

Ultimate Bolt-on Performance!"

#### **Ultimate Bolt-On Performance**

There's only one name you need to know when it comes to high performance—Trick Flow Specialties. Trick Flow products give automotive enthusiasts and racers the edge they need to compete and win.

Trick Flow engineers use advanced 3D solid modeling and Computer-Aided Design (CAD) tools to design and analyze parts. Trick Flow machinists use state-of-the-art rapid prototyping and CNC-machining centers to turn those designs into high performance parts. Trick Flow's in-house engine specialists evaluate components and engine combinations using extensive dynamometer and road and race track data to guarantee all Trick Flow products will exceed your expectations for quality, durability, and performance.

Trick Flow developed exciting new products for 2011, including:

- Twisted Wedge® Race 195 Cylinder Heads for extreme performance Ford 4.6L/5.4L 2V modular engines
- GenX® Top-End Engine Kit for 1999 and later GM 5.3L LS truck engines
- High performance single plane four-barrel and EFI intake systems for Ford 351C and "Clevor"-style engines
- An EFI Power Programmer for 1999-2004 4.6L 2V Mustangs equipped with Trick Flow components
- High-quality Cylinder Head Bolts Kits for popular Chevrolet, Ford, and Chrysler engines
- A Camshaft Installation Handle that takes the hassle out of installing and removing cams
- A Header Spark Plug Socket to help you install headers in crowded engine compartments
- A Throttle Cable Bracket to make your carburetor installation look clean and professional

Your 2011 Trick Flow Specialties catalog has hundreds of other performance products for classic and late model muscle and race cars, too: cylinder heads, intake manifolds, camshaft and valvetrain components, nitrous kits, valve covers, and much more. And every single one is designed with one goal in mind—providing you with Ultimate Bolt-On Performance!







#### Why Trick Flow Cylinder Heads Are Better Than the Competition

- All heads are designed with the latest computerized solid modeling software and machined on modern CNC milling equipment
- Over 10,000 dyno pulls made to develop and test cylinder head/engine combinations
- Premium certified materials for highest quality
- CNC-profiled combustion chambers with port-to-valve seat blending (bowl blending)
- Fast As Cast<sup>®</sup> intake and exhaust runner designs outflow standard cast cylinder head designs
- All valve seat machining done on precision Serdi® equipment
- All assembled cylinder heads come with quality ARP® rocker arm studs

### **Engine Science—Dynomometer Testing**

Trick Flow uses engine dynamometer (dyno) testing to compare the power-building effects of different parts and to tune engine combos for maximum performance. Because it measures engine brake torque, monitors a wide array of engine functions, and tests under controlled conditions, an engine dyno provides very accurate data for repeatable results. These are the results you see in the dyno charts listed throughout this catalog.

Engine dynos make better engine tuning tools than chassis dynos. Chassis dynos are best for tuning vehicle set-ups because they measure the overall efficiency of the vehicle's drivetrain (the engine plus the transmission, driveshaft, axle, wheels, and tires).

Over the years, Trick Flow has made well over 10,000 dyno pulls on its two Superflow engine dynos. When you read that a Trick Flow cylinder head makes a specific amount of power on an engine, the claim is based on a straight-forward test.

For additional information about dyno testing, including chassis dyno testing and types of dynos, please refer to the story "A Dyno Testing Primer" in the Tech Stories section at TrickFlow.com.





GenX® Cylinder Heads and Accessories	High Port® Cylinder Heads	
for GM LSpages 4–7	for Small Block Fordpa	ges 34-35
GenX 205 Cylinder Heads for GM LS 4.8L/5.3L/5.7L (Vortec)     GenX 215 Cylinder Heads for GM LS1	High Port 192 Cylinder Heads     High Port 225 Cylinder Heads	
GenX 225 Cylinder Heads for GM LS2     GenX 235 Cylinder Heads for GM LSX	High Port 240 Cylinder Heads     Accessories for Small Block Ford,	
GenX 245 Cylinder Heads for GM LSX     GenX 220 Cylinder Heads for GM LS1 and LS2	Ford 5.0L/351 Windsorpa	ges 36-41
Cylinder Head Bolt Kit     GenX Top-End Engine Kits	Rocker Stud Girdles     Main Stud Girdles	
Valve Cover Spacers     Valve Spring Upgrade Kit	Roller Rocker Arms     Valve Spring Upgrade Kits	
True Roller Timing Chain Sets     Track Max® Camshafts	Header Flanges	
<ul> <li>TFX™ Fuel Injector Connectors and Adapters</li> <li>TFX™ EFI Fuel Rails</li> </ul>	Locating Dowels     Head Bolt Reducer Bushings     Olinder Head Bolt Kit	
GenX <sup>®</sup> Cylinder Heads and Accessories	EFI Intake Manifolds     TFX™ EFI Fuel Rails/Kits	
for GM LT1pages 8–9	Twisted Wedge® Top-End Engine Kits     TFX™ Nitrous Systems for EFI Manifolds     Track Max® Camshafts	
<ul> <li>GenX 185 Cylinder Heads</li> <li>GenX 195 Cylinder Heads</li> <li>Track Max<sup>®</sup> Camshaft</li> </ul>	Track Max     Camshafts     Gaskets and Gasket Sets	
Cold Air Intake Kits     Air Inlet Elbows	True Roller Timing Chain Set     Billet Oil Fill Kit	
Super 23 <sup>®</sup> and Ultra 18 <sup>®</sup> Cylinder Heads	A/C Eliminator Bracket     Underdrive Pulley Kits	
and Accessories for Small Block Chevroletnages 10-17	FIFI Heat Spacers     SN95 Throttle Body Adapters	
Super 23 175 Cylinder Heads     Super 23 195 Cylinder Heads	Throttle Body Bracket     Valve Covers and Accessories	
• Super 23 215 Cylinder Heads • Super 23 230 Cylinder Heads	Forged Pistons	
Ultra 18 250 Cylinder Heads     Super 23 and GenX LT1 Top-End Engine Kits     Track Max® Camshafts	PowerPort® Cylinder Heads and Accessories	!O !!
Track Max <sup>®</sup> Camshafts     Rocker Stud Girdles	for Ford 429/460pa • PowerPort 290 Cylinder Heads	ges 42–44
True Roller Timing Chain Set     Roller Rocker Arms	PowerPort 325 Cylinder Heads     PowerPort A460 340 Cylinder Heads	
Valve Covers and Adapters     Gaskets and Gasket Sets	<ul> <li>PowerPort A460 360 Cýlinder Heads</li> <li>Rocker Stud Girdles</li> </ul>	
Cylinder Head Bolt Kit	Intake Manifolds     Main Stud Girdle	
PowerOval® and PowerPort® Cylinder Heads and Accessories for Big Block Chevroletpages 18–21	Valve Covers     Roller Rocker Arms	
PowerOval 280 Cylinder Heads     PowerPort 320 Cylinder Heads	Valvetrain Componentspa	ges 45–47
PowerPort 360 Cýlinder Heads	Chromemoly Pushrods     Pushrod Length Checkers	
True Roller Timing Chain Set     Roller Rocker Arms     Roller Rocker Arms     Roller Rocker Arms	Valve Spring Retainers	
Phenolic Carburetor Spacer     Rocker Stud Girdles	Valve Spring Cups     Track Max® Valve Springs     Cam Degree and Supplement Kits	
R-Series Intake Manifold     Valve Covers     Calve Cott	Valve Spring Compressor     Camshaft Installation Handle	
Gasket Sets     Cylinder Head Bolt Kits	Hydraulic Lifters	maa //0 F1
Twisted Wedge® Cylinder Heads	Air and Fuel Deliverypa  • Trick Flow by Magnuson Superchargers	yes 40-51
and Accessories for Ford 4.6L/5.4L 2Vpages 22–28  • Twisted Wedge 185 Cylinder Heads	<ul> <li>TFX™ High-Flow and Cold Air Intake Kits</li> <li>TFX™ EFI Throttle Bodies</li> </ul>	
Twisted Wedge Track Heat 185 Cylinder Heads     Twisted Wedge Race 195 Cylinder Heads	<ul> <li>TFX™ Upper Plenum/Throttle Body Combos</li> <li>TFX™ Fuel Filters</li> <li>TFX™ Fuel Pumps</li> </ul>	
Track Max® Camshafts     Track Max® Camshaft and Valve Spring Upgrade Kits	TEX™ Fuel Rail Adanters	
Twisted Wedge® Top-End Engine Kits	TFX™ Fuel Pressure Regulators     TFX™ Fuel Injectors	
Valve Cover Kits     TFX™ Intake Combos	<ul> <li>TFX™ Fuel Line Fittings</li> <li>TFX™ Nitrous Systems and Blanket</li> </ul>	
<ul> <li>Replacement Valvetrain Components</li> <li>Cylinder Head and Intake Gaskets</li> </ul>	Accessories and Toolspa	ges <b>52–5</b> 4
Oylinder Head Bolt Kit     Valve Spring Upgrade Kit/Service Tools     Track Heat* Manifolds	MLS Head Gaskets     Phenolic Carburetor and TBI Truck Spacers	
TFX™ EFI Fuel Rails	Differential Covers     Transmission Pans	
High Flow Upper Plenums     EFI Programmer	Chrome Engine Accessories     Coolant Overflow/Recovery Tank	
PowerPort® Cylinder Heads and Intake Manifolds	True Roller Timing Chain Sets Track Max® Harmonic Dampers  Track Max® Harmonic Dampers	
for Ford 351C, 351M/400 pages 29–30	Underdrive Pulley Kits     Throttle Cable Bracket	
PowerPort Cleveland 190 Cylinder Heads     PowerPort Cleveland 225 Cylinder Heads     FEI Intake Manifolds	Engine Oil Supplement     Cylinder Head Bolt Kits	
• Track Heat <sup>®</sup> Intake Manifolds	Header Spark Plug Socket     Cylinder Head Porting Tools     Cylinder Head Work Stands	
Twisted Wedge <sup>®</sup> and Twisted Wedge <sup>®</sup> Track Heat <sup>®</sup> Cylinder Heads	Cylinder Head Work Stands     Promotional Items	nano 55
for Small Block Fordpages 31–33	Banner	pays JJ
Twisted Wedge 170 Cylinder Heads     Twisted Wedge 185 Cylinder Heads	License Plate     Windshield Decals	
Twisted Wedge 205 Cylinder Heads	Contingency Decals     Tire Cover	
Twisted Wedge Track Heat 170 Cylinder Heads Twisted Wedge Track Heat 185 Cylinder Heads Twisted Wedge Track Heat 190 Cylinder Heads	Steel Signs     Ball Caps	
Twisted Wedge Track Heat 190 Cylinder Heads     Twisted Wedge Race 206 Cylinder Heads     Twisted Wedge Race 225 Cylinder Heads     Twisted Wedge Race 225 Cylinder Heads	Fender Cover     Apparel	nane EE
Twisted Wedge Race 225 Cylinder Heads	• T-Shirts	pay6 J0
	<ul><li>Polo Shirts</li><li>Sweatshirts</li></ul>	
	Trick Flow Authorized Dealerspa	ges 57-59

Trick Flow Specialties has an ongoing product improvement program and reserves the right to change specifications without notice. Catalog errors in description or photography are subject to correction.



GenX<sup>®</sup> 205, 215, 225, 235, and 245 Cylinder Heads for GM LS Vortec, LS1, LS2, and LSX



**CNC-Profiled Combustion Chamber** 

**★** MADE

TFS-3060T001-C03 GM's LS engines are the hottest thing to hit the scene since Chevy debuted the first small block back in 1955. But even the mighty LS can be improved—that's why Trick

Flow has developed six models of cathedral port cylinder heads that significantly increase the performance of late model GM LS-powered musclecars and trucks.

Trick Flow engineers altered the valve angles from 15° to 13.5° for these fully CNCmachined heads to decrease valve shrouding, increase mid-lift airflow, and improve rocker arm-to-valve cover clearance. Testing verified that material added at the rocker arm mounting points increases high-rpm valvetrain stability and spark plugs relocated in the combustion chambers enhances mid-lift airflow and increases the rigidity of the casting for extreme horsepower applications.

GenX series cylinder heads are available with your choice of 205cc (Vortec), 215cc (LS1), 225cc (LS2), 235cc and 245cc (LSX) intake runners and 80cc exhaust runners. The combustion chambers are fully bowl-blended in 58cc (Vortec), 64cc (LS1), 65cc (LS2), or 70cc (LSX) volumes with 2.000" (Vortec), 2.040" (LS1), 2.055" (LS2), 2.080" (LSX 235cc), or 2.100" (LSX 245cc) intake valves, 1.575" (Vortec/LS1/LS2) or 1.600" (LSX) exhaust valves, bronze valve guides, and ductile iron valve seat inserts. Assembled heads come with 1.300" dual valve springs, Viton® fluoroelastomer canister-style valve seals, 7° machined steel valve locks, and 7° chromemoly or titanium retainers.

Bare cylinder head castings are also available.

#### GenX 205 Heads for GM LS 4.8L/5.3L/5.7L (Vortec), CNC-Ported Runners, Assembled

TFS-30500001-C00 4.8L/5.3L/5.7L (Vortec), chromemoly steel retainers,

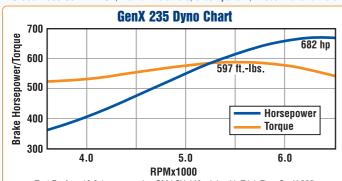
205cc intake runners

TFS-3050T001-C00 4.8L/5.3L/5.7L (Vortec), titanium retainers, 205cc intake runners

#### GenX 215, 225, 235, and 245 Heads for LS1, LS2, and LSX, **CNC-Ported Runners, Assembled**

TFS-3060T001-C01 LS1, titanium retainers, 215cc intake runners TFS-3060T001-C02 LS2, titanium retainers, 225cc intake runners TFS-3060T001-C03 LSX, titanium retainers, standard bolt pattern, 235cc intake runners

TFS-3060T003-C03 LSX, titanium retainers, 6-bolt pattern, 235cc intake runners TFS-3061T003-C04 LSX, titanium retainers, 6-bolt pattern, 245cc intake runners



Test Engine: 10.8:1 compression GM LSX 440 c.i.d. with Trick Flow GenX 235 cylinder heads (TFS-3060T001-C03), Lunati custom hydraulic roller camshaft (262°/270° duration @.050"; .629"/.629" lift; 114° lobe separation), Jesel 1.7 ratio roller rocker arms. FAST 90mm intake manifold. Kook's headers with 2" primaries. 31/2" dual exhaust with Flowmaster mufflers

#### **Specifications**

Material: A356-T61 aluminum Combustion Chamber Volume: C00: 58cc CNC-profiled C01: 64cc CNC-profiled C02: 65cc CNC-profiled

Intake Port Volume:

Intake Valve Seat:

C03/C04: 70cc CNC-profiled C00: 205cc CNC-ported C01: 215cc CNC-ported C02: 225cc CNC-ported C03: 235cc CNC-ported

C04: 245cc CNC-ported Stock

Intake Port Location: 3.250" x 1.070" cathedral Intake Port Dimensions: Cathedral OEM GM O-ring style Intake Gaskets: Intake Valve Diameter:

C00: 2.000" C01: 2 040 C02: 2.055' C03: 2.080 C04: 2.100' Ductile iron

Exhaust Port Volume: 80cc CNC-ported Exhaust Port Location: Stock **Exhaust Port Dimensions:** 1.460" x 1.670" oval Exhaust Gaskets: GM 12617944 Exhaust Valve Diameter: C00/C01/C02: 1.575" C03/C04: 1.600" Exhaust Valve Seat: Ductile iron

Valve Guide Material: C00: Trick-Alloy powdered metal C01/C02/C03/C04: Bronze alloy Valve Seals: Viton® fluoroelastomer canister

37° x 45° x 64° intake; 37° x 45° x 60° exhaust Valve Seat Angles:

Valve Spring Pocket Diameter:

1.480" C00: 7° x 1.300" o.d. chromemoly steel Valve Spring Retainers: C01/C02/C03/C04: 7° x 1.300" o.d. titanium

C00: 7° steel with bead lock Valve Stem Locks: C01/C02/C03/C04: 7° machined steel

Valve Springs: 1.300" o.d. dual spring 150 lbs. @ 1.800" installed height

438 lbs. @ 1.200" open 448 lbs. per inch rate .600" maximum valve lift

Minimum Bore Diameter: C00: 3.780" C01: 3.900"

C02: 4.000' C03: 4.125

TFS-92010 or equivalent Cylinder Head Bolts: Spark Plugs: NGK-4177 or NOTES: • C00: Roller rocker arms recommended NGK-4177 or equivalent

C01/C02/C03/C04: Roller rocker arms required

C03/04: Requires TFS-30694130-051 MLS head gaskets

on 4.000" bore engine blocks

#### **Airflow Results**

GenX 235 with for GM LSX				
Lift Value	Intake Flow CFM	Exhaust Flow CFM		
0.100"	65	55		
0.200"	144	124		
0.300"	229	196		
0.400"	287	242		
0.500"	323	260		
0.600"	340	270		
Tests conduct	Tests conducted at 28" of water (pressure). Bore size: 4 125"			

CNC-profiled combustion chambers; exhaust with 17/8" pipe.

To view more airflow charts, go to TrickFlow.com and type the part number vou want to see into the Search box and then click "Search"





**CNC-Profiled Combustion Chamber** 



**Specifications** 

Stock

Stock

1.575"

1.480"

01: 2.040" 02: 2.055"

Ductile iron

80cc Fast As Cast

GM 12617944

Ductile iron

Bronze alloy

1.460" x 1.670" oval

3.250" x 1.070" cathedral

Cathedral OEM GM O-ring style

Viton® fluoroelastomer canister 37° x 45° x 64° intake; 37° x 45° x 60° exhaust

Standard 1.300" o.d. dual spring

7° x 1.300" o.d. titanium

7° machined steel

Material<sup>3</sup> Combustion Chamber Volume:

Intake Port Volume:

Intake Port Location: Intake Port Dimensions: Intake Gaskets: Intake Valve Diameter:

Intake Valve Seat: Exhaust Port Volume: Exhaust Port Location: **Exhaust Port Dimensions:** Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material: Valve Seals: Valve Seat Angles:

Valve Spring Pocket Diameter: Valve Spring Retainers:

Valve Stem Locks:

Valve Springs:

150 lbs. @ 1.800" installed height 438 lbs. @ 1.200" open 448 lbs. per inch rate .600" maximum valve lift

Minimum Bore Diameter: 01: 3.900" 02: 4.000"

Cylinder Head Bolts: TFS-92010 or equivalent Spark Plugs: NG NOTE: • Roller rocker arms required NGK 4177 or equivalent

#### **Airflow Results**

GenX 220 for GM LS1			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	67	47	
0.200"	133	104	
0.300"	211	167	
0.400"	261	202	
0.500"	292	222	
0.550"	299	229	
0.600"	305	233	
Tests conducted at 28" of water (pressure). Bore size: 3.900"			

#### **Cylinder Head Bolt Kit** for GM LS

Keep combustion where it belongs! Trick Flow's high-quality cylinder head bolt kits provide consistent clamping force from bolt-to-bolt. The bolts are made from premium quality alloy steel with cold-formed heads and rolled threads. The kit contains all the bolts you need to install a pair of heads.

Cylinder head bolt kit, pre-2004 long style, TFS-92010

torque-to-yield, each

TFS-92010

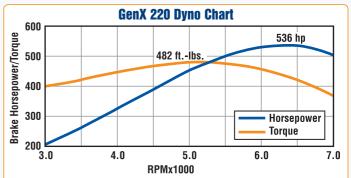
If you're looking for the best value in GM LS performance, look no further than Trick Flow's GenX 220 aluminum cylinder heads with Fast As Cast® runners. These GenX 220 heads feature all of the same goodies that make our CNC-ported heads so incredible—13.5° valve angles, decreased valve shrouding, increased mid-lift airflow, relocated spark plugs, improved rocker arm-to-valve cover clearance, and rigid casting design for extreme horsepower applications—but in a more affordable cast version that flows nearly as much air as the CNC-ported heads.

The Trick Flow GenX 220 cathedral port performance cylinder heads come with 220cc intake and 80cc exhaust Fast As Cast runners that duplicate the port shape and profile of full CNC-ported runners. The result is near CNC-ported power and performance for the same price as ordinary cast cylinder heads. Combustion chambers are 64cc (LS1) or 65cc (LS2) and valve sizes are 2.040" (LS1) or 2.055" (LS2) intake and 1.575" exhaust. Other features include bronze valve guides, ductile iron intake and exhaust valve seat inserts, 1.300" dual valve springs, Viton® fluoroelastomer canister-style valve seals, 7° machined steel valve locks, and 7° titanium retainers.

Bare cylinder head castings are also available.

#### GenX 220 Heads. Fast As Cast Runners. Assembled

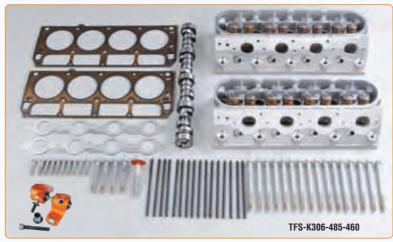
TFS-3060T001 LS1, 220cc intake runners LS2, 220cc intake runners TFS-3060T002



Test Engine: 10.1:1 compression GM 6.0L with Trick Flow GenX 220 cylinder heads (TFS-3060T002). Trick Flow Track Max® hydraulic roller camshaft (TFS-30602003—228°/230° duration @.050"; .585"/.585" lift; 112° lobe separation), Harland Sharp 1.7 ratio roller rocker arms, FAST 90mm intake manifold, Kook's headers with 11/8" primaries, 3" dual exhaust with Flowmaster mufflers



# Top-End Engine Kits • Valve Cover Spacers for GM LS



### GenX® Top-End Engine Kits USA for GM LS1/LS2

Don't waste time trying to figure out which parts you need to get the performance you want-Trick Flow has already done the work for you! These Trick Flow GenX Top-End Engine Kits for GM LS1 and LS2 are designed and dyno-tested to deliver the performance you want for less than purchasing the parts separately. Each kit includes a pair of Trick Flow GenX 215 or 225 CNC-ported cylinder heads (TFS-3060T001-C01 for LS1, TFS-3060T001-C02 for LS2), a specially matched hydraulic roller cam, roller rocker arms, pushrods, head gaskets, head bolts, exhaust gaskets, and balancer bolt. Tuning is required for maximum performance.

#### **GenX Top-End Engine Kits for GM LS1**

TFS-K306-485-460 485 hp/460 ft.-lbs., kit TFS-K306-500-460 500 hp/460 ft.-lbs., kit TFS-K306-515-460 515 hp/460 ft.-lbs., kit

NOTE: These kits were dyno-tested on a stock GM 5.7L LS1 short block with 10.5:1 compression, Trick Flow GenX 215 cylinder heads (TFS-3060T001-C01), Track Max hydraulic roller cam (TFS-30602001), and an LS6 intake manifold. 1997-98 engines require the use of centerbolt valve covers (sold separately).

#### GenX Top-End Engine Kit for GM LS2

TFS-K306-550-470 550 hp/470 ft.-lbs., kit

NOTE: This kit was dyno-tested on a GM 6.0L LS2 short block with 10.86:1 compression, Trick Flow GenX 225 cylinder heads (TFS-3060T001-C02), Track Max hydraulic roller cam (TFS-30602004), stock intake manifold with 90mm throttle body, Kook's headers with 13/4" primaries, and dual exhaust with 3" Flowmaster mufflers.

### GenX Top-End Engine Kit for GM LS Truck USA

Build some serious horsepower into 1999 and later GM 5.3L LS-powered trucks! The GenX Top-End Engine Kit for GM LS Truck features the performance-matched parts needed to add 50-75 horsepower at the rear wheels. The kit includes a pair of GenX 205 cylinder heads (TFS-30500001-C00), a hydraulic roller camshaft (TFS-30602001), heattreated chromemoly pushrods (TFS-21407500), Harland Sharp roller rocker arms, and GM Performance Parts head and exhaust gaskets and bolts. This top-end kit is not recommended for vehicles with flex fuel or active fuel management. Tuning is required for maximum performance.

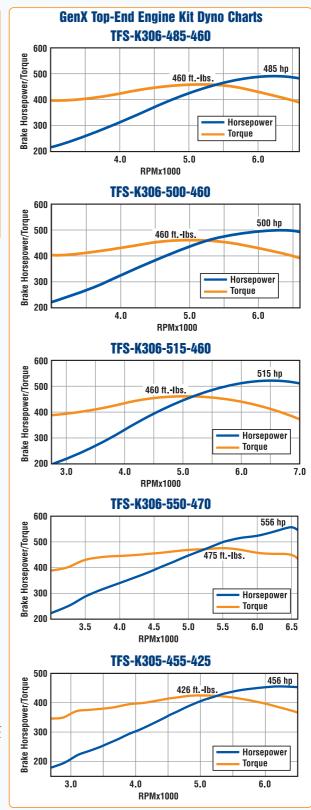
TFS-K305-455-425 455 hp/425 ft.-lbs., kit

NOTE: This kit was dyno-tested on a GM Performance Parts LS327 short block engine with Trick Flow GenX 205 cylinder heads (TFS-30500001-C00), Track Max hydraulic roller camshaft (TFS-30602001), chromemoly pushrods (TFS-21407500), Harland Sharp roller rocker arms, and stock GM LS truck intake manifold and 78mm throttle body.

#### **Valve Cover Spacers** for GM LS



These 1/2" thick aluminum spacers give GM LS owners the clearance they need to run shaft mount rockers. Fit 1999-2006 engines with centerbolt valve covers; includes gaskets and mounting hardware. GM LS valve cover spacers, pair









#### **Valve Spring Upgrade Kit** for GM LS

★ MADE IN THE

**True Roller** 

for GM LS



When installing a new cam in a late model Corvette, Camaro, or Firebird, the weak factory valve springs should be replaced with Trick Flow's GM LS valve spring upgrade kit.

The spring upgrade kit fits all 4.8L-6.0L LS-based engines with factory heads and delivers 6,000-plus rpm capability. Included are 1.300" diameter dual valve springs (150 lbs. seat pressure at 1.800" installed height; 438 lbs. @ 1.200" open pressure, 448 lbs. inch rate, 1.080" coil bind, .600" max valve lift), 1.300" titanium retainers, spring i.d. locators, machined steel valve locks, Viton® fluoroelastomer canister seals, and instructions.

TFS-2500300 Valve spring upgrade kit for OEM LS cylinder heads, each



chain and black oxide-coated crank sprocket are heat-treated for unrivaled strength. The CNC-machined cam gear has nine crank sprocket keyways for zero and  $\pm$  4°, 6°, or 8° timing adjustments. The timing marks are laser-etched.

TFS-30678533 Timing chain set, LS1, each TFS-30678534 Timing chain set, LS2, each



#### **TFX™ Fuel Injector Connectors and Adapters** for GM LS

Trick Flow's TFX fuel injector connectors and adapters make swapping intake manifolds and fuel injectors on late-model GM LS-based engines quick and painless. No cutting is necessary, and they are made to OEM specifications for a secure connection and to keep the contacts free of water, dirt, and debris.

TFS-89200 Replacement connector, EV1 injector, each TFS-89201 Adapter, EV1 injector to EV6 harness, each TFS-89202 Adapter, EV6 injector to EV1 harness, each TFS-89205 Adapter kit, LS2/L92 harness to EV1 injector, each





#### **TFX™ EFI Fuel Rails** for GM LS

These TFX billet fuel rails from Trick Flow were developed to allow owners of high performance GM LS-powered vehicles to build custom fuel systems. Includes specially constructed mounting brackets to keep the fuel rails tucked in close to the engine to prevent hood and intake manifold interference.

NOTE: Fits 1997-2004 LS1 and 2001-04 LS6; does not fit LS2. TFS-3068000R EFI fuel rails and mounting brackets, kit

#### **Camshaft Installation Handle**

Trick Flow's camshaft installation handle makes installing and removing cams much easier. It features an innovative U-shape design for more leverage when you need it most and a cushioned handle for comfort. The handle is 8" long and includes a universal mounting pattern to fit all types of camshafts, plus a protective zinc finish to protect it against corrosion.

Camshaft installation handle, each





TFS-30602001

### Track Max® Hydraulic Roller Camshafts for GM LS

	IN THE Cumshall Opcomodulus			
Part Number	Characteristics	Duration @ .050"	Valve Lift w/1.7 Rocker	Lobe Sep.
TFS-30602001	Street/Strip; excellent idle, strong midrange power, 2,000-6,000 rpm powerband, computer modification recommended. Compression: 10.5:1 minimum	216°/220°	.560"/.560"	114°
TFS-30602002	Street/Strip; good idle, strong midrange/top-end power, 2,500-6,300 rpm powerband, computer modification recommended. Compression: 10.5:1 minimum		.575"/.575"	112°
TFS-30602003	Street/Strip; fair idle, good midrange/strong top-end power, 2,500-6,500 rpm powerband, computer modification recommended. Compression: 10.5:1 minimum	228°/230°	.585"/.585"	112°
TFS-30602004	Street/Strip; fair idle, good midrange/strong top-end power, 3,000-7,000 rpm powerband, computer modification recommended. Compression: 10.5:1 minimum	238°/242°	.595"/.595"	112°

TFS-90150





**GenX® 185 and 195 Cylinder Heads** 





**CNC-Profiled Combustion Chamber** (54cc combustion chamber heads only)

Introduced on the 1992 Corvette, Chevy's Generation II LT1 small block featured a reverse cooling system to handle higher compression ratios and increased spark advance. What kept the LT1 from being a truly exceptional engine was its restrictive intake and cylinder heads.

Trick Flow fixed that problem when it created its first set of high performance heads for GM LT1 engines in 2004. These heads were designed with larger combustion chambers (62cc) to lower compression and larger Fast As Cast® runners (195cc intake/75cc exhaust) to create substantial gains in horsepower and torque in forced induction engines. The heads retain the use of stock sensors and fittings and include stainless steel 2.020" intake/1.600" exhaust valves, 1.460" double valve springs, retainers, locks, guideplates, and 3/8" rocker studs.

Trick Flow has expanded its LT1 lineup to include heads that deliver increased power on naturally aspirated engines. These heads feature 54cc combustion chambers to retain the LT1's factory 10.25:1 compression ratio and are CNC-profiled and bowlblended to maximize performance. The valve angles for the GenX 185 heads were reduced from 23° to 21° to increase piston-to-valve clearance and unshroud the chambers for better flow. Fast As Cast runners (185cc intake/67cc exhaust) duplicate the port shape and profile of fully CNC-ported runners to create the best-flowing cast LT1 head available. Right out of the box, these heads are easily capable of producing well in excess of 500 naturally aspirated horsepower!

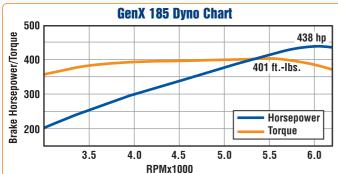
Rounding out the features are stainless steel 2.020" intake/1.600" exhaust valves. GM LS-style 1.300" double valve springs, chromemoly steel retainers and locks, guideplates, and ARP 3/8" rocker studs. Of course, the heads retain the use of all stock sensors and fittings.

So whether you favor supercharged, nitrous, or naturally aspirated LT1 power, Trick Flow has a set of GenX heads to suit your needs.

Bare cylinder head castings are also available.

#### GenX 185 and 195 Heads, Fast As Cast Runners, Assembled

TFS-30400008-M54 Naturally aspirated engines, 21° valve angle, 185cc intake runners TFS-30400010 Forced induction engines, 23° valve angle, 195cc intake runners



Test Engine: 10.42:1 compression 350 c.i.d. with Trick Flow GenX 185 cylinder heads (TFS-3040008-M54), Trick Flow Track Max® hydraulic roller camshaft (TFS-31402081— 219°/227° duration @.050"; .530"/.530" lift; 113° lobe separation), Trick Flow Track Max® 1.6 ratio roller rocker arms (TFS-31400513), stock GM intake manifold and 52mm throttle body, Hooker Super Competition headers with 13/4" primaries, 3" dual exhaust with Flowmaster mufflers

Specialties

#### **Specifications**

Material Combustion Chamber Volume:

Intake Port Volume:

Intake Port Location: Intake Port Dimensions:

Intake Gaskets: Intake Valve Diameter: Intake Valve Seat:

Exhaust Port Volume:

**Exhaust Port Location: Exhaust Port Dimensions:** Exhaust Gaskets:

Exhaust Valve Diameter: Exhaust Valve Seat:

Valve Guide Material: Valve Seals: Valve Seat Angles:

Valve Spring Pocket Diameter:

Valve Spring Retainers: Valve Stem Locks: Valve Springs:

Guideplates:

Rocker Arm Studs:

A356-T61 aluminum M54: 54cc CNC-profiled 10: 62cc

M54: 185cc Fast As Cast 10: 195cc Fast As Cast Stock

M54: 1.220" x 2.120" 010: 1.280" x 2.090" Fel-Pro 1284 or equivalent

2.020" M54: Ductile iron 10: Tungsten alloy

M54: 67cc Fast As Cast 10: 75cc Fast As Cast Stock 1.350" x 1.450" D-shape Fel-Pro 1404

1.600" M54: Ductile iron 10: Tungsten alloy Bronze alloy Viton® fluoroelastomer M54: 37°x 45°x 60°

10: 37°x 45°x 52° M54: 1.615" 10: 1.615" except two center valve springs

1.500" for two center valve springs 7° x 1.437"-1.500" o.d. chromemoly steel 7° machined steel

M54: 1.300" o.d. dual spring with damper 150 lbs. @ 1.800" installed height

450 lbs. @ 1.200" open 448 lbs. per inch rate .600" maximum valve lift

10: 1.460" o.d. dual spring with damper 125 lbs. @ 1.800" installed height 376 lbs. @ 1.180" open

420 lbs. per inch rate .600" maximum valve lift For use with 5/16" pushrods

Rocker Arm Type: Narrow body stud mount roller rocker arms required

4.000" Minimum Bore Diameter: Cylinder Head Bolts:

TFS-92000 or ARP 136-3601 NGK FR5, Autolite 3924, or equivalent Spark Plugs: Includes LT1 and LT4 intake gasket alignment holes NOTE:

(TFS-30400008-M54 only)

#### **Airflow Results**

GenX 195 for GM LT1			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	51	58	
0.200"	136	98	
0.300"	191	136	
0.400"	230	163	
0.500"	253	177	
0.600"	254	190	
Tests conducted at 28" of water (pressure). Bore size: 4.030"; exhaust with 1¾" pipe.			



