

CLUTCH

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SPECIFICATIONS

GENERAL SPECIFICATIONS

Items		FWD	AWD
Clutch operating method		Hydraulic type	Hydraulic type
Clutch disc	Type	Single dry disc type	Single dry disc type
	Facing diameter O.D. x I.D. mm (in.)	225 x 150 (8.86 x 5.91)	250 x 160 (9.84 x 6.30)
Clutch cover assembly	Type	Diaphragm spring strap drive type	Diaphragm spring strap drive type
	Setting load N (lbs.)	6,300 (1,386)	9,220 (2,072)
Clutch release cylinder	I.D. mm (in.)	19.05 (3/4)	17.46 (11/16)
Clutch master cylinder	I.D. mm (in.)	15.87 (5/8)	15.87 (5/8)
Clutch booster	Type	–	Vacuum type
	Effective dia. of power cylinder mm (in.)	–	101 (4.0)
	Boosting ratio [Clutch pedal depressing force]	–	1.7 [at 110 N (24 lbs.)]

SERVICE SPECIFICATIONS

Items		Standard value	Limit
Clutch pedal height mm (in.)	FWD	177–182 (6.97–7.17)	–
	AWD	183–188 (7.20–7.40)	–
Clutch pedal stroke mm (in.)		160 (6.29)	–
Amount of clutch pedal return from full pedal stroke position to where operating sound of interlock switch is produced mm (in.)		10–15 (.394–.591)	–
Clutch pedal free play mm (in.)	FWD	6–13 (.24–.51)	–
	AWD	12–20 (.49–.79)	–
Distance between the clutch pedal and the firewall when the clutch is disengaged mm (in.)		55 (2.2) or more	–
Booster push rod to master cylinder piston clearance mm (in.) <AWD>		0.21–0.46 (.0082–.0181)	–
Vacuum hose insertion distance mm (in.) <AWD>		20–25 (1.0)	–
Facing rivet sink mm (in.)		–	0.3 (.012)
Diaphragm spring end height difference mm (in.)		–	0.5 (.020)

LUBRICANTS

Items	Specified lubricants
Contact surface of release bearing and fulcrum of clutch release fork	MITSUBISHI genuine grease Part No. 0101011 or equivalent
Inner surface of clutch release bearing	
Inner surface of clutch disc spline	
Contact portion of release fork to release cylinder push rod	
Clutch fluid	Conforming to DOT3 or DOT4
Inner surface of clutch release cylinder and outer circumference of piston and cup	
Inner surface of clutch master cylinder and outer circumference of piston assembly	

SEALANT

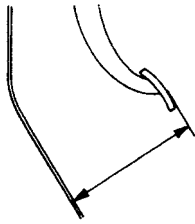
Items	Specified sealant
Thread part fitting	3M ATD Part No. 8663 or equivalent

TROUBLESHOOTING

Symptom	Probable cause	Remedy
Clutch slips	Clutch pedal play too small	Adjust
	Excessive wear of clutch disc facing	Replace
	Hardened clutch disc facing or oil on facing	Replace
	Clutch release fork not operating smoothly	Repair or replace
	Settled or damaged diaphragm spring	Replace
	Clogged hydraulic system	Repair or replace
	Poorly adjusted clutch booster push rod <AWD>	Adjust
Gear shifting failure	Clutch pedal play too large	Adjust
	Large clutch disc distortion or runout	Replace
	Worn clutch cover assembly	Replace
	Worn or corroded clutch disc splines	Replace
	Separated clutch disc facing	Replace
	Worn clutch release bearing	Replace
	Damaged pressure plate or flywheel	Replace
	Leaky or clogged hydraulic system or air trapped in hydraulic system	Repair or replace
	Poorly adjusted clutch booster push rod <AWD>	Adjust

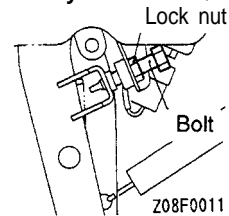
Symptom	Probable cause	Remedy
Noisy clutch	Clutch pedal play too small	Adjust
	Incorrectly installed clutch cover assembly	Repair or replace
	Excessive wear of clutch disc facing	Replace
	Clutch release fork not operating smoothly	Repair or replace
	Worn clutch release bearing	Replace
	Settled or damaged torsion spring	Replace
	Damaged pilot bushing	Replace
	Poorly lubricated bearing sleeve sliding surface	Repair
Heavy clutch pedal	Poorly lubricated clutch pedal	Repair
	Poorly lubricated clutch disc splines	Repair
	Clutch release fork not operating smoothly	Repair or replace
	Poorly lubricated bearing sleeve sliding surface	Repair
	Defective clutch booster <AWD>	Replace
	Leaky or clogged vacuum system <AWD>	Repair
Clutch vibrates	Worn or damaged clutch disc facing	Replace
	Oil on clutch disc facing	Replace
	Uneven diaphragm spring height	Repair or replace
	Settled or damaged torsion spring	Replace
	Damaged pressure plate or flywheel	Replace
	Loose or damaged mounts	Tighten or replace

Clutch pedal height



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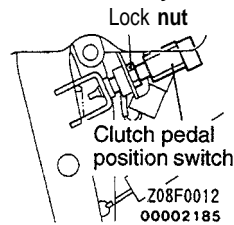
<FWD>

Vehicles without
auto-cruise
control system

Lock nut

Bolt

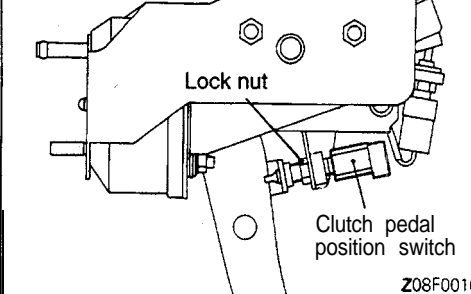
Z08F0011

Vehicles with
auto-cruise
control system

Lock nut

Clutch pedal
position switchZ08F0012
00002185

<AWD>

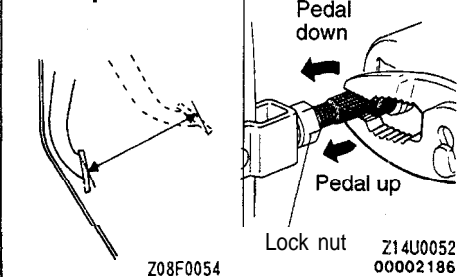


Lock nut

Clutch pedal
position switch

Z08F0013

Clutch pedal stroke

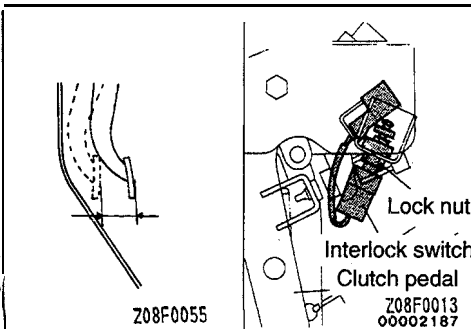


Pedal down

Pedal up

Lock nut

Z08F0054

Z14U0052
00002186

Lock nut

Interlock switch

Clutch pedal

Z08F0055

Z08F0013
00002187

ON-VEHICLE SERVICE

CLUTCH PEDAL CHECK AND ADJUSTMENT

1. Take off the carpet at under the clutch pedal. Measure the clutch pedal height (from the face of the pedal pad to the firewall).

Standard value:

<FWD> 177–182 mm (6.97–7.17 in.)

<AWD> 183–188 mm (7.20–7.40 in.)

If the clutch pedal height is not within the standard value range, adjust as follows:

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 to the specified torque.

Vehicles with auto-cruise control system, disconnect the clutch pedal position switch connector and turn the switch for standard clutch pedal height. Tighten the lock nut to the specified torque.

Specified torque: 13 Nm (9 ft.lbs.)**NOTE**

When the pedal height is lower than the standard value, loosen the bolt or clutch pedal position switch, and then turn the push rod to make the adjustment. After making the adjustment, tighten the bolt or clutch pedal position switch to reach the pedal stopper, and then lock with the lock nut.

2. Measure the clutch pedal stroke.

Standard value: 160 mm (6.29 in.) or more

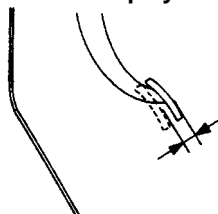
If the clutch pedal stroke deviates from the standard value, turn the push rod to adjust the stroke.

3. Return the clutch pedal gradually from its full-stroke position to measure amount of the return made by the pedal until, the interlock switch makes an operating sound.

Standard value: 10–15 mm (.394–.591 in.)

If the amount of pedal return deviates from the standard value, adjust it by loosening the lock nut and turning the interlock switch.

Clutch pedal clevis pin play and clutch pedal free play



Z08Y043

4. Measure the clutch pedal clevis pin play.

Clutch pedal clevis pin play

Standard value: 1–3 mm (.04–.12 in.)

If the clutch pedal clevis pin play is outside the standard value, adjust with the push rod.

Caution

Do not push in the master cylinder push rod at this time.

5. Measure pedal play. In the case of AWD vehicles, depress the pedal 2 or 3 times to eliminate booster negative pressure with the engine stopped and then push the pedal with a finger to measure the play.

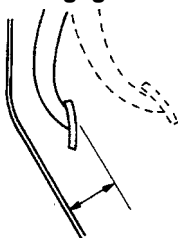
Clutch pedal play

Standard value:

<FWD> 6–13 mm (.24–.51 in.)

