

SECTION **CL**
CLUTCH

A
B
C

CL

CONTENTS

E

SYMPTOM DIAGNOSIS	2	Exploded View	9	F
NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING	2	Removal and Installation	9	
NVH Troubleshooting Chart	2	Disassembly and Assembly	11	G
PRECAUTION	3	Inspection	12	
PRECAUTIONS	3	CLUTCH PIPING	13	H
Service Notice or Precautions for Clutch	3	Exploded View	13	
PREPARATION	4	Hydraulic Layout	13	I
PREPARATION	4	Removal and Installation	13	
Special Service Tools	4	REMOVAL AND INSTALLATION	15	J
Commercial Service Tools	4	CSC (CONCENTRIC SLAVE CYLINDER)	15	
ON-VEHICLE MAINTENANCE	5	Exploded View	15	K
CLUTCH PEDAL	5	Removal and Installation	15	
Inspection and Adjustment	5	CLUTCH DISC AND CLUTCH COVER	19	L
CLUTCH FLUID	6	Exploded View	19	
Air Bleeding Procedure	6	Removal and Installation	19	M
ON-VEHICLE REPAIR	7	Inspection	20	
CLUTCH PEDAL	7	SERVICE DATA AND SPECIFICATIONS (SDS)	22	N
Exploded View	7	SERVICE DATA AND SPECIFICATIONS (SDS)	22	
Removal and Installation	7	Clutch Control System	22	O
Inspection	8	Clutch Pedal	22	
CLUTCH MASTER CYLINDER	9	Clutch Master Cylinder	22	P
		Clutch Disc	22	
		Clutch Cover	22	

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:000000000956919

Use the chart below to help you find the cause of the symptom. The numbers indicate the order of the inspection. If necessary, repair or replace these parts.

Reference		CL-5	CL-6	CL-9	EM-7Z	CL-15											EM-124	
SYMPTOM		SUSPECTED PARTS (Possible cause)																
		CLUTCH PEDAL (Inspection and adjustment)	CLUTCH LINE (Air in line)	MASTER CYLINDER PISTON CUP (Damaged)	ENGINE MOUNTING (Loose)	CSC (Concentric Slave Cylinder) (Worn, dirty or damaged)	CLUTCH DISC (Out of true)	CLUTCH DISC (Runout is excessive)	CLUTCH DISC (Lining broken)	CLUTCH DISC (Dirty or burned)	CLUTCH DISC (Oily)	CLUTCH DISC (Worn out)	CLUTCH DISC (Hardened)	CLUTCH DISC (Lack of spline grease)	DIAPHRAGM SPRING (Damaged)	DIAPHRAGM SPRING (Out of tip alignment)	PRESSURE PLATE (Distortion)	FLYWHEEL (Distortion)
Symptom	Clutch grabs/chatters				1			2			2	2	2			2		
	Clutch pedal spongy		1	2		2												
	Clutch noisy					1												
	Clutch slips	1									2	2			3		4	5
	Clutch does not disengage	1	2	3		4	4	4	4	4	4			4	5	5	6	

PRECAUTIONS

< PRECAUTION >

PRECAUTION

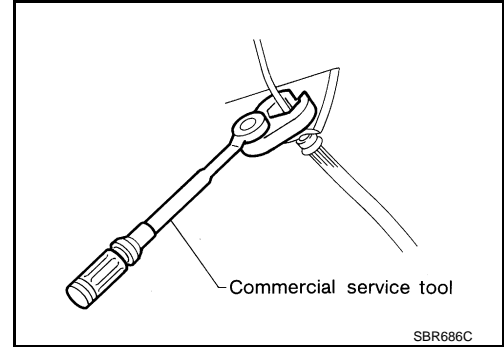
PRECAUTIONS

Service Notice or Precautions for Clutch

INFOID:000000000956920

CAUTION:

- Recommended clutch fluid is brake fluid “DOT 3”. Refer to [MA-10, "Fluids and Lubricants"](#).
- Never reuse drained clutch fluid.
- Be careful not to splash clutch fluid on painted areas.
- When removing clutch tube, use a flare nut wrench.
- When installing clutch tube, use a flare nut torque wrench.
- Use new clutch fluid to clean or wash all parts of master cylinder.
- Never use mineral oils such as gasoline or kerosene. It will ruin the rubber parts of the hydraulic system.
- If transmission assembly is removed from the vehicle, always replace CSC (Concentric Slave Cylinder) body and CSC tube. Return CSC body insert to original position to remove transmission assembly. Dust on clutch disc sliding parts may damage seal of CSC body and may cause clutch fluid leakage.
- Do not disassemble CSC body.



WARNING:

After cleaning clutch disc, wipe it with a dust collector. Do not use compressed air.

A
B
C
CL
E
F
G
H
I
J
K
L
M
N
O
P

PREPARATION

< PREPARATION >

PREPARATION

PREPARATION

Special Service Tools

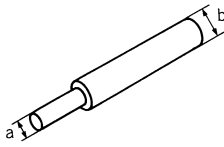
INFOID:000000000956921

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
ST20050240 (—) Diaphragm adjusting wrench	Adjusting unevenness of diaphragm spring of clutch cover
ST20670000 (—) Clutch aligning bar a: 15 mm (0.59 in) dia. b: 23 mm (0.91 in) dia.	Installing clutch disc



ZZA0508D

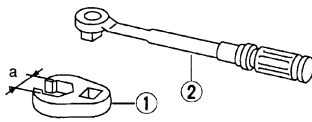


ZZA1178D

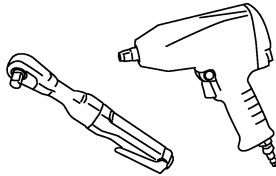
Commercial Service Tools

INFOID:000000000956922

Tool name	Description
1. Flare nut crowfoot a: 10 mm (0.39 in) 2. Torque wrench	Installing clutch tube
Power tool	Loosening bolts and nuts



S-NT360



PBIC0190E

CLUTCH PEDAL

< ON-VEHICLE MAINTENANCE >

ON-VEHICLE MAINTENANCE

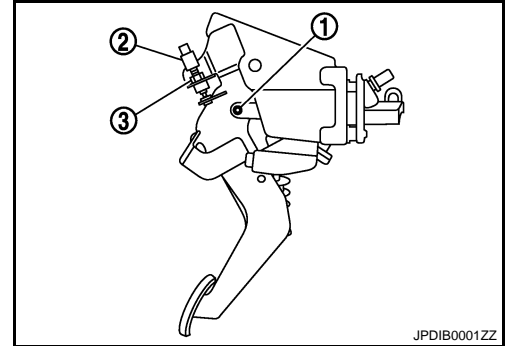
CLUTCH PEDAL

Inspection and Adjustment

INFOID:000000000956923

INSPECTION

1. Make sure that clevis pin (1) floats freely in the bore of clutch pedal. It should not be bound by clevis or clutch pedal.
 - a. If clevis pin is not free, make sure that ASCD clutch switch (2) is not applying pressure to clutch pedal causing clevis pin to bind. To adjust, loosen lock nut (3) and turn ASCD clutch switch.
 - b. Tighten lock nut. Refer to [CL-7, "Exploded View"](#).
 - c. Make sure that clevis pin floats in the bore of clutch pedal. It should not be bound by clutch pedal.
 - d. If clevis pin is still not free, remove clevis pin and check for deformation or damage. Replace clevis pin if necessary. Leave clevis pin removed for step 2.
2. Check clutch pedal stroke for free range of movement.
 - a. With clevis pin removed, manually move clutch pedal up and down to determine if it moves freely.
 - b. If any sticking is found, replace related parts (bushing, clutch pedal assembly, etc.). Reassemble clutch pedal and again make sure that clevis pin floats freely in the bore of clutch pedal.
3. Check clutch hydraulic and system components (clutch master cylinder, CSC, etc.) for sticking or binding.
 - a. If any sticking or binding is found, repair or replace related parts as necessary.
 - b. If hydraulic system repair was necessary, bleed the clutch hydraulic system. Refer to [CL-6, "Air Bleeding Procedure"](#).

