SYSTEM SENSOR®

Replacement Timer Delay/Switch Assembly FS-RT for WFDN waterflow detectors

NOTICE: This manual should be left with the owner/user of this equipment.

GENERAL INFORMATION
This manual includes instructions for replacing the time delay/switch assembly listed above.

The waterflow device does not need to be removed from the fire sprinkler system while the timing delay/switch assembly is being replaced. Do not tamper with the mounting plate attachment screws as water leakage will occur. (See Figure 1.)

Do not replace any other component of the waterflow detector in the field. If any other functional part of the detector becomes faulty, remove and replace the entire detector. Not doing so may result in the failure of the detector to indicate a waterflow condition.
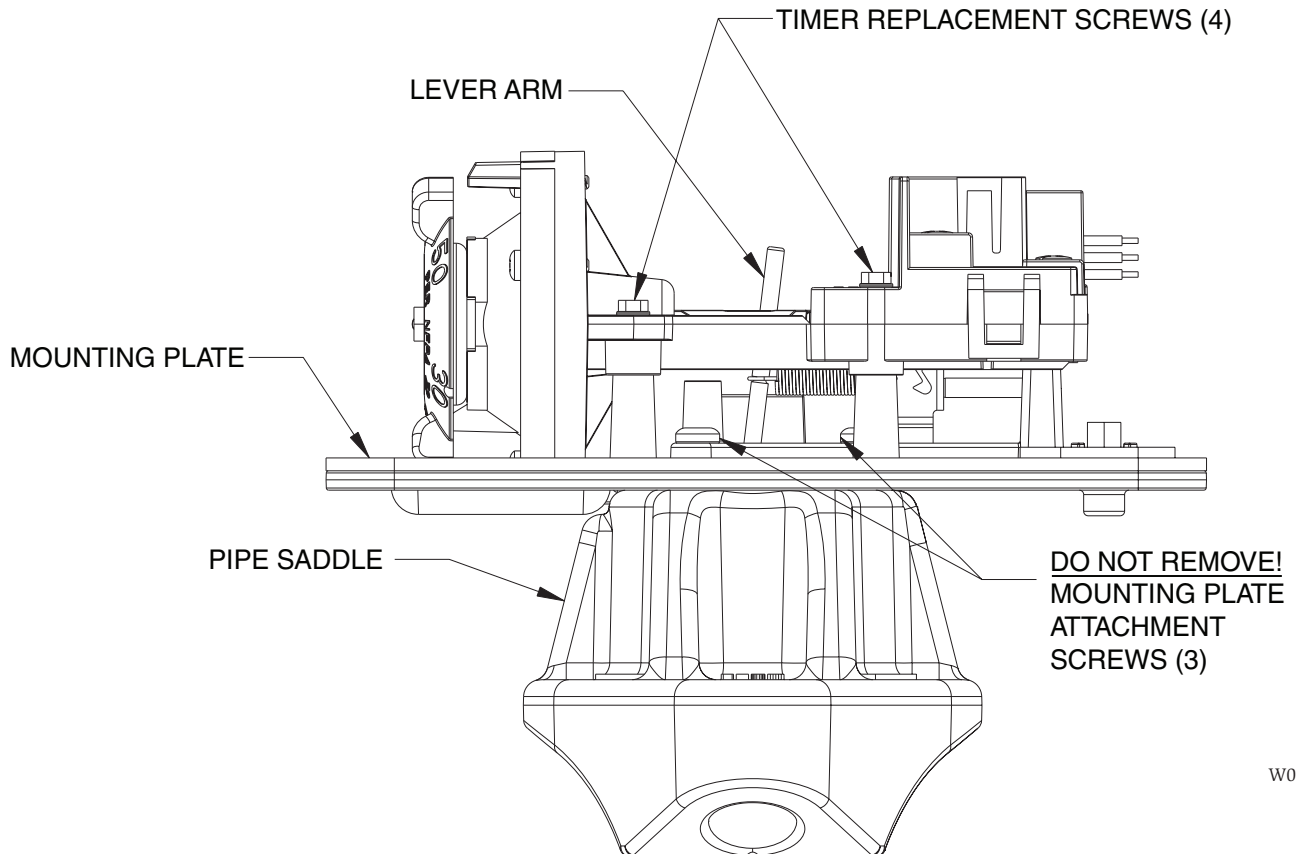
TIMER DELAY/SWITCH ASSEMBLY REMOVAL
1. Turn the dial to zero (0) and remove the four screws holding the timer delay/switch assembly in place.
2. Gently lift the front of the delay mechanism approximately 30 degrees to clear the paddle lever arm (see Figure 1).
3. Pull forward and rock the delay mechanism back and forth slightly to disengage the switch buttons from the timer stop.

