GROUP 21A

CLUTCH

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GENERAL INFORMATION

M1211000100223

The clutch is a dry single-disc, diaphragm type; hydraulic pressure is used for the clutch control. The clutch shares a brake fluid reservoir with the brake system.

SERVICE SPECIFICATIONS

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Item		Standard value
Clutch pedal height mm	LH drive vehicles	203.8 ± 2
Clutch pedal height mm	RH drive vehicles	198.7 ± 2
Clutch pedal clevis pin play mm		1 – 3
Clutch pedal free play mm		4 – 13
Distance between the clutch pedal and the clutch pedal stopper when the clutch pedal is released mm	LH drive vehicles	114.3 or more
Distance between the clutch pedal and the toeboard when the clutch pedal is released mm	RH drive vehicles	100 or more

LUBRICANTS

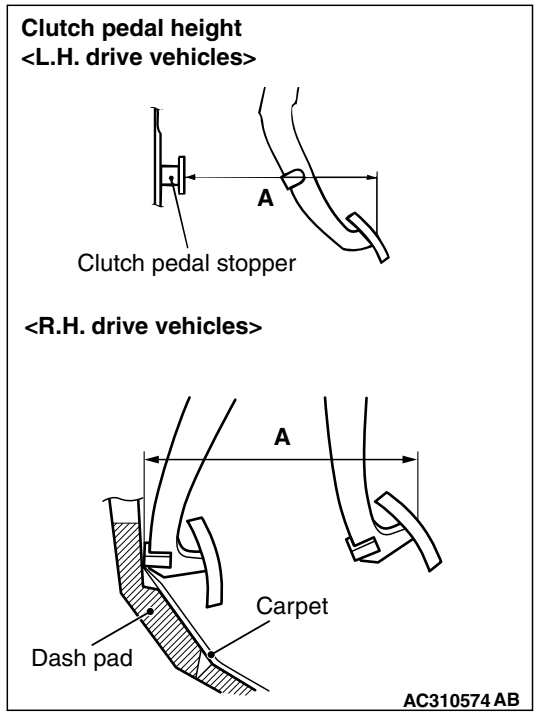
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Item	Specified lubricant	Quantity
Clutch fluid	Brake Fluid DOT 3 or DOT 4	As required
Pushrod assembly	Rubber grease	As required
Boot	Rubber grease	As required
Release cylinder push rod	MITSUBISHI genuine grease Part No.0101011	As required

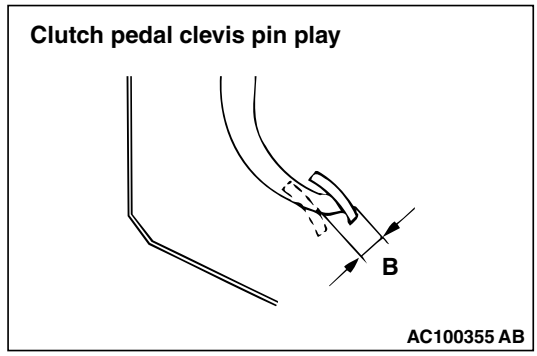
ON-VEHICLE SERVICE

CLUTCH PEDAL CHECK AND ADJUSTMENT

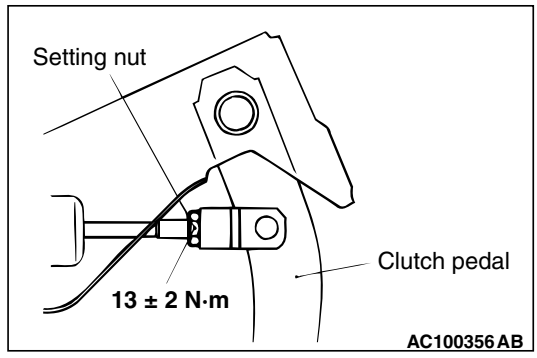
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1. Measure the clutch pedal height.
   Standard value (A): 203.8 ± 2 mm <LH drive vehicles>, 198.7 ± 2 mm <RH drive vehicles>

