



# **INSTALLATION GUIDE**

TorqDrive<sup>®</sup> Kit for YFZ450  
2014+ models

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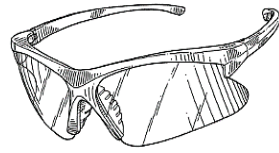
## **OVERVIEW**

This kit replaces some 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 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 vehicle 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.
- 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](http://www.rekluse.com) to learn more.



## TOOLS

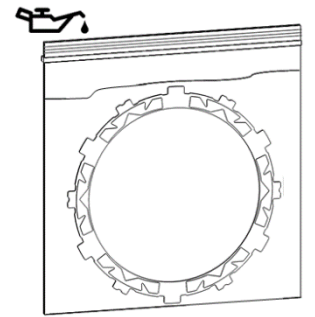
• 8 mm socket	• 2 dental pick tools
• 10 mm socket	• Torque wrench
• End wrenches (Metric)	

## INCLUDED PARTS

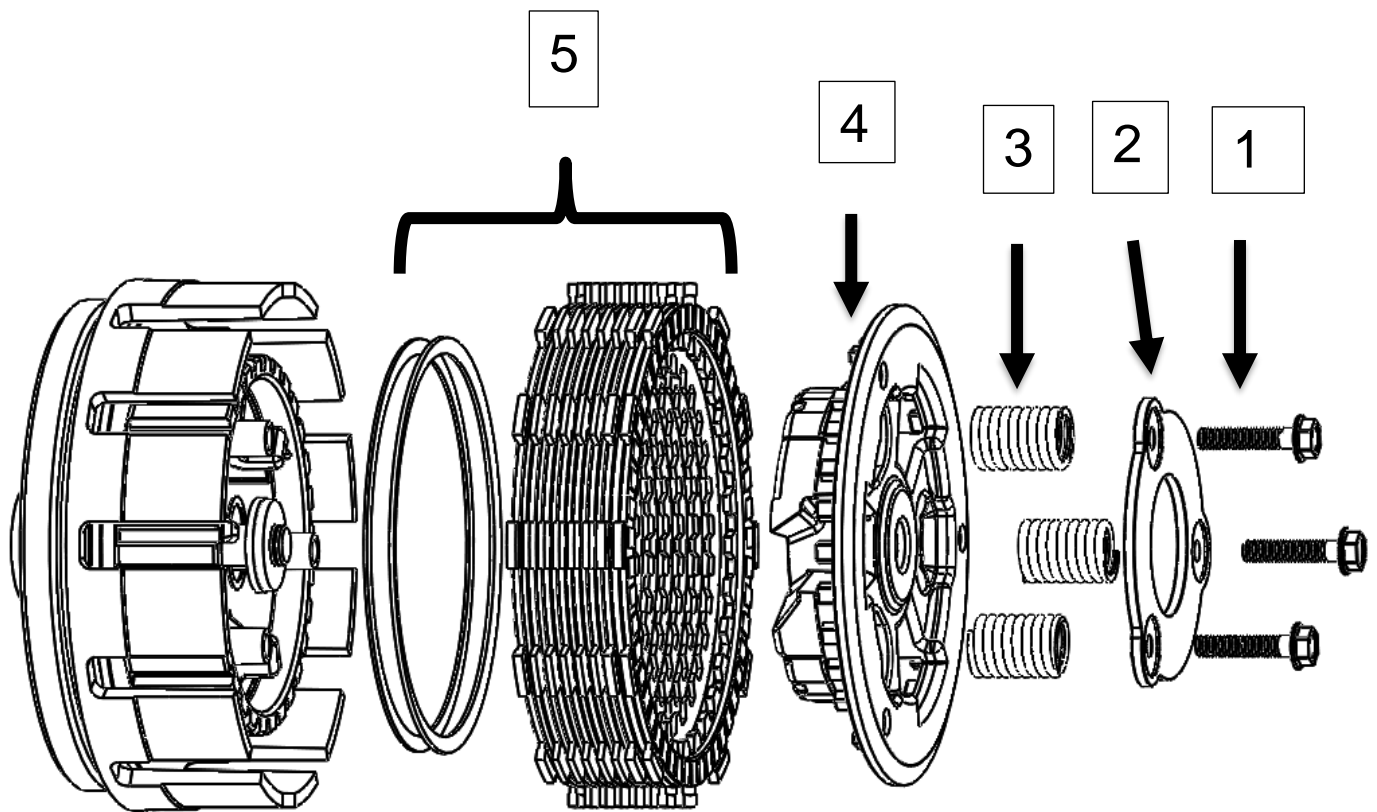
Visit [www.rekluse.com/support](http://www.rekluse.com/support) for a full parts fiche illustration and part numbers.

