



READ ME FIRST

Doc ID: 193-710A
Doc Rev: 091517

You must properly install, break-in and maintain your clutch components. There are several crucial steps that must be understood and performed by all clutch installers, vehicle operators and owners to ensure your clutch will function properly.

⚠ WARNING

To avoid serious injury or death:

- Read and follow included Safety Information before using this product.
- Read and follow included Installation Guide and/or User's Guide to ensure proper installation maintenance and tuning of the product.
- Only a qualified mechanic should install this product.
- If you are installing this product for a customer, be sure to direct them to all the product documentation including the safety information before returning the vehicle to them for use.

See installation videos online at www.rekluse.com/support/videos or the included installation manual for directions.

Refer to the Troubleshooting section in the installation manual for tips on resolving any performance issues.

REKLUSE MOTOR SPORTS

The Rekluse EXP Kit for BMW & Husqvarna
Single-Cylinder 650cc Models

INSTALLATION & USER'S GUIDE

Doc ID: 191-6307A
Doc Rev: 040919

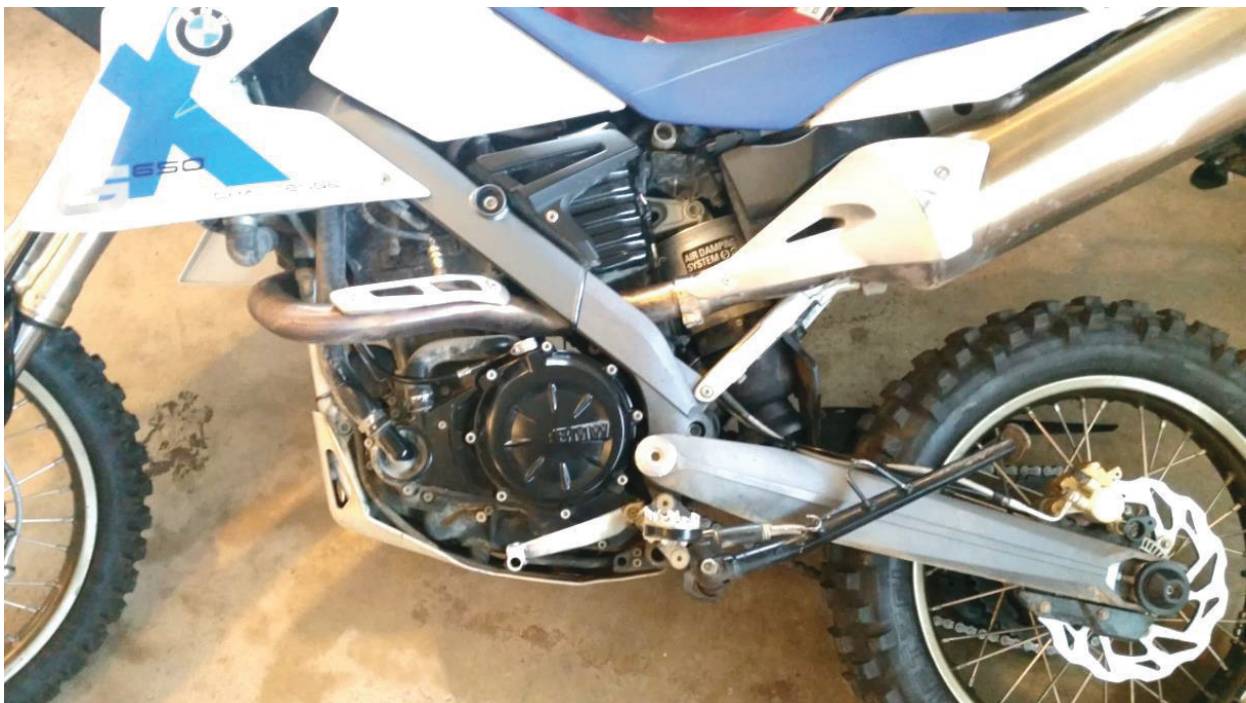
OVERVIEW

This kit replaces the OEM clutch pack with a Rekluse-designed clutch pack designed for optimal operation specific to your bike.

NOTE: Depending on your specific bike model, one of two potential clutch pack configurations has been provided in your kit. These configurations are required because of the differences in the OEM clutch designs between the two bike types. The two options are as follows:

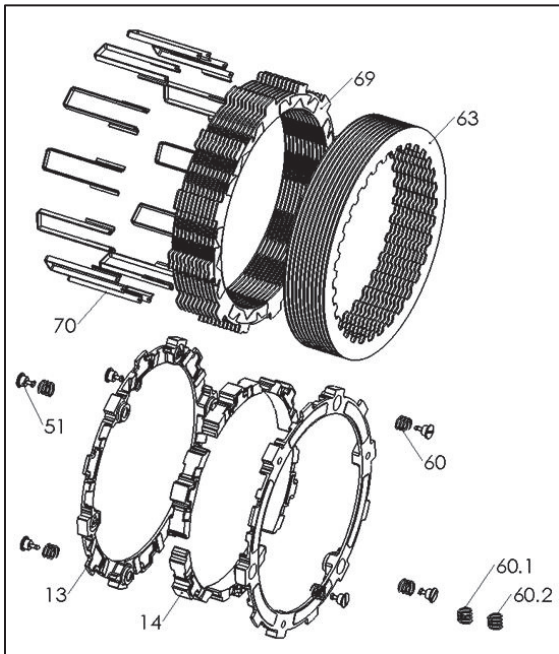
- 2007 BMW G650 X-Challenge, X-Country, and X-Moto (OEM hub has 30 teeth)
- 2008 and newer BMW all G650 models, & 2013-2014 Husqvarna TR650 Terra/Strada models (OEM hub has 36 teeth)

Be sure to follow the specific instructions for your particular model.



