

CAN AM X3 PINION SAVER INSTALLATION GUIDELINES



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PROFORMANCE

MOTORSPORT

PINION SAVER INSTALLATION GUIDELINES

REMOVE PINION/BEARING

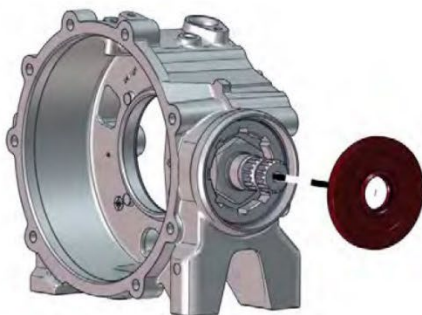
- (Follow OEM Instructions below)

Drive System
Smart-Lok Differential

Pinion

Replacing the Pinion

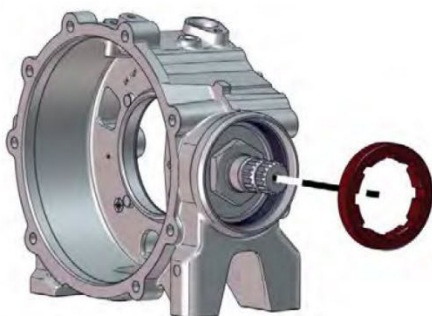
1. Remove and discard oil seal.



2. Lock the multifunctional tool and the spline driver together with a screwdriver.

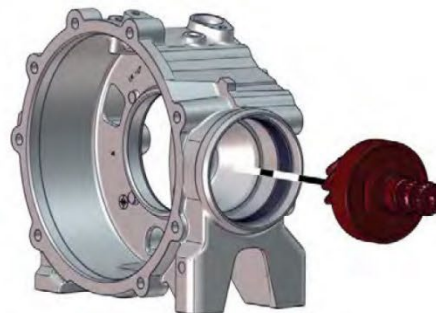
Multifunction differential tool (P/N 529036385)	
Spline driver (P/N 529036386)	

3. Slide the tools until it engage the nut.
4. Unscrew the M75 pinion bearing nut.



5. Remove bearing and pinion gear together.

NOTE: If pinion is hard to pull out, attach the propeller shaft to it and pull while hitting the yoke with a soft hammer.



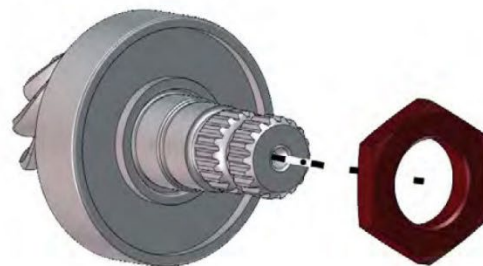
6. Install the multifunctional tool in a vice.

Multifunction differential tool (P/N 529036385)	
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7. Slide the spline driver on the pinion shaft.

Spline driver (P/N 529036386)	
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8. Slide the pinion and the spline driver in the multifunctional tool until the nut is engaged.
9. Turn the spline driver clockwise to unscrew the pinion.
10. Remove nut from pinion.



11. Remove bearing from pinion gear.

NOTE: It is typically necessary to heat the Retaining Ring and Aluminium case to soften the OEM Thread Locker before removal is possible.

Pinion Shaft/Needle Roller Inspection/Replacement

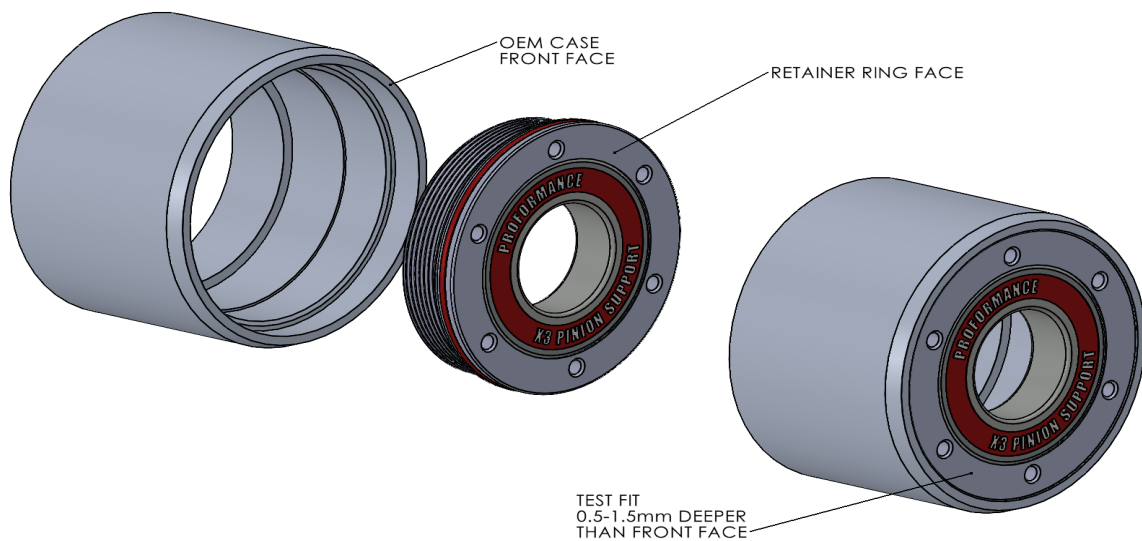
- Inspect the small pinion shaft that sits in the needle roller and replace the pinion if any signs of wear, scratches or damage are present on the needle roller male shaft
- It is highly recommended to replace the pinion needle roller bearing and large pinion bearing before installing the pinion saver

