F060100AHM



Low tire pressure telltale

When the tire pressure monitoring system warning telltale is illuminated, one or more of your tires is significantly under-inflated.

Immediately reduce your speed, avoid hard cornering and anticipate increased stopping distances. You should stop and check your tires as soon as possible. Inflate the tires to the proper pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel. If you cannot reach a service station or if the tire cannot hold the newly added air, replace the low pressure tire with the spare tire. Then the TPMS malfunction indicator or the Low Tire Pressure telltale may turn on after restarting and about 20 minutes of continuous driving before you have the low-pressure tire repaired and replaced on the vehicle.

A CAUTION

in winter or cold weather, the low tire pressure telltale may be illuminated if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean your TPMS is maif nctioning because the decreased temperature leads to a proportional lowering of tire pressure.

When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is greatly higher or lower, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.

A WARNING - Low pressure damage

Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.

Continued driving on low pressure tires can cause the tires to overheat and fail. F060200AHM

TPMS

TPMS (Tire Pressure Monitoring System) malfunction indicator

The TPMS malfunction indicator comes on and stays on when there is a problem with the Tire Pressure Monitoring System. If the system is able to correctly detect an underinflation warning at the same time as system failure then it will illuminate both the TPMS malfunction and the low tire pressure telltale e.g. if Front Left sensor fails, the TPMS malfunction indicator turns on, but if Front Right, Rear Left, or Rear Right tire is under-inflated, the low tire pressure telltale may turn on at the same time as the TPMS malfunction indicator. Have the system checked by an authorized KIA dealer as soon as possible to determine the cause of the problem.

⚠ CAUTION

The TPMS malfunction indicator may be illuminated if the vehicle is moving around electric power supply cables or radios transmitter such as at police stations, government and public offices, broadcasting stations, military installations, airports, or transmitting towers, etc. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).

(Continued)

(Continued)

- If there is a failed tire sensor, it is possible for the TPMS to temporarily learn a replacement sensor if closely driven to another vehicle that is also equipped with TPMS. In rare cases, this may temporarily delay the TPMS malfunction indicator from turning on.
- The TPMS maifunction indicator may be illuminated if Snow chains or some electronic devices, such as notebook computers, are used in the vehicle. This can interfere with normal operation of the Tire Pressure Monitoring System (TPMS).

F060300AHM

Changing a tire with TPMS

If you have a flat tire, the Low Tire Pressure telltale will turn on. Have the flat tire repaired by an authorized KIA dealer as soon as possible or replace the flat tire with the temporary spare tire.

* NOTICE

NEVER use a puncture-repairing agent to repair and/or inflate a low pressure tire. If used, you will have to replace the tire pressure sensor.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. You must use TPMS specific wheels. It is recommended that you always have your tires serviced by an authorized KIA dealer as soon as possible.

After you replace the low pressure tire with the spare tire, the TPMS malfunction indicator or the Low Tire Pressure telltale may illuminate after restarting and about 20 minutes of continuous driving.

Once the low pressure tire is reinflated to the recommended pressure and installed on the vehicle, the TPMS malfunction indicator and the low tire pressure telltale will turn off. If the low pressure and TPMS malfunction indicators do not turn off after about 20 minutes of continuous driving, please visit an authorized KIA dealer.

You may not be able to identify a low tire by simply looking at it. Always use a good quality tire pressure gauge to measure the tire's inflation pressure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold (from sitting stationary for at least 3 hours and driven less than 1 mile during that 3 hour period). Allow the tire to cool before measuring the inflation pressure.

Always be sure the tire is cold before inflating to the recommended pressure.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile in that 3 hour period.

A CAUTION

- Do not use any tire sealant if your vehicle is equipped with a Tire Pressure Monitoring System. The liquid sealant can damage the tire pressure sensors.
- In order for the system to correctly monitor tires for underinflation, there should be a
 total of exactly 4 sensors fitted to each of the four wheels.
 There should be no other sensors in the vehicle including
 the spare tire since this could
 cause the system to monitor
 the wrong sensors.

A WARNING - TPMS

- The TPMS cannot alert you to severe and sudden tire damage caused by external factors such as nails or road debris.
- If you feel any vehicle instability, immediately take your foot off the accelerator, apply the brakes gradually and with light force, and slowly move to a safe position off the road.

A WARNING -

Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

A WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IF YOU HAVE A FLATTIRE



FO70100AEN

Jack and tools

The jack, jack handle, wheel lug nut wrench are stored in the luggage compartment. Pull up the luggage box cover to reach this equipment.

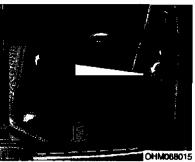
- (1) Jack handle
- (2) Jack
- (3) Wheel lug nut wrench

F070101AHM Jacking Instructions

The jack is provided for emergency tire changing only.

