



INSTALLATION & USER'S GUIDE

Royal Enfield
650 Twins

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OVERVIEW

This kit replaces many of the OE (Original Equipment) or “stock” clutch parts. The following is a summary of what is replaced:

- This kit will replace all the OE frictions and drive plates with a Rekluse TorqDrive® clutch pack and EXP disk.

INSTALLATION TIPS

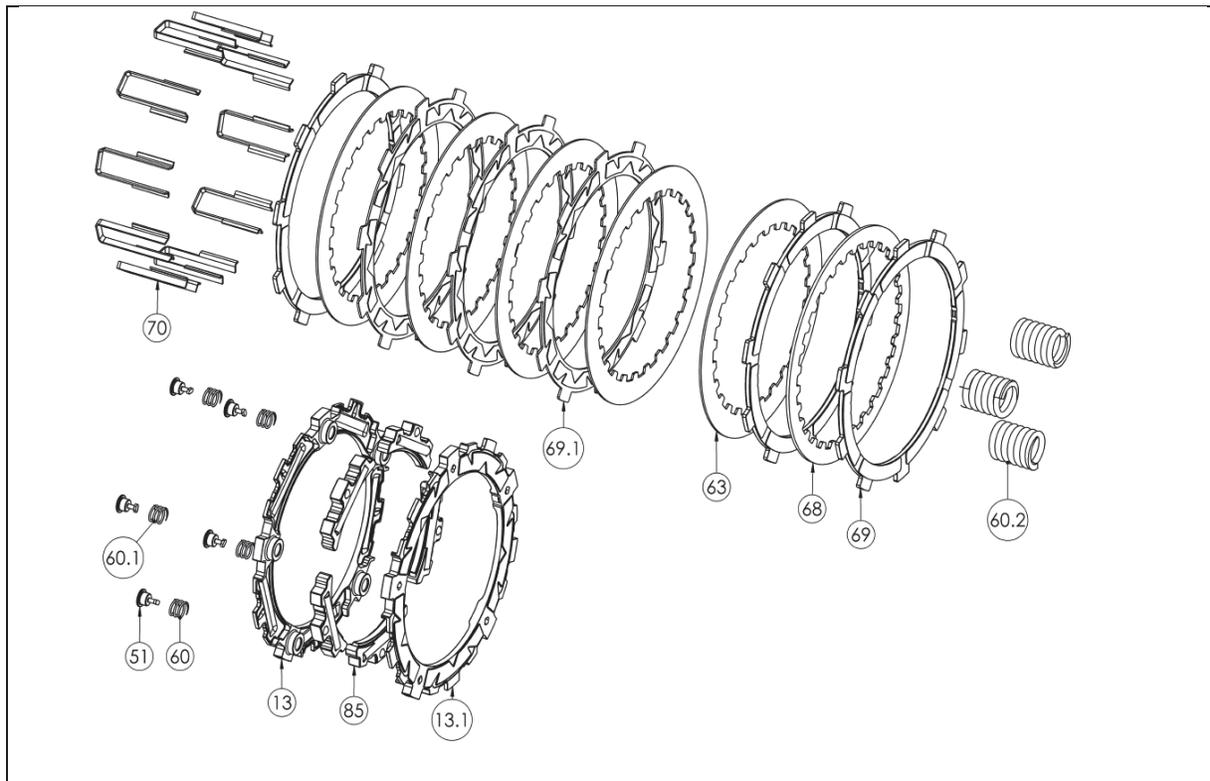
- Read the separate included Safety Information document before operating the vehicle with the product installed.
- Read this entire document before performing any steps.
- If you install this product for a customer or another person, instruct them to read the **Safety Information** document and the **Installation and User Guide** before operating the bike with the product.
- Protect eyes and skin – wear safety glasses and work gloves.
- 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.
- Inspect your OE cable for fraying and replace if needed.



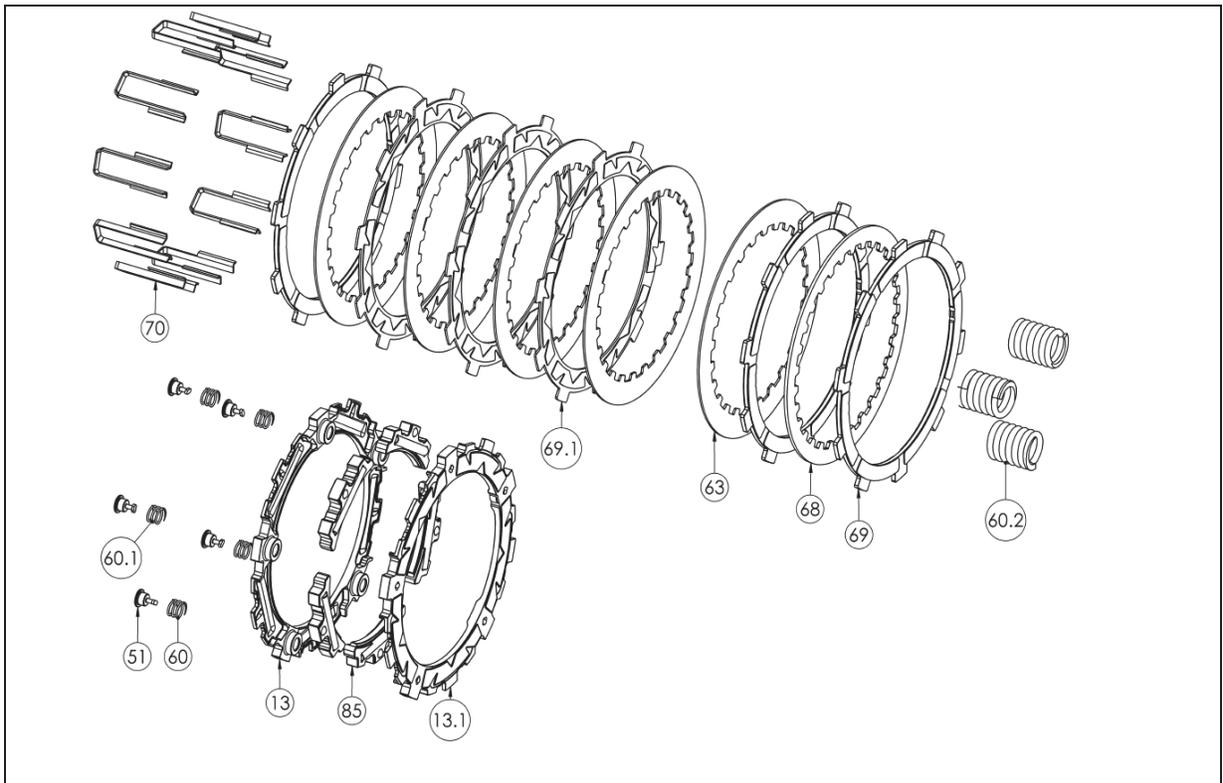
TOOLS NEEDED

- 12mm wrench
- 10mm socket
- 5mm hex driver
- Picks
- Torque wrench (in-lbs & ft-lbs, or N-m)
- Rubber gloves & safety glasses

