



INSTALLATION GUIDE

For BMW F650, F700, F800 Parallel Twins

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OVERVIEW

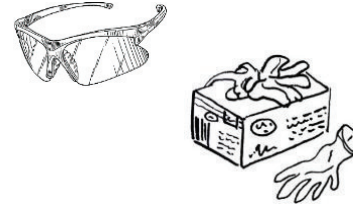
This kit replaces the OE (Original Equipment) or “stock” clutch pack with Rekluse high performance components designed specifically for your bike model.

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

- This kit includes extra EXP springs, which can be used to tune for your desired engagement. See the **EXP tuning options** section in this document for specific tuning information.

INSTALLATION TIPS

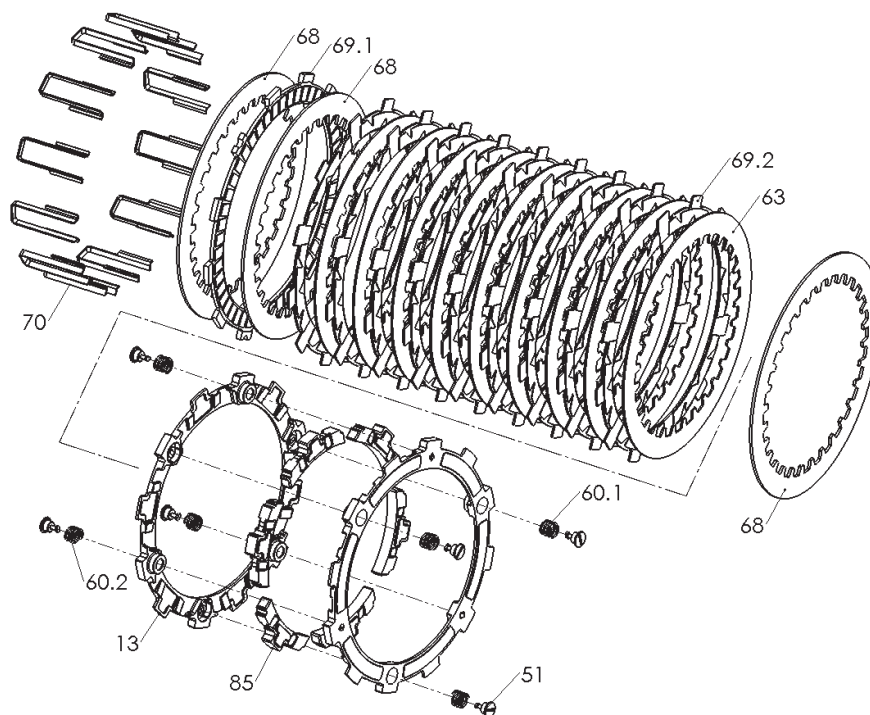
- Read the separate included Safety Information document before operating the vehicle with the product installed.
- Read this entire document before performing any steps.
- If you install this product for a customer or another person, instruct them to read the **Safety Information** document and **Installation Guide** before operating the bike with the product.
- Lay the bike on its left side when replacing the clutch. This makes working on the clutch easier and eliminates the need to drain the oil.
- Protect eyes and skin – wear safety glasses and work gloves. Work in a well ventilated area.
- 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

- | | |
|-----------------------------|-----------------|
| • 6, 8, & 24 mm sockets | • 5 mm hex key |
| • 2x 13 mm end wrenches | • Torque wrench |
| • Channel-lock style pliers | (in-lb, or N-m) |
| • 2x dental pick tools | • T45 Torx bit |

INCLUDED PARTS



Item	Description	Qty.
13	EXP bases	2
85	Wedge assembly	6
51	Quarter-turn pins (extra included)	8
60.1, 60.2	EXP adjustment springs – colors vary	12
63	Steel drive plate - .040" (1 mm) thick	9
68	Steel drive plate - .060" (1.5 mm) thick	3
69.1	Thick TorqDrive® friction disk - .124" (3.15 mm)	1
69.2	TorqDrive® friction disks	9
70	Basket sleeves	12
Not shown	Velcro straps	2
Not shown	Orange Free Play Gain rubber band	1
Not shown	Clutch lever warning label	1
Not Shown	Pressure Plate Springs	6

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

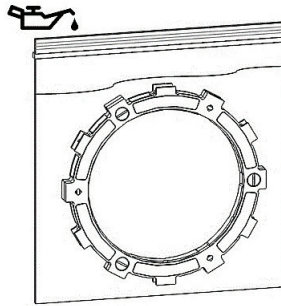
USE OF OTHER AFTERMARKET

PRODUCTS

- Bikes with heavily modified engines for increased horsepower may require stiffer pressure plate springs which can be purchased separately from Rekluse.
- If your bike is equipped with an aftermarket clutch cable, you may find that the adjustment range in your cable is different from described in this manual.
- Bar risers may limit the travel necessary for your cable adjustment to achieve the necessary installed gap.
- If you prefer the use of an aftermarket clutch lever and/or perch, especially the adjustable variety, note that:
 - Some aftermarket lever/perch combos claim “Lighter Lever Pull” which correlates to less lift of the pressure plate (the mechanical advantage is increased, so the distance the pressure plate lifts must decrease).
 - This may have an adverse effect by producing more clutch drag or harder shifts. The lever may be lighter, but you will have to pull the lever in farther to disengage the clutch.
- Some aftermarket lever/perch combos may provide lever “free play” if desirable.
- This product has not been proven to be compatible with hydraulic conversion kits, as it is difficult to achieve the necessary adjustment for installed gap.

