

## **INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS**

### **COMBINATION STATIONS, RECESSED ACTIVATION**



**Models: S2160-PE21-RA / S2260-RA / S3160-RA  
 INCLUDING MODELS WITH -PAN OPTION**

### **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 or 18 months after the date of shipment from factory, whichever comes first. Acorn's™ liability under this warranty shall be discharged solely by replacement of repair of defective material, provided Acorn™ is notified in writing within one year from date of shipment, F.O.B. Industry, California.

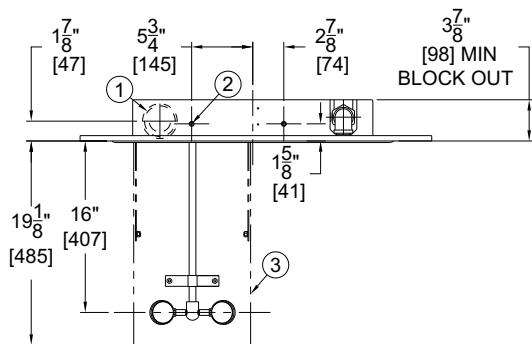
This warranty does not cover installation or labor charges and does not apply to materials, which have been damaged by other causes such as mishandling or improper care or abnormal use. The repair or replacement of the defective materials shall constitute the sole remedy of the Buyer and the sole remedy 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

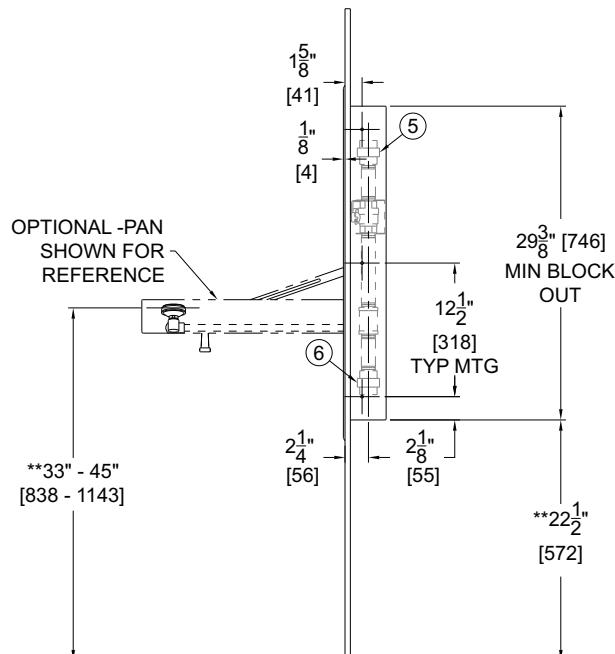
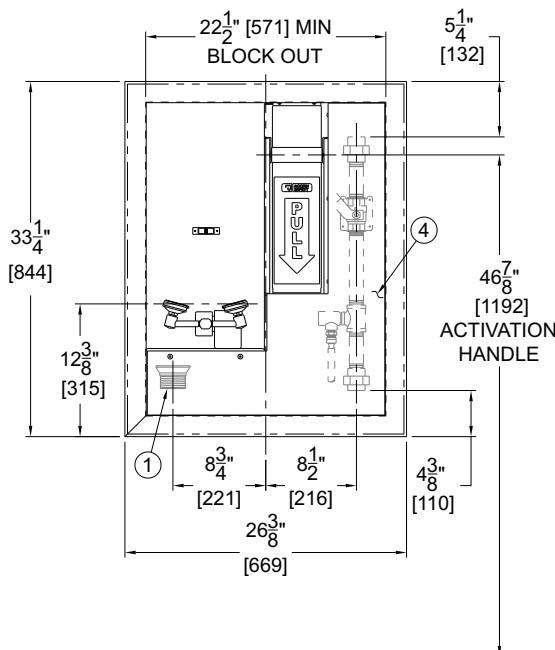
1. Read the installation instructions prior to beginning the installation.
2. Separate parts from packaging and verify all necessary parts are accounted for and undamaged. Obtain missing or damaged parts from Acorn Safety prior to beginning installation.
3. Flush water supply lines prior to installation. 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 injury/contamination should be informed and trained in the use of this and any other safety equipment. The signage provided should be highly visible, posted in a well-lit area within the area served by the safety station.

