

GM HOT ROD

PROCHARGER[®]
SUPERCHARGERS



SUPERCHARGER KITS & ACCESSORY DRIVES FOR
GM MUSCLE CARS, STREET RODS
& RACING APPLICATIONS

**"ProCharger is the
World Headquarters of
supercharging."**

– Bret Kepner





GM HOT ROD

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A Legacy Built on Power, Reliability, and Innovation

ProCharger is the premier manufacturer of high performance superchargers, winning more races and setting more records than any competitor for over 30 years. As a leader in this industry, we proudly boast more patents and innovations than any other aftermarket supercharger manufacturer.

It's our goal to offer unparalleled technology, performance, and reliability to our customers. With offices in Kansas City and San Francisco, ProCharger is well suited to serve customers both in the US and worldwide, with staff that are dedicated to ensuring our customers achieve the most from the world's most powerful supercharger manufacturer. Call us at (913) 338-2886, Monday-Friday 8-5:30 PM CT, or email sales@procharger.com with any questions.

THE WORLD'S MOST POWERFUL SUPERCHARGERS

Over 30 Years of Supercharging Leadership

In 1994, our founders and team embarked on a mission to craft the world's finest supercharger systems. With unwavering dedication to this vision, not only did we achieve that goal, but 30 years later we're still setting new benchmarks and adding to our legacy!

A Legacy Built on Power

- Industry-leading power gains, offering up to twice the gains provided by other power adders
- Optimal supercharging solution for EFI and carbureted small block and big block engines
- Comprehensive product line, with intercooled and non-intercooled systems for 400-4,500+ HP
- Product range optimized for both pump gas and race fuel combinations

A Legacy Built on Reliability

- Most reliable and engine-friendly supercharging solutions
- Customers commonly report 200,000+ miles
- Industry best supercharger warranty coverage

A Legacy Built on Innovation

- Pioneered self-contained superchargers
- World's most effective intercoolers
- Pioneered billet impellers and gear cases

A Legacy Built on Quality

- Simple bolt-on installation
- Show quality, OE fit and appearance
- Made in America
- Technical expertise and support



*"... 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*



THE PROCHARGER ADVANTAGE

LARGEST POWER GAINS, COOLEST CHARGE AIR TEMPERATURES & GREATEST RELIABILITY

The Undisputed Leader of Horsepower

When it comes to street or racing superchargers, ProCharger is the undisputed power leader. The same technology that we have used to produce thousands of event winners and champions over the last 30+ years is also used in our street superchargers. Our family of superchargers includes the industry-standard "P" and "D" series head units for street and mild race applications, the slightly larger more powerful F-1 and F-2 series units for hardcore street and track racing, and record-crushing F-3 and F-4 supercharger models used for racing applications. No matter which head unit is best for you, our power advantages stem from three key product benefits:

Largest Power Gains

Basic ProCharger supercharger systems can add up to 85% additional power to some vehicle applications, with no additional engine modifications, special fuels, or extended cool-down times. In fact, ProCharger systems offer more power per psi of boost than any other supercharger solution thanks to our intercooled system designs and best-in-class aero-stage design capabilities. No other aftermarket company is even close to ProCharger's ability to rapidly design, prototype and test new compressor models.

Centrifugal Compressor Linear Power Curve

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 supercharger also develops boost and power relative to engine speed, giving you a smoother, more usable power curve.

Race proven results from 400 to 4,500+ HP

ProCharger has the broadest range of supercharger head units to support virtually any horsepower level you need. Most modern drag racing records have been achieved by ProCharged racers. With compact units for small engines such as UTV's or snowmobiles to larger units for professional drag racing, marine, or offroad applications, we have you covered.

Real-World Power

ProCharger 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 that doesn't compromise an engine's integrity.

What enables us to push the supercharger harder and achieve better results? The key is in the BILLET!

See page 8 to learn more.

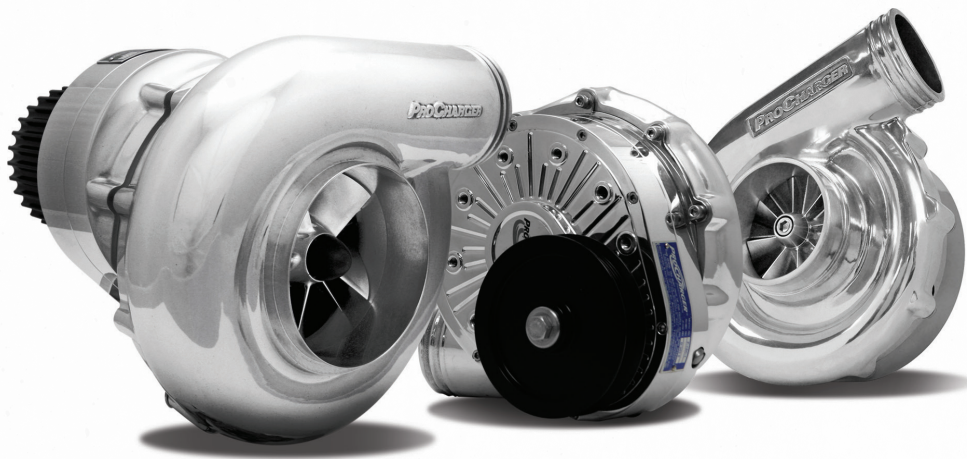


SUPERIOR RELIABILITY FROM QUALITY MANUFACTURING TO DRIVABILITY

Quality From Start to Finish

Meticulous Manufacturing Processes: The result of hard work and a commitment to quality, ProCharger superchargers are designed and assembled at our headquarters in Kansas City to provide superior quality control and availability. Our engineering staff uses state-of-the-art design programs to bring their concepts to reality. Our machinists faithfully reproduce these designs using our vast array of modern 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.

High Mileage Tracking: Each and every ProCharger unit is recorded and tracked based on serial number. To ensure we maintain the best quality of any supercharger manufacturer, we thoroughly analyze and improve our designs based on field experience. Customers commonly report hundreds of thousands of miles driven with the same ProCharger system. In fact, procharger.com documents many of these high milage vehicles to feature in our gallery and blogs.



Designed For Reliability


Optimal Oiling System: ProCharger's innovative, self-contained design allow the supercharger to operate independently from the engine's oil supply, avoiding motor oil contaminants. Also, oil temperatures run cooler than superchargers fed by engine oil. Our proprietary synthetic lubricant allows for higher bearing speeds, decreased bearing temperatures, and increased bearing life.

Aerospace Grade Billet Aluminum: Billet plays an important role in reliability. Because a billet wheel is made from a superior material (vs. cast), it can be designed with thinner features without sacrificing strength and durability. Versus cast components, billet is lighter and stronger and free of flaws. Crafted from aircraft-grade billet aluminum alloy, ProCharger impellers and gear cases are the most reliable in the industry.

Higher Step-up Ratios: Our blowers utilize higher internal step up ratios, which allow the use of larger pulleys that provide more belt contact and increased drive belt longevity. This design allows a serpentine belt to make power in excess of 1,450 HP, a level once only available to cog belt users.

Shared Innovation: Top-selling ProCharger street supercharger models share many of the design elements as the record-setting F-series race superchargers and our industrial division blowers. Drawing on extensive field experience in extreme conditions across these adjacent applications, our street superchargers have the most rugged and reliable gear and bearing designs.

Warranty: Buy a ProCharger, get peace of mind. We make the industry's finest superchargers and stand behind our products. We offer a 12-month warranty on new, serpentine head unit purchases. All superchargers and kits, including cog-driven, gear drive, and race head units, are covered by ProCharger's limited warranty. Visit procharger.com/warranty/ to learn more.



**"You can drive this thing every day
and never even know it's [ProCharger]
on there until you step on the pedal,
and you'll still get good gas mileage."**

– Stacey David, Gearz TV

***SBC Serpentine
Accessory Drive Shown
Learn More on Page 16***

SUPERCHARGER LEADERSHIP

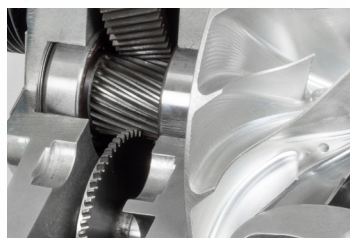
DESIGNED TO BLOW AWAY THE COMPETITION™

Pioneered Self-Contained Oil Supply

ProCharger introduced the industry's first self-contained, gear-driven supercharger in 2000. Since then, this patented and proven self-contained design has become the standard by which other superchargers are measured. By freeing the supercharger of the engine's oil supply, you don't have to punch a hole in your oil pan, motor oil contaminants are eliminated, and our units work great for dry sump or custom applications where blower locations would be limited by motor oil drain back. You also avoid the risk of clogged oil feed lines and oil drainage problems. Testing has shown self-contained superchargers run cooler than those fed by engine oil. Independence from engine oil allows a ProCharger to operate seamlessly under extreme conditions, like arctic cold and desert heat.

The Secret to Our Oiling System Success...

At the heart of the ProCharger self-contained design is a simple, but highly effective oil aerator that creates an effective oil mist lubrication for the precision bearings and gears. This design does not require priming at start-up, and oil changes are only required every 6,000 miles.



MOTORTREND

*"Based on ProCharger's history of many firsts in the bolt-on supercharger market...[such that] over the **past 30 years**, improvements to supercharger kits in general can in large part be attributed to ProCharger, resetting the performance ...bar higher for everyone. **This isn't hype, but a matter of historical record.**" - MotorTrend, 2023*

Leading the Way in Intercooled Supercharger Systems

While it is common to have intercooling on supercharging applications today, that was not the case when ProCharger launched its first products in 1994. Cooler air means more power potential from the engine, so from the beginning ProCharger sought out air-to-air intercooling as a way to lower intake air temps. It's a compliment to see that our principles and practices have inspired other supercharger manufacturers to follow suit. To learn more about ProCharger's intercooler designs and options, see page 49.



The First to Use Billet...Everywhere

Using state-of-the-art, five-axis CNC machines, ProCharger crafts our superchargers from billet everywhere we can. ProCharger's proprietary impeller designs are crafted from aircraft-grade 7075 T-6 aluminum alloy for tremendous strength and performance. The brackets, serpentine drive pulley, and transmission case are made from billet 6061 aluminum. With a higher strength to weight ratio, our superchargers are lighter and can produce higher pressure, flow more air and, in turn, produce more power.

- **Why are ProCharger parts machined from aerospace-quality aluminum billet?**

To give you more boost, airflow, and power! Billet components offer strength unmatched by more commonly used castings. The material tensile strength for most aluminum castings is 32,000-36,000 psi as compared to the 7075 T-6 alloy used in ProChargers which is 83,000 psi, allowing for greater weight savings and tighter tolerances to yield the largest power gains.

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

By using billet, ProCharger is able to test and evaluate new design shapes 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 components also avoid common issues seen in castings, like density variations, porosity, and inclusions.



THE ULTIMATE POWER ADDER[®]

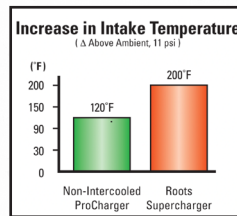
NOTHING ELSE EVEN COMES CLOSE

ProCharger is a Class Above All Other Power Adders

Proven by dealers, racers, and vehicle 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 are inferior to a ProCharger.

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. To cope with these high charge air temperatures, PD blowers must be tuned extremely rich with less timing, which reduces the vehicle's fuel efficiency, drivability, power, and engine longevity.



Turbochargers

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

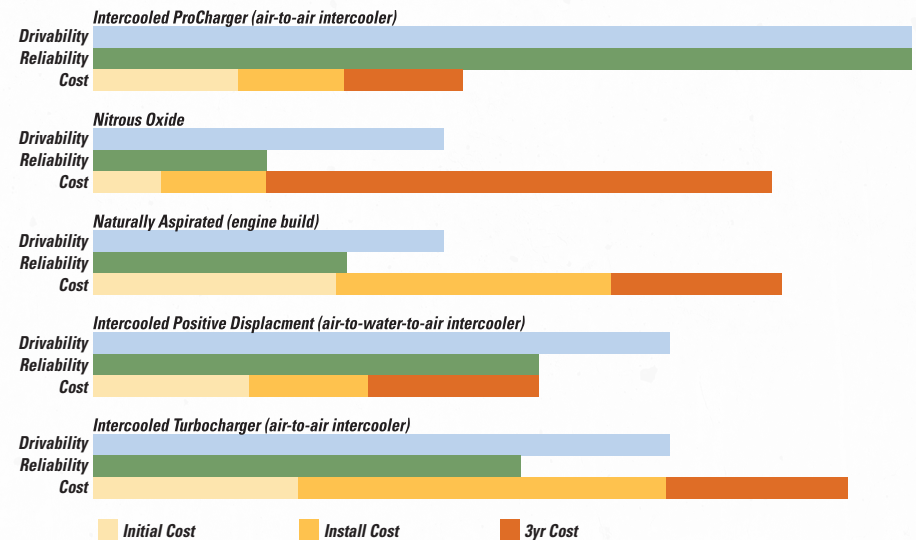
Initially, nitrous may look like a bargain, but a review of the facts reveals otherwise. Nitrous oxide accelerates the combustion rate, which in turn increases peak cylinder pressures. This combination greatly increases the probability of piston-melting pre-detonation. This rapid increase in cylinder 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.

Power Adder Comparison

Comparison for Making 575-600+ When Starting With a Stock 6.2L Engine



LS SERPENTINE ACCESSORY DRIVE KIT 1LS300/400

Add Accessory Drive Now, ProCharge Later

The ProCharger Serpentine Accessory Drive Kit offers the sleek design style you expect from ProCharger, and a unique supercharger bracket design that offers you the convenience of adding the supercharger kit when you are ready. Specifically designed for Chevy LS engines, this kit includes everything you'll need to fit the accessories you want with the ability to support up to 1,450 hp, depending on the blower used. The design features our popular 8-rib or 10-rib supercharger drive options that increase grip, reduce stretching and prevent belt slippage.

Order Just What You Need!

The ProCharger Accessory Drive is flexible and expandable, which allows you to select the combination of accessories you want to use.

The base kit includes:

- Water Pump
- Water Pump Pulley
- Crank Pulley
- Alternator Bracket & Pulley
- Serpentine Belt & Tensioner

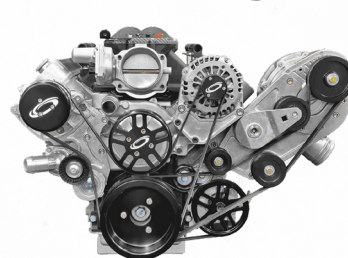
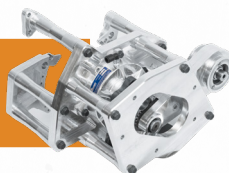
Upgrade options include:

- Power Steering Bracket & Pulley
- A/C Bracket and Pulley Cover
- Supercharger Head Unit P-1SC thru F-2
- Intercooler / Bypass Valve / Tubing
- Supercharger Bracket, Tensioner, & Belt
- Finish options: Satin (standard), Black, Polished

Additional Notes

- Pinning crank pulley is recommended
- Accessories and Crank Balancer sold separately
- Designed for standard deck height, wet sump, aluminum and iron block LS engines (except LS7 & VVT models).
- Minor modifications required for iron block engines with power steering.

For the highest horsepower and race applications you will want to use the ProCharger CrankDrive. See page 35.



Supercharger + All Accessories in Satin (standard)
Low Mount



ALT + A/C + WP



ALT + WP + P/S



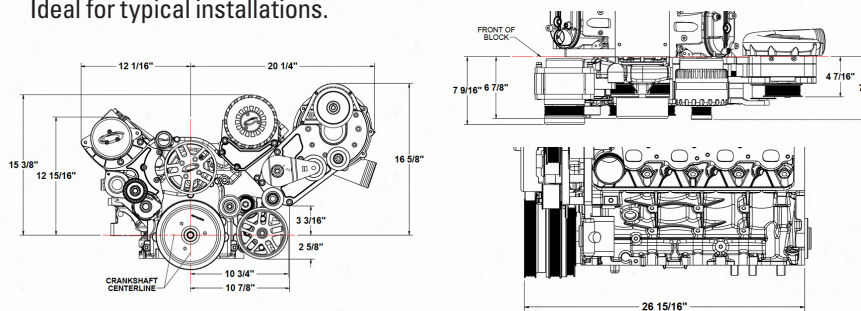
ALT + WP

Compatible Accessories

- Requires Innovators West p/n 844-10-rib or 843-8-rib, or ATI Performance Products Balancer p/n 917345 (8-rib) and p/n 917347X (10-rib)
- Alternator: GM #20881337 (2007-2013 or equivalent)
- A/C Compressor: SD-7B10 A/C compressor 6-rib drive (Sanden)
- GM Type 2 Power Steering pump Tuff Stuff 6175AL (or equivalent), remote reservoir required for supercharged applications

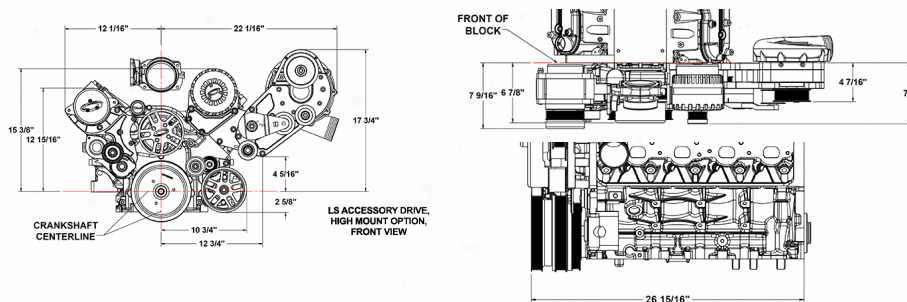
LS ACCESSORY DRIVE, LOW MOUNT SUPERCHARGER BRACKET

The supercharger bracket has a lower profile and is tucked in closer to the engine. Ideal for typical installations.



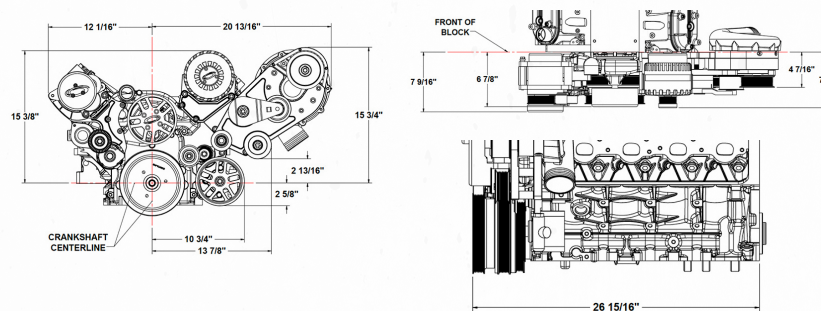
LS ACCESSORY DRIVE, HIGH MOUNT SUPERCHARGER BRACKET

For aftermarket suspension components or frame clearance issues that would otherwise interfere with the standard mount.