DISASSEMBLE CLUTCH

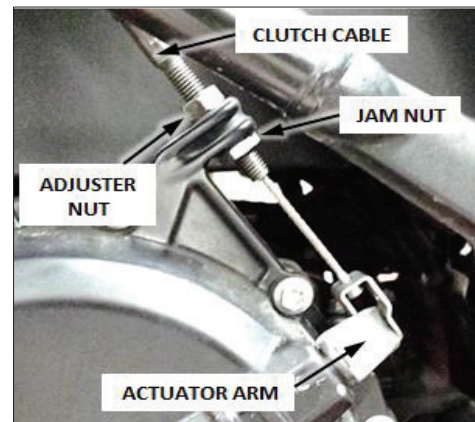
1. Soak the EXP disk and TorqDrive® friction disks in primary/transmission oil for 5 minutes. Make sure the EXP and friction disks are coated on both sides.



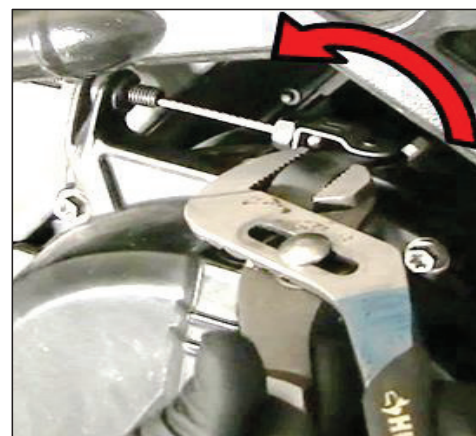
2. Lay the bike on its right side. Catch any fuel that might drain in a suitable container. *Or you can stand the bike vertically on its center stand and drain the oil.*

3. Remove the left side kickstand bracket using a T45 Torx, then remove the shift lever using a 6 mm socket. Take care not to damage the electronics or wires that protrude from the kickstand bracket.

4. Loosen the jam nut and unthread it from the cable adjuster.



5. Use channel-lock style pliers to turn the actuator arm, then detach the clutch cable from the actuator arm and the clutch cover.



6. Remove the clutch cable from the clutch cover.



7. Remove the oil fill cap.



8. Remove the clutch cover bolts and clutch cover, taking care not to damage the cover gasket. Replace this gasket if it is torn or damaged.

Note: The washer on the shifter shaft may stick to the back of the clutch cover when removing it. Ensure that the washer is placed on the shifter shaft.

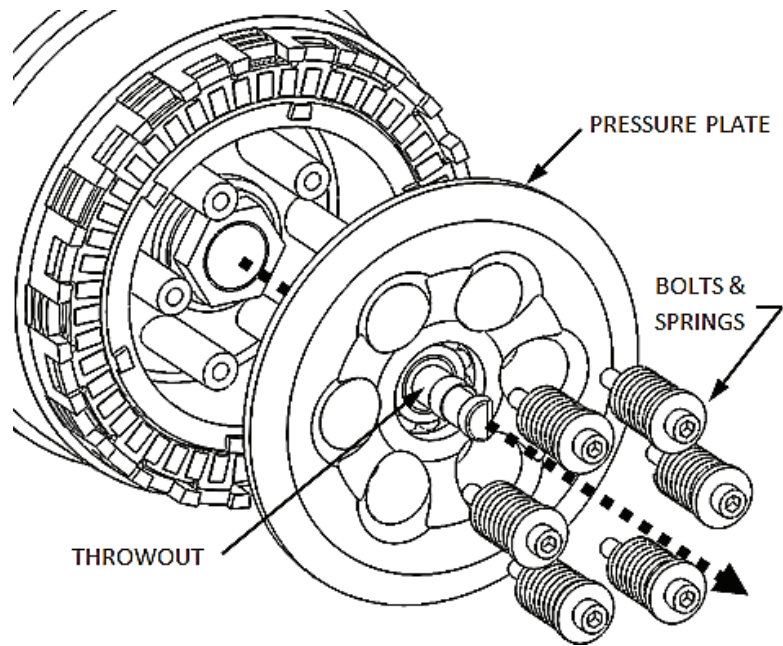
WASHER
(STUCK TO COVER)



