



Turbo Air Charging System with Air Heating (Product Code: R&DU10)



Features

- Extensive range of Experiments
- Comprehensive teaching manual
- One year warranty
- Esthetically designed and finished Rig.
- High Quality instrumentation

Product Description

The purpose of turbo charging is used for forced-induction of an internal combustion engine and to increase the density of air entering the engine to create more power. The system consists of a 3HP turbine blower connected with a variable Speed AC frequency drive. The outlet of the turbine blower is routed to the intake manifold of the engine via an Air Heating system, digital manometer, valve (V2), and finally to the engine intake manifold. A temperature sensor is also provided in the engine manifold to know the temperature of incoming air to the engine. Before using the turbo air charging system to the engine, the engines air consumption at different loads should be MAPPED. Whenever a turbo air charging system is not required Valve (V2) should be closed and valve (V1) should be in open condition.

Product / Component Specification

Turbine Blower	1HP
VFD Controller for AC Motor	Hitachi
Valve	Flow Control Valve
Heat exchanging method	Stainless steel shell and tube
Air inlet manifold	Mild steel pipe
Connecting pipe to engine	Flexible braided Hose
Mounting Frame	Mild Steel Powder coated
Heaters	Coil type
Air flow measurement	Digital Manometer
Temperature measurement	Thermocouple –Digital temperature indicator