

MANUAL TRANSMISSION AND CLUTCH MZZ SERIES

SECTION 7C CLUTCH (FOR MZZ TRANSMISSION)

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DESCRIPTION

Clutch System

Notice:

When fasteners are removed, always reinstall them at the same location from which they were removed. If a fastener needs to be replaced, use the correct part number fastener for that application. If the correct part number fastener is not available, a fastener of equal size and strength (or stronger) may be used. Fasteners that are not reused, and those requiring thread locking compound will be called out. The correct torque value must be used when installing fasteners that require it. If the above conditions are not followed, parts or system damage could result.

Driving Members

The driving members of a clutch usually consist of two flat surfaces machined to a smooth finish.

One of these surfaces is usually the rear face of the engine flywheel, and the other is a comparatively heavy flat ring with one side machined. This part is known as the pressure plate. It is fitted into a steel cover, which also contains some of the operating members, and is bolted to the flywheel.

Driven Member

The driven member is a clutch disc with a splined hub which is free to slide lengthwise along the splines of the clutch shaft, but which drives the shaft through these same splines. Suitable frictional facings are attached to each side of the clutch disc by means of rivets. These facings must be heat resistant since friction produces heat.

Operating Members

The driving and driven members are held in contact by spring pressure.

The throwout (clutch release) bearing is a ball thrust bearing contained in the clutch housing, mounted on a sleeve attached to the front of the transmission case. The throwout bearing is moved by the clutch release yoke to contact the release levers and move the pressure plate to the rear, thus separating the clutch driving members from the driven member when the clutch pedal is depressed by the driver.

Clutch Controls

This system utilizes hydraulic pressure as a means of transmitting clutch pedal movement to the clutch release mechanism. The system consists of a pedal-operated master cylinder and a slave cylinder, interconnected with hydraulic lines. The clutch pedal is connected to the master cylinder push rod, and the slave cylinder push rod is connected to the clutch release fork.

DIAGNOSIS OF CLUTCH

PROBLEM	POSSIBLE CAUSE	CORRECTION
Clutch Slips	1. Binding of release levers in the pressure plate and cover assembly. 2. Clutch release levers improperly adjusted. 3. Facings loose on the clutch disc. 4. Improper clutch release bearing adjustment. 5. Binding or sticking clutch pedal assembly. 6. Weak or broken clutch pressure springs. 7. Burned clutch facings. 8. Binding or sticking of the clutch disc hub on the transmission drive gear. 9. Release bearing binding on bearing retainer. 10. Warped pressure plate or engine flywheel. 11. No free pedal.	1. Replace the clutch cover assembly. 2. If levers are in place, adjust free pedal. 3. Replace the driven disc assembly. 4. Adjust for proper clearance (free pedal). 5. Repair or replace faulty parts. Check linkage for proper adjustment. 6. Replace the clutch cover assembly. 7. Replace clutch driven disc assembly and check flywheel and pressure plate friction surfaces for damage replace parts as necessary. 8. Lubricate splines with high temperature grease (if dry). Replace driven discs if splined hubs are worn. 9. Replace release bearing or lubricate. 10. Replace defective parts. Check transmission, clutch, and engine alignment. 11. Adjust for free pedal, check clutch driven disc wear and replace parts as required.
Clutch Chatters During Engagement	1. Loose engine mounts. 2. Grease or oil on facings. 3. Slight binding in linkage during engagement. 4. Weak pressure springs. 5. Clutch release levers binding during engagement. 6. Worn or broken pilot bearing. 7. Rough engine idle. 8. Bent or out of plane pressure plate fingers. 9. Driven disc warped, cracked, or loose friction material. 10. Pressure plate warped or hot spots. 11. Flywheel warpage or discoloration. 12. Flywheel housing bore and face not aligned.	1. Tighten engine mount bolts to specifications. 2. Replace driven disc assembly and repair oil leak. 3. Check linkage for wear or damage. Replace parts as required. 4. Replace clutch cover assembly. 5. Repair or replace clutch cover assembly. 6. Replace and lubricate pilot bearing. 7. Tune engine to manufacturer's specifications. 8. Replace clutch cover assembly if release fingers are more than 2 mm (0.079 in) out of plane. 9. Replace driven disc assembly. 10. Replace pressure plate or clutch cover assembly. 11. Replace flywheel. 12. Correct per alignment procedure.

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PROBLEM	POSSIBLE CAUSE	CORRECTION
Clutch Drags When Disengaged	1. Pedal cannot disengage clutch because of excessive free pedal travel. 2. Clutch release levers need adjustment. 3. High spots on clutch facings. 4. Loose rivet in facings. 5. Clutch disc wobbles because of broken springs in hub. 6. Flange of clutch cover not in alignment with flywheel because of loose bolts or bent flange. 7. Deteriorated or broken engine mounts. 8. Worn clutch release bearing. 9. Worn linkage components. 10. Clutch disc warped. 11. Broken or loose facings. 12. Misalignment of transmission. 13. Main drive gear misaligned because of worn bearings. 14. Clutch pressure plate warped. 15. Loose flywheel housing bolts.	1. Check pedal and linkage for wear, replace parts as required. Adjust clutch and linkage for proper free travel. 2. Replace clutch cover assembly. 3. Replace driven disc assembly. 4. Replace driven disc assembly. Check for damaged flywheel and pressure plate, replace as necessary. 5. Replace driven disc assembly. 6. Torque bolts to specifications or replace cover assembly. 7. Replace engine mountings. 8. Replace release bearing and adjust clutch free pedal. 9. Check pedal and linkage for wear; replace parts as required. 10. Replace driven disc assembly, also check flywheel for deep heat checks. Replace flywheel as necessary. 11. Replace driven disc assembly. 12. Check engine mounts, wear on flywheel housing, and bolt torque. 13. Repair transmission if required and check flywheel pilot bearing; replace pilot bearing as required. 14. Replace clutch cover assembly; also check flywheel surface for dished out wear pattern. Replace flywheel as required. 15. Torque bolts to specifications.
Clutch Grabs	1. Grease or oil on clutch facings. 2. Exposed rivet heads due to excessively worn facings or loose rivets. 3. Loose engine mounts. 4. Clutch pressure springs too stiff. 5. Momentary binding in linkage while clutch is being engaged. 6. Warped pressure plate or flywheel.	1. Replace driven disc assembly and repair oil leak. 2. Replace driven disc assembly and check for flywheel and pressure plate damage. Replace damaged parts. 3. Tighten engine mount bolts to specifications. 4. Replace clutch cover assembly. 5. Check pedal and linkage for wear or damage. Replace parts as required. 6. Replace damaged parts. Check alignment.

PROBLEM	POSSIBLE CAUSE	CORRECTION
Clutch Noisy When Engaged	1. Improper clutch release bearing adjustment. 2. Clutch disc damper springs weak or broken. 3. Linkage binds. 4. Clutch release bearing binding. 5. Loose flywheel or clutch cover bolts. 6. Misalignment of transmission. 7. Worn splines on clutch disc or transmission main drive gear. 8. Weak or missing clutch return springs. 9. Clutch pedal assembly binding.	1. Adjust clutch linkage for pedal free play. 2. Replace driven disc assembly. 3. Check pedal and linkage. Replace or repair as required. 4. Check for alignment and release bearing lubricant. Replace bearing as required. 5. Torque bolts to specifications. 6. Check engine mountings, wear on flywheel housing, and fixing torque. 7. Replace parts as required. Lubricate with high temperature grease. 8. Replace clutch cover assembly. 9. Check pedal and linkage for wear or damage. Repair or replace parts as required.
Clutch Pedal Pulsates During Engagement	1. Misalignment of transmission. 2. Loose or improperly installed engine mounts. 3. Clutch release levers not adjusted to uniform height.	1. Check engine mountings, wear on flywheel housing, and fixing torque. 2. Refer to ENGINE for proper engine mount installation. 3. Replace clutch cover assembly.
Clutch Rattles When Disengaged with Engine Idling	1. Wear or looseness in linkage. 2. Retractor springs on release lever weak, broken, or disconnected. 3. Loose flywheel or clutch cover bolts. 4. Rough engine idle.	1. Check linkage for wear or damage. Replace parts as required. 2. Replace clutch cover assembly. 3. Torque bolts to specifications. 4. Tune engine to manufacturer's specifications.
Clutch Noisy When Disengaged	1. Pilot bearing or bushing in crankshaft worn, damaged, broken, or inadequately lubricated. 2. Release bearing worn, dirty, damaged, broken, or inadequately lubricated. 3. Transmission main drive gear bearing worn, dirty or lacks lubricant.	1. Replace parts as required. Lubricate with high temperature grease. 2. Replace release bearing. Lubricate with high temperature grease. 3. Repair transmission. Check for rear bearing cap oil hole for restriction clearance.