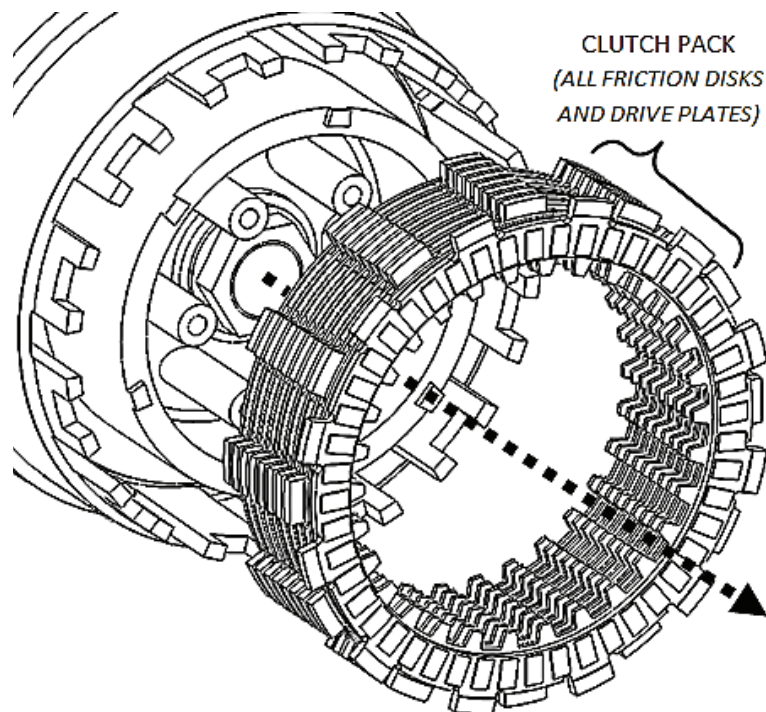
PLACE WASHER ON
SHIFTER SHAFT



9. Remove the OE pressure plate bolts and springs, throw-out, and pressure plate.



10. Remove the entire OE clutch pack.



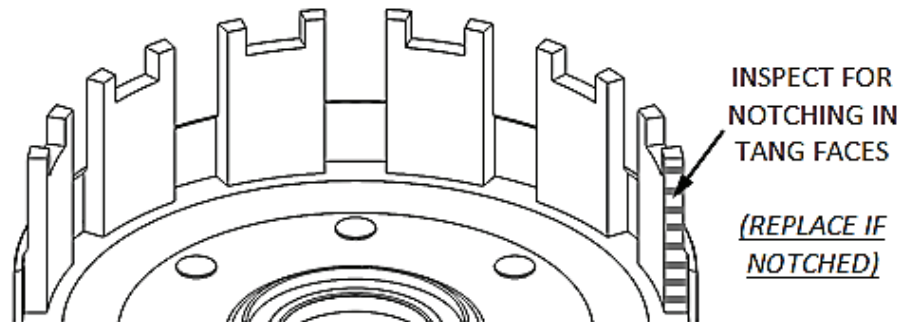
INSTALL THE CLUTCH PACK

Notes for installation

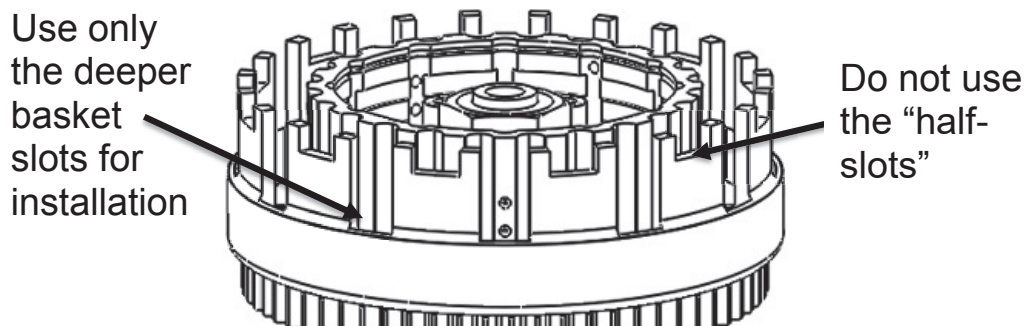
- Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.
- Inspect the clutch basket for notching. Do not install sleeves or use product with a notched basket. Notched basket tang faces can cause the sleeves to break. Do not use baskets that have 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.



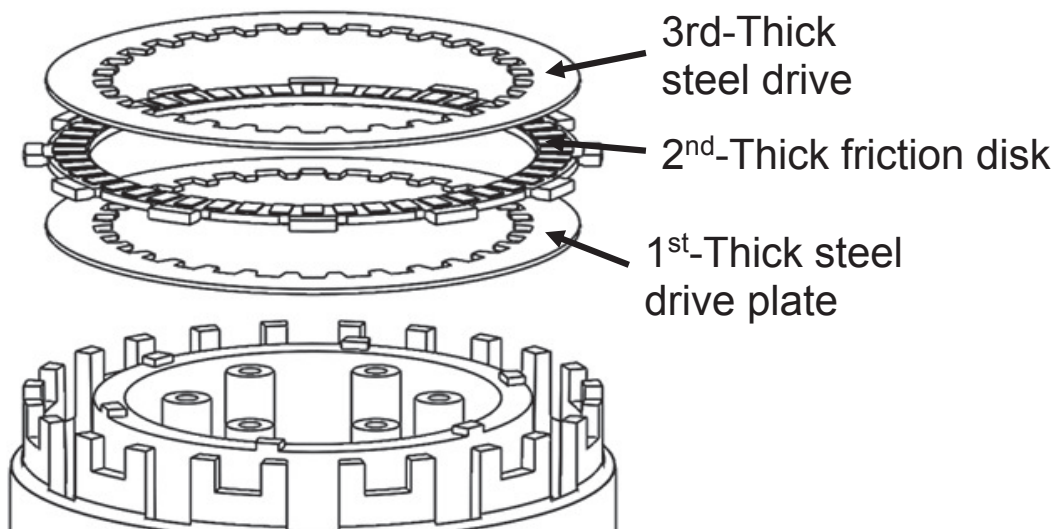
- Some OE basket have “half slots” at the top of the basket tangs. Rekluse products require the entire clutch pack be installed into the MAIN (deeper) basket slots. Installing the pack in the “half slots” will cause performance issues. See the following picture for reference.



