



Installation Instructions

Form No.	Section	Issue Date	Rev. Date
F-1031	3015	04/28/00	02/08/10

Overheat Protection Manager (OPM)

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All Models with Optional Audible Alarm	6, 7

Installation of the Overheat Protection Manager on CM & CS Series Pump Models (After 1/17/00)

1. Locate the OPM valve and the thermal switch on the pump body. (See Figure 1).
2. Locate an area on the panel (1.625" x 2.75") and cut out. (See Figure 2).
3. Insert the OPM control panel wiring through the opening on the panel. Attach the OPM control panel to the apparatus panel with hardware supplied.
4. Connect the extension cable between the thermal switch and the control panel.
5. Connect the power and the ground of the control panel to the appropriate source.
6. Press the test button for circuit completeness (light will flash). (See Figure 3 on next page).

Figure 1. Location

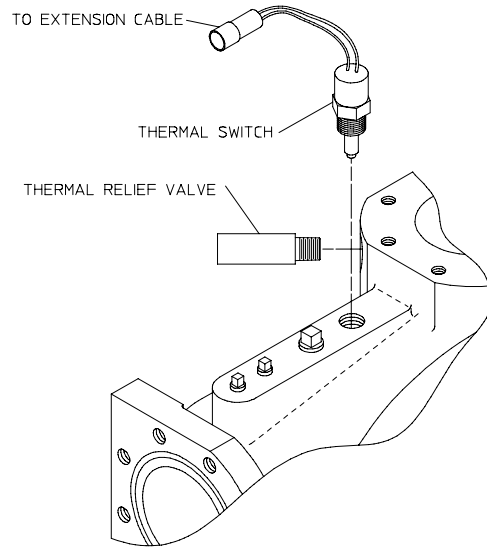
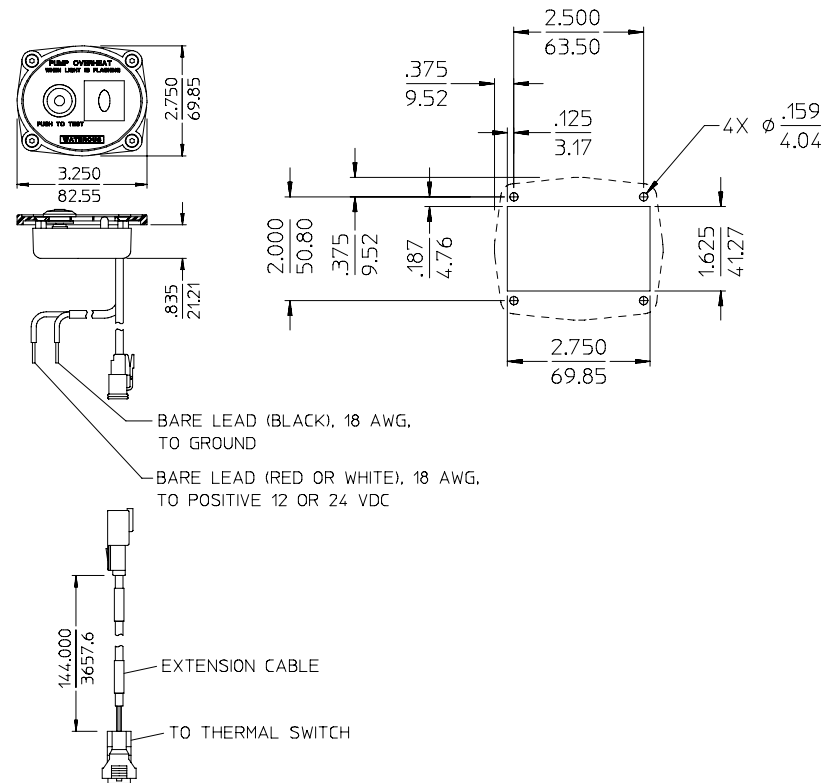


