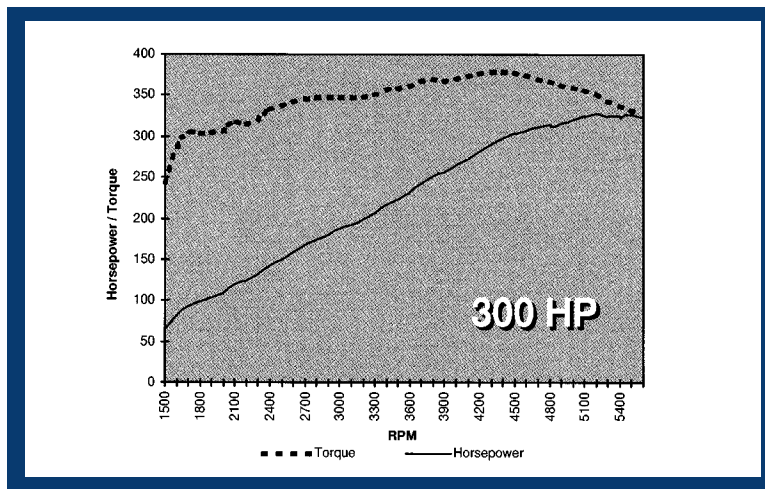
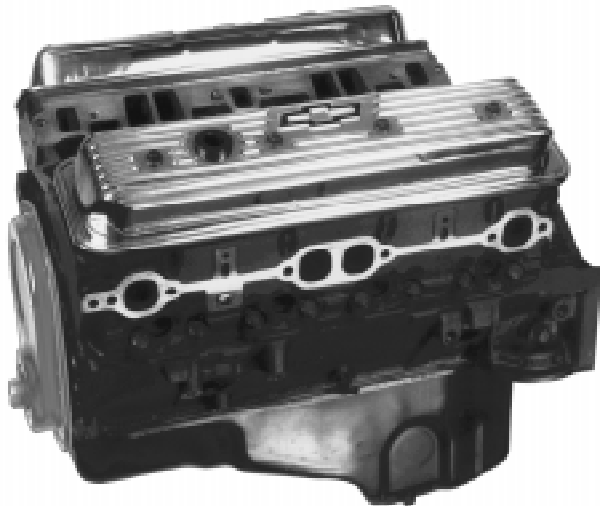


► **NEW 350 HO — PART NUMBER 12486041** **330 Horsepower: Value, Power and Durability**



350 HO — WOW!! 30 MORE HORSEPOWER!!

Our lowest priced crate engine, the 330 horsepower 350 HO doesn't sacrifice power or durability, it just pumps up the value. With its four bolt main block, nodular iron crankshaft, PM steel connecting rods and light but strong cast aluminum pistons, this engine screams durability. Add to the strong foundation a pair of 64cc Vortec cast iron cylinder heads and a dual pattern camshaft with just a bit of a "lumpy" idle, and you've got the muscle car small block that you've been looking for. Dressed to impress with chrome valve covers and timing cover, this engine will look great between the fenders of your favorite street rod, muscle car or grass roots racer.

The cylinder heads on this great little performer use 1.94" intake and 1.50" exhaust valves that are sprung with 1999 Corvette L31 valve springs. The 64cc chambers yield a healthy, but streetable 9.1 to 1 compression ratio.

The cam is a modern dual pattern interpretation of the old '65 to '67 Corvette 327 cam. But with more lift and duration on the exhaust side, it does a better job of clearing exhaust from the combustion chamber. We also decreased duration and lift ever so slightly on the intake side to build more cylinder pressure. The result is a cam that makes great torque and horsepower with the 350 HO's 9.1 to 1 compression ratio.

Add the new dual plane intake manifold P/N 12366573, 650 cfm carburetor, HEI distributor, torsional damper, water pump and exhaust manifolds or headers and you've got an outstanding muscle motor with a broad, smooth torque curve and an honest 330 horsepower. This manifold has four bolts, not six, to attach it to the cylinder head. Older six-bolt manifolds will not fit the new Vortec heads.