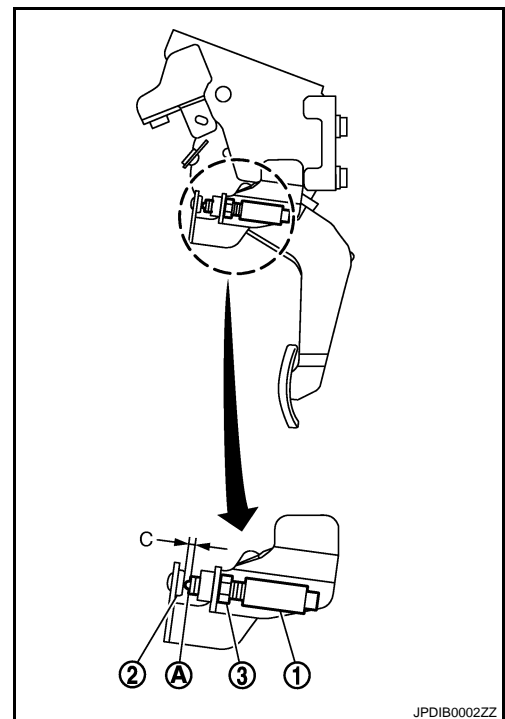


ADJUSTMENT

1. Adjust clutch interlock switch (1) position so that clearance between stopper rubber (2) and thread end (A) of clutch interlock switch with clutch pedal depressed is clearance "C".

Clearance "C" : Refer to [CL-22, "Clutch Pedal"](#).

2. After adjusting clearance "C", tighten lock nut (3) to the specified torque. Refer to [CL-7, "Exploded View"](#).



CLUTCH FLUID

< ON-VEHICLE MAINTENANCE >

CLUTCH FLUID

Air Bleeding Procedure

INFOID:00000000956924

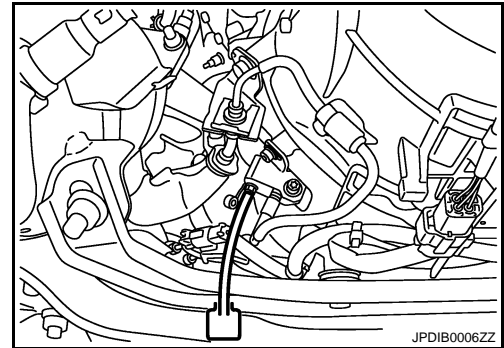
CAUTION:

- Monitor clutch fluid level in reservoir tank to make sure it does not empty.
- Keep painted surface on the body or other parts free of clutch fluid. If it spills, wipe up immediately and wash the affected area with water.

NOTE:

Do not use a vacuum assist or any other type of power bleeder on this system. Use of vacuum assist or power bleeder will not purge all the air from the system.

1. Fill master cylinder reservoir tank with new clutch fluid.
2. Connect a transparent vinyl hose to air bleeder valve.
3. Depress clutch pedal slowly and fully several times at an interval of 2 to 3 seconds and hold it.
4. With clutch pedal depressed, open air bleeder valve to release air.
5. Close air bleeder valve.
6. Release clutch pedal and wait for 5 seconds.
7. Repeat steps 3 to 6 until no bubbles can be observed in clutch fluid.
8. Tighten air bleeder valve to the specified torque. Refer to [CL-15](#), "[Exploded View](#)".



CLUTCH PEDAL

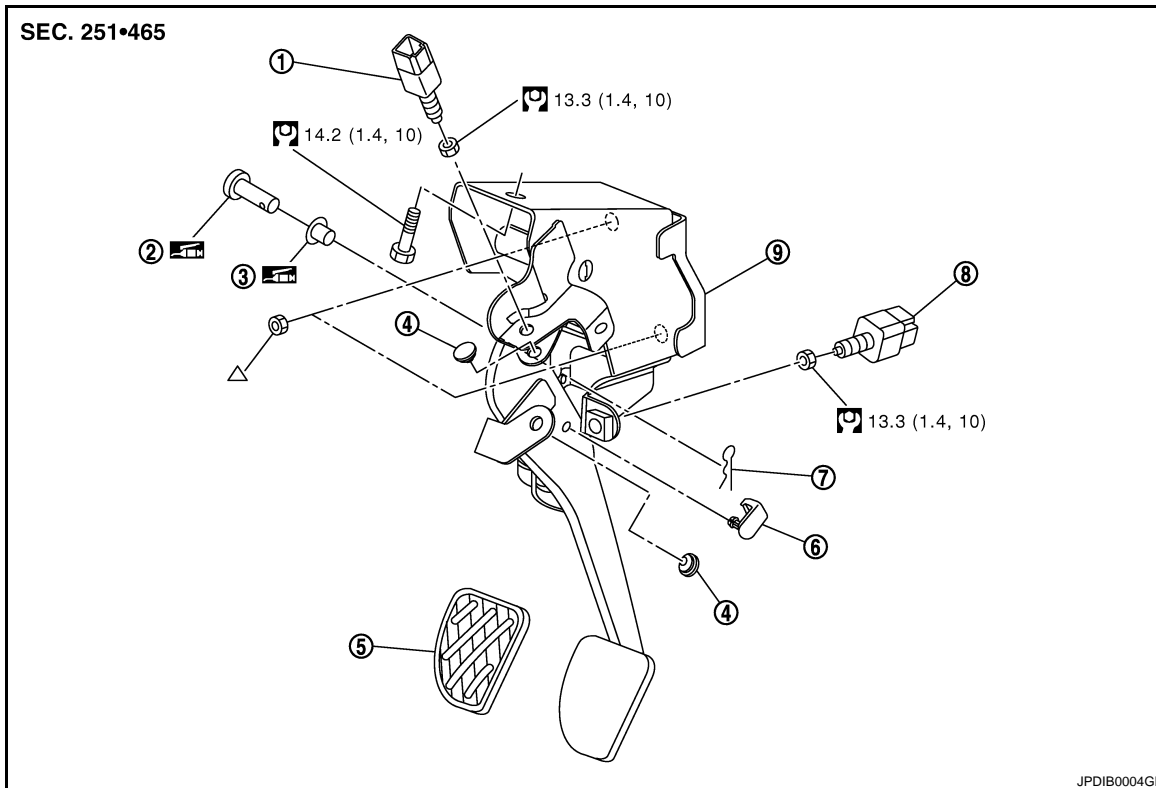
< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR


CLUTCH PEDAL

Exploded View

INFOID:000000000956925



- | | | |
|-----------------------|----------------------------|--------------------------|
| 1. ASCD clutch switch | 2. Clevis pin | 3. Bushing |
| 4. Stopper rubber | 5. Pedal pad | 6. Pedal stopper rubber |
| 7. Snap pin | 8. Clutch interlock switch | 9. Clutch pedal assembly |

: Apply lithium-based grease including molybdenum disulphide.

: Refer to [CL-9, "Exploded View"](#) for the tightening torque.

