



INSTALLATION & USER'S GUIDE

CoreEXP Clutch
for Cobra 65

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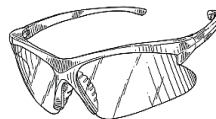
OVERVIEW

This kit replaces many of the OE (Original Equipment) or “stock” clutch parts with Rekluse high quality billet components designed specifically for your bike model. The following is a summary of what is replaced:

- This kit will replace all the OE drive plates with a Rekluse steel drive plates and an EXP disk.
- The OE pressure plate springs are replaced with high quality Rekluse springs.
- OE center clutch and pressure plate components are replaced with Rekluse Core components.
- The bike’s OE basket is replaced using the Rekluse basket. This Rekluse basket is taller than the OE basket. Using the Rekluse basket improves overall clutch performance and life of the clutch basket.













INSTALLATION TIPS

- Read the separate included Safety Information document before operating the vehicle with the product installed.
- Read this entire document before performing any steps.
- If you install this product for a customer or another person, instruct them to read the **Safety Information** document and the **Installation and User Guide** before operating the bike with the product.
- Protect eyes and skin – wear safety glasses and work gloves.
- Lay the motorcycle on its left side when replacing the clutch. This makes the clutch work easier and eliminates the need to drain the oil. Catch any fuel that may drain from the bike.
- Use the torque values listed in the instructions. Otherwise, use the torque specifications found in your OE service manual.

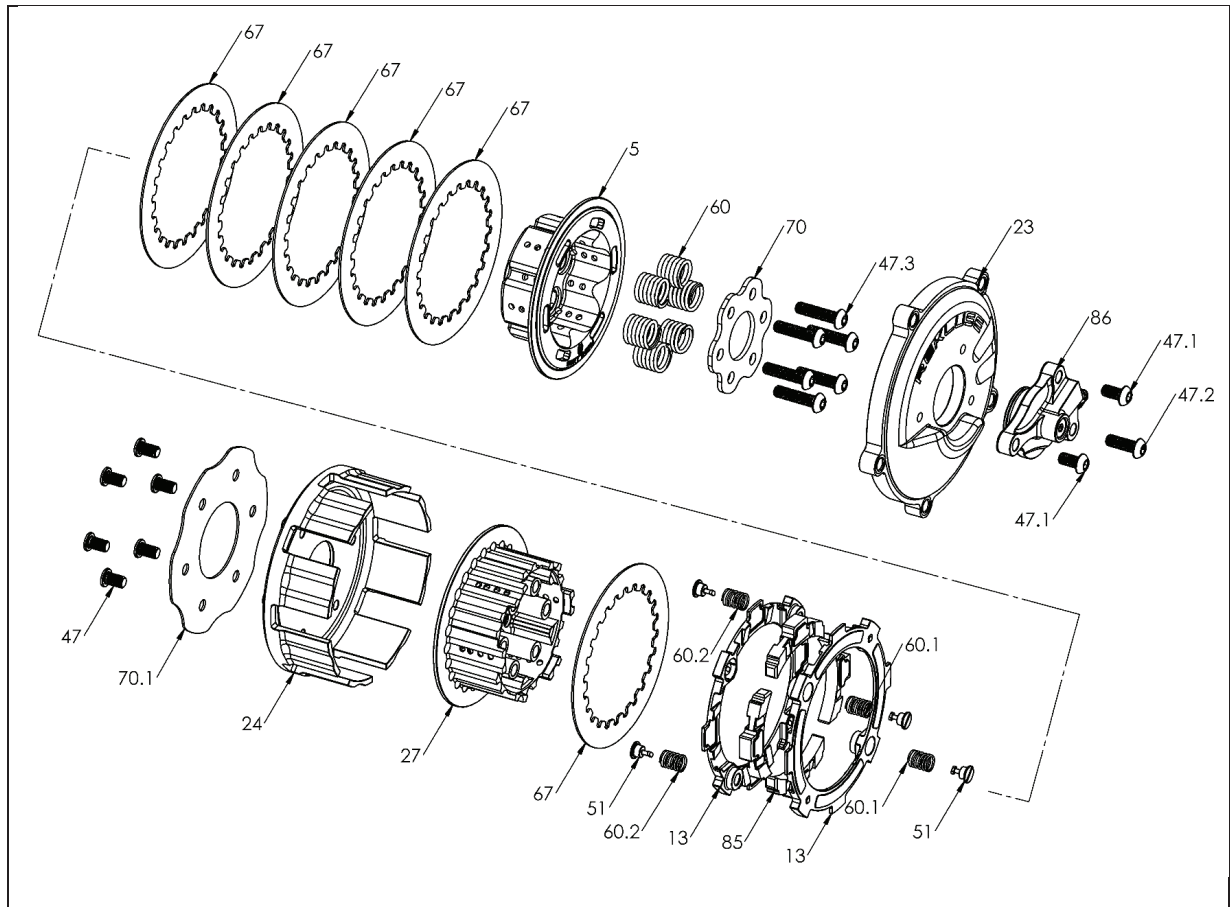


- For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements. Rekluse offers Factory Formulated Oil™ developed specifically for Rekluse products. Rekluse Factory Formulated Oil is a perfect complement to any OEM or aftermarket wet clutch. Visit www.rekluse.com to learn more.
- The Rekluse basket is compatible with the CoreEXP auto clutch, CoreManual manual clutch, and the OE clutch.
- **REPLACEMENT PARTS:**
 Rekluse recommends replacing the clutch cover gasket and clutch cap O-ring whenever they are removed from the bike. (The gasket and O-ring can be reused if they are in good condition.) Rekluse also recommends replacing the OE frictions if they are worn or burnt. You can purchase OE frictions from Rekluse or from your dealer.
 - Clutch cover gasket: Cobra part #ECC60016
 - Clutch cap gasket: Cobra part #ZCC60013
 - OE friction disks: Rekluse #469-691

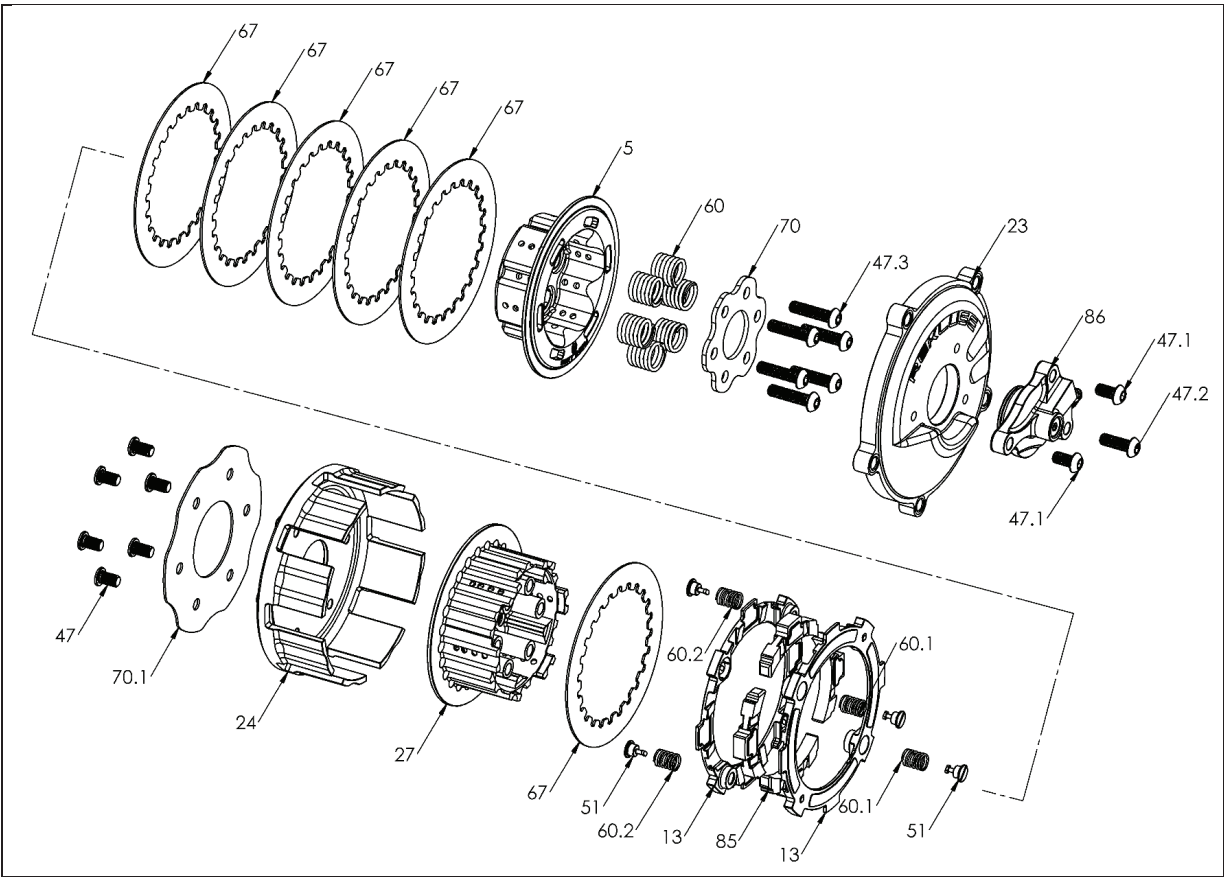
TOOLS

 10 mm	 8 mm		
10 mm socket	8 mm socket	Metric Wrench	Torque Wrench
			
Pick	Fluid Catch Container	14 mm socket	Hammer
 5 mm	 4 mm		 3 mm
5 mm Hex key	4 mm Hex key	3 mm Hex bit	3 mm Hex key

INCLUDED PARTS



Item	Description	Qty.
86	Adjustable slave cylinder assembly	1
27	Center clutch hub	1
67	Steel drive plates	6
13	EXP base	2
85	Wedge assembly	4
51	Quarter-turn pin	4
60	Pressure Plate Springs	6
60.1, 60.2	EXP adjustment springs – varies	2, 2
5	Pressure plate	1
47	Basket Screws	6
47.1	Slave Cylinder Bolts, Short	2

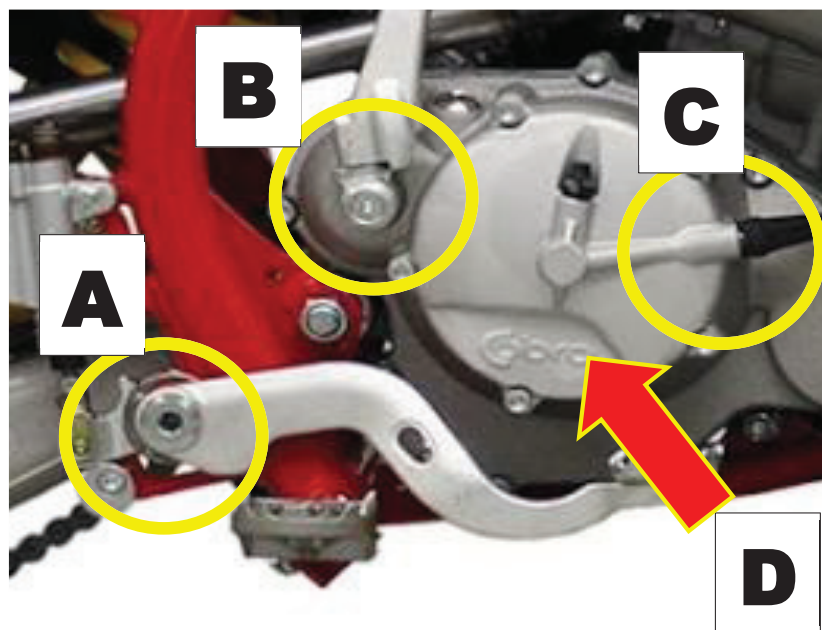
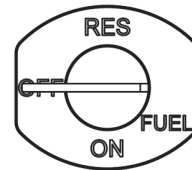


47.2	Slave Cylinder Bolt, Long	1
47.3	Push spring screws	6
23	Clutch cover	1
70	Spring push plate	1
24	Clutch basket	1
70.1	Basket backing plate	1
Not shown	Quarter-turn pin - extra	2
Not shown	Drill Bit – ¼ inch	1
Not shown	Loctite ®	1
Not shown	Free Play Gain rubber band	1
Not shown	EXP adjustment springs – extra	2, 2

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

DISASSEMBLE CLUTCH

1. If your bike is carbureted, turn the fuel petcock to "OFF."
2. Shift the transmission into the highest gear.
3. Lay the bike on its left side. With a suitable container, catch any fuel that might drain from the carburetor tubes.
4. Using an 8 mm hex key, remove the break pedal from the frame of the bike (A).
5. Using a 4 mm hex key, remove the kick-start lever (B).
6. Using a 12 mm open-end wrench, loosen and remove the clutch hydraulic line (C) from the clutch cover. Tying the line up out of the way will help avoid fluid leakage during the clutch installation steps.
7. Using a 5 mm hex key, remove 5 clutch cap bolts, then remove the clutch cap (D).

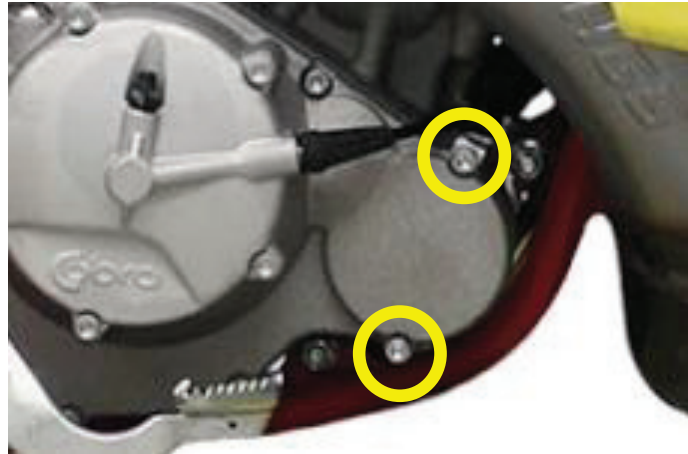


NOTE: Leave the OE clutch cover O-ring in place on the clutch case cover, as it will be reused. Clean it if dirty or contaminated or replace it with a new OE gasket.