The 350 HO is not intended for marine use, and should only be used in 1973 and earlier pre-emissions street vehicles or any year off road vehicles.

300 HP — 350ci CRATE ENGINE — P/N 12355345

There will be a limited number of 300 horsepower 350ci crate engines (P/N 12355345) available in early 1999. It is replaced by the new 330 horsepower version with the Vortec iron cylinder head. This 300 HP engine is identical to the new 330 HP, except for cylinder head P/N 12356026.

350 HO Technical Information

Horsepower	330 @ 5000 RPM
Torque	380 Ft. Lbs. @ 3800
Max. Recommended RPM	5500
Compression Ratio	9.1:1
Block	10105123 Cast iron four bolt with one piece rear main seal
Crankshaft	14088527 Nodular cast iron
Connecting Rods	10108688 PM steel
Pistons	12361371 Cast aluminum
Piston Rings	14089025
Camshaft	24502476 Lift: .435" I, .460" E. Duration @ .050: 212° I, 222° E.
Timing Chain	14087014
Cylinder Heads	12558060 Cast Iron 64cc Vortec combustion chambers
Intake Valves	10241743 1.94"
Exhaust Valves	12550901 1.50"
Valve Springs	10212811
Rocker Arms	10089648 1.5 ratio
Valve Lash	Zero
Spark Plugs	R44TS Gap at .045
Ignition Timing	10 BTDC @ 700 RPM

Technical Notes: Engine ID code is CC. Requires a counterweighted flywheel or flexplate, 10105832, 14088646, 14088650, 14088765, or 12554824. See flywheel chart. Requires torsional damper 6272221 (6.75") or 12555879 (8"). Oil dipstick located on right side. 650 cfm carburetor recommended. Chrome valve covers and timing cover included. Intake manifold, distributor, flywheel, torsional damper, water pump, and exhaust manifolds are not included. Distributor P/N 1104067 or melonized distributor gear P/N 10456413 must be used on all crate engines with steel camshafts.



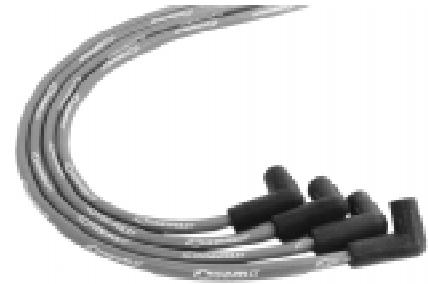
Service your crate engine with ACDelco filters and sparkplugs.

Customize your 350 HO with GM Performance Parts

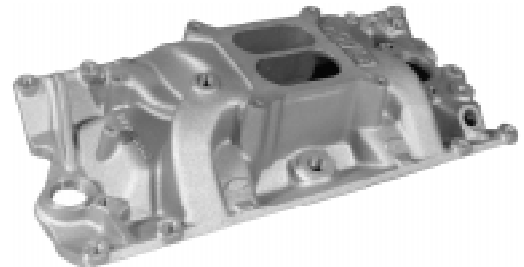
Below is a sample of the parts that you'll find throughout our catalog to help you complete your crate engine installation or customize your crate engine for your specific application.

12529305 — Cast Iron Water Pump

12361051 — Bow Tie Logo 8mm Spark Plug Wires



12366573 — Aluminum Dual Plane



1104067 — HEI Distributor



12361146 — High Torque Mini Starter High power, compact design
Technical Note: This starter not recommended for competition.



