

XFI 2.0™ FUEL INJECTION SYSTEMS



Compatible with all common ignition types, including GM HEI, LT1, LS1, -2, -6, -7 DIS, Ford EDIS (4.6L & 5.4L), and Chrysler 5.7L, 6.1L Hemi applications.

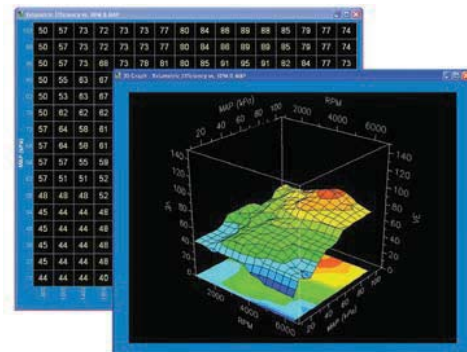
FAST™ engineers designed the revolutionary XFI 2.0™ with improved and expanded functions, capabilities and adjustability. In addition, they upgraded the user interface for power adders, including advanced forced induction, progressive controllability and other advanced racing specific strategies and features. Faster processing means no more flat spots in the power curve or settling for “close enough.” With a cutting edge self tuning option, this is the one EFI system with easy-to-use features and completely configurable capabilities that accurately balances fuel and spark, allowing you to fine tune and precisely control like never before.

Advanced Forced Induction, Power Adder & Race Controls

The Advanced Forced Induction, Power Adder and Race Controls include two separate, fully programmable sequential rev limiters for staging or boost building with six options for activation, four priority assignments and a user selectable mode for rev limiting. The Advanced Forced Induction Controls include a time based boost controller, user selectable fixed VE and/or fixed timing for boost building and staging repeatability. Expanded Progressive Power Adder Controls include configurations for both wet or dry applications; separate tables for power adder solenoid control and fuel control for perfect dry power adder tuning; user adjustable solenoid pulse frequency for optimum solenoid controllability; choice of fixed target air/fuel or standard air/fuel table for correction; and a dry power adder fuel delay in milliseconds for correcting rich spikes on activation. No other system matches the power and adjustability of XFI 2.0™.

Self Learning Auto Tuning VE Table*

The Self Learning Auto Tuning VE Table is an automated process option that makes for quick and easy fuel mapping with the XFI 2.0™. However, this option can be turned off should the user prefer to do the tuning manually. The self learning mode can also be used to speedily and accurately populate a base tune and then turned off for more fine tuning or custom control by the user – it’s all up to you when and how you want to use it. The C-Com® software features enable conditions to turn it on/off automatically and also has an overall enable/disable feature.



The VE table is shaped & refined by self learning capabilities.

* XFI 2.0™ C-Com® software requires suitable PC computer for use.



XFI 2.0™ features are now standard on all newly purchased XFI™ units; an inexpensive XFI 2.0™ firmware upgrade can also be purchased to update your existing XFI™ without the expense of purchasing a completely new system. Call 1.877.334.8355 or visit www.fuelairspark.com for more information. Updated covers are also available.



XFI 2.0™ FUEL INJECTION SYSTEMS

Hardware

The XFI 2.0™ uses the latest in flash microprocessor technology to deliver a significantly faster processing speed. It processes, analyzes and adjusts four times faster than previous EFI systems. In addition, a surface mount component circuit board and billet ECU enclosure give the XFI 2.0™ superior durability. To simplify installation, FAST™ offers engine-specific wiring harnesses with clearly labeled connections.

Software Advances

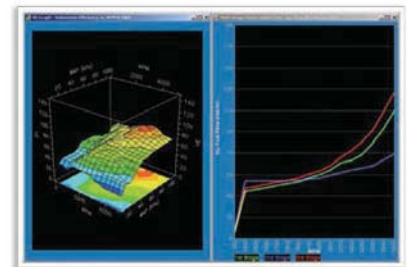
The C-Com® XFI™ Windows-based software is easy to navigate and incorporates field-flashable capabilities that enable you to download the latest software updates via email or directly from the FAST™ website. Your system will stay current without ever needing to remove the XFI 2.0™ from your vehicle.

XFI 2.0™ provides a host of upgrades including individual cylinder correction referenced to RPM. This feature allows for very fine cylinder-by-cylinder tuning of an engine throughout its entire RPM band. Dynamic Fuel Pressure Correction also allows for user-enabled correction for fuel pressure changes in real time. XFI 2.0™ includes the added ability to interface with the cost-effective FAST™ EZ-LS™ Ignition Controller, while comprehensive, user-programmable dwell settings for EZ-LS™ and XIM™ applications allow the user to finely tune the dwell time to match the ignition coils that are being used. Other spark features include increased resolution for power adder ramp retard, a timing offset table supporting alternative fuels by their Fuel Energy Constant and a high-RPM, spark-cut rev limiter.

