



INSTALLATION & USER'S GUIDE

RadiusX
KTM 790

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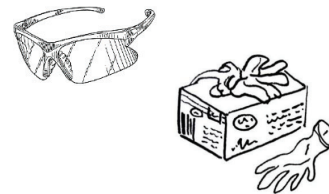
OVERVIEW

This kit replaces the OE (Original Equipment) or “stock” clutch pack with a Rekluse-designed high quality clutch pack designed specifically for your bike model. The following is a summary of what is replaced:

- All OE steel drive plates will be replaced with Rekluse drive plates
- All OE friction disks will be replaced with Rekluse TorqDrive® disks
- The OE pressure plate springs will be replaced.

INSTALLATION TIPS

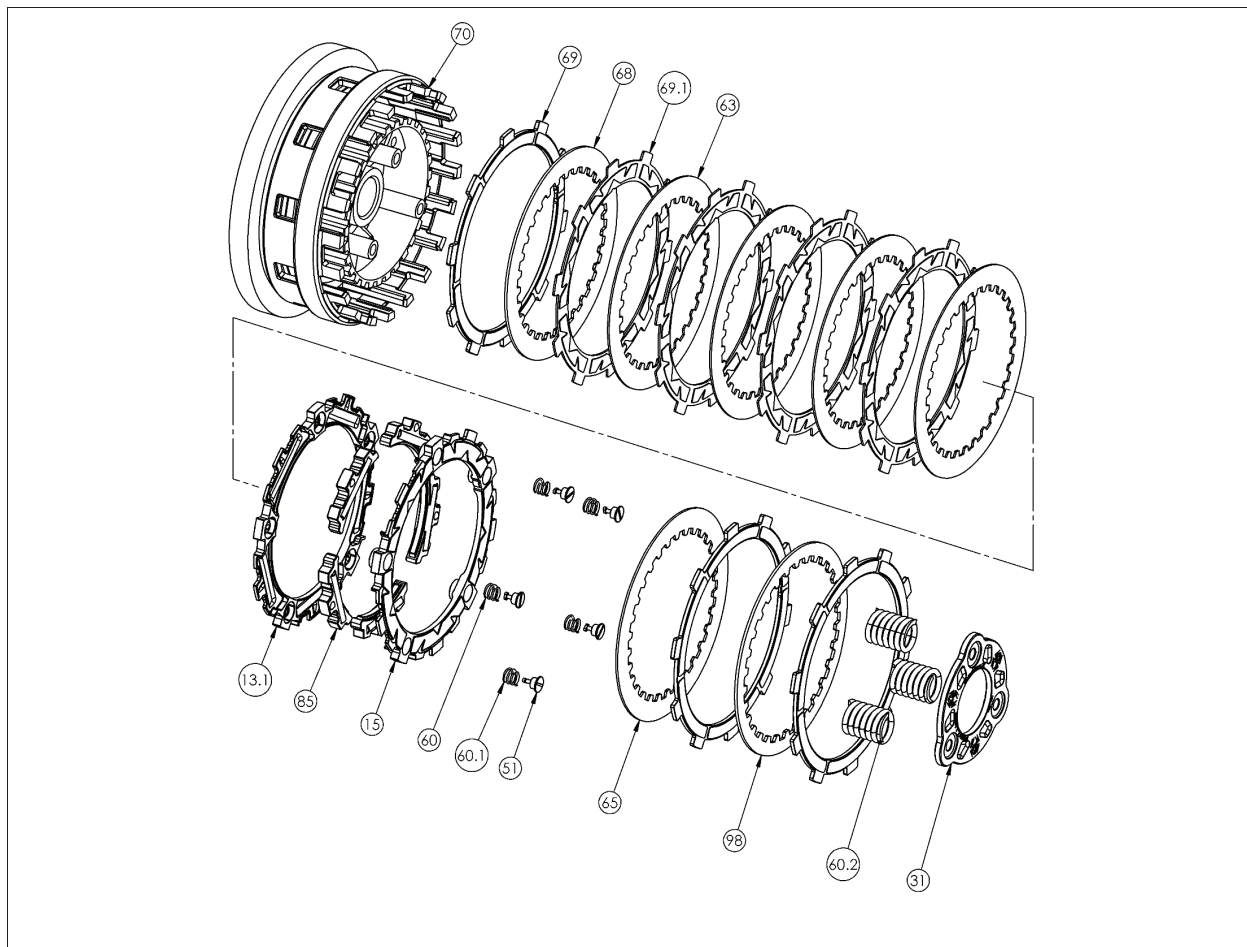
- Read the safety information sheet included with your kit.
- If you install this product for a customer or another person, instruct them to read the **Safety Information** document and the **Installation and User Guide** before operating the bike with the product.
- Protect eyes and skin – wear safety glasses and thin disposable work gloves. Work in a well ventilated area.
- Read this entire document before performing any steps.
- Use clean, quality oil that meets JASO-MA or JASO-MA2 transmission oil standards for best performance.
- 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.
- Use the torque values listed in the instructions. Otherwise, use the torque specifications found in your OE service manual.