TIMER DELAY/SWITCH ASSEMBLY REPLACEMENT
1. Turn the replacement timer delay/switch assembly to zero (0). (See Figure 3)
2. Orient the timer shaft as depicted in Figure 2.
3. Check the following before replacing the retaining screws (refer to Figures 1 and 2).
   a. Firmly seat the timer delay/switch assembly on the four support posts.
   b. Verify that the spring hook is still in the groove in the paddle lever arm. See Figure 2.
4. Replace the four retaining screws and torque using approximately 10 in-lbs. of torque.

FIGURE 1. TIMER DELAY/SWITCH ASSEMBLY:

TIMER REPLACEMENT SCREWS (4)

LEVER ARM

MOUNTING PLATE

PIPE SADDLE

DO NOT REMOVE! MOUNTING PLATE ATTACHMENT SCREWS (3)

W0398-00

SYSTEM CHECK

1. With the dial set to zero, actuate the lever arm forward and back checking for smooth operation of the timer delay/switch assembly. The lever arm should operate freely with no obstruction. The switches should activate when the arm is moved forward and reset when the arm is released.

2. With a continuity meter installed between the (COM) and (B) terminals on one of the switches, the following conditions should occur:

Condition	COM to B Circuit
Normal or non-flow	Open circuit
Lever actuated or waterflow in pipe (10 gpm)	Closed circuit

3. Turn dial to the desired delay setting and time the response of the system to waterflow conditions as normally done on routine system tests.

4. Insure that the system returns to the non-alarm condition after the flow in the system is discontinued.

5. Replace the cover with the two tamper screws(wrench not included).

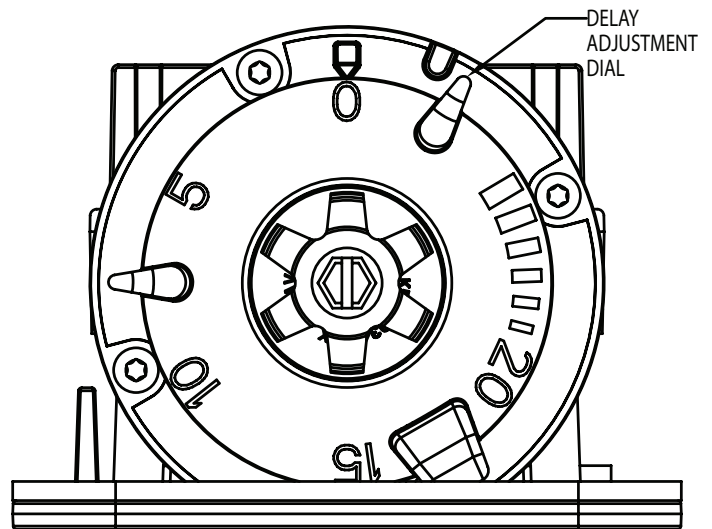## FIGURE 2. TIMER SHAFT ORIENTATION:

TOP VIEW
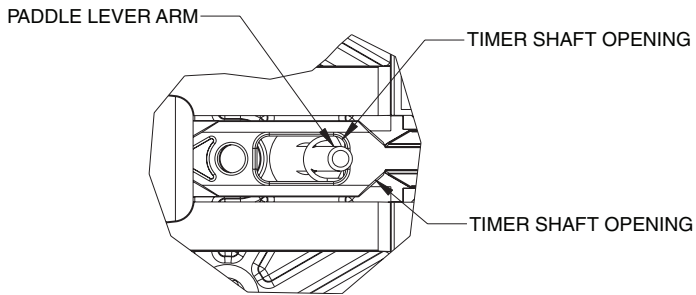
W0396-00

SIDE VIEW
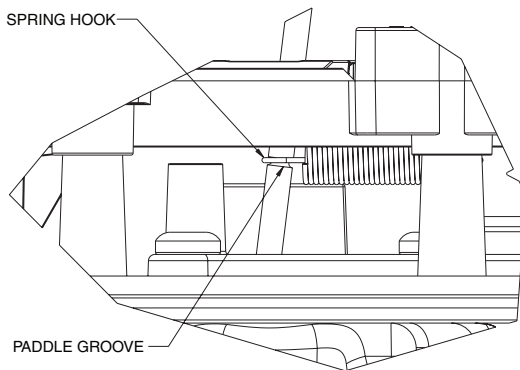
W0397-00

FIGURE 3. DELAY ADJUSTMENT DIAL:

NOTE: RETARD TIME MAY EXCEED 90 SECONDS. ADJUST AND VERIFY THAT TIME DOES NOT EXCEED 90 SECONDS. NUMBER ON DIAL IS APPROXIMATE TIME DELAY IN SECONDS WITH AN ACCURACY OF +/- 50% PER UL.

W0386-00

Please refer to insert for the Limitations of Fire Alarm Systems

---

THREE-YEAR LIMITED WARRANTY