

Performance Crate Engines

Balanced Blueprinted Dyno Proven CNC Machined 100% Live Tested

CR8 by Hi-Tech
Made in USA

AUTO - TRUCK - MARINE

Hi-Tech® Vision™ Performance Crate Engines



Hi-Tech is serious about building the best crate engine in the market today. This is what we do to make our crate engine the best in the business:

Blueprinted – while nearly all performance engine builders claim to hit the blueprint specification, they rarely achieve it. Nor, do they have the equipment to measure a tenth of a micron.



Balanced – balancing the rotation assembly increases power and durability. We balance every crate engine we build.



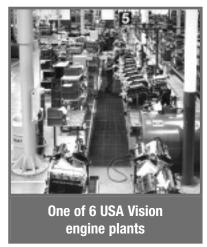
100% Live Tested – before we crate the engine, we test every one to make sure they are built right. Overall friction is measured, oil pressure is confirmed, compression on every cylinder is measured, oil flow to the valvetrain and lower end is confirmed. Just firing an engine on a dyno will tell you that it will run. We 100% test our engines to make sure that they will run for a long time. Our engineers use cold test stands and SuperFlow® dynomometers to prove and test our combinations.



CNC Machining – mating surfaces are CNC micro-finished. Bore centers are corrected to within 1 micron on our 6 vertical CNC machining centers. The only fully CNC crank grinders outside the automakers are in our plants. Part of our research and development effort is to select the right computer numeric control equipment for each type of crate engine.







Vision Engine Plant Certifications: ISO-9002 - QS-9000 - ISO-14000

No Core – these engines average 91% to 100% new component content.

*Warranty – 1 year or 12,000 miles. *454, 502, 540 and 572 cu. in. specialty engines carry no warranty.

Weatherly #002 NPB39 March 1, 2006

Four Crate Engine Power Levels:

OPTIMUM ®

Fuel~Stingy™ (suffix FS)

Lots of power generating torque right off idle yet, engineered to use less fuel than traditional crate motors. Record fuel costs make these an excellent choice. Designed for off hi-way use and pre-emission vehicles. New bore finish technology, using our multi-million dollar CNC equipment, cuts parasitic loss and enhances fuel economy potential. Small blocks are fitted with Hi-Tech's patented Swirl/Quench™ Tri-Level™ pistons. Fuel in the combustion chamber is broken into smaller particles for quick burn combustion AND a lot more torque and horsepower with lower fuel consumption!

Power Crate™ (suffix PC)

Mid-Range to Higher RPM power. Designed for off hi-way use and pre-emission vehicles. Generous horsepower and torque.

Extreme Tork™ (suffix ET)

Off idle to upper Mid-Range RPM power. Designed for axle twisting, stump pulling, snap your head back torque! Designed for off hi-way use and pre-emission vehicles.

Restoration Series™ (suffix RS)

0 to 6,000 RPM, designed as duplicates of high horsepower factory supplied engines such as Ford Mustang. Match them to the right year and model and you'll have all the factory horsepower the vehicle came



Big blocks are offered in four displacements: 454, 502, 540 and 572 cubic inch



Disclamer

Chev, Corvette and Chevrolet are registered trademarks of General Motors Corporation. Ford Mustang is a registered trade mark of the Ford Motor Corporation. It is neither inferred or implied that the products in this catalog are products of General Motors Corporation or Ford Motor Corporation. Their names are used for reference purposes only. Horsepower and torque measurments vary slightly from engine to engine. Accordingly, power measurements are +/- 3%.

Disclosure

Although these engines average 91% to 100% new component pieces, some engines use seasoned blocks which are CNC bored/honed to a maximum of .030" oversize and the bore center is corrected.

High Performance



Performance Crate Engines

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P. 21



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350 Cu.In. to 572 Cu.In. 92 Octane Pump Gas or Race Fuel Versions

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Part No. CH350FS10



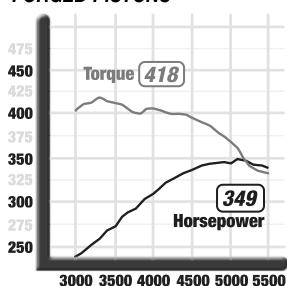




FUEL STINGY & HI TORQUE OUTPUT! **VORTEC HEADS**

New Technology

Patented S/Q TRI-LEVEL® FORGED PISTONS



WinDyn™ - SuperFlow Corp.©2000 Test 1028

ENGINE DETAILS

*Good Gas Milage Potential!

We've done our homework to squeeze the power out of this fuel stingy small block. Patented pistons break fuel into smaller particles for quick burn combustion. Quench pad on the piston promotes extra mixture motion in the combustion space. Smooth idle quality. Includes intake manifold and balancer.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice. *As compared to conventional crate engines with similar HP.

350 HP 418 TORQUE **ENGINE SPECIFICATIONS**

High torque and fuel stingy performance crate engine. Engineered to hold high cylinder pressures right off idle for tire spinning torque. Good fuel economy potential when compared against traditional crate engines.