INCLUDED PARTS

BMW 2007 X-MODELS



Item	Item Type	Qty
13	EXP Base *	2
14	Wedge Assembly *	6
51	Fastener - 1/4-Turn Pin *	6
60.X	EXP Adjustment Spring * (see EXP tuning options)	6
63	Drive Plate	9
69	TorqDrive™ Friction Disk	9
70	Basket Lining Sleeve	12

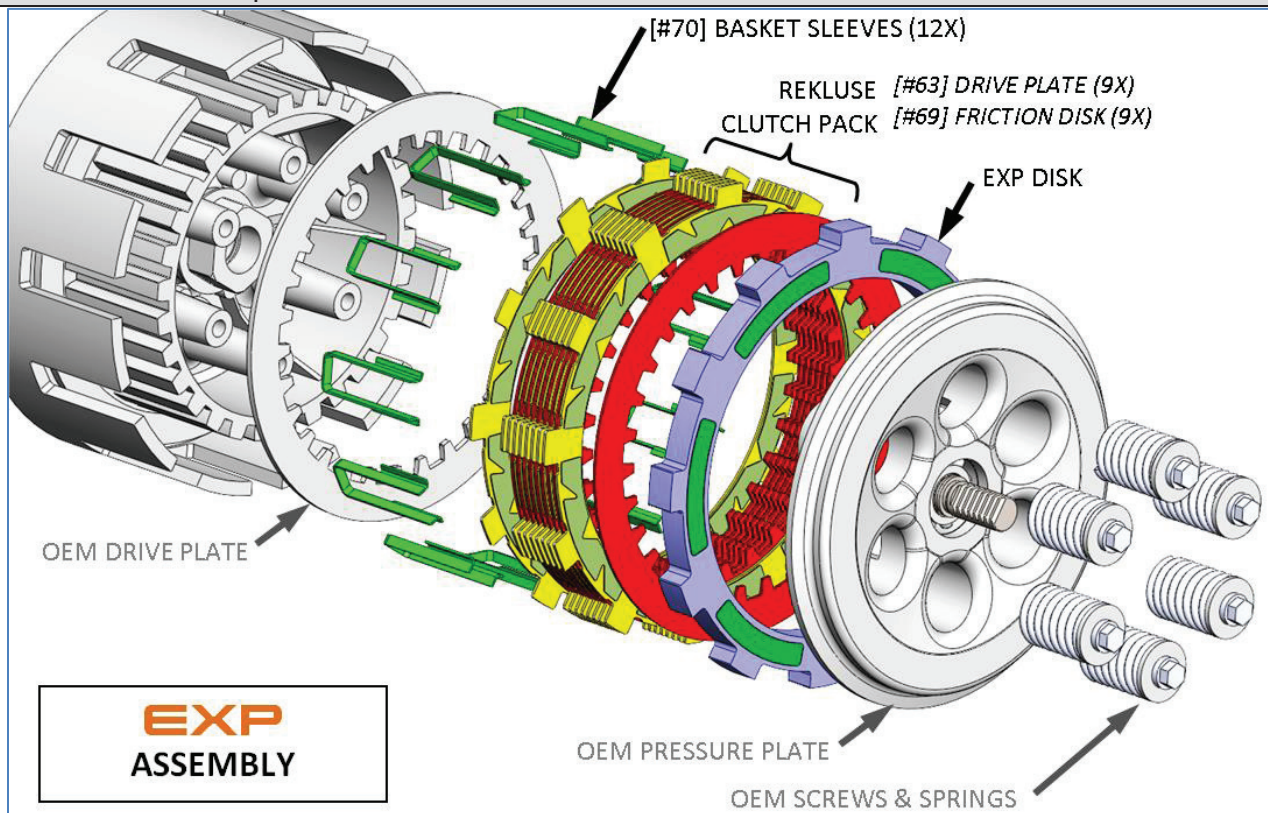
* Denotes parts assembled as part of EXP disk assembly

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

ASSEMBLY OVERVIEW

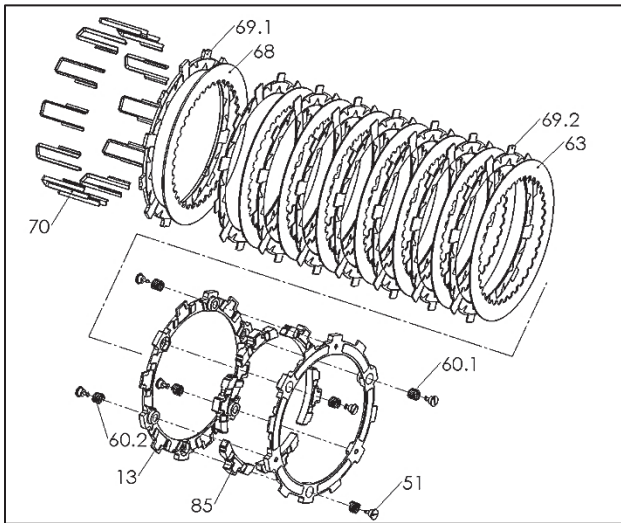
BMW 2007 X-MODELS

NOTE: One OEM drive plate will be reused; it will be the first disk installed with the Rekluse kit.



INCLUDED PARTS

BMW 2008+ MODELS & HUSQVARNA TR650 TERRA / STRADA MODELS



Item	Item Type	Qty
13	EXP Base *	2
51	Fastener - 1/4-Turn Pin *	6
60.X	EXP Adjustment Spring * (see EXP tuning options)	6
63	Drive Plate (.040" thick)	7
68	Drive Plate (.060" thick)	8
69.1	TorqDrive™ Thick Friction Disk	1
69.2	TorqDrive™ Thin Friction Disk	7
70	Basket Lining Sleeve	12
85	Wedge Assembly *	6

