

Cruise Control (if Installed)

Important Information

- Cruise control will be active in gears 2nd to 5th with vehicle speed more than 25 km/h.
- DO NOT use cruise control on winding (or) slippery road surfaces (rainy/icy/ snow-covered), up-hill / down-hill driving (or) in traffic conditions where a constant speed can not easily be maintained.





- Cruise control will not be activated, if the brake pedal is not operated once, after the engine starting.
- Cruise control will be deactivated, if Brake / clutch pedal is pressed, during cruise driving mode.
- When the 'Set Plus' button is pressed, if the acceleration is felt to be too fast and vehicle goes beyond control, press brake or clutch immediately for safety and coming out of cruise.

The cruise control system enables the driver to maintain the constant road speed, with out using the accelerator pedal, generally when driving on free/open highways. The cruise control system is designed to operate above the speed of 25 km/h.

To Operate/Set the Cruise Control Speed

1. Accelerate until the desired cruising speed is reached and the speed must be above the system's minimum operational speed of 25 km/h.

2. Release the accelerator pedal and press & release the SET+ (or) SET- switch, to set the vehicle. The desired vehicle speed will automatically be maintained without accelerator pedal operation.

While operating cruise control, the vehicle speed can be increased temporarily (e.g. for overtaking) by pressing the accelerator pedal enough. Once the accelerator pedal is released, the vehicle speed will return to the set cruising speed. If the accelerator pedal is pressed for more than 30 seconds, the cruise control will be deactivated.

To Reduce the Set Cruising Speed

Press and hold (or) tap the SET- switch. The vehicle speed will reduce automatically. Release the SET- switch as soon as the desired cruise speed has been reached (Do remember that the cruise control system will not operate at vehicle speeds below 25 km/h).

To Increase the Set Cruising Speed

Press and hold (or) tap the SET+ switch. The vehicle speed will increase automatically. Release the SET+ switch as soon as the desired cruise speed has been reached.

Resume to the Last Preset Speed

By pressing the RES / COAST switch, the last set cruise speed can be resumed, provided the ignition switch is ON and the vehicle speed is above 25 km/h.

Disengaging the Cruise Control

The cruise control will be deactivated if the brake or clutch pedal is pressed, (or) when the CRUISE switch is pulled-up.

The preset cruise speed in system memory will automatically get cancelled when the ignition switch is turned OFF.

Audio control on Steering wheel (If installed)

Audio control on steering wheel allows the driver to operate the audio system, without operating the audio system fitted on the instrument panel, while driving

To change the mode

Press the MODE switch to change the mode between the tuner/tape/CD/standby. Each time the MODE switch is pressed, the mode changes as per the following sequence.

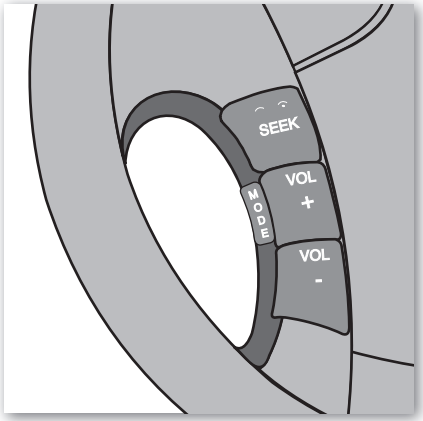
Tuner mode Tape mode External disc control mode (optional) Stand by mode.

Scanning the different radio frequency

Press the SEEK switch once, to scan / select the next frequency when you are in radio tuner mode.

Volume control

To increase the volume press the VOL+ switch and to reduce the audio volume press the VOL- switch.



Follow Me Home Headlight

In order to help the driver / passenger, while getting out of the vehicle during night time, the headlight will light up for maximum 1 minute under the following conditions.

This feature will get activated only when the ignition key and parking lights ON with all the doors closed properly for at least 5 minutes.

With the above condition, the headlights will light-up the moment the driver door is opened after switching OFF the parking lights and removing ignition key. The headlight will remain ON for 30 seconds and then go OFF.

The headlights will again light up for another 30 seconds maximum and goes OFF, the moment the door locks are activated through remote after closing the door.

Temporary deactivation

If you want to deactivate this feature temporarily (one time), switch ON and switch OFF the parking light after removing the ignition key and keeping the driver door open. The feature will automatically get activated once the ignition key and parking lights are switched ON with all the doors closed properly for at least 5 minutes.

Permanently Disabling and Enabling the feature

Please follow the below procedure for permanently disabling and enabling the follow me home headlight feature.

Sit in the vehicle with all switches OFF and all doors closed. Wait for 30 seconds

Step 1 : Insert ignition key, switch ON and switch OFF ignition and remove the ignition key.

Step 2 : Open the driver door for atleast 1 second and close.

Step 3 : Switch ON the parking light for atleast 1 second and switch OFF

Step 4 : Again insert ignition key, switch ON & switch OFF ignition and remove the ignition key.

NOTE

The steps 1 to 4 should be completed within 30 seconds. If controller accepts the procedure, the headlight will flash two times as a confirmation and the feature is either deactivated (or) activated. The above procedure is common for disabling and enabling the feature.

Rear View Mirror

External Rear View Mirror

Manually Adjustable

For adjusting the mirror, push it or slightly twist it in the desired direction until you can clearly see the road behind.

Remote Operated

Adjustments can be made using the lever provided inside the doors.

CAUTION

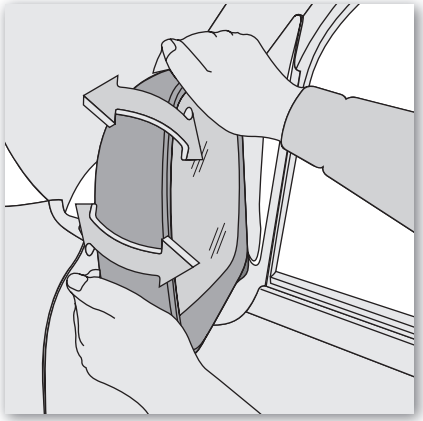
Objects in this mirror look smaller and appear further away than they actually are. Do not overestimate the distance of the objects seen in the mirror.

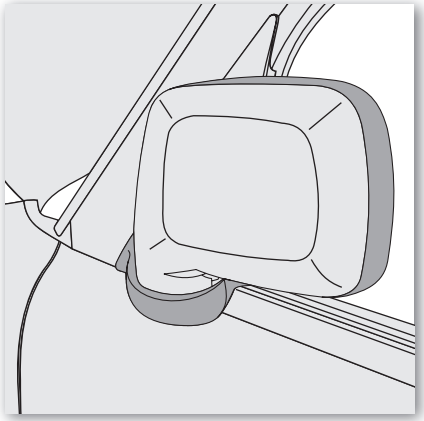
CAUTION

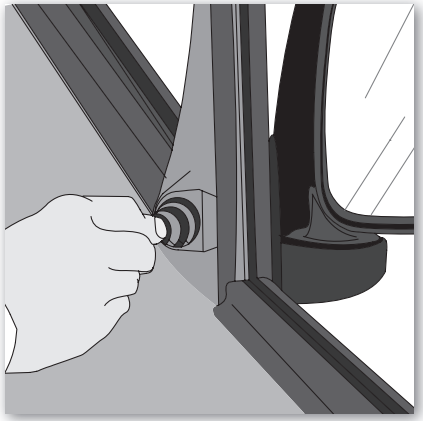
Do not adjust the mirror while the vehicle is moving. If doing so may cause the driver to mishandle the vehicle and may result in loss of vehicle control.

Mirror Folding

Both manual & remote operated outside mirror units can be folded flat, where it is needed, against the vehicle when pushed towards it.





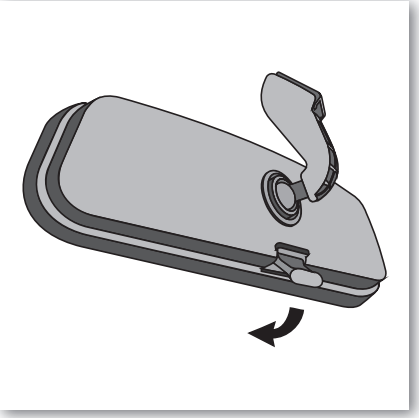


CAUTION

Do not drive the vehicle with the outside rear view mirrors folded backward. Both the driver & the co-driver side rear view mirrors must be extended and properly adjusted before driving. Always adjust the outside mirrors to the driver's convenient position before driving the vehicle.

Internal Rear-view Mirror

Adjust the rear view mirror, in the day position, by slightly turning or twisting it until you see the road behind clearly through the rear glass. To decrease glare/ dazzle (of headlights of following vehicles) when driving in the night, pull the view mirror lever towards yourself. Push the lever away from yourself to bring back for day driving position



CAUTION

Do not adjust the mirror while the vehicle is moving. If doing so may cause the driver to mishandle the vehicle and may result in loss of vehicle control.

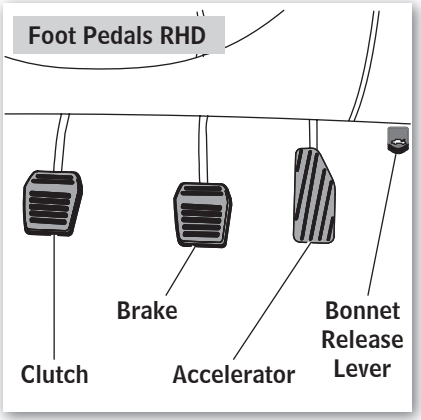
Foot Pedals

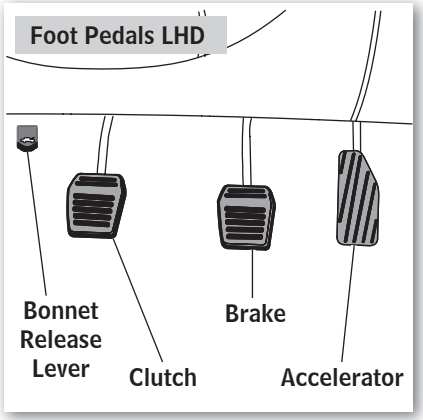
Accelerator: Pushing the accelerator pedal down increases the acceleration and releasing the pressure on it decreases the acceleration.

NOTE

Sudden acceleration or deceleration can cause loss of control on slippery surfaces. Take extra care while driving on slippery surfaces.

Brake: Put your foot on the brake pedal only when you intend to stop or decrease the speed. Resting your foot on the pedal keeps the brakes applied lightly, causing them to build up heat and/or poor fuel efficiency. Heat thus built up can reduce the effectiveness of the brakes. Constant application of brakes while going downhill builds up heat and reduces their effectiveness. Instead, downshift to a lower gear and take your foot off the accelerator pedal.





WARNING

Driving with wet brake is dangerous. Increased stopping distance or vehicle pulling to one side when braking could cause a serious accident. Dry the brakes by driving at very slow speed and applying the brakes lightly until the brake performance become normal.

CAUTION

Even if the power assist is completely lost, the brakes will still work. The brake can be applied to stop the vehicle, by pressing the brake pedal much harder than normal. And the vehicle stopping / braking distance will be longer than usual.

CAUTION

Continuing to drive the vehicle with engine stalled or turned off is dangerous, since braking will require more effort than normal to stop the vehicle. This will cause the longer stopping distance or even an accident.

Anti-Lock Braking System (ABS) (If Installed)

The anti-lock braking system (ABS) is designed to prevent wheel lock-up during an emergency/sudden braking or on hazardous/slippery road surfaces. The safety enhancement is that the brake control system prevents the wheels from locking, even if the brakes are applied too sharply, and allows the vehicle to be steered and thus its direction to be controlled.

The antilock brake system (ABS) is operating at all speeds. The brakes will work normally. Only at the time of wheel locking the ABS will take over and prevent wheel lock.

During the ABS operation, a slight pulsation may be felt in the brake pedal when the brakes are applied and hear a noise from engine compartment. These conditions are normal and indicate that ABS is functioning properly. In this situation, to let the ABS work for you, just hold down the brake pedal down more firmly.Do not pump the brake pedal in panic/emergency stopping. This will result in the reduced level of performance.

When the engine is started or when the vehicle begins to move, the ABS is in the self-check mode. During self-check, you may hear a noise & motor operation sound from the engine compartment. This is normal and is not a malfunction.

WARNING

Use of non recommended tyres / wheel-rims / alloy-wheel-rims other than the recommended size/ specification will greatly reduce the ABS performance. All the brake related works to be attended by a Mahindra Authorised dealer only.

CAUTION

ABS is not designed to shorten the stopping distances. ABS cannot compensate for unsafe and reckless driving.

Although this system allows you to optimize stopping distances, the ABS system does not allow you to increase the vehicle performance which is physically linked to the local conditions of tyre / road surfaces / tyre-ground adhesion. It is still important to drive with all due care and maintain a moderate speed and safe distance from the vehicle in front of you, because there are limits to the vehicle stability and handling even with the anti-lock braking system is on.

Compared with the vehicles not equipped with ABS, your vehicle may require a longer stopping distance in the following cases

- Driving on rough road / gravel / snow covered surfaces
- Driving on the roads where the surface is different between the wheels or wheels are in the different levels.

CAUTION

- The safety features of an ABS equipped vehicle should not be tested by high speed driving or cornering. This could endanger the safety of yourself or others.
- Even if the power assist is completely lost, the brakes will still work. But you will have to press the brake pedal hard, much harder than normal. And your braking distance will be longer.
- In case the engine stalls, do not pump the brake pedal. Each press on the pedal uses up your reserve **vacuum.**

NOTE

Due to ABS operation the wheels will not lock. Hence even during the panic braking, there will not be a skid marks on the road. Please do not confuse the lack of skid marks as poor braking.

'ABS' warning light

The ABS warning light will come on when the ignition key is turned to the IGN position. If the anti-lock braking system works properly, the light goes off after a few seconds. Thereafter, if the system malfunctions, the light comes on again.

When the ABS warning light is on / blinking continuously (and the brake system warning light is off), the anti-lock brake system does not operate, but the brake system still continues to operate conventionally. If ABS warning light on / blinking continuously, immediately contact the nearest Mahindra Authorised dealer.

Clutch: The clutch pedal should be pressed down fully while shifting, and then released slowly. Do not use the clutch pedal to hold the vehicle when you stop the vehicle or while driving on an uphill path. Use the parking brake instead.

CAUTION

Resting the foot on the clutch pedal while driving reduces the life of the clutch liner and the release bearing.

Steering

Power assisted steering

Power assisted steering uses energy from the engine. If the engine is off or if the power assisted steering become inoperative, still the vehicle can be steered, but it will require more effort.

NOTE

Never hold the steering wheel to the extreme right or left for more than five seconds with the engine running. This can cause damage to the power steering system & its components.

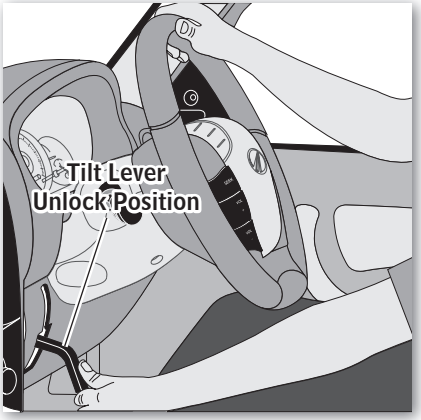
Tilt steering wheel

To change the steering wheel angle (up/down), hold the steering wheel, push down the lock release lever, tilt the steering wheel to the desired angle and return the lock release lever to the original lock position.

CAUTION

Do not adjust the steering wheel angle while the vehicle is moving. It may cause the mishandling of the vehicle and may result in an accident.

After adjusting the steering wheel, try moving it up & down to ensure it is locked properly.



Transmission / Gear Shift

Recommended Maximum Speed During Driving

If speeds shown in the table are exceeded when driving in the respective gears, the engine speed indicator needle will turn towards the Tachometer's (if installed) upper limit. If this happens, you will feel the engine cut in and out. The engine will run normally again if the RPM is reduced below the Tachometer's upper limit.

Gear	Speed (km/hr)
1	35
2	65
3	95
4	130
5	140

The speed at which you drive, however should confirm to all federal, state, province, territory and local laws, and to the condition which will permit safe operation.

CAUTION

Do not exceed the speed limit mentioned against each gear.

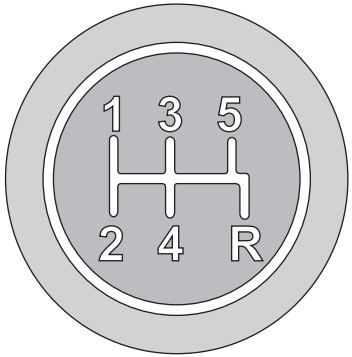
NOTE

Do not downshift if you are going faster than the maximum allowable speed for the next lower gear.

Gearshift: The gearshift pattern is shown on the gear lever knob. The clutch pedal should be pressed down fully while shifting, and then released slowly. Shift into the reverse gear only when the vehicle is stationary.

NOTE

Revving the engine regularly to the maximum in each gear causes excessive engine wear and high fuel consumption.



NOTE

Make sure the vehicle is fully stopped before shifting into reverse.

NOTE

Keep your foot off the clutch pedal except when shifting gears. Also, do not use clutch pedal to hold the vehicle on an up-gradient. It can cause excessive clutch plate wear & damage.

CAUTION

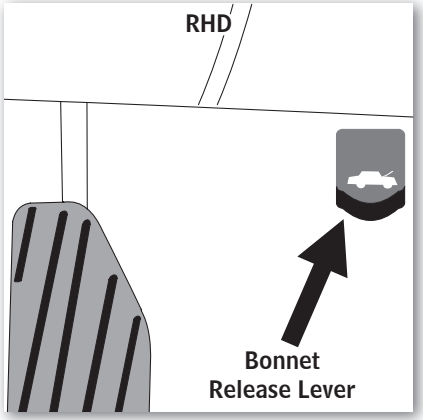
Be careful when downshifting on a slippery surface. Abrupt shifting could cause the vehicle to spin or skid.

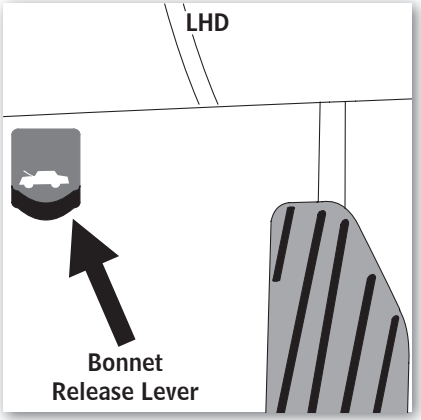
Bonnet Release Lever

Bonnet Release Lever:

To unlock the bonnet, pull the bonnet release lever (located below and to the right of the steering wheel in RHD models, or to the left of the steering wheel in LHD models). Then release the lever under the bonnet by pushing it aside with finger.

To do this you need to slide your finger beneath the partially opened bonnet. Lift the bonnet until it can be supported by the stay rod, whose hook must be locked in the groove provided in the inner side of the bonnet. While closing the bonnet, secure the stay rod in the clip.



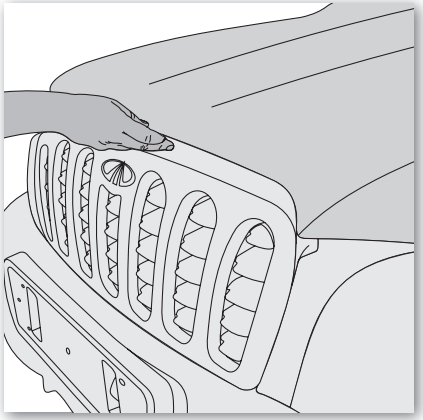


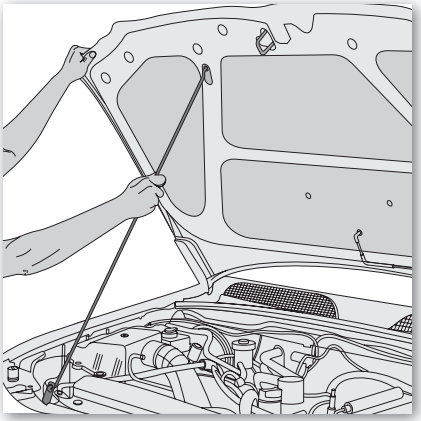
Bonnet Opening

Bonnet Opening:

CAUTION

- Make sure that the bonnet is fully closed and locked before driving. Otherwise, the bonnet may open unexpectedly while driving and an accident may occur.
- After inserting the support rod into the slot, make sure the rod supports the bonnet securely from falling down on your head or your body.





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Starting and Stopping Engine

Initial Checks

- Ensure that the windshield, windows, mirrors and external lights are clean.
- Ensure that the windshield washer reservoir is full.
- Visually inspect tyres for their appearance & condition. Ensure that tyres have appropriate pressure (including spare tyre).
- Ensure that the bonnet is closed properly.
- Check underneath for leaking fuel, oil water or fluid. (water dripping from air-conditioning after use is normal).
- Check for availability of the Jack & wheel nut wrench.
- Adjust seat position, seat-back angle and head restraint height to comfort.
- Adjust internal and external rear-view mirrors.
- Lock all doors.
- Fasten seat belts.
- Turn the key to IGN position.
- Check the lights in the instrument cluster.
- Check the gauges and indicator lights in the instrument cluster.
- After starting the engine / while driving the vehicle, check for any abnormal noise.

CAUTION

Release the key immediately after the engine starts; otherwise this may cause serious damage to the starter assembly.

NOTE

It is not recommended to press the accelerator pedal while starting the engine.

NOTE

Do not crank for more than 10 seconds at a time. If the engine stalls or failed to start, wait for 10 seconds before trying again.

NOTE

Do not race a cold engine.

Starting the Engine (Diesel Engines)

- Apply the parking brake fully
- Insert the key into the ignition switch and turn it into the IGN position.
- If the vehicle is equipped with glow plug, wait for preheat glow plug light in the instrument cluster to go OFF during cold start. The engine may be started without waiting for preheat if the engine is warm
- Check the gear lever in Neutral Position
- Don't push the accelerator pedal
- Crank the engine by turning the key to START position till the engine starts. If the engine does not start in the first attempt, wait for few seconds and try again.
- Let the engine run for at least 10 seconds before releasing the parking brake
- Start driving

For Diesel engines fitted with glow plug

NOTE

If the engine does not start in 10 seconds even after pre heating is over, turn the ignition key to off position and then ON in order to preheat again.

NOTE

Whether cold or warm, the engine should be started with out use of accelerator pedal.

NOTE

Do not crank for more than 10 seconds at a time. If the engine stalls or failed to start, wait for 10 seconds before trying again.

Turbocharger system

Your Mahindra's diesel engine is equipped with turbocharger (TC) system. The TC system uses engine oil for lubrication & cooling of its rotating components. The TC turbine revolving at extremely high speeds and TC can reach extremely high temperatures. It is necessary that clean & sufficient supply of oil flows through the TC system. A sudden interruption of oil supply may cause damage to the TC system.

