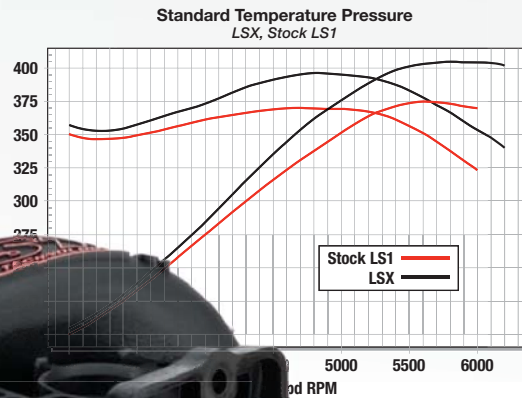


Intake Manifolds & Throttle Bodies

LSX™ 92mm INTAKE MANIFOLD



**50-STATE LEGAL
CARB EO# D-279-9**

LSX™ 92mm Black Intake Manifold *Patent No. 7,021,263 B1*

The patented LSX™ 92mm Black Intake Manifold from FAST™ is the only three-piece Gen III (cathedral port) composite manifold proven to deliver increased performance without compromising bottom-end drivability or high-RPM power. Available for both street and racing applications, the new black intake manifold is an easy bolt-on installation for GM Gen III (LS1, -2 & -6) engines and is designed to work with the FAST™ Big Mouth 92mm Throttle Body™. This intake manifold maintains the performance gains achieved over stock intakes with no loss in drivability or low RPM torque. While the manifold delivers terrific performance right out of the box, it can be ported by the customer for even more flow. As requested by previous LSX™ customers, the intake features the added benefits of corrosion-free stainless steel assembly bolts, an improved throttle body sealing flange with o-ring gasket and threaded insert throttle body mounts that provide increased durability.

- Improved throttle body sealing flange and o-ring gasket
- High-quality polymer materials resist the “heat sink” effect of aluminum
- Maximizes potential of other engine performance upgrades such as cylinder heads
- Designed to work with FAST™ Big Mouth and Big Mouth LT Throttle Bodies™ (92mm)
- Includes stainless steel bolts, threaded insert throttle body mounts and necessary mounting hardware



LSX™ 92mm Black Intake Manifold

Manifold	Upper Shell	Lower Shell
54039B	54039BUS	54039BLS

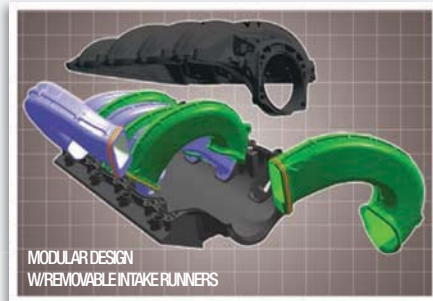
The LSX™ 92mm Intake Manifold uses FAST™ Billet Fuel Rails (Part #54023) and either a Big Mouth Throttle Body™ (Part #54092) or Big Mouth LT Throttle Body™ (Part #54090).



Intake Manifolds & Throttle Bodies

LSX_R™ 102mm INTAKE MANIFOLDS

**50-STATE LEGAL
CARB EO# D-279-9**



LSX_R™ 102mm Intake Manifold Patent No. 8,567,366

#146102B Shown with #54103

FAST™ engineers teamed up with airflow specialists at RHS® to develop polymer intake manifolds for rectangular port GM LS3 and LS7 engines and cathedral port LS1/LS2/LS6 engines. Testing on a near stock 500c.i. LS7 engine with a Big Mouth 102mm Throttle Body™ produced gains of 16+ horsepower and 26+ rear wheel horsepower. The LSX_R™ 102mm Intake Manifold features a revolutionary modular design that allows for fast and easy disassembly and features the ability to remove individual runners for porting.

Constructed from the same advanced polymer material as the original FAST™ LSX™ 92mm Intake Manifold, but now in the popular black color, the LSX_R™ offers a host of benefits over aluminum aftermarket intakes, including lighter weight, increased strength and improved heat dissipating characteristics. While the LSX_R™ features a 102mm air inlet that is perfectly suited to the FAST™ Big Mouth 102mm Throttle Body™, for maximum convenience it can also be used with OEM or aftermarket 90mm or 92mm throttle bodies. Other features include integrated nitrous bungs and perfect bolt-on fitment that allows the use of factory accessories without modification or clearance concerns. Fits most C5 and C6 Corvettes without modification.