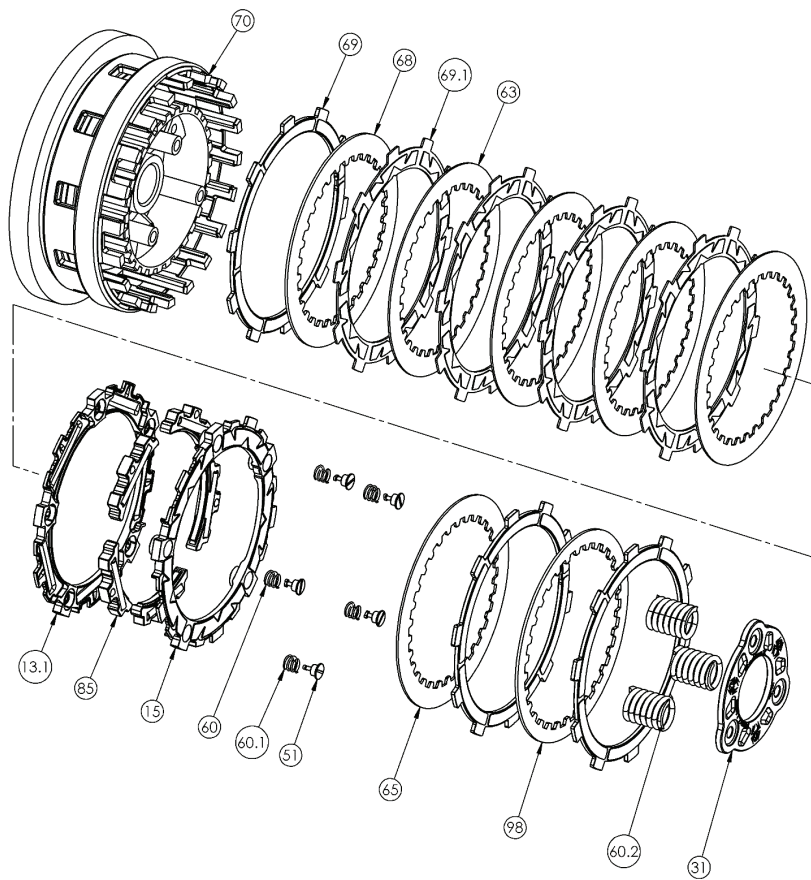
TOOLS NEEDED

- 8mm Wrench
- 12mm Wrench
- 8mm Socket
- 10mm Socket
- Pick Set
- Torque Wrench
- T30 Torx
- Flat Screwdriver

INCLUDED PARTS



Item	Description	Qty.
13	EXP Base - Male	1
13.1	EXP Base - Female	1
31	Spring Hold Down Plate	1
51	Fasteners - 1/4-Turn Pin (includes 2 extra)	5
60	EXP Adjustment Springs - Blue	2
60.1	EXP Adjustment Springs - Gold	3
60.2	Pressure Plate Springs	3
63	Steel drive plates - .040" (1.0 mm)	4
65	Steel drive plate - .048" (1.2 mm)	1
68	Steel drive plate - .060" (1.5 mm)	1
98	Steel drive plate - .065" (1.65 mm)	1
69	Friction Disk - Thick	3
69.1	Friction Disk - Thin	4



70	Basket Sleeves	10
85	EXP Wedges	5
Not Shown	EXP Adjustment Springs – Blue	3
Not Shown	EXP Adjustment Springs – Gold	2
Not Shown	EXP Adjustment Springs – Green (For Duke EXP Setting)	5
Not Shown	Velcro straps	2
Not Shown	Orange Free Play Gain rubber band	1
Not Shown	Clutch lever warning label	1

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

DISASSEMBLE THE CLUTCH

1. With the bike on the side stand, unhook the clutch cable from the throwout arm.

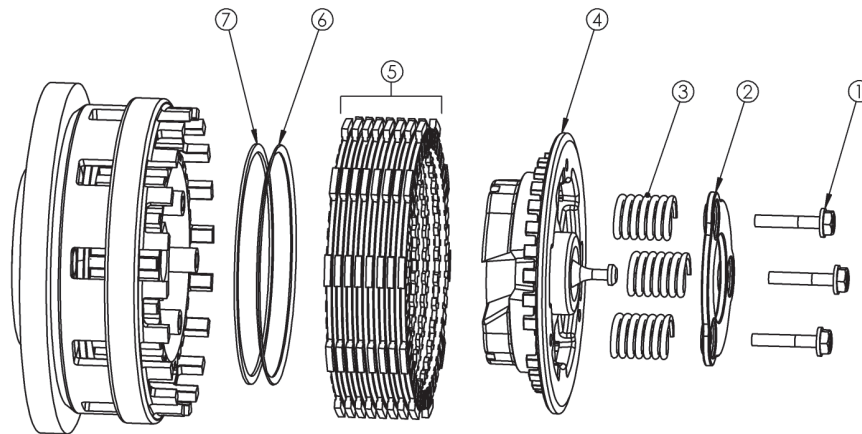
Note: The throwout arm is not splined to the throwout shaft. It can be either left in place or loosened and removed. The throwout arm will be re-indexed in the “Set The Installed Gap” section of the manual.

