

## INSTALLATION PROCESS:

### FK003D940-7 Complete Front & Rear ABS Line Kit

09-13 H.D. FLHTCU/ FLTRU/FLHTK STREET GLIDE ABS



#### Parts List:

7 Lines	
8 Single banjo bolts	1 brake light switch block
1 Double banjo bolt	6 zip ties
2 Bleeder banjo bolts	1 ¼ x20 bolt
1 Galfer T-Block	24 washers

We strongly suggest having a professional mechanic install your brake lines, all other installs may void your warranty. ***Be sure to read through the instructions before installing Galfer lines.***

#### Step 1:

To prevent paint damage from brake fluid, completely cover the front and rear end of the bike. Installing brake lines can be a messy process, and brake fluid *WILL* spill! Remove all brake fluid from the OEM brake system. Take note of how the stock system was routed (you may want to take pictures for reference).

#### NOTE:

*Galfer stainless steel banjos and bolts are to be torqued between 15 – 17 ft. pounds*  
*Galfer stainless steel blocks and hard lines are to be torqued between 5 - 7 ft pounds*

#### Step 2:

Begin by removing the seat and seat rest. There will be a single bolt on the rear of the seat (SEE FIGURE 1). Once removed, reference your service manual on and the fuel tank removal. The tank has a quick disconnect for the fuel on the left side near the rear of the tank. (SEE FIGURE 2) To remove push the metal sleeve up and pull the line down. A small amount of fuel will come out but do not be concerned. From there you will see two bolts on the left and right side of the tank near the front. (SEE FIGURE 3) Remove these two bolts. Once removed it is now time to turn your attention to the rear of the fuel tank. You will see two more bolts on the end of the tank, (SEE FIGURE 4) once located remove bolts. Locate the air vent hoses and the 2 wire harness plugs. Disconnect the plugs and remove the fuel tank. Set on a safe clean bench making sure not to scratch the bottom of the tank.

#### Step 3:

Now that the tank is removed we can now look into opening the instrument cluster. First you will need to remove the 2 torx bolts on either side of the instrument cluster. (SEE FIGURE 5). Once the bolts have been removed there will be a series of electrical connectors. All of these connectors are one way plug specific, and what that means is that they will only fit into its corresponding partner. It's still a good idea to mark each plug for quick installation. (SEE FIGURE 6). Now that you can see into the cluster where the brake line is routed it can be removed with little to no hassle. Disconnect brake lines from the calipers and master cylinder and route them away from the motorcycle. Under the triple tree there will be a roll pin that will need to be removed and discarded in order to fit the Galfer USA distribution block. (SEE FIGURE 7)

#### Step 4:

We are now ready to remove the right side saddle bag and side cover to gain access to the A.B.S. unit. When you open the saddle bag there will be 2 dzus fasteners. Twist them to the left and they will release allowing you to remove the saddle bag. Once the bag is removed and set onto a safe surface you may now pull the side panel off.

It is held on with rubber grommets. Gently pull and remove the cover.

### Step 5:

Once access is gained to the A.B.S. block we may now start removing the all the brake lines. On the rear master cylinder brake line there will be a threaded brake like switch that will be retained for the new kit. (SEE FIGURE 8) .Disconnect the brake light switch plug and remove the brake line. There will be a few zip ties placed periodically on the line in a few different spots. Cut these off as new ones will be provided in the Galfer USA brake line kit. Once all of the O.E.M. brake lines are removed we will be ready to install the new lines.

### Step 6:

Take a look at the Galfer lines and familiarize yourself with them. Start by installing the front master cylinder labeled LINE A and LINE B onto the A.B.S. block. (SEE FIGURE 9). Route the line using the O.E.M. holders. (SEE FIGURE 10). Once you have the lines routed to the front, route the master cylinder line up towards the master cylinder following the O.E.M. routing. (SEE FIGURE 11). The front master cylinder LINE A route up and through the plastic instrument cluster bezel and travel up along the handlebars. (SEE FIGURE 12). The line may seem excessively long but this is to account for turning left and right and give line enough slack to move with the front end. Be sure to have enough slack to allow for this. Triple check once the line is installed onto the master cylinder that you have free movement and no binding.

