# WILSON ANIFOLDS









For nearly 30 years, Wilson Manifolds has consistently helped its customers to set records and win poles, races, and championships in all major categories of professional motorsports. Our customers have claimed titles in virtually every class and form of racing, including: NASCAR NEXTEL CUP, NASCAR Busch Series, NASCAR Busch North, NASCAR Craftsman Truck, NHRA Top Fuel & Funny Car, NHRA Pro Stock, ARCA Re-Max, SCCA Trans Am, NMRA Drag Radial, NMCA/NSCA Super Street, Fun Ford Pro 5.0 & Street Outlaw, Western Late Model, Off Road Trucks, Super Boat LTD, and many others. Wilson Manifolds is probably best recognized for its competition prepared cast intake manifolds that have been used for many years by top teams and engine builders including; John Force Racing, Joe Gibbs Racing, Dale Earnhardt Inc., Robert Yates Racing, Richard Childress Racing, Evernham Motorsports, TRD, Ege Racing Engines, Roush Racing, Hendrick Motorsports, Team Menard, Fischer Engineering, Gaerte Racing Engines, Huffaker Motorsports, Hutter Racing Engines, Tesar Engineering, Rhyne Competition Engines, Roberts Racing Engines, Salina Engines, Cornett Engines, Custom Racing

Tesar Engineering, Rhyne Competition Engines, Roberts Racing Engines, Salina Engines, Cornett Engines, Custom Racing Engines and more.

In recent years, Wilson Manifolds' custom designed billet runner tunnel ram style manifolds have also become the standard in drag racing, being run by many of the top professional teams including: Ashley Force's Top Alcohol Dragster, Dingman Racing/Wilson Manifolds IHRA Pro Stock, and KB Racing's NHRA Pro Stock cars driven by Jason Line and Multi Time Champion Greg Anderson. We transfer the technology learned through working with these top teams to all of our custom designed manifolds. Our Simultaneous 5-axis Machining technology and fully staffed engineering department assure that every manifold is properly designed for each application and is perfectly matched from cylinder to cylinder. We also provide manifolds for all racing applications including: NASCAR, ARCA, IRL, NHRA, IHRA, NMRA, NMCA/NSCA, PRO Street Car Series, IMCA, UDTRA, NJBA, IHBA, APBA, SCORE, SCCA Trans-Am, Sport Compact, and many more. Lincoln Electric, Comp Cams, and Air Turbine Tools have sought out Wilson Manifolds to form business alliances that allow for the transfer of technology within their respective areas of expertise. Wilson Manifolds also provides design and

for the transfer of technology within their respective areas of expertise. Wilson Manifolds also provides design and consulting services to the major automotive manufacturers and other top companies in racing as well as to the research labs at the University of Miami and the University of Central Florida. In years past, Wilson Manifolds has also been contracted to design performance and racing manifolds for Dart, Edelbrock Corporation, and Comp Cams/FAST. Countless requests have driven Wilson Manifolds to continually expand its manufacturing capabilities and distribution network to make our professional racing products available to the public. This allows the weekend racer to receive the same technology & attention to detail that our NASCAR NEXTEL CUP & NHRA Professional teams have come to expect.

When you buy Wilson Manifolds/Nitrous Pro-Flow products, there is no compromise in engineering or manufacturing. This means that you will receive the highest quality and most reliable components available anywhere. When you run Wilson Manifolds/Nitrous Pro Flow products, we're on your team. Our goal is to provide our customers with the best possible customer service and technical support available for all of our products. Find out how Wilson Manifolds can help you win! Just call one of our dealers or call us directly to talk with one of our experts regarding your specific application and goals.













# **Intake Manifolds**

#### **CNC PORTED INTAKE MANIFOLDS**

Independent dyno tests have shown as much as a 24hp increase over a stock Edelbrock manifold.

Wilson Manifolds CNC ported Edelbrock Victor intakes offer the racer a cost-effective option for a competition prepared manifold. These manifolds feature CNC blended port matched runners, recontoured dividers, roof line and plenum area. The intake flanges are also machined to correct casting variations and to optimize runner machining. Wilson Manifolds CNC porting employs the same technology used in our fully ported intakes to improve the most critical areas of the intake manifold for out of the box performance. All programs are developed using our state of the art solid modeling software and machined on our precision 5-axis CNC machining center.

Part No. Description

128070 #2907 Big Block Chevy CNC Port

Matched Intake To The

Edelbrock/Chapman Victor CNC

Head #7765 and Fel-Pro Gasket #1275

128250

#2925 Small Block Chevy CNC

Port Matched To 1206 Fel-Pro Gasket Opening

#2927 Big Block Chevy CNC Port 129170

Matched Intake To The Edelbrock/Chapman Victor CNC

Head #7765 and Fel-Pro Gasket

#1275





Improved Flow & Distribution

Port Matched



#### RELATED PRODUCTS

- Distributor Hold Down Thermostat Housing
- Carburetor Spacers Carburetor Gaskets & Studs
- Intake Bolts

TECH TIP - Add up to 30 HP by bolting on a 4 Hole Tapered Spacer.





# LSX Intake Manifolds & Accessories

#### LSX MANIFOLD

For high performance and racing LS1/LS6/LS2 engines, Wilson Manifolds stocks both 78mm & 90mm FAST™ LSX™ Manifolds as well as our line of LSX™ performance components, including 78mm & 90mm Billet Throttle Bodies, Ultra High Volume Fuel Rail Kits, and Burst Panel Kits. In the design of the LSX™ Manifold, FAST™ assembled a team of experts in manifold design and manufacturing, including Wilson Manifolds, as the performance designer. The goal was to design the finest new manifold ever built. We developed a unique three-piece design that allows you access to every inch of the manifold. The middle and upper shells can be changed to allow for additional engine modifications. Runners can be match ported. The manifold also includes witness grooves to indicate how much material can safely be removed. We also engineered in unparalleled performance. Now you don't have to sacrifice low

material can sately be removed. We also engineered in unparalleled performance. Now you don't have to sacrifice low end torque to gain horsepower!

To make the LSX<sup>™</sup> a true bolt on product, it is made to fit under a stock hood and uses all factory hardware, fuel lines and linkages. However, the runners were redesigned to increase velocity and volume of airflow by moving air more efficiently. The LSX<sup>™</sup> longer, tapered runners allow it to gain top end horsepower without sacrificing low-end torque. With 25% more plenum volume, each runner is allowed to draw from less turbulent air. As the air enters the runners at the bell mouth, the angles

are redesigned for better runner inlet transition. The throttle body is specially angled for improved plenum flow. For all of these reasons, you can expect up to 20 more bolt on horsepower and 15 more foot-pounds of torque.

Part No.

Description

#### LSX THROTTLE BODIES

Wilson Manifolds High Flow Throttle Bodies were developed using the latest computer modeling software and test equipment available to produce designs that yield the maximum flow per square inch of cross-sectional area. This results in maximum power for any given throttle body size. These throttle bodies feature brass throttle blades to control vibration and reduce thermal expansion. Throttle blades are fastened to the throttle shaft using aircraft quality hardware that is both Loctited and peened to assure positive retention of the blades. Throttle shafts are machined to decrease their cross-sectional area, which increases the actual cross-section available for airflow. All throttle bodies are machined from billet 6061-T6 aluminum on precision CNC machining centers for consistent quality and light weight. We also now offer a throttle-by-wire version of our popular 90mm LS1/LS6 design, which allows a 90mm throttle body to be installed on a late model Corvette when using the 90mm LSX™ intake manifold.

#### LSX FUEL RAIL KITS

We custom designed our Wilson Manifolds Ultra High Volume Fuel Rails with an 11/16" ID to feed the highest horsepower applications imagineable. This large ID allows for optimized cylinder to cylinder fuel distribution for more power and reliability, particularly on highly modified engine combinations. Our fuel rails are made of a high quality extruded aircraft quality aluminum and can be machined for any application on your intake or one supplied by us. We also stock CNC machined versions ready to bolt on for specific applications including LS1, LS6, LSX, LS2 and late model Mustangs. Un-machined fuel rails are also available for customer installation. We also stock all of the necessary fittings and lines for any installation.

#### LSX BURST PANEL KIT

These LSX burst panel kits are used to vent excessive pressure from the manifold in the event of a backfire through the intake system due to an ignition or fuel system malfunction. By relieving this pressure, damage to the manifold and throttle body can be prevented in most cases. The kit includes 2 burst panels and 2 retention rings as well as the necessary mounting hardware.

154001	LSX Intake Manifold for the 78mm or Stock Throttle Body	
154003	LSX Intake Manifold for the 90mm Throttle Body	
332211	LSX Burst Panel Replacement (Qty 1)	
332212	LSX Burst Panel Replacement (Qty 2)	
333212	LSX Burst Panel Kit (Qty 2)	
422031	LSX Fuel Rail Kit (Purple)	
474078	LSX Throttle Body 78mm	
474090	LSX Throttle Body 90mm	
470090	LSX 90mm Throttle By Wire Throttle Body	
154014	LSX Hardware Kit	
154022	LSX Inner Seal	
423030	LS1, LS6, LSX Stanchion Set	
840200	LSX Gasket Set – Port Side (set of 8)	
422051	LS1, LS6, LSX High Pressure Fuel Rail & Stanchion Set	



**LSX Burst Panels** 



### Billet Bank Intake Manifolds

#### **BILLET BANK INTAKE MANIFOLD**

Wilson Manifolds has applied the same technology used in our one-off custom designed billet bank sheet metal racing manifolds to our new line of Limited Production Billet Bank Sheet Metal Manifolds. By producing these select manifolds on a limited production basis, we are able to provide a much more affordable manifold that fits the most popular cylinder heads and produces excellent overall performance in many high performance and racing applications, particularly with larger displacement and/or high RPM engines. They also look great on street rods and show cars and are designed to fit under stock hoods. These manifolds are ready to bolt on out of the box and are designed to accept Wilson Manifolds high flow throttle bodies and ultra high flow fuel rails as well as Nitrous Pro Flow direct port nitrous systems and manifold pressure relief valves. These designs were developed using our state of the art solid modeling software, and each manifold's cylinder banks (flanges and runners with integral injector bosses, stanchions, and direct port nozzle bosses) are machined from billet 6061-T6 aluminum on our simultaneous 5-axis CNC machining center. Each manifold is then precision fixtured and heli-arc welded for a perfect fit and maximum structural integrity. This production method allows for optimum runner to runner and manifold to manifold consistency in terms of both geometry and performance.

Part No. Description 210001 LS1, LS6 and

LS1, LS6 and LS2 Billet Bank Manifold





# **LSON** Tapered Spacers

Wilson Manifolds' Carburetor Spacers have been used by more pole, race, and championship winning teams than any other brand in the world.

Our Spacers have been developed through years of testing with the top race teams in nearly all forms of motorsports. Wilson Manifolds offers the largest selection of spacer designs and heights in the industry. This assures that we have a spacer design for virtually all classes of racing that will provide optimum power and distribution. Our precision machining centers allow us to produce the lightest spacer available while still maintaining a high level of structural integrity. This design also reduces the cross-sectional area available for conduction heat transfer from the intake manifold to the carburetor. All Wilson Manifolds spacers, including our tapered spacers, are CNC machined from billet 6061 aluminum for strength, light weight, quality and durability. After machining, a military specification hard coat is applied to each spacer that will not wear off, is scratch resistant, is not affected by alcohol and eliminates corrosion.



#### **TAPERED SPACERS**

Wilson Manifolds Tapered Spacers feature a computer generated variable radius taper design that maximizes the airflow through the carburetor and enhances air/fuel distribution for more horsepower. Part throttle performance and distribution are improved by redirecting the flow pattern created by the partially open throttle blades and gradually reducing the velocity of the air/fuel mixture entering the plenum to allow for a smoother transition into each runner; full throttle performance is improved by increased flow. Our Tapered spacers can increase flow through the carburetor/throttle body by as much as 110 CFM. Wilson Manifolds tapered spacers will increase torque, horsepower and acceleration throughout the entire RPM range. We offer the most complete line of 4-Hole Tapered spacers in 390, 4150, 4500, Q-Jet & 2bbl adapters to provide the high performance consumer with the ability to tune their engine for the maximum performance for any application. Wilson Manifolds is the only manufacturer to offer a choice of tapered spacer heights and produces the only fully CNC machined billet tapered spacer on the market. Wilson Manifolds Tapered spacers will benefit any vehicle that operates under both part and full throttle conditions such as bracket racing using a throttle stop, drag racing, circle track, road racing, off shore power boats, street/strip engines and towing vehicles.

- Up to 30+ Bolt On Horsepower
- Improves Throttle Response
- Improves Distribution
- Increases Signal To The Carburetor
- Increases Flow Through The Carburetor / Throttle Body
- Oval, Drag, Street, Marine & Towing
- Works Through The Entire RPM Range
- Light Weight Design
- Over 30 Years Experience Making Tapered Spacers
- Alcohol Compatible

Part No.	Description
014210	1.00" Tapered Light Weight 390 (1.55" Bore)
004110	1.00" Tapered Light Weight 4150
004130	1.50" Tapered Light Weight 4150
004150	2.00" Tapered Light Weight 4150
064115	Engine Builder Tapered Spacer Kit 4150 (004110, 004130 & 004150)
024110	1.00" Tapered Light Weight 4500 - Will fit Dart & Brodix Cloverleaf Plenum
024130	1.50" Tapered Light Weight 4500
044111	1.00" Tapered 2300 2bbl-4150 4bbl Adapter
044330	1.50" Tapered Light Weight 2300 2bbl-4150 4bbl Adapter
074330	1.50" Tapered 2300 2bbl Sideways Mounted Adapter 90 deg.
074110	1.00" Tapered Quadrajet/Spread Bore



<u>WARNING:</u> Non metallic spacers have been known to become brittle & break apart due to heat and/or fuel exposure. This is not an issue with Wilson Manifolds Billet Spacers.





### **Compound Angle Tapered & Open Spacers**

#### **COMPOUND ANGLE TAPERED SPACER**

Incorporates the same attributes of the standard 4 Hole Tapered spacer, but additionally, this spacer incorporates a compound angle mounting surface which angles the carburetor down in the front and down to the driver side for applications such as Dirt Late Model racing wherein the chassis is set up to maximize traction by keeping the driver side front corner up as high as possible. This spacer allows the carburetor to sit level to keep the jets submerged and to prevent fuel slosh into the engine & loss of power when the chassis and engine are not level.

Part No. Description

003150 2.00" Compound Angle Tapered Spacer 4150







Wilson Manifolds open spacers have become the standard in NASCAR NEXTEL Cup racing, but are for use in any application where a top quality light-weight billet spacer is desired. Open spacers increase plenum volume and move the throttle blades away from the roof of the runners, allowing the air/fuel mixture to turn more easily into the runners for improved distribution and mixture quality. Open spacers will add mid range and top end hp. Wilson Manifolds is the only manufacturer to produce open spacers in thicknesses from 1" to 2" in 1/8" increments for 4150 carburetors for precise tuning and for applications where hood clearance is at a premium. The engine builder spacer kit includes all nine open spacers (4150) in 1/8" increments and is a must have for any dyno room and

- Adds mid & top end power
- Increase plenum volume
- Allows the air/fuel mixture to turn more easily into the runners by moving the carburetor up away from the runner roofline
- Improved distribution and mixture quality
- · Will add mid range and top end hp
- 1" to 2" Heights in 1/8" increments for 4150 carburetors
- Wilson Manifolds is the only manufacturer that offers multiple heights for 4500 carburetors
- 4150 spacers are designed to pass NASCAR **No-Go Gauges**

#### RELATED PRODUCTS

COMPOUND ANGLE TAPERED SPACER • Two Stud Kits required • Gaskets OPEN SPACERS • Stud Kit • Gaskets

TECH TIP - COMPOUND ANGLE TAPERED SPACER • Set float level with bowls removed - Do not rely on sight window.

OPEN SPACERS • Torque curve can be shifted by varying spacer heights - Taller for High RPM. Shorter for Low RPM



ı	Part No.	Description
ı	000010*	1.00" Open Light Weight 4150
ı	000060*	1.125" Open Light Weight 4150
ı	000020*	1.25" Open Light Weight 4150
ı	000070*	1.375" Open Light Weight 4150
ı	000030*	1.50" Open Light Weight 4150
ı	000080*	1.625" Open Light Weight 4150
ı	000040*	1.75" Open Light Weight 4150
ı	000090*	1.875" Open Light Weight 4150
ı	000050*	2.00" Open Light Weight 4150
ı	060015	Engine Builder Light Weight 4150 Spacer Kit
ı		(9 spacers) Hard Coat
ı	020010	1.00" Open Light Weight 4500
ı	020020	1.25" Open Light Weight 4500
ı	020030	1.50" Open Light Weight 4500
ı	020040	1.75" Open Light Weight 4500
ı	020050	2.00" Open Light Weight 4500
ı	050001	1.00" Open Quadrajet / Spread Bore
ı	*These spa	acers are NASCAR NEXTEL Cup & Super Truck leg
I	<ul><li>Passes</li></ul>	NASCAR NoGo Gauge.



# Adapters & Combo Spacers



#### **ADAPTERS**

Wilson Manifolds carburetor adapters maximize horsepower in applications where the carburetor and intake manifold were not originally designed to be used together. The internal shape of the adapters were designed on solid modeling software that allows the transition to be made in the most efficient manner possible to prevent mixture separation and improve overall air flow and distribution.

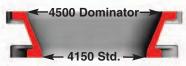
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Part No.	Description
027030	1.50" 4500 Carb to 4150 Manifold Adapter
303206	Burst Panel Spacer 1.50" 4500 to 4150 Adapter
007030	1.50" 4150 Carb to 4500 Manifold Adapter
041111	1.00" Straight Hole 2300 2bbl to 4150 Adapter
044111	1.00" Tapered Light Weight 2300 2bbl to 4150 4bbl Adapter
044330	1.50" Tapered Light Weight 2300 2bbl to 4150 4bbl Adapter
074330	1.50" Tapered 2300 2bbl Sideways Mounted Adapter 90 deg.
050020*	1.25" Quadrajet/Spread Bore To 4150
* Carburet	or Moved Forward .300" For Improved Distribution
087001	LSX 90mm Throttle Body to 90mm Elbow Adapter

Lightweight billet design



Shorter than competitors Adapters

#### 4500 to 4150 Adapter



#### **COMBO SPACERS**



Combo spacers combine the features of a 4-hole spacer and an open spacer into one unit. The top half of the spacer is 4-hole design and the bottom half is an open plenum design. The 4 hole portion of the combo design improves part throttle performance by redirecting the flow pattern created by the partially open throttle blades while the open portion increases plenum volume and moves the carburetor base away from the roof line of the intake runners for improved distribution and top end horsepower.

Part No.	Description
002140	1.75" Combo Spacer Light Weight 4150
002150	2.00" Combo Spacer Light Weight 4150
022120	1.25" Combo Spacer Light Weight 4500
022140	1.75" Combo Spacer Light Weight 4500

#### RELATED PRODUCTS

• Stud Kit • Gaskets

TECH TIP

COMBO SPACERS • This design works well in applications where intake reversion is a concern.





# 4 Hole & SE Series Open Spacers





4-Hole spacers help build low and mid range torque and are particularly useful in applications that require a great deal of part throttle operation. The 4-Hole design improves part throttle performance by redirecting the flow pattern created by the partially open throttle blades. 4-hole carburetor spacers are fully CNC machined from billet 6061 aluminum for durability and light weight. Due to NASCAR rules, BUSCH, Modified, and Re-Max All Pro spacers do not have the hard coating. Also available is a straight bore 2bbl adapter for use in rules restricted classes.

Part No.	Description
011211**	1 00" 4 Holo 1

 011211\*\*
 1.00" 4 Hole 1.550" bore (390) No Light Weight /No Hard Coat

 011311\*\*
 1.00" 4 Hole 1.680" bore (750) No Light Weight /No Hard Coat

 011111\*\*
 1.00" 4 Hole 1.750" bore (850) No Light Weight /No Hard Coat

 04111
 1.00" Straight Hole 2300 2bbl to 4150 Adapter

 021120
 1.25" 4 Hole 2.00" bore (4500) Dominator Light Weight w/Hard Coat

\*\*These spacers are NASCAR Busch, NASCAR Modified & Re-Max All Pro Series legal.

#### SE SERIES OPEN SPACERS

For the price conscious racer looking for a top quality billet aluminum carb spacer, Wilson Manifolds now offers SE series open spacers. Open spacers increase plenum volume and move the throttle blades away from the roof of the runners, allowing the air/fuel mixture to turn more easily into the runners for improved distribution and mixture quality. Open spacers typically add mid range and top end hp. This line of Wilson Manifolds carburetor spacers is 100% CNC machined from billet 6061 Aluminum and features dowel pin provisions for precision locating of the spacer to the manifold if desired.

Part No.	Description
000001	.500" SE Open 4150
000011	1.000" SE Open 4150
000031	1.500" SE Open 4150
000051	2.000" SE Open 4150
020001	.500" SE Open 4500
020011	1.000" SE Open 4500
020031	1.500" SE Open 4500
020051	2.000" SE Open 4500



RELATED PRODUCTS

• Stud Kit • Gaskets

TECH TIP - 4 HOLE SPACERS



#### SHEAR PLATES

Wilson Manifolds shear plates are designed to maximize performance of engines using tunnel ram style manifolds. They incorporate a 5-degree taper in the bore to improve flow and feature a specifically sized anti-reversion groove machined into the bottom of the plate to help turn back reversion pulses. The extended portions of the plate also block reverse flow and help to atomize fuel, reducing puddling in the manifold. This design helps improve signal to the carburetor and flatten the fuel curve. These plates are precision machined from billet aluminum and are anodized purple for durability and corrosion resistance. All shear plates measure 1/2" thick from manifold mounting surface to carb mounting surface and are available for 4150 carbs. as well as 4500 and Split Dominator.

Part No.	Description
525200	2.000" Bore Shear Plate 4500
525210	2.100" Bore Shear Plate 4500
525215	2.150" Bore Shear Plate 4500
525220	2.200" Bore Shear Plate 4500
525300	2.000" Bore Split Shear Plate 4500
525310	2.100" Bore Split Shear Plate 4500
525315	2.150" Bore Split Shear Plate 4500
525320	2.200" Bore Split Shear Plate 4500
505175	1.750" Bore Split Shear Plate 4150

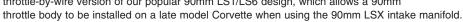


TECH TIP - Reduce reversion, improve signal to the carburetor & increase flow by using shear plates on tunnel ram style intakes.



#### THROTTLE BODIES

Wilson Manifolds High Flow Throttle Bodies were developed using the latest computer modeling software and test equipment available to produce designs that yield the maximum flow per square inch of cross-sectional area. This results in maximum power for any given throttle body type and size. Four barrel style throttle bodies are designed to work with our line of billet spacers and incorporate a tapered and radiused throttle bore and precisely machined progressive linkage for smooth throttle operation. They also feature inward opening throttle blades to eliminate any part throttle directional influence by the blades that can cause poor air distribution. We have also redesigned our Dominator style throttle bodies to incorporate improved throttle linkage and to significantly reduce overall mass. All throttle bodies feature brass throttle blades to control vibration and reduce thermal expansion Throttle blades are fastened to the throttle shaft using aircraft quality hardware that is both Loctited and peened to assure positive retention of the blades. Throttle shafts are machined to decrease their cross-sectional area, which increases the actual cross-section available for airflow. All throttle bodies are machined from billet 6061-T6 aluminum on precision CNC machining centers for consistent quality and light weight. High flow throttle bodies are available in 4500 and 4150 four-barrel styles as well as many single bore sizes in Ford style. We also now offer a throttle-by-wire version of our popular 90mm LS1/LS6 design, which allows a 90mm





470090 LSX 90mm Throttle By Wire Throttle Body Flow data collected at 1.5" Hg pressure drop on Super-Flow 1020 Bench

\*Meets the 11 inch cross-section rule

\*\*Will fit spacers but not 4-hole or 4-hole tapers







#### **RELATED PRODUCTS**

• Tapered Spacer • Carburetor Stud Kit • Carburetor Gasket TECH TIP - Add up to 110 CFM to 4bbl throttle body by adding a tapered spacer

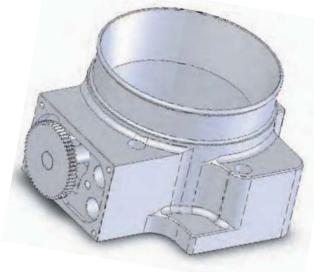


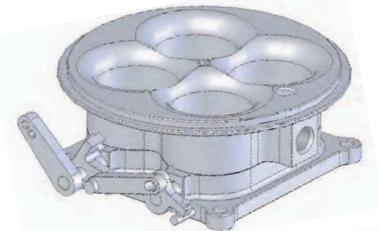
# **Throttle Bodies**

#### **THROTTLE BODY ACCESSORY COMPONENTS**

Wilson Manifolds offers all of the high quality accessory components to complete your High Flow Throttle Body installation including: Throttle Position Sensors, Idle Air Control Valves and Block-off Plates, IAC Adapter Housings, Throttle Body Adapters and Elbows to allow mixing of throttle body and manifold types.

Part No.	Description
087001	LSX 90mm Throttle Body to 90mm Elbow Adapter Plate
452003	LS1/LS6 TPS
452102	LS1/LS6 IAC
481001	Adapter Housing for GM IAC on Single Bore Throttle Body
481002	IAC Block-off Plate - Fits single bore throttle bodies where IAC
	is not used
481003	Ford Style TPS (Throttle Position Sensor) - Used on 4 barrel
	style throttle bodies and all single bore except LS1, LS6, LSX.
	Available with GM or Ford Style connector ends.
481004	Adapter Housing for LS1, LS6 IAC on Single Bore
	Throttle Body
485002	GM Style IAC (Idle Air Control) - Can be used on 4 barrel style
	throttle bodies and on single bore with adapter housing
	(P/N 481001)









# High Flow Elbows & Fuel Injectors

#### **HIGH FLOW ELBOWS**

Wilson Manifolds lightweight 100-degree elbows provide the most efficient method of adapting our high flow single bore throttle bodies to 4-barrel style intake manifolds. This allows the use of a high performance intake manifold with a large diameter single bore fuel injection throttle body. These elbows incorporate a computer-optimized transition from the throttle body to the intake manifold plenum for maximum flow and optimum air flow distribution. Each elbow is CNC machined to match each end of the elbow precisely to it's intended mating size. Commonly used for turbo & blower applications. Available for 90mm or 105mm throttle bodies mated with 4150 or 4500 series manifolds.





