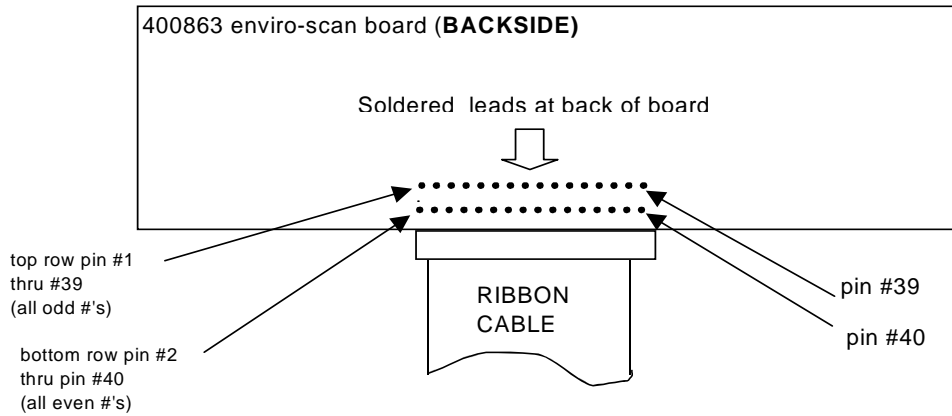


Type(optional)	Document Name (optional)	
8400 & 8500 ULT Freezers	Troubleshooting the 400863 Display Board	July 10, 2017

Troubleshooting the 400863 enviro-scan board

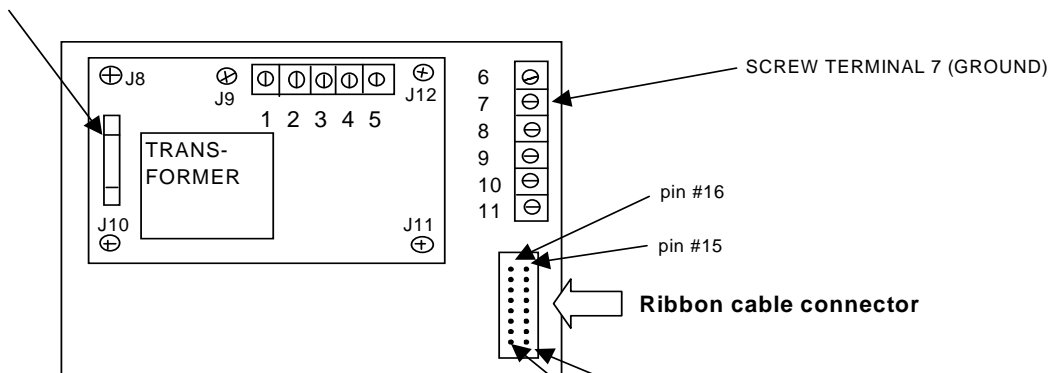


ENVIRO-SCAN SUPPLY VOLTAGE CHECK

Check pin 32 to pin 34 (Regulated 13vdc)

Check pin 32 to pin 39 & 40 (Unregulated power @ approx. 13vdc)

1 AMP FUSE



SCREWS SECURING BOARDS TO GETHER ARE JUMPERS BETWEEN BOARDS.

J8 & J9 - 24VAC POWER SUPPLY TO LOWER BOARD

J10 - 5VDC POWER SUPPLY TO TOP BOARD

J11 - POWER CONNECTION TO HS RELAY (5vdc - Compressor off. 0vdc Compressor on.)

J12 - POWER CONNECTION TO LS RELAY (5vdc - Compressor off. 0vdc Compressor on.)

REFERANCE ALL READINGS FROM RIBBON CABLE TO SCREW TEMINAL 7 (GROUND)

Pin #1 - Battery charge enable signal. (@.7vdc the battery will charge. @8vdc battery will not charge.)

Pin #7 - Board power to enviro-scan. (approx 13.88vdc on line power or 6.5 vdc battery power.)

Pin #8 - Control set point signal. (-.12vdc @ set of -89C. +1.5vdc @ set of -15C)

Pin #11 Line power or battery power signal. (0vdc - boards are running on line power.

5vdc - unit running on battery power.)

Unity Lab Services

A Thermo Fisher Scientific Brand