Figure 2. Panel Hole Layout

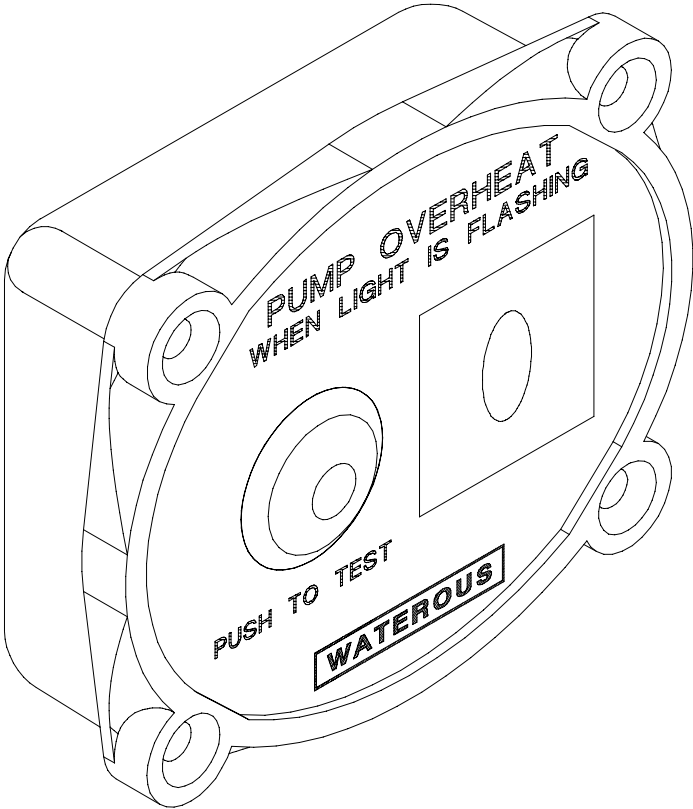


NOTE:
1. ALL DIMENSIONS SHOWN AS INCH/MILLIMETER.

($\frac{\text{INCH}}{\text{MILLIMETER}}$)

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Figure 3. Test Button



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Installation of the Overheat Protection Manager on Pump Models Other than CM & CS

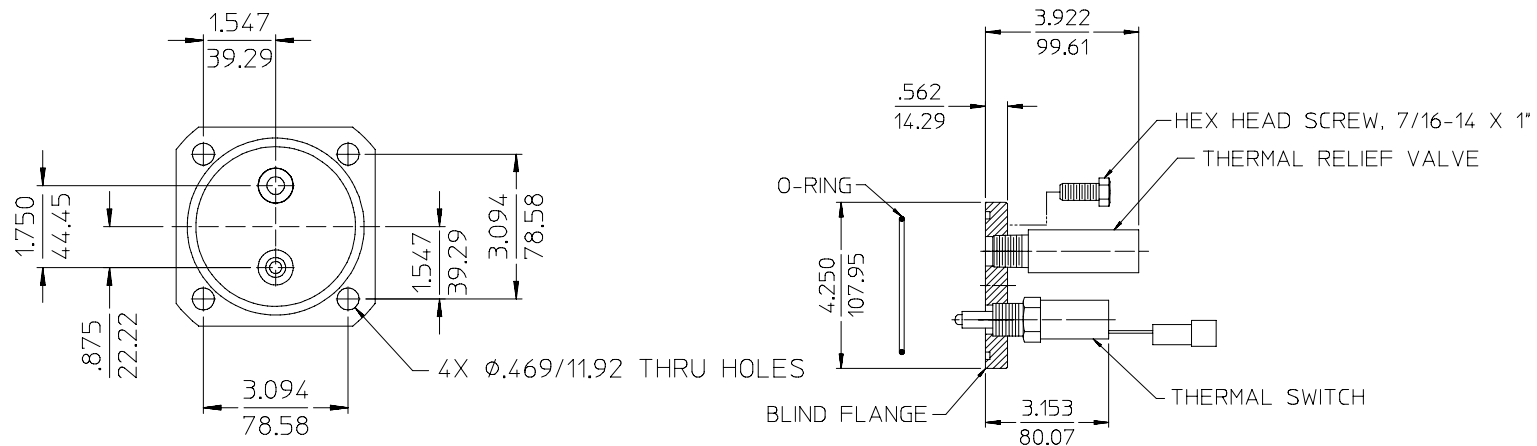
1. Mount flange as close to the pump discharge as possible. There must not be any valves located between the flange and the impeller(s) that would restrict waterflow to the OPM. The flange has a Waterous 4-bolt pattern, dimensions are shown in Figure 4. An O-ring and (4) 7/16-14 x 1 in. long screws are furnished. Some pump models may have a 4-bolt flange suitable for mounting the flange, if not, provisions must be made in the OPM supplied discharge piping for mounting.