INCLUDED PARTS



Item	Description	Qty.
13	EXP RP Base - KTM 790 - Male	1
13.1	EXP RP Base - KTM 790 - Female	1
51	FASTNER - Quarter Turn Pin (includes 2 extra)	5
Not Shown	HARDWARE - Orange Free Play Gain Rubber Band	1
Not Shown	HARDWARE - Velcro Strap 1in x 12in	1
60	EXP adjustment springs - Blue	2
60.1	EXP adjustment springs - Gold	3
60.2	Pressure Plate Springs - BMW A&S - .790OD, .1205WD, .9	3
63	Drive Plate - .040 KTM 390	5
68	Drive Plate - .065 TA KTM 390	1
69	Friction Disk - HD 500-750 Judder	3
69.1	Friction Disk - HD 500-750 Thin Friction	3



Item	Description	Qty.
70	Basket Sleeve - H1.63	10
85	Wedge Assembly, RP - KTM 790	5
Not Shown	Prop. 65 Warning Label	1

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

PREPARE BIKE FOR INSTALLATION

1. Stand the bike up on the side stand.

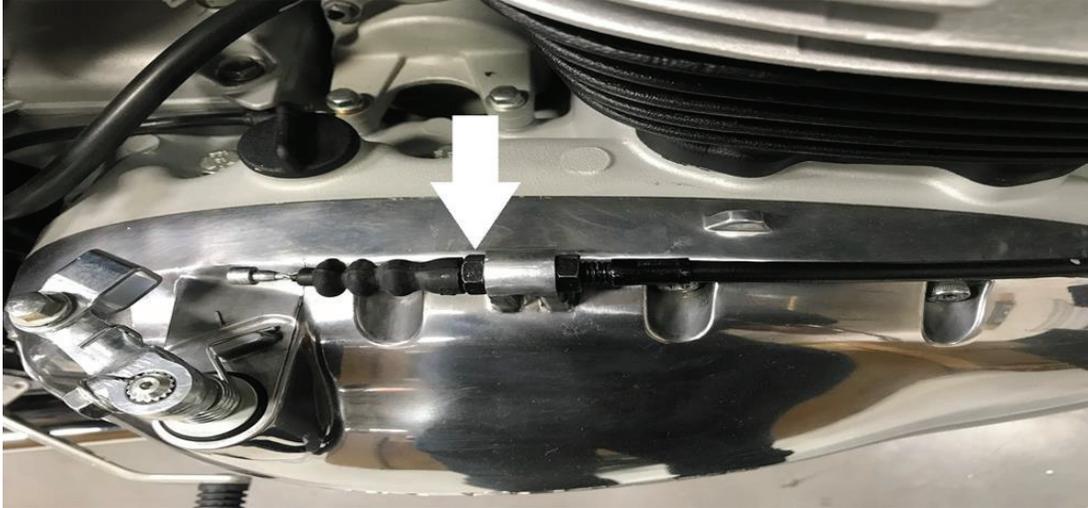


DISASSEMBLE CLUTCH

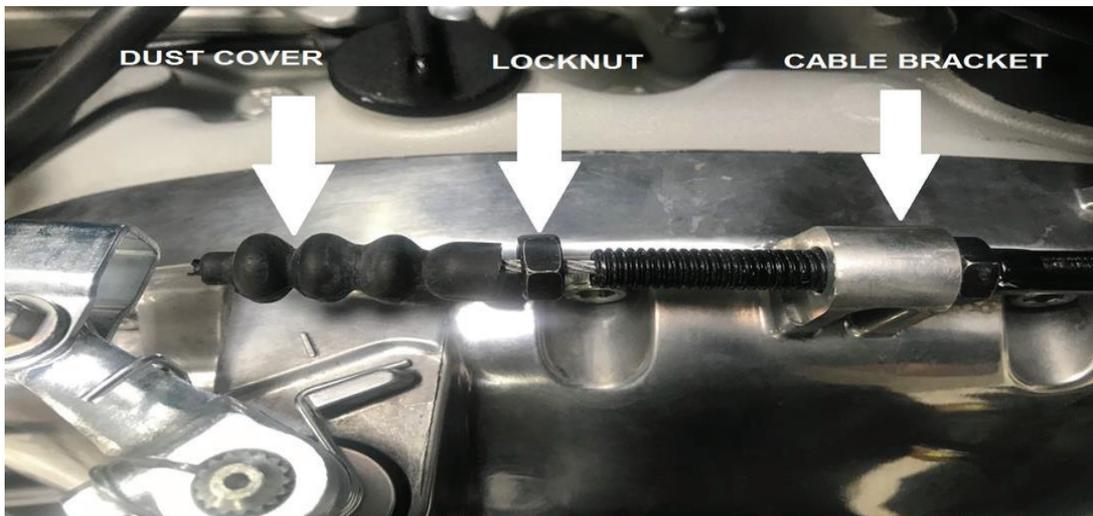
2. Using your hand or pliers, push the clutch actuator arm forward and disconnect the clutch cable.



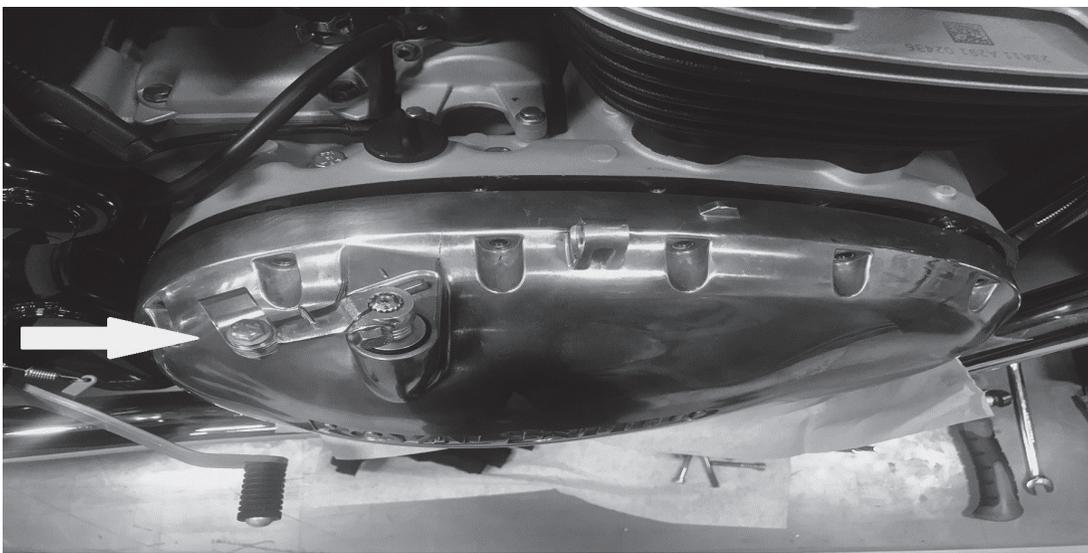
3. Using a 12mm wrench loosen the locknut on the clutch cable housing.



