Trick Flow Specialties’ reputation was earned by creating, engineering, and manufacturing budget-friendly cylinder heads that deliver phenomenal out-of-the-box performance. This devotion has fueled more than 30 years of Trick Flow’s trademark innovation.

It all starts at Trick Flow’s corporate headquarters in Tallmadge, Ohio. Trick Flow engineers design new ports, change valve angles, relocate combustion chambers, and try new spark plug locations to find more usable horsepower and torque. Trick Flow’s in-house pattern makers build the foundry tooling to make the heads. Trick Flow works carefully to verify that its castings meet stringent quality standards before they are machined on-site using the latest in advanced multi-axis CNC-machining equipment. The heads are then assembled with top-quality components by experienced personnel.

Specialists using Trick Flow’s SuperFlow engine dynamometers perform extensive durability and performance analysis before approving the heads for road and track testing. Once Trick Flow is confident that the heads will exceed customers’ expectations, they are boxed and shipped to authorized dealers.

This catalog is full of cylinder heads, intake manifolds, and other parts that are engineered, cast, machined, assembled, durability tested, and dyno proven to provide you with Ultimate Bolt-On Performance!

“Emissions-Legal” Explained

The California Air Resources Board (CARB) prohibits the sale or use of parts that will modify or defeat emissions systems in any 1966 and newer vehicle. This excludes true replacement parts and those granted an exemption (E.O. #) by the California Air Resources Board. Where possible, we list the CARB E.O. # for parts granted one. Look for the CARB E.O. # to choose the right parts for emissions-legal performance. Please call 1-330-630-1555 for further guidance.

WARNING

Proposition 65 Compliance Statement: It is the responsibility of Trick Flow to warn its customers and employees that some products sold in this catalog contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.
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.

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- Track Heat® Intake Manifolds
- Cylinder Head Bolt Kit
- Cylinder Head Stud Kit
- MLS Exhaust Gaskets
- Valve Springs
- Hydraulic Refit Roller Lifters
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- Valve Stem Guides
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- Track Max® Camshafts
- True Pro Camshaft and Valve Spring Upgrade Kits
- Cylinder Head and Camshaft Installation DVD
- Valve Cover-Mount Ignition Systems
- Cast Aluminum Valve Cover Kits
- Folding Chain
- Replacement Valvetrain Components
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- Valve Spring Change Accessory Kit
- Valve Spring Compressor
- Cylinder Head Bolt Kit
- Cam Degree and Gasket Kits and Accessories
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- Twisted Wedge Top-End Engine Kits
- EFI Intake Manifolds
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- TX™ Nitrous Systems for EFI Manifolds
- Carburator and Carb-Style Intake Manifolds
- Gaskets and Gasket Sets
- Header Flanges
- Cylinder Head Bolt Kit
- Track Max® Camshafts
- Roller Rocker Arms
- Valve Spring Upgrade Kits
- True Roller Timing Chain Set
- Rocker Stud Girdles
- Main Stud Girdles
- Valve Covers
- Trick Flow by Wiseco Twisted Wedge Forged Pistons
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- Header Spark Plug Socket
- Chrome Engine Accessories
- Steam Line Fittings and Plumbing Kits
- Engine Priming Pump Kit
- Cylinder Head Porting Tools
- Cylinder Head Work Stands
- Engine Oil Supplement

Ultimate Bolt-On Performance® Lifetime Warranty
Trick Flow Specialties guarantees original, unmodified cylinder head castings against manufacturing defects. Trick Flow’s liability is limited to replacing the casting. The valves, valve guides, valve seats, valve job, valve springs, valve spring retainers, valve locks, rocker arm studs, guide plates, and valve stem seals included on assembled Trick Flow Specialties cylinder heads are warranted to the original purchaser to be free from defects in materials and workmanship for a period of two years from the date of purchase. All other Trick Flow Specialties products are warranted to be free from defects in materials and workmanship for a period of 90 days. There are no mileage limitations.

Visit TrickFlow.com for complete details.
What makes PowerPort heads for big block Mopar so great? For starters, they’re made from A356-T61 aluminum, so they weigh much less than cast iron heads. Then there’s the relocated rocker shaft oil holes that allowed Trick Flow engineers to optimize the shape of the runners to increase flow velocity and add much needed strength to the shaft bosses. Other vital improvements include clearance for 3/8” pushrods, ductile iron valve seats, bronze alloy valve guides, and multi-angle valve seats.

PowerPort heads for big block Mopar come in two flavors: PowerPort 240 and PowerPort 270. The PowerPort 240 heads are for mild-to-moderate performance applications using regular intake manifolds and feature CNC Street Ported intake runners with a standard resolution surface finish. The PowerPort 270 heads feature larger, raised Max Wedge-style intake runners for improved airflow. They’re topped with the high resolution CNC Competition Ported surface finish that guarantees balanced flow for maximum power potential.

Trick Flow designed the PowerPort heads to use all factory-style big block Mopar pistons, roller rocker arms, and headers.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Specifications

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** 78cc CNC-profiled
- **Intake Port Volume:**
  - PowerPort 240: 240cc CNC Street Ported
  - PowerPort 270: 270cc CNC Competition Ported
- **Intake Port Location:**
  - PowerPort 240: Stock
  - PowerPort 270:
    - C01: Raised Max Wedge-style
- **Intake Port Dimensions:**
  - PowerPort 240: 2.270” x 1.230”
  - PowerPort 270:
    - C01: 2.630” x 1.340”
- **Intake Gaskets:**
  - PowerPort 240: Fel-Pro 1216 (gaskets only)
  - PowerPort 270:
    - C01: Fel-Pro 1218 (gaskets only)
- **Valley Pan Gasket Sets:**
  - Performance: 361-400: Fel-Pro 1214
  - Race: 413-440: Fel-Pro 1215
- **Intake Valve Diameter:**
  - PowerPort 240: 1.760” (TFS-61600212)
- **Intake Valve Seat:**
  - PowerPort 240: Ductile iron (TFS-53400271)
  - PowerPort 270: 74cc CNC Street Ported
- **Exhaust Port Volume:**
  - PowerPort 240: 74cc CNC Competition Ported
  - PowerPort 270: Stock
- **Exhaust Port Location:**
  - PowerPort 240: Stock
  - PowerPort 270:
    - C01: Stock
    - C02: 1.250” x 1.650” oval
- **Exhaust Gaskets:**
  - PowerPort 240: Fel-Pro 1414
  - PowerPort 270:
    - C01: Fel-Pro 1418
    - C02: Fel-Pro 1415
- **Valve Angles:**
  - PowerPort 240: 15°
  - PowerPort 270:
    - C01: 15°
    - C02: 18°
- **Valve Guides:**
  - PowerPort 240: Bronze alloy (intake TFS-51600251, exhaust TFS-61600251)
  - PowerPort 270:
    - C01: Bronze alloy (intake TFS-51600251, exhaust TFS-61600251)
    - C02: Bronze alloy (intake TFS-51600251, exhaust TFS-61600251)
- **Valve Springs, Standard:**
  - PowerPort 240:
    - C01: 1.550” x .060” (TFS-21400440)
  - PowerPort 270:
    - C01: 1.550” x .060” (TFS-21400440)
    - C02: 1.460” o.d. dual spring with damper (TFS-61893-16)
- **Valve Stem Locks:**
  - PowerPort 240: Ductile iron (TFS-51400444)
  - PowerPort 270:
    - C01: Ductile iron (TFS-51400444)
    - C02: Ductile iron (TFS-51400444)
- **Valve Springs, Option 1:**
  - PowerPort 240:
    - C01: 1.550” o.d. dual spring (TFS-16094-16)
  - PowerPort 270:
    - C01: 1.550” o.d. dual spring (TFS-16094-16)
    - C02: 1.550” o.d. dual spring (TFS-16094-16)
- **Valve Springs, Option 2:**
  - PowerPort 240:
    - C01: 1.550” o.d. dual spring (TFS-16318-16)
  - PowerPort 270:
    - C01: 1.550” o.d. dual spring (TFS-16318-16)
    - C02: 1.550” o.d. dual spring (TFS-16318-16)

### Airflow Results

#### PowerPort 240

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>72</td>
<td>58</td>
</tr>
<tr>
<td>.200”</td>
<td>154</td>
<td>130</td>
</tr>
<tr>
<td>.300”</td>
<td>230</td>
<td>186</td>
</tr>
<tr>
<td>.400”</td>
<td>282</td>
<td>222</td>
</tr>
<tr>
<td>.500”</td>
<td>310</td>
<td>243</td>
</tr>
<tr>
<td>.600”</td>
<td>326</td>
<td>253</td>
</tr>
<tr>
<td>.700”</td>
<td>334</td>
<td>262</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size: 4.350”, exhaust with 2° pipe.

### Notes

- Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
- For starters, they’re made from A356-T61 aluminum, so they weigh much less than cast iron heads.
- V-Bevel end cut and intake port locations are designed for maximum flow and durability.
- Standard port dimensions are 2.270” x 1.230” for mild to moderate performance applications.
- PowerPort 270 heads feature larger, raised Max Wedge-style intake runners for improved airflow.
- They’re topped with the high resolution CNC Competition Ported surface finish that guarantees balanced flow for maximum power potential.
- Trick Flow designed the PowerPort heads to use all factory-style big block Mopar pistons, roller rocker arms, and headers.
- Cylinder heads are available fully assembled or as bare castings. Sold individually.
PowerPort® Top-End Engine Kit for Big Block Mopar 440

Save cash and take the guesswork out of designing a winning engine combination with this Trick Flow PowerPort top-end engine kit. Carefully tuned by Trick Flow engineers to deliver optimum horsepower and torque on a big block Mopar, this kit is built around a set of dyno-proven PowerPort 240 cylinder heads (TFS-61617802-C00). Also included is a Track Max hydraulic roller camshaft (TFS-61602003), a Track Heat intake manifold (TFS-61600113), 1.5 ratio roller rocker arms with shafts and hold-down bolts, MLS head gaskets (TFS-61694380-051), a cylinder head bolt kit (TFS-92025), and an intake gasket set with valley pan. For Chrysler 440-based engines only.

NOTE: Fits Trick Flow PowerPort 240 and 270 cylinder heads; port matching recommended when used with PowerPort 270 heads.

TFS-61600111 Manifold, 383/400, each
TFS-61600113 Manifold, 440, each

Dyno Results
PowerPort 240 Cylinder Heads and Top-End Engine Kit

Test Engine: 10.5:1 compression 446 c.i.d. with Trick Flow PowerPort® 240 cylinder heads (TFS-61617802-C00), Trick Flow Track Max™ hydraulic roller camshaft (TFS-61602003), 1.5 ratio roller rocker arms, Trick Flow Track Heat® intake manifold (TFS-61600113), Trick Flow Track Heat Pro 850 cfm carburetor (TFS-20950R), Hooker Super Competition headers with 1½" primaries, open exhaust.

- 620 HP/576 lbs.-ft., each

Cylinder Head Bolt Kit for Big Block Mopar

Keep combustion where it belongs! Trick Flow’s high-quality cylinder head bolt kit provides 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-92025 Cylinder head bolt kit, hex head, each

Cylinder Head Stud Kit for Big Block Mopar

Keep your cylinder heads mounted securely in high compression, high-boost applications! Trick Flow’s cylinder head stud kit features precision centerless-ground studs thread-rolled to Mil-S-8879 specs. The studs’ black oxide finish protects them from wear and corrosion, and hardened parallel washers are included for uniform load distribution and accurate torque readings. The kit contains enough studs and washers to install one pair of cylinder heads.

TFS-61604304 Cylinder head stud kit, hex head, each

Track Flow by Cometic MLS Exhaust Gaskets for Big Block Mopar

These superior quality exhaust gaskets from Trick Flow and Cometic offer better torque retention and less distortion compared to conventional exhaust gaskets.

The gaskets are constructed from multiple layers of stainless steel for outstanding corrosion resistance and will not burn through or push out, even under extreme cylinder pressures. No seals are required for installation; gaskets are .030" thick.

TFS-61690931 MLS exhaust gaskets, big block Mopar, 1.460" x 1.780" rectangular port shape, pair

Trick Flow by Cometic MLS Head Gaskets for Big Block Mopar

Sealing aftermarket cylinder heads to an engine can be tough. The best method we’ve found is to use these multi-layer steel head gaskets from Trick Flow and Cometic. With three layers of stainless steel, these gaskets offer better sealing, less distortion, and better torque retention versus conventional or composite head gaskets—especially in high horsepower, high cylinder-pressure applications.

TFS-61694350-040 MLS head gasket, 4.350" bore, .040" thick, each
TFS-61694350-051 MLS head gasket, 4.350" bore, .051" thick, each
TFS-61694380-040 MLS head gasket, 4.380" bore, .040" thick, each
TFS-61694380-051 MLS head gasket, 4.380" bore, .051" thick, each
TFS-61694500-040 MLS head gasket, 4.500" bore, .040" thick, each
TFS-61694500-051 MLS head gasket, 4.500" bore, .051" thick, each

Cylinder Head Bolt Kit for Big Block Mopar

Keep combustion where it belongs! Trick Flow's high-quality cylinder head bolt kit provides 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-92025 Cylinder head bolt kit, hex head, each

Cylinder Head Stud Kit for Big Block Mopar

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TFS-61694350-040 MLS head gasket, 4.350" bore, .040" thick, each
TFS-61694350-051 MLS head gasket, 4.350" bore, .051" thick, each
TFS-61694380-040 MLS head gasket, 4.380" bore, .040" thick, each
TFS-61694380-051 MLS head gasket, 4.380" bore, .051" thick, each
TFS-61694500-040 MLS head gasket, 4.500" bore, .040" thick, each
TFS-61694500-051 MLS head gasket, 4.500" bore, .051" thick, each

Dyvno Results
PowerPort 240 Cylinder Heads and Top-End Engine Kit

Test Engine: 10.5:1 compression 446 c.i.d. with Trick Flow PowerPort® 240 cylinder heads (TFS-61617802-C00), Trick Flow Track Max™ hydraulic roller camshaft (TFS-61602003), 1.5 ratio roller rocker arms, Trick Flow Track Heat® intake manifold (TFS-61600113), Trick Flow Track Heat Pro 850 cfm carburetor (TFS-20950R), Hooker Super Competition headers with 1½" primaries, open exhaust.
Camshaft • Roller Lifters • Valley Plate Kits • Harmonic Dampers • Valve Covers • Camshaft Installation Handle • Transmission Pan for Big Block Mopar

Track Max® Hydraulic Roller Camshaft for Big Block Mopar
Get significant horsepower and torque increases with Trick Flow's Track Max camshaft. It is dyno-proven to produce a wide power curve over the entire RPM range, not just at a particular RPM point or peak. The cam is cut from a premium blank core and checked for proper hardness before being precision ground to exact tolerances.

Camshaft Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050°</th>
<th>Valve Lift w/1.5 Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-61602003</td>
<td>Lumpy idle, good midrange to strong top-end power, 3,000-6,500 RPM powerband. Stall converter recommended. Compression: 10:1 minimum. With 3-bolt gear attachment.</td>
<td>243°/247°</td>
<td>.600°/.600°</td>
<td>108°</td>
</tr>
</tbody>
</table>

Hydraulic Retro-Fit Roller Lifters
Trick Flow hydraulic retro-fit roller lifters are designed for roller camshaft conversions in engines originally equipped with hydraulic flat tappet cams. These affordable lifters are manufactured to factory tolerances for an exact fit and to provide precise oil control to keep your engine running smoothly. Special length pushrods may be required.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>LOGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-21400010</td>
<td>Lifters, 273-360, set of 16</td>
<td>TFS-21400011</td>
</tr>
<tr>
<td>TFS-21400011</td>
<td>Lifters, 383-440, set of 16</td>
<td>TFS-21400012</td>
</tr>
</tbody>
</table>

Valley Plate Kits for Big Block Mopar
These Trick Flow valley plate kits are just the ticket for racers and performance enthusiasts that need fast access to the lifter valley or want to swap in a new cam without removing the cylinder heads. Made from high-strength 6061-T6 billet aluminum to eliminate leaks and withstand bending under extreme engine temperatures. Hardware included.

NOTE: For use with Trick Flow PowerPort 270 cylinder heads only. Not recommended for Trick Flow PowerPort 240 or factory big block Mopar cylinder heads.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>LOGO</th>
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</thead>
<tbody>
<tr>
<td>TFS-61600820</td>
<td>Valley plate kit, 383/400, each</td>
<td>TFS-61600830</td>
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<tr>
<td>TFS-61600830</td>
<td>Valley plate kit, 440, each</td>
<td>TFS-61600840</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>LOGO</th>
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<tr>
<td>TFS-19010</td>
<td>Damper, Chrysler 273-360, internal balance, each</td>
<td>TFS-19011</td>
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<tr>
<td>TFS-19011</td>
<td>Damper, Chrysler 318-360, external balance, each</td>
<td>TFS-19012</td>
</tr>
<tr>
<td>TFS-19012</td>
<td>Damper, Chrysler 383-440, neutral balance, each</td>
<td>TFS-19013</td>
</tr>
</tbody>
</table>

Cast Aluminum Valve Covers for Big Block Mopar
Trick Flow cast aluminum valve covers for big block Mopar are made from durable A319 aluminum, which is much less prone to flex and distortion than stamped steel covers to prevent oil leaks. The covers clear most roller rocker arms, have added clearance for the distributor, and can be drilled to accept breather.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>LOGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-61600802</td>
<td>Valve covers, silver, pair</td>
<td>TFS-61601802</td>
</tr>
<tr>
<td>TFS-61601802</td>
<td>Valve covers, black, pair</td>
<td>TFS-61608802</td>
</tr>
<tr>
<td>TFS-61608802</td>
<td>Valve covers, natural, pair</td>
<td>TFS-61609902</td>
</tr>
</tbody>
</table>

Camshaft Installation Handle
Trick Flow's patented 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.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>LOGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-90150</td>
<td>Camshaft installation handle, each</td>
<td>TFS-90160</td>
</tr>
</tbody>
</table>

Transmision Pan
Trick Flow transmission pans is made from A319 cast aluminum. It holds between one to three extra quarts of fluid (depending on application) and is finned to help the transmission dissipate heat faster for maximum efficiency. The pan comes complete with mounting bolts, drain plug, filter extension, and a new gasket (where applicable).

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>LOGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-1009</td>
<td>Transmission pan kit, Chrysler A-727 Torqueflite, each</td>
<td>TFS-1010</td>
</tr>
</tbody>
</table>

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
PowerPort® 190 Cylinder Heads

for Small Block Mopar

PowerPort 190 cylinder heads fit all non-emissions Chrysler 318, 340, and 360 engines, including both the LA and Magnum-series, giving builders a truly ‘best of both worlds’ scenario.

Like all of Trick Flow’s top-quality cylinder heads, the PowerPort 190 heads are made from A356-T61 aluminum because it’s much lighter but still every bit as strong as cast iron. The intake runners have been enhanced to increase airflow, and both intake and exhaust runners feature Trick Flow’s special CNC Street Ported treatment that combines premium quality CNC-machining with a standard resolution finish that’s perfect for making more power.

That’s not all. Newly designed rocker arm shaft mounting bosses are stronger than the OE design, and larger diameter pushrod holes have been incorporated to accommodate 3/8” pushrods for use with flat tappet and hydraulic roller camshafts. Bronze alloy valve guides, ductile iron valve seats, and multi-angle valve seats further increase performance and durability. Assembled cylinder heads include premium 11/32” stainless steel valves, Trick Flow by PAC Racing valve springs, steel valve stem locks, and have chromoly and titanium retainer options.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>66</td>
<td>54</td>
</tr>
<tr>
<td>.200”</td>
<td>134</td>
<td>121</td>
</tr>
<tr>
<td>.300”</td>
<td>200</td>
<td>181</td>
</tr>
<tr>
<td>.400”</td>
<td>248</td>
<td>213</td>
</tr>
<tr>
<td>.500”</td>
<td>281</td>
<td>231</td>
</tr>
<tr>
<td>.600”</td>
<td>293</td>
<td>237</td>
</tr>
<tr>
<td>.700”</td>
<td>301</td>
<td>240</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size: 4.000”; exhaust with 1½” pipe.

Dyno Results

<table>
<thead>
<tr>
<th>RPM x 1,000</th>
<th>Horsepower</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5</td>
<td>460 Lbs.-Ft.</td>
<td>475 HP</td>
</tr>
<tr>
<td>4.0</td>
<td>440</td>
<td>465</td>
</tr>
<tr>
<td>4.5</td>
<td>420</td>
<td>455</td>
</tr>
<tr>
<td>5.0</td>
<td>400</td>
<td>445</td>
</tr>
<tr>
<td>5.5</td>
<td>380</td>
<td>435</td>
</tr>
<tr>
<td>6.0</td>
<td>360</td>
<td>425</td>
</tr>
</tbody>
</table>

PowerPort 190 Heads, CNC Street Ported Runners, Assembled

TFS-61417801-C00 1.460” dual valve springs, 190cc intake runners
TFS-61417802-C00 1.550” dual valve springs, 190cc intake runners
TFS-61417873-C00 1.550” dual valve springs and titanium retainers, 190cc intake runners
TFS-61417784-C00 1.560” dual valve springs and titanium retainers, 190cc intake runners

Track Heat® Intake Manifold for Small Block Mopar

Hot on the heels of Trick Flow’s new PowerPort 190 cylinder heads for small block Mopar is this matching single plane Track Heat® intake manifold. Perfect for all 273-360 Mopar LA V8 engines making peak power in the 3,000-7,000 RPM range, the manifold is precision CNC-machined from A319 aluminum. It features a one-piece spider-type design with extended high-flow runners and a raised plenum floor to significantly increase horsepower and torque. Trick Flow also engineered it in bosses for nitrous nozzles and provided extra material for custom port work. The manifold works with all 4150-style square bore carburetors and has a carb mounting pad height of 5.125”.

TFS-61400111 Manifold, each
Trick Flow’s GenX 260 square port cylinder heads for GM LS7 meet the needs of enthusiasts using LS-based engine blocks with a 4.100” or larger bore diameter. To improve the factory design, Trick Flow added more material to the A356-T61 aluminum castings for increased rigidity and strength. Then Trick Flow improved the valve train system by integrating one-piece modular, 2024-T4 billet aluminum rocker arm mounts that are removable for high-end shaft rocker setups. CNC Competition Ported runners with a premium high resolution surface finish provide all-out air flow.

Other major improvements include 6-bolt per cylinder clamping for GMPP LSX and other aftermarket engine blocks (some models), clearance for 3/8” pushrods, through-deck coolant holes to fit all GM LS engine block and cylinder locations, and powdered-metal valve guides.

The GenX 260 heads work with all LS7-style intake manifolds. The heads maintain the factory intake and exhaust port locations, valve angles, and valve locations to work with LS7-based pistons.

GenX 260 heads are emissions-legal under CARB E.O. #D-747 for 2006-present GM vehicles with 7.0L engines. Cylinder heads are available fully assembled or as bare castings. Sold individually.

**Specs**

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** 70cc CNC-profiled
- **Intake Port Volume:** 260cc CNC Competition Ported
- **Intake Port Location:** Stock LS7
- **Intake Port Dimensions:** 2.400” x 1.370” LS7 square port
- **Intake Gaskets:** GM 89017852
- **Intake Valve Diameter:** 2.200” (TFS-32700211)
- **Intake Valve Seat:** Ductile iron (TFS-53400271)
- **Exhaust Port Volume:** 87cc CNC Competition Ported
- **Exhaust Port Location:** Stock LS7
- **Exhaust Port Dimensions:** 1.460” x 1.700” oval
- **Exhaust Gaskets:** GM 12582179
- **Exhaust Valve Diameter:** 1.600” (TFS-32600212)
- **Exhaust Valve Seat:** Ductile iron (TFS-30600274)
- **Valve Angles:** 12°
- **Valve Guide Material:** Trick-Alloy powdered metal (TFS-30700252)
- **Valve Seals:** Viton® fluoroelastomer canister (TFS-30600455)
- **Valve Seat Angles:** 45° x multi-angle
- **Valve Spring Pocket Diameter:** 1.480”
- **Valve Spring ID Locations:** 1.300” (TFS-21400443)
- **Valve Spring Retainers:** Steel (TFS-21400410); titanium (TFS-2140415)
- **Valve Stem Locks:** 7” steel (TFS-30600444)
- **Valve Springs, Standard:** 1.300” o.d. dual spring (TFS-16904-16)
  - 150 lbs. @ 1.800” installed height
  - 400 lbs. @ 1.200” open
  - 370 lbs. per inch rate
  - .625” max. valve lift
- **Valve Springs, Optional:** 1.300” o.d. dual spring (TFS-16306-16)
  - 155 lbs. @ 1.820” installed height
  - 465 lbs. @ 1.200” open
  - 448 lbs. per inch rate
  - .650” max. valve lift
- **Rocker Arms:** OEM LS7 with upgraded bearings or roller rocker arms
- **Minimum Bore Diameter:** 4.100”
- **Cylinder Head Bolts/Studs:** TFS-92010 (bolts) or ARP 234-4316
  - (studs) for pre-2004; TFS-92011 (bolts) or ARP 234-4317
  - (studs) for 2004 and later
- **Head Gaskets, C01 Standard:** TFS-30694160-045 or TFS-30694160-051
  - TFS-30697185L051 and TFS-30697185R051 or TFS-30694185L051 and TFS-30694185R051
- **Pushrod Length:** Longer than stock required

Tests conducted at 28” of water (pressure). Bore size: 4.125”; exhaust with 2” pipe.

**Airflow Results**

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100</td>
<td>71</td>
<td>58</td>
</tr>
<tr>
<td>.200</td>
<td>148</td>
<td>113</td>
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<tr>
<td>.300</td>
<td>233</td>
<td>168</td>
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<tr>
<td>.400</td>
<td>296</td>
<td>212</td>
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<tr>
<td>.500</td>
<td>340</td>
<td>237</td>
</tr>
<tr>
<td>.600</td>
<td>375</td>
<td>249</td>
</tr>
<tr>
<td>.700</td>
<td>393</td>
<td>254</td>
</tr>
</tbody>
</table>

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.

**Cylinder Head Bolt Kits 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.

- TFS-92010 Cylinder head bolt kit, pre-2004 long-style, torque-to-yield, each
- TFS-92011 Cylinder head bolt kit, 2004 and later short-style, torque-to-yield, each
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; include gaskets and mounting hardware.

TFS-3060800  Valve cover spacers, pair

Test Engine: GM 6.2L LS3 short block with 10.4:1 compression, Trick Flow GenX® 255 square port cylinder heads (TFS-3261002-C01), Trick Flow Track Max® hydraulic roller cam (TFS-3260003), stock LS9 intake with 90mm throttle body, Kooks headers with 1 7/8" primaries, and dual exhaust with 3" Flowmaster mufflers.

GenX 255 Square Port Cylinder Heads for GM LS3

Trick Flow engineers combined the best features of GM’s LS3 and LS7 cylinder heads with Trick Flow’s own unique brand of race-winning engineering and technology to create the ultimate square port LS cylinder head for 4,000+ and larger bore engines—the GenX 255.

The heads feature fully CNC Competition Ported square port runners with our premium high resolution surface finish for maximum airflow and performance potential. The valve angles have been changed from 15° to 12° to increase piston-to-valve clearance and allow the use of larger camshafts. The coolant holes through the head deck were redesigned to work with all LS head gasket and engine block combinations. Stock LS3 ports accommodate LS3-style intake manifolds and LS9/LSA blower assemblies, plus the available 6-bolt-per-cylinder mounting pattern fits GMPP LSX and other aftermarket engine blocks.

GenX 255 heads are emissions-legal under CARB E.O. #D-747-1 for 2007-present GM vehicles with 6.2L engines. Cylinder heads are available fully assembled or as bare castings. Sold individually.

Airflow Results GenX 255 Square Port

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100&quot;</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>.200&quot;</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>.300&quot;</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>.400&quot;</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>.500&quot;</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>.600&quot;</td>
<td>252</td>
<td></td>
</tr>
<tr>
<td>.700&quot;</td>
<td>258</td>
<td></td>
</tr>
</tbody>
</table>

Tests conducted at 28" of water (pressure). Bore size: 4.065"; 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.”
GenX® 205, 215, 225, 235, and 245 Cathedral Port Cylinder Heads
for GM LS Vortec, LS1, LS2, and LSX

These Trick Flow GenX cathedral port cylinder heads are fully CNC-machined to significantly increase the performance of GM LS-powered vehicles. Trick Flow engineers altered the valve angles from 15° to 13.5° to decrease valve shrouding, increase mid-lift airflow, and improve rocker arm-to-valve cover clearance. Material added at the rocker arm mounting points increases high-RPM valve train stability. The spark plugs were relocated in the CNC-profiled combustion chambers to enhance mid-lift airflow and increase the rigidity of the casting for extreme horsepower applications. Top-of-the-line CNC Competition Ported runners have a premium high resolution surface finish for maximum flow and performance.

These heads are emissions-legal under CARB E.O. JG-747 for 1997-present GM vehicles with 4.8L, 5.3L, 5.7L, and 6.0L engines.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

Dyno Results
GenX 235

Test Engine: 10.8:1 compression GM LSX 440 c.i.d. with Trick Flow GenX® 235 cathedral port cylinder heads (TFS-3061T001-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, Kooks headers with 2" primaries, 3½" dual exhaust with Flowmaster mufflers.

<table>
<thead>
<tr>
<th>RPM x 1000</th>
<th>Horsepower</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>480</td>
<td>340</td>
</tr>
<tr>
<td>500</td>
<td>565</td>
<td>420</td>
</tr>
<tr>
<td>600</td>
<td>682</td>
<td>550</td>
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</tbody>
</table>

Intake Port Volume: Cylinder head volume

<table>
<thead>
<tr>
<th>Valve Angles</th>
<th>Cylinder Head Bolts/Studs</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.5°</td>
<td>C00: Trick-Alloy powdered metal (TFS-30600252)</td>
</tr>
<tr>
<td></td>
<td>C01/C02/C03/C04: Bronze alloy (TFS-30600251)</td>
</tr>
<tr>
<td></td>
<td>Valve Seals: Viton® fluoroelastomer canister (TFS-30600455)</td>
</tr>
<tr>
<td></td>
<td>Valve Seat Angles: 45° x multi-angle</td>
</tr>
<tr>
<td></td>
<td>Valve Spring Pocket Diameter: 1.480&quot;</td>
</tr>
<tr>
<td></td>
<td>Valve Spring I.D. Locations: 1.300&quot; (C00: TFS-21404434; C01/C02/C03/C04: TFS-21400442)</td>
</tr>
<tr>
<td></td>
<td>Valve Spring Retainers: 7° x 1.300&quot; o.d. chromoly steel (TFS-21400410)</td>
</tr>
<tr>
<td></td>
<td>7° x 1.300&quot; o.d. titanium (TFS-2140415)</td>
</tr>
<tr>
<td></td>
<td>Valve Stem Locks: 7° steel with bead lock (TFS-30600444)</td>
</tr>
<tr>
<td></td>
<td>Valve Springs: 1.300&quot; o.d. dual spring (TFS-16306-16)</td>
</tr>
<tr>
<td></td>
<td>150 lbs. @ 1.800&quot; installed height</td>
</tr>
<tr>
<td></td>
<td>438 lbs. @ 1.200&quot; open</td>
</tr>
<tr>
<td></td>
<td>446 lbs. per inch rate</td>
</tr>
<tr>
<td></td>
<td>600° maximum valve lift</td>
</tr>
<tr>
<td></td>
<td>Rocker Arms: C01/C02/C03/C04: Roller rocker arms recommended</td>
</tr>
<tr>
<td></td>
<td>Minimum Bore Diameter: C00: 3.780&quot;, C01/C02/C03/C04: 3.900&quot;</td>
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</tbody>
</table>

Airflow Results
GenX 235

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100&quot;</td>
<td>65</td>
<td>55</td>
</tr>
<tr>
<td>.200&quot;</td>
<td>144</td>
<td>120</td>
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<td>.300&quot;</td>
<td>229</td>
<td>178</td>
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<td>.400&quot;</td>
<td>287</td>
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<td>.500&quot;</td>
<td>323</td>
<td>239</td>
</tr>
<tr>
<td>.600&quot;</td>
<td>340</td>
<td>245</td>
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</tbody>
</table>

Exhaust Port Volume: Cylinder head volume

<table>
<thead>
<tr>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material: A356-T61 aluminum</td>
</tr>
<tr>
<td>Combustion Chamber Volume: C00: 58cc CNC-profiled</td>
</tr>
<tr>
<td>C01: 64cc CNC-profiled</td>
</tr>
<tr>
<td>C02: 65cc CNC-profiled</td>
</tr>
<tr>
<td>C03/C04: 70cc CNC-profiled</td>
</tr>
<tr>
<td>Intake Port Volume: C00: 205cc CNC Competition Ported</td>
</tr>
<tr>
<td>C01: 215cc CNC Competition Ported</td>
</tr>
<tr>
<td>C02: 225cc CNC Competition Ported</td>
</tr>
<tr>
<td>C03: 235cc CNC Competition Ported</td>
</tr>
<tr>
<td>C04: 245cc CNC Competition Ported</td>
</tr>
<tr>
<td>Intake Port Location: Stock</td>
</tr>
<tr>
<td>Intake Port Dimensions: 3.250&quot; x 1.070&quot; cathedral</td>
</tr>
<tr>
<td>Intake Gaskets: Cathedral OEM GM O-ring style</td>
</tr>
<tr>
<td>Intake Valve Diameter: C00: 2.000&quot; (TFS-30600211)</td>
</tr>
<tr>
<td>C01: 2.040&quot; (TFS-30600211)</td>
</tr>
<tr>
<td>C02: 2.055&quot; (TFS-30600210)</td>
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<tr>
<td>C03: 2.080&quot; (TFS-30600209)</td>
</tr>
<tr>
<td>C04: 2.100&quot; (TFS-30600208)</td>
</tr>
<tr>
<td>Intake Valve Seat: C00: Ductile iron (TFS-30300271)</td>
</tr>
<tr>
<td>C01/C02/C03/C04: Ductile iron interlock (TFS-31600271)</td>
</tr>
<tr>
<td>Exhaust Port Volume: 80cc CNC Competition Ported</td>
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<tr>
<td>Exhaust Port Location: Stock</td>
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<tr>
<td>Exhaust Port Dimensions: 1.460&quot; x 1.670&quot; oval</td>
</tr>
<tr>
<td>Exhaust Gaskets: GM 1261744</td>
</tr>
<tr>
<td>Exhaust Valve Diameter: C00/C01/C02: 1.575&quot; (TFS-30600212)</td>
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<tr>
<td>C03/C04: 1.600&quot; (TFS-30600213)</td>
</tr>
<tr>
<td>Exhaust Valve Seat: C00: Ductile iron (TFS-30600272)</td>
</tr>
<tr>
<td>C01/C02/C03/C04: Ductile iron interlock (TFS-30600274)</td>
</tr>
<tr>
<td>Valve Angles: 13.5°</td>
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<tr>
<td>Valve Guide Material: C00: Trick-Alloy powdered metal (TFS-30600252)</td>
</tr>
<tr>
<td>Valve Seals: C01/C02/C03/C04: Bronze alloy (TFS-30600251)</td>
</tr>
<tr>
<td>Valve Seat Angles: 45° x multi-angle</td>
</tr>
<tr>
<td>Valve Spring Pocket Diameter: 1.480&quot;</td>
</tr>
<tr>
<td>Valve Spring I.D. Locations: 1.300&quot; (C00: TFS-21404434; C01/C02/C03/C04: TFS-21400442)</td>
</tr>
<tr>
<td>Valve Spring Retainers: 7° x 1.300&quot; o.d. chromoly steel (TFS-21400410)</td>
</tr>
<tr>
<td>Valve Stem Locks: 7° steel with bead lock (TFS-30600444)</td>
</tr>
<tr>
<td>Valve Springs: 1.300&quot; o.d. dual spring (TFS-16306-16)</td>
</tr>
<tr>
<td>150 lbs. @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>438 lbs. @ 1.200&quot; open</td>
</tr>
<tr>
<td>446 lbs. per inch rate</td>
</tr>
<tr>
<td>600° maximum valve lift</td>
</tr>
<tr>
<td>Rocker Arms: C01/C02/C03/C04: Roller rocker arms recommended</td>
</tr>
<tr>
<td>Minimum Bore Diameter: C00: 3.780&quot;, C01/C02/C03/C04: 3.900&quot;</td>
</tr>
</tbody>
</table>

Cylinder Head Bolt Pattern: 6-bolt pattern

spark plugs: NGK 4177

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
GenX® 220 Cathedral Port Cylinder Heads for GM LS1 and LS2

Trick Flow GenX 220 cylinder heads are the best value in GM LS performance. The cathedral port GenX 220 heads incorporate the features of Trick Flow’s fully CNC-ported LS heads (13.5° valve angles, decreased valve shrouding, increased mid-lift airflow, relocated spark plugs, CNC-profiled combustion chambers with port-to-valve seat blending (bowl blending), improved rocker arm/valve cover clearance, and rigid casting design) in a more affordable “Fast As Cast”® version that flows nearly as much air as our CNC Competition Ported heads. The special Fast As Cast runner design duplicates the port shape and profile of fully CNC-ported runners, resulting in near-CNC-ported performance for the same price as regular cast cylinder heads.

These heads are emissions-legal under CARB E.O. #D-747 for 1997-present GM vehicles with 5.7L and 6.0L engines.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

GenX 220 Heads, Fast As Cast Runners, Assembled
TFS-30610001 LS1, 220cc intake runners
TFS-3061T001 LS1, titanium retainers, 220cc intake runners
TFS-30610002 LS2, 220cc intake runners
TFS-3061T002 LS2, titanium retainers, 222cc intake runners

Active Fuel Management Delete Kit
The problem: most performance camshafts for GM LS engines do not work well on engines equipped with Active Fuel Management (AFM). The solution? A Trick Flow Active Fuel Management Delete Kit!

This kit includes everything to completely remove the AFM cylinder deactivation hardware. This includes GM LS7 hydraulic roller intake, a valve lifter guide set, new head bolts, PVC hose, PVC plug, head gaskets, and an engine valley cover.

A programmer capable of disabling the AFM software (sold separately) is required for proper engine operation.

TFS-30678503 Active fuel management delete kit, 2007-14 5.3L-6.2L GM LS, each
GenX Top-End Engine Kits for GM LS

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!

Trick Flow’s GenX top-end engine kits for GM LS 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 CNC Competition Ported cylinder heads, a specially matched Track Max® hydraulic roller cam, Harland Sharp roller rocker arms (except TFS-K326-580-520), heat-treated chromoly pushrods, performance head and exhaust gaskets, Trick Flow head bolts, and balancer bolt. GenX top-end kits are not recommended for vehicles with flex fuel or active fuel management. Tuning is required for maximum performance.

NOTE: The top-end kit for GM LS3 (TFS-K326-580-520) does not include roller rocker arms. It is recommended that builders use OEM roller arms with upgraded bearings.