ON-VEHICLE SERVICE

Clutch System Inspection

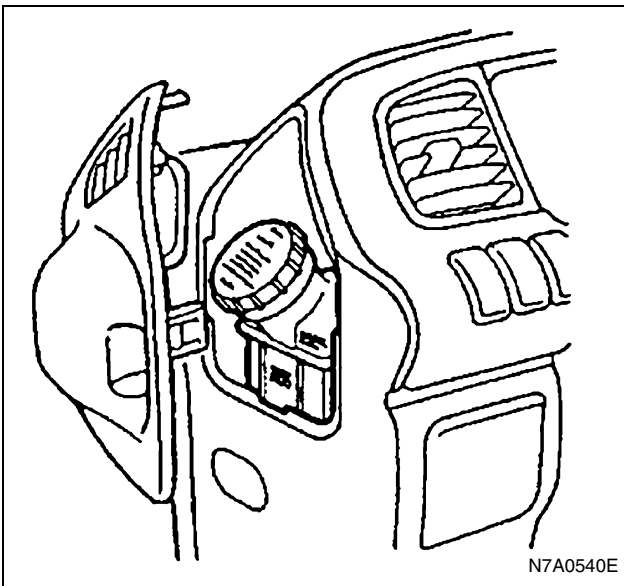
The system should be checked and serviced periodically as stated below.

- Maintain the proper level of hydraulic fluid in the master cylinder reservoir. Refer to MAINTENANCE AND LUBRICATION for recommended fluid and checking intervals.
- Inspect the entire clutch system regularly for fluid leakage. Leakage must be corrected immediately.
- Adjust the clutch linkage if necessary.
- If the clutch pedal action is springy or spongy, it is an indication that air needs to be bled from the hydraulic system.

A specified clearance in the hydraulic control linkage must exist between the end of the push rod and master cylinder piston. This clearance is measured as pedal free travel.

Before making the adjustment, make sure that the level of fluid in the master cylinder reservoir is 13 mm (0.5 in) below the top of the reservoir. The fluid system must be free of air.

The dual brake/clutch master cylinder reservoir is in the left-upper portion of the dash panel. It can be accessed by opening the driver door.



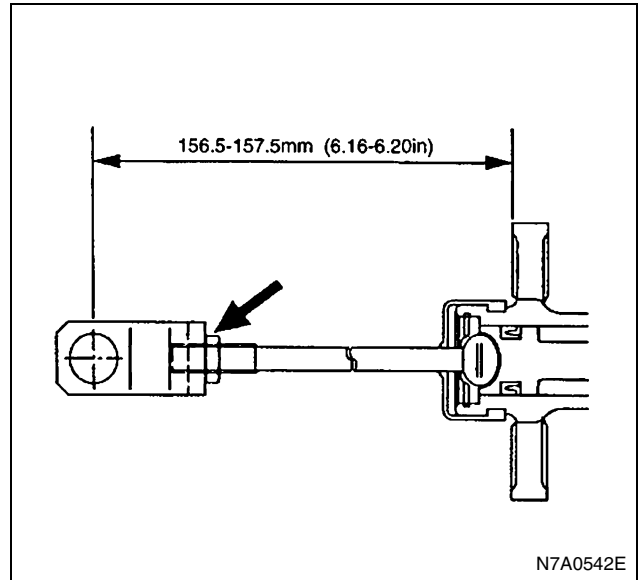
Clutch Pedal Free Play, Height And Travel Adjustment

Adjust

1. Loosen the jam nut on the clutch switch.
2. Remove the master cylinder from the clutch pedal assembly.
3. Loosen the jam nut on the master cylinder push rod.
4. Turn the push rod until the distance from the center of clevis pin hole to mounting surface of clutch ped-

al bracket should be set at 156.5 — 157.5 mm (6.16 — 6.20 in).

When fixed under this condition, there is no need to adjust the clutch pedal height and free play.



5. Install the master cylinder to the clutch pedal assembly.

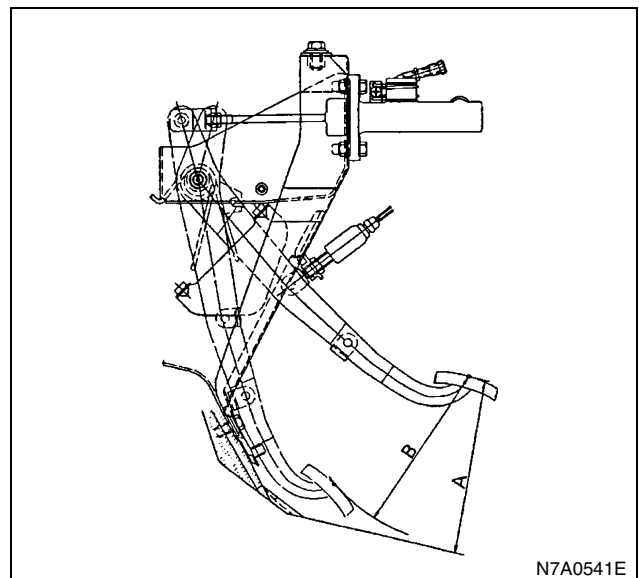
Tighten:

Jam nut to 17 N·m (1.7 kg·m / 148 lb·in).

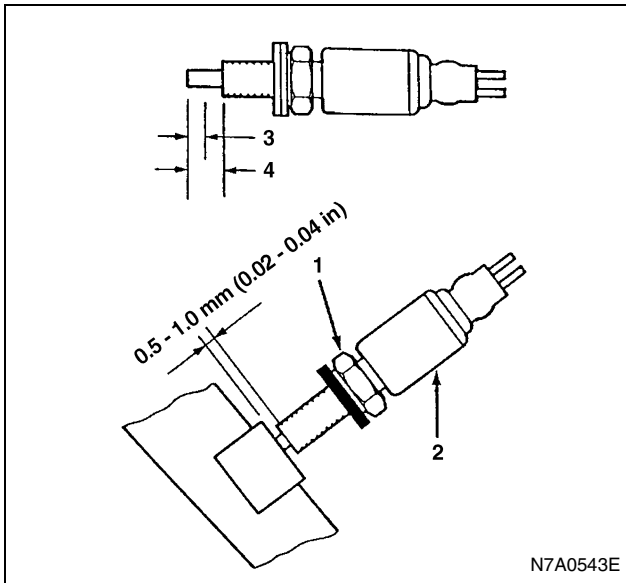
6. Install the master cylinder to the clutch pedal assembly.

Measurement

- Clutch pedal normal play is between 15 — 25 mm (0.6 — 1.0 in) (reference).
- Clutch pedal height "A" is between 160 — 170 mm (6.3 — 6.7 in) (reference).
- Clutch pedal travel "B" is between 159 — 169 mm (6.2 — 6.7 in) (reference).



7. Check clearance at the clutch switch. Turn the switch in its bracket until the clearance between the fully depressed plunger and the clutch pedal is 0.5 — 1.0 mm (0.02 — 0.04 in).



Legend

1. Jam nut
2. Clutch switch
3. OFF
4. Max. stroke

Caution:

Clutch switch must be adjusted so that when the clutch pedal is released, it closes the switch but does not completely depress the switch plunger (max stroke see figure). If the plunger is completely depressed by the pedal, switch damage may result.

8. Tighten the jam nut (1) at the clutch switch (2).

Tighten:

Jam nut to 15 N·m (1.5 kg·m / 133 lb·in).

9. Recheck the clutch switch clearance.

Bleeding The Clutch Hydraulic Circuits

If air enters the clutch circuit, it will cause the clutch to drag. It will be necessary to bleed the clutch fluid circuit if the reservoir has been emptied or the hydraulic circuit has been disassembled. To bleed the clutch circuit properly, an assistant will be needed.

Bleeding Procedure

1. Check the level of the clutch fluid in the clutch reservoir and add clutch fluid if necessary.
2. Remove the rubber cap from the bleeder screw and wipe the bleeder screw clean. Connect a vinyl tube to the bleeder screw and insert the other end of the vinyl tube into a transparent container. Pump the clutch pedal repeatedly and hold the pedal in the depressed position.

