



Patent pending

PCMPK-2 kit shown

Model	Stock #	For use on:
PCMPK-1	0090180	all -RM (Riser Mount) and Dry Pipe Models.
PCMPK-2	0090181	older-style ceiling mount models. Not for use on -RM Models.

NOTICE

Carefully read and follow the instructions and procedures provided in this and referenced documents. Failure to do so will inhibit our ability to provide accurate and complete test results.

Do not handle the probes with your bare hands. Use the latex gloves provided.

The PCMPK consists of the necessary corrosion monitoring probes and pressure switches that, when added to the Potter Corrosion Monitoring Station, provides notification to the fire/sprinkler administrator when there may be an excessive amount of corrosion taking place in the sprinkler piping. The corrosion monitoring probe has a precision thin wall thickness which will eventually corrode through allowing the system water or air pressure to enter into the probe and actuate the pressure switch. When the pressure switch is wired to the building fire alarm panel, a supervisory or trouble signal is generated notifying the fire/sprinkler administrator. This is the notification to remove the test coupons, that were installed at the same time as the probe(s), for analysis on the condition of sprinkler piping. The corrosion monitoring probes are single use devices and must be replaced upon the installation of new test coupons.

Kit Includes:

- (1) corrosion monitoring probe and (1) pressure switch for PCMPK-1
- (2) corrosion monitoring probes and (2) pressure switches for PCMPK-2
- Bottom mounting pressure switch fittings-1" union, 1"-90° street elbow, and 1" nipple
- One pair of latex gloves

Tools Required:

- Pipe wrench or 14" adjustable wrench to remove and replace probes.
- Container used to drain water from the isolated coupon rack.
- Teflon tape

Procedure

Wet Pipe Systems: (Model PCMS-RM)

1. Turn the 1" isolation valve to the closed position to isolate the coupon rack from the fire sprinkler system.
2. Verify that the ½" drain valve is in the closed position. Remove the ½" drain plug.
3. Relieve system pressure from the coupon rack by opening the drain valve slowly. Drain the water from the coupon rack through the ½" drain valve into container. **Note: The water in the coupon rack will be pressurized to the system pressure.** Close the ½" drain valve. Re-install the ½" plug into drain valve.
4. **Do not handle probe with bare hands.** Remove the corrosion monitoring probe from the sealed packaging using the latex gloves provided and carefully remove the cardboard protection sleeve. Apply Teflon tape to the 1" NPT male pipe threads and install the probe into bottom outlet #3 as indicated in the probe installation diagram on the coupon rack label.
5. Apply Teflon tape to the ½" NPT male pipe thread on the pressure switch. Install the pressure switch into the bottom outlet #3 corrosion monitoring probe using Teflon tape on the provided union, nipple, and 90° street elbow as illustrated in Fig. 4. **NOTE:** It is not recommended to mount the pressure switch in an inverted position.
6. Connect the wiring from the fire panel to the pressure switch in accordance to the PS10 Pressure Switch Bulletin #5400928. Notify the fire system administrator to enable the fire panel zone connected to the probe.
7. On some versions, it may be necessary to install fittings to supply pressurized air to the coupon rack through the air inlet isolation valve.
8. With the coupon rack isolation valve closed to the system and the coupon rack drain valve closed and plugged, pre-charge the coupon rack with air through the air inlet isolation valve to approximately ½ the system water pressure. Open the coupon rack isolation valve and check the water level in the coupon rack through the end sight glass. The water level needs to be maintained at the centerline of the pipe (coupon rack). Add additional air through the air inlet isolation valve to lower the water level or relieve air to raise the water to the correct centerline level. Close the air inlet isolation valve after the correct water level has been maintained. **Be sure to leave the coupon rack isolation valve open to the fire sprinkler system. Verify that all valves are in the correct position and the corrosion monitoring station is free of any leaks.**

Wet Pipe Systems: (Model PCMS/PCMS-LP)

1. Turn the two 1" ball valves (PCMS) or butterfly isolation valve (PCMS-LP) to closed position to isolate the coupon rack from the fire sprinkler system.
2. Verify that the ½" drain valve is in the closed position. Remove the ½" drain plug.
3. Relieve system pressure from the coupon rack by opening the drain valve slowly. Drain the water from the coupon rack through the ½" drain valve into container. **Note: The water in the coupon rack will be pressurized to the system pressure.** Close the ½" drain valve. Re-install the ½" plug into drain valve.

4. **Do not handle probes with bare hands.** Remove the corrosion monitoring probes from the sealed packaging using the latex gloves provided and carefully remove the cardboard protection sleeve. Apply Teflon tape to the 1" NPT male pipe threads and install the probes into top outlet #3 and bottom outlet #6 as indicated in the probe installation diagram on the coupon rack label.
5. Apply Teflon tape to the 1/2" NPT male pipe thread on the pressure switches. Install a pressure switch directly into the top outlet #3 corrosion monitoring probe. It is recommended that a union connection be added for easier future probe replacement (eliminates the need for the pressure switch wiring to be disconnected during probe replacement). If ceiling clearance is an issue with the top mounted pressure switch, it can be hard piped up to three feet away. Install a pressure switch into the bottom outlet #6 corrosion monitoring probe using Teflon tape on the provided union, nipple and 90° street elbow as illustrated in Fig. #2 or Fig. #3
NOTE: It is not recommended to mount the pressure switch in an inverted position.
6. Connect the wiring from the fire panel to the pressure switch in accordance to the PS10 Pressure Switch Bulletin #5400928. Notify the fire system administrator to enable the fire panel zone connected to the probe. This zone should be identified as a supervisory or trouble zone, not an alarm zone.
7. **Verify that the isolation valve(s) are in the open position and the corrosion monitoring station is free of any leaks. Be sure to leave the coupon rack isolation valve(s) open to the fire sprinkler system.**

Dry Pipe Systems: (Model DPCMS/DPCMS-RM/PCMS-RM)

1. Notify the fire system administrator and close the system control valve. Shut down the supervisory air supply and relieve system air pressure through the inspectors test valve.
NOTE: When using the DPCMS-RM or PCMS-RM, it may not be necessary to relieve air pressure from the entire system. The PCMS-RM has a drain valve to vent pressure. Use extreme care to loosen a fitting in the DPCMS-RM to relieve pressure.

2. **Do not handle probe with bare hands.** Remove the corrosion monitoring probe from the sealed packaging using the latex gloves provided and carefully remove the cardboard protection sleeve. Apply Teflon tape to the 1" NPT male thread on the probe and install the probe into the bottom outlet as indicated in the probe installation diagram on the coupon rack label.
3. Apply Teflon tape to the 1/2" NPT male pipe thread on the pressure switch. Install the pressure switch into the bottom Outlet #4 corrosion monitoring probe using Teflon tape on the provided union, nipple, and 90° street elbow.
NOTE: It is not recommended to mount the pressure switch in an inverted position.
4. Connect the wiring from the fire panel to the pressure switch in accordance to the PS10 Pressure Switch Bulletin. Notify the fire system administrator to enable the fire panel zone connected to the probe. This zone should be identified as a supervisory or trouble zone, not an alarm zone.
5. Place the system back in service.
6. Verify that all valves are in the proper position and the corrosion monitoring station is free of any leaks. *Be sure to leave the coupon rack isolation valve(s) open to the fire sprinkler system.*

