CO	NT	ΕN	ITS

21209000	10

CLUTCH	• • • •	• •	• •	• •	•	•	• •	•	• •	• •	•	• •	•	•	•	•	•	•	•	•	•
CLUTCH	REI	LE	Α	SI	Ε		CY	/L	.11	ND	ÞΕ	F	ł								

3	General Specifications
_	Lubricants
7	

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CLUTCH RELEASE CYLINDER7	Service Specifications
SPECIFICATIONS 2	Torque Specifications

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	2

## **SPECIFICATIONS**

### **GENERAL SPECIFICATIONS**

Items	F5M41	F5M42
Clutch operating method	Hydraulic type	Hydraulic type
Clutch disc type	Single dry disc type	Single dry disc type
Clutch disc size O.D. × I.D. mm (in.)	200 × 130 (7.87 × 5.12)	215 × 140 (8.46 × 5.51)
Clutch cover type	Diaphragm spring type	Diaphragm spring type
Clutch cover setting load N (lbs.)	4193 (937)	4539 (1014)
Clutch release cylinder I.D. mm (in.)	20.64 (13/16)	20.64 (13/16)

Items	Nm ft.lbs.
TORQUE SPECIFICATIONS	2120018003
Release cylinder I.D. to piston O.D. clearance mm	0.15 (0.0059)
Diaphragm spring end height difference mm (in.)	0.5 (0.020)
Clutch disc facing rivet sink mm (in.)	0.3 (0.012)
Rems	Specifications (firmit)

Items	Nm	ft.lbs.
Clutch tube flare nut	15	11
Clutch fluid line bracket	18	14
Clutch release cylinder union bolt	22	17
Clutch release cylinder air bleeder	. 11	8
Clutch release cylinder mounting bolt	18	14

Clutch release cylinder mounting bolt	18 *** *** ***	14
Fulcrum	35	26

**LUBRICANTS** 

Specified lubricants

21200040071

21200020020

Items

Release fork and fulcrum contact surface

MITSUBISHI genuine grease Part No.0101011 or equivalent

Release fork and release cylinder push rod contact surface

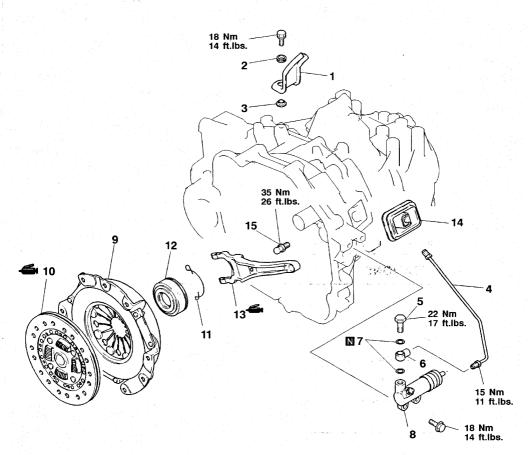
Release fork and release bearing contact surface Piston and piston cup O.D.

Release cylinder I.D.

Brake fluid SAE J1703 (DOT3)

**CLUTCH** 21200100090

### **REMOVAL AND INSTALLATION**

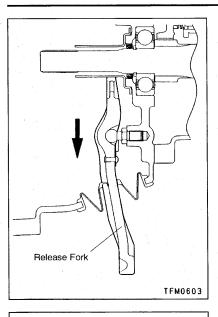


TFM0595

#### Removal steps

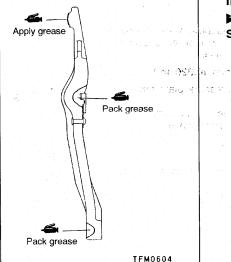
- 1. Clutch fluid line bracket
- 2. Insulator
- Washer
- 4. Clutch tube 5. Union bolt
- 6. Union
- 7. Gasket 8. Clutch release cylinder

- 9. Clutch cover
- ▶B◀ 10. Clutch disc
  11. Return clip
  12. Clutch release bearing
  ▶A◀ 13. Release fork
  14. Release fork boot
- 15. Fulcrum



### REMOVAL SERVICE POINT

- **▲**A▶ RELEASE FORK REMOVAL
- (1) Move the release fork in the direction shown to remove the clip from the fulcrum.



