

#### **INSTALLATION & USER'S GUIDE**

CoreManual for KTM DS Clutch

Doc ID: 191-7013181A Revision: 101422

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## **OVERVIEW**

- This kit will reuse all 7 OE friction disks, plus one extra supplied disk.
- This kit will replace all OE steel drive plates with Rekluse TEC drive plates.
- Overall, the final clutch pack will have 8 friction disks and 9 Rekluse TEC drive plates.
- 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.

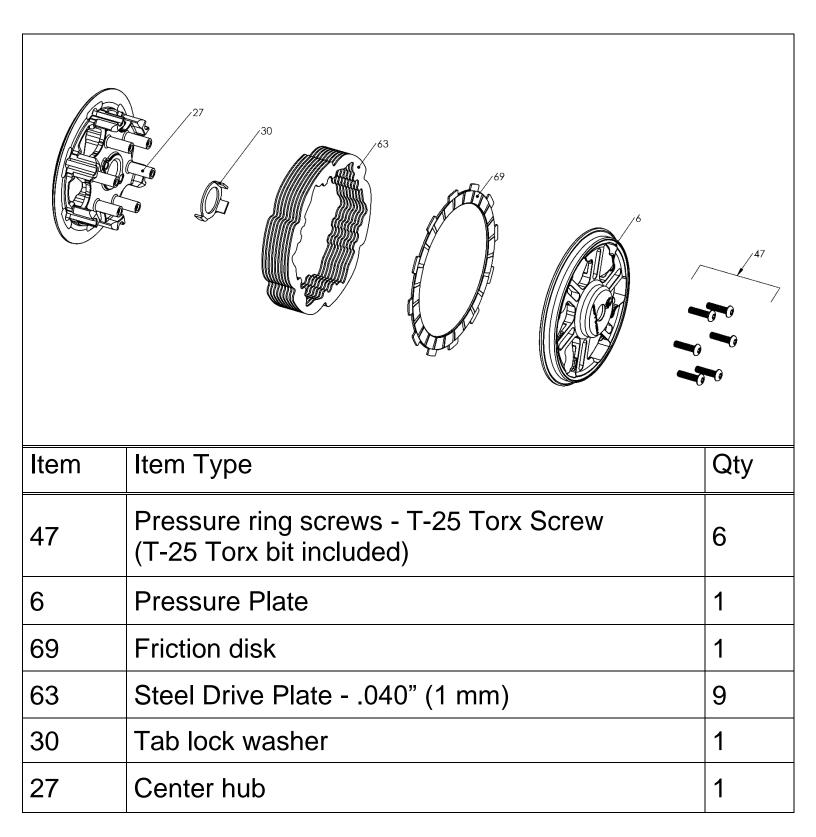
## **INSTALLATION TIPS**

- Read this entire document before performing any steps, so you will know what to expect.
- Be sure to use proper eye protection.
- Laying the bike on its left side allows for easy clutch access and eliminates the need to drain oil.
- Use an air or electric impact wrench to remove the center clutch nut. If one is not available, you can place the bike in top gear and hold the rear brake while loosening the center clutch nut with a socket and breaker bar.
- Channel-lock pliers work best to bend the tabs of the washer up over the center clutch nut.
- 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.

### **TOOLS NEEDED**

- 8 mm socket
- 27 mm socket
- 5 mm hex key
- Torque wrench (in-lb & ft-lb, or N-m)
- Channel-lock pliers
- Needle-nose pliers

## **INCLUDED PARTS**



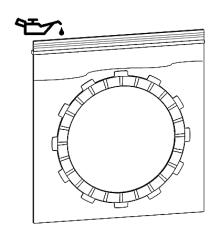
Visit Rekluse.com/support for a full parts fiche illustration and part numbers.

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### **BIKE PREP & DISASSEMBLY**

- 1.Lay the bike on its left side. Catch any fuel that might drain in a suitable container.
- 2. Soak the friction disk in new engine oil for 5 minutes. Make sure the friction disk is coated on both sides.



3. Using a socket, remove the clutch cover bolts, then remove the clutch cover.

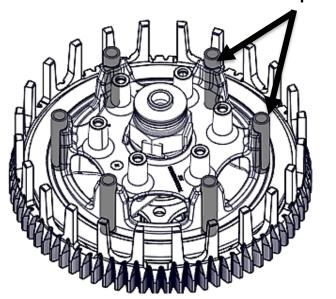


4. Remove the OE parts named in the following diagram.

#### Note:

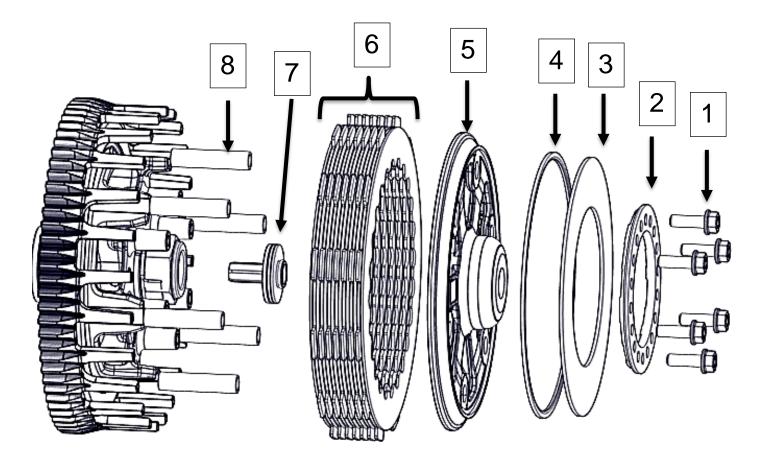
Be careful that the drive pins do not fall into the engine while disassembling.

Drive pins



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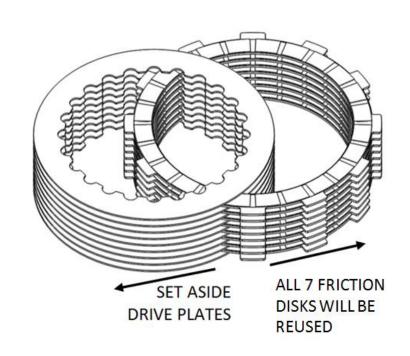
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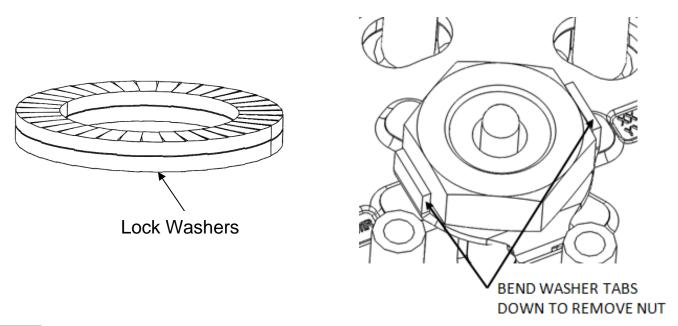
1	Spring ring screws
2	Spring ring
3	Belleville spring
4	Slider ring
5	Pressure plate
6	OE clutch pack
7	Throw-out and washer
8	Drive pins

5. Separate the OE clutch pack. Only the friction disks will be reused.

**Note:** Inspect the friction disks for excessive wear or discoloration. If they are worn, or look and/or smell burnt, replace them before continuing the installation.

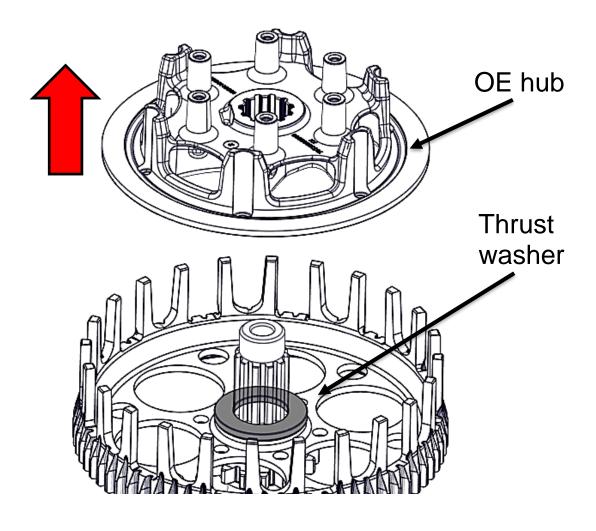


6.Use a hammer and large screwdriver to bend down the tabs of the tab washer, then remove the clutch nut and washer.



