
GROUP 21B**CLUTCH
OVERHAUL****CONTENTS**

GENERAL SPECIFICATIONS.....	21B-2	CLUTCH	21B-3
SERVICE SPECIFICATIONS.....	21B-2	DISASSEMBLY AND REASSEMBLY.....	21B-3
TORQUE SPECIFICATIONS.....	21B-2	INSPECTION.....	21B-5
LUBRICANTS	21B-2	CLUTCH RELEASE CYLINDER	21B-6
		DISASSEMBLY AND REASSEMBLY.....	21B-6
		INSPECTION.....	21B-7

GENERAL SPECIFICATIONS

M1212000200159

Item	F5M41	F5M42
Clutch operating method	Hydraulic type	
Clutch disc type	Single dry disc type	
Clutch disc size OD × ID mm	200 × 130	225 × 150
Clutch cover type	Diaphragm spring type	
Clutch cover setting load N	4,170	4,510

SERVICE SPECIFICATIONS

M1212000300123

Item	Limit
Diaphragm spring end height difference	0.5 mm
Clutch disc facing rivet sink	Minimum 0.3 mm
Release cylinder I.D. to piston O.D. clearance	0.15 mm

TORQUE SPECIFICATIONS

M1212001800400

Item	Specification
Clutch fluid line bracket bolt	18 ± 3 N·m
Clutch tube flare nut	15 ± 1 N·m
Union bolt	22 ± 2 N·m
Clutch release cylinder mounting bolt	18 ± 3 N·m
Clutch cover mounting bolt	18 ± 3 N·m
Fulcrum	35 ± 6 N·m
Air bleeder	17 ± 1 N·m