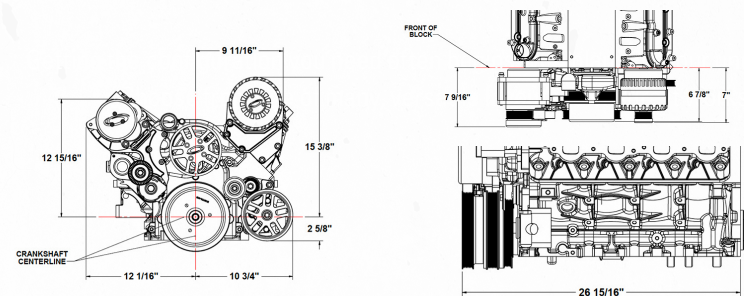
LS ACCESSORY DRIVE WITH F1X / F2 SUPERCHARGER BRACKET

Similar to the low mount, the bracket positions the supercharger close to the engine. It's ideal for people choosing to use a F-1X or F-2 supercharger.

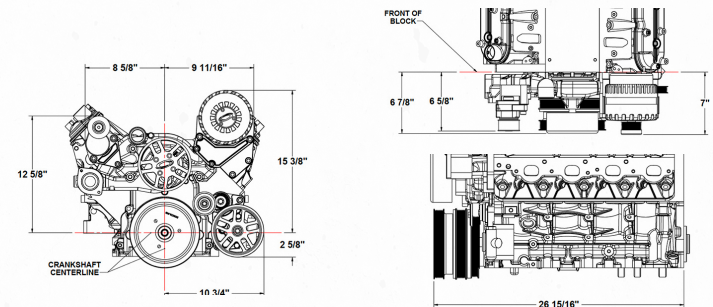


LS ACCESSORY DRIVE NATURALLY ASPIRATED, ALL ACCESSORIES

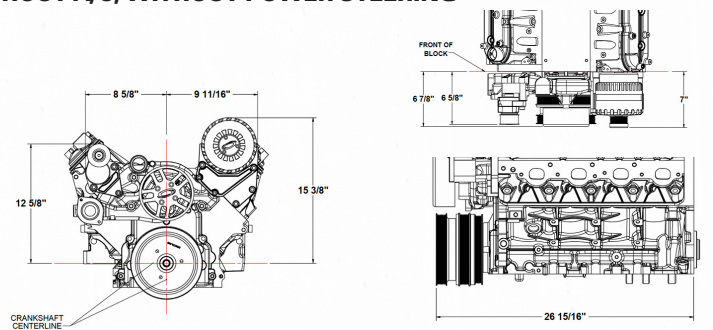
These dimensions show the layout for using the accessory drive without the supercharger bracket for a naturally-aspirated installation.



LS ACCESSORY DRIVE NATURALLY ASPIRATED, WITH POWER STEERING, WITHOUT A/C



LS ACCESSORY DRIVE NATURALLY ASPIRATED, WITHOUT A/C, WITHOUT POWER STEERING



Scan for more dimensions,
mounting options,
and kit details.



LS REVERSE ROTATION KIT 1GQ400

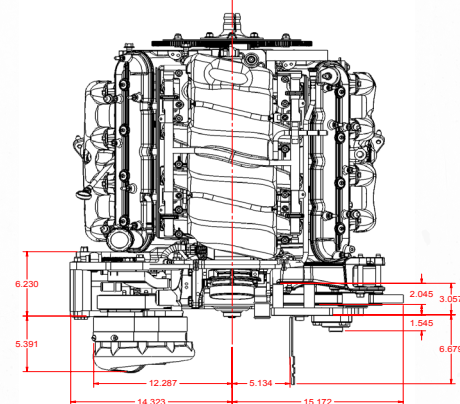
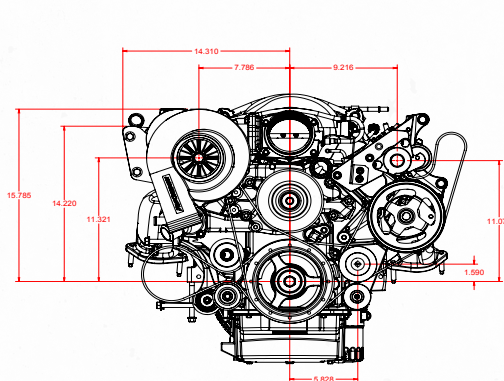
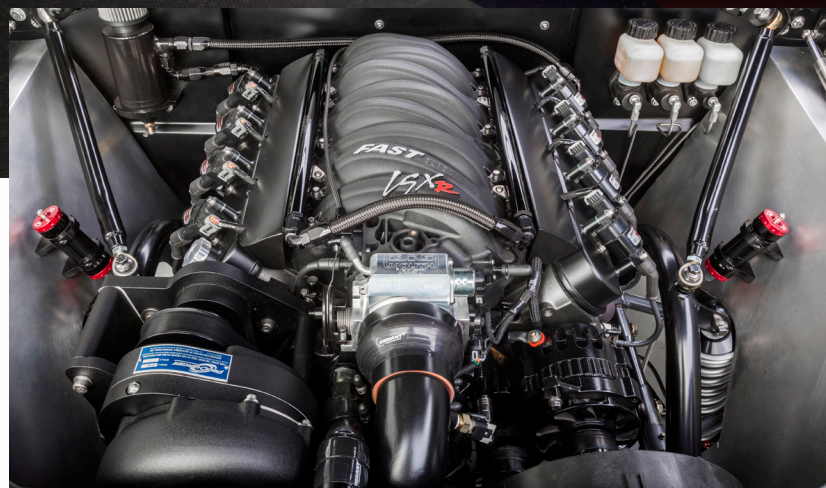
Corvette Accessories and/or Passenger Mount

If you are aiming to use Corvette accessories, or you have a build plan that requires the supercharger to mount on the passenger side, the ProCharger LS Reverse Rotation Kit is exactly what your LS swap vehicle needs. Featuring a self-contained supercharger, serpentine drive bracket, and air-to-air intercooler, the base model in this kit is the P-1SC -1 that is designed to support up to 800 hp. Upgrading to the D-1X supports up to 1,075 hp or for power goals over 1,000 hp the F-Series models are a popular option. Significantly higher power levels are possible with modified engines and a F-Series supercharger (tuning, injectors, and fuel system required).

Our reverse-mounted (forward-facing) ProCharger kit comes with either 8- or 10-rib dedicated drive systems, which covers a wide range of horsepower, from 650 hp to a mind-bending 1,400 hp!

Additional Notes

- Specify wet or dry oil sump
- LS passenger side uses common C5/C6 Corvette accessories
- Also fits Iron block LS engines with additional modifications, Call ProCharger for details.



For the highest horsepower and race applications you will want to use the ProCharger CrankDrive. See page 35.



Compatible Accessories

- Uses factory C5/C6 accessories, including A/C
- Water pump is provided
- Aftermarket balancer required:
Wet Sump: 8 rib ATI: #917345 or IW: #843 / 10 rib: ATI: #917347X or IW: #844
Dry Sump: 8 rib ATI: #918620 or IW: #853 / 10 rib: IW: #854



Scan for more
dimensions,
mounting options,
and kit details.

LS CLASSIC SERPENTINE KIT 1LS100

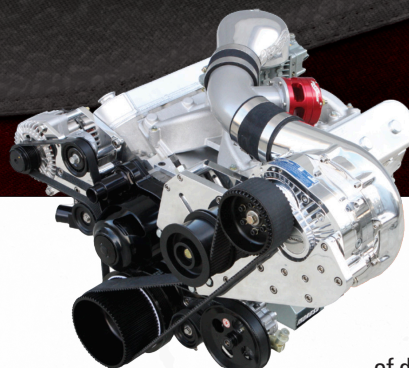


Alternative Mounting Option

The ProCharger LS Classic Serpentine Drive Kit can be ordered with virtually any combination of accessories, or without any at all for racing applications. This flexibility, combined with the bracket location, is a good option for driver's side mount when the LS Serpentine Accessory Drive and/or the LS Cog Drive Race Kit will not suit your application. Available with two drive options: 8-rib or 10-rib. See dimensions below for fitment.

Compatible Accessories for 1LS100/200

- Aftermarket balancer required: Wet Sump: 8/10 rib ATI: #918853
- Power Steering Pump: GM #21997867
- Power Steering Pulley: GM #12568997
- Alternator: GM #19244751
- A/C Compressor: GM #92175482
- A/C Bracket: GM #92066950
- A/C Belt Tensioner: GM# 12595289
- Water Pump GM# 89017593



LS COG DRIVE RACE KIT 1LS200

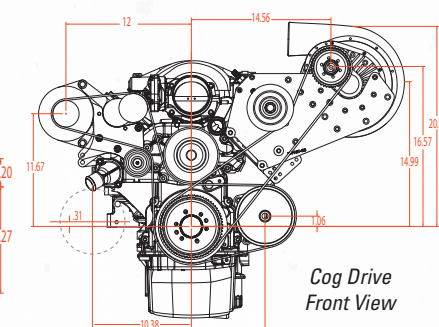
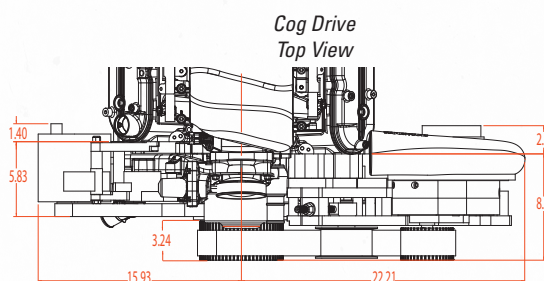
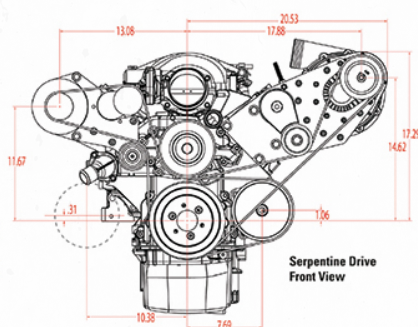
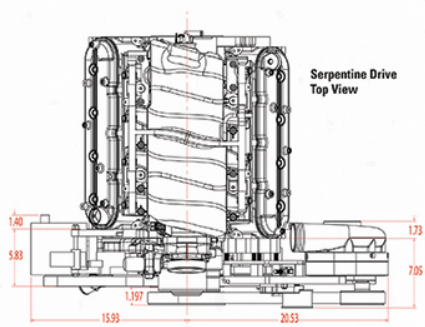
Optional polished supercharger, brackets and Competition Carb Bonnet shown.

Race-Rugged, Street Ready

The LS Cog Drive system offers racers the durability and reliability they need for the unique duty cycle of dedicated drag racing. It can be used in both EFI and carbureted applications and features a cog/Gilmer belt. A properly configured LS engine and ProCharger F-series supercharger can support 1,600+ horsepower and is compatible with accessories such as A/C and P/S.

Additional Notes for 1LS100/200

- Designed to work with F-Body / GTO balancer spacing
- Pinning crank pulley is recommended
- Specify w/ or w/o power steering when using ProCharger accessory brackets
- Compatible with mechanical or electric water pump
- Designed to work with Muscle Rods motor mounts or comparable
- Not compatible with Corvette-style water pump
- Specify iron block, aluminum block or tall deck
- LS7 engine requires modifications (not supplied)
- Not a direct bolt-on for VVT engines



LT SERPENTINE ACCESSORY DRIVE KIT 1LT300/400

Add Accessory Drive Now, ProCharger Later

The ProCharger Serpentine Accessory Drive Kit offers the sleek design style you expect from ProCharger, and a unique supercharger bracket design that offers you the convenience of adding the supercharger kit when you are ready. Specifically designed for Chevy LT engines, this kit includes everything you'll need to fit the accessories you want with the ability to support up to 1,450 hp, depending on the blower used. The design features our popular 8-rib or 10-rib supercharger drive options that increases grip, reduces stretching, and prevents belt slippage.

Order Just What You Need!

The ProCharger Accessory Drive is flexible and expandable, which allows you to select the combination of accessories you want to use.

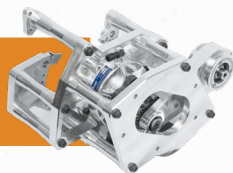
The base kit includes:

- Water Pump
- Water Pump Pulley
- Crank Pulley
- Alternator Bracket & Pulley
- Serpentine Belt & Tensioner

Upgrade options include:

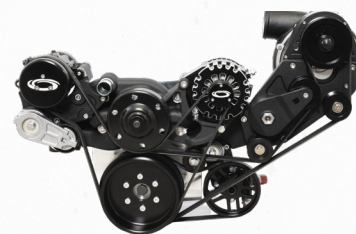
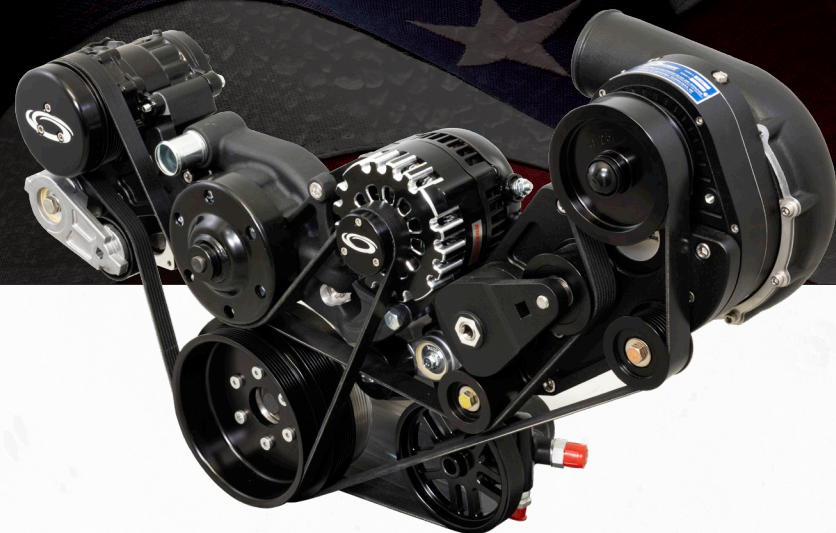
- Power Steering Bracket & Pulley
- A/C Bracket and Pulley Cover
- Supercharger Head Unit P-1SC thru F-2
- Intercooler / Bypass Valve / Tubing
- Supercharger Bracket, Tensioner, & Belt
- Finish options: Satin (standard), Black, Polished

For the highest horsepower and race applications you will want to use the ProCharger CrankDrive. See page 35.



Additional Notes

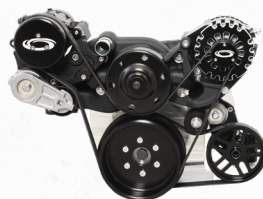
- Accessories and Crank Balancer sold separately



Supercharger + All Accessories in Black



ALT + A/C



ALT + P/S



ALT

Compatible Accessories

- Sanden SD-7B10 A/C compressor 6-rib drive
- GM Type 2 Power Steering pump Tuff Stuff 6175AL (or equivalent), remote reservoir required for supercharged applications
- Aftermarket balancer required: Innovators West: # 780
- 2007-2013 GM Truck Alternator, GM p/n 20881337 (or equivalent)
Holley: 197-301, 197-302, 197-303, 197-304
Mechman: B8206240B, B8206240P, B8206240M, B8206240C

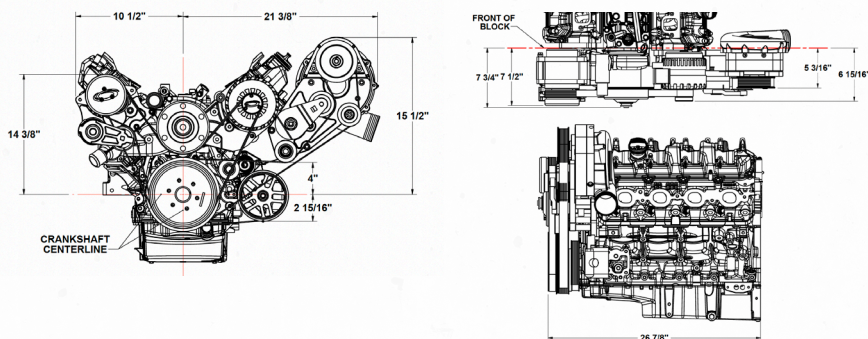


Scan for more
dimensions,
mounting options,
and kit details.

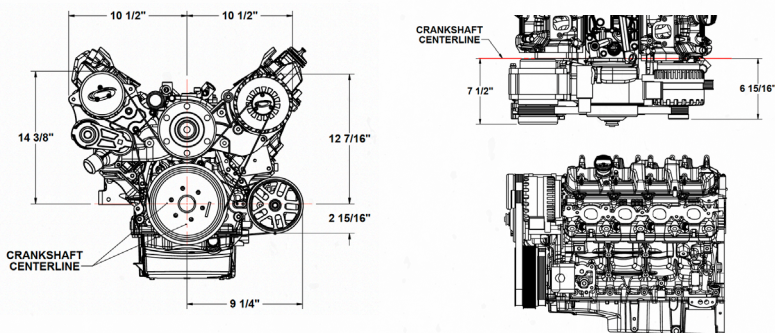
LT SERPENTINE ACCESSORY DRIVE KIT 1LT300/400

LT CLASSIC SERPENTINE KIT LT100

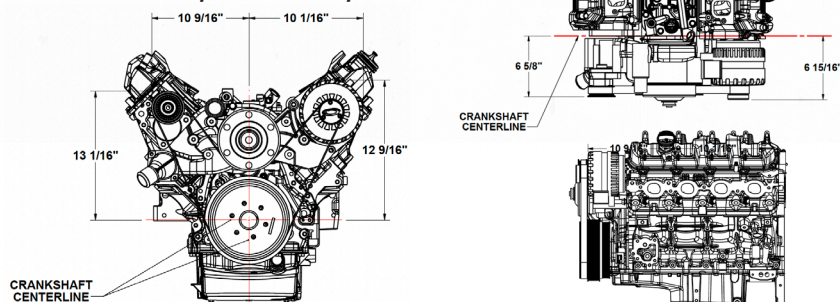
LT ACCESSORY DRIVE, WITH SUPERCHARGER BRACKET



LT ACCESSORY DRIVE NATURALLY ASPIRATED, ALL ACCESSORIES

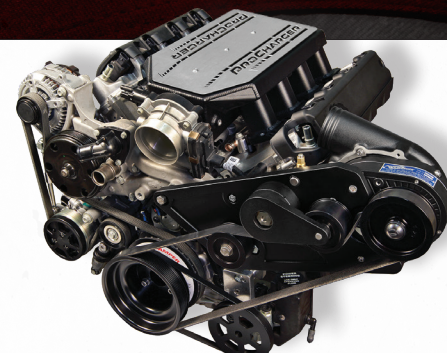


LT ACCESSORY DRIVE NATURALLY ASPIRATED, WITHOUT POWER STEERING, WITHOUT A/C



Running Factory Accessories?

