sonnax®

TRANSMISSION PARTS

Instructions

Ford 4R100, E4OD

Oversized Pump Gear Set

Part No. 36438AX-01K

- Inner Pump Gear
- Outer Pump Gear

NOTE: Sonnax gears cannot be used with either OE gear. Gears must be used as a matched set.

NOTE: Oversized replacement for existing F5 and F8 E4OD pumps (**Figure 1**). Can be used in all 4R100 pumps.

WARNING: Do not use in E9 or F1 E4OD castings.

Also Available

Pump Gear Set
36438A-03

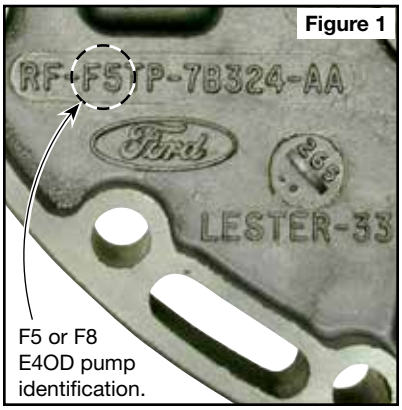
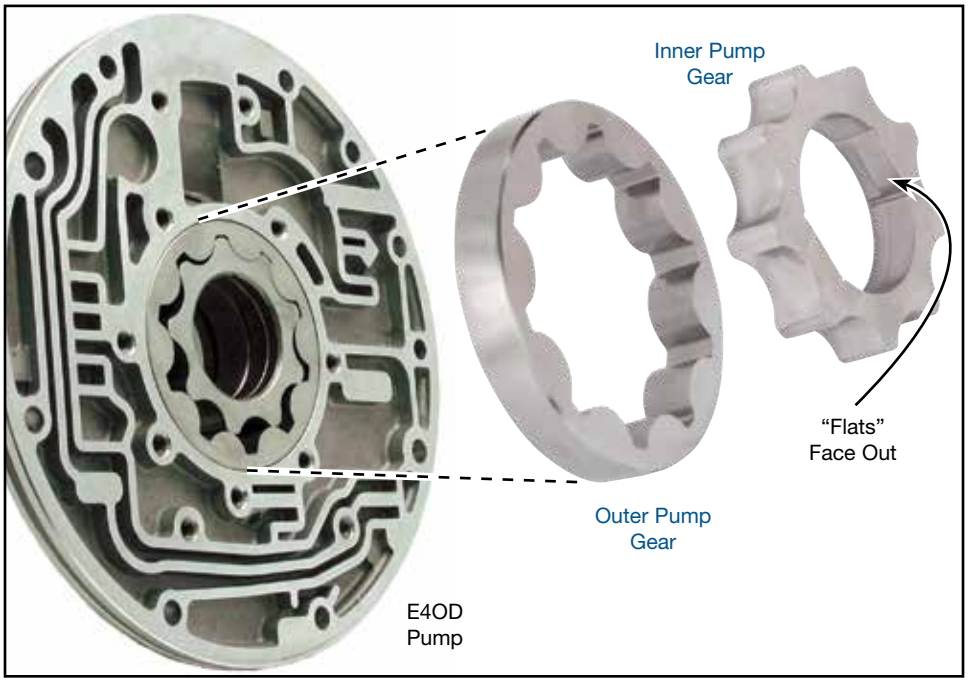


Figure 1



1. Disassembly & Machining

NOTE: Machining the pump cavity is a critical procedure and should only be performed by a qualified machine shop. It is important to maintain OE levels of surface finish, flatness and perpendicularity between pump surface and pocket walls.

a. Remove worn gears from pump housing.

b. Prior to machining, check center distance between I.D. bore and pocket O.D. If offset distance lies outside .152–.155" range, pocket center must be relocated (**Figure 2**). When locating the pocket center, avoid areas of wear. Points X, Y and Z are recommended points for locating the center. The majority of wear should lie between points X and Y.