# DISASSEMBLE CLUTCH

1. Soak the TorqDrive® friction disks in new 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.*



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

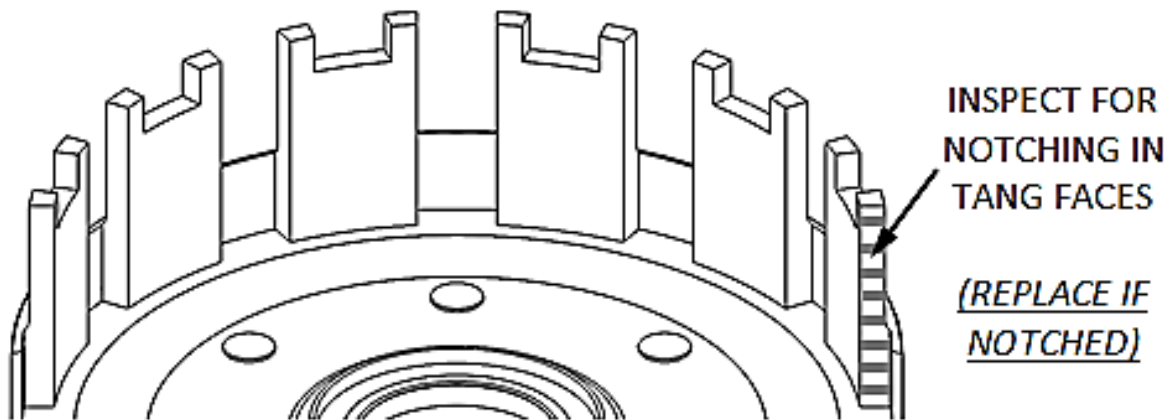
**Note:** Set the pressure plate bolts, spring ring, and pressure plate aside. They will be reused.

# INSTALL THE CLUTCH PACK

1. Inspect the clutch basket for notching. Do not install sleeves or use the 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 the basket if necessary.

