



2017+ Maverick X3 Billet Aluminum Engine Gear Kit

SKU(s): 804FC0166

INCLUDED PARTS

(1) EVP Aluminum Oil Pump Gear, 22 tooth
(1) EVP Aluminum Oil Pump Gear, 25 tooth
(1) EVP Aluminum Oil Pump Gear, 26 tooth
(1) EVP Aluminum Oil Pump Gear, 28 tooth
(1) EVP Aluminum Oil Pump Gear, 29 tooth
(1) EVP Aluminum Oil Pump Gear, 31 tooth

REQUIRED TOOLS

Torque Wrench
Motor Oil
Oil Filter
Crank-Stop Tool
Mag Cover Gasket
BRP Flywheel Puller
Loctite 648 (Green in color)
Loctite 271 (Red in color)

****The EVP Aluminum Gear Kit is for racing only and should be installed by qualified engine builders. These are NOT intended for any other purpose but racing. Gears need to be inspected every 500 miles for tooth wear and play.**

Step 1: This job can be done with the motor in the vehicle, however for these installation instructions we pulled the motor, you must drain motor oil, remove oil filter, remove mag cover.

Step 2: Find Top-Dead-Center (TDC). Install BRP Crank-Stop (PN:529-036-272) into block before removing flywheel. (Figure 1). IF you don't have this tool, you can use **8 x 1.25 x 30mm** long bolt. **MUST FILE TIP DOWN TO A POINT.** (Figure 2).

Step 3: Remove flywheel from the crank shaft, using a Flywheel puller and shaft protector. (Figure 3)

Step 4: Remove and replace one gear at a time; total of (3) idle gears (torque to 80 in/lb using Loctite 271 on bolt threads) and (3) working gears (snap pins), (Use Loctite 648 on the gears) (Figure 4-5).

When applying Loctite 648, please follow the procedure below.

- **All of the gears that are secured with pins need to have Loctite Shaftlock applied to the gears. Apply 2-3 small drops on the back side of the gear, let the Loctite tack up for 3 minites. Slide the gear onto the shaft and install onto the pin. Make sure no loctite seeps behind the gear onto the cover. This is crucial.**

Step 5: Once all (6) gears have been replaced, slide the flywheel and crankshaft key back onto the crank. Torque flywheel bolt to 111 ft/lb.

Step 6: Replace Mag Cover Gasket, EVP PN: 804RC0014.

