

Group: **Aftermarket Products**

Part Number: **IM 784**

Effective: **November 2003**

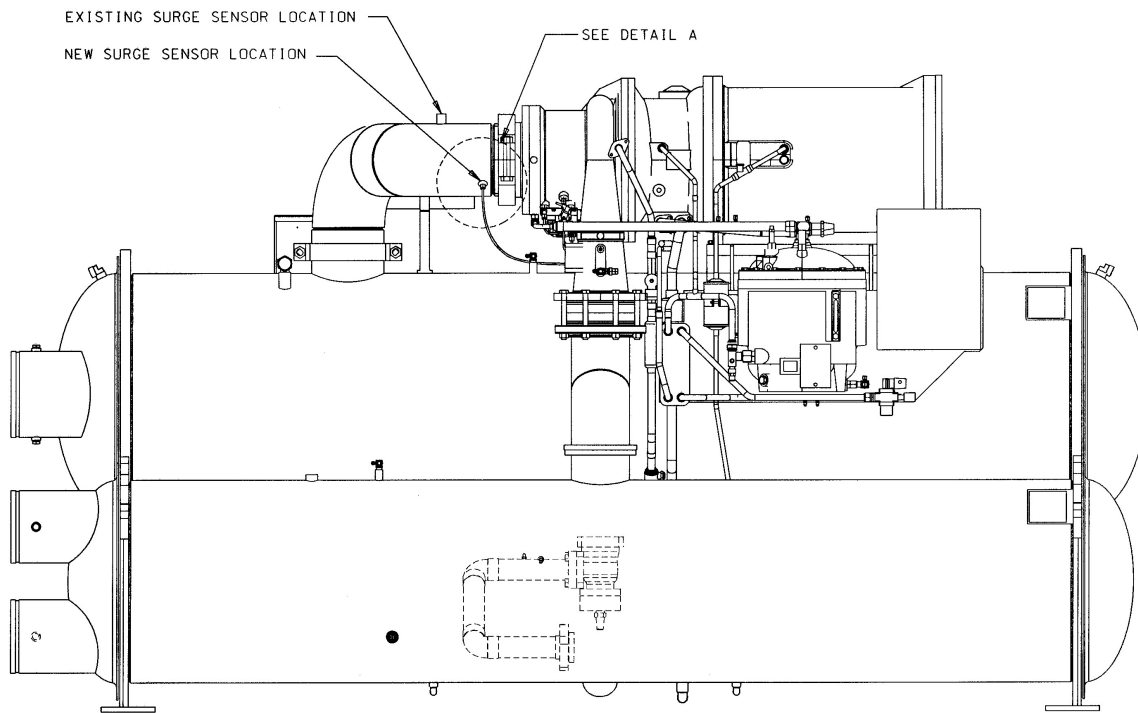
Supersedes: **New**

Field Installation Procedure for Enhanced Surge Protection (Suction Temperature Sensor), Kit Part Number 300040244

| Ref. Des | Description | Part Number |
|----------|-----------------------------------|-------------|
| 100 | ¼ inch MPTF Swagelok, S-400-1-4W | 735043918 |
| | ¾ inch NPTF Pipe Plug | 049760905 |
| | Pipe Coupling, ¾ inch | 7350311434 |
| | Warning Label | 330648701 |
| | Sensor, Thermistor 3K-MR (30 ft.) | 330419603 |
| | Installation Manual | IM 784 |

The procedure consists of relocating the suction sensor location (if necessary) on some compressors (See Figure 1), installing a new sensor, and downloading and installing new software.

Figure 1. Acceptable Sensor Location



REAR VIEW OF UNIT

CE087 SHOWN - PROCEDURE SIMILAR FOR ALL UNITS

If the sensor is in an acceptable location, i.e. within one inch of the edge of the Victaulic® coupling, install the new sensor in the existing well and install new software. If not, begin with Step 1.

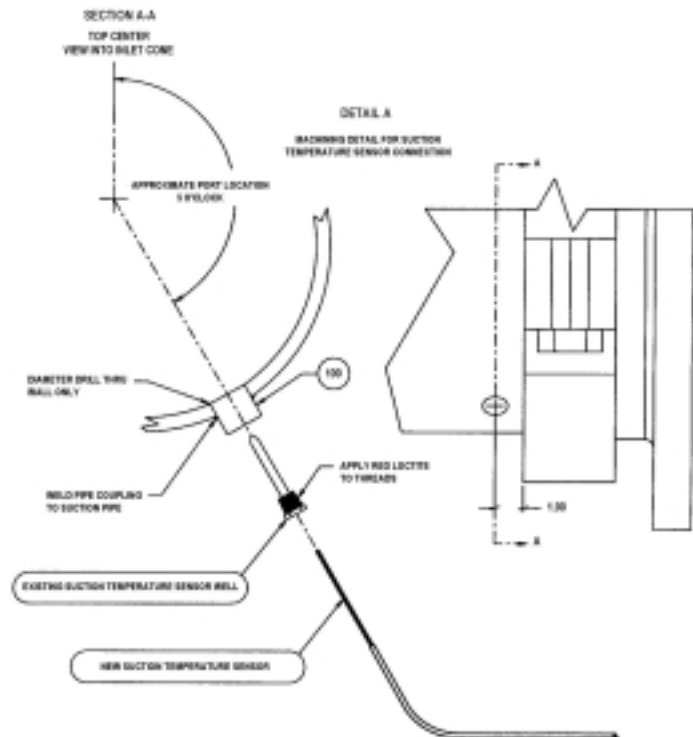
 **WARNING**

System pressure must be 0 psig before removing the sensor. The sensor and/or gas can be ejected if the system is under pressure, resulting in property damage or severe personal injury. This kit must be installed by trained, experienced technicians only.

Relocate Sensor

1. Remove the charge from the compressor following EPA or related government regulations. The related system pressure must be 0 psig to perform this modification.
2. Remove the existing temperature sensor and well.
3. Remove the suction elbow from the chiller unit.
4. Locate the center of the new port approximately 1 inch (2.5 cm) from the Victaulic coupling and at the five o'clock position as viewed looking into the inlet cone.

Figure 2, Detailed Sensor Location



Preferred Method

1. Drill a 1.44 hole as shown.
2. Weld the 3/4 NPT pipe coupling in the new location.
3. Install suction temperature well (with Red Loctite®) and insert new sensor.
4. Plug the original hole with the 3/4-inch plug provided (use Red Loctite) and go to step 6.

Alternate Method

1. Drill a 7/16-inch diameter thru-hole at the center of the port.
2. Thread with a 1/4 NPTF (dryseal) tap. Do not use a NPT tap.
3. Insert the Swagelok 1/4 tube x 1/4 male pipe connector (Swagelok PN B-400-1-4BT-male connector bore through) using Red Loctite.
4. Insert the temperature probe so that it extends 1/2-inch inside the suction pipe.
5. Attach warning label (included in the kit) so that it is visible.
6. Re-attach the suction elbow to the unit.
7. Leak check and evacuate per standard procedure.

Install New Software

Download CFGUU04K software version, install in unit and configure.

This document contains the most current product information as of this printing. For the most up-to-date product information, please go to www.mcquay.com