### Track Max® Hydraulic Roller Camshaft for GM LT1

Camshaft Specifications				
Part Number	Characteristics	Duration @ .050"	Valve Lift w/ 1.6 Rocker Arms	Lobe Sep.
TFS-31402081	Street/Strip, fair idle, strong midrange power, 1,800-5,800 rpm powerband. 2,500-3,000 rpm stall converter. Compression: 10.25:1 minimum		.530"/.530"	113°



#### **TFX™ Cold Air Intake Kits and Air Inlet Elbows** for GM LT1

If you're serious about wringing the maximum amount of power from your LT1, you must eliminate intake restrictions. The same engineers who designed the best LT1 heads available developed the best high-flow cold air intake kit and air inlet elbow available for your car, too!

Trick Flow's Cold Air Intake Kit for LT1 replaces the restrictive stock airbox with a freer-flowing unit and reusable cotton-gauze filter to dramatically increase airflow to the engine. The kit includes the airbox, filter, mounting hardware, and instructions

#### **Cold Air Intake Kits**

TFS-23057 Cold Air Kit, 1993-97 LT1 Chevrolet/Pontiac Camaro/Firebird, each TFS-23058 Cold Air Kit, 1994-96 LT1 Chevrolet Impala SS/Caprice, each

Replace the ugly, performance-robbing factory rubber elbow with Trick Flow's Air Inlet Elbow. Designed to increase airflow and power and add a splash of dress-up under the hood, they eliminate the factory resonator tube and include all provisions for factory sensors. These elbows work with all stock air inlet systems and most brands of cold air intake kits.

#### Air Inlet Elbows

TFS-3150800 Air Inlet Elbow, aluminum, ceramic coated, each TFS-3150801 Air Inlet Elbow, aluminum, black, each TES-315B800 Air Inlet Elbow, aluminum, natural, each TFS-3150805 Air Inlet Elbow, composite polymer, black, each

# Trick Flow Fast As Cast® **Cvlinder Heads**— Great Performance at an As-Cast Price!

Not everyone needs the all-out airflow capability of a Trick Flow CNC-ported cylinder head. But you can get plenty of power-building airflow with Trick Flow's Fast As Cast cylinder heads—and for about the same price as the "other guy's" ordinary cast heads.

To create a Fast As Cast cylinder head, our engineers digitize the intake and exhaust runners from a fully CNC-ported Trick Flow cylinder head. Those digitized profiles allow us to make a high-flow cylinder head without costly CNC-porting. That means Trick Flow Fast As Cast cylinder heads outflow any ordinary cast head available—and even rival some of our competitor's CNCported heads. You get great performance at a very affordable price!

Fast As Cast cylinder heads—Ultimate Bolt-On Performance!TM

#### **Camshaft Installation Handle**

Trick Flow's camshaft installation handle makes installing and removing cams much easier. It features an innovative U-shape design for more leverage when you need it most and a cushioned handle for comfort. The handle is 8" long and includes a universal mounting pattern to fit all types of camshafts, plus a protective zinc finish to protect it against corrosion. TFS-90150

Camshaft installation handle, each









### **Camaro Sign**

Every home, garage, and shop has a wall that looks too slow. Trick Flow has engineered the solution—these



bold steel signs. You get one square foot of pure, American-made cartoon horsepower of a Camaro SS design. Metal corner grommets make installation an easy bolt-on job.

TFS-170 Sign, 1969 Chevy Camaro SS, each







Combustion Chamber

The Trick Flow Super 23 175 heads are a high performance replacement for original equipment cast iron heads and accept most factory accessories. They feature angled spark plugs, 56cc combustion chambers, 1.940"/1.500" stainless steel valves, hardened ductile iron valve seats, and high-flow 175cc Fast As Cast® intake runners with a small cross-section design to promote low-rpm torque and high-rpm horsepower on small bore, street performance engines.

Trick Flow Super 23 175 heads are available with three spring sizes: 1.250" singles for cams up to .480" lift, 1.470" singles for cams up to .540" lift, and 1.460" dual springs for cams up to .600" lift. The heads come fully assembled with stainless steel valves, valve springs, locks, retainers, ARP rocker arm studs, and guideplates. Cylinder heads are 50-state emissions-legal under CARB E.O. number #D-369-6 for 1995 and earlier GM vehicles with Chevy 262–350 engines. Bare cylinder head castings are also available.

#### Super 23 175 Heads, Fast As Cast Runners, Assembled

Super 25 175 r	ieaus, rasi as casi nuilleis, assellibleu
TFS-30300001	1.250" single valve springs, perimeter bolt valve covers,
	175cc intake runners
TFS-30300002	1.470" single valve springs, perimeter bolt valve covers,
	175cc intake runners
TFS-30300003	1.460" dual valve springs, perimeter bolt valve
	covers, 175cc intake runners
TFS-30300005	1.250" single valve springs, center bolt valve
	covers, 175cc intake runners
TFS-30300006	1.470" single valve springs, center bolt valve covers,
	175cc intake runners
TFS-30300007	1.460" dual valve springs, center bolt valve covers,

### Trick Flow Fast Fact: Efficiency

175cc intake runners

Pushrod length greatly affects the efficiency of the motion transfer to the valves by altering the tip travel of the rocker arms. For maximum valvetrain efficiency, rocker arm tip travel on the valve stem should be .080" or less.

As a rule, longer pushrods will decrease rocker arm tip travel. If you can't get a tip travel measurement of .080" or less after trying several pushrod lengths, you will have to switch to another brand of rocker arms and start over.

When checking pushrod length with roller tip rocker arms, note the position of the roller tip on the valve stem when the valve is at one-half of its net lift. Ideally, the centerline of the rocker arm's tip should coincide with the centerline of the valve at one-half of its net lift—providing an equal amount of rocker arm tip travel on each half of the valve stem tip.

If you have questions about checking pushrod length or pushrod/rocker arm recommendations for your combination, contact the Trick Flow Technical Department at 1-330-630-1555, Monday through Friday from 9:00 am to 5:00 pm EST.

#### **Specifications**

A356-T6 aluminum Material: Combustion Chamber Volume: 56cc Intake Port Volume: 175cc Fast As Cast Intake Port Location: Stock 1.230" x 1.990" Intake Port Dimensions: Fel-Pro 1256 Intake Gaskets: Intake Valve Diameter: 1.940" Intake Valve Seat: Ductile iron 67cc Fast As Cast Exhaust Port Volume: Exhaust Port Location: Stock

Exhaust Port Dimensions: 1.300" x 1.350" D-shape Exhaust Gaskets: Fel-Pro 1404

Exhaust Valve Diameter: 1.500"
Exhaust Valve Seat: Ductile iron.

Exhaust Valve Seat: Ductile iron, 1.570" x 1.350" x .375" Valve Guide Material: Bronze alloy

Valve Seals: Viton® fluoroelastomer
Valve Seat Angles: 35° x 45° x 60°
Valve Spring Pocket Diameter: 1.615"
Valve Spring Cups: 1.250"

Valve Spring Retainers: 1.470"
7° x 1.250" o.d. chromemoly steel
7° x 1.500" o.d. chromemoly steel

Valve Stem Locks: 7° stamped steel 7° machined steel

Valve Springs, Standard: 1.250" o.d. single spring with damper 110 lbs. @ 1.800" installed height

300 lbs. @ 1.280" open 360 lbs. per inch rate .480" maximum valve lift

Valve Springs, Option 1: 1.470" o.d. single spring with damper

120 lbs. @ 1.780" installed height 275 lbs. @ 1.280" open

360 lbs. per inch rate .540" maximum valve lift 1.460" o.d. dual spring with damper

Valve Springs, Option 2: 1.460" o.d. dual spring with damper 145 lbs. @ 1.780" installed height

376 lbs. @ 1.800" open 420 lbs. per inch rate

.600" maximum valve lift
Guideplates: For use with 5/16" pushrods

Minimum Bore Diameter: 3.750"

Cylinder Head Bolts: TFS-92000 or ARP 136-3601 Spark Plugs: NGK FR5, Autolite 3924, or equivalent

NOTE: • Must use 350 or larger head gasket on 305 engines

#### **Airflow Results**

Super 23 175 for Small Block Chevrolet			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	62	57	
0.200"	127	109	
0.300"	180	142	
0.400"	219	167	
0.500"	242	181	
0.600"	245	192	
Tests conducted at 28" of water (pressure)			

lests conducted at 28" of water (pressure). Bore size: 4.030"; exhaust with 1¾" pipe.

To view more airflow charts, go to TrickFlow.com and type the part number you want to see into the Search box and then click "Search".



# Super 23® 195 Cylinder Heads



**CNC-Profiled Combustion Chamber** (64cc and 72cc combustion chamber heads only)



#### **Specifications**

Material: Combustion Chamber Volume:

62cc 64cc CNC-profiled 72cc CNC-profiled 195cc Fast As Cast Stock 1.280" x 2.090"

Intake Port Volume: Intake Port Location: Intake Port Dimensions: Intake Gaskets: Intake Valve Diameter:

Fel-Pro 1205 2.020" Tungsten alloy 72cc Fast As Cast Stock

Exhaust Port Volume: Exhaust Port Location: **Exhaust Port Dimensions:** 

Intake Valve Seat:

1.350" x 1.500" D-shape Fel-Pro 1404

Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material:

1.600" Tungsten alloy Bronze alloy Viton® fluoroelastomer

Valve Seals: Valve Seat Angles: Valve Spring Pocket Diameter:

37° x 45° x 52° 1.615"; 1.500" for two center valve springs

Valve Spring Cups: 1.480" x 1.610" x .060" Valve Spring Shims:

.060"

Valve Spring Retainers:

7° x 1.250" o.d. chromemoly steel 7° x 1.437"-1.500" o.d. chromemoly steel

Valve Stem Locks: 7° stamped steel 7° machined steel

Valve Springs, Standard: 1.250" o.d. single spring with damper 110 lbs. @ 1.780" installed height

300 lbs. @ 1.280" open 360 lbs. per inch rate .480" maximum valve lift

Valve Springs, Option 1: 1.470" o.d. single spring with damper 120 lbs. @ 1.800" installed height

300 lbs. @ 1.280" open 360 lbs. per inch rate .540" maximum valve lift

Valve Springs, Option 2: 1.460" o.d. dual spring with damper

125 lbs. @ 1.800" installed height 376 lbs. @ 1.180" open

420 lbs. per inch rate .600" maximum valve lift For use with 5/16" pushrods

Guideplates: Rocker Arm Studs: ARP 3/8"

Minimum Bore Diameter:

TFS-92000 or ARP 136-3601 Cylinder Head Bolts: Spark Plugs: NGK FR5, Autolite 3924, or equivalent

#### **Airflow Results**

Super 23 195 with 72cc CNC-Profiled Chambers			
Lift Value	Intake Flow CFM Exhaust Flow CFM		
0.100"	71	53	
0.200"	142	99	
0.300"	196	135	
0.400"	234	167	
0.500"	249	186	
0.600"	249	199	

Tests conducted at 28" of water (pressure). Bore size 4.030". CNC-profiled chambers; exhaust with 1¾" pipe.

To view more airflow charts, go to TrickFlow.com and type the part number you want to see into the Search box and then click "Search".

fit, high performance replacement for most original

equipment factory heads and accept most factory accessories. Features include angled spark plugs, a choice of 62cc standard cast or 64cc and 72cc CNC-profiled combustion chambers, 2.020"/1.600" stainless steel valves, hardened exhaust valve seats, and 195cc Fast As Cast® intake runners with a high-velocity, small cross-section design to promote low-rpm torque without sacrificing higher rpm horsepower.

The Super 23 195 heads are available with three spring sizes: 1.250" single for cams up to .480" lift, 1.470" single for cams up to .540" lift, and 1.460" dual for cams up to .600" lift. They come fully assembled with valves, valve springs, locks, retainers, rocker arm studs, and guideplates. All cylinder heads are 50-state emissions-legal under CARB E.O. number D-369-16 for 1995 and earlier GM vehicles with Chevy 262-350 engines. Bare cylinder head castings are also available.

#### Super 23 195 Heads, Fast As Cast Runners, Assembled **62cc Combustion Chambers**

TFS-30400001 1.250" single springs, perimeter bolt valve covers, 195cc intake runners TFS-30400002 1.470" single springs, perimeter bolt valve covers, 195cc intake runners TFS-30400003 1.460" dual springs, perimeter bolt valve covers, 195cc intake runners TFS-30400005 1.250" single springs, center bolt valve covers, 195cc intake runners TFS-30400006 1.470" single springs, center bolt valve covers,

195cc intake runners

TFS-30400007 1.460" dual springs, center bolt valve covers,

195cc intake runners

#### 64cc CNC-Profiled Combustion Chambers

TFS-30400001-M64 1.250" single springs, perimeter bolt valve covers,

195cc intake runners

TFS-30400002-M64 1.470" single springs, perimeter bolt valve covers, 195cc intake runners TFS-30400003-M64 1.460" dual springs, perimeter bolt valve covers, 195cc intake runners TFS-30400005-M64 1.250" single springs, center bolt valve covers, 195cc intake runners TFS-30400006-M64 1.470" single springs, center bolt valve covers, 195cc intake runners TFS-30400007-M64 1.460" dual springs, center bolt valve covers, 195cc intake runners

#### 72cc CNC-Profiled Combustion Chambers

TFS-30400012-M72 1.470" single springs, perimeter bolt valve covers, 195cc intake runners TFS-30400013-M72 1.460" dual springs, perimeter bolt valve covers, 195cc intake runners TFS-30400014-M72 1.470" single springs, center bolt valve covers, 195cc intake runners TFS-30400015-M72 1.460" dual springs, center bolt valve covers, 195cc intake runners



Test Engine: 10:1 compression 383 c.i.d. with Trick Flow Super 23 195 cylinder heads (TFS-30400013-M72; 72cc CNC-profiled combustion chambers), Trick Flow Track Max® hydraulic roller camshaft (TFS-31402002— 246°/254° duration @.050"; .558"/.558" lift; 112° lobe separation), Trick Flow 1.5 ratio roller rocker arms (TFS-31400510), Edelbrock Victor Jr. intake manifold, Hooker headers with 13/4" primaries, 3" dual exhaust with Flowmaster mufflers.



Super 23® 215 Cylinder Heads





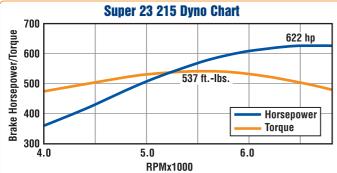
Combustion Chamber

Trick Flow Super 23 215 aluminum cylinder heads will give a performance boost to race-ready small blocks. Based on the Super 23 195 heads, these heads have angled spark plugs and are available with 67cc or 72cc combustion chambers, feature larger, high-flow Fast As Cast® 215cc intake and 78cc exhaust runners, and 2.080" stainless steel intake valves. Trick Flow even offers 1.550" dual valve springs for use with cams up to .680" of valve lift. The result? More airflow in the mid and upper rpm range—and that means more power.

The Super 23 215 heads are fully assembled with valves, valve springs, 10° machined steel locks, retainers, and Viton® fluoroelastomer seals. ARP 7/16" rocker studs and guideplates for 5/16" pushrods are included.

Bare cylinder head castings are also available.

Super 23 215 Heads, Fast As Cast Runners, Assembled				
TFS-32400006	67cc combustion chambers and 1.550" dual valve springs			
	(420 lbs./in.), 215cc intake runners			
TFS-3240T006	67cc combustion chambers, 1.550" dual valve springs			
	(420 lbs./in.), and titanium retainers, 215cc intake runners			
TFS-32400007	67cc combustion chambers and 1.550" dual valve springs			
	(460 lbs./in.), 215cc intake runners			
TFS-3240T007	67cc combustion chambers, 1.550" dual valve springs			
	(460 lbs./in.), and titanium retainers, 215cc intake runners			
TFS-32400012	72cc combustion chambers and 1.550" dual valve springs			
	(420 lbs./in.), 215cc intake runners			
TFS-3240T012	72cc combustion chambers, 1.550" dual valve springs			
	(420 lbs./in.), and titanium retainers, 215cc intake runners			
TFS-32400013	72cc combustion chambers and 1.550" dual valve springs			
	(460 lbs./in.), 215cc intake runners			
TFS-3240T013	72cc combustion chambers, 1.550" dual valve springs			



(460 lbs./in.), and titanium retainers, 215cc intake runners

Test Engine: 12:1 compression 406 c.i.d. with Trick Flow Super 23 215 cylinder heads (TFS-32400007), Trick Flow Track Max® mechanical roller camshaft (TFS-31404000-264°/268° duration @.050"; .630"/.630" lift; 112° lobe separation), Trick Flow 1.5/1.6 ratio roller rocker arms (TFS-31400522), Edelbrock Super Victor intake manifold, Hooker Super Competition headers with 11/4" primaries, open exhaust.

#### **Specifications**

A356-T6 aluminum Material: Combustion Chamber Volume: 06/07: 67cc 12/13: 72cc Intake Port Volume: 215cc Fast As Cast Intake Port Location: Stock Intake Port Dimensions: 1.310" x 2.210" Intake Gaskets: Fel-Pro 1206 Intake Valve Diameter: 2.080" Intake Valve Seat: Ductile iron Exhaust Port Volume: 78cc Fast As Cast

**Exhaust Port Location:** Stock **Exhaust Port Dimensions:** 1.450" x 1.450" D-shape Exhaust Gaskets: Fel-Pro 1406 Exhaust Valve Diameter: 1.600" Exhaust Valve Seat: Ductile iron Valve Guide Material: Bronze alloy Viton® fluoroelastomer

Valve Seals: Valve Seat Angles: 35° x 45° x 60° Valve Spring Pocket Diameter: 1.615"

Valve Spring Retainers: 10° x 1.550" o.d. chromemoly steel 10° x 1.550" o.d. titanium

Valve Stem Locks: 10° machined steel with lash cap recess Valve Springs, Standard: 1.550" o.d. dual spring with damper 138 lbs. @ 1.950" installed height 430 lbs. @ 1.250" open

420 lbs. per inch rate .680" maximum valve lift

1.550" o.d. dual spring with damper Valve Springs, Optional: 215 lbs. @ 1.950" installed height 550 lbs. @ 1.270" open

460 lbs. per inch rate .680" maximum valve lift For use with 5/16" pushrods

Guideplates: ARP 7/16" Rocker Arm Studs: Minimum Bore Diameter: 4.000"

TFS-92000 or ARP 136-3601 Cylinder Head Bolts: Spark Plugs: Autolite 3922 or equivalent NOTE: • Must use head gaskets with 4.155" bore diameter

#### **Airflow Results**

Super 23 215 with 72cc Combustion Chambers				
Lift Value	Lift Value Intake Flow CFM Exhaust Flow CFM			
0.100"	66	58		
0.200"	141	108		
0.300"	199	147		
0.400"	244	180		
0.500" 273 202				
0.600"	0.600" 282 214			
0.700" 287 223				
Tests conducted at 28" of water (pressure). Bore size: 4.155": exhaust with 1%" pipe.				

Compliment your new Super 23® 215 heads with a Track Max® camshaft for unbeatable, race-winning performance! You can find them on page 16.





## Super 23<sup>®</sup> 230 Cylinder Heads for Small Block Chevrolet

TES-3240T001-C03



**CNC-Profiled Combustion Chamber** 

#### **Specifications**

Stock

2 080'

Stock

1.600"

1.615"

A356-T6 aluminum

70cc CNC-profiled

230cc CNC-ported

1.300" x 2.300" Mr. Gasket 111

78cc CNC-ported

1.490" x 1.490" D-shape

Bronze alloy Viton® fluoroelastomer

10° x 1.550" o.d. titanium

420 lbs. per inch rate

.680" maximum valve lift

550 lbs. @ 1.270" open

.680" maximum valve lift

For use with 5/16" pushrods

TFS-92000 or ARP 136-3601

Autolite 3922 or equivalent

460 lbs. per inch rate

ARP 7/16"

10° machined steel with lash cap recess

1.550" o.d. dual spring with damper

1.550" o.d. dual spring with damper

215 lbs. @ 1.950" installed height

138 lbs. @ 1.950" installed height 430 lbs. @ 1.250" open

Ductile iron

Fel-Pro 1406

Ductile iron

35° x 45° x 60°

Material<sup>3</sup> Combustion Chamber Volume: Intake Port Volume: Intake Port Location: Intake Port Dimensions: Intake Gaskets: Intake Valve Diameter: Intake Valve Seat: Exhaust Port Volume: **Exhaust Port Location: Exhaust Port Dimensions:** 

Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material: Valve Seals: Valve Seat Angles:

Valve Spring Pocket Diameter: Valve Spring Retainers:

Valve Stem Locks: Valve Springs, Standard:

Valve Springs, Optional:

Guideplates: Rocker Arm Studs: Minimum Bore Diameter:

Cylinder Head Bolts: Spark Plugs: Autolite 3922 or equivale NOTE: • Must use head gaskets with 4.155" bore diameter

**Airflow Results** 

Super 23 230 for Small Block Chevrolet			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	69	55	
0.200"	144	112	
0.300"	213	158	
0.400"	265	195	
0.500"	296	220	
0.600"	305	234	
0.700"	310	240	
Tests conducted at 28" of water (pressure). Bore size: 4 155"			

CNC-profiled combustion chambers; exhaust with 17/8" pipe.

Trick Flow's Super 23 230 aluminum cylinder heads are the closest thing you can get to 18 degree cylinder head performance in a 23 degree head. Designed to use

standard small block Chevy valvetrain components and headers, Trick Flow Super 23 230 heads are the best value in small block Chevy performance—period.

Designed specifically for 400 cubic inch and larger engines, these heads have the ability to produce well over 600 naturally aspirated horsepower when matched with the proper components.

The Super 23 230 heads are fully CNC-ported with 70cc combustion chambers and high-flow 230cc intake and 78cc exhaust runners. They're ready-to-run out of the box, with 2.080"/1.600" stainless steel valves, 1.550" dual valve springs for use with cams up to .680" of valve lift, 10° machined steel locks, chromemoly or titanium retainers, and Viton® fluoroelastomer valve seals. ARP 7/16" rocker studs and guideplates for 5/16" pushrods are also included.

Bare cylinder head castings are also available.

#### Super 23 230 Heads, CNC-Ported Runners, Assembled

TFS-32400002-C03 1.550" dual valve springs (420 lbs./in.) and chromemoly retainers, 230cc intake runners TES-3240T002-C03 1.550" dual valve springs (420 lbs./in.) and titanium retainers,

230cc intake runners TFS-32400001-C03

1.550" dual valve springs (460 lbs./in.) and chromemoly

retainers, 230cc intake runners

TFS-3240T001-C03 1.550" dual valve springs (460 lbs./in.) and titanium retainers, 230cc intake runners



Test Engine: 11.5:1 compression 406 c.i.d. with Trick Flow Super 23 230 cylinder heads (TFS-3240T001-C03), Trick Flow Track Max® mechanical roller camshaft (TFS-31404001-266°/270° duration @.050"; .630"/.630" lift; 112° lobe separation), Trick Flow 1.5/1.6 ratio roller rocker arms (TFS-31400522), Edelbrock Super Victor intake manifold, Hooker Super Competition headers with 17/8" primaries, open exhaust.



### Finding Serious Horsepower is Easier Than Ever!

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**Ultra 18® 250 Cylinder Heads** 





**CNC-Profiled Combustion Chamber** 

Trick Flow's Ultra 18 250 cylinder heads can make serious horsepower—power ideal for high-rpm circle track or super class drag racing. Dyno-testing proves ita 406 cubic inch. 12:1 compression small block with out-of-the-box Ultra 18 250 heads produced 730 peak horsepower at 7,500 rpm and 545 ft.-lbs. of peak torque

These heads deliver high airflow numbers—334 cfm intake/256 cfm exhaust right out of the box. They feature 56cc CNC-profiled combustion chambers, Fast As Cast® 250cc raised intake and 100cc exhaust runners, ductile iron intake, hard bronze exhaust valve seats, and manganese bronze valve guides.

The bare castings are machined for 2.150"/1.600" valves (and can accept valves up to 2.200"/1.625") and 1.640" valve springs. Assembled heads feature 2.150"/1.600" stainless steel valves, 1.550" dual valve springs, and 10° retainers and locks.

Trick Flow Ultra 18 250 heads accept most current 18 degree intake manifolds (including two-piece manifolds), headers, and other components. They require the use of offset shaft mount rocker arms and a mechanical roller camshaft with offset intake lifters. Bare cylinder head castings are also available.

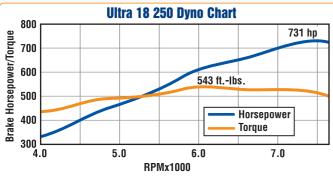
#### Ultra 18 250 Heads, Fast As Cast Runners, Assembled

TFS-31800001-M56 1.560" dual valve springs, 250cc intake runners TFS-3180T001-M56 1.560" dual valve springs and titanium retainers,

250cc intake runners

TFS-3180T801-M56 1.640" dual valve springs and titanium retainers,

250cc intake runners



Test Engine: 12:1 compression 406 c.i.d. with Trick Flow Ultra 18 250 cylinder heads (TFS-3180T001-M56), Trick Flow Track Max® mechanical roller camshaft (TFS-31404001-266°/270° duration @.050"; .630"/.630" lift; 112° lobe separation), Jesel 1.5/1.6 ratio roller rocker arms, Edelbrock Victor intake manifold, Dynatech headers with 11/8" to 2" stepped primaries, open exhaust

#### **Specifications**

A356-T6 aluminum 56cc CNC-profiled Material Combustion Chamber Volume: Intake Port Volume: 250cc Fast As Cast Intake Port Location: GM 18° 1.350" x 2.200" Intake Port Dimensions: TFS-31800901 Intake Gaskets: Intake Valve Diameter: 2.150" Intake Valve Seat: Ductile iron Exhaust Port Volume: 100cc Fast As Cast **Exhaust Port Location:** GM 18° 1.760" x 1.460" oval **Exhaust Port Dimensions:** Exhaust Gaskets: TFS-31800901 Exhaust Valve Diameter: 1.600" Exhaust Valve Seat: Copper bronze alloy Valve Guide Material: Manganese bronze alloy

Valve Seals: Viton® fluoroelastomer Valve Seat Angles: 35° x 45° x 60°

Valve Spring Pocket Diameter: Valve Spring Retainers: 1.660"

10° x 1.550" o.d. chromemoly steel

10° x 1.550" o.d. titanium 10° x 1.625" o.d. titanium

Valve Stem Locks: 10° machined steel with lash cap recess Valve Springs, Standard: 1.560" o.d. dual spring with damper 240 lbs. @ 2.000" installed height

600 lbs. @ 1.280" open 500 lbs. per inch rate .700" maximum valve lift

Valve Springs, Optional: 1.640" o.d. dual spring with damper 250 lbs. @ 2.000" installed height

800 lbs. @ 1.150" open 650 lbs. per inch rate .850" maximum valve lift

Shaft-style with .550" offset intake and Rocker Arm Type:

.220" offset exhaust

Minimum Bore Diameter: 4.155" Cylinder Head Bolts: ARP 234-3721

Spark Plugs: Autolite 3932 or equivalent

NOTES: • Requires use of roller lifters with .180" offset intake and no offset

exhaust

Requires intake manifold and headers designed specifically for 18° heads

#### **Airflow Results**

Ultra 18 250 for Small Block Chevrolet			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	73	61	
0.200"	144	113	
0.300"	215	158	
0.400"	274	200	
0.450"	292	216	
0.500"	313	230	
0.550"	326	240	
0.600"	334	248	
0.650"	334	252	
0.700"	334	256	

Tests conducted at 28" of water (pressure). Bore size: 4.155 CNC-profiled combustion chambers with cartridge roll clean-up; exhaust with 2" pipe.



Get the most out of your small block Chevy or GM LT1 with Trick Flow's Top-End Engine Kits. Each kit is carefully tuned to deliver the right amount of horsepower and torque. Take the time and guesswork out of designing a winning combination and save some hard-earned cash.

Super 23 Top-End Kits for small block Chevy are built around a set of dyno-proven, Super 23 195 cylinder heads with 195cc Fast As Cast® intake runners and your choice of 64cc or 72cc CNC-profiled combustion chambers. You also get a hydraulic flat tappet or hydraulic roller camshaft, matching lifters (flat tappet cams only), pushrods (flat tappet cams only), roller rocker arms, double roller timing chain, thrust button (roller cams only), cam locking plate, head bolts, pushrod length checker (roller cams only), and a gasket set.

GenX Top-End Kits for GM LT1 feature Trick Flow's GenX 185 heads to deliver increased power on naturally aspirated engines. These heads feature 54cc CNC-profiled and bowl-blended combustion chambers and Fast As Cast runners (185cc intake/67cc exhaust). You also get a hydraulic roller camshaft, pushrod length checker, roller rocker arms, head bolts, and a gasket set.



#### Super 23 Top-End Engine Kits, Flat Tappet Cam

TFS-K314-350-400	350 hp/400 ftlbs., kit
TFS-K314-420-395	420 hp/395 ftlbs., kit
TFS-K314-445-405	445 hp/405 ftlbs., kit
TFS-K314-465-450	465 hp/450 ftlbs., kit
TFS-K314-490-440	490 hp/440 ftlbs., kit
TFS-K314-500-450	500 hp/450 ftlbs., kit

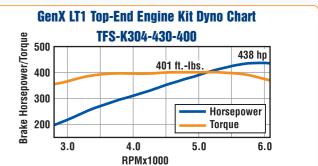


### Super 23 Top-End Engine Kit, Factory Roller Cam

#### TFS-K315-465-450 465 hp/450 ft.-lbs., kit

TFS-K304-430-400 430 hp/400 ft.-lbs., kit

GenX LT1 Top-End Engine Kit



RPMx1000

Test Engine: 350 c.i.d. short block with Trick Flow GenX 185 cylinder heads with 54cc CNC-profiled combustion chambers (TFS-30400008-M54), Track Max® hydraulic roller camshaft (TFS-31402081), 10.42:1 compression, stock intake manifold, and a 52mm throttle body.

# TFS-K314-350-400 400 ft.-lbs. 350 hp Horsepower Torque

5.0

RPMx1000

Test Engine: 350 c.i.d. short block with flat top pistons, Super 23 195 cylinder heads with 64cc CNC-profiled combustion chambers (TFS30400001-M64), Track Max® hydraulic camshaft (TFS-31401000), 9.5:1 to 10.0:1 compression, an Edelbrock Performer RPM intake manifold, and a Holley 600 cfm carburetor.

4.0

Brake Horsepower/Torque

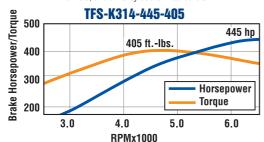
500

400

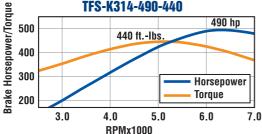
300

200

3.0

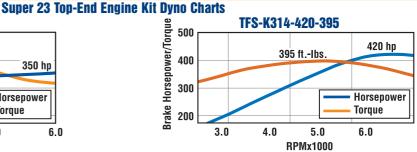


**Test Engine:** 350 c.i.d. short block with flat top pistons, Super 23 195 cylinder heads with 64cc CNC-profiled combustion chambers (TFS-30400003-M64), Track Max® hydraulic roller camshaft (TFS-31402002), 10.0:1 compression, an Edelbrock Performer RPM Air Gap intake manifold, and a Holley 750 cfm carburetor.

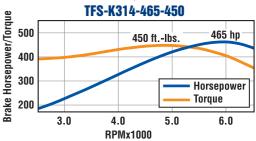


RPMx1000

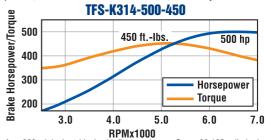
Test Engine: 383 c.i.d. short block with flat top pistons, Super 23 195 cylinder heads with 72cc CNC-profiled combustion chambers (TFS-30400013-M72), Track Max\* hydraulic camshaft (TFS-31401002), 10.0:1 compression, an Edelbrock Victor Jr. intake manifold, and a Holley 750 cfm carburetor.



Test Engine: 350 c.i.d. short block with flat top pistons, Super 23 195 cylinder heads with 64cc CNC-profiled combustion chambers (TFS-30400002-M64), Track Max® hydraulic camshaft (TFS-31401001), 9.5:1 to 10.0:1 compression, an Edelbrock Victor Jr. intake manifold, and a Holley 750 cfm carburetor.



Test Engine: 1987-95 factory roller cam 383 c.i.d. short block with flat top pistons, Super 23 195 cylinder heads with 72cc CNC-profiled combustion chambers (TFS-30400013-M72), Track Max® hydraulic roller camshaft (TFS-31402001), 10.0:1 compression, an Edelbrock Victor Jr. intake manifold, and a Holley 750 cfm carburetor.



Test Engine: 383 c.i.d. short block with flat top pistons, Super 23 195 cylinder heads with 72cc CNC-profiled combustion chambers (TFS-30400013-M72), Track Max® hydraulic roller camshaft (TFS-31402002), 10.0:1 compression, an Edelbrock Victor Jr. intake manifold, and a Holley 750 cfm carburetor.



### Camshafts • Rocker Stud Girdles • Timing Chain Set • Rocker Arms • Valve Cover Adapters for Small Block Chevrolet

# Track Max® Camshafts for Small Block Chevrolet USA





	Hydraulic Flat Tappet Camshaft and Lifter Kit Specifications			
Part Number	Characteristics	Duration @ .050"	Valve Lift w/ 1.5 Rocker Arms	Lobe Sep.
TFS-K31401000	Street; good idle, strong low-end torque, 2,200-5,700 rpm powerband. Small tube headers, low-restriction exhaust, free-flowing induction recommended. Compression: 9:1 minimum	210°/216°	.440"/.454"	110°
TFS-K31401001	Street/Strip; fair idle, strong midrange power, 2,600-6,100 rpm powerband. 2,500-3,000 rpm stall converter. Compression: 9.5:1 minimum	228°/234°	.480"/.494"	110°
TFS-K31401002	Street/Strip; rough idle, excellent top-end power, 3,500-6,700 rpm powerband. 3,000-3,500 rpm stall converter. Compression: 10:1 minimum	246°/254°	.495"/.510"	112°

Hydraulic Roller Camshaft Specifications				
Part Number	Characteristics	Duration @ .050"	Valve Lift w/ 1.5 Rocker Arms	Lobe Sep.
TFS-31402000	Street; good idle, strong low-end power, 2,400-5,900 rpm powerband. Small tube headers, free-flowing induction recommended. Compression: 9:1 minimum	214°/220°	.452"/.465"	110°
TFS-31402001	Street/Strip; fair idle, broad midrange power, 2,800-6,200 rpm powerband. 2,500-3,000 rpm stall converter. Compression: 9.5:1 minimum	230°/234°	.528"/.539"	110°
TFS-31403001	Street/Strip; fair idle, broad midrange power, 2,800-6,300 rpm powerband. 2,500-3,000 rpm stall converter. Compression: 9.5:1 minimum. For use in 1987-95 OEM hydraulic roller cam engines only.	230°/234°	.528"/.539"	110°
TFS-31402002	Race; rough idle, excellent top-end power, 3,200-6,800 rpm powerband. 3,000-3,500 rpm stall converter. Compression: 10:1 minimum	246°/254°	.558"/.558"	112°

#### **Camshaft Installation Handle**

Trick Flow's camshaft installation handle makes installing and removing cams much easier. It features an innovative U-shape design for more leverage when you need it most and a cushioned handle for comfort. The handle is 8" long and includes a universal mounting pattern to fit all types of camshafts, plus a protective zinc finish to protect it against corrosion.