2. Use an 8mm socket to remove the clutch cable bracket.

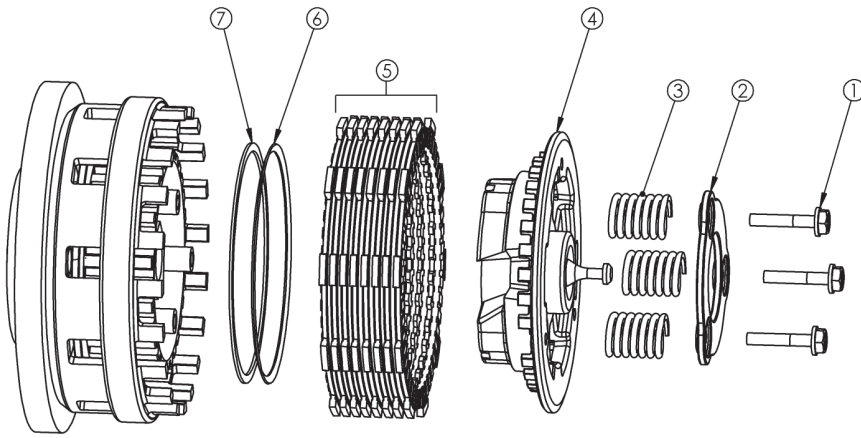
3. Adventure Models Only: Using the 8mm wrench, loosen and remove the clutch cover bolt under the rear brake master cylinder mount.

4. Using the 8mm socket, remove the remaining clutch cover bolts and the cover.

5. Use a 10 mm socket and pick set to remove the following OE parts:



1	Pressure plate bolts
2	Spring retaining plate
3	Pressure plate springs



4	Pressure Plate Assembly
5	OE Clutch Pack
6	Judder Spring (cupped)
7	Judder Seat (flat)

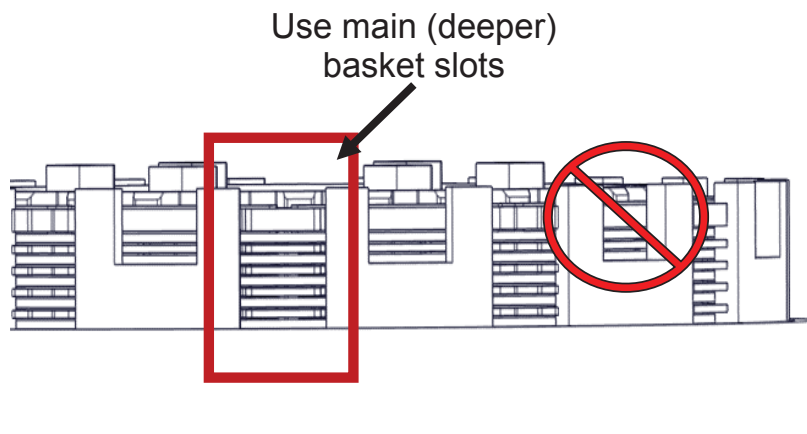
CLUTCH PACK INSTALLATION

Notes for installation

- ***** Attn 790 Duke Owners *****

790 Duke models require a different EXP spring setting than Adventure models. Refer to the Setup Sheet for Duke EXP spring settings.

- *Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.*
- *The OE basket has “half slots” at the top of the basket tangs. This Rekluse product requires the entire clutch pack be installed into the MAIN (deeper) basket slots. Installing the clutch pack into the “half slots” will cause performance issues. See the following picture for reference.*

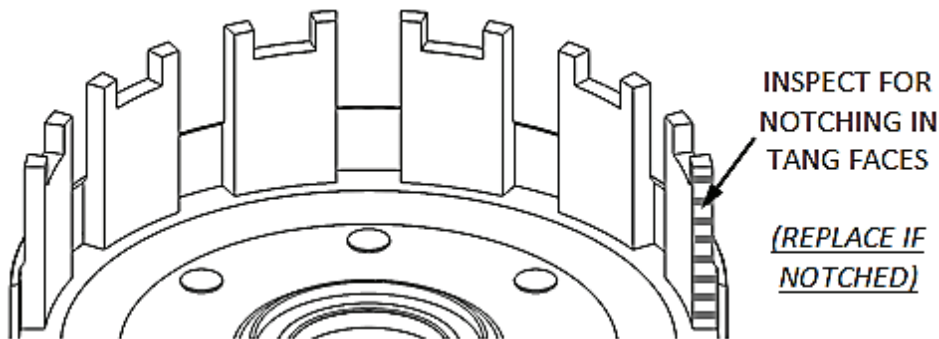


Clutch pack

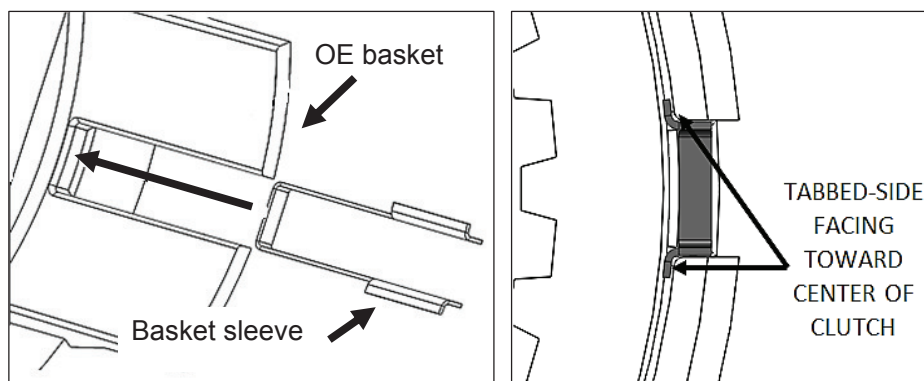
1. Soak the EXP disk and all friction disks in engine oil for 5 minutes. Make sure the EXP and friction disks are coated on both sides.
2. Inspect the clutch basket for notching. Do not install sleeves or use product with a notched basket. Notched basket tang faces can cause the sleeves to break. Do 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.



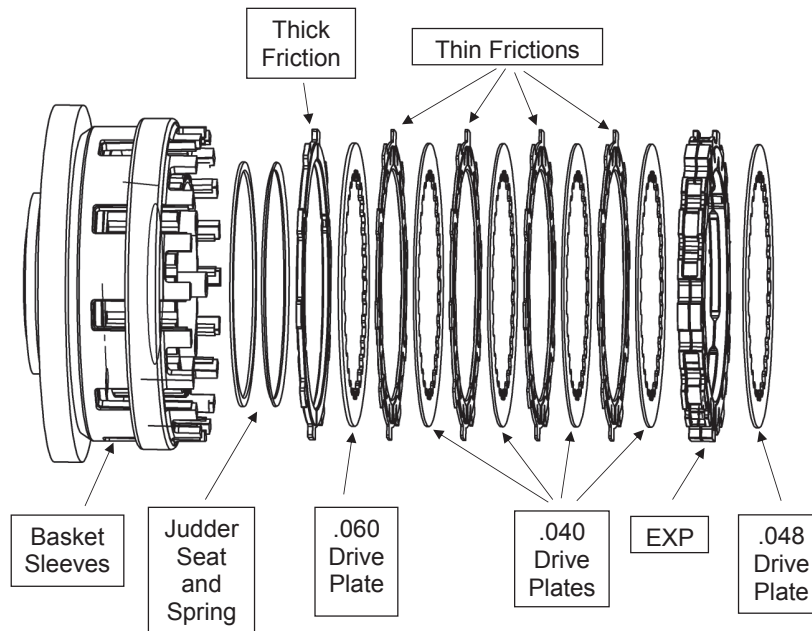
3. Install **ALL** the Rekluse basket sleeves into the basket slots. Make sure the sleeve tabs sit against the inside of the basket, then push the sleeves down until they contact the bottom of the tang slot. See pictures for reference.



NOTE: When seated in the basket slots, the sleeves will sit slightly below flush with the top of the basket tangs. This is normal.

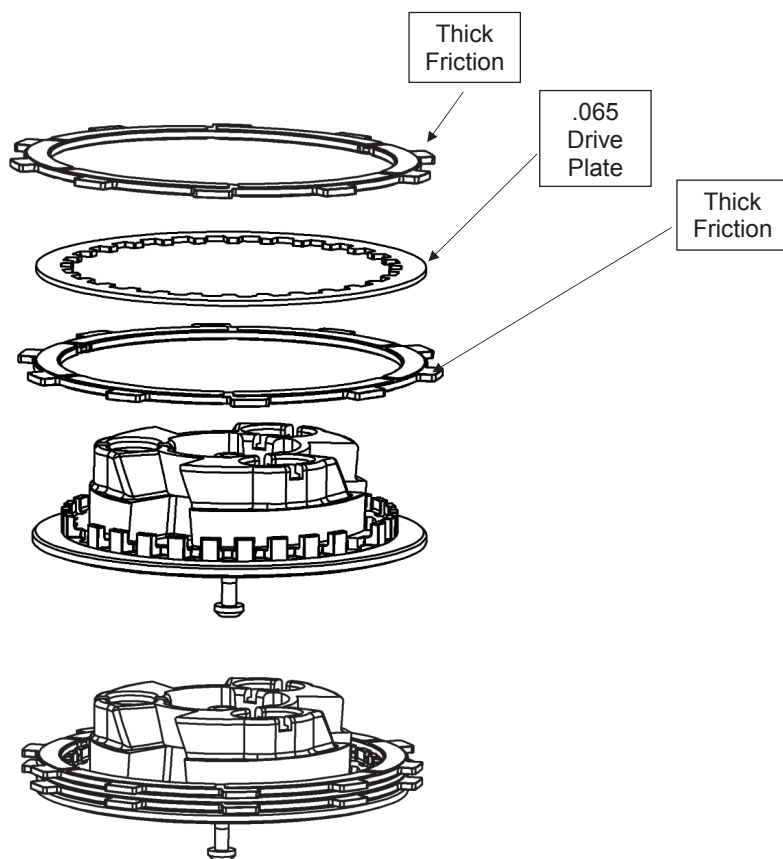
4. Install the judder seat and then the judder spring onto the inner hub. The cupped side of the spring should face outwards.
5. Over the judder, install one thick friction, then install the .060" (1.5mm) steel drive plate.
6. Install a thin friction disk, then install a .040" (1.0 mm) steel drive plate.
7. Continue to alternate three more thin friction disks with 3 more .040" (1.0 mm) steel drive plates.
8. On top of the last drive plate, install the EXP assembly.
9. Over the EXP, install the .048" drive plate.

