
CLUTCH

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SPECIFICATIONS**GENERAL SPECIFICATIONS**

E21CA--

Items	3000
Clutch operating method	Hydraulic type
Clutch disc Type Facing diameter O.D.×I.D.	Single dry disc type 225×150 (8.9×5.9) mm (in.)
Clutch cover assembly Type Setting load	Diaphragm spring strap drive type 6300 (630, 1386) N (kg, lbs)
Clutch release cylinder I.D.	19.05 (3/4) mm (in.)
Clutch master cylinder I.D.	15.87 (5/8) mm (in.)

SERVICE SPECIFICATIONS

E21CB--

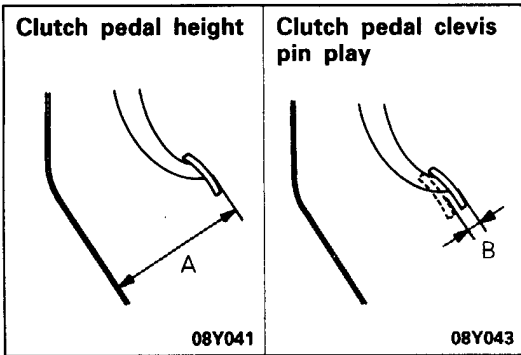
Items	Specifications
Standard value	
Clutch pedal height	mm (in.) 171–181 (6.73–7.13)
Clutch pedal clevis pin play	mm (in.) 1–3 (0.04–0.12)
Clutch pedal free play	mm (in.)
L.H. drive vehicles	7–16 (0.28–0.63)
R.H. drive vehicles	6–13 (0.24–0.51)
Distance between the clutch pedal and the toeboard when the clutch is disengaged	55 (2.2) or more mm (in.)

LUBRICANTS

E21CD--

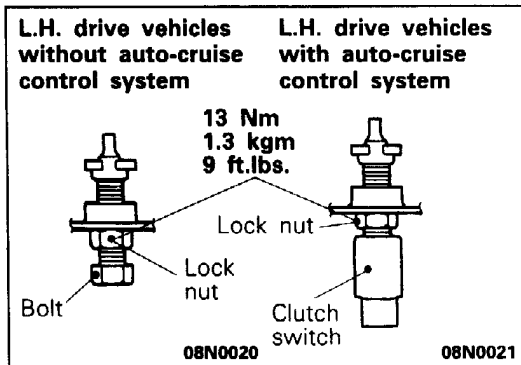
Items	Specified lubricants	Quantity
Clutch fluid	Brake fluid DOT3 or DOT4	As required
Release cylinder push rod end	MITSUBISHI genuine grease Part No. 0101011	As required
Inner surface of clutch master cylinder and outer circumference of piston assembly	Brake fluid DOT3 or DOT4	As required

SERVICE ADJUSTMENT PROCEDURES
CLUTCH PEDAL INSPECTION AND ADJUSTMENT
E21FAAN



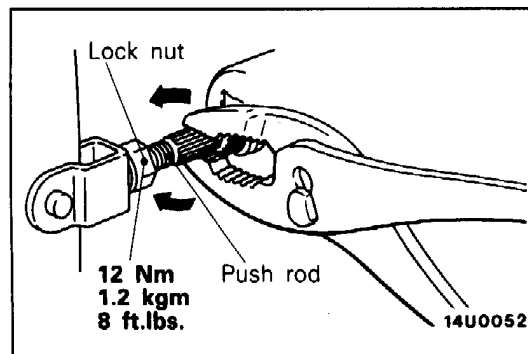
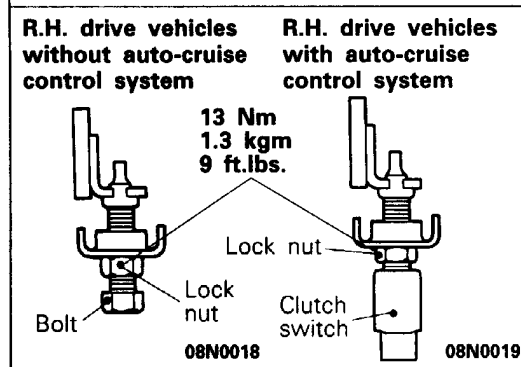
1. Measure the clutch pedal height (from the face of the pedal pad to the toeboard) and the clutch pedal clevis pin play (measured at the face of the pedal pad.)