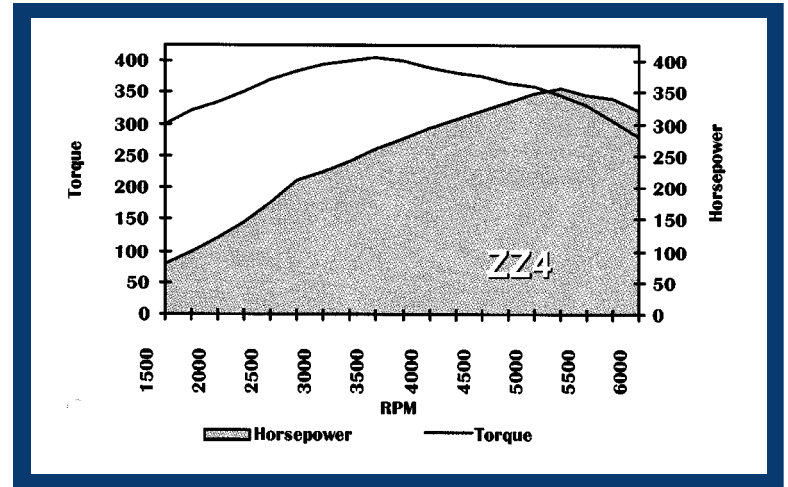
12342080 — Chevrolet Logo 14" Hi Performance Air Cleaner

SERVICE PARTS LIST 300 HP 350ci – 330 HP 350 ci

PART NUMBER 300 HP 12355345	PART NUMBER 330 HP 12486041	DESCRIPTION
10105123	10105123	BLOCK CAST IRON (4 BOLT, 1 PCS RR SEAL
3932482	3932482	BEARING CAP #2,3,4
12356026	12558060	HEAD, COMPLETE W/VALVES (CAST IRON, 64CC)
10093027	10241743	*VALVE, INTAKE 1.94"
14095451	12550909	*VALVE, EXHAUST 1.50"
3911068	10212811	*SPRINGS, VALVE
14042575	14042575	*ROTATOR
14003974	14003974	*CAP, VALVE SPRING
10007818	10007818	*SHIELD, VALVE STEM
10214034	10214034	*SEAL, O-RING
10105117	10105117	GASEKT, HEAD
10089648	10089648	ARM, ROCKER (W/BALL)
12557390	12557390	*NUT ROCKER
12355350	12355350	VALVE COVER (CHROME)
10046089	10046089	GASKET, VALVE COVER
14095256	14095256	ROD, PUSH
5232720	5232720	LIFTER, HYD (FLAT)
24502476	24502476	CAMSHAFT HYD (FLAT)
340235	340235	SPROCKET, CAM
10128346	10128346	SPROCKET, CRANK
14087014	14087014	CHAIN TIMING
10108688	10108688	ROD, CONNECTING PM 2ND DESIGN
12523924	12523924	BEARING, ROD (STD)
12361372	12361372	PISTON W/PIN STD (DEEP OIL GROOVE, 1ST DESIGN)
14089025	14089025	RINGS, STD (DEEP OIL GROOVE, 1ST DESIGN)
12514102	12514102	PISTON W/PIN & RINGS STD (2ND DESIGN)
12507985	12507985	*RINGS, STD (SHALLOW GROOVE, 2ND DESIGN)
14088527	14088527	CRANKSHAFT, NODULAR IRON (1PC SEAL)
12533513	12533513	PAN, OIL (W/DEFLECTOR & GASKET) 5 QT
10108676	10108676	*GASKET, OIL PAN
12554816	12554816	*DEFLECTOR, OIL (WINDAGE TRAY)
12555284	12555284	TUBE, OIL INDICATOR
3855152	3855152	INDICATOR, OIL LEVEL (BLACK HANDLE)
12555283	12555283	PUMP, OIL .620" DIA TUBE 1ST DESIGN
12550042	12550042	SCREEN, OIL PUMP PICK-UP 1ST DESIGN
3998287	3998287	PUMP, OIL .742" DIA TUBE 2ND DESIGN
3764554	3764554	SCREEN, OIL PUMP PICK-UP 2ND DESIGN

ZZ4 — PART NUMBER 24502609

355 Horsepower: Street and Race Performance



ZZ4

Imagine an aluminum head small block that makes 355 horsepower. What if it had a steel roller camshaft, four bolt main block, undercut rolled fillet crankshaft, high silicon pistons and strong PM connecting rods? We imagined it, and then engineered, developed, tested and built it. The ZZ4 is the evolution of our popular ZZ series of small blocks that power thousands of street rods, hot street cars, circle track racers and drag racers. With over 400 ft.lbs. of torque, the ZZ4 is the best way to put an aluminum head, roller cam, high performance small block between your favorite fenders.