Now available for LS3, L76, L92 and L99 rectangle port applications are High Horsepower and Race versions of the LSX_R™ Intake Manifold. With shorter and straighter runners than the original LSX™, the High HP intake can make up to 20+ more horsepower than the original while the Race intakes have proven to make up to 35+ more horsepower. Runner sets can also be purchased separately - see page 46.

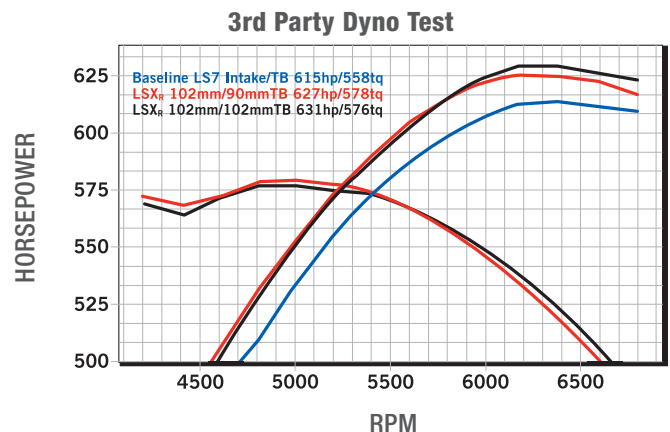
	Manifold	Upper Shell	Lower Shell
LSX _R ™ 102mm STANDARD Intake Manifold – Rectangle Port, See Chart Below	146102B	146000B	146001
LSX _R ™ 102mm HIGH HP Intake Manifold – Rectangle Port, See Chart Below	146103B	146000B	146001
LSX _R ™ 102mm RACE Intake Manifold – Rectangle Port, See Chart Below	146104B	146000B	146001
LSX _R ™ 102mm Intake Intake Manifold – Raised Rectangle Port, See Chart Below	146202B	146000B	146201
LSX _R ™ 102mm Intake Intake Manifold – Cathedral Port, See Chart Below	146302B	146000B	146301

¹ See chart on page 48 for fuel rail options.

LS Port Identification

<p>Raised Rectangle Port</p> <p>LS7 LSXR™</p> <p>Part #146202B</p>	<p>Rectangle Port</p> <p>LS3 LS9 L76 L92 L99 LSA LSXR™</p> <p>Part #146102B Standard Part #146103B High HP Part #146104B Race</p>	<p>Cathedral Port</p> <p>LS1 LS2 LS6 LSXR™ LSXRT™</p> <p>Part #146302 Part #146602B Truck</p>
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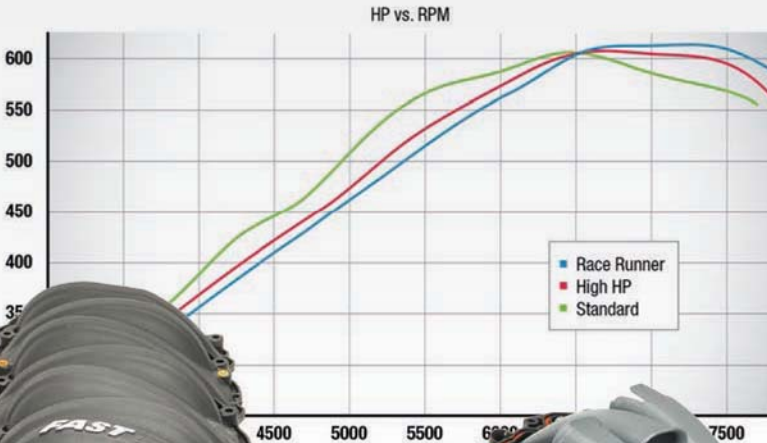
SEE PG 46 FOR NEW RUNNER SET OPTIONS



Intake Manifolds & Throttle Bodies

LSX_R[™] / LSX_{RT}[™] INTAKE RUNNERS

**MAXIMIZE
HORSEPOWER**



LSX_R[™] / LSX_{RT}[™] Interchangeable Intake Runners

High Horsepower and Race versions of the LSX_R[™] Intake Runners are designed specifically for LS3, L99, L76 and L92 engines that are built for high performance applications. The High HP Runner Set is based on Daytona prototype intakes that are shorter and straighter than previous market offerings, specifically to improve high-RPM horsepower and torque in vehicles with added performance modifications. The High HP version has been proven to make 20+ additional horsepower over the original LSX_R[™] manifold with a 500-1000 RPM shift up in peak horsepower on LS3 performance engines.

