

DAIHATSU

L500, L501

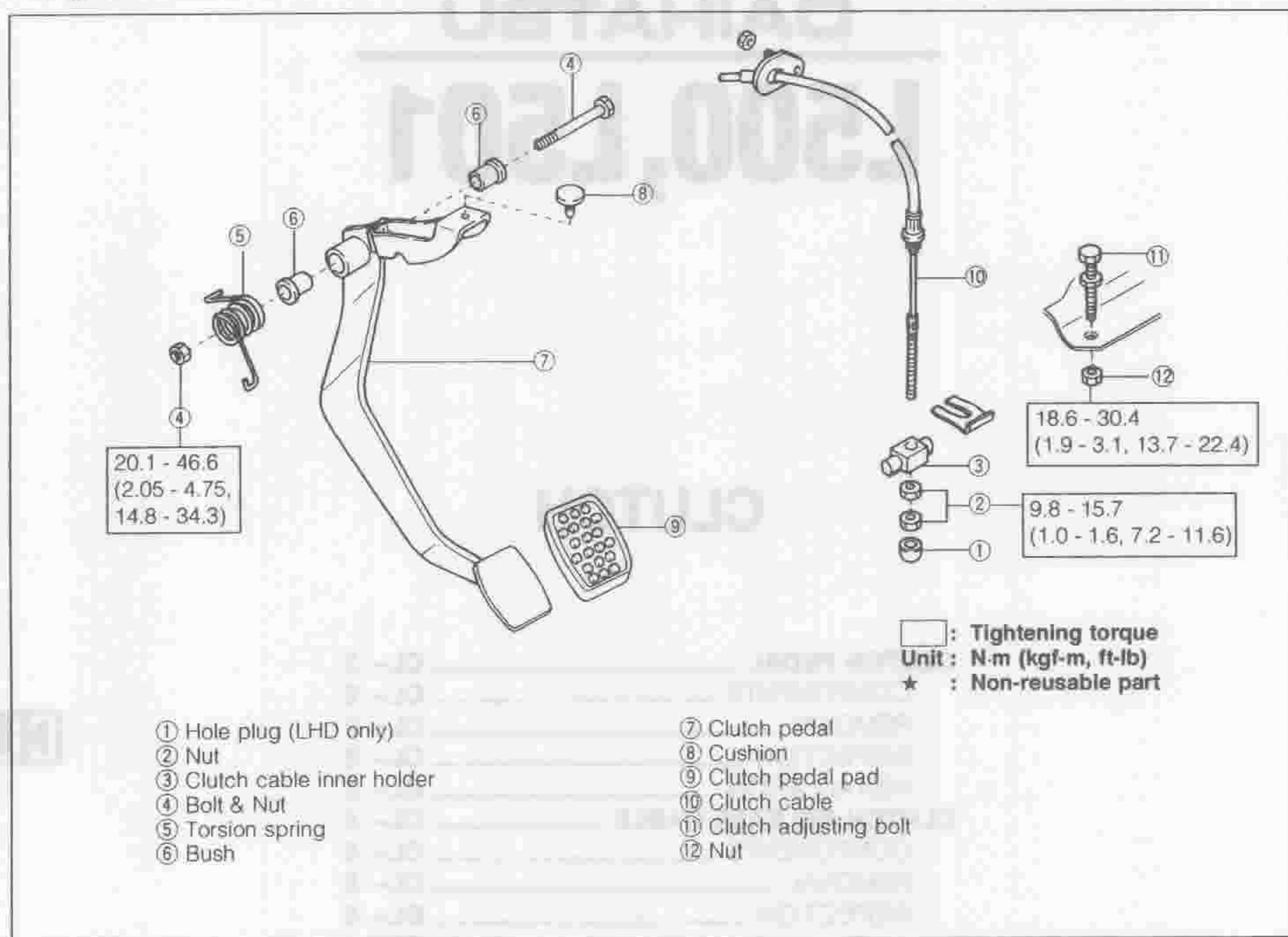
CLUTCH

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CL

CLUTCH PEDAL COMPONENTS



LCL00002-00001

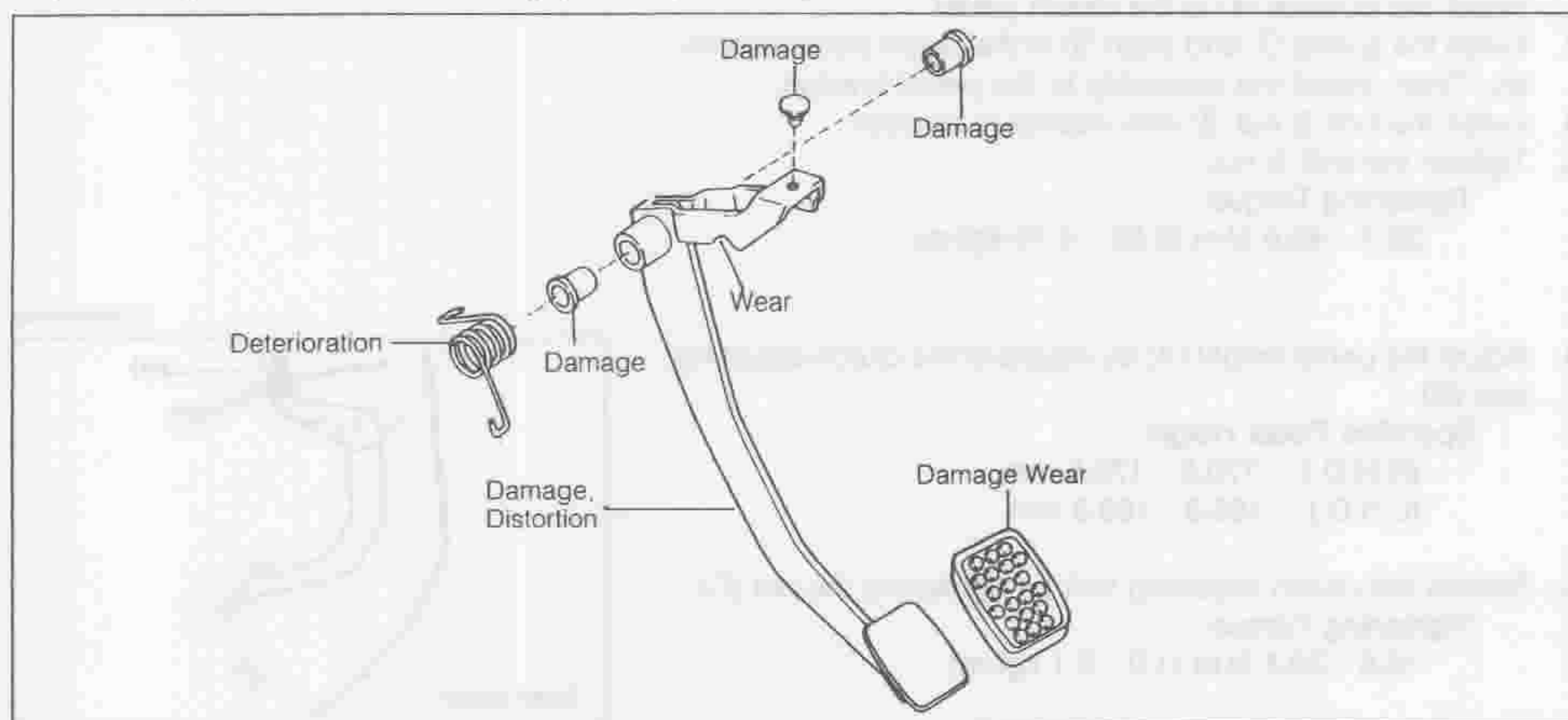
REMOVAL

1. Disconnect the clutch cable from the clutch pedal by removing the hole plug ① (LHD only), nuts ② and clutch cable inner holder ③.
2. Remove the bolt & nut ④ from the clutch pedal bracket.
3. Remove the clutch pedal ⑦.
4. Remove the cushion ⑧ and clutch pedal pad from the clutch pedal.

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INSPECTION

Inspect the parts for wear or damage, and replace any defective parts.

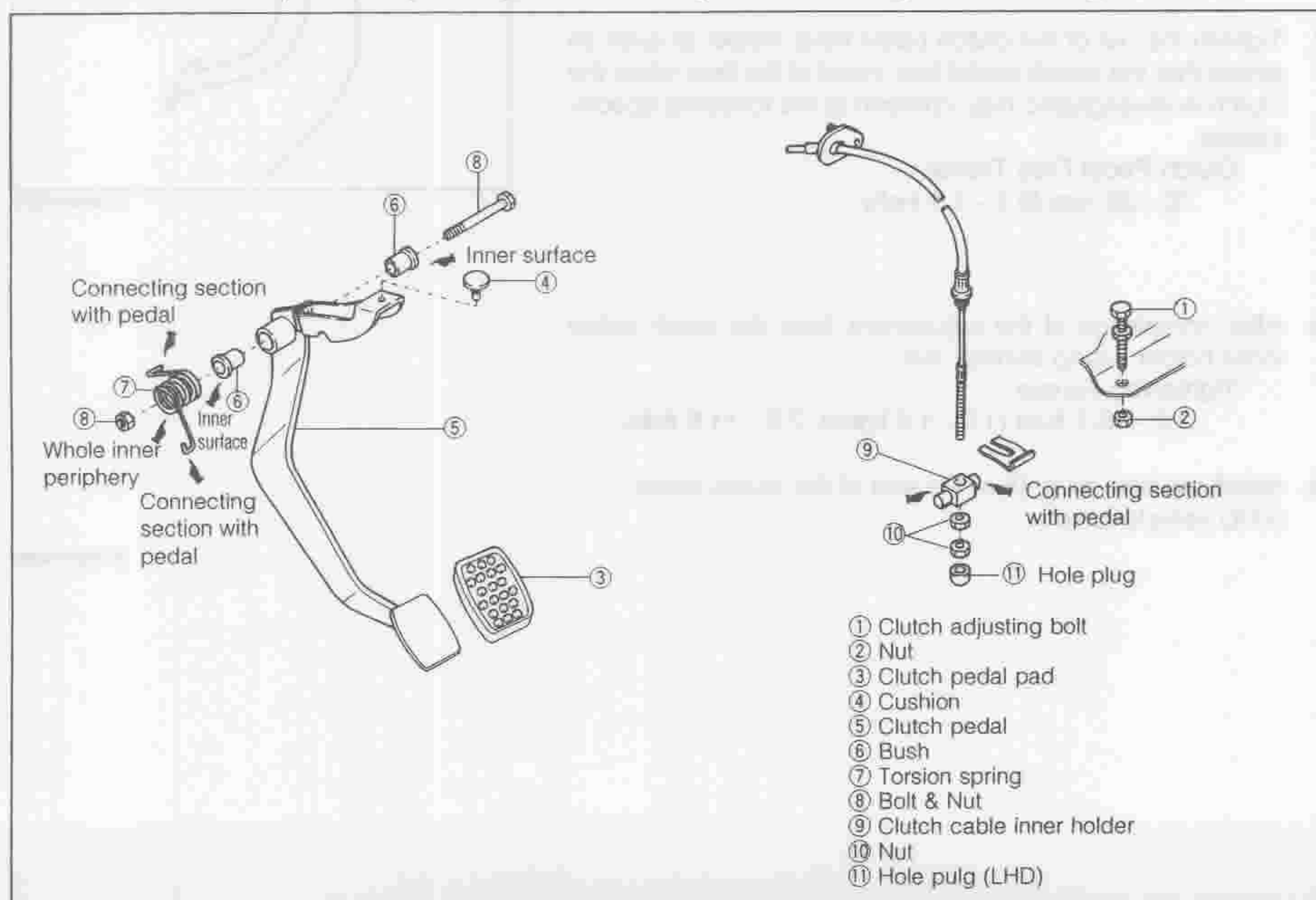


LCL00004-00002

INSTALLATION

NOTE:

- Apply lithium base multi-purpose grease (NLGI No. 2) or equivalent of DAIHATSU MP grease (999-2102-8483-000) to those points specified in the figure below during the assembling.



LCL00005-00003

1. Install the clutch pedal pad ③.
2. Apply soapy water to the cushion.
Install the cushion ④ to the clutch pedal.
3. Install the spring ⑦ and bush ⑥ to the clutch pedal assembly. Then, install the assembly to the pedal bracket.
4. Install the bolt & nut ⑧ with washer in position.
5. Tighten the bolt & nut.

Tightening Torque:

20.1 - 46.6 N·m (2.05 - 4.75 kgf·m)

4. Adjust the pedal height (A) by means of the clutch adjusting bolt (B).

Specified Pedal Height

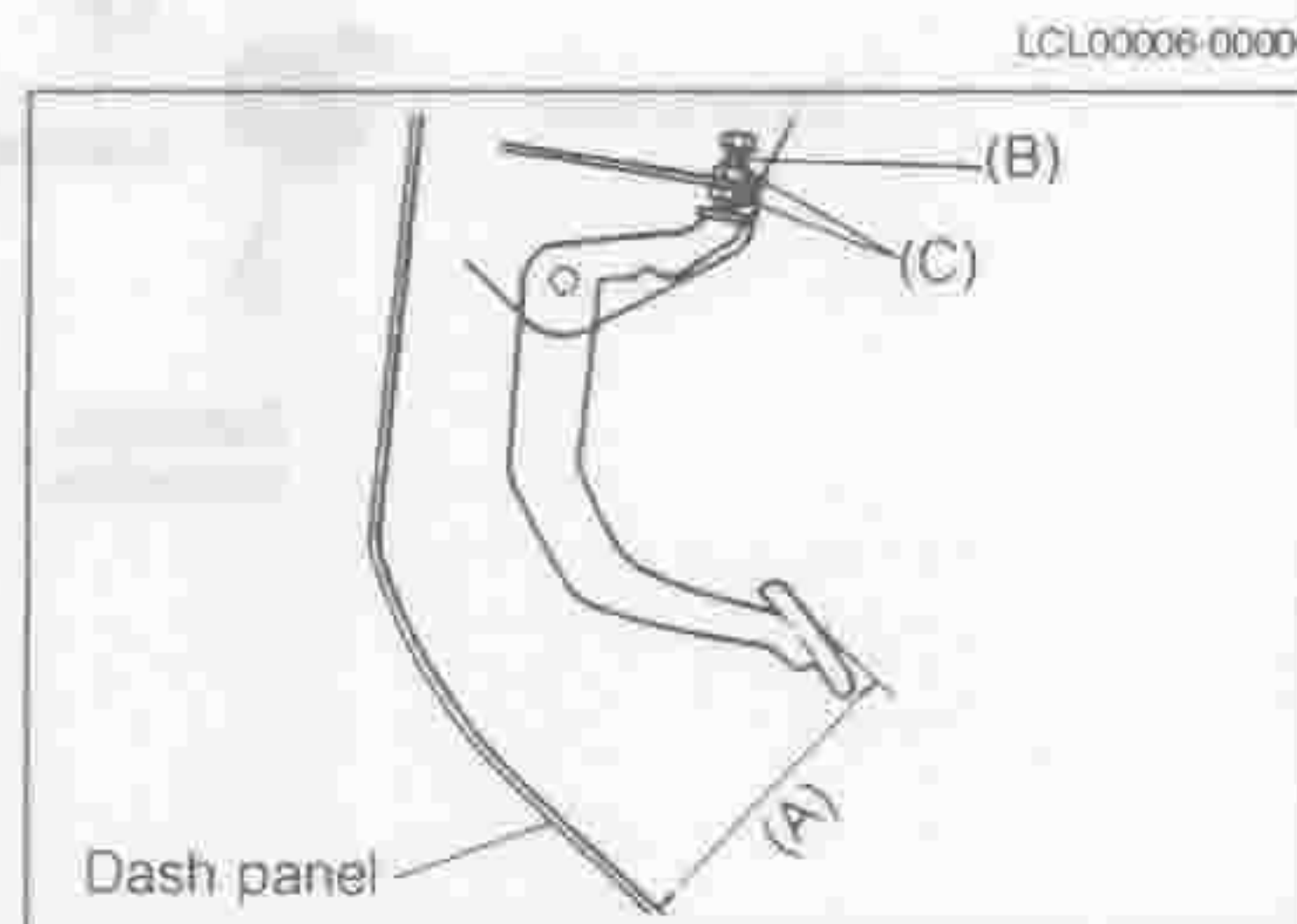
(R.H.D.): 170.5 - 175.5 mm

(L.H.D.): 158.3 - 163.3 mm

5. Secure the clutch adjusting bolt by tightening the nut (C).

Tightening Torque:

18.6 - 30.4 N·m (1.9 - 3.1 kgf·m)