CAUTION

To provide adequate overheat protection, the thermal relief valve and the thermal switch must be mounted in close proximity to the impeller(s).

2. Install the OPM thermal relief valve and the thermal switch in the 1/2" tapped holes. (See Figure 4). The valve shall be installed with the male end mounted on the pump body.
3. Locate an area on the panel (1.625" x 2.75") and cut out. (See Figure 5 on next page).
4. Insert the OPM control panel wiring through the opening on the panel. Attach the OPM control panel to the apparatus panel with hardware supplied.
5. Connect the extension cable between the thermal switch and the control panel.
6. Connect the power and the ground of the control panel to the appropriate source.
7. Press the test button for circuit completeness (light will flash). (See Figure 6 on next page).

Figure 4. Flange Detail



OPM MOUNTED BY OEM

NOTE:

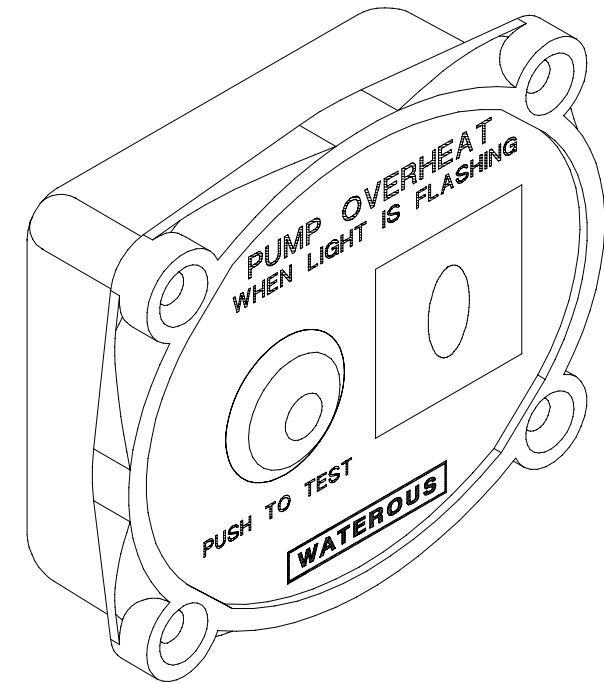
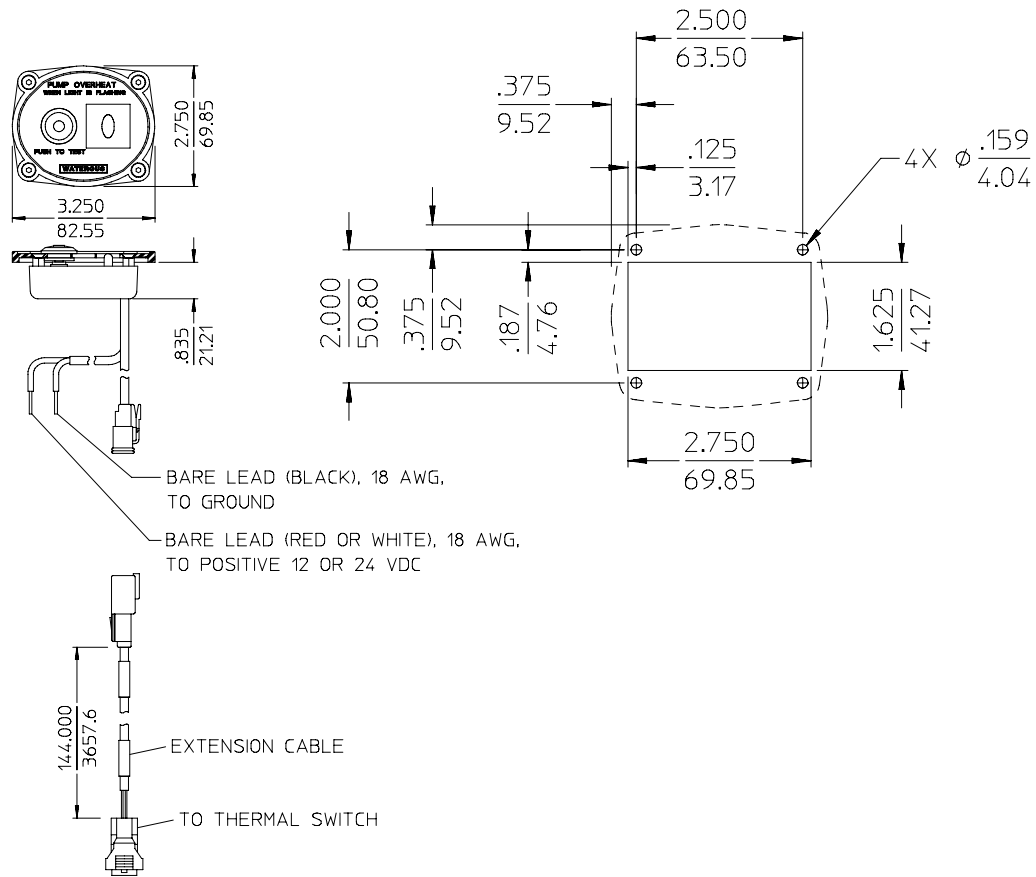
1. ALL DIMENSIONS SHOWN AS INCH/MILLIMETER.

($\frac{\text{INCH}}{\text{MILLIMETER}}$)

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Figure 5. Panel Hole Layout

Figure 6. Test Button



NOTE:
1. ALL DIMENSIONS SHOWN AS INCH/MILLIMETER.

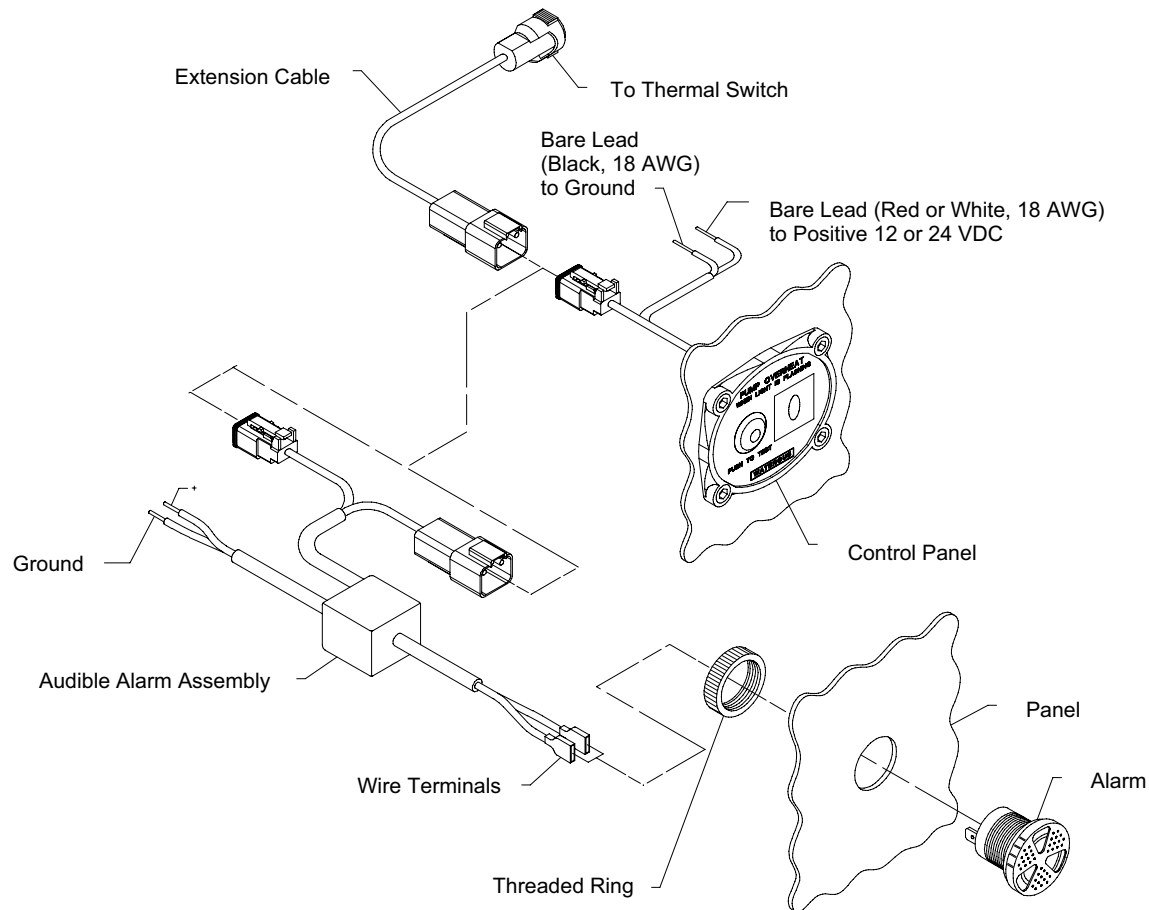
($\frac{\text{INCH}}{\text{MILLIMETER}}$)