GenX Top-End Engine Kits for GM LS1
TFS-K306-485-460  Top-end engine kit, 485 HP/460 lbs.-ft. torque, each
TFS-K306-500-460  Top-end engine kit, 500 HP/460 lbs.-ft. torque, each
TFS-K306-515-460  Top-end engine kit, 515 HP/460 lbs.-ft. torque, each

NOTE: These kits were dyno-tested on a stock GM 5.7L LS1 short block with 10.5:1 compression, Trick Flow GenX 215 cathedral port cylinder heads (TFS-3060T001-C01), Track Max hydraulic roller cam (TFS-30602001, TFS-30602002, or TFS-30602003, depending on application), and an LS6 intake manifold. 1997-98 engines require centerbolt valve covers (sold separately).

GenX Top-End Engine Kit for GM LS2
TFS-K306-550-470  Top-end engine kit, 550 HP/470 lbs.-ft. torque, each

NOTE: This kit was dyno-tested on a GM 6.0L LS2 short block with 10.8:1 compression, Trick Flow GenX 225 cathedral port cylinder heads (TFS-3060T001-C02), Track Max hydraulic roller cam (TFS-30602004), stock intake manifold with 90mm throttle body, Kooks headers with 1 7/8" primaries, and dual exhaust with 3" Flowmaster mufflers.

GenX Top-End Engine Kit for GM LS3
TFS-K306-550-470  Top-end engine kit, 550 HP/470 lbs.-ft. torque, each

NOTE: This kit was dyno-tested on a GM 6.2L LS3 short block with 10.4:1 compression, Trick Flow GenX 255 square port cylinder heads (TFS-3060T001-C01), Trick Flow Track Max hydraulic roller cam (TFS-32603001), stock L92 intake manifold with 90mm throttle body, Kooks headers with 1 7/8" primaries, and dual exhaust with 3" Flowmaster mufflers.

GenX Top-End Engine Kit for GM LS Truck
TFS-K305-455-425  Top-end engine kit, 455 HP/425 lbs.-ft. torque, each

NOTE: This kit was dyno-tested on a GM Performance Parts LS327 short block engine with Trick Flow GenX 205 cathedral port cylinder heads (TFS-30600001-C00), Track Max hydraulic roller cam (TFS-30602001), chromoly pushrods (TFS-21407500), Harland Sharp roller rocker arms, and stock GM LS truck intake manifold and 78mm throttle body.
Camshafts • Timing Chain Sets • Timing Chain Damper and Adapter Bracket • Variable Valve Timing Delete Kits for GM LS

Track Max® Hydraulic Roller Camshafts for GM LS

Get significant horsepower and torque increases with Track Flow Track Max camshafts. The camshafts are dyno-proven to produce a wide power curve over the entire RPM range, not just at a particular RPM point or peak. The cams are cut from a premium blank core and checked for proper hardness before being precision ground to exact tolerances.

### Camshaft Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot; Valve Lift w/1.7 Rocker</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-30602001</td>
<td>Applications: All GM LS engines. Excellent idle, strong midrange power, 2,000-6,000 RPM powerband, computer modification recommended. Compression: 10.5:1 minimum. With 3-bolt cam gear mounting and rear integral LS1/LS6 camshaft sensor pick-up ring.</td>
<td>216°/220°</td>
<td>560°/.560°</td>
</tr>
<tr>
<td>TFS-30602002</td>
<td>Applications: All GM LS engines. Good idle, strong midrange/top-end power, 2,500-6,300 RPM powerband, computer modification recommended. Compression: 10.5:1 minimum. With 3-bolt cam gear mounting and rear integral LS1/LS6 camshaft sensor pick-up ring.</td>
<td>220°/224°</td>
<td>.575°/.575°</td>
</tr>
<tr>
<td>TFS-30602003</td>
<td>Applications: All GM LS engines. Fair idle, good midrange/strong top-end power, 2,500-6,500 RPM powerband, computer modification recommended. Compression: 10.5:1 minimum. With 3-bolt cam gear mounting and rear integral LS1/LS6 camshaft sensor pick-up ring.</td>
<td>228°/230°</td>
<td>.585°/.585°</td>
</tr>
<tr>
<td>TFS-30602004</td>
<td>Applications: All GM LS engines. Fair idle, good midrange/strong top-end power, 3,000-7,000 RPM powerband, computer modification recommended. Compression: 10.5:1 minimum. With 3-bolt cam gear mounting and rear integral LS1/LS6 camshaft sensor pick-up ring.</td>
<td>238°/242°</td>
<td>.595°/.595°</td>
</tr>
<tr>
<td>TFS-32603001</td>
<td>Applications: Optimized for GM LS3/L92 engines; works with all GM LS engines. Fair idle, good midrange/strong top-end power, 3,000-7,000 RPM powerband, computer modification recommended. Compression: 10.5:1 minimum. With 3-bolt cam gear mounting and rear integral LS1/LS6 camshaft sensor pick-up ring.</td>
<td>230°/238°</td>
<td>.625°/.625°</td>
</tr>
</tbody>
</table>

True Roller Timing Chain Sets for GM LS

These billet steel timing sets from Trick Flow for GM LS are 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 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-30675600 Timing chain set, LS1, each
- TFS-30675634 Timing chain set, LS2, each
- TFS-30775535 Timing chain set, 58X/4X camshaft sensor, 1-bolt, L92/LS3, each
- TFS-30775536 Timing chain set, 58X/4X camshaft sensor, 3-bolt, L92/LS3, each

Timing Chain Damper and Adapter Bracket for GM LS

This timing chain damper from Trick Flow provides a small amount of tension on the timing chain to keep it from “whipping” during gear changes and damaging the engine. It’s manufactured from durable OE-quality plastic and includes mounting bolts. The damper fits non-VVT (variable valve timing) GM LS2/L92/LS3 engines, and it should be replaced when changing camshafts or timing chain sets.

The timing chain damper bracket allows the use of LS2 timing chain dampers on any GM LS engine block. The bracket uses the three lower cam/thrust retainer plate bolts for attachment. The bracket can also be used with aftermarket LS2 timing chain dampers (such as TFS-30675540) with the included hardware.

- TFS-30677540 Timing chain damper, LS2/L92/LS3 non-VVT engines, each
- TFS-30675600 Timing chain damper adapter bracket, each
- TFS-K30675600 Timing chain damper and adapter bracket kit, each

Variable Valve Timing Delete Kits

The Variable Valve Timing found on GM LS engines, commonly referred to as VVT, is great for fuel economy but bad for making maximum horsepower. Many people choose to remove it, and a VVT delete kit is required when removing an Active Fuel Management (AFM) system.

These fully engineered Variable Valve Timing Delete Kits from Trick Flow include all of the components required to do the job right. The kits include a 4X camshaft gear, crankshaft gear, true roller timing chain and damper, LS2/LS3 timing cover, timing cover bolts, gasket, and seal, a 4X camshaft sensor, harness, and bracket, camshaft bolts, a camshaft sensor bolt, balancer bolt, and water pump gaskets.

- TFS-30678504 Variable valve timing delete kit, 1-bolt camshafts, 2007-14 5.3L-6.2L GM LS, each
- TFS-30678505 Variable valve timing delete kit, 3-bolt camshafts, 2007-14 5.3L-6.2L GM LS, each
Valve Spring Upgrade Kits • Valve Spring Compressors • Fuel Rails • Rocker Arm Upgrade Components • Flywheel Holding Tool Kit for GM LS

Trick Flow by PAC Racing Valve Spring Upgrade Kits for GM LS

Valvetrain control is critical in performance engines. Boost the performance of your GM LS-powered muscle car or truck with Trick Flow by PAC Racing valve spring sets or valve spring upgrade kits.

The PAC springs are manufactured from premium Pacaloy™ chrome-silicone steel that’s double-shot-peened beyond AMS (Aerospace Material Specifications) reliability standards for exceptional endurance.

Drop-In Beehive Valve Spring Sets
These PAC beehive valve springs are specifically designed as a drop-in upgrade for mildly modified engines. They work with the stock retainers, locks, locators, and seals.

- **TFS-16915-16**: Drop-in valve spring set, chromoly retainers, 105 lbs. seat pressure @ 1.800”, and 293 lbs. open pressure @ 1.200”, 1.140” coil bind, set of 16
- **TFS-16918-16**: Drop-in valve spring set, chromoly retainers, 130 lbs. seat pressure @ 1.800” and 318 lbs. open pressure @ 1.200”, 1.140” coil bind, set of 16

Valve Spring Upgrade Kits
The PAC spring upgrade kits include everything you need to upgrade the valve springs on your mid-to-highly modified LS engines with stock GM or Trick Flow LS heads. Kit contents include dual valve springs, retainers, locks, seals, .500” I.D. locators (except where noted), and instructions.

- **TFS-2500280**: Valve spring upgrade kit, chromoly retainers, 140 lbs. seat pressure @ 1.800” and 380 lbs. open pressure @ 1.200”, 1.064” coil bind, each
- **TFS-2500285**: Valve spring upgrade kit, titanium retainers, 140 lbs. seat pressure @ 1.800” and 380 lbs. open pressure @ 1.200”, 1.064” coil bind, each
- **TFS-2500295**: Valve spring upgrade kit, chromoly retainers, 150 lbs. seat pressure @ 1.800” and 438 lbs. open pressure @ 1.200”, 1.100” coil bind, each
- **TFS-2500300**: Valve spring upgrade kit, titanium retainers, 150 lbs. seat pressure @ 1.800” and 499 lbs. open pressure @ 1.200”, 1.150” coil bind, each
- **TFS-2500400**: Valve spring upgrade kit, titanium retainers, 155 lbs. seat pressure @ 1.800” and 400 lbs. open pressure @ 1.200”, 1.100” coil bind, each

Valve Spring Compressors
If you work on engines, then you need a Trick Flow valve spring compressor. A must for servicing valve springs, retainers, and valve seals, our specially made tools easily remove valve springs—even while they’re on the engine and still in the vehicle. The compressors are made from premium heat-treated steel for a long service life.

- **TFS-90306**: Valve spring compressor, GM LS1/L6/L82, each
- **TFS-90307**: Valve spring compressor, GM LS9/LS3/LS9, each

Flywheel Holding Tool Kit for GM LS
Keep the crankshaft still so you can properly torque the harmonic balancer bolt with Trick Flow’s easy-to-use flywheel holding tool. Just as the name implies, the tool holds the flywheel still so the crankshaft can’t turn and the harmonic balancer bolt can be tightened to the correct torque specs. The tool is even-slotted so it can be used on engines mounted to an engine stand or installed in a vehicle, even if the engine has been swapped into an older chassis. Contents include the slotted flywheel holding tool, two spacers, two M10 x 1.5 x 80mm long bolts, and two 10mm flat washers.

- **TFS-90326**: Flywheel holding tool kit, 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, pair

Rocker Arm Upgrade Components for GM LS
As many have learned, the OE rocker arm bearing design is a proven weak link in high performance LS engines. One way to fix the problem is with a full set of high quality roller rocker arms. However, new rocker arms are very expensive. Trick Flow has another solution that will cure the bearing problem for far less money.

These rocker arm trunnion upgrade kits from Trick Flow include 16 stronger trunnions with circlip grooves that withstand the high valve spring pressures and repeated high RPM blasts common in performance applications. The kit also includes 32 bearings with precision made needles constructed to handle sustained racing use plus 32 retainer clips that eliminate the bearing walk-out problem of the OE design.

The trunnion installation kit takes all of the hassle out of removing old trunnions and installing new ones. That’s because the kit allows you to change the trunnions using just a bench vise instead of a cumbersome hydraulic press like other kits. Maybe best of all, no modifications are required to the OE rocker arms to use these upgrade and installation kits!

- **SME-143002**: Trunnion upgrade kit, each
- **SME-906011**: Trunnion installation kit, each
- **SME-143002-2B**: Replacement trunnion shaft bearings, pair

TFX Specialties

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
Intake Manifolds • EFI Fuel Rails • Fuel Injector Connectors • EFI Throttle Bodies • Steam Line Plumbing Kits for GM LS

R-Series Intake Manifolds for GM LS3

Trick Flow R-Series single plane intake manifolds for GM LS3 bring the simplicity of carbureted-style aspiration to this model of GM’s aluminum powerhouse. The intakes are engineered to produce supreme power in heavily modified engines with 3,500-7,500 plus RPM powerbands.

Other significant features include A319 aluminum construction, a one-piece spider-type design, high-flow individual runners combined with a raised plenum floor, and extra material for custom porting. Manifold part number TFS-32600111 manifold includes integral bosses for adding nitrous and accepts Holley 4150-style square bore carburetors. Manifold part number TFS-32600112 features custom machined fuel injection nozzle ports that accept standard Bosch and Siemens-type fuel injectors. Overall height to the mounting pads for both versions of this manifold is 6.285”.

R-Series Intake Manifolds

- TFS-32600111: Manifold, square bore carburetor, each
- TFS-32600112: Manifold, carb-style EFI, each

TFX™ EFI Fuel Rails

- TFS-3268000R: EFI fuel rails, carb-style EFI manifold, pair

TFX™ EFI Throttle Bodies for GM LS

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. These throttle bodies benefit from multiple throttle linkages for a wide variety of custom installations. Includes gaskets and mounting hardware.

- TFS-24080: Throttle body, 1998-2002 5.7L Chevrolet/Pontiac Camaro/Firebird, 2004 GTO, 80mm, each
- TFS-24085: Throttle body, 1998-2002 5.7L Chevrolet/Pontiac Camaro/Firebird, 2004 GTO, 85mm, each

Steam Line Plumbing Kits and Accessories for GM LS

Trick Flow steam line plumbing kits and accessories allow owners of modified LS-powered cars and trucks to upgrade the factory steam tubes to the more desirable and easier-to-service race car plumbing system.

The plumbing kits are available two ways—just for the front of the heads or for all four corners. They include all of the necessary hose, fittings, and other components needed for installation. Plus, the components are available separately for those who want to design a custom system.

Steam Line Plumbing Kits, Black Rubber Hose

- TFS-30600600: Steam line plumbing kit, front of heads only, each
- TFS-30600601: Steam line plumbing kit, front and rear of heads, each

Steam Line Plumbing Kits, Black Nylon Braided AN Hose

- TFS-306SB600: Steam line plumbing kit, front of heads only, each
- TFS-306SB601: Steam line plumbing kit, front and rear of heads, each

Steam Line Plumbing Kits, Stainless Steel Braided AN Hose

- TFS-306SS600: Steam line plumbing kit, front of heads only, each
- TFS-306SS601: Steam line plumbing kit, front and rear of heads, each

Steam Line Individual Components

- TFS-30600611: Steam line fitting, -4 AN male, each
- TFS-30600612: Steam line cap, each
- TFS-30600613: Steam line fitting, 1/8” female NPT, 90°, each
- TFS-30600615: Cylinder head coolant sensor plug and seal, 12mm, each
Trick Flow GenX 185 cylinder heads for naturally aspirated GM LT1 engines retain the factory compression ratio and have standard resolution CNC-profiled combustion chambers to amplify performance. The valve angles were reduced to 21° to increase piston-to-valve clearance and unshroud the chambers for better airflow. Power-building Fast As Cast® runners duplicate the profiles of fully CNC-ported heads, resulting in high airflow rates without costly CNC-porting.

GenX 195 heads for forced induction engines retain the stock 23° valve angles and feature large, standard cast airflow rates without costly CNC-porting. The profiles of fully CNC-ported heads, resulting in high ratio and have standard resolution CNC aspirated GM LT1 engines retain the factory compression airflow. Power-building Fast valve clearance and unshroud the chambers for better valve angles were reduced to 21° to increase piston-to-combustion chambers to amplify performance. The TFS-30410008-M54, Trick Flow GenX® 185 cylinder heads for naturally aspired engines, 21° valve angle, 185cc intake runners

### GenX 195 Heads, Fast As Cast Runners, Assembled
TFS-30410008-M54 Naturally aspirated engines, 21° valve angle, 185cc intake runners
TFS-30410010 Forced induction engines, 23° valve angle, 195cc intake runners

#### Specifications
- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** M54: 54cc CNC-profiled, M54: 54cc Fast As Cast
- **Intake Port Volume:** M54: 185cc Fast As Cast
- **Intake Port Location:** M54: 1.220° x 2.120°
- **Intake Port Dimensions:** M54: 1.220° x 2.120°
- **Intake Gaskets:** Fel-Pro 1284
- **Intake Valve Diameter:** 2.020" (TFS-15400211)
- **Intake Valve Seat:** Ductile iron (TFS-30300271)
- **Exhaust Port Volume:** M54: 67cc Fast As Cast
- **Exhaust Port Location:** M54: 72cc Fast As Cast
- **Exhaust Port Dimensions:** 1.350" x 1.450” D-shape
- **Exhaust Gaskets:** Fel-Pro 1404
- **Exhaust Valve Diameter:** 1.600" (TFS-15400212)
- **Exhaust Valve Seat:** Ductile iron (TFS-30300272)
- **Valve Angles:** M54: 21°
- **Valve Guide Material:** Bronze alloy (TFS-51400252)
- **Valve Seals:** Viton® fluoroelastomer (TFS-51400454)
- **Valve Seat Angles:** 45° x multi-angle
- **Valve Spring Pocket Diameter:** 7° x 1.460" o.d. (TFS-31400424)
- **Valve Spring Retainer:** 7° x 1.250" o.d. chromoly steel (TFS-31400423)
- **Valve Stem Locks:** 7° steel (TFS-51400444)
- **Valve Springs:** M54: 1.275" o.d. dual spring with damper (TFS-16306-16)
- **Guideplates:** M54: 1.5/16" dual spring with damper (TFS-304000623-8)
- **Rockers:** 3/8" (TFS-51400613)
- **Rockers:** 3/8" (TFS-31400512 (3/8" studs)
- **Rockers:** 3/8" (TFS-31400513 (1.6 ratio, 3/8" studs)
- **Rockers:** 3/8" (TFS-31400514 (1.5 intake, 1.6 exhaust ratio, 3/8" studs)
- **Minimum Bore Diameter:** 4.000" (TFS-30400008-M54 includes L1 and LT4 intake gasket alignment holes.
- **Viton® is a registered trademark of DuPont Performance Elastomers.

#### Diagrams:
- **Dyno Results GenX 185**
- **Airflow Results GenX 185**
- **Airflow Results GenX 195**

#### Tables:
- **Airflow Results GenX 185**
- **Airflow Results GenX 195**

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Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
Track Max® Hydraulic Roller Camshaft for GM LT1

Get significant horsepower and torque increases with Trick Flow’s Track Max camshaft. It is dyno-proven to produce a wide power curve over the entire RPM range, not just at a particular RPM point or peak. The cam is cut from a premium blank core and checked for proper hardness before being precision ground to exact tolerances.

### Camshaft Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.5 Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-31402081</td>
<td>Fair idle, strong midrange power, 1,800-5,800 RPM powerband, 2,500-3,000 RPM stall converter. Compression: 10.25:1 minimum.</td>
<td>220°/227°</td>
<td>.530/.530&quot;</td>
<td>113°</td>
</tr>
</tbody>
</table>

### GenX® Top-End Engine Kit for GM LT1

Get the most out of your GM LT1 with Trick Flow’s top-end engine kit. Trick Flow engineers carefully tuned this kit to deliver optimum horsepower and torque—taking the time and guesswork out of designing a winning combination and saving you some hard-earned cash in the process.

GenX top-end kits for GM LT1 feature Trick Flow’s GenX 185 21° heads to deliver increased power on naturally aspirated engines. These heads feature 54cc CNC-profiled combustion chambers with port-to-valve seat blending (bowl blending) and Fast As Cast® runners (185cc intake/67cc exhaust). You also get a Track Max® hydraulic roller camshaft, pushrod length checker, roller rocker arms, head bolts, and a gasket set.

**TFS-K304-430-400** Top-end engine kit, 430 HP/400 lbs.-ft., each

### 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. Manufactured by K&N for Trick Flow; emissions-legal under CARB E.O. #D-369-14.

**Cold Air Intake Kits**

- **TFS-23057** Cold air kit, 1993-97 5.7L LT1 Chevrolet/Pontiac Camaro/Firebird, each
- **TFS-23058** Cold air kit, 1994-96 5.7L LT1 Chevrolet Impala SS/ Caprice, each

### Air Inlet Elbows

- **TFS-3150800** Air inlet elbow, aluminum, ceramic coated, each
- **TFS-3150801** Air inlet elbow, aluminum, black, each
- **TFS-3158800** Air inlet elbow, aluminum, natural, 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 intake systems and most brands of cold air intake kits.**

**GenX LT1 Top-End Engine Kit Dyno Results**

<table>
<thead>
<tr>
<th>RPM x 1,000</th>
<th>Brake Horsepower/Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>400</td>
<td>300</td>
</tr>
<tr>
<td>500</td>
<td>400</td>
</tr>
<tr>
<td>600</td>
<td>500</td>
</tr>
</tbody>
</table>

Test Engine: 350 c.i.d. short block with Trick Flow GenX® 185 cylinder heads (TFS-30410008-M54), Trick Flow Track Max® hydraulic roller camshaft (TFS-31402081), 10.42:1 compression, stock intake manifold, and factory 52mm throttle body.
DHC™ 175 Cylinder Heads
for Small Block Chevrolet

Nostalgic appearance—check.
Modern performance—check.
The best of both—checkmate!

Trick Flow’s DHC 175 cylinder heads give small block Chevy enthusiasts a new performance option. No longer will anyone have to choose between vintage looks or modern cylinder head power—with DHC 175 heads you get both!

DHC 175 heads are made from premium grade A356-T61 aluminum and have the exterior styling and straight spark plug holes that deliver the nostalgic appearance customers want. On the inside, 60cc CNC-profiled combustion chambers with blended bowl machining under the valves and small cross-section intake runners promote low-RPM torque increases and boost high-RPM horsepower. The runners are finished with Trick Flow’s superior Fast As Cast™ process that precisely duplicates the runner profile and performance levels of fully CNC-ported heads without the added machining cost. In keeping with the vintage design, the heads are available with or without accessory bolt holes cast into them.

Other performance improvements include bronze alloy valve guides, ductile iron valve seats, and multi-angle valve seat machining. Plus, the decks and walls are cast extra thick to increase casting strength and provide plenty of material for future porting. Cylinder heads are available fully assembled or as bare castings. Sold individually.

DHC 175 Heads, Fast As Cast Runners, Assembled
TFS-30210002 1.470" single valve springs, no accessory bolt holes, 175cc intake runners
TFS-30210003 1.460" dual valve springs, no accessory bolt holes, 175cc intake runners
TFS-30210006 1.470" single valve springs, with accessory bolt holes, 175cc intake runners
TFS-30210007 1.460" dual valve springs, with accessory bolt holes, 175cc intake runners

Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100&quot;</td>
<td>65</td>
<td>53</td>
</tr>
<tr>
<td>.200&quot;</td>
<td>133</td>
<td>104</td>
</tr>
<tr>
<td>.300&quot;</td>
<td>192</td>
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<td>.400&quot;</td>
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<tr>
<td>.500&quot;</td>
<td>258</td>
<td>198</td>
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<tr>
<td>.600&quot;</td>
<td>254</td>
<td>207</td>
</tr>
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</table>

Tests conducted at 28" of water (pressure);
Bore size: 4.030"; exhaust with 1½ pipe.

Specifications

Material: A356-T61 aluminum
Combustion Chamber Volume: 60cc CNC-profiled
Intake Port Volume: 175cc Fast As Cast
Intake Port Location: Stock
Intake Port Dimensions: 1.230" x 1.990"
Intake Gaskets: Fel-Pro 1256
Intake Valve Diameter: 2.02" (TFS-51400211)
Intake Valve Seat: Ductile iron (TFS-51400271)
Exhaust Port Volume: 74cc Fast As Cast
Exhaust Port Location: Stock
Exhaust Port Dimensions: 1.240" x 1.240" square
Exhaust Gaskets: Fel-Pro 1404
Exhaust Valve Diameter: 1.600" (TFS-51400212)
Exhaust Valve Seat: Ductile iron (TFS-51400272)
Valve Angles: 23°
Valve Guide Material: Bronze alloy (TFS-51400252, exhaust TFS-30400252)
Valve Seals: Viton® fluoroelastomer (TFS-5140454)
Valve Seat Angles: 45° x multi-angle
Valve Spring Pocket Diameter: 1.650" x 1.500" for two center valve springs
Valve Spring Cups: .4850" ID
Valve Springs: 1.470" o.d. single spring with damper (TFS-16514-16)
118 lbs. @ 1.800" installed height
300 lbs. @ 1.280" open
360 lbs. per inch rate
540" max. valve lift
Valve Sprinngs, Option 1: 1.460" o.d. dual spring with damper (TFS-16315-16)
134 lbs. @ 1.800" installed height
405 lbs. @ 1.200" open
452 lbs. per inch rate
600" max. valve lift
Guideplates: 5/16" (TFS-30400623-8)
Rocker Arm Studs: 7/16" (TFS-51400614)
Rocker Arms: TFS-31400520 (1.5 ratio, 7/16" studs)
TFS-31400521 (1.6 ratio, 7/16" studs)
Minimum Bore Diameter: 4.000"
Cylinder Head Bolts: TFS-920000
Head Gaskets: TFS-30494060-040
Pushrod Length: Longer than stock required
Spark Plugs: Autolite 3924 or Autolite 4252 (13/16" hex)
NOTE: These heads have straight spark plug holes.
Viton® is a registered trademark of DuPont Performance Elastomers.

Trick Flow Fast Fact:

Holes or No Holes—Which Style is Right for You?

Trick Flow DHC 175 head castings come with or without accessory bolt holes. But which style is right for you?

It’s pretty simple: The heads without holes in the end are for engines with block or water pump-mount accessory brackets. The heads with holes in them are for engines with brackets that mount the accessories to the cylinder head. Now you know!
Super 23® 175 Cylinder Heads
for Small Block Chevrolet

Made to outperform factory small block Chevy heads on 283-350 c.i.d. street performance engines, Trick Flow Super 23 175 cylinder heads feature small cross-section intake runners to promote low-RPM torque and high-RPM horsepower on small bore engines. Fast As Cast® rockers duplicate the runner profile and performance levels of CNC-ported heads—for about the same price as ordinary cast heads! Other features include angled spark plugs, raised valve cover rails, and extra-thick decks and walls for porting.

Super 23 175 heads are emissions-legal under CARB E.O. #D-747-1 for 1995 and earlier GM vehicles with Chevy 262–350 engines and accept most factory accessories.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Specifications

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** 56cc standard
- **Intake Port Volume:** 175cc Fast As Cast
- **Intake Port Location:** Stock
- **Intake Port Dimensions:** 1.230” x 1.990”
- **Intake Gaskets:** Fel-Pro 1404
- **Intake Valve Diameter:** 1.940” (TFS-30300211)
- **Intake Valve Seat:** Ductile iron (TFS-30300271)
- **Exhaust Port Volume:** 67cc Fast As Cast
- **Exhaust Port Location:** Stock
- **Exhaust Port Dimensions:** 1.300” x 1.350” D-shape
- **Exhaust Gaskets:** Fel-Pro 1404
- **Exhaust Valve Diameter:** 1.500” (TFS-30300212)
- **Exhaust Valve Seat:** Ductile iron (TFS-30300272)
- **Valve Angles:** 23°
- **Valve Guide Material:** Bronze alloy (intake TFS-51400252-1, exhaust TFS-30400252-1)
- **Valve Seats:** Viton® fluoroelastomer (TFS-31400454)
- **Valve Seat Angles:** 45° x multi-angle
- **Valve Spring Pocket Diameter:** 1.615”; 1.500” for two center valve springs
- **Valve Spring Cups:** 1.270” (TFS-31400433)
- **Valve Spring Retainers:** 7” x 1.250” o.d. chromoly steel (TFS-31400423)
- **Valve Stem Locks:** 7” machined steel (TFS-51400444)
- **Valve Springs, Standard:** 1.250” o.d. single spring with damper (TFS-16314-16)
  - 110 lbs. @ 1.780” installed height
  - 300 lbs. @ 1.280” open
  - 360 lbs. per inch rate
  - .520” maximum valve lift
- **Valve Springs, Option 1:** 1.470” o.d. single spring with damper (TFS-16314-16)
  - 118 lbs. @ 1.800” installed height
  - 300 lbs. @ 1.280” open
  - 360 lbs. per inch rate
  - .540” maximum valve lift
- **Valve Springs, Option 2:** 1.650” o.d. dual spring with damper (TFS-16315-16)
  - 134 lbs. @ 1.800” installed height
  - 405 lbs. @ 1.300” open
  - 452 lbs. per inch rate
  - .600” maximum valve lift
- **Guideplates:** 5/16” (TFS-30400623-8)
- **Rocker Arm Studs:** 3/8” (TFS-51400613)
- **Rocker Arms:** TFS-31400510 (1.5 ratio, 3/8” studs)
- **Rocker Arms:** TFS-31400511 (1.6 ratio, 3/8” studs)
- **Minimum Bore Diameter:** 3.750”
- **Cylinder Head Bolts:** TFS-92000
- **Head Gaskets:** TFS-30494060-040
- **Pushrod Length:** Longer than stock required
- **Spark Plugs:** NGK FR5 or Autolite 3924

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

Viton® is a registered trademark of DuPont Performance Elastomers.

### Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>62</td>
<td>57</td>
</tr>
<tr>
<td>.200”</td>
<td>127</td>
<td>109</td>
</tr>
<tr>
<td>.300”</td>
<td>180</td>
<td>142</td>
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<td>.400”</td>
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<td>.500”</td>
<td>240</td>
<td>181</td>
</tr>
<tr>
<td>.600”</td>
<td>245</td>
<td>192</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size: 4.030”; exhaust with 1½” 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 Fast Fact: Efficiency

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 so the rocker arm tip travels an equal distance 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.
Super 23° 195 Cylinder Heads

for Small Block Chevrolet

Trick Flow Super 23 195 cylinder heads for small block Chevy are a direct fit, high performance replacement for factory heads and accept most original accessories. Ideal for 302-406 c.i.d. engines, these heads feature high-velocity, small cross-section intake runners to promote low-RPM torque and high-RPM horsepower. Fast As CastSM runners deliver near-CNC-ported flow and performance for about the same price as regular cast heads. Angled spark plugs, raised valve cover rails, and extra-thick decks and walls for porting round-out the features.

Super 23 195 heads are emissions-legal under CARB E.O. #D-747-1 for 1995 and earlier GM vehicles with Chevy 262-350 engines. Cylinder heads are available fully assembled or as bare castings. Sold individually.

Specifications

| Material: | A356-T61 aluminum |
| Combustion Chamber Volume: | 01/02/03/05/06/07: 62cc standard |
| M64: 64cc CNC-profiled |
| M72: 72cc CNC-profiled |
| 195cc Fast As Cast |
| Intake Port Volume: | Stock |
| Intake Port Location: | Stock |
| Intake Port Dimensions: | 1.280” x 2.090” |
| Intake Gaskets: | Fel-Pro 1205 or 1266 |
| Intake Valve Diameter: | 2.020” (TFS-51400211) |
| Intake Valve Seat: | Ductile iron (TFS-51400271) |
| Exhaust Port Volume: | 72cc Fast As Cast |
| Exhaust Port Location: | Stock |
| Exhaust Port Dimensions: | 1.350” x 1.500” D-shape |
| Exhaust Gaskets: | Fel-Pro 1404 |
| Exhaust Valve Diameter: | 1.600” (TFS-51400212) |
| Exhaust Valve Seat: | Ductile iron (TFS-51400272-1) |
| Valve Angles: | 23° |
| Valve Guide Material: | Bronze alloy (intake TFS-51400252-1, exhaust TFS-30400252-1) |
| Valve Seals: | Viton® fluoroelastomer (TFS-51400454) |
| Valve Seat Angles: | 45° x multi-angle |
| Valve Spring Pocket Diameter: | 1.615”; 1.500’’ for two center valve springs |
| Valve Spring Cups: | 1.270” (TFS-31400033) |
| Valve Spring Retainers: | 1.480” (TFS-51400434) |
| Valve Stem Locks: | 7° x 1.250” o.d. chromoly steel (TFS-31400423) |
| Valve Springs, Standard: | 7° x 1.460” o.d. chromoly steel (TFS-31400424) |
| Valve Springs, Standard: | 7° x 1.470” o.d. chromoly steel (TFS-31400425) |
| Valve Springs, Standard: | 1.250” o.d. single spring with damper (TFS-16314-16) |
| Valve Springs, Option 1: | 110 lbs. @ 1.780" installed height |
| Valve Springs, Option 1: | 300 lbs. @ 1.280" open |
| Valve Springs, Option 1: | 360 lbs. per inch rate |
| Valve Springs, Option 1: | .520" maximum valve lift |
| Valve Springs, Option 2: | 1.470” o.d. single spring with damper (TFS-16514-16) |
| Valve Springs, Option 2: | 118 lbs. @ 1.800” installed height |
| Valve Springs, Option 2: | 300 lbs. @ 1.280" open |
| Valve Springs, Option 2: | 360 lbs. per inch rate |
| Valve Springs, Option 2: | .540” maximum valve lift |
| Rocker Arm Studs: | 5/16” (TFS-30400023-8) |
| Rocker Arms: | 3/8” (TFS-51400013) |
| Rocker Arms: | TFS-31400510 (1.6 ratio, 3/8” studs) |
| Rocker Arms: | TFS-31400511 (1.6 ratio, 3/8” studs) |
| Minimum Bore Diameter: | 4.000” |
| Cylinder Head Bolts: | TFS-92000 |
| Head Gaskets: | TFS-30494060-040 |
| Pushrod Length: | Longer than stock required |
| Spark Plugs: | NGK FR5 or Autolite 3924 |
| Guideplates: | 400 c.i.d; must modify heads per instructions. |

Viton® is a registered trademark of DuPont Performance Elastomers.

Airflow Results

Super 23 195 with 72cc CNC-Profiled Chambers

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>71</td>
<td>53</td>
</tr>
<tr>
<td>.200”</td>
<td>142</td>
<td>99</td>
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<tr>
<td>.300”</td>
<td>196</td>
<td>135</td>
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<td>.400”</td>
<td>234</td>
<td>167</td>
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<tr>
<td>.500”</td>
<td>249</td>
<td>186</td>
</tr>
<tr>
<td>.600”</td>
<td>249</td>
<td>199</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size 4.030”. CNC-profiled combustion chambers; exhaust with 1½” 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 Heads, Fast As Cast Runners, Assembled

62cc Standard Combustion Chambers

- TFS-30410001-M64: 1.250” single springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410002-M64: 1.470” single springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410003-M64: 1.460” dual springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410005-M64: 1.250” single springs, center bolt valve covers, 195cc intake runners
- TFS-30410006-M64: 1.470” single springs, center bolt valve covers, 195cc intake runners
- TFS-30410007-M64: 1.460” dual springs, center bolt valve covers, 195cc intake runners

64cc CNC-Profiled Combustion Chambers

- TFS-30410001-M64: 1.250” single springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410002-M64: 1.470” single springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410003-M64: 1.460” dual springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410005-M64: 1.250” single springs, center bolt valve covers, 195cc intake runners
- TFS-30410006-M64: 1.470” single springs, center bolt valve covers, 195cc intake runners
- TFS-30410007-M64: 1.460” dual springs, center bolt valve covers, 195cc intake runners

72cc CNC-Profiled Combustion Chambers

- TFS-30410012-M72: 1.470” single springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410013-M72: 1.460” dual springs, perimeter bolt valve covers, 195cc intake runners
- TFS-30410014-M72: 1.470” single springs, center bolt valve covers, 195cc intake runners
- TFS-30410015-M72: 1.460” dual springs, center bolt valve covers, 195cc intake runners

Lift Value

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>71</td>
<td>53</td>
</tr>
<tr>
<td>.200”</td>
<td>142</td>
<td>99</td>
</tr>
<tr>
<td>.300”</td>
<td>196</td>
<td>135</td>
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<tr>
<td>.400”</td>
<td>234</td>
<td>167</td>
</tr>
<tr>
<td>.500”</td>
<td>249</td>
<td>186</td>
</tr>
<tr>
<td>.600”</td>
<td>249</td>
<td>199</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size 4.030”. CNC-profiled combustion chambers; exhaust with 1½” 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.”

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
Super 23® 215 Cylinder Heads
for Small Block Chevrolet

Trick Flow Super 23 215 cylinder heads give a huge performance boost to race-ready small block Chevy engines. Based on the proven Super 23 head design (angled spark plugs, extra-thick decks and walls for porting, and raised valve cover rails), the Super 215 heads feature enlarged valve springs to help pull in more air and fuel with higher lift cams. The larger Fast As Cast® runner design provides near-CNC-ported airflow and power for about the same price as most cast heads. The result is more airflow in the mid and upper RPM range—and that means more power.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

Specifications

- Material: A356-T61 aluminum
- Combustion Chamber Volume: 68.067/67cc standard
- Intake Port Volume: 215cc Fast As Cast
- Intake Port Location: Stock
- Intake Port Dimensions: 1.310" x 2.210"
- Intake Gaskets: Fel-Pro 1206 or 1206
- Intake Valve Diameter: 2.080" (TFS-32400211)
- Intake Valve Seat: Ductile iron (TFS-31600271-1)
- 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" (TFS-32400212)
- Exhaust Valve Seat: Ductile iron (TFS-30600274)
- Valve Angles:
  - 23°
- Valve Guide Material:
  - Bronze alloy (intake TFS-51700252, exhaust TFS-41400251)
- Valve Seats:
  - Viton® fluoroelastomer (TFS-30400454)
- Valve Seat Angles:
  - 23°
- Valve Stem Locks:
  - 1.550" o.d. dual spring with damper (TFS-52400444)
  - 1.550" o.d. dual spring (TFS-16094-16)
  - 1.550" o.d. dual spring (TFS-16324-16)
- Valve Springs:
  - 1.550" o.d. dual spring (TFS-16094-16)
  - 1.550" o.d. dual spring (TFS-16324-16)
- Valve Springs, Optional:
  - 1.550" o.d. dual spring with damper (TFS-16324-16)
- Valve Springs, Standard:
  - 1.550" o.d. dual spring with damper (TFS-16094-16)
- Valve Stem Locks:
  - 1.550" o.d. dual spring with damper (TFS-16324-16)
- Valve Springs:
  - 1.550" o.d. dual spring (TFS-16094-16)
- Valve Springs, Optional:
  - 1.550" o.d. dual spring (TFS-16324-16)
- Guideplates:
  - 51/16" (TFS-30400623-8)
- Rocker Arm Studs:
  - 71/16" (TFS-51-600614)
- Rocker Arms:
  - TFS-31400520 (1.5 ratio, 71/16" studs)
  - TFS-31400521 (1.5 ratio, 71/16" studs)
- Minimum Bore Diameter:
  - 4.000"
- Cylinder Head Bolts:
  - TFS-92000
- Head Gaskets:
  - TFS-30494200-040
- Pushrod Length:
  - Longer than stock required
- Spark Plugs:
  - Autolite 3922

NOTE: Must use head gaskets with 4.155" or larger bore diameter.

Viton® is a registered trademark of DuPont Performance Elastomers.

Dyno Results

Super 23 215

Test Engine: 12:1 compression 540 c.i.d. with Trick Flow Super 23® 215 cylinder heads (TFS-32410007), mechanical roller camshaft (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 1 ¾" primaries, open exhaust.