- Horsepower
- **Torque**
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block
- Crankshaft
- **Pistons**
- **Connecting Rods**
- **Rockers**
- Camshaft Lift intake/exhaust Dur. @ .050" int./exh Hi-Tech Cam No.
- Cylinder Heads
- Manifold

Warranty

418

Dynamically

4.03" x 3.48" 9.0:1

92 Octane

5.700

4 bolt iron

Iron

Forged Tri-Level Swirl/Quench® Forged PM

1.5:1 Full Roller Hvd. Roller

.435"/.462" 198°/210°

105809 Vortec

Hand Worked Dual Plane

1 Year

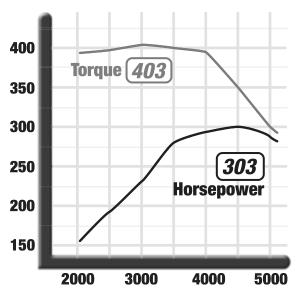


Part No. CH350ET05



EXTREME TORK

400 ft. lb. TORQUE! Hypereutectic Pistons



WinDyn™ - SuperFlow Corp.©2000 Test 1186

ENGINE DETAILS

Supplied without intake manifold or dampner, hitensile fasteners. Moly faced ring set. 100% live tested. With valve covers, oil pan and timing cover. Tire sqawking torque with good idle.

Dyno tested with 750 cfm carb. 1 5/8" primary tube headers 38° total timing, cranking pressure 175 psi.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

300 HP 400 TORQUE

ENGINE SPECIFICATIONS

•	Horsepower
---	------------

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

Block

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh

Cylinder Heads

Manifold

Warranty

300

400

Statically

4.03" x 3.48"

9.5:1

92 Octane

5,500

4 bolt iron

Iron

Hyper Cast

Forged PM

Steel

1.5:1

Hyd. Roller .431"/.451"

196°/206°

196°/206°

Vortec Iron

None

1 Year



Engine supplied without intake manifold or balancer

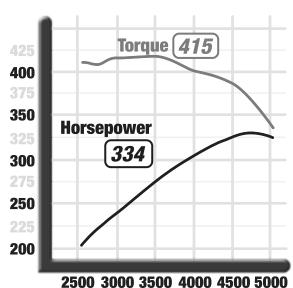
Part No. CH350ET10



EXTREME TORK

The Torque Beast

Roller Cam & 415 ft. lb. TORQUE! Includes Intake Manifold



WinDyn™ - SuperFlow Corp.©2000 Test 878

ENGINE DETAILS

Using a roller cam this engine produces over 400 ft. lbs. of torque right off idle and outperforms flat tappet cams all the way to redline. Smooth idle. Roller cam greatly increases durability. Intake manifold runner volume and angle is matched to the cam profile thus producing a full 40+ ft. lbs. of extra torque compared with other factory crate engines. Strong performer in heavy vehicles. Neck snapping performance in lighter vehicles. Every time you stab the throttle, you'll know you bought the right crate engine. Good idle quality.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

335 HP 415 TORQUE

ENGINE SPECIFICATIONS

- Horsepower
- Torque
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block
- Crankshaft
- Pistons
- Connecting Rods
- Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh
- Cylinder Heads
- Manifold
- Warranty

- 335
- 415
- Statically
- 4.00" x 3.48"
- 8.7:1
- 92 Octane
- 5,500
- 4 bolt iron
- Nodular Iron
- **Coated Hyper**
- Forged PM
- Steel
- Hyd. Roller
- .435"/.460" 212°/222°
- Vortec 64cc
- **Dual Plane**
- 1 Year



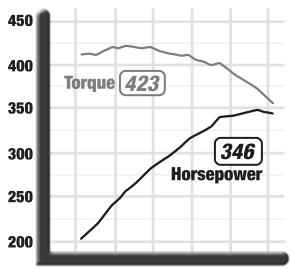
Engine supplied with black valve covers, w/o balancer

Part No. CH350PC30



POWER CRATE

Roller Cam & Roller Tip 1.6 Rockers



2500 3000 3500 4000 4500 5000 WinDyn™ - SuperFlow Corp.©2000 - Test 878

ENGINE DETAILS

Tremendous torque and horsepower for the dollar spent. 1.6:1 rockers push the dual pattern camshaft to the next level. Dyno tests confirm 23 ft. lbs. more torque than the ground pounding 2004 ZO6 5.7L Corvette engine. Good idle quality.

*Includes intake manifold

350 HP 423 TORQUE **ENGINE SPECIFICATIONS**

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

Block

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft w/1.6 *Rocker Hyd. Roller Lift intake/exhaust Dur. @ .050" int./exh

Cylinder Heads

Manifold

Warranty

350

423

Statically

4.00" x 3.48"

8.7:1

92 Octane

5.500

4 bolt iron

Nodular Iron

Coated Hyper

Forged PM

Steel

1.6:1 Ratio

*.460"/.481"

212°/222°

Vortec 64cc

Dual Plane

1 Year



Engine supplied with black valve covers, w/o balancer

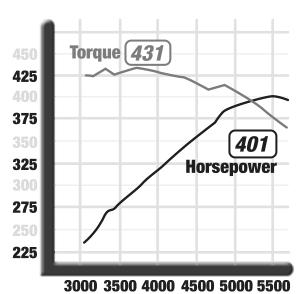
Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

Part No. CH350PC25



POWER CRATE

Roller Cam & Aluminum Heads



WinDyn™ - SuperFlow Corp.©2000 - Test 943

ENGINE DETAILS

400 HP just like the new LS2 Corvette but, with 30 more ft. lbs. of torque. That's not all. Fully balanced, ARP fasteners, 1.6"/2.055" stainless steel valves mean this engine is built for the long run. Slightly lopey idle.

