

MANUAL TRANSMISSION

CONTENTS

LUBRICANT	2	Transmission Oil Replacement	3
SPECIAL TOOLS	2	TRANSMISSION CONTROL	4
ON-VEHICLE SERVICE	3	Shift Lever Assembly	6
Transmission Oil Level Check	3	TRANSMISSION ASSEMBLY*	7

WARNINGS 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 the driver and passenger (from rendering the SRS inoperative).
- (2) If it is possible that the SRS components are subjected to heat over 93°C in baking or drying after painting, remove the SRS components (air bag module and SRS-ECU) beforehand.
- (3) Service or maintenance of any SRS component or SRS-related component must be performed only at an authorised MITSUBISHI dealer.
- (4) 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.

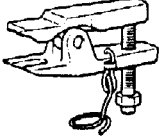
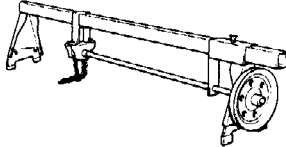

NOTE

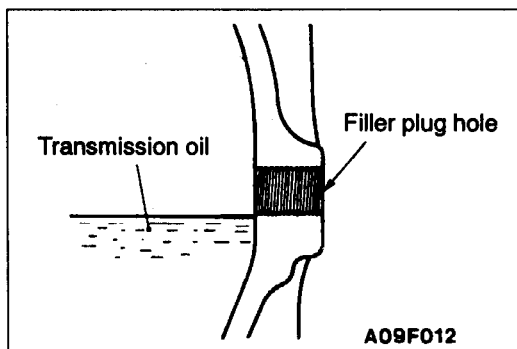
Section titles with the asterisk (*) in the table of contents in each group indicate operations requiring warnings.

LUBRICANT

Items	Specified lubricant	Quantity (litres)
Transmission oil	Hypoid gear oil SAE 75W-85W conforming to API classification GL-4	2.8

SPECIAL TOOLS

Tool	Number	Name	Application
	MB991113	Steering linkage puller	<ul style="list-style-type: none"> • Tie rod end ball joint and knuckle removal • Lateral lower arm ball joint and knuckle removal • Compression lower arm ball joint and knuckle removal
	GENERAL SERVICE TOOL MZ203827	Engine lifter	Supporting the engine assembly during removal and installation of the transmission
	MB991460	Plug	Preventing foreign substances from entering transmission case

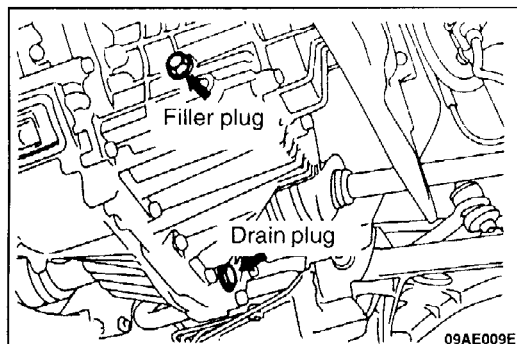


ON-VEHICLE SERVICE

TRANSMISSION OIL LEVEL CHECK

1. Remove the oil filler plug.
2. The 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.

Torque: 32 Nm



TRANSMISSION OIL REPLACEMENT

1. Remove transmission drain plug.
 2. Drain oil.
 3. Tighten drain plug to specified torque.
- Specified torque: 32 Nm (3.3 kgfm)**
4. Remove filler plug and fill with specified oil until the level reaches the lower portion of filler plug hole.

Specified oil:

Hypoid gear oil SAE 75W-85W or 80W conforming to API classification GL-4

Quantity: 2.8 dm³ (2.8ℓ)

5. Tighten filler plug to specified torque.

Specified torque: 32 Nm (3.3 kgfm)

