

DESCRIPTION AND OPERATION

ENGINE

The 3.0L Duratec is a 4-valve-per-cylinder, dual overhead camshaft engine. The engine uses a distributorless ignition system. The cylinder block is a 2-piece design with the upper portion housing the cylinders, and a separate lower cylinder block containing the main bearing caps. Both sections are made of aluminum, with inserts for the bearing areas and caps. An aluminum oil pan bolts to the bottom of the lower cylinder block and to the transaxle to provide greater strength.

The camshafts are mounted in the cylinder heads and act against a roller follower to open and close the valves. A hydraulic lash adjuster is located on one side of the roller follower and the valve tip on the opposite end. The camshafts are driven off the front of each cylinder head by 2 chains (one each side). Both of the chains are driven by sprockets that are located on the crankshaft, just in front of the oil pump.