LUBRICANTS

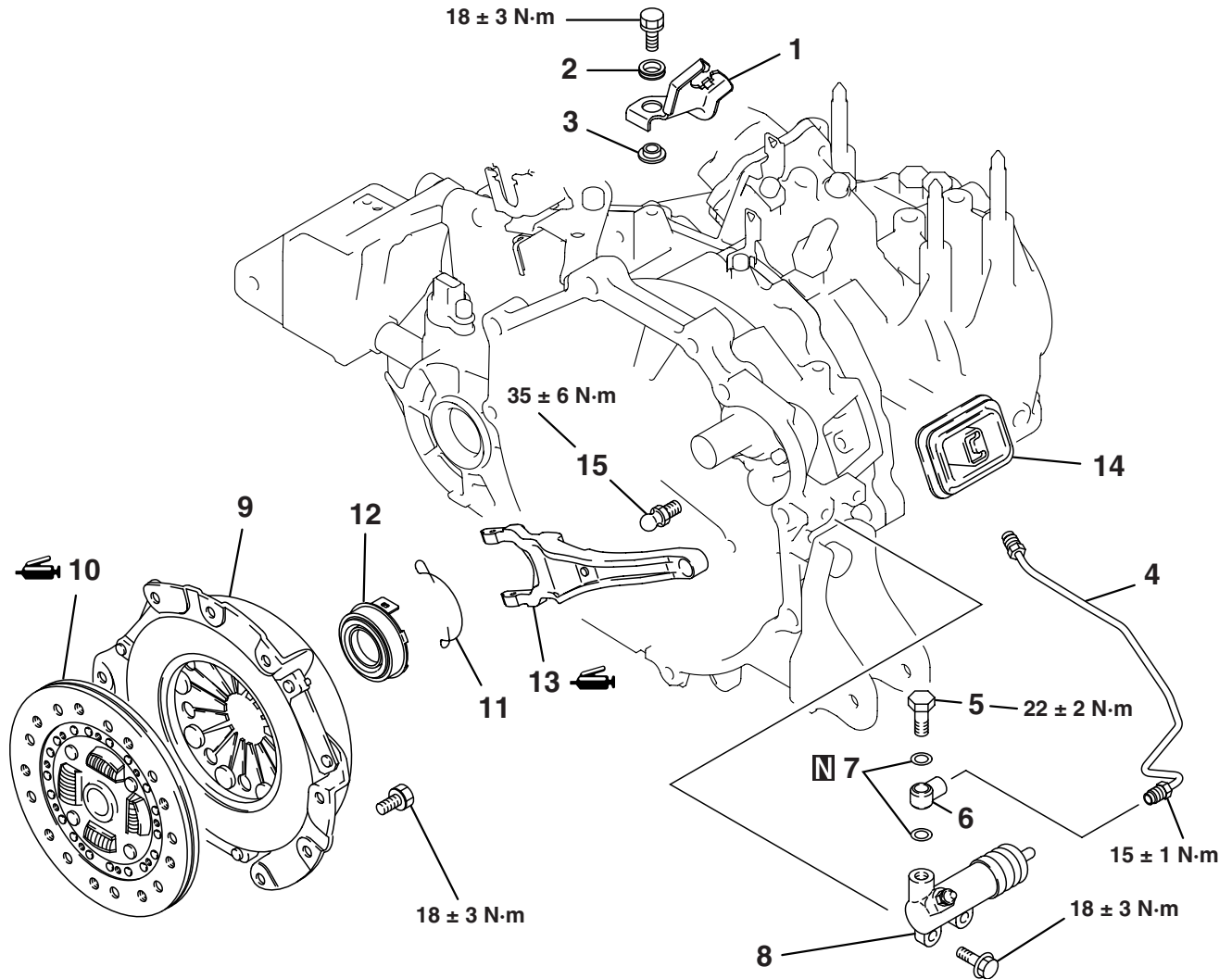
M1212000400379

Item	Specified lubricant
Release fork and release bearing contact surface	Mitsubishi part No. 0101011 or equivalent
Release fork and fulcrum contact surface	
Release fork and release cylinder pushrod contact surface	
Clutch disc splines	
Piston and piston cup	Brake fluid DOT 3 or DOT 4
Release cylinder inner surface	

CLUTCH

DISASSEMBLY AND REASSEMBLY

M1212001000545



AK300028AB

Removal steps

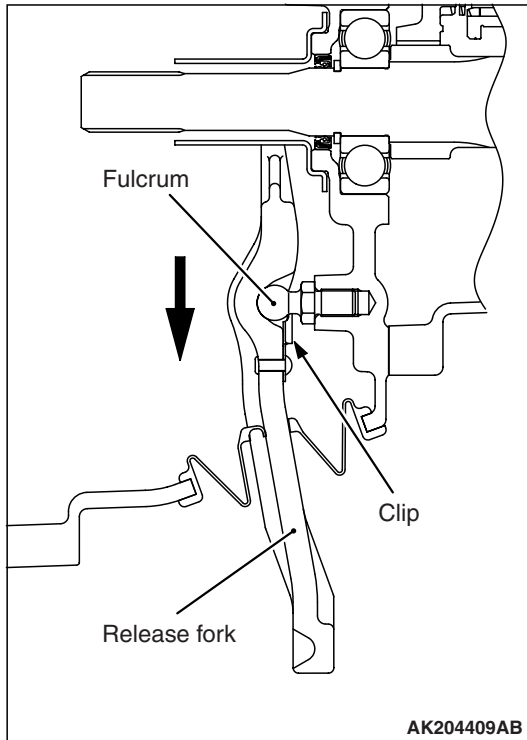
1. Clutch fluid line bracket
2. Insulator
3. Washer
4. Clutch tube
5. Union bolt
6. Union
7. Gasket
8. Clutch release cylinder

Removal steps (Continued)

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

REMOVAL SERVICE POINT

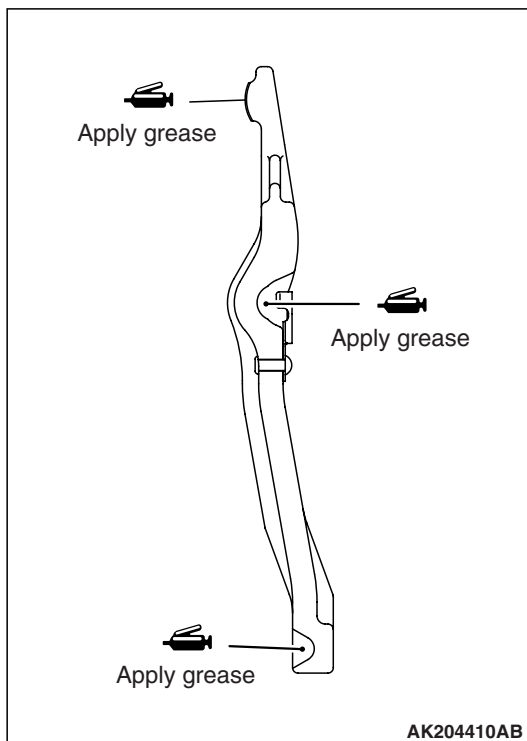
<<A>> RELEASE FORK REMOVAL



Move the release fork in the direction shown to remove the clip from the fulcrum.