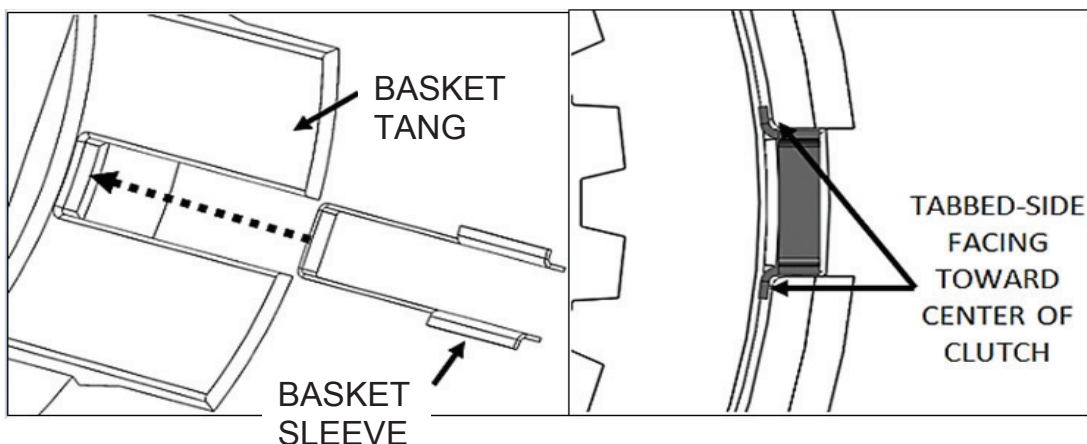
Clutch pack

NOTE: The OE top and bottom friction disks have slightly narrower tabs than the other 7 friction disks. The Rekluse supplied thick friction disk also has this same narrow-tab feature so that it fits properly into the slots of the OE basket.

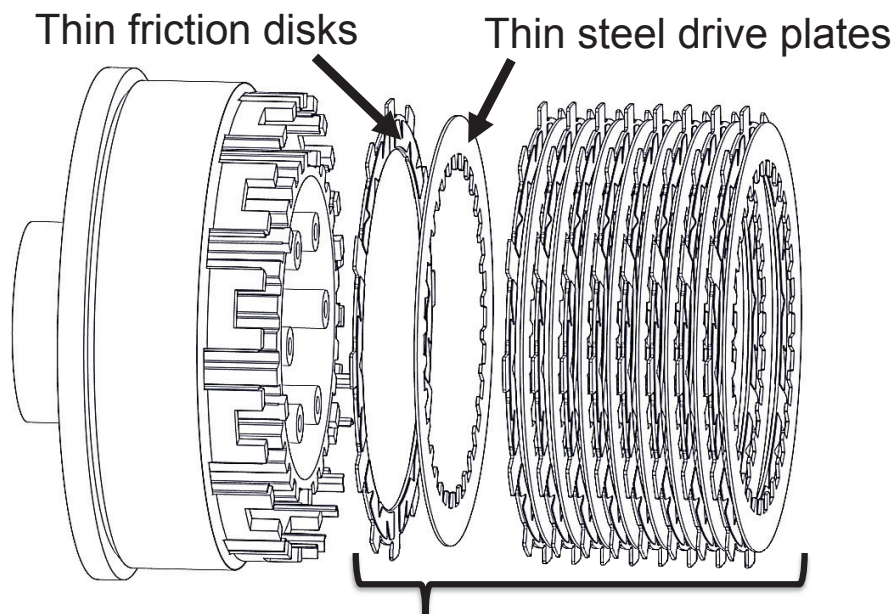
1. Install a .060" (1.5 mm) thick steel drive plate into the clutch basket first.
2. Install a .124" (3.15 mm) thick friction disk, then install another .060" (1.5 mm) thick steel drive plate.



3. Install **ALL** the Rekluse basket sleeves into the OE basket slots with the tabbed side facing toward the inside of the clutch basket. Push the down until they contact the tabs of the first thick friction disk.



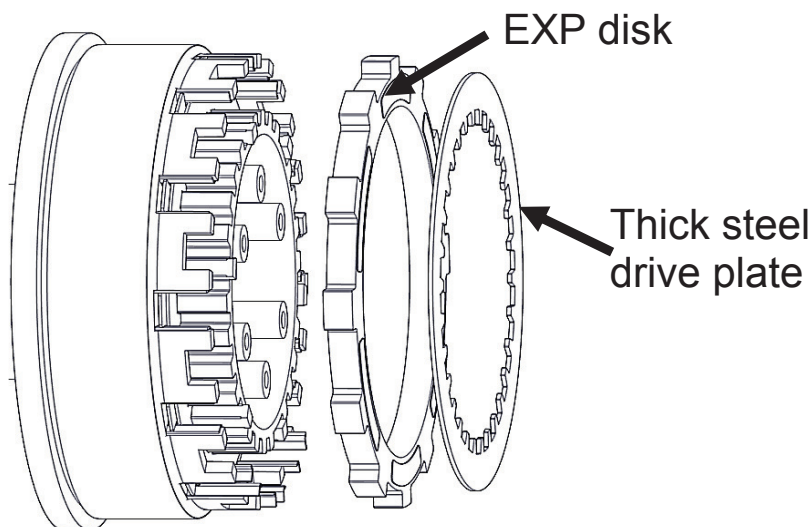
4. Install a thin friction disk, then install a .040" (1 mm) thin steel drive plate. Continue to alternate thin friction disks with thin steel drive plates for the entire clutch pack. *There will be 1 thick steel drive plate left that will be installed in a later step.*



