INSTALLATION PROCESS:

FK003D932-6 FRONT & REAR A.B.S. KIT

2017 Harley Davidson FXDL''Lowrider S''ABS



Parts List:

6 Lines 1 Splitter Block 4 A.B.S. Block Bolts (KIT A) 1 1x1/4 x20x1" Bolt 4 Caliper/Front Master Cylinder Bolts (KIT B) 26 Washers

1 Double Banjo Bolt (KIT C) 6 Zip-Ties
1 Single Banjo Bolt (KIT C) 1 Grommet

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). Be sure to reference your O.E.M. Harley Davidson manual. Do not torque any fastener until all lines are installed to make sure that fitment and orientation is correct. Once you have everything positioned correctly and there is no binding, then all fasteners can be torqued to Galfer specs.

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 Golfer aluminum bolts are to be torqued between 12 - 15 ft pounds

Step 2:

To begin the installation of the Galfer Multi Line A.B.S. kit you will need to reference your Harley Davidson manual on the procedure for removing the gauge cluster and the fuel tank in order to gain access to the hard lines under the fuel tank. Next there will be a side panel on the lower right hand side of the motor cycle that covers the A.B.S. block. (SEE FIGURE 1). Once removed access will be gain to remove battery and battery box. See owner's manual on proper procedure to remove the battery and battery box from the motorcycle. Once removed you will see the hard line routing to the A.B.S. block. (SEE FIGURE 2). Remove all banjo bolts from the A.B.S. block and be sure to reference the line routing to the front. Remove the banjo bolts from the calipers and the front master cylinder. Once done remove the stock lines from the motorcycle. (KEEP ALL THE PLASTIC CLIPS THAT HOLD THE A.B.S. WIRE AS THEY WILL BE REUSED)! (SEE FIGURE 3).

Step 3:

To remove the rear lines you will start with the master cylinder line. (SEE FIGURE 4). Remove the O.E.M. Brake light switch banjo bolt and then remove the brake line but retain the bolt as it will be reused. (SEE FIGURE 5). Remove the rear caliper banjo bolt from the A.B.S. block. Be sure to retain all the plastic clips as they will be reused. There will be a metal clip the helps retain the O.E. brake line on the inside of the swing arm. Bend this clip back so the rubber grommet can be removed. Lastly remove the rear caliper banjo bolt and set the O.E.M. brake line aside. (SEE FIGURE 6).

Step 4:

Start by installing the front master cylinder line labeled LINE A. Use banjo bolts labeled CALIPER/FRONT MASTER CYLINDER BOLTS. Install with the 90 degree elbow facing up. (SEE FIGURE 7). Route the line down the center of the bars through the top triple tree. (SEE FIGURE 8). From this point you will route the line to the right of the head tube using the factory line holder. (SEE FIGURE 9). Route the line against the frame and you will see a factory plastic press fit holder, press the line into this holder until it feels solid and will not move. There will be a second holder/guide for the line to route through. (SEE FIGURE 10). Once the line have been routed to this point you are now ready to install the banjo fitting onto the A.B.S. block. (SEE FIGURE 11).

Step 5:

The next procedure will be installing the GALFER SPLITTER BLOCK along with all lines associated with the front brake calipers. To install the GALFER SPLITTER BLOCK you will need to use the Galfer supplied <code>lx1/4 x20x1</code>" Bolt under the lower triple tree. (SEE FIGURE 12). Do not torque block as it will give you ease of access for line installation. Install LINE C onto the left side of GALFER SPLITTER BLOCK using the SINGLE BLOCK BOLT. Install in the order of banjo bolt/washer/banjo fitting/washer/Galfer block. (SEE FIGURE 13). You can now lightly install he banjo fitting on the caliper. (SEE FIGURE 14). Using a similar procedure as mentioned in step 4 route LINE B along the frame down to the A.B.S. block and loosely mount the banjo fitting onto the block. (REFERENCE FIGURE 9/10/11). Using the DOUBLE BLOCK BOLT install LINE B and LINE D. Install in this order-double banjo bolt/washer/line D fitting/washer/line B fitting/washer/ Galfer block. (REFERNCE FIGURE 12). Route LINE D to the right caliper and install the correct banjo bolt. (SEE FIGURE 15). LINE B must have the 90 degree fitting facing up and a loop should form to allow for left and right movement of the handle bars. (SEE FIGURE 16)

