



930 TURBO SCAVENGE PUMP w/ CAM SYNC INSTALLATION INSTRUCTIONS

- 1. Remove the factory turbo scavenge pump and housing (Figure 1).
- If using the cam sync sensor, rotate the engine through a cycle stopping 90 degrees before Z1 on the compression stroke. Install the scavenge pump drive with cam trigger tooth oriented as shown by the arrow (Figure 2). Remove the second trigger tooth that is NOT at the red arrow. If the cam trigger will not be used, the cam trigger orientation is not important. Install two flat head screws with medium strength Loctite.
- 3. Attach the pump body to the cam housing as shown. Use gasket and three M6 X 45 bolts and wave washers (Figure 3). Torque bolts to 7 lb/ft. Apply motor oil or assembly lube to pump shaft and gears. Install gears in pump body (Figure 3).
- 4. Place O-ring in groove and attach cover plate using 4 M6 X 16 hex head bolts and wave washers (Figure 4). Torque 4 bolts to 7 lb/ft.
- 5. Install the factory oil lines to there respective positions on the pump. The return oil drain tank must be vented with a minimum 5mm hose. For twin turbo applications, oil drain tanks should be plumbed in series with the vent only on the tank furthest the oil scavenge pump.
- 6. To install the cam sync sensor and set the gap, first verify that the trigger tooth on the drive adapter is visible directly below the sensor hole in the pump body (Figure 5). If step 2 was followed, the trigger tooth should be in the correct position.
- 7. Adjusting the sensor gap. Install jam nut, flat washer, and rubber seal on sensor body as shown. Screw the sensor into the body until it stops against the trigger tooth. After the sensor has contacted the top of the trigger tooth, back the sensor out 1½ turns. This will set the sensor gap. Without rotating the sensor, move the rubber washer, metal washer and jam nut to the pump body. Tighten the jam nut ½ turn to seal the sensor and threads.



930 CAM SYNC WIRING INSTRUCTIONS

The sensor is hall type with an internal pull-up resister. Wiring the sensor is as follows:



Figure 1



Figure 2







Figure 4



Figure 5