The Race Runner Set features the shortest and straightest runners that rival aluminum four-barrel intakes for horsepower potential. This setup utilizes a race runner engineered for all-out high-RPM performance and is ideal for vehicles with serious performance modifications and race converters. The Race Version can provide up to a 35+ horsepower gain over the original LSX_R[™] with a 500-1000 RPM upward shift in peak hp for all out race vehicles.

The runners are interchangeable and available in kits so LS3 manifolds ONLY may be configured with Standard, High HP or Race runners.



**MAXIMIZE HORSEPOWER WITH
INTERCHANGEABLE INTAKE RUNNER SETS**

- Standard runners work with stock or mild vehicles
- High HP & Race runners are shorter & straighter than conventional runners to improve high-RPM hp
- High HP option makes 20+ HP over original LSX_R[™] manifold, Race setup makes 35+ HP
- Interchangeable runners allow manifold to be configured as original, High HP or Race

	Runners Only	Manifold & Runner Set
LSX _R [™] 102mm STANDARD Intake Manifold & Runners – LS3 Car	146053	146102B
LSX _R [™] 102mm HIGH HP Intake Manifold & Runners – LS3 Car	146070	146103B
LSX _R [™] 102mm RACE Intake Manifold & Runners – LS3 Car	146071	146104B
LSX _R [™] 102mm Intake Manifold & Runners – LS7 Car	146253	146202B
LSX _R [™] 102mm Intake Manifold & Runners – LS1 Car	146353	146302B
LSX _{RT} [™] 102mm Intake Manifold & Runners - LS1 Truck	146653	146602B



Intake Manifolds & Throttle Bodies

LSX^{RT}™ 102mm INTAKE MANIFOLD



#146602

25 HP BOLT-ON
GAINS FOR 1999 & UP
4.8L/5.3L/6.0L GM
TRUCKS

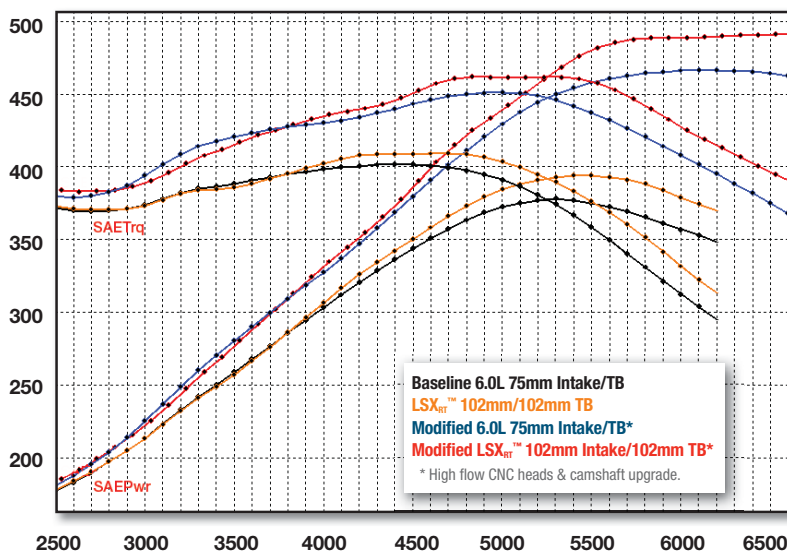
**50-STATE LEGAL
CARB EO# D-279-9**

LSX^{RT}™ 102mm Intake Manifold *Patent No. 8,567,366*

Designed specifically for GM 4.8/5.3/6.0L cathedral port truck engines and cathedral port LS1, -2, -6 race applications where hood clearance is not a concern, the FAST™ LSX^{RT}™ 102mm Intake Manifold follows the path chartered by the original FAST™ LSX™ Gen III Intake. It features a modular design that allows for easy porting and disassembly and a runner design that yields an incredible 25 peak horsepower gain over the stock intake, on a stock 6.0L engine with a Big Mouth 102mm Throttle Body™. Extensive testing led to a runner design that is longer and less restrictive and gives the user the ability to remove individual runners from the manifold for modification.