<AWD> 12–20 mm (.49–.79 in.)

Distance between the clutch pedal and the firewall when the clutch is disengaged



Z08N0010

6. Measure the clearance to the toe board (or pedal stopper) when the clutch disengages. In the case of AWD vehicles, measure with the engine running.

Clearance to toe board when clutch disengages:

Standard value: 55 mm (2.2 in.) or more

7. If the play and/or clearance is out of specification, bleed the hydraulic system or check the master cylinder, release cylinder or clutch proper.
8. Return the carpet to the original position.

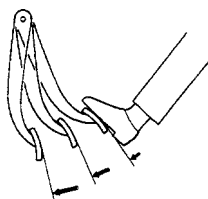
CLUTCH BOOSTER OPERATING CHECK

<AWD>

For simple checking of clutch booster operation, carry out the following tests.

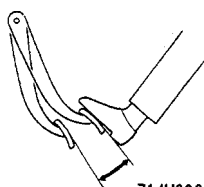
- (1) Run the engine for one or two minutes, and then stop it.
- (2) Step on the clutch pedal several times with normal pressure.
If the pedal depressed fully the first time but gradually becomes higher when depressed succeeding times, the booster is operating properly.
If the pedal height remains unchanged, the booster is faulty.
- (3) With the engine stopped, step on the clutch pedal several times with the same foot pressure to make sure that the pedal height will not change.
Then step on the clutch pedal and start the engine.
If the pedal moves downward slightly, the booster is in good condition. If there is no change, the booster is faulty.

Good

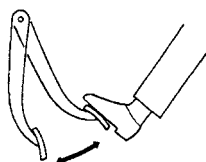


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No good

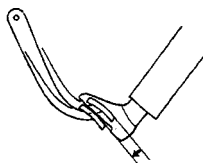
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00002188

When engine is stopped



Z14U0059

When engine is started

Z14U0060
00002189

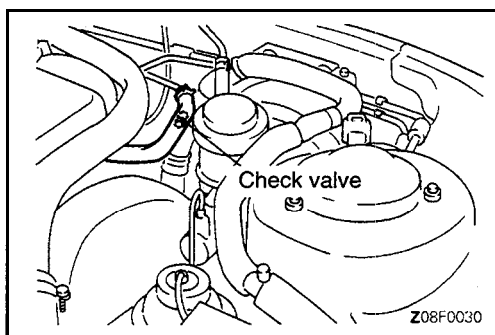
- (4) With the engine running, step on the clutch pedal and then stop the engine.

Hold the pedal depressed for 30 seconds. If the pedal height does not change, the booster is in good condition.

If the pedal rises, the booster is faulty.

If the above three tests are okay, the booster performance can be determined as good.

If one of the above three tests is not okay at last, the check valve, vacuum hose, or booster will be faulty.



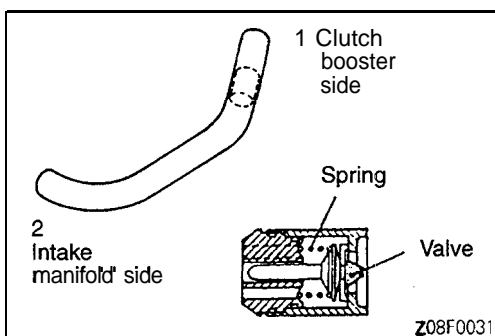
CHECK VALVE OPERATION CHECK <AWD>

When checking the check valve, keep the check valve fit in the vacuum hose.

1. Remove the vacuum hose.

Caution

The check valve is press-fit inside the vacuum hose and do not remove the check valve from the vacuum hose.

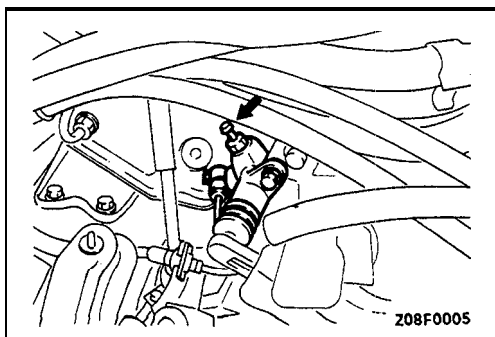


2. Check the operation of the check valve by using a vacuum pump.

Vacuum pump connection	Accept/reject criteria
Connection at the clutch booster side (1)	A negative pressure (vacuum) is created and held.
Connection at the intake manifold side (2)	A negative pressure (vacuum) is not created.

Caution

If the check valve is defective, replace it as an assembly unit together with the vacuum hose.



BLEEDING

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

Specified fluid: Conforming to DOT3 or DOT4

Caution

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

CLUTCH PEDAL

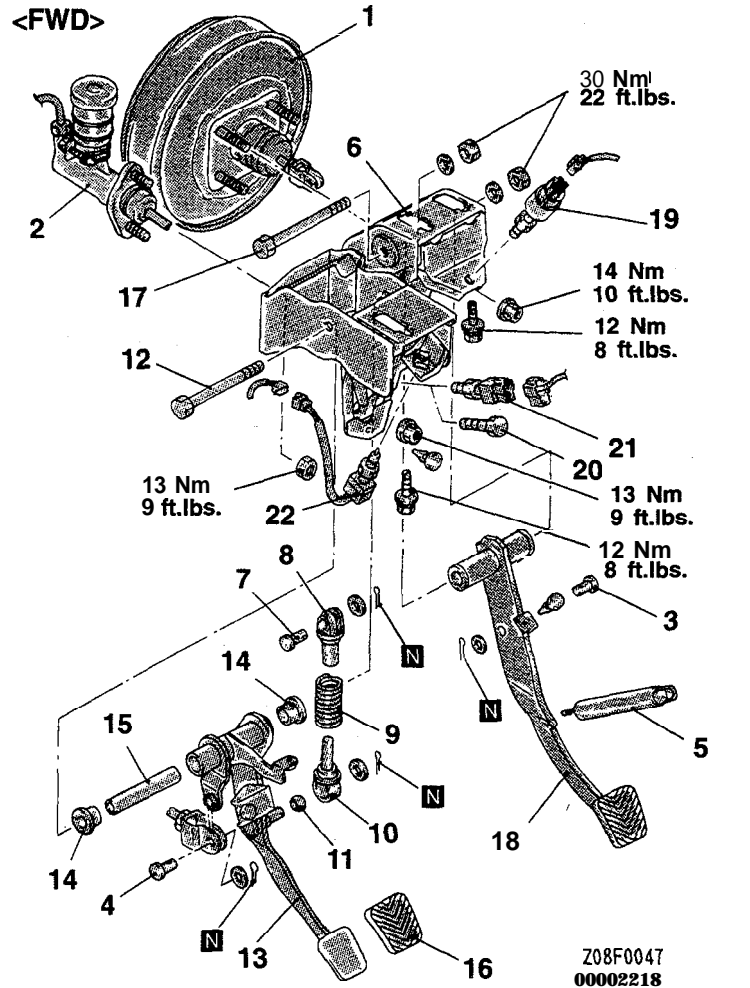
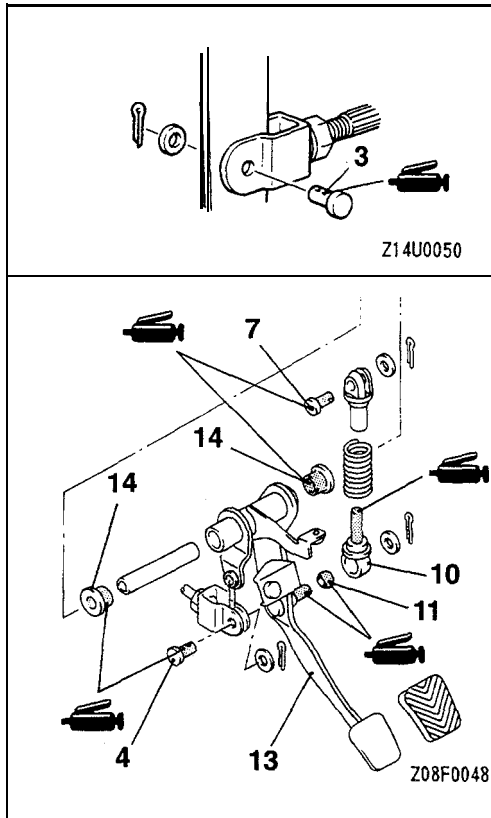
REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation

- Steering Column Assembly Removal and Installation (Refer to GROUP 37A – Steering Wheel and Shaft.)