4. Remove the rubber dust cover and the locknut from the clutch cable. Pull the clutch cable through the clutch cable bracket

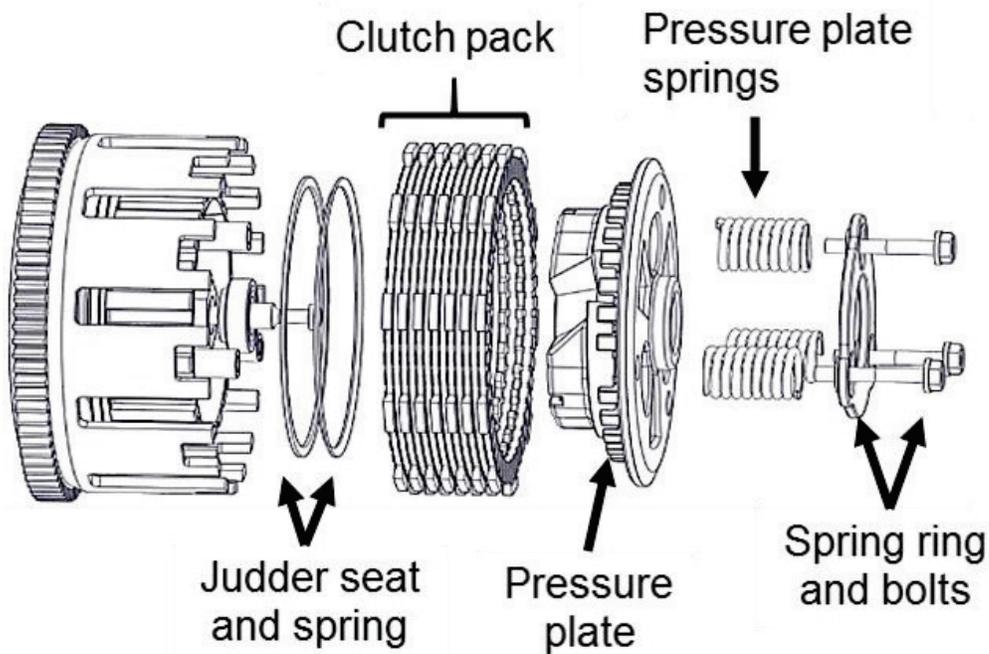


5. Remove the clutch cover bolts and remove the clutch cover



Note: To remove the clutch cover rotate the clutch actuator arm counter clockwise

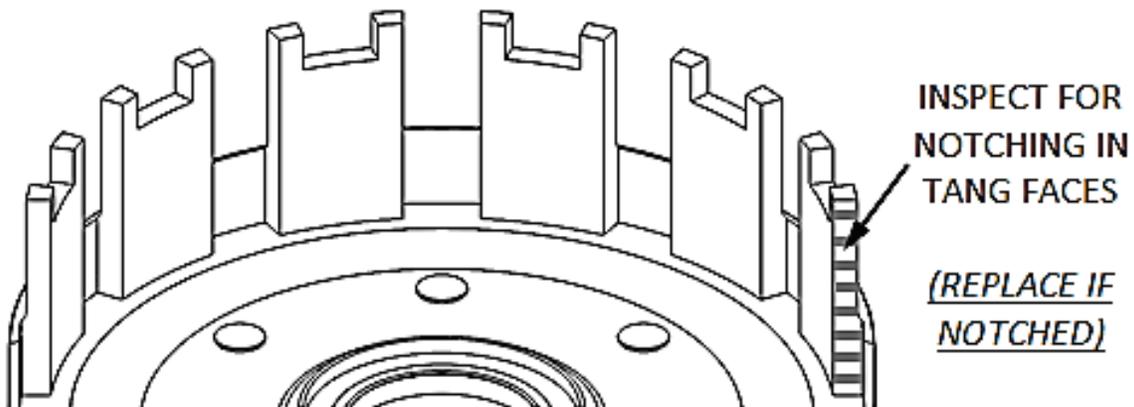
6. Use a 10 mm socket to remove the 3 pressure plate bolts, then remove the spring ring and pressure plate springs. The bolts and spring ring will be reused.
7. Remove the pressure plate, then remove the OE clutch pack. The pressure plate, judder seat, and judder spring will be reused.



8. Inspect the clutch basket for notching. Do not install sleeves or use product with a notched basket. Notched basket tang faces can cause the sleeves to break. Do not use baskets that have been filed, machined, or modified on the tangs. Replace basket if necessary

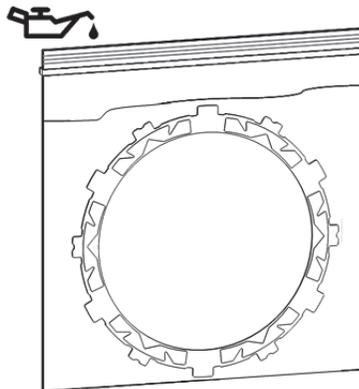
⚠ WARNING

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

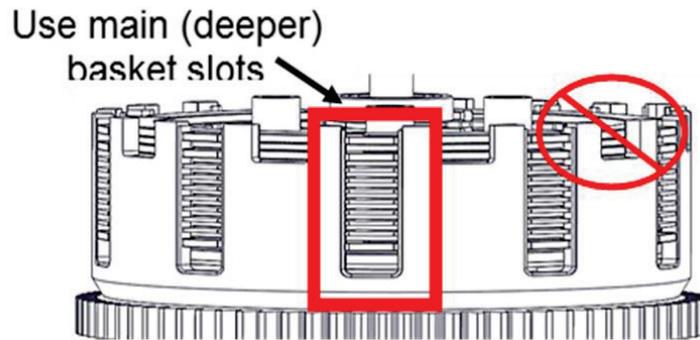


INSTALL THE CLUTCH PACK

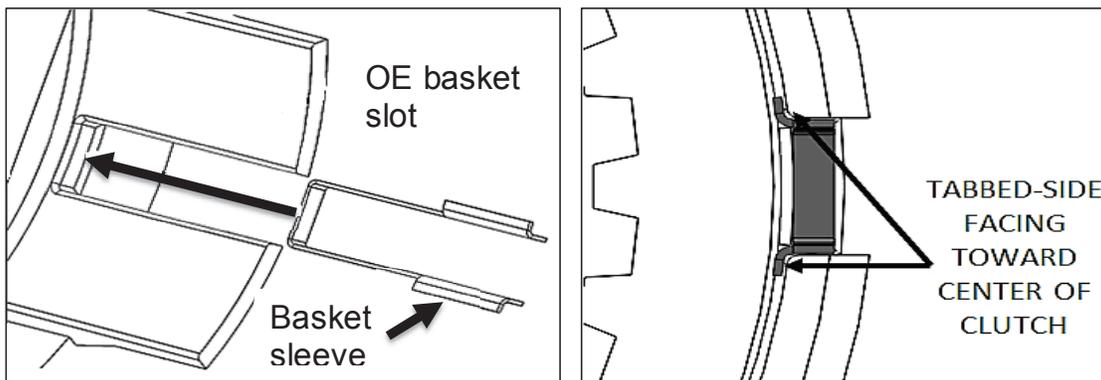
1. Soak the EXP disk and the friction disks in new engine oil for 5 minutes. Make sure the disks are coated in oil on both sides.



Note: 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.

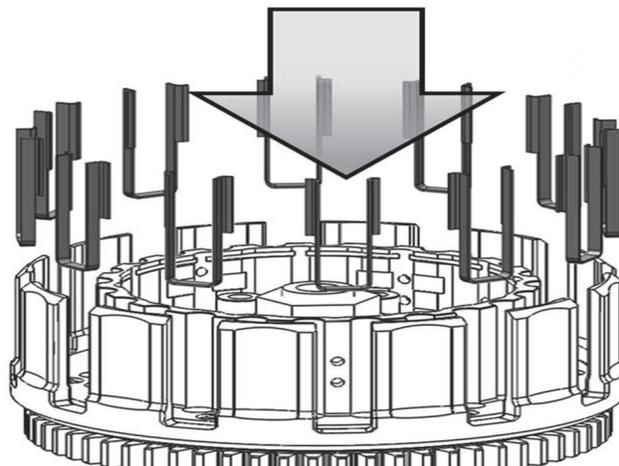


2. Install **ALL** the Rekluse basket sleeves into the basket slots. Make sure the sleeve tabs sit against the inside of the basket, then push the sleeves down until they contact the bottom of the tang slot. See pictures for reference.



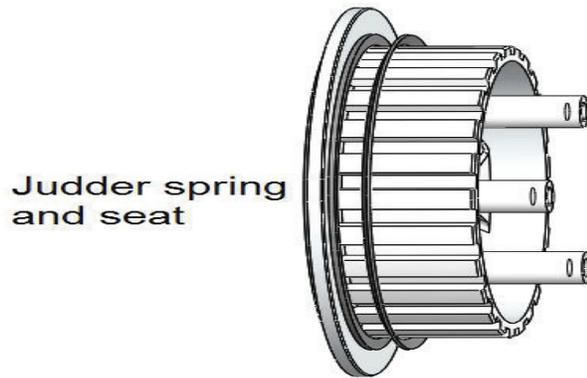
Note: When seated in the basket, the sleeves will be slightly below flush with the top of the basket. This is normal.

Install all the basket sleeves



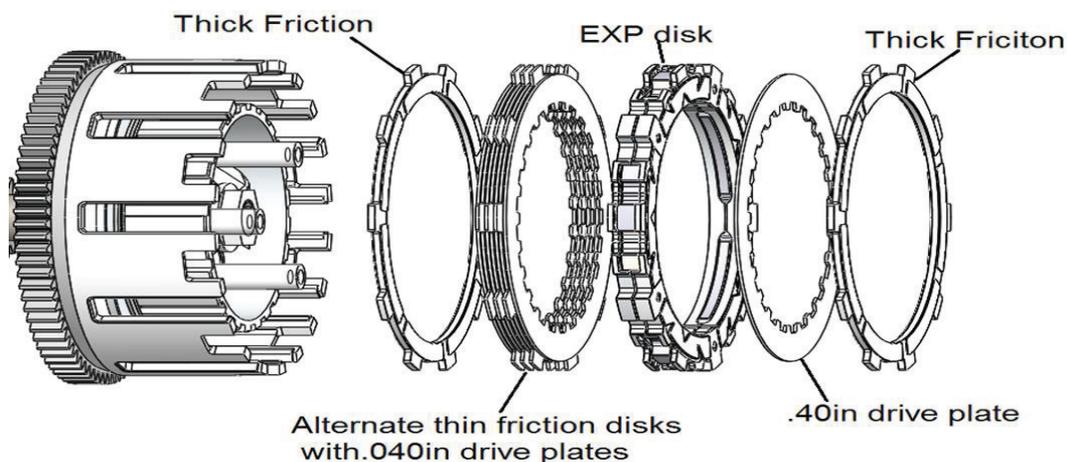
Notes for Clutch Pack Installation:

- *Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.*
3. Verify that the judder spring and judder seat are installed in the basket. If they were removed, install the judder seat followed by the judder spring (cupped side up).



4. Install the thick judder friction disk, then install a .040in steel drive plate.
5. Install a thin friction disk next, then alternate the .040in steel drive plates and thin friction disks ending with a steel drive plate.
6. Install the EXP disk on top of steel drive plate.

Note: Make sure that the EXP disk is installed in the same basket slots as the clutch pack and not in the “half slots.”

