

REKLUSE MOTOR SPORTS

The Rekluse CoreManual Kit for 65cc Bike Models

INSTALLATION & USER'S GUIDE

Doc ID: 191-7043A
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OVERVIEW

- This kit replaces the OEM core clutch components with high-quality billet components designed for optimal operation specific to your bike model.
- When this installation is performed, the bike's basket assembly will be disassembled and then reassembled using the Rekluse basket. This Rekluse basket is taller than the OEM one and is a necessary component to achieve overall clutch performance and improve the life of the clutch basket.

NOTE: The Rekluse basket is compatible with the CoreEXP auto-clutch, CoreManual manual clutch, and the OEM clutch.

INSIDE THIS DOCUMENT

- PREP & DISASSEMBLY
- BASKET ASSEMBLY
- CLUTCH INSTALLATION
- OIL TYPES
- MAINTENANCE
- CONVERSION TO AN AUTO-CLUTCH (Rekluse CoreEXP)

TOOLS NEEDED

- Metric socket set
- Metric end-wrench set
- Metric Allen keys/socket set
- Dental pick tools
- Torque wrench (in-lb & ft-lb, or N-m)
- Electric drill or drill press
- Motorcycle transmission oil & grease
- Hammer and center-punch set

INSTALLATION TIPS



- Watch the installation video by following this QR code or visiting rekluse.com/support/videos.
- Read this entire document before performing any steps, so you will know what to expect.
- Be sure to use proper eye protection, and wear rubber gloves when handling oils and other fluids.
- Laying the bike on its left side makes clutch work easier and eliminates the need to drain the oil.
- An air or electric impact wrench works well to remove the center hub bolt, or you can place the bike in top gear and hold the rear brake while loosening the center hub bolt with a socket.
- For optimal clutch performance Rekluse recommends using fresh, clean oil that meets JASO-MA oil rating requirements.

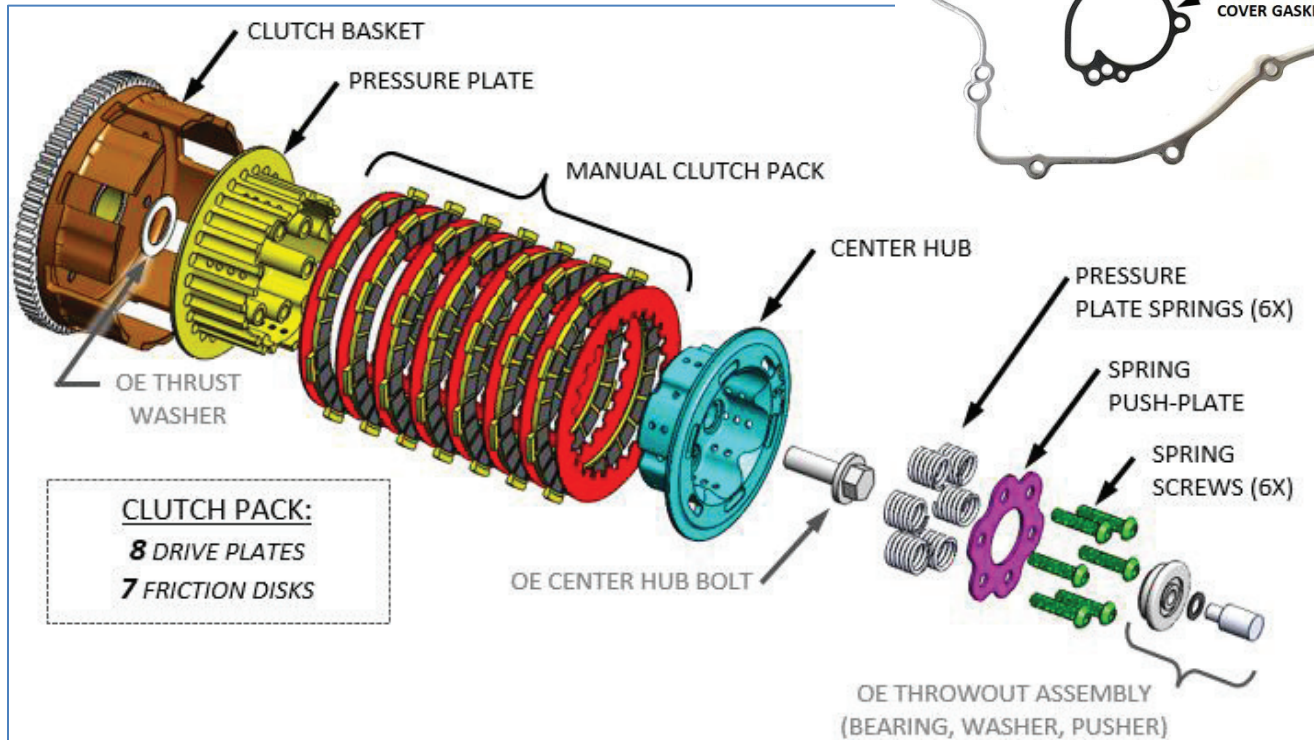
REPLACEMENT GASKETS:

It is recommended to replace the gaskets for the clutch cover and water pump cover whenever they are removed from the bike. The shaft seals can be reused if they are in good condition.

