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# **INSTALLATION MANUAL**

## **AEROFLOW PERFORMANCE**

### MAZDA 13B OIL PAN

### WARNING!

### BEFORE PROCEEDING WITH 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.

#### INTRODUCTION

Congratulations on your purchase of Aeroflow Performance Mazda RX3 & RX4 oil pan. Aeroflow Performance products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions? Please call technical support at +61 2 8825 1900 and have the product part number on hand when calling.

This product is designed to suit your Mazda RX3 & RX4 with 13B engine. It may also suit engine conversion cars with the 13B engine in the following: 1981-1984 Toyota Starlet, 1964-1983 Toyota Corolla, 1971-1973 Datsun 1200 & others with little or no cross-member modifications. Tube chassis cars with 13B engine may also use this oil pan. Ensure to check all measurements before fitment of oil pan.

**NOTE:** Series 6 13B engines will require slight modifications to the dipstick when using this oil pan. The Bend on the end of the dipstick must be removed as it will hit the bottom of the oil pan. (Please refer to picture at the end of these instructions).

This kit includes the race oil pan, baffle plate and hardware to bolt to the engine. This oil pan features a -6 ORB magnetic oil drain plug supplied in the kit,  $1 \times 1/8''$  NPT sensor port with plug supplied with kit and  $1 \times -10$  ORB auxiliary port. It holds 6.80 litres of engine oil.

Before final assembly, make sure all parts are thoroughly cleaned. This oil pan contains hinged trap door style baffles, it is advisable to install the pan with the engine upright to ensure no trap doors will be stuck open.

Due to the welding done on these pans, there is always a chance of slight warping. Some oil pans may encounter a slight 'rocking' effect when laying the pan down on a flat surface. Once the pan is drawn down securely by the bolts and the engine is run, you will find the pan will take a 'set' in the straightened position. We have found that an initial 'rock' of up to a 1/8'' (3.17mm) on a new pan is completely acceptable.

Aeroflow Performance strongly recommends bolting down the oil pan without any sealant and with all the fasteners. Then turn the rotating assembly to check for any interference with the oil pan or windage tray.

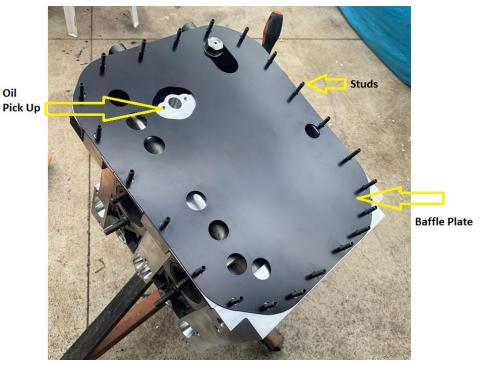
Although the factory hardware may be retained in some cases, Aeroflow Performance oil pans includes fasteners that are engineered to the specific oil pan. Some oil pans will work better with the factory OE bolts, while others are better suited for studs and nuts, particularly aluminium oil pans. A stud kit will protect the threaded oil pan boltholes in a block and simplify removal and replacement of the oil pan.

#### INSTALLATION

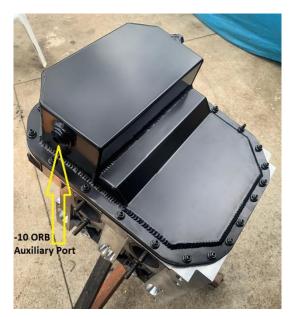
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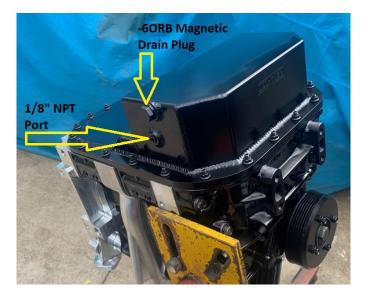
- 1. Remove stock oil pan from the vehicle following the procedure from the factory service manual if you are unsure. Remove pick up and ensure to keep all hardware that was removed in case it is needed during the installation.
- 2. Scrape all old silicone (RTV) from oil pan mounting surface on the block
  - I. NOTE: This surface must be clean and rubbed back to raw material to ensure a good seal from the RTV silicone any contaminants on the mating surfaces may cause an oil leak.
- 3. Install baffle plate onto engine with necessary hardware included. Rotate crank and listen for any interference.
  - **NOTE:** Rotate the crank and make sure that all areas clear. If the baffle plate makes contact with any moving parts you will need to mark them carefully and clearance the areas. After you have clearance, them reinstall the baffle and verify that there is sufficient clearance.

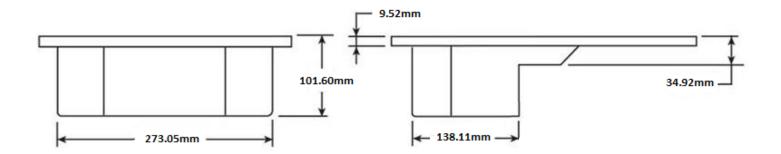
Do not make modifications while the baffle plate is installed and ensure it is thoroughly cleaned after each modification is carried out.



- 4. Install the OEM oil pump pick up (this will be a good chance to purchase and install a new OEM pick up) along with a new gasket supplied in kit.
- 5. Install oil pan using Three-Bond or equivalent RTV silicone sealer. You may choose to use the supplied studs and nuts or re use the factory OE bolts at this stage. Ensure to follow factory service manual for reinstallation of oil pan.
- 6. Once pan is installed rotate crank and verify no noises are heard due to interference.
- 7. Last step is to verify that the drain plug and sensor plug is tight. Then fill it up and let the car run, check for leaks before road testing.

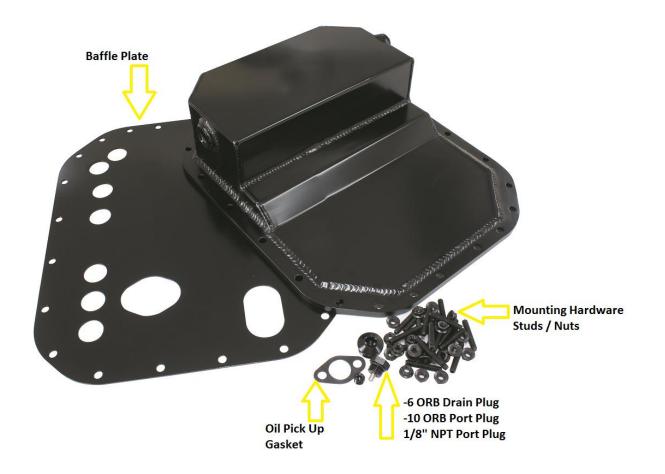






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For more information or technical enquires Contact: Aeroflow Performance on Phone: (02) 8825 1979 Website: <u>www.aeroflowperformance.com</u>