TIRE AND WHEEL

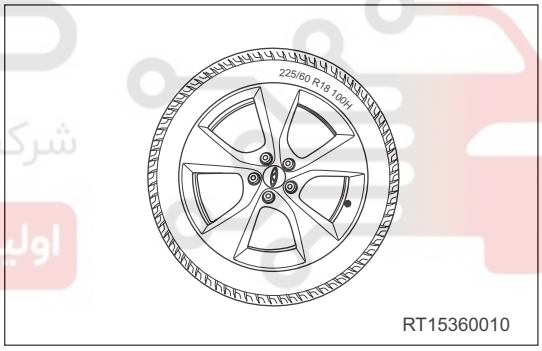
GENERAL INFORMATION

Precautions

- Use tires only with the standard specification and type, because they have excellent reliability and skid resistance. Using a non-standard tire may lead to vehicle malfunction, which may cause an accident, resulting in serious injury or even death.
- Contact surface between rim and tire should be cleaned before installing a new tire.
- When installing wheel bolts, first pre-tighten the bolts by hand, and then tighten them to the specified torque with a torque wrench.
- Do not apply grease to the wheel bolts.
- Some bad driving habits may shorten the tire life:
  - Rapid acceleration
  - Depressing brake pedal suddenly and firmly
  - High-speed driving
  - Turning at excessive speed
  - Striking curbs or other obstacles
  - Tire pressure is too high or too low when driving vehicle

Tire Identification

- Letter and number code of tire type, size, load index and speed level are stamped on the side wall of tire as shown in illustration.



Specifications

Torque Specification

Description	Torque (N·m)
Wheel Mounting Bolt	130 ± 10

Tire Type

Description	Parameter
Tire Type	225/55 R19 225/60 R18

Rim Type

Description	Parameter
Rim Size	18 × 6½J 19 × 7J

Cold Tire Pressure Specifications

Description	Pressure (kPa)
Front Tire (Unloaded)	220 ± 10
Rear Tire (Unloaded)	220 ± 10
Spare Tire	420 ± 30

DIAGNOSIS & TESTING

Problem Symptoms Table

HINT:
Use symptoms table below to help determine cause of problem. Check each suspected area in sequence. Repair or adjust faulty components, or replace as necessary.

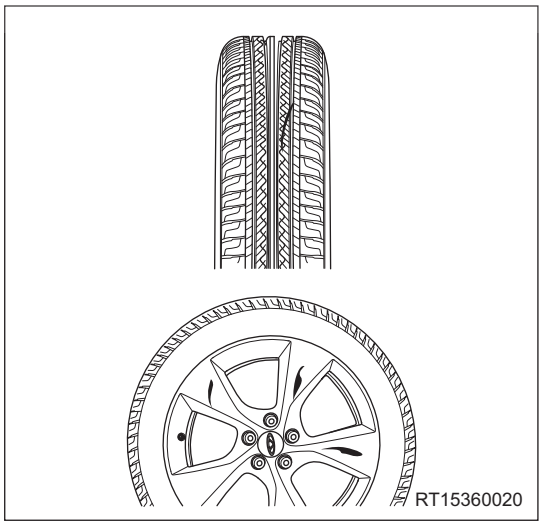
Symptom	Suspected Area	See page
Wear on one side of tire	Wheel alignment (wrong)	36-47
Wear on both sides of tire	Tire pressure (insufficient)	37-3
Tire center wear	Tire pressure (excessive)	37-3
Serrated wear	Wheel alignment (wrong)	36-47
Severe wear on some area of tire	Braking (too hard)	-
Scratches on side wall of tire	Sharp objects on road (scratched)	37-5
Excessive tire noise	Tire pressure (incorrect)	37-3
	Tire (worn)	37-5

Inspection

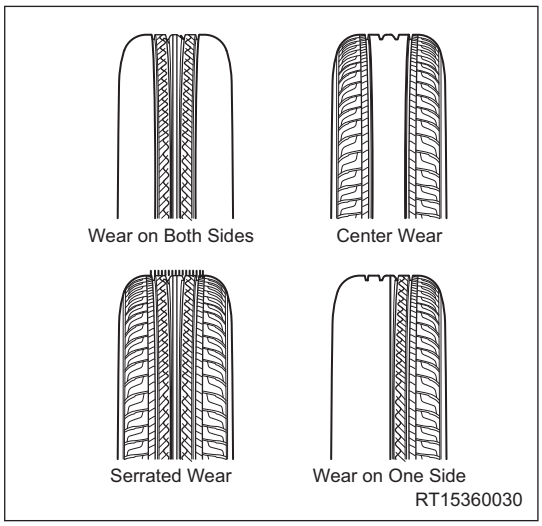
CAUTION

- When installing non-standard tire and rim, always refer to instructions.
- Use tires with standard specification and type.

