

2. Tire and Wheel

A: REMOVAL

- 1) Lift up the vehicle.
- 2) Remove the wheel nut.
- 3) Remove the wheels.

CAUTION:

When removing the wheels, be careful not to damage the hub bolts.

B: INSTALLATION

- 1) Install the wheels to vehicle.
- 2) Tighten the wheel nuts to the specified torque.

Tightening torque:

Chromed plated wheel

150 N·m (15.3 kgf-m, 110.6 ft-lb)

Other than above

120 N·m (12.2 kgf-m, 88.5 ft-lb)

C: INSPECTION

1. TIRES

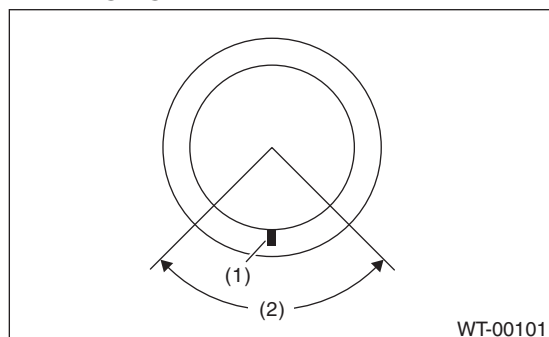
CAUTION:

When replacing a tire, make sure to use only tires of the same size, construction and load range as originally installed.

- 1) Tire size and tire inflation pressure check <Ref. to WT-2, SPECIFICATION, General Description.>
- 2) Check for cracks, damage and wear. Replace tires in the following cases.

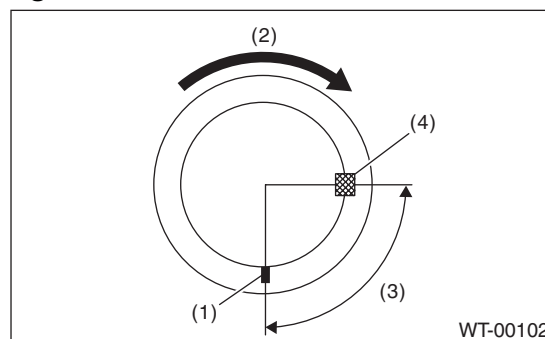
CAUTION:

- When replacing a tire, make sure to use only tires of the same size, construction and load range as originally installed.
- Use a tire changer when removing the tire from the wheel.
- On models equipped with tire pressure monitoring systems, do not use the bead breaker in a 90° area centered on the transmitter to prevent damaging the transmitter.



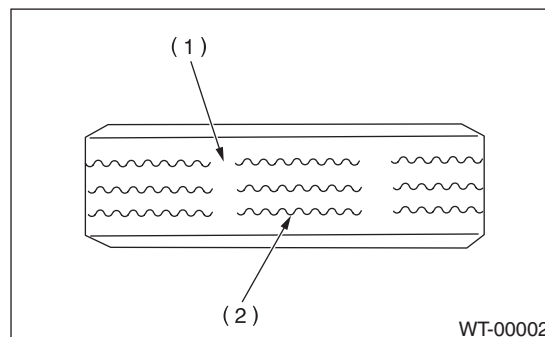
- (1) Transmitter
- (2) 90° (use of a bead breaker is prohibited in this area.)

- To prevent damaging the transmitter, set the tire changer boom in the position as shown in the figure.



- (1) Transmitter
- (2) Direction of turn table rotation
- (3) 90°
- (4) Tire changer boom

- (1) If large cracks on side wall, damage or cracks on the tread is found.
- (2) When the "tread wear indicator" appears as a solid band across the tread.



- (1) Tread wear indicator
- (2) Tire tread

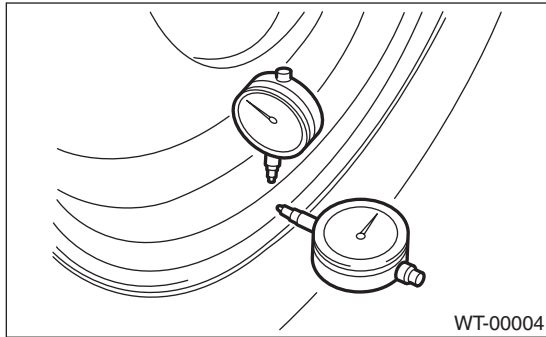
- 3) When a crack on tire valve is found, replace the tire valve.

Tire and Wheel

WHEEL AND TIRE SYSTEM

4) Tire runout check

- (1) Lift up the vehicle.
- (2) Slowly rotate the wheel to check rim "runout" using a dial gauge.