3. Machine pump cavity to specification (**Figure 2**).

4. Clean pump cavity.

2. Installation & Assembly

a. Install Sonnax gear set with the flats on inner gear facing outward, toward the control body assembly (**main image**).

b. Verify clearance of .001–.002" between gears and pump face (**Figure 3**).

c. Verify .007–.009" diametrical clearance (.004" per side) between the gear and pocket. Adjust machining as needed to achieve proper clearance.

NOTE: A porting track exists on OE cover (**Figure 4**). When resurfacing cover, it is important to maintain the track to avoid pump noise. It is acceptable to reduce the track depth slightly, but no portion of the track may be completely removed.

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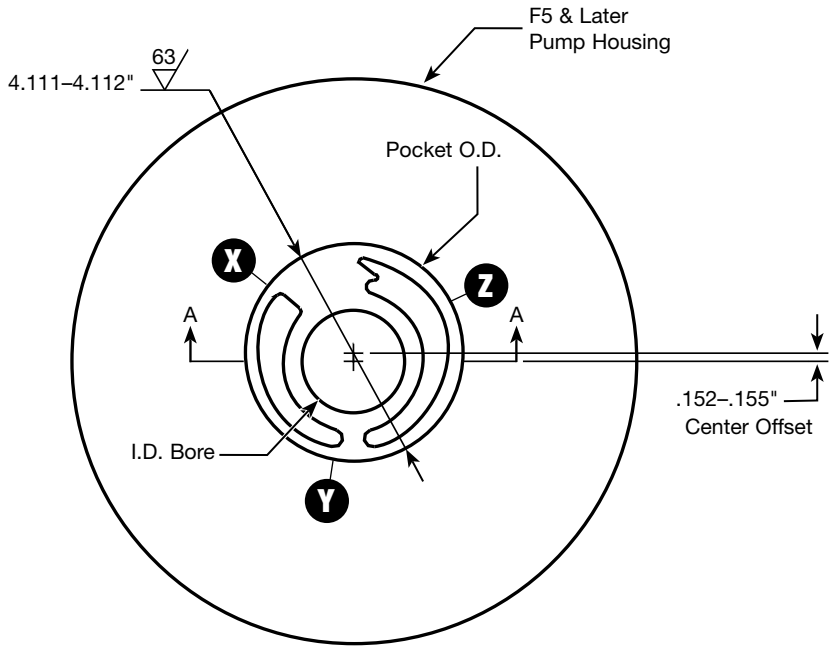
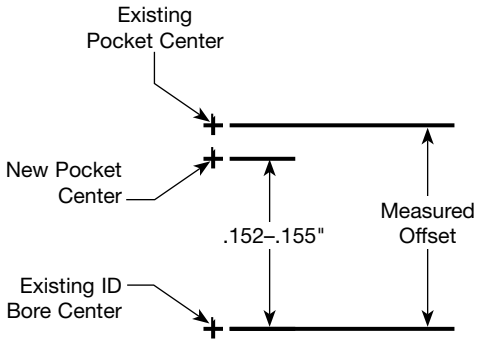
Figure 2





Example of Center Relocation

Figure 3

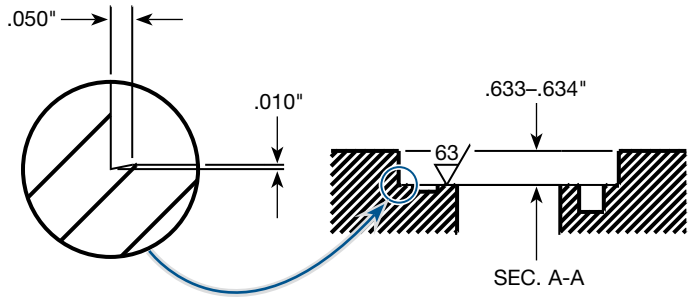


Figure 4