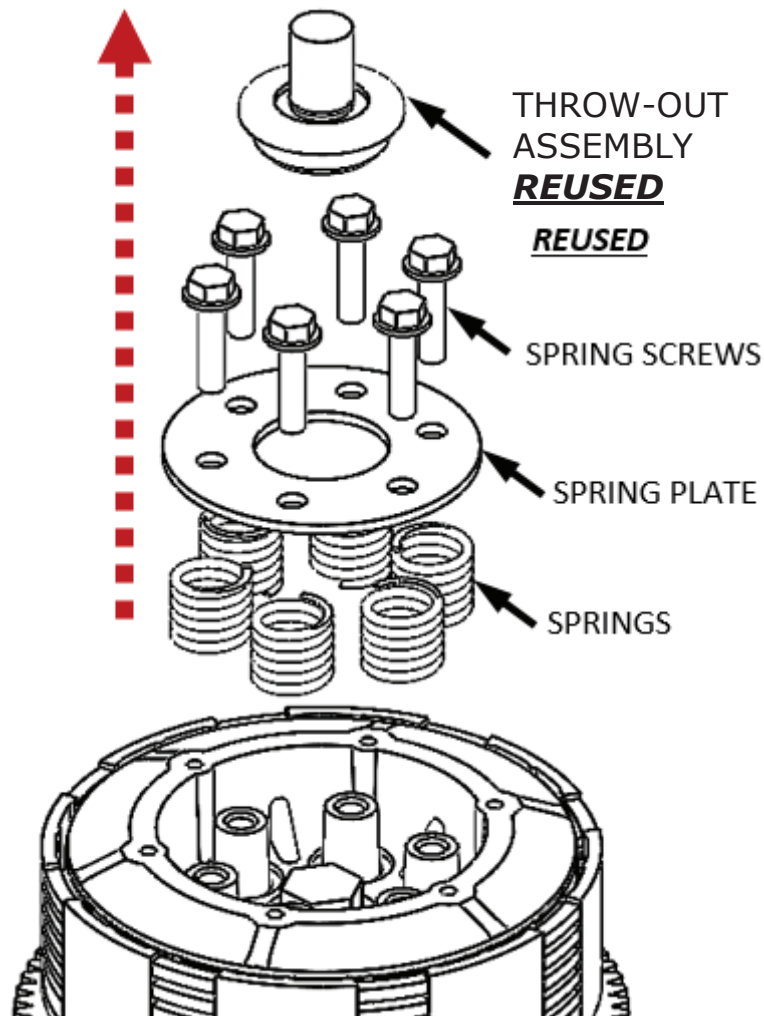
- Using a 5 mm hex key, remove the clutch case cover. Pay close attention to the length and location of the OE screws so they can be returned to their same location.

⚠ CAUTION

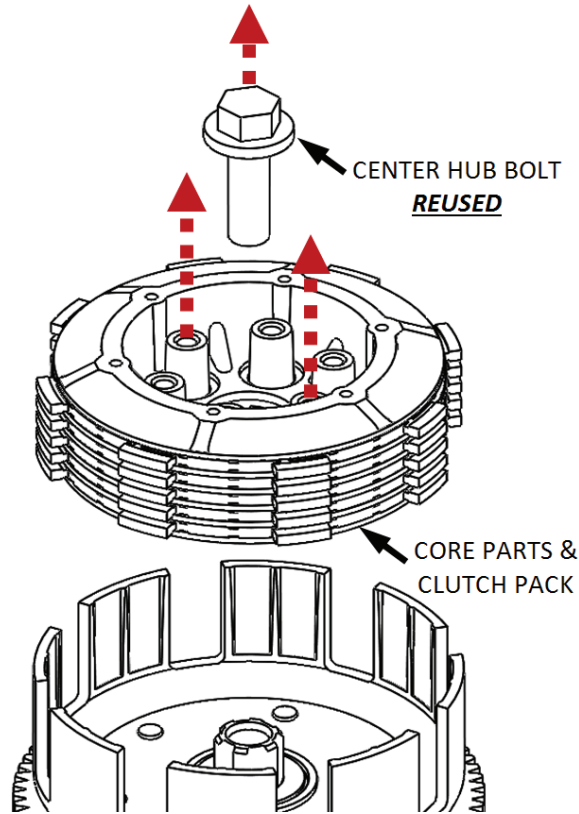
The two screws in the oil filter location (toward the front of the bike) are longer than the rest. These **MUST** be replaced in their exact location when the clutch cover case is reinstalled.



- Remove the throw-out assembly, then using a 5 mm hex key, remove the OE pressure plate spring screws, spring plate, and springs.

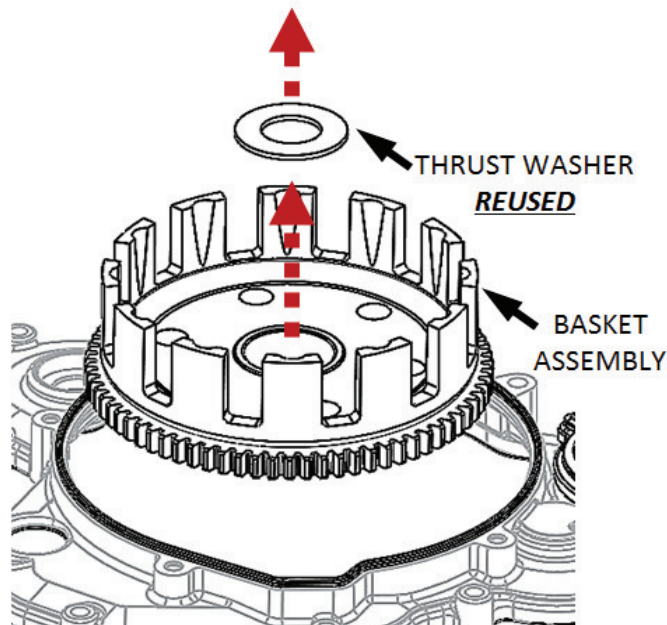


10. Using a 14 mm socket, remove the center hub bolt. Then, lift the core of the clutch out by gripping the spring posts and pulling upward.

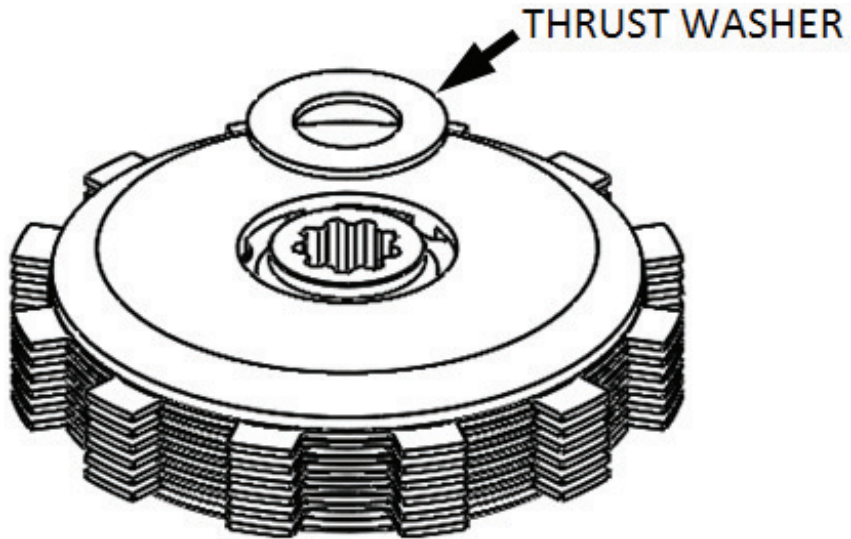


11. Inspect the OE friction disks. Replace if worn out or burnt.
(Replacements can be purchased from Rekluse or your dealer.)

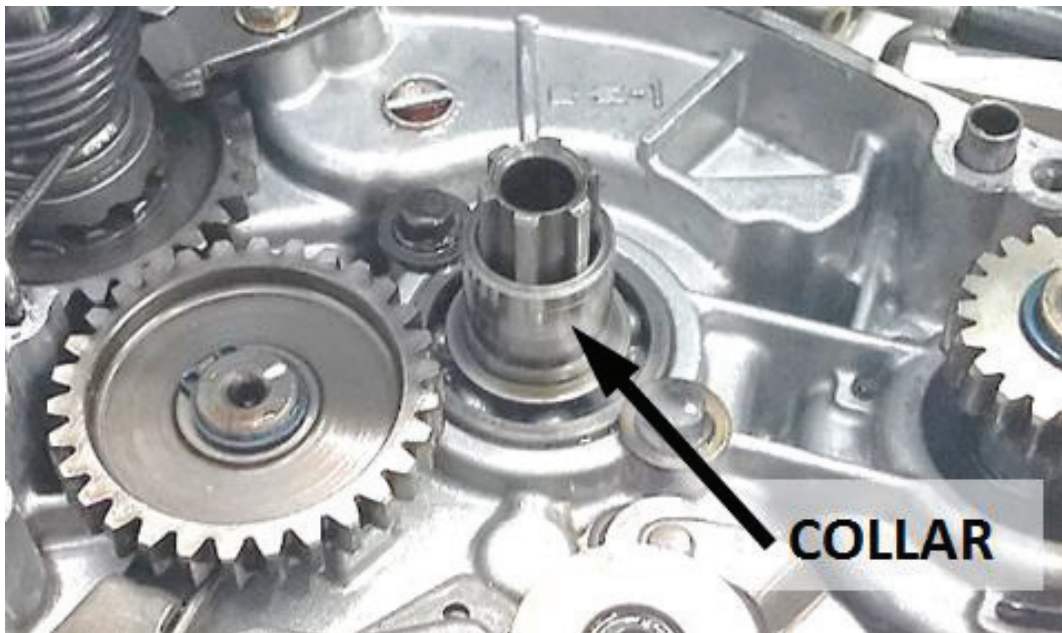
12. Remove the thrust washer followed by the basket assembly.



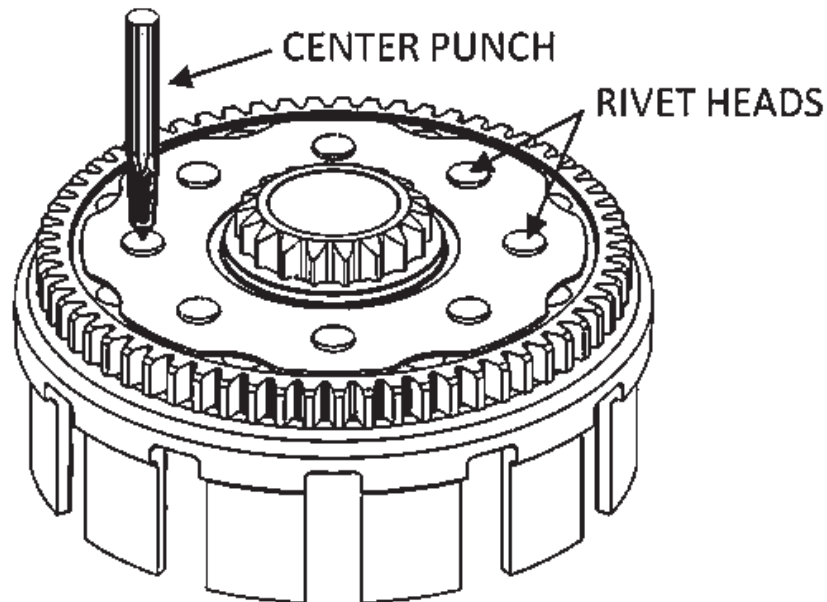
NOTE: If the thrust washer is not in the basket, it is likely stuck to the backside of the hub that was removed in the previous step.



13. Ensure that the mainshaft collar (which the basket rotates on) remains on the mainshaft in the engine.

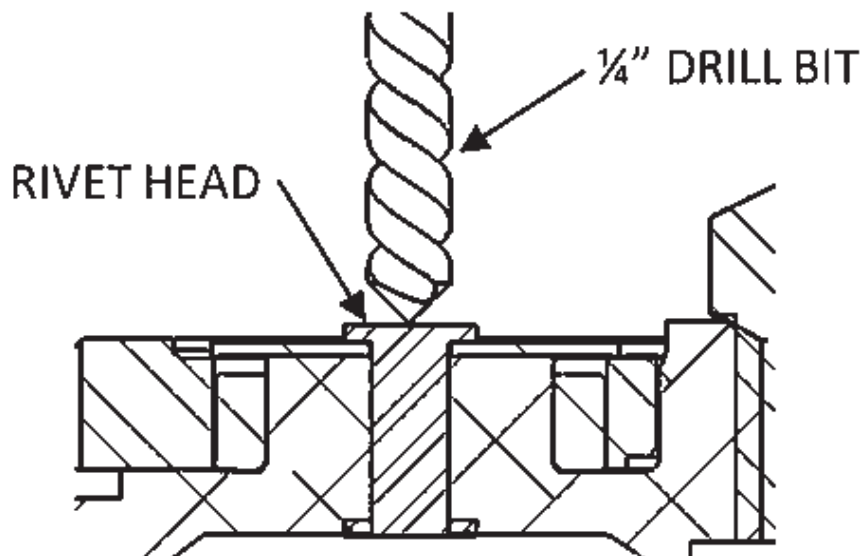


14. Set the OE basket assembly on a workbench with the ring gear facing upward. Using a center punch and hammer, punch a divot into the center of each of the rivet heads.

