

PRESSURE TESTING

C PRESSURE GAUGE

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2.03 Early gauges were equipped with a glass crystal. Latest gauges are equipped with a plastic crystal to minimize the crystal breakage problem.

2.04 While the gauge has been substantially constructed it should be handled with care. Heavy shocks or jars may impair its accuracy. The usual indication of inaccuracy is in failure of the pointer to register at zero when the gauge is not under pressure, or failure of the pointer to move freely when pressure is applied.

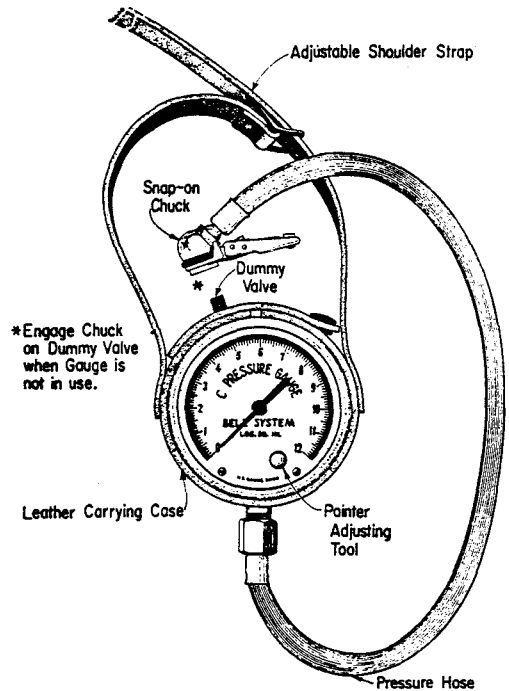
1. GENERAL

1.01 This section describes the C Pressure Gauge used in pressure testing work and covers the method of adjusting and calibrating the instrument. This section has been reissued to include information on replacement parts and to advise that new gauges are equipped with plastic rather than glass crystals.

2. DESCRIPTION AND USE

2.01 The C Pressure Gauge has a range of 0 to 12 pounds per square inch (psi) and is graduated in 0.05 psi divisions. It is intended for use in checking cable pressure in gas systems where a relative accuracy of ± 0.05 psi is adequate.

2.02 The gauge weighs 1-1/4 pounds, is cylindrical in shape and, when enclosed in its leather case, has over-all dimensions of 4-1/4 inch diameter and 3-1/16 inch depth. It is equipped with an 18-inch length of rubber hose having a snap-on chuck for attachment to valves. It is furnished with a detachable leather carrying case having an adjustable shoulder strap. A dummy valve on the carrying case is for engaging the chuck, to protect it from dust and dirt, when the gauge is not in use.



C PRESSURE GAUGE
Fig. 1

NOTICE
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 ELECTRIC - Proprietary

Pursuant to Judge Green's Order of August 5, 1963, beginning on January 1, 1964, AT&T will cease to use "Bell" and the Bell symbol, with the exceptions as set forth in that Order. Pursuant thereto, any reference to "BELL" and/or the BELL symbol in this document is hereby deleted and "expunged".

2.05 The gauge may be used in any position but it should always be faced squarely in reading to avoid error due to parallax. Tap the gauge slightly each time a reading is made. While the dial graduations are in increments of 0.05 psi, readings of 0.025 psi can be readily interpolated.

2.06 In taking pressure gradient readings, always use the same gauge for any one series of measurements.

2.07 It is recommended that the gauge be checked with a manometer about every three months or whenever there is any indication of inaccuracy which cannot be corrected by making a "zero" adjustment of the dial pointer.

3. ADJUSTMENT AND CALIBRATION

3.01 In adjusting the gauge, open the button snap on the leather carrying case, unscrew the retaining ring and remove the plastic crystal. Unscrew the Pointer Adjusting Tool from the dial face. Insert the tip of the tool in

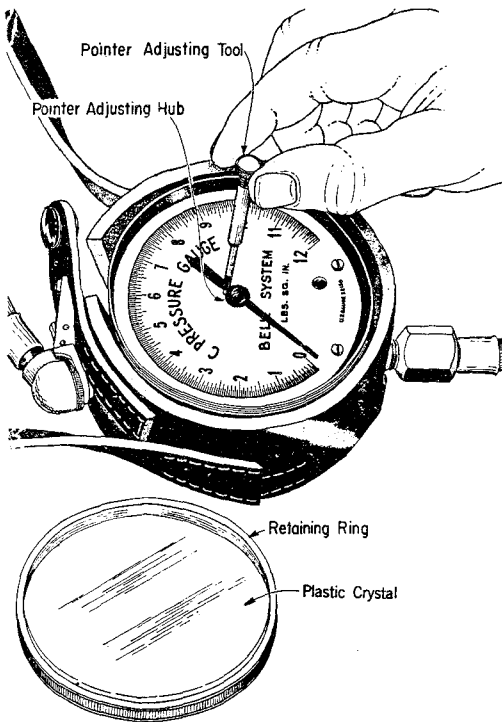


Fig. 2

the hole in the dial pointer. The geared portion of the tool will then be engaged with the teeth on the pointer adjusting hub. Adjust the dial pointer for zero register by turning the pointer adjusting tool clockwise or counterclockwise as may be required.

3.02 In making a calibration check, the following tools and materials are required:

Nitrogen Cylinder with Pressure Regulator Manometer

1/8 in. x 1/8 in. x 1/8 in. Brass Tee having female pipe threads and equipped with F Pressure Testing Valves

3.03 Connect the gauge, manometer and regulator hose to the valves on the brass tee. Adjust the regulator to an outlet pressure of about 10 psi. Disconnect the regulator hose and allow the pressure to stand for about a minute to ensure that the connections are gastight.

3.04 Lower the pressure by releasing the gas slowly at the free valve until the manometer reading is 9 psi. Tap the gauge and read the pressure, making note of any error in the gauge readings. Lower the pressure and take similar gauge readings at manometer pressures of 6 and 3 psi. If any error of 0.05 psi or greater is observed, and the pointer has been adjusted for zero register, the gauge should be returned for repair.

4. REPLACEMENT PARTS

4.01 The following replacement parts are available for the C Pressure Gauge:

- (1) Pressure Hose (complete with fittings)
- (2) Crystal (plastic)
- (3) Retaining Ring

4.02 Orders for replacement parts should be worded as follows: (Quantity) (Name of Replacement Part), for C Pressure Gauge.

4.03 The pressure hose is equipped at one end with a snap-on chuck and at the other with a metal ferrule, gland and nut. Before placing a new hose, clean the male pipe threaded hose fitting on the gauge and coat the threads with a pipe thread compound. To avoid serious damage to the interior of the gauge take particular care that none of the compound gets into the bore of the pipe threaded fitting.