Dyno tested with 850 cfm carb., 15/8" primary tube headers, 35° total timing and 1" 4-hole carb spacer.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

400 HP 430 TORQUE ENGINE SPECIFICATIONS

- Horsepower
- Torque
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block
- Crankshaft
- Pistons
- Connecting Rods
- Rockers
- Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh
- Cylinder Heads
- Manifold
- Warrantv

400

430

Dynamically 4.03" x 3.48"

10.3:1

92 Octane

6,000

4 bolt iron

Nodular Iron

Proprietary ML-124 Alloy

Forged I Beam

Steel

Full Roller

Hyd. Roller .470"/.503"

215°/225°

Aluminum

Hand Worked

Single Plane

1 Year



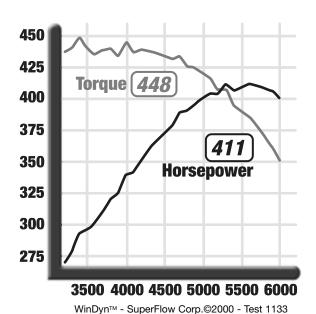
Engine supplied with aluminum valve covers, w/o balancer

Part No. CH350PC05



POWER CRATE

Roller Cam



400 HP 445 TORQUE ENGINE SPECIFICATIONS

Horsepower 415 440 **Torque** Balanced Dynamically 4.03" x 3.48" Bore x Stroke **Compression Ratio** 9.5:1 **Recommended Fuel** 92 Octane Maximum Rec. RPM 5.800 Block 4 bolt iron Crankshaft Iron

Pistons Hyper Cast
Connecting Rods Forged PM
Rockers 1.6:1
Camshaft Hyd. Roller

Lift intake/exhaust w/1.6 .525"/.525" Dur. @ .050" int./exh 218°/228°

Cylinder HeadsManifold

Warranty

1.6:1 Hyd. Roller 5.525"/.525" 218°/228° Ported Vortec Air Flow

Dual Plane 1 Year

ENGINE DETAILS

Air-Flow Dual Plane Aluminum Manifold, Super Duty Valve Springs and Valves. Hi-tensile fasteners. Large vavles 2.02" intake and 1.6" exhaust. Moly faced ring set. 100% live tested. With sheetmetal. Monster horsepower and torque for a 350. Muscle car style lopey idle.

Dyno tested with 850 cfm carb., 15%" primary tube headers, 35° total timing, cranking pressure 160 psi, 12 inches of vacuum at 800 RPM.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.



Engine supplied with black valve covers and balancer

Part No. CH383FS10





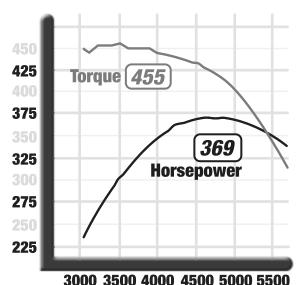
Roller Cam Fuel~Stingy



370 HP 455 TORQUE ENGINE SPECIFICATIONS

New Technology

Patented S/Q TRI-LEVEL® FORGED PISTONS



WinDyn™ - SuperFlow Corp.©2000 - Test 962

- Horsepower
- TorqueBalanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block
- Crankshaft
- Pistons
- Connecting Rods
- Rockers
- Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh
 Hi-Tech Cam
- Cylinder Heads
- Manifold
- Warranty

370

455 Dynami

Dynamically 4.03" x 3.75"

9.0:1

92 Octane

5,800

4 bolt iron Nodular Iron

Forged Tri-Level

Swirl Quench®

Forged I Beam Steel

1.6:1 Ratio

Hyd. Roller

.435"/.462"

198°/210° #105809

Vortec Hand Worked

Dual Plane Air Flow

1 Year

ENGINE DETAILS

*Good Gas Milage Potential!

We've done our homework to squeeze the power out of this fuel stingy small block. Patented Tri-Level Swirl/Quench® pistons break fuel into smaller particles for quick burn combustion. Smooth idle quality. Includes intake manifold and balancer. Over 400 ft. lbs. of torque at 2,000 RPM dyno tested with 750 cfm carb. 30° total timing. Quench pad on the piston promotes extra mixture motion in the combustion space. Special internal balance.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice. *As compared to conventional crate engines with similar HP.

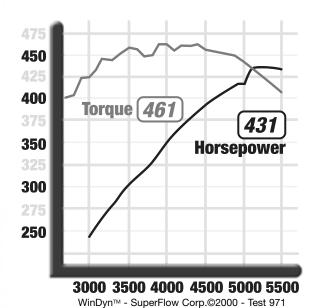


Part No. CH383ET20



EXTREME TORK

Roller Cam Torque Monster



ENGINE DETAILS

HUGE TORQUE NUMBERS, make this 383 a top choice. It acts like a big block yet it's lightweight and durable. ARP fasteners, I Beam connecting rods, roller cam with balancer and flywheel combine to make this fully balanced engine a great value. Slightly lopey idle quality. Special internal balance.

Dyno tested above with 850 cfm carb., dual plane air flow manifold, and 32° total timing.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

430 HP 460 TORQUE ENGINE SPECIFICATIONS

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

• Block

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh

Cylinder Heads

Manifold

Warranty

430 460

Dynamically

4.03" x 3.75"

9.3:1

92 Octane

5.800

4 bolt iron

Nodular Iron

Cast

Hypereutectic

Forged I Beam

Steel

1.6:1 Ratio

Hyd. Roller .540"/.540"

234°/234°

234 /234

Vortec 61cc

Hand Worked

Dual Plane/Air Flow

1 Year

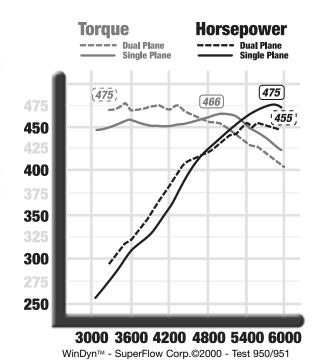


Part No. CH383PC40



POWER CRATE

RAW HORSEPOWER Aluminum Heads



ENGINE DETAILS

Serious horsepower from a small block Chev! Fully balanced, coated piston skirts, ARP fasteners, with balancer & flywheel, 2.055"/1.6"stainless steel valves...THIS ENGINE IS READY TO GO!