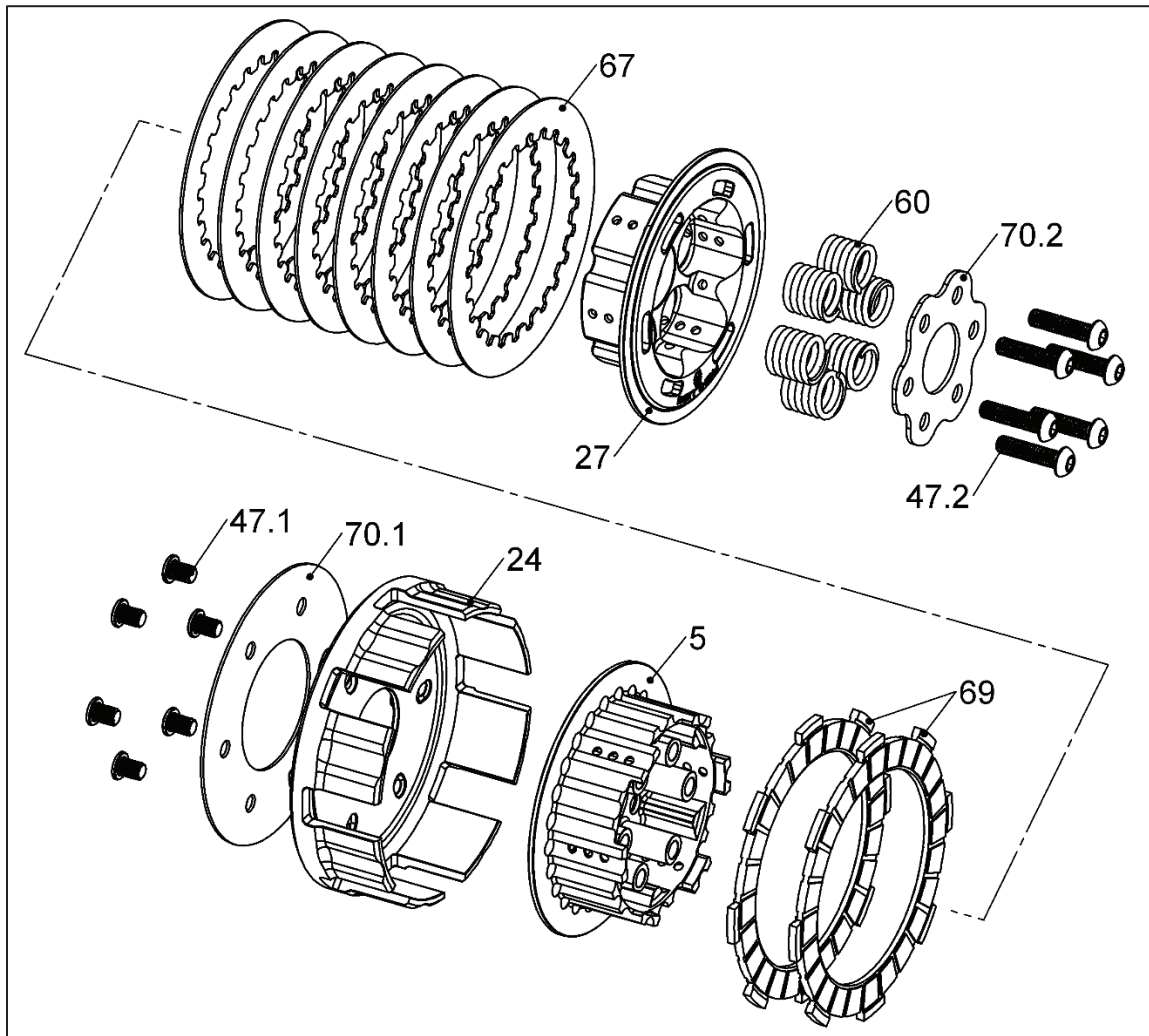
The OEM part numbers for the gaskets and seals are:

- Clutch Cover Gasket: Kawasaki part # 11061-0121
- Water Pump Cover Gasket: Kawasaki part # 11061-0159
- Water Pump Shaft Seals: Kawasaki part #s 92049-1359, 92049-1366
- Kick-Start Shaft Seals: Kawasaki part # 92049-002

CLUTCH ASSEMBLY OVERVIEW



INCLUDED PARTS

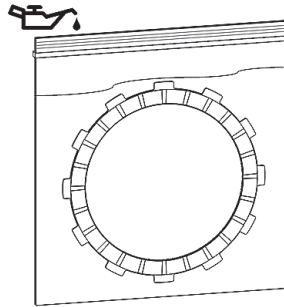


Item #	Item Type	Qty
5	Pressure Plate	1
24	Clutch Basket	1
27	Center Clutch Hub	1
47.1	Fastener – M6 Low-Head Screw	6
47.2	Fastener – M6 x 25 Button Head Screw	6
60	Pressure Plate Spring	6
67	Steel Drive Plate	8
69	Friction Disk	2
70.1	Basket Backing Plate	1
70.2	Spring Push-Plate	1

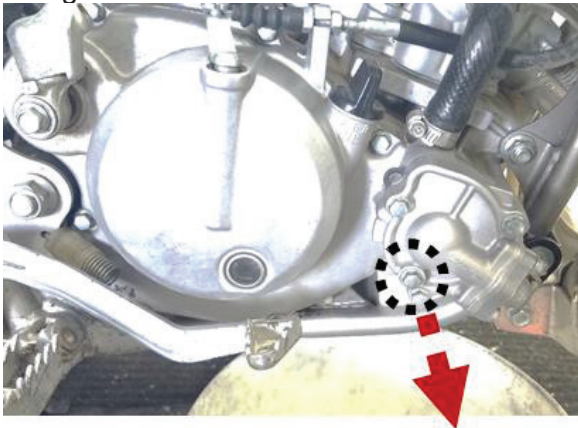
The picture above is representative only. See the parts list included with the product or visit Rekluse.com/support for a full parts fiche illustration and part numbers.

PREP & DISASSEMBLY

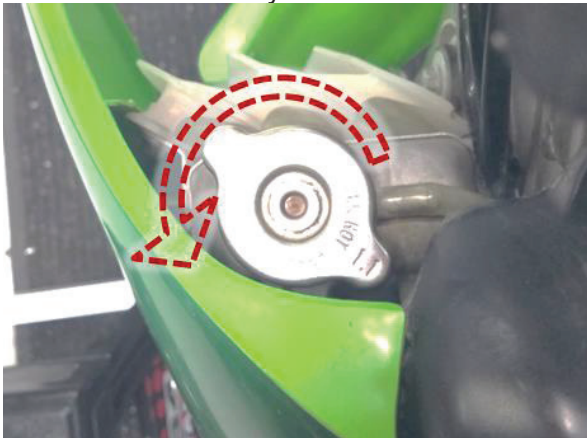
1. Place the included friction disks [#69] in engine oil to soak for at least 5 minutes.



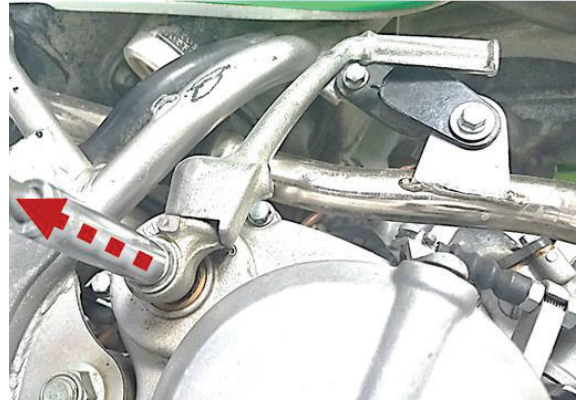
2. With the bike standing vertically on a center stand, place a suitable container for catching the engine coolant under the water pump.
3. Use an 8mm socket to remove the coolant drain bolt from the water pump cover, and then drain the engine coolant into the container.



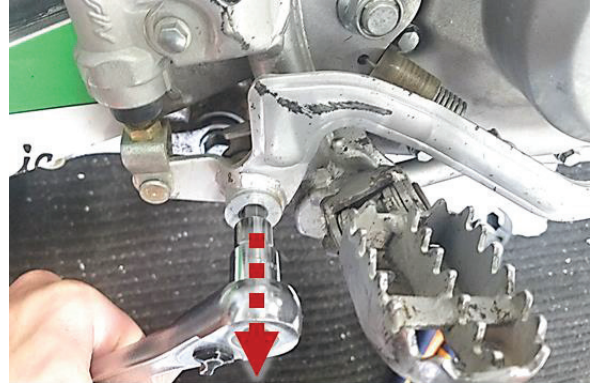
4. Making sure that the engine/coolant is not hot, twist open the radiator cap to help evacuate all the coolant from the system into the container.



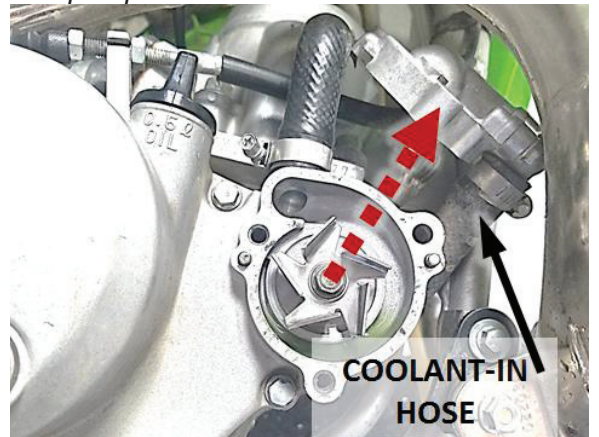
5. Turn off the fuel valve, and lay the bike on its left side. Using a suitable catch pan, catch any fuel that might drain from the carburetor tubes.
6. Remove the kick-start lever using a 10mm socket.



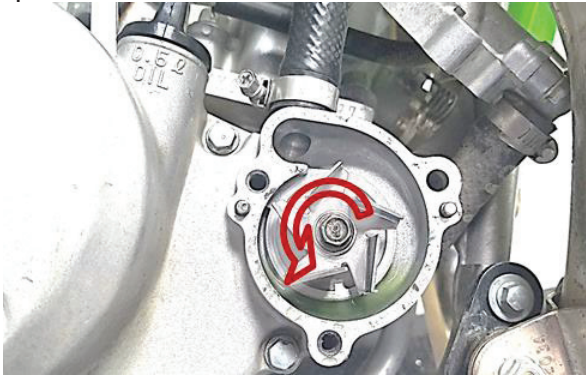
7. Remove the brake pedal pivot bolt using an 8mm Allen. Then, uncouple the spring from the pedal and move the pedal out of the way. *This will provide access and clearance for the clutch cover to be removed in the next steps.*



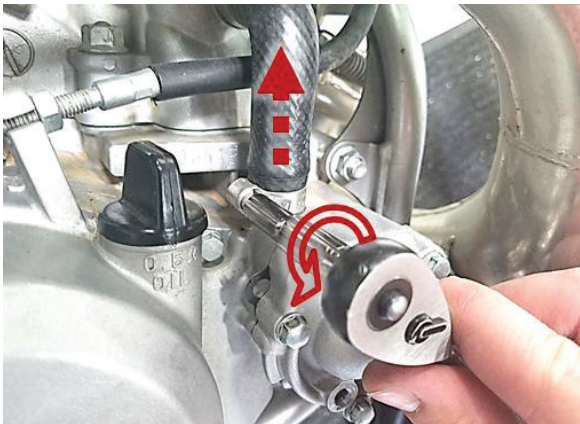
8. Remove the 3x bolts from the water pump cover, and move the cover aside. *The coolant-in hose can remain coupled to the water pump cover.*



9. Using an 8mm socket, remove the water pump impeller.



10. Using a 6mm socket, loosen the hose clamp on the hose that goes from the cylinder to the clutch cover (the coolant-out hose). Then remove the hose end from the clutch cover.

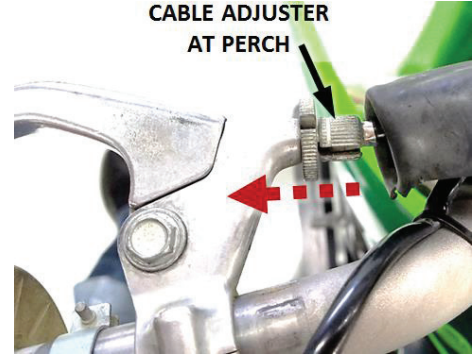


11. Both the water pump housing and the coolant-out hose can be moved out of the way of the clutch cover by gently tucking them between the engine and the exhaust pipe.

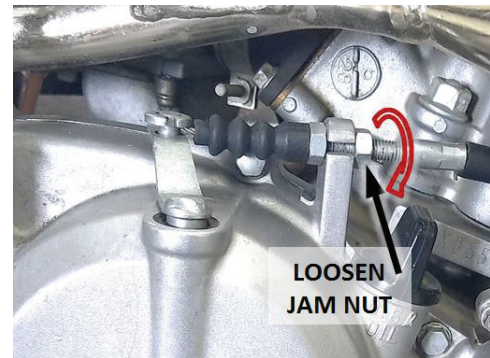


12. At the lever perch, remove all tension from the clutch cable by twisting the perch adjuster clockwise until it bottoms out.

CABLE ADJUSTER
AT PERCH



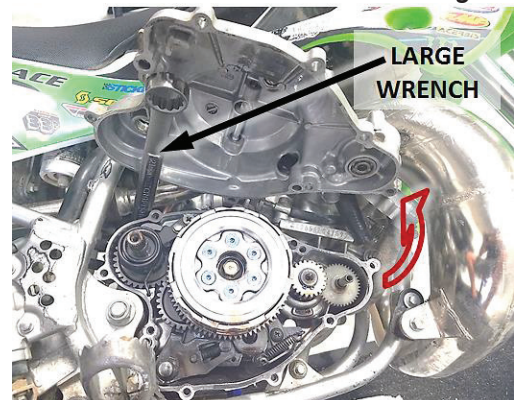
13. At the threaded adjuster, use a 10mm end-wrench to loosen the jam nuts — removing tension from the clutch cable to the position of *maximum cable/lever slack*.



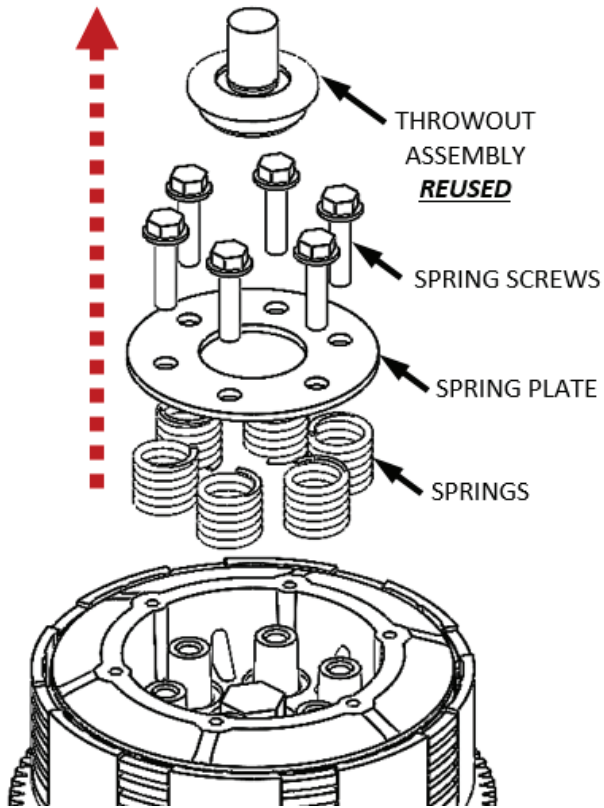
NOTE: The clutch cable does not have to be removed from the clutch cover to enable access to the clutch. See the next steps for the procedure to tilt the cover out of the way.