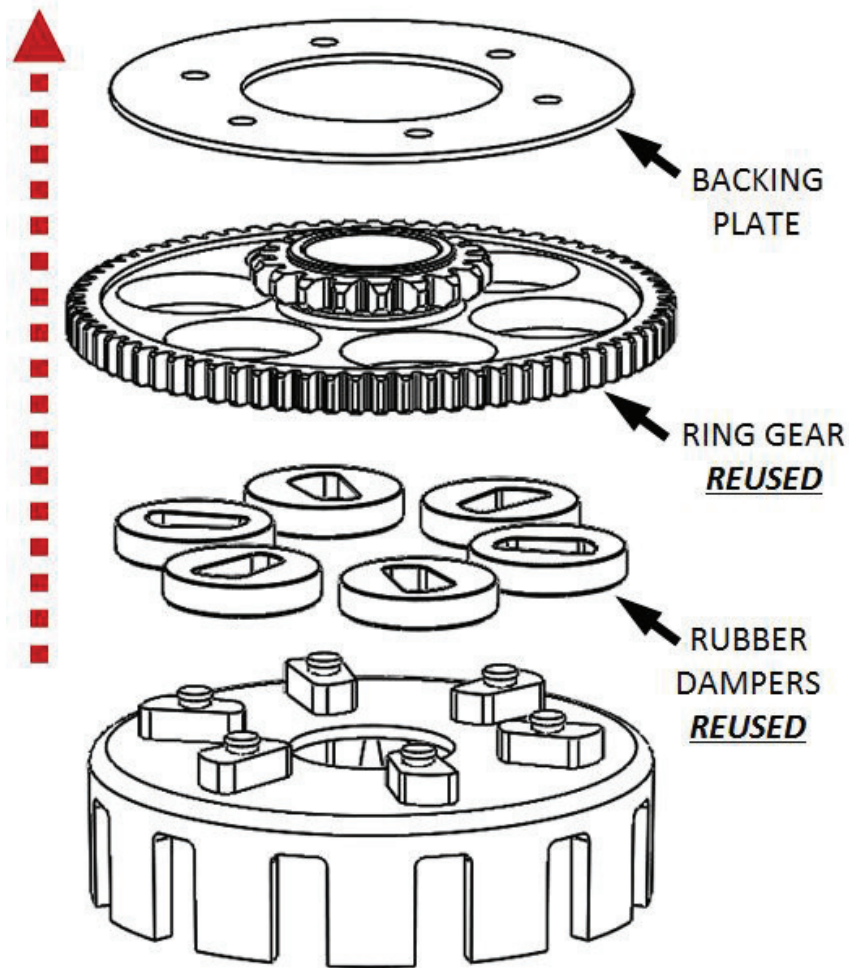


15. Using the provided drill bit, drill the heads off each rivet, so that the backing plate can be removed from the assembly.

NOTE: Set your drill to 300-400 RPM and use proper cutting fluid or oil for best results.



16. Carefully pry off the backing plate and remove the ring gear and rubber dampers from the basket. They will be reused. The OE basket and backing plate will not be reused.

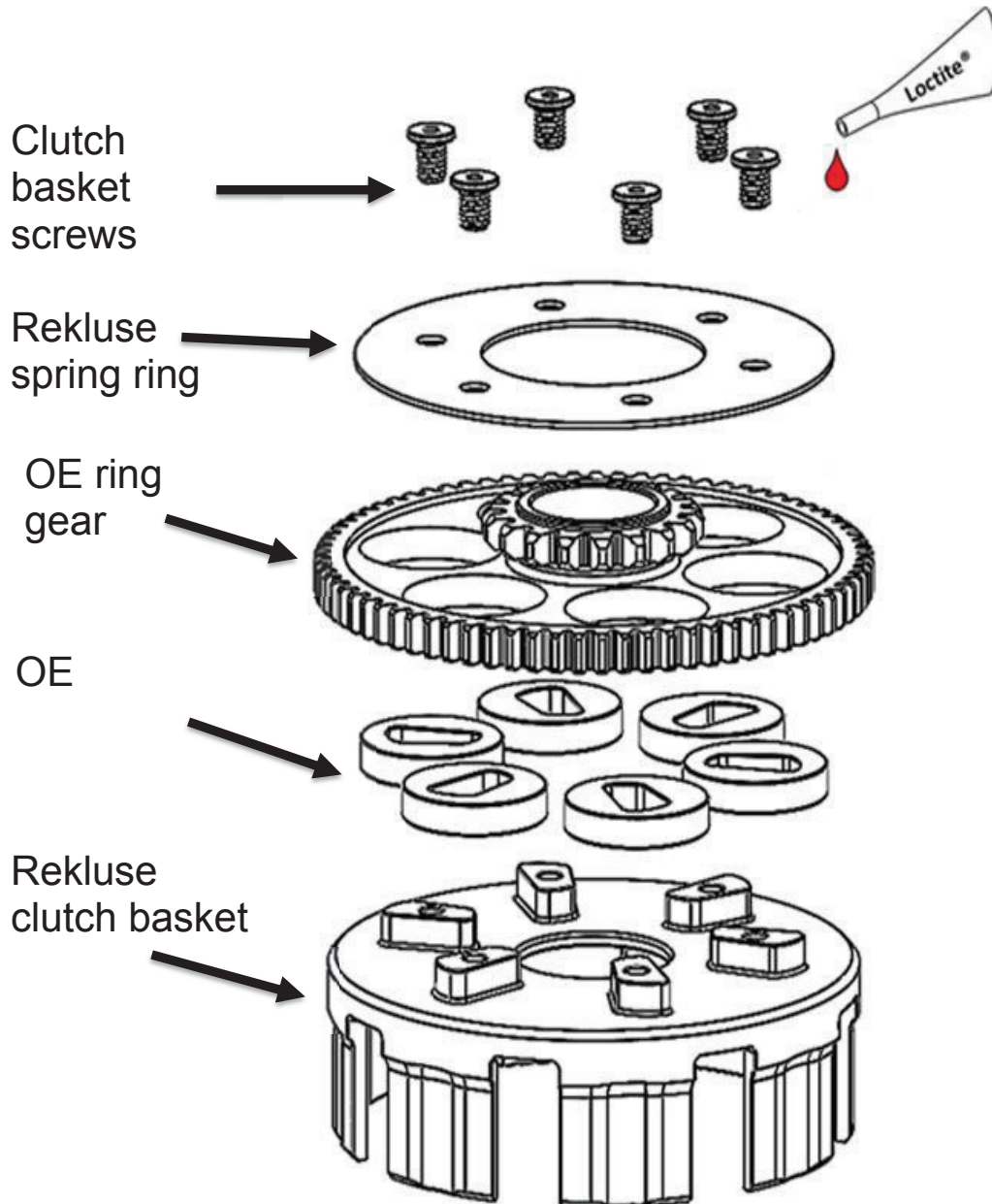


17. Clean the rubber dampers and ring gear of all grit and rivet chips leftover from drilling.

ASSEMBLE THE BASKET

1. Place the new Rekluse clutch basket, tang side down, onto a workbench.
2. Install the rubber dampers onto the clutch basket. Be sure to match the damper shape to the orientation of the posts on the basket.
3. Install the ring gear on top of the dampers, then install the Rekluse basket backing plate.

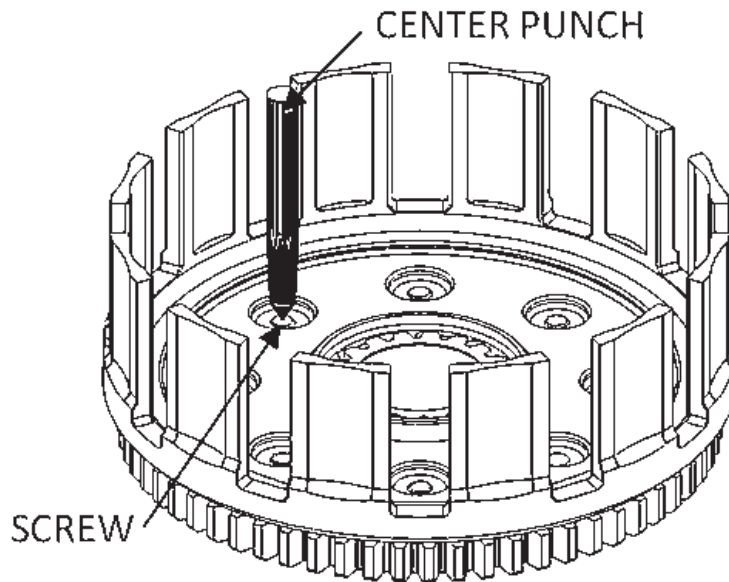
4. Using the provided Loctite® on the screw threads, screw the clutch basket assembly together.
5. Using a 3 mm hex key, tighten the basket screws in small increments in a star pattern. Torque the basket screws in a star pattern to **80 in-lb (9 N-m)**.



⚠ CAUTION

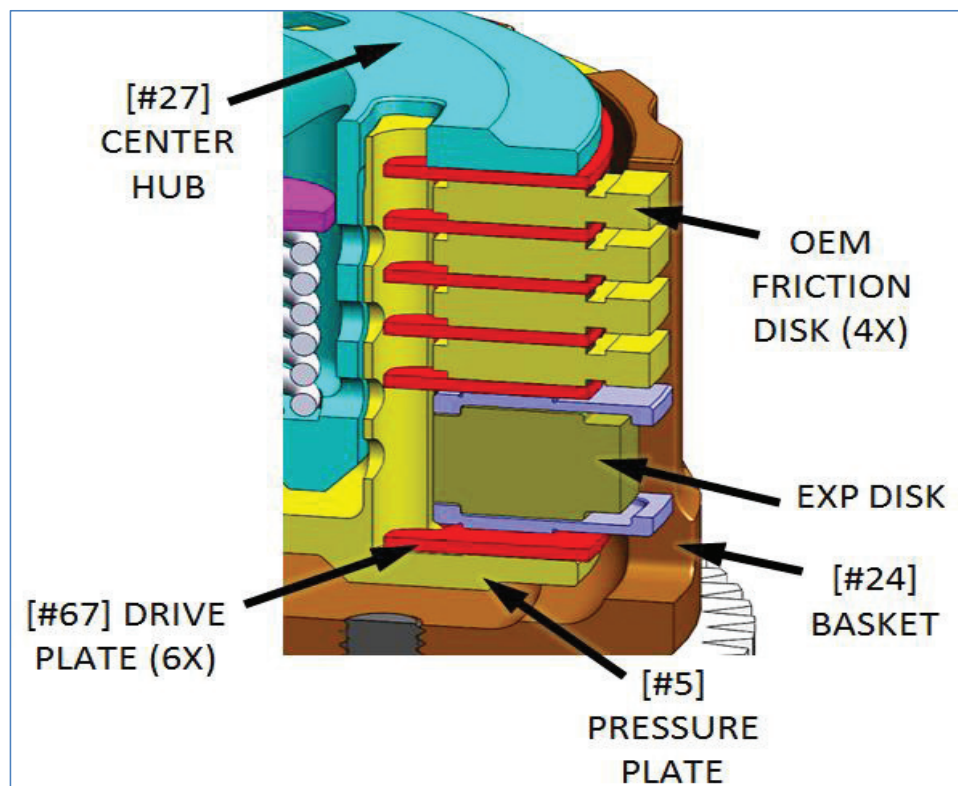
*It is **critical** that you apply Loctite and stake the ends of the screws or they can back out. Rekluse is not responsible for engine damage that may be caused by screws that back out.*

6. Using the hammer and center punch, stake the ends of the screws where they protrude through the inside of the clutch basket. *Be sure to stake the screws... **DO NOT** stake the aluminum basket.*



CLUTCH INSTALLATION

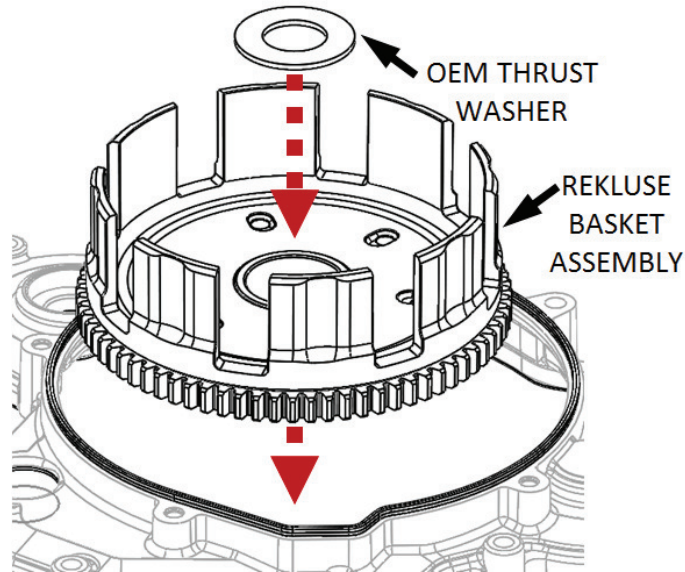
Cross-Section of clutch pack:



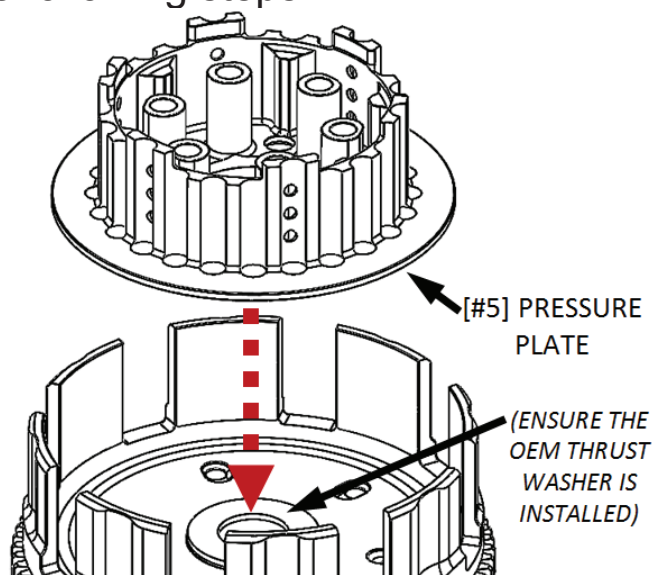
1. Install the Rekluse clutch basket over the mainshaft collar onto the mainshaft in the bike. *Be sure to line up the gear teeth with the crank and kick-starter gears.*

Note: To get the ring gear teeth to properly mesh with the crank and kick-starter gears, gently rotate the basket until it drops in and the teeth all mesh. **DO NOT** force the basket in or damage may occur.