Camshaft installation handle, each TFS-90150



These aluminum roller rockers are excellent for use with Trick Flow heads. They can also be used on stock and other aftermarket Chevy heads. They feature heat-treated CNCmachined bodies, premium needle-bearing fulcrums, roller tips, and a machined relief for improved valve spring clearance. Trick Flow roller rockers

are sold in sets of 16 and come complete with polylocks. Rocker arms, 1.5 ratio, 3/8" stud, set of 16 TFS-31400510 TFS-31400511 Rocker arms, 1.6 ratio, 3/8" stud, set of 16

TFS-31400512 Rocker arms, 1.5 ratio, 3/8" stud, narrow body, set of 16 TFS-31400513 Rocker arms, 1.6 ratio, 3/8" stud, narrow body, set of 16 TFS-31400514 Rocker arms, 1.5/1.6 ratio, 3/8" stud, narrow body,

for 1987-95 centerbolt heads, set of 16

TFS-31400515 Rocker arms. 1.5/1.6 ratio. 3/8" stud. set of 16 TFS-31400520 Rocker arms, 1.5 ratio, 7/16" stud, set of 16 TFS-31400521 Rocker arms, 1.6 ratio, 7/16" stud, set of 16 TFS-31400522 Rocker arms, 1.5/1.6 ratio, 7/16" stud, set of 16



#### **Rocker Stud Girdles** for Small Block Chevrolet



TFS-90150

USA

These CNC-machined stud girdles help control valve lift and timing changes due to stud flex, allowing more consistent high-rpm performance. Each stud girdle is anodized blue and comes with high-quality mounting hardware and hardened adjusting nuts. Tall-style valve covers are required.

TFS-30400700 3/8" rocker stud girdles, pair TFS-30400701 7/16" rocker stud girdles, pair



Billet steel gears and a double roller timing chain combine to make this Trick Flow timing chain set the strongest, most accurate available today. Furthermore, the crank sprocket features multiple keyways to allow the cam to be installed straight-up, retarded, or advanced.

NOTE: Does not fit factory roller camshaft engines. Timing chain set, 1955-95 262-400, each



Trick Flow 1/4" thick steel valve cover adapters allow early-style valve covers to be used with late model Chevy centerbolt heads. Plus, the adapters provide the option of running stud girdles to increase valvetrain stability and improve overall performance. The adapters come with all necessary hardware and .200" thick, rubber steel core gaskets.

NOTE: Requires narrow-body rocker arms (adds .650" to overall height). TFS-31500811 Valve cover adapters, pair



USA





#### **Laser-Etched Valve Covers for Small Block Chevrolet**

Trick Flow fabricated valve covers reduce engine weight without sacrificing one ounce of performance. They're made from .083" thick aluminum and feature a laser-etched Trick Flow logo. Tall height (4" overall) only, will clear roller rockers and stud girdles. Includes fasteners.

TFS-31500803 Valve covers, pair



#### **Cast Aluminum Valve Covers for Small Block Chevrolet**

Made from durable A319 aluminum, Trick Flow cast aluminum valve covers are much less prone to flex and distortion than stamped steel covers, which helps prevent oil leaks. These small block Chevy covers have a tall height to clear girdles and roller rockers and can be drilled for breathers.

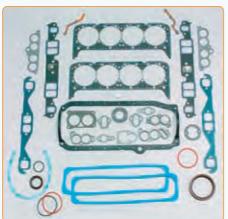
#### Tall Height Covers, 3%" Overall Height

TFS-31400902 Valve covers, polished, pair



TFS-31500802 Valve covers, silver, pair TFS-31511802 Valve covers, black, pair TFS-3150B802 Valve covers, natural, pair TFS-25200801 Hardware kit; includes twelve 1½" studs

and 12 flanged nuts, each





USA

#### **Premium Gasket Sets for Small Block Chevrolet**

Sets include cylinder head gaskets, intake gaskets, exhaust gaskets, valve cover gaskets, oil pan gaskets, and other gaskets specific to application.

#### **Engine Gasket Sets**

TFS-31400915 Engine gasket set, pre-1987 (except 400), each

TFS-31400916 Engine gasket set, 400, each

TFS-31400917 Engine gasket set, 1987-95 (except LT1), each TFS-31400911 Engine gasket set, 1992-97 LT1, each

#### **Head Gasket Sets**

Sets include head gaskets, intake gaskets, exhaust gaskets, valve cover gaskets, and other gaskets specific to application.

TFS-31400905 Head gasket set, pre-1987 (except 400), each

TFS-31400906 Head gasket set, 400, each

TFS-31400907 Head gasket set, 1987-95 (except LT1), each



#### **Chrome Valve Covers for Small Block Chevrolet**

Trick Flow chrome-plated valve covers provide a great alternative to higherpriced aluminum covers. They're baffled to prevent oil breather blow-by and feature embossed Trick Flow logos and triple chrome plating for a long-lasting shine. New gaskets are included.

TFS-44000 Valve covers, 283-400, pair



#### **Embossed Valve Covers for Small Block Chevrolet**

These good-looking, tall height (37/8" overall) fabricated valve covers have an embossed Trick Flow logo and clear roller rockers and stud girdles. They're made from .084" thick aluminum to reduce engine weight and include the necessary fasteners to ensure a correct installation.

TFS-31500804 Valve covers, pair

#### **Individual Gaskets** for Small Block Chevrolet



Trick Flow gaskets are made from high-quality materials with superior fit and finish, designed to deliver trouble-free performance over the long haul. Our individual replacement gaskets save you money by letting you purchase just the gaskets you need instead of an entire kit.

TFS-30400941 Valve cover gaskets, molded with steel core, pair

TFS-30400951 Oil pan gasket, one-piece molded, each

TFS-30400921 Intake manifold gaskets, pair



TFS-3140E915

#### Standard Gasket Sets for Small Block Chevrolet

These Trick Flow gasket sets are ideal for stock or mild performance engine buildups. They include everything required to seal an engine, including header gaskets, for about the same price as less complete kits.

TFS-3140E915 Engine gasket set, pre-1987 (except 400), each TFS-3140E916 Engine gasket set, 400, each

Cylinder Head Bolt Kit for Small Block Chevrolet USA



Keep combustion where it belongs! Trick Flow's high-quality cylinder head bolt kits provide consistent TFS-92000 clamping force from bolt-to-bolt. The bolts are made from premium quality alloy steel with cold-formed heads and rolled threads. A black oxide finish protects them from wear and corrosion. The kit contains all the bolts you need to install a pair of heads, including hardened washers. TFS-92000 Cylinder head bolt kit, hex head, each





PowerOval® 280 Cylinder Heads for Big Block Chevrolet





**Combustion Chamber** 

Trick Flow PowerOval 280 aluminum cylinder heads for big block Chevy feature an oval intake port design to produce excellent low and midrange torque and horsepower—ideal for street/strip applications. The heads have Fast As Cast® 280cc intake and 129cc exhaust runners to promote high airflow and 113cc combustion chambers. They come fully assembled with stainless steel 2.190" intake/1.880" exhaust valves, dual valve springs, 7/16" studs, guideplates, retainers, and locks.

Bare cylinder head castings are also available.

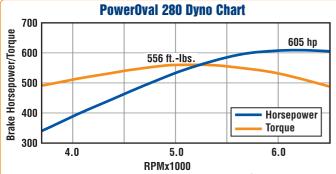
#### PowerOval 280 Heads, Fast As Cast Runners, Assembled

TFS-41300001 1.550" dual valve springs, 280cc intake runners
TFS-41300002 1.560" dual valve springs, 280cc intake runners
TFS-4130T002 1.560" dual valve springs and titanium retainers,

280cc intake runners

TFS-4130T003 1.640" dual valve springs and titanium retainers,

280cc intake runners



Test Engine: 10.25:1 compression 460 c.i.d. with Trick Flow PowerOval 280 cylinder heads (TFS-41300002), COMP Cams solid roller camshaft (248°/254° duration @.050°; 653".650" lift; 106° lobe separation), Trick Flow 1.7 ratio roller rocker arms (TFS-41400621), Edelbrock Victor intake manifold, Hooker Super Competition headers with 2" primaries, 3%" dual exhaust with Flowmaster mufflers.

# Trick Flow PowerOval® Heads Make 20 More Horsepower Than the Competition!

At Trick Flow, the proof is in the dyno sheet. As tested on a Chevy 454 (10.25:1 CR, .653"/.650" lift solid roller cam, 850 cfm carburetor/Edelbrock Air-Gap intake), our PowerOval 280 Cylinder Heads for Big Block Chevrolet made 601 hp—20 more horsepower than the closest competing head. That's Horsepower by Design!

#### **Specifications**

A356-T6 aluminum Combustion Chamber Volume: 113cc Intake Port Volume: 280cc Fast As Cast Intake Port Location: Intake Port Dimensions: 1.820" x 2.050" oval Intake Gaskets: Fel-Pro 1212 Intake Valve Diameter: 2.190" Intake Valve Seat: Ductile iron, interlocking Exhaust Port Volume: 129cc Fast As Cast **Exhaust Port Location:** Raised .300" from stock **Exhaust Port Dimensions:** 1.650" x 1.800" D-shape Exhaust Gaskets: Fel-Pro 1412 Exhaust Valve Diameter: 1.880" Exhaust Valve Seat: Ductile iron 5.425" Exhaust Valve Length: Exhaust Valve Stem Diameter:

Ductile iron
5.425"
11/32"
Bronze alloy
Viton® fluoroelastomer
35° x 45° x 60°
1.760"
1.640"

Valve Spring Pocket Diameter: 1.760"
Valve Spring Cups: 1.640"
Valve Spring Retainers: 10° x 1.550" o.d. + .050" chromemoly steel 10° x 1.550" o.d. + .050" titanium

Valve Guide Material:

Valve Seat Angles:

Valve Seals:

Valve Stem Locks: 10° x 1.625" o.d. titanium
10° machined steel with lash cap recess
1.550" o.d. dual spring with damper
138 lbs. @ 1.950" installed height

430 lbs. @ 1.250" open 420 lbs. per inch rate .700" maximum valve lift

Valve Springs, Option 1: 1.560" o.d. dual spring with damper 240 lbs. @ 2.000" installed height

600 lbs. @ 1.280" open 500 lbs. per inch rate .700" maximum valve lift

Valve Springs, Option 2: 1.640" o.d. dual spring with damper 250 lbs. @ 2.000" installed height

800 lbs. @ 1.150" open 600 lbs. per inch rate .850" maximum valve lift For use with 3/8" pushrods ARP 7/16"

Guideplates: For usi Rocker Arm Studs: ARP 7/ Minimum Bore Diameter: 4.094"

Cylinder Head Bolts: TFS-92002 or ARP 135-3607 Spark Plugs: Autolite 3924 or equivalent

#### **Airflow Results**

PowerOval 280 for Big Block Chevrolet			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	74	64	
0.200"	160	113	
0.300"	231	146	
0.400"	275	178	
0.500"	316	209	
0.600"	336	240	
0.700"	347	264	

Tests conducted at 28" of water (pressure). Bore size: 4.250" Intake with CNC-bowl blend and CNC-inlet with Fel-Pro 1212 gasket; exhaust with 2" pipe.





Combustion Chamber



TFS-41400008

**Specifications** 

Material: Combustion Chamber Volume: Intake Port Volume:

Intake Port Location: Intake Port Dimensions: Intake Gaskets:

Intake Valve Diameter:

Intake Valve Seat: Exhaust Port Volume: **Exhaust Port Location: Exhaust Port Dimensions:** Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material:

Valve Seals: Valve Seat Angles:

Valve Spring Pocket Diameter: Valve Spring Cups: Valve Spring Retainers:

Valve Stem Locks:

Valve Springs, Standard:

Valve Springs, Option 1:

Valve Springs, Option 2:

Guideplates: Rocker Arm Studs:

Minimum Bore Diameter: Cylinder Head Bolts: Spark Plugs:

A356-T6 aluminum 122cc

01/02/03: 320cc Fast As Cast 07/08: 360cc Fast As Cast

Stock 1.780" x 2.500" rectangular Mr. Gasket 121

01/02: 2.250" 03/07/08: 2.300' Ductile iron 137cc Fast As Cast

Raised .300" from stock 1.770" x 1.930" D-shape Fel-Pro 1412 1.880"

Ductile iron Bronze alloy Viton® fluoroelastomer 35° x 45° x 60°

1.760" 1.640"

10° x 1.550" o.d. + .050" chromemoly steel 10° x 1.550" o.d. + .050" titanium

10° x 1.625" o.d. titanium

10° machined steel with lash cap recess 1.550" o.d. dual spring with damper 138 lbs. @ 1.950" installed height

430 lbs. @ 1.250" open 420 lbs. per inch rate .700" maximum valve lift

1.560" o.d. dual spring with damper 240 lbs. @ 2.000" installed height

600 lbs. @ 1.280" open 500 lbs. per inch rate .700" maximum valve lift

1.640" o.d. dual spring with damper 250 lbs. @ 2.000" installed height 800 lbs. @ 1.150" open

600 lbs. per inch rate 850" maximum valve lift For use with 3/8" pushrods

ARP 7/16" 4 250'

TFS-92002 or ARP 135-3607 Autolite 3924 or equivalent

#### **Airflow Results**

PowerPort 320 for Big Block Chevrolet			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	75	64	
0.200"	155	125	
0.300"	230	166	
0.400"	282	202	
0.500"	320	241	
0.600"	348	270	
0.700"	360	290	
0.800"	362	301	

Tests conducted at 28" of water (pressure). Bore size: 4.500" 2.250" intake with CNC-bowl blend and CNC-inlet with MRG-121 gasket; exhaust with 2" pipe.

To view more airflow charts, go to TrickFlow.com and type the part number you want to see into the Search box and then click "Search".

Designed for both street and strip applications, Trick Flow PowerPort 320 and 360 cylinder heads for big block Chevy deliver more performance with less weight. They feature a choice of 320cc or 360cc Fast As Cast® rectangular intake and 137cc exhaust runners, 122cc combustion chambers, 2.250" or 2.300' stainless intake valves, 1.880" exhaust valves, bronze valve guides, and interlocking ductile iron valve seats.

The PowerPort heads are available with valve springs for cams up to .850" lift. They come fully assembled with valves, springs, 10° steel locks, retainers, Viton® fluoroelastomer seals, and are drilled for OEM accessories. Guideplates for 3/8" pushrods and 7/16" rocker studs are included.

Bare cylinder head castings are also available.

#### PowerPort 320 Heads, Fast As Cast Runners, Assembled

TFS-41400001 2.250" intake valves and 1.550" dual valve springs, 320cc intake runners TFS-41400002 2.250" intake valves and 1.560" dual valve springs, 320cc intake runners TFS-41400003 2.300" intake valves and 1.560" dual valve springs, 320cc intake runners TFS-4140T003 2.300" intake valves, 1.560" dual valve springs, and titanium retainers, 320cc intake runners

TFS-4140T803 2.300" intake valves, 1.640" dual valve springs, and titanium retainers,

320cc intake runners

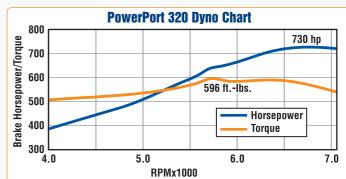
#### PowerPort 360 Heads, Fast As Cast Runners, Assembled

TFS-41400007 2.300" intake valves and 1.550" dual valve springs, 360cc intake runners TFS-41400008 2.300" intake valves and 1.560" dual valve springs, 360cc intake runners TFS-4140T008 2.300" intake valves, 1.560" dual valve springs, and titanium retainers,

360cc intake runners

TFS-4140T808 2.300" intake valves, 1.640" dual valve springs, and titanium retainers,

360cc intake runners



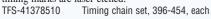
Test Engine: 12.5:1 compression 490 c.i.d. with Trick Flow Flow PowerPort® 320 cylinder heads (TFS-4140T803), COMP Cams custom solid roller camshaft (280°/288° duration @.050"; .748"/.714" lift; 114° lobe separation), Trick Flow 1.7 ratio roller rocker arms (TFS-41400621), Trick Flow R-Series intake manifold (TFS-41400111), Hooker Super Competition headers with 2" primaries, open exhaust.



Timing Chain Set • Rocker Arms • Carburetor Spacer • Stud Girdles • Intake Manifold for Big Block Chevrolet

# True Roller Timing Chain Set for Big Block Chevrolet

This billet steel timing set for big block
Chevrolet is engineered for durability and
versatility. The .250" diameter, double-row true
roller chain and black oxide-coated crank sprocket
are heat-treated for unrivaled strength. The CNCmachined cam gear has nine crank sprocket keyways
for zero and +/- 2°, 4°, 6°, or 8° timing adjustments. The
timing marks are laser-etched.







# Rocker Stud Girdles for Big Block Chevrolet



These CNC-machined stud girdles help control valve lift and timing changes due to stud flex, allowing more consistent high-rpm performance. Each stud girdle is anodized blue and comes with high-quality mounting hardware and hardened adjusting nuts. Tall-style valve covers are required. TFS-41400700 Stud girdles, 7/16" rocker stud girdle, pair



These aluminum roller rockers are excellent for use with Trick Flow heads. They can be used on most factory Chevy and aftermarket heads, too.

They feature heat-treated CNC-machined bodies, premium needle-bearing fulcrums, roller tips, and a machined relief for improved valve spring clearance.

Trick Flow roller rockers are sold in sets of 16 and come complete with polylocks.

TFS-41400621 Rocker arms, 1.7 ratio, 7/16" stud, set of 16

# Phenolic Carburetor Spacer for Holley Dominator

Give a Holley Dominator carburetor a little more space with Trick Flow's premium grade 1" phenolic spacer. The spacer features a cloverleaf design to fit the contours of the Dominator carb and increases horsepower and torque in the mid to upper rpm range.

TFS-2145001C Phenolic spacer, each



TFS-2145001C



The Trick Flow R-Series rectangular port intake manifold for 500-plus cubic inch big block Chevy engines is designed for maximum power delivery between 3,500 and 8,000 rpm—right where it's needed the most. This single plane intake manifold features high-flowing extended runners and a raised plenum floor to increase horsepower and torque. Other special features include extra material for custom port work and bosses for nitrous injection. This intake manifold only fits a Holley 4500 Series Dominator carb; overall height is 6.550".

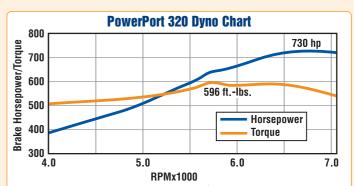
### Trick Flow Fast Fact: Peak Power vs. Area Under the Curve

When you look at a graph from an engine or chassis dyno test, the first things most people look for are peak horsepower and torque figures. These numbers are useful for seeing exactly where in the rpm band an engine makes its power, or for judging the effects a particular part or parts combination can have on output. Peak numbers are great for bragging rights, too.

But the true measurement of real-world horsepower and torque—the stuff that gets your car moving and keeps it moving—is what's called the area under the curve. In basic terms, area under the curve indicates the overall amount of torque or horsepower an engine makes over its operating range. The wider the power curve is, the more area is underneath it. And more area under the curve means more power is produced over a wider rpm range, not just a particular rpm point or peak.

This principle also applies to cylinder head flowbench data. Peak intake and exhaust flow numbers make great ad copy, but the low and mid-lift flow numbers are just as critical. The area under the curve—in this case the valve lift curve—is the true measure of cylinder head performance.

Take a look at the dyno graph for a 490 cubic inch big block Chevy equipped with Trick Flow PowerPort® 320 cylinder heads. Notice how smooth and wide the horsepower and torque curves are, and how much area is underneath them. That means this engine pulls like a freight train, and keeps on pulling all the way up to its rpm limit. That's the kind of power that gets respect on the street and wins races at the track—the kind of power Trick Flow products are designed to make!



Test Engine: 12.5:1 compression 490 c.i.d. big block Chevy with Trick Flow PowerPort® 320 cylinder heads (TFS-4140002), COMP Cams custom solid roller camshaft (280°/288° duration @.050"; .748"/.714" lift; 114° lobe separation), Trick Flow 1.7 ratio roller rocker arms (TFS-41400621), Trick Flow R-Series intake manifold (TFS-41400111), Hooker Super Competition headers with 2" primaries, open exhaust.





#### **Laser-Etched Fabricated Aluminum Valve Covers** for Big Block Chevrolet

Trick Flow fabricated valve covers reduce engine weight without sacrificing one ounce of performance. They're made from .083" thick aluminum and feature a laser-etched Trick Flow logo. Tall height (35/8" overall) only, will clear roller rockers and stud girdles. Includes fasteners.

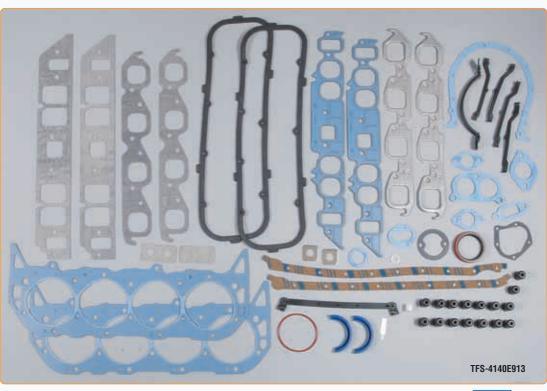
TFS-41400803 Valve covers, pair



#### **Embossed Fabricated Aluminum Valve Covers** for Big Block Chevrolet

These good-looking, tall height (31/8" overall) fabricated valve covers have an embossed Trick Flow logo and clear roller rockers and stud girdles. They're made from .084" thick aluminum to reduce engine weight and include the necessary fasteners to ensure correct installation.

TFS-41400804 Valve covers, pair



#### **Standard Gasket Sets** for Big Block Chevrolet

These Trick Flow gasket sets are ideal for stock or mild performance engine buildups. They include everything required to seal an engine, including header gaskets, for about the same price as less complete kits.

TFS-4140E912 TFS-4140E913 Engine gasket set, oval port intake, each Engine gasket set, rectangular port intake, each

USA

### **Cylinder Head Bolt Kits** for Big Block Chevrolet

Keep combustion where it belongs! Trick Flow's high-quality cylinder head bolt kits provide consistent clamping force from bolt-to-bolt. The bolts are made from premium quality alloy steel with cold-formed heads and rolled threads. A black oxide finish protects them from wear and corrosion. The kits contain all the bolts you need to install a pair of heads, including hardened washers.

TFS-92001 TFS-92002

Cylinder head bolt kit, for OE cast iron heads, hex head, each Cylinder head bolt kit, for aftermarket heads, hex head, each





Twisted Wedge® 185 and Twisted Wedge® Track Heat® 185 Cylinder Heads for Ford 4.6L/5.4L 2V



**★** MADE



for Ford 4.6L/5.4L 2V engines in action, you'll agree they are the only aftermarket 2V heads worth bolting on to your modular-powered Ford.

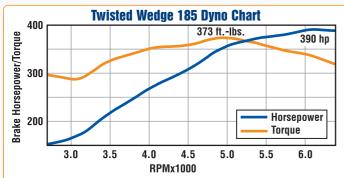
The power comes from the Twisted Wedge combustion chamber design with the intake valve moved to the opposite side of the camshaft. The benefit is a dramatic increase in mid-lift airflow and increased piston-to-valve and valve-to-bore clearance that allow higher lift cams and larger diameter valves to be used without having to alter the bore size or flycutting pistons.

Other features include OE PI-style intake inlets, Fast As Cast® intake/exhaust runners that deliver near CNC-ported airflow, fully CNC-profiled combustion chambers, bulletproof 3/4" thick decks, four-bolt replaceable cam bearing journals, full 3/4"-reach spark plugs, 1.840"/1.450" valves, powdered metal valve guides, ductile iron valve seats, lightweight chromemoly retainers and die-forged locks, beehive valve springs, and Viton® fluoroelastomer valve seals.

The Twisted Wedge 185 series heads fit all 1996-2004 4.6L/5.4L 2V Romeo and Windsor engines and accept all OE-type 2V camshafts, followers, lash adjusters, and valve covers. Furthermore, 8mm end holes in the heads ensure that most OE Ford front covers will fit.

Cylinder heads are available with 38cc or 44cc combustion chambers. Both versions deliver about 10:1 compression on a stock short block depending on the piston used. Twisted Wedge 185 heads have 90 lb. rate (installed height) springs for mildly modified engines. Twisted Wedge Track Heat 185 heads have 125 lb. rate springs for engines with power adders and/or high rpm applications.

Bare cylinder head castings are also available.



Test Engine: 10.35:1 compression 4.6L 2V with Trick Flow Twisted Wedge® 185 cylinder heads (TFS-51900001-M38), Trick Flow Track Max® hydraulic roller camshaft (228°/230° duration @.050"; .550"/.550" lift; 112° lobe separation), stock intake manifold, followers, and PCM (SCT tuned), Trick Flow Cold Air Intake Kit (TFS-23066), Trick Flow 70mm throttle body (TFS-24070), Trick Flow upper plenum (TFS-51800001), long tube headers with 1% primaries, 3" dual exhaust with Flowmaster mufflers.

#### **Specifications**

1.450"

Material Combustion Chamber Volume:

Intake Port Location: Intake Port Dimensions: Intake Gaskets: Intake Valve Diameter: Intake Valve Seat: Exhaust Port Volume: Exhaust Port Location: **Exhaust Port Dimensions:** Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material:

Valve Seat Angles: Valve Spring Pocket Diameter: Valve Spring Retainers: Valve Stem Locks: Valve Springs:

Twisted Wedge 185

Valve Seals:

Valve Springs: Twisted Wedge Track Heat 185

Rocker Arm Type: Minimum Bore Diameter: Cylinder Head Bolts: Spark Plugs:

M38: 38cc CNC-profiled M44: 44cc CNC-profiled 185cc Fast As Cast Stock 1.500" x 1.880" OE PI OE Ford PI 1.840 Ductile iron 93cc Fast As Cast Stock 1.470" x 1.250" D-shape OE Ford

A356-T61 aluminum

Ductile iron Trick-Alloy powdered metal Viton® fluoroelastomer with integral i.d. locator and seal

37°x 45°x 52° 1.180"

7° x .875" o.d. chromemoly steel 7° machined steel, triple groove .940"/1.050" o.d. beehive 90 lbs. @ 1.600" installed height 205 lbs. @ 1.020" open 209 lbs. per inch rate .600" maximum valve lift 1.000"/1.060" o.d. beehive 125 lbs. @ 1.600" installed height

275 lbs. @ 1.020" open 275 lbs. per inch rate .580" maximum valve lift OE roller follower compatible

TFS-92010 or OE Ford Motorcraft SP342 or equivalent

 Accepts all Romeo and Windsor valve covers plus most OE Ford front covers with 8mm head bolt holes

#### **Airflow Results**

Twisted Wedge 185 for Ford 4.6L/5.4L 2V			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	58	49	
0.200"	125	101	
0.300"	175	143	
0.400"	224	174	
0.500"	250	179	
0.600"	252	188	
Tests conducted CNC-profiled co	l at 28" of water (pressure). Imbustion chambers; exhau	Bore size: 3.562" ist with 1¾" pipe.	

#### Twisted Wedge 185 Heads, Fast As Cast Runners, Assembled

TFS-51900001-M38 38cc combustion chambers, 90 lb. valve springs, 185cc intake runners TFS-51900002-M44 44cc combustion chambers, 90 lb. valve springs,

185cc intake runners

#### Twisted Wedge Track Heat 185 Heads, Fast As Cast Runners, **Assembled**

TFS-51900003-M38 38cc combustion chambers, 125 lb. valve springs, 185cc intake runners

TFS-51900004-M44 44cc combustion chambers, 125 lb. valve springs, 185cc



# Twisted Wedge® Race 195 Cylinder Heads



**CNC-Profiled Combustion Chamber** 



#### **Specifications**

Material:

Combustion Chamber Volume: Intake Port Volume:

Intake Port Location: Intake Port Dimensions: Intake Gaskets:

Intake Valve Diameter: Intake Valve Seat: Exhaust Port Volume:

**Exhaust Port Location: Exhaust Port Dimensions:** 

Exhaust Gaskets:

Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material:

Valve Seals: Valve Seat Angles:

Valve Spring Pocket Diameter: Valve Spring Retainers: Valve Stem Locks: Valve Springs, Standard:

Valve Springs, Option 1:

Rocker Arm Type:

Minimum Bore Diameter:

Cylinder Head Bolts: Spark Plugs:

A356-T61 aluminum 44cc CNC-profiled 195cc CNC-ported Stock

1.700" x 2.000" OE PI OE Ford PI

1.900" Ductile iron 95cc CNC-ported Stock

1.470" x 1.250" D-shape OE Ford

1.470" Ductile iron

Trick-Alloy powdered metal Viton® fluoroelastomer can-style

37°x 45°x 52° 1.180"

7° x .875" o.d. chromemoly steel 7° machined steel, single groove 1.000"/1.060" o.d. beehive

125 lbs. @ 1.600" installed height 275 lbs. @ 1.020" open 275 lbs. per inch rate

.580" maximum valve lift 1.100" dual spring 150 lbs. @ 1.500" installed height

290 lbs. @ .900" open 233 lbs. per inch rate .650" maximum valve lift

OE roller follower or aftermarket roller tip

compatible

3 552

TFS-92010 or OE Ford Motorcraft SP432 or equivalent

NOTES: • Accepts all Romeo and Windsor valve covers plus most OE Ford front covers with 8mm end bolt holes

• Must use head gaskets with a minimum bore diameter of 3.700"

#### **Airflow Results**

Twisted Wedge Race 195 for Ford 4.6L/5.4L 2V			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	61	51	
0.200"	131	105	
0.300"	193	152	
0.400"	234	183	
0.500"	264	195	
0.600"	276	199	
Tests conducted	at 28" of water (pressure)	Bore size: 3 700"	

CNC-profiled combustion chambers; exhaust with 13/4" pipe.



Check out TFX™ Cold Air Intake Kits on *paqe 49.* 

Realize the full potential of your extreme performance Ford modular engine with Trick Flow's new Twisted Wedge Race 195 Cylinder Heads for Ford 4.6L/5.4L 2V. Twisted Wedge Race 195 cylinder heads are perfect for all "big bore" engine block builds, superchargers and turbos, high compression E85, big shot nitrous oxide, or any other mega power combination you can dream up!

These heads have the same features of the revolutionary Twisted Wedge 185 Fast As Cast® modular heads—high-quality precision machining, Twisted Wedge combustion chambers, OE PI-style intake inlets, bulletproof 3/4" thick decks, four-bolt replaceable cam bearing journals, full 3/4"-reach spark plugs, and Romeo/Windsor engine interchangeability—plus fully CNC-ported intake (195cc) and exhaust (95cc) runners and CNC-profiled and bowl-blended combustion chambers (44cc). Huge one-piece 1.900"/1.470" forged stainless steel valves and race-duty valvetrain components give these heads 8,000-plus rpm capability.

The fully assembled heads are available with two valve spring packages: 1.000" beehive valve springs for extreme performance street/strip engines or new high load, 1.100" dual springs for all-out racing applications.

Bare cylinder head castings are also available.

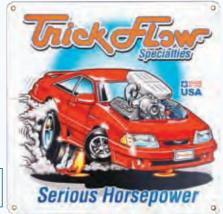
#### Twisted Wedge Race 195 Heads, CNC-Ported Runners, Assembled

TFS-52900001-C01 44cc combustion chambers, 125 lb. beehive valve springs,

195cc intake runners

TFS-52900002-C01 44cc combustion chambers, 150 lb. dual valve springs,

195cc intake runners



#### **Mustang Sign**

Every home, garage, and shop has a wall that looks too slow. Trick Flow has engineered the solution—these bold steel signs. You get one square foot of pure, American-made cartoon horsepower in a Fox-body Mustang Cobra design. Metal corner grommets make installation an easy bolt-on job. Sign, 1993 Ford Mustang Cobra, each



# Camshafts • Camshaft and Valve Spring Upgrade Kits • DVD for Ford 4.6L/5.4L 2V

Track Max® Hydraulic Roller Camshafts and Valve Spring Upgrade Kits for Ford 4.6L/5.4L 2V

Improve the performance of Ford 4.6L or 5.4L 2Vs with Trick Flow's Track Max camshafts. Choose the smaller cams for increased low- to mid-range torque and horsepower in naturally aspirated, mild street/strip cars. The bigger cams will move the power curve up in the rpm range and are ideal for extreme duty street and race forced induction engines. All cams include new 12mm bolts and washers.

Trick Flow can bundle your cams with the appropriate valve spring upgrade kit for more performance gains.

Option 1 includes Trick Flow's standard Twisted Wedge beehive-style springs that provide 90 lbs. of seat pressure at 1.570" installed height, 205 lbs. at 1.020" open, and a maximum lift of .600". Option 2 includes Twisted Wedge Track Heat beehive valve springs with 125 lbs. of seat pressure at 1.600" installed height, 275 lbs. at 1.020" open, and a maximum lift of .580".

The kits come complete with valve springs, chromemoly retainers, locks, seals, and instructions.



