



INSTALLATION GUIDE

Left Hand Rear Brake

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Installation Tips

- Carefully read and be sure to **understand the Safety Information** that accompanies this product before proceeding.
- **Read the entire Guide** before beginning installation.
- Watch the **Brake Kit Installation Video** found at <http://www.rekluse.com/videos>
- **Check brake pads and rotor.** Pads must have at least 50% life and be in good condition. The rotor must be in good condition. Rekluse recommends installing new brake pads with this kit.
- This brake kit is compatible with these brake fluid types: **DOT 3, 4, & 5.1.** Use your bike's recommended brake fluid. **DO NOT use DOT 5** or any mineral oil-based fluids.
- Follow the safety precautions listed on the fluid container.

- To gain space for the Left Hand Rear Brake, it may be advantageous to purchase a lower-profile switch cluster for bikes with bulky left-hand switches.
- Wear proper eye protection and rubber gloves when handling brake fluid.
- Follow local brake fluid disposal and storage guidelines.

Tools Needed

- 2.5 and 3 mm Allen Wrenches
- 8mm, 10, & 17mm End Wrenches
- 21mm End Wrench for threaded brake caps
-or- 7mm End Wrench for bolted brake caps
- Torque Wrench (in-lb or N-m)

Included Parts

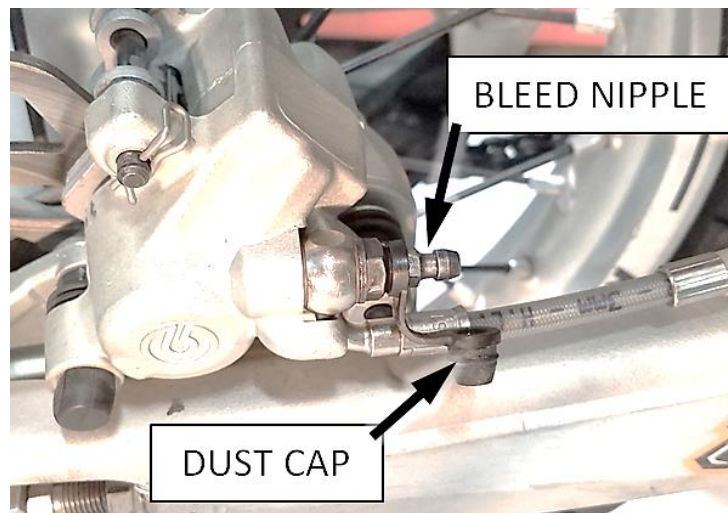
Refer to the included **Parts Fiche** for a detail of the components.

Visit www.rekluse.com/support for a full parts fiche illustration and part numbers.

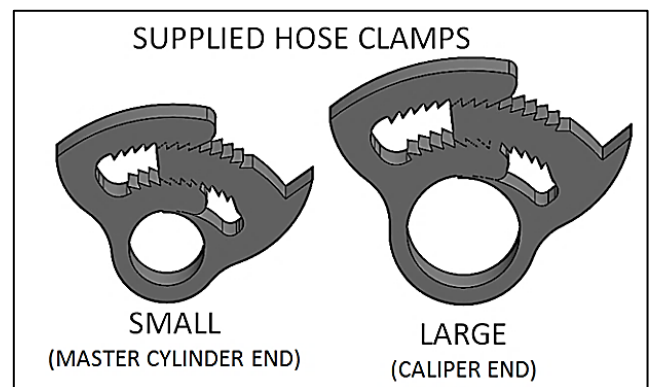
Preparing the Bike

1. Stand the bike upright on a center stand.
2. Surround the caliper with disposable rags to protect the brake pads and rotor from any spilled brake fluid.

3. Remove the dust cap on the rear caliper bleed nipple and, clean the bleed nipple of any debris.



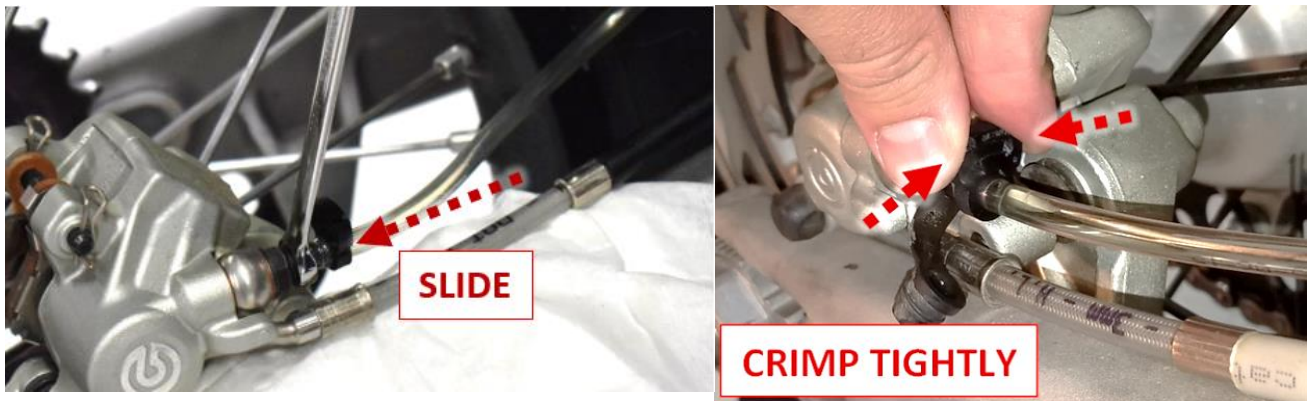
NOTE: Two clamps are included. The larger-diameter clamp will be used at the caliper tube while the smaller clamp will be used at the master cylinder tube.



4. Place an 8mm box end wrench over the bleed nipple and slide the large tubing clamp over the hose on one of the syringes (but don't clamp it yet), then slip the syringe hose over the caliper bleed nipple.



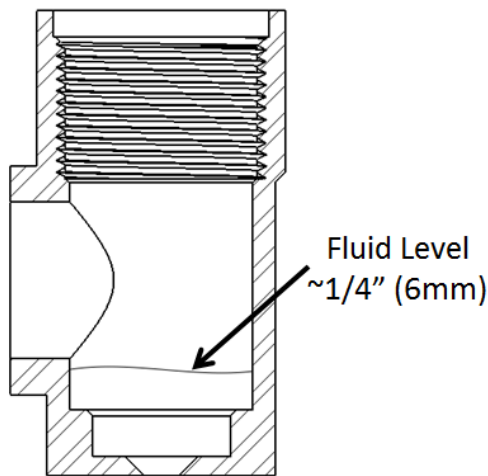
5. Slide the large hose clamp over the area of the syringe tube that is on the bleed nipple.



Bleeding The Foot Master Cylinder

1. Fill the foot master cylinder with brake fluid
2. Keeping the caliper bleed nipple closed, rapidly pump the foot brake pedal 8-10 times, ensuring the pedal is returning to the upward position between pumps
3. On the last pump of the foot pedal, hold the pedal down with significant force and crack the caliper bleed nipple, allowing the pressure to release into the syringe. Close the bleed nipple before releasing the foot pedal.
4. Repeat steps 9-11 until the syringe on the caliper is nearly full.
5. If the fluid in the syringe at this point is dirty, discolored, or otherwise contaminated, remove the syringe from the bike and dispose of the fluid. Re-install the syringe, then skip to step 9 again.

6. Perform steps 10 and 11 until the master cylinder reservoir has minimal fluid — about $\frac{1}{4}$ " (6mm).



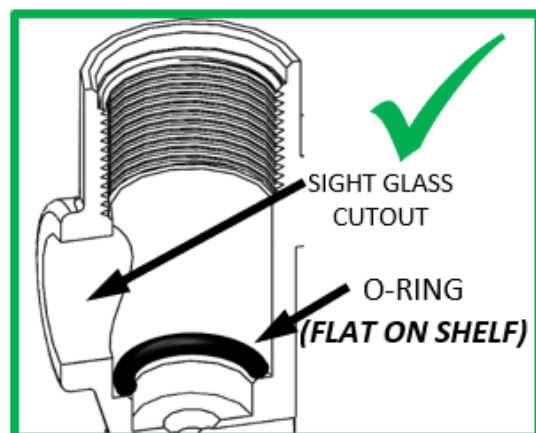
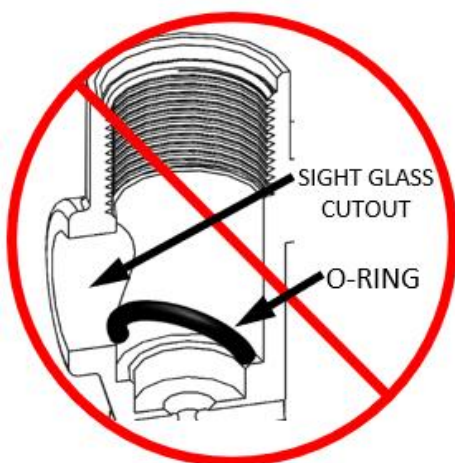
Installing The Brake Sleeve

1. Insert one of the included O-rings into the reservoir of the stock rear master cylinder. Place the O-ring flat on top of the ledge at the bottom of the reservoir.



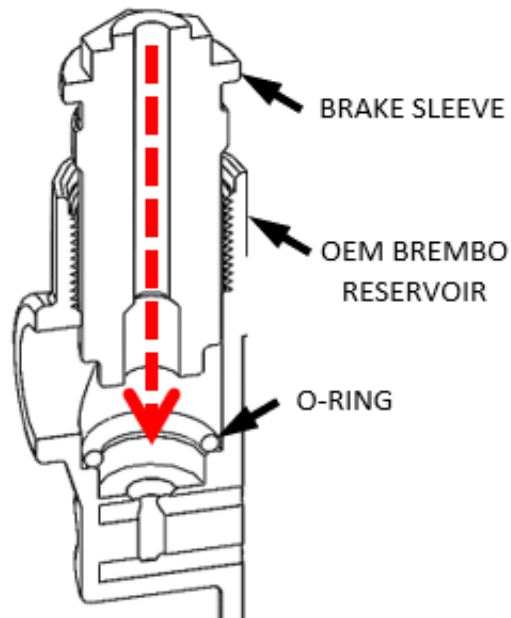
NOTE: Ensure the O-ring seats properly in the reservoir. It can get caught on the sight glass cutout and tear. This will prevent the system from holding brake pressure.

One extra O-ring is included in the kit.

