



# INSTALLATION & USER'S GUIDE

Adventure TorqDrive® Clutch

BMW R1200/1250 Water Cooled Only

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# **OVERVIEW**

This guide shows you how to replace your OE (Original Equipment) or "stock" clutch parts with your new Rekluse manual clutch parts. The following parts are replaced:

- OE Drive Plates
- OE Friction Disks

# **INSTALLATION TIPS**

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





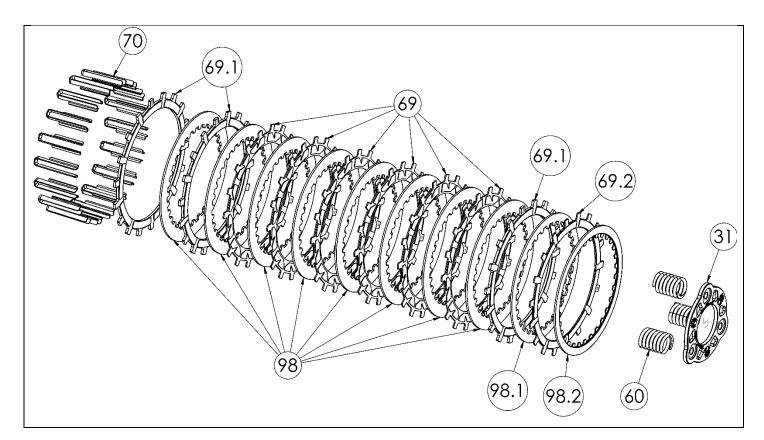
 Read this entire document before performing any steps.

- If you install this product for a customer or another person, instruct them to read the **Safety Information** document and the **Installation and User Guide** before operating the bike with the product.
- Protect eyes and skin wear safety glasses and rubber gloves.
- It is recommended to replace the oil filter and the copper crush washer on the drain plug every time the oil is changed.
- 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 to learn more.

	<b>T</b> -30	O 10 mm	Transferration of the second
Fluid Catch Container	T30 Torx Bit	10 mm Socket	Torque Wrench
Je Je			
Tie-Down Strap	Pick Tool	Razor Blade Scraper	

# TOOLS NEEDED

## **INCLUDED PARTS**

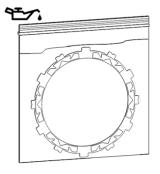


Item	Description	Qty.
31	Spring Hold Down Ring	1
60	Pressure Plate Spring	3
69	Thin Friction Disk070" (1.78 mm)	6
69.1	Thick Fiction Disk115" (2.9 mm)	3
69.2	Thin Fiction Disk, Large ID070" (1.78mm)	1
70	Basket Sleeve	18
98	Steel Drive Plate065" (1.65mm)	8
98.1	Pressure Plate Steel Drive Plate065" (1.65mm)	1
98.2	Pressure Plate Lining Plate065" (1.65mm)	1
Not shown	Breastplate gasket	1

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

# **DISASSEMBLE THE CLUTCH**

1. Soak the Rekluse friction disks in new oil for at least five minutes. Coat the friction disks on both sides.



- 2. Place the bike on a suitable lift, or use the bike's own center stand, and drain the engine oil.
- 3. Compress the front suspension to obtain adequate access to the top breastplate bolts behind the suspension control arm. This can be done by looping a tie-down strap between the top triple clamp and the knuckle / caliper braket.
- 4. Use a Torx bit to remove all the breastplate bolts, then remove the breastplate. Keep an oil pan underneath to catch any remaining oil.



**Note:** To aid with removing the breastplate, it may be helpful to use screws to pull it off of the engine case surface. Thread two screws into the locations below, and turn them evenly until the breastplate is lifted from the engine surface.



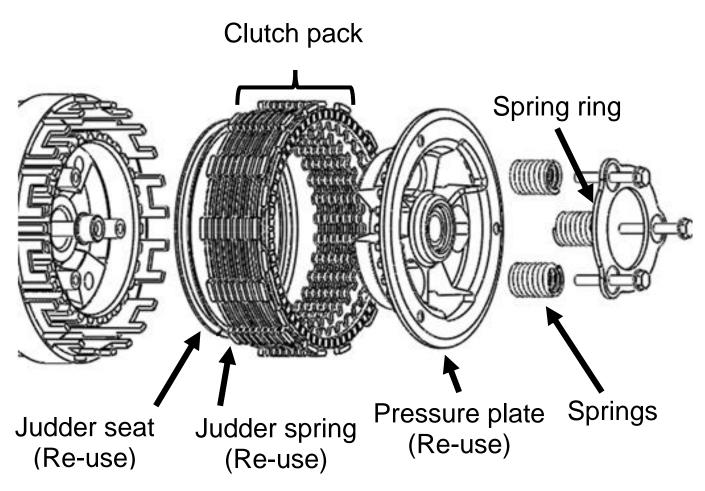
5. Use a 10 mm socket to remove the 3 pressure plate bolts.



