

KTM Intermediate Gear Problem - Applies to 2000-2005 Electric Start KTM RFS 250, 400, 450 and 525.
Text and Pictures from KTMTALK Members.

Post: <http://ktmtalk.com/index.php?showtopic=139918>

Pictures: <http://ktmtalk.com/index.php?showtopic=139918&st=60>

The problem is with the kickback on stopping, not the actual starting. The kickback pressure is there no matter how hard you try to hold it back with

harder gears it still needs to be relieved in some way, thus the new design with torque limiter. Most of the time, the teeth sheared from the intermediate gear will be found stuck to the magnetic drain plug when changing the oil. However they can also get you stuck in one gear or put undue wear on the trans. If you get stuck in one gear out in the middle of nowhere, the trick is to ride it up on a ledge or rock and to lean the bike over far enough to let the broken tooth fall through to the drain magnet, and the shifter will work to get you back to the truck.

The 06 torque limiter gear is the part that is different. Rather than the solid reduction gear as before, it is an assembly that can slip, it seems to be "spring" loaded. You need the 2 needle bearings for it, and you will need to order the new 06 case cover or machine a small amount off your case. The new case is .346 from the flat to the edge of the case. The old one is much shorter distance, as it is a taller post. The new case is milled almost flat with the surface of the inner case (See pictures below). It doesn't look very hard to machine the flat down, but it's a little more than a dremmel tool job.

If you get the new 06 clutch cover, you will need to get the seals that are on the inside, there are two of them. The sight glass is easy to get out, just take your time and don't crack the glass. Put gray silicone around the site glass rubber. Wrap the long bolt that goes right above the site glass with a few turns of Teflon tape. If you don't, the oil passage there will allow oil to drip out the bolt head giving the appearance that the site glass is leaking.

If all your OTHER gearwheels are OK, you may need only the torque limiter. However I would replace the intermediate gear while at it if you still have an original 05 gear.

You have to remove the clutch basket and in order to do it the right way, you should use a KTM clutch holding tool.

Here are the part numbers for the NEW 06 E-start parts.