Axial runout limit	Radial runout limit
1.0 mm (0.039 in)	

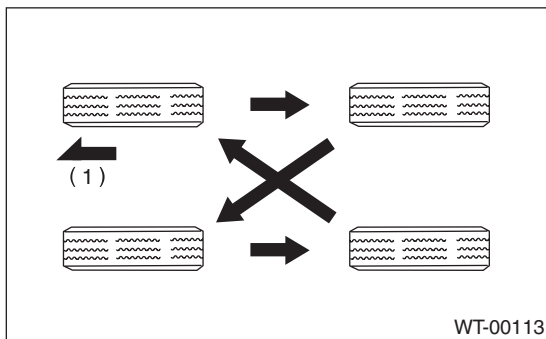
- (3) If the rim runout exceeds service limit, replace the wheel.

2. Tire rotation

NOTE:

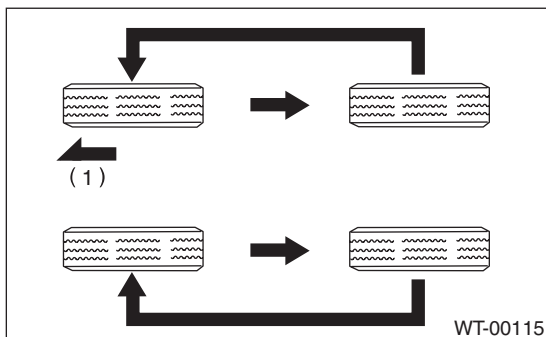
Rotate tires periodically (12,500 km/7,500 miles) in order to prolong life and to prevent uneven wear. Rotate tires as shown in the figure depending on whether or not the direction of the tire rotation is specified.

- When the direction of tire rotation is not specified



(1) Front side of vehicle

- When the direction of tire rotation is specified



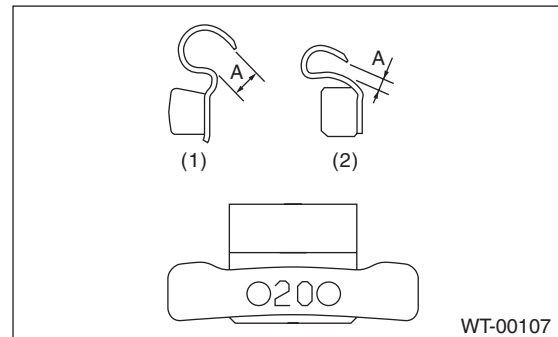
(1) Front side of vehicle

3. Wheel balancing

- 1) Using the wheel balancer, measure wheel balance.
- 2) Adjust the wheel balancing.

NOTE:

- Unbalance after adjusting the wheel balancing should be 5 g (0.18 oz) or less.
- When using the adhesive type weight, degrease the surface where the adhesive type weight will be applied securely.
- After applying the adhesive type weight, apply a force to the weight and attain full adhesion.
- Using the knock-on type weight, check the size of the knock-on part.



- (1) Knock-on type weight for aluminum wheel
- (2) Knock-on type weight for steel wheel

Service limit A:

Knock-on type weight for steel wheel:

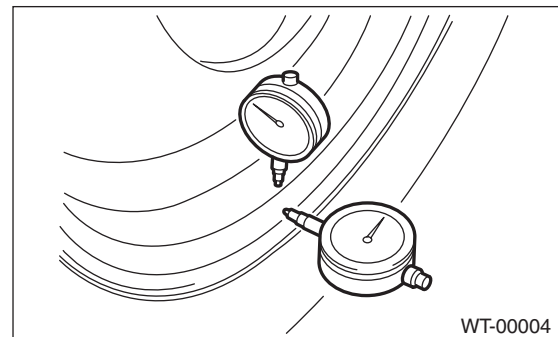
2.0 mm (0.079 in)

Knock-on type weight for aluminum wheel:

5.0 mm (0.197 in)

4. Aluminum wheel

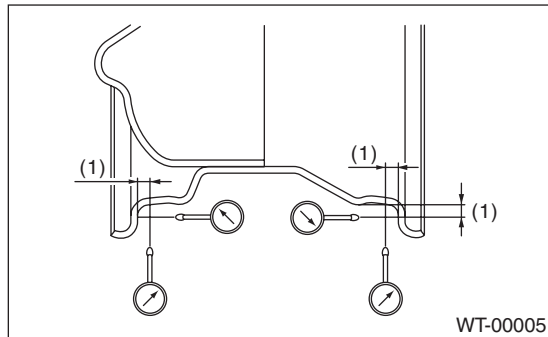
- 1) Deformation or damage to the rim may cause air leakage. Check the rim flange for deformation, cracks or damage, and repair or replace as necessary.
- 2) Jack-up the vehicle until wheels clear the floor.
- 3) Slowly rotate the wheel to check rim "runout" using a dial gauge.



Rim runout:

Axial runout limit	Vertical run-out limit
1.0 mm (0.039 in)	

4) If the rim runout exceeds specifications, remove the tire from wheel and check runout while attaching dial gauge to positions shown in the figure.



(1) Approx. 7 mm (0.28 in)

5) If the measured runout still exceeds specifications, replace the wheel.