	Camshaft Specifications			
Part Number	Characteristics	Duration @ .050"	Valve Lift w/ OEM Followers	Lobe Sep.
TFS-51802001	Street/Strip, fair idle, strong midrange power and torque, 1,500-5,000 rpm powerband. Works with stock PI heads or Trick Flow Twisted Wedge 185 heads; tuning recommended for maximum performance. Piston-to-valve clearance measurement recommended. Compression: stock	228°/230°	.550"/.550"	112°
TFS-51802002	Street/Strip, fair idle, strong mid to top-end power, 1,800-6,500 rpm powerband. Works with stock PI heads or Trick Flow Twisted Wedge 185 heads; tuning recommended for maximum performance. 3.73 or higher gear. Piston-to-valve clearance measurement required. Compression: stock minimum	234°/234°	.580"/.580"	114°

	Camshaft and Valve Spring Upgrade Kit Specifications					
	Part Number	Characteristics	Duration @ .050"	Valve Lift w/ OEM Followers	Lobe Sep.	Valve Springs
	TFS-K51802001	Street/Strip, fair idle, strong midrange power and torque, 1,500-5,000 rpm powerband. Works best with stock PI heads or Trick Flow Twisted Wedge 185 heads; tuning recommended for maximum performance. Piston-to-valve clearance measurement recommended. Compression: stock	228°/230°	.550"/.550"	112°	Twisted Wedge (90 lbs. seat pressure)
.w.	TFS-K51802002	Street/Strip, fair idle, strong mid- to top-end power, 1,800-6,500 rpm powerband. Ideal for mild street/strip engines with power adders up to 5-6 psi. Works best with stock PI heads or Trick Flow Twisted Wedge 185 heads; tuning recommended for maximum performance. 3.73 or higher gear. Piston-to-valve clearance measurement required. Compression: stock minimum	234°/234°	.580"/.580"	114°	Twisted Wedge (90 lbs. seat pressure)
NEV	TFS-K51802003	Race, fair idle, strong top-end power, 1,500-6,500 rpm plus powerband. Works best with Trick Flow Twisted Wedge 185 or 195 heads; tuning recommended for maximum performance. 3.73 or higher gear. Piston-to-valve clearance measurement recommended. Compression: stock minimum	228°/230°	.550"/.550"	112°	Twisted Wedge Track Heat (125 lbs. seat pressure)
NEV	TFS-K51802004	Race, fair idle, strong top-end power, 6,500 rpm plus powerband. Ideal for extreme duty street/strip and race engines with power adders rated at 15 psi-plus. Works best with Trick Flow Twisted Wedge 185 or 195 heads; tuning recommended for maximum performance. 3.73 or higher gear. Piston-to-valve clearance measurement required. Compression: stock minimum	234°/234°	.580"/.580"	114°	Twisted Wedge Track Heat (125 lbs. seat pressure)

#### Horsepower How-To Series: Ford 4.6L Mustang Installing Trick Flow Track Max® Camshafts and Twisted Wedge® Cylinder Heads DVD



Horsepower and Trick Flow teamed up to produce a How-To DVD for enthusiasts that covers the technical aspects of upgrading camshafts and cylinder heads to get more performance from Ford's 4.6L 2V engines, using straightforward and easy to understand demonstrations.

Topics covered include camshaft and valvetrain removal and installation, cylinder head disassembly and installation, timing system removal and replacement, and how to properly degree camshafts, plus detailed tech tips, specs, sample dyno runs, and a huge buyer's guide that contains all the right parts, tools, and accessories you'll need to get the performance gains you want the first time.

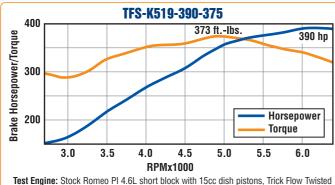
TFS-DVD-1

DVD, installing Trick Flow camshafts and cylinder heads on Ford 4.6L Mustang, each



TFS-DVD-1





Test Engine: Stock Romeo PI 4.6L short block with 15cc dish pistons, Trick Flow Twisted Wedge® 185 cylinder heads with 44cc CNC-profiled combustion chambers (TFS-51900002-M54), 10.0:1 compression, stock PI intake manifold, and a Trick Flow upper plenum (TFS-51800001) and 75mm throttle body (TFS-24075).

# Twisted Wedge® Top-End Engine Kits for Ford 4.6L 2V

Get the most out of your Ford 4.6L 2V with Trick Flow's Twisted Wedge Top-End Engine Kits. Each kit is carefully tuned to deliver the right amount of horsepower and torque. Take the time and guesswork out of designing a winning combination and save some hard-earned cash.

Twisted Wedge Top-End Engine Kits for Ford 4.6L 2V are built around a set of dyno-proven Twisted Wedge 185 cylinder heads with 185cc intake runners and your choice of 38cc or 44cc CNC-profiled and bowl-blended combustion chambers. You also get a hydraulic roller camshaft set (228°/230° duration @ .050", .550"/.550" lift, and 112° lobe separation), matching followers, lash adjusters,

timing chains, valve spring compressor tool, intake and head gasket kit.

TFS-K519-380-375

44cc combustion chambers, 380 hp/375 ft.-lbs., kit

TFS-K519-390-375 44CC combustion chambers, 390 hp/375 ft.-lbs., kit



# Cast Aluminum Valve Cover Kits for Ford 4.6L/5.4L 2V

Trick Flow's lightweight cast aluminum valve covers for Ford 4.6L/5.4L 2V engines are more durable and eliminate the cracking and distortion problems that plague the factory plastic covers. Unique design features include a baffled PCV connection plus baffled and threaded fresh air connections for forced induction applications. The covers come complete with OE-style gaskets, bolts, bolt seals, and two filler caps.

**NOTE:** Valve covers fit vehicles with left or right side oil fill.

TFS-51800801 Valve cover kit, Romeo engines, 11-bolt, silver, each
Valve cover kit, Romeo engines, 11-bolt, black, each
Valve cover kit, Romeo engines, 11-bolt, natural, each
Valve cover kit, Windsor engines, 13-/14-bolt, silver, each
Valve cover kit, Windsor engines, 13-/14-bolt, black, each
Valve cover kit, Windsor engines, 13-/14-bolt, natural, each
Valve cover kit, Windsor engines, 13-/14-bolt, natural, each
Valve cover kit, Windsor engines, 13-/14-bolt, natural, each



Trick Flow bundled its best air intake components into these TFX Intake Combos so you can easily upgrade a 1996-2004 4.6L 2V Mustang—no mixing or matching required. You get a Trick Flow cold air intake kit, an aluminum upper plenum with silver finish, and your choice of a 70mm or 75mm throttle body. It's easy to install, it all fits under the stock hood, is 50-state legal, and works with the computer's factory programming.

TFS-K51864070 TFX intake combo, 70mm throttle body, each



#### **Replacement Valvetrain Components** for Ford 4.6L/5.4L 2V

Finally, a less expensive alternative to high-priced factory Ford replacement valvetrain and timing parts! Trick Flow's line of valvetrain replacement parts for Ford modular V8 engines features OEM quality and durability at a fraction of the cost. Trick Flow crankshaft sprockets are machined from solid billet steel for durability and are adjustable in 2 degree increments. The chain tensioners are machined from high-quality steel and include tensioners for both the left and right cylinder banks. Camshaft bolts are made from quality Grade 10.9 steel with a black oxide finish and fit all aftermarket and original equipment non-PI cams that require 12mm bolts. Timing chain kits are engineered to keep modular engines running smoothly and include two new high tensile strength steel chains plus hex spacers, cam sprockets, your choice of adjustable or non-adjustable crank gears, timing chain arms and guides, and tensioners.

TFS-21400008-16\* Hydraulic lash adjusters, Ford 4.6L/5.4L 2V/4V, set of 16

TFS-21400009-12\* Hydraulic lash adjusters, Ford 4.6L/5.4L 3V, set of 12

TFS-51800500 Timing chain set, Ford 4.6L 2V, each TFS-51800501 Timing chain only, Ford 4.6L 2V, each TFS-51800504 Timing chain only, Ford 5.4L 2V, each TFS-51800502 Timing gear set/spacers, Ford 4.6L/5.4L 2V, kit

TFS-51800500 Timing chain kit with non-adjustable crankshaft gear, Ford 4.6L 2V. each

TFS-51800503

Camshaft gear spacers, Ford 4.6L/5.4L 2V, pair Timing chain tensioners, Ford 4.6L 2V, pair TFS-51800506 Timing chain arms and guides, Ford 4.6L 2V, kit TFS-51800507 TFS-51800520 Timing chain kit with adjustable crankshaft gear, Ford

4.6L 2V, each

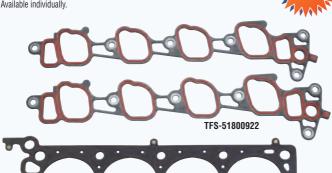
TFS-51800505 Adjustable crankshaft gear, Ford 4.6L 2V/4V, set Timing chain arm and guides, Ford 5.4L 2V, kit TFS-51800511 TFS-51800508 Camshaft bolts, fit cams that require 12mm

bolts, Ford 4.6L 2V/4V, pair

TFS-51800510 Roller follower, Ford 4.6L/5.4L 2V/4V, OE-style, each

TFS-51800610-12\* Roller follower, Ford 4.6L/5.4L 3V, OE-style, set of 12

\* Available individually.



#### TFS-5180901L **Cylinder Head and Intake Gaskets** for Ford 4.6L/5.4L 2V

Trick Flow teamed up with Fel-Pro to produce premium quality gaskets to complement Trick Flow cylinder heads and intakes. These gaskets are constructed from the highest quality materials

for superior sealing under under extreme pressure and heat. Intake gaskets, PI-style, aluminum intake manifolds only, TFS-51800921

Ford 4.6L/5.4L 2V, pair

TFS-51800922 Intake gaskets, PI-style, aluminum or OE composite intake

manifolds, Ford 4.6L/5.4L 2V, pair

TFS-5180901L MLS head gasket, Ford 4.6L/5.4L 2V, left, each TFS-5180901R MLS head gasket, Ford 4.6L/5.4L 2V, right, each



#### **Cylinder Head Bolt Kit** for Ford 4.6L 2V/3V/4V



TFS-92008

Keep combustion where it belongs! Trick Flow's high-quality cylinder head bolt kits provide consistent clamping force from bolt-to-bolt. The bolts are made from premium quality alloy steel with cold-formed heads and rolled threads. The kit contains all the bolts you need to install a pair of heads, including hardened washers.

TFS-92008

Cylinder head bolt kit, torque-to-yield, each



#### **Serious Horsepower T-Shirts**

Show everyone you know the source for Serious Horsepower with a Trick Flow T-shirt. Made from 100 percent cotton, the shirt sports centrifugally-supercharged 1993 Mustang Cobra artwork.

T-shirt, white, 1993 Mustang Cobra, 3X-Large, each TFS-P42000 TFS-P42002 T-shirt, white, 1993 Mustang Cobra, 2X-Large, each TFS-P42004 T-shirt, white, 1993 Mustang Cobra, X-Large, each TFS-P42006 T-shirt, white, 1993 Mustang Cobra, Large, each TFS-P42008 T-shirt, white, 1993 Mustang Cobra, Medium, each TFS-P42010 T-shirt, white, 1993 Mustang Cobra, Small, each



### Valve Spring Upgrade Kits • Valve Spring Change Accessory Kit • Valve Spring Compressor • Cam Degree Supplement Kit for Ford 4.6L/5.4L 2V/4V

# Valve Spring Upgrade Kits for Ford 4.6L/5.4L 2V



When changing cams or making other valvetrain upgrades to a Ford 4.6L or 5.4L engine, it's important to replace the stock valve springs with a set designed to handle the increased valve lift. Trick Flow valve spring upgrade kits feature a beehive spring design so they can be installed without machine work to the heads. Two versions are available: The Twisted Wedge upgrade kit is perfect for mildly modified engines and includes valve springs with 90 lbs. of seat pressure at 1.570" installed height, 205 lbs. at 1.020" open, with a maximum lift rating of .600". The Twisted Wedge Track Heat upgrade kit is recommended for engines with power adders and/or high rpm applications. It includes valve springs with 125 lbs. of seat pressure at 1.600" installed height, 275 lbs. at 1.020" open, with a maximum lift rating of .580". Both kits come complete with springs, chromemoly retainers, locks, seals, and instructions.

TFS-2500500 TFS-2500525 Twisted Wedge valve spring upgrade kit, fits one pair of OEM Ford 4.6L/5.4L 2V cylinder heads, each Twisted Wedge Track Heat valve spring upgrade kit, fits one pair of OEM Ford 4.6L/5.4L 2V cylinder heads, each

TFS-90520



#### Valve Spring Change Accessory Kit



Originally engineered just for valve spring replacements on Ford 4.6L/5.4L 2V and 4V modular engines, Trick Flow's valve spring change accessory kit now works on all engines. The accessory kit includes a valve seal installer, magnetic pen, and an extended air hose adapter for putting air into the cylinder to keep the valves closed during service.

TFS-90520

Valve spring change accessory kit, universal, each



If you work on Ford modular engines, then you need Trick Flow's valve spring compressor. A must for servicing valve springs, retainers, camshafts, and valve seals, this specially made tool can remove the valve springs with the camshafts in the heads—even while they're on the engine.

TFS-90518

Valve spring compressor.

Ford 4.6L/5.4L 2V/4V, each





Leave your competition in the dust with a Trick Flow by Magnuson supercharger system! They're 100% bolt-on and can be installed in less than a day. Learn more about them on page 48.

# Cam Degree Supplement Kit for Ford 4.6L/5.4L 2V/4V

Trick Flow's cam degree kit is perfect for accurately degreeing a camshaft when an engine is mounted on a stand.

However, the kit is a little tricky to use when the engine is in a car. That's why Trick Flow has engineered this cam degree supplement kit. The kit contains components to make degreeing the cam in a vehicle easier: a steel plate for the magnetic base, an allen key, adjustable set-up lash adjuster, and an extension for the dial indicator. This kit must be used with the TFS-90000 cam degree kit (page 47).

TFS-90100 Cam degree supplement kit, each





## Trick Flow Fast Fact: Compression Ratio

Choosing the proper compression ratio is crucial to engine performance. Too high and the engine will detonate, causing a loss of power and reduced life. Too low and the engine will feel sluggish and not perform to its full potential.

Compression ratio is affected by piston design (dome, flat top, or dish), head gasket thickness, cylinder head volume, and cylinder bore diameter. For example, a 302 c.i.d. engine with 67cc combustion chamber cylinder heads has a compression ratio of 9.15:1. Keeping all of the variables the same but altering the stroke to 3.480" results in a compression ratio increase to 10.45:1

and a displacement increase to 350 c.i.d. Going one step further, increasing the stroke to 3.750" results in a compression ratio of 11.2:1 and displacement of 383 c.i.d.

Compression ratio is dependent on many variables. Taking the time to choose the proper engine components for your horsepower needs will reward you with a higher level of performance and increased engine life. Call the Trick Flow Technical Department today (1-330-630-1555, Monday through Friday from 9:00 am to 5:00 pm EST). The best consultants in the business will help you design the perfect engine combination for your performance goals.

#### **Automotive Formulas**

**Horsepower** = (Torque x RPM)/5252

**Torque** = (Horsepower x 5252)/RPM

**Cubic Inch Displacement (c.i.d.)** = Bore x Bore x .7854 x Stroke x Number of Cylinders

Compression Ratio = (Compressed Volume + Swept Volume)/Compressed Volume

Compressed Volume = (Chamber Volume - Dome Volume + Deck Clearance Volume

+ Gasket Volume) x .061

Swept Volume = (3.14159 x Stroke x Bore x Bore)/4





# Manifolds • EFI Fuel Rails • Upper Plenums • EFI Programmer for Ford 4.6L 2V/5.0L



# Track Heat® Manifolds for Ford 4.6L 2V

Add some ponies to your Mustang with Trick Flow's newest high performance intake manifold—the Track Heat 4.6L 2V! Designed for hot street and track-ready 4.6L Mustang GTs, the Track Heat 4.6L 2V manifold improves performance in the meat of the engine's powerband—between 1,500 to 6,500 rpm with unported cylinder heads and 1,500 to 7,200 rpm with aftermarket or ported cylinder heads.

The secret lies with the symmetrical high-velocity intake ports and 75mm throttle body inlet, which work together to substantially increase airflow and distribute it evenly to the cylinders. With this revolutionary intake, you will be rewarded with big increases in performance over more expensive manifolds!

Plus, the intake's A319 aluminum construction is not affected by nitrous like the weak plastic factory manifold. And don't worry about hood clearance—the 75mm throttle body Track Heat intake is a direct bolt-on replacement for stock and will fit under any stock-height hood.

 ${\bf NOTE:}$  Works with stock and aftermarket fuel rails. Will work on 1996-98 Ford 4.6L 2V with modifications.

#### Track Heat 4.6L 2V Intake Manifolds

HUUK HUUL T.OL	LV IIItuko Mullilolus
TFS-51800002	Manifold kit, 75mm throttle body inlet, silver, each
TFS-51811002	Manifold kit, 75mm throttle body inlet, black, each
TFS-518B0002	Manifold kit, 75mm throttle body inlet, natural, each
TFS-51800003	Manifold kit, dual 57mm throttle body inlet, silver, each
TFS-51811003	Manifold kit, dual 57mm throttle body inlet, black, each
TFS-518B1003	Manifold kit, dual 57mm throttle body inlet, natural, each
TFS-518L0002	Lower manifold, silver, each
TFS-518L1102	Lower manifold, black, each
TFS-518LB002	Lower manifold, natural, each
TFS-518U0002	Upper manifold, 75mm throttle body inlet, silver, each
TFS-518U1102	Upper manifold, 75mm throttle body inlet, black, each
TFS-518UB002	Upper manifold, 75mm throttle body inlet, natural, each
TFS-518U0003	Upper manifold, dual 57mm throttle body inlet, silver, each
TFS-518U1103	Upper manifold, dual 57mm throttle body inlet, black, each

#### TFX EFI Fuel Rails

TFS-5188000R EFI fuel rails and mounting brackets, 1999-2004 4.6L 2V, kit

# High-Flow Upper Plenums for Ford 4.6L 2V

More horsepower starts with more air—as much as 100 cfm of additional air over stock with a Trick Flow High-Flow upper plenum. Made for 1996-2004 4.6L 2V powered Ford cars and trucks, the aluminum plenums have been raised 3/4" to enhance airflow yet still fit under a stock hood. They work with stock sensors, are compatible with throttle bodies up to 75mm, and come in silver, black, and natural finishes.

TFS-51800001 Plenum, fits 1996-2004 Mustang, silver, each TFS-51811001 Plenum, fits 1996-2004 Mustang, black, each TFS-518B0001 Plenum, fits 1996-2004 Mustang, natural, each

TFS-51800021 Plenum, fits Explorer, Thunderbird, and Cougar, silver, each TFS-51811021 Plenum, fits Explorer, Thunderbird, and Cougar, black, each TFS-518B0021 Plenum, fits Explorer, Thunderbird, and Cougar, natural, each



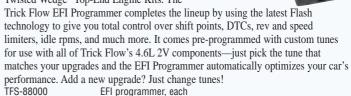
TFS-518B0001

High-Flow Upper Plenums Airflow Chart		
Throttle position	Stock upper plenum/throttle body	
Half	250 cfm	
Full	460 cfm	
Throttle position	Stock upper plenum/70mm throttle body	
Half	270 cfm	
Full	500 cfm	
Throttle position	Trick Flow upper plenum/stock throttle body	
Half	265 cfm	
Full	550 cfm	
Throttle position	Trick Flow upper plenum/70mm throttle body	
Half	290 cfm	
Full	618 cfm	
Throttle position	Trick Flow upper plenum/75mm throttle body	
Half	280 cfm	
Full	610 cfm	
	t <b>Vehicle:</b> 2001 4.6L Ford Mustang GT s conducted at 28" of water (pressure).	

#### Trick Flow EFI Programmer for 1999-2004 4.6L 2V Ford Mustang GT

Trick Flow helped turn 1999-2004 4.6L 2V Mustang GT pony cars into

thoroughbreds with dyno-proven Track Max® camshafts, TFX™ Cold Air Intake Kits, and Twisted Wedge® Top-End Engine Kits. The



TFS-88000

### Trick Flow Fast Fact: Performance and Price

Until 2007, the only performance intake manifold available for the 4.6L 2V Mustang was the expensive and hard-to-find Bullitt manifold. That was the year Trick Flow introduced the Track Heat intake manifold—and gave Mustang fans better performance for less money.

The Track Heat intake not only provides much-needed low end torque, it also outperforms the

factory intake above 6,000 rpm. The Track Heat intake also comes with everything needed for installation on either a Romeo or Windsor 4.6L—gaskets, hardware, air intake tubing, brackets, hose, and line—for less than half the price of the Bullitt intake kit!







**CNC-Profiled Combustion Chamber** 

#### **Specifications**

Combustion Chamber Volume:

Intake Port Volume:

Intake Port Location: Intake Port Dimensions:

Intake Gaskets: Intake Valve Diameter: Intake Valve Seat: Exhaust Port Volume:

**Exhaust Port Location:** Exhaust Port Dimensions: Exhaust Gaskets:

Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material: Valve Seals:

Valve Seat Angles:

Valve Spring Pocket Diameter: Valve Spring Retainers:

Valve Stem Locks:

Valve Springs, Standard:

Valve Springs, Option 1:

Valve Springs, Option 2:

Guideplates:

Rocker Arm Studs:

Rocker Arm Type:

Minimum Bore Diameter: Cylinder Head Bolts: Spark Plugs:

A356-T61 aluminum M62: 62cc CNC-profiled C01: 60cc CNC-profiled M62: 190cc Fast As Cast C01: 225cc CNC-ported Stock

M62: 1.470" x 2.100" C01: 1.500" x 2.100" Fel-Pro 1240 2.080"

Ductile iron M62: 112cc Fast As Cast

C01: 115cc CNC-ported Raised .100" from OE 2V 1.380" x 1.670' Fel-Pro 1430 1.600

Ductile iron Bronze alloy Viton® fluoroelastomer

35°x 45°x 60° 1.615"

7° x 1.500" o.d. chromemoly steel 10° x 1.550" o.d. chromemoly steel

10° x 1.550" o.d. titanium 7° machined steel

10° machined steel with lash cap recess

1.460" o.d. dual spring with damper 120 lbs. @ 1.900" installed height 394 lbs. @ 1.175" open

390 lbs. per inch rate .650" maximum valve lift

1.550" o.d. dual spring with damper 138 lbs. @ 1.950" installed height

430 lbs. @ 1.250" open 420 lbs. per inch rate .680" maximum valve lift

1.560" o.d. dual spring with damper 240 lbs. @ 2.00" installed height

600 lbs. @ 1.280" open 500 lbs. per inch rate .720" maximum valve lift

For use with 5/16" or 3/8" pushrods

(depending on model)

ÀRP 7/16"

Stud mount roller rocker arms recommended

4.000"

ARP 154-3604 or equivalent Autolite 3924 or equivalent

#### **Airflow Results**

PowerPort Clev	PowerPort Cleveland 190 for Ford 351C, 351M/400, and Clevor		
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	68	55	
0.200"	140	111	
0.300"	202	151	
0.400"	248	187	
0.500"	286	217	
0.600"	299	232	
Tests conducted at 28" of water (pressure). Bore size: 4.030"			

#### CNC-profiled combustion chambers; exhaust with 17/8" pipe. PowerPort Cleveland 190 Heads, Fast As Cast Runners, Assembled

TFS-51600003-M62 1.460" dual valve springs, 190cc intake runners TFS-51600004-M62 1.550" dual valve springs, 190cc intake runners

#### PowerPort Cleveland 225 Heads, CNC-Ported Runners, Assembled

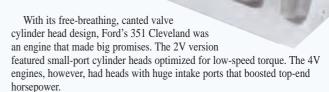
TFS-5160T003-C01 1.460" dual valve springs, 225cc intake runners 1.550" dual valve springs, 225cc intake runners TFS-5160T004-C01 TFS-5160T005-C01 1.560" dual valve springs, 225cc intake runners

Viton® is a registered trademark of DuPont Performance Elastomers









What Ford did not do was make a version of the Cleveland that combined the torque of the 2V heads and the high-rpm rush of the 4V head design.

But Trick Flow engineers picked up where the factory left off. They took the best qualities of the factory head designs, added a healthy dose of hot rodder ingenuity, and created the PowerPort Cleveland 190 and 225 cylinder heads.

The heads feature intake and exhaust runners based on the OE Ford 2V design. The exhaust runners are raised .100" from the OE 2V location to improve the short turn radius, thus dramatically improving exhaust flow. The combustion chambers are fully CNC-profiled and bowl-blended to further maximize performance. The oil return system has been revised to improve oil drainback and includes provisions for mating with 351 Windsor blocks.

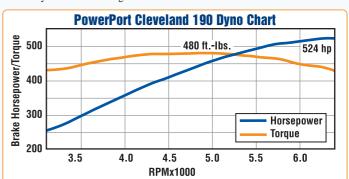
The PowerPort Cleveland 190 heads feature Trick Flow's Fast As Cast® intake/exhaust runner technology that provides near CNC-ported power and performance at a standard head price. These heads have 190cc intake runners, 112cc exhaust runners, and 62cc combustion chambers, plus your choice of 1.460" or 1.530" valve springs.

The PowerPort Cleveland 225 heads feature fully CNC-ported 225cc intake and 115cc exhaust runners, 60cc combustion chambers, and your choice of 1.460", 1.550", or 1.560" valve springs.

The PowerPort Cleveland heads fit 351C, 351M, and 400 engines out of the box. With minor machining, the heads can be used with 302 and 351W blocks to create a "replica" Boss 302 or a 351 "Clevor" engine.

The PowerPort Cleveland heads come fully assembled with lightweight stainless steel 2.080"/1.600" valves, ductile iron valve seats, chromemoly retainers, machined valve locks, Viton® fluoroelastomer valve seals, 7/16" ARP rocker arm studs, and your choice of valve spring packages.

Bare cylinder head castings are also available.



Test Engine: 9.65:1 compression 383 c.i.d. with Trick Flow Flow PowerPort® Cleveland 190 cylinder heads (TFS-51600003-M62), Crane Cams hydraulic roller camshaft (236°/240° duration @.050"; .621"/.631" lift; 112° lobe separation), Trick Flow 1.73 ratio roller rocker arms (TFS-53400621), Edelbrock Performer RPM Air Gap intake manifold, Holley 4150 HP 750 cfm carburetor, Hooker Super Competition headers with 1 3/4" primaries, 3" dual exhaust with Flowmaster mufflers.



#### **EFI Intake Manifold Kits** for Ford 351C and Clevor USA



Trick Flow aluminum EFI Intake Manifold Kits for Ford 351C and Windsorbased Clevor-style engines are computer-modeled and tested to deliver excellent air/fuel distribution and velocity for increased horsepower and torque.

The runner lengths and cross-sectional taper of the R-Series intakes are tuned for street/strip engines that operate in the 2,500 to 7,250 rpm range. Box-R-Series intakes feature a large plenum/short runner design that maximizes mid-to high-rpm power and torque, making it ideal for supercharged, turbocharged, nitrous, and racing applications that produce power in the 3,000 to 8,000 rpm range.

All EFI manifold uppers are available in silver and black powdercoated finishes or natural aluminum for those who prefer a bare look or wish to use a custom finish.

NOTE: These EFI manifolds are designed for non-EGR engines. Engines will require a calibrated mass air or adjustable fuel injection computer, aftermarket fuel rails, and adjustable fuel pressure regulator to operate properly.

#### P Carios Intaka Manifold Kita

R-Series intake ivi	anitolo Kits
TFS-51600114	R-Series manifold kit, Ford 351C, 9.200" deck height, 75mm
	throttle body inlet, silver upper, each
TFS-51600115	R-Series manifold kit, Ford Clevor, 9.500" deck height, 75mm
	throttle body inlet, silver upper, each
TFS-51611114	R-Series manifold kit, Ford 351C, 9.200" deck height, 75mm
	throttle body inlet, black upper, each
TFS-51611115	R-Series manifold kit, Clevor, 9.500" deck height, 75mm
	throttle body inlet, black upper, each
TFS-516B0114	R-Series manifold kit, Ford 351C, 9.200" deck height, 75mm
	throttle body inlet, natural upper, each
TFS-516B0115	R-Series manifold kit, Clevor, 9.500" deck height, 75mm

<b>Box-R-Series Inta</b>	ake Manifold Kits
TFS-51600118	Box-R-Series manifold kit, Ford 351C, 9.200" deck height,
	90mm throttle body inlet, silver upper, each
TFS-51600119	Box-R-Series manifold kit, Clevor, 9.500" deck height, 90mm
	throttle body inlet, silver upper, each
TFS-51611118	Box-R-Series manifold kit, Ford 351C, 9.200" deck height,
	90mm throttle body inlet, black upper, each
TFS-51611119	Box-R-Series manifold kit, Clevor, 9.500" deck height, 90mm
	throttle body inlet, black upper, each
TFS-516B0118	Box-R-Series manifold kit, Ford 351C, 9.200" deck height,
	90mm throttle body inlet, natural upper, each
TFS-516B0119	Box-R-Series manifold kit, Clevor, 9.500" deck height, 90mm

throttle body inlet, natural upper, each

throttle body inlet, natural upper, each



EFI Intake Manifold Specifications for Ford 351C and Clevor		
Manifold	R-Series	Box-R-Series
Runner	Large cross-section with 13.300" runner	Large cross-section with 11.000" runner
RPM Range	1,500-5,500	2,500-7,500
Throttle Body Inlet	75mm	90mm
Port Size at Head	2.100" x 1.500"	2.100" x 1.500"
Port Size at Mating Flange	2.380" x 1.380"	2.380" x 1.380"
Overall Height to Upper Manifold Flange	11.000"	12.000"
Overall Height to Lower Manifold Flange	5.375"	5.375"

### Track Heat® Intake Manifolds for Ford 351C and Clevor



The Track Heat single plane intake manifolds for Ford 351C and Windsorbased Clevor-style engines are designed for street/strip applications that operate in the 3,000-7,000 rpm range. The high-rise, one-piece spider design features high-flowing individual extended runners that provide significant horsepower and torque increases in the mid- to high-rpm range; and a raised plenum floor for increased flow velocity and fuel atomization.

Other important features include OE 2V port locations and dimensions, A319 aluminum construction, integral bosses for nitrous or fuel injection nozzles, extra material for custom port work, and a Holley 4150-style 4-barrel carburetor mounting pad. Overall height to the mounting pad is 6.400".

TFS-51600111 Manifold, Ford 351C, 9.200" deck height, each TFS-51600112 Manifold, Ford Clevor, 9.500" deck height, each





### Twisted Wedge® 170, 185, and 205 Cylinder Heads for Small Block Ford



**CNC-Profiled Combustion Chamber** 



**Specifications** 

Material: Combustion Chamber Volume:

02/03/04/05: 61cc C01: 64cc CNC-profiled C02: 65cc CNC-profiled 02/03/04/05: 170cc Fast As Cast

Intake Port Volume:

C01: 185cc CNC-ported C02: 205cc CNC-ported

Intake Port Location: Intake Port Dimensions:

02/03/04/05: 1.200" x 2.000

C01: 1.250" x 2.150" C02: 2.240" x 1.375'

Stock

Intake Gaskets:

02/03/04/05: Fel-Pro 1250 C01: Fel-Pro 1262 C02: Fel-Pro 1262R 2.020"

Intake Valve Diameter: Intake Valve Seat: Exhaust Port Volume:

170 Optional

Tungsten alloy 02/03/04/05: 66cc Fast As Cast

C01/C02: 66cc CNC-ported

**Exhaust Port Location:** Stock **Exhaust Port Dimensions:** 1.250" x 1.500' Exhaust Gaskets: Fel-Pro 1415 Exhaust Valve Diameter: 1.600 Exhaust Valve Seat: Tungsten alloy

Valve Guide Material: Bronze alloy Valve Seals: Viton® fluoroelastomer Valve Seat Angles: 37° x 45° x 60°

Valve Spring Pocket Diameter: 1.615" Valve Spring Cups: 1.480" Valve Spring Retainers: 7° x 1.500" o.d. chromemoly steel

10° x 1.500" o.d. chromemoly steel Valve Stem Locks: 7° machined steel

10° machined steel with lash cap recess

1.470" o.d. single spring with damper 110 lbs. @ 1.800" installed height 305 lbs. @ 1.260" open Valve Springs: 170 Standard

360 lbs. per inch rate .540" maximum valve lift

1.460" o.d. dual spring with damper 125 lbs. @ 1.800" installed height 376 lbs. @ 1.180" open Valve Springs: 185/205 Standard

420 lbs. per inch rate .600" maximum valve lift

Guideplates: For use with 5/16" pushrods

ARP 3/8" ARP 7/16" Rocker Arm Studs:

Minimum Bore Diameter: 4 000"

TFS-92005 or equivalent Cylinder Head Bolts: Spark Plugs: Autolite 3924 or equivalent

NOTE: • Valve cover rail is raised .350" over stock

#### **Airflow Results**

Twisted Wedge 185 for Small Block Ford		
Lift Value	Intake Flow CFM	Exhaust Flow CFM
0.100"	72	58
0.200"	142	112
0.300"	216	150
0.400"	258	192
0.500"	287	220
0.600"	301	231
	-	

Tests conducted at 28" of water (pressure). Bore size: 4.030" CNC-profiled combustion chambers; exhaust with 2" pipe.

To view more airflow charts, go to TrickFlow.com and type the part number you want to see into the Search box and then click "Search".

Trick Flow's patented Twisted Wedge 170, 185, and 205 performance aluminum cylinder heads feature Trick Flow's revolutionary "twisted wedge" combustion chambers to build more mid-range and top-end power without sacrificing bottom-end torque.

Here's how it works: Trick Flow engineers rotated the valves and moved them over the center of the cylinder bores. This optimizes the valve angles and the combustion chamber shape to dramatically boost airflow and allow for more complete combustion of the air/fuel charge. And unlike other brands, Trick Flow Twisted Wedge heads are the only aftermarket heads that can run 2.020"/1.600" valves with stock, unmodified pistons and performance camshafts up to .550" lift.

The Twisted Wedge series heads are built for heavy-duty use, too. They have .560" thick combustion chamber walls and fire decks for added strength without a loss of cooling capacity, plus additional support risers in the water jackets for increased head gasket integrity.

The Twisted Wedge 170 heads are designed as a performance replacement for stock Ford heads and are 50-state emissions-legal on 1996 and earlier 289, 302, and 351W Fords (CARB E.O. number D-369-12). The Twisted Wedge 185 and 205 heads combine the proven power-building features of the Twisted Wedge 170 heads with five-axis CNC-porting to give small block Fords an even bigger performance boost. When dyno-tested on a fuel injected 347 stroker mill, the Twisted Wedge 205 heads made 50 more horsepower than the Twisted Wedge 170 heads. That's power you can really feel!

All Twisted Wedge series heads work with most OEM and aftermarket intake and exhaust manifolds/headers. The heads come fully assembled and ready-toinstall right out of the box with stainless steel valves (intakes are backcut for improved flow), valve springs, locks, retainers, ARP rocker studs, and guideplates.

Bare cylinder head castings are also available.

#### Twisted Wedge 170 Heads, Fast As Cast Runners, Assembled

TFS-51400002 1.470" single valve springs, 170cc intake runners

1.470" single valve springs and O-rings, TFS-51400003

170cc intake runners

1.460" dual valve springs, 170cc TFS-51400004 intake runners

TFS-51400005 1.460" dual valve springs and O-rings,

170cc intake runners

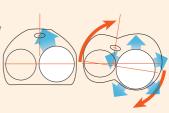
#### Twisted Wedge 185 and 205 Heads, CNC-Ported Runners, Assembled

TFS-51400004-C01 1.460" dual valve springs, 185cc intake runners TFS-51400004-C02 1.460" dual valve springs, 205cc intake runners

## What is a Twisted Wedge Head?

Compare a stock combustion chamber (left) with the patented Twisted Wedge® combustion chambers found in Trick Flow Twisted Wedge cylinder heads (right).

The valve angles are rotated to unshroud the valves, and the spark plug has been moved closer to the center of the cylinder. This increases airflow and allows more complete combustion.