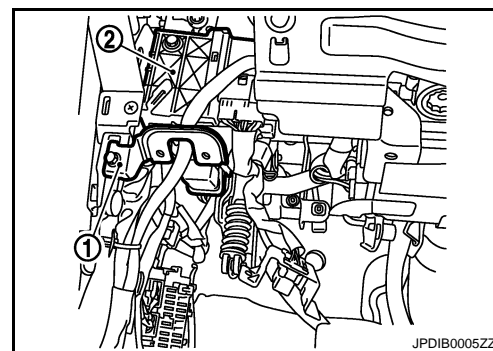
Refer to [GI-4, "Components"](#) for symbols not described on the above.

Removal and Installation

INFOID:000000000956926

REMOVAL

1. Remove front kicking plate inner and dash side finisher. Refer to [INT-13, "Removal and Installation"](#).
2. Remove instrument driver lower panel. Refer to [IP-12, "Removal and Installation"](#).
3. Remove bracket (1) and harness bracket (2).
4. Disconnect ASCD clutch switch and clutch interlock switch harness connectors and then disconnect clip of harness from clutch pedal assembly.
5. Remove snap pin and clevis pin.
6. Remove clutch pedal assembly.



INSTALLATION

CLUTCH PEDAL

< ON-VEHICLE REPAIR >

Note the following, and install in the reverse order of removal.

- After installing clutch interlock switch, adjust the switch position. Refer to [CL-5, "Inspection and Adjustment"](#).
- Tighten lock nut of ASCD clutch switch to the specified torque after installing clutch pedal assembly and adjusting the pedal free play. Refer to [CL-5, "Inspection and Adjustment"](#).

Inspection

INFOID:000000000956927

INSPECTION AFTER REMOVAL

Check clutch pedal for bend, damage, or a cracked weld. If bend, damage, or a cracked weld is found, replace clutch pedal assembly.

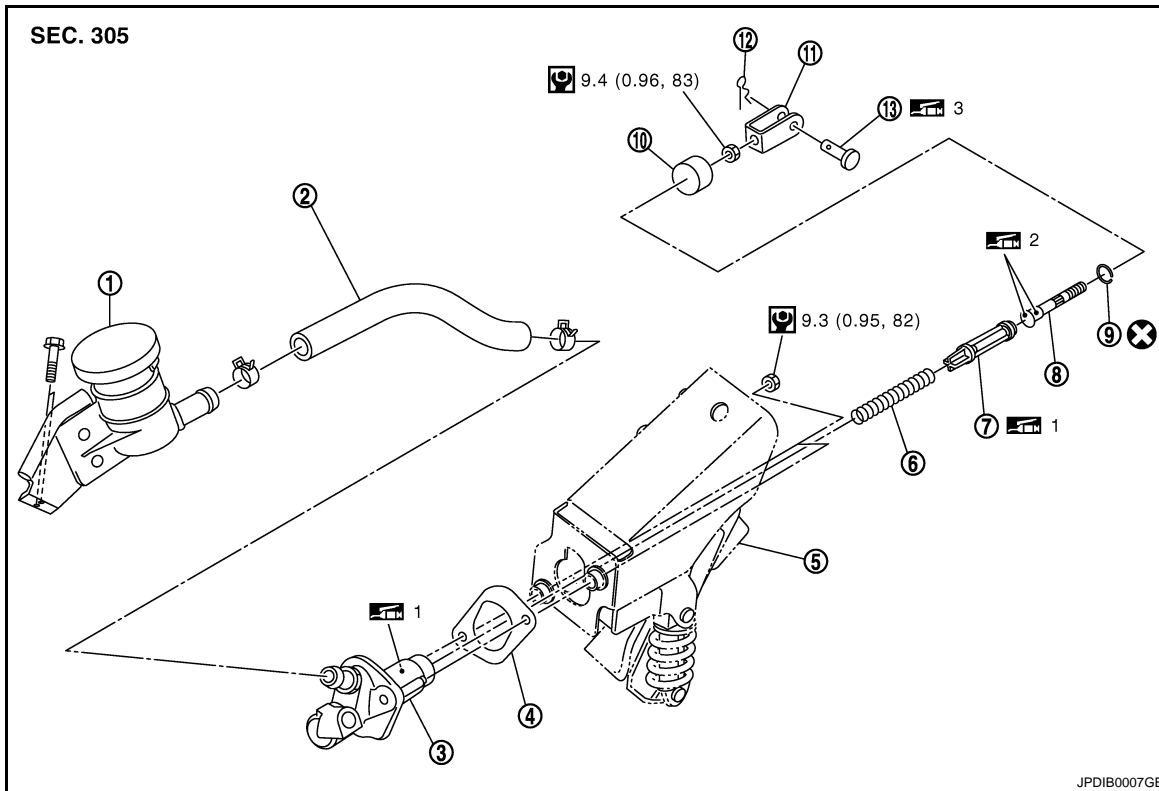
CLUTCH MASTER CYLINDER

< ON-VEHICLE REPAIR >


CLUTCH MASTER CYLINDER


Exploded View


INFOID:000000000956928



- | | | |
|----------------------------|--------------------------|------------------|
| 1. Reservoir tank assembly | 2. Hose | 3. Cylinder body |
| 4. Packing | 5. Clutch pedal assembly | 6. Return spring |
| 7. Piston assembly | 8. Push rod | 9. Stopper ring |
| 10. Boot | 11. Clevis | 12. Snap pin |
| 13. Clevis pin | | |

 1: Apply rubber lubricant.

 2: Apply silicone grease.

 3: Apply lithium-based grease including molybdenum disulphide.

Refer to [GI-4, "Components"](#) for symbols not described on the above.

Removal and Installation

INFOID:000000000956929

REMOVAL

CAUTION:

Keep painted surface on the body or other parts free of clutch fluid. If it spills, wipe up immediately and wash the affected area with water.

1. Remove front kicking plate inner and dash side finisher. Refer to [INT-13, "Removal and Installation"](#).
2. Remove instrument driver lower panel. Refer to [IP-12, "Removal and Installation"](#).
3. Remove snap pin and clevis pin from clevis and then separate it from clutch pedal assembly.
4. Remove brake master cylinder cover. Refer to [EXT-18, "Removal and Installation"](#).
5. Drain clutch fluid in reservoir tank and then remove hose and clips.

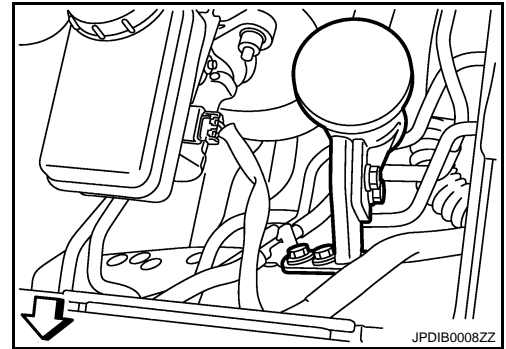
CLUTCH MASTER CYLINDER

< ON-VEHICLE REPAIR >

6. Remove reservoir tank assembly.

← : Vehicle front

7. Remove clutch tube using a flare nut wrench.

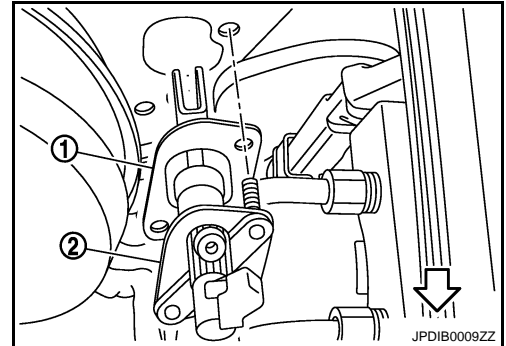


8. Remove packing (1) and master cylinder assembly (2).

← : Vehicle front

CAUTION:

Be careful not to damage packing, brake booster, and dash lower.