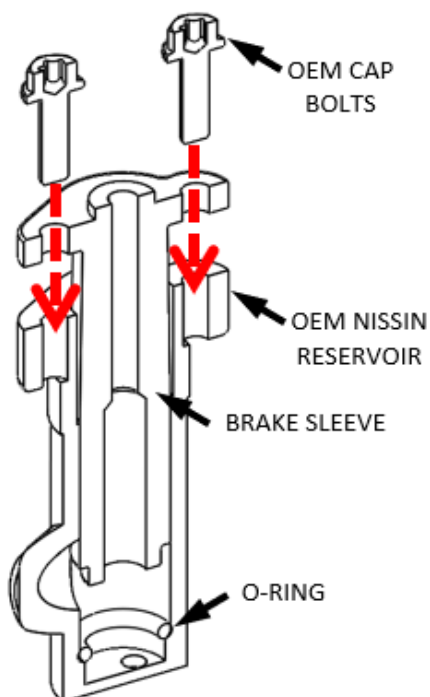


2. Install the Rekluse Brake Sleeve into the rear master cylinder.

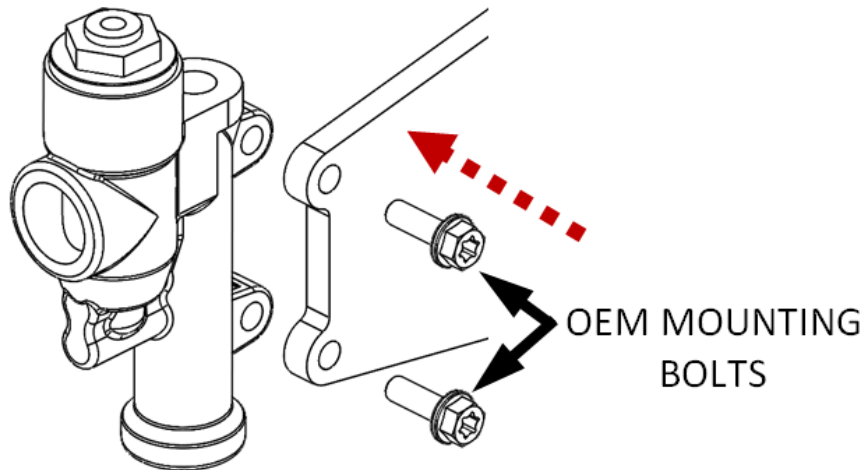
For Threaded cylinders: Thread the sleeve into the reservoir of the master cylinder and tighten with a 17mm end wrench to compress and seal the O-Ring.



For Bolted cylinders: Reuse your two stock reservoir cap bolts and tighten with a 7mm wrench or socket to OEM spec.



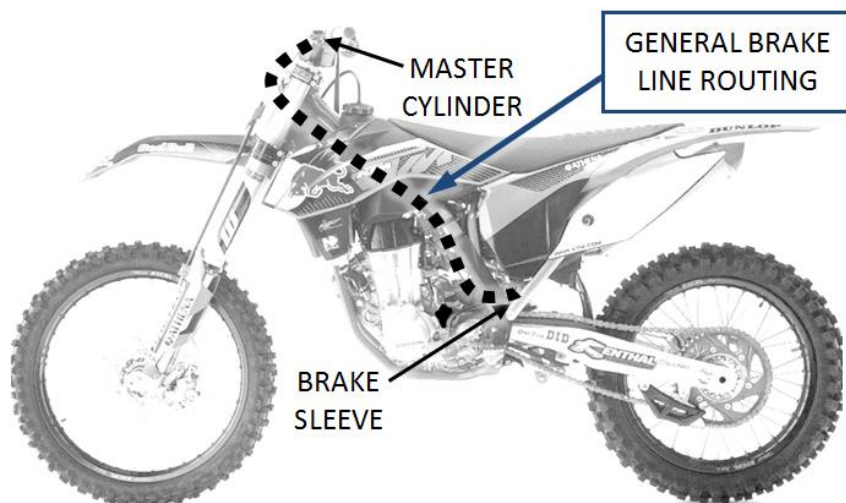
3. If it was previously removed, re-secure the rear master cylinder body to the bike frame using Loctite® 243 (blue) and torque to OE specifications.



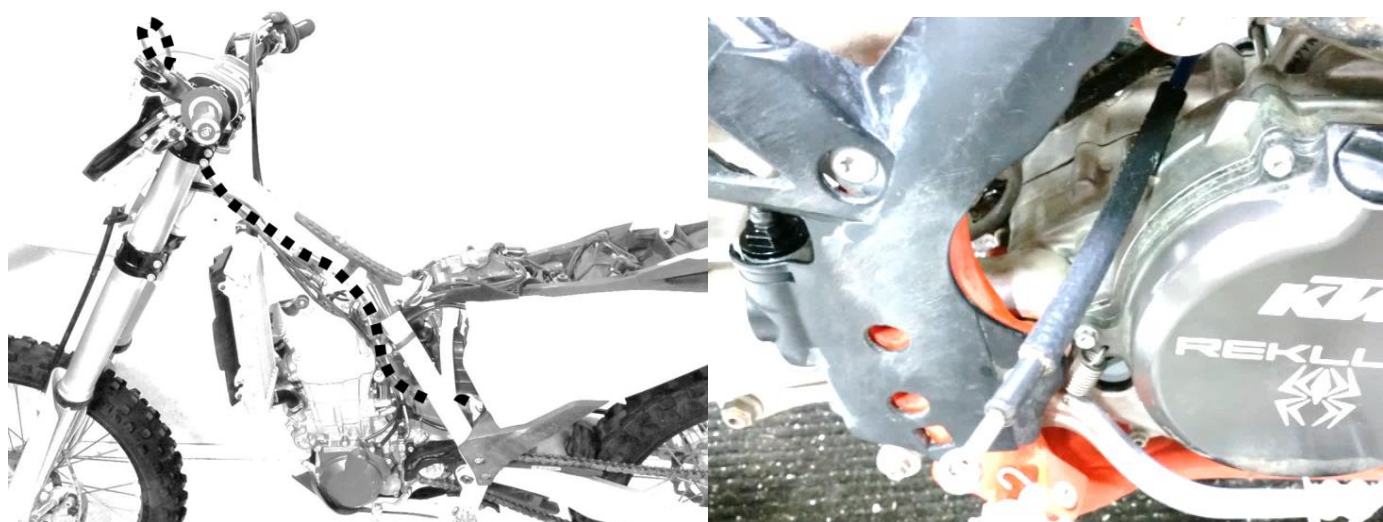
Installing the Left Hand Rear Brake

NOTE: Do not secure the brake line with the zip-ties until the bleeding procedure has been completed. This avoids creating low points in the system for air to be trapped when bleeding.

