

CASTLEMAINE
ROD SHOP
SINCE 1976

**BEFORE INSTALLATION PLEASE READ INSTRUCTIONS CAREFULLY.
THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS.
WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.**



INSTALLATION

1. Before installation, please note the following points:

-All gasket surfaces should be free of oil or other foreign material during assembly. Inspect the engine block oil gallery passages to make sure they are free from any debris or restrictions.

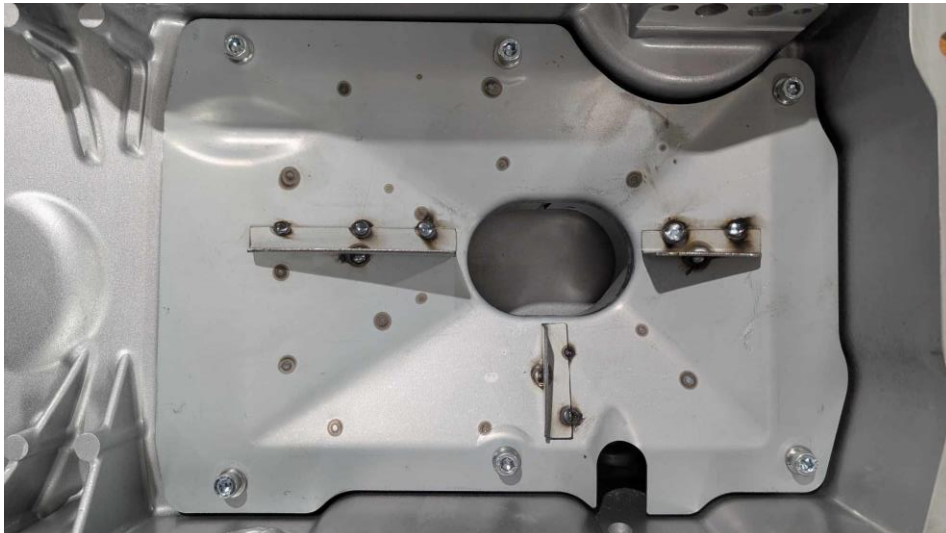
- It is advisable to wash all of the new parts well before installing to remove any dirt or debris from the packing and shipping process.

2. Install the supplied oil pick up O-ring onto the oil pump pickup tube also supplied and lubricate with clean engine oil.



3. Install the new oil pump pickup tube ensuring that oil pump pickup tube is pushed completely into the oil pump before tightening the bolt. Do not allow the bolt to pull the tube into the pump. Torque these bolts to 12Nm.

4. Install the supplied OEM baffle into the oil pan using the supplied M6 x 1.00 (13mm UHL) screws and torque down to 12Nm. This will be a tight fit so ensure to place baffle down at an even level into the oil pan to avoid any damage.

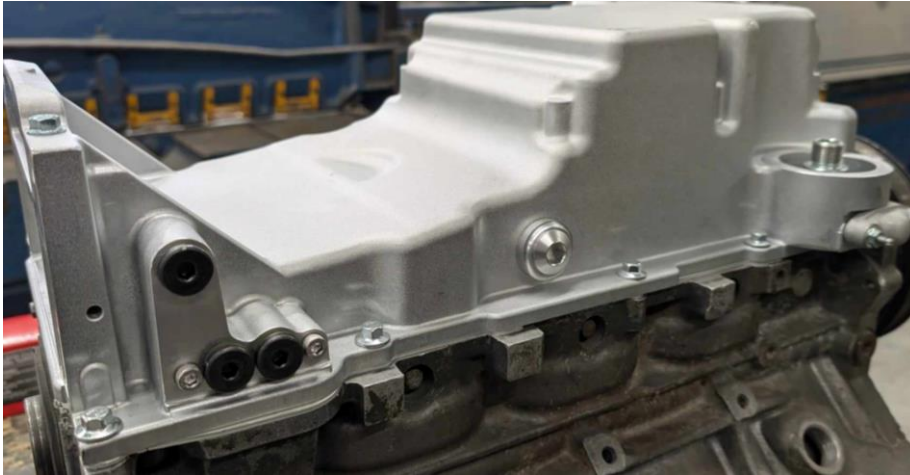


5. Install all four 1/4" NPT supplied plugs into the four locations shown below

- This step is very important to ensure no leaks in the oil pan due to machining processes this plugs are included to block off these machining ports.

