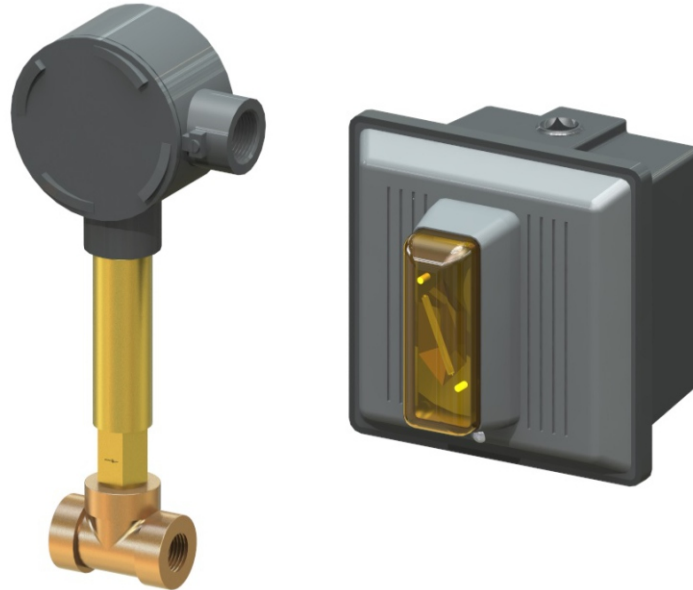




ACORN SAFETY
P.O. BOX 3527
CITY OF INDUSTRY, CA 91744-0527
UNITED STATES OF AMERICA
WWW.ACORNSAFETY.COM

INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS



Models S0000-AL3

TECHNICAL ASSISTANCE TOLL FREE TELEPHONE NUMBER
1.800.591.9360
TECHNICAL ASSISTANCE FAX: 1.626.855.4894

NOTES TO THE INSTALLER:

- 1. Please leave this documentation with the owner of the fixture when finished.**
- 2. Please read this entire booklet before beginning the installation.**
- 3. Check your installation for compliance with plumbing, electrical, ANSI Z358.1 and other applicable codes.**

LIMITED WARRANTY **UNITED STATES AND CANADA**

Acorn Safety warrants that its products are free from defects in material or workmanship under normal use and service for a period of one year from date of shipment. Acorn's liability under this warranty shall be discharged solely by replacement or repair of defective material, provided Acorn is notified in writing within one year from date of shipment, F.O.B. Industry, California.

