



REKLUSE MOTOR SPORTS

The Rekluse Clutch Basket Kit – Yamaha 450

INSTALLATION GUIDE

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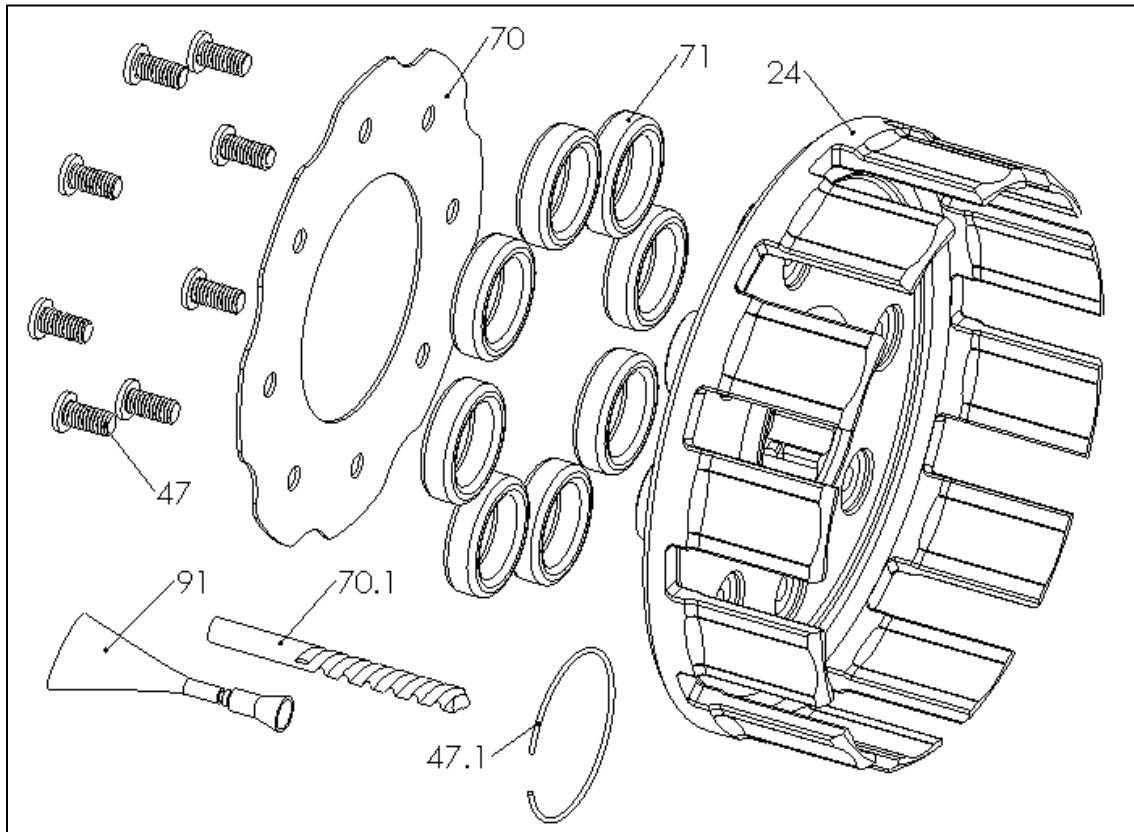
INSTALLATION NOTES

- 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.
- **2018+ YZ450F and all years YFZ450R/X models** will not use the snap ring during installation.
- Always wear gloves and proper eye protection when working on your bike.

