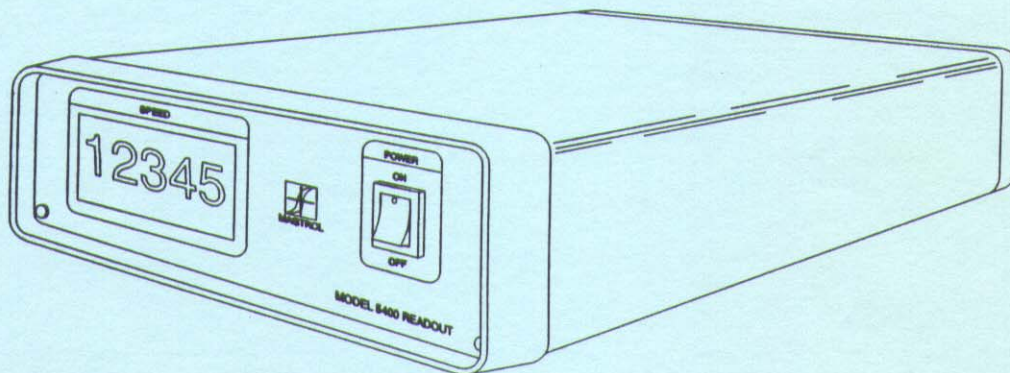


MAGTROL

Model 5400 Tachometer



Operating Instructions

Model 5400 Digital Tachometer

Magtrol Model 5400 is a digital speed readout for Magtrol Dial Weight Dynamometers equipped with an accessory 7116 speed transducer. The unit provides an accurate display at any speed the dynamometer is capable of.

Specifications:

Input power: 120/240 VAC, 48-63 Hz, 6 VA Maximum. Incoming line is EMI filtered.
Speed range: 0-99,999 RPM. The usable limit is the speed rating of the dynamometer in use.
Display: 5 digits, .56" high, red LED with leading zero blanking above 100 RPM. One second conversion and display rate.
Accuracy: Better than .02% of reading.

Incoming Inspection:

Upon receipt of the instrument, remove from the shipping container and inspect the unit for obvious damage. Please retain the packing material until an operational check has been performed. In the unlikely event of shipping damage, notify the carrier and Magtrol immediately!

Operational Checkout:

- Check to see that the line voltage selector has been set properly for the destination power source. The default setting for the United States is 120 V; the default setting for overseas customers is 240 V, unless otherwise instructed. Change the setting by removing the line cord, sliding the clear plastic cover to the left, pulling out the selector card, and replacing it so that the correct voltage is seen by the operator. Please be sure to install the correct fuse when changing the voltage; 120 V - 1/2 amp slow blow, 240 V - 1/4 amp slow blow.
Note: choose only 120 V or 240 V. Choosing 100 V or 220 V will cause the instrument to not function.
- Replace the line cord and plug into your power source.
- Connect the dynamometer speed transducer to the 5400 by inserting the six pin Cinch plug into the connector on the rear panel.
- Turn the instrument on via the front panel switch. The display should light up and indicate " 000".
- Spin the dynamometer shaft by hand and observe that the digital display indicates a count. If a count is displayed, then it is assumed that the instrument is functioning properly.
- If the unit is inoperative, contact Magtrol Customer Service for instructions.

Functional Description:

The 5400 is essentially a frequency counter, using a Harris ICM7226A Universal Counter chip, to decode the 60 pulse per revolution signal from the speed transducer attached to the dynamometer shaft. The incoming speed signal is a TTL level square wave; used with a one second time base, it gives a direct conversion to RPM.

On the rear panel of the 5400 are two connectors, other than the power input module. The rectangular Cinch connector is for connection to the speed transducer on a Dial Weight Dynamometer and has the following pinout:

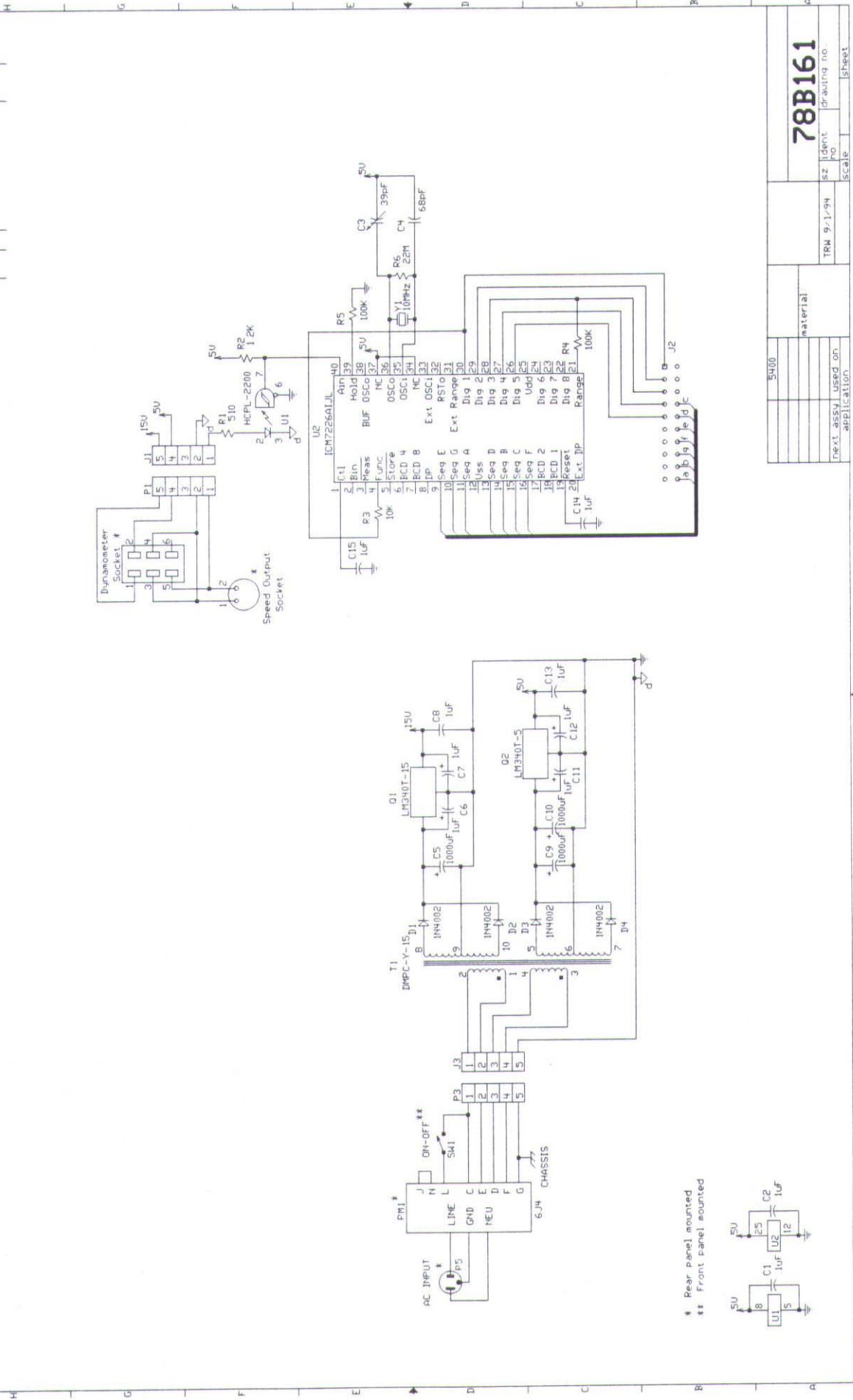
1 - +15VDC
2 - +5VDC
3,4 - Common
5 - Signal input
6 - NC

The round DIN connector is for connection to a Magtrol Speed Stabilized Power Supply for closed loop speed control and has the following pinout:

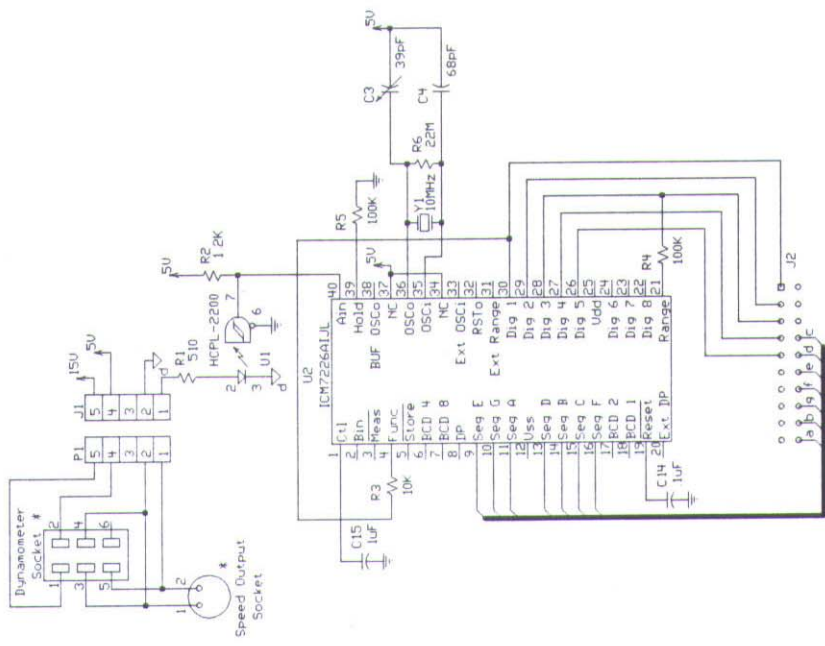
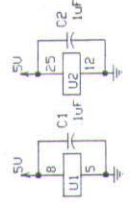
1 - Common
2 - Speed output (60 pulses per revolution, TTL)
3,4,5 - NC

