



REKLUSE[®]
SlaveCylinder

INSTALLATION MANUAL

Manual Slave Cylinder Kit
For LC8

Doc ID: 194-102A
Doc Rev: 100818

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OVERVIEW

This document includes instructions for replacing the OE slave cylinder with a Rekluse manual slave cylinder. This kit replaces the OE slave cylinder assembly on KTM models with 'LC8' engines. These parts are designed specifically for your V-twin to ensure optimal performance.

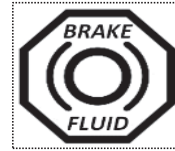
INSTALLATION TIPS

- Read this entire document before performing any steps.
- Protect eyes and skin—wear safety glasses and work gloves.
- If using brake fluid (see following note), use a new, unopened container when replacing the fluid.
- Use the torque values listed in the instructions. Otherwise, use the torque specifications found in your OE service manual.

CLUTCH FLUID TYPE

Every O-ring seal in the clutch control system is compatible with **ONLY ONE** clutch fluid type and **CANNOT** be used interchangeably. Read the information located on your bike's

clutch fluid reservoir cap to determine which fluid system was installed with your bike.



⚠ CAUTION

Failure to use the correct clutch fluid type will cause seal damage.

IMPORTANT CLUTCH FLUID NOTE:

- **950/990cc model owners:** Your bike's hydraulic clutch system uses *mineral oil*, and so all the O-ring seals in the slave cylinder assembly are compatible with oils.
- **1050/1190/1290cc model owners:** Fluid type has changed in mid-model-year of 2016.
 - **2013 – 2016½:** Your bike's hydraulic clutch system uses *mineral oil*.
 - **2016½ or newer:** Your bike's hydraulic clutch system uses *brake fluid*.

For MY2016 bike owners only:

Refer to the *Slave Cylinder Appendix* document before installing the Rekluse slave cylinder on your bike. It may be necessary to change the fluid seals in the cylinder housing and piston before proceeding.

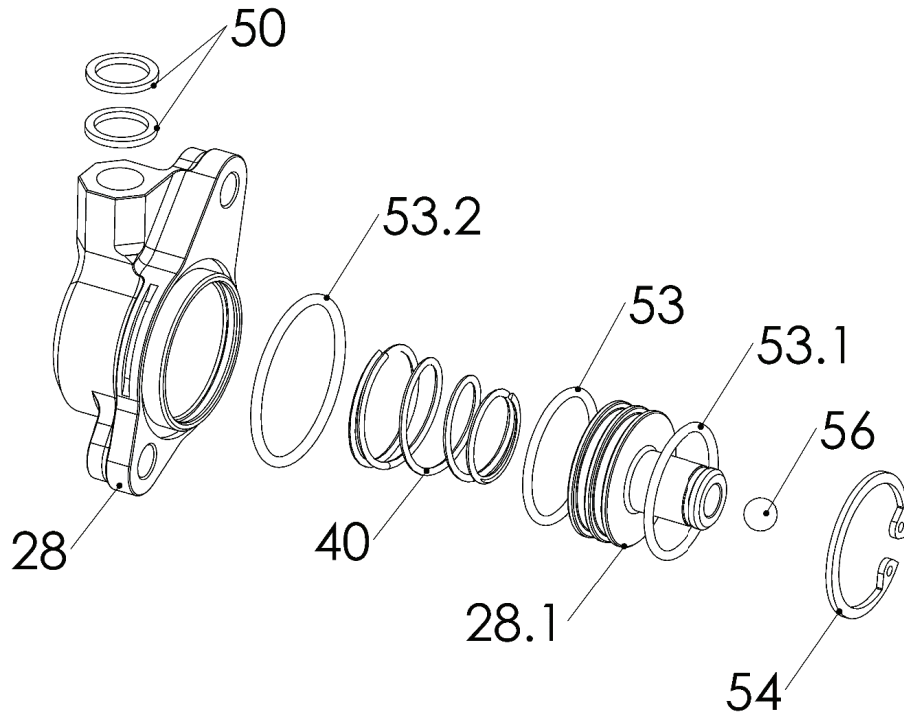
For all other model-years:

Read the fluid information located on the reservoir cap of your bike's clutch master cylinder. This will inform you of which clutch fluid to use in the following steps, either mineral oil or DOT brake fluid.

