

# **INSTALLATION GUIDE**

Clutch Basket Kit For Honda 2017-2020 CR450R & 450RX

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## **INSTALLATION NOTES**

- It is imperative to follow the heating and cooling methods described in the "Starter Gear Installation" section of this document.
- Always wear gloves and proper eye protection when working on your bike.

## TOOLS NEEDED

- Hydraulic press
- Hack saw
- Oven (or toaster oven) & freezer
- Center punch
- Hammer
- Soft mallet or dead blow

- Drill press or power drill
- 1⁄4" bit driver
- Torque wrench (in-lb or Nm)
- Dental picks
- Small flathead screwdriver

# **BEFORE YOU BEGIN**

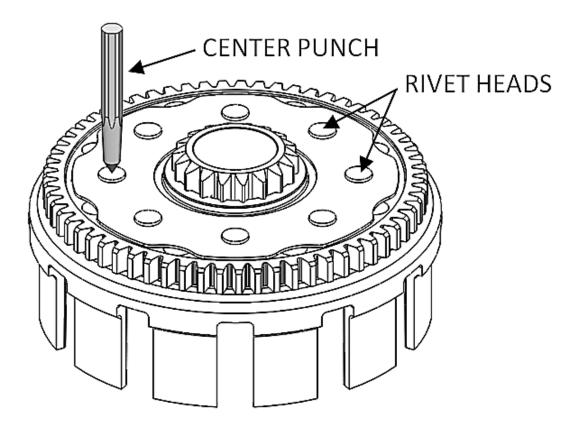
A hydraulic press is **REQUIRED** to install the OE starter gear into the Rekluse basket because of the extremely tight fit. This tight fit is designed to prevent the starter gear from backing out of the basket during use.

## **DISASSEMBLY**

1. Lay the bike on its left side. Catch any fuel that might drain with a suitable container. Remove the clutch cover.



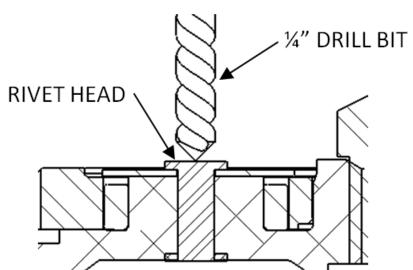
- 2. Remove the existing clutch basket from the engine according to your OE service manual.
- 3. Set the OE basket on a hard surface with the ring gear facing up. Using a center punch and hammer, punch a divot into the center of each top rivet head.



4. Using the supplied drill bit, drill out the heads of all the rivets. Set your drill to 300-400 RPM and use proper cutting fluid or oil for best results.

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# Drill only deep enough to pop the rivet head off. Do not damage the steel ring gear; it will be reused.



- 5. Carefully pry the OE steel backing plate from the basket and remove the ring gear. A hammer and chisel may be used to carefully remove the rivet head if there is some remaining.
- 6. Press the starter gear out of the OE basket without damaging it.

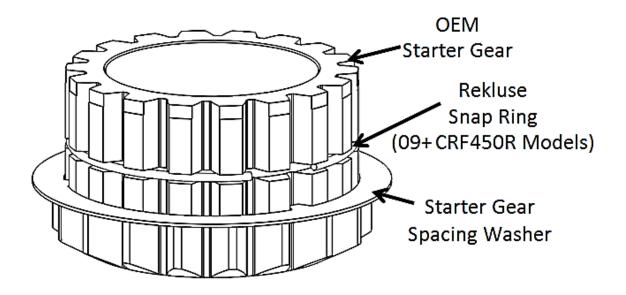
**NOTE:** The starter gear has a blind retaining ring holding it in place. It will take extra force to press the gear out of the OE basket. The basket may break during removal.

7. If the basket breaks during starter gear removal, use a hacksaw to remove any part of the basket that remains on the starter gear. You will saw through any remaining basket, the snap ring, and the gear washer. Saw parallel to the starter gear between the teeth, being careful not to damage the starter gear.

## **ASSEMBLY**

Before attempting to install the starter gear, read through the entire process and be prepared to perform the procedure as quickly as possible at favorable temperatures.

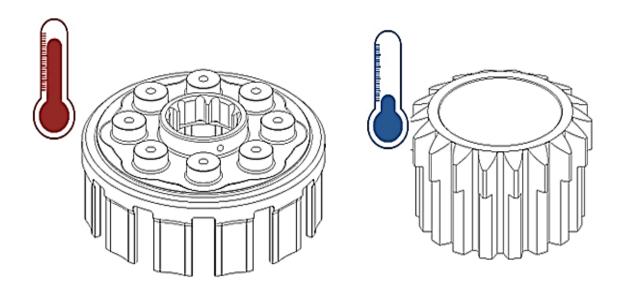
- 1. Install the Rekluse supplied starter gear spacing washer onto the OE starter gear.
- 2. Install the supplied Rekluse snap ring onto the OE starter gear. Take care not to bend the snap ring.



