
REAR AXLE

CONTENTS

110003096

GENERAL INFORMATION	2	SERVICE SPECIFICATIONS	2
REAR AXLE HUB	4	TROUBLESHOOTING	3
SERVICE ADJUSTMENT PROCEDURES	3		
Rear Hub Rotary-Sliding Resistance Check	3		
Wheel Bearing End Play Check	3		

GENERAL INFORMATION

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The wheel bearing adopted is a unit ball bearing (double-row angular contact ball bearing), which uses the inside surface of the rear hub as the bearing outer race to reduce weight and size.

This bearing has excellent service efficiency since it is so constructed that appropriate bearing preload is available just by tightening the flange nut to the specified torque.

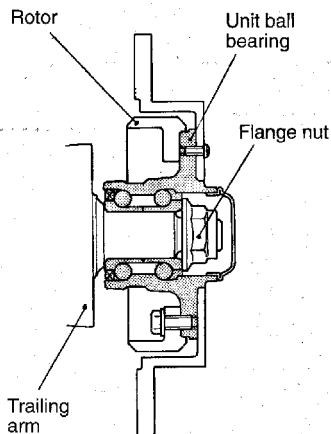
On vehicles with ABS, the rotor for detecting the wheel speed is installed on the rear hub.

SECTIONAL VIEW

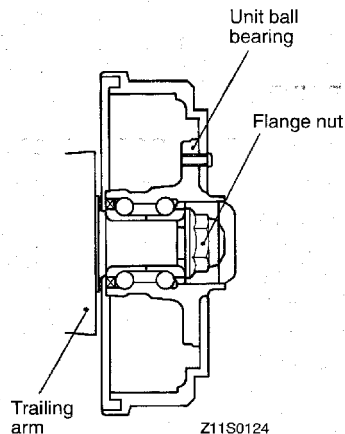
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<Vehicles with ABS>

<Vehicles without ABS>



Z11S0058



Z11S0124

SERVICE SPECIFICATIONS

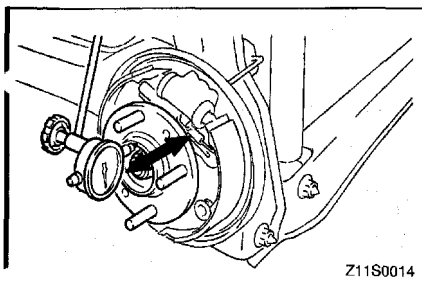
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Items	Standard value	Limit
Clearance of the rear speed sensor's pole piece and the rotor's toothed surface mm (in.)	0.3–0.9 (.012–.035)	–
Wheel bearing end play mm (in.)	–	0.05 (.0020)
Wheel bearing rotary-sliding resistance N (lbs.)	–	19 (4) or less

TROUBLESHOOTING

110003100

Symptom	Probable cause	Remedy
Abnormal sound	Loose wheel nuts	Tighten
	Damaged or worn wheel bearings	Replace
	Bent or distorted brake discs	



SERVICE ADJUSTMENT PROCEDURES

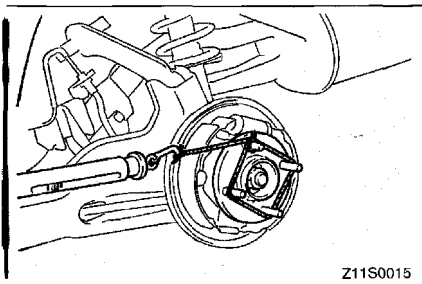
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WHEEL BEARING END PLAY CHECK

1. Remove the hub cap and then release the parking brake.
2. Remove the brake drum.
3. For vehicles with ABS, remove the caliper assembly and the brake disc.
4. Check the bearing's end play.
Place a dial gauge against the hub surface; then move the hub in the axial direction and check whether or not there is end play.

Limit: 0.05 mm (.0020 in.)

5. If the end play exceeds the limit, the flange nut should be tightened to the specified torque [180 Nm (130 ft.lbs.)] and check the end play again.
6. Replace the rear hub assembly if an adjustment cannot be made to within the limit.



REAR HUB ROTARY-SLIDING RESISTANCE CHECK

110003102

1. Release the parking brake.
2. Remove the brake drum.
3. For vehicles with ABS, remove the caliper assembly and the brake disc.
4. After turning the hub a few times to seat the bearing, wind a rope around the hub bolt and turn the hub by pulling at a 90° angle with a spring scale. Measure to determine whether or not the rotary-sliding resistance of the rear hub is at the limit value.

Limit: 19 N (4 lbs.) or less

5. If the limit value is exceeded, loosen the flange nut and then tighten it to the specified torque [180 Nm (130 ft.lbs.)] and check the rear hub rotary sliding resistance again.
6. Replace the rear hub assembly if an adjustment cannot be made to within the limit.

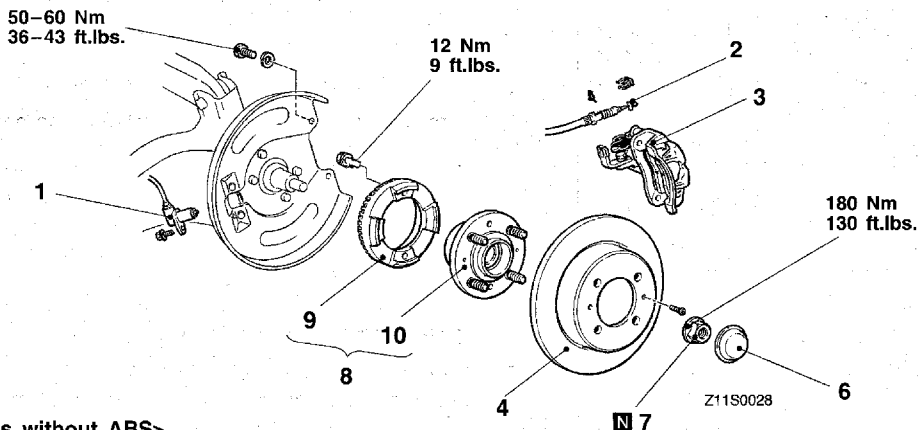
REAR AXLE HUB

REMOVAL AND INSTALLATION

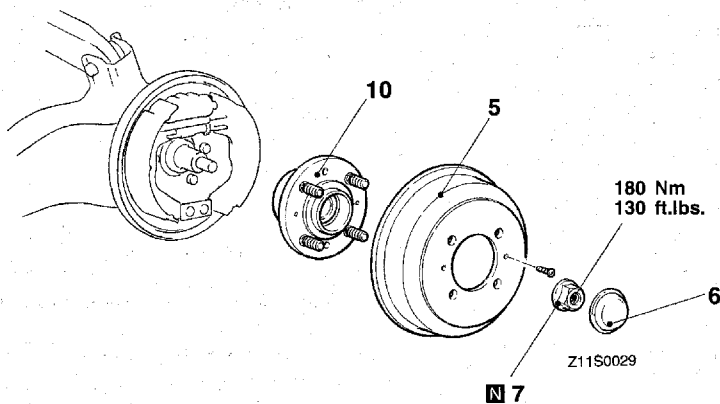
Post-installation Operation

- Parking Brake Adjustment <Vehicles with ABS>
(Refer to GROUP 36 – Service Adjustment Procedures.)

<Vehicles with ABS>



<Vehicles without ABS>



Removal steps

- ▶ A ◀
1. Rear speed sensor
 2. Parking brake cable connection
 3. Caliper assembly
 4. Brake disc
 5. Brake drum
 6. Hub cap
 7. Flange nut
 8. Rear hub assembly
 9. Rotor
 10. Rear hub unit bearing
- ◀ B ▶
- ◀ B ▶

Caution

Never disassemble the rear hub unit bearing.
Be careful not to drop or strike the ABS speed sensor and rotor, or accurate vehicle speed can not be detected.

REMOVAL SERVICE POINTS**◀A▶ CALIPER ASSEMBLY REMOVAL**

Remove the caliper assembly and suspend it.

◀B▶ REAR HUB ASSEMBLY / REAR HUB UNIT BEARING REMOVAL**Caution**

Replace the rear hub assembly or rear hub unit bearing with a new one if the wheel bearing inner race is left on the spindle when removing the rear hub assembly. If the removed rear hub assembly is reinstalled with the inner race attached on the spindle, it can be caused that the oil seal lip is pushed in the reverse direction, resulting in oil leaks or loose mounting.

INSPECTION

- Check the oil seal for crack or damage.
- Check the rear hub unit bearing for wear or damage.
- Check the rear rotor for chipped teeth.

INSTALLATION SERVICE POINT**▶A◀ REAR SPEED SENSOR INSTALLATION**

- (1) Provisionally install the speed sensor to the sensor bracket.
- (2) With the caliper assembly and brake disc removed, insert a feeler gauge into the space between the speed sensor's pole piece and the rotor's toothed surface, and then tighten the speed sensor bracket at the position where the clearance at all places is within the standard value.

Standard value: 0.3–0.9 mm (.012–.035 in.)