- 6. Continue to remove the following OE parts and set them aside. Some of the OE parts will be reused. See following picture for reference.
  - Spring ring
  - 3 springs

- Pressure plate
- Entire clutch pack

**NOTE:** Verify that the judder seat and spring are installed in the clutch. They will be reused. The judder seat and spring do not need to be removed when dissassembling the clutch pack.





Once the clutch pack is removed, DO NOT pull the clutch lever in or damage may occur.

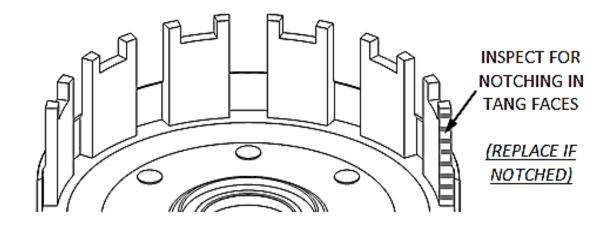
# **CLUTCH PACK INSTALLATION**

### See Setup Sheet at the end of this manual for reference.

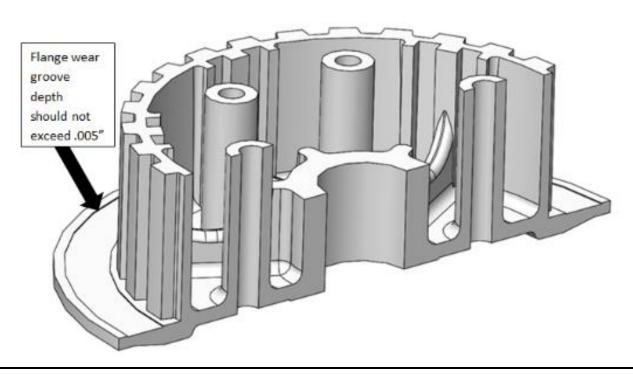
1. Inspect the clutch basket for spring damper play or notching. Do not install sleeves or use product with a notched basket. Notched basket tang faces or worn spring dampers can cause the new sleeves to break.

#### **A**WARNING

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

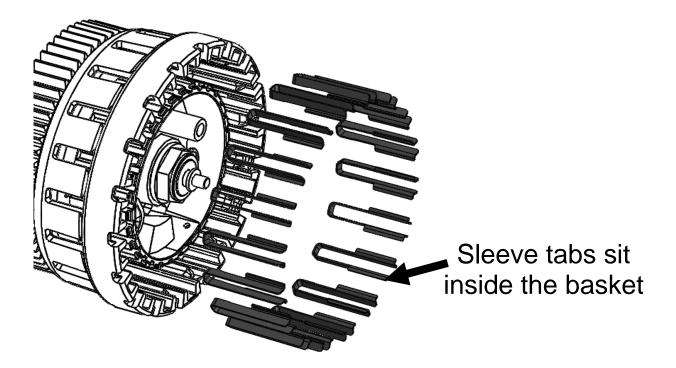


Inspect your OE center hub plate flange for excess wear.
If wear is visible use a drop gauge to verify that the wear across the flange does not exceed .005" (.12mm).

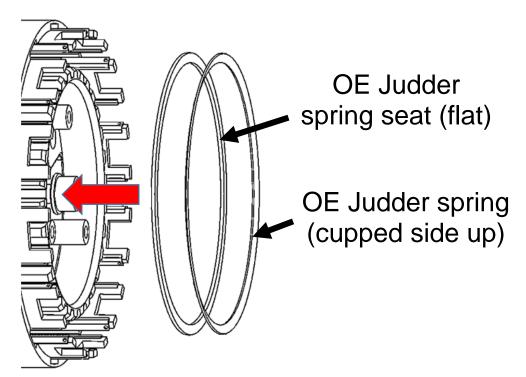


3. Install all the Rekluse basket sleeves into the basket slots. Make sure the bottom of the sleeve is facing down, and the sleeve tabs sit against the inside of the basket.