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)
- Picks

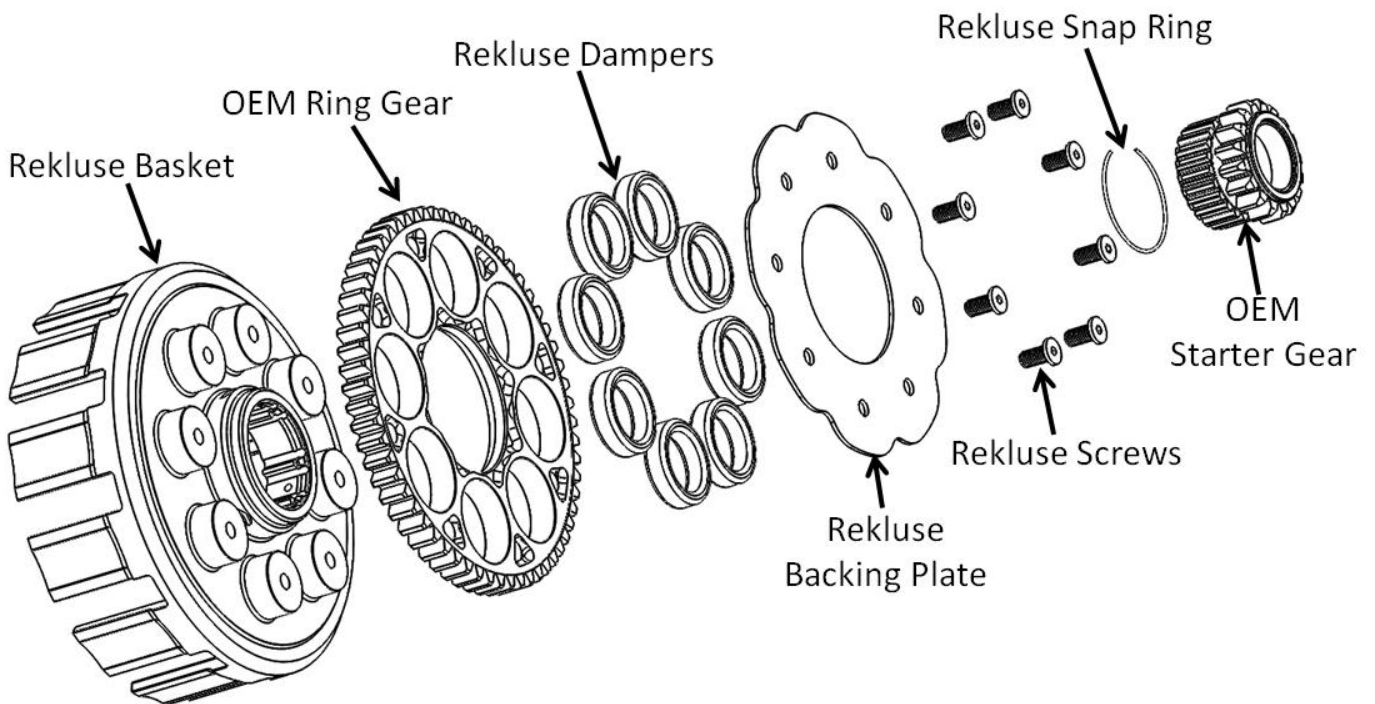
INCLUDED PARTS



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

Visit Rekluse.com/support for a full parts fiche illustration and part numbers.

ASSEMBLY OVERVIEW



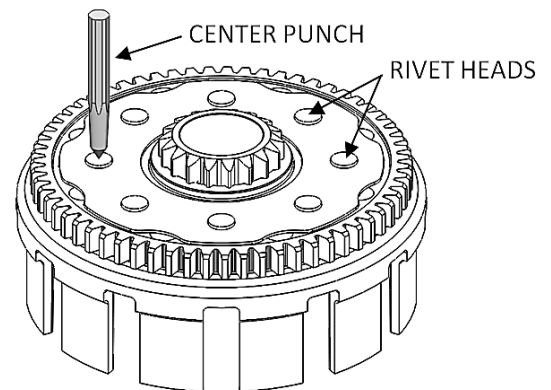
BIKE PREP & DISASSEMBLY

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



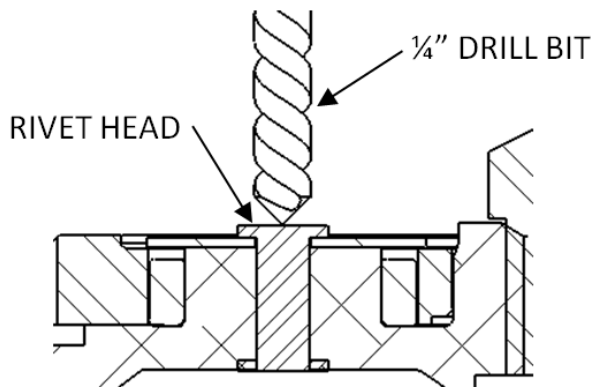
2. Following the procedures in your OEM service manual, remove the existing clutch basket from the engine.