Super 23 215 Heads, Fast As Cast Runners, Assembled

TFS-32410006 67cc combustion chambers and 1.550" dual valve springs
- 420 lbs./in., 215cc intake runners
- 460 lbs./in., titanium retainers, 215cc intake runners

Dyno Results

Super 23 215

Test Engine: 12:1 compression 540 c.i.d. with Trick Flow Super 23® 215 cylinder heads (TFS-32410007), mechanical roller camshaft (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 1 ¾" primaries, open exhaust.

Airflow Results

Super 23 215 with 72cc Chambers

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100&quot;</td>
<td>66</td>
<td>58</td>
</tr>
<tr>
<td>.200&quot;</td>
<td>141</td>
<td>108</td>
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<tr>
<td>.300&quot;</td>
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<td>.400&quot;</td>
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<td>202</td>
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<td>282</td>
<td>214</td>
</tr>
<tr>
<td>.700&quot;</td>
<td>287</td>
<td>223</td>
</tr>
</tbody>
</table>

Tests conducted at 28" of water (pressure). Bore size: 4.155"; exhaust with 1 ¾" 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 Super 23 230 cylinder heads represent the best value in small block Chevy racing technology. That's because they are the closest thing you can get to 18° cylinder head performance in a 23° design. The Super 23 230 heads work best on 400 cubic inch and larger engines. The heads come standard with Trick Flow's advanced CNC Competition Ported runner design that features fully CNC-profiled combustion chambers and runners with a premium high resolution surface finish for maximum flow and performance. Additional highlights include angled spark plugs, extra-thick decks and walls for porting, and raised valve cover rails.

To make swapping cylinder heads less costly and time-consuming, Trick Flow designed the Super 23 230 heads to use all standard small block valvetrain parts and headers.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Specifications

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** 70cc CNC-profiled
- **Intake Port Volume:** 230cc CNC Competition Ported
- **Intake Port Location:** Stock
- **Intake Port Dimensions:** 1.300’’ x 2.230’’
- **Intake Gaskets:** Fel-Pro 1207 or 1267
- **Intake Valve Diameter:** 2.080’’ (TFS-32400211)
- **Intake Valve Seat:** Ductile iron (TFS-51600271-1)
- **Exhaust Port Volume:** 78cc CNC Competition Ported
- **Exhaust Port Location:** Stock
- **Exhaust Port Dimensions:** 1.490’’ x 1.490’’ D-shape
- **Exhaust Gaskets:** Fel-Pro 1406
- **Exhaust Valve Diameter:** 1.600’’ (TFS-32400212)
- **Exhaust Valve Seat:** Ductile iron (TFS-30600274)
- **Valve Angles:** 23°
- **Valve Guide Material:** Bronze alloy (intake TFS-51700252, exhaust TFS-41400251)
- **Valve Seals:** Viton® fluorocelastomer (TFS-30400454)
- **Valve Seat Angles:** 45° x multi-angle
- **Valve Spring Pocket Diameter:** 1.615’’
- **Valve Spring I.D. Locators:** 1.550’’ x .060’’ (TFS-21400425)
- **Valve Spring Retainers:** 1.550’’ x 1.550’’ o.d. chromoly steel (TFS-21400425)
- **Valve Stem Locks:** 10° machined steel with lash cap recess (TFS-52400444)
- **Valve Springs, Standard:** 1.550’’ o.d. dual spring with damper (TFS-16094-16)
  - 138 lbs. @ 1.950’’ installed height
  - 430 lbs. @ 1.250’’ open
  - 420 lbs. per inch rate
  - .680’’ maximum valve lift
- **Valve Springs, Optional:** 1.550’’ o.d. dual spring with damper (TFS-16324-16)
  - 215 lbs. @ 1.950’’ installed height
  - 550 lbs. @ 1.270’’ open
  - 460 lbs. per inch rate
  - .680’’ maximum valve lift
- **Guideplates:**
  - 5/16’’ (TFS-30400693-8)
  - 7/16’’ (TFS-51400693-8)
- **Rocker Arm Studs:**
  - TFS-31400320 (1.5 ratio, 7/16’’ studs)
  - TFS-31400316 (1.6 ratio, 7/16’’ studs)
- **Minimum Bore Diameter:** 4.000’’
- **Cylinder Head Bolts:** TFS-92000
- **Head Gaskets:** TFS-30494200-040
- **Pushrod Length:** Longer than stock required
- **Spark Plugs:** Autolite 3922

**NOTE:** Must use head gaskets with 4.155” or larger bore diameter.

Viton® is a registered trademark of DuPont Performance Elastomers.

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### Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100’’</td>
<td>69</td>
<td>55</td>
</tr>
<tr>
<td>.200’’</td>
<td>144</td>
<td>112</td>
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<tr>
<td>.300’’</td>
<td>213</td>
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<td>.400’’</td>
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<td>.500’’</td>
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<td>.600’’</td>
<td>305</td>
<td>234</td>
</tr>
<tr>
<td>.700’’</td>
<td>310</td>
<td>240</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size: 4.155”; exhaust with 1/2” 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.”

Compliment your new Super 23° heads with a Track Max® camshaft for unbeatble, race-winning performance! You can find them on page 25.

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Super 23° 230 Cylinder Heads for Small Block Chevrolet

![Image of Super 23° 230 Cylinder Heads](image-url)
Get the most out of your small block Chevy with Trick Flow's top-end engine kits. Trick Flow engineers carefully tune each kit to deliver optimum horsepower and torque—taking the time and guesswork out of designing a winning combination and saving you some hard-earned cash in the process.

The Super 23 top-end kits for small block Chevy are built around a set of dyno-proven, Super 23 195 cylinder heads with your choice of Super 23 Top-End Engine Kits, Flat Tappet Cam

- TFS-K314-350-400 350 HP/400 lbs.-ft., each
- TFS-K314-420-395 420 HP/395 lbs.-ft., each
- TFS-K314-490-440 490 HP/440 lbs.-ft., each

Super 23 Top-End Engine Kits, Hydraulic Roller Cam

- TFS-K314-445-405* 445 HP/405 lbs.-ft., each
- TFS-K314-465-450 465 HP/450 lbs.-ft., fits factory non-hydraulic roller cam engine blocks, each
- TFS-K314-500-450 500 HP/450 lbs.-ft., fits factory hydraulic roller cam engine blocks, each
- TFS-K315-465-450 465 HP/450 lbs.-ft., each


Super 23 Top-End Engine Kit Dyno Results

**TFS-K314-350-400/TFS-K315-350-400**

- Test Engine: 350 c.i.d. short block with flat top pistons, Trick Flow Super 23° 195 cylinder heads with 64cc CNC-profiled combustion chambers (TFS-30410001), Trick Flow Track Max® hydraulic camshaft (TFS-31401000), Trick Flow StreetBurner® intake manifold (TFS-30400222), 9.5:1 to 10.0:1 compression, and a Trick Flow by Quick Fuel Technology Street Heat® 650 cfm carburetor.

**TFS-K314-420-395**

- Test Engine: 350 c.i.d. short block with flat top pistons, Trick Flow Super 23° 195 cylinder heads with 64cc CNC-profiled combustion chambers (TFS-30410002), Trick Flow Track Max® hydraulic camshaft (TFS-31401001), 9.5:1 to 10.0:1 compression, and an Edelbrock Victor Jr. intake manifold, and a Trick Flow by Quick Fuel Technology Track Heat® 750 cfm carburetor.

**TFS-K314-490-440**

- Test Engine: 383 c.i.d. short block with flat top pistons, Trick Flow Super 23° 195 cylinder heads with 72cc CNC-profiled combustion chambers (TFS-30410013-M72), Trick Flow Track Max® hydraulic camshaft (TFS-31401002), 10.0:1 compression, an Edelbrock Victor Jr. intake manifold, and a Trick Flow by Quick Fuel Technology Track Heat® 750 cfm carburetor.

**TFS-K314-445-405**

- Test Engine: 350 c.i.d. short block with flat top pistons, Trick Flow Super 23° 195 cylinder heads with 64cc CNC-profiled combustion chambers (TFS-30410003), Trick Flow Track Max® hydraulic roller camshaft (TFS-31402002), Trick Flow StreetBurner® intake manifold (TFS-30400222), 10.0:1 compression, and a Trick Flow by Quick Fuel Technology Track Heat® 750 cfm carburetor.

**TFS-K314-465-450/TFS-K315-465-450**

- Test Engine: 1987-95 factory roller cam 383 c.i.d. short block with flat top pistons, Trick Flow Super 23° 195 cylinder heads with 72cc CNC-profiled combustion chambers (TFS-30410013-M72), Trick Flow Track Max® hydraulic roller camshaft (TFS-31402001/M72), 10.0:1 compression, an Edelbrock Victor Jr. intake manifold, and a Trick Flow by Quick Fuel Technology Track Heat® 750 cfm carburetor.

**TFS-K314-500-450**

- Test Engine: 383 c.i.d. short block with flat top pistons, Trick Flow Super 23° 195 cylinder heads with 72cc CNC-profiled combustion chambers (TFS-30410013-M72), Trick Flow Track Max® hydraulic roller camshaft (TFS-31402002), 10.0:1 compression, an Edelbrock Victor Jr. intake manifold, and a Trick Flow by Quick Fuel Technology Track Heat® 750 cfm carburetor.
Ultra 18® 250 Cylinder Head for Small Block Chevrolet

Trick Flow Ultra 18 250 cylinder heads with 18 degree runners make serious horsepower—power ideal for drag and high-RPM circle track racing. Right out of the box, these heads deliver higher airflow numbers than fully prepped 23 degree heads.

Features include Trick Flow’s CNC-profiled combustion chambers and CNC Competition Ported runners with a premium high resolution surface finish for maximum flow and performance.

Ultra 18 250 heads accept most current 18 degree intake manifolds, headers, and other components. They require the use of offset shaft-mounted rocker arms and a mechanical roller camshaft with offset intake lifters.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Specifications

- **Material:** A-356-T61 aluminum
- **Combustion Chamber Volume:** 56cc CNC-profiled
- **Intake Port Volume:** 250cc CNC Competition Ported
- **Intake Port Location:** GM 18°
- **Intake Port Dimensions:** 1.350” x 2.200”
- **Intake Gaskets:** TFS-31800921
- **Intake Valve Diameter:** 2.150” (TFS-31800211)
- **Intake Valve Seat:** Ductile iron (TFS-31800271)
- **Exhaust Port Volume:** 100cc CNC Competition Ported
- **Exhaust Port Location:** GM 18°
- **Exhaust Port Dimensions:** 1.760” x 1.460” oval
- **Exhaust Gaskets:** TFS-31800931
- **Exhaust Valve Diameter:** 1.600” (TFS-31800212)
- **Exhaust Valve Seat:** Copper bronze alloy (TFS-31800272)
- **Valve Angles:** 18°
- **Valve Guide Material:** Manganese bronze alloy (TFS-51600251)
- **Valve Seal Materials:** Viton® fluoroelastomer (TFS-30400454)
- **Valve Spring Pocket Diameter:** 1.660”
- **Valve Spring I.D. Locators:** TFS-21400440
- **Valve Spring Retainers:** 10° x 1.550” o.d. titanium (TFS-214T0520)
- **Valve Spring Stem Locks:** .700” max. valve lift
- **Rocker Arms:** Shaft-style with .550” offset intake and .220” offset exhaust
- **Minimum Bore Diameter:** 4.155”
- **Cylinder Head Bolts:** ARP 234-3721
- **Head Gaskets:** TFS-30494200-040
- **Pushrod Length:** Varies per application
- **Spark Plugs:** Autolite 3932
- **NOTES:** Requires roller lifters with .180” offset intake and no exhaust offset. Requires intake manifold and headers designed for 18° heads.

Viton® is a registered trademark of DuPont Performance Elastomers.

### Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>73</td>
<td>56</td>
</tr>
<tr>
<td>.200”</td>
<td>144</td>
<td>103</td>
</tr>
<tr>
<td>.300”</td>
<td>221</td>
<td>150</td>
</tr>
<tr>
<td>.400”</td>
<td>280</td>
<td>204</td>
</tr>
<tr>
<td>.500”</td>
<td>315</td>
<td>236</td>
</tr>
<tr>
<td>.600”</td>
<td>338</td>
<td>258</td>
</tr>
<tr>
<td>.700”</td>
<td>343</td>
<td>269</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure).

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.”

### Dyto Results

Ultra 18 250

<table>
<thead>
<tr>
<th>RPM x 1,000</th>
<th>Horsepower</th>
<th>701 HP</th>
<th>Torque</th>
<th>467 Lbs.-Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.0</td>
<td>650</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.0</td>
<td>700</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.0</td>
<td>750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Test Engine: 13.35:1 compression 355 c.i.d. with Trick Flow Ultra 18° 250 cylinder heads (TFS-3181T001-C01), COMP cams solid roller camshaft (264°/292° duration @ .050”; .726°/.704° lift; 114° lobe separation), Jesel 1.60 ratio shaft mount roller rocker arms, ported Bowtie intake manifold, Quick Fuel 4150 series carburetor, Dynotech headers with 1½” to 2” stepped primaries.

### Fabricated Aluminum Valve Covers for Small Block Chevrolet

These good-looking, tall height (3/4” 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, natural, pair

### Chrome Valve Covers for Small Block Chevrolet

Trick Flow chrome plated valve covers provide a great alternative to higher-priced 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, chrome, pair

### Chrome Valve Covers for Small Block Chevrolet

Trick Flow also has cast aluminum valve covers. You can find them on page 26.
Roller Rocker Arms for Small Block Chevrolet

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 CNC-machined bodies, premium needle-bearing fulcums, 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-31400511 Roller arms, 1.6 ratio, 3/8” studs, set of 16
- TFS-31400512 Roller arms, 1.5 ratio, 3/8” studs, narrow body, set of 16
- TFS-31400513 Roller arms, 1.6 ratio, 3/8” studs, narrow body, set of 16
- TFS-31400514 Roller arms, 1.5/1.6 ratio, 3/8” studs, narrow body, set of 16
- TFS-31400516 Roller arms, 1.5/1.6 ratio, 3/8” studs, set of 16
- TFS-31400520 Roller arms, 1.5 ratio, 7/16” studs, set of 16
- TFS-31400521 Roller arms, 1.6 ratio, 7/16” studs, set of 16
- TFS-31400522 Roller arms, 1.5/1.6 ratio, 7/16” studs, set of 16

Rocker Stud Girdles for Small 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-30400700 Rocker stud girdles, 3/8”, pair
- TFS-30400701 Rocker stud girdles, 7/16”, pair

Valve Cover Adapters for Small Block Chevrolet

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.

- TFS-31500811 Valve cover adapters, pair

Track Max® Camshafts for Small Block Chevrolet

Get significant horsepower and torque increases with Trick Flow Track Max camshafts. The camshafts are dyno-proven to produce a wide power curve over the entire RPM range, not just at a particular RPM point or peak. The cams are cut from a premium blank core and checked for proper hardness before being precision ground to exact tolerances.

**Hydraulic Flat Tappet Camshaft and Camshaft/Lifter Kit Specifications**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.5 Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-31401000 (camshaft only)</td>
<td>Good idle, strong low-end torque, 2,200-5,700 RPM powerband. Small tube headers and low-restriction exhaust recommended. Compression: 9.1 minimum.</td>
<td>212°/214°</td>
<td>.443&quot;/.449&quot;</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-31401001 (camshaft only)</td>
<td>Fair idle, strong midrange power, 2,600-6,100 RPM powerband. 2,500-3,000 RPM stall converter. Compression: 9.5:1 minimum.</td>
<td>226°/234°</td>
<td>.480&quot;/.495&quot;</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-31401002 (camshaft only)</td>
<td>Rough idle, excellent top-end power, 3,500-6,700 RPM powerband. 3,000-3,500 RPM stall converter. Compression: 10:1 minimum.</td>
<td>246°/254°</td>
<td>.510&quot;/.518&quot;</td>
<td>112°</td>
</tr>
</tbody>
</table>

**Hydraulic Roller Camshaft Specifications**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.5 Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-31402001</td>
<td>Fair idle, broad midrange power, 2,800-6,300 RPM powerband. 2,500-3,000 RPM stall converter. Compression: 9.5:1 minimum.</td>
<td>230°/234°</td>
<td>.528&quot;/.539&quot;</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-31403001</td>
<td>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.</td>
<td>230°/234°</td>
<td>.530&quot;/.540&quot;</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-31402002</td>
<td>Rough idle, excellent top-end power, 3,500-7,000 RPM powerband. 3,000-3,500 RPM stall converter. Compression: 10:1 minimum.</td>
<td>246°/254°</td>
<td>.555&quot;/.555&quot;</td>
<td>112°</td>
</tr>
</tbody>
</table>

Hydraulic Flat Tappet Camshaft and Camshaft/Lifter Kit Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.5 Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-31401000 (camshaft only)</td>
<td>Good idle, strong low-end torque, 2,200-5,700 RPM powerband. Small tube headers and low-restriction exhaust recommended. Compression: 9.1 minimum.</td>
<td>212°/214°</td>
<td>.443&quot;/.449&quot;</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-31401001 (camshaft only)</td>
<td>Fair idle, strong midrange power, 2,600-6,100 RPM powerband. 2,500-3,000 RPM stall converter. Compression: 9.5:1 minimum.</td>
<td>226°/234°</td>
<td>.480&quot;/.495&quot;</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-31401002 (camshaft only)</td>
<td>Rough idle, excellent top-end power, 3,500-6,700 RPM powerband. 3,000-3,500 RPM stall converter. Compression: 10:1 minimum.</td>
<td>246°/254°</td>
<td>.510&quot;/.518&quot;</td>
<td>112°</td>
</tr>
</tbody>
</table>

True Roller Timing Chain Set for Small Block Chevrolet

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.

- TFS-31478500 Timing chain set, each

Cylinder Head Bolt Kit for Small 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 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
StreetBurner® Intake Manifold for Small Block Chevrolet

Trick Flow’s StreetBurner intake manifold for small block Chevrolet engines is designed for applications that operate in the 1,500-6,500 RPM range. The dual plane, open air design with high-flow individual runners provides significant torque increases in the low- to mid-RPM range. The air space below the plenum separates the runners from the heat of the lifter valley cover to keep the air/fuel mixture cooler for more power. Other features include A319 aluminum construction, integral bosses for nitrous nozzles, and extra material for custom port work. This intake manifold works with all 4150-style carburetors; overall height to the carburetor mounting pad is 5.400".

TFS-30400222 Manifold, each

Cast Aluminum Valve Covers for Small Block Chevrolet

Made from durable A319 cast aluminum, Trick Flow pent roof-style valve covers are much less prone to flex and distortion than stamped steel covers, which helps prevent oil leaks. These small block Chevy covers are 4 3/8" tall to clear girdles and roller rockers, and can be drilled for breathers.

TFS-31500802 Valve covers, silver, pair
TFS-31511802 Valve covers, black, pair
TFS-25200801 Hardware kit, includes twelve 1/4"-20 x 1.500" studs and 12 flanged nuts, each

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. The 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 mold, each
TFS-30400921 Intake manifold gaskets, 23° cylinder heads, pair
TFS-31800921 Intake manifold gaskets, 18° cylinder heads, pair
TFS-31800931 Header gaskets, 18° cylinder heads, pair

Standard Gasket Sets for Small Block Chevrolet

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

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

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 the 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 the 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

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
**PowerOval® 280 Cylinder Heads for Big Block Chevrolet**

Trick Flow PowerOval 280 cylinder heads for big block Chevy are an ideal upgrade from factory cast iron heads. They feature an oval intake port design that produces excellent low- and mid-range torque and horsepower, plus more efficient heart-shaped, CNC-profiled combustion chambers. 300° raised exhaust ports, extra-thick decks and walls for porting, and Fast As Cast® runners for near-CNC-ported performance at standard cast head prices. CNC bowl blended valve seat transitions promote high velocity and huge airflow volume and 24 degree valve angles with 4 degree sidecants further increase airflow.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

---

### Specifications

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** 113cc CNC-profiled
- **Intake Port Volume:** 280cc Fast As Cast
- **Intake Port Location:** Stock
- **Intake Port Dimensions:** 1.820" x 2.050" oval
- **Intake Gaskets:** Fel-Pro 1212
- **Intake Valve Diameter:** 2.190" (TFS-41400211)
- **Intake Valve Seat:** Ductile iron interlock (TFS-41400271)
- **Exhaust Port Volume:** 129cc Fast As Cast
- **Exhaust Port Location:** Raised .300" from stock
- **Exhaust Port Dimensions:** 1.650" x 1.925" D-shape
- **Exhaust Gaskets:** Fel-Pro 1412
- **Exhaust Valve Diameter:** 1.880" (TFS-41300212)
- **Exhaust Valve Seat:** Ductile iron interlock (TFS-54400272)
- **Valve Angles:** Intake 24°/4°, exhaust 15°/4°
- **Valve Guide Material:** Bronze alloy (TFS-54500253-1)
- **Valve Seals:** Viton® fluoroelastomer (TFS-30400454)
- **Valve Seat Angles:** 10° x 1.625" o.d. titanium (TFS-214T0620)
- **Valve Spring Pocket Diameter:** .760"
- **Valve Spring Cups:** 1.640" (TFS-41400434)
- **Valve Spring i.d. Locators:** 1.550" (TFS-21400440)
- **Valve Spring Retainers:** 10" x 1.550" o.d. + .050" chromoly steel (TFS-41400423)
- **Valve Stem Locks:** 10" machined steel with lash cap recess (TFS-52400444)
- **Valve Springs, Standard:** 1.550" o.d. dual spring with damper (TFS-16094-16)
  - 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 (TFS-16318-16)
  - 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 (TFS-16414-16)
  - 250 lbs. @ 2.000" installed height
  - 800 lbs. @ 1.150" open
  - 600 lbs. per inch rate
  - .850" maximum valve lift
- **Guideplates:** 3/8" (TFS-41400624)
- **Rocker Arm Studs:** 7/16" (intake TFS-41400613, exhaust TFS-41400614)
- **Rocker Arms:** TFS-41400621 (1.7 ratio, 7/16" studs)
- **Minimum Bore Diameter:** 4.094"
- **Cylinder Head Bolts:** TFS-92002
- **Head Gaskets:** TFS-4134375-040
- **Pushrod Length:** Longer than stock required
- **Spark Plugs:** Autolite 5924

---

### Dyno Results

**PowerOval 280**

<table>
<thead>
<tr>
<th>RPM</th>
<th>Horsepower</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000</td>
<td>605 HP</td>
<td>556 Lbs.-Ft.</td>
</tr>
</tbody>
</table>

Test Engine: 10.25:1 compression 460 c.i.d. with Trick Flow PowerOval® 280 cylinder heads (TFS-41310002), COMP Cams solid roller camshaft (248°/254° duration @ .050", .653/.650" lift; 108° lobe separation), Trick Flow 1.7 ratio roller rocker arms (TFS-41400621), Edelbrock Victor intake manifold, Hooker Super Competition headers with 2" primaries, 3/5" dual exhaust with Flowmaster mufflers.

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

- TFS-41310001-M13 1.550" dual valve springs, 280cc intake runners
- TFS-41310002-M13 1.560" dual valve springs, 280cc intake runners
- TFS-4131T002-M13 1.560" dual valve springs and titanium retainers, 280cc intake runners
- TFS-4131T003-M13 1.640" dual valve springs and titanium retainers, 280cc intake runners

### Airflow Results

**PowerOval 280**

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100&quot;</td>
<td>74</td>
<td>64</td>
</tr>
<tr>
<td>.200&quot;</td>
<td>150</td>
<td>113</td>
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<td>.300&quot;</td>
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<td>.600&quot;</td>
<td>336</td>
<td>240</td>
</tr>
<tr>
<td>.700&quot;</td>
<td>347</td>
<td>264</td>
</tr>
</tbody>
</table>

Tests conducted at 28" of water (pressure). Bore size: 4.250"; 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."

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**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 and Edelbrock Air-Gap intake), Trick Flow PowerOval 280 Cylinder Heads for Big Block Chevrolet made 601 HP—20 more horsepower than the closest competing head.

That’s Horsepower by Design!
Trick Flow PowerPort 365 and 320 cylinder heads for big block Chevy deliver the exceptional power potential and competition level durability required for heavily modified engines.

Want proof? The extreme performance PowerPort 365 heads flow a massive 424 cfm @ .900" lift. The high-strength aluminum castings withstand very high compression and RPM. Plus, the heads’ rectangular-shaped 365cc CNC Competition Ported runners, 119cc heart-shaped chambers, 24° intake valve angles with 4° side cants for additional airflow volume, and high quality valve train components are dyno-proven to turn ordinary engines into contenders. In fact, these heads are so powerful they’re recommended for 500 plus cubic inch engines.

The PowerPort 320 heads are no slouches in the power department either. With Fast As Cast® runners that flow almost as much as fully CNC-ported heads and many of the same features as the 365° heads, PowerPort 320 heads deliver the strong mid- to high-RPM performance that made Trick Flow famous—but for smaller cubic inch, lower RPM high performance applications.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

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### Specifications

<table>
<thead>
<tr>
<th>Material:</th>
<th>A-356-T61 aluminum</th>
</tr>
</thead>
</table>
| Combustion Chamber Volume: | PowerPort 320: 122cc CNC-profiled  
                        | PowerPort 365: 119cc CNC-profiled  
                        | PowerPort 320: 320cc Fast As Cast  
                        | PowerPort 365: 365cc CNC Competition Ported                                      |
| Intake Port Location: | Stock                                                                                |
| Intake Port Dimensions: | 1.750" x 2.500" rectangular                                                        |
| Intake Gaskets:       | Fel-Pro 1412 or TFS-41400931                                                        |
| Intake Valve Diameter: | PowerPort 320: 1.880" (TFS-41300212)  
                       | PowerPort 365: 1.880" (TFS-41400212)                                              |
| Exhaust Valve Diameter: | PowerPort 365: 1.925" (TFS-41400212)  
                       | Ductile iron interlock (TFS-54000272)                                             |
| Exhaust Valve Seat:   | Intake: 24°/4°, exhaust 15°/4°                                                     |
| Valve Guide Material: | PowerPort 320: Bronze alloy (TFS-5400253-1)                                         |
| Valve Seals:          | PowerPort 320: Viton® fluoroelastomer (TFS-30400454)                                |
| Valve Seat Angles:    | 45° x multi-angle                                                                    |
| Valve Spring Pocket Diameter: | 1.760"                                                                 |
| Valve Spring Cups:    | 1.640" (TFS-41400434)                                                             |
| Valve Spring I.D. Locators: | 1.550" (TFS-41400440)                                                            |
| Valve Spring Retainers: | 10° x 1.550" o.d. + .050" chromoly steel (TFS-41400432)                          |
| PowerPort 320: 10" long machined steel with lash cap recess (TFS-54000445) |
| PowerPort 365: 10" long machined steel with lash cap recess (TFS-54000445) |
| Valve Springs:        | 1.550" o.d. dual spring with damper (TFS-16994-16)                                |
| PowerPort 320 Standard: | 138 lbs. @ 1.950" installed height  
                       | 430 lbs. @ 1.250" open  
                       | 420 lbs. per inch rate  
                       | .700" maximum valve lift                                                      |
| Option 1:             | 1.560" o.d. dual spring with damper (TFS-16994-16)                                  |
| Option 2:             | 1.640" o.d. dual spring with damper (TFS-16414-16)                                 |
| Valve Stem Locks:     | PowerPort 320: 10" machined steel with lash cap recess (TFS-5400444)              |
| Valve Springs:        | 1.550" o.d. dual spring with damper (TFS-16994-16)                                |
| PowerPort 320 Standard: | 138 lbs. @ 1.950" installed height  
                       | 430 lbs. @ 1.250" open  
                       | 420 lbs. per inch rate  
                       | .700" maximum valve lift                                                      |
| Option 1:             | 1.560" o.d. dual spring with damper (TFS-16318-16)                                 |
| Option 2:             | 1.640" o.d. dual spring with damper (TFS-16414-16)                                 |
| Valve Springs:        | 1.550" o.d. dual spring with damper (TFS-16994-16)                                |
| PowerPort 320 Standard: | 138 lbs. @ 1.950" installed height  
                       | 430 lbs. @ 1.250" open  
                       | 420 lbs. per inch rate  
                       | .700" maximum valve lift                                                      |
| Option 1:             | 1.560" o.d. dual spring with damper (TFS-16318-16)                                 |
| Option 2:             | 1.640" o.d. dual spring with damper (TFS-16414-16)                                 |

---

### Dyno Results

<table>
<thead>
<tr>
<th>Brake Horsepower/Torque</th>
<th>PowerPort 365</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horsepower</td>
<td>1,071 HP</td>
</tr>
<tr>
<td>Torque</td>
<td>802 Lbs.-Ft.</td>
</tr>
</tbody>
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### Valve Specifications

<table>
<thead>
<tr>
<th>Valve Springs, PowerPort 365</th>
<th>1.645&quot; o.d. triple spring (TFS-16994-16)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>332 lbs. @ 2.100&quot; installed height</td>
</tr>
<tr>
<td></td>
<td>950 lbs. @ 1.200&quot; open</td>
</tr>
<tr>
<td></td>
<td>638 lbs. per inch rate</td>
</tr>
<tr>
<td></td>
<td>.900&quot; maximum valve lift</td>
</tr>
</tbody>
</table>

---

### Guideplates

<table>
<thead>
<tr>
<th>Rocker Arm Studs:</th>
<th>1.750&quot; (TFS-41400624)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7/16&quot; (intake TFS-41400612, exhaust TFS-41400614)</td>
</tr>
</tbody>
</table>

---

### Rocker Arms

| Minimum Bore Diameter: | 4.250 |

---

### Cylinder Head Bolts

<table>
<thead>
<tr>
<th>Minimum Head Bolts:</th>
<th>TFS-41394540-040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Pushrod Length:</td>
<td>Longer than stock required</td>
</tr>
<tr>
<td>Spark Plugs:</td>
<td>Autolite 3924</td>
</tr>
</tbody>
</table>

---

Viton® is a registered trademark of DuPont Performance Elastomers.
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 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-41478510 Timing chain set, each

R-Series Intake Manifold for Big Block Chevrolet

Optimized to work with Trick Flow PowerPort® 365 cylinder heads installed on 500-plus cubic inch engines, the new and improved R-Series rectangular port intake manifolds flow more air than ever. Their high-rise single plane design with high-flowing extended runners and raised plenum floors significantly increase power and torque in the 3,500-8,000 RPM range. There are also bosses for nitrous nozzles and extra material for custom port work. Overall height to the carburetor mounting pad is 7.565" (TFS-41400111) or 7.580" (TFS-41400112). For use with Holley 4500 series Dominator carbs.

TFS-41400111 Manifold, 9.800" deck height, each
TFS-41400112 Manifold, 10.200" deck height, each

Roller Rocker Arms for Big Block Chevrolet

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" studs, set of 16

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 Rocker stud girdles, 7/16", pair

Laser-Etched Fabricated Aluminum Valve Covers for Big Block Chevrolet

These fabricated valve covers for big block Chevrolet engines feature a laser-etched Trick Flow logo for bold, distinctive looks. The covers have a thick, 3/8" billet mounting rail for a leak-free fit, and their tall height (3¾" overall) provides plenty of clearance for roller rocker arms and stud girdles. Made from .083" thick aluminum to reduce engine weight.

TFS-41400805 Valve covers, natural, pair

Carburetor Spacers

Give your carburetor a little more space for a noticeable power boost with a premium quality Trick Flow carburetor spacer.

The unique, CNC-ported exit shape on Trick Flow’s four-hole carburetor spacers smooth the airflow between the bottom of the carburetor and the intake manifold plenum for more torque and horsepower. Available in two versions, phenolic/composite and billet aluminum, they fit Holley 4150 and other square bore-style carbs.

The open-style spacer for Holley Dominator carbs features a cloverleaf design that increases power in the mid-to-upper RPM range.

The spacers are 1" thick and come complete with mounting studs and gaskets.

TFS-2141501B Billet aluminum spacer, black anodized, square bore carburetors, each
TFS-2141501C Phenolic/composite spacer, square bore carburetors, each
TFS-2145001C Phenolic/composite spacer, Holley Dominator carburetors, each

Phone: 1-330-630-1555 • Fax: 1-330-633-2504 • TrickFlow.com
Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.

Track Max® Hydraulic Roller Camshaft for Big Block Chevrolet

Get significant horsepower and torque increases with Trick Flow Track Max camshafts. The camshafts are dyno-proven to produce a wide power curve over the entire RPM range, not just at a particular RPM point or peak. The cams are cut from a premium blank core and checked for proper hardness before being precision ground to exact tolerances.

Hydraulic Roller Camshaft Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.7 Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-41302000</td>
<td>Fair idle, good midrange and strong top-end power. 3,000-6,200 RPM powerband. 2,500-3,000 RPM stall converter recommended. Compression: 9.5:1 minimum.</td>
<td>236°/242°</td>
<td>.600’/.600’</td>
<td>112°</td>
</tr>
</tbody>
</table>

Mechanical Roller Camshaft Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.7 Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-41404002</td>
<td>Rough idle, 4/7 cylinder firing order swap, strong top-end power. 5,400-7,900 RPM powerband. 500 plus minimum cubic inches and 5,000 RPM stall converter recommended. Compression: 12.5:1 minimum.</td>
<td>285°/288°</td>
<td>.850’/.828’</td>
<td>114°</td>
</tr>
</tbody>
</table>

PowerOval® Top-End Engine Kit for Big Block Chevrolet

Take the time and guesswork out of designing a winning engine combination and save hard-earned cash with this Trick Flow PowerOval top-end engine kit. Carefully tuned by Trick Flow engineers to deliver optimum horsepower and torque for your big block Chevrolet, this kit is built around a set of our dyno-proven PowerOval 280 cylinder heads. You also get a Track Max hydraulic roller camshaft, matching lifters, 3/8” pushrods, 1.7 ratio roller rocker arms, billet steel double roller timing chain set, cylinder head bolts, and a gasket set.

TFS-K413-580-560 Top-end engine kit, 580 HP/560 lbs.-ft., each

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 Cylinder head bolt kit, OE cast iron heads, hex head, each
TFS-92002 Cylinder head bolt kit, aftermarket heads, hex head, each

Standard Gasket Sets for Big Block Chevrolet

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

TFS-4140E912 Engine gasket set, oval port intake, each
TFS-4140E913 Engine gasket set, rectangular port intake, each
Trick Flow by Wiseco
PowerPort® Forged Piston Sets for Big Block Chevrolet

Trick Flow by Wiseco lightweight forged pistons are fully skirted and precision-machined from premium aluminum alloy to fit big block Chevy engines equipped with Trick Flow PowerPort 365 cylinder heads. The pistons feature 3D profile dome milling, oversized valve reliefs, precision-fit wrist pins, and Spirolox retainers.

The pistons are available in two different bore diameters, 4.600” and 4.625”. All pistons use ring sets with .043” top rings, .043” second rings, and 3.0mm oil control rings (see chart for details). Sold in sets of 8.

NOTE: Compression ratios are based on the 119cc combustion chambers of Trick Flow PowerPort 365 cylinder heads.

Specifications

<table>
<thead>
<tr>
<th>Part Numbers</th>
<th>Engine Size</th>
<th>Bore</th>
<th>Stroke</th>
<th>Rod</th>
<th>Comp. Height</th>
<th>Dome Volume</th>
<th>Comp. Ratio</th>
<th>Pin Dia.</th>
<th>Rings</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-41404600</td>
<td>565 (454)</td>
<td>4.600”</td>
<td>4.250”</td>
<td>6.536”</td>
<td>1.129”</td>
<td>40.5cc</td>
<td>14.0:1</td>
<td>.990”</td>
<td>.043”, .043”, 3.0mm</td>
</tr>
<tr>
<td>TFS-41404625</td>
<td>572 (454)</td>
<td>4.625”</td>
<td>4.250”</td>
<td>6.536”</td>
<td>1.129”</td>
<td>40.5cc</td>
<td>14.2:1</td>
<td>.990”</td>
<td>.043”, .043”, 3.0mm</td>
</tr>
</tbody>
</table>

Trick Flow Gets 1,071 Horsepower Out of 572 Cubic Inches!

What does it take to extract over 1,000 naturally-aspirated horsepower out of a 572 cubic inch big block Chevy? Good engine-building skills and off-the-shelf parts from Trick Flow! The 572 made 1,071 peak horsepower at 7,400 RPM and 802 lbs.-ft. peak torque at 6,200 RPM on 116 octane Q16 fuel using several Trick Flow parts to make it happen.

572 Engine Build Parts List

Long Block
- Trick Flow by Wiseco PowerPort forged pistons (TFS-41404625)
- Trick Flow PowerPort 365 cylinder heads (TFS-4141T804-C02)
- Trick Flow R-Series intake manifold (TFS-41400111)
- Dart Big M iron engine block, 9.800” inch deck
- Crower Maxi-Light 4.250” forged steel crank
- Crower Maxi-Light I-beam steel connecting rods

Valvetrain
- Trick Flow Track Max® solid roller camshaft (TFS-42404002)
- Crower Severe Duty Cutaway roller lifters
- Crower 1.8/1.7 ratio shaft mount roller rocker arms
- Jesel belt drive system

Oiling System
- Moroso Drag Race oil pan
- Moroso Blueprinted high volume oil pump
- Moroso breather tank
- Moroso vacuum pump system

Other Parts
- Trick Flow by Stainless Works dragster headers (TFS-DBBC238250)
- Holley 1,425 cfm Gen 3 Ultra Dominator carburetor
- MSD crank trigger, Pro-Billet distributor, and Super Conductor spark plug wires
- Meziere 200 Series electric water pump
- ATI Super Damper harmonic damper and timing pointer
- SCE gaskets
- ARP fasteners
- Clevite bearings

Dyno Results

Test Engine: 13.86:1 compression 572 c.i.d. with Trick Flow PowerPort® 365 cylinder heads (TFS-4141T804-C02), solid roller camshaft (285°/298° duration @ .050”; .900”/ .828” lift; 114° lobe separation), 1.8/1.7 ratio shaft mount roller rocker arms, Trick Flow R-Series intake manifold (TFS-41400111), Holley Gen 3 Ultra Dominator 1,425 cfm carburetor, Trick Flow by Stainless Works headers (TFS-DBBC238250), Q16 racing fuel.
Twisted Wedge® 185 and Twisted Wedge® Track Heat® 185 Cylinder Heads for Ford 4.6L/5.4L 2V

Trick Flow Twisted Wedge and Track Heat 185 series cylinder heads are the best aftermarket heads for modular-powered Fords. The secret? Twisted Wedge combustion chambers and intake valves moved on the opposite side of the cam. The result is dramatic increases in mid-lift airflow, piston-to-valve clearance, and valve-to-bore clearance for using higher lift cams and larger valves without altering bore size or flycutting pistons.

Other features include OE PI-style intake inlets, Fast As Cast® runners that deliver near-CNC-ported airflow, CNC-profiled combustion chambers, 3/4” thick decks, patented replaceable cam bearing journals*, and 3/4”-reach CNC-profiled combustion chambers, 3/4” thick decks, patented replaceable cam bearing journals*, and 3/4”-reach spark plugs.

The heads fit all 2V Romeo and Windsor engines and accept all OE-style camshafts, followers, lash adjusters, valve covers, and most OE Ford front covers. Twisted Wedge 185 heads are intended for mildly modified engines; Twisted Wedge Track Heat 185 heads are for engines with power adders and/or high RPM applications.

