DAIHATSU

TERIOS

J100

TO INDEX

CLUTCH

JCL00001-00000

CL

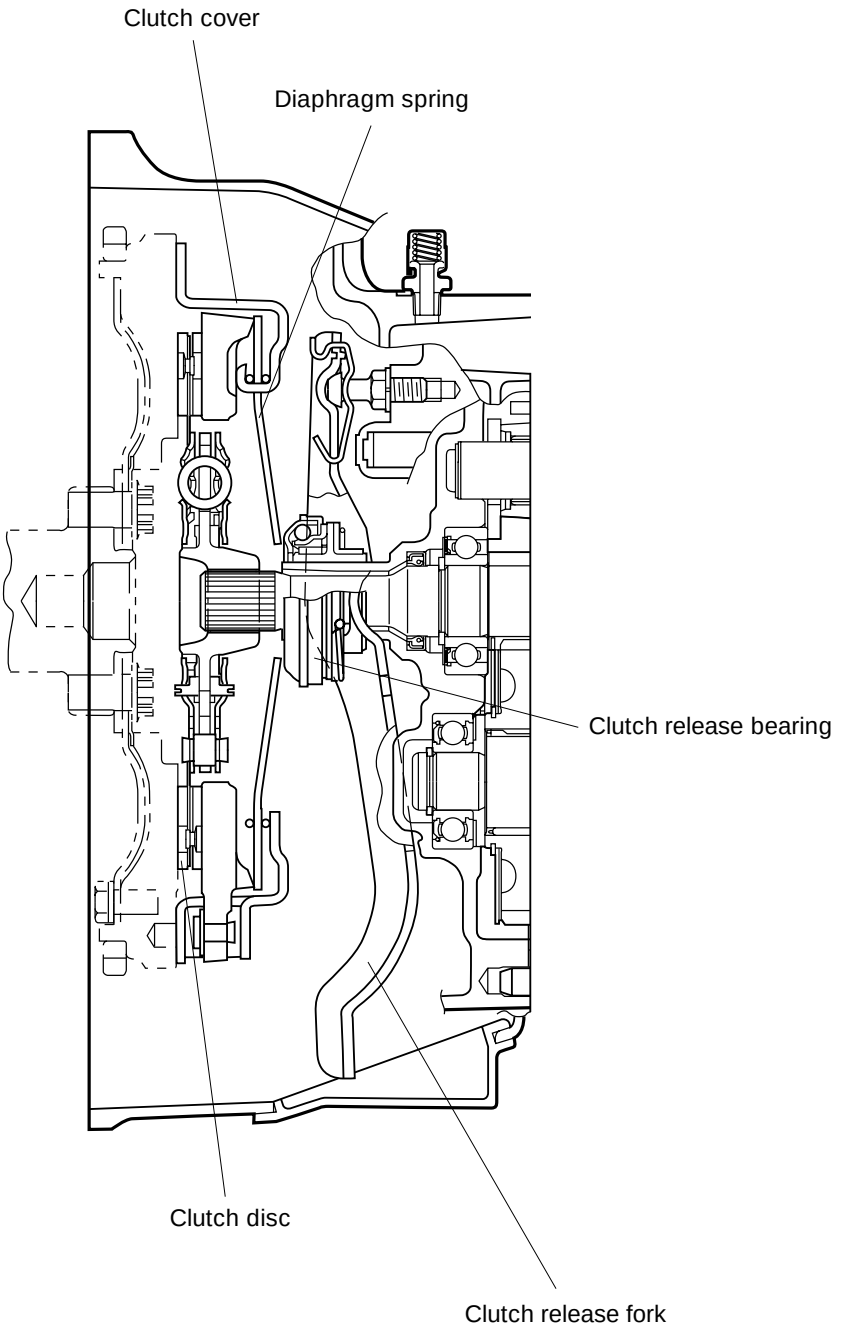
NO. 9710-JE

OUTLINE

1. The clutch mechanism has employed a cable-operated mechanical clutch. This clutch has adopted a dry, single disc type diaphragm type which features easy operation and excellent serviceability.
2. The release mechanism employs a lever type featuring superb stroke efficiency and load efficiency, as is the case with S100 series.
3. For improved cooling performance of the clutch friction surface, the clutch housing is provided with cooling holes at its front and rear sides.