### Step 7:

Install the Galfer USA block under the triple tree using the supplied hardware. (SEE FIGURE 13). Once the block is installed you will need to route the line as shown in figure 13. LINE B will follow a similar path as the O.E.M. line to accommodate the left and right motion of the handlebars. I needs to have a large loop, that when the bars are turned it will travel into the fairing. Each individual caliper line will travel to their respective caliper and be installed using the bleeder banjo bolts. (SEE FIGURE 14). Make sure to clock the caliper lines out slightly to avoid contact with fender. Once install (SEE FIGURE 15) to see final install.

### Step 8:

Now that the front lines are install let's move onto the rear line. Find LINES E/F/G from the kit. These are all of the rear lines needed to be installed. Using LINE E, install onto the master cylinder and route line against the bottom of the frame. (SEE FIGURE 16). You will now need to install the O.E.M. brake light switch into the switch block using corrosion resistant thread tape (30inlbs)-(60inlbs). Next install the assembled brake light switch onto the brake line. Do not torque, yet as this will make the rest of the brake line install easier. (SEE FIGURE 17). Next install LINE F onto the other end of the assembled brake light switch and install the supplied clip on to the line, using the O.E.M. hardware bolt the clip and line onto the bike. Route this line to the A.B.S. block following the O.E.M. routing. (SEE FIGURE 18). Install LINE F onto the A.B.S. block in its designated location. (SEE FIGURE 19). Once the line is installed you may now position your brake light switch and torque the compression fittings. Reinstall the brake light switch plug .

### Step 9:

To begin the final part of the rear line installation you will need LINE G. Start by installing LINE G onto the last open port on the A.B.S. block labeled R. Route the line in a similar fashion as the O.E.M. line was routed. (SEE FIGURE 20). The brake line will follow the swing arm all the way to the rear caliper. Once there, install the line onto the caliper. (SEE FIGURE 21) . Once all lines are installed it is now time to go back and torque all banjo bolts, fasteners and any holder you may have left loose. Be sure to use the supplied zip ties to secure all the A.B.S. wires to the brake lines and to secure the brake line against the frame where needed.

**Step 10:**

Before continuing, check clearance of your new lines with the suspension fully extended and compressed. Make sure to double check that the lines are traveling correctly and are clear from any obstructions. Using Galfer DOT-4 brake fluid (or equivalent); bleed your brake system according to the owner's manual.

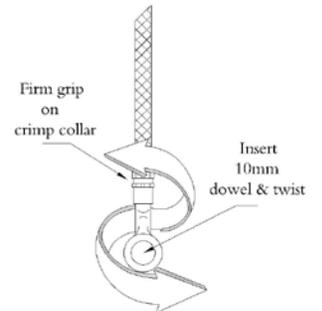
**BE AWARE SOME HARLEY DAVIDSONS USE D.O.T. 5 WHICH IS SILICONE BASED AND IS NOT COMPATIBLE WITH D.O.T. 4, BE SURE TO CHECK YOUR SERVICE MANUAL TO SEE WHAT FLUID YOUR BIKE IS EQUIPED WITH!!!!**

**Step 11:**

Once the system is properly bled, check the brake fluid level in your master cylinders and top off if necessary. Clean any residual fluid from around the banjos and fittings, making sure to keep solvents away from the brake pads and/or rotors. To ensure there are no leaks in the system, apply pressure to the brake lever and pedal for at least 30 minutes. For the front, a zip tie around the bar and lever works well. In the rear use a dumbbell or something similar to apply pressure to the brake pedal. If the lines are not leaking and all else looks good, you are ready to ride.

Please be aware that the newly modified braking system is now much more responsive and will take some getting used to. We recommend riding carefully as you feel out the lever and pedal. Check your brake system periodically for proper torque, leaks, and damage to the lines. If there are any signs of damage, the lines will need to be replaced. All Galfer USA brake lines have a LIFETIME WARRANTY! If you have any problems or questions, do not hesitate to call our tech department - **(800) 685-6633**.

