

ULTRASONIC BOARD CALIBRATION (P/N 9060)

FOR E SERIES MACHINES

1. EQUIPMENT REQUIRED:

- Oscilloscope with high impedance, low capacitance probe
- Multimeter

NOTE! All following measurements are made with respect to circuit common ground- the heat sink that the board is mounted to.

2. DC VOLTAGE VERIFICATION:

- Turn on bonder main power.
- Using DC volt meter, verify the DC voltages at the test points as follows:
 - TP2 for +12 VDC
 - TP3 for -12 VDC
 - TP5 for 0 VDC
 - U6 pin 20 for +5 VDC

3. OSCILLISCOPE CALIBRATION:

- Disconnect transducer at connector J2.
- Connect the oscilloscope probe to TP6.
- Verify that the signal is a square wave. The amplitude of the signal is about 5Vp-p.
- Adjust potentiometer RT2 until the frequency is 110.0KHz, \pm 0.3KHz.

4. FINAL CHECK:

- Remove all test leads.
- Reconnect transducer to J2.
- Reset the machine (turn the power off and then back on. An ultrasonic test is performed at power up. If no error message is displayed then the test was successful.