Dyno tested above with single plane and dual plane manifolds. Tested with 850 cfm carb and 35° total timing. Intake valve 1.6" exaust 2.055". Vacuum 10"@900 RPM, 8.5" @700 RPM. Slightly lopey idle. 1" 4-hole spacer. Special internal balance.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

475 HP 475 TORQUE ENGINE SPECIFICATIONS

- Horsepower
- Torque
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block
- Crankshaft
- Pistons
- Connecting Rods
- Rockers
- Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh
- Cylinder Heads
- Manifold
- Warranty

475 475

Dynamically 4.03" x 3.75"

10.3:1

92 Octane

5,800

4 bolt iron

Nodular Iron Hypereutectic

Coated Skirt

Forged I Beam Steel

Full Roller 1.6:1

Hyd. Roller .543"/.545"

234°/240°

Aluminum

Hand Worked

Dual Plane Air Flow

1 Year

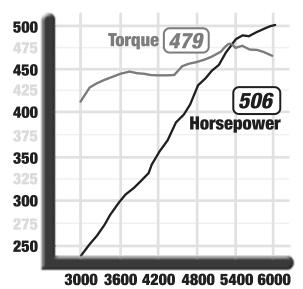


Part No. CH383PC20



POWER CRATE

500 Horsepower! Forged Pistons



WinDyn™ - SuperFlow Corp.©2000 - Test 1039

ENGINE DETAILS

HUGE HORSEPOWER, places this 383 on a level playing field with new 7.0L small block Chev's. ARP fasteners, I Beam connecting rods, roller cam, coated piston skirts, with balancer and flywheel combine to make this fully balanced engine a great value. Higher stall converter recommended. Lopey idle quality. Special internal balance.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

506 HP 480 TORQUE ENGINE SPECIFICATIONS

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

Block

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh

Cylinder Heads

Manifold

Warranty

500 480

Dynamically

4.03" x 3.75"

10.7:1

92 Octane

6,000

4 bolt iron

Nodular Iron

Forged

Forged I Beam

Steel

Full Roller 1.5:1

Hyd. Roller .563"/.570"

238°/242°

Aluminum Hand Worked

Single Plane 1 Year



Part No. CH454ET40



EXTREME TORK

LOW END TORQUE WITH A ROLLER CAM



WinDyn™ - SuperFlow Corp.©2000

ENGINE DETAILS

The high velocity L29 oval port head delivers 485 ft. lbs. of durable torque most of which is available from off idle to redline. Provides tire spinning performance in a light vehicle or plenty of low end torque for heavy trucks and towing. Good idle.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

300 HP 485 TORQUE ENGINE SPECIFICATIONS

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

• Recommended Fuel

Maximum Rec. RPM

• Block (std. deck 9.8")

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./exh

Cylinder Heads

Manifold

Warranty

300

485

Dynamically 4.25" x 4.00"

8.75:1

92 Octane

5,500

4 bolt iron

Forged Steel

Forged

Forged Steel

1.7:1 Steel

Hyd. Roller

.480"/.483"

204°/209°

Iron L29 Oval

High Velocity

None

None



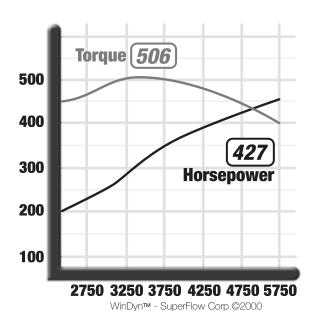
This engine supplied w/o manifold, water pump or dampner

Part No. CH454PC50



POWER CRATE

MUSCLE CAR HERITAGE WITH A ROLLER CAM



ENGINE DETAILS

Genuine American Muscle

Very complete crate engine with covers, balancer, water pump, roller cam and aluminum manifold. Blueprinted, balanced, live tested and ready to go.

427 HP 506 TORQUE ENGINE SPECIFICATIONS

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

Block (std. deck 9.8")

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./ext
 Hi-Tech Cam Part No.

Cylinder Heads

Manifold

Warranty

427 506

Dynamically

4.25 x 4.00

8.75:1

92 Octane

5.500

4 bolt iron

Forged Steel

Forged

Forged Steel

1.7:1 Steel

Hvd. Roller

.512"/.540"

212°/230°

106840

Iron

Rectangular

Aluminum

Dual Plane

None



Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

Part No. CH454PC60



POWER CRATE

ALUMINUM HEADS & ROLLER CAM



ENGINE DETAILS Street Friendly Torque

Aluminum heads allow for a compression ratio increase to 9.6:1. This engine still runs on 92 Octane pump gas. Includes manifold, covers, water pump and balancer. Fully blueprinted and balanced.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

444 HP 510 TORQUE ENGINE SPECIFICATIONS

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

Block (std. deck 9.8")

Overlabet

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./ext
 Hi-Tech Cam Part No.

Cylinder Heads

Manifold

Warranty

444 510

Dynamically

4.25" x 4.00"

9.6:1

92 Octane

5,500

4 bolt iron Forged Steel

Forged

Forged Steel

1.7:1 Steel Hyd. Roller .512"/.540" 212°/230°

106840

Aluminum Oval Port

Dual Plane None



Part No. CH502ET20



EXTREME TORK

BOTTOM END TORQUE HUGE DISPLACEMENT!

Hi-Velocity Heads





ENGINE DETAILS

Ideal for off-highway heavy vehicles and towing. Forged components ensure durability. Includes high velocity L29 iron head. Huge torque kicks in right off idle. There is no replacement for displacement! Camshaft is more conservative than traditional crate engines which gives this engine good fuel economy potential. Bore centers are corrected to within one micron to reduce power robbing and fuel robbing friction. Hey, if you can make 500 ft.lbs. of torque and keep more fuel in your tank, WHY NOT? Good idle.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

340 HP 500 TORQUE **ENGINE SPECIFICATIONS**

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

Block (std. deck 9.8")

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft Lift intake/exhaust Dur. @ .050" int./ext Hi-Tech Cam Part No.

Cylinder Heads

Manifold

Warranty

340 500

Dynamically

4.47 x 4.00

8.75:1

92 Octane

5.500

4 bolt iron

Forged Steel

Forged

Forged Steel

1.7:1 Steel

Hvd. Roller

.480"/.483" 204°/209°

106802

L29 Oval

High Velocity

None

None

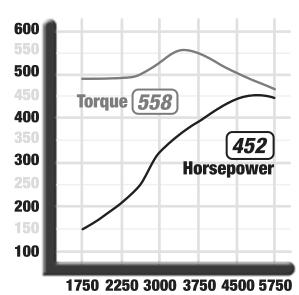


Part No. CH502PC20



POWER CRATE

RECTANGULAR PORT **IRON HEADS** FORGED COMPONENTS



WinDyn™ - SuperFlow Corp. ©2000

ENGINE DETAILS

Great balance of torque and horsepower. Runs on pump gas and includes balancer, water pump and covers. Fully balanced and blueprinted assembly.

452 HP 558 TORQUE **ENGINE SPECIFICATIONS**

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

Block (std. deck 9.8")

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft Lift intake/exhaust Dur. @ .050" int./ext Hi-Tech Cam Part No.

Cylinder Heads

Manifold

Warranty

452 558

Dynamically

4.47" x 4.00"

8.75:1

92 Octane

5.500

4 bolt iron

Forged Steel

Forged

Forged Steel

1.7:1 Steel

Hvd. Roller

.512"/.540"

212°/230° 106840

Iron

Rectangular

Dual Plane

None

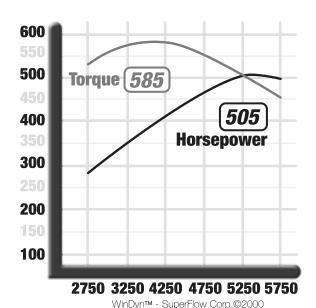
Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

Part No. CH502PC40



POWER CRATE

505 hp 585 ft. lb. torque ENOUGH SAID!



ENGINE DETAILS

"I want over 500 HP and huge torque, forged pistons, rods, crank, fully blueprinted and balanced, roller cam, aluminum heads and manifold and live tested before I buy it."

THIS IS IT!

Tested with 850 cfm carb. Includes black valve covers, water pump and balancer.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

505 HP 585 TORQUE ENGINE SPECIFICATIONS

Horsepower

Torque

Balanced

Bore x Stroke

Compression Ratio

Recommended Fuel

Maximum Rec. RPM

• Block (std. deck 9.8")

Crankshaft

Pistons

Connecting Rods

Rockers

Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./ext
 Hi-Tech Cam Part No.

Cylinder Heads

Manifold

Warranty

505 585

Dynamically

4.47 x 4.00

9.6:1

92 Octane

5.500

4 bolt iron

Forged Steel

Forged

Forged Steel

1.7:1 Steel

1.7.1 3166

Hyd. Roller

.530"/.546"

225°/237°

106840

Aluminum

Oval Port

Dual Plane

None



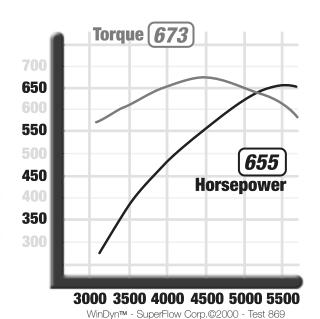
Shown with custom valve covers, not included. Supplied with black valve covers.