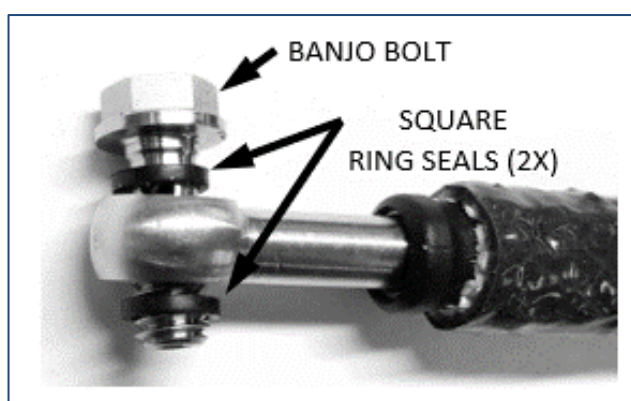
1. Starting from the front number plate with the banjo end of the brake line, route the new brake line beside the clutch cable (or hydraulic clutch line) along the left side of the frame. Continue behind the engine and cross over to the right side of the frame in front of the rear shock.



If the brake line is too long for this routing, you may route it from the number plate along the right side of the frame and then cross over to the left side behind the cylinder head, then behind the carburetor or throttle body and cross over to the right side of the frame in front of the rear shock. The key is to make sure the hose is away from the exhaust and is not pinched by the tank once installed.

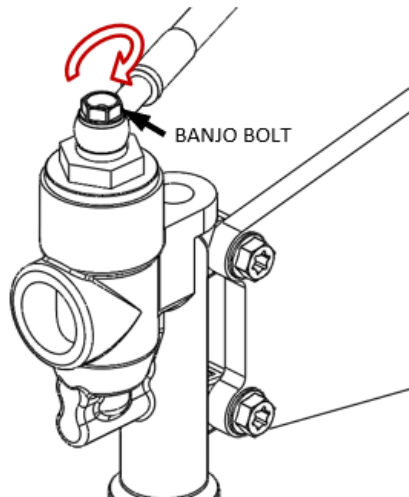


4. From the Brake Line Kit, install the fittings at the rear master cylinder as shown. The banjo fitting on the line should be sandwiched between two square-ring seals on the banjo bolt.



NOTE: Only two square-ring seals will be used. Extra square-ring seals are included in the kit in case any are lost or torn.

5. Ensuring that the line will not contact any moving parts or the exhaust pipe, tighten the banjo bolt to **60 in-lb (7 N-m)**.



6. Using an 8mm socket, mount the Rekluse master cylinder onto the left handlebar. This does not have to be its permanent location but is a good location for routing the brake line and bleeding the system.



NOTE: It can be helpful to remove the clutch master cylinder from the bar after installing the line to assist in the bleeding of the Rekluse master cylinder

⚠ WARNING

Do NOT move the engine kill switch in a manner that makes it inaccessible for proper use in emergencies.

7. With the Rekluse master cylinder mounted on the handlebar, insert the line fitting and tighten to **15 ft*lbs (20N-m)**.



Bleeding The System

See the *Brake Kit Installation* video online at rekluse.com/support/videos for visual instructions

NOTE: It can be helpful to have two people when bleeding: one at the caliper and one at the master cylinder

The brake system will first be “back-bled” from the lowest point (rear caliper) to the highest (Rekluse master cylinder bleed port).

NOTE: Be sure the rotor and pads are in good condition. See the *MAINTENANCE* section for further details.

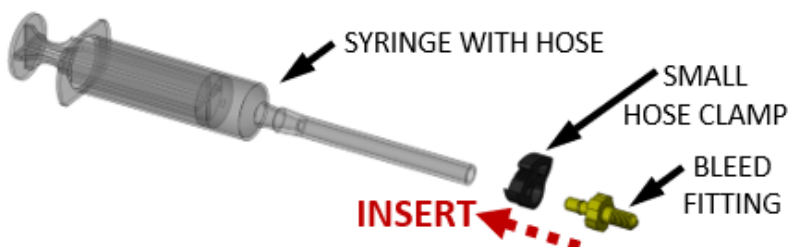
1. Orient the filled syringe at the caliper (filled from step 12) so that the plunger is facing upward and tap on the hose to ensure any air bubbles rise to the top and out of the tubing.



2. At the Rekluse master cylinder, remove the top bleed port screw using a 2.5mm Allen



3. Slide the small hose clamp onto the unused syringe, followed by the supplied Bleed Fitting, but do not crimp the hose clamp yet.

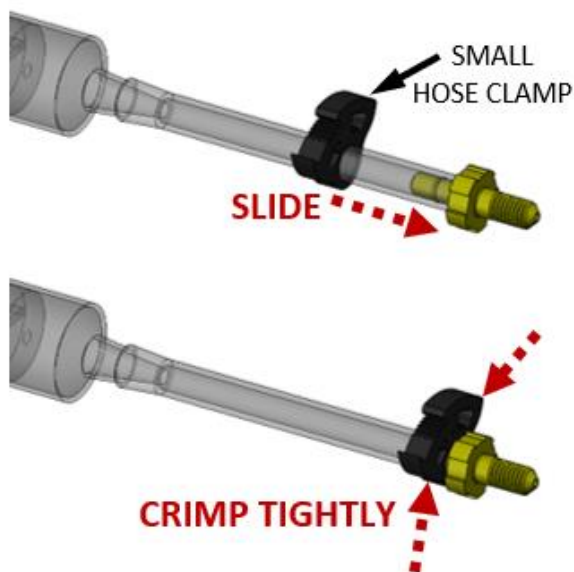


4. Thread the Bleed Fitting (now attached to the syringe hose) into the bleed port in the Rekluse master cylinder. This syringe *will not* have any brake fluid in it at this point.



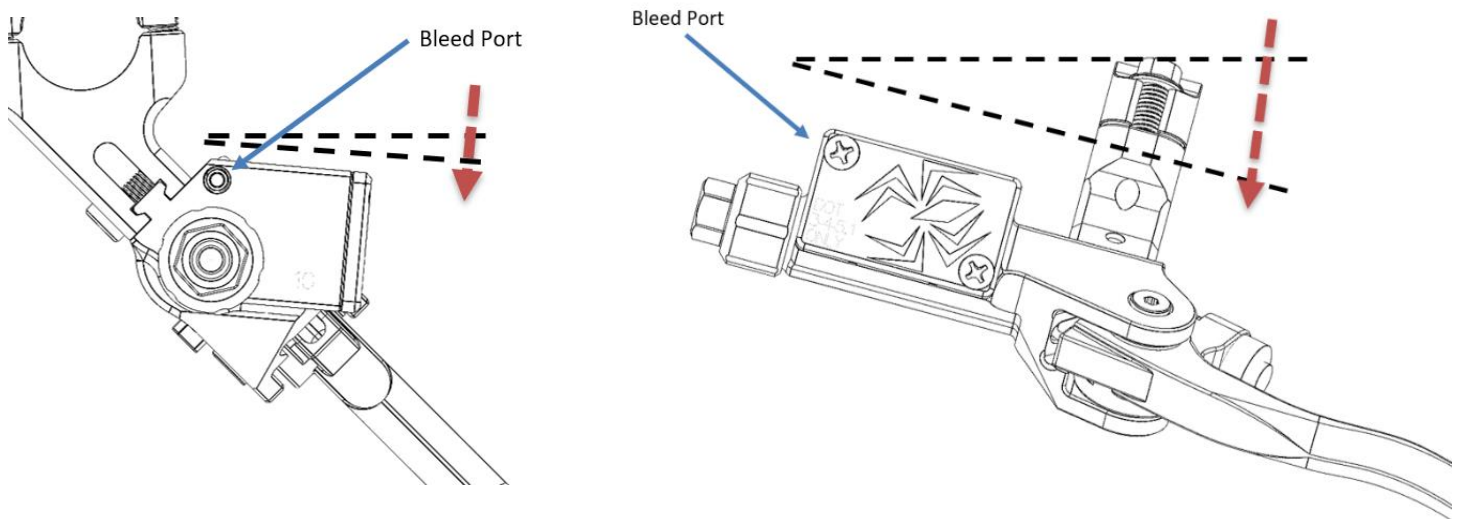
NOTE: If the fitting leaks after being tightened hand tight, then pliers can be used to tighten the fitting into the housing. Be careful not to over-tighten and snap the fitting off in the housing.

5. Slide the hose clamp down over the bleed fitting and crimp the hose clamp to secure the hose to the bleed fitting.



NOTE: The master cylinder cap will **NOT** be removed in this process. The Rekluse master cylinder cannot be properly bled with the cap off.

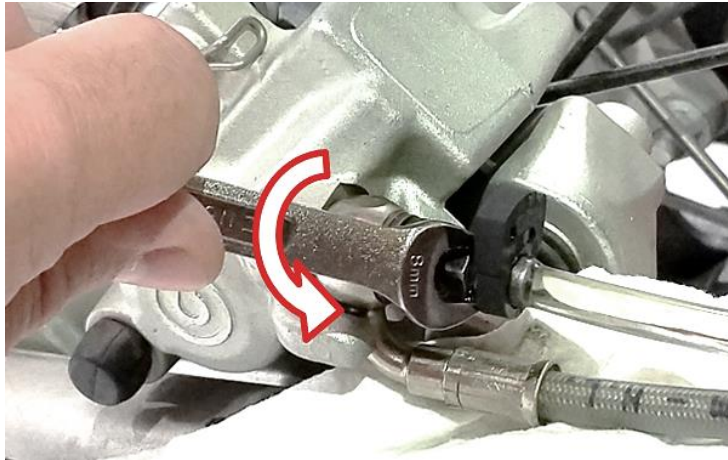
6. At this point, it is necessary to have the bleed port on the Rekluse master cylinder at the highest point of the reservoir. This can be achieved with the master cylinder mounted on the bars by having the front tilted down slightly, and with the bars turned such that the right side of the housing is angled upward (see photos).



NOTE: This can also be achieved by removing the housing from the bars and being allowed to hang in a proper orientation



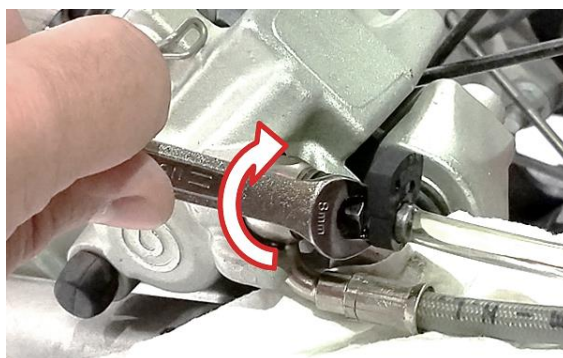
7. While applying light pressure with the syringe, use an 8mm wrench to loosen the bleed nipple ½-turn.



8. Slowly start to push fluid through the system with the syringe at the caliper.



9. Keep pushing fluid through the system while it starts to fill the syringe up at the master cylinder. Push until no more air bubbles are coming out of the master cylinder bleed port, then close the bleed nipple at the caliper.



NOTE: It can be helpful to tap the brake line and master cylinder, pump the lever rapidly, and rotate the master cylinder to help dislodge any remaining air bubbles.

- 10.** Ensuring that the caliper bleed nipple is closed and there are no air bubbles in the syringe hose at the Rekluse master cylinder, apply pressure to the master cylinder syringe while opening the caliper bleed nipple, allowing the fluid in the master cylinder syringe to travel down to the syringe on the caliper.
- 11.** Continue to push the fluid back and forth until no more air bubbles are trapped in the system.
- 12.** At this point, the brake lever should be functioning fully and there should be significant pressure in the system with every lever pull. If the lever feels spongy or soft, repeat the bleeding procedure until there is significant lever pressure.

NOTE: If the master cylinder was removed from the bar to bleed the system, you will need to remount it on the bar to feel the lever pull.

- 13.** Confirm the operation of both the foot pedal and hand lever.

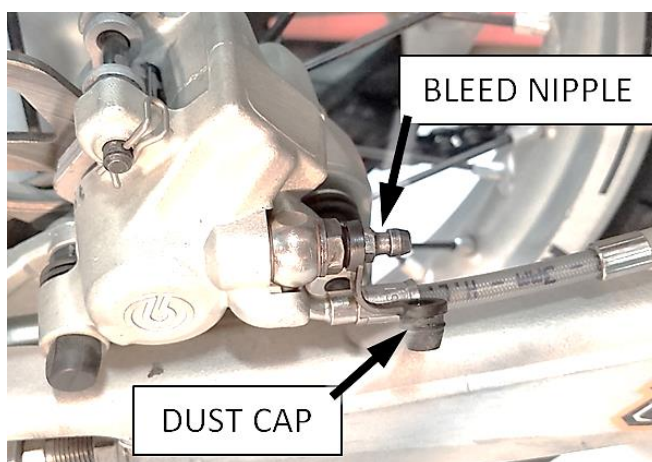
NOTE: It may be necessary to re-bleed the system after the first ride for best performance, as riding tends to help loosen any remaining air bubbles in the brake system.

- 14.** Once all the air is bled from the system, place rags around the bleed port of the Rekluse master cylinder to avoid fluid spillage in the next step.
- 15.** Unscrew the bleed fitting from the master cylinder.

16. Using the syringe at the caliper, *gently* force a small amount of fluid to top off the master cylinder bleed port and reinstall the Bleed Port Screw using

NOTE: Fluid should be flush with the bleed port when installing the screw.

17. With the bleed nipple tightly closed at the caliper, remove the 8mm end wrench, syringe, and hose and replace the dust cap on the bleed nipple.



NOTE: Do not discard any items from your Bleed Kit, as you will reuse them when performing future maintenance on your brake system. See the MAINTENANCE section for info.

18. Check all brake line fittings for leaks.

19. Slide the rubber boot over the fitting on Rekluse master cylinder

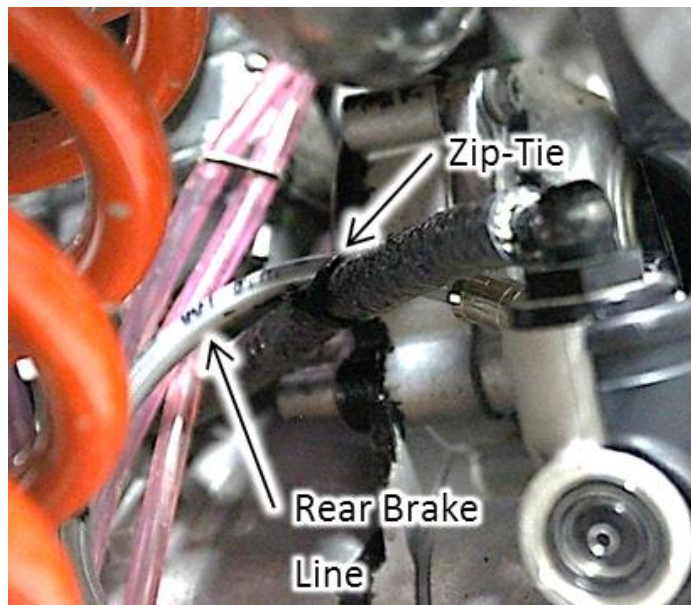


WARNING

Pads contaminated with brake fluid cannot be used. New pads must be installed if contamination occurs.

Final Installation

1. Secure the new brake line to the OEM rear brake line near the shock with the included zip-tie and then to the hydraulic clutch line (or clutch cable) upward along the frame using the other provided zip-ties is one popular method. Ensure the brake line is clear of moving parts and the exhaust pipe.

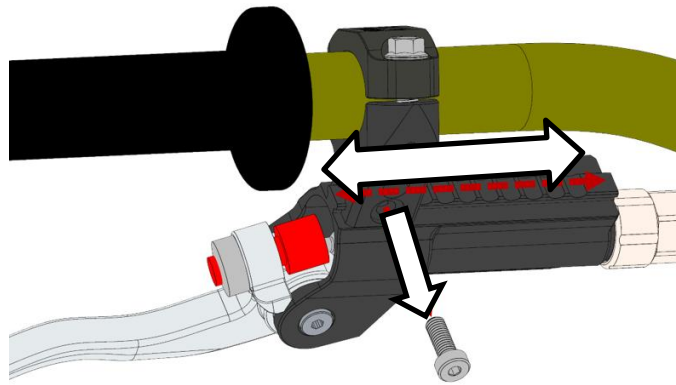


NOTE: The brake line comes preassembled with a length of thermal shielding on the banjo end. Make sure that this shielding is slid down the line toward the banjo before securing the line with zip ties. The shield is intended to protect the brake line from the heat of the exhaust pipe.

Lever Adjustment

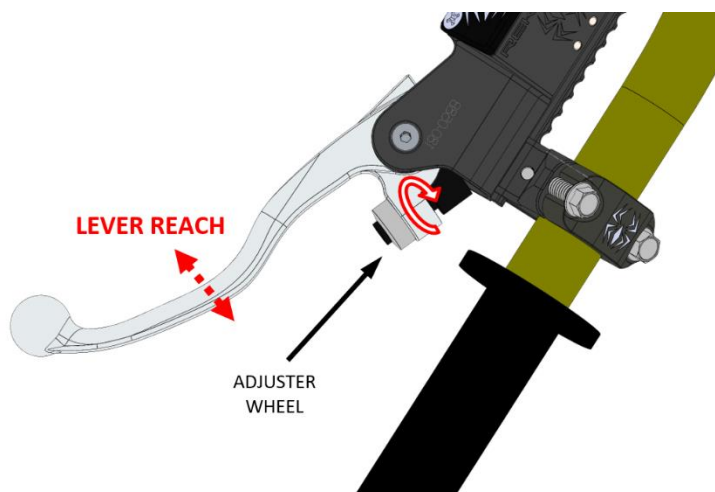
Lateral Lever Adjustment

The master cylinder body can be moved laterally (left and right) in the bar mount by removing the stainless-steel Allen screw. Once adjusted, reinsert the screw and torque to **26 in.lbs (3N-m)**

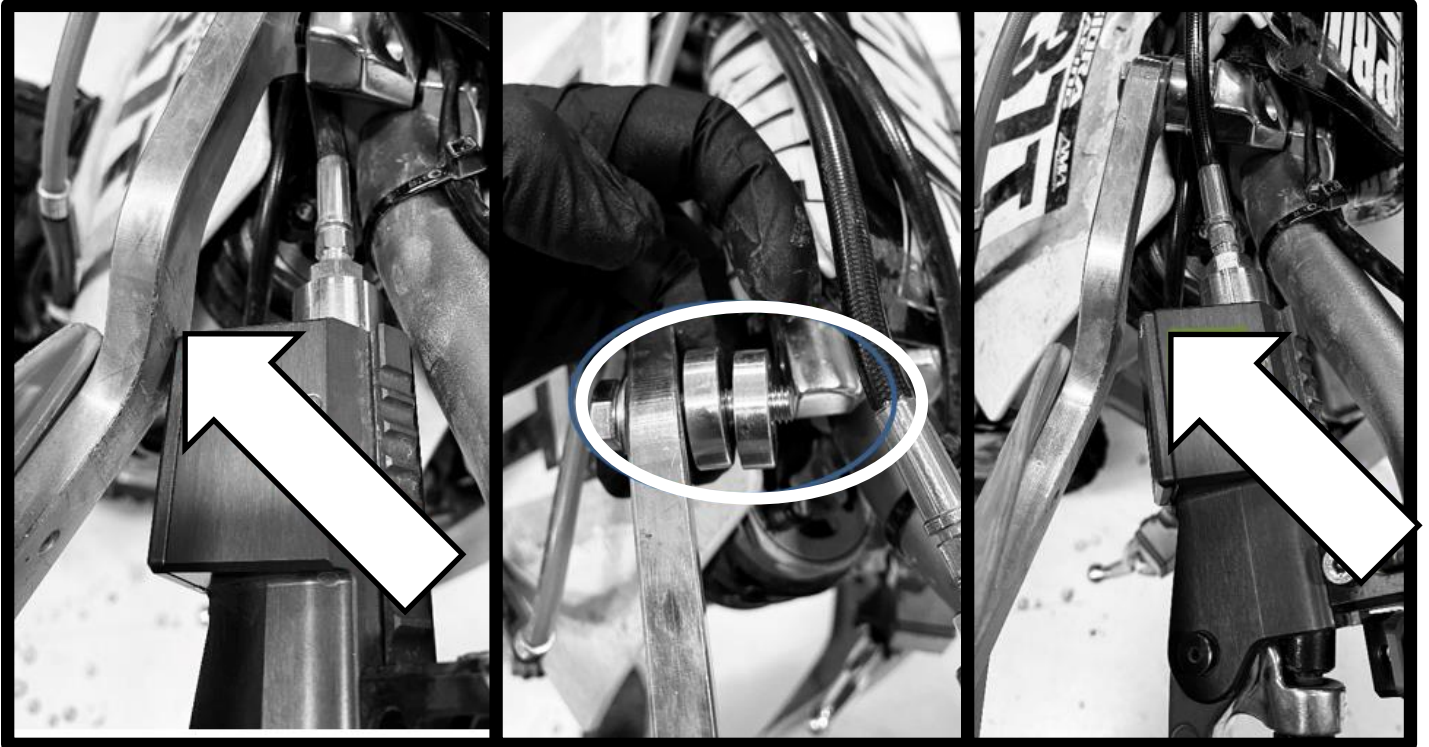


Lever Reach Adjustment

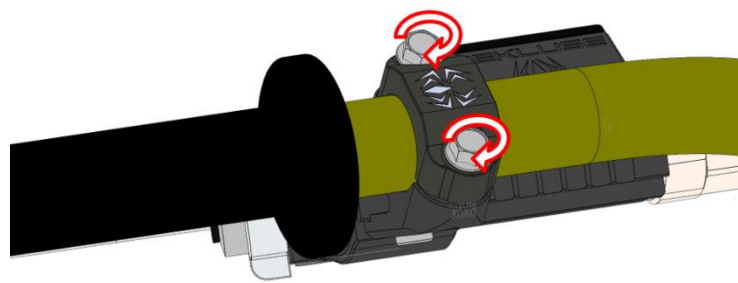
To adjust the brake lever toward or away from the handlebar, turn the adjuster wheel located at the push rod cup to obtain the desired position.



NOTE: Some hand guards may need to be adjusted or modified to achieve the desired lever positions. Shown is an example of where spacing washers were used to space out a bark buster spar to clear the master cylinder:



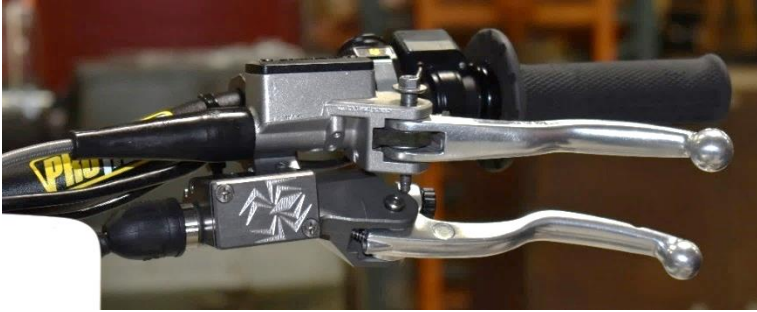
2. After determining the desired lever positions, including the clutch lever perch, re-tighten the handlebar clamps evenly. Tighten the clamp screws to **7 ft-lbs (10N-m)**.



3. Check the rotation of the handlebars to ensure there is no binding or pinching in the lines.

NOTE: Be sure to leave enough clearance for proper actuation of the clutch and brake lever.

NOTE: The Rekluse master cylinder can be mounted **above** or **below** the stock clutch lever depending on your preference and riding style. However, mounting below is recommended.



4. If the brake rotor was contaminated with any brake fluid during the bleeding process, use brake cleaner or isopropyl alcohol to clean it.

⚠ WARNING

Pads contaminated with brake fluid cannot be used. New pads must be installed if contamination occurs.

5. Reinstall the bike's fuel tank and seat, along with any other components that were removed during the installation process.

⚠ WARNING

Failure to become familiar with Rekluse Left Hand Rear Brake operation before use can cause death, serious injury, and/or property damage.

Do NOT attempt to operate a Rekluse Left Hand Rear Brake equipped vehicle on unfamiliar terrain until you are completely familiarized with the operation of this product.

First practice operating Rekluse Left Hand Rear Brake equipped vehicles in a safe area free of obstructions.

Maintenance

- 1.** Before every ride, check to be sure that your brake lever and pedal have sufficient fluid pressure. Also, check that the Rekluse master cylinder's adjustment mechanisms and pivot joints are free of dirt and debris and that they operate smoothly.
- 2.** Periodically, it may be necessary to lubricate the pivot joints of the master cylinder. Graphite dry lube or white lithium grease both work well.
- 3.** After hard use, if the master cylinder lever does not return to full extension or it takes too long to do so, it may become necessary to lubricate the master cylinder piston and seals. Use silicone-based grease such as Molykote® 111 to lubricate the piston and seals, and then re-bleed the system after reassembly.
- 4.** The Rekluse master cylinder is fully rebuildable. Rebuild kits and replacement parts are available from Rekluse.

Troubleshooting

Symptom	Solution
Spongy Lever	Re-bleed the system, taking extra care to get all of the air out of the master cylinder by rotating and tapping on it. All air in the system must be removed. The brake line connection at the left-hand master cylinder can be cracked open while the lever is being depressed to aid in purging bubbles.
Leaking fluid around the rear master cylinder	The brake sleeve O-ring may be torn or seated incorrectly in the rear master cylinder reservoir. Disassemble and inspect for any tears or pinched spots in the O-ring. A spare O-ring is included in your kit. Replace it if necessary.
Fluid will not push through the system (hydro-locked)	<p>Either the brake line is plugged or pinched somewhere, there is debris in the system, or the master cylinder port is blocked by its piston.</p> <ol style="list-style-type: none"> 1. Ensure that the system is bled up to the rear master cylinder by loosening the banjo bolt and pushing fluid until it flows out around the banjo bolt without bubbles. 2. Confirm that the Rekluse master cylinder lever is not being depressed by a hand guard or something else on the handlebars. 3. Check to see that the line is not blocked or pinched by decoupling it from the Rekluse master cylinder and pushing fluid. If the fluid does not flow freely, try to flush the line or order a new one.
The system will not pressurize (the lever remains spongy after re-bleeding)	<p>Air is likely trapped in a low spot of the brake line. One common area for this to happen is near the rear shock where the line dips underneath the intake. Try to position the line in a way that this section slopes upward, and air can travel up the line.</p> <p>Remove the MC from the bars and hold it high in the air, pulling it tight to get the line as straight and vertical as possible. Repeat stages 2-5 of the bleeding process, shaking and tapping the lower sections of the line to loosen any air bubbles.</p> <p>It may also help to close the bleeder bolt and pull on the syringe at the master cylinder. This may dislodge the air.</p>
Rear Wheel is Not Locking / Poor Braking Performance	The brake pads and/or rotor may have been contaminated with brake fluid during the bleeding process. Clean the area with isopropyl alcohol or a quality brake-cleaning spray. If this does not help, replace the pads and/or rotor (once brake-pad friction material is exposed to brake fluid, it will absorb it and is permanently compromised).

Spongy Foot Pedal	If re-bleeding does not solve this, you may have torn the O-ring in the rear master cylinder. Replace the O-ring and add about 1/4" (6mm) of brake fluid to the reservoir before reinstalling the Rekluse Brake Sleeve and re-bleeding.
During or after riding, the lever gets spongy or performance lessens	Likely, a small amount of air was trapped in the Rekluse master cylinder after bleeding, and vibrations created during the ride allowed the air to enter the pressurized brake line. To ensure that no air is trapped in the master cylinder, re-bleed the system and be sure to top off the bleed port as described in Stage 5 of the bleeding process.
Squeaky Lever Pivots	Lubricate the pivot joints using either a graphite dry lubricant or white lithium grease.
Worn-out Lever Pivots	If you have worn your pivots to the point that they are loose and/or your lever is sloppy, a replacement lever and pivot kit can be purchased from Rekluse.
Lever Not Returning	Lubricate the master cylinder piston and seals using silicone-based grease. Re-bleed the system after reassembly of the master cylinder.

NEED ADDITIONAL HELP?

Website

www.rekluse.com/support

Phone

(208) 426-0659

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Email

tech@rekluse.com