LCL00006-00000

6. Insert the clutch cable inner holder (A) to the clutch cable (B). Temporarily install the nut (C).

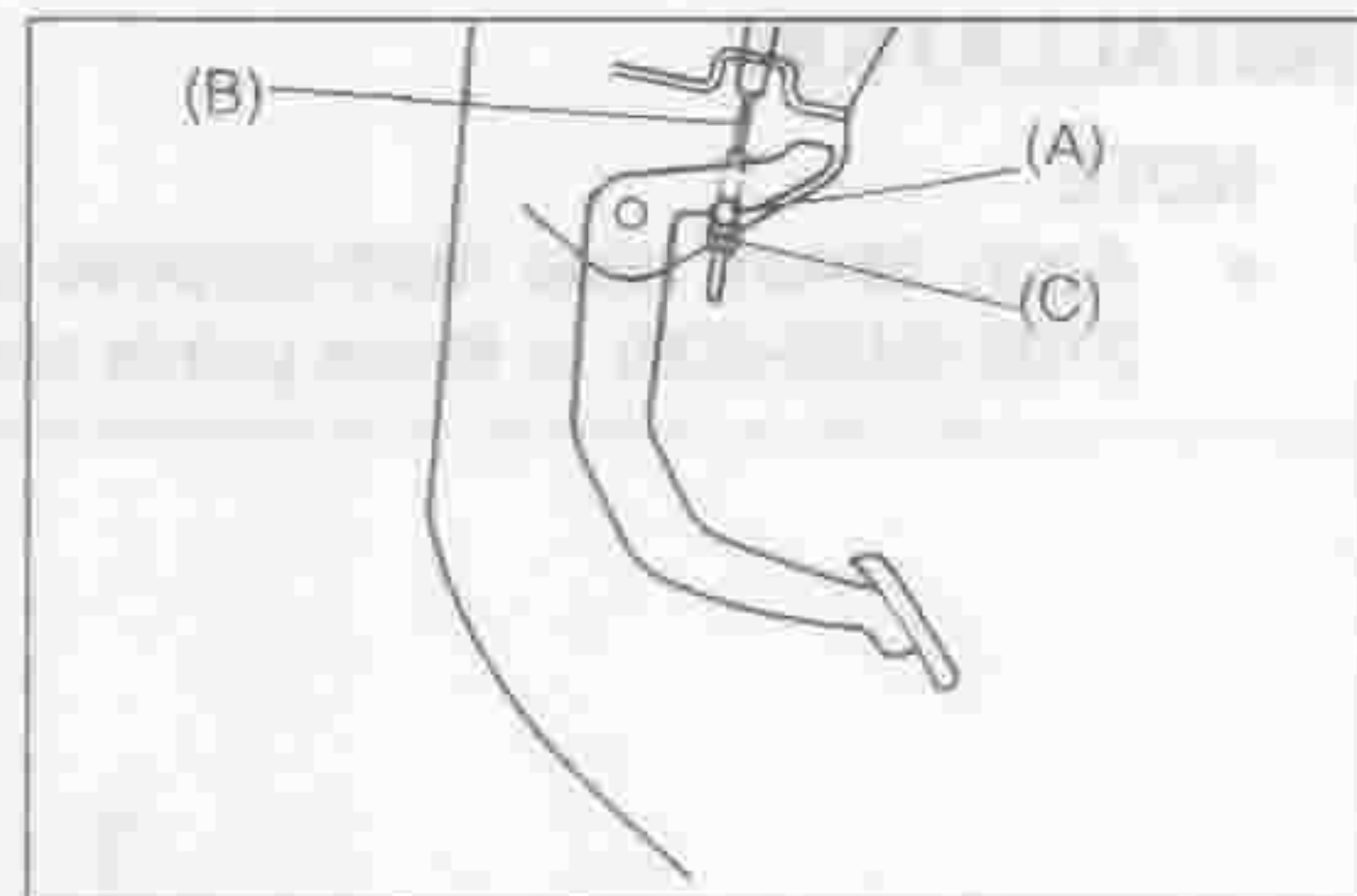
NOTE:

- Install the inner holder in the correct direction.

7. Tighten the nut of the clutch cable inner holder to such an extent that the clutch pedal free travel at the time when the clutch is disengaged may conform to the following specifications.

Clutch Pedal Free Travel:

10 - 30 mm (0.4 - 1.2 inch)



LCL00007-00004

8. After completion of the adjustment, lock the clutch cable inner holder, using another nut.

Tightening Torque:

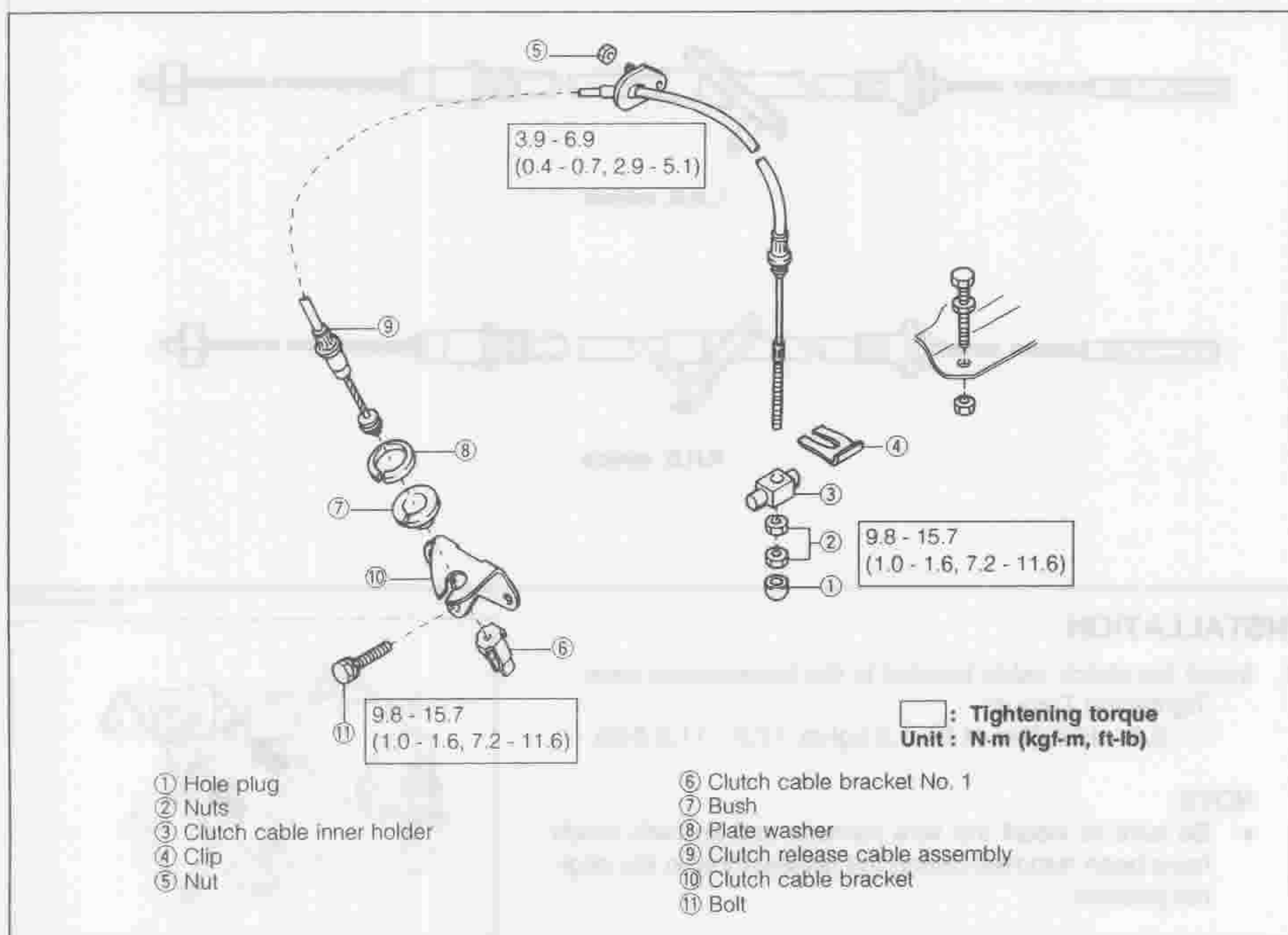
9.8 - 15.7 N·m (1.0 - 1.6 kgf·m, 7.2 - 11.6 ft·lb)

9. Install the hole plug ⑪ at the end of the clutch cable.
(LHD vehicle only)

LCL00008-00005

LCL00009-00000

CLUTCH RELEASE CABLE COMPONENTS



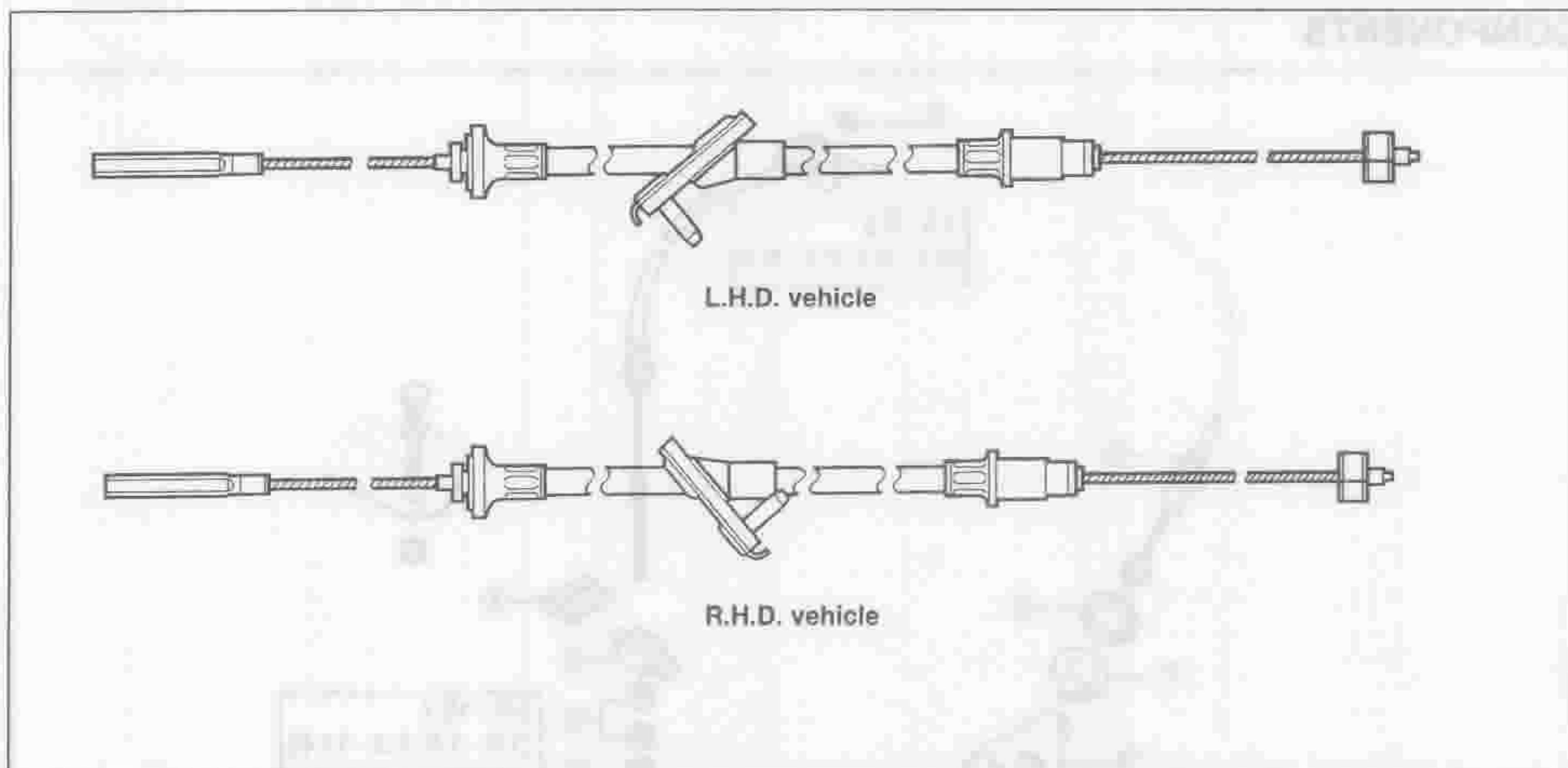
LCL00010-00006

REMOVAL

1. Disconnect the clutch cable from the clutch pedal by removing the hole plug ① (LHD only), nuts ②, clutch cable inner holder ③ and clip ④.
2. Remove the clutch cable from the dash panel by removing the nut ⑤.
3. Disconnect the clutch release cable ⑨ from the clutch release lever at the transmission side. Then, pull the cable upward to remove it from the transmission clutch cable bracket, ⑩.
4. Remove the clutch cable bracket No. 1 ⑥ from the clutch release cable.
5. Remove the bush ⑦ and plate washer ⑧ from the clutch release cable.
6. Pull the clutch release cable toward the vehicle interior. Remove the clutch cable bracket from the transmission case.

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INSPECTION



LCL00012-00007

INSTALLATION

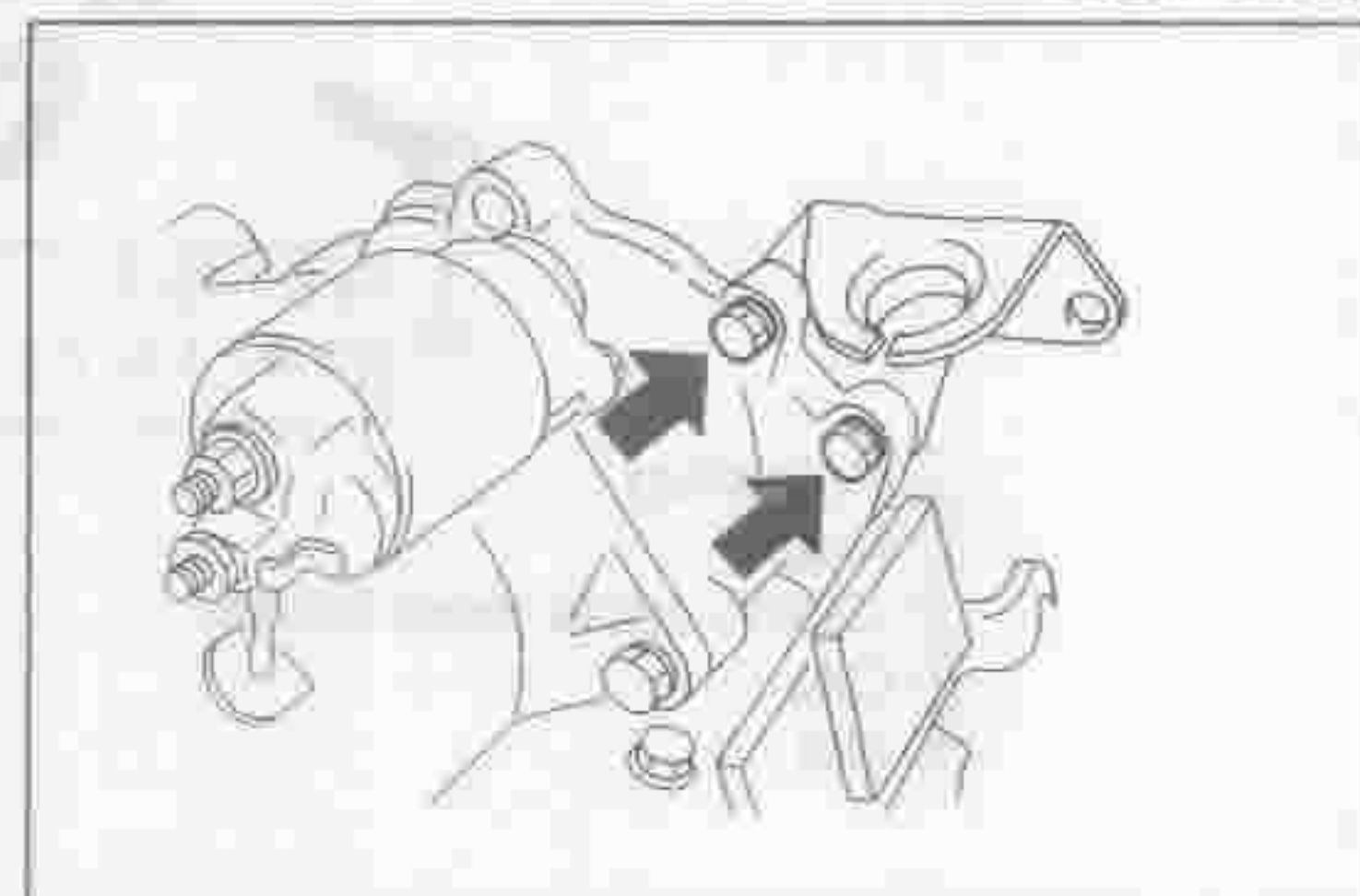
1. Install the clutch cable bracket to the transmission case.

Tightening Torque:

9.8 - 15.7 N·m (1.0 - 1.6 kgf-m, 17.2 - 11.6 ft-lb)

NOTE:

- Be sure to install the wire harness and so forth which have been removed during the disassembly in the original position.

