

CLUTCH – CLUTCH SYSTEM**CL-1****CLUTCH SYSTEM****PROBLEM SYMPTOMS TABLE**

Use the table below to help you find the cause of the problem. The numbers indicate the ranked order of probability of each of the possible causes. Check each part in order. Replace parts as necessary.

CLUTCH SYSTEM**CL**

Symptom	Suspected area	See page
Clutch grabs/chatters	1. Engine mounting (Loosen)	-
	2. Clutch disc (Runout is excessive)	CL-32
	3. Clutch disc (Oily)	CL-32
	4. Clutch disc (Worn out)	CL-32
	5. Clutch disc torsion rubber (Damaged)	CL-32
	6. Clutch disc (Glazed)	CL-32
	7. Diaphragm spring (Out of tip alignment)	CL-32
Clutch pedal is spongy	1. Clutch Line (Air in line)	CL-25
	2. Master cylinder cup (Damaged)	CL-15
	3. Release cylinder rubber (Damaged)	CL-24
Clutch is noisy	1. Release bearing (Worn, dirty, or damaged)	CL-33
Clutch slips	1. Clutch pedal (Free play is out of adjustment)	CL-4
	2. Clutch disc (Oily)	CL-32
	3. Clutch disc (Worn out)	CL-32
	4. Diaphragm spring (Damaged)	CL-33
	5. Pressure plate (Distortion)	CL-32
	6. Flywheel (Distortion)	CL-33
Clutch does not disengage	1. Clutch pedal (Free play is out of adjustment)	CL-4
	2. Clutch line (Air in line)	CL-25
	3. Master cylinder cup (Damaged)	CL-15
	4. Release cylinder cup (Damaged)	CL-24
	5. Clutch disc (Out of true)	CL-32
	6. Clutch disc (Runout is excessive)	CL-32
	7. Clutch disc (Lining broken)	CL-32
	8. Clutch disc (Dirty or burned)	CL-32
	9. Clutch disc (Oily)	CL-32
	10. Clutch disc (Lack of spline grease)	CL-32

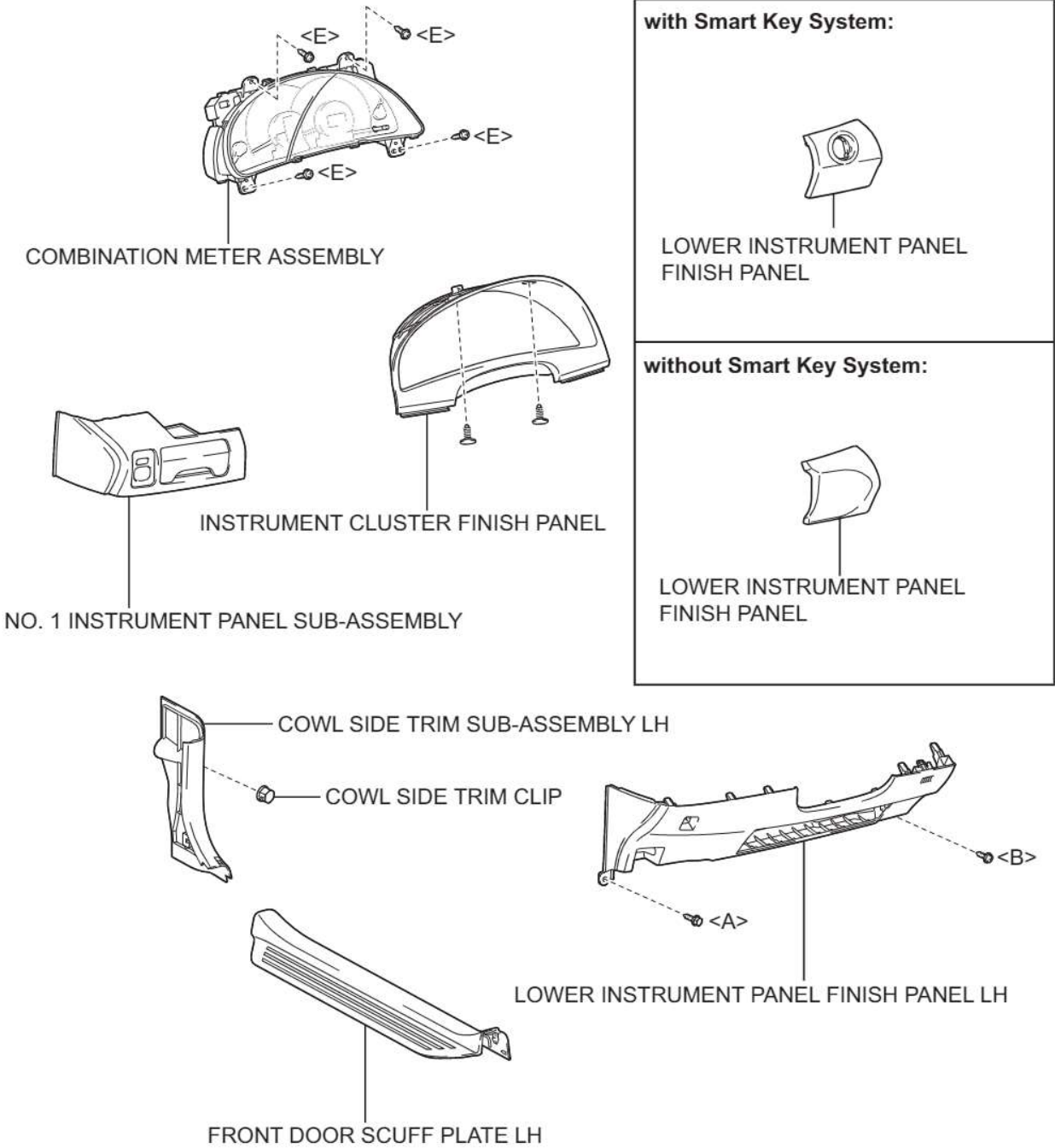
CL-2

CLUTCH – CLUTCH PEDAL

CLUTCH PEDAL
COMPONENTS

for TMC Made:

CL



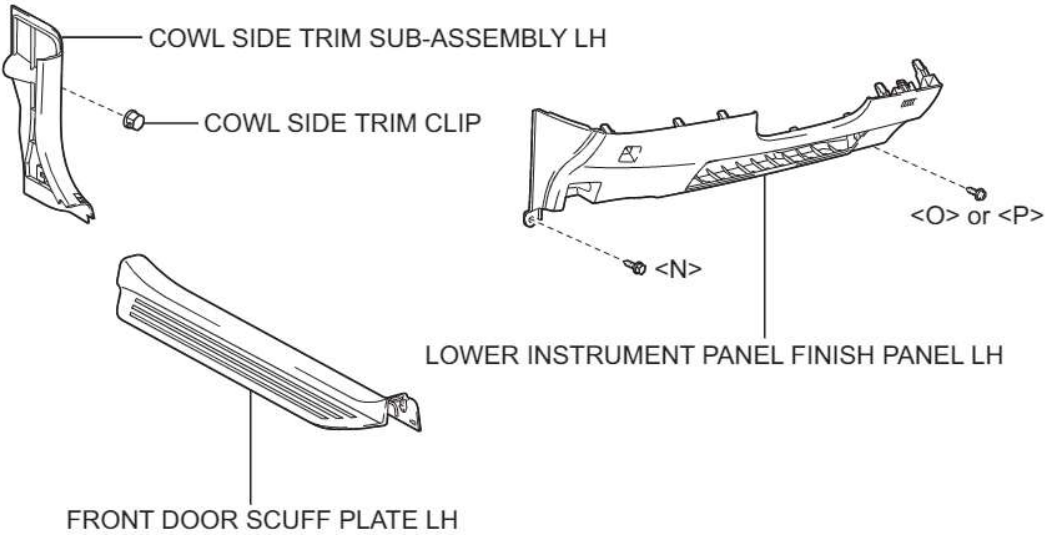
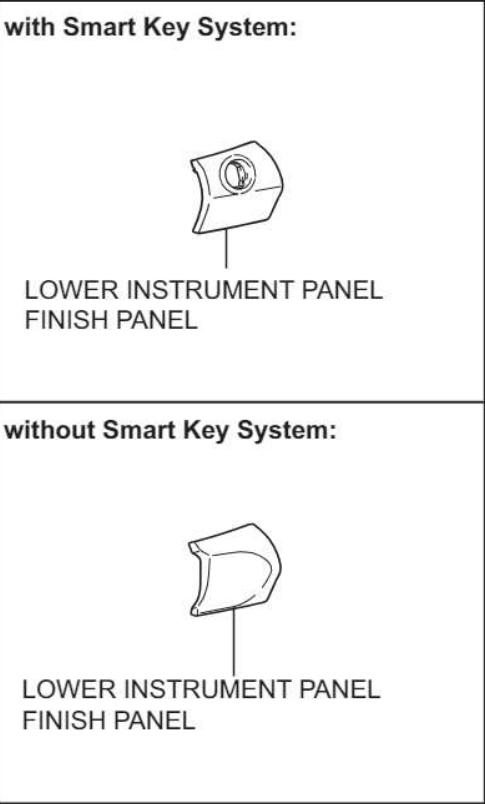
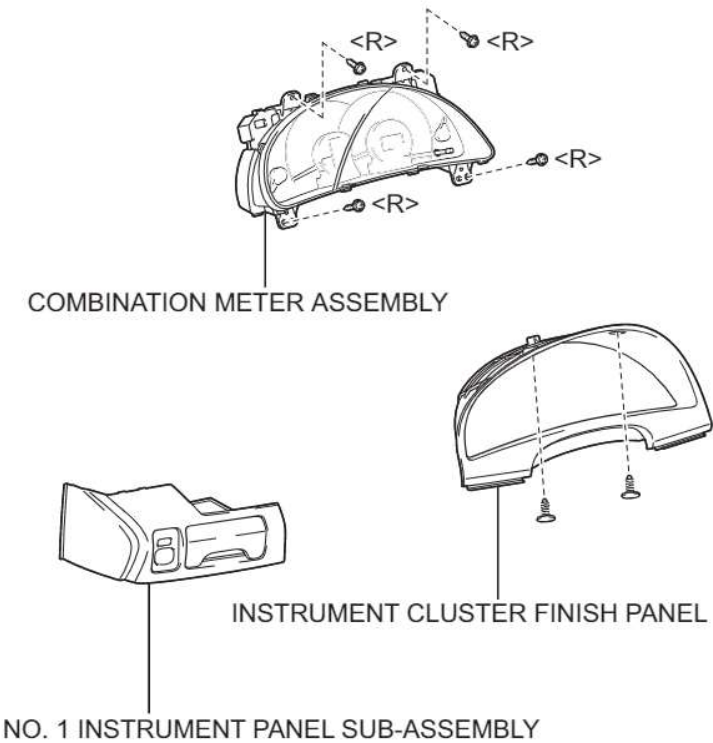
P

C138372E01

CLUTCH – CLUTCH PEDAL

CL-3

for TMMK Made:

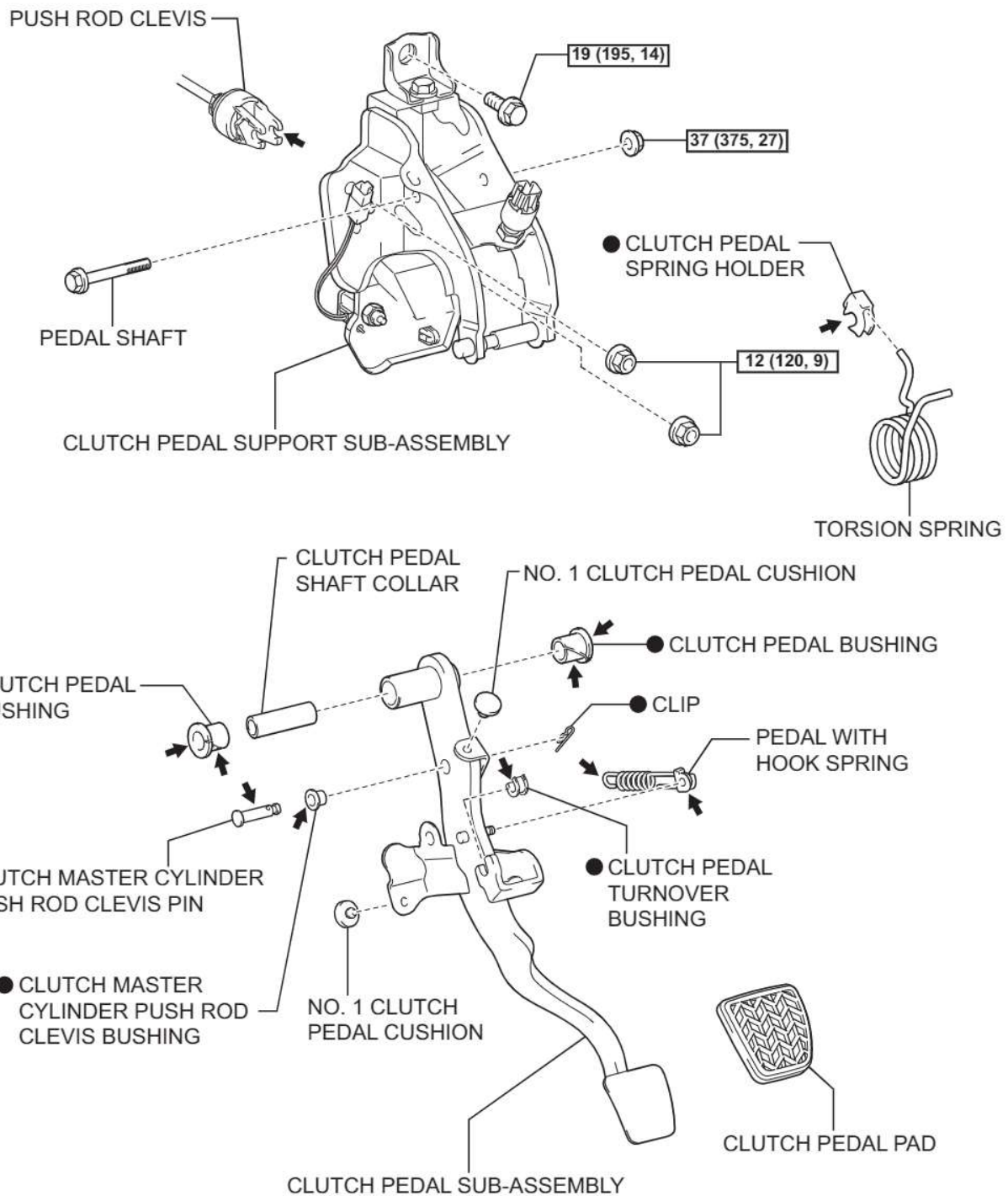


P

C138372E02

CL-4

CLUTCH – CLUTCH PEDAL



[N*m (kgf*cm, ft.*lbf)]: Specified torque ● Non-reusable part ← Apply MP grease

P

C132955E01

CLUTCH – CLUTCH PEDAL

CL-5

ON-VEHICLE INSPECTION

1. INSPECT AND ADJUST CLUTCH PEDAL HEIGHT

(a) Turn back the floor carpet.

(b) Check the pedal height.

Pedal height from asphalt sheet:**148.0 to 158.0 mm (5.8268 to 6.2205 in.)**

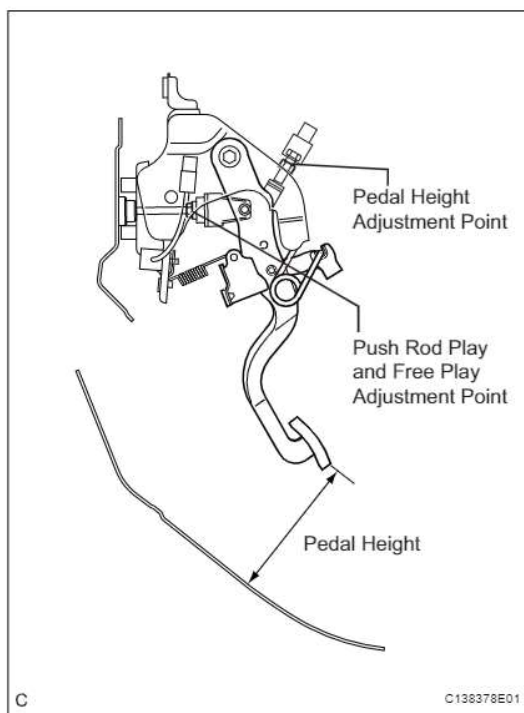
If necessary, adjust the pedal height.

(c) Adjust the pedal height.

(1) Loosen the lock nut and turn the clutch switch until the height is correct. Tighten the lock nut.

Torque: 16 N*m (160 kgf*cm, 12 ft.*lbf)

CL



2. INSPECT CLUTCH PEDAL FREE PLAY AND PUSH ROD PLAY

(a) Check that the pedal free play and push rod play are correct.

(1) Depress the pedal until clutch resistance is felt.

Pedal free play:**5.0 to 15.0 mm (0.197 to 0.591 in.)**

(2) Gently depress the pedal until the resistance begins to increase a little.

Push rod play at pedal top:**1.0 to 5.0 mm (0.039 to 0.197 in.)**

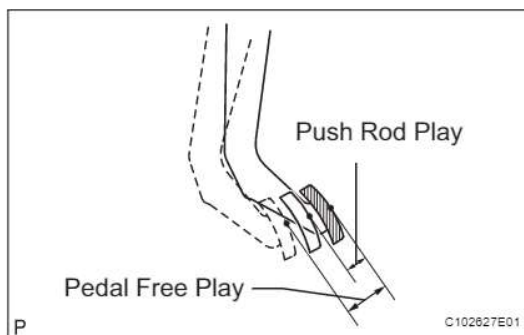
(b) Adjust the pedal free play and push rod play.

(1) Loosen the lock nut and turn the push rod until the free play and push rod play are correct.

(2) Tighten the lock nut.

Torque: 12 N*m (120 kgf*cm, 9 ft.*lbf)

(3) After adjusting the pedal free play, check the pedal height.



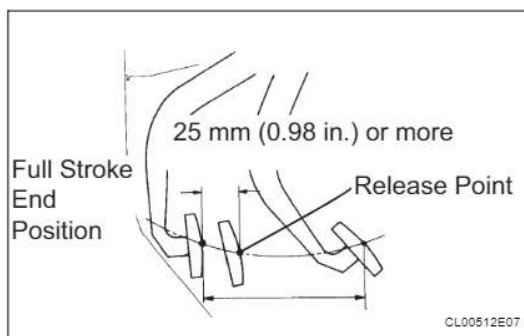
3. INSPECT CLUTCH RELEASE POINT

(a) Check the clutch release point.

(1) Pull the parking brake lever and install the wheel stopper.

(2) Start and idle the engine.

(3) Without depressing the clutch pedal, slowly move the shift lever to the reverse position until the gears are engaged.



CL-6

CLUTCH – CLUTCH PEDAL

- (4) Gradually depress the clutch pedal and measure the stroke distance from the point that the gear noise stops (release point) to the full stroke end position.

Standard distance:

25 mm (0.98 in.) or more (From pedal stroke end position to release point)

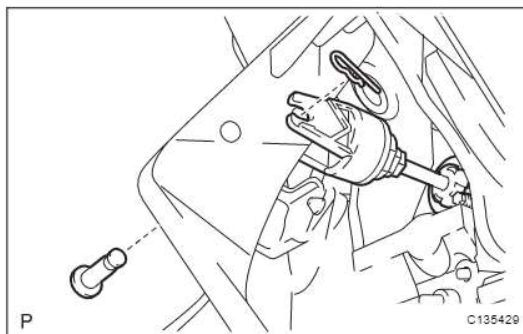
If the distance is not as specified, perform the following operations:

- Check the pedal height.
- Check push rod play and pedal free play.
- Bleed the clutch line.
- Check the clutch cover assembly and disc assembly.

CL

REMOVAL

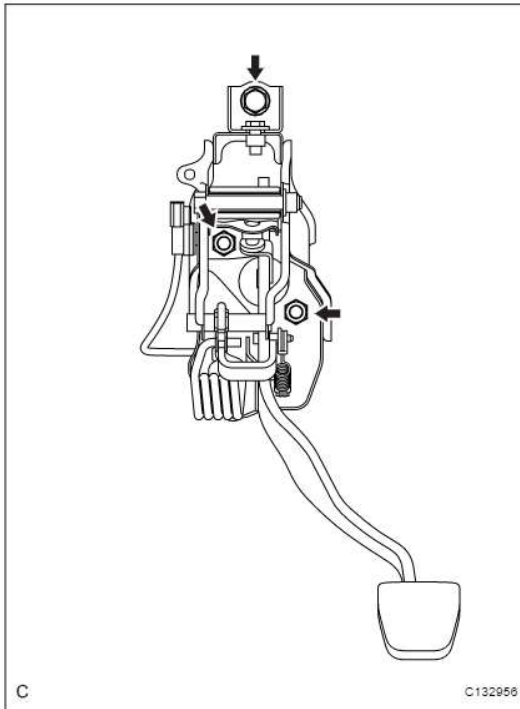
1. **PRECAUTION**
See page [IP-1](#).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
3. **REMOVE FRONT DOOR SCUFF PLATE LH** (See page [IR-24](#))
4. **REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH** (See page [IR-25](#))
5. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMC Made)** (See page [IP-20](#))
6. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMMK Made)** (See page [IP-21](#))
7. **REMOVE NO. 1 INSTRUMENT PANEL SUB-ASSEMBLY** (See page [IP-22](#))
8. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL (w/o Smart Key System)** (See page [IP-22](#))
9. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL (w/ Smart Key System)** (See page [IP-22](#))
10. **REMOVE INSTRUMENT CLUSTER FINISH PANEL** (See page [IP-22](#))
11. **REMOVE COMBINATION METER ASSEMBLY (for TMC Made)** (See page [IP-23](#))
12. **REMOVE COMBINATION METER ASSEMBLY (for TMMK Made)** (See page [IP-23](#))
13. **DISCONNECT CONNECTORS**
 - (a) Disconnect the clutch start switch connector.
 - (b) Disconnect the clutch switch connector (with cruise control).
14. **REMOVE CLUTCH MASTER CYLINDER PUSH ROD CLEVIS PIN**
 - (a) Remove the clip and pin.



CL-8

CLUTCH – CLUTCH PEDAL

CL

**15. REMOVE CLUTCH PEDAL SUPPORT SUB-ASSEMBLY**

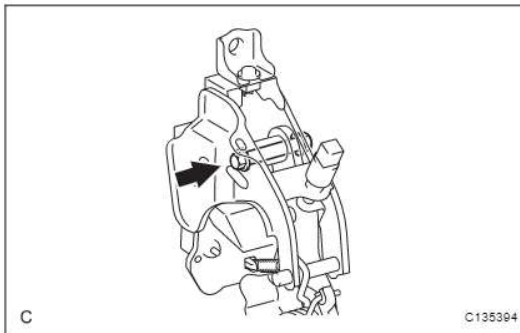
- (a) Remove the bolt, 2 nuts and clutch pedal support assembly.

16. REMOVE TORSION SPRING

- (a) While the clutch pedal is fully depressed, remove the torsion spring.

17. REMOVE PEDAL WITH HOOK SPRING

- (a) Remove the pedal with hook spring.

**18. REMOVE CLUTCH PEDAL SUB-ASSEMBLY**

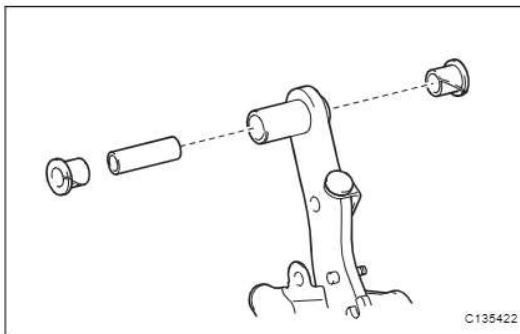
- (a) Remove the pedal shaft and nut.
(b) Remove the clutch pedal from the clutch pedal support.

19. REMOVE CLUTCH PEDAL SPRING HOLDER

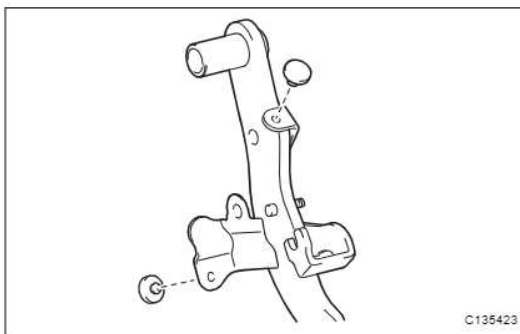
- (a) Remove the clutch pedal spring holder from the clutch pedal support.

20. REMOVE CLUTCH PEDAL PAD

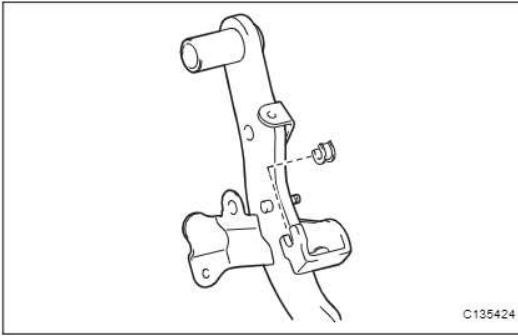
- (a) Remove the clutch pedal pad from the clutch pedal.

**21. REMOVE CLUTCH PEDAL BUSHING**

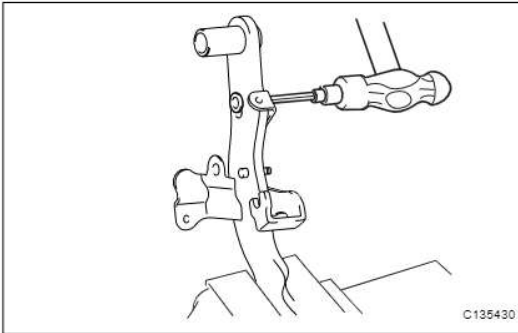
- (a) Remove the 2 pedal bushings and pedal shaft collar from the clutch pedal.

**22. REMOVE NO. 1 CLUTCH PEDAL CUSHION**

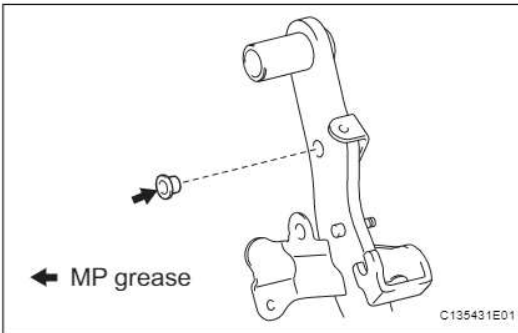
- (a) Using needle-nose pliers, remove the 2 No. 1 clutch pedal cushions from the clutch pedal.

CLUTCH – CLUTCH PEDAL**CL-9****CL****23. REMOVE CLUTCH PEDAL TURNOVER BUSHING**

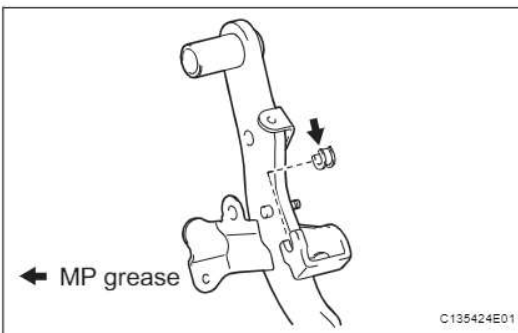
- (a) Remove the turnover bushing from the clutch pedal.

**24. REMOVE CLUTCH MASTER CYLINDER PUSH ROD CLEVIS BUSHING**

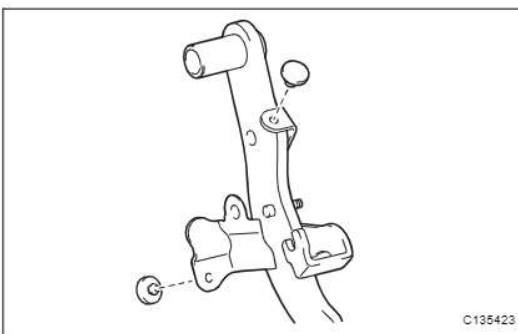
- (a) Using an 8 mm hexagon wrench and a hammer, remove the clevis bushing from the clutch pedal.

**INSTALLATION****1. INSTALL CLUTCH MASTER CYLINDER PUSH ROD CLEVIS BUSHING**

- (a) Apply MP grease to the inside of a new clevis bushing.
 (b) Install the clevis bushing to the clutch pedal.
HINT:
 Install the clevis bushing from the left side of the vehicle.

**2. INSTALL CLUTCH PEDAL TURNOVER BUSHING**

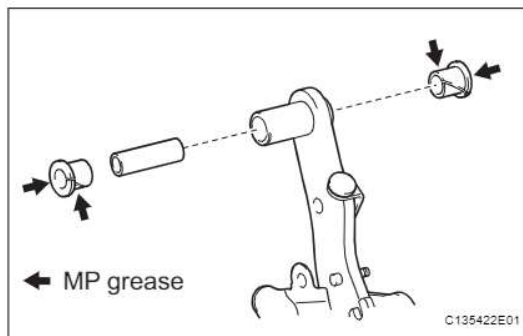
- (a) Apply MP grease to the inside of the turnover bushing.
 (b) Install the turnover bushing to the clutch pedal.

**3. INSTALL NO. 1 CLUTCH PEDAL CUSHION**

- (a) Using needle-nose pliers, install the 2 No. 1 clutch pedal cushions to the clutch pedal.

CL-10

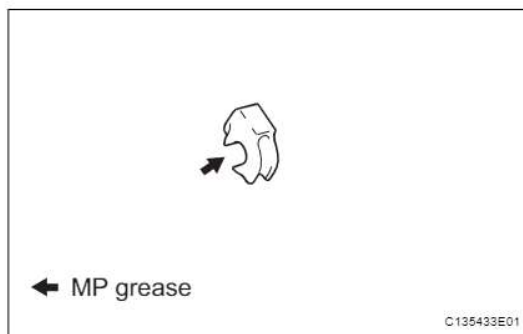
CLUTCH – CLUTCH PEDAL

**4. INSTALL CLUTCH PEDAL BUSHING**

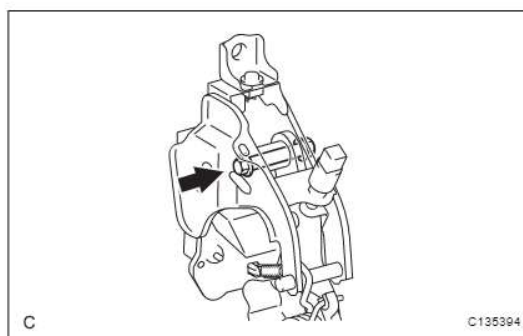
- (a) Apply MP grease to the inner, outer and end surfaces of 2 new pedal bushings.
- (b) Install the clutch pedal shaft collar and 2 pedal bushings to the clutch pedal.

5. INSTALL CLUTCH PEDAL PAD

- (a) Install the clutch pedal pad to the clutch pedal.

**6. INSTALL CLUTCH PEDAL SPRING HOLDER**

- (a) Apply MP grease to the inside of a new clutch pedal spring holder.
- (b) Install the clutch pedal spring holder.

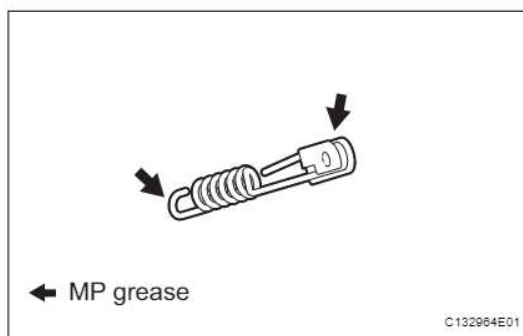
**7. INSTALL CLUTCH PEDAL SUB-ASSEMBLY**

- (a) Install the clutch pedal to the clutch pedal support with the bolt and nut.

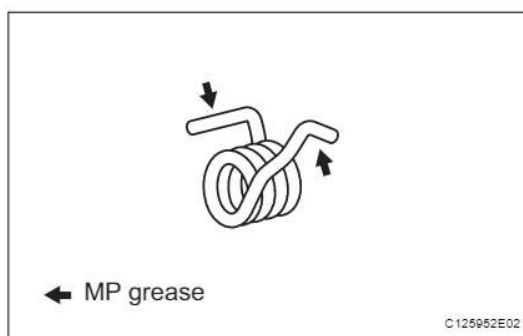
Torque: 37 N*m (375 kgf*cm, 27 ft.*lbf)

HINT:

Install the bolt from the right side of the vehicle.

**8. INSTALL PEDAL WITH HOOK SPRING**

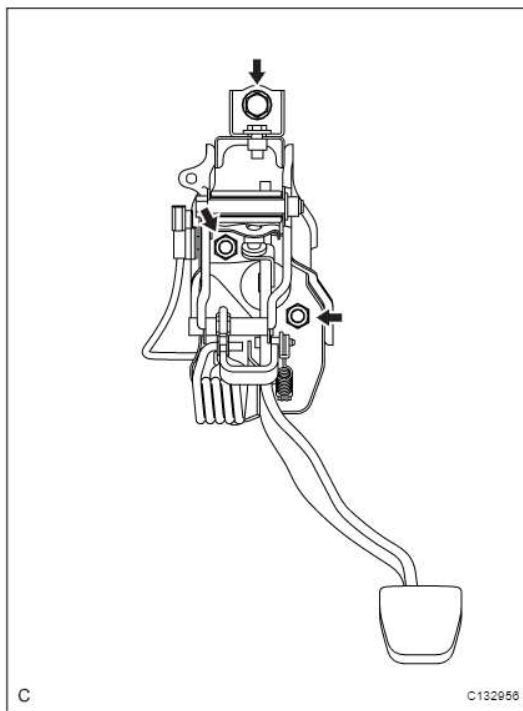
- (a) Apply MP grease to the sliding portion of the spring.
- (b) Install the hook spring.

**9. INSTALL TORSION SPRING**

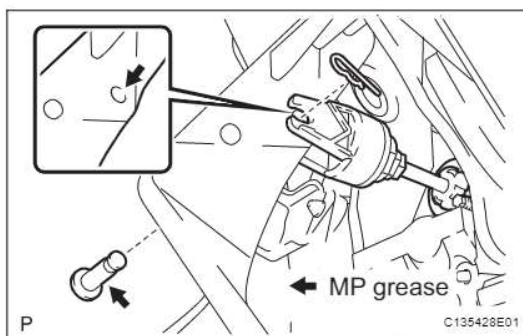
- (a) Apply MP grease to the sliding portion of the spring.
- (b) Install the torsion spring.

CLUTCH – CLUTCH PEDAL

CL-11

**10. INSTALL CLUTCH PEDAL SUPPORT SUB-ASSEMBLY**

- (a) Install the clutch pedal support to the vehicle with the 2 nuts and bolt.

Torque: Bolt**19 N*m (195 kgf*cm, 14 ft.*lbf)****Nut****12 N*m (120 kgf*cm, 9 ft.*lbf)****CL****11. INSTALL CLUTCH MASTER CYLINDER PUSH ROD CLEVIS PIN**

- (a) Apply MP grease to the contact surface of the pin and clevis bushing.
(b) Connect the clevis to the clutch pedal with the pin and a new clip.

HINT:

Install the pin from the left side of the vehicle.

12. CONNECT CONNECTORS

- (a) Connect the clutch start switch connector.
(b) Connect the clutch switch connector (with cruise control).

13. INSTALL COMBINATION METER ASSEMBLY (for TMC Made) (See page [IP-56](#))**14. INSTALL COMBINATION METER ASSEMBLY (for TMMK Made) (See page [IP-56](#))****15. INSTALL INSTRUMENT CLUSTER FINISH PANEL (See page [IP-57](#))****16. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL (w/o Smart Key System) (See page [IP-57](#))****17. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL (w/ Smart Key System) (See page [IP-57](#))****18. INSTALL NO. 1 INSTRUMENT PANEL SUB-ASSEMBLY (See page [IP-57](#))****19. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMC Made) (See page [IP-58](#))****20. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMMK Made) (See page [IP-59](#))**

CL-12**CLUTCH – CLUTCH PEDAL**

21. **INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH** (See page [IR-54](#))
22. **INSTALL FRONT DOOR SCUFF PLATE LH** (See page [IR-54](#))
23. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
24. **INSPECT AND ADJUST CLUTCH PEDAL SUB-ASSEMBLY**
See page [CL-4](#).

CL

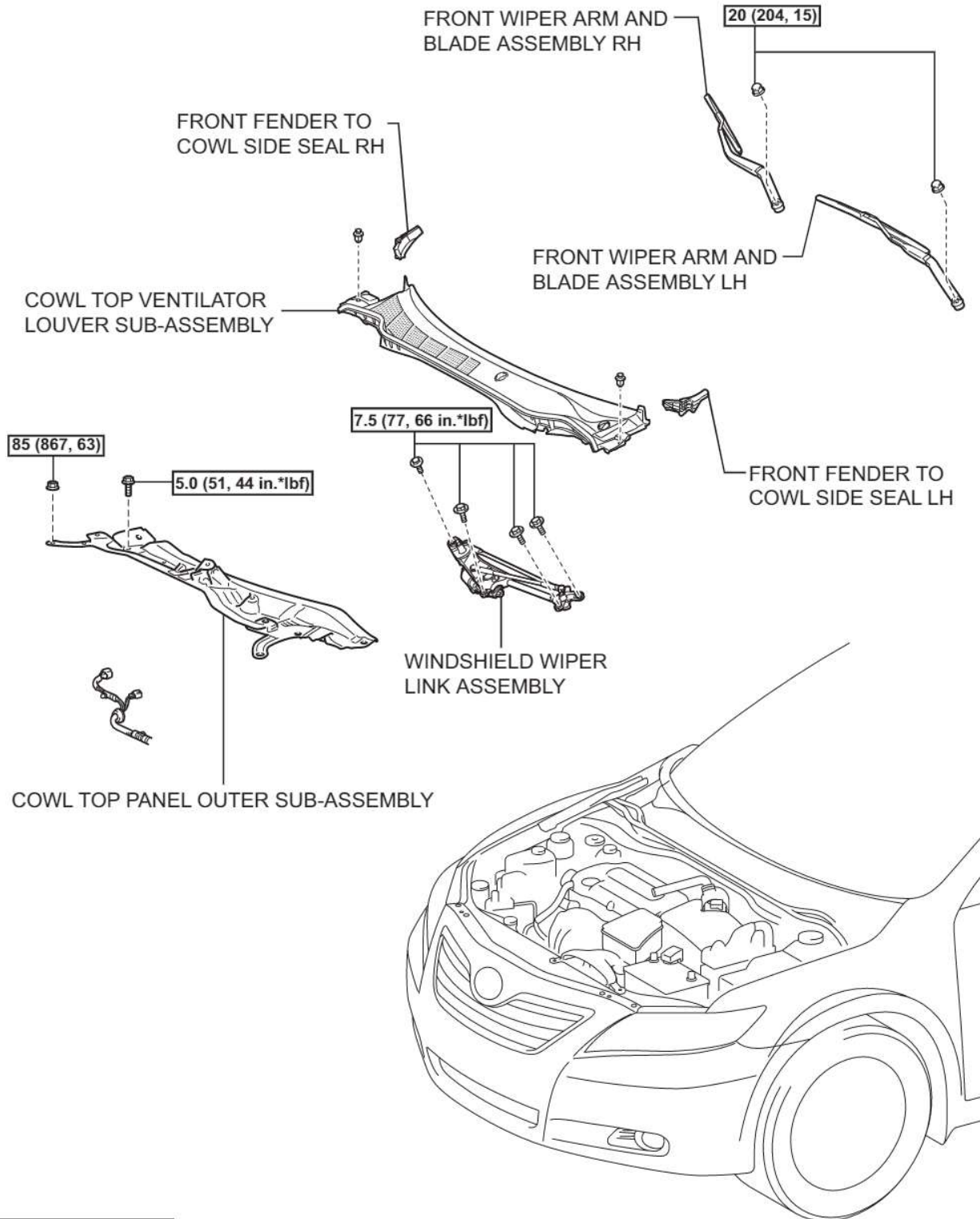
CL-12

CLUTCH – CLUTCH MASTER CYLINDER

CLUTCH MASTER CYLINDER

COMPONENTS

CL



N*m (kgf*cm, ft.*lbf): Specified torque

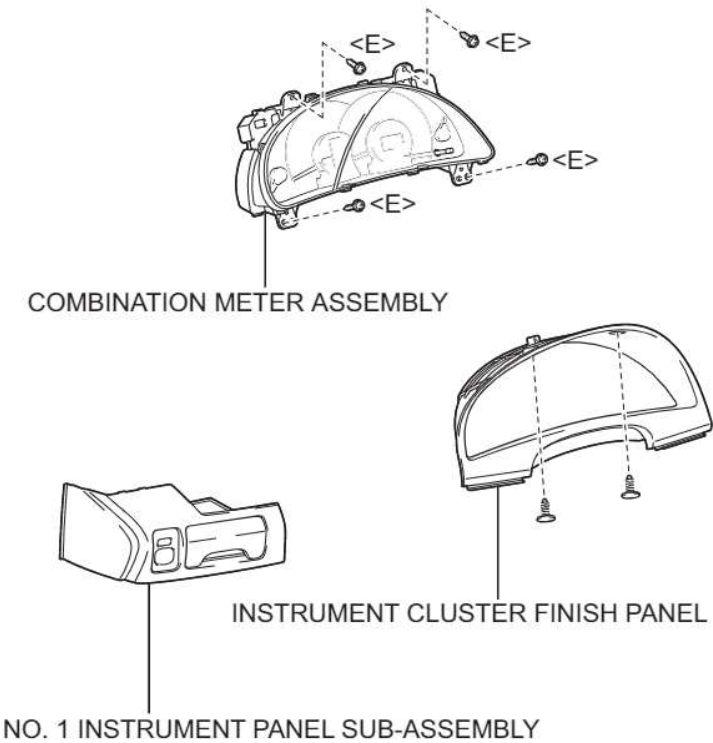
A136912E01

CLUTCH – CLUTCH MASTER CYLINDER

CL-13

CL

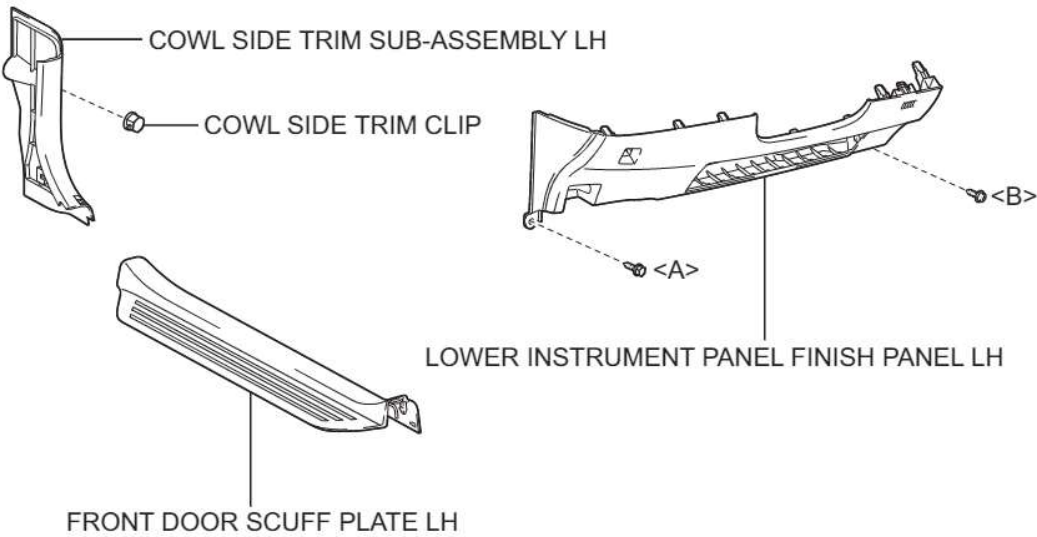
for TMC Made:



with Smart Key System:



without Smart Key System:



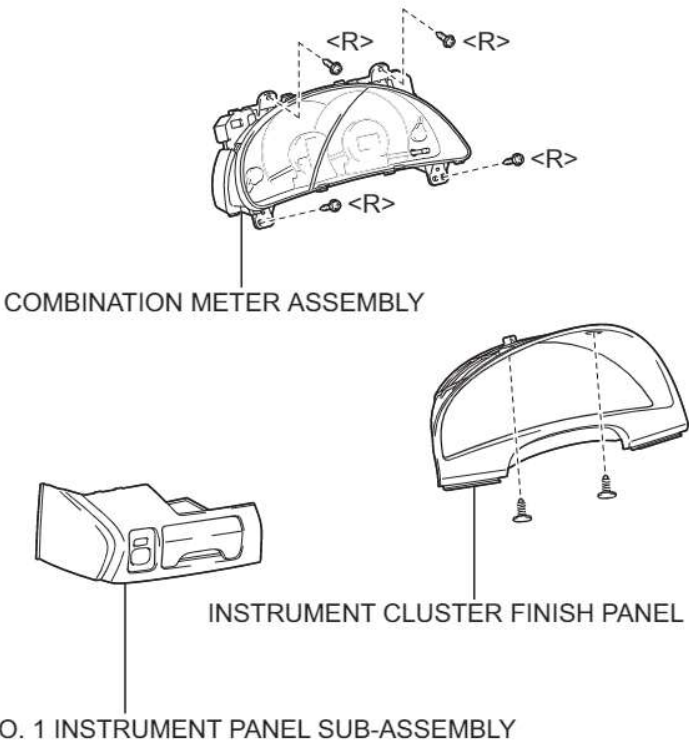
P

C138372E01

CL-14

CLUTCH – CLUTCH MASTER CYLINDER

for TMMK Made:



with Smart Key System:

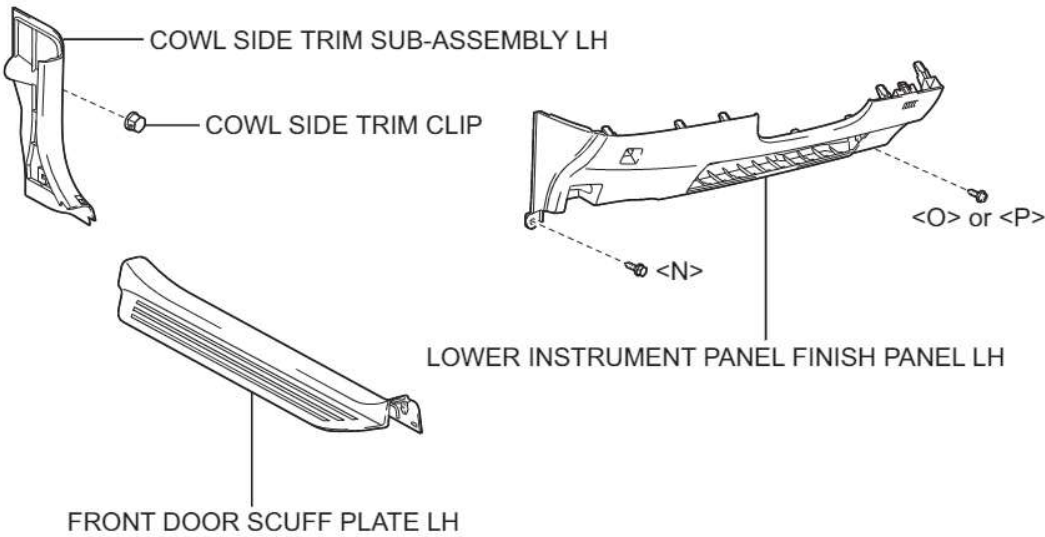


LOWER INSTRUMENT PANEL
FINISH PANEL

without Smart Key System:



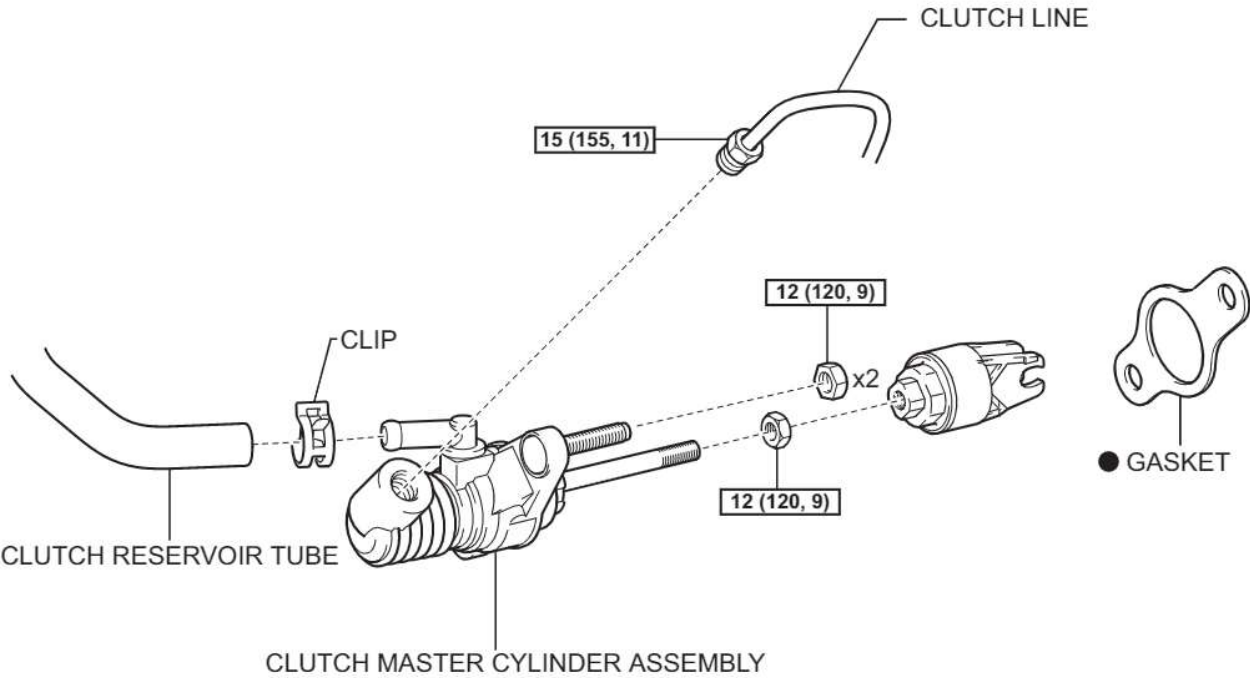
LOWER INSTRUMENT PANEL
FINISH PANEL



CLUTCH – CLUTCH MASTER CYLINDER

CL-15

CL



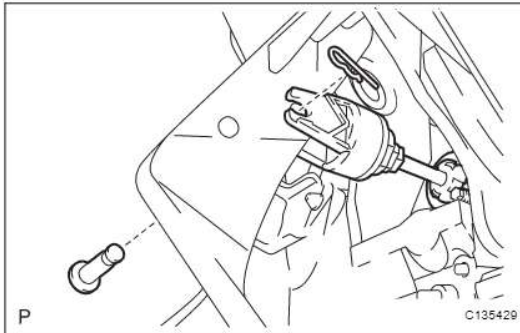
N*m (kgf*cm, ft.*lbf) : Specified torque ● Non-reusable part

P

C132968E01

REMOVAL

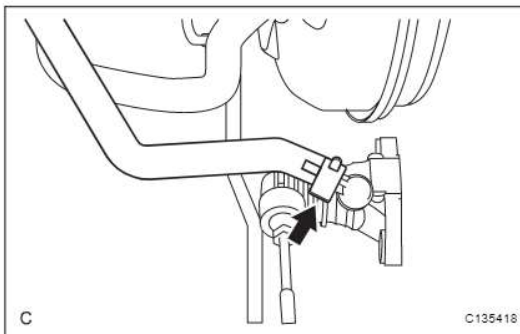
1. **PRECAUTION**
See page [IP-1](#).
2. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
3. **DRAIN BRAKE FLUID** (See page [BR-28](#))
4. **REMOVE AIR CLEANER CAP SUB-ASSEMBLY** (See page [ES-416](#))
5. **REMOVE AIR CLEANER CASE SUB-ASSEMBLY** (See page [EM-95](#))
6. **REMOVE WINDSHIELD WIPER ARM AND BLADE ASSEMBLY LH** (See page [WW-9](#))
7. **REMOVE WINDSHIELD WIPER ARM AND BLADE ASSEMBLY RH** (See page [WW-9](#))
8. **REMOVE FRONT FENDER TO COWL SIDE SEAL LH** (See page [WW-9](#))
9. **REMOVE FRONT FENDER TO COWL SIDE SEAL RH** (See page [WW-9](#))
10. **REMOVE COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY** (See page [WW-10](#))
11. **REMOVE WINDSHIELD WIPER LINK ASSEMBLY** (See page [WW-10](#))
12. **REMOVE COWL TOP PANEL OUTER SUB-ASSEMBLY** (See page [ES-424](#))
13. **REMOVE BRAKE BOOSTER ASSEMBLY**
See page [BR-42](#).
14. **REMOVE FRONT DOOR SCUFF PLATE LH** (See page [IR-24](#))
15. **REMOVE COWL SIDE TRIM SUB-ASSEMBLY LH** (See page [IR-25](#))
16. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMC Made)** (See page [IP-20](#))
17. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMMK Made)** (See page [IP-21](#))
18. **REMOVE NO. 1 INSTRUMENT PANEL SUB-ASSEMBLY** (See page [IP-22](#))
19. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL (w/o Smart Key System)** (See page [IP-22](#))
20. **REMOVE LOWER INSTRUMENT PANEL FINISH PANEL (w/ Smart Key System)** (See page [IP-22](#))
21. **REMOVE INSTRUMENT CLUSTER FINISH PANEL** (See page [IP-22](#))
22. **REMOVE COMBINATION METER ASSEMBLY (for TMC Made)** (See page [IP-23](#))

CLUTCH – CLUTCH MASTER CYLINDER**CL-17****23. REMOVE COMBINATION METER ASSEMBLY (for TMMK Made) (See page IP-23)****24. DISCONNECT CLUTCH MASTER CYLINDER PUSH ROD CLEVIS**

- (a) Remove the clip and pin, and disconnect the push rod clevis from the clutch pedal.

25. DRAIN BRAKE FLUID**NOTICE:**

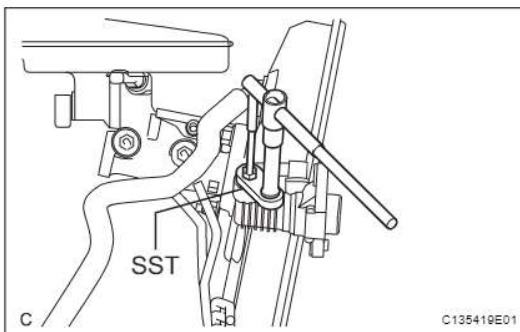
Wash brake fluid off immediately if it is spilled on any painted surface.

**26. DISCONNECT CLUTCH RESERVOIR TUBE**

- (a) Using pliers, grip the claws of the clip and slide the clip to disconnect the tube from the clutch master cylinder.

HINT:

Use a container to catch the fluid.

**27. DISCONNECT CLUTCH LINE**

- (a) Using SST, disconnect the clutch line.

SST 09023-00101

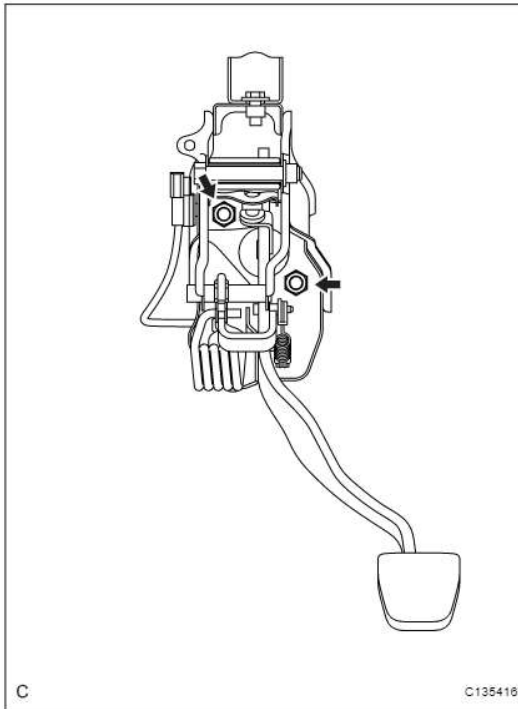
HINT:

Use a container to catch the fluid.

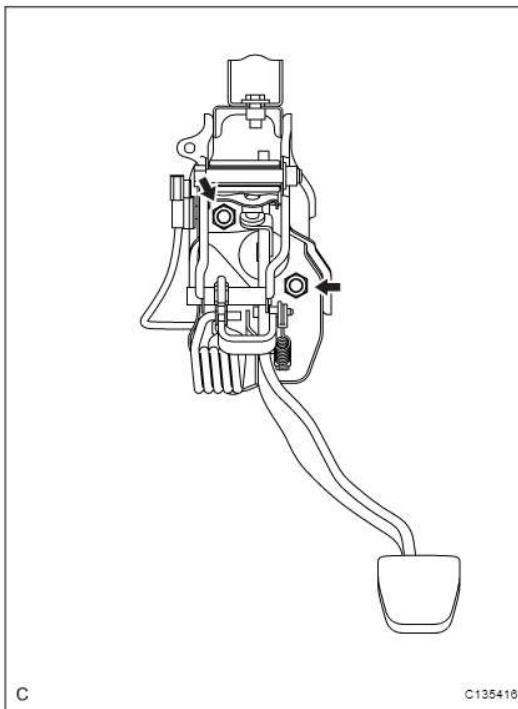
CL-18

CLUTCH – CLUTCH MASTER CYLINDER

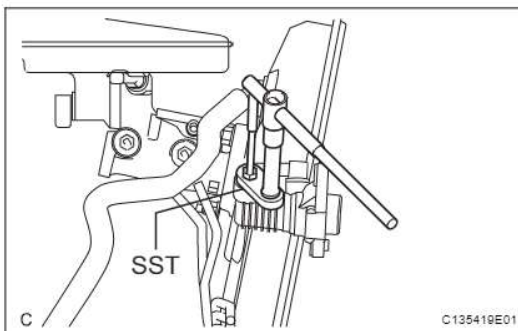
CL

**28. REMOVE CLUTCH MASTER CYLINDER ASSEMBLY**

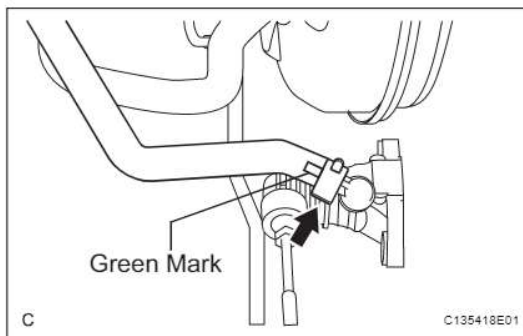
- (a) Remove the 2 nuts and clutch master cylinder.
- (b) Remove the gasket from the clutch master cylinder assembly.

**INSTALLATION****1. INSTALL CLUTCH MASTER CYLINDER ASSEMBLY**

- (a) Install a new gasket to the clutch master cylinder assembly.
- (b) Install the clutch master cylinder with the 2 nuts.
Torque: 12 N*m (120 kgf*cm, 9 ft.*lbf)

**2. CONNECT CLUTCH LINE**

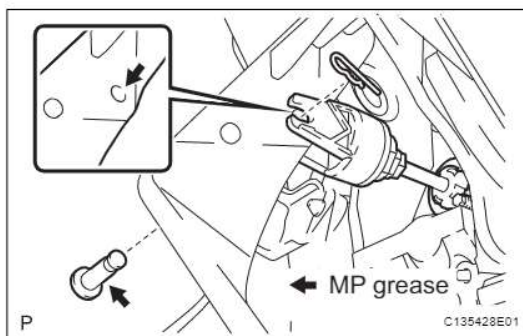
- (a) Using SST, connect the clutch line.
SST 09023-00101
Torque: 15 N*m (155 kgf*cm, 11 ft.*lbf)

CLUTCH – CLUTCH MASTER CYLINDER**CL-19****3. CONNECT CLUTCH RESERVOIR TUBE**

- (a) Connect the clutch reservoir tube to the clutch master cylinder with the clip.

NOTICE:

- Connect the clutch reservoir tube so that it will not be twisted.
- Make sure that the green mark is positioned as shown in the illustration.

CL**4. CONNECT CLUTCH MASTER CYLINDER PUSH ROD CLEVIS**

- (a) Apply MP grease to the contact surface of the pin and clevis bushing.
- (b) Connect the clevis to the clutch pedal with the pin and a new clip.

HINT:

Install the pin from the left side of the vehicle.

5. INSTALL BRAKE BOOSTER ASSEMBLY

See page [BR-43](#).

6. INSTALL COMBINATION METER ASSEMBLY (for TMC Made) (See page [IP-56](#))**7. INSTALL COMBINATION METER ASSEMBLY (for TMMK Made) (See page [IP-56](#))****8. INSTALL INSTRUMENT CLUSTER FINISH PANEL (See page [IP-57](#))****9. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL (w/o Smart Key System) (See page [IP-57](#))****10. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL (w/ Smart Key System) (See page [IP-57](#))****11. INSTALL NO. 1 INSTRUMENT PANEL SUB-ASSEMBLY (See page [IP-57](#))****12. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMC Made) (See page [IP-58](#))****13. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL LH (for TMMK Made) (See page [IP-59](#))****14. INSTALL COWL SIDE TRIM SUB-ASSEMBLY LH (See page [IR-54](#))****15. INSTALL FRONT DOOR SCUFF PLATE LH (See page [IR-54](#))****16. INSTALL COWL TOP PANEL OUTER SUB-ASSEMBLY (See page [ES-426](#))****17. INSTALL WINDSHIELD WIPER LINK ASSEMBLY (See page [WW-14](#))****18. INSTALL COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY (See page [WW-15](#))**

CL-20

CLUTCH – CLUTCH MASTER CYLINDER

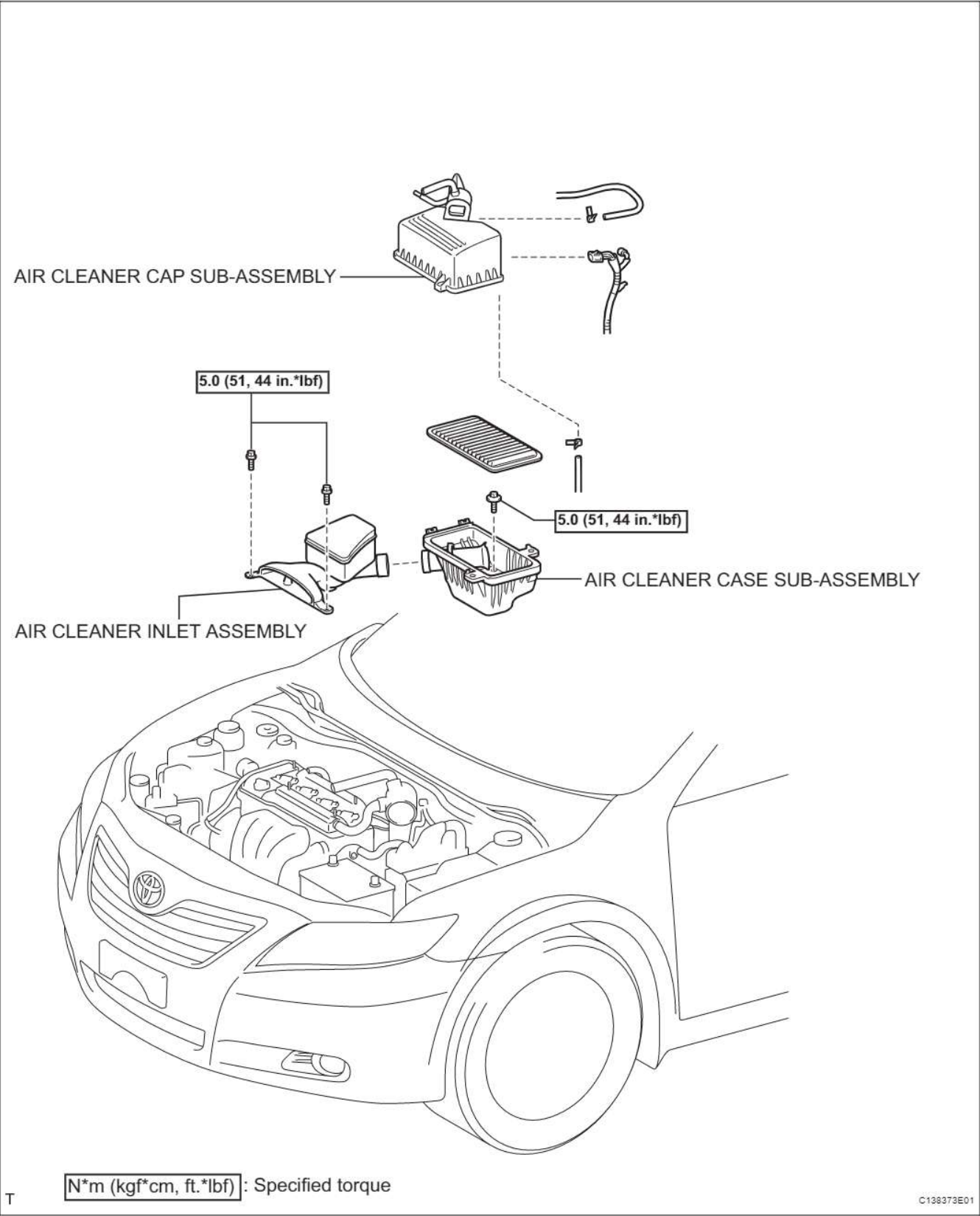
CL

19. **INSTALL FRONT FENDER TO COWL SIDE SEAL LH**
(See page [WW-15](#))
20. **INSTALL FRONT FENDER TO COWL SIDE SEAL RH**
(See page [WW-15](#))
21. **INSTALL WINDSHIELD WIPER ARM AND BLADE ASSEMBLY LH** (See page [WW-15](#))
22. **INSTALL WINDSHIELD WIPER ARM AND BLADE ASSEMBLY RH** (See page [WW-16](#))
23. **INSTALL AIR CLEANER CASE SUB-ASSEMBLY** (See page [EM-120](#))
24. **INSTALL AIR CLEANER CAP SUB-ASSEMBLY** (See page [ES-419](#))
25. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**
26. **BLEED CLUTCH PIPE LINE**
 - (a) Fill the brake reservoir with brake fluid and bleed the clutch system.
Torque: 8.3 N*m (85 kgf*cm, 74 in.*lbf)
27. **CHECK BRAKE FLUID**
 - (a) Check the brake fluid (See page [BR-6](#)).
HINT:
 - Check for leakage in the brake system.
 - Check for leakage in the clutch system.
28. **CHECK FLUID LEVEL IN RESERVOIR** (See page [BR-6](#))
29. **INSPECT AND ADJUST CLUTCH PEDAL SUB-ASSEMBLY**
See page [CL-4](#).

CL

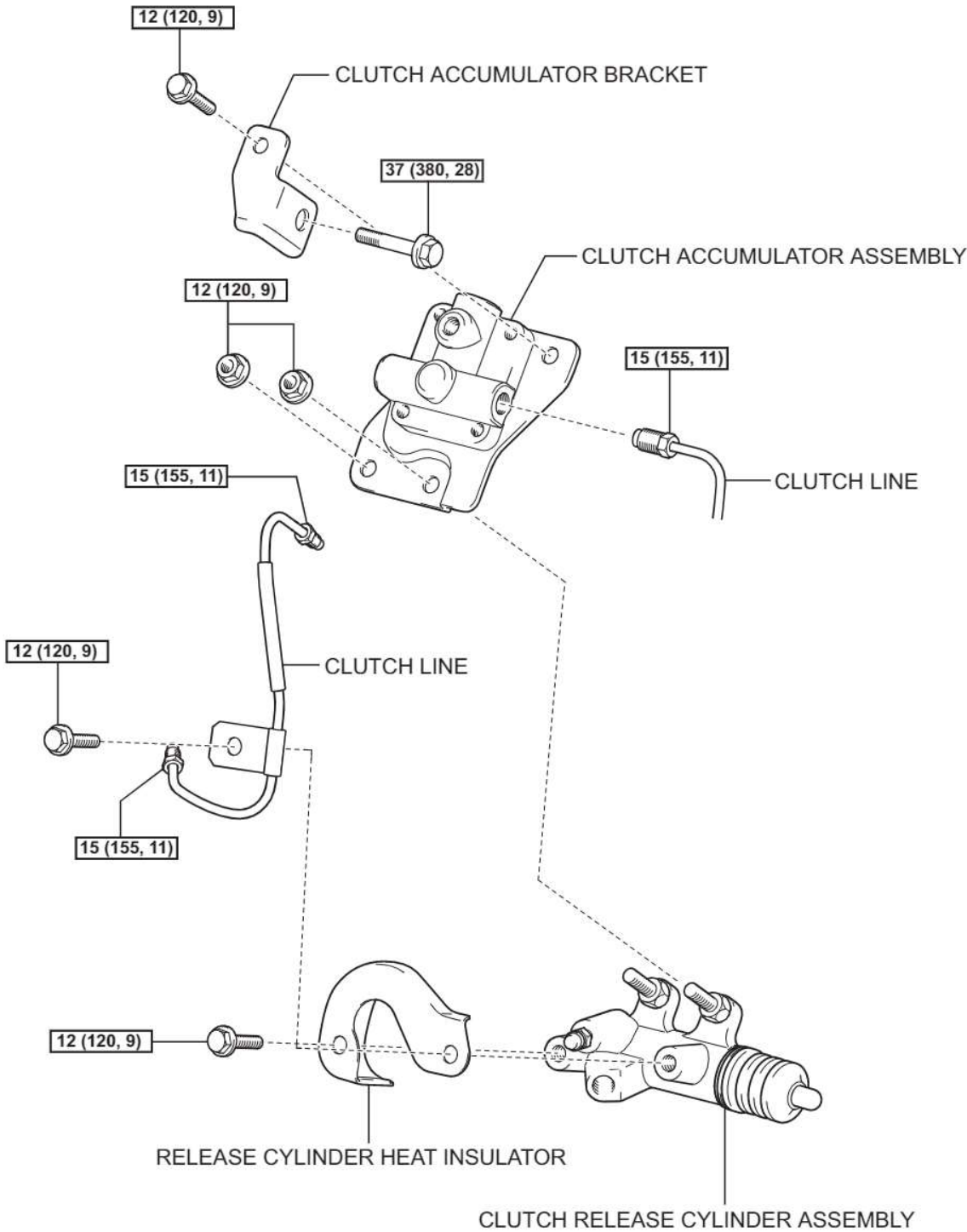
CLUTCH RELEASE CYLINDER

COMPONENTS



CL-22

CLUTCH – CLUTCH RELEASE CYLINDER



[N*m (kgf*cm, ft.*lbf)]: Specified torque

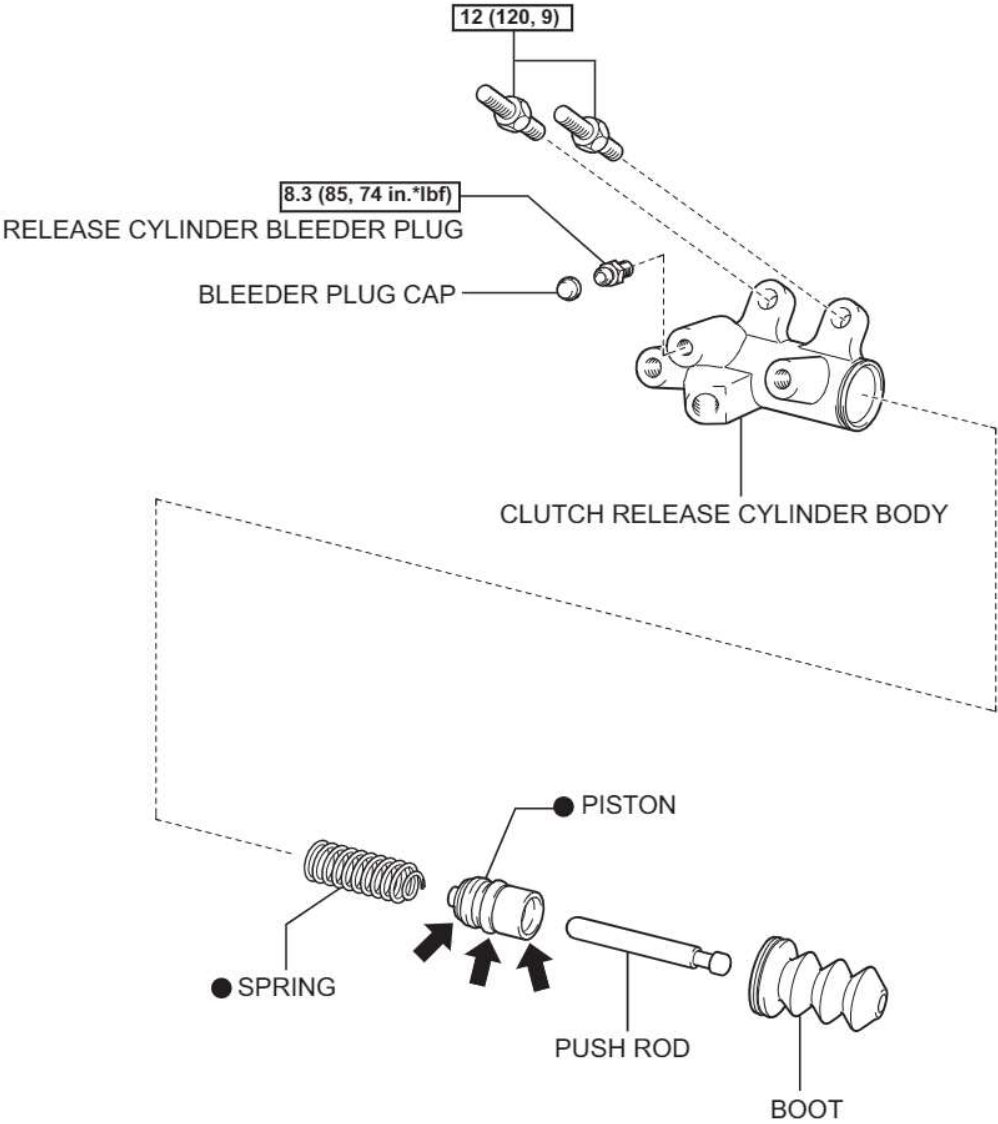
P

C135413E01

CLUTCH – CLUTCH RELEASE CYLINDER

CL-23

CL



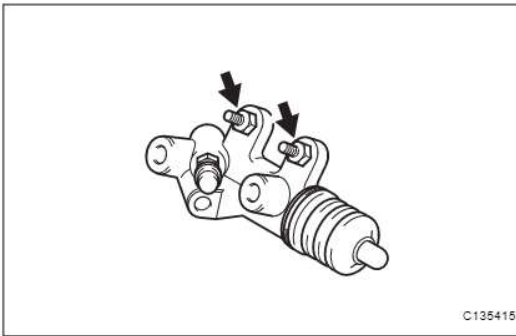
N*m (kgf*cm, ft.*lbf) : Specified torque ● Non-reusable part ← Lithium soap base glycol grease

P

C135414E01

CL-24**CLUTCH – CLUTCH RELEASE CYLINDER****CL****REMOVAL**

1. **DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL**
2. **REMOVE AIR CLEANER INLET ASSEMBLY** (See page [EM-94](#))
3. **REMOVE AIR CLEANER CAP SUB-ASSEMBLY** (See page [ES-416](#))
4. **REMOVE AIR CLEANER CASE SUB-ASSEMBLY** (See page [EM-95](#))
5. **REMOVE CLUTCH ACCUMULATOR BRACKET** (See page [CL-28](#))
6. **REMOVE RELEASE CYLINDER HEAT INSULATOR** (See page [CL-28](#))
7. **DISCONNECT CLUTCH LINE** (See page [CL-28](#))
8. **REMOVE CLUTCH ACCUMULATOR ASSEMBLY** (See page [CL-28](#))
9. **REMOVE CLUTCH RELEASE CYLINDER ASSEMBLY**
 - (a) Remove the 2 bolts and clutch release cylinder assembly.



DISASSEMBLY

1. REMOVE CLUTCH RELEASE CYLINDER KIT

- (a) Remove the boot from the cylinder body.
- (b) Remove the push rod from the cylinder body.
- (c) Remove the piston from the cylinder body.

NOTICE:

Be careful not to damage the inside of the cylinder body.

- (d) Remove the spring from the cylinder body.
- (e) Remove the bleeder plug cap from the bleeder plug.

2. REMOVE RELEASE CYLINDER BLEEDER PLUG

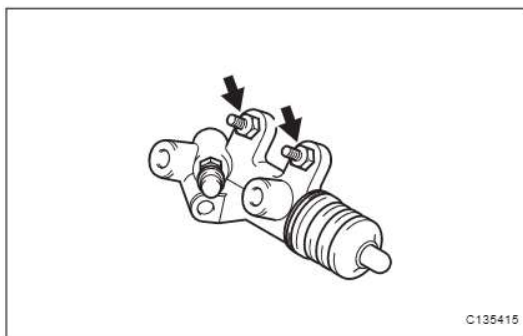
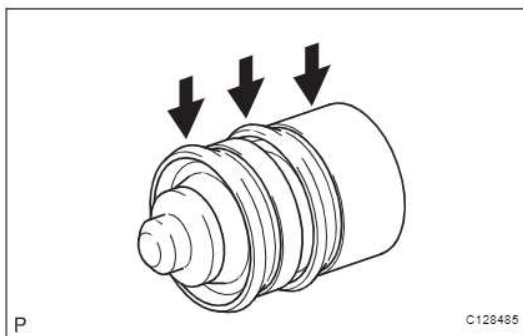
- (a) Remove the bleeder plug from the cylinder body.

CL

CL-26

CLUTCH – CLUTCH RELEASE CYLINDER

CL



REASSEMBLY

1. INSTALL RELEASE CYLINDER BLEEDER PLUG

- (a) Install the bleeder plug to the cylinder body.

Torque: 8.3 N*m (85 kgf*cm, 73 in.*lbf)

2. INSTALL CLUTCH RELEASE CYLINDER KIT

- (a) Install the bleeder plug cap to the bleeder plug.

- (b) Install a new spring to the cylinder body.

- (c) Coat the piston with lithium soap base glycol grease as shown in the illustration.

- (d) Install the piston to the cylinder body.

NOTICE:**Be careful not to damage the inside of the cylinder body.**

- (e) Install the push rod to the cylinder body.

- (f) Install the boot to the cylinder body.

INSTALLATION

1. INSTALL CLUTCH RELEASE CYLINDER ASSEMBLY

- (a) Install the clutch release cylinder and clutch line bracket with the 2 bolts.

Torque: 12 N*m (120 kgf*cm, 9 ft.*lbf)

2. INSTALL CLUTCH ACCUMULATOR ASSEMBLY (See page [CL-29](#))3. CONNECT CLUTCH LINE (See page [CL-29](#))4. INSTALL RELEASE CYLINDER HEAT INSULATOR (See page [CL-29](#))5. INSTALL CLUTCH ACCUMULATOR BRACKET (See page [CL-29](#))

6. BLEED CLUTCH LINE

- (a) Fill the brake reservoir with brake fluid and bleed the clutch system.

Torque: 8.3 N*m (85 kgf*cm, 74 in.*lbf)

7. CHECK FOR BRAKE FLUID LEAKAGE

HINT:

Check for leakage in the clutch system.

8. INSTALL AIR CLEANER CASE SUB-ASSEMBLY (See page [EM-120](#))9. INSTALL AIR CLEANER CAP SUB-ASSEMBLY (See page [ES-419](#))10. INSTALL AIR CLEANER INLET ASSEMBLY (See page [EM-120](#))

11. CHECK FLUID LEVEL IN RESERVOIR

12. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

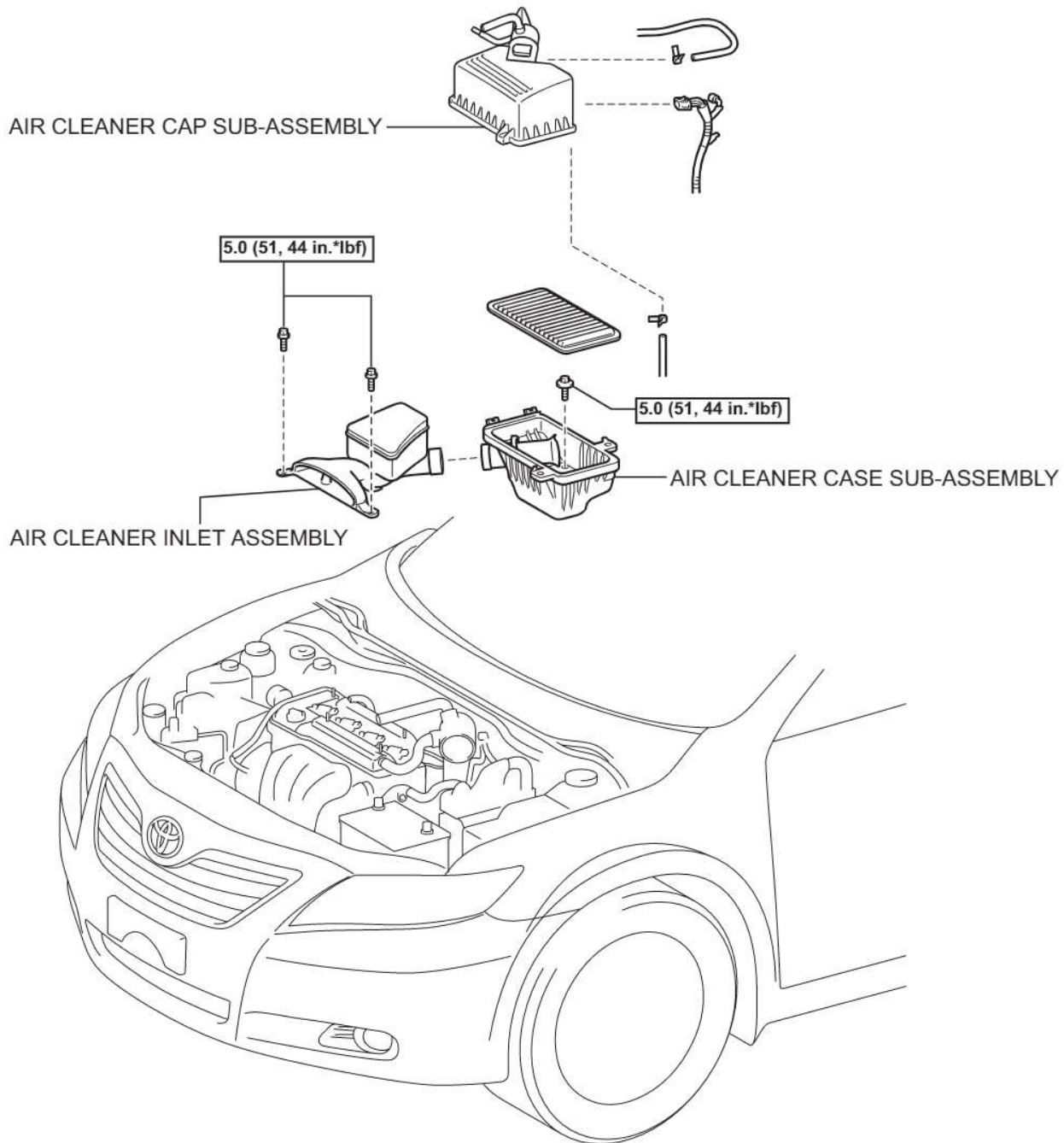
CL-26

CLUTCH – CLUTCH ACCUMULATOR

CLUTCH ACCUMULATOR

COMPONENTS

CL



T

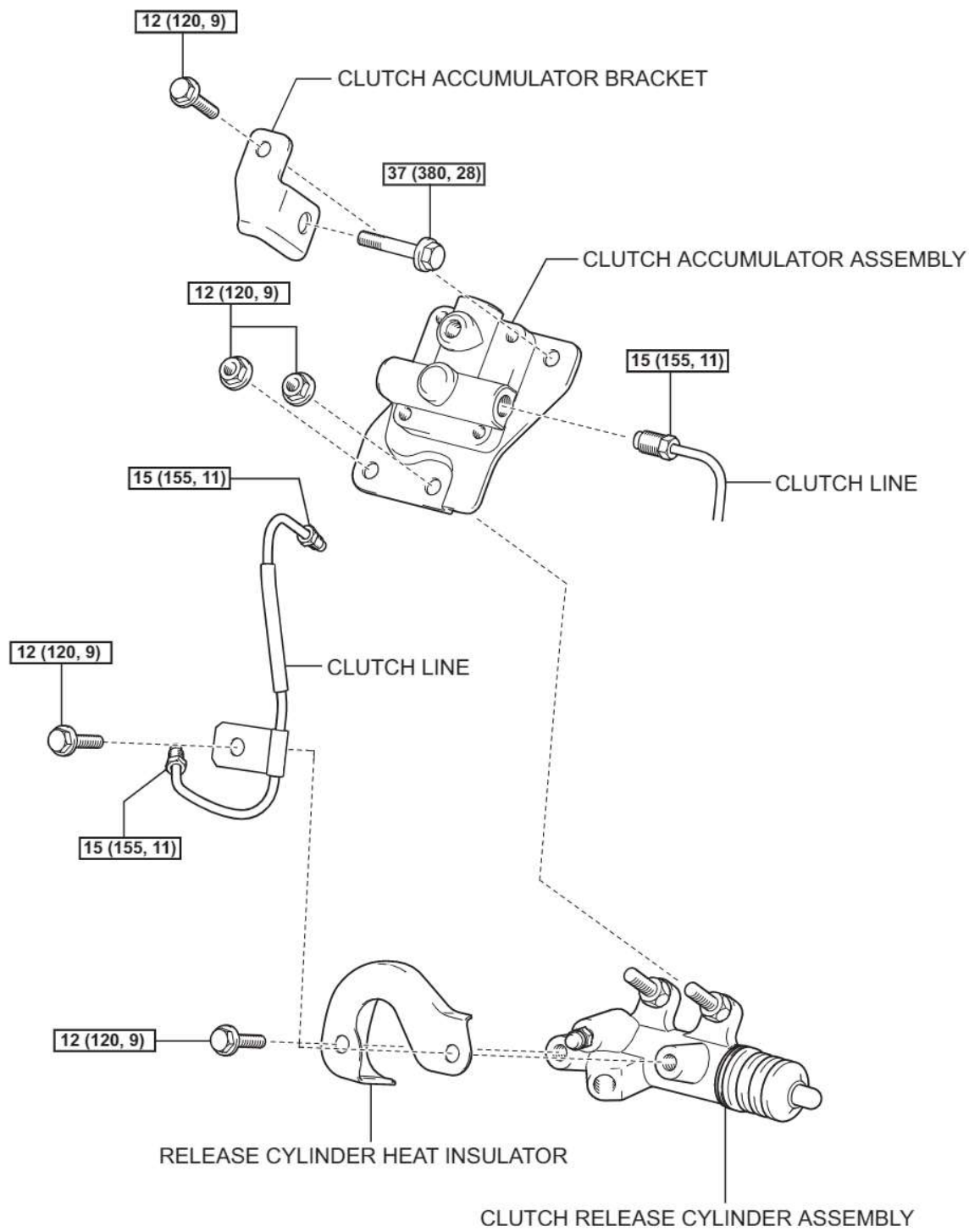
N*m (kgf*cm, ft.*lbf): Specified torque

C138373E01

CLUTCH – CLUTCH ACCUMULATOR

CL-27

CL



[N*m (kgf*cm, ft.*lbf)] : Specified torque

P

C135413E01

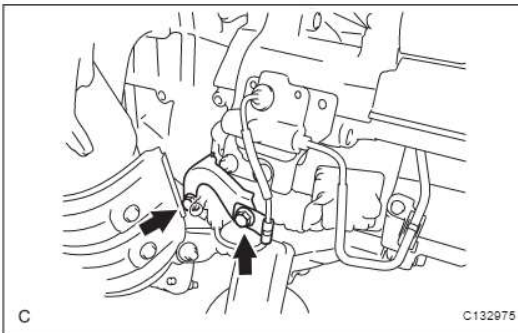
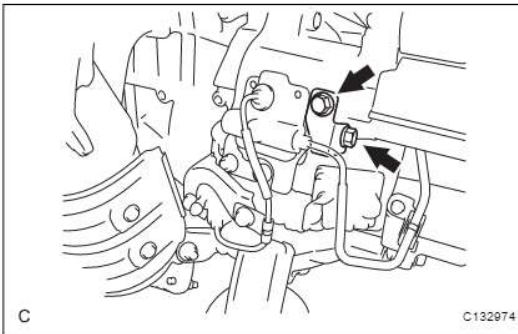
CL-28

CLUTCH – CLUTCH ACCUMULATOR

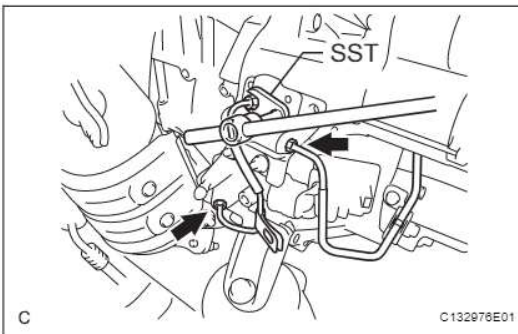
CL

REMOVAL

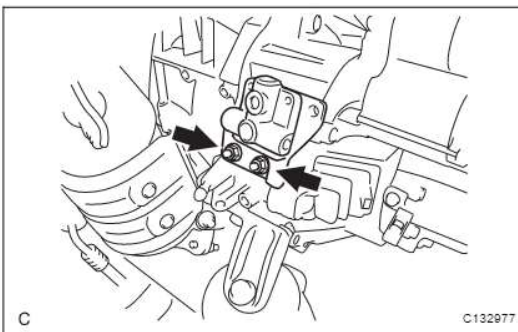
1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL
2. REMOVE AIR CLEANER INLET ASSEMBLY (See page EM-94)
3. REMOVE AIR CLEANER CAP SUB-ASSEMBLY (See page ES-416)
4. REMOVE AIR CLEANER CASE SUB-ASSEMBLY (See page EM-95)
5. REMOVE CLUTCH ACCUMULATOR BRACKET
 - (a) Remove the 2 bolts and clutch accumulator bracket.



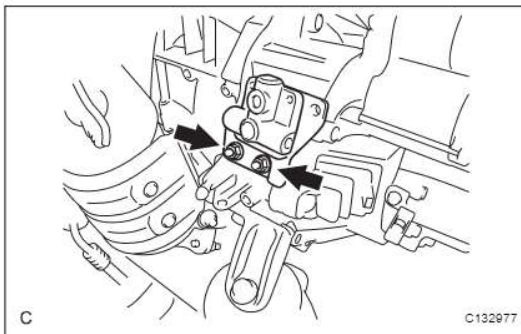
6. REMOVE RELEASE CYLINDER HEAT INSULATOR
 - (a) Remove the 2 bolts and release cylinder heat insulator.



7. DISCONNECT CLUTCH LINE
 - (a) Using SST, disconnect the clutch lines.
SST 09023-00101
HINT:
 Use a container to catch the fluid.

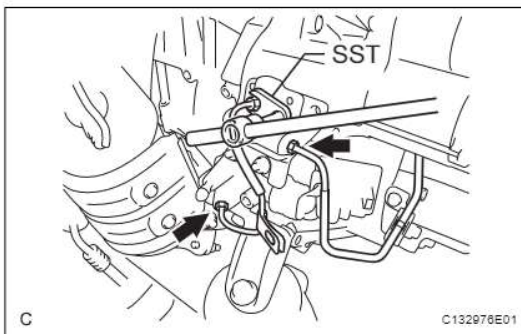


8. REMOVE CLUTCH ACCUMULATOR ASSEMBLY
 - (a) Remove the 2 nuts and clutch accumulator assembly.

CLUTCH – CLUTCH ACCUMULATOR**CL-29****INSTALLATION****1. INSTALL CLUTCH ACCUMULATOR ASSEMBLY**

- (a) Install the clutch accumulator assembly with the 2 nuts.

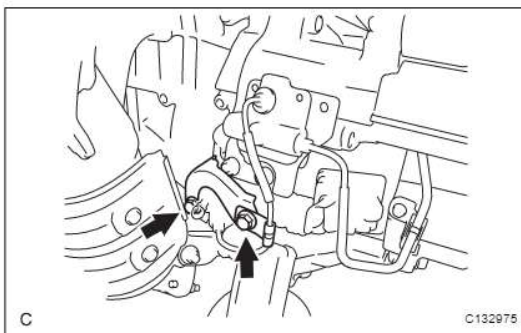
Torque: 12 N*m (120 kgf*cm, 9 ft.*lbf)

**2. CONNECT CLUTCH LINE**

- (a) Using SST, connect the clutch lines to the clutch accumulator assembly.

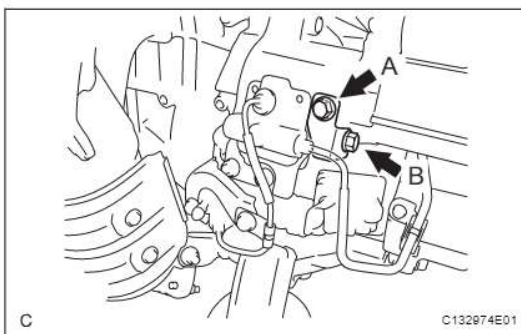
SST 09023-00101

Torque: 15 N*m (155 kgf*cm, 11 ft.*lbf)

**3. INSTALL RELEASE CYLINDER HEAT INSULATOR**

- (a) Install the release cylinder heat insulator with the 2 bolts.

Torque: 12 N*m (120 kgf*cm, 9 ft.*lbf)

**4. INSTALL CLUTCH ACCUMULATOR BRACKET**

- (a) Install the clutch accumulator bracket with the 2 bolts.

Torque: Bolt A

12 N*m (120 kgf*cm, 9 ft.*lbf)

Bolt B

37 N*m (380 kgf*cm, 28 ft.*lbf)

5. BLEED CLUTCH PIPE LINE

- (a) Fill the brake reservoir with brake fluid and bleed the clutch system.

Torque: 8.4 N*m (86 kgf*cm, 74 in.*lbf)

6. CHECK FOR BRAKE FLUID LEAKAGE

HINT:

Check for leakage in the clutch system.

7. INSTALL AIR CLEANER CASE SUB-ASSEMBLY (See page EM-120)**8. INSTALL AIR CLEANER CAP SUB-ASSEMBLY (See page ES-419)**

CL-30**CLUTCH – CLUTCH ACCUMULATOR**

9. **INSTALL AIR CLEANER INLET ASSEMBLY** (See page [EM-120](#))
10. **CHECK BRAKE FLUID LEVEL IN RESERVOIR**
11. **CONNECT CABLE TO NEGATIVE BATTERY TERMINAL**

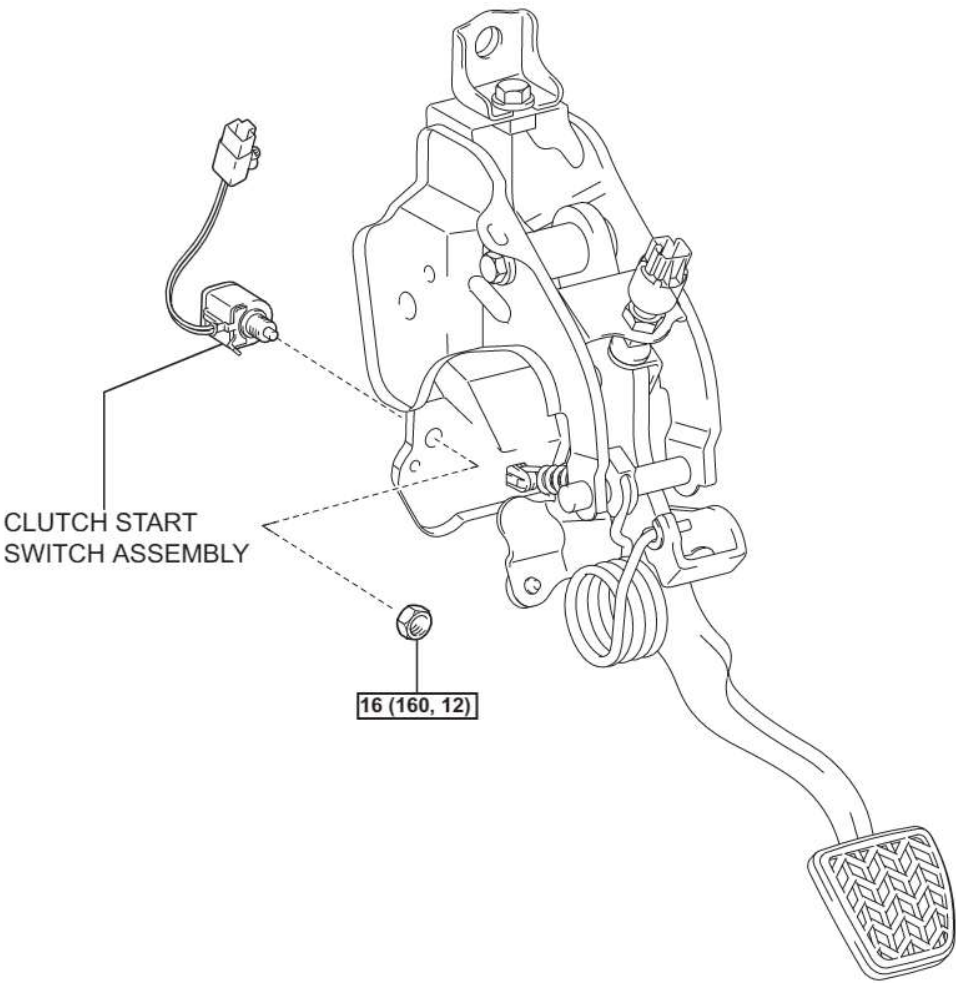
CL

CL-36

CLUTCH – CLUTCH START SWITCH

CLUTCH START SWITCH
COMPONENTS

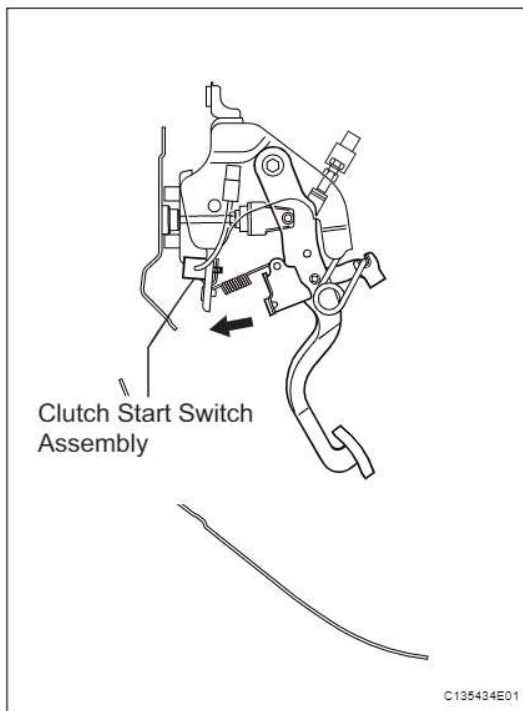
CL



N*m (kgf*cm, ft.*lbf) : Specified torque

P

C135420E01

CLUTCH – CLUTCH START SWITCH**CL-37****ON-VEHICLE INSPECTION****1. INSPECT CLUTCH START SWITCH ASSEMBLY**

- (a) Check that the engine does not start when the clutch pedal is released.
 - (b) Check that the engine starts when the clutch pedal is fully depressed.
- If necessary, replace the clutch start switch assembly.

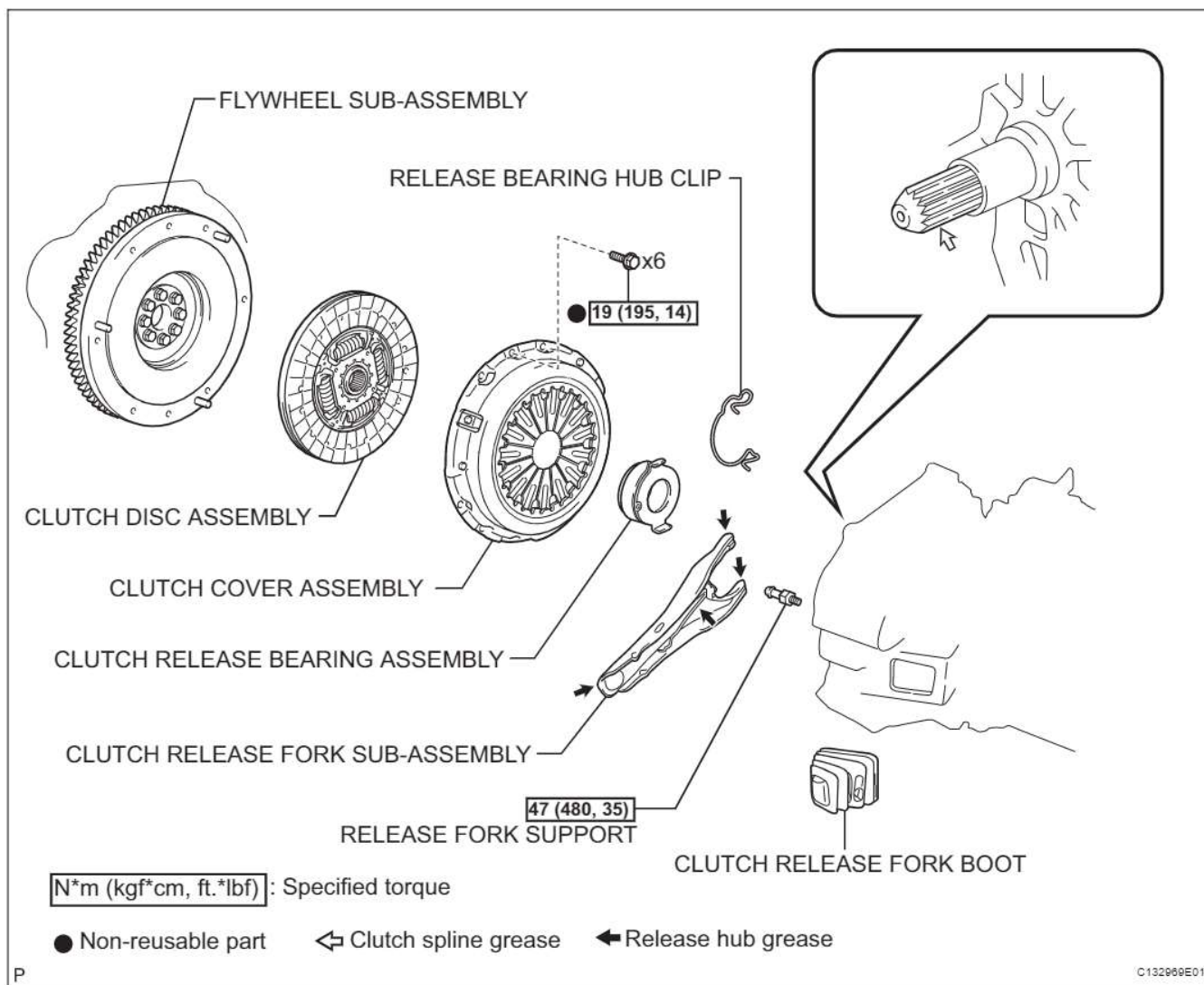
CL

CLUTCH – CLUTCH UNIT

CL-31

CLUTCH UNIT

COMPONENTS



CL-32

CLUTCH – CLUTCH UNIT

DISASSEMBLY

1. REMOVE MANUAL TRANSAXLE ASSEMBLY

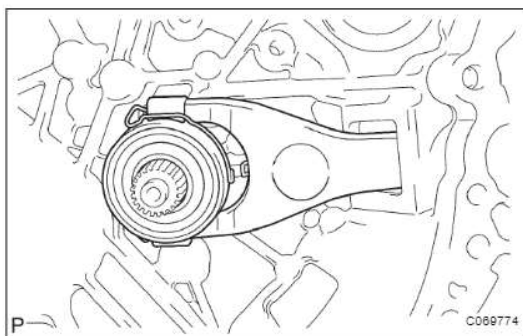
See page [MX-24](#).

2. REMOVE CLUTCH RELEASE FORK SUB-ASSEMBLY

- (a) Remove the clutch release fork with the clutch release bearing from the transaxle assembly.

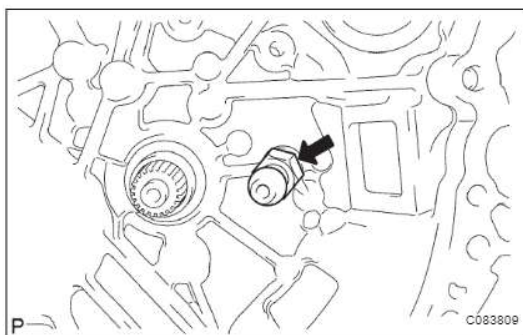
3. REMOVE CLUTCH RELEASE BEARING ASSEMBLY

- (a) Remove the release bearing hub clip and clutch release bearing assembly from the clutch release fork.