*\*Please note that although Galfer fittings come pre-positioned from the factory for easy installation, differences in bike setup, bar position, control angle, etc. may require the banjos to be rotated slightly. All Galfer fittings are what we refer to as turn-to-fit and can be rotated to alleviate twist or tension in the lines. To do so, firmly hold the crimped portion of the line; insert a wood dowel, brass punch, or pen into the banjo, and rotate as shown in the diagram below. Just be sure to only apply rotational force and NEVER pry on the connection. If you have any questions, please contact our tech department before attempting this procedure.*



**310 IRVING DRIVE OXNARD, CA 93030 . PH (805) 988-2900 . FAX (800) 685-6633**

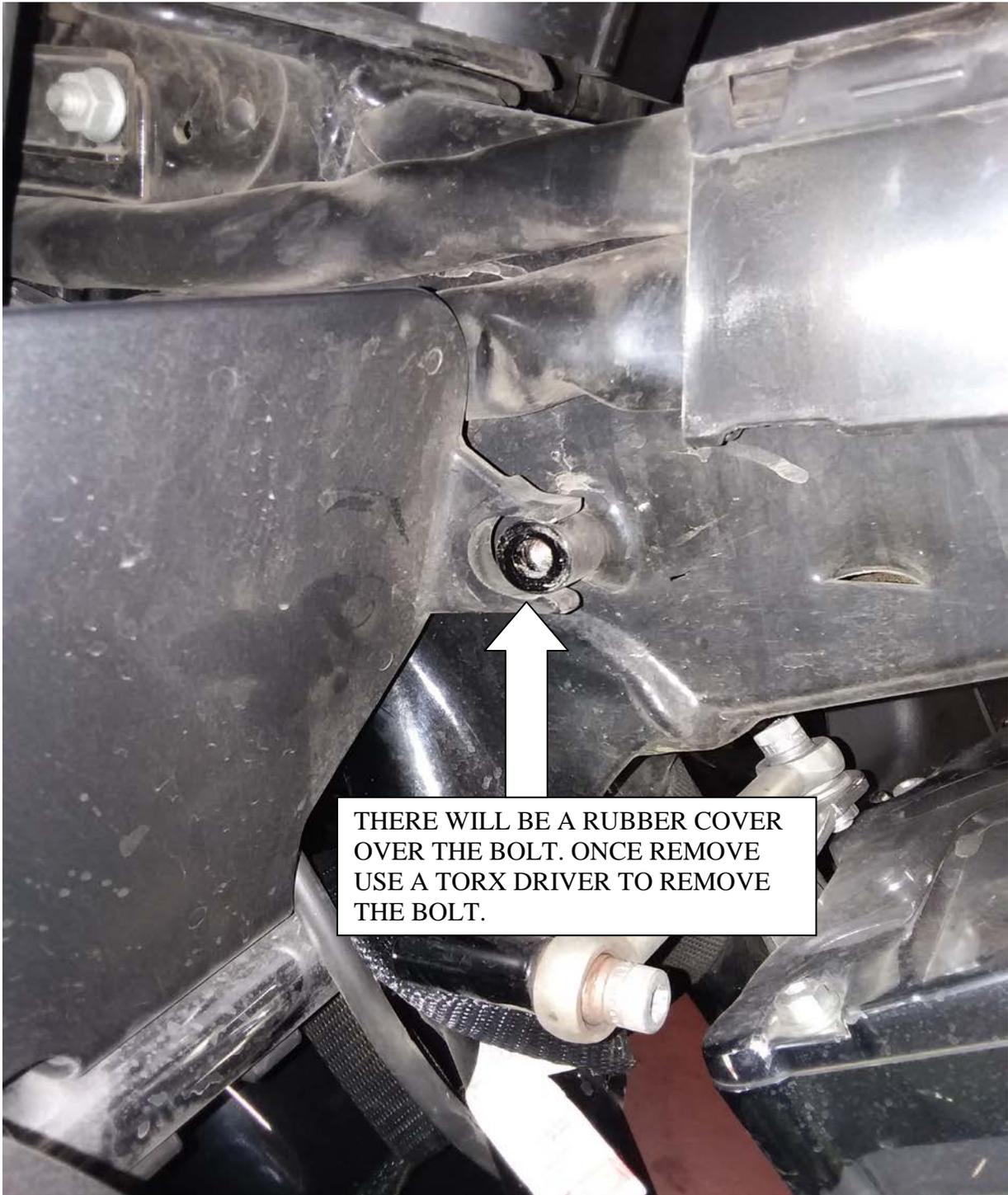
**[WWW.GALFERUSA.COM](http://WWW.GALFERUSA.COM)**