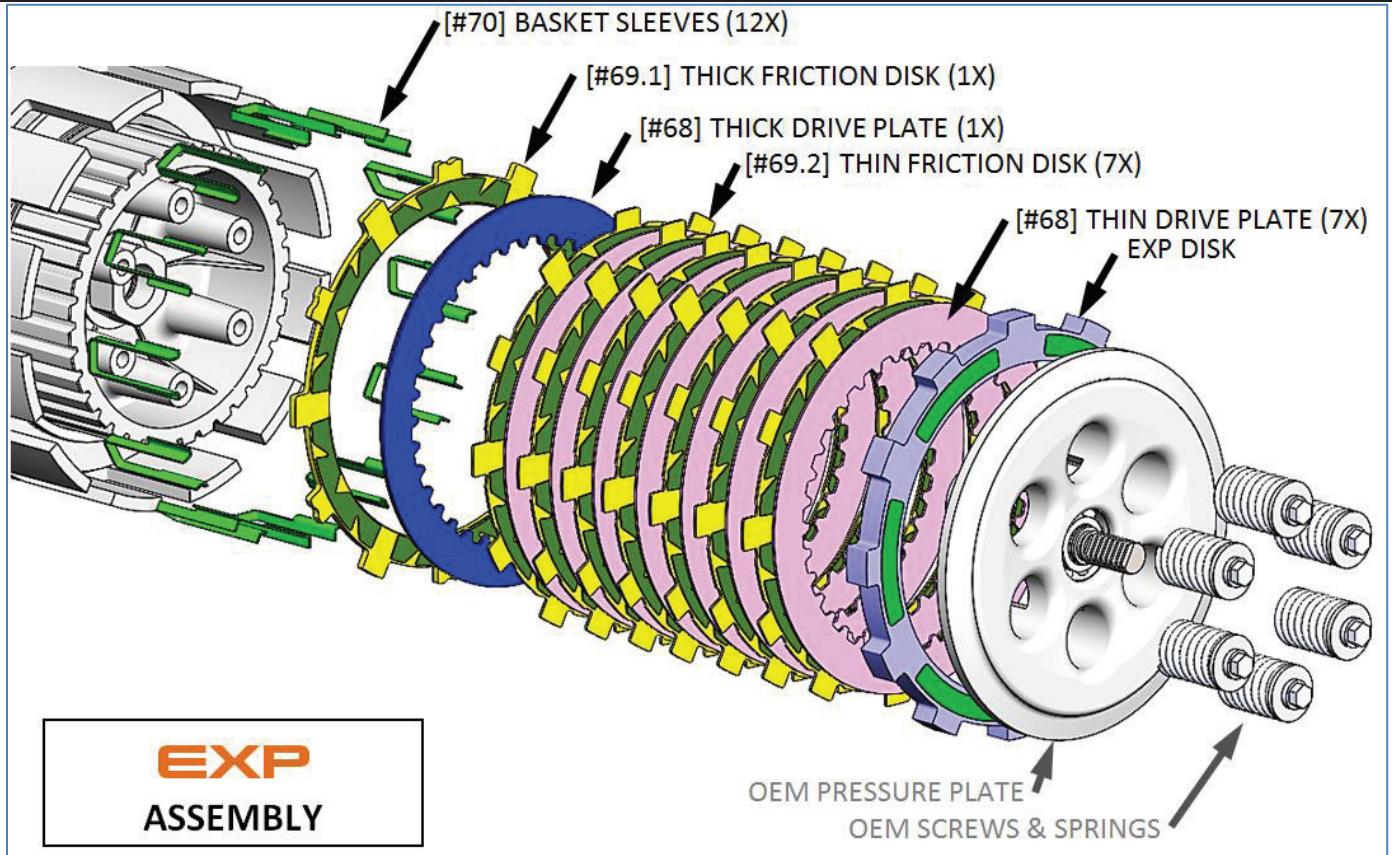
* Denotes parts assembled as part of EXP disk assembly

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

ASSEMBLY OVERVIEW

BMW 2008+ MODELS & HUSQVARNA TR650 TERRA / STRADA MODELS

NOTE: No OEM clutch plates will be reused; all necessary clutch plates are included with this Rekluse kit.



INSIDE THIS DOCUMENT

- INSTALLATION
- SETTING THE INSTALLED GAP
- CHECKING FREE PLAY GAIN
- BREAK-IN
- CLUTCH PACK ADJUSTMENT
- EXP TUNING OPTIONS & ENGAGEMENT SETTINGS
- MAINTENANCE

INSTALLATION TIPS

- Watch the “EXP Auto-Clutch Installation Video” by following this QR code or visiting rekluse.com/videos.
- Read this entire document before performing any steps, so you will know what to expect.
- Be sure to wear proper eye protection.
- It is recommended to replace any gaskets that you may remove during installation.
- Laying the bike on its side allows for easy clutch access and eliminates the need to drain oil
- For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements. Rekluse offers Factory Formulated Oil™ developed specifically for Rekluse products. Rekluse Factory Formulated Oil is a perfect complement to any OEM or aftermarket wet clutch. Visit www.rekluse.com to learn more.
- When reinstalling components, use the torque specifications found in your OEM service manual



USE OF OTHER AFTERMARKET PRODUCTS

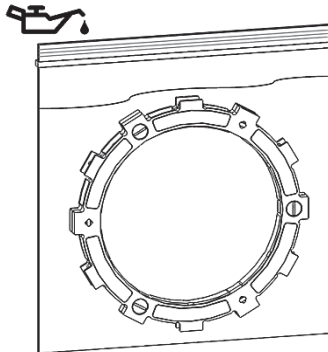
- If your bike is equipped with an aftermarket clutch cable, you may find that the adjustment range in your cable is different than depicted in this manual.
- Bar risers may limit the travel necessary for your cable adjustment to achieve the necessary installed gap.
- If you prefer the use of an aftermarket 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.

TOOLS NEEDED

- Metric socket set
- Channel-Lock style pliers
- 2x Dental Pick Tools
- Metric Allen key set
- Torque wrench (in-lb, or N-m)

BIKE PREP & DISASSEMBLY

1. Soak the EXP disk and all the Rekluse friction disks in engine oil for at least 5 minutes.



2. To avoid draining the oil, lay the motorcycle on its right side. Or, you can stand the bike vertically on its center stand and drain the oil.

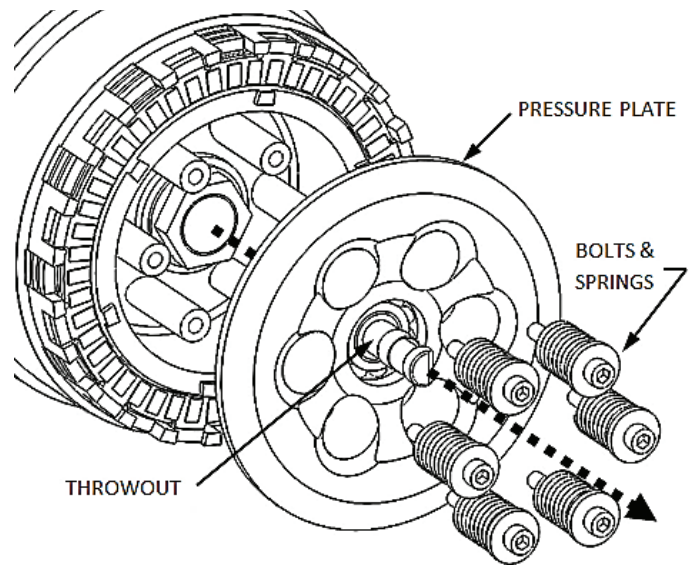
3. Loosen all clutch cable tension and detach the cable end from the actuator arm.