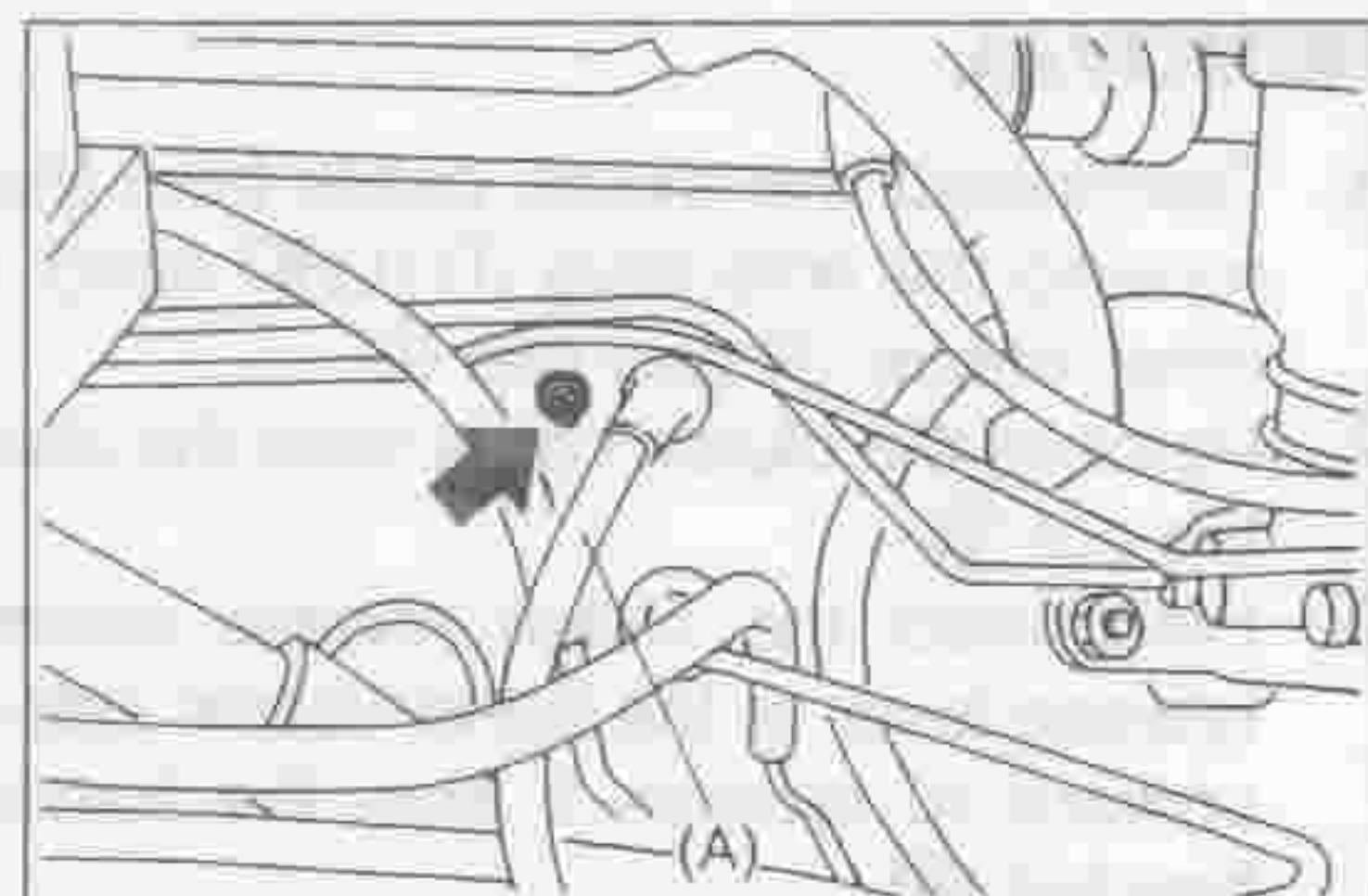


8000013-00009

2. Working from the vehicle interior, route the clutch release cable through the hole of the dash panel.
3. Install the clutch release cable (A) to the dash panel.

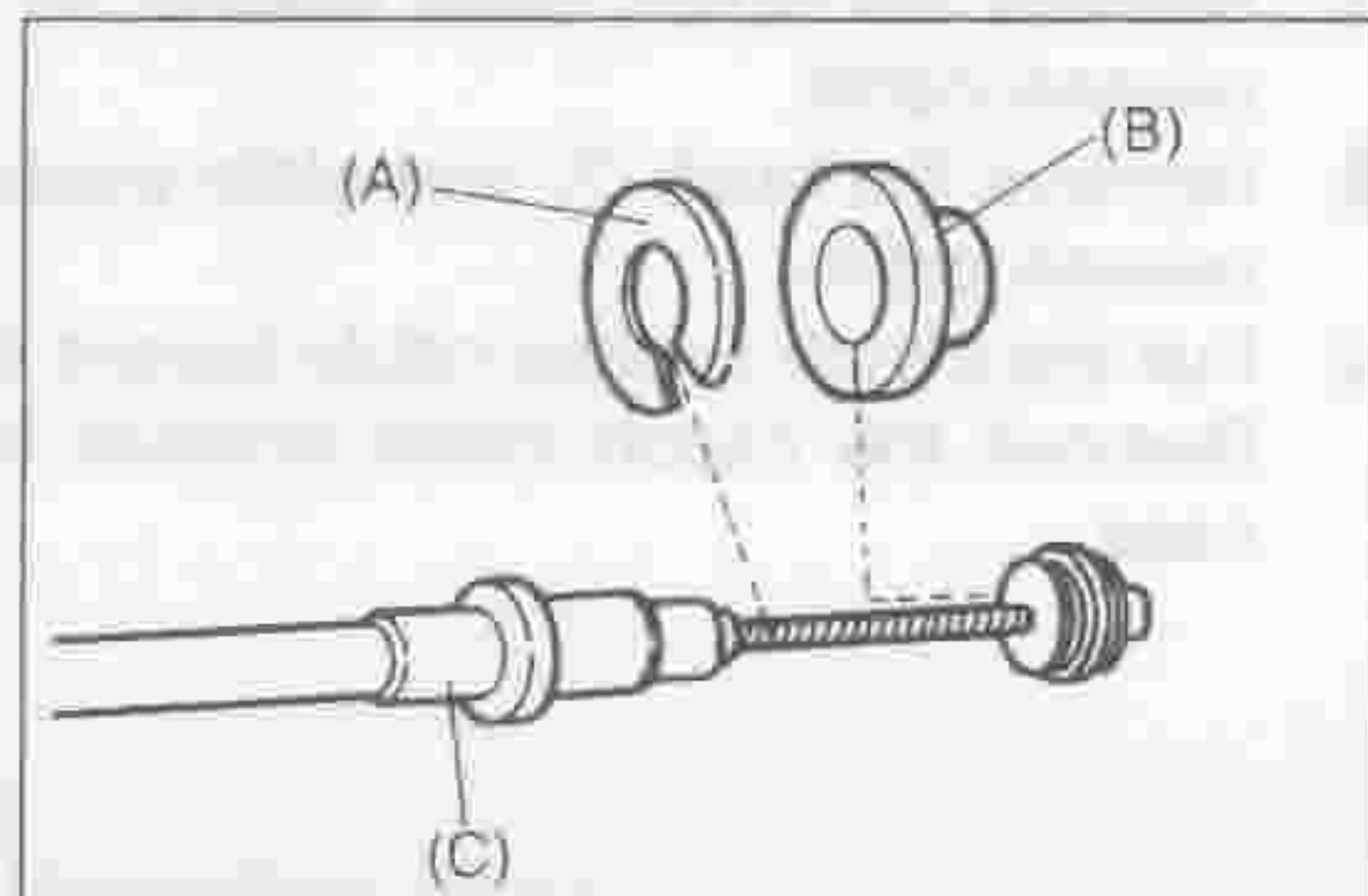
Tightening Torque:

3.9 - 6.9 N·m (0.4 - 0.7 kgf-m, 2.9 - 5.1 ft-lb)



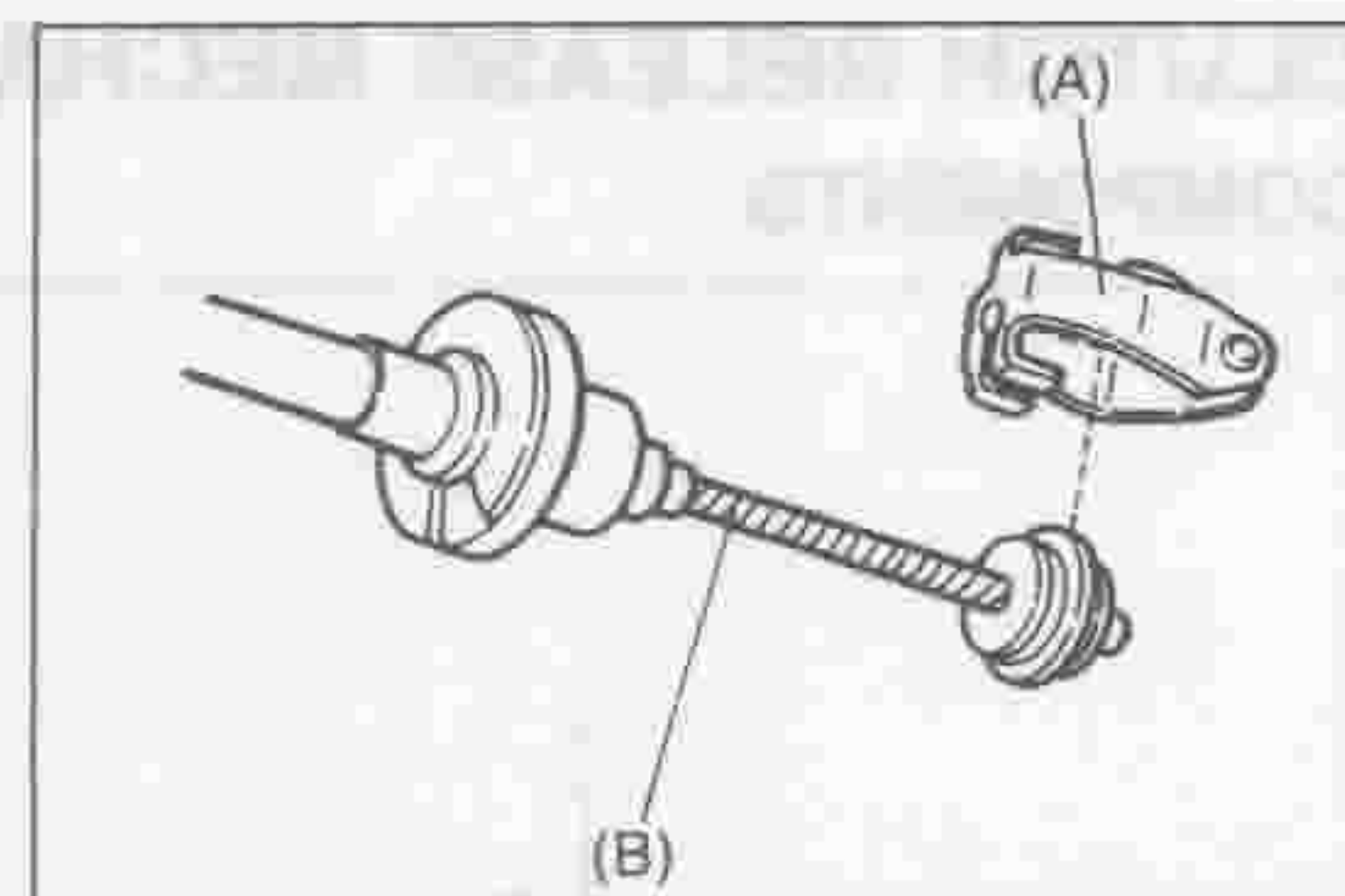
LCL00014-00009

4. Install the plate washer (A) and bush (B) to the clutch release cable (C).



LCL00015-00010

5. Install the clutch cable bracket No. 1 (A) to the clutch release cable (B).

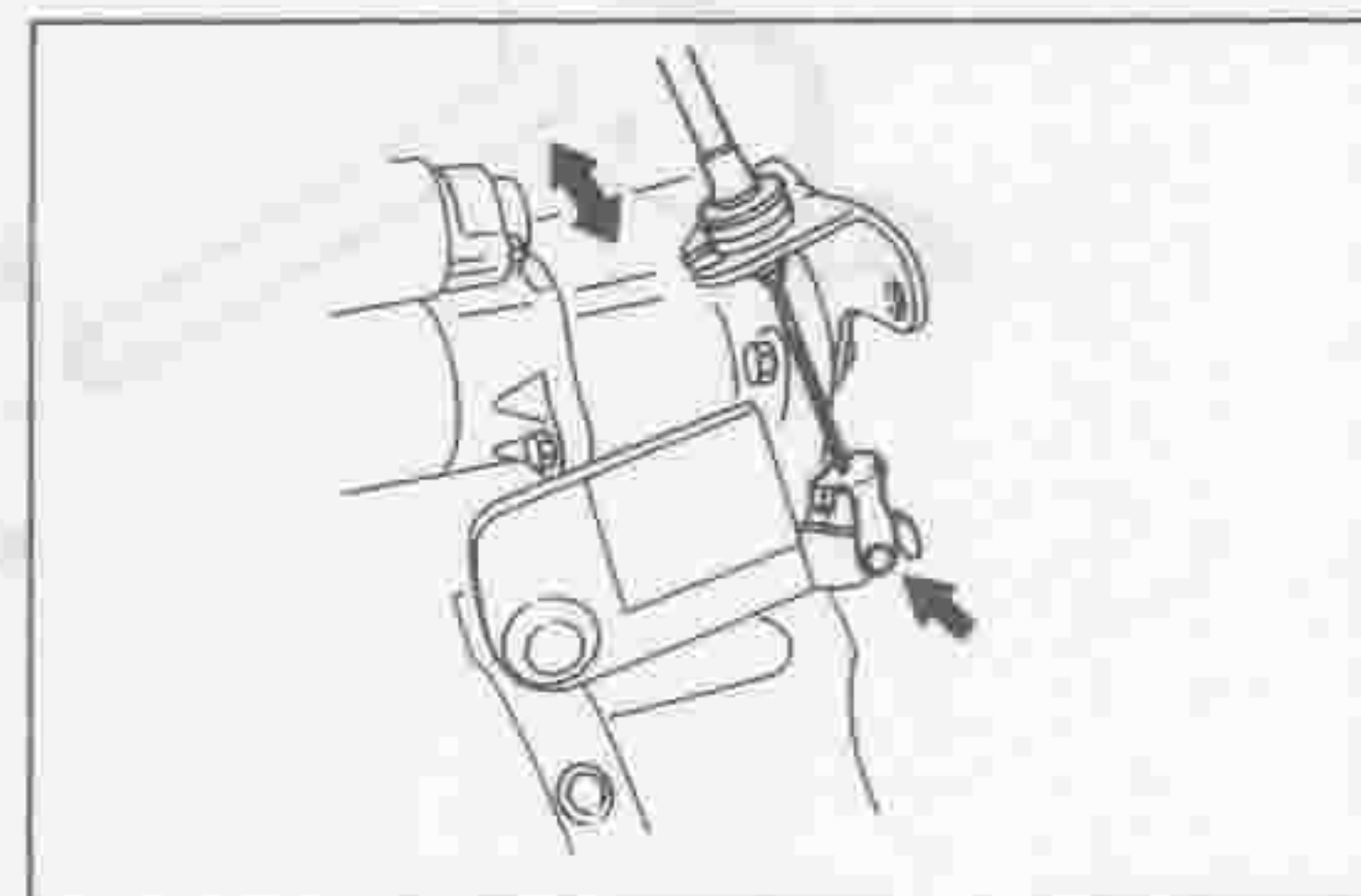


LCL00016-00011

6. Route the clutch release cable through the clutch cable bracket of the transmission. Connect the clutch release cable to the clutch release lever.

NOTE:

- Apply multi-purpose grease (NLGI No. 2) or equivalent of DAIHATSU MP grease (999-2102-8483-00) to the connecting section between the clutch release cable and the clutch release lever.

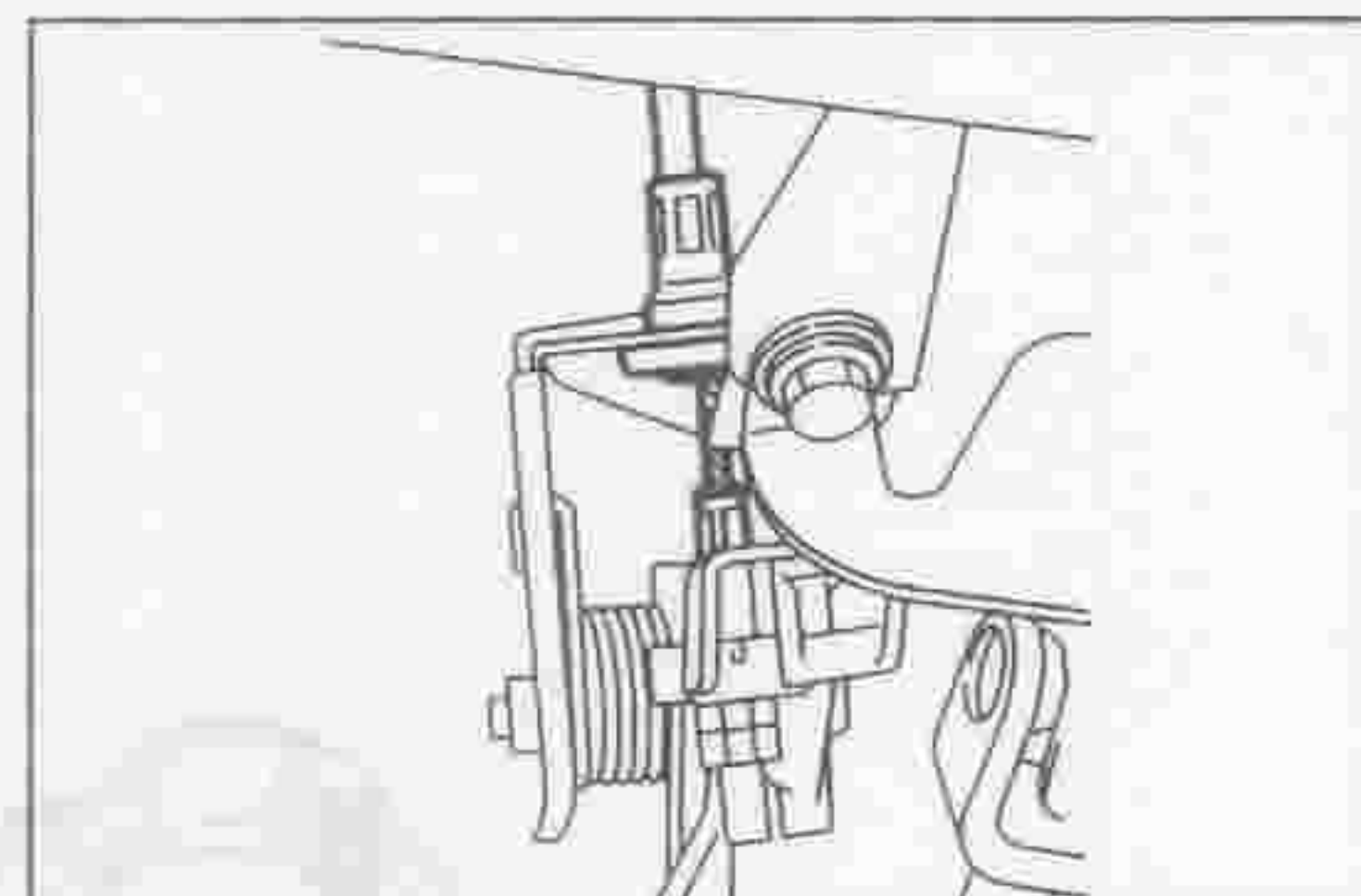


LCL00017-00012

7. Install the clutch release cable with the clip to the pedal bracket.

NOTE:

- Align the flange pawl of the clutch release cable with the pedal bracket pawl.