3. 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.



- 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.



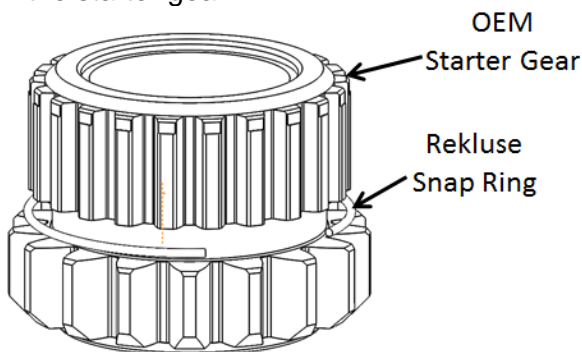
- Carefully pry the OEM steel backing plate from the basket and remove the ring gear. A hammer and chisel may be used to carefully remove any remaining pieces of rivet head.

- Press the starter gear out of the OEM basket without damaging it.

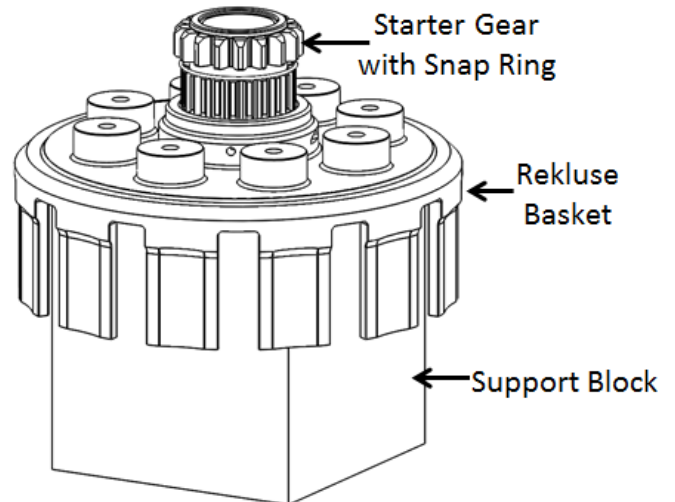
ASSEMBLY

PREPERATION

- 2018+ YZ450F and all years YFZ450R/X models skip to next step.**
All other Models: Install the supplied Rekluse snap ring onto the OEM starter gear taking care not to bend the snap ring. The ring will sit loose within the groove on the starter gear.



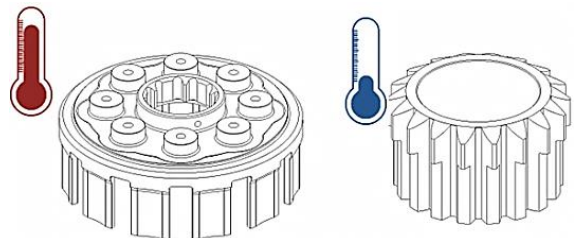
- Prepare the press/vice by setting it to the correct width to press the starter gear into the basket. Use a block to support the center of the basket during the pressing operation. **Do not press the gear in at this point!**



