



SEAL GAUGE UNIT

PAPER MACHINE COMPONENTS, INCORPORATED
Miry Brook Road, Danbury, Connecticut, U.S.A 06810

INSTALLATION & OPERATING DATA

CUT HOLE FOR NIPPLE : Drill or cut a hole slightly smaller than the nipple outside diameter ($1\frac{7}{8}$ "(48mm)), in the side or top of pipe where the nipple is to be located. The hole should be close to a flange or opening so that the inside wall of the tank can be cleaned up after the nipple is welded in place. File the hole so that the stainless steel nipple fits tightly. The fit must be snug otherwise the nipple will distort when it is welded in place.

NOTE : *PMC hole saw kit LT-HSK includes a ground Marvel hole saw, mandrel, drill, guide dowel, SCR speed control, cutting oil concentrate applicator and case. PRICE Needs $\frac{1}{2}$ " electric drill. Customers may purchase hole saws locally, $1\frac{7}{8}$ " O.D. (48mm) is required. The saw teeth should be continuously cooled while cutting the hole with a water soluble cutting oil.*

WELD NIPPLE IN PLACE : Position the nipple and transmitter with set screws installed, into the hole so that diaphragm on the transmitter is flush with the inside wall of the pipe and the **gauge faces the operator**. Mark the nipple both inside and out. On small diameter pipes (4" and less) the nipple and transmitter will protrude into the pipe due to the crown of the pipe. **(The transmitter must be removed from the nipple before welding.)** Weld the nipple in place with either Heliarc (inert gas arc process) or with arc and stabilized 316 stainless steel rods. This will prevent carbide precipitation and subsequent corrosion at the weld.

GRIND NIPPLE FLUSH : Finish grind the nipple flush with the inside of the tank. Clean up the inside edge of the nipple at the tank end with a fine half round file. Remove all the burrs but do not make any ridges or grooves on the inside nipple wall, otherwise material inside the tank will leak past the O-ring seal.

INSTALL TRANSMITTER : Capsules of Dow Silicone grease (Valve Seal) are furnished with each order. Apply a thin wipe to the O-ring, diaphragm ring, edge of the nipple, and the remainder to the inside wall of the nipple at the bottom end where it connects to the pipe wall. The purpose of applying silicone grease at this point is to prevent galvanic cell corrosion between the diaphragm ring and the nipple wall. Silicone grease is stable from -40°F to 500°F and does not readily dissolve. Install the transmitter and locate with set screws. The transmitter diaphragm should be flush with the inside wall of the pipe if the nipple was properly positioned in the first place.

NOTE : *Avoid contact with eyes when using silicone grease.*

ADDITIONAL INFORMATION

CAUTION: Do not use a pipe wrench on the body of the transmitter during installation. The fit between nipple and transmitter should be free enough to permit installation and removal by hand. Avoid excessive clearance.

SERIAL NUMBER: Each transmitter is marked on the end opposite the diaphragm. Please refer to this number when ordering parts.

EXTREMELY IMPORTANT: A white cap has been installed over the diaphragm to protect it during shipment and installation. **Keep this cap in place until the final tubing connections are made.**

GAUGE REPLACEMENT

- Process pressure should be zero.
- Unscrew existing gauge and completely fill seal body hole with *correct** oil.
- Remove plastic tip cap from replacement PMC gauge, thread in place and tighten with wrench.
- Turn gauge to face operators.
- If gauge pointer reads above zero, remove gauge and body from nipple, loosen bleed screw and express oil *SLOWLY* until zero is reached. Lock screw and replace body in nipple.

*Use Dow 200 oil for all normal temperature and food installations.

*Use Dow 550 silicone oil for high temperature (400°F - 200°C) installations.

DIAPHRAGM REPLACEMENT

Body, or Body and Gauge should be returned to agent or factory for diaphragm replacement. All air must be evacuated from body cavity and replaced with oil. This requires special fixtures and vacuum pump. Replacement bodies with correct diaphragm, O-rings, and seal oil available from stock. Specify serial number and type code when ordering.

