
GROUP 22

**MANUAL
TRANSAXLE**

CONTENTS

MANUAL TRANSAXLE 22A

MANUAL TRANSAXLE OVERHAUL 22B

GROUP 22A

MANUAL TRANSAXLE

CONTENTS

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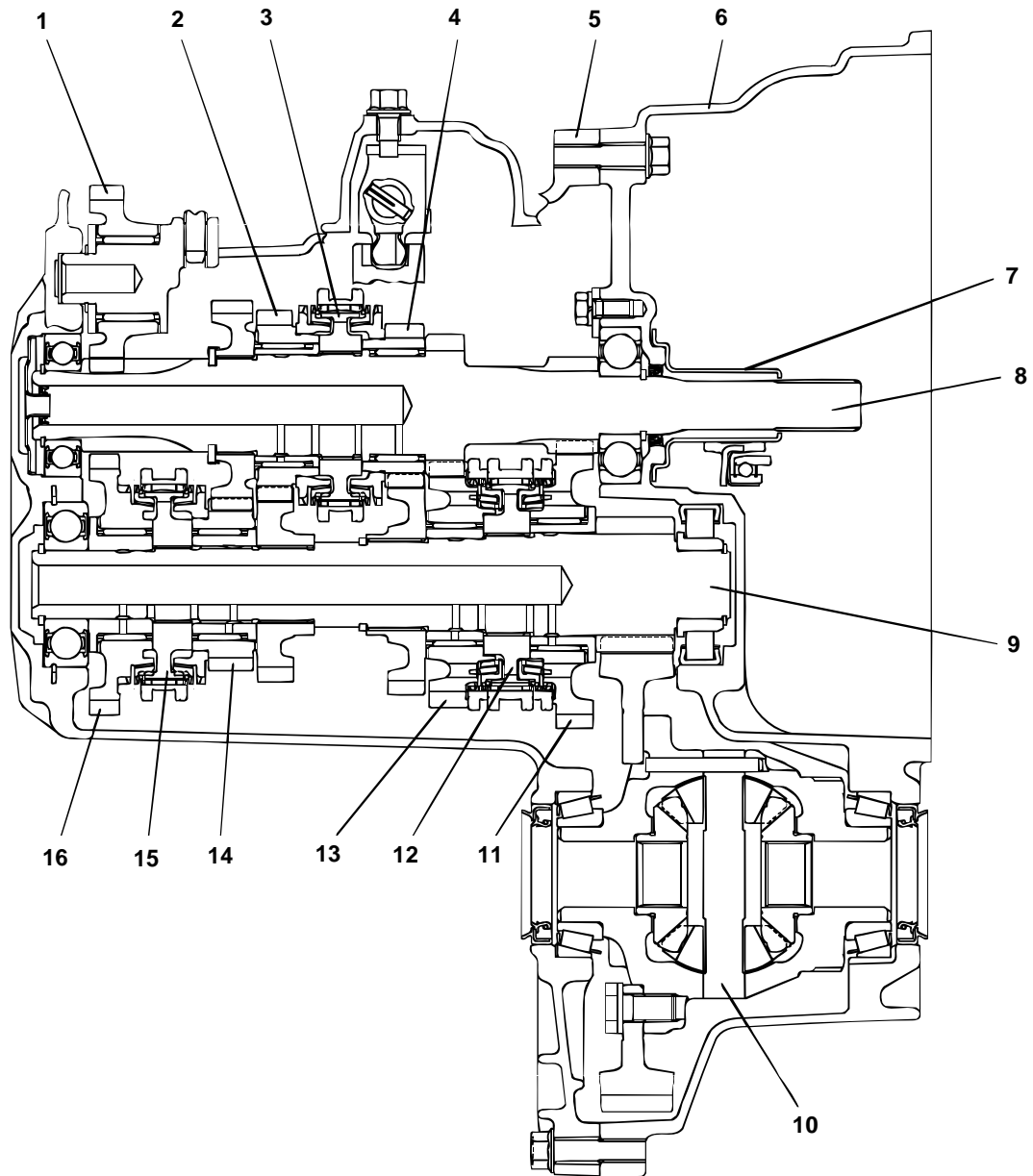
GENERAL DESCRIPTION

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ITEMS		SPECIFICATIONS	
Transaxle model		F5M42	F5M51
Engine model		4G64	6G72
Transaxle type		5-speed forward, 1-speed reverse constant mesh	
Gear ratio	1st	3.583	3.333
	2nd	1.947	2.105
	3rd	1.379	1.407
	4th	1.030	1.031
	5th	0.767	0.761
	Reverse	3.363	3.416
Final gear ratio (Differential gear ratio)		3.722	3.736
Speedometer gear ratio		29/36	28/36

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SECTIONAL VIEW <F5M42>

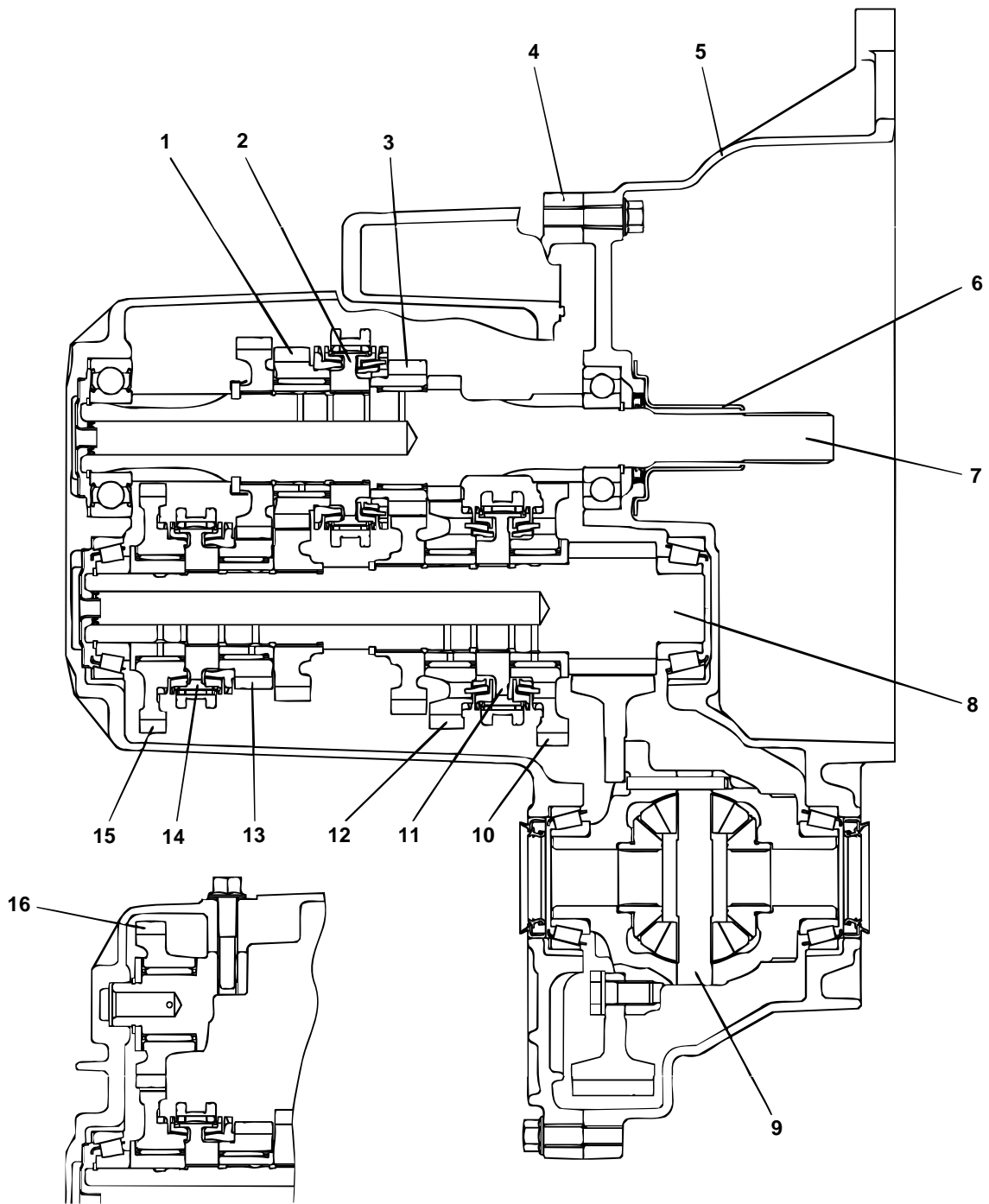


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- | | |
|-----------------------------------|--|
| 1. REVERSE IDLER GEAR | 10. DIFFERENTIAL |
| 2. 4TH SPEED GEAR | 11. 1ST SPEED GEAR |
| 3. 3RD-4TH SPEED SYNCHRONIZER HUB | 12. 1ST-2ND SPEED SYNCHRONIZER HUB |
| 4. 3RD SPEED GEAR | 13. 2ND SPEED GEAR |
| 5. TRANSAXLE CASE | 14. 5TH SPEED GEAR |
| 6. CLUTCH HOUSING | 15. 5TH-REVERSE SPEED SYNCHRONIZER HUB |
| 7. RELEASE BEARING RETAINER | 16. REVERSE GEAR |
| 8. INPUT SHAFT | |
| 9. OUTPUT SHAFT | |

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<F5M51>



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- | | |
|-----------------------------------|--|
| 1. 4TH SPEED GEAR | 10. 1ST SPEED GEAR |
| 2. 3RD-4TH SPEED SYNCHRONIZER HUB | 11. 1ST-2ND SPEED SYNCHRONIZER HUB |
| 3. 3RD SPEED GEAR | 12. 1ST-2ND SPEED SYNCHRONIZER HUB |
| 4. TRANSAXLE CASE | 13. 5TH SPEED GEAR |
| 5. CLUTCH HOUSING | 14. 5TH-REVERSE SPEED SYNCHRONIZER HUB |
| 6. RELEASE BEARING RETAINER | 15. REVERSE GEAR |
| 7. INPUT SHAFT | 16. REVERSE IDLER GEAR |
| 8. OUTPUT SHAFT | |
| 9. DIFFERENTIAL | |

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MANUAL TRANSAXLE DIAGNOSIS

INTRODUCTOIN TO MANUAL TRANSAXLE DIAGNOSIS

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The mounting could be incorrect, the oil level may be low, or a component of the transaxle may be faulty in the following conditions: noise or vibration is generated, oil leaks, shifting of the gears is hard or troublesome, or the transaxle jumps out of gear.

TROUBLESHOOTING STRATEGY

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Use these steps to plan your diagnostic strategy. If you follow them carefully, you will be sure that you have exhausted most of the possible ways to find a manual transaxle fault.

1. Gather information from the customer.

2. Verify that the condition described by the customer exists.
3. Find the malfunction by following the Inspection Chart for Trouble Symptoms.
4. Verify malfunction is eliminated.

SYMPTOM CHART

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SYMPTOMS	INSPECTION PROCEDURE	REFERENCE PAGE
Noise, vibration	1	P.22A-6
Oil leaks	2	P.22A-7
Shifting gears is hard	3	P.22A-8
Jumps out of gear	4	P.22A-8

SYMPTOM PROCEDURES

INSPECTION PROCEDURE 1: Noise, vibration

DIAGNOSIS

STEP 1. Check whether the transaxle and engine mount is loose or damaged.

Q: Are the transaxle and engine mount loosened or damaged?

YES : Tighten or replace the part. Then go to Step 7.

NO : Go to Step 2.

STEP 2. Check the end play of the input and output shafts.

Q: Does the end play of the input and output shafts meet the standard value?

YES : Go to Step 3.

NO : Adjust the end play of the input and output shafts. Then go to Step 7.

STEP 3. Check the gears for wear and damage.

Q: Are the gears worn or damaged?

YES : Replace the gears. Then go to Step 7.

NO : Go to Step 4.

STEP 4. Check that the specified oil.

Q: Is the specified oil gear oil SAE 75W – 90W or 75W – 85W conforming to API classification GL-4?

YES : Go to Step 5.

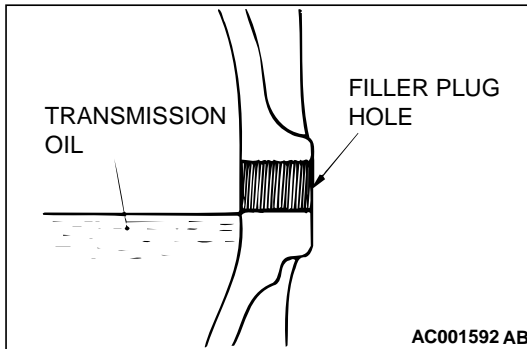
NO : Replace the oil. Refer to [P.22A-9](#). Then go to Step 7 .

STEP 5. Check that the oil level is up to the lower edge of the filler plug hole.

Q: Is the oil level up to the lower edge of the filler plug hole?

YES : Go to Step 6.

NO : Refill gear oil SAE 75W – 90W or 75W – 85W conforming to API classification GL-4. Then go to Step 7.



STEP 6. Check the idle speed.

Q: Does the idle speed meet the standard values?

YES : <2.4L Engine> Refer to GROUP 11A [P.11A-8](#), On-vehicle Service – Curb Idle Speed Check. <3.0L Engine> Refer to GROUP 11C [P.11C-7](#), On-vehicle Service – Curb Idle Speed Check.

NO : <2.4L Engine> Refer to GROUP 11A [P.11A-8](#), On-vehicle Service – Curb Idle Speed Check. <3.0L Engine> Refer to GROUP 11B [P.11C-7](#), On-vehicle Service – Curb Idle Speed Check.

STEP 7. Check trouble symptoms.

Q: Isn't the noise or vibration generated?

YES : Return to Step 1.

NO : This diagnosis is complete.

INSPECTION PROCEDURE 2: Oil leaks

DIAGNOSIS

STEP 1. Check the oil seal or O-ring for damage.

Q: Is the oil seal or O-ring damaged?

YES : Replace the oil seal or the O-ring. Then go to Step 2.

NO : Go to Step 2.

STEP 2. Check trouble symptoms.

Q: Isn't the oil leaking?


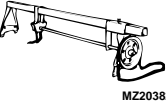

YES : Return to Step 1.

NO : This diagnosis is complete.

INSPECTION PROCEDURE 3: Shifting gears is hard**DIAGNOSIS****STEP 1. Check the control cable****Q: Is the control cable in good condition?****YES :** Go to Step 2.**NO :** Repair or replace the control cable. Then go to Step 5.**STEP 2. Check for poor meshing or wear of synchronizer ring and gear cone.****Q: Is poor meshing or wear of synchronizer ring and gear cone found?****YES :** Repair or replace the synchronizer ring and gear cone. Then go to Step 5.**NO :** Go to Step 3.**STEP 3. Check the synchronizer spring for weakness.****Q: Is the synchronizer spring weakened?****YES :** Replace the synchronizer spring. Then go to Step 5.**NO :** Go to Step 4.**STEP 4. Check that the specified oil is gear oil SAE 75W – 90W or 75W – 85W conforming to API classification GL-4.****Q: Is the specified oil gear oil SAE 75W – 90W or 75W – 85W conforming to API classification GL-4?****YES :** Go to Step 5.**NO :** Replace the oil. Refer to [P.22A-9](#). Then go to Step 5.**STEP 5. Check trouble symptoms.****Q: Isn't the shifting of the gears hard?****YES :** Return to Step 1.**NO :** This diagnosis is complete.**INSPECTION PROCEDURE 4: Jumps out of gear****DIAGNOSIS****STEP 1. Check the gear shift forks for wear or the poppet spring for breakage.****Q: Is the gear shift forks worn or the poppet spring broken?****YES :** Replace the gear shift fork or poppet spring. Then go to Step 3.**NO :** Go to Step 2.**STEP 2. Check the clearance (excessive) between the synchronizer hub and sleeve.****Q: Does the clearance (excessive) between the synchronizer hub and sleeve meet the standard value?****YES :** Go to Step 3.**NO :** Replace the synchronizer hub and sleeve. Then go to Step 3.**STEP 3. Check trouble symptoms.****Q: Don't the gears slip out?****YES :** Return to Step 1.**NO :** This diagnosis is complete.

SPECIAL TOOLS

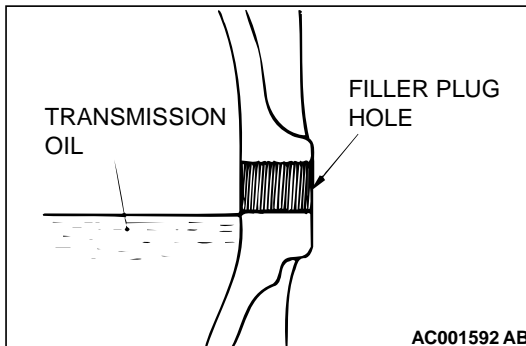
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TOOL	TOOL NUMBER AND NAME	SUPERSESSON	APPLICATION
 MB991453	MB991453 Engine hanger	-	Supporting the engine assembly during removal and installation of the transaxle
 MZ203827	GENERAL SERVICE TOOL MZ203827 Engine lifter	General service tool	
 MB990635	MB991113 Steering linkage puller	MB990635	Tie rod end and lower arm disconnection

ON-VEHICLE SERVICE

TRANSAXLE OIL LEVEL CHECK

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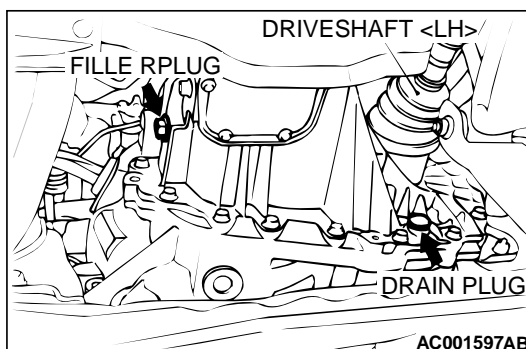


1. Remove the filler plug.
2. Check that the oil level is up to the lower edge of the filler plug hole.
3. Check that the oil is not noticeably dirty, and that it has a suitable viscosity.
4. Tighten the filler plug to the specified torque.

Tightening torque: 32 ± 2 N·m (24 ± 1 ft·lb)

TRANSAXLE OIL REPLACEMENT

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1. Remove the filler plug.
2. Remove the drain plug and drain the oil.
3. Tighten the drain plug to the specified torque.
4. Fill with gear oil SAE 75W – 90W or 75W – 85W conforming to API classification GL-4 till the level comes to the lower portion of filler plug hole.

Quantity:

<F5M42> 2.2 dm³ (2.3 quarts)

<F5M51> 2.8 dm³ (3.0 quarts)

5. Tighten the filler plug to the specified torque.

Tightening torque: 32 ± 2 N·m (24 ± 1 ft·lb)

TRANSAXLE CONTROL

REMOVAL AND INSTALLATION

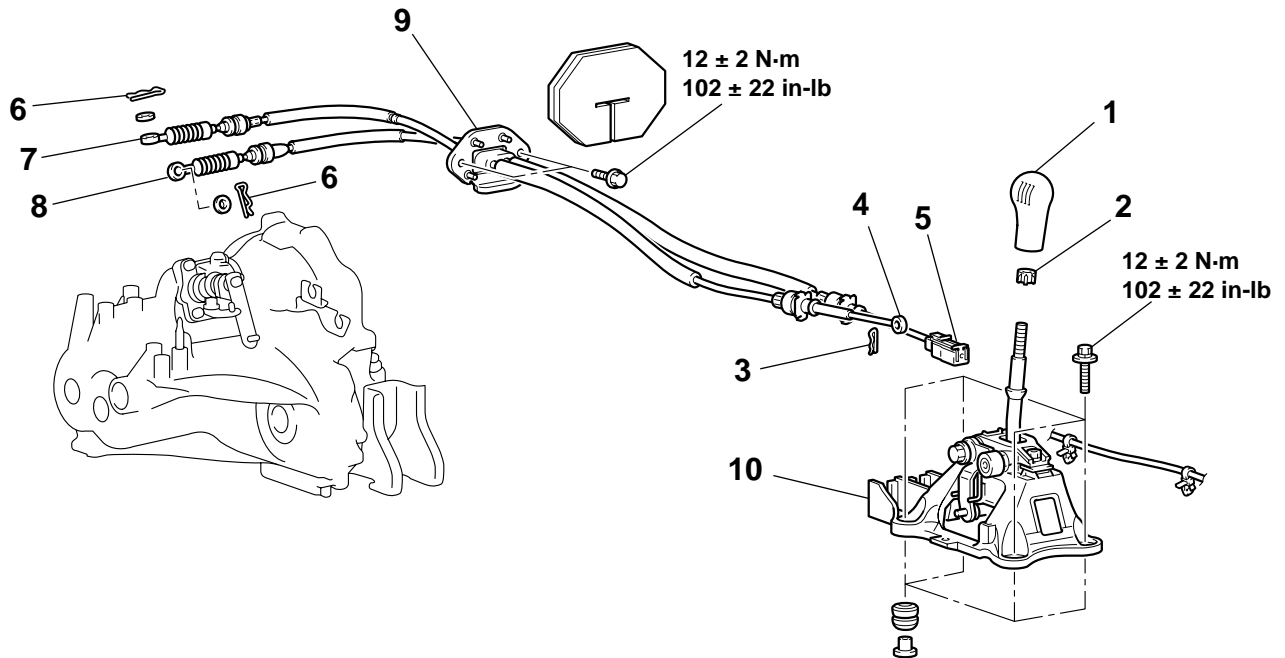
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WARNING

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

Pre-removal and Post-installation Operation

- Air Cleaner Assembly Removal and Installation (Refer to GROUP 15, Air Cleaner P.15-5.)
- Battery and Battery Tray Removal and Installation. (Refer to GROUP 54A, Battery P.54A-8.)



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SHIFT CABLE AND SELECT CABLE ASSEMBLY REMOVAL STEPS

- >>B<< 1. SHIFT KNOB
- >>B<< 2. SLEEVE
 - FLOOR CONSOLE BOX (REFER TO GROUP 52A, FLOOR CONSOLE P.52A-9.)
- 3. SNAP PIN
- 4. SELECT CABLE CONNECTION (SHIFT LEVER SIDE)
- <<A>> >>A<< 5. SHIFT CABLE CONNECTION (SHIFT LEVER SIDE)
- 6. SNAP PIN
- >>C<< 7. SELECT CABLE CONNECTION (TRANSAXLE SIDE)
- >>C<< 8. SHIFT CABLE CONNECTION (TRANSAXLE SIDE)

SHIFT CABLE AND SELECT CABLE ASSEMBLY REMOVAL STEPS (Continued)

- HEATER/COOLER UNIT (REFER TO GROUP 55, HEATER/COOLER UNIT, HEATER CORE AND EVAPORATOR P.55-30.)
 - >>C<< 9. SHIFT CABLE AND SELECT CABLE ASSEMBLY
- SHIFT LEVER ASSEMBLY REMOVAL STEPS**
- >>B<< 1. SHIFT KNOB
 - >>B<< 2. SLEEVE
 - FLOOR CONSOLE BOX (REFER TO GROUP 52A, FLOOR CONSOLE P.52A-9.)
 - 3. SNAP PIN
 - 4. SELECT CABLE CONNECTION (SHIFT LEVER SIDE)

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**SHIFT LEVER ASSEMBLY
REMOVAL STEPS (Continued)**

- <<A>> >>A<< 5. SHIFT CABLE CONNECTION
(SHIFT LEVER SIDE)
10. SHIFT LEVER ASSEMBLY

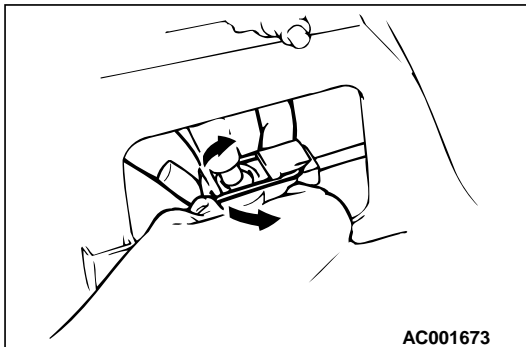
REMOVAL SERVICE POINT

**<<A>> SHIFT CABLE CONNECTION (SHIFT LEVER SIDE)
REMOVAL**

⚠ CAUTION

Be careful not to disengage the clip from the shift cable or deform it.

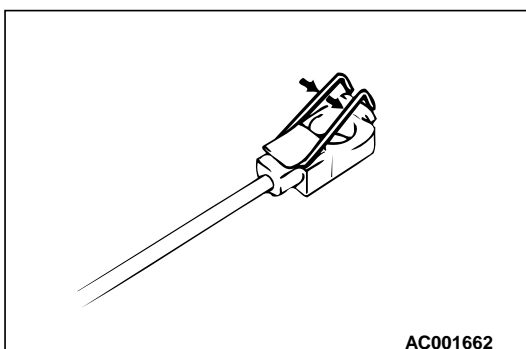
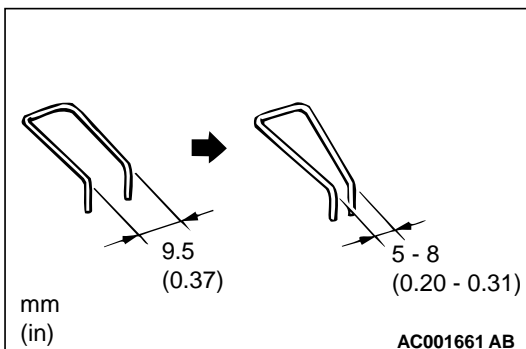
Expand the clip at the shift cable end toward the arrow direction, and remove the cable from the shift lever by pushing the shift cable down.



INSTALLATION SERVICE POINTS

**>>A<< SHIFT CABLE CONNECTION (SHIFT LEVER SIDE)
INSTALLATION**

1. Make sure that there is no excessive play at the shift cable end clip. If there is an excessive play or the clip is disengaged from the shift cable end, check the clip opening gap. If the gap is more than 9.5 mm (0.37 inch), deform the clip until the gap reaches 5 to 8 mm (0.20 to 0.31 inch).



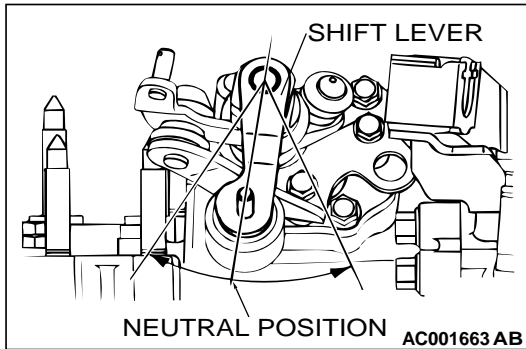
2. Engage the clip with the shift cable hook securely, and push the clip with your thumbs until it clicks in place.
3. Install the shift cable to the shift lever.

>>B<< SLEEVE/SHIFT KNOB INSTALLATION

1. Place the sleeve over the shift lever end.
2. Place the shift knob over the sleeve.
3. Screw in the shift knob. When the shift knob is hard to turn (approximately seven turns), screw in the shift knob four additional turns until its shift pattern faces forward.

**>>C<< SHIFT CABLE AND SELECT CABLE ASSEMBLY/
SHIFT CABLE CONNECTION/SELECT CABLE
CONNECTION**

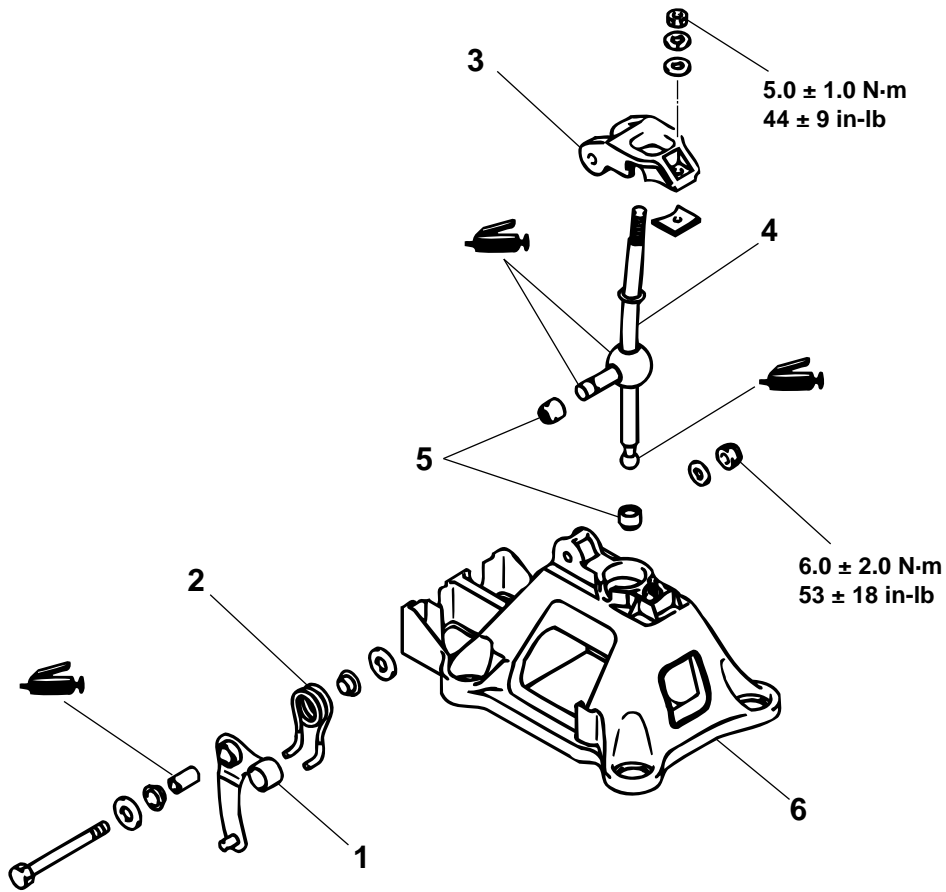
1. Set the transaxle side shift lever and the passenger compartment side shift lever to the neutral position.
2. For the transaxle side, the white and yellow paint marks on the shift and select cable ends should face the snap pins.
3. Move the shift lever to all positions and check that the operation is smooth.



SHIFT LEVER ASSEMBLY

DISASSEMBLY AND ASSEMBLY

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DISASSEMBLY STEPS

1. SELECT LEVER
2. RETURN SPRING
3. RETAINER

DISASSEMBLY STEPS

4. SHIFT LEVER
5. SHIFT LEVER BUSHING
6. LEVER BASE

TRANSAXLE ASSEMBLY

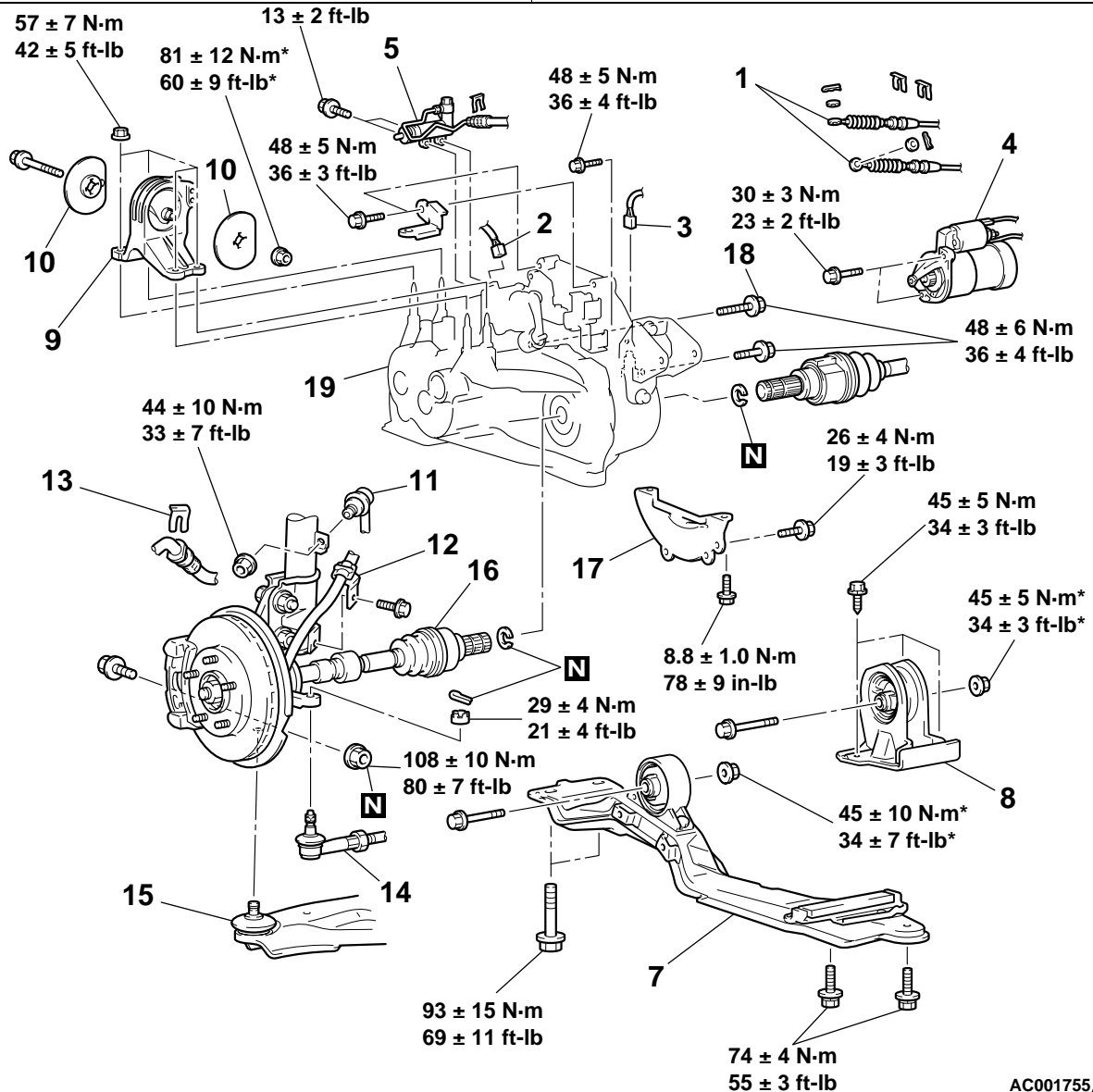
REMOVAL AND INSTALLATION <2.4L ENGINE>

M1221002700103

CAUTION

*: Indicates parts which should be temporarily tightened, and then fully tightened after placing the vehicle fully on the ground and loading the full weight of the engine on the vehicle body.

Pre-removal Operation	Post-installation Operation
<ul style="list-style-type: none"> • Transaxle Oil Draining (Refer to P.22A-9.) • Battery and Battery Tray Removal (Refer to GROUP 54A, Battery P.54A-8.) • Air Cleaner Assembly Removal (Refer to GROUP 15, Air Cleaner P.15-5.) 	<ul style="list-style-type: none"> • Air Cleaner Assembly Installation (Refer to GROUP 15, Air Cleaner P.15-5.) • Battery and Battery Tray Installation (Refer to GROUP 54A, Battery P.54A-8.) • Transaxle Oil Refilling (Refer to P.22A-9.) • 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 33, On-vehicle Service – Wheel Alignment Check and Adjustment P.33A-6.)



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REMOVAL STEPS

1. SHIFT CABLE AND SELECT CABLE CONNECTION (REFER TO P.22A-10.)
2. BACKUP LIGHT SWITCH CONNECTOR <<E>>
3. VEHICLE SPEED SENSOR CONNECTOR <<E>> <<G>>
- <<A>> 4. STARTER MOTOR
- <> 5. CLUTCH RELEASE CYLINDER CONNECTION
6. TRANSAXLE ASSEMBLY UPPER PART COUPLING BOLTS <<H>>
- <<C>> 7. CENTERMEMBER ASSEMBLY
- <<D>> 8. REAR ROLL STOPPER
- >>C<< 9. TRANSAXLE MOUNT BRACKET
10. TRANSAXLE MOUNT STOPPER
11. STABILIZER LINK CONNECTION <STRUT SIDE>

REMOVAL STEPS (Continued)

12. WHEEL SPEED SENSOR CABLE CONNECTION <VEHICLES WITH ABS>
13. BRAKE HOSE CLAMP
14. TIE ROD END CONNECTION
15. LOWER ARM CONNECTION
16. DRIVESHAFT CONNECTION
17. BELL HOUSING COVER
18. TRANSAXLE ASSEMBLY LOWER PART COUPLING BOLTS
19. TRANSAXLE ASSEMBLY

Required Special Tools:

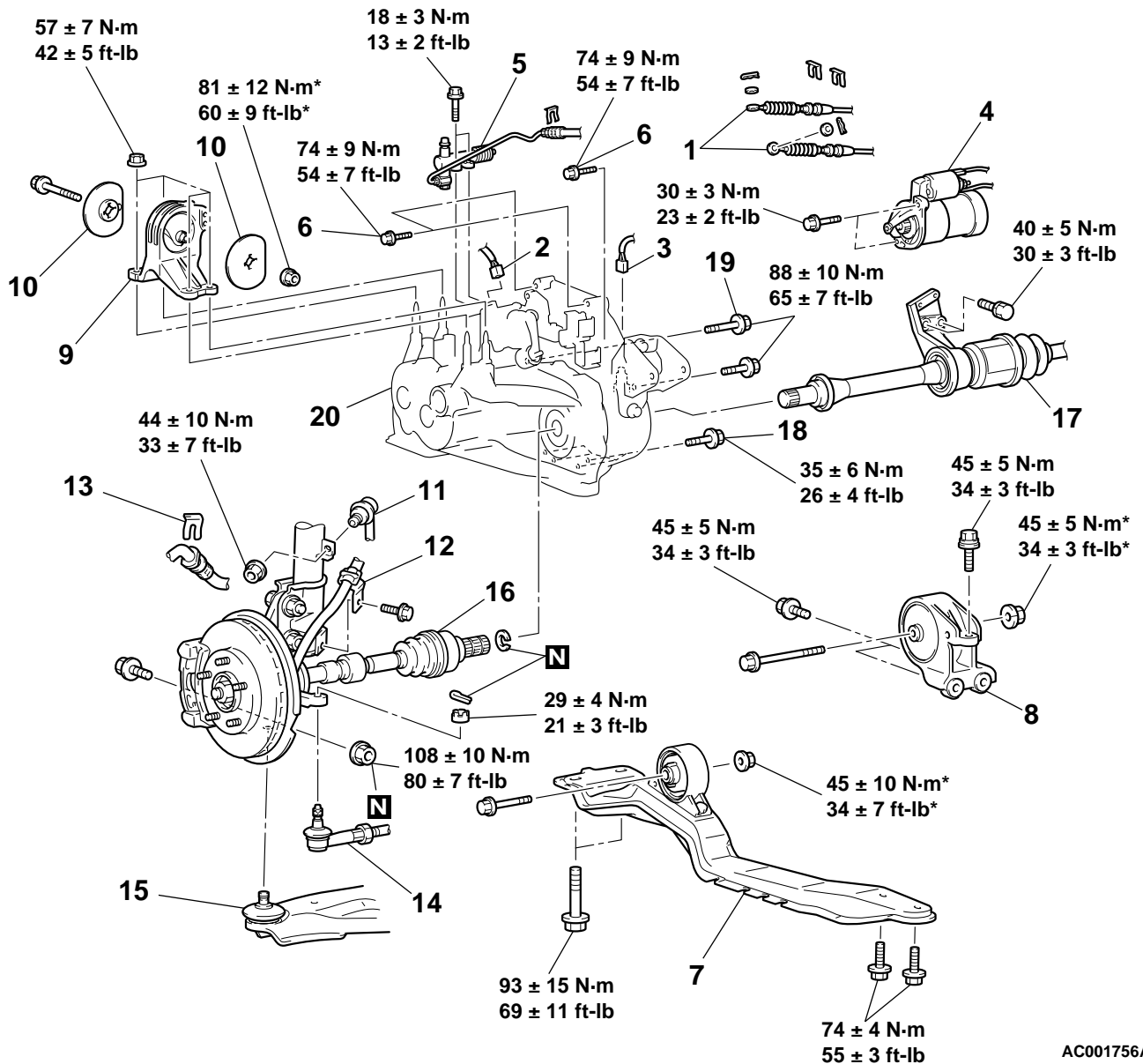
- MB991113: Steering Linkage Puller
- MB991453: Engine Hanger Assembly
- MZ203827: Engine Lifter

<3.0L ENGINE>

CAUTION

*: Indicates parts which should be temporarily tightened, and then fully tightened after placing the vehicle fully on the ground and loading the full weight of the engine on the vehicle body.

Pre-removal Operation	Post-installation Operation
<ul style="list-style-type: none"> • Transaxle Oil Draining (Refer to P.22A-9.) • Battery and Battery Tray Removal (Refer to GROUP 54A, Battery P.54A-8.) • Air Cleaner Assembly Removal (Refer to GROUP 15, Air Cleaner P.15-5.) • Front Exhaust Pipe Removal (Refer to GROUP 15, Exhaust Pipe P.15-19.) 	<ul style="list-style-type: none"> • Air Cleaner Assembly Installation (Refer to GROUP 15, Air Cleaner P.15-5.) • Battery and Battery Tray Installation (Refer to GROUP 54A, Battery P.54A-8.) • Transaxle Oil Refilling (Refer to P.22A-9.) • 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 – Wheel Alignment Check and Adjustment P.33A-6.) • Front Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe P.15-21.)



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REMOVAL STEPS

REMOVAL STEPS (Continued)

- | | | | | |
|-------|---|-------------|---|--|
| | 1. SHIFT CABLE AND SELECT CABLE CONNECTION (REFER TO P.22A-10.) | <<E>> | | 14. TIE ROD END CONNECTION |
| | 2. BACKUP LIGHT SWITCH CONNECTOR | <<E>> | | 15. LOWER ARM CONNECTION |
| | 3. VEHICLE SPEED SENSOR CONNECTOR | <<F>> >>B<< | • | CLUTCH RELEASE BEARING ENGAGEMENT |
| <<A>> | 4. STARTER MOTOR | <<G>> | | 16. DRIVESHAFT CONNECTION |
| <> | 5. CLUTCH RELEASE CYLINDER CONNECTION | <<G>> | | 17. DRIVESHAFT AND INNER SHAFT CONNECTION |
| | 6. TRANSAXLE ASSEMBLY UPPER PART COUPLING BOLTS | | | 18. UPPER OIL PAN CONNECTING BOLT |
| <<C>> | 7. CENTERMEMBER ASSEMBLY | <<H>> >>A<< | | 19. TRANSAXLE ASSEMBLY LOWER PART COUPLING BOLTS |
| <<D>> | 8. REAR ROLL STOPPER | | | 20. TRANSAXLE ASSEMBLY |
| | 9. TRANSAXLE MOUNT BRACKET | | | |
| | 10. TRANSAXLE MOUNT STOPPER | | | |
| | 11. STABILIZER LINK CONNECTION <STRUT SIDE> | | | |
| | 12. WHEEL SPEED SENSOR CABLE CONNECTION <VEHICLES WITH ABS> | | | |
| | 13. BRAKE HOSE CLAMP | | | |

Required Special Tools:

- MB991113: Steering Linkage Puller
- MB991453: Engine Hanger Assembly
- MZ203827: Engine Lifter

REMOVAL SERVICE POINTS

<<A>> STARTER MOTOR REMOVAL

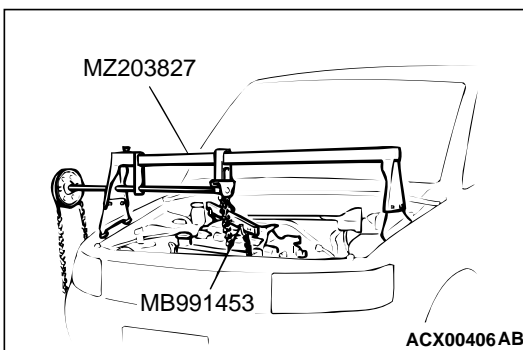
Remove the starter motor with the starter motor harness still connected and secure it inside the engine compartment.

<> CLUTCH RELEASE CYLINDER REMOVAL

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

<<C>> CENTERMEMBER ASSEMBLY REMOVAL

Set the special tools MB991453 and MZ203827 to the vehicle to support the engine assembly.



<<D>> TRANSAXLE MOUNT BRACKET REMOVAL

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

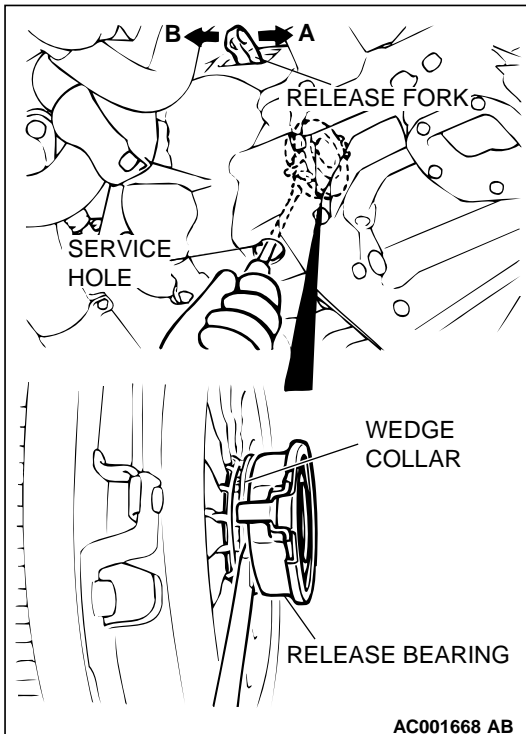
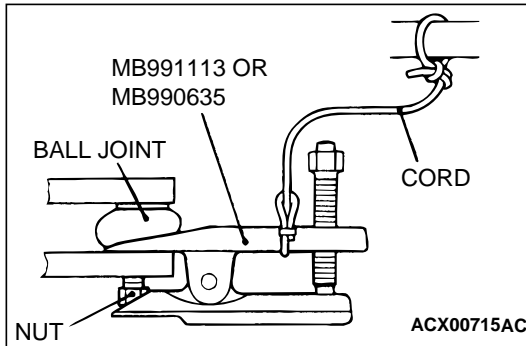
<<E>> TIE ROD END/LOWER ARM BALL JOINT
DISCONNECTION**⚠ CAUTION**

Use special tool MB991113 to loosen the tie rod end mounting nut. Only loosen the nut; do not remove it from the ball joint.

⚠ CAUTION

Support special tool MB991113 with a cord, etc., to prevent it from coming off.

<<F>> CLUTCH RELEASE BEARING DISENGAGEMENT



1. Remove the service hole plug at the clutch housing.
2. Insert a flat-tipped screwdriver into space between the release bearing and the wedge collar while pushing the release fork to the "A" direction by hand slightly.

⚠ CAUTION

Do not insert the screwdriver before pushing the release fork to the "A" direction.

3. Disengage the wedge collar from the release bearing by using the flat-tipped screwdriver to pry gently (twisting the screwdriver handle 90 degree).

NOTE: If the release bearing is disengaged, the release fork will move fully to the

⚠ CAUTION

If the screwdriver cannot be twisted easily (the release bearing cannot be disengaged), remove the screwdriver, and push the release fork to the "A" direction two or three times to try again. If the clutch release bearing is pried forcibly, it will be damaged.

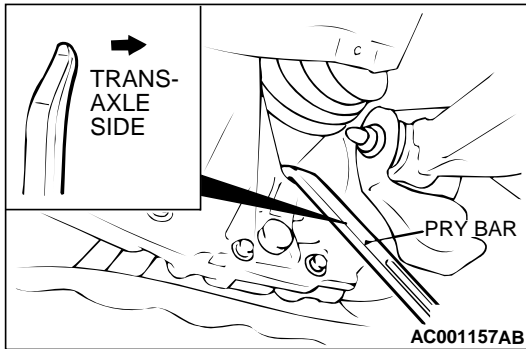
<<G>> DRIVESHAFT/DRIVESHAFT AND INNER SHAFT
DISCONNECTION

⚠ CAUTION

- Do not pull on the drive shaft; doing so will damage the TJ; be sure to use a pry bar.
- Do not insert a pry bar so deep as to damage the oil seal.
- Do not damage the transaxle oil seal with the spline of the drive shaft.

<2.4L ENGINE, 3.0L ENGINE – LH>

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

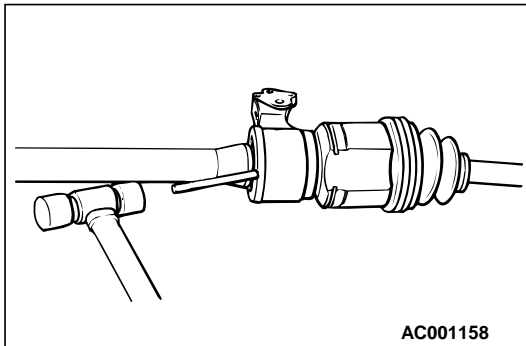


⚠ CAUTION

Do not damage the transaxle oil seal with the spline of the inner shaft.

<3.0L ENGINE – RH>

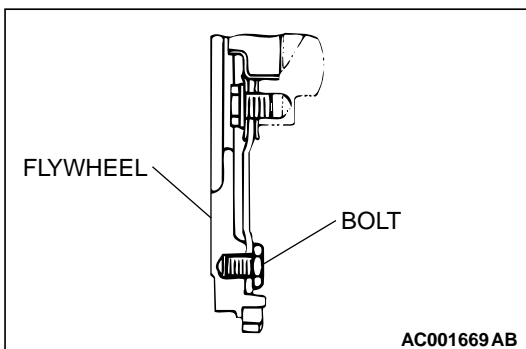
2. If the inner shaft and transaxle are tightly joined, tap the center bearing bracket lightly with a plastic hammer, etc. to remove the drive shaft and inner shaft from the transaxle.
3. Cover the transaxle case with a shop towel to prevent foreign material from entering it.



<<H>> TRANSAXLE ASSEMBLY REMOVAL

⚠ CAUTION

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

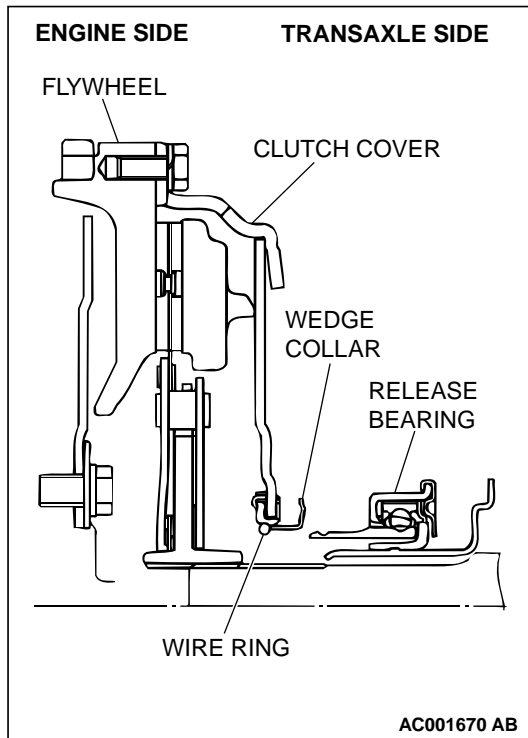


INSTALLATION SERVICE POINTS

>>A<< TRANSAXLE ASSEMBLY INSTALLATION

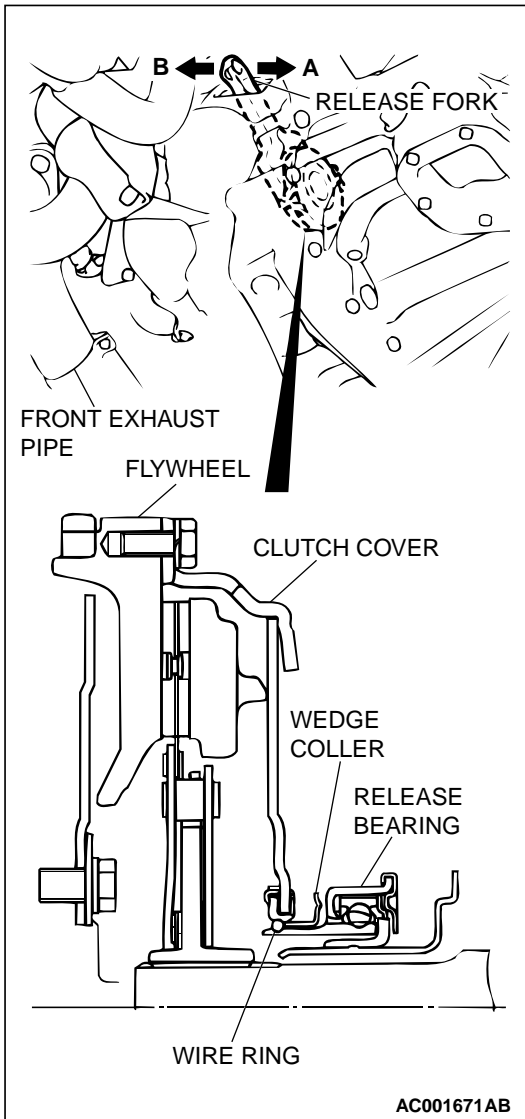
⚠ CAUTION

On the pull-type clutch, do not roll the transaxle assembly when installing it to the engine. If the transaxle assembly is rolled, the wedge collar and the wire ring will be deformed, causing a clutch malfunction due to improper engagement of the wedge collar and the wire ring.



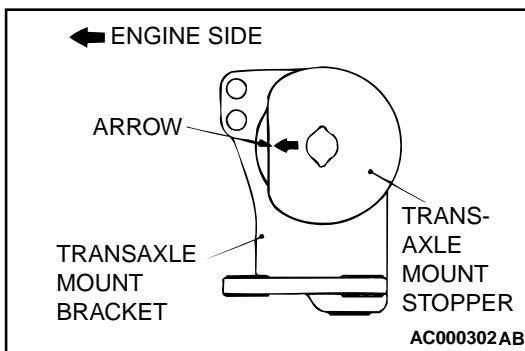
>>B<< CLUTCH RELEASE BEARING CONNECTION

1. Move the release fork to the "A" direction, and engage the release bearing with the wedge collar.
2. When the release fork is moved to the "B" direction, the release fork should drag.



>>C<< TRANSAXLE MOUNT STOPPER INSTALLATION

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



SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

M1221006600056

ITEM		SPECIFICATION
Transaxle control		
Lever base bracket attaching bolt		12 ± 2 N·m (102 ± 22 in-lb)
M/T cable attaching bolt		12 ± 2 N·m (102 ± 22 in-lb)
Retainer nut		5.0 ± 1.0 N·m (44 ± 9 in-lb)
Select lever attaching bolt		6.0 ± 2.0 N·m (53 ± 2.0 in-lb)
Transaxle assembly		
Bell housing cover (to engine)		8.8 ± 1.0 N·m (78 ± 9 in-lb)
Bell housing cover (to transaxle)		26 ± 4 N·m (19 ± 3 ft-lb)
Center bearing bolt		40 ± 5 N·m (30 ± 3 ft-lb)
Clutch release cylinder		18 ± 3 N·m (13 ± 2 ft-lb)
Front center member attaching bolt		93 ± 15 N·m (69 ± 11 ft-lb)
Front roll stopper bracket nut		44 ± 10 N·m (33 ± 7 ft-lb)
Lower arm nut		108 ± 10 N·m (80 ± 7 ft-lb)
Rear center member attaching bolt		74 ± 4 N·m (55 ± 3 ft-lb)
Rear roll stopper bracket attaching bolt		45 ± 5 N·m (33 ± 3 ft-lb)
Rear roll stopper bracket nut		45 ± 10 N·m (33 ± 7 ft-lb)
Stabilizer link nut		45 ± 10 N·m (33 ± 7 ft-lb)
Starter motor		30 ± 3 N·m (23 ± 2 ft-lb)
Tie rod end nut		29 ± 4 N·m (21 ± 4 ft-lb)
Transaxle assembly lower part coupling bolt	2.4L ENGINE	48 ± 5 N·m (36 ± 3 ft-lb)
	3.0L ENGINE	71 ± 12 N·m (52 ± 9 ft-lb)
Transaxle assembly upper part coupling bolt	2.4L ENGINE	48 ± 5 N·m (36 ± 3 ft-lb)
Transaxle assembly upper part coupling bolt (bolt, flange)	3.0L ENGINE	71 ± 12 N·m (52 ± 9 ft-lb)
Transaxle assembly upper part coupling bolt (bolt, washer assembly)	3.0L ENGINE	88 ± 10 N·m (65 ± 7 ft-lb)
Transaxle mount bracket attaching nut		57 ± 7 N·m (42 ± 5 ft-lb)
Transaxle mount stopper attaching nut		81 ± 12 N·m (60 ± 9 ft-lb)
Transmission oil drain plug		32 ± 2 N·m (24 ± 1 ft-lb)
Transmission oil filler plug		32 ± 2 N·m (24 ± 1 ft-lb)