**NOTE:** Some models contain a set of lock washers instead of a tab washer. These will be removed after clutch nut and will not be reused.

7. Remove the center hub from the bike. *Make sure the thrust washer is in place on the main shaft and not stuck to the bottom of the center hub.* 

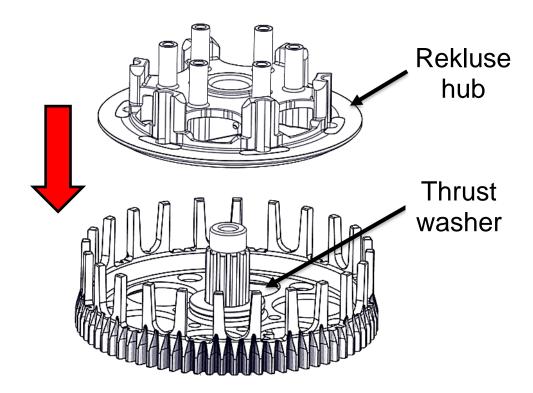


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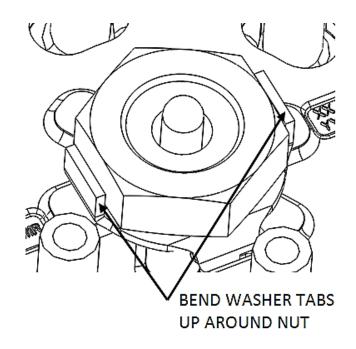
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## **INSTALL THE HUB**

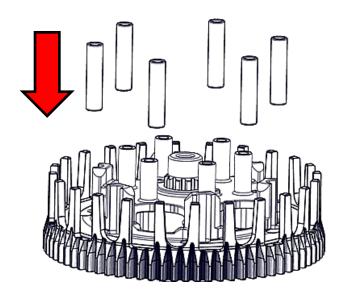
1.Install the new center hub into the clutch basket. *Make sure the thrust washer is on the main shaft before installing.* 



- 2. Install the Rekluse tab lock washer and OE center clutch nut.
- 3. Torque the nut to 50 ft-lb (68 N-m).
- 4. Using the channel-lock pliers, bend up **both** tabs of the tab washer tightly around the nut. The tabs can be bent on the straight sides or around the corners.



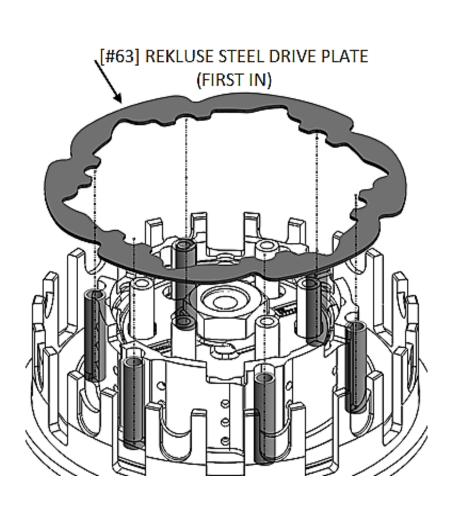
5. Seat the 6 OE drive pins into the Rekluse hub.

