

## INSTALLATION PROCESS:

### FK003D943-4 Complete Front & Rear ABS Line Kit

2018+ KAWASAKI EX 400 MIMJA ABS



#### Parts List:

4 Lines

6 Single banjo bolts

16 Crush washers (14 will be used, 2 will be spares)

5 Grommets

4 Olive flare adapters

6 ZIP TIES

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:

To begin with the installation of the Galfer U.S.A stainless steel braided brake line kit you will first need to familiarize yourself with the motorcycle. Consult your owner's manual and make you have a firm grasp of all of the body work and line routing. The lower cowling and body work will have to be removed in order to remove the fuel tank. The fuel tank must be removed to gain full access to the A.B.S. junction blocked located behind the steering stem. **(SEE FIGURE 1)**. On the left and right of the motorcycle there will be many small bolts and push pins that hold the fairings on the motorcycle. Be sure to retain exact location due to the bolts are varying sizes for specific body panels. **(SEE FIGURE 2) (THERE WILL BE MULTIPLE PICUTRES FOR REFERNCE IN THIS FIGURE)**. Once the lower fairing is removed and all the upper fairings are loose, you may now gain access to the tank. Remove the rear tank bolts and tilt the tank forward. Remove the fuel pump plug and the fuel pump line **(REFERENCE OWNERS MANUAL)**. There will be a few vent hoses on the tank as well. They can be pulled off with little force. **(MAKE SURE TO MARK THE VENT HOSE LOCATIONS)**. Once all vents and hoses have been disconnected the tank can be lifted off. The front of the tank is help with 2 rubber grommets that are fairly tight. To ease removal you can spray a thin coat of light penetrating oil on the grommets to help slide the pins out of the grommets.

#### Step 3:

Now that access is granted to all the lines, we can start to remove the O.E.M. lines from the motorcycle. The first line to remove will be the front master cylinder line. Remove the banjo bolt from the front master cylinder. **(SEE FIGURE 3)**. Follow the routing down the left side of the frame to just behind the steering stem. **(SEE FIGURE 4)**. Remove the line from the A.B.S. block and set aside. Use **Line A** from the Galfer USA kit and install in the same fashion as the O.E.M. line using one of the provided grommets. Once the master cylinder line is installed we can now install the caliper line. Remove the line the same way you removed the front master cylinder line. Install the Galfer USA **line B** using the 3 provided grommets. **(SEE FIGURE 5)**. Once all the lines are in place and secured you may now torque the banjo bolts to the specified torque.

#### Step 4:

To install the rear lines you will need lines C & D from the Galfer USA kit. First you will need to remove the

O.E.M. brake lines. At the A.B.S. block there is a small section of rubber line that connects to a hard line that leads down to the rear master cylinder. This small section of rubber line needs to be replaced with the **Line C** from the kit. When installing this line you will need to use the olive inverter to make a seal. **(SEE FIGURE 6)**. To remove the rear caliper brake line you will need to locate the hardline that connects to the rubber line. **(SEE FIGURE 7)** Remove the banjo bolt at the caliper and remove the line from the motorcycle. **(SEE FIGURE 8)**. Once the old line is removed we can continue with the installation of **line D** to the rear caliper. Thread the hard line into the the Galfer line again using and olive inverter to make a proper seal. Once the line is installed you can now route the line toward the rear caliper similar to the factory routing. Use the supplied grommet in the factory holder where the old rubber grommet was. **(SEE FIGURE 9)**. Use the supplied hardware and install the rear banjo fitting onto the caliper. **(SEE FIGURE 10)**. Once all the lines are installed you may now torque all the fittings to the correct specification.

### Step 5:

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. Reinstall all of the fairings the same way they were removed and be careful not to damage any of the plastic clips or holders.