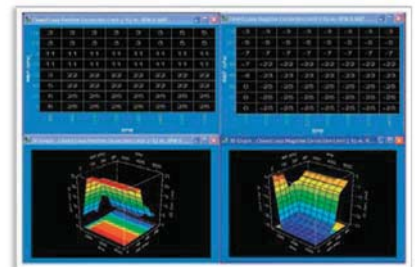
XFI 2.0™ provides a second communication port to allow for simultaneous use of the FAST™ XFI™ eDash and C-COM® software, while new calibration parameters are designed to initiate a minimum oil pressure shutdown. In addition, a dedicated real-time baro sensor supports live corrections of barometric pressure for altitude changes. Finally, the progressive power adder fuel and nitrous solenoid duty cycles have been merged into one table to allow for more convenient tuning.

Technology

The XFI 2.0™ features Qwik Tune™ Technology that allows ECU programming without a laptop. Preprogram up to four different EFI MAPs. You can optimize one setting for everyday driving, others for racing conditions and still another for improved fuel economy. Simply select the tune-up you need with the flip of an in-car switch. Other features include on-board diagnostics, EZ Test™ Indicator Lights, 5 bar MAP sensing and controls for your power adder and torque converter.



Easy-to-navigate C-Com XFI™ software contains the advanced features demanded by professionals, yet allows first-time EFI users to tune with confidence.



Standard Features

- Built-in wide-band O₂ sensor
- Fully sequential and/or bank-to-bank capability
- Individual cylinder correction
- Fan and fuel pump control
- Dynamic scaling of vectors in 2D & 3D tables
- Scalable TPS, air temp, water temp & calibrations
- 1, 2, 3 and 5 bar capability
- Spare definable inputs/outputs for auxiliary fan control, EGT monitoring, etc.
- Torque converter lock-up control
- Air conditioning wide-open throttle cutout
- Boost control
- Enhanced 4 stage power adder controls
- Multiple calibration stored in ECU w/ switching capability
- L-key function for easy steady-state table correction using wide-band
- On-board diagnostics
- Fuel and oil pressure logging
- Adjustable injector timing
- Adjustable battery voltage injector opening correction table
- Fixed timing test mode for easy verification of ignition timing accuracy
- Spark vs. coolant temp offset table
- Configurable target air/fuel offset table vs. coolant temp table: more accurate warm-up enrichment
- Selectable safety feature deactivates power adders in event of fault code
- Automatic and manual TPS calibration modes
- Additional transbrake control features
- Improved on-board diagnostics
- Nominal dimensions: 8.25"W x 5.25"H x 1.5"D

XFI 2.0™ FUEL INJECTION SYSTEMS

Option Features

Internal Data Logging (IDL)

The internal memory-based data logging option provides comprehensive data from all vehicle sensors and powertrain controllers. IDL allows recording of up to 24 input channels and sensors to instantly assemble a comprehensive, real-time picture of exactly what is going on under the hood of your vehicle. Newly expanded controls feature a separate arming input option. It doesn't require additional hardware and is an affordable option compared to purchasing an external data logger.

Intelligent Traction Control™ (ITC)

Intelligent Traction Control™ solves the problem of lost traction that results from trying to put too much engine power to the ground with too little tire by using state-of-the-art predictive software in conjunction with the most sophisticated electronics in the industry. The feature includes user adjustable delay to ignore erroneous starting line activation data and separate output wire activation upon ITC triggering. Intelligent Traction Control™ is not legal in all sanctioning bodies/classes; check your rulebook before ordering this upgrade.

16 Injector Option

The 16 injector option is available for already existing XFI™/XFI 2.0™ units by sending in your engine control unit and also for brand new XFI™ purchases. This allows the XFI 2.0™ injector drivers to operate up to 16 injectors and includes the injector Y adapter.



16 Injector Harness

XFI 2.0™ Marine

Specifically designed for marine applications, the XFI 2.0™ Marine features a waterproof housing and several system upgrades engineered specifically to maximize the power potential of a boat engine.

- ECU is o-ring and conformally sealed for marine use
- User defined pressure and temperature alarm sets off sirens, lights or any other preferred alert when problems arise
- Upgraded user interface for power adders including advanced forced induction and progressive controllability
- Revolutionary self tuning option combines easy-to-use features and completely configurable capabilities
- Nominal dimensions: 8.75"W x 5.5"H x 1.5"D



COMPLETE OR CUSTOM?

