

## INSTALLATION GUIDE

TorqDrive Kit for Harley-Davidson 2013 + CVO and 2014 + Triglides 2015+Touring Low Models

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## **OVERVIEW**

This kit replaces many of the OE (Original Equipment) or "stock" clutch parts. These parts are designed specifically for your motorcycle to ensure optimal performance. The following is a summary of what is replaced:

- OE friction disks
- OE drive plates
- OE Pressure plate springs

## **INSTALLATION TIPS**

 Read the separate included Safety Information document before operating the vehicle with the product installed.



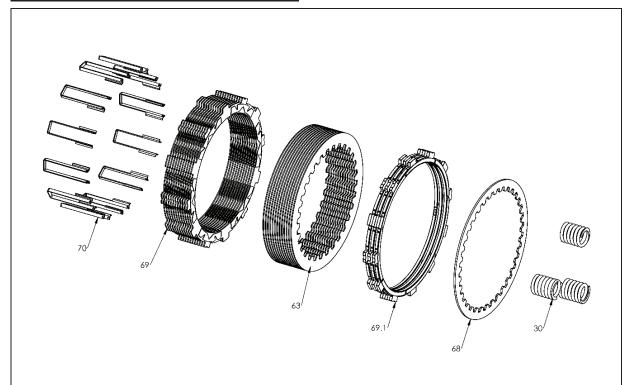
- This kit is compatible ONLY with the OE or Rekluse clutch components.
- Read this entire document before performing any steps.
- If you install this product for a customer or another person, instruct them to read the **Safety Information** document and the **Installation Guide** before operating the bike with the product.
- Protect eyes and skin wear safety glasses and work gloves.
- Use the torque values listed in the instructions. Otherwise, use the torque specifications found in your OE service manual.
- Different spring options may be available purchased from Rekluse (depending on the bike model) for:
  - Motorcycles with taller gearing or modified engines with increased horsepower
  - o Customers looking for a lighter lever pull
- 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.

#### **TOOLS**

Hex key set (Standard SAE)	Torque wrench (in-lb & ft-lb, or N-m)
Torx bit set	End wrenches (Standard SAE)
10 mm socket	2 dental pick tools

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# **INCLUDED PARTS**



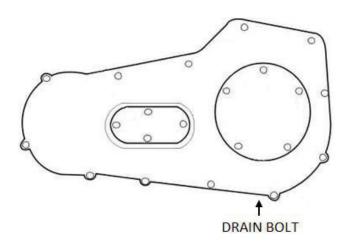
Item	Description		
63	Steel drive plate040" (1 mm)		
68	Steel drive plate065" (1.6 mm)		
69	TorqDrive® thin friction disks	12	
69.1	TorqDrive® thick friction disks150" (3.81 mm)		
70	Basket sleeves	12	
30	Pressure plate spring kit – Extra Light	1	
Not Shown	Pressure plate spring kit – Light	1	
Not Shown	Pressure plate spring kit - Standard	1	

Visit <a href="www.rekluse.com/support">www.rekluse.com/support</a> for a full parts fiche illustration and part numbers.

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## PREPARE BIKE FOR INSTALLATION

- 1. Stand the bike up on a lift or suitable bike stand.
- 2.On the primary chain case, use a wrench to remove the oil drain plug, then drain the oil into a suitable container.



3. Remove any parts that are attached or blocking the primary chaincase cover. These may include the left floorboard, foot peg(s), shift lever, and/or the side stand.

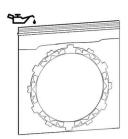
**Note:** Before removing the shift lever, shift the bike into 5th gear.

4. Remove the primary chain case cover.

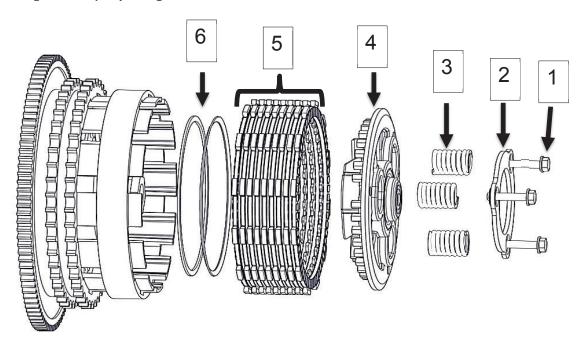


## **DISASSEMBLE CLUTCH**

1. Soak the TorqDrive® friction disks in new primary chaincase oil for 5 minutes. Make sure the friction disks are coated on both sides.