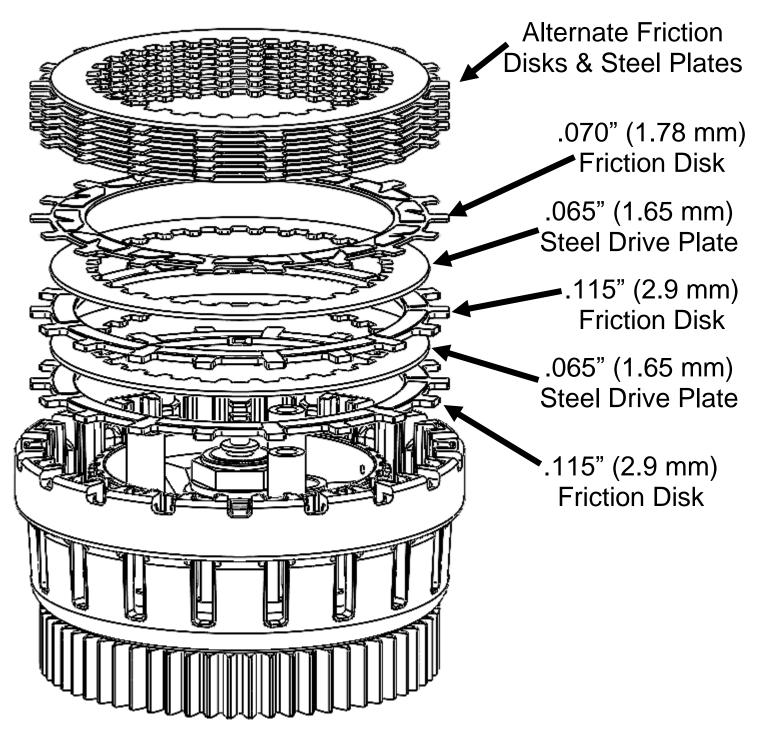
**Note:** When seated in the basket, the sleeves will sit nearly flush with the top of the basket. This is normal.



- Separate the new drive plates and friction disks according to thickness and profile. This will speed up the installation.
- 5. Verify that the OE judder spring seat and judder spring are installed in the clutch basket.



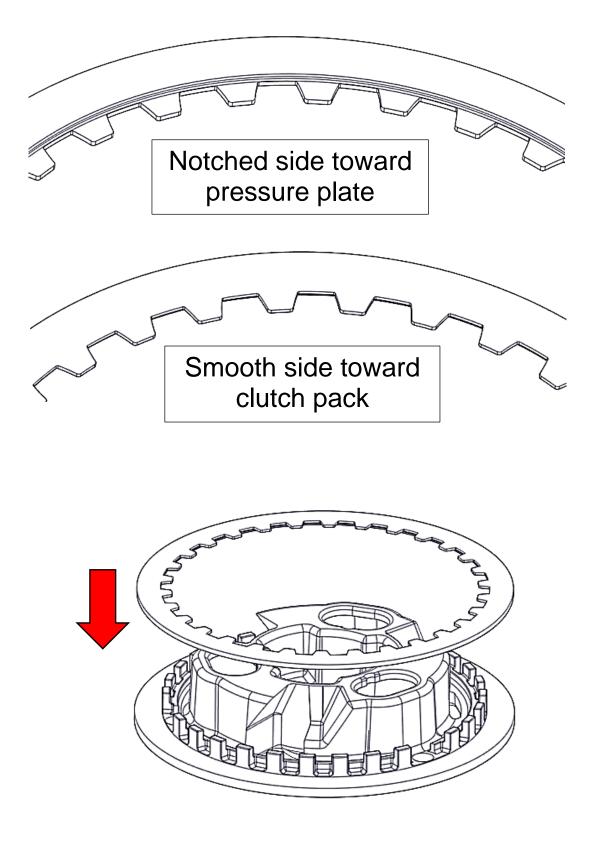
 Install a .115" (2.9 mm) thick friction disk, followed by the .065" (1.65 mm) thick steel drive plate. Repeat this step one more time.