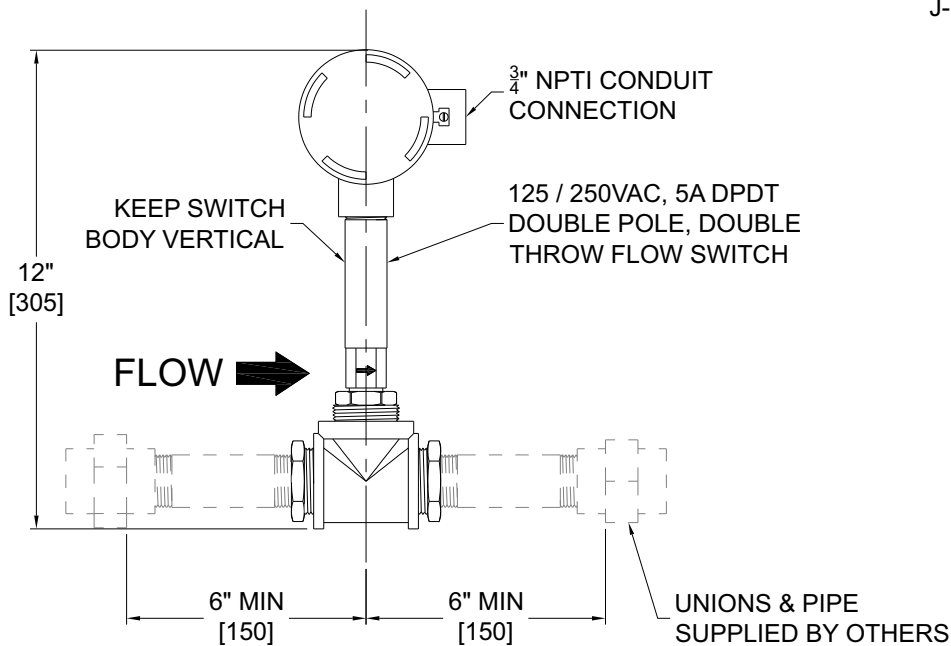
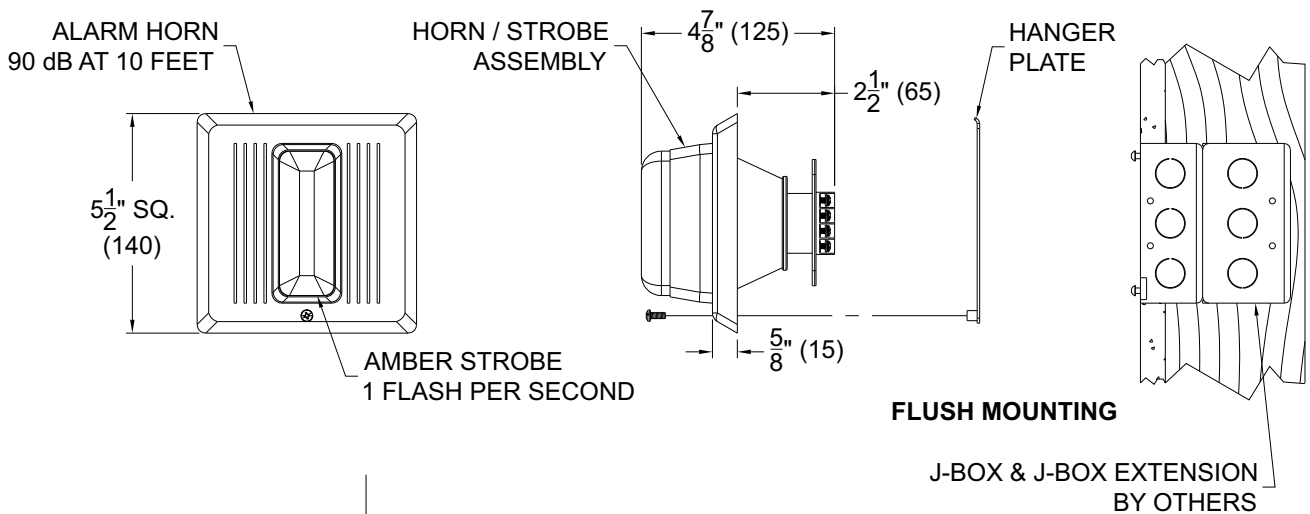
This warranty does not cover installation or labor charges and does not apply to materials, which have been damaged by other causes such as mishandling or improper care or abnormal use. The repair or replacement of the defective materials shall constitute the sole remedy of the Buyer and the sole remedy of Acorn under this warranty. Acorn shall not be liable under any circumstances for incidental, consequential or direct charges caused by defects in materials, or any delay in the repair or replacement thereof. This warranty is in lieu of all other warranties expressed or implied. Product maintenance instructions are issued with each unit and disregard or non-compliance with these instructions will constitute an abnormal use condition and void the warranty. Stainless steel must be protected on job sites during construction and must be properly maintained after the water has been introduced into the safety product or Acorn's warranty is void.

PRELIMINARY STEPS

1. Read the installation instructions prior to beginning the installation.
2. Separate parts from packaging and verify all necessary parts are accounted for and undamaged. Obtain missing or damaged parts from Acorn Safety prior to beginning installation.
3. Flush water supply lines prior to installation. This will remove unwanted debris from the lines and prevent unwanted blockages in the safety equipment.
4. In order to comply with ANSI Z358.1, the safety equipment must be inspected periodically. An inspection tag is provided for documentation purposes.
5. All employees at risk of contamination should be informed and trained in the use of this and any other safety equipment. The signage provided should be posted appropriately in close proximity to this equipment.

