# **BRAKE FLUID**

# BLEEDING

## HINT:

If any work is performed on the brake system or if air in the brake lines is suspected, bleed the air out of the brake system.

## NOTICE:

Wash the brake fluid off immediately if it adheres to any painted surfaces.

- 1. REMOVE V-BANK COVER SUB-ASSEMBLY (See page EM-113)
- 2. REMOVE AIR CLEANER ASSEMBLY
- 3. REMOVE AIR CLEANER HOSE NO.1

## 4. FILL RESERVOIR WITH BRAKE FLUID

(a) Fill up the reservoir with brake fluid. **Fluid:** 

SAE J1703 or FMVSS No. 116 DOT3 NOTICE:

Perform the procedure after confirming the subtank at the upper of the master cylinder assembly is filled enough.

#### 5. BLEED MASTER CYLINDER HINT:

If the master cylinder has been disassembled or if the reservoir becomes empty, bleed the air out of the master cylinder.

(a) Using SST, disconnect the brake lines from the master cylinder.

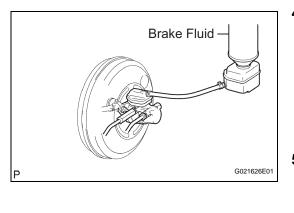
## SST 09023-00101

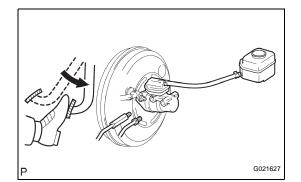
(b) Slowly depress and hold the brake pedal.

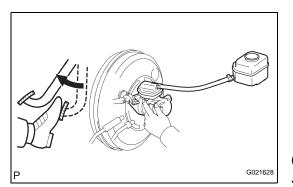
- (c) Cover the outer holes with your fingers, and release the brake pedal.
- (d) Repeat the above bleeding operation several times until the air in the master cylinder is bled out.
- (e) Using SST, connect the brake lines from the master cylinder.

SST 09023-00101 Torque: 15 N\*m (155 kgf\*cm, 11 ft.\*lbf)

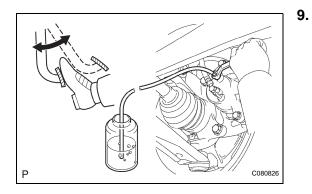
- 6. INSTALL AIR CLEANER HOSE NO.1
- 7. INSTALL AIR CLEANER ASSEMBLY
- 8. INSTALL V-BANK COVER SUB-ASSEMBLY

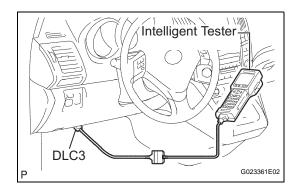


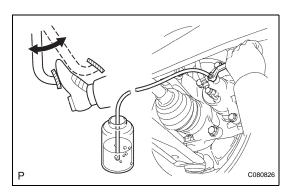












# **BLEED BRAKE LINE**

- (a) Connect the vinyl tube to the bleeder plug.
- (b) Depress the brake pedal several times, then loosen the bleeder plug with the pedal depressed.
- (c) At the point when fluid stops coming out, tighten the bleeder plug, then release the brake pedal.
- (d) Repeat the above bleeding operation until all the air in the fluid is completely bled out.
- (e) Tighten the bleeder plug completely.Torque: 8.3 N\*m (85 kgf\*cm, 73 in.\*lbf)
- (f) Repeat the above procedure to bleed the air out of the brake line for each wheel.
- 10. BLEED BRAKE ACTUATOR ASSEMBLY NOTICE:

After performing the usual air bleeding in the brake system, if the height or feel of the brake pedal cannot be obtained, perform air bleeding in the BRAKE actuator assembly with a intelligent tester by following procedures below.

- (a) Depress the brake pedal more than 20 times with the engine off.
- (b) Connect the intelligent tester to the DLC3, then turn the ignition switch to the ON position.
   NOTICE:

## Do not start the engine.

(c) Select "AIR BLEEDING" on the intelligent tester. HINT:

Refer to the Intelligent Tester Operator's Manual for further details.