Case Parts

1 P/N 59030001100 CLUTCH COVER RACING 2006 \$113.71

1 P/N 59030025100 GASKET FOR CLUTCH COVER \$14.60

1 P/N 0760193070 SHAFT SEAL RING 19X30X7 B \$3.95

1 P/N 59030019000 OIL LEVEL GLASS G 1777 Y \$13.11

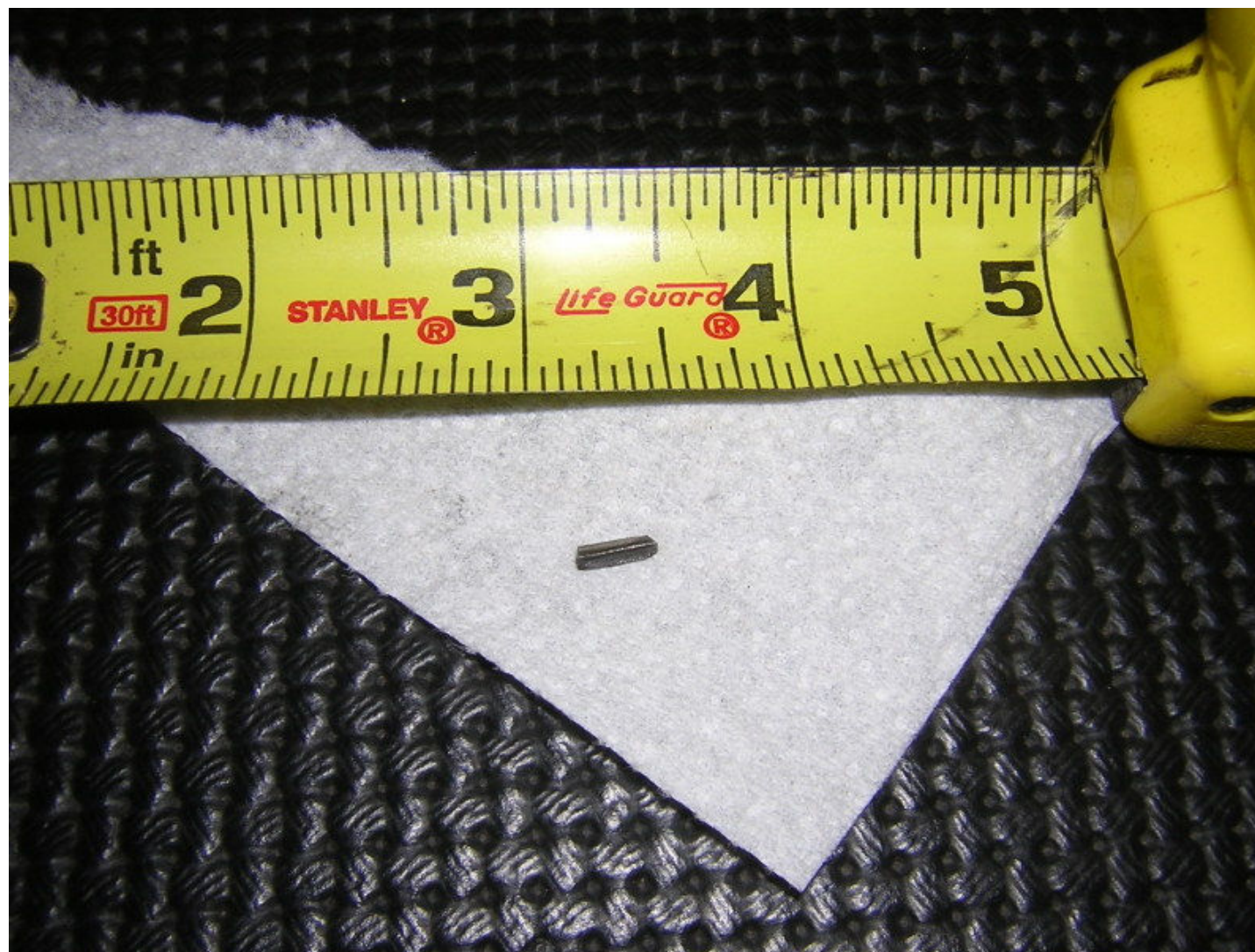
1 P/N 0760142460 SHAFT SEAL RING 14X24X6 B \$7.60

Gears and Bearings

1 P/N 59040022258 GEAR WHEEL (Intermediate) \$29.65