TOOLS NEEDED

Box-end Wrench set
8 mm socket

INCLUDED PARTS



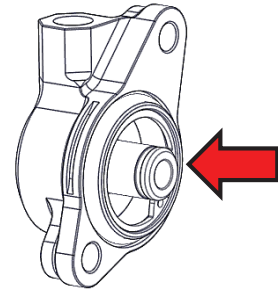
Item	Description	Qty
54	Snap ring	1
56	Ball bearing	1
53.1	Piston O-ring seal (engine side)	1
28.1	Slave cylinder piston	1
53	Piston O-ring seal (brown or black depending on clutch fluid)	1
40	Slave cylinder spring	1
53.2	Case O-ring seal	1
28	Slave cylinder housing	1
50	Crush washer	2
Not shown	Clear vinyl tube	1

Visit Rekluse.com/support for a full part fiche illustration and part numbers.

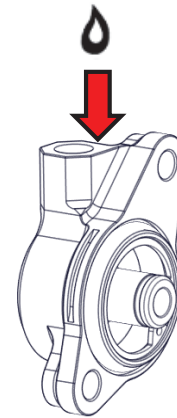
BLEED THE NEW SLAVE CYLINDER

On a workbench (away from the engine), bleed the Rekluse slave cylinder.

1. Using your thumbs, compress the slave cylinder piston until it bottoms out and hold it there.

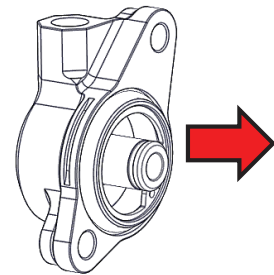


2. While holding the slave cylinder piston, pour the appropriate clutch fluid into the slave cylinder port until it is full.



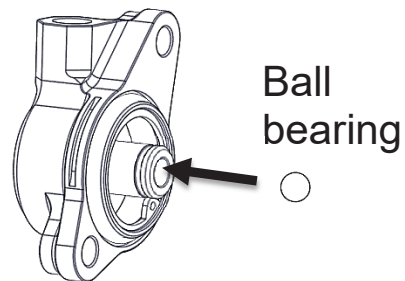
Note: When compressing the piston, fluid can shoot out from the slave cylinder port. Be sure to wear eye protection.

3. Release the piston and allow it to pull the fluid into the slave cylinder.



4. Repeat this process until the slave cylinder remains full when the piston is released.

Note: There is a ball bearing installed in the slave piston with a small amount of grease. Confirm that this ball bearing is still inside the piston before installing on the bike.

