automatic electric vehicle

OWNERS MANUAL

For Service and assistance contact
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GoinGreen, Green Station, 201 Beaconsfield Road,
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Foreword

Congratulations ! You have made a wise decision by choosing to own this automatic electric vehicle!

G-Wiz is a whole new concept in city mobility, a step forward towards a pollution free environment – something our future generations will thank us for. And with it, G-Wiz will provide you with years of hassle free ownership.

Please read this Owner's Manual carefully. It has been structured to provide you with all information you need on the operation and maintenance of your car. Please keep it safe, as it will be of helpful should you require any assistance.

We also encourage you to carefully read the Warranty terms and conditions. It will help you understand the warranty coverage and responsibilities for ensuring warranty protection for your car.

Your car maintenance schedule is also provided in this manual. Following the schedule will help keep your driving hassle free and also preserve your investment.

Everyone here at Goingreen is dedicated to ensure your driving satisfaction. Please email us at service@goingreen.co.uk should you have any questions or concerns at anytime.

We wish you the joy of commuting without polluting!

Please read this manual and follow the instructions carefully.

Signal words CAUTION and NOTE have special meanings.

⚠ CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in injury or property damage.

NOTE

NOTE indicates information to assist maintenance and instructions.

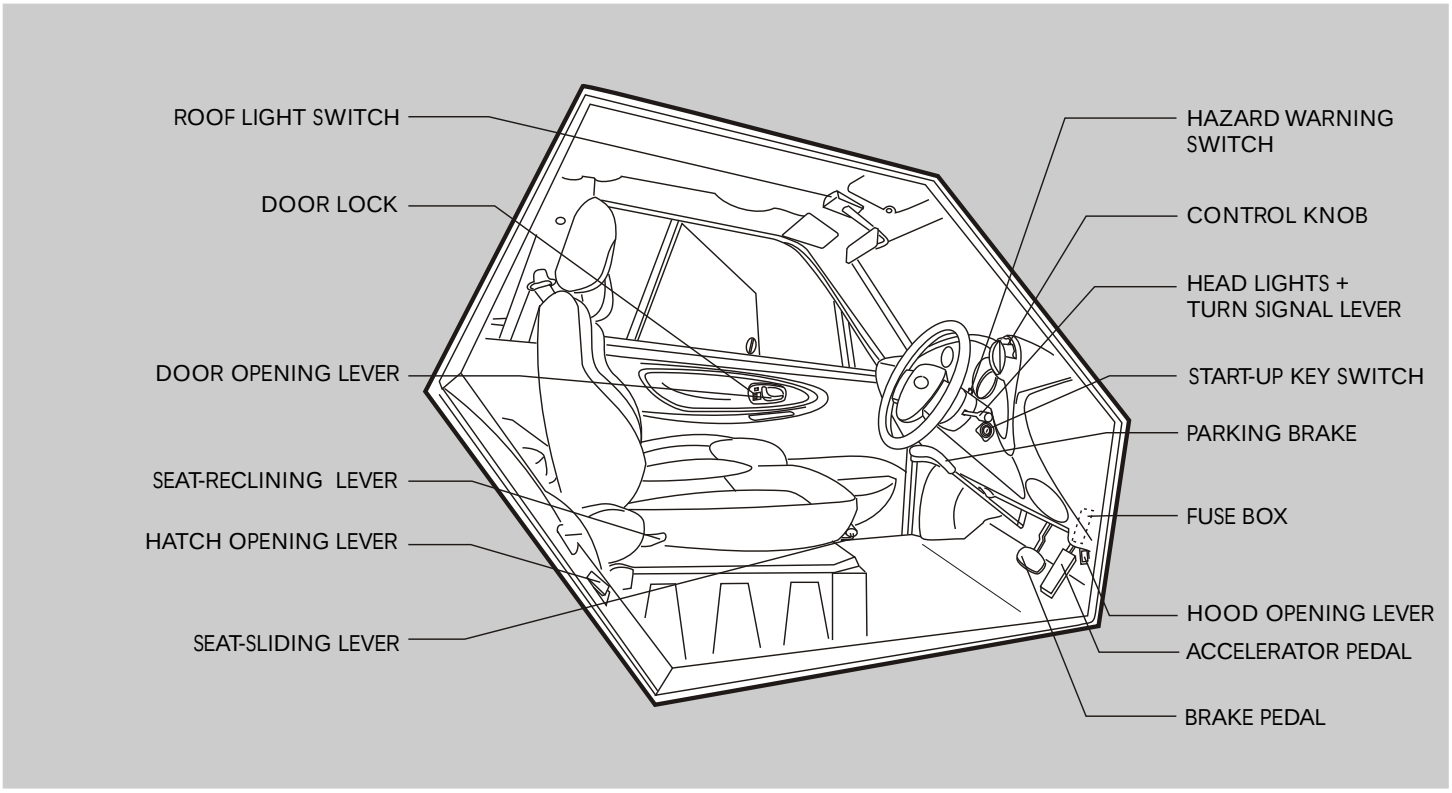
Obey all safety messages that follow these symbols.

✻ : This asterisk in the manual signifies that an item is an optional extra.

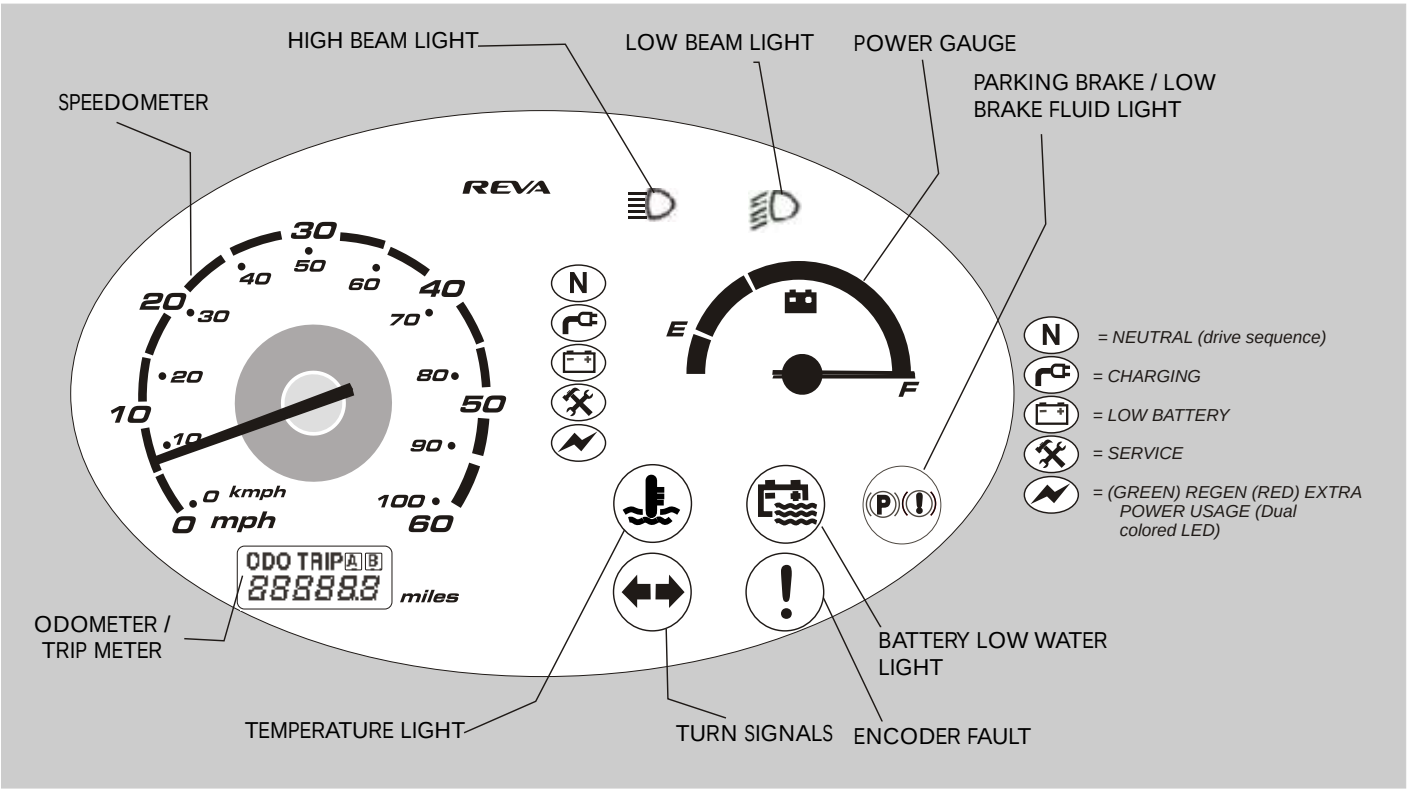
All information, illustrations and specifications in this Owner's Manual were in effect at the time of printing.

GOINGREEN in the course of product development reserves the right to discontinue or change specifications or design at any time without notice and without incurring any obligation whatsoever.

Contents



Instrument Cluster



1

Instrument Cluster and Controls

1.1 Indicator Lights

NOTE

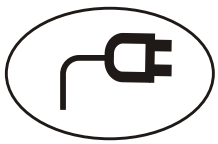
When the key is turned ON or OFF, some of the lights of the instrument panel cluster glow for short time.

This is part of the car's self test program.

In case you notice any change in this behavior during usage, please contact Goingreen on service@goingreen.co.uk

I. CHARGE LIGHT (Green)

This light should come on and flash green when your car is put on charge. This indicates that charging is taking place. When the Power Pack is fully charged, this light stops flashing and glows green permanently.
The light disappears when the charge cable is removed from the charge port.



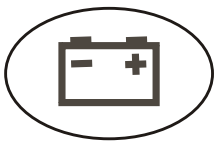
CHARGE LIGHT

.II. LOW BATTERY LIGHT (Red)

When the State-Of-Charge (SOC) in the Power Pack drops to about 35%, this light starts flashing.
The light turns solid red once the SOC goes down to 25%. This is a warning and at this stage it is advisable to charge at the first opportunity. The AC/Heating will automatically switch OFF (if it is ON). Speed of vehicle will be limited to 'F' mode if driving in 'B' mode

⚠ CAUTION

Driving at conditions of 20% SOC or less will reduce Power Pack life, cause damage and affect its warranty.



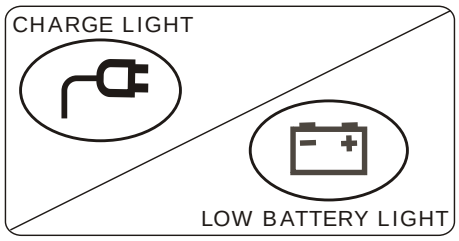
LOW BATTERY LIGHT

.III. EQUALISATION (Alternate between CHARGE LIGHT and LOW BATTERY LIGHT)

Batteries are programmed to automatically perform “Equalisation Charge” once every 3-4weeks. This ensures all individual batteries of power pack are equalised. During this process, Charge light and Low battery light will blink alternatively.

When this process is complete, the charge light will remain green.

It is advisable to allow the car to continue until Charge light turns permanently green. This process will take 10Hrs and only after full charge.



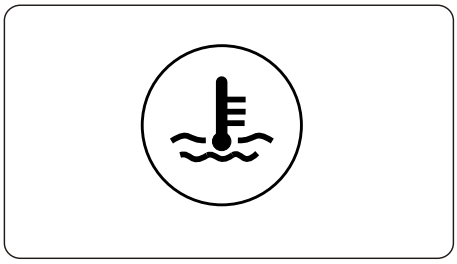
IV. TEMPERATURE LIGHT

If the light glows while driving, it indicates overheating in either or all of the following components:

1. Motor
2. Motor Controller
3. Power Pack
4. Charger

NOTE

While in charge, if the light continues to glow/flash, it indicates increased charging time due to high Power Pack / Charger temperature.



In cold climate, the temperature light will flash during charge or drive, if battery temperature is less than 10°C. This indicates that the range of the car is likely to be low.

When the car is not in use, keeping the car plugged in to the utility supply under this condition will activate the battery heaters and warm up the batteries.

⚠ CAUTION

Do not charge your car in high ambient temperature conditions or in direct sunlight.
This will reduce the life of your Power Pack.

1.1 Indicator Lights

A flashing (ON/OFF) temperature light during drive indicates a severe over temperature condition and may completely restrain the car.
If you continue driving the car, electronics may reduce the speed and power in order to limit the heating.

In any such a situation, switch the car off and start again approximately after 15 min. If it continues to glow, it is advisable to contact Goingreen

⚠ CAUTION

If you attempt to drive with the light glowing red, you will notice that the performance of your car is reduced.
If you still continue to drive, the temperature light will flash and your car will soon come to a stop to protect its drive train.

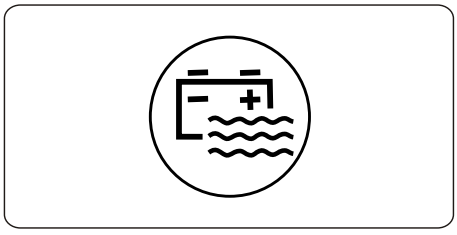
V. LOW BATTERY WATER

This lamp glows red when the water level in the battery is low.

⚠ CAUTION

After the light comes ON you should get the batteries watered within the next 3 cycles. Failure to do so will reduce the life of the power pack and affect warranty.

If low water is sensed, the battery low water light will come on for the first 5 mins of a drive. If watering is not carried out following the next charge the low water light will repeat for the next drive.



If the battery is not watered after a 3rd and 4th journey then the BATTERY LOW WATER light will flash every 2 seconds for the entire journey until the batteries are watered.

NOTE

Low water sensing may be skewed by parking on a slope. Please observe during drive.

⚠ CAUTION

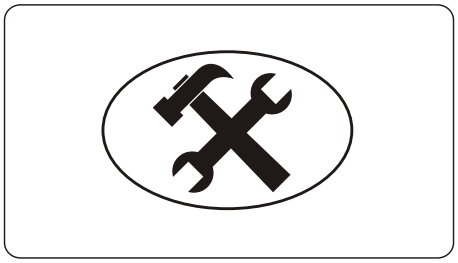
ONLY water the battery when it is fully charged and ONLY use distilled or de-ionised water.
Not watering the car may VOID your warranty, see Terms & Conditions of Agreement.

VI. SERVICE LIGHT

When the start-up key is turned ON, this light should glow red and disappear immediately. In the event it stays on, it indicates that your G-Wiz requires attention by Goingreen

⚠ CAUTION

The appearance of service light can be due to a temperory condition detected by EMS (On board computer). Please continue using the car and inform your nearest service center at the earliest opportunity.

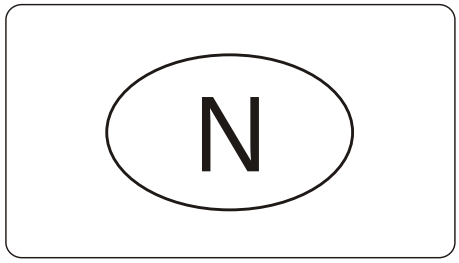


VII. NEUTRAL LIGHT

This light will be on when BFNR knob is at 'N' position. This light will blink if the key is switched on with control knob in either B, F and R position. If this light is blinking the car will not move. Please turn the control knob to N and then to desired mode to drive the car.

NOTE

Ensure knob position in NEUTRAL before start-up



VIII. POWER INDICATOR

This light will come on GREEN during regen and will glow RED when ever more power is drawn from the battery. This is an indication to driver to achieve an optimum mileage out of G-Wiz by gradual acceleration

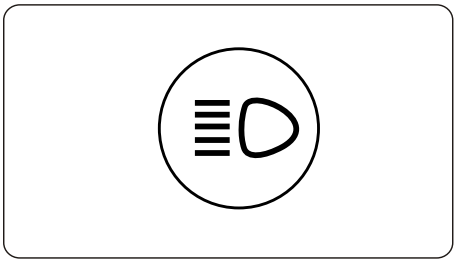
IX. ENCODER FAULT LIGHT

This light glows during driving which indicates a Drive system fault. Please call Goingreen.

1.1 Indicator Lights

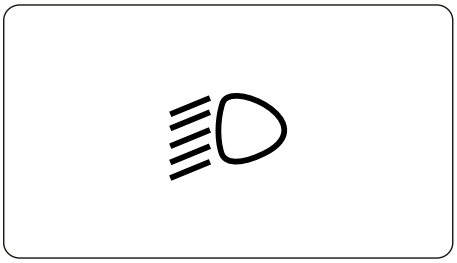
X. HIGH BEAM

This lamp glows when the high beam headlights are turned on.



XI. LOW BEAM

This lamp glows when the headlights are turned to low beam.



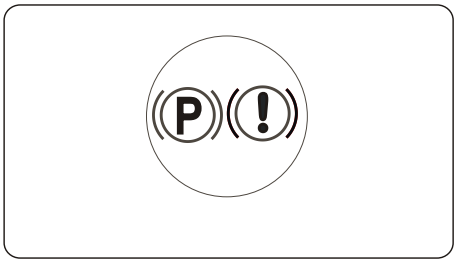
XII. PARKING BRAKE / LOW BRAKE FLUID LIGHT

Parking brake light (P) with continous alarm chime indicates you are driving with the parking brake engaged.

Low brake fluid light (!) with intermittent chime indicates low brake fluid level. Please top up the brake fluid at the first opportunity.

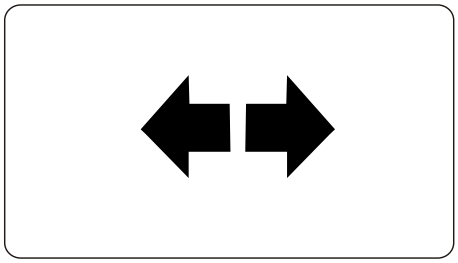
NOTE

In the event this light continues to glow irrespective of the above, please contact Goingreen.



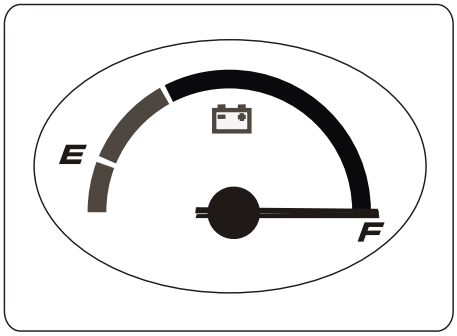
XIII. TURN INDICATOR

The turn indicator light on the cluster will flash when either of turn indicator signalh ON or if hazard warning light turned ON.



I. POWER GAUGE

This gauge, like the fuel gauge in a conventional automobile, indicates your possible range of transportation with the energy source available.
(*Refer chapter on "Driving Your Car"*).



II. SPEEDOMETER

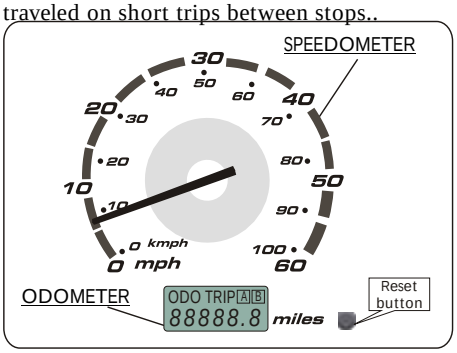
The outer perimeter (white) indicates the speed of your car in miles per hour (Mph) and the inner perimeter indicates speed of your car in Kilometers per hour (Kmph).

III. ODOMETER

The odometer records the total distance in miles that your car has completed.

IV. TRIP METER

Trip meter can be used to measure the distance traveled on short trips between stops..



Display Length
Total - 0 to 999999 miles
Trip A- 0.0 to 9999.9 miles
Trip B- 0.0 to 9999.9 miles

i) Total odometer will be displayed by default.
ii) Push the reset button under 1.2 seconds, you can select Total -->Trip A -->Trip B.
iii) Push the reset button over 1.2 seconds, display data is reset. Count start from switch ON --->OFF. (Only at trip odometer display)

⚠ CAUTION

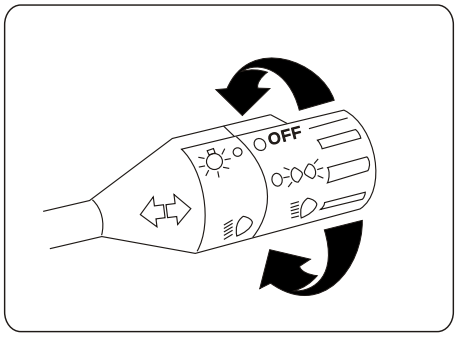
Keep track of your odometer reading and check the maintenance schedule regularly for required services. Increased wear or damage to certain parts can result from failure to perform required services at the proper mileage intervals and your warranty rights may be affected.

1.3 Steering Wheel Controls

I. HEADLIGHTS

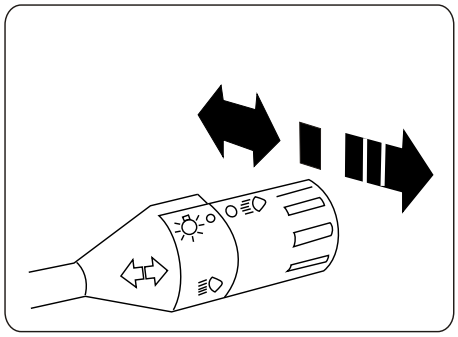
This lever operating the headlights has three positions. They are:

1. OFF - In this position, all lights are off.
2. Middle Position - Front parking lights, tail lights, registration plate lights and dashboard backlighting is lit but headlights remain off.
3. Third Position - The headlight also comes on when the lever is turned to this position.



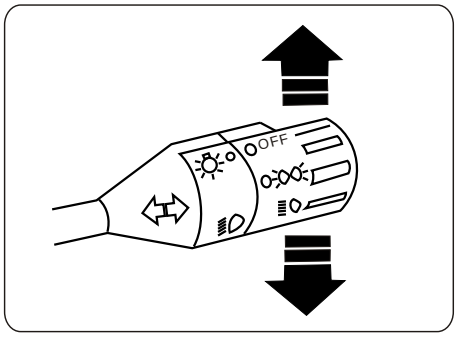
II. LOW BEAM / HIGH BEAM

To change between low beam and high beam, pull the turn signal lever until you hear a click, then let go. To flash the high beam, pull the lever slightly towards you and release it in a quick action. Flashing the high beam is necessary at times to warn traffic in the front about your presence, especially while overtaking at night.



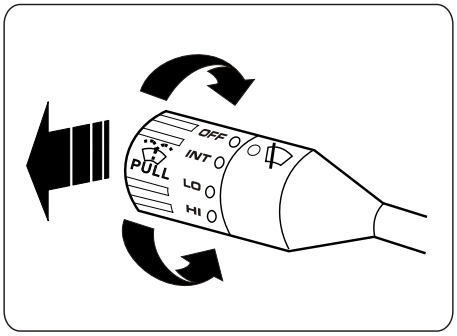
III. TURN SIGNALS

The turn signal lights blink when you signal a lane change or turn.
Turn the side indicator lever upwards for left turn and downwards for right turn respectively.



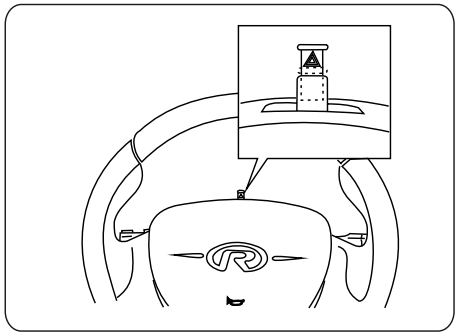
IV. WINDSCREEN WIPER

To operate the windscreen wiper, twist the lever from OFF position to any of the operating positions as required. The speed of the wiper can be varied to intermediate, low and high by operating the lever switch.
To spray windscreen washer fluid, pull the lever towards you, the wiper will come ON for a few seconds/ wipes.



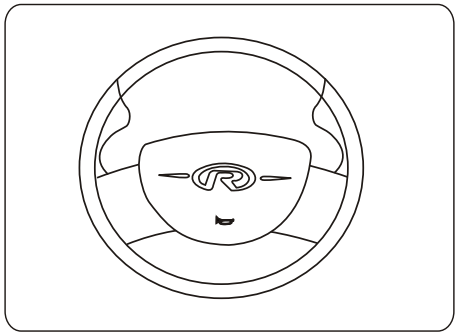
V. HAZARD WARNING

Pull up the switch to activate the hazard warning lights. All six external turn signal lights and turn signal indicators will flash simultaneously. To turn off the lights, push the switch down. These lights can be used to warn the traffic in the event of any emergency.



VI. HORN

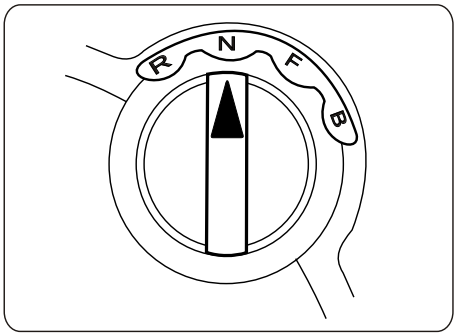
The horn is integrated in the center pad of the steering wheel. Press anywhere on this pad to sound horn.



1.4 Control Knob

CONTROL KNOB

The control knob of your car enables you to choose the direction and speed of movement.
It has the following positions:
Forward [F]:
This is the normal driving mode position which enables you to move forward. (max speed is 45mph) and driving in this will give the best driving range out of your car.



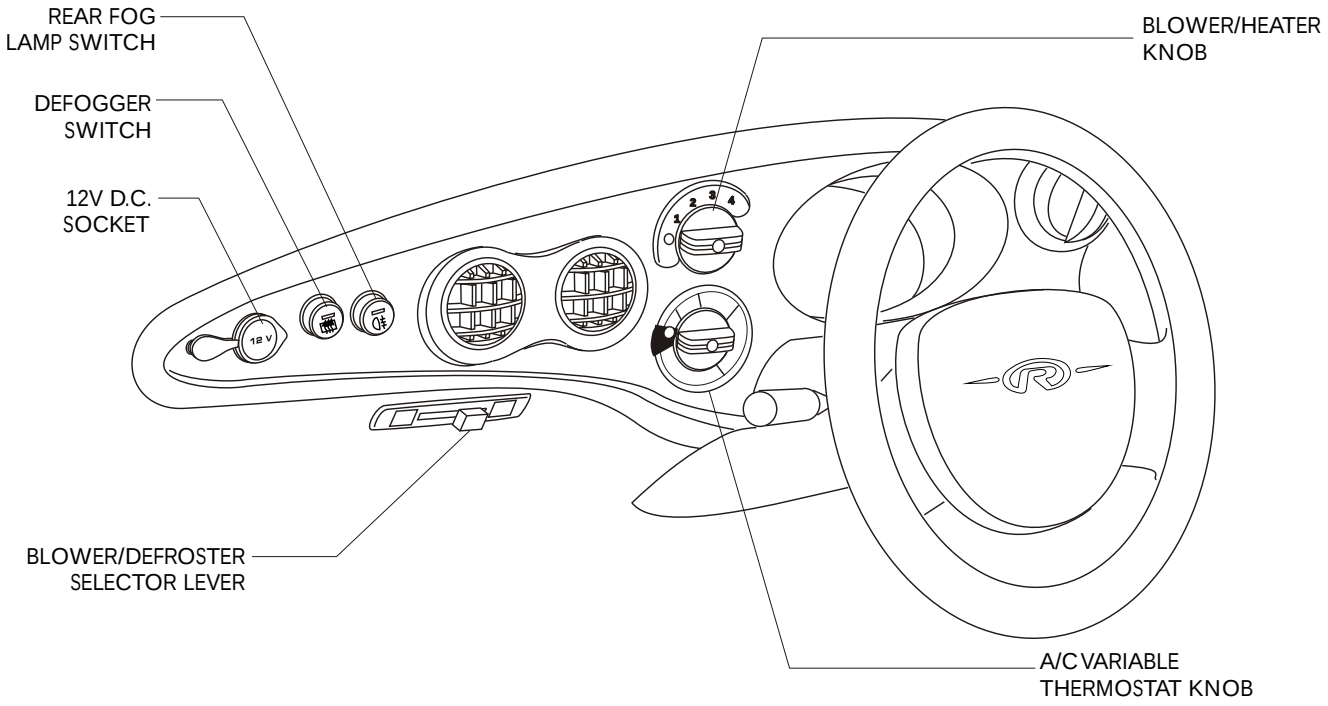
Power Boost [B]:
This mode is to be used 'only' if 'Boost Power' is required. This position also enables you to move forward direction, will give you addition speed, acceleration and hill climbing.
Neutral [N]:
The BFNR knob should be in this position at the time of Key on and should be used while parking your car, or when you place your car in a stationary position.
Reverse [R]:
When you rotate the control knob to this position, your car would move in the reverse direction. Your speed in this position is limited to 12 mph.

(To know more about how to derive the maximum range from your car, please refer to section 4.0 on "Driving your Car")

NOTE

While climbing steep gradients, it is advisable to switch over to 'B' mode for better gradeability.

1.5 Climate Control System - controls

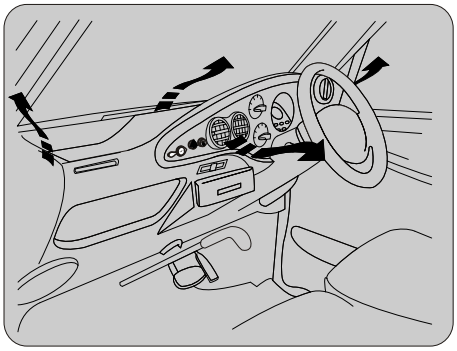


1.5 Climate Control System - controls

I. AIR FLOW VENTS

The car is equipped with a blower system with air flow vents provided to circulate air in the car.

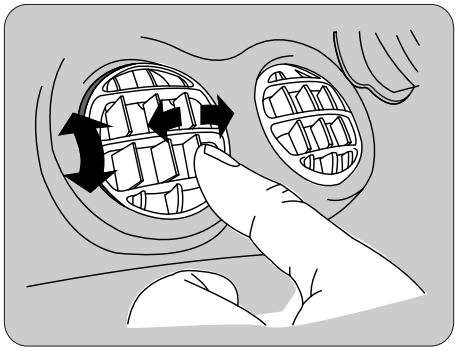
1. The central (circular) vents direct air towards the cabin
2. The vents near the windshield direct air towards it
3. The vents at the two corners of the dashboard direct air onto the windows.



The louvers of the central vents can be adjusted to direct the air for better comfort.

NOTE

Do not switch the blower on before switching the car on.
Continuous use of the blower can effect the range of the car.

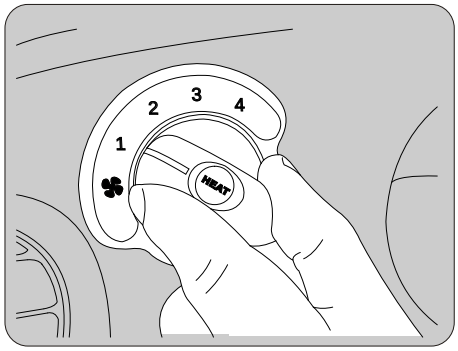


II. BLOWER OPERATION

The Blower can be operated by turning the knob from OFF position to any of the desired 4 operating positions.

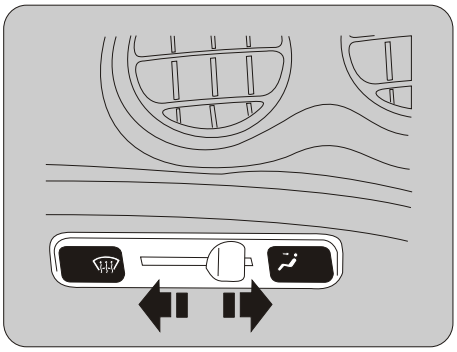
⚠ CAUTION

Always switch the blowers off before turning the car off.



III. BLOWER/ DEFROSTER-DEMISTER SELECTOR

The direction of air flow from the blower can be changed by positioning the Blower/ Defroster-Demister Selector Lever.
Positioning this lever to the right - directs air towards the cabin.
Positioning it to the left - directs air towards the windshield and window - acting as Defroster and Demister respectively in Heater ON position.

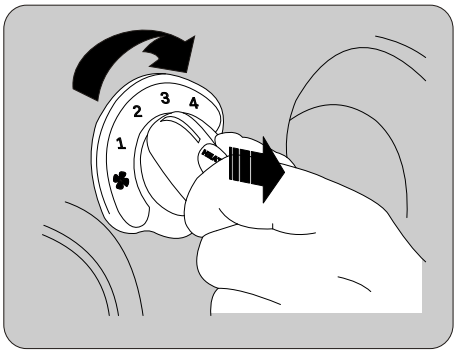


IV. HEATER

To operate the Heater, pull the blower knob gently towards yourself and turn it to desired position.
The 'HEAT' symbol (in the center of the knob) will light up.
Heater will automatically switch off at 25% SOC.