Assembly so far:



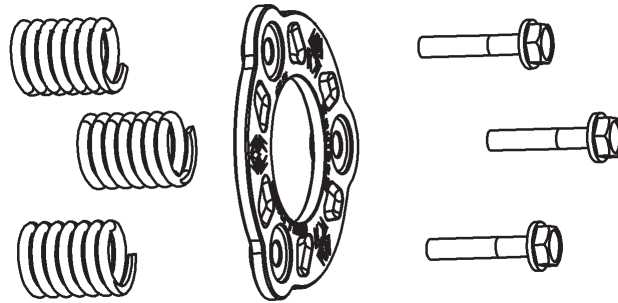
PRESSURE PLATE INSTALLATION

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. Finally, install the last thick friction disk onto the pressure plate.



4. 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. The friction on top of the drive plate can be used to hold the drive plate in place during installation. Note: A slight counterclockwise rotation will be required to index the pressure plate into the clutch assembly.

5. Install the Rekluse pressure plate springs, followed by the Rekluse spring hold down plate and the OE bolts.
6. Torque the bolts using the torque specifications found in your OE service manual.



7. Reinstall the clutch cover, then lightly tighten the cover bolts in a star pattern. Tighten bolts in small increments before torquing the cover bolts to OE specifications.
8. Reinstall the clutch cable bracket.
9. Reattach clutch cable to throwout 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 installed gap must be set correctly.

1. On the clutch perch (by the clutch lever), loosen the jam nut and completely **collapse the cable adjuster**, allowing for plenty of clutch cable and lever slack.



2. At the lower in-line cable adjuster, tighten the clutch cable tension to the point where there are **3-4 threads** showing outside the end jam nut.



3. Using a T30 Torx, loosen the clamping bolt on the throwout arm. Rotate and the **shaft counter-clockwise** with a flat screwdriver while turning the **arm clockwise**. Tighten the clamping bolt with the arm and shaft in this position.



4. Finally, expand the cable adjuster on the clutch perch **7-8 turns** to lift the pressure plate.
5. To set the final installed gap, check Free Play Gain. (See directions in the next section.)

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.

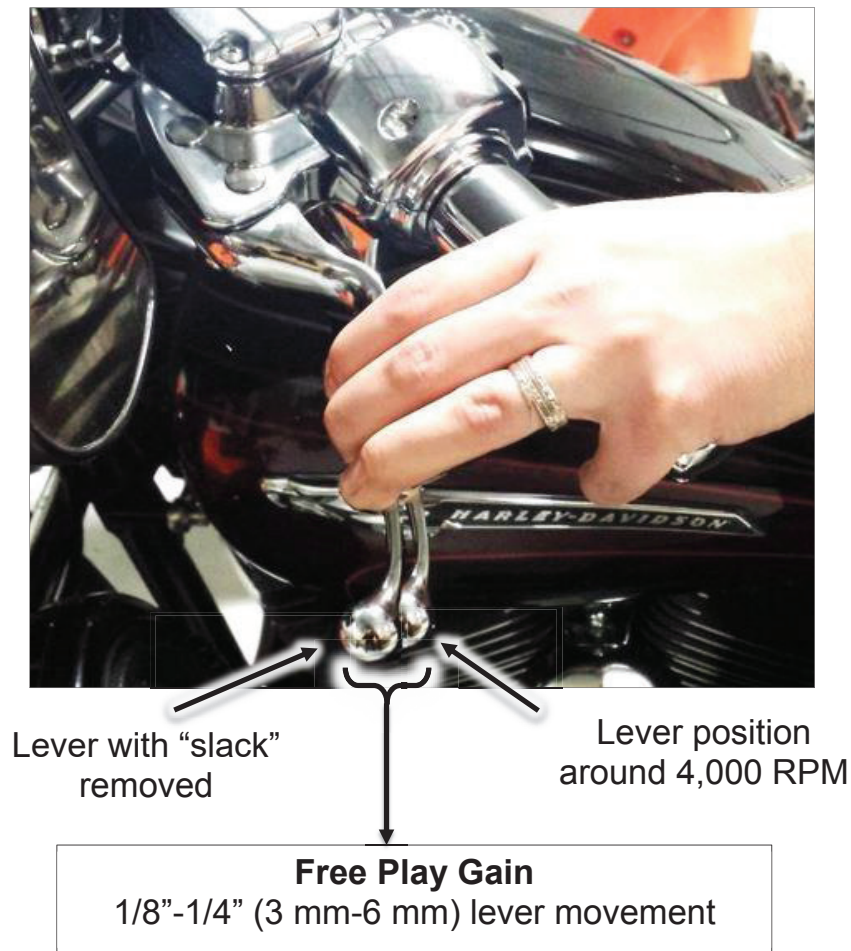
Learn how to check Free Play Gain

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.”



