Control Troubleshooting Guide

(15, 125, 250, 500 Series Controls ONLY)

Perform a visual inspection, looking for burn marks, burnt components and blown traces before testing *Before beginning testing please be sure the fuses in the drive are good

The following should be checked with the drive disconnected from AC power and the motor. Use the continuity (diode checking) function of your multi-meter. A short (indicated by a solid beep, not a momentary beep) on any of the below indicates a drive that is in need of repair.

CHECK FOR SHORTS

	Pin Locations			
Meauring Points	**15DV Series**	**125D Series**	**250G Series**	**530B Series**
AC N to AC L	AC2 to AC1	P1-1 to P1-2	P1-10 to P1-11	
-A to +A	-ARM to +ARM	P1-4 to P1-3	P1-4 to P1-5	P1-4 to P1-5
-A to AC N	-ARM to AC2	P1-4 to P1-2	P1-4 to P1-10	
-A to AC L	-ARM to AC1	P1-4 to P1-1	P1-4 to P1-11	
+A to AC N	+ARM to AC2	P1-3 to P1-2	P1-5 to P1-10	
+A to AC L	+ARM to AC1	P1-3 to P1-1	P1-5 to P1-11	
-A to POT HI	-ARM to SPEEDPOT HI	P1-4 to P1-6	P1-4 to P1-3	P1-5 to P2-5

Table 1 *Continuity Check Points*

If none of the above measure as a short circuit, connect the speed pot, AC power and the motor to the drive per the instruction manual. Set your multi-meter to the DC voltage mode and measure the following:

CHECK FOR PROPER VOLTAGE

	Pin Locations				Expected Measurement (Approximate)	
Meauring Points	**15DV Series**	**125D Series**	**250G Series**	**530B Series**	**120VAC Input**	**240VAC Input**
-F to +F	-FIELD to +FIELD	P1-4 to P1-5	P1-6 to P1-7	P1-6 to P1-7	100VDC	200VDC
-A to POT HI	-ARM to SPEEDPOT HI	P1-4 to P1-6	P1-4 to P1-3	P1-5 to P2-5	12VDC	12VDC
-A to POT LO	-ARM to SPEEDPOT LO	P1-4 to P1-8	P1-4 to P1-1	P1-5 to P2-3	Varies w/ MIN pot	
-A to POT WIPER	-ARM to SPEED POT WIPER	P1-4 to P1-5	P1-4 to P1-2	P1-5 to P2-4	Varies w/ SPEED POT	
-A to +A	-ARM to +ARM	P1-4 to P1-3	P1-4 to P1-5	P1-4 to P1-5	45-60VDC (open motor) 0-90VDC (good motor)	90-140VDC (open motor) 0-180VDC (good motor)

Table 2 *DC Voltage Measurement Points*