## REPLACEMENT

- 1. REMOVE FR WIPER ARM LH (SEE PAGE 66–14)
- 2. REMOVE FR WIPER ARM RH (SEE PAGE 66-14)
- 3. REMOVE HOOD TO COWL TOP SEAL (SEE PAGE 66–14)
- 4. REMOVE COWL TOP VENTILATOR LOUVER LH (SEE PAGE 66-14)
- 5. REMOVE COWL TOP VENTILATOR LOUVER RH (SEE PAGE 66-14)
- 6. REMOVE WINDSHIELD WIPER MOTOR & LINK ASSY (SEE PAGE 66–14)
- 7. PERFORM ACCUMULATOR PRESSURE DOWN

## NOTICE:

32-54

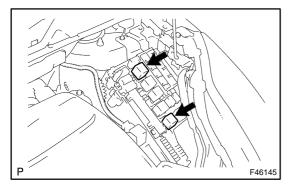
Carry out accumulator zero down and lower the internal pressure before removing the brake actuator.

- (a) Move the shift lever to the P position. Apply the parking brake and connect the hand-held tester to the DLC3.
- (b) Turn the power switch on (IG).
- (c) Turn on the hand-held tester. Select "ZERO DOWN".

## NOTICE:

#### Keep the fluid inside the reservoir above the "LOW" level by replenishing. HINT:

- Accumulator pressure is released and accumlated repeatedly, which circulates the fluid inside the accumulator when performing this procedure.
- The pump motor rotates and the accumulator is pressurized every time turning the power switch from off to on (IG).
- (d) Turn the power switch off.



# 8. BRAKE CONTROL (ECB) OFF NOTICE:

- Prohibit the brake control (ECB) certainly before air bleeding.
- Be sure to remove the motor relays No.1 and No.2 first, then the brake actuator.
- (a) With the power switch off to prohibit brake control, remove the motor relays No.1 and No.2.

## NOTICE:

If the pump motor operates while there is air remaining inside the brake actuator hose, the air will enter the actuator, resulting in difficulty in air bleeding.

- 9. REMOVE COWL TOP PANEL SUB-ASSY OUTER FRONT (SEE PAGE 32-24)
- 10. REMOVE W/CONVERTER INVERTER ASSY (SEE PAGE 21–23)

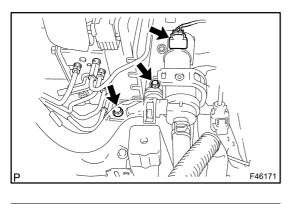
HINT:

Refer to the procedures from the removal of the engine under cover LH up untill the removal of the inverter assy with converter.

## 11. DRAIN BRAKE FLUID

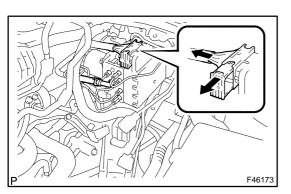
## NOTICE:

## Wash brake fluid off immediately if it adheres to any painted surface.



- 12. SEPARATE WATER W/MOTOR & BRACKET PUMP ASSY
- (a) Remove the 2 bolts and connector, separate the heater water pump assy from the gusset assy.

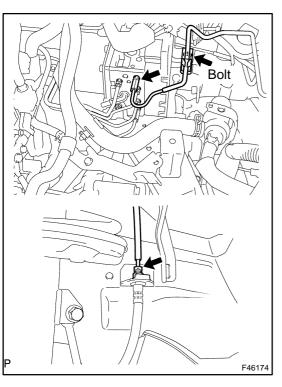
(b) Remove the 2 clamps and bolt, and remove the heater hose bracket from the gusset assy.



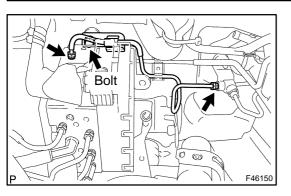
F46172

## 13. REMOVE BRAKE ACTUATOR WITH BRACKET

- (a) Release the lock and separate the connector from the brake actuator assy.
- (b) Remove the clip and separate the brake actuator hose No.2 from the brake actuator assy.
- Using SST, separate the front brake tube No.5 from the brake actuator assy and front brake flexible hose.
  SST 09023–00100
- (d) Remove the bolt and front brake tube No.5 from the bracket of the brake actuator assy.



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#### BRAKE - BRAKE ACTUATOR ASSY

- (e) Using SST, separate the front brake tube No.1. SST 09023–00100
- (f) Remove the bolt and the front brake tube No.1 from the bracket of the brake actuator assy.

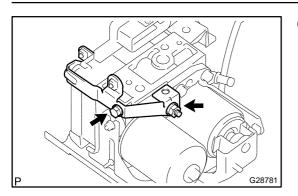
(g) Remove the 3 nuts and the brake actuator tubes assy from the brake stroke simulator and brake actuator assy.

 (h) Using SST, remove the bolt and the 4 brake tubes from the brake stroke simulator and brake actuator assy.
 SST 09023–00100

(i) Remove the bolt, 2 nuts and the brake actuator assy with gusset assy.

- P 628780
- 14. REMOVE BRAKE ACTUATOR ASSY
- (a) Remove the 2 bolts and brake actuator damper.

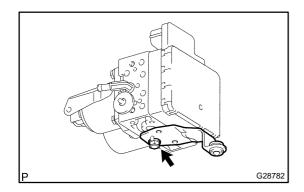
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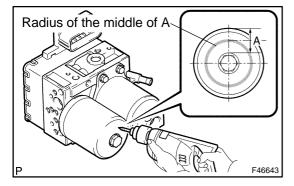
(b) Remove the bolt, nut, and the bracket from the brake actuator assy.

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- P G30216
- (c) Remove the 2 nuts, bolt, and the brake actuator assy from the gusset assy.



(d) Remove the bolt and brake actuator bracket No.2 from the brake actuator assy.



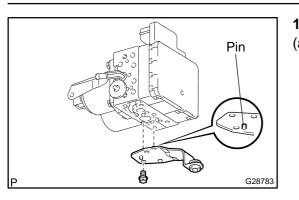
- 15. DISPOSE OF BRAKE ACTUATOR ASSY
- (a) Using a drill, slowly make a hole at the radius indicated at the middle of A in the illustration and bleed the charged gas.

#### NOTICE:

## Be sure to wear protective glasses as fragments may fly out due to pressure.

HINT:

- The hole may be drilled up to approximately 5mm to 10mm away from the point indicated by A without problem.
- The gas is nitrogen, which is colorless, odorless, and harmless.



#### BRAKE - BRAKE ACTUATOR ASSY

#### 16. INSTALL BRAKE ACTUATOR ASSY

(a) Aligning the positioning pin, install the brake actuator bracket No.2 to the brake actuator assy with the bolt.
 Torque: 18 N·m (184 kgf·cm, 13 ft·lbf)

- P F46178
- (b) Aligning the positioning pin, install the brake actuator assy to gusset assy with the 2 nuts and bolt.

Torque: 7.5 N⋅m (76 kgf⋅cm, 66 in. lbf) NOTICE:

Tighten the nuts and bolt in the order shown in the illustration.

- (c) Install the bracket to the brake actuator assy with the bolt and nut.

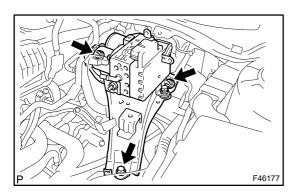
Torque: 18 N⋅m (184 kgf⋅cm, 13 ft⋅lbf) NOTICE:

Tighten the nuts and bolt in the order shown in the illustration.

- P G28780
- (d) Install the brake actuator damper to the brake actuator assy with the 2 bolts.
  Torque: 18 N⋅m (184 kgf⋅cm, 13 ft⋅lbf)

NOTICE:

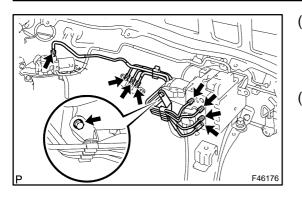
Tighten the bolts in the order shown in the illustration.



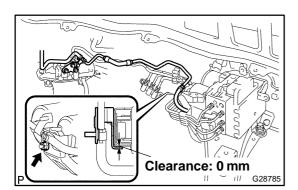
### 17. INSTALL BRAKE ACTUATOR WITH BRACKET

(a) Install the brake actuator assy and the gusset assy with the bolt and 2 nuts.
 Torque: 20 N·m (200 kgf·cm, 15 ft·lbf)

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- (b) Using SST, install the 4 brake tube to the brake stroke simulator and brake actuator assy.
  SST 09023–00100
  Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)
- (c) Set the brake tube with the clamp bracket bolt.
  Torque: 5.0 N·m (51 kgf·cm, 44 in.·lbf)
- (d) Install the brake actuator tube assy with the 2 nuts. **Torque: 8.5 N·m (87 kgf·cm, 75 in.·lbf)**



(e) Set the brake actuator tube assy with the nut. Torque: 8.5 N·m (87 kgf·cm, 75 in. lbf)

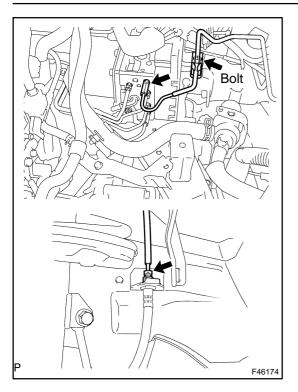
## NOTICE:

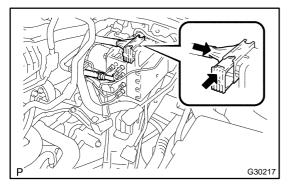
G28784

Press the brake actuator tube assy so that there is no clearance between the bracket and the actuator tube assy as shown in the illustration, and tighten the nut.

- Bolt F46150
- (f) Using SST, install the front brake tube No.1 to the brake actuator and 2 way.
  SST 09023–00100
  Torque: 15 N·m (155 kgf·cm, 11 ft·lbf)
- (g) Install the bolt and the front brake tube No.1 to the bracket of the brake actuator assy.

Torque: 5.0 N m (51 kgf cm, 44 in. lbf)

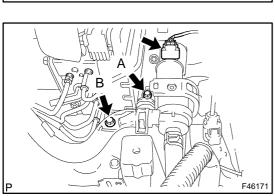




- BRAKE BRAKE ACTUATOR ASSY
- Using SST, install the front brake tube No.5.
  SST 09023–00100
  Torque: 15 N m (155 kgf cm, 11 ft lbf)
- (i) Install the bracket of front brake tube No.5 with the bolt. Torque: 5.0 N·m (51 kgf·cm, 44 in. lbf)

- (j) Install the connector to the brake actuator assy, and fix it with the lock.
- (k) Install the brake actuator hose No.2 to the brake actuator assy with the clip.

P F46172



- 18. CONNECT WATER W/MOTOR & BRACKET PUMP ASSY
- (a) Install the heater hose bracket to the gusset assy with the 2 clamps and bolt.

(b) Install the heater water pump assy with 2 bolts. **NOTICE:** 

## Tighten bolt A and then bolt B.

(c) Connect the connector to the heater water pump assy.

## 19. INSTALL W/CONVERTER INVERTER ASSY (SEE PAGE 21-23)

HINT:

Refer to the procedures from the installation of the inverter assy with converter up untill the installation of the engine under cover LH.

- 20. INSTALL COWL TOP PANEL SUB-ASSY OUTER FRONT (SEE PAGE 32-24)
- 21. INSTALL WINDSHIELD WIPER MOTOR & LINK ASSY (SEE PAGE 66–14)
- 22. INSTALL FR WIPER ARM LH (SEE PAGE 66-14)
- 23. INSTALL FR WIPER ARM RH (SEE PAGE 66–14)
- 24. FILL RESERVOIR WITH BRAKE FLUID (SEE PAGE 32-4)
- 25. BLEED BRAKE ACTUATOR (SEE PAGE 32-4)
- 26. CHECK BRAKE FLUID LEAKAGE
- 27. CHECK FLUID LEVEL IN RESERVOIR
- 28. CHECK AND CLEAR DTC (SEE PAGE 05-975)
- 29. SYSTEM INITIALIZATION (SEE PAGE 05-958)
- 30. ACTIVE TEST (SEE PAGE 05-981)