The aluminum angle plug cylinder heads have screw in rocker studs, 1.94" intake and 1.50" exhaust valves and 58cc combustion chambers that yield a crisp and responsive 10 to 1 compression ratio. Also included are our lightweight valve spring retainers that weigh half as much as our previous design. The valve seats are radiused and we've included valve stem seals to help keep the oil where it belongs.

To compliment the cylinder head design, we've incorporated a steel roller tappet camshaft with .474" intake and .510" exhaust valve lift. The combination makes 355 horsepower at 5250 rpm and has that great sounding muscle car idle, with just enough lope to let people know that this is no station wagon engine.

Also included with the ZZ4 is an HEI distributor with an ignition timing advance curve developed for performance, a dual plane aluminum intake manifold that accepts your spread bore or square bore carburetor, an 8" high-RPM torsional damper, 12.75" auto trans flex plate and cast iron water pump.

The ZZ4 is currently our most popular crate engine, and you can see why. With a long history of successes in circle track and drag racing as well as street rods and other performance applications, the ZZ4 may just be the bullet for your next project.

The ZZ4 is not intended for marine use, and should only be used in 1974 and earlier pre-emissions street vehicles or any year off road vehicles.

ZZ4 Technical Information

Horsepower	355 @ 5250 RPM
Torque	405 @ 3500 RPM
Max. Recommended RPM	5800
Compression Ratio	10:1
Block	10105123 Four bolt main, cast iron
Crankshaft	12551485 Nodular cast iron with undercut and rolled fillets
Connecting Rods	10108688 PM rods
Pistons	10159436 High silicon aluminum with offset pins
Piston Rings	14089025
Camshaft	10185071 Hydraulic roller Lift .474" I, .510" E. Duration @ .050: .208° I, .221° E.
Intake Manifold	10185063 Aluminum dual plane
Distributor	1104067 HEI
Cylinder Heads	12556463 Aluminum 58cc combustion chambers
Intake Valves	10168465 1.94"
Exhaust Valves	10168514 1.50"
Valve Springs	12551483 LT4 chrome silicon
Rocker Arms	10089648 1.5 ratio
Valve Lash	Zero
Spark Plugs	FR5LS OR MR43LTS
Fuel	92 Octane
Ignition Timing	10° BTDC @ 800 RPM 32° total @ 4000 RPM with vacuum advance disconnected

Technical Notes: Carburetor, spark plug wires, starter, oil filter and oil filter adapter, and exhaust manifolds not included. Distributor P/N 1104067 or melonized distributor gear P/N 10456413 must be used on all crate engines with steel camshafts.



Service your crate engine with ACDelco filters and sparkplugs.

Customize your ZZ4 with GM Performance Parts

Below is a sample of the parts that you'll find throughout our catalog to help you complete your crate engine installation or customize your crate engine for your specific application.

12361146 — High Torque Mini Starter High power, compact design
Technical Note: This starter not recommended for competition.

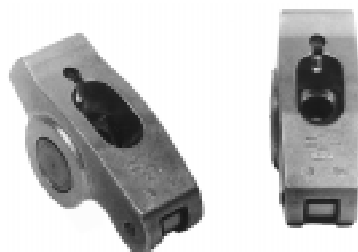


12361056 — GM Performance Parts Logo 8mm Spark Plug Wires

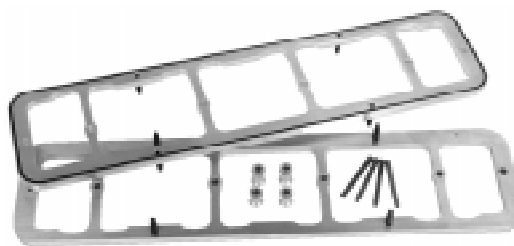
12342079 — Chrome 14" High Performance Air Cleaner

24502586 — HOT Cam-Hydraulic steel roller designed for showroom stock racing

12370839 — 1.6 Ratio Roller Rocker Arms Required with HOT cam



24502540 — Valve Cover Adapters - Allows use of flange mount valve covers on center bolt style heads - Required when roller rocker arms are used



SERVICE PARTS LIST Z ENGINES (350" & 355HP) SMALL BLOCK

SERVICE NUMBER	DESCRIPTION	STAMPED	12561723	10134338	10185025	10185025	10185072	24502609
			ZZ4 PARTIAL	(ZZZ)	(ZZ1)	(ZZ2)	(ZZ3)	(ZZ4)
12561723	PARTIAL ENGINE		X	X	X	X	X	X
10105123	BLOCK, BARE CAST IRON 4 BOLT MAIN		X	X	X	X	X	X
3932482	*CAP, BEARING - 2,3,4		X	X	X	X	X	X
12453170	*BEARING - CAM #1		X	X	X	X	X	X
12453171	*BEARING - CAM #2 REAR		X	X	X	X	X	X
12453172	*BEARING - CAM #3,4		X	X	X	X	X	X
10120990	BEARING, MAIN (STD) #1,2,3,4		X	X	X	X	X	X
10120993	BEARING, MAIN (STD) REAR		X	X	X	X	X	X
10046160	COVER, ENGINE FRONT W/O POINTER			X	X	X		
3991436	POINTER, TIMING (6" DAMPER)			X	X	X		
12513961	COVER, ENGINE FRONT W/POINTER						X	
12552557	COVER, FRT ENG (PLASTIC W/POINTER)							X
RTV	GASKET, FRONT COVER (RTV SEALER)							X
10185087	HEAD, COMPLETE W/VALVES			X	X	X	X	
12556463	HEAD, COMPLETE W/VALVES							X
10125374	*HEAD, BARE W/SEATS & GUIDES			X	X	X	X	X
10241743	*VALVE, INTAKE 1.94"			X	X	X	X	X
12550909	*VALVE, EXHAUST 1.50"			X	X	X	X	X
10134358	*SPRINGS, HI PERF. VALVE (ORANGE)			X	X	X	X	
12551483	*SPRINGS, LT4 VALVE							X
10185066	*SHIM/SPACER,UNDER SPRING			X	X	X	X	
10212809	*SHIM/SPACER,UNDER SPRING (LT4)							X
10045007	*CAP, VALVE SPRING			X	X	X	X	X
10212808	*CAP, VALVE SPRING (LT4)							X
24503866	*KEY, VALVE KEEPER			X	X	X	X	X
12552126	*STUD, ROCKER ARM			X	X	X	X	X
10111771	*PLATE, PUSH ROD GUIDE			X	X	X		
460483	*SEAL, INTAKE STEM			X	X	X	X	
10147883	*SEAL, EXHAUST STEM			X	X	X	X	
10214034	*SEAL, INT & EXH VALVE GUIDE (ZZ4)							X
10212810	*SEAL, INT & EXH VALVE STEM (ZZ4)							X
10007818	*SHIELD, VALVE STEM			X	X			
12557236	GASKET, HEAD			X	X	X	X	X
10089648	ARM, VALVE ROCKER W/NUT & BALL			X	X	X	X	X
10046173	ROD, PUSH			X	X	X	X	X
5234890	LIFTER, HYD ROLLER VALVE			X	X	X	X	
17120735	LIFTER, HYD ROLLER VALVE							X
14101116	RETAINER, LIFTER			X	X	X	X	X
12550002	GUIDE, LIFTER			X	X	X	X	X
24501365	BOLT, LIFTER RETAINER T/W 120386			X	X	X	X	X
10134334	CAMSHAFT, HYD ROLLER			X	X	X		
10185071	CAMSHAFT, HYD ROLLER						X	X
12554553	*PIN. LOCATOR - SPROCKET TO CAM			X	X	X	X	X
14088785	SPROCKET, CAM			X	X	X		
12552128	SPROCKET, CAM			X	X	X	X	X
14088783	CHAIN, TIMING			X	X	X		
10128485	CHAIN, TIMING						X	
14088783	CHAIN, TIMING							X
14088784	SPROCKET, CRANK			X	X	X		