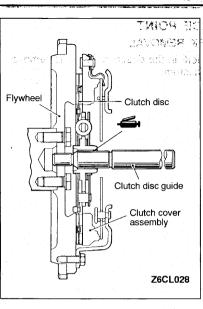
## **INSTALLATION SERVICE POINTS**

▶A 

GREASE APPLICATION TO RELEASE FORK

Specified grease: MITSUBISHI equivalent

pecified grease:
MITSUBISHI genuine grease part No.0101011 or



#### **▶**B CLUTCH DISC INSTALLATION

Apply the specified grease to the clutch disc splines and rub it in the splines with a brush.

# Specified grease: MITSUBISHI genuine grease part No.0101011 or

equivalent

(2) Using the clutch disc guide to position the clutch disc on the flywheel.

### INSPECTION

21200110062

## CLUTCH COVER

 Check the diaphragm spring end for wear and uneven height. Replace if wear is evident or height difference exceeds the limit.

## Limit: 0.5 mm (0.020 in.)

- (2) Check the pressure plate surface for wear, cracks and discoloration.
- (3) Check the rivets of the strap plate for looseness. If loose, replace the clutch cover.

#### CLUTCH DISC

## Caution

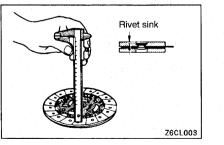
Don't immerse and clean the clutch disc in a cleaning solvent.

- Check the facing for loose rivets, uneven contact, evidence of seizure, or deposited oils and greases. If defective, replace the clutch disc.
- (2) Measure the rivet sink and replace the clutch disc if it is out of specification.

### Limit: 0.3 mm (0.012 in.)

and/or input shaft.

- (3) Check the torsion spring for looseness and damage. If defective, replace the clutch disc.
- (4) Combine the clutch disc with the input shaft and check for sliding condition and play in the rotating direction. If poor sliding condition is evident, clean, reassemble, and recheck. If excessive looseness is evident, replace the clutch disc



Caution

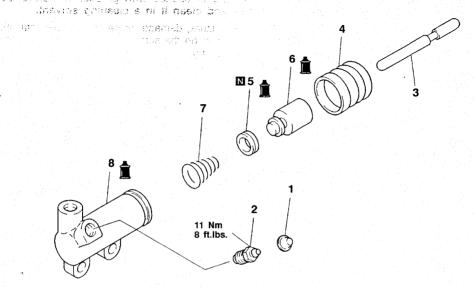
- (3) Check for wear on the surface which contacts with release fork. If abnormally worn, replace.
- Release bearing is packed with grease. Therefore, do not immerse and clean it in a cleaning solvent. (1) Check for seizure, damage, noise or improper rotation. (2) Check for wear on the surface which contacts with the diaphragm spring.

RELEASE FORK If the surface which contacts with the bearing is abnormally worn, replace.

## CLUTCH RELEASE CYLINDER

21200150088

## DISASSEMBLY AND REASSEMBLY



TFM0594

#### Disassembly steps

- 1. Cap
- Air bleeder
- 3. Push rod 4. Boot



- ►A 5. Piston cup
  - 6. Piston
  - 7. Conical spring
  - Release cylinder



#### DISASSEMBLY SERVICE POINT

### **▲A▶ PISTON CUP/PISTON REMOVAL**

(1) Remove the piston from the release cylinder using compressed air.

#### Caution

- 1. Cover with shop towel to prevent the piston from popping out.
- 2. Apply compressed air slowly to prevent brake fluid from splashing.

### REASSEMBLY SERVICE POINT

#### ►A PISTON/PISTON CUP INSTALLATION

(1) Apply brake fluid to the bore of the release cylinder, and immerse the piston and piston cup in a brake fluid.

(2) Insert the piston and piston cup into the cylinder.

Specified brake fluid:

Brake fluid SAE J1703 (DOT3)

21B-8 **CLUTCH OVERHAUL - Clutch Release Cylinder** INSPECTION 21200160067 (1) Check the bore of the release cylinder for rust, scratches or damage. (2) Using a cylinder gauge, measure the inside diameter

of the release cylinder at about three positions (the deepest, middle and brim positions). If the clearance from the outside diameter of the piston exceeds the limit, replace the release cylinder as an assembly. Limit: 0.15 mm (0.0059 in.)