TRANSMISSION CONTROL

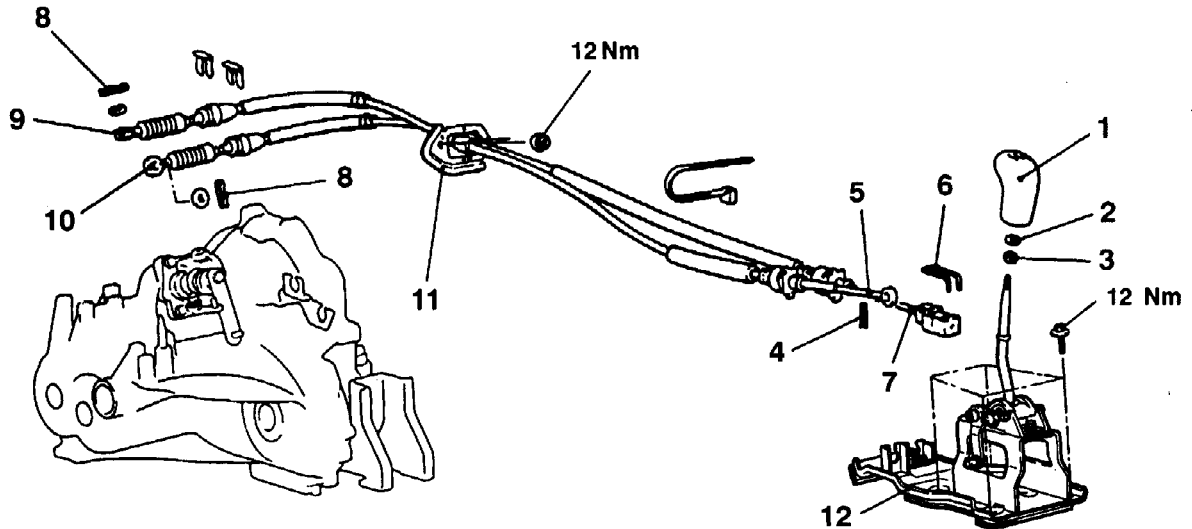
REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation

- Air Cleaner – Removal and Installation (Refer to Group 15).

Caution: SRS

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



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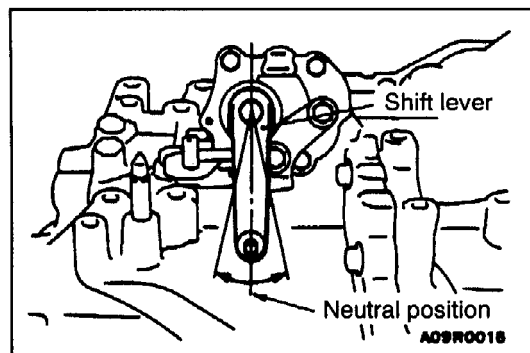
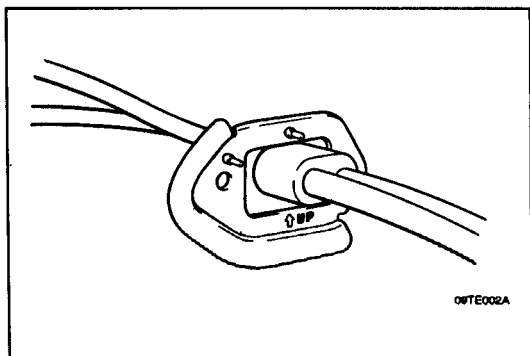
Transmission control cable assembly removal steps

- ▶B◀ 1. Shift knob
- ▶B◀ 2. Spring washer
- ▶B◀ 3. Nut
 - Front floor console (Refer to Group 52A)
- 4. R-clip
- 5. Select cable connection (Shift lever side)
- 6. Clip
- 7. Shift cable connection (Shift lever side)
- 8. R-clip
- ▶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
 - Front floor console (Refer to Group 52A)
- 4. R-clip
- 5. Select cable connection (Shift lever side)
- 6. Clip
- 7. Shift cable connection (Shift lever side)
- 12. Shift lever assembly



INSTALLATION SERVICE POINT

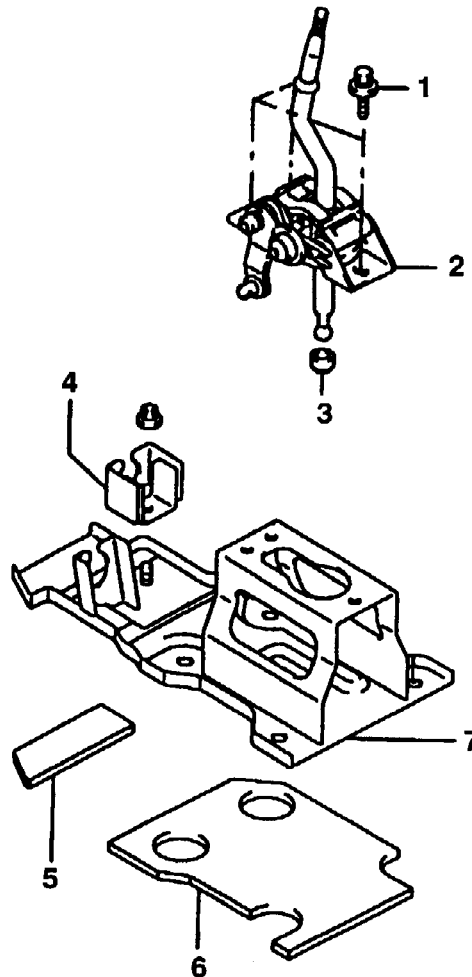
▶A◀ SHIFT CABLE AND SELECT CABLE ASSEMBLY/SHIFT CABLE CONNECTION/SELECT CABLE CONNECTION

