



M-9486-A460 Crankcase Evacuation Pump INSTALLATION INSTRUCTIONS

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

Please visit www.fordracingparts.com for the most current instruction information

!!! PLEASE READ ALL OF THE FOLLOWING INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION. AT ANY TIME YOU DO NOT UNDERSTAND THE INSTRUCTIONS, PLEASE CALL THE FORD RACING TECHLINE AT 1-800-367-3788 !!!

INSTALLATION INSTRUCTIONS FOR CRANKCASE EVACUATION PUMP:

NOTE: The M-9486-A460 Crankcase Evacuation Pump is not recommended for wet sump systems. The pump can develop enough vacuum in the crankcase to upset the oil inlet pressure to a wet sump oil pump.

The M-9486-A460 Crankcase Evacuation Pump rotates clockwise when viewed from the front. Inlet and outlet fittings can be rotated to accommodate various hose routing directions (or remove and replace with AN fittings). The pump has one 3/8" thru hole and two 3/8"-16 threaded holes which can be used for mounting and belt tension adjustment. Mounting and adjusting bolt torques should be limited to 30 ft. lbs.

Drive pulleys are available from Ford dealers (5" pulley PN D9HZ-9B447-D). Moroso also offers a 5" billet aluminum pulley (PN 64885) for the pump and various crank pulleys. A 1" dry sump mandrel mounted, 2.5" crank drive pulley (PN 390-300) is also available from Coleman Machine ((906) 863-8945). A cog belt drive system using a typical crankshaft damper mounted mandrel can be used. To fit the pump, a sprocket can be fabricated from a solid blank (available from Weaver Bros.) about 1" thick. Pilot hole diameter should be 0.501" - 0.503". Drive flange bolt holes are 6mm, equally spaced on a 1.170" bolt circle.

The pump speed should be limited to about 5000RPM max. to provide adequate durability. This is severe service for these pumps due to the oil/air mixture that is drawn from the crankcase. Any steps that reduce introduction of oil into the pump will increase life span of the pump. The oil deteriorates the vanes in the pump leading to reduced efficiency and eventual failure. Reversing front or rear main seals is not recommended. A spring loaded pressure relief valve should be mounted in one valve cover so that crankcase pressure can be relieved in case of a holed piston, piston ring failure or pump or belt failure. Spring loaded check valve part # ITV08S from Aircraft Rubber ((800) 433-6524) with a K & N breather # 62-1360 can be used for this purpose. Otherwise, valve covers should be sealed to maintain crankcase vacuum.

The pump inlet should be connected to a baffled valve cover outlet with a minimum AN 16 line. The pump should generate a vacuum of 10 Hg to 20 Hg on a nicely sealed engine. The line must withstand these levels without collapsing. The outlet should be routed to a baffled, vented overflow can so the discharge is not restricted and any oil is collected for subsequent disposal. Recommended minimum size for the overflow can is one quart. Restricting either inlet or outlet of the pump will decrease the efficiency of the pump (and the vacuum in the crankcase).

Factory Ford shop manuals are available from Helm Publications, 1-800-782-4356