Step 6:

In the next step you will be using LINE E, and LINE F. Install LINE E, from the A.B.S. block to the rear master cylinder. (SEE FIGURE 17). Using the O.E.M. brake light switch bolt install the master cylinder brake line and reinstall the brake light switch plugs. (SEE FIGURE 18). Install LINE F onto the A.B.S. block and route the brake line in the same way as the O.E.M. line using the Galfer grommet provided. (SEE FIGURE 19). The rear caliper banjo is now ready to be installed. (SEE FIGURE 20). Once all lines are in place, torque all fittings to Galfer specifications. Use the O.E.M. plastic retainers to hold the A.B.S. line to the new Galfer line

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Step 7:

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.

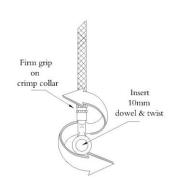
Step 8:

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.





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FIGURE 1 LEFT SIDE A.B.S. COVER

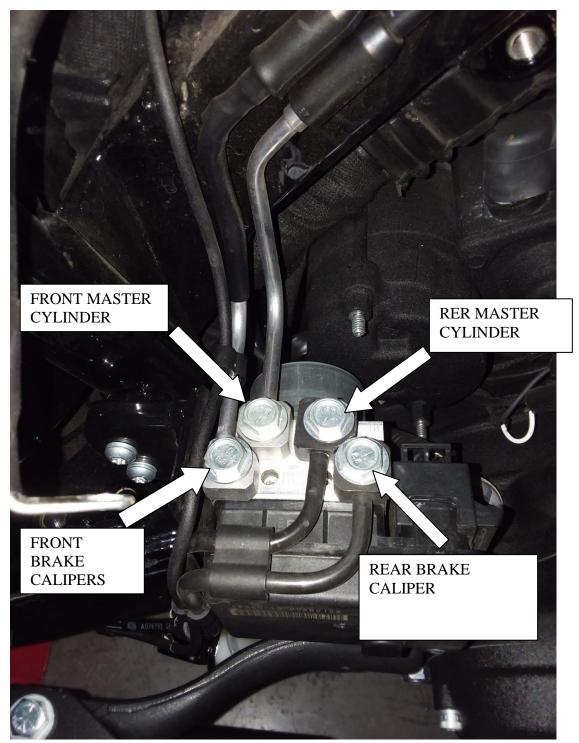


FIGURE 2 A.B.S. BLOCK

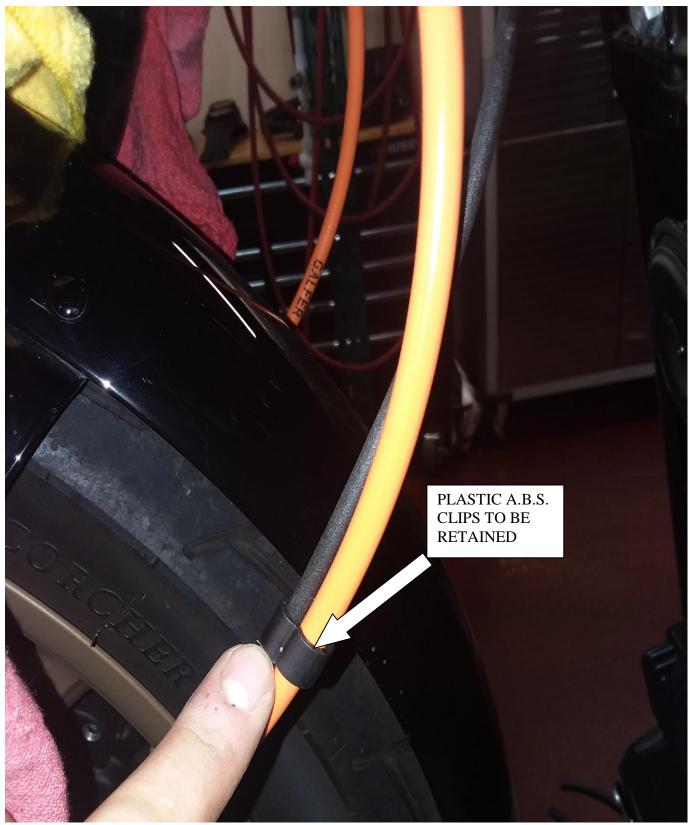


FIGURE 3 A.B.S. WIRE HOLDING CLIP

