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# CLUTCH

## F5MR1, F5MR2

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**NOTES**

# 1. SPECIFICATIONS

## GENERAL SPECIFICATIONS

Items	F5MR1	F5MR2	F5MR3
Clutch operating method	Hydraulic type	Hydraulic type	Hydraulic type
Clutch disc type	Single dry disc type	Single dry disc type	Single dry type
Clutch disc size O.D. × I.D. mm	200 × 137	215 × 147	215 × 145
Clutch cover type	Diaphragm spring strap drive type	Diaphragm spring strap drive type	Diaphragm spring strap drive type
Clutch cover setting load Nm	4,000	4,400	4,400
Clutch release cylinder I.D. mm	20.64	20.64	20.64

## SERVICE SPECIFICATIONS

Items	Specifications (Limit)
Facing rivet sink mm	0.3
Diaphragm spring end height difference mm	0.5

## TORQUE SPECIFICATIONS

Items	Nm
Clutch cover bolt	30
Release cylinder mounting bolt	30
Clutch tube flare nut	15
Clutch tube bracket mounting bolt	48
Release cylinder union bolt	23
Release cylinder bleeder plug	11

## LUBRICANTS

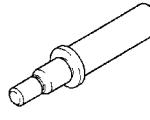
Items	Specified lubricants	Quantity
Piston and cup surface	Rubber grease	As required
Clutch disc spline	Mitsubishi genuine grease Part No.0101011 or equivalent	As required
Clutch release bearing to release fork contact surface		

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## NOTES

## 2. SPECIAL TOOLS

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Tool	Number	Name	Use
 MD998126	MD998126	Clutch disc center guide	Aligning clutch disc center hole

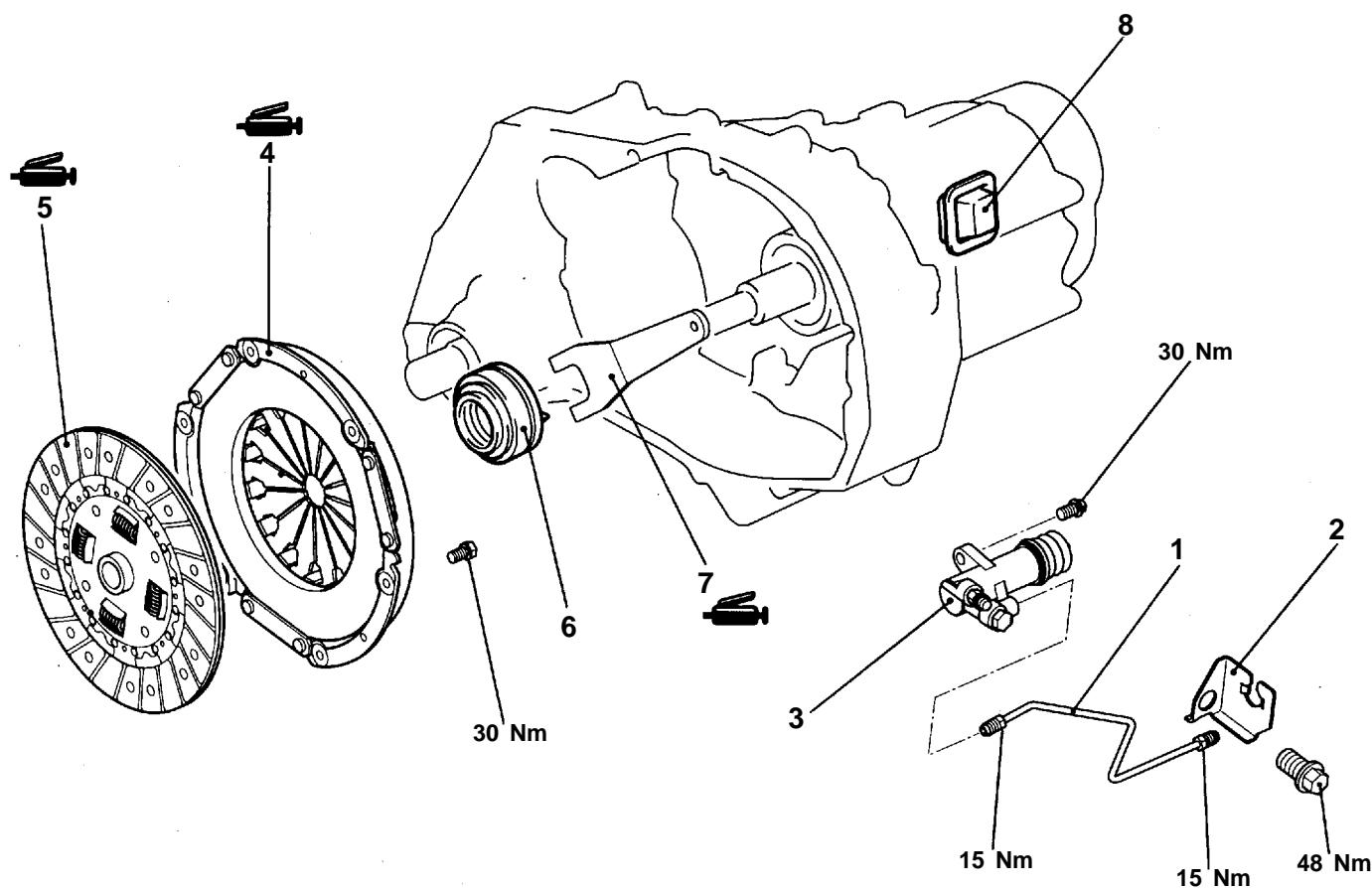
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## NOTES