Choose a complete XFI 2.0™ kit for your application OR buy individual components specifically designed to work together to customize your own system.

COMPLETE XFI 2.0™ SYSTEMS
ON PG 31

-OR-

INDIVIDUAL COMPONENTS
BEGIN ON PG 32



#3012350-10

XFI 2.0™ Electronic Fuel Injection Kits

FAST™ offers bolt-on XFI 2.0™ Kits to install fully sequential EFI on Small and Big Block Chevy and Small Block Ford engines from mild street rods to 1000 HP all-out race cars. XFI 2.0™ Fuel Injection Kits include carefully matched components, including the XFI 2.0™, Dual-Sync Distributor, a single plane aluminum intake manifold, 4 barrel throttle body, proper size Precision-Flow™ Fuel Injectors, aluminum fuel rails, fuel pump kit, all necessary sensors, professional quality wiring harnesses with labeled connectors and the FAST™ EFI Installation & Tuning DVD.

* Kits may vary by application. Call for specific kit contents.

Notes: Minor machine work or clearancing to the intake manifold may be required, depending on the cylinder heads used. Naturally aspirated horsepower figures.

	Red Throttle Body	Polished Throttle Body
XFI 2.0™ Kit – SBC Up To 550 HP	3012350-05	3012350-05P
XFI 2.0™ Kit – SBC Up To 1,000 HP	3012350-10	3012350-10P
XFI 2.0™ Kit – BBC Up To 550 HP	3011454-05	3011454-05P
XFI 2.0™ Kit – BBC Up To 1,000 HP	3011454-10	3011454-10P
XFI 2.0™ Kit – BBC Tall Deck Up To 1,000 HP	3011572-10	3011572-10P
XFI 2.0™ Kit – SBF Up To 550 HP	3031302-05	3031302-05P
XFI 2.0™ Kit – SBF Up To 1,000 HP	3031302-10	3031302-10P
XFI 2.0™ Kit – Ford Windsor Up To 550 HP	3035351-05	3035351-05P
XFI 2.0™ Kit – Ford Windsor Up To 1,000 HP	3035351-10	3035351-10P

EFI Crate/Transplant Engine Management Kits

For owners of fuel injected crate/transplant engines, FAST™ presents a solution to allow easy conversion to aftermarket EFI for late model GM and Chrysler engines. Kits are tailored to perfectly match the specific brand and model of crate engine being converted and include a FAST™ XFI 2.0™ system, an XIM™ Ignition Module, cable-driven 92mm high-flow throttle body, and all necessary plug and play wiring.

- Kit allows easy conversion to more powerful aftermarket EFI for late model GM and Chrysler applications
- Includes XFI 2.0™, XIM™ Ignition Module, cable-driven throttle body and all necessary wiring
- Provides flexibility to precisely tune your engine for performance upgrades using aftermarket components



#301010

EFI Crate/Transplant Kit For GM LS1/LS6	301009 ¹
EFI Crate/Transplant Kit For GM LS2 – 2005 Only	301010
EFI Crate/Transplant Kit For GM LS2/LS3/LS7 – 2006 & Up	301011

¹ Part #301009 does not include throttle body.