Adjustment

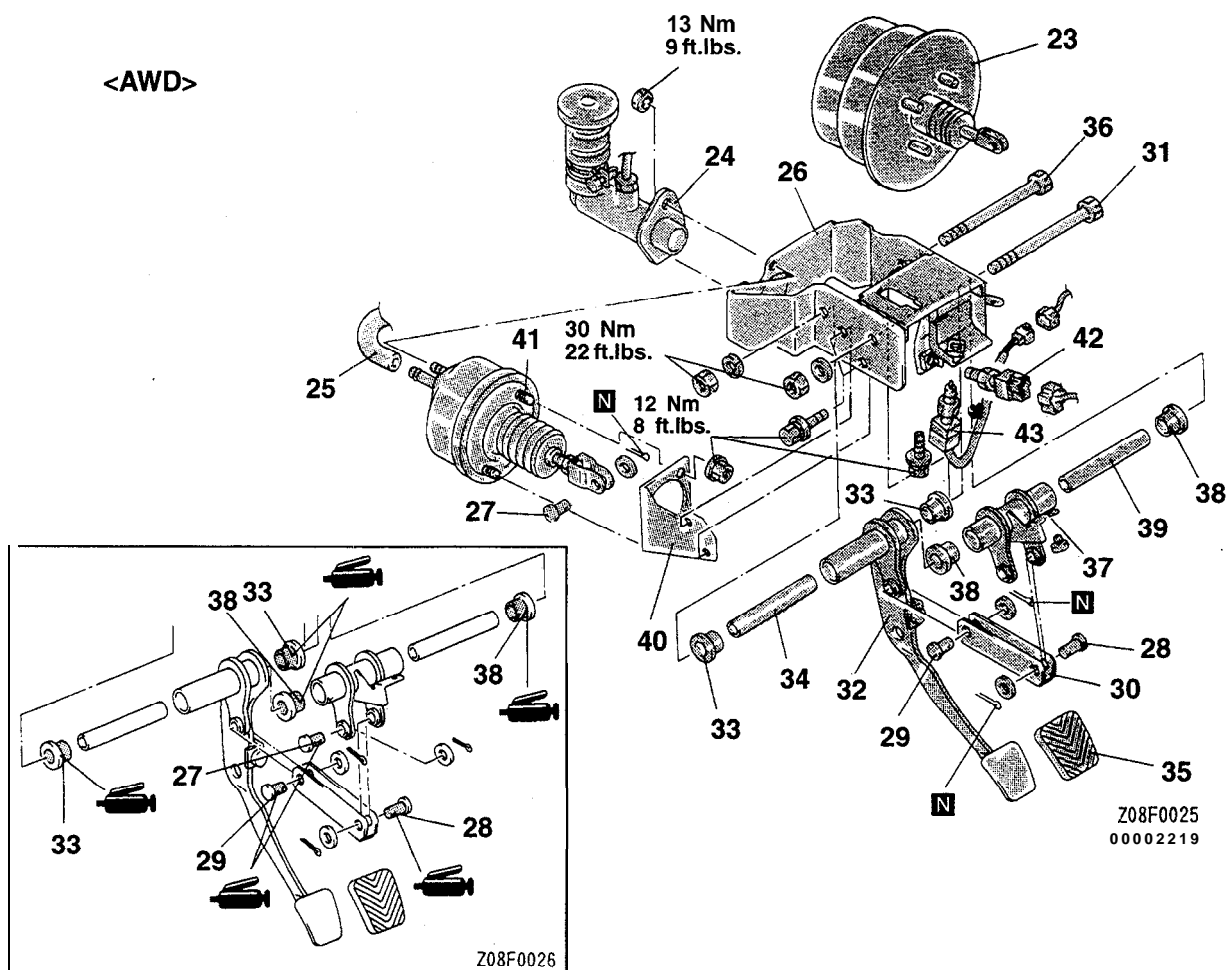
- Clutch Pedal Adjustment (Refer to P.21-5.)



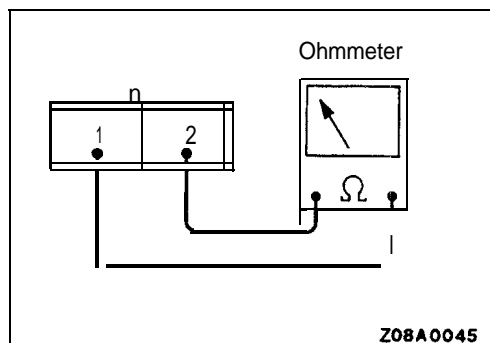
Removal steps

1. Brake booster connection
- Brake pedal adjustment (Refer to GROUP 35 – Service Adjustment Procedures.)
2. Clutch master cylinder connection
3. Clevis pin
4. Clevis pin
5. Return spring
6. Pedal support bracket
7. Clevis pin
8. Rod A
9. Turn over spring
10. Rod B
11. Bush
12. Clutch pedal shaft
13. Clutch pedal
14. Bushing
15. Spacer
16. Clutch pedal pad
17. Brake pedal shaft
18. Brake pedal
19. Stop light switch
20. Bolt <Vehicles without auto-cruise control system>
21. Clutch pedal position switch <Vehicles with auto-cruise control system>
22. Interlock switch

<AWD>

**Removal steps**

- | | |
|---|----------------------------------|
| 23. Brake booster
(Refer to GROUP 35 – Brake Booster.) | 33. Bushing |
| 24. Clutch master cylinder connection | 34. Spacer |
| 25. Vacuum hose connection | 35. Clutch pedal pad |
| 26. Pedal support bracket | 36. Bolt |
| 27. Clevis pin | 37. Lever assembly |
| 28. Clevis pin | 38. Bushing |
| 29. Clevis pin | 39. Spacer |
| 30. Yoke | 40. Support bracket |
| 31. Clutch pedal shaft | 41. Clutch booster |
| 32. Clutch pedal | 42. Clutch pedal position switch |
| | 43. Interlock switch |



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INSPECTION

- Check the pedal shaft and bushing for wear.
 - Check the clutch pedal for bend or torsion.
 - Check the turn over spring for damage or deterioration.
- <FWD>
- Check the pedal pad for damage or wear.

INTERLOCK SWITCH CHECK

- (1) Disconnect the connector.
- (2) Check to be sure that there is continuity between connector terminals 1 and 2.

CLUTCH CONTROL

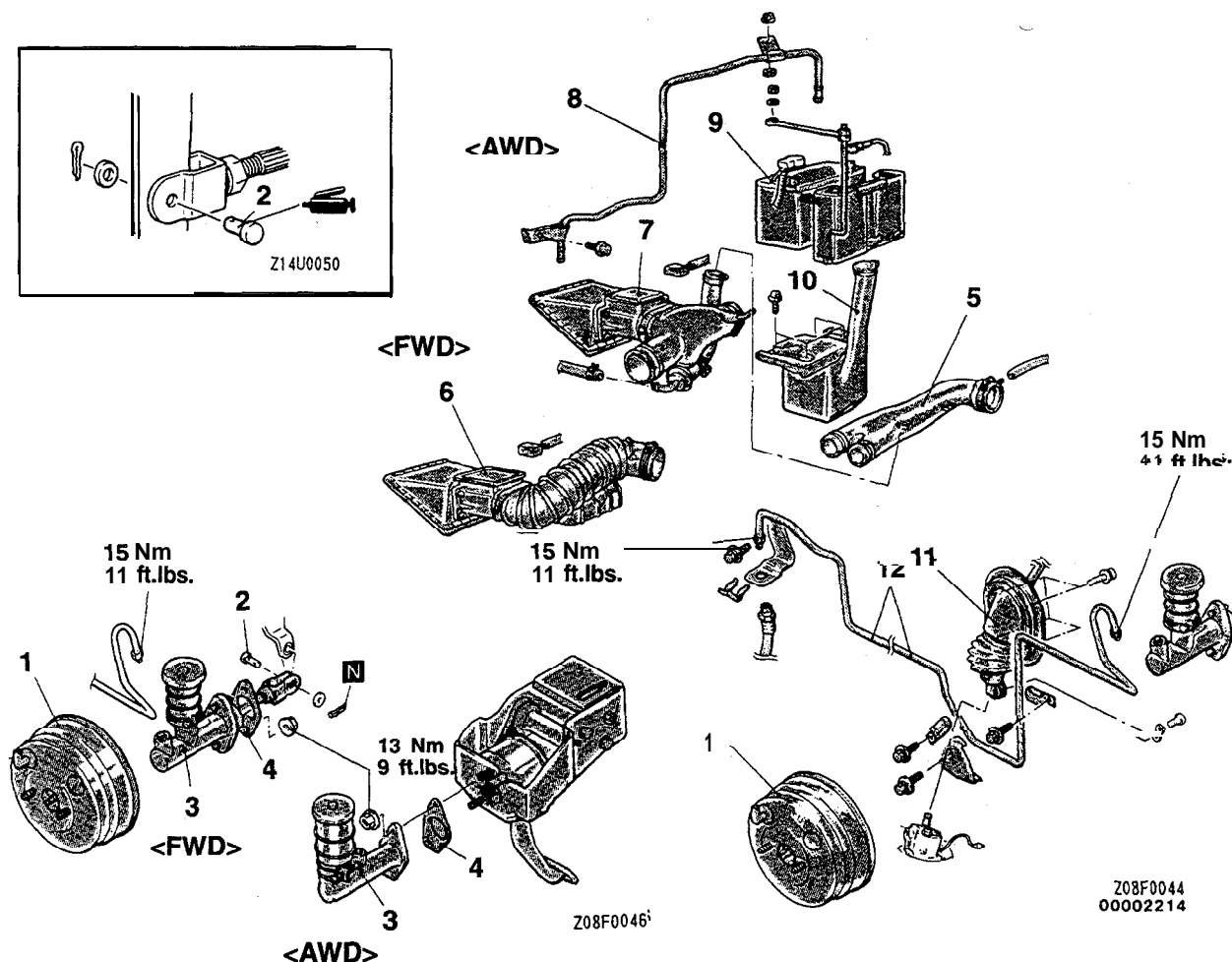
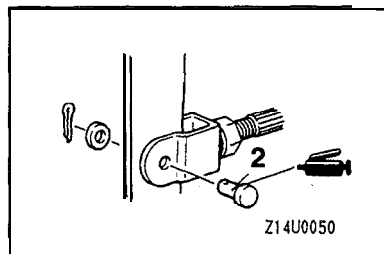
REMOVAL AND INSTALLATION

Pre-removal Operation

- Draining of the Clutch Fluid

Post-installation Operation

- Clutch Fluid Supplying
- Clutch Line Bleeding (Refer to P.21-7.)
- Clutch Pedal Adjustment (Refer to P.21-5.)

