



Ford P4AT / P5AT Engine

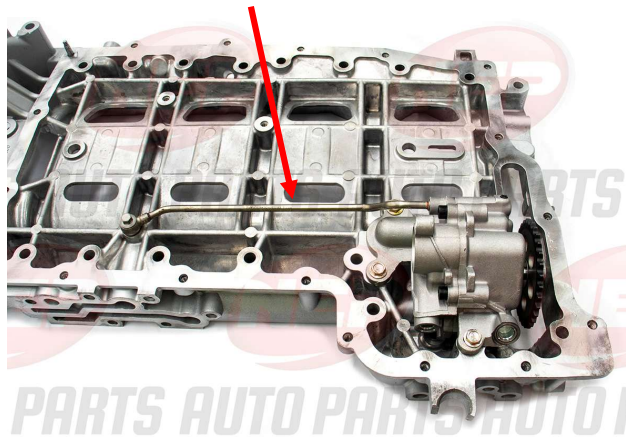
(Ford Ranger/Mazda BT-50)

Engine Oil Pump Upgrade

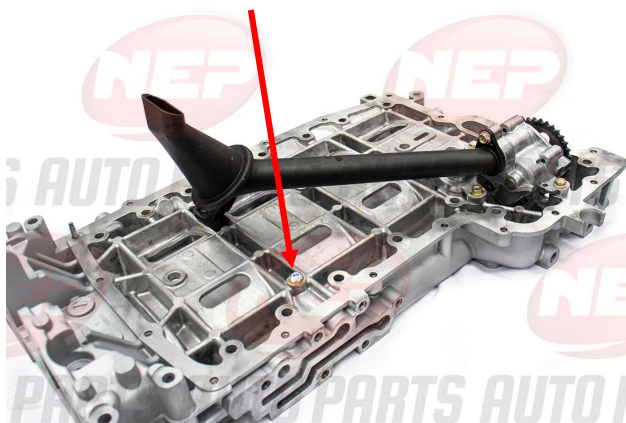
The original oil pump that's fitted to the Ford P4AT/P5AT engines are a vane type pump. This upgrade kit contains a gear type pump that replaces the O.E Vane pump.

Old Pump Removal & New Pump Installation:

1. Remove the oil pressure pipe (from the pump to the cradle) this will not be used when installing the new gear pump.



2. Substitute the bolt that secures the oil pressure pipe to the cradle with supplied M8 hex socket screw and copper washer and tighten to 10 Nm. If this is not installed you could have low or no oil pressure.



3. Remove the oil pump chain tensioner, push the chain tensioner plunger in and insert pin to hold the plunger in.
4. Remove the oil pump.
5. Lube the new gear pump with assembly lube/grease or similar product, This can be done through the inlet port of the oil pump and will not require disassembling of the pump.
6. Install the new gear pump and hand tighten the securing bolts at this stage.
7. Fit the tensioner and chain, tension bolts to 15 Nm and release the pin from the tensioner.
8. Check the alignment of the pump gear and chain. Check that the pump gear teeth are positioned in the middle of the chain and the crankshaft and oil pump gears are parallel after the engine has been rotated by hand.
9. Tension the pump mounting bolts to 10 Nm.
10. Install the oil pickup tube in the pump using the o-ring provided in the kit. Tighten the pick up to pump and pick up to cradle bolts to 10Nm
11. In some applications you may find you have interference between the oil pan baffle and the new oil pump housing. There are a few options for resolving this matter...

Oil Pan Baffle Interference Solutions:

The first option is to completely cut out the baffle.



The second option is to grind the baffle back at the point in which the pump makes contact, roughly grinding it back by 10mm.



Figure 1: Blue marker is the grind line



Figure 2: Modified baffle