Twisted Wedge® Track Heat® 170, 185, 190 and 205 Cylinder Heads





**CNC-Profiled Combustion Chamber** 

Trick Flow Twisted Wedge Track Heat series cylinder heads are capable of producing 600 plus

horsepower on naturally aspirated engines—the winningest head in NMRA racing. Twisted Wedge Track Heat heads so dominated that the NMRA saddled them with a weight penalty!

Twisted Wedge Track Heat heads include all of the features of the famous Twisted Wedge series heads, plus higher-rate valve springs (125 lbs. seat pressure at 1.780" installed height), 10° machined steel super locks, and manganese bronze guides to support camshafts of up to .600" lift when used with the proper pistons.

Track Heat 170 and 190 heads with Fast As Cast® runners are perfect for dual purpose street/strip cars and for racers looking for the best combination of performance and value. These heads feature cast intake and exhaust runners with Twisted Wedge CNC-ported profiles. You get near CNC-ported power and performance for the price of ordinary cast heads.

The Track Heat 185 and 205 heads take power-making to the next level. These heads feature fully CNC-profiled and bowl blended combustion chambers and CNC-ported intake and exhaust runners to provide maximum airflow throughout camshaft valve lift, and guarantee the same amount of flow from port-to-port and chamber-to-chamber for improved power over the entire rpm range.

Twisted Wedge Track Heat series heads work with most OEM and aftermarket intake and exhaust manifolds/headers. The heads are ready for installation straight out of the box. They come with stainless steel valves (intakes are backcut), 1.460" dual valve springs, locks, retainers, ARP 7/16" rocker studs, and guideplates.

Bare cylinder head castings are also available.

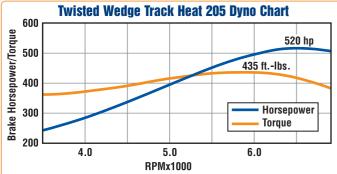
#### Twisted Wedge Track Heat Heads, Fast As Cast Runners, Assembled

TFS-51400010 Without O-rings, 170cc intake runners
TFS-51400011 With O-rings, 170cc intake runners

TFS-51400015 190cc intake runners

#### Twisted Wedge Track Heat Heads, CNC-Ported Runners, Assembled

TFS-51400010-C01 185cc intake runners TFS-51400010-C02 205cc intake runners



Test Engine: 10.45:1 compression 347 c.i.d. with Trick Flow Twisted Wedge® Track Heat® 205 cylinder heads (TFS-51400010-C02), Trick Flow Track Max® hydraulic roller camshaft (TFS-51402002—236°/248° duration @.050°; .574°/.595° lift; 110° lobe separation), Trick Flow 1.6 ratio roller rocker arms (TFS-51400520), Edelbrock Super Victor intake manifold, Hooker headers with 19½° primaries, 3° dual exhaust with Flowmaster mufflers.

#### **Specifications**

A356-T61 aluminum 10/11: 61cc

C02: Fel-Pro 1262R

Combustion Chamber Volume:

Material

15/C01: 64cc CNC-profiled
C02: 65cc CNC-profiled
Intake Port Volume: 10/11: 170cc Fast As Cast
15: 190cc Fast As Cast
C01: 185cc CNC-ported

Intake Port Location: Stock
Intake Port Dimensions: 10/11: 1.200" x 2.000"

15/C01: 1.250" x 2.150" C02: 2.240" x 1.375" Intake Gaskets: 10/11: Fel-Pro 1250 15/C01: Fel-Pro 1262

Intake Valve Diameter:
Intake Valve Seat:
Exhaust Port Volume:

2.020"
Tungsten alloy
10/11/15: 66cc Fast As Cast
C01/C02: 66cc CNC-ported

**Exhaust Port Location:** Stock **Exhaust Port Dimensions:** 1.250" x 1.500" Exhaust Gaskets: Fel-Pro 1415 Exhaust Valve Diameter: 1.600" Exhaust Valve Seat: Tungsten alloy Valve Guide Material: Bronze alloy Viton® fluoroelastomer Valve Seals: Valve Seat Angles: 37° x 45° x 60°

Valve Seat Angles: 37° x 45° x
Valve Spring Pocket Diameter: 1.615"
Valve Spring Cups: 1.480"

Valve Spring Retainers: 10° x 1.500" o.d. chromemoly steel
Valve Stem Locks: 10° machined steel with lash cap recess
Valve Springs: 1.460" o.d. dual spring with damper
125 lbs. @ 1.800" installed height

376 lbs. @ 1.180" open 420 lbs. per inch rate .600" maximum valve lift For use with 5/16" pushrods

Guideplates: For use with 5/16" pushrods
Rocker Arm Studs: ARP 7/16"
Minimum Bore Diameter: 4.000"

Cylinder Head Bolts: TFS-92005 or equivalent Spark Plugs: Autolite 3924 or equivalent NOTES: • Valve cover rail is raised .350" over stock

Heads are drilled to accept 1/2" head bolts

 Flat top or Twisted Wedge-specific dome pistons required with camshafts over .550" lift

#### **Airflow Results**

Twisted W	Twisted Wedge Track Heat 205 for Small Block Ford		
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	71	56	
0.200"	144	112	
0.300"	220	150	
0.400"	270	192	
0.500"	299	220	
0.600"	316	231	

Tests conducted at 28" of water (pressure). Bore size: 4.030" CNC-profiled combustion chambers; exhaust with 2" pipe.

To view more airflow charts, go to TrickFlow.com and type the part number you want to see into the Search box and then click "Search".





**CNC-Profiled Combustion Chamber** 



#### **Specifications**

Stock

2.080

A356-T61 aluminum

M61: 1.375" x 2.125'

C01: 1.375" x 2.240' M61: Fel-Pro 1262

C01: Fel-Pro 1262R

M61: 92cc Fast As Cast C01: 100cc CNC-ported

Raised .500" from stock 1.510" x 1.660" oval

Copper bronze alloy

Viton® fluoroelastomer

10° x 1.550" o.d. titanium

430 lbs. @ 1.250" open 420 lbs. per inch rate

.680" maximum valve lift

600 lbs. @ 1.280" open

.720" maximum valve lift

800 lbs. @ 1.150" open

.850" maximum valve lift

TFS-92005 or equivalent

(depending on model)

600 lbs. per inch rate

500 lbs. per inch rate

10° x 1.550" o.d. chromemoly steel

1.550" o.d. dual spring with damper

1.560" o.d. dual spring with damper

1.640" o.d. dual spring with damper

250 lbs. @ 2.000" installed height

For use with 5/16" or 3/8" pushrods

240 lbs. @ 2.000" installed height

138 lbs. @ 1.950" installed height

10° machined steel with lash cap recess

Tungsten alloy

Fel-Pro 1427

Bronze alloy

37° x 45° x 60°

1.600"

1.760"

M61: 61cc CNC-profiled

C01: 65cc CNC-profiled

M61: 206cc Fast As Cast C01: 225cc CNC-ported

Material: Combustion Chamber Volume:

Intake Port Volume:

Intake Port Location: Intake Port Dimensions:

Intake Gaskets:

Intake Valve Diameter: Intake Valve Seat: Exhaust Port Volume:

Exhaust Port Location: Exhaust Port Dimensions: Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat

Valve Guide Material: Valve Seals: Valve Seat Angles:

Valve Spring Pocket Diameter:

Valve Spring Retainers:

Valve Stem Locks:

Valve Springs, Standard:

Valve Springs, Option 1:

Valve Springs, Option 2:

Guideplates:

Rocker Arm Studs:

Minimum Bore Diameter: Cylinder Head Bolts:

Spark Plugs:

Autolite 3932 or equivalent NOTE: • Valve cover rail is raised .350" over stock

**Airflow Results** 

4.000"

#### Twisted Wedge Race 225 for Small Block Ford Lift Value Intake Flow CFM **Exhaust Flow CFM** 0.100' 67 59 0.200' 141 116 0.300' 213 159 0.400' 270 205 0.500' 308 244 0.600' 331 259 0.700341 Tests conducted at 28" of water (pressure). Bore size: 4.030'

CNC-profiled combustion chambers; exhaust with 2" pipe. To view more airflow charts, go to TrickFlow.com and type the part number vou want to see into the Search box and then click "Search"

206 heads feature fully CNC-profiled and bowl-

blended "Twisted Wedge" combustion chambers, plus Fast As Cast® 206cc intake runners and 92cc exhaust runners raised .500" from stock.

If this doesn't get you excited, then check out the Twisted Wedge Race 225 cylinder heads. These heads are fully 5-axis CNC-ported to boost the intake runner volume to 225cc and exhaust runner volume to 100cc.

The Twisted Wedge Race heads have other race-ready features, too—additional material for porting, a .560" thick deck, intake port shaping for Fel-Pro #1262 intake gaskets, stud mounts for roller rocker arms, spring pockets machined for 1.630" valve springs, bronze valve guides, tungsten alloy intake seats, and copper bronze exhaust seats.

The fully assembled heads are available with three valve spring packages: 1.550" dual valve springs for hydraulic roller camshafts up to .680" of valve lift; 1.560" dual valve springs for mechanical roller camshafts up to .720" of valve lift; and 1.640" dual valve springs for mechanical roller cams up to .850" of valve lift, ARP 7/16" rocker arm studs and 5/16" guideplates round out the package.

Bare cylinder head castings are also available.

#### Twisted Wedge Race 206 Heads, Fast As Cast Runners, Assembled

TFS-52400003-M61 1.550" dual valve springs, 206cc intake runners TFS-52400004-M61 1.550" dual valve springs and O-rings, 206cc intake runners TFS-52400005-M61 1.560" dual valve springs, 206cc intake runners

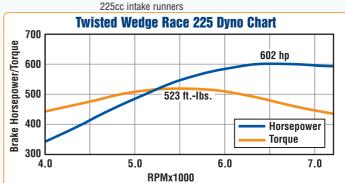
TFS-5240T005-M61 1.560" dual valve springs and titanium retainers. 206cc intake runners

TFS-52400006-M61 1.560" dual valve springs and O-rings, 206cc intake runners TFS-5240T006-M61 1.560" dual valve springs, O-rings, and titanium retainers, 206cc intake runners

TFS-5240T805-M61 1.640" dual valve springs and titanium retainers. 206cc intake runners

#### Twisted Wedge Race 225 Heads, CNC-Ported Runners, Assembled

TFS-52400003-C01 1.550" dual valve springs, 225cc intake runners TFS-52400005-C01 1.560" dual valve springs, 225cc intake runners TFS-5240T005-C01 1.560" dual valve springs and titanium retainers, 225cc intake runners TFS-5240T805-C01 1.640" dual valve springs and titanium retainers,



Test Engine: 10.59:1 compression 408 c.i.d. with Trick Flow Twisted Wedge® Race 225 cylinder heads (TFS-5240T005-C01), COMP Cams Xtreme Energy mechanical roller camshaft (254°/260° duration @.050"; .621"/.627" lift; 110° lobe separation), Trick Flow 1.6 ratio roller rocker arms (TFS-51400520), Edelbrock Super Victor intake manifold, Hooker headers with 17/8" primaries, open exhaust.



High Port® 192 Cylinder Heads for Small Block Ford



**Combustion Chamber** 



They're the originals—the ones others have tried to copy. Trick Flow's High Port 192 aluminum cylinder heads not only started the high performance small block Ford head revolution, they became one of the most dominant aftermarket heads in racing. Even today, you can still find vintage High Port heads on some of the fastest Fords around.

And now Trick Flow has made them better! All of the things that made the original heads great are still here: unique valve spacing, raised exhaust ports, extra strong castings and thick decks for additional rigidity and gasket integrity, superior cooling characteristics, and most importantly, excellent airflow.

But to make the High Port 192 heads even better, they've been updated with today's cutting edge technology. The entry into the intake port has been reshaped to help seal the area along the port roof, and thicker port walls increase strength and provide more material for porting. Plus, interlocking ductile iron seats are used to handle the stresses of high heat, high horsepower applications.

Other features include 64cc combustion chambers for more complete combustion, large Fast As Cast® 192cc intake runners and 87cc exhaust runners that have been raised .750" for increased flow, stainless steel 2.020" intake and 1.600" exhaust valves to build top-end horsepower, bronze alloy valve guides, 1.460" valve springs, 7° machined steel locks, and chromemoly steel retainers.

Bare cylinder head castings are also available.

#### High Port 192 Heads. Fast As Cast Runners. Assembled

TFS-51700001 Without O-rings, 192cc intake runners TFS-51700002 With O-rings, 192cc intake runners

Trick Flow fabricated aluminum valve covers are TIG-welded to hold up against the abuse dished out by race engines. They're lightweight and look good, too! Check them out on page 41.



#### **Specifications**

64cc

Stock

2.020"

1.600"

1.615"

A356-T6 aluminum

192cc Fast As Cast

Ductile iron, interlocking

87cc Fast As Cast Raised .750" from stock

1.250" x 1.500"

Fel-Pro 1415

Ductile iron

Bronze alloy Viton® fluoroelastomer

35° x 45° x 60°

.600" maximum valve lift

For use with 5/16" pushrods or 3/8"

pushrods (depending on model)

ARP 3/8" or ARP 7/16" (depending on model)

2.260" x 1.820" x .375"

1.200" x 2.000"

Fel-Pro 1250

Material: Combustion Chamber Volume: Intake Port Volume: Intake Port Location: Intake Port Dimensions: Intake Gaskets: Intake Valve Diameter: Intake Valve Seat:

Exhaust Port Volume: Exhaust Port Location: Exhaust Port Dimensions: Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material: Valve Seals:

Valve Seat Angles: Valve Spring Pocket Diameter: Valve Spring Cups:

Valve Spring Retainers: Valve Stem Locks: Valve Springs:

1.480" 7° x 1.500" o.d. chromemoly steel 7° machined steel 1.460" o.d. dual spring with damper 125 lbs. @ 1.800" installed height 376 lbs. @ 1.180" open 420 lbs. per inch rate

Guideplates:

Rocker Arm Studs: Minimum Bore Diameter: Cylinder Head Bolts:

4.000" TFS-92005 or equivalent Autolite 3924 or equivalent Spark Plugs Valve cover rail is raised .400" over stock

#### **Airflow Results**

High Port 192 for Small Block Ford			
Lift Value	Intake Flow CFM	Exhaust Flow CFM	
0.100"	67	55	
0.200"	133	103	
0.300"	186	138	
0.400"	230	166	
0.500"	257	183	
0.600"	267	193	
Tests conducted at 28" of water (pressure). Bore size: 4.030"; exhaust with 1¾" pipe.			

MATE USA

#### **Spark Plug Wire Sets** for Small Block Ford

Trick Flow spark plug wires feature a spiral metal core to suppress electrical interference that can affect on-board computer circuitry. The wires use a silicone inner and outer jacket with silicone boots to withstand extreme heat. The blue custom-fit sets even come with two coil wires for both early and late model coil locations. TFS-2800 8mm wire, set







TFS-2800









**CNC-Profiled Combustion Chamber** 



**Specifications** 

A356-T6 aluminum Combustion Chamber Volume: 10-C01: 58cc CNC-profiled

12-C01/13-C01/14-C01: 70cc CNC-profiled

16-C02: 67cc 18-C02: 76cc

Intake Port Volume: 10-C01/12-C01/13-C01/14-C01:

225cc CNC-ported 16-C02/18-C02: 240cc

Intake Port Location: Stock

Intake Gaskets:

Intake Valve Seat:

Intake Valve Diameter:

Intake Port Dimensions: C01: 1.380" x 2.240"

C02: 1.380" x 2.300' Fel-Pro 1262R 2 080' Ductile iron 95cc CNC-ported

Exhaust Port Volume: **Exhaust Port Location:** Raised .750" from stock **Exhaust Port Dimensions:** 1.400" x 1.850' Exhaust Gaskets: Fel-Pro 1420

1.600" Exhaust Valve Diameter: Exhaust Valve Seat: Ductile iron Valve Guide Material: Bronze alloy Viton® fluoroelastomer Valve Seals:

37° x 45° x 60° Valve Seat Angles: Valve Spring Pocket Diameter: 1.615"

Valve Spring Cups: 1.480 Valve Spring Retainers: 12-CO1: 10° x 1.500" o.d. chromemoly steel

T12-C01: 10° x 1.500" o.d. titanium T10-C01/T13-C01/T16-C02/ T18-C02: 10° x 1.550" o.d. titanium

Valve Stem Locks: 10° machined steel with lash cap Valve Springs, 10-CO1: 1.560" o.d. dual spring with damper 240 lbs. @ 2.000" installed height

600 lbs. @ 1.280" open 500 lbs. per inch rate .700" maximum valve lift

Valve Springs, 12-CO1: 1.460" o.d. dual spring with damper

125 lbs. @ 1.800" installed height 376 lbs. @ 1.180" open 420 lbs. per inch rate

.600" maximum valve lift Valve Springs, 13-C01/14-C01/ 1.550" o.d. dual spring with damper 16-C02/18-C02:

240 lbs. @ 1.920" installed height 550 lbs. @ 1.270" open 460 lbs. per inch rate

.680" maximum valve lift For use with 5/16" pushrods or 3/8" pushrods (depending on model)

Rocker Arm Studs: ARP 7/16" 4.125" Minimum Bore Diameter:

TFS-92005 or equivalent Cylinder Head Bolts: Spark Plugs: Autolite 3924 or equivalent

 Valve cover rail is raised .400" over stock NOTE: **Airflow Results** 

#### **High Port 225 with 70cc Combustion Chambers** Intake Flow CFM Lift Value **Exhaust Flow CFM** 0.100' 72 58 0.200' 146 117 0.300 216 162 0.400'268 210 0.500'305 234 0.600322 247 335 0.700Tests conducted at 28" of water (pressure). Bore size: 4.030";

CNC-profiled combustion chambers; exhaust with 2" pipe. To view more airflow charts, go to TrickFlow.com and type the part number you want to see into the Search box and then click "Search".

Trick Flow brought the High Port cylinder heads back because of the excellent power gains their unique design offers. In true Trick Flow performance style, Trick Flow has developed several fully CNC-ported versions of the famous High Port cylinder head for large cubic inch and/or large power adder applications.

High Port CNC heads feature your choice of 225cc or 240cc intake runners and 2.080" intake valves for up to 343 cfm of flow @ .700" lift, 58cc, 67cc, or 70cc CNC-profiled and bowl-blended combustion chambers, and 1.600" exhaust valves that allow 257 cfm to exit through the 95cc exhaust runners @ .700" lift. Other features include bronze valve guides and interlocking ductile iron intake and exhaust seats.

Assembled 58cc combustion chamber heads (225cc) feature 1.560" dual valve springs and 10° titanium retainers. These heads are designed for mechanical roller cam applications with up to .700" valve lift.

Assembled 70cc chamber heads (225cc) are available with two valve spring packages. The 1.460" dual valve spring package is meant for hydraulic roller cam applications and is available with 10° chromemoly steel or 10° titanium retainers. This package can support cams with valve lifts up to .600". The 1.550" dual valve spring package for mechanical roller cams features 10° titanium retainers and can handle up to .680" of valve lift.

Assembled 67cc and 76cc chamber heads (240cc) come with the 1.550" dual valve spring package and 10° titanium retainers. All assembled heads include 7/16" ARP rocker arm studs and 5/16" guideplates.

Bare cylinder head castings are also available.

#### High Port 225 Heads, CNC-Ported Runners, Assembled

58cc combustion chambers, 1.560" dual valve springs and TFS-5170T010-C01 titanium retainers, 225cc intake runners

TFS-51700012-C01 70cc combustion chambers and 1.460" dual valve springs,

225cc intake runners

TFS-5170T012-C01 70cc combustion chambers, 1.460" dual valve springs and

titanium retainers, 225cc intake runners

TFS-5170T013-C01 70cc combustion chambers, 1.550" dual valve springs and

titanium retainers, 225cc intake runners

TFS-5170T014-C01 70cc combustion chambers, 1.550" dual valve springs, O-rings, and titanium retainers, 225cc intake runners

#### High Port 240 Heads, CNC-Ported Runners, Assembled

TFS-5170T016-C02 67cc combustion chambers, 1.550" dual valve

springs and titanium retainers, 240cc intake

76cc combustion chambers, 1.550" dual valve TFS-51700018-C02

springs and titanium retainers, 240cc intake

runners



Viton® is a registered trademark of DuPont Performance Elastomers



Guideplates:

# Stud Girdles • Rocker Arms • Valve Spring Upgrade Kits • Header Flanges • Dowels • Bushings • Cylinder Head Bolt Kit for Small Block Ford, Ford 5.0L



# Rocker Stud Girdles for Small Block Ford



These CNC-machined stud girdles help control valve lift and timing changes due to stud flex, allowing more consistent high-rpm performance. Each stud girdle is anodized blue and comes with high-quality mounting hardware and hardened adjusting nuts. Tall-style valve covers are required.

#### **Girdles for Twisted Wedge Heads**

TFS-51400700 Stud girdles, 3/8" rocker stud girdles, pair TFS-51400701 Stud girdles, 7/16" rocker stud girdles, pair

#### **Girdles for High Port Heads**

TFS-51700700 Stud girdles, 3/8" rocker stud girdles, pair TFS-51700701 Stud girdles, 7/16" rocker stud girdles, pair

#### **Girdles for Race Heads**

TFS-52400701 Stud girdles, 7/16" rocker stud girdles, pair



Trick Flow bolt-on main girdles strengthen Ford's factory two-bolt main cap assembly. The girdles are made from tool steel, finished with black oxide, and come with ARP main cap bolts and a provision for an oil pump pickup tube hold down. The race girdle features beefier 1/2" thick construction for extra strength and includes main studs instead of bolts.

NOTE: Race version requires main cap machining.

#### Main Stud Girdles, Street

TFS-51500700 Stud girdle for 289/302, each TFS-51500701 Stud girdle for 351W, each

#### Main Stud Girdles, Race

TFS-5150R700 Stud girdle for 289/302, each



TFS-51400510

#### Roller Rocker Arms for Small Block Ford

These aluminum roller rockers are excellent for use with Trick Flow heads. They can also be used on Ford factory and other aftermarket heads. They feature heat-treated CNC-machined bodies, premium needle-bearing fulcrums, roller tips, and a machined relief for improved valve spring clearance. Trick Flow roller rockers are sold in sets of 16 and come complete with polylocks.

TFS-51400510 Rocker arms, 1.6 ratio, 3/8" stud, set of 16
TFS-51400511 Rocker arms, 1.7 ratio, 3/8" stud, set of 16
TFS-51400520 Rocker arms, 1.6 ratio, 7/16" stud, set of 16
TFS-51400521 Rocker arms, 1.7 ratio, 7/16" stud, set of 16

# Valve Spring Upgrade Kits for Small Block Ford

These kits include everything needed to upgrade the valve springs on OEM or Twisted Wedge heads. The OEM spring upgrade kit is for 289-351W Ford cast iron heads and will provide 110 lbs. of seat pressure at 1.800" installed height and .540" max lift. The dual-spring upgrade kit converts standard Twisted Wedge 170 heads to Twisted Wedge 185/205 specifications—125 lbs. of seat pressure at 1.800" installed height and .600" max lift. Both kits include valve springs with dampers, chromemoly retainers, valve seals and locks, spring shims, spring height gauge, and instructions.



TFS-2500100

TFS-2500100 Valve spring upgrade kit for OEM cast iron heads, each
TFS-2500200 Valve spring upgrade kit for Twisted Wedge 170 heads, each



# Header Flanges for 5.0L Mustang



113-3240000

TFS-51700801 Header flanges, 3/8" thick, High Port cylinder heads, pair TFS-52400801 Header flanges, 3/8" thick, Twisted Wedge Race 206 and 225 cylinder heads, pair

# Locating Dowels for Small Block Ford



These cylinder head locating dowels provide positive location of the cylinder heads on the engine block during installation.

TFS-51400420 Locating dowels.

Locating dowels, .650" high x .675" o.d. x 33/64" i.d., pack of 4



#### Cylinder Head Bolt Reducer Bushings for Small Block Ford

These reducer bushings allow the use of 7/16" head bolts in heads with 1/2" head bolt bores.

TFS-51400419 Head bolt reducer bushings, pack of 20





#### Cylinder Head Bolt Kit for Small Block Ford

Keep combustion where it belongs! Trick Flow's high-quality cylinder head bolt kits provide consistent clamping force from bolt-to-bolt. The bolts are made from premium quality alloy steel with cold-formed heads and rolled threads. A black oxide finish protects them from wear and corrosion. The kit contains all the

bolts you need to install a pair of heads, including hardened washers. TFS-92005 Cylinder head bolt kit, 289/302, hex head, each



# **EFI Intake Manifold Kits for Ford 5.0L/351 Windsor**

When it comes to making horsepower, one size doesn't fit all. That's why Trick Flow offers many intake manifold combinations for 5.0L and 351 Windsor Fords. Each manifold is computer-engineered to deliver an excellent balance of airflow distribution and velocity to increase low-end torque and provide superior high-rpm horsepower.

All Trick Flow manifold uppers are made from A319 aluminum and available in silver and black powdercoated finishes for long-lasting good looks, or in a natural version for those who prefer a natural aluminum look or wish to use a custom finish.

NOTE: 5.0L StreetBurner EFI manifolds are 50-state emissions-legal under CARB E.O. number D-369-3. All other manifolds are designed for non-EGR engines. Most applications will require a calibrated mass air or adjustable fuel injection computer, aftermarket fuel rails, and adjustable fuel pressure regulator to operate properly.

## EFI Intake Manifold Kits for Ford 5.0L

TFS-51500001 StreetBurner manifold kit, silver upper, each TFS-51500002 Track Heat manifold kit, silver upper, each TFS-51500003 R-Series 75mm manifold kit, silver upper, each R-Series 90mm manifold kit, silver upper, each TFS-51500005 TFS-51500008 Box-R-Series manifold kit, silver upper, each TFS-51511001 StreetBurner manifold kit, black upper, each Track Heat manifold kit, black upper, each TFS-51511002 TFS-51511003 R-Series 75mm manifold kit, black upper, each TFS-51511005 R-Series 90mm manifold kit, black upper, each TFS-51511008 Box-R-Series manifold kit, black upper, each TFS-515B0001 StreetBurner manifold kit, natural upper, each TFS-515B0002 Track Heat manifold kit, natural upper, each TFS-515B0003 R-Series 75mm manifold kit, natural upper, each TFS-515B0005 R-Series 90mm manifold kit, natural upper, each TFS-515B0008 Box-R-Series manifold kit, natural upper, each



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TFS-51500004	R-Series 75mm manifold kit, silver upper, each
TFS-51500006	R-Series 90mm manifold kit, silver upper, each
TFS-51500009	Box-R-Series manifold kit, silver upper, each
TFS-51511004	R-Series 75mm manifold kit, black upper, each
TFS-51511006	R-Series 90mm manifold kit, black upper, each
TFS-51511009	Box-R-Series manifold kit, black upper, each
TFS-515B0004	R-Series 75mm manifold kit, natural upper, each
TFS-515B0006	R-Series 90mm manifold kit, natural upper, each
TFS-515B0009	Box-R-Series manifold kit, natural upper, each











All EFI intake manifolds are available with silver, black, or natural uppers!

# **TFX™ EFI Fuel Rails/Fuel Rail Kits for Ford 5.0L**

#### **TFX EFI Fuel Rails**

TFS-5158000R EFI fuel rails and mounting brackets,

1986-95 5.0L, kit



#### **TFX EFI Fuel Rail Kit**

TFS-51580001 EFI fuel rail kit, 1986-95 5.0L, each



EFI Intake Manifold Specifications for Ford 5.0L/351 Windsor							
	STATE LEGAL	5	.0L		351 Windsor		
Manifold	StreetBurner®	Track Heat®	R-Series	Box-R-Series	R-Series	Box-R-Series	
Engine Size	5.0L	5.0L	5.0L	5.0L	351 Windsor	351 Windsor	
Runner	Small cross-section with 15.000" runner	Small cross-section with 12.200" runner	Large cross-section with 12.000" runner	Large cross-section with 9.750" runner	Large cross-section with 13.300" runner	Large cross-section with 11.000" runner	
RPM Range	Idle-5,500	1,500-6,500	2,500-7,250/ 3,000-7,750	3,000-8,000	1,500-5,500/ 2,000-7,000	2,500-7,500	
Throttle Body Inlet 75mm 75mm		75mm	75mm/90mm	90mm	75mm/90mm	90mm	
Port Size at Head	2.000" x 1.200"	2.000" x 1.200"	2.000" x 1.200"	2.000" x 1.200"	2.000" x 1.200"	2.000" x 1.200"	
Port Size at Mating Flange	2.000" x 1.200"	2.000" x 1.200"	2.380" x 1.380"	2.380" x 1.380"	2.380" x 1.380"	2.380" x 1.380"	
Overall Height to Upper Manifold Flange	10.200"	10.200"	11.000"	11.500"	11.500"	12.750	
Overall Height to Lower Manifold Flange	4.625"	4.625"	4.625"	4.625"	5.375"	5.375"	

# **Top-End Engine Kits • Nitrous Systems for EFI Manifolds** for Ford 5.0L



# Twisted Wedge® Top-End Engine Kits for Ford 5.0L

Trick Flow Twisted Wedge Top-End Engine Kits provide dyno-proven power without the guesswork. Built around Trick Flow's Twisted Wedge 170 cylinder heads (TFS-51400004), the kits include a specially matched hydraulic roller cam (TFS-51402000), roller rockers (TFS-51400510), gasket kit (TFS-51400904), billet timing chain (TFS-514748520), pushrods (TFS-21406700), short valve covers, and our billet oil fill kit (TFS-51400800). Lifters not included.

# TFX™ Nitrous Systems for Trick Flow EFI Manifolds

Trick Flow TFX nitrous systems are an easy, affordable way to bolt on big power. These EFI manifold nitrous systems are specifically designed for 1986-95 5.0L Fords with Trick Flow intake manifolds. TFX systems are adjustable in 50 horsepower increments from 50 to 200 horsepower. The systems include spray bar plates, calibrated solenoids, jets, switches, lines, filter, 10 lb. unfilled bottle, bottle brackets, 14 ft. of -4 AN braided stainless steel line, hardware, and instructions.

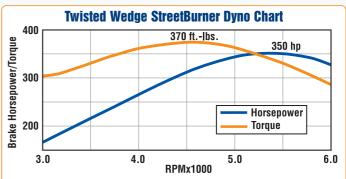
TFS-N5150 Kit for Trick Flow StreetBurner®/Track Heat® intake, each

TFS-N5150PL Plate and jets only for Trick Flow StreetBurner®/Track Heat® intake, kit

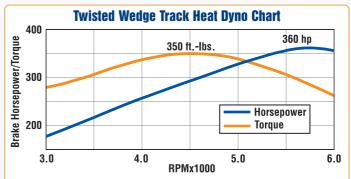
TFS-N515RP Kit for Trick Flow R-Series intake, each
TFS-N515RPL Plate and jets only for Trick Flow R-Series intake, kit

TFS-N5158 Kit for Trick Flow Box-R-Series intake, each

TFS-N5158PL Plate and jets only for Trick Flow Box-R-Series intake, kit



Test Engine: 306 c.i.d. short block with 9.5:1 compression, Twisted Wedge® 170 cylinder heads (TFS-51400004), Track Max® hydraulic roller cam (TFS-51402000), StreetBurner® EFI intake manifold (TFS-51500001), TFX 70mm throttle body (TFS-24070), TFX 24 lb./hr. fuel injectors (TFS89024), 190 lph fuel pump, mass air, and 10° base timing.



Test Engine: 306 c.i.d. short block with 9.5:1 compression, Twisted Wedge® 170 cylinder heads (TFS-51400004), Track Max® hydraulic roller cam (TFS-51402000), Track Heat® EFI intake manifold (TFS-51500002), TFX 70mm throttle body (TFS-24070), TFX 24 lb./hr. fuel injectors (TFS-89024), 190 lph fuel pump, mass air, and 10° base timing.

# Twisted Wedge StreetBurner® Top-End Engine Kits

These kits include everything listed above, plus Trick Flow's StreetBurner EFI intake manifold.

TFS-K514-350-370 350 hp/370 ft.-lbs., silver valve covers and intake, kit TFS-K514-350370B 350 hp/370 ft.-lbs., black valve covers and intake, kit

## Twisted Wedge Track Heat® Top-End Engine Kits

These kits include everything listed above, plus Trick Flow's Track Heat EFI intake manifold.

TFS-K514-360-350 360 hp/350 ft.-lbs., silver valve covers and intake, kit TFS-K514-360350B 360 hp/350 ft.-lbs., black valve covers and intake, kit





# Track Max® Hydraulic Roller Camshafts for Ford 5.0L



	Camshaft Specifications			
Part Number	Characteristics	Duration @ .050"	Valve Lift w/1.6 Rocker	Lobe Sep.
TFS-51402000	Street; good idle, strong midrange power. Aftermarket intake, heads, and headers recommended. Calibrated mass airflow meter required. Compression: 9:1 minimum	221°/225°	.499"/.510"	112°
TFS-51402001	Street/Strip; fair idle, good midrange power, 2,500-3,000 rpm stall converter or 5-speed. 3.55-higher gear. Calibrated mass airflow meter required. Compression: 9.5:1 minimum	224°/232°	.542"/.563"	112°
TFS-51402002	Race; rough idle, strong top-end power, 3,000-3,500 rpm stall converter, 3.90-4.11 gears. Calibrated mass airflow meter required. Compression: 10:1 minimum	236°/248°	.574"/.595"	110°

# Standard Gasket Sets for Small Block Ford



These Trick Flow gasket sets are ideal for stock or mild performance engine buildups. They include everything required to seal an engine, including header gaskets, for about the same price as less complete kits.

TFS-5140E912 Engine gasket set, with two-piece rear main seal, each TFS-5140E913 Engine gasket set, with EFI and one-piece rear main seal,





## **Individual Gaskets**

Trick Flow gaskets are made from high-quality materials with superior fit and designed to deliver trouble-free performance over the long haul. Our individual replacement gaskets save you money by letting you purchase just the gaskets you need instead of an entire kit

need moteud of un	chine kit.
TFS-2855	Intake manifold gaskets, large race, 2.250" x 1.400", 1/16" thick, pair
TFS-2893	Intake manifold gaskets, large race, 2.250" x 1.400", 1/8" thick, pair
TFS-51400941	Valve cover gaskets, molded with steel core, pair
TFS-51400951	Oil pan gasket, one-piece molded, each
TFS-51400921	
TFS-51400931	Header gaskets, OE Ford cylinder heads, pair
TFS-51700931	Header gaskets, Trick Flow High Port cylinder heads, pair
FTS-52400901	Header gaskets, Trick Flow Twisted Wedge Race cylinder heads, pair

# **Camshaft Installation Handle**



Trick Flow's camshaft installation handle makes installing and removing cams much easier. It features an innovative U-shape design for more leverage when you need it most and a cushioned handle for comfort. The handle is 8" long and includes a universal mounting pattern to fit all types of camshafts, plus a protective zinc finish to protect it against corrosion. TFS-90150 Camshaft installation handle, each

# Premium Gasket Sets for Small Block Ford



TFS-90150

Sets include cylinder head gaskets, intake gaskets, exhaust gaskets, valve cover gaskets, oil pan gaskets, and other gaskets specific to application.