## ROUGH IN

### -RA RECESSED ACTIVATION

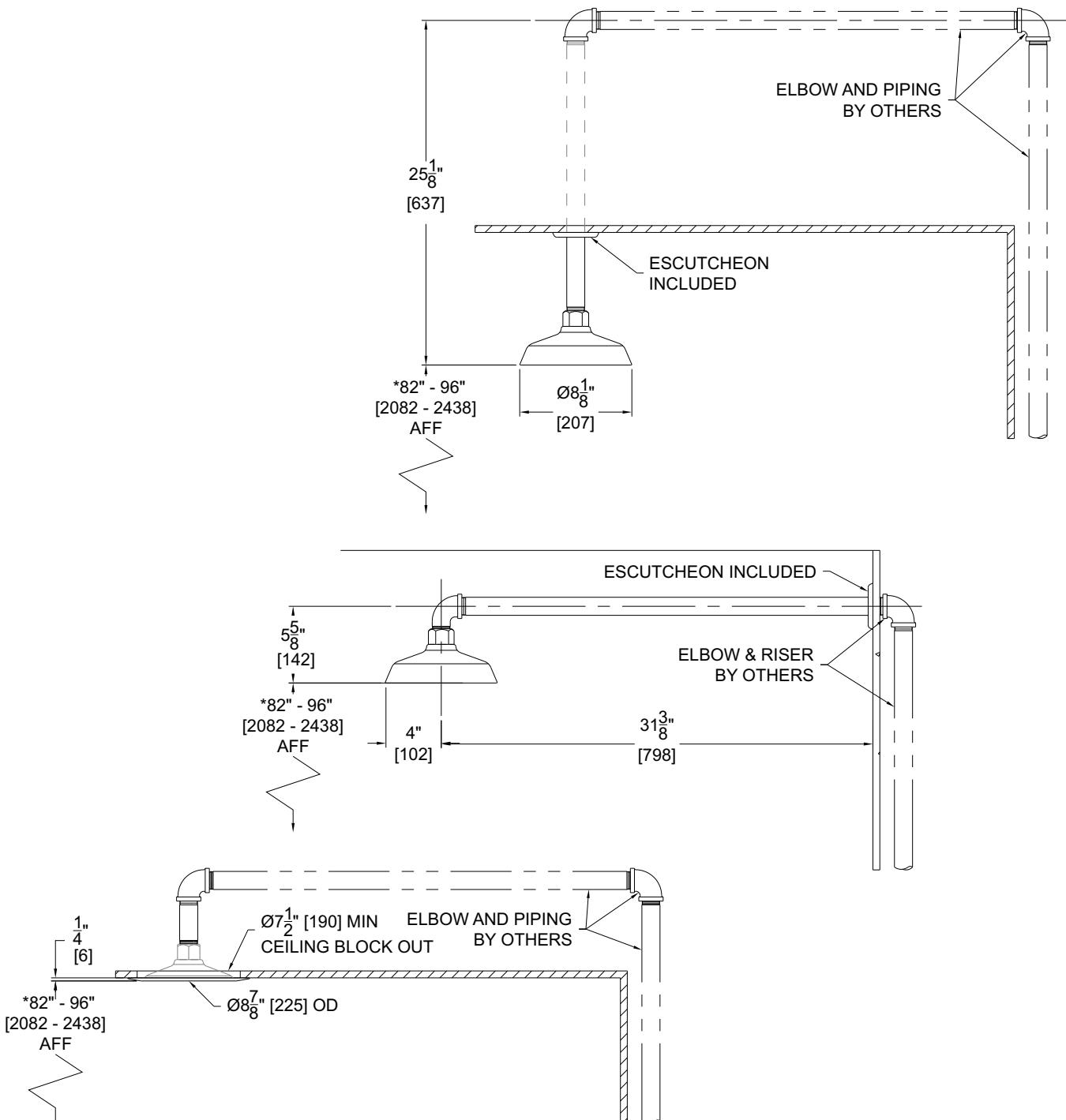


- ① 2" NPS DRAIN CONNECTION FOR OPTIONAL -PAN
- ② (10) Ø1/4" [6] MOUNTING HOLES, 6 ON RIGHT & LEFT, 2 ON TOP & BOTTOM
- ③ OPTIONAL -PAN, SHOWN IN PHANTOM
- ④ REMOVABLE ACCESS PANEL
- ⑤ 1" NPT SHOWER RISER CONNECTION
- ⑥ 1" NPT FIXTURE INLET CONNECTION