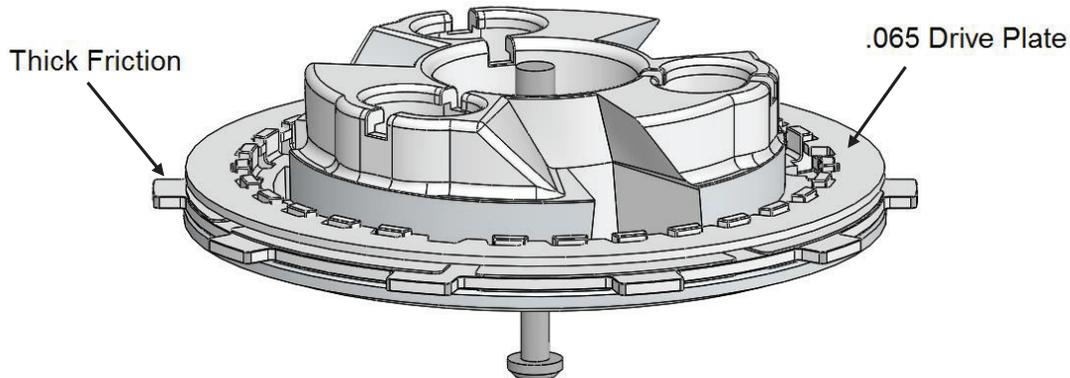


7. Install the last .40in drive plate on top of the EXP.
8. Install a thick friction.

Note: See set up sheet for clutch configuration reference.

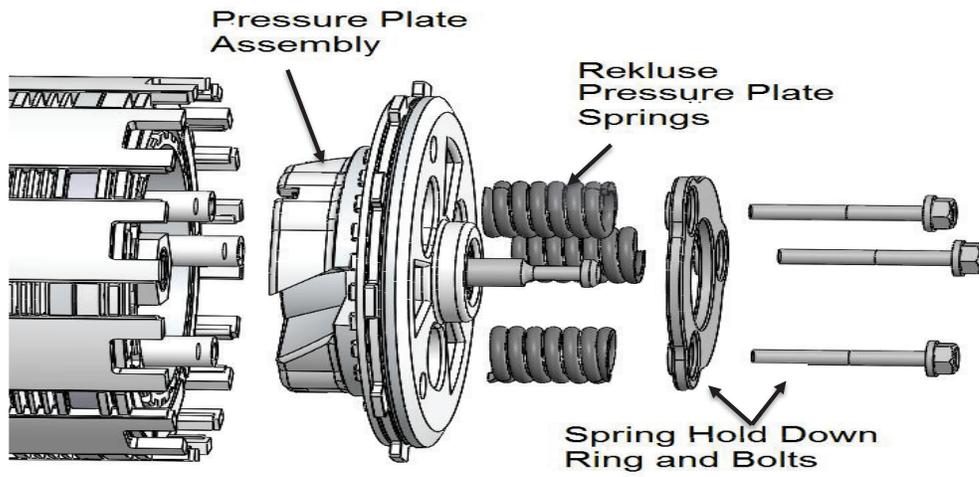
PRESSURE PLATE INSTALLATION

1. Turn the OE pressure plate upside down then install a thick friction disk onto the pressure plate.
2. Next, install the .065" (1.65mm) steel drive plate. Note: this drive plate indexes into the pressure plate splines.



3. Turn the assembled pressure plate right side up, then install it onto the clutch pack. Take care to keep the drive plate indexed to the pressure plate and index the thick friction into the main basket slots

Note: A slight counterclockwise rotation will be required to index the pressure plate into the clutch assembly.



4. Install the Rekluse springs, the hold down ring, and bolts. Torque to OE specifications.

CLUTCH COVER INSTALLATION

Before securing the clutch cover to the engine, follow the next steps to achieve the correct actuator arm orientation to ensure adequate cable travel during use.

Note: *The clutch actuation mechanism is a rack and pinion system. Align the teeth on the throw-out with the actuator shaft in the clutch cover, then hold the clutch cover in place on the clutch.*

1. Check that the actuator arm position is slightly back from parallel with the engine case, then slowly push the clutch cover onto the case



- a. While pushing the actuator arm forward to a stop, the actuator arm should be in the position shown in the picture below. If the actuator arm is in the correct position, continue with the step 2.



- b. If the actuator arm is not parallel to the alignment mark on the clutch cover, there are two options:
- gently pull the cover off and move the actuator shaft up one more gear tooth on the throw-out. Replace the clutch cover and recheck that the actuator arm position is parallel with the mark on the clutch cover.
 - Remove the bolt from the actuator arm and clock the arm to the correct position, reinstall the bolt and tighten to OE torque specification.

2. When the actuator arm is in the correct position, lightly tighten the cover bolts in a star pattern. Torque the bolts in small increments before tightening all the bolts to OE specifications.

3. Pull the clutch cable through the clutch cable bracket. Reinstall the locknut and rubber dust cover to the clutch cable.



4. Reattach the clutch cable to the clutch actuator arm.

SET THE INSTALLED GAP

The installed gap is the separation in the clutch pack created by the tension adjusted into the clutch cable. This gap is what allows the clutch to spin freely until the desired RPM is reached for engagement. The gap must be set correctly for optimal performance.

With this bike model, the installed gap is set by lifting the pressure plate a preset amount using cable tension.

1. Adjust the inline perch adjuster to the midway or center position.



1. Use a 12 mm wrench to tighten the clutch cable until you have stock free play in the clutch lever. *This is your starting point and not the final adjustment.*



2. Continue to tighten the clutch cable 5 or 6 turns past your starting point.

Note: *If you run out of threads on the cable adjuster, readjust the actuation arm as explained in the previous section.*

3. Check Free Play Gain (next section) to adjust the cable tension to its final setting.

4. After reaching the final Free Play Gain setting tighten the clutch cable jam nut.

Do not ride your bike without adjusting the installed gap.

⚠ CAUTION

You will not be able to disengage the clutch until you set the installed gap.

CHECK FREE PLAY GAIN

It is very important that you understand how to verify the correct 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 verify the installed gap by checking 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.

Step 1: Learn how to check Free Play Gain

If you are familiar with checking Free Play Gain, check for Free Play Gain then skip to Step 2, “Step 2: Adjust Free Play Gain.”

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.



Lever with "slack"
removed

Lever position
around 4,000 RPM

Free Play Gain
1/8"-1/4" (3 mm-6 mm)
lever movement

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."

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”-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.

