



## M-6600-D46 4.6L High Volume Oil Pump INSTALLATION INSTRUCTIONS

NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF FORD RACING PERFORMANCE PARTS.

**!!! PLEASE READ ALL OF THE FOLLOWING INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION.**

### OVERVIEW:

The following instructions cover the installation procedures for the M-6600-D46 High Volume Oil Pump Kit. This kit is designed to work in 4.6L 2V or 4V applications. The instructions covered by this document deal with the installation of the oil pump on 2V engines since the kit is a direct replacement for 4V engine applications. **Ford Racing strongly recommends the engine be removed from the vehicle prior to installing this kit. The instructions are written to reflect the engine being out of the vehicle and on an engine stand with the oil pan, front cover and drive chains removed.**

### INSTALLATION INSTRUCTIONS:

- STEP 1:** Remove the three (3) bolts that attach the oil pump screen and cover assembly and remove the assembly from the engine. Save fasteners for re-assembly.
- STEP 2:** Remove the four (4) 6mm bolts that fasten the oil pump to the front of the block and remove the oil pump by sliding it off the front of the crankshaft. Save the bolts for re-assembly.
- STEP 3:** Thoroughly clean the oil pump mounting surface of the block and crankshaft.
- STEP 4:** Rotate the inner rotor of the new oil pump assembly to align with the flats on the crankshaft and slip the assembly over the crankshaft until seated against the block.
- STEP 5:** Rotate the oil pump housing to align the bolt holes in the housing with the bolt holes in the block and install one (1) 6mm bolt in the #3 hole. See Figure 1. Do not tighten at this time.
- STEP 6:** Loosely attach new screen and cover assembly (provided) to the oil pump using the original two (2) 6mm bolts. Note: Make sure that the o-ring is properly located between the assembly and oil pump. See Figure 1.
- STEP 7:** Using the original 8mm bolt, attach the screen and cover assembly to the hex spacer. **Important note: If the oil pump is being used without a windage tray, insert a 2mm washer (not provided) between the hex spacer and the tube mounting bracket. This is required to keep the pick-up in the proper position.**
- STEP 8:** Re-install the three (3) remaining 6mm bolts in the oil pump housing and torque all four (4) oil pump mounting bolts to 6-9 ft./lbs. (8-12 Nm).
- STEP 9:** Torque screen and cover assembly attaching bolts. Two (2) 6mm to oil pump: 6-9 ft./lbs. (8-12 Nm) and one (1) 8mm to spacer: 19 ft./lbs. (25 Nm).
- STEP 10:** Verify pickup tube to bottom of oil pan clearance.

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**4.6L High Volume Oil Pump**  
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**Figure 1 – Oil Pump Installation**