1. Ensure the shift cable and select lever assembly is mounted in the vehicle with the "UP" symbol and arrow on the mounting plate pointing upward as shown in the illustration.
2. Set the transmission side shift lever and the passenger compartment side shift lever to the neutral position.
3. For the transmission side, the white and the yellow paint marks on the shift and select cable ends should face the snap rings.
4. Move the shift lever to all positions and check that the operation is smooth.

▶B◀ NUT/SPRING WASHER/SHIFT KNOB

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 the adjust the shift pattern.

SHIFT LEVER ASSEMBLY DISASSEMBLY AND REASSEMBLY



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Disassembly steps

1. Gearshift lever assembly retaining bolts
2. Gearshift lever assembly
3. Gearshift linkage bushing
4. Gearshift cable bracket
5. Gearshift lever bracket insulator
6. Gearshift lever bracket insulator
7. Gearshift lever bracket

TRANSMISSION ASSEMBLY

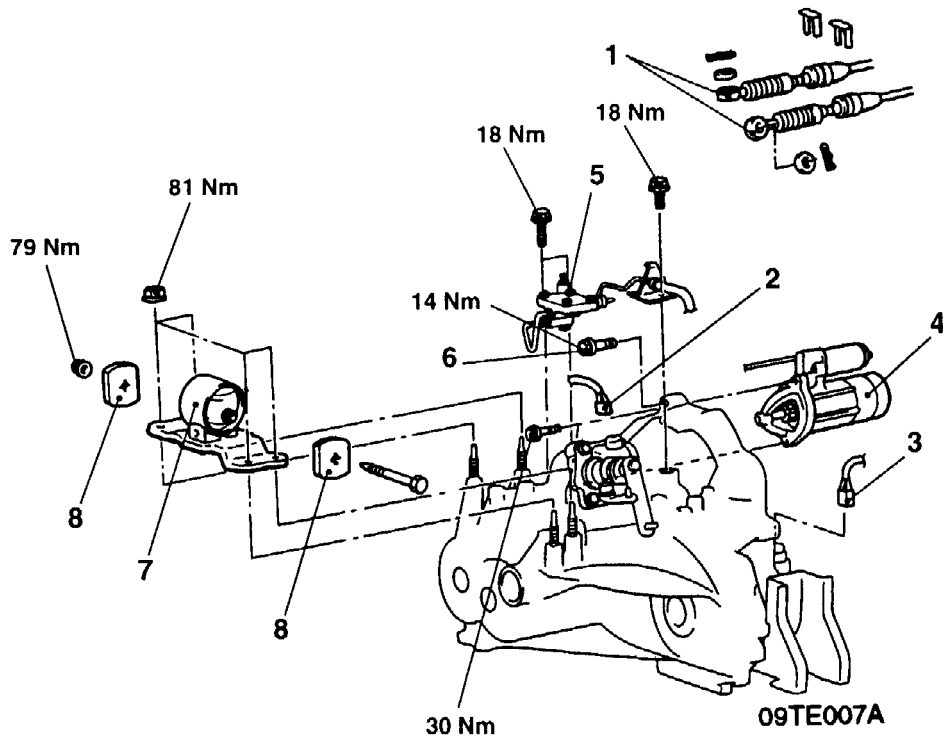
REMOVAL AND INSTALLATION

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

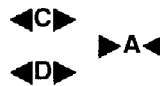
- Air Cleaner Assembly Installation
- Battery and Battery Tray Installation
- Under Cover Installation
- Supplying Transmission Oil (Refer to P.22-3.)
- Shift Lever Operation Check
- Speedometer Operation Check

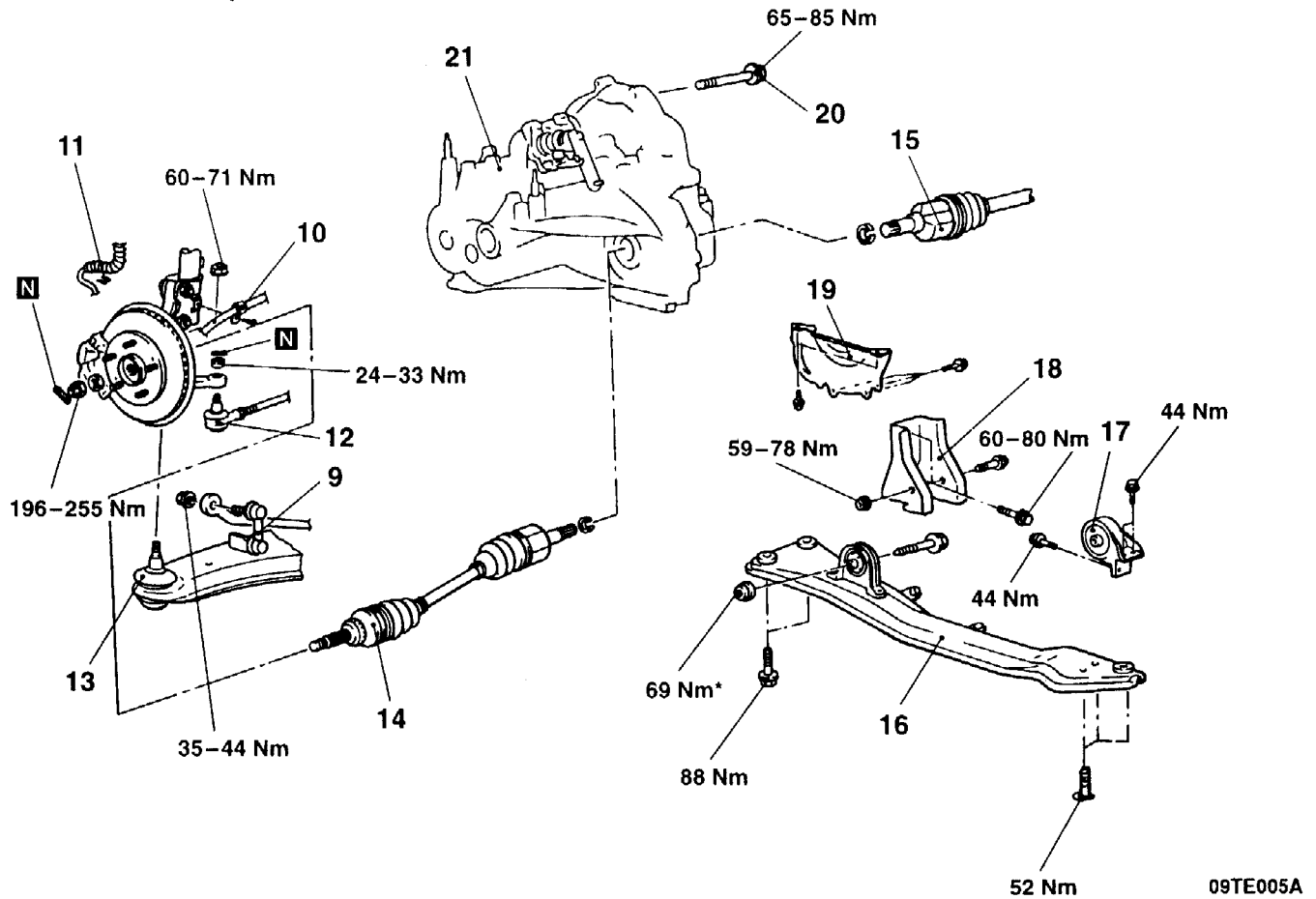


Removal steps

1. Shift cable and select cable connection (Refer to P.22-4)
2. Reverse lamp switch connector
3. Vehicle speed sensor connector
4. Starter motor
5. Clutch release cylinder connection

6. Transmission assembly upper part coupling bolts
7. Transmission mount bracket
8. Transmission mount stopper
- Supporting engine assembly





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- 9. Stabiliser bar connection
- 10. Wheel speed sensor cable connection (Vehicles with ABS)
- 11. Brake hose clamp
- 12. Tie rod end connection
- 13. Lower arm ball joint connection
- 14. Drive shaft <LH> connection
- 15. Drive shaft <RH> connection
- 16. Centre member assembly
- 17. Rear roll stopper

- 18. Rear roll stopper bracket
- 19. Bell housing cover
- 20. Transmission assembly lower part coupling bolts
- 21. Transmission assembly



Caution

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

REMOVAL SERVICE POINTS

◀A▶ STARTER MOTOR REMOVAL

Remove the starter motor with the starter harness still connected and secure it to the inside of the engine compartment.

◀B▶ CLUTCH RELEASE CYLINDER REMOVAL

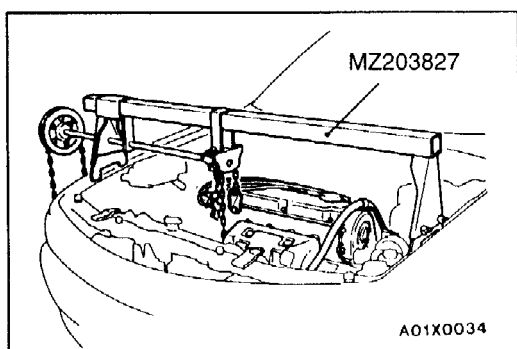
Remove the clutch release cylinder without disconnecting the oil line connection, and fix it to the vehicle chassis.

◀C▶ TRANSMISSION MOUNT BRACKET REMOVAL

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

◀D▶ ENGINE ASSEMBLY SUPPORTING

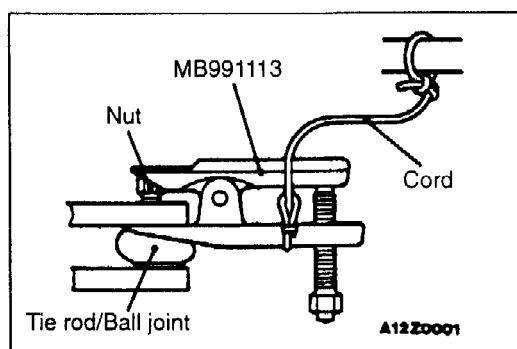
Set the special tool to the vehicle to support the engine assembly.

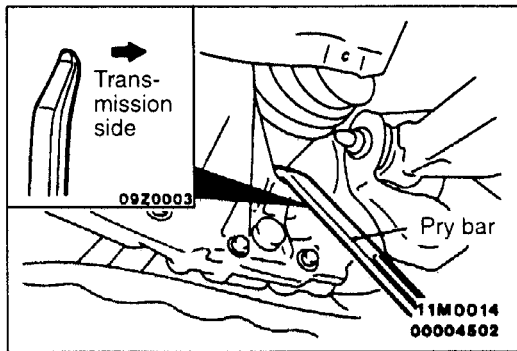


◀E▶ TIE ROD END/LOWER ARM BALL JOINT REMOVAL

Caution

1. Loosen the nut without removing it from the ball joint and use the special tool MB991113 to disconnect the tie rod or ball joint.
2. Support the special tool with a cord in order to prevent it from falling off.



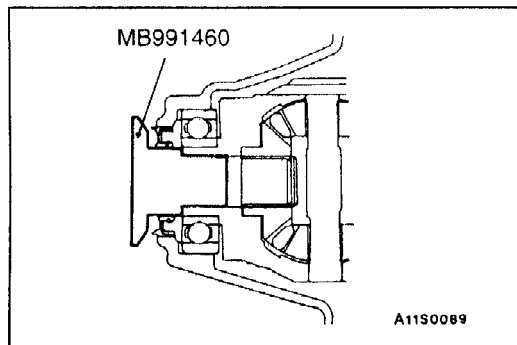


◀F▶ DRIVE SHAFT REMOVAL

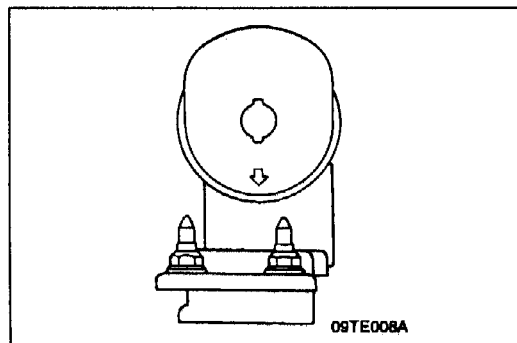
1. Insert a pry bar between the transmission case and the drive shaft to remove the drive shaft.

Caution

Always use a pry bar or the drive shaft joints will be damaged.



2. To prevent foreign matter from entering the transmission case, insert a suitable plug into the drive shaft openings.
3. Suspend the RH drive shaft with wire so that there are no sharp bends in any of the joints.



INSTALLATION SERVICE POINT

▶A◀ TRANSMISSION MOUNT STOPPER INSTALLATION

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