To ensure prolonged life & performance of the TC, change your vehicle engine oil according to the recommended interval with recommended engine oil and follow the starting & stopping procedure

CAUTION

During Starting the engine 'After starting the engine, run the engine in low idle speed for at least 20 seconds. Do not accelerate the engine immediately after starting to avoid damage to turbocharger'

WARNING

It is dangerous to run the engine in a closed space. The engine consumes oxygen and discharges carbon dioxide, carbon monoxide and other toxic gases.

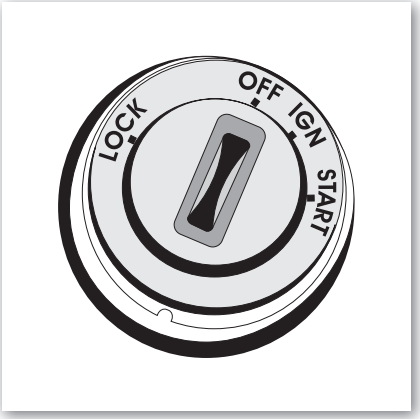
CAUTION

Release the key immediately after the engine starts, otherwise this may cause serious damage to the starter assembly.

Stopping Engine / Limp Home Mode

CAUTION

During Stopping the engine 'Before switching off the engine, run the engine on idle for at least 20 seconds and then switch off. This is to ensure that turbocharger speed is minimum when switching off the engine.



Stopping the Engine

Bring the vehicle to a stop and allow the engine to idle. Turn the key to OFF position.

CAUTION

Abruptly stopping the engine after a long journey may damage the engine. Idle the engine for some time before switching it OFF.

Limp Home Mode

Limp home mode is an emergency situation declared by the EMS due to failure of one/ more critical sensors / actuators. In this mode, the EMS will revert back to basic minimum requirement (fuel quantity / injection timings) to aid the driver to bring back the vehicle to the nearest workshop / a safe place. Needless to say the drivability & fuel consumption will be greatly affected.

Driving the vehicle to the Mahindra Authorised dealer in the Limp home Mode:

- Follow the engine starting instructions as mentioned in the previous page
- During the normal condition, the engine check lamp glows and dies down. This will take approximately 5 seconds
- If the lamp on the instrument panel blinks, it means your vehicle has shifted to the limp home mode

- In the limp home mode, the engine speed fluctuates at 1200 rpm approx, and you will not be able to use the accelerator control. But this mode enables you to drive your vehicle to the nearest Mahindra Authorised Dealer.
- The limp home mode can be erased, only after rectifying the problem.

NOTE

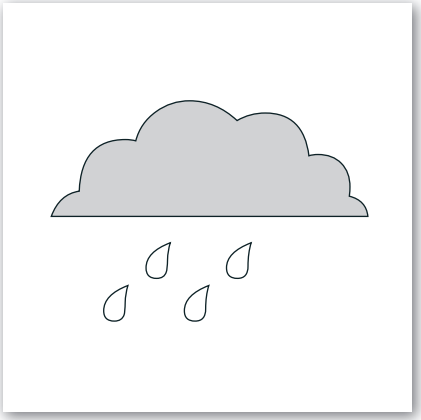
If the engine does not start or stalls frequently, get the engine checked immediately by a Mahindra Authorised Dealer.

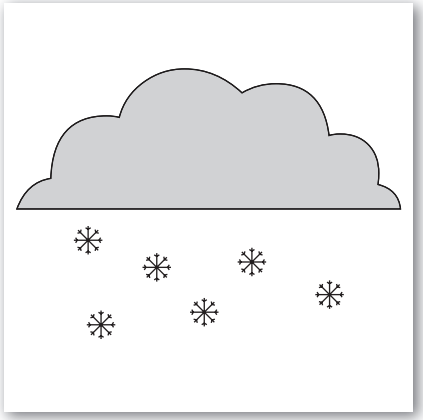
Driving Tips

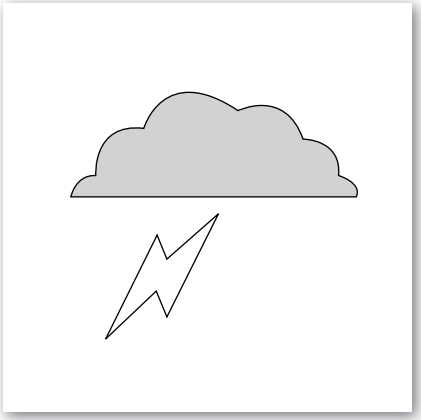
Driving in Wet Weather/Snowy Conditions

Wet weather or snow can be dangerous for driving. The following tips tell you how to avoid accidents in such conditions:

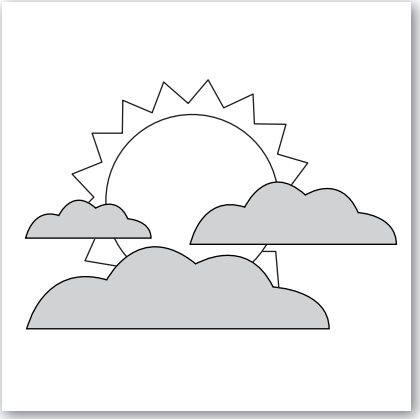
- Drive slowly: Low driving speed increases the surface of tyre tread in contact with the road and provides better traction
- Maintain safe distances from other vehicles: Wet weather results in longer stopping distances (about four times that of normal stopping distance). So, it makes sense to keep a good distance from other vehicles, people and objects on your path.
- Maintain tyres: Tyres may not provide adequate traction once the tread wears below two thirds of the tread depth. Check tyres regularly and replace them at proper times. Maintain the recommended tyre pressure in the tyres at all times.
- While braking, accelerating or turning, avoid jerky and abrupt movements







- Apply smooth, even pressure on all controls. Abrupt steering wheel movements or sudden, hard application of brakes can cause loss of control.
- Exercise extra caution while driving in rain after a long dry spell. After months of dry weather, the first rain brings grime to the surface of the roads, making it slippery.
- While driving on wet surfaces, downshift carefully. If the traction is low, it can lock up the drive wheels for a moment and cause a skid.



- If the battery is not fully charged during extremely cold weather conditions, the battery fluid may freeze and damage the battery. To maintain the maximum efficiency, the battery should be checked regularly.
- It is recommended that the following items to be carried in the vehicle during winter driving.
  - A shovel to dig the vehicle out of snowdrifts.
  - A sturdy, flat board to be placed under the jack to give the firm support.
  - A scraper and stiff bristled brush to remove ice & snow from the windows.

Refer the lubrication chart, for use of suitable lubricants, engine coolant, windshield washer fluid & brake/clutch fluids, for the cold winter (extreme cold atmospheric) conditions.

To avoid door lock from freezing, squirt lock de-icer or glycerin into the locks. Heated key can be used to open the frozen lock.

CAUTION

Be careful when accelerating, up-shifting, downshifting or braking on a slippery surface. Sudden acceleration or engine braking could cause the vehicle wheels to spin or skid or loss of control.

Driving in Low Visibility

Being able to see clearly in all directions and being visible to other drivers is important in all weather conditions. This is more difficult in bad weather conditions. To be seen more clearly by other road users during daylight hours, turn the headlights ON. Inspect the windshield wipers and washers regularly. Keep the windshield washer reservoir full. If the windshield wiper blades start to streak the windshield or leave parts un-wiped, replace them. Use the defroster to avoid fogging of windshield on the inside.

Safe driving tips

- Always slow down in gusty cross winds. This will allow/improve the better vehicle control.
- Drive slowly when passing over speed breakers / bumps or traveling on a bumpy road. Not doing so could cause severe damage to the tires/wheels/ suspension system & may result in personal injury also.
- When parking on a slope, turn the front wheels until they touch the side curb to avoid vehicle rolling. Apply the parking brake and keep the transmission in first/reverse gear. If possible, block the wheels.
- Do not drive across steep slopes. Instead drive either straight-up or straight-down the slopes.
- Driving through deep water or washing the vehicle may get the brakes wet. Wet brakes could make the stopping distance longer or even no braking or brake pulling. To dry the wet brakes, drive the vehicle cautiously, when there is no-traffic near you, while lightly applying the brake pedal with parking brake applied. If brakes still not working safely, park the vehicle beside the road and contact the nearest Mahindra Authorized dealer.

CAUTION

To drive down a long or steep hill, reduce your vehicle speed and downshift the gears. Excessive use of brakes may cause overheating, and resulting in poor braking or brake not working.

Precautions for off-road driving

This vehicle is not designed for cornering at the same speeds as regular passenger cars designed to perform satisfactorily under off-road conditions. Hence, avoid sharp cornering or abrupt maneuver at excessive speeds and it may cause vehicle rollover / lose of control resulting in serious injury or even death. When driving off-road or rough roads do not drive at excessive speeds. As with other vehicles of this type, failure to operate this vehicle correctly may result in lose of control or vehicle rollover.

Caution

- Avoid loading any items / objects on the roof of the vehicle, since it increase the height of the vehicle's centre of gravity.
- Drive carefully when off the road.
- Do not grip the steering wheel spokes when driving off-road. A bad bump could jerk the wheel and injure your hands. Keep both hands especially your thumbs on the outside of the steering wheel rim.

Caution

After driving through tall grass, mud, rock, rivers, etc., check that there is no grass, bush, paper rags, stone, sand, etc., trapped adhering on the underbody. Clear of any such matter from the underbody. Otherwise, a breakdown or fire could occur.

- If driving/crossing through shallow streams, first check the level of the water & bottom of the river bed for better gripping.
- Take all the necessary safety measures to make sure that no damage to the engine or other components due to water entry. Otherwise water entry can cause air intake system failure resulting in engine seizure, washing away the bearing greases causing rusting and premature failure. And transmission, transfer case or differential also may get damage due to water entry.
- Accumulated sand/mud in the brake drum/disc may greatly affect the braking efficiency & can damage the braking system components.
- It is necessary to carryout the maintenance inspection after each day of off-road driving that was driving through rough terrain, water, sand and/ or mud.

Luggage in cargo - precautions

- When putting away luggage or cargo in the vehicle, observe the following
- Put luggage or cargo in the rear deck when at all possible. Make sure all the items are properly secured.
- Be cautious to maintain the vehicle balance by locating the weight as far forward as possible
- For better fuel economy, avoid carrying unwanted weights.

WARNING

Don't travel on the cargo box. Travelling outside the cockpit causes serious danger conditions.

The weight of the cargo load must be evenly distributed. All cargo should be securely fastened with ropes or straps to prevent it from shifting or sliding within the vehicle.

CAUTION

In a sudden stop or collision, unsecured cargo could cause personal injury.

Full Rear Bumper (on selected models)

The full rear bumper of your Mahindra is for better aesthetic, and not for step-up / loading / unloading.

CAUTION

- Never allow any people to get / stand on the rear bumper, since it is not designed for carrying person(s). And it may be too dangerous allowing any person on the rear bumper while vehicle is moving.
- Before drop down the Cargo tail gate door completely, make sure that the rear bumper is removed (on models fitted with full rear bumper). Not doing so will result in rear bumper & tailgate damage.

Shifting Driving Modes

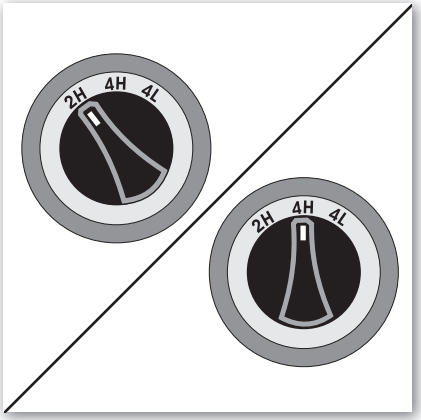
Transfer case shifting guidelines for 4-wheel drive models.

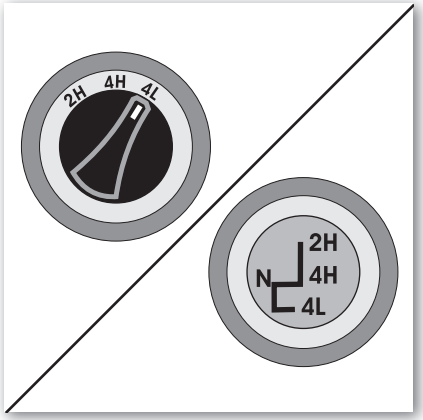
2H - (2WD) in this mode only rear wheels are driven. Use when driving under the same conditions as standard 2WD vehicles.

4H - (4WD, high mode) Four wheels are driven. Use when driving on roads where it is difficult to drive in 2H position (i.e., driving at normal speeds on snow covered, icy, wet, muddy or sandy road surfaces). Avoid excessive speeds, as it will cause loss of traction.

4L - (4WD, low mode) Four wheels are driven. Use when climbing or descending steep hills, or during hard driving in sand, mud or deep snow. The '4L' position provides maximum traction. Avoid excessive speed when driving in '4L' mode.

N - (only for manual shift transfer case models) No wheels are driven. Always keep the transfer lever out of the 'N' position.





CAUTION

Shift the lever quickly and smoothly when moving across the 'N' position with the vehicle stopped.

Need not to stop the vehicle / depress the clutch pedal, when shifting between 2H to 4H and 4H to 2H.

CAUTION

- Driving the vehicle in 4WD Low / High mode on dry, hard surface may cause damage to the driveline, excessive tyre, poor fuel economy & unnecessary noise, hence not recommended.
- Never select the 4WD mode if wheels are slipping. Stop the slipping or spinning before select the 4WD modes.

For the vehicles fitted with auto-lock free running hubs

Electric Shifting of Driving Modes (In vehicles with Electric 4WD Switch)

NOTE

The switch is normally at 2H position indicating that you are in 2WD (Two-wheel drive) mode.

TO SHIFT TRANSFER	SHIFT PROCEDURE FOR ELECTRIC T/F CASE WITH AUTO LOCK-FREE-RUNNING HUBS
From 2H to 4H	• Turn Knob of the switch into 4H position • After 2 seconds the indicator lamp starts glowing • You are now in the 4WH mode
From 4H to 4L	• Stop the vehicle • Keep the engine running • Depress the clutch pedal and turn the knob to 4L position • The indicator lamp will blink for six seconds and go OFF • The indicator (4WD LOW) lamp will start glowing • You are now in the 4WL mode
From 4L to 4H	• Stop the vehicle • Keep the engine running • Depress the clutch and turn the knob of the switch from 4L to 4H • The indicator (4WD LOW) lamp will blink for six seconds and go OFF • The 4H indicator lamp will start glowing • You are now in the 4WH mode
From 4H to 2H	• Turn the knob from 4H position to 2H position • The 4H indicator lamp will go OFF • You are now in the 2WD mode

NOTE

To release the front wheel locking hubs please refer the procedure under the section. 'To Release the Locking Hubs' on Next page.

Manual Shifting of Driving Modes (In vehicles with Manual 4WD Shift Lever)

TO SHIFT TRANSFER	SHIFT PROCEDURE FOR MANUAL T/F CASE WITH AUTO LOCK-FREE-RUNNING HUBS
From 2H to 4H or From 4H to 2H	• Drive in a straight line up to maximum speed of 30 km/hr • Do not depress the clutch pedal • Shift the lever quckly and smoothly to position 4H
From 4H to 4L or From 4L to 4H or From 2H to 4L or From 4L to 2H	• Stop the vehicle • Depress the clutch pedal and shift the lever to the desired mode

NOTE

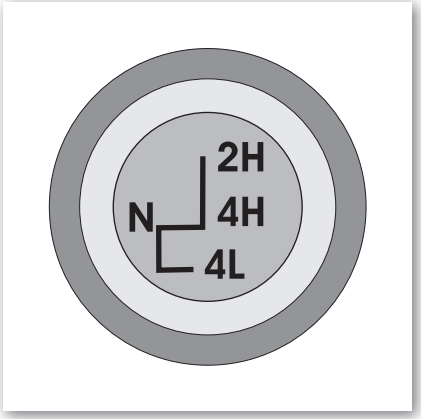
To release the front wheel locking hubs please refer the procedure under the section
To Release the Locking Hubs on subsequent page.

CAUTION

Never shift lever to 4WD position if wheels are slipping. Stop the slipping or spinning before select the 4WD modes.

NOTE

Driving the vehicle in 4WD Low / High mode on dry, hard surface may cause damage to the driveline, may cause excessive tyre wear/ unnecessary noise and/or poor fuel economy, hence not recommended.

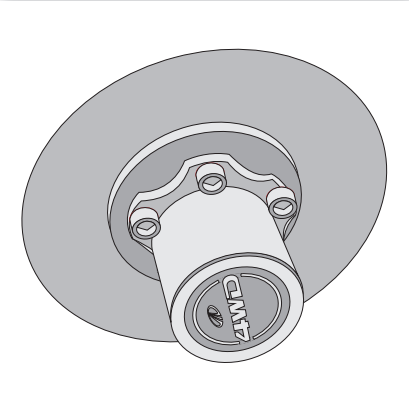


Wheel Locking Hubs (Only for 4WD vehicles)

Automatic Locking Hubs

NOTE

When you shift to 4WD mode, an audible 'click' will indicate that automatic locking hubs are engaged and therefore power is being transmitted to the front wheels. While changing back to the 2WD mode, the hubs need to be released.



To Release the locking hubs

- Shift from 4WD to 2WD
- Reverse the vehicle in a straight line for about a meter
- An audible 'click' will indicate that the hubs have been released
- Unlocking is necessarily required to be done to isolate front axle & transfer case from transmission & from front wheels

CAUTION

If auto-lock hubs make a clattering noise when driving in 2H mode, stop and move the vehicle about 2 to 3 meters in backward direction.

NOTE

When engaging & disengaging, the auto-lock hubs will make a clicking noise. It is normal.

Manual Locking Hubs

NOTE

Before you shift to 4WD mode, manually lock the front wheel hubs.

For engaging the free wheel locking hubs, Turn the knob of the locking hubs to 'LOCK' and for disengaging turn knob to 'FREE'.

Make sure the triangle mark on the hub aligns with the other one at the you desires to set.

Now both the hubs are engaged and therefore power is being transmitted to the front wheels. While changing back to the 2WD mode, the hubs need to be released.

NOTE

Do not drive the vehicle in 2WD mode with front free wheel hubs locked

CAUTION

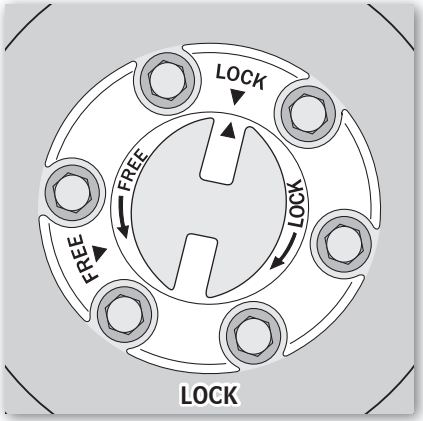
Never drive with only one hub engaged.

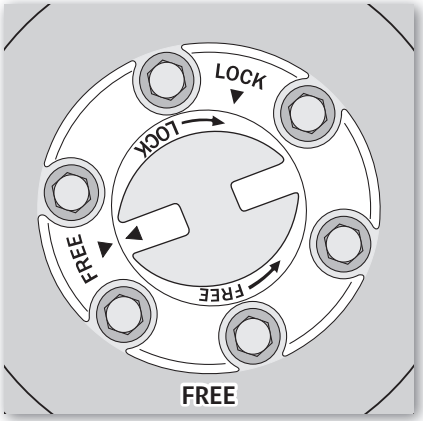
For the vehicles fitted with manual-lock free running hubs

Electric Shifting of Driving Modes (In vehicles with Electric 4WD Switch)

NOTE

The switch is normally at 2H position indicating that you are in 2WD (Two-wheel drive) mode.





TO SHIFT TRANSFER	SHIFT PROCEDURE FOR ELECTRIC T/F CASE WITH MANUAL LOCK-FREE-RUNNING HUBS
From 2H to 4H	• Stop the vehicle & set the free running hubs to the 'LOCK' position • Turn the knob of the switch into 4H position • After 2 seconds the indicator lamp starts glowing • You are now in the 4WH mode
From 4H to 4L	• Stop the vehicle & keep the engine running • Depress the clutch pedal and turn the knob to 4L position • The indicator lamp will blink for six seconds and go OFF • The indicator 4WD LOW lamp will start glowing • You are now in the 4WL mode
From 4L to 4H	• Stop the vehicle & keep the engine running • Depress the clutch and turn the knob of the switch from 4L to 4H • The indicator 4WD LOW lamp will blink for six seconds and go OFF • The 4H indicator lamp will start slowing • You are now in the 4WH mode
From 4H to 2H	• Stop the vehicle & turn the knob from 4H position to 2H position • Set the free running hubs to the 'FREE' position • The 4H indicator lamp will go OFF • You are now in the 2WD mode

CAUTION

Driving the vehicle in 4WD Low / High mode on dry, hard surface may cause damage to the driveline, excessive tyre, poor fuel economy & unnecessary noise, hence not recommended.

Never select the 4WD mode if wheels are slipping. Stop the slipping or spinning before select the 4WD modes.

Manual Shifting of Driving Modes (In vehicles with Manual 4WD Shift Lever)

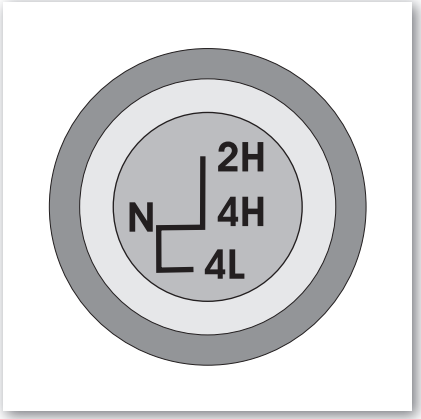
TO SHIFT TRANSFER	SHIFT PROCEDURE FOR MANUAL T/F CASE WITH MANUAL LOCK-FREE-RUNNING HUS
From 2H to 4H	• Stop the vehicle • Set the free running hubs to the 'LOCK' position • Drive in a straight line up to maximum speed of 30 km/hr • Do not depress the clutch pedal • Shift the lever quickly and smoothly to position 4H
From 4H to 4L	• Stop the vehicle • Depress the clutch and shift the lever from 4H to 4L • You are now in the 4WH mode
From 4L to 4H	• Stop the vehicle • Keep the engine running • Depress the clutch and shift the lever from 4L to 4H • You are now in the 4WH mode
From 4H to 2H	• Stop the vehicle • Shift the lever from 4H position to 2H position • Set the free running hubs to the 'FREE' position • You are now in the 2WD mode

CAUTION

Never shift lever to 4WD position if wheels are slipping. Stop the slipping or spinning before select the 4WD modes.

NOTE

Driving the vehicle in 4WD Low / High mode on dry, hard surface may cause damage to the driveline, may cause excessive tyre wear/ unnecessary noise and/or poor fuel economy, hence not recommended.