### Step 6:

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.*



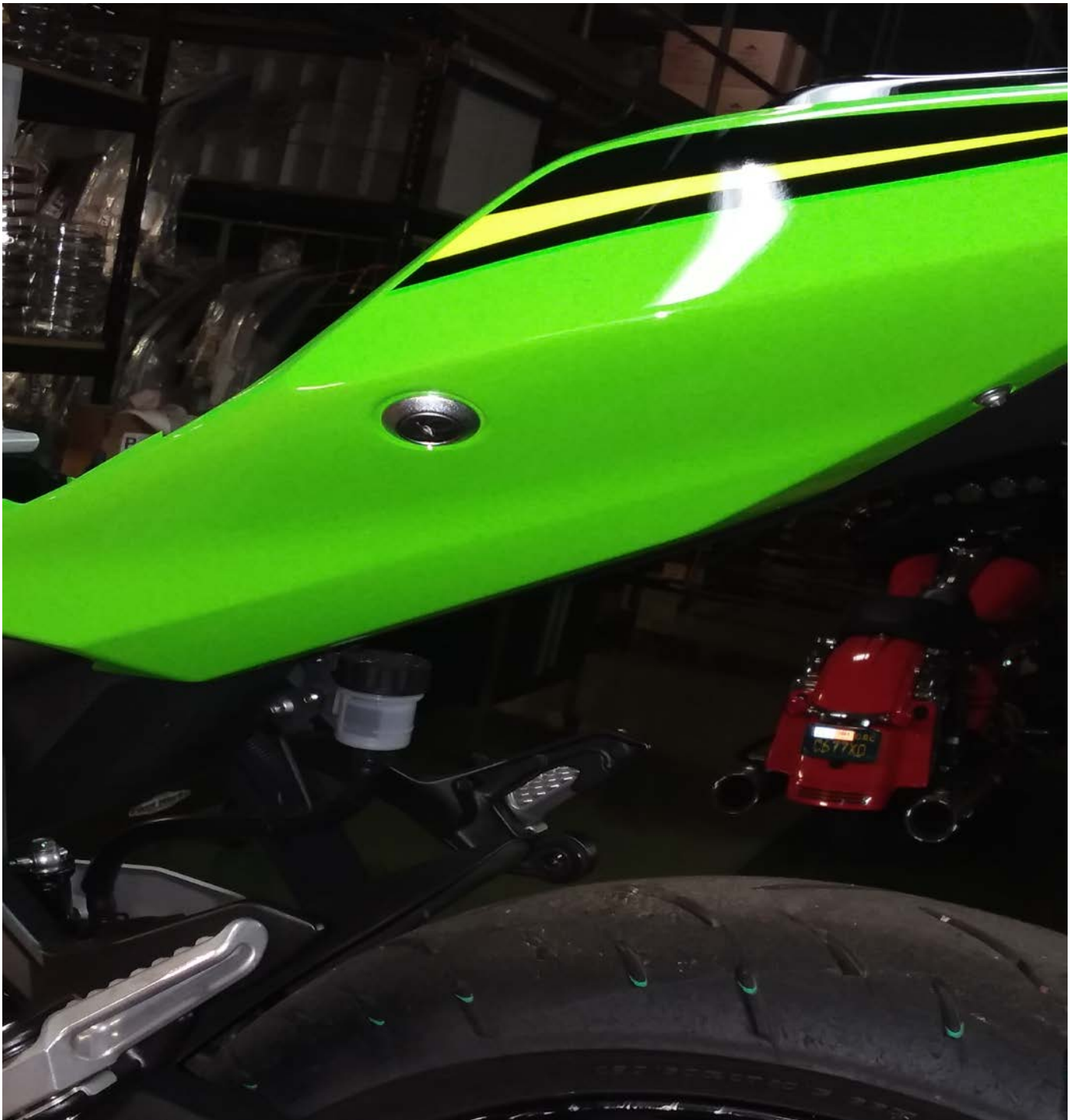
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310 IRVING DRIVE OXNARD, CA 93030 . PH (805) 988-2900 . FAX (800) 685-6633  
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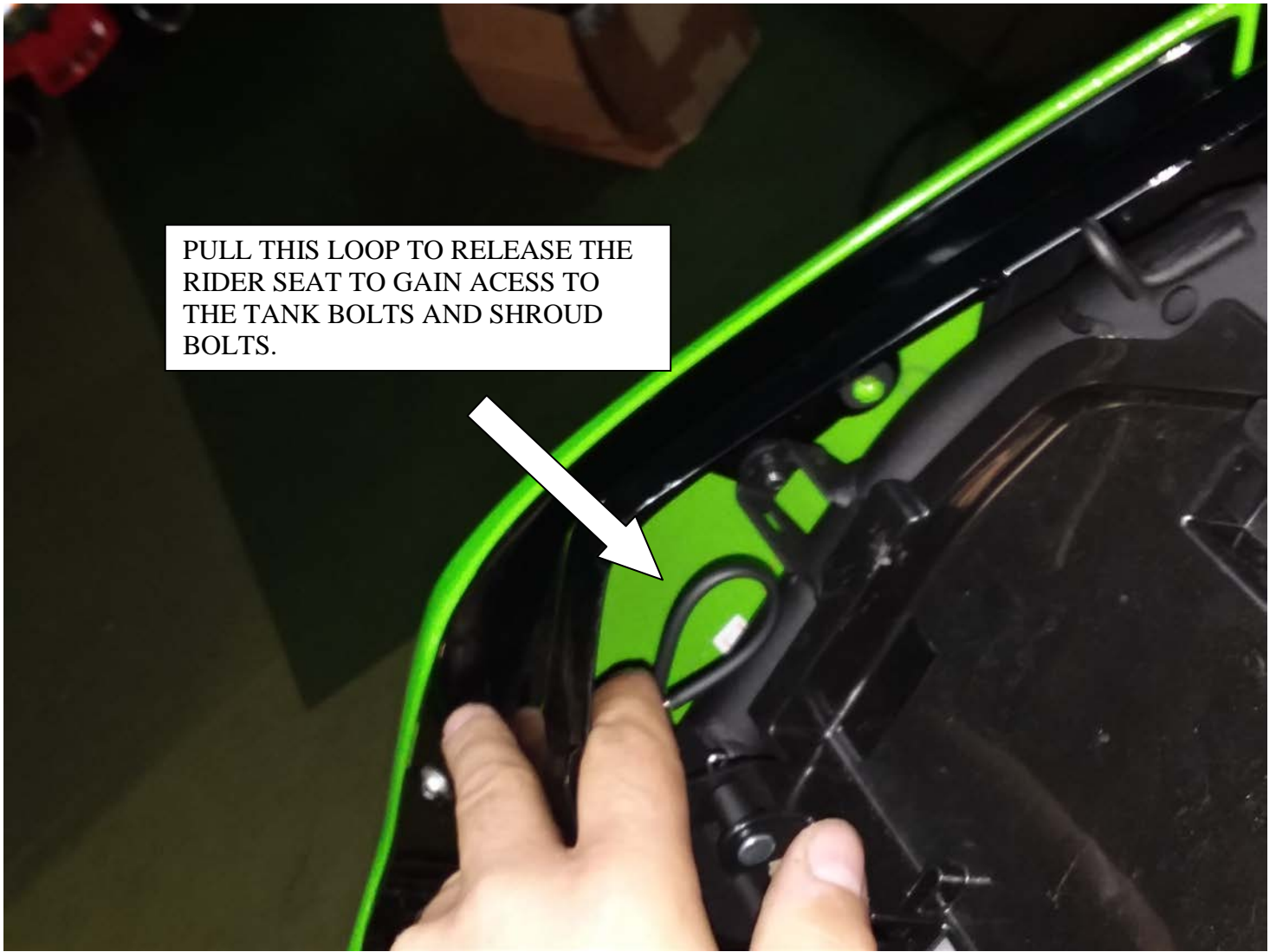