Part No.	Description
461101	Standard Elbow 60-90mm 4150
461102	Standard Elbow 60-90mm Sideways 4150
461201	Standard Elbow 60-90mm 4500
462101	Standard Elbow 90-105mm
462102	Standard Elbow 90-105mm Sideways 4150
462201	Standard Elbow 90-105mm 4500
461103	Custom Ported Elbow (90mm or 105mm)
087001	LSX 90mm Throttle Body to 90mm Elbow Adapter

#### HIGH PERFORMANCE FUEL INJECTORS

Wilson Manifolds electronic fuel injectors are produced by the leading manufacturers in the automotive industry for optimized performance and durability. These injectors increase horsepower and efficiency by producing a spray pattern conducive to complete fuel atomization. We offer a wide range of injector sizes to cover many different applications.

See the chart below for recommended Injector sizing for your application.

Part No.	Description	*Maximum Horsepower
411030	30 lb/hr	375 hp
411036	36 lb/hr	450 hp
411042	42 lb/hr	525 hp
412055	55 lb/hr	700 hp
411065	65 lb/hr	825 hp
412083	83 lb/hr	1050 hp
413095	95 lb/hr	1200 hp
411160	160 lb/hr	2025 hp
* Accumo	80% duty cycl	a and naturally agnirated VR angir

\* Assumes 80% duty cycle and naturally aspirated V8 engine. Power adders typically require greater fuel delivery per horsepower (higher BSFC), and therefore, require larger injectors.

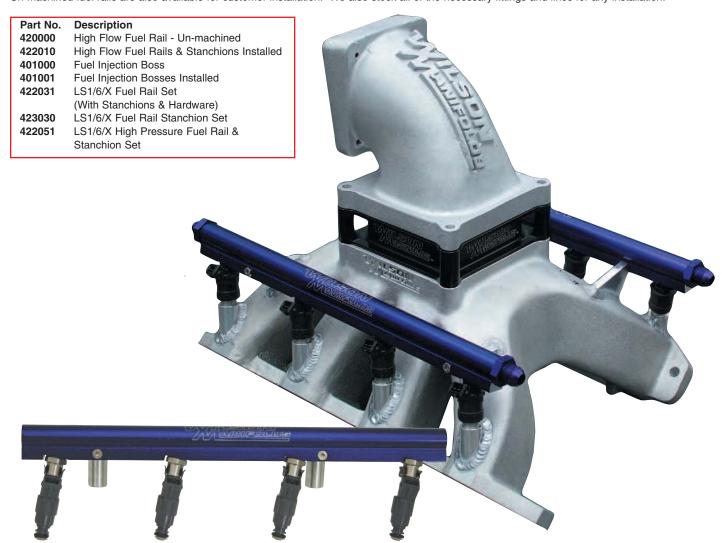




# High Flow Fuel Rails

#### **HIGH FLOW FUEL RAILS**

We custom designed our Wilson Manifolds Ultra High Volume Fuel Rails with an 11/16" ID to feed the highest horsepower applications imagineable. This large ID allows for optimized cylinder to cylinder fuel distribution for more power and reliability, particularly on highly modified engine combinations. Our fuel rails are made of a high quality extruded aircraft quality aluminum and can be machined for any application on your intake or one supplied by us. We also stock CNC machined versions ready to bolt on for specific applications including LS1/6/X, LS2/7, and late model Mustangs. Un-machined fuel rails are also available for customer installation. We also stock all of the necessary fittings and lines for any installation.



#### FUEL INJECTION CONVERSION SERVICE

Fuel Injection conversions are a specialty of Wilson Manifolds. We are able to supply a manifold assembly, which includes the throttle body, adapter elbow (where needed), manifold, fuel rails, and all necessary fittings to install the system in your vehicle. Our experience, machining capability, and welding technology assure that our customers achieve maximum performance and reliability from their fuel injection system. We install fuel injector bosses and fabricate custom ultra high volume fuel rails for many of the top engine builders and manufacturers in the country. Injector location and direction are precisely set according to our years of experience in the conversion of intake manifolds for use with fuel injection. Secure fuel rail mounting is provided by robust Heli-Arc Welded stanchions. Call for technical assistance and pricing.

#### RELATED PRODUCTS

HIGH FLOW FUEL RAILS • Throttle Body • Fuel Pump • Fuel Lines • Fittings TECH TIP - HIGH FLOW FUEL RAILS

Use our large diameter fuel rails to dampen pulses within the fuel rails and to improve fuel distribution to the injectors. Can be tapped to #8 straight thread without drilling.



### **Nitrous Pro-Flow**

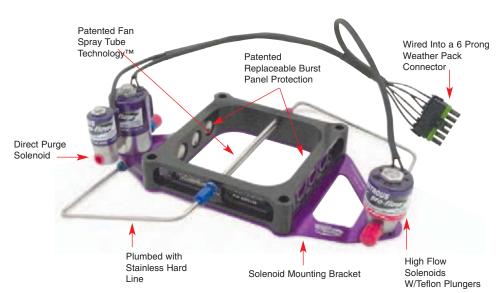
Nitrous Pro-Flow, a Division of Wilson Manifolds, has prepared race winning nitrous systems in NHRA, IHRA, IHRA, IHRA, NMCA/NSCA, NMRA, PRO, Fun Ford, Sport Compact, NJBA, IHBA and others. Nitrous Pro-Flow is known and respected by race teams for designing state of the art nitrous systems using the finest components available in terms of overall engineering, craftsmanship, durability, and particularly performance. The Patented Nitrous Pro-Flow plate system was developed to cure the most common problems associated with nitrous oxide injection systems. Systems currently offered by other companies have consistently failed to provide even fuel and nitrous oxide distribution from cylinder to cylinder. Providing even distribution is the only way to optimize the efficiency of the combustion process for each cylinder of the engine. To solve this problem, Nitrous Pro-Flow developed Patented "Fan Spray Tube Technology" That provides far superior distribution of the fuel and nitrous oxide as compared to any other nitrous plate delivery system on the market.

Nitrous Pro-Flow is the only company that has addressed the problem of backfires through the intake system, which may occur in the event of an ignition or fuel system failure. These small explosions through the intake system often result in damage to the intake manifold and carburetor, which can be very costly and end a racer's weekend. The Nitrous Pro-Flow plate system incorporates Patented replaceable burst panels into the spacer body, which blow out in the event of such a backfire and relieve the pressure that causes damage to manifolds and carburetors. By simply replacing the set of burst panels, a racer can be back on track in a matter of minutes, enabling him to make the next round.

We set out to build the best products possible using the latest technology, engineering, machining techniques, materials & racing experience. We have applied this philosophy to all of our nitrous related products such as Solenoid Mounting Brackets, Distribution Blocks, Nitrous Filters, Bottle Valves, and Nozzles. There are many new products to come as we continue our research and development in this area. Let our experience and commitment to quality & performance help you win races.



360 Degree Patented Spray Pattern



- Completely Assembled & Wired
- Easy To Install
- Easy To Tune
- Easy To Maintain
- Improved Performance
- Improved Consistency
- Improved Reliability
- Purge Included





### Single Stage Assembled Systems

#### SINGLE STAGE ASSEMBLED SYSTEMS

Patented Nitrous Pro Flow assembled plate systems produce more horsepower and provide better reliability than any other system on the market. These assembled systems provide the cleanest & easiest method of installing a nitrous system. Nitrous Pro Flow assembled systems are the standard in the industry for state of the art nitrous systems.

At the heart of the system is the Patented Nitrous Pro-Flow plate with its exclusive stainless steel spray bars incorporating "Fan Spray Tube Technology" TM, and burst panel protection. The Fan Spray Pattern created by progressively angled orifices evenly covers the full 360 degrees of the intake plenum to insure equal distribution and to eliminate corner cylinder lean out. Burst panels provide protection to the carburetor/throttle body in the event of a fuel system or ignition system failure. The plate itself is fully CNC machined from 6061-T6 Aluminum and is hard coated for durability and corrosion resistance. Systems are assembled using our high flow fuel solenoids, high flow nitrous solenoids, nitrous purge solenoid, patent pending solenoid mounting bracket, and stainless hard lines from the solenoids to the plate. The uniquely designed plate inlet fittings and hard line plumbing significantly enhance metering capabilities by eliminating expansions in the system that can cause a phase change in the nitrous oxide. The nitrous oxide is purged directly from the nitrous solenoid body. This allows the solenoid bowl to be completely filled with liquid nitrous, allowing the liquid to reach the plate faster. Completely plumbed and wired into 6 prong weather pack connectors. Each system is individually flow tested after assembly to insure quality and consistency. Stainless steel jet pack and supporting weather pack connectors are included along with detailed installation and operating instructions. Complete your system with a 10lb or 15lb Completion Kit (available separately).





#### Single Stage Systems

	SINGLE STAGE SYSTEMS 50-250HP	
Part No.	Description	
309006	NPF 50-250hp No Burst Panels 4150	
309106	NPF 50-250hp W/Burst Panels 4150	
309346	NPF 50-250hp No Burst Panels 4500	
309446	NPF 50-250hp W/Burst Panels 4500	
309606	NPF 50-250hp W/Burst Panels 4500 to 4150 Adapter	
	SINGLE STAGE SYSTEMS 175-350HP	
Part No.	Description	
309000	NPF 175-350hp No Burst Panels 4150	
309100	NPF 175-350hp W/Burst Panels 4150	
309340	NPF 175-350hp No Burst Panels 4500	
000440	NDE 475 050L M/D + D + 4500	
309440	NPF 175-350hp W/Burst Panels 4500	

#### **Single Stage Cross Bar Systems**

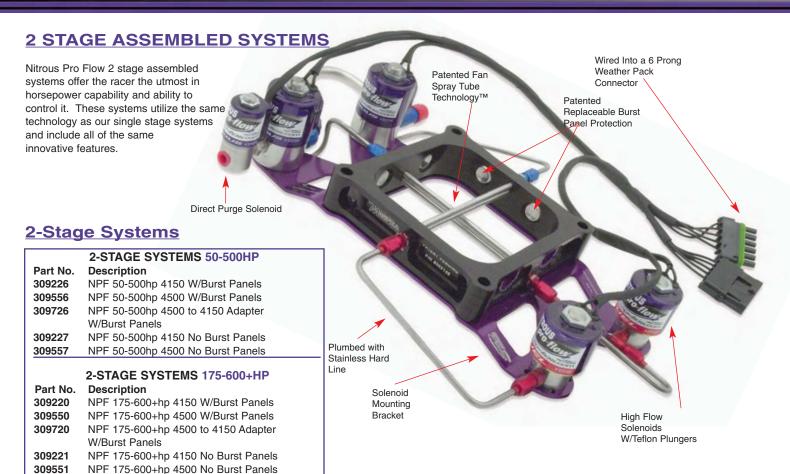
SINGLE STAGE CROSS BAR SYSTEMS		
100-500HP		
Part No. Description		
<b>309206</b> NPF 100-500hp W/Burst Panels 4150		
309536 NPF 100-500hp W/Burst Panels 4500		
<b>309706</b> NPF 100-500hp W/Burst Panels 4500 to 4150 Adapter		
<b>309207</b> NPF 100-500hp No Burst Panels 4150		
309547 NPF 100-500hp No Burst Panels 4500		
000011	The second the Datest and the second	
300011	SINGLE STAGE CROSS BAR SYSTEMS	
	SINGLE STAGE CROSS BAR SYSTEMS 350-600+HP	
Part No.	SINGLE STAGE CROSS BAR SYSTEMS	
	SINGLE STAGE CROSS BAR SYSTEMS 350-600+HP	
Part No.	SINGLE STAGE CROSS BAR SYSTEMS 350-600+HP Description	

#### RELATED PRODUCTS

- WOT Switch Nitrous Control Unit Replacement Burst Panels Burst Panel Tool Nitrous & Fuel Pressure Gauge
- Bottle Heater Spark Plug Light Stud Kits Fuel Pumps Spark Plug Holder



# 2-Stage Assembled & In-Line Plate Systems



#### 2 STAGE IN-LINE PLATE SYSTEMS

The Nitrous Pro-Flow 2 Stage Inline Bar Systems were developed for use in traction-limited applications. The plate used in these systems incorporates four stainless steel spray bars with the same "Fan Spray Tube Technology™" used in all of our nitrous plates. In this configuration, the spray bars are arranged in line instead of in a cross-bar arrangement.

This allows the power level between the spray bar sets to be staggered (less horsepower on launch) while maintaining excellent distribution characteristics. The upper bars are used for the first stage and are adjustable from 50-250hp.