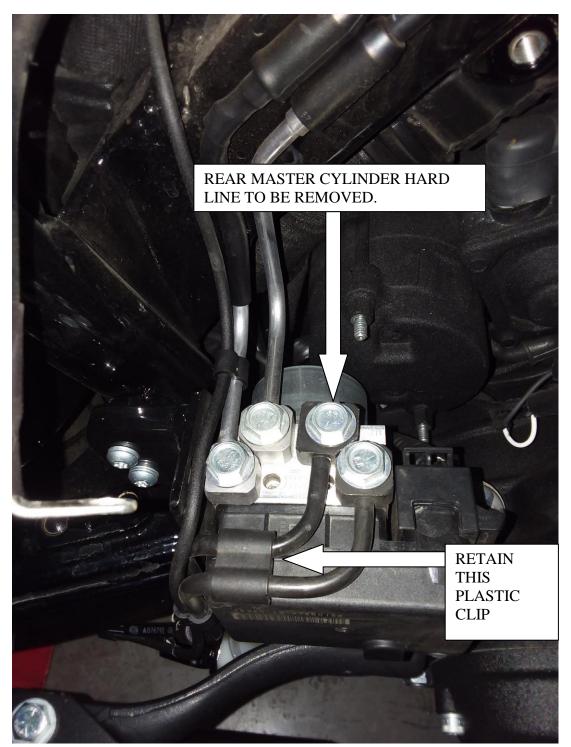


FIGURE 4 A.B.S. REAR LINE LOCATION

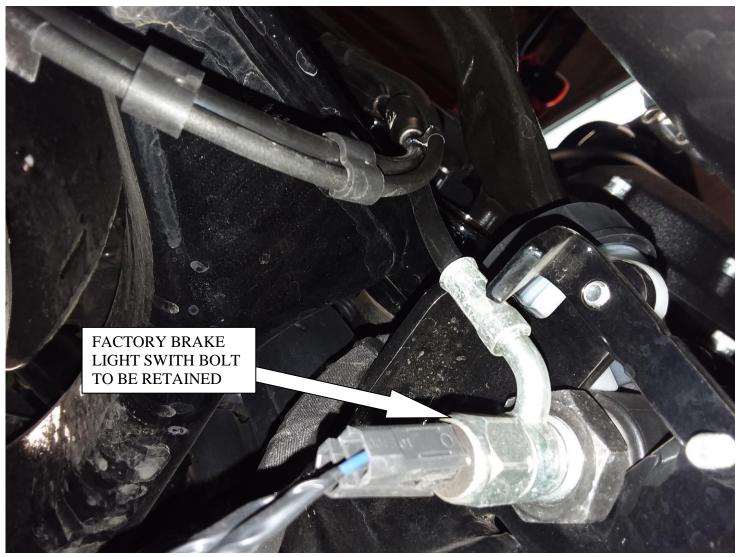


FIGURE 5 REAR MASTER CYLINDER BRAKE LIGHT SWITCH



FIGURE 6 REAR CALIPER



FIGURE 7 FRONT MASTER CYLINDER POSITION



FIGURE 8 FRONT BRAKE LINE ROUTING

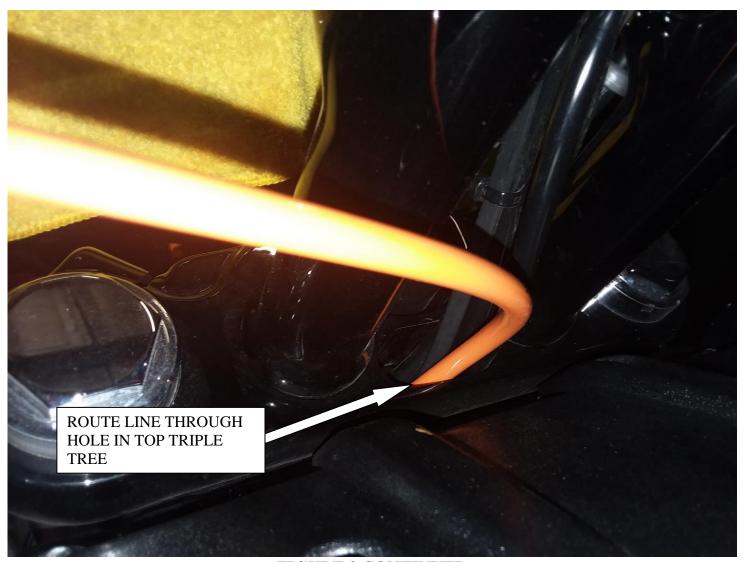


FIGURE 8 CONTINUED

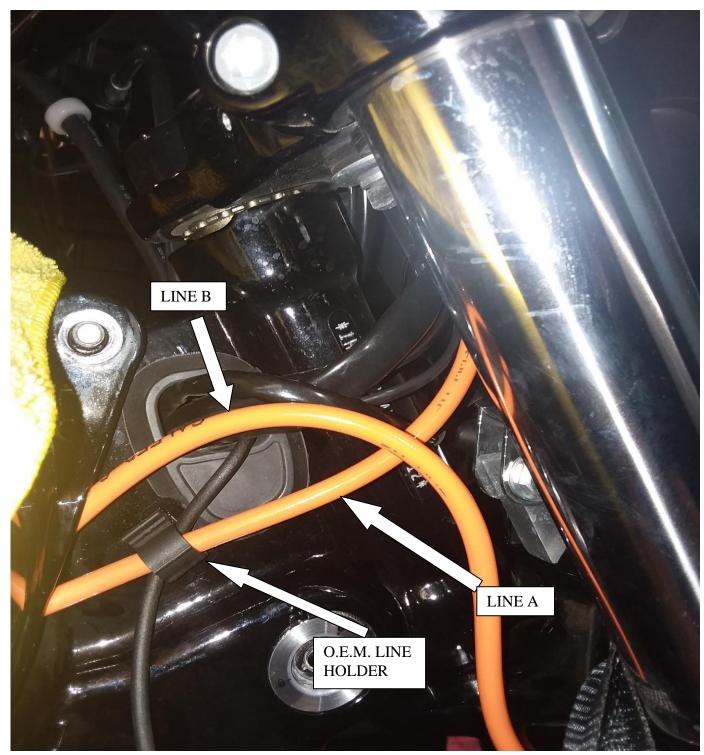