1 P/N 59040016000 TORQUE LIMITER 06 \$93.19

2 P/N 0405101310 NEEDLE BEARING K 10X13X10 02 \$8.67



Example of Intermediate Gear tooth found in oil



Another Example



05 and Older Reduction Gear and Intermediate gear



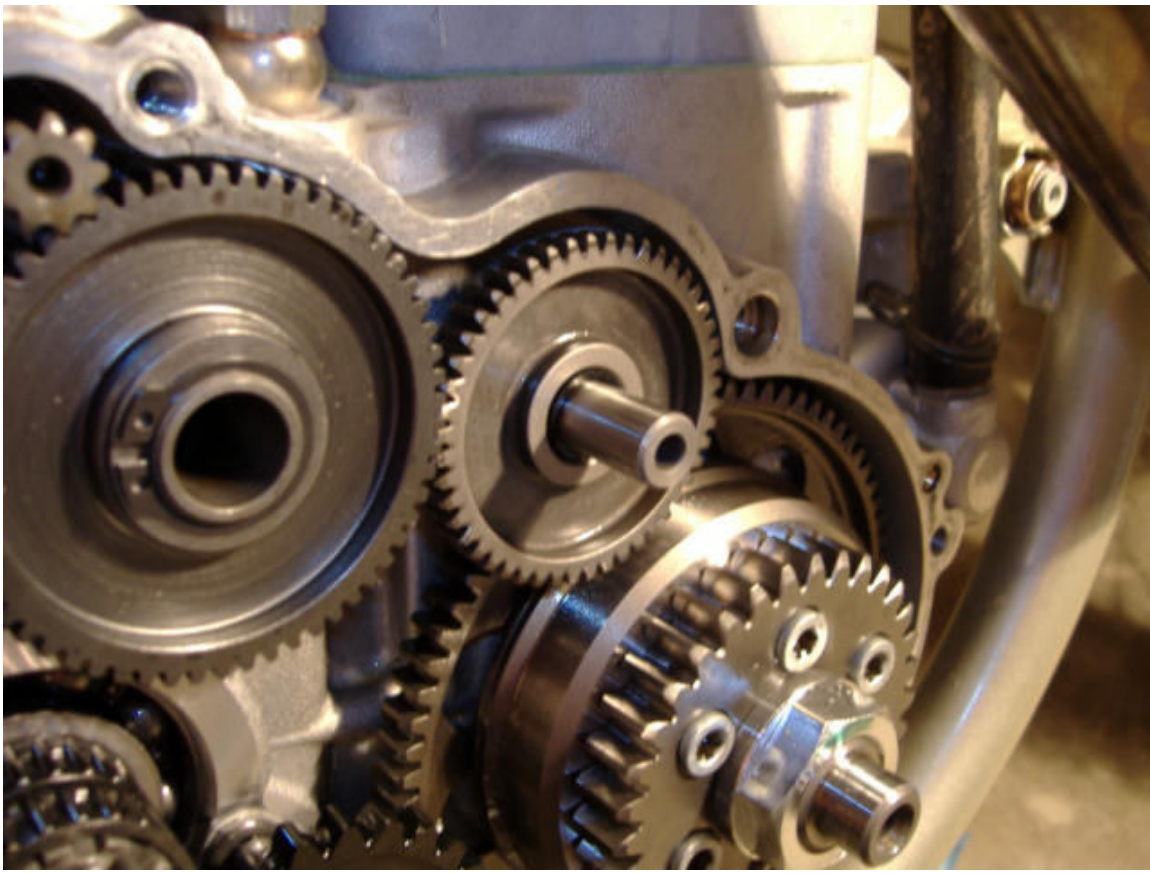
06 New Torque Limiter Inside View - 59040016000 TORQUE LIMITER 06