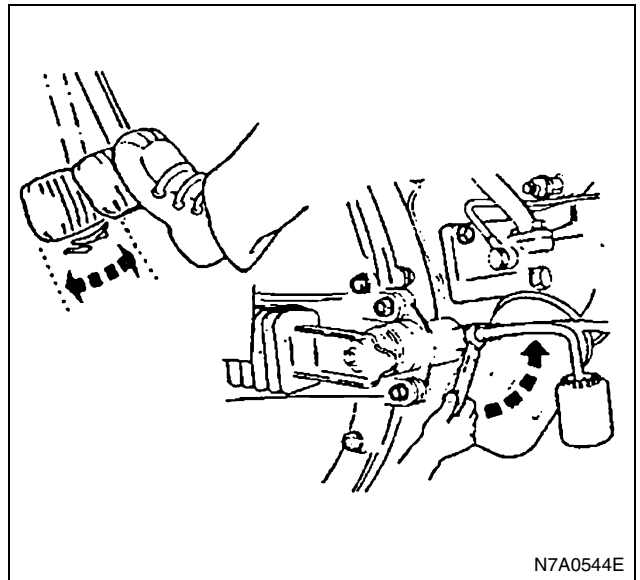
3. Loosen the bleeder screw on the clutch slave cylinder to discharge clutch fluid and air bubbles into a container then tighten the bleeder screw immediately.
4. Release the clutch pedal slowly. Repeat step 3 until all air bubbles disappear from the clutch fluid being discharged into the container. During the bleeding operation, keep the clutch fluid reservoir filled to 13 mm (0.5 in) below the top of the reservoir.
5. Install the rubber cap onto the bleeder screw.

Optional Bleeding Method

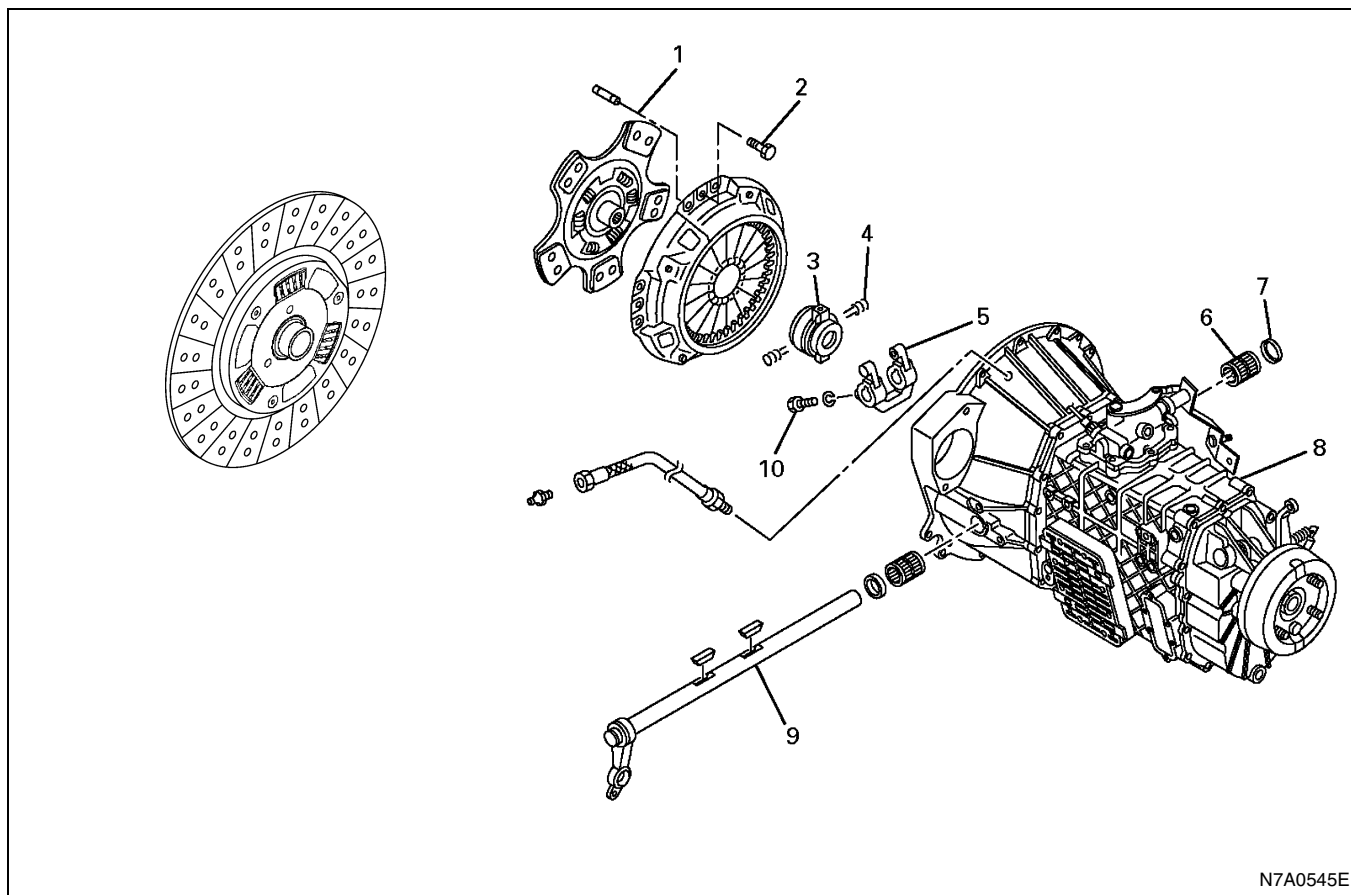
Tool Required:

J-35854 Power Bleeder Adapter or Equivalent

- Connect a power bleeding machine to the master cylinder with the use of adapter J-35854 or equivalent. Bleed until all air bubbles are out of the system and a solid pedal is obtained.



COMPONENT PARTS REPLACEMENT



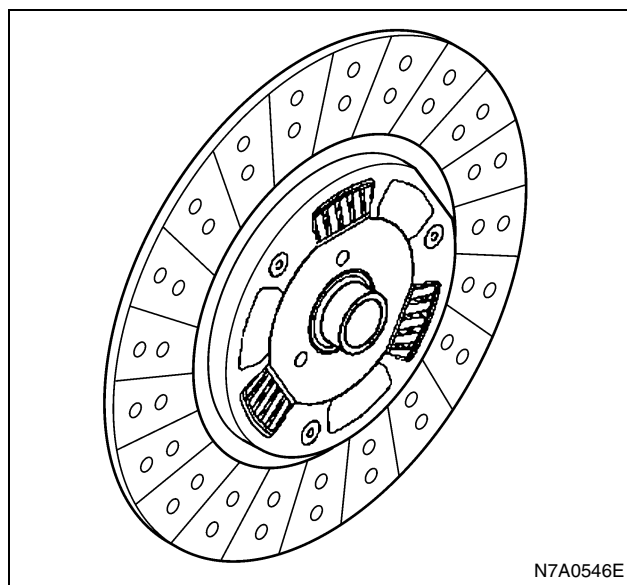
Legend

- | | |
|------------------------------------|--------------------------|
| 1. Clutch disc assembly | 6. Needle bearing |
| 2. Pressure plate assembly | 7. Dust cover |
| 3. Shift block and release bearing | 8. Transmission assembly |
| 4. Return spring | 9. Clutch shaft |
| 5. Shift fork | 10. Set bolt |