FIGURE 9 MASTER CYLINDER ROUTING

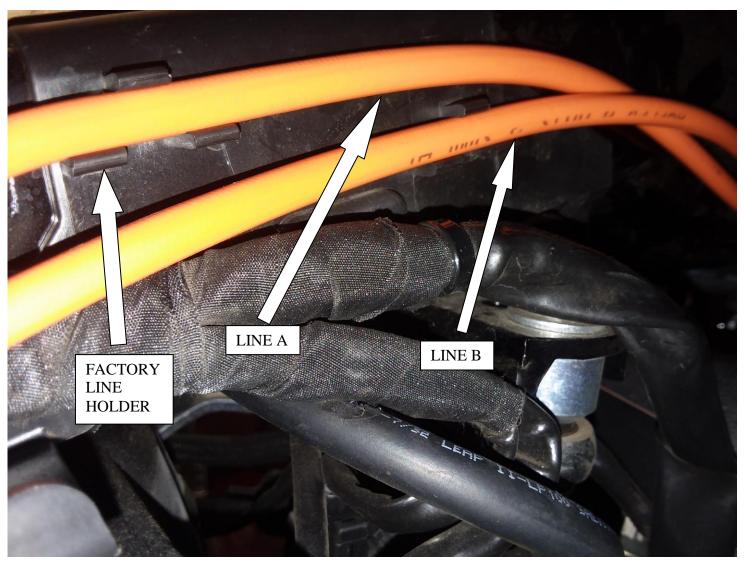


FIGURE 10 INSIDE OF FRAME ROUTING

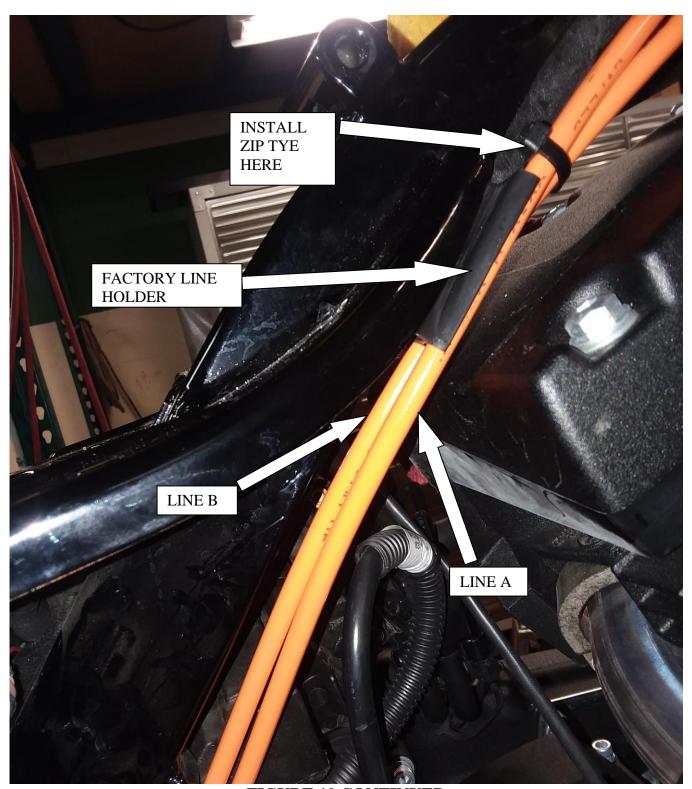


FIGURE 10 CONTINUED

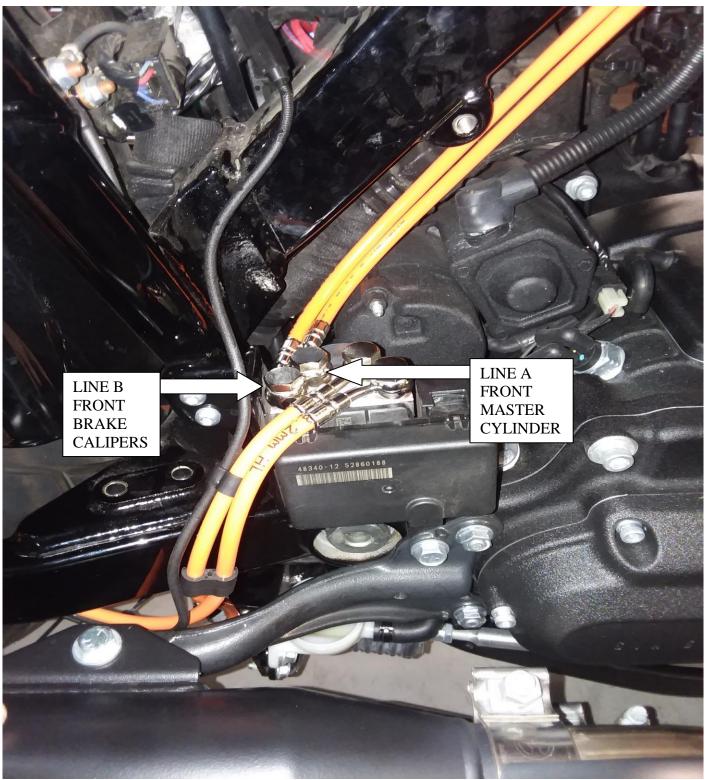


FIGURE 11 A.B.S. LINE POSITIONING

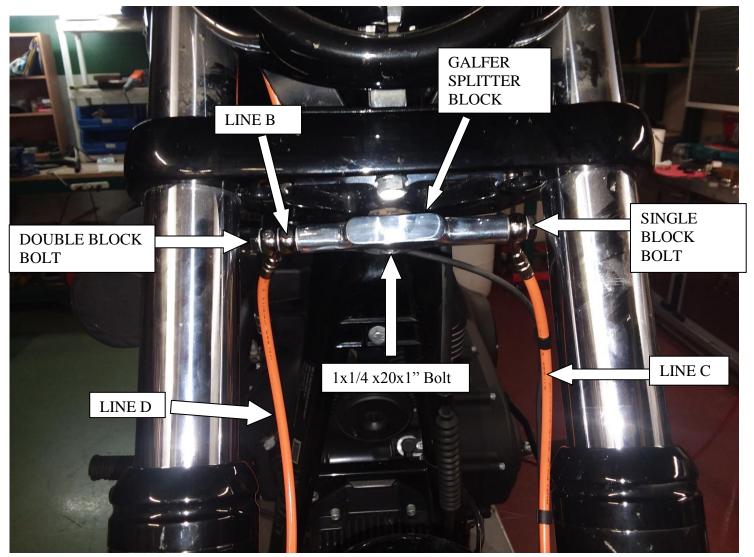


FIGURE 12 FRONT BLOCK INSTALATION



FIGURE 13 LEFT CALIPER BLOCK

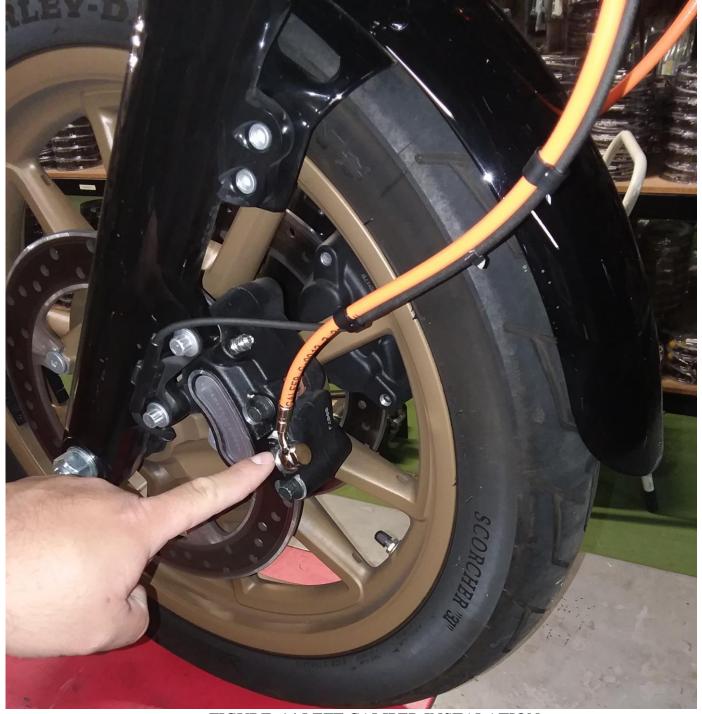