2. Remove the following OE parts. You may need to use dental pick tools to reach and remove the bottom plates and damper (judder) spring.



1	Pressure plate bolts
2	Spring hold-down ring
3	Pressure plate springs
4	Pressure plate
5	Clutch pack
6	Damper (judder) spring and seat

**Note:** Set the pressure plate bolts, spring ring, pressure plate, and damper spring seat and spring aside. They will be reused.

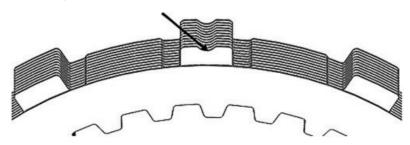
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## **INSTALL THE CLUTCH PACK**

#### **Notes for Clutch Pack Installation:**

• When assembling the clutch pack, it is important to line up the alignment notches on the friction disk tabs. *Correct alignment is critical for optimal performance.* 

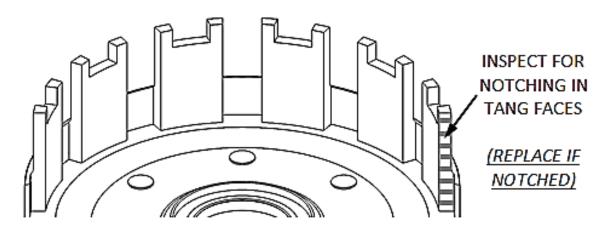




- Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.
- 1. Inspect the clutch basket for notching. Do not install sleeves or use product with a notched basket. Notched basket tang faces can cause the sleeves to break. Do not use baskets that have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

#### **AWARNING**

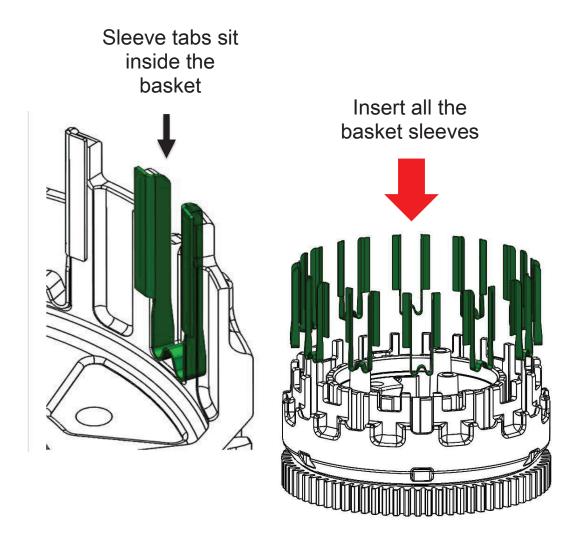
Failure to inspect the basket and replace if necessary could result in death, serious injury, and/or property damage.



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

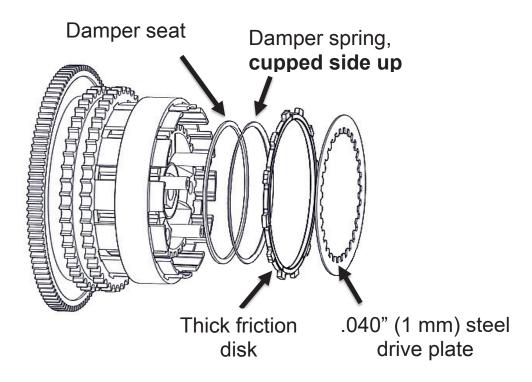
**Note:** Rekluse basket sleeves are designed to be installed into an OE or Rekluse clutch basket **ONLY**. The use of non-Rekluse aftermarket clutch baskets may cause clutch damage or failure.