SERVICE NUMBER	DESCRIPTION	STAMPED	12561726	10134338	10185025	10185025	10185072	24502609
			ZZ4 PARTIAL	(ZZZ)	(ZZ1)	(ZZ2)	(ZZ3)	(ZZ4)
10128346	SPROCKET, CRANK						X	
14088784	SPROCKET, CRANK							X
10088128	RETAINER, CAM 1ST DES 3.620" BOLT PATTERN			X	X	X		
10186501	RETAINER, CAM 2ND DES 3.294" BOLT PATTERN						X	X
14093637	BOLT, CAM RETAINER (TORX)			X	X	X	X	X
14096846	ROD, CONNECTING (FORGED-PINK) 1ST DES			X	X	X	X	X
10108688	ROD, CONNECTING (POWDERED METAL) 2ND DES			X				X
12523924	BEARING, ROD (STD)			X	X	X	X	X
10181390	PISTON, STD. W/PIN (HYPEREUTECTIC)			X		X	X	X
10104456	PISTON, STD - W/PIN (HYPEREUTECTIC)			X				
10159436	PISTON, STD. W/PIN (HYPEREUTECTIC)							X
14089025	RINGS, PISTON (STD)			X	X	X	X	X
12528817	RINGS, PISTON (STD)							X
14096036	CRANKSHAFT (FORGED STEEL)			X	X	X		
14088533	CRANKSHAFT (FORGED STEEL)			X				X
12551485	CRANKSHAFT (MODULAR IRON)							X
12551537	DAMPER (6 3/4" DIA)			X	X	X		
12555879	DAMPER (8" DIA)							X
14088765	FLYWHEEL, AUTOMATIC 12 3/4"			X	X	X	X	X
12529305	PUMP, WATER (LONG LEG)			X	X	X	X	X
12528916	PAN, OIL KIT W/BAFFLE (5QT)							X
10108676	*GASKET, OIL PAN (1PC DES)							X
12523316	PAN, OIL KIT W/ BAFFLE (5QT)			X	X	X	X	
12553058	REINFORCEMENT, OIL PAN			X	X	X	X	X
12553059	REINFORCEMENT, OIL PAN			X	X	X	X	X
12551154	TUBE, OIL INDICATOR			X	X	X	X	X
12551144	INDICATOR, OIL			X	X	X	X	X
12555284	PUMP, OIL (.620" DIA TUBE)			X	X	X	X	
3855152	SCREEN, OIL PUMP PICK UP .620 TUBE			X	X	X	X	
12555283	PUMP, OIL (.742" DIA TUBE)							X
12550042	SCREEN, OIL PUMP PICK UP .742 TUBE							X
12554816	DEFLECTOR, CRANK OIL (WINDAGE TRAY)							X
3998287	SHAFT, DIST TO OIL PUMP W/RETAINER			X	X	X	X	X
3764554	*RETAINER, OIL PUMP SHAFT (NYLON)			X	X	X	X	X
5614106	PLUG, SPARK (FRSLS)			X	X	X	X	
5614238	PLUG, SPARK (AC904)(OPTIONAL)							X
5614210	PLUG, SPARK (MR43LTS)							X
1104067	DISTRIBUTOR, COMPLETE (HEI)							X
10185063	MANIFOLD, INT (DUAL BOLT PATTERN)(EGR)						X	X
10159409	GASKET, INTAKE			X	X	X	X	X
6269414	COVER, EGR						X	X
12554530	GASKET, EGR						X	X
14094792	COVER, CHOKE						X	X
14096848	GASKET, CHOKE COVER						X	X