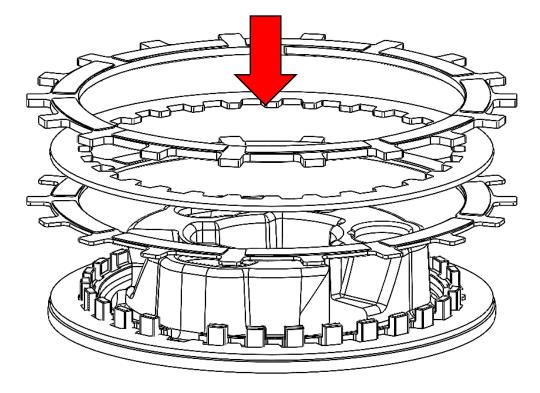
7. Install a .070" (1.78 mm) **thin** friction disk, then install a .065" (1.65 mm) **thick** steel drive plate. Continue to alternate thin friction disks with thin steel drive plates until there are 4 plates remaining: 1 x Large ID Thin Friction disk, 1 x Thick Friction Disk, 1 x Pressure Plate Steel Plate, and 1 x Lining Plate. These are installed with the pressure plate on the next step.

# **PRESSURE PLATE INSTALLATION**

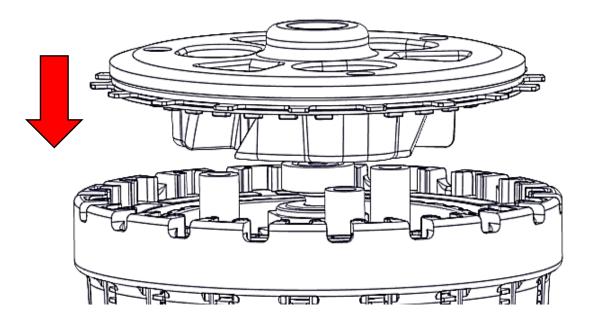
1. Flip the pressure plate upside down on a workbench. Install the notched lining plate onto the flange of the pressure plate, **NOTCHED SIDE DOWN toward the pressure plate**.



2. Install the last thin friction disk (with the larger inner diameter), the pressure plate drive plate, and the remaining thick friction disk.

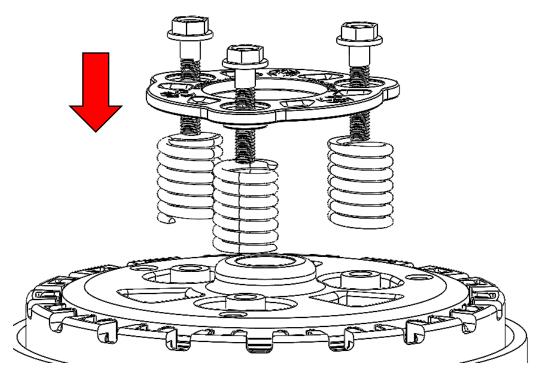


3. Flip the pressure plate assembly back over, then install it onto the clutch pack, taking care to align the friction disk tabs into the basket sleeves with the rest of the clutch pack.



**Note:** In the OE clutch pack, the last friction is offset in the hub. The Rekluse clutch pack requires that **ALL the** frictions be installed in the main basket slots with the sleeves including the friction on the pressure plate.

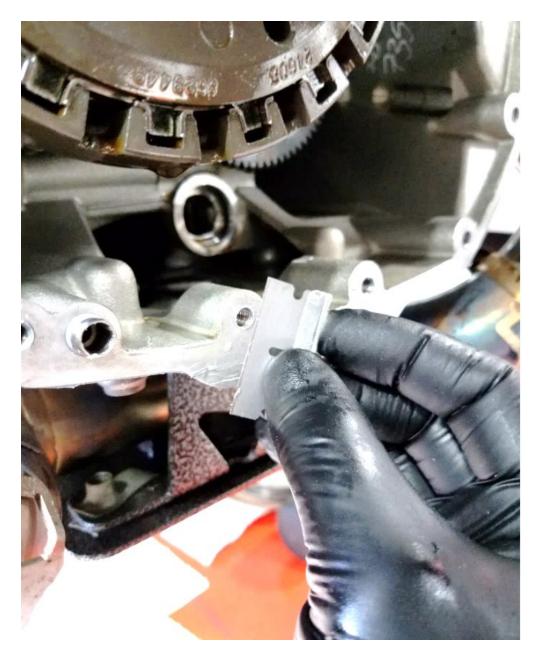
4. Install the Rekluse pressure plate springs, followed by the Rekluse spring ring and OE bolts.