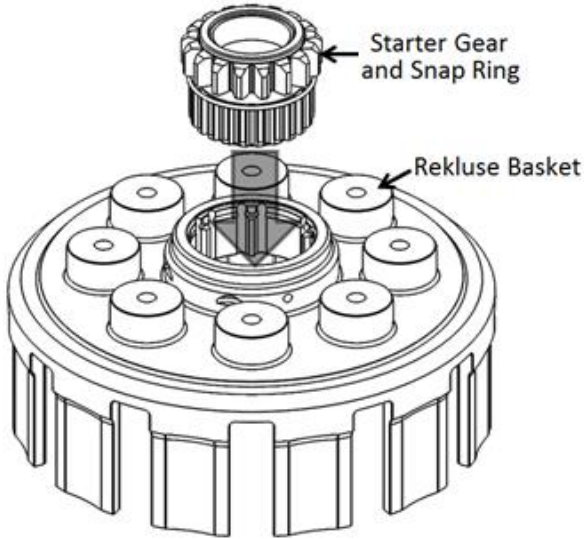
STARTER GEAR INSTALLATION

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

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



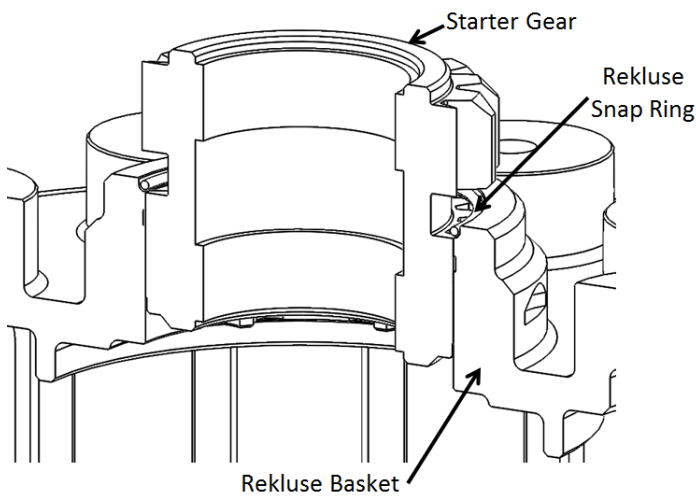
10. Be sure to use proper heat protection (oven mits). After 15 minutes, remove the basket from the oven. **Immediately** align and press the starter gear in **by hand** as far as it will go. This will ensure proper alignment of the starter gear.



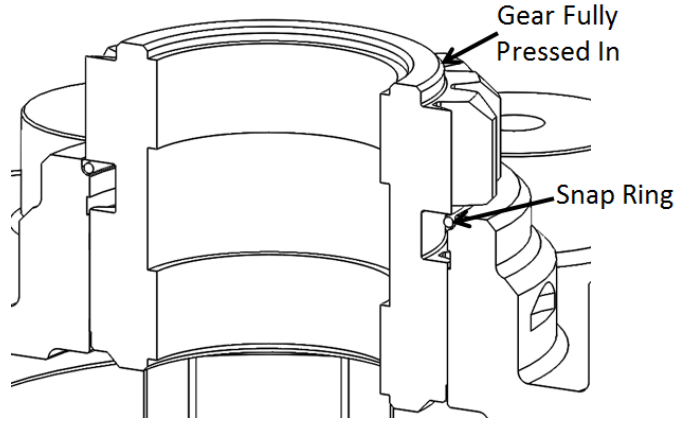
11. 2018+ YZ450F and all years YFZ450R/X models skip to step 14.

All other Models: During the starter gear installation, ensure that the snap ring falls into the counter-bore feature in the basket so that the gear can be fully pressed in.

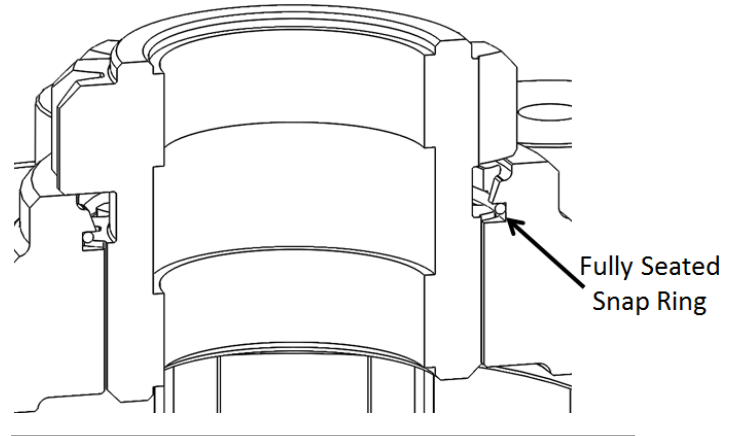
OEM



12. Seat the starter gear fully against the basket face. A soft mallet may be used to tap the gear in until it is seated. If needed, shop press or vice may have to be used to fully press in the gear. Do this while the basket is hot. Use the support block to support the basket while seating the gear.



