

### Autotronics

#### Multipoint injection demonstrator

Electronic injection demonstrator

ABS 4 channel system demonstrator

Engine controls & sensors simulator

Car air-conditioning & climate control simulator

Suspension simulator

Transmission simulator

Safety systems simulator

Automotive electrical accessories

Diesel Electrical Wiring Simulator

Diesel Starting & Charging Simulator

Hydraulic Brakes Demonstrator

Smart Gasoline Car Fault Insertion system

Smart Truck Fault Insertion system

Smart Tractor Fault Insertion system

Smart Motorcycle Fault Insertion system

Common Rail Injection

Main Panel

Multipoint Fuel Injection

**Emission Control** 

Airbag Systems

Electronic Stability Program

Hybrid Vehicle Systems

# AT-5101

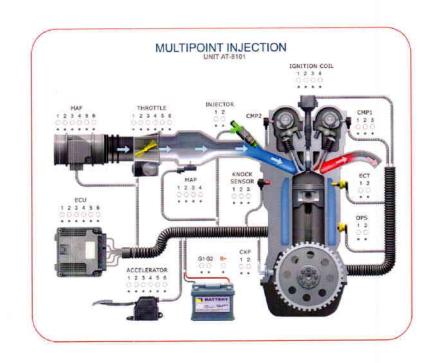
## Multipoint Fuel Injection

### **Advanced Autotronics Simulator**

Degem's AT-5101 Multipoint Fuel Injection course consists of a module and computer courseware. The module, which plugs into any free compartment in the AT-5000 main panel, contains multicolor graphic of the entire multipoint system, several test points and LED indicators.

The interactive courseware contains essential theory enhanced with vivid simulations, guided exercises that interact with the MPI module, guided diagnostic exercises and self assessment exercises

All of these provide the ideal learning environment to provide valuable true-to-life diagnostic exercises to train competant autotronics technicians.



### Specifications

#### THEORY LESSONS COVER

- MAP sensor, MAF sensor
- Motorized throttle
- Injectors
- DIS ignition coil
- CMP: Hall effect camshaft position sensor
- CKP: inductive crankshaft position sensor
- ECT: engine coolant teperature sensor
- Knock sensor
- Accelerator position Hall effect sensor.
- Engine electronic control unit (ECU)

### **TESTING AND MEASUREMENT GUIDE**

Using virtual test instruments, such as digital multimeter and oscilloscope, at designated test points, for observing normal operationg condition.

### **DIAGNOSTIC PROCEDURES**

Teach the student various logical diagnostic methods through detailed step-by-step diagnostic procedures.

#### **FAULT FINDING**

- Faults are inserted in random order
- Student needs to identify fault by himself.