Clutch Assembly

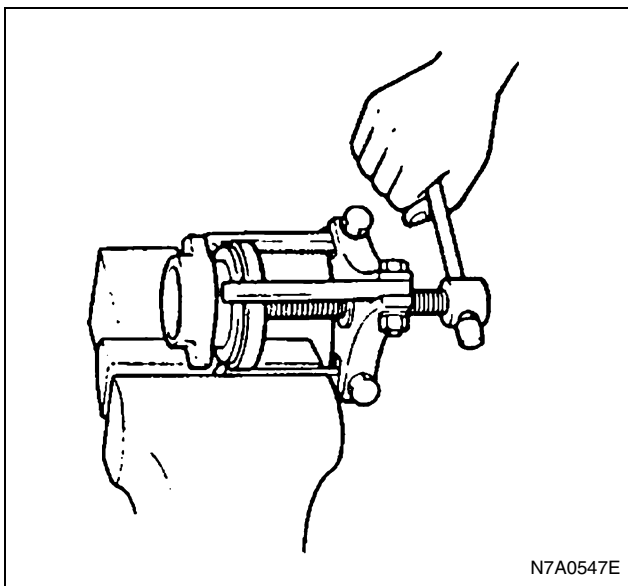
Remove or Disconnect

1. Transmission assembly.
Refer to TRANSMISSION.
2. Pressure plate assembly.
3. Clutch disc assembly.

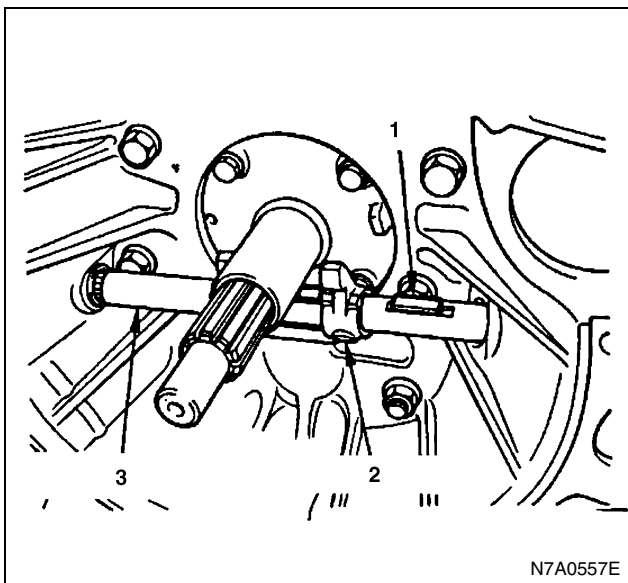


4. Return spring.

5. Shift block and release bearing.
 - Use suitable puller to remove the release bearing.



6. Set bolt.
7. Clutch shaft.
 - Use a brass bar to remove the clutch shaft.
8. Shift fork.



Legend

1. Key
2. Shift fork
3. Clutch shaft

9. Dust cover.
10. Needle bearing.

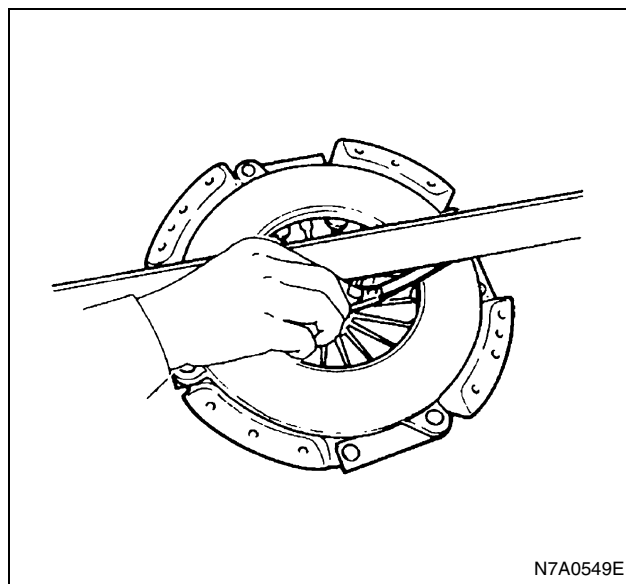
Inspect

- Pressure plate cover for cracks or distortion.
- Diaphragm spring for heat distortion.
- For loose or bent rivets.

- Release bearing for roughness or noise by rotating the bearing race under light pressure.
- Shift fork for wear or damage.
- Pilot bearing on the crankshaft for roughness by rotating the bearing race under light pressure.
- Replace all parts that would effect proper operation of the clutch release assembly.
- Replace the flywheel, pressure plate assembly, or driven plate if found to be scored, burned, warped, or worn. Do not machine the flywheel or the pressure plate to eliminate these conditions.

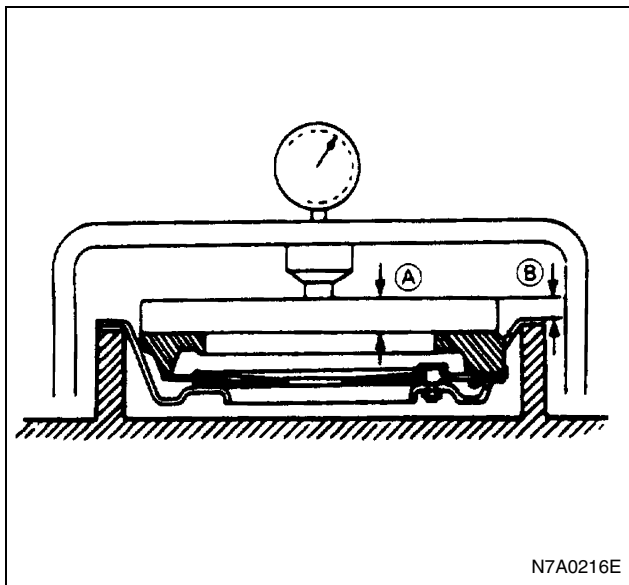
Measure

- Pressure plate wear.
If the wear exceeds the limit 0.3 mm (0.012 in), the pressure plate assembly must be replaced.

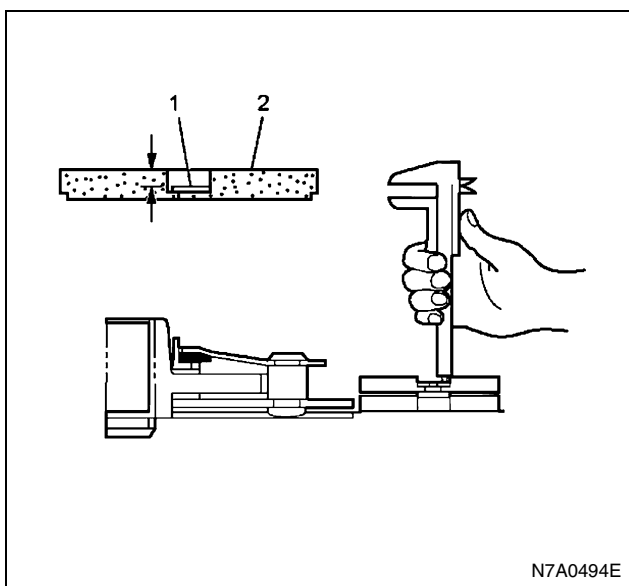


- Pressure plate clamping force. Invert the pressure plate and position an 9.2 mm (0.36 in) thick plate A over the pressure plate with hydraulic press. Then observe the load gauge reading when the dimension B becomes 19 mm (0.75 in) as indicated in the figure. Replace the pressure plate assembly if the clamping force is less than 970 kg (2,139 lb).

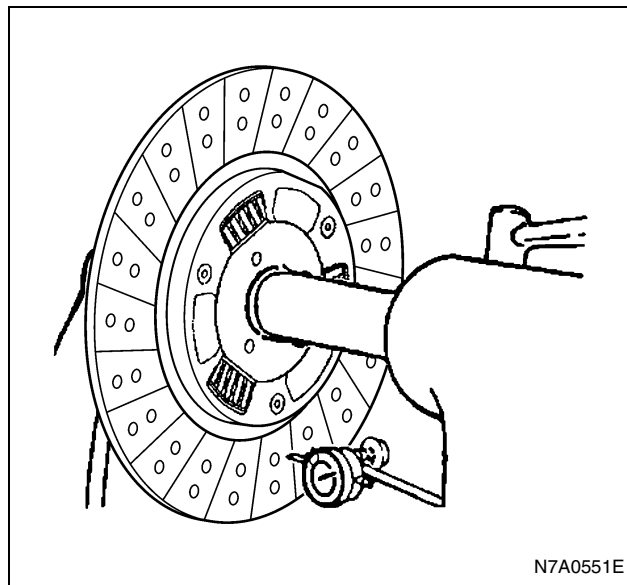
7C-10 CLUTCH (FOR MZZ TRANSMISSION)



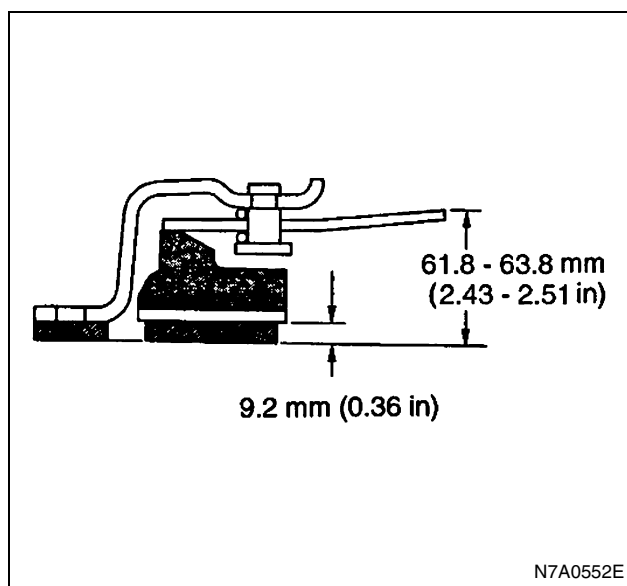
- The depression of the rivet head (1) on the driven plate (2).
Replace the clutch disc assembly if the thickness of the friction material is less than 0.2 mm (0.008 in).



