Harley-Davidson Sportster Evolution Front Brake Fluid Change

Bleeding and refilling the front brake lines

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INTRODUCTION

This guide will show you how to bleed and refill the front brake lines on the Harley-Davidson Sportster Evolution.

TOOLS:

- Brake Bleeder Hose (1)
- Phillips #2 Screwdriver (1)

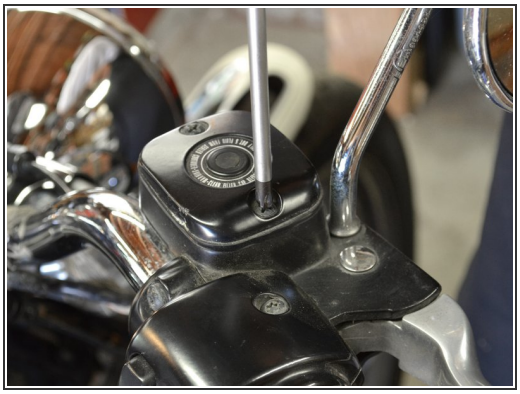
PARTS:

- Brake Fluid (1)

Step 1 — Preparing the Motorcycle

When working with the brake lines, we strongly recommend using a bike stand or similar apparatus to stand the bike upright and lock the front tire in place.

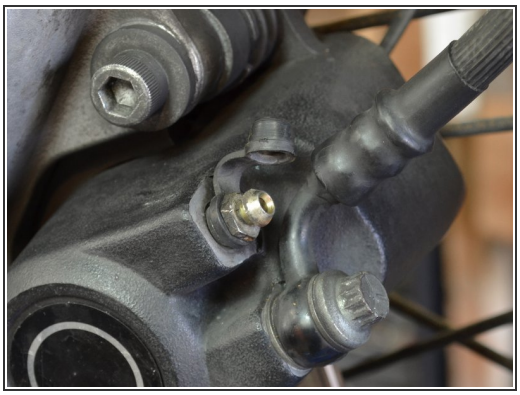
Step 2 — Opening the brake line



- Using a Phillips #2 screwdriver, remove the two screws securing the lid on the master brake fluid cylinder.
- Remove the lid from the master cylinder, and set it aside.

Brake fluid is very caustic, and will easily strip paint and discolor chrome. Do your best to not spill any, and be ready with a damp rag in the event of a spill.

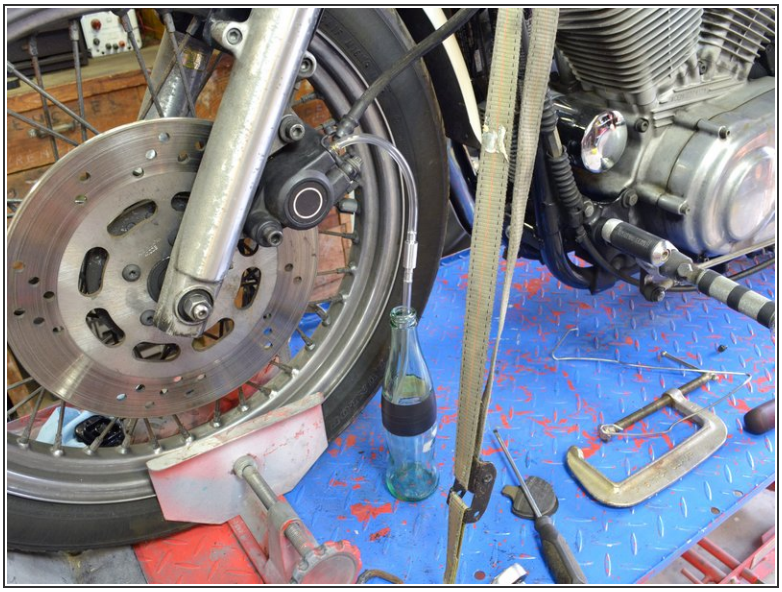
Step 3



- Locate the brake fluid bleed valve on the top of the front brake assembly, and flip up the rubber cap covering it.
- Slide a 3/8" brake bleeder hose over the bleed valve.

If you are using a stop valve for bleeding the brake lines, make sure that the arrow on the valve is pointing *away* from the brake assembly (along the direction of flow).

Step 4



- Make sure that the free end of the bleed tube is safely pointed at some kind of reservoir. A glass bottle works great.
- Bleeding the brake lines is a whole-body effort. You will need to use one hand to pump the brake handle and one hand to maneuver a wrench on the brake bleed valve.
  - You may need to raise or lower your bike stand to be able to reach all the way across the bike.

Step 5 — Flushing the brake line

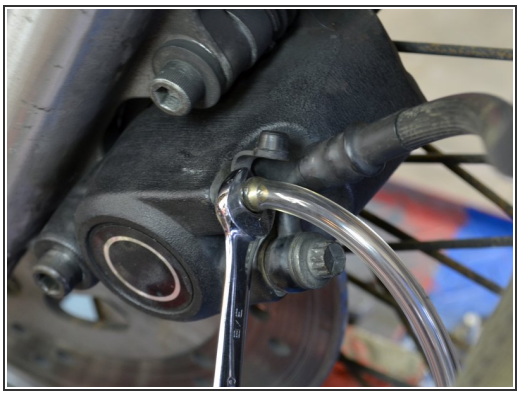
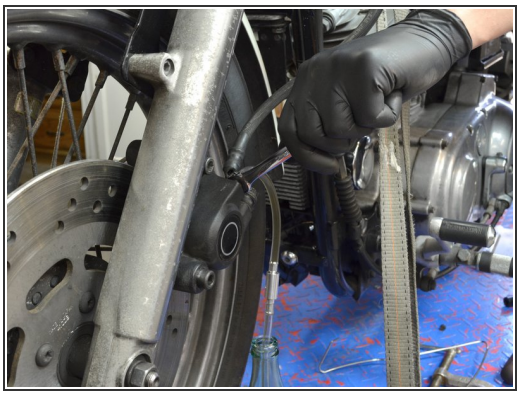
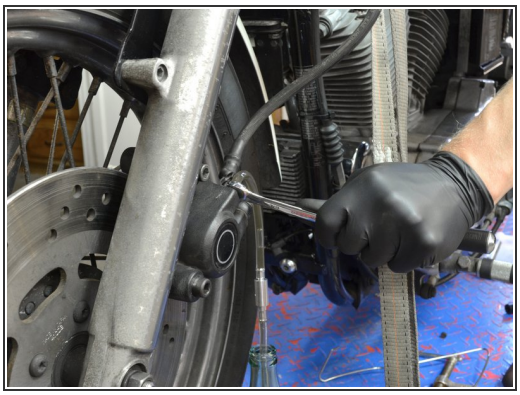


⚠ Before proceeding, read all the way through steps five and six to make sure that you completely understand the actions for bleeding the brake lines.

- Carefully pump the brake lever a few times to build up pressure in the brake lines.

ⓘ In the next step, you will release the fluid from the brake lines by opening the bleed valve at the bottom of the lines and simultaneously squeezing the brake lever.

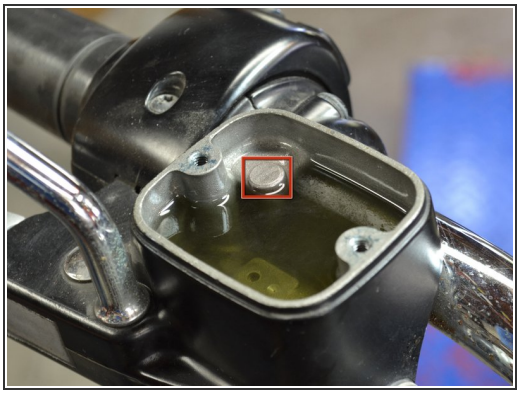
Step 6

- Using a 3/8" wrench with your left hand, open the bleed valve on the front brake cylinder.
  - The built-up pressure in the lines will force some of the brake fluid out of the lines.
- Continue to force more brake fluid out of the brake lines by depressing the front brake lever with your right hand.

  ⚠ While bleeding the brakes, focus on the bleeder hose. If you see an air bubble traveling up the bleed hose, close the bleed valve immediately, and begin the process again.
- Once the brake lever is completely depressed, quickly close the bleed valve, making sure that no air bubbles enter into the brake lines.