zone	tr	description	date	approved

1 2 3 4 5 6 7 8



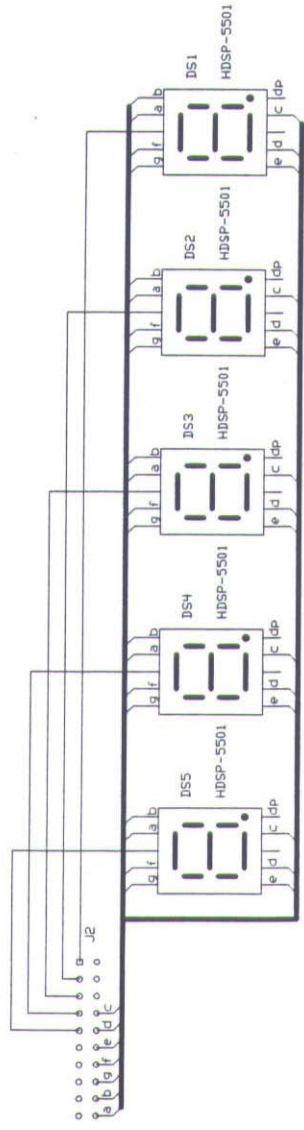
* Rear panel mounted
 ** Front panel mounted



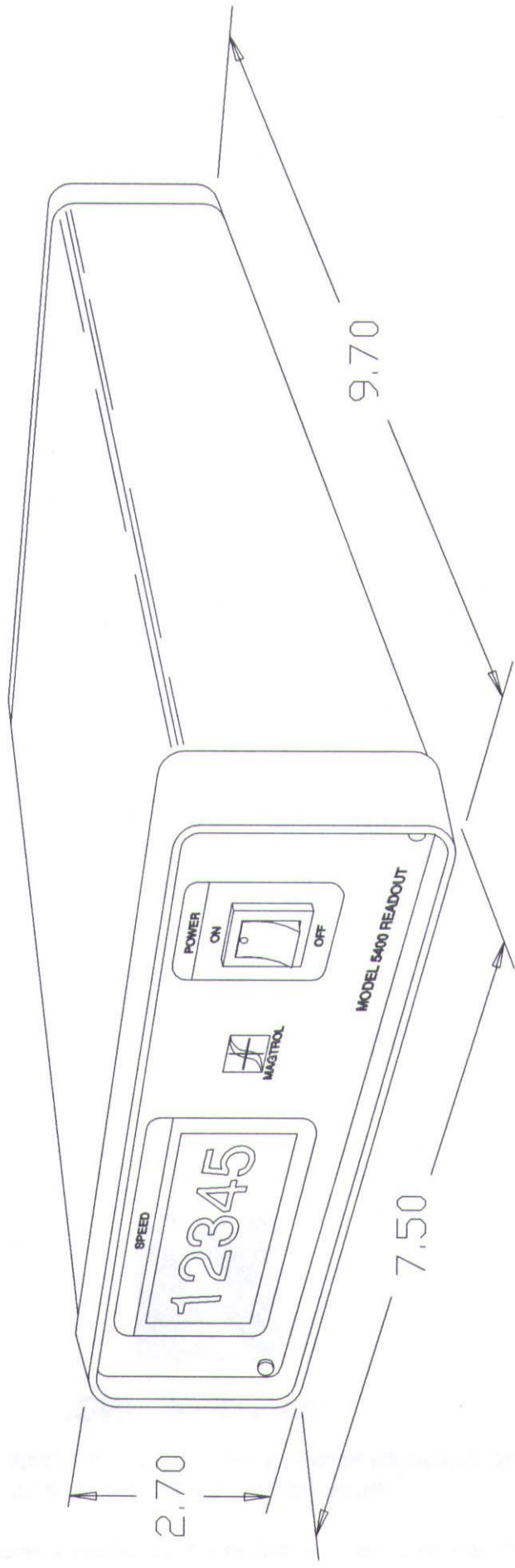
TRM 9/1/94	Ident no.	78B161
Scale	Sheet	
Material	next assy. used on	application

2 3 4 5 6 7 8

zone	lir	revisions	date	approved



5400	material:	78B164
	next assy used on	ident no.
	application	drawing no.
		scale
		sheet



WEIGHT = 3.5 LBS.
DIMENSIONS ARE IN INCHES