



## Oil Pump Instructions

Make sure that oil pump turns freely before installation. Check to be sure that pump does not bind end to end (.008 to .100).

On G.M., Chevy, 392 Chrysler, and Ford pumps, be sure that the drive does not rub main cap or block (on sides). Be sure that the intermediate drive shaft has .008 to .100 end play.

On all pumps make sure that all lines, fittings and filters have maximum flow so that the pump can keep the crankshaft cool. Most big block engines need 13 to 14 quarts of oil, small blocks 11 to 13 quarts. (Blown Fuel/Alcohol Drag Racing Engines) Some engines require less.

We usually set pressure 90 to 120 psig peak pressure, for blown motors. But all gauges and dynamic conditions vary. We recommend 70 to 80 psig peak pressure, for normally aspirated motors. Some engines require less. Please call us if you have any questions.

Titan recommends 1/4" to 3/4" clearance between the pump pickup and the pan. The flow into the pump should not be restricted. Pans deeper than 8.5" from crank centerline can run more clearance than shallow pans.

On G.M. and early Chrysler pumps, be sure pumps sits flat on mating surface. Sometimes main studs and or indexing bores can interfere.

To raise or lower peak pressure, loosen 1/4-28 half nut (they have locktite on the nut and the set screw), turn the allen set screw clockwise to raise the pressure and counter clockwise to lower the pressure. Look for between 3 and 5 psig change per turn.

Titan recommends that the oil temperature be at least 140° F before loading an engine. On pumps shipped with drives that are long, cut hex end to set end play (.007 minimum).

On remote style pumps that have hose(s) or tubes that feed the suction side of the pump we strongly recommend that the fittings be lapped into the tapers for a perfect seal. Small vacuum leaks can cause bearing problems.

### OIL DRAIN BACK

All wet sump oil systems require adequate oil drain-back to pan.

Titan does not recommend the use of screens in the valley area. If you do use them we recommend the use of external oil drains. (#8 or #10)

Oval track engines can accumulate a large volume of oil in the right valve cover and therefore can benefit from draining the valve cover to the pan. (external drain)

If you use a belt driven camshaft we recommend the use of a vapor equalizer tube (#16 or #20) between either the fuel pump boss or the upper edge of the pan and valve cover.