

**Product Name :**  
Efi Petrol Engine Test Bed

**Product Code :**  
AutomobileLab0015



## Description :

Efi Petrol Engine Test Bed

## Technical Specification :

The Petrol Engine Test Bed should be supplied complete with EFI petrol engine and transmission with all components necessary for operation. The test bed should be especially designed for teaching diagnosis, tune up, fault finding and trouble shooting. The engine should be mounted on a strong tubular steel frame, powder coated and come complete with instrumentation and accessories thus the unit should be ready to run. Test bed must have capability to connect to a modular dynamometer system for future upgradeability.

### Specifications:

1. The trainer should have the following requirements:

- Modular frame
- Should have strong heavy duty welded tubular, powder coated frame, cross braced.
- Rubber engine mounts should be incorporated into the frame, in order to reduce vibration.
- Should be mounted on castor wheels with brake for mobility.
- All wiring should be neatly routed next to frame members for operational safety and must have number identification codes on the cables.
- Instrumentation and control system
- Should have key ignition switch, operation lights, ampere meter, oil pressure gauge and water temperature gauge.
- Throttle controller should be provided to set engine speed.
- All electrical wiring and cabling should be wrap secured for protection from weather elements, and for safety aspects

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- Cooling system
  - Should have standard water radiator matched to engine size.
  - Should have a radiator guard for safety so as to prevent accidents from the radiator fan.
  - Electrical system
  - Should be provided with 12V battery with the alternator with a voltage regulator for recharging the battery.
  - The electrical system should be fully fused protected for all aspects of the wiring harness, engine and instrumentation.
  - Fuel System
  - The EFI system should come complete with all sensors and actuator as originally fitted to the engine such as injector system, mass air flow sensor, throttle body valve, fuel pressure regulator, temperature sensor, etc. the fuel system also includes approx. 10 liter fuel tank.
  - Air Intake and Exhaust system
  - Should be provided with a matched exhaust system including exhaust manifold with silencer (muffler). The air intake should also provide with an air cleaner for use during operation.
  - Engine
  - The engine Petrol Engine, E.F.I system, 4 stroke, 4 cylinder in-line, complete with the cooling system including the radiator, fuel system with fuel tank, lubrication system including oil filter, exhaust manifold with silencer (muffler), air filter and starter motor. The Engine should come with transmission.
- The test bed should be included with operation manuals and experiment manuals which includes step-by-step chapters with theoretical information and practical student experiments

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