
FRONT AXLE

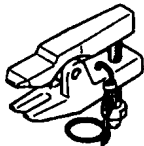
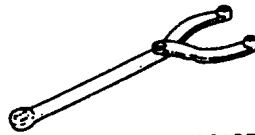
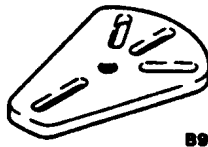
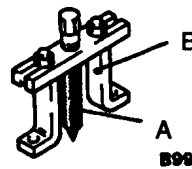
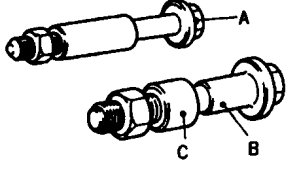
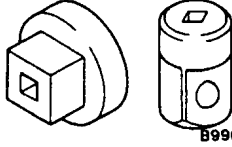
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SERVICE SPECIFICATIONS

Items	Limit
Hub axial play mm	0.05
Hub rotation starting torque Nm {kgf · m}	1.8 {1.8}

SPECIAL TOOLS

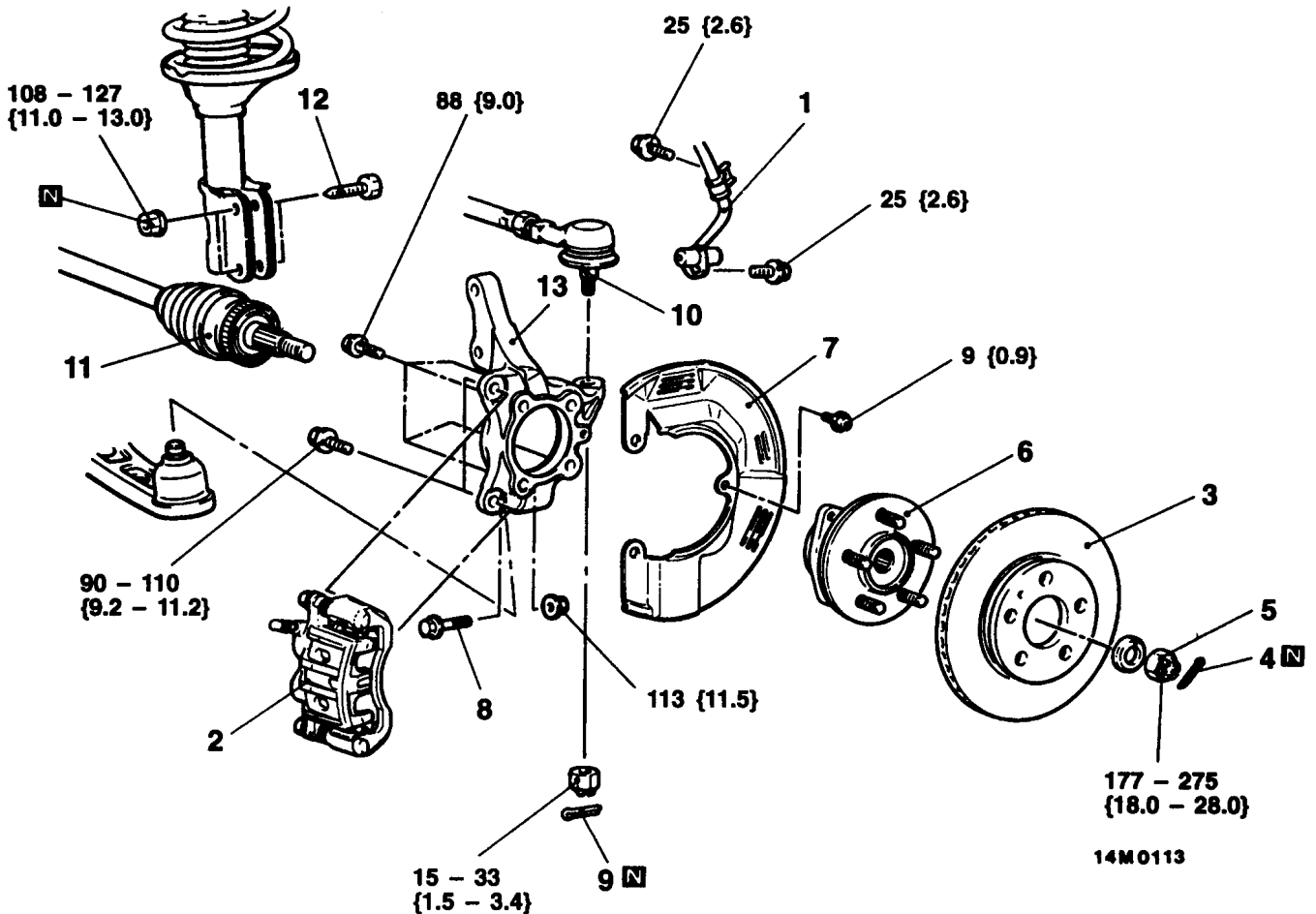
Tool	Number	Name	Use
 B991113	MB990635 or MB991113	Steering linkage puller	Ball joint disconnection
 B990767	MB990767	End holder	Fixing of hub
 B991354	MB991354	Puller body	Removal of drive shaft
 B990241	MB990241 A: MB990242 B: MB990244	Axle shaft puller A: Puller shaft B: Puller bar	
	A: MB991017 B: MB990998 C: MB991000	A, B: Front hub remover & installer C: Spacer	• Temporary fixing of unit bearing • Measurement of hub rotation starting torque • Measurement of hub axial play Use MB991000 (component of MB990998) for the spacer.
 B990326	MB990326	Preload socket	Measurement of hub rotation starting torque

AXLE HUB AND KNUCKLE

REMOVAL AND INSTALLATION

Post-installation Operation

- Check the Dust Cover for Cracks or Damage by Pushing it with Finger.



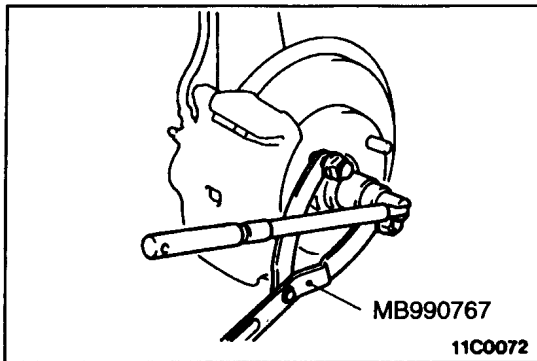
Unit: Nm {kgf · m}

Removal steps

1. Front speed sensor
<Vehicles with AYC>
2. Caliper assembly
3. Brake disc
4. Split pin
5. Drive shaft nut
6. Front hub assembly
7. Dust shield
8. Connection for lower arm ball joint
9. Split pin
10. Connection for tie rod end
11. Front drive shaft
12. Front strut mounting bolt
13. Knuckle

Caution

- (1) For vehicles with AYC, be careful when handling the pole piece at the tip of the speed sensor so as not to damage it by striking against other parts.
- (2) For vehicles with AYC, be careful not to damage the rotors installed to B.J. outer race during removal and installation of the drive shaft.

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

Secure the removed caliper assembly with wire, so that it does not fall.

◀B▶ DRIVE SHAFT NUT REMOVAL**Caution**

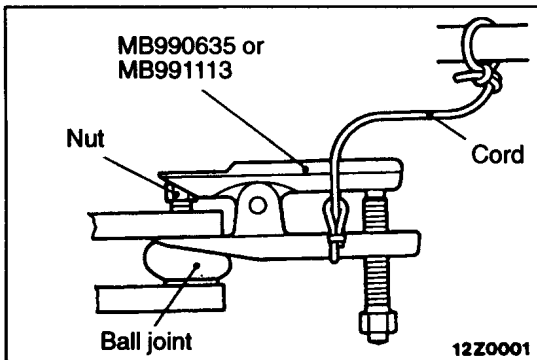
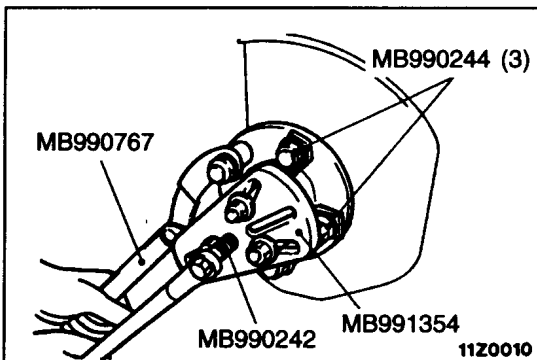
Do not apply the vehicle weight to the wheel bearing while loosening the drive shaft nut.

◀C▶ TIE ROD END DISCONNECTION

Use the special tool to disconnect the ball joint.

Caution

- (1) Use the special tool to loosen the nut only; do not remove it from the ball joint.
- (2) Tie the special tool with a cord not to let it fall off.

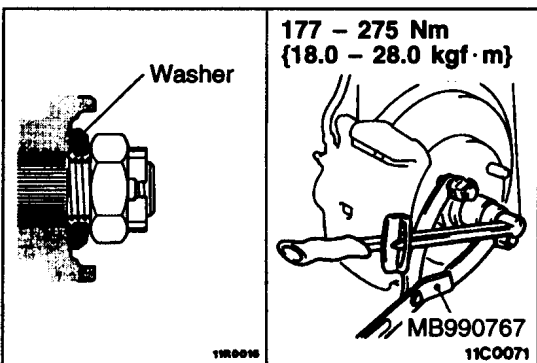
**◀D▶ DRIVE SHAFT REMOVAL****INSTALLATION SERVICE POINT****▶A◀ DRIVE SHAFT NUT INSTALLATION**

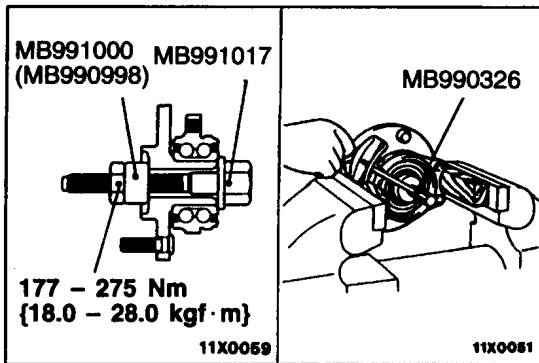
- (1) Install the drive shaft washer in the specified direction.
- (2) Using the special tool, tighten the drive shaft nut.

Caution

Before securely tightening the drive shaft nuts, make sure there is no load on the wheel bearings.

- (3) If the position of the split pin holes does not match, tighten the nut up to the first matching holes. Install the split pin and bend it securely.





INSPECTION

1. HUB ROTATION STARTING TORQUE CHECK

- (1) Install the special tool to the front hub assembly and tighten the nut to the specified torque.
- (2) Use the special tool to measure the hub rotation starting torque.

Limit: 1.8 Nm {18.0 kgf·cm}

- (3) The hub rotation starting torque should be within the limit value range, and there should be no engagement or feeling of roughness.

2. HUB AXIAL PLAY CHECK

- (1) Measure the hub play in the axial direction.

Limit: 0.05 mm

NOTE

Measure the hub play while clamping the hub in a vice with wooden blocks against the bearing section.

- (2) If the limit value of hub axial play cannot be obtained with the nut tightened to the specified torque (177 to 275 Nm {18.0 to 28.0 kgf·m}), replace the front hub assembly.

