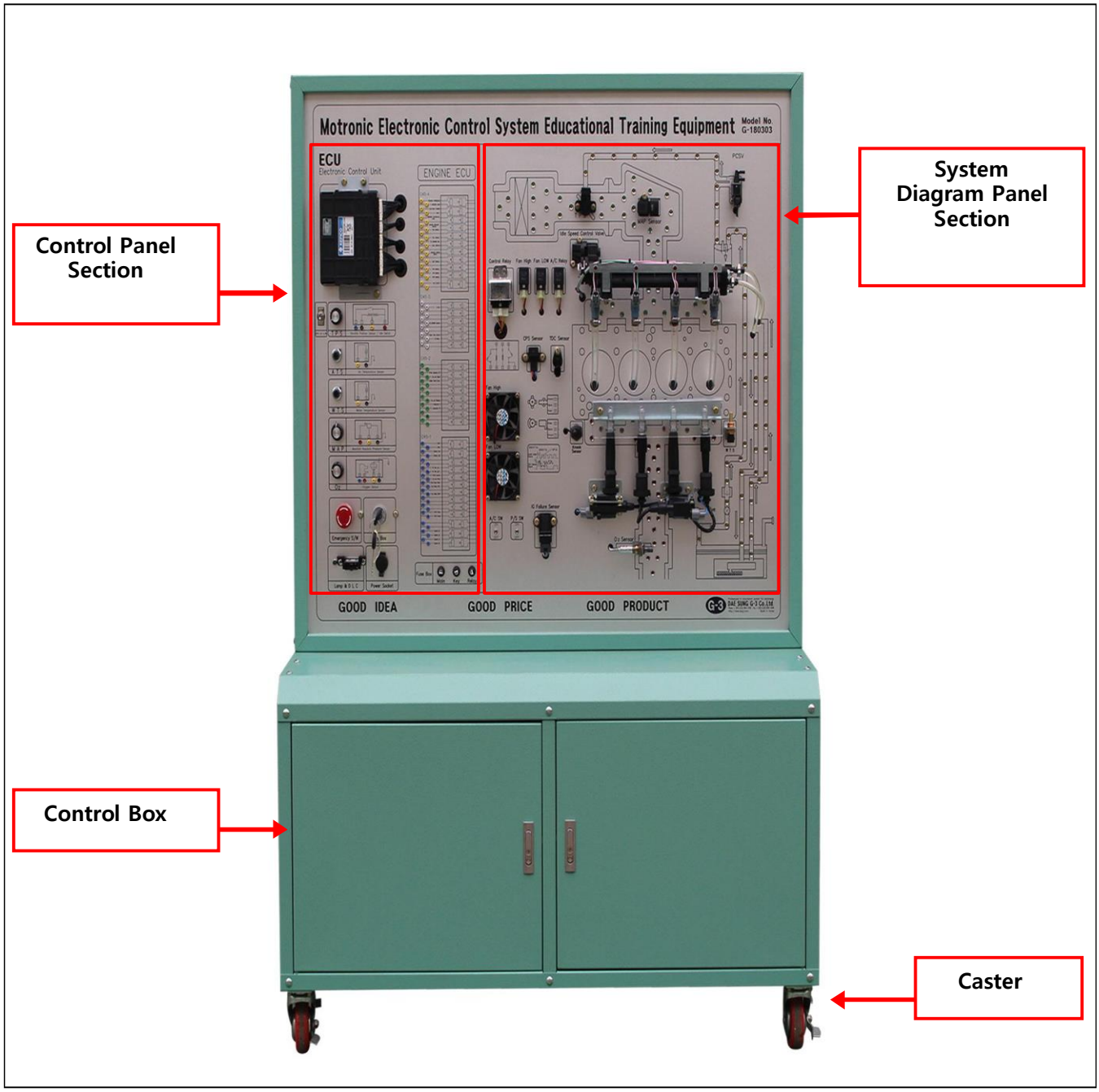
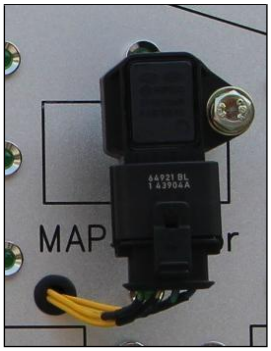
Structure Names

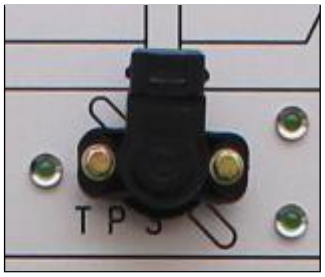


System Diagram Panel Section



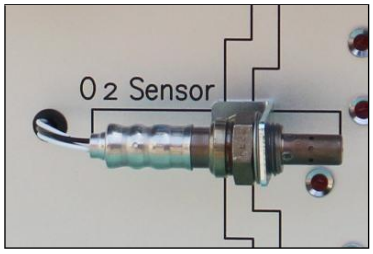
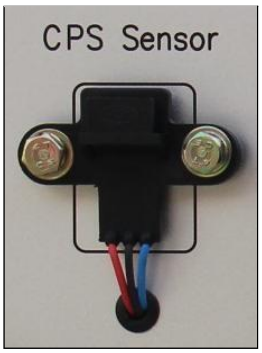
*** Air Temperature Sensor (ATS)**