Based on our record setting Camaro and CTS-V bracket system, this LT Classic Serpentine Kit bracket system adds the features you want in your vehicle, starting with provisions for a power steering pump to be added or aftermarket balancers for higher HP applications. Head units all the way up to an F-1X and F-2 are possible, while being driven off an 8- or 10-rib belt system.



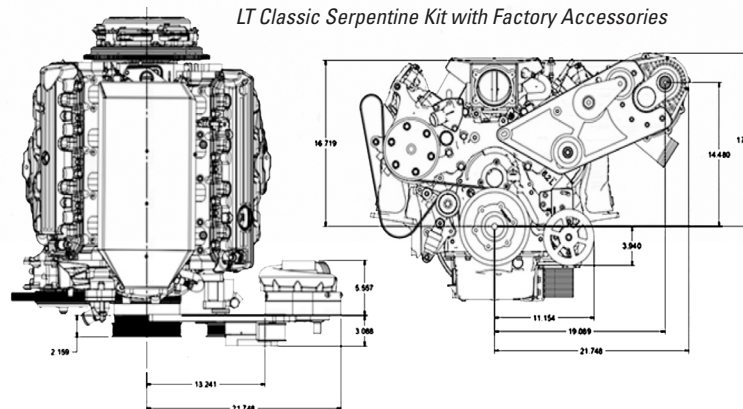
Compatible Accessories

- Comes with ProCharger 8-rib crank pulley, but also compatible w/ ATI PP Super Damper # 917314
- Uses all factory LT1 (C7 Corvette) accessories
- Factory power steering pump can be used with an attached fluid reservoir, remote reservoir recommended
- Compatible with factory and most aftermarket A/C compressors

Additional Notes

- Works with OEM LT1 intake and ProCharger LT1/LT4 intakes
- Specify LT1 or LT4 engine model
- Specify wet or dry oil sump

LT Classic Serpentine Kit with Factory Accessories



Scan for more dimensions, mounting options, and kit details.



SBC SERPENTINE ACCESSORY DRIVE KIT 1CA300/400

Add Accessory Drive Now, ProCharge Later

The ProCharger Serpentine Accessory Drive Kit offers the sleek design style you expect from ProCharger, and a unique supercharger bracket design that offers you the convenience of adding the supercharger kit when you are ready. Specifically designed for Chevy small block engines, this kit includes everything you'll need to fit the accessories you want with the ability to support up to 1,450 hp, depending on the blower used. The design features our popular 8-rib or 10-rib supercharger drive options that increases grip, reduces stretching, and prevents belt slippage.

Order Just What You Need!

The ProCharger Accessory Drive is flexible and expandable, which allows you to select the combination of accessories you want to use.

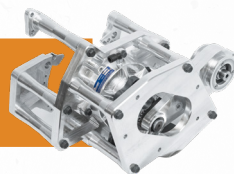
The base kit includes:

- Water Pump Pulley
- Crank Pulley
- Alternator Bracket & Pulley
- Serpentine Belt & Tensioner

Upgrade options include:

- Power Steering Bracket & Pulley
- A/C Bracket and Pulley Cover
- Supercharger Head Unit P-1SC thru F-2
- Intercooler / Bypass Valve / Tubing
- Supercharger Bracket, Tensioner, & Belt
- Finish options:
Satin (standard), Black, Polished

For the highest horsepower and race applications you will want to use the ProCharger CrankDrive. See page 35.



Additional Notes

- No accessories provided – see list of compatible accessories



Supercharger + All Accessories in Black
Low Mount



ALT + A/C + WP



ALT + P/S + WP



ALT + WP

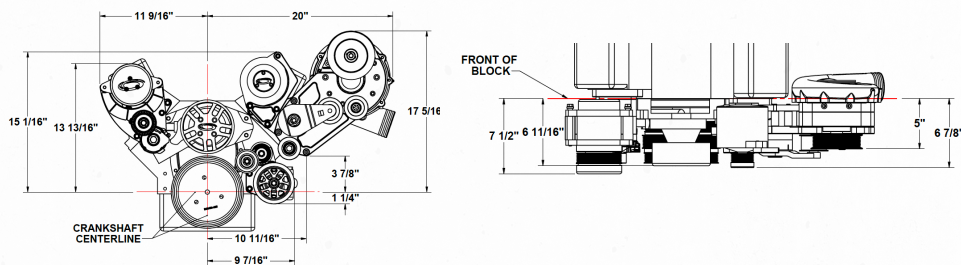
Compatible Accessories

- Uses factory balancer or aftermarket factory replacement
- Power Steering Pump: GM Type 2 Tuff Stuff #6175AL
- Alternator: #CS130 (6.14 center bolt spacing)
- A/C Compressor: #SD-7B10 Sanden, 6-rib
- Water Pump, SBC: #8815 Edelbrock (or similar), 84-91 Corvette reverse rotation

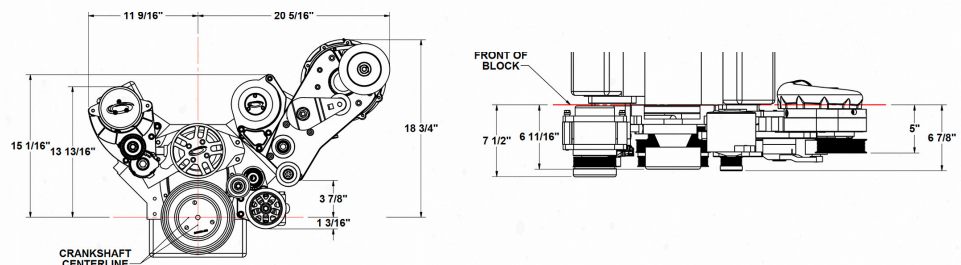


Scan for more
dimensions,
mounting options,
and kit details.

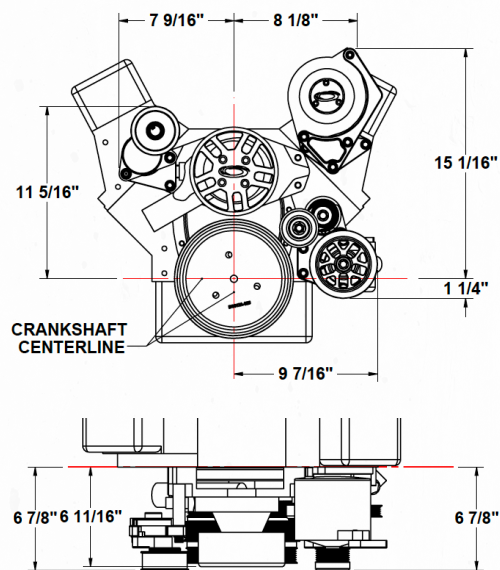
SBC ACCESSORY DRIVE, LOW MOUNT SUPERCHARGER BRACKET



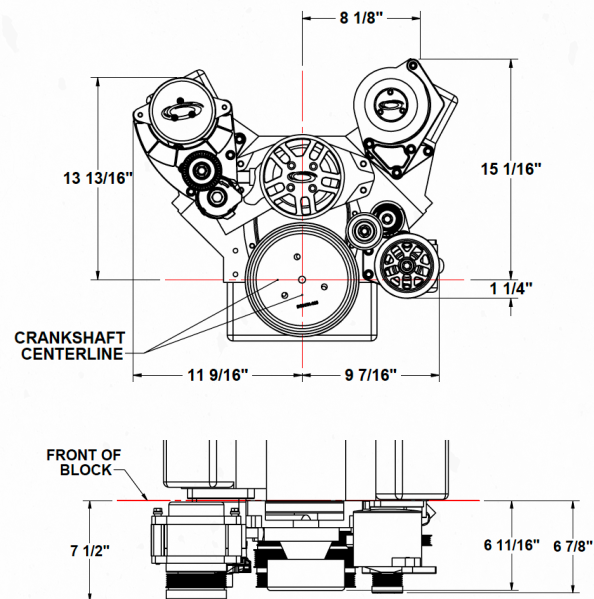
SBC ACCESSORY DRIVE, HIGH MOUNT SUPERCHARGER BRACKET



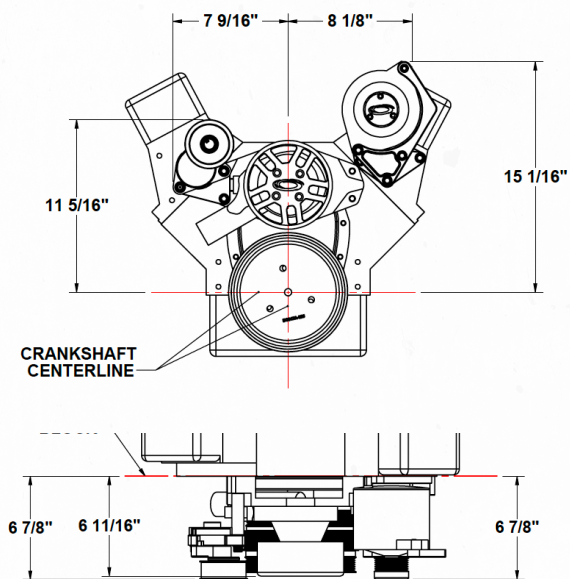
SBC ACCESSORY DRIVE WITH WATER PUMP, ALTERNATOR, AND POWER STEERING, NO A/C, NO SUPERCHARGER



SBC ACCESSORY DRIVE, ALL ACCESSORIES, NO SUPERCHARGER



SBC ACCESSORY DRIVE WITH WATER PUMP AND ALTERNATOR ONLY, NO POWER STEERING, NO A/C, NO SUPERCHARGER



SBC CLASSIC KIT (SERP & COG DRIVE) SERPENTINE ACCESSORIES 1CA110 & 1CA210

Our Classic SBC Kit

Get legendary ProCharger power gains for your Small Block Chevy and still drive all of your accessories with a 6-rib dedicated serpentine drive belt. 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 alternative accessory mounting options for your ProCharged Small Block Chevrolet "muscle car" and want to use a single serpentine belt for the A/C compressor, water pump, power steering pump and alternator, ProCharger has the solution.

Additional Notes

- Drive all your accessories, or any combination, on a single 6-rib serpentine belt which provides longer belt life and better belt wrap and reliability
- 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 and black finish available
- Designed to operate with commonly used accessories
- Power steering pump with remote reservoir (optional) sold separately
- Compatible with the following ProCharger supercharger models: P series through F-2

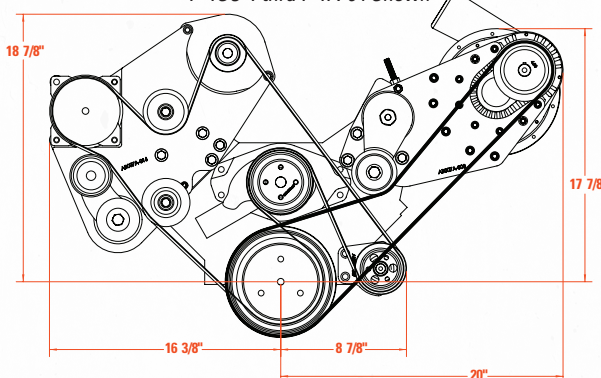
Options for Serpentine Kits

- Finish options: Satin (standard), Black, Polished
- Helical gearset for noise reduction (P & D Series)
- Carb Bonnet upgrade
- Supercharger upgrade (up to F-2)
- Intercooler upgrade
- Bypass Valve upgrade
- Repositioning bracket for alternate mounting supercharger outward

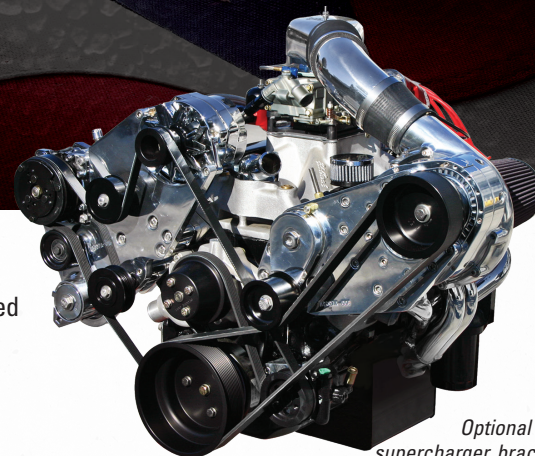
Compatible Accessories

- 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
- Power Steering Pump: GM Type 2 (Napa #811255 / 811426) or similar
- Alternator placement with serpentine accessory drive is not compatible with some aftermarket EFI systems; designed to work with Delco style alternator with 6.61" center to center mounting

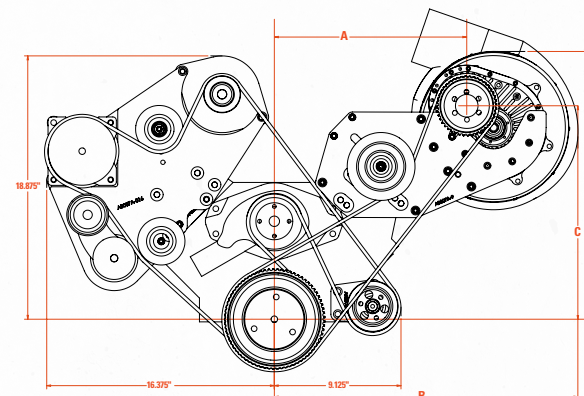
Small Block Chevy Serpentine Accessory Drive Front View
P-1SC-1 thru F-1A-94 Shown



8/12 Rib Serpentine Blower Drive SBC Shown



Optional polished supercharger, brackets and Standard Carb Hat shown.



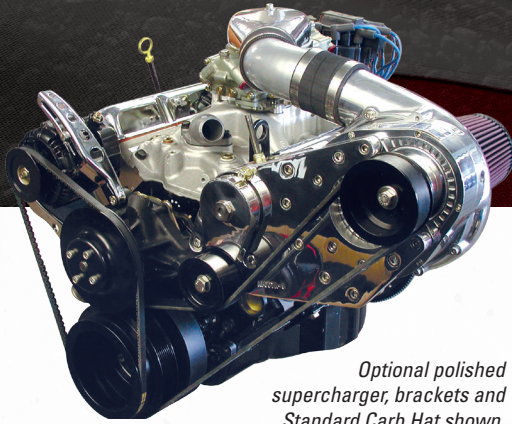
Cog Blower Drive Shown

	A	B	C	D
SBC F-1/F-1R Cog/Serp	15.4	20.2	16.4	19.2
SBC F-1X/F-2 Cog/Serp	15.4	21	16.4	19.2

CRANK PULLEYS DIMENSION FROM BALANCER FORWARD

	SBC
8 Rib w/ Serp Accessory	2.87
12 Rib w/ Serp Accessory	3.43
Cog w/ Serp Accessory	4.1

SBC CLASSIC KIT (SERP & COG DRIVE) V-BELT ACCESSORIES 1CA100 & 1CA200



Optional polished supercharger, brackets and Standard Carb Hat shown.

Big Power For Your SBC With V-Belt Accessories

Featuring a 8- or 12-rib supercharger drive and v-belt accessory drive, this kit utilizes the common, OEM-style passenger-side high-mount alternator and long water pump. If your classic is equipped with power steering, we offer a bracket that can be supplied with the ProCharger kit to relocate a compact power steering pump slightly downward for supercharger clearance. NOTE: A/C is only available with our serpentine accessories drive kits.

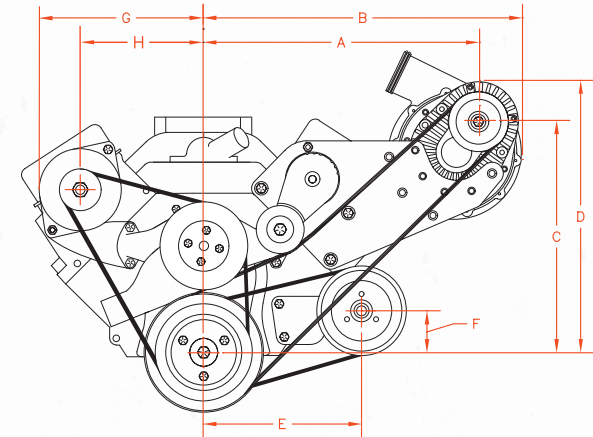
Additional Notes

- All kits include precision-machined and anodized black pulleys for the water pump, alternator, and supercharger
- Designed to work with long water pump for SBC, early style Delco, and some late style Delco alternators
- Carbureted systems require 4150 style or similar blow-through carburetor or EFI throttle body (sold separately by others) and fuel system upgrade (sold by ProCharger and others)
- Universal tubing kit included (only if intercooled), not designed for a specific vehicle
- Electric water pump recommended only for cog offering
- Requires standard rotation, long water pump
- A/C not an option for V-belt; consider upgrading to serpentine accessories
- ProCharger blow-off valve recommended above 8 psi, or w/intercooler
- Cog drive may be required above 1,000 hp

Compatible Accessories

- Alternator bracketry is not included. Summit#G4016 or #420100/Mr Gasket#517
- Must provide own P/S pump with remote reservoir, GM Type II pump (NAPA part #'s 811255 / 811426) or similar (optional)

SBC V-Belt Accessories, Serpentine Supercharger Drive



	A	B	C	D	E	F	G	H
SBC P-1SC/D-1SC	17.7	20.4	14.5	17.2	8.6	1.9	10	5.8
SBC F-1/F-1R	15.4	20.2	16.4	19.2	8.6	1.9	10	5.8
SBC F-1X/F-2	15.4	21	16.4	19.2	8.6	1.9	10	5.8
SBC F-3	16.4	21.6	16.3	20.3	NA	NA	NA	NA

Options for V-Belt Kits

- Finish options: Satin (standard), Black, Polished
- Helical gearset for noise reduction (P & D Series)
- Supercharger upgrade (up to F-3)
- Carb Bonnet upgrade
- Intercooler upgrade
- Bypass Valve upgrade
- Repositioning bracket for alternate mounting supercharger outward

CRANK PULLEYS DIMENSION FROM BALANCER FORWARD

	SBC
8 Rib w/ V-Belt Accessory	3.449
12 Rib w/ V-Belt Accessory	3.449
Cog w/ V-Belt Accessory	3.418

BBC SERPENTINE ACCESSORY DRIVE KIT 1CB300/400

Add Accessory Drive Now, ProCharge Later

The ProCharger Serpentine Accessory Drive Kit offers the sleek design style you expect from ProCharger, and a unique supercharger bracket design that offers you the convenience of adding the supercharger kit when you are ready. Specifically designed for Chevy big block engines, this kit includes everything you'll need to fit the accessories you want with the ability to support up to 1,450 hp, depending on the blower used. The design features our popular 8-rib or 10-rib supercharger drive options that increases grip, reduces stretching, and prevents belt slippage.

Order Just What You Need!

The ProCharger Accessory Drive is flexible and expandable, which allows you to select the combination of accessories you want to use.