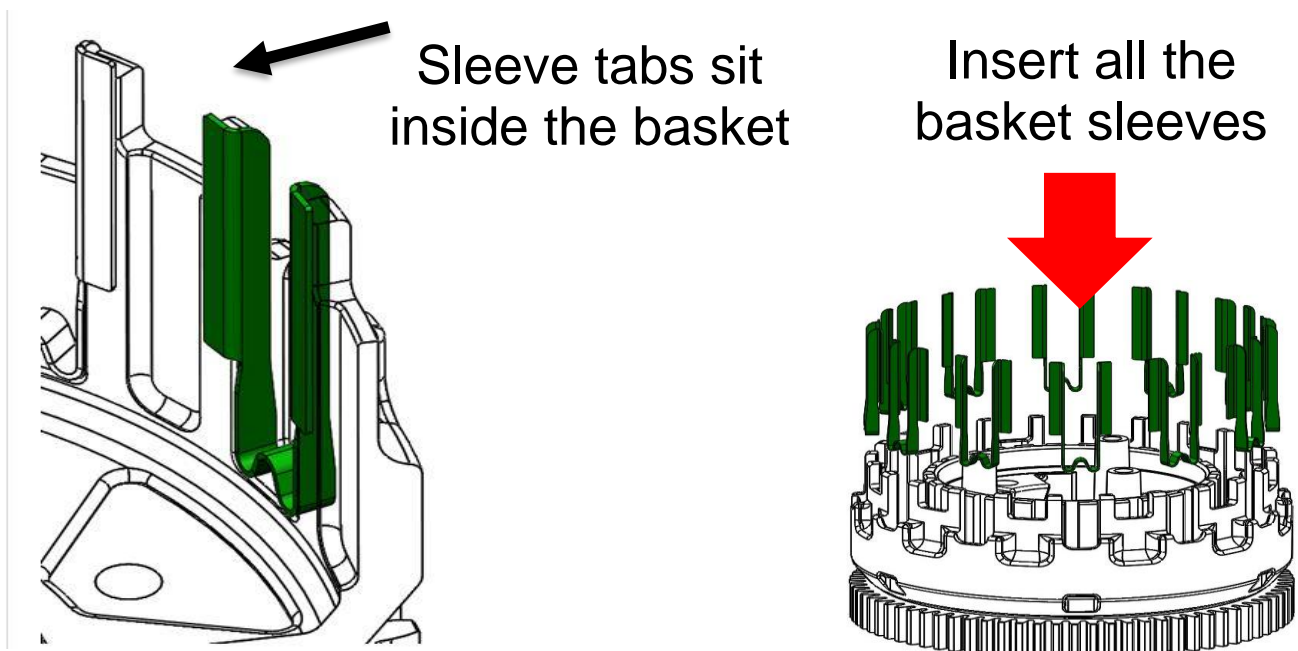
## **⚠ WARNING**

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



3. Install a Rekluse thin friction disk, then install a .040" (1 mm) steel drive plate.

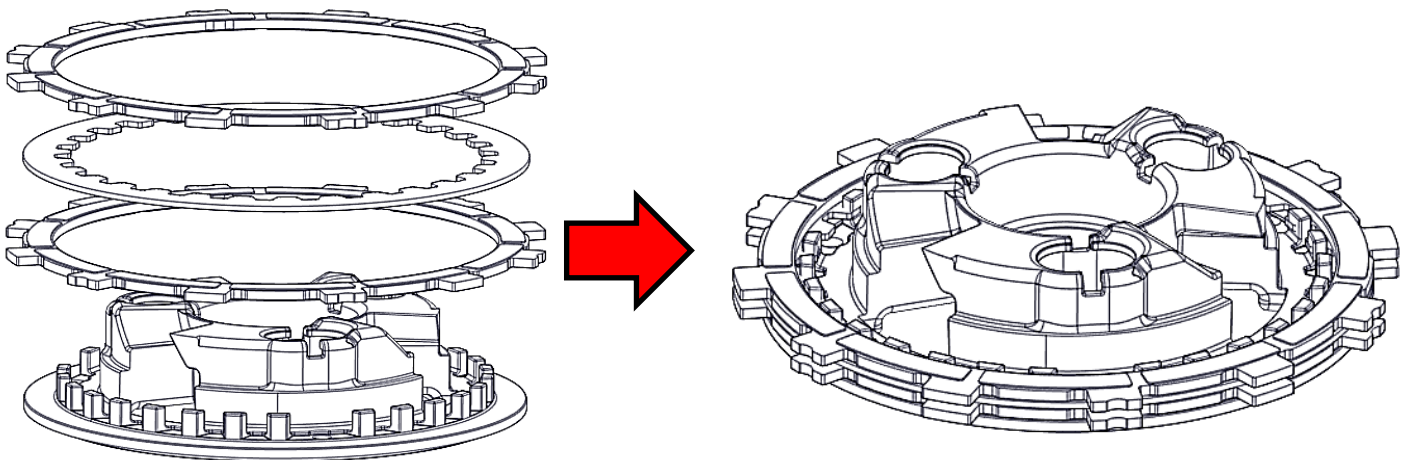
**Note:** Some friction disks are marked with a small colored dot. This mark is used for processing and can be ignored.

4. Continue to alternate thin friction disks with .040" (1 mm) steel drive plates, ending in a steel drive plate. You will have 2 thick frictions and one thick steel drive plate left which are used in the next step.