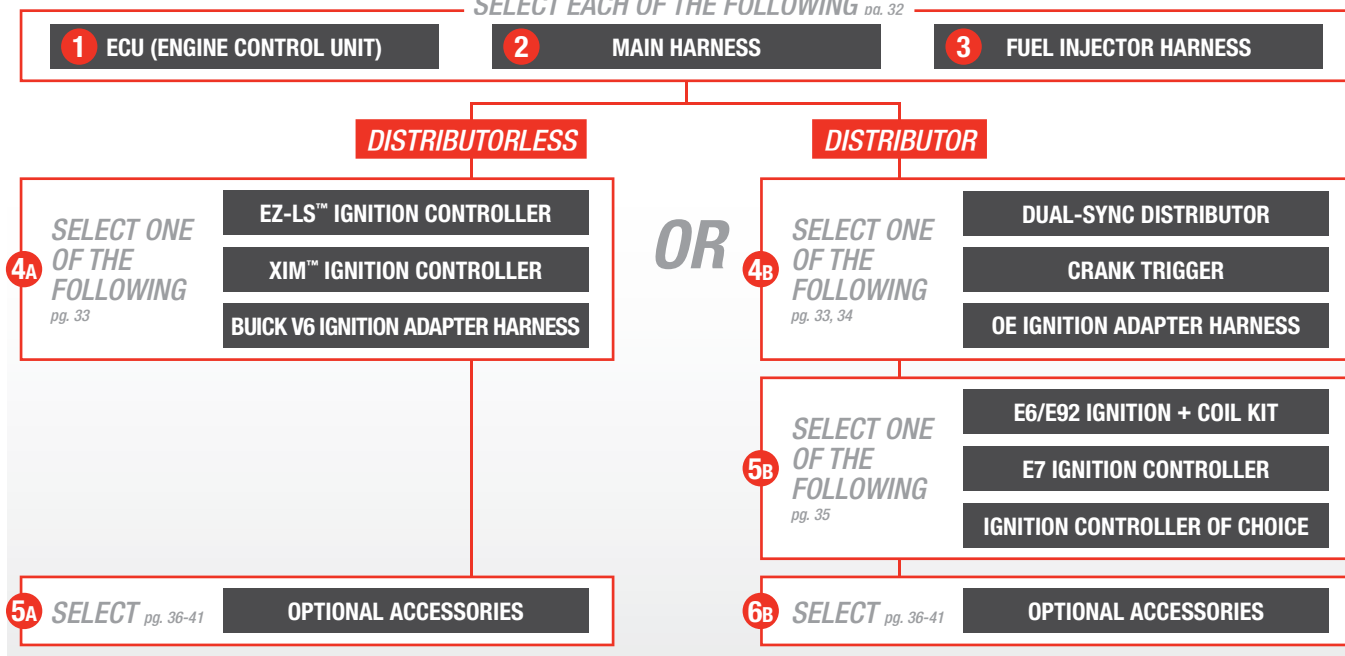
EFI Crate/Transplant Kit For Chrysler 5.7L Hemi	301012
EFI Crate/Transplant Kit For Chrysler 6.1L/6.4L Hemi	301013
EFI Crate/Transplant Kit For Ford 5.0 4V Modular	301014

* Kit contents may vary by application. Call for specific kit contents.

XFI 2.0™ BASE COMPONENTS

HOW TO ORDER AN XFI™ 2.0 SYSTEM: Answer each question below for help deciding the best setup for your needs.

SELECT EACH OF THE FOLLOWING pg. 32



1 XFI 2.0™ ECU (Engine Control Unit)*

XFI 2.0™ ECU	301000
XFI 2.0™ ECU (For 16 Injectors Including Fuel Injector Y Adapter)	301001
XFI 2.0™ ECU w/ Internal Data Logging	301003
XFI 2.0™ ECU w/ Internal Data Logging (For 16 Injectors Including Fuel Injector Y Adapter)	301004
XFI 2.0™ ECU w/ Intelligent Traction Control™	301005

XFI 2.0™ ECU w/ Intelligent Traction Control™ – Black ECU (For 16 Injectors Including Fuel Injector Y Adapter)	301006
XFI 2.0™ ECU w/ Internal Data Logging & Intelligent Traction Control™ – Black ECU	301007
XFI 2.0™ ECU w/ Internal Data Logging & Intelligent Traction Control™ (For 16 Injectors Including Fuel Injector Y Adapter) – Black ECU	301008
XFI 2.0™ Marine ECU – Blue ECU	301015

* All XFI 2.0™ ECUs include (1) NTK O₂ sensor.

2 XFI 2.0™ Main Harnesses

GM TPI	301100
GM LT1/Carb Conversion	301101
GM LS1, -2, -3, -6, -7, -9, Trucks	301108
Chrysler 5.7L, 6.1L, 6.4L Hemi	301104

Universal (Flying Lead Harness w/ Weatherpack Connectors)	301105
Rear Engine Dragster/Boat (Short Main Lead)	301106
ECU Main Connector Kit (Connectors Only, No Wires)	301000K

3 XFI 2.0™ Fuel Injector Harnesses

	Firing Order	Injector Type Connector*	
SBC, BBC, LT1	18436572	Minitimer	301200
Small/Big Block Chevy (4/7 Swap Cam)	18736542	Minitimer	301201
GM Gen III LS1, LS6 (See Injector Type for Proper Selection)	18726543	Minitimer	301202
GM Gen III LS2, LS3, LS7 (See Injector Type for Proper Selection)	18726543	USCAR	301209
Ford 5.0L Coyote	15486372	USCAR	301210
Ford 4.6L, 5.0L, 5.4L, 5.8L	13726548	Minitimer	301203
Ford 289, 302, FE, 429, 460	15426378	Minitimer	301204
Chrysler (Except 5.7L, 6.1L)	18436572	Minitimer	301200
Chrysler 5.7L, 6.1L, 6.4L Hemi	18436572	USCAR	301208
Y Adapter For Multiple Injector Applications	NA	NA	301205
Buick V6	165432	Minitimer	301206
4 Cylinder (Partially Completed Harness)	User Determined	Minitimer	301207

* See pg. 43 for details.