Standard value (A): 171–181 mm (6.73–7.13 in.)
Standard value (B): 1–3 mm (0.04–0.12 in.)



2. If either the clutch pedal height or the clutch pedal clevis pin play are not within standard value range, adjust as follows:

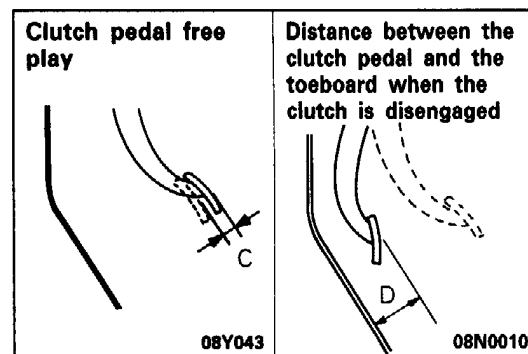
- (1) For vehicles without auto-cruise control system, turn and adjust the bolt so that the pedal height is the standard value, and then secure by tightening the lock nut. Vehicles with auto-cruise control system, disconnect the clutch switch connector and turn the switch for standard clutch pedal height. Then lock with the lock nut.



- (2) Turn the push rod to adjust the clutch pedal clevis pin play to agree with the standard value and then secure the push rod with the lock nut.

Caution

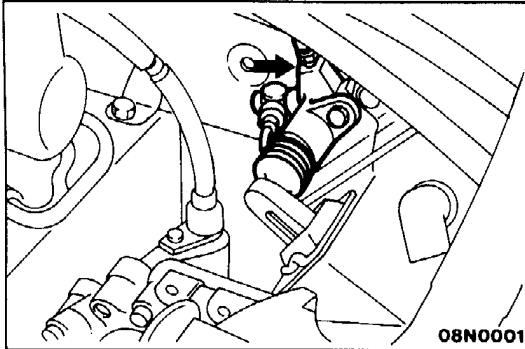
When adjusting the clutch pedal clevis pin play, be careful not to push the push rod toward the master cylinder.



3. 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 toeboard when the clutch is disengaged are within the standard value ranges.

Standard value (C):
 L.H. drive vehicles 7–16 mm (0.28–0.63 in.)
 R.H. drive vehicles 6–13 mm (0.24–0.51 in.)
Standard value (D): 55 mm (2.2 in.) or more

4. If the clutch pedal free play and the distance between the clutch pedal and the 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 or clutch. Bleed the air, or disassemble and inspect the master cylinder or clutch.



BLEEDING

E21FEAB

Whenever the clutch pipe, the clutch hose, and/or the clutch master cylinder have been removed, or if the clutch pedal is spongy, bleed the system.

Specified brake fluid: DOT 3 or DOT 4

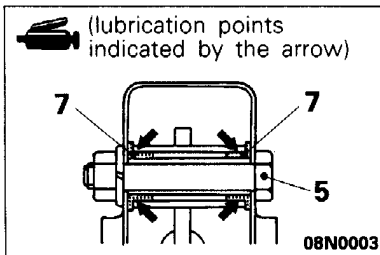
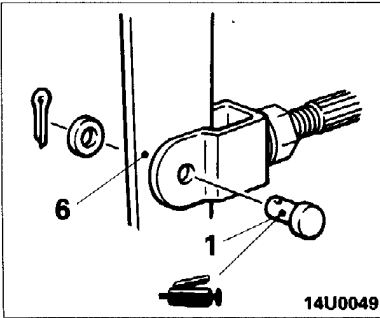
Caution

Use the specified brake fluid. Avoid using a mixture of the specified fluid and other fluid.