FIGURE 14 LEFT CALIPER INSTALATION



FIGURE 15 RIGHT BLOCK AND CALIPER INSTALATION

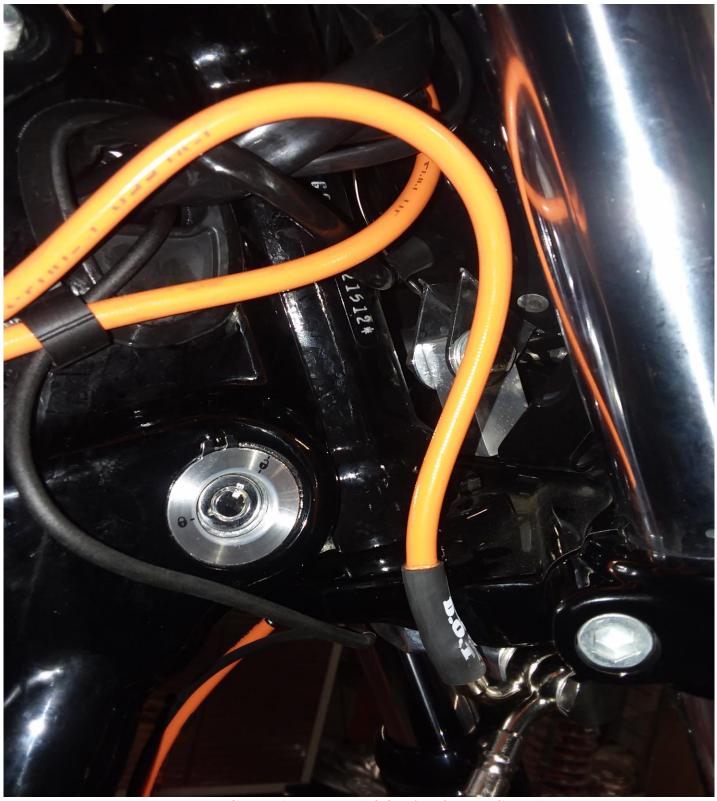


FIGURE 16 LINE B LOOP & ROUTING

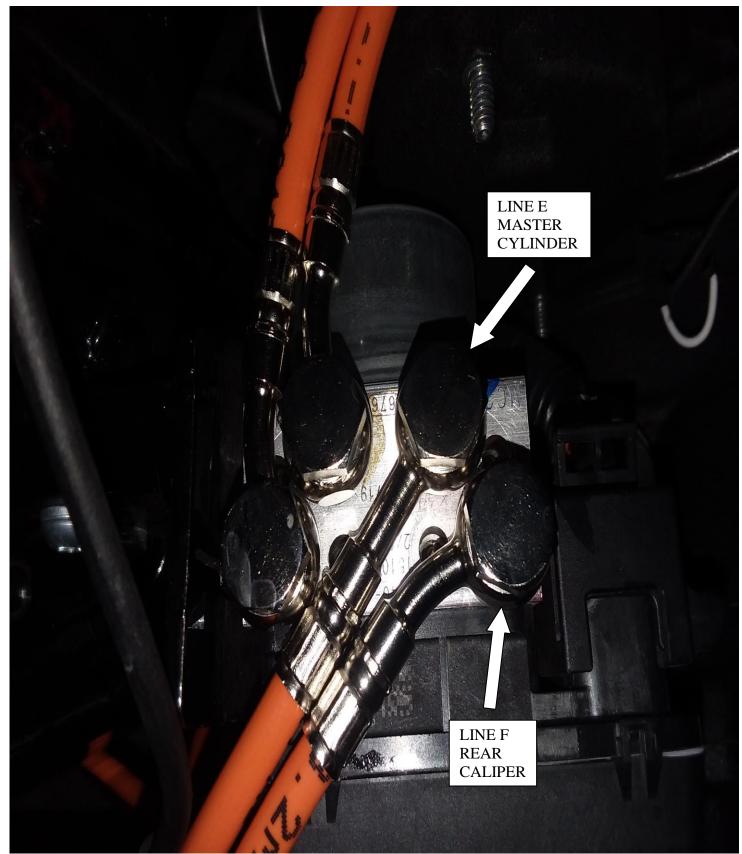


FIGURE 17 REAR LINE ON A.B.S. BLOCK



FIGURE 18 REAR BRAKE LIGHT SWITCH



FIGURE 19 REAR BRAKE LINES



FIGURE 19 CONTINUED



FIGURE 20 CALIPER INSTALATION