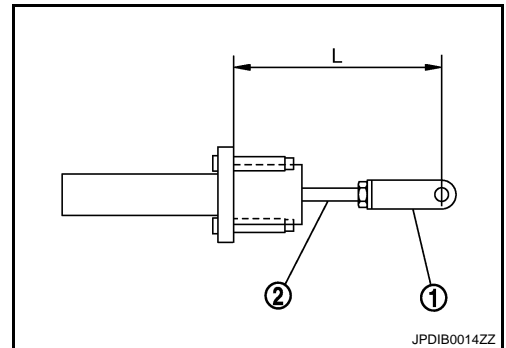
INSTALLATION

CAUTION:

Keep painted surface on the body or other parts free of clutch fluid. If it spills, wipe up immediately and wash the affected area with water.

1. Check position of clevis (1) and push rod (2). If measurement is outside the standard length, adjust position of clevis and push rod. After adjusting length, tighten lock nut to the specified torque.

Length "L" : Refer to [CL-22, "Clutch Master Cylinder"](#).

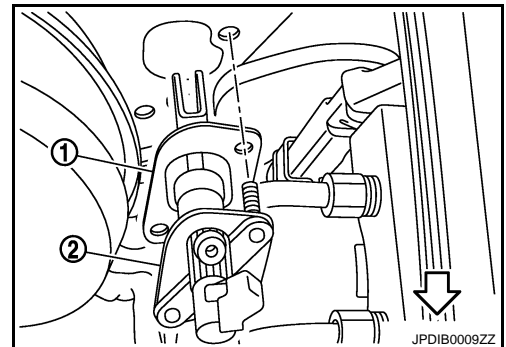


2. Install packing (1) and master cylinder assembly (2).

← : Vehicle front

CAUTION:

- Be careful not to damage packing, brake booster, and dash lower.

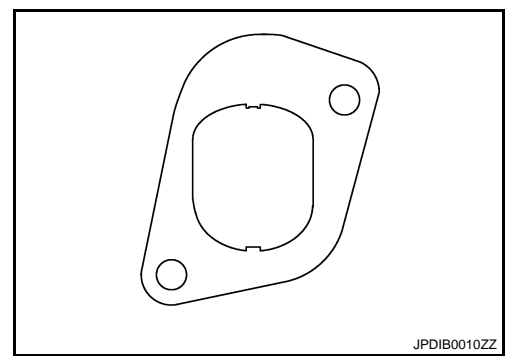


CLUTCH MASTER CYLINDER

< ON-VEHICLE REPAIR >

- Be careful with the orientation of packing. The figure is the view from the vehicle forward.

3. Connect clutch tube to master cylinder assembly and temporarily tighten flare nut.
4. Install master cylinder assembly and tighten mounting nuts to the specified torque.
5. Tighten clutch tube flare nut to the specified torque using a flare nut torque wrench. Refer to [CL-13, "Exploded View"](#).
6. Set clevis to clutch pedal assembly.
7. Apply recommended grease to clevis pin and then insert clevis pin to clevis.
8. Attach snap pin to clevis pin.
9. Install hose (1) and clips to reservoir tank assembly (2) and master cylinder assembly (3).

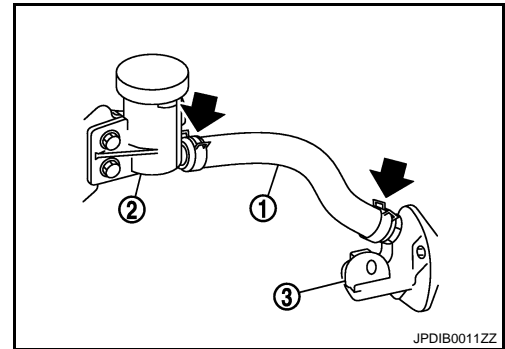


← : Painted mark

CAUTION:

Set hose with painted mark facing upward.

10. After completing this procedure, inspect and adjust for clutch pedal and then bleed the air from the clutch hydraulic system. Refer to [CL-5, "Inspection and Adjustment"](#) and [CL-6, "Air Bleeding Procedure"](#).
11. Install brake master cylinder cover. Refer to [EXT-18, "Removal and Installation"](#).
12. Install instrument driver lower panel. Refer to [IP-12, "Removal and Installation"](#).
13. Install dash side finisher and front kicking plate inner. Refer to [INT-13, "Removal and Installation"](#).

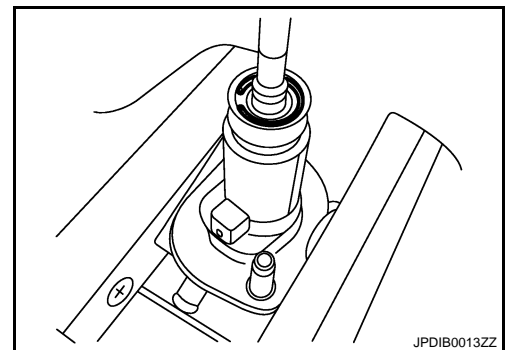


Disassembly and Assembly

INFOID:000000000956930

DISASSEMBLY

1. Loosen push rod lock nut and then remove clevis and lock nut, if necessary.
NOTE:
Clutch pedal height is controlled with position of clevis and push rod.
2. Remove boot.
3. Remove stopper ring.
4. Remove push rod while holding it securely to prevent piston assembly popping out.
5. Remove piston assembly and return spring.



ASSEMBLY

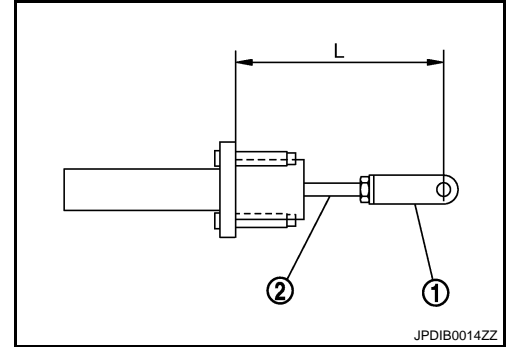
1. Apply rubber lubricant to the internal surface of cylinder body, the sliding surface and piston cup of piston assembly.
2. Insert return spring and piston assembly to cylinder body.
3. Apply silicon grease to push rod.
4. Install stopper ring while holding down push rod by hand to prevent piston assembly from popping out.
CAUTION:
Do not reuse stopper ring.
5. Install boot to cylinder body.

CLUTCH MASTER CYLINDER

< ON-VEHICLE REPAIR >

6. Install lock nut and clevis to push rod.
7. Check and adjust the positions of clevis (1) and push rod (2).
After adjusting length, tighten lock nut to the specified torque.

Length "L" : Refer to [CL-22, "Clutch Master Cylinder"](#).



Inspection

INFOID:000000000956931

INSPECTION AFTER DISASSEMBLY

Check for any of the conditions shown below. If any malfunction is found, replace the part concerned.

- Damaged cylinder internal wall, foreign matter, wear, corrosion.
- Damaged or deformed reservoir tank.
- Settling of return spring.
- Cracked or deformed boot.
- Cracked or deformed packing.