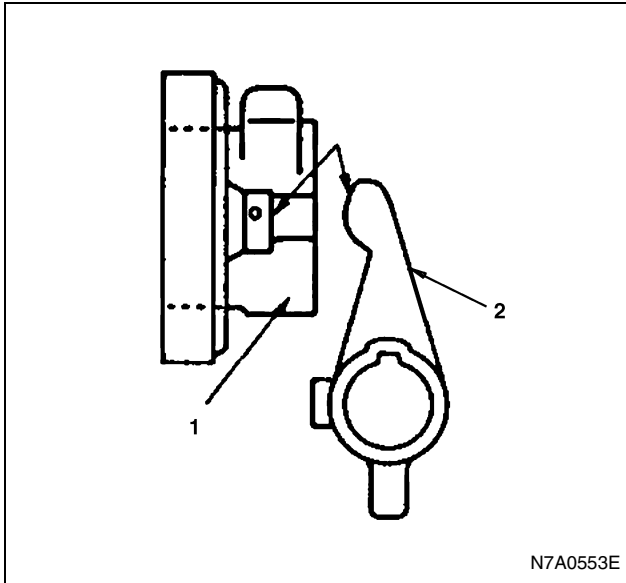
- Clutch Disc warpage.
Limit: 0.6 mm (0.024 in).
Clutch Size: 325 mm (12.80 in).



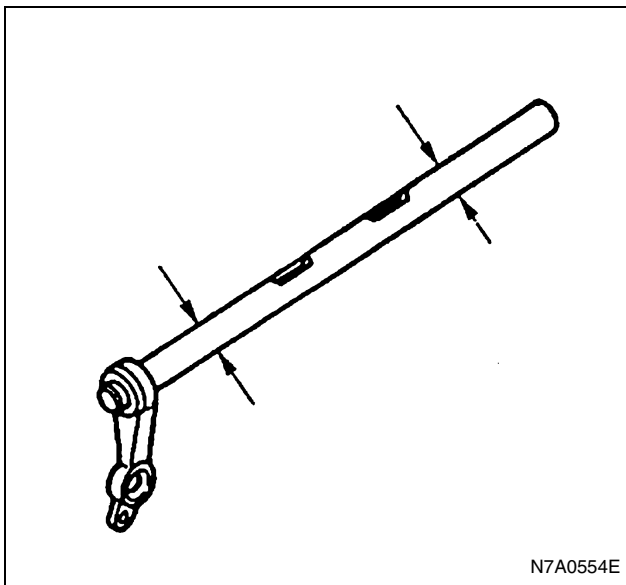
- Height of the diaphragm spring fingers. Position an 9.2 mm (0.36 in) thick plate under the pressure plate. Compress the diaphragm spring until the spring touches the table. Measure the height of the diaphragm spring fingers. They must be 61.8 — 63.8 mm (2.43 — 2.51 in) high.



- Check the surface of the shift block (1) for wear or damage.
- Check the surface of the shift fork (2) for wear or damage.

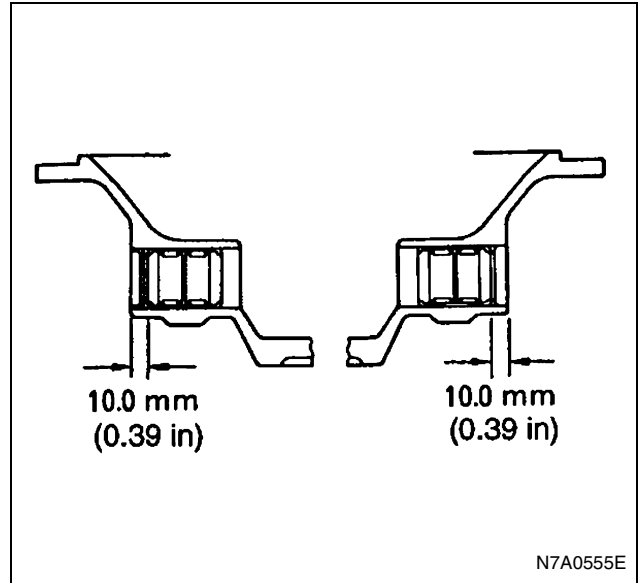


- Clutch shaft diameters as shown in the figure. If the diameter is less than 24.5 mm (0.96 in), replace the clutch shaft and needle bearing.

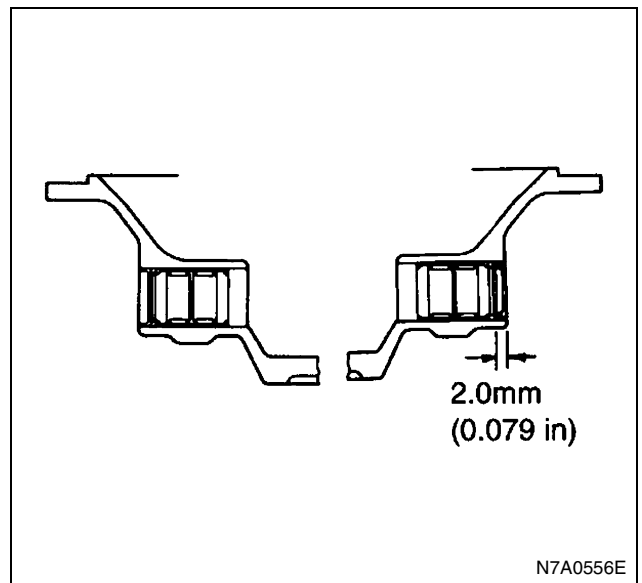


Install or connect

1. Needle bearing.
 - Use a 32 mm (1.26 in) diameter bar to drive the needle bearing from the marked side of bearing and install it specified depth as shown in illustration.



2. Dust seal.
 - Before installing the new bearing, apply MoS₂ contained type grease to the bearing surfaces and the clearance area between the bearing and the dust seal.

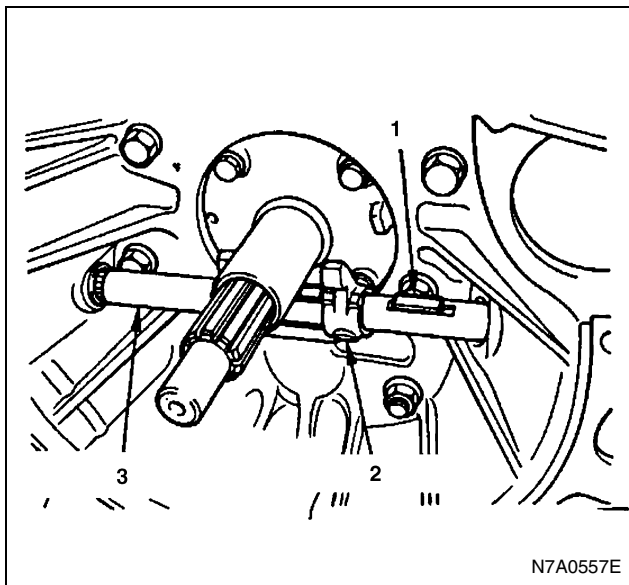


3. Shift fork.
4. Clutch shaft and key.
5. Set bolt.
 - Install the clutch shaft to the clutch housing.
 - Key and shift fork onto the clutch shaft assembly.
 - Tighten the set bolt.