The base kit includes:

- Water Pump Pulley
- Crank Pulley
- Alternator Bracket & Pulley
- Serpentine Belt & Tensioner

Upgrade options include:

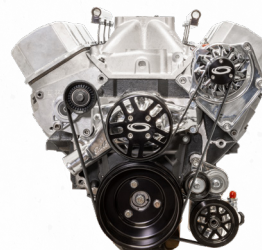
- Power Steering Bracket & Pulley
- A/C Bracket and Pulley Cover
- Supercharger Head Unit P-1SC thru F-2
- Intercooler / Bypass Valve / Tubing
- Supercharger Bracket, Tensioner, & Belt
- Finish options:
Satin (standard), Black, Polished



Supercharger + All Accessories in Polish



ALT + A/C + WP

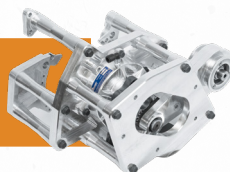


ALT + P/S + WP



ALT + WP

For the highest horsepower and race applications you will want to use the ProCharger CrankDrive. See page 35.



Scan for more
dimensions,
mounting options,
and kit details.

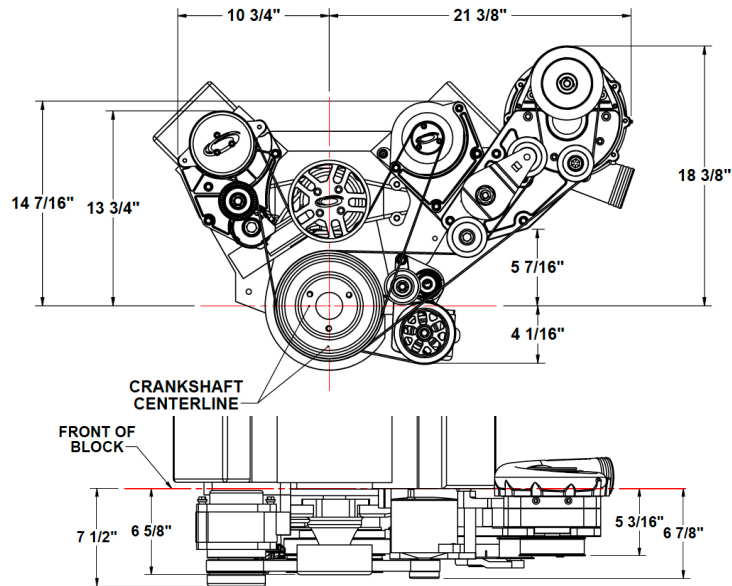
Additional Notes

- No accessories provided – see list of compatible accessories

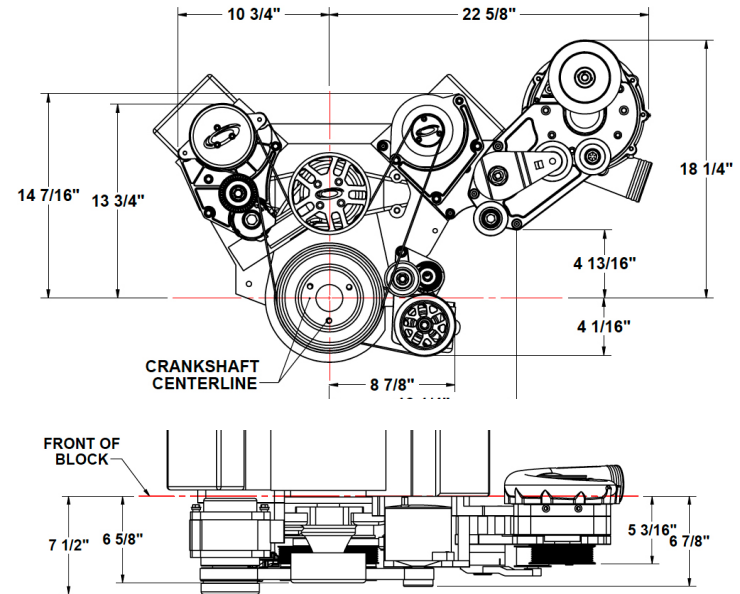
Compatible Accessories

- Uses factory balancer or aftermarket factory replacement
- Power Steering Pump: GM Type 2 Tuff Stuff #6175AL
- Alternator: #CS130 (6.14 center bolt spacing)
- A/C Compressor: #SD-7B10 Sanden, 6-rib
- Water Pump, #8854 Edelbrock, #1495ACREV

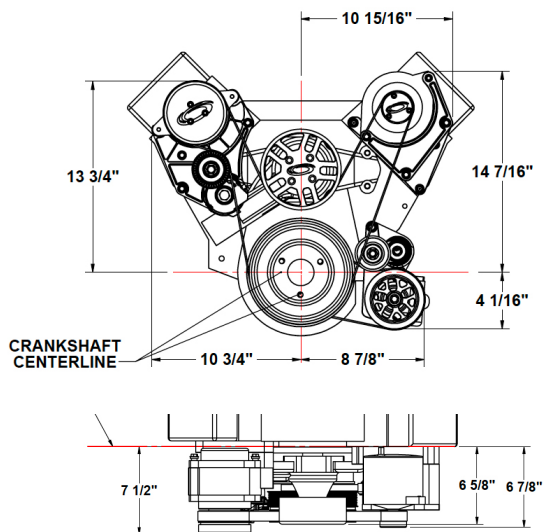
BBC ACCESSORY DRIVE, ALL ACCESSORIES AND ALL SUPERCHARGERS EXCEPT F-1X/F-2



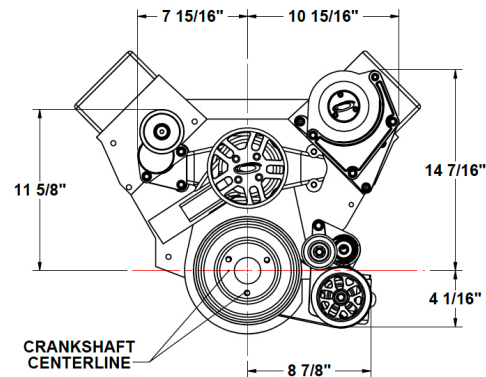
BBC ACCESSORY DRIVE, ALL ACCESSORIES AND F-1X/F-2 SUPERCHARGER



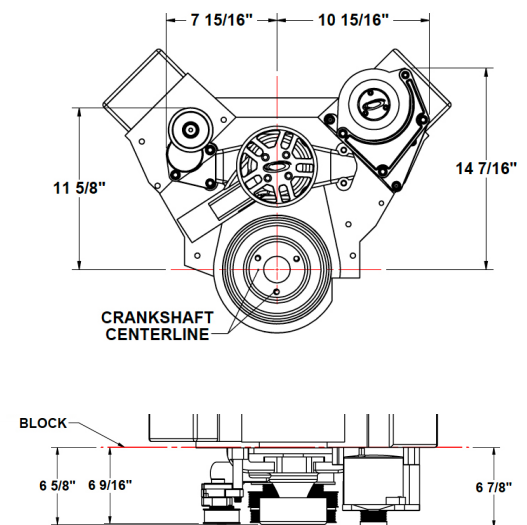
BBC ACCESSORY DRIVE, ALL ACCESSORIES, NO SUPERCHARGER



BBC ACCESSORY DRIVE WITH WATER PUMP AND POWER STEERING, NO A/C, NO SUPERCHARGER



BBC ACCESSORY DRIVE WITH WATER PUMP ONLY, NO POWER STEERING, NO A/C, NO SUPERCHARGER



BBC CLASSIC KIT (SERP & COG DRIVE) SERPENTINE ACCESSORIES 1CB110 & 1CB210

Our Classic BBC Kit

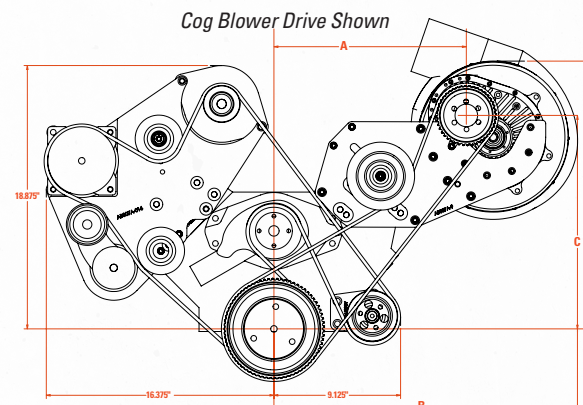
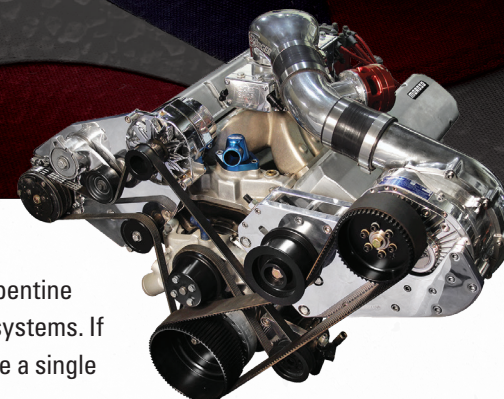
Get legendary ProCharger power gains for your Big Block Chevy and still drive all of your accessories with a 6-rib dedicated serpentine drive belt. This accessory drive system utilizes an automatic tensioner similar to the one incorporated in all late model OE drive systems. If you're looking for alternative accessory mounting options for your ProCharged Big Block Chevrolet "muscle car" and want to use a single serpentine belt for the A/C compressor, water pump, power steering pump and alternator, this kit offers you a solution.

Additional Notes

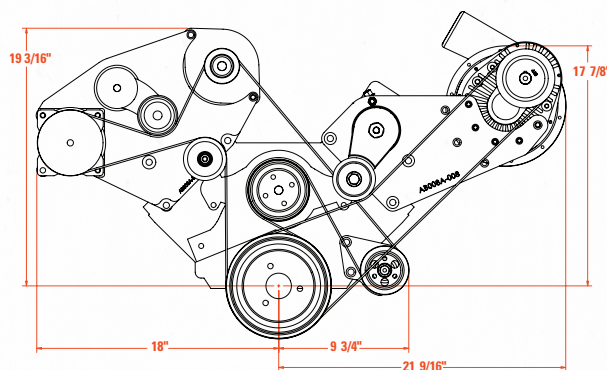
- Drive all your accessories, or any combination, on a single 6-rib serpentine belt which provides longer belt life and better belt wrap and reliability
- Includes an automatic tensioner for the accessory drive belt: designed to ensure consistent belt tension
- All bracketry is machined from the highest quality billet aluminum
- Designed to operate with commonly used accessories
- Power steering pump with remote reservoir (optional) sold separately
- Compatible with the following ProCharger supercharger models: P series through F-2

Compatible Accessories

- BBC kit requires use of reverse rotation water pump (Edelbrock Part# 8854 or similar).
- Power Steering Pump: GM Type 2 (Napa #811255 / 811426) or similar
- A/C-equipped vehicles require Sanden 508/SD5H14 a/c compressor (Manufacturer part #4514) or similar
- Alternator placement with serpentine accessory drive is not compatible with some aftermarket EFI systems; designed to work with Delco style alternator with 6.61" center to center mounting



Big Block Chevy Serpentine Accessory Drive Front View
P-1SC-1 thru F-1A-94 Shown



8/12 Rib Serpentine Blower Drive BBC Shown

Options for Serpentine Kits

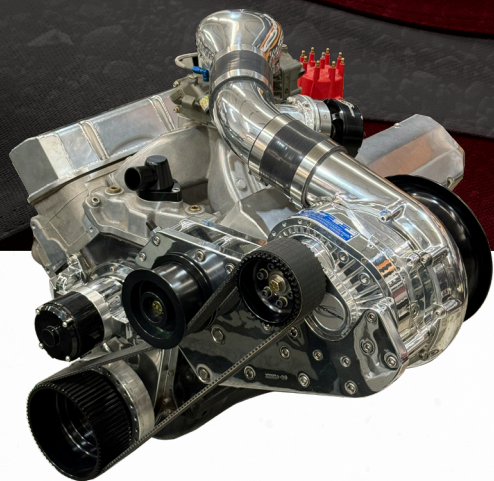
- Finish options: Satin (standard), Black, Polished
- Helical gearset for noise reduction (P & D Series)
- Carb Bonnet upgrade
- Intercooler upgrade
- Bypass Valve upgrade
- Repositioning bracket for alternate mounting supercharger outward

	A	B	C	D
BBC F-1/F-1R Cog/Serp	15.1	21.5	15.2	17.8
BBC F-1X/F-2 Cog/Serp	15.1	22.3	15.2	18.8

CRANK PULLEYS DIMENSION FROM BALANCER FORWARD

	BBC
8 Rib w/ Serp Accessory	2.583
12 Rib w/ Serp Accessory	3.143
Cog w/Serp Accessory	3.818

BBC CLASSIC KIT (SERP & COG DRIVE) V-BELT ACCESSORIES 1CB100 & 1CB200



Big Power For Your BBC With V-Belt Accessories

The 1CB100 features an 8- or 12-rib supercharger drive and v-belt accessory drive, this kit 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 slightly downward for supercharger clearance. The 1CB200 kits include cog drive, uses an electric water pump, and has one available v-belt on the balancer side of the crank pulley. Call for accessory fitting.

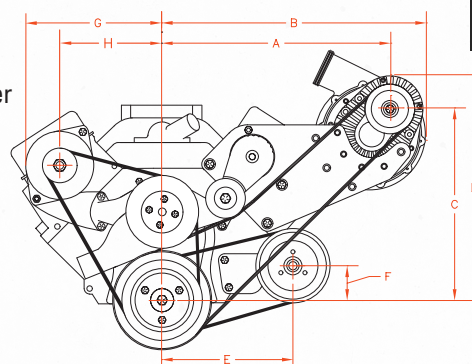
NOTE: A/C is only available with our serpentine accessories drive kits.

Additional Notes

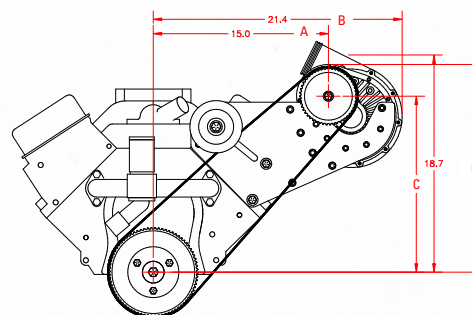
- All kits will include precision machined and anodized black Crank and Supercharger pulleys. The 1CB100 kits will also include v-belt style water pump pulley and alternator pulley to align with the new supplied ProCharger crank pulley
- The 1CB100 kit for v-belt accessories is designed to work with long water pump for BBC and early style (or some late style) Delco Alternators
- Carbureted systems require 4150/4500 style or similar blow-through carburetor or EFI throttle body (sold separately by others) and fuel system upgrade (sold by ProCharger and others)
- Universal tubing kit included (only if intercooled), not designed for a specific vehicle
- Electric water pump recommended only for cog offering
- The 1CB100 kit for v-belt accessories requires standard rotation, long water pump
- A/C not an option for v-belt; consider upgrading to serpentine acc.
- ProCharger blow-off valve recommended above 8 psi or w/intercooler
- Cog may be required above 1,000 hp
- Fits up to F-3 supercharger

Compatible Accessories

- Alternator bracketry is not included. Summit #420102 / Mr Gasket # 4955
- Must provide own P/S pump with remote reservoir, GM Type II pump (NAPA part #'s 811255 / 811426) or similar (optional)



BBC V-Belt Accessory Front View
With Serp Blower Drive

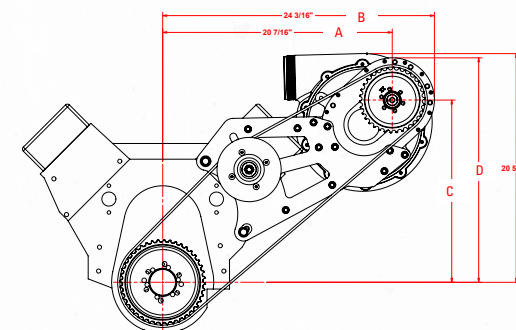


BBC Race F-1/F-2 Serp
With Cog Blower Drive

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

CRANK PULLEYS DIMENSION FROM BALANCER FORWARD

	BBC
8 Rib w/ V-Belt Accessory	3.04
12 Rib w/ V-Belt Accessory	3.04
Cog w/ V-Belt Accessory	3.368



BBC Race F-3
With Cog Blower Drive

Options for V-Belt Kits: Same as page 22

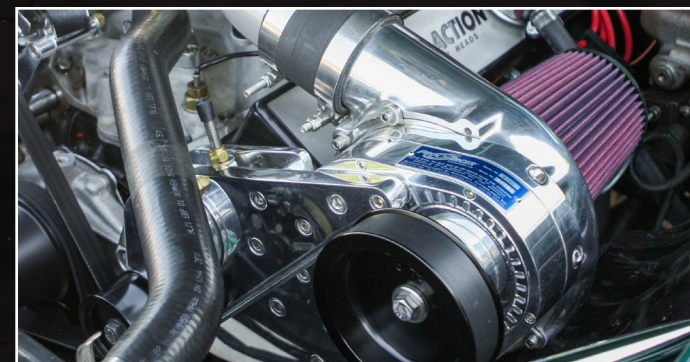
P-1SC / P-1SC-1 / P-1X

SUPPORTS UP TO 950+ HP



The Power of the P-Series

Experience the unparalleled efficiency of the P-1X, where every ounce of power is optimized for peak performance. Engineered to minimize temperature increases per pound of boost, the P-1X is the ultimate choice for your classic muscle car project. Feel the smooth, predictable power of the P-1X's linear power curve and up to 950 hp on pump gas, transforming every drive into an adventure. For those seeking maximum power without compromise, our P-1SC and P-1SC-1 models offer both performance and precision, delivering an impressive 825 horsepower. Elevate your driving experience with the unrivaled power and reliability of our supercharger P-series lineup.



VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
-----------------	---------------------	---------------------	----------------	---------------	---------------------	------------------	------------------	----------------------	------------------	------------------

P-1SC	9"	825	200-500	1200	30	3.75"	3.37"	6.25"	3"	62,000	4.10:1
P-1SC-1	9"	825	200-450	1200	32	3.75"	3.37"	5.25"	3"	65,000	4.10:1
P-1X	9"	950	300-500	1275	32	3.75"	3.57"	5.56"	3"	65,000	4.10:1



Engine Power: Season 6, Episode 19

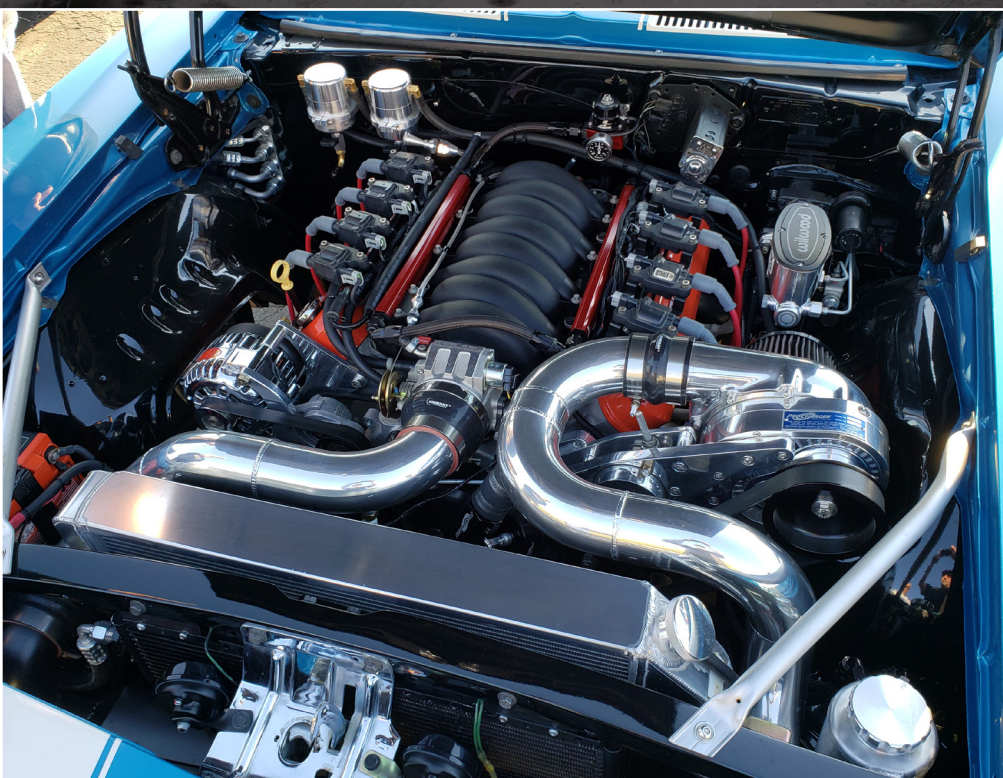
"That's absolutely incredible, 938 Horsepower!!!"

[938 RWHP, with P-1X]



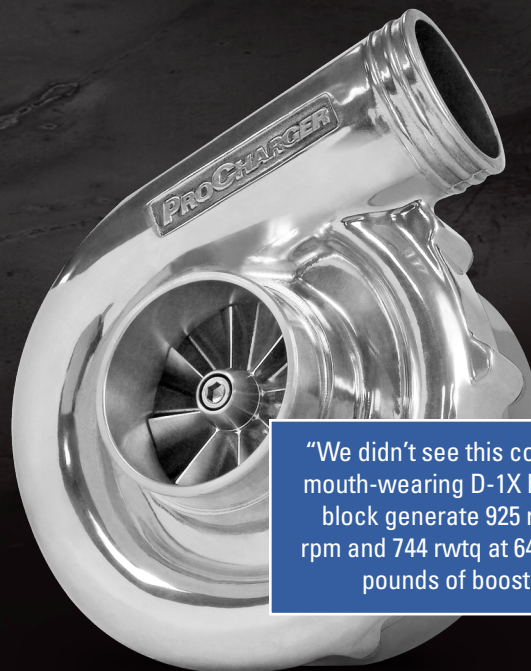
D-1SC / D-1X

SUPPORTS UP TO 1075+ HP



The Distinction of the D-Series

For individuals with modified or built engines featuring forged internals, aftermarket camshafts, and more, it's important to understand the nuanced differences between the D-1SC and D-1X superchargers. While both may appear similar by the numbers, their power delivery sets them apart. The D-1SC delivers an exhilarating mid-range punch while achieving nearly 1,000 horsepower on pump gas. On the other hand, the D-1X was engineered to excel on the race track, prioritizing upper-end horsepower dominance. Whether your ambitions lie on the street or the track, whether you're working with a small block or a big block engine, rest assured that ProCharger offers the ideal D-series supercharger head unit to fulfill your power goals.



Satin, Black, and Polished finish options available

	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
D-1SC	9"	925	300-500	1400	32	3.75"	3.37"	6.25"	3"	62,000	4.10:1
D-1X	9"	1075	300-550	1500	32	3.75"	3.57"	6.20"	3"	65,000	4.10:1

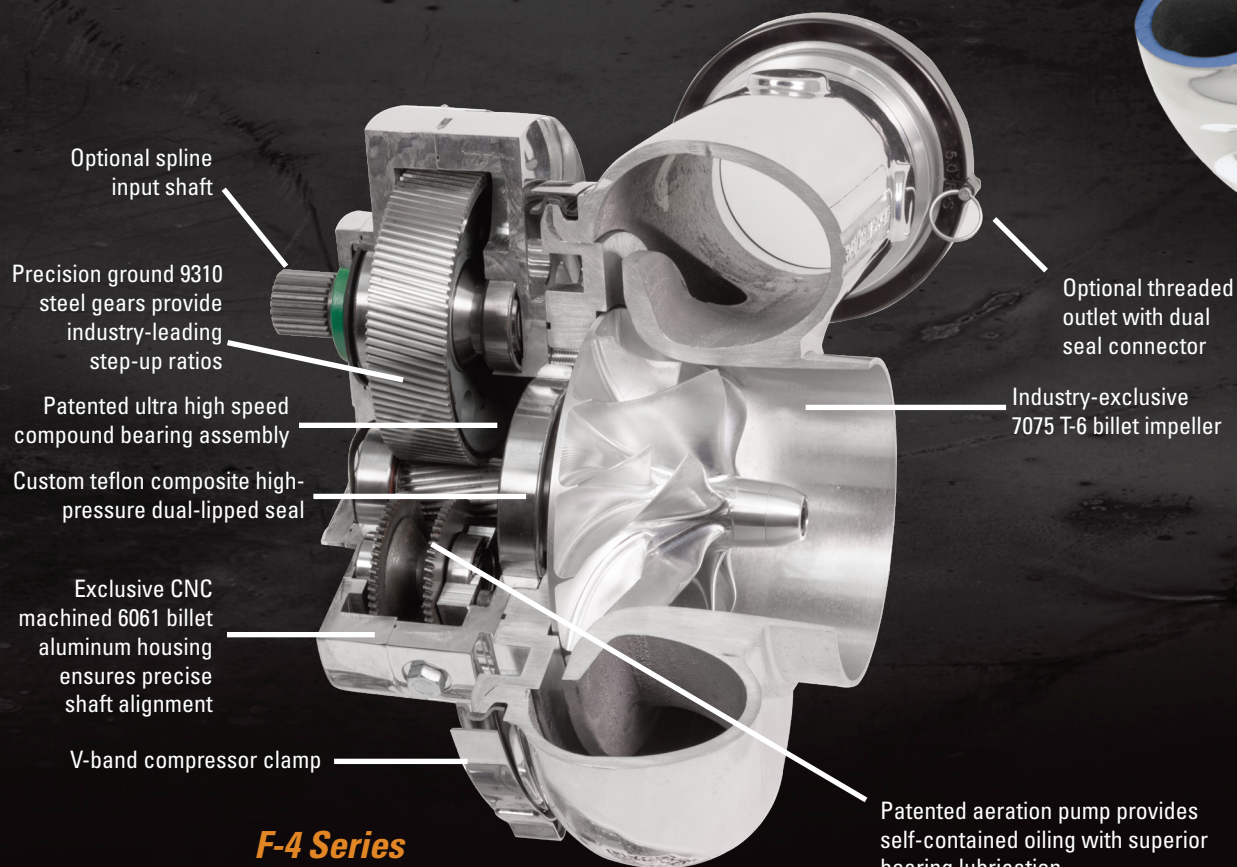
"We didn't see this coming: the bell mouth-wearing D-1X helped our big block generate 925 rwhp at 6580 rpm and 744 rwtq at 6470 rpm at 15.5 pounds of boost." – FSC



INSIDE A PROCHARGER

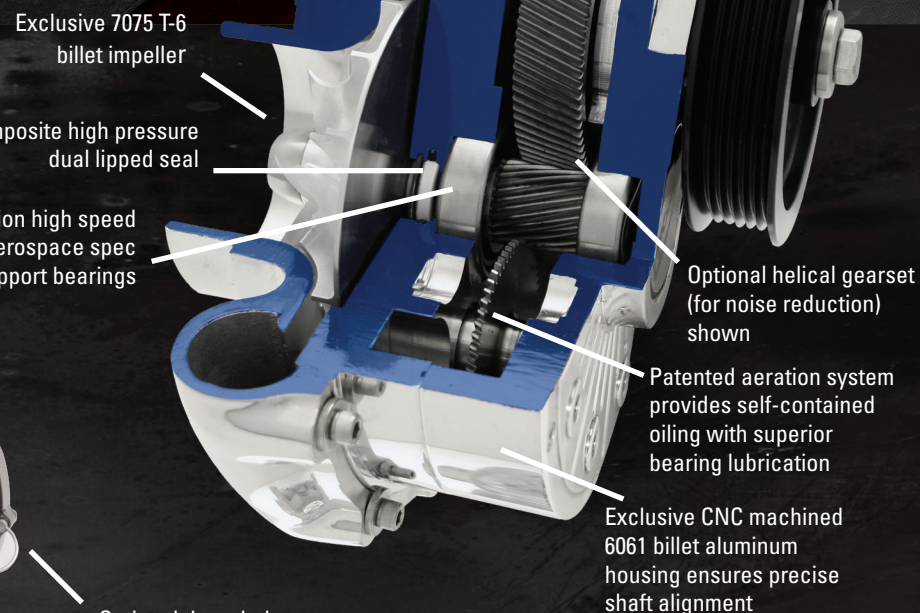
Self-Contained Superiority

ProCharger self-contained superchargers were designed specifically to be self-lubricating. Not only does this make our superchargers easier to install, but it offers superior reliability, higher blower speeds, and lower temperatures.



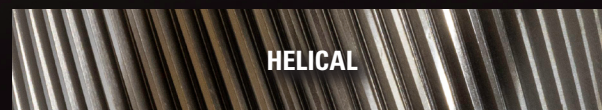
Industry leading 4.10:1 step up ratio with precision ground gears provide unmatched durability

P/D Series



Helical Gear Set

Our helical gear set offers the same power potential and durability as the standard, straight-cut gear set, but at reduced sound levels, especially at engine idle speeds. We're not talking about the quintessential "ProCharger whoosh," but a unique sound best described on procharger.com.





F-1D/F-1/F-1A/F-1A-91/F-1A-94

SUPPORTS UP TO 1300+ HP

9" F-Series Models

The ProCharger F-1A thru F-1A-94 head units are the next step up the ladder from the P- and D-series superchargers. Equipped with our 9" volutes, these units pack a lot of power in a modestly sized package. The drive system utilizes an 8-rib, 10-rib, 12-rib, or cog belt with oversized pulleys that provide maximum belt contact for peak power output. A CrankDrive™ is an upgrade option.

Power AND Reliability

It's not just the power that ProCharger provides, it's the reliability to go rounds. The quality of our engineering and material selection provide you with the trouble free use you need when you're racing. See page 8 to learn more.

Like all ProChargers, they are 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. Utilizing a patented high-speed compound bearing design, these superchargers offer operating speeds unmatched by any other line of superchargers on the market.

	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
F-1D	9"	1050	300-500	1500	34	3.75"	3.37"	6.25"	3"	65,000	5.40:1
F-1	9"	1050	300-550	1525	38	3.75"	3.57"	6"	3"	70,000	5.40:1
F-1A	9"	1,100	300-500	1,575	38	3.75"	3.5"	5.56"	3"	74,000	5.40:1
F-1A-91	9"	1,200	300-500	1,600	38	3.75"	3.57"	5.56"	3"	74,000	5.40:1
F-1A-94	9"	1,300	300-550	1,625	38	4"	3.7"	5.56"	3"	74,000	5.40:1



"ProCharger has really taken supercharging to the next level"
- Chevy High Performance

F-1C/F-1R

SUPPORTS UP TO 1250+ HP

9.75" F-Series

A step up in volute diameter at 9.75", the ProCharger F-1C and F-1R head units pack a lot of power in a modestly sized package. Their drive system, compatible with 8-rib, 10-rib, 12-rib, or cog belts, ensures maximum belt contact for peak power. Upgrade options include the CrankDrive™ system.

Call our racer support staff to help you determine which F-model best suits your specific application at (913) 338-2886, Monday-Friday 8-5:30 PM CT, or email sales@procharger.com.

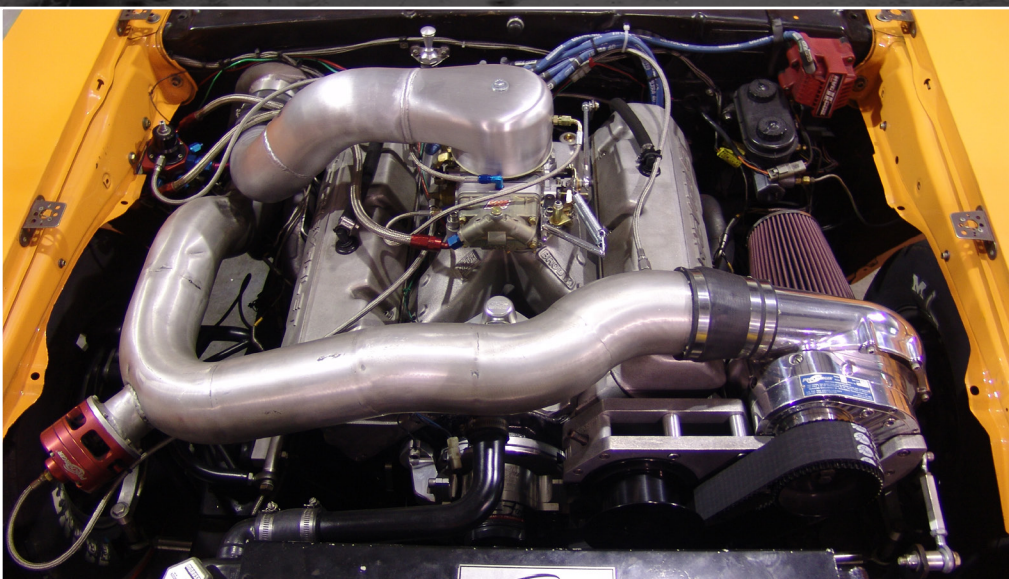


	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
F-1C	9.75"	1100	300-550	1625	38	4"	3.7"	5.56"	3"	74,000	5.40:1
F-1R	9.75"	1250	375-550	1700	38	4.05"	4"	6"	3"	68,000	5.40:1



F-1X / F-2

SUPPORTS UP TO 1450+ HP



10.5" F-Series

The next step in the F-series product line is our 10.5" volute diameter F-1X and F-2. Ideal for applications looking to make up to 1,450+ hp in a package that will fit under most hoods, The drive system utilizes an 8-rib, 10-rib, 12-rib, or cog belt with oversized pulleys that provide maximum belt contact for peak power output. A variety of supercharger drive upgrade options exist, including a CrankDrive™ and a wide range of pulley sizes to quickly change boost levels to suit your application.

Call our racer support staff to help you determine which F-model best suits your specific application at (913) 338-2886, Monday-Friday 8-5:30 PM CT, or email sales@procharger.com.



	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
F-1X	10.5"	1400	375-550	2000	38	4.8"	4.20"	6"	3.5"	72,000	5.40:1
F-2	10.5"	1450	425-600	2100	38	4.6"	4.5"	6.75"	3.5"	65,000	5.40:1

F-3D-102/-106

SUPPORTS UP TO 1800+ HP



F-3D-102/-106

With more than 200 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. These head units offer both reliability and power, with a target horsepower up to 1,800 hp. Call our racer support staff to help you determine which F-3 model best suits your specific application.

Spinning at an overdrive ratio of 5.63:1 and equipped with F-3D specific 10.5" volute, these models can be ordered with the following options to make a complete "one-stop-shop" supercharger package for your engine. Additional options include:

- 8mm, 14mm cog drive, or CrankDrive™ unit
- Splined or keyed input shaft
- Race, ProRace, or Competition blow-off valves
- Race Bellmouth



	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
F-3D-102	10.5"	1500	550-750	1900	38	4.8"	4"	6"	3.5"	74,000	5.63:1
F-3D-106	10.5"	1800	550-750	2200	38	4.8"	4.2"	6"	3.5"	74,000	5.63:1

F-3R-112 /-121

SUPPORTS UP TO 2400+ HP



F-3R-112 / -121

The first centrifugal supercharger to power a doorslammer over 200 mph and into the 6's, F-3 ProChargers are the superchargers of choice among heads-up racers across the continent. As the next step in the F-series product line, this 12" volute diameter F-3R-112 and F-3R-121 is ideal for applications looking to make up to 2,400+ horsepower.

Spinning at an overdrive ratio of 5.63:1, these units pack a lot of power. These models have an optional billet flange thread-on outlet to accommodate either a v-band or "dual-seal" style charge pipe connection. Additional options include:

- 14mm cog drive or CrankDrive™ unit
- Splined or keyed input shaft
- Race, ProRace, or Competition blow-off valves
- Race Bellmouth

Call our racer support staff to help you determine which F-model best suits your specific application at (913) 338-2886, Monday-Friday 8-5:30 PM CT, or email sales@procharger.com.



Dragster Drive

The number of wins and championships that ProCharged Top Dragster have racked up in the NHRA and PDRA are beyond impressive. The supercharger mounting options fit virtually all dragster chassis. Scan the QR code to learn more about all five mounting options for ProCharger head units.



Reverse Belt Drive



	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
F-3R-112	12"	2100	CALL	2300	38	5"	4.4"	6.75"	4"	72,000	5.63:1
F-3R-121	12"	2400	CALL	3100	40	5.5"	4.8"	6.75"	4"	72,000	5.63:1

F-3R-130/-136/-140

SUPPORTS UP TO 3300+ HP

"ProCharger is the easiest combination that I've tuned. Very, very raceable."