JCL00002-00000

CLUTCH SECTIONAL VIEW



JCL00003-00001

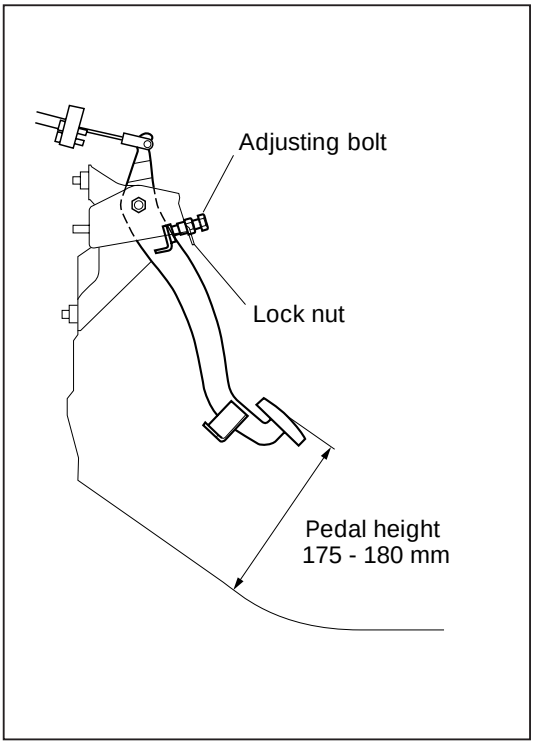
CLUTCH PEDAL ADJUSTMENT

PEDAL INSTALLATION HEIGHT

Loosen the lock nut. Adjust the pedal height by turning the adjusting bolt.

Pedal Installation Height: 175 - 180 mm
(Distance from center of pedal pad upper surface to dash panel)

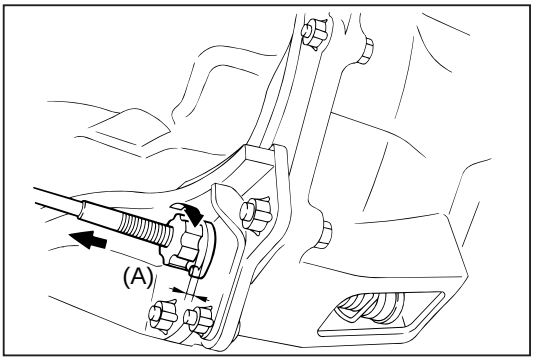
Lock Nut Tightening Torque: 11.8 - 27.4 N·m
(1.2 - 2.8 kgf-m)



JCL00004-00002

ADJUSTMENT OF CLUTCH PEDAL FREE TRAVEL

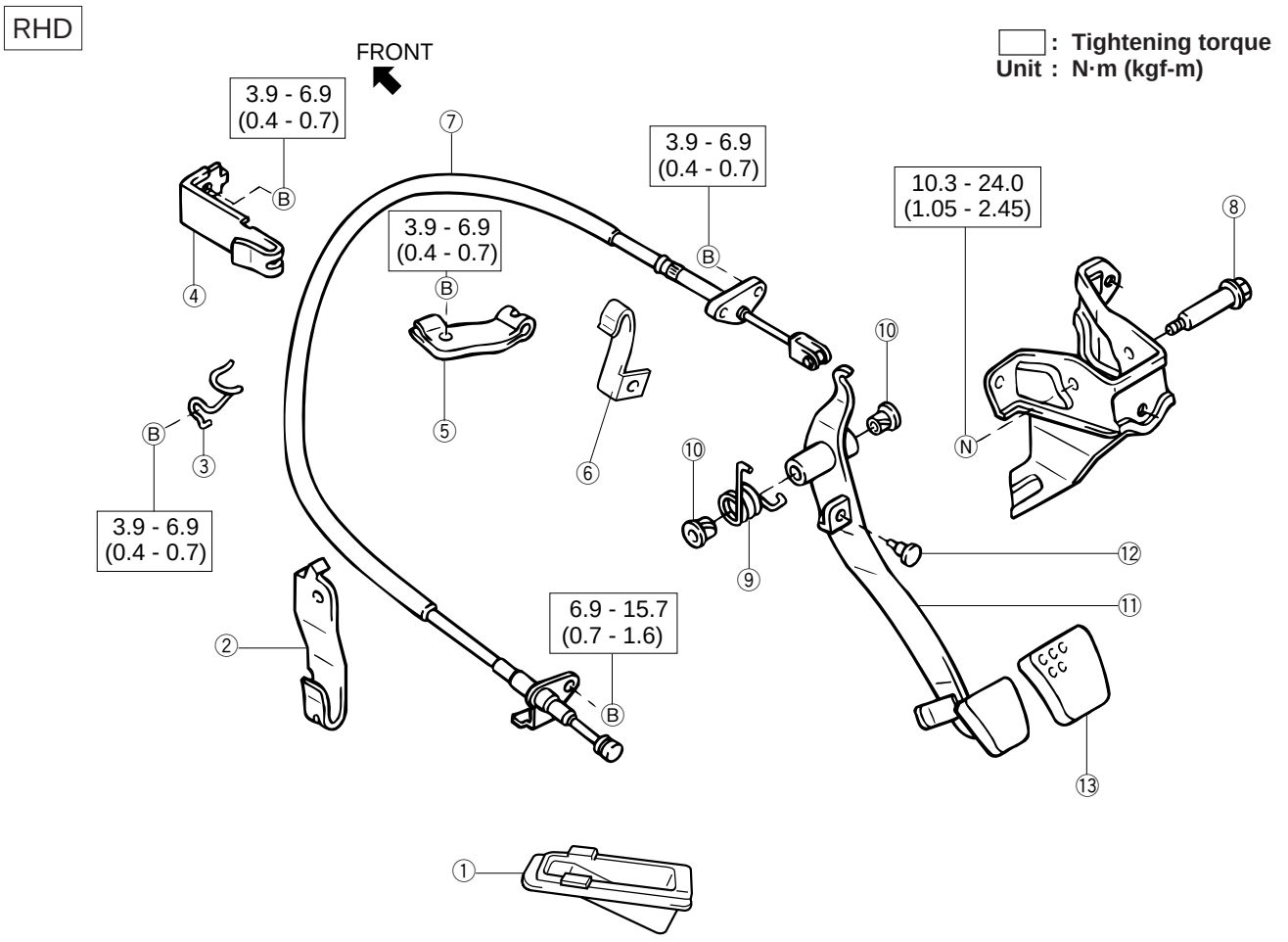
1. Pull the clutch outer cable toward the vehicle front, until the clutch release bearing hub is brought into contact with the diaphragm spring of the clutch cover.
2. Under the condition in the step 1, turn the adjusting nut in such a way that the gap relative to the grommet (dimension (A) in the right figure) may be adjusted to 4 - 7 mm.
3. Align the nearest groove of the adjusting nut with the protrusion of the grommet, and secure it.
4. Ensure that the free travel of the clutch pedal conforms to the specification.
   Clutch pedal free travel: 15 - 30 mm