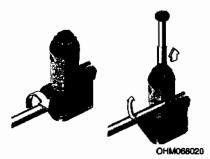
To prevent the jack from "rattling" while the vehicle is in motion, store it properly.

Follow jacking instructions to reduce the possibility of personal injury.



Removing and storing the jack

- 1. Open the cover.
- 2. Remove the tie-down band and then pull up the clip.
- 3. Take out the jack.
- 4. After finishing using the jack, put it back in the reverse order.



Operating the jack To raise the jack:

- Check whether the jack valve is closed. If not, insert the jack handle into the valve and turn it clockwise until it is closed.
- Insert the jack handle into the pump bracket.
- Pump the jack handle up and down until the ram is raised to the desired level.

A CAUTION

This jack is hydraulic, and the ram is a two stage type. When both rams are raised and the stop mark of the upper ram becomes visible, stop jacking immediately.



OHM068021

To lower the jack:

- Insert the jack handle into the valve and turn it counterclockwise until it is opened. Do not turn it more than twice.
- Push the ram in by pushing the top of the ram.
- When the ram is completely lowered, insert the jack handle into the valve and turn it clockwise and close it.

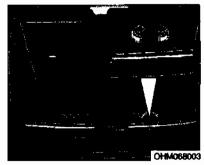
A WARNING - Changing tires

- Never attempt vehicle repairs in the traffic lanes of a public road or highway.
- Always move the vehicle completely off the road and onto the shoulder before trying to change a tire. The jack should be used on a firm level ground. If you cannot find a firm, level place off the road, call a towing service company for assistance.

(Continued)

(Continued)

- Be sure to use the correct front and rear jacking positions on the vehicle; never use the bumpers or any other part of the vehicle for jack support.
- The vehicle can easily roll off the jack causing serious injury or death. No person should place any portion of their body under a vehicle that is supported only by a jack; use vehicle support stands.
- Do not start or run the engine while the vehicle is on the jack.
- Do not allow anyone to remain in the vehicle while it is on the jack.
- Make sure any children present are in a secure place away from the road and from the vehicle to be raised with the jack.



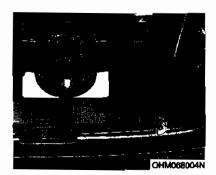
F070200AHM

Removing and storing the spare tire

Your spare tire is stored underneath your vehicle, directly below the cargo area.

To remove the spare tire:

- Open the tailgate.
- Find the plastic hex bolt cover and remove the cover.



Use the wheel lug nut wrench to loosen the bolt enough to lower the spare tire.

Turn the wrench counterclockwise until the spare tire reaches the ground.



- 4. After the spare tire reaches the ground, continue to turn the wrench counterclockwise, and draw the spare tire outside. Never rotate the wrench excessively, otherwise the spare tire carrier may be damaged.
- 5. Remove the retainer (1) from the center of the spare tire.



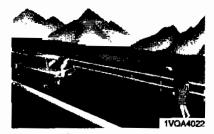
To store the spare tire:

- Lay the tire on the ground with the valve stem facing up.
- Place the wheel under the vehicle and install the retainer (1) through the wheel center.
- Turn the wrench clockwise until it clicks.

A WARNING

Ensure the spare tire retainer is properly aligned with the center of the spare tire to prevent the spare tire from "rattling".

Otherwise, it may cause the spare tire to fall off the carrier and lead to an accident.



F070300AHM-EU
Changing tires

- Park on a level surface and apply the parking brake firmly.
- Place the transmission shift lever in P (Park).
- Activate the hazard warning flasher.



- Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.
- Block both the front and rear of the wheel that is diagonally opposite from the jack position.

A WARNING - Changing a tire

- To prevent vehicle movement while changing a tire, always set the parking brake fully, and always block the wheel diagonally opposite the wheel being changed.
- We recommend that the wheels of the vehicle be blocked, and that no person remain in a vehicle that is being jacked.

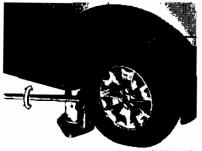


Loosen the wheel lug nuts counterclockwise one turn each, but do not remove any nut until the tire has been raised off the ground.



 Place the jack at the front or rear jacking position closest to the tire you are changing. Place the jack at the designated locations under the frame.

A WARNING - Jack location To reduce the possibility of injury, be sure to use only the jack provided with the vehicle and in the correct jack position; never use any other part of the vehicle for jack support.



OHM068011

8. Insert the jack handle into the jack valve and turn it clockwise. Then insert the jack handle into the pump bracket and raise the vehicle until the tire just clears the ground. This measurement is approximately 1 in. (30 mm).

Before removing the wheel lug nuts, make sure the vehicle is stable and that there is no chance for movement or slippage. 9. Loosen the wheel nuts and remove them with your fingers. Slide the wheel off the studs and lay it flat so it cannot roll away. To put the wheel on the hub, pick up the spare tire, line up the holes with the studs and slide the wheel onto them. If this is difficult, tip the wheel slightly and get the top hole in the wheel lined up with the top stud. Then jiggle the wheel back and forth until the wheel can slide over the other studs.

WARNING

Wheels may have sharp edges. Handle them carefully to avoid possible severe injury. Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that interferes with the wheel from fitting solidly against the hub.

If there is, remove it. If the contact of the mounting surface between the wheel and hub is not good, the wheel nuts could come loose and cause the loss of a wheel. Loss of a wheel may result in loss of control of the vehicle. This may cause serious injury or death.

- 10. To install the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. Jiggle the tire to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.
- Lower the vehicle to the ground by turning the jack valve counterclockwise.



Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every nut following the numerical sequence shown in the image until they are all tight. Then double-check each nut for tightness. After changing wheels, have an authorized KIA dealer tighten the wheel nuts to their proper torque as soon as possible.

Wheel nut tightening torque:

65~79 lb-ft (9~11 kg·m)

If you have a tire gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting the tire pressure. If the cap is not replaced, dust and dirt may get into the tire valve and air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed the wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.

A CAUTION

Your vehicle has metric threads on the wheel studs and nuts. Make certain during wheel removal that the same nuts that were removed are reinstalled or, if replaced, that nuts with metric threads and the same chamfer configuration are used. Installation of a non-metric thread nut on a metric stud or vice-versa will not secure the wheel to the hub properly and will damage the stud so that it must be replaced.

Note that most lug nuts do not have metric threads. Be sure to use extreme care in checking for thread style before installing aftermarket lug nuts or wheels. If in doubt, consult an authorized KIA dealer. A WARNING - Wheel studs if the studs are damaged, they may lose their ability to retain the wheel. This could lead to the loss of the wheel and a collision resulting in serious injuries.

To prevent the jack, jack handle, wheel lug nut wrench and spare tire from rattling while the vehicle is in motion, store them properly.

A WARNING - Inadequate spare tire pressure

Check the inflation pressures as soon as possible after installing the spare tire. Adjust it to the specified pressure, if necessary. Refer to "Tires and wheels" section 8.

F070301AUN-EU

Important - use of compact spare tire (If equipped)

Your vehicle is equipped with a compact spare tire. This compact spare tire takes up less space than a regular-size tire. This tire is smaller than a conventional tire and is designed for temporary use only.

⚠ CAUTION

- You should drive carefully when the compact spare is in use. The compact spare should be replaced by the proper conventional tire and rim at the first opportunity.
- The operation of this vehicle is not recommended with more than one compact spare tire in use at the same time.

A WARNING

The compact spare tire is for emergency use only. Do not operate your vehicle on this compact spare at speeds over 80 km/h (50 mph). The original tire should be repaired or replaced as soon as is possible to avoid failure of the spare possibly leading to personal injury or death.

The compact spare should be inflated to 60 psi (420 kPa).

* NOTICE

Check the inflation pressure after installing the spare tire. Adjust it to the specified pressure, as necessary.

When using a compact spare tire, observe the following precautions:

- Under no circumstances should you exceed 50 mph (80 km/h); a higher speed could damage the tire.
- Ensure that you drive slowly enough for the road conditions to avoid all hazards. Any road hazard, such as a pothole or debris, could seriously damage the compact spare.
- Any continuous road use of this tire could result in tire failure, loss of vehicle control, and possible personal injury.
- Do not exceed the vehicle's maximum load rating or the load-carrying capacity shown on the sidewall of the compact spare tire.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 1 inch (25 mm), which could result in damage to the vehicle.

- Do not take this vehicle through an automatic car wash while the compact spare tire is installed.
- Do not use tire chains on the compact spare tire. Because of the smaller size, a tire chain will not fit properly. This could damage the vehicle and result in loss of the chain.
- Do not use the compact spare tire on any other vehicle because this tire has been designed especially for your vehicle.
- The compact spare tire's tread life is shorter than a regular tire. Inspect your compact spare tire regularly and replace worn compact spare tires with the same size and design, mounted on the same wheel.

- The compact spare tire should not be used on any other wheels, nor should standard tires, snow tires, wheel covers or trim rings be used with the compact spare wheel. If such use is attempted, damage to these items or other car components may occur.
- Do not use more than one compact spare tire at a time.
- Do not tow a trailer while the compact spare tire is installed.

TOWING





2WD or part-time 4WD (2H position) vehicles only



OHM068016

F080100AHM-EU

Towing service

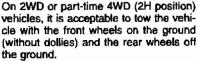
If emergency towing is necessary, we recommend having it done by an authorized KIA dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies or flatbed is recommended.

For trailer towing guidelines information, refer to "Trailer towing" in section 5.

On full-time 4WD vehicles, your vehicle must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground.

⚠ CAUTION

The full-time 4WD vehicle should never be towed with the wheels on the ground. This can cause serious damage to the transmission or the 4WD system.



If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the rear wheels on the ground, use a towing dolly under the rear wheels.

When being towed by a commercial tow truck and wheel dollies are not used, the rear of the vehicle should always be lifted, not the front.



OHM068017



OHM068018

⚠ CAUTION

- Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.
- Do not tow the vehicle forward with the rear wheels on the ground as this may cause damage to the vehicle.

When towing your vehicle in an emergency without wheel dollies:

- Set the ignition switch in the ACC position.
- Place the transmission shift lever in N (Neutral).
- For part-time 4WD vehicle, set the transfer shift knob to 2H.
- 4. Release the parking brake.

/\ CAUTION

Failure to place the transmission shift lever in N (Neutral) and the transfer shift knob for part-time 4WD operation to 2H may cause internal damage to the transmission.



F080300AHM-EU

Emergency towing

If towing is necessary, we recommend you to have it done by an authorized KIA dealer or a commercial tow truck service.

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook under the front of the vehicle. Use extreme caution when towing the vehicle. A driver must be in the vehicle to steer it and operate the brakes.

Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speeds. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

- Do not use the tow hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.
- Avoid towing a vehicle heavier than the vehicle doing the towing.
- The drivers of both vehicles should communicate with each other frequentty.

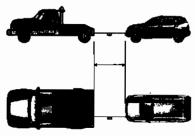
A CAUTION

- Attach a towing strap to the tow hook.
- Using a portion of the vehicle other than the tow hooks for towing may damage the body of your vehicle.
- Only use a cable or chain specifically intended for use in towing vehicles. Securely fasten the cable or chain to the towing hook provided.
- Before emergency towing, check that the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply it steadily and with even force.
- To avoid damaging the hook, do not pull from the side or at a vertical angle. Always pull straight ahead.

A WARNING

Use extreme caution when towing the vehicle.

- Avoid sudden starts or erratic driving maneuvers which would place excessive atress on the emergency towing hook and towing cable or chain. The hook and towing cable or chain may break and cause serious injury or damage.
- If the disabled vehicle is unable to move, do not forcibly continue the towing. Contact an authorized KIA dealer or a commercial tow truck service for assistance.
- Tow the vehicle as straight ahead as possible.
- Keep away from the vehicle during towing.



OHM068019

- Use a towing strap less than 16 feet (5 m) long. Attach a white or red cloth (about 12 inches (30 cm) wide) in the middle of the strap for easy visibility.
- Drive carefully so that the towing strap is not loose during towing.

F080301AHM-EU

Emergency towing precautions

- Turn the ignition switch to ACC so the steering wheel isn't locked.
- Place the transmission shift lever in N (Neutral).
- · Release the parking bake.
- Press the brake pedal with more force than usual since you will have reduced brake performance.
- More steering effort will be required because the power steering system will be disabled.
- If you are driving down a long hill, the brakes may overheat and brake performance will be reduced. Stop often and let the brakes cool off.

⚠ CAUTION - Automatic transmission

- If the vehicle is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transmission is in neutral. Do not tow at speeds greater than 25 mph (40 km/h) and for more than 15 mile (25 km). Be sure the steering is unlocked by placing the ignition switch in the ACC position. A driver must be in the towed vehicle to operate the steering and brakes.
- Before towing, check the automatic transmission fluid leak under your vehicle. If the automatic transmission fluid is leaking, a flatbed equipment or towing dolly must be used.



F080400AHM

Tie-down hook
(for flatbed towing)

A WARNING

Do not use the hooks under the rear of the vehicle for towing purposes. These hooks are designed ONLY for transport tie-down. If the tle-down hooks are used for towing, the tle-down hooks or rearbumper will be damaged and this could lead to serious injury.

Engine compartment / 7-2
Maintenance services / 7-4
Owner maintenance / 7-5
Scheduled maintenance service / 7-7
Explanation of scheduled maintenance items / 7-12
Engine oil / 7-15
Engine coolant / 7-16
Brake fluid / 7-19
Power steering fluid / 7-20
Washer fluid / 7-21
Parking brake / 7-21
Air cleaner / 7-22
Climate control air filter / 7-23
Wiper blades / 7-25
Battery / 7-28

Tires and wheels / 7-31

California perchlorate notice / 7-72

Fuses / 7-45

Maintenance

Light bulbs / 7-56
Appearance care / 7-63
Emission control system / 7-69