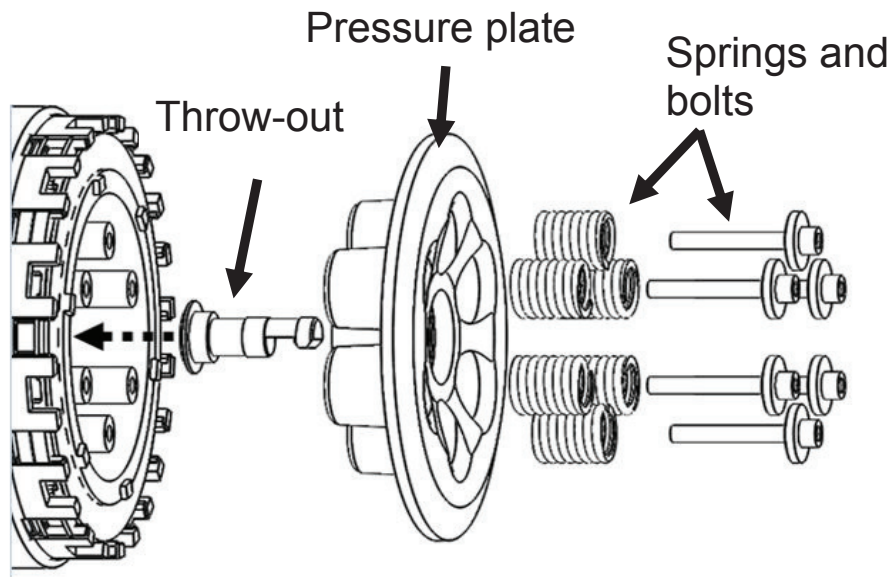
Total of 9 friction disks and 9 steel drive plates

Note: Use dental picks can help control the basket sleeves when installing the clutch pack.

5. Install the Rekluse EXP disk, then install the last thick drive plate. Remember to install the EXP and drive plate into the main basket slots with the clutch pack.



6. Reinstall the OE throw-out and pressure plate, followed by the Rekluse supplied pressure plate springs and OE bolts.



7. Torque the pressure plate bolts in a star pattern to OE specifications.
8. Install a new clutch cover gasket followed by the clutch cover. *Make sure that the throw-out is aligned correctly with the actuator mechanism in the cover.*



9. Tighten the cover bolts in small increments in a star pattern, then torque the cover bolts to OE specifications.

10. Reinstall the left side kickstand bracket and the shift lever.
Use Loctite 243 or equivalent thread-locking compound, then torque to OE specifications.
11. Reinstall the clutch cable to the clutch cover. Thread the jam nut onto the adjuster, but do not tighten it. It will be tightened after you set the Free Play Gain.



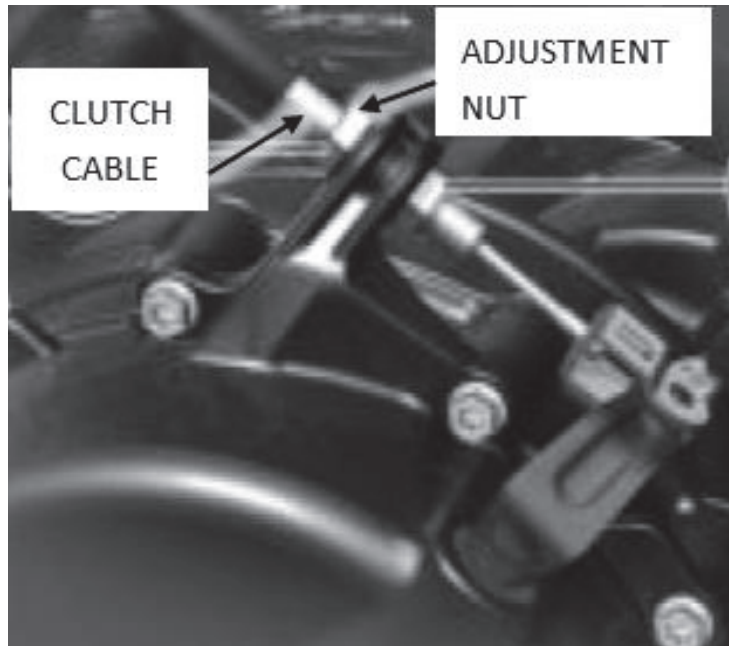
12. Use the channel-lock pliers to reattach the clutch cable to the clutch cover and the actuator arm.
13. Stand the bike up, supporting it on its kickstand or center stand.
14. Install the provided warning sticker on the backside of the clutch lever, such that it is visible to the rider.



SET THE INSTALLED GAP

The installed gap is the separation in the clutch pack created by adjusting the tension in 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.

1. The clutch lever should be tight against the perch. If not, use the adjustment nut to adjust the cable so that the lever is tight against the perch.



2. Turn the cable and/or perch adjuster 3-5 turns tighter. Tightening beyond the initial perch adjustment creates the installed gap.
3. Continue the installation by checking for Free Play Gain.

⚠ CAUTION

Do not ride your bike without adjusting the installed gap. 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. The installed gap is what allows the auto function of the product to perform properly.

Correct Free Play Gain = Correct installed gap

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. 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.