**FIGURE 1 SEAT BOLT LOCATION**



**FIGURE 2 FUEL LINE DISCONNECT**



**FIGURE 3 LEFT FRONT BOLT LOCATION**



**FIGURE 4 REAR FUEL TANK BOLT LOCATION**



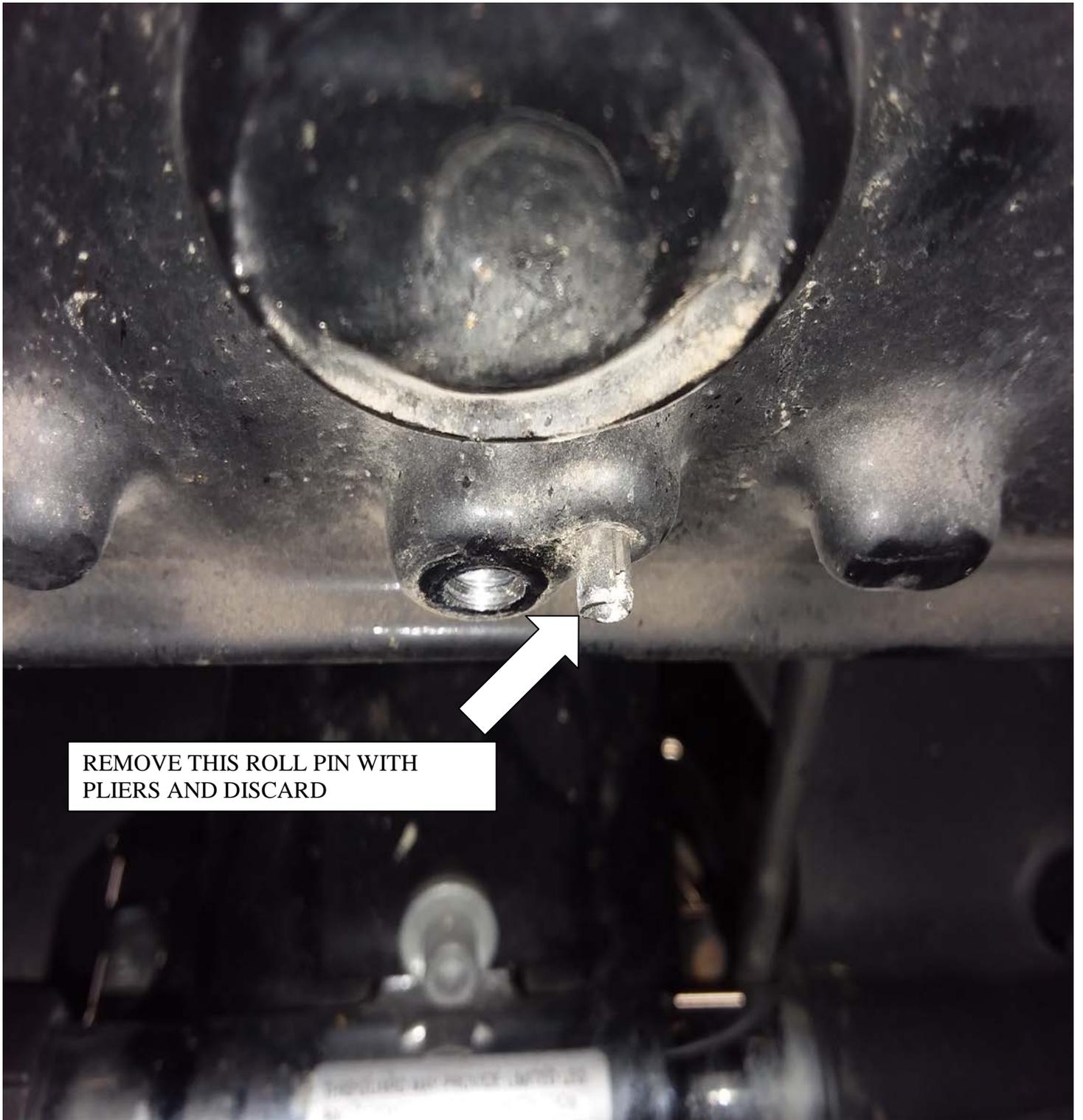
TORX BOLT ON THE SIDE OF THE INSTRUMENT CLUSTER TO BE REMOVED

**FIGURE 5 INSTRUMENT CLUSTER**



AS YOU CAN SEE THE PLUGS ARE  
