



## REKLUSE MOTOR SPORTS

The Rekluse Clutch Basket Kit

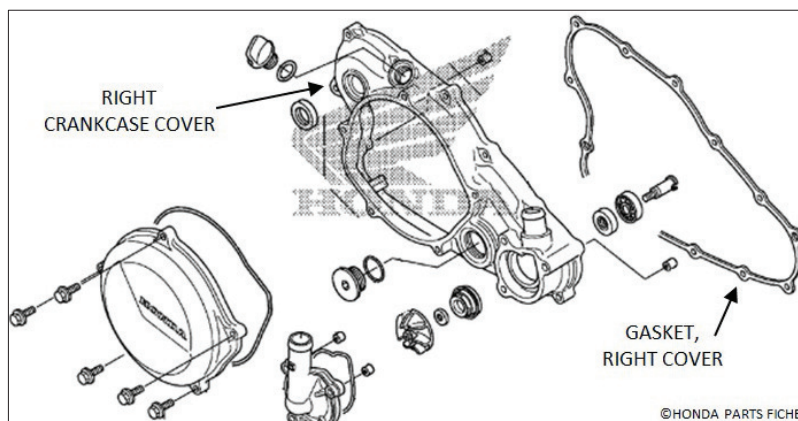
# INSTALLATION GUIDE

Doc ID: 195-4113

Doc Rev: 091918

## INSTALLATION NOTES

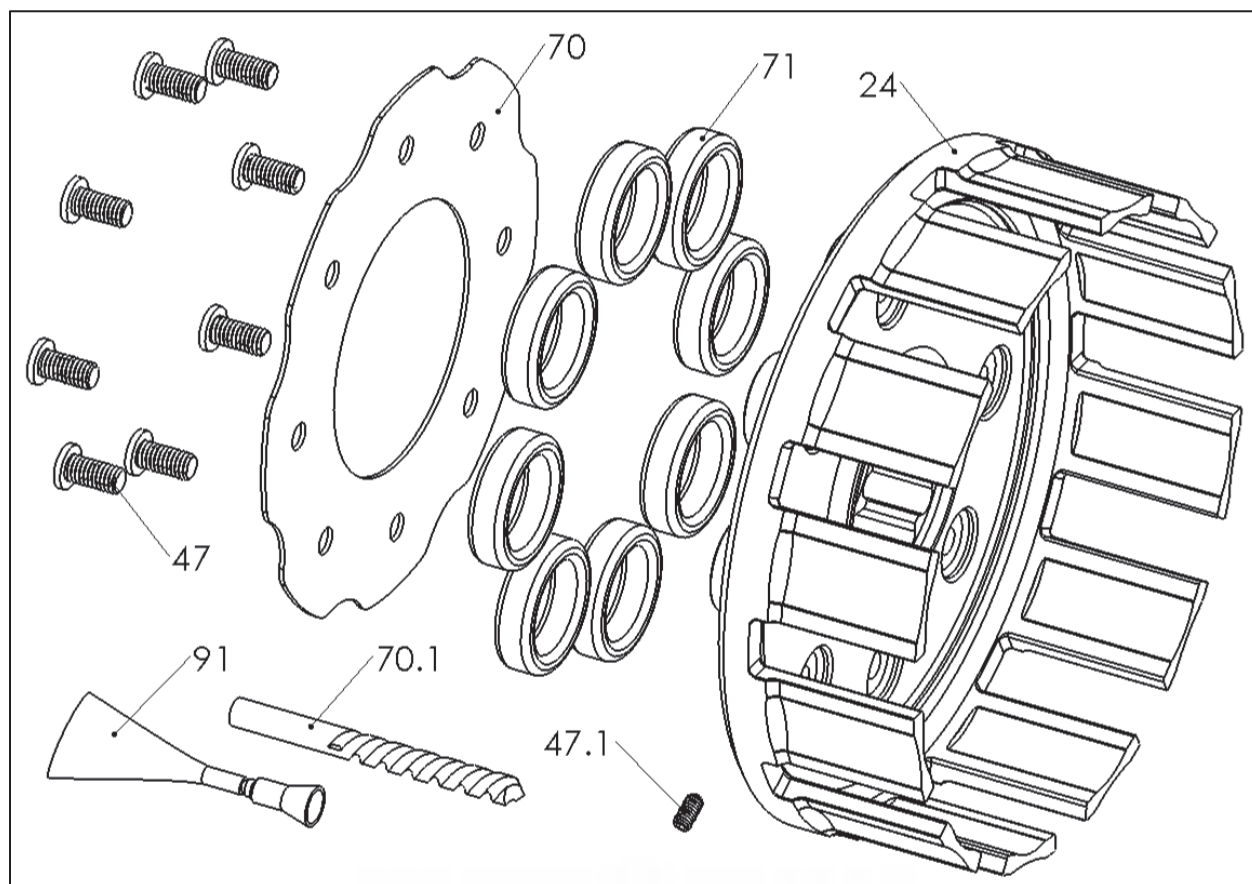
- The machined teeth in the center of your Rekluse billet clutch basket accept the OEM starter gear. Your Rekluse basket may have a different tooth profile than your OEM basket, which is part of the intended design for function and manufacturability. They may look different, but your starter gear will fit into the new basket in the same manner that it fit in the OEM basket.
- It is imperative to follow the heating and cooling methods described in the "Starter Gear Installation" section of this document. This ensures a secure press-fit that will prevent the starter gear from backing out of the basket during use. 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.
- Always wear gloves and proper eye protection when working on your bike.
- **Honda Owners & some KTM Owners:** Removing the OEM basket may require draining the engine coolant and removing the right crankcase cover (refer to your OEM service manual). It is recommended to replace the right cover gasket upon reinstallation. Your new *Rekluse basket has been designed to fit through the clutch access hole in the right crankcase cover*, so any future basket removal or clutch work can be performed without removing it again.