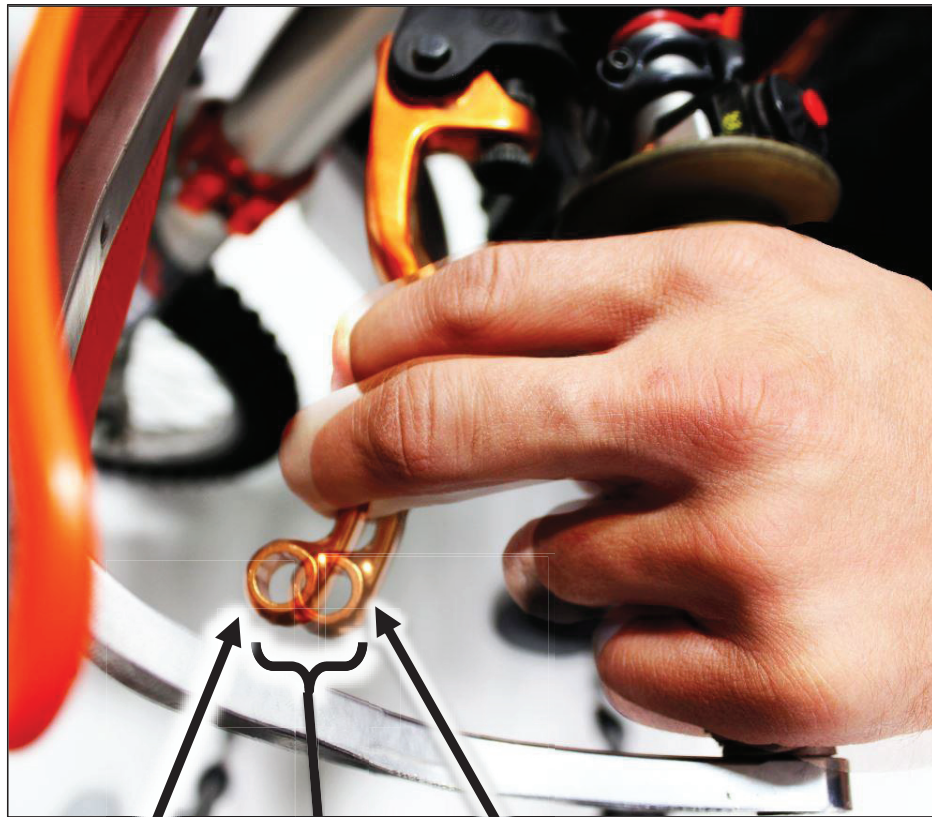
Learn how to check Free Play Gain

If you are familiar with checking Free Play Gain, check for Free Play Gain then skip to the “Adjust the Installed Gap” section.

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 <https://rekluse.com/support/videos>.

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.”



Lever with “slack”
removed

Lever position around
5,000 RPM

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

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) 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 (1/4 to 1/2 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.

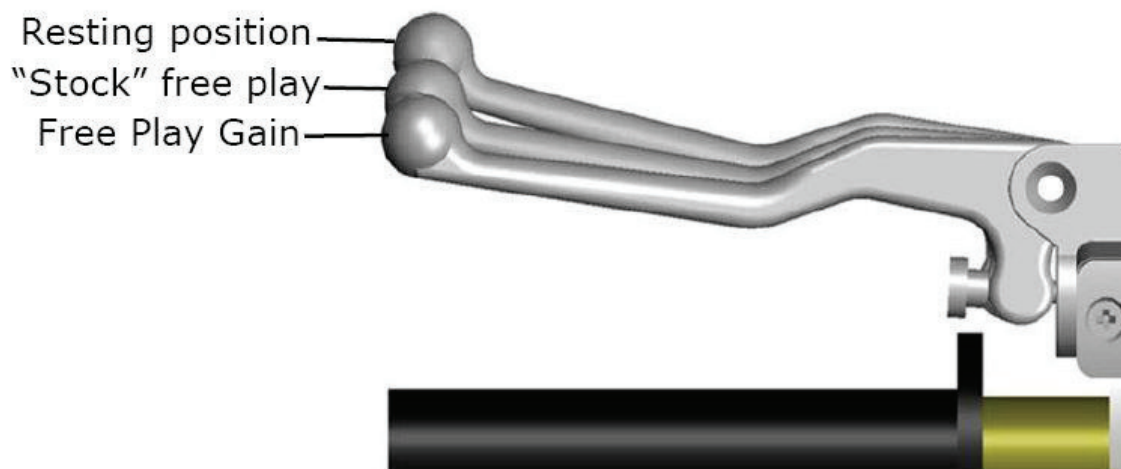
Note: *It is very important the motor returns to idle before revving the engine again or Free Play Gain will not be correct.*

- 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.

- 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 (1/4 to 1/2 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.



ADJUST THE INSTALLED GAP

After checking for Free Play Gain, you may need to adjust the installed gap. If Free Play Gain is optimal, continue to the "Break In The New Clutch" step.

If the 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.

Note: *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, the cable should be replaced.*

Symptom	Reason	Solution
<ul style="list-style-type: none">• Too much Free Play Gain: Clutch lever moves in too far• 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 by turning the adjuster nut to increase the Installed Gap.</p> <p>Recheck Free Play Gain.</p>
<ul style="list-style-type: none">• Too little Free Play Gain: Clutch lever only moves slightly or does not move at all• Clutch slips• Bike seems to lose power	Installed gap is too large	<p>Loosen the cable by tuning the adjuster nut to reduce the Installed Gap.</p> <p>Recheck Free Play Gain.</p>

CLUTCH PACK ADJUSTMENT

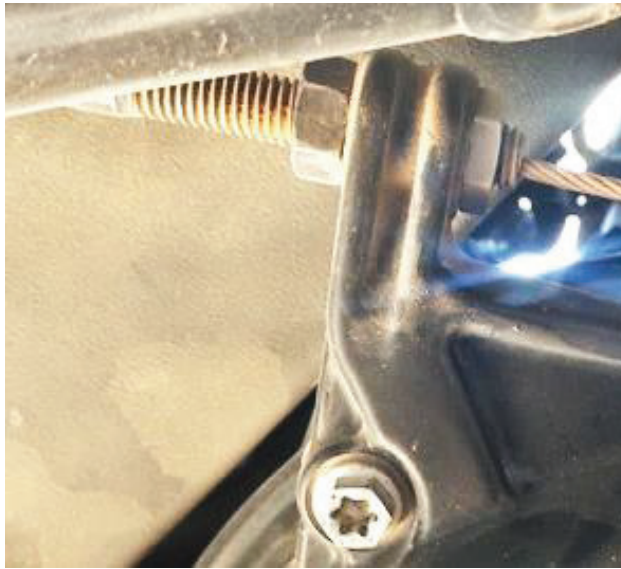
If you are unable to obtain the correct Free Play Gain or you are nearly out of cable adjustment when correct Free Play Gain is achieved, follow the steps below.

Symptom: Unable to achieve optimal Free Play Gain before running out of or becoming dangerously low on adjustment travel on the adjustment nut (upper) side.



- **Cause:** Overall clutch pack height may be too short.
- **Consequences:** Excessive clutch slip and subsequent heat buildup; becoming stranded.
- **Solution:** Measure your friction disks as per the spec in the maintenance section. If they are within spec, replace the thin Rekluse drive plate below the EXP disk with one thick OE drive plate. If they are out of spec, replace as necessary.

Symptom: Running out of adjustment travel on the jam nut (lower) side of the cable adjuster.





- **Cause:** Possible stretched (worn out) cable, or possible incorrect clutch pack configuration.
- **Consequences:** Possibly having too much Free Play Gain and no more room for adjustment; you may have to move the jam nut to the adjustment (upper) side as well if there are not enough threads left for the jam nut on the cable adjuster below the case.
- **Solution:** If correct clutch pack configuration is confirmed, options include:
 1. Place both nuts on the upper side of the cable holder and tighten against each other.
 2. Purchase a new OE cable if yours is stretched too far to operate optimally.

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
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.	
2. With the engine still running, pull in the clutch lever, then shift the bike into 1 st gear. Slowly release the clutch lever. The bike should stay running and in place, or have a slight amount of forward creep.	
3. With the bike idling in first gear, slowly apply throttle to begin moving.	
4. 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 15 times.	 15 roll-on starts

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.*

5. Place the bike in **NEUTRAL** and recheck Free Play Gain. Continue to adjust the installed gap until the clutch lever is 1/8"-1/4" (3 mm-6 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.

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.

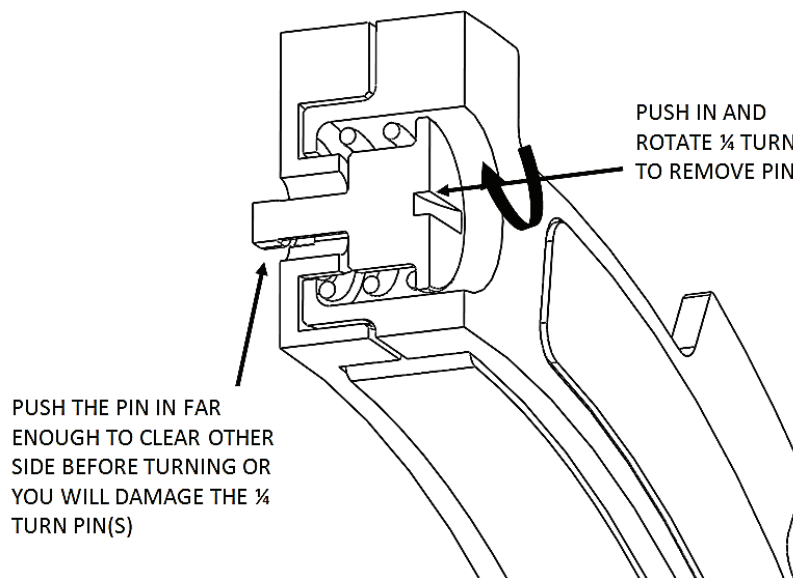
You can tune the engagement RPM of the EXP disk by changing the spring configuration. The EXP disk comes set with the recommended “**Medium**” setting from Rekluse.

See the following chart for settings. Use the following steps to change the springs. It is **NOT necessary** to disassemble the EXP halves to change springs!

ENGAGEMENT SETTING	SPRING CONFIGURATION
Low	6 Red springs
Medium	3 Red & 3 Blue springs
High	6 Blue springs

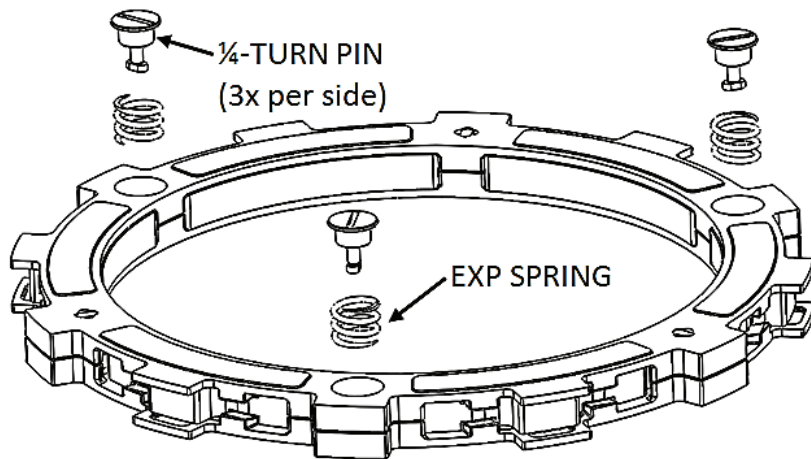
Changing the springs

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.