ROUGH-IN

S0000-AL3 FLUSH MOUNT



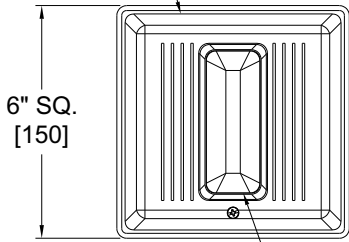
GENERAL NOTES:

1. ALL DIMENSIONS ARE IN INCHES [MM].
2. FLOW SWITCH SHALL BE INSTALLED VERTICALLY WITH HORIZONTAL FLOW.
3. DIRECTION OF WATER FLOW MUST BE IN SAME DIRECTION AS SHOWN ON FLOW SWITCH.
4. J-BOX AND J-BOX EXTENSION BY OTHERS.

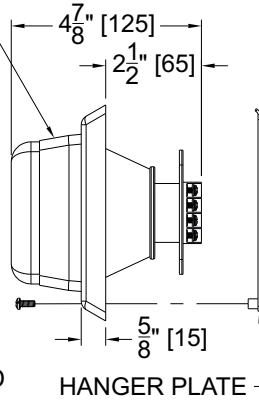
ROUGH-IN
S0000-AL3 SURFACE
MOUNT

SURFACE MOUNTING

ALARM HORN
90 dB AT 10 FEET

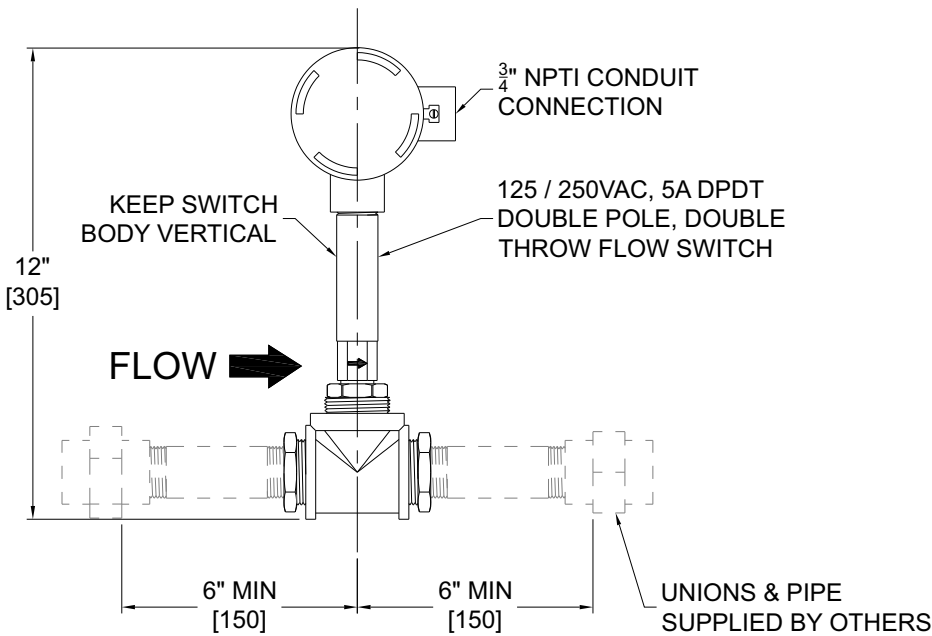
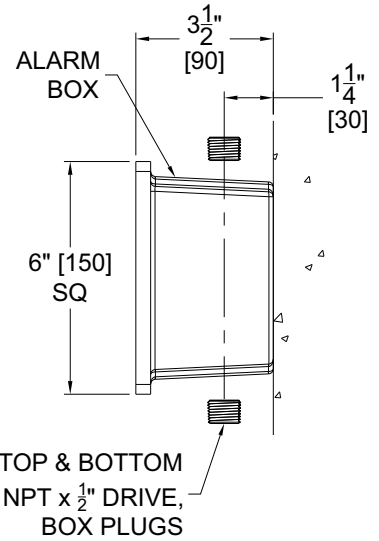


