

INSTALLATION PROCESS:

FK003D896-7 Complete Front & Rear Line Kit

2016+ HONDA CRF1000L Africa Twin ABS



Parts List:

- | | |
|--|-----------------------------------|
| 7 lines | 4 large clips |
| 6 single banjo bolts | 7 grommets |
| 1 double banjo bolt | 6 olive inersor |
| 17 washers (15 will be used, 2 will be spares) | 6 zip-ties (to be used as needed) |
| 3 M6 bolts | |

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!

Step 2:

In order to install the brake lines and gain access to all connection points, the ***front fairings, tank trim, seat/bracket, and tool tray will all need to be removed.*** While you do not need to completely remove the ***gas tank***, it may be easier to do so. 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) before removing the OEM lines.

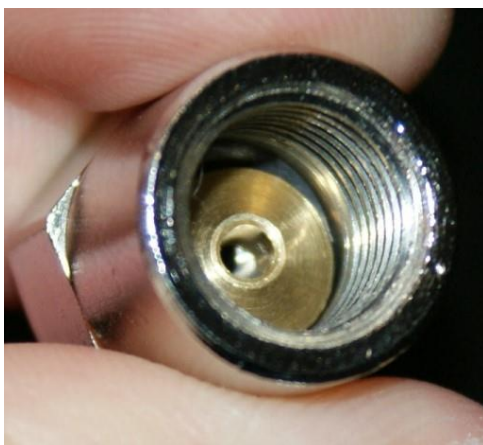
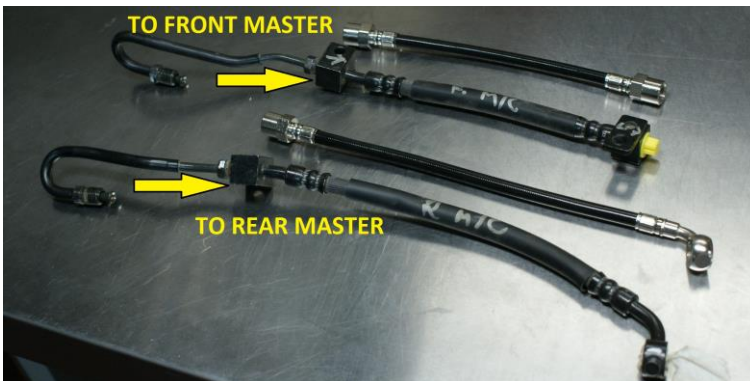
NOTE:

Galfer stainless steel banjos and bolts are to be torqued between 15 – 17 ft pounds

Galfer stainless steel flare fittings are to be torqued between 5 – 7 ft pounds

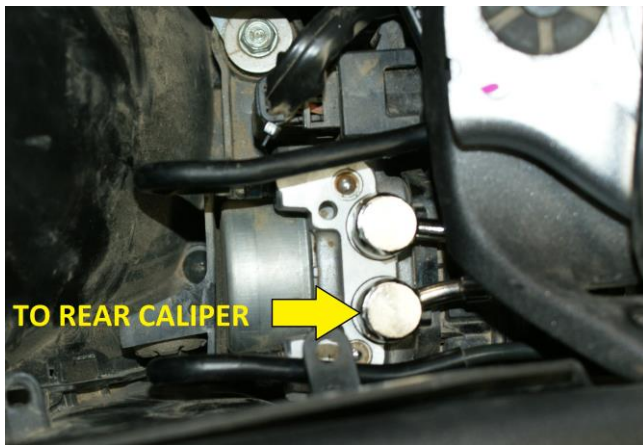
Step 3:

Locate **lines B & F**. These will need to be pre-attached to the OEM hardlines. Take note of the banjo positioning for the rear master cylinder before separating the lines, and note that the hard lines are port specific. Using a supplied brass olive at each connection point, attach the hard lines to the new Galfer flex lines and torque to the appropriate spec. Double check banjo positioning before moving on.



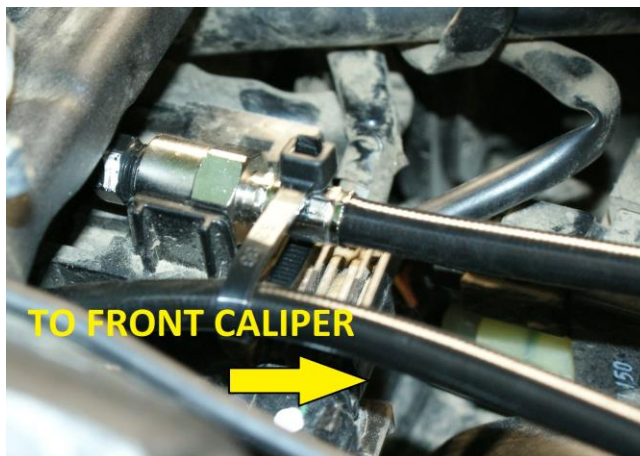
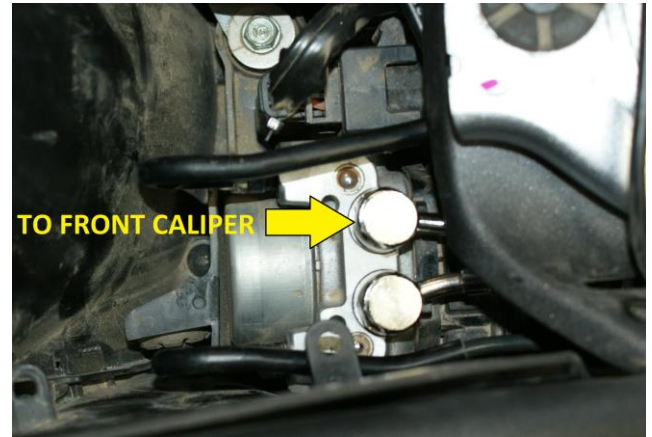
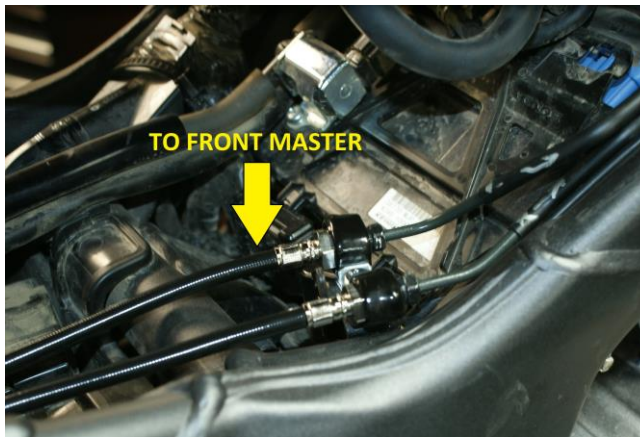
Step 4:

Attach the OEM hardline (connected to **line F**) to the right-rear port on the ABS unit and torque to spec. Route **line F** down to the rear master cylinder and attach using a single banjo bolt and 2 washers. Attach **line G** to the right-forward port on the ABS unit using a single bolt and 2 washers. Route the line to the OEM bracket on the frame rail and attach using a provided grommet. Route the line down to the OEM bracket on the swing arm and attach using a provided grommet. Follow the factory routing to the rear caliper. Use zip ties as needed to secure the ABS sensor wire. Attach the banjo to the caliper using a single bolt and 2 washers.



Step 5:

Attach the OEM hardline (pre-attached to **line B**) to the left-rear port on the ABS unit and torque to spec. Route **line B** forward and attach to the left OEM hard line (under the tank) using a provided olive. Locate **line C**. Attach this line to the left-forward port on the ABS unit using a single banjo bolt and 2 washers. Route **line C** forward and attach to the right OEM hard line (under the tank) using a provided olive. Once the connections are torqued, use 2 of the provided clips and 1 bolt to secure the lines to the mounting tab as pictured. You can also use a zip tie to tether the lines further rearward.



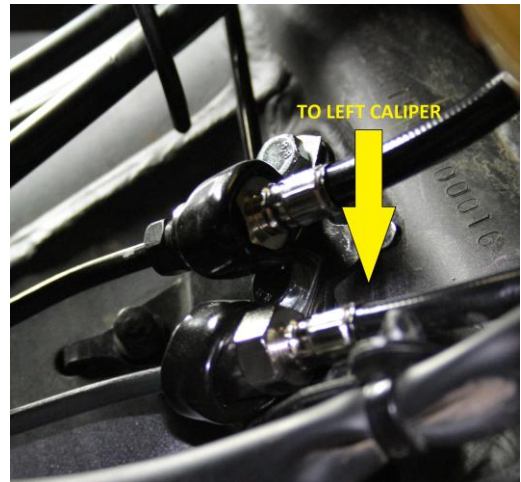
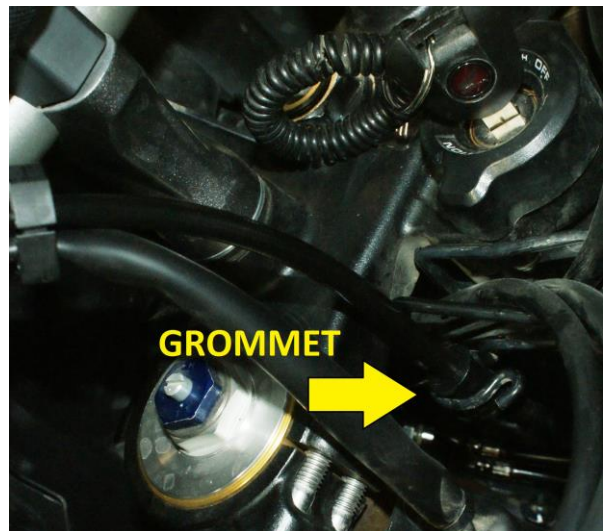
Step 6:

Remove the factory line bracket from the right side of the head tube. You will need to unclip the 2 wiring harness fasteners (**red arrows**), remove the single mounting bolt (**red arrow**), and unhook the throttle/parking brake cables to do so. Once removed, bend the 2 locating tabs flat (**yellow arrows**) so they will work with the provided mounting hardware. The tabs bend fairly easily if you use a large hammer and anvil. Reattach the bracket once the modification is complete.