Part No. CH540PC10



POWER CRATE

BIG BORE-BIG BLOCK NEW 4.5" BORE



ENGINE DETAILS

Enough torque to turn tires into grease! Our exclusive hand worked heads produce extraordinary horsepower. Forged pistons, crank and rods ensure durability. Includes CNC customized valve covers. Standard deck block is ideal replacement for 396 or 454 engines.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

655 HP 673 TORQUE ENGINE SPECIFICATIONS

- Horsepower
- Torque
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block (std. deck 9.8")
- Crankshaft
- Pistons
- Connecting Rods
- Rockers
- Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./ext
- Cylinder Heads
- Manifold
- Warranty

655 673

Dynamically 4.50" x 4.25"

9.3:1

92 Octane

5,800

4 bolt iron Forged Steel

4340

Forged

Forged Steel 4340

4340 1.7:1 Roller

Hyd. Roller

.632"/.632" 255°/260°

Cast Iron Hand Worked

Rectangular Single Plane

Single Pia

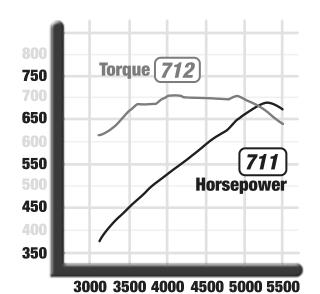


Part No. CH540PC20



POWER CRATE

ALUMINUM HEADS NEW 4.5" BORE BLOCK



ENGINE DETAILS

Over 700 ft. lbs. of torque! If you get traction, you won't be able to get the smile off of your face. Built with all the premium components to make sure it stays together. It's hard to believe you can have this much fun on 92 octane pump gas. Includes CNC customized valve covers. Highly desired standard deck block for easy installation.

WinDyn™ - SuperFlow Corp.@2000 - Test 1107

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

711 HP 712 TORQUE ENGINE SPECIFICATIONS

- Horsepower
- Torque
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block (std. deck 9.8")
- Crankshaft
- Pistons
- Connecting Rods
- Rockers
- Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./ext
- Cylinder Heads
- Manifold
- Warranty

- 711 712
- Dynamically 4.50" x 4.25"
- 9.6:1
- 92 Octane 5.800
- 4 bolt iron
- Forged Steel 4340
- Forged
- Forged Steel 4340
- 1.7:1 Roller Hyd. Roller
- .632"/.632" 255°/260°
- Aluminum Rectangular
- Hand Worked
- Single Plane None



Includes custom CNC valve covers shown above

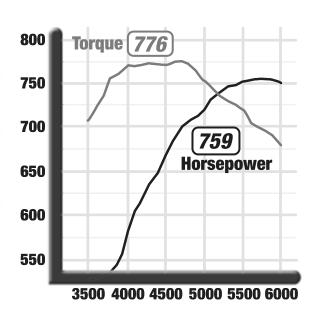
Part No. CH572PC10



POWER CRATE

T-Rex

BIGGER IS BETTER NEW 4.5" BORE BLOCK



WinDyn™ - SuperFlow Corp.©2000 - Test 1017

ENGINE DETAILS

This is the T-Rex of GM style Big Blocks. ARP head/rod stud and fasteners. Hi-Tech CNC aluminum valve covers and balancer. This supersized, super power engine runs on 92 octane pump gas. Tall deck block. The 4.5" bore and 4.5" stroke out performs other 572's.

Dyno tested wih 1050 cfm carb., $2^{1/8}$ " primary tube headers and 34° total timing advance.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

750 HP 775 TORQUE ENGINE SPECIFICATIONS

- Horsepower
- Torque
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block (tall deck 10.2")
- Crankshaft
- Pistons
- Connecting Rods
- Rockers
- Camshaft
 Lift intake/exhaust
 Dur. @ .050" int./ext
- Cylinder Heads
- Manifold
- Warranty

750 775

Dynamically 4.50" x 4.50"

9.6:1

92 Octane 5,700 Max!

4 bolt iron Forged Steel

Forged Steel

Forged Steel 4340

1.7:1 Roller Hyd. Roller .629"/.629"

255°/265° Aluminum Rectangular Hand Worked

Single Plane

None



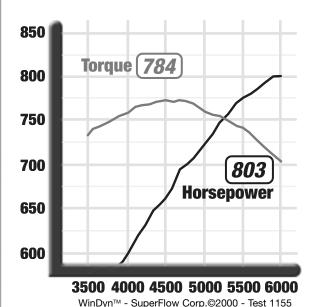
Includes custom CNC valve covers shown above

Part No. CH572PC20



POWER CRATE

BIGGER IS BETTER & 12.1:1 C.R. NEW 4.5" BORE BLOCK & MAIN GIRDLE



ENGINE DETAILS

Massive displacement and horsepower. Parts are engineered as a total <u>high strength</u> assembly. Complete engine is blueprinted, balanced and then live tested. Hi-Tech CNC aluminum valve covers and balancer. The forged steel crankshaft is shot peened and nitrided for additional higher RPM strength.

Must use melonized steel distributor gear. Not legal for sale on pollution controlled motorized vehicles, boats or equipment. Specifications subject to change without notice.

800 HP 780 TORQUE ENGINE SPECIFICATIONS

- Horsepower
- Torque
- Balanced
- Bore x Stroke
- Compression Ratio
- Recommended Fuel
- Maximum Rec. RPM
- Block (tall deck 10.2")
- Crankshaft
- Pistons
- Connecting Rods
- Rockers
- Camshaft Lift intake/exhaust Dur. @ .050" int./ext
- Cylinder Heads
- Manifold
- Warranty

800 770

Dynamically 4.50" x 4.50"

12.1:1

110 Octane

6,200

4 bolt iron

Forged Steel Super Duty

Shot Peended

Nitrited

Forged

Forged Steel 4340

1.7:1 Roller

Mech. Roller .649"/.656"

258°/262°

Aluminum

Rectangular

Hand Worked

Aluminum





Hi-Tech Performance Crate Engine - FORD

Ford 4.6L Restoration Series

w/o sheetmetal, manifold or damper



Engine Specifications Part No. Part No. F04.6RS50 (S0HC) F04.6RS49 (D0HC) Cobra Horsepower 320 260 Torque 300 317 **Compression Ratio** 9.0:1 9.85:1 **Aluminum Block** Iron **Cylinder Heads** Aluminum Aluminum

Ford 5.0L Restoration Series

w/o sheetmetal, manifold or damper



Engine Specifications Part No.

