



# **Atomic**<sup>®</sup> **EFI TBI**

## **Do-It-Yourself Electronic Fuel Injection**

- Gives your classic the performance of a late model
- Bolts in place of your current carb
- Simple Install - only 8 connections
- Ditch the tuner - Self-learning
- Capable of controlling ignition timing
- Fear no trail - Runs vertical or at any angle

# **MSD**<sup>®</sup>

# Atomic® EFI - the easiest way to quicker starts, smoother idling and immediate throttle response

## INTERNAL FUEL RAIL

Not only does the internal fuel rail present a sleek appearance, it removes fitting connections where leaks could develop. Also note that with a returnless fuel system, you can bring the fuel line up from the back or use the front fitting. That's right, the Atomic is compatible with returnless fuel systems!

## MOUNT & BLADES

The Atomic throttle body bolts right in place of a standard square bore carburetor and accepts the same linkage as most carbs. The throttle inlets are 1.75" diameter and ride in precision roller bearings for smooth pedal transition.

## TPS

The Atomic's TPS is unlike any you have used before. It is an automatic, self-calibrating, non-contact sensor. That means you don't have to worry about configuring it during set up. Also, with no contact, there is nothing to wear out or replace.

## ECU & SENSORS

Yes, the ECU is integral to the throttle body! This unique design reduces wiring and keeps your EFI installation easier than ever. Better yet, several sensors such as the TPS, MAP, IAT and fuel pressure are all incorporated into the ECU. In fact, the only sensors you need to connect are the coolant temp and the O2.

## INJECTORS

Fuel delivery is provided by four precision 80-pound injectors. These injectors feature a stainless steel ball and seat metering method for maximum internal sealing. For a secure mount the injectors are sealed between the housing and the cast fuel rails.

## POWER MODULE AND HANDHELD PROGRAMMER

This compact device handles the high power systems such as the electric fans and the fuel pump control. It simply plugs into the throttle body via MSD's CAN-Bus network with a single connection. The power runs to the electric fuel pump and there are two fan control wires allowing you to program what temperatures to activate the fans. Eliminating the need for an external fan controller.

Atomic's handheld programmer gets the system set for your particular engine in just a few easy clicks! This controller, combined with the Self-Learning technology from the internal ECU, eliminate the need for a laptop or user tuning. Simply push the joystick left, right, up, and down to move through the options. Within minutes the setup will be complete! Plus, the handheld will act as a dash to display all that is happening in your new Atomic FI system!



## TIMING CONTROL

The Atomic system does more than just fuel! When paired with an ignition control, like the MSD 6A, the Atomic unit can take over your vehicle's timing advance. The handheld gives three simple options to set the timing including the total, initial and rate of advance. It's like the springs and bushings on a distributor, but with digital control.

## Atomic Supports Nitrous and Boost!

That's right, you can run nitrous with your Atomic Throttle Body! Setting up the Atomic for use with your favorite power adder is designed to be as simple as the initial programming. For nitrous fans, a wet system (one that supplies its own fuel to compensate for nitrous) must be incorporated. From the Atomic handheld monitor you'll be able to program a target air/fuel ratio that will be used when the nitrous is activated. There is also a timing setting that will retard the timing during nitrous activation as well.

For boosted applications, whether it be a blow through or draw through, the menu settings are similar. The throttle body incorporates a 2-bar MAP sensor and can manage up to 14-psi of boost. There is a value for a target air/fuel ratio during boost on the Handheld Monitor as well as a timing retard that is based off timing per pound of boost.

An important aspect of using power adders with the Atomic TBI is to consider the fuel system as well as overall power levels. The injectors of the throttle body can support up to about 625 horsepower on naturally aspirated applications when used with the high horsepower fuel pump.

# TBI KITS and ACCESSORIES

## Atomic TBI Master Kit, PN 2900

The Master Kit includes every component you need to complete an EFI conversion, including: Throttle Body, Power Module, Wide Band O2 Sensor, Handheld Monitor and the Fuel Pump Kit which includes the pump (good to 525hp), filters, brackets, high pressure hose and clamps.



PN 2900

PN 2910



## Atomic TBI Kit, PN 2910

If you have a vehicle that already uses an electric fuel pump (with a return line), the Basic Kit provides the parts you'll need to convert to Atomic power. These include; Throttle Body, Power Module, Wide-Band O2 Sensor and the Handheld Programmer.

*Accepts Boost and Nitrous!*



Legal for installation and use on specific vehicles in accordance with the California Air Resources Board (CARB) Executive Order Number D-722.

## Fuel Pump Kit, PN 2920\*

For engines up to 525hp, the standard Fuel Package includes all of the parts needed to upgrade a vehicle's fuel system to Atomic standards. Parts included: Fuel Pump, Filters, 15 ft. 3/8" Fuel Line, Mounting Hardware.



PN 2920

## Fuel Pressure Regulator, only - PN 2938



PN 2922

## Fuel Pump Return Kit, PN 2922

If you plan to run a return line with your Atomic EFI system, this kit provides a regulator, 15 ft. of 3/8" line and the fittings to assemble.



PN 2921

## Atomic Fuel Pump only, 525HP, 3/8, PN 2925

This is the same pump supplied with the Atomic Master Kits. The pump features a 3/8" inlet/outlet to ensure to feed the demands of your engine.



## Atomic Fuel Pump only, 625HP, PN 2926



## High Horsepower Fuel Kit, PN 2921\*

The Fuel Upgrade is a replacement fuel pump for vehicles making between 525-625hp. Parts included: Fuel Pump, Post-Filter, 15 ft. 3/8" Fuel Line, Mounting Hardware.

## Atomic TBI TPS module, 0-5 Volt, PN 2939

The Atomic TBI Throttle Position Sensor Module is designed for use with the MSD Atomic Throttle Body Fuel Injection system. It connects inline to the Atomic TBI communication network and provides a common 0-5 volt throttle position output signal that is required for the operation of an electronic overdrive transmission or factory ECU TPS input.



## Atomic EFI Replacement Parts

- TBI, Throttle Body Unit Only - PN 2905\*
- TBI, ECU Only - PN 2906
- TBI, Power Module Only - PN 2911
- TBI, Hand Held Module Only - PN 2912
- Pre Fuel Filter - PN 2923
- Post Fuel Filter - PN 2924
- 3/8" Fuel Hose 15Ft. - PN 2927
- Clamp Kit 35/64"-21/32" Dia, Qty 10 - PN 2928
- TBI, Fuel Pressure Sensor - PN 2929

- O2 Sensor Wideband - PN 2930
- O2 Sensor Bung & Plug Only - PN 2931
- TBI, Map Sensor Assembly - PN 2933
- TBI, Sensor Coolant Temp - PN 2934
- 6AN Fitting 90 Degree Socketless Black - PN 2935
- 6AN Fitting Straight Socketless Black - PN 2936
- TBI, Idle Air Control Motor - PN 2937
- Fuel Pressure Regulator - PN 2938