A.B.S. BLOCK LOCATION  
BEHIND THE TOP STEER STEM

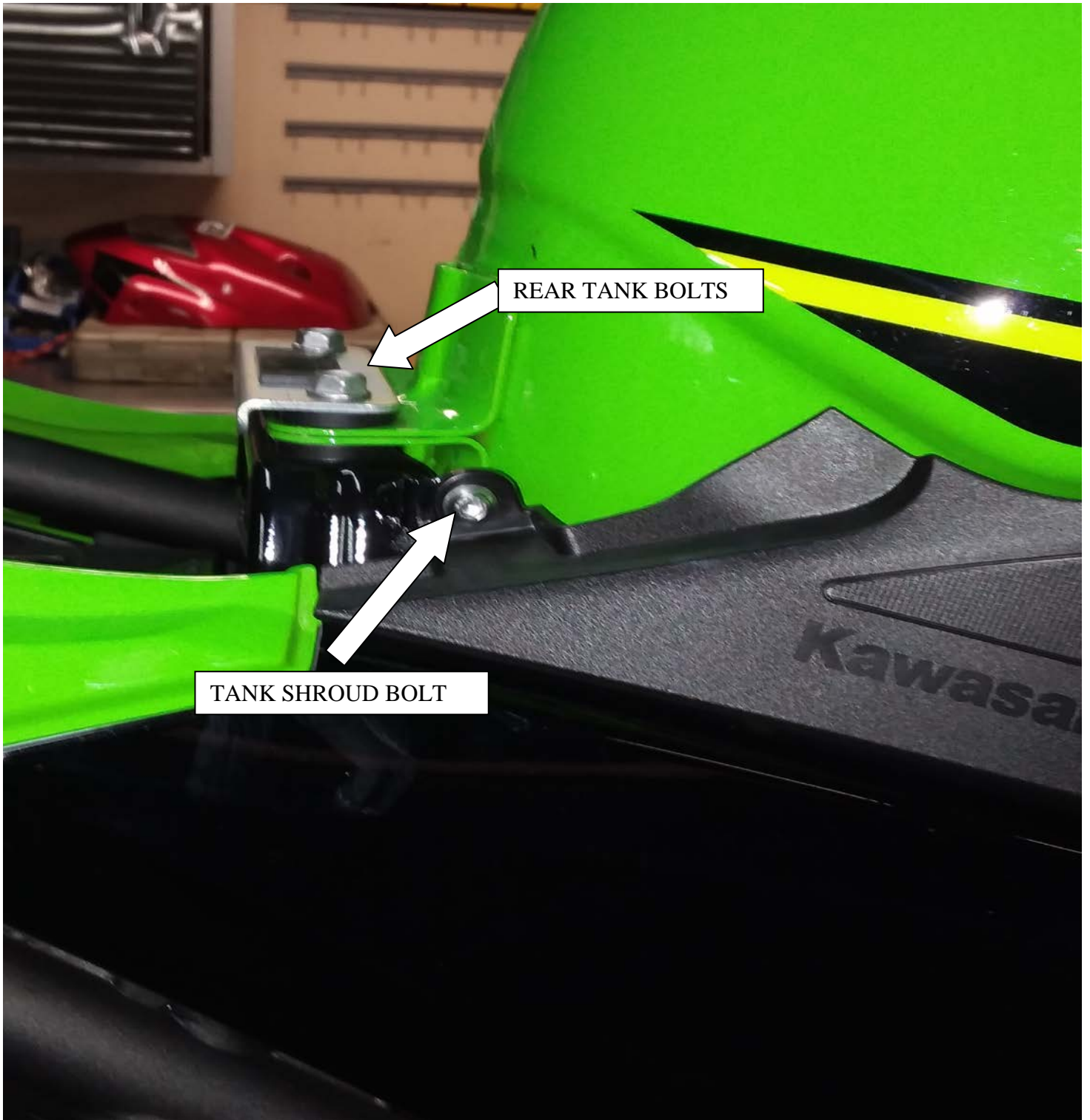
**FIGURE 1: A.B.S. BLOCK LOCATION.**



**FIGURE 2: REMOVE THE PASSENGER SEAT WITH THE KEY**



**FIGURE 2 :CONTINUED**