Twisted Wedge and Track Heat 185 heads are emissions-legal under CARB E.O. #D-747-3 for 1996–2004 Ford vehicles with 4.6L/5.4L 2V engines.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

* The replaceable cam bearing journals are protected under U.S. patent number 8,231,278.

Specifications

| Material: | A356-T61 aluminum |
| Combustion Chamber Volume: | M38: 38cc CNC-profiled |
| Intake Port Volume: | M44: 44cc CNC-profiled |
| Intake Port Location: | 185cc Fast As Cast |
| Intake Port Dimensions: | OE Ford PI |
| Intake Gaskets: | OE Ford PI |
| Intake Valve Diameter: | M38: 1.840” (TFS-51900211) |
| Intake Valve Seat: | Ductile iron (TFS-51900271) |
| Exhaust Port Location: | Stock |
| Exhaust Port Dimensions: | 1.470” x 1.250” D-shape |
| Exhaust Gaskets: | OE Ford PI |
| Exhaust Valve Diameter: | M38: 1.450” (TFS-51900212) |
| Exhaust Valve Seat: | Ductile iron (TFS-51900272) |
| Valve Angles: | 9° |
| Valve Guide Material: | Trick-Alloy powdered metal (intake TFS-51900251, exhaust TFS-51900252) |
| Valve Seals: | 01/02/03/04: Viton® fluoroelastomer (TFS-51900454) |
| Valve Seat Angles: | 45° x multi-angle |
| Valve Spring Pocket Diameter: | 1.180” |
| Valve Spring Cups: | 05/06: 1.100” (TFS-52900434) |
| Valve Spring Retainers: | 05/06: 7° x 1.100” o.d. chromoly steel (TFS-52900423) |
| Valve Stem Locks: | 7° machined steel (TFS-51900444) |
| Valve Springs: | 94°/12°0.050” o.d. beehive spring (TFS-16515-16) |
| Twisted Wedge 185: | 90 lbs. @ 1.600” installed height |
| Twisted Wedge: | 205 lbs. @ 1.020” open |
| Track Heat 185, Standard: | 90 lbs. per inch rate |
| Track Heat 185, Optional: | .600” maximum valve lift |
| Valve Springs: | 1.000”/1.060” o.d. beehive spring (TFS-16125-16) |
| Twisted Wedge: | 125 lbs. @ 1.600” installed height |
| Track Heat 185: | 275 lbs. @ 1.020” open |
| Track Heat 185, Optional: | 275 lbs. per inch rate |
| Valve Springs: | .500” maximum valve lift |
| Valve Springs: | 1.100” dual spring (TFS-16521-16) |
| Twisted Wedge: | 150 lbs. @ 1.500” installed height |
| Track Heat 185, Optional: | 290 lbs. @ 900” open |
| Track Heat 185, Optional: | 233 lbs. per inch rate |
| Rocker Arms: | .650” maximum valve lift |
| Minimum Bore Diameter: | TFS-51805010 (OE-style) |
| Cylinder Head Bolts: | TFS-51805010 (Ford GT-style) |
| Head Gaskets: | TFS-52900423 (intake TFS-51900251, exhaust TFS-51900252) |
| Rocker Arms: | 3.552” |
| Minimum Bore Diameter: | 3.552” |
| Cylinder Head Bolts: | 3.552” |
| Head Gaskets: | 3.552” |

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

Viton® is a registered trademark of DuPont Performance Elastomers.

Test Engine:
- 10.35:1 compression 4.6L 2V with Trick Flow Twisted Wedge® 185 cylinder heads (TFS-51910001-M38), Trick Flow Track Max® hydraulic roller camshaft (TFS-5180901L and TFS-5180901R), Trick Flow TFX™ cold air intake kit (TFS-51800001), long tube headers with 15⁄8” primaries, 3” dual exhaust with Flowmaster mufflers.
- Trick Flow Twisted Wedge and Track Heat 185 series cylinder heads (TFS-51900001-M38), Trick Flow Track Max® hydraulic roller camshaft (TFS-51802001), stock intake manifold, followers, and PCM (SCT tuned), Trick Flow TFX™ cold air intake kit (TFS-23036), Trick Flow TFX™ 70mm throttle body (TFS-24070), Trick Flow upper plenum (TFS-51800001), long tube headers with 1½” primaries, 3½” dual exhaust with Flowmaster mufflers.

Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>58</td>
<td>49</td>
</tr>
<tr>
<td>.200”</td>
<td>125</td>
<td>101</td>
</tr>
<tr>
<td>.300”</td>
<td>175</td>
<td>143</td>
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<td>.400”</td>
<td>224</td>
<td>174</td>
</tr>
<tr>
<td>.500”</td>
<td>250</td>
<td>179</td>
</tr>
<tr>
<td>.600”</td>
<td>252</td>
<td>188</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size: 3.562”; exhaust with 1½” pipe.
Twisted Wedge® Race 195 Cylinder Heads
for Ford 4.6L/5.4L 2V

Trick Flow Twisted Wedge Race 195 cylinder heads are perfect for big bore engine builds, superchargers and turbos, high compression E85, big shot nitrous oxide, and other mega-power combinations.

The heads have the same features of the Twisted Wedge 185 series heads—Twisted Wedge combustion chambers, altered intake valve positions, OE PI-style intake inlets, CNC-profiled combustion chambers, 3/4" thick decks, patented replaceable cam bearing journals*, and 3/4"-reach spark plugs—but have fully CNC Competition Ported runners with a premium high resolution surface finish for ultimate performance. Larger, stronger valves and race-duty valvetrain components give these heads 8,000-plus RPM capability.


Cylinder heads are available fully assembled or as bare castings. Sold individually.

*The replaceable cam bearing journals are protected under U.S. patent number 8,231,278.

Specifications

- Material: A356-T61 aluminum
- Combustion Chamber Volume: 44cc CNC-profiled
- Intake Port Volume: 195cc CNC Competition Ported
- Intake Port Location: Stock
- Intake Port Dimensions: 1.700" x 2.000" OE Ford PI
- Intake Gaskets: OE Ford PI
- Intake Valve Diameter: 1.900" (TFS-52900211)
- Intake Valve Seat: Ductile iron (TFS-52900271)
- Exhaust Port Volume: 95cc CNC Competition Ported
- Exhaust Port Location: Stock
- Exhaust Port Dimensions: 1.470" x 1.250" D-shape
- Exhaust Gaskets: OE Ford PI
- Exhaust Valve Diameter: 1.470" (TFS-52900212)
- Exhaust Valve Seat: Ductile iron (TFS-51900272)
- Valve Angles: 9°
- Valve Guide Material: Trick-Alloy powdered metal (intake TFS-51900251, exhaust TFS-51900252)
- Valve Seats: Viton® fluoroelastomer (TFS-52900454)
- Valve Seat Angles: 45° x multi-angle
- Valve Spring Pocket Diameter: 1.180" (TFS-52900444)
- Valve Spring Retainers: 7/8" x 1.100" o.d. chromoly steel (TFS-52900424)
- Valve Stem Locks: 7/8" machined steel (TFS-52900450)
- Valve Spring Springs: 1.100" dual spring (TFS-16521-16)
- Valve Springs: 150 lbs. @ 1.500" installed height
- Valve Springs: 290 lbs. @ .900" open
- Valve Springs: 233 lbs. per inch rate
- Valve Springs: .650" maximum valve lift
- Rocker Arms: TFS-51800510 (OE-style)
- TFS-52900510 (Ford GT-style)
- Minimum Bore Diameter: 3.572" (TFS-92008)
- Head Gaskets: TFS-5180902L and TFS-5180902R
- Spark Plugs: Motorcraft SP432
- 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".

Viton® is a registered trademark of DuPont Performance Elastomers.

Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100&quot;</td>
<td>61</td>
<td>51</td>
</tr>
<tr>
<td>.200&quot;</td>
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<tr>
<td>.300&quot;</td>
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<td>234</td>
<td>183</td>
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<tr>
<td>.500&quot;</td>
<td>262</td>
<td>195</td>
</tr>
<tr>
<td>.600&quot;</td>
<td>278</td>
<td>199</td>
</tr>
</tbody>
</table>

Tests conducted at 28" of water (pressure). Bore size: 3.700"; exhaust with 1¾" pipe.

Power Steering Reservoir Bracket for Ford 5.4L 2V Trucks

Use this hefty steel bracket to move your 1997-2010 5.4L Ford truck’s power steering reservoir from the cylinder head to the valve cover so you can run Trick Flow Twisted Wedge 185/195 series heads. Includes flange bolts and captive nut clips for easy installation.

TFS-51954PSB Power steering reservoir bracket, each

Twisted Wedge Race 195 Heads, CNC Competition Ported Runners, Assembled

TFS-52910002-C01 195cc intake runners

Dyno Results

Twisted Wedge Race 195

<table>
<thead>
<tr>
<th>RPM x 1,000</th>
<th>Horsepower</th>
<th>Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5</td>
<td>417 Lbs.-Ft.</td>
<td>518 HP</td>
</tr>
</tbody>
</table>

Test Engine: 11.67:1 compression 5.3L Ford Racing Boss engine with 3.700" bore, Twisted Wedge® Race 195 cylinder heads (TFS-52910002-C01), COMP Cams hydraulic roller camshaft (252°/256° duration @ .050"; .625"/625" lift; 113° lobe separation), Trick Flow Track Heat® intake manifold (TFS-51800002), 90mm mass airflow sensor, PaceSetter headers with 1 5/8" primaries, 3" dual exhaust with Flowmaster mufflers.

8mm Timing Cover Bolt and Stud Kit for Ford 4.6L/5.4L 2V

Trick Flow’s 8mm timing cover bolt and stud kit allows you to maintain factory accessory mounting when using our Twisted Wedge 185/195 series cylinder heads on modular engines originally equipped with 10mm bolts and studs.

TFS-51954TCB Timing cover bolt and stud kit, each
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 engines. The bigger cams will move the power curve up in the RPM range and are ideal for extreme duty forced induction engines. All cams include new 12mm bolts and washers.

Track Flow can bundle your cams with the appropriate Track Flow by PAC Racing valve spring upgrade kit for more performance gains. The first option includes Track Flow by PAC Racing beehive-style springs (TFS-16519-16) that provide 90 lbs. of seat pressure at 1.570” installed height, 205 lbs. at 1.020” open, and a maximum lift of .600”. The second option includes Track Flow by PAC Racing beehive-style valve springs (TFS-16125-16) 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 camshafts, valve springs, chromoly retainers, locks, seals, and instructions.

Camshaft Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050”</th>
<th>Valve Lift w/OEM Followers</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-S1802001</td>
<td>Fair idle, strong midrange power and torque, 1,500-5,000 RPM powerband. Works with stock PI heads or Trick Flow Twisted Wedge® 185 series heads; tuning recommended for maximum performance. Piston-to-valve clearance measurement recommended. Compression: stock.</td>
<td>228°/230°</td>
<td>.550’/.550’</td>
<td>112°</td>
</tr>
<tr>
<td>TFS-S1802002</td>
<td>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 series heads; tuning recommended for maximum performance. 3.73 or numerically higher gear. Piston-to-valve clearance measurement required. Compression: stock minimum.</td>
<td>234°/234°</td>
<td>.580’/.580’</td>
<td>114°</td>
</tr>
</tbody>
</table>

Camshaft and Valve Spring Upgrade Kit Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050”</th>
<th>Valve Lift w/OEM Followers</th>
<th>Lobe Sep.</th>
<th>Valve Springs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-KS1802001</td>
<td>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 series heads; tuning recommended for maximum performance. Piston-to-valve clearance measurement recommended. Compression: stock.</td>
<td>228°/230°</td>
<td>.550’/.550’</td>
<td>112°</td>
<td>TFS-16519-16</td>
</tr>
<tr>
<td>TFS-KS1802002</td>
<td>Fair idle, strong mid- to top-end power, 1,800-6,500 RPM powerband. Ideal for mild engines with power adders up to 5-6 psi. Works best with stock PI heads or Trick Flow Twisted Wedge 185 series heads; tuning recommended for maximum performance. 3.73 or numerically higher gear. Piston-to-valve clearance measurement required. Compression: stock minimum.</td>
<td>234°/234°</td>
<td>.580’/.580’</td>
<td>114°</td>
<td>TFS-16519-16</td>
</tr>
<tr>
<td>TFS-KS1802003</td>
<td>Fair idle, strong top-end power, 1,500-6,500 RPM plus powerband. Works best with Trick Flow Twisted Wedge 185 or 195 series heads; tuning recommended for maximum performance. 3.73 or numerically higher gear. Piston-to-valve clearance measurement recommended. Compression: stock minimum.</td>
<td>228°/230°</td>
<td>.550’/.550’</td>
<td>112°</td>
<td>TFS-16125-16</td>
</tr>
<tr>
<td>TFS-KS1802004</td>
<td>Fair idle, strong top-end power, 6,500 RPM plus powerband. Ideal for extreme duty engines with power adders rated at 15 psi-plus. Works best with Trick Flow Twisted Wedge 185 or 195 series heads; tuning recommended for maximum performance. 3.73 or numerically higher gear. Piston-to-valve clearance measurement required. Compression: stock minimum.</td>
<td>234°/234°</td>
<td>.580’/.580’</td>
<td>114°</td>
<td>TFS-16125-16</td>
</tr>
</tbody>
</table>

Horsepower How-To Series: 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.

Includes 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, each
Valve Cover-Mount Ignition Systems for Ford 4.6L/5.4L 2V

Attention mod motor racers! Trick Flow’s Valve Cover-Mount Ignition System allows you to take complete and accurate control of your race-prepped motor’s ignition timing in applications with custom fuel management systems or carburetor conversions.

Designed specifically for use with Trick Flow’s Twisted Wedge® and Twisted Wedge Track Heat® cylinder heads for the 4.6L 2V, these systems feature a valve cover-mounted MSD distributor driven off the driver’s side camshaft plus a pair of modified Trick Flow cast aluminum valve covers, a distributor mount and hold-down, a hex drive cam bolt and washer, spark plug wires, and all necessary brackets and mounting hardware.

**NOTES:**
- For racing use only.
- Can only be used with Trick Flow Twisted Wedge® and Twisted Wedge Track Heat® cylinder heads for Ford 4.6L 2V.
- Requires relocation of the OE power steering reservoir or conversion to manual rack and pinion steering.
- An ignition box compatible with an MSD Pro-Billet distributor is required.
- Trick Flow Track Max® harmonic damper TFS-19009 must be used.

**Valve Cover-Mount Ignition Systems with MSD Pro-Billet Crank Trigger Distributors**
- TFS-K5290B801 Valve cover-mount ignition system, Romeo engines, 11-bolt, silver, each
- TFS-K52911801 Valve cover-mount ignition system, Romeo engines, 11-bolt, black, each
- TFS-K5290B801 Valve cover-mount ignition system, Romeo engines, 11-bolt, natural, each

**Valve Cover-Mount Ignition Systems with MSD Pro-Billet Dual Pick-Up Distributors**
- TFS-K52900803 Valve cover-mount ignition system, Romeo engines, 11-bolt, silver, each
- TFS-K52911803 Valve cover-mount ignition system, Romeo engines, 11-bolt, black, each
- TFS-K5290B803 Valve cover-mount ignition system, Romeo engines, 11-bolt, natural, each

**Valve Cover-Mount Ignition Systems Components**
- TFS-K5292800 Spark plug wire set, direct fit, includes separators, each
- TFS-K5295800 Spark plug wire set, universal fit, includes separators and crimp tool, each
- TFS-S292B810 Trick Flow/MSD Pro-Billet dual pick-up distributor, each
- TFS-S292B802 Trick Flow/MSD Pro-Billet crank trigger distributor, each
- TFS-S292B080 Trigger wheel and bracket kit, each
- TFS-S290B8L1 Modified Trick Flow valve cover with distributor mount, left side only, Romeo engines, 11-bolt, silver, each
- TFS-S29118L1 Modified Trick Flow valve cover with distributor mount, left side only, Romeo engines, 11-bolt, black, each
- TFS-S290B8L1 Modified Trick Flow valve cover with distributor mount, left side only, Romeo engines, 11-bolt, natural, each

**Cast Aluminum Valve Cover Kits and Accessories 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.

**Valve Cover Kits**
- TFS-51800801 Valve cover kit, Romeo engines, 11-bolt, silver, each
- TFS-51811801 Valve cover kit, Romeo engines, 11-bolt, black, each
- TFS-5180B801 Valve cover kit, Romeo engines, 11-bolt, natural, each
- TFS-51800802 Valve cover kit, Windsor engines, 13-/14-bolt, silver, each
- TFS-51811802 Valve cover kit, Windsor engines, 13-/14-bolt, black, each
- TFS-5180B802 Valve cover kit, Windsor engines, 13-/14-bolt, natural, each
- TFS-51800800 Oil filler cap and grommet, each
- TFS-51800804 Valve cover gaskets, Trick Flow valve covers only, pair
- TFS-51800805 Valve cover sealing washers, set of 27

**PCV Valve Kits**
- TFS-51800810 Upgrade PCV and large baffle kit, fits Trick Flow valve covers purchased before 6/1/2012 only, each
- TFS-51800811 Late model PCV valve conversion kit, fits OEM Ford and Trick Flow valve covers, each

**Trick Flow Folding Chair**

Take a seat with the champs—Trick Flow Specialties! This comfy, go-with-you-anywhere chair is fitted with strong 600-denier poly-canvas material and equipped with cup holder for your favorite beverage. Relax with the best and when your day is done simply fold up your chair and slip it into the included storage bag.

TFS-P2500 Folding chair, each
Replacement Valvetrain Components for Ford 4.6L/5.4L

Trick Flow’s line of replacement valvetrain parts for Ford modular V8s feature OEM quality and durability.

Trick Flow adjustable crankshaft sprockets are machined from solid billet steel for durability and adjust in 2 degree increments. The chain tensioners are manufactured from cast iron to OEM specifications 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 non-PI cams (OE and aftermarket) 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, powder metal cam sprockets, your choice of adjustable or non-adjustable billet steel crank gears, timing chain arms and guides, and two cast iron tensioner assemblies.

Timing Chain Kits
- TFS-51800519 Timing chain kit, non-adjustable crankshaft gear, Ford 4.6L 2V, each
- TFS-51800520 Timing chain kit, adjustable crankshaft gear, Ford 4.6L 2V, each

Camshaft Gears, Bolts, Crankshaft Gears, and Spacers
- TFS-51800502 Timing gear set with spacers, OEM-style, Ford 4.6L/5.4L 2V, kit
- TFS-51800503 Camshaft gear spacers, Ford 4.6L/5.4L 2V, pair
- TFS-51800505 Crankshaft gears, adjustable, billet steel, Ford 4.6L 2V/4V, set
- TFS-51800508 Crankshaft gears, 12mm, Ford 4.6L 2V/4V, pair
- TFS-51800509 Crankshaft gears, non-adjustable, billet steel, Ford 4.6L 2V, set

Timing Chains, Guides, and Tensioners
- TFS-51800504 Timing chain only, Ford 5.4L 2V, each
- TFS-51800511 Timing chain arms and guides, Ford 5.4L 2V, kit
- TFS-51800512 Timing chain only, Ford 4.6L 2V, each
- TFS-51800513 Timing chain tensioners, cast iron, Ford 4.6L/5.4L 2V, pair
- TFS-51800517 Timing chain arms and guides, Ford 4.6L 2V, kit

Lash Adjusters
- TFS-21400008 Hydraulic lash adjuster, Ford 4.6L/5.4L 2V/4V, each
- TFS-21400008-16 Hydraulic lash adjusters, Ford 4.6L/5.4L 2V/4V, set of 16
- TFS-21400009 Hydraulic lash adjuster, Ford 4.6L/5.4L 3V, each
- TFS-21400009-12 Hydraulic lash adjusters, Ford 4.6L/5.4L 3V, set of 12

Camshaft Followers
- TFS-51800510 Roller follower, OEM-style, Ford 4.6L/5.4L 2V/4V, each
- TFS-51800510-16 Roller followers, OEM-style, Ford 4.6L/5.4L 2V/4V, set of 16
- TFS-51800601 Roller follower, OEM-style, Ford 4.6L/5.4L 3V, each
- TFS-51800601-12 Roller followers, OEM-style, Ford 4.6L/5.4L 3V, set of 12
- TFS-52900515 Ford GT-style roller follower with low restriction lash adjuster, Ford 4.6L/5.4L 2V/4V, set

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. Trick Flow engineers tune each kit to deliver optimum horsepower and torque—taking the time and guesswork out of designing a winning combination and saving you some hard-earned cash in the process.

The Twisted Wedge top-end kits are built around a set of our dyno-proven Twisted Wedge® 185 cylinder heads with 90 lb. valve springs. The Twisted Wedge Track Heat® top-end kits feature our race-winning Twisted Wedge Track Heat 185 cylinder heads with 125 lb. valve springs. With each kit, you get your choice of 38cc or 44cc CNC-profiled combustion chambers plus a Track Max® hydraulic roller camshaft set (TFS-51802001), matching followers, lash adjusters, timing chains, valve spring compressor tool, and intake and head gasket kit.

Twisted Wedge 185 Top-End Engine Kits
- TFS-K519-380-375 380 HP/375 lbs.-ft., 44cc combustion chambers, each
- TFS-K519-390-375 390 HP/375 lbs.-ft., 38cc combustion chambers, each

Twisted Wedge Track Heat 185 Top-End Engine Kits
- TFS-K520-380-375 380 HP/375 lbs.-ft., 44cc combustion chambers, each
- TFS-K520-390-375 390 HP/375 lbs.-ft., 38cc combustion chambers, each

Twisted Wedge® Top-End Engine Kits
- TFS-K519-390-375 Dyno Results

Test Engine: Stock Romeo PI 4.6L short block with 15cc dish pistons, Trick Flow Twisted Wedge® 185 cylinder heads with 38cc CNC-profiled combustion chambers (TFS-51910001-M38), Trick Flow Track Max® hydraulic roller camshafts (TFS-51802001), 10.01 compression, stock PI intake manifold, Trick Flow upper plenum (TFS-51800001), and Trick Flow TFX™ 75mm throttle body (TFS-24075).
Valve Spring Upgrade Kits • Valve Spring Change Accessory Kit • Valve Spring Compressor • Cylinder Head Bolt Kit • Cam Degree and Supplement Kit for Ford 4.6L/5.4L

Frozen in Time! Trick Flow's Frozen Valve Spring Upgrade Kits for Ford 4.6L/5.4L 2V

Valve Spring Upgrade Kits

Trick Flow’s valve spring upgrade kits are specifically designed to fit various Ford modular engines. The kits are beneficial for mildly modified engines, providing increased performance and durability. Each kit contains premium quality alloy steel valve springs with cold-formed heads and rolled threads to ensure optimal performance.

- Valve Spring Change Accessory Kit
- Valve Spring Compressor
- Cylinder Head Bolt Kit
- Cam Degree and Supplement Kit

Trick Flow by PAC Racing Valve Spring and Valve Spring Upgrade Kits for Ford 4.6L/5.4L 2V

Trick Flow by PAC Racing’s 90 lb. valve spring upgrade kit is perfect for mildly modified Ford modular engines using OEM Ford 2V heads. The kit includes .940”/1.050” o.d. Pacaloy™ beehive valve springs with a 209 lb. spring rate (90 lbs. seat pressure at 1.600” installed height) and maximum lift rating of .600”, plus chromoly retainers, locks, and instructions.

The Trick Flow by PAC Racing 125 lb. spring upgrade kit is recommended for engines with power adders and/or other high RPM applications. It includes 1.000”/1.600”, 275 lb. Pacaloy beehive springs (125 lbs. seat pressure at 1.600” installed height) with a maximum lift rating of .580” and chromoly retainers, locks, and instructions. This kit is intended for use with OEM Ford 2V heads or Trick Flow Twisted Wedge® 185 cylinder heads.

The Trick Flow by PAC Racing 150 lb. valve spring upgrade kit is designed for extreme performance applications—“big bore” builds, superchargers and turbos, high compression E85, big shot nitrous oxide, and other high power combinations. With this kit you receive sixteen 1.100” diameter Pacaloy dual valve springs with a 233 lb. spring rate (150 lbs. seat pressure at 1.500” installed height) for use with cams up to .650” valve lift, chromoly retainers, locks, seals, and instructions. This kit is intended to convert Trick Flow Twisted Wedge/Track Heat® 185 cylinder heads with 90/125 lb. valve springs to Twisted Wedge Track Heat 185 with 150 lb. dual springs specifications.

Valve Spring Change Accessory Kit

Originally engineered just for valve spring replacement 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 seat 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

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

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

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

Cam Degree and Supplement Kits

Trick Flow’s camshaft degree kit will help dial in a camshaft accurately. In addition, 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 and a 1” diameter center hole to accommodate aftermarket crankshaft sockets, three adapter bushings (3/8”, 7/16”, and 1/2”), flat washer, magnetic base, dial indicator, and a carrying case.

The supplement kit contains components to make degreeing the cam in a vehicle easier: a steel plate for the magnetic base indicators, an Allen key, adjustable set-up lash adjuster, and an extension for the dial indicator is included. The supplement kit only works with the TFS-90000-16 cam degree kit.

- TFS-90000-16 Cam degree kit, universal fit, each
- TFS-90000-16W Degree wheel only, universal fit, each
- TFS-90100 Cam degree supplement kit, Ford 4.6L/5.4L 2V/4V, each
- TFS-90100-BODY Steel plate for magnetic base indicators, Ford 4.6L/5.4L 2V/4V, each
- TFS-90100-EXT Adjustable set-up lash adjuster, Ford 4.6L/5.4L 2V/4V, each, 4-48 male threads, each

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-90000-16 Cam degree kit, universal fit, each
- TFS-90000-16W Degree wheel only, universal fit, each
- TFS-90100 Cam degree supplement kit, Ford 4.6L/5.4L 2V/4V, each
- TFS-90100-BODY Steel plate for magnetic base indicators, Ford 4.6L/5.4L 2V/4V, each
- TFS-90100-EXT Adjustable set-up lash adjuster, Ford 4.6L/5.4L 2V/4V, each, 4-48 male threads, each

Phone: 1-330-630-1555 • Fax: 1-330-633-2504 • TrickFlow.com

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EFI Intake Manifolds • EFI Fuel Rails • Upper Plenums • Cylinder Head and Intake Gaskets for Ford 4.6L 2V

EFI Intake Manifolds for Ford 4.6L 2V

Add some ponies to your 4.6L 2V Mustang with a high performance Trick Flow EFI intake manifold. Trick Flow’s revolutionary intakes reward you with big increases in performance over more expensive manifolds!

StreetBurner® Intake Manifold Kits

- Works with stock and aftermarket fuel rails.
- Will work on 1996-98 Ford 4.6L 2V with modifications.

StreetBurner® Track Heat® Intake Manifold Kits

TFS-51800000 StreetBurner manifold kit, 75mm throttle body inlet, silver, each
TFS-51811000 StreetBurner manifold kit, 75mm throttle body inlet, black, each
TFS-518B0000 StreetBurner manifold kit, 75mm throttle body inlet, natural, each

NOTES:

- Will work on 1996-98 Ford 4.6L 2V with modifications.
- Will work on 1996-98 Ford 4.6L 2V with modifications.

Track Heat® Intake Manifold Kits

TFS-51800002 Track Heat manifold kit, 75mm throttle body inlet, silver, each
TFS-51811002 Track Heat manifold kit, 75mm throttle body inlet, black, each
TFS-518B0002 Track Heat manifold kit, 75mm throttle body inlet, natural, each
TFS-51811003 Track Heat manifold kit, dual 57mm throttle body inlet, silver, each
TFS-518B0003 Track Heat manifold kit, dual 57mm throttle body inlet, black, each
TFS-518B0003 Track Heat manifold kit, dual 57mm throttle body inlet, natural, each

TFX™ EFI Fuel Rails

TFS-5188000R EFI fuel rails, 1999-2004 4.6L 2V, pair

EFI Intake Manifold Specifications for Ford 4.6L 2V

<table>
<thead>
<tr>
<th>Engine Size</th>
<th>StreetBurner</th>
<th>Track Heat</th>
<th>Track Heat w/Dual Throttle Body Inlets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runner</td>
<td>Small cross section with 13.300&quot; runner</td>
<td>Large cross section with 11.000&quot; runner</td>
<td>Large cross section with 11.000&quot; runner</td>
</tr>
<tr>
<td>RPM Range</td>
<td>2,500-7,000</td>
<td>3,500-8,000</td>
<td>3,500-8,000</td>
</tr>
<tr>
<td>Throttle Body Inlet</td>
<td>75mm</td>
<td>75mm</td>
<td>Dual 57mm (Bullitt)</td>
</tr>
<tr>
<td>Port Size at Head</td>
<td>OE PI 1.700&quot; x 2.000&quot;</td>
<td>OE PI 1.700&quot; x 2.000&quot;</td>
<td>OE PI 1.700&quot; x 2.000&quot;</td>
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<tr>
<td>Port Size at Plenum</td>
<td>1.750&quot; x 1.750&quot;</td>
<td>1.750&quot; x 2.900&quot;</td>
<td>1.750&quot; x 2.900&quot;</td>
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<tr>
<td>Overall Height to Mounting Flange</td>
<td>7.800&quot;</td>
<td>7.800&quot;</td>
<td>8.300&quot;</td>
</tr>
</tbody>
</table>

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 an emissions-legal Trick Flow high-flow upper plenum (CARB E.O. #D-389-S). 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

Cylinder Head and Intake Gaskets for Ford 4.6L/5.4L 2V

Trick Flow premium quality gaskets complement Trick Flow cylinder heads and intakes. The gaskets are constructed from the highest quality materials for superior sealing under extreme pressure and heat.

TFS-51800021 Intake gaskets, PI-style, aluminum intake manifolds only, Ford 4.6L/5.4L 2V, pair
TFS-51800022 Intake gaskets, PI-style, aluminum or OE composite intake manifolds, Ford 4.6L/5.4L 2V, pair
TFS-5189091L MLS head gasket, Ford 4.6L/5.4L 2V, 3.630" bore, left, each
TFS-5189091R MLS head gasket, Ford 4.6L/5.4L 2V, 3.630" bore, right, each
Spark Plugs:
- Pushrod Length:
- Cylinder Head Bolts:
- Minimum Bore Diameter:
- Rocker Arms:
- Guideplates:
- Valve Springs, Option 2:
- Valve Springs, Option 1:
- Valve Spring I.D. Locators:
- Valve Spring Cups:
- Valve Spring Pocket Diameter:
- Valve Seals:
- Valve Guide Material:
- Valve Angles:
- Valve Seat:
- Valve Diameter:
- Valve Volume:
- Valve Material:

Autolite 3924
- Longer than stock required
- TFS-51600624
- 7/16" (TFS-51400614)
- 5/16" (TFS-51600623)
- .700" maximum valve lift
- 600 lbs. @ 1.280" open
- 420 lbs. per inch rate
- PowerPort Cleveland 225 Heads, CNC Competition Ported Runners and Titanium Retainers, 225cc Intake Runners, Assembled
- TFS-5161T003-C00
- 60cc combustion chambers, 1.560" dual valve springs
- TFS-5161T004-C01
- 60cc combustion chambers, 1.550" dual valve springs
- TFS-5161T005-C01
- 60cc combustion chambers, 1.560" dual valve springs
- TFS-5161T003-C11
- 72cc combustion chambers, 1.460" dual valve springs
- TFS-5161T004-C11
- 72cc combustion chambers, 1.550" dual valve springs
- TFS-5161T005-C11
- 72cc combustion chambers, 1.560" dual valve springs

Cylinder heads feature CNC Competition Ported runners with a premium high resolution surface finish for maximum, all-out performance.

PowerPort Cleveland heads are available fully assembled or as bare castings. Sold individually.

PowerPort Cleveland series heads fit Ford 351C, 351M, and 400 engines out of the box. With minor machining, the heads also fit Ford 302/351W blocks to create a "replica" Boss 302 or a 351 "Cleveland" engine.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

PowerPort Cleveland 195 Heads, CNC Street Ported Runners, 195cc Intake Runners, Assembled
- TFS-51616203-C00
- 62cc combustion chambers and 1.460" dual valve springs
- TFS-51616204-C00
- 62cc combustion chambers and 1.550" dual valve springs
- TFS-51616725-C00
- 62cc combustion chambers, 1.560" dual valve springs, and titanium retainers
- TFS-51616720-C00
- 72cc combustion chambers and 1.460" dual valve springs
- TFS-51616725-C00
- 72cc combustion chambers and 1.550" dual valve springs
- TFS-51616725-C00
- 72cc combustion chambers, 1.560" dual valve springs, and titanium retainers

PowerPort Cleveland 225 Heads, CNC Competition Ported Runners and Titanium Retainers, 225cc Intake Runners, Assembled
- TFS-5161T003-C01
- 60cc combustion chambers, 1.460" dual valve springs
- TFS-5161T004-C01
- 60cc combustion chambers, 1.550" dual valve springs
- TFS-5161T005-C01
- 60cc combustion chambers, 1.560" dual valve springs
- TFS-5161T003-C11
- 72cc combustion chambers, 1.460" dual valve springs
- TFS-5161T004-C11
- 72cc combustion chambers, 1.550" dual valve springs
- TFS-5161T005-C11
- 72cc combustion chambers, 1.560" dual valve springs

Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°</td>
<td>88</td>
<td>55</td>
</tr>
<tr>
<td>200°</td>
<td>140</td>
<td>111</td>
</tr>
<tr>
<td>300°</td>
<td>202</td>
<td>155</td>
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<tr>
<td>400°</td>
<td>254</td>
<td>193</td>
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<tr>
<td>500°</td>
<td>289</td>
<td>221</td>
</tr>
<tr>
<td>600°</td>
<td>313</td>
<td>236</td>
</tr>
</tbody>
</table>

Tests conducted at 28° of water (pressure). Bore size: 4.030"; exhaust with 1/2" pipe.
**Intake Manifolds for Ford 351C and Clevor**

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

Trick Flow aluminum EFI intake manifold kits for Ford 351C and 351 Windsor-based 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 tapers of the R-Series intakes are tuned for 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. The manifolds will work with all 2V and 4V applications. All 9.200” deck height manifolds fit standard Cleveland engine blocks; 9.500” deck height manifolds fit standard 351W-based engine blocks.

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

**NOTES:**

- 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.
- All manifold lowers have a natural aluminum finish.

**R-Series Intake Manifold Kits**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51600114</td>
<td>R-Series manifold kit, Ford 351C, 9.200” deck height, 75mm throttle body inlet, silver upper, each</td>
</tr>
<tr>
<td>TFS-51600115</td>
<td>R-Series manifold kit, Clevor, 9.500” deck height, 75mm throttle body inlet, silver upper, each</td>
</tr>
<tr>
<td>TFS-51611114</td>
<td>R-Series manifold kit, Ford 351C, 9.200” deck height, 75mm throttle body inlet, black upper, each</td>
</tr>
<tr>
<td>TFS-51611115</td>
<td>R-Series manifold kit, Clevor, 9.500” deck height, 75mm throttle body inlet, black upper, each</td>
</tr>
<tr>
<td>TFS-516B0114</td>
<td>R-Series manifold kit, Ford 351C, 9.200” deck height, 75mm throttle body inlet, natural upper, each</td>
</tr>
<tr>
<td>TFS-516B0115</td>
<td>R-Series manifold kit, Clevor, 9.500” deck height, 75mm throttle body inlet, natural upper, each</td>
</tr>
<tr>
<td>TFS-51600116</td>
<td>R-Series manifold kit, Ford 351C, 9.500” deck height, 90mm throttle body inlet, silver upper, each</td>
</tr>
<tr>
<td>TFS-51600117</td>
<td>R-Series manifold kit, Clevor, 9.500” deck height, 90mm throttle body inlet, silver upper, each</td>
</tr>
<tr>
<td>TFS-51611116</td>
<td>R-Series manifold kit, Ford 351C, 9.500” deck height, 90mm throttle body inlet, black upper, each</td>
</tr>
<tr>
<td>TFS-51611117</td>
<td>R-Series manifold kit, Clevor, 9.500” deck height, 90mm throttle body inlet, black upper, each</td>
</tr>
<tr>
<td>TFS-516B0116</td>
<td>R-Series manifold kit, Ford 351C, 9.200” deck height, 90mm throttle body inlet, natural upper, each</td>
</tr>
<tr>
<td>TFS-516B0117</td>
<td>R-Series manifold kit, Clevor, 9.500” deck height, 90mm throttle body inlet, natural upper, each</td>
</tr>
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</table>

**Box-R-Series Intake Manifold Kits**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51600118</td>
<td>Box-R-Series manifold kit, Ford 351C, 9.200” deck height, 90mm throttle body inlet, silver upper, each</td>
</tr>
<tr>
<td>TFS-51600119</td>
<td>Box-R-Series manifold kit, Clevor, 9.500” deck height, 90mm throttle body inlet, silver upper, each</td>
</tr>
<tr>
<td>TFS-51611118</td>
<td>Box-R-Series manifold kit, Ford 351C, 9.200” deck height, 90mm throttle body inlet, black upper, each</td>
</tr>
<tr>
<td>TFS-51611119</td>
<td>Box-R-Series manifold kit, Clevor, 9.500” deck height, 90mm throttle body inlet, black upper, each</td>
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<tr>
<td>TFS-516B0118</td>
<td>Box-R-Series manifold kit, Ford 351C, 9.200” deck height, 90mm throttle body inlet, natural upper, each</td>
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<tr>
<td>TFS-516B0119</td>
<td>Box-R-Series manifold kit, Clevor, 9.500” deck height, 90mm throttle body inlet, natural upper, each</td>
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</table>

**PCV Valve, Grommet, and Filter Kit**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>TFS-51500810</td>
<td>PCV valve, grommet and filter kit, screen-type filter, each</td>
</tr>
</tbody>
</table>

**EFI Intake Manifold Specifications for Ford 351C and Clevor**

<table>
<thead>
<tr>
<th>Manifold</th>
<th>R-Series</th>
<th>Box-R-Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runner</td>
<td>Large cross-section with 13.300” runner</td>
<td>Large cross-section with 11.000” runner</td>
</tr>
<tr>
<td>RPM Range</td>
<td>1,500-5,500/2,500-7,500</td>
<td>2,500-7,500</td>
</tr>
<tr>
<td>Throttle Body Inlet</td>
<td>75mm/90mm</td>
<td>90mm</td>
</tr>
<tr>
<td>Port Size at Head</td>
<td>2.100” x 1.500”</td>
<td>2.100” x 1.500”</td>
</tr>
<tr>
<td>Port Size at Mating Flange</td>
<td>2.380” x 1.380”</td>
<td>2.380” x 1.380”</td>
</tr>
<tr>
<td>Overall Height to Upper Manifold Flange</td>
<td>12.250”</td>
<td>13.650”</td>
</tr>
<tr>
<td>Overall Height to Lower Manifold Flange</td>
<td>5.960”</td>
<td>5.960”</td>
</tr>
</tbody>
</table>

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

The Track Heat single plane intake manifolds for Ford 351C and Windsor-based Clevor-style engines are designed for 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 carburetor mounting pad. Plus, the manifolds will work with all 2V and 4V applications. Overall height to the carburetor mounting pad for TFS-51600111 is 6.250”, Overall mounting pad heights for TFS-51600112 and TFS-51600113 is 6.625”.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51600111</td>
<td>Manifold, Ford 351C, 9.200” deck height, factory Cleveland engine blocks, each</td>
</tr>
<tr>
<td>TFS-51600112</td>
<td>Manifold, Ford Clevor, 9.500” deck height, factory Windsor engine blocks, each</td>
</tr>
<tr>
<td>TFS-51600113</td>
<td>Manifold, Ford Clevor, 9.200” deck height, aftermarket Windsor engine blocks, each</td>
</tr>
<tr>
<td>TFS-5161NTBK-92</td>
<td>Manifold bolt kit, fits 9.200” and 9.500” deck height blocks, each</td>
</tr>
</tbody>
</table>
**Cast Aluminum Valve Covers**

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 covers have a tall height to clear rocker stud girdles and roller rockers and can be drilled to accept breathers.

