

REKLUSE



REKLUSE MOTOR SPORTS

z-Start™ Dual-Actuated Brake Kit

INSTALLATION GUIDE

RMS510, 511, 512, 513, 511MC 510-OR, 512-OR
196-210

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REQUIRED TOOLS

- 7mm open end wrench
- 8mm open end wrench
- 12mm open end wrench
- 14mm open end wrench
- 5mm allen key
- Phillips head screwdriver
- Dot 3 or 4 brake fluid

INCLUDED PARTS

- Left hand master cylinder
- Stock Master Cylinder Adapter Sleeve
- 2 o-rings (1 extra)
- Brake line
- Banjo Bolt (black) M10x1
- Banjo Bolt M10x1.5
- 4 Replacement crush washers
- Zip tie
- Brake line retainer
- Syringe and tubing

WARNING

- Brake components are vital to the safe operation of your vehicle. This brake system should only be installed by a certified motorcycle technician.
- z-Start Left Hand Rear Brake Kit is for Off-Road use only.
- Always wear hand and eye protection when installing this brake system.
- **Braking is a critical aspect of motorcycle riding. Be sure to allow sufficient training time in a safe environment to learn how to use the z-Start Left Hand Rear Brake Kit.**
- As with anything new, it takes time to adjust and train your instincts to brake with your left hand. Go slow on your initial ride and allow significant time to become familiar with your new brake actuation. Be careful and enjoy your z-Start Left Hand Rear Brake!

BIKE PREPARATION AND DISASSEMBLY

Note: Hydraulic clutch models skip steps 1-2. Refer to RMS195-230A Hydraulic Clutch Removal Kit and Appendix A on page 8 of this Manual.

1. Disconnect the clutch cable and hot start cable from the stock perch, and remove the perch and clutch lever.

Note: If you have one, you must relocate your hot start. If you purchased the optional z-Start Hot Start, install it now.

2. **z-Start owners:** If you did not purchase the Rekluse 2-Finger Clutch Override kit, you will need to remove the clutch cable and install the basic external adjuster for your z-Start Clutch (z-Start Clutch only; z-Start Pro does NOT use external adjuster)—refer to the z-Start Clutch Installation Manual.

z-Start Pro owners: If you did not purchase the Rekluse 2-Finger Clutch Override Kit, remove clutch cable and perch.

3. Remove your fuel tank and seat for routing your new brake line.
4. Remove rear wheel.
5. Remove right-side brake pad.
6. Pump rear brake pedal until rear caliper piston(s) bottoms out on left brake pad. **See photo below.**

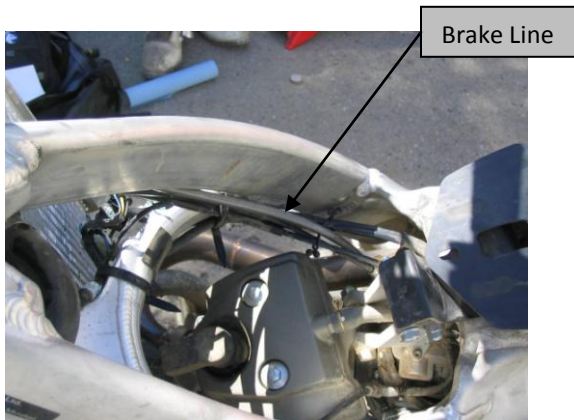


WARNING: Ensure brake line is secured away from the head pipe of the exhaust system to prevent brake line damage.

ROUTE YOUR NEW HYDRAULIC BRAKE LINE

Note: The 90° banjo fitting of the brake line connects to the master cylinder on the handle bars and the 10° banjo end connects to the Master Cylinder Adapter Sleeve.

7. Follow the existing routing of the throttle cables along the right hand side of the frame. Continue along the right hand side of the bike dropping down to the stock master cylinder. See following pictures.



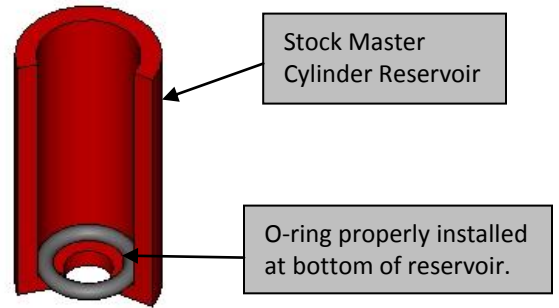
Note: The included zip tie and/or brake line retainer may be used to anchor the brake line away from heat and pinch points.