R.H. drive vehicles

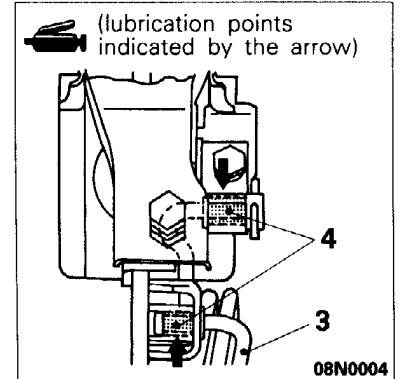
Pre-removal Operation

- Removal of the Foot Shower Duct (R.H.) and the Lap Shower Duct (Refer to GROUP 55 – Ducts.)

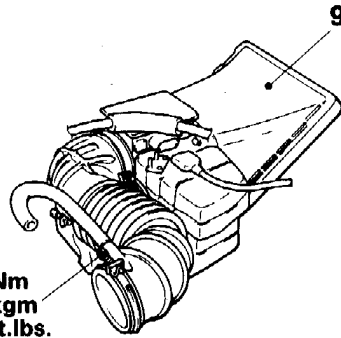


Post-installation Operation

- Installation of the Foot Shower Duct (R.H) and the Lap Shower Duct (Refer to GROUP 55 – Ducts.)
- Adjustment of the Clutch Pedal (Refer to P.21-3.)



4.0 Nm
0.4 kgm
2.9 ft.lbs.

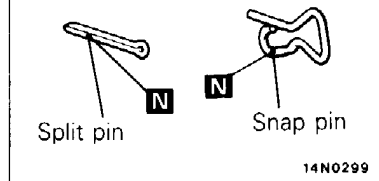


13 Nm
1.3 kgm
9 ft.lbs.

30 Nm
3.0 kgm
22 ft.lbs.

10 Nm
1.0 kgm
7 ft.lbs.

<Vehicles built up to May, 1991> <Vehicles built from June, 1991>



08N0013

Removal steps

1. Clevis pin
2. Bracket
3. Turnover spring
4. Bushings
5. Pedal shaft
6. Clutch pedal
7. Bushings
8. Pedal pad
9. Air cleaner cover, air intake hose
10. Clutch master cylinder connection
11. Clutch pedal bracket
12. Bolt <vehicles without auto-cruise control system>
13. Clutch switch <vehicles with auto-cruise control system>

INSPECTION

E21PCAB

- Check the pedal shaft and bushing for wear.
- Check the clutch pedal for bend or torsion.
- Check the turnover spring for damage or deterioration.
- Check the pedal pad for damage or wear.