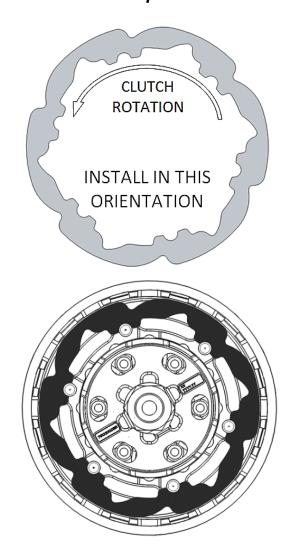


## **INSTALL THE CLUTCH PACK**

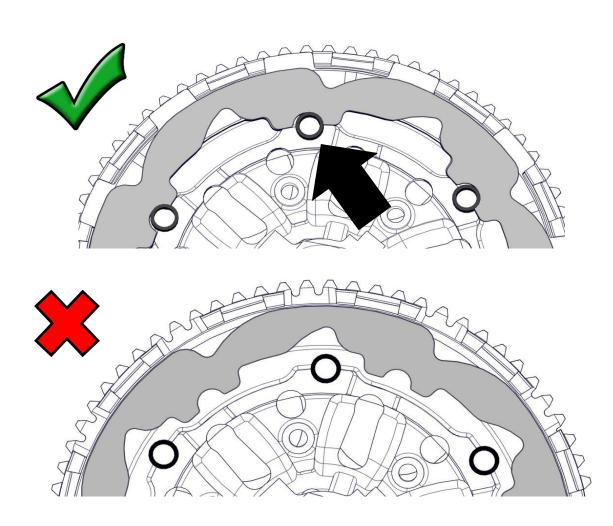
### Notes for clutch pack installation

- Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.
- Proper orientation of the drive plates is critical for optimal clutch performance. If you install them backwards, the clutch will still function but will lack proper modulation performance.



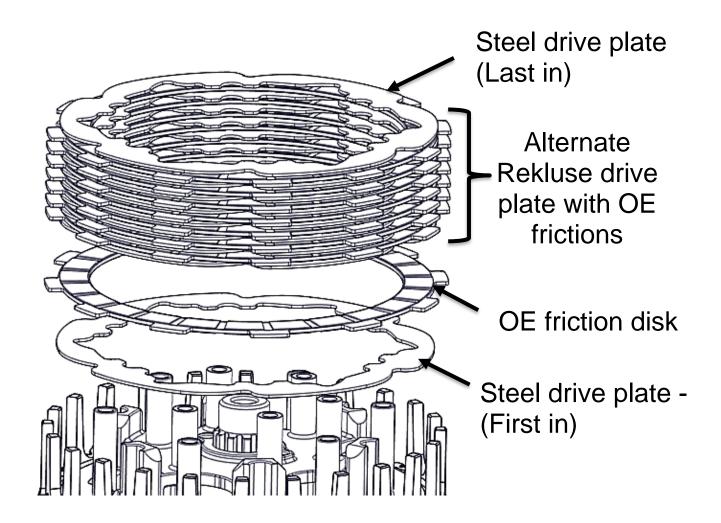


- Align the drive pin notches in the TEC drive plate with the drive pins on the hub when you install the drive plate into the basket. Be sure that the drive pins are seated in the notches and not in the bigger sections.
- ALL the TEC plates must be aligned in the drive pins notches or damage may occur. The plates will not move when installed correctly.



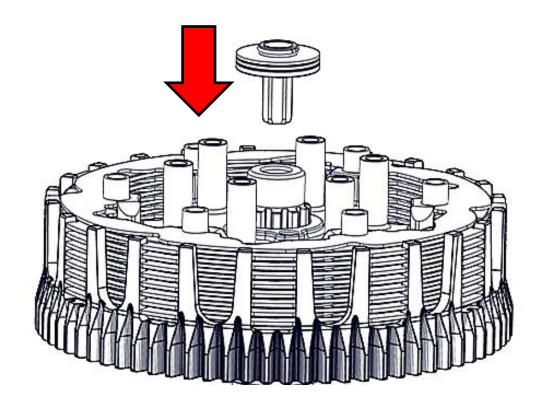
#### **Clutch Pack**

- 1.Install 1 of the Rekluse steel drive plates, in the orientation shown, then install an OE friction disk.
- 2. Continue to alternate Rekluse drive plates with OE fricitons for the entire clutch pack. Your kit includes an additional friction for installation. There will be a total of 9 steel drive plates and 8 OE frictions.



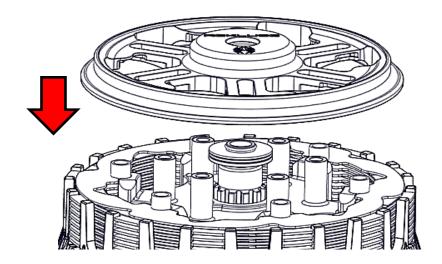
Total Pack
9 Rekluse drive plates and 8 OE frictions

#### 3. Reinstall the OE throw-out.



### PRESSURE PLATE INSTALLATION

1. Install the Rekluse pressure plate.

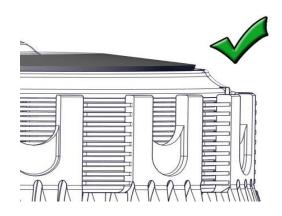


2. Place the OE slider ring on the pressure plate with the "top" marking facing up. (The top side is rounded and the bottom edge is sharp.)