4. Remove the clutch cover bolts and clutch cover.

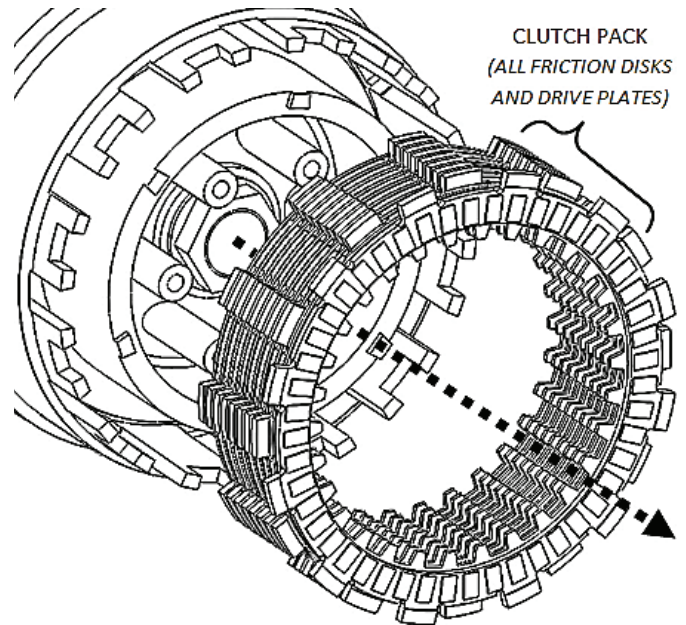


5. Remove the OEM springs followed by the pressure plate and throwout:



6. Remove the entire OEM clutch pack (all plates).

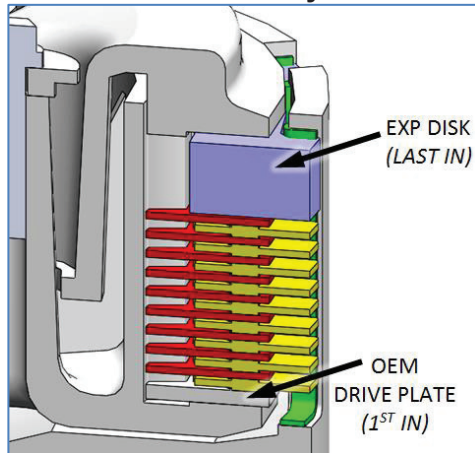
NOTE: You will reuse 1x OEM drive plate.
All other OEM clutch plates WILL NOT be reused.



PACK INSTALLATION

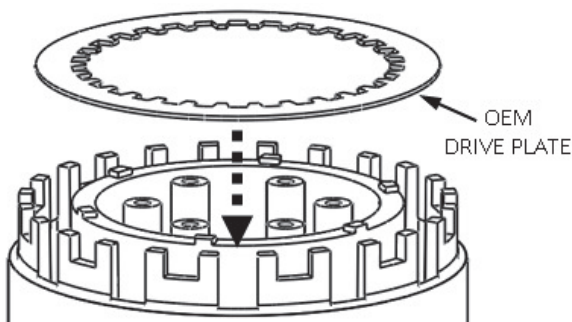
BMW 2007 X-MODELS

Clutch Pack Cutaway Overview

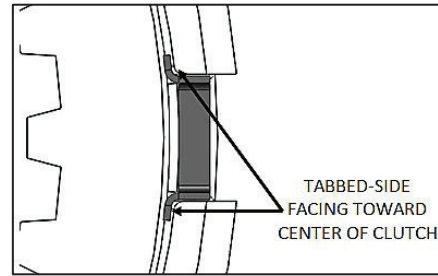
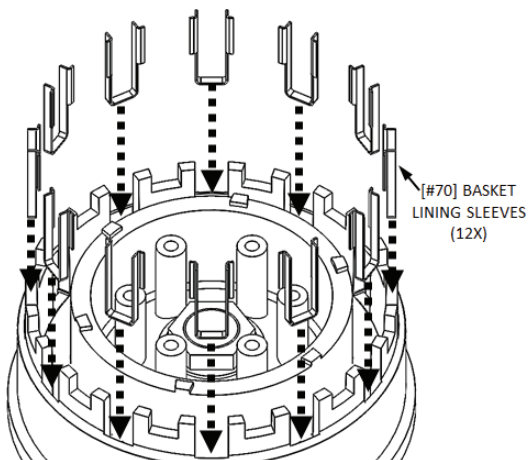


- A.** The first disk into your clutch should be one of the OEM drive plates removed in the last step. It is easiest to reuse the OEM drive plate that was at the bottom of the clutch pack when you first disassembled it.

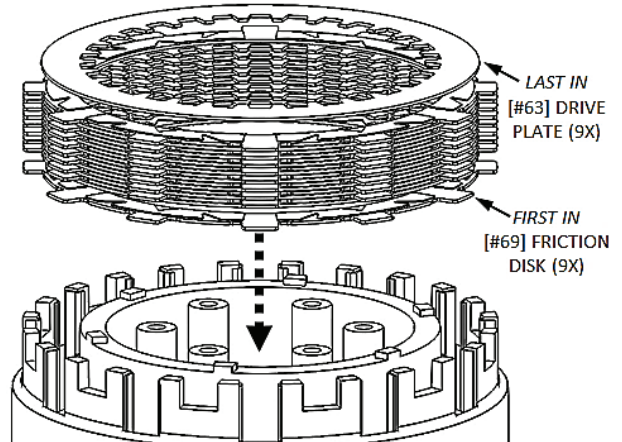
Install this OEM drive plate first.



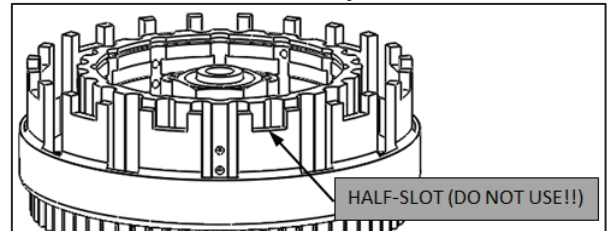
- B.** Install the 12x Basket Sleeves [#70] into the tang slots of the basket, pushing each down until it seats in the bottom of each basket slot.



- C.** Install the Rekluse clutch pack as shown, starting with a thin friction disk [#69] and alternating drive plates [#63] with friction disks.

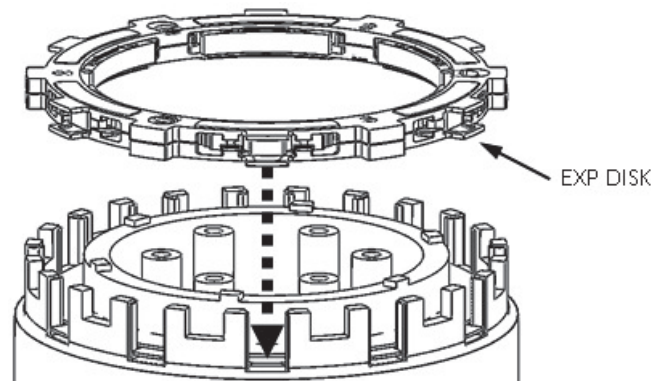


Use only the full tang slots. Never install any disks into the half-slots, if your basket has them.



- D.** Install the Rekluse EXP disk last.