### 3. CLUTCH

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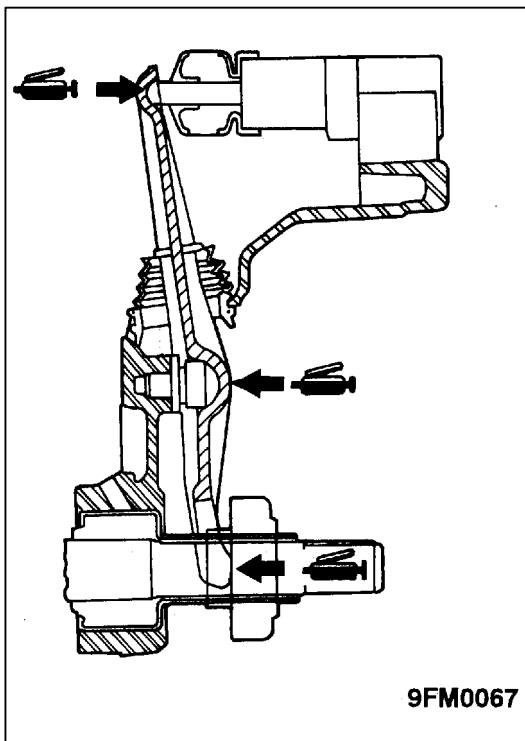
#### REMOVAL AND INSTALLATION



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##### Removal steps

- 1. Clutch tube
- 2. Clutch tube bracket
- 3. Clutch release cylinder
- B► 4. Clutch cover
- B► 5. Clutch disc
- A◄ 6. Clutch release bearing
- A◄ 7. Release fork
- 8. Release fork boot

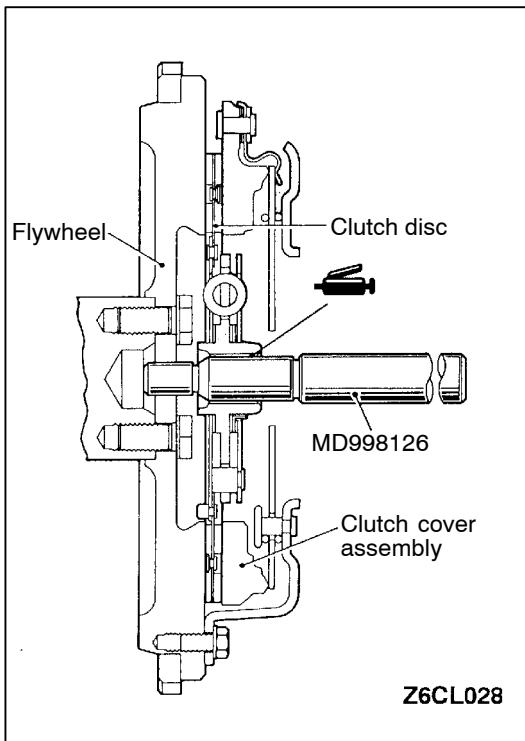


### INSTALLATION SERVICE POINTS

#### ►A◀GREASE APPLICATION TO RELEASE FORK

##### Specified grease:

Mitsubishi genuine grease Part No.0101011 or equivalent



#### ►B◀CLUTCH DISC/CLUTCH COVER ASSEMBLY INSTALLATION

- (1) Apply specified grease to clutch disc splines and squeeze it in place with a brush.