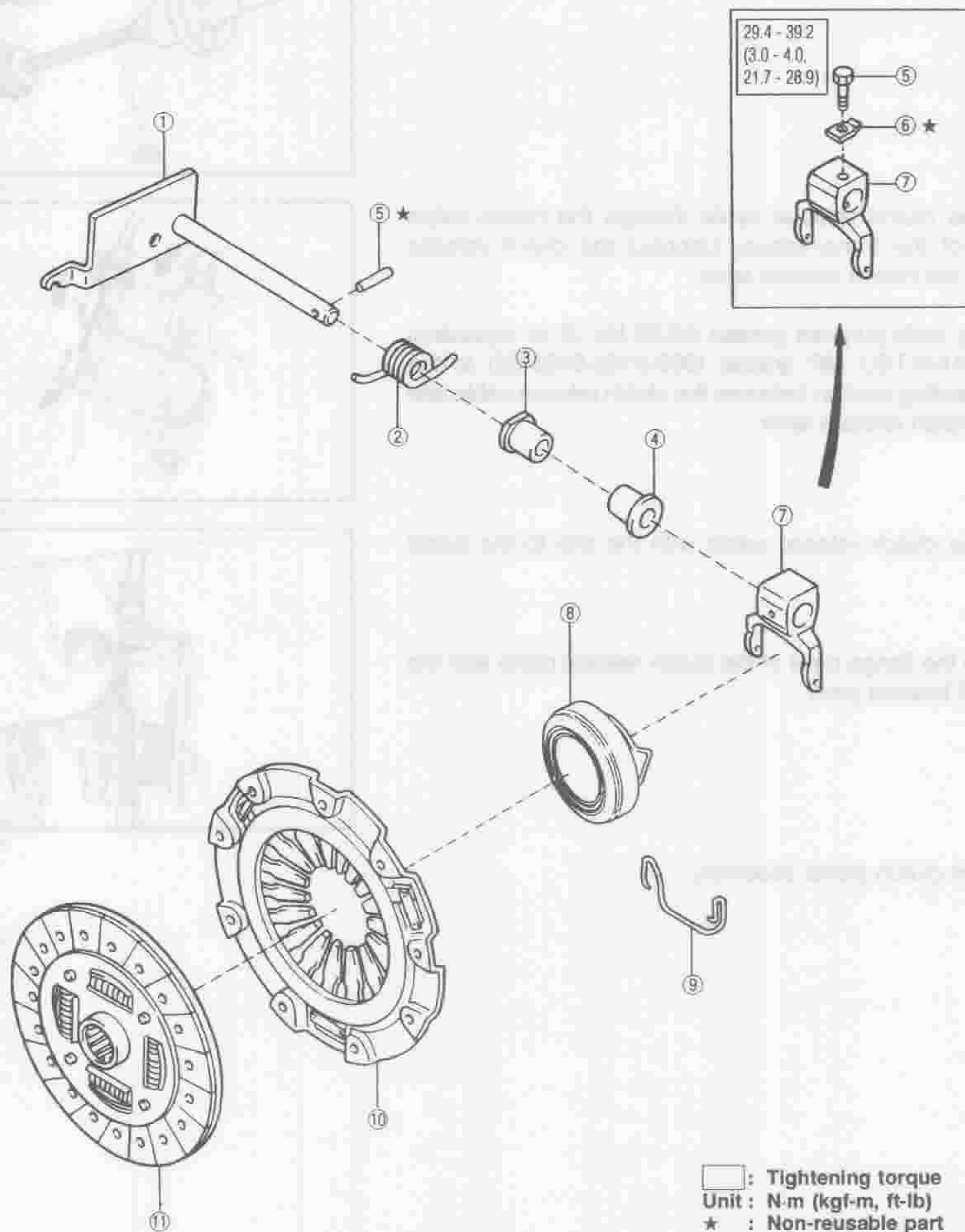


LCL00018-00013

8. Install the clutch pedal assembly.

LCL00019-00000

CLUTCH RELEASE MECHANISM COMPONENTS



- ① Clutch release lever subassembly
- ② Torsion spring
- ③ Bush No. 1 (with cut-out section)
- ④ Bush No. 2 (without cut-out section)
- ⑤ Slotted spring pin (Hexagon bolt)
- ⑥ Lock washer

- ⑦ Clutch release lever yoke
- ⑧ Clutch release bearing hub subassembly
- ⑨ Release bearing hub clip
- ⑩ Clutch cover assembly
- ⑪ Clutch disc

REMOVAL

NOTE:

- As for the removal and installation of the transmission assembly, refer to the EM Section.

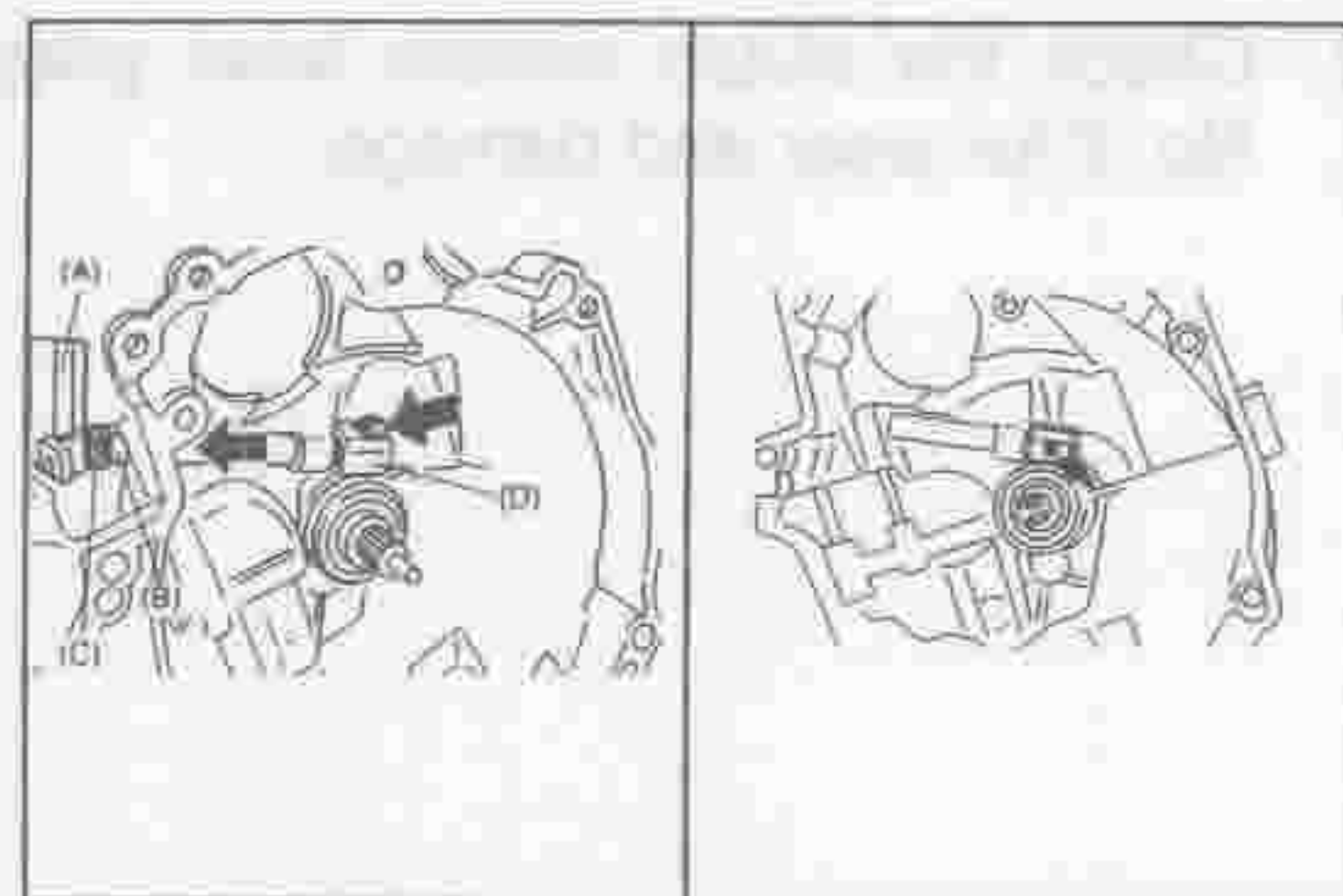
- Release the lock washer. Remove the hexagon bolt of the clutch release lever yoke. (Drive out the slotted spring pin)

CAUTION:

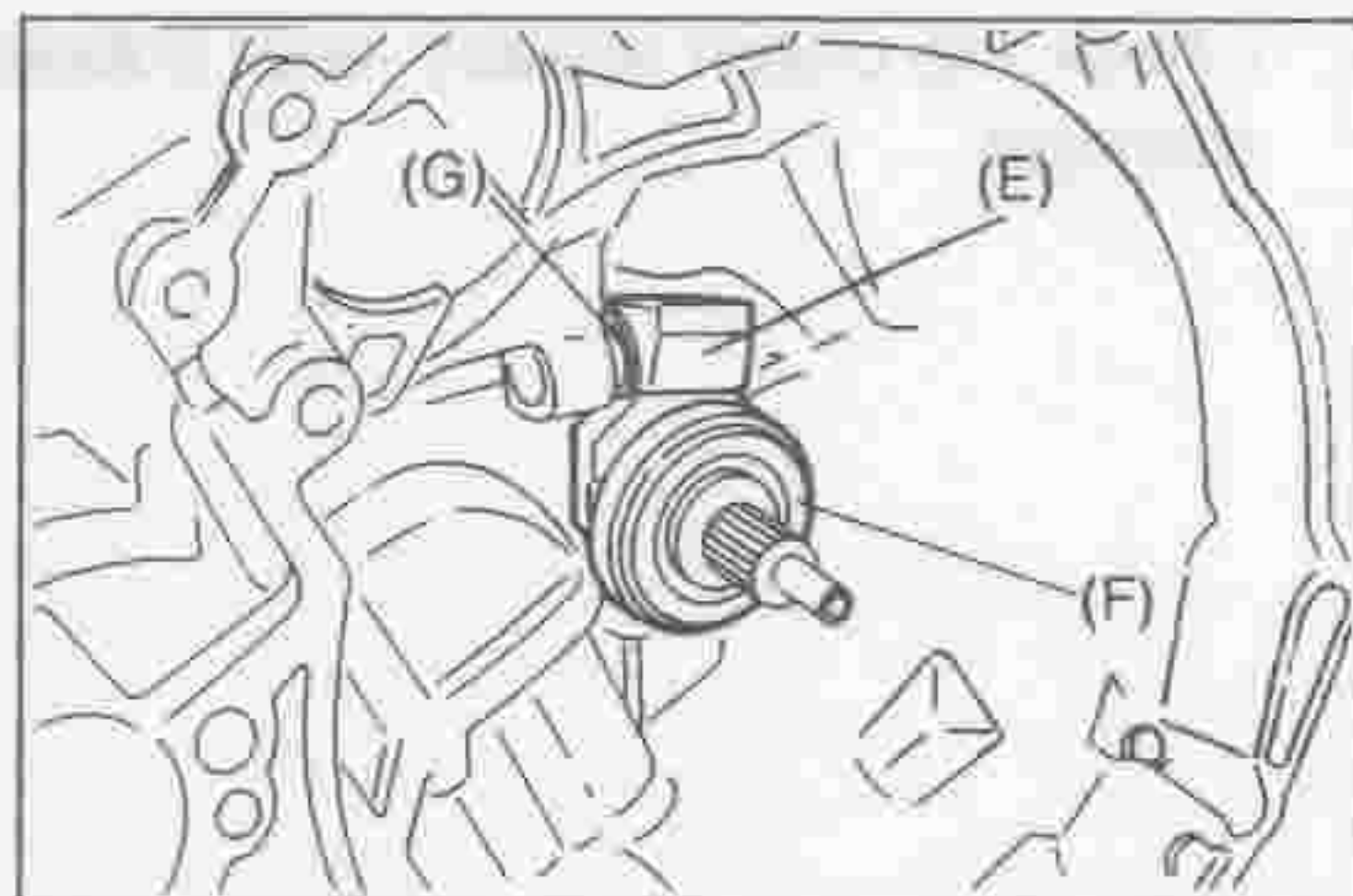
- Be very careful not to damage the clutch release bearing during the removal.

- Pull out the clutch release lever (A) from the clutch housing.
- Remove the bush No. 1 (B) and torsion spring (C) from the clutch release lever (D).
- Remove the clutch release lever yoke (E) together with the clutch release bearing hub subassembly (F) from the clutch housing. Remove the bush No. 2 (G) from the clutch housing.

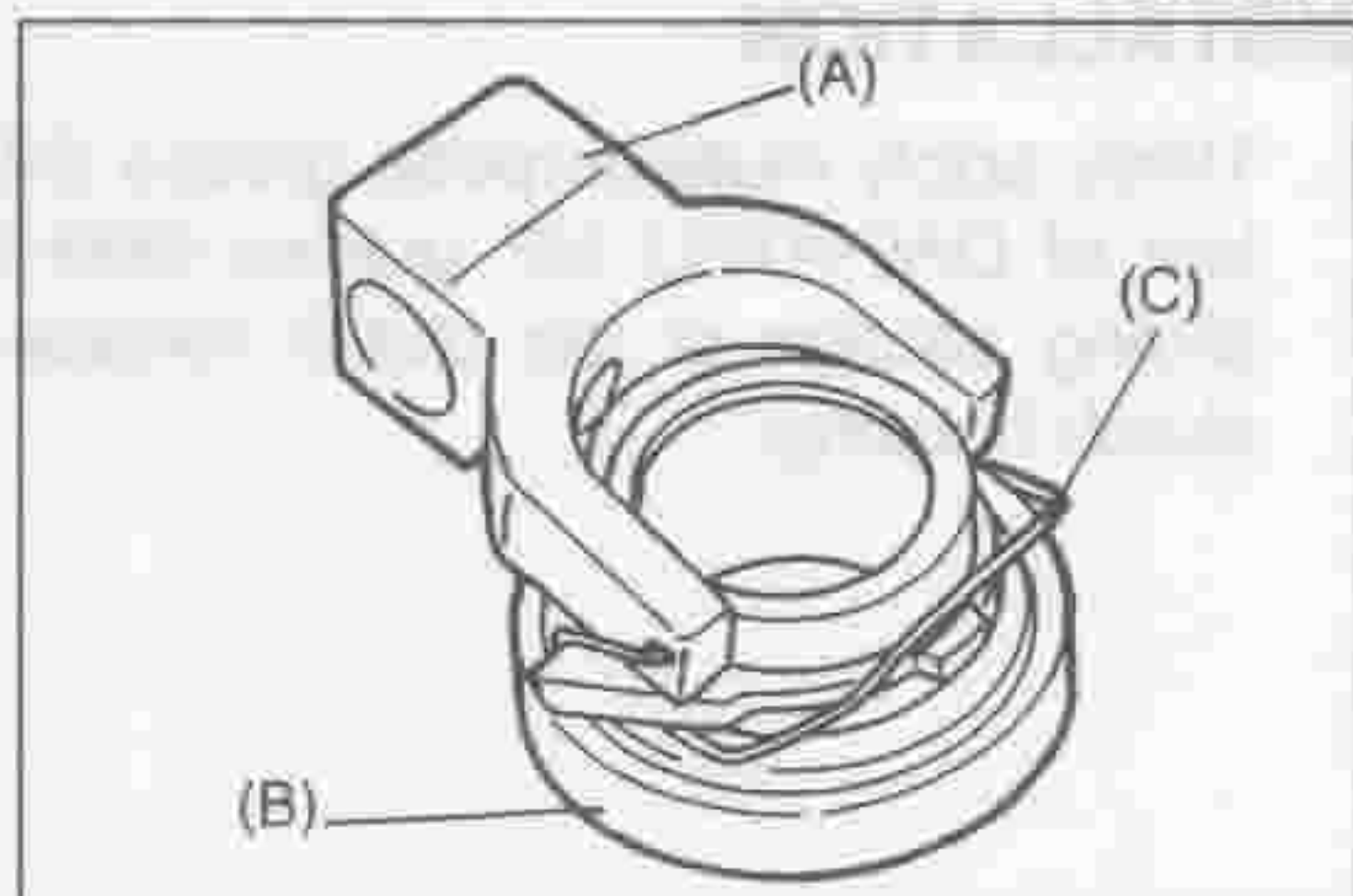
- Separate the clutch release lever yoke (A) from the clutch release bearing hub subassembly (B) by detaching the release bearing hub clip (C).