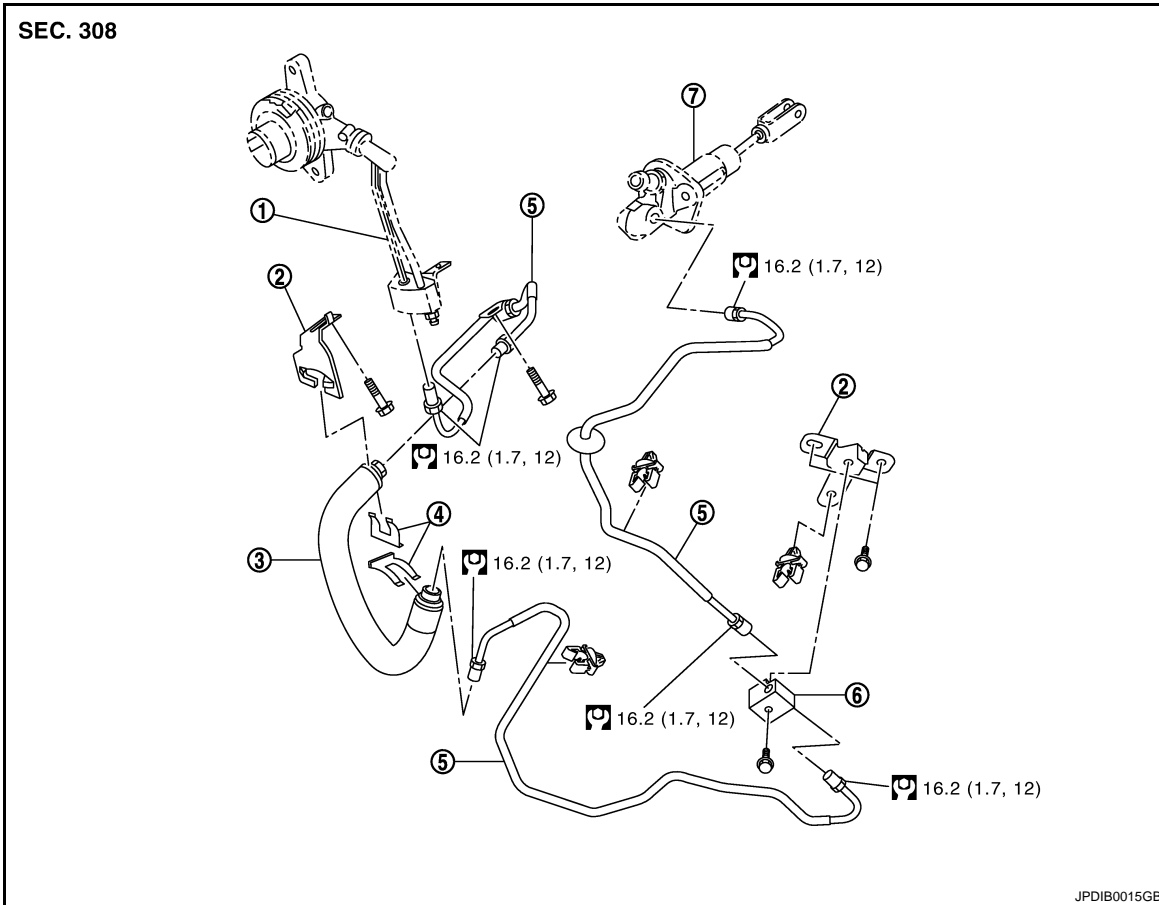
CLUTCH PIPING

< ON-VEHICLE REPAIR >

CLUTCH PIPING

Exploded View

INFOID:000000000956932

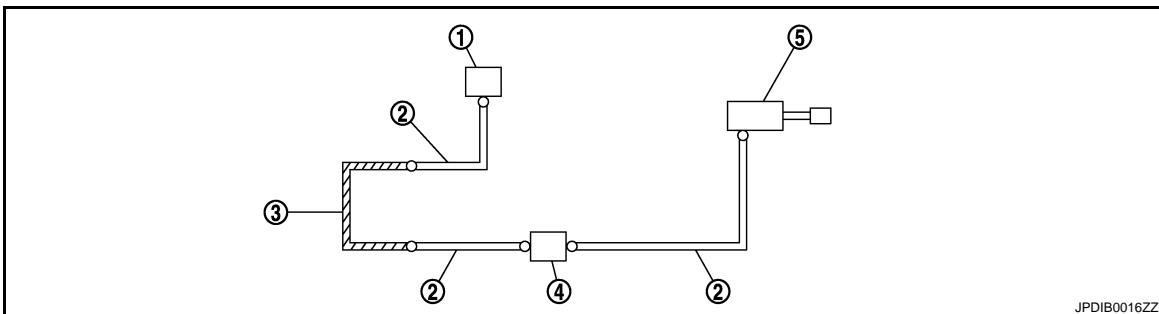


- | | | |
|---|----------------|----------------|
| 1. CSC (Concentric Slave Cylinder) assembly | 2. Bracket | 3. Clutch hose |
| 4. Lock plate | 5. Clutch tube | 6. Connector |
| 7. Master cylinder assembly | | |

Refer to [GI-4, "Components"](#) for the symbols in the figure.

Hydraulic Layout

INFOID:000000000956933



- | | | |
|---|-----------------------------|----------------|
| 1. CSC (Concentric Slave Cylinder) assembly | 2. Clutch tube | 3. Clutch hose |
| 4. Connector | 5. Master cylinder assembly | |

Removal and Installation

INFOID:000000000956934

CLUTCH PIPING

< ON-VEHICLE REPAIR >

CAUTION:

Keep painted surface on the body or other parts free of clutch fluid. If it spills, wipe up immediately and wash the affected area with water.

REMOVAL

Refer to the figure for removal procedure.

INSTALLATION

Refer to the figure for installation procedure.

- To fix clutch hose on bracket, position clutch hose clasp on the emboss of bracket and drive lock plate vertically from above.

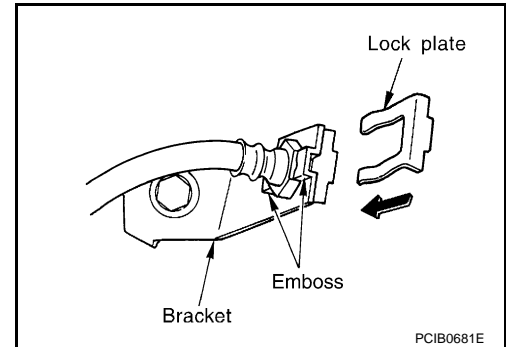
CAUTION:

- Be careful not to bend or twist clutch hose.
- Do not scratch or damage clutch hose.
- Tighten clutch tube flare nut to the specified torque.

CAUTION:

Be careful not to damage flare nut and clutch tube.

- After installation, bleed the air from the clutch hydraulic system. Refer to [CL-6, "Air Bleeding Procedure"](#).