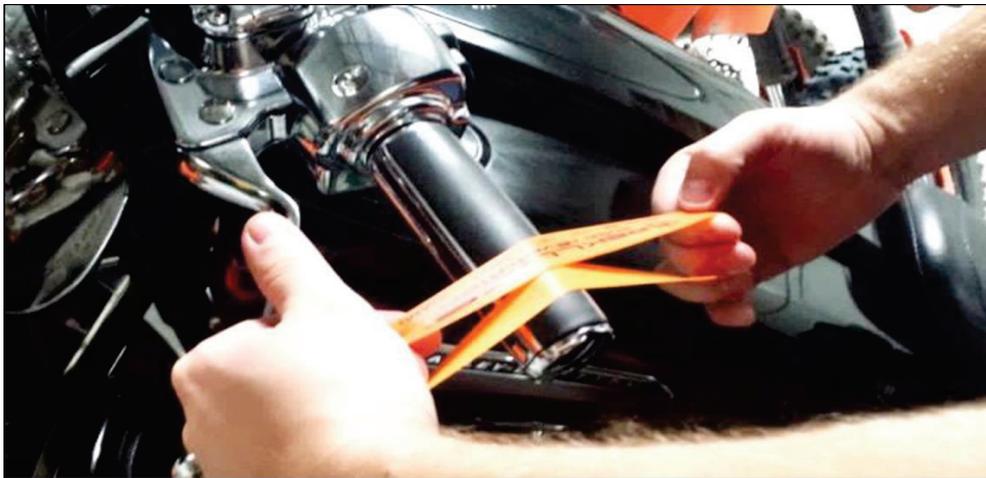
⚠ WARNING

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)

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



- e) 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.

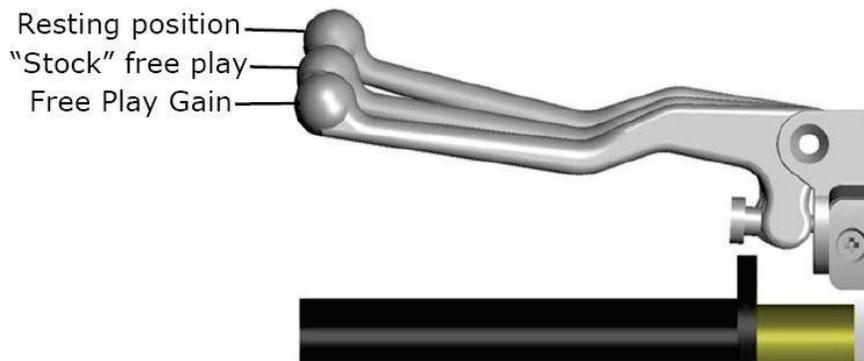


- f) While still in **NEUTRAL**, quickly rev the engine between 5,000-7,000 RPM (1/2 to 3/4 throttle), then let it return to idle.

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.*

- g) 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

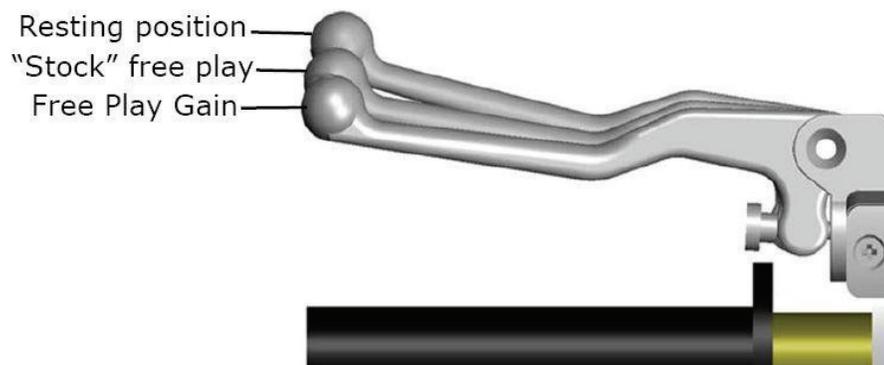
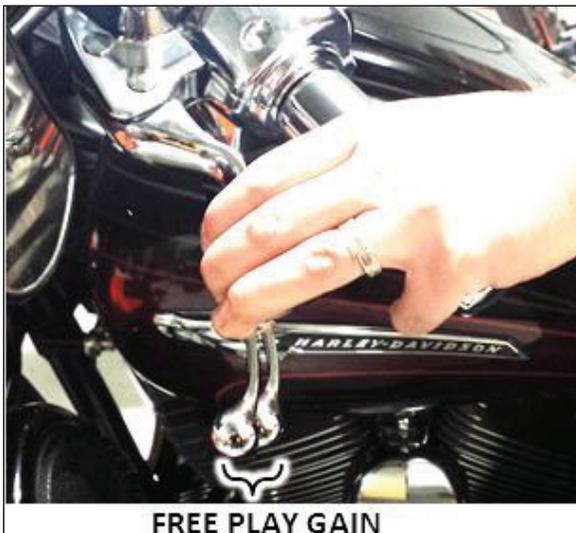
BEFORE YOU BEGIN, verify that the bike is in NEUTRAL before checking Free Play Gain. Failure to do so may result in the bike lurching forward, and loss of control and/or injury may result.

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 verify the Free Play Gain again.

Step 2: Adjust Free Play Gain

After checking for Free Play Gain, you may need to adjust the installed gap. If Free Play Gain is optimal, continue to step 3, "Notes:

If you are unable to obtain the correct Free Play Gain or you are nearly out of cable adjustment after performing the adjustment, your cable may be worn or stretched from wear or use. If this is the case, purchasing a new cable should provide the necessary performance.

- If the threaded adjuster is maxed-out (meaning you have threaded it out as far as is desirable while maintaining at least 3 threads engaged with the housing) and there is still too much Free Play Gain, readjust the throw-out. Refer to the steps to reorient the actuator shaft (pinion gear) one more tooth COUNTERCLOCKWISE on the throw-out (rack gear).*

Step 3: Break in the new clutch.” If Free Play Gain is not optimal, the installed gap needs to be adjusted.

The installed gap should be fine-tuned in small increments and then recheck Free Play Gain. Refer to the table below to set the proper installed gap based on your Free Play Gain.

Adjust the Installed Gap

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	<p>Tighten the cable: increase the length of the in-line cable adjuster housing until the correct amount of Free Play Gain is achieved.</p> <p>Recheck Free Play Gain.</p>
<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	<p>Loosen the cable: Reduce the length of the cable housing (collapse the adjusters) until the correct amount of Free Play Gain is achieved.</p> <p>Recheck Free Play Gain.</p>

Notes:

- *If you are unable to obtain the correct Free Play Gain or you are nearly out of cable adjustment after performing the adjustment, your cable may be worn or stretched from wear or use. If this is the case, purchasing a new cable should provide the necessary performance.*
- *If the threaded adjuster is maxed-out (meaning you have threaded it out as far as is desirable while maintaining at least 3 threads engaged with the housing) and there is still too much Free Play Gain, readjust the throw-out. Refer to the steps to reorient the actuator shaft (pinion gear) one more tooth COUNTERCLOCKWISE on the throw-out (rack gear).*

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>1. Warm up the bike for 2-3 minutes. With the bike in NEUTRAL and your hand off of the clutch lever, rev the engine 10 times, being sure to let it return to idle between each rev cycle.</p>	
<p>2. With the engine still running, pull in the clutch lever, then shift the bike into 1st gear. Slowly release the clutch lever. The bike should stay running and in place, or have a slight amount of forward creep.</p> <p>3. With the bike idling in first gear, slowly apply throttle to begin moving.</p> <p>4. Without using the clutch lever, accelerate moderately to around ½ throttle to fully engage the clutch. Release the throttle and come to a complete stop. Repeat 15 times.</p>	 <p>15 roll-on starts</p> <p>Continued on next page </p>

Note: *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.*

1. Place the bike in **NEUTRAL** and recheck Free Play Gain and adjust the installed gap until the clutch lever is 1/8" (3 mm).