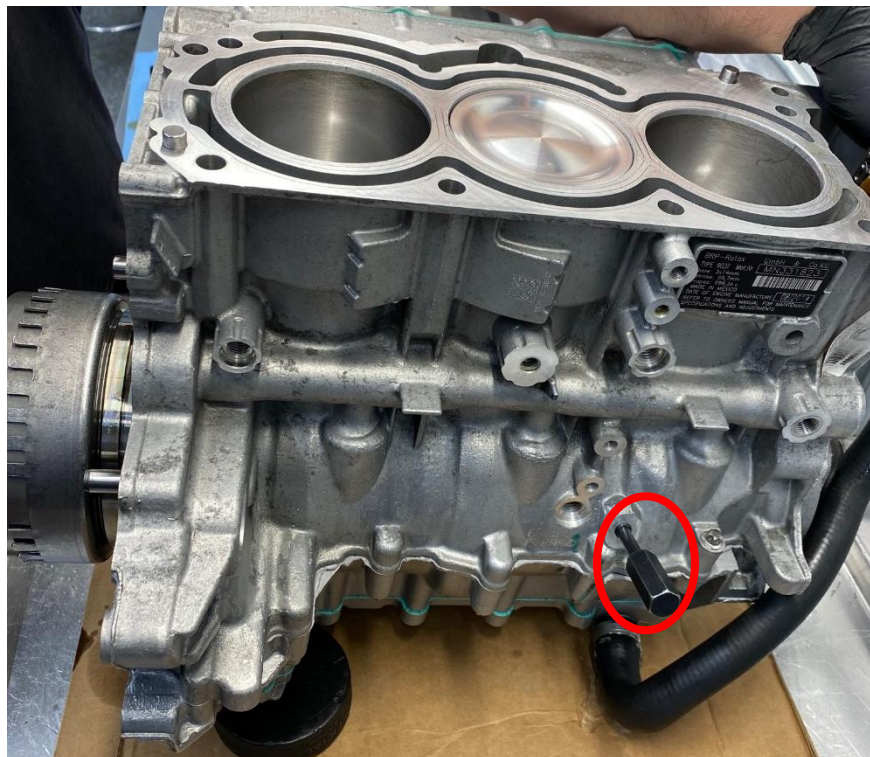


Figure 1



Figure 2

- Find Top-Dead-Center and place the Crank Stop tool into the block, turn all the way in. (Figure 1)
- BRP PN: 529-036-272 Crank Stop Tool. (Figure 2)

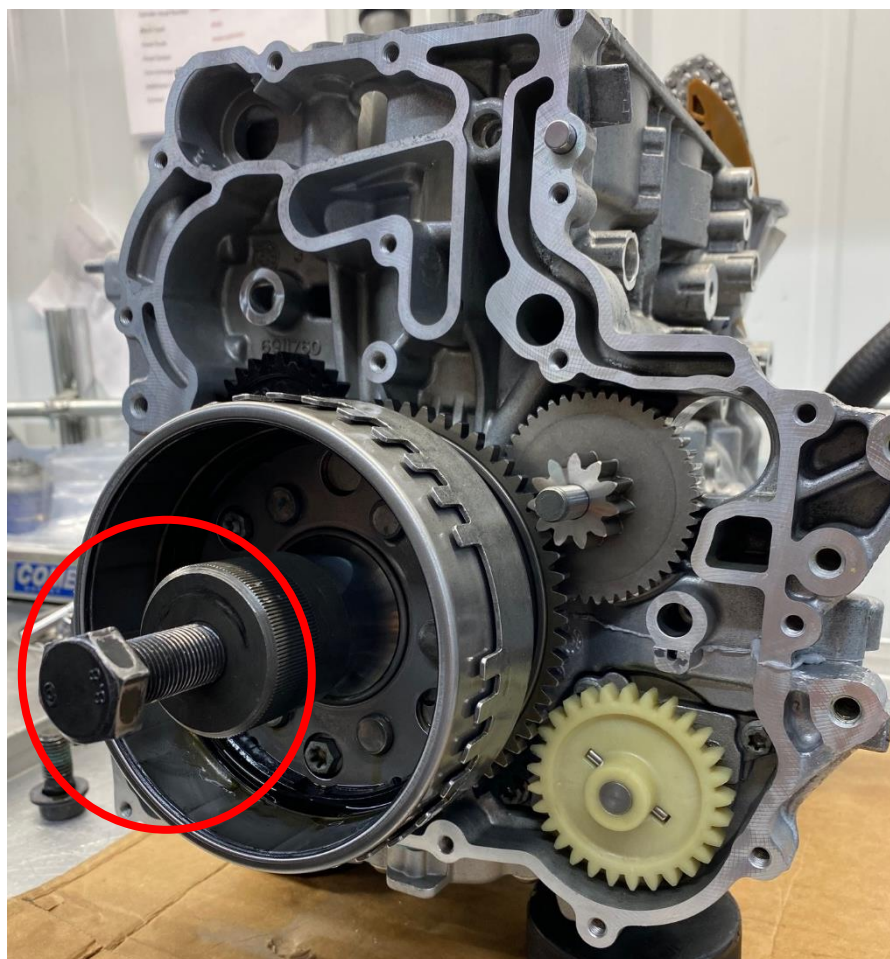


Figure 3

- Flywheel puller and shaft protector mounted on engine.

