



**Chrysler 383-440 Wedge and 426 [Hemi Oil Pump](#)
Billet #21814 and Double Entry #21815**

These oil pumps are the same as used by the Hemi Pro Stock cars when they dominated the ranks and the same as used in Top Fuel cars. They will easily pump 19 G.P.M. of oil while using less horsepower to drive it than many other styles of pump. Like any other trick piece they only require a little care when installing to give many years of flawless performance. There are certain problems that may occur upon installation that can cause serious damage to the oil pump and should be checked before the engine is fired.

Use the Correct Shaft and Gear:

<u>Pump</u>	<u>Bronze Gear & Shaft</u>	<u>Steel Gear & Shaft</u>
21814	21525	21505
21815	21523	21503
21814 w/dual Line Spacer	21520	21500

1. Length of distributor drive shaft should always be checked to be sure that shaft is not bottoming out in gear pushing the gear into the pump cover. This will seize the gear immediately shearing the drive shaft hex upon turning. A minimum of .060" shaft end clearance is required. Shaft should be shortened if necessary.
2. Before priming the pump initially, a liberal coating of oil or the like should be applied to the inside of the pump housing and all gear surfaces. This will prevent dry start up scoring and will allow immediate priming of the oil system. For initial system priming Milodon's 23015 shaft should be used. To assist the pump to prime on initial start-up the rear inlet line should be routed slightly above the oil pump before it turns down to the pick-up. This will not allow oil in the pump to drain while sitting.
3. This pump is required to pull usually cold oil through two 7/8" I.D. lines as opposed to a stock system's 1/2" I.D. passageway, so it may react a little slower. Because it has a tougher job, any gear scoring due to foreign debris will start to inhibit the pumps priming ability. The oil filter will catch this debris but only after going through the gears! Replacement gear set for this pump is part #21817. Externally adjustable pressure regulator is #21550. Pump O-ring and gasket rebuild kit is #21590. NOTE: 21814 / 21815 does NOT use a stock Chrys o-ring around the gear.
4. The depth of the gear set in the pump housing is very important in the pump's ability to prime. This pump has been factory measured to be between .0015" and .004", any less will score the cover, any more will result in poor priming. If you replace the gears this will need to be checked.
5. As there have been many block producers over the years, we have found on some blocks (both steel & aluminum) mis-match between the pump mounting holes in the block and the holes thru the pump. If this occurs, pump and cover bolt holes may be drilled slightly over size within reason to compensate for any misalignment.
6. In just a few cases some blocks (both steel & aluminum) the pump pad is not 90° to the neck pilot in the block. This causes the pump to not sit square against pad and when bolted up will distort pump housing and perhaps crack the pump neck. If this occurs, block pump pad should be re-machined on correct angle (90 degree to pump neck hole).

All these inspections should be done upon initial installation of oil pump. The oil pump should be bolted to the block and must be turned by hand to check for any interference problems. These Milodon Oil Pumps are guaranteed for any defects due to workmanship or material only and not for installation issues.



Oil Pumps

Before installing this new oil pump, there are several preventative measures that should be taken:

If this new oil pump is being installed on an engine that has been in service and experienced a loss of oil pressure, a thorough examination should be made of all bearings. The oil pan should be checked for signs of broken valve stem seals and pieces of nylon timing gear sprocket teeth or other foreign materials. Small pieces of debris can cause the oil pump to "lock up" and damage other vital engine parts.

The new oil pump should be primed prior to installation by submerging it in a supply of clean engine oil and rotating the shaft. If the pump cannot be primed with oil, it should be packed with petroleum jelly which will aid in priming. Do not pack the pump cavity with grease as the oil filter may become clogged due to the higher melting point of grease.

Sometimes it may be necessary to rotate the pump body slightly to insure crankshaft clearance. Rotate the crankshaft at least once as a precautionary measure.

When installing a high volume pump, be sure to check the pump & pick-up to pan clearance. Longer gears or gerotors on the high volume pumps might pose an interference problem. Be sure that the pick-up is between 1/4" to 3/8" above the pan floor for best performance. In all applications it is recommended that an intermediate shaft with the steel sleeve be used (Milodon manufactures oil pump drive shafts #23050-23060 Chevy, #21500-21525 Chrysler, and #22500-22570 for Ford).

Prior to starting a new engine, the oiling system should be pre pressurized by spinning the oil pump with an electric drill using an adapter (Milodon part # 23000, 23005, 23010 or 23015). Initial start up of a "dry" engine can cut the service life of the engine in half.