



INSTALLATION GUIDE

Foot Master Cylinder

Doc ID: 191-5310A
Revision: 101223

Contents

INSTALLATION TIPS	2
TOOLS NEEDED.....	3
INCLUDED PARTS	3
PREPARE THE BIKE	3
INSTALL THE FOOT MASTER CYLINDER.....	4
BLEED THE SYSTEM	9
ADJUST THE PEDAL.....	12
TRIM AND INSTALL THE FRAME GUARD.....	13
TROUBLESHOOTING.....	14
MAINTENANCE.....	15
NEED ADDITIONAL HELP?.....	15

Installation Tips

- Carefully read and be sure to **understand the Safety Information** document 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, DOT 4, & DOT 5.1.** Use your bike's recommended brake fluid. **DO NOT use DOT 5 fluid** (which is a silicone-based fluid) or any mineral oil-based fluids.
- Follow the safety precautions listed on the fluid container.
- Be sure to wear proper eye protection and rubber gloves when handling brake fluids and oils.

- Check your local regulations regarding brake fluid disposal and suitable containers for storing it.

Tools Needed

- 2.5 Allen Wrench
- 8mm End Wrench
- 8 & 13mm Socket
- Torque Wrench

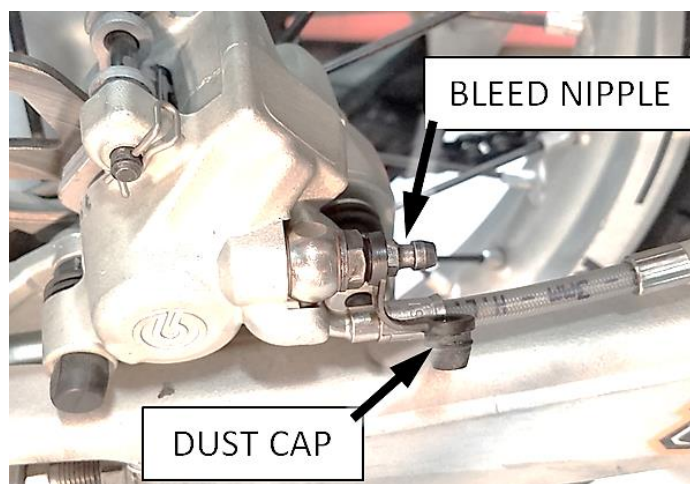
Included Parts

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.

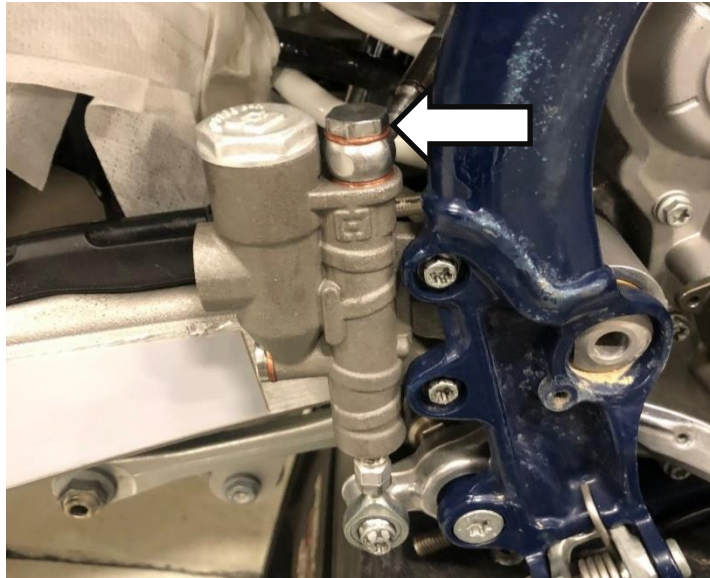
Prepare the Bike

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.