The LSX^{RT}™ is constructed from a proprietary precision injection molded black polymer which offers many benefits, including lighter weight, greater strength and lower heat soak propensity. While it features a 102mm air inlet that was designed for the FAST™ Big Mouth 102mm Throttle Body™, it can also be used with OEM electronic 78/90mm or aftermarket 90/92mm throttle bodies (three-bolt electronic throttle bodies require an adapter). Other features include integrated nitrous bungs and a precise bolt-on fit that permits the use of factory accessories and OEM fuel/emission connections without adjustments or clearance issues. Some GM truck models may require the FAST™ 92mm or 102mm throttle body.

- Designed for use with FAST™ 102mm Big Mouth Throttle Body™
- 102mm inlet also works w/ OEM electronic 78/90mm or aftermarket 90/92mm throttle bodies for high flow and minimal restriction (three-bolt electronic throttle bodies require an adapter)
- Advanced polymer material is strong, lightweight and cools intake charge for enhanced power
- Big gains in rear-wheel HP yet retains factory fitments and under-hood clearance requirements



	Manifold	Upper Shell	Lower Shell
LSX ^{RT} ™ 102mm Intake Manifold	146602B ¹	146100B	146601
LSX ^{RT} ™/LSX™ Throttle Body Adapter Plate			146029-KIT ²

¹ See diagram on page 48 for fuel rail options. ² Allows use of OEM electronic throttle body.

Replacement runners can be purchased separately - see page 46.

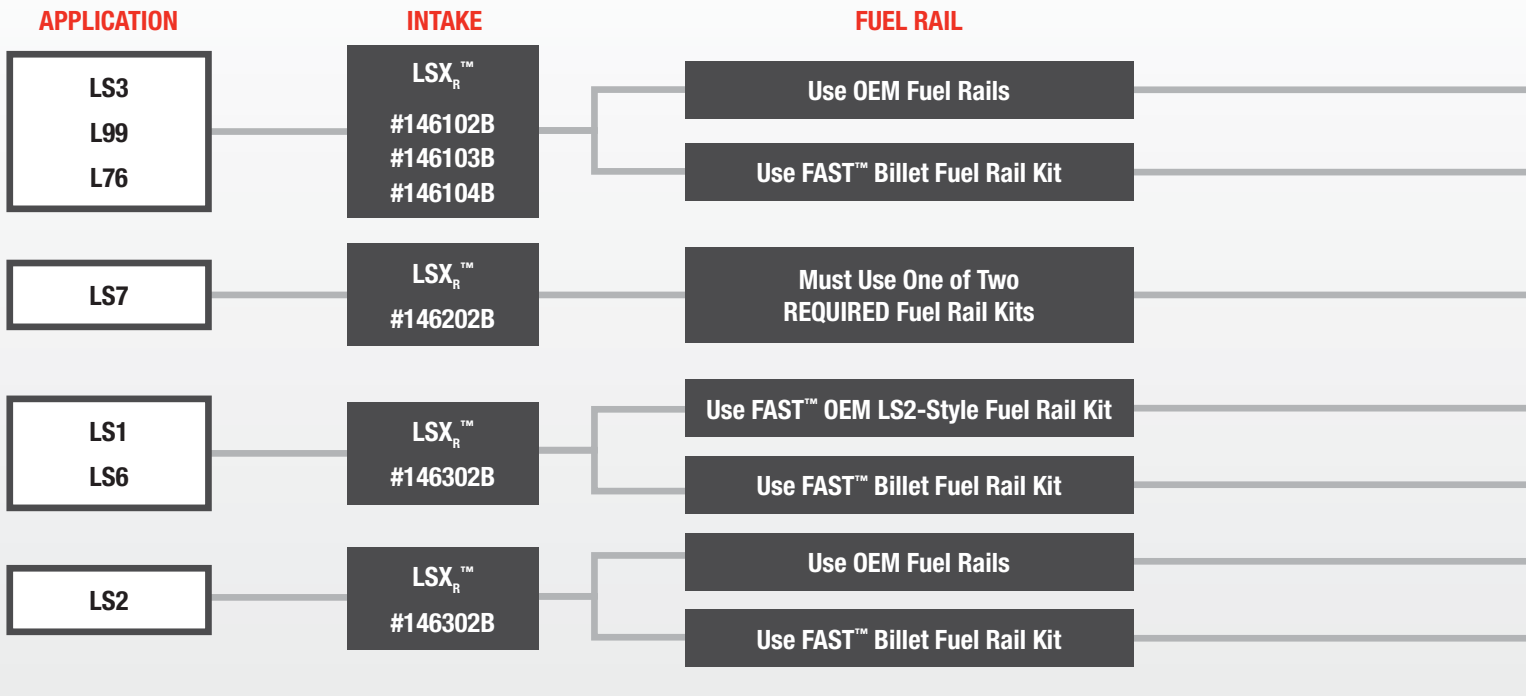
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Intake Manifolds & Throttle Bodies