EVP Aluminum Oil Pump Gear, 22 tooth	PN: 835400
EVP Aluminum Oil Pump Gear, 25 tooth	PN: 835230
EVP Aluminum Oil Pump Gear, 26 tooth	PN: 835321
EVP Aluminum Oil Pump Gear, 28 tooth	PN: 834887
EVP Aluminum Oil Pump Gear, 29 tooth	PN: 834882
EVP Aluminum Oil Pump Gear, 31 tooth	PN: 835059

(See next page for Gear Placement)

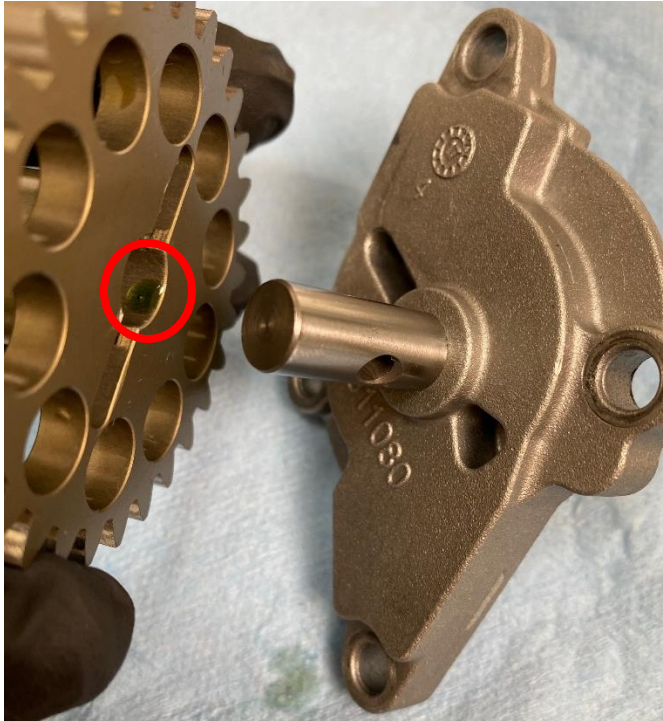


Figure 4

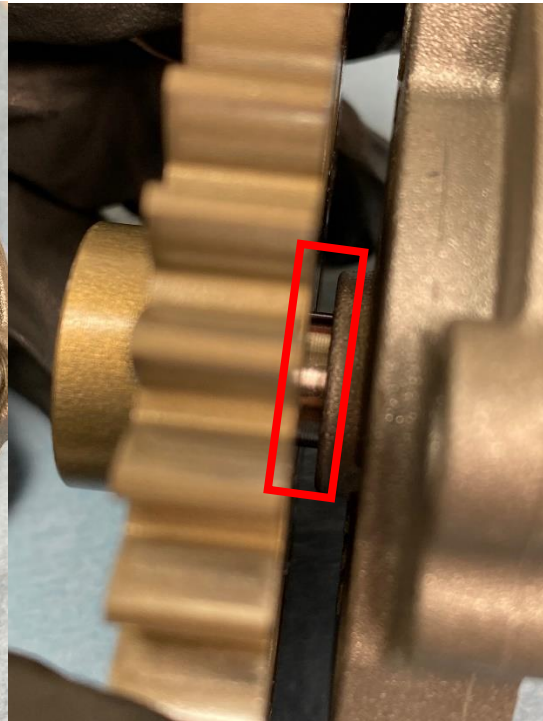


Figure 5

Figure 4 - shows one drop of Loctite 648 on the bottom and top of gear.

Figure 5 - shows the gear installed with no excess loctite running past the gear, towards the cover.