HORN / STROBE
ASSEMBLY



AMBER STROBE
1 FLASH PER SECOND

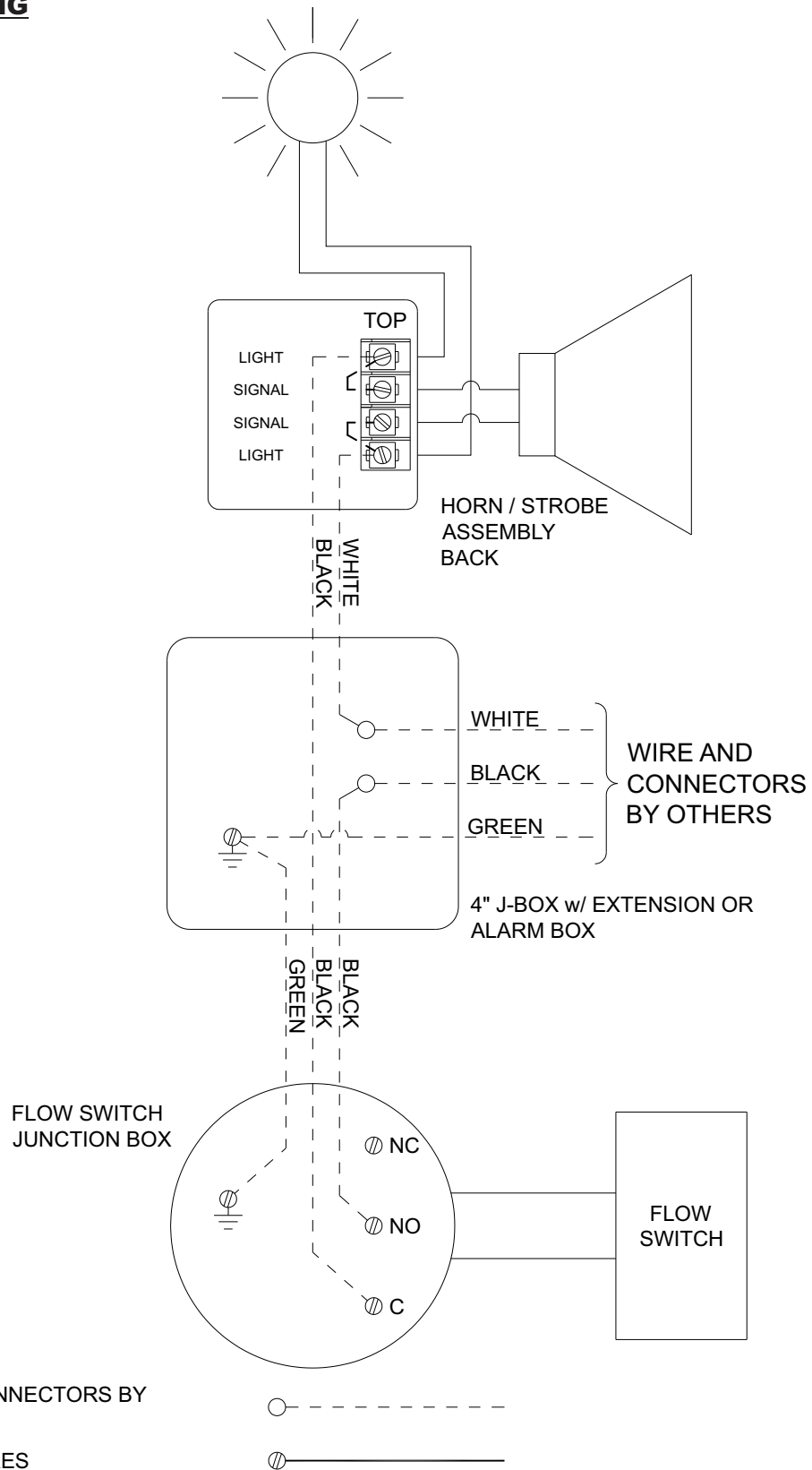
HANGER PLATE



GENERAL NOTES:

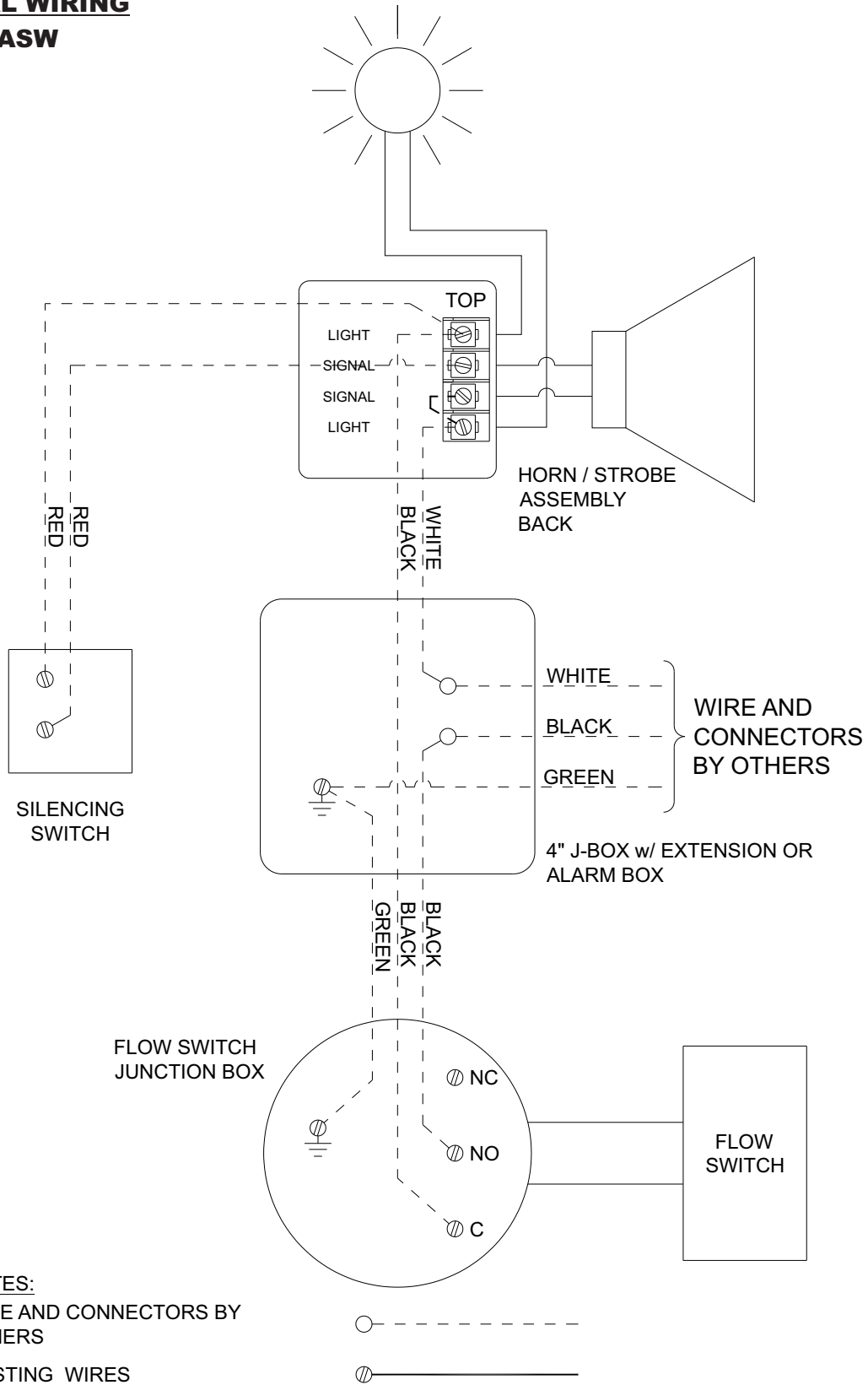
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ELECTRICAL WIRING
S0000-AL3



NOTES:
WIRE AND CONNECTORS BY OTHERS
EXISTING WIRES

ELECTRICAL WIRING
S0000-AL3-ASW



WARNINGS:

- DO NOT connect AC power to the alarm until directed to in these installation instructions to reduce the risk of shock.
- DO NOT tamper with this device when the signal circuit is energized. Disconnect power and wait at least 5 minutes for stored energy to dissipate before handling to reduce the risk of shock.

