BRAKE FLUID (W/ VSC)

320QA–01

BLEEDING

HINT:

- If any work is done on the brake system or if air in the brake lines is suspected, bleed the air from the system.
- When bleeding, keep the amount of the fluid within the line of reservoir between Min. and Max.

NOTICE:

- **Wash off the brake fluid immediately if it comes into contact with a painted surface.**
- **With the reservoir cap removed, when depressing the brake pedal, the fluid will spray.**

1. FILL RESERVOIR WITH BRAKE FLUID
Fluid: SAE J1703 or FMVSS NO. 116 DOT3

2. IN CASE OF USING HAND–HELD TESTER:
BLEED BRAKE MASTER CYLINDER

HINT:

If the brake master cylinder is disassembled, if the brake line is disconnected from the brake master cylinder if the reservoir become empty, bleed brake master cylinder.

(a) Turn the ignition switch to OFF, depress the brake pedal more than 40 times.

HINT:

When a pressure in power supply system is released, reaction force becomes light and stroke becomes longer.

(b) Turn the ignition switch to ON, check that the pump stops after approx. 30 to 40 sec.

NOTICE:

When the pump does not stop, repeat step (a) and (b) again.

(c) With the ignition switch remained ON, depress the brake pedal more than 20 times.

(d) Follow the procedure in step 4 and bleed the right and left front brake caliper.

(e) Keep depressing the brake pedal, bleed the right and left rear brake caliper.

HINT:

It is not necessary to depress the pedal continuously, because brake fluid flows out by first depressing.

(f) Connect hand–held tester.
  (1) Turn the ignition switch to OFF, connect the hand–held tester to DLC3.
  (2) Turn the ignition switch to ON and select ”AIR BLEEDING” on the hand–held tester.

HINT:

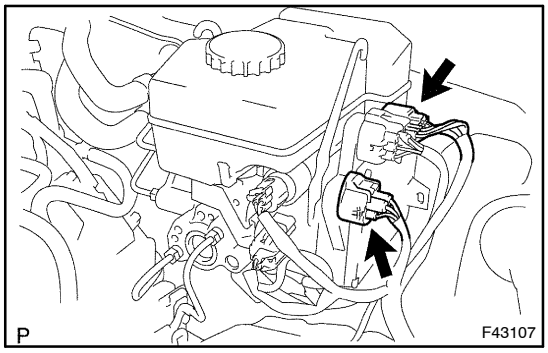
Please refer to the hand–held tester operator’s manual for further details.

(g) Bleed right front brake line.
  (1) Select ”FR LINE” on the hand–held tester.
  (2) With ”FR LINE” turned ON with the hand–held tester, depress the brake pedal and hold it to bleed the right front brake caliper.
  (3) Repeat step (2) until there are no more air bubbles in the fluid.

(h) Bleed left front brake line.
  (1) Select ”FL LINE” on the hand–held tester.
  (2) With ”FL LINE” turned ON with the hand–held tester, depress the brake pedal and hold it to bleed the left front brake caliper.
  (3) Repeat step (2) until there are no more air bubbles in the fluid.

(i) Bleed rear brake line.
  (1) Select ”RR LINE” on the hand–held tester.
  (2) With ”RR LINE” turned ON with the hand–held tester, bleed the left and right rear brake caliper.

(j) Disconnect the hand-held tester from DLC3.
(k) Clear the DTC (See page 05–730).