JCL00005-00003

CLUTCH PEDAL & CLUTCH CABLE

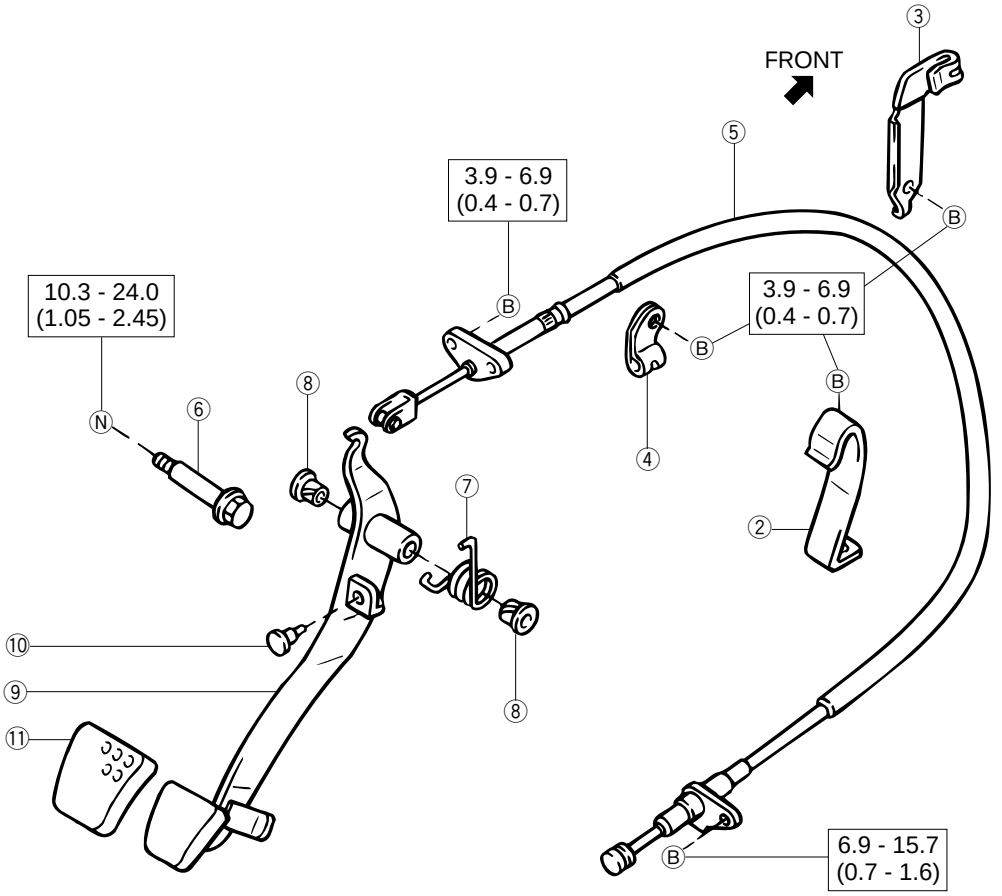
COMPONENTS

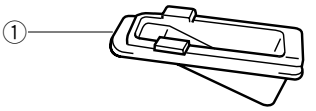


① Clutch housing cover
② Clutch cable bracket
③ Clutch cable bracket
④ Clutch cable bracket
⑤ Clutch cable bracket
⑥ Clutch cable bracket (ABS vehicle only)
⑦ Clutch release cable assembly
⑧ Pedal shaft
⑨ Spring
⑩ Bush
⑪ Clutch pedal subassembly
⑫ Cushion
⑬ Clutch pedal pad.