3. Secure a tip-tie over the snapring to hold it in place during installation.



- 4. Place the starter gear with the snapring and washer installed into a freezer.
- 5. Place the Rekluse basket in a preheated oven at 400°F (200°C) for 15 minutes, making sure there is no oil on the basket.



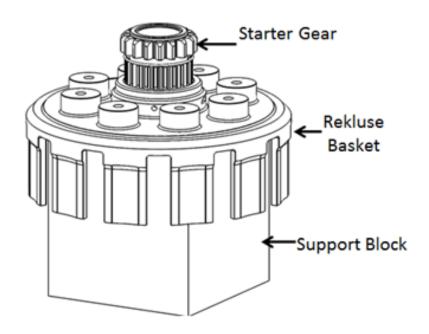
6. After 15 minutes, use oven mitts to remove the basket from the oven, then remove the starter gear from the freezer.

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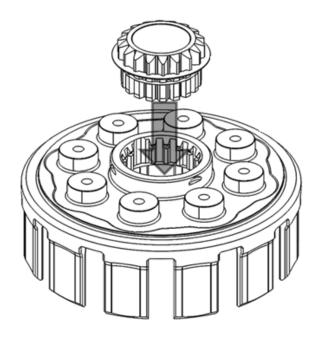
The basket will be HOT! Be sure to wear a protective covering on your hands when removing the basket from the oven.

7. Place the Rekluse basket into the hydraulic press with the basket supported (such as using a block of wood).

**NOTE:** Pressing the gear in while the basket tangs are resting on a hard surface may damage the basket.



8. Quickly align the frozen starter gear, then slowly press it into the basket, making sure the snap ring is seated in its channel. **Be careful not to touch the hot basket.** 



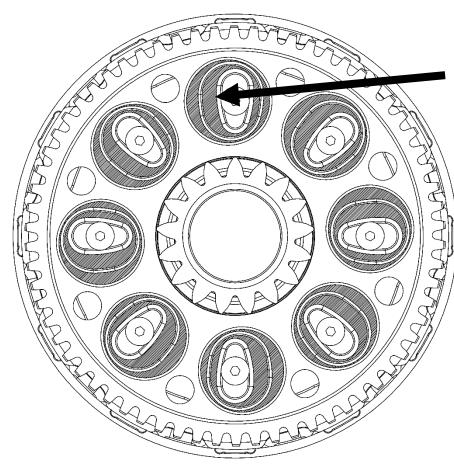
9. Once the gear is far enough into the basket that the ziptie starts to deform, pull the zip tie out before pressing the gear fully into the basket.



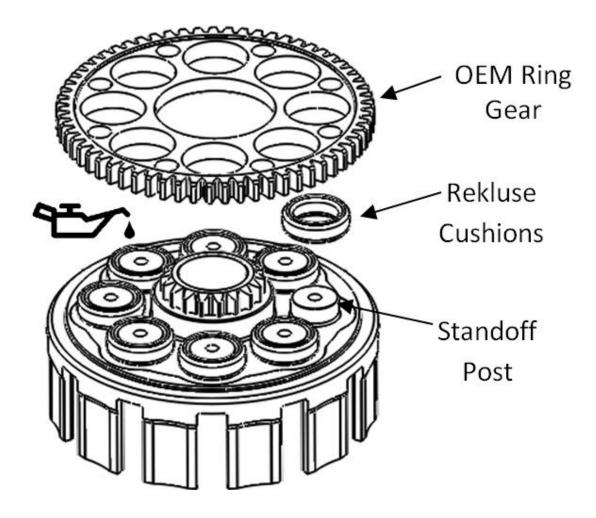
10. Once the basket has cooled, add some engine oil to the damper cushions and install one per standoff post. Starting from the top install dampers with the thick side of the damper to the left of the standoff.

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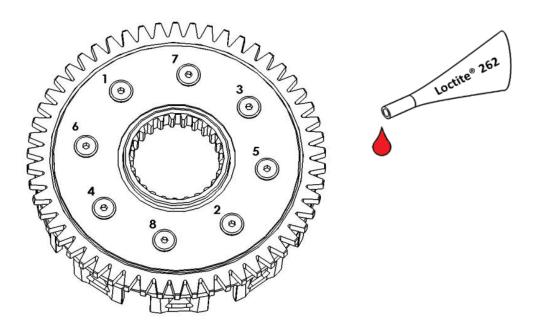
Failure to install dampers in the correct orientation can result in excessive clutch and transmission wear. Dampers should be oriented as shown in the image below.