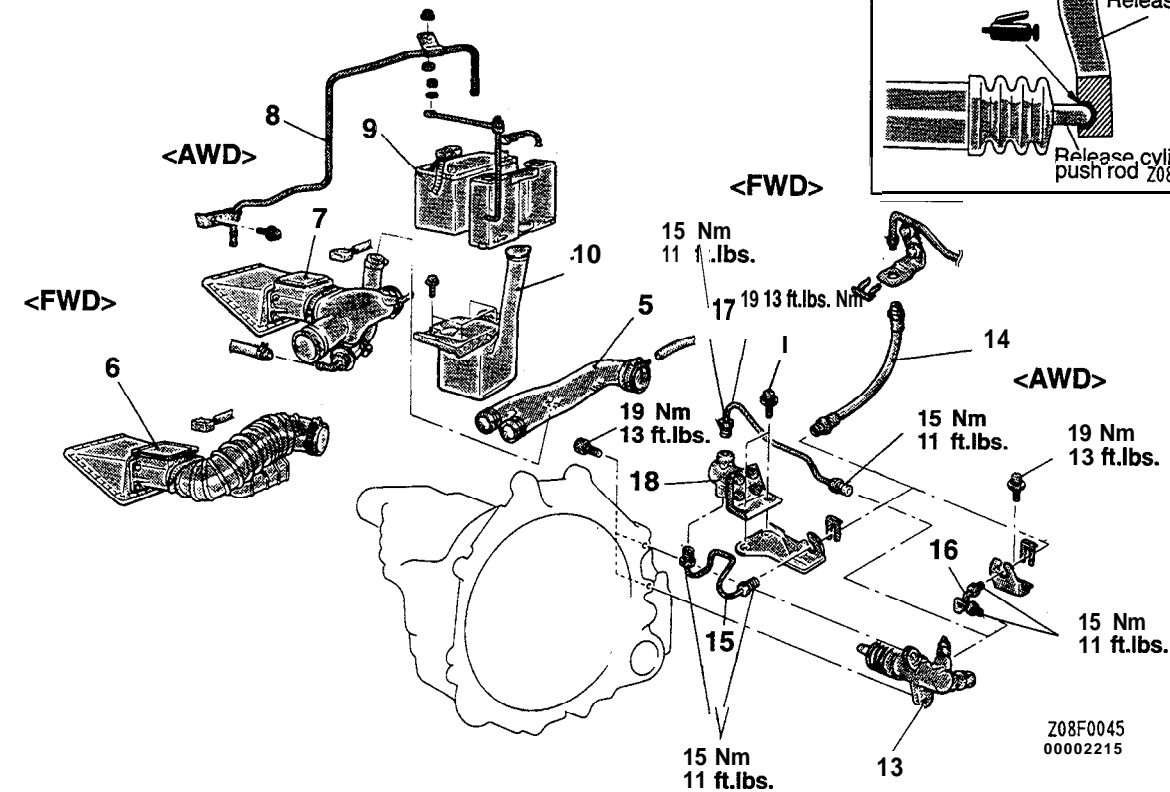
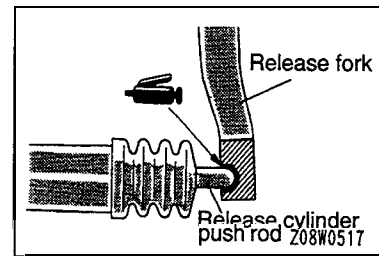


Clutch master cylinder removal steps

1. Brake booster
(Refer to GROUP 35 – Brake Booster.)
 2. Clevis pin <FWD>
 3. Clutch master cylinder
 4. Sealer
- F◄ • Piston adjustment to push rod clearance <AWD>

Clutch tube removal steps

1. Brake booster
(Refer to GROUP 35 – Brake Booster.)
- E◄ 5. Air hose A <AWD>
6. Air cleaner cover, air intake hose <FWD>
- D◄ 7. Air cleaner cover, air intake hose A <AWD>
- C◄ 8. Vacuum pipe <AWD>
9. Battery
10. Battery seat, washer tank
11. Steering column assembly
(Refer to GROUP 37A – Steering Wheel and Shaft.)
- ◄A►►A◄ 12. Clutch tube



Clutch release cylinder removal steps

- ▶E◀ 5. Air hose A <AWD>
- ▶D◀ 6. Air cleaner cover, air intake hose <FWD>
- ▶D◀ 7. Air cleaner cover, air intake hose A <AWD>
- ▶C◀ 8. Vacuum pipe <AWD>
- ▶B◀ 9. Battery
- ▶B◀ 10. Battery seat, washer tank
- ▶B◀ 13. Clutch release cylinder

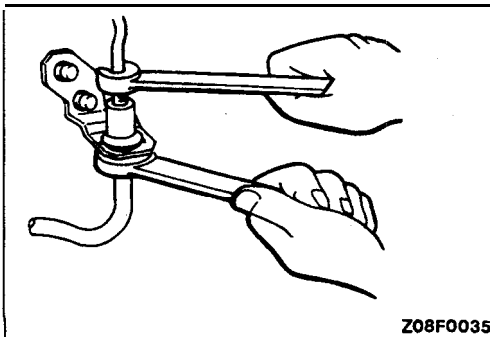
Clutch hose removal steps

- ▶E◀ 5. Air hose A <AWD>
- ▶D◀ 6. Air cleaner cover, air intake hose <FWD>
- ▶D◀ 7. Air cleaner cover, air intake hose A <AWD>

- ▶C◀ 8. Vacuum pipe <AWD>
- ▶C◀ 9. Battery
- ▶C◀ 10. Battery seat, washer tank
- ▶C◀ 14. Clutch hose

Clutch tube A, tube B, tube C, damper removal steps

- ▶E◀ 5. Air hose A <AWD>
- ▶D◀ 6. Air cleaner, air intake hose <FWD>
- ▶D◀ 7. Air cleaner cover, air intake hose A <AWD>
- ▶C◀ 8. Vacuum pipe <AWD>
- ▶C◀ 9. Battery
- ▶C◀ 10. Battery seat, washer tank
- ▶D◀ 15. Clutch tube A <FWD>
- ▶D◀ 16. Clutch tube B <AWD>
- ▶D◀ 17. Clutch tube C <FWD>
- ▶D◀ 18. Clutch damper <FWD>



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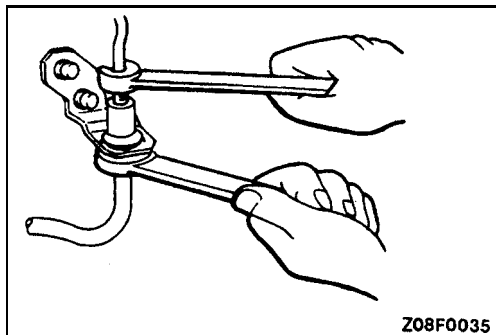
REMOVAL SERVICE POINTS

◀A▶ CLUTCH TUBE REMOVAL (CLUTCH HOSE SIDE)

While holding the clutch hose side nut, loosen the clutch tube flare nut.

◀B▶ CLUTCH RELEASE CYLINDER REMOVAL

On AWD-vehicles, use a flat type short box wrench to remove the clutch release cylinder mounting bolts.

**◀C▶ CLUTCH HOSE REMOVAL**

To disconnect clutch hose from the clutch tube, proceed as follows:

- (1) Secure the nut on the clutch hose and loosen the flare nut on the clutch tube.
- (2) Remove the clip from the clutch hose to remove clutch hose from bracket.

◀D▶ CLUTCH TUBE A <FWD> (CLUTCH HOSE SIDE) / CLUTCH TUBE B <AWD> (CLUTCH HOSE SIDE) REMOVAL

While holding the clutch hose side nut, loosen the clutch tube flare nut.

INSTALLATION SERVICE POINTS**▶A▶ CLUTCH TUBE B <AWD> / CLUTCH TUBE A <FWD> / CLUTCH HOSE / CLUTCH TUBE INSTALLATION**

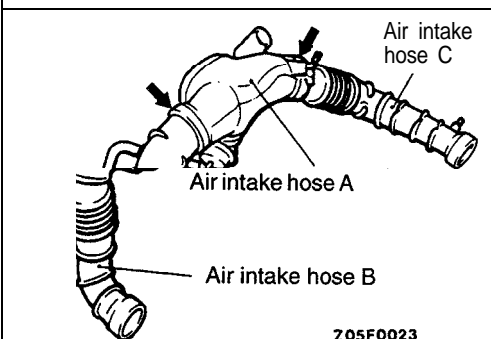
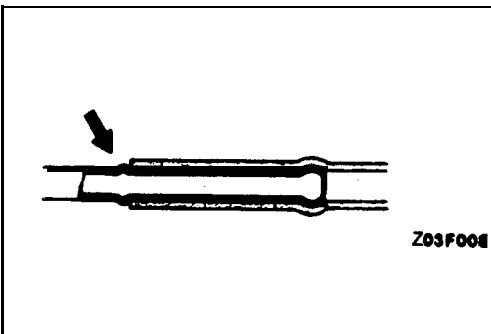
Be careful that the clutch hose does not become twisted.