F05.0RS45 (direct replacement for 1995-1993 Mustang Cobra)

Cobra (hydraulic roller cam)

Horsepower 275
Torque 300
Compression Ratio 9.0:1
Block Iron
Cylinder Heads Iron

Legal for sale on pollution controlled motorized vehicles with correct VIN code match

Marine Performance Crate Engines

Hi-Tech® service replacement engines for MerCruiser® - OMC® - Volvo® marinized engines

Extreme Tork - Rated 300 HP - Original Rating 220 HP - up to 315 HP

		up to 0.0
CHE\	VROLET BASED MARINE 5.7L/350 V8	Engine #
2000-96	6 EXTREME TORK original rating 220 HP up to 315 HP Standard rotation, $\underline{\mathbf{f}}_{\mathbf{L}}$	uel inj. CV350ET60
	Vortec. 4 bolt main, head #906 or 162, block 880	
95-87	EXTREME TORK original rating 220 HP up to 290 HP Standard rotation,	CV350ET50
	carbureted, 4 bolt main, Non Roller, Full Circle Rear Seal, Valve cover bolts T	Thru Center
	of Cover	
	Reverse rotation versions of the same engine as shown above, use:	CV350ET55
CHE\	VROLET BASED MARINE 7.4L/454 V8	
വ വ	EVIDEME TOPY original rating 200 HP - up to 250 HP oval intake ports S	tondord CV/5/ET25

99-98	EXTREME TORK original rating 300 HP - up to 350 HP . oval intake ports, Standard rotation, <u>fuel inj. Vortec</u> , 4 bolt main, Head #279, Block #297, 313, Crank #188, Roller	CV454ET35
	cam, 6 bolt timing cover	
98-96	EXTREME TORK original rating 300 HP - up to 350 HP . <u>oval intake ports</u> , Standard rotation, <u>carbureted</u> , 4 bolt main, Head #156, Block #297, 313, Crank #188, Roller cam, 6 bolt timing cover	CV454ET30
95-91	EXTREME TORK original rating 275 HP - up to 350 HP . <u>oval intake ports</u> , Reverse rotation, <u>carbureted</u> , 4 bolt main, 1 pc. Rear main seal, Head #156, Block #182	CV454ET25

95-91 EXTREME TORK original rating 275 HP - up to **350 HP**. <u>oval intake ports</u>, Standard rotation, <u>carbureted</u>, 4 bolt main, 1 pc. Rear main seal, Head #156, Block #182

99-91 PowerCrate Marine 8.75:1 C.R. rated at **385 HP** <u>rectangular port head</u>

CV454PC10

19-91 PowerCrate Marine 8.75:1 C.R. rated at **385 HP** <u>rectangular port head</u> CV454PC10 Forged pistons, Forged Crank, Forged Rods

CHEVROLET BASED MARINE 8.2L/502 V8

PowerCrate Marine 8.75:1 C.R. 1 pc. Rear main seal, forged crank, forged pistons, forged rods, L29 iron oval port cylinder head, **415 HP**, engine can be used as a service Replacement for 502 marine engines or as a re-power engine to replace 7.4L/454 V8

CV502PC10

MARINE CRATE ENGINES Include:

Oil Pan Front Timing Cover Valve Covers Harmonic Balancers Water Pump

Engines are supplied without intake manifold

Engines with cast pistons are blueprinted and statically balanced

Engines with forged pistons are blueprinted and dynamically balanced



Numerical Listing

-Continued

-Continued			
ADDDEVIATION	MANILIFACTURER	Part No.	Applications
ABBREVIATION	MANUFACTURER	ENGINES	
CHEV FORD GM	GENERAL MOTORS FORD MOTOR COMPANY GENERAL MOTORS	CH350ET05 CH350ET10 CH350FS10 CH350PC05 CH350PC25 CH350PC30	CHEV 350 GEN 4 BOLT CHEV 350 GEN 4 BOLT
		CH383FC30 CH383FC10 CH383FC20 CH383PC20 CH383PC40	CHEV 383 GEN I 4 BOLT CHEV 383 GEN I 4 BOLT
		CH454ET40 CH454PC50 CH454PC60	CHEV 454 GEN VI 4 BOLT CHEV 454 GEN VI 4 BOLT CHEV 454 GEN VI 4 BOLT
		CH502ET20 CH502PC20 CH502PC40	CHEV 502 GEN VI 4 BOLT CHEV 502 GEN VI 4 BOLT CHEV 502 GEN VI 4 BOLT
		CH540PC10 CH540PC20	CHEV 540 BEN VI 4 BOLT CHEV 540 BEN VI 4 BOLT
		CH572PC10 CH572PC20	CHEV 572 GEN VI 4 BOLT CHEV 572 GEN VI 4 BOLT
		CV350ET50	CHEV 350 MARINE 95-87 CARB Mercury, Volvo, OMC
		CV350ET55	CHEV 350 MARINE 95-87 REV. ROT. Mercury, Volvo, OMC
		CV350ET60	CHEV 350 MARINE 00-98 FUEL INJ. Mercury, Volvo, OMC
		CV454ET20	CHEV 454 MARINE 95-92 CARB Mercury, Volvo, OMC
		CV454ET25	CHEV 454 MARINE 95-91 CARB Mercury, Volvo, OMC
		CV454ET30	CHEV 454 MARINE 98-96 CARB Mercury, Volvo, OMC
		CV454ET35	CHEV 454 MARINE 99-98 FUEL INJ. Mercury, Volvo, OMC
		CV454PC10	CHEV 454 MARINE 99-91 HO CARB Mercury, Volvo, OMC
		CV502PC10	CHEV 502 MARINE 91-99 HO CARB Mercury, Volvo, OMC
		F04.6RS49 F04.6RS50 F05.0RS45	FORD 4.6L COBRA FORD 4.6L GT FORD 5.0L COBRA 95-93