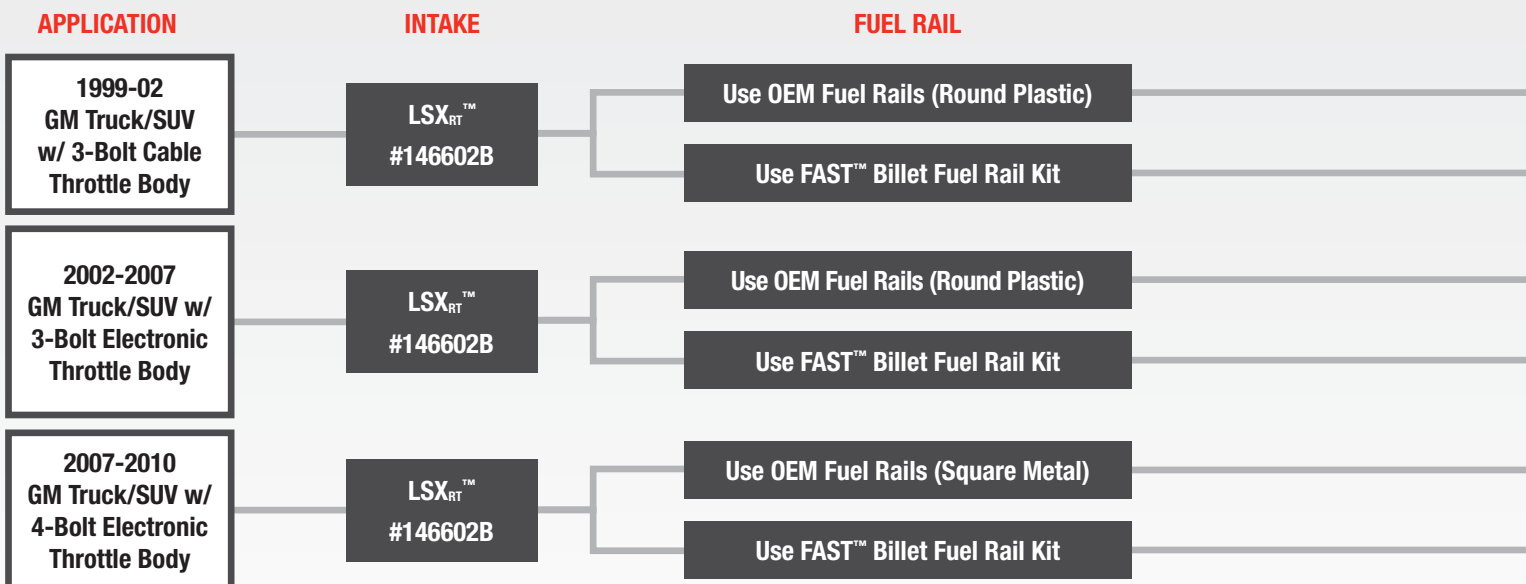
102MM INTAKE MANIFOLD OPTIONS

Having trouble determining which FAST™ Intake Manifold is the right one for your application? The diagram below can help. Find your LS application in one of the application boxes below and follow the lines to determine the proper intake manifold part number, along with fuel rail options and other required and optional accessory pieces. Please refer to these diagrams as some parts are REQUIRED with the installation of a FAST™ Intake Manifold.

LSX_R™ 102mm Intake Manifold (Rectangle, Raised Rectangle & Cathedral Port)



LSX_{RT}™ 102mm Intake Manifold (Cathedral Port)



¹ Requires injector lower o-ring swap (included w/ manifold).

² Except Corvette, call FAST™ for recommendations.

³ Except 1997-1998 Corvettes.

⁴ Permanent modification to OEM fuel rail required.

⁵ For use w/ OEM GM Truck/SUV injectors & FAST™ LS2 Injectors.

⁶ Requires injector lower o-ring swap when using OEM injectors (included with manifold).

⁷ Excludes '06 Trailblazer SS, some cowl modifications required.

⁸ Includes '06 Trailblazer SS, some cowl modifications required.

⁹ Requires GM Purge Solenoid #12581282 (not sold by FAST™).

* LSX_R™ applications must use OEM injector length



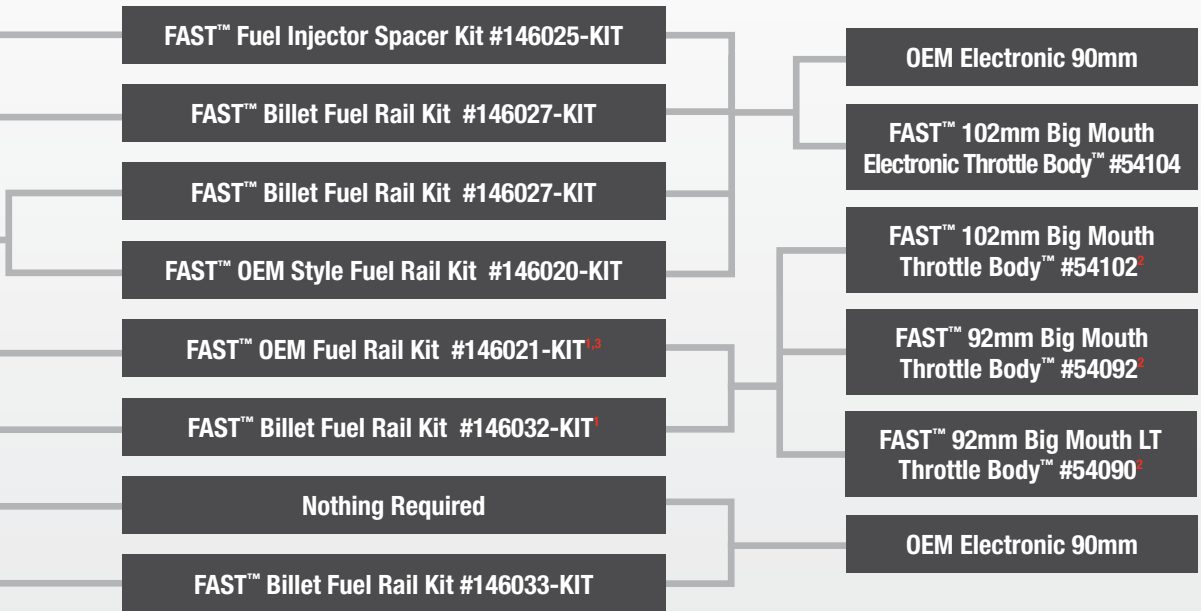
Intake Manifolds & Throttle Bodies

102MM INTAKE MANIFOLD OPTIONS

LSX_R™ 102mm Intake Manifold (Rectangle, Raised Rectangle & Cathedral Port)

FUEL RAIL KIT

THROTTLE BODY



LSX_{RT}™ 102mm Intake Manifold (Cathedral Port)

FUEL RAIL KIT

THROTTLE ADAPTER PLATE

THROTTLE BODY



Intake Manifolds & Throttle Bodies

FUEL RAILS



LSX™/LSX_R™/LSX_{RT}™ Fuel Rails

FAST™ LSX™/LSX_R™/LSX_{RT}™ Fuel Rails feature a larger internal diameter that dampens the pulses and provides increased fuel volume, ensuring that your injectors never run dry. In addition, they yield better fuel distribution and ultimately greater horsepower. Featuring high strength billet, lightweight, red or black* (specific applications) anodized aluminum construction (does not include Part #146020-KIT or Part #146021-KIT), FAST™ fuel rails deliver performance in addition to a show car quality appearance.

	Red	Black
LSX™ LS1/LS6 Billet Fuel Rail Kit	146035-KIT	146035B-KIT
LSX™ LS1/LS6 Fuel Rails w/o Fittings	54023HDW	—
LSX™ LS1 Fittings, O-Rings & Hardware (No Fuel Rails)	54023FRH	—
LSX™ LS2 OEM Fuel Rail/Injector Adapter Kit	54026	—
LSX _R ™ LS1/LS6 Billet Fuel Rail Kit	146032-KIT	146032B-KIT
LSX _R ™ LS2-Style OEM Fuel Rail Kit For LS1/LS6 (Non-Billet)	146021-KIT	—
LSX _{RT} ™ LS2 Billet Fuel Rail Kit	146033-KIT	146033B-KIT

	Red	Black
LSX _R ™ LS3/LS7 OEM Car Fuel Rail Kit (Non-Billet)	146020-KIT	—
LSX _{RT} ™ LS3/LS7 OEM Fuel Injector Adapter Kit (No Fuel Rails)	146025-KIT	—
LSX _{RT} ™ LS3/LS7 Billet Fuel Rail Kit	146027-KIT	146027B-KIT
LSX _{RT} ™ Gen III Billet Fuel Rail Kit	146028-KIT ¹	146028B-KIT ¹
LSX _{RT} ™ Round OEM Fuel Rail Bracket Kit (No Fuel Rails)	146030-KIT	—
LSX _{RT} ™ Square OEM Fuel Rail Bracket Kit (No Fuel Rails)	146031-KIT	—

¹ For use w/ OEM GM Truck/SUV injectors & FAST™ LS2 Injectors.

* LSX™/LSX_R™/LSX_{RT}™ parts are NOT interchangeable.



LSX™/LSX_R™/LSX_{RT}™ Fuel Rail Systems & Accessories

LSX™/LSX _R ™/LSX _{RT} ™ 0-100 EFI Fuel Pressure Gauge Kit	54027
LSX™/LSX _R ™/LSX _{RT} ™ 0-100 EFI Fuel Pressure Gauge (Only)	54027G
LS1 OEM Fuel 3/8" to -6AN Fuel System Conversion Fitting	54028
LSX™/LSX _R ™/LSX _{RT} ™ OEM Fuel Line Conversion Kit (1998-02 LS1 F-Bodies w/ FAST™ Billet Fuel Rails)	54028-KIT
LSX™/LSX _R ™/LSX _{RT} ™ OEM Fuel Line Conversion Kit w/ Fuel Pressure Gauge (Part 54028-KIT w/ Part 54027G)	54028G-KIT
-6AN, 90°/45° End Fuel Supply Line	54028FSL
-8AN, 90° End Crossover For FAST™ Fuel Rails	54028FRC

LSX™ LS1 Only Replacement O-Ring (Single)	54023OR-1
LSX™ 8 SAE O-Ring To -8AN Fitting	54023A-1
LSX™ 8 SAE O-Ring To -6AN Fitting	54023B-1
LSX™ 8 SAE O-Ring To 1/8 NPT Fitting	54027A
LSX™ 8 SAE O-Ring Plug & O-Ring	54028P
LSX _R ™ LS3/LS7/L76/L99 Injector O-Ring	146020COR
LSX _{RT} ™ LS3/LS7 OE Fuel Injector Adapter Kit	146025-KIT

¹ Includes 8 SAE o-ring to 1/8 NPT fitting and o-ring for use with FAST™ billet fuel rails.

² Includes Part #54028, #54028FSL, #54028FRC and #54028P.

* LSX™/LSX_R™/LSX_{RT}™ are NOT interchangeable unless listed together.

Black Anodized Fuel Rails

FAST™ Fuel Rails are machined from high strength aluminum and feature a large 11/16" inside diameter for consistent pressure at each fuel injector. Offered in 18", 24", 36", 48" and 72" lengths, FAST™ has you covered no matter the application.

Universal Fuel Rail – 18"	30700218B
Universal Fuel Rail – 24"	30700224B
Universal Fuel Rail – 36"	30700236B
Universal Fuel Rail – 48"	30700248B
Universal Fuel Rail – 72"	30700272B