#### **Engine Gasket Sets**

Engine dusket dets	,				
TFS-51400912	Engine gasket set,	302/5.0L,	with EFI,	includes I	Loc-Wire and

GT-40 upper gasket, each

TFS-51400914 Engine gasket set, Twisted Wedge cylinder heads, each TFS-51400915 Engine gasket set, Twisted Wedge cylinder heads with

O-rings, each

TFS-51700914 Engine gasket set, High Port cylinder heads, each

TFS-51700915 Engine gasket set, High Port cylinder heads with O-rings, each

# **Head Gasket Sets**

Sets include head gaskets, intake gaskets, exhaust gaskets, valve cover gaskets, and other gaskets specific to application.

TFS-51400902 Head gasket set, 302/5.0L with EFI, includes Loc-Wire and

GT-40 upper gasket, each

TFS-51400903 Head gasket set, Twisted Wedge cylinder heads with O-rings,

carbureted intake manifold, each

TFS-51400904 Head gasket set, Twisted Wedge cylinder heads, each TFS-51400905 Head gasket set, Twisted Wedge cylinder heads with

O-rings, EFI intake manifold, each

TFS-51700904 Head gasket set, High Port cylinder heads, each

TFS-51700905 Head gasket set, High Port cylinder heads with O-rings, each

# True Roller Timing Chain Set for Small Block Ford

Billet steel gears and a double roller timing chain combine to make this Trick Flow timing chain set the strongest, most accurate available today. Furthermore, the crank sprocket features multiple keyways to allow the cam to be installed straight-up, retarded, or advanced.

TFS-51478520 Timing chain set,

1962-95 Ford 255-351W, each







# Oil Fill Kit • Brackets • Underdrive Pulley Kits • Heat Spacers • Adapters for Ford 5.0L/351 Windsor

# **Billet Oil Fill Kit** for Ford 5.0L

This great-looking oil fill kit is specially made to work with small block EFI Fords with Trick Flow short valve covers. Made from billet aluminum, it comes with a vacuum fitting, an O-ring cap, and value cover grommet. The kit also has a clear corrosion-resistant finish for long life and is 4" tall.

TFS-51400800 Billet oil fill kit, each

TFS-51400800-C Replacement cap with O-ring, each



TFS-51400800

₩ MARE USA

TFS-51500600

# **EFI Intake Manifold SN95 Throttle Body Adapters**

These aluminum adapters allow Trick Flow manifolds to be mounted on 1994-95 5.0L Mustangs. They feature 75mm throttle bore and include mounting gaskets.

TFS-5150SN95 Adapter, natural, each TFS-5150SN95-00 Adapter, silver, each

TFS-5150SN95-11 Adapter, black, each



# A/C Eliminator Bracket for Ford 5.0L

Designed for 1986-93 5.0L Mustang, this Trick Flow A/C eliminator bracket mounts above the water pump and bolts to the power steering unit using your stock hardware. The bracket is made from 6061 aluminum, powdercoated black, and comes with all necessary mounting hardware. Pulley

**NOTE:** New serpentine belt required after installation. TFS-51500600 Eliminator bracket, each

# **Throttle Cable Brackets** for Ford EFI Intake Manifolds

Our Trick Flow throttle cable brackets provide a place to mount throttle cables on 1986-93 5.0L Mustangs with either 75mm or 90mm race manifolds and no EGR plate. They feature a clear anodized finish and include gaskets and mounting hardware. Throttle bracket, 75mm manifolds. TFS-51500075

each TFS-51500090 Throttle bracket, 90mm manifolds,



MADE IN THE USA



Trick Flow underdrive pulleys are a simple way to boost horsepower. The precision balanced, billet aluminum pulleys have a blue anodized finish and are sold in complete sets that include a 6 groove crankshaft pulley, non-ribbed water pump pulley, 6 groove alternator pulley, and new mounting hardware. TFS-34000

Pulleys, 1982-96 Ford 5.0L/5.8L (except 1994-95 Mustang),

TFS-34001 Pulleys, 1994-95 Mustang 5.0L, set of 3

# TFS-515200013 TFS-51520009

# **EFI Heat Spacer Kits** for Ford 5.0L/351 Windsor

CNC-machined in the USA from premium phenolic material, Trick Flow EFI heat spacers fit between the upper and lower intakes to create a heat flow barrier. This keeps the air in the upper intake cooler and denser. In addition, they will allow the use of taller valve covers by raising the upper intake.

Trick Flow EFI spacers are available for stock 5.0L H.O., GT-40 and Cobra, 5.0L truck and Holley, Edelbrock Performer RPM and Victor 5.0L, and Trick Flow EFI manifolds in 3/8" and 1" thick versions. Gaskets and longer mounting bolts are included. 1994-95 Mustangs will require modifications for hood clearance.

# 5.0L H.O. Heat Spacer Kits, 1986-93

3/8" thick spacer, each TFS-51520001 TFS-51520002 1" thick spacer, each

# 5.0L H.O. Heat Spacer Kits, 1994-95

TFS-5152SN01 3/8" thick spacer, each TFS-5152SN02 1" thick spacer, each

#### **5.0L Ford Truck Heat Spacer Kits**

TFS-51520003 3/8" thick spacer, each TFS-51520004 1" thick spacer, each

# **Holley Manifold Heat Spacer Kits**

TFS-51520005 3/8" thick spacer, each TFS-51520006 1" thick spacer, each

# Trick Flow StreetBurner® and Track Heat® Spacer Kits

TFS-51520007 3/8" thick spacer, each TFS-51520008 1" thick spacer, each

# Trick Flow R-Series (5.0L and 351W) Spacer Kits

3/8" thick spacer, each TFS-51520009 TFS-51520012 1" thick spacer, each

# **Edelbrock Performer 5.0L RPM Spacer Kits**

TFS-51520013 3/8" thick spacer, each TFS-51520014 1" thick spacer, each

# **Edelbrock Performer 5.0L RPM II Spacer Kits**

TFS-51520021 3/8" thick spacer, each TFS-51520022 1" thick spacer, each

# **Edelbrock Victor 5.0L Spacer Kits**

TFS-51520015 3/8" thick spacer, each TFS-51520016 1" thick spacer, each

# **Cobra Heat Spacer Kits**

TES-51520001

3/8" thick spacer, each TFS-51520017 TFS-51520018 1" thick spacer, each

#### **GT-40 Heat Spacer Kits**

TFS-51520019 3/8" thick spacer, each TFS-51520020 1" thick spacer, each





# **Laser-Etched Fabricated Valve Covers** for Small Block Ford

Trick Flow fabricated valve covers reduce engine weight without sacrificing one ounce of performance. They're made from .083" thick aluminum and feature a laser-etched Trick Flow logo. Tall height (4" overall) only, will clear roller



# **Embossed Fabricated Valve Covers** for Small Block Ford



These good-looking, tall height (37/8" overall) fabricated valve covers have an embossed Trick Flow logo and clear roller rockers and stud girdles. They're made from .084" thick aluminum to reduce engine weight and include the necessary fasteners to ensure a correct installation.



# **Chrome Valve Covers** for Small Block Ford

Trick Flow chrome-plated valve covers provide a great alternative to higherpriced aluminum covers. They feature embossed Trick Flow logos and triple chrome plating for a long-lasting shine. New gaskets are included. TFS-44002 Valve covers, pair



Trick Flow's lightweight forged pistons are fully skirted and precision-machined from premium aluminum alloy. They feature oversized valve reliefs, precision-fit wrist pins, and Spirolox retainers.

Trick Flow pistons are designed to perfectly match the unique chamber and valve angles of the Twisted Wedge heads. They're available with a choice of compression ratios for hot street/strip engines. Pistons are available as low as 8.0:1 for supercharged Ford applications.

All pistons use ring sets with a 1/16" top ring, 1/16" second ring, and 3/16" oil control ring. Sold in sets of 8.

NOTE: Compression ratios are based on 61cc combustion chambers.



# **Cast Aluminum Valve Covers** for Small Block Ford



Made from durable A319 aluminum, Trick Flow cast aluminum valve covers are much less prone to flex and distortion than stamped steel covers, which helps prevent oil leaks. The small Ford cast covers come in standard height to clear most roller rockers and tall height to clear stud girdles and roller rockers. Covers can be drilled for breathers.

# Standard Height Covers, 3" Overall Height

NOTE: These covers will clear roller rockers but not stud girdles.

TFS-51400801 Valve covers, silver, pair TFS-51411801 Valve covers, black, pair TFS-5140B801 Valve covers, natural, pair

TFS-25200801 Hardware kit; includes twelve 1½" studs and 12 flanged nuts, each

# Tall Height Covers, 31/8" Overall Height

NOTE: These covers will clear roller rockers and stud girdles.

TFS-51400802 Valve covers, silver, pair TFS-51411802 Valve covers, black, pair TFS-5140B802 Valve covers, natural, pair

TFS-25200802 Hardware kit; includes ten 1½" studs, two 4¼" studs

and 12 flanged nuts, each





TFS-51404330

TFS-51404000

	Twisted Wedge® Piston Specifications						
Part Number	Engine Size	Bore	Stroke	Rod	Comp. Height	Comp. Ratio	Pin Dia.
TFS-51404010	306 (302)	4.030"	3.000"	5.090"	1.610"	8.0:1	.912"
TFS-51404000	306 (302)	4.030"	3.000"	5.090"	1.600"	10.0:1	.912"
TFS-51404332	331 (302)	4.030"	3.250"	5.400"	1.175"	10.0:1	.927"
TFS-51404111	347 (302)	4.030"	3.400"	5.400"	1.090"	10.0:1	.927"
TFS-51404110	347 (302)	4.030"	3.400"	5.400"	1.090"	8.5:1	.927"
TFS-51404221	358 (351W)	4.030"	3.500"	5.955"	1.785"	10.0:1	.912"
TFS-51404010	393 (351W)	4.030"	3.850"	5.955"	1.610"	10.0:1	.912"
TFS-51404000	393 (351W)	4.030"	3.850"	5.955"	1.610"	12.0:1	.912"
TFS-51404331	408 (351W)	4.030"	4.000"	6.200"	1.290"	10.0:1	.927"
TFS-51404330	408 (351W)	4.030"	4.000"	6.200"	1.290"	8.5:1	.927"





Combustion Chamber

01/02/03/04: 290cc Fast As Cast

01/02/03/04: 130cc Fast As Cast CO1: 145cc CNC-ported

 $7^{\circ}$  x 1.500" o.d. chromemoly steel 10° x 1.550" o.d. chromemoly steel

A356-T6 aluminum

01/02/03/04: 74cc CO1: 80cc CNC-profiled

C01: 325cc CNC-ported

01/02/03/04: 1.960" x 2.210' C01: 1.960" x 2.600"

01/02/03/04: Fel-Pro 1230 C01: TFS-53400921 01/02/03/04: 2.200

Viton® fluoroelastomer

35° x 45° x 60° 1.760"

1 480"

1.550

1.640

# **Specifications**

Stock

C01: 2.250' Ductile iron

Combustion Chamber Volume:

Intake Port Location:

Intake Valve Diameter:

Intake Valve Seat: Exhaust Port Volume:

Exhaust Port Location: Raised .270" from stock Exhaust Port Dimensions: 1.400" x 1.850"

Fel-Pro 1420 1.760" Exhaust Gaskets: Exhaust Valve Diameter: Exhaust Valve Seat: Ductile iron Valve Guide Material: Bronze allov Valve Guide Length: 1 925

Valve Seals: Valve Seat Angles: Valve Spring Pocket Diameter:

Valve Spring Cups:

Valve Spring Retainers:

10° x 1.550" o.d. titanium 10° x 1.625" o.d. + .050" titanium Valve Stem Locks: 7° machined steel

10° machined steel with lash cap Valve Springs: 1.460" o.d. dual with damper PowerPort 290 Standard 120 lbs. @ 1.900" installed height

394 lbs. @ 1.175" open 390 lbs. per inch rate

.650" maximum valve lift 1.550" o.d. dual spring with damper

Valve Springs: PowerPort 290 Option 1 138 lbs. @ 1.950" installed height 430 lbs. @ 1.250" open

420 lbs. per inch rate .680" maximum valve lift Valve Springs 1.550" o.d. dual spring with damper

PowerPort 290 Option 2 215 lbs. @ 1.950" installed height 550 lbs. @ 1.270" open

460 lbs. per inch rate .680" maximum valve lift

Valve Springs: PowerPort 290 Option 3, 1.640" o.d. dual spring with damper 250 lbs. @ 2.000" installed height PowerPort 325 Standard 800 lbs. @ 1.150" open

600 lbs. per inch rate .850" maximum valve lift For use with 3/8" pushrods Guideplates:

Rocker Arm Studs: ARP 7/16" Minimum Bore Diameter:

ARP 155-3603 or equivalent Cylinder Head Bolts: Spark Plugs: Autolite 3924 or equivalent

# **Airflow Results**

PowerPort 290 for Ford 429/460				
Lift Value	Intake Flow CFM	Exhaust Flow CFM		
0.100"	72	60		
0.200"	152	110		
0.300"	219	145		
0.400"	280	180		
0.500"	331	204		
0.600"	344	225		
0.700"	350	240		
Tests conducted at 28" of water (pressure). Bore size: 4.380"; exhaust with 2" pipe.				

These Trick Flow cylinder heads are designed for high performance Ford 429/460 street and street/strip applications, providing significant horsepower and torque gains over similar-style cylinder heads.

The PowerPort 290 heads feature Fast As Cast® 290cc intake/130cc exhaust runners and 74cc combustion chambers. The PowerPort 325 heads feature CNCported 325cc intake/145cc exhaust runners and CNC-profiled and bowl-blended 80cc combustion chambers. The exhaust ports for both heads are raised .270" from stock for better flow.

The PowerPort cylinder heads are assembled with 2.200" (290cc) or 2.250" (325cc) intake/1.760" exhaust stainless steel valves, valve springs, 7/16" studs, guideplates, retainers, and locks. The heads do not have provisions for EGR or other emissions equipment. Bare cylinder head castings are also available.

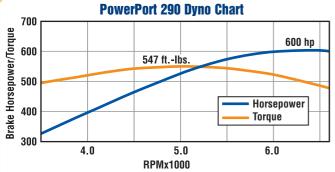
## PowerPort 290 Heads, Fast as Cast Runners, Assembled

1.460" dual valve springs, 290cc intake runners TFS-53400001 TFS-53400002 1.550" dual valve springs, 290cc intake runners TFS-5340T002 1.550" dual valve springs and titanium retainers, 290cc intake runners TFS-53400003 1.550" dual valve springs, 290cc intake runners TFS-5340T003 1.550" dual valve springs and titanium retainers, 290cc intake runners TFS-5340T004 1.640" dual valve springs and titanium retainers,

290cc intake runners

# PowerPort 325 Heads, CNC-Ported Runners, Assembled

TFS-5340T010-C01 1.640" dual valve springs and titanium retainers, 325cc intake runners



Test Engine: 10.25:1 compression 460 c.i.d. with Trick Flow Flow PowerPort® 290 cylinder heads (TFS-53400003), COMP Cams Xtreme Energy mechanical roller camshaft (254°/260° duration @.050"; .671"/.678" lift; 110° lobe separation), Trick Flow 1.73 ratio roller rocker arms (TFS-53400621), Edelbrock Performer RPM intake manifold, Hedman headers with 17/8" primaries, 3" dual exhaust with Flowmaster mufflers.

Viton® is a registered trademark of DuPont Performance Elastomers.





**Combustion Chamber** 



Combustion Chamber Volume:

Intake Port Volume:

Intake Port Location: Intake Port Dimensions: Intake Gaskets:

Intake Valve Diameter:

Intake Valve Seat: Exhaust Port Volume:

Exhaust Port Location: **Exhaust Port Dimensions:** Exhaust Gaskets:

Exhaust Valve Diameter: Exhaust Valve Seat: Valve Guide Material:

Valve Seals:

Valve Spring Pocket Diameter: Valve Spring Cups:

Valve Spring Retainers: Valve Stem Locks:

Valve Springs, 340cc:

Valve Springs, 360cc:

Guideplates:

Rocker Arm Studs: Minimum Bore Diameter:

A356-T6 aluminum 01/02 Standard: 91cc 01/02 18-bolt: 83cc C03: 85cc CNC-profiled

01/02: 340cc Fast As Cast C03: 360cc CNC-ported Raised 1.000" from stock 1.870" x 2.510" 01/02: Fel-Pro 1230

C03: TFS-53400921 01/02 Standard: 2.300" 01/02 18-bolt: 2.350" C03 18-bolt: 2.400'

Ductile iron 01/02: 172cc Fast As Cast C03: 180cc CNC-ported Raised 1.500" from stock 1.780" x 1.870" D-shape Fel-Pro 1412

1 880' Ductile iron Bronze alloy, intake Bronze alloy, exhaust Viton® fluoroelastomer

1.760 1.640" 10° x 1.625" o.d. + .050" titanium 10° machined steel with lash cap

1.640" o.d. dual spring with damper 250 lbs. @ 2.000" installed height 800 lbs. @ 1.150" open

600 lbs. per inch rate .850" maximum valve lift

1.645" o.d. triple spring with damper 332 lbs. @ 2.100" installed height

950 lbs. @ 1.200" open 688 lbs. per inch rate .850" maximum valve lift For use with 3/8" pushrods

ARP 7/16" 01/02: 4.360" C03: 4.440"

Cylinder Head Bolts: ARP 255-4304 or equivalent Spark Plugs: Autolite 3922 or equivalent

# **Airflow Results**

PowerPort 340 A460 with Standard Bolt Pattern				
Lift Value	Intake Flow CFM	Exhaust Flow CFM		
0.100"	72	68		
0.200"	142	121		
0.300"	213	164		
0.400"	271	202		
0.500"	325	235		
0.600"	365	262		
0.700"	395	284		
0.800"	412	300		
Tests conducted at 28" of water (pressure).				

Bore size: 4.500"; intake valve: 2.300"; exhaust with 2" pipe.

To view more airflow charts, go to TrickFlow.com and type the part number you want to see into the Search box and then click "Search".



The Trick Flow PowerPort A460 cylinder heads are machined from A356-T6 aluminum and are available in two

versions. The PowerPort A460 340 has Fast As Cast®

340cc intake and 172cc exhaust runners and your choice of 83cc (18-bolt) or 91cc (standard) combustion chambers. The PowerPort A460 360 heads have CNCported 360cc intake and 180cc exhaust runners plus 85cc CNC-profiled and bowl blended combustion chambers.

PowerPort® A460 340 and 360 Cylinder Heads

for Ford 429/460

The PowerPort A460 heads feature bronze alloy valve guides, tungsten seats, big block Chevrolet exhaust port openings and bolt pattern, and 1.760" spring pockets. Assembled heads come with intake and exhaust valves. 1.640" dual valve springs (340cc) or 1.645" triple valve springs (360cc) rated up to .850" lift, 10° titanium retainers, 10° machined locks, Viton® fluoroelastomer valve seals, ARP 7/16" rocker studs, and guideplates for 3/8" pushrods.

Bare cylinder head castings are also available.

#### PowerPort A460 340 Heads, Fast as Cast Runners, Assembled

Standard bolt pattern and 2.300" intake valves, TFS-5440T801

340cc intake runners

TFS-5440T802 Standard bolt pattern and 2.350" intake valves,

340cc intake runners

TFS-5450T801 18-bolt pattern and 2.300" intake valves, 340cc intake runners

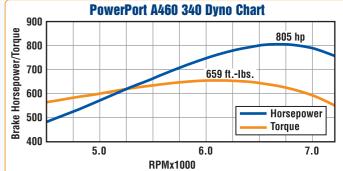
TFS-5450T802 18-bolt pattern and 2.350" intake valves,

340cc intake runners

#### PowerPort A460 360 Heads, CNC-Ported Runners, Assembled

TFS-5450T804-C03 18-bolt pattern and 2.400" intake valves,

360cc intake runners



Test Engine: 10.5:1 compression 520 c.i.d. with Trick Flow Flow PowerPort® A460 340 cylinder heads (TFS-5440T801), Crane mechanical roller camshaft (268°/278° duration @.050"; .718"/.718" lift; 110° lobe separation), Trick Flow 1.73 ratio roller rocker arms (TFS-53400621), Trick Flow R-Series A460 intake manifold (TFS-54400111), Hooker headers with 21/4" primaries, open exhaust.

# **Rocker Stud Girdles for PowerPort A460 Cylinder Heads**

These CNC-machined stud girdles help control valve lift and timing changes due to stud flex, allowing more consistent high-rpm performance. Each stud girdle is anodized blue and comes with high-quality mounting hardware and hardened adjusting nuts. Tall-style valve covers are required. TFS-54400700 Stud girdles, 7/16" rocker stud girdle, pair

Viton® is a registered trademark of DuPont Performance Elastomers.







# Intake Manifolds • Main Stud Girdles • Valve Covers • Rocker Arms for Big Block Ford







# **R-Series A460 Tunnel Ram Manifold** for A460 Cylinder Heads

The R-Series A460 Tunnel Ram is ideal for big cubic inch, high-rpm applications from drag racing to tractor pulling. The manifold features thick wall, A319 aluminum construction, plus bosses for both nitrous and fuel injection. The available top covers mount single or dual Holley 4500 Series Dominator carbs. Overall height to the top of carburetor mounting pad is 10.480".

# R-Series A460 Tunnel Ram Intake Manifold

TFS-54494000 Manifold, each

# Top Cover/Linkage Kit for Dual 4500 Series Dominators

TFS-54494140 Cover, each TFS-54494140-LK Linkage kit, each

# Top Cover for Single 4500 Series Dominator

TFS-54494001 Cover, each

**Top Cover Gasket** 

TFS-54494140-G Gasket, each







# Track Heat® Intake Manifolds for Ford 429/460

Trick Flow's Track Heat single plane intake manifolds for big block Ford engines are designed for street/strip applications that operate in the 3,500-8,000 rpm range. The high-rise, one-piece spider design with high-flowing individual extended runners provides significant horsepower and torque increases in the mid- to high-rpm range. Other features include A319 aluminum construction, a raised plenum floor for increased flow velocity and fuel atomization, integral bosses for nitrous or fuel injection nozzles, and extra material for custom port work. The overall height to the carburetor mounting pad is 6.800" and the manifolds are available with your choice of Holley 4150 or 4500 Dominator mounting patterns.

TFS-53400111 Manifold, Holley 4150 pattern, each Manifold, Holley 4500 Dominator pattern, TFS-53400112

TFS-534INTBK Intake manifold bolt kit, each





# **Main Stud Girdle for Ford 429/460**

Trick Flow's bolt-on main girdle strengthens Ford's factory two-bolt main cap assembly. The girdles are made from tool steel, finished with black oxide, and come with ARP main cap bolts and a provision for an oil pump pickup tube hold down. Stud girdle kit for 429/460, each TFS-53400700

# **R-Series A460 Intake Manifold** for A460 Cylinder Heads



Trickotow

TFS-53411802





Intended for 500-plus inch, high-rpm engines, the Trick Flow R-Series A460 intake manifold provides significant horsepower and torque increases. Made to fit Trick Flow PowerPort® A460 340 and 355 big block Ford cylinder heads, this single plane intake manifold is a one-piece, spider-type design that uses highflowing, individual extended runners and a raised plenum floor. It features A319 aluminum construction, extra material for custom port work, and bosses for nitrous or fuel injection. The intake manifold is designed for use with a Holley 4500 Series Dominator carb and Trick Flow PowerPort A460 cylinder heads only. Overall height to carburetor mounting pad is 8.600".

TFS-54400111 Manifold, each

# **Cast Aluminum Valve Covers** for Ford 429/460

Made from durable A319 aluminum. Trick Flow cast aluminum valve covers are much less prone to flex and distortion than stamped steel covers, which helps prevent oil leaks. The Ford 429/460 cast covers have a tall height (45/8" overall) to clear girdles and roller rockers, and can be drilled for breathers.

NOTE: These covers will clear roller rockers and stud girdles.

TFS-53400802 Valve covers, silver, pair TFS-53411802 Valve covers, black, pair TFS-5340B802 Valve covers, natural, pair

TFS-25200803 Hardware kit; includes fourteen 3" studs, fourteen nuts and fourteen washers, each



# **Fabricated Valve Covers for Ford 429/460**

These good-looking, tall height (3\%" overall) fabricated valve covers have an embossed Trick Flow logo and clear roller rockers and stud girdles. They're made from .084" thick aluminum to reduce engine weight and include the necessary fasteners to ensure a correct installation. TFS-53400804 Valve covers, pair



TFS-53400804

# Roller Rocker Arms for Ford 429/460

These aluminum roller rockers are excellent for use with Trick Flow heads. They can also be used on small block Ford or Ford 429/460 heads. They feature heat-treated CNC-machined bodies, premium needle-bearing fulcrums, roller tips, and a machined relief for improved valve spring clearance. Trick Flow roller rockers are sold in sets of 16 and come complete with polylocks.

Rocker arms, 1.73 ratio, 7/16" stud, set of 16



# **Chromemoly Pushrods**

The proper length pushrod is critical to achieving correct valvetrain geometry. Trick Flow one-piece chromemoly pushrods are available in a variety of lengths for use with any Trick Flow cylinder head as well as other OEM and aftermarket heads.

Designed specifically for high performance applications, the pushrods have the following features:

- Cold-formed from 4130 chromemoly steel construction
- .080" wall thickness

· Induction-hardened heat-treating for use with guideplates In addition, the oil hole is closed to within .040" then drilled and chamfered to .093". This eliminates stress fractures and cracks caused by the cold-forming process.

NOTE: Always check the proper pushrod length for the specific application before ordering

## Trick Flow Chromemoly 5/16" Pushrods, Set of 16

TFS-21407200	Pushrods, 7.200" long, small block Chevy with OE roller cam
TFS-21407800	Pushrods, 7.800" long, small block Chevy, 90° V6
TFS-21408400	Pushrods, 8.400" long, 1970-74 Ford 351C/429CJ
TFS-21408500	Pushrods, 8.500" long, 1971-72 Ford Boss 351
TFS-21408650	Pushrods, 8.650" long, Ford 429 SCJ
TFS-21408700	Pushrods, 8.700" long, Ford 429 SCJ +.050"
TFS-21408750	Pushrods, 8.750" long, Ford 429 SCJ +.100"

#### Trick Flow Chromemoly 3/8" Pushrods, Set of 8

TFS-21418250-8	Pushrods, 8.250" long, big block Chevy intake
TFS-21418350-8	Pushrods, 8.350" long, big block Chevy intake +.100"
TFS-21418650-8	Pushrods, 8.650" long, tall deck big block Chevy intake
TFS-21418700-8	Pushrods, 8.700" long, Ford 429 SCJ +.050"
TFS-21418750-8	Pushrods, 8.750" long, tall deck big block Chevy intake +.100"
TFS-21418750-8	Pushrods, 8.750" long, Ford 429 SCJ +.100"
TFS-21419250-8	Pushrods, 9.250" long, big block Chevy exhaust
TFS-21419350-8	Pushrods, 9.350" long, big block Chevy exhaust +.100"
TFS-21419650-8	Pushrods, 9.650" long, tall deck big block Chevy exhaust
TFS-21419750-8	Pushrods, 9.750" long, tall deck big block Chevy exhaust +.100"

#### How to Build a Pushrod Part Number

Trick Flow offers more pushrod lengths than shown here. They can be ordered in any length from 6.250" to 9.000" (5/16") or 7.650" to 9.950" (3/8") in .050" increments by building a pushrod part number. Just add the length desired to the end of the part number code. Here's how:

#### Base part numbers:

To order 5/16" pushrods—TFS-2140 To order 3/8" pushrods—TFS-2141\_

For example: TFS-21406250 designates 5/16" diameter, 6.250" pushrods. For example: TFS-21419000-8 designates 3/8" diameter, 9.000" pushrods.

# **Adjustable Pushrod Length Checkers**

These 5/16" pushrod checkers feature over 1" of travel to help determine proper pushrod length for any application. A must-have tool for setting up proper valvetrain geometry, they're made from thinwall steel and have 5/16" ball ends.



TFS-9000 6.125" to 7.500" long, each TFS-9001 7.500" to 8.700" long, each TFS-9002 8.700" to 9.800" long, each 9.700" to 11.000" long, each TFS-9003 TFS-9004 10.200" to 11.500" long, each TFS-9005 7.200" to 8.300" cup style, each TFS-9006 8.350" to 9.800" cup style, each TFS-9007 10.200" to 11.800" cup style, each



# **Valve Spring Retainers and Spring Cups**

Trick Flow 4140 chromemoly steel retainers and spring cups are through hardened for long life and black oxide coated for a high-quality appearance. All spring cups, shims, and i.d. locators are .060" thick. For use with all cast iron and aluminum cylinder heads.



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TFS-31400433	Spring cups, $.507\mbox{"}$ i.d., $1.415\mbox{"}$ o.d., $1.270\mbox{"}$ max spring o.d., set of 16
TFS-31400434	Spring cups, .645" i.d., 1.610" o.d., 1.480" max spring o.d., set of 16

TFS-21400426 Spring cups, .705" i.d., 1.670" o.d., 1.560" max spring o.d., set of 16

TFS-41400434 Spring cups, .630" i.d., 1.745" o.d., 1.640" max spring o.d., set of 16



**Double Spring Retainer** 



# **Spring Shims**

TFS-31500432

Spring shims, .680" i.d., 1.460" o.d., 1.500" max spring o.d.,

I.D. Locators

TFS-21400440

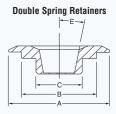
TFS-21400441

I.D. locators, .570" i.d., 1.500" o.d., 1.550" max spring o.d., set of 16

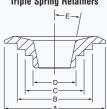
I.D. locators, .575" i.d., 1.740" o.d., 1.640" max spring o.d., set of 16

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Valve Spring Retainer Specifications							
	Steel						
Part Number	Spring Description	Valve Max. Diameter	Α	В	С	D	E
TFS-31400423	Single spring	1.250"	1.187"	0.850"	0.650"	-	7°
TFS-51400423	Double spring	1.437" - 1.500"	1.375"	1.060"	0.675"	-	7°
TFS-21400424	Double spring	1.437" - 1.500"	1.400"	1.050"	0.690"	-	10°
TFS-21400425	Double spring	1.500" - 1.550"	1.495"	1.115"	0.690"	-	10°
TFS-41400423	Double spring, +0.050	1.550"	1.500"	1.115"	0.690"	-	10°
		Titanium					
Part Number	Spring Description	Valve Max. Diameter	A	В	С	D	E
TFS-214T0410	LS1, Double spring	1.300"	1.229"	0.944"	0.668"	-	7°
TFS-214T0420	Double spring	1.437" - 1.500"	1.442"	1.065"	0.705"	-	10°
TFS-214T0520	Double spring	1.500" - 1.550"	1.500"	1.110"	0.690"	-	10°
TFS-214T0525	Double spring	1.500" - 1.550"	1.500"	1.110"	0.710"	-	10°
TFS-214T0620	Double spring	1.625"	1.500"	1.180"	0.765"	-	10°
TFS-214T0630	Triple spring	1.625"	1.500"	1.180"	0.870"	0.635"	10°



**Triple Spring Retainers** 





# **Track Max® Valve Springs**

Did you know that the average valve spring compresses and rebounds hundreds of times a second? Make sure your next set of valve springs are built to last *and* built to win! Track Max valve springs are the only springs manufactured to Trick Flow's rigorous, world-class testing standards. Every spring is CNC-coiled from high tensile-strength, extra-durable Pacaloy<sup>TM</sup> chrome-silicon steel and double shotpeened beyond Aerospace Material Specifications (AMS) reliability standards. Track Max valve springs are available in four configurations to work with virtually any camshaft and valvetrain combination.

#### **Single Valve Springs**

Track Max single valve springs have flat internal damping coils to prevent spring surge at high revs, maintaining proper spring pressure at critical load levels.

#### **Dual Valve Springs**

Track Max dual valve springs are for more aggressive cam profiles. Choose the standard dual springs, or the dual springs with damper coils for spring surge prevention.

# **Triple Sportsman Valve Springs**

These Track Max springs are designed for bracket drag racing, with higher spring rates to

withstand ultra high-revving, high-horsepower engines.

# **Beehive Valve Springs**

Drop in a more aggressive cam without machining your spring seats! These beehive Track Max springs have heavyweight spring rates but will fit inside the stock valve seats and can be used with the stock retainers.