Tighten:

Set bolt to 13 N·m (1.3 kg·m / 113 lb·in)

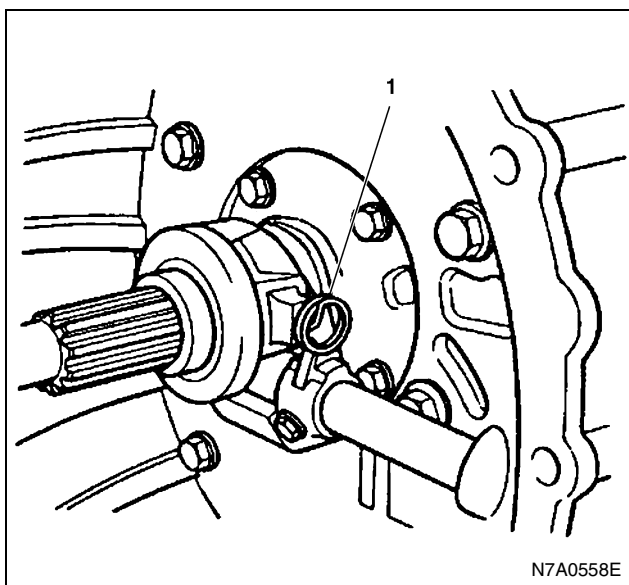
7C-12 CLUTCH (FOR MZZ TRANSMISSION)



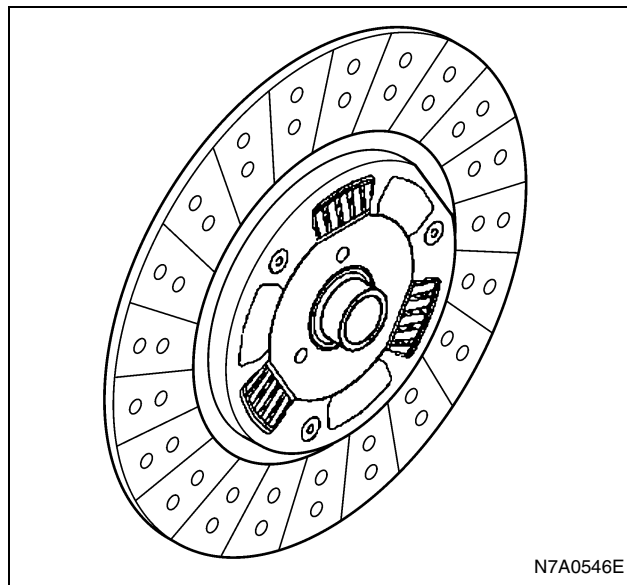
Legend

1. Key
2. Shift fork
3. Clutch shaft

6. Shift block and release bearing.
7. Return spring.
 - Apply the MoS₂ contained type grease to shift fork and shift block surfaces.
 - Install the return spring (1).



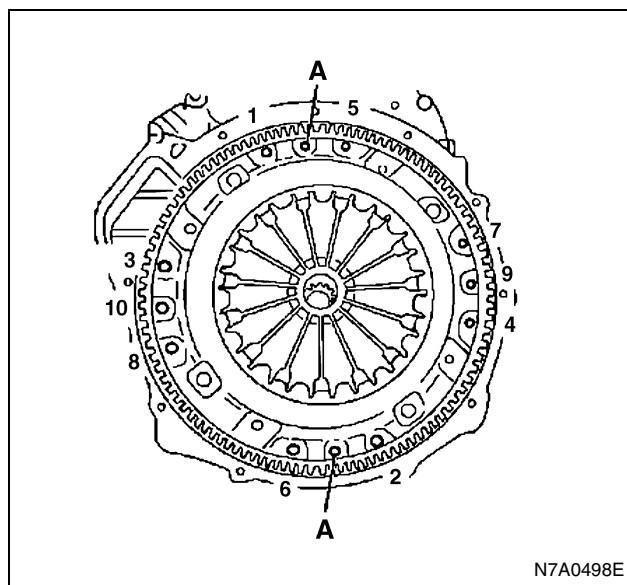
8. Clutch disc assembly.
 - Clutch pilot aligner 5-8840-2790-0 into the center of the clutch disc assembly.



9. Pressure plate assembly.
 - Install the pressure plate assembly to the flywheel. If the pressure plate was replaced to new parts, be sure to remove the ring which is installed to the diaphragm spring.

Tighten:

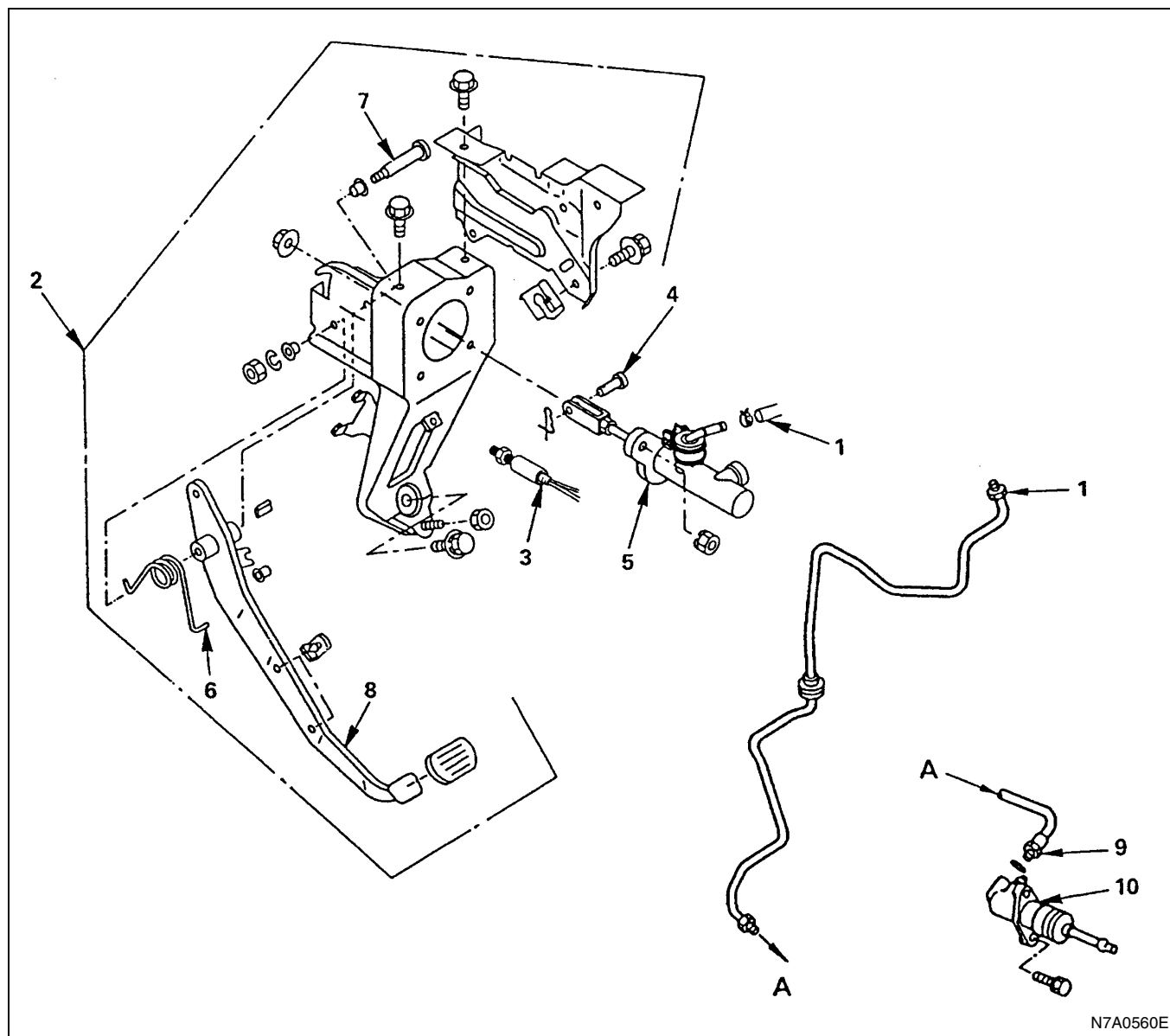
Pressure plate bolt to 40 N·m (4.1 kg·m / 30 lb·ft) in the sequence shown in the figure.



Legend

- A. Dowel pin

- Remove the pilot aligner.
10. Transmission assembly.
 - Refer to TRANSMISSION in this manual.

Clutch Controls**Clutch Control Assembly****Legend**

- | | |
|--------------------------------------|--------------------|
| 1. Hose and pipe | 5. Master cylinder |
| 2. Clutch pedal and bracket assembly | 6. Return spring |
| 3. Clutch switch | 7. Fulcrum pin |
| 4. Clevis pin | 8. Clutch pedal |
| | 9. Flexible hose |
| | 10. Slave cylinder |

Remove or Disconnect

- Drain the clutch fluid from the clutch hydraulic line.

Notice:

Do not let clutch fluid remain on a painted surface. Wash it off immediately.

1. Meter cluster and meter assembly.

- Pull out the meter cluster and disconnect harness connectors.
Refer to INSTRUMENTAL PANEL.

2. Electric vacuum pump.

- Remove the electric vacuum pump.
Refer to ELECTRIC VACUUM PUMP.

