

## **TACHOMETER TESTER**

### **Model 1790**

This test instrument is used for testing and calibration of electrical and mechanical tachometer generators and indicators. A high quality DC motor is coupled directly to a 1/4 inch square hole drive (AN Pad). This tachometer tester output can be converted to a wide variety of adapters and different tachometer interfaces. The motor drive control circuit uses SCR components and an open loop system for an economical solution to speed adjustment. The control panel consists of a five digit LED display, momentary switches for start and stop, a direction switch, a display select switch, and a ten-turn potentiometer for speed adjustment.



- 250-10,000 RPM Tachometer Testing Range
- 250-5,000 RPM Actual Drive Speed
- $\pm 1$  RPM Accuracy of Digital Display
- Bright Red 5 Digit Display
- Maximum Torque: 60 oz-in
- Low Cost
- Direct Drive
- Bi-directional
- Ten-turn Speed Adjustment
- Optional Calibration Kit Available

## SPECIFICATIONS

Model 1790	
Drive Type:	Permanent Magnet DC Motor
Maximum Torque:	60 oz-in.
Drive Outlet:	¼ inch Square Hole (AN Pad)
Shaft Speed Range:	Infinitely variable within 250-5000 RPM Bi-directional
Indicator Speed Range: (1X Setting)	250 -5000 RPM
Indicator Speed Range: (2X Setting)	500 - 10,000 RPM
Dimensions:	12.7W x 12.0L x 8.1H in. (323 x 305 x 206 mm)
Approximate Weight:	Standard: (115 VAC): 25 lbs. (11.5 Kg) Optional: (230VAC): 36 lbs. (16 Kg)
Digital Display: • Accuracy • Units • Readout	5 digit LED, quartz crystal controlled ± 1 RPM RPM (Standard), Percentage (Optional) (XXXXX) RPM or (XXX.X) Percent
Power Requirements:	IEC 60320 Power Entry Module 115 VAC, 50/60 Hz (Standard) 230 VAC, 50/60 Hz (Optional)
Operating Environment: • Temperature • Relative Humidity	40° to 90° F (4° to 32° C) 20% to 85% noncondensing

### Buyers Guide

Model Number	Part Number	Description
Model 1790	230020-6	115Vac, RPM Readout
Model 1790-230	230020-7	230Vac, RPM Readout
Model 1790-4200	230020-8	115Vac, Percentage Readout
Model 1790-230-4200	230020-9	230Vac, Percentage Readout
Model 1790 Calibration Kit	230355-1	Calibration Kit for Model 1790

Please note that in the above example, the "Percentage" models assume a rate of 4200 rpm to be equal to 100%. This rate will be determined by the Buyer per order, please change your Model number accordingly.

### Accessories

- Contact Ideal for information on Ratio Adapters
- Please note that in order to use a ratio adapter with our 1790 Tachometer Tester, an AN Pad to SAE Aero Adapter must be used. This item is our part number 222070.
- A SAE Aero 27-inch flexible shaft is also available. Part number 210965.
- Maximum RPM when using the adapters is an output (rpm at output side of adapter) of 10,000-12,000 RPM. When operated at this level for extended periods of time, or at speeds above this level, the adapter will become noisy and get warm resulting in reduced life.

For special requirements or custom specifications, contact Ideal Aerosmith, Inc.

Prices and specifications are subject to change without notice

Please state your Power Requirement when ordering

If ordering the percentage version, please state the RPM equivalent to 100% both in your description, and in the form of a Model number suffix as explained above.

Price is in U.S. Dollars

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