

PG7000 VACUUM GAUGE LINEARIZATION TABLE UPDATE

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2004 MAY 10

DESCRIPTION

DHI piston gauge models PG7601 and PG7607 feature an on-board sensor to measure the reference vacuum under the bell jar. A lookup table is utilized internally to convert the raw output of the sensor into pressure. PG7000 embedded software version 2.04a includes a revised lookup table to improve the linearity of the reference vacuum measurements.

APPLICATION

The vacuum lookup table upgrade described in this technical note is available in PG7601 or PG7607 systems that are upgraded to embedded software version 2.04a or later from version 2.04 or earlier. PG7000 systems delivered from the factory with embedded software version 2.04a or later incorporate the improved vacuum lookup table by default. To display the current version of embedded software, press and hold **[ESCAPE]** on the PG7000 terminal.

PROCEDURE

Refer to the PG7000 Operation and Maintenance Manual for embedded software load procedures. The new vacuum lookup table is NOT automatically activated when PG7601 or PG7607 is reloaded to embedded software version 2.04a or later. The following procedure must be performed to activate the new vacuum lookup table after successfully reloading the PG7000 embedded software:

Enter the PG7000 diagnostic menu by simultaneously pressing and holding **[±]** and **[ESCAPE]** on the PG7000 terminal.

1. Select <1mode> in the diagnostic menu.
2. Set to mode 1 by entering "1" and then **[ENTER]**.
3. Press **[SPECIAL]**.
4. Select <9Reset>.
5. Select <9Factory>.
6. Press **[←]** once so that "Update VAC cal table" is displayed.
7. Press **[ENTER]** and "Update VAC cal table" is displayed again.
8. Press **[ENTER]** and the system restarts.

The vacuum table upgrade process is permanent. The improved vacuum lookup table will remain active if the system is reset or the PG7000 is reloaded with any other embedded software version. User and factory level calibration coefficients are not modified by the upgrade process. Because the vacuum measurements are directly affected by the implementation of the new lookup table, it is recommended that an as received verification calibration be performed before applying the new vacuum table in addition to an as left after calibration. Refer to the PG7000 Operation and Maintenance Manual for reference vacuum sensor calibration procedures.

NOTES