##### Specified grease:

Mitsubishi genuine grease Part No.0101011 or equivalent

- (2) Using special tool, position clutch disc on flywheel.

**CLUTCH INSPECTION**

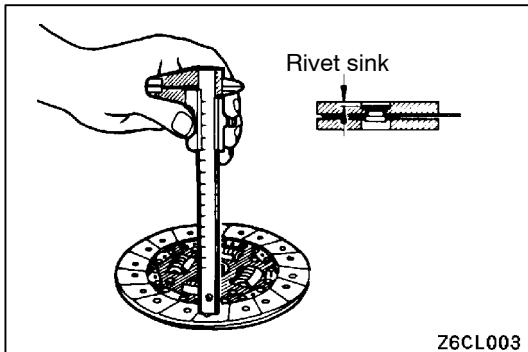
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**CLUTCH COVER ASSEMBLY**

- 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**

- Check the pressure plate surface for wear, cracks and seizure.
- Check the strap plate rivets for looseness and replace the clutch cover assembly if loose.



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**CLUTCH DISC**

- Check the facing for loose rivets, uneven contact, deterioration due to seizure, adhesion of oil or grease, and replace the clutch disc if defective.
- Measure the rivet sink and replace the clutch disc if it is out of specification.

**Limit: 0.3 mm**

- Check torsion spring for play and damage and replace the clutch disc if defective.
- Combine the clutch disc with the input shaft, and check sliding condition and play in the rotating direction. If it does not slide smoothly or the play is excessive, check after cleaning and reassembling. If the play is excessive, replace the clutch disc and/or the input shaft.

**CLUTCH RELEASE BEARING****Caution**

**Release bearing is packed with grease. Therefore do not wash it in cleaning solvent or the like.**

- Check bearing for seizure, damage, noise, or improper rotation. Check also diaphragm spring contact surface for wear.
- Replace bearing if its release fork contact surface is abnormally worn.