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

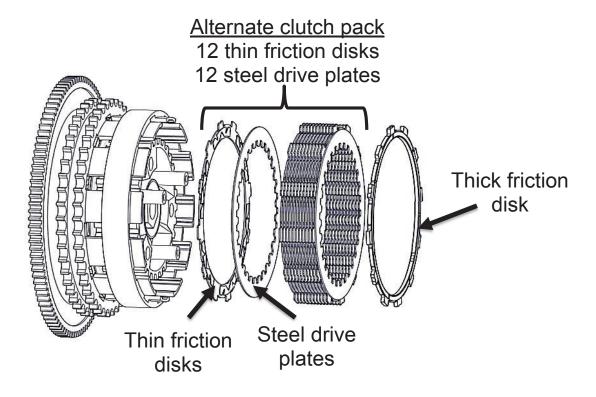


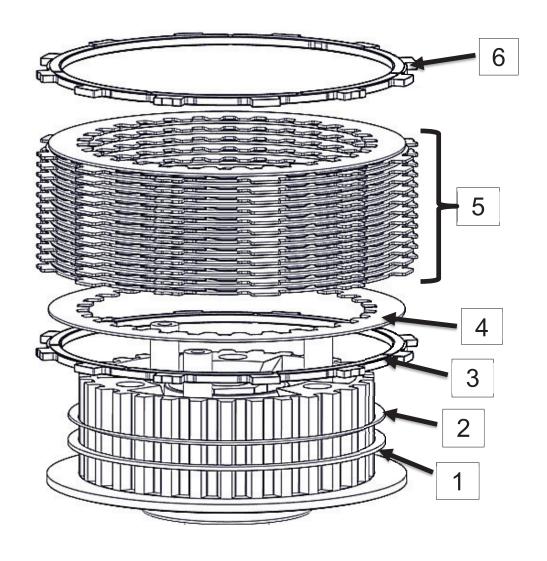
- 3. Reinstall the damper (judder) seat, then reinstall the damper spring, cupped side up, into the clutch basket.
- 4. Install a Rekluse .150" (3.81 mm) thick friction disk, then install a .040" (1 mm) steel drive plate.

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- 5. Alternate 12 thin friction disks with 12 -.040" (1 mm) steel drive plates. Remember to align the notches on the friction disks when installing the clutch pack.
- 6.On top of the last steel drive plate, install a thick friction disk. There will be 1 thick friction and 1 thick steel drive plate left which are used in the next step.

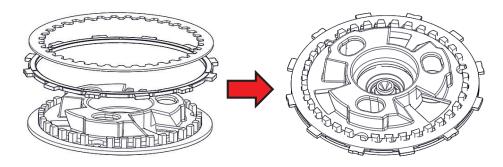




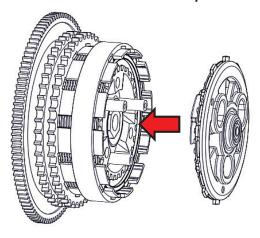
1	Damper spring seat
2	Damper spring- cupped side up
3	One .150" (3.81 mm) thick friction disk
4	One .040" (1 mm) steel drive plate
5	Alternate 12 thin friction disks with 12040" (1 mm) steel drive plates
6	Thick friction disk

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- 7. Turn the OE pressure plate upside down on a workbench. Install the remaining Rekluse thick friction disk on top of the pressure plate.
- 8. Install the remaining .065" (1.6 mm) steel drive plate on top of the friction disk.



9. Install the pressure plate assembly onto the clutch pack. Be sure to check that the OE push rod is still indexed to the pressure plate and align the notches of the pressure plate friction with the notches in the clutch pack.



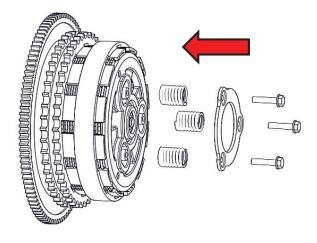
10. Select which pressure plate springs are best suited for your motorcycle and riding style using the table below. For reference, the factory 3 spring clutch is rated to hold approximately 135 ft-lbs of engine torque.