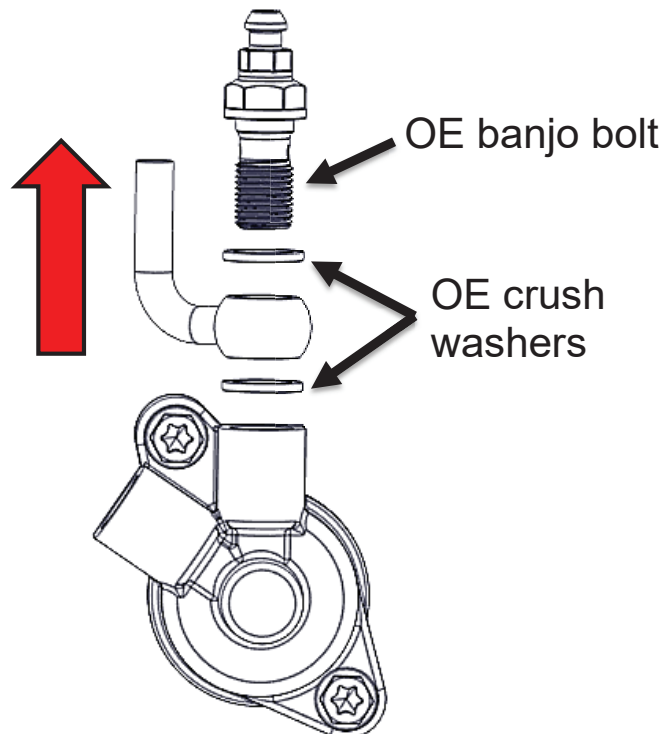


REPLACE THE OE SLAVE CYLINDER

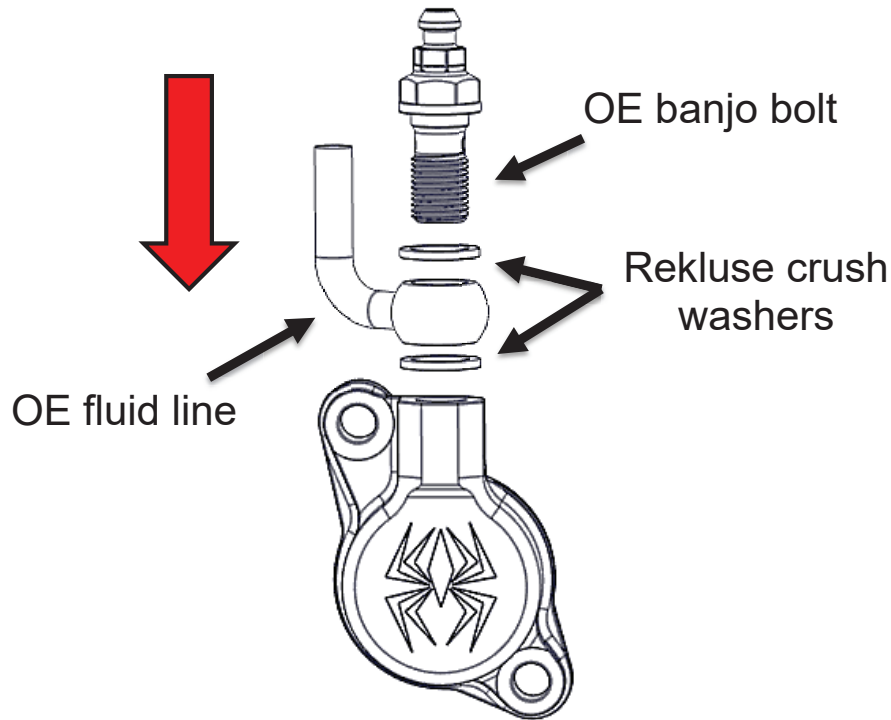
1. Stand the bike up and lean it on its kickstand, or place it on a bike stand. Catch any fluid that might drain into a suitable container.



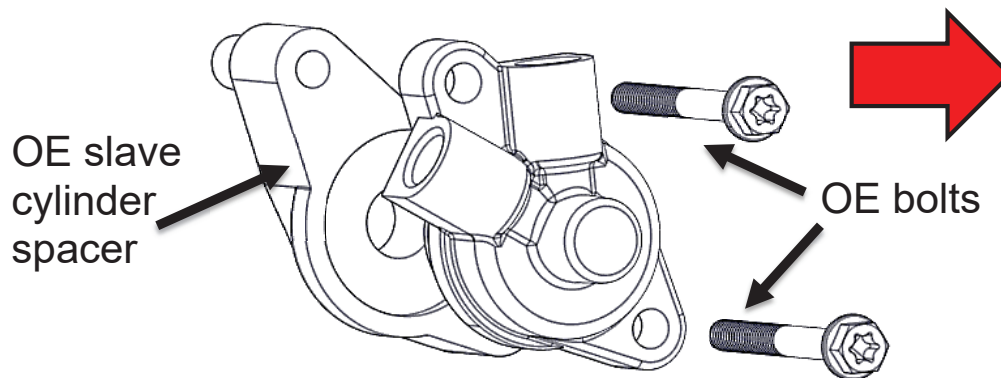
2. On the left side of the bike, while leaving the OE slave cylinder intact on the engine, remove the banjo bolt and the 2 OE crush washers from the OE slave cylinder. Discard the OE crush washers.