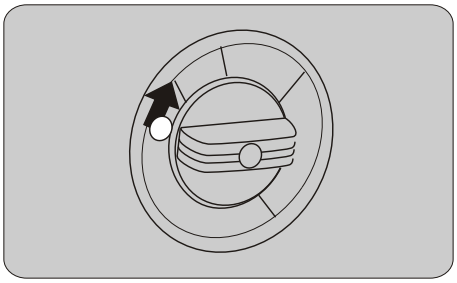
NOTE

Use on low setting to increase mileage during drive



V. A/C VARO SYSTEM*

This is an optional feature.
To operate the air conditioner, turn on the blower and rotate the Varo Knob for desired cooling position. Cool air will be blown through the main vents gradually.
The A/C Varo knob is located below the Blower switch and has a blue back light in the ON condition. The Varo system allows you to steplessly set the amount of cooling you need and has an added advantage in getting more mileage by setting at low cooling.

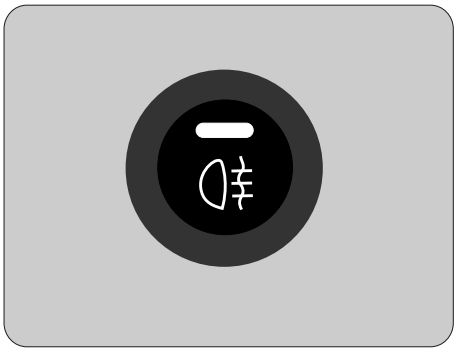


1.5 Climate Control System - controls

VI. REAR FOG LAMP

The car is fitted with a rear fog lamp to enable other vehicles (coming from the rear) to pin-point your car in foggy weather conditions.

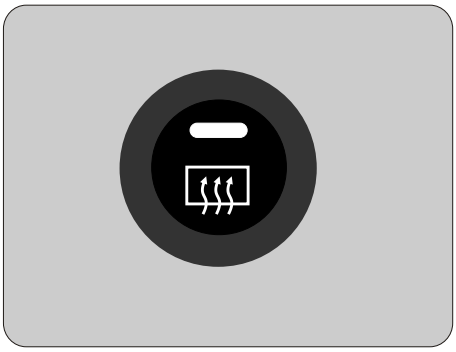
The rear fog lamp can be activated by pressing the rear fog lamp switch provided on the dashboard. Switch symbol gets backlit when ON.
Press again to switch it OFF.



VII. REAR DEFOGGER

The rear hatch defogger will clear the fog, frost or thin ice to give you a clear rear view.

The defogger can be activated by pressing the defogger switch provided on the dashboard. Switch symbol gets backlit when ON.
Press again to switch it OFF.



NOTE

Always remember to switch OFF the Defogger switch once the hatch gets cleared OR after 10 mins of continuous operation.
Not doing so will reduce your driving range significantly.

NOTE

In case both - the Heater and the A/C are ON at the same time , only the A/C will function.
(i.e. the A/C overrides the Heater and the Blower)

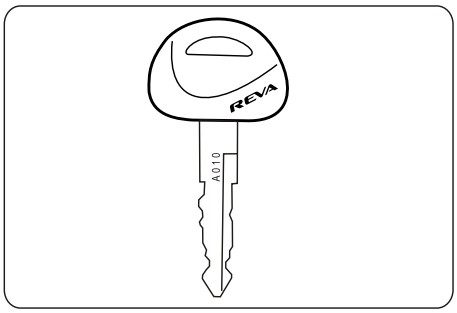
NOTE

Heater or A/C will not operate when the car's SOC is less than 25% (Low Battery light starts flashing).

Heater or A/C will not operate when the car is in the Equalisation mode.

I. KEYS

Your car comes with two identical keys. They fit all the locks on your car - Key Switch and Doors. Each key has an identification number stamped on it. It is suggested that the key number is noted down and stored in a safe place.

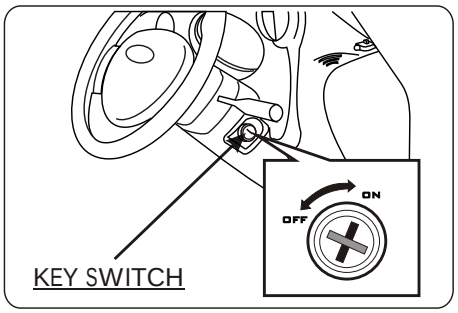


II. KEY SWITCH

The key switch is on the right side of the steering column.
It has 2 positions:

1. Lock (OFF):
The key can be inserted and removed only in this position.

2. ON:
When you turn the key to this position all electrical features in your car will come on.



III. CHIME

The chime comes on under the following circumstances:

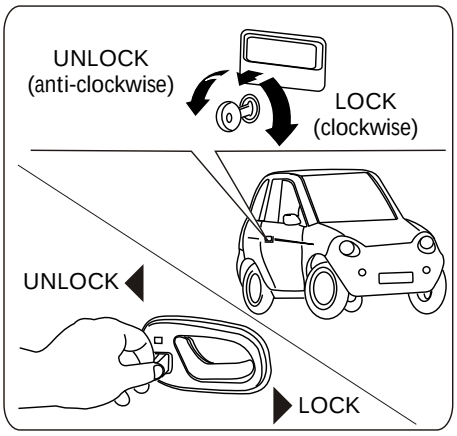
1. Door/s is opened while the Key Switch is ON.
2. Door/s is opened while the headlights are ON (though Key Switch is OFF.)
3. If Parking Brake is engaged, Key Switch is ON and accelerator is pressed.
4. Brake Fluid is low. (An intermittent chime comes on in this case).
5. When you leave the car without applying parking brake
   i.e. Key Switch is OFF, door is open and Parking Brake is not applied.

1.7 Door Locks

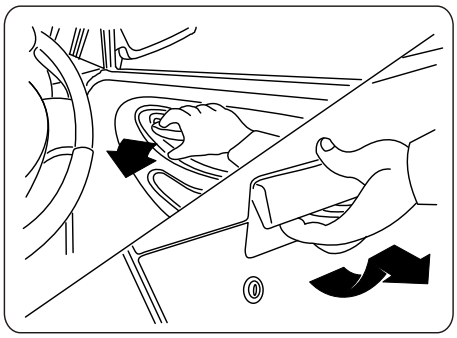
DOOR LOCKS -

I. TO LOCK/ UNLOCK MANUALLY:

To lock or unlock your car manually, turn the key in the clockwise or anti-clockwise direction respectively as shown in the figure.
To lock from inside, push door lock lever towards front of car and push it back to unlock as indicated in the figure.



II. TO OPEN THE DOOR:



NOTE

Your car has been equipped with factory fitted central door locking (CDL) system. Hence the keys must be used to lock/unlock the doors only when the CDL system is not functional.

⚠ CAUTION

Always ensure to lock both the doors while driving.
Locking the doors will guard the occupants from being thrown out in case of accidental opening of a door.

III. TO LOCK/ UNLOCK AUTOMATICALLY - USING CDL

Your Car is fitted with a Central Door Locking (CDL) system, which has the following features:

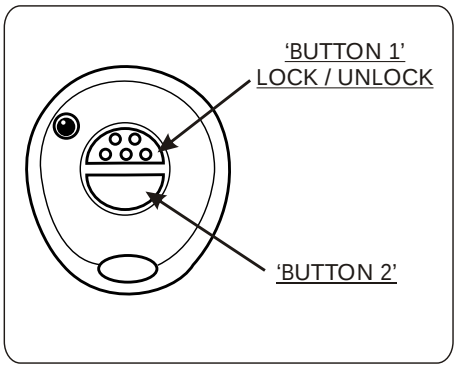
1. Remote lock/ unlock of car.
2. Immobiliser.
3. Remote car heating/cooling*.

(continued)

1.7 Door Locks - Central Door Locking System

1. Operation with Remote:

The car can be locked or unlocked by pressing Button 1 on the remote unit. A locking action is accompanied by a single 'Flash' of Turn indicator lights, Unlocking action is accompanied by 3 flashes of Turn indicator lights.



2. Automatic Door Locking/ Unlocking (*if programmed)

1. Doors get locked automatically after 20 sec. when you turn ON the Key Switch (provided the doors are closed and the car is in the disarmed condition).
2. Doors get locked automatically after 30 sec., once it is unlocked by the remote.
3. Doors get unlocked automatically when you turn OFF the Key Switch.

NOTE

It is advisable to operate the remote while the car is within visual range, as the car's alarm system is of the visual type (turn indicators flash) and NOT the audible (siren) type.

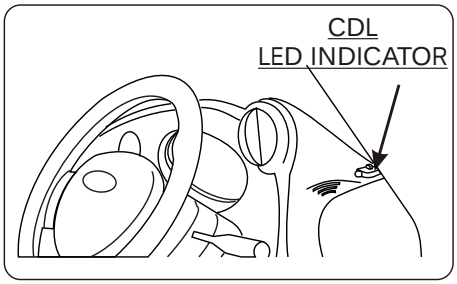
3. Car 'Armed' Position

After 45 seconds of locking operation car enters in to 'armed' condition and CDL system LED indicator flashes continuously. Any attempt to do the following events causes alarm:
i) Cutting of system wire.
ii) Disturbing the UN-switched supply loads.
iii) Attempt to turn ON key switch.
iv) Attempt to open the doors.
v) Panic alarm – by pressing Button2 on the remote.

Under alarm conditions, flashes will come for 30 seconds, and heater comes ON with blower running at 4th speed. If the event is still happening even after 30 seconds, then flashes continue for further 30 seconds.

1.7 Door Locks - Central Door Locking System

CDL system LED Indicator:
The CDL system LED indicator is located in the right hand corner on top of the dashboard / front windshield.
i) This LED will be 'flashing' in armed condition.
ii) It will be 'unlit' in disarmed condition.
iii) During Neutral time, the LED will glow continuously.
Iv) The LED will also glow continuously if doors are opened in disarmed condition.



4. Neutral Time
The CDL system has a 'Neutral time' of 45 sec. after 'Lock' operation. During this neutral time, the system allows you to unlock the car manually, get in and out of the car, without raising an alarm.

During the neutral time however, the car stays immobilized - the CDL-LED glows continuously to indicate this.

5. Immobiliser action:
When the car is armed, it can only be unlocked using the remote. Any attempt to start the car by other means is blocked by the CDL. The car stays immobilized if - one attempts to switch ON the key switch when the car is in the 'Armed' condition. The car also gets automatically 'Armed' after a 75 sec. delay, if the Key Switch is in the OFF position and the doors are closed.

NOTE

1. There should be a 5 sec. gap between any two operations with the remote.
2. The CDL system does not provide master motor function.

⚠ CAUTION

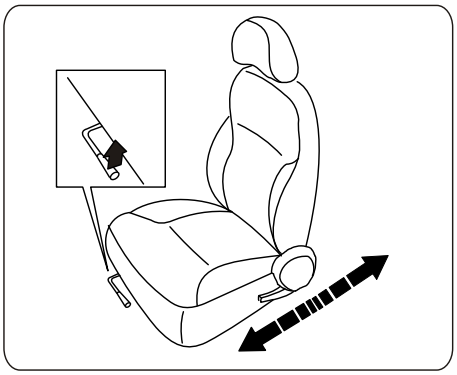
1. Close doors properly while coming out of the car.
2. Do not turn the Key Switch ON when the doors are open - this makes remote button disabled even after the Key Switch is switched OFF.
   This situation is indicated by the continuous glow of the CDL-LED.

NOTE

Remote is lost or is not functioning/ Keys are lost - Contact Goingreen at once.

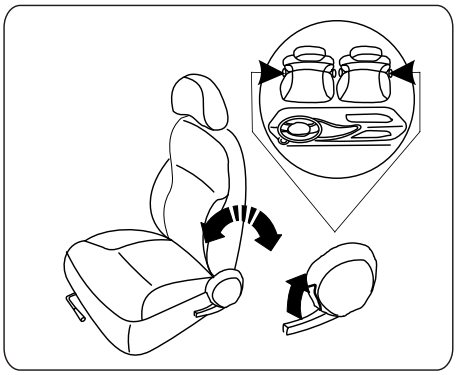
I. FRONT SEAT ADJUSTMENTS

Find a driving position, which is most comfortable for you. The adjustment lever for each of the front seats is located in the front, under the right side of the driver's seat and left side of the passenger's seat.
To adjust, pull the lever up and slide the seat forward or backward.



II. RECLINING THE SEAT

The seat back can be reclined to four different angles by pulling a lever located on the right hand side of the driver's seat and the left-hand side of the passenger's seat.



⚠ CAUTION

The position of seat backs should always be in an upright position when driving, or seat belt effectiveness may be reduced.

Always adjust the seats before driving. Never attempt to adjust seats while driving.

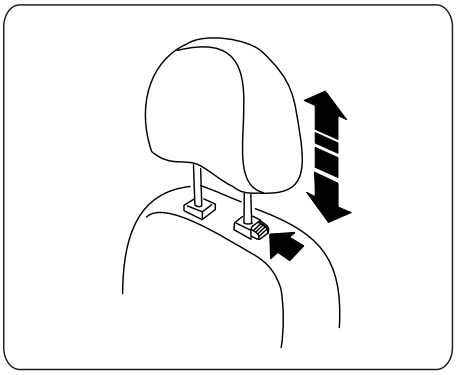
1.8 Seat Adjustments

III. HEAD REST

The head rest can be adjusted for height with the help of the button located on it. To raise, pull the headrest upward to a level most comfortable for you. To lower it, press the button and push the head rest down.

⚠ CAUTION

It is dangerous to drive without head rest.



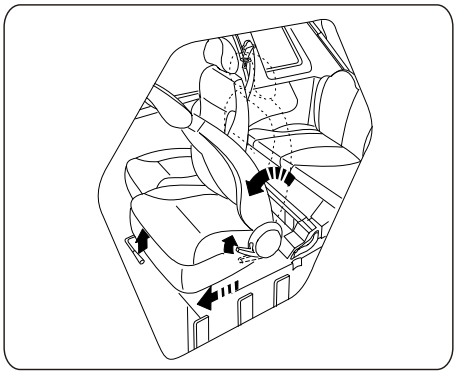
IV. REAR SEAT ACCESS

You can access the rear seats from both sides of your car. To do so:

Step 1: Pull up the seat adjustment lever of the respective front seat and slide the seat forward.

Step 2: Recline the seat forward to allow easy entry to the rear seat.

Step 3: Make sure the front seat is returned back to the normal position.

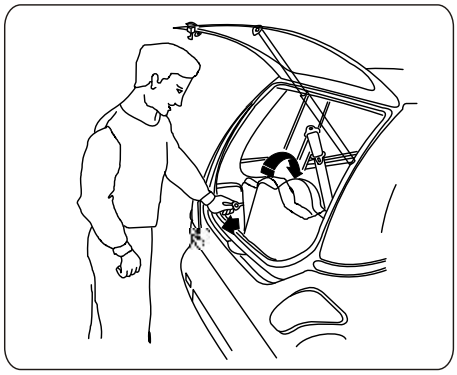


V. FOLDING REAR SEAT

Step 1 : To get additional luggage space, detach the two rubber latches located behind the rear seat.

Step 2 : Fold the backrest forward.

Step 3 : When not required lift backrest and push back to normal position attaching the rubber latches.



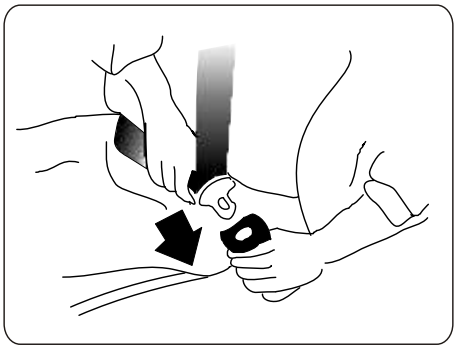
VI. SEAT BELTS

Both front and rear seats of your car have been fitted with safety belts for maximum protection from any inadvertent event.

⚠ CAUTION

Make sure all seat-belts are properly fastened before driving, for your safety.

The Rear seat belts are static type. Manually adjust them according to the comfort of the occupant to fit snugly.

