

## Procedure for Identifying Large Gauge Problems (Comparing Channels on the Same Gauge)

The following procedure is designed to identify a large problem with a gauge such as a failing pressure sensor, and should be conducted periodically. The procedure involves using a Blower Door or Duct Blaster® fan to generate a pressure signal, to measure the pressure signal on both channels of a single gauge, and to then compare the readings with each other.

**Note:** This procedure does not replace the need for gauge re-calibration every two years.

1. Connect a piece of tubing from the pressure tap on a Blower Door or Duct Blaster fan to a “T” tubing connector (one is provided with each digital pressure gauge).
2. Connect the open ends of the “T” tubing connector to the **Input Taps** on Channel A and Channel B of the gauge being tested.
3. Turn the gauge **ON** and leave it in the **PR/PR Mode** (gauge is measuring pressure in Pascals on both Channels) with a **1 Second Time Average**.
4. Turn up the fan speed controller on the Blower Door or Duct Blaster fan until the pressure readings on the gauge are approximately -50 Pa (anywhere between -45 and -55 is fine).
5. Change the time average setting to **Long Term Average** using the **TIME AVG** button.
6. Wait approximately 30 seconds for the readings to completely stabilize, and then compare the two readings to each other. The readings should be within 1% of each other (for example if Channel A reads -49.6 Pa, then Channel B should read between -49.1 Pa and -50.1 Pa).
7. With the fan continuing to run, move the tubing from the **Input Taps** on Channel A and Channel B to the **Reference Taps**. After the tubing is attached, press the **START** button to begin a new long-term average reading. Wait approximately 30 seconds for the readings to stabilize and once again compare the two readings to each other.
8. If the difference in readings from either comparison is larger than 1%, send your gauge to TEC to determine the cause of the problem.

**Note:** You can re-start the long-term average reading by pressing the **START** button. This clears the long-term average buffer, re-zeros the pressure sensors and starts a new measurement period.



“T” tubing connector



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