LCL00021-00015



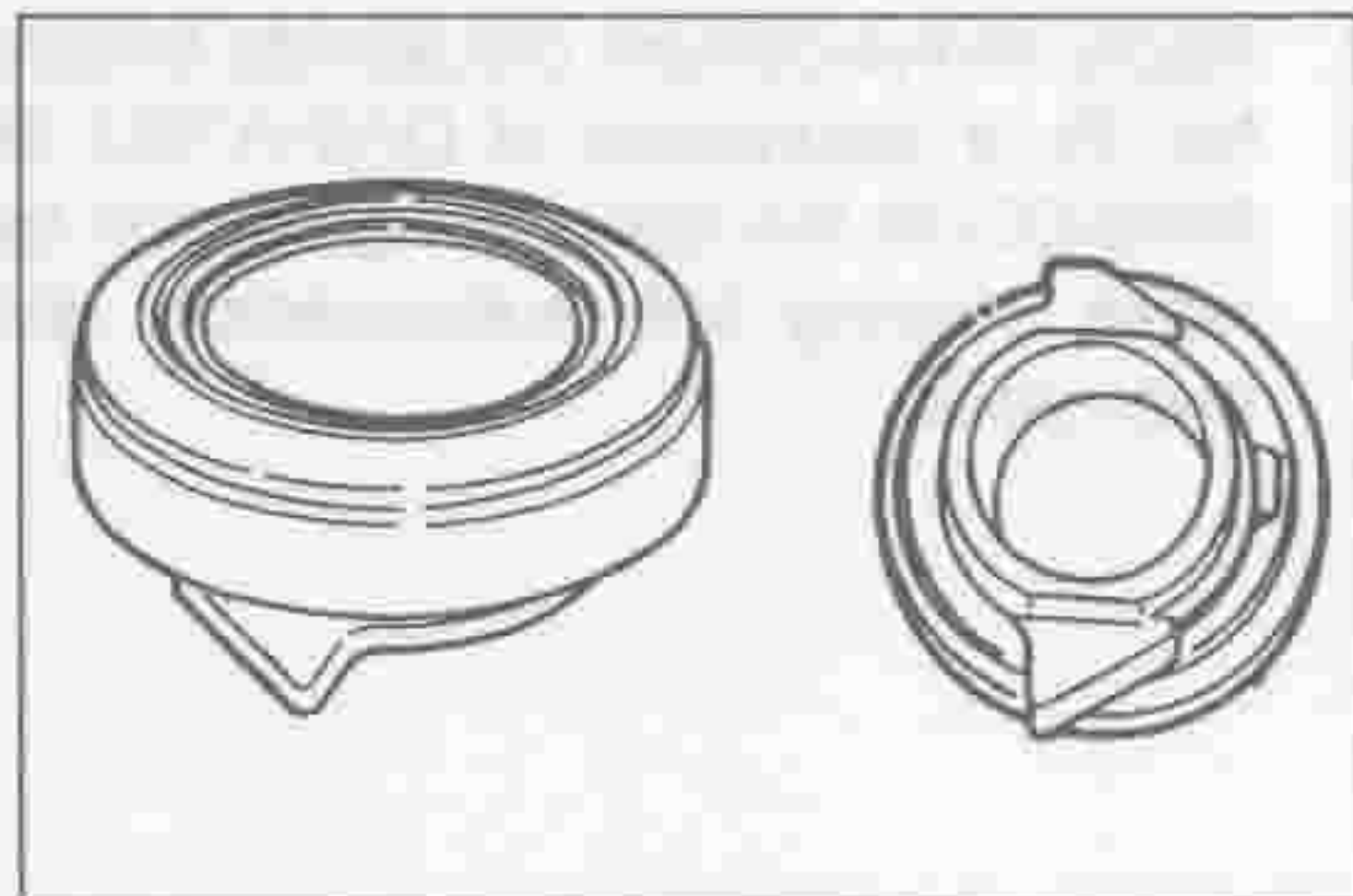
LCL00022-00016



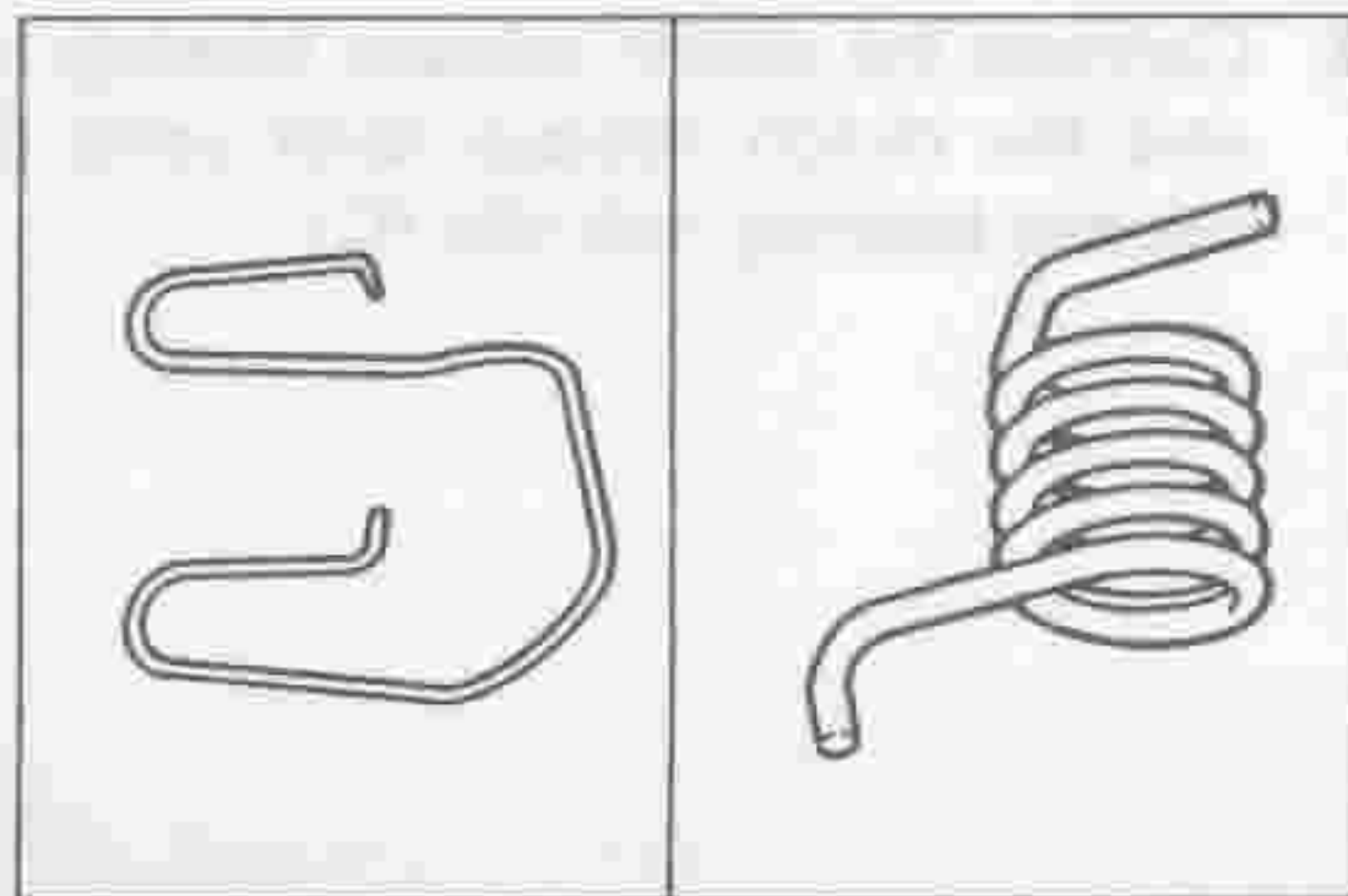
LCL00023-00017

INSPECTION

- Inspection of clutch release bearing hub subassembly
 - Check the diaphragm spring connecting section of the bearing for wear and damage.
 - Check to see if the bearing rotates smoothly.
 - Check the release yoke connecting section and hub clip installing section of the bearing hub for wear and damage.
 - Check the bearing hub inner periphery's sliding section with the clutch housing for wear and damage.
- Check the release bearing clip and torsion spring for deformation and flattened condition.

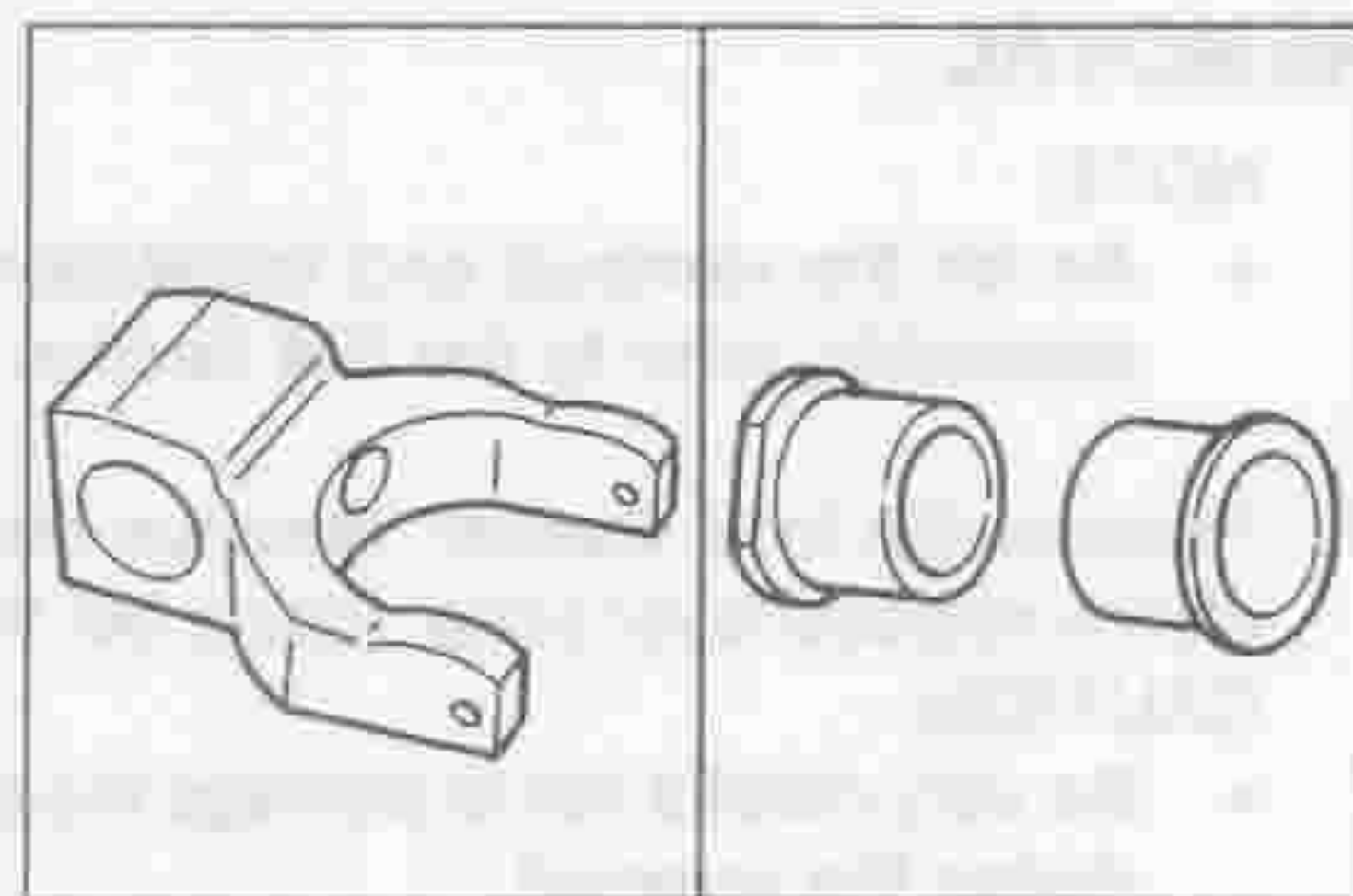


LCL00024-00018



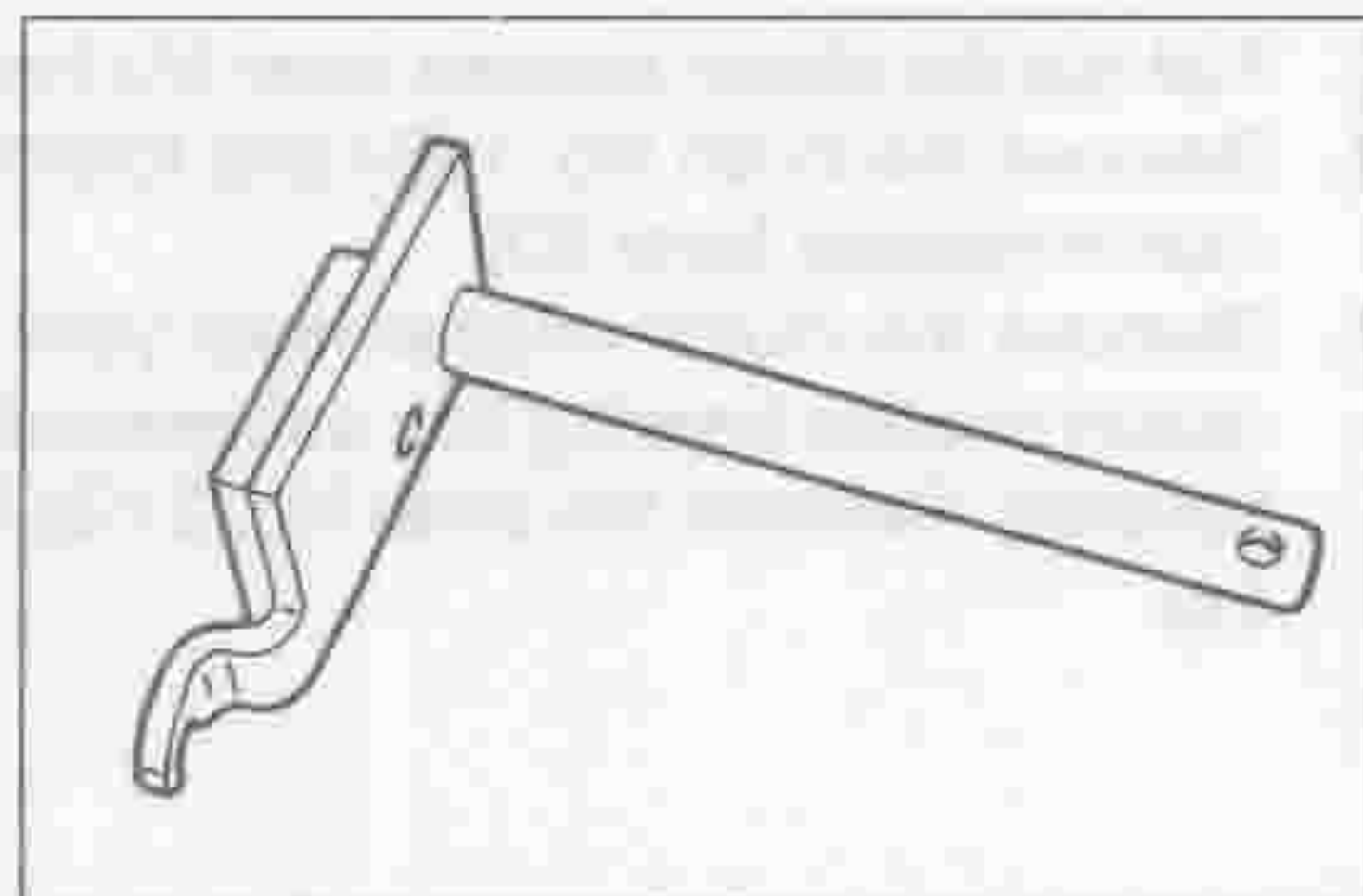
LCL00025-00019

3. Check the clutch release lever yoke, bushes No. 1 and No. 2 for wear and damage.



LCL00026-00020

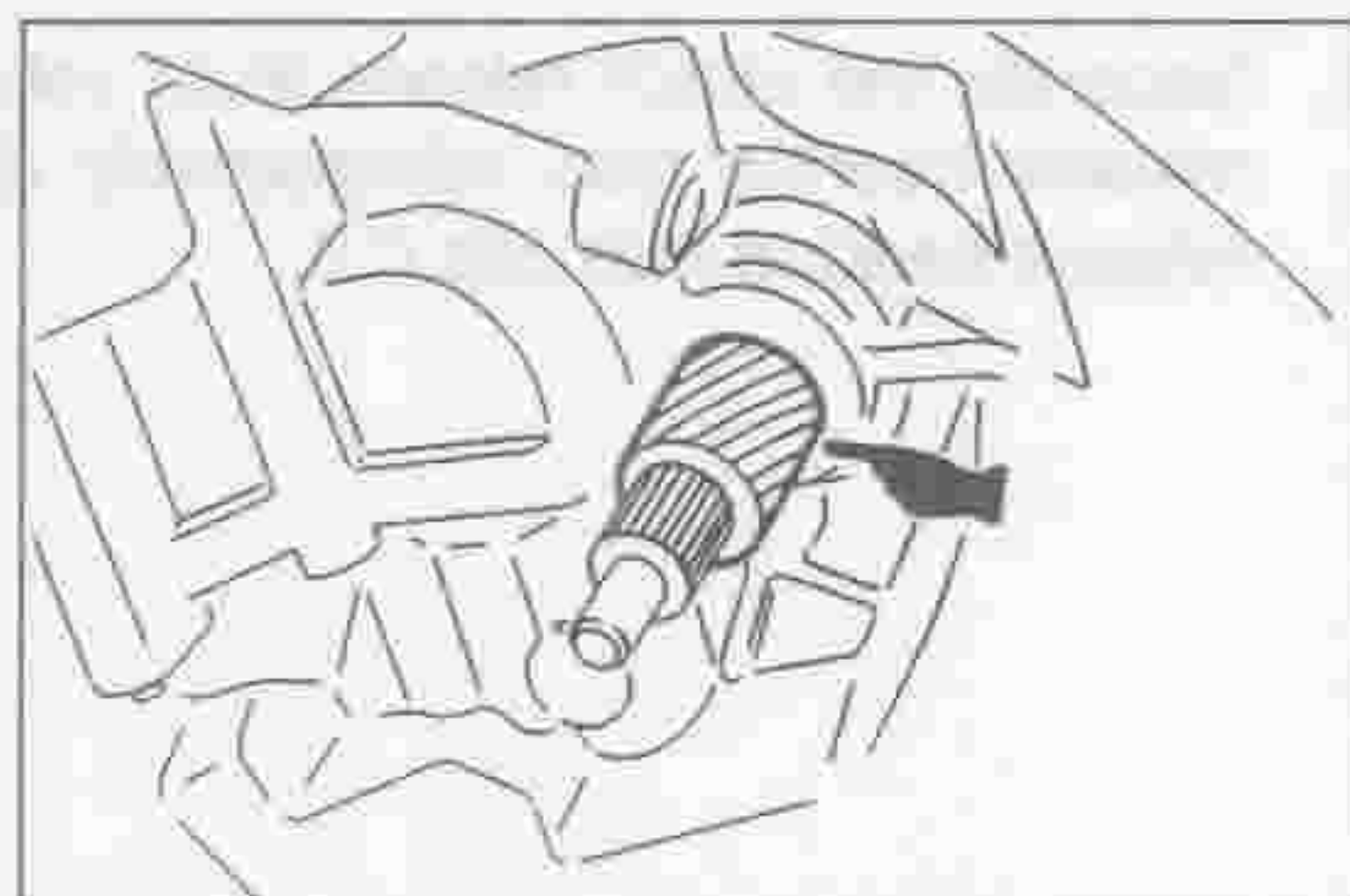
4. Check the clutch release lever subassembly for wear and damage.