JCL00006-00004

LHD





① Clutch housing cover
② Clutch cable bracket
③ Clutch cable bracket
④ Clutch cable bracket
⑤ Clutch release cable assembly
⑥ Pedal shaft
⑦ Spring
⑧ Bush
⑨ Clutch pedal subassembly
⑩ Cushion
⑪ Clutch pedal pad

: **Tightening torque**
Unit : N·m (kgf-m)

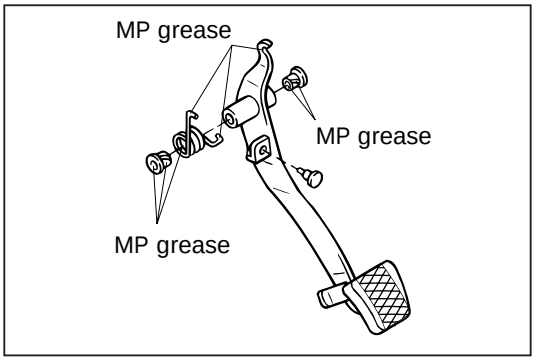
JCL00000-00005

1. Main points of clutch pedal installation

(1) Apply MP grease to the points where the inner surface of the clutch pedal subassembly is connected to the clutch release cable assembly; the inner surface and hook section of the torsion spring; and the inner/outer surfaces of the bush.

NOTE:

- Be very careful not to allow grease to get to the threaded portion of the pedal shaft.



JCL00007-00006

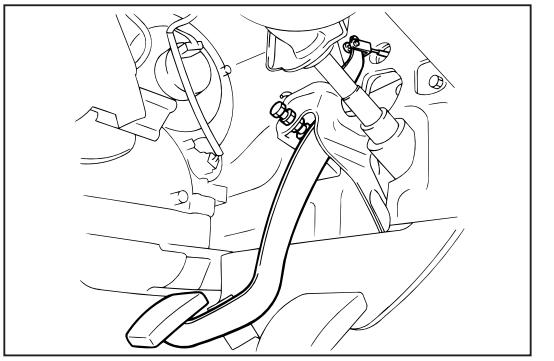
2. Main points of clutch cable installation

(1) Pull the clutch release cable assembly into the vehicle interior. Apply MP grease to the cable end section. Install the assembly to the clutch pedal.

(2) Install the clutch release cable assembly to the clutch re Clutch cable bracket (ABS vehicle only)
lease fork assembly in such a way that the end section of the clutch release cable assembly is aligned with the ellipse section of the clutch release fork assembly.

NOTE:

- Be sure to install all clamps.



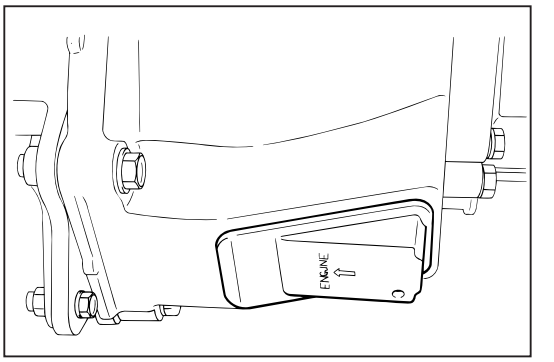
JCL00008-00007

(3) Adjust the clutch pedal free travel.

(4) Install the clutch housing cover.

NOTE:

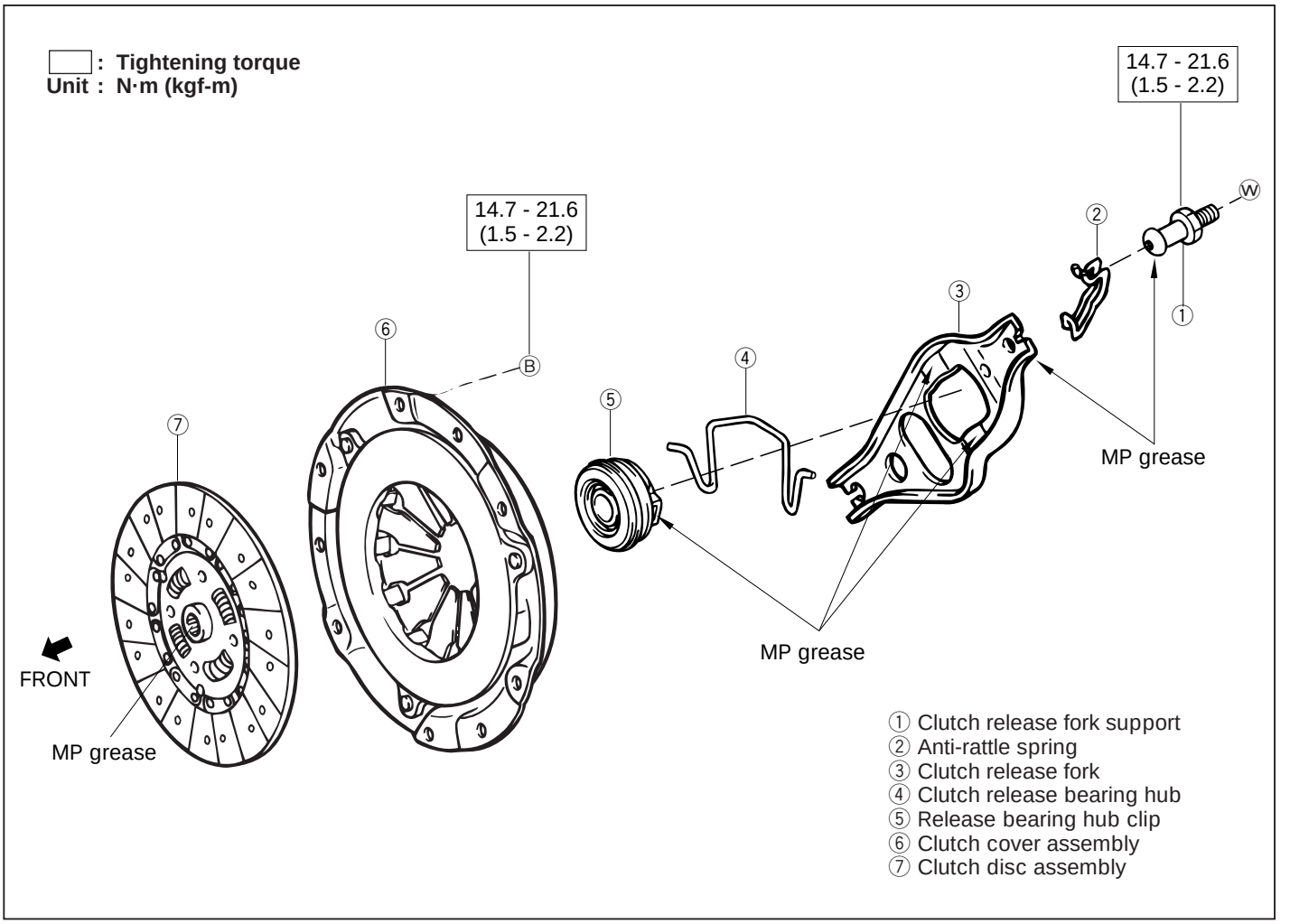
- Be sure to install the clutch housing cover in the direction shown in the right figure.



JCL00009-00008

CLUTCH RELEASE MECHANISM

COMPONENTS



JCL00010-00009

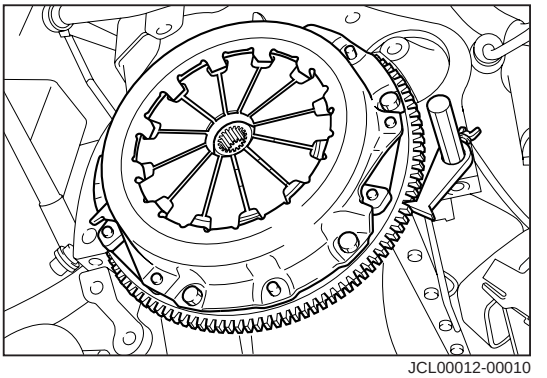
1. Operation prior to removal

(1) Remove the transmission assembly from the vehicle. (Refer to the MT section.)

JCL00011-00000

2. Main points of removal

(1) Remove the clutch cover assembly and clutch disc assembly, while preventing the ring gear from turning by means of the following SST.
SST: 09210-87701-000



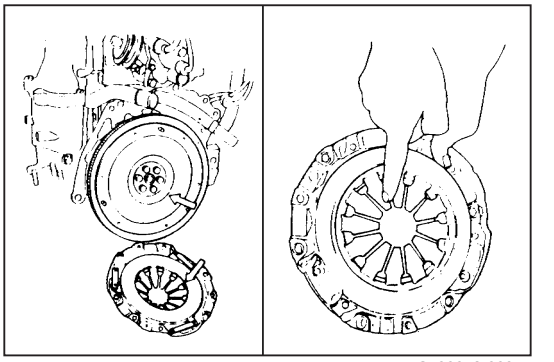
JCL00012-00010

3. Check

Clutch cover and diaphragm spring

Inspect the following parts. Replace any parts which exhibit defects.

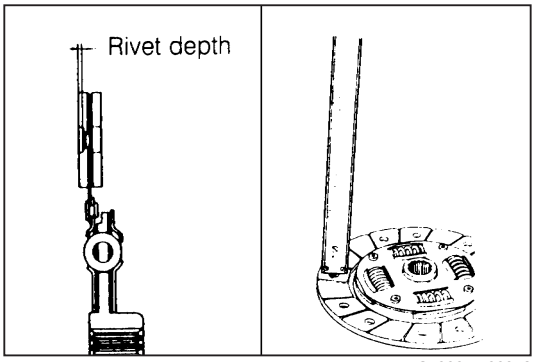
(1) Check the clutch pressure plate and the clutch disc contracting surface of the flywheel for evidence of wear or burns.
(2) Check the diaphragm spring lever for wear, corrosion or damage.