▶B▶ CLUTCH RELEASE CYLINDER INSTALLATION

On AWD-vehicles, use a flat type short box wrench to tighten the clutch release cylinder mounting bolts.

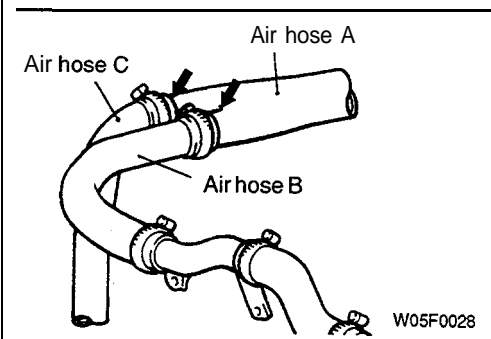
▶C▶ VACUUM PIPE <AWD> INSTALLATION

If the vacuum pipe has a stepped part, connect the vacuum hose to the pipe securely, up to the stepped part, as shown in the illustration.

**▶D▶ AIR CLEANER COVER, AIR INTAKE HOSE A INSTALLATION**

Align slots indicated by arrows in air intake hose A with A markings on air intake hoses B and C; then, insert hoses B and C all the way into air intake hose A.

Insert air intake hoses B and C all the way up to the roots on the turbocharger end.

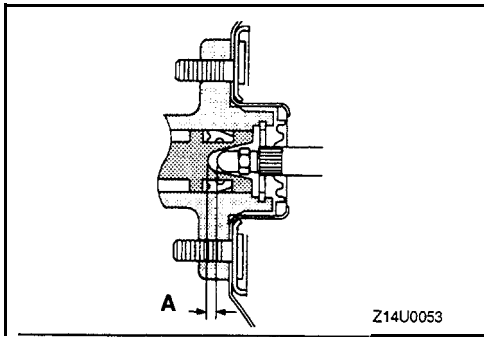
**▶E▶ AIR HOSE A INSTALLATION**

Connect the air hoses ensuring that alignment marks are aligned with projections.

Insert air hoses B and C into pipe all the way to its step.

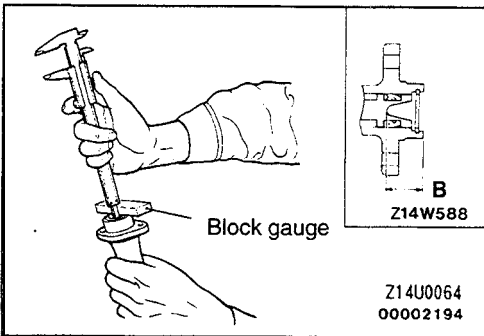
Caution

Be careful not to allow any foreign matter to get into the hoses, pipes, or the intercooler itself.



►F◄ CLEARANCE BETWEEN CLUTCH BOOSTER PUSH ROD AND PISTON ADJUSTMENT<AWD>

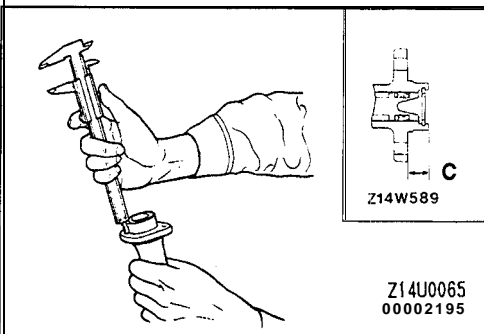
Adjust the clearance (A) between the clutch booster push rod and piston as follows:



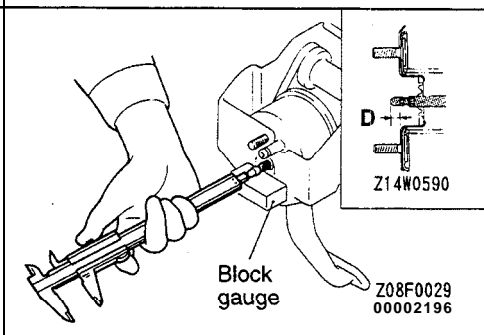
- (1) Measure the dimension (B) between the master cylinder end face and piston.

NOTE

To obtain (B), first take measurement with a square placed on the master cylinder end face. Then, subtract the thickness of the square to arrive at (B).



- (2) Obtain the dimension (C) between the clutch booster mounting surface on the master cylinder and the end face.



- (3) Measure the dimension (D) between the master cylinder mounting surface on clutch booster and the push rod end.

NOTE

To obtain (D), first take measurement with a square placed on the clutch booster. Then, subtract the thickness of the square to arrive at (D).

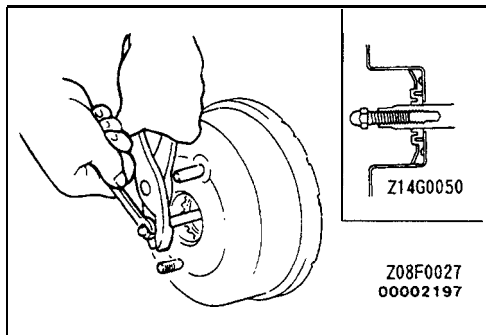
- (4) Using the measured values obtained in (1) through (3), obtain the clearance (A) between the clutch booster push rod and piston.

Standard value: [A (A = B – C – D)]

0.21–0.46 mm (.0082–.0181 in.)

[Atmospheric pressure]

[When the clutch booster negative pressure of 66.7 kPa (9.7 psi) is applied, the clearance (A) becomes 0.1 to 0.3 mm (.0039 to .0118 in.).]



- (5) If the clearance is not within the standard value range, adjust by changing the push rod length by turning the adjustable end of the push rod.

Caution

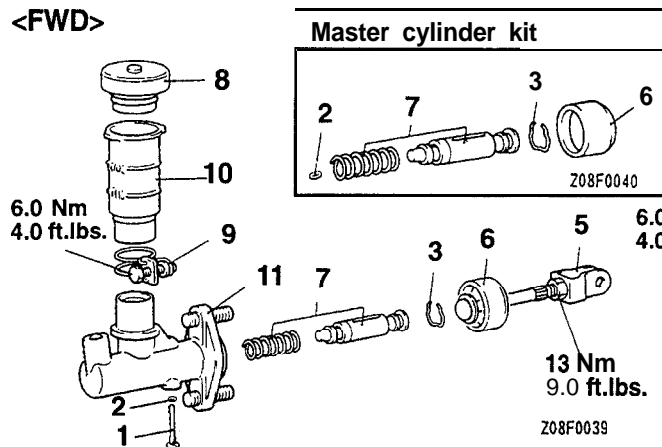
Insufficient clearance may cause the slippage or seizure of the clutch.

INSPECTION

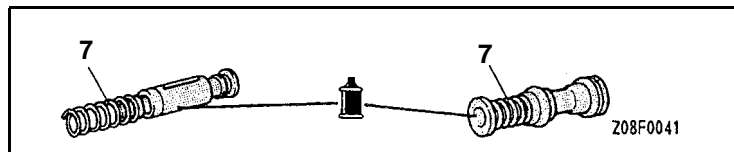
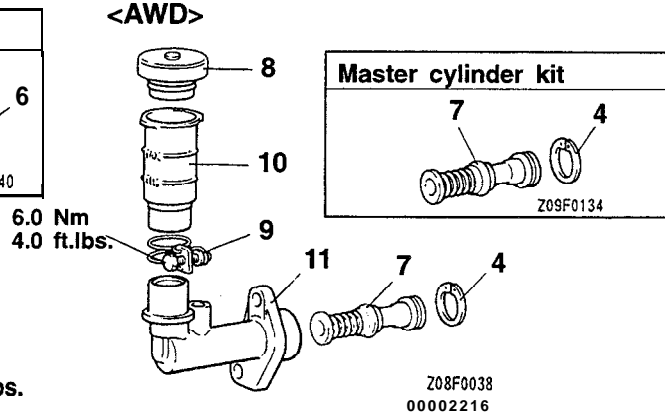
- Check the clutch hose or tube for cracks or clogging.

CLUTCH MASTER CYLINDER**DISASSEMBLY AND REASSEMBLY**

<FWD>



<AWD>

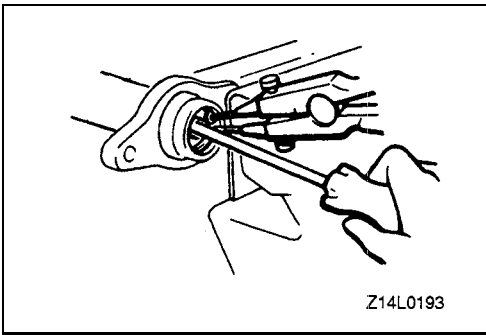


Brake fluid: Conforma to DOT3 or DOT4

Disassembly steps

1. Piston stop bolt <FWD>
2. Gasket <FWD>
3. Piston stop ring <FWD>
4. Snap ring <AWD>
5. Push rod <FWD>
6. Boot <FWD>

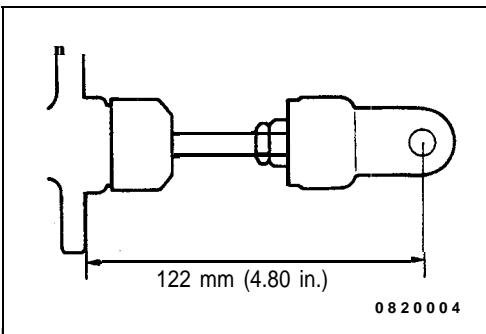
7. Piston assembly
8. Reservoir cap
9. Reservoir band
10. Reservoir
11. Master cylinder body

**◀A▶ PISTON STOP RING <FWD> / SNAP RING
<AWD> DISASSEMBLY**

Remove the piston stop ring or snap ring, while depressing the piston.