COLOR CORDINATED AND HAVE  
PINS THAT WILL ONLY FIT INTO  
ITS PARTNER

**FIGURE 6 INSTRUMENT CLUSTER HARNESS**

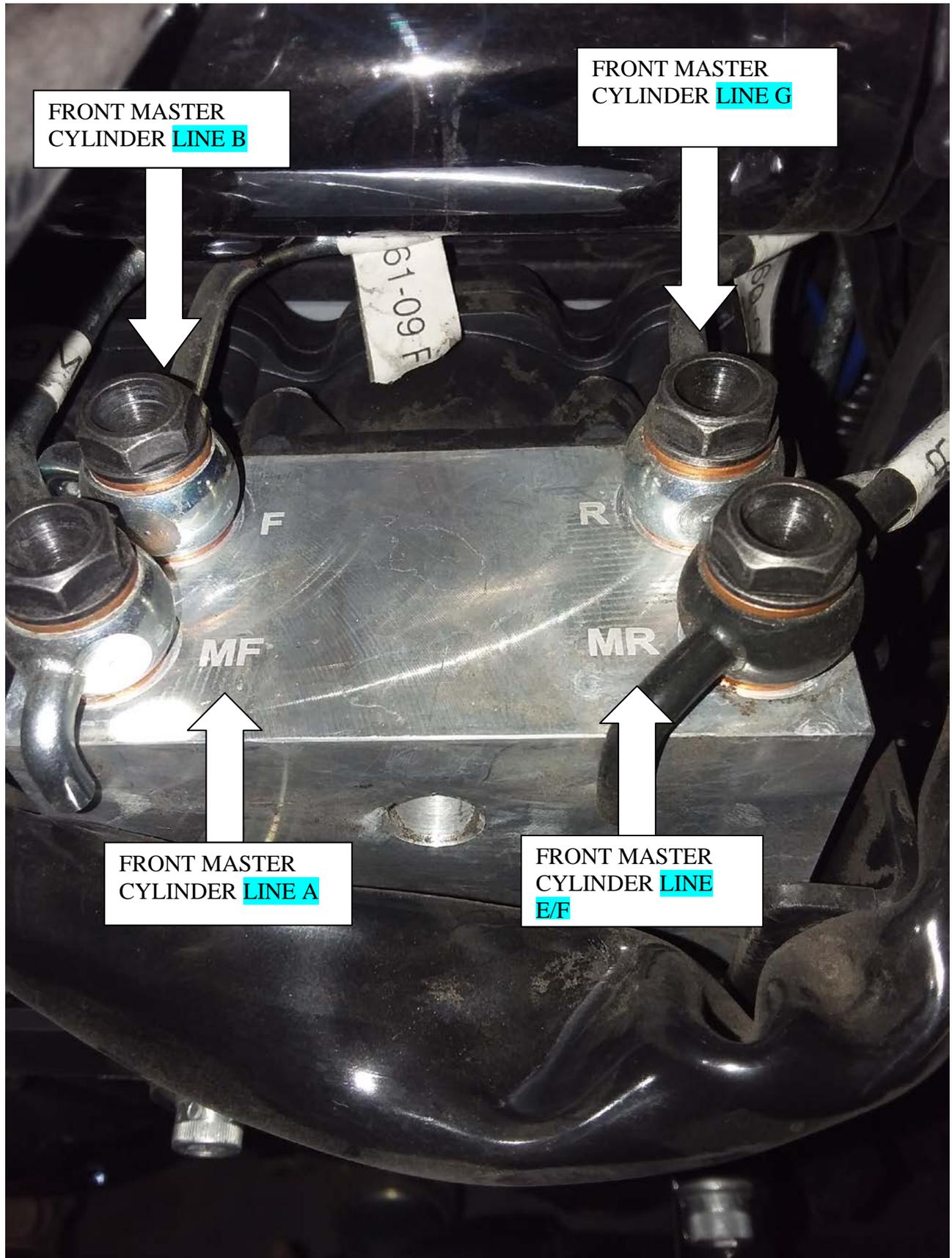


**FIGURE 7 ROLL PIN LOCATION**



REMOVE THE CONNECTOR ON THE SWITCH

**FIGURE 8 REAR BRAKE LIGHT SWITCH**



**FIGURE 9 A.B.S. BLOCK WITH LINE LOCATION**