Recheck Free Play Gain and adjust the installed gap

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.*

⚠ CAUTION

Do not perform 2nd and 3rd gear starts with this product. Always keep the motorcycle in first gear when taking off from a stop. Taking off from a higher gear can cause premature clutch wear and damage the product.

MAINTENANCE

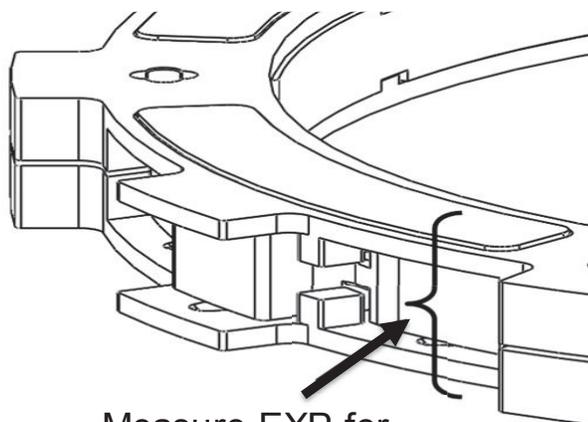
To keep your clutch performing at its best, perform regular maintenance on your bike and clutch.

- Keep up with regular oil changes according to the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality.
- Oil recommendations can 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. This includes your basket sleeves and dampers. 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

- 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 frictions disks. Always soak friction disks in oil for at least 5 minutes before installing.



Measure EXP for allowable thickness
0.416" (10.6 mm)

- Replace friction disks if they measure below specifications or if the disks are glazed and/or burnt.
- Replace the drive plates if they show signs of excessive heat or warping.
- Nominal clutch pack height (Measure steel drive plates, friction disks, and EXP together): **see set up sheet**

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 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

TROUBLESHOOTING

Performance issues

If you find yourself constantly adjusting free play or adjusting for 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.

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.

BUMP-STARTING

1. Use the perch adjuster or in-line cable adjuster to remove cable tension until you have lever free play (slack).
2. Bump-start the bike. The clutch will function like a manual clutch at this point, but the clutch will not be fully over-rideable at high RPM.
3. Once the vehicle is running, readjust the cable tension to properly set the installed gap using Free Play Gain.



It is not recommended to ride any further than necessary with the clutch's installed gap collapsed.

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.

Technical Support 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.

Customer Service hours:

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

Mountain Time zone

Email: customerservice@rekluse.com



RIDER'S GUIDE

How to get the most out of your new clutch

LET'S RIDE

This guide is to help get the best experience riding with your new Rekluse RadiusX centrifugal auto clutch.

It doesn't matter if you, a mechanic, or a dealer installed your new clutch, take a moment to read this Rider's Guide. It will help you understand some important points about how to shift with the new clutch, how the auto clutch functions, some important safety information, and how to check Free Play Gain.

What it does

The Rekluse auto clutch is designed to eliminate the need for clutching when starting and stopping. The auto clutch provides smooth acceleration without loss of power. It also prevents stalling when riding at slower speeds or maneuvering through traffic. You retain full control of shifting and can continue to use the clutch lever if you like.

What it doesn't do

The Rekluse auto clutch is not an automatic transmission. You still need to shift to maintain the proper gear selection when accelerating, cruising, and decelerating.

Items to Note

- Thoroughly read and understand the **Safety Information** before operating any vehicle with this product.
- Videos related to this product can be viewed online at <https://rekluse.com/support/videos>.
- **Do not "rev" the throttle while in gear and not moving.** Revving the engine without the clutch lever pulled in will lurch the bike forward or move it unexpectedly.
- Check your Free Play Gain before the 1st ride of the day. Instructions for checking Free Play Gain are included in the guide.
 - If Free Play Gain is not correct, adjust the installed gap and recheck Free Play Gain before continuing. Continuing to ride when the clutch is not adjusted properly may cause damage to the clutch.
 - If Free Play Gain cannot be corrected (too much or too little), stop riding the bike until the issue can be resolved.

GETTING STARTED

There are a few basic steps you need to know when shifting with your new auto clutch. Learning these steps will keep your ride smooth and prevent damage to the clutch.

- Always start your bike in **Neutral** and let the engine warm up. If the bike is cold, there may be clutch drag. Clutch the bike manually until it is warm.

- **Always shift your bike from Neutral to 1st gear with the clutch lever pulled in.**
- To move or start, let the clutch lever out and slowly roll on the throttle.
- Upshift gears as you normally would, using the clutch lever as you shift.
- Your Rekluse auto clutch engages during normal riding from idle to 4,500 RPM. See section 3 below for suggestions regarding optimal RPM for riding conditions.

SHIFTING

1. Upshifting:

- For normal riding situations, upshift as you normally would.

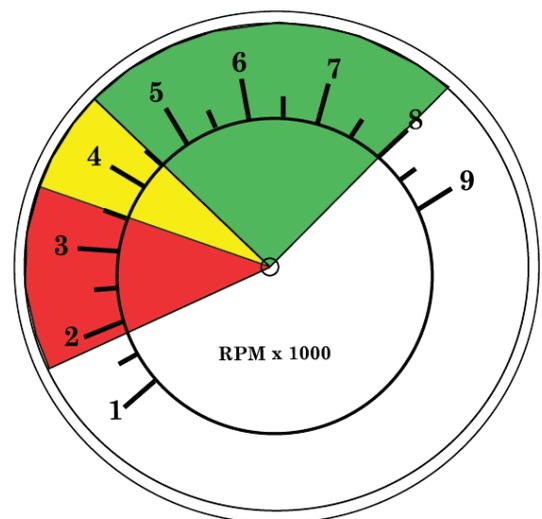
2. Downshifting:

- For normal riding situations—including slowing down from a tall gear—**downshift as you normally would.** Downshift if the engine is jerking or “lugging.”
- Downshift one gear at a time and allow the engine braking to engage like normal.
- When downshifting, apply a small amount of throttle then slowly release the clutch lever to reactivate the clutch.
- If you are traveling at a high rate of speed in a tall gear, you **MUST** apply a small amount of throttle to reactivate the clutch. If you pull the clutch lever in or allow the RPM to drop to idle without reactivating the clutch, free-wheeling occurs.
- Do not ride in a gear higher than you need. Adjust your gear selection to match your ground speed, engine RPM, and terrain.
- When you slow down to stop, you do not need to touch or modulate the lever. The EXP disk will release the clutch automatically when the RPM drops below the engagement point.
- **Once you are stopped, shift into 1st gear using your clutch lever before accelerating again.**

3. Maintaining proper RPM for best performance :

Shift points will vary by bike and your riding style. However, these are some general guidelines to help you get the most out of your clutch and reduce slipping.