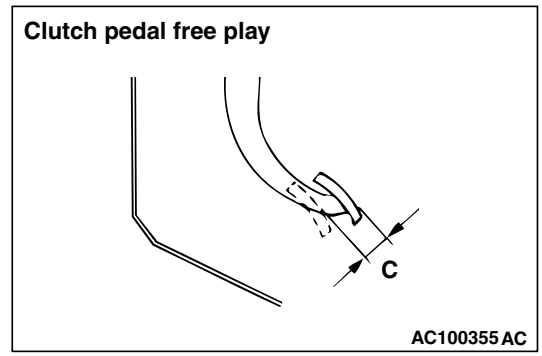


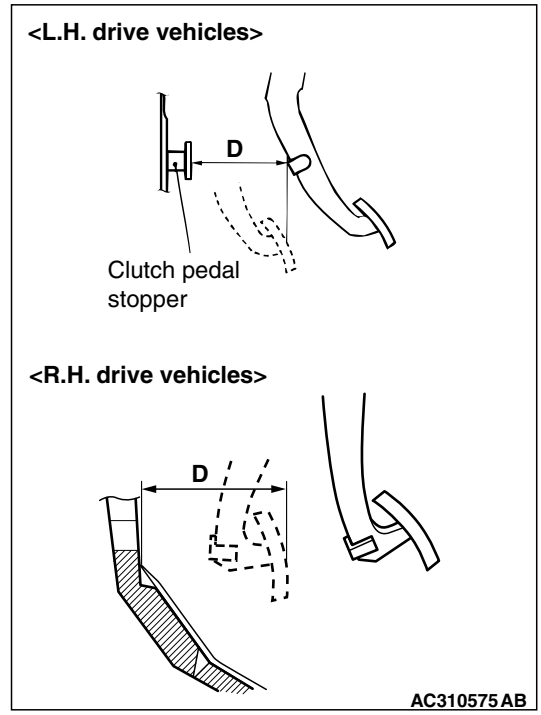
2. Measure the clutch pedal clevis pin play.
   Standard value (B): 1 – 3 mm



⚠ CAUTION
Do not push in the master cylinder pushrod at this time, otherwise the clutch will not operate properly.

3. If the clutch pedal height and clutch pedal clevis pin play are not within the standard value, loosen the setting nut to adjust the clutch pedal height and clevis pin play to the standard value.





4. After completing the adjustments, confirm that the clutch pedal free play (measured at the face of the pedal pad) and the distance between the clutch pedal (the face of the pedal pad) and the clutch pedal stopper when the clutch is disengaged are within the standard value ranges.
   Standard value (C): 4 – 13 mm
   Standard value (D): 114.3 mm or more <LH drive vehicles>, 100 mm or more <RH drive vehicles>

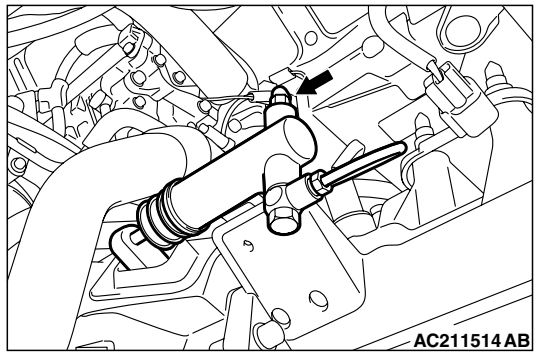
5. If the clutch pedal free play and the distance between the clutch pedal and the clutch pedal stopper or toeboard when the clutch is disengaged do not agree with the standard values, it is probably the result of either air in the hydraulic system or a faulty master cylinder, release cylinder or clutch. Bleed the air, or disassemble and inspect the master cylinder, release cylinder or clutch.

CLUTCH BLEEDING

M1211001400216

⚠ CAUTION
Use the specified brake fluid. Do not mix brake fluids.

Specified fluid: Brake fluid DOT 3 or DOT 4



1. Connect a hose with a bottle to the bleeder screw.
2. Open the bleed nipple.

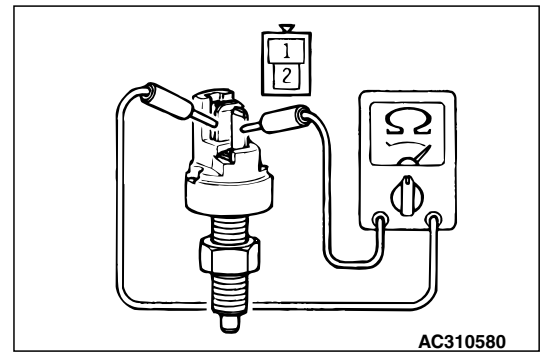
⚠ CAUTION
For bleeding, never "pump" the clutch pedal. This may cause an oil leak at the clutch cylinder.

3. Depress the clutch pedal slowly. Open the bleeder screw to let air and brake fluid out. Close the bleeder screw. Release the clutch pedal. Repeat until only brake fluid and no air comes out.
4. Check that the brake fluid reservoir level stays between "MAX" and "MIN" marks throughout the clutch bleeding process.

CLUTCH SWITCH CHECK AND ADJUSTMENT

M1211001100185

1. Adjust the clutch pedal.



2. Connect an ohmmeter to the clutch switch connector, and then check for continuity when the clutch pedal is fully depressed and when it is released outward.

Tester connection	Pedal position	Specified condition
1-2	Fully depressed	Open circuit
	Released	Less than 2 ohms

3. If the continuity is incorrect, replace the clutch switch.

CLUTCH PEDAL

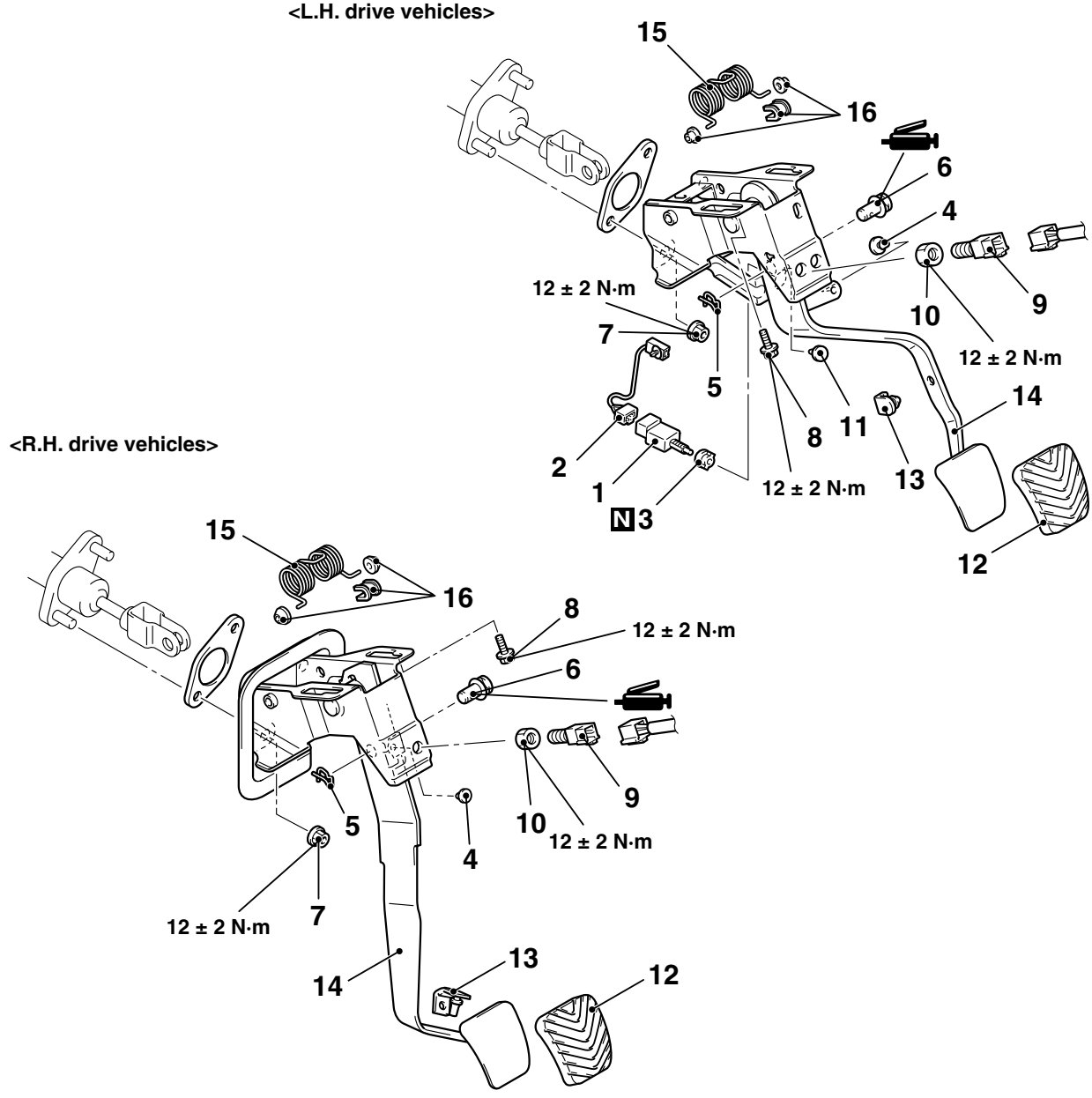
REMOVAL AND INSTALLATION

M1211001600210

Post-installation Operation
Clutch Pedal Adjustment (Refer to P.21A-3).

<L.H. drive vehicles>

<R.H. drive vehicles>



AC310323 AB

Removal steps
- Instrument panel under cover (Refer to GROUP 52A, Instrument panel P.52A-2).

1. Clutch pedal position switch
2. Clutch pedal position switch harness
3. Clip
4. Stopper
5. Snap pin

Removal steps (Continued)

6. Clevis pin
7. Clutch master cylinder mounting nut
8. Clutch pedal assembly mounting bolt

>>A<< 9. Clutch switch

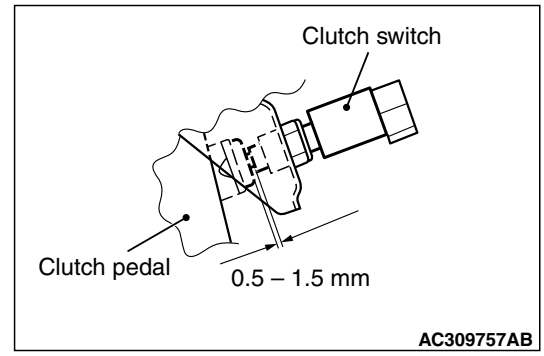
10. Nut
11. Stopper
12. Pedal pad

Removal steps (Continued)

13. Pedal stopper
14. Clutch pedal assembly
15. Turn over spring
16. Bushing

INSTALLATION SERVICE POINT

>>A<< CLUTCH SWITCH INSTALLATION



Install the clutch switch at the specified dimension when the clutch pedal is released.

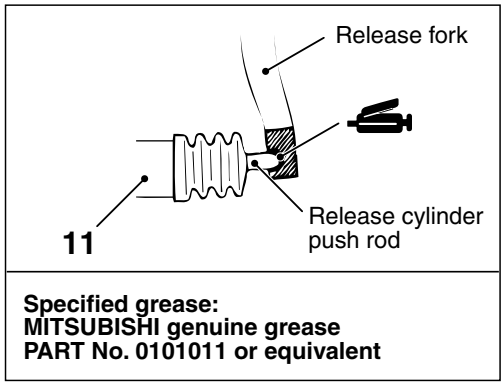
CLUTCH CONTROL

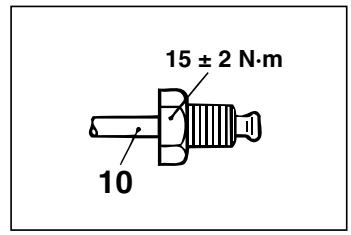
REMOVAL AND INSTALLATION

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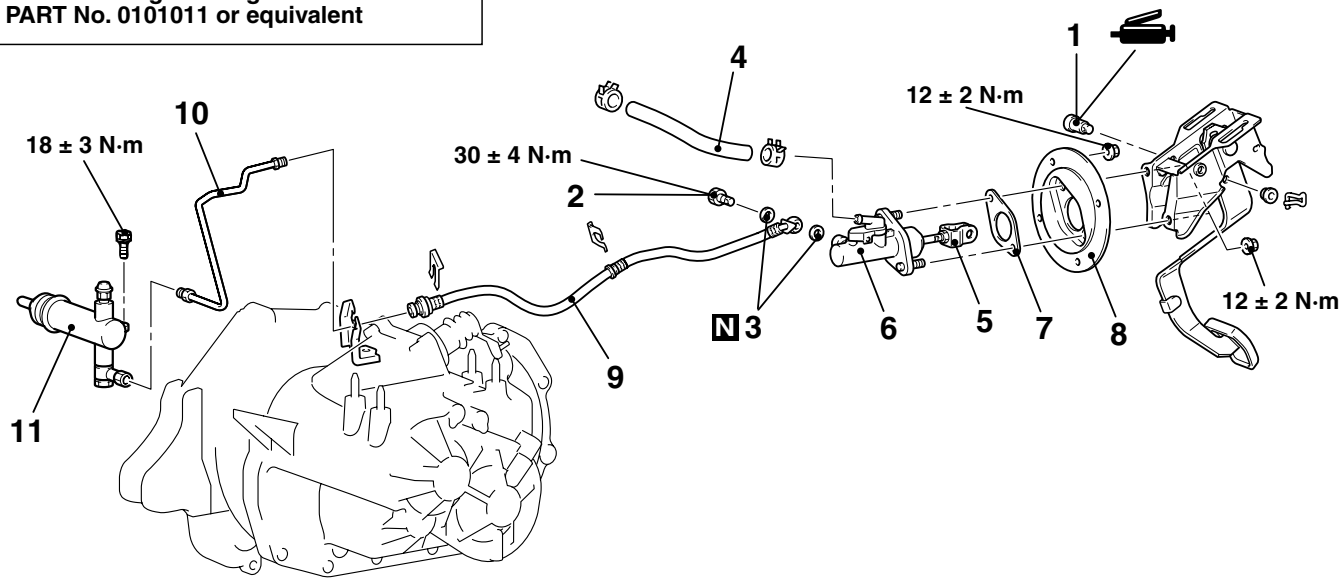
Pre-removal Operation	Post-installation Operation
• Clutch Fluid Draining • Strut Tower Bar Removal (Refer to GROUP42, Strut Tower Bar P.42-9).	• Strut Tower Bar Removal (Refer to GROUP42, Strut Tower Bar P.42-9). • Clutch Fluid Supplying • Clutch Line Bleeding (Refer to P.21A-4). • Clutch Pedal Adjustment (Refer to P.21A-3).

<LH drive vehicles>





Specified grease:
MITSUBISHI genuine grease
PART No. 0101011 or equivalent



AC211515 AD

Clutch master cylinder removal steps

1. Clevis pin assembly
2. Eye bolt
3. Gasket
4. Reservoir hose
5. Clevis pin and pushrod assembly connecting part
6. Clutch master cylinder
7. Sealer
8. Retainer plate

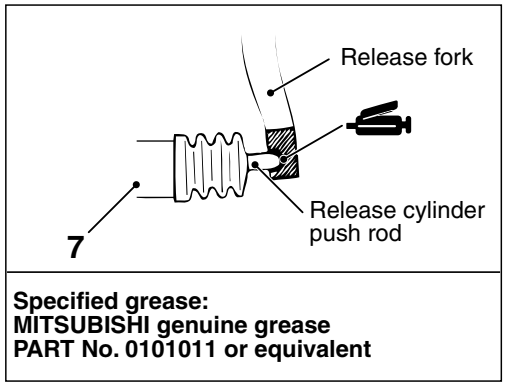
Clutch release cylinder removal steps

10. Clutch pipe
11. Clutch release cylinder

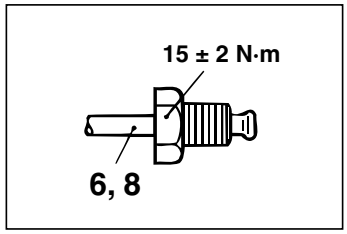
Clutch line removal steps

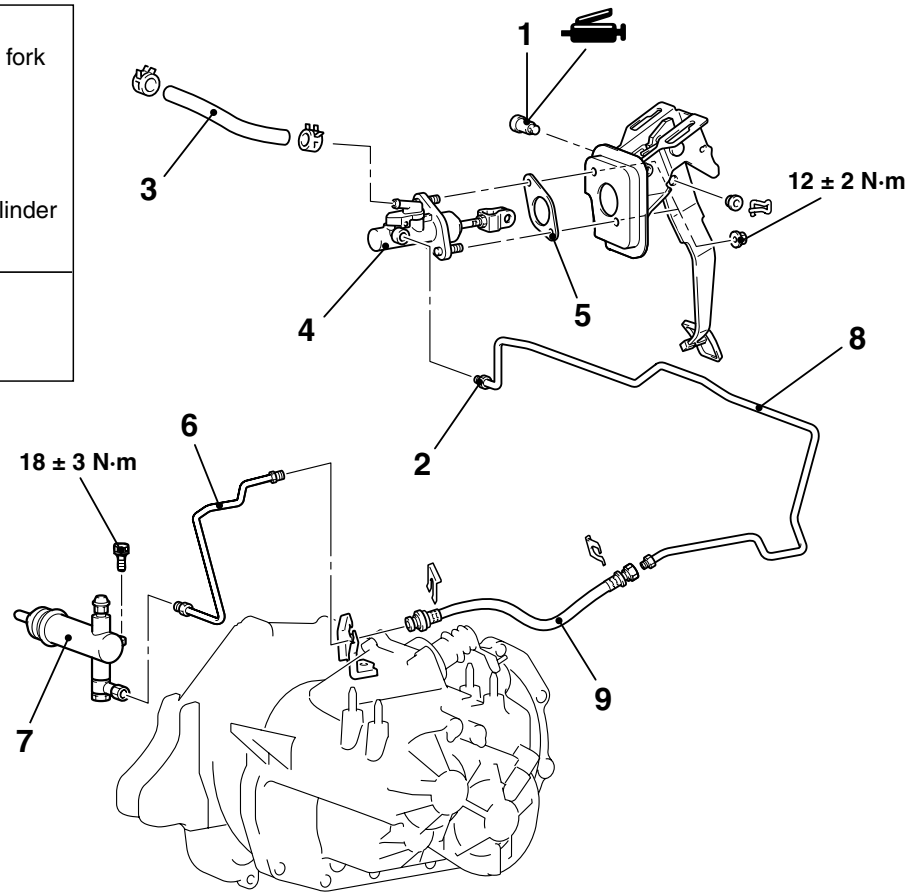
9. Clutch hose
10. Clutch pipe

<RH drive vehicles>



Specified grease:
MITSUBISHI genuine grease
PART No. 0101011 or equivalent





AC310343 AB

Clutch master cylinder removal steps

1. Clevis pin assembly
2. Clutch pipe connection
3. Reservoir hose
4. Clutch master cylinder
5. Sealer

Clutch release cylinder removal steps

6. Clutch pipe
7. Clutch release cylinder

Clutch line removal steps

8. Clutch pipe
9. Clutch hose

INSPECTION

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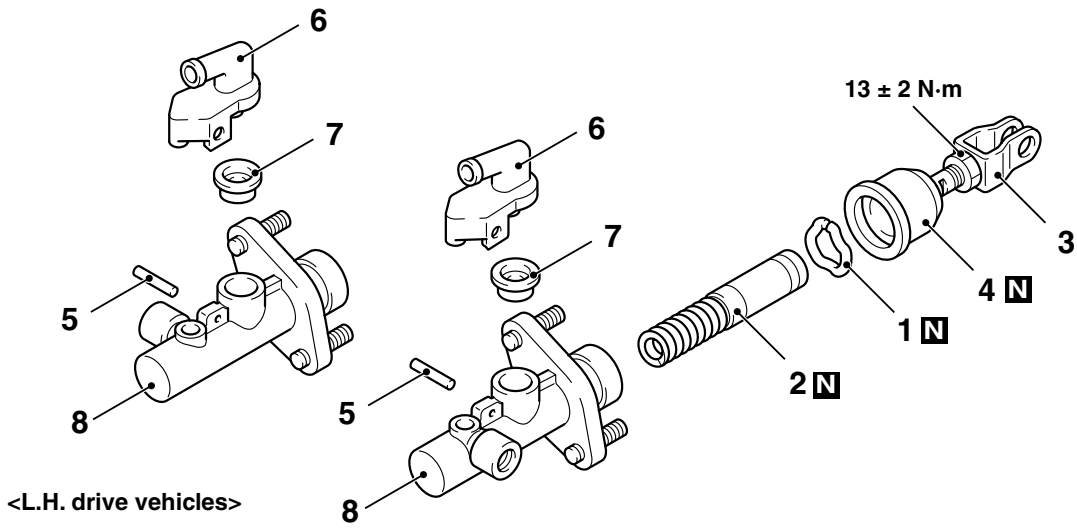
- Check the master cylinder or clutch hose for fluid leakage.
- Check the clutch hose or tube for cracks or clogging.

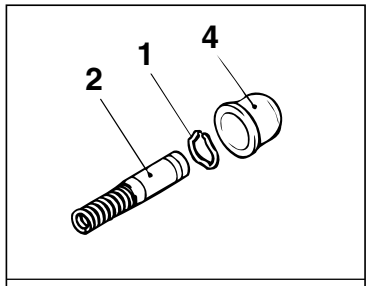
DISASSEMBLY AND REASSEMBLY

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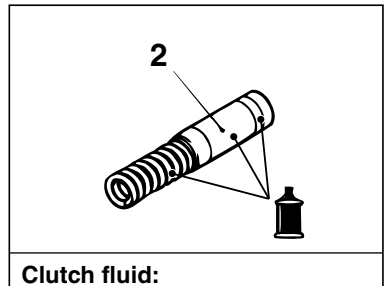
CLUTCH MASTER CYLINDER

⚠ CAUTION
Do not disassemble the piston assembly.

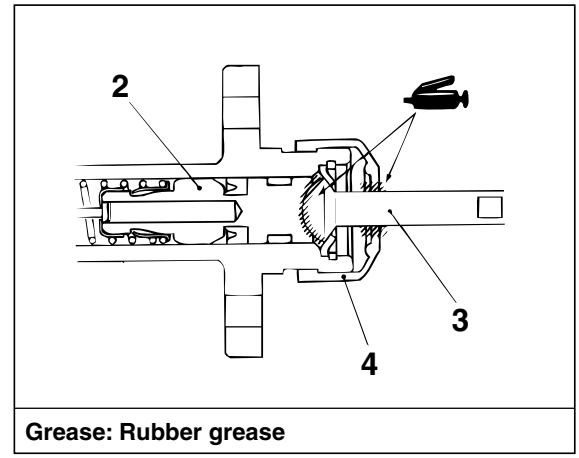




Piston repair kit



Clutch fluid:
Brake fluid DOT3 OR DOT4



Grease: Rubber grease

AC310349 AB

Disassembly steps

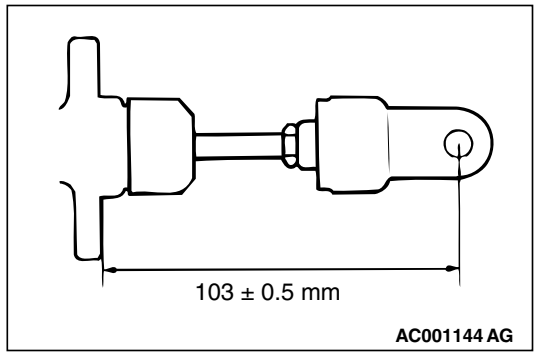
1. Piston stopper ring
2. Piston assembly
>>A<< 3. Pushrod assembly
4. Boot

Disassembly steps (Continued)

5. Spring pin
6. Reservoir tank
7. Seal
8. Master cylinder body

REASSEMBLY SERVICE POINT

>>A<< PUSHROD ASSEMBLY INSTALLATION



Set the length of the pushrod assembly to the dimension shown to make the adjustment of the clutch pedal easier.

INSPECTION

M1211002200163

- Check inside the cylinder body for rust and scars.
- Check the piston for rust and scars.
- Check the pipe connection for clogging.