14. Using an 8mm socket, remove all of the clutch cover bolts, and then lift the clutch cover free of the kick-start and water pump shafts.

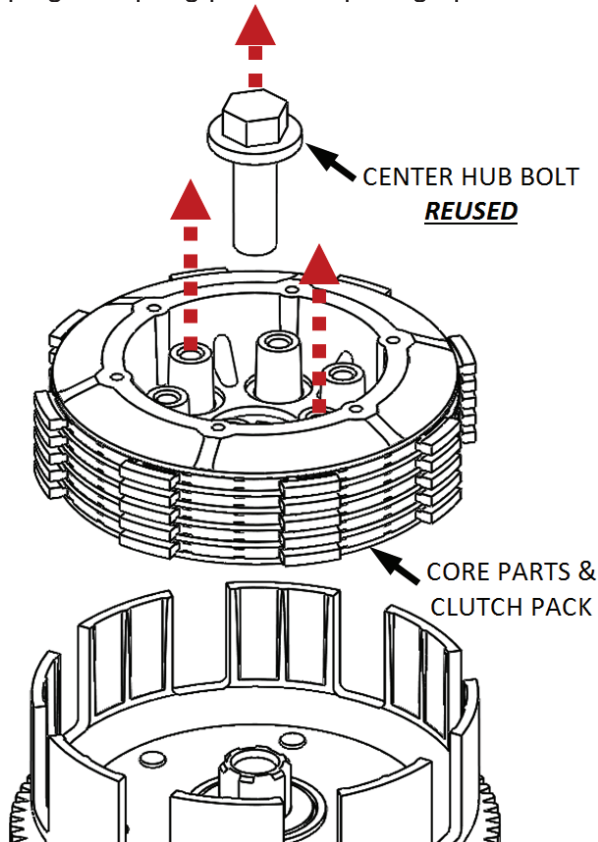
15. Tilt the clutch cover up toward the gas tank (top of the bike). *Placing a large wrench between the frame and engine can help hold it out of the way to access the clutch in the following steps.*



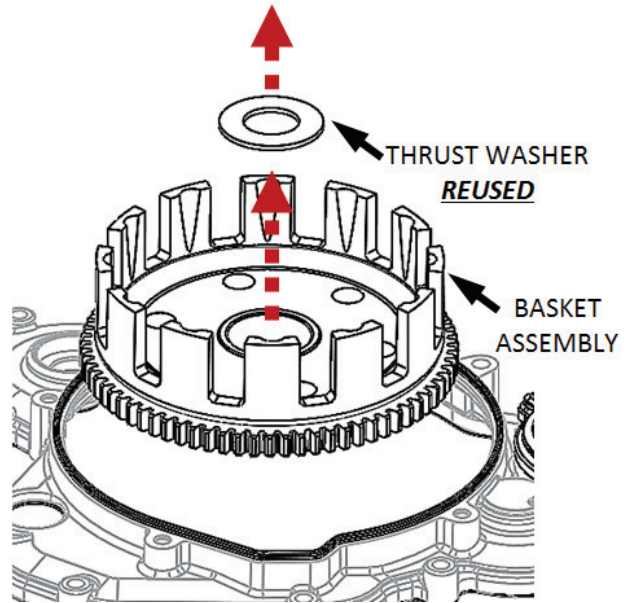
16. Remove the OEM clutch parts named in the following diagram.



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



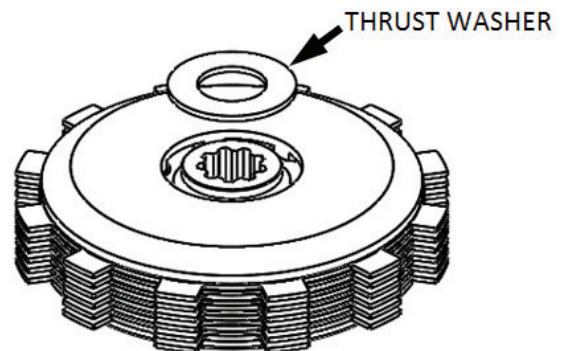
18. Remove the thrust washer from the bike, followed by the basket assembly.



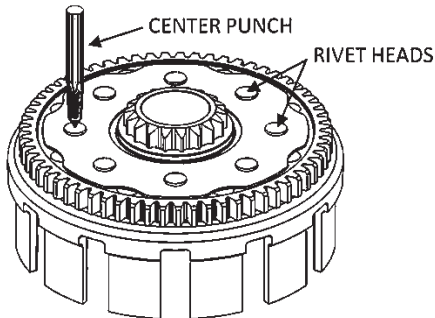
Ensure that the mainshaft collar (which the basket spins around) remains on the mainshaft in the engine.



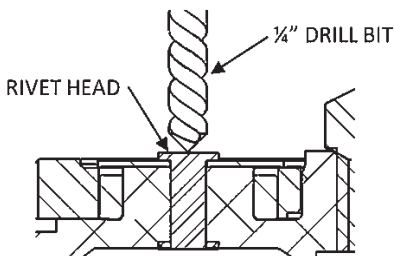
NOTE: If the thrust washer is not in the basket, it is likely stuck to the backside of the hub that was removed in the previous step.



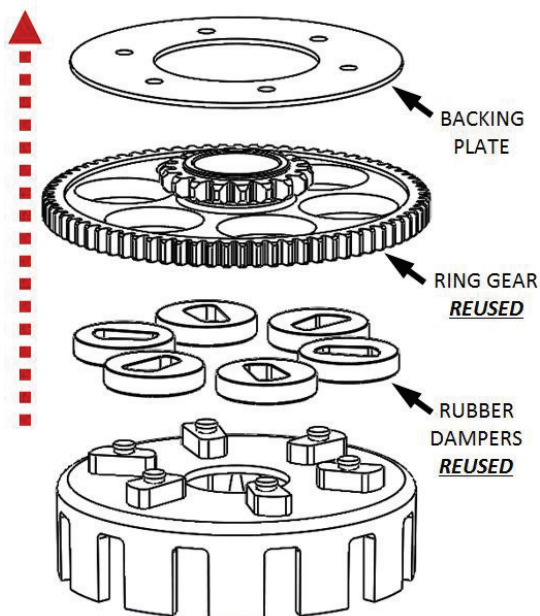
19. Set the OEM basket assembly on a workbench with the ring gear facing upward. Using a center punch and hammer, punch a divot into the center of each of the rivet heads.



20. Using the drill bit provided, drill the heads off of each rivet, so that the backing plate can be removed from the assembly. Set your drill to 300-400 RPM and use proper cutting fluid or oil for best results.



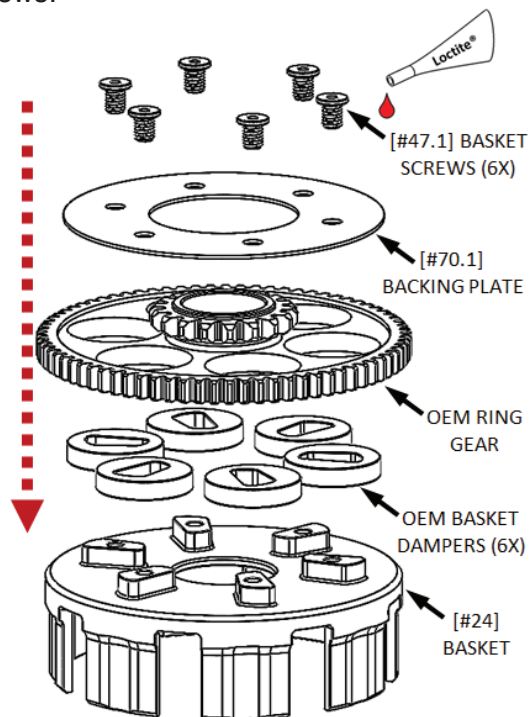
21. Carefully pry off the backing plate and remove the ring gear and rubber dampers from the basket. The OEM basket and backing plate will not be reused.



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

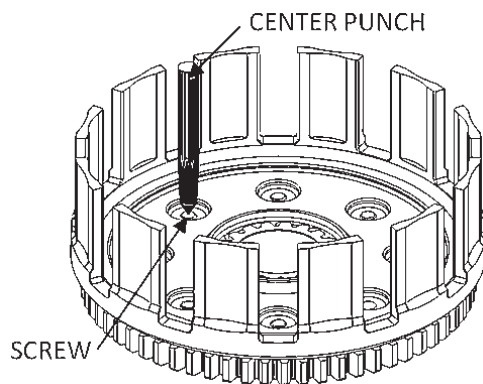
BASKET ASSEMBLY

23. Using the provided Loctite® on the screw threads, recompile the basket assembly using the supplied Rekluse basket, backing plate, and screws.



Torque the basket screws evenly to **80 in-lb (9 N-m)** in a crisscross pattern.

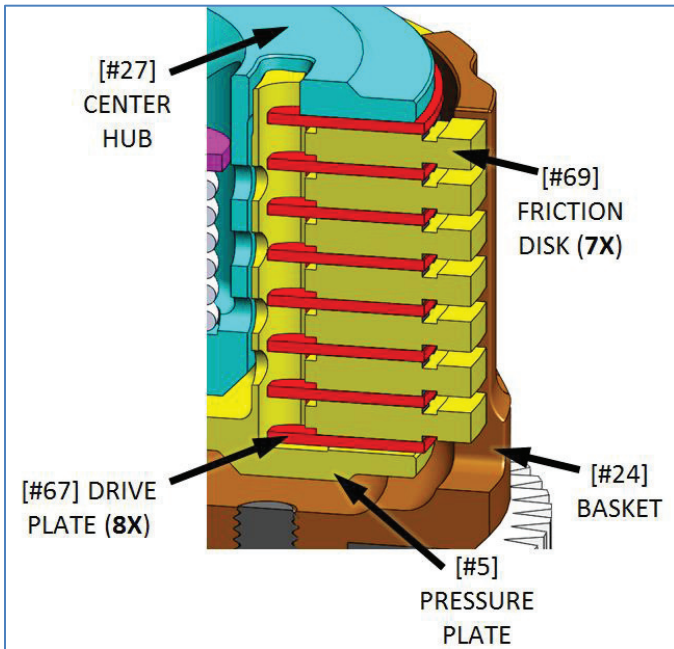
24. Using the hammer and center punch, stake the ends of the screws where they protrude through the inside of the clutch basket. Be sure to stake the screws... **DO NOT** stake the aluminum basket.



WARNING: 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.

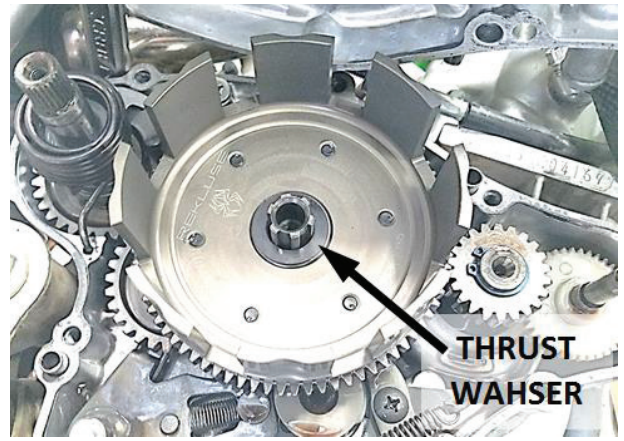
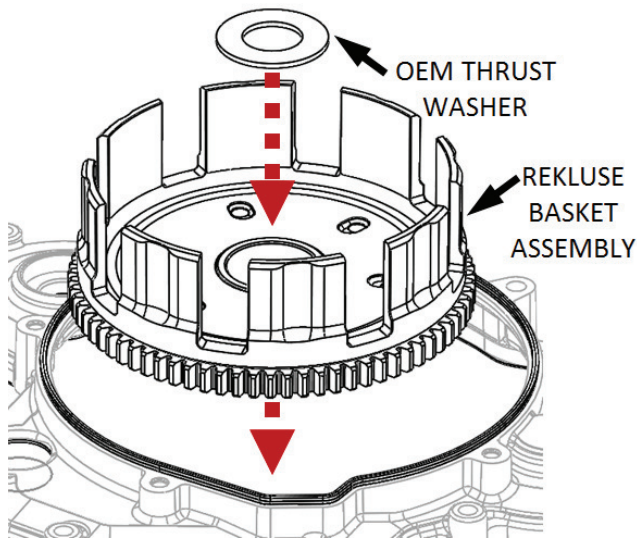
CLUTCH INSTALLATION