	Track Max® Single Valve Spring Specifications									
Part Number	Style	O.D. of Outer Spring (in.)	I.D. of Outer Spring (in.)	I.D. of Inner Spring or Damper (in.)	Installed Height (inches)	Open Height (inches)	Pressure @ Installed Height (lbs./in.)	Pressure @ Open Height (lbs./in.)	Coil Bind (inches)	Rate (lbs./in.)
TFS-15100	Single (inner spring)	.953	.697	.697	1.500	1.000	55	127	.860	144
TFS-15101	Single (inner spring)	1.015	.731	.731	1.800	1.250	54	140	1.020	156
TFS-15102	Single with damper	1.254	.880	.790	1.700	1.250	110	300	1.150	422
TFS-15103	Single with damper	1.244	.860	.770	1.750	1.250	125	350	1.100	450
TFS-15104	Single with damper	1.255	.871	.781	1.700	1.200	110	311	1.160	402
TFS-15105	Single with damper	1.265	.865	.765	1.750	1.250	125	388	1.130	526
TFS-15106	Single ovate wire	1.260	.836	.836	1.700	1.200	105	301	1.130	392
TFS-15107	Single with damper	1.355	.941	.851	1.850	1.350	90	300	1.204	418
TFS-15108	Single with damper	1.430	1.066	.976	1.750	1.250	110	225	1.125	230
TFS-15109	Single with damper	1.437	1.037	.947	1.700	1.200	115	285	1.113	340
TFS-15110	Single with damper	1.437	1.073	1.003	1.500	1.030	115	240	.903	266
TFS-15111	Single with damper	1.460	1.060	.970	1.850	1.250	109	293	1.146	307
TFS-15112	Single with damper	1.460	1.060	.970	1.580	1.100	92	296	.923	425
TFS-15113	Single with damper	1.464	1.080	.990	1.900	1.300	95	236	1.189	235
TFS-15114	Single with damper	1.476	1.062	.972	1.800	1.300	110	318	1.167	416
TFS-15115	Single with damper	1.495	1.081	.991	1.650	1.220	101	253	1.100	355
TFS-15116	Single with damper	1.500	1.086	.996	1.880	1.300	98	316	1.100	375
TFS-15117	Single with damper	1.525	1.111	1.000	1.900	1.400	127	311	1.110	368
TFS-15118	Single with damper	1.540	1.125	1.016	1.900	1.338	145	320	1.200	311

	Track Max® Dual Valve Spring Specifications									
Part Number	Style	O.D. of Outer Spring (in.)	I.D. of Outer Spring (in.)	I.D. of Inner Spring or Damper (in.)	Installed Height (inches)	Open Height (inches)	Pressure @ Installed Height (lbs./in.)	Pressure @ Open Height (lbs./in.)	Coil Bind (inches)	Rate (lbs./in.)
TFS-15200	Dual spring no damper	1.212	.900	.674	1.516	.970	97	256	.880	29
TFS-15201	Dual spring no damper	1.300	.895	.655	1.800	1.150	135	400	1.110	408
TFS-15203	Dual spring no damper	1.459	1.075	.794	1.875	1.175	120	394	1.050	391
TFS-15204	Dual spring no damper	1.465	1.090	.807	1.688	1.208	106	306	.916	416
TFS-15205	Dual spring with damper	1.464	1.080	.724	1.900	1.300	133	333	1.198	333
TFS-15206	Dual spring with damper	1.490	1.105	.810	1.800	1.200	165	385	1.054	366
TFS-15207	Dual spring with damper	1.538	1.140	.752	1.850	1.200	157	440	1.090	436
TFS-15208	Dual spring with damper	1.545	1.130	.737	1.800	1.175	140	457	1.190	507
TFS-15209	Dual spring with damper	1.539	1.125	.731	2.000	1.300	200	550	1.125	500
TFS-15210	Dual spring with damper	1.539	1.125	.731	1.950	1.250	200	550	1.125	500
TFS-15211	Dual spring with damper	1.540	1.140	.754	1.900	1.300	144	403	1.125	431
TFS-15212	Dual spring with damper	1.540	1.140	.754	1.900	1.250	145	465	1.130	492
TFS-15213	Dual spring with damper	1.550	1.125	.720	2.050	1.300	220	625	1.190	540
TFS-15214	Dual spring no damper	1.550	1.135	.812	2.000	1.300	230	580	1.190	500
TFS-15215	Dual spring with damper	1.545	1.130	.757	1.900	1.275	175	442	1.190	427
TFS-15216	Dual spring with damper	1.550	1.150	.790	1.880	1.250	160	389	1.140	363
TFS-15217	Dual spring no damper	1.550	1.135	.812	1.900	1.200	240	625	1.068	550
TFS-15218	Dual spring no damper	1.550	1.135	.812	2.000	1.300	240	608	1.186	525
TFS-15219	Dual spring with damper	1.540	1.105	.700	2.000	1.250	225	715	1.150	653
TFS-15220	Dual spring with damper	1.555	1.140	.747	1.950	1.300	194	500	1.150	469
TFS-15221	Dual spring no damper	1.570	1.120	.796	1.950	1.250	190	710	1.045	742
TFS-15222	Dual spring no damper	1.620	1.170	.846	1.950	1.200	230	710	1.045	640
TFS-15223	Dual spring with damper	1.625	1.175	.769	2.050	1.300	250	673	1.211	564
TFS-15224	Dual spring with damper	1.635	1.185	.779	1.900	1.200	250	728	1.090	682
TFS-15225	Dual spring no damper	1.645	1.192	.871	2.050	1.250	207	67	1.130	580

# Trick Flow Track Max® Valve Springs (continued)

	Track Max® Triple Valve Spring Specifications									
Part Number	Style	O.D. of Outer Spring (in.)	I.D. of Outer Spring (in.)	I.D. of Inner Spring or Damper (in.)	Installed Height (inches)	Open Height (inches)	Pressure @ Installed Height (lbs./in.)	Pressure @ Open Height (lbs./in.)	Coil Bind (inches)	Rate (lbs./in.)
TFS-15300	Triple spring	1.645	1.195	.635	2.050	1.250	250	801	1.130	688
TFS-15301	Triple spring	1.645	1.195	.635	2.070	1.270	290	835	1.130	688
TFS-15302	Triple spring	1.645	1.195	.635	2.100	1.200	332	950	1.130	688

	Track Max® Beehive Valve Spring Specifications										
Part Number	Style	Bottom O.D. (inches)	Bottom I.D. (inches)	Top O.D. (inches)	Top I.D. (inches)	Installed Height (inches)	Open Height (inches)	Pressure @ Installed Height (lbs./in.)	Pressure @ Open Height (lbs./in.)	Coil Bind (inches)	Rate (lbs./in.)
TFS-15400	Beehive ovate wire spring	1.061	.738	.959	.636	1.640	1.090	80	185	1.020	191
TFS-15401	Beehive ovate wire spring	1.105	.742	.943	.580	1.470	.970	90	252	.900	324
TFS-15403	Beehive ovate wire spring	1.290	.885	1.055	.650	1.800	1.200	105	293	1.140	313
TFS-15404	Beehive ovate wire spring	1.445	1.000	1.095	.650	1.880	1.280	155	377	1.210	370
TFS-15405	Beehive ovate wire spring	1.450	1.014	1.295	.859	1.940	1.380	120	375	1.316	455
TFS-15406	Beehive ovate wire spring	1.454	1.070	1.264	.880	1.750	1.225	100	290	1.070	362
TFS-15407	Beehive ovate wire spring	1.210	.805	1.035	.630	1.800	1.200	135	350	1.160	408
TFS-15408	Beehive ovate wire spring	1.290	.885	1.055	.650	1.800	1.200	130	318	1.140	313



stand. However, the kit is a little tricky to use when the engine is in a car. That's why Trick Flow has engineered this cam degree supplement kit. The kit contains components to make degreeing the cam in a vehicle easier: a steel plate for the magnetic base, an allen key, adjustable set-up lash adjuster, and an extension for the dial indicator. This kit must be used with the TFS-90000 cam degree kit.

TFS-90100

Cam degree supplement kit, each



the degree kit can be used to check piston-to-valve clearance, flywheel runout, crankshaft endplay, and ring gear backlash. The kit includes two low-tension checking springs, wire pointer, top dead center stop, 11" black degree wheel with laser-etched marks, three adapter bushings (3/8", 7/16", and 1/2"), flat washer, magnetic base, dial indicator, and a carrying case.

FFS-90000 Degree kit, each

# Valve Spring Compressor for Ford 4.6L/5.4L 2V/4V

If you work on Ford modular engines, then you need Trick Flow's valve spring compressor. A must for servicing valve springs, retainers, camshafts, and valve seals, this specially made tool can remove the valve springs with the camshafts in the heads—even while they're on the engine.

TFS-90518 Valve spring compressor, Ford 4.6L/5.4L 2V/4V, each



TFS-21400001

**★**MADE

# Camshaft Installation Handle

Trick Flow's camshaft installation handle makes installing and removing cams much easier. It features an innovative U-shape design for more leverage when you need it most and a cushioned handle for comfort. The handle is 8" long and includes a universal mounting pattern to fit all types of camshafts, plus a protective zinc finish to protect it against corrosion.

TFS-90150 Camshaft installation handle, each

# **Hydraulic Lifters**

Trick Flow hydraulic lifters are the perfect choice to freshen up your engine. These affordable lifters are designed to factory tolerances for a perfect fit and to provide precise oil control to keep your engine running smoothly. The Retro-Fit Roller lifters are designed for a roller cam conversion in engines originally equipped with a hydraulic flat tappet cam. Special length pushrods may be required.



TFS-21400001 Lifters, Chevy 262-454, set of 16

#### **OEM Hydraulic Roller Lifters**

TFS-21400002-16\* Lifters, Chevy 5.0L/5.7L/GM LS Gen III, set of 16 TFS-21400004-16\* Lifters, Ford 5.0L, set of 16

#### Retro-Fit Hydraulic Roller Lifters with Link Bars

TFS-21400003 Lifters, Chevy 262-454, set of 16 TFS-21400005 Lifters, Chevy 396-502, set of 16

TFS-21400006 Lifters, Ford 221-351W (including Boss), 351C/M-400, set of 16

TFS-21400007 Lifters, Ford 352-428, 370-460, set of 16







# **Trick Flow by Magnuson Superchargers**

The airflow experts at Trick Flow teamed up with the supercharger experts at Magnuson to produce applicationspecific systems that can add up to 150 horsepower to your GM, Ford, or Dodge hot rod!

At the core of each system is the Magnuson supercharger, a Roots design upgraded with intermeshed helical rotors and special port geometry to increase power with original equipment quietness and reliability and no adverse effects on fuel economy. The supercharger is overdriven for instantaneous boost off-idle, and an internal bypass valve eliminates part throttle power loss. Rounding out the features is a self contained lubrication system. Trick Flow by Magnuson supercharger systems come with a three year warranty.



Systems include an MP112 supercharger, cast aluminum intake manifold, air-towater intercooler, plumbing, wiring harnesses, brackets, hardware, programmer to properly calibrate your ECM, and an instruction manual complete with color photographs (exact contents vary by application).

TEO 1/00000	0 1 1 1 0005 00 4 01 0 15 1 14 1 0 0 7
TFS-K26003	Supercharger system, 2005-08 4.6L 3V Ford Mustang GT, each
TFS-K26006	Supercharger system, 1999-2003 Chevrolet/GMC
	Silverado/Sierra, Suburban/Tahoe/Yukon/Yukon XL, each
TFS-K26007	Supercharger system, 2004-06 Chevrolet/GMC Silverado/
	Sierra 2500, Suburban/Avalanche/Yukon XL 2500, each
TFS-K26008	Supercharger system, 2007-08 5.3L Flex Fuel (J-code only)
	Chevrolet/GMC Silverado/Sierra, each
TFS-K26009	Supercharger system, 2006-07 Chevrolet Trailblazer SS, each
TFS-K26010	Supercharger system, 2004 5.7L LS1 Pontiac GTO, each
TFS-K26011	Supercharger system, 2005-06 6.0L LS2 Pontiac GTO, each

#### **MP122 Supercharger Systems**

Systems include an MP122 supercharger, cast aluminum intake manifold and top plate for square bore carburetors, crank pulley, idler assembly, distributor hold down, alternator bracket, 6-rib drive belt, gaskets, spacers, hardware, and an instruction manual complete with color photographs (exact contents vary by application).

TFS-K26004 Supercharger system, pre-1987 small block Chevrolet, long water pump, each TFS-K26005 Supercharger system, pre-1987 small block Chevrolet, short water pump, each TFS-K26012 Supercharger system, 1987 and later small block Chevrolet with Vortec cylinder heads, short water pump, each



# **TFX™ High-Flow Intake Kits**

Similar to the Cold Air Intake Kits, the Trick Flow High-Flow Intake Kits are built for performance and show, using the highest quality components available to provide late-model vehicles with more power and acceleration. The filters are washable cotton-gauze, and a polished aluminum inlet tube adds some sparkle under the hood. The kits also feature heat shields to isolate cooler air from engine heat (most applications), plus all necessary mounting hardware

ions), pras an necessary mounting nare ware	
High-flow intake kit, 2010 3.6L Chevrolet	7
Camaro, each	
High-flow intake kit, 2010 6.2L Chevrolet	
Camaro SS, each	7
High-flow intake kit, 1999-2004 4.8L/5.3L	
Chevrolet/GMC Silverado/Sierra, each	
High-flow intake kit, 1999-2007 4.8L-6.0L Chevro	olet/GMC/Cadillac
trucks/SUVs, each	
High-flow intake kit, 2005-07 4.8L-6.0L Chevrole	t/GMC/Cadillac
	High-flow intake kit, 2010 3.6L Chevrolet Camaro, each High-flow intake kit, 2010 6.2L Chevrolet Camaro SS, each High-flow intake kit, 1999-2004 4.8L/5.3L Chevrolet/GMC Silverado/Sierra, each High-flow intake kit, 1999-2007 4.8L-6.0L Chevrolet Camaro SS, each



TFS-K26020

Systems include an MP1900 TVS supercharger, cast aluminum intake manifold, air-to-water intercooler, high capacity fuel injectors and/or fuel pump, plumbing, wiring harnesses, brackets, hardware, programmer to properly calibrate your ECM (TFS-K26015 only), and an instruction manual complete with color photographs (exact contents vary by application). Customers purchasing part numbers TFS-K26013, TFS-26014, TFS-26016, and TFS-26018 must send their ECM to Magnuson via the enclosed pre-paid shipping container to be reprogrammed.

TFS-K26013 Supercharger system, 2007-08 6.0L/6.2L Chevrolet/GMC Silverado/Sierra, black, each Supercharger system, 2007-08 6.0L/6.2L Cadillac/Chevrolet/ TFS-K26014

GMC Escalade/Tahoe/Yukon/Suburban/Avalanche, black, each Supercharger system, 2008-early 2009 6.0L Pontiac G8, TFS-K26015 black, each

Supercharger system, 2007-09 4.8L/5.3L TFS-K26016 Chevrolet/GMC Silverado/Sierra, black, each TFS-K26018 Supercharger system, 2007-09 5.3L Flex Fuel (J-code only) Chevrolet/GMC Silverado/Sierra and Trailblazer/Envoy, each

# **MP2300 TVS Supercharger Systems**

Magnuson's MP2300 TVS supercharger technology is the same used for the Corvette ZR1. The four-lobe rotor features a high-twist 160° helix that increases efficiency, lowers discharge temperatures, and is much quieter than previous superchargers. The superchargers also interface seamlessly with OE cylinder deactivation systems for improved fuel economy during light throttle applications.

MP2300 TVS supercharger systems come complete with a high-velocity aluminum intake manifold, integral air-to-water intercooler, a programmer to properly calibrate your ECU, new fuel injectors and fuel rails, an instruction manual complete with color photographs, and all necessary brackets, connectors, hardware, and specialized tools required for installation (exact contents vary by application).

TFS-K26017 Supercharger system, 2010 6.2L Chevrolet

Camaro SS, each

Supercharger system, 2009-10 5.7L Dodge TFS-K26020

Challenger R/T, each

Supercharger system, 2009-10 6.1L Dodge TFS-K26021

Challenger SRT8, each



TFS-23103 High-flow intake kit, 1997-2004 4.6L/5.4L Ford/Lincoln trucks/SUVs. each

TFS-23104 High-flow air intake kit, 2003-07 5.7L Hemi Dodge Ram

1500/2500/3500, each

TFS-23105 High-flow air intake kit, 2007-08 4.8L-6.0L Chevrolet/GMC

trucks/SUVs, each



trucks/SUVs, each

# **TFX™ Cold Air Intake Kits**

Trick Flow cold air intake kits replace an engine's restrictive stock air cleaner or airbox with a black composite, low-restriction unit and reusable cotton-gauze filter that will increase airflow to the engine. As we all learned in Horsepower 101, more air equals more power. The kits include an air filter assembly, a plenum (where applicable), mounting hardware, and instructions.

Cold air intake kit, 1999-2004 4.8L-5.3L Chevrolet/GMC Silverado/Sierra, each TFS-23050 TFS-23051 Cold air intake kit, 1996-2005 4.3L Chevrolet/GMC S-Series trucks/SUVs, each TFS-23052 Cold air intake kit, 2001-04 6.0L Chevrolet/GMC 2500HD/3500 pickups, each TFS-23053 Cold air intake kit, 2005 4.8L-6.0L Chevrolet/GMC trucks/SUVs, each TFS-23054 Cold air intake kit, 1988-95 5.7L Chevrolet/GMC trucks/SUVs, each Cold air intake kit, 1999-2004 6.0L Chevrolet/GMC Silverado/Sierra, each TFS-23055 TFS-23056 Cold air intake kit, 1996-2000 5.0L/5.7L Chevrolet/GMC trucks/SUVs, each TFS-23057 Cold air intake kit, 1993-97 5.7L LT1 Chevrolet/Pontiac Camaro/Firebird, each TFS-23058 Cold air intake kit, 1994-96 5.7L LT1 Chevrolet Impala SS/Caprice, each TFS-23059 Cold air intake kit, 1994-2001 5.2L/5.9L Magnum Dodge Ram 1500/2500, each TFS-23060 Cold air intake kit, 2003-04 5.7L Hemi Dodge Ram 1500/2500, each TFS-23061 Cold air intake kit, 1988-95 5.8L Ford F-150/Bronco, each TFS-23062 Cold air intake kit, 1997-2000 4.6L/5.4L Ford/Lincoln trucks/SUVs, each TFS-23063 Cold air intake kit, 2004-05 4.6L Ford F-150, each TFS-23064 Cold air intake kit, 2004 5.4L Ford F-150, each TFS-23065 Cold air intake kit, 1999-2004 5.4L F-250/350 Super Duty pickup/Excursion, each TFS-23066 Cold air intake kit, 1996-2004 4.6L 2V Ford Mustang GT, each TFS-23067 Cold air intake kit, 2005-06 4.6L Ford Mustang GT, each TFS-23068 Cold air intake kit, 1988-95 4.9L-7.5L Ford F-Series/Bronco, each TFS-23069 Cold air intake kit, 2004 5.7L LS1 Pontiac GTO, each TFS-23070 Cold air intake kit, 2005 6.0L LS2 Pontiac GTO, each TFS-23071 Cold air intake kit, 2007-09 4.6L 3V Ford Mustang GT, each TFS-23072 Cold air intake kit, 2010 4.0L Ford Mustang, each TFS-23075 Cold air intake kit, 2008 4.8L/5.3L Cadillac/Chevrolet/GMC trucks/SUVs, each TFS-23076 Cold air intake kit, 2008-09 5.7L Hemi Chrysler 300C; Dodge Challenger/Magnum, each TFS-23077 Cold air intake kit, 2008 Ford F-150, each Cold air intake kit, 2005-07 5.7L Hemi Chrysler 300C; Dodge Challenger/Magnum, each TFS-23078 TFS-23079 Cold air intake kit, 2007 4.8L/5.3L Cadillac/Chevrolet/GMC trucks/SUVs, each TFS-23080 Cold air intake kit, 2006-07 6.0L Chevrolet Corvette, each Cold air intake kit. 2001-04 5.7L Chevrolet Corvette, each TFS-23081 TFS-23082 Cold air intake kit, 2008-09 6.0L Pontiac G8, 6.2L G8 GXP, each





Add 5-15 more rear-wheel horsepower in less than an hour with a Trick Flow TFX EFI throttle body. The cast aluminum throttle bodies are crafted with hand-assembled butterflies for maximum quality and dependability. Idle adjustment is as easy as turning a screw, so you'll be enjoying that new power and responsiveness in no time. The LS1 models benefit from multiple throttle linkages for a wide variety of custom installations. Includes gaskets and mounting hardware.

TFS-24080†
Throttle body, 1996-2004 Ford 4.6L/5.4L 2V, 70mm, each
TFS-24080†
Throttle body, 1996-2004 Ford 4.6L/5.4L 2V, 75mm, each
TFS-24080†
Throttle body, 1998-2002 Chevy/Pontiac Camaro/Firebird, 2004
GTO, 80mm, each

TFS-24085† Throttle body, 1998-2002 Chevy/Pontiac Camaro/Firebird, 2004 GTO, 85mm, each

TFS-24570\*† Throttle body, 1986-93 5.0L Ford Mustang, 70mm, each TFS-24575\*† Throttle body, 1986-93 5.0L Ford Mustang, 75mm, each

\* EGR plate required, not included.

† 50-State emissions legal under CARB E.O. number D-369-10.



# **TFX™ Upper Plenum/Throttle Body Combos**

You can get a Trick Flow 4.6L 2V aluminum upper plenum plus one of our new TFX throttle bodies in an easy-to-order package. The silver powdercoated upper plenum is raised 3/4" to increase airflow by 100 cfm and the throttle body features die-cast aluminum construction and hand-fitted butterflies. The combo is good for 10-15 additional rear-wheel horsepower on a 1996-2004 4.6L 2V engine. Throttle response is improved, everything fits under a stock hood and works with stock sensors. Includes gaskets and mounting hardware.

TFS-K51824070 Upper plenum/throttle body combo, 1996-2004 Ford 4.6L 2V,

70mm, silver, each

TFS-K51824075 Upper plenum/throttle body combo, 1996-2004 Ford 4.6L 2V,

75mm, silver, each



# Fuel Filters • Fuel Pumps • Fuel Rail Adapters • Fuel Pressure Regulators

# **TFX™ Fuel Filters**

## **TFX Inline Fuel Filters**

TFS-23001

TFS-23002

TFS-23003

TFS-23004

TFS-23005

Trick Flow TFX inline fuel filters keep fuel clean without restricting it-just what your high performance engine requires. The black anodized billet aluminum filters can handle up to 300 psi of fuel pressure and 1,000 horsepower. Available with your choice of 10, 40, or 100 micron elements and with -6, -8, or -10 AN male inlet and outlet fittings. TFS-23000



Inline filter, -6 AN, 40 micron element, 1.250" x 4.000", each Inline filter, -8 AN, 40 micron element, 1.250" x 4.000", each Inline filter, -8 AN, 10 micron element, 1.750" x 6.500", each Inline filter, -10 AN, 10 micron element, 1.750" x 6.500", each Inline filter, -8 AN, 100 micron element, 1,750" x 6,250", each

Inline filter, -10 AN, 100 micron element, 1.750" x 6.250", each TFS-RF010 Replacement element, 10 micron, each TFS-RF040 Replacement element, 40 micron, each TFS-RF100 Replacement element, 100 micron, each

#### **TFX Canister Fuel Filter**

Trick Flow's TFX billet aluminum, high-flow canisterstyle fuel filter can handle the pressures of the most extreme high performance carbureted or fuel injected fuel system. The lightweight filter assembly flows 1,500 lbs. per hour of fuel with less than 1 psi of pressure drop through its 3/8" inlet and outlet fittings. The maximum fuel pressure rating is a whopping 2,000 psi! A 10 micron replaceable filter element and chromeplated mounting hardware are included.





TFS-23006



# **TFX™ Electric Fuel Pump** for EFI Engines

Multi-port EFI systems need a stable fuel supply at all rpms, and Trick Flow's newest high-pressure, high-flow electric fuel pump can supply it. Features include a free-flow rate of 43 gph at a maximum pressure of 85 psi, 5/16" inlet and outlets, brass stud terminals for secure connections, and two cushioned clamps for mounting. This fuel pump is ideal as a stand-alone pump for multi-port EFI systems on engines making up to 500 hp, or as a booster for nitrous-assisted engines. Kit includes fuel pump, 30 amp relay, fuse holder, wire, connectors, and mounting hardware.

TFS-25004 Fuel pump kit, universal fit, EFI, includes fuel pump and wiring kit,

43 gph @ 85 psi, each

TFS-25004P Fuel pump only, universal fit, EFI, 43 gph @ 85 psi, each TFS-25004K Fuel pump wiring kit, includes 30 amp relay, fuse holder, wire, and

connectors, each



Trick Flow has an easy way to tap into the fuel system of a Ford 4.6L engine. These TFX fuel rail adapters make it simple to install a nitrous oxide solenoid, a fuel pressure gauge, or any other component that requires a 1/8" NPT fitting. The billet aluminum adapters feature a black anodized finish with a white engraved Trick Flow logo for good looks and durability. Mounting hardware included. Fuel rail adapter, 1999-2004 Ford 4.6L 2V, each TFS-27021 TFS-27022 Fuel rail adapter, 2005-10 Ford 4.6L 3V, each

# **TFX™ Fuel Pressure Regulators**

Trick Flow TFX universal bypass fuel pressure regulators are ideal for applications TFS-27001 where precise fuel control is required. The Type 1 regulator can be adjusted from 3-20 psi with the standard pressure spring (perfect for carburetors) or from 20-60 psi after installing the included high-pressure spring (EFI systems). The Type 2 regulator is designed to provide total control of the fuel pressure settings on EFI-equipped cars. This regulator has a -6 AN O-ring boss inlet, outlet, and return fittings, a 1/8" NPT gauge port, and can be adjusted from 30-70 psi. Both regulators include a boost reference port that raises fuel pressure on a 1:1 ratio. Like our other TFX fuel system components, the regulators are black anodized for stealthy looks

and corrosion resistance. Fuel pressure regulator, Type 1, 3-60 psi, each TFS-27001 TFS-5158REG1 Fuel pressure regulator, Type 2, 30-70 psi, each

# USA

# **TFX™ Fuel Pumps**

# TFX Electric Fuel Pumps for 1986-97 EFI Mustang

Trick Flow TFX high-volume, in-tank electric fuel pumps for 1986-97 EFI Mustangs are not only great for stock replacement, but are designed to meet the fuel requirements of modified engines. And unlike stock fuel pumps that only flow 88-95 lph, Trick Flow pumps are available in 155, 190, and 255 lph flow rates to help your modified engine meet its full power potential.

New fuel strainer included. TFS-25000 Fuel pump, 155 lph, in-tank mount, each TFS-25001 Fuel pump, 190 lph, in-tank mount, each TFS-25002 Fuel pump, 255 lph, in-tank mount, each

## **TFX Electric Fuel Pump** for Carbureted Engines

Trick Flow fuel pump technology is now available for carbureted vehicles! The Trick Flow TFX external mount, free-flow electric fuel pump flows 140 gph of fuel at a maximum pressure of 14 psi. Other desirable features include an integrated mounting bracket with rubber isolator to prevent noise from being transmitted into the vehicle body, 3/8" NPT female inlet and outlet ports, and compact dimensions (3.750" x 2.875" x 5.500") for easy mounting.

Fuel pump, 140 gph, external mount, each



TFS-25000

TFS-25003



# **TFX™ Fuel Injectors**

With disc-type fuel control valves, improved nozzles, and more reliable coil windings, Trick Flow's TFX

electronic fuel injectors atomize fuel better, are less likely to become clogged by fuel deposits, are quieter,

and require less energy to operate than other aftermarket injectors.

And the features don't stop there. Low magnetic stainless steel injector bodies prevent corrosion from underhood contaminates and seal the injectors from moisture contamination. EV1-style wiring connectors match original equipment wiring harnesses for an easy and positive connection. OEM-style clip grooves secure the injectors to fuel rails and eliminate possible fuel leaks. Viton® fluoroelastomer O-rings seal the injectors to the fuel rails and intake manifold and prevent fuel and air leaks under extreme operating conditions. High-quality, 1/2 micron filter screens keep foreign debris and contaminants from entering the injectors to ensure proper performance and a long life cycle. Electronically drilled and machined internal discs and valve seats prevent rich air fuel mixtures that could reduce fuel economy and performance.

Plus, all TFX fuel injectors are 100% duty cycle tested to ensure that you receive the same reliable, performance-improving high-quality components you've come to expect from Trick Flow.

come to expect from 1	TICK I IOW.
TFS-89024	Fuel injectors, 24 lbs./hr., 14.5 ohms, set of 8
TFS-89030	Fuel injectors, 30 lbs./hr., 14.5 ohms, set of 8
TFS-89036	Fuel injectors, 36 lbs./hr., 14.5 ohms, set of 8
TFS-89044	Fuel injectors, 44 lbs./hr., 12.2 ohms, set of 8
TFS-89048	Fuel injectors, 48 lbs./hr., 12.2 ohms, set of 8
TFS-89055	Fuel injectors, 55 lbs./hr., 2.2 ohms, set of 8
TFS-89072	Fuel injectors, 72 lbs./hr., 2.2 ohms, set of 8
TFS-89083	Fuel injectors, 83 lbs./hr., 2.2 ohms, set of 8
TFS-89095	Fuel injectors, 95 lbs./hr., 2.2 ohms, set of 8
TFS-89120	Fuel injectors, 120 lbs./hr., 2.2 ohms, set of 8









# **TFX™ Fuel Line Fittings**

Trick Flow's reusable TFX fuel line fittings are easy to install. They're made from precision CNC-machined aerospace grade aluminum and feature a sharp, black anodized finish for great looks and long-lasting durability. Best of all, they're available in several sizes and styles for any plumbing job.

avaliable ili several	i sizes and styles for any pidinon
TFS-22006	Hose end, -6 AN, straight, each
TFS-22008	Hose end, -8 AN, straight, each
TFS-22001	Hose end, -10 AN, straight, each
TFS-22456	Hose end, -6 AN, 45°, each
TFS-22458	Hose end, -8 AN, 45°, each
TFS-22451	Hose end, -10 AN, 45°, each
TFS-22906	Hose end, -6 AN, 90°, each
TFS-22908	Hose end, -8 AN, 90°, each
TFS-22901	Hose end, -10 AN, 90°, each
TFS-22386	Adapter, 3/8" NPT to -6 AN, each
TFS-22388	Adapter, 3/8" NPT to -8 AN, each
TFS-22666	Union, -6 AN to -6 AN, each
TFS-22888	Union, -8 AN to -8 AN, each
TFS-22111	Union, -10 AN to -10 AN, each



# **TFX™ Nitrous Systems**



# **TFX Carbureted Nitrous Systems**

Trick Flow TFX nitrous systems are an affordable way to bolt on big power. TFX systems are adjustable in 50 horsepower increments from 50 to 200 horsepower, and include everything you need to install them on to your vehicle. TFS-N4150 Nitrous system, Holley 4150, each TFS-N4500 Nitrous system, Holley 4500, each

#### **TFX EFI Nitrous Systems**

These EFI manifold nitrous systems are specifically designed for 1986-95 5.0L Fords with Trick Flow intake manifolds. TFX systems are adjustable in 50 horsepower increments from 50 to 200 horsepower. The systems include spray bar plates, calibrated solenoids, jets, switches, lines, filter, 10 lb. unfilled bottle, bottle brackets, 14 ft. of -4 AN braided stainless steel line, hardware, and instructions.

TFS-N5150 Trick Flow StreetBurner®/Track Heat® intake, kit Trick Flow StreetBurner®/Track Heat® intake, TFS-N5150PL

plate and jets only, kit TFS-N515R Trick Flow R-Series intake, kit

TFS-N515RPL Trick Flow R-Series intake, plate and jets only, kit

TFS-N5158 Trick Flow Box-R-Series intake, kit TFS-N5158PL Trick Flow Box-R-Series intake, plate and jets only, kit

# **TFX™ Nitrous Bottle Blanket**

Keep your nitrous bottle properly insulated with these 10 lb. bottle blankets from Trick Flow. The blankets help maintain consistent bottle temperature and pressure to get maximum efficiency from your nitrous system. The blue nylon bottle blankets also feature an embroidered Trick Flow logo. Bottle blanket, 6.500" x 14.500", each

TFS-28000



Viton® is a registered trademark of DuPont Performance Elastomers







TFS-30694030-045

# **Trick Flow by Cometic MLS Head Gaskets**

These multi-layer steel head gaskets from Trick Flow and Cometic are the best way to seal aftermarket cylinder heads to a GM LS or Ford small block engine. With three layers of stainless steel, these gaskets offer better torque retention, less distortion, and better sealing than conventional or composite head gaskets in high horsepower high cylinder pressure applications.

horsepower, high cyline	der-pressure applications.
TFS-30494040-040	MLS head gasket, GM LT1/LT4, 4.040" bore, .040" thick, each
TFS-30494060-040	MLS head gasket, small block Chevrolet, 4.060" bore, .040" thick, each
TFS-30494200-040	MLS head gasket, small block Chevrolet, 4.200" Jone, .040" thick, each
TFS-30694030-045	MLS head gasket, GM LS1/LS6, 3.910" bore, .045" thick, each
TFS-30694030-051	MLS head gasket, GM LS1/LS6, 3.910" bore, .051" thick, each
TFS-30694060-045	MLS head gasket, GM LS2/6.0L, 4.060" bore, .045" thick, each
TFS-30694060-051	MLS head gasket, GM LS2/6.0L, 4.060" bore, .051" thick, each
TFS-30694125L051	MLS head gasket, GM LSX, 4.125" bore, .051" thick, 6-bolt, left, each
TFS-30694125R051	MLS head gasket, GM LSX, 4.125" bore, .051" thick, 6-bolt, right, each
TFS-30694185L051	MLS head gasket, GM LSX, 4.185" bore, .051" thick, 6-bolt, left, each
TFS-30694185R051	MLS head gasket, GM LSX, 4.185" bore, .051"

thick, 6-bolt, right, each

TFS-30694130-051\* MLS head gasket, GM LS2/6.0L, 4.130" bore, .051" thick, each

MLS head gasket, GM LS7/LSX, 4.150" bore, .045" thick, each

MLS head gasket, GM LS7/LSX, 4.150" bore, .051" thick, each

MLS head gasket, GM LS7/LSX, 4.150" bore, .051" thick, each

TFS-41394375-040 MLS head gasket, big block Chevrolet, 4.375" bore, .040" thick, each
TFS-41394540-040 MLS head gasket, big block Chevrolet, 4.540" bore, .040" thick, each

TFS-51494030-040 MLS head gasket, small block Ford, 4.030" bore, .040" thick, each

TFS-51494060-040 MLS head gasket, small block Ford, 4.060" bore, .040" thick, each

TFS-51494080-040 MLS head gasket, small block Ford, 4.080" bore, .040" thick, each

TFS-53494500-040 MLS head gasket, Ford 429/460, 4.500" bore, .040" thick, each

TFS-53494670-040 MLS head gasket, Ford 429/460, 4.670" bore, 040" thick each

\* Required when using Trick Flow GenX® 235 or 245 cylinder heads on 4.000" and larger bore engine blocks.

# **Differential Covers**

Trick Flow differential covers feature heavy-duty A319 cast aluminum construction and extreme-duty bearing cap support studs to prevent cap movement and breakage, as well as ensure proper pinion depth and backlash. The covers come with support studs, jam nuts, ARP stainless steel bolts, gasket, and a 3/8" magnetic drain plug.

TFS-8510200 Differential cover kit, Chevy 12-bolt car, each
TFS-8510300 Differential cover kit, GM 8.2"/8.5", each
TFS-8510400 Differential cover kit, GM 7.5", each
TFS-8510500 Differential cover kit, Ford 8.8", each
TFS-8510600 Differential cover kit, Ford 10.25"/10.5" Sterling





Increase pulling power and enhance throttle response without sacrificing drivability with Trick Flow's 1" tall phenolic throttle body spacers. The spacers improve both low-end power and fuel economy, and come with gaskets and installation hardware.

TFS-30620001 TBI Spacer for 1999-2001 4.8L-6.0L Chevy/GMC trucks, each TFS-30620002 TBI Spacer for 2001-02 8.1L and 2002-03 4.8L-6.0L Chevy/GMC trucks, each

 TFS-31520001
 TBI Spacer for 1986-92 4.3L-5.7L Chevy/GMC trucks, each

 TFS-31520002
 TBI Spacer for 1993-95 4.3L-5.7L Chevy/GMC trucks, each

 TFS-31520003
 TBI Spacer for 1996-2003 4.3L Chevy/GMC trucks, each

 TFS-31520004
 TBI Spacer for 1996-99 5.0L/5.7L Chevy/GMC trucks, each

 TFS-51620001
 TBI Spacer for 1997-2003 4.6L Ford F-150/Expedition, each

 TFS-61520001
 TBI Spacer for 1992-2003 5.4L Ford F-150/Expedition, each

 TBI Spacer for 1992-2001 3.9L-5.9L Dodge Ram/Dakota/

TFS-61520002 TBI Spacer for 1991-2002 4.0L Jeep YJ/TJ/XJ, each

# **Phenolic Carburetor Spacer for Holley Dominator**

Give a Holley Dominator carburetor a little more space with Trick Flow's premium grade 1" phenolic spacer.