4. REMOVE RELEASE FORK SUPPORT

- (a) Remove the release fork support from the manual transaxle assembly.



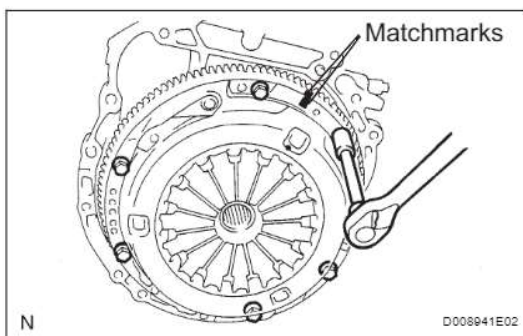
5. REMOVE CLUTCH RELEASE FORK BOOT

6. REMOVE CLUTCH COVER ASSEMBLY

- (a) Put matchmarks on the clutch cover assembly and flywheel sub-assembly.
 (b) Loosen the 6 bolts one turn at a time until spring tension is released.
 (c) Remove the 6 bolts and pull off the clutch cover assembly.

NOTICE:

Do not drop the clutch disc assembly.



7. REMOVE CLUTCH DISC ASSEMBLY

NOTICE:

Keep the lining part of the clutch disc assembly, the pressure plate and surface of the flywheel sub-assembly away from oil and foreign matter.

INSPECTION

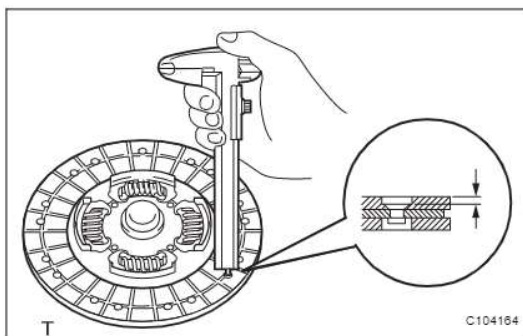
1. INSPECT CLUTCH DISC ASSEMBLY

- (a) Using vernier calipers, measure the rivet head depth.

Minimum rivet depth:

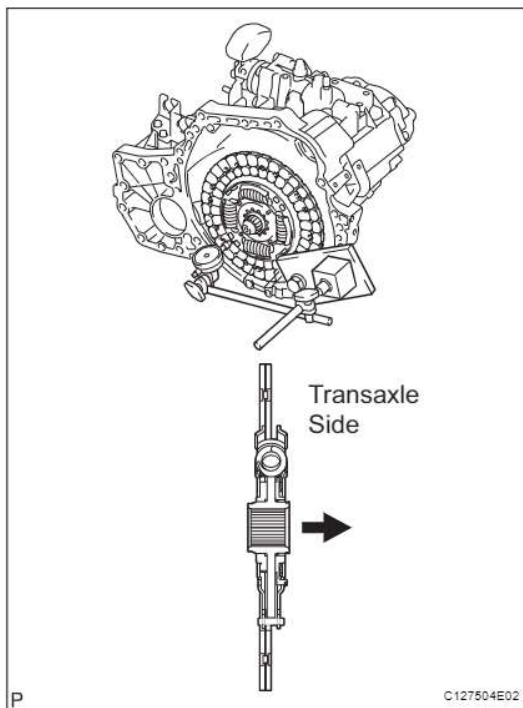
0.3 mm (0.012 in.)

If necessary, replace the clutch disc assembly.



CLUTCH – CLUTCH UNIT

CL-33



- (b) Install the clutch disc assembly to the transaxle assembly.

NOTICE:

Take care not to insert the clutch disc assembly in the wrong direction.

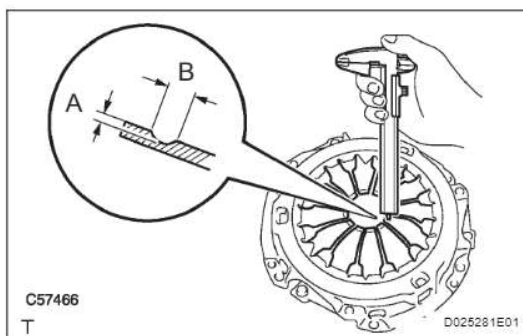
- (c) Using a dial indicator with a roller instrument, measure the clutch disc assembly runout.

Maximum runout:

0.8 mm (0.031 in.)

If necessary, replace the clutch disc assembly.

CL

**2. INSPECT CLUTCH COVER ASSEMBLY**

- (a) Using vernier calipers, inspect the diaphragm spring for depth and width of wear.

Maximum:

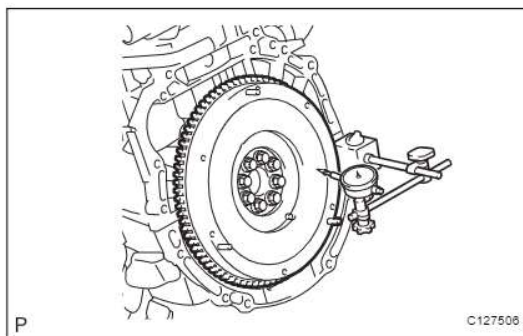
A (Depth):

0.5 mm (0.020 in.)

B (Width):

6.0 mm (0.236 in.)

If necessary, replace the clutch cover assembly.

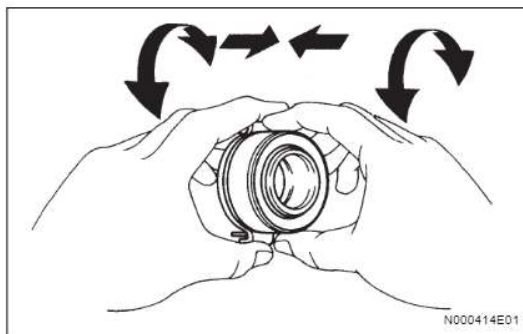
**3. INSPECT FLYWHEEL SUB-ASSEMBLY**

- (a) Using a dial indicator, measure the flywheel runout.

Maximum runout:

0.1 mm (0.004 in.)

If necessary, replace the flywheel sub-assembly.

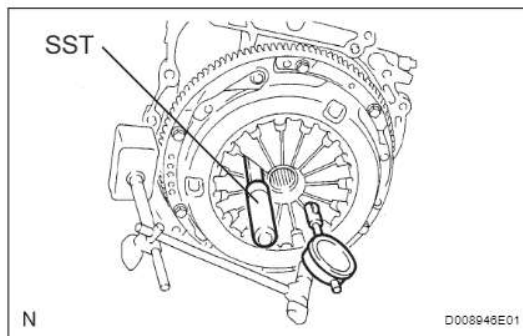
**4. INSPECT CLUTCH RELEASE BEARING ASSEMBLY**

- (a) Check that the bearing moves smoothly without abnormal resistance by turning the sliding parts of the bearing (contact surfaces with the clutch cover) while applying force in the axial direction.
- (b) Inspect the bearing for damage or wear. If necessary, replace the release bearing assembly.

CL-34

CLUTCH – CLUTCH UNIT

CL

**5. INSPECT AND ADJUST CLUTCH COVER ASSEMBLY**

- (a) Using a dial indicator with a roller instrument, check the diaphragm spring tip alignment.

Maximum variation:

0.5 mm (0.020 in.)

If alignment is not as specified, adjust the diaphragm spring tip alignment with SST.

SST 09333-00013

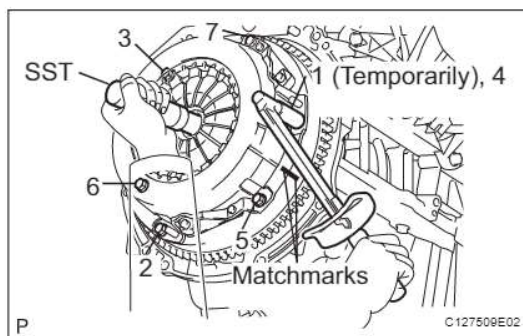
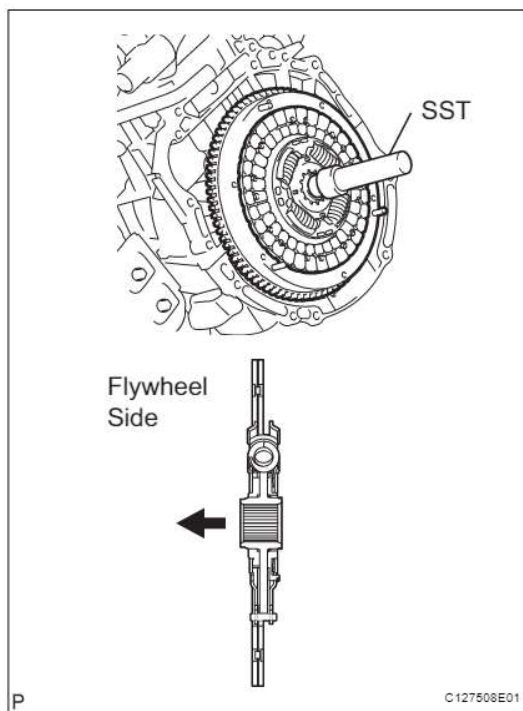
REASSEMBLY**1. INSTALL CLUTCH DISC ASSEMBLY**

- (a) Insert SST into the clutch disc assembly, then insert them into the flywheel sub-assembly.

SST 09301-00220

NOTICE:

Take care not to insert the clutch disc assembly in the wrong direction.

**2. REMOVE AND INSTALL CLUTCH COVER ASSEMBLY**

- (a) Align the matchmarks on the clutch cover assembly with the one on the flywheel sub-assembly.

- (b) Following the procedures shown in the illustration, tighten the 6 bolts in order, starting with the bolt located near the knock pin on the top.

Torque: 19 N*m (195 kgf*cm, 14 ft.*lbf)

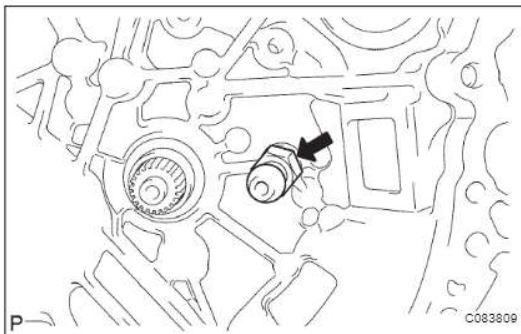
HINT:

- Following the order in the illustration, evenly tighten the bolts one turn at a time.
- Lightly move SST up and down, and right and left after checking that the disc is in the center to tighten the bolts.

SST 09301-00210

CLUTCH – CLUTCH UNIT

CL-35

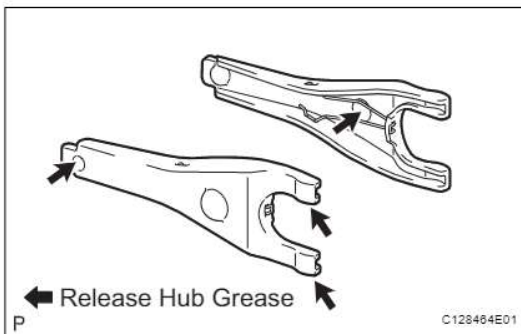
**3. INSTALL RELEASE FORK SUPPORT**

- (a) Install the release fork support to the manual transaxle assembly.

Torque: 47 N*m (480 kgf*cm, 35 ft.*lbf)

4. INSTALL RELEASE BEARING HUB CLIP

- (a) Install the release bearing hub clip to the release bearing assembly.

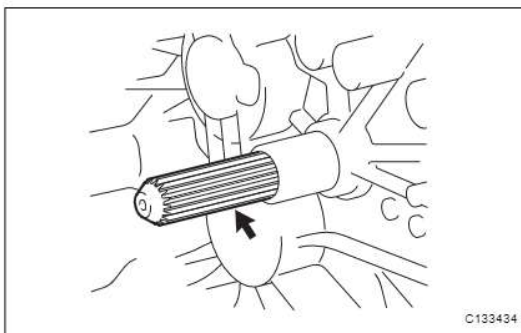
**5. INSTALL CLUTCH RELEASE FORK SUB-ASSEMBLY**

- (a) Apply release hub grease to the contact surfaces between the release fork and release bearing, fork and push rod, and fork and fork support.

Sealant:

Part No. 08887-01806, RELEASE HUB GREASE or equivalent

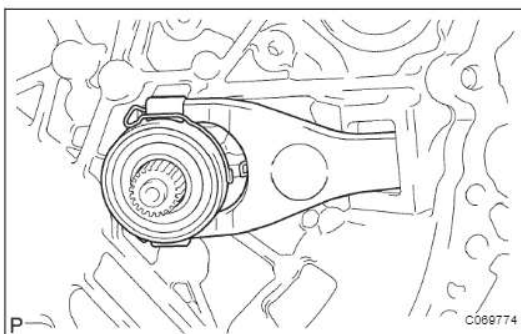
- (b) Install the release fork to the release bearing assembly.

**6. INSTALL CLUTCH RELEASE BEARING ASSEMBLY**

- (a) Apply clutch spline grease to the input shaft spline as shown in the illustration.

Sealant:

Part No. 08887-01706, CLUTCH SPLINE GREASE or equivalent



- (b) Install the release fork with the release bearing assembly to the manual transaxle assembly.

NOTICE:

After installation, move the fork back and forth to check that the release bearing slides smoothly.

7. INSTALL CLUTCH RELEASE FORK BOOT**8. INSTALL MANUAL TRANSAXLE ASSEMBLY**

See page [MX-27](#).

REMOVAL

- 1. REMOVE CLUTCH START SWITCH ASSEMBLY
 - (a) Disconnect the clutch start switch assembly connector.
 - (b) Remove the nut and clutch start switch assembly from the clutch pedal support.

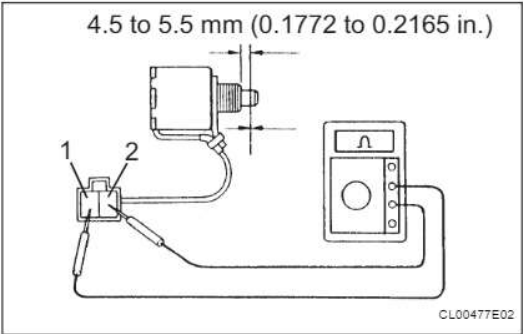
INSPECTION

- 1. INSPECT CLUTCH START SWITCH ASSEMBLY
 - (a) Measure the resistance according to the value(s) in the table below.

Standard resistance

Terminal connection	Switch position	Condition
1 - 2	ON (pushed)	Below 1 Ω
1 - 2	OFF (free)	10 kΩ or higher

CL



INSTALLATION

1. INSTALL CLUTCH START SWITCH ASSEMBLY

- (a) Install the clutch start switch assembly with the nut.

Torque: 16 N*m (160 kgf*cm, 12 ft.*lbf)

- (b) Connect the clutch start switch assembly connector.

2. INSPECT CLUTCH START SWITCH ASSEMBLY

See page [CL-37](#).

CL