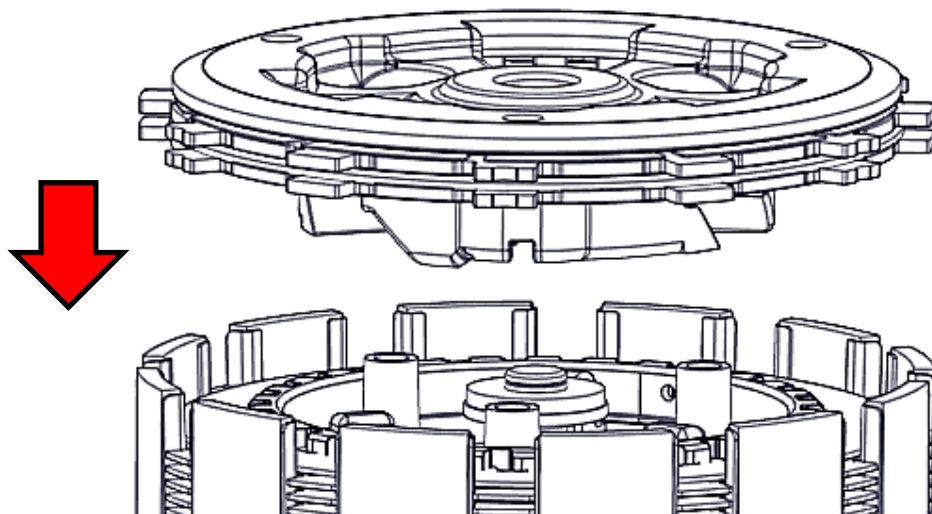
## **INSTALL THE PRESSURE PLATE**

1. Turn the OE pressure plate upside down on a workbench, then install a .130" (3.30 mm) Rekluse thick friction disk.

2. Install the .060" (1.5 mm) thick steel drive plate onto the pressure plate, then install the remaining .130" (3.30 mm) Rekluse thick friction disk.



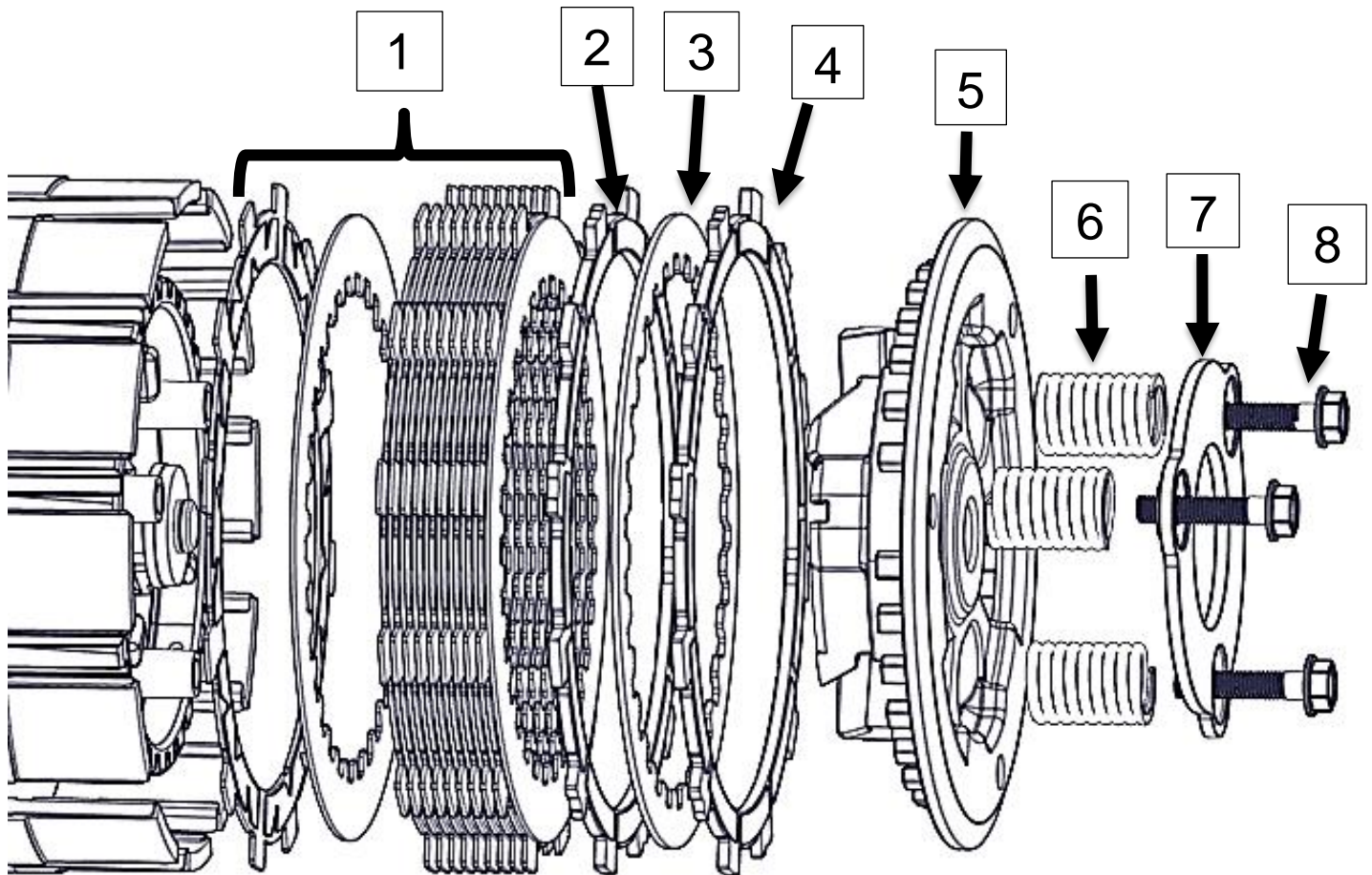
3. Turn the assembled pressure plate right side up, then install it onto the clutch pack.