13. Use picks to push the snap ring down into the ring groove.

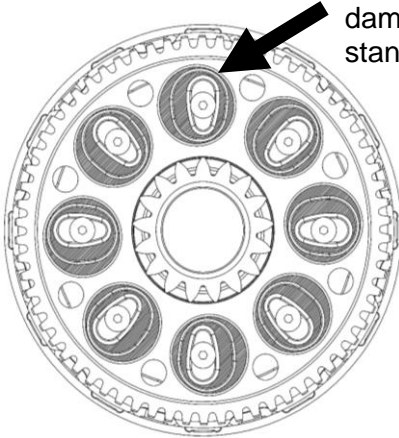


FINAL ASSEMBLY

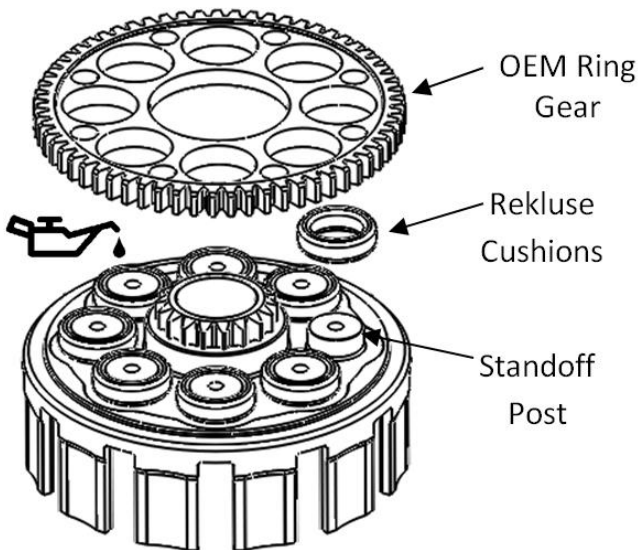
14. Once the basket is cooled, add some engine oil to the cushions and install one per standoff post

NOTE: For profile dampers that are not round posts, install starting from the top install dampers with the logo facing up and the thick side of the damper to the left of the standoff

Starting from the top install dampers with the thick side of the damper to left of the standoff

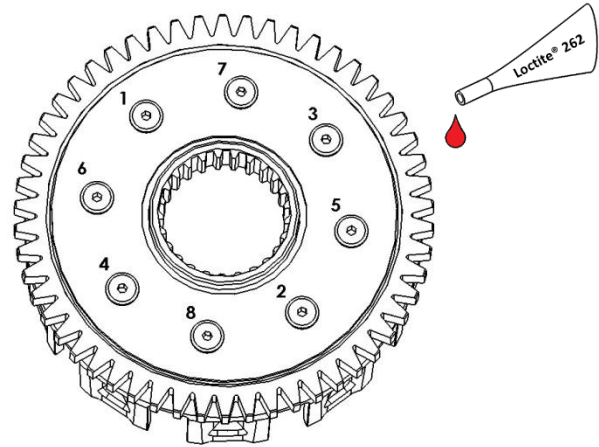


15. Install the OEM Ring Gear (recessed side out). The ring gear may fit snugly and will likely require using a soft mallet to tap it on until it seats down against the basket.