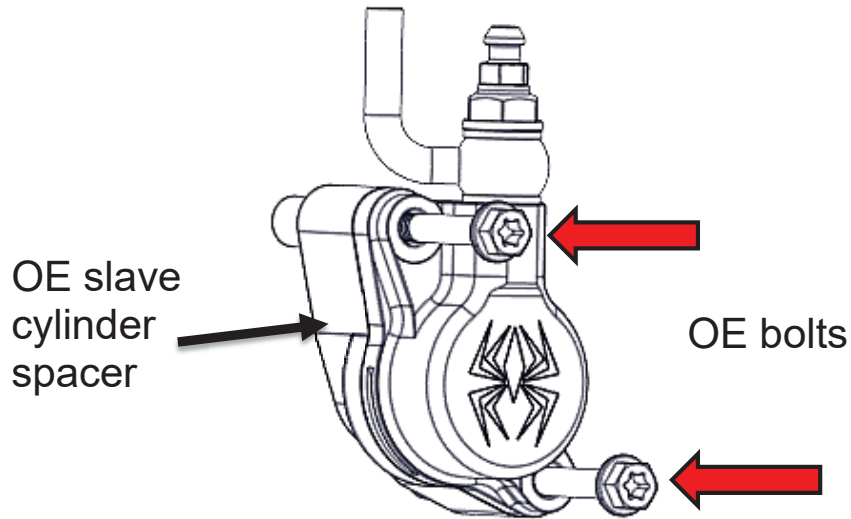
3. Attach the clutch fluid line to the Rekluse slave cylinder using the OE banjo bolt and the 2 new Rekluse crush washers. *Make sure the fluid line is sandwiched between the 2 crush washers.*



4. Tighten the banjo bolt with your hand until snug. (You will torque it to spec once installed on the bike.)
5. With the clutch fluid line attached to the Rekluse slave cylinder, remove the OE slave cylinder from the engine. Keep the OE bolts and slave cylinder spacer for reuse.



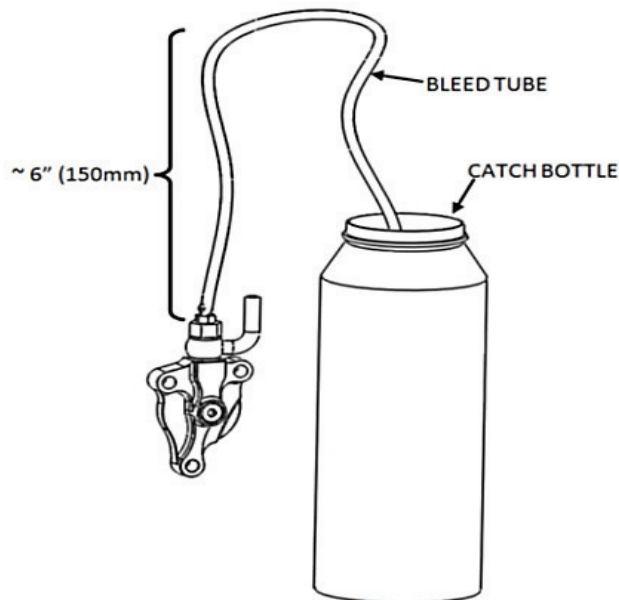
6. Mount the Rekluse slave cylinder to the engine using the OE slave cylinder spacer and OE bolts. Torque to OE specifications.



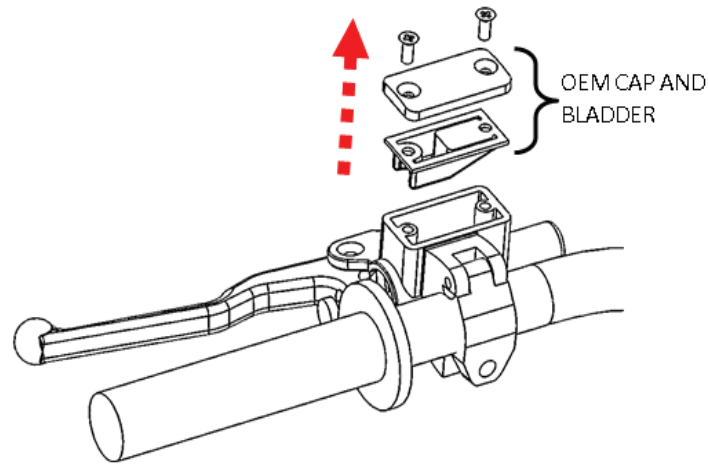
7. Torque the banjo bolt to OE specification.

