

Meriam Instruments Model MP-100-KT Pressure Calibration Pump Kit

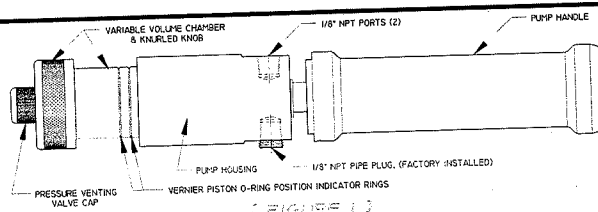
!!WARNING, MAXIMUM PRESSURE 100 PSIG!!

INSURE ALL GAUGES AND INSTRUMENTS TO BE CALIBRATED ARE DISCONNECTED FROM PROCESS PRESSURES PRIOR TO CONNECTING PUMP. THE MAXIMUM PUMP DESIGN PRESSURE IS 100 PSIG. CONNECTION TO A PRESSURE SOURCE GREATER THAN 150 PSIG COULD CAUSE SERIOUS INJURY.

PRIMARY COMPONENT OPERATION:

THE PUMP CONSISTS OF FOUR MAJOR OPERABLE COMPONENTS:

1. THE PRESSURE VENTING VALVE CAP
2. THE VARIABLE VOLUME CHAMBER
3. THE PUMP HOUSING
4. THE PUMP HANDLE.



PRESSURE VENTING VALVE CAP OPERATION: (SEE FIGURE 1):

PRESSURE is relieved from the pump using the pressure relief knob. The pressure relief knob is the small knurled knob. The extra fine threads allow venting in increments as small as 0.01" of H₂O. To vent the system, turn the knob clockwise. Do not over tighten this valve

VARIABLE VOLUME CHAMBER OPERATION: (SEE FIGURE 1):

Most pressure adjustments can be made with the vernier knob. Adjustment is made by holding the pump housing and turning the vernier knob. Pressure adjustments can be made in the 1" H₂O and lower ranges. For extremely low pressure calibrations, turn in the vernier knob almost all the way in.

NOTE: There are two warning rings on the vernier knob column the first is a warning and the second is that you have gone too far. In either event, no loose parts will fall out.

FOR BEST RESULTS:

Operate pump with vernier turned all the way in.

PUMP HOUSING OPERATION: (SEE FIGURE 1):

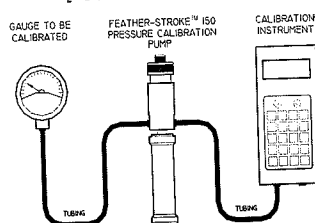
There are two 1/8" NPT female ports on the pump housing. Both are common, one is plugged and the other is for the HK-1 Hose Kit assembly. Many users purchase an additional hose kit assembly for the second port.

FITTINGS

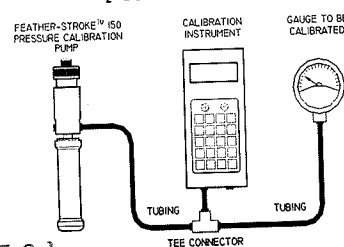
The fittings and tubing are unique. To reattach tubing to any fitting, heat the tubing end with a heat gun or boiling water to soften. Put tubing on fitting with a twisting action

CONNECTION EXAMPLES:

[CONFIGURATION 1.]



[CONFIGURATION 2.]



SUGGESTED TOOLS TO SERVICE THE PUMP:

1. (A/R) BRASS SHIM MATERIAL
2. (2)-STANDARD PLIERS
3. (1)-SNAP-RING PLIERS, COMPRESSION
4. (1)-SNAP-RING PLIERS, EXPANSION
5. (1)-WOOD TOOTHPICK FOR O-RING REMOVAL
6. (1)-3/8" DIA. WOOD DOWEL, 10" LONG
7. (A/R)-SILICON GREASE (FROM FACTORY)
8. (A/R)-TEFLON LUBE (FROM FACTORY)
9. (A/R)-TEFLON TAPE (FROM FACTORY)

Use Rebuilding Kit RBK-1

PUMP CLEANING: (FIRST REFER TO SECTIONS "PUMP HANDLE ASS'Y", "VARIABLE VOLUME CHAMBER ASS'Y", & "PUMP HOUSING ASS'Y"):

Once the pump is disassembled, use a clean cotton cloth, or paper towel. Use Isopropyl Alcohol to clean off any remaining residue of lubricants. If process fluids have contaminated the pump, please call the factory for instructions.

