EFI Electronic Fuel Injection

On the cutting edge of change

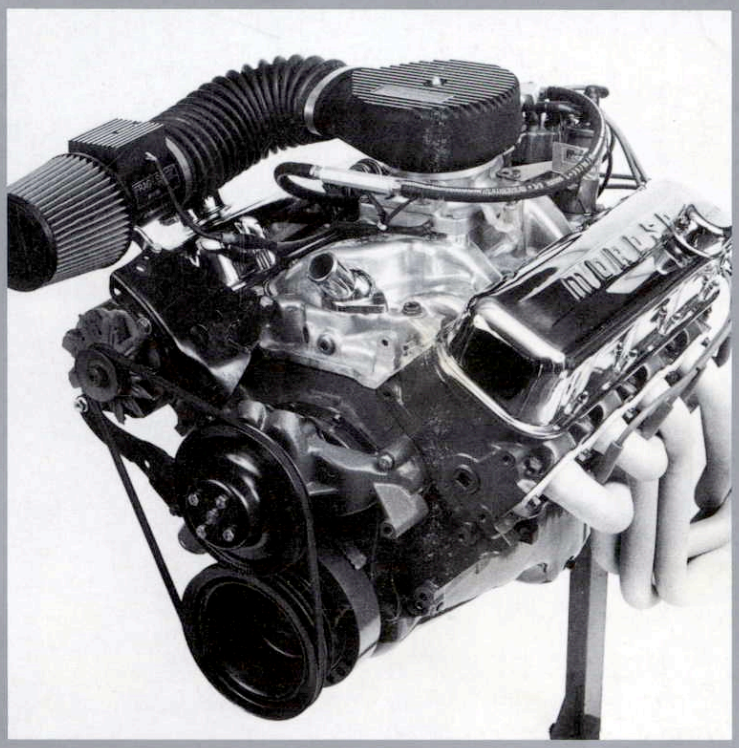
Electronic fuel injection is displacing conventional carburetion. And ***AirSensors, inc.*** *is leading the way with unsurpassed electronic fuel injection technology. We're updating automobiles and light trucks to maximize power and economy, minimize emissions and improve driveability.*

Electronic fuel injection is the new standard in engine design. And AirSensors is out in front, leading the industry with an air mass sensor we developed specifically for electronic fuel injection for the aftermarket.

We've used modernized hot wire anemometry to accurately measure the mass of air flowing to the engine and to match that with optimal fuel flow through throttle-body mounted injectors.

We designed and manufactured a computer that calculates the proper air/fuel ratio for conditions which vary from cold start to full power. Engine temperature, load and RPM, air flow and ignition timing all affect the computer-metered fuel flow to match specific conditions.

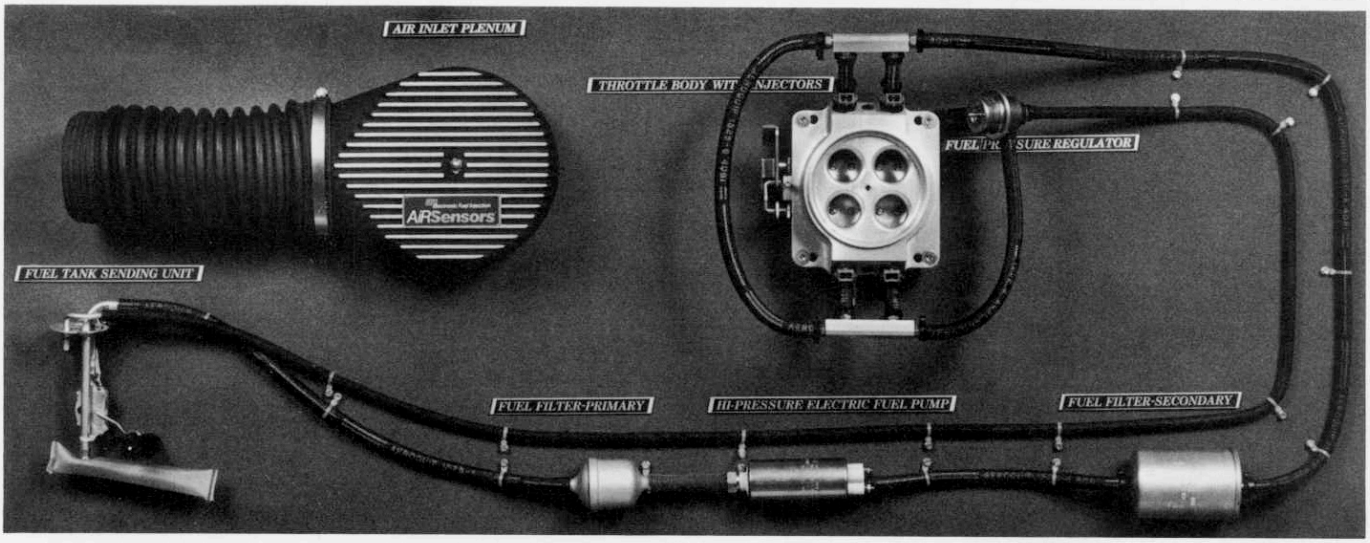
It all adds up to this: multiple benefits. Electronic Fuel Injection by AirSensors provides higher torque at low speeds, improved driveability over a broad spectrum of operating conditions, lower exhaust emissions, improved fuel efficiency and performance and prolonged engine life.