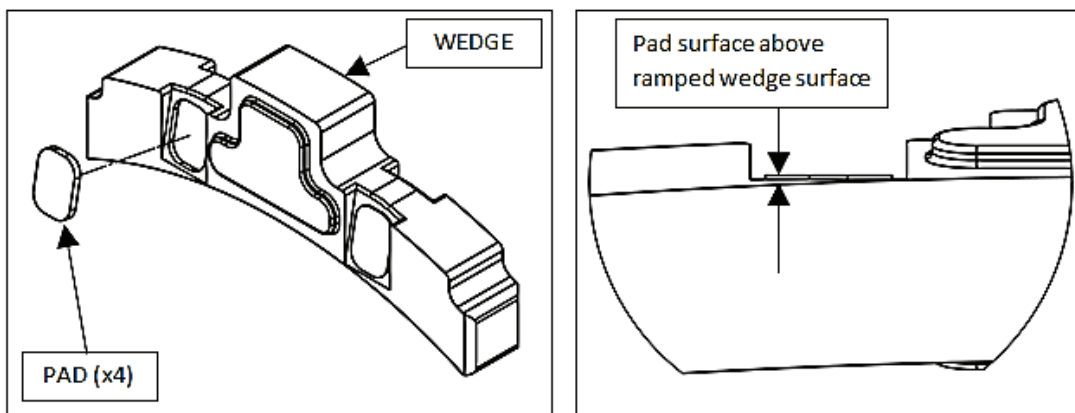
5. Push the turn pin in far enough to clear the base, then turn 90° and release the pin. The pin should sit almost flush with the EXP base.



6. Flip the EXP friction disk over, and repeat on the other side depending on engagement preference.

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.



MAINTENANCE

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

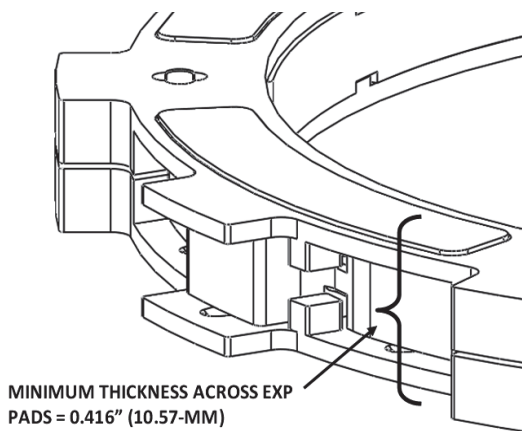
Clutch wear

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

- Maintain adequate Free Play Gain. Check before every ride and adjust as necessary.
- Repeat the break-in procedure anytime you replace any components of the EXP disk or frictions disks. Always soak new friction disks in fresh oil before installing.

Clutch parts

- Inspect all of your clutch parts at regular intervals for signs of wear or excessive heat, and replace components as necessary. Rekluse recommends inspecting after the first 10 hours of use, then every 20 hours after that.
- Measuring the clutch pack and/or the EXP disk can help determine if the components need replacing.
 - Friction disk minimum allowable thickness = **0.067" (1.73mm)**
 - Rekluse thick friction disk minimum allowable thickness = **0.117" (2.97mm)**
- Replace friction disks or drive plates if they are glazed and/or burnt. See the following sections for examples.



- Keep up with regular oil changes as per the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality.

Basket

- Inspect the basket dampers and/or springs by checking the play between the ring gear and the basket. Replace the dampers/springs if you feel any play in the assembly.
- Inspect and replace basket sleeves if they appear to be notched from friction disks. Rekluse recommends replacing them every 25 hours for abusive riding/racing, every 50 hours for moderate riding, or every time friction disks are replaced.

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.**

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

LEVER SAFETY STRAPS

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

These straps are intended to reduce the risk of injury or damage that may occur from the bike rolling or launching unexpectedly with or without a rider. Use the lever safety straps every time you park or leave the bike. **Refer to the Safety Information sheet for more information.**

1. Pull the lever tight against the handlebar.
2. Wrap the Velcro safety strap around the lever and handlebar, pull it tight, then fasten it.



Clutch Lever Strap: to prevent unwanted launching.



Brake Lever Strap: for use as a parking brake.

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

REKLUSE



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.

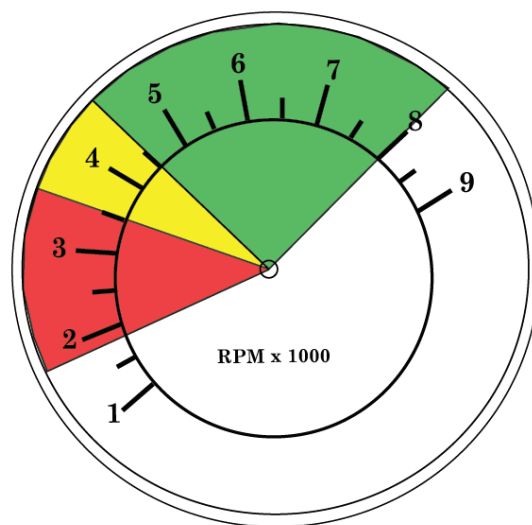
2. Downshifting:

- 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.

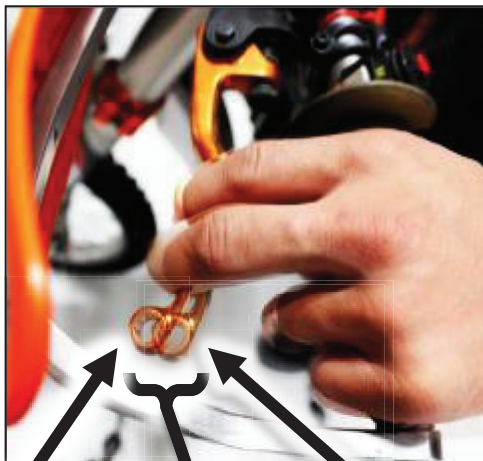
- a) Before you begin checking Free Play Gain, place the bike in **NEUTRAL**, start the engine and let it warm up for 2-3 minutes to idle down and warm the engine oil.
- b) Stretch the included rubber band between your thumbs, then place the top end of the rubber band on the outer end of the left handlebar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



Lever with slack"
removed

Lever position around
5,000 RPM

Free Play Gain
1/4"-3/8" (6 mm-9 mm)

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.