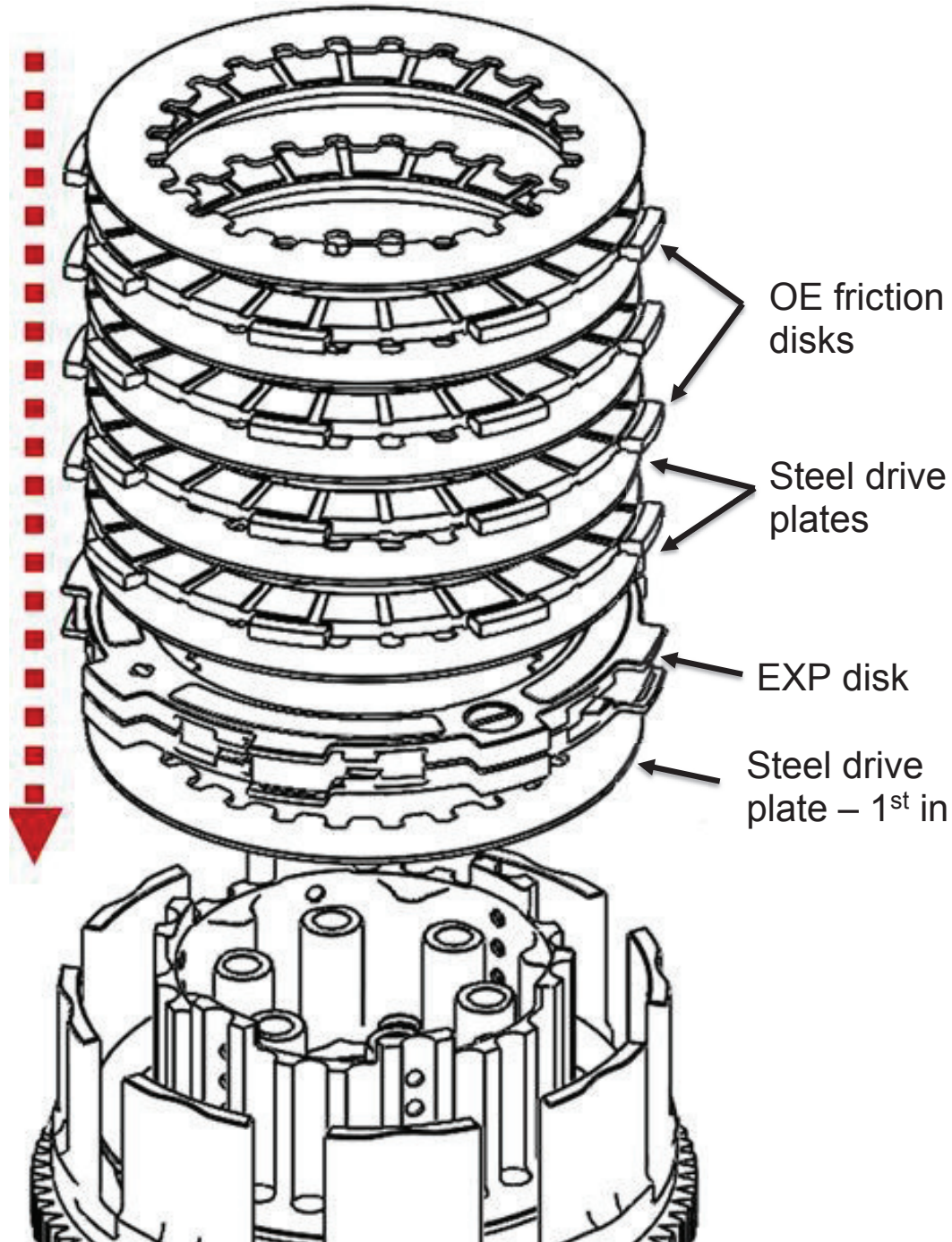
2. Install the OE thrust washer.



3. Install the Rekluse pressure plate in into the basket. It will fit loosely in the basket until the clutch plates and hub are installed in the following steps.

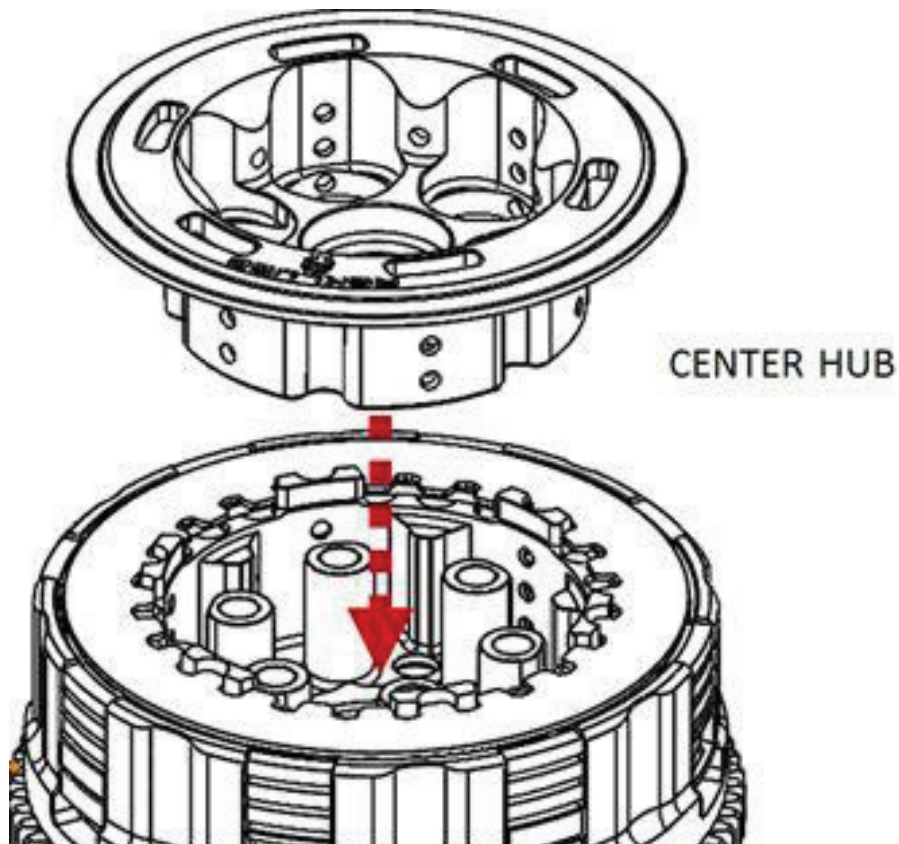


4. Install a Rekluse steel drive plate onto the pressure plate, then install the EXP disk.
5. Install another steel drive plate, then alternate the OE frictions with the steel drive plates, ending with a steel drive plate. *You will have an extra OE friction disk left over that will not be reused.*



6. Install the Rekluse center clutch hub onto the clutch pack.

Note: To get the spline in the hub to line up with the mainshaft spline, gently rotate the hub back and forth while installing it until the splines mesh and the hub drops into place. **DO NOT** force the hub into place or damage will occur.



7. Install the new provided pressure plate springs, followed by the Rekluse spring plate screws.

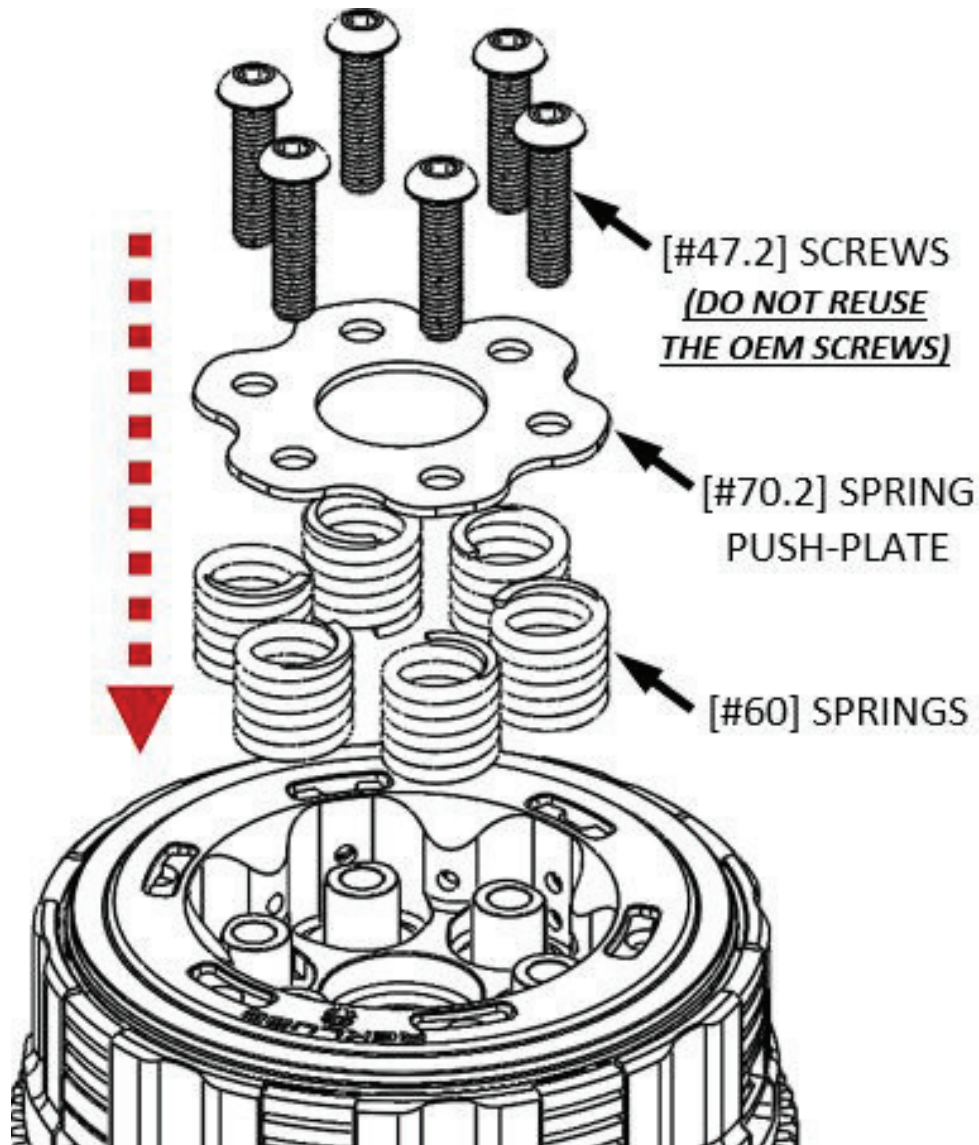
CAUTION

DO NOT reuse the OE screws. They cause interference with the clutch cover.

8. Use the 3 mm hex bit to carefully tighten the screws in small increments in a star pattern to evenly lift the pressure plate.

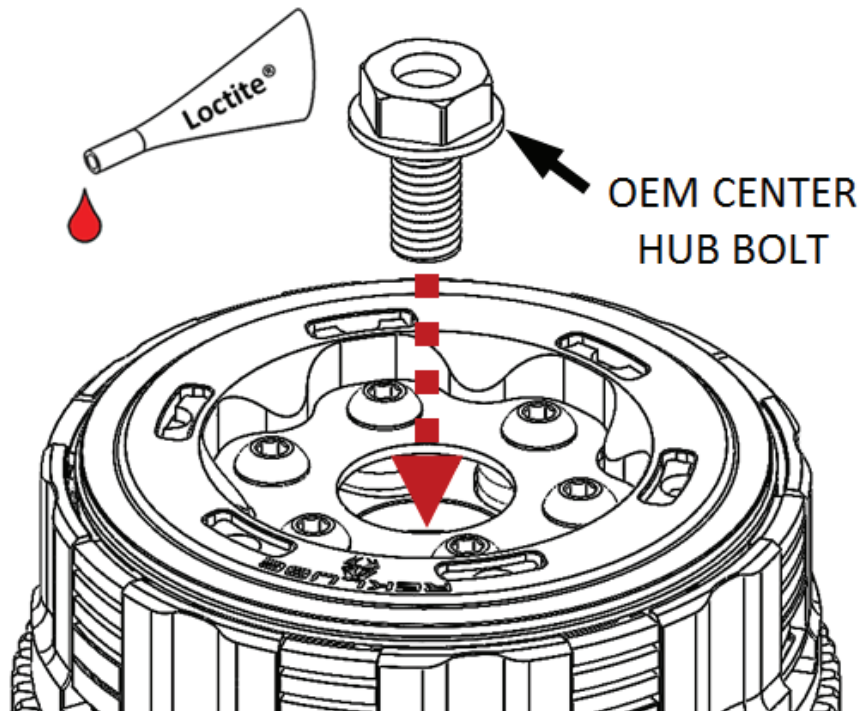
9. Torque the screws to **7.5 ft-lb (10 N-m)** in a star pattern.

NOTE: Shifting the transmission into 5th gear and holding the rear wheel or rear brake pedal helps keep the shaft from rotating when tightening the screws and center hub bolt.

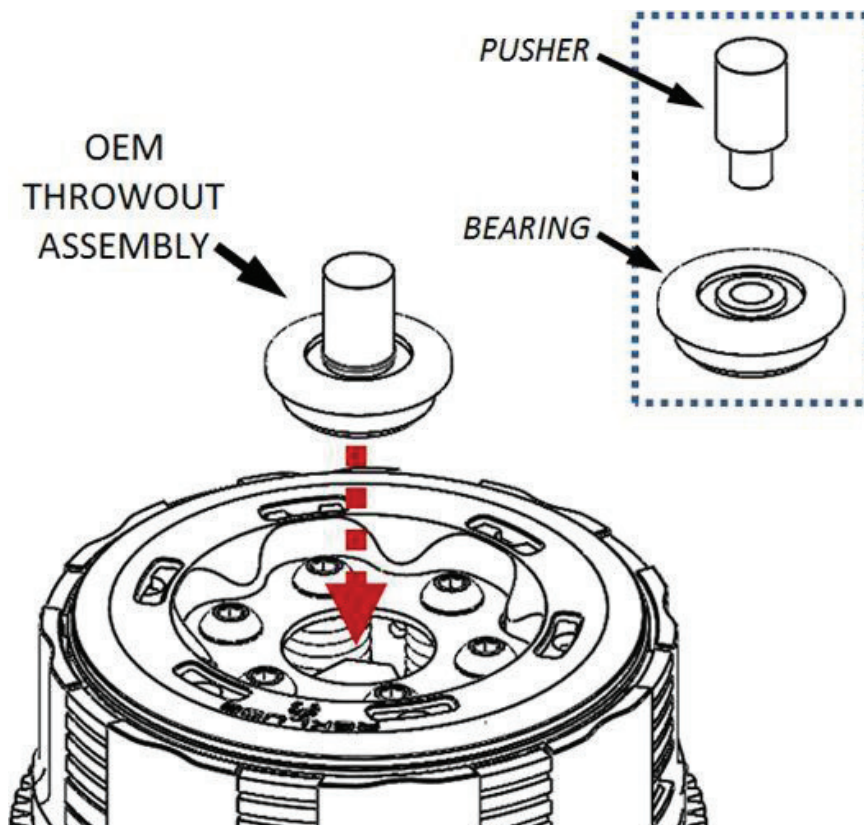


10. Clean and dry any oil or debris from the threads of the OE center hub bolt, then apply the supplied Loctite® to the threads of the bolt.