## TOOLS NEEDED

- Kitchen Oven (or toaster oven) & Freezer
- Center Punch
- Hammer
- Soft Mallet or Dead Blow
- Drill Press or Power Drill
- Shop Press or Vice
- ¼" Bit Driver
- Torque Wrench (in-lb or N-m)

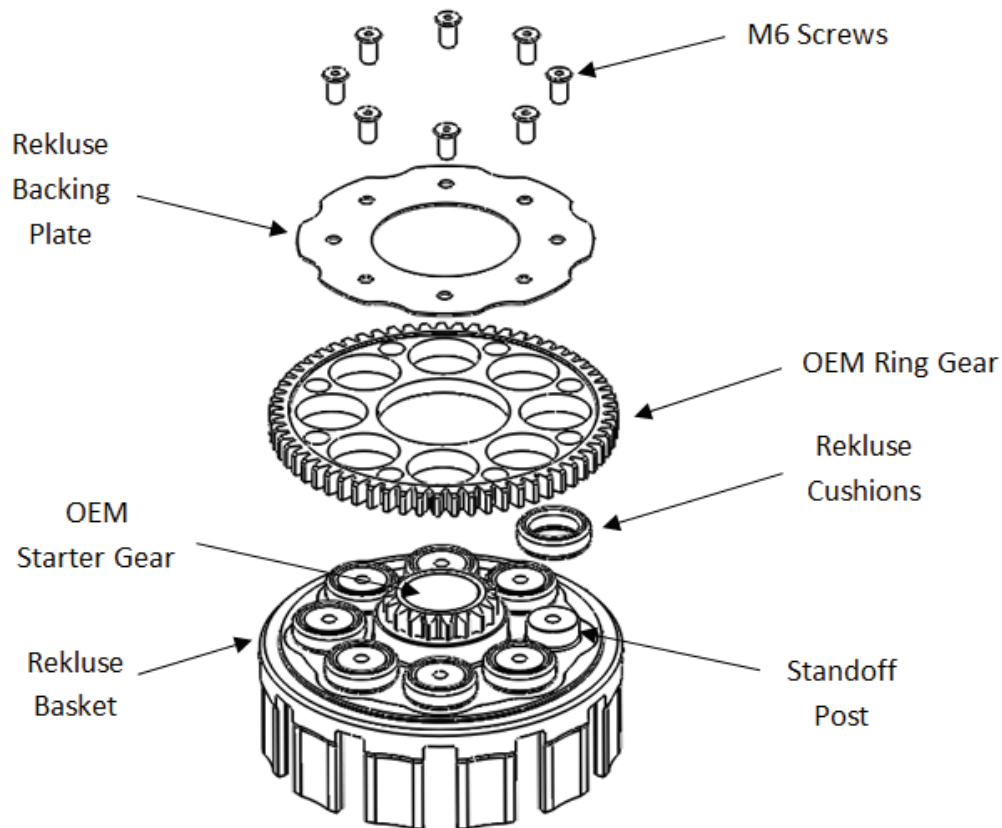
## INCLUDED PARTS



Item	Item Type	Qty
24	Clutch Basket	1
47	M6 Flat-Head Screws	8
47.1	Set Screw	1
70	Backing Plate	1
70.1	¼" Drill Bit	1
71	Basket Damper	8
91	Loctite 262 (Red)	1

Visit [Rekluse.com/support](https://Rekluse.com/support) for a full parts fiche illustration and part numbers.

# ASSEMBLY OVERVIEW



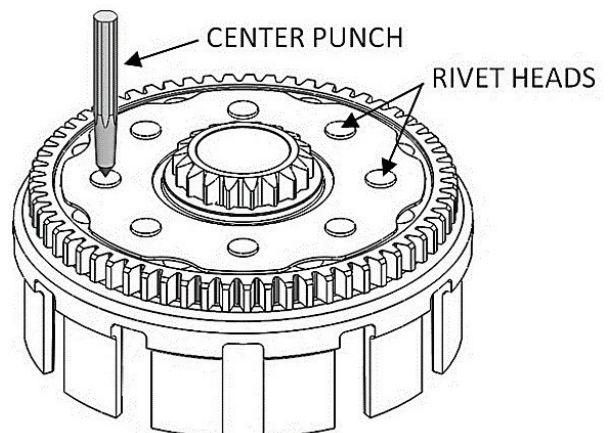
## BIKE PREP & DISASSEMBLY

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

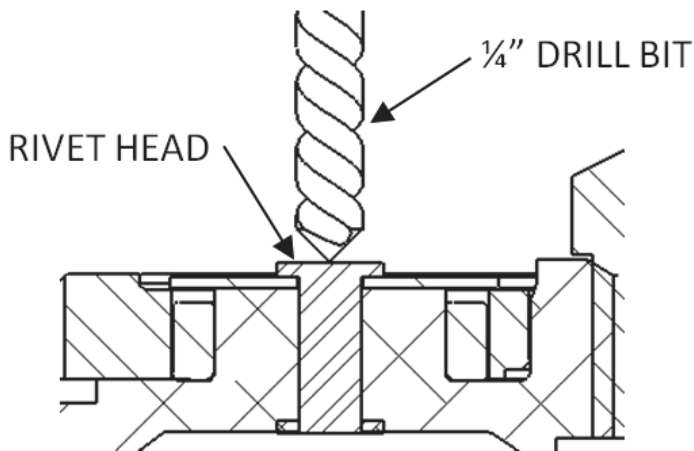


1. Following the procedures in your OEM service manual, remove the existing clutch basket from the engine.

2. Set the OEM basket on a hard surface with the ring gear facing upward. Using a center punch and hammer, punch a divot into the top of each rivet head, taking care to be on center.
3. Use the supplied drill bit to 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.



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



4. Carefully pry the OEM steel backing plate from the basket. Mark the side that faces upward on the ring gear and then remove it.

**Note:** It is important that the ring gear be reinstalled with the same side facing up. Marking the top side of the ring gear will help ensure that the correct side is facing up during reinstallation.

5. Press the starter gear out of the OEM basket without damaging it. See exception notes below:

**Kawasaki KX250F,  
Some KTM 125,144,150,200 2-strokes, &  
Honda Owners** (except all CRF450X and  
2004-2009 CRF250R):

Your starter gear has a spacing washer behind it. This washer **WILL** be reused with the Rekluse basket (see step 8).

