### 4. Gauge Installation

- Transducer tube may be installed in any orientation. However, if condensation is likely to occur, then port should be orientated downward.
- When installing 1/8" NPT style transducer tube, use the 7/16" wrench flats as shown.
- Attach cable.
- With the vacuum chamber at atmosphere, turn on the power supply (typically +24 VDC. Gauge is now reading pressure. The pressure in Torr as read by channel 1 is given by, P = 100 x V where V is the voltage between pins 5 and 6.



- For best accuracy, the gauge should now be zeroed. Pump the vacuum system down to low (10<sup>-6</sup> Torr) pressure if possible. Ideally the gauge should be operated in this condition for one hour.
- Place the HPM-2002-OBE in the "CAL" mode by using the "SELECT" button. Using a small flat head screwdriver, rotate the "ADJUST" rotary encoder until the unit flashes between "0.0" and "-0.0".
- Return to the "RUN" mode by using the "SELECT" button.
- \*Similary the pressure in mTorr as read by channel 2 is given by  $P = 100 \times V$  where V is the voltage between pins 7 and 6.

# HASTINGS INSTRUMENTS

# MODEL HPM-2002-OBE QUICK START GUIDE

README FIRST!

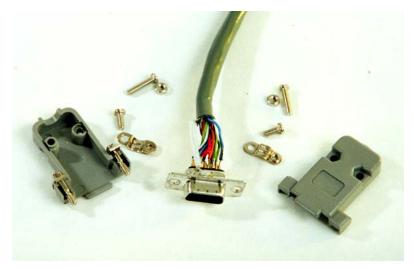
# 1. Unpacking and Inspection



• Unpack and inspect all items for any obvious signs of damage due to shipment. Immediately advise the carrier who delivered the shipment if any damage is suspected.



### 2. Cable Connections



Pin No.	Color Sugested	Description
1	Green	Setpoint #1 Output (Hi)
2	Blue	Setpoint #2 Output (Lo)
3	Red	Power Input (9-36 VDC)
4	Black	Power Ground
5	White	Analog Out (1000 Torr)
6	White/Black	Analog Ground
7	Red/White	Analog Out (1000 mTorr)
8	Black/White	Digital Ground
9	Orange	Remote Zero
10	Green/White	NC
11	Blue/White	NC
12	Red/Black	NC
13	Orange/Black	NC
14	Green/Black	Rx In (Internal use)
15	Blue/Black	Tx Out (Internal use)

- Wire the 15-pin "D" connector according with the wiring table ٠ using 24 AWG or other suitable wire.
- Using a unipolar DC power supply, set the desired operating ٠ voltage within the range of 11.5 VDC to 30 VDC.

## 3. OBE Module Installation



• Note that the connector is keyed.

Connect the OBE

•

• A finger tight connection is all that is required for adequate operation.