Vision™ Engine Limited Warranty

Hi-Tech Vision engines are warranted against defects in workmanship and material in accordance with the schedules and limitations outlined below. An authorization number must be received prior to repair or replacement of goods. Authorized repairs or replacements will be approved at the factory within a reasonable time after written notice and upon receipt of the goods deemed to be defective per the schedules and limitations of the written warranty.

PERFORMANCE ENGINES:	Warranty Term	Coverage
*Complete Engines, small block	12 Months or 12,000 miles	Parts + Labor maximum of \$350
*except specialty big block Chevrolet	no warranty on 454, 502, 540, 572	2 cubic inch
Time or Mileage, whichever occurs first.		

Vision™ Engine Limited Warranty -Continued

PRODUCT REPLACED UNDER WARRANTY:

Product replaced under warranty carries the remainder of the original product's warranty term.

STANDARDS:

Subject to limitations listed herein. Hi-Tech, at its option, shall repair or replace a product within the warranty term after determination by factory that the product is defective. All products are to be returned to factory for inspection. Products not returned to the factory will not be warranted. All repairs and/or replacements covered by this warranty must be authorized by the factory. Unauthorized repairs will not be paid. Inspected products that are not covered by this warranty will be held in storage for a period of 30 days. After 30 days product will be disposed of.

LIMITATIONS:

This warranty applies to products originally supplied by Hi-Tech. This warranty does not apply to any of the following:

- A. Damage as a result of OVERHEATING, LACK OF LUBRICATION, FUEL WASH, CONTAMINATION OR NITROUS OXIDE INJECTION.
- B. Damage resulting from PRE-IGNITION or DETONATION. This includes but is not limited to melted or broken pistons, broken piston rings, damaged cylinder heads, leaking head gaskets, etc. For more information regarding pre-ignition and detonation please contact our Warranty Department at 1-800-581-7835
- C. Repair or replacement required as a result of any accident or misuse.
- D. Repair or replacement of any accessory or service item, including specifically but not limited to: all components of the cooling, fuel, electrical and ignition systems in addition to all belts, hoses and filters.
- E. Any product used for competition, racing or related purposes.
- F. Any product to which a device or accessory not conforming to original manufacturer's specifications has been installed.
- G. Damage as a result of electrolysis, including but not limited to, deterioration of engine components as a result of excessive electrical current or improperly maintained coolant, and/or any product on which periodic maintenance services required by the original manufacturer have not been performed.
- H. Crankshaft Thrust Surface worn due to excessive forward pressure placed on the rear of the crankshaft.
- I. Damage resulting from improper repair(s) or attempted repair(s) by any service technician.
- J. Engines that have been operated above maximum recommended RPM.
- K. Damage occuring from the engine being submerged in water or other liquids.

LIMITED LIABILITY

LIMITED WARRANTY: This warranty is given in lieu of all other warranties, expressed or implied, including any warranty of merchantability, or fitness for a particular purpose, on the part of Hi-Tech, the factory or the dealer installing the engine. No dealer, not any agent or employee thereof, is authorized to extend or modify this warranty.

LABOR PAYMENTS:

Factory authorized repairs will be compensated at a rate not to exceed the Current Motor/All Data Manual's published applicable flat rate schedule. Hourly rates for all authorized labor claims will be paid in accordance with the original installation rate, not to exceed \$54.00 per flat rate hour. Do-it-yourself repairs, and repairs performed by unlicensed repair facilities do not qualify for labor reimbursement.

PARTS PAYMENTS

Factory authorized repairs will have parts reimbursed at the amounts approved by factory, not to exceed the original purchase price. Proof of purchase may be required. Fluid and filter costs will be reimbursed for the first 2,000 miles of service, on approved claims only. Hi-Tech's liability under this warranty is limited solely to the repair or replacement of the defective product. Hi-Tech shall not be liable for any incidental, special, consequential or exemplary damages, including but not limited to rental cars, towing fees or for any service not expressly provided for herein, relating to or arising from the Hi-Tech product.

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Computer Assisted Manufacturing



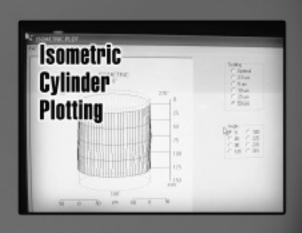






NAPA Crate engines are created using a combination of computerized manufacturing equipment. The result is durable, street friendly brute power.





Today's new car engines seem to last forever, shouldn't yours?

Order Entry & Tech Support 800-655-3951



Fully Computerized Machining:



6 CNC Machining Center



Gehring "smooth peak" hone



The only fully CNC crank equipment outside the automakers



Rods are perfect or replaced



Hi-Tech Engine Components P.O. Box 26185 • Salt Lake City, UT 84126-0185 Cat. No. HTLB34



Cranks





Cylinder Heads