EFI by AirSensors returns the pleasure to driving.

AiRSensors

EFI *ELECTRONIC FUEL INJECTION*



The facts at a glance.

☐ **Greater accuracy.**
Hot wire anemometry measures the air flow to the engine, correcting for altitude, temperature and humidity.

☐ **Reliable control.**
A highly reliable electrical signal representing inlet air flow for air/fuel ratio control is generated by the patented air mass sensor.

☐ **Tested aerodynamics.**
An aerodynamically designed and tested plenum conducts inlet air from the air mass sensor to the throttle body with minimum restriction. Yet it is compatible with underhood clearance needs.

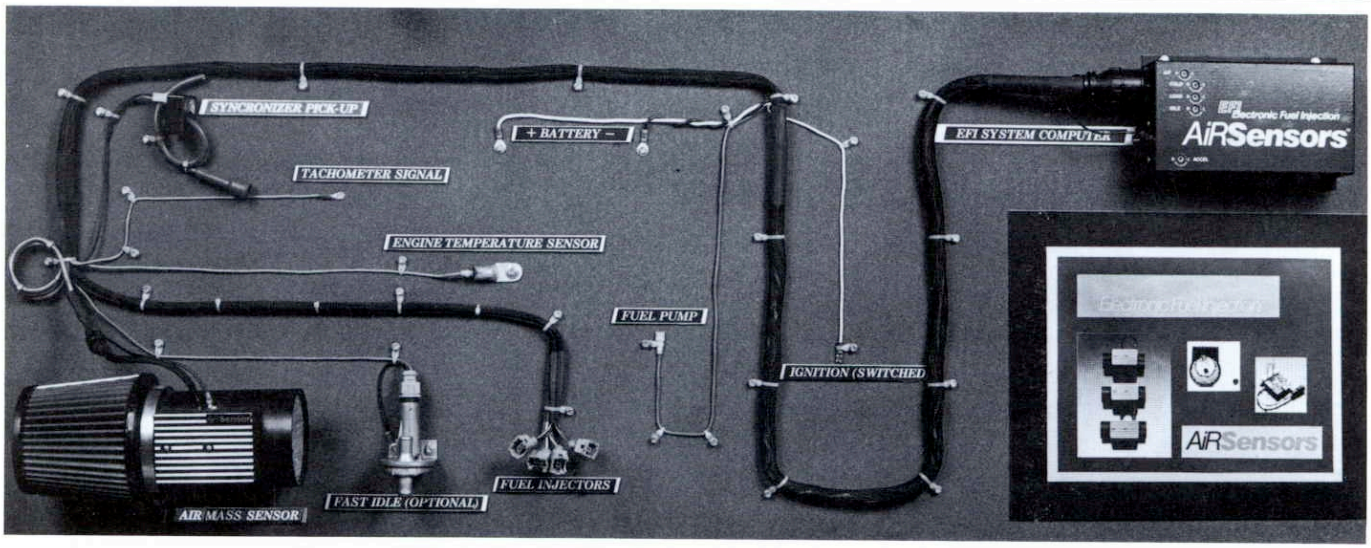
☐ **A good mix.**
The fuel injectors, mounted in the throttle body, are targeted to areas of high air velocities for thorough fuel/air mixing during the injection cycle.