BLEED THE CLUTCH LINE

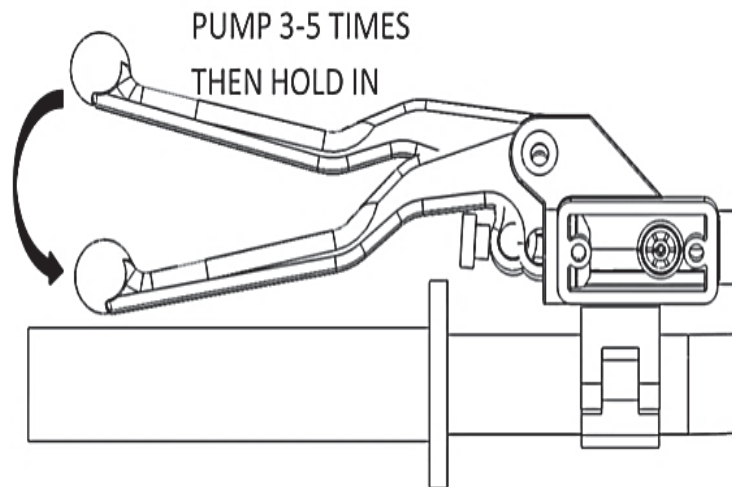
1. Attach one end of the supplied bleed tube to the bleeder screw port, then loop the opposite end into a suitable catch bottle.



2. On the handlebar, remove the cap and bladder from the clutch master cylinder. Adjust the reservoir so it is level with the ground.

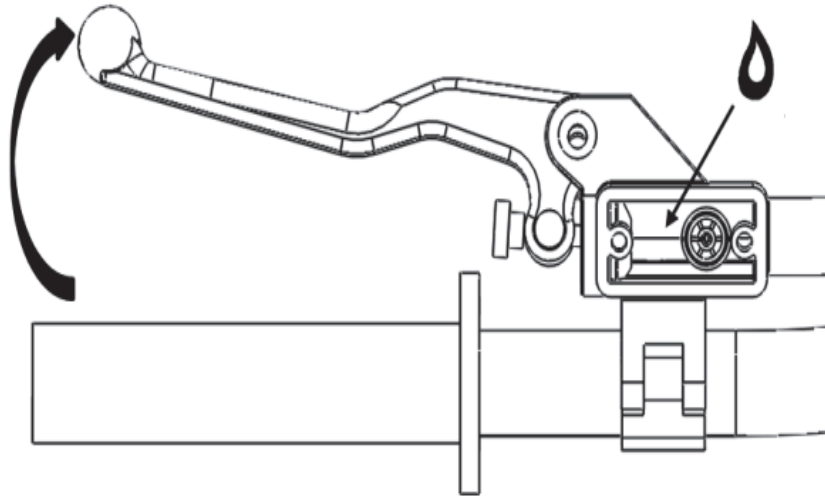


3. Top off the master cylinder with the recommended clutch fluid.
4. Pump the clutch lever 3 to 5 times, then hold it against the handlebar/grip.



5. While still holding the clutch lever in, use a wrench to open the bleed port. Air and fluid should flow from the bleed tube into the catch bottle.

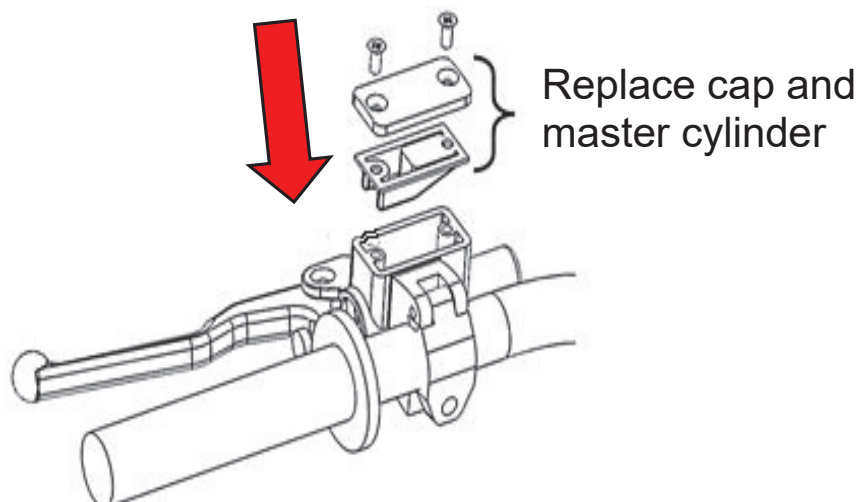
6. Before releasing the clutch lever, tighten the bleeder screw.
7. Slowly release the clutch lever and check the fluid level in the clutch master cylinder. Top off if necessary.