GAUGE ADJUSTMENT

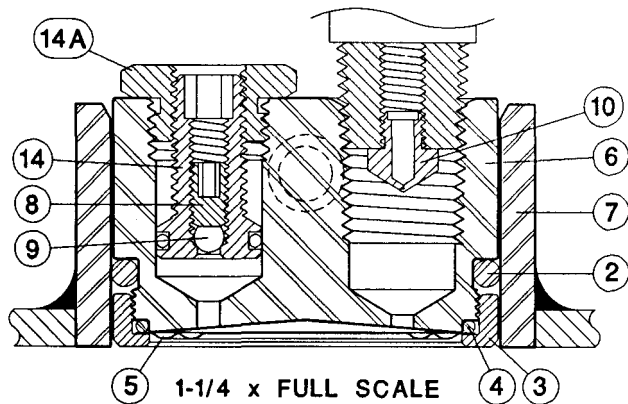
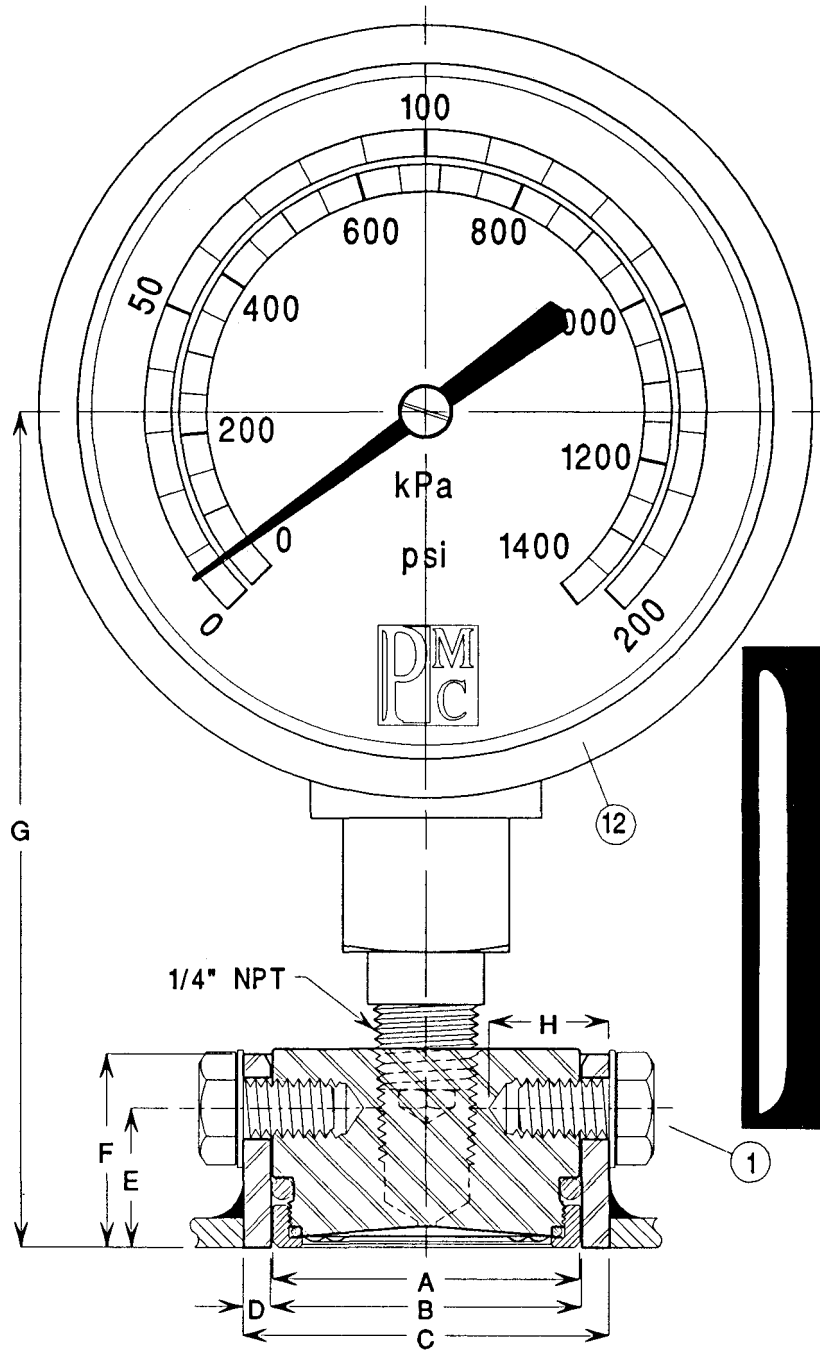
Use a 3/16 Allen wrench to adjust piston assembly (item 14 on drawing #1210-A and 1212-A) in or out to re-zero pointer at zero process pressure. Seal gauge units may be returned to PMC for recalibration and repairs.