11. Install the bolt into the mainshaft, and torque to **40 ft-lb (54 N-m)** using a 14 mm socket.

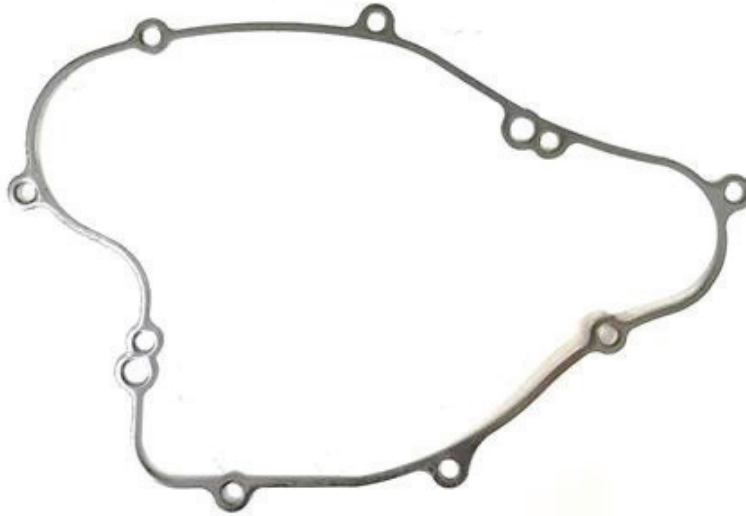


12. Reinstall the OE throw-out assembly into the spring push plate.



INSTALL THE CLUTCH COVER

1. Reinstall the side case cover gasket or install a new gasket onto to bike.



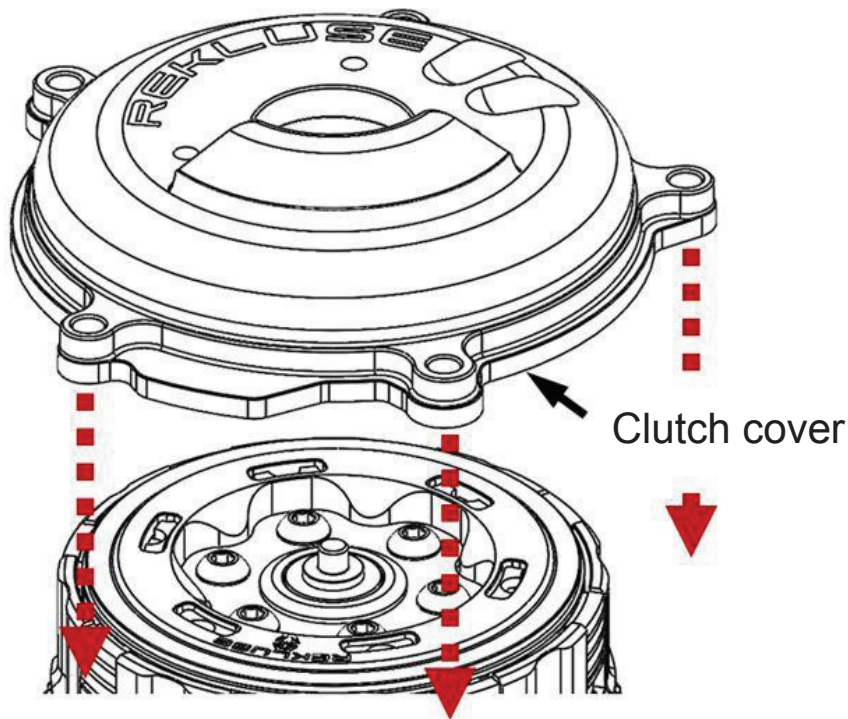
2. Reinstall the side case cover using the OE bolts. Be sure to replace the bolts in the location they were removed.

⚠ CAUTION

Failure to install the OE clutch cover bolts back in their proper location can result in damage to your motorcycle.

3. Torque the bolts evenly to **6 ft-lb (8 N-m)**.
4. Ensure the OE clutch cover gasket is in place before installing the cover.

5. Install the Rekluse clutch cover using the OE cover bolts. Torque the clutch cover bolts to **9 ft-lbs (12 N-m)**.



6. Reinstall the break pedal.
7. Reinstall the kick-start lever.
8. Reinstall the clutch hydraulic line to the clutch cover.

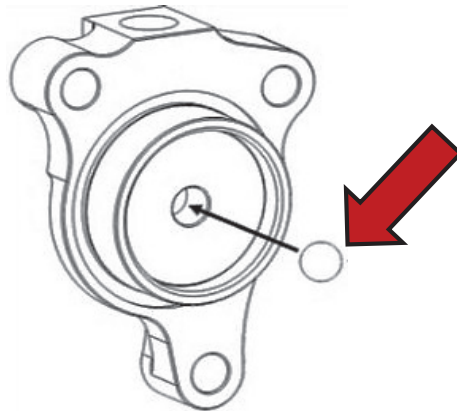
Note: The *OE* clutch cover is **not compatible** with the Rekluse CoreEXP product because it does not provide external adjustability. The Rekluse clutch cover **must** be installed.

SLAVE CYLINDER INSTALLATION

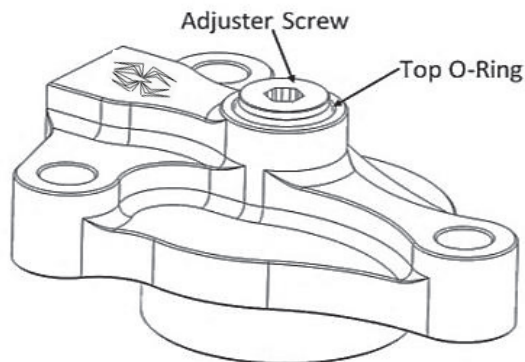
Installing the new Rekluse slave cylinder takes several steps. Please read the entire section before beginning the process to ensure you have the right equipment and clutch fluid needed for the replacement. Rekluse recommends wearing gloves and safety glasses for the install.

⚠ CAUTION

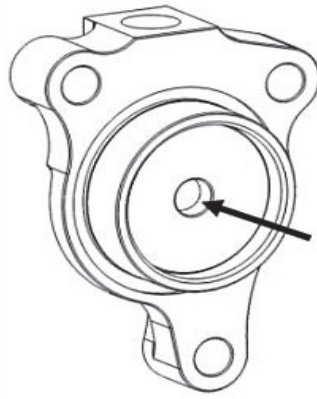
During the bleed and assembly, note that there is a small ball bearing installed in the slave piston with a small amount of grease. When installing the Rekluse slave cylinder, make sure the ball is in place and has not fallen out during shipping.



1. On a workbench, use a 4 mm hex key to turn the adjuster screw counterclockwise so that the top O-ring is visible under the adjuster screw.



2. Use your thumbs to compress the piston until it bottoms out, then release it.



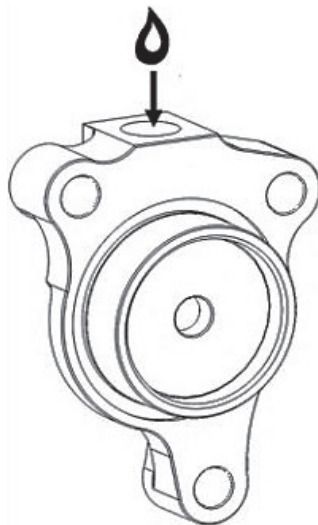
⚠ CAUTION

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

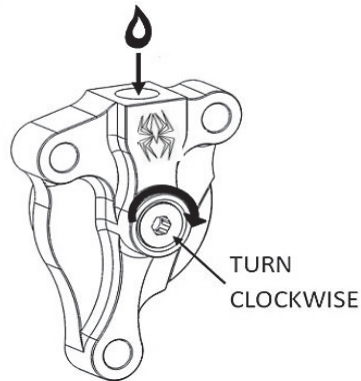
3. Pour the manufacturer recommended clutch fluid into the slave cylinder port.

⚠ CAUTION

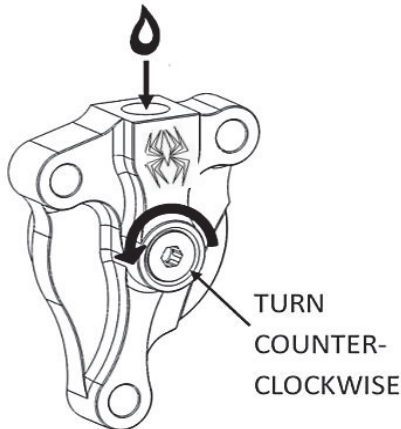
Be sure to use the correct clutch fluid. Check the cap of the clutch master cylinder to determine which clutch fluid to use. Failure to use the correct fluid will result in seal damage and/or failure.



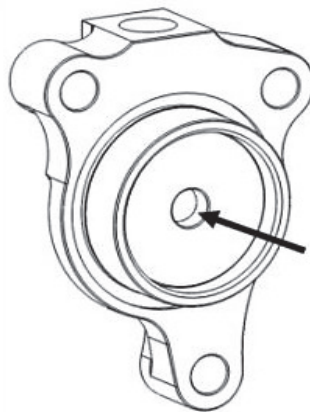
4. Use a 4 mm hex key to turn the adjuster screw clockwise until it bottoms out and the O-ring is no longer visible. Keep the fluid topped off as you go.



5. Use the hex key to turn the adjuster screw counterclockwise back to the initial position, with the top O-ring visible. Keep the fluid topped off as you go.

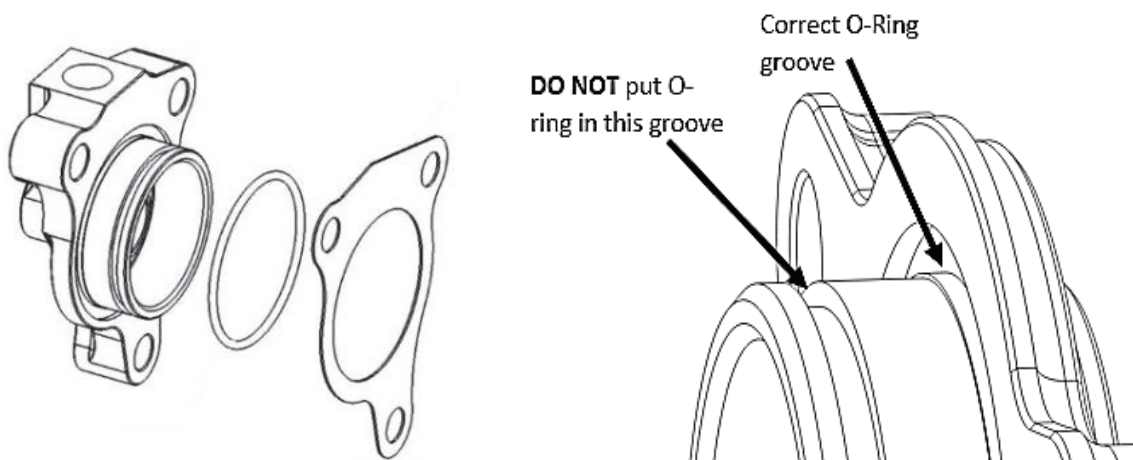


6. Use your thumbs to compress the piston again until it bottoms out while looking for air bubbles.

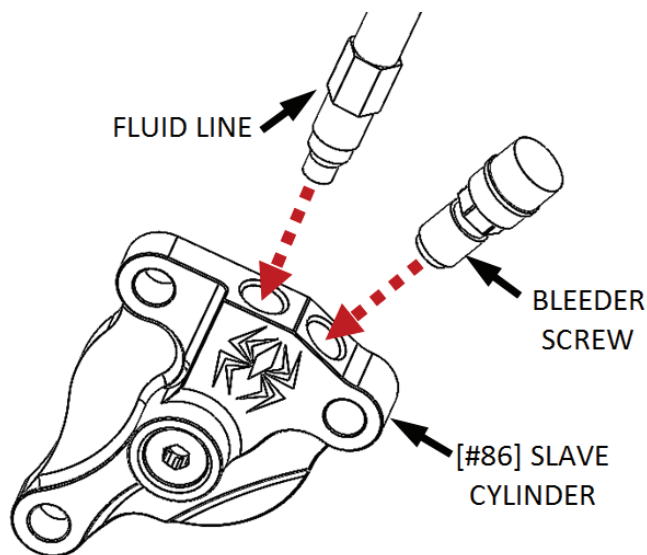


7. Repeat steps 3 - 6 until there are no air bubbles coming out in the fluid when the piston is compressed.
8. When the bleeding is complete, turn the adjuster screw counterclockwise so that the top O-ring is visible.
9. Compress the piston until it bottoms out, and top off with fluid.
10. Check that the ball bearing is still in place in the piston.

Note: *The Rekluse slave cylinder comes preassembled in the kit. If the parts become separated, assemble them in the following order: Rekluse slave cylinder, O-ring, then the supplied paper gasket.*



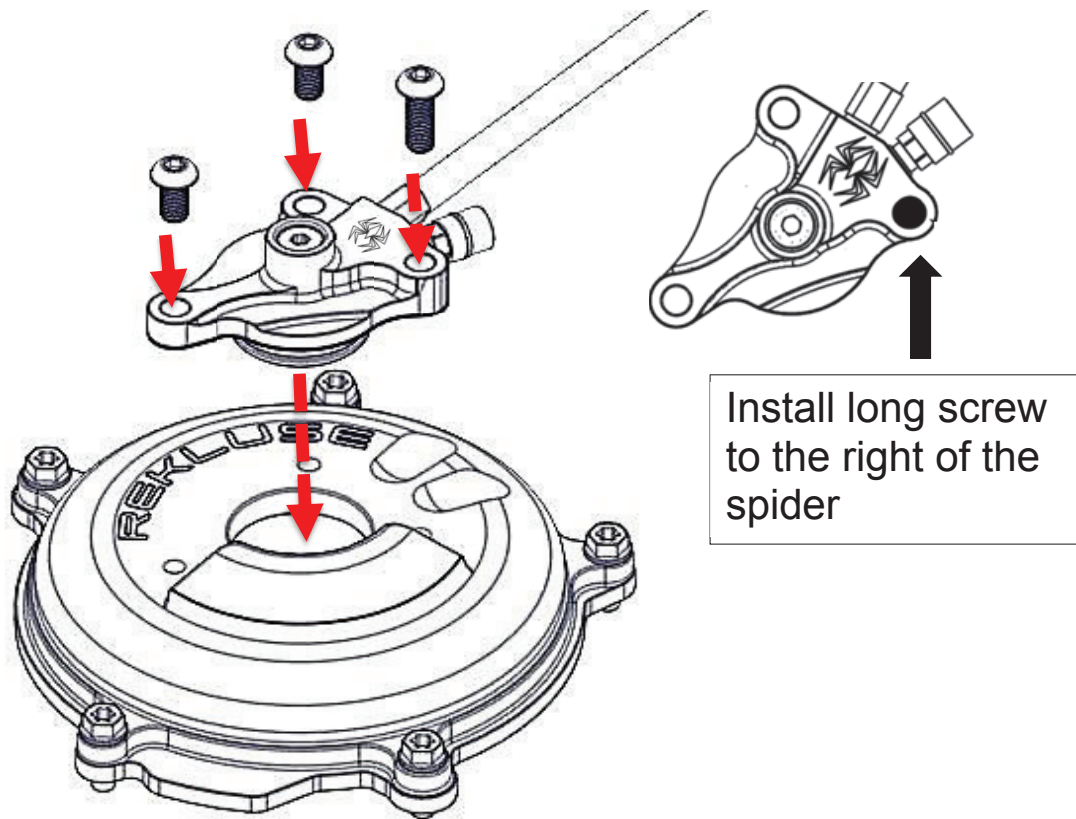
11. Loosely thread the OE clutch fluid line and the bleeder screw into the ports in the Rekluse slave cylinder.



7. Mount the Rekluse slave cylinder to the engine by lightly threading the two shorter OE bolts on the left side of the spider until finger tight, then thread the longer screw on the right side.

⚠ CAUTION

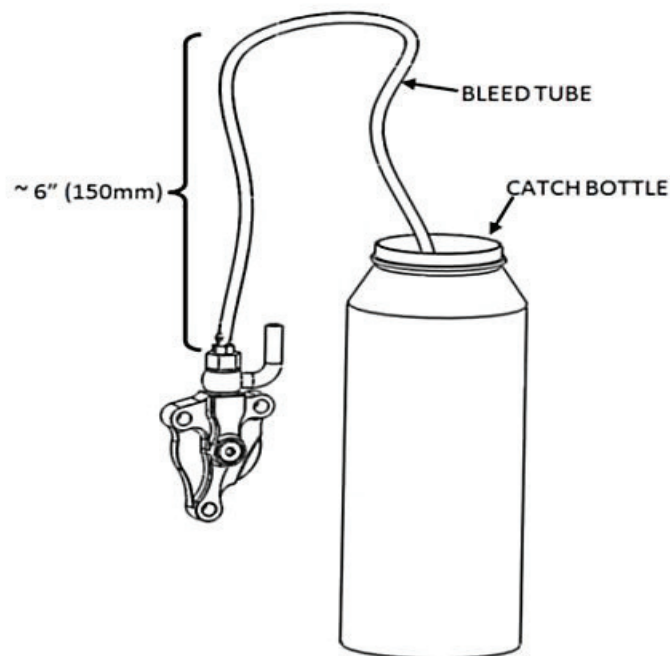
The long screw *must* be placed in the location where the slave cylinder housing is thickest (right side of the spider engraving).



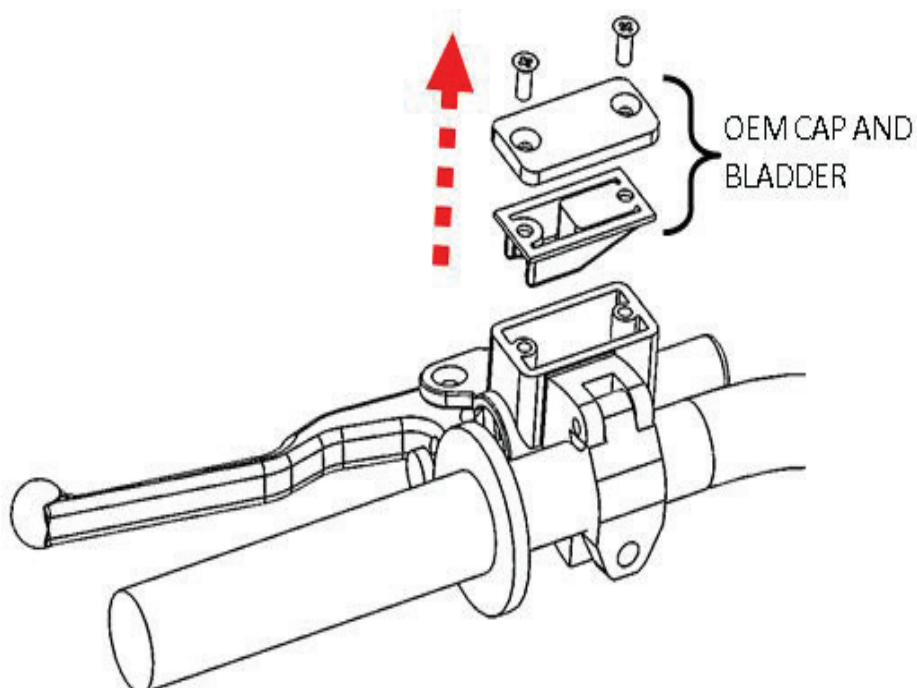
12. Apply Loctite[®] to the screws and torque them evenly to **6 ft-lb (8 N-m)**.
13. Using a 12 mm open-ended wrench, tighten the clutch line nut.

BLEED THE CLUTCH LINE

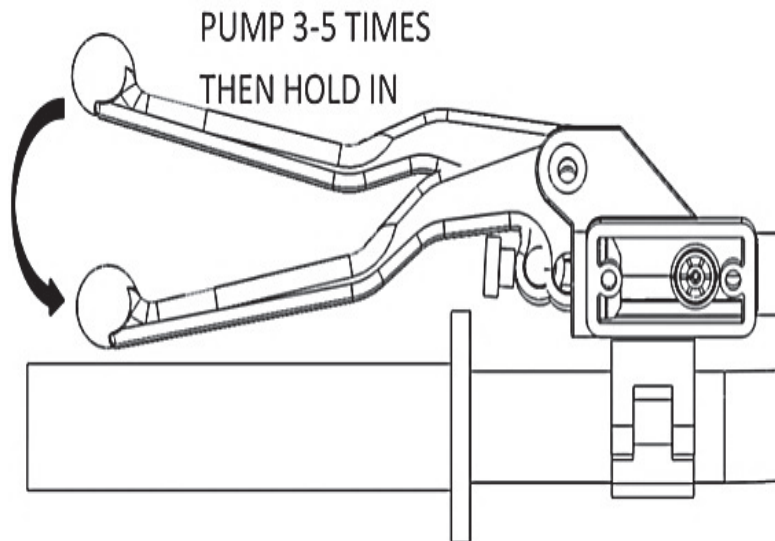
1. Attach one end of the supplied bleed tube to the bleed port on the slave cylinder, then loop the opposite end into a suitable catch bottle.



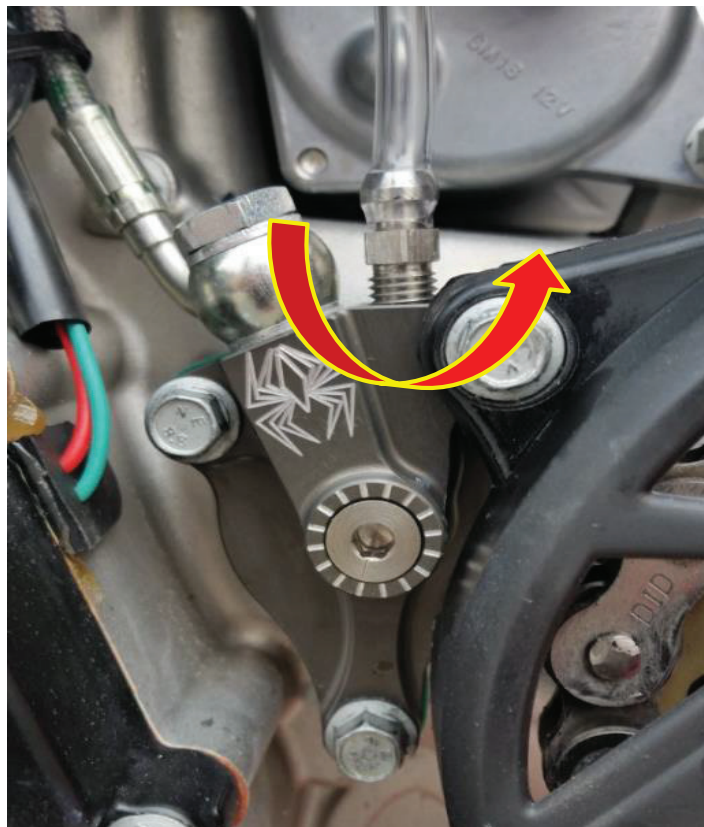
2. On the handlebar, remove the cap and bladder from the clutch master cylinder. Adjust the reservoir so it is level with the ground.



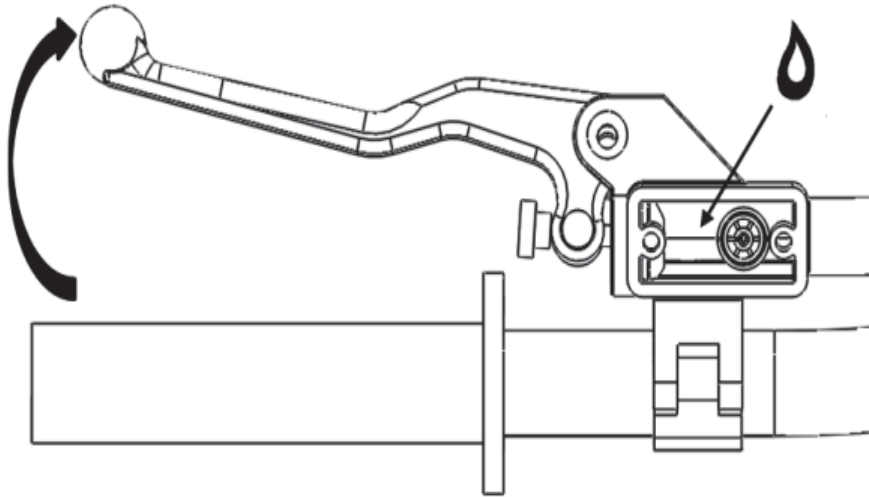
3. Top off the master cylinder with the recommended clutch fluid until it is 75% full.
4. Pump the clutch lever 3 to 5 times, then hold it against the handlebar/grip.



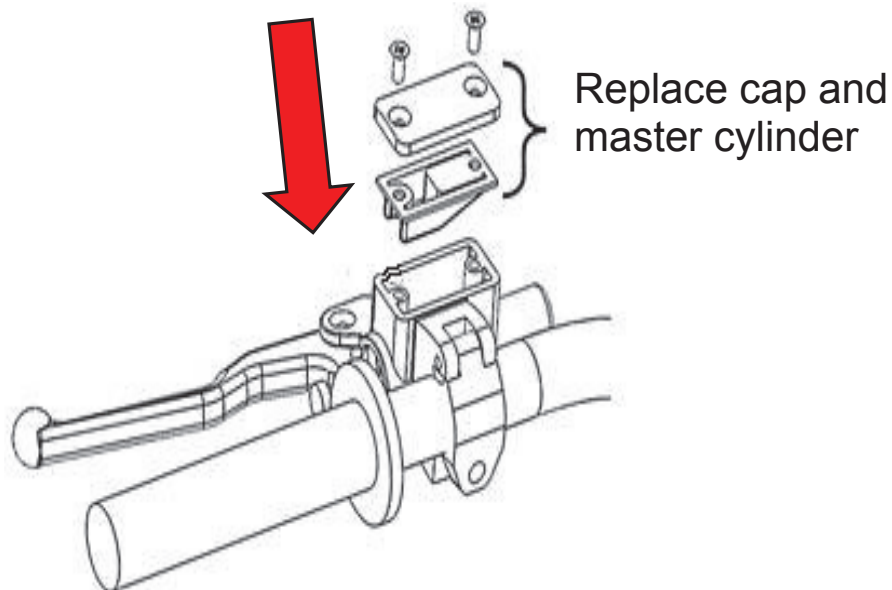
5. While still holding the clutch lever in, use a wrench to open the bleed port. Air and fluid should flow from the bleed tube.



6. Before releasing the clutch lever, tighten the bleed port when the pressure is released from the bleed tube.
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.
9. Check that the clutch master cylinder is 75% full, then replace the cap and bladder.



10. Remove the bleed tube from the bleed bolt and remove the bottle.
11. Torque the bleed screw to 150 in-lb (17 Nm) with a socket or the closed end of an 8 mm wrench.

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

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

SET THE INSTALLED GAP AND **VERIFY BY CHECKING FREE PLAY** **GAIN**

It is very important that you understand how to set the installed gap in your new clutch, and be able to verify the installed gap by checking Free Play Gain.

Setup, break-in, and rechecking the installed gap is CRUCIAL. Failure to properly maintain your installed gap can result in premature wear or failure of your clutch.

The “installed gap” is the free space in the clutch pack when the EXP disk is disengaged (collapsed). This gap allows the clutch to spin freely until the engagement RPM is reached and the EXP disk expands to close the gap and apply pressure to the pressure plate, which in turn drives the motorcycle forward.

The installed gap is what allows the auto function of the product to perform properly. Use the following steps to set the installed gap and check the Free Play Gain.

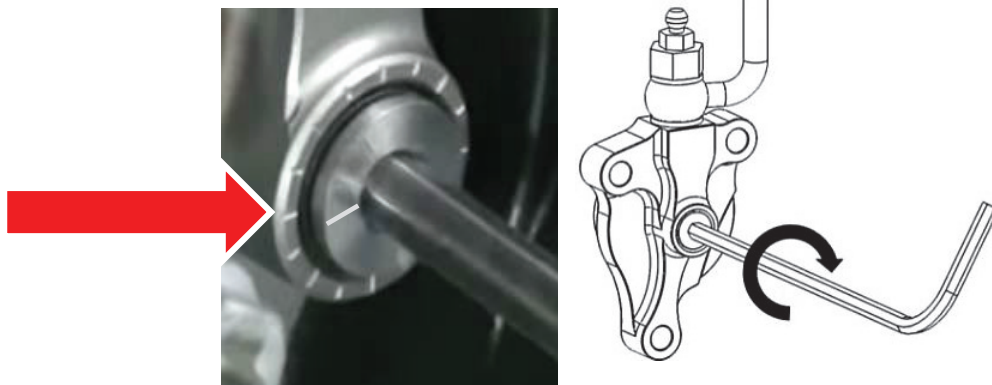
⚠ WARNING

Failure to check and verify Free Play Gain can cause failure or damage to this product. Setting the correct installed gap is critical for clutch performance.

Setting the installed gap and checking Free Play Gain is a 4-step process. It is important to follow each step to ensure that your new clutch functions as designed.

Step 1: Find the starting point

- a) With the bike standing up, locate the adjuster screw in the center of the adjustable slave cylinder.
- b) With the O-ring showing, use a 4 mm hex key to turn the adjuster screw clockwise until it stops under light pressure. This is your “starting point.”



Note: *The resistance you feel is where the throw-out begins to lift the pressure plate. Finding the right starting point may take a few tries, but you will feel a noticeable change in turning effort once you reach that point. Stop when you feel the pressure increase. The “starting point” will change as the clutch pack wears over time.*

- d) Once you have found the starting point, note the position of the hex key using the tick marks on the slave cylinder housing and the small etch mark located on the screw. You will begin here to adjust the installed gap.
- e) Use a 4 mm hex key to turn the adjuster screw clockwise **1 full turn + 2 tick marks** from your starting point. This may NOT be your final setting, but it is a beginning adjustment for finding the correct setting.



Use the tick marks on the cylinder and the etch mark on the screw to remember the starting point for adjusting the gap.

- f) Continue with Step 2 to check for Free Play Gain.

⚠ CAUTION

Do not ride your bike without the adjusting the installed gap. You will not be able to disengage the clutch until you set the installed gap.

Step 2: Learn how to check Free Play Gain

Feeling Free Play Gain with the beginning adjustment to the slave cylinder aids in learning to recognize Free Play Gain.

If you are familiar with Free Play Gain, check for Free Play Gain then skip to Step 3 -“Break-in the new clutch.”

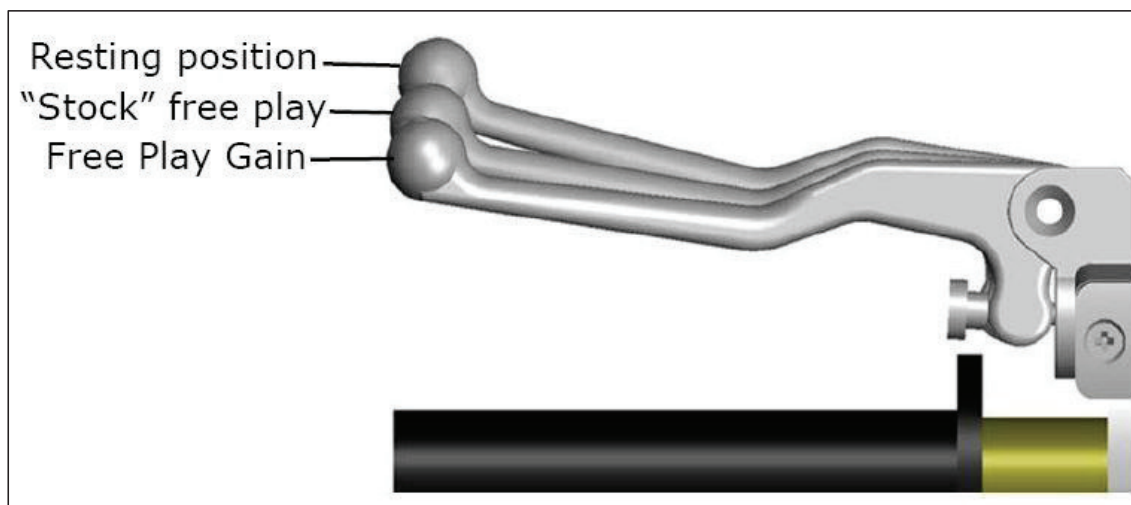
If Free Play Gain is new to you, follow the instructions below to help you learn this important step. You can also view the video entitled “How to Check Free Play Gain” on our website at www.rekluse.com/support/videos.

Free Play Gain is different from the “normal” free play (slack) you are used to with your stock clutch. With the Rekluse auto clutch, Free Play Gain is the result of the EXP disk expanding and lifting the pressure plate to engage the clutch.

Free Play Gain happens when the engine’s RPM increases from idle to above approximately 5,000 RPM and the EXP closes the installed gap. The amount of Free Play Gain you feel in the lever corresponds to the amount the pressure plate has been lifted by the EXP disk expansion.

Checking Free Play Gain allows you to externally monitor the installed gap so you can know when to make an adjustment if the installed gap is too large or too small.

The correct installed gap is verified by observing and feeling the increased free play movement in the clutch lever. This extra movement is called “Free Play Gain.”



If there is too much Free Play Gain, the installed gap is too small. The bike may drag and stall because it has difficulty disengaging the clutch. It may also be difficult to shift. Too much Free Play Gain will not hurt the clutch, but it will negatively affect clutch performance.

With too little or no Free Play Gain, the installed gap is too large. This means when the EXP is fully expanded it does not lift the pressure plate. The clutch may slip and make the bike seem like it is losing power. The bike may not move forward even though

the engine RPM increases as if the clutch lever is slightly pulled. Too little Free Play Gain will cause the clutch system to burn up.

Optimal Free Play Gain yields 1/8" to 1/4" (3 mm-6 mm) of clutch lever movement, measured at the ball end of the lever. This measurement at the lever correlates to achieving the ideal installed gap.

Two Ways to Check for Free Play Gain

The following steps explain **2 ways** to check Free Play Gain. One way uses the rubber band Rekluse includes in the clutch kit, and one uses your hand. You can use either method to check for Free Play Gain.

Rekluse recommends that you begin with the rubber band method first to check for Free Play Gain and then learn the hand method. The rubber band will help you learn how to recognize Free Play Gain until you are comfortable with the hand method. Learning to check Free Play Gain by hand effectively and comfortably can make it easy to check Free Play Gain every time you ride.

The Rubber Band Method

Use the rubber band method for the initial set up. It can also be used before each ride until you feel comfortable checking the Free Play Gain using the hand method.

⚠ WARNING

BEFORE YOU BEGIN, verify that the bike is in NEUTRAL before checking Free Play Gain. Failure to do so may result in the bike lurching forward, and loss of control and/or injury may result.

A Rekluse auto-clutch can make your motorcycle appear to be in neutral when in gear, even when the engine is running and clutch lever released.

Motorcycles equipped with a Rekluse auto-clutch can move suddenly and unexpectedly and cause riders to lose control. To avoid death, serious injury, and/or property damage, always sit on the motorcycle to start it.

- a) Before you begin, place the bike in **NEUTRAL**, start the engine and let it warm up for 2-3 minutes to idle down and warm the engine oil.
- b) Stretch the included rubber band between your thumbs, then place the top end of the rubber band on the outer end of the left handlebar grip.



- c) While holding the top end of the rubber band against the handlebar, stretch the band downward, then loop it through itself.



- d) Pull the band through the loop, then attach it to the outside end of the clutch lever. This will take up the initial free play (slack) and put the lever in a position to detect the Free Play Gain.



- e) While still in **NEUTRAL**, quickly rev the engine between 5,000-7,000 RPM (1/2 to 3/4 throttle), then let it return to idle. Notice the movement in the clutch lever when the engine is revved. This is your Free Play Gain.

Note: *It is very important the motor returns to idle before revving the engine again or Free Play Gain will not be correct.*

- f) When the bike returns to idle, rest your hand across the clutch lever. Rev the engine again to 5,000-7,000 RPM so you can observe the movement while feeling for Free Play Gain with your hand.

The Hand Method

Use the hand method to check Free Play Gain before the start of every ride for optimum performance and longevity of your new clutch.

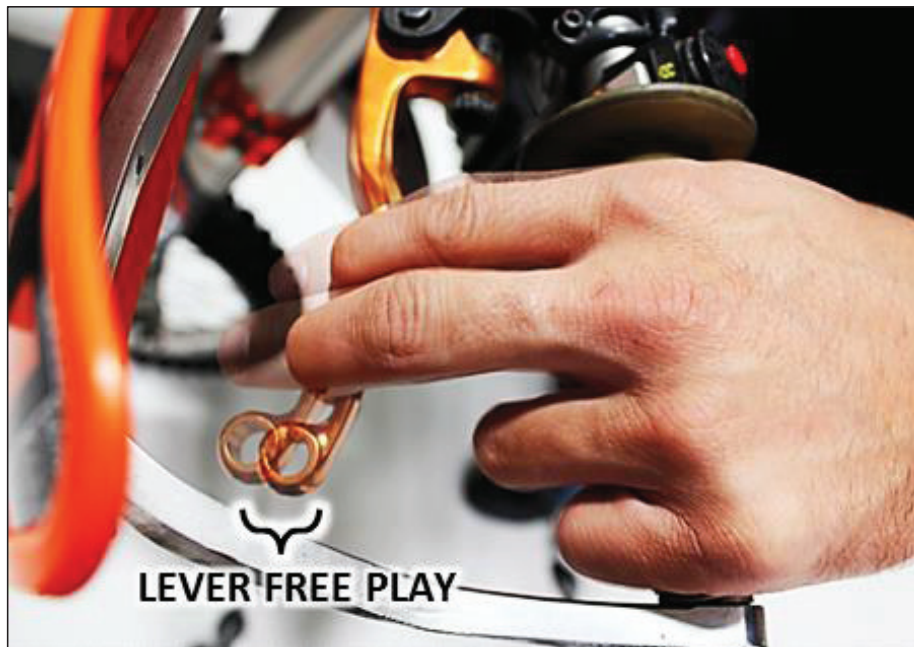
⚠ WARNING

BEFORE YOU BEGIN, verify that the bike is in **NEUTRAL** before checking Free Play Gain. Failure to do so may result in the bike lurching forward, and loss of control and/or injury may result.

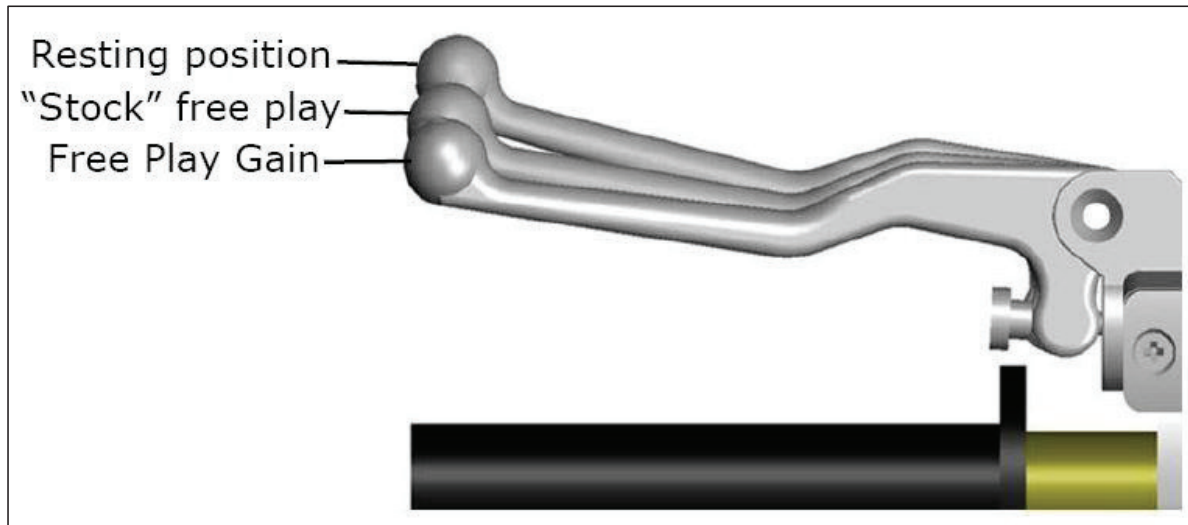
A Rekluse auto-clutch can make your motorcycle appear to be in neutral when in gear, even when the engine is running and clutch lever released.

Motorcycles equipped with a Rekluse auto-clutch can move suddenly and unexpectedly and cause riders to lose control. To avoid death, serious injury, and/or property damage, always sit on the motorcycle to start it.

- a) Before you begin, place the bike in **NEUTRAL**, start the engine and let it warm up for 2-3 minutes to idle down and warm up the engine oil.
- b) With the bike at idle, apply enough pressure to the clutch lever to take up the initial free play (slack) in the clutch lever.



- c) While still in **NEUTRAL**, continue to apply light pressure and quickly rev the engine between 5,000-7,000 RPM (1/2 to 3/4 throttle), then let it return to idle. Notice the movement in the clutch lever when the engine is revved. This is your Free Play Gain.






- d) When the bike returns to idle, rev the engine between 5,000-7,000 RPM a second time to feel the Free Play Gain again.
- e) Continue with Step 3 to break-in the new clutch.