CLUTCH CONTROL

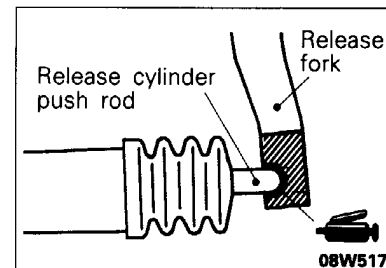
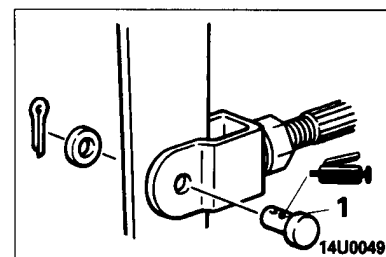
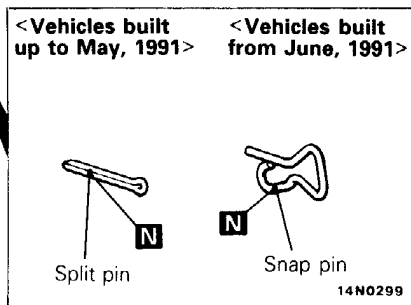
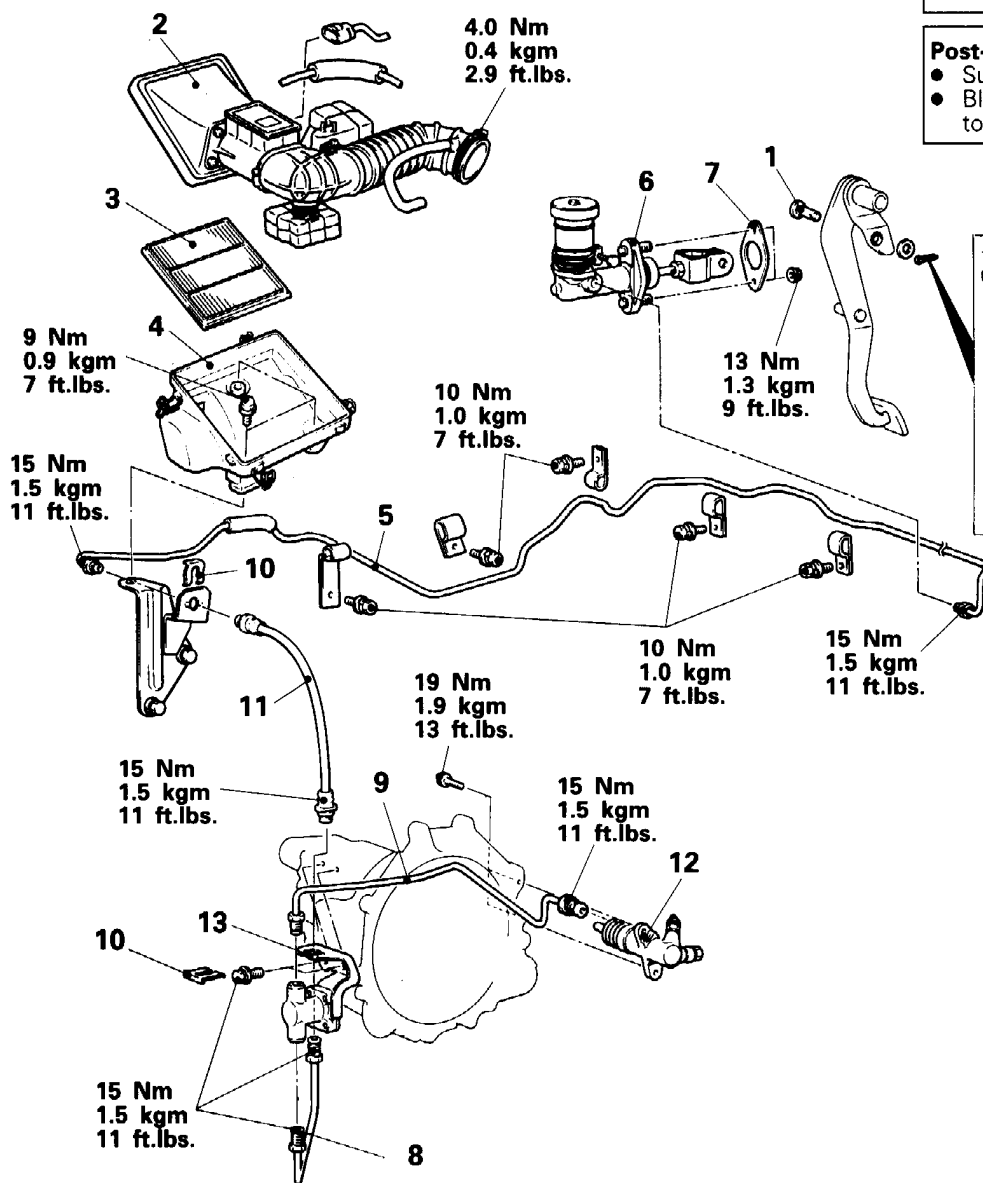
REMOVAL AND INSTALLATION

E21JA--

L.H. drive vehicles

Pre- removal Operation
 ● Draining of the Clutch Fluid

Post- installation Operation
 ● Supplying of Clutch Fluid
 ● Bleeding of the Clutch Line (Refer to P. 21-4.)



Specified grease:
mitsubishi genuine
grease Part No. 0101011

Clutch master cylinder removal steps

- Adjustment of clutch pedal (Refer to P. 21-3.)
- 1. Clevis pin
- 6. Clutch master cylinder
- 7. Sealer

Clutch pipe removal steps

- 2. Air cleaner cover, air intake hose
- 3. Air cleaner element
- 4. Air cleaner body
- 5. Clutch pipe
- 8. Clutch pipe A
- 9. Clutch pipe

Clutch hose removal steps

- 2. Air cleaner cover, air intake hose
- 3. Air cleaner element
- 4. Air cleaner body
- 10. Hose clip
- 11. Clutch hose

Clutch release cylinder removal steps

- 2. Air cleaner cover, air intake hose
- 12. Clutch release cylinder

Clutch damper removal steps

- 2. Air cleaner cover, air intake hose
- 8. Clutch pipe A
- 13. Clutch damper assembly

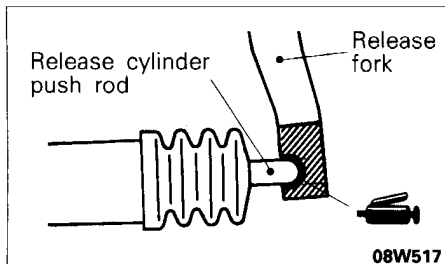
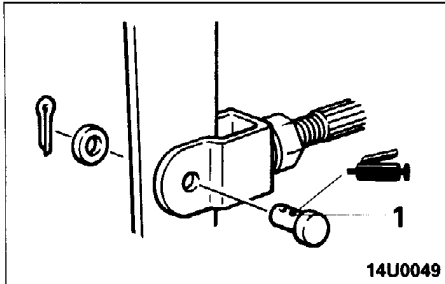
R.H. drive vehicles

Pre-removal Operation

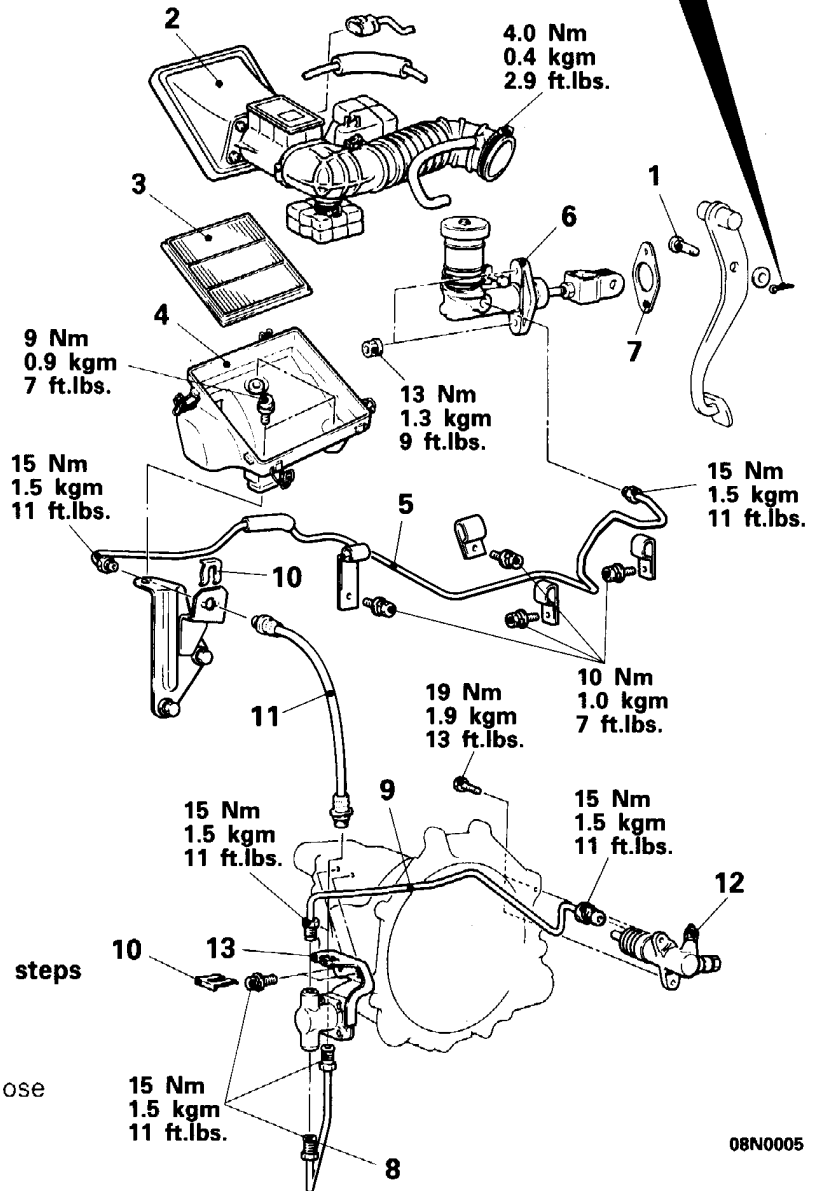
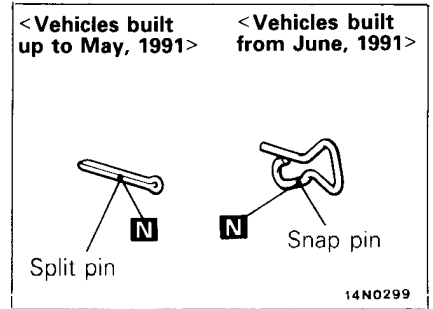
- Draining of the Clutch Fluid

Post-installation Operation

- Supplying of Clutch Fluid
- Bleeding of the Clutch Line (Refer to P.21-4.)



Specified grease:
MITSUBISHI genuine grease
 Part No. 0101011



Clutch master cylinder removal steps

- Adjustment of clutch pedal (Refer to P.21-3.)
- 1. Clevis pin
- 2. Air cleaner cover, air intake hose
- 6. Clutch master cylinder
- 7. Sealer

Clutch pipe removal steps

- 2. Air cleaner cover, air intake hose
- 3. Air cleaner element
- 4. Air cleaner body
- 5. Clutch pipe
- 8. Clutch pipe A
- 9. Clutch pipe

Clutch hose removal steps

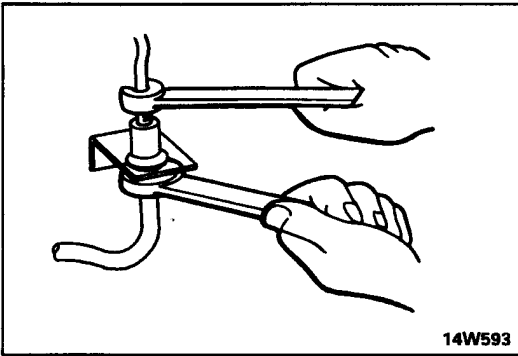
- 2. Air cleaner cover, air intake hose
- 3. Air cleaner element
- 4. Air cleaner body
- 10. Hose clip
- 11. Clutch hose

Clutch release cylinder removal steps

- 2. Air cleaner cover, air intake hose
- 12. Clutch release cylinder

Clutch damper removal steps

- 2. Air cleaner cover, air intake hose
- 8. Clutch pipe A
- 13. Clutch damper assembly

**SERVICE POINTS OF REMOVAL**

E21JBBD

5. REMOVAL OF CLUTCH PIPE

- (1) For L.H. drive vehicles, remove the brake booster.
(Refer to GROUP 35 – Brake Booster.)
- (2) Holding the nut at the clutch hose side, loosen the flare nut of the clutch pipe.