- (d) Bleed the air out of the regular brake line in "Step 1: Increase" on the intelligent tester display.
   NOTICE:
  - Perform the air bleeding by following the steps displayed on the intelligent tester.
  - Make sure that the brake fluid in the master cylinder reservoir tank does not become empty.
  - (1) Connect the vinyl tube to either one of the bleeder plugs.
  - (2) Depress the brake pedal several times, then loosen the bleeder plug of one of the above wheels with the pedal depressed.
  - (3) When fluid stops coming out, tighten the bleeder plug, then release the brake pedal.
  - (4) Repeat the above bleeding operation until all the air in the fluid is completely bled out.
  - (5) Tighten the bleeder plug completely.Torque: 8.3 N\*m (85 kgf\*cm, 73 in.\*lbf)
  - (6) Repeat the above procedure to bleed the air out of the brake line for each wheel.

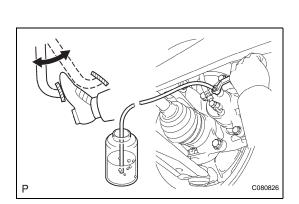
- Bleed the air out of the suction line in "Step 2: Inhalation" on the intelligent tester display.
   NOTICE:
  - Perform the air bleeding by following the steps displayed on the intelligent tester.
  - Make sure that the brake fluid in the master cylinder reservoir tank does not become empty.
  - (1) Connect the vinyl tube to the bleeder plug at the right front wheel or the right rear wheel and loosen the bleeder plug.
  - (2) Operate the ABS & TRACTION actuator assembly using the intelligent tester to bleed the air.

NOTICE:

- The operation stops automatically in 4 seconds.
- At this time, be sure to release the brake pedal.
- (3) Check that the operation has stopped, by referring to the intelligent tester display.
- (4) Repeat the above bleeding operation until all the air in the fluid is completely bled out.
- (5) Tighten the bleeder plug completely.Torque: 8.3 N\*m (85 kgf\*cm, 73 in.\*lbf)
- (6) For the rest of the wheels, bleed the air in the same way as stated in the above procedure.
- (f) Bleed the air out of the pressure reduction line in "Step 3: Decrease" on the intelligent tester display.
   NOTICE:
  - Perform air bleeding by following the steps displayed on the intelligent tester.
  - Make sure that the brake fluid in the master cylinder reservoir tank does not become empty.
  - (1) Connect a vinyl tube to either one of the bleeder plugs.
  - (2) Loosen the bleeder plug.
  - (3) Using the intelligent tester, operate the ABS & TRACTION actuator assembly using intelligent tester, completely depress the brake pedal and keep it.

NOTICE:

- The operation stops automatically in 4 seconds. When performing this procedure continuously, an interval of at least 20 seconds is required.
- When the operation is completed, the brake pedal slightly goes down. This a normal phenomenon caused when the solenoid opens.



- During this procedure, the pedal seems heavy, but completely depress it so that the brake fluid comes out from the bleeder plug.
- Be sure to keep depressing the brake pedal. Never depress and release the pedal repeatedly.
- (4) Tighten the bleeder plug, then release the brake pedal.
- (5) Repeat the above bleeding operation until all the air in the fluid is completely bled out.
- (6) Tighten the bleeder plug completely.
  Torque: 8.3 N\*m (85 kgf\*cm, 73 in.\*lbf)
- (7) Repeat the above procedure to bleed the air out of the brake line for each wheel.
- (g) Bleed the air out of the regular brake line again in "Step 4: Increase" on the intelligent tester display. **NOTICE:** 
  - Perform air bleeding by following the steps displayed on the intelligent tester.
  - Make sure that the brake fluid in the master cylinder reservoir tank does not become empty.
  - (1) Connect the vinyl tube to either one of the bleeder plug.
  - (2) Depress the brake pedal several times, then loosen the bleeder plug of the above wheels with the pedal depressed.
  - (3) When fluid stops coming out, tighten the bleeder plug, then release the brake pedal.
  - (4) Repeat the above bleeding operation until all the air in the fluid is completely bled out.
  - (5) Tighten the bleeder plug completely. Torque: 8.3 N\*m (85 kgf\*cm, 73 in.\*lbf)
  - (6) Repeat the above procedure to bleed the air out of the brake line for each wheel.

# 11. REMOVE FLUID LEVEL IN RESERVOIR

(a) Check the fluid level and add fluid, if necessary. **Fluid:** 

SAE J1703 or FMVSS No. 116 DOT3