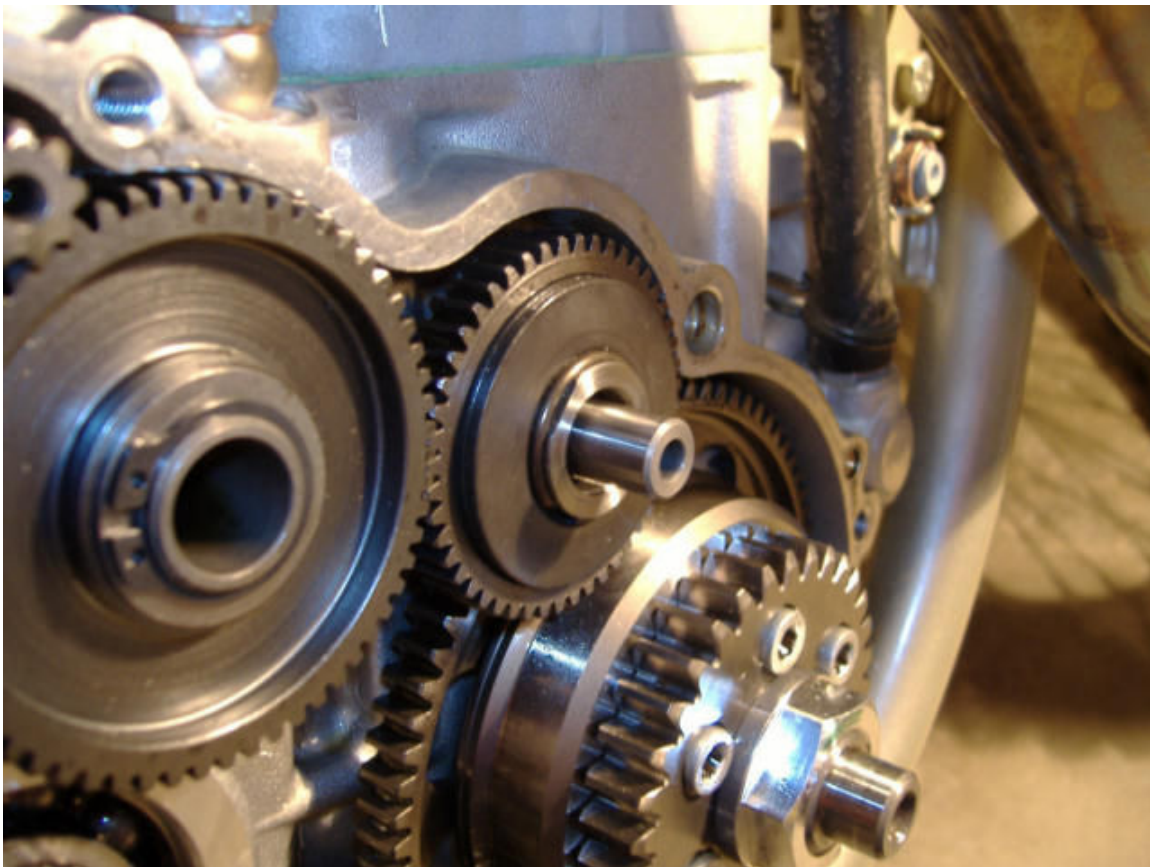
06 Torque Limiter Outside View



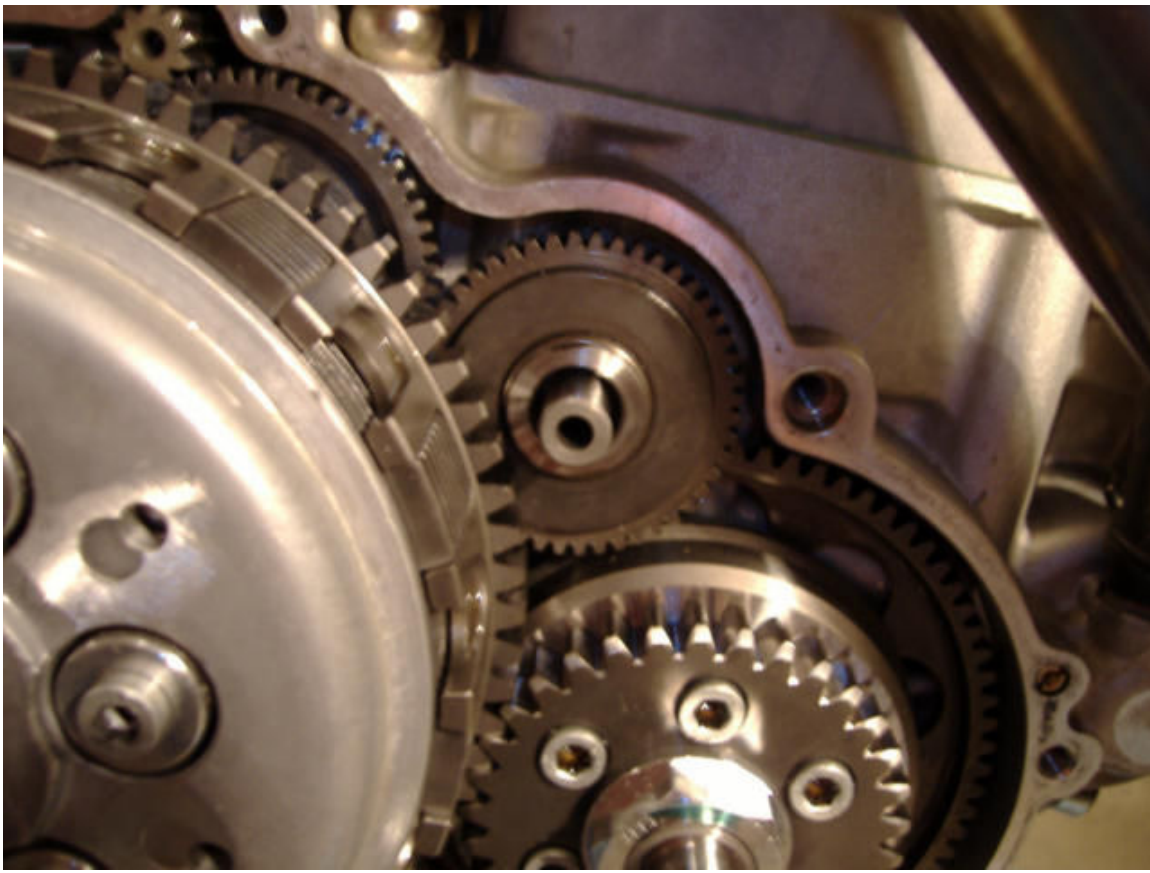
06 Needle Bearings - 0405101310 NEEDLE BEARING



05 and Older Gears Mounted on the Bike



06 Gears Mounted on the Bike. Notice the thickness of the Torque Limiter



06 Front View



06 Case Cover - 59030001100 CLUTCH COVER RACING 2006



05 and Older Case Cover