



# **INSTALLATION & USER'S GUIDE**

## **Adventure TorqDrive® Clutch**

For KTM 1090, 1190, 1290 ADV & SuperDuke  
Manual Clutch

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## **OVERVIEW**

This guide shows you how to replace your OE (Original Equipment) or “stock” clutch parts with your new Rekluse TorqDrive® clutch parts. The following parts are replaced:

- OE Drive Plates
- OE Friction Disks

## **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 working on the clutch easier and eliminates the need to drain the oil.
- 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](http://www.rekluse.com) to learn more.

## **TOOLS NEEDED**

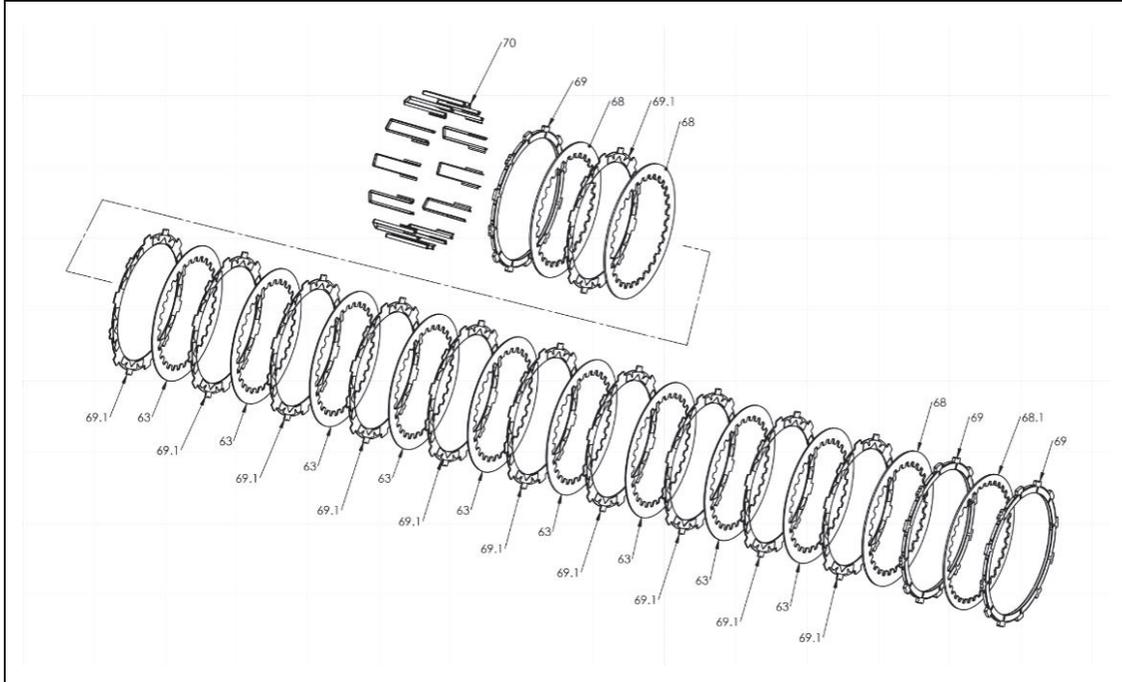
	 8 mm	 10 mm	
Fluid Catch Container	8 mm Socket	10 mm Socket	Torque Wrench

## **OPTIONAL PARTS**

You can purchase a Rekluse slave cylinder to replace the OE cylinder. The part numbers are as follows:

<b>Bike Models</b>	<b>Bikes</b>	<b>Slave Cylinder Product</b>
950,990 LC8 - Oil	Mineral Oil	RMS-241
1050,1090,1190,1290 LC8	Mineral Oil	RMS-242
1050,1090,1190,1290 LC8	Brake Fluid	RMS-243

# INCLUDED PARTS

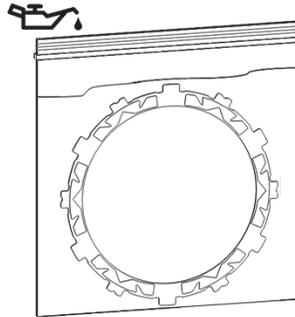


Item	Description	Qty.
68	Thick steel drive plates (.065 in)	3
63	Steel drive plates (.040 in)	9
68.1	Steel drive plate with a larger internal diameter (.065 in)	1
70	Basket sleeves	12
69	Thick TorqDrive® friction disks	3
69.1	TorqDrive® friction disks	11

Visit [www.rekluse.com/support](http://www.rekluse.com/support) for a full parts fiche illustration and part numbers.