Step 7

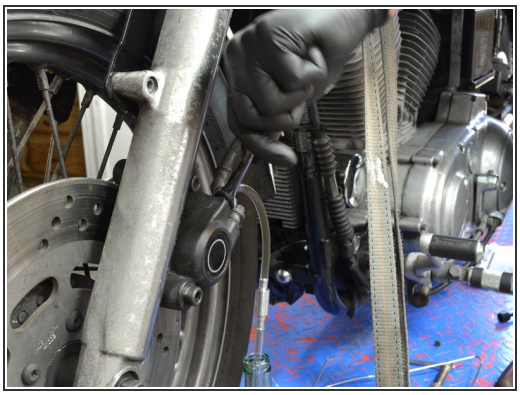
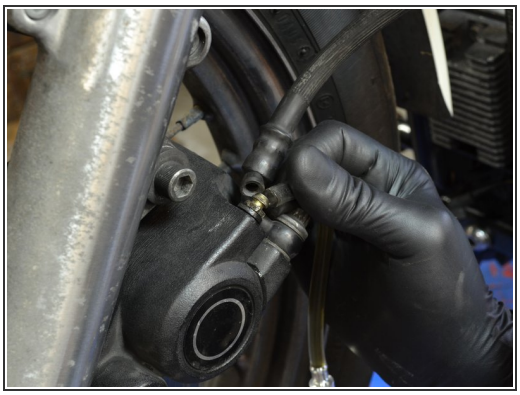


- Repeat the process outlined in step five and six until the amount of brake fluid in the master cylinder is getting low.

  ⚠ Make sure to not remove so much brake fluid that air gets into the brake lines.

- Refill the master cylinder with fresh brake fluid until the level of fluid is even with the metal protrusion in the rear right corner of the master cylinder.

Step 8

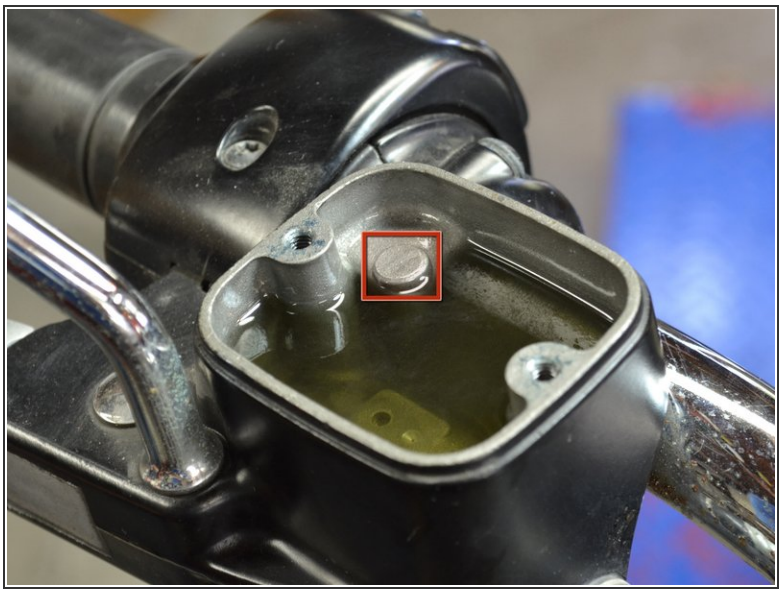

- Continue flushing the brake lines as described above until you see the new brake fluid coming through the bleed tube.

  The new brake fluid will be a lighter color than the old, discolored brake fluid.

Keep an eye on the master cylinder. If the fluid level gets too low again, be sure to add more fluid.

- When you are seeing new brake fluid coming through the bleed hose, stop the flushing process and firmly close the bleed valve.
- Gently pull the bleed tube off of the bleed valve and re-cover the valve with the little rubber cap.

Step 9



- Fill the master brake cylinder one last time with fresh brake fluid until the fluid is level with the metal tab in the rear right corner of the cylinder.

Step 10

- Using a damp rag, wipe down the rim and rubber gasket of the master cylinder and the master cylinder cover.

Step 11

- Using a Phillips #2 screwdriver, replace the master cylinder cover and screw it firmly into place.