- **If there is too much Free Play Gain**, the installed gap is too small.
 - The vehicle 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. dd
- **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 vehicle seem like it is losing power.
 - The vehicle 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 vehicle is in NEUTRAL before checking Free Play Gain. Failure to do so may result in the vehicle 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.

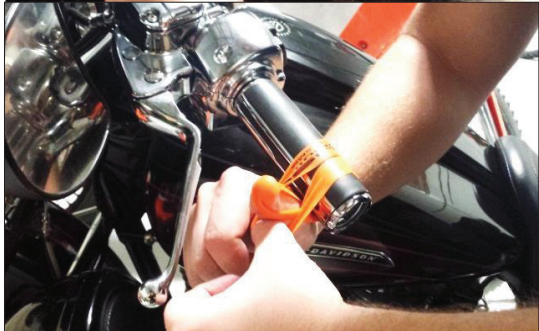
a) Before you begin, place the vehicle in **NEUTRAL**, start the engine and let it warm up for 2-3 minutes to idle down and warm the engine oil.

b) Stretch the included rubber band between your thumbs, top end of the rubber band on the outer end of the left



rubber band then place the band on the handlebar grip.

c) While holding the top rubber band against stretch the band loop it through itself.



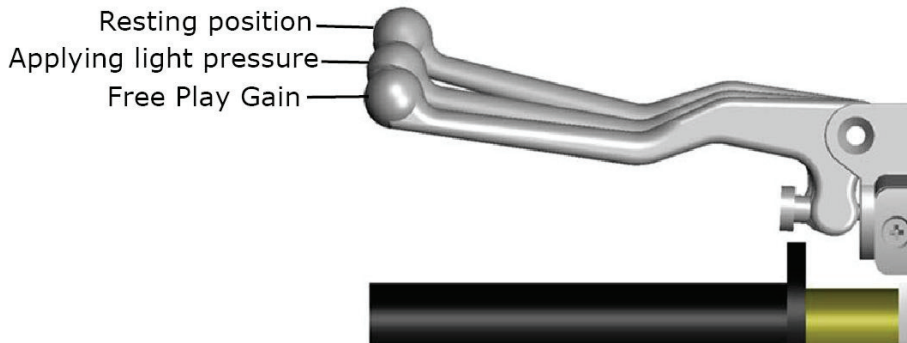
end of the the handlebar, downward, then

d) Pull the band through attach it to the outside lever. This will take up play (slack) and put position to detect the



the loop, then end of the clutch the initial free the lever in a Free Play Gain.

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



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 vehicle returns to idle, rest your hand across the clutch lever. Rev the engine again to 4,000-5,000 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 vehicle 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 vehicle 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 4,000-5,000 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 vehicle returns to idle, rev the engine between 4,000-5,000 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 "SHIFTING AND OPERATION"

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.

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; increase the length of the in-line cable adjuster housing and/or the lever perch adjuster (extend the adjusters) until the correct amount of Free Play Gain is achieved.</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 • Vehicle seems to lose power 	<p>Installed gap is too large</p>	<p>Reduce the length of the cable housing (collapse the adjusters) until the correct amount of freeplay gain is achieved.</p> <p>Recheck Free Play Gain.</p>
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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 vehicle for 2-3 minutes. With the vehicle 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>① ● N ② ③ ④ ⑤</p>
<p>2. With the engine still running, pull in the clutch lever, then shift the vehicle into 1st gear. Slowly release the clutch lever. The vehicle should stay running and in place or have a slight amount of forward creep.</p>	 <p>● ① N ② ③ ④ ⑤</p> <p>15 roll-on starts</p>
<p>3. With the vehicle idling in first gear, slowly apply throttle to begin moving.</p>	
<p>4. Without using the clutch lever, accelerate moderately to</p>	

approximately 3,500 RPM to fully lock up the clutch and come to a complete stop. Repeat 15 times.

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 vehicle 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 vehicle 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.

DO NOT DYNO TEST YOUR MOTORCYCLE BEFORE BREAK IN! Always break in the product before performing dyno testing. Read the included dynamometer sheet for more information.

EXP TUNING OPTIONS

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 for the 790 Adventure and Adventure R models. **For other EXP tuning options, and for the 790 Duke model, see the Setup sheet at the back of the Installation Manual.**

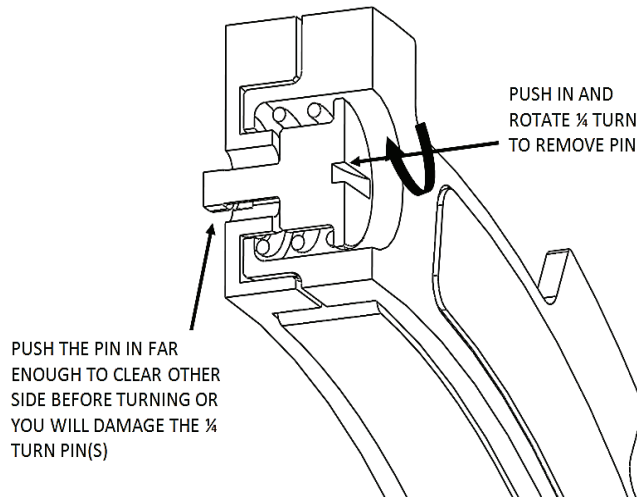
To prevent freewheeling and maximize engine braking, set the EXP so there is a slight amount of drag while the vehicle is idling in gear and warmed up.