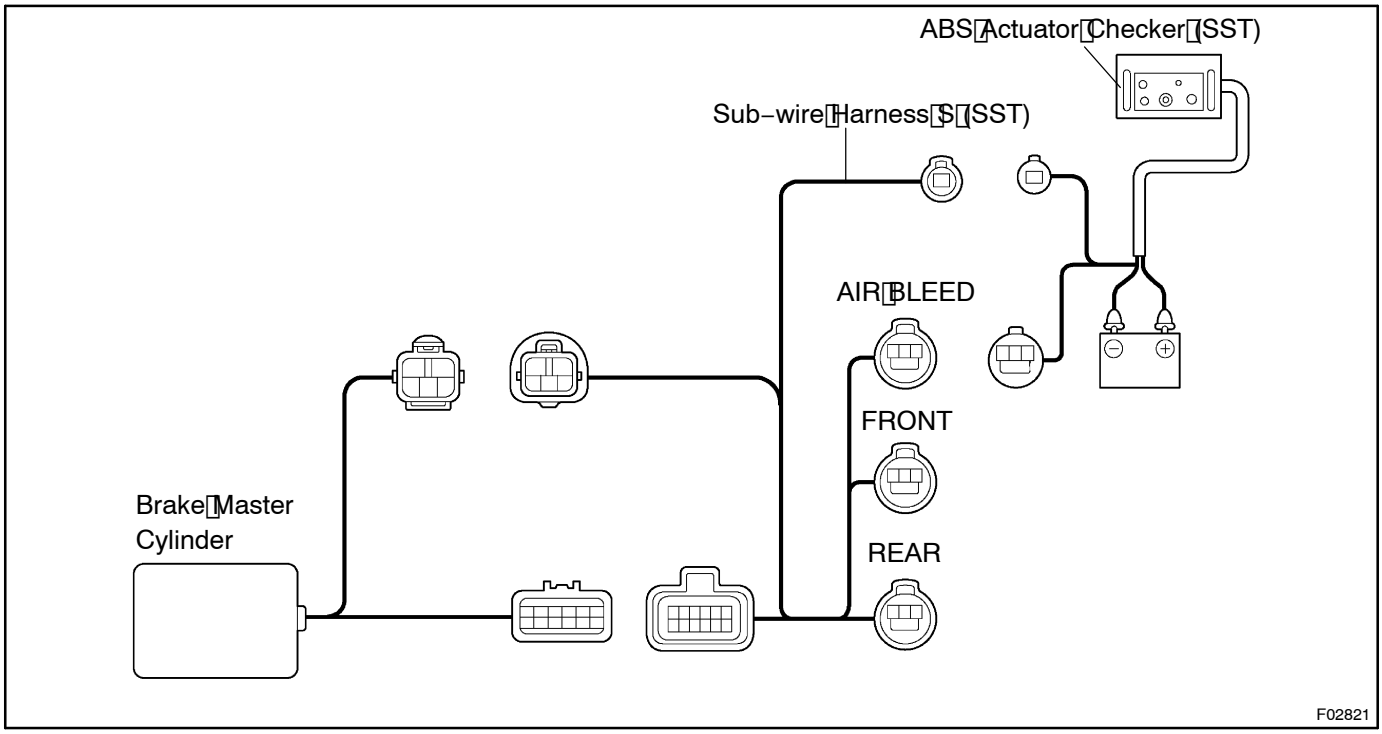
3. IN CASE OF USING ABS ACTUATOR CHECKER (SST) BLEED BRAKE MASTER CYLINDER

HINT:
If the brake master cylinder is disassembled, if the brake line is disconnected from the brake master cylinder if the reservoir become empty, bleed the brake master cylinder.

(a) Disconnect the 2 connectors from the brake master cylinder.
(b) Connect the actuator checker (SST) to the brake master cylinder side wire harness via the sub–wire harness (SST), as shown in the chart below.
SST 09990–00150, 09990–00480

HINT:
Connect the connector with the label of ”AIR BLEED” attached to the connector of actuator checker.

(c) Connect the red cable of the checker to the battery positive (+) terminal and the black cable to the negative (–) terminal.



(d) Turn the ignition switch to OFF, depress the brake pedal more than 40 times.

HINT:

When a pressure in power supply system is released, reaction force becomes light and stroke becomes longer.

(e) Turn the ignition switch to ON, check that the pump stops after 30 to 40 sec.

NOTICE:

When the pump does not stop, repeat step (d) and (e) again.

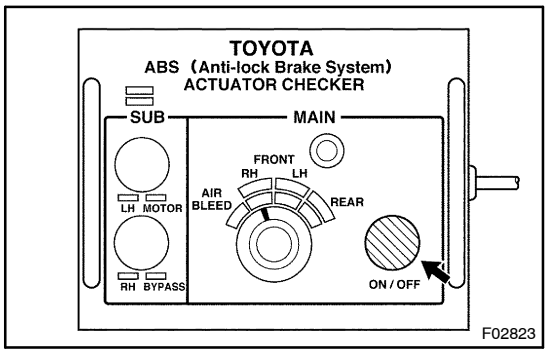
(f) With the ignition switch remained ON, depress the brake pedal more than 20 times.

(g) Follow the procedure in step 4 and bleed the right and left front wheel caliper.

(h) Keep depressing the brake pedal depressed, bleed the right and left rear brake caliper.

HINT:

It is not necessary to depress the pedal continuously, because brake fluid flows out by first depressing.