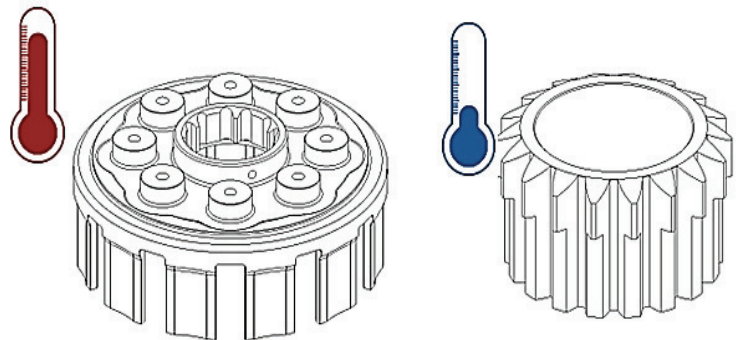
**2010+ Honda CRF250R &  
All Honda CRF450R Owners:**

The OEM starter gear has a blind retaining ring holding it in place. It will take extra force to press the gear out of the OEM basket and you may break the basket during removal. This retaining ring **will not** be reused with the Rekluse basket.

## STARTER GEAR INSTALLATION

**NOTE:** Read through this entire process and prepare your tools so the procedure can be performed as quickly as possible while temperatures are favorable.

6. Place the Rekluse basket in a preheated oven at 400°F (200°C) for 15 minutes (**do not exceed 20 minutes**), making sure there is no oil on the basket. Place the starter gear in the freezer for the same duration.

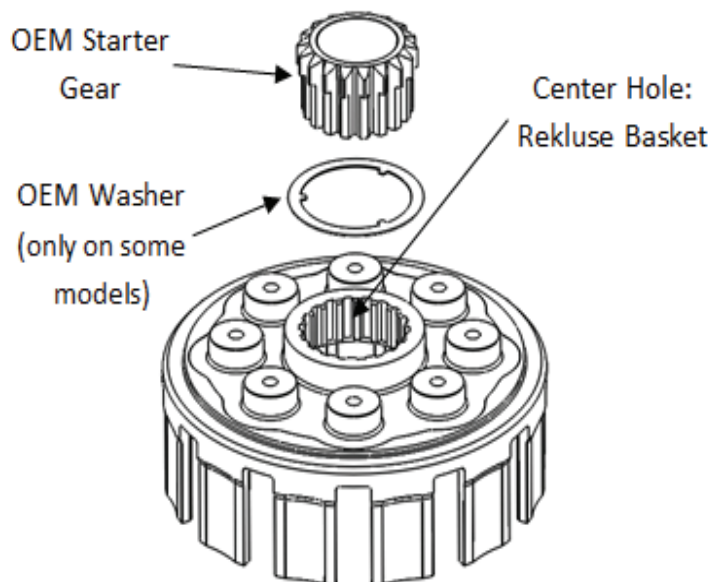


7. After 20 minutes, remove the starter gear from the freezer, then use oven mitts to remove the basket from the oven.

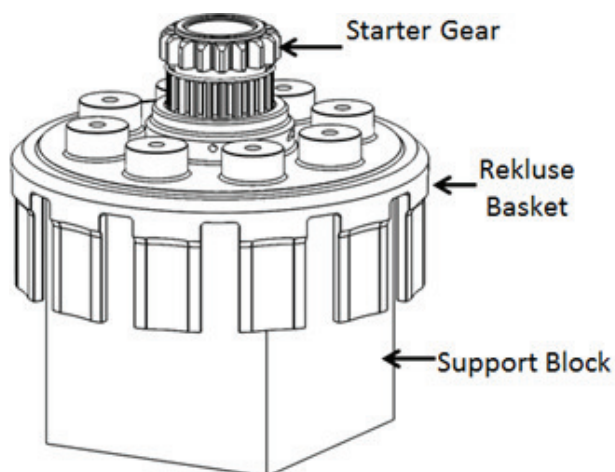
**CAUTION:** The basket will be HOT! Be sure to wear protective covering on your hands when removing the basket from the oven.