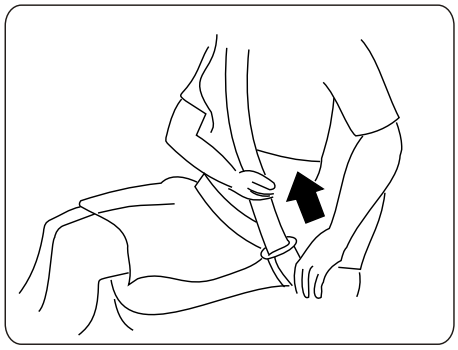


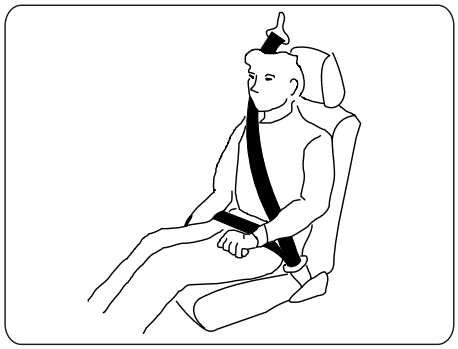
The following steps may be followed.

Step 1: Adjust the seats so you can sit up straight.

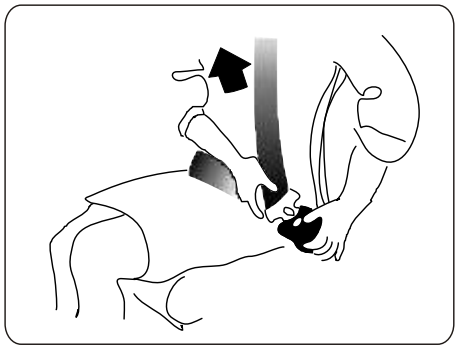
Step 2: Pull the belt across you and insert the latch plate into the latch slot. Make sure the belt is securely latched. Also check that the belt is not twisted.

Step 3: Position the lap belt as low as possible across your hips. Then pull and adjust the shoulder belt so they both fit snugly.





To unfasten the belt, press the release button on the latch slot.



1.8 Seat Adjustments

NOTE

Make sure you remove hard or breakable objects lying in pockets or clothing, if any, before wearing seatbelts.

The seatbelt is equipped to be used by one person only. Never use seat belts for more than one occupant

Ensure that the seat belt straps are not twisted while in use.

Pregnant woman are recommended to wear seat belt for protection. Please consult your doctor for any specific recommendations.

Never attach the seat belt over a child or infant in the occupant's lap.

Child restraint system:
Children and infants must never be transported without a proper restraint system. This system can be purchased from the market. Ensure that the system purchased meets all the applicable standards and safety measures. Use as per instruction of the manufacturer while seating the child in the front seat.

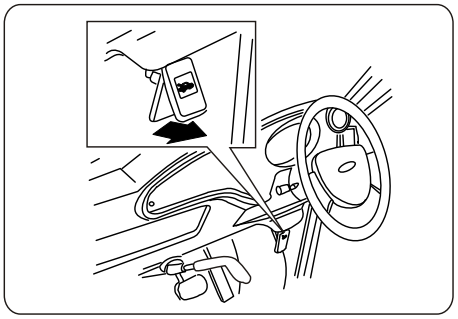
Cleaning the seat belts:
Never use any harsh detergents to clean the seat belt as this may render them ineffective.

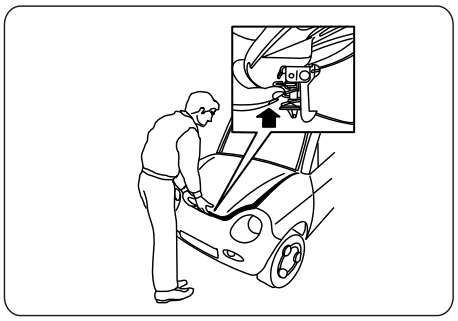
Inspect the seatbelts regularly for excessive wear and tear. If any damages/ frays etc are found, replace the seat belt immediately.

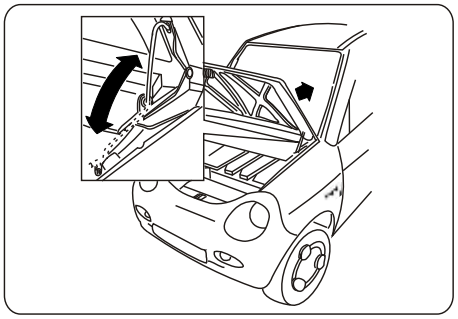
Do not attempt to tamper the seatbelts as this may affect the performance of the seat belts.

I. OPENING THE HOOD

Step 1: Pull the hood release lever located beneath dashboard on right side of steering column.
Step 2: Locate the hood-latch lever under the middle edge of the hood with your finger. Pull this lever until it releases hood.
Step 3: Lift the hood and pull the hood support-rod out of its clip and insert the end into its housing on the passenger's side





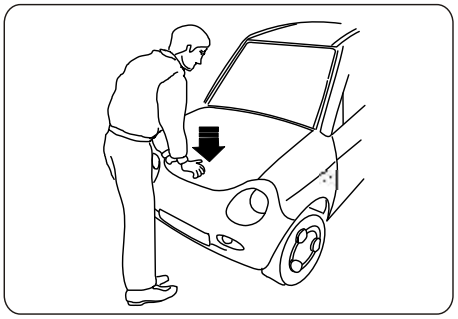


II. CLOSING THE HOOD

Step 1: Lift it up slightly to remove the support rod.
Step 2: Put the support rod back into the holding clip.
Step 3: Lower the hood till it touches the fender and press it lightly.

NOTE

Do not bang the hood. Ensure that the hood is fully locked before driving



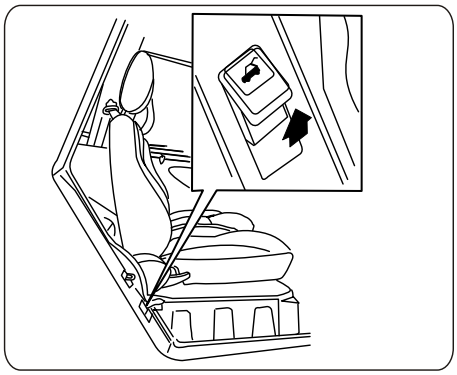
1.10 Rear Hatch

I. OPENING THE HATCH

Pull the hatch release lever located below the door latch on the doorframe on the driver's side. Lift the hatch.

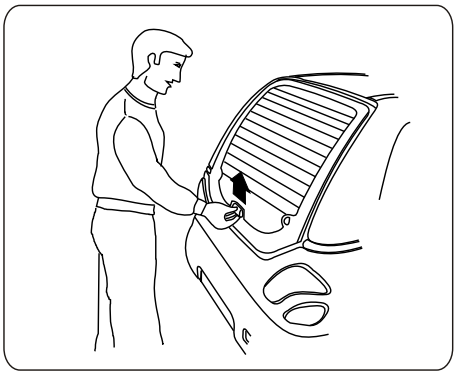
II. CLOSING THE HATCH

Gently press hatch down until it locks into position.



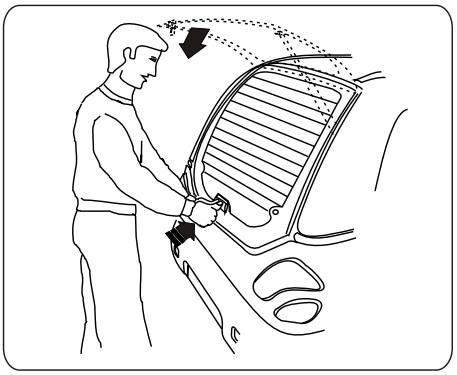
⚠ CAUTION

Do not bang the hatch.
Secure the hatch fully before driving.



⚠ CAUTION

Be very careful of the hatch-catcher when hatch is in the open/raised condition.
You might get seriously hurt.

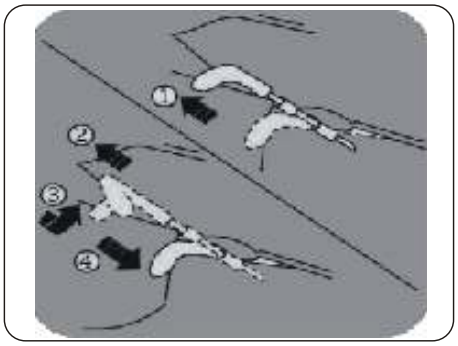


PARKING BRAKE WITH CHILD LOCK

To Engage brake
(1) Pull handle with force.

To Disengage
(2) Pull handle lightly.
(3) Turn through 90° anticlockwise.
(4) Release with slight push.

Make sure the handle has gone down fully for complete release of brake.



NOTE

In the event, the start-up key is ON, the door is closed, and the parking brake is pulled, a chime should be heard when you press accelerator pedal

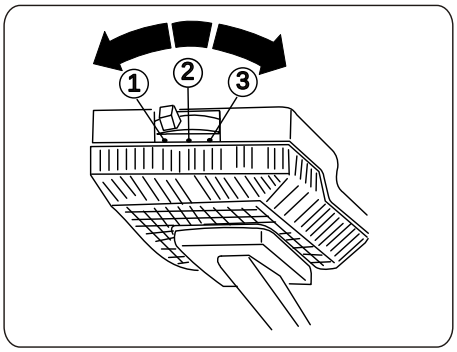
.This will ensure that you do not drive your G-Wiz with the parking brake engaged. The chime will also be heard when the start-up key is ON/OFF, parking brake is disengaged and the door is opened. This is to ensure that, you do not park your car

⚠ CAUTION

Never drive your car with the parking brake on. If you do, the motor will overheat and the effectiveness of the main brake will be reduced. This will result in either shortened brake life or permanent damage.

ROOF LIGHT

It has 3 positions:
Position 1: The light remains off even when the door is open.
Position 2: The light comes on even when doors are opened.
Position 3: The light comes on regardless of whether the door is opened or closed.

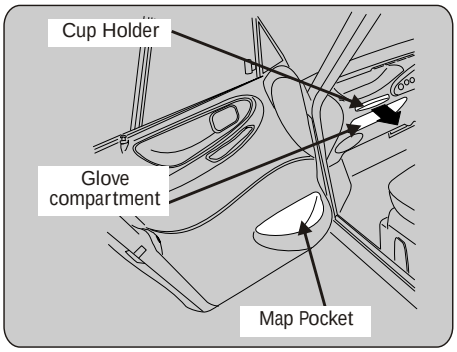


1.13 Compartments

COMPARTMENTS

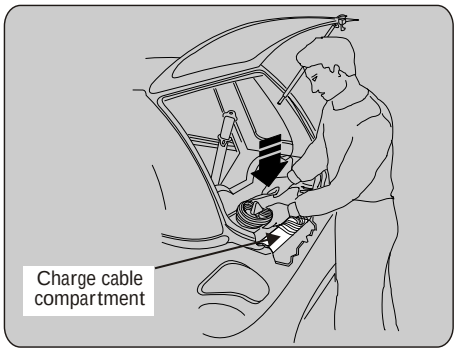
i. Door Pocket
The door pocket provided on both door inner panels can be used for keeping magazines, dailies and other reading material.

ii. Glove Compartment
This open compartment may be used for keeping lightweight articles.



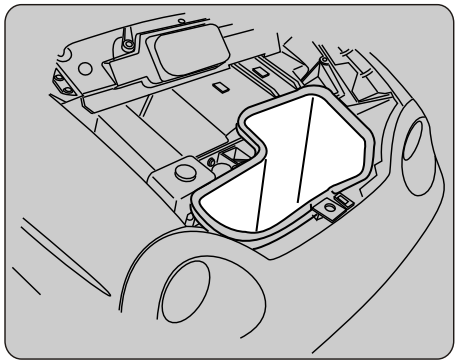
iii. Cable compartment
This compartment in the rear is provided to store your charging cable and tool kit.

iv. Beverage Holder
The beverage-holder can be accessed by pulling it out. Be careful when using it. A spilled liquid that is very hot can scald you or your passenger. Spilled liquids can also damage the upholstery, carpeting and electrical components in the interior.



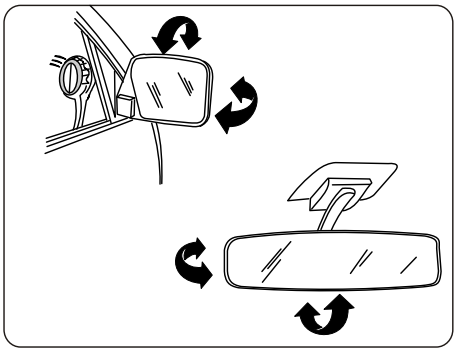
UTILITY BOX

The Utility box has been provided in your car for storage purpose. This is located in the frontal crush zone under the hood. To access the utility box, open the hood by accessing the lever near the driver seat. *(refer page 24.)*.



MIRRORS

Keep the inside and outside mirrors clean and adjusted for better visibility. Be sure to adjust the mirrors before you start driving.



AUDIO SYSTEM

The radio-CD Player provided with your car, is governed by its separate Owner's Manual.

SUN VISOR

Two adjustable sun visors are provided in your G-Wiz for protection of driver and passenger against glare.

In addition, the passenger side sun-visor comes equipped with a vanity mirror.

IV. 12 V D.C. SOCKET

The dashboard is fitted with a 12 V power outlet for charging your mobile phone.

This outlet can be used upto a max. load of 3 Amps.

NOTE

This socket has been designed for charging gadgets like mobile phones and laptops. Using gadgets drawing heavy current can damage the Power Pack.

2
Climate Control Seats

2.3 CLIMATIC CONTROL SEATS (CCS)*

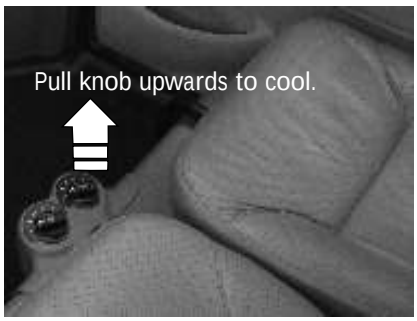
The CCS is a unique feature to enhance driver and co-passenger comfort by allowing adjustment of the temperatures of the Front Seats independently.
If your car is fitted with a CCS option, switches as shown will be available between the driver seat and co-passenger seat.

The two switches can be used to independently control the temperatures of the two seats. To select 'cool' mode, pull the switches 'UP'. To select heat mode, keep the switches 'pushed' in.
In both the cool and heat modes, the following levels can be selected based on your individual comfort requirements.

1. Fan only
2. Low(heat/ cold)
3. High(heat/ cold)
4. Off

NOTE

To extend your driving range use more of CCS and less of Heater, Defroster, Defogger for climate conditioning.

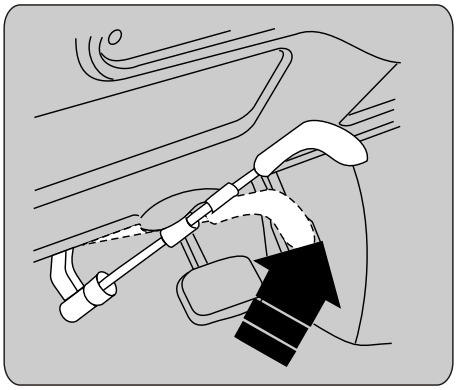


3
Charging Your G-Wiz

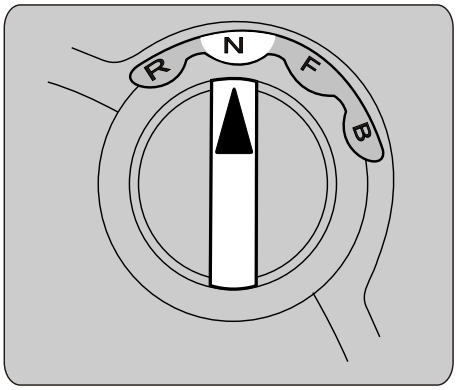
3.1 Steps for Charging

Charging your car is a safe and simple process.
Just follow the 4 steps given below:

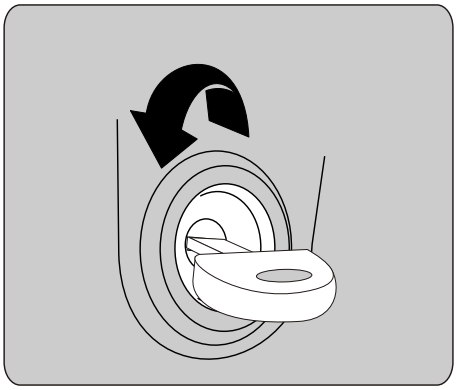
Step 1:
- Make sure parking brake is engaged.



- Ensure control knob is in neutral (N) mode.