◀B▶ PISTON ASSEMBLY REMOVAL**Caution**

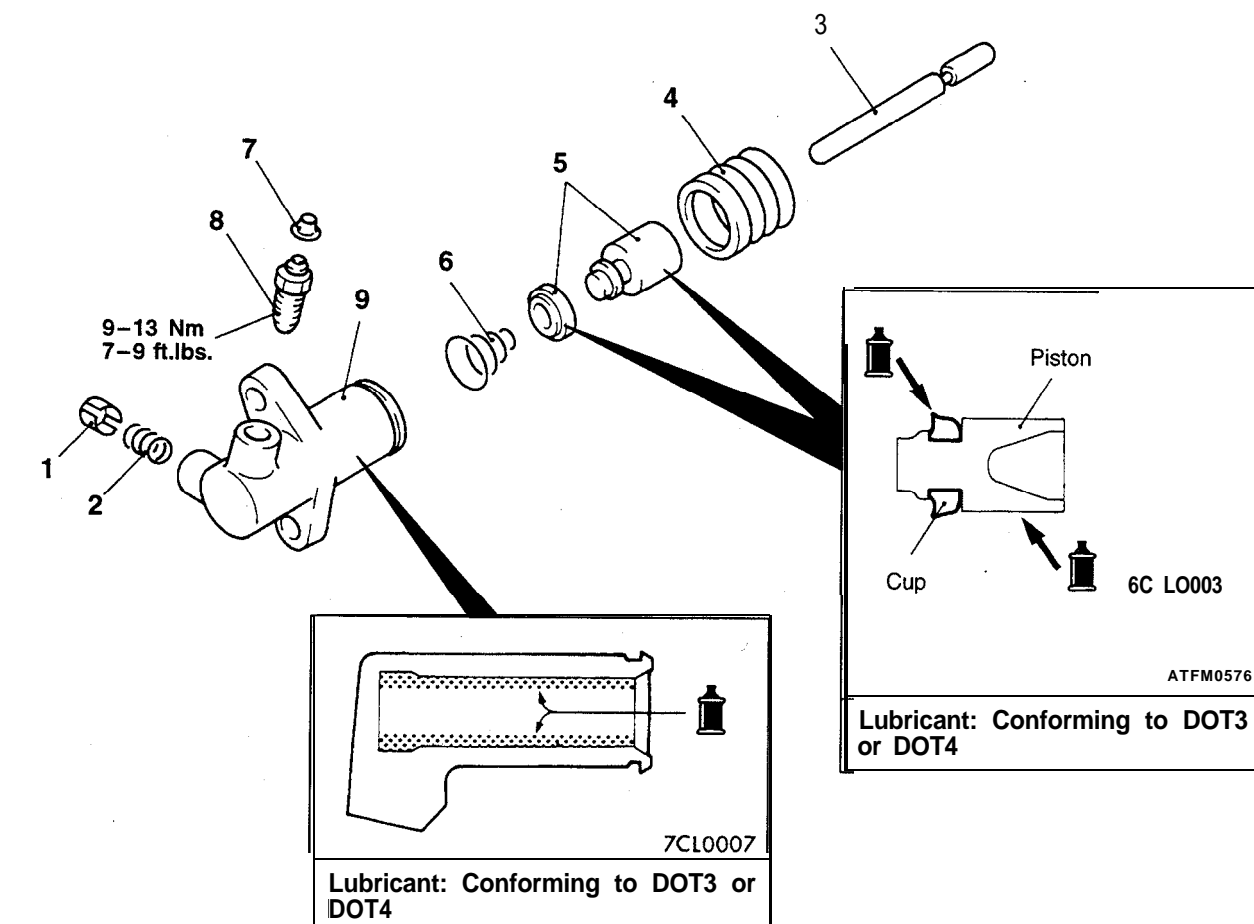
1. Do not damage the master cylinder body and piston assembly.
2. Do not disassemble piston assembly.

**REASSEMBLY SERVICE POINT****▶A◀ PUSH ROD INSTALLATION****NOTE**

Set the push rod length to the dimension shown in the illustration before installation. This can facilitate the clutch pedal adjustment.

INSPECTION

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

CLUTCH RELEASE CYLINDER**DISASSEMBLY AND REASSEMBLY****Disassembly steps**

1. Valve plate
2. Spring
3. Push rod
4. Boots

6. Conical spring
7. Bleeder plug
8. Bleeder plug
9. Release cylinder

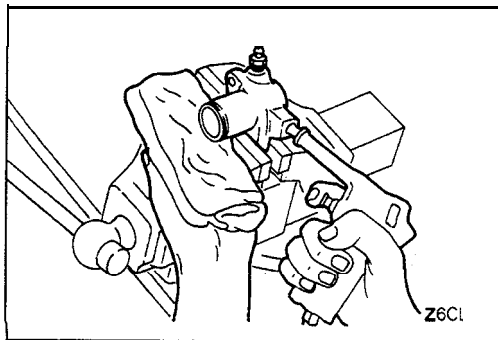
◀A▶▶A▶ 5. Piston and cup

DISASSEMBLY SERVICE POINT**◀A▶ PISTON AND CUP DISASSEMBLY**

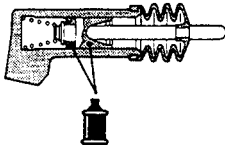
- (1) Remove the corrosion from the piston-removal port of the release cylinder.
- (2) Remove the piston from the release cylinder using compressed air.

Caution

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



TSB Revision

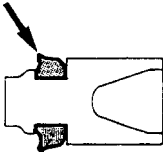


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REASSEMBLY SERVICE POINT**►A◄ FLUID APPLICATION TO PISTON AND CUP**

Apply specified brake fluid to the release cylinder inside and outer surface of the piston and piston cup and push the piston cup assembly in the cylinder.

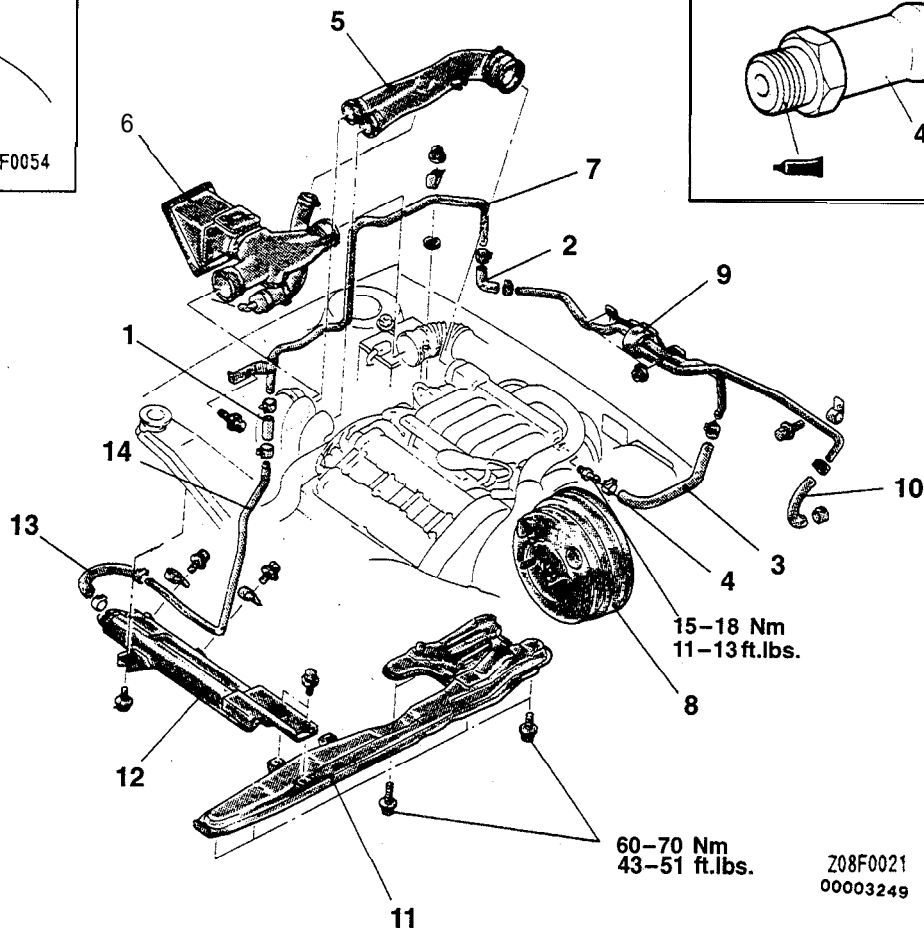
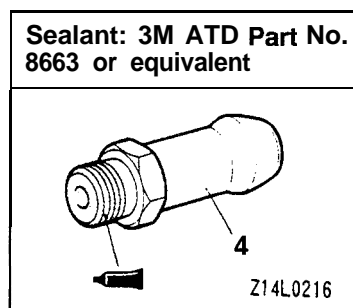
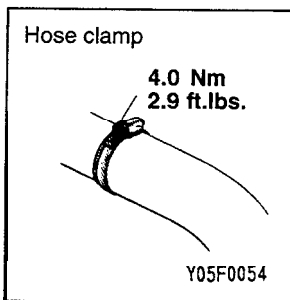
Specified brake fluid: Conforming to DOT3 or DOT4



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INSPECTION

- (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.