INSTALLATION SERVICE POINTS

>>A<< RELEASE FORK INSTALLATION



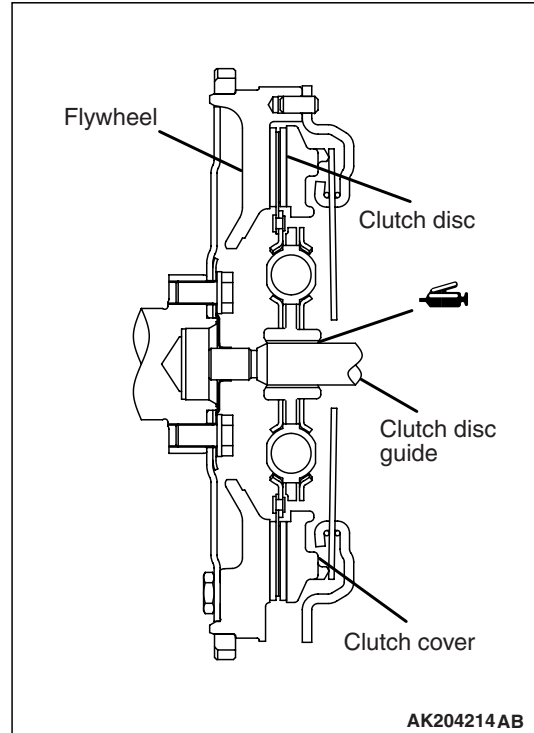
1. Apply grease to the illustrated positions of the release fork.

Specified grease:

Mitsubishi Part No. 0101011 or equivalent

2. Install the release fork to the fulcrum.

>>B<< CLUTCH DISC AND CLUTCH COVER INSTALLATION

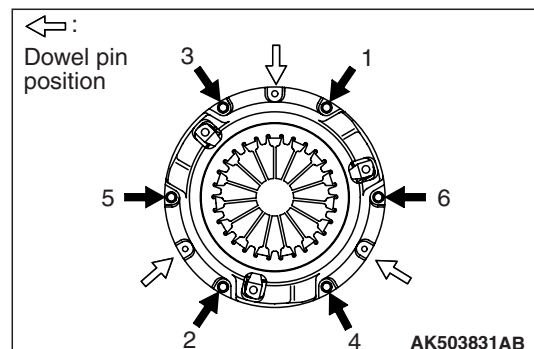


1. Apply grease to the clutch disc splines and rub it in the splines with a brush.

Specified grease:

Mitsubishi Part No. 0101011 or equivalent

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

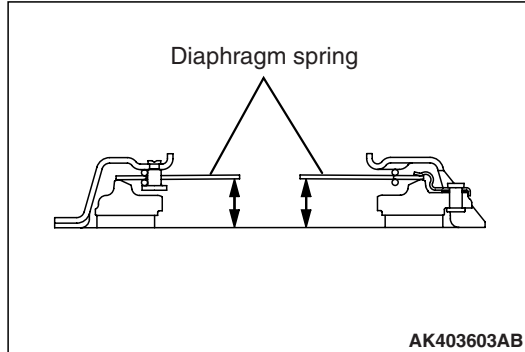


3. Install the clutch cover, aligning its installation position with the dowel pins, and then tighten the bolts to the specified torque of 18 ± 3 N·m in the order shown in the illustration.

INSPECTION

CLUTCH COVER

M1212001100348



1. 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
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.

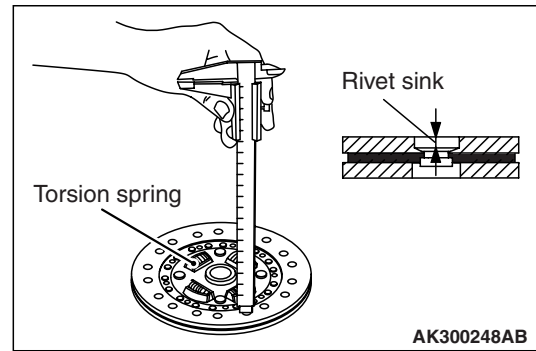
CLUTCH DISC

CAUTION

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

1. Check the facing for loose rivets, uneven contact, evidence of seizure, or deposited oils and greases. If defective, replace the clutch disc.

NOTE: If contaminated with grease or oil, determine the source of the contaminant and repair it.



2. Measure the rivet sink. Replace the clutch disc if it is below the limit.

Minimum limit: 0.3 mm

3. Check the torsion spring for play and damage. If defective, replace the clutch disc.
4. Place the clutch disc on 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 play is evident, replace the clutch disc and/or input shaft.

CLUTCH RELEASE BEARING

CAUTION

Release bearing is packed with grease. Therefore, do not wash it in a cleaning solvent.

1. Check for seizure, damage, noise or binding/rough rotation.
2. Check for wear on the surface which contacts with the diaphragm spring.
3. Check for wear on the surface which contacts with the release fork. If abnormally worn, replace.