INSTALL THE ADAPTER SLEEVE

- Using a 7mm or 8mm end wrench, remove the reservoir cap, gasket, and diaphragm. Be prepared for brake fluid to spill out. **See following picture.**



Removing reservoir cap and diaphragm.



Stock Master Cylinder Reservoir

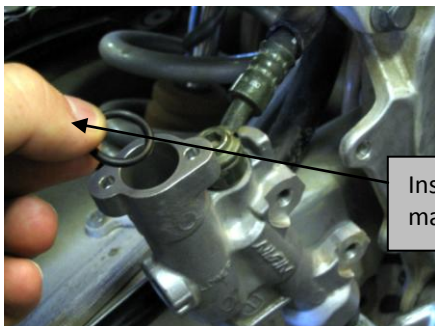
O-ring properly installed at bottom of reservoir.

WARNING: Improper o-ring installation will cause the system to leak and ultimately fail. Take the time to get the o-ring lying flat at the base of the master cylinder.

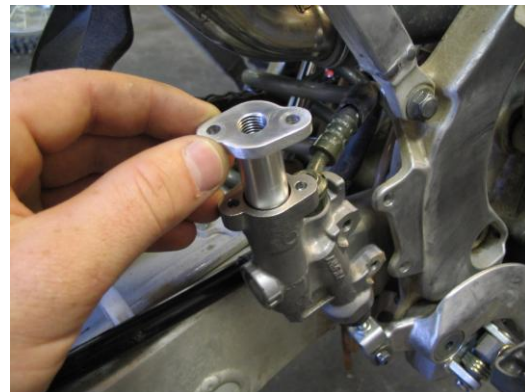
Note: An extra o-ring is included with the kit.

- Using a 5mm allen key remove the two screws holding the stock master cylinder to the frame. This will make installing the o-ring in the following step easier.
- Insert one of the included o-rings into the reservoir of the stock master cylinder. Force the o-ring to the bottom of the reservoir so it lies flat. Use a long screwdriver to guide the o-ring past the sharp edges of the reservoir window to the bottom of the reservoir—this will prevent tearing of the o-ring.
- Use the Rekluse Adapter Sleeve to lightly press the o-ring flat against the bottom of the reservoir. **See picture below and illustration above right.**

- Install the Rekluse Adapter Sleeve into the reservoir of the stock master cylinder. Slide it down until it hits the o-ring, line up the two mounting holes, and fasten it to the stock master cylinder with the two bolts from the stock reservoir cap. **See following picture.**

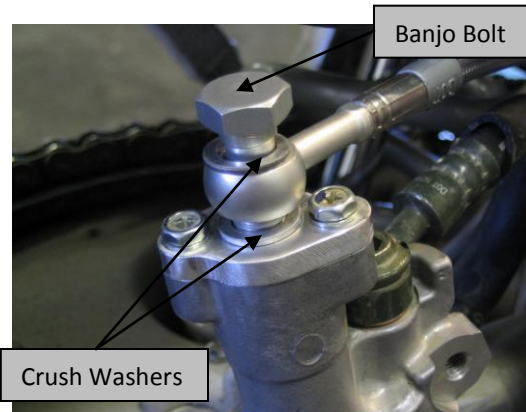


Inserting O-ring into stock master cylinder reservoir.



13. Attach the brake line to the Rekluse Adapter Sleeve with the included M10x1.5 banjo bolt through the banjo fitting making use of the included crush washers. Re-attach the stock master cylinder to the frame so the banjo bolt can be tightened properly. **See picture at right.**

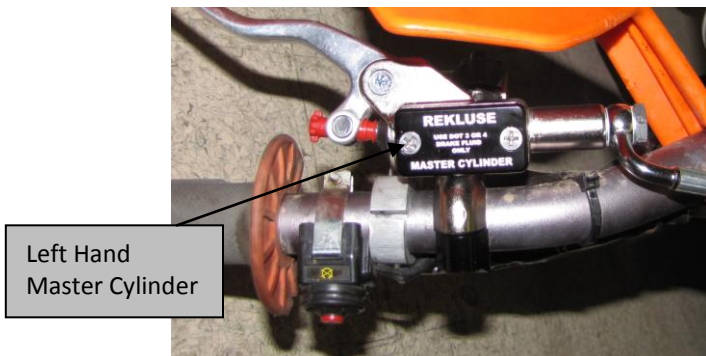
NOTE: The M10x1.5 banjo bolt has no color; the M10x1 banjo bolt is black



MOUNT THE LEFT-HAND MASTER CYLINDER

14. Using a 5 mm allen key, attach the Left Hand Master Cylinder to your handle bars. **See following picture.**
15. Using a 14mm open end wrench, attach the 90° banjo fitting to the master cylinder using the included M10x1 black banjo bolt with two crush washers, one on either side.

NOTE: If your brake line has a straight threaded fitting on one end, attach this end to left hand MC.



Left Hand Master Cylinder

BLEEDING THE BRAKE LINE

Warning: Carefully read and follow the safety precautions on the label of the Dot 4 brake fluid. Eye and hand protection must be worn.

16. Use a Phillips head screwdriver to remove the reservoir cap on the Rekluse Left Hand Master Cylinder.
17. Remove hand-tightened 8mm lock nut and 30mm flat-head screw retaining lever and remove lever at Master Cylinder.
18. Remove left-side brake pad.
19. At rear caliper, push piston(s) of caliper in, displacing brake fluid from the caliper into the new hose. The idea is to bottom the piston(s) back into the caliper allowing the system to be bled in the following steps. **See following pictures.**
20. Re-install left- and right-side brake pads and rear wheel.
21. Fill the syringe with Dot 4 brake fluid. Rotate the syringe so the tubing is aiming up to allow the air bubbles to rise to the top. It helps to tap the syringe lightly with your finger first and then leave the syringe, tubing side up, to settle for a minute. This should ensure that all the air bubbles have risen to the top.
22. With the tubing still aiming up, squeeze the plunger of the syringe until all the air is pushed out and a small amount of brake fluid comes out. **See picture below.**



WARNING: Use paper towels to protect the brake pads and rotor from brake fluid. If brake fluid gets on the brake pads they will need to be replaced.

Note: In order to access the rear caliper bleeder nipple, some models require you to remove the rear caliper guard.

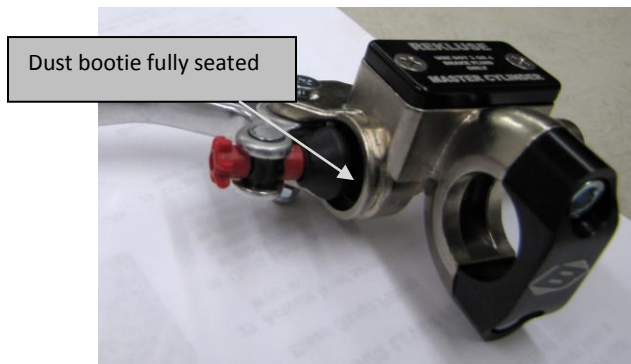
23. Remove the dust cap from the rear caliper bleeder nipple. ***Make sure the bleeder nipple is clean and free of debris (loosening the bleeder nipple and drawing fluid into the syringe will clear the nipple of debris – be sure to remove the debris from syringe before continuing).*** Slip the tubing end over the nipple being very careful not to allow air into the line. Rotate the syringe so the plunger end is up and squeeze the tubing to ensure that any air bubbles float to the top. **See following picture.**



24. Using an 8mm open end wrench, carefully loosen the bleeder nipple one turn, 360°. Push Dot 4 brake fluid in until it fills the sight glass of the Rekluse Left Hand Master Cylinder. It is very important not to push any air into the system. Tighten the bleeder nipple before you stop pushing fluid.
25. Push fluid until only fluid comes into the MC reservoir (no air bubbles).

NOTE: It may be necessary to drain the MC reservoir and push more fluid until there are no bubbles.

26. Once the line is filled with fluid and MC reservoir is full, replace lever, ensuring that dust bootie is fully seated on both ends to protect from dust.



27. Tighten 8mm lock nut. **DO NOT** over-tighten. When pulled, lever should return to its fully extended position on its own. If it does not, try loosening the 8mm lock nut.

28. Return dust cover to bleeder nipple. Push rear caliper back over by slowly actuating the lever.
29. Squeeze the lever slowly a few times, being very careful not to pull air into the system. On the return stroke, after the lever is squeezed, the fluid in the reservoir will be sucked into the line.

WARNING: Add fluid to the reservoir after every squeeze of the lever or air can be sucked into the system. It usually takes 3-4 squeezes of the lever to force the caliper back into place. Be very careful not to suck air or you will have to start the whole bleeding process over.

30. If you feel firm resistance when actuating the lever, proceed to Final Installation Steps. If your lever has a spongy feel, proceed to next step.

IF YOUR LEVER FEELS SPONGY

Bleed Banjo Fitting

31. Actuate lever several times then **HOLD** lever in.
32. Using 14mm wrench, loosen banjo bolt at stock master cylinder ¼ turn, then tighten quickly. This allows some fluid to escape around the base of the banjo bolt, which will help purge any trapped air from this area.
33. Let go of lever. If any air was purged, lever will feel more solid. Check reservoir level after each pull.

Bleed Master Cylinder Fitting

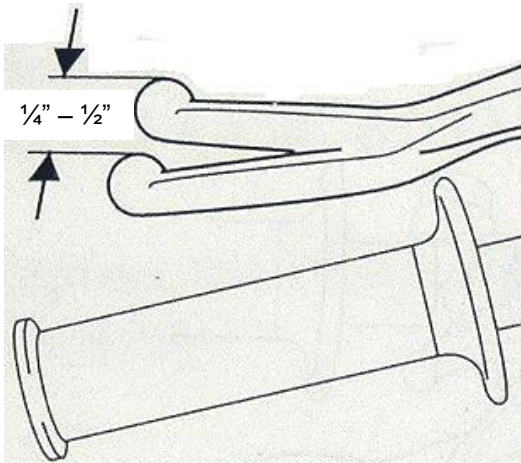
34. Actuate lever several times then **HOLD** lever in. Using 14mm wrench, loosen bolt at Rekluse Left Hand Master Cylinder ¼ turn, then tighten quickly. This allows some fluid to escape around the base of the bolt, which will help purge any trapped air from this area.
35. Let go of lever. If any air was purged, lever will feel more solid. Check reservoir level.

FINAL INSTALLATION STEPS

36. Re-install the reservoir cap onto the Rekluse Left Hand Master Cylinder.
37. Use brake cleaner to clean rear caliper, rotor and left hand master cylinder. Allow to dry before using the brake.

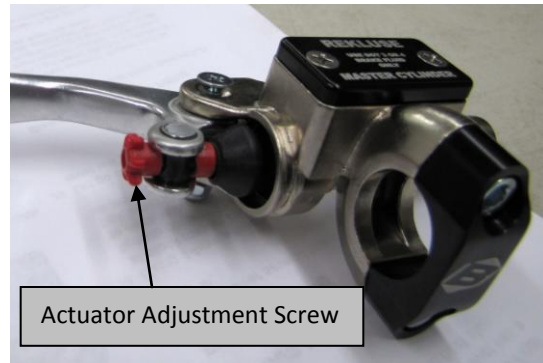
LEVER ADJUSTMENT

38. Adjust Actuator Adjustment Screw to adjust lever to desired position.
39. Adjust actuator adjustment screw so that there is $\frac{1}{4}$ "- $\frac{1}{2}$ " free play at the lever (see diagram).



40. Loosen Actuator Adjustment screw until the piston of the rear caliper can be pushed in. This ensures fluid can flow back into the master cylinder reservoir.

Note: After riding, the rear brake will heat up and expand. You may need to adjust the actuator screw out if the brake begins to drag. **See picture below for lever adjustment points.**



APPENDIX A

If your bike has hot start or decompression reservoir cap with lever:

- A Magura reservoir cap with lever will fit on our Rekluse Master Cylinder. *You must replace the Magura reservoir bladder with the bladder included with the Rekluse Master Cylinder.*
- On hydraulic models with hot start or decompression cap other than Magura (e.g. Gas Gas) with AJP or KTM with Brembo, you can purchase the Magura reservoir cap with hot start or decompression lever from either Magura or your local KTM dealer.
- Breakaway levers are available for our Rekluse left hand master cylinder. Contact ARC @ 1.800.204.7411.