With correct Free Play Gain and the vehicle in gear, the vehicle should move forward under slight opening of the throttle.

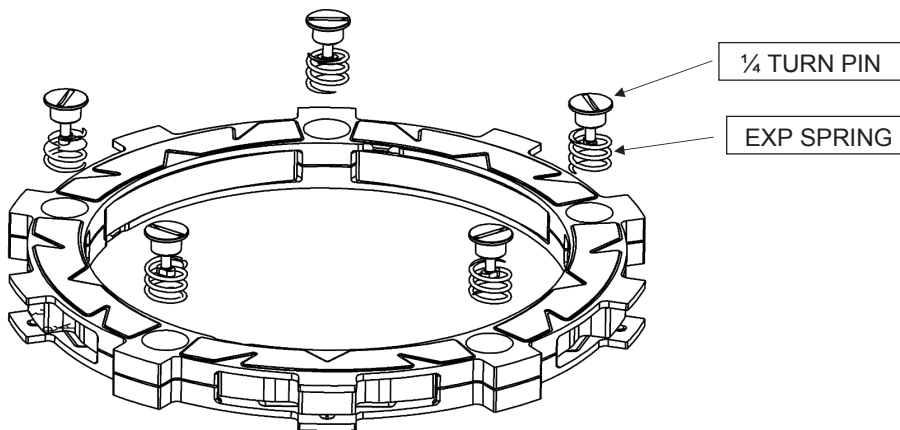
Changing the EXP springs

Use the following steps to change the EXP spring configuration. It is **NOT necessary** to disassemble the EXP halves to change 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 4 pins and springs from the EXP base.



4. Drop new springs into the spring pockets, then add the $\frac{1}{4}$ turn pins.



Note: To maintain even pressure, alternate EXP spring colors.

5. To lock, push the $\frac{1}{4}$ turn pin in far enough to clear the base, then turn 90° and release the pin. The pins should sit almost flush with the EXP base.
6. If you need to disassemble the EXP disk, you can watch the video on our website under Tech Tips at www.rekluse.com/support/videos.

SHIFTING AND OPERATION

- Always use proper gear selection for the speed and situation whether accelerating or slowing down.
- When accelerating from a stop it is best to start in 1st gear to prevent excessive slipping of the clutch. Starting in too tall a gear repeatedly will prematurely wear out the clutch resulting in failure.

MAINTENANCE

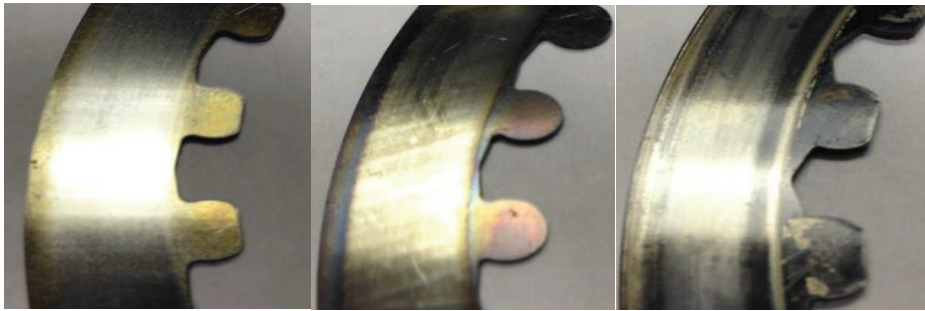
To keep your clutch performing at its best, perform regular maintenance on your clutch.

- Keep up with regular oil changes according to the manufacturer's recommendations. Clutch performance and longevity depend on oil quality. Tired, dirty, or worn oil may cause excessive clutch drag or noise.
- Use oil recommended by the manufacture of your vehicle.
- Inspect all of your clutch parts for signs of wear or excessive heat, and replace components as necessary. This includes your basket sleeves. Clutch wear is dependent on the riders use.
- Measuring the friction disks for wear. This can help determine if the components need replacing.
 - Rekluse thin friction disk minimum allowable thickness = **0.068" (1.7 mm)**
- Replace friction disks if they measure below specifications or if the disks are glazed and/or burnt.
- Repeat the break-in procedure anytime you replace the frictions disks. Always soak friction disks in oil for at least 5 minutes before installing.
- Replace the drive plates if they show signs of excessive heat.

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

Clutch Drag:

- *Cold Drag Only* – Cold drag is normal. The clutch will usually have some amount of drag before the oil warms to operating temperature. Be sure to warm up the vehicle before riding.
- *Hot and Cold Drag* – Change oil. Check for warped or non-flat drive plates in the clutch pack.