Limited-slip Differential (LSD) (If equipped)

On the vehicles fitted with LSD, if one rear wheel begins to spin / slip, the limited-slip differential is designed to help/improve traction by automatically transmitting driving force to the other rear wheel evenly. Hence spinning of one wheel is avoided and torque is transmitted to both wheels, which helps the vehicle to move on loose terrain. however during normal driving, differential action takes place in the same manner as in a standard differential.

CAUTION

Do not start or run the engine while your vehicle is supported by a jack. The vehicle could be driven off from the jack and could cause a danger or result in fatal injury.

NOTE

Use only a spare tyre of the same size, construction & load capacity as the original tyres on your Mahindra. Not doing so may cause damage to the LSD.

Instructions for Driving in the Break-in Period

You can assure your vehicle's future reliability, economical operation and performance by paying extra attention to how you drive during the first 1,000 km (600 miles). Follow these recommendations during this period:

- After starting the engine, do not rev it up; Warm up gradually at idling speed
- Do not drive over 100 km/hr or 3/4 of the top speed.

- Avoid sudden acceleration and full throttle
- Do not drive for a long time at a single speed; either increase or decrease the speed at intervals
- Do not drive slowly with the transmission in high gear
- Avoid hard braking; new brakes need to be broken-in by moderate use for the first 300 km
- Do not tow a trailer during first 2500 kms of operation
- Avoid running the engine at high speeds at full load until it has reached its normal operating temperatures.

These recommendations should be followed when the engine is overhauled or when the brakes pads / liners replaced.

Fuel

Recommended Fuel

Diesel: Euro III diesel or higher grade for Euro III diesel engines, and Euro II diesel or higher grade for Euro II diesel engines

CAUTION

- Damage caused due to the use of substandard fuel / other than specified, will not be covered under Mahindra's warranty. The operation, power output and durability of the engine are affected to a great extent by the quality of the fuel.
- Never add fuel system additives or cleaning agents. These may damage the system. These may damage the system. And use of petrol / kerosene in diesel engines will result in engine damage and adversely affect the emission.

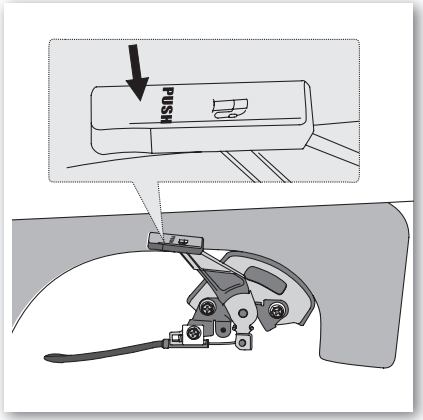
Opening Fuel Lid

Remote Operated Fuel Lid

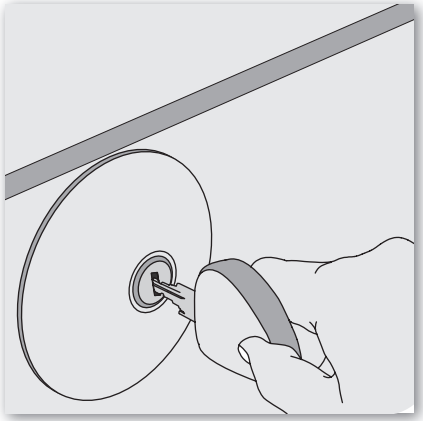
To open the fuel lid, gently press the switch once, which is located in centre of instrument panel.

NOTE

In the unlikely event of fuel lid not opening by electrical actuation, the operating cable can be approached by opening the tail light inspection cover (LH side) and pull the inner cable upward to open the fuel lid.



Unscrew the inner cap and fill the recommended fuel. Replace the inner cap and push the outer lid until you hear an audible click.

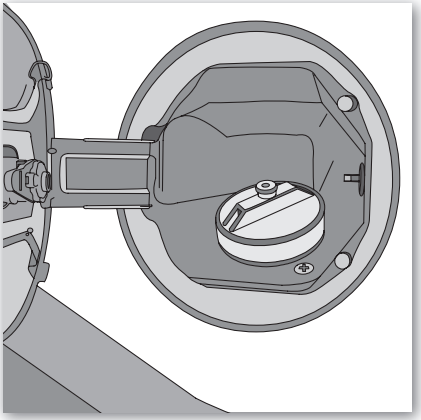


Key Operated Fuel Lid

Unlock the fuel lid (on LH side of vehicle) using the ignition key. Unscrew the inner cap and fill the recommended fuel. Replace the inner cap and lock the outer lid.

CAUTION

Make sure the cap is tightened properly to prevent fuel spillage in case of an accident.



WARNING

Fuel spray is dangerous. Fuel can burn skin & eyes and cause illness when ingested. Fuel spray happens when there is pressure inside the tank & fuel cap is removed too fast. While removing the fuel cap, loosen the cap slightly and wait for any hissing noise to stop, before removing it.

WARNING

Before refueling stop the engine. Always keep sparks or open flames away from the filler neck. Do not smoke while refueling.

CAUTION

Always use only a designated Mahindra fuel cap. The wrong cap can result in a serious malfunction of your vehicle fuel system and/or the emission control system.

NOTE

If fuel is spilled on the vehicle body, flush it away with water to avoid paint damage.

NOTE

For your own safety avoid using mobile/cell phone while refueling.

Fuel Economy & Money-Saving Suggestions

These suggestions are to help save money on fuel & repair costs.

- Maintain correct tyre pressure; Under-inflated tyres result in increased running resistance, leading to higher fuel consumption.
- Maintain proper front-wheel alignment; Improper front wheel alignment causes tyres to wear out faster and exerts more load on the engine, leading to higher fuel consumption.
- Avoid driving with excess weight; Excess weight increases load on the engine, leading to higher fuel consumption.
- Avoid excessive engine idling; It is advisable to switch the engine OFF during prolonged waits at traffic signals, railway crossings etc.
- Avoid fast start and unnecessary stops; Avoid sudden acceleration or deceleration.
- Do not try to maintain the same speed up a hill; accelerate no more than you would on the level. Keep you foot in the same position on the acceleration.
- Driving with open window at high speed will increase fuel consumption.
- Avoid long warm-ups. Once the engine runs smoothly, start driving.
- Keep the engine tuned. Get the vehicle serviced at a Mahindra Authorised service centre regularly.
- Drive slowly on rough roads / crosswinds / headwinds.
- Drive the vehicle at optimum engine speeds.
- Maintain a clear air-cleaner; Clogged air-cleaner decreases the amount of air supplied to the engine, resulting in incomplete combustion and thus, wastage of fuel.
- Anticipate traffic conditions. Avoid traffic congestions whenever and wherever possible. This would lead to considerable fuel savings.

NOTE

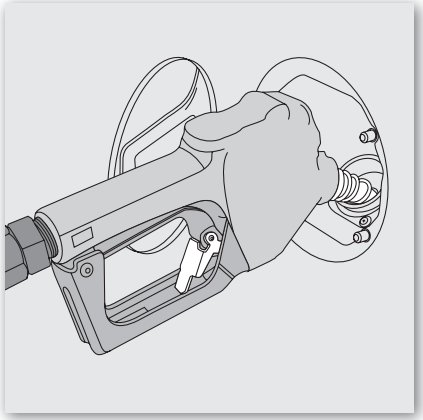
Do not drive with the air cleaner filter element removed. Doing so can cause the excessive engine wear.

- Follow proper driving practices; Do not rest your foot on the clutch or brake pedals unnecessarily; It doesn't allow transmission of full engine power to the wheels and causes premature wear and results in poor fuel economy.

- Follow the recommended maintenance schedule; Get your vehicle checked and maintained periodically by the Mahindra Authorised Dealer.
- Use the air-conditioner only when necessary
- Use only recommended grade fuel
- Use only recommended grade oil
- Use only recommended coolant

CAUTION

Never switch off the engine to coast down hill. Your vehicle power steering & brake booster may not function properly with out engine running.



Window Winding

Manual Winding

To manually open the windows, rotate clockwise the handle on the door pad. Rotate anti-clockwise to close the windows.

Power Assisted

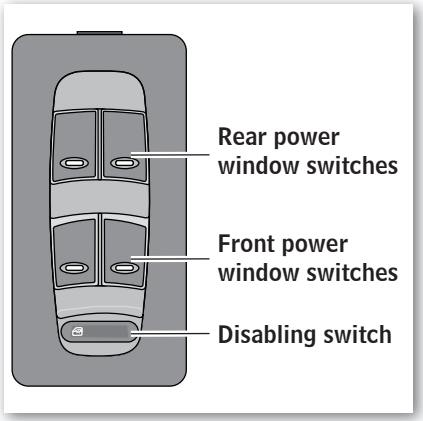
The power windows system functions only when the ignition switch is in the IGN position. All windows can be operated by means of switches located on the center console. Rear windows can be wound or unwound individually using separate switches provided on the rear door trim pads.

- Push the switch to open the window
- Pull the switch to close the window

Rear Window Safety Switch (only on double cab models)

An additional switch in the center console disables the switches on the rear windows. When disabled, power windows in the rear can not be operated. We advise you to use this switch when there are children in the back seat.

- Press the switch to the left - To enable the operation of the rear power windows



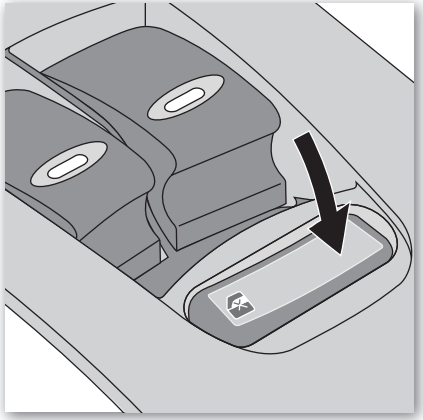
- Press the switch to the Right - To disable the operation of the rear power windows

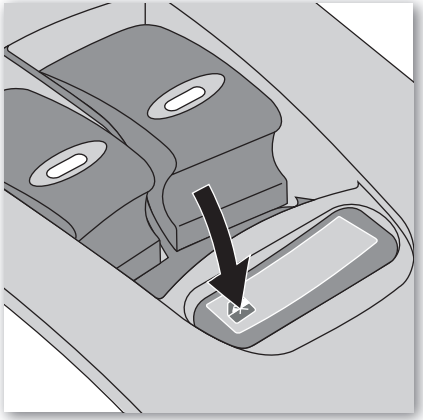
CAUTION

Always remove the ignition key when leaving children alone in the vehicle, to avoid risk of injuries due to unintended operation of power windows.

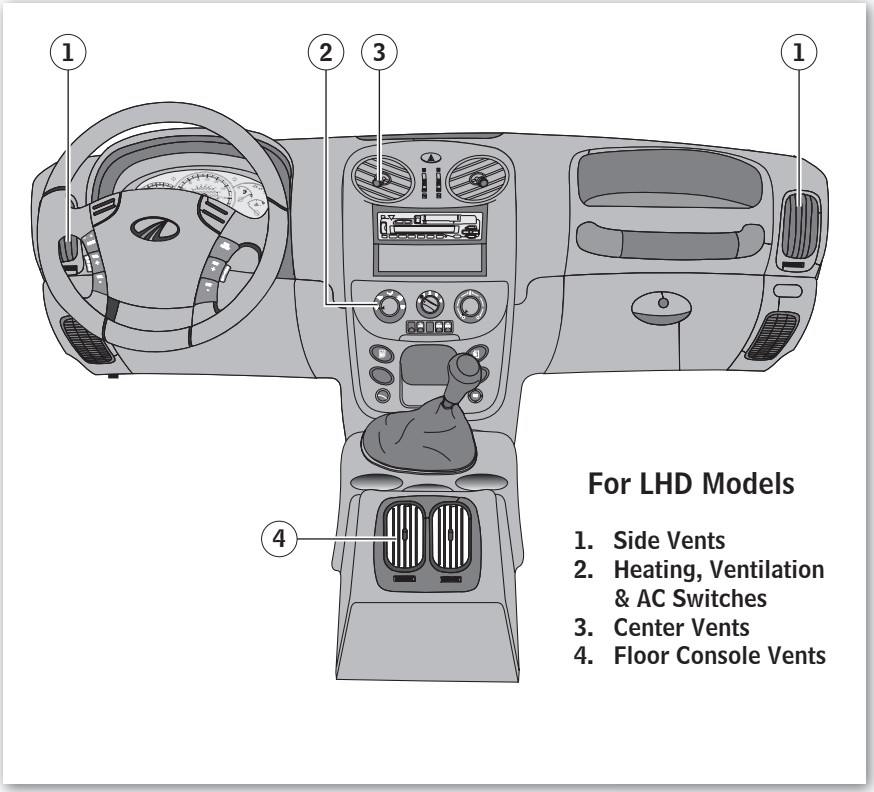
WARNING

Make sure window opening is clear before closing the windows. It may be a dangerous, if someone's hand / head / neck could get caught in a closing window, and may resulting in serious injuries.



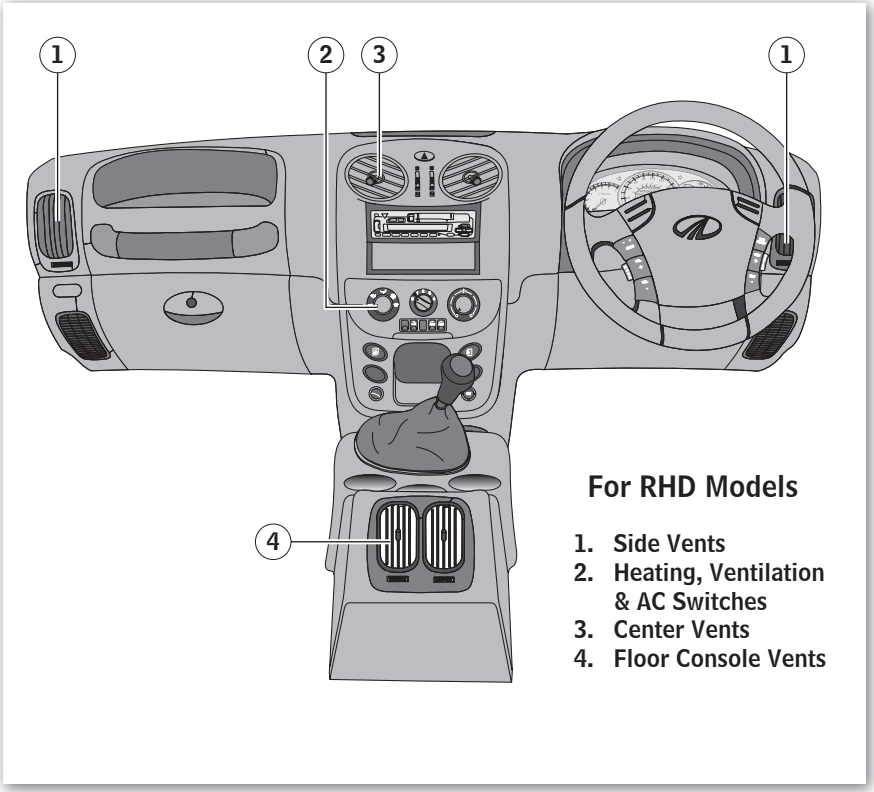


Heating, Ventilation, Air Conditioning



For LHD Models

1. Side Vents
2. Heating, Ventilation & AC Swithches
3. Center Vents
4. Floor Console Vents



For RHD Models

1. Side Vents
2. Heating, Ventilation & AC Swithches
3. Center Vents
4. Floor Console Vents

Blower Speed Control Knob: Blower speed can be regulated by turning the blower speed control knob.

0 Blower Off 1 Low Speed

2 Medium Speed 3 High Speed

4 Very High Speed

Temperature Control Knob: Air temperature can be controlled by turning the temperature control knob to blue (anti-clockwise) for cold or red (clockwise) for warm.

Fresh / Recirculation Air Selector Switch:

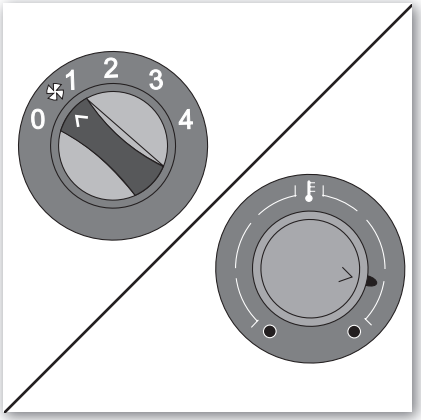
Fresh Air Mode: When light is OFF.

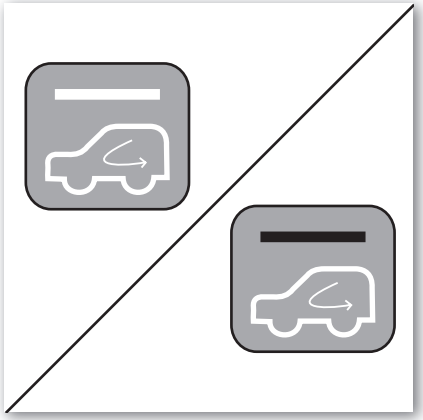
Recirculation mode when light is ON.

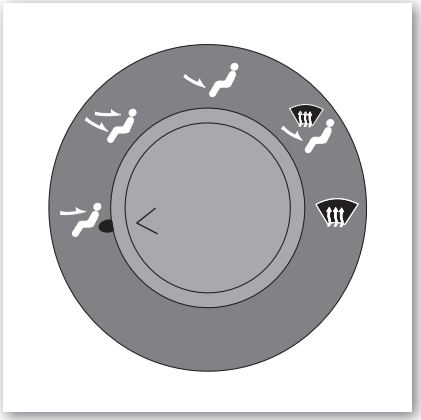
Air Distribution Control Knob: The knob can be used in the following modes to change the direction of the airflow. Operation is as follows:

Face Mode: Air stream flows primarily to the face level and console vents. A minor flow of air is directed to the windshield and the foot-well area.

Face/Foot-well Mode: Air stream flows to face vents, foot-well areas and to console vents.







Foot-well Mode: Air stream flows primarily to foot-well area and to the console vents. A minor portion is also directed to the side and center vents and to the windshield.

Foot-well/Defroster Mode: Air stream flows primarily to the foot-well area, the windshield vents and to the console vents. (Fresh air intake mode is preferable with this distribution)

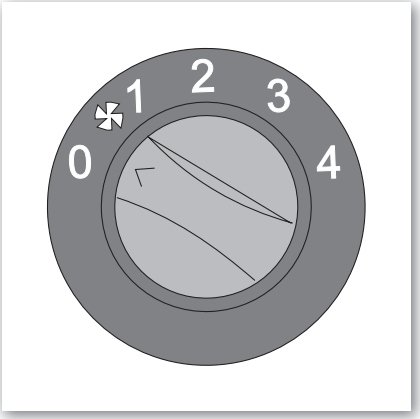
Defroster Mode: Air stream is directed to the windshield.

(Fresh air intake mode is preferable with this distribution).

Air Distribution: Airflow and direction can be regulated in the centre / side / floor console vents with the rotary controls and centre knobs.

Center Vents: Airflow can be adjusted with rotary controls located between the centre vents. The airflow can be directed with knob at the centre of the vents.

Side and Console Vents: Airflow can be adjusted with rotary controls underneath the vents. The airflow can be directed with lever at the centre of the vent by swiveling up or down and from side to side.



Air Intake Selector

This switch is used to select the fresh outside air or recirculating inside air. To change the air intake mode, (Fresh or Recirculation mode) press the switch .

Fresh Air Mode ( ): The indicator light on the switch goes off when the air intake selector is in fresh air (outside air) mode.

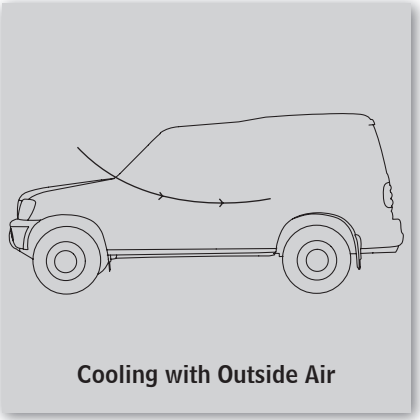
Recirculation Air Mode ( ): The indicator light on the switch is illuminated when the air intake selector is in recirculation mode.

With the **Fresh** air mode selected, air enters the vehicle through filter from outside and is cooled / heated according to the function selected.

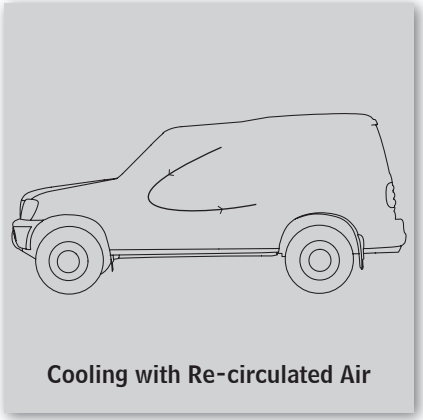
With the **Recirculation** air mode selected, the air from within the compartment will be drawn through filter and is cooled / heated according to the function selected.

NOTE

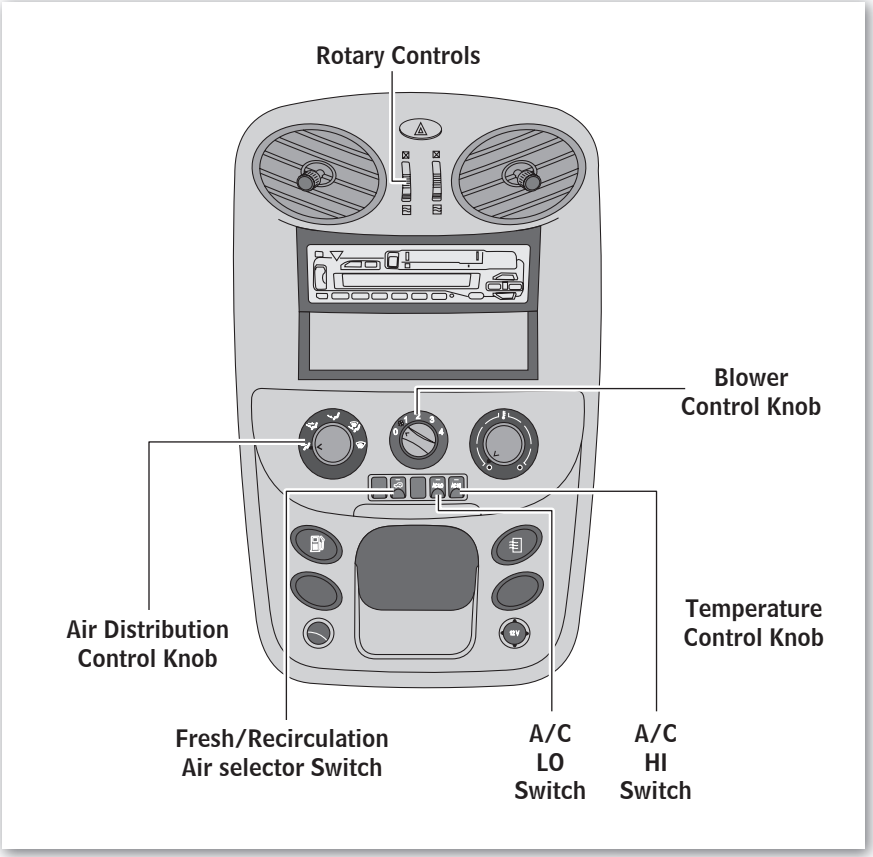
Do not use the recirculation ( ) mode for long periods as it may cause the interior air to become stale and windows to mist up.



Cooling with Outside Air



Cooling with Re-circulated Air



Operating the Air Conditioner

The air conditioner operates only when the engine is running with blower on and when the temperature is over +4°C. To switch on the air conditioner, press the A/C HI or A/C LO switch.

Air Conditioner ON/OFF Switches (if applicable):

A/C LO Switch (AC LO): To turn ON the air-conditioner, press the A/C LO switch, and the indicator lamp will come on. Air conditioner starts to operate. To turn off the A/C LO, press the switch again.

A/C HI Switch (AC HI): If you need higher cooling, turn ON the air-conditioner by pressing A/C HI switch and the A/C HI indicator lamp will come on. To turn off the A/C HI, press the switch again.

If the A/C HI switch is pressed when A/C LO is on, it will switch on high cooling and the A/C LO will be switched off automatically and vise versa.

We recommend to operate in A/C LO mode for better fuel economy.

For the vehicles fitted with HVAC

NOTE

If your vehicle has been parked in the hot sun with the windows closed, drive with windows open for few minutes. This will help to vent hot air out and allowing the air conditioner to cool the interior quickly.

- Air conditioner extracts humidity from cooled air. Therefore it is completely normal if a small pool of water forms underneath your parked vehicle.
- Make sure that the air intake grills in the windshield areas are not blocked (with leaves, ice/snow etc)
- On humid days, do not blow cold air on the wind shield & side window glass, because the difference between the outside & inside temperature could make the fogging worse.
- When driving the vehicle in dusty conditions, it is recommended to select the air intake to Recirculation mode temporarily, to avoid the outside dust entering the vehicle.
- The air conditioner should be operated for a few minutes atleast once in a week. This helps prevent damage to the system due to lack of lubrication.

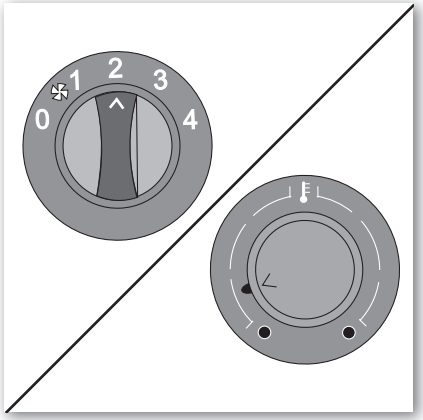
Shutting Out Unpleasant Odors: To shut out unpleasant odors, set the blower to re-circulated air.

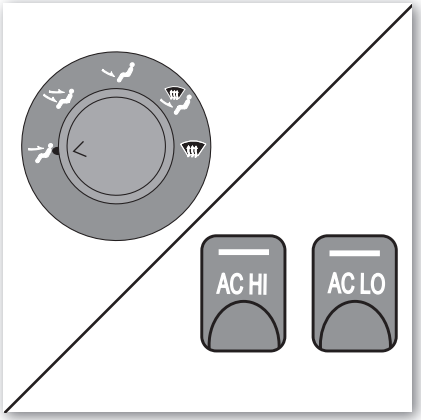
Air conditioning (if applicable)

For cooling the vehicle interior,

- Switch on the engine
- Set the blower to any speed except OFF
- Set the temperature control knob to cold (blue)
- Set the air distribution control knob to face mode
- Press the A/C HI or A/C LO switch.

(For fast cooling, select the recirculation mode)





Windshield Defogging (if applicable)

To defog inside of the windshield

- Switch on the engine
- Set the blower to any speed except OFF
- Set the temperature control knob to cold (blue) / hot (red)
- Select the fresh air intake mode.
- Set the air distribution control knob to defroster mode
- Press the A/C HI or A/C LO switch.

NOTE

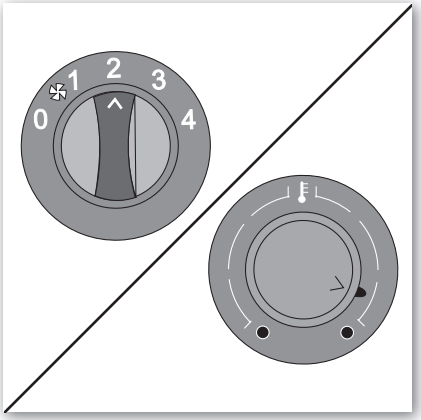
On humid days, do not blow cold air on the wind shield & side window glass, because the difference between the outside & inside temperature could make the fogging worse.

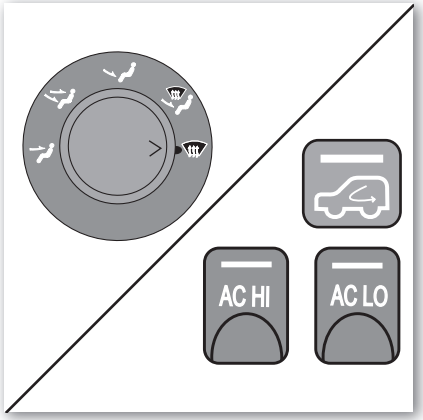
Windshield Defrosting

To defrost outside of the windshield

- Switch on the engine
- Set the blower to any speed except OFF
- Set the temperature control knob to hot (red)
- Select the fresh air intake mode.
- Set the air distribution control knob to defroster mode
- With the air conditioner off

For heating the vehicle interior while windshield defrosting, select the Foot-well / Defroster mode, if required.





Heating

Rapid Heating of Vehicle Interior:

- Switch on the engine
- Set the blower to any speed except OFF
- Set the temperature control knob to hot (red)
- Select the fresh air intake mode.
- Set the air distribution control knob to Foot-well mode
- With the air conditioner off

For fast heating the vehicle interior, select the recirculation air intake mode for a few minutes. To keep the windows clean from fogging, select the Fresh air intake mode, once the vehicle interior is warm.

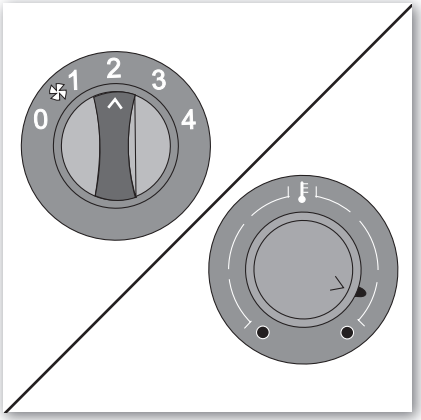
For heating the vehicle interior while windshield defrosting, select the Foot-well / Defroster mode, if required.

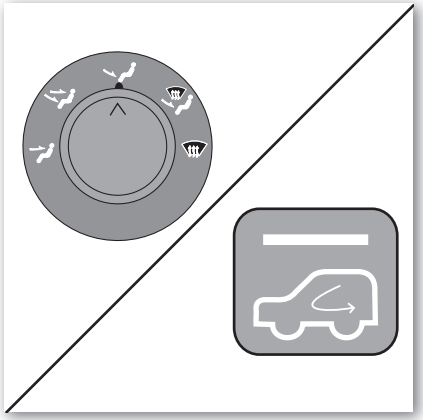
Switch on the A/C HI or A/C LO for dehumidified heating.

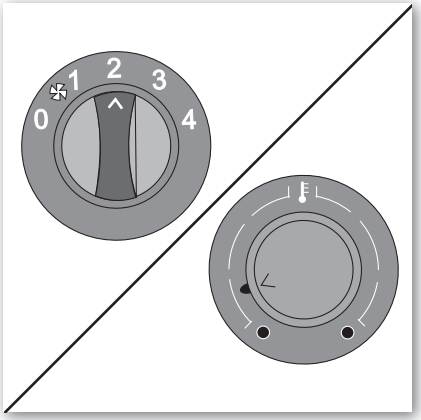
Ventilation

For better ventilation:

- Set the blower to any speed except OFF
- Set the temperature control knob to cold (blue)
- Select the fresh air intake mode.
- Set the air distribution control knob to Face mode
- With the air conditioner off







NOTE

Your vehicle HVAC system is fitted with filter in air intake. Do not run the blower with filter removed condition. Running the blower with filter removed may result in blower motor malfunction. Have the filter cleaned / replaced by a Mahindra Authorised dealer as recommended / when required. Filter to be cleaned by tapping gently only, and not by blowing compressed air or any other method.

Other Equipment

Interior Lights (if applicable)

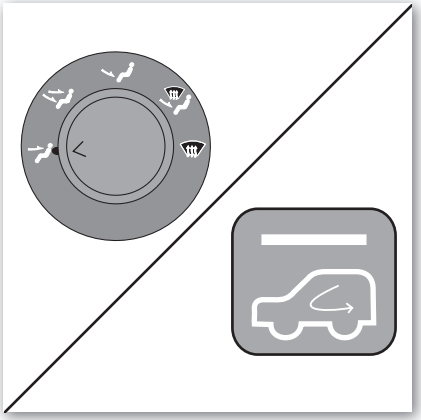
The lamps function in three modes

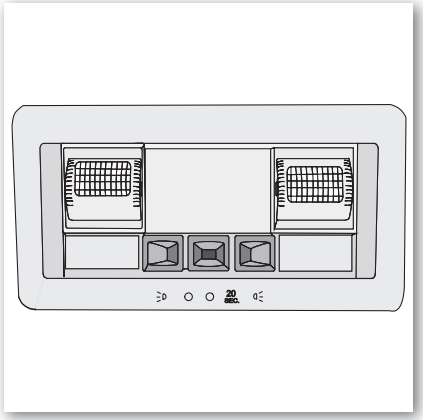
- ON - Switch to this mode to keep the lights ON always
- OFF - Switch to this mode to turn the lights OFF
- DOOR - The lights come ON when any of the side doors or the back door is opened. The lights go OFF when all the doors are closed.

The lights can be swivelled in the desired direction.

NOTE

Do not use the interior lights for extended periods of time with the engine stopped.





12 V Power Output

This 12V power supply socket is provided for power take off for other electrical instruments like mobile phone etc. on the instrument panel. And an additional 12V power output socket provided on the rear side of the floor console for the rear passenger use, on selected models.

NOTE

The Cigarette Lighter (if applicable) can be used on 12 power output socket. Press the lighter in to heat it up. When it reaches the correct temperature, the lighter will eject automatically and can then be withdrawn for use.

If the engine is off, the ignition key must be in the ON position for the lighter to operate.

CAUTION

Hold the lighter by the handle

CAUTION

If the lighter does not pop out within 30 seconds, remove it to prevent overheating. Do not keep it pressed for a long period unnecessarily because it will overheat.

WARNING

The cigarette lighter reaches high temperatures. Handle it carefully and do not allow children to use it: risk of fire and burns!

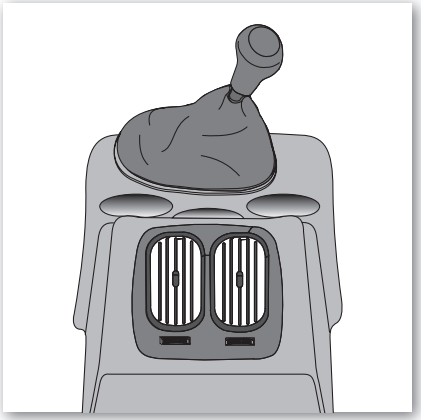
Front Ashtray

Ashtray is located on the floor console

- To use, open the lid of ashtray
- To empty, take out the ashtray just by pulling by hand.
- To fit it back just press the ashtray gently on its location.

Keep the ashtrays clean by emptying them regularly.

Do not use ashtrays for rubbish. You might start a fire.



Smoking in the Vehicle

Avoid smoking inside the vehicle. Smoking in the vehicle spoils the ambience and the interiors of the vehicle.

- Do not toss a cigarette out of the window. It may land on somebody or may result in a fire hazard. Ashtrays have been provided for disposing ash and cigarette butts.
- Take care not to drop the cigarette on the seats. It may burn holes in the upholstery.

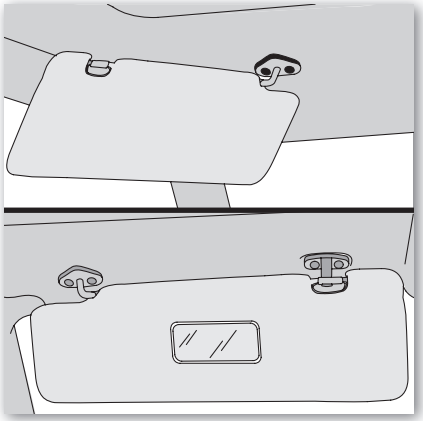
Sun-visors: Sun-visors protect the eyes from bright light. They can be lowered, released from the retention clips and swiveled sideways towards the door. The sun-visor on the co-driver's side has a vanity mirror on its backside.

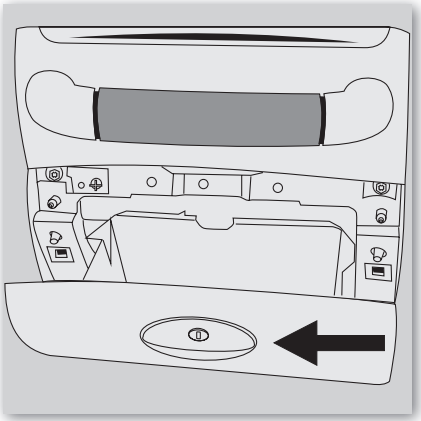
Grab Handles with Coat Hook: Grab handles with coat hooks are located above the passenger door and the rear doors. A grab handle is also provided for pulling the door from inside.

Glove Box: To open, lift the handle on the glove box. Always keep the Owner's Manual in the glove box for ready reference. On selected models, a light is given for better visibility, and it will glow when the glove box is open.

Always keep the glove box closed after use.

Additional power connection for extra fittings: Use the 12V 10 Amps extra fitting connection point (where ever provided) for taking out supply for additional accessories. This is visible just behind the driver instrument panel.





Cup Holder (Floor Console)

The cup holder is designed for holding cup or drink-cans securely

CAUTION

Do not place anything else other than cups or drink-cans in the cup holder. If doing so, cause the object thrown in the compartment and possibly injure people in the vehicle during sudden braking or in an accident. Using the cup holder to hold hot liquids when the vehicle is moving is dangerous. The contents may spill on the occupants causing scald.

Front and Rear Tow Hooks: Your Mahindra comes with two towing eyelets. The front tow hook should be used when the vehicle needs towing, and the rear tow hook should be used when other vehicles need towing.

Towing A Trailer

Your vehicle is designed as a passenger-&-load carrying vehicle. Towing a vehicle / trailer will have adverse effect on the vehicle performance, durability, driving economy and/or handling/ braking. Your safety & satisfaction is depending on the correct use of proper equipment & cautious driving habits. Contact your Mahindra Authorised Dealer for further details before towing, as there may be some additional legal requirements in your country.

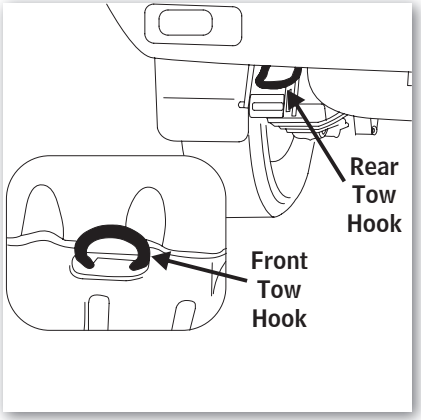
Before towing, be sure of the total weight of your vehicle, trailer weight, gross axle weight and towing-tongue-load-capacity, are well with in the permissible limits. And for further details on towing a trailer, call nearest Mahindra Authorised dealer.

NOTE

When towing a vehicle, a driver must be in the vehicle being towed to steer and operate the brakes.

CAUTION

Use only the towing eyelets for towing; otherwise the vehicle may be damaged. Switch on the hazard lights when the vehicle is being towed.



Antena

Lift the antenna to improve the reception of the tuner. This manually adjusted antenna must be lifted and lowered by hand.

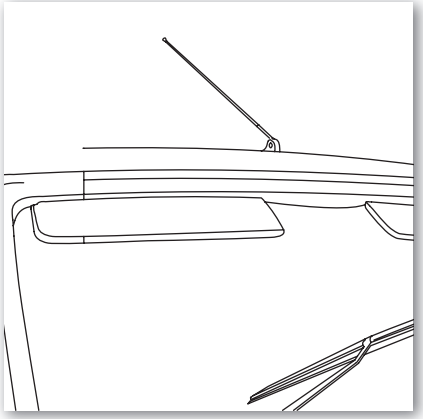
NOTE

To prevent damaging the antenna, lower it before entering a car wash facility or passing beneath a low overhead clearance.

Floor Mat

CAUTION

Make sure the floor mat is properly secured on the floor carpet. If the floor mat slips and interferes with the movement of the pedals during driving, it may cause an accident.



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Maintenance Schedule Chart

WARNING

Installationofnon-genuineparts or accessories could be dangerous. Non-genuine & non-approved parts / accessories may fit into your vehicle, but they could seriously affect your vehicle performance or safety system which could cause a serious accident.

Maintenance Schedule

To make sure that your vehicle runs efficiently all the time, follow the maintenance schedule. The service interval for the scheduled maintenance is determined by the odometer reading or by time interval, whichever comes earlier. Take your vehicle to a Mahindra Authorized Service Station only.

WARNING

Also remember that the scrupulous observance of the maintenance procedures is essential for the validity of the warranty.

Trained technicians & genuine Mahindra parts at Mahindra Authorized Service Stations are best for your vehicle & they will perform all the scheduled maintenance jobs reliably and economically. Inadequate, incomplete & insufficient servicing may result in problems. This even may cause an accident.

The owner should retain records/ documents that proper maintenance has been performed as prescribed.

Help Your Technician in Identifying Problems Quickly.

A majority of the time taken in servicing goes in identifying problems. You can help your technician reduce this time by telling him about the conditions you experienced in your vehicle.

- When experiencing a problem, try to listen to any unusual noises made by the vehicle
- Enginecoolanttemperaturecontinuously higher than the normal.
- Note if the vehicle is sluggish or feels different than normal
- Tell the technician about the circumstances prior to the moment you experienced the problem

The recommended service schedule is listed in the chart attached.

Work Nature \ Maintenance Schedule	Distance Covered (in Kms) / Months in service whichever is earlier																					
	PDI500	Daily	5000/3m	10000/6m	15000/9m	20000/12m	25000/15m	30000/18m	35000/21m	40000/24m	45000/27m	50000/30m	55000/33m	60000/36m	65000/39m	70000/42m	75000/45m	80000/48m	85000/51m	90000/54m	95000/57m	100000/60m
Engine & Cooling System																						
Check Radiator coolant level and coolant hose & heater hose connections for leaks.	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check & Replace accessory Drive belt tension (all type of engines)	✓		✓	✓		✓		✓		✓		✓		✓		✓		R		✓		✓
Check & Replace idler/tensioner pulley/gear bearing assy			✓	✓		✓		✓		✓		R		✓		✓		✓		✓		R
Change Engine coolant										R								R				
Check Fluid Reservoirs levels	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check Engine oil level and leakage	✓	✓																				
Adjust intake and Exhaust valve clearance						✓				✓				✓				✓				✓
Check the drive belts for cracks, fraying, wear & tension	✓		✓	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Change Engine oil & oil filter (all type of Diesel Engines)			R			R			R			R			R			R			R	
Check Vacuum pipe oil hoses connection	✓		✓			✓				✓				✓				✓				✓
Check Diesel smoke (or) as per local regulation										✓								✓				
Air, Fuel & Exhaust																						
Replacement of air cleaner foam element (or when service indicator shows red band, whichever is earlier)										R								R				
Rectify fuel leakage if any / Check fuel lines (Every 20,000 till 80,000 and then every 10,000 Kms)	✓					✓				✓				✓				✓				✓
Clean the diesel fuel strainer (in tank)			✓			✓				✓				✓				✓				✓
Remove drain plug fuel tank and drain off sediments																		✓				
Check & drain water from Fuel filter (or when indicators in the cluster glows)				✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Replace fuel filter element.						R				R				R				R				R
Exhaust pipes and mountings, Check and if necessary replace	✓					✓				✓				✓				✓				✓

Work Nature \ Maintenance Schedule	Distance Covered (in Kms) / Months in service whichever is earlier																					
	PDI500	Daily	5000/3m	10000/6m	15000/9m	20000/12m	25000/15m	30000/18m	35000/21m	40000/24m	45000/27m	50000/30m	55000/33m	60000/36m	65000/39m	70000/42m	75000/45m	80000/48m	85000/51m	90000/54m	95000/57m	100000/60m
H V A C																						
Check Air conditioning / cooler Refrigerant	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Tighten the bolts on brackets and compressor	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Change the HVAC filter element					R			R			R			R			R			R		
Clean the evaporator (Every 40,000 Kms. or every 9 months in normal condition & 4 months in dusty condition)										✓								✓				
Clutch & Transmission																						
Clutch fluid. Check & Top up	✓			✓		✓		✓		R		✓		✓		✓		R		✓		✓
Replace Transmission Gear oil	✓		R	✓	✓	R	✓	✓	✓	R	✓	✓	✓	R	✓	✓	✓	R	✓	✓	✓	✓	R
Clean & refit breather									✓								✓					
Steering																						
Check All stg rods & Arms (Loose, damage, wear) + tighten intermediate shaft bolts	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check stg ball joint and dust covers	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check Steering wheel linkage & gear box oil	✓					✓				✓				✓				✓				✓
Check Power steering reservoir fluid level and hose connections for leaks	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Front Axle																						
Change grease in front wheel hub							✓					R					✓					R
Adjust bearing play (0.0254 mm - 0.1016 mm)							✓					✓					✓					✓
Check Front Axle Drive shafts (Bent or boot damage)						✓				✓				✓				✓				✓

Work Nature \ Maintenance Schedule	Distance Covered (in Kms) / Months in service whichever is earlier																					
	PDI500	Daily	5000/3m	10000/6m	15000/9m	20000/12m	25000/15m	30000/18m	35000/21m	40000/24m	45000/27m	50000/30m	55000/33m	60000/36m	65000/39m	70000/42m	75000/45m	80000/48m	85000/51m	90000/54m	95000/57m	100000/60m
Rear Axle																						
Check & change Rear Axle wheel bearing and check for Smooth rotation												R										R
Check, top-up if required & replace Rear Axle differential gear oil	✓		R	✓		R		✓		R		✓		R		✓		R		✓		R
Brake																						
Check front brake pads, disc & other brake components for wear, deterioration & leaks				✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check rear brake lining, drums & other brake components for wear, deterioration & leaks				✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check Brake pedal operation	✓		✓	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check and adjust parking brakes	✓		✓	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check or Change Brake fluid	✓		✓	✓		✓		✓		R		✓		✓		✓		R		✓		✓
Pedals & Controls																						
Check foot brake, parking brake & clutch for free play stroke & operation	✓					✓				✓				✓				✓				✓
Suspension																						
Check Wheel alignment & rotate the wheels as per manual				✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check shock absorber & its bushes (for oil leakages / damages), Replace if necessary						✓				✓				✓				✓				✓
Check condition of bushes, rubber links in anti-roll bar Replace if necessary. @@								✓						✓						✓		
Check the condition of rubber bushes in lower link of front suspension. Replace if necessary. @@								✓						✓						✓		

@@ - or once in a year, whichever is earlier

Work Nature \ Maintenance Schedule	Distance Covered (in Kms) / Months in service whichever is earlier																				
	PDI500	Daily	5000/3m	10000/6m	15000/9m	20000/12m	25000/15m	30000/18m	35000/21m	40000/24m	45000/27m	50000/30m	55000/33m	60000/36m	65000/39m	70000/42m	75000/45m	80000/48m	85000/51m	90000/54m	95000/57m	100000/60m
Check condition of pivot bushes in top wishbone. Replace if necessary @@								✓						✓						✓		
Check and tight the suspension arm mounting bolts and ball joint mounting bolts to the specified torque				✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Electrical																						
Check the Operation of all instruments, gauges, lights and accessories.	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check Battery fluid level, specific gravity and conditions of battery terminals (or once in six months)	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check Operation of Horn (s) wiper and washer	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check Operation of headlights (High & Low beam) & leveling mechanism	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check Operation of warning lights	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check & grease the wiper motor linkages (or Once in a year before monsoon)										✓								✓				
Interiors & Mechanisms																						
Check Front and rear seats, and seat belts for operation.	✓																					
Check All moldings, trims and fittings for fit and alignment	✓																					
Check seat belts, buckles, retractors & adjuster	✓					✓				✓				✓				✓				✓
Check All windows for operation & alignment	✓																					
Check Hood, NVH covers, door panels for fit and alignment	✓																					
Check & lubricate Latches, Keys and locks for operation	✓		✓	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check & apply grease Door lock striker, Check arm, Bonnet opening lever & lock plate.	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓

@@ - or once in a year, whichever is earlier

Work Nature / Maintenance Schedule	Distance Covered (in Kms) / Months in service whichever is earlier																					
	PDI500	Daily	5000/3m	10000/6m	15000/9m	20000/12m	25000/15m	30000/18m	35000/21m	40000/24m	45000/27m	50000/30m	55000/33m	60000/36m	65000/39m	70000/42m	75000/45m	80000/48m	85000/51m	90000/54m	95000/57m	100000/60m
Wheels & Tyres																						
Tires rotation & Inflation pressure (Including Spare tyre)				✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Check & Grease Propeller shaft & sliding yoke	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Under Body Inspection																						
Check oil level & leak on Transmission, transfercase and differential propeller shafts, drive shafts, engine & body mounting bolts.	✓			✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Lubricate locks, hinges & latch Tighten bolt and nuts of steering linkage, gear box, suspension,				✓		✓		✓		✓		✓		✓		✓		✓		✓		✓
Road Test																						
Check clutch operation, parking brake operation, steering control & returnability, Engine performance, Squeaks & rattles, Body & Chassis noise, operation of service / parking brakes, gear shifting, instrument cluster, operation of HVAC	✓		✓	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓

Work Nature / Maintenance Schedule	Distance Covered (in Kms) / Months in service whichever is earlier																					
	PDI500	Daily	5000/3m	10000/6m	15000/9m	20000/12m	25000/15m	30000/18m	35000/21m	40000/24m	45000/27m	50000/30m	55000/33m	60000/36m	65000/39m	70000/42m	75000/45m	80000/48m	85000/51m	90000/54m	95000/57m	100000/60m
Final Inspection																						
Install necessary parts (Outside mirror, Wheel covers, Seat belts, mat, Side foot step, Ski-rack & mud flaps) Inspect for interior and exterior metal and paint damage. Check for spare tire, jack, jack rod, tools and literature. Wash & Clean interior and exterior before every delivery.	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
General Inspection																						
Check Sound System & Controls, Retractable Aerial, Child lock, Power Window Controls, Power Lock system & control, Cigarette Lighter and Remote Control Mirrors. Check proper operation of Security system and voice messaging system (if fitted),	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace

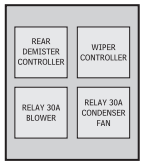
R - Indicates Replace or change

Recommended Lubrication Chart

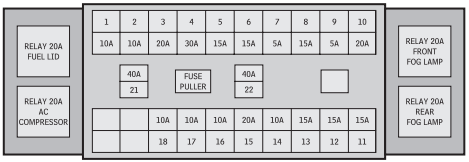
LUBRICANT RECOMMENDATION FOR LOW TEMPERATURE APPLICATIONS						
	PERFORMANCE SPECIFICATION	VISCOSITY CLASS SAE				QUANTITY
OIL TYPE	Diesel Engines	50° to 0°C	0° to -10°C	-10° to -20° C	-20° to -25 °C	
ENGINE OIL	API CH4, MB 228.3, VDS-2, DHD-1	15W-40	15W-40	5W-40	5W-40 / OW-30	Diesel Engine - 6 Litres
TRANSMISSION OIL	GL4	80W-90	75W-90	75W-90	75W-90 / 70W-90	2 Litres
AXLE OIL	GL5	75W-90	75W-90	75W-90	75W-90/ 70W-90	Rear Axle 1.65 lit. & Front Axle 1.2 Lit
TRANSFER CASE OIL	ATF MEETING THE SPEC. OF DEXTRON II D & above					1.1 lit
POWER STEERING OIL	CALTEX MAKE 'TEXAMATIC' 1888 AT Fluid					0.8 lit. (approx)
CLUTCH & BRAKE FLUID	DOT 3 BRAKE FLUID MEETING FMVSS NO.116 / SAE J 1703 SPECIFICATIONS					As Required
ENGINE RADIATOR COOLANT	BASF MAKE 'GLYSANTIN' 48-24 or 45-23 for Diesel vehicle # **Note: # Mix coolant and clean water externally and fill up to the max level Ratio: 30% Coolant + 70% Clean Water for temperatures down to -10°C Below -10°C use 50%Coolant + 50% Clean water**					Diesel Engine -10 Litres
WHEEL HUB & CHASSIS LUBRICATION POINTS		50° to 0°C	+0° to -10°C		-10° to -25°C	As Required
	General specification	Lithium Complex Grease meeting NLGI2 grade				
	Manufacturer	Recommonded brands ##				
	BalmerLawrie	AUTOPLEX2/3	SYNTHPLEX 3		SYNTHPLEX 3	
	Castrol	LCG2	LCG2		--	
	Exxon-Mobil	XHP 222	XHP 222		SHC 220	
	Shell	Retinax LX2	Retinax LX2		Retinax EP2	

(Note: The brand-wise recommendation is optimised one which is found suitable for both Wheel hub and Chassis lubrication at various temperatures)

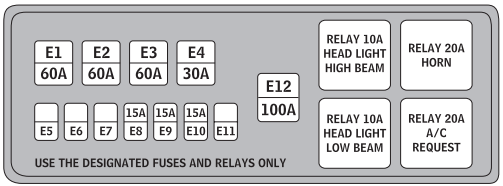
Fuse & Relay Identification



LOCATION :
BEHIND GLOVE BOX



LOCATION :
BEHIND DRIVER INSTRUMENT PANEL



LOCATION :
ENGINE COMPARTMENT

Sl. No.	FUSE RATINGS	FUSE TYPE	COLOUR CODING	PROTECTED COMPONENT
1	10A	BLADE TYPE	RED	INTERIOR LAMPS
2	10A	BLADE TYPE	RED	FUEL LID OPERATION
3	20A	BLADE TYPE	YELLOW	4WD - ELECTRIC SHIFT
4	30A	BLADE TYPE	GREEN	CONDENSER FAN
5	15A	BLADE TYPE	BLUE	FRONT FOG LIGHT
6	15A	BLADE TYPE	BLUE	REAR FOG LIGHT
7	5A	BLADE TYPE	BROWN	CRDe DIAGNOSTIC
8	15A	BLADE TYPE	BLUE	DEMISTER
9	5A	BLADE TYPE	BROWN	CENTRAL DOOR LOCKING 2
10	20A	BLADE TYPE	YELLOW	CENTRAL DOOR LOCKING 1
11	15A	BLADE TYPE	BLUE	AIR CONDITION
12	15A	BLADE TYPE	BLUE	CIGAR LIGHTER & ACC.
13	15A	BLADE TYPE	BLUE	FRONT WIPER MOTOR
14	10A	BLADE TYPE	RED	REAR WIPER MOTOR
15	20A	BLADE TYPE	YELLOW	CRDe ECU K28
16	10A	BLADE TYPE	RED	TURN
17	10A	BLADE TYPE	RED	PARKING LIGHTS
18	10A	BLADE TYPE	RED	AUDIO SYSTEM
21	40A	MAXI FUSE	GREEN	POWER WINDOW
22	40A	MAXI FUSE	GREEN	AC BLOWER
E1	60A	MAXI FUSE	YELLOW	BATTERY 1
E2	60A	MAXI FUSE	YELLOW	BATTERY. 2
E3	60A	MAXI FUSE	YELLOW	GLOW PLUG
E4	30A	MAXI FUSE	PINK	CRDe ECU
E8	15A	BLADE TYPE	BLUE	HEAD LAMP HI BEAM
E9	15A	BLADE TYPE	BLUE	HEAD LAMP LOW BEAM
E10	15A	BLADE TYPE	BLUE	HORN & HAZARD
E12	100A	MAXI FUSE	BLUE	CHARGING SYSTEM

Fuses

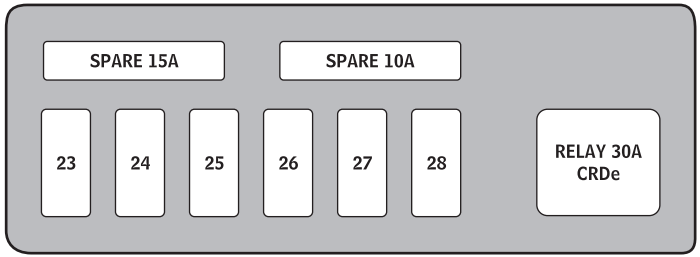
Your vehicle electrical system is protected by fuses. If any lights accessories, or controls do not work, check the appropriate circuit fuse. If the inside element is melted indicates that the fuse is blown. Fuse box is provided inside the IP-driver panel and in the engine compartment.

To replace the blown fuse

- Turn off the ignition switch and other controls / switches.
- Open the IP-driver panel.
- Pull the fuse straight out with help of fuse puller provided on the fuse panel.
- Inspect it and replace if it is blown.
- Get a new fuse of the same rating from the spare fuses provided and fit it tightly in the appropriate fuse slot.

If you have no spare fuses, borrow one of the same ratings from a circuit not essential to vehicle operation. Get the spare fuses replenished at a Mahindra Authorised dealer.

Sl. No.	FUSE RATINGS	FUSE TYPE	COLOUR CODING	PROTECTED COMPONENT
23	10A	BLADE TYPE	RED	ECU TERMINAL SUPPLY KO1
24	15A	BLADE TYPE	BLUE	CLUSTER INDICATOR LAMP
25	15A	BLADE TYPE	BLUE	ECU TERMINAL SUPPLY KO5
26	15A	BLADE TYPE	BLUE	EGR & BRAKE SWITH
27	10A	BLADE TYPE	RED	HOTFILM AIR-MASS SENSOR
28	10A	BLADE TYPE	RED	AC ON

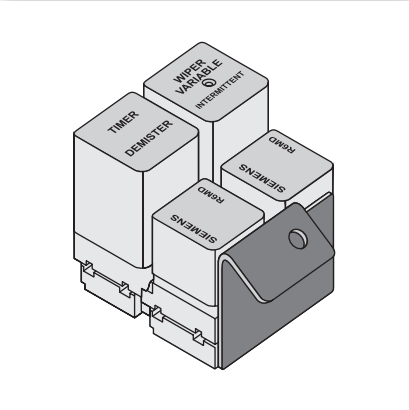


LOCATION :
BEHIND GLOVE BOX

CAUTION

Always replace a fuse with one of the same rating. Otherwise it will damage the vehicle electrical system.

If the engine is not starting or headlights do not work and the fuses in the instrument panel are okay, check the (high current) fuses in the engine compartment. If the fuses are blown, it must be replaced by an authorised Mahindra dealer or by a qualified technician.



To replace the heavy fuses

- Turn off the ignition switch and other controls / switches.
- Open the bonnet & secure it with stay rod
- Remove the negative battery terminal
- Open the fuse cover
- If fuse is blown, replace with a new one of the same rating.
- Install the fuse cover

Light / Bulb Specifications

Replacing The Lights Bulb

When replacing a bulb, make sure the ignition switch and light switch are off. Use only the correct wattage rating bulbs (refer the table for rating).

CAUTION

Using bulbs with units of higher output capacity/wattage is illegal and may damage your vehicle electrical system.

CAUTION

Before replacing a light bulb, make sure that the corresponding fuse is intact. For replacement, use only genuine new light bulbs having the same characteristics as the bulb to be replaced.

Table on light bulb & units, wattage and type

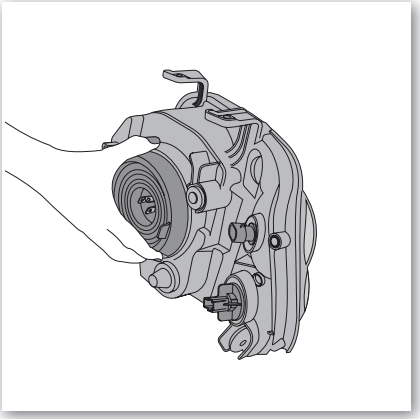
LIGHT BULB	WATTAGE	CAP TYPE	NO. OF BULBS / Veh
Headlights	60/55W	H4 - P43T	2
Front turn signal lights	21W Amber	BAU15D	2
Front parking lights	5W	W5W	2
Side turn signal lights (Fender)	5W	W5W	2
Brake / tail lights	21/5 W	BAY15D	2
Rear Turn-signal lights	21W	BAS15D	2
Reverse lights	21W	BAS15D	1
Rear Fog light	21W	BAS15D	1
Rear License plate lights	5W	W5W	2
Interior lights bulb type 1 #	10W	C10W	1
Side foot step lights *	5W	W5W	4
Glove box light *	3W	W3W	1
Engine Compartment Light	10W	BA15S	1

* - on selected models # - model specific

Self Maintenance Checks

CAUTION

To avoid burning yourself, do not replace the light bulbs when they are hot. Halogen bulbs have pressurized gas inside and are to be handled with special care. Mishandling it may cause the bulb to burst or shatter. Hold the bulb with its metal / plastic and do not touch the glass part with bare hands.



Headlight Bulb

The headlight bulb can be replaced without removing the headlight assembly from vehicle. To replace the headlight bulb;

- Disconnect the negative terminal from the battery.
- Remove the rear dust cover from the headlight.
- Remove the bulb assy with connector from the headlight by unlocking the wire clamp.
- Detach the bulb assy from the wiring connector near to the headlight.
- Insert the connector in to the new bulb assy (of the same wattage), and follow the reverse procedure to assemble the bulb assy in the headlight assy.
- Clamp the bulb assy by wire clamp properly.

Front Parking & turn-signal light bulbs

Parking Light

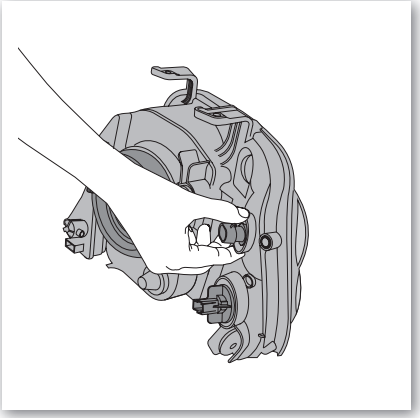
- Disconnect the negative terminal from the battery.
- Remove the (upper) wiring connector
- Turn the bulb assy in anti-clockwise direction to remove it from the head light assy
- Insert the new bulb assy and turn clock wise direction to fit it properly
- Re-connect the wiring connector

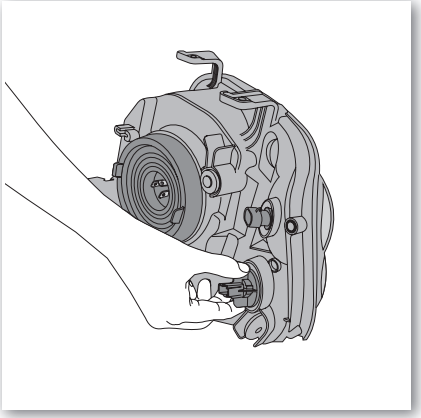
Turn Indicator

- Turn the bulb holder in the anticlockwise direction in order to remove the bulb holder
- Pull out the bulb holder from head light assy
- Replace the burned bulb with new bulb of the same wattage
- Assemble back the bulb & holder assy in to the head lamp
- Turn the bulb holder clockwise to lock it.

Rear Parking, turn-signal & tail light bulbs

- Disconnect the negative terminal from the battery.
- Remove the inspection cover from the inside cargo box by loosening the screws
- Turn the respective bulb holder assy in anti-clock wise direction to remove it from light assy
- Replace the bulb in the holder





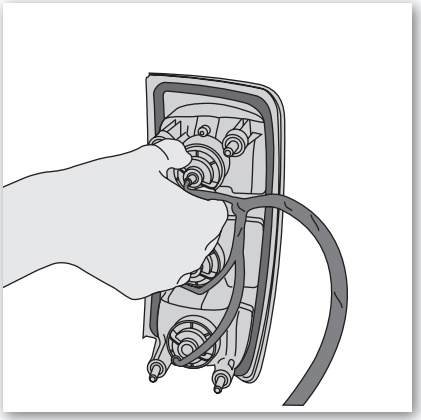
- Re-assemble the bulb & holder assy back to the light assembly in the respective slot.
- Turn the bulb holder clockwise to lock it.
- Fit back the inspection cover

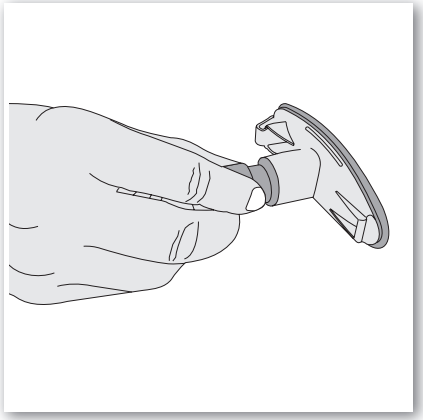
Fender Side turn-signal light bulbs

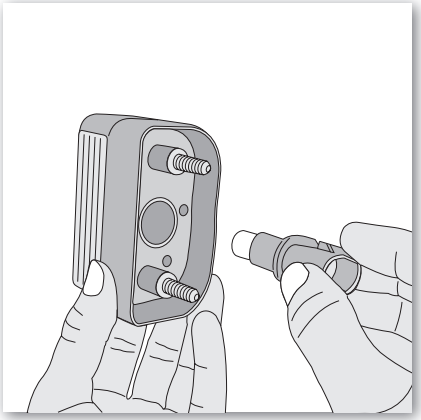
- Use a small flat head screw driver as tool at the front side of light assy to remove it from the vehicle body panel
- Pull out the bulb holder from the lens
- Replace the burned bulb with new one
- Insert the bulb holder back to lens
- Keep the hook at rear side first and press the front side of the lens, to assemble it back on the vehicle body

Rear registration plate light bulbs

- Disconnect the wiring connector
- Remove the light assy by loosening the 2 nos. of M6 nuts (which can be accessed from behind)
- Take off the rubber gasket from the assy
- Remove the bulb holder assy by turning it in anti-clock wise direction
- Replace the bulb with new one of the same rating
- Reverse the procedure for re-assembling the light assy







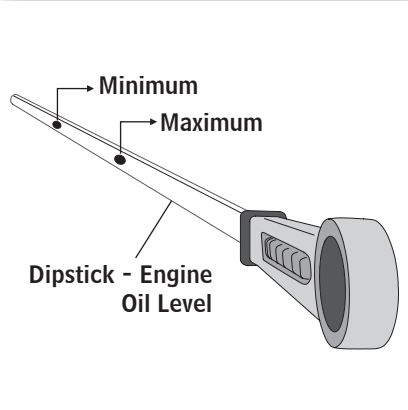
Maintenance of your vehicle is best performed at a Mahindra Authorized Service Station. However, for your vehicle to function in peak condition, it is necessary that you do a little maintenance yourself. This section provides maintenance instructions that are relatively easy to perform. Take maximum care when working on the vehicle to prevent accidental injury.

Check the following at regular intervals.

- **Lights:** Make sure that headlights, stop lights, tail lights, turn signal lights and other lights are working properly. And also check the headlight aim.
- **Engine oil level:** Check every time you fill the fuel tank
- **Engine coolant level:** Check the radiator reserve tank every time you fill the fuel tank

WARNING

With the engine warm, be very careful when working inside the engine compartment since there is the risk of burns. Remember that, when the engine is warm, the fan could start to move and this could cause injury.



- **Windshield Wipers:** Check the wiper condition every month; Check for wear, cracks or other damage

CAUTION

Working near the engine when it is running is dangerous. When the engine is running, keep hands, loose cloths, neckties, scarves & tools away from the moving fan and engine drive belts.

CAUTION

If the engine is hot, do not remove / loosen the radiator cap to prevent burning yourself.

Brakes: Check the brake fluid level regularly, if the level is low add the brake fluid until it reaches Max level. It should be kept at max level.

WARNING

Low brake fluid level could be dangerous. Low level could signal brake lining wear or brake system leak, which may leads to system failure and cause a serious accident. If you find fluid level low, have the brake system checked at Mahindra Authorised dealer.

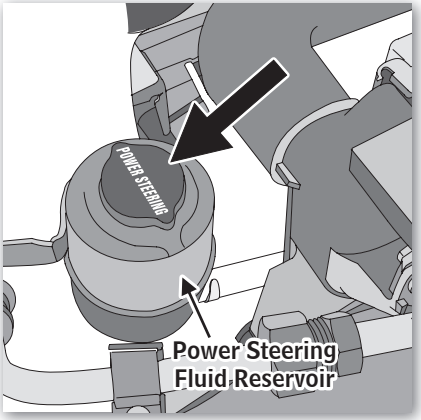
If brake fluid spills in your eyes, they could be seriously injured. If this happens, immediately flush your eyes with water and get medical attention.

CAUTION

Brake fluid will damage the painted surface & interior /exterior trims. If brake fluid gets on these surfaces, wipe it off immediately.

Power steering: Check the oil level regularly when engine is off, if the level is low add the recommended power steering oil until it reaches Max level. It should be kept between Max & Min level.

- **Brake pedal:** Check the brake pedal for smooth operation
- **Clutch pedal:** Check the clutch pedal for smooth operation
- **Parking brake:** Check the parking brake lever for smooth operation



- **Tyres:** Check the tyres for air pressure; Check tread every month for wear and foreign objects
- **Battery:** Check battery and terminals for corrosion

CAUTION

Be extremely cautious when working on the battery. It contains corrosive & poisonous sulphuric acid.

Air conditioner: Check its operation for effective cooling every week; Note any drop in cooling efficiency

Windshield washer fluid: Check that there is adequate fluid in the tank.

Windscreen defroster: Check the fan, heater and air conditioner every month

Doors: Check all doors including the tail door for smooth opening/closing and secure locking

Seat Belts: Check all the parts of seat belt system working properly and smoothly. Check belt webbing for cuts, fraying wear or damage.

Adding wind shield washer fluid

If washer does not work, the washer tank may be empty. Add washer fluid.

Use recommended washer fluid or plain water (in case of non-availability of fluid). For the vehicles operated in cold area where the temperature is below freezing point, use the recommended washer fluid which contains antifreeze.

NOTE

Do not use the engine antifreeze or any other fluids which are not suitable, because it may damage your vehicle's paint & exterior.

Regular cleaning and polishing of your vehicle helps keep it looking new.

Windscreen Wiper Blades

When the wipers no longer clean well, the blades are probably worn or cracked. Replace them.

CAUTION

To prevent damage to the wiper arms and other components, do not move the wipers by hand.

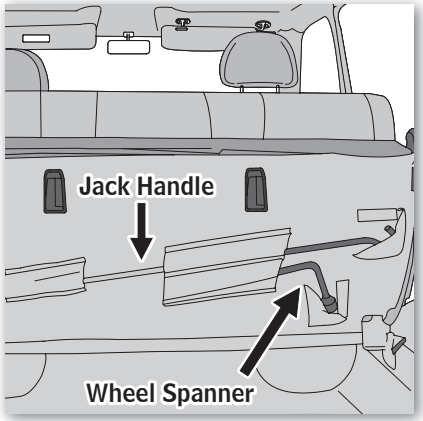
- Do not operate the wipers on a dry screen
- In freezing or very hot conditions, ensure that the blades are not frozen or stuck to the glass
- In winter, remove any snow or ice from around the arms and blades, including the wiped area of the windscreen.

Toolkit

Jack: The jack is located under the co-driver's seat.

Wheel spanner & jack handle: In double cab models, the tools can be found strapped on to the bottom of the 2nd row seat. In single cab models, the tools are located behind seat.

Toolkit bag: Located under the co-driver's seat



Identifying Vehicle Problems

To identify the problems with your vehicle, pay close attention to the following:

Fluid leaks: If you frequently find puddles underneath the vehicle, you may be able to identify the origin from the color/odor of the fluid.

- Coolant is usually bright green
- Oil is brown
- Power steering fluid is generally red
- Brake fluid is either tan or clear
- Fuel (diesel/petrol) has a distinct odor
- If the fluid is plain water, touch it. If the water is cold, then it may be the condensation from your air conditioning system and is nothing to worry about.

Warning Lights: Warning lights on your dash board give important information about your vehicle. Go through the section on the instrument panel to learn about warning lights.

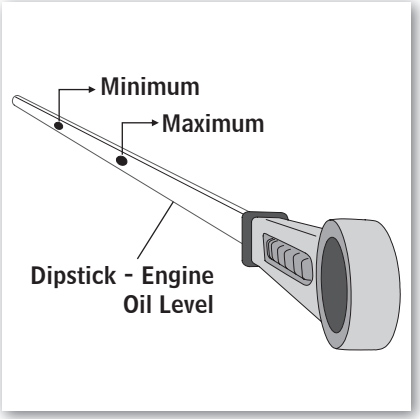
For CRDe diesel engine only

WARNING

Never try to work on injection system with engine running. High pressure must be existing in high-pressure pump, rail, injectors and high pressure pipes. The high pressure spray produced by fuel leaks may cause serious injuries

Engine Oil Check

Engine oil has the primary functions of lubricating and cooling the inside of the engine. It plays a major role in maintaining the engine in proper working order. Therefore, it is essential to check the engine oil regularly.



Engine oil consumption:

It is normal for engines to consume some engine oil during operation. Causes of consumption in a normal engine are as follows:

Oil is used to lubricate pistons, piston rings and cylinders. Thin films of oil, left over when pistons move in cylinders, are sucked into the combustion chamber due to high negative pressure generated when the vehicle is decelerating. This oil gets burnt in the combustion chamber.

Oil is also used to lubricate the stems of intake valves. Some of this oil is sucked into the combustion chamber together with the intake air and is burnt there.

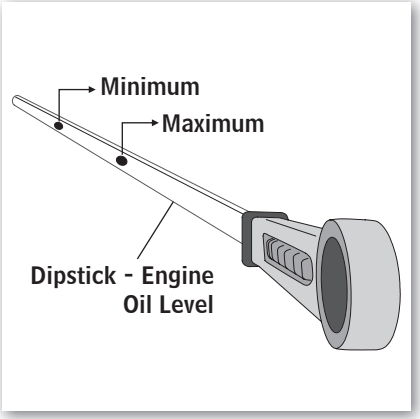
Engine oil consumption depends upon the viscosity and quality of the oil, and upon the conditions in which the vehicle is driven. Oil consumption will be more due to high speed driving and frequent acceleration and deceleration. A new engine may consume more oil since its pistons, piston rings and cylinder walls are not conditioned.

WARNING

If the oil pressure warning light glows continuously, check the engine oil level and add the recommended grade of oil, if necessary.

Checking the Engine Oil

- Be sure the vehicle is on a level surface.
- Warm up the engine to normal temperature
- Turn it off and wait for 10~15 minutes for the oil to return to the sump. Pull out the dipstick and Wipe the dipstick with a clean cloth or paper towel
- Insert it all the way back in its tube



- Remove the dipstick again and check the level. It should be between the maximum and minimum marks. If the level is close to the minimum mark, add oil.

CAUTION

A hot engine is dangerous. If the engine has been running, parts of engine / engine compartment can become very hot. You could get burned / injured. Avoid working when engine is hot.

WARNING

With the engine warm, be very careful when working inside the engine compartment since there is the risk of burns. Remember that, when the engine is warm, the fan could start to move and this could cause injury.

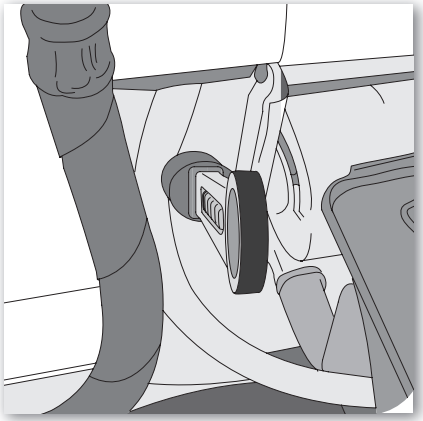
Changing the Engine Oil

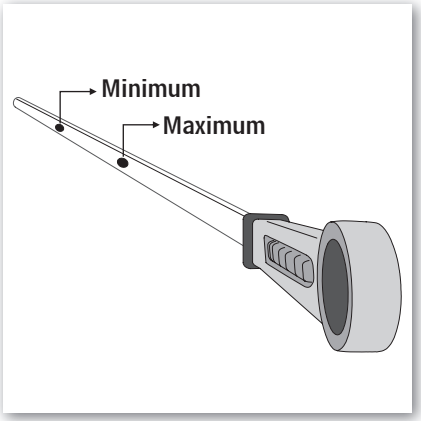
- Remove the drain plug in the sump
- Drain the engine oil
- Put the plug back in place
- Fill with recommended engine oil (Refer lubrication chart given on the start of this chapter.)

NOTE

Change the engine oil every time you replace the oil filter. Mahindra recommends the use of correct grade of engine oil according to the temperature range the vehicle is being operated. Changing the engine oil and the coolant should be done by an Authorised Mahindra dealer.

The drain plug has a magnet that attracts metallic particles. Hence, clean the drain plug every time engine oil is changed.





Failure to check the engine oil level regularly may lead to engine trouble / poor performance due to insufficient oil.

CAUTION

- Do not add engine oil over maximum mark.
- Used engine oil contains harmful contaminants which may cause skin disorders. Avoid prolonged / repeated direct contact with used engine oil. Wash your skin thoroughly with soap & water.
- Do not leave used engine oil within the reach of children.
- Dispose used oil & filter only in safe & acceptable manner to local law. Do not dispose in sewage or house hold thrash.

Oil Filters: Replace the oil filters at recommended intervals.

Battery Check

Checking Battery Condition

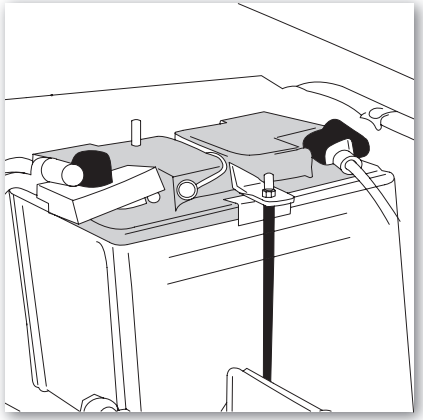
Battery Exterior

Check the battery exterior for corroded or loose terminal connections, cracks or loose hold-down clamp. First remove the ground cable from the negative ('-') terminal. After checking, the cable to the negative terminal should be installed last. If the battery terminal is corroded, wash it with a solution of warm water and baking soda.

CAUTION

Prevent further corrosion by applying petroleum jelly to the outside of the terminals. If the terminal connections are loose, tighten their clamp nuts, but do not tighten excessively. Tighten the hold-down clamp only enough to keep the battery firmly in place. Tightening excessively may damage the battery's case.

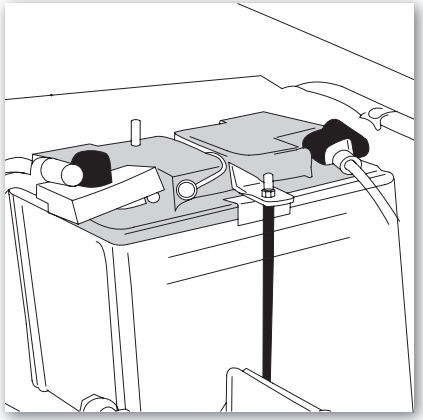
- Be sure the engine and all accessories are turned OFF before performing maintenance.
- When washing, ensure that the washing solution does not get into the battery
- Do not remove the battery connection while engine is in running. This may cause serious damage to fuel system-ECU and to other electronic equipments.



- Always disconnect the negative terminal cable first from the battery. But when reconnecting, always connect the cable to the positive terminal first.

Checking Electrolyte Level

Check the electrolyte level and specific gravity at intervals of three months. Check all the six cells for proper electrolyte level. If the level is below the lower marker, add distilled water until the level reaches the upper marker.



Adding Distilled Water

- Remove the vent plugs
- Add distilled water to all the cells that require the fluid
- Secure the plugs properly

CAUTION

Do not fill distilled water beyond the upper mark level. Excessive electrolyte could squirt out of the battery during heavy charging, causing corrosion or damage.

Draining water from fuel Filter

The fuel filter warning light on indicates that the water from the fuel filter to be removed immediately.

- Place a small open container / tray under the drain plug cum sensor to collect the water.
- Place a small open container / tray under the drain plug cum sensor to collect the water.
- Turn the drain plug cum sensor about 2 to 2 1_2 turns in the anti clockwise direction
- Operate the priming pump until fuel begins to flow clean & clear.
- After draining, retighten the drain plug cum sensor. Do not use any tool. Use the priming pump to inspect for leaks.

Catalytic Converter / Fuel

Catalytic Converter (if equipped)

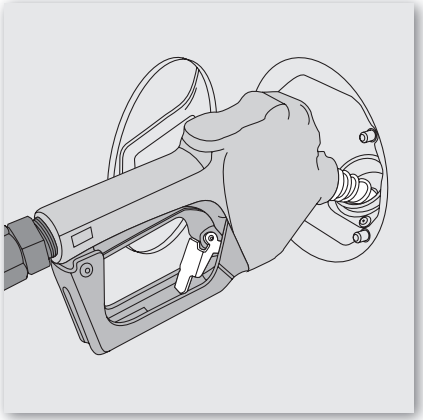
The catalytic converter is an emission control equipment fitted in the exhaust system, that reduces pollutants by converting poisonous exhaust emissions from the engine into less environment polluting gases. It converts harmful un-burnt hydrocarbons, carbon monoxide and oxides of nitrogen into harmless carbon dioxide, water vapor and nitrogen.

Care and maintenance to minimize the possibility of damage to the catalytic converter

- Maintain the engine in the proper operating conditions
- Consult a Mahindra Authorised Dealer/ Service Center at the earliest in the event of irregular running of engine following a cold start, misfiring, a significant loss of vehicle drivability or other unusual malfunctions which may indicate a fault in the ignition system.

CAUTION

- Avoid jump starting of the engine by pushing or towing the vehicle, or by coasting downhill.
- Euro III diesel or higher grade for Euro III diesel engines, and Euro II diesel or higher grade for Euro II diesel engines.
- Avoid frequent cold starts.



NOTE

Even if the emission control system is operating properly, under certain engine operating conditions there may be an unusual exhaust smell from the vehicle.

WARNING

High temperature in catalytic converters (in very unfavorable conditions) may cause fire if it comes in contact with inflammable materials. Therefore the vehicle should be parked in such a way that the catalytic converter does not come in contact with inflammable materials such as grass, leaves, paper or rags.

CAUTION

- Avoid inhaling the engine exhaust.
- Do not run the engine in a closed area / garage except for time needed to take the vehicle in & out. The exhaust gas reduces the oxygen content in the air and can cause unconsciousness or even death.
- If the exhaust smells / fumes are detected inside the vehicle, drive the vehicle with windows fully open and have the cause immediately rectified.

Engine Maintenance Checks

CAUTION

Never drive the vehicle if the fuel tank is nearing empty (in vehicle fitted with catalytic converter). This can cause irregular fuel supply leading to misfiring. Misfiring allows unburned fuel into the exhaust system which can cause overheating and damage the catalytic converter.

Misfiring can cause a loss of power and engine running is also rough. This may be due to fault in the ignition system. Reduce your speed immediately and have the fault rectified. Remember your Mahindra dealer knows best about your vehicle and its emission control system.

- Do not switch off the engine or interrupt the ignition when the gearbox is engaged and the vehicle is in motion
- Do not idle the vehicle for prolonged periods if idling seems rough or indicates any other malfunctions
- Do not empty the fuel tank totally
- Do not switch off the ignition when the vehicle is coasting down a slope
- Do not park or operate the vehicle near combustible materials such as dry grass and leaves as this may lead to fire hazard.
- Avoid driving on roads flooded with water
- Do not operate the engine in confined areas such as garages
- Check for exhaust system leaks and any other damages:
  - Each time your vehicle is raised up for an oil change
  - Whenever you notice a change in the noise of the exhaust system
  - Whenever the tail pipe end of the exhaust system is found rusty

Tyre Inspection & Rotation

The recommended tyre pressures for front and rear tyres (Laden/Partial Laden), in cold condition, are as under:

P245 / 75 R 16		
	Laden	Partial Laden
FRONT in Kg/cm² (PSI)	2.1 (30)	2 (29)
REAR in Kg/cm² (PSI)	2.5 (36)	2.1 (30)

* Laden - Fully loaded vehicle

\# Partial Laden:
Single Cab - Up to 2 persons + 500 kg luggage
Double Cab - Up to 3~4 persons + 300 kg luggage

Tyre Pressures

For reasons of proper performance, safety, and better fuel economy, always maintain the recommended tyre pressure and stay within the recommended load limits and proper weight distribution.

CAUTION

- Driving your vehicle with different types of tyres is dangerous. It could cause poor handling and poor braking resulting in loss of control.
- Using any other tyre size than what is specified for your Mahindra is dangerous. It could seriously affect ride, handling, ground clearance, tyre clearance and speedometer calibration. This could cause serious accident. Use only tyres that are correct size specified for your vehicle.

NOTE

Warm tyres normally exceed recommended pressures. Do not release air from warm tyre to adjust the pressure.

WARNING

Driving on tyres with over-inflation or under-inflation is dangerous. It will affect the vehicle handling and may result in an accident. Always inflate the tyres to the correct pressure.

Tyre Inspection

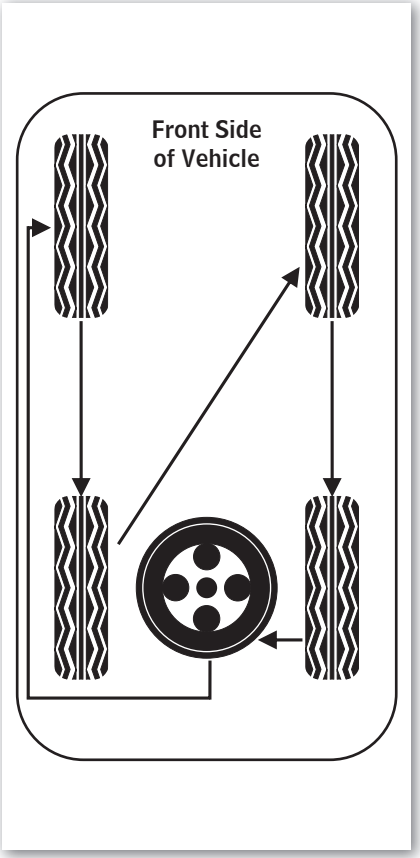
Inspect your vehicle's tyres periodically by performing the following checks:

- Measure the air pressure with a tyre gauge only when the tyres are cold. Adjust the pressure if necessary
- Check for abnormal wear, cracks and damage. If any tyre shows abnormal wear, have it inspected by your Mahindra Authorised Dealer and replace it if necessary.
- Check for loose wheel nuts
- Check for stones, nails and other objects that may be stuck in the tread.

Plug method (mushroom type) is preferred over filler method, for repairing the punctured tubeless tyres. And avoid the patch method, for tyre repairing. Proper tools to be used for mounting & de-mounting the tubeless tyres from the wheel rim, to avoid the tyre bead damage / rim damage.

CAUTION

- Air pressures should be checked when the tyres are cold. Otherwise, you may get inaccurate results. Never under-inflate or over-inflate tyres. Under-inflation may cause the rim to slip on the tyre bead, resulting in an accident or damage to the tyre or rim. Over-inflation may cause the tyre to burst.
- Do not mix different ply-type-ratings and/or different brands, construction or tread patterns of tyres on your Mahindra vehicle and do not use tyres other than the manufactures recommended size. DO not use the alloy wheels / rims other than the recommended. Doing so may cause dangerous handling characteristics resulting in loss of control.



WARNING
Driving with worn tyres is dangerous.

WARNING
Have the old tyres inspected by an experienced tyre fitter, to make sure they can still be used safely. If the same tyre has been on your vehicle for 4 or 5 years, have it inspected anyway by an experienced tyre fitter.

WARNING
Never fit tyres of uncertain origin.

WARNING
Drive carefully on wet roads to decrease the risk of aquaplaning.

Tyre Rotation & Wheel Alignment

To avoid uneven wear of the tyres and to prolong their life, rotate the tyres as shown alongside. Tyres should be rotated every 10,000 km, as recommended in the periodic maintenance schedule. After rotation, adjust front and rear tyre pressures to recommended levels.

NOTE

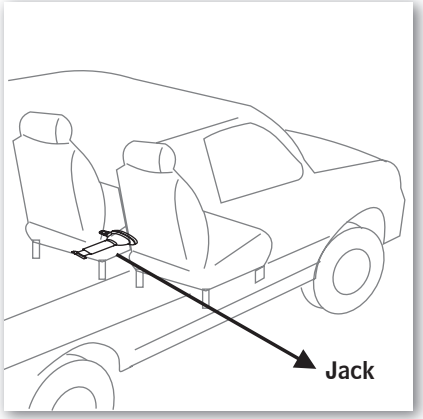
- **For best results rotate tyres every 5,000 km**
- **Wheel balancing must be done every 20,000 km or whenever you vehicle has a flat tyre.**

However, the most appropriate time to do the tyre rotation may vary according to your driving habits and road surfaces conditions.

Flat Tyres

If the vehicle has a flat tyre

- Slow down and move cautiously off the road. Park in a place away from the traffic
- Avoid stopping in the center of a road
- Turn off the engine
- Turn on the hazard lights
- Activate the parking brake and set the transmission to reverse



- Place hazard warning triangle, supplied in the toolkit, 10 meters behind your vehicle facing on-coming traffic.

NOTE

If the following occurs in while driving, it could indicate a flat tyre.

- Steering becomes difficult.
- The vehicle begins to vibrate excessively / abnormally.
- The vehicle pulls in one direction.

CAUTION

Do not drive with a deflated tyre. Doing so can damage the wheel and tyre.

Changing Flat Tyres

To change a flat tyre you will require the following:

Jack
Jack Handle
Tool Kit
Spare Tyre

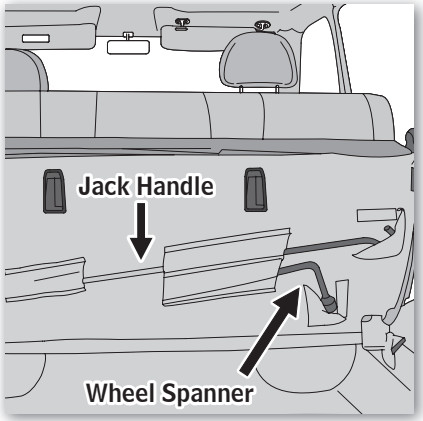
Getting acquainted with the locations of each of the tools mentioned above and learning to use them will help you in emergencies.

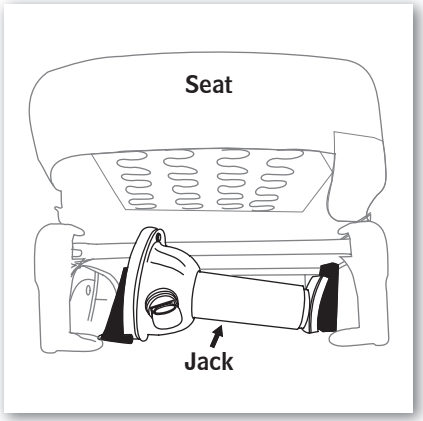
Removing & Storing the Jack

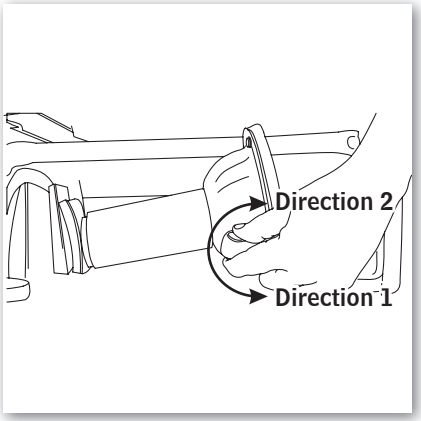
- To remove the jack from the brackets, turn the joint in direction 1 (as shown in the diagram).
- To store the jack, place it between the brackets and turn the joint in direction 2 (as shown in the diagram).

CAUTION

Secure the jack properly in its location to prevent it from flying forward during collision or sudden braking.





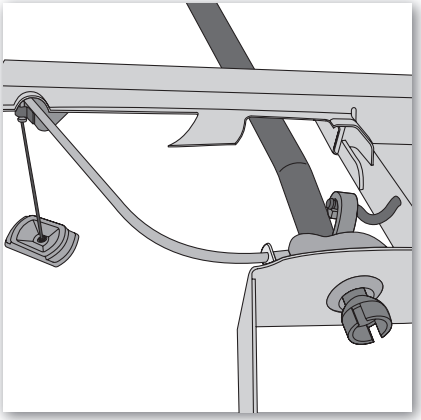


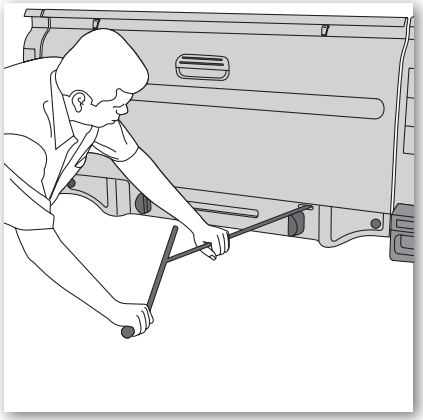
Removing the Spare Tyre

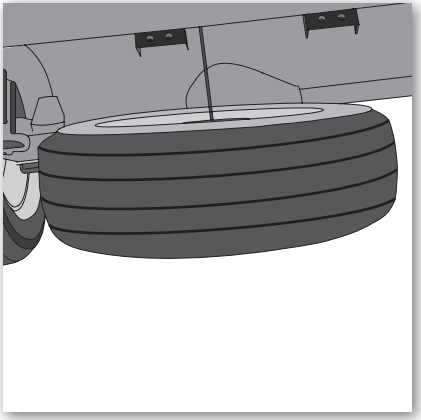
- Keep the cargo tail gate closed.
- Insert the jack handle (wheel nut wrench) into the lowering screw extension (RH side of the cargo rear) as shown in the picture.
- Turn the wheel spanner in the clockwise direction (the tyre lowers with each turn).
- After the tyre is lowered completely to the ground tilt the holding bracket a little and remove the tyre.

When fitting back the spare tyre,

- Put it in place with the outer side of the wheel facing up.
- Place the retaining plate in the centre of the spare tyre
- Then secure the spare wheel properly by tightening the tyre winch screw extension (RH side of the cargo rear).
- Check the spare wheel from the side of the vehicle to ensure the spare wheel secured properly.







NOTE

If the tyre is not stored securely, spare wheel winch will not lock properly. Even though it may lock temporarily, the spare tyre may fall out while the vehicle is moving.

CAUTION

To prevent the vehicle from rolling when it is jacked up, block the wheel which is diagonally opposite the flat tyre.

Removing the Wheel Cover

Pry off the wheel cover, using a screw driver and then pull it out with hands. Wrap the tip of the screw driver with cloth, then insert it near the lugs of the wheel cover and pry the cover away from the wheel.

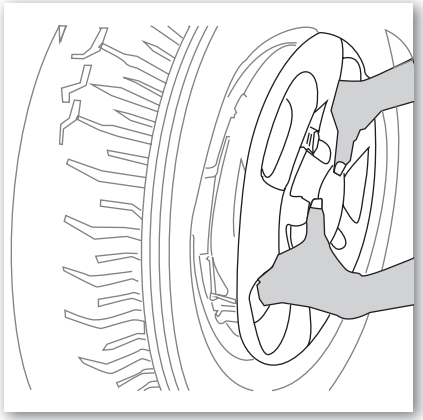
CAUTION

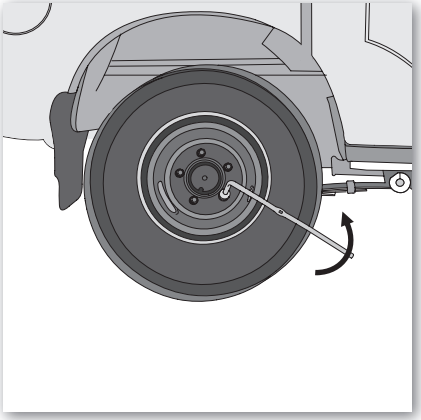
Do not try to pry off the wheel cover by hand. Take due care in handling the wheel cover to avoid unexpected personal injury.

Loosening all the Wheel Nuts

Always loosen the wheel nuts before raising the vehicle.

Turn the wheel nuts anti-clockwise to loosen them. To get maximum leverage, fit the wheel spanner to the nut so that the handle is on your right, as shown. Grab the wheel spanner near the end of the handle and pull up on the handle. Be careful that the spanner does not slip off the nut. Do not remove the nuts yet. Just unscrew them about one-half turn.



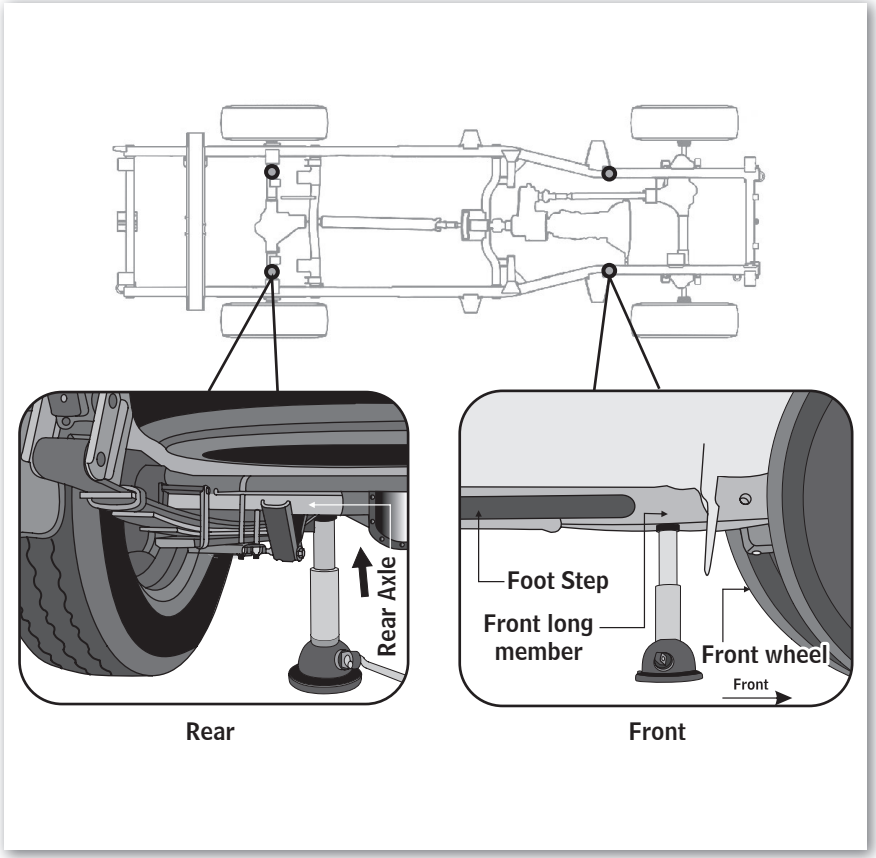


WARNING

On 4WD models with manual shifting transfer-case, the transfer shift lever should not be kept in 'N' position, to prevent from vehicle rolling.

Positioning the jack at the correct location

- Front jack up point - below chassis side long member just behind the front wheels (refer to diagram)
- Rear jack up point under rear axle (refer to diagram)
- Ensure that the jack is on solid and level ground
- Insert the jack handle into the jack and turn clockwise
- Ensure that the handle remains firmly fitted
- When the jack touches the vehicle, check once more to see that it is properly positioned under the vehicle
- Raise it high enough to remove the flat tyre and install the spare one



Caution

- Ensure that the vehicle is on firm and level ground
- Block the wheel diagonally opposite the flat tyre
- The jack supplied is only designed for your model. On no account attempt to lift heavier vehicles or other loads.
- Apply the hand brake before jacking up the car. Never start the engine when the car is jacked up for the risk of accident.
- If it is necessary to carry out work underneath the vehicle, ensure that it is supported on suitable stands.
- Never position the jack under the rear suspension leaf springs at any circumstances.

Position the jack properly under the vehicle. Raising the vehicle with an improperly positioned jack may damage the vehicle or cause personal injury.

- Do not put any object on or under the jack
- Raise the vehicle only high enough to remove the flat tyre and install the spare one.

When the vehicle is supported by the jack:

Warning

Do not put any part of your body under the vehicle (personal injury may occur in case the jack gives in or slips off)

Do not start or run the engine.

Warning

Attempting to jack the vehicle in position other than recommended in this manual is dangerous. The vehicle could slip off the jack and seriously injure. Use the location as recommended in this manual.

Caution (4WD only)

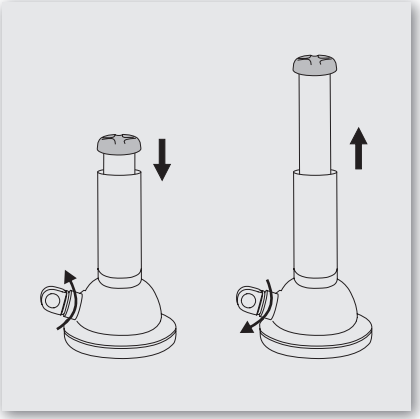
- Do not position the jack under the torsion bar when jacking the front wheel
- On 4WD models with manual shifting transfer-case, the transfer shift lever should not be kept in 'N' position, to prevent from vehicle rolling.

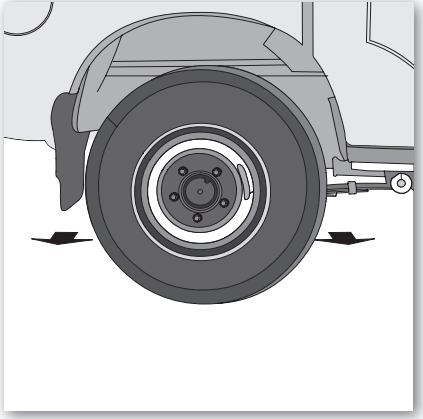
Removing the Wheel Nuts and Changing the Tyres

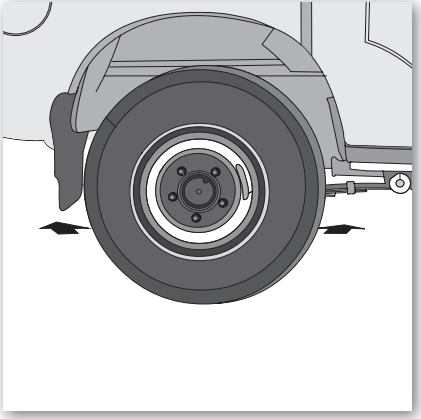
- When the wheel is off the ground, remove the wheel nuts completely
- Lift the flat tyre off the bolts and set it aside
- Clean the bolts with a wire brush to remove corrosion (lack of good metal to metal contact on the mounting surfaces may loosen the nuts and cause the wheel to come off when driving)
- Position the spare so that the holes in the wheel align with the bolts
- Press the tyre over the bolts till it is secured properly (you may need to wiggle the tyre a little)

Reinstalling the Wheel Nuts

Reinstall all the wheel nuts and tighten them as much as possible using your fingers. Press the tyre to see if it can be pushed in further. Tighten the nuts a little more using your finger, if possible



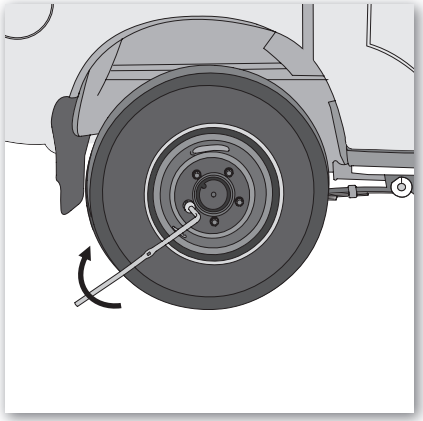




Tightening the nuts

Lower the vehicle by turning the jack handle anti-clockwise. Tighten the nuts one by one, a little each time, until all the nuts are fully tight. Use only the wheel nut wrench and turn it clockwise to tighten the nuts. Do not use other tools or any additional leverage other than your hands, such as hammer, pipe or your foot.

Never apply oil or grease on the bolts or nuts. Doing so may resulting in over-tightening



WARNING

Improperly or loosely tightened wheel nuts are dangerous. The wheel could wobble or come off. This could result in loss of vehicle control and cause a serious accident. Always make sure all the wheel nuts are properly / securely tightened to the specified torque.

WARNING

When lowering the vehicle, do not put any part of your body under the vehicle

CAUTION

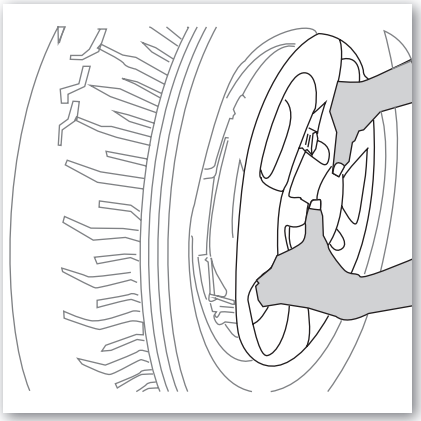
Never use oil or grease on the bolts or nuts. The nuts may loose and the wheels may fall off, which may leads to an accident.

Reinstalling the Wheel Cover

Position the wheel cover so that it aligns with the valve stem. Tap the outer edge of the wheel cover with the heel of the hand to snap it into place.

CAUTION

Be careful in handling the wheel cover to avoid personal injury.



Checking the Air Pressure of the Replaced Tyre

Check the air pressure of the replaced tyre. If it is lower than the specified level, go to the nearest service station and fill air.

CAUTION

Driving on tyres with over-inflation or under-inflation is dangerous. It will affect the vehicle handling and result in a serious accident. Always inflate the tyres to the correct pressure.

Restoring the Tools, Jack and Flat Tyre

After changing the wheels, tighten the wheel nuts to the torque to specifications, as soon as possible. Replace the tools and jack in their respective locations properly, to avoid rattling. Get the flat tyre repaired by a technician and replace it.

NOTE

Follow the same procedure for changing or rotating the tyres.

CAUTION

Store the spare tyre with its outer side facing upwards. Ensure that the tyre is secure to prevent it from flying during collision or sudden braking.

Wipers

WARNING

Travelling with worn wiper blades is very dangerous because it reduces the visibility in the event of poor atmospheric conditions.

- Do not operate the wipers on a dry screen.
- In freezing or very hot conditions, ensure that the blades are not frozen or stuck to the glass.
- In winter, remove any snow or ice from around the arms and blades, including the wiped area of the windscreen.

Engine Compartment Washing

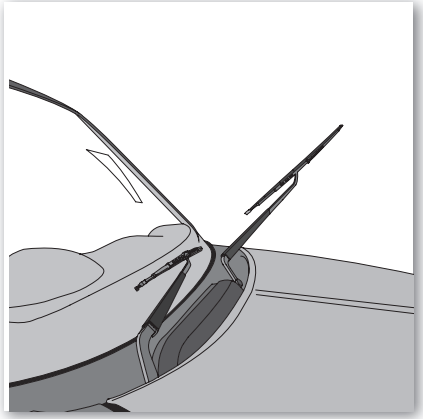
Ignition must be switched off before washing. It is recommended to cover other electrical / electronic items (such as ECU, alternator, fuses, ignition coil, wiring harness connectors etc) before washing the engine compartment.

CAUTION

Even though all the electrical and electronic sensors / actuators, etc. are water resistant / sealed, care must be taken, and avoid direct water jet on these items during car wash.

High pressure washing of engine compartment is forbidden otherwise it can leads to short circuit / malfunction of electrical / electronic system. After washing all the electrical / electronic units and wiring connectors should be dried by blowing moderate compressed air all around.

Mahindra recommends to carry out engine compartment wash at Mahindra authorised workshops.



Appearance Care

Care of Exterior

Washing

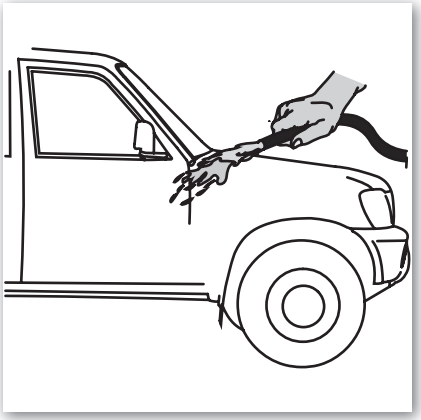
- Letting dirt collect on the vehicle can cause scratches on the paint. Leaving bird droppings unwashed can cause permanent damage to the finish. However, you can preserve the vehicle's looks by washing it regularly.
- Wash the vehicle in shade and not in direct sunlight or in freezing temperatures. If the vehicle is exposed to the sun, move the vehicle into shade and let the exterior cool off before you start washing.

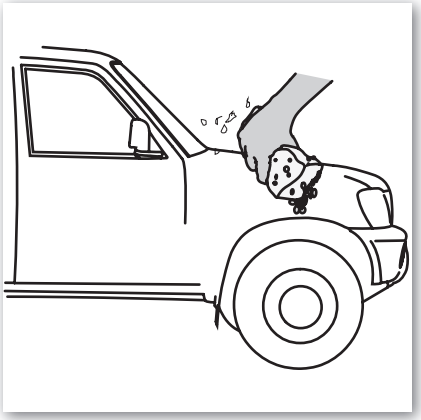
CAUTION

Avoid using chemical solvents and strong cleaners that can damage the paint and metal of the vehicle.

Washing Tips

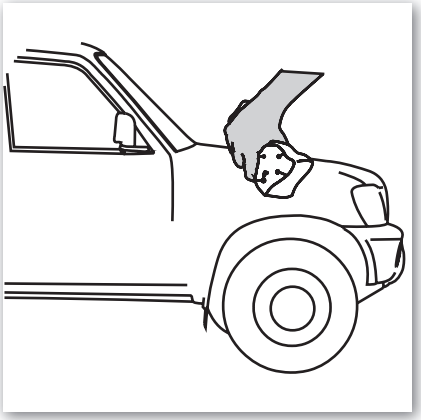
- Rinse the vehicle thoroughly to remove loose dirt.
- Make a solution of a detergent, made especially for vehicle washing, and cool water.
- Use a soft bristle brush, sponge or soft cloth with the detergent solution to wash the vehicle.
- Rinse frequently.





Check the body for road tar, tree sap, etc. Remove these stains with tar remover or turpentine. Rinse it off immediately so that it does not harm the finish. Remember to re-wax these areas, even if the rest of the vehicle does not need re-waxing.

When the exterior is washed and rinsed, dry it with a soft towel or chamois. Letting it dry in the air will cause dulling and leave water spots on the surface.



As you dry the vehicle, inspect for chips and scratches that could start corrosion. Repair them with the recommended touch-up paint.

NOTE

Observe local regulations.

Aluminum wheels: Use only a mild soap or neutral detergent

Plastic Bumpers: wash carefully. Do not scrub with abrasive cleaners.

NOTE

Mahindra is not responsible for scratches caused by automatic car washes or improper washing. Scratches are more noticeable on vehicles with darker paint finishes. Avoid washing your vehicle in an automatic car washer that uses high-speed / hard brushes.

WARNING

Driving with wet brake is dangerous. Increased stopping distance or vehicle pulling to one side when braking could cause a serious accident. Dry the brakes by driving at very slow speed and applying the brakes lightly until the brake performance become normal.

Waxing (only for vehicles without metallic paint)

Always wash and dry the complete vehicle before waxing it. The vehicle should be waxed whenever you see water on the surface in large patches. Apply the wax according to directions on the container. In general, there are two types of products -

- Waxes: A wax coats the finish and protects it from damage due to sunlight, air pollution etc.

- Polishes: Polishes restore shine to paint that is oxidized or has lost some of its shine. They typically contain mild solvents and abrasives that remove the top layer of the finish. Use a polish if your vehicle does not have the original shine after using wax.

Removing tar, dead insects etc. from your vehicle using removers, wears off the wax. Rewax these areas even if you are not rewaxing the rest of the vehicle.

Care for Interiors

Seat Belts:

Check to see if dirt has accumulated in the loops (this usually results in the slowing down of the retraction mechanism).

Check for cuts and frayed spots in the belt material

Check to see if the locking and unlocking mechanism is smooth.

CAUTION

If you encounter any faults, get them repaired only at Mahindra Authorised Service Station. Get the damaged parts replaced immediately. It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Washing the seat belts: Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged. Use a soft cloth with the solution to clean the seat belts. You may also use isopropyl alcohol to wipe the loops of the seat belt anchors. Use a soft-bristle brush with the same solution for places that are difficult to reach.

CAUTION

Avoid using solvents, such as bleach, that tend to damage the belt material.

Windows: Windows need to be cleaned regularly and completely, both from the inside and the outside. Make a solution of vinegar and water in the ratio 1:10 (you can use a commercially available glass cleaner instead). Use a soft cloth or tissue paper with this solution to clean the windows.

Corrosion Protection

Typically, corrosion in vehicles is caused due to two principal factors:

- Collection of damp-dirt and road salt on the underside of the vehicle.
- Loss of paint and protective coatings from the exterior and underside of the vehicle.
- Corrosion can be prevented through simple periodic maintenance.
- Repair chips and scratches in the paint as soon as you find them.
- Inspect and clean drain holes at the bottom of doors and body.
- Check the floor covering for dampness. Carpeting and floor mats may remain damp for a long time especially in winter. Dry the areas immediately.
- Use a high-pressure spray to clean the underside of the vehicle.
- Get the corrosion-preventive coatings on the underside of the vehicle checked periodically.

NOTE

Do not scrape or scratch the inside of the rear glass. You may damage the rear window defroster grid.