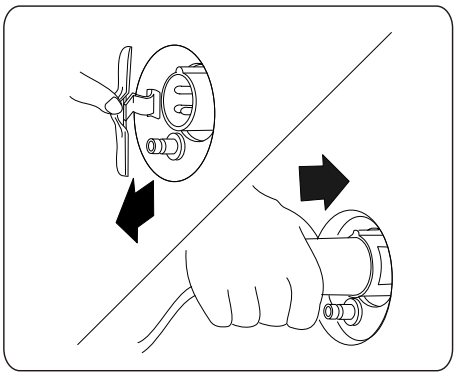


- Turn start-up key to OFF position and remove it from the key-slot.

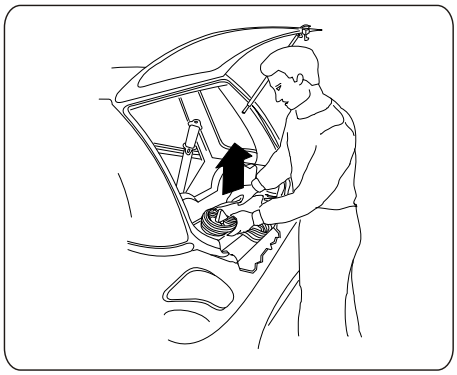


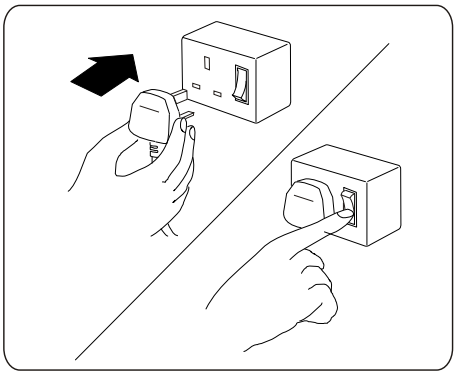
3.1 Steps for Charging

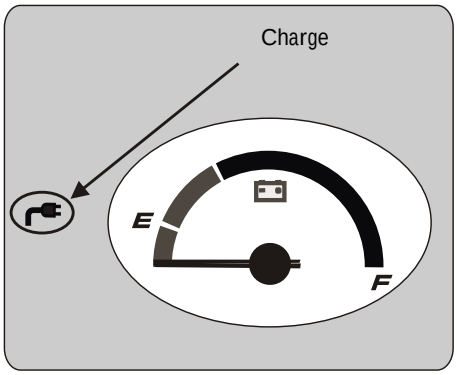
Step 2: Remove charging-cable from its compartment located (under flap) behind rear seat.
Step 3: Flip open Car onboard charge port lid and attach charging-cable (female-end).
Step 4: Plug the other (male) end into a 15 Amp, 220-240V external power source and then switch on power supply to it.



Your Car is now on charge. Check the Power Gauge on the Instrument Cluster. The Charge Light (green) starts flashing (at intervals of approximately 2 seconds) and turns solid once your Car is fully charged.







3.2 CHARGE DURATION

The time taken to charge your car completely is approximately 8 hours. You can however, obtain upto 80% charge in approximately 2.5 hours. Usually, the Power Pack will only need "topping up" and you will achieve full charge in lesser time.

Charge duration may vary:
e.g..
1) If you have returned from a long drive and your Power Pack is hot, while you attempt to charge, the time taken could be longer. This is because the computerised system in your car will wait till the temperature of the Power Pack lowers before enabling the charging process.
2) In conditions $<10°$ C or $>45°$ C temperature the battery charging duration will exceed.

3.3 IDEAL TIME TO CHARGE

The car can be charged anytime, anywhere. However, charging at night has the following advantages:

1. Normally, most of your requirements for city mobility are during the day. Hence, charging at night will not interfere in your daily travel plans.
2. If the temperature of the environment where you are charging your car is cool, the life of the Power Pack will be extended.

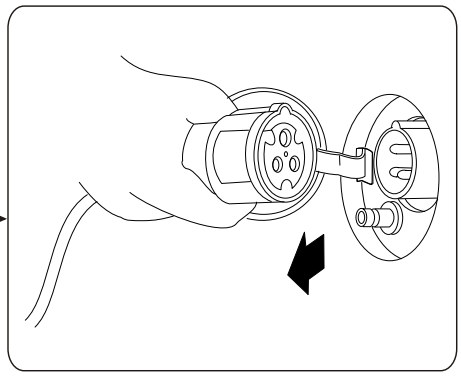
3.4 UNDER-CHARGING / OVER-CHARGING YOUR Gwiz

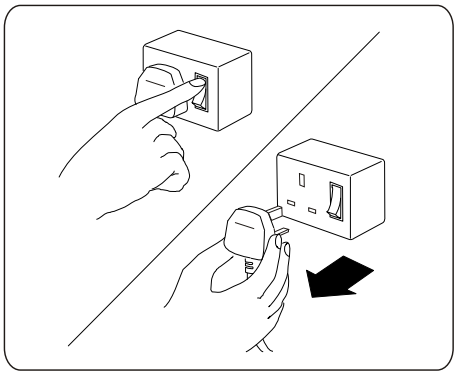
This can never happen, as your car is an intelligent car. The car's unique Energy Management System [EMS] controls the flow of electricity from the power supply to the Power Pack. It will draw only the required power to charge the Power Pack completely.

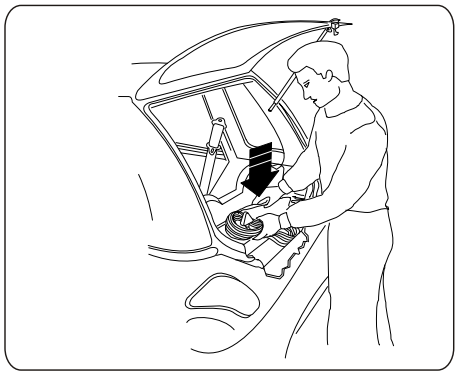
Furthermore, if there is voltage fluctuation or an interruption in power supply, the computer controlled on-board charger remembers the point at which charging was interrupted and resumes charging from where the charging stopped. It also has an auto shut-off mechanism by which the charging automatically stops once the Power Pack is completely charged.

NOTE

After completing the charging process, first switch off power supply at the external power source. Then remove / disconnect the charging cable from the source and the on-board charge port in this order. Roll up and store charging cable in its compartment behind the rear seat of your car.







3.5 EQUALIZING CHARGE

The Batteries in car require an 'Equalizing' charge at periodic intervals (approx. 500 miles of running). This is automatically carried out by the G-wiz's internal system. The equalization charge takes about 10 hours after the full charge. The car indicates equalization by alternatively flashing the charge(green) light and the 'Low Battery' light. It is advisable not to disturb the equalization charge until the green lights turns permanently ON.

NOTE

It is recommended that you carry out manual battery equalization once in every month if you do not get a chance to complete automatic equalization

NOTE

Equalizing uses a lot of battery water so you may find that you need to water afterwards.

3.6 EQUALIZATION BY CUSTOMER

a) After charge, if charge(Green) and low battery(red symbol) is flashing alternately, it is indication of Equalization charge "Keep it undisturbed for 10 Hrs, by this time equalization will be completed and charge light will be Solid green".

b) In case it has to be disturbed before completion of 10 hrs, ensure that in the next five cycle of charge, the balance of 10 hrs for equalization is completed. (There will be no indication, when remaining equalization will happen).

c) There will be no indication if the equalization has not been completed. Once every month, manually initiate equalization by following procedure.

(i) Sit in the car, close both doors and release parking brake.

(ii) Turn "ON and OFF" the key switch three times. Ensure that all the lights in the IP come on and go off each time it is switched ON.

(ii) Beep sound will be heard as an acknowledgment of "Equalization" command

(iii) Plug in charge plug and after full charge equalization will start automatically and will continue for 10 hrs after the full charge.

NOTE

If the car has been stationary for few days, for manual equalization Key ON-OFF may need to be repeated a fourth time.

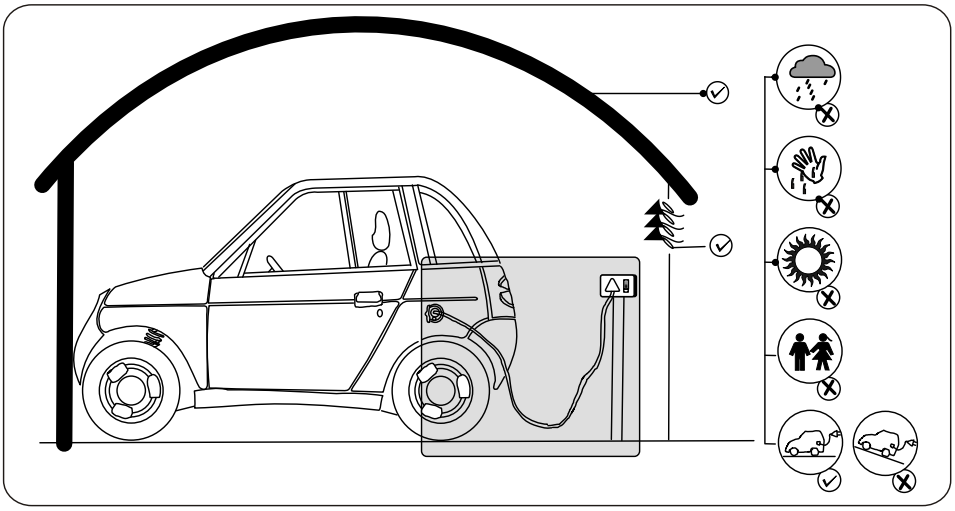
3.7 Trickle Charging / 3.8 Battery Heating / 3.9 Charging Precautions

3.7 TRICKLE CHARGING

If the car is not used for long period of time, always plug on the Charge cable with mains ON. The car goes for trickle charge every 24 hrs once for 15 minutes. This will help your battery pack to be full charged.

3.8 BATTERY HEATING

In extreme cold conditions, keep the car connected to the mains power when not driving. This will keep the battery heating system active and enhance your battery life and range.



3.9 CHARGING PRECAUTIONS

1. Do not charge your car if the Power Socket and / or the charge port are exposed to rain or water.
2. Do not plug-in with wet hands.
3. It is recommended that your car is not in the sun during the charging process.
4. Make sure that children are kept away from both on-board & external charge ports, especially while charging.
5. While charging, it is recommended that your car is parked on a level surface.
6. If you are parking in a closed space, ensure that there is an exhaust fan operational.

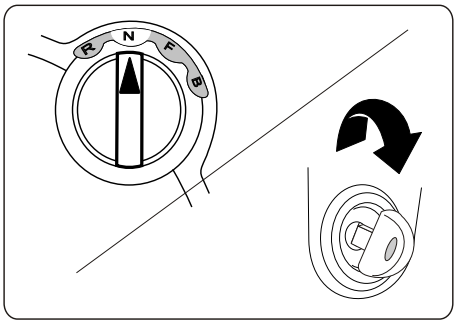
4
Driving Your G-Wiz

Check the energy level on the Power Gauge and ensure that there is enough charge for your immediate journey.

Seven simple steps to get your Car started:

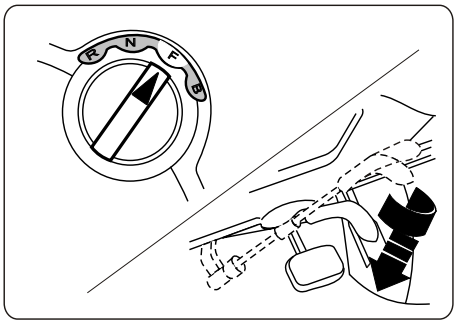
Step 1: Check and ensure that the Control Knob [RNFB] is in Neutral [N] mode.

Step 2: Insert the key and turn Key Switch ON. Check to see that all lamps on the instrument cluster light up.

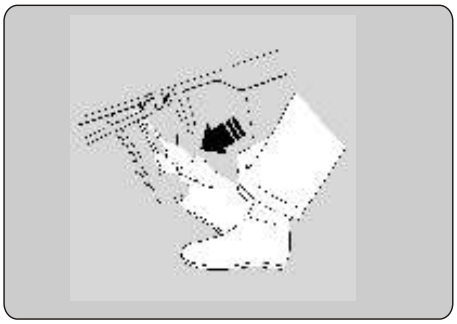


Step 3: Rotate the Control Knob to Forward [F] mode. This mode electronically limits acceleration and speed at the take off stage. This will enhance your safety and that of pedestrians nearby. This mode also enables you to maximise your driving range.

Step 4: Disengage the parking brake by gently pulling up and turning the brake handle anti-clockwise by 90 degrees and then push down the parking brake handle to release completely.



Step 5: Now your Car is ready to roll. Press the accelerator gently. Increase the pressure to accelerate further. Both the brake pedal and the accelerator pedal must be operated by your right foot only.



4.1 Quick Start

NOTE

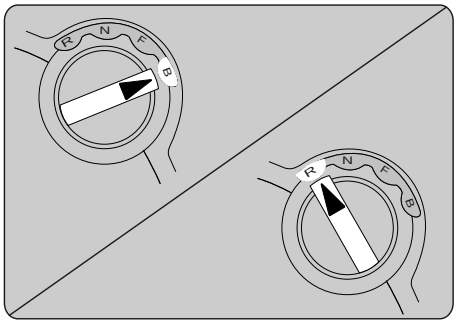
While driving, if you remove your foot from the accelerator pedal without pressing the brake pedal, you will sense automatic braking taking place.
This is normal and is attributed to the car's regenerative braking system. Through this form of braking the Power Pack will get re-charged partially.

Step 6: When you require a higher degree of acceleration, rotate the Control Knob to 'Boost' [B] mode. In this mode, you attain a much higher top speed. This is electronically limited to 50 mph It is possible for you to switch from Forward [F] mode to Boost [B] mode and vice-versa while the car is in motion. However, for optimal driving range, you are advised to use Forward [F] mode as far as possible.

Step 7: To reverse, make sure that your car is stationary. Then turn the Control knob to Reverse [R] mode. Press accelerator gently and move backward. In this mode too, speed is electronically limited to approx 12 mph for safety.

By following the above steps, you will notice that driving your car is a simple and delightful experience.

Read on to derive the maximum out of your car.



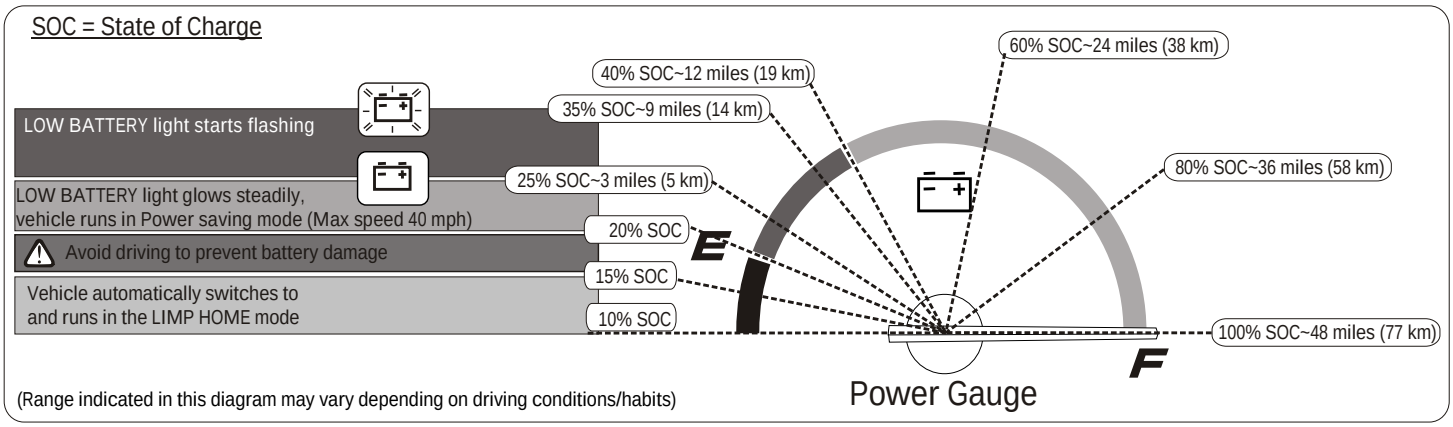
4.2 Estimating Your Driving Range

The Power Gauge displays the energy available in the Power Pack and also gives an indication of your driving range. Plan your trips to get the most of your car.

As you cover distance, the needle on this gauge will descend from the “Full” [F] position on the green band to “Empty” [E] on the red band.

While continuing driving, the energy level further reduces. Once you reach 25% State Of Charge (SOC) your car will move into the Economy mode activated by EMS by default(On board computer). The “Low Battery Light” will be ON continuously.

This is due to pre-programmed software in your car’s Energy Management System [EMS] and Motor Controller. These warning signals ensure, as far as possible, that you are never stranded on the road due to insufficient energy in the Power Pack.



4.3 Extending Your Driving Range

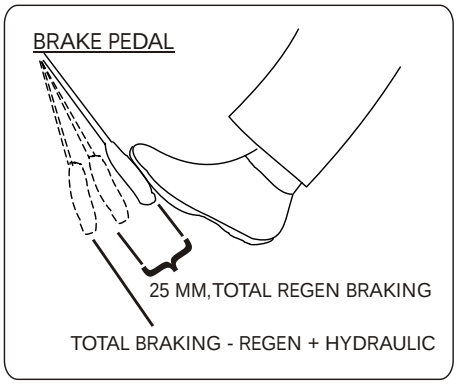
When the charge in your Power Pack reduces to 35% SOC, the “Low battery light” will start blinking. At 15% SOC, car will automatically switch to the LIMP-HOME mode, limiting your acceleration and top speed. This will ensure the Power Pack is not damaged and also help you reach the nearest charging point.

⚠ CAUTION

Driving in the Limp Home mode will affect your Power Pack and also its Warranty.

⚠ CAUTION

Always ensure right energy level for proposed travel distance.
Your car’s Power Pack is designed to discharge up to 80% depth of discharge only.Therefore never try to go below the 20% State of Charge of the batteries to ensure extended Power Pack life. In the event that this situation occurs the warranty of the Power Pack may get affected.



4.3 EXTENDING YOUR DRIVING RANGE

1. As far as possible drive with your Control Knob in the Forward [F] mode.
2. Accelerate moderately.
3. Always maintain the recommended tyre pressure in the four “Low roll resistance” tubeless tyres recommended for use on your Car.
4. For better average speed, acceleration, driving range and comfort, please ensure that prescribed maximum payload of 227Kgs is not exceeded..
5. Avoid hard braking. The first 25mm of brake pedal travel will gives you full regenerative braking and increase your driving range.

4.4 BATTERY CARE

The performance of your car depends to a large extent on the state of the batteries. Taking good care of the batteries goes a long way in getting the best out of your car.

1. Watering:
   Batteries need to be watered regularly. Please make sure watering is done regularly (Refer Sec. 8.5)

2. Equalisation:
   Batteries tend to develop irregularities with usage. They periodically need 'equalisation'. Please make sure that the equalisation goes through regularly. (Refer Sec. 3.5/3.6)

3. Keep Charging:
   If the car is not in use for long periods (several days) the batteries tend to lose charge due to self discharge. Please keep the car continuously plugged to the mains. The EMS on-board will detect the 'idle' condition of the car and automatically carry out a 'trickle charging' every 24 hrs.. This will ensure availability of the car anytime you want and also conserve battery life.

5
Tyres

Your car is provided with tubeless tyres.

TYRE PRESSURE

Recommended tyre pressure for the tyres of your car is:

FRONT - 35 PSI
REAR - 40 PSI

TYRE MARKINGS

Size Markings:

Hankook Tyres on your Car are marked as:

Hankook: 145 / 70 R 13 71 T

NOTE

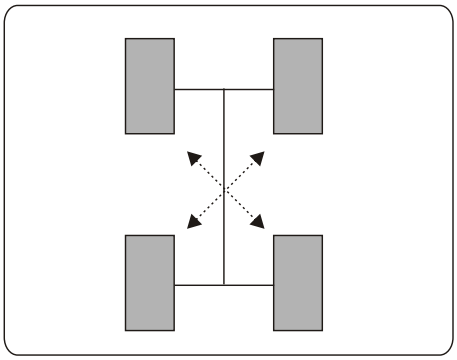
Any underinflated tyre generates excessive heat that may result in reduced life of your tyres.

Check inflation pressures on all the tyres at least once a month before driving. This should be done when the tyres are not hot.

Low tyre inflation pressure will result in higher roll resistance and will have a negative effect on the range of your car.

5.4 TYRE ROTATION

To equalize tyre wear, rotate tyres periodically as shown in the figure. The purpose of regular rotation at specified intervals is to achieve more uniform wear for all the tyres on the vehicle. The first rotation is the most important. When rotating the tyres, always use the rotation pattern as shown below. Make sure that the wheel nuts are tightened to the specifications.



After tyre rotation is conducted, check the wheel alignment. Also check for damaged tyres and wheels.

After 3,000 miles the tyres need the first rotation. Then periodic rotation of tyres will result in uniform tyre wear. It is however essential to get wheel alignment checked.

After the tyres have been rotated, adjust the front and rear inflation pressures as indicated on the door pillar. The tyres would have to be checked for the specification in each tyre.

5.5 TYRE AND WHEEL INSPECTION

Hazards

Objects on the road, such as potholes, pieces of glass, metal, rocks, wood, debris, etc. can damage a tyre. These should be safely avoided at all possible times. Unavoidable contact with such objects should immediately be followed by a tyre inspection.

Always look for bulges, cracks, cuts and abnormal tyre wear, especially on the edge of tyre tread, which might be caused by a wrong alignment or under-inflation. If any such damage is found, contact your nearest G-Wiz Authorised Service Centre immediately.

5.6 WHEEL ALIGNMENT AND BALANCE

NOTE

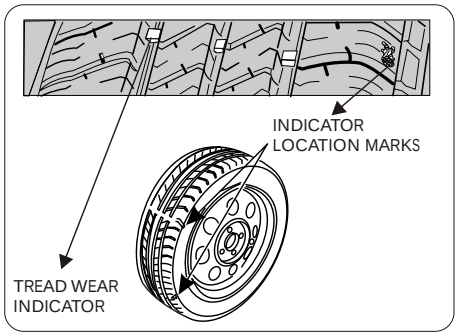
Wheel alignment and balance are important for the safety and maximum range of your Car.

Check the wear on your tyres at least once a month.

If your tyres are wearing unevenly, e.g. the inside shoulder of the tyre wearing faster than the rest of the tread, or if you detect excessive vibration, get your wheel alignment and balancing checked immediately. These conditions not only effect the life of the tyres but also adversely affect the handling characteristics of your car.

Replacement of a tyre is needed when:

1. The wear indicators are seen at three or more places around the tyre.
2. Cord / Fabric can be seen showing through the tyres' rubber.
3. The tread or sidewall is cracked, cut, or snagged deep enough to show cord or fabric.
4. The tyre has a bump, bulge or split.
5. The tyre has a damage, puncture or cut, that can't be repaired well because of the size or location of the damage.



⚠ CAUTION

Using any other tyre except Hankook will result in reduced driving range. All kind of repair/maintenance should be carried out by the Authorised Service Centre only. Failure to do so can result in your tyre warranty being null and void.

6
Do's & Don'ts

6.1 Charging - Do's & Don'ts

DO'S	DON'TS
▪ Inspect your charging cable periodically for any damage like cracks, cuts, exposed wire, etc. Replace if required. ▪ Park your car on a level ground. ▪ When the charging process is over, first switch off the power supply. Then remove the charging cable from the external Power Source and the on-board charge port, in this order. Roll up and store charging cable in its compartment behind the rear seat. ▪ Make sure that children are kept away from the Power Source and the on-board charge port during the charging process. ▪ When your car is not in use, keep it on charge. ▪ The computer controlled on-board charger will compensate any normal discharge of power. ▪ Allow the Power Pack to charge completely whenever possible. ▪ Top up battery water in the Power Pack as soon as possible after the Battery Water Level Lamp lights up on the instrument panel.	▪ Do not charge your car if the external Power Source and / or the on-board charge port are exposed to rain or water. ▪ Do not charge when your car is not parked on a level ground. ▪ Do not carry out charging procedure with wet hands. ▪ It is not advisable to disturb the charging while equalization charge is in process. ▪ Do not charge your car in a closed environment (like a garage) unless it has adequate ventilation.

6.2 Driving - Do's & Don'ts

DO'S	DON'TS
▪ Always ensure right charge for right distance. Check energy level on the Power gauge before commencing a journey. ▪ Always wear seat belts while driving. ▪ The prescribed maximum payload is 227 kg. For better average speed, acceleration, driving range and comfort, limit payload and certainly do not exceed it. ▪ As far as possible, drive with the Control knob in Forward [F] mode. This will enhance your driving range. Accelerate moderately always. ▪ To operate the brake as well as accelerator, use only your right leg as the brake input overrides the throttle. ▪ While driving during the night, switch off the head lights when at a traffic signal. This will help in conservation of charge in the Power Pack and enhance your driving range. ▪ Always maintain the recommended tyre pressure for optimizing driving range and comfort and increased tyre life. ▪ Discharge upto 80% at least once a week, so that range is not reduced.	▪ Do not undertake to drive when the energy level indicator is on the red band of the power. Driving at this stage might reduce the life of the power pack. ▪ Avoid sudden acceleration and hard turns. This will consume more energy and thereby reduce driving range. ▪ Avoid using accelerator pedal to hold the car on an incline. When stopped, use the brake pedal or the parking brake.

6.3 Servicing - Do's & Don'ts

DO'S	DON'TS
▪ Get your Car serviced at specified intervals as per the maintenance schedule provided in this handbook. ▪ Your Car needs special attention in the following situations: • Charge Light stays on even after the charge cable is detached or it does not come on when the charging connections are made. • Service Light stays on after the start up key is turned on and when the Power Pack has been watered properly. • Power Gauge Light stays on after the start up key is turned on. • Temperature Light flashes after the start up key is turned on. • Parking Light stays on after the parking brake is disengaged and there is adequate brake fluid. • Top- up the Power Pack water within 3 charge cycles after the Battery Water Level Lamp comes on. • Check Brake Fluid Level at least once a month. Have it topped up if the brake fluid light starts flashing. • Wash your Car regularly and keep the interiors clean. This will keep your Car new for a long time.	Do not charge the Car while washing or cleaning the vehicle Do not use / spray water inside and on motor of your Car while washing / cleaning the vehicle.

6.3 Installation of Accessories - Do's & Don'ts

DO'S	DON'TS
All accessories should be installed through the Authorised	G-Wiz customers should not install any accessories. Unauthorised addition of accessories can damage your car and the manufacturer warranty will become null and

6.4 Parking - Do's & Don'ts

DO'S	DON'TS
Always engage the parking brake while parking your car.	

6.5 Maintenance - Do's & Don'ts

DO'S	DON'TS
Use a damp cloth or a soft brush to clean the interiors of your	Do not spray water inside your car as water can get

7
Troubleshooting

7.0 Troubleshooting

7.1 CHARGING

	PROBLEM	POSSIBLE CAUSE	REMEDY
i.	Charge Light does not come on when the car is put on charge.	There may not be power supply at the External Power Source. Charging Cable may not be connected properly either at the external Power Source or at the On-board Charge Port.	Power Supply needs to be restored / ensured. Re-insert the charging cable at the external Power Source and / or the on-board Charge Port and check that power supply is available.
ii.	Temperature Light is on while charging.	Charging time of your car has increased due to high ambient	Charge in shade/cooler temperature or during the night when the ambient temperature is reduced.

7.2 DRIVING

	PROBLEM	POSSIBLE CAUSE	REMEDY
i.	Lights on the Instrument Cluster do not come on when the start-up key is turned ON, and your car does not move.	The Charging Cable may not have been removed from the external Power Source.	Turn the Control Knob to Neutral mode [N] and engage the parking brake. Remove the Charging Cable from the external power source and then from the on-board charge port.

7.0 Troubleshooting

7.1 DRIVING *(continued)*

	PROBLEM	POSSIBLE CAUSE	REMEDY
ii.	Your car does not move in any of the driving modes [F, B or R] when the accelerator is pressed.	The accelerator pedal may have been depressed while the start up key was turned ON. Your car will not move in this situation due to the “High Pedal Fault” which is a safety feature. The Motor Controller senses the pre-throttle operation and jams the throttle pedal thus, preventing sudden movement of your car.	Release the accelerator and press it again with gentle pressure.
		If You may have engaged the RNFB knob to other positions other than Neutral (N) and pressed the accelerator.	Turn the RNFB knob to Neutral position and then turn the knob to desired position and press the accelerator.
iii.	Temperature Light comes on while driving.	The Motor, Controller or Power Pack may have got heated up.	Park your car at safe place. Turn Control Knob to neutral [N] mode. Engage parking brake. Wait for ~ 15 minutes and start again and drive slowly.
		The Power Pack temperature falls below 10° C.	Immediately put the car for charging to activate the battery heater.

7.1 DRIVING *(continued)*

	PROBLEM	POSSIBLE CAUSE	REMEDY
iv.	Hard Steering.	Low or uneven tyre pressure.	Inflate to correct tyre pressure.
v.	Car pulls to one side while driving.	Low or uneven tyre pressure/ disturbed Wheel Alignment	Inflate to correct tyre pressure. Check wheel alignment.
vi.	Car pulls to one side while braking.	Low or uneven tyre pressure/ disturbed Wheel Alignment	Inflate to correct tyre pressure. Check wheel alignment.
vii.	Steering Kickback: (While driving, you feel jerks and vibrations on the steering wheel.)	Low or uneven tyre pressure.	Inflate to correct tyre pressure.
viii.	Hard or Rough ride: (When you drive your car, you feel that the ride is bumpy and rough and the car is jumping abnormally.)	Excessive tyre pressure.	Inflate to correct tyre pressure.
ix.	Wheel Wobbling: (While you drive, the wheels and/or steering shake.)	Incorrect wheel balancing and/or alignment.	Contact the Authorized Service Centre and get the wheels checked for alignment and balancing.

7.0 Troubleshooting

7.1 DRIVING *(continued)*

	PROBLEM	POSSIBLE CAUSE	REMEDY
x.	Poor wiping action: (The wiper blade is not moving or is stuck on windscreen area.)	Blade improperly set. Windshield is dirty with oil.	Adjust the blade position and clean the windshield properly.
xi.	Immobiliser activated	Opening the door manually with keys will activate immobiliser.	Press button1 of remote twice to deactivate this condition

NOTE

Appearance of Service light can be due to temporary condition read by the EMS (On board computer). Please continue using the car and inform your Authorised G-Wiz service centre at the first oppurtunity.

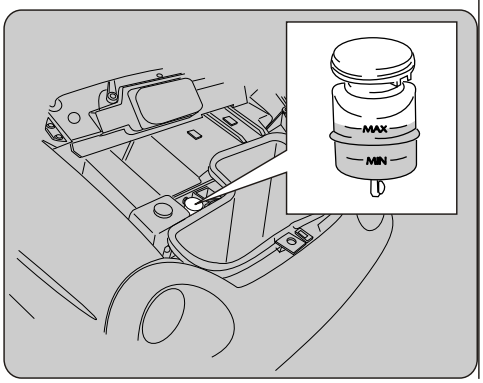
NOTE

If any of the problems mentioned above persists even after you have attempted remedial measures mentioned above, please contact the Authorised G-Wiz Service Centre.

8
Maintenance

BRAKES

Check the brake fluid level in the reservoir located under the hood every month. The fluid level should be between the “MIN” and “MAX” marks on the side of the reservoir. If the level is below the “MIN” mark, your brake fluid needs topping up. To fill the reservoir, press the cap and turn it open, fill the reservoir with DOT-3 brake fluid up to the “MAX” level and close the cap.



If frequent drop in fluid level is noticed, have the brake system inspected for leaks or worn brake pads.

TYRES

For safe driving, the tyres must be in good condition with adequate tread and correctly inflated.

Inflation

Keeping the tyres properly inflated provides the best combination of handling, tread life and riding comfort. Underinflated tyres, wear unevenly, adversely affect handling, and are more likely to fail from being overheated. Overinflated tyres can make your ride harsher. They are also more prone to damage from road hazards and wear unevenly.

We recommend that you visually check your tyres everyday and maintain the correct tyre pressure as recommended in the Section on Tyres.

In addition to proper inflation, correct wheel alignment helps to decrease tyre wear. If you find a tyre is worn unevenly, contact the Authorised G-Wiz Service Centre for wheel alignment.

8.3 Lights

LIGHTS

Check the operation of your Car's exterior lights at least once a month. A burned out bulb can create an unsafe condition by reducing your vehicle's visibility and ability to signal your intentions to other drivers.

The following check list will help:
1. Headlights (low and high beam)
2. Parking lights
3. Tail lights
4. Brake lights
5. Turn signals
6. Reverse lights
7. Number Plate light
8. All indicator / warning lights on the instrument panel
9. Rear Fog Light

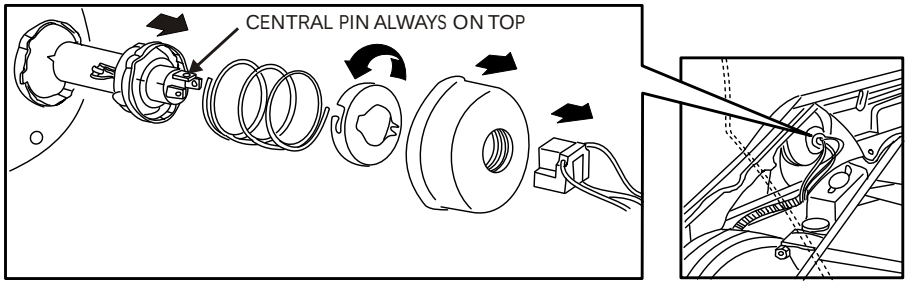
If you find any bulbs are nonfunctional, have them replaced.

REPLACEMENT OF BULBS

• Headlight:
1. Open the Bonnet and engage the support rod.
2. Disconnect the wiring harness connector from the rear of bulb.
3. Pull the rubber cap out.
4. Release the bulb retaining spring and remove the bulb.
5. Replace the bulb with a new one.
6. Install in the reverse order of removal. When installing new bulb, ensure that the lugs on the bulb holder engage correctly in recesses of the housing.
7. Install the rubber cap correctly in place.
8. Connect the wiring harness connector to the rear of the bulb.

⚠ CAUTION

Greasy hands/fingers will cause stains, resulting in dull and inefficient light. Do not touch bulbs with bare hands. Clean with a non fluffy cloth using spirit.



Front Turn Signal Lights

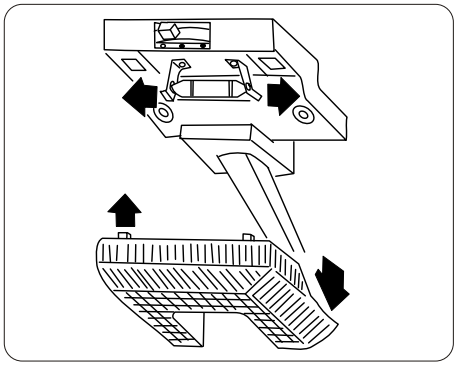
1. Remove the two fixing screws.
2. Rotate the bulb anticlockwise and remove it.
3. Pull out the bulb from the bulb holder.
4. Replace the bulb with a new one.
5. Install in the reverse order of removal.

Tail Light, Brake Light, Turn Signal and Reverse Indicator Lights

1. Remove the 3 fixing screws [in case of taillight & brake light] or the 2 screws [in case of turn indicator and reverse lamp.]
2. Rotate the bulb anticlockwise and remove it.
3. Pull out the bulb from the bulb holder.
4. Replace the bulb with a new one.
5. Install in the reverse order of removal.

Interior Light

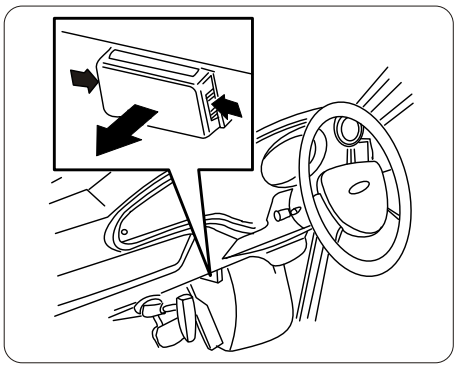
1. Pull down on the rear part of the lens to remove the cover.
2. To remove the bulb, pull it out gently.
3. While replacing the bulb, make sure that the contact springs are holding the bulb correctly.
4. To install the cover, hook its front end in and push it up.

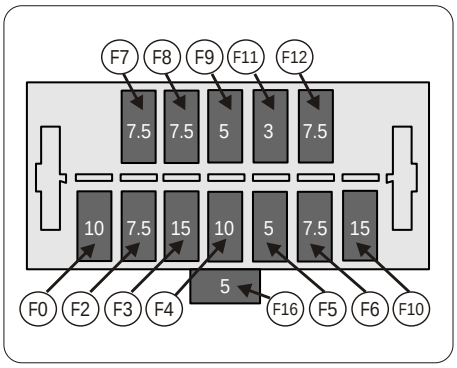


8.4 Fuse Box

FUSE BOX

The wiring harness in your G-Wiz is protected from short circuits by fuses. The fuse box containing the various fuses is housed below the instrument panel on the lower right hand side corner.



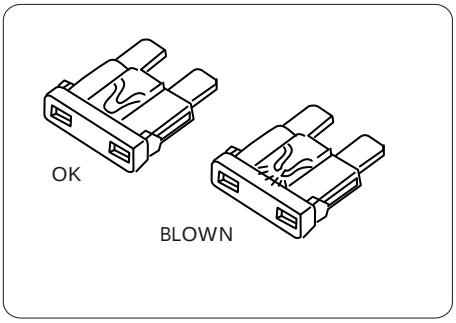


F_0	10 A	Unswitched Blower 12V Adaptor
F_2	5 A	Brake Light, Battery Fan, Chime, Heater pad controller
F_3	15 A	Head Lights
F_4	10 A	Horn, Hazard Lights
F_5	5 A	Roof Light, Parking Lights, IP Cluster high beam, RNFB switch back illumination, License Plate Lights
F_6	7.5 A	IP Cluster, Warning Lights, Tape, Clock, Stereo, chime relay
F_7	7.5 A	Turn Signals, Reverse Lights
F_8	7.5 A	Wiper and Washer
F_9	5A	Fog lamps
F_{10}	15 A	CDL Lighting
F_{11}	3 A	CDL Controls
F_{12}	7.5 A	Blower, Relay, Rear Defogger
F_{16}	5A	Condensor fan

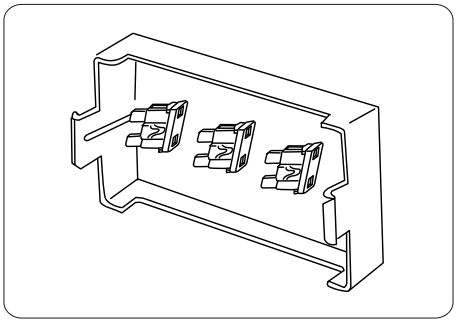
If any of the fuses mentioned are not working satisfactorily or has stopped working, it could be due to a short circuit in the electrical system.

⚠ CAUTION

Always use fuses of correct rating. Do not use wire or aluminum for a fused circuit. Remember to replenish the fuse box with spare fuses that can be purchased from an Authorised Service Centre.



To check the fuse(s), open the fuse box by pushing it at both ends and pulling off the cover. To identify the amperage and location, refer to the fuse list on top of the fuse cover. Pull the respective fuse and check for a short circuit. In the event of a short circuit, the circuitry will be broken.
Replace the blown fuse with the spare fuse provided on the inside of the fuse box cover. Replace the fuse box cover to its original position.



POWER PACK

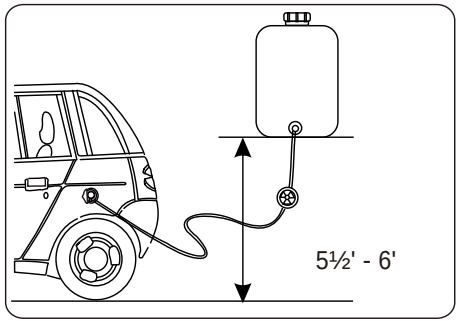
The power pack requires to be topped with distilled water every 500 miles or whenever the “battery water light” on the Instrument Cluster comes on (whichever, is earlier).
Topping the power pack can be done at the nearest G-Wiz authorised service centre or authorised battery watering centre. Topping the power pack can also be done using the battery watering equipment.

8.5 Power Pack

Before topping the power pack with “distilled water”, ensure that it is fully charged. Place the “distilled water can” at a height of 5½' - 6' feet above the level of the power pack. Flip open the lid of the onboard charge port on the side of your car. Pull the ring of the quick release connector back. Insert it into the battery water inlet located below the charge point in the on-board charger.

Release the ring. At this point, you will hear a click indicating that the system is secured. The distilled water should start flowing into the power pack, indicated by the small revolving fan, acting as a water flow indicator inside the vacuum nozzle. Check the tube for proper flow of water.

The watering process will take 2-5 minutes, depending on the water level in your power pack. When full, the flow indicator will stop revolving indicating that the power pack has stopped the intake of water. Hold the water flow indicator on a flat surface to check the flow of water. To disconnect the watering system, turn the water outlet off, pull the ring of the quick release connector back and gently remove the tube connection by pulling the tube from the water inlet pipe.



⚠ CAUTION

Never topup the power pack with battery water unless your car is fully charged.

Never topup the power pack while charging is in process.

Topup the power pack within 3 charging cycles after the battery water light comes on. Not doing so will turn ON the Low water light permanently. This will also affect the performance of your car and your power pack warranty.

Use only demineralised water, else the warranty on power pack will be void.

WINDSCREEN WASHER

The windscreen washer fluid tank is located under the hood on the left-hand side corner. Check the washer fluid in the tank at least once a month. Top up the fluid as and when necessary.

Absence of windscreen washer fluid can damage your washer motor. It is advisable to always keep the washer fluid topped-up.

⚠ WARNING

Use “anti-freeze” solution in the windscreen washer reservoir. This will help water in the Washer unit not be frozen.

⚠ CAUTION

Damage may result if the washer motor is operated whilst the fluid is frozen or with no fluid in the washer reservoir, or in case nozzle is blocked

WIPER BLADE REPLACEMENT

Contamination of either the windscreen or the wiper blade with foreign matter can reduce the effectiveness of the windscreen wiper. If the blades are not wiping properly, it could be time to replace the wiper blade. To replace the wiper blade press the retaining clip and pull the blade off the arm & push the new wiper blade into the arm.

8.7 Storing Your G-Wiz / 8.8 Appearance Care

STORING YOUR G-WIZ

In the event, you are not using your car for an extended period for e.g. a week or so:

- Top-up the Power Pack Water Level after full charge..
- Ensure it is kept on charge while you are away. The computer-controlled on-board charger will keep the Power Pack charged as and when a discharge takes place.
- Leave the parking brake engaged and the Control Knob in the 'N' (Neutral) position.
- If the vehicle is to be stored for a longer period, it should ideally be supported on jackstands / blocks, so that the tyres are off the ground.
- Support the wiper blade arms with a folded towel or paper tag so that they do not touch the windshield.

APPEARANCE CARE

Regular cleaning and polishing your car helps keep it looking new. Here are some tips on preserving the appearance of your car.

A. Exterior

i. Washing:

- Dirt and grit can scratch the paint, while tree sap and bird droppings can permanently ruin the finish.
- Rinse the car thoroughly with cold water to remove loose dirt.
- Mix mild detergent specially made for car wash with cold water.
- Wash your car using sponge or soft cloth. Start at the top and work your way down and rinse frequently.
- Check the body for tree sap and other foreign particles. Clean it as soon as possible to prevent any stain marks on paint and harm the finish.
- After washing, dry it with chamois or a soft towel.

ii. Wheels and wheel covers:

These have to be cleaned like the rest of the exteriors.

- Remove the wheel covers carefully, wash and keep on a soft surface so they do not get scratched.
- Use a mild detergent and soft brush to clean the wheels.
- Wash wheels with water and refix wheel caps.

B. Interior

i. Carpets

To remove dirt, vacuum carpets frequently. Always keep the carpets as dry as possible.

ii. Fabric

Vacuum dirt and dust out of the upholstery fabric frequently. To clean stubborn stains, use a commercially available fabric cleaner. To make sure it does not bleach or stain the fabric, test it on a hidden area of the fabric. Make sure the solution does not penetrate into the foam beneath the fabric. Covering your headrest with a cover will ensure that the upholstery is maintained.

iii. Seat Belts

If your seat belts get dirty, you can use a soft brush with a mixture of mild soap and warm water to clean them. Do not use bleach, dye, or cleaning solvents. They can weaken the belt material. Let the belts air-dry before you use the car.

Dirt builds up in the loops of the seat belt anchors and can cause the belts to retract slowly. Wipe the insides of the loops with a clean cloth dampened in mild soap and warm water.

iv. Windows

Clean the windows inside and outside with soap and water or a commercially available glass cleaner. This will remove the haze that builds up on the inside of the windows. Use a soft cloth or paper towels to clean all glass and clear plastic surfaces.

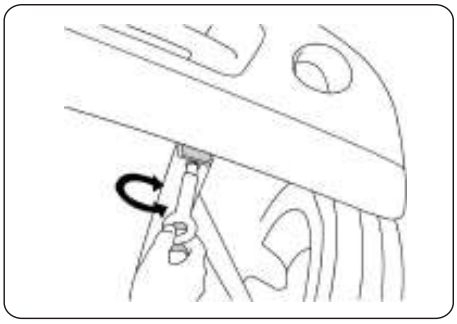
⚠ CAUTION

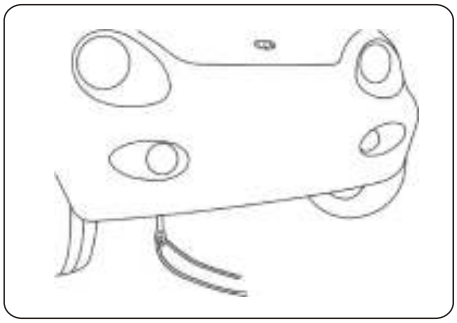
Do not use / spray water in the interior of your car. Doing so car can result in damage(s) to the various electronics components. It is advisable to vacuum clean the inside of your car whenever required.

8.9 Towing your G-Wiz

TOWING YOUR G-WIZ

In case of a breakdown, push the car towards one side of the road. Take the tow hook available in the tool kit
Tow hook mounting threaded holes are provided at both front ends (LH / RH) of the chassis frame, immediately behind the front bumper for fixing the tow hook. Fix the hook by turning it in either of the holes as per your convenience. Tie one end of the towing rope to the tow hook eye and the other to the vehicle towing it. While towing, key should be in off position and hand brake in released condition.





9
Maintenance Schedule

Service at the interval listed x 1,000 miles or number of months, whichever comes first	x 1000 miles	0.6	3.75	7.5	*	15	*	22.5	*	30	*	37.5	*	45
	x months	1	6	12		24		36		48		60		72
9.1 FRONT & REAR SUSPENSION SUB-ASSEMBLY														
Front & Rear Suspension Strut Bushes		I	I	I		I		I & R		I		I		I & R
Stabilizer bar bushes			I	I & R				I & R				I & R		
A-arm Bushes			I	I		I		I & R		I		I		I & R
A-arm Ball Joint (play, loose)		I	I	I		I		I & R		I		I		I & R
Trailing Arm Bushes		I	I	I		I & R		I		I & R		I		I & R
Panhard Rod Bushes		I	I	I		I		I & R		I		I		I & R
All Bolts and Nuts			I	I		I		I		I		I		I
9.2 STEERING SUB-ASSEMBLY														
Steering Wheel (play, loose)		I	I	I		I		I		I		I		I
Steering Rack & Pinion		I	I	I		I		I		I		I		I
Tie Rod End Ball Joint		I	I	I		I & R		I		I & R		I		I & R
All rods, arms & mountings + linkages		I & L	I	I		I & L		I		I & L		I		I & L
9.3 BRAKE SUB-ASSEMBLY														
Brake Fluid (level, leakage)		I	I	I		R		I		R		I		I
Brake Pedal (play)		I	I	I		I		I		I		I		I
Brake shoes		I	I	I		I		I		I		I		I
Brake Master cylinder		I	I	I		I		I		I		I		
Wheel Cylinder Brake Pipes * Hoses (leakage, damage)			I			I & R				I & R				I & R I & L
Brake Pedal Bush Parking Brake Lever & Cable (play, damage)		I & L	I	I & L		I & L		I & L		I & L		I & L		
Regen Braking		Check & Adjust every 7500 miles												

A = Adjust, C = Clean, L = Lubricate, R = Replace, I = Inspect & Correct, T = Tighten to Specified Torque

NOTE: INSPECT can lead to REPLACE, based on condition of part.