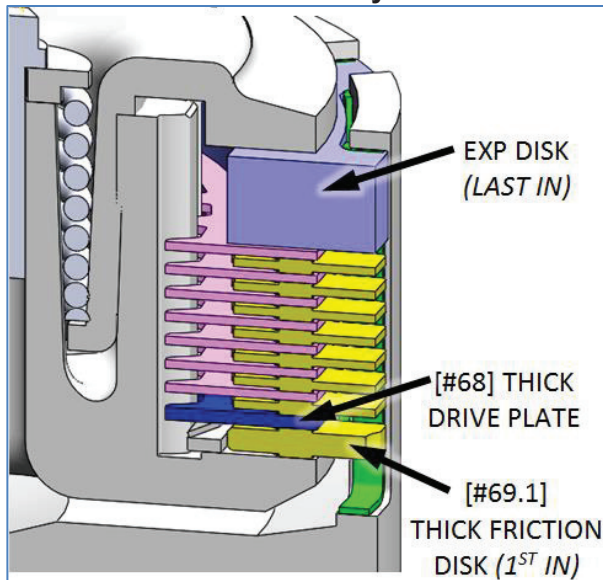
The EXP disk is not directional; it can be installed in any orientation.



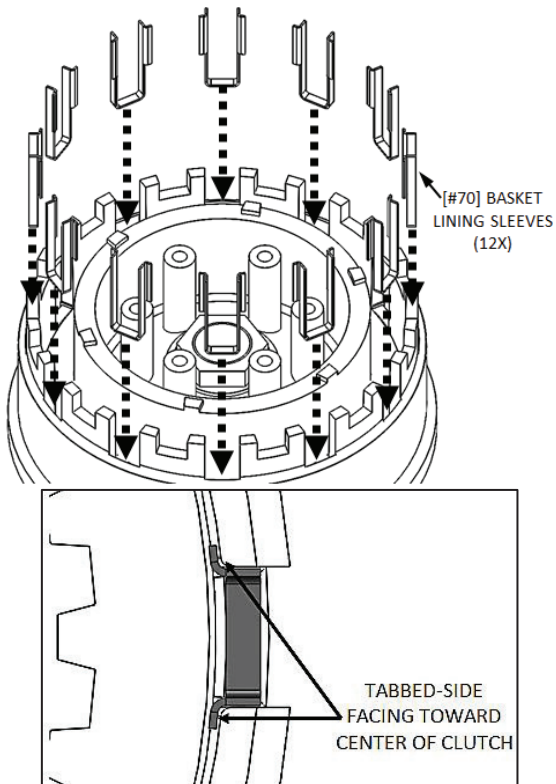
PACK INSTALLATION

BMW 2008+ G650 MODELS, & HUSQVARNA TR650 MODELS

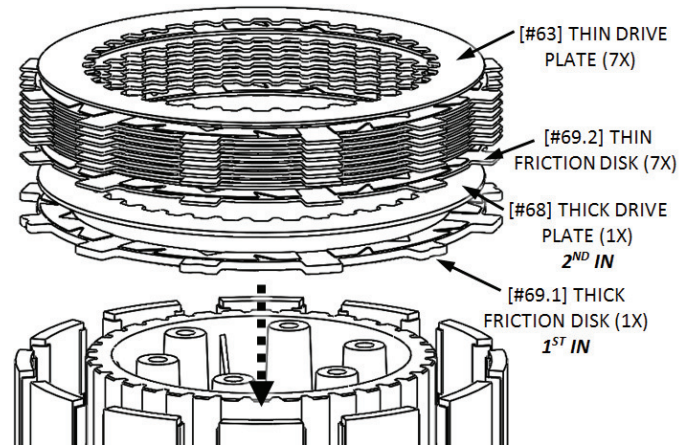
Clutch Pack Cutaway Overview



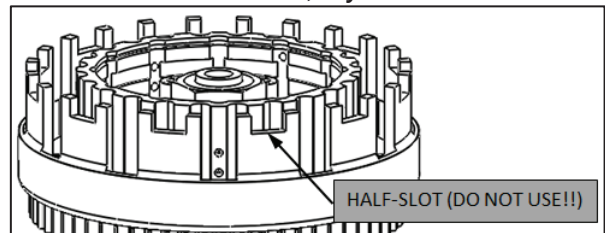
- A. Install the 12x Basket Sleeves [#70] into the tang slots of the basket, pushing each down in until it seats in the bottom of each basket slot.



- B. Install the Rekluse clutch pack as shown, starting with the thick friction disk [#69.1] followed by the thick drive plate [#68] provided, then alternating between thin friction disks [#69.2] and thin drive plates [#63] so that the last disk in is a thin drive plate [#63].

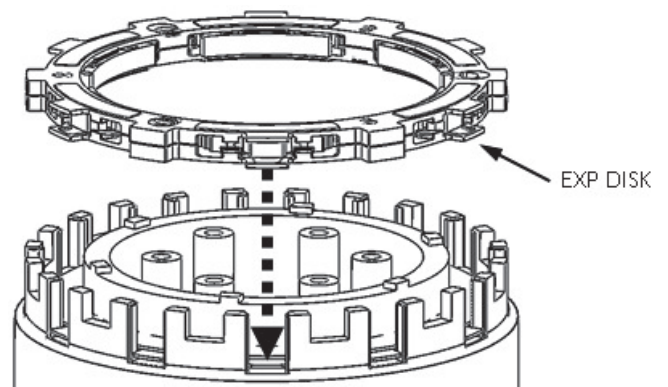


Use only the full tang slots. Never install any disks into the half-slots, if your basket has them.



- C. Install the Rekluse EXP disk last.

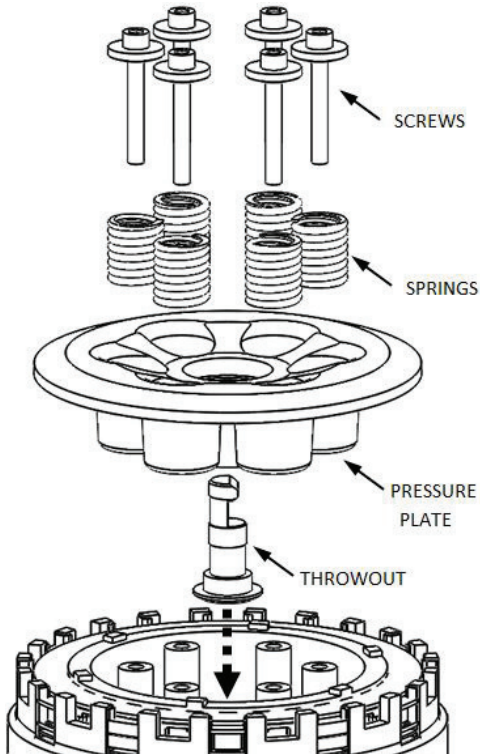
The EXP disk is not directional; it can be installed in any orientation.



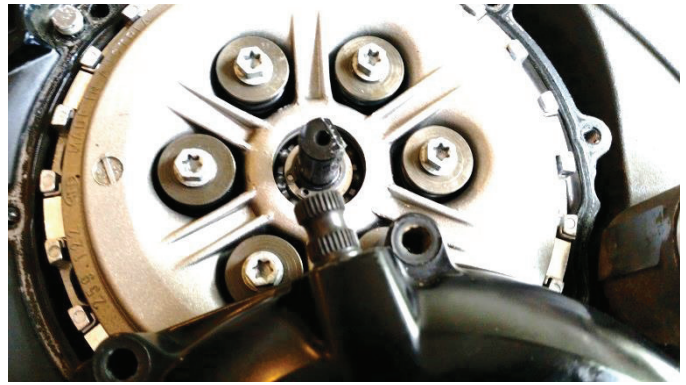
FINAL INSTALLATION

ALL MODELS

7. Reinstall the OEM throwout and pressure plate, followed by the springs and screws. Torque to OEM spec.



8. Reinstall the clutch cover, ensuring that the throwout teeth are aligned correctly with the actuator mechanism in the clutch cover. Torque the cover bolts in a star pattern to OEM spec.



9. Before reattaching the clutch cable to the actuator arm, follow this procedure to ensure adequate cable travel and actuator arm angle during use:

NOTE: Because there is limited cable adjustment at the clutch perch on the handlebar, you will be performing the major adjustment at the actuator arm. In order to orient the actuator arm in the optimal position, it will be necessary to move its rotational position on the splined shaft.

- a. Remove the actuator arm from its splined shaft using an 8mm socket.
- b. Spin the splined shaft COUNTERCLOCKWISE until it stops (any further and it would start to lift the pressure plate).
- c. Locate the orientation of the arm on the shaft that situates the arm nearest to 90 degrees relative to the cable.
- d. Now orient the arm one spline-tooth CLOCKWISE, past this 90 degree orientation, and index the arm back onto the shaft. The arm's orientation should resemble that in this photo:



10. Ensure that the cable adjuster at the lever perch is bottomed out, meaning that it is in the position that would provide the least amount of cable tension.



11. Use channel-lock pliers to reattach the clutch cable to the actuator arm. The cable should be tight at this point.



NOTE: After you complete the steps in the next section (setting and verifying the installed gap), the actuator arm will rest at nearly 90 degrees to the cable, as shown here.



12. Stand the bike up, supporting it on its kickstand or center stand.

INSTALLED GAP SETTING

DEFINITION: “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; it must be set correctly for optimal performance.

In this bike model, the installed gap is set by lifting the pressure plate a pre-set amount using cable tension. By performing the steps in the previous section—advancing the actuator arm one tooth from its stock position—you’ve completed the main adjustment. Next, you will fine-tune the adjustment based on free play gain (explained in the next section) using the threaded cable tension adjuster at the perch on the handlebar.



NOTICE

Failure to check and verify Free Play Gain can cause failure or damage to this product. Setting the correct gap is critical for clutch performance.

CHECKING LEVER FREE PLAY GAIN

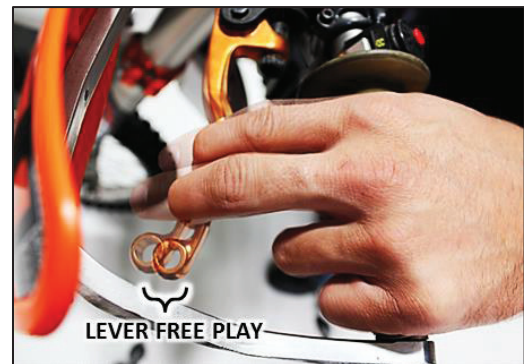
WARNING

Always make sure 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.

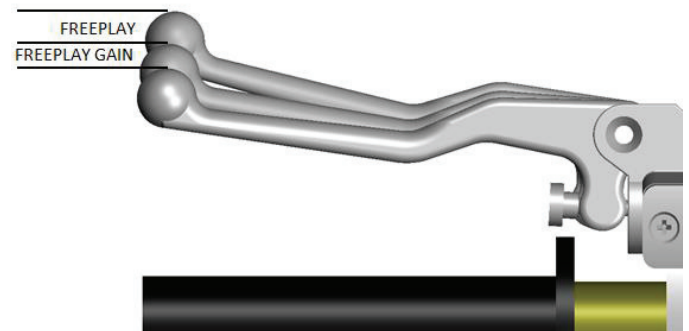
NOTE: Before performing this step, please visit our website at rekluse.com/support to view the TECH VIDEO entitled “How to Check Free Play Gain”.



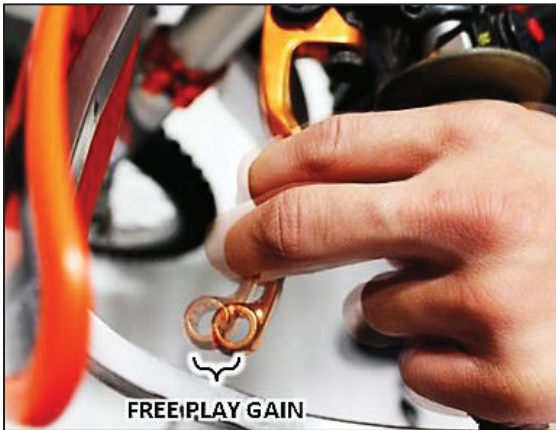
“Lever Free Play” is essentially the “slack” in the clutch lever before it starts actuating the clutch. Applying a light finger pressure will take up this slack. *With this clutch kit installed, there will be NO lever free play, as the cable is always under tension.*



“Free Play Gain” is the increase of lever free play as the auto-clutch engages. This happens when the RPM increase from idle through around 5,000 RPM. Free Play Gain is caused by the expansion of the EXP disk which lifts the pressure plate away from the throwout assembly.



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



The following steps explain two ways to check Free Play Gain. One will use the rubber band that has been included in the clutch kit and one explains using your hand, which you will perform before every ride.

Place the bike in neutral, start the engine and let it warm up for 2-3 minutes.

NOTICE

Failure to check and verify Free Play Gain can cause failure or damage to this product. Setting the correct gap is critical for clutch performance.

WARNING

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.

Rubber Band Method:

It is recommended that you use this method first to find your Free Play Gain so you can see what it is. Then, check it by hand as well so that you can effectively and comfortably check free play gain every time you ride.

Wrap the included rubber band around the outer end of the handlebar grip and attach it to the ball end of the clutch lever.



With the bike at idle in neutral, quickly blip (rev) the engine to at least 5,000 RPM and let it return to idle. **The clutch lever should move in about 1/8" (3mm) toward the handlebar as you rev the engine.**

NOTE: If you are not getting the correct lever movement, see the "Free Play Gain Troubleshooting Guide" on the next page.

Hand Method:

Free play gain should also be checked using your hand, as you will check it by hand before every ride. With the bike at idle, apply enough pressure to the lever to take up the initial freeplay (slack) shown in the photos on the previous page. While continuing to apply light pressure, rev the engine to at least 5,000 RPM.

The clutch lever should move in 1/8" (3mm) under your finger pressure as you rev the engine and the auto-clutch engages.



BREAK – IN

Follow these procedures for a new installation and any time new friction disks or EXP bases or wedges are installed.

1. Rev cycles: 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 running, pull in the clutch lever and click the bike into gear. Slowly release the clutch lever. The bike should stay in place, perhaps with a slight amount of forward creep.
3. Now that the bike is idling in first gear, slowly apply throttle to begin moving. To break in the clutch components, perform the following roll-on starts in 1st and 2nd gear without using the clutch lever: In 1st gear, accelerate moderately to approximately 5,000 RPMs and come to a stop—repeat this 5 times. Next, starting in 2nd gear, accelerate moderately to approximately 5,000 RPMs then come to a stop—repeat this 5 times.

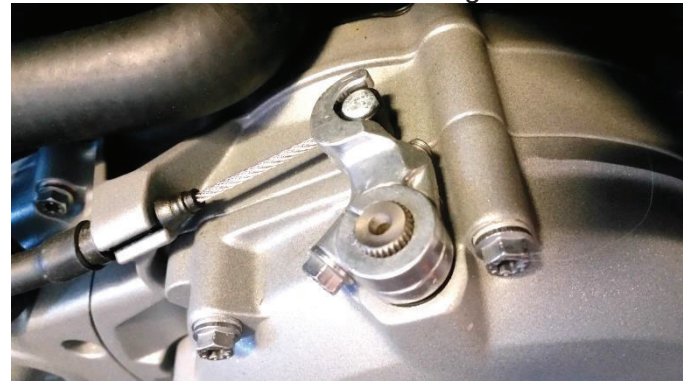
4. Now that the EXP is broken-in and the clutch is warm, re-check free play gain at your clutch lever and adjust if necessary. Your clutch pack will expand with heat, so final adjustments should be made when the bike is warm. Now you are ready to ride!

WARNING: DO NOT RIDE WITHOUT SUFFICIENT FREE PLAY GAIN!

Checking free play gain is easy and takes less than a minute to perform. For optimum performance and longevity, check free play gain when the bike is warm at the start of every ride.

NO FREE PLAY GAIN MEANS THE CLUTCH WILL SLIP!

5. When optimal free play gain—and therefore the optimal installed gap—is achieved, it is important to ensure that the actuator arm is close to 90 degrees relative to the cable, as shown below. This ensures optimal mechanical performance of the cable system, and will keep the actuator arm from contacting the cover.



CLUTCH LEVER STICKER

Install the provided warning label on the clutch lever so that the writing is visible to the rider as shown.



FREE PLAY GAIN

TROUBLESHOOTING

Each adjustment should be done in small increments (one turn of the threaded adjuster—at the lever perch—at a time). After each adjustment, repeat the rev-cycle until optimal free play gain is achieved.

NOTE:

If you are unable to obtain the correct free play gain or you are nearly out of cable adjustment after performing the steps below, 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.

Symptom:

- Clutch lever moves in too far (too much free play gain)
- Clutch has excessive drag or it stalls
- It is difficult to fully override the clutch with the lever

Answer: Installed Gap is too small

Solution: TIGHTEN THE CABLE by turning the threaded perch adjuster to ADD tension to the cable, thus increasing the Installed Gap.

If the threaded perch adjuster is maxed-out, meaning you have threaded it out as far as is desirable while maintaining at least 3 threads engaged with the perch, and yet there is still too much free play gain, then repeat **steps 9-10** on **page 6**, reorienting the actuator arm one more tooth CLOCKWISE on the actuator shaft. Do this until the desired installed gap is achieved with the perch cable adjuster in a relatively centered position.

Symptom:

- Clutch lever does not move enough or does not move at all (too little free play gain)
- Clutch is slipping

Answer: Installed Gap is too large

Solution: LOOSEN THE CABLE by turning the threaded perch adjuster to reduce the cable tension, and thus reduce the Installed Gap.

CLUTCH NOISE & DRAG

Noise:

Although it is harmless, some bikes may have “squeal” or “chatter” coming from the clutch at idle or low RPM as it engages. Clutch squeal is caused by the clutch components vibrating as the clutch engages and can become more audible as the clutch gets hot. For bikes that tend to have clutch squeal or chatter here are some recommendations to reduce or eliminate it:

- **Oil:** For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements. Rekluse offers Factory Formulated Oil™ developed specifically for Rekluse products. Rekluse Factory Formulated Oil is a perfect complement to any OEM or aftermarket wet clutch. Visit www.rekluse.com to learn more.
- **Installed Gap:** Adjusting the Installed Gap will NOT affect clutch squeal or chatter

Drag:

Now that your clutch has more friction disks and therefore surfaces than stock, the clutch may drag more than stock, and possibly may drag more noticeably more when cold. If this occurs, warm the bike up by allowing it to idle for a few minutes before riding.

EXP TUNING OPTIONS

Included are spring options to tune the engagement RPM of the EXP friction disk. *The EXP friction disk comes set with the recommended "Medium" setting from Rekluse. See the following chart for settings.*

2007 BMW G650 X-models

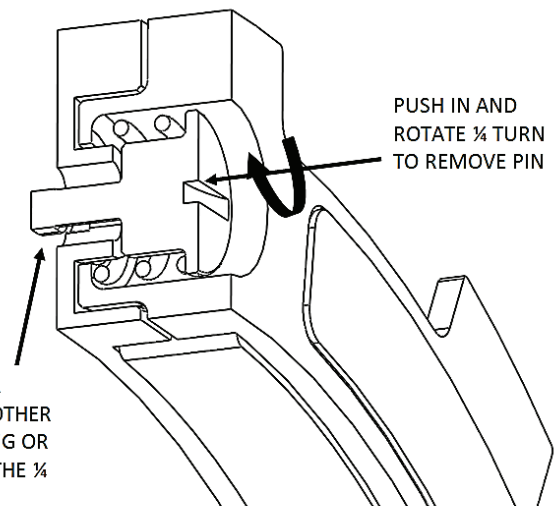
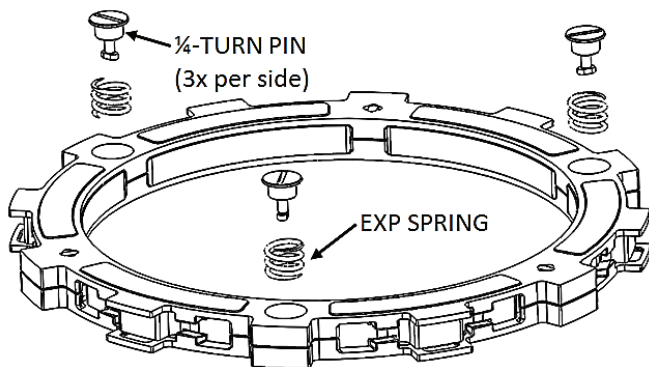
ENGAGEMENT SETTING	SPRING CONFIGURATION
Low	6 Red Springs
Medium	3 Red & 3 Blue Springs
High	6 Blue Springs