**FIGURE 2: CONTINUED**



**FIGURE 2 CONTINUED:  
WHERE EVER THERE IS AN ARROW THERE IS A PUSH PIN OR BOLT  
THAT MUST BE REMOVED**

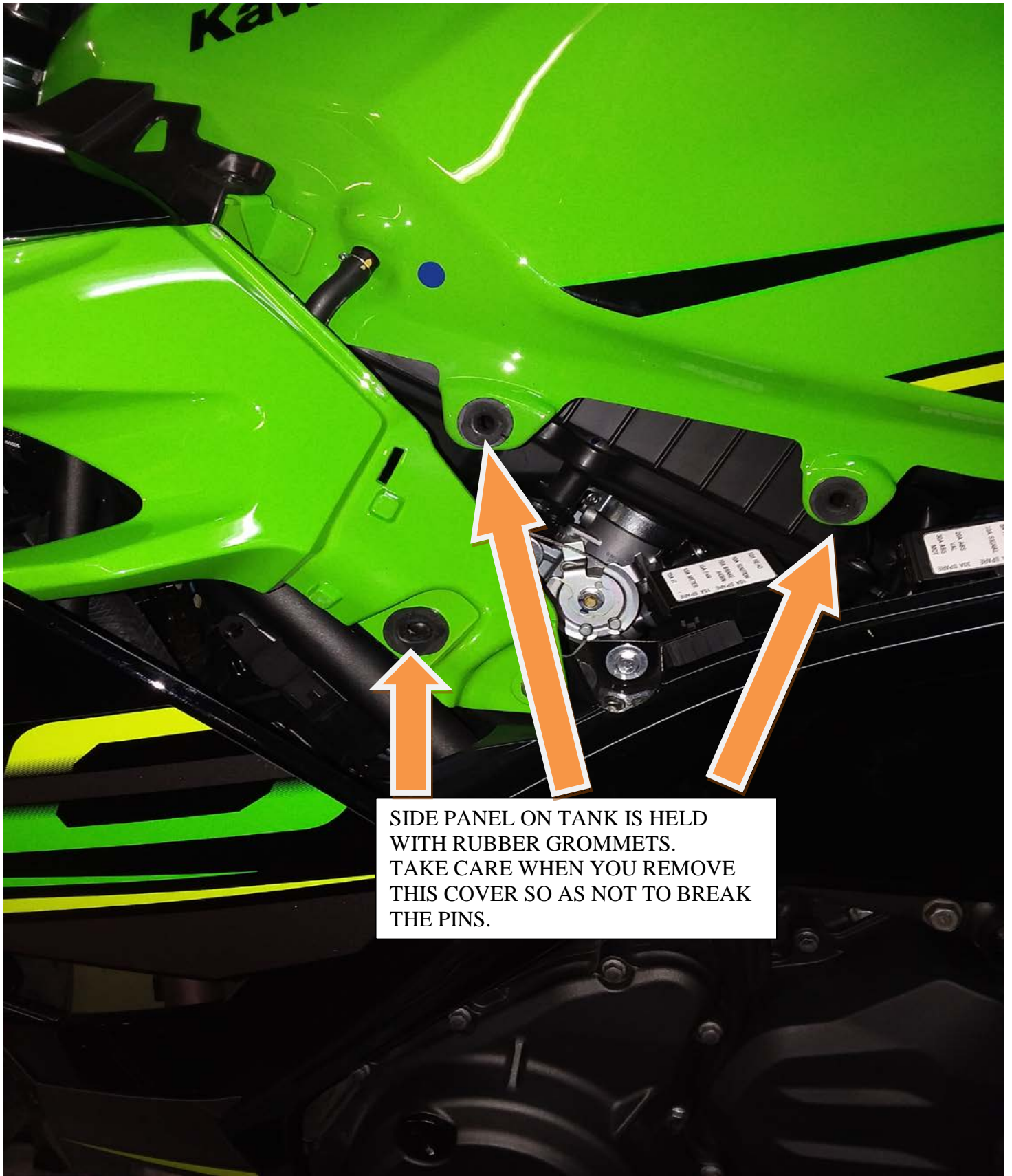


**FIGURE 2 CONTINUED:**