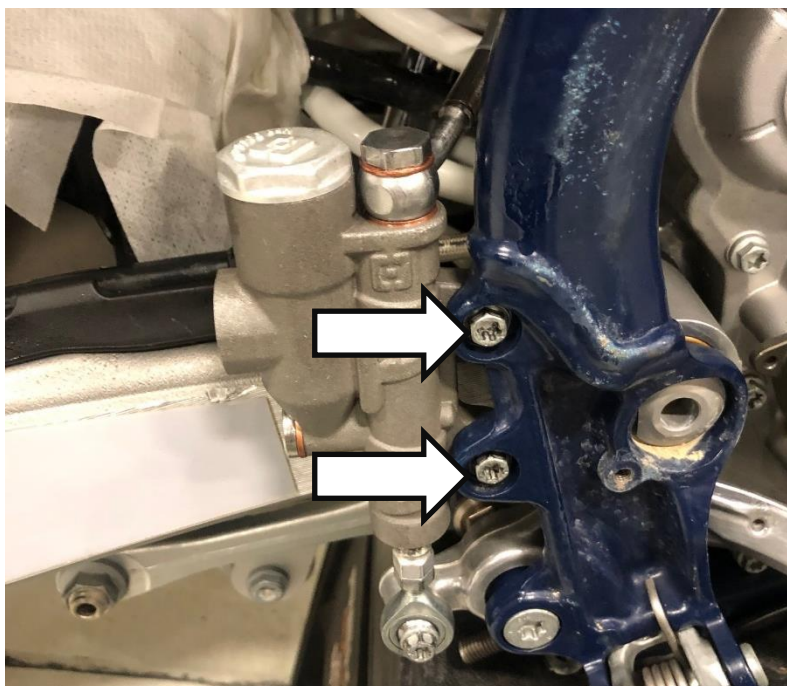


Install the Foot Master Cylinder

1. Loosen but do not remove the brake line banjo on the foot master cylinder.

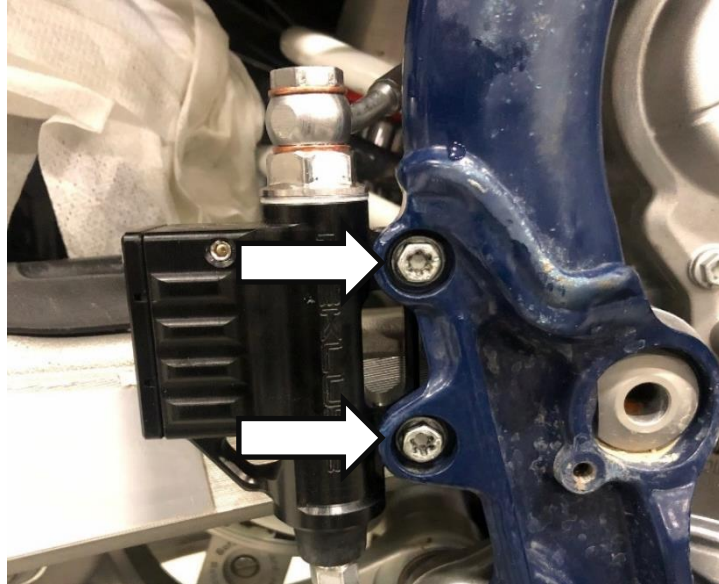


2. Remove the OE foot master cylinder from the frame.



3. Prime the Rekluse foot master cylinder by filling it with brake fluid, and keeping it in an upright position. This will make bleeding the system easier.

4. Apply Blue Loctite 243 to the two mounting screws and mount the Rekluse master cylinder to the frame. Torque to **7 lb.ft**



5. Remove the brake line from the OE master cylinder and attach it to the Rekluse master cylinder, hand tightening it. Performing this step quickly can keep much of the fluid in the line, and will make bleeding the system easier

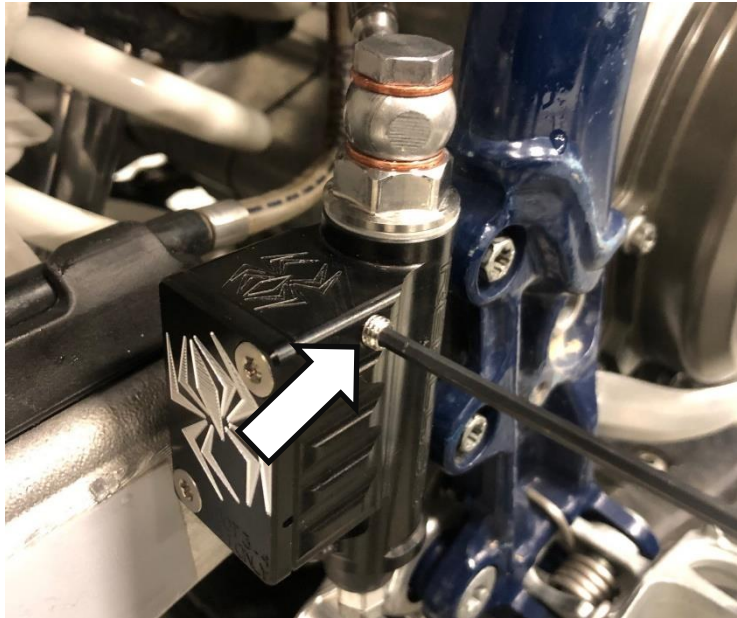
6. Position the brake line so that it is safely away from the exhaust and the coil spring. Torque the banjo to **18 lb.ft**