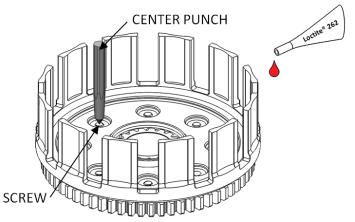
Starting from the top install dampers with the thick side of the damper to left of the standoff 11. Reinstall the OE ring gear (recessed side out). The ring gear may fit snugly and will likely require using a soft mallet to tap it on until it seats down against the basket.



- 12. Install the Rekluse backing plate and **apply the supplied Loctite® 262 to each of the M6 screws**, threading them into the clutch basket assembly.
- Torque the screw in small increments in a star pattern to 80 in-lbs (9 N-m) to compress the assembly evenly.



14. Using a hammer and center punch, peen the ends of the screws where they come through the bottom-inside of the clutch basket. Be sure to peen the screws. **DO NOT** peen the aluminum basket.



#### **A**WARNING

It is critical that you apply Loctite, torque the screws, and peen the ends of the screws or they can back out during use. Rekluse is not responsible for engine damage caused by screws that back out.

15. Install the new Rekluse clutch basket assembly into the engine following the procedures in your OE service manual.

## **INSPECTION AND MAINTENANCE**

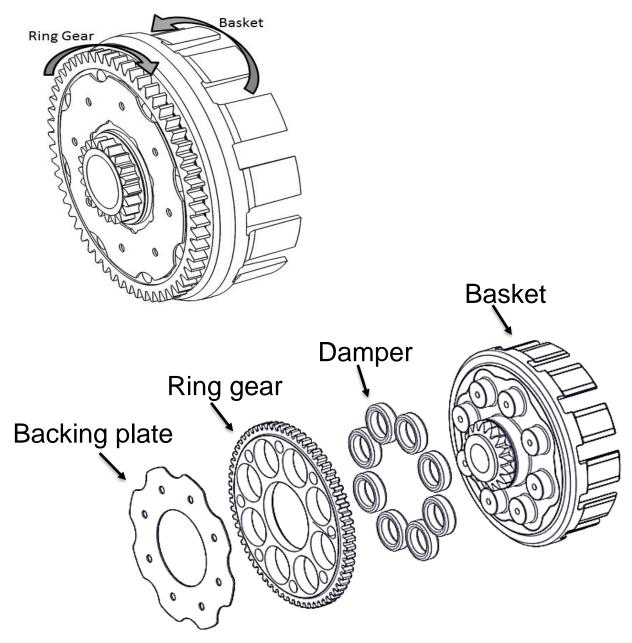
### Dampers

The dampers inside the basket assembly shrink due to heat and use. This is a normal wear item and should be **inspected every 10 hours**. Any movement of the dampers will shorten the life of your inner hub and accelerate basket wear.

- Inspect the basket dampers and/or springs by checking the play between the ring gear and the basket. Replace the dampers/springs if you feel any play in the assembly.
- Inspect the dampers if your inner hub is notched. This is usually a sign that the dampers need to be replaced.

### To inspect the dampers:

1. Remove the basket from the engine, hold the ring gear in one hand and the basket in the other, then twist in opposite directions. *The rotational play is sometimes accompanied by an audible "click" sound when rotating back and forth.* 



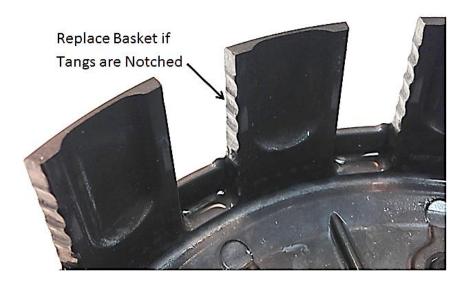
2. If any rotational play can be felt between the basket and the ring gear, the dampers are worn and either the dampers and/or basket assembly need to be replaced.

#### Basket

Rekluse baskets are built using high-quality materials but do wear based on the rider's use, type of terrain, and natural wear and tear.

• To keep your clutch basket performing at its best, perform regular maintenance on your bike and inspect your components regularly.

- Inspect the clutch basket for notching. Notched basket tang faces can cause performance issues. The basket should also be inspected for any fatigue cracking at the tang bases. Replace basket if necessary.
- Do not use baskets that have been filed, machined, or modified on the tangs.



## **Starter Gear**

The starter gear fitment can wear and should be inspected at regular intervals. A loose starter gear can cause performance issues in the clutch.

To inspect the starter gear:

- 1. Press on one side of the clutch basket, then press on the opposite side trying to see if the basket moves when pressure is applied to each side.
- 2. If the basket moves or tilts significantly, the basket needs to be replaced.

## **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: tech@rekluse.com

#### **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>