Clutch Slip:

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

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.

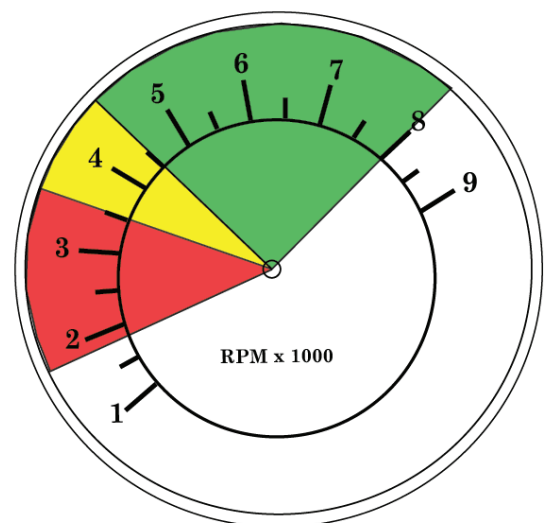
2. Downshifting:

- 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.

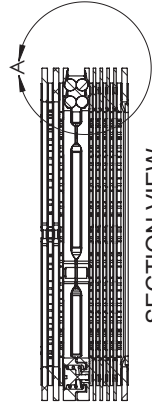
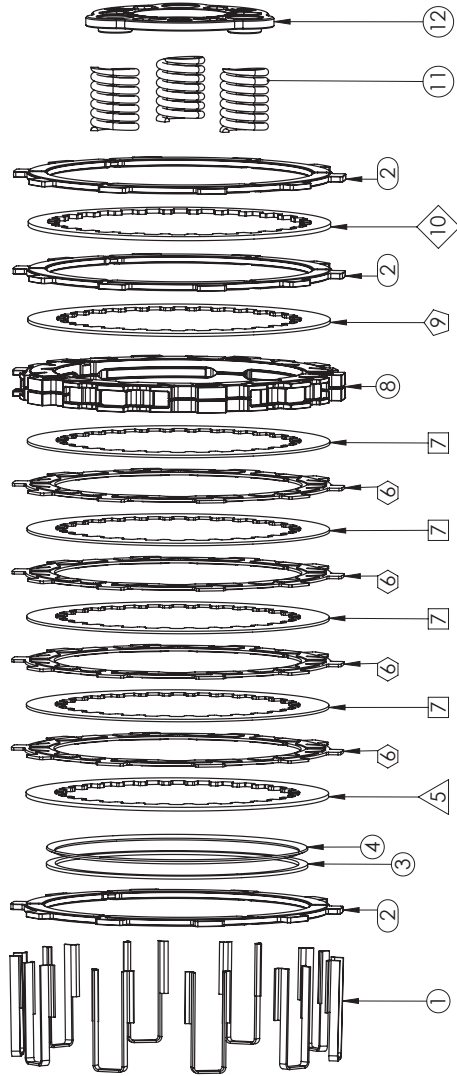
NEED ADDITIONAL HELP?

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

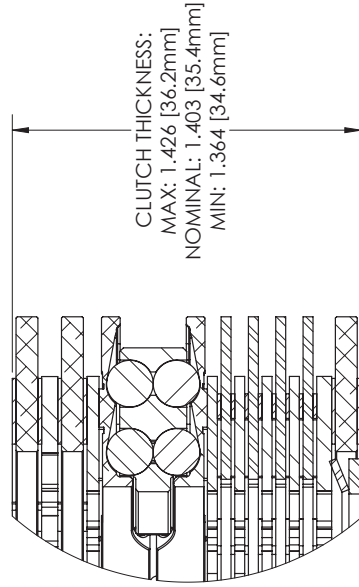


CLUTCH PACK CONFIGURATION

SETUP SHEET 198-6313100



CLUTCH PACK SPECS & SERVICE LIMITS



DETAIL A
SCALE 2 : 1

Item Number	Description	Quantity
1	Basket Sleeves	10
2	Friction Disk .118 in [3mm]	3
3	OEM Judder Seat (Flat)	1
4	OEM Judder Spring (Cupped)	1
5	Drive Plate .060 in [1.5mm]	1
6	Friction Disk .070 in [1.8mm]	4
7	Drive Plate .040 [1mm]	4
8	EXP Disk	1
9	Drive Plate .048 in [1.2mm]	1
10	Drive Plate .065 in [1.7mm]	1
11	Springs Blue/White	3
12	Spring Plate	1

EXP TUNING OPTIONS

790 Adventure, Adventure R

ENGAGEMENT RPM SETTING	SPRING CONFIGURATION
LOW	5 BLUE
MEDIUM **	2 BLUE, 3 GOLD
HIGH	5 GOLD

790 Duke ***

ENGAGEMENT RPM SETTING	SPRING CONFIGURATION
LOW **	2 GOLD, 3 GREEN
HIGH	5 GREEN

- * SETTING IS PREINSTALLED IN THE EXP DISK
- ** ALTERNATE SPRING COLORS WHEN POSSIBLE
- *** EXP SPRING SETTING MUST BE UPDATED BEFORE INSTALLATION

