

The High Performance 360 Police Engine

The engine option used in the Dodge Li'l Red Express trucks was known as the "EH1" option.

On the **1978 Equipment ID Label** it is listed as:

EH1 - 360 4BBL SPECIAL ENGINE (Canadian Label)

On the **1979 Equipment ID Label**, it is listed as:

EH1 - 360 ENG 8 CYL 360-1 HI PER (U.S. Label)

Both engines were produced at the Windsor Engine plant in Canada and are basically identical. They were a modified version of the E58 "High Performance" Police engines, only the casting numbers are different, **1978 and early 1979 - 4006830 & Late 1979 - 4179930**. The cylinder heads were the same, both years, **4027596**. The 1979 engine did have a few more pollution controls, EGR valve, Vapor Recovery Canister & Vacuum Amplifier, than did the 1978, but had very little, if any, effect on the performance of the engines, since in 1979, the pollution requirements were not near what they were in later years. Horsepower was rated 225 net @ 3800 RPM and Torque was rated 295 lb/ft @ 3200 RPM. The same specifications were used for both year engines.

The engine information is stamped on the front of the block on the driver's side and will either start with:

1978 engine 8W360TIXXXX (last 4 digits are the build date)

1979 engine 9W360TIXXXX

1st digit – year

2nd digit – Windsor plant

3rd digits – factory ID info

4th digits – build date, Chrysler 10,000-day calendar.

One of the big differences in the 360 blocks, over the 340 blocks was the significantly beefier bottom end, with wider spaced main bearing caps, special forged crankshaft, manufactured by Central Foundry Division (GM) with CFD markings on the crank.

The other items that made the E58 engine unique were:

1. Silichrome-1 hi-temp intake valves, #3549963
2. Nimonic alloy exhaust valves, #4104402
3. Hi-strength rocker arms, #4100774 right #4100775 left
4. Hi-strength push rods, #2899567
5. HD chrome piston oil rings, #4049158
6. Upgraded valve springs, #2863409, (Hemi style)
7. Hot alkali cleaned cylinder heads, #4041003
8. Special Forged Crankshaft, CFD #4095019
(Manufactured by Central Foundry Division of GM)
8. HD water pump, #3837641
9. Double-row roller timing set, sprocket, #2899556
10. Hi-temp valve stem seals, #4095543
11. 1968 340 Purple Shaft Cam, #4041998 (see specs below)
12. 850CFM Thermoquad carburetor,
1978 TQ 9173S, #4095418 **1979** TQ 9226S, #4104499
13. E58 Cylinder heads #4041003, casting # 4027596
14. Dual Plane, Spread Bore intake manifold, #4096080

1978 & 1979 360 Hi Perf. Purple Cam # 4041998

1968 340 Automatic Purple Cam Specs:

Original Dodge part number # 2899206, used in the 1968 340 with the automatic transmission.

268° intake duration,

276° exhaust duration

Duration @.050 intake 228 exhaust 235

LSA/ICL 114°/114° (Load Separation Angle / Centerline)

44° overlap

0.429 intake lift

0.444 exhaust lift

All information is derived directly from Chrysler and Dodge.

John C. Roberts (Lil Red Dad)
Co-Founder, President & Senior Judge, NALRETO