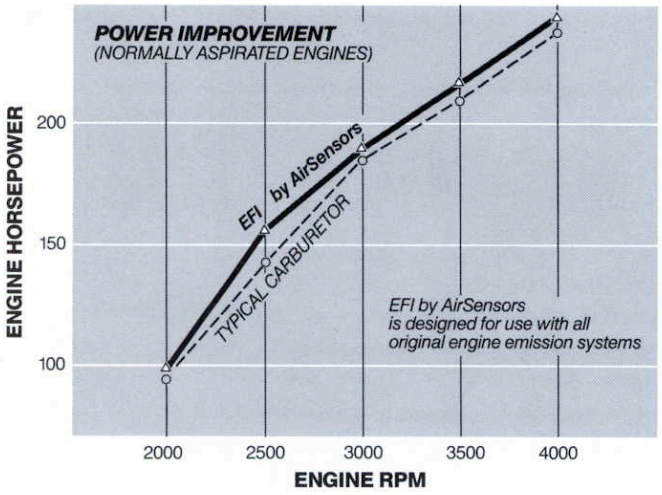
☐ **Precision engineering.**
A precision engineered computer calculates the optimum air/fuel ratio for specific engine demands and sends time-regulated fuel signals to the injectors.

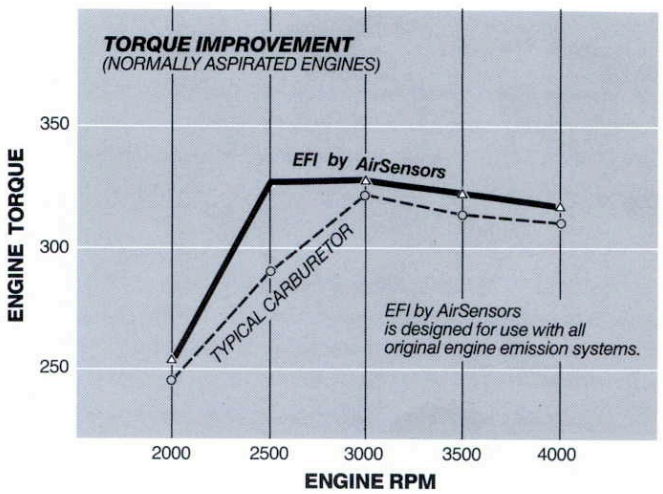
☐ **Engine matching.**
Adjustments for engine matching include air/fuel ratio and enrichments for cold start, heavy load, idle and acceleration.

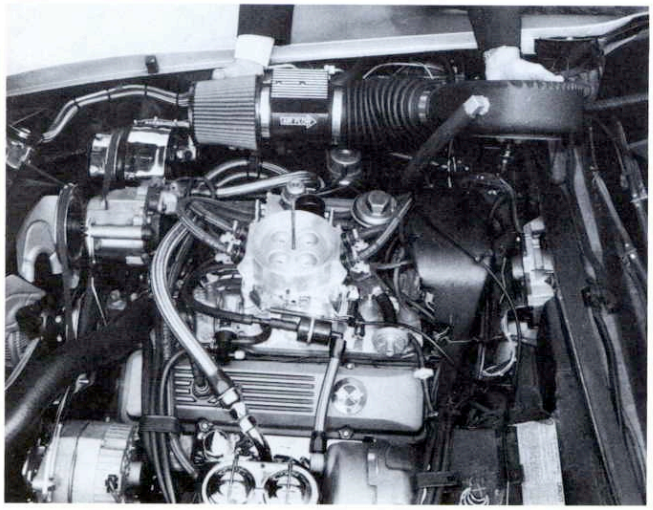
☐ **Trouble-free installation.**
Custom installation kits are complete with fuel supply system, air supply system, computer, wiring harness, air mass sensor and connectors and contain step by step installation and operating instructions.

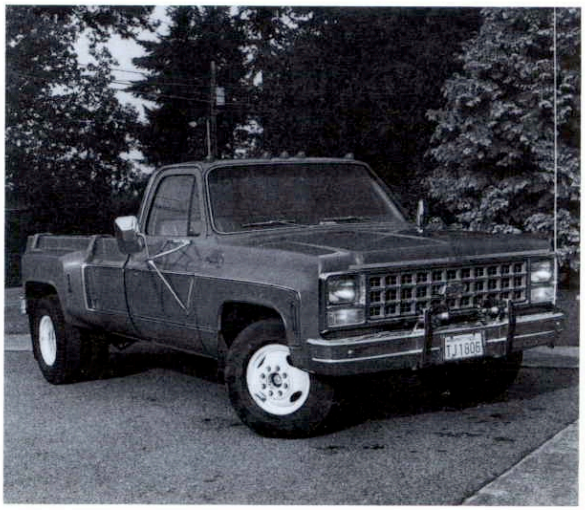
☐ **An easy step up.**
Stepping up to electronic fuel injection can be very simple. A system can be installed with little or no modification to stock parts. Some vehicles may require throttle linkeage or similar minor mechanical changes. Minor computer adjustments and plumbing relocation may be needed on later models.