Cross-Section Overview: CoreManual

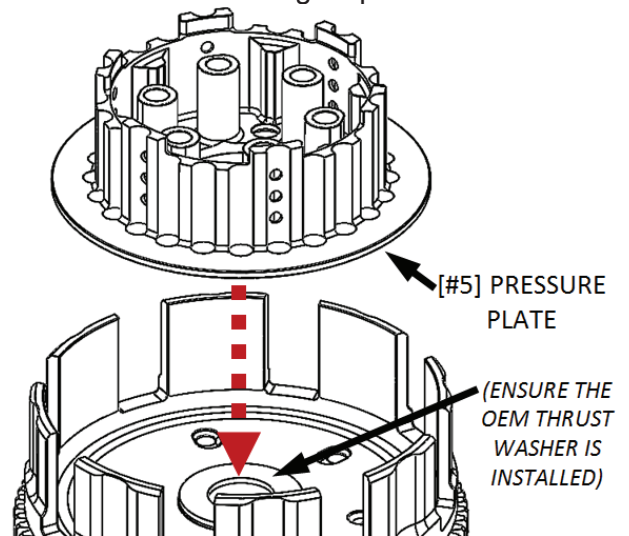


25. Install the newly-compiled basket assembly into the bike over the collar on the mainshaft, followed by the OEM thrust washer.

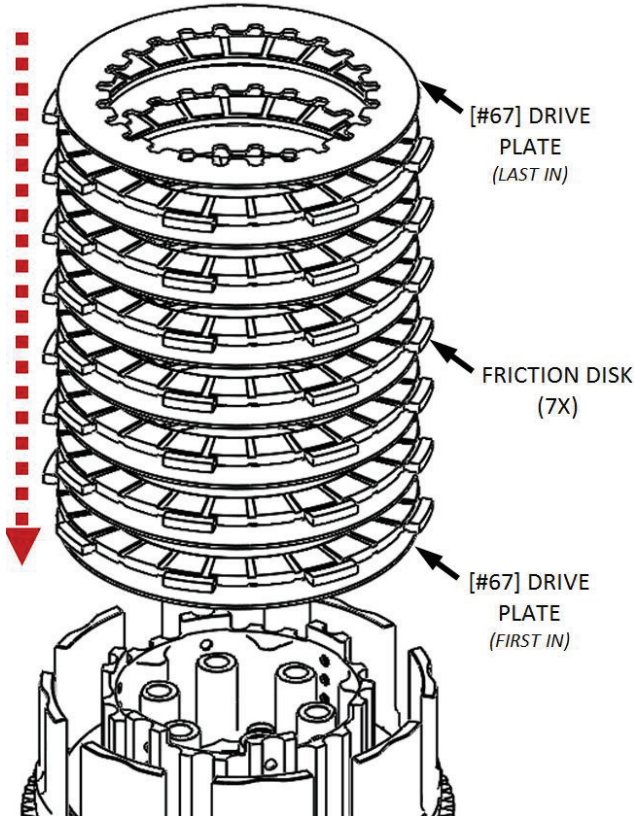
To get the ring gear teeth to properly mesh with the crank and kick-starter gears, gently rotate the basket until it drops in and the teeth all mesh. DO NOT force the basket in or damage may occur.



26. Install the Rekluse pressure plate [#5] in the orientation shown below. It will fit loosely in the basket until the clutch plates and hub are installed in the following steps.



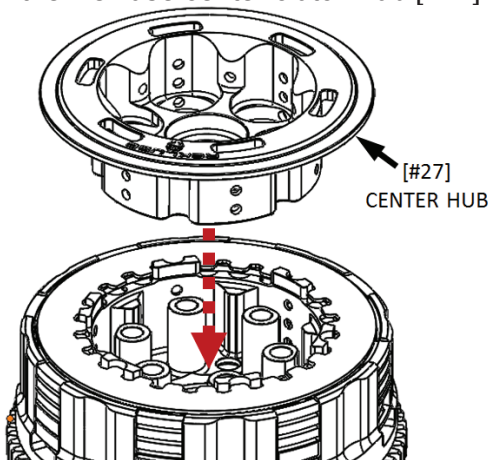
27. Install the Rekluse clutch pack as shown, starting and ending with a steel drive plate [#67]. 7x total drive plates will be used, 5x stock and 2x provided.



Refer again to the **Cross-Section Overview** at the beginning of this section for clarification.

NOTE: The last drive plate will be indexed to the pressure plate in only the 6 protruding tooth features of the pressure plate. This is normal.

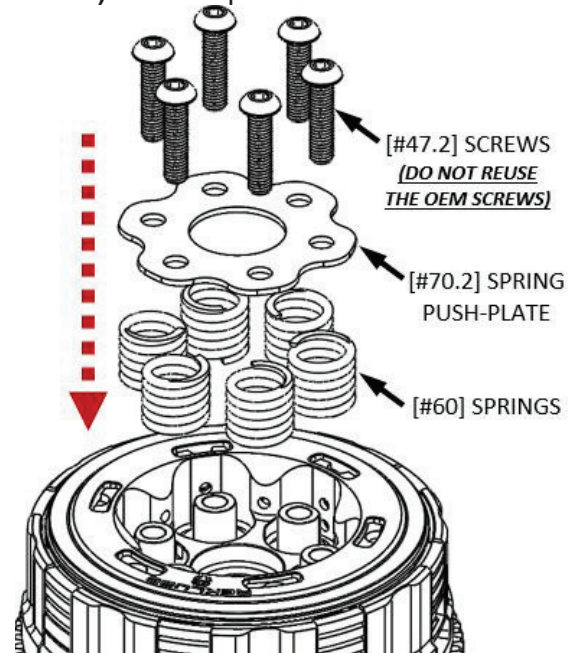
28. Install the Rekluse center clutch hub [#27].



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.

29. Install the new clutch springs [#60], followed by the Rekluse spring push-plate [#70.2] and button-head screws [#47.2].

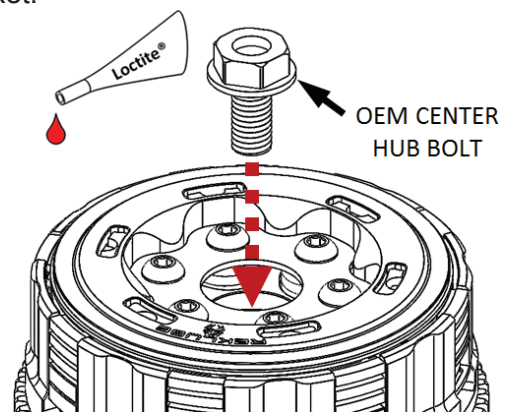
Carefully tighten the screws—each a little at a time in a star pattern to evenly lift the pressure plate—before torquing the screws to **10 N-m (7.5 ft-lb)** in a star pattern.