	Torque Capacity (ft-lb)	Change in Lever Pull	Spring Option	Spring Color
	200.0	+4%	Standard Spring (744-126)	Black Stripe
RMS-285	175.0	-10%	Light Spring (744-124)	Purple Stripe
	135.0	-30%	Extra Light Spring (744-125)	White Stripe

<u>Note:</u> If you own a Trike or plan to tow with your motorcycle, Rekluse recommends selecting the "Standard" spring option unless your engine exceeds the rated torque capacity for that spring configuration. If your engine produces more than 200 ft-lbs of torque, please contact our customer service team for higher torque capacity spring options.

For hydraulic clutch owners looking to reduce their clutch lever pull without affecting the clutch's torque capacity, please see Rekluse's 30% lighter pull Manual Slave Cylinder, product number RMS-2415050 (M8 Models) or RMS-2415051 ('13 -'16 HD Models), at <a href="https://rekluse.com/">https://rekluse.com/</a>

11. Install the Rekluse pressure plate springs, OE spring ring, and OE pressure plate bolts.

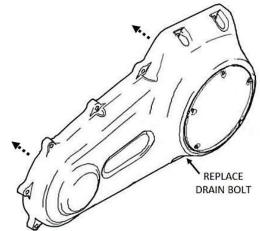


12. Using a 10 mm socket, torque the pressure plate bolts to **90-110 in-lb (10-12 N-m)**.

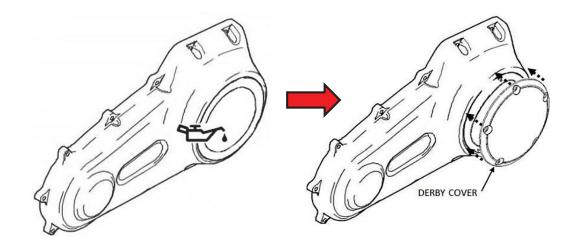
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### PRIMARY COVER INSTALLATION

- 1. Thoroughly clean the mating surfaces of the primary cover and the engine case.
- 2. Reinstall the primary gasket (or new gasket).
- 3. Reinstall the primary cover, then torque the cover bolts to 84-108 in-lb (9.5-12.2 N-m).



- 4. Reinstall the drain bolt, then torque the drain bolt to **36-60 in-lb (4-6.8 N-m)**.
- 5. With the primary cover installed, use a T-27 Torx bit to remove the derby cover.
- 6. Using a funnel, add 1.25 quarts of oil to the primary case through the derby cover cavity. Use the OE recommended oil or any quality primary oil.
- 7. Reinstall the derby cover and torque bolts to **84-108 in lbs. (9.5-12.2 N-m).**



## **BREAK IN THE NEW CLUTCH**

The clutch will break in within 100-200 miles of normal riding. Until break-in is complete, you may experience more clutch drag than normal.

 It is recommended to do an oil change after the first 1,000 miles to drain any excess clutch debris that occurred from break-in.

## **MAINTENANCE**

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

- Keep up with regular oil changes according to the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality. Tired, dirty, or worn oil may cause excessive clutch drag or noise.
- Use oil recommended by the manufacture of your bike.
- For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements.
- 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.

Total Clutch Pack Height: 1.875" +.030" / -.045"

o Rekluse Friction Discs: Thin Friction: .070" +/-.002"

Thick Friction: .150" +/-.002"

- 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.

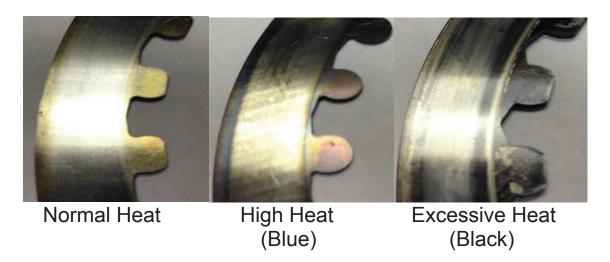
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• Replace the drive plates if they show signs of excessive heat.

### **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 <a href="https://www.rekluse.com/support">www.rekluse.com/support</a>.

**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.



**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 bike 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.

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## **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



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