11. REMOVAL OF CLUTCH HOSE

Holding the nut at the clutch hose side, loosen the flare nut of the clutch pipe.

INSPECTION

E21JCAC

- Check the clutch hose or pipe for cracks or clogging.

**CLUTCH MASTER CYLINDER
DISASSEMBLY AND REASSEMBLY**

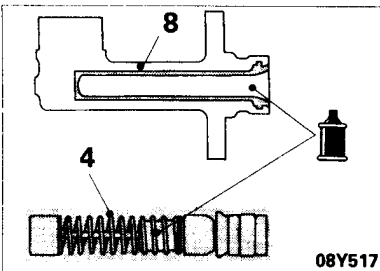
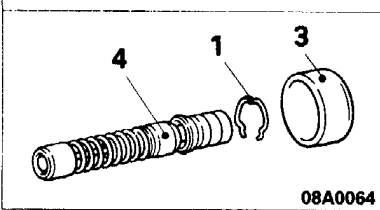
E21SE--

Disassembly steps

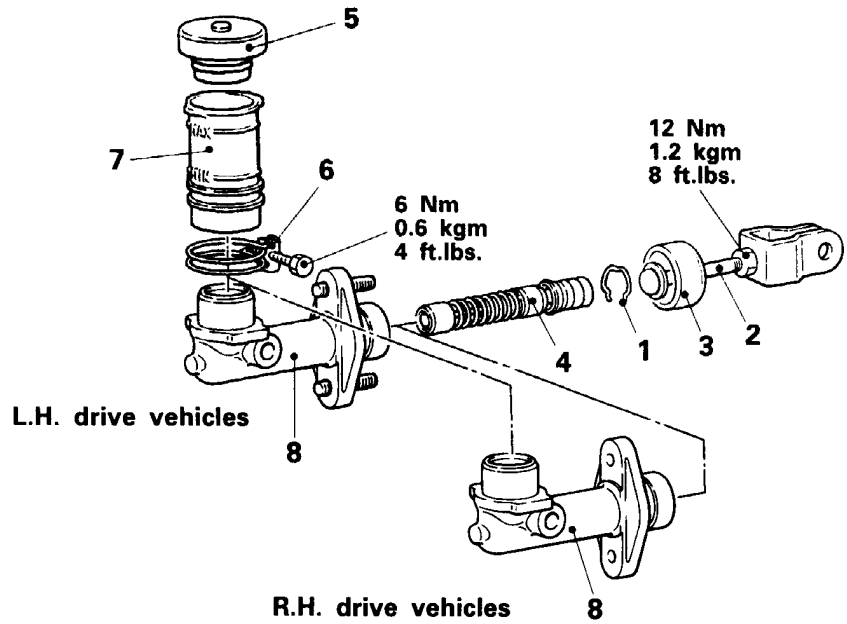
1. Piston stopper ring
2. Damper push rod assembly
3. Boot
4. Piston assembly
5. Reservoir cap.
6. Fluid reservoir band
7. Fluid reservoir
8. Clutch master cylinder



Piston repair kit



Clutch fluid
Brake fluid DOT3 or DOT4



08N0016

SERVICE POINTS OF DISASSEMBLY

E21SFAE

4. REMOVAL OF PISTON ASSEMBLY

Caution

1. Do not damage the master cylinder body and piston assembly.
2. Do not disassembly piston assembly.

INSPECTION

E21SGAC

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