8. Repeat steps 4 - 7 until air no longer comes out of the bleed tube and the clutch feels normal.

Note: If this process does not work, use the provided syringe to back-bleed the system.

9. Check that the clutch master cylinder is 75% full, then replace the cap and bladder.



10. Remove the bleed tube, then torque the bleeder screw to **150 in-lb (17 N-m)** with a socket or the closed end of an 8 mm wrench.

Note: *Be sure to use a socket or closed end wrench when torqueing the bleed screw. Using an open-ended wrench can strip the hex screw.*

11. Finally, install the rubber dust cap over the bleeder screw.

NEED ADDITIONAL HELP?

Website

www.rekluse.com/support

Frequently Asked Questions

www.rekluse.com/faq

Support Videos

www.rekluse.com/support/videos

Phone

(208) 426-0659

Technical Support

Contact Technical Support for questions related to product installation, tuning, and performance.

Hours:

Monday thru Friday: 8:00 a.m. - 5:00 p.m.

Mountain Time zone

Email: tech@rekluse.com

Customer Service

Contact Customer Service for additional product information, orders, and returns.

Hours:

Monday thru Friday: 8:00 a.m. - 5:00 p.m.

Mountain Time zone

Email: customerservice@rekluse.com



SLAVE CYLINDER APPENDIX

Converting to Mineral Oil Clutch Fluid Compatibility – KTM LC8 models

Doc ID: 195-6382A
Doc Rev: 061316

NOTE: Affects Model-Year 2016 bikes only!

OVERVIEW

KTM Tech Bulletin #1603 — published December 10, 2015 — states that some bike models received a revision to their Magura clutch fluid systems during mid-production for MY2016 bike models. This will affect the functionality of your clutch kit if your bike was assembled before the production revision was enacted by KTM.

The O-ring seals in the clutch control system are compatible with *only one* clutch fluid type and *cannot* be used interchangeably. As per the photos in the tech bulletin, read the information located on your bike's clutch fluid reservoir cap to determine which fluid system was installed by KTM.

- If the cap calls for **DOT Brake Fluid** (4 or 5.1 or both), then you can skip the rest of this document and proceed with installing the Rekluse Adjustable Slave Cylinder [#86] as it was pre-assembled.
- If the cap calls for **Mineral Oil**, then you must perform the following steps to change the O-ring seals in the Rekluse Adjustable Slave Cylinder before installing it on your bike. *If your cap calls for mineral oil, failure to install the correct mineral-oil-compatible O-ring seals will result in poor slave cylinder performance and may have the potential to cause fluid leaks.*

NOTE: Rekluse's O-ring seals are color-coded for ease of identification:

BROWN = mineral oil & engine oil compatible

BLACK = DOT brake fluid compatible

INCLUDED PARTS

Your kit also includes extra O-ring seals in case any are cut or damaged during assembly or installation:

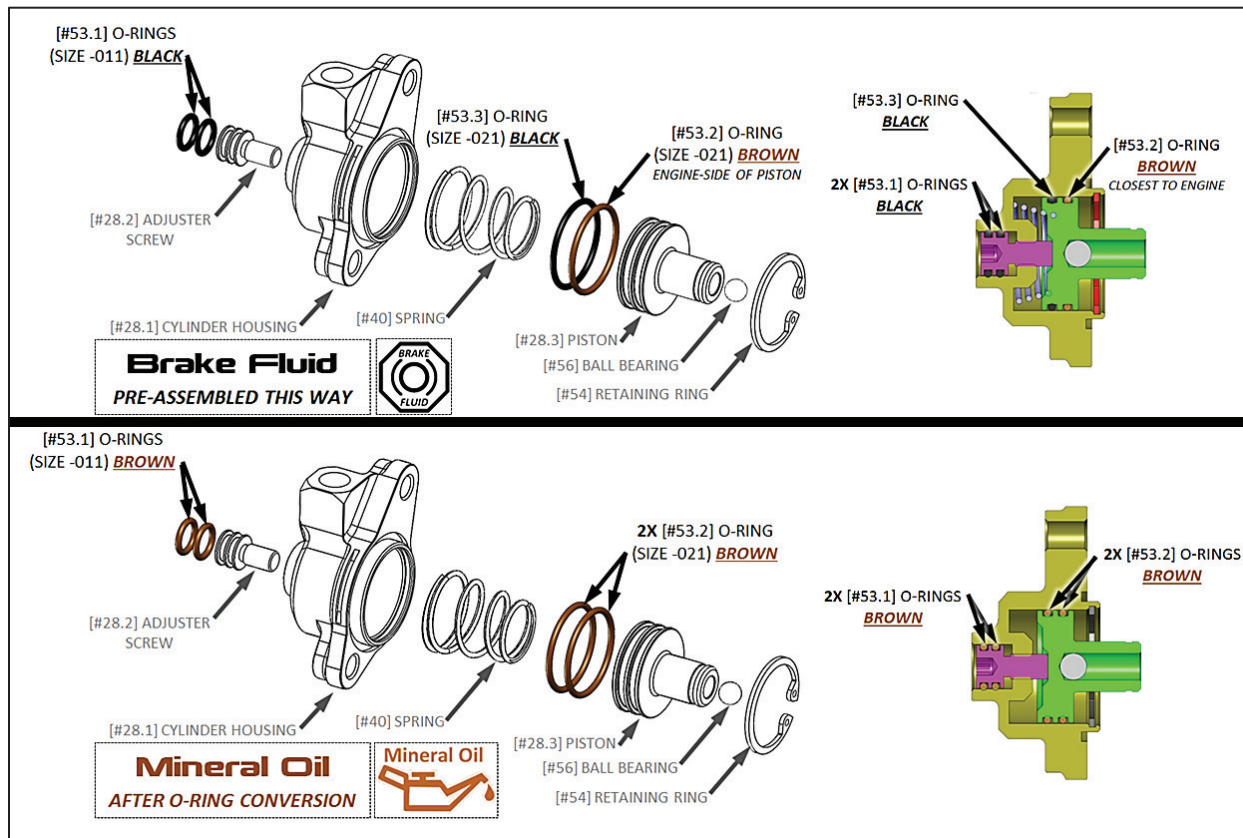
- 3x Replacement **BROWN** rubber O-ring seals [#53.1] for the Adjuster Screw [#28.2] (one is extra)
- 2x Replacement **BROWN** rubber O-ring seals [#53.2] for the Piston [#28.3] (one is extra)
- 1x Silicone grease packet for lubricating the O-ring seals before installing them

TOOLS NEEDED

- Internal Snap-Ring Pliers
- 4mm Allen Key
- 13mm End Wrench
- Dental Pick Tool
- Rubber Gloves & Safety Glasses



EXPLODED & CUTAWAY VIEWS



DISASSEMBLY

- Using snap-ring pliers, remove the retaining ring (aka: the snap ring) [#54] from the cylinder housing.
- Remove the piston assembly and spring [#40] from the housing.
- Remove the **black** O-ring seal [#53.3] from the piston [#28.3] and discard it (it will be located on the clutch-fluid side of the piston).
- Remove the adjuster screw [#28.2] from the housing using a 4mm Allen key.
- Using a dental pick tool, remove and discard the small **black** O-ring seals [#53.1] from the screw.

INSTALLATION

- Using the provided silicone grease packet, apply grease to the new **brown** O-ring seals [#53.1 & #53.2], the adjuster screw [#28.2] and inside the cylinder bore.
- Carefully install the new small **brown** O-ring seals [#53.1] into the grooves on the adjuster screw.

- Reinstall the adjuster screw [#28.2] into the cylinder housing.
- Carefully install a new large **brown** O-ring seal [#53.2] into the piston groove.
- Reinstall the spring [#40] into the cylinder, with the wider end facing into the cylinder bore. Ensure that the narrower end is centered in the piston grooves as shown**.

**** CRITICAL:**
Ensure spring is centered inside the step in the piston.
- Reinstall the piston assembly using constant, gentle thumb pressure, taking care not to cut, roll, or damage the O-ring seals.
- Reinstall the retaining ring [#54] to secure the piston inside the cylinder housing.

- Make sure that the ball bearing [#56] has remained in place inside the piston before installing the slave cylinder onto your bike.
- Proceed back to the *Installation Guide* document for instructions regarding bleeding the clutch fluid system, setting the Installed Gap, and making clutch adjustments.