**TFS-51600802**  
Valve covers, silver, pair

**TFS-51611802**  
Valve covers, black, pair

**TFS-51608802**  
Valve covers, natural, pair

**TFS-25200804**  
Hardware kit, includes twelve 1/4"-20 x 1.500" studs, four 1/4"-20 x 4.500" bolts, sixteen flat washers, and twelve nyloc nuts

**Roller Rocker Arms**

for Ford 351C and 351M/400

These aluminum roller rockers are excellent for use with Trick Flow heads. They can also be used on factory Ford 351C and 351M/400 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-53400621**  
Rocker arms, 1.73 ratio, 7/16" stud, set of 16

**Rocker Stud Girdles**

for Ford 351C

These CNC-machined stud girdles help control valve lift and timing changes due to stud flex, allowing for 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-51600700**  
Rocker stud girdles, 7/16", pair

**Coolant Crossover Kit**

for Ford Clevor

Trick Flow’s coolant crossover kit allows you to mate the cooling passages of our PowerPort® Cleveland cylinder heads with a Ford Windsor block to complete a Clevor conversion. The crossover kit replaces the water passage and thermostat housing on a factory Windsor intake manifold with one that redirects the coolant out the front of the cylinder heads and moves the thermostat housing horizontally above the original Windsor location. Includes housing, fittings, hose, hose clamps, and mounting studs.

**TFS-51600600**  
Clevor water crossover kit, each

**Throttle Cable Bracket Kits**

for Ford 351C and Clevor

Our Trick Flow throttle cable bracket kits provide a place to mount throttle cables on EFI-equipped Ford 351C and Clevor engines. They work with 75mm and 90mm EFI manifolds without EGR plates and feature a clear anodized finish. Includes gaskets and mounting hardware.

**TFS-51500075**  
Throttle cable bracket kit, 75mm manifolds, each

**TFS-51500090**  
Throttle cable bracket kit, 90mm manifolds, each

**TFX™ EFI Fuel Rails**

for Ford 351C and Clevor

These TFX billet fuel rails from Trick Flow were developed to allow owners of high performance Ford 351C and Clevor 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.

**TFS-5158000R**  
EFI fuel rails, pair

**Specifications**

<table>
<thead>
<tr>
<th>Part Numbers</th>
<th>Engine Size</th>
<th>Bore</th>
<th>Stroke</th>
<th>Rod</th>
<th>Comp. Height</th>
<th>Comp. Ratio</th>
<th>Pin Dia.</th>
<th>Rings</th>
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<tbody>
<tr>
<td>TFS-51604330</td>
<td>408 (351W)</td>
<td>4.030&quot;</td>
<td>4.000&quot;</td>
<td>6.250&quot;</td>
<td>1.235&quot;</td>
<td>12.0:1</td>
<td>.927&quot;</td>
<td>1/16, 1/16', 3/16&quot;</td>
</tr>
<tr>
<td>TFS-51604330-125</td>
<td>427 (351W)</td>
<td>4.125&quot;</td>
<td>4.000&quot;</td>
<td>6.250&quot;</td>
<td>1.235&quot;</td>
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<tr>
<td>TFS-51604331</td>
<td>408 (351W)</td>
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<td>4.000&quot;</td>
<td>6.250&quot;</td>
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<td>9.8:1</td>
<td>.927&quot;</td>
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<tr>
<td>TFS-51604331-125</td>
<td>427 (351W)</td>
<td>4.125&quot;</td>
<td>4.000&quot;</td>
<td>6.250&quot;</td>
<td>1.235&quot;</td>
<td>9.3:1</td>
<td>.927&quot;</td>
<td>1/16, 1/16', 3/16&quot;</td>
</tr>
</tbody>
</table>

**Trick Flow by Wiseco**

**PowerPort® Forged Piston Sets for Ford Clevor**

Trick Flow’s lightweight forged pistons are fully skirted and precision-machined from premium aluminum alloy to fit Ford Windsor engine blocks with Ford 351C-type cylinder heads. They feature oversized valve reliefs, precision-fit wrist pins, and Spirolox retainers.

The pistons are available with a choice of compression ratios. 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 for part numbers TFS-51604330 and TFS-51604331 are based on 62cc combustion chamber heads; part numbers TFS-51604330-125 and TFS-51604331-125 are based on 72cc combustion chamber heads.
Twisted Wedge® 170 Cylinder Heads for Small Block Ford

Trick Flow's legendary Twisted Wedge 170 series cylinder heads are better than ever!

The A356-T61 aluminum castings have been redesigned on the exhaust side to improve strength and water jacket integrity for durability.

All of the unique features that made Twisted Wedge series heads so dominant in high performance and racing are still here—Twisted Wedge combustion chambers and valve layout, high-flow/high-velocity intake runners, and top-quality valvetrain components—plus CNC-profiled combustion chambers with port-to-valve seat blending (bowl blending) and refined Fast As Cast® runners that deliver near-CNC-ported power and airflow at cast head prices.

Certain Twisted Wedge 170 heads are emissions-legal under CARB E.O. #D-747-1 for 1996 and earlier Ford 289, 302, and 351W engines.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

Twisted Wedge 170 Heads, Emissions Legal, Fast As Cast Runners, Assembled

TFS-51410002-M58 58cc combustion chambers and 1.470° single valve springs, 170cc intake runners
TFS-51410002-M61 61cc combustion chambers and 1.470° single valve springs, 170cc intake runners
TFS-51410004-M58 58cc combustion chambers and 1.460° dual valve springs, 170cc intake runners
TFS-51410004-M61 61cc combustion chambers and 1.460° dual valve springs, 170cc intake runners

Twisted Wedge 170 Heads, Non-Emissions, Fast As Cast Runners, Assembled

TFS-51410010-M58 58cc combustion chambers and 1.460° dual valve springs, 170cc intake runners
TFS-51410010-M61 61cc combustion chambers and 1.460° dual valve springs, 170cc intake runners

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.

Test Engine: 9.5:1 compression 360 c.i.d. with Trick Flow Twisted Wedge 170 cylinder heads (TFS-51410004-M61), Trick Flow Track Max® hydraulic roller camshaft (TFS-51400001), Trick Flow StreetBurner® EFI intake manifold (TFS-51500001), Trick Flow TFX™ 70mm throttle body (TFS-24070), Trick Flow TFX™ 24 lb./hr. fuel injectors (TFS-89024), Hooker Competition Headers with 13⁄4” primaries, 3” dual exhaust with Flowmaster mufflers.

Specifications

Material: A356-T61 Aluminum
Combustion Chamber Volume: M58: 58cc CNC-profiled
M61: 61cc CNC-profiled
Intake Port Volume: 170cc Fast As Cast
Intake Port Location: Stock
Intake Port Dimensions: 1.200” x 2.000”
Intake Valves: Fel-Pro 1250
Intake Valve Diameter: 2.020” (TFS-51400211)
Intake Valve Seat: Ductile iron (TFS-51400271)
Exhaust Port Volume: 66cc Fast As Cast
Exhaust Port Location: Stock
Exhaust Port Dimensions: 1.250” x 1.500”
Exhaust Gaskets: Fel-Pro 1415
Exhaust Valve Diameter: 1.600” (TFS-51400212)
Exhaust Valve Seat: Ductile iron (TFS-51400272-1)
Exhaust Valve Angles: Intake 15°, exhaust 17°
Valve Guide Material: Bronze alloy (TFS-51400252)
Valve Seals: Viton® fluoroelastomer (TFS-30400454)
Valve Seat Angles: 45° x multi-angle
Valve Spring Pocket Diameter: 1.615”
Valve Spring Cups: 1.480” (TFS-51400434)
Valve Spring Retainers: 7” x 1.500” o.d. chromoly steel (TFS-51400423)
Valve Stem Locks: 7” machined steel (TFS-51400444)
Valve Stem Locks: 10” machined steel with lash cap recess (TFS-52400444)
Valve Springs: Standard 1.470” o.d. single spring with damper (TFS-1615-16)
118 lbs. @ 1.800’’ installed height
305 lbs. @ 1.260” open
360 lbs. per inch rate
540” maximum valve lift
Valve Springs: Optional 1.460” o.d. single spring with damper (TFS-16315-16)
134 lbs. @ 1.800” installed height
405 lbs. @ 1.200” open
452 lbs. per inch rate
600” maximum valve lift
Guideplates: 5/16” (TFS-51400623)
3/8” (TFS-51400624)
Rockyer Arm Studs: 02/04: 3/8” (TFS-51400613)
10: 7/16” (TFS-51400614)
10: 7/16” (TFS-51400614)
Rockyer Arms: 51400511 (1.6 ratio, 3/8” studs)
51400520 (1.6 ratio, 7/16” studs)
51400521 (1.72 ratio, 7/16” studs)
Minimum Bore Diameter: 4.000”
Cylinder Head Bolts: TFS-92005
Head Gaskets: TFS-51494030-040 or TFS-51494060-040
Pushrod Length: Longer than stock required
Spark Plugs: Autolite 3924

NOTES:
- Valve cover rail is raised .350” over stock height.
- 61cc combustion chamber heads work with stock pistons and performance camshafts up to .350” lift.
- 58cc combustion chamber heads require Twisted Wedge specific pistons for proper piston-to-valve clearance.

Viton® is a registered trademark of DuPont Performance Elastomers.

Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>63</td>
<td>53</td>
</tr>
<tr>
<td>.200”</td>
<td>141</td>
<td>107</td>
</tr>
<tr>
<td>.300”</td>
<td>205</td>
<td>144</td>
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<tr>
<td>.400”</td>
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<td>171</td>
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<tr>
<td>.500”</td>
<td>257</td>
<td>187</td>
</tr>
<tr>
<td>.600”</td>
<td>257</td>
<td>193</td>
</tr>
</tbody>
</table>

Tests conducted at 28˚ of water (pressure). Bore size: 4.030” 61cc CNC-profiled combustion chambers; exhaust with 1/4” pipe.
Twistedy Wedge® 11R Cylinder Heads
for Small Block Ford

Trick Flow took its track-proven Twistedy Wedge design and, using advanced 3D solid modeling and CAD tools, plus a couple decade’s worth of racing experience, made it even more potent for serious performance enthusiasts and racers.

Twistedy Flow’s Twistedy Wedge 11R cylinder heads feature 11° intake and 13° exhaust valve angles and a restructured combustion chamber arrangement for more airflow and performance potential than original Twistedy Wedge heads. The high velocity, race-inspired runners have been optimized for today’s popular bore and stroke combinations. Premium certified materials and components, along with the finest CNC tooling, are used to ensure uncompromising quality and durability, dimensional accuracy, and balanced flow from port-to-port. Fully machined castings increase strength and have a great-looking billet-like appearance.

Twistedy Wedge 11R and 190 heads with CNC Street Ported runners are great entry-level CNC heads combining fully CNC-machined runners and combustion chambers with a standard resolution surface finish for significant performance gains. Twistedy Wedge 11R 190 and 205 heads with CNC Competition Ported runners feature fully CNC-machined runners and chambers with a premium high resolution finish for ultimate performance.

Twistedy Wedge 11R heads are for use on non-emissions engines. The heads are a direct replacement for previous Twistedy Wedge heads and work with all Twistedy Wedge specific pistons. Cylinder heads are available fully assembled or as bare castings. Sold individually.

Specifications

Material: A-356-T61 aluminum
Combustion Chamber Volume: 53cc CNC-profiled

Intake Port Volume: C00: 170cc CNC Street Ported
C01: 190cc CNC Street Ported
C02: 205cc CNC Competition Ported

Intake Port Location: Stock
Intake Port Dimensions: C00: 2.000" x 1.200"
C01: 2.100" x 1.280"
C02: 2.250" x 1.400"

Intake Gaskets: C00: Fel-Pro 1250
C01/C02: 7/16" (TFS-51400614)
C03: Fel-Pro 1262R or TFS-52400921

Intake Valve Diameter: C00: 2.020" (TFS-52500211)
C01/C02: 2.055" (TFS-52500213)
C03: 2.080" (TFS-52500215)

Intake Valve Seat: TFS-5261T661-C03

Exhaust Port Volume: C00/C01: 66cc CNC Street Ported
C02/C03: 66cc CNC Competition Ported

Exhaust Port Location: Stock
Exhaust Port Dimensions: C00: 1.250" x 1.480"

Exhaust Gaskets: Fel-Pro 1415 or TFS-5140931

Exhaust Valve Diameter: 1.600" (TFS-52500212)

Exhaust Valve Seat: Ductile iron (TFS-30600274)

Valve Angles: C00: 11° intake, 13° exhaust
C01/C02: 45° x multi angle
C03: 7° x 1.300" o.d. chromoly steel (TFS-21400415)

Valve Seat Angles: 45° x mulli angle

Valve Spring Pocket Diameter: 1.640"
Valve Spring I.D. Locators: 1.300" (TFS-21400442)

Valve Spring Retainers: 7" x 1.300" o.d. chromoly steel (TFS-21400415)
7" x 1.300" o.d. titanium (TFS-21404415)

Valve Stem Locks: 7° steel bead lock (TFS-30600444)

Valve Springs: 1.275" o.d. dual spring (TFS-18306-16)
150 lbs. @ 1.800" installed height
420 lbs. @ 1.200" open
450 lbs. per inch rate
600" max. valve lift

Guideplates: 5/16" (TFS-6400683)

Rocker Arm Studs: 3/8" (TFS-5400684)

Rocker Arms: TFS-51400520 (1.6 ratio, 7/16" studs)
TFS-51400521 (1.7 ratio, 7/16" studs)

Minimum Bore Diameter: 4.000"

Cylinder Head Bolts: TFS-92005

Head Gaskets: TFS-51494030-040 or TFS-51494060-040

Pushrod Length: Longer than stock required

Spark Plugs: Autolite 3924

NOTE: Drilled for 1/2" head bolts; 7/16" head bolts require TFS-51400419 reducer

Dyno Results

Test Engine: 11.59:1 compression, 427 c.i.d. with Trick Flow Twistedy Wedge® 11R 205 cylinder heads (TFS-52616501-C03), Trick Flow Track Max® hydraulic roller camshaft (TFS-51403005), 1.72 ratio roller rocker arms, Edelbrock Super Victor intake manifold, Hooker headers with 1½" primaries, 3" dual exhaust with Flowmaster mufflers.

Twistedy Wedge 11R 170 Cylinder Heads, CNC Street Ported

Runners, Assembled

TFS-52515301-C00 53cc combustion chambers, 170cc intake runners
TFS-52516301-C00 63cc combustion chambers, 170cc intake runners

Twistedy Wedge 11R 190 Cylinder Heads, CNC Street Ported

Runners, Assembled

TFS-52515601-C00 56cc combustion chambers, 190cc intake runners
TFS-52516601-C00 66cc combustion chambers, 190cc intake runners

Twistedy Wedge 11R 190 Cylinder Heads, CNC Competition Ported

Runners, Assembled

TFS-52615601-C02 56cc combustion chambers and titanium retainers, 190cc intake runners
TFS-52616601-C02 66cc combustion chambers and titanium retainers, 190cc intake runners

Twistedy Wedge 11R 205 Cylinder Heads, CNC Competition Ported

Runners, Assembled

TFS-52616501-C03 56cc combustion chambers, 205cc intake runners
TFS-52617561-C02 56cc combustion chambers and titanium retainers, 205cc intake runners
TFS-52616601-C03 66cc combustion chambers, 205cc intake runners
TFS-52617661-C03 66cc combustion chambers and titanium retainers, 205cc intake runners

Twistedy Wedge 11R with 205cc CNC Competition Ported Runners

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>140</td>
<td>60</td>
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<td>.200”</td>
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<td>212</td>
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<tr>
<td>.500”</td>
<td>321</td>
<td>227</td>
</tr>
</tbody>
</table>

Tests conducted at 28° of water (pressure). Bore size: 4.030” 66cc CNC-profiled combustion chambers; exhaust with 1 1/8” pipe.

Airflow Results

Twistedy Wedge® 11R with 205cc CNC Competition Ported Runners

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
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<td>.500”</td>
<td>298</td>
<td>212</td>
</tr>
<tr>
<td>.600”</td>
<td>321</td>
<td>227</td>
</tr>
</tbody>
</table>
Small Block Ford

Twisted Wedge® Race 206 and 225 Cylinder Heads for Small Block Ford

Trick Flow’s Twisted Wedge Race 206 heads feature fully CNC-profiled Twisted Wedge combustion chambers and valve arrangement with port-to-valve seat blending (bowl blending), plus .500” raised exhaust runners, and raised valve cover rails. Fast As Cast® runners deliver near-CNC-portered airflow and power for about the same price as cast heads.

The Twisted Wedge Race 225 heads have all of the features of the Race 206 heads but come with top-of-the-line CNC Competition Ported runners with a high resolution surface finish for maximum airflow and power over the entire powerband.

Twisted Wedge Race heads have additional material for porting, thick decks and chamber walls for durability, intake port shaping for Fel-Pro #1262 gaskets, stud mounts for roller rocker arms, and huge valve spring pockets.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

Twisted Wedge Race 206 Heads, Fast As Cast Runners, Assembled
TFS-52410003-M61 1.550” dual valve springs, 206cc intake runners
TFS-52410004-M61 1.550” dual valve springs and O-rings, 206cc intake runners
TFS-52410005-M61 1.560” dual valve springs, 206cc intake runners
TFS-52410105-M61 1.560” dual valve springs and titanium retainers, 206cc intake runners
TFS-52410006-M61 1.560” dual valve springs and O-rings, 206cc intake runners
TFS-52410106-M61 1.560” dual valve springs, O-rings, and titanium retainers, 206cc intake runners
TFS-5241T805-M61 1.640” dual valve springs and titanium retainers, 206cc intake runners

Twisted Wedge Race 225 Heads, CNC Competition Ported Runners, Assembled
TFS-52410003-C01 1.550” dual valve springs, 225cc intake runners
TFS-52410005-C01 1.550” dual valve springs, 225cc intake runners
TFS-52410105-C01 1.560” dual valve springs and titanium retainers, 225cc intake runners
TFS-5241T805-C01 1.640” dual valve springs and titanium retainers, 225cc intake runners

Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
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<tbody>
<tr>
<td>.700</td>
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<td>.700</td>
<td>341</td>
<td>271</td>
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</table>

Tests conducted at 28” of water (pressure). Bore size: 4.125”; 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.”

Specifications

Material: A356-T61 aluminum
Combustion Chamber Volume: M61: 61cc CNC-profiled
Intake Port Volume: M61: 206cc Fast As Cast
Intake Port Location: C01: 226cc CNC Competition Ported
Intake Port Dimensions: M61: 1.375” x 2.125”
Intake Gaskets: M61: Fel-Pro 1262
Intake Valve Diameter: 2.080” (TFS-52400217)
Intake Valve Seat: Ductile iron (TFS-52400271)
Exhaust Port Volume: M61: 90cc Fast As Cast
Exhaust Port Location: C01: 1.00cc CNC Competition Ported
Exhaust Port Dimensions: Raised .500” from stock
Exhaust Gaskets: Fel-Pro 1262
Exhaust Valve Diameter: 1.600” (TFS-52400212)
Exhaust Valve Seat: Copper bronze alloy (TFS-52400272)
Valve Angles: Intake 15°, exhaust 17°
Valve Guide Material: Bronze alloy
(inside TFS-51600251, exhaust TFS-51600252)
Valve Seals: Viton® fluoroelastomer (TFS-30400454)
Valve Seat Angles: .45° x multi-angle
Valve Spring Pocket Diameter: 1.760”
Valve Spring I.D. Locators: 1.550” (TFS-21400440), 1.640” (TFS-21400441)
Valve Spring Retainers: 10° x 1.550” o.d. chromoly steel (TFS-21400425)
Valve Spring Springs, Standard: 1.530” o.d. dual spring with damper (TFS-16094-16)
Valve Spring Springs, Option 1: 1.560” o.d. dual spring with damper (TFS-16318-16)
Valve Spring Springs, Option 2: 1.640” o.d. dual spring with damper (TFS-16414-16)
Valve Springs, Option 3: 2.000” installed height
Valve Springs, Option 4: 2.000” installed height
Guideplates: 5/16” (TFS-52400022), 3/8” (TFS-52400024)
Rocker Arm Studs: 7/16” (TFS-51400614)
Rocker Arms: TFS-51400520 (1.6 ratio, 7/16” studs)
Minimum Bore Diameter: 4.000”
Cylinder Head Bolivia: TFS-92005
Cylinder Head Bolts: TFS-51494060-040, TFS-51494080-040, or TFS-51494155-040
Pushrod Length: Longer than stock required
Spark Plugs: Autolite 3932
NOTE: Valve cover rail is raised .350” over stock height.

Viton® is a registered trademark of DuPont Performance Elastomers.

Dyno Results

Twisted Wedge Race 225

<table>
<thead>
<tr>
<th>RPM x 1,000</th>
<th>Brake Horsepower</th>
<th>Torque</th>
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<tr>
<td>400</td>
<td>436</td>
<td>327</td>
</tr>
<tr>
<td>500</td>
<td>523</td>
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<td>600</td>
<td>602</td>
<td>485</td>
</tr>
<tr>
<td>700</td>
<td>685</td>
<td>564</td>
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</table>

Test Engine: 10.59:1 compression 408 c.i.d. with Trick Flow Twisted Wedge® Race 225 cylinder heads (TFS-5240005-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 1½” primaries, open exhaust.

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
High Port 192 Cylinder Head
for Small Block Ford

Trick Flow High Port 192 cylinder heads for small block Ford are one of the most dominant aftermarket heads in racing. They feature unique valve spacing, .750” raised exhaust runners, extra strong castings and thick decks for additional rigidity and gasket integrity, superior cooling characteristics, and most importantly, excellent airflow.

And that’s not all. The entry into the intake runner 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 fully CNC-profiled combustion chambers with port-to-valve seat blending (bowl blending), raised valve cover rails, and large Fast As Cast® runners that duplicate the profiles of CNC-ported heads to create ultra high-flowing heads without costly CNC-porting.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Specifications

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** 64cc CNC-profiled
- **Intake Port Volume:** 192cc Fast As Cast
- **Intake Port Location:** Stock
- **Intake Port Dimensions:** 1.200” x 2.000”
- **Intake Gaskets:** Fel-Pro 1415
- **Intake Valve Diameter:** 2.020” (TFS-51700211)
- **Intake Valve Seat:** Ductile iron interlock (TFS-51600271)
- **Exhaust Port Volume:** 87cc Fast As Cast
- **Exhaust Port Location:** Raised .750” from stock
- **Exhaust Port Dimensions:** 1.250” x 1.500”
- **Exhaust Gaskets:** Fel-Pro 1415
- **Exhaust Valve Diameter:** 1.600” (TFS-51700212)
- **Exhaust Valve Seat:** Ductile iron (TFS-51700272)
- **Valve Angles:** 20°
- **Valve Guide Material:** Bronze alloy (TFS-51700252)
- **Valve Seals:** Viton® fluoroelastomer (TFS-30400454)
- **Valve Seat Angles:** 45° x multi-angle
- **Valve Spring Pocket Diameter:** 1.615”
- **Valve Springs:** 1.480” (TFS-51400434)
- **Valve Spring Retainers:** 7” x 1.500” o.d. chromoly steel (TFS-31400424)
- **Valve Stem Locks:** 7” machined steel (TFS-51400444)
- **Valve Springs:** 1.460” o.d. spring with damper (TFS-16315-16)
  - 134 lbs. @ 1.800” installed height
  - 405 lbs. @ 1.200” open
  - 453 lbs. per inch rate
- **Guideplates:** 5/16” (TFS-51700623), 3/8” (TFS-51700624)
- **Rocker Arm Studs:** 3/8” (TFS-51400613)
- **Rocker Arms:**
  - TFS-51400511 (1.72 ratio, 3/8” studs)
  - TFS-51400521 (1.72 ratio, 7/16” studs)
- **Minimum Bore Diameter:** .400”
- **Cylinder Head Bolts:** TFS-92005
- **Head Gaskets:**
  - TFS-51494060-040, TFS-51494080-040, or TFS-51494155-040
- **Pushrod Length:** Longer than stock required
- **Spark Plugs:** Autolite 3924

**NOTE:** Valve cover rail is raised .400” over stock height. Viton® is a registered trademark of DuPont Performance Elastomers.

### Airflow Results

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100”</td>
<td>67</td>
<td>55</td>
</tr>
<tr>
<td>.200”</td>
<td>137</td>
<td>103</td>
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<td>183</td>
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<tr>
<td>.600”</td>
<td>283</td>
<td>193</td>
</tr>
</tbody>
</table>

Tests conducted at 28” of water (pressure). Bore size: 4.030”; exhaust with 1⅛” pipe.
High Port® 225 and 240 Cylinder Heads for Small Block Ford

Trick Flow has developed several fully CNC-ported versions of the High Port cylinder heads specifically for large cubic inch, large power adder, big shot nitrous oxide, and other mega-power combinations.

High Port 225 and 240 cylinder heads for small block Ford have all of the same features of Fast As Cast® High Port heads—unique valve spacing, raised exhaust runners, extra strong castings, thick decks, superior cooling, reshaped intake runner entries, extra material for porting, raised valve cover rails, and excellent airflow—plus top-of-the-line CNC Competition Ported runners with a high resolution surface finish for maximum airflow and power over the entire RPM range.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Airflow Results

<table>
<thead>
<tr>
<th>LIFT VALUE</th>
<th>INTAKE FLOW</th>
<th>EXHAUST FLOW</th>
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<tbody>
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<td>.100</td>
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<td>.600</td>
<td>322</td>
<td>247</td>
</tr>
<tr>
<td>.700</td>
<td>335</td>
<td>257</td>
</tr>
</tbody>
</table>

Tests conducted at 28˚ of water pressure. Bore size: 4.030”, 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.”

### Specifications

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:**
  - 10-C01: 58cc CNC-profiled
  - 12-C01/13-C01/14-C01: 70cc CNC-profiled
  - 16-C02: 67cc CNC-profiled
- **Intake Port Volume:**
  - 10-C01/12-C01/13-C01/14-C01: 225cc CNC Competition Ported Runners
  - 16-C02/18-C02: 240cc CNC Competition Ported Stock
- **Intake Port Location:**
  - C01: 1.380” x 2.240”, C02: 1.310” x 2.300”
- **Intake Gaskets:** Fel-Pro 1262R
- **Intake Valve Diameter:**
  - 2.080” (10-C01: TFS-52400217; 12-C01/13-C01/14-C01: TFS-51700217)
  - 2.100” (16-C02: TFS-52400218; 18-C02: TFS-51700218)
- **Intake Valve Seat:** Ductile iron interlock (TFS-51600271)
- **Exhaust Port Volume:**
  - 95cc CNC Competition Ported
- **Exhaust Port Location:**
  - Raised .750” from stock
- **Exhaust Port Dimensions:**
  - 1.520” x 1.620”
- **Exhaust Gaskets:**
  - Fel-Pro 1481 for diagonal bolt pattern headers
  - Fel-Pro 1487 for inline bolt pattern headers
- **Exhaust Valve Diameter:**
  - 1.600” (10-C01: TFS-51700212; 12-C01/13-C01/14-C01/16-C02/18-C02: TFS-51700213; 16-C02: TFS-52400212)
- **Exhaust Valve Seat:**
  - Ductile iron (TFS-51700272)
- **Valve Angles:** 20°
- **Valve Guide Material:** Bronze alloy (TFS-51700252)
- **Valve Seals:** Viton® fluoroelastomer (TFS-30400454)
- **Valve Stem Angles:**
  - 45° x multi-angle
- **Valve Spring Pocket Diameter:**
  - 1.615”
- **Valve Spring Caps:**
  - 1.480” (TFS-51400434)
- **Valve Spring I.D. Locators:**
  - 1.550” (TFS-21400440)
- **Valve Spring Retainers:**
  - 12-C01: .7” x 1.500” o.d. chromoly steel (TFS-31400424)
  - T12-C01: 10” x 1.500” o.d. titanium (TFS-21407040)
  - 10-C01/12-C01/13-C01/14-C01/16-C02/18-C02: 10” x 1.550” o.d. titanium (TFS-21407052)
- **Valve Stem Locks:**
  - 7° machined steel (TFS-51400444)
  - 10° machined steel with lash cap (TFS-52400444)
- **Valve Springs, 10-C01:**
  - 1.560” o.d. dual spring with damper (TFS-16318-16)
  - 240 lbs. @ 2.000” installed height
  - 600 lbs. @ 1.280” open
  - 500 lbs. per inch rate
  - .700” maximum valve lift
- **Valve Springs, 12-C01:**
  - 1.460” o.d. dual spring with damper (TFS-16315-16)
  - 134 lbs. @ 1.800” installed height
  - 405 lbs. @ 1.200” open
  - 452 lbs. per inch rate
  - 600” maximum valve lift
- **Valve Springs, 13-C01/14-C01/16-C02/18-C02:**
  - 1.550” o.d. dual spring with damper (TFS-16324-16)
  - 240 lbs. @ 1.900” installed height
  - 550 lbs. @ 1.270” open
  - 460 lbs. per inch rate
  - 680” maximum valve lift
- **Guideplates:**
  - 5/16” (TFS-51700623), 3/8” (TFS-51700624)
- **Rocker Arm Studs:**
  - 7/16” (TFS-51400514)
- **Rocker Arms:**
  - TFS-51400510 (1.6 ratio, 3/8” studs)
  - TFS-51400511 (1.7 ratio, 3/8” studs)
  - TFS-51400520 (1.6 ratio, 7/16” studs)
  - TFS-51400521 (1.7 ratio, 7/16” studs)
- **Minimum Bore Diameter:**
  - C01: 4.000”, C02: 4.125”
- **Cylinder Head Bolts:**
  - TFS-92005
- **Head Gaskets:**
  - TFS-51494060-040, TFS-51494080-040, or TFS-51494155
- **Pushrod Length:**
  - Longer than stock required
- **Spark Plugs:** Autolite 3924

NOTE: Valve cover rail is raised .400” over stock.

Viton® is a registered trademark of DuPont Performance Elastomers.
Twisted Wedge® 11R Top-End Engine Kit for Small Block Ford

Save cash and take the guesswork out of designing a winning engine combination with this Trick Flow Twisted Wedge 11R top-end engine kit. Carefully tuned by Trick Flow engineers to deliver optimum horsepower and torque on a small block Ford, this kit is built around a set of dyno-proven Twisted Wedge 11R 170 cylinder heads (TFS-52515301-C00). Also included is a Track Max® hydraulic roller camshaft (TFS-51403001), 1.6 ratio roller rocker arms (TFS-51400520), true roller timing chain set (TFS-52578520), chromoly pushed set (TFS-21407050), cylinder head bolt kit (TFS-92005), and a complete engine gasket set (TFS-51400904).

TFS-K525-432-370 Top-end engine kit, 432 HP/370 lbs.-ft., each

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-51410004-M61), the kits include a specially matched Track Max® hydraulic roller cam (TFS-51403001), roller rockers (TFS-51400510), gasket kit (TFS-51400904), billet timing chain set (TFS-52578520), cylinder head bolt kit (TFS-92005), and a complete engine gasket set (TFS-51400904).

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

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 lbs.-ft., silver valve covers and intake, each
TFS-K514-360350B 360 HP/350 lbs.-ft., black valve covers and intake, each
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 351W 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.

NOTES:

• 5.0L StreetBurner EFI manifolds are emissions-legal under CARB E.O. #D-369-3; all other manifolds are designed for non-EGR engines.

• May require aftermarket fuel rails; computer modification required to operate properly.

• All manifold lowers have a natural aluminum finish.

EFI Intake Manifold Kits for Ford 5.0L

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Color</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51500001</td>
<td>StreetBurner manifold kit, silver upper, each</td>
<td>Silver</td>
<td>CARB Exempt</td>
</tr>
<tr>
<td>TFS-51500002</td>
<td>Track Heat manifold kit, silver upper, each</td>
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<td>TFS-51500003</td>
<td>R-Series 75mm manifold kit, silver upper, each</td>
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EFI Intake Manifold Kits for Ford 351W

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<tr>
<td>TFS-51500009</td>
<td>Box-R-Series manifold kit, silver upper, each</td>
<td>Silver</td>
<td>CARB Exempt</td>
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<tr>
<td>TFS-51511004</td>
<td>R-Series 75mm manifold kit, black upper, each</td>
<td>Black</td>
<td>CARB Exempt</td>
</tr>
<tr>
<td>TFS-51511006</td>
<td>R-Series 90mm manifold kit, black upper, each</td>
<td>Black</td>
<td>CARB Exempt</td>
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<tr>
<td>TFS-515B0004</td>
<td>R-Series 75mm manifold kit, natural upper, each</td>
<td>Natural</td>
<td>CARB Exempt</td>
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<tr>
<td>TFS-515B0006</td>
<td>R-Series 90mm manifold kit, natural upper, each</td>
<td>Natural</td>
<td>CARB Exempt</td>
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</tbody>
</table>

EFI Intake Manifold Specifications for Ford 5.0L/351W

<table>
<thead>
<tr>
<th>Engine Size</th>
<th>Runner</th>
<th>RPM Range</th>
<th>Throttle Body Inlet</th>
<th>Port Size at Head</th>
<th>Port Size at Mating Flange</th>
<th>Overall Height to Upper Manifold Flange</th>
<th>Overall Height to Lower Manifold Flange</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0L</td>
<td>Small cross-section with 15.000&quot; runner</td>
<td>1,500-6,500</td>
<td>75mm</td>
<td>2.000&quot; x 1.200&quot;</td>
<td>2.000&quot; x 1.200&quot;</td>
<td>10.200&quot;</td>
<td>4.625&quot;</td>
</tr>
<tr>
<td>351W</td>
<td>Small cross-section with 12.000&quot; runner</td>
<td>2,500-7.500</td>
<td>75mm</td>
<td>2.000&quot; x 1.200&quot;</td>
<td>2.000&quot; x 1.200&quot;</td>
<td>11.000&quot;</td>
<td>4.625&quot;</td>
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</tbody>
</table>

EFI Intake Manifold Kits • EFI Fuel Rails and Kit

TFX™ EFI Fuel Rails and Fuel Rail Kit for Ford 5.0L

<table>
<thead>
<tr>
<th>TFS-5158000R</th>
<th>EFI fuel rails, pair</th>
</tr>
</thead>
</table>

TFX EFI Fuel Rail Kit

<table>
<thead>
<tr>
<th>TFS-51580001</th>
<th>EFI fuel rail kit, includes fuel rails, mounting brackets, fittings, hose, and fuel pressure regulator, each</th>
</tr>
</thead>
</table>
TFX™ Nitrous Systems for Trick Flow EFI Manifolds for Ford 5.0L

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: Nitrous system, StreetBurner®/Track Heat® intakes, each
- TFS-N5150PL: Plate and jets only, StreetBurner/Track Heat intakes, kit
- TFS-N515R: Nitrous system, R-Series intake, each
- TFS-N515RPL: Plate and jets only, R-Series intake, kit
- TFS-N5158: Nitrous system, Box-R-Series intake, each
- TFS-N5158PL: Plate and jets only, Box-R-Series intake, kit

R-Series Intake Manifolds

Trick Flow R-Series single plane intake manifolds for small block Ford are designed for maximum power delivery in heavily modified engines that operate in the 3,500-7,500 plus RPM range. Crucial features include A319 aluminum construction, a one-piece spider-type design, high-flow individual runners combined with a raised plenum floor, and extra material for custom porting. Manifolds for carburetor use include integral bosses for adding nitrous and accept Holley 4150-style square bore carburetors. Manifolds for EFI use feature custom machined fuel injection nozzle ports that accept standard Bosch and Siemens-type fuel injectors. The port size at the head flange for all versions of these manifolds is 2.100” x 1.280”, however, they can be port matched as large as 2.250” x 1.400”. Overall height to the mounting pad is 6.300” (5.0L/302 engines) or 6.450” (351W engines).

- TFS-52400111: Manifold, 289/302, square bore carburetor, each
- TFS-52400112: Manifold, 289/302, carb-style EFI, each
- TFS-52400114: Manifold, 351W, square bore carburetor, each
- TFS-52400115: Manifold, 351W, carb-style EFI, each

TFX™ EFI Fuel Rails

- TFS-5248000R: EFI fuel rails, 289/302, carb-style EFI manifolds, pair
- TFS-5248005R: EFI fuel rails, 351W, carb-style EFI manifolds, pair

725 Horsepower Using Trick Flow High Port® 240 Cylinder Heads!

Mike Petralia of Hardcore Horsepower and Dyno Testing in Franklin, Tennessee built a carbureted, 438 cubic inch small block Ford. To feed that big motor the air it needed, he called on Trick Flow for a pair of High Port 240 cylinder heads. The results? 725 horsepower and 614 lbs.-ft. of torque—naturally aspirated!

Phone: 1-330-630-1555 • Fax: 1-330-633-2504 • TrickFlow.com
**Small Block Ford**

**Gaskets and Gasket Sets • Header Flanges • Cylinder Head Bolt Kit**

**for Small Block Ford and Ford 5.0L**

---

**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. The individual replacement gaskets save you money by letting you purchase just the gaskets you need instead of an entire kit.

- **TFS-51400921** Intake manifold gaskets with crossover, pair
- **TFS-51400931** Header gaskets, OE Ford cylinder heads, pair
- **TFS-51400941** Valve cover gaskets, molded with steel core, pair
- **TFS-51400951** Oil pan gasket, one-piece molded, each
- **TFS-51700931** Header gaskets, Trick Flow High Port cylinder heads, pair
- **TFS-52400901** Header gaskets, Trick Flow Twisted Wedge® Race cylinder heads, pair
- **TFS-52400921** Intake manifold gaskets, large race, 2.250” x 1.400”, 1/16” thick, pair
- **TFS-52400922** Intake manifold gaskets, large race, 2.250” x 1.400”, .090” thick, pair
- **TFS-52400923** Intake manifold gaskets, large race, 2.250” x 1.400”, 1/8” thick, pair

---

**Premium Gasket Sets for Small Block Ford**

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

**Engine Gasket Sets**

- **TFS-51400912** Engine gasket set, 302/5.0L, with EFI, includes 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, and other gaskets specific to the 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

---

**Standard Gasket Sets for Small Block Ford**

These Trick Flow gasket sets are ideal for stock or mild performance engine builds. They include everything required to seal an engine, including header gaskets, for about the same price as other companies’ 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, each

---

**Header Flanges for Small Block Ford**

Trick Flow header flanges allow you to custom build your own set of headers and mount them to Trick Flow High Port and Race series small block Ford cylinder heads.