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Danbury, Connecticut, U.S.A. 06810

Tel. (203) 792-8686 Fax (203) 743-2051

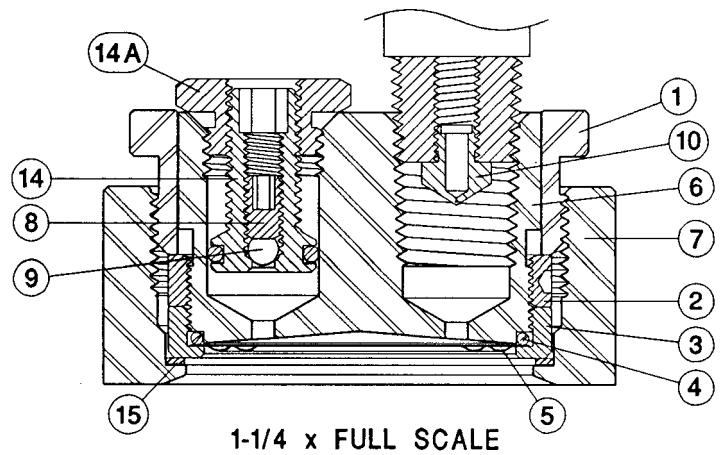
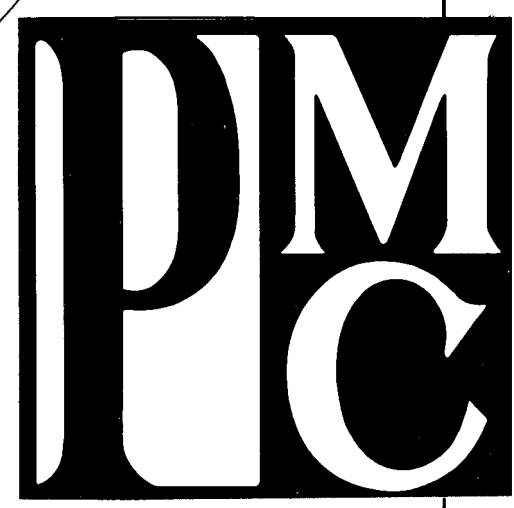
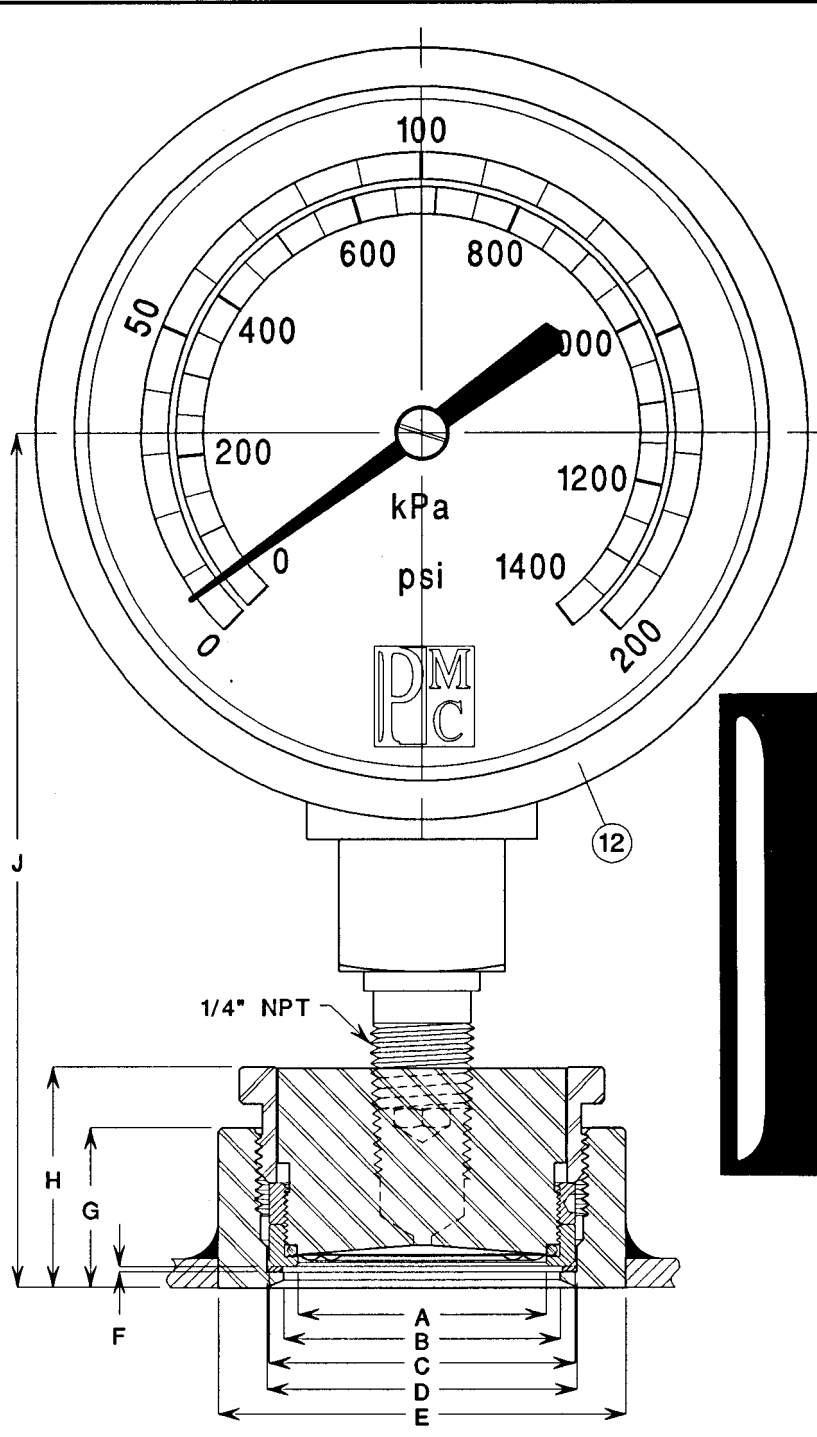


