

CHEVROLET ^{AND} RACE ENGINE APPLICATIONS



THE ULTIMATE POWER ADDER[®]

Aftermarket EFI and Carbureted
SBC, BBC, LS/LT, and Racing Applications

ProCharger

THE PROCHARGER WAY

At ATI ProCharger, we believe nothing is ever good enough. It is this mentality that has made ATI the premier manufacturer of centrifugal superchargers, winning more races and setting more records than any competitor for over 25 years. ATI's engineering team has been awarded more patents than any other aftermarket supercharger manufacturer, and has introduced many innovations to the world of supercharging. It's our goal to offer unparalleled technology, performance and reliability to our customers. With offices in Kansas City and San Francisco, ATI is well suited to serve customers both domestic and worldwide, and our staff is composed of automotive enthusiasts who are dedicated to producing the finest supercharger systems available. Our Technical Service and Sales Representatives are available to serve you Monday through Friday from 8:30 AM to 5:30 PM Central Time 913-338-2886.

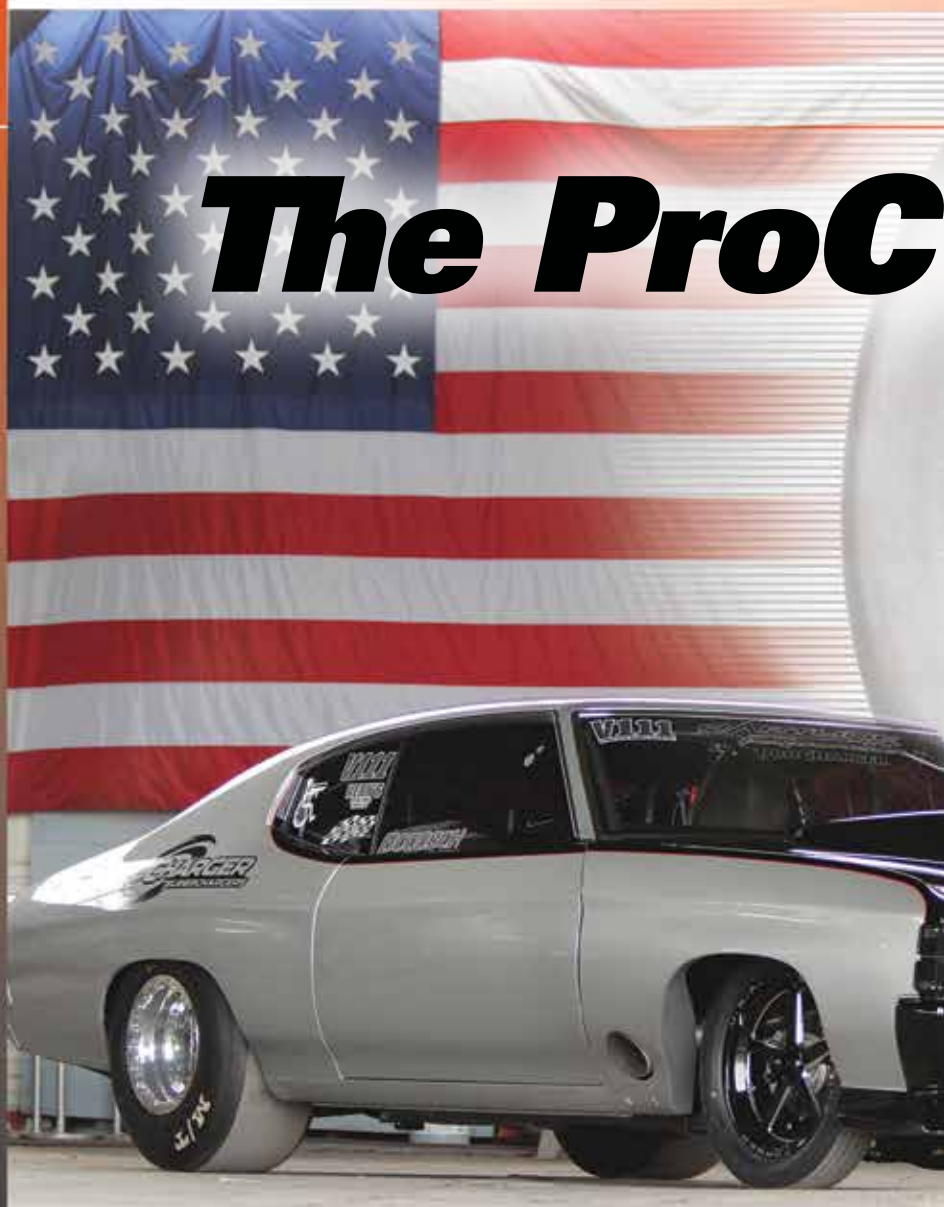


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harger Advantage

- Over 25 years of innovation and industry leadership
- The next generation of supercharging, offering up to twice the gains provided by other power adders
- Industry-leading power gains running pump gas or racing fuel
- Simple underhood installation
- Patented, proven self-contained, SC and F-Series superchargers
- Industry-best supercharger warranty coverage
- Most complete lineup of superchargers and kits, with intercooled and non-intercooled Chevy SB and BB systems for 400-3,500+ HP
(Higher HP gains are attainable through the use of exotic racing fuels like nitro-methane, methanol, etc.)
- Industry-leading LSx and LT-transplant solutions: 1,600+ HP
- More experience with today's carbureted and fuel injected Chevy engines than any other centrifugal supercharger manufacturer



PROCHARGER RACING FACTS

- More than 100 national racing championships in the last 15 years
- ProCharger-equipped cars have won HOT ROD's Drag Week and "Fastest Street Car in America"
- First drag radial car in the 3.50's is powered by ProCharger.
- Fastest centrifugal doorslammer record is held by a ProCharged car.

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Superch

Revolutionary Self-Contained ProChargers

The pursuit of perfection. ATI ProCharger is proud to be known for innovation when it comes to modern, self-contained, centrifugal superchargers. After offering the industry's best, strongest and most powerful centrifugal blowers (our original, oil fed design), we felt it wasn't enough and went back to the drawing board to raise the bar even higher! This effort produced a completely new breed of centrifugal superchargers; fully self-contained requiring no external oil source. Our family of superchargers includes the stealthy P-1SC and D-1SC, the industry-standard F-1 and F-2, as well as the record crushing F-3 superchargers and most recently our new P-1X and D-1X product line.

By freeing the supercharger of the engine's oil supply, ATI ProCharger's engineers gained more latitude in design and allowed building a supercharger without compromise. By utilizing a proprietary synthetic lubricant (free of motor oil contaminants), higher bearing speeds, decreased bearing temperatures and increased bearing life are now possible. This independence from motor oil for lubrication means you don't have to punch a hole in your oil pan and works great for dry sump or custom applications where blower locations would be limited by motor oil drain back.

These new blowers utilize higher internal step up ratios, which allow the use of larger pulleys that provide more belt contact and increased drive belt longevity. You can use a serpentine belt to make power in excess of 1,000 HP, a level once only available to cog belt users.

Buy a ProCharger, get peace of mind. We make the industry's finest superchargers and stand behind our products by providing you with the industry's best warranty. If you purchase a serpentine belt driven ProCharger, we will warranty it for a full 12 months from the date of purchase.



chargers

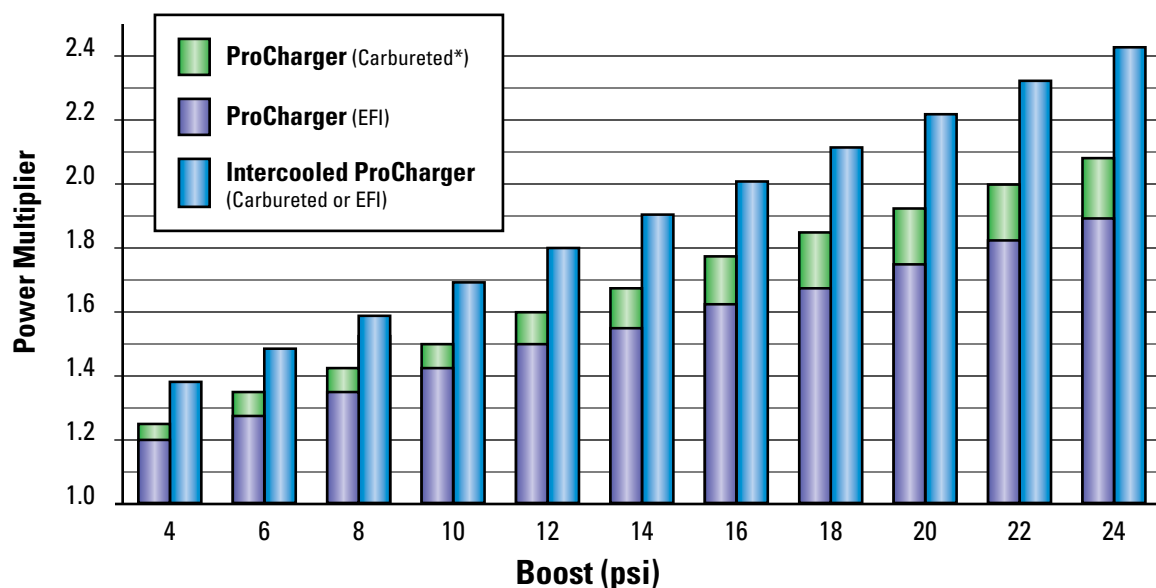
To use this chart, find your desired boost level and follow the bar upward to its end. Multiplying your engine's base horsepower by the corresponding value at the left of the chart will provide you with an estimate of your new ProCharged power level. The multiplier value assumes the use of 91 octane pump gas and an appropriate compression ratio.



How Much Power Can a ProCharger Supercharger Add to Your Engine?

Maximum HP Increase

At Various Boost Levels



*Carbureted applications utilizing racing fuel will experience power gains approaching those of an Intercooled ProCharger.



Made with

Reliable Performance

Well suited for both street and racing use, ProCharger kits are available for a broad range of applications. Running 91 octane pump gas, a highly efficient ProCharger can deliver gains of up to 70% when used on a typical Chevy small block, big block or LS-based engine. If you choose to add an intercooler or use racing fuel, gains well in excess of 100% are readily achievable. Here's why: at given boost levels, ProCharger superchargers produce far lower inlet air temperatures than others. This cooler air charge offers a three-fold benefit: cooler air is more dense and provides the engine with more oxygen than a highly heated air charge. Greater efficiency and cooler air allow you to safely run higher boost and power levels. Your engine is also able to make more power in the absence of this excessive heat due to the fact that you can run more ignition timing without fear of detonation (detonation is the primary limiting factor with any power adder running pump gas). In addition to providing cooler air charges, the centrifugal supercharger provides the engine with a mixture that develops power at crank angles farther past top dead center, thereby avoiding the undue engine strain generated by other power adders. A centrifugal blower also develops boost and power relative to engine speed, giving you a smoother, more usable power curve. Finally, not only is the ProCharger easier on your engine and drivetrain, it's easier on your car as well, requiring minimal modification to your vehicle when compared to other systems. In fact, our basic system can be installed in just a matter of hours without the use of any special tools. Once you get the system dialed in, you're done! You have a car with its original drive ability, no bottles to refill and no need for special trips to pick up expensive racing fuel. Simply fill the tank with premium unleaded and let the fun begin.

"... A centrifugal supercharger is the easiest big horsepower gainer that can be added to an automotive engine. Whether it's a blow-through carb system or on an EFI-controlled engine, bolting on a ProCharger results in instant performance." – Super Chevy Magazine

Real-World Power

ATI strongly believes that performance claims should always be representative of the performance gains that customers can reproduce in real world use. During testing on an engine dyno, peak power output can easily be overstated when obtained from a brief pull, which avoids the effects of heat buildup seen in an extended run. Similarly, unrealistic results may also be obtained with the use of higher octane fuels, which are great for making power, but impractical for street use. This catalog provides reliable, reproducible power figures obtained with pump gas and a tune that doesn't compromise an engine's integrity.

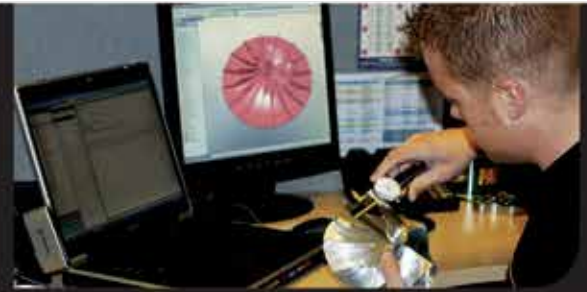


With Pride

ATI: Quality From Start to Finish

The result of hard work and a commitment to quality, ATI ProCharger superchargers have proven to be the finest in the industry. Our engineering staff makes use of state-of-the-art design programs to bring their concepts to reality. Our machinists then work with our engineers to faithfully reproduce these designs at the highest quality using our vast array of CNC machinery. Upon completion, precision machined supercharger parts are inspected for quality and distributed to our supercharger assembly department where skilled technicians hand build and test run each unit prior to shipment.

All ProCharger intercoolers are designed and assembled in-house to provide superior quality control and availability. Prior to shipment, the contents of each assembly and supercharger system are thoroughly double checked for completeness to ensure our customers a swift, hassle free installation. And our air-to-air intercoolers come with a 3-year warranty; designed and built for years of trouble-free use.





Patented Aeration
Pump Provides
Bearing Lubrication

Rugged CNC Machined
Aluminum Housings Ensure
Precise Shaft Alignment

P-1SC

825 MAX HORSEPOWER

CUSTOMER PROFILE:

This classic '69 Camaro is equipped with a hydraulic cammed 355-cid small block and has been shown nationally. Utilizing a non-inter-cooled P-1SC ProCharger, this powerful and streetable combination turns heads wherever it goes.

Vehicle: 1969 Camaro
ProCharger Kit: P-1SC
Bypass Valve: Bullet
Boost: 6 psi
Engine: 355 Small Block
Pistons: Forged
Crank: GM steel
Heads: RHS aluminum
Intake: Weiland single plane
Carb: 750 cfm
Fuel Pump: Mechanical
Block: factory 4-Bolt GM
Cam: Hydraulic Flat Tappet
Ignition & Distributor: MSD
RWHP: 520 @ 6,500

35% INCREASE

Naturally Aspirated HP	PC HP	PC Max *
452	611	825

*Flywheel HP; accounts for 15% drivetrain loss w/ manual transmission

Available for small block and big block Chevy engines, the intercooled and non-intercooled ProCharger P-1SC and D-1SC kits are ATI's entry level self-contained superchargers. Built more ruggedly than the high-end "race" models offered by others, these superchargers utilize a transmission case constructed from 6061 aluminum billet. Lubricated with ProCharger's own proprietary synthetic oil blend, the ultra rigid precision ground shafts and gears (mounted on super-precision, high speed bearings) transfer power from the engine to a CNC machined 7075 aluminum billet impeller, spinning it at an overdrive ratio of 4.10:1. Equipped with a 9" volute, these units pack a lot of power while keeping a low profile. Utilizing a 6061 billet serpentine drive pulley, these blowers are custom configured for your application at no extra cost. Want to turn it up on the weekends? No problem. With a wide range of pulley sizes available you can quickly change boost levels to suit your needs. The mounting brackets, like the transmission case, are constructed from 6061 billet, providing a solid foundation for your ProCharger. The drive system utilizes an 8 or 12 rib drive system with a rugged spring loaded belt tensioner and oversized pulleys that provide optimal belt contact, providing maximum belt life. These kits also include a carb bonnet and the tubing required to boost your Holley 4150-style carburetor, while providing maximum hood clearance. The P-1SC utilizes a radial impeller capable of accommodating a wide range of applications while providing a smooth boost curve. Capable of supporting 925 HP, the D-1SC utilizes a helixed impeller and upgraded bearings and can satisfy the appetite of most power hungry enthusiasts.



Super Precision High
Speed Rated Aerospace
Spec Support Bearing

Precision Ground Gears
Standard straight cut gears shown

Custom Teflon Composite
High Pressure Dual Lipped Seal

Industry Exclusive
7075 T-6 Billet Impeller

Helical gearset available
for reduced supercharger
noise level.

D-1SC

925 MAX HORSEPOWER

CUSTOMER PROFILE:

Equipped with a hydraulic cammed small block, this Chevelle sees frequent street duty without skipping a beat. Even with a conservative tune this 3,500 lb car is capable of dipping into the 10's in the quarter.

Vehicle: 1968 Chevelle
ProCharger Kit: D-1SC
Intercooler: 3 Core, Race 3"
Bypass Valve: Pro-Flo
Boost: 12 psi
Engine: 383 Small Block
Pistons: Pro-Tru Forged
Crank: CAT 5140 Steel
Rods: CAT 4340 Steel
Heads: Dart Iron Eagle
Intake: Victor Jr.
Carb: Holley 750
Fuel Pump: Electric
Block: factory 4-Bolt GM
Cam: Hydraulic Roller
Transmission: 5-speed manual
Options: A/C, P/S, Serp Accessory Drive
RWHP: 652 @ 6200

53% INCREASE

Naturally Aspirated HP

ProCharged HP

Max

531

815

925

*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission

Part Number	Description	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
1CX100-P1SC*	High Output with P-1SC	-	sold separately	low profile	8-rib
1CX100-P1SC-I*	High Output Intercooled with P-1SC	3"	ProFlow	standard	8-rib
1CX100-D1SC*	High Output with D-1SC	-	sold separately	standard	12-rib
1CX100-D1SC-I*	High Output Intercooled with D-1SC	3"	ProFlow	standard	12-rib
Part Number	Optional Equipment	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
-	Black or Polished finish for ProCharger, brackets, and/or bonnet				
add "-H" to part #	Helical gearset for noise reduction				
add "-CB" to part #	Competition Carb Bonnet Upgrade				
AI003A-001	3 core intercooler (825 hp)	3"			
AI003A-002	Sheet metal 3 core race intercooler (950 hp)	3"			
AI003A-005	Sheet metal 3 core race intercooler (1050 hp)	3.5"			
FV001I-BST / FV002I-BST	Boost sensitive fuel pressure regulator (EFI or Carb)				
FP001I-002	ProPump fuel pump 700 hp				
FP001I-006	High performance 1000 hp electric fuel pump				
AB00XX-000	BBC/SBC p/s reloc. kit (remote reservoir) pump not inc. (V-belt)				
AB007A-085/AB008A-065	SBC or BBC Repositioning bracket				
AI004A-003	Universal Tubing Kit	3"			

(Replace "X" in part number with "A" for small block applications and "B" for big block applications)



ENGINE POWER

Season 6, Episode 19

"That's absolutely incredible, 938 Horsepower!!!"

[938 RWHP, with P-1X]

P-1X

950 MAX HORSEPOWER

PRODUCT PROFILE:

P-1X: Our newest and most efficient entry level street supercharger.

Volute Diameter: 9"
Max Supercharged HP: 950
Motor Base HP Range: 300-500
Max Flow (CFM): 1,400
Max Boost (PSI): 32
Inlet Hose Diameter: 3.75"
Inducer Diameter: 3.57"
Exducer Diameter: 5.56"
Outlet Hose Diameter: 3"
Outlet I.D.: 2.62"
Max Impeller RPM: 65,000
Internal Step-up: 4.10:1
Reverse Rotation Avail.: Yes
Self Contained: Yes
Oil Capacity: 6 oz

Helical gasket

Hardened steel helical gasket for a significant reduction in supercharger sound levels.

This helical gasket along with internal design modifications result in a supercharger with all the same power potential as the standard blower, but at reduced sound levels, especially at engine idle speeds. Available on P-1SC-1, D-1SC, P-1X, and D-1X line of superchargers.

New and Improved designs (P-1X and D-1X): Built on the successful history of the P-1SC-1 and D-1SC superchargers, the P-1X and D-1X superchargers each represent higher, more efficient designs, producing cooler charger air temperatures while reducing parasitic engine load. The P-1X/D-1X superchargers use the same brackets and 4:10-1 step-up ratio as their P-1SC/D-1SC counterparts, which provide an easy upgrade or a hassle free new installation. These new superchargers also contain ProCharger's durable self-contained gear case requiring no external oil source for years of trouble-free use.

P-1X™

Delivers a 10-15 HP increase over the P-1SC-1 at the same boost level and is capable of 950+ HP. Fits P-1SC-1 brackets and is a direct bolt-in upgrade from the P-1SC-1.

D-1X™

Delivers more efficiency and is capable of 1,075+ HP. Fits P-1SC-1 and D-1SC brackets and is a direct bolt-in upgrade from the D-1SC.

P-1X™ and D-1X™: A perfect match for today's high revving, high compression LS/LT engines. Try out the next generation of ProCharger superchargers on your Chevy.

"We didn't see this coming: the bell mouth-wearing D-1X helped our big block generate 925 rwHP at 6580 rpm and 744 rwtq at 6470 rpm at 15.5 pounds of boost." – FSC



D-1X

1075 MAX HP

CUSTOMER PROFILE:

Taking this Nova to the next level, the D-1X delivered impressive numbers (925 RWHP) and helped power this Nova down the quarter mile with an ET of 8.76 @ 155.26 MPH. A 159 RWHP improvement over the prior D-1SC supercharger setup is impressive.

Vehicle: 1970 Nova SS
 ProCharger Kit: D-1X
 Intercooler: None
 Bypass Valve: ProFlow
 Boost: 15 psi
 Engine: 498 Big Block
 Rotating Assembly: Eagle Forged
 Heads: AFR 24
 Cams: Comp Cams Custom
 Carb: QFT 850 cfm
 Intake: Edelbrock
 Transmission: FTI TH400
 Converter: FTI 10" 5700 Stall
 Rear End: 12-bolt, 3.42 gears
 RWHP: 925
 ET: 8.76 at 155.26 MPH

82% INCREASE

Naturally Aspirated HP	ProCharged HP
668	925 1075

*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission

Part Number	Description	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
1CX100-P1X*	High Output with P-1X (8 rib)	-	sold separately	low profile	8-rib
1CX100-P1X-I*	High Output Intercooled with P-1X (8 rib)	3"	ProFlow	standard	8-rib
1CX100-D1X*	High Output with D-1X (12 rib)	-	sold separately	standard	12-rib
1CX100-D1X-I*	High Output Intercooled with D-1X (12 rib)	3"	ProFlow	standard	12-rib
Part Number	Optional Equipment	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
-	Black or Polished finish for ProCharger, brackets, and/or bonnet				
add "-H" to part #	Helical gearset for noise reduction				
add "-CB" to part #	Competition Carb Bonnet Upgrade				
AI003A-001	3 core intercooler (825 hp)	3"			
AI003A-002	Sheet metal 3 core race intercooler (950 hp)	3"			
AI003A-005	Sheet metal 3 core race intercooler (1050 hp)	3.5"			
FV001I-BST / FV002I-BST	Boost sensitive fuel pressure regulator (EFI or Carb)				
FP001I-002	ProPump fuel pump 700 hp				
FP001I-006	High performance 1000 hp electric fuel pump				
AB00XX-000	BBC/SBC p/s reloc. kit (remote reservoir) pump not inc. (V-belt)				
AB007A-085/AB008A-065	SBC or BBC Repositioning bracket				
AI004A-003	Universal Tubing Kit	3"			

(Replace "X" in part number with "A" for small block applications and "B" for big block applications)





Patented Aeration
Pump Provides
Bearing Lubrication

CNC Machined
6061 Billet Housings Ensure
Precise Shaft Alignment

F-1D / F-1 / F-1A / F-1A-94

UP TO 1200 MAX HORSEPOWER

CUSTOMER PROFILE:

This 1998 Camaro was built specifically to dominate the very competitive drag racing class called Ultra Street. The F-1A-94 had set so many records and major event wins, that the rule makers have restricted our racers back to the little F-1A-91. But that smaller supercharger has proved just as mighty, and continues to dominate the class and set records.

Vehicle: 1998 Camaro
ProCharger Kit: F-1A-91
Intercooler: none
Bypass Valve: Pro Race
Boost: 21 psi
Engine: 434ci SBC
Heads: HRE Custom
Cam: Custom grind solid roller
Pistons: Forged
Crank: Forged Steel
Rods: Aluminum
EFI System: Haltech
Fuel: Methanol
Horsepower: 1500 +
Racing Class: Ultra Street
Best 1/8th mile ET to date : 4.60 @ 152 MPH

100% INCREASE



*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission

Available for small block and big block Chevy engines, the intercooled and non-intercooled ProCharger F-1D thru F-1R kits are the next step up the ladder from the P-1SC and D-1SC. Utilizing a patented high speed compound bearing design, these superchargers offer operating speeds unmatched by any other line of superchargers on the market. Lubricated with ProCharger's own proprietary synthetic oil blend, the ultra rigid precision ground 9310 steel shafts and gears (mounted on super-precision, high speed bearings) transfer power from the engine to a CNC machined 7075 aluminum billet impeller, spinning it at an overdrive ratio of 5.40:1. Equipped with our 9" volutes (**F-1D, F-1, F-1A, F-1A-91, F-1A-94**) and 9.75" volutes (**F-1C and F-1R**), these units pack a lot of power in a modestly sized package. Utilizing a 6061 billet serpentine drive pulley, these blowers are custom configured for your application at no extra cost. Want to turn it up on the weekends? No problem. With a wide range of pulley sizes available you can quickly change boost levels to suit your needs. The mounting brackets, like the transmission case, are constructed from 6061 billet, providing a solid foundation for your ProCharger. The drive system utilizes a 12-rib belt (cog option available) with a rugged spring loaded belt tensioner and oversized pulleys that provide maximum belt contact for peak power output. These kits also include a standard carb bonnet and the tubing required to boost your Holley 4150-style carburetor. The F-1D thru F-1R utilize an advanced helixed impeller capable of accommodating a broad range of applications. The F-1D and F-1 flow enough air to feed 1,050 HP while the F-1R will support up to 1,200 HP.



Super Precision High
Speed Rated Aerospace
Spec Support Bearing

Precision Ground 9310 Steel Gears
Provide 5.40:1 Step Up Ratio

Patented Ultra High Speed
Compound Bearing Assembly

Industry Exclusive
7075 T-6 Billet Impeller

F-1C/F-1R

UP TO 1250 MAX HORSEPOWER

CUSTOMER PROFILE:

This Camaro can be found roaming about the city streets sporting a modified 850 Holley, an F-1R, a 3 core race intercooler and 502 cubic inches. At 3300 lbs, low nine second E.T.'s are easily within its grasp.

Vehicle: 1970 1/2 Camaro
ProCharger Kit: F-1R
Intercooler: 3 Core, Race 3"
Bypass Valve: ATI Race
Boost: 15 psi

Engine: 502 Big Block
Pistons: JE Forged
Crank: GM 1053 Steel
Rods: GM Steel
Heads: GM

Intake: Brodix
Carb: Holley 850
Fuel Pump: Aeromotive
Block: factory Gen VI 4-Bolt GM
Cam: Solid Roller
RWHP: 756 @ 6400

93% INCREASE

Naturally Aspirated HP	ProCharged HP	PC Max*
490	945	1250

*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission

Part Number	Description	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
1CX100-F1*	High Output with F-1D, F-1, F-1A (12 rib)	-	sold separately	standard	12 rib
1CX100-F1-I*	High Output Intercooled with F-1D, F-1, F-1A (12 rib)	3"	ProFlow	standard	12 rib
1CX100-F1C/F1R*	High Output with F-1C, F-1R (12 rib)	-	sold separately	standard	12 rib
1CX100-F1C/F1R-I*	High Output Intercooled with F-1C, F-1R (12 rib)	3.5"	ProFlow	standard	12 rib
1CX200-F1*	Cog Race Kit with F-1D, F-1, F-1A	-	Race Valve	standard	8 x 50mm cog
1CX200-F1-I*	Intercooled Cog Race Kit with F-1D, F-1, or F-1A	3"	Race Valve	standard	8 x 50mm cog
1CX200-F1R*	Cog Race Kit with F-1A-94, F-1C, F-1R	-	Race Valve	standard	8 x 50mm cog
1CX200-F1R-I*	Intercooled Cog Race Kit with F-1A-94, F-1C or F-1R	3.5"	Race Valve	standard	8 x 50mm cog
Part Number	Optional Equipment	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
-	Black or Polished finish for ProCharger, brackets, and/or bonnet				
add "-CB" to part #	Competition Carb Bonnet Upgrade				
AI003A-005	Sheet metal 3 core race intercooler (1050 hp)	3.5"			
AI045A-001	Sheet metal 3 core race intercooler (1300 hp)	3.5"			
AI006A-001	Sheet metal 3 core race intercooler (1550 hp)	4"			
3FAS-00X	Race Bypass Valve, Open or Closed (alum. or steel flange)				
add "-PRV" to part #	ProRace Bypass Valve (From Race, v-band clamp mounting)				
FV001I-BST / FV002I-BST	Boost sensitive fuel pressure regulator (EFI or Carb)				
FP001I-002	ProPump fuel pump 700 hp				
FP001I-006	High Performance 1000 hp electric fuel pump				
DP010I-001	Cog Drive mechanical water pump pulley				
AB00XX-000	BBC/SBC p/s reloc. kit (remote reservoir, pump not inc. (V-belt)				
AB007A-085/AB008A-065	SBC or BBC Repositioning bracket				
AI004A-003/AI004A-035	Universal Tubing Kit (3.0" or 3.5")	3" or 3.5"			

(Replace "X" in part number with "A" for small block applications and "B" for big block applications)





F-1X/F-2

1600 MAX HORSEPOWER

VEHICLE PROFILE:

Built for *Super Chevy* Magazine to demonstrate the potential of a carbureted, centrifugally blown engine using 91 Octane pump gas, this mildly built big block makes well over 3 HP per cubic inch breathing through a pair of lightly modified 450 Holley carbs, and runs in the low 8's.

Vehicle: 1969 Nova
ProCharger Kit: F-2
Intercooler: 1800 HP A/W
Bypass Valve: ATI Race
Boost: 28 psi
Engine: 440 Big Block
Pistons: JE Forged
Crank: Eagle
Rods: 4340 H-beam Eagle
Heads: Brodix BB2 Xtra
Intake: Offenhauser
Carb: 2 x 450 Holley
Block: Merlin
Cam: Comp Solid Roller
ET: 8.18 @ 170
RWHP: 1196 @ 8100

Available for Small Block and Big Block Chevy engines (1300-1600+ HP). The intercooled and non-intercooled ProCharger F-1X and F-2 kits are the next step up the ladder from the popular F-1R supercharger. These superchargers utilize a patented high-speed compound bearing design and are completely self-contained in ProCharger's proprietary synthetic oil blend. Key components include precision ground 9310 steel shafts and gears, CNC machined 7075 aluminum billet impeller, 6061 billet serpentine drive pulley, and 6061 billet transmission case. These quality parts are made from some of the toughest materials, providing you with years of trouble free use. Spinning at an overdrive

ratio of 5.40:1 and equipped with our 10.5" volute, this unit packs a lot of power in a package that will fit under most hoods. A wide range of pulley sizes are available to quickly change boost levels to suit your application. The drive system utilizes a 12-rib belt (cog option available) with a rugged manual belt tensioner and oversized pulleys that provide maximum belt contact for peak power output. These kits also include a carb bonnet and the tubing required to boost your Holley 4150-style carburetor.



203% INCREASE



*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission





F-3D-102 / F-3D-106

1800 MAX HORSEPOWER

VEHICLE PROFILE:

This beautiful 1966 Nova SS was purpose built to compete in the NMCA Street Outlaw class. This super competitive class has very strict limitations on vehicle weight, supercharger sizes and engine combinations. The teams that compete in the class must use the best-of-the-best components available because they will be put to the test running maximum effort to achieve the winning results.

Vehicle: 1966 Nova SS
ProCharger: F-3D-106
Intercooler: 2500HP A/W
Bypass Valve: ProRace
Boost: 32
Engine: 430CI SBC
Block: Dart
Pistons: Ross Forged
Crank: Bryant
Rods: GRP
Heads: SB2 by M&M Comp. Revolution Billet
Head flow: 460 cfm intake flow
Intake: M&M custom cast w/ 123mm throttle body
Cam: BES Racing Engines -custom solid roller
EFI System: Fuel Tech FT600
Fuel: VP Q-16
ET: 4.38 @ 168 (1/8th mile)
RWHP: 1800+

With more than 100 national racing championships in the last 15 years, ProCharger has become the supercharger of choice among racers across the world. The F-3 "D" models were designed to meet the strict rules of the X275 series of drag racing, while continuing to dominate the class. The F-3 family of superchargers utilize a patented high-speed compound bearing design and are completely self-contained requiring no external oil source. Key components include precision ground 9310 steel shafts and gears, CNC machined 7075 aluminum billet impeller, and 6061 billet transmission case. These quality parts are made from some of the toughest materials, providing race after race of trouble free use. Spinning at an overdrive ratio of 5.63:1 and equipped with F-3D specific 10.5" volute, these models can be ordered with our CrankDrive unit, ProRace bypass valves, and Race Bellmouth to make a complete "one-stop-shop" supercharger package for your engine. Call our racer support staff to help you determine which F-3 model best suits your specific application.



124% INCREASE



*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission





Patented Aeration
Pump Provides
Bearing Lubrication

CNC Machined
6061 Billet Housings Ensure
Precise Shaft Alignment

F-1X-12/F-3R-112/F-3R-121

2400 MAX HORSEPOWER

VEHICLE PROFILE:

This true original SS has had a full life of fun! It's been the quintessential desired original Muscle Car through the 70's and 80's, then modified to a vicious Street Machine and weekend racer through the 90's and early 2000's, and now made a transition to a top level Drag Radial race car.

ProCharger Model: F-3R-121

Boost: 35+ psi

Intercooler: Air to Water

Fuel: VP Q-16

Horsepower Naturally aspirated: 800

Horsepower Boosted: 2400+

Fastest 1/8th mile: 4.22 @ 175 mph

Racing class: LDR and Pro 275

1971 Chevelle SS

Cubic Inch: 540ci

Compression: 9.0:1

Weight: 3300lbs

200% INCREASE

Nat. Asp. HP	ProCharged HP	Max
800	2400	2400

*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission

The first centrifugal supercharger to power a doorslammer over 200 mph and into the sixes, F-3 ProChargers are the centrifugal superchargers of choice among heads-up racers across the continent. These superchargers utilize a patented high-speed compound bearing design and are completely self-contained in ProCharger's proprietary synthetic oil blend. Key components include precision ground 9310 steel shafts and gears, CNC machined 7075 aluminum billet impeller, 6061 billet serpentine drive pulley, and 6061 billet transmission case. These quality parts are made from some of the toughest materials, providing you with years of trouble free use. Spinning at an overdrive ratio of 5.63:1 and equipped with our 12" volute, these units pack a lot of power in a package that can be fitted under most hoods. The drive systems utilize 8mm or 14mm cog belts along with a rugged manual belt tensioner and oversized pulleys that provide maximum belt contact for peak power output. This kit can be ordered with an intercooler, bypass valves and the tubing needed to boost your engine. F-3 ProChargers utilize advanced helix shaped impellers, which accommodate a broad range of applications. With numerous trims available, our racer support staff can help you determine which F-3 model best suits your specific application.



Super Precision High
Speed Rated Aerospace
Spec Support Bearing

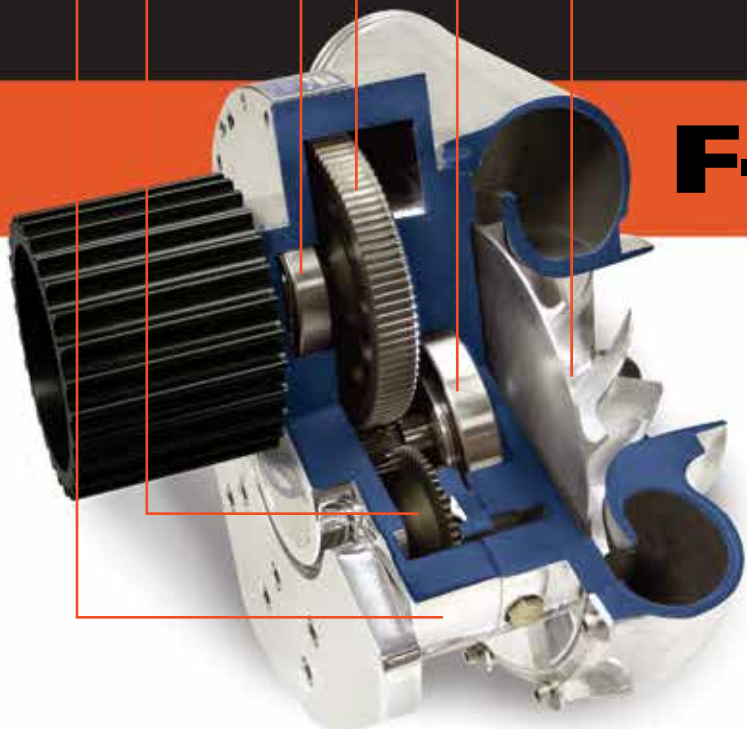
Precision Ground
9310 Steel Gears Provide
5.63:1 Step Up Ratio

Patented Ultra High Speed
Compound Bearing Assembly

Industry Exclusive
7075 T-6 Billet Impeller

F-3R-130/-136

3000 MAX HORSEPOWER



CUSTOMER PROFILE:

Crossing the scales at nearly 2800 lbs, this Outlaw Pro-Mod style Camaro is powered by a 522 cubic inch big block. Fitted with an F-3R-136 ProCharger, this car has blasted to a best time of 6.18 @ 228 mph.

Vehicle: 1968 Jerry Bickel Camaro
ProCharger Kit: F-3R-136
Intercooler: None
Fuel: Methanol
Bypass Valve: ATI Race
Boost: 51 psi
Engine: 522 BAE
Pistons: Forged
Crank: Forged
Rods: Aluminum
Heads: BAE
Intake: Custom
EFI: KAM System
Block: BAE
Cam: Solid Roller
ET: 6.18 @ 228 mph
FWHP: 2600 @ 9000

Part Number	Description	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
1CX200-F3A-spec*	Cog Race Kit with F-3R-121	-	Race Valve	-	14 x 55mm cog
1CX200-F3R-spec*	Cog Race Kit with F-3R-130 or -136	-	Race Valve	-	14 x 55mm cog
1CX200-F3AR-spec*	Reverse Rotation Cog Race Kit with F-3R-121	-	Race Valve	-	8 x 75mm cog
1CX200-F3RR-spec*	Reverse Rotation Cog Race Kit with F-3R-130 or -136	-	Race Valve	-	8 x 75mm cog
Part Number	Optional Equipment	Tube Diameter	Bypass Valve	Carb Bonnet	Drive System
add *-PRV* to part #	ProRace Bypass Valve (From Race, v-band clamp mounting)				
add *-CB* to part #	Competition Carb Bonnet Upgrade				
AI006A-001	Sheet metal 3 core race intercooler (1550 hp)	4"			
WI1005A-001	Air/water race intercooler (race use only, 1,800 hp max)				
WI1005A-002	Air/water race intercooler (race use only, 2,500+ hp max)				
FV002I-BST	Boost sensitive fuel pressure regulator (Carb only, 1000 hp)				
FP001I-006	High Performance 1000 hp electric fuel pump				
DP010I-001	Cog Drive mechanical water pump pulley				
AB007A-085/AB008A-065	SBC or BBC Repositioning bracket				
AI004A-003/-035/004	Universal Tubing Kit (3.0", 3.5" or 4.0")	3"-4"			

(Replace "X" in part number with "A" for small block applications and "B" for big block applications)

160% INCREASE

Naturally Asp. HP	ProCharged HP	Max*
1000	2600	3000

*Flywheel HP: accounts for 20% drivetrain loss w/ automatic transmission



3-Second
2017 Corvette C7 Z06,
3,100+ HP



1969 Camaro
**5.85 ET @
243 MPH**



3-Second
1969 Camaro
3,100+ HP





F-3X-140

3400 MAX HORSEPOWER

VEHICLE PROFILE:

This ProMod Camaro had the race of a lifetime in early 2019. It rocketed to the top of the radial racing world, racking up a \$101,000 payday, and becoming the first car to break into the 3.50s on a small tire. Breaking the 3.5-second barrier was a monumental accomplishment for ProCharger and it's something this racing team earned through dedication to the sport, and a reliable power plant fed by the ProCharger F-3X-140.

Vehicle: 1969 Camaro
ProCharger: F-3X-140
ProCharger CrankDrive
Bypass Valve: ProRace
Intercooler: None
Boost: 50+ psi
Fuel: Methanol
Engine: 548 ProLine Hemi
Pistons: BME Forged
Crank: Bryant Billet
Rods: GRP Aluminum
Heads: AJPE MH4 P3
Cam: Tool Steel PLR Grind
Intake: Visner / PLR Billet Aluminum
Throttle Body: 123mm Accufab V-Band
Throttle Body
EFI: Fuel Tech
Block: AJPE Billet Hemi
HP: 3500+
Best ET : 1/8th mile: 3.58 @ 206mph
Best ET: 1/4th mile: 5.71 @ 247mph

With more than 100 national racing championships in the last 15 years, ProChargers are the centrifugal superchargers of choice among racers across the world. The largest of the F-3 family of superchargers, the F-3 "X" has the newest in high efficient impeller blade design, producing cooler charge air temperatures. These models utilize a patented high-speed compound bearing design and are completely self-contained requiring no external oil source. Key components include precision ground 9310 steel shafts and gears, CNC machined 7075 aluminum billet impeller, and 6061 billet transmission case. These quality parts are made from some of the toughest materials, providing race after race of trouble free use. Spinning at an overdrive ratio of 5.63:1 and equipped with F-3X specific 13.5" volute, these models have an optional billet flange thread-on outlet, to accommodate either a v-band or "dual-seal" style charge pipe connection. The F-3X can be ordered with our CrankDrive unit, ProRace bypass valves, and Race Bellmouth to make a complete "one-stop-shop" supercharger package for your engine. Call our racer support staff to help you determine which F-3 model best suits your specific application. Call or email racing@procharger.com



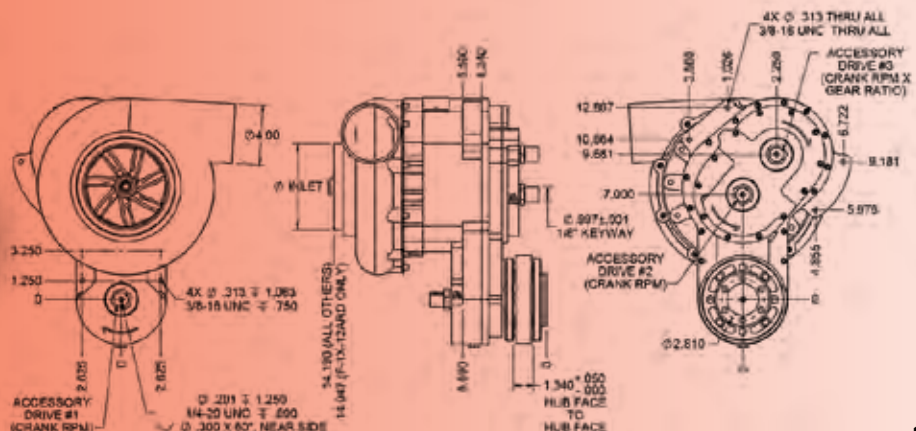
SEMA
BEST NEW
PERFORMANCE-RACING PRODUCT

-

BAE Hemi
AJ TFX Hemi
481X

**TWO CONFIGURATIONS AVAILABLE
F-1X-12RD AND F-3R-121RD**

A key feature of the ProCharger RaceDrive is the ability to change the gear sets or blower speeds by simply removing the front cover, and replacing the 10 spline quick change gear sets with well over 40 different ratios to choose from. The gear case is isolated from the supercharger transmission and holds 4 oz of ProCharger oil.





Factory-style EFI intake shown. LSx Serpentine Drive Kits are compatible with aftermarket EFI and carburetor-equipped LSx engines. Optional polished finish shown.

LSx TRANSPLANT SERPENTINE

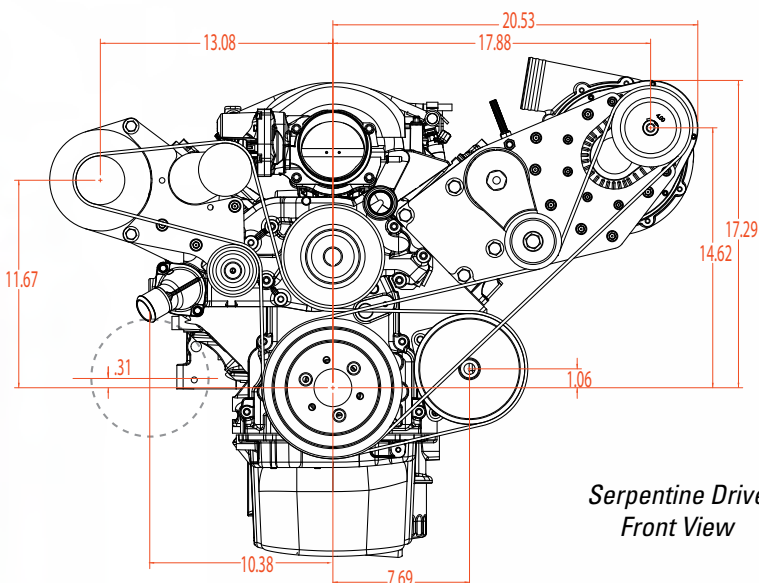
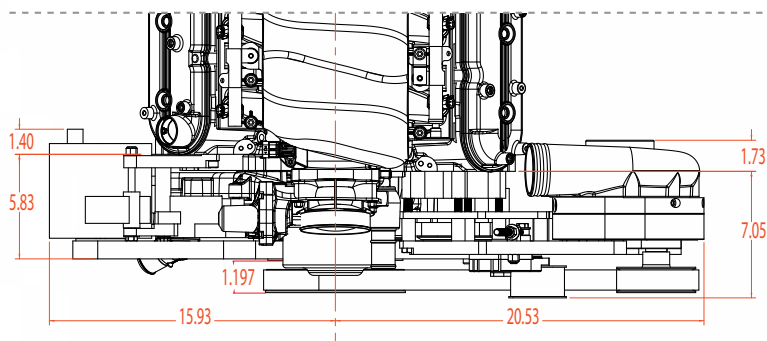
Serpentine Transplant Kit Notes:

The following list includes the GM part #'s for the accessories that provide proper fitment with the supercharger kit. Due to the many accessories available for the LS engine, other accessories may be compatible with this system. A water pump is required, but the Corvette-style water pump is not compatible.

Accessory	GM Part#
P/S Pump	21997867
P/S Pump Pulley	12568997
Alternator	19244751
A/C Compressor	92175482
A/C Bracket	92066950
A/C Belt	25040430
A/C Belt Tensioner	12595289

Featuring a self-contained supercharger, serpentine-drive bracket, air-to-air intercooler and the ability to retain many stock accessories (including A/C and P/S), the ProCharger LSx Serpentine Drive Kit is exactly what your LSx transplant vehicle needs. An intercooled system is good for a safe, fuel-efficient and streetable 530 HP on an otherwise stock LS1, and 620 HP on an otherwise stock LS3. Upgrading to a D-1SC will support up to 925 HP. Significantly higher power levels are possible with modified engines and a F-Series supercharger (tuning, injectors and fuel system required). The serpentine kit utilizes a dedicated 8-rib drive (12-rib upgrade available) and includes a standard one year warranty on the supercharger. HO Kits with P- and D-Series ProChargers include a ProFlow bypass valve, kits with an F-Series get a legendary ProCharger race bypass valve.

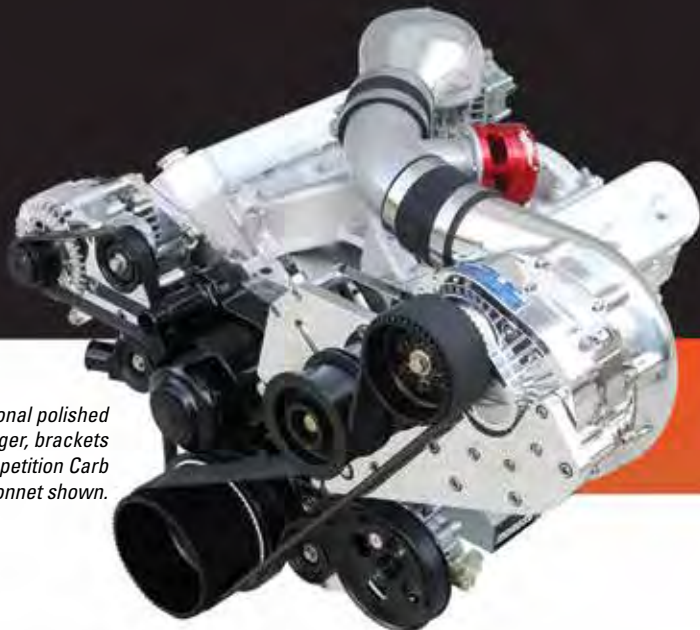
Serpentine Drive Top View



Serpentine Drive Front View



Optional polished
supercharger, brackets
and Competition Carb
Bonnet shown.



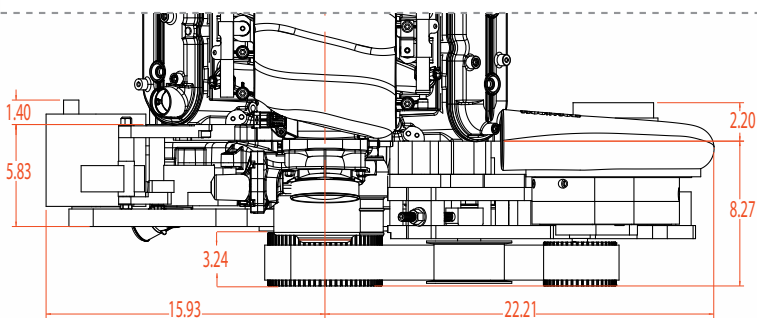
LSx TRANSPLANT COG DRIVE

Cog **Transplant Kit Notes:**

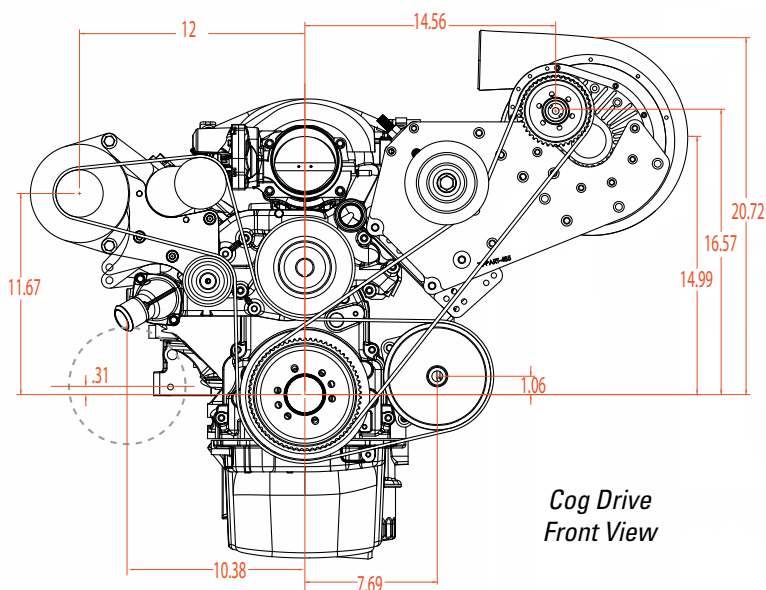
ProCharger is the 1st to offer a complete supercharger kit for use on modern EFI LSx engines being transplanted into various vehicles. A properly spaced LSx engine and ProCharger F-2 supercharger can support 1,600+ horsepower! Call ProCharger at (913) 338-2886 for available LSx Transplant Kit options.

- Requires ATI balancer part #918853 (sold separately by others)
- Specify with or without p/s when using ProCharger accessory brackets
- Pinning the crank is recommended
- Mechanical or Electric water pump
- Designed to work with Muscle Rods motor mounts or comparable (application dependent, sold separately by others)
- Specify iron or alum. block, tall deck
- LS7 engine requires modifications

The ProCharger LSx Cog Drive Kit can be used in both carbureted and EFI applications and is compatible with accessories such as A/C and P/S, making the kit race-rugged while still maintaining excellent street ability. The patented and proven lineup of ProCharger superchargers feature self-contained oiling, so there is no need for an external oil line and can be matched with a wide range of highly effective intercooler options. In addition to the rugged 50 mm-wide cog drive belt, the Cog Drive Kit includes a ProCharger race bypass valve. The ProCharger Competition Carb Bonnet is also available for that ultimate finishing touch for The Ultimate Power Adder under the hood of your LSx transplant project. The LSx Transplant Kit dimensions are also available online at www.ProCharger.com.



*Cog Drive
Top View*



*Cog Drive
Front View*





LT1/LT4 TRANSPLANT SERPENTINE

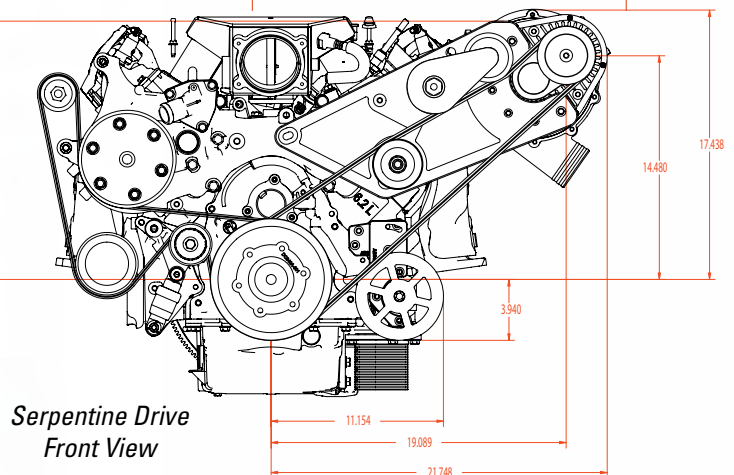
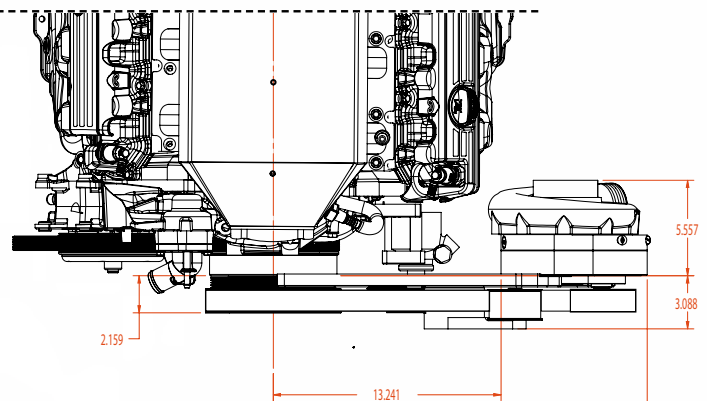
Serpentine Transplant Kit Notes:

The following list includes the GM part #'s for the accessories that provide proper fitment with the supercharger kit. Due to the many accessories available for the LT engine, other accessories may be compatible with this system. A water pump is required, but the Corvette-style water pump is not compatible.

Accessory	GM Part#
P/S Pump	25960709
P/S Pump Pulley	12578552
Alternator	25888970
Belt Tensioner	12569301
A/C Compressor	92175482
A/C Bracket	92066950
A/C Belt	25040430
A/C Belt Tensioner	12595289

Add a ProCharger to GM's latest generation of engines and enjoy even more horsepower (40%+ HP increase). Our kit includes our most popular P-1SC-1 supercharger with optional supercharger upgrades up to F-2, for those seeking ultimate power. Dedicated 8-rib serpentine belt drive system ensures optimum belt contact for maximum power output. This kit works with the OEM LT1 intake as well as ProCharger's intake manifold upgrade with optional axillary fuel rails, for even higher performance (see picture). The kit is compatible with ATI's standard ATI PP Super Damper (Part# 917314) and a power steering bracket option is available for use with a GM Type II power steering pump. The kit is also compatible with most OEM and aftermarket A/C compressors. Race and Bullet bypass valve kits are also available. Satin, polished, or black finish options are available for superchargers, brackets, and intake manifolds to help your ride stand out at car shows. A wide range of intercooler options are available (intercooler kits contain universal components and customization is required). See page 31 for intercooler sizing options.

*Serpentine Drive
Top View*



*Serpentine Drive
Front View*

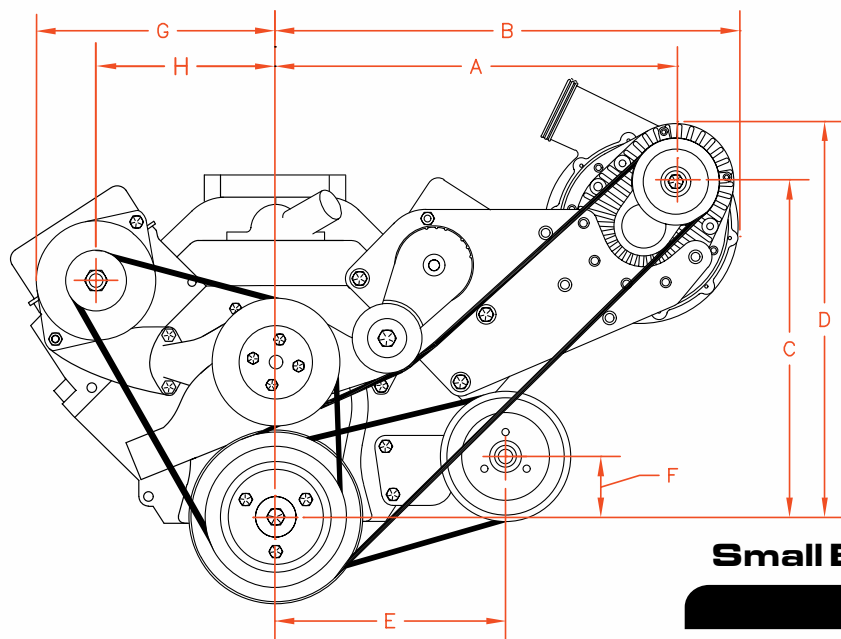




SBC/BBC V-BELT ACCESSORY

V-Belt Accessory Notes:

The V-belt Accessory Drive kit is included with our standard Small Block Chevy or Big Block Chevy kits. It utilizes the common, OEM style passenger side high mount alternator, and long water pump. If your classic is equipped with Power Steering, we manufacture a bracket that can be supplied with the ProCharger kit to relocate a compact power steering pump downward slightly for supercharger clearance. ProCharger offers a wide range of intercoolers and bypass valve options for the highest yet safest horsepower gains available. For the ultimate finishing touch under the hood, we also offer a show quality polished, or textured black powder coated option.



SBC/BBC V-Belt Accessory Front View

- All standard kits will include precision machined and anodized black, water pump pulley, and alternator pulley to align with the new supplied ProCharger crank pulley.
 - Designed to work with long water pump for both SBC and BBC, and early style Delco and some late style Delco Alternators.
 - Power Steering pump part numbers: NAPA # 811255 or 811426 or similar
 - Alternator bracketry is not included, but may be easily purchased using the following part numbers:
- SBC: Summit # G4016 or 420100
Mr Gasket # 5170
- BBC: Summit # G4018 or 420102
Mr Gasket # 4955 & 5177
- Compatible with the following ProCharger supercharger models: P-1SC, P-1X, D-1SC, D-1X, F-1D, F-1, F-1A, F-1C, F-1R, F-1X and F-2.

Small Block

	A	B	C	D	E	F	G	H
Small Block P-1SC/D-1SC	17.7	20.4	14.5	17.2	8.6	1.9	10.0	5.8
Small Block F-1/F-1R	15.4	20.2	16.4	19.2	8.6	1.9	10.0	5.8
Small Block F-1X/F-2	15.4	21.0	16.4	19.2	8.6	1.9	10.0	5.8
Small Block F-3	16.4	21.6	16.3	20.3	NA	NA	NA	NA

Big Block

	A	B	C	D	E	F	G	H
Big Block P-1SC/D-1SC	18.5	21.4	15.5	18.2	10.7	2.9	10.3	7.8
Big Block F-1/F-1R	15.1	21.5	15.2	17.8	10.7	2.9	10.3	7.8
Big Block F-1X/F-2	15.1	22.3	15.2	18.8	10.7	2.9	10.3	7.8
Big Block F-3	20.7	24.7	16.2	20.9	NA	NA	NA	NA

Crank Pulleys Dimension from balancer forward

	SBC	BBC
8/12 rib w/ V-belt Accessory	3.450	3.05
Cog w/ V-Belt Accessory	3.420	3.370



SBC COG & SERPENTINE ACCESSORY DRIVE

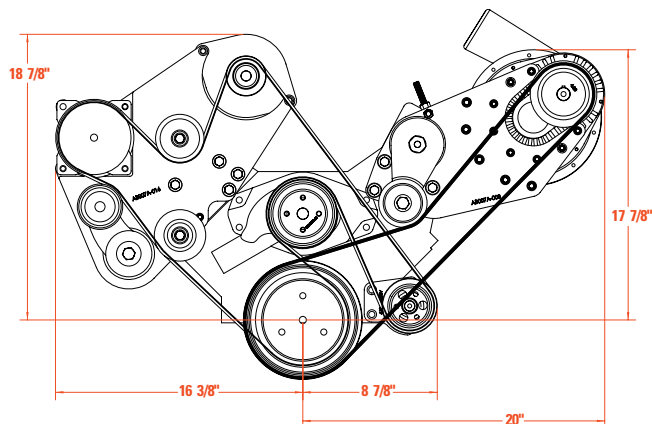
SBC Accessory Notes:

- Drive all your accessories or any combination on a single 6-rib serpentine belt which provides longer belt life and better belt wrap.
- Includes an automatic tensioner for the accessory drive belt: designed to ensure consistent belt tension.
- All bracketry is machined from the highest quality billet aluminum; satin finish standard, polished finish available.
- Designed to operate with commonly used accessories—see opposite page for details.
- Compatible with the following ProCharger supercharger models: P-1SC, P-1X, D-1SC, D-1X, F-1D, F-1, F-1A, F-1C, F-1R, F-1X and F-2.

Now you can get those legendary ProCharger power gains you've been looking for with your Small Block or Big Block Chevy and still drive all of your accessories with an attractive, fully-engineered 6-rib dedicated serpentine drive belt. All brackets included in the Serpentine Accessory Drive option are machined from the highest quality billet aluminum. This accessory drive system utilizes an automatic tensioner similar to the one incorporated in all late model OE drive systems. If you're looking for the largest street-friendly power gains for your ProCharged Big or Small Block Chevrolet "muscle car" and want to use a single serpentine belt for the A/C compressor, power steering pump and alternator, ProCharger has the solution.

SBC kit requires use of reverse rotation water pump (Edelbrock 8815, GM 1984-91 L98 Corvette, or similar). If A/C-equipped, requires use of Sanden 508 A/C compressor. Please call ProCharger at (913) 338-2886 for additional information.

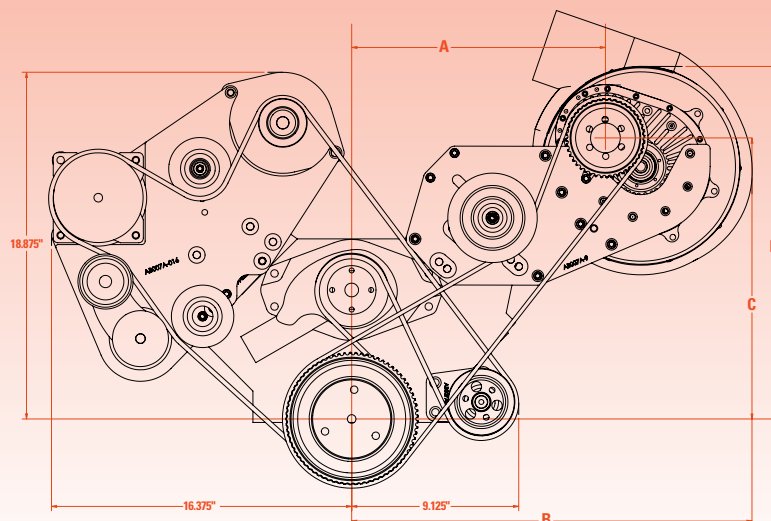
Small Block Chevy Serpentine Accessory Drive Front View



8/12 Rib Serpentine Blower Drive SBC Shown

Small Block

	A	B	C	D
Small Block F-1/F-1R Cog/Serp.	15.4	20.2	16.4	19.2
Small Block F-1X/F-2 Cog/Serp.	15.4	21.0	16.4	19.2
Small Block F-3 Cog	16.4	21.6	16.3	20.3



Cog Blower Drive Shown



BBC COG & SERPENTINE ACCESSORY DRIVE

BBC Accessory Notes:

The ProCharger Cog and Serpentine Accessory Drive has an optional provision for air conditioning and utilizes the Sanden 508 air conditioner compressor that is commonly found in most aftermarket air conditioning systems. The ProCharger Serpentine Accessory Drive has been fitted on the most popular Small Block and Big Block GM muscle cars including the 1967-82 Camaro, 1965-72 Chevelle, & 1968-72 Nova, plus many more.

See the measurement specifications below or call ProCharger for additional fitment info.

BBC kit requires use of reverse rotation water pump (Edelbrock Part# 8854 or similar).

More Small Block and Big Block V-belt accessory dimensions are on page 41.

Please call ProCharger at (913) 338-2886 for additional information.

The perfect option for your street-driven, 1600+ HP ProCharged Chevrolet "muscle car." Contact our Technical Service Department for details.

- Vehicle space limitations may necessitate the use of a repositioning kit which allows the supercharger and bracket assembly to be raised, lowered or shifted outward relative to the engine.
- A/C-equipped vehicles require Sanden 508/SD5H14 a/c compressor (Manufacturer part # 4514) or similar
- Requires reverse rotation water pump (not included)
- Utilizes GM Type II power steering pump (NAPA part #'s 811255 / 811426) or similar (optional)

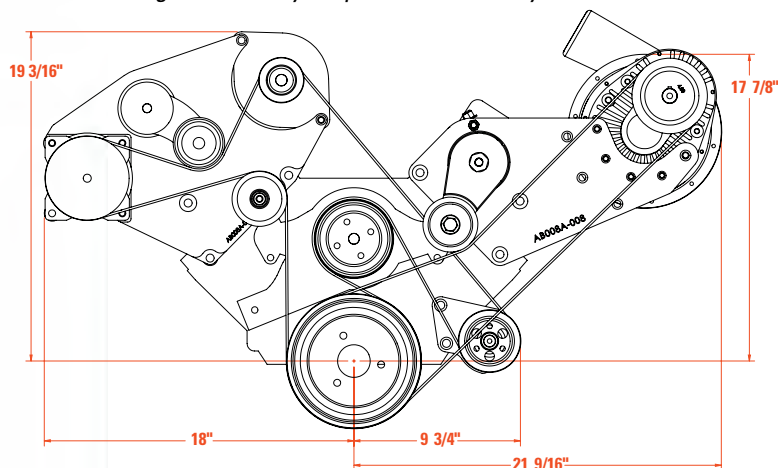
Big Block

	A	B	C	D
Big Block F-1/F-1R Cog/Serp.	15.1	21.5	15.2	17.8
Big Block F-1X/F-2 Cog/Serp.	15.1	22.3	15.2	18.8
Big Block F-3 Cog	20.7	24.7	16.2	20.9

Crank Pulleys Dimension from balancer forward

	SBC	BBC
8/12 rib w/ Serp Accessory	3.250	3.00
Cog w/ Serp Accessory	4.100	3.820

Big Block Chevy Serpentine Accessory Drive Front View



8/12 Rib Serpentine Blower Drive BBC Shown

High-Tech Engineering

Utilizing the industry's most advanced technology, our engineers have developed the most powerful and most reliable centrifugal superchargers on the market. From the custom designed 7075 billet aluminum impeller to the CNC machined transmission case, each ProCharger is designed to deliver years of trouble free performance. Though they may appear similar to impellers used for turbo-charger applications, each billet impeller and compressor housing has been designed and optimized by ATI engineers to offer superior boost and efficiency in gear driven centrifugal supercharger applications. To complement these specialized impellers, ProCharger SC units utilize precision ground gears and shaft assemblies designed to offer miles of quiet, trouble free street & strip operation. F-series models employ ultra strong heat treated, precision machined 9310 steel shafts and gears designed to operate at the high operating speeds (up to 74,000 impeller rpm with impeller tip speeds approaching Mach 2!) regularly experienced in extreme racing applications. These gearsets offer the industry's highest step up ratios (refer to enclosed Supercharger Models document), which allow the use of large pulleys that provide maximum belt contact and belt life. The gear and shaft assemblies, bathed in ATI's proprietary synthetic lubricant, ride on single super precision bearings (SC series) or ATI's patented compound bearing assembly (F-series), precisely stationed in a CNC machined, aerospace quality billet aluminum case. The combination of these elements provide you with superchargers that offer the industry's largest power gains on pump gas or racing fuel.

Billet Impeller Q & A

- **Why has ATI developed impellers machined from Aerospace quality 7075 aluminum billet?**

To give you more boost, airflow and power! ATI has invested a great deal of time and money to develop these billet impellers which offer strength unmatched by more commonly used cast impellers. The material strength for most aluminum castings is 32,000-36,000 psi tensile strength as compared to the 7075 T-6 alloy used in ProChargers which is 83,000 psi.

- **Why is a stronger impeller better?**

The billet material results in an impeller design capable of withstanding loads (a product of RPM, boost and airflow) substantially greater than those experienced in less capable models.

- **What other benefits do billet impellers offer?**

By using billet, ATI is able to test and evaluate several alternatives prior to production and is not confined to a basic design that may only be "trimmed" in an attempt to meet the needs of a given application. Billet impellers don't suffer from the density variations generally present in cast impellers and as such are better naturally balanced and may be operated at higher speeds without generating additional load. Generally lighter than their cast counterparts, billet impellers also reduce blower transmission loads under acceleration and deceleration.



Supercharger Models

Available in many different configurations, there is a ProCharger for most every automotive application. The blower that started it all in 1994, the P600B, is the predecessor to our popular, self-contained P-1SC. Sharing a common compressor design and mated to a rugged self-contained transmission with a heavy duty 4.10:1 gearset, the P-1SC is an economical choice for those wanting to add punch to their street machine. The D-1SC (self-contained) and D-1 (oil fed) superchargers are equipped with 4.10:1 / 4.44:1 extreme duty gearsets. Their durability and power output has allowed them to remain popular among those building high powered street/strip machines. Prior to the introduction of the F-series ProCharger, the D-series was the standard by which other race blowers were judged. Building on this great success, our newest and most efficient models, the P-1X and D-1X superchargers, deliver even more power through more efficient impeller and housing designs. With 875+ HP capable for P-1X and 1000+ HP capable for the D-1X, these superchargers really pack a punch and offer the ability to push your engine even further. Both the P-1X and D-1X use the same 4:10-1 step-up ratio as their P-1SC/D-1SC counterparts.

Introduced in 2001, the F-series ProCharger has rewritten the record books and redefined centrifugal supercharging, with its patented ultra-high speed compound bearing assembly and industry high step-up ratios (5.40:1 for F-1 through F-2 models) and (5.63:1 for F-1X-12 through F-3R models). Visit our website to learn more at <http://www.procharger.com>.



Simple Underhood Installation

ProCharger kits are long on performance, but short on complexity. Equipped with one of our basic kits (standard P-1SC kit shown at left) you can bolt on an easy 300+ HP in an evening.

Installation is simple and requires no frequent maintenance, fabrication or special tools. No other power adder on the market can match these claims.



Why Centrifugal?

Other Power Adders Just Don't Add Up

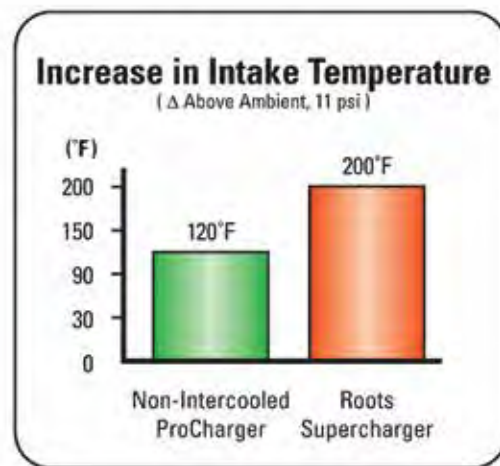
Proven by dealers, racers and GM owners around the world, no other form of aftermarket power-adder provides the combination of power, reliability, ease of installation and maintenance, engine safety and cool operation of a ProCharger. Let's take a look at why the other power enhancing options just don't add up.

Positive Displacement Blowers

Centrifugal superchargers offer substantially higher adiabatic efficiencies than their positive-displacement (PD) counterparts. PD blowers are located on top or nestled in the "V" of the engine, placing them in a very hot, harsh environment which results in significantly hotter charge air temperatures. This location also requires the use of a significantly more complex and less effective air-to-water-to-air intercooling configuration. To cope with these high charge air temperatures, PD blowers must be tuned extremely rich with less timing. This reduces the vehicle's fuel efficiency, drive ability, power and engine longevity.

Turbochargers

Although they use advanced compressor technologies similar to ProCharger's compressor designs, turbo systems' initial cost and complexity make them less practical for everyday street driving. Because a turbo relies on hot engine exhaust to create power, they also create high exhaust temperatures and back pressure, high charge air temperatures and are subject to "lag" that degrades their real-world driving performance. Additionally, turbos require engine oil feed and return lines for lubrication and due to extreme heat, increases the thermal breakdown of your engine's oil.



Nitrous Oxide

Initially, nitrous may look like a bargain, but a review of the facts reveals otherwise. Nitrous oxide accelerates the combustion rate, which in turn, increases peak cylinder pressures. This combination greatly increases the probability of piston-melting pre-detonation. This rapid increase in cylinder pressure also increases the load placed on internal engine components. Additionally, nitrous oxide adds the expense and hassle of constantly having to refill bottles and is not always available when you need it.

Large Displacement Engines

The expense associated with building an engine large enough to produce the same power as a ProCharged stock engine just doesn't add up, especially when you consider the poor idle quality and extra fuel the larger engine will require. You must also consider the time and hassle of a complete engine swap or the downtime of a complete engine rebuild. Large displacement engines also tend to utilize higher compression ratios which create more heat and require expensive race fuels.



Other Power Adders Don't Add Up...

Comparison for 700 hp Engine Using 91 Octane Pump Gas

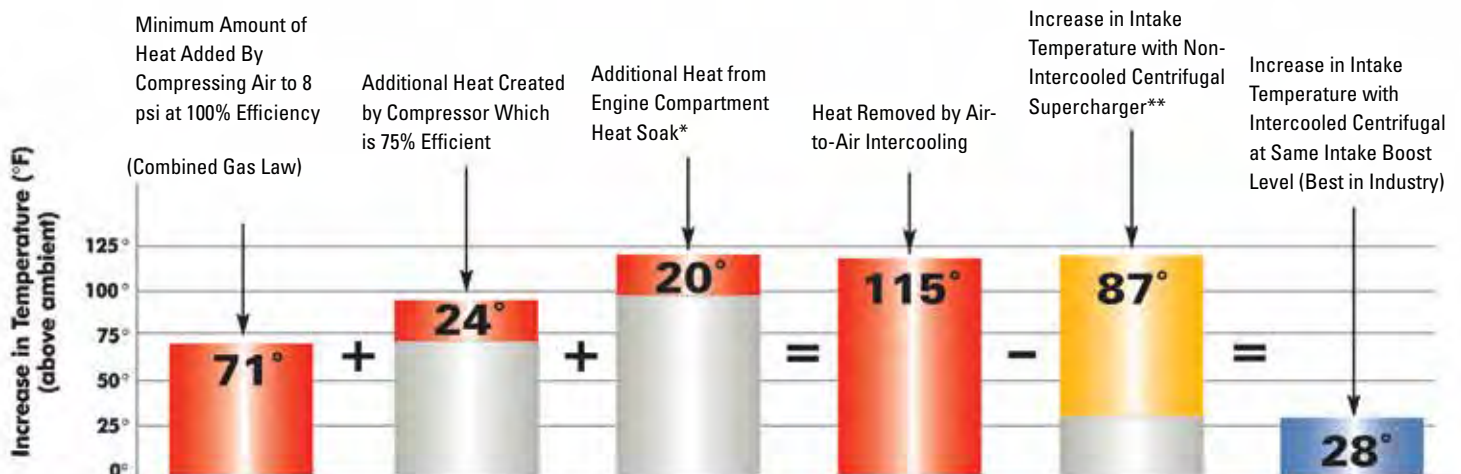
Power Adder	Initial Cost	5 year Cost	Base HP Required	Drivability	Typical Install	Notes
Nitrous Oxide	\$	\$\$\$\$	525	fair	3-5 hours	high long term cost due to bottle refills
Roots	\$\$\$	\$\$\$	550	poor	8-12 hours	requires custom carburetion, hood modification, etc.
Naturally Aspirated	\$\$\$\$\$	\$\$\$\$\$	—	fair	20+ hours	450+ ci, requires complete engine assembly & installation
ProCharger	\$\$	\$\$	440	good	3-5 hours	underhood installation, no fabrication required
Turbocharger	\$\$\$\$	\$\$\$\$	480	good	20+ hours	requires custom exhaust fabrication
Intercooled ProCharger	\$\$\$	\$\$\$	350	good	8-12 hours	requires intercooler tubing fabrication
Intercooled Turbocharger	\$\$\$\$\$	\$\$\$\$\$	375	good	20+ hours	requires custom exhaust & intercooler tube fabrication

Intercooled Supercharger Kits

Supercharge your supercharger by adding an intercooler! A centrifugal supercharger used alone is a potent power adder. When coupled with an intercooler it becomes a power multiplier! Among the many benefits of an intercooler is its ability to be purchased upfront or added to your ProCharger in the future. Using an intercooler allows you to generate even greater power gains without increasing octane levels. While a centrifugal supercharger's reduced discharge temperatures allow it to outperform a roots super-charger, coupling it with an intercooler makes the effect even more pronounced. Anytime a gas (air in this case) is compressed, its temperature will rise (Boyle's gas law). Remember, a high performance engine's greatest enemy is detonation, a by product of excessive combustion temperatures. Adding an intercooler to your engine removes detonation inducing heat from the combustion air charge and further increases its density, thereby allowing you to get more air into the cylinder. Adding an intercooler alone will reduce boost levels (as will increasing displacement or improving the engine's ability to flow air) while increasing HP. Boost is simply a measure of the engine's inability to accept the air being forced into it: more pressure = more resistance. Looking at boost levels alone won't tell the whole story. While boost usually gets all of the credit, it is actually the resultant increase in air density that is responsible for the increase in power. Yet another benefit of intercooling is that the reduced air temperatures allow the use of more spark advance, allowing you to extract more power from your engine. With a blower alone, a 350 HP, 9:1 compression ratio engine can be quickly turned into a 540 HP engine running 10 psi of non-intercooled boost on pump gas with a ProCharger. Add an intercooler to that same engine, turn the boost up to 14-16 psi and you'll make 700 HP without sacrificing reliability, while still running 91-93 octane pump gas!

Selecting An Intercooler

There are a few factors that must be taken into consideration when evaluating your intercooling needs. Though all applications can benefit from the use of an intercooler, carbureted or throttle body injected (TBI) applications running low boost levels on pump gas or high boost levels with racing fuel will make similar peak power numbers, but will not pick up as much power as their port fuel injected counterparts when intercooled. This is due to the fact that the charge air is cooled and its density is increased when mixed with the fuel at the carburetor venturi/throttle body injector.

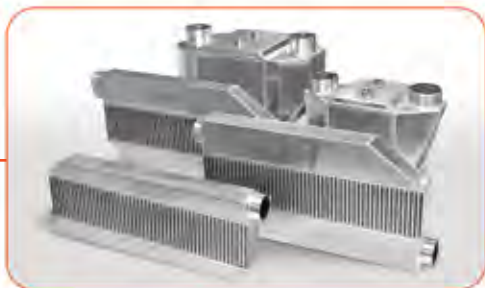


*Radiant heat from engine and exhaust transferred through air, conductive heat transferred directly, and convective heat from engine oil. This engine compartment heat is not addressed by SAE J1723 (supercharger efficiency standard). ** Temperature will be higher for PD blower or turbo.

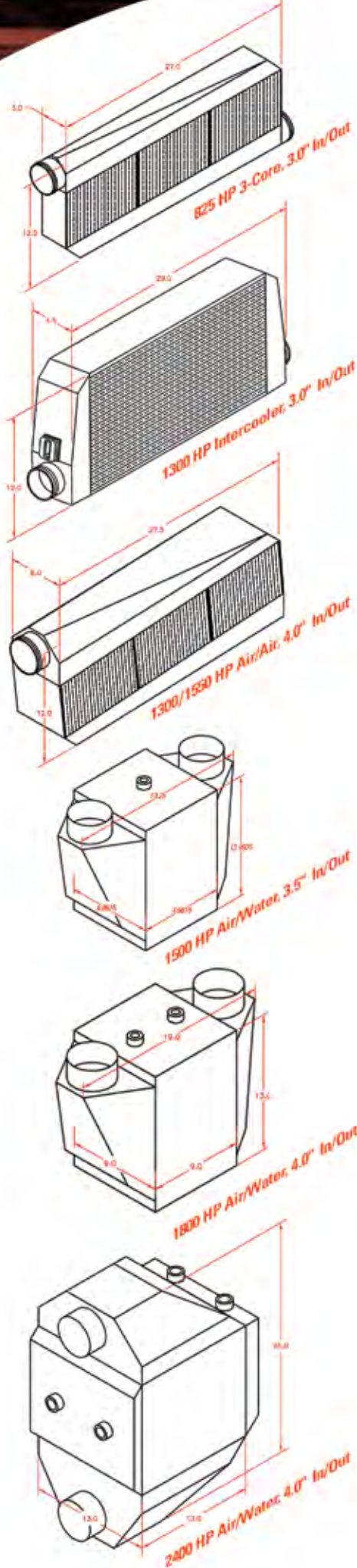
Intercooler Dimensions

Item Description	Part Number	Tube Diameter	Recommended Maximum HP	Approx. Dimensions (Width x Height x Depth)
3 Core Intercooler, Standard	AI003A-001	3"	825	27 x 12.5 x 3
3 Core Intercooler (950 HP)	AI003A-002	3"	950	27 x 15 x 3
3 Core Intercooler (1050 HP)	AI003A-005	3.5"	1050	27 x 15 x 3
Air/Air Intercooler (1300 HP)	AI045A-001	3.5"	1300	27 x 12 x 4.5
Air/Air Intercooler (1550 HP)	AI006A-001	4.0"	1550	27 x 12 x 6
Air/Water Intercooler	WI1005A-003	3.5"	1500	13 x 13 x 9
Air/Water Intercooler	WI1005A-001	4.0"	1800	9 x 19 x 13
Air/Water Intercooler	WI1005A-002	4.0"	2400	13 x 23 x 13
Universal Tube Kit	AI004A-003	3"	950	
Universal Tube Kit	AI004A-035	3.5"	1400	

Note: Intercoolers must be used with Bypass valves (included in kits). Refer to page 40 for appropriate Bypass valve models, and pages 8-17 for intercooler kit part numbers.



The upstream fuel has already done part of the intercooler's job. Often times, a non-intercooled carbureted or TBI engine will show a slight edge when compared to its port fuel injected counterpart. For street applications, including those that will see occasional duty at the track, air-to-air intercoolers deliver consistent, trouble free performance. For race only applications, air-to-water intercoolers offer the ultimate in charge air temperature reduction when used in conjunction with a mixture of ice and water, but are a poor choice for street use. In order to deliver the full benefit, an intercooler must also be appropriately sized. Use of an intercooler that is too small for your application will result in inferior performance as it will restrict airflow and/or fail to remove a sufficient amount of heat from the air charge. Though there is no harm in doing so, little benefit will be observed when using a larger than recommended intercooler. ATI has a full line of intercoolers engineered for use in centrifugally supercharged applications. Please refer to the chart above to determine which intercooler best meets your needs. When using an intercooler system, a surge/bypass valve should be incorporated into the system. The use of this valve allows excess charge air to be vented to the atmosphere under high rpm/low airflow situations, thereby preventing harmful compressor surge.



Preparing Your Engine For A ProCharger

Though a ProCharger can be made to provide sizable power gains with most any application, those building a new engine will find that adhering to the following guidelines should provide an engine that allows you to get the most from your ProCharger.

Engine Blocks

Most ProCharged engines are built using production engine blocks. Though they offer many benefits, an aftermarket block isn't a necessity in a small block producing less than 900 ProCharged HP or a big block making under 1,300 ProCharged HP. As with any high performance engine build, it is wise to use a block that shows minimal signs of core shift and does not require an excessively large over bore that may weaken the cylinder walls.

Crankshaft & Rods

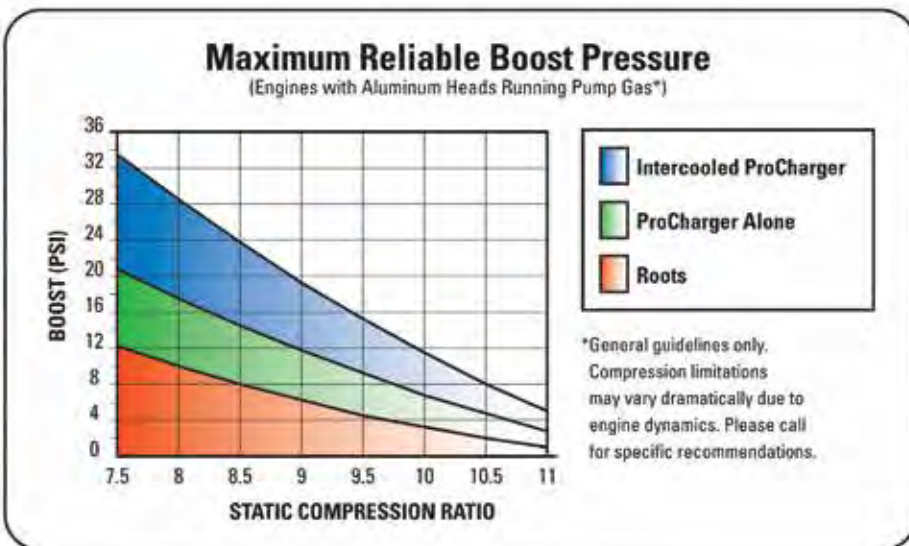
When selecting your crankshaft, our experience has shown that cast crankshafts are sufficient for small blocks making 500 HP or less and big blocks producing less than 700 HP with a ProCharger. Given the difficulty of finding a quality core and the availability of low priced forgings, 5140 steel crankshafts often prove to be a more cost effective option than a reconditioned factory casting, while offering substantially greater peak power capability. A 5140 steel crank will usually get the job done in a 900 HP small block and a big block making 1300 HP (on engines operated below 7,000 rpm). Engines operating at higher RPM's or power levels will benefit from the use of 4340 steel crankshafts. High HP (900+) small blocks will also benefit from the additional rigidity of a crankshaft equipped with a big block diameter snout. When selecting connecting rods, a heavy duty factory connecting rod will often prove capable of supporting 800 HP in a small block and over 1,000 HP in a big block (on engines operated below 6,500 rpm). Stepping up to a set of aftermarket 4340 H-beam rods should get you safely up to 1,000 HP from a small block and 1400 HP in a big block.

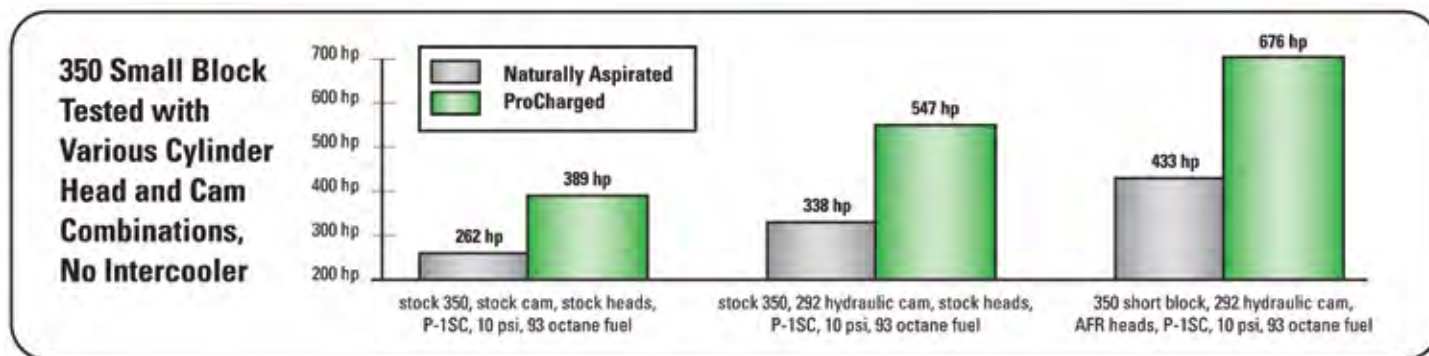
Pistons

Though the price of cast and Hypereutectic pistons make them very attractive, they should be avoided in any small block producing more than 400-450 HP and any big block making more than 500-550 HP. For most street/strip applications, high production forged pistons with "moly" rings are fine. High boost racing applications will offer the best power and reliability when coupled with premium pistons and rings.

Compression Ratio

For pump gas (91-93 octane) applications, a compression ratio of 8.5:1 to 9.0:1 works best on engines running 8-10 psi of boost and using iron heads. Using higher octane fuel or an intercooler will allow these same engines to support higher boost levels. For every 2 points of increase in octane, you can generally support 1 additional psi of boost. Refer to the chart on the right to determine the most appropriate compression ratio for your application.





Cylinder Heads

A supercharged engine enjoys the same benefit as a naturally aspirated engine when breathing through higher flowing cylinder heads. Cylinder heads that offer a strong exhaust side performance (peak flow greater than 75% of intake flow) will further your supercharged engine's ability to produce power as they assist the engine in getting rid of the increased exhaust volume. Stepping up from iron to aluminum heads will also prove beneficial as the improved ability to rid the combustion chamber of excess heat will allow you to run higher boost levels or compression ratios with a given fuel.

Camshaft

When selecting a camshaft, we have found that cams using 112-114 degree lobe separation and exhaust duration 10-12 degrees greater than intake duration offer the best supercharged performance. Adding a centrifugal supercharger will extend the operating range of most engines and will typically allow a camshaft rated to 5500 rpm to run strong beyond 6000 rpm. Keep this fact in mind when making your choice. Most street/strip engines operated below 6500 rpm will make excellent power with economical hydraulic flat tappet or hydraulic roller cams. Higher revving engines will benefit from the use of solid lifter, flat or roller tappet camshafts.

Exhaust

Though a supercharged engine does not rely solely on atmospheric pressure to fill the cylinders (as a naturally aspirated engine does) and can provide power in excess of a system's rated performance, sizable gains will be seen when equipping your ProCharged engine with an appropriately sized, free flowing exhaust system.

Intake Manifold

With the broad RPM range offered by modern intake designs, most engines will do best with an appropriately sized single plane manifold. Those operating strictly below 5500 RPM may benefit from the use of a dual plane manifold (which may require staggered jetting to provide proper fuel distribution) to enhance low end torque output.

Ignition System

As cylinder pressure increases, ignition energy must be increased accordingly. Many aftermarket vendors provide ignition systems well-suited for use with your ProCharged vehicle. Though intercooled applications may retain an ignition curve very similar to that observed with a naturally aspirated application, non-intercooled applications may benefit from the use of a device which modifies ignition timing relative to boost levels.

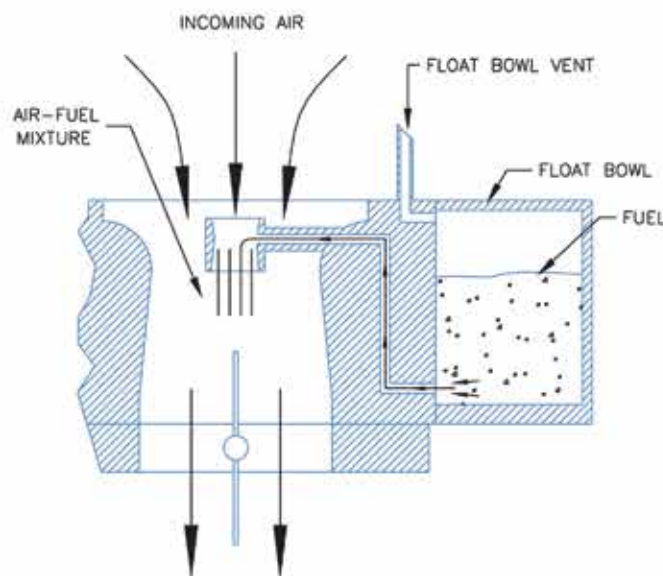
Selecting the Proper ProCharger for Your Application

The key to getting the most from your ProCharger is selecting a unit that is properly matched to your engine. Just as selecting the wrong carburetor for your engine will cause it to perform at less than its best, selecting the wrong supercharger can do the same. Please refer to the enclosed Supercharger Models document to determine which ProCharger best fits your needs.

Blow-Through Carbureted Applications

Carburetor Operation 101

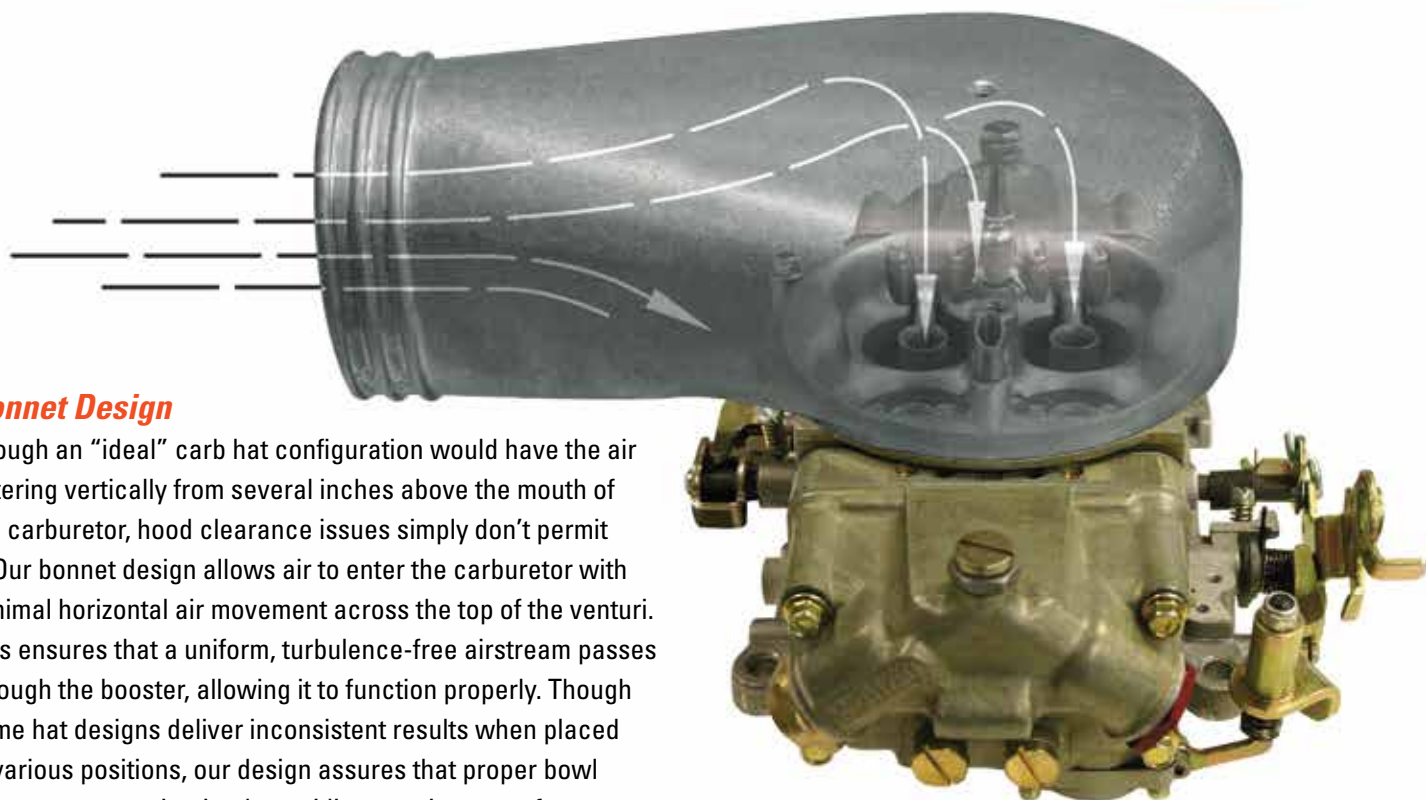
Though some used to question the viability of “blowing through” a carburetor designed for use in atmospheric conditions, carburetors (with a few simple modifications) have been used successfully in blow-through applications for decades. This includes applications with boost levels in excess of 25 psi and power levels in excess of 1,400 HP. The key benefit of using a carburetor as opposed to EFI is the charge cooling effect which is best summarized in this quote from Hot Rod magazine: “Working under the laws of latent heat of evaporation, an engine equipped with a carburetor will exhibit substantially cooler charge temperatures when it arrives at the intake port in the cylinder head. A temperature this cool means the cylinders are being fed a much denser oxygen charge and producing at least 5 percent more power.” A carburetor is a simple device that utilizes a siphon or “booster” placed within a venturi to mix fuel with the incoming air stream. As air moves through the carburetor it passes through the venturi which causes the air to rapidly contract and then gradually expand back to its original state. As the air accelerates through the venturi, its pressure decreases and causes fuel to be siphoned from the float bowl (which, by its connection to the bowl vent, is at the same pressure as the slower moving air at the top of the venturi). As airflow increases, the pull at the booster becomes even stronger, causing even more fuel to be drawn into the air stream. Through the selection of a specific booster design and the manipulation of fuel supply circuits, this system can be used to meet the fuel demands of most any engine. Proper operation of the venturi-booster requires three conditions: float bowl pressures must be equal to that of the incoming air, there must be a smooth delivery of air into the venturi, and a steady supply of fuel entering the float bowl. This is the case for any carbureted application, naturally aspirated or supercharged. Read below to see how the ProCharger system addresses each of these needs.



The Carburetor Bonnet

While fully enclosing the carburetor in a “box” is necessary for marine applications (as required by U.S. Coast Guard regulations), automotive applications are able to benefit from the performance and serviceability offered by a properly configured carburetor “bonnet”. Pressurizing the bowls and guiding the air into the venturi are quite simple since they are addressed with the installation of the carburetor bonnet. The float bowls on a Holley “double pumper” are referenced to the carburetor air entry at the bowl vents. Once the carburetor hat is installed, these bowl vents will allow the float bowls to maintain proper pressure and operate just as in naturally aspirated form. By design, the ProCharger carburetor bonnet also controls the movement of incoming air and allows it to enter the venturi in a direct, controlled fashion. ATI offers three different bonnet designs to accommodate a wide variety of applications. Applications operating at higher air flow and boost levels will benefit from efforts to further control the movement of air entering the venturi. This is typically accomplished through the use of a spacer placed between the standard ProCharger carburetor bonnet and the carburetor, and in some cases supplementary float bowl vent installation. Applications allowing minimal hood clearance will benefit from the use of our low profile bonnet, which extends only 2” above the carburetor’s air filter mounting flange.

Fuel Systems



Bonnet Design

Though an "ideal" carb hat configuration would have the air entering vertically from several inches above the mouth of the carburetor, hood clearance issues simply don't permit it. Our bonnet design allows air to enter the carburetor with minimal horizontal air movement across the top of the venturi. This ensures that a uniform, turbulence-free airstream passes through the booster, allowing it to function properly. Though some hat designs deliver inconsistent results when placed in various positions, our design assures that proper bowl pressures are maintained, providing consistent performance on ProCharged, carbureted applications.

Carburetor Bonnet Options



**Competition
Height: 4.5"**



**Standard
Height: 2.75"**



**Low Profile
Height: 2.00"**



Blow-Through Carbureted Applications (continued)

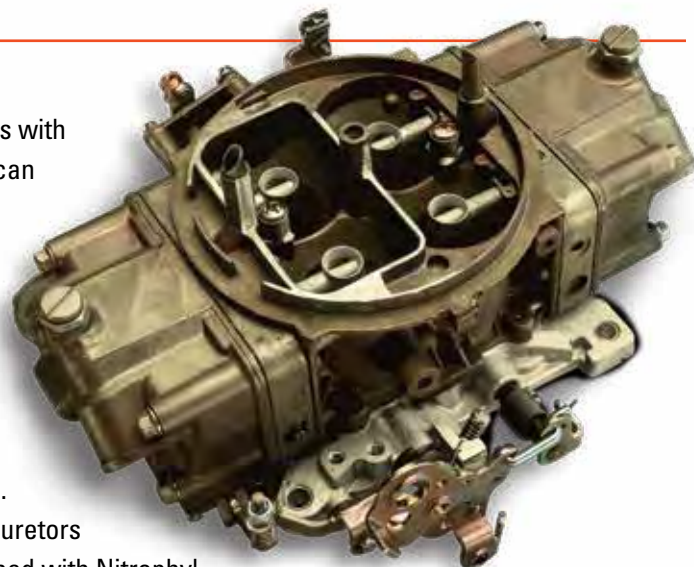
Carburetor Selection and Preparation

When selecting a carburetor for your blow-through application, as with naturally aspirated engines, less is generally more. A carburetor can be sized according to your engine's airflow and resultant power output. To determine what carburetor size best meets your needs, please refer to the chart at the right. Even though a larger than recommended carburetor may offer some increase in peak power, it will likely cause the engine to be less responsive at low RPM and result in drive ability unacceptable for cars that will be street driven. Preparing a carburetor for use in a blow-through application typically involves few modifications.

Among those needing no modification are Holley's HP series carburetors which are designed with no choke assembly and generally equipped with Nitrophyl floats from the factory. For standard "double pumper" carburetors, the choke assembly should be removed to provide optimal airflow and performance when used with a carburetor bonnet. Additionally, the brass floats (which will collapse under boost) must be replaced with Nitrophyl floats (available from ATI, or Holley). With only the modifications listed above, Holley "double pumpers" (when properly jetted) will typically flow enough fuel to support roughly 1 HP per rated cfm of airflow.

Single carburetor applications exceeding 1 HP per rated cfm may require additional modifications such as resizing main wells and power valve restrictions, changing boosters and emulsion circuit recalibration. If you would prefer not to make these modifications yourself, they can be performed by an experienced carburetor

shop. Please contact ATI's Technical Service Department for the phone number of a qualified carburetor builder. Knowing the fuel flow, the appropriate fuel pump size may be determined as well. Refer to the axis at the right of the chart on the opposite page to determine the minimum pump flow rating (in gallons per hour). Keep in mind that the pump you use must be able to support this flow rate at your peak operating pressure (base fuel pressure + max boost pressure) as the fuel pressure must remain at a fixed amount above manifold pressure for proper operation.



Recommended Carburetor CFM

(Engine Size x RPM) ÷ 3,456

ENGINE SIZE	302	350	383	400	427	454	502	540	572
	437	506	554	579	618	657	726	781	828
	481	557	610	637	680	723	799	859	910
	524	608	665	694	741	788	872	938	993
	568	658	720	752	803	854	944	1016	1076
	612	709	776	810	865	920	1017	1094	1159
	655	760	831	868	927	985	1089	1172	1241
	699	810	887	926	988	1051	1162	1250	1324
	743	861	942	984	1050	1117	1235	1328	1407
	5000	5500	6000	6500	7000	7500	8000	8500	
MAXIMUM RPM									

Forced Induction and EFI Applications

For many years now the method preferred by OEM's has been electronic fuel injection, as it offers the best drive ability and fuel economy under varying conditions. Not only do most fuel injection systems available today offer precise open and closed loop fuel management, they also integrate data recording and ignition controls which allow you to get the most from your ProCharged engine. Most OEM fuel injection systems utilize mass airflow sensors to calculate the actual mass or quantity of air flowing into the engine and then looks up appropriate spark and fuel amounts from tables stored inside the vehicle's computer. Though TBI (Throttle Body Injection) systems are readily available and work well at lower boost levels (typically under 12 psi), MPFI (Multi-Point Fuel Injection), systems are most commonly found on forced induction applications. MPFI systems offer the most consistent fuel distribution and are easily configured to a broad range of applications.

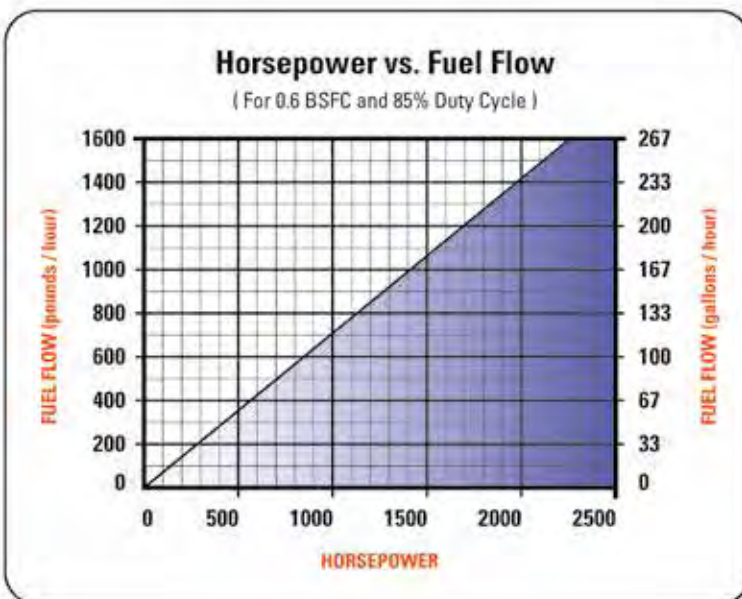


Electronic Fuel Injection Component Selection

When selecting an EFI system, it is necessary to ensure that the system being considered is capable of compensating for manifold pressures above ambient. This typically requires little more than installing a 2 or 3-bar GM MAP, (Manifold Absolute Pressure), type sensor and configuring the software to accommodate this new bit hardware. Applications operating at 15 psi and below typically work best when used in conjunction with the 2-bar type sensors (boost levels up to 18 psi can be safely used), while applications operating at higher levels will benefit from the use of a 3-bar sensor. Using a 3 bar sensor at lower boost levels is acceptable, but is not recommended as it will decrease the resolution at which the system operates and can result in diminished overall performance.

Not only must a MAP sensor be of the proper type, the fuel injectors must be sized to correspond with the power level at which the engine is to be operated. To determine the appropriate injector size, please use the chart to the right to determine the approximate fuel flow (in lbs/hr) for your application, and divide that figure by the number of injectors to be used (8 in the case of an MPFI system on a V-8, and 2 or 4 on TBI applications) to determine the injector size which best fits your application. These values assume a 0.6 BSFC (Brake Specific Fuel Consumption) and a maximum duty cycle of 85% which are typically observed on supercharged vehicles. Though a larger than recommended injector may be used, doing so will adversely affect fuel atomization and vehicle drive ability, as the injector may not be pulsed long

(cont. next page)



Induction & F

Forced Induction & EFI Applications (continued)

enough to develop an ideal spray pattern at low engine RPM's. Another consideration is the decision as to which type of O₂ sensor will be used. Though popular for use on OEM applications, standard oxygen sensors fail to provide the resolution needed to properly tune a supercharged engine operating at air-fuel ratios numerically lower than 14.7:1. The best choice for a forced induction setup is typically a linear O₂ sensor which offers a high level of accuracy at a broad range of air-fuel ratios. In the absence of a linear "wideband" O₂ sensor option, initial tuning can be performed with an external sensor (often available at chassis dyno shops or available as a stand-alone unit). With injector, fuel pump and MAP sensor determination complete, the software provided with your EFI system can be configured to accommodate your particular engine combination. Once the EFI system is configured, an ATI carburetor bonnet can be fitted to applications utilizing a 4-bbl type throttle body, while applications using a single butterfly type throttle body are easily adapted to ProCharger discharge tubes using a short section of rubber hose. Though the initial configuration of an EFI system may prove a bit more involved than simply choosing a carburetor, when properly configured it can offer OEM-like drive ability and optimal fuel economy.

Boosting Your Fuel System

Both carbureted and EFI applications rely on a consistent delivery of fuel into the engine, as the fuel pressure must be controlled relative to the boost level. This is done through the use of a pressure reference line connected to a mechanical fuel pump (on carbureted applications making 600 HP or less) or to a bypass style fuel pressure regulator used in conjunction with an electric fuel pump. Doing so will allow the fuel pressure to rise as the boost level rises.

Carbureted Profile

"In the end, on the dyno with 10 pounds of boost and 36 degrees total timing, the engine produced 633 HP and 536 lbs-ft of torque on 92-octane pump fuel. The ProCharger added 229 HP and 156.5 lbs-ft of torque to the 404 HP naturally aspirated motor (that's a 57% HP gain with the non-intercooled, classic ProCharger P600B)." —**Chevy High Performance**

EFI Profile

Switched from Nitrous to ProCharger and substantially improved power, reliability and overall competitiveness.



Fuel Systems

In a carbureted application with a typical base pressure of 8 psi to the carburetor and a boost level of 10 psi the system will cause the fuel pressure, as read on a gauge, to rise 8 psi higher than the boost level at any point in the RPM range and 18 psi at peak boost. EFI applications are also subject to the same conditions. With a typical base pressure of 40 psi and boost level of 15 psi your EFI fuel system would operate at a peak pressure of 55 psi. When selecting a fuel pump for your application, check with the manufacturer to confirm that it will support your desired power level at the needed fuel pressure. Though many pumps claim to be able to support a given power level, this is generally at fuel pressures utilized on naturally aspirated engines. Unlike those offered by ATI, most fuel pumps' performance will drop off significantly at higher pressures. Refer to the diagrams for fuel system layout details.

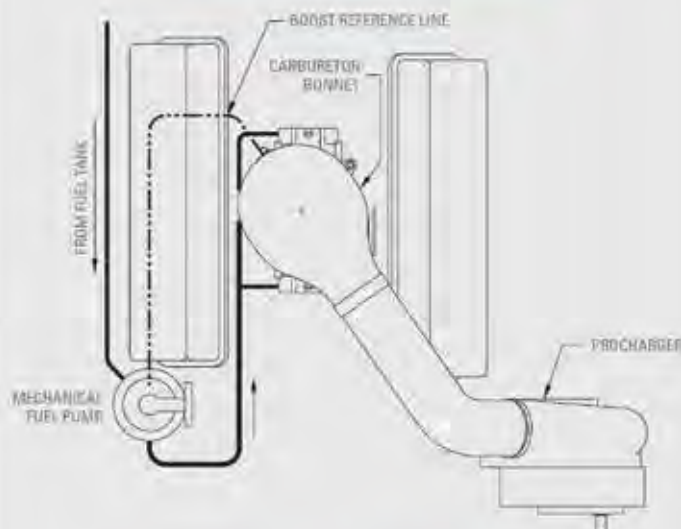


NHRA Top Sportsman

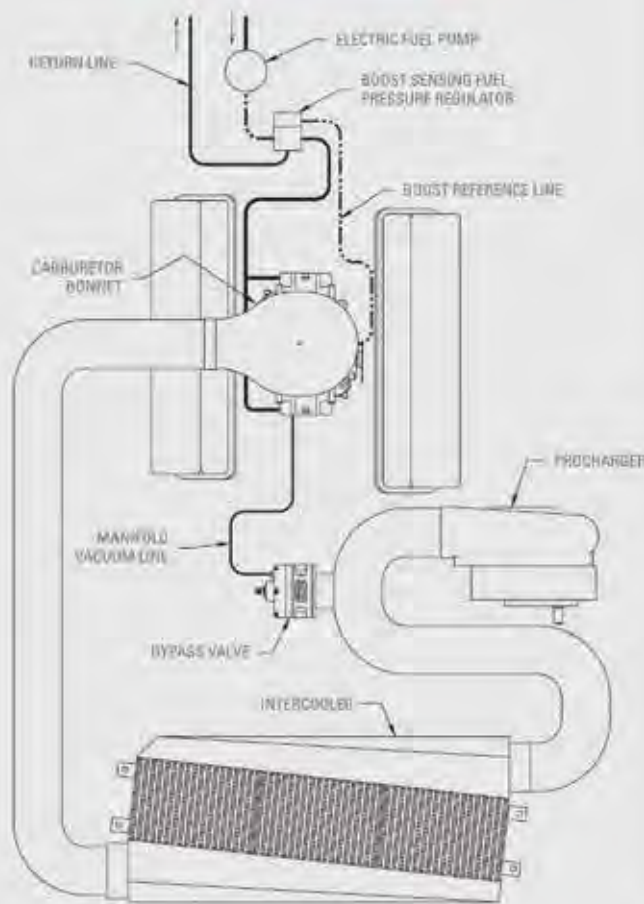
ProCharger F-3R-136 with Gear Drive
526 cubic inch BAE HEMI, Methanol
50+ psi
2,800+ HP



Mechanical Fuel Pump



Electric Fuel Pump



Bypass Valves

Why Bypass/Surge Valves are so Important

A bypass/anti-surge valve, also known as a "Surge valve," or "Blow off valve," is an important part of the forced induction driving experience. From a practical standpoint, it's designed to help maintain the longevity and reliability of the compressor by evacuating turbulent air from hitting the impeller. From a driver's standpoint, it can either operate quietly by re-routing this discharged air back into the intake plumbing, or provide a distinctive and visceral woosh of sound when vented directly to the atmosphere. Whether you like to be reminded that you're driving a ProCharged car with the satisfying vent of air, or prefer to have it run quietly in the background, ProCharger offers four different surge valve options to fit your preference.

Street Valves

ProFlow™ Valve: The ProFlow valve is the standard surge valve option for street supercharger systems and kits. Compact in size, it can be fitted into tight spots when space is limited. Its butterfly valve is extremely durable and reliable, and this design creates a straight airflow path which achieves excellent flow for its size. The ProFlow valve can also be paired with a small air filter to minimize noise.

Bullet Valve: This surge valve's compact design also makes it fit easily in tight spaces. It comes in both an open and closed format. The closed format allows you to recirculate air back into the system, or instead, to run to an air filter to minimize noise.

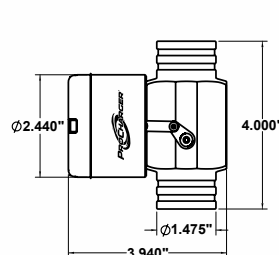
Race Valves

Race Valve: This is the industry leading surge valve for both street and race applications. The larger valve diameter is designed for high flow applications.

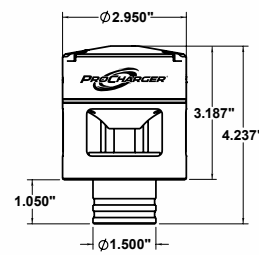
ProRace™ Valve: The ProRace valve outperforms any other single valve on the market and is ProCharger's highest-HP bypass valve option. This massive flow capacity comes from a piston style valve design (patent pending) that allows for a significant increase in curtain area over traditional style valves, while still fitting into a reasonably sized package. It also incorporates a v-band clamp for an easy install.



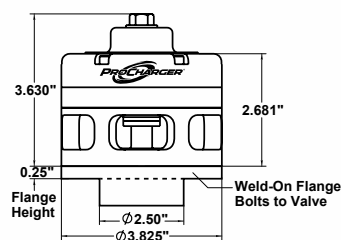
	ProFlow	Bullet (open)	Bullet (closed)	Race (open)	Race (closed)	ProRace
Application	Street	Street	Street	Street/Race	Street/Race	Race
Inlet Diameter	1.5 in	1.5 in	1.5 in	2.0 in	2.0 in	3.0 in
Outlet Diameter	1.5 in	Open Vent	1.5 in	Open Vent	2.0 in	Open Vent
Mounting	Hose Clamp	Hose Clamp	Hose Clamp	Weld-On Flange, Bolt-On Valve	Weld-On Flange, Bolt-On Valve	Weld-on Flange, V-Band Clamp Valve



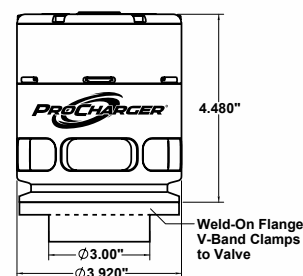
ProFlow™



Bullet



Race



ProRace™

Editorial

"His 93 Chevy Caprice wagon with a 572 ci big block engine makes 1,740 HP [with 93 octane] and recently ran a 9.57 at 163 mph [weighing in at 4,850 pounds with Morris on board]. The real magic, of course, comes from the ProCharger centrifugal supercharger." – *Hot Rod*

"They are relatively easy to install, affordable, and easily transform a mundane street engine into a stout powerplant with minimal effort ... it's good to point out that the potential to achieve power levels of this magnitude is real and it doesn't have to break the bank." – *Chevy High Performance*

"The coolest vehicle on the ground has been turning heads like no other car we've seen. The 1969 Nova utilizing a 427 Chevy crate motor and carburetors with a ProCharger centrifugal supercharger astonished everyone with 8 second runs on 91 octane pump gasoline. This is an astonishing achievement!" – *Bret Kepner, ESPN2*

"Our 355 ci mouse makes 765 HP on 91-octane ... well over 2 HP/ci with a street engine that could conceivably fit into almost any rear-drive Chevy ever built." – *Chevy High Performance*

"Bolting on the ProCharger also increased our gas mileage." – *Sport Truck*

"The motor alone puts out 400 HP to the tires, and will pilot the Nova down the quarter at 12.29 seconds elapsed time at 111 mph. When the F-2 ProCharger is bolted on with 26-27 psi of boost, this 91 octane (with no additives) bad boy puts out 1,160 HP to the tires! Then it sent the Nova down the quarter at 8.24 at 163.5 mph. Stop and think about it, ProCharger bolted on 4 seconds and 50 plus mph!" – *Super Chevy*

"If you want to go heads up racing with the big boys, then here's a power adder that can help put you in the winner's circle." – *Horsepower TV*

"With plenty of visceral grunt, an aspect of civility, and practicality thrown in for good measure, centrifugal blowers are perhaps one of the best investments you can make when purchasing a power adder." – *GM High-Tech Performance*

"... a 'bolt-on' increase of over 50 mph in the quarter-mile, and over 3.5 seconds drop in elapsed time!" – *Super Chevy*

"My favorite things to work on are these pump gas ProCharger motors. I love these things. They're a very practical application for some serious horsepower with a lot less maintenance. [ProChargers] are very good on not beating up the engine." – *Steve Morris, ESPN2*

"Bringing a smile to every gearhead's face who sees the motor, this blown big-block pumps out 1,000 HP." Traction is a small problem with 1,000 HP and 780 lb-ft of torque..." – *Truckin*

"Terzich's (ProCharged) Camaro is a perfect example of astounding performance coupled with rock-solid reliability." – *Hot Rod*

"His best pass with 17 psi of ProCharger thrust was a 10.51 at 131 ['59 Impala, 509 cid, F-1R]. Not bad for a car that's all steel except for the bumpers and weighs nearly 2.5 tons with driver." – *Super Chevy*

"It is no secret that intercoolers are the most effective and safe way of resisting detonation in blown motors, plus they offer the opportunity to increase boost - and horsepower." – *GM High-Tech Performance*

"Due to its superior efficiency, centrifugal superchargers heat the air less than Roots blowers per pound of boost, thus each pound carries more oxygen molecules (something we refer to as greater mass flow) ... [This means] a centrifugal supercharger is capable of supplying more power per pound of boost than a Roots blower." – *Super Chevy*



Optional Components

ATI offers a variety of accessories to enhance your ProCharger installation such as gauges and modification kits, mechanical and electric fuel pumps, fuel pressure regulators, and also bracket kits that allow the use of late model GM power steering pumps and air conditioning compressors.



Apparel & Accessories

ProCharger has a number of licensed apparel items like t-shirts, caps as well as other accessories such as license plate frames, ProCharger banners, and much more. Visit our online store at ProCharger.com/store or give us a call today for more information and availability.



Be Sure to Visit Our Online Store at ProCharger.com

**Call us today for the name of a ProCharger
dealer in your area at 913-338-2886
M-F 8:30 AM to 5:30 PM central.**

For towing or for fun, street or strip, we offer a variety of Intercooled ProCharger systems for Marine, Truck/SUV, Harley-Davidson and late-model Automotive applications. Whether you're on the pavement or on the water, ProCharger has an application for you.



Marine



Powersports



Truck/SUV



V-Twin



Street



Strip



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