- **TFS-51700801** Header flanges, 3/8” thick, High Port and R-Series cylinder heads, pair

---

**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

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_Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details._
Track Max® Hydraulic Roller Camshafts for Ford 5.0L

Give your small block Ford or Ford 5.0L engine significant horsepower and torque increases with a Trick Flow® Track Max® Hydraulic Roller Camshaft. These premium billet steel, hydraulic roller camshafts are dyno-proven to produce a wide power curve over the entire RPM range, not just at a particular RPM point or peak. The camshafts are cut from premium blank cores and checked for proper hardness before being precision ground to exact tolerances.

### Camshaft Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/.165&quot; Rocker</th>
<th>Lobe Separation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51403001</td>
<td>Good idle, strong midrange power; 2,000-5,000 RPM powerband. Aftermarket intake, heads, and headers recommended. Calibrated mass airflow meter required. Compression: 9.1:1 minimum.</td>
<td>221°/225°</td>
<td>.498°/.510°</td>
<td>112°</td>
</tr>
<tr>
<td>TFS-51403002</td>
<td>Fair idle, good midrange power; 2,500-6,000 RPM powerband. 2,500-3,000 RPM stall converter or 5-speed transmission. 3.50-numerically higher gears. Calibrated mass airflow meter required. Compression: 9.5:1 minimum.</td>
<td>224°/232°</td>
<td>.542°/.563°</td>
<td>112°</td>
</tr>
<tr>
<td>TFS-51403003</td>
<td>Rough idle, strong top-end power; 3,200-6,800 RPM powerband. 3,000-3,500 RPM stall converter. 3.90-4.11 gears. Calibrated mass airflow meter required. Compression: 10:1 minimum.</td>
<td>236°/248°</td>
<td>.574°/.595°</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-51403004</td>
<td>Rough idle, strong top-end power; 3,000-7,000 RPM powerband. 3,000-3,500 RPM stall converter. 3.90-4.11 gears. Calibrated mass airflow meter required. Compression: 10:1 minimum.</td>
<td>242°/246°</td>
<td>.595°/.595°</td>
<td>110°</td>
</tr>
<tr>
<td>TFS-51403005</td>
<td>Rough idle, strong top-end power; 3,400-7,000 RPM powerband. 3,000-3,500 RPM stall converter. 3.90-4.11 gears. Calibrated mass airflow meter required. Compression: 10:1 minimum.</td>
<td>250°/254°</td>
<td>.595°/.595°</td>
<td>110°</td>
</tr>
</tbody>
</table>

### 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" studs, set of 16
- TFS-51400511: Rocker arms, 1.72 ratio, 3/8" studs, set of 16
- TFS-51400512: Rocker arms, 1.6/1.72 ratio split, 3/8" studs, set of 16
- TFS-51400520: Rocker arms, 1.6 ratio, 7/16" studs, set of 16
- TFS-51400521: Rocker arms, 1.72 ratio, 7/16" studs, set of 16
- TFS-51400522: Rocker arms, 1.6/1.72 ratio split, 7/16" studs, set of 16

### Trick Flow by PAC Racing 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 PAC dual spring upgrade kit converts standard Twisted Wedge 170 heads to the optional high lift cam spring set with 125 lbs. of seat pressure at 1.800" installed height and .600" max lift. Both kits include valve springs with dampers, chromoly retainers, valve seals and locks, spring shims, spring height gauge, and instructions.

- TFS-2500100: Valve spring upgrade kit, OEM 289-351W cast iron heads, each
- TFS-2500200: Valve spring upgrade kit, upgrades Twisted Wedge 170 heads to optional high lift cam spring set, 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-2527520: Timing chain set, each

### 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. Tail-style valve covers are required.

- TFS-51400700: Rocker stud girdles, 3/8", pair
- TFS-51400701: Rocker stud girdles, 7/16", pair

### Girdles for Twisted Wedge® Heads

- TFS-51700700: Rocker stud girdles, 3/8", pair
- TFS-51700701: Rocker stud girdles, 7/16", pair

### Girdles for Race Heads

- TFS-52400700: Rocker stud girdles, 7/16", pair

### Main Stud Girdles for Small Block Ford

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 befer 1/2" thick construction for extra strength and includes main studs instead of bolts.

**NOTE:** Race version requires main cap machining.
Chrome Valve Covers for Small Block Ford

Trick Flow chrome plated valve covers provide a great alternative to higher-priced 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, chrome, pair

Fabricated Aluminum Valve Covers for Small Block Ford

These good-looking, tall height (3¾” 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-51400804 Valve covers, natural, pair

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 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 rocker arms but not rocker 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 1/4”–20 x 1.500” studs and 12 flanged nuts, each

Tall Height Covers, 3¾” Overall Height

NOTE: These covers will clear roller rocker arms and rocker 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 1/4”–20 x 1.500” studs, two 1/4”–20 x 4.250” studs and 12 flanged nuts, each

Specifications

<table>
<thead>
<tr>
<th>Part Numbers</th>
<th>Engine Size</th>
<th>Bore</th>
<th>Stroke</th>
<th>Rod</th>
<th>Comp. Height</th>
<th>Comp. Ratio</th>
<th>Pin Dia</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51404010</td>
<td>306 (302)</td>
<td>4.030”</td>
<td>3.000”</td>
<td>5.090”</td>
<td>1.610”</td>
<td>8.0:1</td>
<td>.912”</td>
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<tr>
<td>TFS-51404000</td>
<td>306 (302)</td>
<td>4.030”</td>
<td>3.000”</td>
<td>5.090”</td>
<td>1.600”</td>
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<td>.912”</td>
</tr>
<tr>
<td>TFS-51404332</td>
<td>331 (302)</td>
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<td>3.250”</td>
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<tr>
<td>TFS-51404111</td>
<td>347 (302)</td>
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<td>3.400”</td>
<td>5.400”</td>
<td>1.090”</td>
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<tr>
<td>TFS-51404110</td>
<td>358 (315W)</td>
<td>4.030”</td>
<td>3.500”</td>
<td>5.955”</td>
<td>1.786”</td>
<td>10.0:1</td>
<td>.912”</td>
</tr>
<tr>
<td>TFS-51404221</td>
<td>393 (351W)</td>
<td>4.030”</td>
<td>3.850”</td>
<td>5.955”</td>
<td>1.610”</td>
<td>12.0:1</td>
<td>.912”</td>
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<tr>
<td>TFS-51404331</td>
<td>393 (351W)</td>
<td>4.030”</td>
<td>3.850”</td>
<td>5.955”</td>
<td>1.610”</td>
<td>12.0:1</td>
<td>.912”</td>
</tr>
<tr>
<td>TFS-51404330</td>
<td>408 (351W)</td>
<td>4.030”</td>
<td>4.000”</td>
<td>6.200”</td>
<td>1.290”</td>
<td>9.0:1</td>
<td>.927”</td>
</tr>
</tbody>
</table>

Trick Flow by Wiseco

Twisted Wedge® Forged Piston Sets for Small Block Ford

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 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 chamber heads.
**EFI Heat Spacer Kits for Ford 5.0L/351W**

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 in 3/8” and 1” thick versions. Gaskets and longer mounting bolts are included. 1994-95 Mustangs will require modifications for hood clearance.

<table>
<thead>
<tr>
<th>5.0L H.O. Heat Spacer Kits, 1986-93</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51520001 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-51520002 Spacer, 1”, each</td>
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</table>

<table>
<thead>
<tr>
<th>5.0L H.O. Heat Spacer Kits, 1994-95</th>
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</thead>
<tbody>
<tr>
<td>TFS-5152SN01 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-5152SN02 Spacer, 1”, each</td>
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<table>
<thead>
<tr>
<th>5.0L Ford Truck Heat Spacer Kits</th>
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<tbody>
<tr>
<td>TFS-51520003 Spacer, 3/8”, each</td>
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<tr>
<td>TFS-51520004 Spacer, 1”, each</td>
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</table>

<table>
<thead>
<tr>
<th>Holley Manifold Heat Spacer Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51520005 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-51520006 Spacer, 1”, each</td>
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<table>
<thead>
<tr>
<th>Trick Flow StreetBurner® and Track Heat® Spacer Kits</th>
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<tbody>
<tr>
<td>TFS-51520007 Spacer, 3/8”, each</td>
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<tr>
<td>TFS-51520008 Spacer, 1”, each</td>
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<table>
<thead>
<tr>
<th>Trick Flow R-Series Spacer Kits</th>
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<tbody>
<tr>
<td>TFS-51520009 Spacer, 3/8”, each</td>
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<tr>
<td>TFS-51520012 Spacer, 1”, each</td>
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<table>
<thead>
<tr>
<th>Edelbrock Performer 5.0L RPM Spacer Kits</th>
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<tbody>
<tr>
<td>TFS-51520013 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-51520014 Spacer, 1”, each</td>
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</table>

<table>
<thead>
<tr>
<th>Edelbrock Performer 5.0L RPM II Spacer Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51520021 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-51520022 Spacer, 1”, each</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Edelbrock Victor 5.0L Spacer Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51520015 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-51520016 Spacer, 1”, each</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ford Racing Cobra Heat Spacer Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51520017 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-51520018 Spacer, 1”, each</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ford Racing GT-40 Heat Spacer Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51520019 Spacer, 3/8”, each</td>
</tr>
<tr>
<td>TFS-51520020 Spacer, 1”, each</td>
</tr>
</tbody>
</table>

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**EFI Intake Manifold SN95 Throttle Body Adapters for Ford 5.0L**

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

| TFS-5150SN95 Adapter, natural, each |
| TFS-5150SN95-00 Adapter, silver, each |
| TFS-5150SN95-11 Adapter, black, each |

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**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 not included.

NOTE: New serpentine belt required after installation.

TFS-5150600 Eliminator bracket, each

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**EFI 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 valve cover grommet. The kit also has a clear corrosion-resistant finish for long life and is 4” tall.

| TFS-51400800 Oil fill kit, each |
| TFS-51400800-C Replacement cap, with O-ring, each |
| TFS-51400800-G Replacement grommet, 3/4”, each |

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**Throttle Cable Bracket Kits for Ford 5.0L/351W**

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

| TFS-51500075 Throttle cable bracket kit, 75mm manifolds, each |
| TFS-51500090 Throttle cable bracket kit, 90mm manifolds, each |

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**Throttle Cable Brackets**

Trick Flow throttle cable brackets are designed to provide a secure mounting point for your throttle cables. They are available in a variety of styles to suit different manifold types and applications.

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**Holley Manifold Heat Spacer Kits**

TFS-51520017 Spacer, 3/8”, each

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**EDelbrock Performer 5.0L RPM Spacer Kits**

TFS-51520013 Spacer, 3/8”, each

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

TFS-51520021 Spacer, 3/8”, each

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**Edelbrock Victor 5.0L Spacer Kits**

TFS-51520015 Spacer, 3/8”, each

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**Ford Racing Cobra Heat Spacer Kits**

TFS-51520017 Spacer, 3/8”, each

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**Ford Racing GT-40 Heat Spacer Kits**

TFS-51520019 Spacer, 3/8”, each
PowerPort® 175 Cylinder Heads for Ford 390-428

Trick Flow PowerPort 175 cylinder heads are freshly designed and engineered to deliver more flow and more go for your 1961-76 390-428 engine! They’re made from top-quality A356-T61 aluminum so they’re much lighter but still as strong as OE castings. The intake runners have been optimized to increase flow velocity and Trick Flow’s special CNC Street Ported treatment guarantees proper dimensional accuracy and balance between the runners. Other performance improvements of the PowerPort 175 heads include bronze alloy valve guides, ductile iron valve seats, and multi-angle valve seat machining.

Assembled cylinder heads include premium 11/32” stainless steel valves, Trick Flow by PAC Racing valve springs, 7° or 10° steel valve stem locks, and chromoly or titanium retainer options.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

PowerPort 175 Heads, CNC Street Ported Runners, Assembled
TFS-56417001-C00 1.460” dual valve springs, 175cc intake runners
TFS-56417002-C00 1.550” dual valve springs, 175cc intake runners
TFS-56417703-C00 1.550” dual valve springs and titanium retainers, 175cc intake runners

Specifications
Material: A356-T61 aluminum
Combustion Chamber Volume: 70cc CNC-profiled
Intake Port Volume: 175cc CNC Street Ported
Intake Port Location: Stock
Intake Port Dimensions: 1.400” x 2.100”
Intake Valve Material: 2.190” (TFS-56400211)
Intake Valve Seat: Ductile iron (TFS-5340271)
Intake Port Gaskets: 113cc CNC Street Ported
Exhaust Port Volume: 113cc CNC Street Ported
Exhaust Port Location: Stock
Exhaust Port Dimensions: 1.300” x 1.670”
Exhaust Valve Diameter: 1.625” (TFS-56400212)
Exhaust Valve Seat: Ductile iron (TFS-30600274)
Exhaust Valve Angles: 13°
Valve Guide Material: Bronze alloy (intake TFS-51600251, exhaust TFS-61600251)
Valve Seals: Viton® fluoroelastomer canister (TFS-30400454)
Valve Seal Angles: 45° x multi-angle
Valve Spring Pocket Diameter: 1.615”
Valve Spring I.D. Locators: 1.550” (TFS-21400440)
Valve Spring Retainers: 7° x 1.500” o.d. chromoly steel (TFS-31400424)
Valve Spring Retainers: 10” x 1.550” o.d. chromoly steel (TFS-31400425)
Valve Stem Locks: 7° machined steel (TFS-51400444)
 Valve Stem Locks: 10” machined steel with lash cap recess (TFS-52400444)
Valve Springs, Standard: 1.460” o.d. dual spring with damper (TFS-16833-16)
Valve Springs: 120 lbs. @ 1.900” installed height
Valve Springs: 394 lbs. @ 1.175” open
Valve Springs: 390 lbs. per inch rate
Valve Springs: .650” max. valve lift
Valve Springs, Option 1: 1.550” o.d. dual spring with damper (TFS-16094-16)
Valve Springs: 138 lbs. @ 1.950” installed height
Valve Springs: 430 lbs. @ 1.250” open
Valve Springs: 420 lbs. per inch rate
Valve Springs: .680” max. valve lift
Minimum Bore Diameter: 4.050”
Cylinder Head Bolts: ARP 155-3601
Cylinder Head Studs: ARP 155-4001
Head Gaskets: TFS-56494080-040, TFS-56494165-040, or TFS-56494250-040
Spark Plugs: Autolite 3924

R-Series Tunnel Wedge Intake Manifold for Ford 390-428

Track Heat® Intake Manifold for Ford 390-428: A new set of performance cylinder heads isn’t much good without an intake manifold with the same power-building characteristics, so Trick Flow engineers designed an intake to work with them and other similar-style cylinder heads. Trick Flow’s Track Heat single plane intake manifold for Ford 390-428 features a high-rise, one-piece spider-type design with high flow extended runners and a raised plenum floor to significantly increase horsepower and torque in the 4,000-7,500 RPM range. There are also bosses for nitrous nozzles and extra material for custom port work. Overall height to the carburetor mounting pad is 6.250”. Accepts Holley 4150 and other square bore-style carbs.

R-Series Tunnel Wedge

Test Engine: 10.63:1 compression 396 c.i.d. with Trick Flow PowerPort® 175 cylinder heads (TFS-56417703-C00), COMP Cams Xtreme Energy hydraulic roller camshaft (230°/230° duration @ 0.650”/0.680” max. lift; 110° lobe separation), Harland Sharp 1.76 ratio shaft mount roller rocker arms, Trick Flow Track Heat® intake manifold (TFS-56400112), Trick Flow Track Heat Pro 850 cfm carburetor (TFS-2141501B), Patriot Exhaust full-length headers with 1 3/4” primaries, 3" dual exhaust with Flowmaster mufflers.

Spark Plugs: Autolite 3924

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
PowerPort® 290 and 325 Cylinder Heads for Ford 429/460

Trick Flow PowerPort cylinder heads are designed for high performance Ford 429/460 engines, providing significant horsepower and torque gains over similar-style cylinder heads. Highlights include an extremely efficient chamber design for more complete combustion and exhaust ports raised .270" from stock for increased airflow.

The PowerPort 290 heads feature Fast As Cast® runners that duplicate the port shape and profile of CNC-ported heads, delivering near-CNC-ported airflow, power, and performance for about the same price as regular cast cylinder heads. The PowerPort 325 heads have Competition Ported runners with CNC-profiled combustion chambers and runners with a premium high resolution surface finish for maximum, all-out performance.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Specifications

- **Material:** A356-T61 aluminum
- **Combustion Chamber Volume:** 01/02/03/04: 74cc standard, 80cc CNC-profiled
- **Intake Port Volume:** 01/02/03/04: 290cc Fast As Cast
- **Intake Port Location:** Stock
- **Intake Port Dimensions:** 01/02/03/04: 1.960" x 2.120" C01, 2.030" x 2.540"
- **Intake Gaskets:** 01/02/03/04: Fel-Pro 1230
- **Intake Valve Diameter:** 01/02/03/04: 2.200" (TFS-53400211)
- **Intake Valve Seat:** Ductile iron (TFS-53400271)
- **Intake Exhaust Port Volume:** 01/02/03/04: 130cc Fast As Cast C01, 145cc CNC Competition Ported
- **Exhaust Port Location:** Raised .270" from stock
- **Exhaust Port Dimensions:** 01/02/03/04: 1.400" x 1.850" D-shape C01, 1.550" x 1.925"
- **Exhaust Gaskets:** Fel-Pro 1420
- **Valve Spring Pocket Diameter:** 1.760" TFS-53400212
- **Exhaust Valve Seat:** Ductile iron (TFS-53400272)
- **Valve Angles:** Intake 15°/5°, exhaust 15.25°/4.5°
- **Valve Guide Material:** Bronze alloy (TFS-51600252)
- **Valve Seats:** Viton® fluoroelastomer (TFS-30400454)
- **Valve Seat Angles:** 45° x multi-angle
- **Valve Spring Cups:** 1.640" (TFS-41400434)
- **Valve Spring I.D. Locators:** 1.460/1.550" (TFS-21400440)
- **Valve Spring Retainers:** 7" x 1.500" o.d. chromoly steel (TFS-51400423)
- **Valve Stem Locks:** 7" machined steel (TFS-51400444)
- **Valve Springs:** 1.460" o.d. dual TFS-53400444
- **PowerPort 290/325 Standard Airflow:** 120 lbs. @ 1.900" installed height (TFS-16893-16), 294 lbs. @ 1.175" open, 390 lbs. per inch rate, .650" maximum valve lift
- **Valve Springs:** 1.550" o.d. dual spring with damper (TFS-16094-16), 138 lbs. @ 1.950" installed height, 430 lbs. @ 1.250" open, 420 lbs. per inch rate, .680" maximum valve lift
- **Powerport 290 Option 1 Airflow:** 215 lbs. @ 1.950" installed height, 460 lbs. per inch rate, .680" maximum valve lift
- **Valve Springs:** 1.550" o.d. dual spring with damper (TFS-16324-16), 250 lbs. @ 2.000" installed height, 800 lbs. per inch rate, .850" maximum valve lift
- **Powerport 325 Option 1 Airflow:** 250 lbs. @ 2.000" installed height, 800 lbs. per inch rate, .850" maximum valve lift
- **Guideplates:** 3/8" (TFS-53400623)
- **Rocker Arm Studs:** 7/16" (TFS-51400614)
- **Rocker Arms:** TFS-53400621 (1.73 ratio, 7/16" studs)
- **Minimum Bore Diameter:** 4.380" ARP 155-3603
- **Cylinder Head Bolts:** Head Gaskets: TFS-53494500-04, Spark Plugs: Autolite 3924

### Dyno Results

**Test Engine:** 10:25:1 compression 460 c.i.d. with Trick Flow FlowPower® 290 cylinder heads (TFS-53410003), 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 1½" primaries, 3" dual exhaust with Flowmaster mufflers.

**PowerPort 290 Heads, Fast as Cast Runners, Assembled**

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100°</td>
<td>72</td>
<td>60</td>
</tr>
<tr>
<td>.200°</td>
<td>152</td>
<td>110</td>
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<tr>
<td>.300°</td>
<td>219</td>
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<tr>
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<td>344</td>
<td>225</td>
</tr>
<tr>
<td>.700°</td>
<td>350</td>
<td>240</td>
</tr>
</tbody>
</table>

**Airflow Results**

Tests conducted at 28" of water (pressure). Bore size: 4.380"; exhaust with 2" pipe.
PowerPort® A460 340 and 360 Cylinder Heads for Ford 429/460

Trick Flow's potent PowerPort A460 340 and 360 cylinder heads for Ford 429/460 are ideal for use in drag racing, monster trucks, tractor pulling, and other ultra high power, large cubic inch engine combinations.

Notable features include big block Chevrolet-style exhaust port openings and bolt pattern plus your choice of standard or heavy duty 18-bolt mounting patterns.

The PowerPort 340 heads feature a Fast As Cast® runner design that duplicates the port shape and profile of CNC-ported heads, delivering near-CNC-ported airflow, power, and performance for about the same price as regular cast cylinder heads. The PowerPort 360 heads feature CNC Competition Ported runners with our top-of-the-line, premium high resolution surface finish for maximum airflow and performance in all-out naturally aspirated or forced induction applications.

Cylinder heads are available fully assembled or as bare castings. Sold individually.

### Airflow Results PowerPort A460 340 with Standard Bolt Pattern

<table>
<thead>
<tr>
<th>Lift Value</th>
<th>Intake Flow CFM</th>
<th>Exhaust Flow CFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>.100&quot;</td>
<td>76</td>
<td>67</td>
</tr>
<tr>
<td>.200&quot;</td>
<td>164</td>
<td>120</td>
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<tr>
<td>.700&quot;</td>
<td>1840</td>
<td>1000</td>
</tr>
<tr>
<td>.800&quot;</td>
<td>2140</td>
<td>1250</td>
</tr>
</tbody>
</table>

Tests conducted at 28" of water (pressure). Bore size: 4.500"; intake valve: 2.400" 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.”

### PowerPort A460 340 Heads, Fast As Cast Runners, Assembled

- TFS-5441T801-M87: 87cc combustion chambers, standard bolt pattern, and 2.300" intake valves, 340cc intake runners
- TFS-5441T802-M83: 83cc combustion chambers, standard bolt pattern, and 2.350" intake valves, 340cc intake runners
- TFS-5441T802-M87: 87cc combustion chambers, standard bolt pattern, and 2.350" intake valves, 340cc intake runners
- TFS-5451T802-M87: 87cc combustion chambers, 18-bolt pattern, and 2.350" intake valves, 340cc intake runners
- TFS-5451T802-M87: 87cc combustion chambers, 18-bolt pattern, and 2.350" intake valves, 340cc intake runners

### PowerPort A460 360 Heads, CNC Competition Ported Runners, Assembled

- TFS-5451T804-C03: 85cc combustion chambers, 18-bolt pattern, and 2.400" intake valves, 360cc intake runners
- TFS-5451T875-C03: 85cc combustion chambers, 18-bolt pattern, and 2.400" titanium intake valves, 360cc intake runners
- TFS-5451T804-C04: 87cc combustion chambers, 18-bolt pattern, and 2.400" intake valves, 360cc intake runners

### Specifications

- Material: A356-T61 aluminum
- Combustion Chamber Volume: M83: 83cc CNC-profiled
- Intake Port Volume: M83/M87: 340cc Fast As Cast
- Intake Port Location: Raised 1.900" from stock
- Intake Port Dimensions: M83/M87: 1.810" x 2.460"
- Intake Gaskets: C03/C04: 600cc
- Intake Valve Diameter: M83/M87 Standard: 2.300" (TFS-54400211)
- Intake Valve Seat: TFS-2706
- Exhaust Port Volume: M83/M87: 172cc Fast As Cast
- Exhaust Port Location: Raised 1.500" from stock
- Exhaust Port Dimensions: M83/M87: 1.900" x 1.850” D-shape
- Exhaust Gaskets: Fel-Pro 1412
- Exhaust Valve Diameter: M83/M87: 1.880" (TFS-54400212)
- Exhaust Valve Seat: Ductile iron (TFS-54400271)
- Valve Angles: Intake 13°; exhaust 9.57°
- Valve Guide Material: M83/M87: Bronze alloy (TFS-41400251, exhaust TFS-54500253)
- Valve Seat Angles: 45° x multi-angle
- Valve Spring Pocket Diameter: 1.760" (TFS-545000455-8)
- Valve Spring Cups: 1.640” (TFS-545000454-8)
- Valve Spring Retainers: M83/M87: 10° x 1.625" o.d. titanium (TFS-2140620)
- Valve Spring, 340cc: 1.840” o.d. dual spring with damper (TFS-16141-16)
- Valve Spring, 360cc: 1.645” o.d. triple spring (TFS-16948-16)
- Valve Springs, 360cc: 332 lbs. @ 2.100" installed height
- Valve Springs: 250 lbs. @ 2.000" installed height
- Valve Spring: 950 lbs. @ 1.200" open
- Valve Spring: 600 lbs. per inch rate
- Valve Spring: .850” maximum valve lift
- Valve Spring: 250 lbs. @ 2.000" installed height
- Valve Spring: 950 lbs. @ 1.200" open
- Valve Spring: 600 lbs. per inch rate
- Valve Spring: .900” maximum valve lift
- Guideplates: 3/8” (TFS-54400263), 7/16” (TFS-54400264)
- Rocker Arm Studs: 7/16” (TFS-54400614, exhaust TFS-54400614)
- Rocker Arms: M83/M87: 4.390”
- Cylinder Head Bolts: ARP 255-4304
- Head Gaskets: TFS-53494500-04, TFS-53494670-040 (standard), TFS-53494600-045 (18-bolt)
- Pushrod Length: Longer than stock required
- Spark Plugs: Autolite 3924

Viton® is a registered trademark of DuPont Performance Elastomers.
R-Series A460 Intake Manifolds for Ford 429/460 with Trick Flow PowerPort® A460 Cylinder Heads

Intended for 500-plus cubic inch, high-RPM engines, the Trick Flow R-Series single plane intake manifold features a one-piece, spider-type design with high-flow, extended individual runners and a raised plenum floor for significant horsepower and torque increases. Other features include A319 aluminum construction, extra material for custom port work, and bosses for nitrous or fuel injection. The manifold is designed for Holley 4500 Dominator-style carbs; overall height to carburetor mounting pad is 8.800".

The R-Series A460 tunnel ram manifold has many new exciting features. For starters, the entire A319 aluminum casting was put on a diet to decrease weight. Part of this process included eliminating the water crossover, but bosses have been incorporated on the intake flange to allow external plumbing of a coolant crossover and thermostat, if desired. Additional bosses have also been added to the runners to accommodate fuel injection or multi-stage nitrous injection. The R-Series A460 tunnel ram excels in large cubic inch, high-RPM applications such as tractor pulling and drag racing. The available top covers mount single or dual Holley 4500 Series Dominator-style carbs. Overall height to the top of carburetor mounting pad is 10.480" with the dual carb top and 13.100" with the single carb top.

NOTE: These intake manifolds only fit engines equipped with Trick Flow PowerPort® A460 cylinder heads.

A460 Single Plane Intake Manifold
TFS-54400111 Manifold, single Holley 4500 Dominator-style carburetor, each

A460 Tunnel Ram Intake Manifold and Accessories
TFS-54494000 Manifold, lower only, each
TFS-54494001 Manifold top cover, for single Holley 4500 Dominator-style carburetor, each
TFS-54494140 Manifold top cover, for dual Holley 4500 Dominator-style carburetors, each
TFS-54494140-G Top cover replacement gasket, each
TFS-54494140-LK Linkage kit, for dual Holley 4500 Dominator-style carburetors, each

Track Heat® and R-Series Intake Manifolds for Ford 429/460

Trick Flow’s Track Heat single plane intake manifolds for Ford 429/460 are designed for engines that operate in the 3,500-8,000 RPM range. Features include a high-rise, one-piece spider design with high-flow, extended individual runners, 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 manifold is designed to use Holley 4150 and other square bore-style carbs. The overall height to the carburetor mounting pad is 6.800".

The Trick Flow R-Series single plane intake manifold is intended for 500-plus cubic inch, high-RPM engines using single Holley 4500 Dominator-style carbs. The manifold is a one-piece, spider-type design with high-flow extended runners and a raised plenum floor for a significant power boost. A319 aluminum construction, extra material for custom port work, and bosses for nitrous or fuel injection round out the features. Overall height to carburetor mounting pad is 6.800".

Track Heat Intake Manifold and Bolt Kit
TFS-53400111 Manifold, each
TFS-534011B Manifold bolt kit, fits Track Heat intake manifolds only, each

R-Series Intake Manifold
TFS-53400112 Manifold, each

Phone: 1-330-630-1555 • Fax: 1-330-633-2504 • TrickFlow.com
Timing Chain Set • Rocker Arms • Girdles • Valve Covers
for Ford 429/460

**True Roller**
Timing Chain Set for Ford 429/460

This billet steel timing set from Trick Flow 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 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-53478530 Timing chain set, each

**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 factory 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.

TFS-53400621 Rocker arms, 1.73 ratio, 7/16" studs, set of 16

**Rocker Stud Girdles for Trick Flow 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 Rocker stud girdles, 7/16", pair

**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.

TFS-53400700 Stud girdle kit, 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 covers have a tall height (4 3/8" overall) to clear stud girdles and roller rockers, and can be drilled for breathers.

TFS-53400802 Valve covers, silver, pair
TFS-53411802 Valve covers, black, pair
TFS-53408802 Valve covers, natural, pair
TFS-25200803 Hardware kit, includes fourteen 1/4"~20 x 3.000" studs, fourteen washers, and fourteen nuts, each

**Fabricated Valve Covers for Ford 429/460**

These good-looking, tall height (3¾" 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, natural, pair

**Chrome Valve Covers for Ford 429/460**

Trick Flow chrome plated valve covers provide a great alternative to higher-priced aluminum covers. They feature embossed Trick Flow logos and triple chrome plating for a long-lasting shine. New gaskets are included.

TFS-44003 Valve covers, pair

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
Cylinder Heads
for 1949-53 Ford and Mercury Flathead V8

Finding Ultimate Bolt-On Performance™ is Easier than Ever!

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- Find information on new product releases, learn about race event announcements, get updates on Trick Flow-sponsored racers, and more in the News section
- Trick Flow technical stories jam-packed with useful information on cylinder heads, camshafts, intake manifolds and more, all backed-up with lots of detailed images and engine combo parts lists
- Complete Trick Flow dealer listing

Looking for more power? Find it at TrickFlow.com!

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
Hydraulic Lifters

Trick Flow hydraulic lifters are the perfect choice to freshen up your engine. These affordable lifters are designed to factor tolerance 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.

Hydraulic Flat Tappet Lifters
TFS-21400001 Lifter, Chevy 262-454, set of 16

OEM Hydraulic Roller Lifters
TFS-21400002-16 Lifter, Chevy 5.0L/5.7L GM LS Gen III, set of 16
TFS-21400004-16 Lifter, Ford 5.0L, set of 16

Retro-Fit Hydraulic Roller Lifters with Link Bars
TFS-21400003 Lifter, Chevy 262-400 and 348/409, set of 16
TFS-21400005 Lifter, Chevy 396-502, set of 16
TFS-21400006 Lifters, Ford 221-351W (including Boss), 351C/M-400, set of 16

TFS-21400007 Lifter, Ford 352-428, 370-460, set of 16

*Available individually.

Hydraulic Lifters • Pushrod Length Checkers • Pushrods

Chromoly Pushrods

The proper length pushrod is critical to achieving correct valvetrain geometry. Trick Flow one-piece chromoly 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 chromoly 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 Chromoly 5/16” Pushrods, Set of 16
TFS-21407200 Pushrods, 7.200” long, small block Chevy with OE roller cam
TFS-21407400 Pushrods, 7.400” long, GM 4.8L/5.3L, LS1, LS2, and L92
TFS-21407800 Pushrods, 7.800” long, small block Chevy, 90° V6
TFS-21408400 Pushrods, 8.400” long, 1970-74 Ford 351C/429 CJ
TFS-21408500 Pushrods, 8.500” long, 1971-72 Ford Boss 351
TFS-21408530 Pushrods, 8.550” long, 1979-98 Ford 429/460 (except SCJ)
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”
TFS-21457000 Pushrods, 6.600” long intake/7.825” long exhaust, Chrysler 5.7L Hemi
TFS-21461000 Pushrods, 6.650” long intake/7.850” long exhaust, Chrysler 6.1L Hemi
TFS-21464000 Pushrods, 6.800” long intake/8.100” long exhaust, Chrysler 6.4L Hemi

Trick Flow Chromoly 3/8” Pushrods, Set of 8
TFS-21416250-8 Pushrods, 8.250” long, big block Chevy intake
TFS-21418350-8 Pushrods, 8.350” long, big block Chevy intake +.100”
TFS-21418550-8 Pushrods, 8.550” long, 1970-98 Ford 429/460 (except SCJ)
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, tall deck big block Chevy intake +.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, 6.650” long, tall deck big block Chevy exhaust +.100”
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 are available in any length from 6.250”–9.000” (5/16”) or 7.850”–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:

To order 5/16” pushrods use the base number: TFS-2140___ and add the length.

For example: TFS-21406250 designates 5/16” diameter, 6.250” pushrods.
To order 3/8” pushrods use the base number: TFS-2141___ and add the length.
For example: TFS-21419000-8 designates 3/8” diameter, 9.000” pushrods.

Trick Flow’s camshaft degree kit will help dial in a camshaft accurately. The supplement kit for Ford 4.6L/5.4L 2V/4V contains components to make degreeing camshafts in a vehicle easier. You can find them on page 37.
Track Max® Camshafts

Get significant horsepower and torque increases with Trick Flow’s Track Max camshafts. They are dyno-proven to produce a wide power curve over the entire RPM range, not just at a particular RPM point or peak. That’s the kind of power that gets respect on the street and wins races at the track!

The cams are cut from premium blank cores and checked for proper hardness before being precision ground to exact tolerances.

Track Max Hydraulic Roller Camshafts for GM LS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050”</th>
<th>Valve Lift w/1.7 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-30602001</td>
<td>Applications: All GM LS engines. Excellent idle, strong midrange power, 2,000-6,000 RPM powerband, computer modification recommended. Compression: 10.5:1 minimum. With 3-bolt cam gear mounting and rear integral LSI/LS6 camshaft sensor pick-up ring.</td>
<td>218°/220°</td>
<td>.560”/.560”</td>
<td>114°</td>
<td>TFS-16904-16 TFS-16306-16</td>
<td>TFS-21400415 TFS-214T0425</td>
<td>TFS-30600444</td>
<td>TFS-2500280 TFS-2500285 TFS-2500295 TFS-2500300*</td>
</tr>
<tr>
<td>TFS-30602003</td>
<td>Applications: All GM LS engines. Fair idle, good midrange/strong top-end power, 2,500-5,000 RPM powerband, computer modification recommended. Compression: 10.5:1 minimum. With 3-bolt cam gear mounting and rear integral LSI/LS6 camshaft sensor pick-up ring.</td>
<td>228°/230°</td>
<td>.585”/.585”</td>
<td>112°</td>
<td>TFS-16904-16 TFS-16306-16</td>
<td>TFS-21400415 TFS-214T0425</td>
<td>TFS-30600444</td>
<td>TFS-2500280 TFS-2500285 TFS-2500295 TFS-2500300*</td>
</tr>
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</table>

Track Max Hydraulic Roller Camshaft for GM LT1

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050”</th>
<th>Valve Lift w/1.5 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-3140281</td>
<td>Fair idle, strong midrange power, 1,800-5,800 RPM powerband, 2,500-3,000 RPM stall converter. Compression: 10.25:1 minimum.</td>
<td>220°/227°</td>
<td>.530”/.530”</td>
<td>113°</td>
<td>TFS-16838-16</td>
<td>TFS-51400423 TFS-31400443</td>
<td>TFS-K16838</td>
<td></td>
</tr>
</tbody>
</table>

Track Max Hydraulic Roller Camshafts for Small Block Chevrolet

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050”</th>
<th>Valve Lift w/1.5 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-3140201</td>
<td>Fair idle, broad midrange power, 2,800-6,200 RPM powerband, 2,500-3,000 stall converter. Compression: 9:5:1 minimum.</td>
<td>230°/234°</td>
<td>.528”/.539”</td>
<td>110°</td>
<td>TFS-16838-16</td>
<td>TFS-51400423 TFS-31400443</td>
<td>TFS-K16838</td>
<td></td>
</tr>
<tr>
<td>TFS-3140301</td>
<td>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.</td>
<td>230°/234°</td>
<td>.530”/.540”</td>
<td>110°</td>
<td>TFS-16838-16</td>
<td>TFS-51400423 TFS-31400443</td>
<td>TFS-K16838</td>
<td></td>
</tr>
<tr>
<td>TFS-3140202</td>
<td>Rough idle, excellent top-end power, 3,200-6,800 RPM powerband. 3,000-3,500 RPM stall converter. Compression: 10:1 minimum.</td>
<td>246°/254°</td>
<td>.558”/.558”</td>
<td>112°</td>
<td>TFS-16921-16</td>
<td>TFS-21400410</td>
<td>TFS-2500200</td>
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</tr>
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</table>

Track Max Hydraulic Flat Tappet Camshaft and Camshaft/Lifter Kits for Small Block Chevrolet

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050”</th>
<th>Valve Lift w/1.5 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-31401000</td>
<td>Fair idle, strong midrange power, 2,600-6,100 RPM powerband. 2,500-3,000 RPM stall converter. Compression: 9.5:1 minimum.</td>
<td>226°/234°</td>
<td>.480”/.495”</td>
<td>110°</td>
<td>TFS-16981-16</td>
<td>TFS-31400423 TFS-31400443</td>
<td>TFS-K16981</td>
<td></td>
</tr>
<tr>
<td>TFS-31401000</td>
<td>Rough idle, excellent top-end power, 3,500-6,700 RPM powerband. 3,000-3,500 RPM stall converter. Compression: 10:1 minimum.</td>
<td>246°/254°</td>
<td>.510”/.518”</td>
<td>112°</td>
<td>TFS-16838-16</td>
<td>TFS-51400423 TFS-31400443</td>
<td>TFS-K16838</td>
<td></td>
</tr>
</tbody>
</table>

*Roller rockers recommended ∆Titanium retainers \*Camshaft only \*Kit
### Track Max® Camshafts (continued)

#### Track Max® Hydraulic Roller Camshaft for Big Block Chevrolet

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.7 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-41302000</td>
<td>Fair idle, good midrange and strong top-end power, 3,000-6,200 RPM powerband.</td>
<td>236°/242°</td>
<td>.600°/.600°</td>
<td>112°</td>
<td>TFS-16943-16</td>
<td>TFS-21400425</td>
<td>TFS-52400444</td>
<td>TFS-K16943</td>
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</table>

#### Track Max® Mechanical Roller Camshaft for Big Block Chevrolet

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.7 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kit</th>
</tr>
</thead>
</table>

#### Track Max® Hydraulic Roller Camshfts for Ford 4.6L/5.4L 2V

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.7 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51802001</td>
<td>Fair idle, strong midrange power and torque, 1,500-5,000 RPM powerband. Works</td>
<td>228°/230°</td>
<td>.550°/.550°</td>
<td>112°</td>
<td>TFS-16519-16</td>
<td>TFS-51900423</td>
<td>TFS-51900444</td>
<td>TFS-2500500/TFS-2500525*</td>
</tr>
<tr>
<td>TFS-51802002</td>
<td>Fair idle, strong to top-end power, 1,800-6,500 RPM powerband. Works with stock</td>
<td>234°/234°</td>
<td>.580°/.580°</td>
<td>114°</td>
<td>TFS-16519-16</td>
<td>TFS-51900423</td>
<td>TFS-51900444</td>
<td>TFS-2500500/TFS-2500525*</td>
</tr>
</tbody>
</table>

#### Track Max® Hydraulic Roller Camshafts for Small Block Ford

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.6 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
<th>Recommended Valve Springs</th>
<th>Recommended Valve Spring Retainers</th>
<th>Recommended Valve Locks</th>
<th>Recommended Valve Spring Upgrade Kits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-51403001</td>
<td>Good idle, strong midrange power. Aftermarket intake, heads, and headers</td>
<td>221°/225°</td>
<td>.494°/.510°</td>
<td>112°</td>
<td>TFS-16315-16</td>
<td>TFS-21400424</td>
<td>TFS-31400443</td>
<td>TFS-2500200</td>
</tr>
<tr>
<td>TFS-51403002</td>
<td>Fair idle, good midrange power, 2,500-3,000 RPM stall converter or S-speed</td>
<td>224°/232°</td>
<td>.542°/.563°</td>
<td>112°</td>
<td>TFS-16315-16</td>
<td>TFS-21400424</td>
<td>TFS-31400443</td>
<td>TFS-2500200</td>
</tr>
<tr>
<td>TFS-51403003</td>
<td>Rough idle, strong top-end power, 3,000-3,500 RPM stall converter.</td>
<td>236°/248°</td>
<td>.574°/.595°</td>
<td>110°</td>
<td>TFS-16306-16</td>
<td>TFS-21400125</td>
<td>TFS-51400444</td>
<td>TFS-K16306</td>
</tr>
<tr>
<td>TFS-51403004</td>
<td>Rough idle, strong top-end power, 3,000-3,500 RPM stall converter.</td>
<td>242°/246°</td>
<td>.595°/.595°</td>
<td>110°</td>
<td>TFS-16306-16</td>
<td>TFS-21400125</td>
<td>TFS-51400444</td>
<td>TFS-K16306</td>
</tr>
<tr>
<td>TFS-51403005</td>
<td>Rough idle, strong top-end power, 3,000-3500 RPM stall converter.</td>
<td>250°/254°</td>
<td>.595°/.595°</td>
<td>110°</td>
<td>TFS-16306-16</td>
<td>TFS-21400125</td>
<td>TFS-51400444</td>
<td>TFS-K16306</td>
</tr>
</tbody>
</table>

#### Track Max Camshaft for Big Block Mopar

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Characteristics</th>
<th>Duration @ .050&quot;</th>
<th>Valve Lift w/1.7 Ratio Rocker Arms</th>
<th>Lobe Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-61602003</td>
<td>Lopey idle, good midrange to strong top-end power, 3,000-6,500 RPM powerband.</td>
<td>234°/247°</td>
<td>.600°/.600°</td>
<td>108°</td>
</tr>
</tbody>
</table>

*Roller rocker arms required

### Valve Spring Compressors

If you work on engines, then you need a Trick Flow valve spring compressor. A must for servicing valve springs, retainers, and valve seals, our specially made tools easily remove valve springs—even while they’re on the engine and still in the vehicle. The compressors are made from premium heat-treated steel for a long service life.