SYNCRONIZER PICK-UP
+ BATTERY −
TACHOMETER SIGNAL
EFI SYSTEM COMPUTER
ENGINE TEMPERATURE SENSOR
FUEL PUMP
IGNITION (SWITCHED
FUEL INJECTORS
AIR MASS SENSOR
FAST IDLE (OPTIONAL)
AiRSensors


POWER IMPROVEMENT
(NORMALLY ASPIRATED ENGINES)
ENGINE HORSEPOWER
200
150
100
EFI by AirSensors
TYPICAL CARBURETOR
EFI by AirSensors
is designed for use with all
original engine emission systems
2000
2500
3000
3500
4000
ENGINE RPM


TORQUE IMPROVEMENT
(NORMALLY ASPIRATED ENGINES)
ENGINE TORQUE
350
300
250
EFI by AirSensors
TYPICAL CARBURETOR
EFI by AirSensors
is designed for use with all
original engine emission systems.
2000
2500
3000
3500
4000
ENGINE RPM





SPECIFICATIONS—**EFI by AiRSensors**™

FOUR INJECTOR MODELS

*Normally Aspirated Systems**

Model N-8A *V-8 & Large V-6 applications 170-400 HP*

Model N-8HD *Big Block V-8 applications 120-400 HP (C.A.R.B. (EO) D-163 GM 454 applications for vehicles exceeding 8500 lbs. GVW)*

**(Supercharged, Turbocharger and other applications are available)*

OPERATION REQUIREMENTS

Electrical

- *Direct current, negative ground*
- *Nominal—13.5 volt*
- *Minimum—10.0 volt*
- *Maximum—15.0 volt*
- *Nominal—9.0 amperes (continuous)*
- *Maximum fuel delivery—12.0 amperes*

Protection

- *Fuse—total system*
- *Solid-state overvoltage—computer and air mass sensor*
- *Automatic drive-home mode—loss of air flow signal*
- *Temperature range — – 25°C to 80°C (– 13°F to 176°F)*

Engine Applications

- *260 to 500 CID (4.4 to 8.2 liters) V-8*
- *170 to 262 CID (2.8 to 4.3 liters) V-6*

Fuel Supply

- *Any leaded or unleaded gasoline*

Air Flow

- *1000 cubic feet per minute air flow at 1.0 inches of mercury pressure loss or less, through throttle body*

Fuel Flow

- *0.6 to 55 gallons per hour*

PERFORMANCE

Fuel Economy

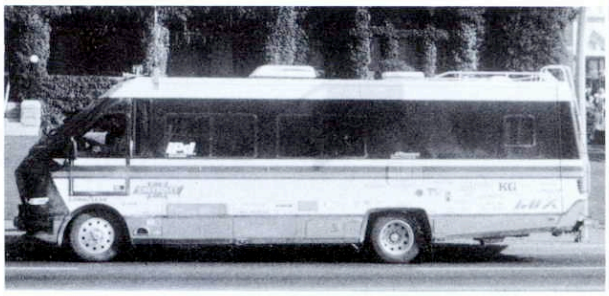
- *Driver sensitive; improved fuel economy under normal driving conditions*

Accuracy

- *+/– 3.5% from 0°C to 50°C (32°F to 122°F) (This equates to air/fuel ratio control of 14.2:1 to 15.2:1 when nominal is 14.7:1)*
- *+/– 7.0% from – 25°C to 80°C (– 13°F to 176°F)*

COMPONENTS

- *Air filter and plenum*
- *Remote air mass sensor assembly*
- *System computer*
- *Four injector throttle body*
- *Fuel pump*
- *Fuel pressure regulator*
- *Fuel filter primary*
- *Fuel filter secondary*
- *Engine timing sensor*
- *Engine temperature sensor*
- *Wiring harness*
- *Installation kit with instructions*



AirSensors conquers the Alcan 5000. This Rockwood 29 ft. motorhome, Rocky II, equipped with a 454 C.I.D. engine and the AirSensors Electronic Fuel Injection system dazzled the competition in the grueling Alcan 5000 Enduro Rally. Performance was substantially enhanced by a 35% increase in torque created by the AirSensors EFI system.

EFI by AirSensors is distributed by: