

## Phase Dynamics Troubleshooting Guide Sheet

Date \_\_\_\_\_ Customer \_\_\_\_\_

Location \_\_\_\_\_ Phone Number \_\_\_\_\_

Unit Serial Number \_\_\_\_\_ On white EPROM label or on Butt End of Flow Through  
or Flange of Insertion Analyzer

Oscillator Serial Number \_\_\_\_\_ (On the back of the Oscillator Housing)

1.) Switch to Technician Mode (dip switches to the left) take the following:

Frequency = \_\_\_\_\_ MHz      Vref = \_\_\_\_\_ Volts  
Water Cut = \_\_\_\_\_ %      Temperature = \_\_\_\_\_

2.) Step through the Technician Menu and write down the following:

Cal Factor = \_\_\_\_\_ %      P1= \_\_\_\_\_ Volts    P0= \_\_\_\_\_ Volts

3. Measure the following voltages at the Main Electronics Terminal strip:

**Terminals**      ***This Table Is For A 24 VDC INPUT UNIT***  
**GND POS**

Name	--	+	Measured Voltage	Expected Voltage
5 Volt Power	31	32		+4.8 to + 5.2 VDC
15 Volt Power	31	30		+14.7 to +15.3 VDC
Heater Power	29	28		+20 to +32 VDC
Ground Sense	31	27		+0.00 to +0.40 VDC
Vincid	31	26		+0.00 to +4.95 VDC
Vref	31	25		+0.20 to +4.95 VDC
Osc. Select	31	17		+1.25 to +8.50 VDC
Vtune	31	16		+0.00 to +12.5 VDC
Ext. Vtune	31	15		+0.20 to + 15 VDC
DC+ to DC -	DC -	DC+		+20 to +32 VDC
DC - to Earth	Earth	DC -		-0.5 to + 0.5 VDC
DC - to Chassis	DC	Chassis		-0.5 to + 0.5 VDC

### ***This Table Is For An AC INPUT UNIT (120 or 240 VAC)***

**Terminals**  
**GND POS**

Name	--	+	Measured Voltage	Expected Voltage
5 Volt Power	31	32		+4.8 to + 5.2 VDC
15 Volt Power	31	30		+14.7 to +15.3 VDC
Heater Power	29	28		+20 to +32 VDC
Ground Sense	31	27		+0.00 to +0.40 VDC
Vincid	31	26		+0.00 to +4.95 VDC
Vref	31	25		+0.20 to +4.95 VDC
Osc. Select	31	17		+1.25 to +8.50 VDC

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Vtune	31	16		+0.00 to +12.5 VDC
Ext. Vtune	31	15		+0.20 to + 15 VDC
AC Line-Neutral	Line	Neutral		
AC Line-Ground	Line	Earth		
AC Neutral-Gnd	Neut	Earth		
AC Line-Chassis	Line	Chassis		

4.) Describe below the error conditions and any other problems that you may find.

ERRORS Displayed \_\_\_\_\_

Comments: