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## GROUP 21A

# CLUTCH

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**GENERAL INFORMATION**

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.

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**SERVICE SPECIFICATIONS**

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Item	Standard value
Clutch pedal height mm	208.4 ± 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	105 or more

**LUBRICANTS**

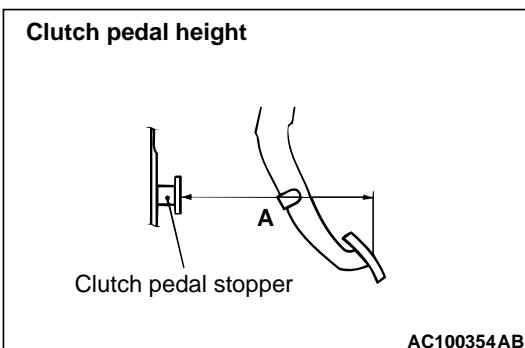
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Item	Specified lubricant	Quantity
Clutch fluid	Brake Fluid DOT 3 or DOT 4	As required
Pushrod assembly	Rubber grease	As required
Boot	Rubber grease	As required
Release cylinder push rod	MITSUBISHI genuine grease Part No.0101011	As required

## ON-VEHICLE SERVICE

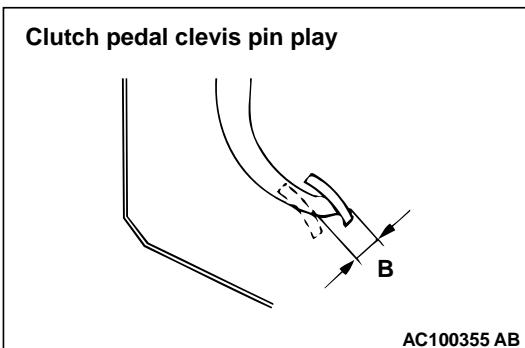
CLUTCH PEDAL CHECK AND  
ADJUSTMENT

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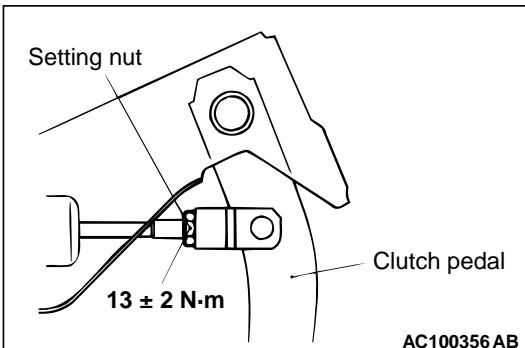
1. Measure the clutch pedal height.

**Standard value (A):  $208.4 \pm 2$  mm**



2. Measure the clutch pedal clevis pin play.

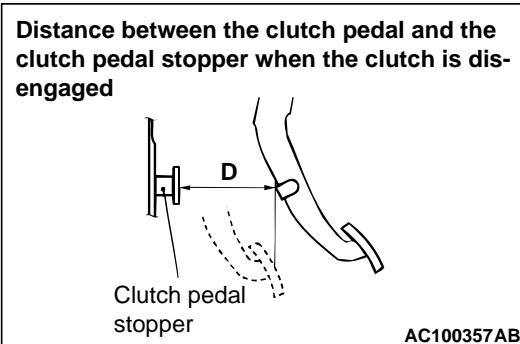
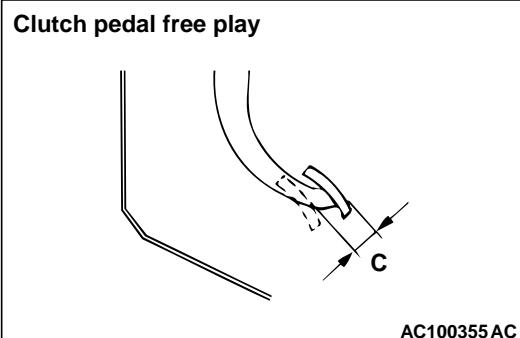
**Standard value (B): 1 – 3 mm**



**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): 105 mm or more**

5. If the clutch pedal free play and the distance between the clutch pedal and the clutch pedal stopper 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

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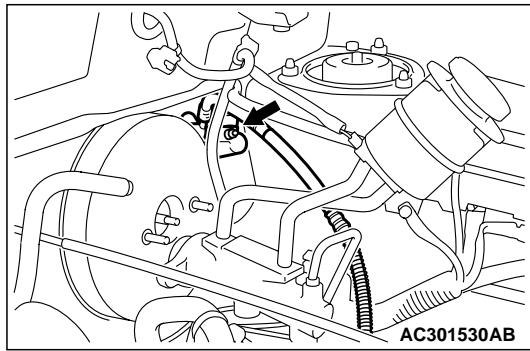
## Clutch master cylinder bleeding

**CAUTION**

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

**Specified fluid: Brake fluid DOT 3 or DOT 4**

1. Disconnect the brake tube clamp and remove the brake master cylinder with the brake tubes connected.
2. Remove the brake fluid reservoir with the hoses connected.



3. Connect a hose with a bottle to the bleeder screw.
4. Open the bleed nipple.
5. 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.

6. Check that the brake fluid reservoir level stays between "MAX" and "MIN" marks throughout the clutch bleeding process.

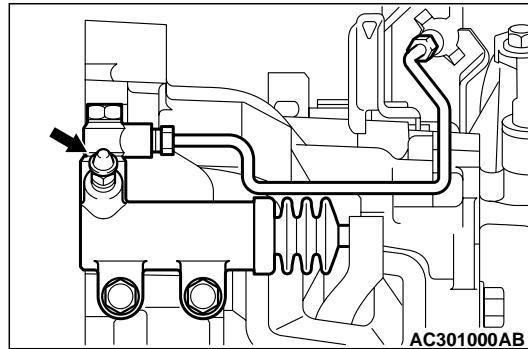
## Clutch release cylinder bleeding

**CAUTION**

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

**Specified fluid: Brake fluid DOT 3 or DOT 4**

1. Remove the under cover.



2. Connect a hose with a bottle to the bleeder screw.
3. Open the bleed nipple.
4. 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.
5. Check that the brake fluid reservoir level stays between "MAX" and "MIN" marks throughout the clutch bleeding process.

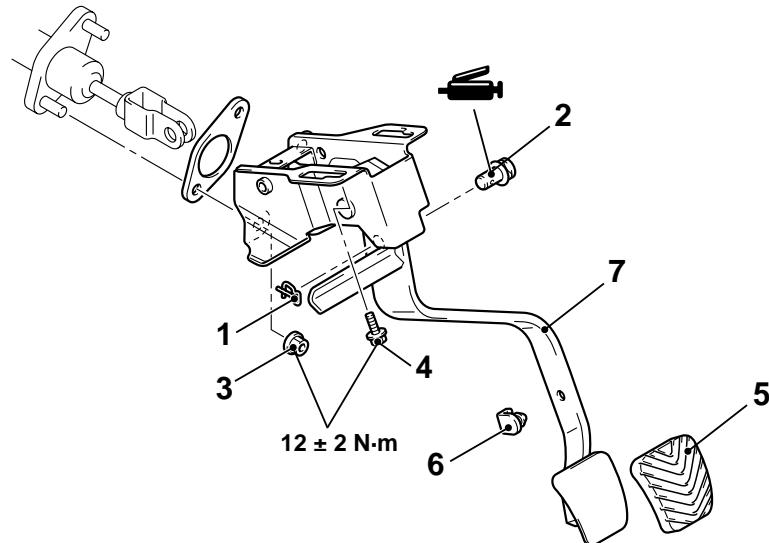
## CLUTCH PEDAL

## REMOVAL AND INSTALLATION

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## Post-installation Operation

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



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## Removal steps

- Instrument panel under cover (Refer to GROUP 52A, Instrument panel P.52A-2).
  1. Snap pin
  2. Clevis pin
  3. Clutch master cylinder mounting nut

## Removal steps (Continued)

4. Clutch pedal assembly mounting bolt
5. Pedal pad
6. Pedal stopper
7. Clutch pedal assembly

## CLUTCH CONTROL

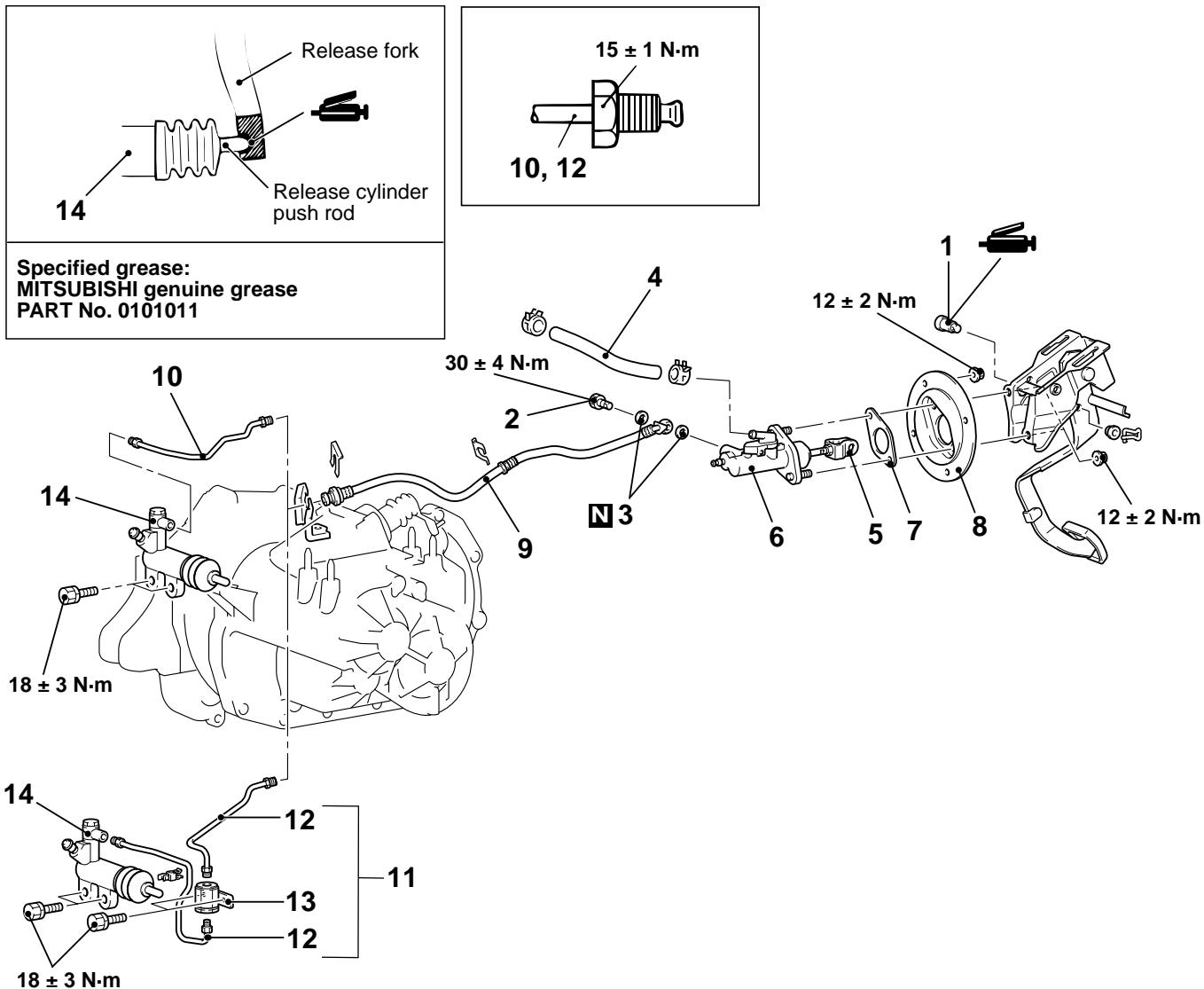
## REMOVAL AND INSTALLATION

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Pre-removal Operation  
Clutch Fluid Draining

## Post-installation Operation

- Clutch Fluid Supplying
- Clutch Line Bleeding (Refer to P.21A-4).
- Clutch Pedal Adjustment (Refer to P.21A-3).



## 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

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## Clutch release cylinder removal steps

10. Clutch pipe <4G63-2WD>
11. Clutch pipe and clutch orifice assembly <4G63-4WD, 4G69>
12. Clutch pipe <4G63-4WD, 4G69>
13. Clutch orifice assembly <4G63-4WD, 4G69>
14. Clutch release cylinder

## Clutch line removal steps

9. Clutch hose
10. Clutch pipe <4G63-2WD>
12. Clutch pipe <4G63-4WD, 4G69>

**REMOVAL SERVICE POINT****<<A>> CLUTCH MASTER CYLINDER REMOVAL**

1. Disconnect the brake tube clamp and remove the brake master cylinder with the brake tubes connected.
2. Remove the brake fluid reservoir with the hoses connected.

3. Remove the clutch master cylinder.

**INSPECTION**

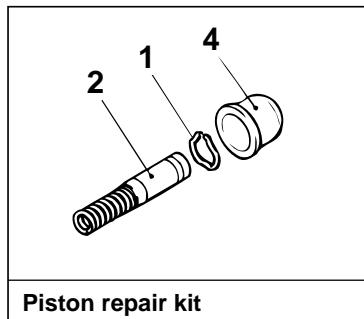
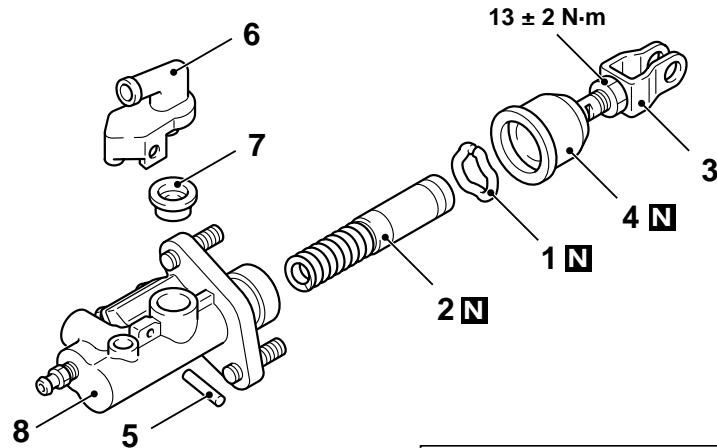
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- Check the master cylinder or clutch hose for fluid leakage.
- Check the clutch hose or tube for cracks or clogging.

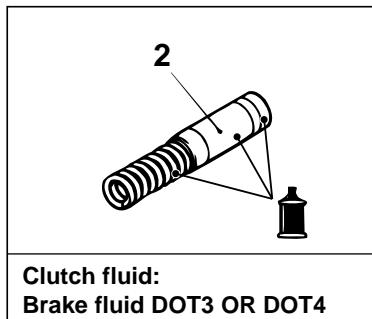
**DISASSEMBLY AND REASSEMBLY****CLUTCH MASTER CYLINDER****⚠ CAUTION**

Do not disassemble the piston assembly.

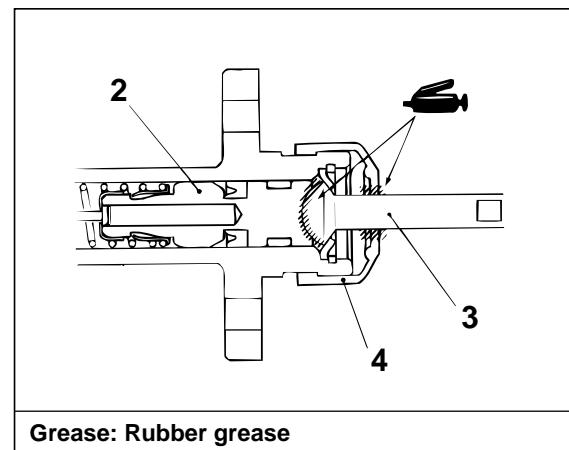
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Piston repair kit



Clutch fluid:  
Brake fluid DOT3 OR DOT4



Grease: Rubber grease

**Disassembly steps**

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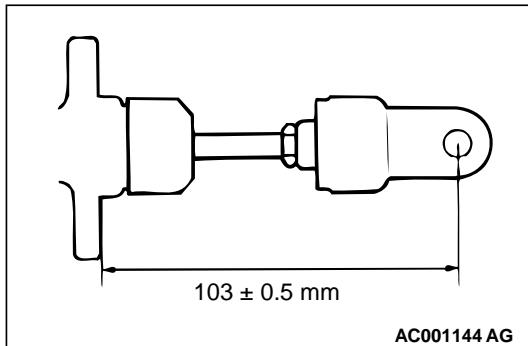
1. Piston stopper ring
2. Piston assembly
3. Pushrod assembly
4. Boot

**Disassembly steps (Continued)**

5. Spring pin
6. Nipple
7. Seal
8. Master cylinder body

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## REASSEMBLY SERVICE POINT



## &gt;&gt;A&lt;&lt; PUSHROD ASSEMBLY INSTALLATION

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

## INSPECTION

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