3. Hose and pipe.
4. Clutch pedal and bracket assembly.
5. Clutch switch.
6. Clevis pin.
7. Master cylinder.
8. Return spring.

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9. Fulcrum pin.
10. Clutch pedal.
11. Flexible hose.
12. Slave cylinder.

Inspect

- All parts for damage or wear.
- The clearance between the pedal shaft and bushings.
- Replace the clutch pedal assembly if the clearance is excessive.

Install or Connect

Notice:

For steps 1, 7 and 9 see "Notice" on page 7C-2 of this section.

1. Slave cylinder.

Tighten:

Slave cylinder bolt to 19 N·m (1.9 kg·m / 14 lb·ft).

2. Flexible hose.

Tighten:

Flexible hose tube nut to 20 N·m (2 kg·m / 14 lb·ft).

3. Clutch pedal.
4. Fulcrum pin.
5. Return spring.
6. Master cylinder.

Adjust:

- Loosen the jam nut on the master cylinder push rod.
- Adjust push rod length to 156.5 — 157.5mm (6.16 — 6.20 in), and tighten the jam nut.

Tighten:

Master cylinder jam nut to 17 N·m (1.7 kg·m / 148 lb·in).

7. Clutch switch.
8. Clutch pedal and bracket assembly.

Tighten:

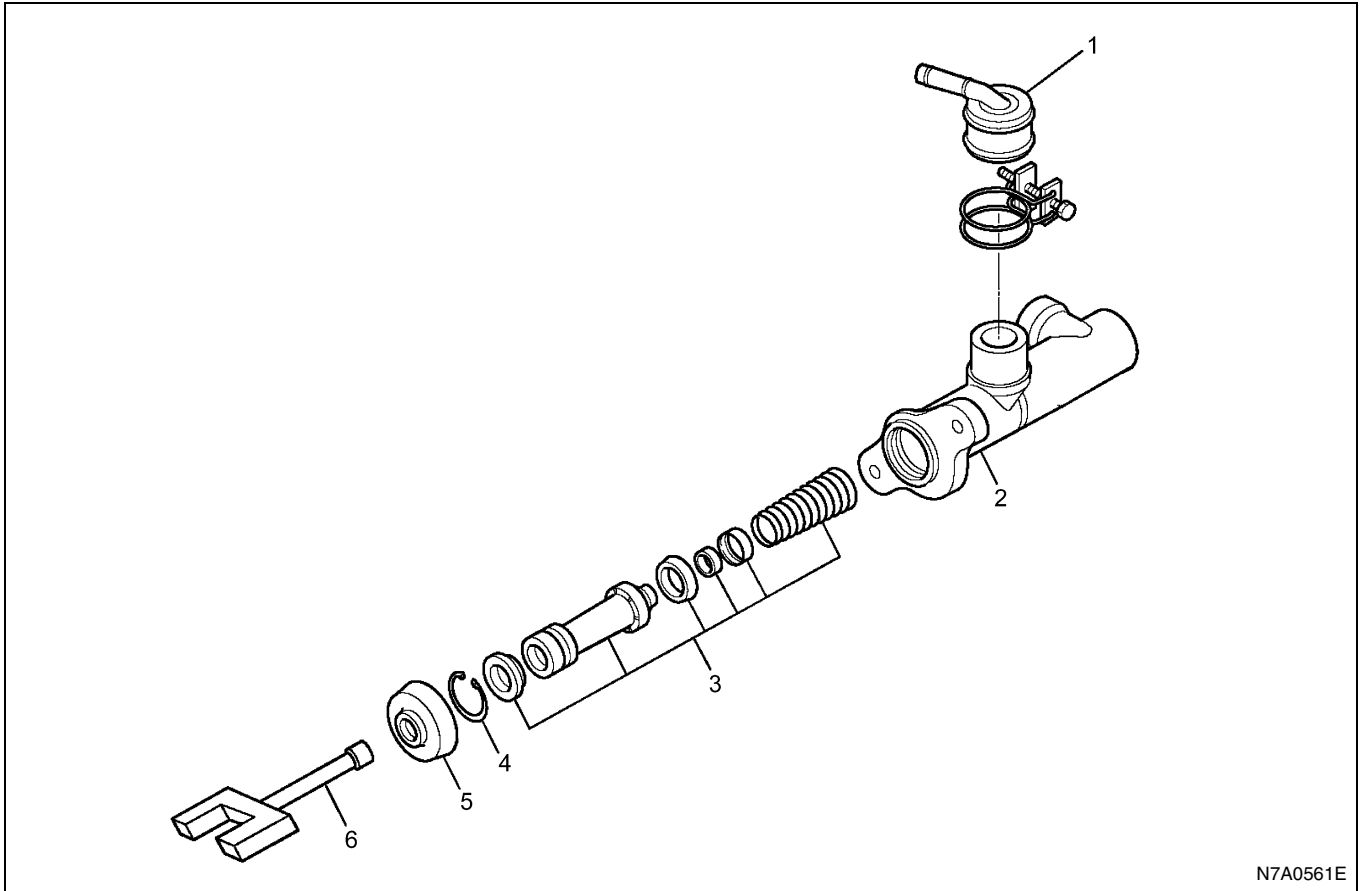
Clutch pedal and bracket bolt to 37 N·m (3.8 kg·m / 27 lb·ft).

9. Hose and pipe.
10. Electric vacuum pump.
 - Refer to ELECTRIC VACUUM PUMP.
11. Meter cluster and meter assembly.
 - Refer to INSTRUMENTAL PANEL.
12. Bleed the clutch hydraulic circuit. Refer to BLEEDING CLUTCH HYDRAULIC CIRCUITS previously in this section.

UNIT REPAIR

Master Cylinder

Master Cylinder Assembly



N7A0561E

Legend

- | | |
|--------------------|---------------|
| 1. Hose joint | 4. Snap ring |
| 2. Cylinder body | 5. Dust cover |
| 3. Piston assembly | 6. Push rod |

Disassembly

1. Hose joint (1).
2. Dust cover (5).
3. Snap ring (4).
4. Piston assembly (3).
5. Cylinder body (2).

Measure

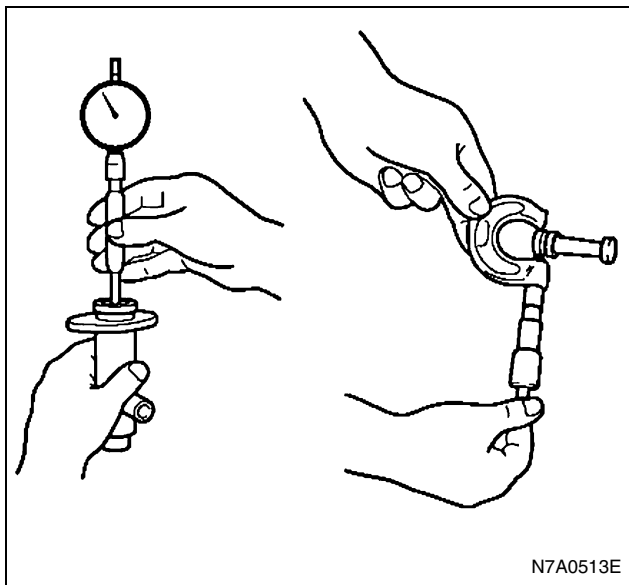
- The bore inside the master cylinder body with a dial indicator. Use a micrometer to check the thickness of the piston. Replace the master cylinder body or piston if the clearance is less than 0.12 mm (0.0047 in).

Clean

- All disassembled parts in brake fluid. Be sure to check the ports for restrictions. Use a metal wire to loosen the dirt.

Inspect

- Cylinder bore and piston for wear and rust formation.
- Spring for weakening.
- Replace any parts if wear, damage, or any other abnormal conditions are found during inspection.

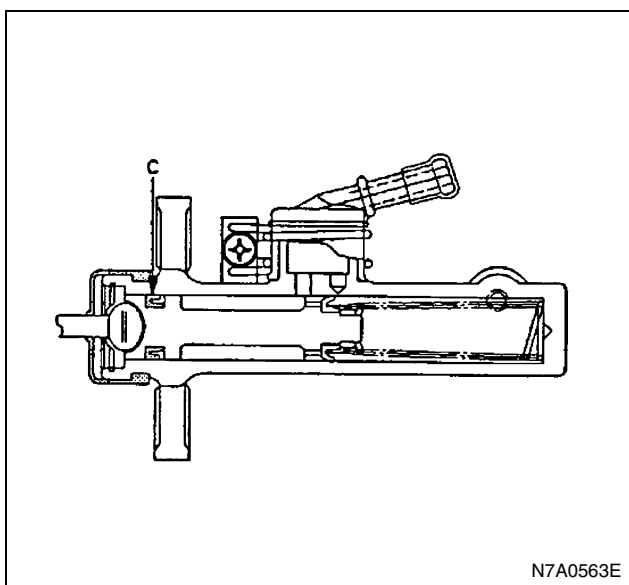


Reassembly

1. Cylinder body (2).

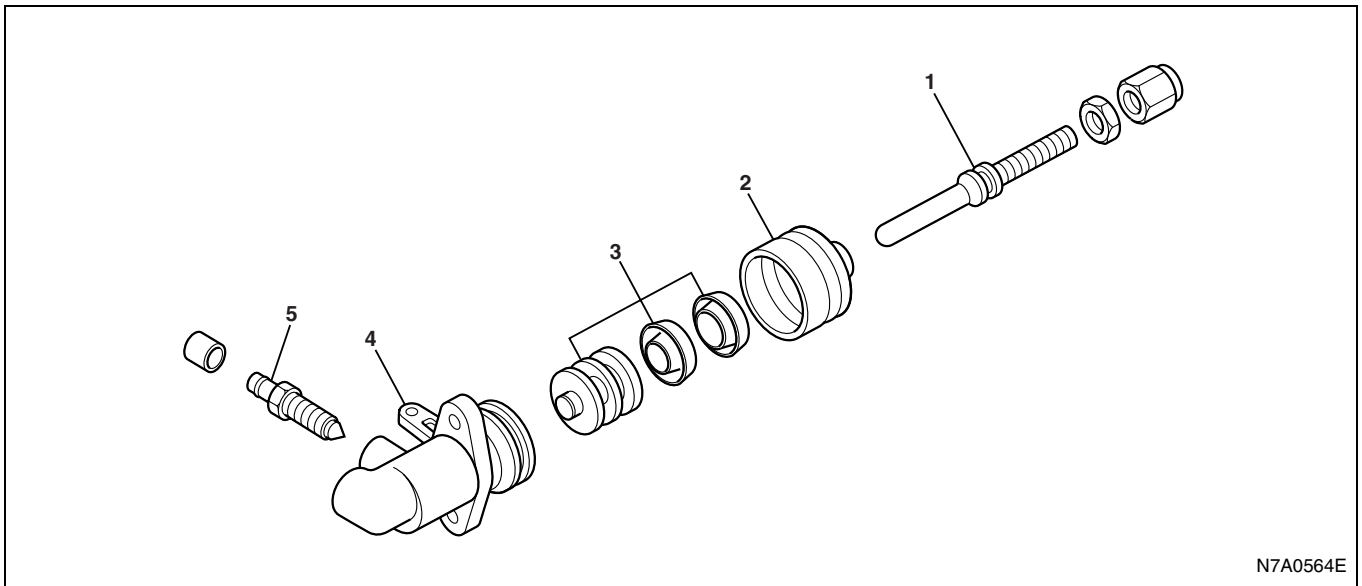
Important:

- Before installing the parts, apply a thin coat of brake fluid.
2. Piston assembly (3). Install new cup (C) in groove in piston with the lip turned toward the front of the cylinder body. Use care so as not to scratch the lipped portion of the cup.
 3. Snap ring (4) to the cylinder body groove.
 4. Dust cover (5).
 5. Hose joint (1).



Slave Cylinder

Slave Cylinder Assembly



Legend

- | | |
|--------------------|--------------------------|
| 1. Push rod | 4. Slave cylinder body |
| 2. Boot | 5. Bleeder screw and cap |
| 3. Piston assembly | |

Disassembly

1. Push rod (1).
2. Boot (2).
3. Piston assembly (3).
4. Slave cylinder body (4).
5. Bleeder screw and cap (5).

Clean

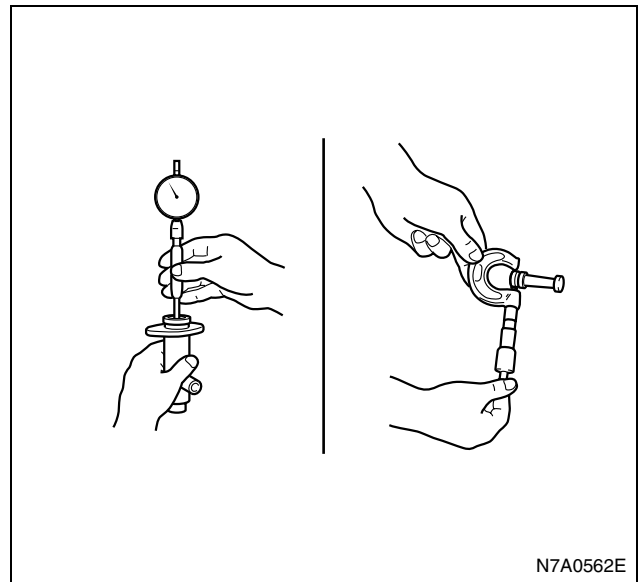
- All disassembled parts in brake fluid. Be sure to wipe excess brake fluid from the components.

Inspect

- Cylinder bore and piston for wear and rust formation.
- Spring for weakening.
- Piston cups for wear, deterioration and scratches.
- Replace any parts if wear, damage, or any other abnormal conditions are found during inspection.

Measure

- The clearance inside the slave cylinder body with a dial indicator. Use a micrometer to check the thickness of the piston. Replace the slave cylinder body or piston if the clearance is less than 0.11 mm (0.0043 in).



Reassembly

1. Slave cylinder body (4).

Notice:

See "Notice" on page 7C-2 of this section.

2. Bleeder screw and cap (5).

Tighten:

Bleeder screw to 8 N·m (0.8 kg·m / 69 lb·in).

Important:

- Before installing the parts, apply a thin coat of brake fluid.

7C-18 CLUTCH (FOR MZZ TRANSMISSION)

- Be sure to install the piston cup in the piston groove with the lip turned toward the front of the cylinder body. Use care so as not to scratch the lip portion of the piston cup.
3. Piston assembly (3).
 4. Boot (2).
 5. Push rod (1).

SPECIFICATIONS

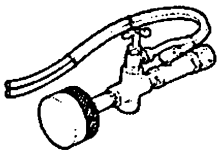
Specifications

Pressure Plate Types	Dry Single Plate w/Cushioning Spring
Clearance Between Master Cylinder Body and Piston	0.12 mm (0.0047 in)
Clearance Between Slave Cylinder Body and Piston	0.11 mm (0.0043 in)
Driven Plate Warpage Maximum Limit	0.6 mm (0.024 in)
Clutch Size	325 mm (12.80 in)
Depression of Rivet Head Maximum Limit	0.2 mm (0.008 in)
Pressure Plate Clamping Force Maximum Limit	970 kg (2,139 lb)
Pressure Plate Finger Height	61.8 — 63.8 mm (2.43 — 2.51 in)
Master Cylinder Push Rod Length (From Center of Crevis Pin Hole to Mounting Surface)	156.5 — 157.5 mm (6.16 — 6.20 in)
Pedal Height (Reference)	160 — 170 mm (6.3 — 6.7 in)
Pedal Travel (Reference)	159 — 169 mm (6.2 — 6.7 in)
Free Play (Reference)	15 — 25 mm (0.6 — 1.0 in)
Clutch Switch Clearance	0.5 — 1.0 mm (0.020 — 0.039 in)

Fixing Torque

Master Cylinder Push Rod Jam Nut	17 N·m (1.7 kg·m / 148 lb·in)
Clutch Switch Jam Nut	15 N·m (1.5 kg·m / 133 lb·in)
Pressure Plate Bolts	40 N·m (4.1 kg·m / 30 lb·ft)
Master Cylinder Bolts	13 N·m (1.3 kg·m / 113 lb·in)
Slave Cylinder Bolts	19 N·m (1.9 kg·m / 14 lb·ft)
Flexible Hose Tube Nuts	20 N·m (2 kg·m / 14 lb·ft)
Slave Cylinder Bleeder Screw	8 N·m (0.8 kg·m / 69 lb·in)
Clutch Pedal and Bracket Assembly Mounting Bolt	37 N·m (3.8 kg·m / 27 lb·ft)

SPECIAL TOOLS**Special Tools**

Illustration	Tool Number / Description / Remarks
 J35854	J-35854 / Power Bleeder Adapter
 5884027900	5-8840-2790-0 / Clutch Pilot Aligner