

## Manual Transmission/Transaxle: Service and Repair

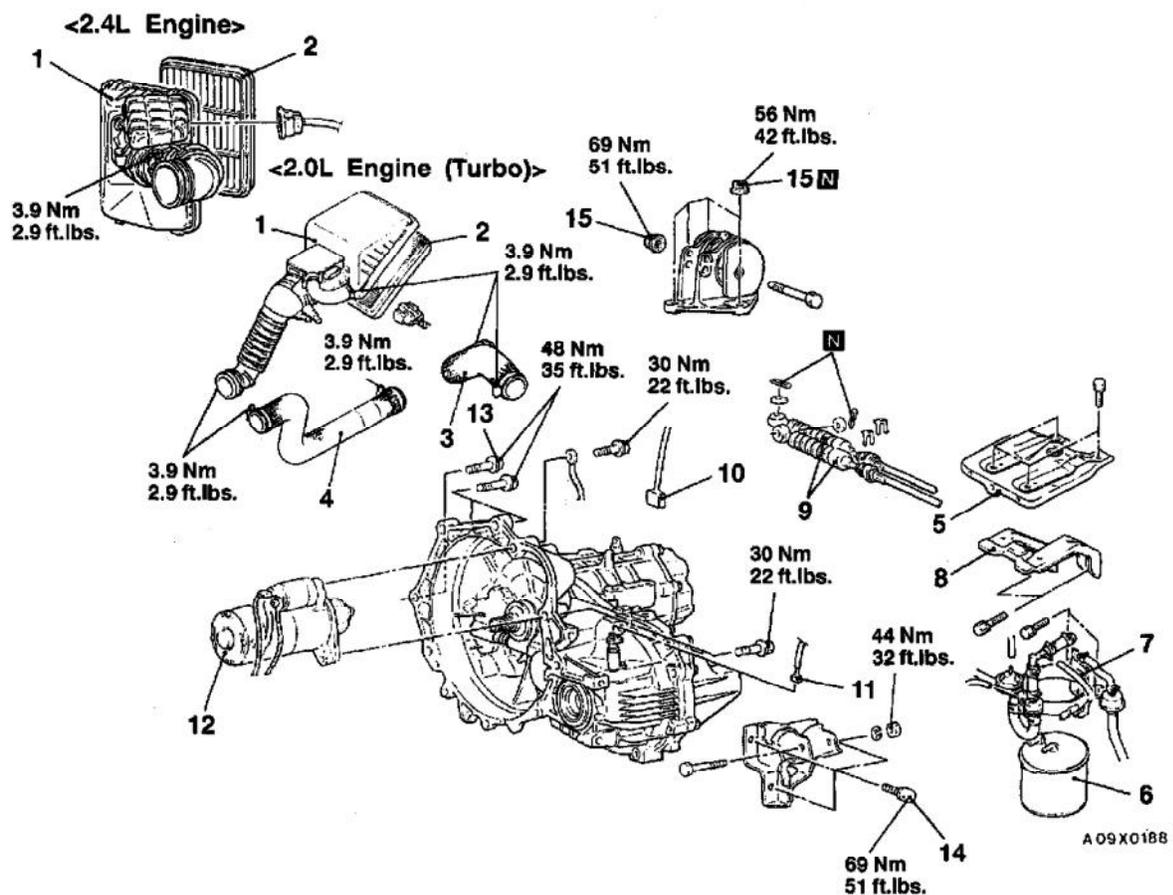
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**Pre-removal Operation**

- Transaxle Oil Draining (Refer to Maintenance Service.)
- Battery Removal
- Under Cover Removal

**Post-installation Operation**

- Supplying Transaxle Oil (Refer to Maintenance Service.)
- Shift Lever Operation Check
- Speedometer Operation Check
- Under Cover Installation
- Battery Installation