- Ensure to use correct thread sealant when installing these plugs to ensure a leak free installation.

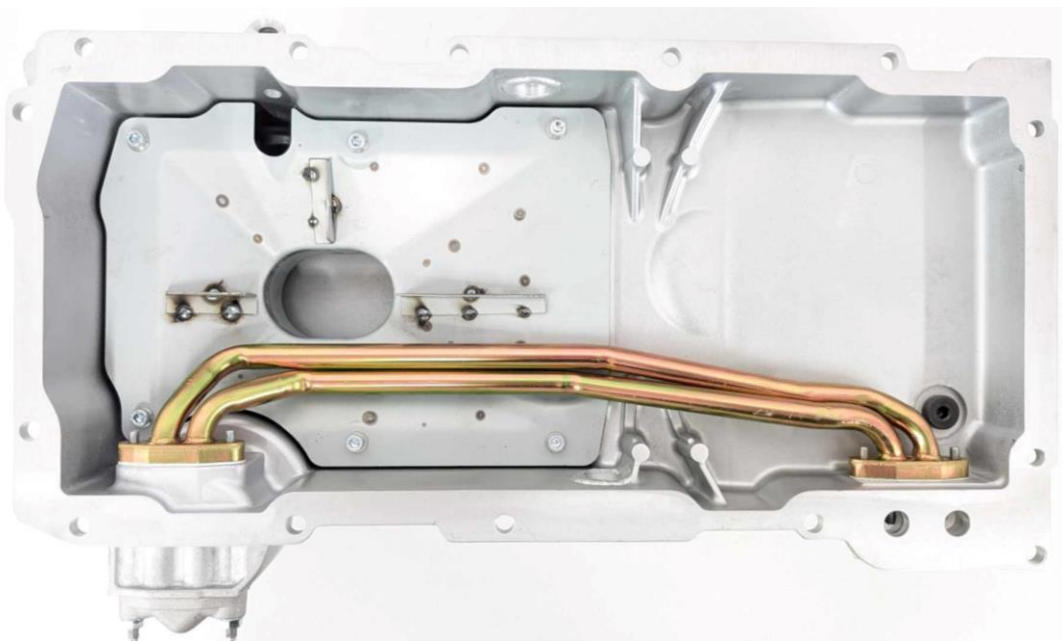
- These plugs may be installed already from factory. Ensure to check they correct depth and are not blocking the oil passages on the inside of the oil pan. This can be seen form the top view on the oil pan rail.



6. To install the oil cross over tube, place the cross over tube into the oil pan the correct way with the tubes facing down toward the baffle plate. Install both of the long studs that are supplied through the block which is located above the oil filter landing. These studs should be sticking out outside the oil pan and inside the oil pan. Install the factory metal/rubber gasket onto the studs on the inside of the oil pan. Screw in the studs into the cross over tube which has threads on the 2-bolt flange. Only start these at this point as you need to move to the over side of the cross over tube to install the other two bolts. Install the two bolts into the oil pan next to the 1/4" NPT block off plugs. Install the factory metal/rubber gasket onto the bolts, and screw them into the cross over tube flange.

7. Once all four studs/bolts have been started on to the cross over tubes you can continue to screw them in until the cross over tubes sit flush with the inside of the oil pan. Tighten the oil passage cover bolts to 12Nm.

8. Install the metal 2 bolt gasket and oil plate block onto the studs on the outside of the oil pan. Two new serrated nuts are supplied which can be installed and tighten down to 8 Nm.



9. Install the two -12 ORB port supplied if you are not using any for a turbo drain setup.
10. Install the new oil pan gasket to the oil pan and install the oil pan bolts to the pan through the gasket. The gasket is designed to hold the bolts in place.
11. Apply a 5mm bead of gasket sealant 20mm long to the engine block directly onto the tabs of the front cover gasket and the rear cover gasket that protrude into the oil pan surface.
12. Install the oil pan assembly to the engine block. Install all oil pan bolts and working from centre out. Torque these bolts to 11Nm.
13. Install and tighten bellhousing bolts and torque to 50Nm.
14. Install and tighten both the right hand and left hand transmission cover bolts and torque to 12Nm.
15. Install and tighten the oil pan drain plug and torque to 24Nm
16. Install the supplied oil filter adapter and tighten to 50Nm. Install new oil filter (z160).
17. **Start the vehicle and check for leaks and adequate oil pressure.**