Replacement Timer Delay Assembly A3008-00 and Switch Assembly A77-01-02 for WFD and WFDT



3825 Ohio Avenue, St. Charles, Illinois 60174 1-800-SENSOR2, FAX: 630-377-6495 www.systemsensor.com

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

General Information

This manual includes instructions for replacing either of the assemblies listed above. Either of these may be replaced without replacing the other.

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

Do not replace any other component of the waterflow indicator 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.

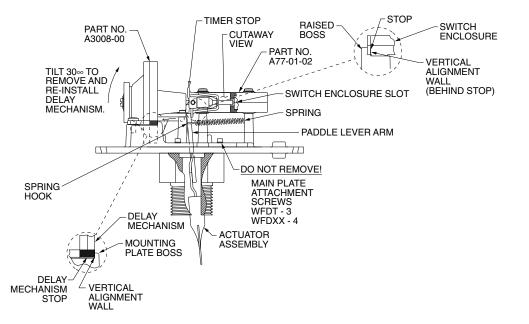
Delay Mechanism Removal

- 1. Turn the dial to zero (0) and remove the three screws holding the delay mechanism 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.

Delay Mechanism Replacement

- 1. Turn the replacement delay mechanism to zero (0).
- 2. Orient the timer stop as depicted in Figure 2. Note the offset in the two vertical faces of the stop and their position.
- 3. Placing the mechanism on a slight angle to the waterflow device as shown in Figure 1, slide the rear of the timer shaft between the switch buttons until the timer stop is encountered. Rock the delay mechanism back and forth to retract the switch buttons and continue to seat the delay mechanism into position on the plate.
- 4. Check the following before replacing the retaining screws (refer to Figures 1 and 2).
 - a. Insert the end of the shaft into the rear slot of the switch enclosure (see Figure 1).
 - b. Rest the paddle lever arm on the front face of the timer stop (see Figure 2).
 - c. Center the delay mechanism on the plate, making sure the slots in the plastic are aligned with the holes in the metal mounting plate.
 - d. Make sure the leading edge of the mounting plate boss is in contact with the stops on the delay mechanism (see Figure 1).
 - e. Firmly seat the delay mechanism on the three support posts.
 - f. Seat the spring hook in the groove in the paddle lever arm.

Figure 1. Delay Assembly (WFDT shown, WFDXX lower unit configuration is different):



W0204-00

Switch Enclosure Replacement

- 1. Remove the three screws holding the switch enclosure.
- 2. Pull gently on the switch enclosure and rock slightly to disengage the switch buttons from the timer stop.
- 3. Install the replacement switch enclosure using a similar rocking action to depress the switch buttons. Do not turn the timer stop or shaft more than 15 degrees while replacing the switch enclosure. Check the position of the timer stop per Figure 2.
- 4. Slide the switch enclosure toward the delay mechanism until the vertical alignment boss on the plate seats into the alignment groove one corner of the switch enclosure. (Only one will engage.) Exert pressure on the switch enclosure holding it seated flat and pushed toward the delay mechanism while replacing the three retaining screws. Seat firmly using approximately 6 inlbs. of torque.

System Check

- 1. With the dial set on zero, actuate the lever arm forward and back checking for smooth operation of the switch mechanism. 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:

<u>Condition</u> Normal or non-flow Lever actuated or waterflow in pipe (10 gpm)

<u>COM to B Circuit</u> Open circuit

flow in pipe (10 gpm) Closed circuit

- 3. Turn the 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 security screws and wrench (not supplied).



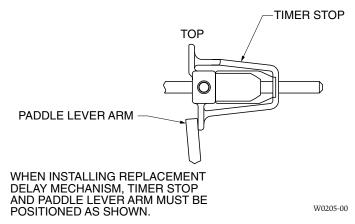
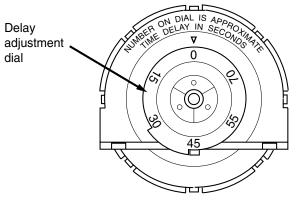


Figure 3.



NOTE: Retard time may exceed 90 seconds. Adjust and verify that time does not exceed 90 seconds

Three-Year Limited Warranty

System Sensor warrants its enclosed product to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for the enclosed product. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the replacement of any part of the product which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: System Sensor, Returns

Department, RA #_____, 3825 Ohio Avenue, St. Charles, IL 60174. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.