**FIGURE 9 CONTINUED**



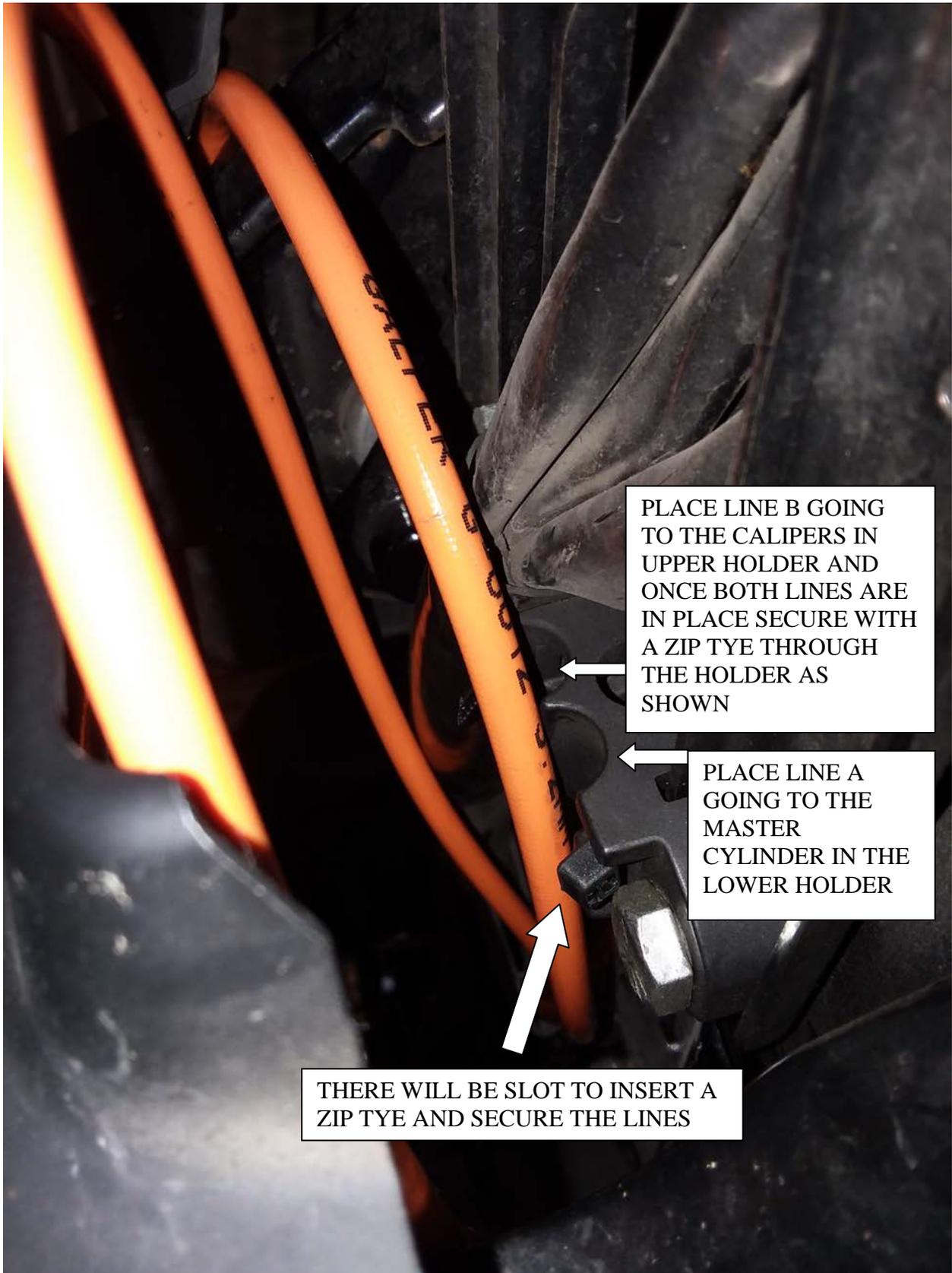
**FIGURE 10 LINE A/B ROUTING**



**LINE A/B ROUTING CONTINUED**



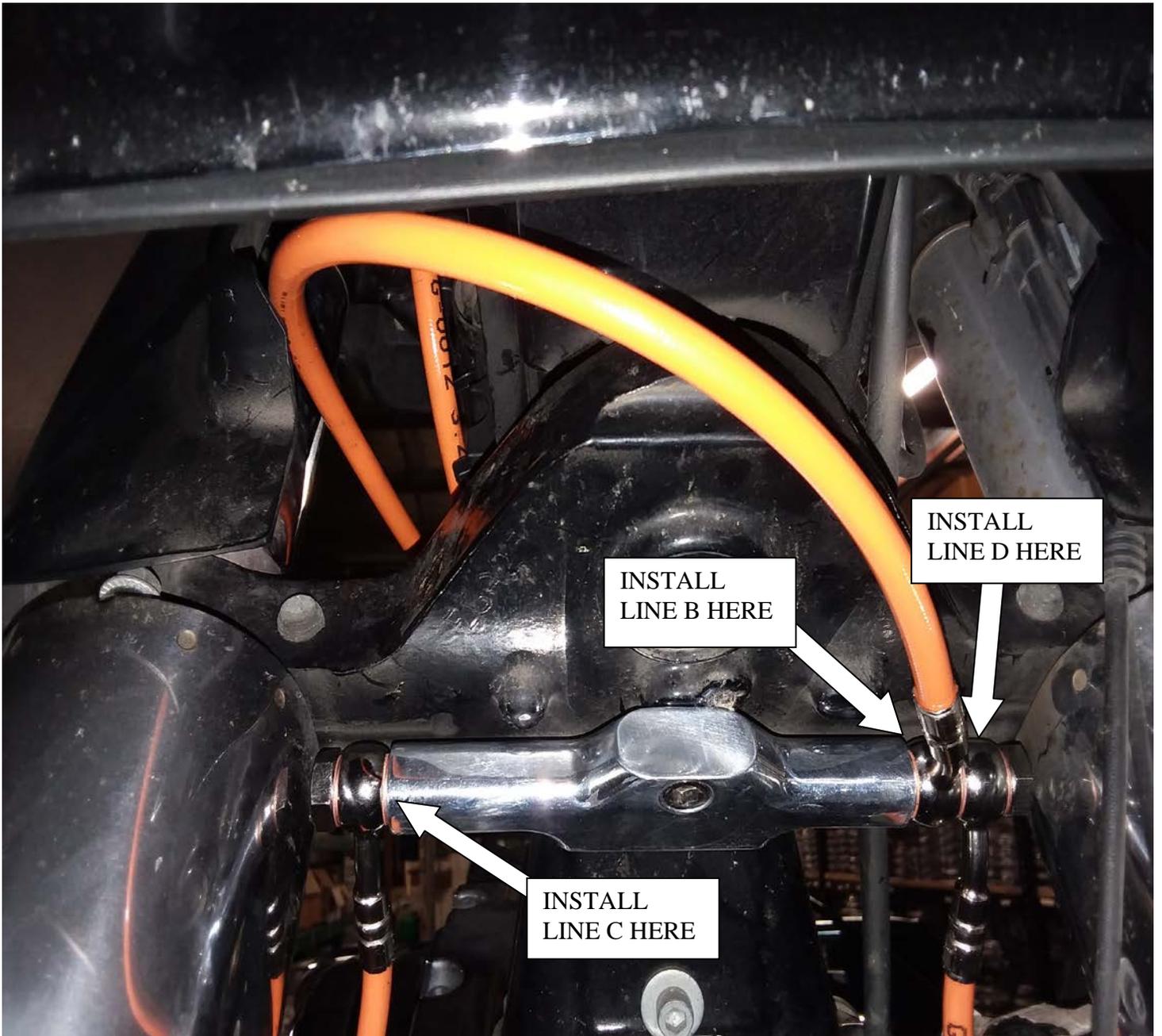
**LINE A/B ROUTING CONTINUED**



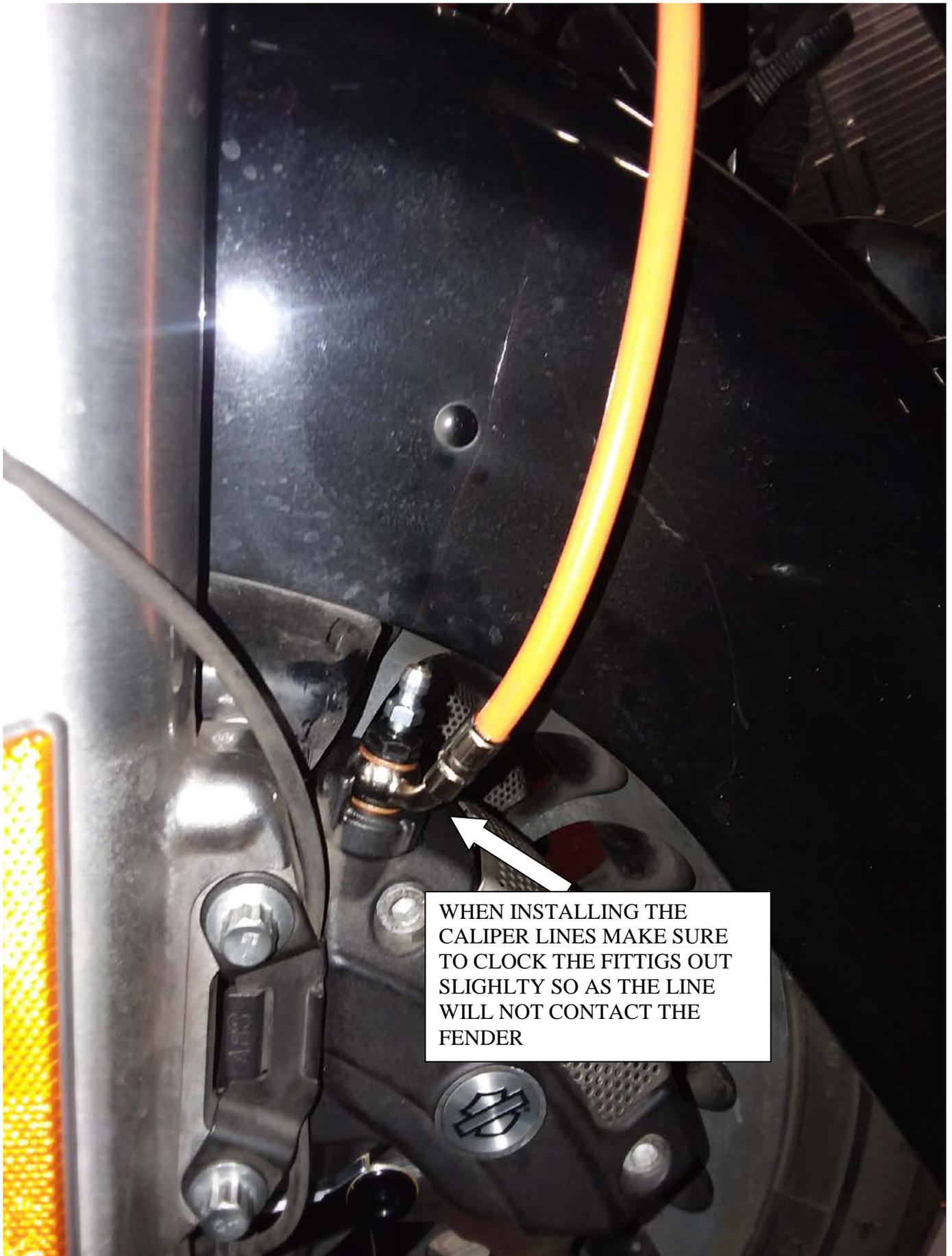
**FIGURE 11 FRONT LINE ROUTING**



**FIGURE 12 LINE A ROUTING TO MASTER CYLINDER**



**FIGURE 13 GALFER BLOCK WITH LINES INSTALLED**



WHEN INSTALLING THE  
CALIPER LINES MAKE SURE  
TO CLOCK THE FITTINGS OUT  
SLIGHTLY SO AS THE LINE  
WILL NOT CONTACT THE  
FENDER

**FIGURE 14 CALIPER LINE INSTALLED USING BLEEDER BOLT**



**FIGURE 15 FINAL INSTALL OF GALFER BLOCK**



**GALFER BLOCK INSTALL CONTINUED**



**FIGURE 16 LINE E INSTALLED ONTO MASTER CYLINDER**



**FIGURE 17 BRAKE LIGHT SWITCH**



**FIGURE 18 LINE F INSTALLED**



**FIGURE 18 CONTINUED**



**FIGURE 19 LINE F LOCATION**



**FIGURE 20 LINE F ROUTING**



**FIGURE 21 REAR LINE ROUTING**



**FIGURE 21 CONTINUED CALIPER INSTALL**