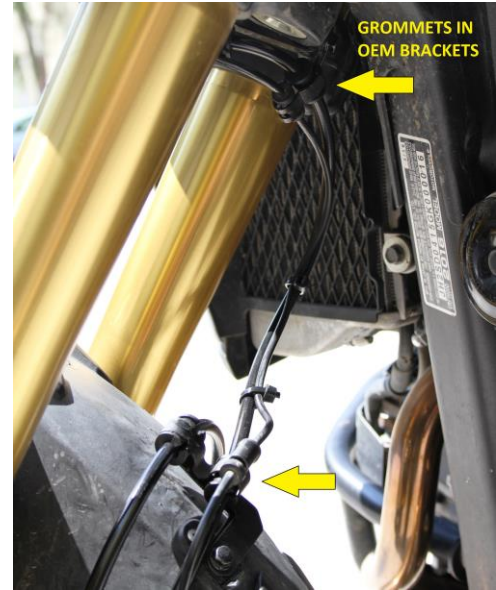
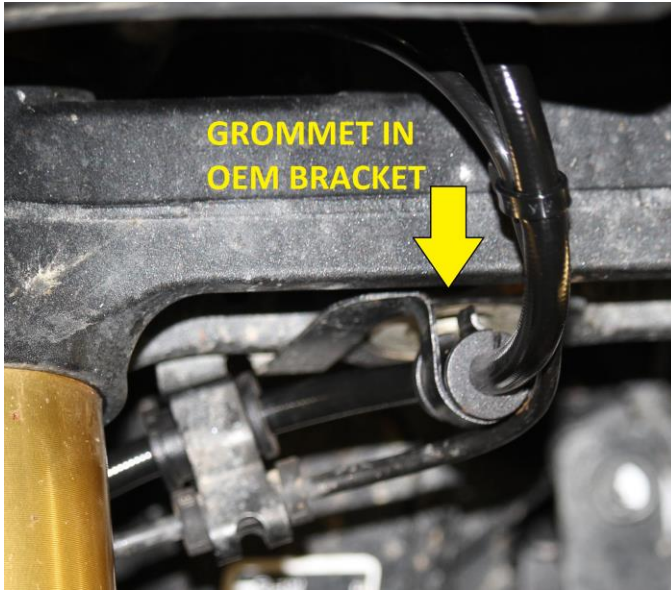
Step 7:

Locate **line A**. Attach to the upper hard line on the head tube using a provided olive. Route the line up toward the master cylinder using a grommet at the factory bracket. Attach the banjo to the master cylinder using a single bolt and 2 washers. Locate **line D**. Attach to the lower hard line on the head tube using a provided olive. Attach both lines to the factory bracket as pictured with the provided clips and bolts.



Step 8:

Route **line D** down in front of the triple clamp and through the factory brackets to the left front caliper. You will use a total of 3 grommets and 3 zip ties. Locate **line E**. This line will cross over the fender and attach the 2 front calipers. Use a double banjo bolt and 3 washers to attach **lines D & E** to the left caliper. Note the orientation and order of the banjos in the pictures below. The crossover line will be closest to the caliper with the banjo bowing outward. The line from the master cylinder will be furthest from the caliper with the banjo bowing inward. Use a provided grommet to route **line E** over the fender and attach it to the factory bracket. Attach the banjo to the caliper with a single bolt and 2 washers. Note the orientation of the banjo in the picture below. It will be bowing outward.



Step 9:

Check the clearance of your new lines with the front and rear ends fully extended and compressed. Make sure to double check that the lines are traveling correctly and are clear from any obstructions.

Step 10:

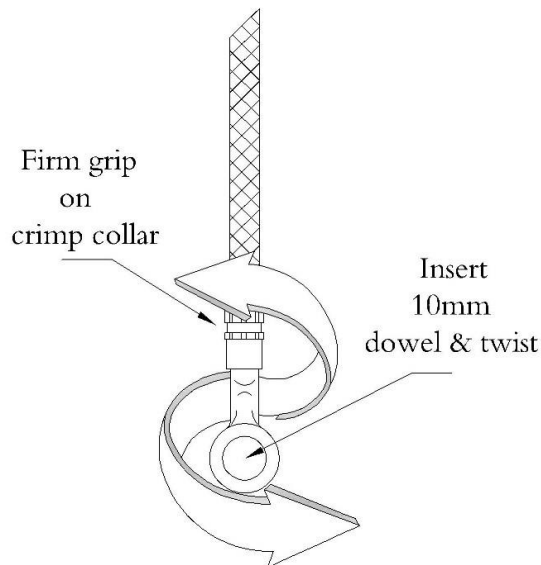
Using Galfer DOT-4 brake fluid (or equivalent), bleed your brake system according to the owner's manual.

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, zip-tie the brake lever to the throttle for at least 2 hours. For 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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