Customized Test System for Starter Motors

APPLICATION

This CMTS is designed for starters with 12-volt DC motors, direct drive output for up to 12,000 rpm, up to 100 lb-in (11.3 N-m) and 750 amps peak current draw. Starter motors are very powerful for short periods of time and draw very high current.

COMPONENTS

- Heavy-Duty Equipment Rack: with plug panel
- Dynamometer Table
- HD-800 Hysteresis Dynamometer
- DSP6001 High-Speed Programmable Dynamometer Controller
- M-TEST 4.0 Motor Testing Software
- 6510e Single-Phase Power Analyzer
- Power Supply (830 A)
- PC, Monitor, Keyboard

CUSTOM FRONT PANEL

In the front of the equipment rack, a three-position power lead plug panel is provided to select the appropriate current shunt for the most suitable measurement range.

FUTURE MODIFICATIONS

This system is expected to have a second fixture added in the near future for testing high torque motors used to shift automatic 4-wheel drive transmissions into 4WD at the push of a button. Magtrol will then add a PB115 Magnetic Powder Dynamometer to the existing CMTS.