Fig. 1 Corrosion Monitoring Probe

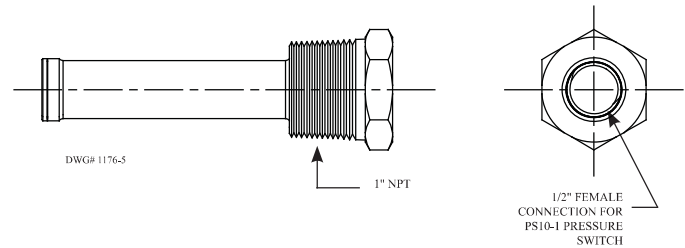


Fig. 2 PCMS Assembly

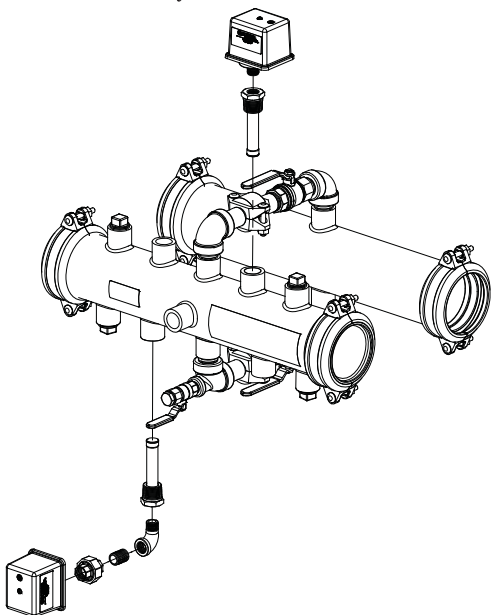


Fig. 3 PCMS-LP Assembly (Obsolete)

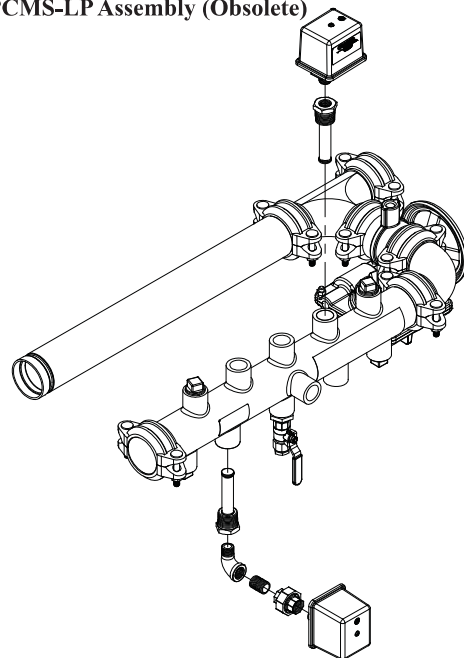


Fig. 4 PCMS-RM Assembly

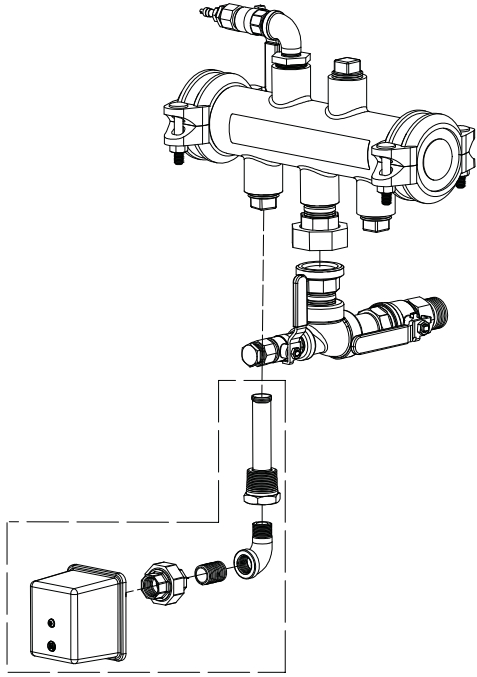


Fig. 5 DPCMS Assembly (Obsolete)

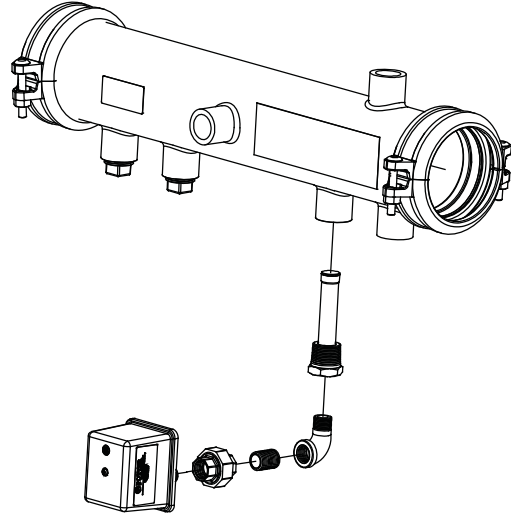


Fig. 6 DPCMS-RM Assembly (Obsolete)