LCL00027-00021

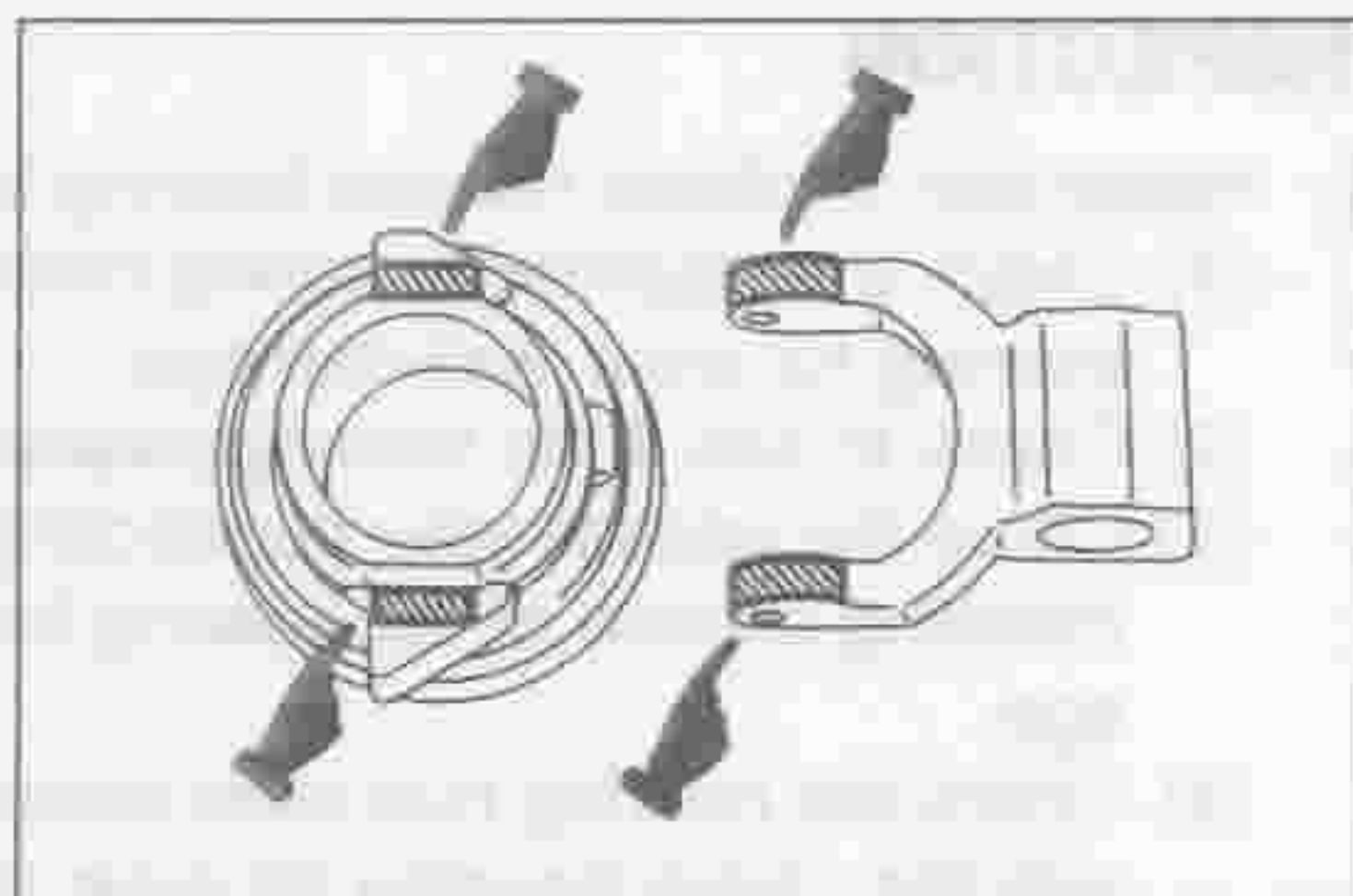
INSTALLATION

1. Thinly apply multi-purpose grease (NLGI No. 2) or equivalent of DAIHATSU MP grease (999-2102-8483-00) to the sliding section of the clutch release bearing hub of the clutch housing.



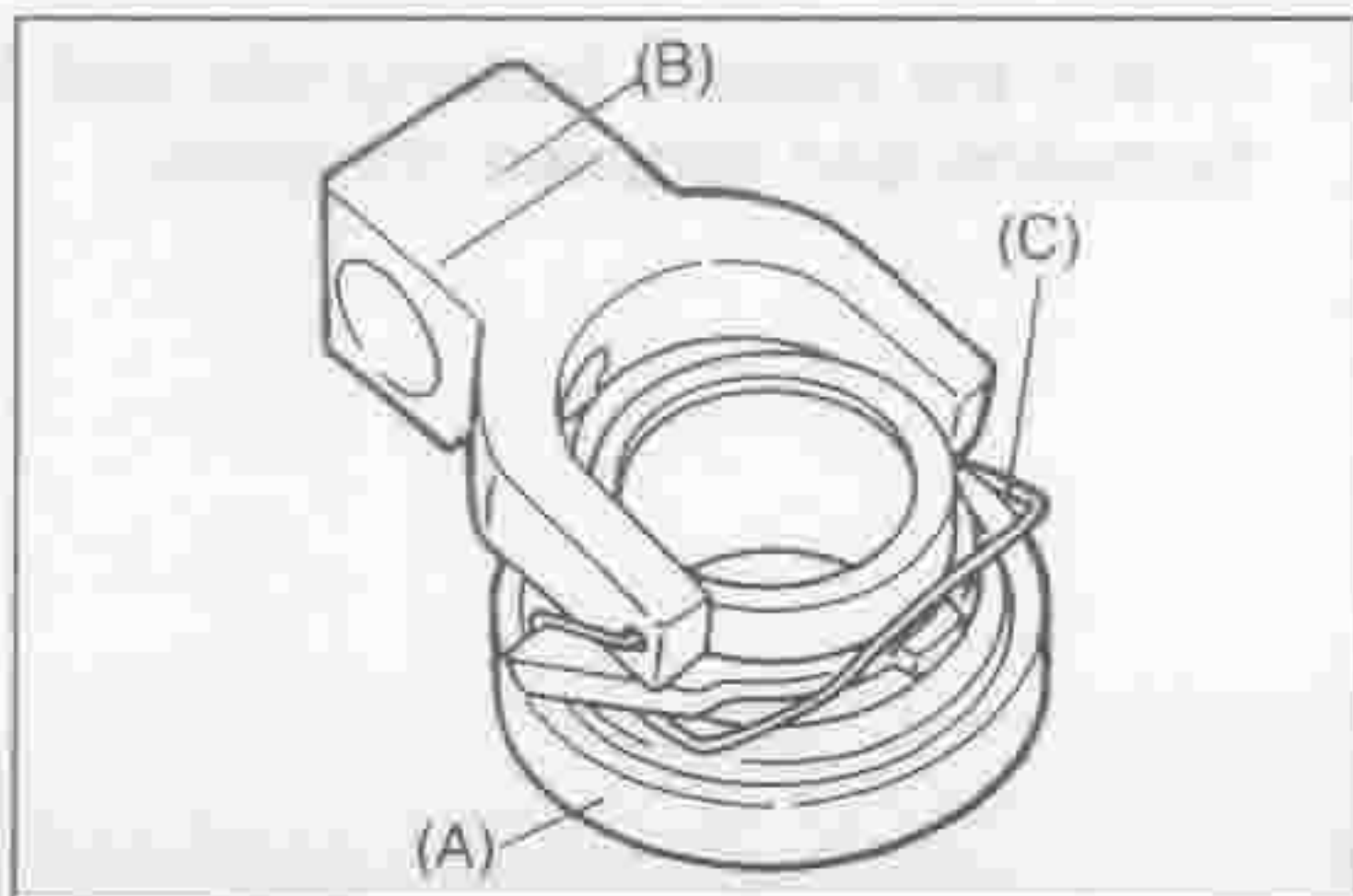
LCL00028-00022

2. Apply molybdenum disulphide lithium base grease (NLGI No. 2) or equivalent of DAIHATSU EP grease (999-2404-8483-00) to the connecting section between the clutch release bearing hub subassembly and the clutch release lever yoke.



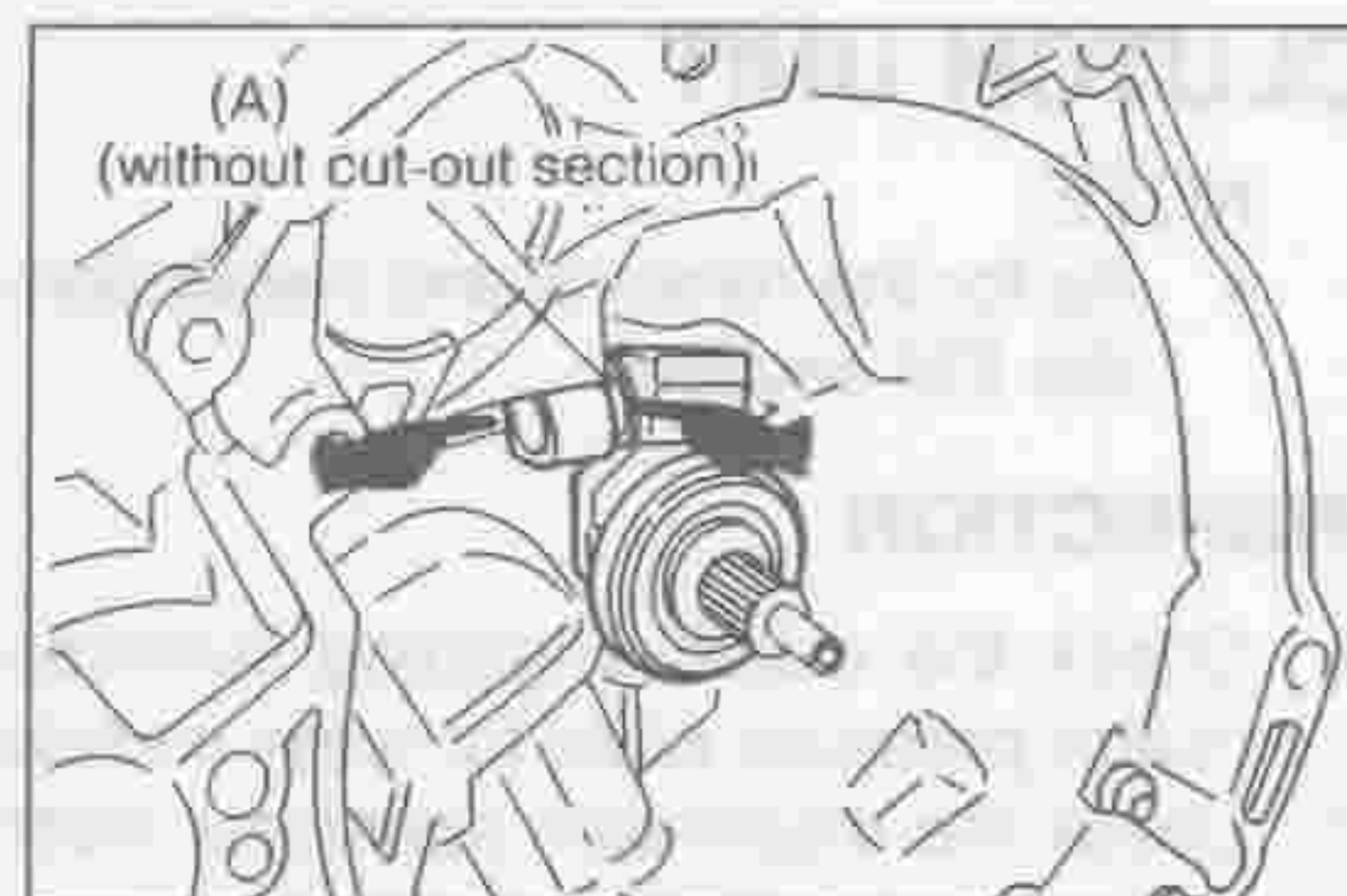
LCL00029-00023

3. Connect the clutch release bearing hub subassembly (A) and the clutch release lever yoke (B) by means of the release bearing hub clip (C).



LCL00030-00024

4. Apply multi-purpose grease (NLGI No. 2) or equivalent of DAIHATSU MP grease (999-2102-8483-00) to the inner and outer peripheries of the bush No. 2. (A) Install the bush No. 2 to the clutch release lever rod supporting section at the inside of the clutch housing.
5. Install the clutch release lever yoke and clutch release bearing hub subassembly to the clutch housing.

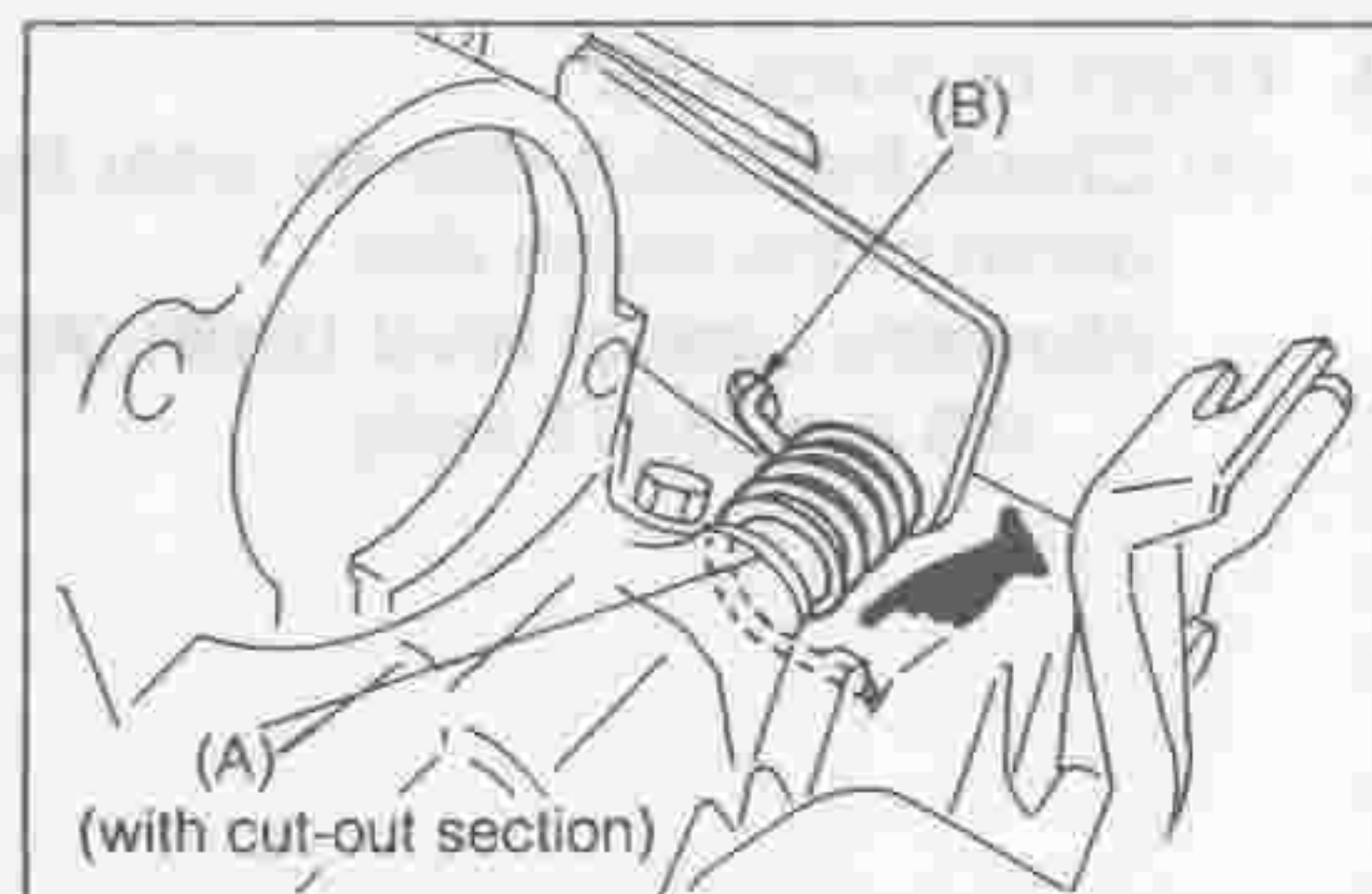


LCL00031-00025

6. Apply multi-purpose grease (NLGI No. 2) or equivalent of DAIHATSU MP grease (999-2102-8483-00) to the inner and outer peripheries of the bush No. 1. (A) Install the bush No. 1 to the clutch release lever rod supporting section at the outside of the clutch housing.
7. Insert the clutch release lever into the clutch housing while attaching the torsion spring, as shown in the right figure.