# **DISASSEMBLE THE CLUTCH**

1. Soak the Rekluse friction disks in new oil for at least 5 minutes. Coat the friction disks on both sides.



2. Prepare the bike for the installation. Lay the bike on its left side to eliminate draining the oil.
  - If you prefer, you can stand the bike on its center stand and drain the oil.

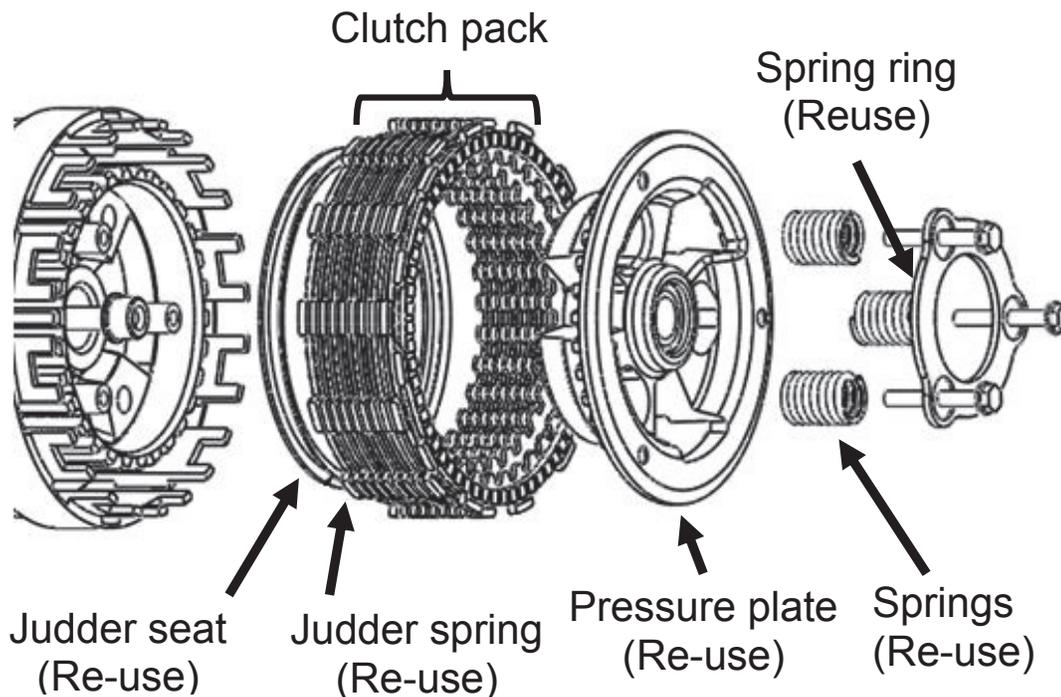


3. Use an 8 mm socket to remove the clutch cover. Pay close attention to the length and location of the OE screws so they can be returned to their same location.



4. Use a 10 mm socket to remove the 3 pressure plate bolts.
5. Remove the following OE parts and set them aside. Some of the OE parts will be reused. See following picture for reference.

- Spring ring
- 3 springs
- Pressure plate
- Entire clutch pack
- Judder spring
- Judder spring seat

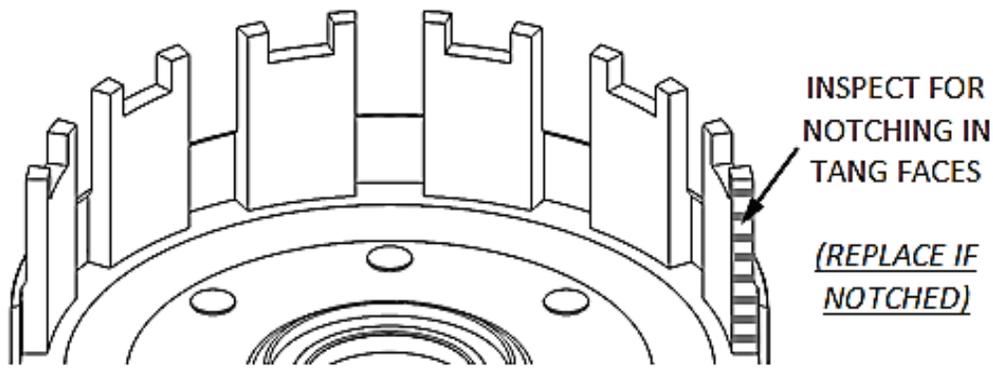


# CLUTCH PACK INSTALLATION

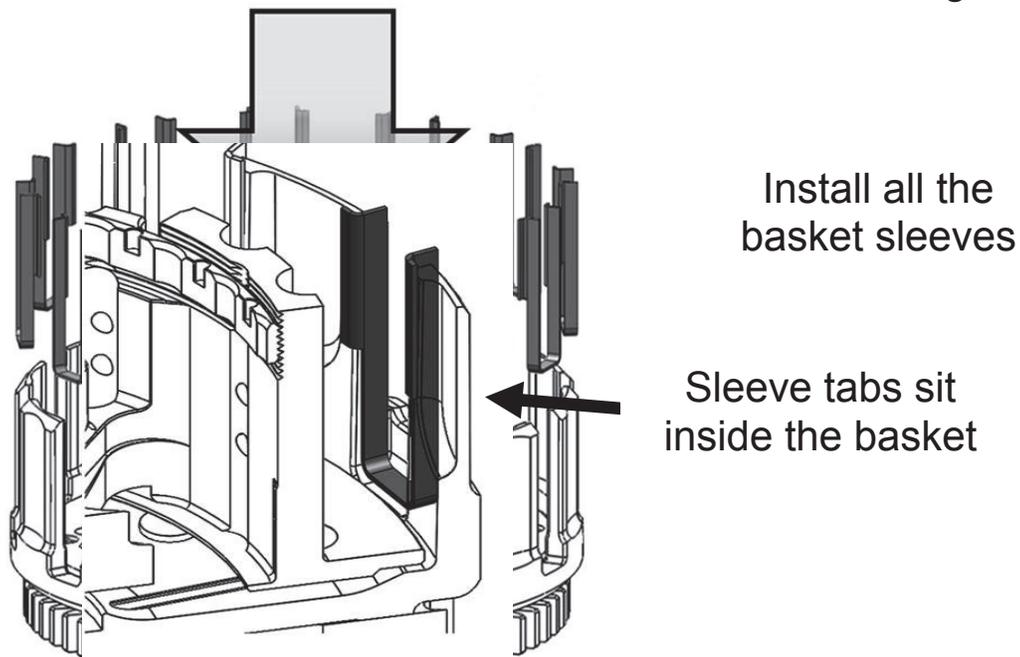
1. Inspect the clutch basket for spring damper play or notching. Do not install sleeves or use product with a notched basket. Notched basket tang faces or worn spring dampers can cause the sleeves to break.

## **⚠ WARNING**

**Failure to inspect the basket and replace if necessary could result in death, serious injury, and/or property damage.**



2. Install all of the Rekluse basket sleeves into the basket slots. Make sure the bottom of the sleeve is facing



down, and the sleeve tabs sit against the inside of the basket. See pictures for reference.

*When seated in the basket, the sleeves will sit below flush with the top of the basket. This is normal.*

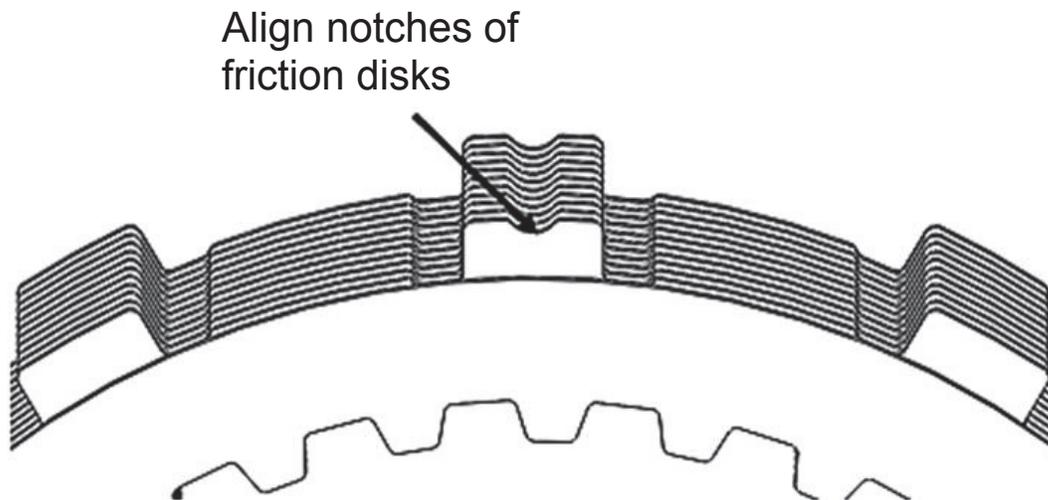
3. Separate the steel drive plates and friction disks according to thickness. This will speed up the installation.

The clutch pack includes:

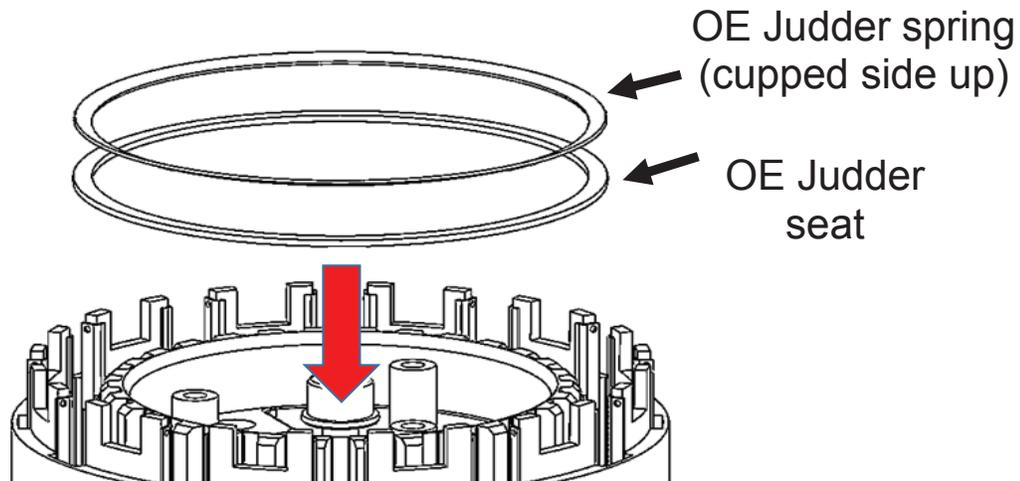
- 3 thick friction disks
- 10 thin friction disks
- 2 thick steel drive plates
- 9 thin steel drive plates
- 1 steel drive plate with a larger internal diameter

## Assemble the clutch pack

When assembling the clutch pack, it is important to line up the alignment notches on the friction disk tabs. Correct alignment is critical for optimal performance. *Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.*



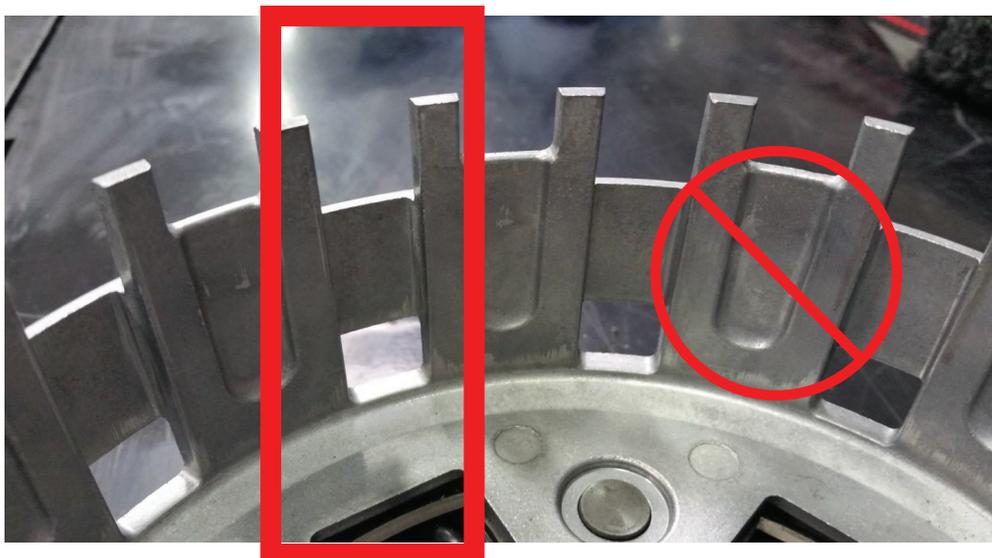
1. Reinstall the OE judder spring seat followed by the OE judder (boss) spring, cupped side up



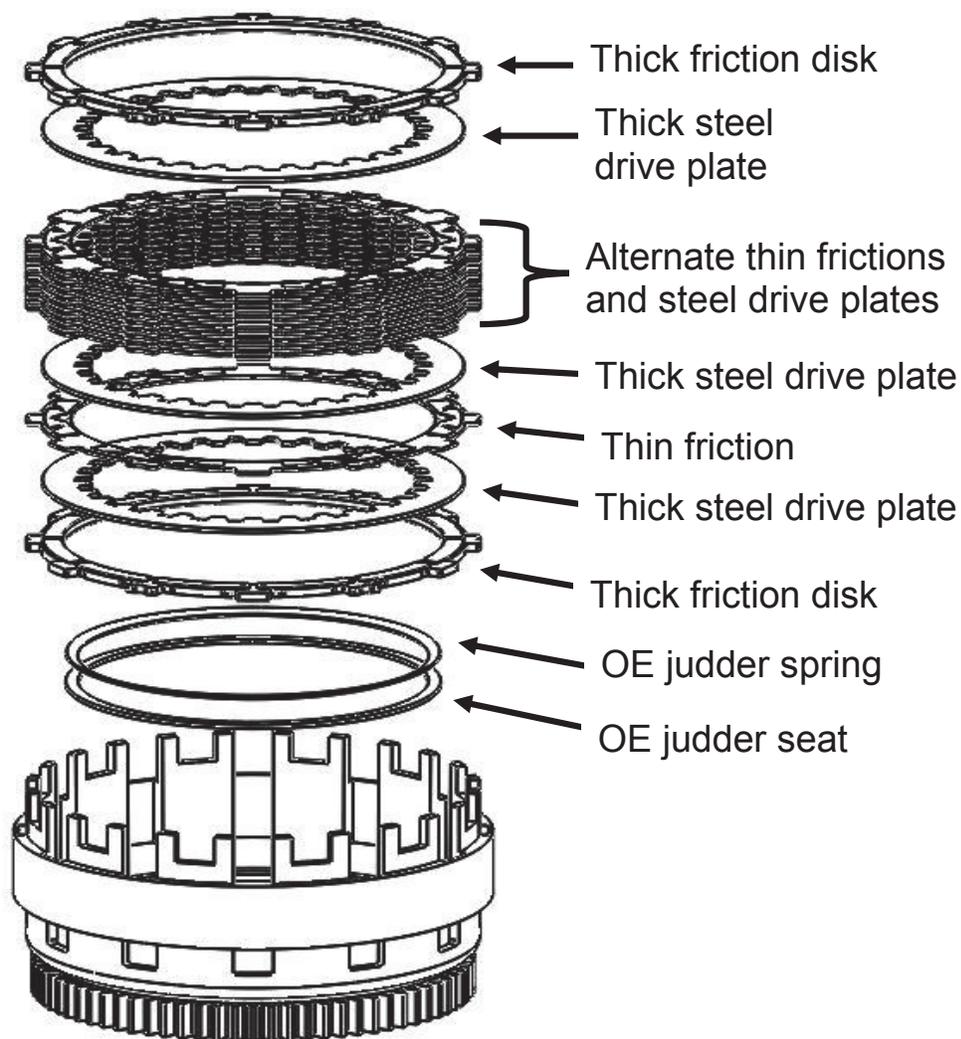
2. Install a **thick** friction disk first. Remember to line up the alignment notches on the friction disks when installing the clutch pack.

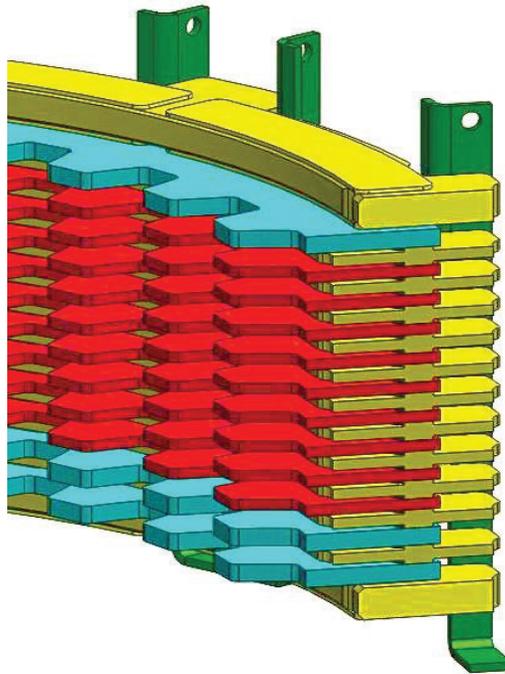
### NOTICE

*Some OE basket have “half slots” at the top of the basket tangs. Rekluse products require the entire clutch pack be installed into the MAIN (deeper) basket slots. See the following picture for reference.*



3. Add a **thick** steel drive plate (.065 in) on top of the friction disk. Add a **thin** friction disk.
4. Add another **thick** steel drive plate on top of the friction disk.
5. Alternate 10 **thin** friction disks with 9 **thin** steel drive plates (.040 in), ending with a friction disk.
6. Add the last **thick** steel drive plate, then add a **thick** friction disk. See the following diagrams for reference. *You will have 1 thick friction and 1 thick steel plate left over. These are installed on the pressure plate.*