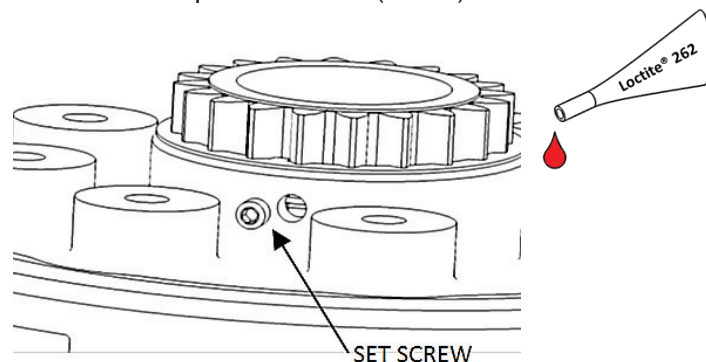
8. Set the basket on a flat surface. Quickly align and press the frozen starter gear by hand into the center hole in the basket being careful not to touch the hot basket.



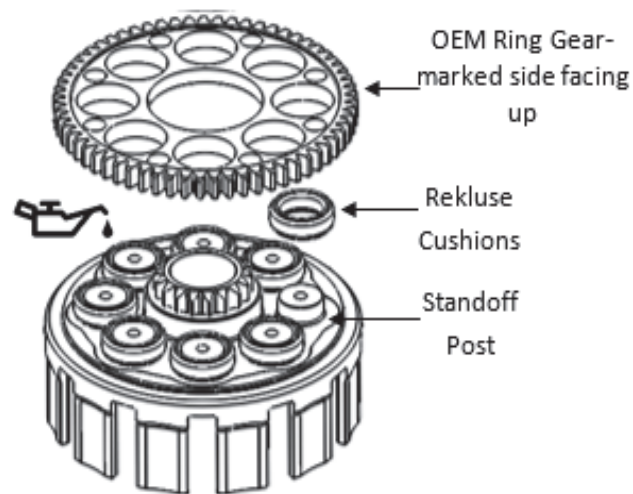
9. If the fit seems too tight, a rubber mallet may be used to tap the gear in while supporting it (such as supporting the basket using a block of wood). Tapping the gear in while the tangs are resting on a hard surface may damage the basket.



10. Once the basket has cooled, install the set screw [#47.1]. Use some of the included red Loctite® 262 on the threads of the set screw. Torque to **18 in-lb (2 N-m)**.



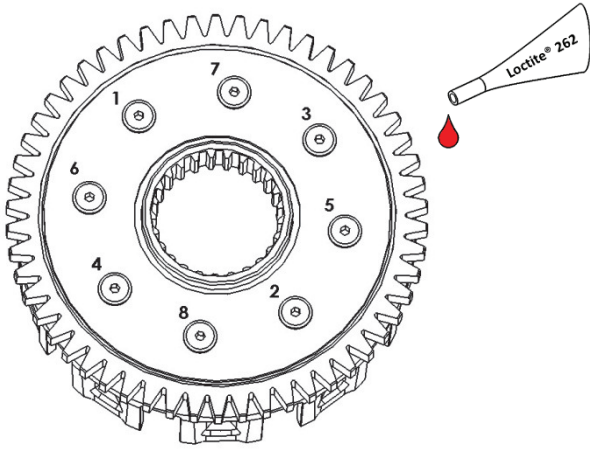
11. Add some engine oil to the cushions and install one per standoff post.
12. Install the OEM Ring Gear with the marked side facing up. The ring gear may fit snugly and will likely require using a soft mallet to tap it on until it seats down against the basket.



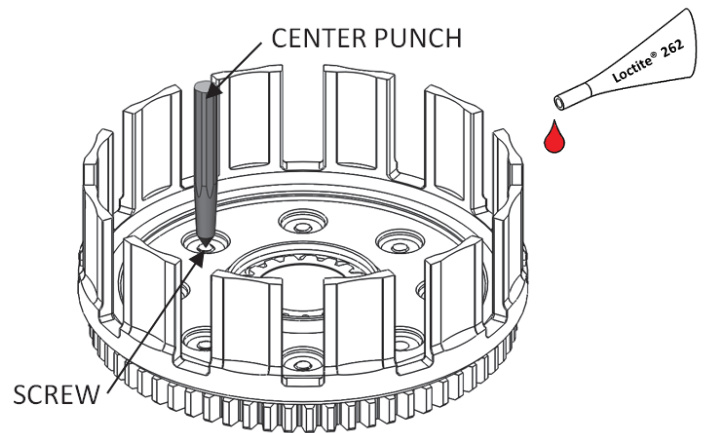
**NOTE:** KX250F baskets have a Bellville spring washer between the ring gear and backing plate, **DO NOT** re-use this.