NOTE:

- Ensure that the end of torsion spring should be hold at the hole in the right figure illustration (B).

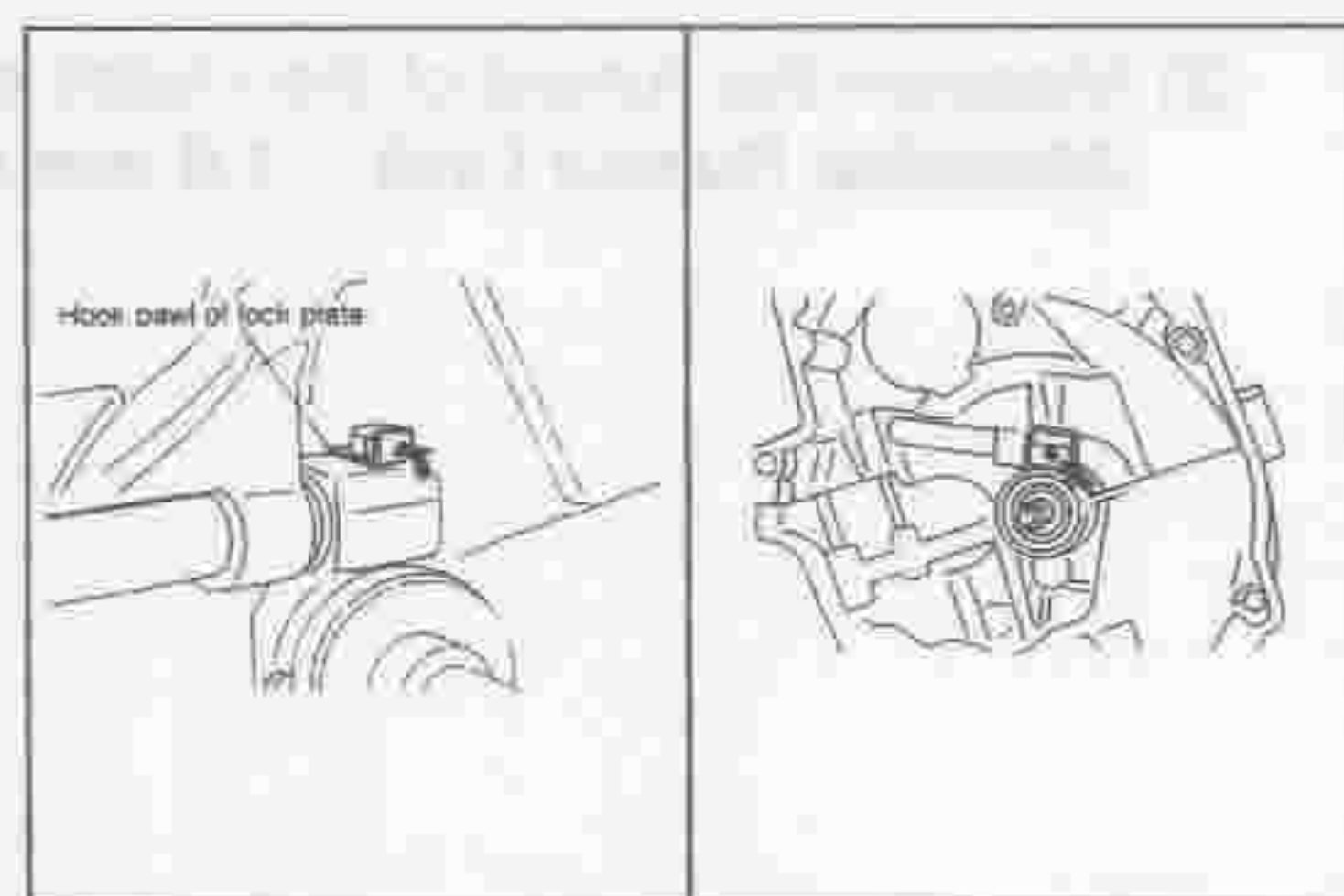


LCL00032-00025

8. Pass the clutch release lever rod through the clutch release lever yoke. Secure it with the new lock plate and the hexagon bolt. After tightening the bolt, bend the lock plate and stake the bolt. (Drive new slotted spring pin)

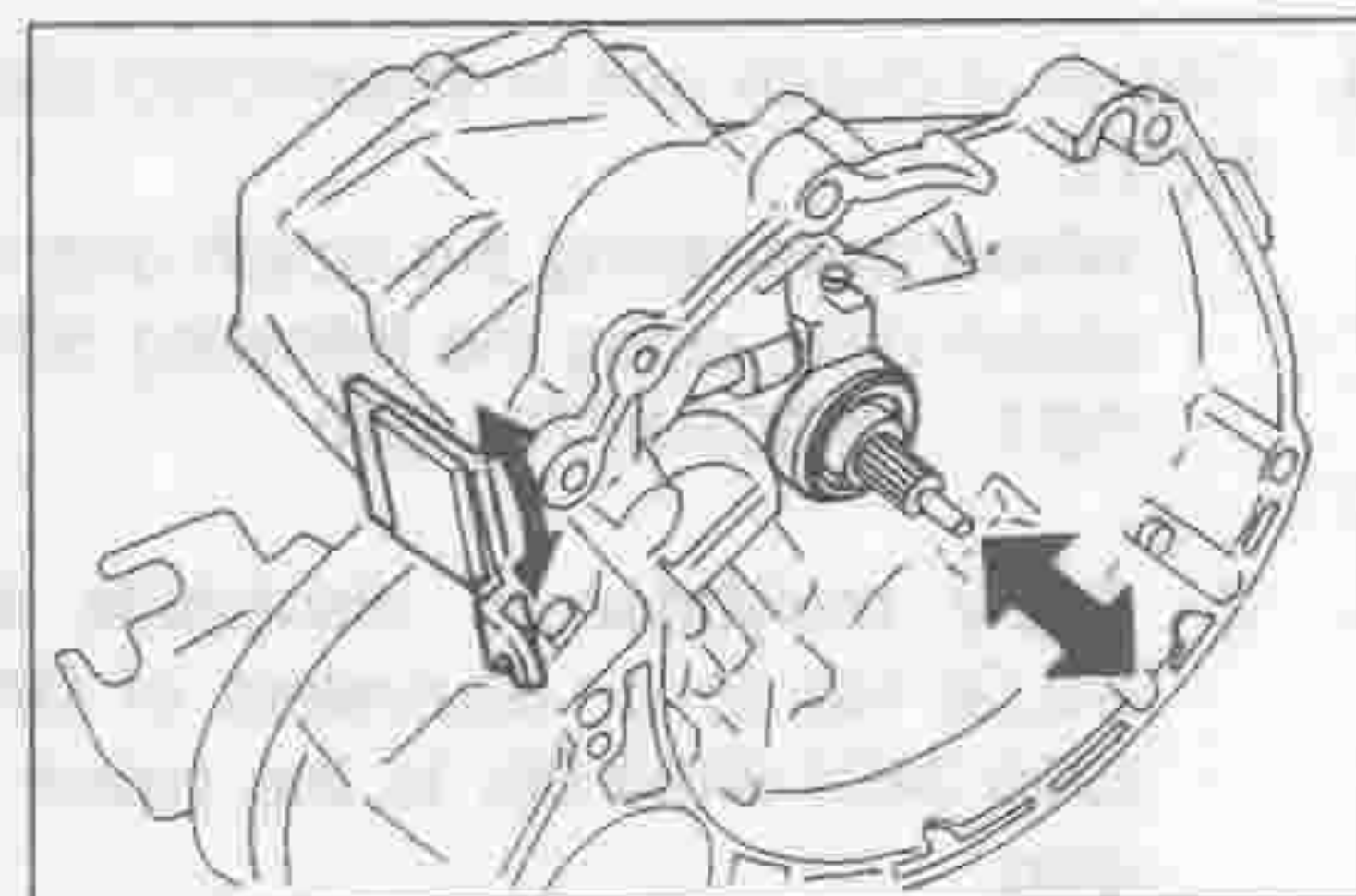
Tightening Torque:

29.4 - 39.2 N·m (3.0 - 4.0 kgf-m, 21.7 - 28.9 ft-lb)



LCL00033-00027

9. Ensure that the clutch release bearing hub subassembly moves smoothly by moving the clutch release lever.



LCL00034-00026

CLUTCH UNIT

NOTE:

- As for the removal and installation of the clutch unit, see the EM section.

INSPECTION

- Check the clutch engaging surfaces of the flywheel and clutch pressure plate for wear and damage.
- Check the diaphragm spring for wear, damage and corrosion.

3. Check of clutch disc

- Check the clutch disc for wear by measuring the rivet depth of the clutch disc.

Allowable Limit of Rivet Depth (A):
0.3 mm (0.012 inch)

- Measure the runout of the clutch disc (A).

Allowable Runout Limit: 1.0 mm (0.039 inch)

4. Check of clutch unit in assembled state

NOTE:

- When assembling the clutch unit, be sure to center the clutch disc, using the following SST.

SST: 09301-87701-000

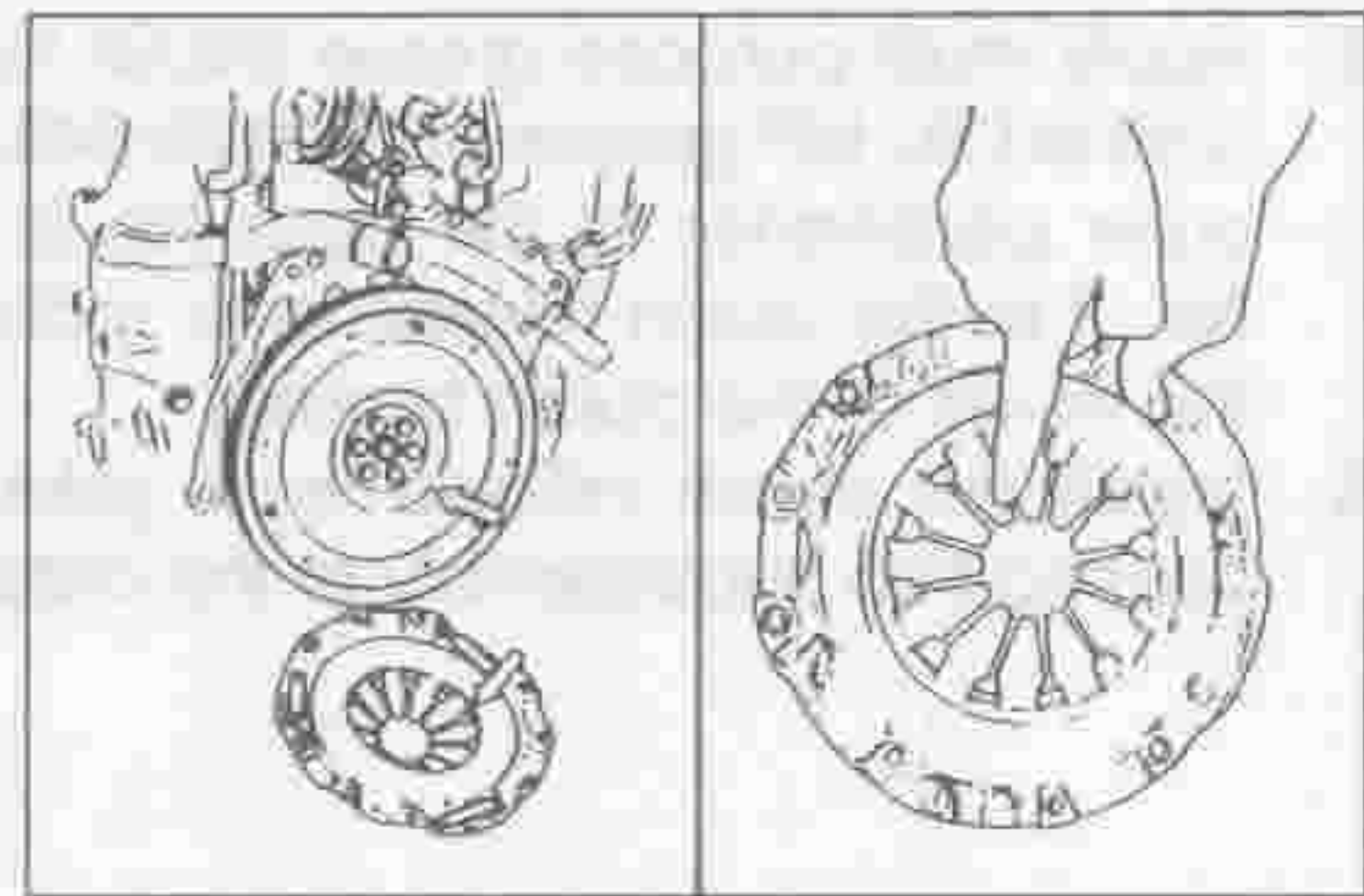
- Apply molybdenum disulphide lithium base grease (NLGI No. 2) or equivalent of DAIHATSU EP grease (999-2404-8483-00) to the spline section of the clutch disc.

- As for the assembling procedure for the clutch unit, refer to the EM Section.

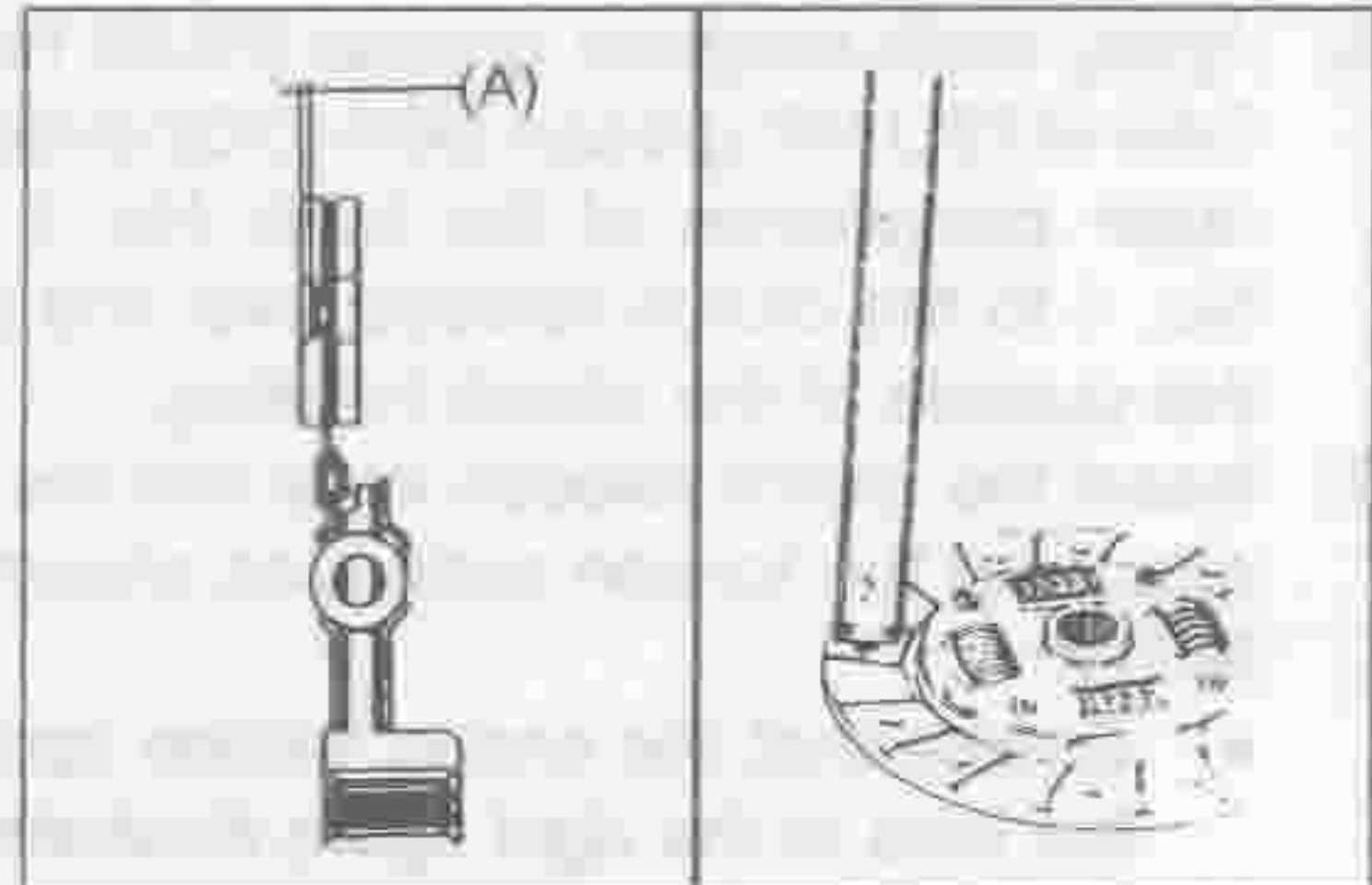
- Check the diaphragm spring tips for variation in height, using a thickness gauge in combination with the following SST.