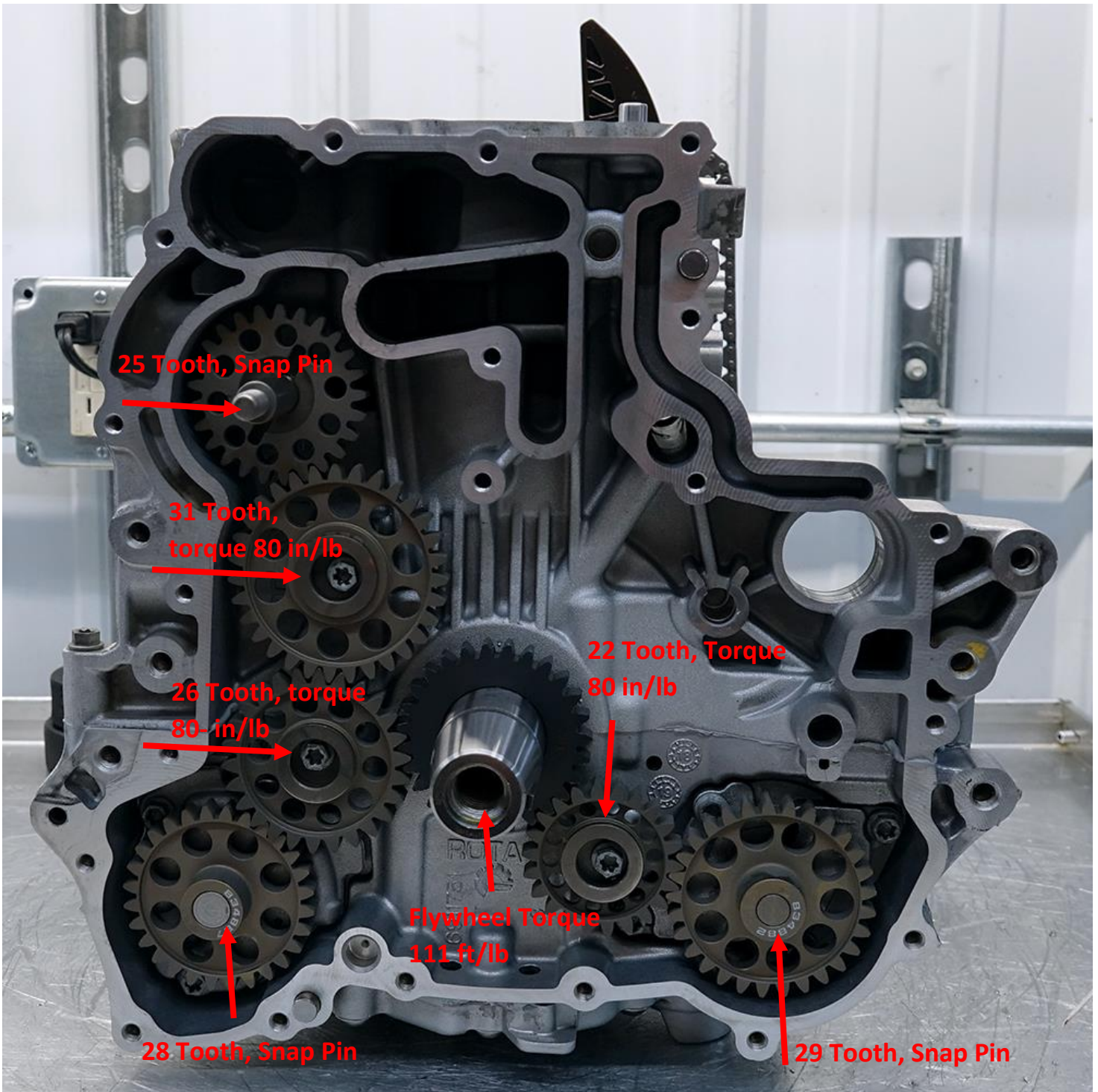


Figure 6



INSTALLATION INSTRUCTIONS

Thank you for choosing Evolution Powersports products. If you require further assistance, please call our Tech Support @ (715) 247-3862

Note: This product is exempt from the emission standards and related requirements of 40 C.F.R. § 1051 as provided by 40 C.F.R. § 1051.620, and California law [e.g., vehicle code §§ 27156 and 38391]. This product is sold only for use in connection with EPA certified, purpose-built, nonroad vehicles used solely for closed course, nonroad competition/racing and not used for any recreational purpose or on public highways or right of ways maintained by and open to the public. This product is sold only in connection with machines that do not fall under state and/or federal noise or emission standards/regulations. Purchasers who/that purchase this product represent and warrant that the product is purchased only in connection with EPA -certified, emission-regulations-exempt and noise-regulations-exempt competition/racing vehicles as interpreted under applicable state and/or federal law. Questions: Call Evolution Powersports at (715) 247-3862.

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