The lower bars are used as the second stage and are adjustable from 175-350hp.

2-STAGE SYSTEMS 50-600HP

#### 2-Stage In-Line Plate Systems

	2 GIAGE GIGIEMO 30 300III	
Part No.	Description	
309822*	NPF 50-600hp 4150 W/Burst Panels	
309823*	NPF 50-600hp 4150 No Burst Panels	
309952*	NPF 50-600hp 4500 W/Burst Panels	
309953*	NPF 50-600hp 4500 No Burst Panels	
*All inline plates are 1.50" thick		



#### RELATED PRODUCTS - 2 STAGE ASSEMBLED SYSTEMS

- WOT Switch Nitrous Control Unit Replacement Burst Panels Burst Panel Tool
- Nitrous & Fuel Pressure Gauge Bottle Heater Spark Plug Light Fuel Pumps
- Spark Plug Holder

TECH TIP - 2 STAGE ASSEMBLED SYSTEMS

Nitrous Pro Flow assembled systems offer the type of performance and distribution previously available only with a direct port system, but in an economical, easy to install, and easy to tune package.



# Single & 2 Stage Plates



#### NITROUS PRO-FLOW PLATES (Single Stage)

Nitrous Pro Flow Plates feature our patented "Fan Spray Tube Technology™" with individually angled orifices to cover 360 degrees of the plenum for optimum distribution characteristics. Improved distribution equals more power, consistency and reliability. Nitrous Pro Flow stainless steel spray tubes improve consistency because they will not wear or change flow or spray pattern like soft brass tubes can. Single stage plates are available with or without our patented burst panels. Burst panels will vent pressure between 75-90 psi. to help prevent carburetor and/or manifold damage due to a fuel or ignition system failure. Spacer portion of the plates are precision machined from billet aluminum with a military spec hard coat for durability and corrosion resistance. Each plate is individually flow tested to insure quality and consistency. Plates are available in 4150, 4500, 4500 to 4150, and Quadrajet / Spread Bore configurations. Plates without burst panels are most commonly used for limited hood clearance applications.





#### SINGLE STAGE PLATES 50-250HP

Part No.	Description
300030	NPF Plate 50-250hp 4150 No Burst Panels .750" Thick
300130	NPF Plate 50-250hp 4500 No Burst Panels .750" Thick
302036	NPF Plate 50-250hp 4150 W/Burst Panels 1.25" Thick
302136	NPF Plate 50-250hp 4500 W/Burst Panels 1.25" Thick
303236	NPF Plate 50-250hp 4500 to 4150 Adapter W/Burst Panels 1.50" Thick
300330	NPF Plate 50-250hp Quadrajet /Spread Bore .750" Thick No Burst Panels
300090	NPF Plate 50-250hp 4150 No Burst Panels .750" Thick Tunnel Ram Applications
300190	NPF Plate 50-250hp 4500 No Burst Panels .750" Thick Tunnel Ram Applications

#### SINGLE STAGE PLATES 175-350HP

Part No.	Description
300020	NPF Plate 175-350hp 4150 No Burst Panels .750" Thick
300120	NPF Plate 175-350hp 4500 No Burst Panels .750" Thick
302026	NPF Plate 175-350hp 4150 W/Burst Panels 1.25" Thick
302126	NPF Plate 175-350hp 4500 W/Burst Panels 1.25" Thick
303226	NPF Plate 175-350hp 4500 to 4150 Adapter W/Burst Panels 1.50" Thick

#### **2-Stage Cross Bar Plates**

	2-STAGE CROSS BAR PLATES 50-500HP
Part No. Description	
302056	NPF Plate 50-500hp 4150 W/Burst Panels 1.25" Thick
302156	NPF Plate 50-500hp 4500 W/Burst Panels 1.25" Thick
303256	NPF Plate 50-500hp 4500 to 4150 Adapter W/Burst Panels 1.50" Thick
302050	NPF Plate 50-500hp 4150 1.25" Thick No Burst Panels
302150	NPF Plate 50-500hp 4500 1.25" Thick No Burst Panels
	2-STAGE CROSS BAR PLATES 175-600+HP
Part No.	Description
302046	NPF Plate 175-600+hp 4150 W/Burst Panels 1.25" Thick
302146	NPF Plate 175-600+hp 4500 W/Burst Panels 1.25" Thick
303246	NPF Plate 175-600+hp 4500 to 4150 Adapter W/Burst Panels 1.50" Thick
302040	NPF Plate 175-600+hp 4150 1.25" Thick No Burst Panels
302140	NPF Plate 175-600+hp 4500 1.25" Thick No Burst Panels





<sup>•</sup> Bottle Heater • Spark Plug Light & Holder • Burst Panels • Nitrous Jets • Filter / Adapter • Nitrous Bottles • Gaskets • Studs





# 2-Stage Inline Plates & Burst Panel Spacers

#### 2-STAGE IN-LINE PLATES

The Nitrous Pro-Flow 2 Stage Inline Bar Plates were developed for use in traction-limited applications. These plates incorporate four stainless steel spray bars with the same "Fan Spray Tube Technology<sup>TM</sup>" used in all of our nitrous plates. In this configuration, the spray bars are arranged in line instead of in a cross-bar arrangement. This allows the power level between the spray bar sets to be staggered (less horsepower on launch) while maintaining excellent distribution characteristics. The upper bars are used for the first stage and are adjustable from 50-250hp. The lower bars are used as the second stage and are adjustable from 175-350hp.

#### 2-STAGE INLINE PLATES 50-600HP

Part No. Description

303076\* NPF 50-600hp 4150 W/Burst Panels 303070\* NPF 50-600hp 4150 No Burst 303176\* NPF 50-600hp 4500 W/Burst Panels 303170\* NPF 50-600hp 4500 No Burst

\*All inline plates are 1.50" thick



#### **BURST PANEL SPACERS**

Nitrous Pro Flow burst panel spacers serve two distinct functions. These spacers provide the benefits of an open carburetor spacer, but also incorporate our patented replaceable burst panels that will vent pressure between 75-90 psi. for backfire protection with direct port & plate type nitrous systems. Use of this spacer is the only way to meet the requirement by IHRA and other sanctioning bodies for burst panel protection when using a direct port type nitrous system on a cast intake manifold. These light weight spacers are precision machined from billet aluminum with a military spec hard coat for durability and corrosion resistance. Can be used with existing nitrous plate systems. Burst panels are easily replaced within minutes so you can make the next round.



Part No.	Description
302006	Burst Panel Spacer 4150
302106	Burst Panel Spacer 4500
303206	Burst Panel Spacer 4500 to 4150
332006	Replacement burst panel set for Nitrous Pro Flow Plates (Qty. 6)
901001	Burst Panel Tool - Aluminum Hex Tool With Relieved Ends
	To Protect the Precisely Stamped Burst Panels During Installation.
331110	Replacement Retention Ring for Nitrous Pro Flow Plates



#### RELATED PRODUCTS

- WOT Switch Nitrous Control Unit Replacement Burst Panels Burst Panel Tool Nitrous & Fuel Pressure Gauge
- Bottle Heater Spark Plug Light Stud Kits Fuel Pumps Spark Plug Holder

TECH TIP - BURST PANEL SPACERS

In the event of any backfire, all 6 burst panels should be replaced as it is impossible to tell if the burst panel has been stressed by the backfire pressure, changing the relief characteristics of the burst panel.



# Direct Port Systems

#### **DIRECT PORT SYSTEMS (Kits Only)**

Nitrous Pro Flow direct port systems offer maximum horsepower capability. At the heart of these systems is the Nitrous Pro Flow V-Force nozzle, providing optimized mixture quality and balanced cylinder to cylinder distribution. Included in these systems are our Equalizer™ Distribution Blocks, which provide the best possible distribution of nitrous and fuel while maximizing flow and preventing a phase change in the nitrous oxide. Also included in our systems are high flow fuel solenoids, high flow nitrous solenoids, nitrous purge solenoid, and stainless steel hard lines. Single stage systems offer 50-500+hp while 2 stage systems are capable of 100-1000+hp.

Part No.	Description	
308301	4 Cyl Pro Flow Direct Port 50-250hp	
308501	6 Cyl Pro Flow Direct Port 75-350hp	
308101	V-8 Pro Flow Single Stage Direct Port System 150-500+hp	
308111	V-8 Pro Flow Direct Port Bottom Out Nozzle System 150-500+hp	
308201	V-8 Pro Flow 2 Stage Direct Port System 150-1000hp	
308211	V-8 Pro Flow 2 Stage Direct Port Bottom Out Nozzle System 150-10	000hp



#### **INSTALLED DIRECT PORT SYSTEM KITS**

Nitrous Pro Flow's professionally installed Direct Port Systems offer maximum horsepower capability. When we install a Direct Port system on your manifold you are assured that every aspect of the system installation has been addressed including: Optimized nozzle placement and direction based on years of on track and flow bench testing; Custom bent stainless hard lines to provide the most efficient delivery of fuel and nitrous to the nozzles; Custom wiring to weather pack connectors for reliable and simple installation; and Individual flow testing of every system to assure that all fluid and electrical circuits are functioning to our standards. At the heart of the systems themselves is the Nitrous Pro Flow V-Force nozzle, providing optimized mixture quality and balanced cylinder to cylinder distribution. Included in these systems are our Equalizer™ Distribution Blocks, which provide the best possible



distribution of nitrous and fuel while maximizing flow and preventing a phase change in the nitrous oxide. Also included in our systems are high flow fuel solenoids, high flow nitrous solenoids, nitrous purge solenoid, and stainless steel hard lines. Single stage systems offer 50-500+hp while 2 stage systems are capable of 100-1000+hp.

Part No.	Description	
<b>308300</b> 4 Cyl Pro Flow Direct Port 50-250hp		
308500	6 Cyl Pro Flow Direct Port 75-350hp	
308100	V-8 Pro Flow Single Stage Direct Port System 150-500+hp	
308110	V-8 Pro Flow Direct Port Bottom Out Nozzle System 150-500+hp	
308200	V-8 Pro Flow 2 Stage Direct Port System 150-1000hp	
308210	V-8 Pro Flow 2 Stage Direct Port Bottom Out Nozzle System 150-1000hp	
(Call for o	Call for other options on direct port systems)	

#### RELATED PRODUCTS

• 10 lb or 15 lb Completion Kit



# Dry Nitrous Systems & Nitrous Control Units

#### DRY DIRECT PORT NITROUS SYSTEMS

Dry Direct Port systems introduce only nitrous oxide into the intake tract. Nitrous Pro Flow Dry Direct Port Systems are centered around our Conical Discharge Dry Nozzles and Equalizer™ Distribution Blocks. The combination of these components assures excellent mixture quality and optimized distribution. These characteristics provide maximum power and reliability. Also included in these kits are our high flow nitrous solenoids, nitrous purge solenoid, and stainless hard lines.

Part No.	Description	
308321	4 Cyl Dry Pro Flow Direct Port System 50-250hp	
308521	6 Cyl Dry Pro Flow Direct Port System 75-350hp	
308121	V-8 Dry Pro Flow Direct Port System 150-500hp	

#### INSTALLED DRY DIRECT KITS

Dry Direct Port Systems can be plumbed on your intake or on a custom prepared Wilson Manifold. All components are installed, plumbed, flow tested, and wired into a Weather Pack connector.

Part No.	Description	
308320	4 Cyl Dry Pro Flow Direct Port System 50-250hp	
308520	6 Cyl Dry Pro Flow Direct Port System 75-350hp	
308120	V-8 Dry Pro Flow Direct Port System 150-500hp	



#### NITROUS CONTROL UNITS

Nitrous Pro-Flow control units can power up to four stages of nitrous and a purge system with one unit. The unit requires only one power input from the battery and one ground and has inputs available for an arming switch, wide open throttle switch, and clutch switch or trans-brake interrupt. Positive and negative outputs from the unit are provided for timing retards. The unit also allows the steering wheel button to function as both the purge and a second stage activation that is programmable to activate with a single touch of the button or as a push and hold momentary type switch. The second stage may also be activated as a function of time with the addition of our Timer Delayed Activation Module and Delay Timer. The unit also features diagnostic LED's for all inputs and outputs for easy troubleshooting and is furnished with all necessary wiring and installation instructions. Available for use with both plate and direct port systems. Also available in alternate configurations upon request for various timing/delay controls. (Switches and Button are not included)



Part No.	Description	l
810000	810000 2 Stage Nitrous Control Unit – For Plate Systems	
810009	Timer Delay Activation Module	l
810010 Delay Timer		l
811000	70 Amp 2 Stage Nitrous Control Unit- For Direct Port Systems	l
811004	70 Amp 4-Stage Nitrous Control Unit	l
810012	2-Stage Delay Timer Cable	l
810013	1st Stage Delay Cable	l
810014	Dual Timer Delayed Activation Module	l





# **EFI Wet Systems**

#### **EFI WET SYSTEMS**

Nitrous Pro-Flow single nozzle wet systems are designed to maximize performance of fuel-injected applications. These 25-150hp systems incorporate our New V-Force 2<sup>™</sup> nozzle and Programmable TPS Activation System. The V-Force 2 nozzle was designed specifically for these upstream injected

applications to provide the best possible cylinder to cylinder distribution characteristics for maximum power and reliability. The Programmable TPS Activation System utilizes the vehicle's Throttle Position Sensor to properly activate the nitrous system at Wide Open Throttle only. Each application specific system also includes specifically sized lines, a custom solenoid mounting bracket, and customized installation instructions. Complete systems are available for '05 Mustang GT, GTO, Corvette, and Ford Focus. A universal kit is also available.

Part No.	Description	
308751	Universal Wet System Kit	
308760	Ford Focus Wet System	
308710	'05 Mustang Wet System	
308720	GTO Wet System	
308730	Corvette Wet System	



Universal Wet System





05 Mustang Wet System

#### RELATED PRODUCTS

- . 10 lb or 15 lb Completion Kit
- · Electric Bottle Warmer



### WOT Switches, TPS Activation System, Relay & Harness

#### **WIDE OPEN THROTTLE SWITCHES**



Nitrous Pro Flow's Wide Open Throttle bracket and switch assemblies ensure that the nitrous system is activated only at wide open throttle for safety and to prevent engine damage. Easily mounts to one carburetor stud and is adjustable to provide consistent nitrous activation. The bracket is constructed from precision laser cut aluminum and includes a 15-amp switch for reliable service.



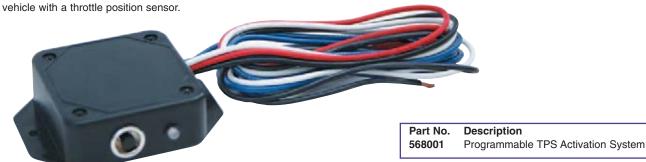
WOT Switch & Bracket King Demon

810011 WOT Switch only

732501

#### PROGRAMMABLE TPS ACTIVATION SYSTEMS

The Nitrous Pro Flow Programmable TPS Activation System allows the nitrous system to be activated at wide open throttle on fuel injected applications based on the output from the vehicle's throttle position sensor rather than a mechanical switch triggered by linkage. On throttle-by-wire applications, this is the only way to safely and reliably activate the nitrous system. This system is easily installed and programmed for use on virtually any vehicle with a throttle position sensor.



#### **RELAY & HARNESS**

30 amp relay recommended for wiring up all nitrous systems. Available with or without fused electrical harness.

Part No. Description

450030 30 amp Relay With Harness

451030 30 amp Relay

**RELATED PRODUCTS - WIDE OPEN THROTTLE SWITCHES** 

• 2 Stage Controller • Weather Pack Connectors • 30 Amp Relay W/Harness • Stud Kits

TECH TIP - WIDE OPEN THROTTLE SWITCHES

For Safety, Activate Nitrous Only At WOT & above 3500 RPM. Never power solenoids through a WOT micro switch or Hobb





### **Nozzles**

#### CONICAL DRY NOZZLETM

The Nitrous Pro Flow Conical Discharge Dry Nozzle™ is the first dry nozzle to promote expansion of nitrous in a conical patternupon exiting the nozzle to more completely fill the intake tract leading to better distribution from cylinder to cylinder. This nozzle design is available in 2024 Aluminum and Stainless Steel with a 1/16 NPT Thread.

Part No. Description

308021 Conical Discharge Dry Nozzle308021SS Stainless Conical Dry Nozzle



#### V-FORCE NOZZLETM

The design of the Nitrous Pro Flow Patent Pending V-Force Nozzle™ provides the most gradual and natural introduction of nitrous and fuel into the intake tract with an oval pattern completely filling the port rather than a disruptive fan or wedge pattern that may cause excessive fuel wash. This 90 degree Nozzle is CNC machined from 303 stainless to exacting tolerances. No more sifting through nozzles to find a matching set that are machined properly. These nozzles are built to the same quality you've come to expect from Wilson Manifolds and Nitrous Pro Flow. With stainless entry fittings instead of zinc-plated steel, there is no corrosion factor to worry about. The 1/16" NPT thread will make replacement of the former industry standard easy.

Part No. Description
308001 V-Force Nozzle™



#### **V-FORCE** 2 NOZZLE

The V-Force 2 nozzle is a version of our competition proven V-Force nozzle that was designed specifically for single nozzle wet nitrous systems used on fuel injected applications. This nozzle design generates optimized fuel and nitrous mixture quality in these upstream injected applications. This results in significantly improved cylinder to cylinder distribution for more power, easier tuning, and improved engine durability.

Part No. Description

308041 V-Force 2 Nozzle™



#### RELATED PRODUCTS

- Order Part #905010 for a 1/16" Pipe Tap
- Plumbing Solenoids



# Equalizer Distribution Blocks & Plumbing Kits

#### **EQUALIZER DISTRIBUTION BLOCKS**



Part No. Description

380000 Nitrous/Fuel Distribution Block Assembly 381000 Single Block Assembly For 4 Cylinder Our Equalizer™ Distribution Blocks provide up to 75% better distribution and a 35% improvement in flow over other brands. This design was developed using the latest Computational Fluid Dynamics software. There are no rapid expansions within the distribution block that can cause a phase change in the nitrous oxide or create an excessive pressure drop. Improved distribution means easier tuning for more power, consistency and reliability. These distribution blocks come assembled with fittings.



#### 90 DEGREE DISTRIBUTION BLOCKS

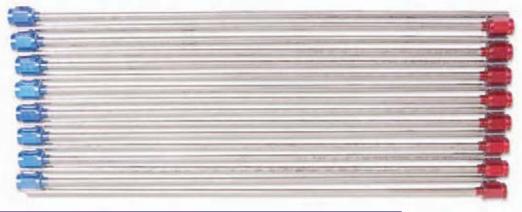
This distribution block is a simple one into four block with all threads being 1/8" NPT.

Part No. Description

382000 Single 90 degree Distribution Block Assembly



#### STAINLESS STEEL DIRECT PORT PLUMBING KIT



Kit includes 3/16" seamless stainless steel tubing with red & blue nuts & sleeves to plumb a direct port system on an intake.

Part No. Description

**853108** Eight 12" lengths of 3/16" tubing with 4 red nuts & sleeves, 4 blue nuts & sleeves. **853116** Sixteen 12" lengths 3/16" tubing with 8 red nuts & sleeves, 8 blue nuts & sleeves.

#### RELATED PRODUCTS

• Spark Plug Holder • Lighted Spark Plug Viewer • Nitrous Bottle Rack

When plumbing fuel systems, all lines should start out at the lowest point of the pump and run up hill to their final delivery point, never running back down hill. This will insure complete purging of air in the fuel system and eliminate destructive regulator bounce.



# System Completion Kits

#### **SYSTEM COMPLETION KITS**

System Completion Kits include a Nitrous Pro Flow bottle with a modified Ultra high flow valve and pick-up tube assembly. The unique Patent Pending Radiused inlet and large diameter pick-up tube design prevents separation in the flow of the nitrous which can cause a phase change and a resulting loss in flow. The Nitrous Pro Flow valve/tube combination flows360 lb/hr more than the competition. As a result, independent testing has shown a 20hp increase by simply switching to the Nitrous Pro Flow bottle. A nitrous pressure gauge, high efficiency nitrous filter / adapter fitting (eliminates one connection), 16 ft of feet line, and heavy-duty quick release bottle mounting brackets are also included in the kit.





Part No.	Description
307540	10 lb. System Completion Kit #4 Line
307510	10 lb. System Completion Kit #6 Line
307545	15 lb. System Completion Kit #4 Line
307515	15 lb. System Completion Kit #6 Line



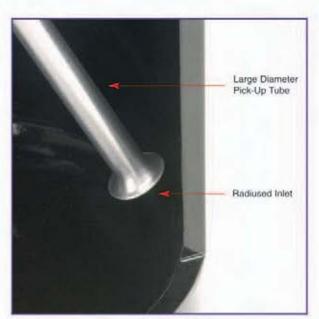


### Nitrous Pro-Flow Bottles

#### NITROUS PRO-FLOW BOTTLES



The Nitrous Pro Flow bottle with its patent pending valve and tube assembly flows 360 lb/hr more than the competitor's high flow valve and tube! Independent testing showed a 20hp increase by switching bottles alone. The unique Radiused inlet and large diameter pick-up tube design prevents separation in the flow of the nitrous which can cause a phase change and a resulting loss in flow. The valve assembly is a specially modified version of the industry standard. Nitrous Pro Flow lightweight aluminum bottles are powder coated black and are available in 10lb and 15lb sizes.



Nitrous Bottle Cut-Away

The Patent Pending Nitrous Pro Flow bottle valve and tube assembly outflows the competition by 360 lb/hr, resulting in a 20hp improvement. The industry standard valve assembly is specially modified to achieve maximum flow. A large diameter, radiused inlet pick-up tube is then installed into the valve. This design minimizes the pressure drop across the assembly and prevents separation in the flow of the nitrous, which can cause a phase change and a resulting loss in flow.



#### RELATED PRODUCTS

• Professional Bottle Heater • 12-Volt Bottle Warmer • Filter / Adapter • Gauge • Brackets TECH TIP

Over filling nitrous bottles is not beneficial. This reduces the pressure head volume in the bottle, resulting in a larger pressure drop during a run. When over filled, the liquid nitrous in the bottle is not able to boil off quickly enough to maintain a stable pressure head.



# Nutbuster, Valves & Filter/Line Adapter

#### **NUTBUSTER**

This wing style wrench stays attached to the line fitting at your nitrous bottle for quick bottle changes with no other tools needed. A plastic tipped set screw retains the wrench without damaging your aluminum fittings. CNC machined from billet 6061-T6 aluminum, it's light weight and durable. Available in -6 or -4 sizes.

Part No. Description 906004 #4 Nutbuster 906006 #6 Nutbuster



#### **HIGH FLOW BOTTLE VALVES**

The Patent Pending Nitrous Pro Flow bottle valve and tube assembly outflows the competition by 360 lb/hr, resulting in a 20hp improvement. The industry standard valve assembly is specially modified to achieve maximum flow. A large diameter, radiused inlet pick-up tube is then installed into the valve. This design minimizes the pressure drop across the assembly and prevents separation in the flow of the nitrous, which can cause a phase change and a resulting loss in flow.

Part No. Description
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307110 Modified high flow valve with Nitrous Pro Flow tube for 10lb bottles 307115 Modified high flow valve with Nitrous Pro Flow tube for 15lb bottles

Patent Pending Radiused Inlet



#### **HIGH FLOW FILTER/LINE ADAPTER**



Nitrous Pro Flow's unique Patent Pending bottle mounted high flow filter is a must for prevention of costly solenoid damage and lost races due to debris entering the solenoids, nozzles, and/or spray bars. This filter was designed to provide a minimal pressure drop for maximum flow and to prevent a phase change in the nitrous oxide as it passes through. It replaces the bottle adapter fitting and in-line filter for a cleaner, more efficient package with fewer connections. Our filter incorporates a stainless steel body and a cleanable stainless steel mesh filter element. Fits all standard nitrous bottle valves and available in #4 or #6 feed line sizes. Required for use with all Nitrous Pro Flow systems.



High Flow Filter/Line Adapter Cut-Away

Part No. 368014 #4 Bottle Mounted Filter/Line Adapter 368016 #6 Bottle Mounted Filter/Line Adapter 368114 Brass #4 Bottle Adapter Fitting Replacement Filter & Teflon Washer Kit

TECH TIP - HIGH FLOW FILTER/LINE ADAPTER

Why should you use our bottle filter rather than a screen in your solenoid inlet fitting? The surface area of the screen in your inlet fitting is so small that a limited amount of debris can quickly reduce the flow of nitrous by 50%, sending you in circles chasing a problem that is simply a dirty filter. Our bottle filter has 4 times the surface area of a fitting's screen, eliminating this problem.



# Gauges, Brackets & Blow Down Tube

#### **PRESSURE GAUGES**

Nitrous Pro Flow's high quality stainless steel 1.5" diameter mechanical gauge is a critical tool for monitoring nitrous bottle & fuel pressure, which relates directly to the nitrous/fuel tune up.

Part No. Description

**821000** 0-1500 PSI Nitrous Gauge **823000** 0-15 PSI Fuel Gauge **824000** 0-150 PSI Fuel Gauge







#### **HEAVY DUTY BOTTLE BRACKETS**

Nitrous Pro Flow heavy-duty bottle mounting brackets ensure positive retention of your bottle under any conditions. Our bottle mounting system consists of a pair of heavy duty 1/8" nickel plated steel cradles with quick release stainless steel band clamps that require no tools for ease of service between rounds.

Part No. Description

307300 Bottle brackets for 10lb and 15lb bottles



#### NITROUS BOTTLE BLOW DOWN TUBE

The Nitrous Pro Flow blow-down tube assembly is installed to vent nitrous oxide to the outside of the vehicle in the event of a bottle over pressure occurrence. Required by all sanctioning bodies when a nitrous oxide bottle is mounted within the driver compartment. #8 Blow off adapter required.

Part No. Description

307600 Nitrous Blow-Down Tube 362918 #8 Safety Blow Off Adapter



When using a nitrous system of greater than 200hp, or when retarding timing 10 degrees or more, a crank trigger should be used to keep rotor phasing correct.





# Bottle Heater, Warmer & Rack

#### PROFESSIONAL BOTTLE HEATER

Nitrous Pro Flow's professional water bath type bottle heater offers the serious racer fast, precise heating of the nitrous bottle. An adjustable thermostat allows the user to set the desired temperature for optimum bottle pressure. Proper bottle heating ensures consistent bottle pressure and repeatable on-track performance.

Part No. Description

307400 Professional Bottle Heater

#### **ELECTRIC BOTTLE WARMER**

Nitrous Pro Flow 12 Volt DC/120 Volt Bottle Warmers have greater surface area than other brands for quicker heating and incorporate Velcro Strap attachments for quick & easy installation. Keeping the correct bottle temperature is critical for consistent performance.



Part No. Description

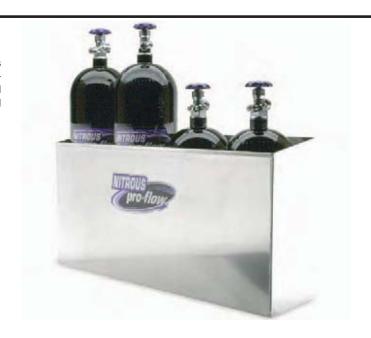
307412 Bottle Warmer 12 Volt 307420 Bottle Warmer 120 Volt

#### NITROUS BOTTLE RACK

The safest way to transport nitrous bottles in a trailer is with the Nitrous Pro Flow Nitrous Bottle Rack. This bottle rack will protect both the bottles and the race vehicle. Made from heavy gauge 5052 aluminum and Heli-Arc welded for durability. Holds up to four 10 or 15lb bottles and easily mounts to trailer wall or floor.

Part No. Description

903004 Nitrous Bottle Rack





### Pressure Relief Valve & Burst Panels

#### **MANIFOLD PRESSURE RELIEF VALVE**



Our new Manifold Pressure Relief Valve is yet another innovation by Nitrous Pro Flow to provide the racer with the safest and best performing nitrous systems in the world. This reusable pressure relief valve will eliminate races lost at the line since it immediately resets for small backfires. This keeps you on the track after a backfire, rather than having to replace a burst panel. Naturally aspirated engines can benefit from this technology as well, particularly when using O2 sensors, which often cause a backfire upon engine shut-down. The panel features a 1.25" hole that allows for the venting of excessive pressure whether it is from a nitrous backfire or a naturally aspirated hiccup. The part is excellent insurance to protect expensive carburetors, throttle bodies and intake manifolds. The parts are fully CNC machined, anodized and o-ringed to seal to the manifold.

Part No.	Description
333222	Manifold Pressure Relief Valve Set (Qty. 2)
333221	Manifold Pressure Relief Valve (Qty. 1)



#### SHEET METAL BURST PANELS

These large diameter burst panel kits are typically installed in nitrous oxide injected applications in sheet metal manifolds and where space will not permit use of our Manifold Pressure Relief Valve. These panels also work in blown applications. The kits include 2 burst panels, 2 retention rings and stainless steel mounting screws. These kits meet the sanctioning body requirements for burst panel protection when using nitrous oxide. Nitrous Pro Flow burst panel kits incorporate our replaceable burst panels that will vent pressure between 75-90 psi. for backfire protection.

Part No.	Description
333202	Burst Panel Kit For Sheet Metal Intakes (Large Set Of 2)
332202	Large Burst Panel Replacement Set (Qty. 2)
333212	Low Pressure Burst Panel Kit
332212	Low Pressure Burst Panel Replacement Set (Qty. 2)

#### **BURST PANEL REPLACEMENT PARTS**







Part No.	Description
332006	Replacement burst panel set for Nitrous Pro Flow plates (Qty. 6)
901001	Burst Panel Tool - Aluminum Hex Tool With Relieved Ends To Protect the
	Precisely Stamped Burst Panels During Installation.
331110	Replacement Retention Ring for Nitrous Pro Flow Plates
332202	Large Burst Panel (Sheet Metal Type) Replacement Set (Qty. 2)
332212	Low Pressure Burst Panel Replacement (Qty.2)
332211	Low Pressure Burst Panel Replacement (Qty.1)
332201	Large Burst Panel Replacement (Qty.1)
I	

TECH TIP

When wiring nitrous systems, remember you must return all of the power you draw. Your ground circuits should be able to carry the same amperage as your positive circuits. All grounds on nitrous systems should return to the battery instead of your chassis. This insures a good connection and filters any noise that may interfere with your ignition or fuel injection systems.



### Solenoid Mounting Brackets & Solenoids

#### SOLENOID MOUNTING BRACKETS

Nitrous Pro Flow's Patent Pending solenoid mounting brackets mount the solenoids close to the nitrous plate for minimum pressure drop. These brackets also provide a light-weight, clean, and secure method of mounting your nitrous and fuel solenoids and can be used with all Nitrous Pro Flow plates and most other brands. They are made from laser cut aluminum and are anodized for protection.



#### HIGH FLOW SOLENOIDS

Solenoid Mount Bracket 2 Stage 4500

Nitrous Pro Flow solenoids are designed with the professional racer in mind. These high quality solenoids feature stainless bodies, high lift plungers for maximum flow capacity, and Teflon seals for longevity. Nitrous Pro Flow also offers nitrous solenoids with an integrated purge port for ease of packaging and for the most complete purge of the system for consistency & reliability. Available in orifice sizes for any application. Special Alcohol compatible solenoid available.



#### Solenoids

391400

Part No.	Description
371157	Fuel Solenoid .157 - Up To 350HP
371957	Fuel Solenoid .157 Small Body - Up To 350HP
371312	Fuel Solenoid .312 - Up To 700+HP
379312	Alcohol Solenoid .312
372073	Nitrous Solenoid .073 - Purge
372105	Nitrous Solenoid .115 - Up To 350HP
372115	Nitrous Solenoid .115 W/Purge Port- Up To 350HP
372157	Nitrous Solenoid .157 - Up To 700+HP
372257	Nitrous Solenoid .157 W/Purge Port - Up To 700+HP

#### Solenoid Rebuild Kits & Components

Part No.	Description	
373157	Fuel Solenoid Rebuild Kit .157	
373957	Fuel Solenoid Rebuild Kit .157 Small Body	
373312	Fuel Solenoid Rebuild Kit .312	
378312	Alcohol Solenoid Rebuild Kit .312	
374073	Nitrous Solenoid Rebuild Kit .073 (Purge)	
374115	Nitrous Solenoid Rebuild Kit .115	
374157	Nitrous Solenoid Rebuild Kit .157	
375157	Coil - Fuel Solenoid .157	
375957	Coil - Fuel Solenoid .157 small body	
375312	Coil - Fuel/Alcohol Solenoid .312	
376073	Coil - Nitrous Solenoid .073	
376115	Coil - Nitrous Solenoid .115	
376157	Coll - Nitrous Solenoid .157	
379157	Alcohol Solenoid .157	

#### TECH TIP - HIGH FLOW SOLENOIDS

Solenoids are intermittent duty only. They are 20 seconds on, 20 minutes off. Over cycling of solenoids will result in damage to the solenoid's coil. Damage is usually done to solenoids while trouble shooting electrical problems and checking timing retards for extended periods of time. If a solenoid is being over cycled, the housing will be hot to the touch. Coils may be tested with an OHM meter to check their condition.



# Fuel Flow Tool & Nitrous/Fuel Lines

#### **FUEL FLOW TOOL**

The Nitrous Pro Flow Fuel Flow Tool is a must for the nitrous racer. Use of this tool is the only accurate way to set flowing fuel pressure. To be set properly, fuel pressure must be set while fuel is flowing through the regulator at the same rate as when the nitrous system is activated. The flow tool works by attaching one end to the #6 fuel feed line, and inserting the proper size slip fit fuel/nitrous jet in the other end. The fuel supply is then turned on and fuel pressure is set while fuel is allowed to flow through the flow tool and into a fuel container. The tool includes an instruction sheet and jet chart. One tool is needed per fuel solenoid on the engine. fuel solenoid on the engine.

<u>WARNING:</u> Fuel must be directed into an approved fuel container to avoid fuel spillage and possible fire

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Part No. Description 904001 Fuel Flow Tool

#### **NITROUS & FUEL LINES**

Stainless steel braided Teflon lines are used for custom plumbing on fuel and nitrous systems. Custom lines available on request – Prefix R or B is used for Red or Blue Fitting Color, Next two digits represent the AN size of each end of the line (smaller size always listed first), Last three digits represent the length of the line in inches. Example: Red #4 X #6 X 24" Long = R46024





Part No.	Description
B66192	#6 X 16 feet Blue Feed Line
B44192	#4 X 16 feet Blue Feed Line
B34012	#3 X #4 X 12" Blue
B34018	#3 X #4 X 18" Blue
B34024	#3 X #4 X 24" Blue
R34012	#3 X #4 X 12" Red
R34018	#3 X #4 X 18" Red
R34024	#3 X #4 X 24" Red
B44012	#4 X 12" Blue
B44018	#4 X 18" Blue
B44024	#4 X 24" Blue
B44072	#4 X 72" Blue
R44012	#4 X 12" Red
R44018	#4 X 18" Red
R44024	#4 X 24" Red
B46012	#4 X #6 X 12" Blue
B46018	#4 X #6 X 18" Blue
B46024	#4 X #6 X 24" Blue
R46012	#4 X #6 X 12" Red
R46018	#4 X #6 X 18" Red
R46024	#4 X #6 X 24" Red
B66012	#6 X 12" Blue
B66018	#6 X 18" Blue
B66024	#6 X 24" Blue
B66072	#6 X 72" Blue
R66012	#6 X 12" Red
R66018	#6 X 18" Red
R66024	#6 X 24" Red



# Nitrous Purge Kits & Jets

#### **NITROUS PURGE KITS**

Nitrous Pro Flow Purge Kits are designed to be plumbed into the main nitrous feed line with no additional fittings required. A purge system allows any vapor in the nitrous feed I ine to be purged prior to the nitrous system activation. This eliminates any lag caused by the time required for the liquid nitrous to reach the plate or nozzle.

 Part No.
 Description

 307704
 #4 Purge Kit

 307706
 #6 Purge Kit



#### **NITROUS & FUEL JETS (Stainless Steel)**

Nitrous Pro Flow Stainless Steel Precision Machined jets are CNC machined for accuracy and will not erode and wear like comparable brass jets, eliminating changes in flow with use - stays consistent run after run.

Part No. Description

321xxx \* Use Jet Orifice Size For The Last Three Digits Of The Part Number

(Example: .065 = 321065)





#### PROFESSIONAL JET PACK

Each of these kits contains an assortment of Nitrous Pro Flow stainless steel jets and is contained within a plastic organizing box.

Part No.	Description
322002	Single Nozzle Wet System Jet Kit
322013	50-250hp Plate System Flow Tool Jet Kit – one each of (42,46,50,56,65,73,82)
322003	175-350hp Plate System Flow Tool Jet Kit – one each of (65,73,82,92,102,110)
322004	Single Stage Direct Port Flow Tool Jet Kit – 2 each of (18,20,22,24,26,28,30,32,34,36,38,40,42)
322005	50-250hp Plate System Jet Kit – 2 each of (42,46,50,56,65,73,82)
322025	100-500hp 2 Stage Plate System Jet Kit – 4 each of (42,46,50,56,65,73,82)
322006	175-350hp Plate System Jet Kit – 2 each of (65,73,82,92,102,110)
322026	350-600hp 2 Stage Plate System Jet Kit – 4 each of (65,73,82,92,102,110)
322007	4 cyl. Direct Port System Jet Kit – 8 each of (18,20,22,24,26,28,30,32)
322008	8 cyl. Direct Port System Jet Kit – 16 each of (18,20,22,24,26,28,30,32,34,36,38,40,42)
322020	Sportsman Series Jet Kit – 6 each of 42-120 even numbers & 16 each of
	18-42 even numbers (448 total jets)
322030	Pro Series Jet Kit – 10 each of 42-120 all numbers & 32 each of 18-42 all numbers (1590 total jets)



## **Fittings**

#### **HIGH FLOW NITROUS/FUEL FITTINGS & Y-BLOCKS**

Billet aluminum male Y-blocks offer a smooth transition of flow from a single inlet to two outlets. Typically used in plumbing nitrous and fuel systems.

Part No. Description 800001 Y-Block #4 X #4 800002 Y-Block #6 X #6 800003 Y-Block #8 X #6 800004 Y-Block #10 X #8



Wilson Manifolds high flow fuel/nitrous fittings are precision machined with a smoothly radiused entry/exit to enhance fuel flow and help eliminate excessive pressure loss.

**Gauge Adapters** 

Part No.

