BRAKE SYSTEM (OTHER) BRAKE FLUID(w/ ABS) BLEEDING

CAUTION / NOTICE / HINT

NOTICE:

- Bleed air with the neutral and the parking brake applied.
- Bleed air while adding fluid to maintain the fluid level between the MIN and MAX lines of the reservoir.
- Do not allow brake fluid to come into contact with any painted surface. If contact occurs, wash off the fluid
- When bleeding air, select the suitable procedure listed below.

Replaced/Installed Item	Work Procedure
Flexible hose (Rear)	Bleed brake line
Disc brake cylinder assembly (Rear)	
Brake actuator assembly	Bleed brake system
Brake master cylinder sub-assembly	
Brake master cylinder reservoir assembly	
Brake booster assembly	
Flexible hose (Front)	
Disc brake cylinder assembly (Front)	

PROCEDURE



■ 1.BLEED BRAKE LINE

- a. Remove the brake master cylinder reservoir filler cap assembly.
- Add brake fluid to keep the level between the MIN and MAX lines of the reservoir while bleeding the brakes.

Brake fluid:

SAE J1703 or FMVSS No. 116 DOT 3

Do not remove the filter from the brake master cylinder reservoir and be sure to fill with new brake fluid to avoid any potential contamination of the brake system. Contamination, for example by dirt particles or mineral oil, could lead to functional brake problems.

- c. Loosen the bleeder plug of the front disc brake cylinder RH.
- Repeatedly depress the brake pedal and bleed the air from the bleeder plug of the front disc brake cylinder RH. **NOTICE:**

Add fluid as necessary so that the fluid in the reservoir does not decrease below the MIN level.

After air is completely bled out, tighten the bleeder plug while depressing the brake pedal.

Torque:

10.75 N*m (110 kgf*cm, 8 ft.*lbf)

- Bleed the air from the bleeder plug of the front disc brake cylinder LH using the same procedure as for the RH side.
- g. Loosen the bleeder plug of the rear disc brake cylinder RH.
- Repeatedly depress the brake pedal and bleed the air from the bleeder plug of the rear disc brake cylinder RH.

NOTICE:

Add fluid as necessary so that the fluid in the reservoir does not decrease below the MIN level.

i. After air is completely bled out, tighten the bleeder plug while depressing the brake pedal.

Torque

10.75 N*m (110 kgf*cm, 8 ft.*lbf)

- j. Bleed the air from the bleeder plug of the rear disc brake cylinder LH using the same procedure as for the RH side.
- k. Check for brake fluid leaks.
- Check the brake fluid level in the reservoir (Click hereBrake>BRAKE SYSTEM (OTHER)>BRAKE FLUID(w/ ABS)>ON-VEHICLE INSPECTION).

2.BLEED BRAKE SYSTEM

NOTICE:

Be sure to clean your hands before bleeding from the master cylinder to avoid any potential contamination of the brake system. Contamination, for example by dirt particles or mineral oil, could lead to functional brake problems.

a. Bleed brake master cylinder:

HINT:

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

- i. Remove the brake master cylinder reservoir filler cap assembly.
- ii. Add brake fluid until the fluid level is between the MIN and MAX lines of the reservoir.

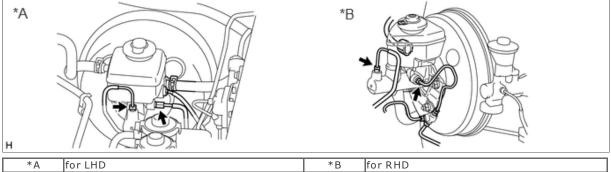
Brake fluid:

SAE J1703 or FMVSS No. 116 DOT 3

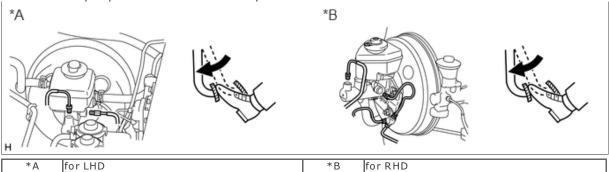
NOTICE:

Do not remove the filter from the brake master cylinder reservoir and be sure to fill with new brake fluid to avoid any potential contamination of the brake system. Contamination, for example by dirt particles or mineral oil, could lead to functional brake problems.

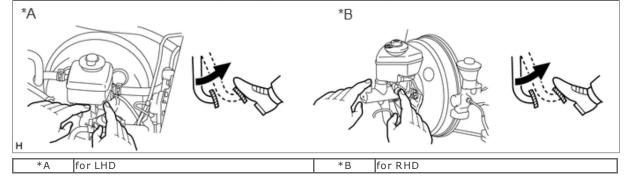
iii. Using a union nut wrench, disconnect the 2 brake lines from the master cylinder.



iv. Slowly depress and hold the brake pedal.

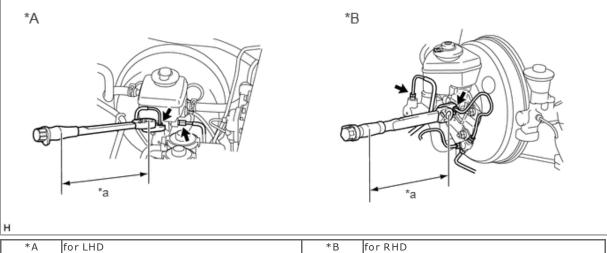


v. Block the outer holes with your fingers, and release the pedal.



vi. Repeat the 2 previous steps 3 or 4 times.

vii. Using a union nut wrench, connect the 2 brake lines to the brake master cylinder.



*A for LHD *B for RHD *a Torque Wrench Fulcrum Length - -

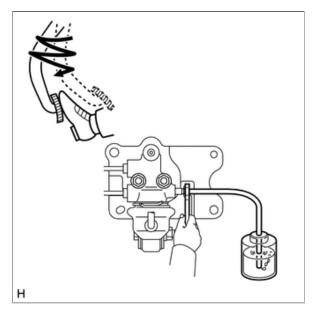
Torque:

Specified tightening torque: 15.2 N*m (155 kgf*cm, 11 ft.*lbf)

HINT:

- · Calculate the torque wrench reading when changing the fulcrum length of the torque wrench. Click hereGeneral>INTRODUCTION>REPAIR INSTRUCTION>PRECAUTION
- · When using a union nut wrench (fulcrum length of 22 mm (0.8661 in.)) + torque wrench (fulcrum length of 162 mm (6.3779 in.)): 13.4 N*m (137 kgf*cm, 10 ft.*lbf)
- **b.** Bleed air from load sensing valve body:
 - i. Remove the bleeder plug cap.

ii.



Connect the vinyl tube to the bleeder plug.

- iii. Depress the brake pedal several times, and then loosen the bleeder plug with the pedal depressed.
- iv. When fluid stops coming out, immediately tighten the bleeder plug. Then release the pedal.
- v. Repeat the 2 previous steps until all the air in the brake fluid is gone.
- vi. Tighten the bleeder plug.

Torque:

10.5 N*m (107 kgf*cm, 8 ft.*lbf)

- vii. Install the bleeder plug cap.
- viii. Bleed air from the brake line for each wheel by repeating the above procedures.
- c. Bleed brake line:
 - i. Remove the bleeder plug cap.
 - ii. Connect the vinyl tube to the bleeder plugs.
 - iii. Loosen the bleeder plug of the front disc brake cylinder RH.
 - iv. Repeatedly depress the brake pedal and bleed the air from the bleeder plug of the front disc brake cylinder RH.

NOTICE:

Add fluid as necessary so that the fluid in the reservoir does not decrease below the MIN level.

v. After air is completely bled out, tighten the bleeder plug while depressing the brake pedal.

Torque

10.75 N*m (110 kgf*cm, 8 ft.*lbf)

- vi. Bleed the air from the bleeder plug of the rear disc brake cylinder LH using the same procedure as for the RH side.
- vii. Install the bleeder plug cap.
- viii. Check for brake fluid leaks.
 - ix. Check the brake fluid level in the reservoir (Click hereBrake>BRAKE SYSTEM (OTHER)>BRAKE FLUID(w/ABS)>ON-VEHICLE INSPECTION).