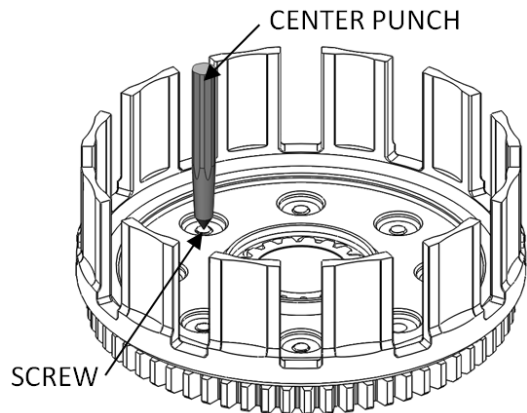


16. Install the Rekluse Backing Plate [#70] and apply the supplied Loctite® 262 to each of the M6 screws [#47], threading them into the clutch basket assembly.

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



17. 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.

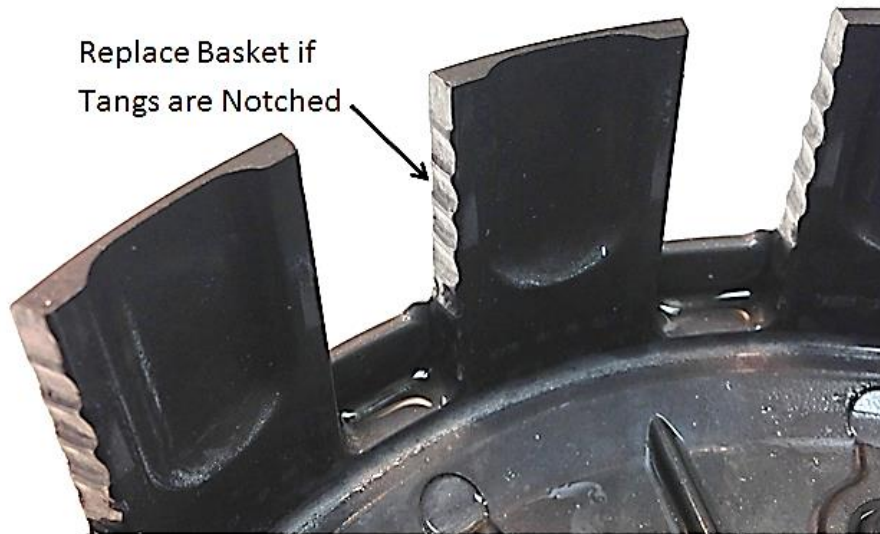
18. Install the new clutch basket assembly into the engine following the procedures in your OEM service manual.

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

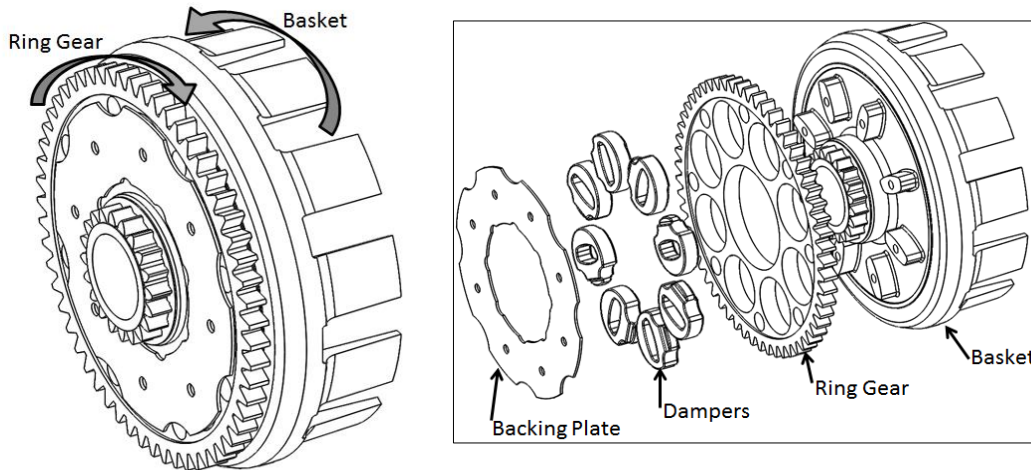
The OE dampers inside the center hub assembly shrink due to heat and use. This is a normal wear item and should be inspected periodically. Any movement between the dampers will shorten the life of your inner hub and accelerate basket wear.

- 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