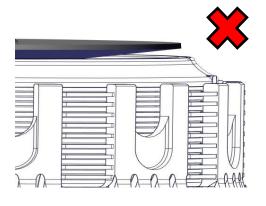


3. Install the OE Belleville spring onto the slider ring, with the rounded dome side facing up. See pictures for reference.

**NOTE:** The outer edge of the Bellville spring will make contact with the slider ring. If it does not, the Bellville spring is upside down.



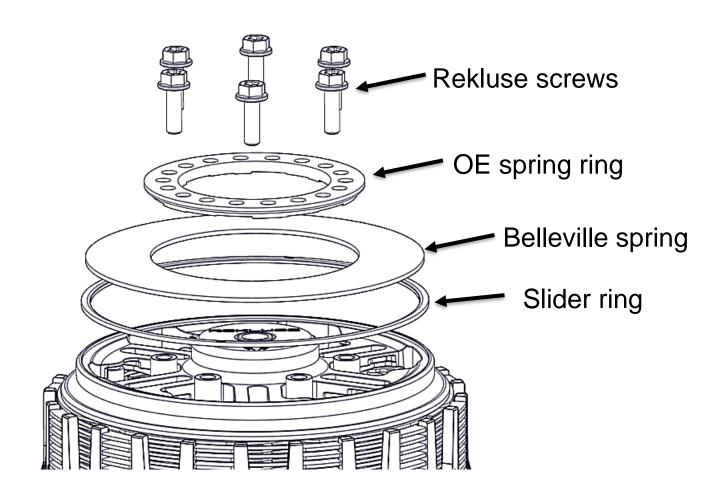
**Correct** – The Belleville spring sits flat against the slider ring.



**Incorrect** – The Belleville spring is upside down.

Pg. 12 Doc ID: 191-7013181A Doc Rev: 101422 4. Install the OE pressure ring followed by the Rekluse spring ring screws.

**NOTE:** There are 3 possible settings on the OE pressure ring. Rekluse recommends setting Y/II (4-strokes) for optimum clamping force and performance.



# **ACAUTION**

**DO NOT reuse** the stock screws, or clutch cover interference will occur! **DO NOT over-torque** the screws, or damage to the screw heads will occur!

- 5. Torque the pressure ring screws to 55 in-lb (4.5 ft-lb) (6 N-m).
- 6. Reinstall the OE clutch cover, then reinstall the clutch cover bolts.
- 7. Lightly tighten the cover bolts in small increments in a star pattern, then torque the cover bolts to OE specifications.

## **MAINTENANCE**

### **Clutch wear**

Rekluse clutches are built using high quality materials but do wear based on the rider's use, type of terrain, and natural wear and tear.

- Clutch longevity and performance is greatly increased with oil quality and other bike factors that reduce engine heat.
- Riding style, such as speed, engine RPM, and terrain can also affect the life of the clutch.
- To keep your clutch performing at its best, perform regular maintenance on your bike and clutch based on your riding style.
- The maintenance range is based on an average rider's moderate use. If you ride in extreme environments or riding conditions, use the lower end of the range for best performance.

### **Clutch parts**

Inspect all of your clutch parts at regular intervals for signs of wear or excessive heat, and replace components as necessary.

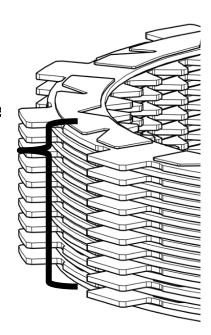
- The OE spring ring can be optimized based on the wear and height of the clutch pack. See the attached Setup Sheet for the specific clutch pack measurements.
- Repeat the break-in procedure anytime you replace the frictions disks. Always soak new friction disks in fresh oil before installing.

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- Measuring the clutch pack can help determine if the components need replacing. The clutch pack is measured with the entire clutch pack together. Include the friction pad in the measurement.
- Disk inspection examples are found in the following section.

Measure entire clutch pack including the friction pad.



#### **Preventive Maintenance**

- For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements.
- Keep up with regular oil changes as per the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality.
- Change the oil filter and/or clean the oil screen with every oil change.
- 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)

**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

#### **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



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