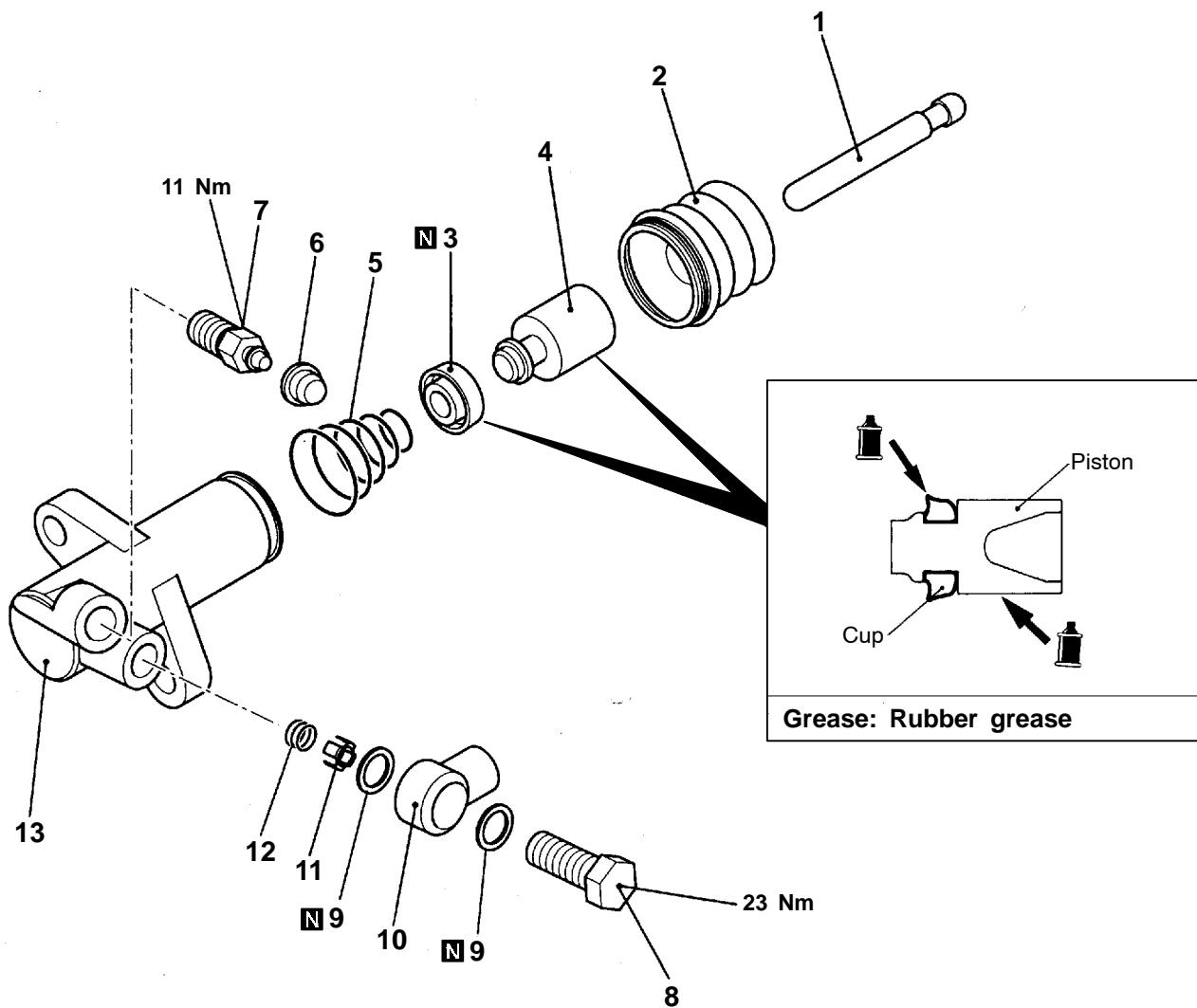
**RELEASE FORK**

- Replace release fork if its bearing contact surface is abnormally worn.

## 4. CLUTCH RELEASE CYLINDER

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## DISASSEMBLY AND REASSEMBLY

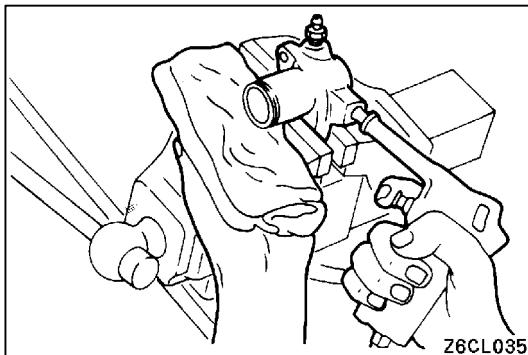


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## Disassembly steps

1. Push rod	9. Gasket
2. Boot	10. Union
3. Piston cup	11. Valve plate
4. Piston	12. Compressor spring
5. Conical spring	13. Release cylinder
6. Cap	
7. Bleeder plug	
8. Union bolt	

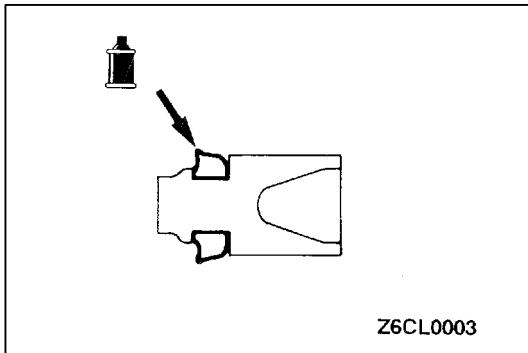


**DISASSEMBLY SERVICE POINTS****◀▲► PISTON AND PISTON CUP REMOVAL**

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.

**CLUTCH RELEASE CYLINDER INSPECTION**

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- (1) Check the inner surface of the release cylinder for scratches or irregular wear.
- (2) Replace if the piston cup outer circumference is scratched or shows signs of fatigue, or if there is excessive wear of the lip where indicated in the figure.

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## NOTES