CLUTCH VACUUM LINE, VACUUM TANK <AWD>**REMOVAL AND INSTALLATION**

- ▶A◀ 1. Vacuum hose A
 ▶A◀ 2. Vacuum hose B
 ▶A◀ 3. Vacuum hose C with check valve
 4. Fitting

Vacuum pipe A removal steps

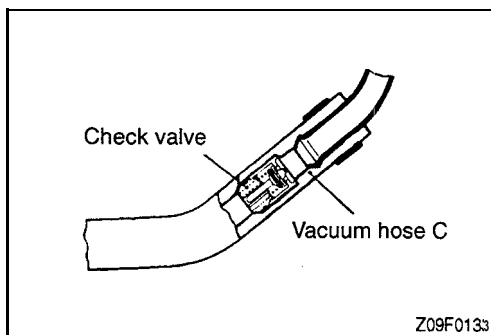
- ▶C◀ 5. Air hose A
 ▶B◀ 6. Air cleaner cover, air intake hose A
 7. Vacuum pipe A

Vacuum pipe B, vacuum hose D removal steps

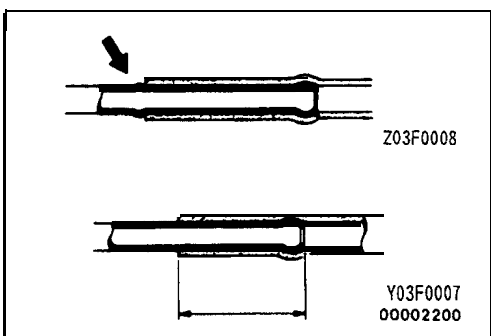
8. Brake booster (Refer to GROUP 35 – Brake Booster.)
 9. Vacuum pipe B
 ▶A◀ 10. Vacuum hose D

Vacuum tank assembly, vacuum hose E, vacuum pipe C removal steps

11. Right member (Refer to GROUP 32 – Right Member, Left Member and Crossmember.)
 12. Vacuum tank assembly
 ▶A◀ 13. Vacuum hose E
 14. Vacuum pipe C

**REMOVAL SERVICE POINT****◀A▶ VACUUM HOSE C WITH CHECK VALVE REMOVAL****NOTE**

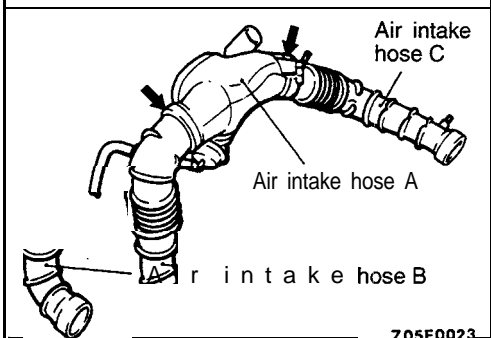
Since the check valve is fit to the vacuum hose C, replace the check valve as an assembly unit together with the vacuum hose C if the check valve is defective.

**INSTALLATION SERVICE POINTS****▶A◀ VACUUM HOSE E / VACUUM HOSE D / VACUUM HOSE C WITH CHECK VALVE / VACUUM HOSE B / VACUUM HOSE A INSTALLATION**

If a hose is connected to a pipe with a stepped part, insert the hose up to the stepped part.

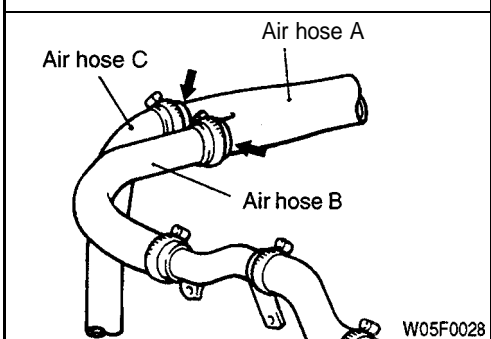
If it is connected to a pipe without any stepped part, insert the hose until the insertion amount reaches the standard value.

Standard value: 20–25 mm (.8–1.0 in.)

**▶B◀ AIR CLEANER COVER, AIR INTAKE HOSE A INSTALLATION**

Align slots indicated by arrows in air intake hose A with A markings on air intake hoses B and C; then, insert hoses B and C all the way into air intake hose A.

Insert air intake hoses B and C all the way up to the roots on the turbocharger end.

**▶C◀ AIR HOSE A INSTALLATION**

Connect the air hoses ensuring that alignment marks are aligned with projections.

Insert air hoses B and C into pipe all the way to its step.

Caution

Be careful not to allow any foreign matter to get into the hoses, pipes, or the intercooler itself.

INSPECTION

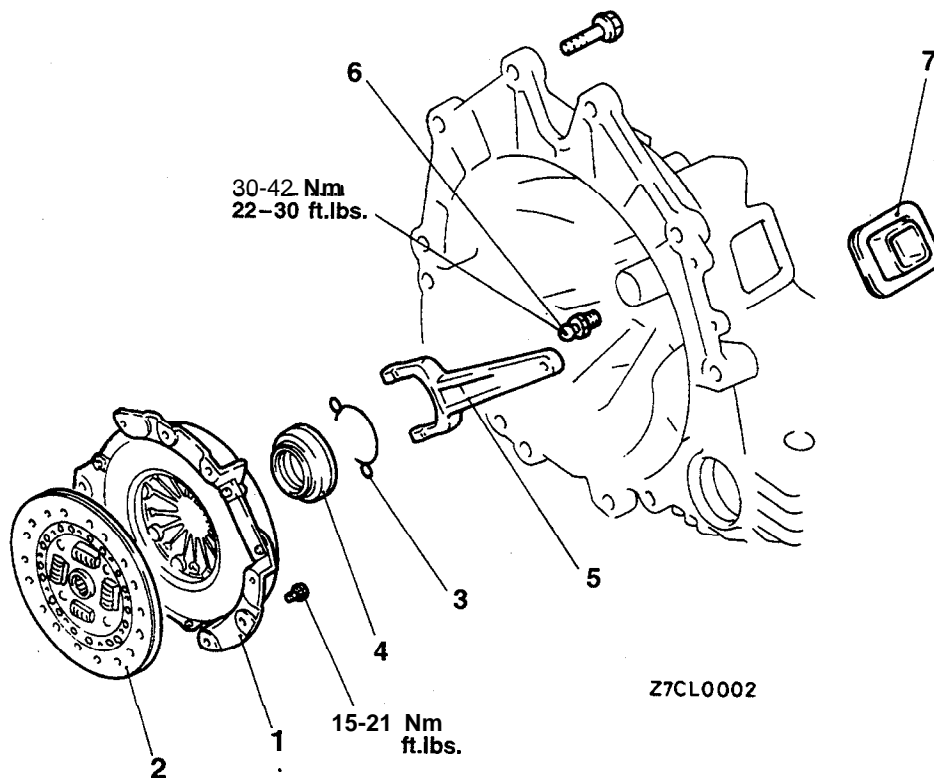
- Check the hose and pipes for cracks, bend, deformation and clogging.
- Check the vacuum tank for deformation or crack.

CLUTCH COVER AND DISC**REMOVAL AND INSTALLATION****Pre-removal Operation**

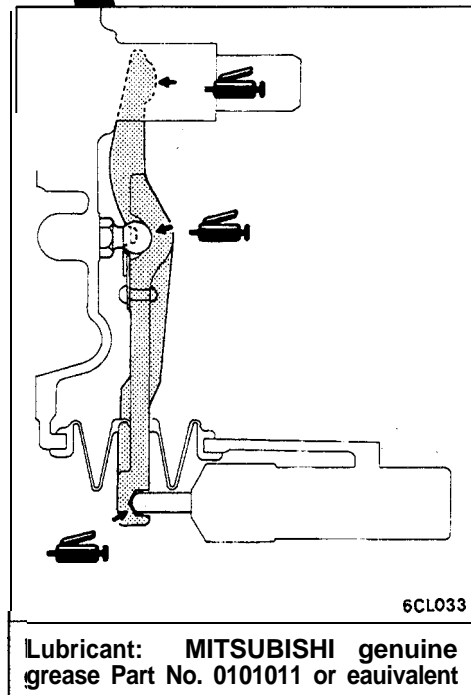
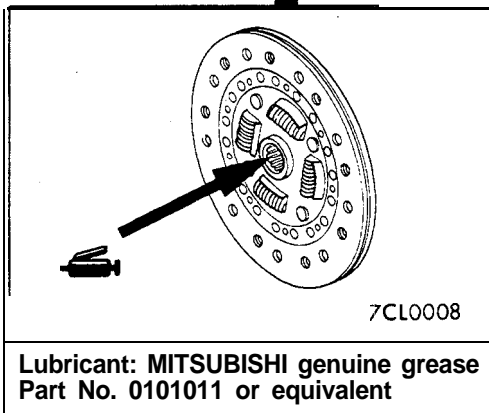
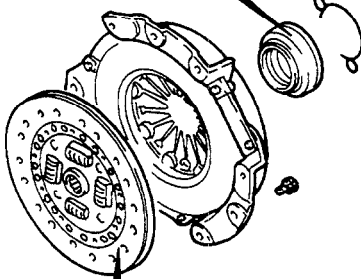
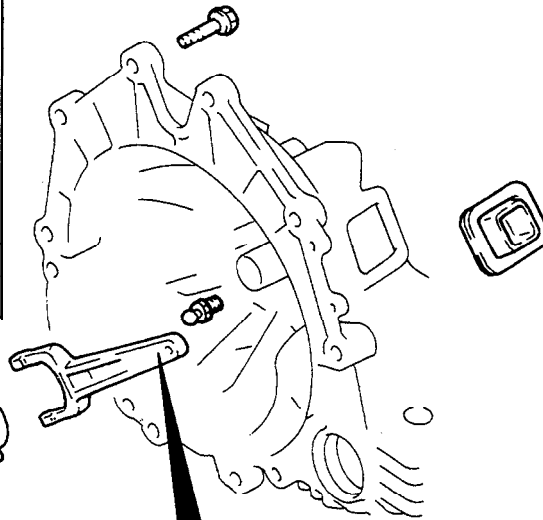
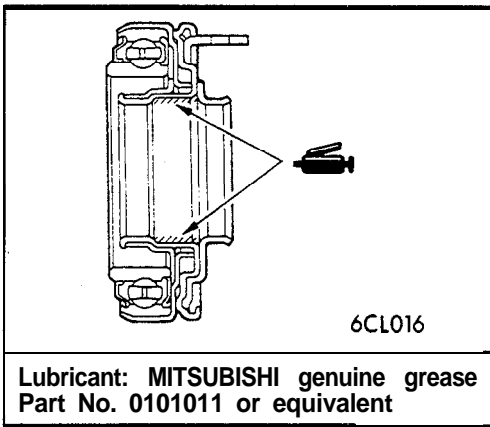
- Transaxle Assembly Removal
(Refer to GROUP 22 – Transaxle Assembly.)

Post-installation Operation

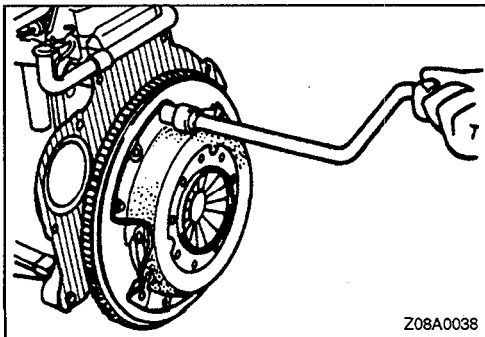
- Transaxle Assembly Installation
(Refer to GROUP 22 – Transaxle Assembly.)



3. Return clip
4. Clutch release bearing
5. Release fork
6. Fulcrum
7. Release fork boot



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REMOVAL SERVICE POINT

◀▶ CLUTCH COVER ASSEMBLY / CLUTCH DISC REMOVAL

Diagonally loosen bolts which attach clutch cover to flywheel. Back off bolts in succession, one or two turns at a time, to avoid bending cover flange.

Caution

DO NOT clean clutch disc or release bearing with cleaning solvent.

INSTALLATION SERVICE POINTS**►A◀ GREASE APPLICATION TO RELEASE FORK**

- (1) Apply a coating of the specified grease to the point of contact with the fulcrum and the point of contact with the release bearing.

Specified grease:

mitsubishi genuine grease Part No. 0101011 or equivalent

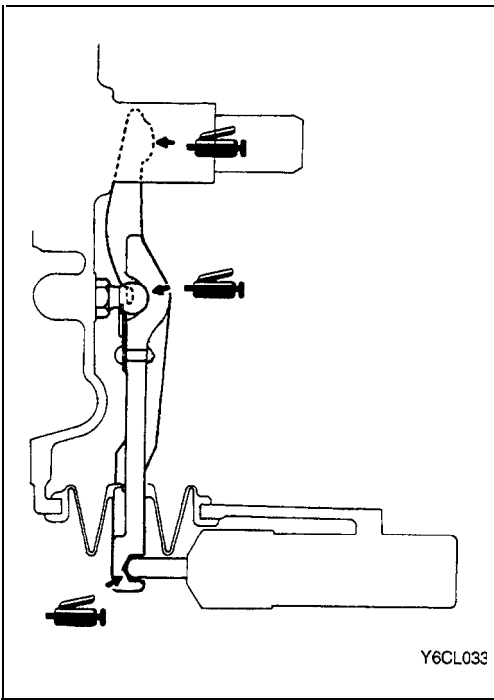
Caution

When installing the clutch, apply grease to each part, but be careful not to apply excessive grease; excessive grease will cause clutch slippage and shudder.

- (2) Apply a coating of the specified grease to the end of the release cylinder's push rod and to the push rod hole in the release fork.

Specified grease:

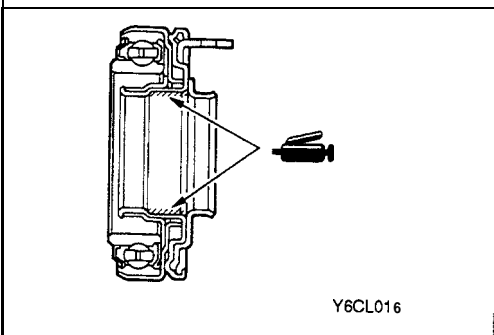
mitsubishi genuine grease Part No. 0101011 or equivalent

**►B◀ GREASE APPLICATION TO CLUTCH RELEASE BEARING (FWD)**

Pack the inner surface of the clutch release bearing and the groove with the specified grease.

Specified grease:

mitsubishi genuine grease Part No. 0101011 or equivalent

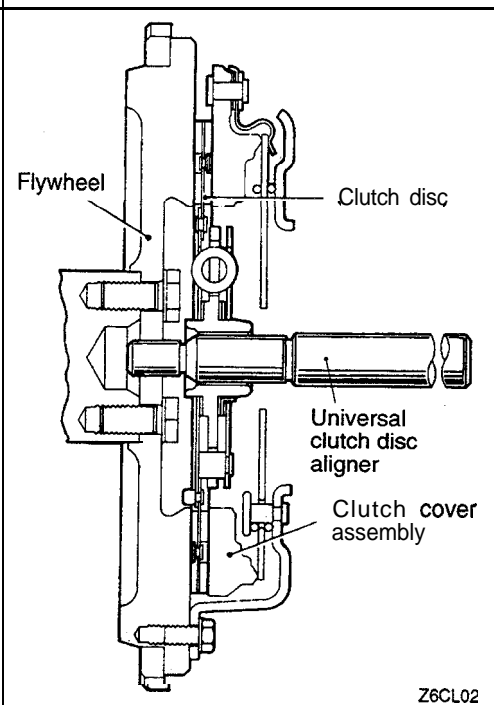
**►C◀ GREASE APPLICATION TO CLUTCH DISC / CLUTCH COVER ASSEMBLY**

- (1) Apply a coating of the specified grease to the clutch disc spline, and then use a brush to rub it in.

Specified grease:

mitsubishi genuine grease Part No. 0101011 or equivalent

- (2) Using the universal clutch disc aligner, position the clutch disc to the flywheel.
- (3) install the clutch cover assembly. Tighten the bolts a little at a time, working in a diagonal sequence, finally tightening them to the specified torque.

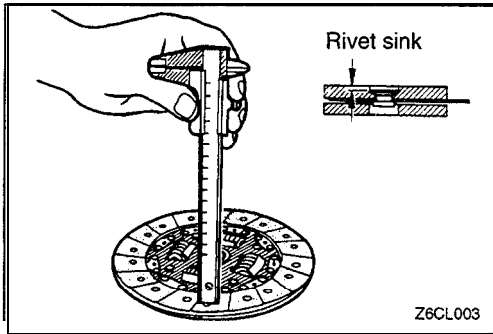


INSPECTION**CLUTCH COVER ASSEMBLY CHECK**

- 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 (.020 in.)

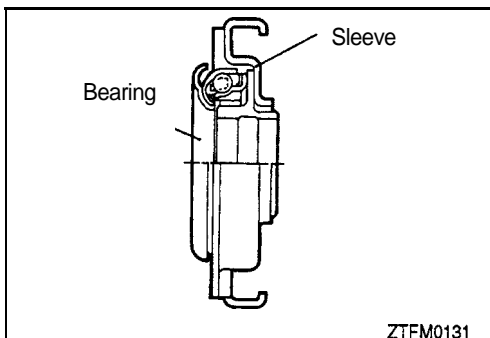
- Check the pressure plate surface for wear, cracks and color change.
- Check the strap plate rivets for looseness and replace the clutch cover assembly if loose.

**CLUTCH DISC CHECK**

- 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 (.012 in.)

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

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

1. **The release bearing is packed with grease, so don't use cleaning oil, etc. to clean it.**
2. **Do not disassemble the bearing and sleeve of the clutch release bearing. If disassembled, replace. (AWD only)**

- Check for bearing heat damage, other damage, abnormal noise and/or improper rotation. Also check whether or not there is wear at the point of contact with the diaphragm spring.
- If there is abnormal wear at the point of contact with the release fork, replace the bearing.

RELEASE FORK CHECK

If there is abnormal wear at the point of contact with the bearing, replace the release fork.