9.0 Maintenance Schedule

Service at the interval listed x 1,000 miles or number of months, whichever comes first	x 1000 miles	0.6	3.75	7.5	*	15	*	22.5	*	30	*	37.5	*	46
	x months	1	6	12		24		36		48		60		72
9.4 TRANSMISSION SUB-ASSEMBLY														
Transmission Check		I	I	I		I		I		I		I		I
Transmission Oil Leakage		I	I	I		I		I		I		I		I
Transmission Oil Level		I	I	I		I		I		I		I		I
Oil Replacement		R	I			R				R				R
Rear Axle Bearings		I	I	I		I		I		I		I		I & R
9.5 WHEEL & TYRES														
Tyre Rotation			I	Every 3000 miles										
Tread Wear		I	I	I		I		I		I		I		I
Clean - Wheel Rim & Tyres		I	I	I		I		I		I		I		I
Front & Rear Wheel Bearings (loose, damage)		I	I	I		I		I & R		I		I		I & R
Wheel Alignment			I	Every 7500 miles										
9.6 BODY														
All Chassis Bolts & Nuts		I	I	I & T		I & T		I & T		I & T		I & T		I & T
All Latches, Hinges & Locks		I	I	I & L		I & L		I & L		I & L		I & L		I & L
All Body Panels, Beading (vibration, rattling, looseness)		T	I	T		T		T		T		T		T

A = Adjust, C = Clean, L = Lubricate, R = Replace, I = Inspect & Correct, T = Tighten to Specified Torque

NOTE: INSPECT can lead to REPLACE, based on condition of part.

NOTE

Compulsorily carry out the services - one at 600 miles (or before 30 days) & the other at 7500 miles (or after 360 days).
Failure to do so will result in the Warranty getting void.

Service at the interval listed x 1,000 miles or number of months, whichever comes first	x 1000 miles	0.6	3.75	7.5	*	15	*	22.5	*	30	*	37.5	*	46
	x months	1	6	12		24		36		48		60		72
9.7 ELECTRICAL / ELECTRONICS SUB-ASSEMBLY														
Specific Gravity		Inspect at every Service / 7500 miles.												
Refill of Battery Water		Top up every 500 miles or when LOW BATTERY LIGHT comes ON												
Accelerator Pot Adjustment		I & A	I	I & A		I & A		I & A		I & A		I & A		I & A
Water Leak at the Top		I	I	I		I		I		I		I		I
Electrical Switch Functioning		I	I	I		I		I		I		I		I
Lighting System		I	I	I		I		I		I		I		I
Check Motor Power Cable		I	I	I		I		I		I		I		I
Wiring Harness connection		I	I	I		I		I		I		I		I
Check for Busbar connections		I	I	I		I		I		I		I		I
Motor (brushes)		I	I	I		I		I		I		I		I
EMS - download the data & analyse		I	I	I		I		I		I		I		I
Rear Tub Electronics		C	I	C		C		C		C		C		C
Power Pack		C & L	I	C & L		C & L		C & L		C & L		C & L		C & L
Charger / Controller Heat Sink		C	I	C		C		C		C		C		C
Battery Ventilation Fan		I	I	I		I		I		I		I		I
Charge Port Flap - Micro switch		I	I	I		I		I		I		I		I
Charge Cable		I	I	I		I		I		I		I		I
SOC Gauge		I	I	I		I		I		I		I		I

A = Adjust, C = Clean, L = Lubricate, R = Replace, I = Inspect & Correct, T = Tighten to Specified Torque

NOTE: INSPECT can lead to REPLACE, based on condition of part.

10
Your G-Wiz Safety Features

10.0 Your G-Wiz's Safety Features

Your car has many features that are unique, which makes it very safe and reliable.

Low Center of Gravity:
The heaviest part of the car is its Power Pack, which is housed below the front seats. This lowers the car's center of gravity, providing high stability and improved manoeuverability.

Steel Space Frame Chassis and Side Impact Beams:
A specially developed steel frame chassis and side impact beams cocoons passengers in an inadvertent accident.

Dent Proof Body Panels:
Most accidents in cities involve low speed skirmishes with other vehicles often leaving owners with expensive tinkering jobs. The car's body panels are made of ABS.

Energy Absorbing Bumpers:
The car has energy absorbing bumpers, which can withstand low magnitude impact and reduce external damage to it.

Special Crush Zone:
The frontal crush zone housing the utility box, reduces the effect of impact in a head-on collision.

Additional Safety Features:

i. The car will not move unless the charge cable is unplugged from the charge port.
ii. In case you have forgotten to engage the parking brake or you leave the keys in the car, warning chimes are activated.
iii. Depending on the level of charge, your car is designed to automatically switch to "Economy mode" or the "Limp Home mode" to get you safely to your destination or home.
iv. The Tyres used in the car are tubeless tyres designed for all weather conditions. They enhance driving range and provide an improved road grip.

Reliability Tested:
The car has cleared all the mandatory tests for roadworthiness. It has completed 1Million kms of rigorous testing, which is equivalent to going around the earth 25 times.

11
Key Technologies

A unique feature of G-Wiz Reva is absorption of the best technology from USA while productionising the car in India, thus enabling the car to be a truly global product. G-Wiz Reva deploys three key patent protected technologies.

STEEL SPACE FRAME CHASSIS

The chassis is constructed on a space frame pattern. It consists of a very strong, self supporting, light weight space frame and includes the motor, drive-train, steering suspension, brakes, wheels, tyres and high voltage systems. It has the following benefits:

Safety: It cocoons the passengers in the event of a skirmish with another vehicle.

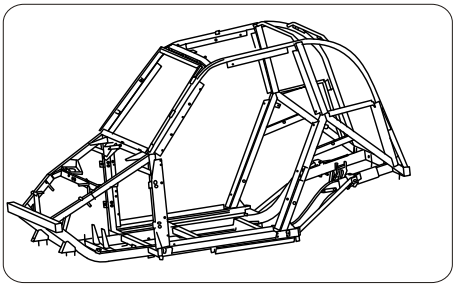
Lightweight: It is ideal for Electric Vehicle applications, since it offers manoeuverability and better range.

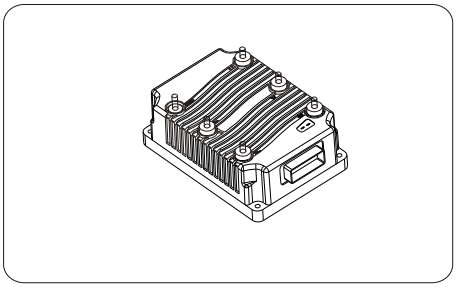
Repairs: Quick and economical.

MOTOR CONTROLLER

Salient Features:

- It converts power pack voltage to required AC voltage and current to the motor.
- It performs regenerative braking to extend the driving range of your car.
- The controller ensures built-in protection for itself and for the motor through microprocessor controlled logic.
- It communicates with the Energy Management System (EMS) and other key electronics of the car.
- It automatically reduces output when the energy level in the Power Pack goes down.
- It is programmed for hill restraint operation that enables the driver to hold the car in rolling area and traffic signals without applying brake for a small period of time
- It enhances safety. For example, in case you press the accelerator before turning the start-up key ON, your car will not move. This feature reduces the possibility of accidental movement.

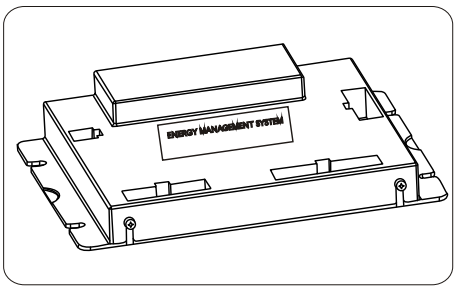




11.3 EMS

ENERGY MANAGEMENT SYSTEM (EMS)

The EMS is a on-board computer system that optimises the flow of energy, by monitoring the energy output of the Power Pack. It maximises the operating range and improves the performance of your car.



Functions:

- It interfaces with other on-board electronics for system diagnostics. (e.g. Brake fluid, sensor, door switch sensor, etc.)

- It provides State-Of-Charge (SOC) or energy level in the Power Pack.

- It interfaces with the IP cluster to enable various lamps to function. These include:
  1. Charge Light
  2. Power Pack Low Battery Water Light.
  3. Low battery light.
  4. Parking Brake ON in drive mode.
  5. Low Brake Fluid level.
  6. Neutral light.
  7. Temperature light.
  8. Hi power and Regen light.
  9. Encoder fault light.
- It interfaces with the Charger and the Motor Controller.

- It records:
  1. Vehicle Identification data
  2. Power Pack Warranty Management data
  3. Power Pack error and repair data
  4. Detects failures in the vehicle electronics and turns ON the Service Light.
  5. Gives equalisation command when key switch is turned on and off for three times

12
Power Pack

12.1 LOCATION

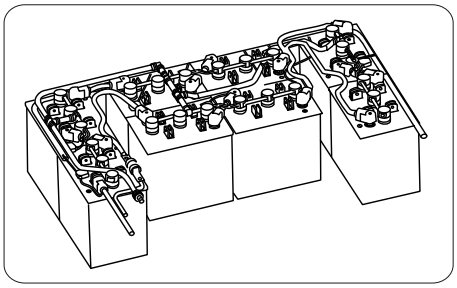
The heart of your car is its Power Pack, which consists of eight 6-Volt lead acid batteries specially made for Electric Vehicles.
The Power Pack is housed beneath the front seats. This lowers the Center of Gravity (CG) of the car thereby ensuring high stability for G-Wiz on the road. This is a unique safety feature.

12.2 LIFE SPAN

This is largely dependent on maintenance and your driving pattern. Under normal conditions, with proper maintenance and driving range, the Power Pack should last approximately 3 years.

12.3 INTEGRATED SYSTEMS IN THE POWER PACK

- Centralised Water Top-up System
- Water Level Sensor
- Battery Temperature Sensor
- Individual Block Voltage Sensors



12.4 SERVICING

The Power Pack in your car needs very little maintenance. There is no need to check battery water level, or clean battery terminals and cables frequently. The car has a single point watering system. All you have to do is top up battery water after full charge whenever the power pack water level light on the instrument cluster turns on or every 500 miles, whichever is earlier.

12.5 EXTENDING THE LIFE OF THE POWER PACK

- Never discharge the power pack completely.
- Keep your car on charge whenever possible.
- Allow the power pack to charge completely whenever possible.
- Do not charge when the ambient temperature is high or when your car is parked under the sun. It is advisable to charge in cooler temperature to extend the life of the power pack.
- Do not drive when the needle indicator in the power gauge is on the red band.
- In the event you are not using your car for more than one week, it needs proper storing and plugged in for charging so trickle charge can take place.
  (*See this item in the section on "Maintenance"*).
- While driving, avoid repeated hard / sudden acceleration.
- Water the batteries in the power pack as soon as possible after the "Battery water level lamp" lights up and stays on.

Regenerative braking through the motor controller can increase driving range by 10 to 20%. It also increases the life of the power pack.

COLD CLIMATE OPERATION

The G-Wiz has an estimated range of 48 miles. The range is dependent on a number of factors including ambient temperature.

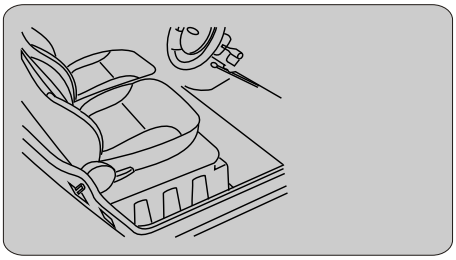
The capacity of the batteries is defined at an ambient temperature of 25°C (77°F). The battery capacity reduces at lower temperatures and hence affects the range. Typically the range could drop by 25% at 0°C (32°F).

NOTE

Do not store or leave the car in cold conditions when the power pack is at 25% SOC or less.

POWER PACK HEATER PAD

The G-Wiz batteries have been provided with a 'battery heating system' for improving battery performance in cold climates. It 'preheats' the batteries before a drive so that the range is preserved. This battery heating system is automatically activated if battery temperature falls below 20°C.



NOTE

1. Do not leave the car in the 'open' when it is very cold/snowy.
2. Keep the car continuously plugged into the mains power even after full charging - so as to keep the battery heating system active. (as the battery heating system is powered by the mains voltage and operates through the charge port.)
3. In case you see the 'temperature light' flashing in cold climate conditions, it indicates that the battery temperature is below 10ºC. Make sure that you put the car on charge immediately.

13
Specifications

13.1 GENERAL	
Type	2 Door hatch-back Right Hand Drive
Seating Capacity	2 Adults + 2 Children
Overall Length	2638 mm
Overall Width	1324 mm
Overall Height	1510 mm
Wheelbase	1710 mm
Ground Clearance	118 mm
Curb Weight	665 Kgs.
Gross Vehicle Weight Rating	817 Kgs.
Turning Radius	3800 mm
Steering Gear Box	Rack & Pinion
Frame Type	Welded Tubular Steel Space Frame

NOTE

A 20% drop will be noticed in the driving range if A/C or Heater or Wiper is in use during drive.

13.2 PERFORMANCE	
Estimated range	48 miles* in F mode under
	normal driving conditions
Estimated top speed	50 mph [Electronically Limited]
Maximum gradeability	18%
Estimated charge time	80% SOC in 2.5 hours 100% SOC in 8 hours

*** In F mode without accessories**

13.3 MOTOR	
Three phase squirrel cage induction motor.	
Nominal Power	6 kW
Max. Power	12 kW @ 2400 rpm
Max. Speed	8000 rpm

13.0 Technical Specifications

13.4 POWER PACK	
Battery type/ location	Lead acid EV type with single point watering system packaged under the front seats.
Pack voltage	Uses eight 6-Volt batteries connected in series to build up the 48V DC system
Capacity	200 AH [C5 Rating]

13.5 MOTOR CONTROLLER	
Type	3 phase AC Motor Controller with hill restraint

13.6 SUSPENSION TYPE	
Front	MacPherson strut
Rear	Trailing arm with pan-hard rod. Solid axle with coils over springs and hydraulic shock absorbers.

13.7 TYRES	
Tyre size (Front & Rear)	145 / 70 R 13, Tubeless Hankook (Silica low rolling resistance)
Tyre pressure	Front - 35 psi, Rear - 40 psi

13.8 CONTROLS
2 pedal operation (Brake and Accelerator) 4 operating modes (B, F, N, R)
The RNFB switch provides Reverse / Neutral / Foward / Boost power modes of operation.

13.9 ELECTRICALS	
G-Wiz uses 12V D.C. for its lighting system.	
Headlights/Park (front)	55/60w-Halogen bulbs/4w
Front / Rear Indicators	21/5w
Side Indicators	4w
Brake/Park (rear)	21/5w
Roof light	5w
Reverse Light	10w
Number Plate Light	5w
Fog Lamp* (optional)	21w

13.10 BRAKING SYSTEM	
Type	Internal expanding drum brake
Wheel brake cylinder	Front - 19.05 mm Rear - 15.87 mm
Parking brake mechanically actuated on the rear wheels.	
Regenerative Braking to enhance the driving range.	
Low Brake Fluid Warning provided on the Instrument Cluster.	
Asbestos free brake liners.	

13.11 BODY PANELS & BUMPERS	
Body Panels	Dent resistant high Impact ABS.
Bumpers	Dent resistant high Impact ABS. (Energy absorbing plastic bumpers)

NOTE

In favour of product development, specifications are subject to change at any time without notice.

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Vehicle identification numbers

LOCATION OF VEHICLE IDENTIFICATION NUMBER PLATE

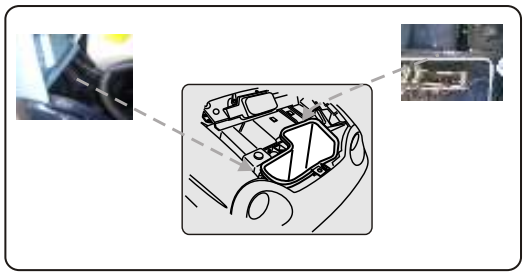
The vehicle identification is riveted on the chassis strut cross member near windshield wiper washer unit under the hood.

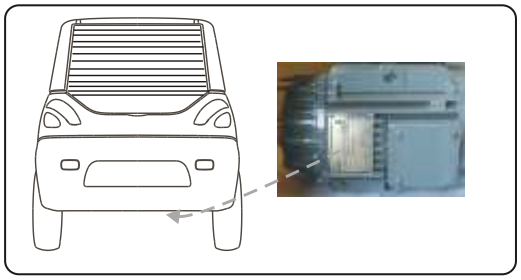
LOCATION OF CHASSIS NUMBER

Chassis number is punched on the chassis strut cross member, near the front basket mounting.

LOCATION OF MOTOR NUMBER

Motor number is punched on the body of the motor.





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