Step 3: Break-in the new clutch

Once you install your new clutch, it is important to break it in. A series of roll-on starts are used to break in the clutch. Follow these procedures for breaking in your clutch and any time new friction disks, EXP bases, Teflon pads, or wedges are installed.

⚠ WARNING

Failure to follow the break-in procedure and oil screen inspection process could cause motor oil delivery failure, which can result in motor failure, serious injury, or death.

Break-in Procedure	Number of times
<p>Rev Cycles:</p> <ol style="list-style-type: none"> Place the bike in NEUTRAL. With your hand off the clutch lever, rev the engine 10 times, being sure to let it return to idle between each rev cycle. 	 <p>10 rev cycles</p>
<ol style="list-style-type: none"> With the engine still running, pull in the clutch lever, then click the bike into 1st gear. Slowly release the clutch lever. The bike should stay in place or have a slight amount of forward creep. With the bike idling in first gear, slowly apply throttle to begin moving. Without using the clutch lever, accelerate moderately to approximately 5,000 RPM to fully lock up the clutch and come to a complete stop. Repeat 10 times. <p>Note: <i>If the engine wants to stall or the creep is excessive, the idle may be too high or the installed gap may be too small. Make necessary adjustments before proceeding.</i></p>	 <p>10 roll-on starts</p> <p>Continued on next page </p>

6. Without using the clutch lever, start in 2nd gear, then accelerate moderately to approximately 5,000 RPM and come to a complete stop. Repeat 10 times.



10 roll-on starts

7. Place the bike in **NEUTRAL** and recheck Free Play Gain.

8. Continue to step 4 to adjust the installed gap until the Free Play Gain of the clutch lever is 1/8" to 1/4" (3 mm-6 mm).

Note: *Your clutch pack will expand with heat, so final adjustment to Free Play Gain should be made when the bike is warm. Remember not to ride without sufficient Free Play Gain.*



Recheck Free Play Gain and adjust the installed gap

⚠ CAUTION

Do not perform 3rd gear starts with this product. Starting in 3rd gear will burn up the clutch and decrease the performance of this product in a short amount of time.

Step 4: Adjust the installed gap and Recheck Free Play Gain

Once you have learned how to check Free Play Gain, you need to finish adjusting the installed gap, then recheck the Free Play Gain until the clutch lever moves only 1/8" to 1/4" (3 mm-6 mm). The gap is adjusted by turning the slave cylinder screw.

- a) With the bike running and in **NEUTRAL**, locate the adjuster screw in the center of the adjustable slave cylinder.
- b) Use a 4 mm hex key to turn the adjuster screw clockwise 1 tick mark from the last setting, then recheck Free Play Gain.



Tick marks are located on the slave cylinder, and an etch mark is on the screw. If you need to re-position the hex key, you can use these marks for reference.

- c) Continue to adjust the slave cylinder 1 tick mark at a time until optimal Free Play Gain is achieved.
- d) Refer to the following pictures and chart in the next section for additional adjustment information.
- e) The Free Play Gain will change as the clutch pack wears over time.
- f) Checking the Free Play Gain is easy and indicates when the install gap needs adjusting.

FREE PLAY GAIN ADJUSTMENTS

Make each adjustment in small increments - one tick mark at a time. After each adjustment, recheck Free Play Gain until you achieve the optimal 1/8" to 1/4" (3 mm-6 mm) of clutch lever movement.

Symptom	Reason	Solution
<ul style="list-style-type: none">• Clutch lever moves in too far (too much Free Play Gain)• Clutch has excessive drag or stalls• It is difficult to fully override the clutch with the lever	Installed gap is too small	Turn the adjuster screw clockwise 1-2 marks to increase the installed gap and decrease Free Play Gain. Recheck Free Play Gain.
<ul style="list-style-type: none">• Clutch lever only moves slightly or does not move at all (too little Free Play Gain)• Clutch slips• Bike seems to lose power	Installed gap is too large	Turn the adjuster screw counterclockwise 1-2 marks to reduce the installed gap and increase Free Play Gain. Recheck Free Play Gain.

MAINTENANCE

To keep your clutch performing at its best, perform regular maintenance on your bike and clutch.

- Keep up with regular oil changes as per the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality. Oil recommendations can also be viewed under Tech Tips on our website at www.rekluse.com/support/videos/atv-mc-support-videos.

- Inspect all of your clutch parts for signs of wear or excessive heat, and replace components as necessary. Clutch wear is dependent on the riders use.

Maintenance Protocol	Maintenance Intervals
Check and verify Free Play Gain	Every ride
Inspect all clutch parts for excessive wear or heat. Replace as needed.	Refer to OE service manual
Change oil, inspect and clean oil screen	Refer to OE service manual

- Maintain adequate Free Play Gain. Check before every ride and adjust if necessary.
- Replace friction disks if the disks are glazed and/or burnt.
- Measuring the clutch pack and/or the EXP disk can help determine if the components need replacing.
- Repeat the break-in procedure anytime you replace the EXP bases, Teflon pads, EXP wedges, or frictions disks. Always soak friction disks or EXP bases in oil for at least 5 minutes before installing.
- Replace the drive plates if they show signs of excessive heat.

Disk inspection examples

When inspecting the clutch pack, the following pictures can be used as a reference. **These are best viewed in color by viewing this install document on our website at www.rekluse.com/support.**

Drive Plates – If the clutch pack is getting high amounts of heat, purple, blue, or black color can be seen on the drive plate teeth. See pictures below. Not all drive plates look the same and may look different than pictured.



Normal Heat

High Heat
(Blue)

Excessive Heat
(Black)

TROUBLESHOOTING

Performance issues

If you find yourself adjusting the slave cylinder to fix Free Play Gain or drag, the clutch disks might be worn. Excessive heat or clutch slip can cause premature clutch failure as well. Once extreme temperatures are reached, irreversible damage will occur.

- Inspect all of your clutch parts for signs of wear or excessive heat, and replace components as necessary. Clutch wear is dependent on the riders use.
- Measuring the clutch pack can help determine if the components need replacing. Measure all the frictions, steel drive plates, and EXP together.

Nominal = **1.167” (29.65 mm)**

Clutch pack Minimum: = **1.150” (29.2 mm)**

Clutch pack Maximum: = **1.185” (30.0 mm)**

Clutch noise

Although it is harmless, some bike models may have “squeal” or “chatter” coming from the clutch at low RPM as it engages. Clutch squeal is caused by the clutch components vibrating as the clutch

engages and can become more audible as the clutch gets hot. Adjusting the installed gap will NOT affect clutch squeal or chatter.

For bike models that have clutch squeal or chatter here are some recommendations to reduce or eliminate it:

- Change the oil: For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements. Rekluse offers Factory Formulated Oil™ developed specifically for Rekluse products. Rekluse Factory Formulated Oil is a perfect complement to any OEM or aftermarket wet clutch. Visit www.rekluse.com to learn more. Dirty or old oil can make the clutch more likely to squeal or chatter.

EXP TUNING OPTIONS

Adjusting the engine idle speed to match your engagement setting is important and greatly affects the overall feel of how the EXP disk engages.

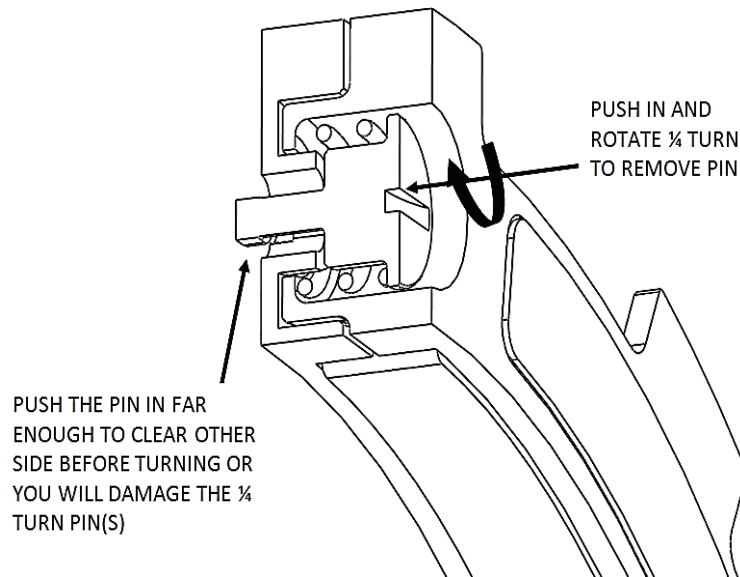
To prevent freewheeling and maximize engine braking, set the idle so there is a slight amount of drag while the bike is idling in gear and warmed up. The idle should not be so high as to move the bike forward in gear with the throttle closed. However, with a small opening of the throttle the bike should move forward.

You can tune the engagement RPM of the EXP disk by changing the spring configuration. The EXP disk comes set with the recommended “**Medium**” setting from Rekluse. Use the following steps to change the springs. It is **NOT necessary** to disassemble the EXP halves to change springs!

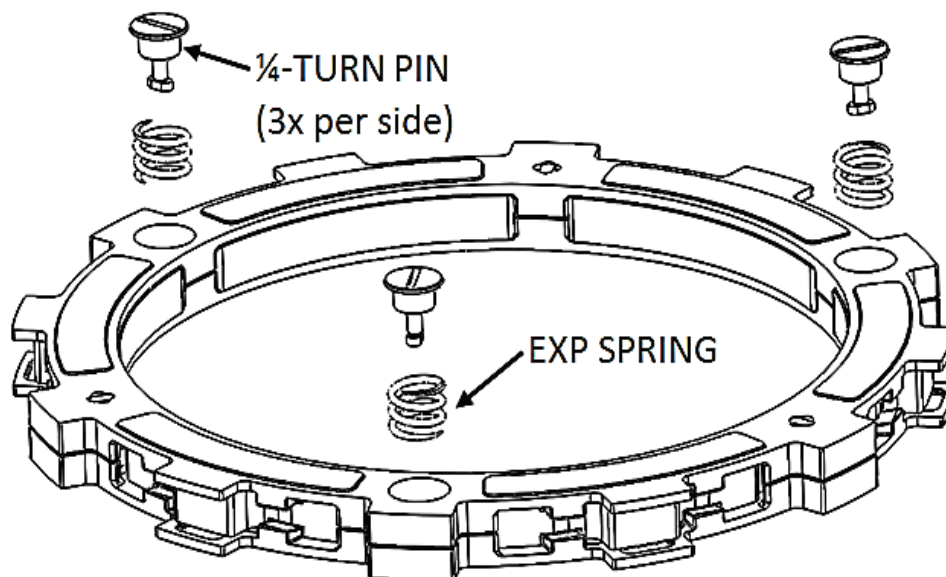
Engagement settings	Spring configuration
Low	4 Red
Medium	2 Red / 2 Blue
High	4 Blue

Changing the springs

1. Using a flat-blade screwdriver, push the $\frac{1}{4}$ turn pin in far enough to clear the opposite side of the EXP to unlock the pin.
2. With the pin still pushed past the base, turn 90° to remove the pin and spring.



3. Remove the remaining 2 pins and springs from the same side of the EXP base.
4. Drop a new spring into the spring slot on the base, then add the $\frac{1}{4}$ turn pin.

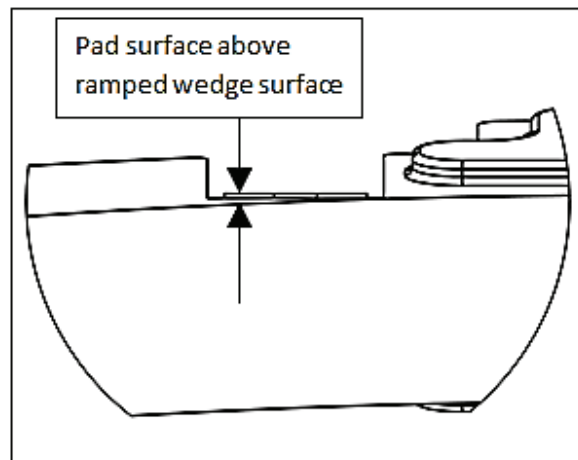
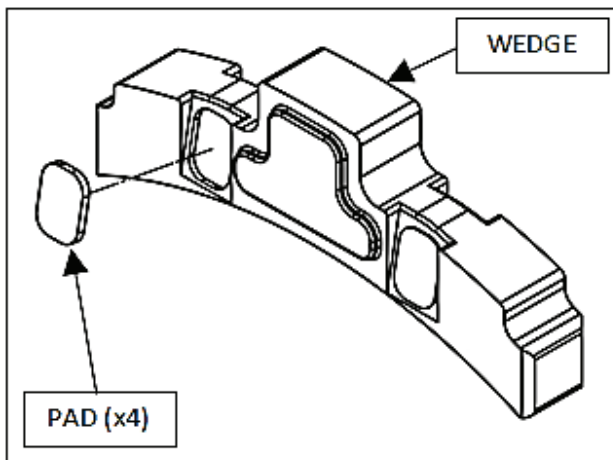


5. Push the turn pin in far enough to clear the base, then turn 90° and release the pin. The pin should sit almost flush with the EXP base.
6. Flip the EXP friction disk over, and repeat on the other side depending on engagement preference.
7. If you need to disassemble the EXP disk, you can watch the video on our website under Tech Tips at www.rekluse.com/support/videos/atv-mc-support-videos.

Note: To maintain even pressure, when using two different color spring sets, install one set of 3 on one side of the EXP and the remaining set of 3 on the other side.

⚠ CAUTION

If you disassemble the EXP, the Teflon pads may fall out or be stuck to the ramp surfaces of the EXP bases. Take care to ensure all pads are correctly placed into wedge pockets using gentle pressure to avoid damage to the pad surfaces before reassembling the EXP. Properly seated pads will be secured in place once the EXP is reassembled. Operating the clutch without the pads in place will cause part damage or failure.



BUMP-STARTING

If your bike needs to be bump-started due to a dead battery or any other reason, follow the steps below to quickly bump-start your bike.

1. Turn the adjustable slave cylinder counterclockwise to collapse the gap until no resistance is felt.
2. Bump start the bike. The clutch will function like a manual clutch at this point, but the clutch will not be fully over-ridable at high RPMs.
3. Once the bike is started, readjust the installed gap.

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