JCL00013-00011

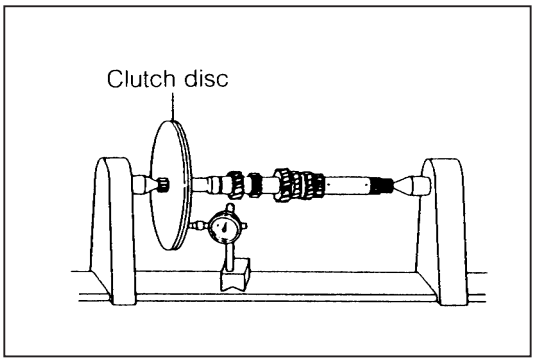
Clutch disc

(1) Check the clutch disc for wear.
Rivet Depth
Limit: 0.4 mm



JCL00014-00012

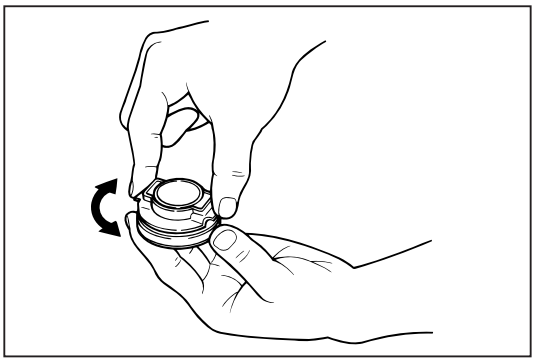
(2) Check the clutch disc for runout.
Runout
Limit:
(Longitudinal Runout): 1.0 mm
(Lateral Runout): 0.7 mm



JCL00015-00013

Release bearing

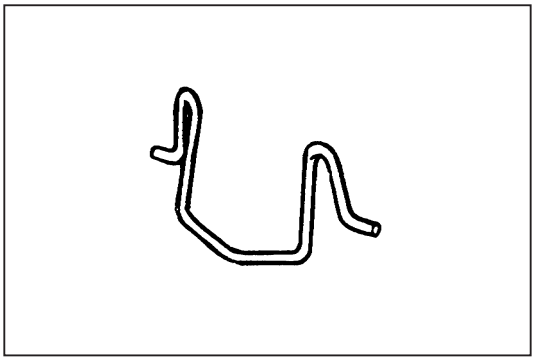
(1) Checking of release bearing for smooth turning. Turn the release bearing while applying a force to the bearing by your hand in the thrust direction. Ensure that you feel no abnormal stiffness or binding.
(2) Check the release bearing hub for damage or wear. Also, check to see if any damage or wear is present at the clip contact surface and the housing sliding section.



JCL00016-00014

Release bearing hub clip

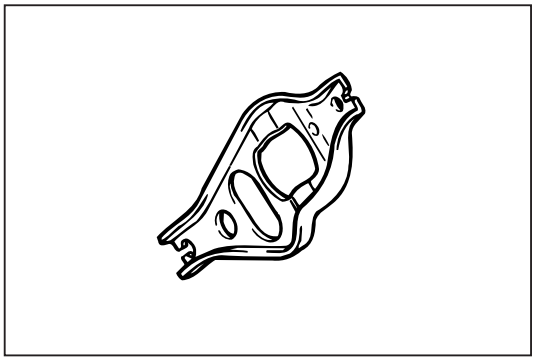
(1) Check for wear or damage.



JCL00017-00015

Clutch release fork

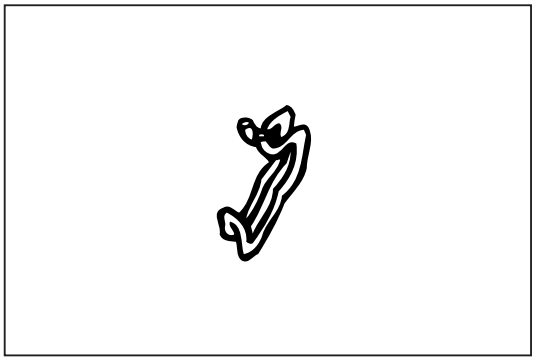
(1) Check for wear or damage.



JCL00018-00016

Anti-rattle spring

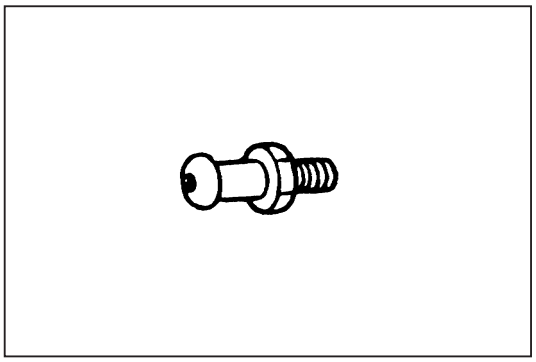
(1) Check for wear or damage.