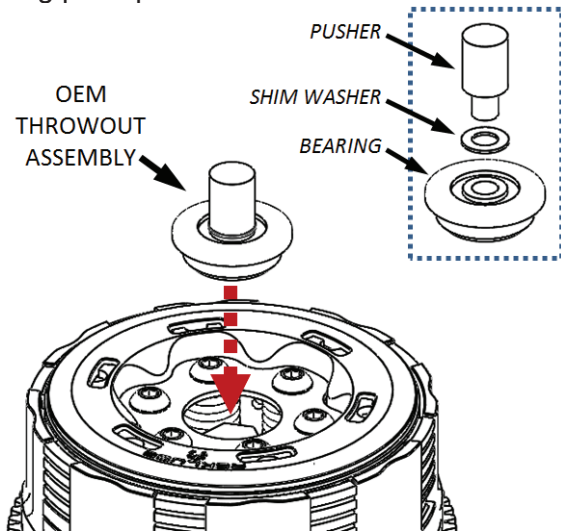
DO NOT reuse the OE screws, as interference with the clutch cover will occur.

NOTE: Shifting the transmission into 5th gear, and having a friend hold the rear wheel or rear brake pedal, will help to keep the clutch from spinning to torque the screws and center hub bolt.

30. Clean and dry any oil or debris from the threads of the OEM center hub bolt, and apply the supplied Loctite® to the threads on the bolt. Then, install the bolt into the mainshaft, and torque to **64 N-m (47 ft-lb)** using a 14mm socket.



31. Reinstall the OEM throwout assembly into the spring push-plate.



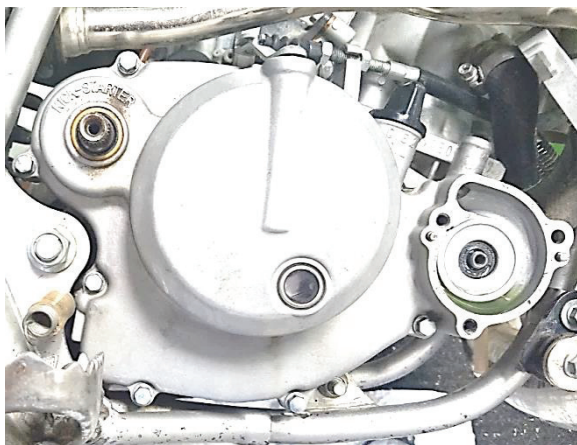
32. Before reinstalling the clutch cover:
- Replace the cover gasket with new.
 - Check the condition of the rubber seals in the clutch cover and replace if necessary.
 - Lightly apply grease to the water pump shaft and kick-start shaft.

NOTES:

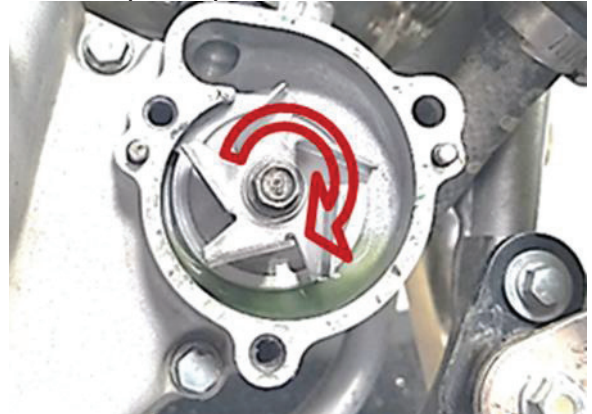
- Installing the clutch cover without a new gasket could cause engine oil leaks.
- Installing the clutch cover without lightly greasing the water pump shaft and kick-start shaft could cause seal damage.

The OEM replacement gasket & seal part numbers are listed in the *Installation Tips* section at the beginning of this document.

33. Reinstall the clutch cover using the OEM cover bolts. Torque the cover bolts evenly to **10 N-m (7.5 ft-lb)**.



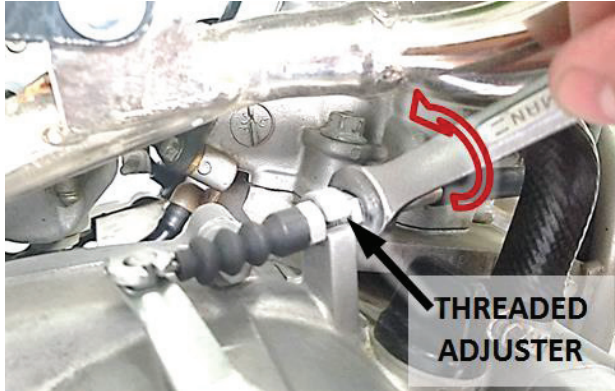
34. Replace the water pump impeller. Torque to **8.3 N-m (6 ft-lb)**.



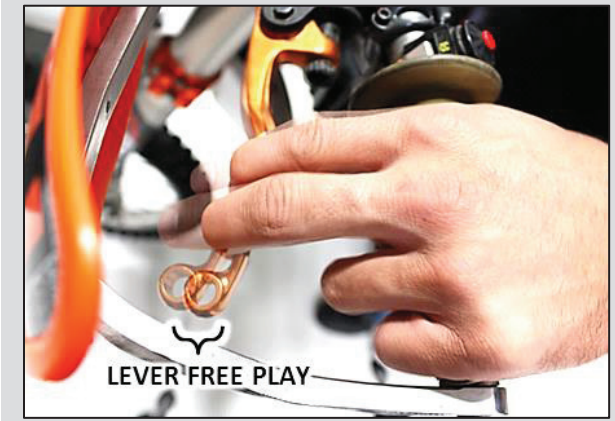
35. Reinstall the water pump cover and torque the bolts to **8.8 N-m (6.5 ft-lb)**.
36. Replace the coolant hoses and tighten the hose clamps.
37. Reinstall the kick-start lever. Torque to **12 N-m (9 ft-lb)**.
38. Fill the radiator up with the recommended coolant before replacing the radiator cap.
39. Clean and apply a little bit of grease to the O-ring seals on the rear brake pedal pivot bolt, and then reinstall the brake pedal using the 8mm Allen socket. Torque to **25 N-m (18.5 ft-lb)**.

CLUTCH CABLE ADJUSTMENT

40. Using a 10mm wrench, set and tighten the threaded adjuster so that the clutch lever has a few millimeters of freeplay.



NOTE: "Lever Free Play" is essentially the "slack" in the clutch cable system felt at the lever before it starts actuating the clutch. Applying a light finger pressure will take up this slack.



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.