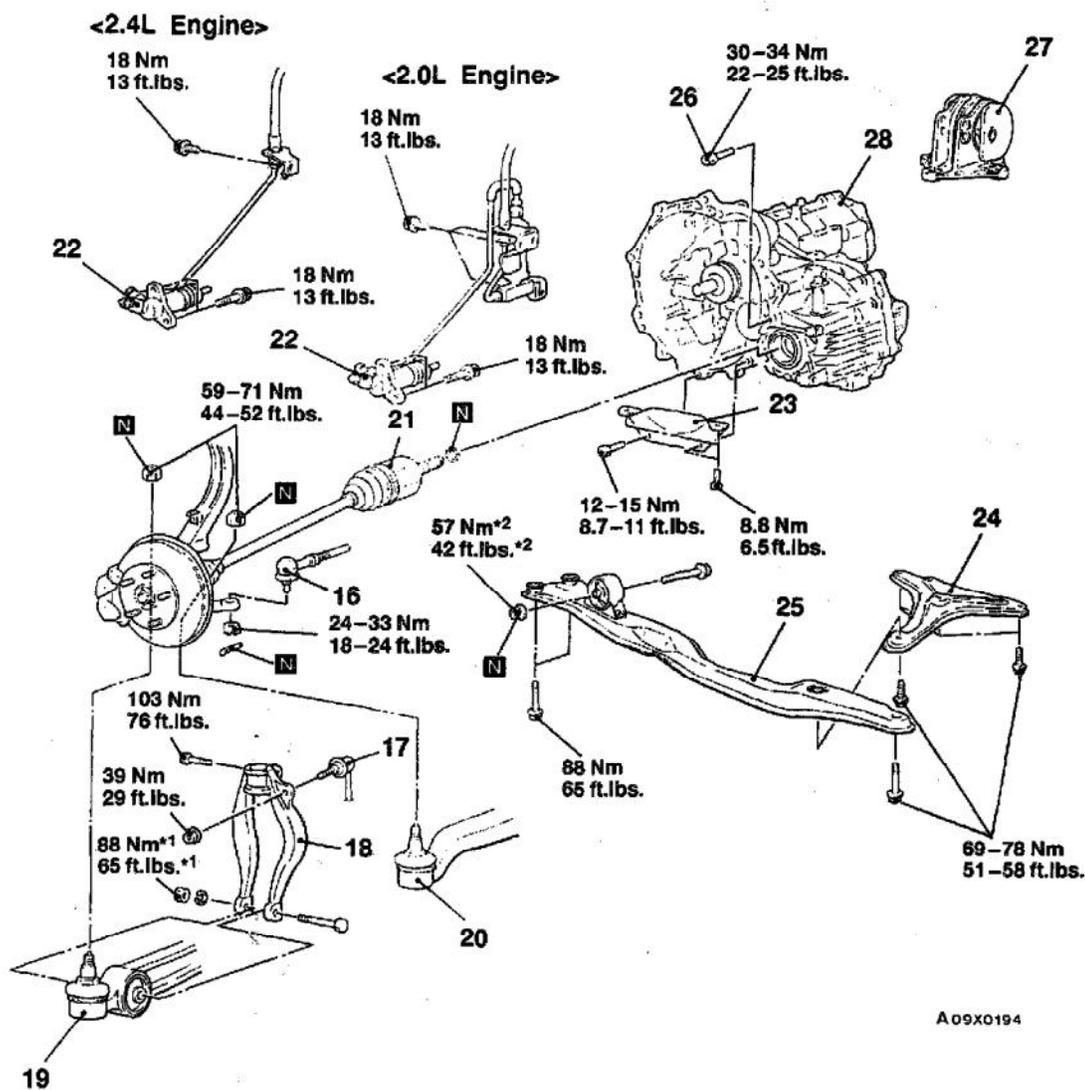
**Removal steps**

1. Air cleaner cover and air intake hose assembly
2. Air cleaner element
3. Air hose C <2.0L Engine (Turbo)>
4. Air hose A <2.0L Engine (Turbo)>
5. Battery tray
6. Evaporative emission canister
7. Evaporative emission canister holder
8. Battery tray stay
9. Shift cable and select cable connection
10. Backup light switch connector
11. Vehicle speed sensor connector
12. Starter motor
13. Transaxle assembly mounting bolts
14. Rear roll stopper bracket mounting bolts
15. Transaxle mounting bracket mounting nuts
  - Supporting engine assembly

◀A▶

◀B▶

Part 1



A09X0194

- Lifting up of the vehicle**
- ◀C▶ 16. Tie rod end ball joint and knuckle connection
  - ◀C▶ 17. Stabilizer link connection
  - ◀C▶ 18. Damper fork
  - ◀C▶ 19. Lateral lower arm ball joint and knuckle connection
  - ◀C▶ 20. Compression lower arm ball joint and knuckle connection
  - ◀D▶ ▶C▶ 21. Drive shaft connection
  - ◀E▶ ▶C▶ 22. Clutch release cylinder connection
  - 23. Bell housing cover
  - 24. Stay (R.H.)

- ▶B◀ 25. Center member assembly
- ▶A◀ 26. Transaxle assembly mounting bolt
- 27. Transaxle mounting
- 28. Transaxle assembly

**Caution**

\*1: Indicates parts which should be temporarily tightened, and then fully tightened with the vehicle on the ground in the unladen condition.

\*2: For tightening locations indicated by the symbol, first tighten temporarily, and then make the final tightening with the entire weight of the engine applied to the vehicle body.

**Part 2**

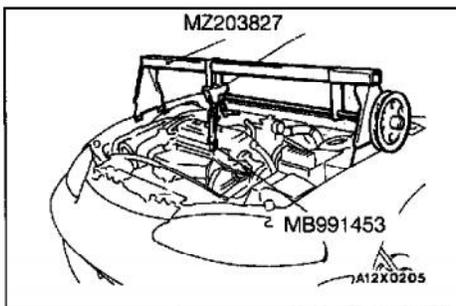
**REMOVAL AND INSTALLATION**

**REMOVAL SERVICE POINTS**

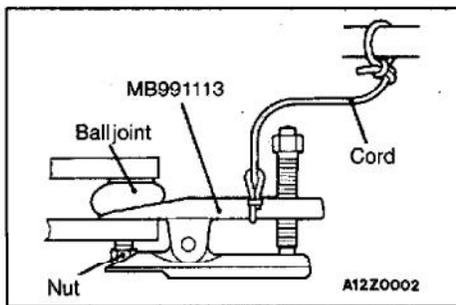
**(A) TRANSAXLE MOUNTING BRACKET MOUNTING NUTS REMOVAL**

Jack up the transaxle assembly gently with a garage jack, and then remove the transaxle mounting bracket nuts.

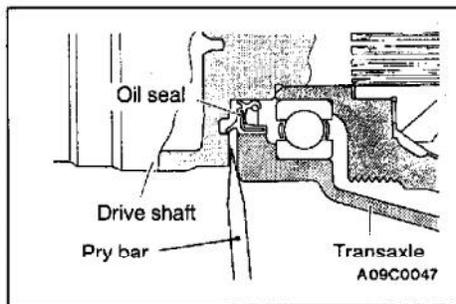
**CAUTION:** Be sure not to tilt the transaxle assembly.

**(B) SUPPORTING ENGINE ASSEMBLY**

Set the special tool to the vehicle to support the engine assembly.

**(C) THE ROD END BALL JOINT AND KNUCKLE/LATERAL LOWER ARM BALL JOINT AND KNUCKLE/COMPRESSION LOWER ARM BALL JOINT AND KNUCKLE DISCONNECTION****CAUTION:**

1. Using the special tool, loosen the tie rod end mounting nut. Only loosen the nut; do not remove it from the ball joint.
2. Support the special tool with a cold, etc. to prevent it from coming off.

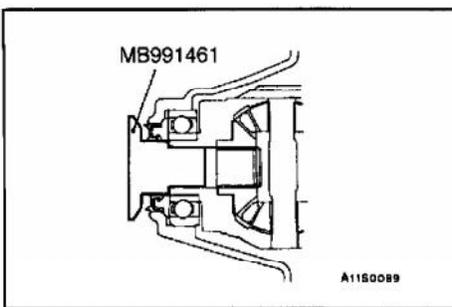
**(D) DRIVE SHAFT DISCONNECTION**

1. Insert a pry bar between the transaxle case and the drive shaft to remove the drive shaft.

**NOTE:** Do not remove the hub and knuckle from the drive shaft.

**CAUTION:**

1. Use a pry bar to remove the drive shaft from the B.J. assembly, or the T.J. assembly may be damaged.
2. Do not insert the bar too far, or the oil seal may be damaged.

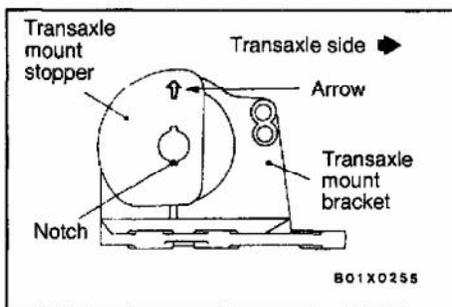


2. Suspend the removed drive shaft with wire so that there are no sharp bends in any of the joints.
3. Use the special tool as a cover not to let foreign objects get into the transaxle case.

#### (E) CLUTCH RELEASE CYLINDER DISCONNECTION

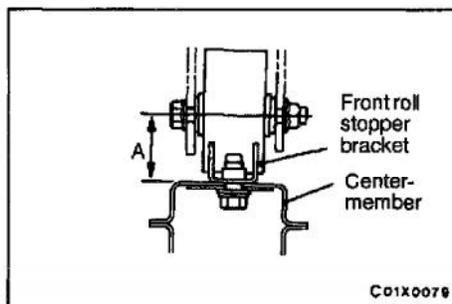
Remove the clutch release cylinder without disconnecting the oil line, and suspend it to a nearby parts with a wire, etc.

#### INSTALLATION SERVICE POINT



#### (A) TRANSAXLE MOUNTING INSTALLATION

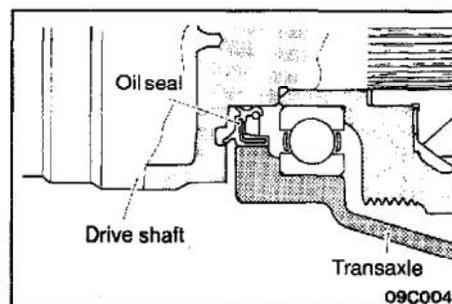
Align the notches on the stopper with the transaxle mount bracket with the arrow mark facing toward the shown direction. Then install the stopper.



#### (B) CENTER MEMBER ASSEMBLY INSTALLATION

If the dimension shown in the illustration is outside the standard value when the weight of the engine is on the body, replace the front roll stopper bracket assembly.

Standard value (A):  $43 \pm 3$  mm ( $1.69 \pm .12$  in.)



**(C) DRIVE SHAFT CONNECTION**

Temporarily install the drive shaft so that the T.J. case of the drive shaft is perpendicular to the transaxle.

**CAUTION:** Do not damage the oil seal lip by the serrated part of the drive shaft.