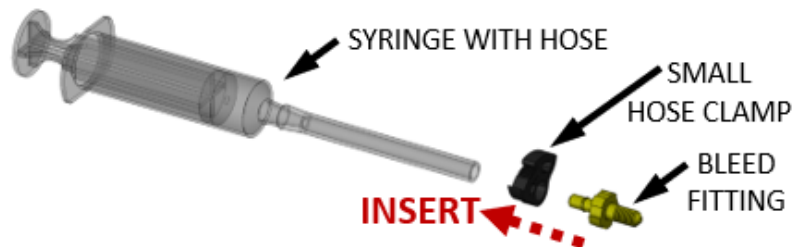
⚠ WARNING

Failure to correctly position the brake line may result in damage to the line and brake system failure. The line must be clear of any moving components as well as the exhaust.

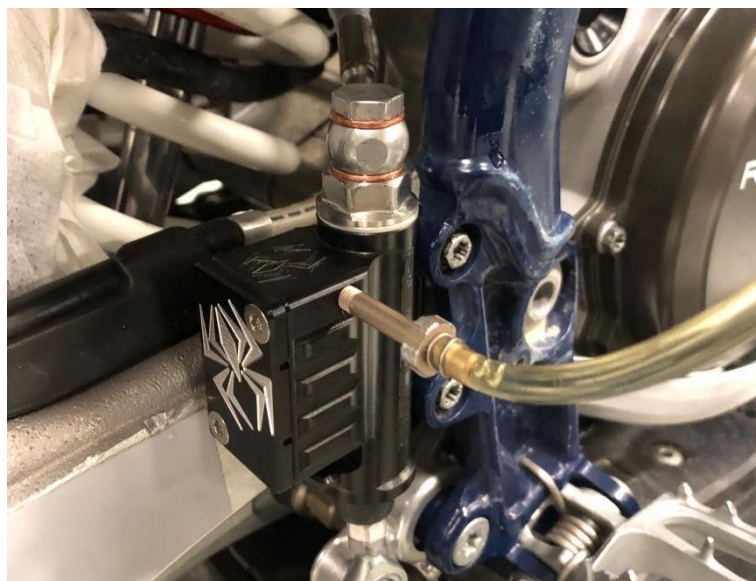
7. At the Rekluse master cylinder, remove the top bleed port screw using a 2.5mm Allen



8. Slide the small hose clamp onto the empty syringe, followed by the supplied bleed fitting, but do not crimp the hose clamp yet.

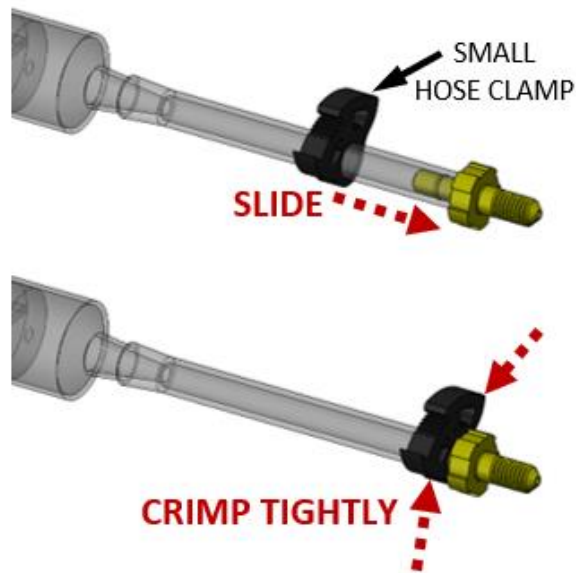


9. Thread the empty syringe into the bleed port in the Rekluse master cylinder.



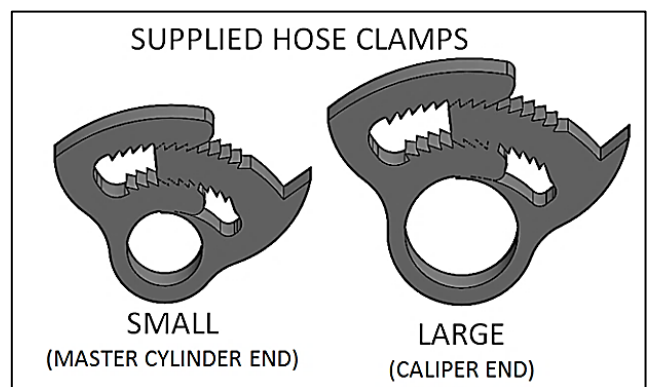
NOTE: If the fitting leaks after being tightened hand tight, then pliers can be used to tighten the fitting into the housing. Be careful not to over-tighten and snap the fitting off in the housing.

10. 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.

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.

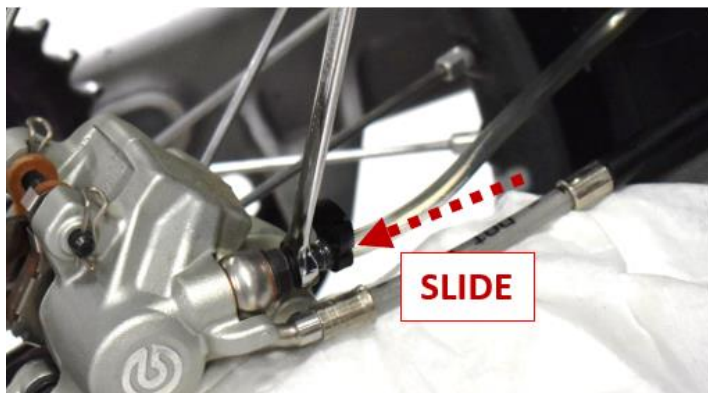


11. Fill the second syringe with fluid.

12. 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.



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



Bleed The System

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

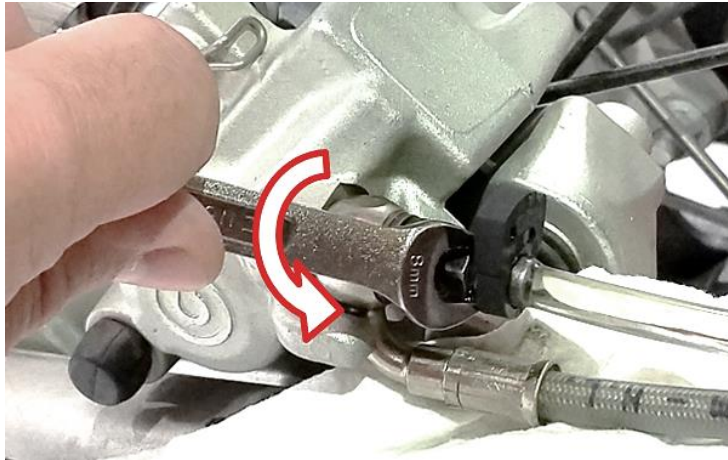
The brake system will first be “back-bled” from the lowest point (rear caliper) to the highest (Rekluse master cylinder bleed port).

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 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. Apply light pressure with the syringe at the caliper, then loosen the bleed nipple ½-turn.

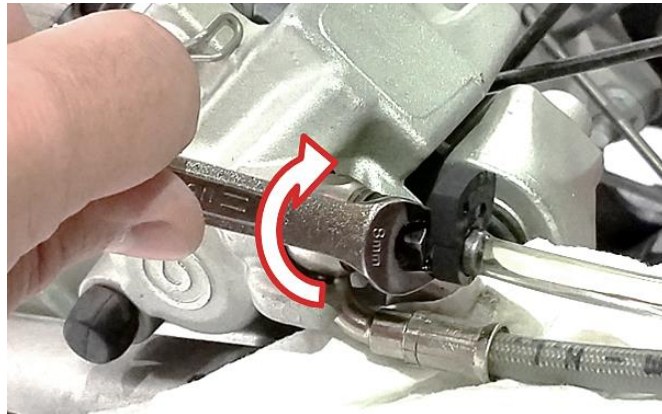


3. Slowly start to push fluid through the system with the syringe at the caliper.



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

4. 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



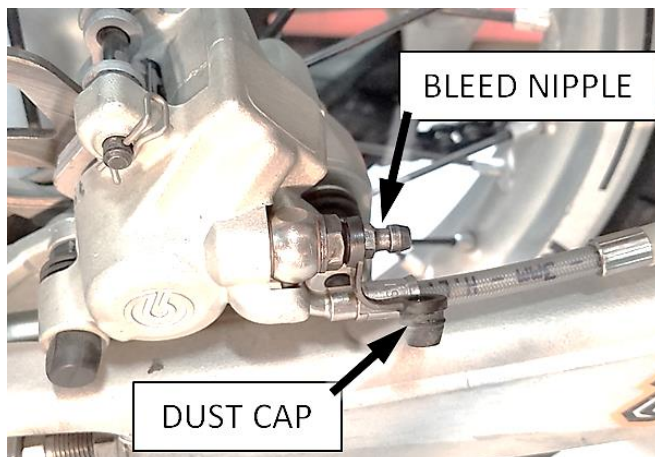
5. Check the brake pedal for pressure. If the pedal is firm and there are no air bubbles, continue to step 17.
6. If the pedal feels spongy or soft, continue to push fluid back and forth until there is firm pressure.

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.

7. 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.
8. Unscrew the bleed fitting from the master cylinder.
9. 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.

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

10. With the bleed nipple tightly closed at the caliper, remove the end wrench, syringe, and hose. 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.

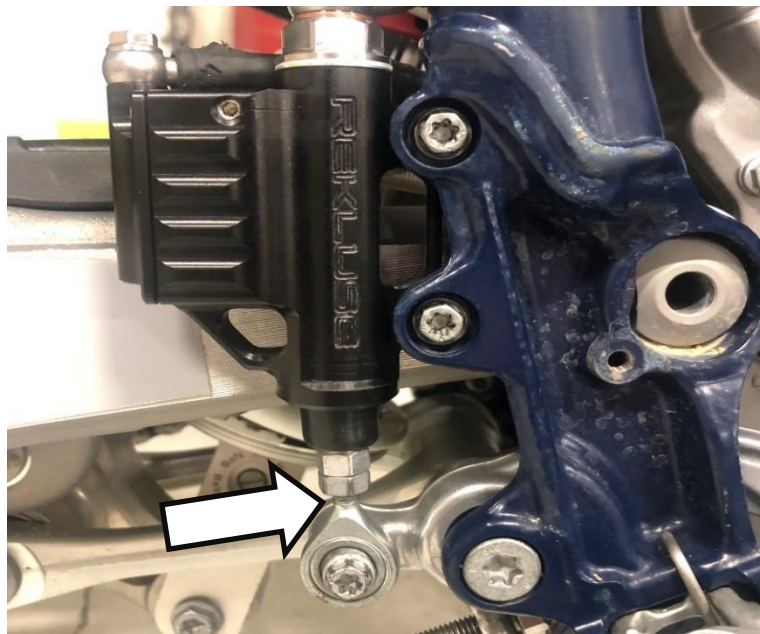
11. Check all brake line fittings for leaks.

WARNING

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

Adjust the Pedal

Adjust the brake pedal to achieve the proper amount of free play as specified in the OE manual. (typically 3-5mm)



Trim and Install the Frame Guard

To better fit the frame guard over the Rekluse Master Cylinder, it is recommended that the guard be trimmed.

1. Mark a vertical line as shown here.



2. Cut the frame guard along the line and sand or buff the plastic to clean the edge

3. Install the guard on the bike with the screw and a cable-tie



Troubleshooting

Symptom	Solution
Bleeding: Spongy Pedal Feel	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.
Leaking fluid around the master cylinder	Clean the master cylinder and inspect for leaks again to identify where the leaks are coming from. Inspect the crush washers and re-torque the connections.
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 pedal is not being held up and that it has proper free play. 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.
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).
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 the bleeding process.
Squeaky Pedal Pivots	Lubricate the pivot joints using either a graphite dry lubricant or white lithium grease.
Pedal Not Returning	Lubricate the master cylinder piston and seals using silicone-based grease. Re-bleed the system after reassembly of the master cylinder.

Maintenance

1. Before every ride, check to be sure that your brake pedal has sufficient fluid pressure.
2. Inspect the system for leaks and verify that the pedal moves properly.
3. After hard use, if the brake pedal 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.

NEED ADDITIONAL HELP?

Website

www.rekluse.com/support

Phone

(208) 426-0659

Monday thru Friday: 8 am – 5 pm Mountain Time

Email

customerservice@rekluse.com