The spacer features a cloverleaf design to fit the contours of the Dominator carb and increases horsepower and torque in the mid to upper rpm range.

TFS-2145001C

Phenolic spacer, each





USA

Trick Flow transmission pans are made from A319 cast aluminum. They hold between one to three extra quarts of fluid and are finned to help the transmission dissipate heat faster for maximum efficiency. The pans come complete with mounting bolts, drain plug, filter extension, and a new gasket (where applicable).

Transmission pan kit, GM TH250/350, each
Transmission pan kit, GM TH400, each
Transmission pan kit, Ford C-6, each
Transmission pan kit, Ford C-4 1970 and later, case-fill, each
Transmission pan kit, Ford AOD, each
Transmission pan kit, Chrysler A-727 Torqueflite, each
Transmission pan kit, Ford E40D/4R100/5R110, each
Transmission pan kit, GM TH700R4/4L60/E, each
Pan fill conversion kit, Ford C-4, each



# Chrome Engine Accessories • Overflow/Recovery Tank • Timing Chain Sets • Harmonic Dampers • Underdrive Pulley Kits





# **Chrome Engine Accessories**

Trick Flow 14" diameter air cleaners feature a high-flow, 3" tall cotton gauze element and triple chrome-plated steel construction. The Trick Flow logo is embossed into the lid and three different base options will fit just about any carburetor and ignition combination. Includes mounting stud and wing nut.

The chrome-plated valve covers provide a great alternative to higher priced aluminum covers. They're baffled to prevent oil breather blow-by (except small block Ford) and feature embossed Trick Flow logos, triple chrome plating, and new gaskets.

The valve cover breathers feature a pre-treated cotton gauze filter element that protects your engine while letting it breathe freely. Other features include a push-in design for quick installation and chrome tops with embossed Trick Flow logos.

#### **Chrome Air Cleaners**

TFS-23020 TFS-23021	Air cleaner, flat base, each Air cleaner, 13/16" drop
	base, each
TFS-23022	Air cleaner, offset base for

# **Chrome Valve Covers**

TFS-44000	Valve covers, Chevy 283-400, pair
TFS-44001	Valve covers, Chevy 396-454, pair
TFS-44002	Valve covers, Ford 260-351W, pair
TFS-44003	Valve covers, Ford 429/460, pair

HEI distributor, each



TFS-23020

# **Chrome Valve Cover Breathers**

TFS-44020	Valve cover breather, fits 1.250" hole, rubber base, shielded, each
TFS-44021	Valve cover breather, fits 1.250" hole, rubber base, each
TFS-44022	Valve cover breather, fits 1.250" hole, steel base, each
TFS-44023	Valve cover breather, fits 1.000" i.d. grommets, steel base, each

# **Coolant Overflow/Recovery Tank**

The Trick Flow stainless steel overflow/recovery tank will prevent excess coolant from spilling out onto the street or track. The brightly polished tank features a custom drain petcock and includes all necessary brackets and fittings for an easy installation.

Overflow/recovery tank, 3.000" x 10.750", each



TFS-53478530

# Track Max® Harmonic Dampers

Put Trick Flow's advanced engineering to work for you with a Track Max harmonic damper. Engineered for safety and power, these SFI 18.1 rated, carbon steel dampers contain an injection-molded and bonded elastomer and come with removable counterweights. They also have engraved timing marks for easy adjustment and a corrosion-resistant black powdercoat finish for durability.

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TFS-19000	Damper, Chevy 283-350, internal	
	balance, each	
TFS-19001	Damper, Chevy 400, external	
	balance, each	2000
TFS-19002	Damper, Chevy 396-427, internal	- A - A
	balance, each	
TFS-19003	Damper, Chevy 454, external balance	ce, each
TFS-19004	Damper, 1997-2002 5.7L LS1 Chev	rolet/Pontiac Camaro/Firebird
	2005-06 6.0L LS2 Pontiac GTO, each	ch
TFS-19005	Damper, 1997-2007 5.7L/6.0L LS1/	LS2/LS6 Chevrolet Corvette,
	each	
TFS-19006	Damper, Ford 289-351W (except 5.	OL), external balance, each
TFS-19007	Damper, 1981-95 Ford 5.0L, extern	al balance, each
TFS-19008	Damper, Ford 429/460, external bal	ance, each
TFS-19009	Damper, 1996-2004 Ford 4.6L 2V, 6	external balance, each

# **Track Max® Underdrive Harmonic Dampers**

Trick Flow's underdrive harmonic dampers have many of the same features as our harmonic dampers-SFI 18.1 safety rating, carbon steel construction, injectionmolded and bonded elastomer, and corrosion-resistant black powdercoat finish—but are underdriven to increase horsepower by reducing the amount of power required to drive external accessories.

TFS-18004 Underdrive damper, 1998-2002 5.7L LS1 Chevrolet/Pontiac Camaro/Firebird;

2004-06 5.7L/6.0L LS1/LS2 Pontiac GTO,

TFS-18015

25% underdrive, each

TFS-18005 Underdrive damper, 1997-2006 5.7L/6.0L LS1/LS2/LS6 Chevrolet Corvette, 25% underdrive, each

TFS-18012 Underdrive damper, 1999-2006 GM 4.8L-6.0L trucks/SUVs,

25% underdrive, each

TFS-18015 Underdrive damper, 2005-08 5.7L Hemi Chrysler 300C; Dodge Magnum/Charger, 20% underdrive, each

TFS-18016 Underdrive damper, 2003-08 5.7L Hemi Dodge Ram 1500-3500/Durango, 20% underdrive, each

# **True Roller Timing Chain Sets**

These billet steel timing sets from Trick Flow are engineered for durability and versatility. The .250" diameter, double-row true roller chain and black oxide-coated crank sprocket are heattreated for unrivaled strength. The CNC-machined cam gear has nine crank sprocket keyways for zero and +/- 2°, 4°, 6°, or 8° timing adjustments. The timing marks are laser-etched.

TFS-30678533 Timing chain set, LS1, each Timing chain set, LS2, each TFS-30678534

Timing chain set, 1955-95 262-400 small block Chevrolet, each TFS-31478500 Timing chain set, 396-454 big block Chevrolet, each TFS-41478510

Timing chain set, 1962-95 Ford 255-351W, each TFS-51478520 TFS-53478530 Timing chain set, 1972-78 Ford 429/460, each

# Track Max® Underdrive Harmonic **Damper/Pulley Kits**

Trick Flow assembled these underdrive harmonic damper and pulley kits just for the Ford 4.6L. The kits start with a Track Max underdrive damper, then Trick Flow adds black powdercoated steel pulleys for the water pump and alternator to protect those accessories from high-speed

burnout while allowing more power to go to the wheels. TFS-18009

Underdrive damper/pulley kit, 1996-2000 Ford 4.6L 2V/4V, with long water pump, 25% underdrive, each TFS-18010 Underdrive damper/pulley kit, 2001-04 Ford 4.6L 2V/4V, with short water pump, 25% underdrive, each TFS-18011 Underdrive damper/pulley kit, 2005-07 Ford 4.6L 3V,





# Throttle Cable Bracket • Oil Supplement • Cylinder Head Bolt Kits • Header Spark Plug Socket • Porting Tools • Work Stands

# **Throttle Cable Bracket**

Crafted from black anodized billet aluminum, this throttle cable bracket from Trick Flow makes your carb installation look clean and professional. Installation is easy—just attach it to the base of your carburetor. All the hardware you need is included, including a return spring. The bracket is compatible with most carburetor

designs and transmission kickdown cables (except Dominators). TFS-20000 Throttle cable bracket, each



# **Header Spark Plug Socket**

To help save your knuckles while installing headers in crowded engine compartments (like late-model GM F-bodies), Trick Flow designed this modified socket. The square drive has been removed so the spark plug protrudes through the end for more clearance at the header tubes; just use your 3/4" open or box end wrench to turn the hex base. The socket is made from vanadium steel and has a black oxide finish for protection against corrosion and wear. Fits all 5/8" spark plugs. TFS-90500

Header spark plug socket, each





# **Engine Oil Supplement**



Protect your high performance engine from the inside! Just a few short years ago engine oils had higher levels of zinc-dialkyldithiophosphate (ZDDP), an anti-wear additive crucial to preventing valvetrain wear in flat tappet camshaft engines. Modern oils have much lower levels of ZDDP, leaving all high-rpm racing, performance street, and marine applications as well as classic, vintage, and musclecar engines with flat tappet camshafts vulnerable to premature camshaft failure.

That's why Trick Flow engineered this oil supplement with increased levels of ZDDP and anti-wear additives. It even provides the extra protection engines need during the critical break-in period.

One bottle treats 5-9 quarts of conventional or synthetic oil and should be used at every oil change.

TFS-94000 Oil supplement, 12 oz. bottle, each TFS-94000-12 Oil supplement, 12 oz. bottles, case of 12



TFS-94000



Trick Flow's cylinder head porting tool kits have everything you need for cleaning up ports and chambers. The deluxe cartridge roll kit includes (4) 60-grit cartridge rolls, (40) 80-grit rolls, and (40) 120-grit rolls all in assorted sizes, plus (2) 1/4" shank mandrels and a durable plastic storage box. It can be used on both cast iron and aluminum heads.

The three-piece deburring set includes (1) 5/8" diameter bit, (1) 3/4" diameter bit, and (1) 3/4" diameter cylindrical tree-style bit. All bits are 6" long. For use on non-ferrous metals only.

Deluxe cartridge roll kit, each TFS-90001

TFS-90002 Three-piece rotary carbide deburring set, each







Cylinder Head Bolt Kits

Keep combustion where it belongs! Trick Flow's high-quality cylinder head bolt kits provide consistent clamping force from bolt-to-bolt. The bolts are made from premium quality alloy steel with cold-formed heads and rolled threads. A black oxide finish protects them from wear and corrosion (except TFS-92008 and TFS-92010). The kits contain all the bolts you need to install a pair of heads, including hardened washers.

TFS-92000 Cylinder head bolt kit, small block Chevrolet, hex head, each

TFS-92001 Cylinder head bolt kit, big block Chevrolet, for OE cast iron heads, hex head, each TFS-92002 Cylinder head bolt kit, big block Chevrolet, for aftermarket heads, hex head, each

TFS-92005 Cylinder head bolt kit, Ford 289/302, hex head, each TFS-92021 Cylinder head bolt kit, Chrysler B/RB, hex head, each

#### Torque-To-Yield Style, OE Finish

TFS-92008 Cylinder head bolt kit, Ford 4.6L 2V/3V/4V, each TFS-92010 Cylinder head bolt kit, GM LSX, pre-2004 long style, each



# **Cylinder Head Work Stands**

These Trick Flow cylinder head work stands are ideal for home porting, polishing, or CCing jobs. They'll work with most popular cylinder heads and disassemble for easy storage.

TFS-9100 Work stands, pair





TFS-92000







# **Promotional Items**

TFS-167	Banner, 34" wide x 7'9" high , each
TFS-168	"RACING" license plate, each
TFS-P102	Windshield decal, white, 18" wide x 3" high, each
TFS-P102-B	Windshield decal, blue, 18" wide x 3" high, each
TFS-P102-0	Windshield decal, orange, 18" wide x 3" high each
TFS-P102-S	Windshield decal, silver, 18" wide x 3" high, each
TFS-P103	Decal, Trick Flow logo, 5½" wide x 1¼" high, each
TFS-P106	Contingency decal, Trick Flow, 12" wide x 3" high, each
TFS-P106-C	Contingency decal, cylinder head, 12" wide x 3" high, each
TFS-P106-M	Contingency decal, intake manifold, 12" wide x 3" high, each



TFS-172

# **Tire Cover**

Proper chassis setup is crucial for consistent performance at the track. Don't let the sun heat up your tires and ruin your day—protect them with Trick Flow tire covers. The 35½" high x 43½" wide vinyl covers attach to metal or fiberglass with five suction cups and shade your slicks from the sun's harsh, tire-expanding rays. Plus, the Trick Flow logo lets everyone know you're serious about performance.

TFS-172 Tire cover, each



# **Steel Signs**

Every home, garage, and shop has a wall that looks too slow. Trick Flow has engineered the solution—these bold steel signs. You get one square foot of pure, American-made cartoon horsepower in your choice of Camaro SS or Fox-body Mustang Cobra designs. Metal corner grommets make installation an easy bolt-on job.

TFS-170 Sign, 1969 Chevy Camaro SS, each TFS-171 Sign, 1993 Ford Mustang Cobra, each







# **Ball Caps**

These Trick Flow® embroidered hats are made of a cotton twill material and have an adjustable back closure. They are available in black or khaki, with the Trick Flow® logo prominently embroidered on the front.

TFS-HAT-BK Ball cap, black, each TFS-HAT-KH Ball cap, khaki, each TFS-P200 Ball cap, American flag, each



# **Fender Cover**

Trick Flow fender covers feature durable, heavy-gauge vinyl sheeting bonded to thick foam backing to protect your car's fenders from scratches, dings, nicks, and chemicals during service. The cover is blue with an orange Trick Flow logo. Fender cover, each



# **Apparel**

From 100% cotton T-shirts to sweatshirts and everything in between, Trick Flow has something for every fashionable motorsports enthusiast!

#### **Trick Flow T-Shirts**

TFS-P60S T-shirt, white, Small, each
TFS-P60M T-shirt, white, Medium, each
TFS-P60L T-shirt, white, Large, each
TFS-P60XL T-shirt, white, X-Large, each
TFS-P60XXL T-shirt, white, 3X-Large, each
TFS-P60XXXL T-shirt, white, 3X-Large, each

#### **Trick Flow Sweatshirts**

TFS-P70S Sweatshirt, white, Small, each TFS-P70M Sweatshirt, white, Medium, each TFS-P70L Sweatshirt, white, Large, each Sweatshirt, white, X-Large, each TFS-P70XL TFS-P70XXL Sweatshirt, white, 2X-Large, each TFS-P70XXXL Sweatshirt, white 3X-large, each TFS-P75S Sweatshirt, gray, Small, each TFS-P75M Sweatshirt, gray, Medium, each TFS-P75L Sweatshirt, gray, Large, each TFS-P75XL Sweatshirt, gray, X-Large, each TFS-P75XXL Sweatshirt, gray, 2X-Large, each TFS-P75XXXL Sweatshirt, gray, 3X-Large, each TFS-P80S Sweatshirt, black, Small, each TFS-P80M Sweatshirt, black, Medium, each TFS-P80L Sweatshirt, black, Large, each Sweatshirt, black, X-Large, each TFS-P80XL TFS-P80XXL Sweatshirt, black, 2X-Large, each TFS-P80XXXL Sweatshirt, black, 3X-Large, each

#### **Trick Flow Polo Shirts**

TFS-P90S Polo, black, Small, each TFS-P90M Polo, black, Medium, each TFS-P90L Polo, black, Large, each TFS-P90XL Polo, black, X-Large, each TFS-P90XXL Polo, black, 2X-Large, each TFS-P90XXXL Polo, black, 3X-Large, each TFS-P95S Polo, gray, Small, each TFS-P95M Polo, gray, Medium, each TFS-P95L Polo, gray, Large, each TFS-P95XL Polo, gray, X-Large, each TFS-P95XXL Polo, gray, 2X-Large, each TFS-P95XXXL Polo, gray, 3X-Large, each

# **Trick Flow Long Sleeve T-Shirts**

TFS-P50S Long sleeve T-shirt, gray, Small, each Long sleeve T-shirt, gray, Medium, each TFS-P50M TFS-P50L Long sleeve T-shirt, gray, Large, each TFS-P50XL Long sleeve T-shirt, gray, X-Large, each TFS-P50XXL Long sleeve T-shirt, gray, 2X-Large, each TFS-P50XXXL Long sleeve T-shirt, gray, 3X-Large, each TFS-P55S Long sleeve T-shirt, black, Small, each TFS-P55M Long sleeve T-shirt, black, Medium, each TFS-P55L Long sleeve T-shirt, black, Large, each TFS-P55XL Long sleeve T-shirt, black, X-Large, each TFS-P55XXL Long sleeve T-shirt, black, 2X-Large, each TFS-P55XXXL Long sleeve T-shirt, black, 3X-Large, each

#### Serious Horsenower T-Shirts

T-shirt, white, 1969 Chevy Camaro, 3X-Large, each TFS-P41000 TFS-P41002 T-shirt, white, 1969 Chevy Camaro, 2X-Large, each TFS-P41004 T-shirt, white, 1969 Chevy Camaro, X-Large, each TFS-P41006 T-shirt, white, 1969 Chevy Camaro, Large, each TFS-P41008 T-shirt, white, 1969 Chevy Camaro, Medium, each TFS-P41010 T-shirt, white, 1969 Chevy Camaro, Small, each TFS-P42000 T-shirt, white, 1993 Mustang Cobra, 3X-Large, each TFS-P42002 T-shirt, white, 1993 Mustang Cobra, 2X-Large, each TFS-P42004 T-shirt, white, 1993 Mustang Cobra, X-Large, each TFS-P42006 T-shirt, white, 1993 Mustang Cobra, Large, each TFS-P42008 T-shirt, white, 1993 Mustang Cobra, Medium, each TFS-P42010 T-shirt, white, 1993 Mustang Cobra, Small, each



#### Alabama

Bennett Racing (205) 486-5520 BennettRacing.com

#### Arizona

All Mustang Parts and Performance (602) 437-2727 AllMustang.com

Basko Engine Service (480) 967-1956

Desert Fox 4x4 (623) 931-8590 DesertFox4x4.com

K Dezine's (520) 885-6275 KDezines.com

Performance Distributing (602) 254-9586

Performance Solutions (602) 269-8955

#### Arkansas

Keith Craft Racing (870) 246-7460 KeithCraft.com

Kuntz and Company (870) 246-2595 KuntzandCompany.com

# **California**

Brothers Performance Warehouse—West 1-800-486-2681 BrothersPerformance.com

Coast High Performance (310) 784-1010 CoastHigh.com

Dante's Modular Performance (619) 474-8675 Dante's Modular Perf.com

Griggs Racing Products (707) 939-2244 GriggsRacing.com

GTR High Performance 1-888-447-6487 GTRHiPo.com

Hawaii Racing (805) 583-8880 HawaiiRacing.com

JBA Racing 1-888-522-5570 JBARacing.com

## California (cont.)

Muscle Motors Performance (818) 341-7223 MuscleMotors.com

NewTech Performance (510) 785-3278 NewTechPerformance.com

Nextgen Autosport (510) 538-8088 NextgenAutosport.com

Pacific Performance (714) 773-4177 PacificPerf.com

Pacifica Performance (951) 719-1521 PacificaPerformance.com

Probe Industries 1-866-718-6267 ProbeIndustries.com

RC Performance (714) 841-5391

The Racer's Edge (760) 586-5617 TREPerformance.com

Total Performance (619) 562-9894

#### Colorado

Blue Oval Performance Engineering (303) 762-8298

# Connecticut

Corvette Center (860) 953-2994 CorvetteCenter-CT.com

Mustangs Unlimited (860) 647-1965 MustangsUnlimited.com

# Delaware

Race Proven Motorsports (302) 798-4000 RaceProvenMotorsports.net

#### Florida

BMC Performance 1-877-262-7947 BMCPerformance.com

Brothers Performance Warehouse—East 1-800-486-2681 BrothersPerformance.com

## Florida (cont.)

Caveman Performance (305) 728-9335 CavemanPerformance.com

D&E Total Performance (386) 402-8996 DNETotal.com

Extreme Motorsports (561) 733-1169 ExtremeMotorsports.com

Ford Speed Racing (727) 549-8255 FordSpeedRacing.com

Gearhead Performance (727) 733-8590

JD'S Performance 1-888-217-0905

Lethal Injection (941) 694-0925

Lethal Performance 1-877-253-8425 LethalPerformance.com

MAK Performance 1-877-625-7223 MAKPerformance.com

Panhandle Performance (850) 265-9818 PanhandlePerformance.com

Prodigy Customs (407) 832-1752 ProdigyCustoms.com

Propower Performance Parts (954) 491-6988 ProPowerPerf.com

Racer Walsh Co. (904) 721-2289 RacerWalsh.com

Speedway of America (954) 415-0638

UPR Products (561) 588-6630 UPRProducts.com

XXX Performance (850) 457-3966

# Georgia

Engine Systems (770) 491-0583 EngineSystems.com

Grimes Automotive (770) 475-5272

#### Illinois (cont.)

Jon Kaase Racing Engines (770) 307-0241 JonKaaseRacingEngines.com

Purvis Performance (912) 512-6127

Summit Racing Equipment (770) 288-3200 1-800-230-3030 SummitRacing.com

Year One 1-800-932-7663 YearOne.com

## Idaho

TF Performance Solutions (208) 853-7223

#### Illinois

Anderson Ford Motorsport 1-888-715-6487 AndersonFordMotorsport.com

ASSC Racing (847) 473-4720

Automotive Engine Specialties (847) 956-1244 AESRacing.net

D.S.S. Racing (630) 587-1169 DSSRacing.com

Dyno Tune (647) 347-5331

Ford Strokers 1-877-723-5487 FordStrokers.com

J & M Street Stuff (630) 832-3773

Kurgan Motorsports (847) 877-8935 KurganMotorsports.com

Olson's Performance (630) 973-7798 OlsonsPerformance.com

P.E.R. Race Engines (815) 254-2333 Per-Race-Engines.com

Scott Lovell Performance (630) 922-1505

Speed Inc. 1-866-571-7733 SpeedInc.com

Straightline Performance (815) 485-7741 1320HP.com

## Indiana

BES Racing Engines (812) 576-2371

Cook Performance Engines (317) 697-6061 CPEEngines.com

House Racing Engines (812) 926-0019

Rhyne Competition Engines (219) 845-1218 RhyneCompetitionEngines.com

White's Pit Stop 1-888-856-7223 WPSRacing.com

Woody's Automotive Machine (765) 436-7047

## Kansas

Carlson Motors (620) 285-6340

#### Kentucky

B.F. Evans Ford (270) 278-2376 BFEvansFord.com

Bluegrass Performance Parts (270) 799-3513 BPP-KY.com

Philip Oakley's Automotive (270) 684-1069

#### Louisiana

A-1 Speed & Accessories (337) 334-0344

# Maryland

Bob's Automotive Speed (310) 785-1428 BobSpeed.com

Every Last Detail (410) 729-8418

JE Import Performance (410) 686-5111 JEImportPerformance.com

Justin's Performance (410) 768-3025

McKeown Motorsport Engineering (301) 932-9292 MMERacing.com

Mt. Airy Motors/Total Performance (301) 829-1500 TotalPerf.com





## Maryland (cont.)

Performance Specialties (410) 766-7774

Rockville Speed (301) 279-0070 RockvilleSpeed.com

Woodbine Motorsports (410) 259-8737

XLR8 Autosports (301) 845-2224

#### Massachusetts

Camco Racing Engines (781) 331-6763

Forte's Parts Connection (508) 875-0016

Mike Dez Racing (508) 336-6588

# Michigan

Advanced Airflow Engineering (586) 294-7915

Alternative Auto Performance (586) 949-7505 AlternativeAuto.com

Barnett High Performance (517) 719-5185 BarnettHighPerformance.com

Diversified Creations (810) 227-4777 DiversifiedCreations.com

Duratech (616) 443-7823

ET Performance (248) 668-9390 ETHeads.com

Great Lakes Weld Design (231) 943-4180 GreatLakesWeldDesign.com

Induction Dynamics Technology (810) 395-2779

Livernois Motorsports (313) 561-5500 DetroitSpeedShops.com

Motor State Distributing 1-800-772-2678 MotorState.com

Nelson's Performance (248) 683-9500

Performance Warehouse (734) 762-6050

## Michigan (cont.)

Victory Racing Parts (734) 762-7665

#### Minnesota

Modern Automotive Performance 1-888-627-3736 MAPerformance.com

Shanons Engineering (320) 274-5278 ShanonsRacing.com

## Mississippi

BB&T Racing (662) 280-7600 BBandTRacing.com

#### Missouri

Mid Coast Performance (636) 946-7223 MidCoastPerformance.com

Mustang Muscle (636) 677-9987 MustangMuscleOnline.com

Race Parts Direct (573) 517-7223 RacePartsDirect.com

Solus Motorsports (314) 303-5195

# Nebraska

Charlie's Speed & Machine (402) 426-9681

High Performance Motorsports (402) 731-7301

#### Nevada

Baker Cylinder Heads 1-800-564-1510 BakerCylinderHeads.com

Dyno-Flo (702) 567-3035 DynoFlo.com

Shelby Automobiles (702) 942-7325 ShelbyAutos.com

Summit Racing Equipment (775) 352-8787 1-800-230-3030 SummitRacing.com

# New Hampshire

5.0 Pro Shop (603) 579-9741

# New Hampshire (cont.)

Golen Engine Service 1-800-591-9171 GolenEngineService.com

# New Jersey

Ceralli Competition Engines (973) 742-4972

East Coast Supercharging (609) 752-0321 EastCoastSupercharging.com

Haddon Services (856) 881-7870

JDM Engineering (732) 780-0770 TeamJDM.com

Jersey Cylinder Head (856) 589-5658

Tune Time Performance (732) 349-7800 TuneTimePerformance.com

Valley Performance (973) 751-7505

#### New York

B&B Automotive Machine Shop (516) 599-7182 BBAutoMachine.com

BTR Performance (585) 303-7560 BTRPerformance.com

GTP Racing (450) 449-4947 RaceShop2000.com

Mustang Warehouse (585) 226-6450

New Era Performance Parts (585) 865-1832 NewEraPerformanceParts.com

# North Carolina

Advanced Induction (704) 793-1440 AdvancedInduction.com

Holcomb Motorsports 1-800-475-7223 HolcombMotorsports.com

MBE (704) 662-7901 MBellC.com

My Mechanic (919) 467-8668 MyMechanicOnline.com

# North Carolina (cont.)

Olthoff Racing (704) 647-9924 OlthoffRacing.com

Power Adder Solutions (919) 744-5245 PowerAdderSolutions.com

RoushYates Performance Parts 1-877-798-7977 RoushYatesParts.com

RPM (919) 661-7947

# Ohio

Auvil's Sales and Service (330) 452-6242

Box Performance (440) 892-0282 BoxPerformance.com

Chassis by Sidor (330) 725-5349

Cincy Speed (513) 821-2221 CincySpeed.com

Dave's Total Performance (513) 831-6000 DaveTotalPerformance.com

Dayton Performance Motorsports (937) 396-2946 Dayton50Perf.com

Fox Lake Power Products (330) 682-8800 FoxLakeRacing.com

Jerry's Speed Shop (419) 382-6255

Mallett Cars (440) 243-8550 MallettCars.com

Paul's Automotive (513) 791-1087 PaulsAutomotiveEngineering.com

Performance Research (614) 475-8300 PRIRacingEngines.com

Part Time Performance 1-877-566-7223 PTPRacingOnline.com

Street Dreams Rod and Custom (740) 264-4785 StreetDreamsRodandCustom.com

## Ohio (cont.)

Summit Racing Equipment (330) 630-0250 1-800-230-3030 SummitRacing.com

Total Engine Airflow (330) 634-2155 TotalEngineAirflow.com

Van Horne Racing Motorsports (614) 679-5682 VanHorneRacing.com

Victory Engines (216) 251-7157 VictoryEngines.com

# Oregon

Portland Speed Industries (503) 431-1395 TunedbyPSI.com

# Pennsylvania

Budz Motorsports (610) 275-1908

CJ Pony Parts 1-800-888-6473 CJPonyParts.com

Harris Speed Works (610) 534-1004 HarrisSpeedWorks.com

L&M Engines (215) 675-8485 LMEngines.com

McNews Automotive (717) 432-9503 McNewsAutomotive.com

MCRP (610) 559-8656

Rapid Motorsports (610) 404-7979 RapidMotorsports.com

Tillman Speed (610) 497-5776 ShopTillman.com

# Rhode Island

Creb Engineering (401) 568-3426

The Speed Shop (401) 658-0700

# South Carolina

Association of Speed (803) 760-9439



# South Carolina (cont.)

C&C Speed Shop (803) 719-3851 CandCSpeedShop.com

East Coast Performance Corvette (864) 404-1776 EastCoastPerformance.net

Hawks Third Generation (864) 855-2694 HawksThirdGenParts.com

Palmetto Pony Parts (803) 532-8181 PalmettoPonySales.com

Unique Tuning (843) 208-3724 UniqueTuning.net

## Tennessee

In-Tune Motorsports (423) 336-5850

Nickel's Performance 1-800-251-0331 NickelsPerformance.com

Performance Technologies (423) 479-3232

Straub Tech (423) 854-0007

#### Texas

Allen Motorsports (214) 391-7562

C & S Performance (972) 578-3550 CandSPerformance.com

Dallas Export Sales (214) 350-4979

Elliott's Port Works (972) 617-5671 ElliottsPortWorks.com

H.P.W. (972) 271-3900 HPWTX.com

HK Enterprises (713) 722-7000 HKRacingEngines.com

Houston Performance (281) 893-6080 HoustonPerformance.com

Kotzur Racing Heads (210) 590-1540 KotzurRacing.qpg.com

Late Model Engines (713) 849-4505 LateModelEngines.com

## Texas (cont.)

Laternodel Restoration Supply (254) 662-1714 50Resto.com

Mark Racing Engines (903) 612-4300

Owens Racing Engines (281) 485-5257

Parks Engine Service 1-800-371-4563 ParksEngineService.com

Paschal Performance (979) 865-0231 PaschalPerformance.com

Rusert Machine Shop (432) 684-7644 RusertMachine.com

Scoggin-Dickey Parts Center 1-800-456-0211 SDParts.com

Strictly Performance (713) 910-0111 StrictlyPro.com

Texas Hot Rods (915) 593-6225

White's Performance (940) 886-7137 WhitesPerformance.net

# Virginia

EB3 Motorsports (703) 378-4040 EB3Motorsports.com

Holeshot Performance (757) 361-0496

Kowalsky Machine (434) 821-6107 KowalskyMachine.com

Steen Racing (757) 480-7223

# Washington

Blue Oval Performance Products (360) 993-1745 BlueOvalPerformance.net

Brad's Custom Auto (206) 367-1471 BradsCustomAuto.com

# Washington (cont.)

Oregon Cam Grinding (360) 256-7985

Wide Open Performance (360) 695-9433

## West Virginia

Trick Trucks (304) 263-9400

#### Wisconsin

Beyond Redline Performance (920) 498-1223 BeyondRedline.com

Westech Automotive (262) 889-4346 WestechAuto.com

#### Wyoming

Mountain Legacy (307) 455-3265

#### International

#### Australia

Cromer Motors, NSW 02 5 9982 7317

High Performance World, NSW 61 2 9630 2333 HighPerformanceWorld.com.au

VPW, Victoria 61 38405 9209 VPW.com.au

# Bahrain

Hot Rod Auto Parts 97339656517

## Brazil

ODG Auto Acessorios 31 33633676

# Canada

Canadian Auto Stop, BC (604) 524-0544

Canadian Performance Depot, ON (519) 756-8906

Cushman MotorSports, ON (519) 245-1164

DaSilva Racing, ON (905) 837-7700 MustangToyStore.com

D'Sousa Performance, ON (905) 878-7095 DSousaPerformance.com

Lentech Automatics, ON (613) 838-5390 LentechAutomatics.com

# Canada (cont.)

Mopac Auto Supply— Calgary, AB (403) 277-0101 MopacAutoSupply.com

Mopac Auto Supply— Edmonton, AB (780) 486-6900 MopacAutoSupply.com

Mopac Auto Supply, BC 1-800-667-6677 MopacAutoSupply.com

Mustang Revolution, QC (450) 531-9090 MustangRevolution.ca

Performance Plus Distributors, SK 1-800-943-3003

# Canada (cont.)

The Mustang Shop, AB 1-888-707-0774 TheMustangShop.ca

TYA Performance, AB (780) 446-3466

TYA Performance, BC (604) 539-9577

Western Motorsports, AB (403) 243-6205 WMSRacing.com

## Finland

Tuumacid 040 5606 254 Tuumacid.com

#### Kuwait

Hi Speed 009 6524 341 582

#### Mexico

Nitro Shop 01 (33) 36473737 NitroShop.com.mx

#### Netherlands

Speed Shop Holland 31 06-45734661 SpeedShopHolland.com





Phone: 1-330-630-1555 • Fax: 1-330-633-2504 • TrickFlow.com

# Trick Flow Cylinder Heads are on NHRA Pro Stock Racer Jason Line's 812 HP 1968 Biscayne!

Following a race in 2009, Summit Racing Equipment Pro Stock driver Jason Line bought a 1968 Chevy Biscayne station wagon. The plan was to build the ultimate grocery getter—a car capable of hauling the family to the store and you-know-what at the track.

Powering his car is a custom 557 cubic inch Chevy big block topped with a modified set of Trick Flow PowerPort® 360 cylinder heads, a port-matched Trick Flow R-Series single plane intake manifold, and Trick Flow fabricated aluminum valve covers. The 557 exceeded





Jason had this to say about the PowerPort 360 heads:

"The Trick Flow PowerPort 360 heads are probably the nicest casting from an aftermarket manufacturer I have seen. Out of the box, without any modifications, they're great cylinder heads."

# **Trick Flow Warranty**

Trick Flow Specialties warrants each product to be free of defects in both materials and workmanship for a period of 90 days from date of purchase, except for assembled street high performance cylinder heads, which are warranted for one year. The warranty is effective only when the product is properly installed, subjected to normal use and service, does not fail due to negligence, and is not modified, altered, or used for racing or competition purposes in

Customers who believe they have a defective product should either return it to the dealer from which it was purchased or ship it freight prepaid to Trick Flow along with proof of purchase and a complete description of the problem. If a thorough inspection indicates defects in materials or workmanship, our sole obligation shall be to repair or replace the product. The warranty does not cover any installation or removal costs.

Trick Flow Specialties shall not be liable for any or all consequential damages occasioned by the breach of any written or implied warranty pertaining to the sale of its products in excess of the purchase price of the product sold.

#### **About Emissions-Legal Parts**

Some Trick Flow parts are emissions-legal for use in all 50 states and are designated as such with a "50-State-Legal" symbol. These parts have either been granted a California Air Resources Board (CARB) E.O. number or are considered a direct replacement part.

Parts that do not have this symbol are not emissions-certified, are for racing or off-road use only, and cannot be used on vehicles that operate on public highways.