- Red Zone: This zone is from idle to around 3,500 RPM. This is a caution zone where the clutch is in a transitional state. Cruising below 3,500 RPM should only be done in 1st gear or below ¼ throttle. Cruising in a tall gear without downshifting is hard on your clutch as well as your engine.
- Yellow Zone: This zone is from about 3,500-4,500 RPM. This is a healthy zone for easy trail riding and cruising situations. It is acceptable to cruise in this range unless you are carrying a heavy load, riding uphill, riding into the wind, or riding well above 1/3-1/2 throttle.
- Green Zone: For best clutch performance and longevity, it is best if most riding is done above



4,500 RPM. The clutch is fully clamped at this point. Any technical trail riding or ascending a grade should be done in this range. Upshift and downshift as you normally would using the clutch lever.

PARKING WITH YOUR AUTO CLUTCH

Your kit includes 2 Velcro-type straps to be used to secure both the clutch lever and front brake lever when the bike is parked.

To keep your bike from rolling away without you, use the 2 Velcro lever safety straps every time you park or leave your bike. Using these straps will reduce your risk of injury and/or damage. Refer to the Safety Information sheet for more information.

1. Pull the brake lever tight against the right grip.
2. Wrap the Velcro safety strap around the front brake lever and grip, pull it tight, then fasten it to use as a parking brake.
3. Wrap the other strap around the clutch lever and the grip in the same way to prevent unwanted launching.

LONG LIVE YOUR CLUTCH

In order to keep your clutch functioning properly and prevent damage, you need to check your Free Play Gain before the 1st ride of the day.

Don't know how to check your Free Play Gain?

- **Watch the video:**
<https://rekluse.com/support/videos>
- **Read about it:**
Read the following instructions in this guide and/or the Information Guide that came with your kit.

⚠ WARNING

BEFORE YOU BEGIN, verify 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.

CHECK FREE PLAY GAIN

Optimal Free Play Gain yields **1/4 - 3/8" (6 mm - 9 mm)** of clutch lever movement, measured at the end of the lever. This measurement at the lever correlates to achieving the ideal installed gap.

- a) Before you begin checking Free Play Gain, 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 to about 5,000 RPM, 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.



When the bike returns to idle, rest your hand across the clutch lever. Rev the engine again to 3,000-5,000 RPM so you can observe the movement while feeling for Free Play Gain with your hand.

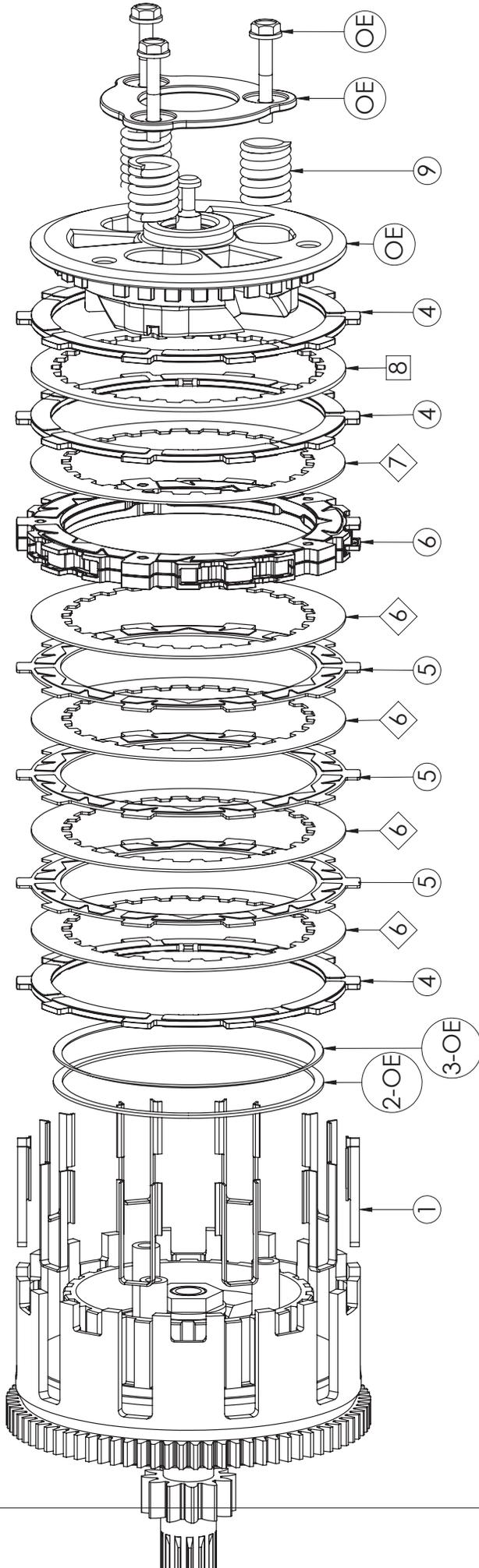
- f) If your Free Play Gain is correct, then enjoy the ride. If you have too little or too much Free Play Gain, adjust the installed gap and recheck Free Play Gain. Instructions for adjusting the gap are found in the Information Guide that came with your kit or on our website.

NEED ADDITIONAL HELP?

Visit our website at www.rekluse.com/support or call us at (208) 426-0659.



SETUP SHEET 198-6319001



ITEM NO.	DESCRIPTION	QTY.
1	BASKET SLEEVE	12
2-OE	OE JUDDER SEAT	-
3-OE	OE JUDDER SPRING	-
4	3mm FRICTION DISK	3
5	1.78mm FRICTION DISK	3
6	EXP DISK	1
7	1mm STEEL PLATE	5
8	1.65mm STEEL PLATE	1
9	REKLUSE SPRINGS	3