2008+ BMW G650 & Husqvarna TR650 models

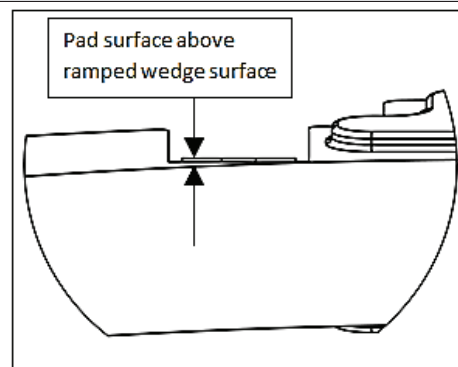
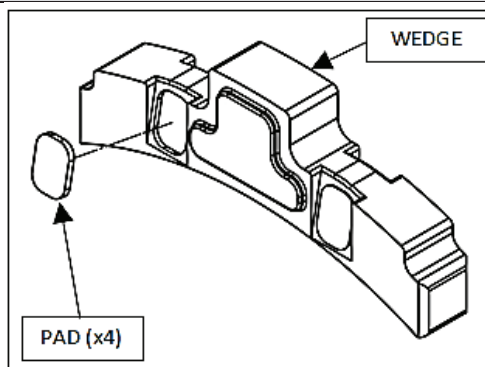
ENGAGEMENT SETTING	SPRING CONFIGURATION
Low	3 Red & 3 Blue Springs
Medium	6 Blue Springs
High	3 Blue & 3 Gold Springs

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.

It is **NOT necessary** to disassemble the EXP halves to change springs! To change springs, remove 3 of the ¼-turn pins from one side of the EXP, replace springs, and re-install ¼-turn pins. Next, flip the EXP disk over and repeat on the other side if necessary. To maintain even pressure when using two different color spring sets, install one color set of 3 on one side of the EXP and the remaining color set of 3 on the other side.

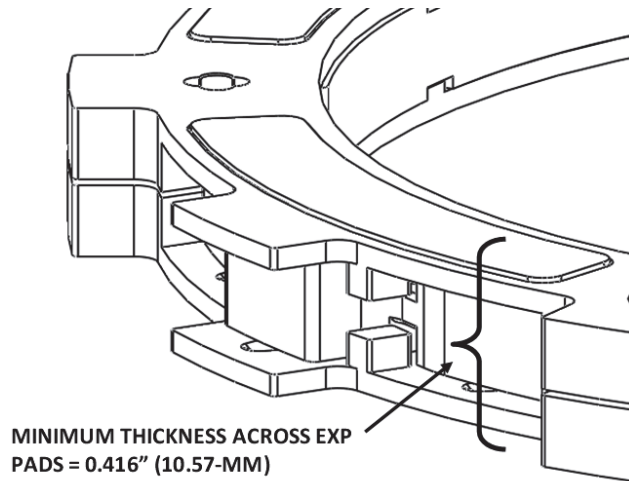


CAUTION: If you disassemble the EXP, bearing pads may fall out or be stuck to the ramp surfaces of the EXP bases. Take care to ensure all pads are correctly placed into wedge pockets using gentle pressure to avoid damage to the pad surfaces before reassembling the EXP. Properly seated pads will be secured in place once the EXP is reassembled. Operating the clutch without the pads in place will cause part damage or failure.



MAINTENANCE

- Maintain adequate free play gain, checking before every ride and adjusting if necessary.
- Keep up with regular oil changes as per the bike manufacturer's recommendations. Clutch function and longevity depends on oil quality.
- Inspect all of your clutch parts **every 40 hours** for signs of wear or excessive heat, and replace components as necessary.



- If you find yourself making frequent cable adjustments to fix free play gain, drag, or performance, it is likely time to replace worn clutch disks. Measure your friction disks and replace as necessary.
 - o Rekluse friction disk minimum allowable thickness = **0.068" (1.73mm)**

Excessive heat or clutch slip can cause premature clutch failure. Once extreme temperatures are reached, irreversible damage will occur. Inspect your clutch plates; if the friction disks look burnt or glazed, or the drive plates are warped, it is best to replace the entire clutch pack.

- Repeat the break-in procedure anytime the friction disks or EXP bases or wedges are replaced. Always soak friction disks or EXP bases in oil for at least 5 minutes before installing.

LEVER SAFETY STRAPS

This kit includes 2 Velcro-type straps to be used to secure both the clutch and front brake levers when the bike is parked. These 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 on it. Use the straps to pull both levers as tight to the bar as possible as shown in the photos every time you park or leave the motorcycle. Refer to the Safety Information document for more information.

Brake Lever Strap: for use as a parking brake.



Clutch Lever Strap: to prevent unwanted launching.



Rekluse auto-clutch-equipped motorcycles may roll back or move suddenly and unexpectedly and cause riders to lose control.

An auto-clutch-equipped motorcycle will move in gear with the engine off because the clutch is only engaged when engine RPM is greater than the engagement threshold of the auto-clutch. Engine compression will not prevent motorcycles from moving while in gear.

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.

To avoid death, serious injury, and/or property damage:

- Use the included brake lever strap to secure the front brake lever to the handlebar as a parking brake.
- Use the included clutch lever strap when the motorcycle is parked to secure the clutch lever to the handle bar, thereby completely disengaging the clutch.



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.

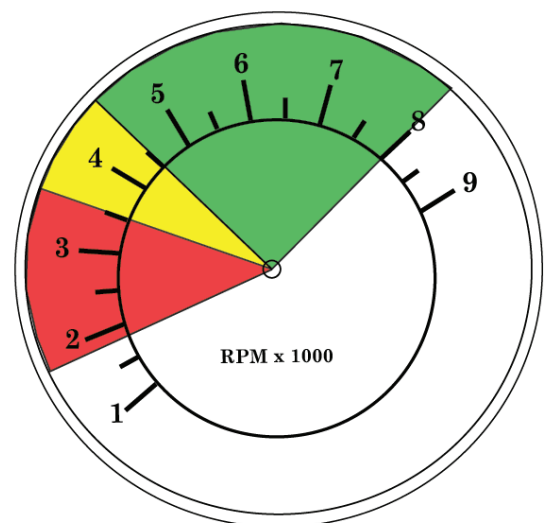
2. Downshifting:

- 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.