800140



Part No. Description 1/8" Male 800083 Pipe X 1/8" Female Pipe X #3 Slip Fit Jet (for gauge with air bleed)

NPT X Female AN Flare Swivel - Straight		
Part No.	Description	
800119	1/8" X #4 - Blue	The same of
800121	1/4" X #4 - Blue	1 THE PERSON NAMED IN COLUMN 1
800123	1/4" X #6 - Blue	
800128	1/2" X #10 - Blue	

Description

NPT - Blue

#6 Male Flare X #6 Female Flare Swivel - Blue

#6 Male Flare X 1/4" Male

Male AN Flare X Straight O-Ring		
Part No.	Description	
800023	#3 X #6	
800024	#4 X #10	
800025	#6 X #6	
800026	#6 X #8	
800027	#6 X #10	
800028	#8 X #6	
800029	#8 X #8	
800030	#8 X #10	
800031	#8 X #12	
800032	#10 X #6	
800033	#10 X #8	
800034	#10 X #10	
800035	#10 X #12	
800036	#12 X #10	
800037	#12 X #12	

#### **Holley Float Bowl Fittings**

Part No.	Description
800093	Plug
800094	#6
800095	#8
800096	#8 Long 🚗 🚗 🔣
	3 4 4 4

800138

#### **Straight Thread Plugs**

Part No.	Descriptio
800010	#6
800011	#8
800012	#10
800013	#12



#### **Bushings**

Part No.	Description
800150	1/4" Male NPT X 1/8" Female
	NPT - Blue
800151	1/4" Male NPT X 1/8" Female
	NPT – Red
	20000000

Compressi	ion Fittings
Part No.	Description
800106	Brass 3/16" Compression
	Nut, Nickel Plated
800107	Brass 3/16" Compression
	Ferule
800108	Stainless distribution Block Fitting
	(for pro series distribution blocks)
800109	Brass 1/8" Male NPT X 3/16"
	Tube Compression, Nickel
	Plated
400	
1.00	CONTRACTOR OF THE PARTY OF THE

## Straight Thread Port Plug with 1/8"









#### Male Flare Reducers

Male AN Flare X Straight O-ring with			
	Female Pipe Port		
Part No.	Description	CANADA TO THE PARTY OF THE PART	
800060	#8 X #10		
800061	#10 X #10		
800062	#10 X #12	11111	





#### **Male Straight Thread Couplers**

Part No. Description 800072 #10 X #10 800073 #12 X #12





## **Fittings**

#### **HIGH FLOW NITROUS/FUEL FITTINGS & Y-BLOCKS**

#### **Female Flare Caps** Part No. Description 800201 #3 Blue 800202 #3 Red 800203 #4 Blue 800204 #4 Red 800205 #6 Blue 800206 #6 Red 800207 #8 Blue 800208 #8 Red

#### 90 Degree Male NPT X Male Flare Part No. Description 1/8" X #3 - Red 800262 1/8" X #3 - Blue 800263 800264 1/8" X #4 - Red 1/8" X #4 - Blue 800265 800266 1/4" X #4 - Red 800267 1/4" X #4 - Blue 1/4" X #6 - Red 800268 800269 1/4" X #6 - Blue



Description

3/16" - Red

3/16" - Blue

1/4" - Blue

3/8" - Blue

1/2" - Blue

3/16" - Purple

Tube Sleeve

Part No.

800358

800359

800360

800363

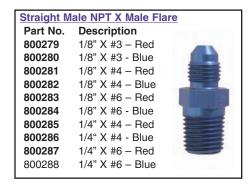
800366

800369

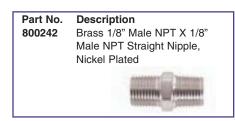




Part No.	Description
800232	#3 Female Flare Swivel X #3
	Male Flare Tee (used to two
	stage single bar plates)





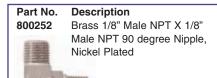




Tube Nuts		
Part No.	Description	
800338	#3 - Red	
800339	#3 - Blue	10
800340	#3 - Purple	100
800342	#4 - Blue	
800345	#6 - Blue	100
800348	#8 - Blue	

45 Degree Male NPT X Male Flare		
Part No.	Description	
800298	1/8" X #3 - Red	Allen.
800299	1/8" X #3 - Blue	
800300	1/8" X #4 - Red	
800301	1/8" X #4 - Blue	(Bigg)
800302	1/4" X #6 - Red	1500 mg/s
800303	1/4" X #6 - Blue	







# Refill Station & Weld On Fittings

#### NITROUS REFILL STATION

The Nitrous Pro Flow refill system allows you to quickly and easily refill nitrous bottles without freezing them. The base kit includes an industrial grade liquefied gas transfer pump which runs off of a compressed air supply. Also included in the kit are all of the plumbing accessories, nitrous filter, nitrous gauge, and bottle stand. A completion kit is also available separately, which includes all of the additional items needed to begin refilling bottles. The completion kit includes the proper air filter/water separator/regulator assembly, compressed air plumbing and valve, high quality digital scale, and a custom pump/regulator mounting bracket for a clean and simple installation.

Part No.	Description
307050	Basic Nitrous Bottle Refill Station Kit
307051	Nitrous Bottle Refill Station Completion Kit
307001	Digital Scale 0-150lbs
307002	Air Filter/Water Separator/Regulator
307010	Replacement Transfer Pump
307011	Bottle Stand
307012	Nitrous Valve
307013	Air Valve
307014	Aluminum Refill Station Mount
800138	Nitrous Gauge Adapter
368016	#6 Bottle Mount Nitrous Filter
821000	0-1500 psi Nitrous Gauge
940001	"Refill Here" Banner



<u>WARNING:</u> The driving air supply must contain a water separator and filter and must be regulated to 100psi max. Excessive air pressure can cause equipment damage and result in serious injury or death in the event of an explosion. Loose connections in the nitrous oxide plumbing side of the system can result in high pressure leaks and can cause serious injury or death due to displacement of breathable air in the room.

#### **WELD ON FITTINGS**

Wilson Manifolds weld-on CNC machined billet aluminum bosses are used for attaching lines, fittings, or sensors to intake manifolds, coolant manifolds or other accessories.

Part No.	Description	
401000	Fuel Injection Boss	
700100	1/16 NPT Nitrous Boss	
700200	1/8 NPT Boss	
700300	1/4 NPT Boss	
700400	3/8 NPT Boss	
700500	1/2 NPT Boss	
700800	#8 Boss	
701000	#10 Boss	
701200	#12 Boss	



#### TECH TIP

When wiring nitrous systems, remember you must return all of the power you draw. Your ground circuits should be able to carry the same amperage as your positive circuits. All grounds on nitrous systems should return to the battery instead of your chassis. This insures a good connection and filters any noise that may interfere with your ignition or fuel injection systems.

# Performance Accessories

#### **TUNNEL RAM LINKAGE KITS**

Wilson Manifolds professional quality tunnel ram linkage kits incorporate precisely machined components for smooth operation. These linkage kits are the standard in Pro Stock racing. Complete application-specific kits for custom applications are available.

Part No.	Description
830001	TR Linkage- Top Portion Only
830002	TR Linkage SBC 4150/4500
830003	TR Linkage BBC 4150/4500
830004	TR Linkage 426 hemi 4500
830005	TR Linkage 340/440 Dodge 4150
830006	TR Linkage 340/440 Dodge 4500
830007	TR Linkage 351C Ford 4150
830008	TR Linkage 351C Ford 4500
830009	TR Linkage 460 Ford 4150
830010	TR Linkage 460 Ford 4500
830011	Blower Linkage
830012	TR Linkage Big Chief Heads
831013	12" Serrated Shaft
831020	5/16" Serrated Coupler







# Performance Accessories

#### **FUEL PUMPS & ACCESSORIES**

MagnaFuel Pro Star 500 & Quick Star 275 fuel pumps are hand assembled to the highest quality standards, then flow tested to ensure maximum performance. The efficient design, compatibility with gas & alcohol fuels, low current draw, superior flow, and unparalleled stability across the entire fuel curve make the Pro Star 500 & Quick Star 275 pumps your only choice.

Pro Star 500 – Up to 2000hp at 25 psi. Bypass adjustable from 24 to 36 psi. Quick Star 275 - Up to 700hp. Bypass preset at 18 psi.





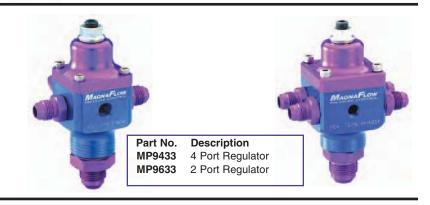
Part No.	Description
MP4450	Pro Star 500 Pump With Filter
MP4401	Pro Star 500 Pump
MP4550	Quick Star 275 Pump With Filte

MP4501

Quick Star 275 Pump

MP4401-SK Pro Star 500 Pump Std Seal Kit Quick Star 300 Pump with Filter MP4650 MP4701 Pro Star 600 EFI Pump MP4701-7 Pro Star 700 Series EFI Pump





Part No.	Description
MP9520	1 4bbl Single Stage Nitrous Kit
MP9530	2 4bbl Single Stage Nitrous Kit
MP9525	1 4bbl Dual Stage Nitrous Kit
MP9535	2 4bbl Dual Stage Nitrous Kit
MP9540	Dual Stage Nitrous
MP9545	3 Stage Nitrous





Part No.	Description
MP9575	Dual Air Bleed System
MP9580	Triple Air Bleed System
MP7600-02	Dual Fuel Log
MP7600-03	Triple Fuel Log
MP4900	Band Clamp
MP1050	Dual Relay Harness

#### **CARBURETOR TOOL TRAY**

The Wilson Manifolds carburetor tool tray keeps tools organized and covers the carburetor/throttle body while servicing your engine. The center of the tray is designed to clear a carburetor stud or hood scoop mount. This tray also holds up to 16 spark plugs and incorporates a handle for easy carrying. Additional mounting rings available for tunnel ram intakes.

Part No. Description

902900 Carburetor Tool Tray 4150
902901 Carburetor Tool Tray 4500
902910 Additional 4150 Carburetor Ring
902911 Additional 4500 Carburetor Ring



#### PRO SERIES TIMING LIGHT

The Pro Series professional timing light is both accurate and easy to use and has been designed to work in the most rugged environment. This timing light can with stand accidental exhaust header contact. The potential for false readings has been eliminated by the inductors ability to be connected to the spark plug wire in either direction. Ample wire leads are included, making timing easier. Extra bright light for daytime use. This timing light is the standard in NEXTEL Cup and other Professional Racing.

Part No. Description

546001 Pro Series Timing Light 12 Volt

546002 Pro Series Timing Light – Operates using 6 AAA Batteries



#### PRO SERIES SPARK PLUG VIEWER

The Pro Series Spark Plug Viewer has a fine optical glass lens and 2 stage lighting that allows you to accurately read plug conditions. This precision examination and inspection tool fits in the palm of your hand. It provides a clear, distortion-free image for close inspection of the spark plug. An ergonomic plastic body & two angled Illumination lamps (45 or 90 degree from the viewing angle). Uses 2 AA batteries. A must for serious engine tuning, especially when using nitrous. Includes padded carrying case.

Part No. Description
546100 Spark Plug Viewer





## Performance Accessories





Part No. Description 902008 Plug Holder (8) 902016 Plug Holder (16)

902108 Plug Holder (8) W/Light Holder902116 Plug Holder (16) W/Light Holder

#### SPARK PLUG HOLDER

The Wilson Manifolds spark plug holder is a must for keeping your spark plugs organized for accurate evaluation of engine conditions. The spark plugs are retained in rubber grommets to keep them in place and to prevent damage to the plugs. A 16-plug version is available for those who use a separate warm up set of plugs. These holders are also available with a provision for holding the Pro Series Plug Light.

#### **IN-LINE THERMOSTAT HOUSINGS**

Wilson Manifolds in-line thermostat housings, along with a FAILSAFE thermostat, provides a dependable method for controlling coolant temperatures in racing applications, especially when running alcohol or when a quick warm-up is desired. Our in-line thermostat housings allow the racer to run a thermostat in-line where there is no provision for one in the intake manifold. These housings are CNC machined from billet aluminum and are available in hose sizes of 1.25", 1.50", and in #16 AN. The engine side of the housings incorporate an O-ring seal for leak proof performance. Each half is sold separately so that sizes can be mixed. Wilson Manifolds recommends the use of the FAILSAFE Thermostat with these in-line housings.

Part No.	Description
500311	In-Line Housing Engine Side 1.50" Hose
500312	In-Line Housing Engine Side 1.25" Hose
500314	In-Line Housing Engine Side #16 AN
500321	In-Line Housing Radiator Side 1.50" Hose
500322	In-Line Housing Radiator Side 1.25" Hose
500324	In-Line Housing Radiator Side #16 AN

## SWIVEL THERMOSTAT HOUSINGS



Part No.	Description
510101	Thermostat Housing Chev/Chrysler 1.50" Hose
510102	Thermostat Housing Chev/Chrysler 1.25" Hose
510103	Thermostat Housing Chev/Chrysler #12 AN
510104	Thermostat Housing Chev/Chrysler #16 AN
510111	Thermostat Housing w/Fill Neck Chev/Chrysler 1.50" Hose
510112	Thermostat Housing w/Fill Neck Chev/Chrysler 1.25" Hose
510113	Thermostat Housing w/Fill Neck Chev/Chrysler #12 AN
510114	Thermostat Housing w/Fill Neck Chev/Chrysler #16 AN
510201	Thermostat Housing Ford 1.50" Hose

#### **RELATED PRODUCTS - THERMOSTAT HOUSINGS**

- 557160 160 Deg. Fail Safe Thermostat
- 557180 180 Deg. Fail Safe Thermostat
- 557195 195 Deg. Fail Safe Thermostat TECH TIP - THERMOSTAT HOUSINGS

Consistent coolant temperatures provide more consistent engine performance and durability.