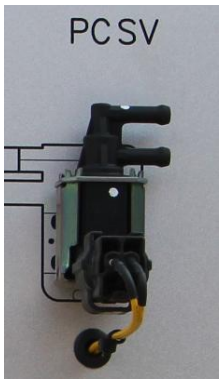
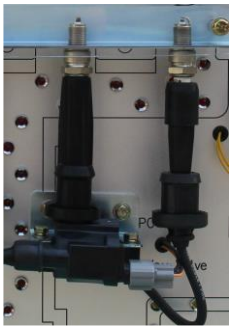
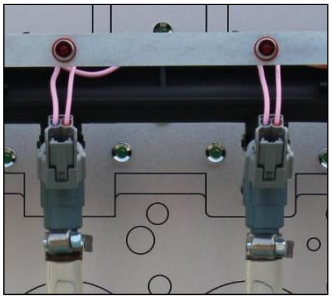
Installed inside the MAP sensor, it detects the temperature of the air taken in. Output value can be adjustable through variable control knob of this equipment.

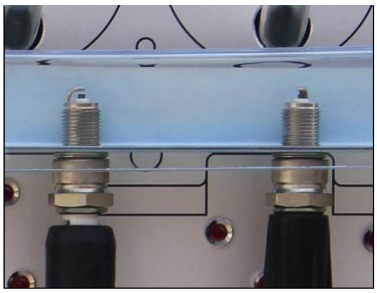
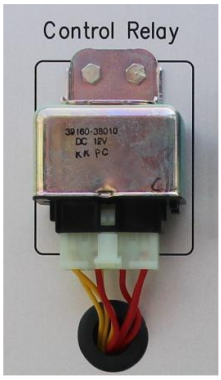
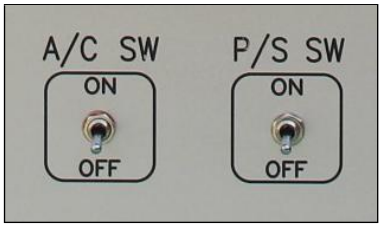
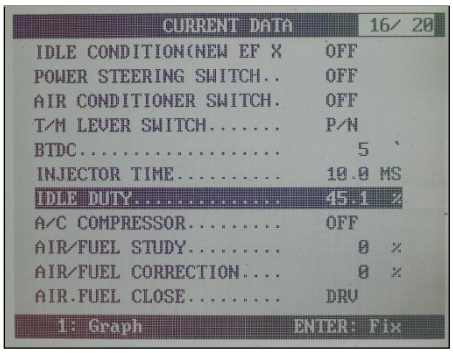
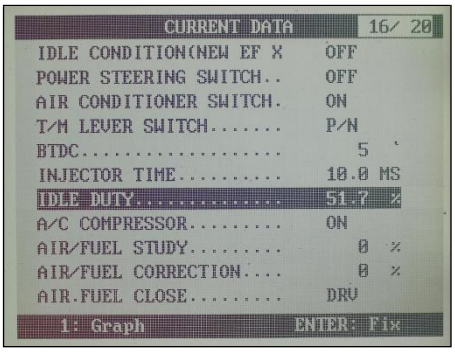


*** Throttle Position Sensor (TPS)**

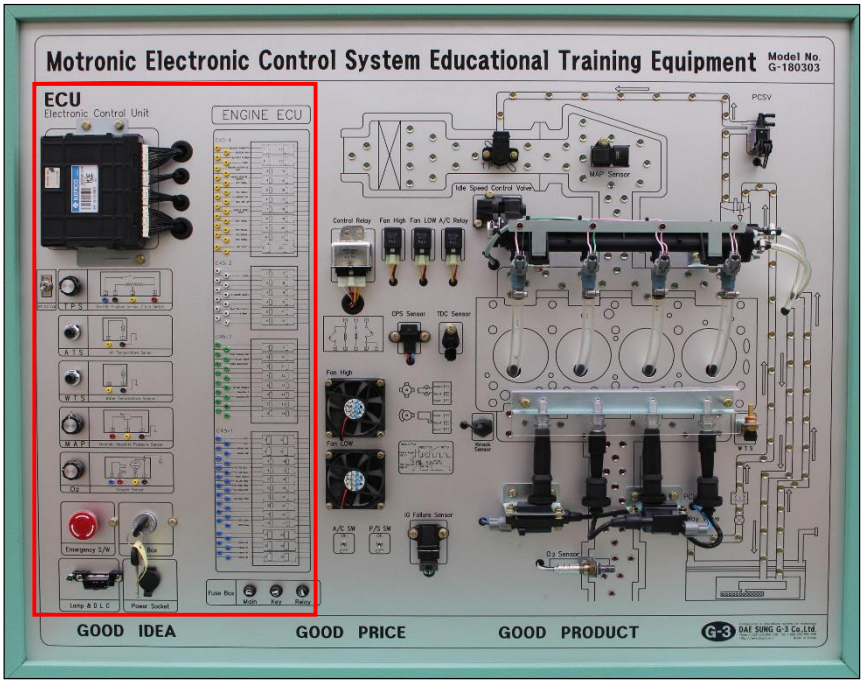
Installed on the throttle body, it detects the tread power to the accelerator cable. Output value can be adjustable through variable control knob of this equipment.

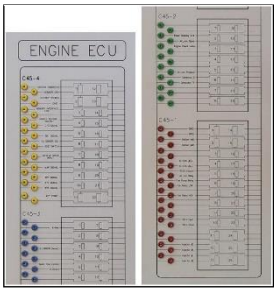
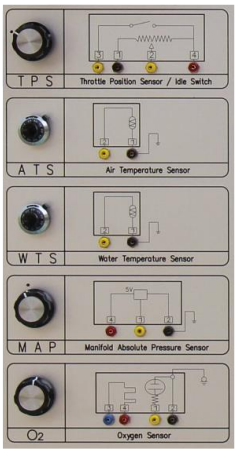
	*** Manifold Absolute Pressure Sensor (MAPS)** Installed on the air surge tank, it detects the knob of the air taken in. Output value can be adjustable through variable control knob of this equipment.
	*** Oxygen Sensor** Installed at the exhausted manifold, it detects the oxygen density in the emitted gas. Output value can be adjustable through variable control knob of this equipment.
	*** Crank Position Sensor (CKPS)** Installed on the crank shaft sprocket, it detects the engine speed. Output value can be adjustable through variable control knob of this equipment.
	*** Cam Position Sensor (CMPS)** It is installed at the side of camshaft, and detects top dead center of each cylinder. Output value can be adjustable through variable control knob of this equipment.
	*** Knock Sensor (KNS)** Installed on cylinder block, it detects the knocking of the combustion chamber. It is not used at this equipment.

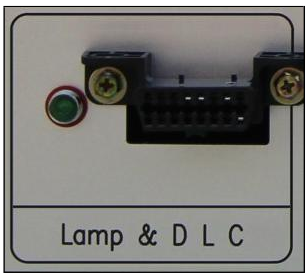
	*** IG Failure Sensor** Installed at the top of cylinder head, it detects failure of the ignition coil.
	*** Idle Speed Control Actuator (ISCA)** Installed on the throttle body, it controls the knob of air taken according to the engine condition. Only actuator operation can be verified for this equipment.
	*** Purge Control Solenoid Valve** Installed on the connection part between the air intake manifold and the canister, it induces fuel vaporized gas to air intake line, accordingto the engine condition. Only actuator operation can be verified for this equipment.
	*** Ignition Coil** The ignition coil is connected to the ignition plug, and creates an ignition voltage via engine control.
	*** Injector** Installed on each cylinder, it induces fuel into the combustion chamber. Only actuator operation can be verified for this equipment.

<table>
<tr><td>  </td><td>* Spark Plug
Spark plugs are installed in each cylinder to ignite the fuel-air mixture inside each combustion chamber. The spark plugs in this equipment create actual ignition voltage.</td></tr>
<tr><td> 
</td><td>* EMS(Engine Management System) Control Relay
This is a relay that controls engine the ECU, sensor, and actuator.
It operates when the IG key is turned on.</td></tr>
<tr><td> 
</td><td>*A/C Pressure S/W, P/S S/W
Equipped with an air-con pressure switch and power steering switch it can test the effect on the EMS when the equipment is turned on.</td></tr>
<tr><td> 
</td><td> 
</td></tr>
<tr><td>A/C PRESS SW : Key "OFF" - IDLE DUTY 45.1%</td><td>A/C PRESS SW : Key "ON" - IDLE DUTY 51.7%</td></tr>
</table>

Control Panel Section



	*** Engine ECU** It calculates output value by sensor to control each actuator.
	*** Check Terminal** Per each terminal, measuring of power supply voltage, output voltage, grounding voltage of each sensor and actuator is available.
	***Sensor Variable Knob** It can variably control output value of such devices as the throttle position sensor, the intake air temperature sensor, the cooling water temperature sensor, the intake air knob sensor, and the oxygen sensor, help verify the change of the control system in line with the output value change and trouble code output.

	*** Emergency S/W** Emergency switch that shuts off main power. To restore, turn the switch clockwise in the direction indicated by the arrows, which will raise the switch and connect main power.
	*** Ignition key** Ignition key is a kind of switch to supply power to electric system. Power is supplied to each electric system according to key position. ACC position:clock and audio, ON position: lighting system, wiper, power window, St position: starting motor.
	*** D.L.C (Data Link Connector) and Warning Lamp** This is a communication engine ECU and computer diagnosis devices. It lights up the lamp when the trouble code produced.
	*** Fuse** Located before the power switch, the fuse protects the circuit from overload. 240V 15A glass tube fuse is equipped to ensure safety and if a short occurs, check the cause of the malfunction and repair, and replace with the appropriate fuse.