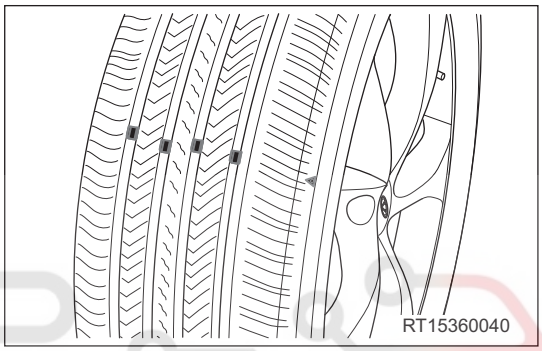
1. Check if tires are scratched or damaged as shown in illustration.
2. Check if rims are scratched or damaged as shown in illustration.



3. Check if tires are worn abnormally as shown in illustration.



4. Check the tread wear indicators (arrow). When tires are worn to the indicating mark, replace them.



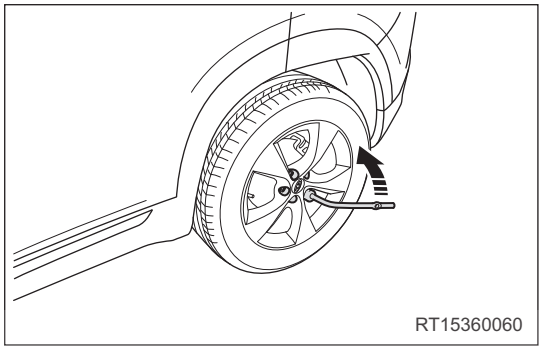
5. Use tire pressure gauge to check if pressures of all tires (including spare tire) are normal. Inflate tires to specified tire pressure as necessary.
6. Check air valve for leakage.

ON-VEHICLE SERVICE

Wheel

Removal

1. Remove the wheel.
   a. Stop vehicle at a level surface and apply parking brake.
   b. Using a tire wrench, loosen wheel mounting bolts.
   c. Firmly support and raise vehicle to a proper height.
   d. Using a tire wrench, remove 5 wheel mounting bolts.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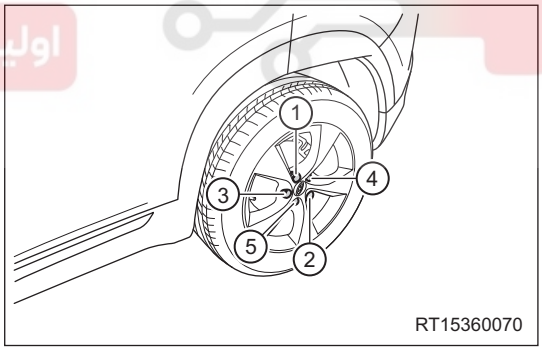
   e. Remove the wheel.

Installation

1. Install the wheel.
   a. Anticorrosion treatment is conducted on contact surface between wheel and brake disc.
   b. Install wheel and pre-tighten wheel mounting bolts by hand.
   c. Using a torque wrench, tighten wheel mounting bolts evenly to specified torque in order shown in illustration.
      (Tightening torque: 130 ± 10 N·m)



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CAUTION

- DO NOT attempt to repair wheels by striking, heating or welding.
- Replace wheel mounting bolts with special ones, rather than those with different specifications or inferior quality.
- Be careful not to damage coating on wheel.
- To avoid damage to tire or over/under tightening wheel mounting bolts, never use an impact wrench.
- DO NOT apply grease to wheel mounting bolts.
- To ensure wheel mounting bolts are tightened in place, wheel mounting bolts should be tightened after driving 800 km at the first time.

Tire Replacement

WARNING

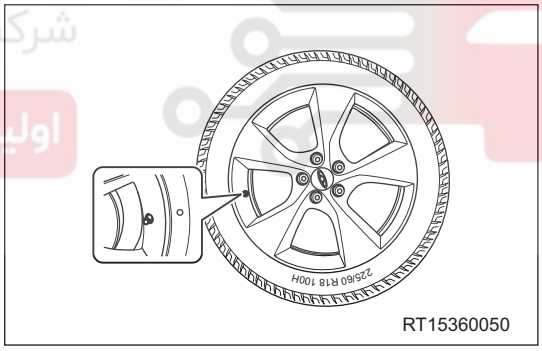
- Speed level of new replaced tire must meet the specified values for safe operation; otherwise the tire may blow out.

1. Remove the wheel (See page 37-7).
2. Use a tire remover to remove tires according to the instructions.

CAUTION

- Before assembling air valve, check if air valve hole of wheel is smooth without any burrs, and apply glycerin to air valve rubber surface or soak air valve into glycerin fluid, and then pull or press the locating ring of air valve by force to pass it through the air valve hole and install it into place (it is possible to use soapy water instead of glycerin).
- Apply glycerin or soapy water around the tire before assembly.
- When installing wheel assembly with TPMS, align dynamic balance testing mark (light point) on tire with valve core (TPMS) position on rim.
- When there is dark point mark on rim, align dynamic balance testing mark on tire with dark point mark on rim.
- When there is no dark point mark on rim, align dynamic balance testing mark on tire with air valve.

3. Yellow point on tire edge must be aligned with air valve on rim when installing tire.



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4. Adjust tire pressure to specified value.

CAUTION

- Be sure to inflate tires to specified air pressure.
- Please replace tires only with standard specification and type.

5. Check contact surface among air valve, tire and rim for leakage.
6. Using a dynamic balancer, adjust wheel balance (See page 37-10).
7. Install the wheel (See page 37-7).
   (Tightening torque: 130 ± 10 N·m)

CAUTION

- Avoid scratching tires and rims when removing tires.
- Contact surface between tire and rim should be cleaned when installing tires.

Wheel Balance

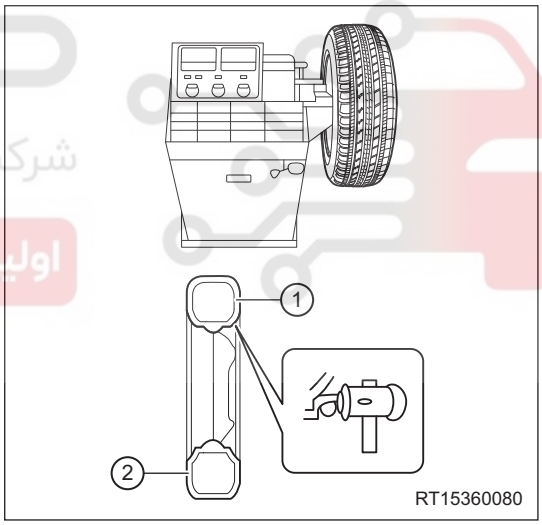
Adjustment

CAUTION

- Dynamic balancer must be calibrated before adjusting wheel balance.
- Remove impurities inside tread pattern and original balance blocks to ensure wheel balance.

1. Remove the wheel (See page 37-7).
2. Adjust tire pressure to specified value.
3. Install wheel with balance block removed to balancer. Install balance shaft with mounting surface of wheel facing inward, choose a suitable taper body, and firmly lock wheels using a locking device (align taper body with center hole, otherwise data may be incorrect).
4. Turn on power source of balancer, and input parameters such as the measured distance from rim to balancer, rim width and rim diameter.
5. Put down wheel protector, and proceed to balance test procedure automatically (start button should be pushed for some balancers). When measurement is completed, the unbalanced weight for both sides of tire will be displayed on balancer automatically, and wheel brakes automatically until it stops. Do not open protector before stopping. Failure to do this may lead to an accident.

6. According to the measurement result, corresponding balance blocks should be installed on outside (1) and inside (2) of rim edge as shown in illustration.



7. Perform test again after assembly is completed, until balancer displays 0.
8. After dynamic balance is completed, remove wheel.

CAUTION

- When installing balance blocks, the final unbalanced degree of assembly should be as follows: clamp type balance block side is 8 g or less, and paste type balance block side is 10 g or less.
- Either side of each wheel is permitted to use only one clamp type balance block at most, and paste type balance block should be pasted as needed.
- Single side weight of clamp type balance block and paste type balance block is less than 65 g and 80 g separately.
- DO NOT tap balance blocks forcibly during installation, in order to prevent balance blocks from being deformed.
- DO NOT reuse deformed balance blocks. Replace in time.

Tire Rotation

Description

Front and rear tires operate at different loads and perform different steering, driving and braking functions. For these reasons, different wear rate is formed, causing irregular wear patterns. These effects can be reduced by rotating tires at regular time.

Advantages of tire rotation:

- Improving tread life
- Maintaining traction levels
- Maintaining a smooth and quiet drivability

CAUTION

- Chery recommends you to rotate the tires every 10000 km. However, the best suitable time for tire rotation differs depending on driver's driving habits and road conditions.

Rotation Method

Perform tire rotation as shown in illustration.