(i) Bleed right front brake line.

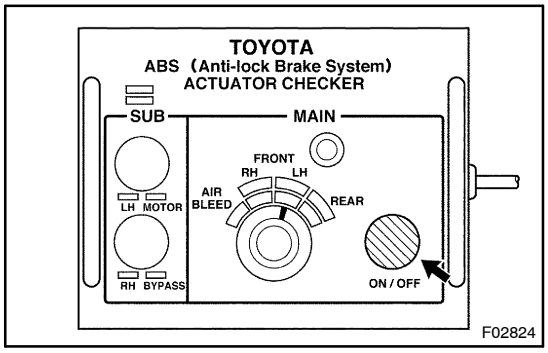
(1) Turn the selector switch of the actuator checker to the ”FRONT RH” position.

(2) Push and hold in MAIN push switch, depress the brake pedal and hold it to bleed the right front brake caliper.

NOTICE:

Do not keep the MAIN switch pushed in for more than 10 sec. When operating it continuously, set the interval of more than 20 sec.

(3) Repeat step (2) until air bubbles in the fluid has gone.



(j) Bleed left front brake line.

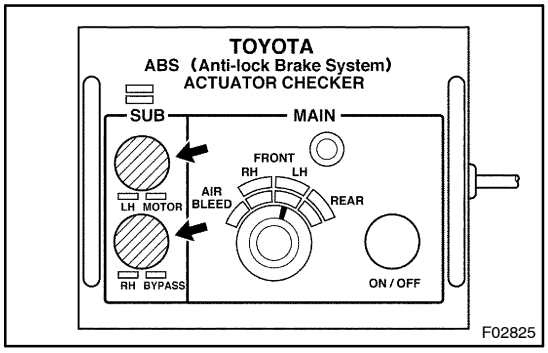
(1) Turn the selector switch of the actuator checker to the ”FRONT LH” position.

(2) Push and hold in the MAIN push switch, depress the brake pedal and hold it to bleed the left front brake caliper.

NOTICE:

Do not keep the MAIN switch pushed in for more than 10 sec. When operating it continuously, set the interval of more than 20 sec.

(3) Repeat step (2) until air bubbles in the fluid has gone.



(k) Bleed right rear brake line.
(1) Push and hold in the "SUB LH" and "SUB RH" switches, bleed the right rear brake caliper.

NOTICE:
Do not keep the MAIN switch pushed in for more than 10 sec. When operating it continuously, set the interval of more than 20 sec.

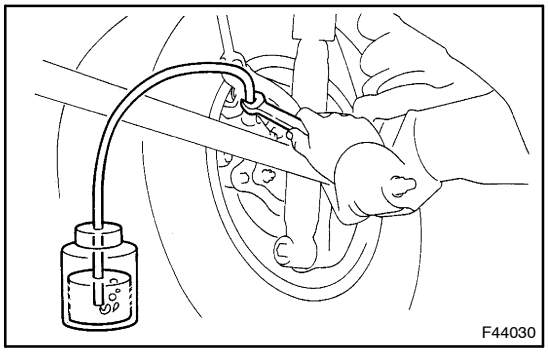
(2) Repeat step (1) until air bubbles in the fluid has gone.

(l) Observe the procedure in step (k) and bleed left rear brake line.

(m) Disconnect the actuator checker (SST) and sub-wire harness (SST) from the brake master cylinder.
SST 09990-00150, 09990-00480

(n) Connect the 2 connectors to the brake master cylinder.

(o) Clear the DTC (See page 05-730).



4. BLEED BRAKE LINE

(a) Connect the vinyl tube to the brake caliper.

(b) Ignition key is turn to ON.

(c) Depress the brake pedal several times, and then loosen the bleeder plug with the pedal held down.

(d) At the point when fluid stops coming out, tighten the bleeder plug, then release the brake pedal.

(e) Repeat (b) and (c) until all the air in the fluid has been bled out.

(f) Repeat the above procedure to bleed the brake line for each wheel.
Torque: 11 N·m (112 kgf·cm, 8 ft·lbf)

5. CHECK FLUID LEVEL IN RESERVOIR

(a) With the ignition switch to OFF, depress the brake pedal more than 40 times.

HINT:
When a pressure in power supply system is released, reaction force becomes lighter and stroke becomes longer.

(b) Remove the reservoir cap. Add brake fluid up to the "MAX" line.
Fluid: SAE J1703 or FMVSS NO. 116 DOT3