13. Install the Rekluse Backing Plate [#70] and apply the supplied Loctite® 262 to each of the M6 screws [#47], threading them into the clutch basket assembly.

Tighten to **80 in-lb (9 N-m)** in a crisscross pattern 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.



**WARNING:** It is *critical* that you apply Loctite 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.

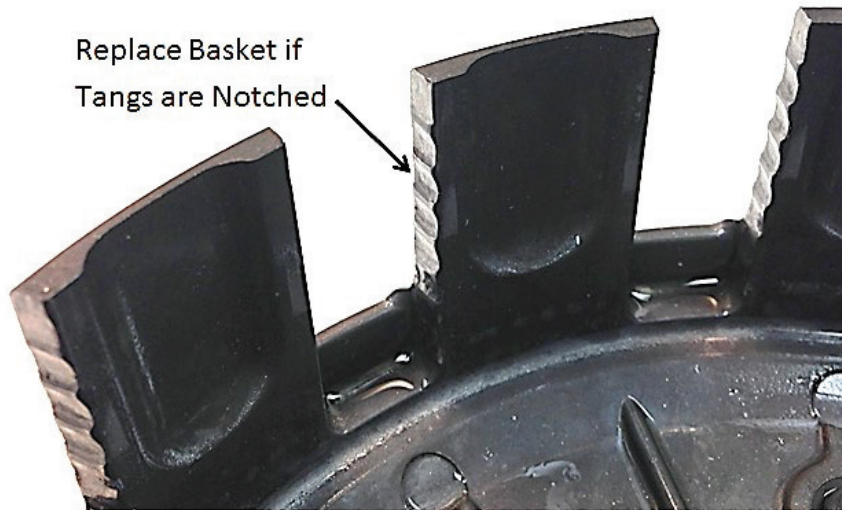
15. Install the new clutch basket assembly into the engine following the procedures in your OEM service manual.

## INSPECTION AND MAINTENANCE

### 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.



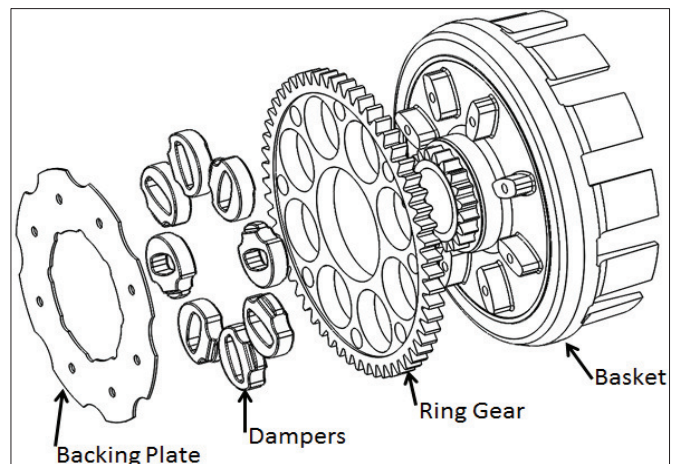
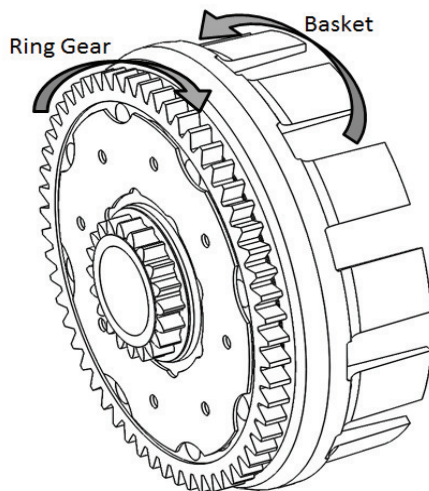
## Dampers

The OE dampers inside the center hub assembly shrink due to heat and use. This is a normal wear item and should be inspected periodically. Any movement between 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.



## **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?**

Contact Technical Support for questions related to product installation.

### Technical Support hours:

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

Phone: (208) 426-0659

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