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Audible Alarm Installation

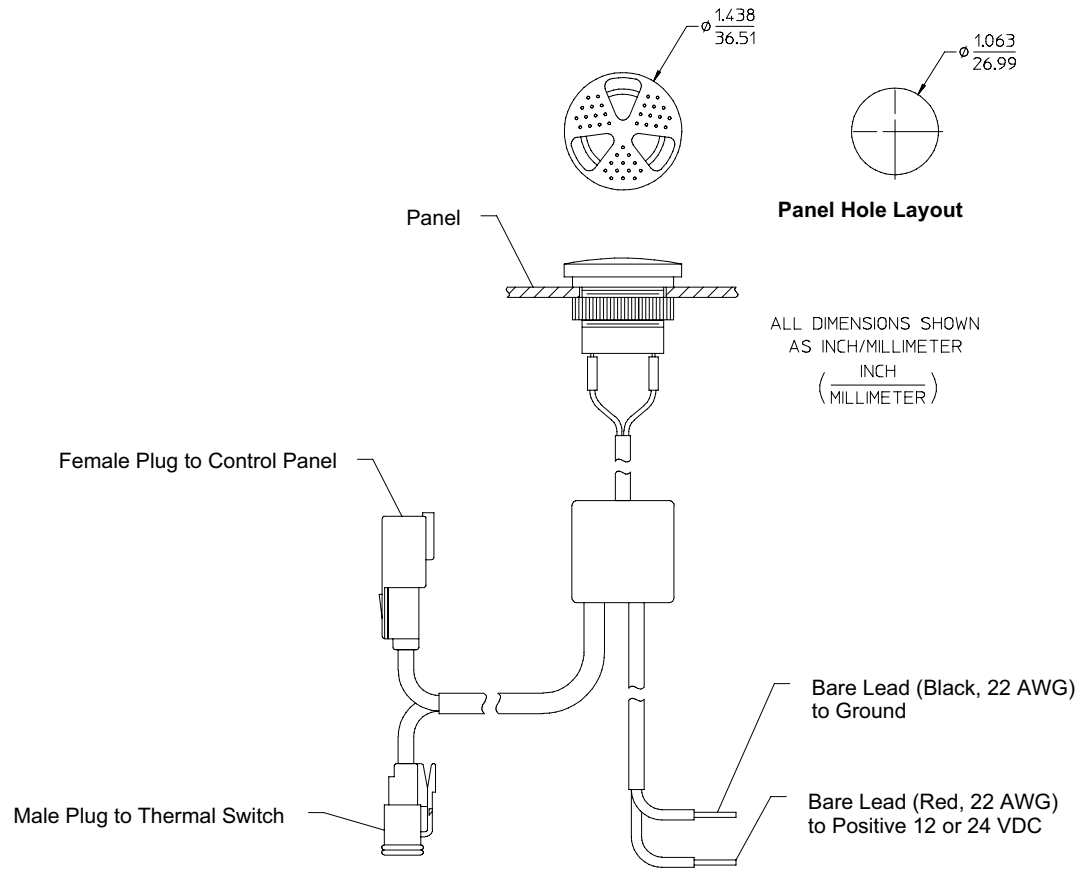
1. Disconnect extension cable from control panel.
2. Locate area on panel near control panel and cut out hole for alarm (see Figure 8).
3. Connect audible alarm assembly between extension cable and control panel (see Figure 7).
4. Install alarm by first disconnecting wire terminals and removing threaded ring. Slide alarm into panel hole, tighten down threaded ring and reconnect wire terminals.
5. Connect the power and the ground of the audible alarm to the appropriate source (see Figure 8).
6. Press the test button for circuit completeness (light will flash but alarm will not sound).

Figure 7. Audible Alarm Assembly



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Figure 8. Audible Alarm



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