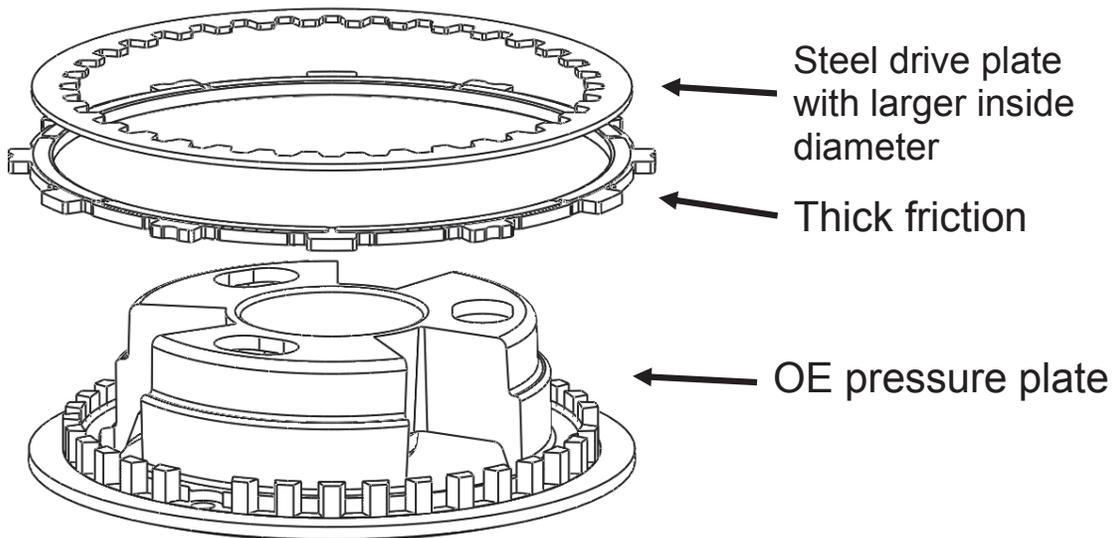




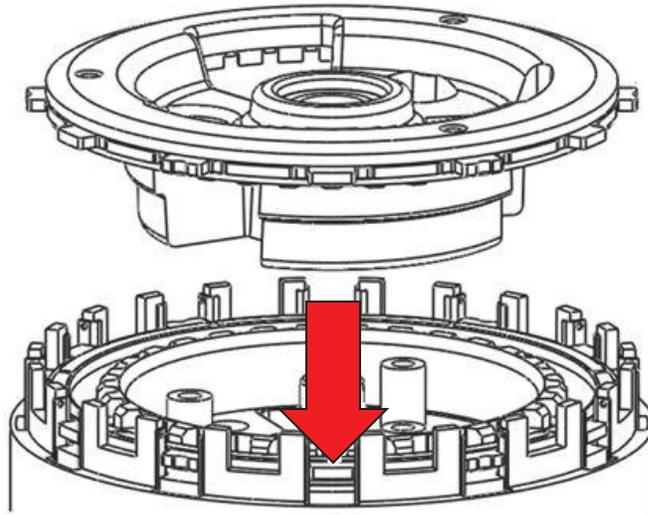
*Cutaway View*

## **PRESSURE PLATE INSTALLATION**

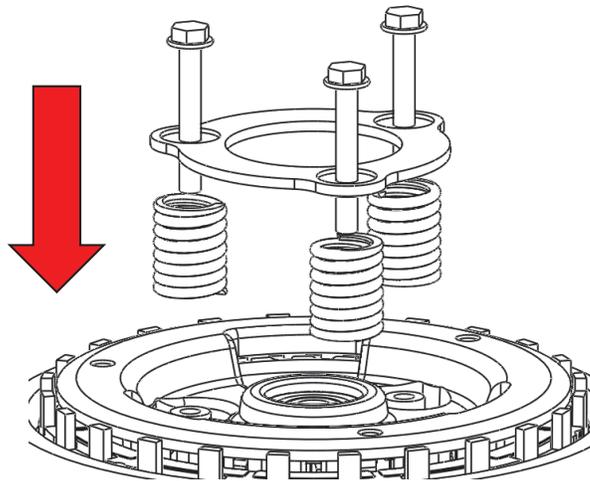
1. Flip the pressure plate upside down on a workbench. Install the last **thick** friction disk on top of the pressure plate.
2. Install the **thick** steel drive plate with the larger internal diameter (.065 in) on top of the thick friction. Index its teeth to the teeth of the pressure plate.



3. Install the pressure plate assembly, taking care to align the tab notches on the top friction disk with the tab notches on the previously installed clutch pack.



4. Install the OE springs, spring ring, and bolts. Torque pressure plate bolts in small increments to 8.9 ft-lb (12 N-m) as per OE specifications.



5. Reinstall the clutch cover by lightly tightening the cover bolts in a star pattern. Torque the bolts in small increments to 7.4 ft-lb (10 N-m) as per OE specifications.

## **BREAK-IN**

Break-in will occur over the first 1-2 hours of use, depending on the rider. During break-in more clutch drag may occur than normal.

## **TROUBLESHOOTING**

### **Clutch Drag:**

If drag occurs only while the bike is cold, oil is the most likely cause. Be sure to warm up the bike before riding and/or racing. Use of lighter weight oil can help to minimize cold drag.

### **Clutch Slip:**

If clutch slip occurs, inspect the clutch for signs of wear or heat.

## **MAINTENANCE**

To keep your clutch performing at its best, perform regular maintenance on your bike and clutch. Clutch longevity and performance is greatly increased with oil quality and other bike factors that reduce engine heat.

- Inspect all of your clutch parts at regular maintenance intervals for signs wear or excessive heat, and replace components as necessary. Clutch wear is dependent on the riders use.
- Inspect and replace basket sleeves if they appear to be notched from friction disks.
- Replace friction disks if they are glazed and/or burnt.
- Keep up with regular oil changes as per the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality.

- For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements.

## 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 at [www.rekluse.com/support](http://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)

**Friction Disks** – Due to the dark color of the friction material, the friction disks will appear almost black as soon as they are put in oil. During inspection, look for glazing of the friction material. Glazing will appear shiny and feel like glass, even after oil is cleaned from the friction disk. Not all friction disks look the same and may look different than pictured.



Normal  
Friction



Glazed  
Friction

# **NEED ADDITIONAL HELP?**

## **Website**

[www.rekluse.com/support](http://www.rekluse.com/support)

## **Frequently asked questions**

[www.rekluse.com/faq](http://www.rekluse.com/faq)

## **Support Videos**

[www.rekluse.com/support/videos](http://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](mailto: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](mailto:customerservice@rekluse.com)