- Torque the pressure plate bolts in small increments to 9 ft-lb (12 N-m) per OE specification.
- 6. Once the pressure plate is secure, check for clutch function by pulling the cluch lever a few times and observing whether the pressure plate is actuating properly.

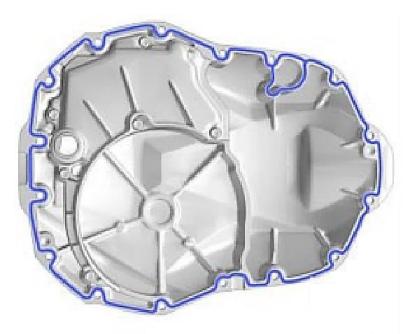
# **BREASTPLATE INSTALLATION**

1.Use a razor blade or a scraper tool to remove all excess RTV sealant from the mating surfaces of both the exposed engine case and the breastplate. Take care not to injure yourself or damage the aluminum surfaces.

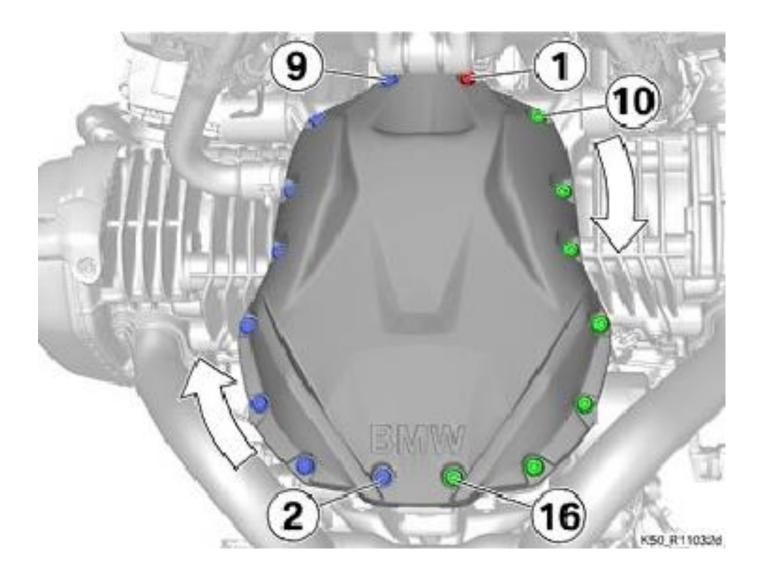


2. Use a proper solvent to thoroughly clean all remnants of RTV sealant and oil residue from the mating surfaces of both the exposed engine case and the breastplate.

3. Install the new Rekluse breastplate gasket onto the breastplate.



- 4. Reinstall the breastplate onto the engine case. Install and hand-tighten the all the breastplate screws evenly.
- 5. Torque the breastplate screws to **9 ft-lb (12 N-m)** in the order shown, moving clockwise on both sides.



# **BREAK-IN**

Break-in will occur over the first few hours of use, depending on the rider. During the break-in process, more clutch drag may occur than normal.

# **TROUBLESHOOTING**

### Clutch Drag:

If drag occurs only while the bike is cold, oil is the most likely cause. Be sure to warm up the bike before riding and/or racing. Use of lighter weight oil can help to minimize cold drag.

### **Clutch Slip**:

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

## **MAINTENANCE**

To keep your clutch performing at its best, perform regular maintenance on your bike and clutch. Clutch longevity and performance is greatly increased with oil quality and other bike factors that reduce engine heat.

- Inspect all of your clutch parts at regular maintenance intervals for signs wear or excessive heat and replace components as necessary. Clutch wear is dependent on the rider's use.
- Inspect and replace basket sleeves if they appear to be notched from friction disks.
- Replace friction disks if they are glazed and/or burnt.
- Keep up with regular oil changes as per the bike manufacturer's recommendations. Clutch performance and longevity depend on oil quality.

• For optimal clutch performance Rekluse recommends using fresh, clean oil that **meets JASO-MA** oil rating requirements.

### **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 at <u>www.rekluse.com/support</u>.

**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



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



Normal Friction





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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.

## **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.

#### Hours:

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

Email: <u>tech@rekluse.com</u>

### **Customer Service**

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

#### Hours:

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

Email: <u>customerservice@rekluse.com</u>