

Engine - Overview

Overview

The 7.3L 2V Dual Equal Variable Camshaft Timing (DEVCT) is a V-8 engine with the following features:

- Overhead valves (two valves per cylinder)
- In-block camshaft
- Push rod/rocker arm design valve train
- Dual Equal Variable Camshaft Timing (DEVCT)
- SFI
- Aluminum cylinder heads (high airflow cylinder head intake and exhaust ports)
- Cast iron, 90-degree V-cylinder block
- Forged steel crankshaft
- Variable displacement oil pump

Engine Identification

Always refer to these labels when installation of new parts is necessary or when checking engine calibrations. The engine parts often differ within a CID (cubic inch displacement) family. Verification of the identification codes will make sure the correct parts are obtained. These codes contain all the pertinent information relating to the dates, optional equipment and revisions.

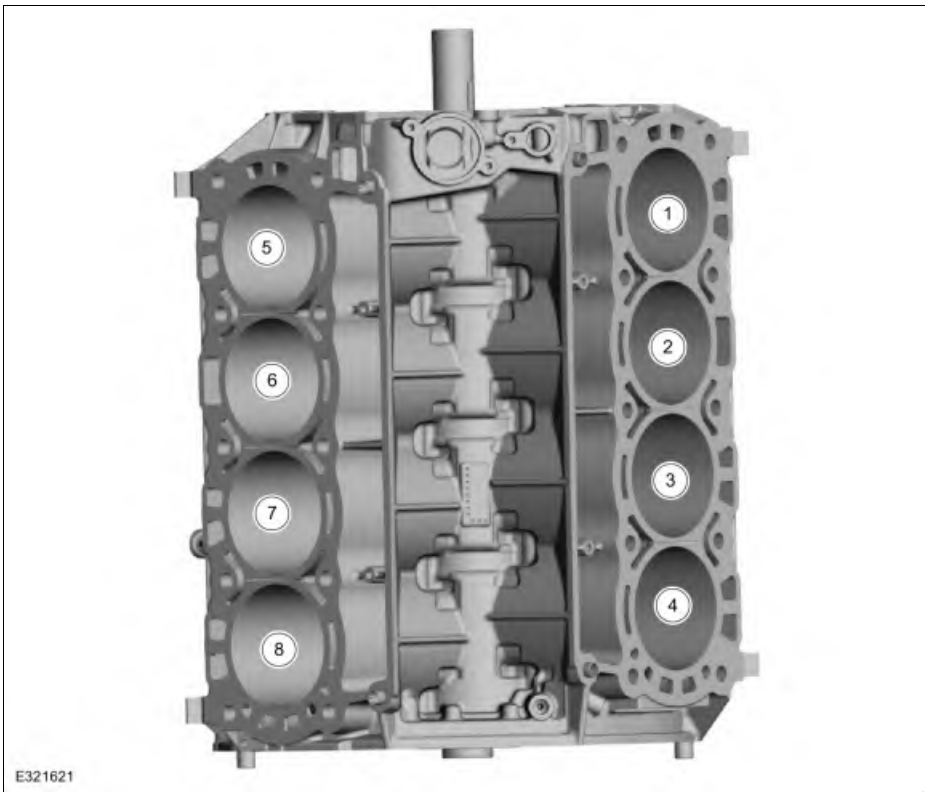
Engine Code Information Labels

The engine code information label contains the following:



Item	Description
1	WEP (Windsor Engine Plant) - Annex plant code
2	Engine build date (YYDDDD)
3	Sequential number of engine built on this date
4	Engine part number
5	Engine build date (DDMMYY)
6	Shipping code

Engine Cylinder Identification



Valve Train

The engine valve train consists of overhead valves operated through a single in-block camshaft with roller lifters, push rods and rocker arms. Placing the camshaft in the block reduces the engine height, width and weight.

Dual Equal Variable Camshaft Timing (DEVCT)

Variable camshaft timing is of the dual-equal type where the exhaust and intake are phase shifted equally. the system is capable of advancing or retarding the camshaft timing up to 50 degrees.

Fuel System

The engine fuel system uses Port Fuel Injection (PFI) to deliver fuel to each cylinder. Fuel is delivered under pressure to each cylinder bank through a common rail manifold. The fuel is then injected into each intake port to mix with air before passing through the intake valve into the cylinder.

Oil Pump

A variable displacement oil pump provides more oil when needed, and can reduce parasitic losses under light loads. The oil cooler is mounted on the side of the oil pan. Jets mounted in the block direct a stream of oil directly into channels in the pistons to aid in engine cooling.

Oil Flow Diagram



E321622

Item	Description
Yellow	High pressure oil flow
Blue	Oil return/low pressure oil flow