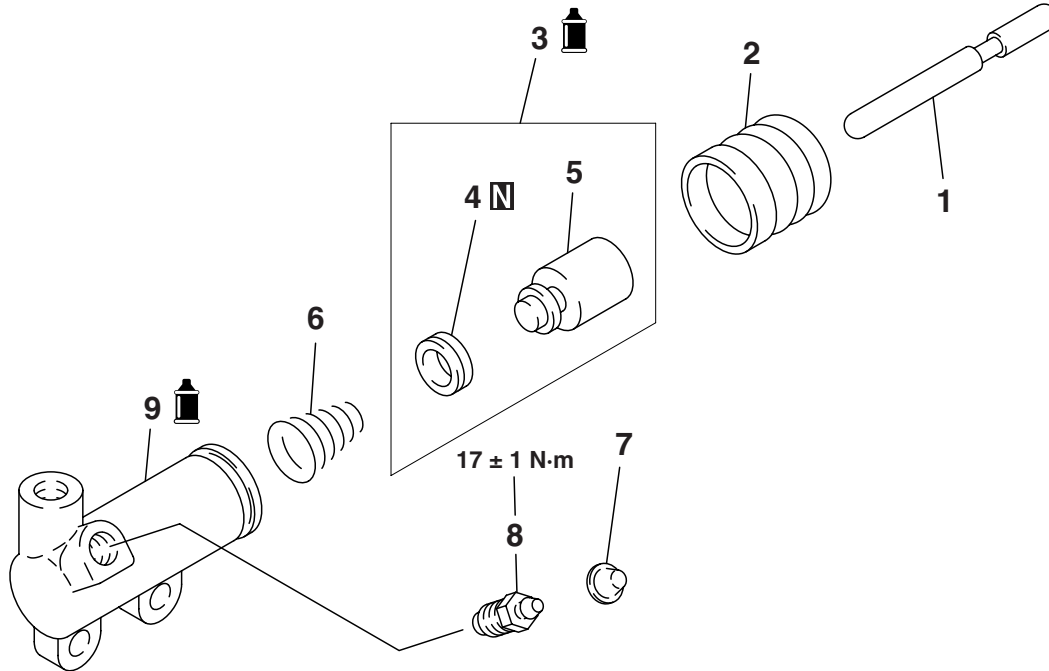
RELEASE FORK

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

CLUTCH RELEASE CYLINDER

DISASSEMBLY AND REASSEMBLY

M1212001500380



AK204216AB

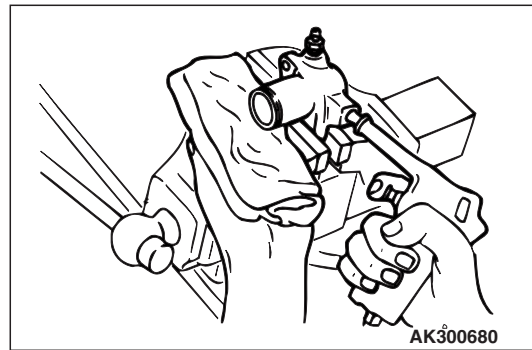
Disassembly steps

<<A>> >>A<<

1. Push rod
2. Boot
3. Piston assembly
4. Piston cup
5. Piston
6. Conical spring
7. Cap
8. Air bleeder
9. Release cylinder

DISASSEMBLY SERVICE POINT

<<A>> PISTON ASSEMBLY REMOVAL



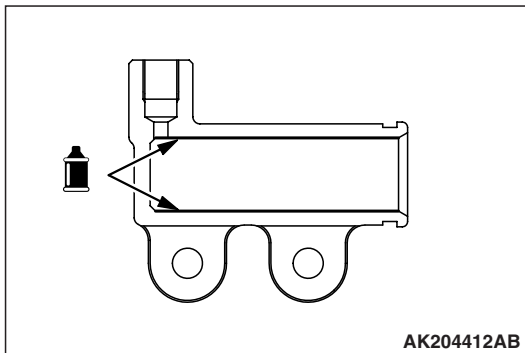
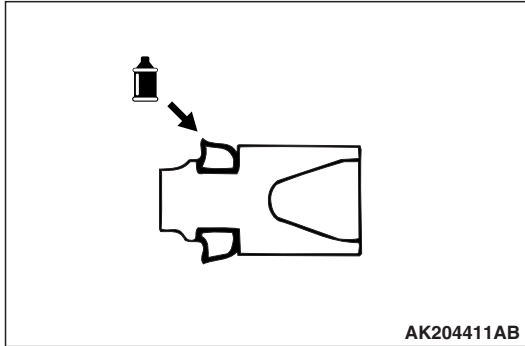
1. Cover with a shop towel to prevent the piston from popping out.

⚠ CAUTION

Apply compressed air slowly to prevent brake fluid from splashing.

2. Apply the compressed air into the tube mounting hole to remove the piston assembly.

REASSEMBLY SERVICE POINT
>>A<< PISTON ASSEMBLY INSTALLATION



1. Apply brake fluid to the piston cup and inner surface of the release cylinder.

Specified Brake Fluid:
Brake fluid DOT 3 or DOT 4

2. Insert the piston assembly into the release cylinder.

INSPECTION

M1212001600127

RELEASE CYLINDER

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

NOTES