CSC (CONCENTRIC SLAVE CYLINDER)

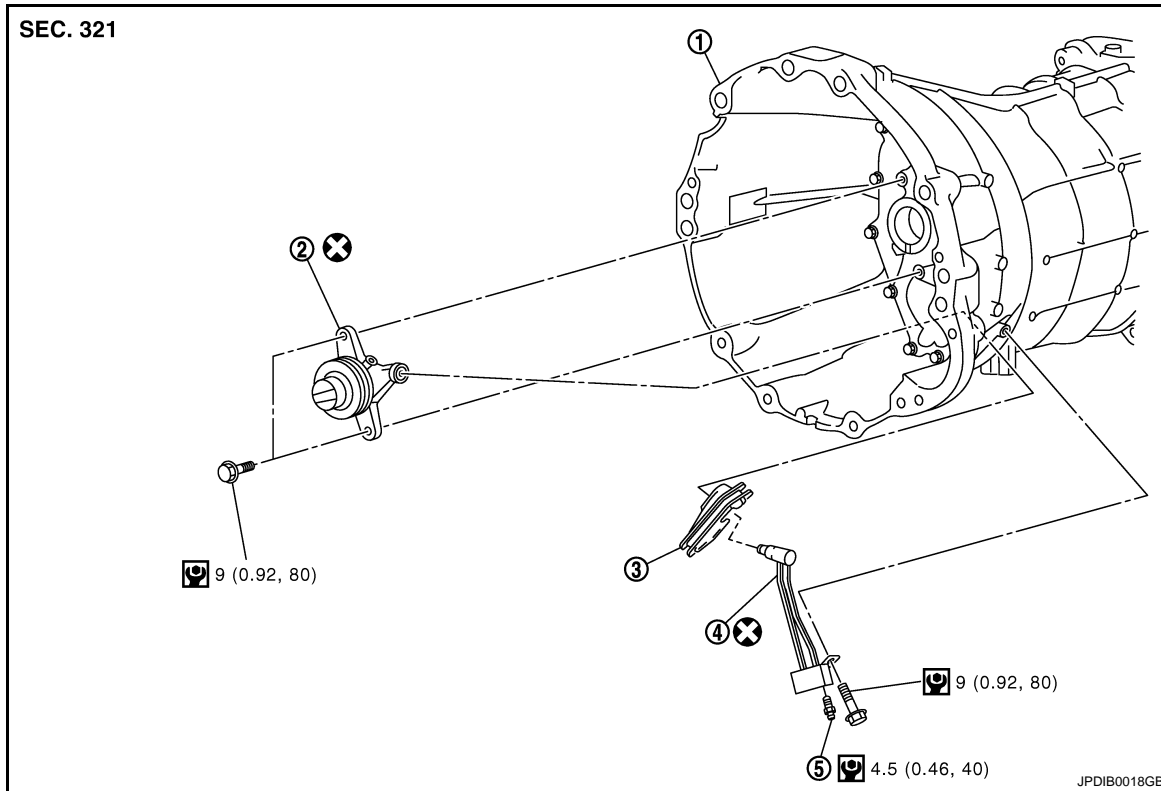
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

CSC (CONCENTRIC SLAVE CYLINDER)

Exploded View

INFOID:000000000956935



1. Transmission assembly
2. CSC (Concentric Slave Cylinder) body
3. Dust cover
4. CSC (Concentric Slave Cylinder) tube
5. Air bleeder valve

Refer to [GI-4, "Components"](#) for the symbols in the figure.

Removal and Installation

INFOID:000000000956936

CAUTION:

- If transmission assembly is removed from the vehicle, always replace CSC (Concentric Slave Cylinder) body and CSC tube. Return CSC body insert to original position to remove transmission assembly. Dust on clutch disc sliding parts may damage seal of CSC body and may cause clutch fluid leakage.
- Do not disassemble CSC body.
- Keep painted surface on the body or other parts free of clutch fluid. If it spills, wipe up immediately and wash the affected area with water.

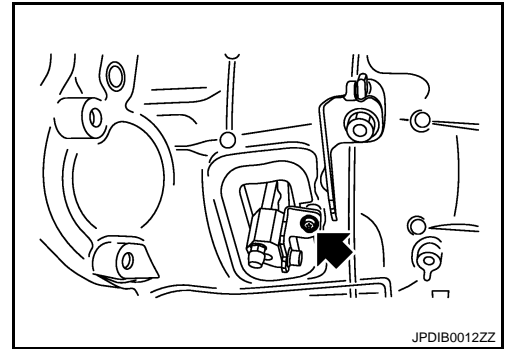
REMOVAL

1. Remove transmission assembly from the vehicle. Refer to [TM-26, "Removal and Installation"](#).

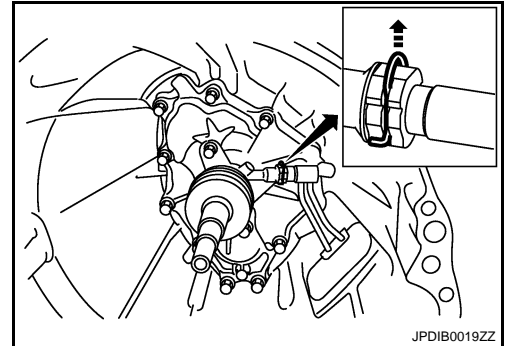
CSC (CONCENTRIC SLAVE CYLINDER)

< REMOVAL AND INSTALLATION >

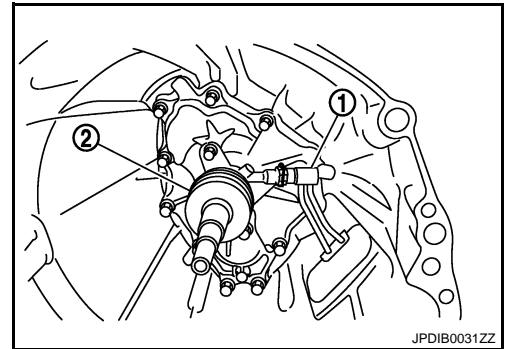
2. Remove CSC tube mounting bolt.



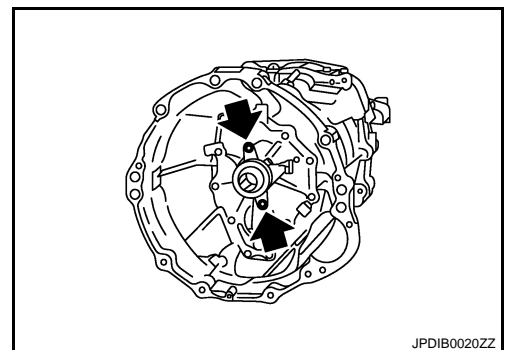
3. Pull up the lock pin of the CSC body.



4. Pull out the CSC tube (1) from the CSC body (2).
5. Remove CSC tube and dust cover from transmission case.
6. Remove air bleeder valve from CSC tube.



7. Remove CSC body from transmission case.



INSTALLATION

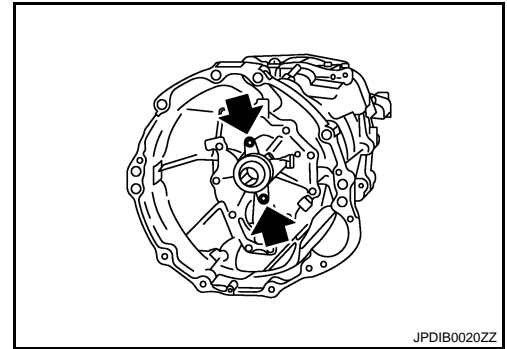
CSC (CONCENTRIC SLAVE CYLINDER)

< REMOVAL AND INSTALLATION >

1. Install CSC body to transmission case and then tighten mounting bolts to the specified torque.

CAUTION:

- Do not reuse CSC body.
- Do not insert and operate CSC body because piston and stopper of CSC body components may fall off.



2. Install dust cover to transmission case.

← : Vehicle front

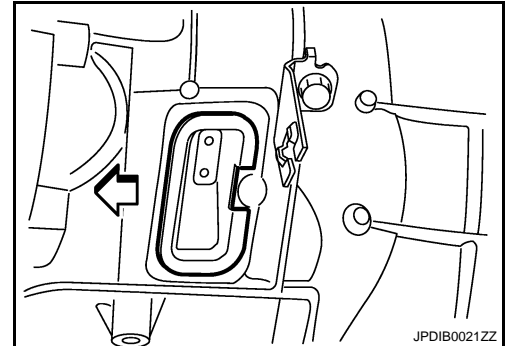
CAUTION:

Be careful with the orientation of dust cover.

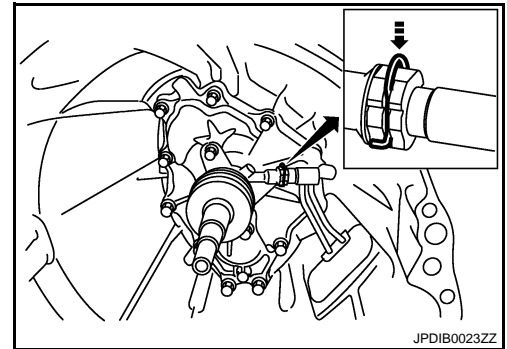
3. Insert CSC tube to dust cover.

CAUTION:

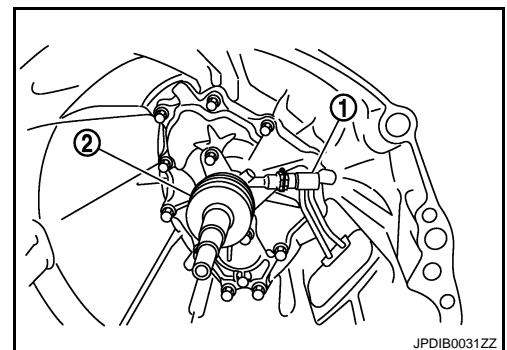
- Do not reuse CSC tube.
- Be sure not to damage O-ring of CSC tube.



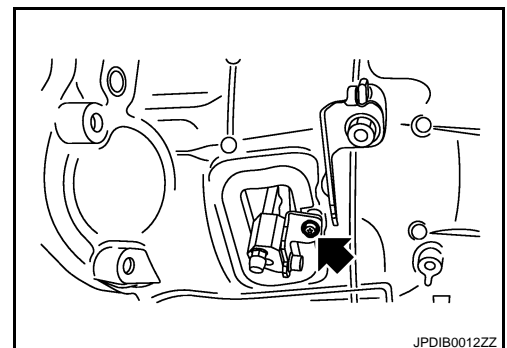
4. Press down the lock pin of the CSC body.



5. Insert the CSC tube (1) into the connector of the CSC body (2) until it clicks.



6. Install CSC tube mounting bolt and then tighten mounting bolt to the specified torque.



A
B
C
CL
E
F
G
H
I
J
K
L
M
N
O
P

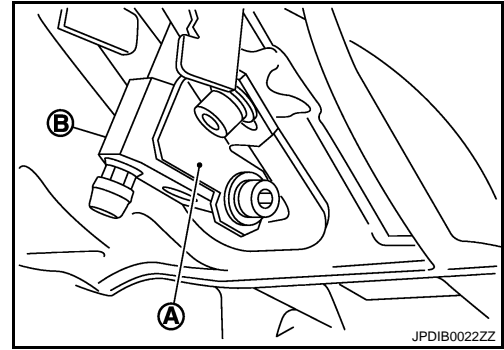
CSC (CONCENTRIC SLAVE CYLINDER)

< REMOVAL AND INSTALLATION >

CAUTION:

Assemble the components checking that the bracket (A) on the CSC body and the nozzle (B) closely contact each other before tightening the bolt. When assembled correctly, the components should not move beyond the allowable looseness of the connector on the CSC body.

7. Install air bleeder valve to CSC tube and then tighten air bleeder valve to the specified torque.
8. Install transmission assembly to the vehicle. Refer to [TM-26](#), "[Removal and Installation](#)".
9. Bleed the air from the clutch hydraulic system. Refer to [CL-6](#), "[Air Bleeding Procedure](#)".



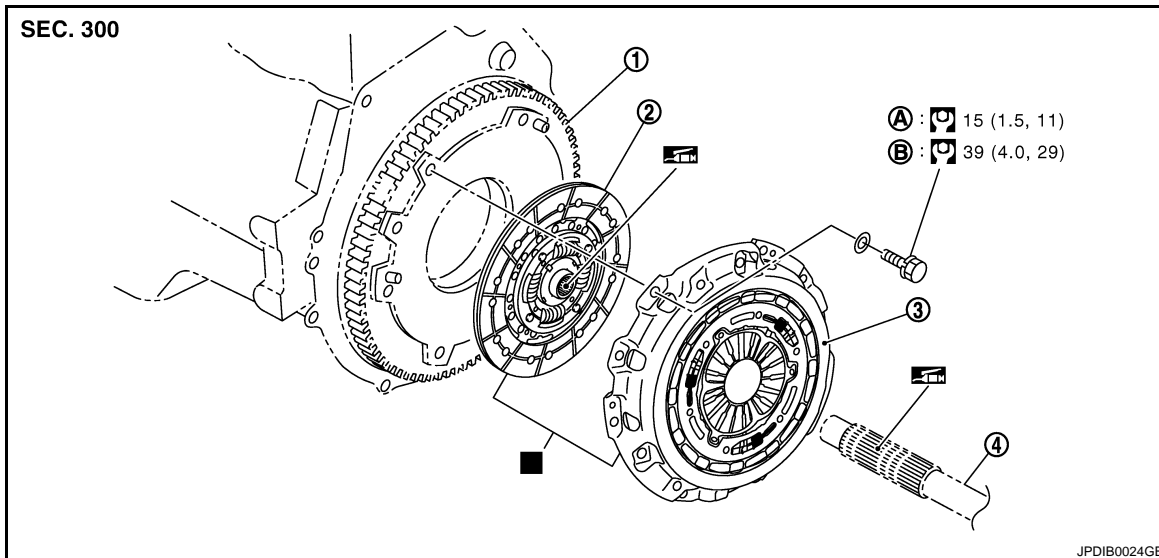
CLUTCH DISC AND CLUTCH COVER

< REMOVAL AND INSTALLATION >

CLUTCH DISC AND CLUTCH COVER

Exploded View

INFOID:000000000956937



- 1. Flywheel
- 2. Clutch disc
- 3. Clutch cover
- 4. Main drive gear
- A. First step
- B. Final step

■ : Replace the parts as a set.

☑ : Apply lithium-based grease including molybdenum disulphide.

Refer to [GI-4, "Components"](#) for symbols not described on the above.

CAUTION:

- If transmission assembly is removed from the vehicle, always replace CSC (Concentric Slave Cylinder) body and CSC tube. Return CSC body insert to original position to remove transmission assembly. Dust on clutch disc sliding parts may damage seal of CSC body and may cause clutch fluid leakage.
- Be careful not to bring any grease to the clutch disc facing, pressure plate surface and flywheel surface.
- When installing, be careful that grease applied to main drive gear does not adhere to clutch disc.
- Do not clean in solvent on clutch disc.
- If flywheel is removed, align dowel pin with the smallest hole of flywheel. Refer to [EM-114, "Disassembly and Assembly"](#).