SST: 09302-87701-000

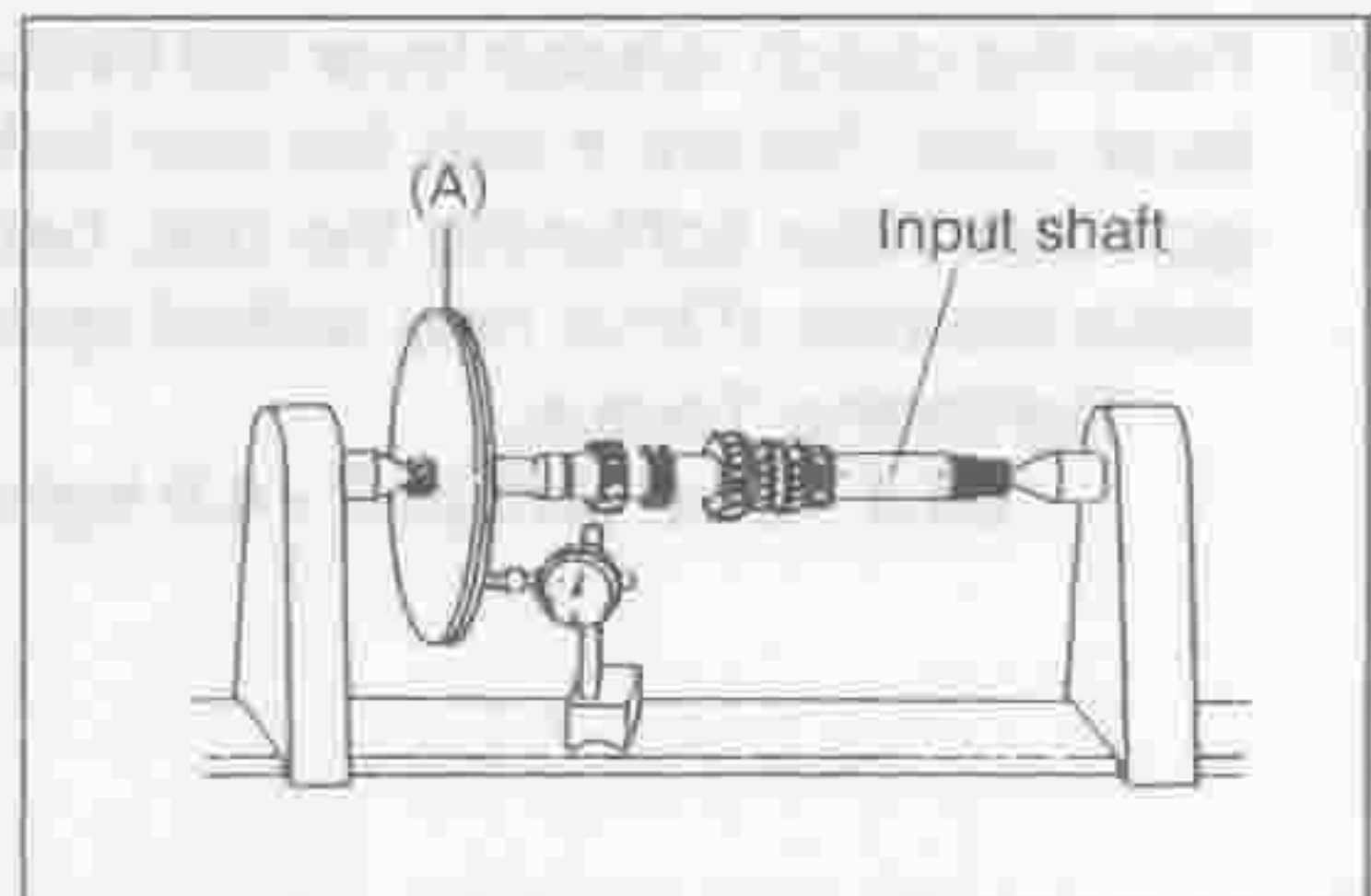
Allowable Limit of Variation in Height:
0.7 mm (0.028 inch)



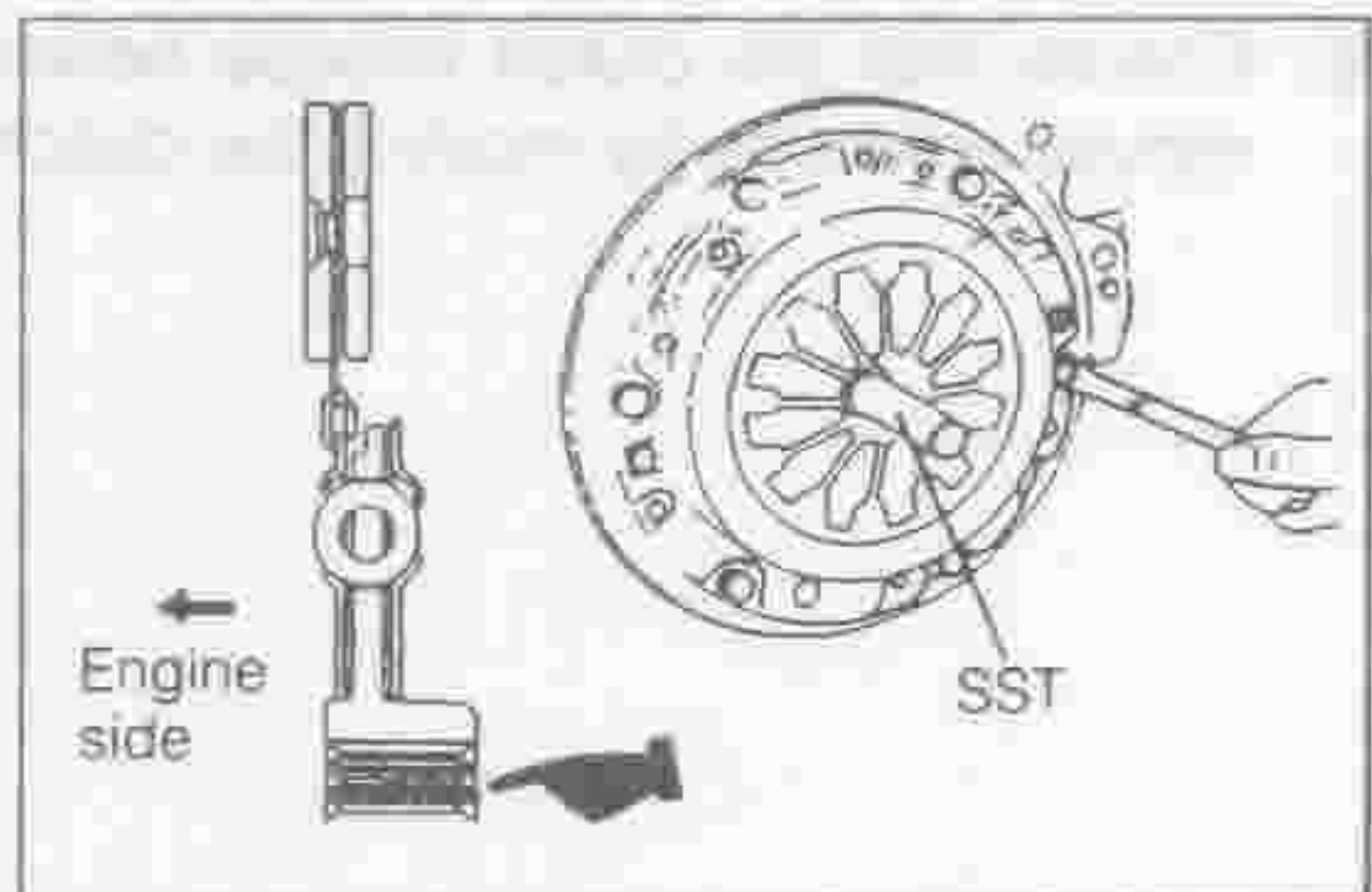
LCL00035-00029



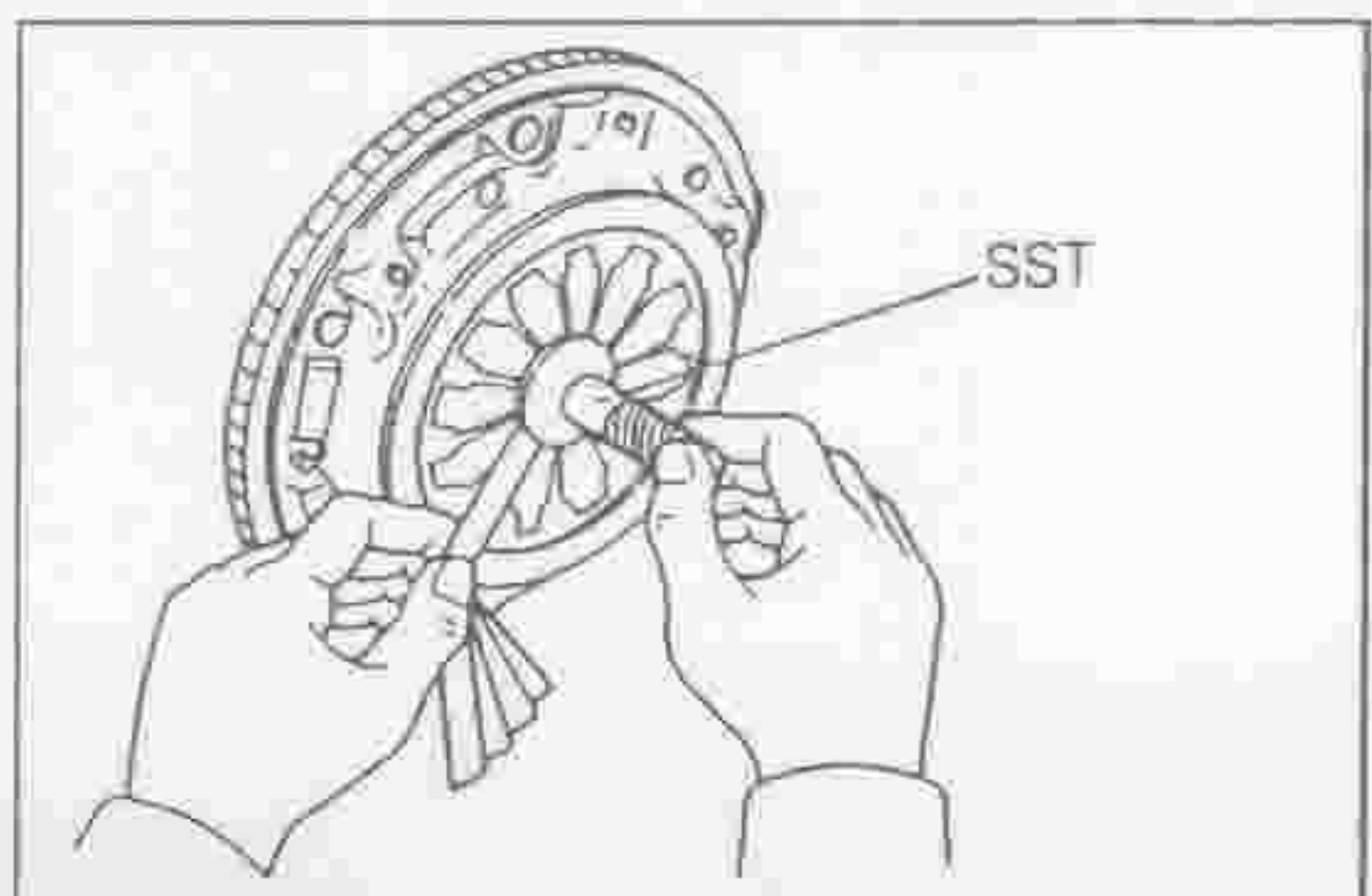
LCL00036-00030



LCL00037-00031



LCL00038-00032

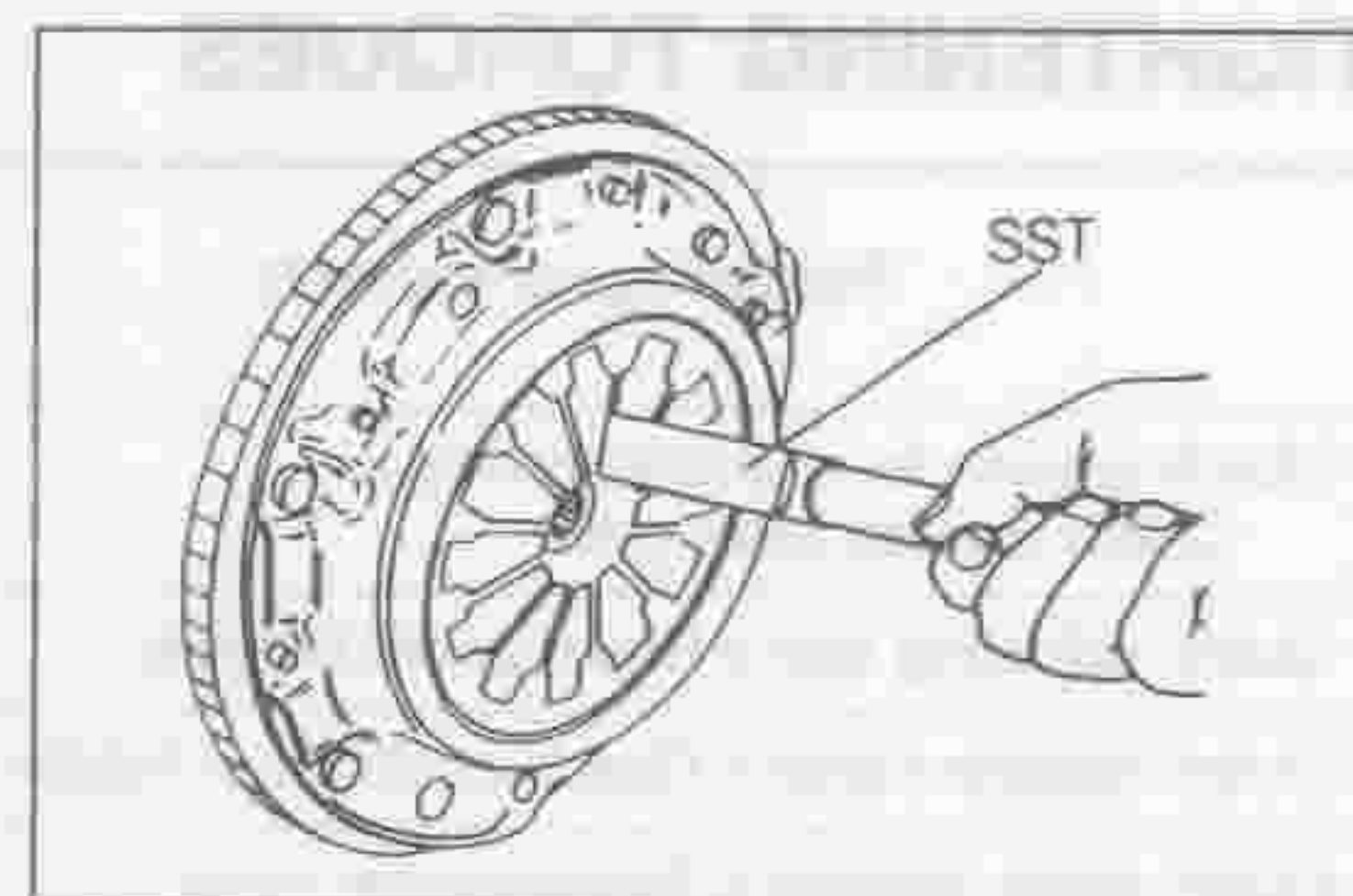


LCL00039-00033

NOTE:

- If the variation in height at the diaphragm spring tips exceeds the allowable limit, adjust the variation in height, using the following SST.

SST: 09301-00012-000



LCL00040-00034

SSTs

Figure	Part No.	Part name
	09301-00012-000	Clutch diaphragm spring aligner tool set
	09301-87701-000	Clutch guide tool
	09302-87701-000	Clutch diaphragm spring height No. 4 gauge

LCL00041-00035

SERVICE SPECIFICATIONS

Unit: mm (inch)

Item			Specified value	Allowable limit	Remarks
Clutch disc	Rivet depth		—	0.3 (0.012)	Remaining lining
	Runout		—	1.0 (0.039)	
Clutch cover	Variation in height of diaphragm spring		—	0.7 (0.028)	
Clutch pedal	Height	RHD	157 - 163 (6.18 - 6.37)	—	
		LHD	156 - 161 (6.14 - 6.33)	—	
	Free travel		10 - 30 (0.4 - 1.2)	—	

LCL00042-00000

TIGHTENING TORQUES

Tightening components	Tightening torque		
	N·m	kgf·m	ft·lb
Clutch release lever subassembly × Clutch release lever yoke	29.4 - 39.2	3.0 - 4.0	21.7 - 28.9
Clutch adjusting bolt × Brake pedal bracket	18.6 - 30.4	1.9 - 3.1	13.7 - 22.4
Clutch release cable × Clutch cable inner holder	9.8 - 15.7	1.0 - 1.6	7.2 - 11.6
Clutch cable bracket × Transmission case	9.8 - 15.7	1.0 - 1.6	7.2 - 11.6
Clutch release cable × Dash panel	3.9 - 6.9	0.4 - 0.7	2.9 - 5.1

LCL00043-00000



SERVICE SPECIFICATIONS			
Item	Specification	Unit	Remarks
Clutch pedal free play	10 - 15	mm	
Clutch pedal stroke	100 - 120	mm	
Clutch cable free play	10 - 15	mm	
Clutch cable stroke	100 - 120	mm	
Clutch release lever yoke clearance	1 - 2	mm	
Clutch cable bracket clearance	1 - 2	mm	
Clutch release cable clearance	1 - 2	mm	