CERTIFIED PRINT

PAPER MACHINE COMPONENTS

DANBURY, CONNECTICUT U.S.A.

PART NAME		SEAL GAUGE ASSEMBLY	
MATERIAL		DATE	SCALE
STAINLESS STEEL		Jan. 26, 1995	FULL
QUANTITY	DRAWN BY	ORIG. DWG.	ASSY. DWG.
	L.W.		
BREAK ALL SHARP EDGES AND CORNERS			DWG. NO.
FRACT. DIMS. +/- 1/64", DECIMAL DIMS. +/- .005"			1210-A
ANGLES +/- 1/4 UNLESS OTHERWISE SPECIFIED			



1-1/4 x FULL SCALE

CERTIFIED PRINT SANITARY OPTION

PAPER MACHINE COMPONENTS			
DANBURY, CONNECTICUT U.S.A.			
PART NAME		SANITARY SEAL GAUGE ASSEMBLY	
MATERIAL	DATE	SCALE	
STAINLESS STEEL	Jan. 26, 1995	FULL	
QUANTITY	DRAWN BY	ORIG. DWG.	ASSY. DWG.
	L.W.		
BREAK ALL SHARP EDGES AND CORNERS			DWG. NO.
FRACT. DIMS. +/- 1/64" , DECIMAL DIMS. +/- .005"			1212-A
ANGLES +/- 1/4 UNLESS OTHERWISE SPECIFIED			