4. Install the Rekluse pressure plate springs, then reinstall the OE spring ring and OE pressure plate bolts.

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

## **ASSEMBLED CLUTCH**



1	Alternate 10 thin friction disks with 10 - .040" (1 mm) steel drive plates. Start with a thin friction first.
2	.130" (3.30 mm) thick friction disk
3	.060" (1.5 mm) steel drive plate
4	.130" (3.30 mm) thick friction disk
5	Pressure plate
6	Rekluse pressure plate springs
7	Spring ring
8	Pressure plate bolts

# CLUTCH COVER INSTALLATION

1. Install the new Rekluse cover gasket onto the OE clutch cover.
2. Reinstall the OE clutch cover, then reinstall the clutch cover bolts.
3. Lightly tighten the bolts in a star pattern, then torque the bolts to OE specifications.

## BREAK-IN

Break-in will occur over the first 1-2 hours of use, depending on the rider. During break-in, more clutch drag may occur 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.

## 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.
- 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.
  - 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](http://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](http://www.rekluse.com/support)

## **Frequently Asked Questions**

[www.rekluse.com/faq](http://www.rekluse.com/faq)

## **Support Videos**

[www.rekluse.com/support/videos](http://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](mailto:tech@rekluse.com)

## **Customer Service**

Contact Customer Service for additional product information, orders, and returns.

Customer Service hours:

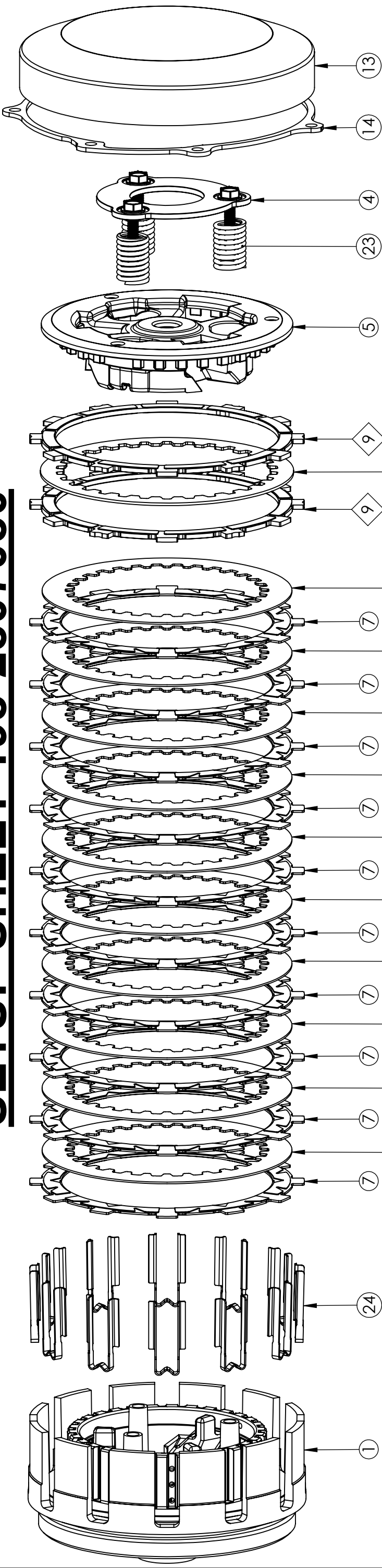
Monday thru Friday: 8:00 a.m. - 5:00 p.m.