SUPPLIES REQUIRED:

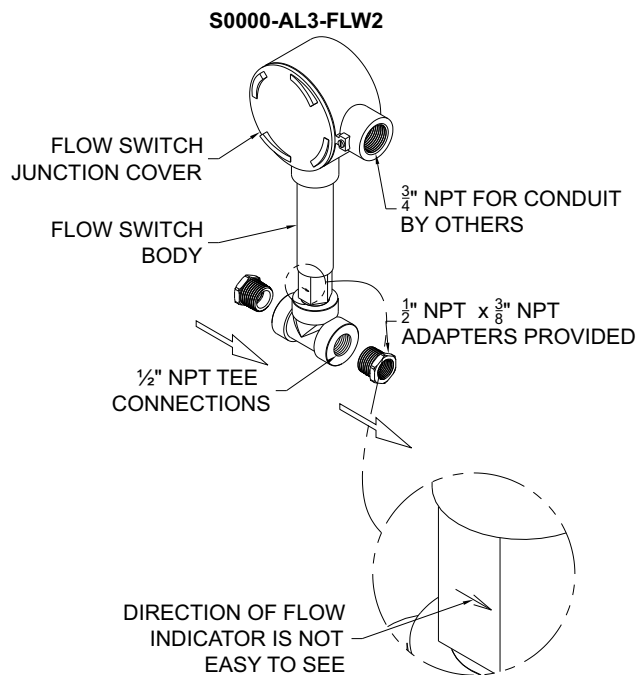
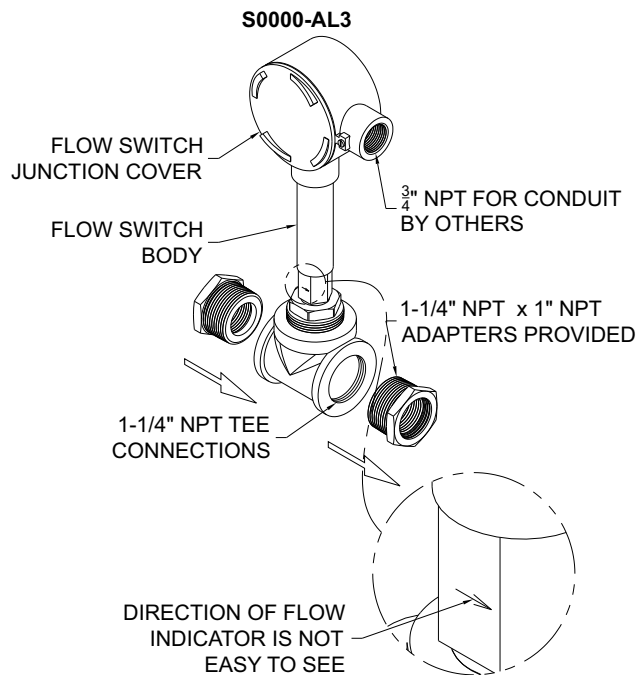
(not provided by Acorn)

1. UL building wire to make connections from flow switch, alarm (light / horn) and electrical service.
2. Piping, unions or other connections to meet required minimum distances for flow switch.
3. 4" x 4" x 2-1/8" J-box and 1-1/2" J-box extension for adapting alarm for flush mounting to finished wall.
4. Surface mounting may require wall anchors and anchoring hardware for wall mounting alarm box.
5. Pipe sealant or Teflon tape for sealing water connections.