- **TFS-90306**: Valve spring compressor, GM LS1/L6/L8/L9, each
- **TFS-90307**: Valve spring compressor, GM L92/L3/L9/L9/LS9, each
- **TFS-90518**: Valve spring compressor, Ford 4.6L/5.4L 2V/4V, each

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Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
Trick Flow by PAC Racing Double Platinum .660" Dual Valve Spring Kits for GM LS

Trick Flow is always looking for ways to improve performance. When it was discovered that a better valve spring option was needed for GM LS engines, Trick Flow called on PAC Racing to help come up with a solution. The results are these polished double platinum .660" spring kits for GM LS.

The springs were engineered as a drop-in replacement that delivers the durability customers want with the valvetrain stability required for more aggressive camshafts. An added advantage is that the springs play nice with the stock rocker arms and lifters, too.

Rounding out the kits are precision-machined 7 degree valve stem locks, Viton® fluoroelastomer canister valve seals, valve spring I.D. locators, and the choice of chromoly steel and titanium retainers.

Coil Spring Specs:

**Viton®** is a registered trademark of DuPont Performance Elastomers.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>I.D. of Outer Spring (In.)</th>
<th>I.D. of Inner Spring (In.)</th>
<th>Seat Load (Lbs./In.)</th>
<th>Open Load (Lbs./In.)</th>
<th>Rate (Lbs./In.)</th>
<th>Coil Bind (In.)</th>
<th>Valve Spring Retainers</th>
<th>Valve Spring Upgrade Kits</th>
<th>Recommended Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-16840-16</td>
<td>1.460</td>
<td>0.970</td>
<td>92 @ 1.580</td>
<td>296 @ 1.100</td>
<td>1.050</td>
<td>300 @ 1.250</td>
<td>1.125</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16841-16</td>
<td>1.460</td>
<td>0.970</td>
<td>92 @ 1.580</td>
<td>296 @ 1.100</td>
<td>1.050</td>
<td>300 @ 1.250</td>
<td>1.125</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16905P-16</td>
<td>1.488</td>
<td>0.966</td>
<td>98 @ 1.800</td>
<td>333 @ 1.200</td>
<td>1.040</td>
<td>300 @ 1.250</td>
<td>1.110</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16906-16</td>
<td>1.470</td>
<td>0.960</td>
<td>98 @ 1.800</td>
<td>333 @ 1.200</td>
<td>1.040</td>
<td>300 @ 1.250</td>
<td>1.110</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16910-16</td>
<td>1.355</td>
<td>0.940</td>
<td>90 @ 1.850</td>
<td>300 @ 1.350</td>
<td>1.204</td>
<td>300 @ 1.350</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16915-16</td>
<td>1.325</td>
<td>0.910</td>
<td>92 @ 1.820</td>
<td>296 @ 1.100</td>
<td>1.050</td>
<td>300 @ 1.350</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16926-16</td>
<td>1.476</td>
<td>0.972</td>
<td>110 @ 1.800</td>
<td>318 @ 1.300</td>
<td>1.167</td>
<td>300 @ 1.350</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16942-16</td>
<td>1.437</td>
<td>0.947</td>
<td>115 @ 1.700</td>
<td>285 @ 1.200</td>
<td>1.150</td>
<td>300 @ 1.350</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16981 Up to .550&quot; lift @ 1.800&quot; installed height</td>
</tr>
<tr>
<td>TFS-16990-16</td>
<td>1.437</td>
<td>1.003</td>
<td>115 @ 1.500</td>
<td>240 @ 1.030</td>
<td>0.903</td>
<td>300 @ 1.400</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16990 Up to .500&quot; lift @ 1.500&quot; installed height</td>
</tr>
<tr>
<td>TFS-16840-16</td>
<td>1.460</td>
<td>0.970</td>
<td>92 @ 1.580</td>
<td>296 @ 1.100</td>
<td>1.050</td>
<td>300 @ 1.400</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16990 Up to .500&quot; lift @ 1.500&quot; installed height</td>
</tr>
<tr>
<td>TFS-16841-16</td>
<td>1.460</td>
<td>0.970</td>
<td>92 @ 1.580</td>
<td>296 @ 1.100</td>
<td>1.050</td>
<td>300 @ 1.400</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16990 Up to .500&quot; lift @ 1.500&quot; installed height</td>
</tr>
<tr>
<td>TFS-16906-16</td>
<td>1.460</td>
<td>0.970</td>
<td>92 @ 1.580</td>
<td>296 @ 1.100</td>
<td>1.050</td>
<td>300 @ 1.400</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16990 Up to .500&quot; lift @ 1.500&quot; installed height</td>
</tr>
<tr>
<td>TFS-16905P-16</td>
<td>1.488</td>
<td>0.966</td>
<td>98 @ 1.800</td>
<td>333 @ 1.200</td>
<td>1.040</td>
<td>300 @ 1.400</td>
<td>1.204</td>
<td>TFS-51400423</td>
<td>TFS-K16990 Up to .500&quot; lift @ 1.500&quot; installed height</td>
</tr>
</tbody>
</table>

Valve springs compress and rebound hundreds of times a second. Make sure your next set of valve springs are built to last and built to win! Trick Flow by PAC Racing 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™ chrome-silicon steel and double shot-peened beyond Aerospace Material Specifications (AMS) reliability standards.

The Trick Flow by PAC Racing valve springs are available in four configurations to work with virtually any camshaft and valvetrain combination. Sold in sets of 16, except for TFS-15410-24 (set of 24) and TFS-15411-32 (set of 32).

**Single Valve Springs**

Trick Flow by PAC Racing 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**

Trick Flow by PAC Racing 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.

**Triplet Sportsman Valve Springs**

Trick Flow by PAC Racing triplate 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! Trick Flow by PAC Racing beehive springs have heavyweight spring rates but will fit inside the stock valve seats and can be used with the stock retainers.
### Trick Flow by PAC Racing Single Valve Springs (continued)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Specifications</th>
<th>Recommended Components</th>
<th>Application Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-16001-16</td>
<td>1.495 .991 .991 No</td>
<td>TFS-51400423 - TFS-31400443</td>
<td>Up to .500&quot; lift @ 1.650&quot; installed height</td>
</tr>
<tr>
<td>TFS-16839-16</td>
<td>1.500 .996 .996 No</td>
<td>TFS-51400423 - TFS-31400443</td>
<td>Up to .600&quot; lift @ 1.880&quot; installed height</td>
</tr>
<tr>
<td>TFS-16911-16</td>
<td>1.525 1.000 No</td>
<td>TFS-21400425 - TFS-52400444</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
</tr>
<tr>
<td>TFS-16936-16</td>
<td>1.540 1.016 1.185 Yes</td>
<td>TFS-21400425 - TFS-52400444</td>
<td>Up to .700&quot; lift @ 1.950&quot; installed height</td>
</tr>
</tbody>
</table>

### Trick Flow by PAC Racing Dual Valve Springs (continued)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Specifications</th>
<th>Recommended Components</th>
<th>Application Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-16521-16</td>
<td>1.100 .816 .620 No</td>
<td>TFS-51400423 - TFS-31400443</td>
<td>Replacement for Trick Flow Super 23° cylinder heads for small block Ford</td>
</tr>
<tr>
<td>TFS-16891-16</td>
<td>1.212 .674 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16904-16</td>
<td>1.290 .694 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16306-16</td>
<td>1.275 .675 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16921-16</td>
<td>1.300 .665 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16905P-16</td>
<td>1.304 .694 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16893-16</td>
<td>1.460 1.075 .794 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .700&quot; lift @ 1.875&quot; installed height</td>
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<tr>
<td>TFS-16315-16</td>
<td>1.460 1.074 .720 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Replacement for Trick Flow Super 23° cylinder heads for small block Ford</td>
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<tr>
<td>TFS-16900-16</td>
<td>1.464 1.080 .724 Yes</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16838-16</td>
<td>1.465 1.087 .807 No</td>
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<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16914-16</td>
<td>1.490 1.105 .810 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .600&quot; lift @ 1.900&quot; installed height</td>
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<tr>
<td>TFS-16929-16</td>
<td>1.538 1.140 .762 Yes</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .700&quot; lift @ 2.000&quot; installed height</td>
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<tr>
<td>TFS-16907-16</td>
<td>1.539 1.125 .731 Yes</td>
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<td>Up to .700&quot; lift @ 2.000&quot; installed height</td>
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<tr>
<td>TFS-16907-16</td>
<td>1.539 1.125 .731 Yes</td>
<td>TFS-31400443 - TFS-K16891</td>
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<td>TFS-16886-16</td>
<td>1.540 1.105 .700 Yes</td>
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<td>Up to .750&quot; lift @ 2.000&quot; installed height</td>
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<tr>
<td>TFS-16895-16</td>
<td>1.540 1.140 .754 Yes</td>
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<td>TFS-16896-16</td>
<td>1.540 1.140 .754 Yes</td>
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<td>TFS-16904-16</td>
<td>1.545 1.130 .757 Yes</td>
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<td>Up to .750&quot; lift @ 2.000&quot; installed height</td>
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<td>TFS-16912-16</td>
<td>1.545 1.130 .737 Yes</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .725&quot; lift @ 1.800&quot; installed height</td>
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<tr>
<td>TFS-16088-16</td>
<td>1.550 1.135 .812 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .700&quot; lift @ 2.000&quot; installed height</td>
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<td>TFS-16115-16</td>
<td>1.550 1.125 .720 Yes</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .700&quot; lift @ 2.000&quot; installed height</td>
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<tr>
<td>TFS-16928-16</td>
<td>1.550 1.150 .790 Yes</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .750&quot; lift @ 2.000&quot; installed height</td>
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<tr>
<td>TFS-16943-16</td>
<td>1.550 1.135 .812 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .750&quot; lift @ 2.000&quot; installed height</td>
</tr>
<tr>
<td>TFS-16955-16</td>
<td>1.550 1.135 .812 No</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Up to .750&quot; lift @ 2.000&quot; installed height</td>
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<tr>
<td>TFS-16925-16</td>
<td>1.555 1.140 .747 Yes</td>
<td>TFS-31400443 - TFS-K16891</td>
<td>Replacement for Trick Flow Super 23° 215 and 230 cylinder heads for small block Chevrolet</td>
</tr>
</tbody>
</table>

Notes:
- **Chromoly Steel**
- **Titanium retainers**
- **Includes Damper**
- **O.D. of Spring (In.)**
- **I.D. of Inner Spring (In.)**
- **Specs Recommended Components**
- **Seat Load (Lbs./In.)**
- **Open Load (Lbs./In.)**
- **Coil Bind (Lb/in.)**
- **I.D. of Spring (Chromoly Steel)**
- **Coil Load**
- **Valve Spring Retainers (Chromoly Steel)**
- **Valve Stem Locks**
- **Application Recommendations**

*Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.*
### Trick Flow by PAC Racing Valve Springs (continued)

#### Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>O.D. of Outer Spring (In.)</th>
<th>I.D. of Outer Spring (In.)</th>
<th>I.D. of Inner Spring (In.)</th>
<th>Includes Damper</th>
<th>Seat Load (lbs./in.)</th>
<th>Open Load (lbs./in.)</th>
<th>Coil Bind (lbs./in.)</th>
<th>Valve Spring Retainers (Chromoly Steel)</th>
<th>Valve Stem Locks</th>
<th>Valve Spring Upgrade Kits</th>
<th>Application Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-16318-16</td>
<td>1.560</td>
<td>1.136</td>
<td>.750</td>
<td>Yes</td>
<td>240 @ 2.000</td>
<td>600 @ 1.280</td>
<td>1.100</td>
<td>TFS-214T0525*</td>
<td>TFS-52400445</td>
<td>—</td>
<td>Replacement for Trick Flow Ultra 18° 250 cylinder heads for small block Ford and Twisted Wedge® Race cylinder heads for small block Ford.</td>
</tr>
<tr>
<td>TFS-16944-16</td>
<td>1.570</td>
<td>1.120</td>
<td>.796</td>
<td>No</td>
<td>190 @ 1.950</td>
<td>710 @ 1.250</td>
<td>1.045</td>
<td>TFS-21400425</td>
<td>TFS-52400445</td>
<td>—</td>
<td>Up to .800&quot; lift @ 1.950° installed height</td>
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<tr>
<td>TFS-16951-16</td>
<td>1.620</td>
<td>1.170</td>
<td>.846</td>
<td>No</td>
<td>230 @ 1.950</td>
<td>710 @ 1.200</td>
<td>1.045</td>
<td>TFS-214T0520*</td>
<td>TFS-52400444</td>
<td>—</td>
<td>Up to .800&quot; lift @ 1.960° installed height</td>
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<tr>
<td>TFS-16099-16</td>
<td>1.625</td>
<td>1.175</td>
<td>.769</td>
<td>Yes</td>
<td>250 @ 2.050</td>
<td>673 @ 1.300</td>
<td>1.211</td>
<td>TFS-214T0520*</td>
<td>TFS-52400444</td>
<td>—</td>
<td>Up to .750° lift @ 2.050° installed height</td>
</tr>
<tr>
<td>TFS-16998-16</td>
<td>1.635</td>
<td>1.185</td>
<td>.779</td>
<td>Yes</td>
<td>250 @ 1.900</td>
<td>728 @ 1.200</td>
<td>1.090</td>
<td>TFS-214T0520*</td>
<td>TFS-52400444</td>
<td>—</td>
<td>Up to .700° lift @ 1.900° installed height</td>
</tr>
<tr>
<td>TFS-16951-16</td>
<td>1.640</td>
<td>1.191</td>
<td>.860</td>
<td>Yes</td>
<td>250 @ 2.000</td>
<td>800 @ 1.150</td>
<td>1.050</td>
<td>TFS-214T0620*</td>
<td>TFS-52400444</td>
<td>—</td>
<td>Replacement for Trick Flow PowerDome® 280 and PowerPort® 320 cylinder heads for big block Chevrolet.</td>
</tr>
</tbody>
</table>

#### Recommended Components

- **Trick Flow by PAC Racing Beehive Valve Springs**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>O.D. of Outer Spring (In.)</th>
<th>I.D. of Outer Spring (In.)</th>
<th>Seat Load (lbs./in.)</th>
<th>Open Load (lbs./in.)</th>
<th>Coil Bind (lbs./in.)</th>
<th>Valve Spring Retainers (Chromoly Steel)</th>
<th>Valve Stem Locks</th>
<th>Valve Spring Upgrade Kits</th>
<th>Application Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-16801-32</td>
<td>T: .862</td>
<td>B: 1.025</td>
<td>80 @ 1.575</td>
<td>200 @ 1.000</td>
<td>.943</td>
<td>Use factory retainers</td>
<td>Use factory locks — 7°: TFS-51400444</td>
<td>Ford 5.0L DOHC 4V with OEM VVT; up to .575° lift</td>
<td></td>
</tr>
<tr>
<td>TFS-15411-32</td>
<td>T: .873</td>
<td>B: 1.061</td>
<td>115 @ 1.600</td>
<td>300 @ 1.000</td>
<td>.980</td>
<td>Use factory retainers</td>
<td>Use factory locks — 10°: TFS-52400444</td>
<td>Ford 4.6L/4.4L 3V; up to .550° lift @ 1.870°</td>
<td></td>
</tr>
<tr>
<td>TFS-15410-24</td>
<td>T: .900</td>
<td>B: 1.025</td>
<td>105 @ 1.670</td>
<td>270 @ 1.120</td>
<td>1.980</td>
<td>Use factory retainers</td>
<td>TFS-51900444 — Ford 6.0L/4.0L 4V</td>
<td>Ford 6.0L/4.0L 4V; up to .580° lift @ 1.600°</td>
<td></td>
</tr>
<tr>
<td>TFS-16519-16</td>
<td>T: .940</td>
<td>B: 1.050</td>
<td>90 @ 1.600</td>
<td>205 @ 1.020</td>
<td>.980</td>
<td>Use factory retainers</td>
<td>TFS-51900423</td>
<td>Ford 4.6L/5.4L 2V; up to .575° lift</td>
<td></td>
</tr>
<tr>
<td>TFS-16123-32</td>
<td>T: .943</td>
<td>B: 1.105</td>
<td>90 @ 1.470</td>
<td>252 @ 0.970</td>
<td>.990</td>
<td>Use factory retainers</td>
<td>TFS-21400392</td>
<td>Ford 4.6L/5.4L 4V</td>
<td></td>
</tr>
<tr>
<td>TFS-16213-16</td>
<td>T: .959</td>
<td>B: 1.061</td>
<td>80 @ 1.640</td>
<td>185 @ 1.090</td>
<td>1.020</td>
<td>Use factory retainers</td>
<td>TFS-51900423</td>
<td>Ford 4.6L/5.4L 2V</td>
<td></td>
</tr>
<tr>
<td>TFS-16213-24</td>
<td>T: .959</td>
<td>B: 1.061</td>
<td>80 @ 1.640</td>
<td>185 @ 1.090</td>
<td>1.020</td>
<td>Use factory retainers</td>
<td>TFS-51900444</td>
<td>Ford 4.6L/5.4L 3V</td>
<td></td>
</tr>
<tr>
<td>TFS-16125-16</td>
<td>T: 1.013</td>
<td>B: 1.101</td>
<td>125 @ 1.600</td>
<td>275 @ 1.020</td>
<td>.970</td>
<td>Use factory retainers</td>
<td>TFS-51900423</td>
<td>Ford 4.6L/5.4L 2V; up to .590° lift @ 1.570°</td>
<td></td>
</tr>
<tr>
<td>TFS-16125-24</td>
<td>T: 1.013</td>
<td>B: 1.101</td>
<td>120 @ 1.570</td>
<td>275 @ 1.020</td>
<td>.970</td>
<td>Use factory retainers</td>
<td>TFS-51900423</td>
<td>Ford 4.6L/5.4L 3V; up to .590° lift @ 1.570°</td>
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<tr>
<td>TFS-16125-32</td>
<td>T: 1.013</td>
<td>B: 1.101</td>
<td>120 @ 1.570</td>
<td>275 @ 1.020</td>
<td>.970</td>
<td>Use factory retainers</td>
<td>TFS-51900423</td>
<td>Ford 4.6L/5.4L 4V; up to .590° lift @ 1.570°</td>
<td></td>
</tr>
<tr>
<td>TFS-16235-16</td>
<td>T: 1.035</td>
<td>B: 1.210</td>
<td>135 @ 1.800</td>
<td>350 @ 1.200</td>
<td>1.160</td>
<td>Use factory retainers</td>
<td>No machining required for small block Chrysler; up to .600° lift @ 1.800° installed height</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TFS-16915-16</td>
<td>T: 1.055</td>
<td>B: 1.250</td>
<td>105 @ 1.800</td>
<td>293 @ 1.200</td>
<td>1.140</td>
<td>Use factory retainers</td>
<td>Upgrade for GM LS and small block Chevrolet with up to .510° lift.</td>
<td></td>
<td></td>
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<tr>
<td>TFS-16916-16</td>
<td>T: 1.055</td>
<td>B: 1.290</td>
<td>130 @ 1.800</td>
<td>318 @ 1.200</td>
<td>1.140</td>
<td>Use factory retainers</td>
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<tr>
<td>TFS-16120-16</td>
<td>T: 1.095</td>
<td>B: 1.445</td>
<td>155 @ 1.880</td>
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<td>—</td>
<td>—</td>
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<tr>
<td>TFS-16841-16</td>
<td>T: 1.295</td>
<td>B: 1.450</td>
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<td>375 @ 1.380</td>
<td>1.316</td>
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<tr>
<td>TFS-16962-16</td>
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<td>B: 1.250</td>
<td>100 @ 1.750</td>
<td>290 @ 1.225</td>
<td>1.100</td>
<td>Use factory retainers</td>
<td>Up to .550° lift @ 1.750° installed height</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*O.D.: Outer Diameter, I.D.: Inner Diameter*
Trick Flow by PAC Racing Performance Valve Spring Upgrade Kits

Installing a new camshaft is a sure way to improve horsepower—just remember that the rest of the valvetrain must be upgraded to support it. These Trick Flow by PAC Racing performance valve spring upgrade kits include the components you need to keep your engine running in tip-top shape after a cam swap. Each kit features high-quality Trick Flow by PAC Racing Pacaloy™ valve springs, hardened chromoly steel or titanium retainers, and precision machined steel valve locks.

### Trick Flow by PAC Racing Performance Valve Spring Upgrade Kits

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Spring Style</th>
<th>Part</th>
<th>Kit Number</th>
<th>Valve Spring Style</th>
<th>Valve Stem Locks</th>
<th>Lock Type</th>
<th>Max. Lift (In.)</th>
<th>Application Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-2500100</td>
<td>Single</td>
<td>118</td>
<td>TFS-16514-16</td>
<td>180</td>
<td>330 @ 1.200</td>
<td>1.040</td>
<td>358</td>
<td>TFS-21400424 TFS-31400443</td>
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<tr>
<td>TFS-2500200</td>
<td>Single</td>
<td>134</td>
<td>TFS-16315-16</td>
<td>180</td>
<td>405 @ 1.200</td>
<td>1.013</td>
<td>452</td>
<td>TFS-51400423 TFS-52400444</td>
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<tr>
<td>TFS-2500280</td>
<td>Single</td>
<td>150</td>
<td>TFS-16984-16</td>
<td>180</td>
<td>372 @ 1.200</td>
<td>1.010</td>
<td>370</td>
<td>TFS-21400415 TFS-30600444</td>
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<tr>
<td>TFS-2500285</td>
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<td>TFS-16984-16</td>
<td>180</td>
<td>372 @ 1.200</td>
<td>1.010</td>
<td>370</td>
<td>TFS-21470425* TFS-30600444</td>
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<tr>
<td>TFS-2500286</td>
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<td>TFS-16905-16</td>
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<td>425 @ 1.130</td>
<td>1.050</td>
<td>392</td>
<td>TFS-21400415 TFS-30600444</td>
</tr>
<tr>
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<td>TFS-16905-16</td>
<td>180</td>
<td>425 @ 1.130</td>
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<td>1.050</td>
<td>392</td>
<td>TFS-21470427* TFS-30600444</td>
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<tr>
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<td>1.100</td>
<td>450</td>
<td>TFS-21400415 TFS-30600444</td>
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<td>TFS-16306-16</td>
<td>180</td>
<td>420 @ 1.200</td>
<td>1.100</td>
<td>450</td>
<td>TFS-21470425* TFS-30600445</td>
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<td>TFS-16917-16</td>
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* Titanium retainers

Some parts are not legal for use in California or other states with similar laws/regulations—see page 2 for details.
Valve Spring Components

Valve Spring Retainers, Cups, Seals, I.D. Locators, and Spring Shims

Trick Flow valve spring retainers, valve spring cups, spring shims, and I.D. locators are made from 4140 chromoly steel, through-hardened for long life, and black oxide coated. Trick Flow titanium valve spring retainers substantially reduce weight and are incredibly strong to safely and reliably rev faster. Trick Flow Viton™ fluoroelastomer valve stem seals feature a posi-stop design to prevent oil from leaking into the valve guides. For use with all cast iron and aluminum cylinder heads.

*Viton is a registered trademark of DuPont Performance Elastomers.

### Valve Spring Retainers, Sets of 16

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Spring Description</th>
<th>Valve Spring Max. Dia.</th>
<th>Valve Stem Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<td>.675&quot;</td>
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<td>7°</td>
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<td>11/32&quot;</td>
<td>1.160&quot;</td>
<td>.880&quot;</td>
<td>.675&quot;</td>
<td>—</td>
<td>7°</td>
</tr>
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<td>.675&quot;</td>
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<td>7°</td>
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<td>10°</td>
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### Valve Spring Cups

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<th>Inner Diameter</th>
<th>Max. Spring O.D.</th>
<th>Overall Thickness</th>
<th>Shim Thickness</th>
<th>Fits Valve Guide O.D.</th>
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### Valve Spring Shims, Set of 16

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### Valve Spring I.D. Locators, Sets of 16

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### Steel Valve Stem Lock Specifications, Sets of 16

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<td>Gold</td>
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<td>Single beadlock</td>
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<td>10° standard</td>
<td>11/32&quot;</td>
<td>Single beadlock</td>
<td>Black</td>
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True Roller Timing Chain Sets and Accessories

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 heat-treated 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.

The timing chain damper for GM LS provides a small amount of tension on the timing chain to keep it from “whipping” during gear changes and damaging the engine. It’s manufactured from durable OE-quality plastic and includes mounting bolts. The damper fits non-VVT (variable valve timing) GM LS2/L92/LS3 engines, and it should be replaced when changing camshafts or timing chain sets.

The GM LS timing chain damper adapter bracket allows the use of LS2 timing chain dampers on any GM LS engine block. The bracket uses the three lower cam/thrust retainer plate bolts for attachment. The bracket can also be used with aftermarket LS2 timing chain dampers (such as TFS-30675540) with the included hardware.

TFS-30675540 Timing chain damper, GM LS2/LS92/LS3 non-VVT engines, each
TFS-30675600 Timing chain damper adapter bracket, GM LS, each
TFS-K30675600 Timing chain damper and adapter bracket kit, each
TFS-30678533 Timing chain set, LS1, each
TFS-30678534 Timing chain set, L52, each
TFS-30778533 Timing chain set, 58/4x camshaft sensor, 1-bolt, L92/LS3, each
TFS-30778536 Timing chain set, 58/4x camshaft sensor, 3-bolt, L92/LS3, each
TFS-31478500 Timing chain set, Chevrolet 262-400, each
TFS-41478510 Timing chain set, Chevrolet 396-454, each
TFS-51678521 Timing chain set, Ford 351C/400, each
TFS-52578520 Timing chain set, Ford 351C-351W, each
TFS-53478530 Timing chain set, Ford 429/460, each
TFS-56478508 Timing chain set, Ford 390-428, each
TFS-61478503 Timing chain set, Chrysler 318-360, each
TFS-61678525 Timing chain set, Chrysler 383-440, each

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.

TFS-19000 Damper, Chevrolet 283-350, internal balance, each
TFS-19001 Damper, Chevrolet 400, external balance, each
TFS-19002 Damper, Chevrolet 396-427, internal balance, each
TFS-19003 Damper, Chevrolet 454, external balance, each
TFS-19004 Damper, 1997-2002 5.7L Chevrolet/Pontiac Camaro/Firebird; 2005-06 6.0L Pontiac GTO, each
TFS-19005 Damper, 1997-2007 5.7L/6.0L Chevrolet Corvette, each
TFS-19006 Damper, Ford 289-351W (except 5.0L), 28 ounce external balance, each
TFS-19006-W Counterweight, Ford 289-351W (except 5.0L), 28 ounce external balance, bolt-on, each
TFS-19007 Damper, 1981-2001 Ford 5.0L, 50 ounce external balance, each
TFS-19008 Damper, Ford 429/460, internal/external balance, each
TFS-19009 Damper, 1996-2004 Ford 4.6L 2V, external balance, each
TFS-19010 Damper, Chrysler 273-360, internal balance, each
TFS-19011* Damper, Chrysler 318-360, external balance, each
TFS-19012 Damper, Chrysler 383-440, neutral balance, each

*Requires 1971 and later design timing cover.

Track Max® Underdrive Harmonic Damper and Pulley Kits for Ford 4.6L 2V/3V/4V

Trick Flow assembled these Track Max underdrive harmonic damper and pulley kits just for the Ford 4.6L. The kits start with an 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, 25% underdrive, each
Air and Fuel Delivery

Carburetor Spacers
Give your carburetor a little more space for a noticeable power boost with a premium quality Trick Flow carburetor spacer.

- The unique, CNC-ported exit shape on Trick Flow’s four-hole carburetor spacers smooth the airflow between the bottom of the carburetor and the intake manifold plenum for more torque and horsepower. Available in two versions, phenolic/composite and billet aluminum, they fit Holley 4150 and other square bore-style carbs.
- The open-style spacer for Holley Dominator carbs features a cloverleaf design that increases power in the mid-to-upper RPM range.
- The spacers are 1” thick and come complete with mounting studs and gaskets.

**TFS-2145001C**
Billet aluminum spacer, black anodized, square bore carburetors, each

**TFS-2141501C**
Phenolic/composite spacer, square bore carburetors, each

**TFS-2145001C**
Phenolic/composite spacer, Holley Dominator carburetors, each

Phenolic TBI Spacer Kits for Trucks
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. Emissions-legal under CARB E.O. D-369-17.

- 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-51620002 TBI Spacer for 1997-2003 5.4L Ford F-150/Expedition, each
- TFS-61520001 TBI Spacer for 1992-2001 3.9L-5.9L Dodge Ram/Dakota/Durango, each

Ball Caps
These Trick Flow® embroidered hats are made of a cotton twill material and have an adjustable back closure.

- **TFS-P201**
Ball cap, Trick Flow Racing, black, each
- **TFS-HAT-KH**
Ball cap, Trick Flow Racing, khaki, each
- **TFS-HAT-BK**
Ball cap, Ultimate Bolt-On Performance!™, black, each

Throttle Cable Mounting Brackets, Regulator Brackets, and Linkage Adapters
Crafted from black anodized billet aluminum, these Trick Flow throttle cable brackets make carb installation look clean and perform great. All of the hardware you need is included (including dual return springs!) and installation is easy as mounting the appropriate bracket to the base of your carburetor. The brackets are compatible with most square bore and Holley Dominator-style carburetor designs and transmission kickdown cables.

- Also available are fuel pressure regulator brackets and linkage adapters made from the same great-looking black anodized aluminum as the cable brackets. The regulator brackets mount to the passenger side of a carburetor to make plumbing easy and reduce the distance of the fuel lines to the float bowls. They’ll clear throttle linkages, electric and manual chokes, and vacuum ports. The linkage adapters allow you to easily attach the throttle cable to the mounting bracket on vehicles equipped with Ford or Lokar-style throttle cables—no fabrication required. Mounting hardware included.

**Throttle Cable Mounting Brackets**
- **TFS-20000**
Throttle cable bracket, square bore carburetor, each
- **TFS-20005**
Throttle cable bracket, Holley Dominator carburetor, each

**Throttle Cable Linkage Adapters**
- **TFS-20000-F**
Linkage adapter, for Ford-style throttle cables, 5/16” slotted hole with 1/4” bolt tab, each
- **TFS-20000-L**
Linkage adapter, for Lokar-style throttle cables, 5/16” slotted hole, each

**Fuel Pressure Regulator Brackets**
- **TFS-20010**
Regulator bracket, square bore carburetor with Holley regulator, each
- **TFS-20011**
Regulator bracket, square bore carburetor with Aeromotive regulator, each
- **TFS-20020**
Regulator bracket, Holley Dominator carburetor with Holley regulator, each
- **TFS-20021**
Regulator bracket, Holley Dominator carburetor with Aeromotive regulator, each

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**TFX™ Bypass Fuel Pressure Regulators**

Trick Flow TFX universal bypass fuel pressure regulators are ideal for applications where precise fuel control is required. The Type 1 regulator can be adjusted from 3-60 psi with the standard pressure spring (perfect for carburetors) or from 20-60 psi after installing the included pressure spring (perfect for carburetors) or be adjusted from 3-20 psi with the standard fuel control is required. The Type 1 regulator can regulators are black anodized for stealthy looks and corrosion resistance.

- TFS-27001 Fuel pressure regulator, Type 1, 3-60 psi, each
- TFS-5158REG1 Fuel pressure regulator, Type 2, 30-70 psi, each

**TFX™ Fuel Pumps**

**TFX Electric Fuel Pump and Regulator Combo for Carbureted Engines**

To feed the serious demands of your carbureted racing engine, you need the serious performance of this TFX fuel pump and regulator combo from Trick Flow.

This combo features the compact, external-mount TFX fuel pump (3.500’’ wide x 3.125’’ high x 5.500’’ long) capable of free-flowing 140 gph of fuel at a maximum pressure of 14 psi. It has 3/8” NPT ports for easy connections and externally accessible pressure relief valves. To control all that fuel flow, you also get the universal bypass-style TFX fuel pressure regulator. It’s CNC-machined from cast aluminum and is adjustable from 4.5 to 9 psi. The combo also includes a fuel pump mounting bracket with a rubber isolator to minimize cabin noise. For drag race use only; not recommended for street applications that require a continuous flow fuel pump.

- TFS-25003 TFX fuel pump and regulator combo for carbureted engines, each
- TFS-25003P TFX fuel pump only for carbureted engines, each
- TFS-25017 TFX fuel pressure regulator only for carbureted engines, each

**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; E85 compatible.

- 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™ Inline Fuel Filters**

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
- TFS-23001 Inline filter, -6 AN, 40 micron element, 1.250” x 4.000”, each
- TFS-23002 Inline filter, -8 AN, 10 micron element, 1.750” x 6.500”, each
- TFS-23003 Inline filter, -10 AN, 10 micron element, 1.750” x 6.500”, each
- TFS-23004 Inline filter, -8 AN, 100 micron element, 1.750” x 6.250”, each
- TFS-23005 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 canister-style 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 with less than 1 psi of pressure drop through its 3/8” inlet and outlet fittings. The maximum pressure rating is a whopping 2,000 psi! A 10 micron replaceable filter element and chrome-plated mounting hardware are included.

- TFS-23006 Canister filter, 6.125” x 3.250”, each
- TFS-RF006 Canister filter replacement element, each

**TFX™ Universal Electric Fuel Pump for EFI Engines**

Multi-port EFI systems need a stable fuel supply at all RPMs, and Trick Flow’s 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; E85 compatible.

- 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
TFS™ Fuel Rail and Pressure Sensor Adapters for Ford 4.6L 2V/3V/4V

Trick Flow has engineered two easy ways to upgrade the factory fuel systems on Ford 4.6L engines for better performance.

The 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. They mount between the factory fuel rail and pressure sensor.

The fuel pressure sensor adapter allows the installation of Trick Flow fuel rails on engines that retain the factory returnless fuel system. Its design permits the pressure sensor to be mounted either remotely or coupled directly to the fuel rails; -8 AN ORB inlet and outlet ports provide a positive seal and eliminate the need for thread sealant.

The adapters feature a black anodized finish with an engraved Trick Flow logo for good looks and durability; mounting hardware is included.

TFS-27021 Fuel rail adapter, 1999-2004 Ford 4.6L 2V, each
TFS-27022 Fuel rail adapter, 2005-10 Ford 4.6L 3V, each
TFS-5188000S Fuel pressure sensor adapter, universal Ford-style, 1997-2004 4.6L 2V/4V, each

TFS™ Fuel Injectors

With electronically drilled and machined disc-type fuel control valves, plus improved nozzles and coil windings, Trick Flow TFX fuel injectors atomize fuel better, resist clogging, 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. 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 to 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. TFX fuel injectors are 100% duty cycle tested to ensure reliability and performance. Sold in sets of 8. Also available individually by adding “-1” to the end of the part number. All flow values are at 3 bar (43.5 psi).

TFS Bosch-Style Fuel Injectors

- TFS-89024 Fuel injectors, 24 lbs/hr, 14.4 ohms, Jetronic plugs, set of 8
- TFS-89030 Fuel injectors, 30 lbs/hr, 14.4 ohms, Jetronic plugs, set of 8
- TFS-89036 Fuel injectors, 36 lbs/hr, 14.4 ohms, Jetronic plugs, set of 8
- TFS-89044 Fuel injectors, 44 lbs/hr, 12.0 ohms, Jetronic plugs, set of 8
- TFS-89048 Fuel injectors, 48 lbs/hr, 12.0 ohms, Jetronic plugs, set of 8
- TFS-89072 Fuel injectors, 72 lbs/hr, 2.0 ohms, Jetronic plugs, set of 8
- TFS-89083 Fuel injectors, 83 lbs/hr, 2.2 ohms, Jetronic plugs, set of 8
- TFS-89095 Fuel injectors, 95 lbs/hr, 2.2 ohms, Jetronic plugs, set of 8
- TFS-89120 Fuel injectors, 120 lbs/hr, 2.2 ohms, Jetronic plugs, set of 8
- TFS-89160 Fuel injectors, 160 lbs/hr, 2.2 ohms, Jetronic plugs, set of 8

TFS Siemens-Style Fuel Injectors

- TFS-89860 Fuel injectors, 60 lbs/hr, 12.0 ohms, Jetronic plugs, set of 8
- TFS-89960 Fuel injectors, 60 lbs/hr, 12.0 ohms, USCAR plugs, set of 8
- TFS-89880 Fuel injectors, 80 lbs/hr, 12.0 ohms, Jetronic plugs, set of 8
- TFS-89980 Fuel injectors, 80 lbs/hr, 12.0 ohms, USCAR plugs, 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.