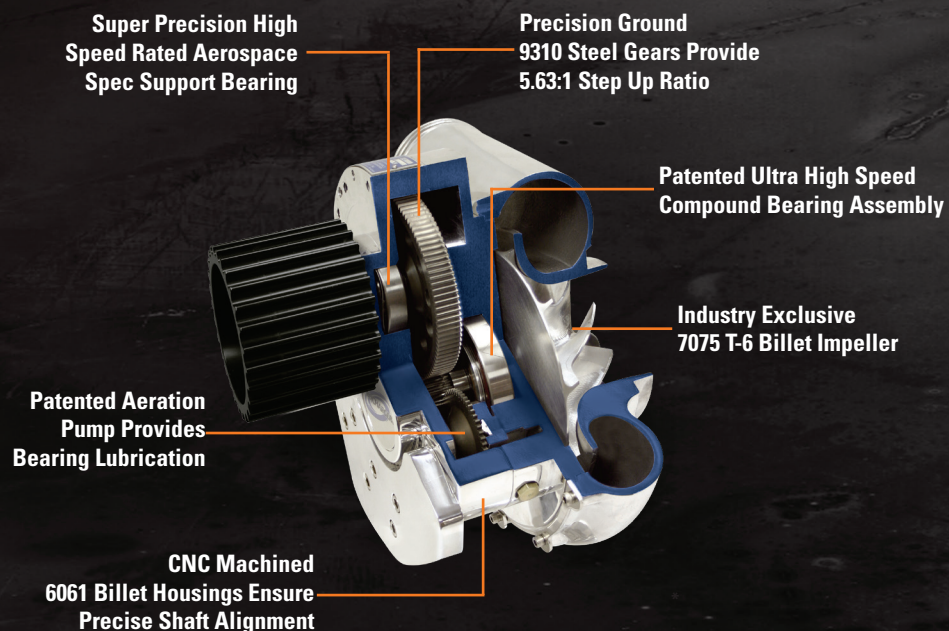
*—Steve Petty
Pro Line Racing Tuner*

F-3R-130/-136/-140

With a 12" volute diameter, the F-3R-130, F-3R-136, and F-3R-140 are best suited for applications looking to make up to 3,300 horsepower. The first centrifugal supercharger to power a doorslammer over 200 mph and into the 6's, F-3 ProChargers are the superchargers of choice among heads-up racers across the continent.

The quality and reliability of the ProCharger parts are second to none, providing you with the reliability you need for your race car. These models have an optional billet flange thread-on outlet, to accommodate either a v-band or "dual-seal" style charge pipe connection. Call our racer support staff to help you determine which F-3 model best suits your specific application. These models can be ordered with:

- 14mm cog drive or CrankDrive™ unit
- Splined or keyed input shaft
- Race, ProRace, or Competition blow-off valves
- Race Bellmouth



	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
F-3R-130	12"	2700	CALL	3600	45	5.75"	5.12"	7.22"	4"	72,000	5.63:1
F-3R-136	12"	3000	CALL	4000	50	5.75"	5.23"	7.22"	4"	72,000	5.63:1
F-3R-140	12"	3300	CALL	4300	58	5.75"	5.37"	7.22"	4"	72,000	5.63:1



F-4X-136/-140/-140-1/-144/-145

SUPPORTS UP TO 4500+ HP



F-4X-136/-140/-140-1/-144/-145

With thousands of event wins in the last 10 years, ProChargers are the power adder of choice among racers across the world. The largest in ProCharger's supercharger product line, the F-4X series features our newest high-efficiency impeller blade design, producing cooler charge air temperatures. Spinning at an overdrive ratio of 4.77:1 and equipped with F-4X 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-4X can be ordered with our CrankDrive unit, Competition blow-off 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-model best suits your specific application at (913) 338-2886, Monday-Friday 8-5:30 PM CT, or email sales@procharger.com.

	VOLUTE DIAMETER	MAX SUPERCHARGER HP	MOTOR BASE HP RANGE	MAX FLOW (CFM)	MAX BOOST PSI	INLET HOSE DIAMETER	INDUCER DIAMETER	EXDUCER DIAMETER	OUTLET HOSE DIAMETER	MAX IMPELLER RPM	INTERNAL STEP-UP
F-4X-136	13.5"	3200	CALL	4200	55	6"	5.35"	7.22"	4"	72,000	4.77:1
F-4X-140	13.5"	3500	CALL	4500	60	6"	5.37"	7.22"	4"	72,000	4.77:1
F-4X-140-1	13.5"	3700	CALL	4700	65	6"	5.51"	7.42"	4"	72,000	4.77:1
F-4X-144	13.5"	4000	CALL	5000	70	6"	5.63"	7.91"	4"	72,000	4.77:1
F-4X-145	13.5"	4500+	CALL	5200	72	6"	5.71"	7.69"	4"	72,000	4.77:1



BLOW-OFF VALVES

Why Blow-off Valves Are So Important

More horsepower is associated with more airflow. It is important to get the air charge out of the tubing quickly when you let off of the throttle to avoid compressor surge and potential damage to the ProCharger Supercharger or other power adder, and help prevent other issues such as throttle hang, and belt snap on cog or serpentine driven applications. ProCharger currently has 5 different blow-off valve models available based on the needs of different applications.

For street applications, our supercharger kits come with the proper valve based on the vehicle's horsepower output level so, no need to worry about the right one. However, we do offer upgrade options for those seeking a little more sound or those that like the cool look of the anodized finish of our Race valves. Race valves can be used on stock vehicles and are a great upgrade for sound, look, and when you turn the power and boost up.

When to run a Competition blow-off valve vs. Race blow-off valve? Competition valves are generally used in pairs and are only for high horsepower competition applications. They are not recommended for street use.

Open Blow-Off Valves - Vents to the atmosphere and creates a distinctive "whoosh," when the throttle blade suddenly closes. Many customers enjoy this sound.

Closed Bypass Valves - Vents to an external air filter or an internal tube for rerouting excess boost pressure back upstream of the supercharger. Often referred to as a recirculating valve.

UP TO 700 HP

PROFLOW VALVE: 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 that achieves excellent flow for its size. The ProFlow valve can also be paired with a small filter to minimize noise.

BULLET VALVE: This 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 run to an air filter to minimize noise.

UP TO 1,200 HP

RACE VALVE: This is the industry-leading blow-off valve for both street and race applications. The larger valve diameter is designed for high-flow applications, and can be used in pairs.

1,200-4,500+ HP

PRORACE VALVE: This piston-style valve outflows any other single valve on the market, and is the valve of choice for Top Sportsman and Top Dragster racers.

COMPETITION VALVE: Our Competition Valve is ideal for our highest horsepower applications, designed with the Pro Mod racer in mind. It is compact, lightweight, and fast acting. For use as a pair in applications above 4,000 hp, the Competition Valve is the go-to for our ProCharged racers.



	ProFlow	Bullet (open)	Bullet (closed)	Race (open)	Race (closed)	ProRace	Competition (pair)
Application	Street	Street	Street	Street/Race	Street/Race	Race	Race
Inlet Diameter	1.5 in	1.5 in	1.5 in	2.0 in	2.0 in	3.0 in	2.5 in
Outlet Diameter	1.5 in	Open Vent	1.5 in	Open Vent	2.0 in	Open Vent	Open Vent
Mounting	Hose Clamp	House Clamp	Hose Clamp	Bolt-On	Bolt-On	V-Band	V-Band
Horsepower	Up to 700 HP	Up to 700 HP	Up to 700 HP	Up to 1,200 HP	Up to 1,200 HP	Up to 2,500 HP	1,500-4,000+ HP
Flange Included	N/A	N/A	N/A	Yes	Yes	Yes	Yes



Scan to learn how to choose the right blow-off valve

***All valves available in black**

GEAR DRIVES

CrankDrive™ & RaceDrive™

CrankDrive™

The award winning CrankDrive™ gear drive is capable of supporting 4,500+ horsepower, allows for a variety of accessories, has easy to change gear ratios, and provides maximum efficiency at extreme power levels. Compatible with the ProCharger F-1 through F-4X model superchargers, the CrankDrive™ is available for most drag racing engine applications.

- The ProCharger CrankDrive™ positions the supercharger higher to allow for better steering component and frame clearance
- Lightweight design
- Easy to assemble, disassemble, and swap gear ratios
- Complete assembly for specific engines, no sourcing additional components
- Allows engine to rotate both directions for servicing

Applications

Chevrolet Small Block/Big Block
Chevrolet LS/LT
Ford Small Block/Big Block
BAE Hemi
AJ TFX Hemi
481X
Noonan Hemi
Coyote
7.3L Godzilla



RaceDrive™

The RaceDrive™ is an integrated gear drive combined with our rugged F-Series supercharger, and is offered in two configurations: the F-3R-112RD and F-3R-121RD. The ProCharger RaceDrive™ is a compact drive unit that centrally mounts the ProCharger closer to the engine and higher up for easier installation and fitment advantages.

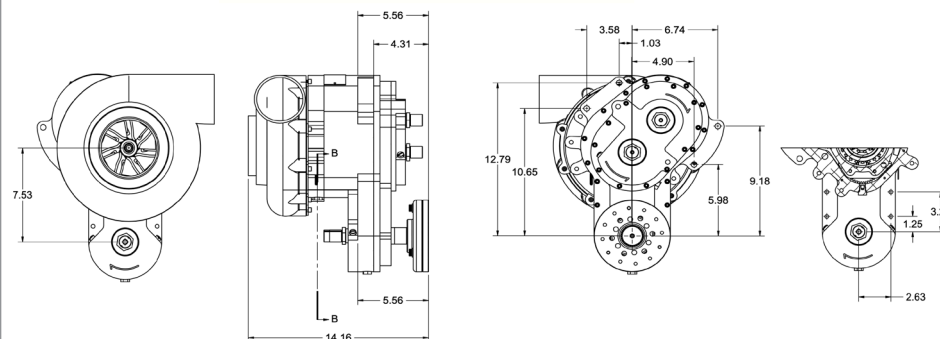
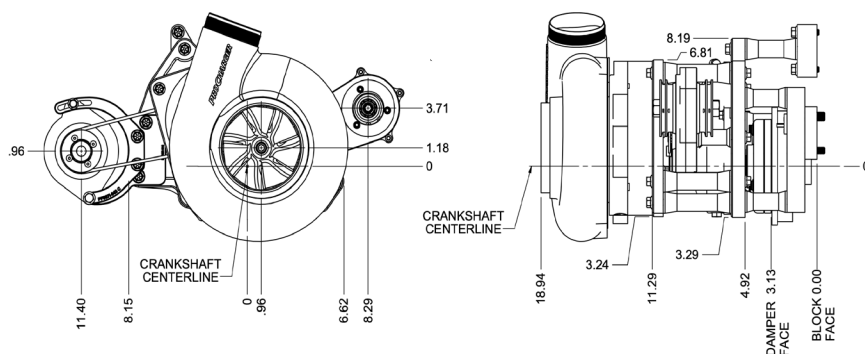
A key feature of the ProCharger RaceDrive™ is the ability to change the gear sets or blower speeds by simply removing the front cover and replacing the 10-spline quick change gear sets with different ratios options. Independent self-contained gear cases are used for the supercharger and the drive.



Custom mounting brackets required



More information on Gear Drive applications and specifications,



RACING DOMINATION

REAL WORLD PROCHARGER POWER

ProCharger Motorsports

ProCharger has a long, 30-year history of helping enthusiasts and racers accomplish their performance goals: WINNING! You'll find ProCharged racers competing and winning on drag strips, road courses, the salt flats of Bonneville, open road races, and rear-wheel dyno competitions. As you know, when it comes to motorsports, talk is cheap. Actions and results speak for themselves. And ProCharger is proud to boast more records and championships in the past 20 years than all of our direct competitors combined.

ProCharger and Racing: A Winning Combination

ProCharged race engines are hard to beat, especially in sanctioned drag racing competition. ProCharger has been helping racers set new ET and MPH records for decades. As far back as 2002, every single Super Street and Street Outlaw racer in the 7's, and Renegade racer in the 8's were all ProCharged. The list of ProCharged racing champions, record holders, and top performers reads like a Who's Who of winning racers. Check out the ProCharger Honor Roll at Procharger.com. Are you ready to put your name on this list?

From Strip to Street

The same design philosophy that puts top racers into the winner's circle can be found in every street-legal ProCharger supercharger system. With a ProCharger system, not only will you receive the largest and most engine-friendly horsepower gains, you also have the peace of mind knowing that your supercharger was designed to reliably and consistently produce event and championship-winning power race after race, year after year. Whatever your high-performance goals, let ProCharger help you blow them away.



Scan to view
Parts & Racing
Price Guide





ProCharger Motorsports Achievements:

- ProCharged racers have won over 200 national championships in the past 15 years
- The first centrifugal supercharger to power a doorslammer past 200 mph
- HOT ROD Pump Gas Drags Championship, Drag Week Championships and Maxton Mile Top Speed Challenge Winner
- Car Craft Street Machine of the Year Award
- The ONLY supercharger to make 2,000 horsepower on pump gas
- The ONLY supercharger to make 4,500 horsepower on alcohol
- First and only centrifugal approved for NHRA Pro Mod

OPTIMIZE YOUR ENGINE

PREPARING YOUR ENGINE FOR A PROCHARGER

Maximizing Power with ProCharger

Though a ProCharger can provide sizable power gains on totally stock engines, 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. Although 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. Newer generation motors such as the LS and LT of the small block family, have pushed HP levels well into the 1000+ hp range, without the use of aftermarket blocks. 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

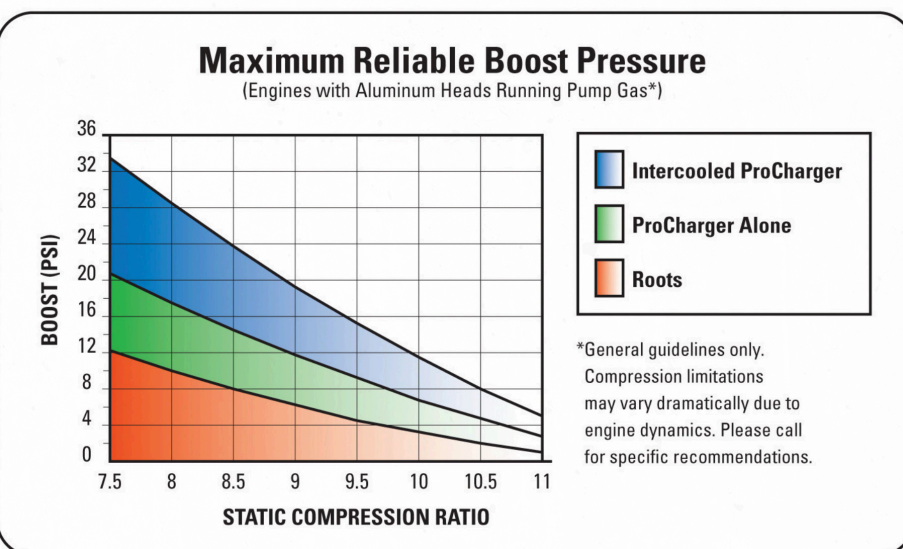
When selecting your crankshaft, our experience has shown that cast crankshafts are sufficient for small blocks making 500 HP or less and big blocks producing less than 700 HP with a ProCharger. Given the difficulty of finding a quality core and the availability of low priced forgings, 5140 steel crankshafts 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. For LS or LT recommendations, please give our team a call.

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. For modern LS or LT applications, the stock cast pistons can be good for 200-300 hp over older generation motors.

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 and 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 (115-117 for LS Engines) 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

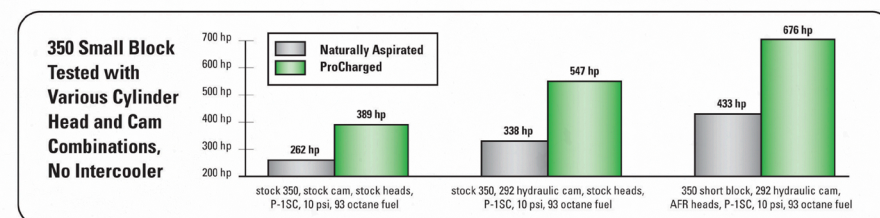
Though a supercharged engine does not rely solely on atmospheric pressure to fill the cylinders (as a naturally aspirated engine does) and can provide power in excess of a system's rated performance, sizable gains will be seen when equipping your ProCharged engine with an appropriately sized, free flowing 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. In an EFI application, it would be best to size plenum volume and runner length to the engine RPM range you want the maximum performance in. Longer runners for more down low torque, and shorter runners for higher engine RPM range.

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.

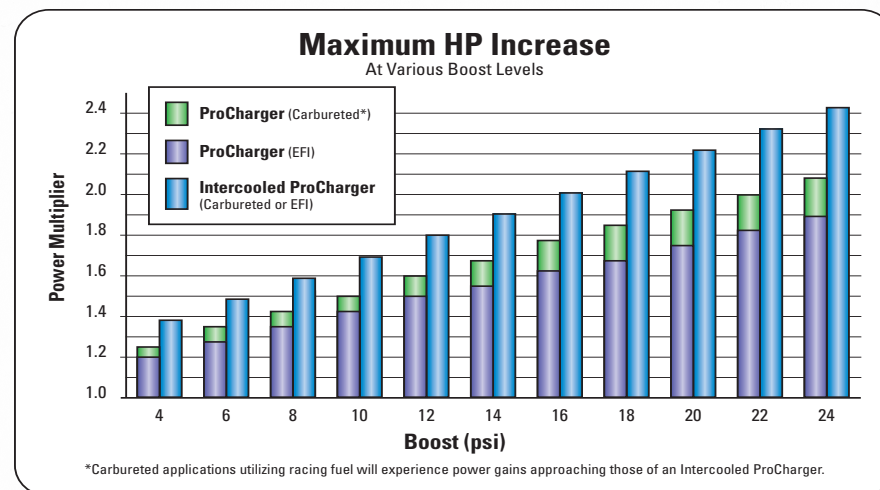


Fuel System

Both EFI and carbureted applications rely on a consistent delivery of fuel into the engine. There are several considerations, depending on the type of fuel system you've selected, which we outline in detail on pages 42-45.

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 model specification pages to determine which ProCharger best fits your needs.



OPTIMIZE YOUR COMBINATION

MAXIMIZING YOUR POWER GAIN

E-85 & High Octane Race Fuels

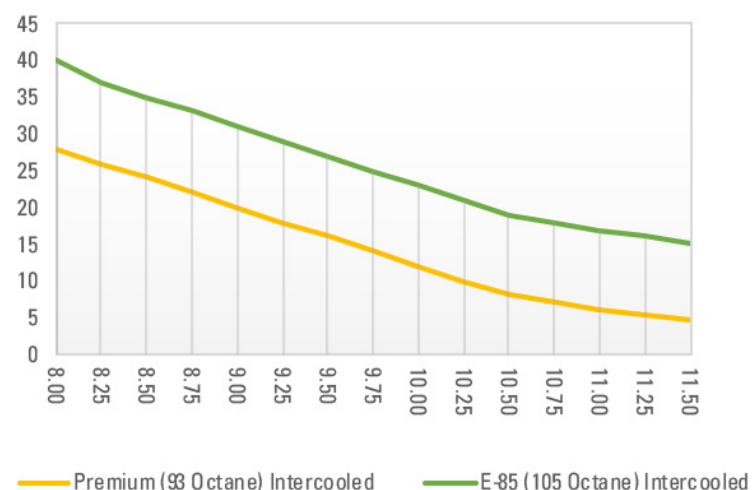
You can achieve great power gains with pump gas, but for those looking to turn it up even further, alternative fuels is one option. True E85, a blend of 85% ethanol and 15% gasoline, offers several compelling advantages for high-performance engines, making it an ideal fuel choice for enthusiasts seeking maximum power and efficiency. Higher octane fuels allow for greater power gains from increased boost pressures and advanced timing. With a significantly higher octane rating ranging between 100 to 105, E85 enables engines to withstand more aggressive compression ratios and ignition timing, maximizing horsepower potential. Its elevated oxygen content enhances combustion efficiency, resulting in improved engine response and throttle performance. Moreover, the inherent cooling properties of E85 effectively act as an intercooler, reducing intake temperatures and mitigating the risk of detonation under high-boost conditions. Compared to pump gas, E85 offers a gain of approximately 75-100 hp over pump 93 at the same boost level, when dealing with street car power levels (550-750 whp). E85 can offer nearly 20% powergain, without changing boost level, and 100% or more if the boost pressure is increased. E85 can be a good fuel option for maximizing the potential of high-performance engines, offering benefits in terms of power, cooling, and boost tolerance.

Note: These numbers are based on true E85 content. Ethanol blends can vary.

Considerations: Greater fuel supply demands - Higher flow fuel pump and larger injectors.



Boost, Static Compression and Octane



Note: The premium pump gas and E-85 Intercooled boost and compression ratios shown above are based on a conventional pushrod, LS, SBC & BBC based engines. Modern technologies such as variable cams, direct injection, knock sensors, etc. allow for even greater boost pressures and advanced timing at higher static compression than the numbers shown.

ProCharger Bellmouth

The bellmouth cross-sectional area is designed to allow the maximum amount of air to be drawn into the compressor with the minimum of turbulence and pressure drop. For this reason, you will commonly see a ProCharger bellmouth on applications where maximum performance and efficiency is paramount.



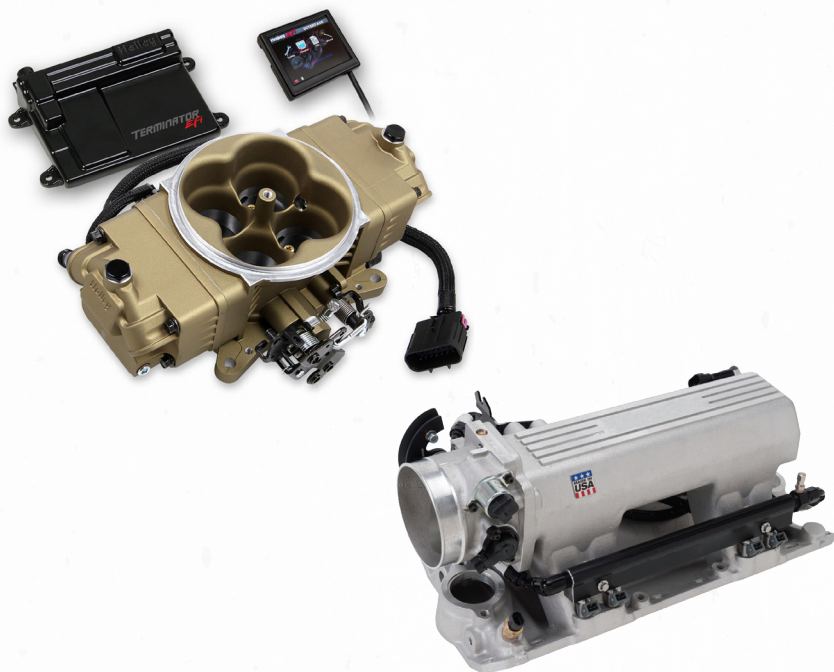


INDUCTION & FUEL SYSTEMS

EFI APPLICATIONS

Benefits of Fuel Injection When Supercharging

For many years now the method preferred by OEM's has been electronic fuel injection, as it offers the best drivability 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 references 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.



Considerations For EFI Component Selection

With forced induction, you want to select the proper injectors, fuel pump, and sensors, so the software provided with your EFI system can be configured for your particular engine combination. Once the EFI system is configured, a ProCharger carb hat 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. Although 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 drivability and optimal fuel economy.

O2 Sensor

Another consideration is the decision as to which type of O2 sensor will be used. Although 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).

Injector Size

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. When selecting your injector size, be sure to consider the approximate fuel flow (in lbs/hr) for the boost levels you plan to run, 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. Most 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 drivability, as the injector may not be pulsed long enough to develop an ideal spray pattern at low engine RPM's.

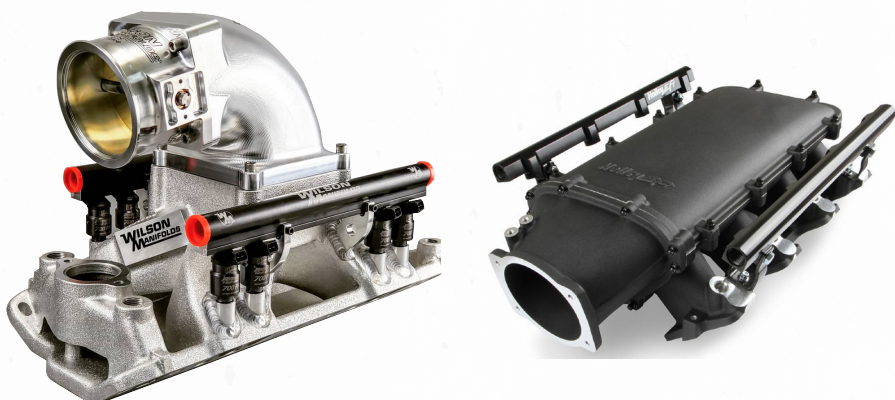


MAP Sensor

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 MAP (Manifold Absolute Pressure) type sensor and configuring the software to accommodate this new bit of 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.

Fuel Pressure Regulator Bypass

All engines rely on a consistent delivery of fuel into the engine, so the fuel pressure must be controlled relative to the boost level. This can be achieved in an EFI system through the use of 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.



Effect of Forced Induction on Fuel System

Considerations for Selecting a Fuel Pump

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 ProCharger, most fuel pumps' performance will drop off significantly at higher pressures.



INDUCTION & FUEL SYSTEMS

BLOW-THROUGH CARBURETED APPLICATIONS

Benefits of Carburetor Fuel Systems

Although 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 2,500 HP. The key benefit of using a carburetor, as opposed to EFI, is the charge cooling effect that 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.”

Carburetor Operation 101

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 venturis, and a steady supply of fuel entering the float bowl. This is the case for any carbureted application, naturally aspirated or supercharged. A carburetor with mechanically operated secondaries (not vacuum) must be used for these blow through applications.

Fuel Pressure Consideration

To achieve a consistent delivery of fuel into the engine, fuel pressure must be controlled relative to the boost level on carbureted applications making 600 HP or less, it is important to use a pressure reference line connected to a mechanical fuel pump. Doing so will allow the fuel pressure to rise as the boost level rises.

The Carburetor Hat

Automotive applications benefit from the performance and serviceability offered by a properly configured carburetor “hat”. Pressurizing the bowls and guiding the air into the venturi are quite simple. The float bowls on a Holley “double pumper” are referenced to the carburetor air entry at the bowl vents. Once the carb 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 hat also controls the movement of incoming air and allows it to enter the venturi in a direct, controlled fashion.





ProCharger Carb Hat Options

ProCharger offers different carb hat 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 hat and the carburetor, and in some cases supplementary float bowl vent installation. Lower horsepower applications with minimal hood clearance will benefit from the use of our low profile hat, which extends only 2" above the carburetor's air filter mounting flange.



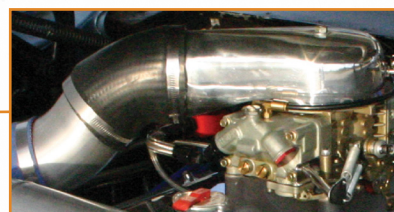
Competition - 4500
Height: 5.5"
Inlet: 5"
Black/Polish



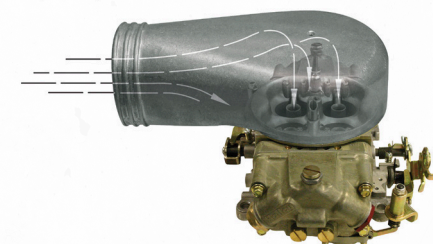
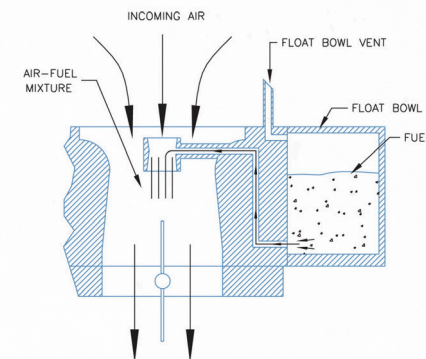
Competition - 4150
Height: 4.5"
Inlet: 3.5"
Black/Polish/Satin



Standard - 4150
Height: 2.75"
Inlet 3.5"
Black/Polish/Satin



Low Profile - 4150
Height: 2.00"
Inlet 3"
Black/Polish/Satin



Carb Hat Design

Although an "ideal" carb hat configuration would have the air entering vertically from several inches above the mouth of the carburetor, hood clearance issues often don't permit it. Our carb hat designs allow 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. Some other hat designs deliver inconsistent results when placed in various positions, but our design assures that proper bowl pressures are maintained, providing consistent performance on ProCharged, carbureted applications.

COOLER IS BETTER

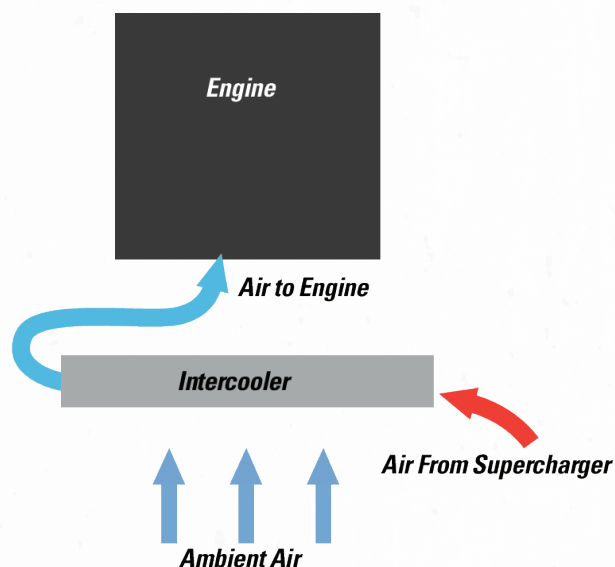
TECHNOLOGY ADVANTAGE

Thermal Advantages

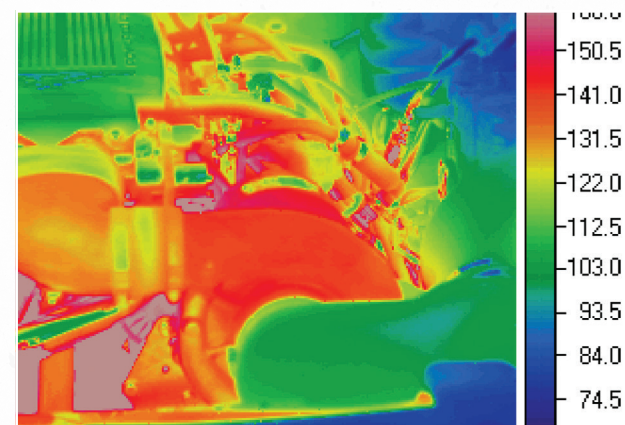
It's really quite simple: cooler air is more dense. Denser air is able to produce more power. If your goal is to produce maximum reliable power, then you want the coolest charge air temperatures possible. When it comes to producing consistent and reliable power, heat is the ultimate enemy. With other forced induction designs, excess heat not only reduces power gains on your first pull, it produces power fade that further reduces power and performance as the engine heats up.

These images illustrate the thermal advantages of a ProCharger supercharger system when compared with a turbocharger and positive displacement blower. By their very design, centrifugal superchargers are more efficient compressors and create less heat during their operation. Additionally, ProCharger superchargers are mounted in front of the engine which is a much cooler environment than on top of the engine or if plumbed into the engine's exhaust.

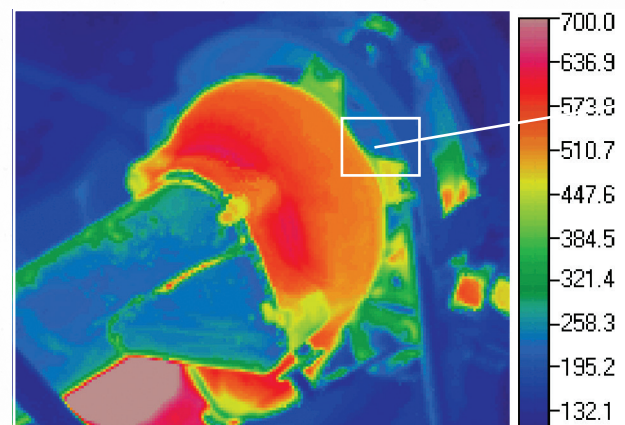
Turbochargers require hot engine exhaust to compress air. The result is a very hot turbine and turbine housing which transfers heat to the compressor. Turbochargers also create high exhaust gas temperatures and back pressure, causing additional heat build up in exhaust manifolds, cylinder heads and valves.



Positive-displacement (PD) blowers are typically located directly on top of the engine or deep between the cylinder heads. Because they are attached to or surrounded by hot engine components, this is an extremely hot environment. Now add the heat created by their lower-efficiency compressors and you end up with a hot compressor producing hot, compressed air. The location of a PD blower necessitates the use of a complex intercooling system which is also located in a hot and heat-soaked environment. Heat is the enemy of consistent and reliable power in general, but especially on direct injection engines, which experience substantial power fade when exposed to excess heat.

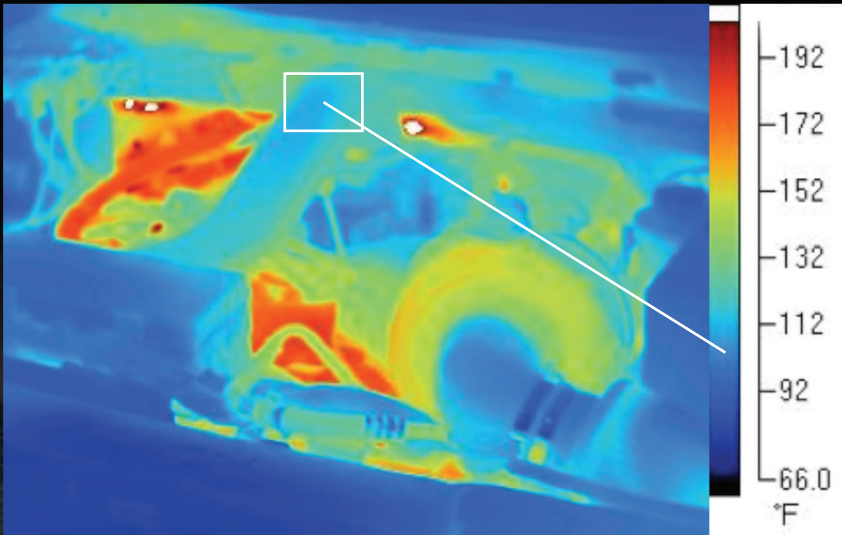


Other centrifugal, non-intercooled, 9 psi

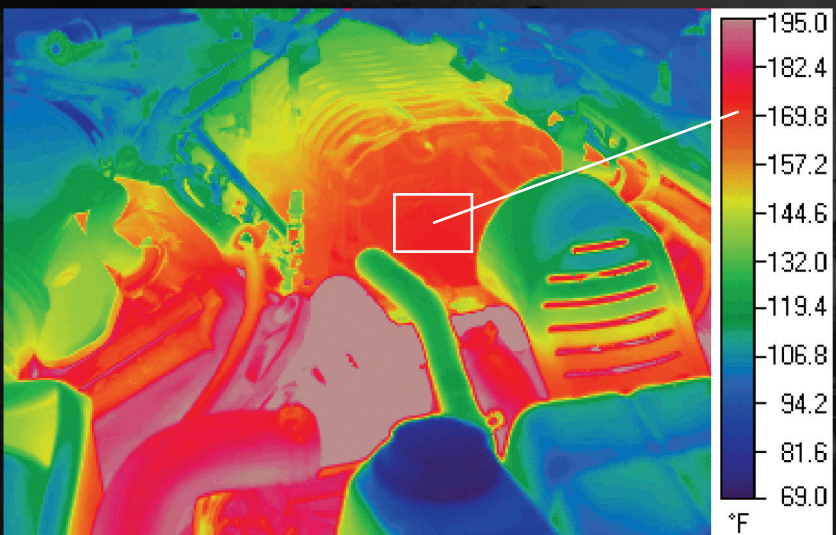


Turbocharger

"Any time that you compress air, like with a supercharger, that creates heat, and heat is the enemy of horsepower. An air-to-air intercooler takes that hot blast of air and cools it down. This [Intercooled ProCharger system] will give you a **65% increase in power**. That's more than any other supercharger on the market." – *"Trucks!" TV*



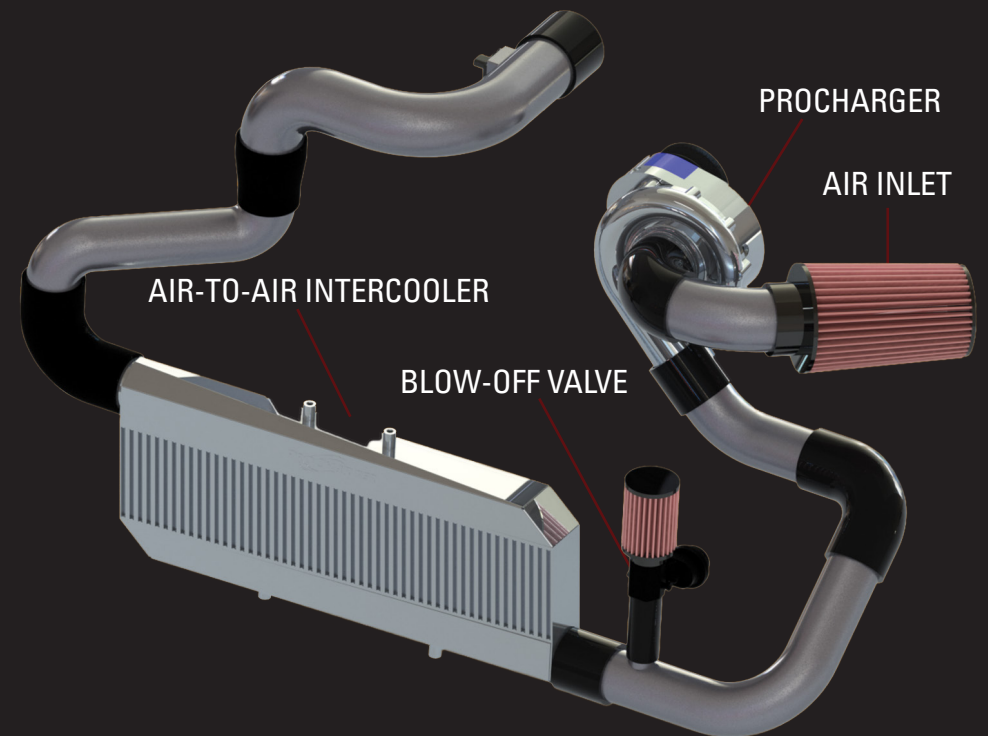
Intercooled ProCharger, 8 psi



Positive displacement w/ air-to-water-to-air intercooler, 8 psi

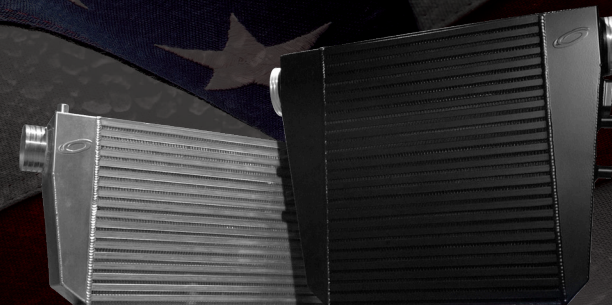
Ease of Installation

ProCharger's supercharger mounting location provides a quick, simple installation, with no engine disassembly, unlike positive displacement blowers. The simplicity of air-to-air intercooling, especially with the space available in your engine compartment, further simplifies installation. Typical installation time for a ProCharger kit is approximately 6-8 hours, vs. 10-12 hours for intercooled positive displacement and 12-20 hours for intercooled turbo kits.