Leather upholstery caring: (if applicable)

Leather should be treated from time to time in accordance with the instructions below, depending on the amount of use. Use the slightly moisten cotton / woolen cloth with water for normal cleaning of leather. Severe dirt can be cleaned with mild soap solution. The leather should never get moistened through at any point of time. No water should get through the stitches. Never try to use solvents, wax, shoe-cream, stain remover or similar products to treat the leather. It is recommended to contact the your Mahindra dealer for treating leather.

Maintaining the AC System

Maintaining the Air-Conditioning System

Your vehicle's air-conditioning is a sealed system. Any major maintenance, such as recharging should be done by a qualified technician. However, you can do a few things by yourself to make sure the air-conditioning works efficiently.

Run the air-conditioning system at least once a week during the cold weather months.

Run it for at least ten minutes with the engine running at normal operating temperature. This circulates the lubricating oil contained in the refrigerant.

NOTE

The condenser and radiator fins of the air conditioning system bend easily. Use only a low-pressure spray or soft-bristle brush to clean them.

CAUTION

Whenever you get the air-conditioning system serviced, make sure the service facility uses a refrigerant recycling system. This system captures the refrigerant for reuse. Releasing the refrigerant into the atmosphere may cause damage to the environment.

Air Fresheners

It is better to use a solid type air freshener/ deodorizer instead of a liquid type. Some liquid air fresheners contain chemicals that may cause parts of the interior trim and fabric to crack or discolor.

CAUTION

If you use a liquid air freshener, make sure you fasten it securely so that it does not spill as you drive.

Trouble Shooting

If the Engine does not start

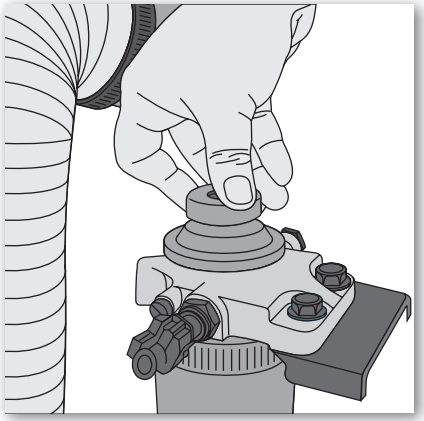
Determining why your vehicle won't start falls into two areas, depending on what you hear when you turn the key to IGN:

Case 1: You hear nothing, or almost nothing. The engine's starter motor does not operate at all, or operates very slowly.

Case 2: You can hear the starter motor operating normally, or the starter motor sounds like it is spinning faster than normal, but the engine does not start up and run.

In either case, do the following:

- Turn the ignition switch to IGN. Turn on the headlights and check their brightness. If the headlights are very dim or don't light at all, the battery is discharged. You will need to 'Jump Start' the vehicle.
- If the headlights don't dim, there may be something wrong with the electrical circuit. Meet a qualified technician to rectify it.
- Turn the ignition switch to IGN position and check the fuel gauge for fuel.



- If you are starting the engine after adding fuel to an empty fuel tank, you may have to bleed the fuel system by operating the priming pump several times until you feel more resistance. Your engine may take longer to start.

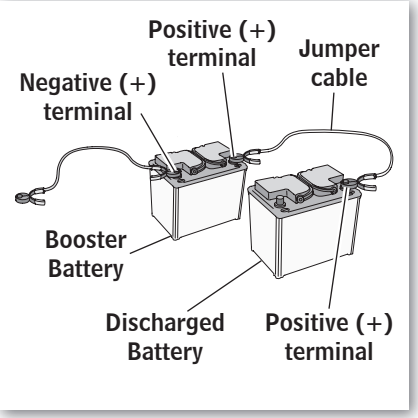
Jump Starting

WARNING

Do not carry out this procedure if you have no experience of it: incorrect manoeuvres can originate high electrical discharges and even cause the battery to explode.

WARNING

You are also advised not to approach the battery with naked flames or lit cigarettes and not to cause sparks: risk of explosion and fire.



If your vehicle's battery has run down, you may be able to start the engine by using a booster battery. Although this seems like a simple procedure, you should take several precautions while you are at it:

Open the bonnet and check the physical condition of the battery. If the weather is very cold, check the condition of the electrolyte. If it seems slushy or like ice, do not attempt jump-starting until it thaws.

Connect one jumper cable to the positive (+) terminal on the booster battery. Connect the other end of the cable to the positive terminal of your vehicle's battery.

Connect the second jumper cable to the negative (-) terminal on the booster battery. Connect the other end to the grounding strap. Do not connect this jumper cable to any other part of the engine.

CAUTION

Connect the negative lead to a point away from the battery. Connect the jumper cable leads away from moving parts. Otherwise it may be dangerous, the lead could get caught when the engine starts and cause serious injury.

If the booster battery is in another vehicle, set an assistant to start the vehicle and run it at a fast idle.

Start your vehicle. If the starter motor still operates slowly, check the jumper cable connections to make sure they have good metal-to-metal contact.

- Once your vehicle is running, disconnect the negative cable from your vehicle, and then from the booster battery. Next, disconnect the positive cable from your vehicle and then from the booster battery.

WARNING

A battery may explode if you do not follow the correct jump starting procedure, seriously injuring anyone nearby. Keep all sparks, open flames, and smoking materials away from the battery.

WARNING

Attempting to jump-start when the electrolyte is frozen or slushy can cause the battery to rupture / explode causing serious injury.

- Turn off all electrical accessories such as lights, stereo system, A/C etc. Put the transmission in neutral and set the parking brake.
- Batteries contain sulphuric acid, which is highly corrosive. Wear protective safety glasses when jump starting, and avoid spilling acid on to yourself, your clothing or your vehicle.
- If acid gets into your eyes or spills on to your body accidentally, wash the area with water until the burning sensation subsides. Get immediate medical attention. Continue application of water en route to the medical institute.
- The gas normally produced by a battery will explode if a flame or spark is close enough. So use only standardized jumper cables and do not light a match or smoke while jump starting.

NOTE

The battery used for boosting should be a 12 V type. Jump start only with the correct type of booster battery.

NOTE

If the battery is low, the glow plug would not operate (in extreme cold climatic conditions) and the engine won't start.

WARNING

Towing a vehicle to start it could be a dangerous. The vehicle being towed could surge forward when its engine starts, causing the tow vehicles to collide & injuring the occupants

If the Engine is Overheated

If the engine is overheated, the pointer turns to the upper limit of temperature gauges and the engine overheating warning light comes ON.

The pointer of the temperature gauge should stay in the midrange under most conditions. It is normal for it to go higher if you are driving up along steep hill. In all other cases it is necessary that you determine the reason for the increase in temperature.

The engine may overheat for several reasons, such as lack of coolant, or mechanical problems.

CAUTION

- Driving with the pointer of the temperature gauge in the extreme right or with the engine overheating warning light ON, may cause serious damage to the engine.
- Do not drive for prolonged periods at very low speeds or very high speeds or in low gear.

If the engine is over heated follow this procedure....

- Get the vehicle side of road safely, apply the parking brake.
- Do not stop the engine.
- Switch off the air-conditioner if it is being used. Open all the windows, move the temperature control knob to the maximum hot position and put the fan at max speed.
- If the coolant or steam boiling out of the radiator / reservoir, stop the engine. Wait until steam subsides before opening the bonnet hood. If there is no coolant boiling over or steam, leave the engine running.

- Visually check to see if the engine fan drive belt is broken or slipping. Check for coolant leaks from the radiator, hoses and underneath the vehicle. But do not get misunderstanding with air-conditioning water dripping is normal if it is being used. If the fan belt is broken / coolant leak stop the engine, contact the nearest Mahindra Authorised dealer for assistance.
- If the fan belt is okay and no coolant leak, then you may have to cool down the engine by running it at about 1500 rpm for a few minutes.
- If the coolant reservoir is dry or with low level, add coolant to the reservoir while the engine is running. Fill it up to the maximum level mark.
- After the engine coolant temperature has come to normal, again cheek the coolant level in the reservoir, if required, add the coolant to the maximum mark. Heavy coolant lose indicates a leak in the system. Have the vehicle checked at a Mahindra Authorised dealer at the earliest.

If the temperature gauge stays at the extreme right end, turn off the engine. Wait until you see no more signs of steam or spray, and then open the bonnet. Let the engine cool down until the pointer reaches the middle of the temperature gauge, or lower, before checking the radiator. Using gloves or a heavy cloth, turn the radiator cap anti-clockwise, without pushing down, to the first stop. This releases any remaining pressure in the cooling system. After the pressure is released, push down on the cap and turn it until it comes off.

CAUTION

Do not attempt to remove the radiator cap when the engine and radiator are hot. Serious injury could result from scalding hot fluid & steam blown out under pressure.

Start the engine. Add coolant to the radiator up to the base of the filter neck. If you do not have the proper coolant mixture available, you may add plain water. Remember to have the cooling system drained and refilled with the proper mixture as soon as you can. Put the radiator cap back on tightly. Run the engine and watch the temperature gauge. If it goes back to the red mark, the engine needs servicing.

If the temperature stays normal, check the coolant level in the radiator and reserve tank. If it has gone down, add coolant to the MAX mark. Put the cap back on tightly.

CAUTION

Wherever the engine is overheated, safely pull to the side of the road. Put the transmission in neutral and set the parking brake. Turn off the air-conditioning system and all other accessories. Turn on the hazard warning indicators.

Low Oil Pressure

- If the low oil pressure indicator stays ON when the engine is running, it shows that the engine has lost oil pressure.
- Running the engine with low oil pressure can cause serious mechanical damage almost immediately.
- Safely pull off the road and shut off the engine. Turn on the hazard warning indicators.
- Let the vehicle 'sit' for a minute. Open the bonnet and check the oil level. Although oil level and oil pressure are not directly connected, an engine that is very low on oil may lose pressure during cornering and other maintenance maneuvers. If necessary, add oil to bring the level back to the FULL mark on the dipstick.
- Start the engine and have a look at the oil pressure indicator. If the light does not go out within 10 seconds, it means that there is a mechanical problem that needs to be addressed before you can continue driving.

Towing

Towing A Trailer

Your new vehicle was designed to be used primarily for carrying passenger and luggage.

Remember that towing a trailer will place additional loads on your vehicle's engine, drive-train, steering, braking and other systems. Also towing a trailer may greatly affect your vehicle's handling & suspension characteristics. Your vehicle cannot be driven as normal with a trailer attached.

Towing your vehicle

If your vehicle needs to be towed, call a professional towing service.

Flat-bed Towing

Towing Equipment

Towing equipments are of three types.

- Flat-bed equipment: Your vehicle is loaded on the back of a truck. This is the safest and best way of towing.
- Wheel-lift equipment: The tow truck uses two pivoting arms that go under the tyres (front or rear) and lift them off the ground. The other two tyres remain on the ground.
- Sling-type equipment: The tow truck uses metal cables with hooks on both ends. These hooks go around parts of the frame or suspension and lift the end of the vehicle off the ground. This is not a good method of towing as it may damage the vehicle's suspension and body. Avoid tow with sling type equipment

If your vehicle cannot be transported by flat-bed equipment, it should be towed by wheel-lift equipment with the front wheels off the ground.

Note

Improper towing procedure will damage the transmission. Follow the above instructions precisely. When towing with the front wheels off the ground, it is best to tow no more than 80 kms. Also keep the towing speed below 55 kmph.

Towing your vehicle during Emergency

If a towing service is unavailable in an emergency, your vehicle may be temporarily towed by a cable or chain secured to the emergency towing eyelet under the front bumper of the vehicle.

Use only the eyelet provided, for towing in an emergency. Otherwise the vehicle may be damaged.

Caution

- A driver must be in the vehicle being towed to steer and operate the brakes. Towing in this manner must be done only on hard-surfaced roads for short distances and at low speeds. Also, the wheels, axles, drive train, steering and brakes must all be in good condition.
- Avoid sudden starts or erratic driving maneuvers, which would place excessive stress on the towing eyelet and towing cable or chain, and result in breaking of the eyelet or the chain.
- If the engine is not running, the power assist for the steering & brakes will not work and it will be much harder than usual.

Warning

Do not extract the key, as the steering wheel will lock automatically and you will be unable to steer the wheels.

Warning

When towing the vehicle, make sure that you observe the road traffic regulations concerning both the towing device and driving conduct.

NOTE

Use only a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing eyelets provided.

NOTE

Do not tow with sling type truck, either from the front or rear. Doing so may cause body damage.

For your vehicle safety

When leaving your vehicle unoccupied

- Always remove the ignition key even when you park vehicle in your own garage.
- Close all the windows completely & lock all the doors.
- Always park your vehicle in where it can be seen. At night, park in a well lighted area.
- If you have an alarm, use it even for short period.
- Do not leave any valuables in your vehicle. If you must leave something in your vehicle secure it properly by locking the doors / by hiding it.
- Do not leave the vehicle documents in your vehicle. In the unfortunate event of your vehicle being stolen the documents will only help a thief to sell the vehicle.
- Do not leave the spare key or a note of your vehicle key number in the vehicle. Keep the spare key in a safe place in your home.

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Technical Specifications

Engine	
Type	4 stroke, Turbo charged with intercooler, CRDi Engine
Bore/Stroke, mm	94 x 94
No. of Cylinders	4
No. of Valves	8
Displacement, CC	2609
Compression Ratio	18.5:1
Max. Net Engine Output, RPM	84.5 kW (115 HP) @ 3800 RPM
Max. Net Torque, RPM	278 N-m (28.3 kg-m.) @ 1700-2200 RPM
Air Cleaner	Foam type
Oil Filter	Full flow, Paper type
Fuel Filter	Single with water in fuel indicator
Clutch	Hydraulically operated, Single plate, dry type, Dia. 240 X 160, Valeo F 810
Transmission	5 speed, Manual
Type	Synchromesh in all forward gears
No. of gears	5 forward, 1 reverse
Gear ratios	
I	3.78 : 1
II	2.09 : 1
III	1.38 : 1
IV	1.00 : 1
V	0.79 : 1
Reverse	3.53 : 1

TRANSFER CASE (for 4X4 version only)	
Type	Electric shift or Manual shift & mounted on transmission
Ratio : High	1 : 1
Low	1 : 2.48
AXLES	
Front	2WD:Non-drive, Stub axle
	4WD : Full floating, Drive axle, 4.3:1
Rear	Semi floating Hypoid type, 4.3:1 (LSD Optional)
TYRES & WHEELS	
Rim	6.5J x 16 (Alloy wheel optional)
Tyres	P245/75R16
No. of Wheels	5 (inclusive of spare wheel)
STEERING	
Type	Power assisted, Rack & Pinion
Steering column	Tilt mechanism - optional
Steering wheel turn lock-to-lock	3.5 (Approx)
Turning Circle Diameter, mtr	12.6
FRAME	Tubular ('C' in 'C') Ladder type
SUSPENSION	
Front	Independent Front with Torsion bar & Double wishbone
Rear	Semi-elliptical leaf spring
Anti Roll Bar	Provided in Front & Rear
Shock Absorbers	Hydraulic, Double Acting, Telescopic

BRAKES	
Service Brakes	Tandem Master Cylinder, Vacuum assisted servo, with LSPV & BV
Front	Ventilated Disc and caliper type
Rear	Drum type
Parking Brake	Internal expanding with auto adjuster on rear wheels, hand lever and cable type
ABS (with DRP)	Optional
FUEL TANK CAPACITY, Lits.	80 Liters
ELECTRICAL SYSTEM	
System Voltage, V	12 V
Battery, V, Amp-Hr	12 V, 65 Ah (12V, 80Ah for cold temperature)

	Single Cab	**Double Cab**
Alternator (max. output), Amp	90 A	
Wiper Motor	2 speed with adjustable intermittent, link type	
DIMENSIONS		
Wheel Base, mm	3040	3040
Overall length, mm	5098	5098
Overall width, mm	1770 (excluding outside mirrors)	1770 (excluding outside mirrors)
Overall height, mm unladen	1942 - Laden	1862 - Laden
Front Track, mm	1450	1450
Rear Track, mm	1450	1450
Min. Ground Clearance, mm	210 (below axle differential)	210 (below axle differential)
Cargo width	1520	1520

Cargo Depth	550	550
Cargo height from Ground	668	668
Tail door Opening	1348	1348
CAB		
Type Front Seat	Normal control all steel shell Bucket seats with front to rear & backrest adjustments, Adjustable head restraint & seat belt.	Normal control all steel shell Bucket seats with front to rear & backrest adjustments, Adjustable head restraint & seat belt.
Rear Seat	Non-adjustable bench seat with seat belts, lap belt for middle occupant & adjustable head restraints	
WEIGHTS		
Kerb weight, Kg	2WD: 2050 Kg, 4WD: 2150 Kg	2WD: 1990 Kg, 4WD: 2090 Kg
Max. GVW, Kg	2WD: 3150 Kg, 4WD: 3150 Kg	2WD: 3150 Kg, 4WD: 3150 Kg
Pay Load, Kg	2WD: 1185 Kg, 4WD: 1000 Kg	2WD: 1245 Kg, 4WD: 1060 Kg
Max. FAW, Kg	2WD: 1210 Kg, 4WD: 1210 Kg	2WD: 1210 Kg, 4WD: 1210 Kg
Max. RAW, Kg	2WD: 1940 Kg, 4WD: 1940 Kg	2WD: 1940 Kg, 4WD: 1940 Kg
Max. Gradeability in 1st. Gear, deg.	2WD: 15 deg, 4WD: 25 deg	2WD: 15 deg, 4WD: 25 deg

Safety

Drinking and Driving Don't Go Together

Driving, anytime, anywhere, under the influence of alcohol or drugs, is dangerous to you, to your family, the passengers, and to everyone else on the road. Alcohol or drugs reduce your alertness and lead to accidents.

Driving Long Distances

When you are driving over long distances, follow these tips so that you have a safe journey:

- Avoid driving more than 150 kms at a time. Switch drivers even if you are not tired.
- Lack of sleep or fatigue may impact your ability to drive safely
- Exercise your eyes by shifting the focus of your eyes to different parts of the road
- Use stimulating beverages such as coffee or tea
- Relax and stay calm

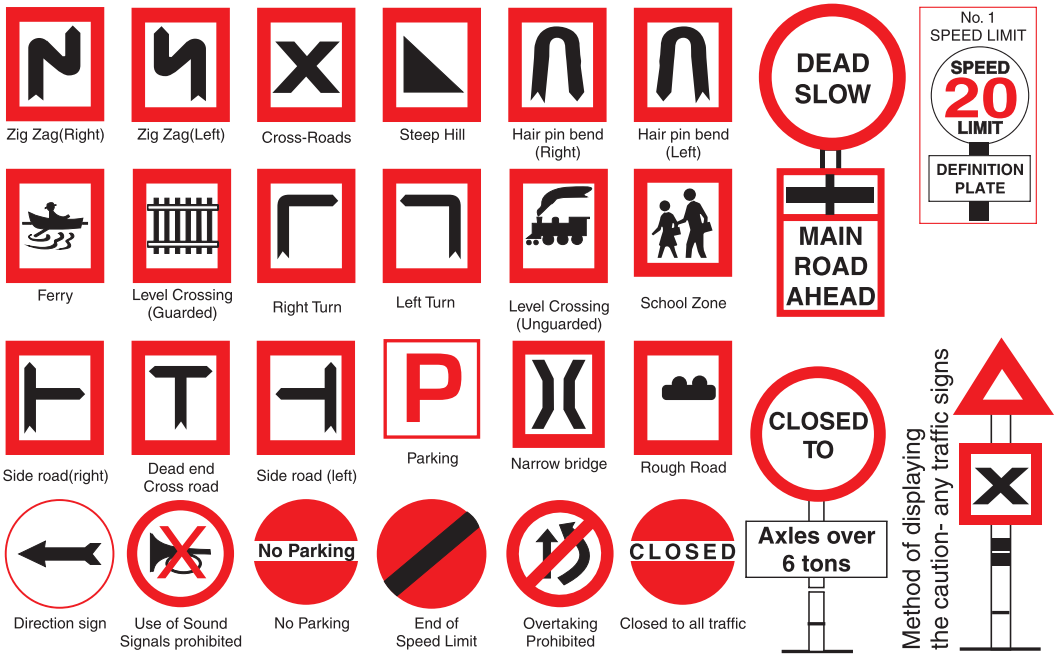
Anti-theft Precautions

- Ensure that the windows are closed
- Avoid leaving packages, valuables etc., inside an unattended vehicle
- Lock the doors

Use of Seat Belts

- In the interest of safety to the driver and passengers of all four wheelers, wearing of seat belts has been made compulsory for all front seat passengers and rear seat passengers under the Central Motor Vehicle Rules.
- Prohibition of Use of Mobile Phones while Driving
- Using a mobile phone while driving constitutes nuisance or danger to the public and is prohibited under the Central Motor Vehicle Rules.

Road Signs


Zig Zag(Right)
Zig Zag(Left)
Cross-Roads
Steep Hill
Hair pin bend (Right)
Hair pin bend (Left)
DEAD SLOW
No. 1
SPEED LIMIT
SPEED
20
LIMIT
DEFINITION PLATE
Ferry
Level Crossing (Guarded)
Right Turn
Left Turn
Level Crossing (Unguarded)
School Zone
MAIN ROAD AHEAD
Side road(right)
Dead end Cross road
Side road (left)
Parking
Narrow bridge
Rough Road
CLOSED TO
Axles over 6 tons
Method of displaying the caution- any traffic signs
Direction sign
Use of Sound Signals prohibited
No Parking
No Parking
End of Speed Limit
Overtaking Prohibited
CLOSED
Closed to all traffic

Item	Grades / Ratings, Filling capacities, Specified values	Frequency
Engine oil & Engine oil filter replacement	SAE 15W40; API CG4, ACEA B3/E3 (Upto ambients -10 degrees celcius) - 6 Ltrs	At 5000 km, 10000 km and there after at every 10000 km
Diesel filters replacement		Primary filter at every 10000 km & Secondary at every 20000 km
Air filter replacement		Every 10000 km
Engine coolant change	BASF GLYSANTIN G45-23; Mix of Coolant 30% & water 70%; System capacity - 1 0 Ltrs	Every 40000 km
Injector nozzle pressure testing	250 + 8 bar	At every 40000 km
Valve clearance adjustment	Inlet valves - 0.30 mm; Exhaust valves - 0.45 mm	Every 20000 km
Transmission oil replacement	SAE 80W90, API GL4, (Upto ambients -5 degree celcius)	At 5000 km, 20000 km and there after at every 20000 km
	SAE 75W90, API GL4, (Upto ambients -5 to 15 degree celcius)	
Front & Rear differential oil	SAE 80W90, API GL5, (Upto ambients -10 degre celcius)	
	SAE 75W90, API GL5, (Upto ambients -10 to 15 degree celcius)	
Check front brake pads, disc, rear brake drums & linings		At every 10000 km
Wleel alignment & Tyre rotation		At every 10000 km
Tyre pressures	On front - 2 Kg / Sq Cm; On rear - 2.2 Kg / Sq Cm	Atleast weekly once