Removal and Installation

INFOID:000000000956938

CAUTION:

If transmission assembly is removed from the vehicle, always replace CSC (Concentric Slave Cylinder) body and CSC tube. Return CSC body insert to original position to remove transmission assembly. Dust on clutch disc sliding parts may damage seal of CSC body and may cause clutch fluid leakage.

REMOVAL

1. Remove transmission assembly from the vehicle. Refer to [TM-26, "Removal and Installation"](#).
2. Loosen clutch cover mounting bolts with power tool.
3. Remove clutch cover and clutch disc.

CAUTION:

Do not drop clutch disc.

INSTALLATION

1. Clean clutch disc and main drive gear splines to remove grease and powder arisen from abrasion.
2. Apply recommended grease to clutch disc and main drive gear splines.

CAUTION:

CLUTCH DISC AND CLUTCH COVER

< REMOVAL AND INSTALLATION >

Be sure to apply grease to the points specified. Otherwise, noise, poor disengagement, or damage to the clutch may result. Excessive grease may cause slip or judder. And if it adheres to seal of CSC body, it cause clutch fluid leakage. Wipe off excess grease. Wipe off any grease oozing from the parts.

3. Install clutch disc using the clutch aligning bar [SST: ST20670000 (—)]

CAUTION:

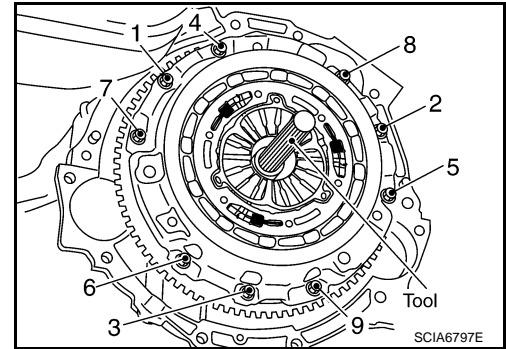
If either clutch disc or clutch cover is needed to be replaced, replace them as a set.

4. Install clutch cover. Pre-tighten clutch cover mounting bolts.

CAUTION:

If either clutch disc or clutch cover is needed to be replaced, replace them as a set.

5. Tighten clutch cover mounting bolts evenly in two steps in the order shown in the figure.
6. Install transmission assembly to the vehicle. Refer to [TM-26](#), "[Removal and Installation](#)".



Inspection

INFOID:000000000956939

INSPECTION AFTER REMOVAL

CLUTCH DISC

- Measure circumferential runout relative to clutch disc center spline. If it is outside the specification, replace clutch disc and clutch cover as a set.

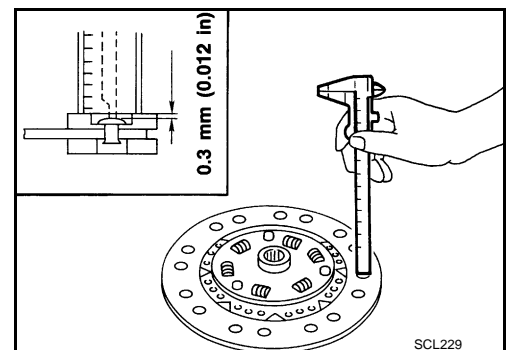
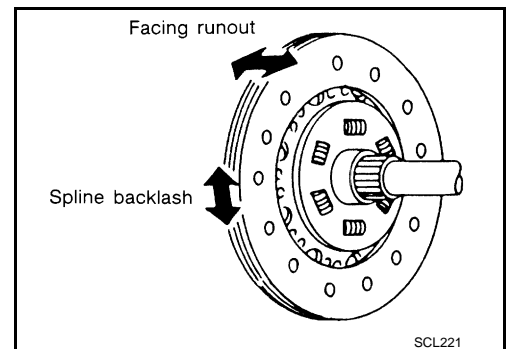
Runout limit/diameter of the area to be measured : Refer to [CL-22](#), "[Clutch Disc](#)".

- Measure backlash to clutch disc spline and main drive gear spline at the circumference of clutch disc. If outside the specification, replace clutch disc and clutch cover as a set.

Maximum allowable spline backlash (at outer edge of disc) : Refer to [CL-22](#), "[Clutch Disc](#)".

- Measure the depth to clutch disc facing rivet heads using calipers. If it exceeds the allowable wear limit, replace clutch disc and clutch cover as a set.

Facing wear limit (depth to the rivet head) : Refer to [CL-22](#), "[Clutch Disc](#)".



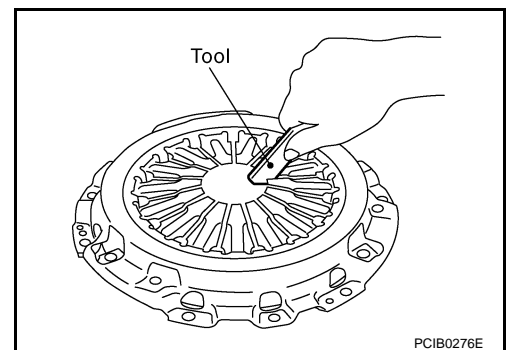
CLUTCH COVER

Check diaphragm spring lever claws for unevenness with the lever still on the vehicle. If they exceed the tolerance, adjust lever height using the diaphragm adjusting wrench [SST: ST20050240 (—)].

Tolerance for diaphragm spring lever unevenness : Refer to [CL-22](#), "[Clutch Cover](#)".

- Check clutch cover thrust ring for wear or breakage. If wear or breakage is found, replace clutch disc and clutch cover as a set.

NOTE:



CLUTCH DISC AND CLUTCH COVER

< REMOVAL AND INSTALLATION >

- Worn thrust ring will generate a beating noise when tapped at the rivet with a hammer.
- Broken thrust ring will make a clinking sound when cover is shaken up and down.
- If a trace of burn or discoloration is found on the clutch cover pressure plate to clutch disc contact surface, repair the surface with sandpaper. If surface is damaged or distorted, replace clutch disc and clutch cover as a set.

A

B

C

CL

E

F

G

H

I

J

K

L

M

N

O

P

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Clutch Control System

INFOID:000000000956940

Type of clutch control	Hydraulic
------------------------	-----------

Clutch Pedal

INFOID:000000000956941

Unit: mm (in)

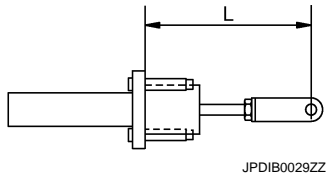
Clearance "C" between pedal stopper rubber and clutch interlock switch threaded while clutch pedal is fully depressed.	0.1 - 1.0 (0.004 - 0.039)
--	---------------------------

Clutch Master Cylinder

INFOID:000000000956942

Unit: mm (in)

Inner diameter	17.46 (11/16)
Standard length "L" between clevis and push rod	133.0 - 133.9 (5.24 - 5.27)



Clutch Disc

INFOID:000000000956943

Unit: mm (in)

Facing size (Outer dia. × Inner dia. × Thickness)	240 × 160 × 3.5 (9.45 × 6.30 × 0.138)
Runout limit/diameter of the area to be measured	1.0 (0.039) /230 (9.06) dia.
Maximum allowable spline backlash (at outer edge of disc)	1.0 (0.039)
Facing wear limit (depth to the rivet head)	0.3 (0.012)

Clutch Cover

INFOID:000000000956944

Set-load	10,300 N (1,050.6 kg, 2,315.4 lb)
Tolerance for diaphragm spring lever unevenness	0.8 mm (0.031 in) or less
Diaphragm spring lever height	44.7 - 46.7 mm (1.760 - 1.839 in)