JCL00019-00017

Clutch release fork support

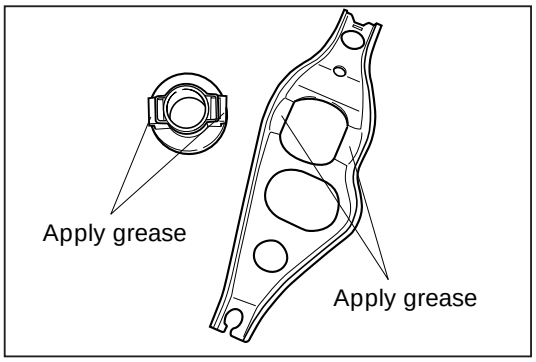
(1) Check for wear or damage.



JCL00020-00018

4. Main points of installation

(1) Thinly apply EP grease to the clutch release fork or the entire periphery of the sliding surface of the clutch release bearing hub assembly.

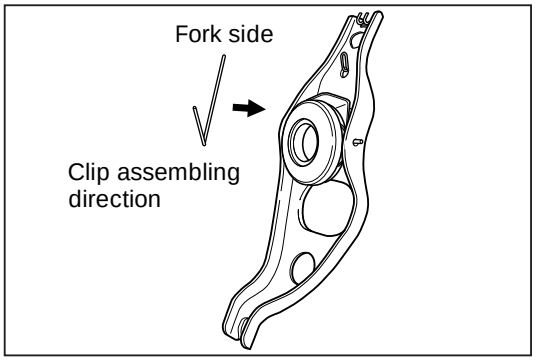


JCL00021-00019

(2) Install the release bearing hub clip to the clutch release fork.

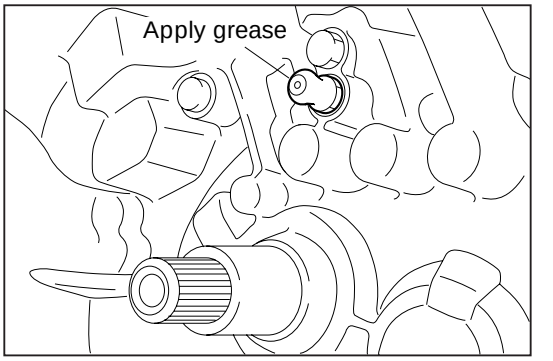
NOTE:

- Be sure to assemble the release bearing hub clip in the direction shown in the right figure.



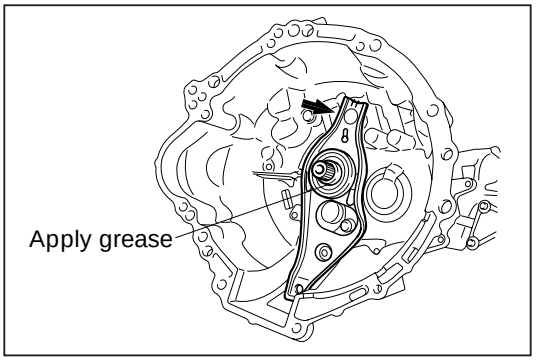
JCL00022-00020

(3) Apply EP grease to the entire periphery of the sliding surface of the release fork support.



JCL00023-00021

(4) Apply EP grease to the entire inner periphery of the clutch release bearing hub assembly. Install the clutch release fork to the transmission.

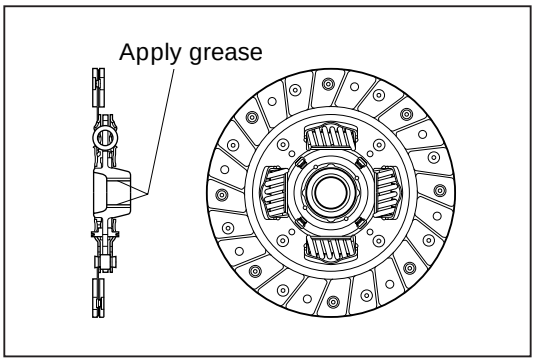


JCL00024-00022

(5) Thinly apply EP grease to the spline section of the clutch disc assembly.

NOTE:

- The grease should be applied from the clutch cover side. Be sure to apply the grease as sparsely as possible so that no excess grease may ooze out to the flywheel side.
  Specified Amount: 0.1 - 0.2 g

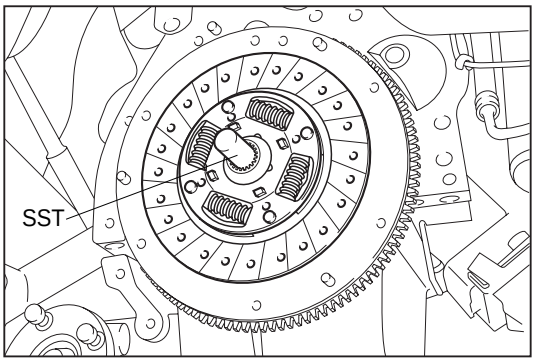


JCL00025-00023

(6) With the clutch disc assembly placed at the center position by means of the following SST, install the clutch disc assembly to the flywheel.
  SST: 09301-87703-000

NOTE:

- Be very careful not to mistake the installation direction of the clutch disc assembly.



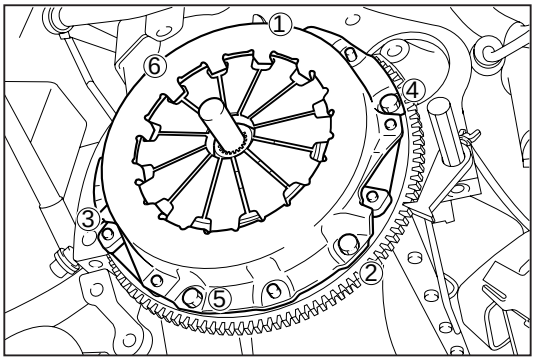
JCL00026-00024

(7) Install the clutch cover assembly, aligning with the locating pins of the flywheel at three points. Tighten the six bolts to the specified torque, while preventing the flywheel from turning by means of the following SST.
  SST: 09210-87701-000

NOTE:

- As for the tightening sequence of the bolts, first temporarily tighten the bolt (1). Then, fully tighten the bolts in order of (2) - (3) - (1) - (4) - (5) - (6). (Here, any bolt can be the bolt (1).)

  Tightening Torque: 14.7 - 21.6 N·m (1.5 - 2.2 kgf-m)

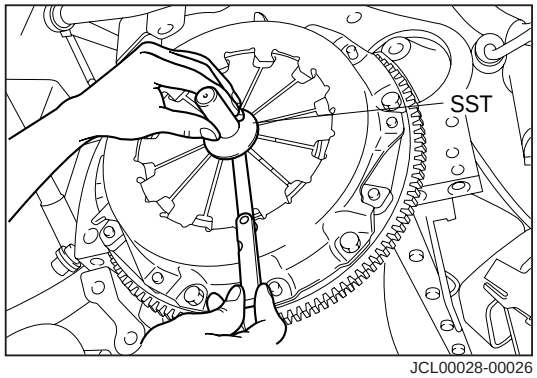


JCL00027-00025

5. Operation after installation

(1) Check the diaphragm spring section for unevenness in height, using the following SST.
SST: 09210-87701-000

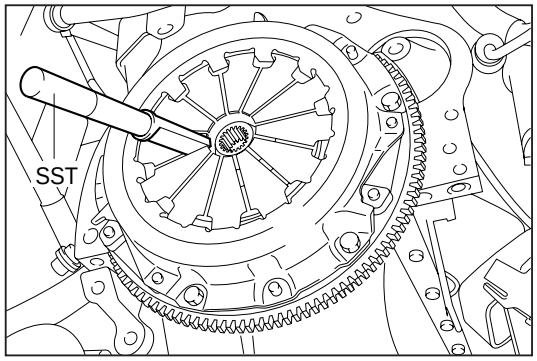
Limit: 0.5 mm



JCL00028-00026

(2) If the check above reveals that the unevenness in height exceeds its limit, correct the unevenness, using the following SST.
SST: 09333-00016-000

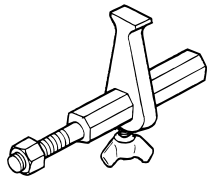
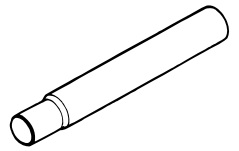
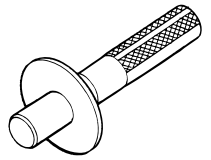
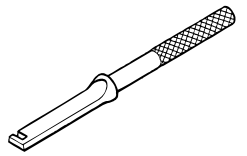
(3) Install the transmission assembly to the vehicle.



JCL00029-00027

APPENDIX

SSTs (Special Service Tools)

Illustration	Tool No.	Tool name
	09210-87701-000	Flywheel holder
	09301-87703-000	Clutch guide tool
	09302-87702-000	Clutch diaphragm spring height gauge No.4
	09333-00013-000	Clutch diaphragm spring aligner

JCL00030-00028

SERVICE SPECIFICATIONS

Unit : mm

Item		Specified value	Allowable limit	Remark
Clutch pedal	Height	175 - 180	–	Distance from upper surface of pedal to floor
	Free travel	15 - 30	–	
Clutch disc	Run-out	–	Longitudinal: 1.0 Lateral: 0.7	
	Lining wear	–	0.4	Rivet depth

JCL00031-00000

TIGHTENING TORQUE

Tightening component	Tightening torque	
	N·m	kg-m
Clutch cover × Flywheel	14.8 - 21.5	1.5 - 2.2
Clutch release fork support × Clutch housing	14.7 - 21.6	1.5 - 2.2
Clutch release cable × Right stiffener plate	6.9 - 15.7	0.7 - 1.6
Clutch cable bracket attaching bolt	3.9 - 6.9	0.4 - 0.7
Clutch release cable × Dash panel	3.9 - 6.9	0.4 - 0.7
Pedal shaft attaching nut	10.3 - 24.0	1.05 - 2.45

JCL00032-00000

TO INDEX TO NEXT SECTION