Clean OEM Components

- Remove all thread locker from the OEM Diff Case Bore and Threads
- Remove All thread locker from the PINION Shaft and Pinion Shaft Thread
- Clean the OEM bore/thread and Pinion Shaft/Thread using a solvent based cleaner such as Brake/Carby Cleaner

Pinion Saver Test Fit

- Pinion saver comes pre-assembled ready for test fitment (do not install the pinion prior to test fitment)
- Do not remove any O RINGS
- Test Fit the Pinion Saver into the OEM case using the OEM Tool or a 41mm Socket
 - Ensure the face of the pinion saver sits approx. 0.5-1.5mm deeper than the face of the OEM case when tightened by hand
- Remove the pinion saver from the OEM case
- Clean the OEM Case/bore again, using a solvent based cleaner such as Brake/Carby Cleaner

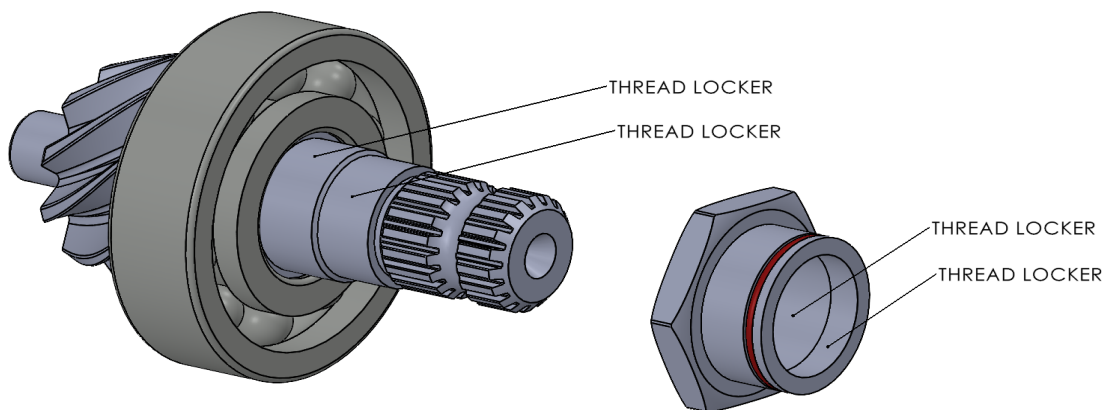


Pinion Saver Disassembly

- Remove the 5mm Screws from the Hexagon Pinion Saver Installation tool
 - Remove the Hexagon Installation Tool
- Push the Pinion Saver Nut out of the bearing bore
 - Use a socket to press the nut from the bearing bore if necessary
- Remove all Oils and Corrosion Inhibitors from the pinion saver components
 - Use a solvent based cleaner such as Brake/Carby Cleaner

Pinion Saver Nut Installation

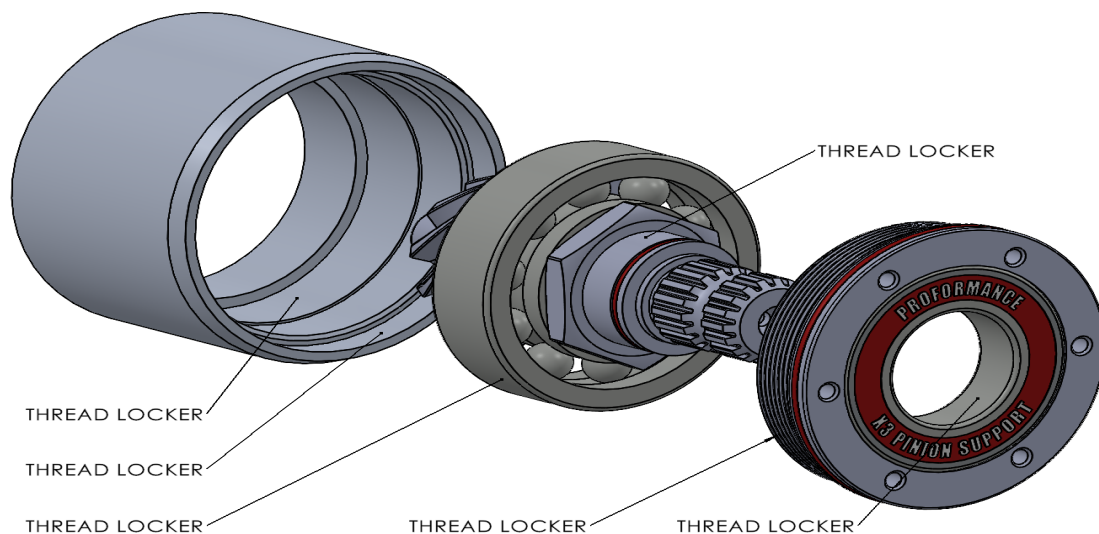
- Install a NEW Pinion Bearing onto the pinion shaft
 - It is highly recommended to replace the pinion needle roller bearing and large pinion bearing before installing the pinion saver
- Apply Red Thread Locker to areas shown below



- Hold pinion nut and shaft using OEM tools above
- **Tighten the pinion saver nut to 150 Ft/lbs**
- Remove any excess Thread Locker

Pinion Saver Installation

- Bolt the Hex Installation Tool onto the bearing retainer using the 5mm Screws
- Apply Red Thread Locker to areas shown below:



- Slide the Bearing Retainer onto the pinion assembly (light force may be required to push over the o ring)
- Install the entire assembly and hand tighten to “press” the large pinion bearing into the case
- **Tighten the Bearing Retainer to 200-220 Ft-lbs**
- Remove the 5mm screws – remove the Hex Installation Tool
- Remove Excess Thread Locker