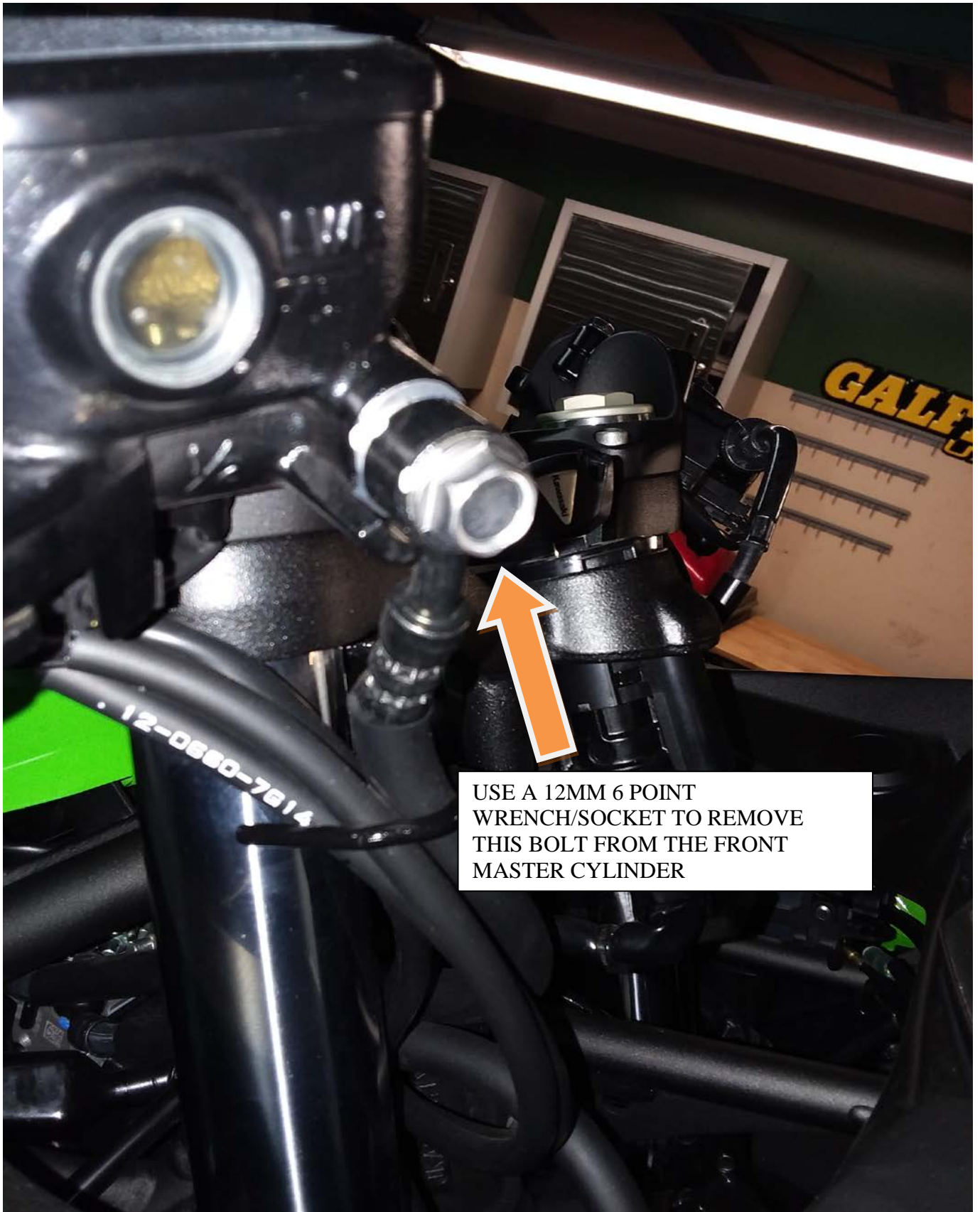




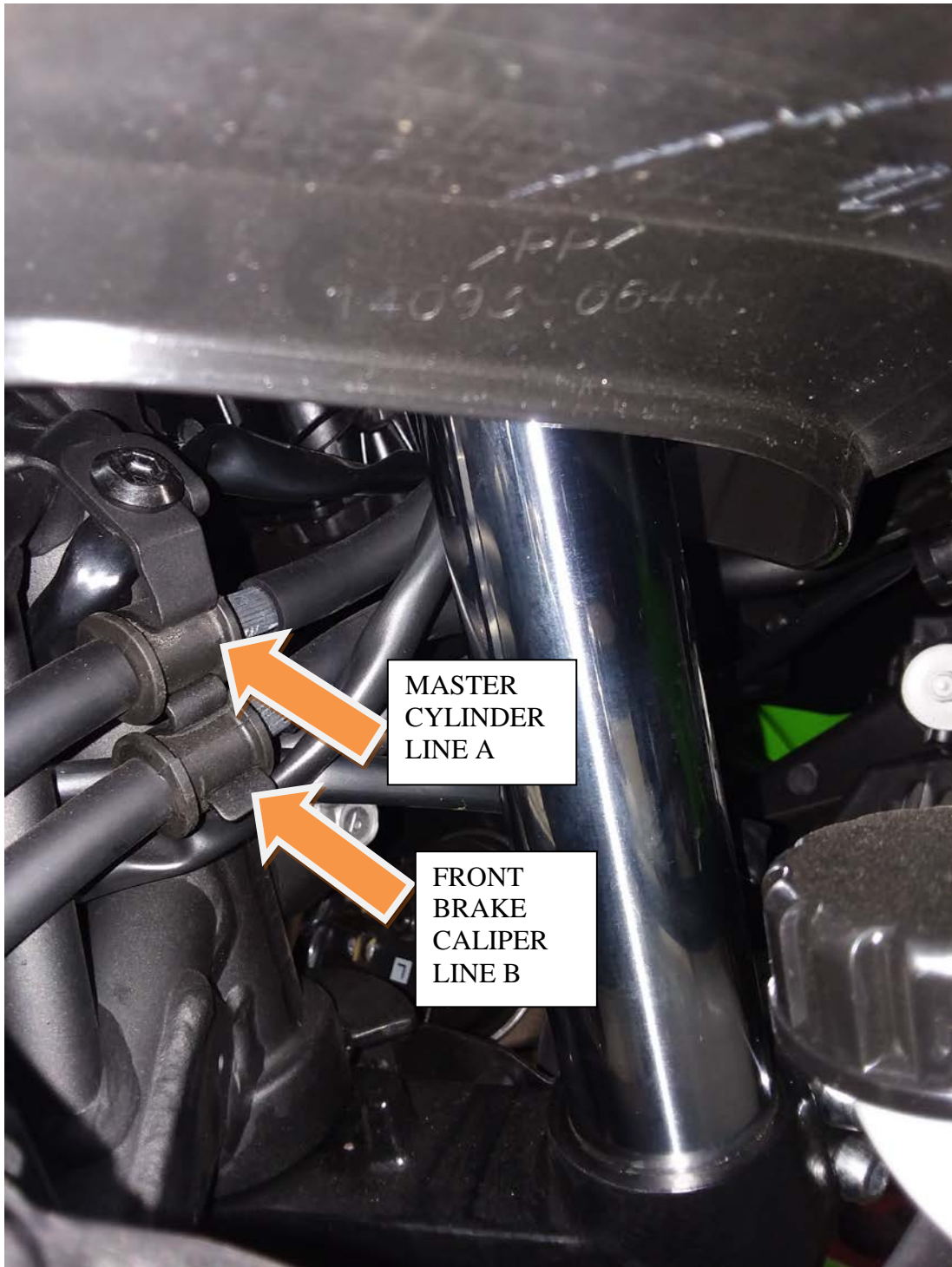
**FIGURE 2 CONTINUED:**



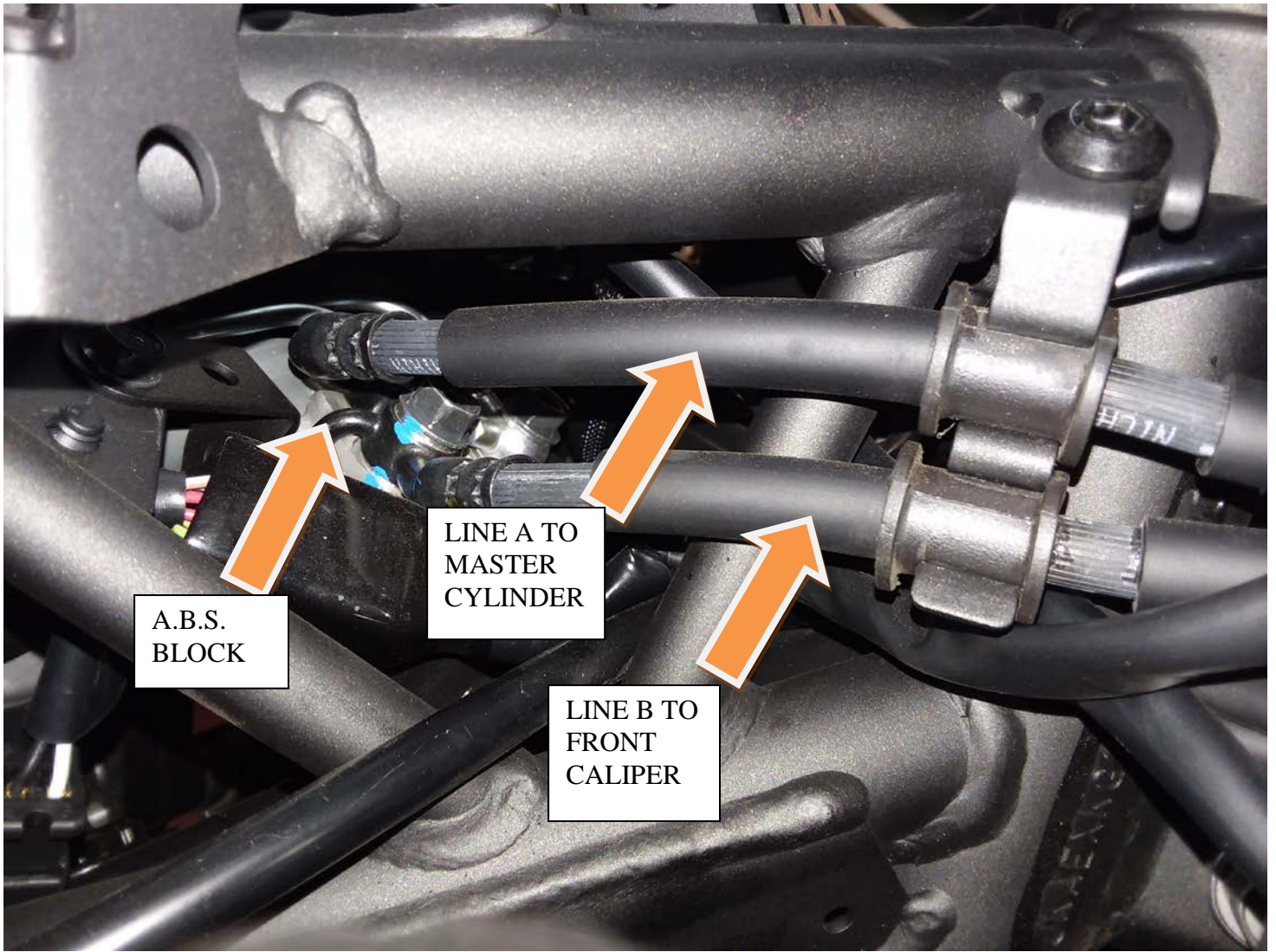
**FIGURE 2 CONTINUED:**



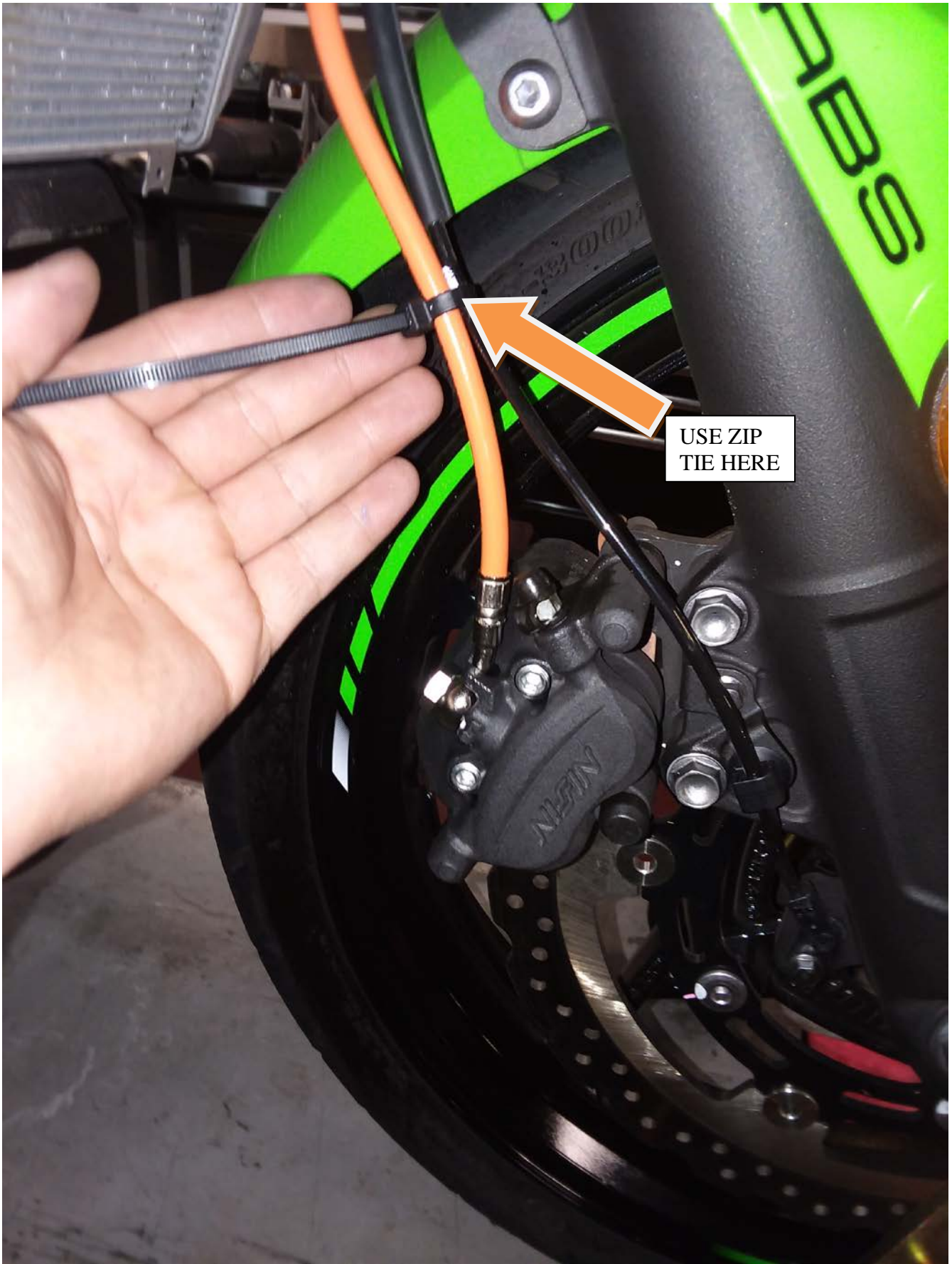