IMPORTANT: FLUSH WATER SUPPLY LINES PRIOR TO CONNECTION TO SAFETY EQUIPMENT.

Notes:

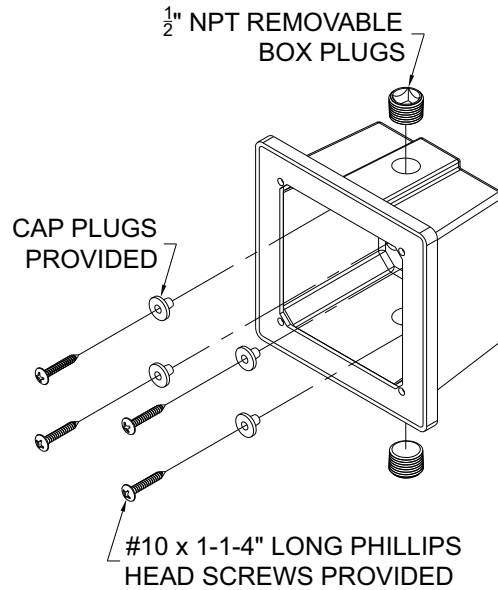
- Flow Switch must be installed with tee fitting in horizontal position, switch body in vertical position (as shown on page 3) and at least 6" from closest fitting.
- Flow Switch direction of flow is indicated on switch body.
- Use hand tools and wrenches in a manner which will prevent marring finished surfaces. Strap wrenches or tools with plastic jaw linings are highly recommended.
- Refer to fixture rough-in information for location of supply lines.
- Fragments of Teflon tape or pipe sealant residue can interfere with the proper operation of this unit. Ensure pipe sealant methods do not cause contamination in the system.



STEP ONE:

FLOW SWITCH INSTALLATION

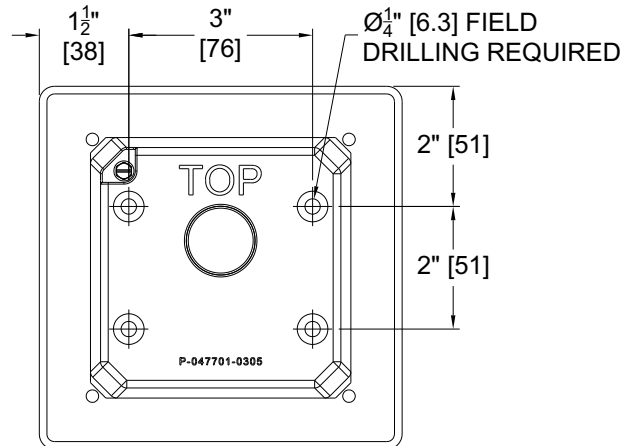
1. Determine location of flow switch in water supply line. The inlet and outlet ports of the flow switch must be a minimum of 6" from any tees or elbows (as shown on page 3) in the water supply line. Refer to page 6 and rough-in drawing.
2. Pipe the flow switch in-line of fixture supply inlet. The switch body must be in the vertical position with the water pipe horizontal. The water flow must be in the direction of the arrow that is marked on the flow switch body. Refer to page 6 and rough-in drawing.
3. Connect wiring (supplied by others) to the terminals within the flow switch junction box as shown in the appropriate wiring diagram. Extra set of wiring terminals provided for remote monitoring, not shown.



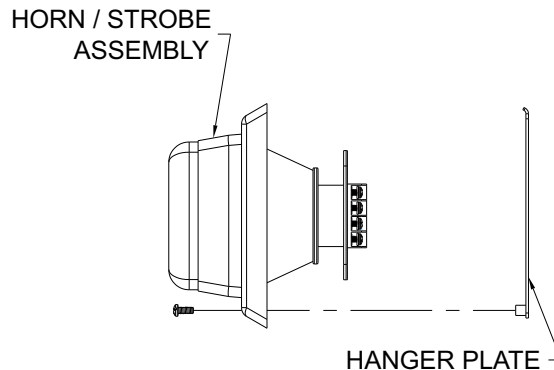
STEP TWO:

ALARM INSTALLATION

1. Determine mounting method and location of alarm. As a recommendation, locate the alarm near emergency equipment and in a manner that would allow it to be readily visible by employees and quick reaction or emergency personnel when activated.
2. Attach alarm hanger plate as shown with angled flange in an upward orientation.
3. Field wire flow switch to alarm box (or J-box). Provide electrical service wiring to alarm box (or J-box). Note: Circuit wiring should not be energized at this time. It is recommended that the alarm and other components be installed in accordance of national and local electrical codes.
4. Connect the ground wires and ground in accordance of local and NEC National Electrical Code requirements. A green ground screw is provided on the alarm box (or J-box).
5. Connect flow switch field wiring and electrical service wiring to alarm terminals as indicated in wiring diagram.
6. Hang the horn/strobe assembly over the hanger plate with the mounting screw at the bottom, then tighten mounting screw to secure..
7. Apply power to the circuit and test to verify operation.



SURFACE MOUNTING J-BOX (NTS)

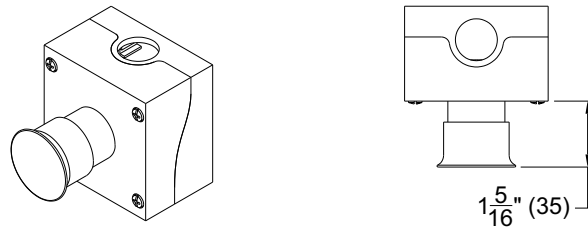


STEP THREE:
TEST OPERATION

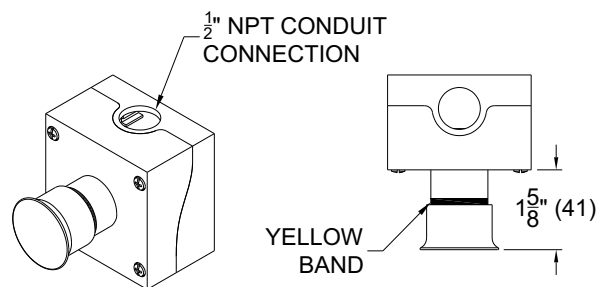
1. Apply power to alarm circuit. Unit should not be operating if safety equipment is not activated.
2. Supply water to fixture and flush air from system.
3. Activate safety equipment. Alarm horn should be sounding and strobe light should be flashing.

ASW SILENCING SWITCH ONLY. Test silencing switch. Push silencing button, while alarm is active; the horn should stop sounding and the strobe should continue to flash. To reset -ASW Silencing Switch: Pull button firmly, an audible “pop” should be heard and a yellow band should be visible near the end of the mushroom button. NOTE: If the yellow band is not visible, switch is NOT reset and the horn will not sound the next time alarm is activated.

4. De-activate safety equipment. Alarm horn and strobe should now automatically de-activate.



ALARM SILENCING SWITCH SHOWN ACTIVATED. TO RESET AFTER SILENCING ALARM, ASW PUSHBUTTON MUST BE PULLED FIRMLY TO FULLY EXTENDED POSITION.



WHEN FULLY EXTENDED, A VISIBLE YELLOW BAND WILL APPEAR ON THE PUSHBUTTON SHAFT AT THE REAR OF THE MUSHROOM PUSHBUTTON.

MAINTENANCE:

Caution: Replace alarm should the unit fail to operate. Do not attempt repair.

Perform visual inspection and an operational test twice a year.

PARTS LIST

ITEM	PART NUMBER	DESCRIPTION
1	7103-115-000	ALARM, AMBER STROBE WITH HORN
2	7103-102-000	DPDT FLOW SWITCH, 1/2" NPT
3	7103-104-000	DPDT FLOW SWITCH, 1-1/4" NPT
4	7103-111-001	DPDT FLOW SWITCH, 3/8" NPT
5	7103-110-001	DPDT FLOW SWITCH, 1" NPT