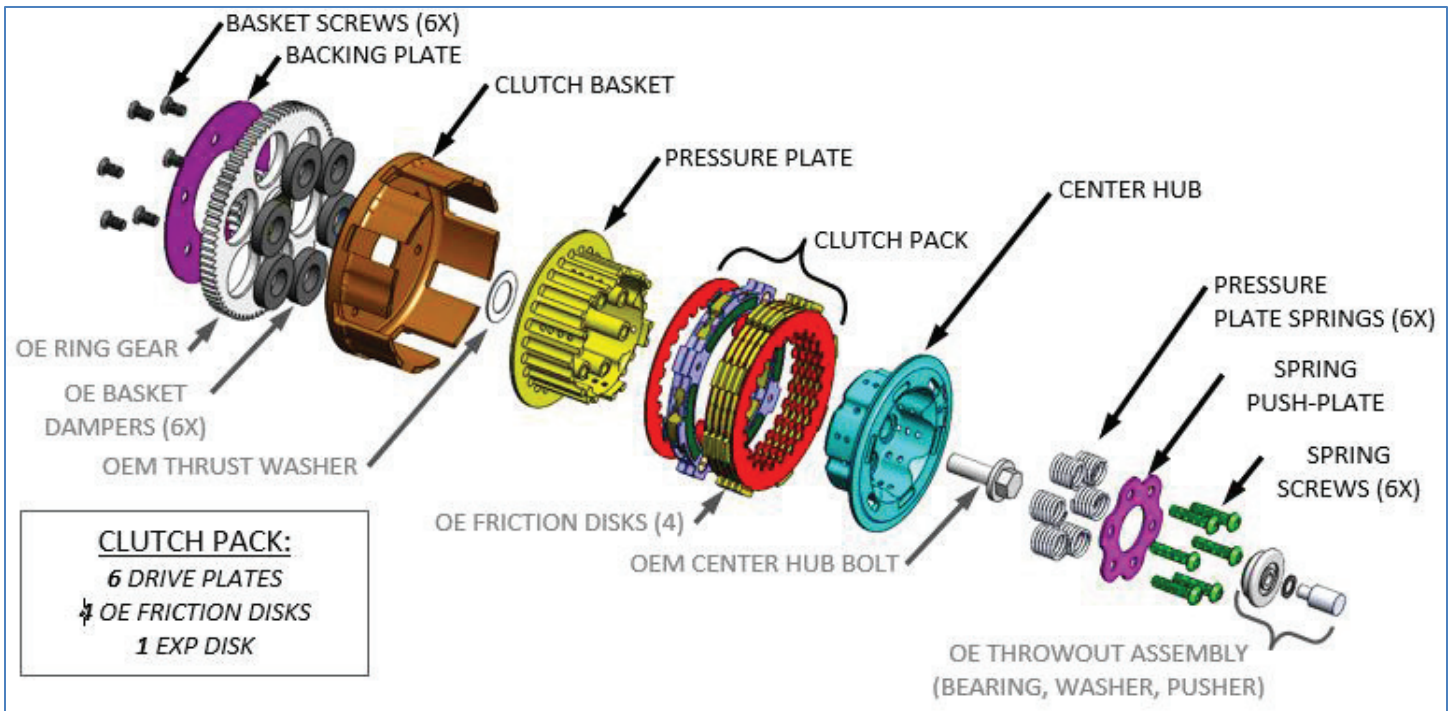
MAINTENANCE

- Keep up with regular oil changes as per the bike manufacturer's recommendations. Clutch function and longevity depends on oil quality.
- Inspect all of your clutch parts **every 20 hours** of operation for signs of wear or excessive heat, and replace components as necessary.
- If you find performance dwindling with use or time it is likely necessary to replace worn clutch disks. Measure your friction disks and replace as necessary.
 - o Friction disk minimum allowable thickness = **0.115" (2.9mm)** Rekluse part #: 469-691
- Excessive heat or clutch slip can cause premature clutch failure. Once extreme temperatures are reached, irreversible damage will occur. Inspect your clutch plates; if the friction disks look burnt or glazed, or the drive plates are blue/black in color or warped, it is best to replace the entire clutch pack.
- Repeat the break-in procedure anytime the friction disks or EXP bases or wedges are replaced. Always soak new friction disks or EXP bases in oil for at least 5 minutes before installing.

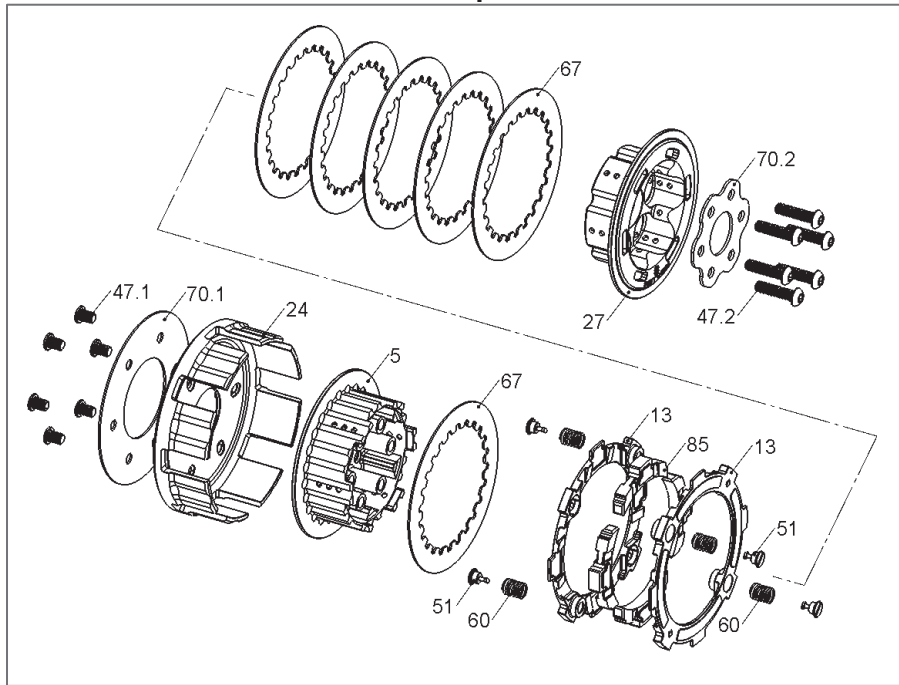
CONVERTING TO AN AUTO-CLUTCH (BONUS OPTION)

NOTE: When the installation of the CoreManual clutch is performed, the bike's basket assembly is disassembled and then reassembled using the Rekluse basket instead of the stock basket. The Rekluse basket is taller than the stock basket, which is required for Rekluse clutches to fit and function. This Rekluse basket is fully compatible with the stock clutch components, and can be used as a direct OEM basket replacement if desired.

The Rekluse Core components, including the Basket [#24], Center Hub [#27], and Pressure Plate [#5], are compatible with both the CoreManual and CoreEXP (auto) clutches. CoreManual can be converted to a CoreEXP auto-clutch by purchasing the EXP disk components from Rekluse. Follow the directions in the CoreEXP Installation Guide to properly install and check for function.



Converting to CoreEXP Clutch – Additional Parts Required:



Item #	Item Type	Qty
13	EXP Base	2
51	Fastener – ¼-Turn Pin	4
60	EXP Adjustment Spring - Red	2
60	EXP Adjustment Spring - Blue	2
85	Wedge Assembly	4

Cross-Section Overview: CoreEXP

