

MANUAL TRANSMISSION

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WARNING REGARDING SERVICING OF SUPPLEMENTAL RESTRAINT SYSTEM (SRS) EQUIPPED VEHICLES

WARNING!

- (1) Improper service or maintenance of any component of the SRS, or any SRS-related component, can lead to personal injury or death to service personnel (from inadvertent firing of the air bag) or to driver and passenger (from rendering the SRS inoperative).
- (2) Service or maintenance of any SRS component or SRS-related component must be performed only at an authorized MITSUBISHI dealer.
- (3) MITSUBISHI dealer personnel must thoroughly review this manual, and especially its GROUP 52B - Supplemental Restraint System (SRS) before beginning any service or maintenance of any component of the SRS or any SRS-related component.

NOTE

The SRS includes the following components: SRS-ECU, SRS warning lamp, air bag module, clock spring, side impact sensors and interconnecting wiring. Other SRS-related components (that may have to be removed/installed in connection with SRS service or maintenance) are indicated in the table of contents by an asterisk (*).

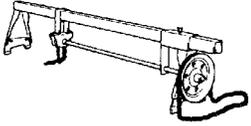
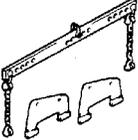
LUBRICANT

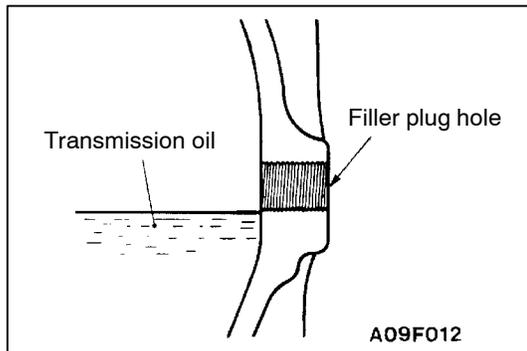
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Item	Specified lubricant	Quantity L
Transmission oil	Hypoid gear oil SAE 75W - 90 or 75W - 85W conforming to API GL-4	2.2

SPECIAL TOOLS

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Tool	Number	Name	Use
 <p>B991113</p>	MB990635 or MB991113	Steering linkage puller	Ball joint disconnection
 <p>Z203827</p>	GENERAL SERVICE TOOL MZ203827	Engine lifter	Supporting the engine assembly during removal and installation of the transmission
 <p>B991453</p>	MB991453	Engine hanger	



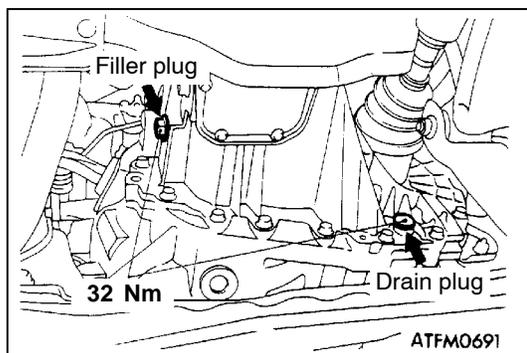
ON-VEHICLE SERVICE

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TRANSMISSION OIL CHECK

- (1) Remove the oil filler plug.
- (2) Oil level should be at the lower portion of the filler plug hole.
- (3) Check that the transmission oil is not noticeably dirty, and that it has a suitable viscosity.
- (4) Tighten the filler plug to the specified torque.

Tightening torque: 32 Nm



TRANSMISSION OIL REPLACEMENT

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- (1) Remove the drain plug to drain oil.
- (2) Tighten the drain plug to the specified torque.
- (3) Remove the filler plug and fill with specified oil till the level comes to the lower portion of filler plug hole.

Transmission oil

Specified oil:

**Hypoid gear oil SAE 75W - 90 or 75W - 85W
conforming to API GL-4**

Quantity: 2.2 L

- (4) Tighten the filler plug to the specified torque.

TRANSMISSION CONTROL

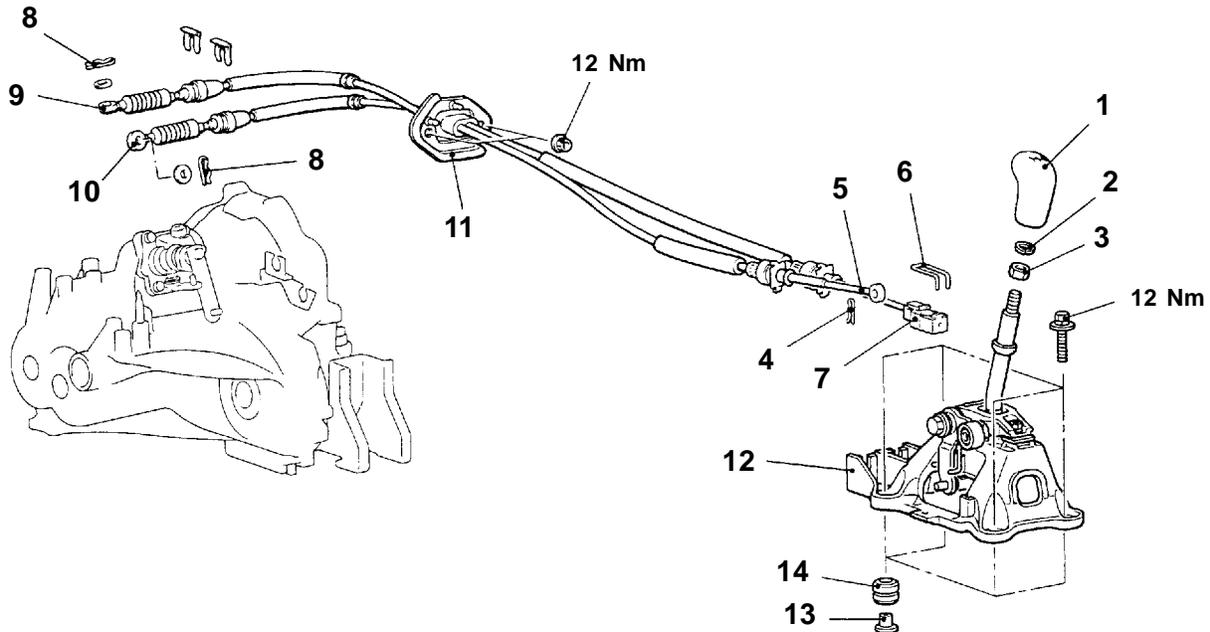
REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation

- Air Cleaner Assembly Removal and Installation
- Battery and Battery Tray Removal and Installation

Caution: SRS

Be careful not to subject the SRS-ECU to any shocks during removal and installation of the shift cable and select cable assembly.



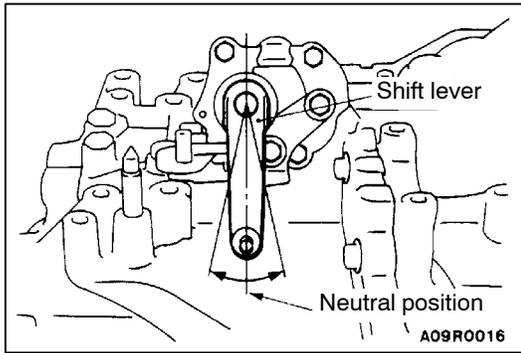
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Shift cable and select cable assembly removal steps

- Lower cover and side cover (Refer to GROUP 52A - Instrument Panel.)
- ▶B◀ 1. Shift knob
▶B◀ 2. Spring washer
▶B◀ 3. Nut
- Floor console box (Refer to GROUP 52A.)
- ▶A◀ 4. Snap pin
▶A◀ 5. Select cable connection (Shift lever side)
▶A◀ 6. Clip
▶A◀ 7. Shift cable connection (Shift lever side)
▶A◀ 8. Snap pin
▶A◀ 9. Select cable connection (Transmission side)
▶A◀ 10. Shift cable connection (Transmission side)
▶A◀ 11. Shift cable and select cable assembly

Shift lever assembly removal steps

- ▶B◀ 1. Shift knob
▶B◀ 2. Spring washer
▶B◀ 3. Nut
- Floor console box (Refer to GROUP 52A.)
- ▶A◀ 4. Snap pin
▶A◀ 5. Select cable connection (Shift lever side)
▶A◀ 6. Clip
▶A◀ 7. Shift cable connection (Shift lever side)
▶A◀ 12. Shift lever assembly
▶A◀ 13. Distance piece
▶A◀ 14. Bushing



INSTALLATION SERVICE POINTS

▶A◀ SHIFT CABLE AND SELECT CABLE ASSEMBLY/ SHIFT CABLE CONNECTION/SELECT CABLE CONNECTION

- (1) Set the transmission side shift lever and the passenger compartment side shift lever to the neutral position.

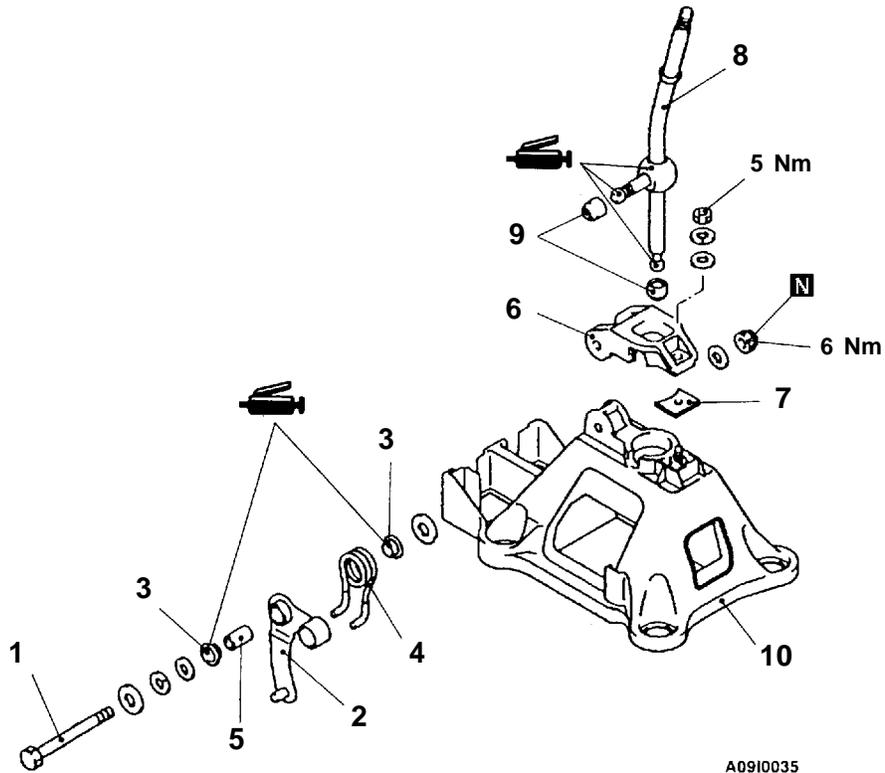
- (2) For the transmission side, the white and yellow paint marks on the shift and select cable ends should face the snap pins.
- (3) Move the shift lever to all positions and check that the operation is smooth.

▶B◀ NUT/SPRING WASHER/SHIFT KNOB INSTALLATION

- (1) Screw in the nut all the way by hand, turn back half a turn, and then insert the spring washer.
- (2) Screw in the shift knob until it touches the spring washer, and make one more turn. Then turn more to adjust the shift pattern on the shift knob.
- (3) If the above steps are impossible, you can turn back the shift knob by one turn at most after screwing in all the way to adjust the shift pattern.

SHIFT LEVER ASSEMBLY DISASSEMBLY AND REASSEMBLY

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Disassembly steps

- | | |
|------------------|------------------------|
| 1. Bolt | 6. Cap |
| 2. Select lever | 7. Spacer |
| 3. Bushing | 8. Shift lever |
| 4. Return spring | 9. Shift lever bushing |
| 5. Collar | 10. Lever bracket |

TRANSMISSION ASSEMBLY

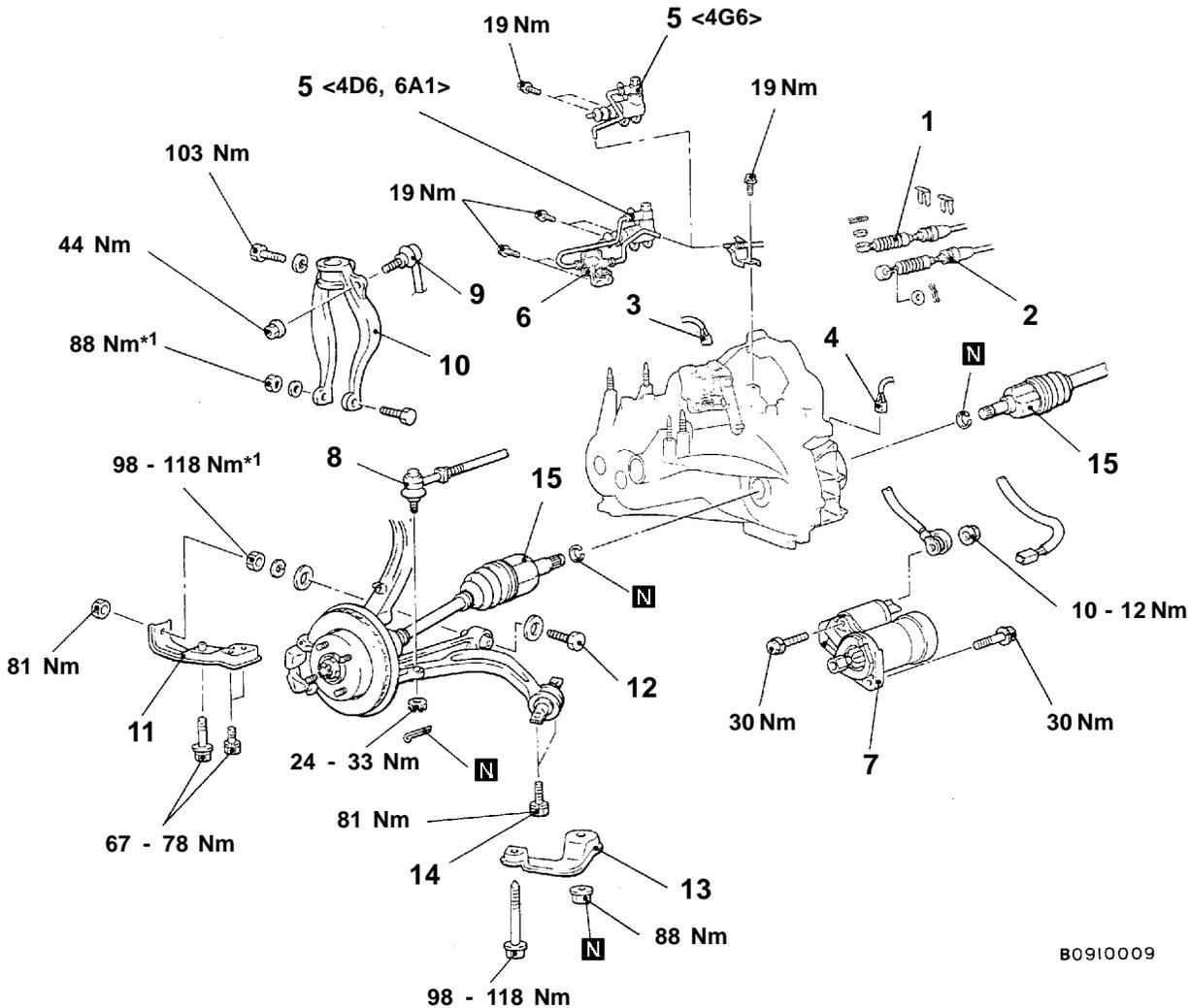
REMOVAL AND INSTALLATION

Pre-removal Operation

- Transmission Oil Draining (Refer to P.22-3.)
- Under Cover Removal
- Battery and Battery Tray Removal
- Air Cleaner Assembly Removal

Post-installation Operation

- Air Cleaner Assembly Installation
- Battery and Battery Tray Installation
- Under Cover Installation
- Transmission Oil Supplying (Refer to P.22-3.)
- Check the Dust Cover for Cracks or Damage by Pushing it with Finger.
- Shift Lever Operation Check
- Speedometer Operation Check
- Wheel Alignment Adjustment (Refer to GROUP 33A - On-vehicle Service.)



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Removal steps

1. Select cable connection
2. Shift cable connection
3. Backup lamp switch connector
4. Vehicle speed sensor connector
5. Clutch release cylinder connection
6. Clutch fluid line damper connection
7. Starter motor <6A1>
8. Tie rod end connection
9. Stabilizer link connection
10. Damper fork

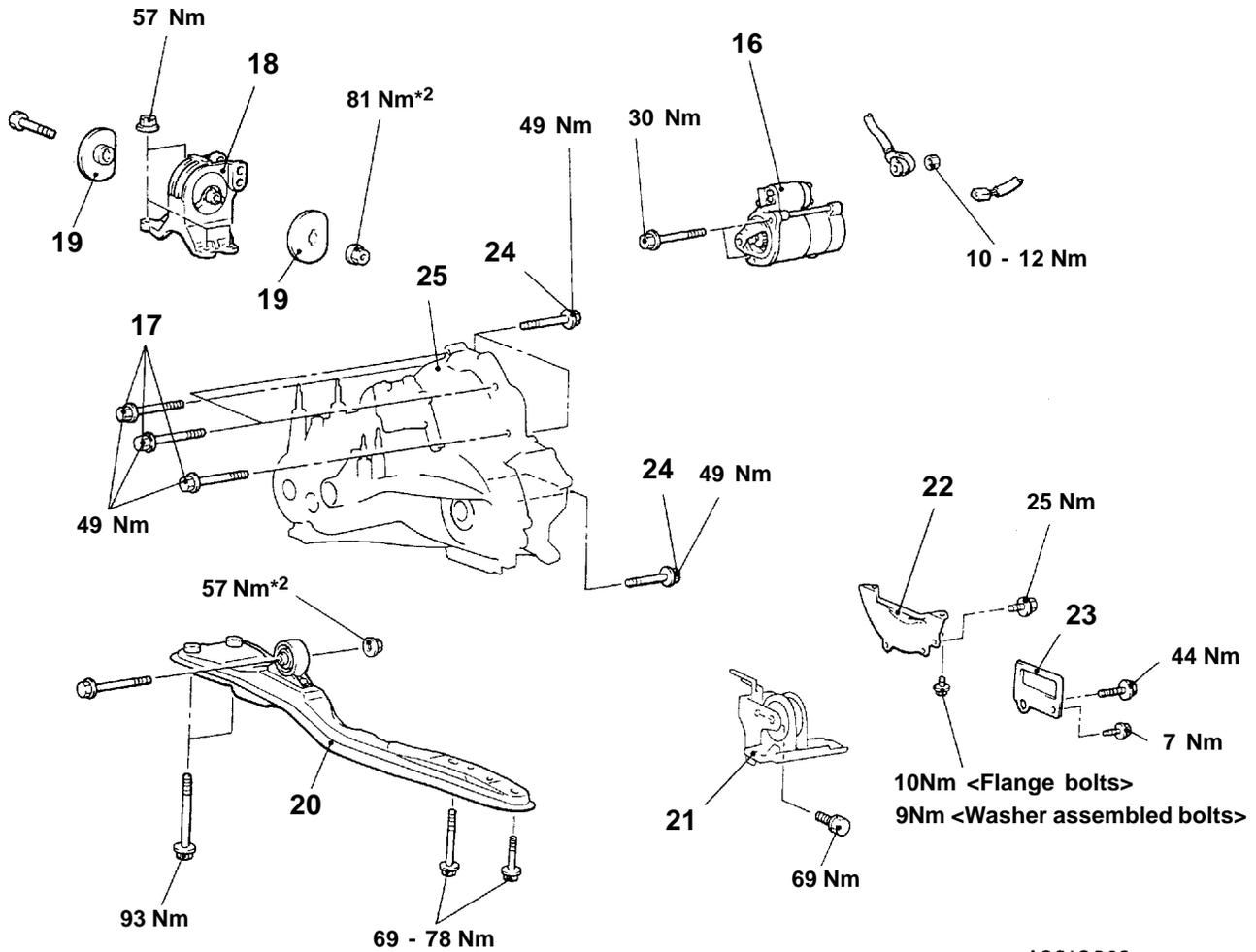
11. No.2 stay
12. Lateral lower arm connection
13. No.3 stay
14. Compression lower arm connection
15. Drive shaft



Caution

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





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◀D▶

◀E▶

▶A▶

- 16. Starter motor <4G6, 4D6>
- 17. Transmission assembly upper part coupling bolts
- 18. Transmission mount bracket
- 19. Transmission mount stopper
 - Engine and transmission assembly supporting
- 20. Centermember assembly
- 21. Rear roll stopper
- 22. Bell housing cover <4G6, 4D6>

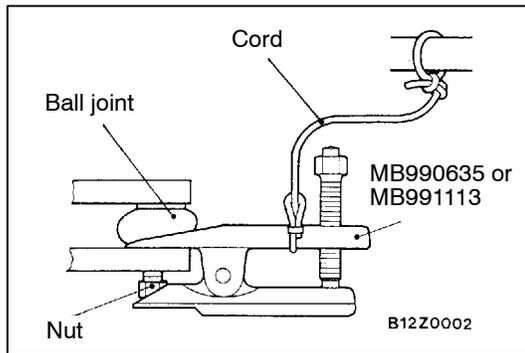
◀F▶

◀F▶

- 23. Cover <6A1>
- 24. Transmission assembly lower part coupling bolts
- 25. Transmission assembly

Caution

Mounting locations marked by *2 should be provisionally tightened, and then fully tightened after placing the vehicle horizontally and loading the full weight of the engine on the vehicle body.

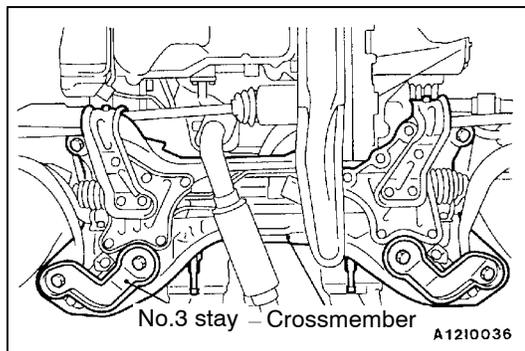


REMOVAL SERVICE POINTS

◀A▶ TIE ROD END DISCONNECTION

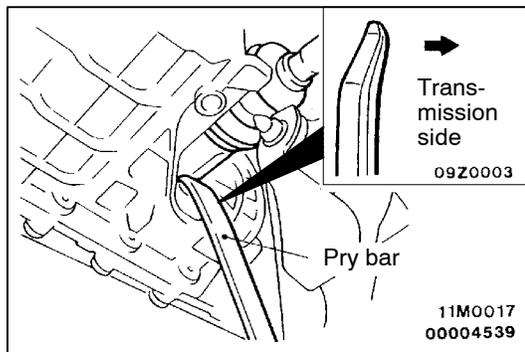
Caution

1. Use the special tool to 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 cord, etc. not to let it come off.



◀B▶ NO.3 STAY REMOVAL

No.3 stay is tightened together with the crossmember. Therefore, after removing No.3 stay, install the nut and bolt to the crossmember provisionally.



◀C▶ DRIVE SHAFT DISCONNECTION

- (1) Insert a pry bar between the transmission case and the drive shaft as shown to remove the drive shaft.

NOTE

Do not remove the hub and knuckle from the drive shaft.

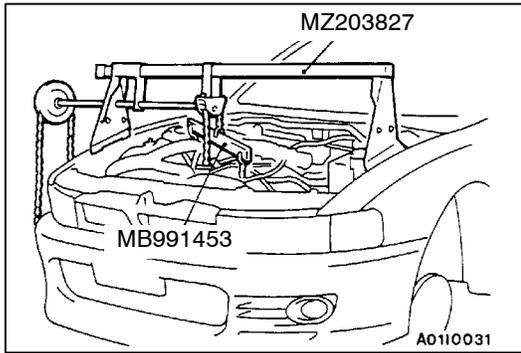
Caution

Always use a pry bar, or the TJ will be damaged.

- (2) Suspend the removed drive shaft with a wire so that there are no sharp bends in any of the joints.
- (3) Use a shop towel to cover the transmission case not to let foreign material get into it.

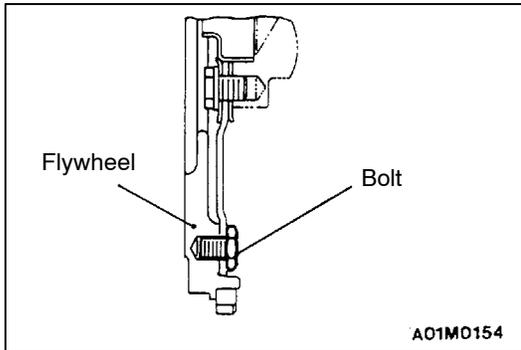
◀D▶ TRANSMISSION MOUNT BRACKET REMOVAL

Jack up the transmission assembly gently with a garage jack, and then remove the transmission mount bracket.



◀E▶ ENGINE AND TRANSMISSION ASSEMBLY SUPPORTING

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



◀F▶ TRANSMISSION ASSEMBLY LOWER PART COUPLING BOLTS/TRANSMISSION ASSEMBLY REMOVAL

1. Support the transmission assembly with a transmission jack.
2. Remove the transmission assembly lower part coupling bolts, and lower the transmission assembly to remove.

Caution

Do not remove the flywheel mounting bolt shown in the illustration. If this bolt is removed, the flywheel will become out of balance and damaged.

INSTALLATION SERVICE POINTS

▶A◀ TRANSMISSION MOUNT STOPPER INSTALLATION

Install the transmission mount stopper so that the arrow points as shown in the illustration.