Mountain Time zone

Email: [customerservice@rekluse.com](mailto:customerservice@rekluse.com)

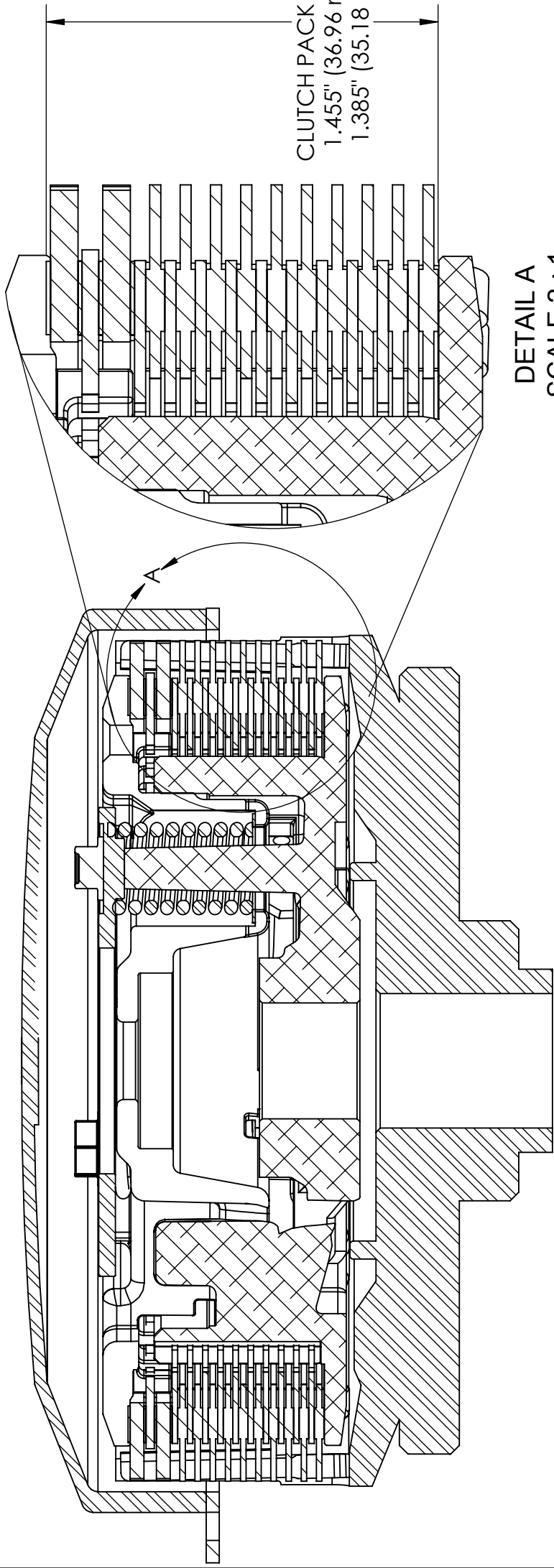


# SETUP SHEET 198-2807080



ITEM NO.	PART NUMBER	QTY.
1	OEM CLUTCH HUB AND BASKET	1
4	STOCK SPRING BOLTS	3
5	STOCK PRESSURE PLATE	1
7	THIN FRICTION DISK - TORQ-DRIVE	10
9	THICK FRICTION DISK - TORQ-DRIVE	2
0.040	0.040" THICK DRIVE PLATE	10
0.060	0.060" THICK DRIVE PLATE	1
13	OEM CLUTCH COVER	1
14	REKLUSE CLUTCH COVER GASKET	1
24	BASKET SLEEVES	12
23	REKLUSE SPRINGS	3

## CLUTCH PACK SPECS & SERVICE LIMITS



DETAIL A  
SCALE 2 : 1