INTERCOOLED SUPERIORITY

THE FUNDAMENTAL SOLUTION



Intercooled Supercharger Kits

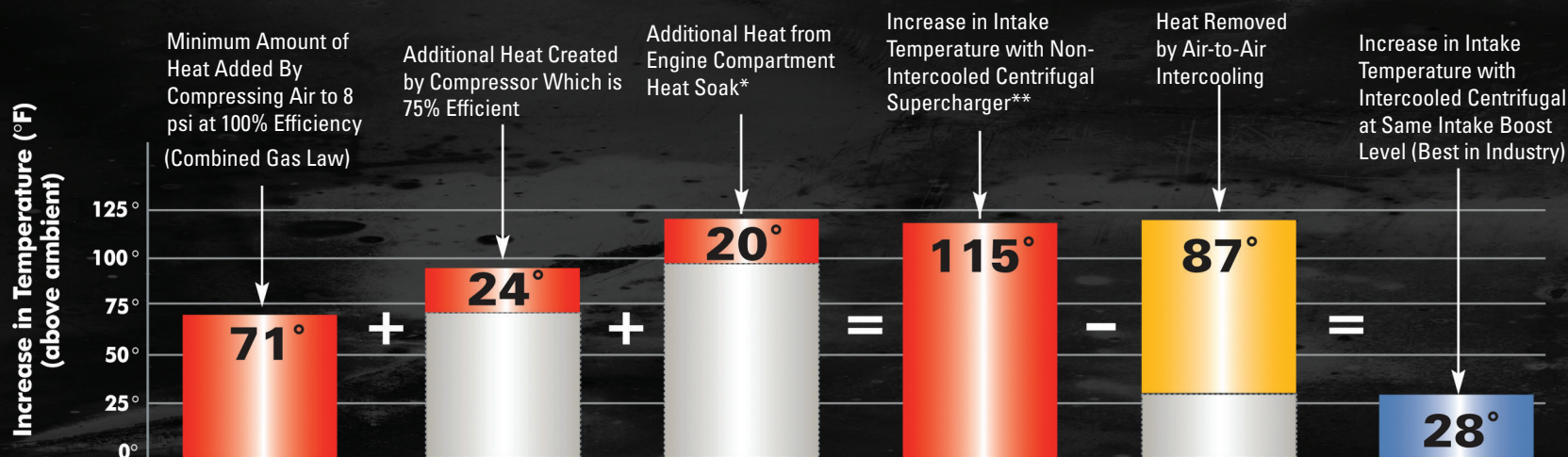
A centrifugal supercharger used alone is a potent power adder. When coupled with an intercooler it becomes a power multiplier! Among the many benefits of an intercooler is its ability to be purchased up front or added to your ProCharger in the future. Using an intercooler allows you to generate even greater power gains without increasing octane levels. While a centrifugal supercharger's reduced discharge temperatures allow it to outperform a roots supercharger, 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

Intercooler Dimensions

The upstream fuel has already done part of the intercooler's job. Often, 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 frequently 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

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!

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. ProCharger has a full line of intercoolers engineered for use in centrifugally supercharged applications. When using an intercooler system, a surge/blow-off 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.



"When space permits an adequately sized air-to-air intercooler to be fitted and given access to decent airflow, it will always prove superior."
–"SuperCharged", Corky Bell



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.

AIR-TO-AIR INTERCOOLERS

Part #	End Tank Type	In/Out Location	In/Out DIA.	Max HP	Core Width	Height	Depth
A1002A-001	Sheet Metal	Opposite Sides	3"	500	18	12.5	3
A1FP1A-004	Sheet Metal	Opposite Sides	3"	500	18	12.5	3.5
A1FP1A-001	Sheet Metal	Opposite Sides	3"	650	24	12.5	3.5
A1003A-001	Sheet Metal	Opposite Sides	3"	825	27	12.5	3
A1003A-002	Sheet Metal	Opposite Sides	3"	950	27	15	3
A1DD1A-071	Sheet Metal	Opposite Sides	3"	1000	24	20	3
A1003A-005	Sheet Metal	Opposite Sides	3.5"	1050	27	15	3
A1045A-001	Sheet Metal	Opposite Sides	3.5"	1300	27	12	4.5
A1006A-001	Sheet Metal	Opposite Sides	4"	1550	27	12	6
A1UK1A-002	Sheet Metal	Opposite Sides Cross Flow	3"	475	18	11	3
A1FR1A-010	Sheet Metal	Opposite Sides Cross Flow	3"	650	29	12	3.5
A1GN2A-011	Sheet Metal	Opposite Sides Cross Flow	3"	800	29	12	4.5
A1FW1A-035	Sheet Metal	Opposite Sides Cross Flow	3.5"	1200	20	17.5	4.5
A1GU1A-001	Sheet Metal	Front, Cross Flow	3"	1000	34	9	4.5
A1DD1A-015	Sheet Metal	Top/Side	3"	750	24	17	3
A1GO3A-001	Sheet Metal	Top/Side	3"	1050	27	13	3.5
A1GO3A-003	Sheet Metal	Top/Side	3.5"	1300	27	12	4.5
A1GO3A-004	Sheet Metal	Top/Side	3.5/4"	1300	27	12	4.5
A1002A-003	Sheet Metal	Same Side	3"	500	18	12.5	3
A1GN1A-001	Sheet Metal	Same Side	3"	600	18	12.5	3.5
A1003A-003	Sheet Metal	Same Side	3"	825	27	12.5	3
A1003A-004	Sheet Metal	Same Side	3"	950	27	15	3
A1DG1A-073	Sheet Metal	Same Side	3"	1000	24	20	3
A1003A-006	Sheet Metal	Same Side	3.5"	1050	27	15	3
A1045A-002	Sheet Metal	Same Side	3.5"	1300	27	15	4.5
A1006A-002	Sheet Metal	Same Side	4"	1550	27	12	6

AIR-TO-AIR TWIN INTERCOOLERS

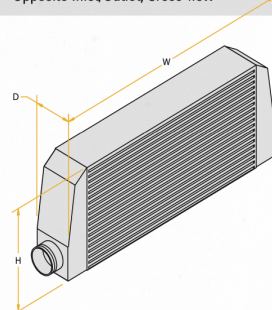
Part #	End Tank Type	In/Out Location	In/Out DIA.	Max HP	Width	Height	Depth
A1GB1A-XXX	Twin Sheet Metal	Opposite Sides	2"	500 Per Pair	9	10.5	3
A1GA1A-XXX	Twin Sheet Metal	Opposite Sides	2.5"	750 Per Pair	9	11	3.5
A1GK1A-XXX	Twin Sheet Metal	Front/Side	3"	850 Per Pair	9	11	4.5

AIR-TO-WATER INTERCOOLERS

Part #	End Tank Type	In/Out Location	In/Out DIA.	Max HP	Width	Height	Depth
A1GU1I-123	Sheet Metal/Billet	Same Side	3.5"	1500	12.5	10	12
W11005A-003	Sheet Metal	Same Side	3.5"	1500	13	11	9
W11005A-001	Sheet Metal	Same Side	4"	1800	9	13	19
W11005A-002	Sheet Metal	Same Side	4"	2400	13	13	23

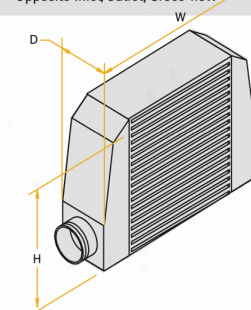
AIR-TO-AIR S/M

Opposite Inlet/Outlet, Cross-flow



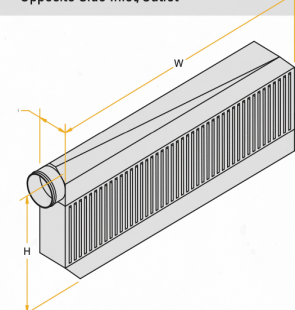
AIR-TO-AIR S/M

Opposite Inlet/Outlet, Cross-flow



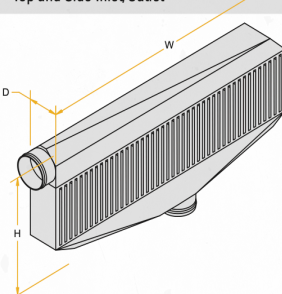
AIR-TO-AIR S/M

Opposite Side Inlet/Outlet



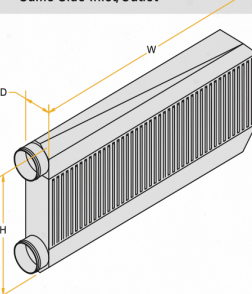
AIR-TO-AIR S/M

Top and Side Inlet/Outlet



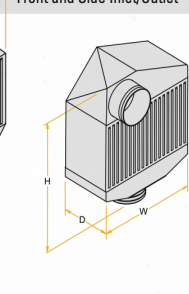
AIR-TO-AIR S/M

Same Side Inlet/Outlet



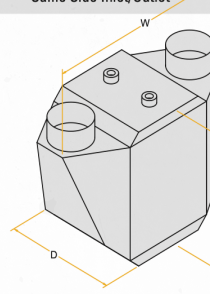
AIR-TO-AIR TWIN

Front and Side Inlet/Outlet



AIR-TO-WATER

Same Side Inlet/Outlet



Scan to learn
more on Air-to-Air,
Air-to Air Twin,
and Air-to-Water
Intercoolers






LEADERSHIP THROUGH INNOVATION

ENGINEERED QUALITY AND PERFORMANCE



Fundamental Advantage

ProCharger has many advantages which help support cutting-edge innovation, precise engineering, quality manufacturing, unsurpassed performance, and best in class service. Here are just a few of those advantages:

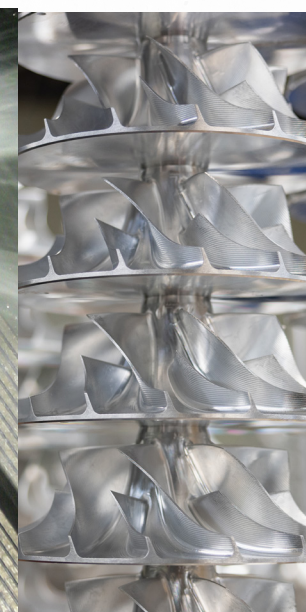
-  ProCharger designs and manufactures its own supercharger systems, unlike some competitors who buy superchargers and components elsewhere and are really only assembling kits. This helps ensure that ProCharger delivers a high quality, high performance product designed specifically for your needs.
-  ProCharger resources lead the industry, including best-in-class aerodynamic design capabilities, and an unmatched commitment to testing (test lab, chassis and engine dynos, industry's largest test fleet). No other aftermarket company is even close to ProCharger's ability to rapidly design, prototype and test new compressor models.
-  ProCharger's entire staff and large dealer network is composed of automotive enthusiasts who share your passion for high performance. These advantages, together with over 30 years of experience, help to explain why ProCharger leads the supercharging industry in patents, documented performance gains, and racing.

Exclusive Billet Impellers

Using state-of-the-art, five-axis CNC machines, ProCharger's proprietary impeller designs are crafted from aircraft-grade 7075 T-6 aluminum alloy for tremendous strength and performance. This top-tier material allows for larger impellers that weigh less, are free of the flaws found in typical cast impellers, and reliably produce more power. Additionally, the precision bearings used in ProCharger superchargers are of consistently higher-quality and carry higher load ratings than those used by others.

Billet Gear Cases

ProCharger designs and manufactures all supercharger gear cases from high-quality billet for superior quality, durability, sealing and appearance. This helps to support higher boost level and superior overall performance relative to other superchargers, as well as improved performance. Billet gear cases cost more than castings, but are representative of ProCharger's commitment to quality and high performance. Billet is also utilized for brackets, crank pulleys and most other components.

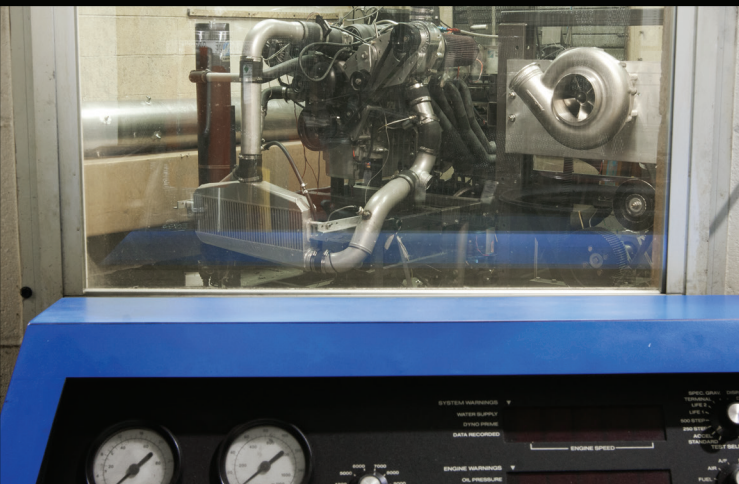




Test lab, building #2 of ProCharger campus



Chassis dyno (1 of 2), building #3



Engine dynos, building #1



Aerodynamic test station, (1 of 6) in lab, building #2



BUILDING THE POWER

INVENTED, ENGINEERED, AND MADE IN THE USA

"ProCharger takes pride in this kit being designed and manufactured in the U.S. of A."

— GM High-Tech Performance

Made in America

ProCharger products are of the highest quality, with proven reliability, and possess the most sophisticated engineering. To meet these standards, we make nearly all products in-house which ensures the industry's best availability.

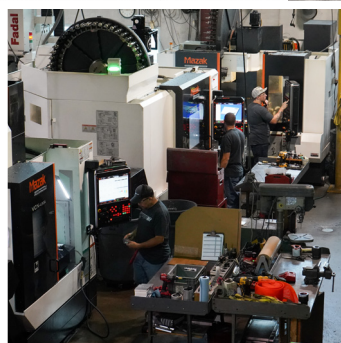
Raw metal arrives at our factories regularly, most commonly aluminum 7075 and 6061-T6. They are processed by our machine shop using high precision CNC machines into compressor wheels, gearboxes, brackets, and more. Our intercooler cores are welded by hand by our highly-skilled fabricators. We aren't dependent on other vendors to do this work for us, so we can easily flex production up or down, based on demand. Parts are inspected by our quality control team using precision measuring equipment to guarantee the parts match the design.

Each ProCharger system and kit comes equipped with a blower, typically an intercooler, a supercharger bracket assembly, tubing, clamps, and all other parts needed to make the installation process straightforward. Given our vast amount of part numbers, our shipping crew have a meticulous process in place to ensure all packages contain the proper components. Each evening, shipping companies collect our bounty of boxes, which find their way to your door within a few days.

State-of-the-Art Test Facility

ProCharger's aerodynamics test lab utilizes state-of-the-art equipment and multiple test cells to ensure that ProCharger superchargers are the best available. With the industry's largest and most capable test lab, ProCharger engineers simultaneously perform aerodynamic, gear case, and long-term durability testing.

A hallmark of the company's success has been a thorough understanding of engine dynamics and customer usage on the street, off road, and at the track. Our testing in the lab, on the dyno, and on the pavement are all representative of real-world performance. Additionally, knowledge transferred from Inovair, Accessible Technology's industrial products division which features gear cases designed for nonstop 24/7 operation and compressor efficiencies exceeding 80%, now helps fuel further advances for ProCharger superchargers.



FOR WHATEVER MOVES YOU

STREET, STRIP, SAND & WATER... WE'VE GOT YOU COVERED

ProCharger is The **ULTIMATE** Power Adder®

ProCharger has products beyond muscle cars. From trucks to boats, modern muscle cars to motorcycles, professional drag race cars to amateur drift cars, chances are ProCharger has a supercharger solution for it. Give our sales team a call at (913) 338-2886, email sales@procharger.com, or visit ProCharger.com for more information.



"The real magic, of course, comes from the ProCharger centrifugal supercharger. Which specific blower model used depends on how fast you want to go." – HOT ROD Magazine

UNMATCHED POWER

WORD ON THE STREET



"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**

"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**

FIND A DEALER NEAR YOU

Dealers are experts at installing ProChargers, and with one of the largest dealer networks in the industry, there are dealers globally.

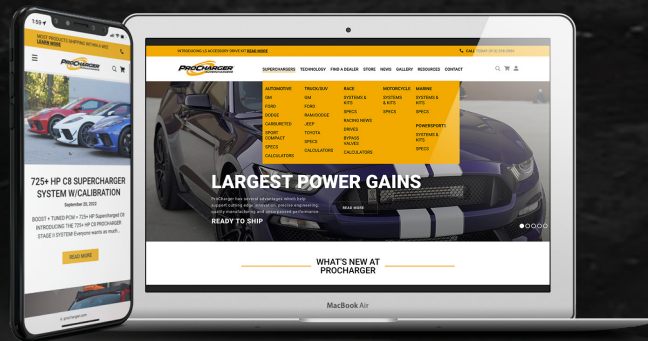


PROCHARGE YOUR LIFE

GET EQUIPPED, GET CONNECTED

ProCharger Online: Catalogs, Vehicle Gallery, Apparel, Parts and more!

Check out our website for more application-specific information about our complete line of supercharger systems. You'll find cool videos, installation manuals, and a vehicle gallery where you can add your own build! It also offers online, downloadable versions of our product catalogs. Show your ProCharger pride by purchasing from our large selection of ProCharger apparel and merchandise, including T-shirts, hats, license plate frames, and more. Stock up or upgrade ProCharger-related parts, like gauges, oil, and blow-off valves. Visit ProCharger.com.



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PROCHARGER STORE NOW!**





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THE ULTIMATE POWER ADDER®

All of us at ProCharger encourage you to use your newfound ProCharger power responsibly.
Please drive safely and be respectful of your fellow motorists. If you feel the need to race, don't do it on the street—take it to the track!

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