

# 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 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 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**

- Do not dyno test this product without reviewing the included dynamometer document.
- Thoroughly read and understand the Safety Information and User's Guide before operating the bike with this product.
- Videos related to this product can be viewed online at www.rekluse.com/support/videos.
- **Do not "rev" the throttle while in gear and not moving**. Revving the engine while in gear may lurch the bike forward or move it unexpectedly.
- Check your Free Play Gain before the 1<sup>st</sup> ride of the day. Instructions for checking Free Play Gain are included in the guide.
  - If your clutch is not working as intended, stop the bike and recheck Free Play Gain.
     Continuing to ride when the clutch is not adjusted properly may cause damage to the clutch.
  - If Free Play Gain is not correct, adjust the installed gap and recheck Free Play Gain before continuing. If Free Play Gain cannot be corrected (too much or too little), stop riding the bike and have the clutch serviced.

### **GETTING STARTED**

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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.

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- Always start your bike in **Neutral** and let the engine warm up. If the bike is cold, clutch the bike manually until it is warm.
- Always shift your bike from Neutral to 1st gear with the clutch lever pulled in.
- To begin moving, let the clutch lever out and simply twist 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 1,800 RPM. While cruising, keep the RPM at or above 2,500 RPM to keep the clutch from slipping.

### **SHIFTING**

#### 1. Upshifting:

For normal riding situations, upshift as you normally would.

#### 2. Downshifting:

- For normal riding situation—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 or allow the RPM to drop to idle without reactivating the clutch, free-wheeling occurs.
- Don't 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 automatically when you drop below the engagement RPM.
- Once you are stopped, shift into 1<sup>st</sup> 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 2,000 RPM (about 1/4 throttle). This is a caution zone. Cruising below 2,000 RPM should only be done in 1st or 2nd gear. Cruising in a tall gear without downshifting is hard on your clutch as well as your engine.
- Yellow Zone: This zone is from about 2,000-2,400 RPM (about 1/3 throttle). This is a healthy zone for most riding and cruising situations. There is no need to downshift while cruising in this range unless you are pulling a trailer or heavy load, riding uphill, or riding into the wind.

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Green Zone: Upshift and downshift as you normally would using the clutch lever. Keep the RPM in the green zone when loaded with weight, pulling a trailer, or riding uphill.

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RPM x 1000

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- 4. <u>Gear Selection Gauge</u>: Some newer models of Harley-Davidson bikes have a gear selection gauge. This gauge does not tell you what gear you are currently riding in!
  - The gear indicator light shows the recommended gear based on a combination of the bike's RPMs and your speed.
  - Be sure to ride in an appropriate gear based on your speed. If you are riding in a high gear and then begin to slow down, the gear indicator light may display a false reading of the actual gear you are riding in.
  - For example, if you are cruising in 5<sup>th</sup> gear and slow for traffic, the gear indicator light may start to show the bike is shifting into a lower gear because your speed is dropping. However, the bike is not downshifting, only the indicator light is dropping.
  - No matter what gear your gauge indicates you are currently in, you will need to downshift before accelerating again.

#### 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 1<sup>st</sup> 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 User's Guide that came with your kit.

## **AWARNING**

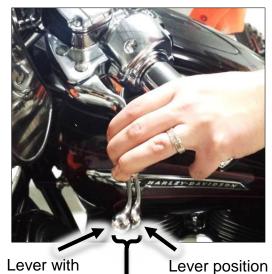
BEFORE YOU BEGIN, verify the bike is in NEUTRAL before checking Free Play Gain. Failure to do so may result in the bike lurching forward, and loss of control and/or injury may result.

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#### **CHECK FREE PLAY GAIN**

Optimal Free Play Gain yields 1/8-1/4" (3 mm-6 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.



"slack" removed 

↓ around 4,000 RPM

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







e) While still in **NEUTRAL**, quickly rev the engine between 3,000-5,000 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.

**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 3,000-5,000 RPM so you can observe the movement while feeling for Free Play Gain with your hand.
- g) 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 User's manual.

#### **NEED ADDITIONAL HELP?**

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

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