- 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

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Air and Fuel Delivery

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**TFX™ High-Flow Air Intake Kits**

The Trick Flow TFX high-flow air 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 and instructions. Manufactured by K&N for Trick Flow.

- TFS-23100 High-flow air intake kit, 1999-2004 4.8L/5.3L Chevrolet/GMC Silverado/Sierra, each
- TFS-23102 High-flow air intake kit, 2005-07 4.8L/6.0L Cadillac/Chevrolet/GMC trucks/SUVs, each
- TFS-23103 High-flow air intake kit, 1997-2004 4.6L/5.4L Ford/Lincoln F-150/250 and Expedition/Navigator, each
- TFS-23104 High-flow air intake kit, 2003-08 5.7L Hemi Dodge Ram 1500-3500, each
- TFS-23105 High-flow air intake kit, 2007-08 4.8L-6.2L Cadillac/Chevrolet/GMC trucks/SUVs, each

*Many more applications available. Please visit TrickFlow.com and type “High-Flow Kits” into the search box to find your specific application.*

**TFX™ Nitrous Systems**

**TFX Carbureted Nitrous Systems**

Trick Flow TFX 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 Nitrous system, StreetBurner®/Track Heat® intake, each
- TFS-N5150PL Plate and jets only, StreetBurner/Track Heat intake, kit
- TFS-N515R Nitrous system, R-Series intake, each
- TFS-N515RPL Plate and jets only, R-Series intake, kit
- TFS-N5158 Nitrous system, Box-R-Series intake, each
- TFS-N5158PL Plate and jets only, Box-R-Series intake, kit

**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 Nitrous system, StreetBurner®/Track Heat® intake, each
- TFS-N5150PL Plate and jets only, StreetBurner/Track Heat intake, kit
- TFS-N515R Nitrous system, R-Series intake, each
- TFS-N515RPL Plate and jets only, R-Series intake, kit
- TFS-N5158 Nitrous system, Box-R-Series intake, each
- TFS-N5158PL Plate and jets only, Box-R-Series intake, kit

*Many more applications available. Please visit TrickFlow.com and type “High-Flow Kits” into the search box to find your specific application.*

**TFX™ Cold Air Intake Kits**

Trick Flow TFX 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. Manufactured by K&N for Trick Flow.

- TFS-23050 Cold air intake kit, 1999-2004 4.8L-5.3L Chevrolet/GMC Silverado/Sierra 1500, each
- TFS-23051 Cold air intake kit, 1996-2005 3.3L Chevrolet/GMC S10/15 trucks/SUVs, each
- TFS-23052 Cold air intake kit, 2001-07 6.0L Chevrolet/GMC 2500HD/3500, 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
- TFS-23055 Cold air intake kit, 1999-2004 6.0L Chevrolet/GMC Silverado/Sierra, each
- 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 Pontiac Camaro/Firebird, each
- TFS-23058 Cold air intake kit, 1994-96 5.7L Chevrolet Impala SS/Caprice, each
- TFS-23059 Cold air intake kit, 1994-2002 5.2L/5.9L Dodge Ram 1500/2500, each
- TFS-23060 Cold air intake kit, 2007 4.6L/5.4L Ford F-150/Bronco, each
- TFS-23061 Cold air intake kit, 1998-99 5.0L/5.8L Ford F-150/Bronco, each
- TFS-23062 Cold air intake kit, 1997-2002 4.6L/5.4L Ford/F-150 Expedition/Navigator, each
- TFS-23063 Cold air intake kit, 2004-05 4.6L Ford F-150, each
- TFS-23064 Cold air intake kit, 1999-2004 5.4L Ford F-250/350
- TFS-23065 Cold air intake kit, 2006-07 6.0L Ford F-250/350
- TFS-23066 Cold air intake kit, 1996-2004 4.6L Ford Mustang GT, each
- TFS-23067 Cold air intake kit, 2004 5.7L Pontiac GTO, each
- TFS-23068 Cold air intake kit, 2005 4.8L-5.3L Chevrolet/GMC Silverado/Sierra trucks/SUVs, each
- TFS-23069 Cold air intake kit, 2005-06 5.7L Pontiac GTO, each
- TFS-23070 Cold air intake kit, 2008 5.4L Ford/Lincoln F-150/Mark LT, each
- TFS-23071 Cold air intake kit, 2009-13 5.0L Hemi Chrysler 300C, Dodge Charger/Magnum, each
- TFS-23072 Cold air intake kit, 2007-13 6.2L Cadillac/Chevrolet/GMC trucks/SUVs, each
- TFS-23073 Cold air intake kit, 2006-07 6.0L Chevrolet Corvette, each
- TFS-23074 Cold air intake kit, 2001-04 5.7L Chevrolet Corvette, each
- TFS-23075 Cold air intake kit, 2005-06 5.4L Ford F-250 Super Duty, each
- TFS-23076 Cold air intake kit, 2009-14 5.7L Hemi Dodge Ram 1500, each
- TFS-23077 Cold air intake kit, 2005-07 5.7L/6.1L Hemi Chrysler 300C, Dodge Charger/Magnum, each
- TFS-23078 Cold air intake kit, 2006-07 5.4L Ford Lincoln F-150/Mark LT, each
- TFS-23079 Cold air intake kit, 2007-14 5.4L Ford/Lincoln Expedition/Navigator, each
- TFS-23080 Cold air intake kit, 2007-12 3.7L Chevrolet/GMC Colorado/Canyon, each
- TFS-23081 Cold air intake kit, 2009-14 4.8L-6.2L Chevrolet/GMC Silverado/Sierra, each
- TFS-23082 Cold air intake kit, 2008 6.2L Chevrolet Corvette, each
- TFS-23083 Cold air intake kit, 2010-15 6.2L Chevrolet Camaro SS, each
- TFS-23084 Cold air intake kit, 2008 5.4L Ford F-250 Super Duty; 2007-10 5.4L Ford F-350 Super Duty, each

*Many more applications available. Please visit TrickFlow.com and type “Cold Air” into the search box to find your specific application.*

†Emissions-legal under CARB E.O. #D-369-14.

‡Emissions-legal under CARB E.O. #D-369-14.
Trick Flow by Stainless Works Headers

Headers
Flow is about more than just stuffing as much air and fuel as possible into an engine. In order to draw a new air/fuel charge into the cylinder heads to burn, everything left over from igniting the previous air/fuel charge must be removed from the cylinders efficiently.

That’s why Trick Flow turned to the exhaust specialists at Stainless Works for headers designed to complement the high-flow characteristics of Trick Flow’s cylinder heads and other performance engine components. Made in the USA from 304L stainless steel, the Trick Flow by Stainless Works Headers feature CNC mandrel-bent tubing for maximum flow and extra-thick, laser-cut 3/8” flanges for a leak-free fit. Plus, the headers are fully TIG-welded—no need to worry about tubes cracking at the flanges or collectors. All headers are backed by a lifetime warranty.

Header Build Kits
Trick Flow header build kits are designed for enthusiasts who want to build their own stainless steel headers. Only the laser-cut header flanges and collectors are premade—you use the kit’s J-bends and filler diamonds to connect the tubes together to build a custom exhaust solution for your application.

Turbo Headers
Trick Flow even offers headers just for turbo applications. These Trick Flow by Stainless Works turbo headers are engineered to handle the higher EGTs typically found in turbocharged applications. The headers are made from heavy wall 16 gauge 304L stainless steel for added durability and are carefully TIG welded using 308 SS weld wire and are back purged to assure full weld penetration. Requires fabrication to fit an exhaust system.

NOTE: These turbo headers are designed to work with dimensionally stock cylinder heads and valve covers. If you are using aftermarket heads and valve covers, please contact the Trick Flow Technical Department (1-330-630-1555 Monday through Friday from 9:00 am to 5:00 pm EST) for additional measurements.

Headers with Catalytic Converters Systems
Trick Flow by Stainless Works headers for late model vehicles also include high flow stainless steel catalytic converters and O2 sensor extensions to keep you street legal, along with clamps, bolts, and RTV silicone for an easy installation.

Headers with Off-Road Intermediate Pipe Systems
Announce your arrival with a raspy, race car like growl with a Trick Flow by Stainless Works header and off-road intermediate pipe system. The lack of catalytic converters increases the engine’s volume while the high-flow design of the low restriction lead pipes greatly improves horsepower, torque, and engine efficiency. For off-road use only.

### Trick Flow by Stainless Works Headers

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<th>Application</th>
<th>Type</th>
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<td>LT1</td>
<td>1 1/4”</td>
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<td>1 1/4”</td>
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<td>Camaro Headers</td>
<td>2010-15</td>
<td>LS3/7.99/LSA</td>
<td>1 1/4”</td>
<td>Fits to factory connection</td>
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<td>2010-15</td>
<td>LS3/7.99/LSA</td>
<td>2”</td>
<td>Fits to factory connection</td>
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<td>Chevrolet Camaro (continued)</td>
<td>Headers with Converters System</td>
<td>2010-15</td>
<td>LS3/L99/LSA</td>
<td>1½&quot;</td>
<td>3&quot; slip-on, fits to Stainless Works Performance Connect system</td>
<td>Includes 3&quot; lead pipes</td>
<td>TFS-CA11HDR3CAT5</td>
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<td>LS3/L99/LSA</td>
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<td>Includes 3&quot; lead pipes</td>
<td>TFS-CA11HDR3CAT</td>
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<td>Chevrolet Camaro</td>
<td>Headers with Off-Road Pipe System</td>
<td>2010-15</td>
<td>LS3/L99/LSA</td>
<td>1½&quot;</td>
<td>3&quot; slip-on, fits to Stainless Works Performance Connect system</td>
<td>Includes 3&quot; off-road lead pipes</td>
<td>TFS-CA11HDR3ORST</td>
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<td>Headers with Off-Road Pipe System</td>
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<td>LS3/L99/LSA</td>
<td>2&quot;</td>
<td>Fits to factory connection point</td>
<td>Includes 3&quot; off-road lead pipes</td>
<td>TFS-CA11HDROR</td>
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<td>Headers with Off-Road Pipe System</td>
<td>2010-15</td>
<td>LS3/L99/LSA</td>
<td>1½&quot;</td>
<td>Fits to factory connection point</td>
<td>Includes 3&quot; off-road lead pipes</td>
<td>TFS-CA11HDRORST</td>
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<td>Chevrolet Camaro/Nova</td>
<td>Headers</td>
<td>1967-69</td>
<td>283-400</td>
<td>1½&quot;</td>
<td>3&quot; slip-on</td>
<td>Will not work with factory A/C</td>
<td>TFS-CA679S7</td>
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<td>Chevrolet Camaro/Nova</td>
<td>Headers</td>
<td>1967-69</td>
<td>LS engine</td>
<td>1½&quot;</td>
<td>3&quot; slip-on with O2 sensor bungs</td>
<td>With rack and pinion steering, will not work with factory A/C box</td>
<td>TFS-CALS1</td>
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<tr>
<td>Chevrolet Camaro/Nova</td>
<td>Headers</td>
<td>1967-69</td>
<td>LS engine swap</td>
<td>1½&quot;</td>
<td>3&quot; slip-on with O2 sensor bungs</td>
<td>With OEM steering box, will not work with factory A/C box</td>
<td>TFS-CALS1SB</td>
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<tr>
<td>Chevrolet Camaro/Nova</td>
<td>Headers</td>
<td>1967-69</td>
<td>396-454</td>
<td>2&quot;</td>
<td>3½&quot; slip-on</td>
<td>With aftermarket rack and pinion steering includes motor mount adapters for use with stock motor mounts in neutral position</td>
<td>TFS-CANV679</td>
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<td>Nova</td>
<td>Headers</td>
<td>1962-67</td>
<td>LS engine swap</td>
<td>1½&quot;</td>
<td>3&quot; slip-on</td>
<td>With aftermarket rack and pinion steering includes motor mount adapters for use with stock motor mounts in neutral position</td>
<td>TFS-NVLS1</td>
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<tr>
<td>Chevelle/ Malibu/ El Camino/ Monte Carlo</td>
<td>Headers</td>
<td>1968-72</td>
<td>283-400</td>
<td>1½&quot;</td>
<td>3&quot; slip-on</td>
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<td>TFS-CV6872SB</td>
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<td>Chevelle/ Malibu/ El Camino/ Monte Carlo</td>
<td>Headers</td>
<td>1968-72</td>
<td>396-454</td>
<td>2&quot;</td>
<td>3½&quot; slip-on</td>
<td>Recommend mini starter for clearance</td>
<td>TFS-CV6872B</td>
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<td>LS engine swap</td>
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<td>396-454</td>
<td>2½&quot;</td>
<td>4&quot; merge-style slip-on</td>
<td>Downswept style, with conventional heads</td>
<td>TFS-0NBB225</td>
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<td>Dragster</td>
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<td>396-454</td>
<td>2½&quot;</td>
<td>4½&quot; merge-style slip-on</td>
<td>Downswept style, with conventional heads</td>
<td>TFS-0NBB238</td>
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<td>2½&quot;</td>
<td>5&quot; merge-style slip-on</td>
<td>Downswept style, with conventional heads</td>
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<td>4½&quot; merge-style slip-on</td>
<td>Downswept style, with conventional heads</td>
<td>TFS-0BBC225320</td>
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<td>396-454</td>
<td>2½&quot; x 2½&quot; stepped</td>
<td>5&quot; merge-style slip-on</td>
<td>Downswept style, with conventional heads</td>
<td>TFS-0BBC23250</td>
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<td>396-454</td>
<td>2½&quot;</td>
<td>4&quot; merge-style slip-on</td>
<td>Upswept style, with conventional heads</td>
<td>TFS-UPBB225</td>
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<td>Headers</td>
<td>—</td>
<td>396-454</td>
<td>2½&quot;</td>
<td>4½&quot; merge-style slip-on</td>
<td>Upswept style, with conventional heads</td>
<td>TFS-UPBB238</td>
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<td>Corvette</td>
<td>Headers with Converters System</td>
<td>1992-96</td>
<td>LT1/LT4</td>
<td>1½&quot;</td>
<td>2½&quot;) fits to factory connection point</td>
<td>Includes AIR tubes and O2 sensor bungs installed</td>
<td>TFS-C492-96CAT</td>
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<td>Fits to factory connection point</td>
<td>Includes 3&quot; X-pipe and center section AIR tubes and O2 sensors installed</td>
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<td>LS1/LS6</td>
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<td>Includes 3&quot; X-pipe and center section AIR tubes and O2 sensors installed</td>
<td>TFS-C5LS103CATBT</td>
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<td>1½&quot;</td>
<td>Fits to factory connection point</td>
<td>Includes 2½&quot;) X-pipe and center section</td>
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<td>Fits to factory connection point</td>
<td>Includes 3&quot; X-pipe and center section includes oil cooler lines</td>
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<td>LS7</td>
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<td>2006-13</td>
<td>LS7</td>
<td>1 1/8”</td>
<td>3” slip-on; fits to factory connection point</td>
<td>Includes 3” off-road lead pipes and X-pipe, O2 extensions, Accusel clamps, clamp/hanger assemblies, oil cooler lines, compression fittings, zip ties, cable clamps, center section, and oil cooler lines</td>
<td>TFS-Z061780R</td>
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<td>Dodge</td>
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<td>383-440</td>
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<td>2008-15</td>
<td>Hemi</td>
<td>1 1/4”</td>
<td>3” slip-on; fits to factory connection point</td>
<td>Includes 3” off-road lead pipes, clamps, O2 sensor extensions, and RTV silicone</td>
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<td>Hemi</td>
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<td>3” slip-on; fits to factory connection point or to Stainless Works Performance Connect system</td>
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<td>Ford</td>
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<td>Turbo Headers</td>
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<td>428/460</td>
<td>2 1/4”</td>
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<td>Down and forward turbo mounting position</td>
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<td>3” slip-on</td>
<td>Down and forward turbo mounting position</td>
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<td>3” slip-on</td>
<td>Down and forward turbo mounting position</td>
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<td>Mustang</td>
<td>Turbo Headers with Downpipe Kit</td>
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<td>3” slip-on</td>
<td>Down and forward turbo mounting position Includes 3” crossover tube with 3/8” T6 turbo flange, 3” V-band flanges and clamps, 1/4” aluminum motor plate, and coned 5”-to-4” 90” bend downpipe</td>
<td>TFS-SBFDFKIT</td>
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<td>Headers</td>
<td>1979-93</td>
<td>351W</td>
<td>1 1/4”</td>
<td>3 1/2” slip-on</td>
<td>With Brodix T1 F STD and Trick Flow High Port® cylinder heads; fits all manual/auto transmissions up to GM TH400 case dimensions</td>
<td>TFS-FOXHP188</td>
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<td>With Brodix T1 F STD and Trick Flow High Port® cylinder heads; fits all manual/auto transmissions up to GM TH400 case dimensions</td>
<td>TFS-FOXHP2</td>
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<td>1979-93</td>
<td>351W</td>
<td>1 1/4”</td>
<td>3 1/2” slip-on</td>
<td>With UPR Products and AJE Suspension K-members; fits all manual/auto transmissions up to GM TH400 case dimensions</td>
<td>TFS-FOXTW188</td>
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<td>Headers</td>
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<td>3 1/2” slip-on</td>
<td>With UPR Products and AJE Suspension K-members; fits all manual/auto transmissions up to GM TH400 case dimensions</td>
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<td>Headers</td>
<td>1979-93</td>
<td>351W</td>
<td>1 1/4”</td>
<td>3 1/2” slip-on</td>
<td>With Brodix T1 F STD X; Ford Racing SVO N351, Trick Flow Twisted Wedge®, and Edelbrock Victor II cylinder heads; fits all manual/auto transmissions up to GM TH400 case dimensions</td>
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<td>Headers</td>
<td>1979-93</td>
<td>351W</td>
<td>2”</td>
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<td>With Brodix T1 F STD X; Ford Racing SVO N351, Trick Flow Twisted Wedge®, and Edelbrock Victor II cylinder heads; fits all manual/auto transmissions up to GM TH400 case dimensions</td>
<td>TFS-FOXTW2</td>
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<td>Headers</td>
<td>1996-2002</td>
<td>4.6L 2V</td>
<td>1 1/4”</td>
<td>2 1/2” slip-on; fits to factory connection point</td>
<td>Includes 2-1/2” X-pipe</td>
<td>TFS-M9604</td>
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<td>4.6L 2V</td>
<td>1 1/4”</td>
<td>3” slip-on; fits to factory connection point</td>
<td>Includes 3” lead pipes</td>
<td>TFS-M05H175</td>
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<td>Headers</td>
<td>2011-13</td>
<td>5.0L 4V</td>
<td>1 1/4”</td>
<td>3” slip-on with merge spikes; fits to factory connection point</td>
<td>Includes 3” X-pipe and lead pipes</td>
<td>TFS-M11HDRCATX</td>
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<td>Headers</td>
<td>2011-14</td>
<td>5.0L 4V</td>
<td>1 1/4”</td>
<td>3” slip-on with merge spikes; fits to factory connection point</td>
<td>Includes 3” off-road lead pipes and X-pipe</td>
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<td>GT500</td>
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<td>5.4L 4V S/C</td>
<td>1 1/4”</td>
<td>3” slip-on with merge spikes; fits to factory connection point or to Stainless Works Performance Connect system</td>
<td>Includes 3” X-pipe and lead pipes</td>
<td>TFS-GT5HCAT</td>
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### Trick Flow by Stainless Works Headers

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<tr>
<th>Application</th>
<th>Type</th>
<th>Year</th>
<th>Engine</th>
<th>Tube Diameter</th>
<th>Collector Size and Style</th>
<th>Notes</th>
<th>Part Number</th>
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<td>Ford GT500 (continued)</td>
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<td>2007-10</td>
<td>5.4L 4V S/C</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to factory connection point or Stainless Works Performance Connect system</td>
<td>Includes 3” off-road lead pipes and X-pipe</td>
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<td>5.4L 4V S/C</td>
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<td>3” slip-on with merge spikes; fits to factory connection point or Stainless Works Performance Connect system</td>
<td>Includes 3” x-pipe and lead pipes</td>
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<td>5.4L 4V S/C</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to factory connection point or Stainless Works Performance Connect system</td>
<td>Includes 3” off-road lead pipes and X-pipe</td>
<td>TFS-GT115HOR</td>
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<td>F-150</td>
<td>Downpipe</td>
<td>2011-14</td>
<td>3.5L EcoBoost</td>
<td>—</td>
<td>Fits to factory connection point</td>
<td>Includes 3” downpipe and Y-pipe, does not come with headers</td>
<td>TFS-FTECODPCAT</td>
</tr>
<tr>
<td>F-150</td>
<td>Downpipe</td>
<td>2011-14</td>
<td>3.5L EcoBoost</td>
<td>—</td>
<td>Fits to factory connection point</td>
<td>Includes 3” off-road downpipe and Y-pipe, does not come with headers</td>
<td>TFS-FTECODP</td>
</tr>
<tr>
<td>Raptor SuperCab</td>
<td>Headers with Converters System</td>
<td>2010-14</td>
<td>6.2L</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to Stainless Works Performance Connect system</td>
<td>Includes 3” lead pipes, X-pipe, and clamps</td>
<td>TFS-FTRPT10HCAT</td>
</tr>
<tr>
<td>Raptor SuperCab</td>
<td>Headers with Converters System</td>
<td>2010-14</td>
<td>6.2L</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to factory connection point</td>
<td>Includes 3” lead pipes, Y-pipe, and clamps</td>
<td>TFS-FTRPT10HCATY</td>
</tr>
<tr>
<td>Raptor SuperCab</td>
<td>Headers with Off-Road Pipe System</td>
<td>2010-14</td>
<td>6.2L</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to Stainless Works Performance Connect system</td>
<td>Includes 3” off-road lead pipes, X-pipe, and clamps</td>
<td>TFS-FTRPT10HOR</td>
</tr>
<tr>
<td>Raptor SuperCab</td>
<td>Headers with Converters System</td>
<td>2011-14</td>
<td>6.2L</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to Stainless Works Performance Connect system</td>
<td>Includes 3” lead pipes, X-pipe, and clamps</td>
<td>TFS-FTRPT11HCATY</td>
</tr>
<tr>
<td>Raptor SuperCrew</td>
<td>Headers with Converters System</td>
<td>2011-14</td>
<td>6.2L</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to Stainless Works Performance Connect system</td>
<td>Includes 3” lead pipes, X-pipe, and clamps</td>
<td>TFS-FTRPT11HORSC</td>
</tr>
<tr>
<td>Raptor SuperCrew</td>
<td>Headers with Off-Road Pipe System</td>
<td>2011-14</td>
<td>6.2L</td>
<td>1½”</td>
<td>3” slip-on with merge spikes; fits to Stainless Works Performance Connect system</td>
<td>Includes 3” off-road lead pipes, X-pipe, and clamps</td>
<td>TFS-FTRPT11HORYS</td>
</tr>
<tr>
<td>Pontiac GTO</td>
<td>Headers with Converters System</td>
<td>2004</td>
<td>LS1</td>
<td>1½”</td>
<td>Fits to factory connection point</td>
<td>Includes 3” pipes</td>
<td>TFS-GTOHCAT</td>
</tr>
<tr>
<td>GTO</td>
<td>Headers with Off-Road Pipe System</td>
<td>2004</td>
<td>LS1</td>
<td>1½”</td>
<td>Fits to factory connection point</td>
<td>Includes 3” pipes and O2 sensor extensions</td>
<td>TFS-GTOHDR</td>
</tr>
<tr>
<td>GTO</td>
<td>Headers with Converters System</td>
<td>2005-06</td>
<td>LS2</td>
<td>1½”</td>
<td>Fits to factory connection point</td>
<td>Includes 3” pipes</td>
<td>TFS-05GTOHCAT</td>
</tr>
</tbody>
</table>

### Trick Flow by Cometic MLS Exhaust Gaskets

These superior quality exhaust gaskets from Trick Flow and Cometic offer better torque retention and less distortion compared to conventional exhaust gaskets. The gaskets are constructed from multiple layers of stainless steel for outstanding corrosion resistance and will not burn through or push out, even under extreme cylinder pressures. No sealants are required for installation; all gaskets are .030” thick.

- TFS-30490931: MLS exhaust gaskets, small block Chevrolet, 1.500” x 1.500” D-port shape, pair
- TFS-30490941: MLS exhaust gaskets, GM LT1/LT4, 1.500” x 1.500” D-port shape, pair
- TFS-30690931: MLS exhaust gaskets, GM LS, 1.820” round port shape, pair
- TFS-41490931: MLS exhaust gaskets, big block Chevrolet, 2.125” rectangular port shape, pair
- TFS-51490931: MLS exhaust gaskets, small block Ford, 1.250” x 1.500” rectangular port shape, pair
- TFS-51890931: MLS exhaust gaskets, Ford 4.6L/5.4L 2V, 1.700” round port shape, pair
- TFS-52990931: MLS exhaust gaskets, Ford 4.6L/5.4L 3V, 1.600” x 1.570” D-port shape, pair
- TFS-52990951: MLS exhaust gaskets, Ford 5.0L 4V, 1.875” round port shape, pair
- TFS-53490931: MLS exhaust gaskets, Ford 429/460, 1.550” x 2.350” oval port shape, pair
- TFS-54690931: MLS exhaust gaskets, Ford 390-428, 1.560” x 2.320” rectangular port shape, pair
- TFS-61690931: MLS exhaust gaskets, big block Mopar, 1.460” x 1.780” rectangular port shape, pair
### MLS Head Gaskets

These multi-layer steel head gaskets from Trick Flow and Cometic are the best way to seal aftermarket cylinder heads to an 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.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-1006-PFK</td>
<td>Pan fill dipstick tube fitting, Ford C-4, each</td>
</tr>
<tr>
<td>TFS-1006</td>
<td>Transmission pan kit, Ford TH700R/4L60/E, each</td>
</tr>
<tr>
<td>TFS-1006-050</td>
<td>Transmission pan kit, Ford C-4, 1970 and later, case-fill, each</td>
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<tr>
<td>TFS-1007</td>
<td>Transmission pan kit, Ford AOD, each</td>
</tr>
<tr>
<td>TFS-1009</td>
<td>Transmission pan kit, Chrysler A-277 Torquettle, each</td>
</tr>
<tr>
<td>TFS-1011</td>
<td>Transmission pan kit, Ford E400/4R100/5R110, each</td>
</tr>
<tr>
<td>TFS-1012</td>
<td>Transmission pan kit, Ford 5R55N/5R55S/5R5SW, includes dipstick, each</td>
</tr>
<tr>
<td>TFS-1012-PFK</td>
<td>Transmission pan kit, Ford TH700R/4L60/E, each</td>
</tr>
<tr>
<td>TFS-1013</td>
<td>Transmission pan kit, GM TH250/350, each</td>
</tr>
<tr>
<td>TFS-1011</td>
<td>Transmission pan kit, GM TH400, each</td>
</tr>
<tr>
<td>TFS-1012</td>
<td>Transmission pan kit, Ford C-4, 1970 and later, case-fill, each</td>
</tr>
<tr>
<td>TFS-1012</td>
<td>Transmission pan kit, Ford C-4, 1970 and later, case-fill, each</td>
</tr>
<tr>
<td>TFS-1015</td>
<td>Transmission pan kit, Ford 5R55N/5R55S/5R5SW, includes dipstick, each</td>
</tr>
<tr>
<td>TFS-1018</td>
<td>Transmission pan kit, GM LT1/LT4, 4.040” bore, .040” thick, each</td>
</tr>
<tr>
<td>TFS-1019</td>
<td>MLS head gasket, small block Chevrolet, 4.060” bore, .040” thick, each</td>
</tr>
<tr>
<td>TFS-1020</td>
<td>MLS head gasket, small block Chevrolet, 4.080” bore, .040” thick, each</td>
</tr>
<tr>
<td>TFS-1021</td>
<td>MLS head gasket, small block Chevrolet, 4.200” bore, .040” thick, each</td>
</tr>
<tr>
<td>TFS-1022</td>
<td>MLS head gasket, Ford 390-428, 4.165” bore, .070” thick, each</td>
</tr>
<tr>
<td>TFS-1023</td>
<td>MLS head gasket, Ford 400/440, 4.500” bore, .051” thick, each</td>
</tr>
<tr>
<td>TFS-1024</td>
<td>MLS head gasket, Ford 4.600” bore, .045” thick, each</td>
</tr>
<tr>
<td>TFS-1025</td>
<td>MLS head gasket, Ford 4.670” bore, .040” thick, each</td>
</tr>
<tr>
<td>TFS-1026</td>
<td>MLS head gasket, Ford 4.700” bore, .040” thick, each</td>
</tr>
<tr>
<td>TFS-1027</td>
<td>MLS head gasket, Ford 4.725” bore, .040” thick, each</td>
</tr>
</tbody>
</table>

### Transmission Pans

Trick Flow transmission pans are made from A319 cast aluminum. They hold between one to three extra quarts of fluid (depending on application) 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). Part number TFS-1012 also includes a dipstick and tube.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-1000</td>
<td>Transmission pan kit, GM TH250/350, each</td>
</tr>
<tr>
<td>TFS-1001</td>
<td>Transmission pan kit, GM TH400, each</td>
</tr>
<tr>
<td>TFS-1002</td>
<td>Transmission pan kit, Ford C-4, 1970 and later, case-fill, each</td>
</tr>
<tr>
<td>TFS-1003</td>
<td>Transmission pan kit, Ford C-4, 1970 and later, case-fill, each</td>
</tr>
<tr>
<td>TFS-1004</td>
<td>Transmission pan kit, Ford C-4, 1970 and later, case-fill, each</td>
</tr>
<tr>
<td>TFS-1005</td>
<td>Transmission pan kit, Ford AOD, each</td>
</tr>
<tr>
<td>TFS-1006</td>
<td>Transmission pan kit, Chrysler A-277 Torquettle, each</td>
</tr>
<tr>
<td>TFS-1007</td>
<td>Transmission pan kit, Ford E400/4R100/5R110, each</td>
</tr>
<tr>
<td>TFS-1008</td>
<td>Transmission pan kit, Ford 5R55N/5R55S/5R5SW, includes dipstick, each</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TFS-851000</td>
<td>Differential cover kit, GM 12-bolt passenger car, each</td>
</tr>
<tr>
<td>TFS-851020</td>
<td>Differential cover kit, GM 24-bolt passenger car, each</td>
</tr>
<tr>
<td>TFS-851030</td>
<td>Differential cover kit, GM 8.2/8.5&quot;, each</td>
</tr>
<tr>
<td>TFS-851040</td>
<td>Differential cover kit, GM 7.5/7.625&quot;, each</td>
</tr>
<tr>
<td>TFS-851050</td>
<td>Differential cover kit, Ford 8.8&quot;, each</td>
</tr>
<tr>
<td>TFS-851060</td>
<td>Differential cover kit, Ford 10.25/10.5” Sterling, each</td>
</tr>
<tr>
<td>TFS-851070</td>
<td>Carrier bearing cap stud kit, Ford 8.8&quot;, each</td>
</tr>
<tr>
<td>TFS-851080</td>
<td>Carrier bearing cap stud kit, GM 12-bolt passenger car, each</td>
</tr>
</tbody>
</table>
Valve Cover Breather Systems and Accessories

Protect your investment with Trick Flow valve cover breather systems and accessories. Made from premium components, these pieces deliver great performance and add the perfect finishing touch to your engine compartment.

The oil vapor separator tank systems pre-clean crankcase ventilation gasses before introducing them into the intake manifold. The modular design fits a variety of applications, including traditional open breather systems, late model closed systems, and systems for forced induction engines. Manufactured from billet aluminum with a black anodized finish, the systems feature a ball-style drain valve, fluid level sight plug, stainless steel mounting bracket, -8 AN male inlet, and a customizable outlet for 3/4” push-in breathers, PCV valves, and push-in filter elements.

The oil vapor line limiting breather fittings attach to the valve cover breather opening and reduce the amount of oil vapor vented from the crankcase. The fittings are manufactured from billet aluminum and feature a cleanable, reusable sintered metal strainer element.

Oil Vapor Separator Tank Systems and Components

Oil Vapor Tank Systems
- TFS-K51400850 Single separator tank system and plumbing kit, fits 1¼” hole valve covers, each
- TFS-K51400852 Dual separator tank system and plumbing kit, fits 1¼” hole valve covers, each

Oil Vapor Tank Individual Components
- TFS-51400850 Separator tank only, -8 AN single inlet, each
- TFS-51400851 Separator tank only, -6 AN single inlet, each
- TFS-51400852 Separator tank only, -8 AN dual inlet, each
- TFS-51400853 Separator system plumbing kit only, 3’ of hose and limiting fittings, single tank, each
- TFS-51400854 Separator system plumbing kit only, 6’ of hose and limiting fittings, dual tank, each
- TFS-51400870 Clamp-on filter, 2” O.D., with tank adapter, each

Oil Vapor Line Limiting Breather Fittings and Components
- TFS-51400855 Valve cover separator/breather fitting, 1.220” hole, 3/4” or 1” breather or PCV valve, push-in, each

Oil Fill Plugs
- TFS-51800800 Oil fill plug, 1.150” hole, each
- TFS-51400803 Oil fill plug, with Trick Flow logo, 1.150” hole, each

Filler Tubes
- TFS-51400805 Filler tube, short, weld-on, each
- TFS-51400806 Filler tube, tall, weld-on, each
- TFS-51400807 Filler tube cap, each

Weld-In Bungs
- TFS-51400808 Bung, 1/8” NPT female, each
- TFS-51400809 Bung, 1/4” NPT female, each
- TFS-51400810 Bung, 3/8” NPT female, each
- TFS-51400811 Bung, 1/2” NPT female, each
- TFS-51400812 Bung, 3/4” NPT female, each
- TFS-51400813 Bung, -6 AN male, each
- TFS-51400814 Bung, -8 AN male, each
- TFS-51400815 Bung, -10 AN male, each
- TFS-51400816 Bung, -12 AN male, each
- TFS-51400817 Bung, -16 AN male, each

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 Valve Covers
- TFS-44000 Valve covers, Chevrolet 283-400, pair
- TFS-44001 Valve covers, Chevrolet 396-454, pair
- TFS-44002 Valve covers, Ford 260-351W, pair
- TFS-44003 Valve covers, Ford 428/460, pair

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

Header Spark Plug Socket

To help save your knuckles while installing headers in crowded engine compartments (like fourth- and fifth-generation 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
Steam Line Fittings • Engine Priming Pump • Cylinder Head Work Stands • Oil Supplement

Steam Line Plumbing Kits and Accessories for GM LS

Trick Flow steam line plumbing kits and accessories allow owners of modified LS-powered cars and trucks to upgrade the factory steam tubes to the more desirable and easier-to-service race car plumbing system.

The plumbing kits are available two ways—just for the front of the heads or for all four corners. They include all of the necessary hose, fittings, and other components needed for installation. Plus, the components are available separately for those who want to design a custom system.

Steam Line Plumbing Kits, Black Rubber Hose

- TFS-30600600 Steam line plumbing kit, front of heads only, each
- TFS-30600601 Steam line plumbing kit, front and rear of heads, each

Steam Line Plumbing Kits, Black Nylon Braided AN Hose

- TFS-306SB600 Steam line plumbing kit, front of heads only, each
- TFS-306SB601 Steam line plumbing kit, front and rear of heads, each

Steam Line Plumbing Kits, Stainless Steel Braided AN Hose

- TFS-30600600 Steam line plumbing kit, front of heads only, each
- TFS-30600601 Steam line plumbing kit, front and rear of heads, each

Steam Line Individual Components

- TFS-30600611 Steam line fitting, -4 AN male, each
- TFS-30600612 Steam line cap, each
- TFS-30600613 Steam line fitting, 1/8" female NPT, 90°, each
- TFS-30600615 Cylinder head coolant sensor plug and seal, 12mm, each

Engine Priming Pump Kit for Late Model Engines

Looking for an easy way to pre-lube your freshly-built LSX, Ford modular, or late model Hemi engine? Then look no farther than this engine priming pump kit from Trick Flow. Specifically designed just for late model engines with crank driven oil pumps, this pump kit allows easy pre-oiling of your engine. It can also be used to transfer non-flammable fluids such as gear lube and transmission fluid. The kit includes an engine priming/fluid transfer pump, a driveshaft, 10 ft. of -6 AN hose, and an assortment of fittings and adapters required to turn any 3/8" drill into an oil pumping machine!

TFS-90400 Engine priming pump kit, each

Cylinder Head Porting Tools

Trick Flow’s cylinder head porting tools and accessories are essential for cleaning up ports, combustion chambers, and port-matching intake manifolds at home.

The Deluxe Cartridge Roll Kit (TFS-90001) for cast iron and aluminum cylinder heads includes (4) 60-grit cartridge rolls, (40) 80-grit rolls, and (40) 120-grit rolls in assorted sizes, plus two 1/4" shank mandrels and a durable plastic storage box.

The Carbide Deburring Set (TFS-90002) for aluminum heads and intakes includes one 3/8" oval, one 3/8" cylindrical, and one 3/8" tree-style bit. The bits are six inches long to reach deep inside the ports.

The Complete Port Match Tool Kit (TFS-K90015) includes the Deluxe Cartridge Roll Kit plus precision measuring instruments, two 3/8" oval carbide burrs, layout dye, and grinding wax. This kit works with both cast iron and aluminum heads.

Many of the tools custom head and manifold porters use in their own shops to turn out race-winning parts are also available individually.

- TFS-K90015 Complete port match tool kit, each
- TFS-90001 Deluxe cartridge roll kit, each
- TFS-90002 Carbide deburring set, single-cut for aluminum, set of 3
- TFS-90003 L-square, 3" x 4", 90°, stainless steel, each
- TFS-90004 Precision scribe, each
- TFS-90005 Carbide burr, 21/16" long x 3/8" oval, 1/4" shank, single-cut for aluminum, each
- TFS-90006 Centering scale, 24" long, each
- TFS-90007 Layout dye, blue, 8 ounces, each
- TFS-90008 Grinding wax, .43 ounces, each
- TFS-90025 Carbide burr, 21/16" long x 3/8" oval, 1/4" shank, double-cut for aluminum and cast iron, 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

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 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
It's fun to root for the underdog. It's even more fun to help the underdog win a few. When BMR Racing decided to build a new engine for their Fox-body Mustang to beat up on the BMWs and Porsches that usually win in American Endurance Racing, they turned to Trick Flow for high performance Twisted Wedge® 11R 205 heads, R-Series carb-syle EFI intake, Track Max® cam, and cast aluminum valve covers to get the job done.

With expert assembly handled by PowerNation TV’s Engine Power's Mike Galley and Pat Topolinski, BMR’s new 363 c.i.d. small block Ford makes upwards of 600 horsepower, revs to 8,000 RPM, and will hold together for nine hours at a stretch.

BMR Racing trusts Trick Flow to help them win races and earn a championship—you should too!