The thermostat must be oriented to place the jiggle valve at the top side when installed

#### FAILSAFE HIGH FLOW THERMOSTAT

The New MotoRad FAILSAFE thermostat was developed through years of research and development. Its unique and exclusive extra stroke allows operation in two stages. During stage 1, it will operate like any other thermostat. Stage 2 operation provides extra stroke and actually locks the thermostat open when overheating is encountered. The high flow design will also outflow a standard thermostat by over 50% for extra cooling capacity. This thermostat is constructed from stainless steel and includes an integrated Jiggle Valve to help stabilize the pressure in the engine, reduces the delay in warm-up of the engine, and eliminates trapped air in the cooling system. This is the first thermostat in use world wide that will not fail.





WARNING: Once the FAILSAFE Thermostat has locked open, it must be replaced. It cannot be used again.

#### COOLANT MANIFOLD

Wilson Manifolds coolant manifold is designed to allow for efficient cooling of your engine. Collecting coolant from both ends of each cylinder head provides uniform cooling while helping to eliminate dangerous hot spots. Consistent cooling also helps maintain repeatability round after round. Adapts up to four inlets into a single 1 1/2" hose outlet and includes a radiator cap provision.

Part No. Description
712400 Coolant Manifold 4 #12 AN Male "O"-Ring Inlet
Custom applications available





#### DISTRIBUTOR HOLD DOWNS

Wilson Manifolds billet distributor hold downs are designed for durability and maximum retention strength. These hold the distributor firmly in place to prevent rotation. Slotted bolthole allows for easy distributor removal. Complete with stainless stud, nut and washer.

Part No.	Description	
610101	Distributor hold Down SBC / BBC	
610102	Distributor hold Down SBF	



#### **VALVE COVERS**

Wilson Manifolds now offers affordable polished aluminum valve covers for Small Block Chevy, Small Block Ford, & Big Block Chevy. Each is offered with either the Wilson Manifolds or Nitrous Pro-Flow logo engraved on the top.



Part No.	Description
579001	Valve Cover Set – SBC/Wilson Logo
579002	Valve Cover Set – SBF/Wilson Logo
579003	Valve Cover Set – BBC/Wilson Logo
579011	Valve Cover Set – SBC/Nitrous Pro-Flow Logo
579012	Valve Cover Set – SBF/Nitrous Pro-Flow Logo
579013	Valve Cover Set – BBC/Nitrous Pro-Flow Logo

#### **CARBURETOR / SPACER GASKETS**



Wilson Manifolds carburetor base gaskets are now available in a special energy absorbing rubber material as well as a premium race proven paper type material. Our new rubber material is being introduced as a result of our extensive research and development programs with our customers in applications from dirt track racing to NHRA Pro Stock racing. We have found that in many applications, isolating the carburetor from engine harmonics can significantly improve carburetor performance and ultimately overall engine performance. All of our gaskets are precision cut to fit our Wilson Manifolds light weight spacer shape so that there is no obstruction to flow through the carburetor and/or spacer and no trimming required. Also includes holes for Wilson Manifolds locating dowel pins for precise alignment of the gasket. Our rubberized washers must also be used in conjunction with the rubber gaskets to achieve full isolation of the carburetor.

Part No.	Description
840001	Open 4150
840002	4 Hole 4150
840003	Open 4500
840004	4 Hole 4500
840011	Open 4150 10 Pack
840012	4 Hole 4150 10 Pack
840013	Open 4500 10 Pack
840014	4 Hole 4500 10 Pack
841001	4 Hole 4150 Rubber
841002	Open 4150 Rubber
841003	4 Hole 4500 Rubber
841004	Open 4500 Rubber
	Single Bore Throttle Body Gaskets
Part No.	Description
840090	Throttle Body Gasket Up to 90mm
840105	Throttle Body Gasket Up to 105mm

#### **CARBURETOR STUD KITS**

Wilson Manifolds premium quality carburetor stud kits have a bullet end for easy locating and have one stud drilled to facilitate sealing of the carburetor by race officials. Stud kits come in a variety of heights to fit any need. All kits come with hex nuts & washers.

	4150 Flange
Part No.	Description
650000	Carb Stud
650500	Carb & .500" Spacer
651000	Carb & 1.00" Spacer
651250	Carb & 1.25" Spacer
651500	Carb & 1.50" Spacer
651750	Carb & 1.75" Spacer
652000	Carb & 2.00" Spacer

4500 Flange	
Part No.	Description
650500	Carb Stud
651000	Carb & .500" Spacer
651500	Carb & 1.00" Spacer
652000	Carb & 1.50" Spacer
652500	Carb & 2.00" Spacer



#### **INTAKE MANIFOLD BOLTS**

Wide head flange & washers distribute torque to provide consistent load for intake gasket sealing. Our 12 Point heads have been designed for applications where head clearance is insufficient for a standard hex head.

Part No.	Description
660001	3/8" X 1 1/8" (12 pieces)
660002	3/8" X 1 1/4" (12 pieces)
660004	3/8" X 1 1/2" (12 pieces)
660101	SBF 289,302 & 351W
660102	SBF Yates Head
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#### **WEATHER PACK CONNECTORS**

Weather pack connectors are used for wiring all assembled Nitrous Pro Flow systems. The use of Weather Pack connectors can be used to clean up wiring for any accessory. These are the same connectors that are used on all assembled Nitrous Pro Flow Plate and Direct Port Systems.

Part No.	Description
810001	Weather Pack Connector Male & Female 1 prong
810002	Weather Pack Connector Male & Female 2 prong
810003	Weather Pack Connector Male & Female 3 prong
810004	Weather Pack Connector Male & Female 4 prong
810006	Weather Pack Connector Male & Female 6 prong







#### **COMPETITION PORTING**

You can get the same race winning technology the professionals have relied on for nearly 30 years. We prepare manifolds for the weekend racer as well as for the top teams in NHRA Top Fuel Drag Racing and NASCAR NEXTEL CUP racing. Wilson Manifolds' competition prepared intake manifolds are known for their superior quality, power, acceleration, distribution and repeatability. Each manifold is welded where necessary, precisely fit to the cylinder heads, and incorporates fully ported runners and a reshaped plenum area that is sized specifically for your engine and vehicle combination to achieve maximum performance from your engine. Special head/deck height combinations, 4150 to 4500 conversions, EFI conversions, and turbo/blower/nitrous conversions are specialties.

Call for technical assistance and pricing.

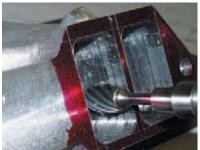


#### INTERMEDIATE PORTING

Intermediate porting is an economical alternative to our full competition

porting. This service consists of porting the critical areas of the plenum including the divider walls and roofline, and port matching to either your heads or to a gasket. This provides improved performance and distribution

characteristics when compared to an out of the box manifold. Call for technical assistance and pricing.



#### "DISGUISE" INTAKE MANIFOLD PORTING

Wilson Manifolds is well known for "Disguise" porting. We can port a manifold for improved performance and distribution and reapply an "as-cast" finish.

Call for technical assistance and pricing.



# ALUMINUM MANIFOLD RESTORATION, REPAIR, WELDING AND RIASTING

Our years of experience in welding and disguising cast aluminum allows us to provide repair and/or restoration services for aluminum intake manifolds. We can make your old manifold like new again. Call for technical assistance and pricing.



#### **SHEET METAL INTAKES**

Wilson Manifolds designs state-of-the-art sheet metal intakes for any application. These manifolds represent the ultimate in performance manifold technology, particularly in high RPM and high specific output racing applications. Each manifold is custom designed, fabricated, and ported specifically for each customer's engine/vehicle combination. Our engineering staff uses the latest CAD/CAM software and computer modeling along with Wilson Manifolds' extensive experience in the development of racing manifolds for many different applications to provide the best possible design for your specific engine/vehicle combination. All machining and fabrication is performed by the country's leading craftsmen utilizing the finest equipment available. For many applications, we also utilize our 5-axis machining center to produce billet aluminum runner banks, providing the ultimate in runner to runner consistency where sheet aluminum material cannot easily be formed. Available in single or dual carburetor, turbo or blower tops. Also available with fuel injection rails & bungs and/or nitrous oxide injection. Wilson Manifolds is known for its high quality welding and as a result, works closely with Lincoln Electric to continue to develop advanced TIG welding technology. Wilson Manifolds sheet metal intakes have been the choice for Greg Anderson, Jason Line, Rob Mansfield, and many others.

Call for a quote on a custom designed Wilson Manifolds sheet metal for your specific application.









# TYVILSON NITROUS Pro-flow

## **SERVICES**



#### **CUSTOM NITROUS PLUMBING**

Maximize the performance of your nitrous delivery system with Nitrous Pro Flow's custom nitrous plumbing services. When we install a nitrous delivery system on your manifold you are assured that every aspect of the system installation has been addressed including: Optimized nozzle placement and direction based on years of on track and flow bench testing; Custom bent stainless hard lines to provide the most efficient delivery of fuel and nitrous to the nozzles; Custom wiring to weather pack connectors for reliable and simple installation; and Individual flow testing of every system to assure that all fluid and electrical circuits are functioning to our standards. We provide custom nitrous plumbing for many of the top engine builders in many forms of racing and install Nitrous Pro Flow components exclusively to provide our customers with the best systems in the industry. V-Force nozzles, custom made stainless hard lines, our patent pending distribution blocks, and our high flow solenoids are the basis of our fully installed direct port nitrous systems. When Nitrous Pro Flow plumbs your nitrous system, you have access to our vast data bank of design and tuning characteristics as well as our industry leading technical support staff.

#### NITROUS BOSS INSTALLATION

We install 90 degree style (for our V-Force nozzles) and bottom out stylenitrous bosses in your manifold or a custom prepared Wilson Manifold. All bosses are precisely located according to our years of experience in installation of direct port nitrous systems.

Call for technical assistance and pricing.





## **NITROUS SYSTEM FLOW TESTING**

Nitrous and fuel system flow testing services are available for evaluation of a current system or to provide a customized tune up for your new Nitrous Pro Flow system. All testing is conducted using our state of the art Nitrous/Fuel flow bench with precision mass flow metering technology. Call for technical assistance and pricing.

## **ULTRASONIC FUEL INJECTOR CLEANING AND FLOW TESTING**

We clean and flow test fuel injectors and provide flow test results.

O-rings and filter baskets are changed at additional cost as required.

Call for technical assistance and pricing.



#### **FUEL INJECTION CONVERSION**

Fuel Injection conversions are a specialty of Wilson Manifolds. We are able to supply a manifold assembly, which includes the throttle body, adapter elbow (where needed), manifold, fuel rails, and all necessary fittings to install the system in your vehicle. Our experience, machining capability, and welding technology assure that our customers achieve maximum performance and reliability from their fuel injection system. We install fuel injector bosses and fabricate custom ultra high volume fuel rails for many of the top engine builders and manufacturers in the country. Injector location and direction are precisely set according to our years of experience in the conversion of intake manifolds for use with fuel injection. Secure fuel rail mounting is provided by robust Heli-Arc Welded stanchions.





#### AIR FLOW TESTING AND DEVELOPMENT

Wilson Manifolds offers air flow testing and development services utilizing the latest flow bench testing equipment and techniques, as well as our experienced engineering staff. Using our high capacity SuperFlow 1020 & 1200 flow benches, we can provide corrected air flow data reports and analysis for various types of components from air cleaners to cylinder heads. Modifications can be accurately analyzed to determine effectiveness.

## **QUALITY CONTROL INSPECTION & REVERSE ENGINEERING**

Wilson Manifolds provides quality control inspection and reverse engineering services utilizing our state of the art Brown & Sharpe Coordinate Measuring Machine and PCDMIS software. This machine is equipped for typical inspection routines as well as continuous surface scanning. Our experienced engineering staff can develop custom inspection or scanning programs for virtually any type of component.

## **PROTOTYPE DESIGN & MACHINING**

Wilson Manifolds offers design and prototype machining services as well as production 3, 4 & 5-axis CNC machining. Our engineering and CNC machining departments use the latest solid modeling software, tool path generation software, and simultaneous 5-axis machining technology to create optimized component designs for many different applications.





## **CONSULTING**

Wilson Manifolds has provided air/fuel/nitrous flow consulting services to many of the top aftermarket performance component manufacturers as well as to the major automotive manufacturers. These companies have sought out our services based on our vast experience and reputation in manifold and nitrous system design. We are also currently expanding our consulting services outside of the automotive industry to other areas which require our expertise in air flow for fuel efficiency improvements and emissions reduction.