**FIGURE 3: FRONT MASTER CYLINDER**



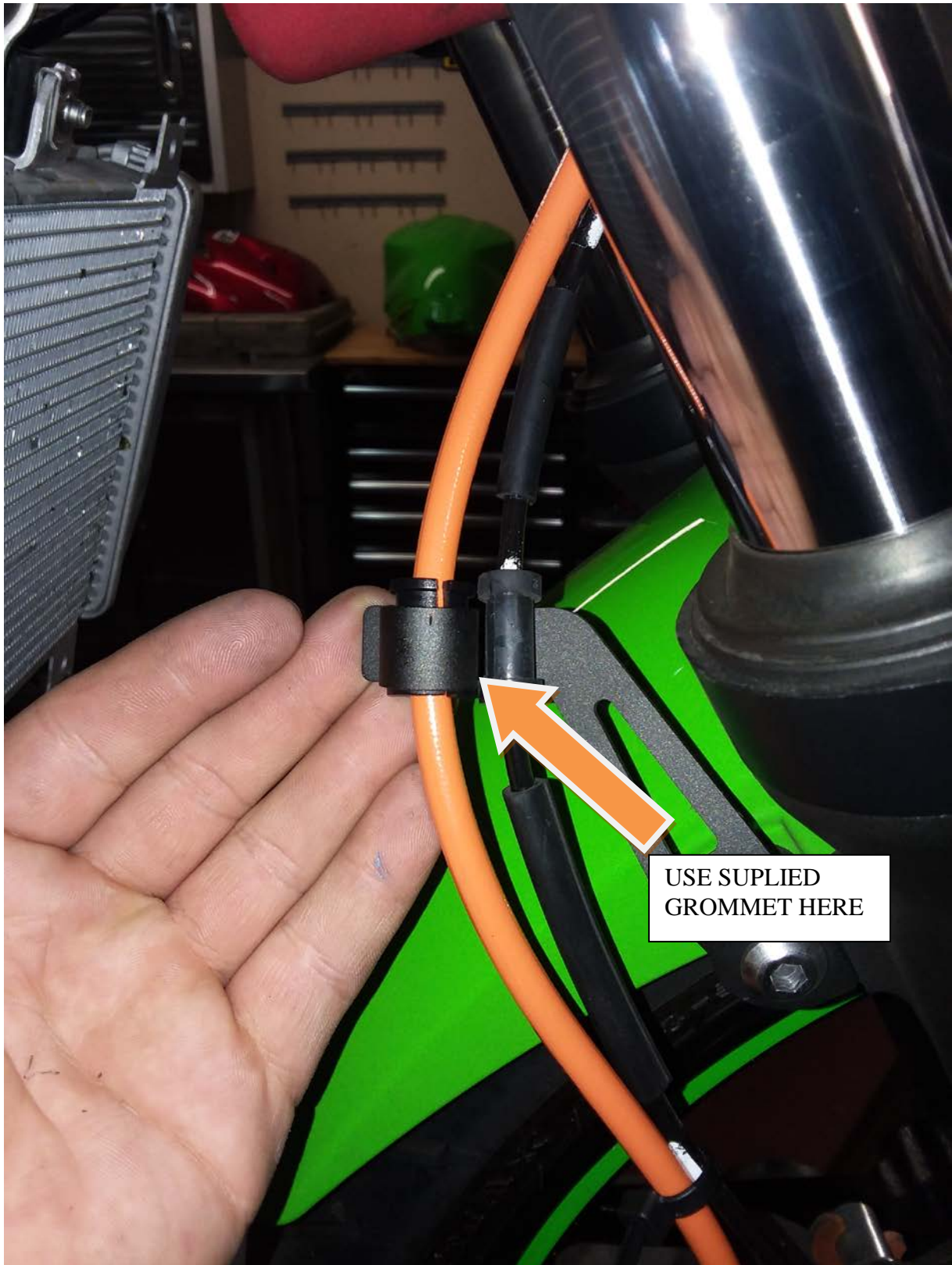
**FIGURE 4: O.E.M LINE HOLDER**



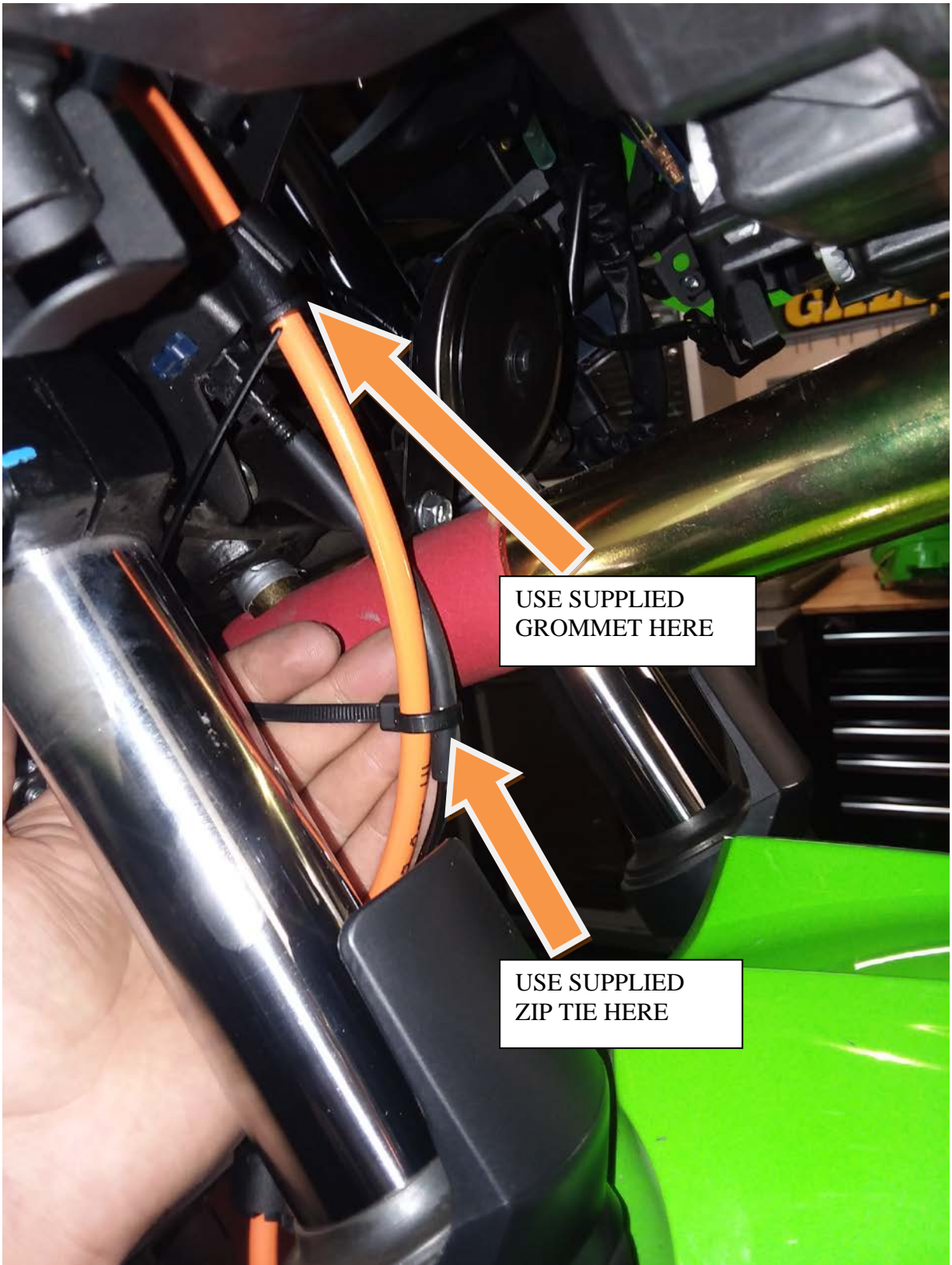
**FIGURE 4 CONTINUED:  
LINE HOLDER TO A.B.S BLOCK**



**FIGURE 5: FRONT CALIPER**

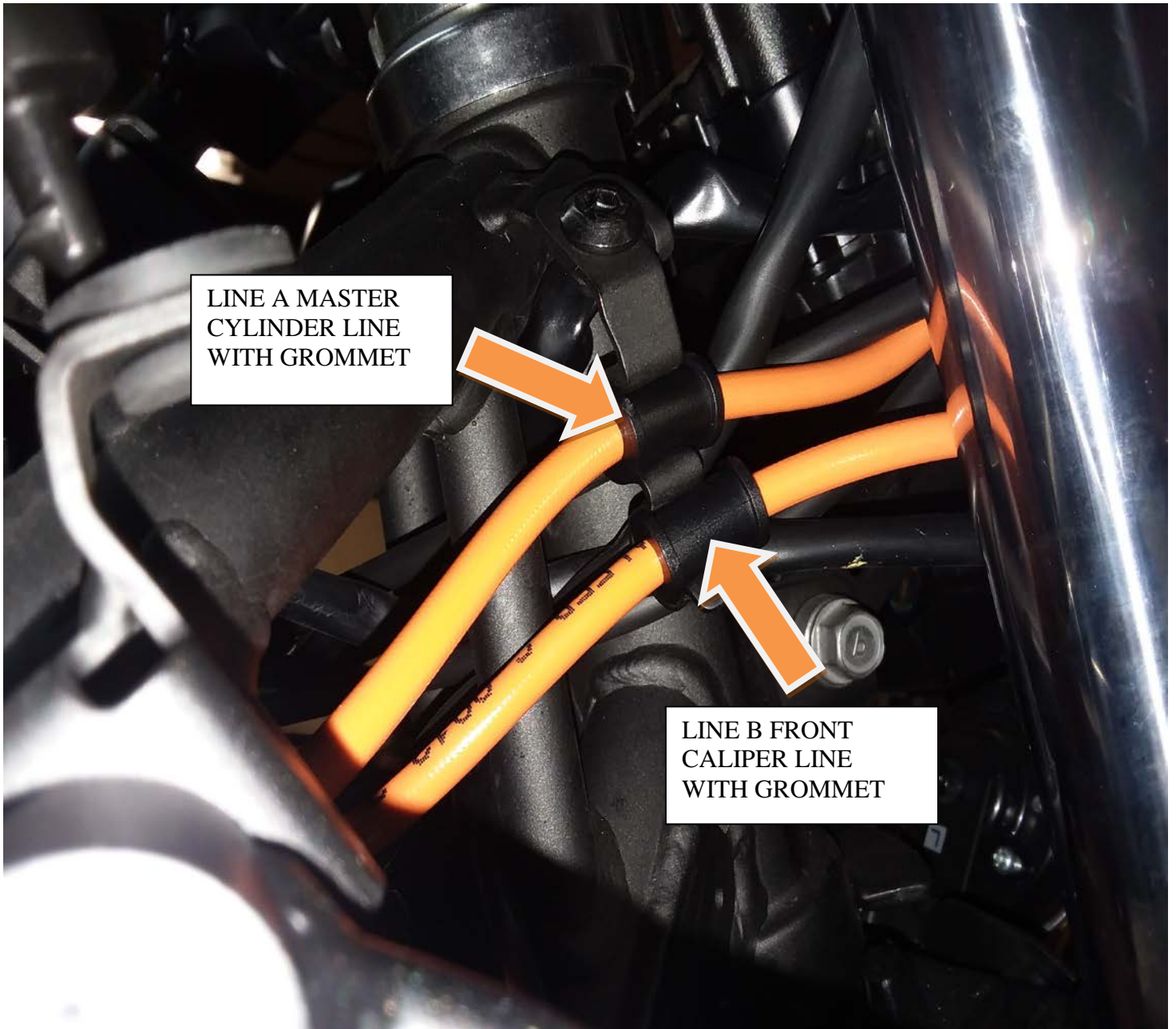


**FIGURE 5 CONTINUED: FACTORY HOLDER**



**FIGURE 5 CONTINUED:**

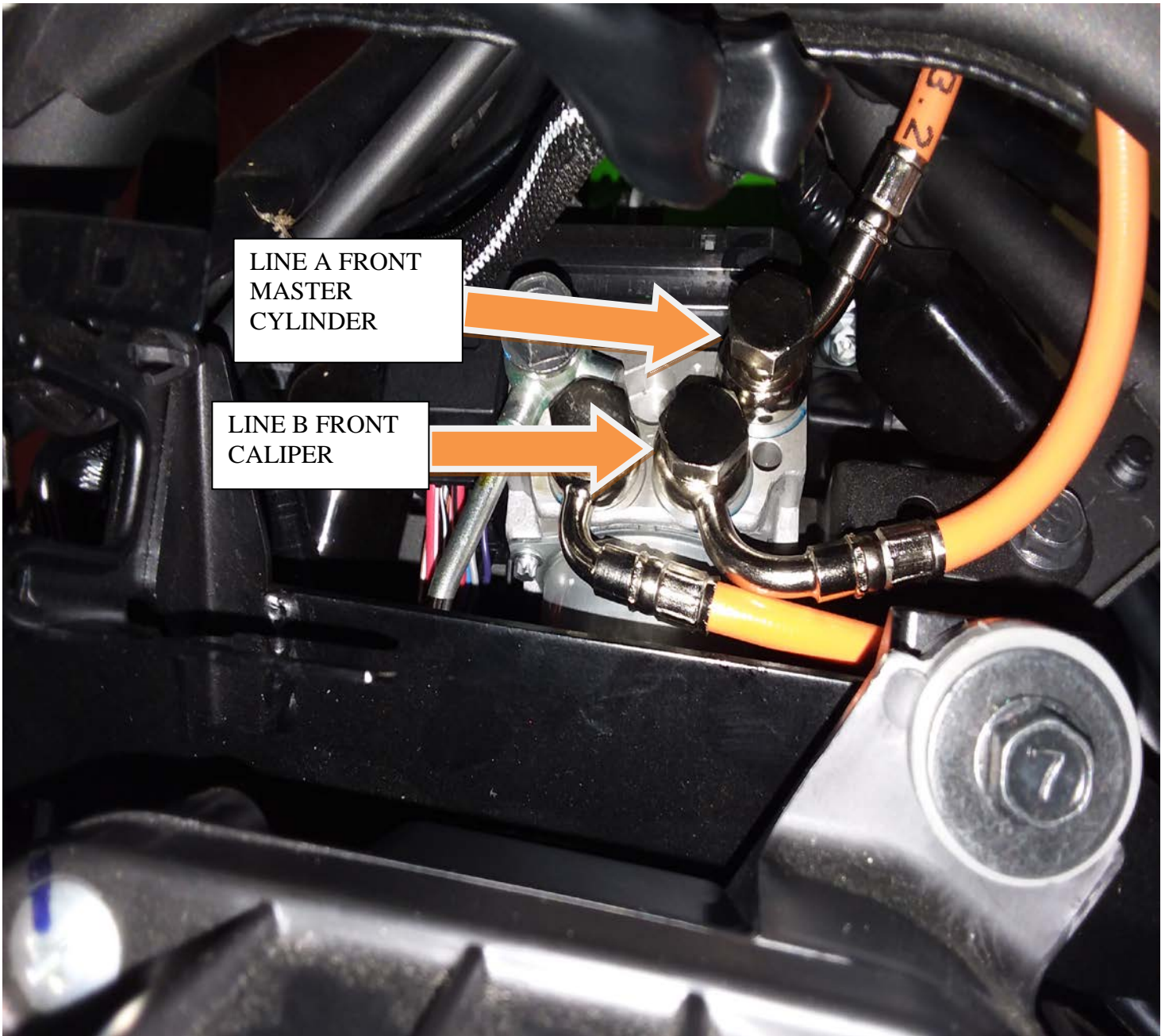




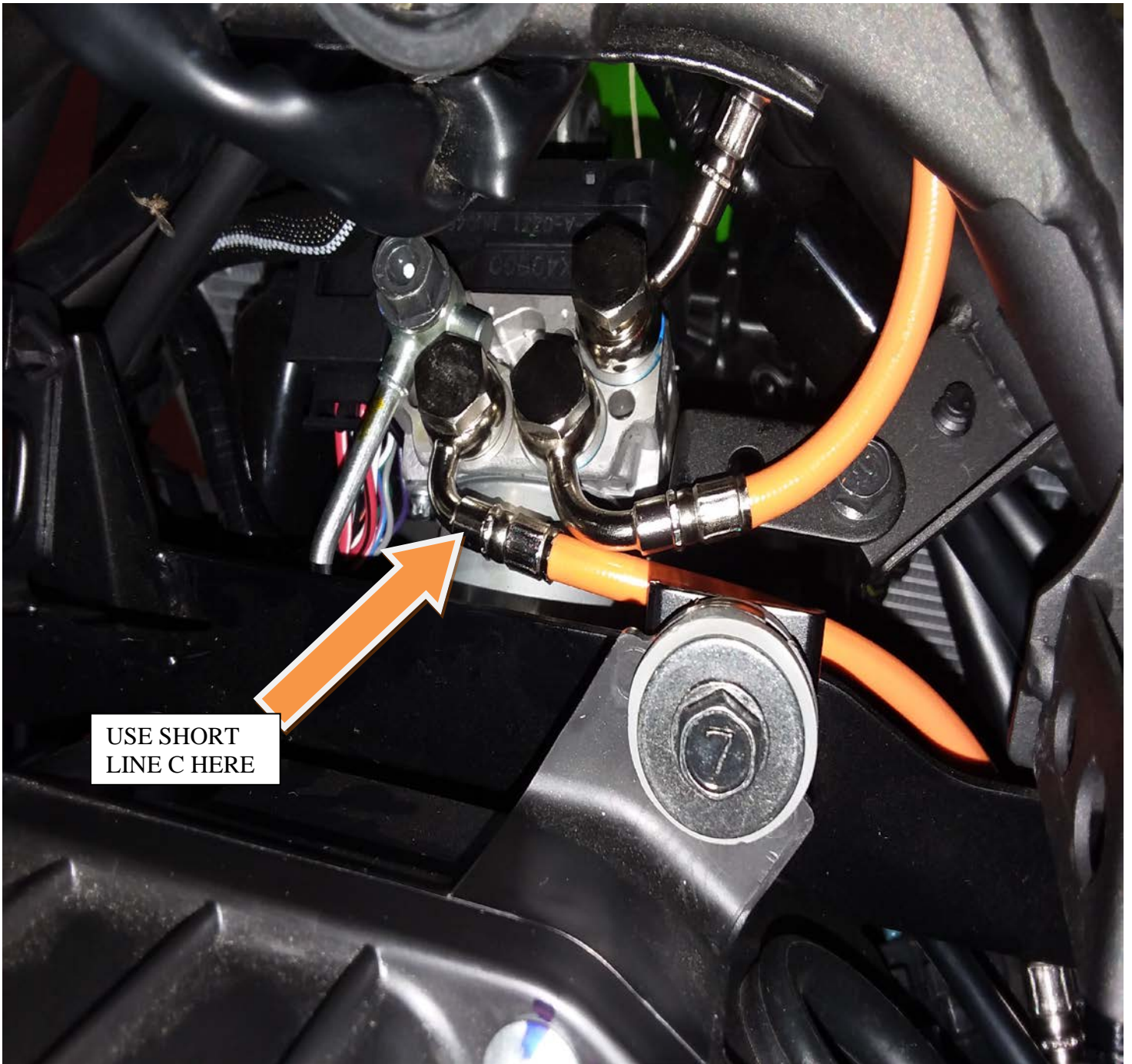
LINE A MASTER  
CYLINDER LINE  
WITH GROMMET

LINE B FRONT  
CALIPER LINE  
WITH GROMMET

**FIGURE 5: LINE HOLDER**



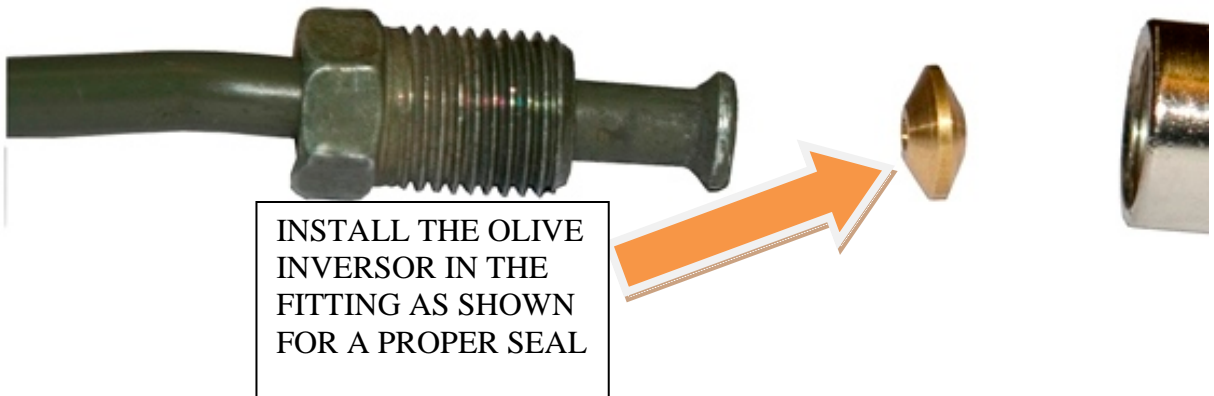
**FIGURE 5 CONTINUED: A.B.S. BLOCK**



**FIGURE 6: A.B.S. BLOCK**



**FIGURE 6 CONTINUED: HARD LINE INSTALLATION**





THE REAR CALIPER IS ATTACHED  
TO A HARD LINE RIGHT ABOVE  
THE SWING ARM PIVOT

**FIGURE 6: REAR BRAKE LINE**



**SEE FIGURE 9: REAR LINE HOLDER**



**FIGURE 10: LINE INSTALLED ONTO CALIPER**