#### GENERAL NOTES:

1. ALL DIMENSIONS ARE INCHES [MM].
2. REFER TO ADA FOR CLEAR FLOOR/GROUND SPACE AND APPROACH REQUIREMENTS.
- \*3. ANSI Z358.1 REQUIRES NOZZLES TO BE MOUNTED BETWEEN 33" - 45" [838 - 1143] ABOVE THE FINISHED FLOOR AND REQUIRES A MINIMUM DISTANCE OF 6" [152] FROM THE WALL OR OBSTRUCTION.
- \*\*4. ANSI Z358.1 REQUIRES SHOWER HEAD TO BE MOUNTED BETWEEN 82" - 96" [2083 - 2438] ABOVE THE FINISHED FLOOR AND REQUIRES A MINIMUM DISTANCE OF 16" [406] FROM THE WALL OR OBSTRUCTION.



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## INSTALLATION INSTRUCTIONS:

Supplies required: (not provided by Acorn)

1. Wall fasteners for signage mounting.
2. Pipe sealant or Teflon tape for sealing water connections.
3. 1" NPT elbow and pipe nipple to connect recessed activation cabinet to shower head.

### **IMPORTANT: FLUSH WATER SUPPLY LINES**

#### **PRIOR TO CONNECTION TO SAFETY EQUIPMENT.**

##### **Notes:**

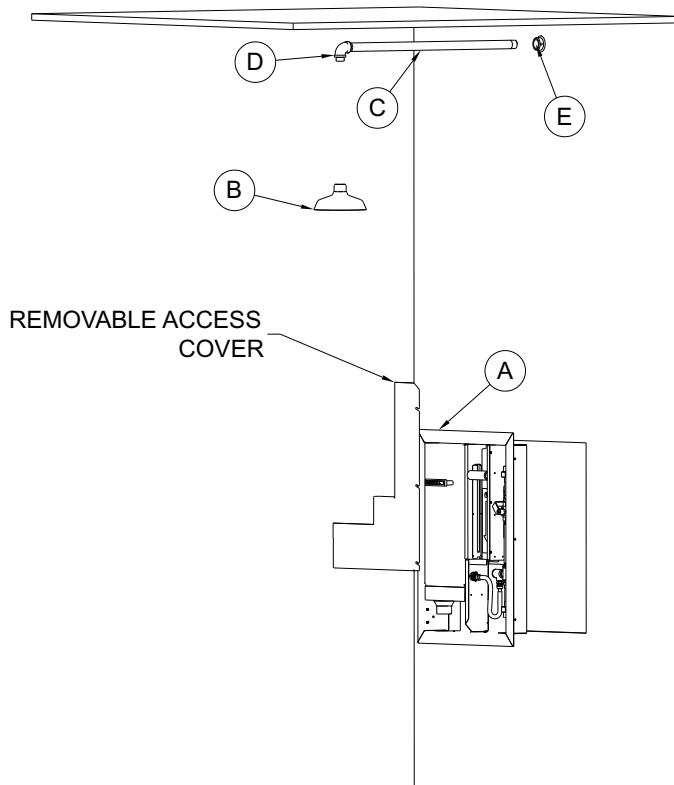
- Bottom of shower head must be between 82"-96" from finished floor in order to meet ANSI Z358.1
- Use hand tools and wrenches in a manner which will prevent marring finished surfaces. Strap wrenches or tools with plastic jaw linings are highly recommended.
- Refer to Rough-in for location of supply and drain 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.
- Prior to beginning assembly, **TURN OFF** water supply to 1" potable water supply line.

### **STEP ONE:**

#### **MOUNTING OPENING/INSTALLATION**

1. Remove the front access cover.
2. Locate the Recessed Activation cabinet component "A" at 48" maximum from the floor to the center of the activation handle, refer to rough-in. mark the wall for cutting.
3. The cut opening dimensions in the wall shall be 22 3/4" wide x 29 3/4" tall per rough-in.
4. Frame out as necessary to accept 1/4" mounting screws located in sides, top and bottom. Install the cabinet and mark the mounting hole locations, remove the cabinet and drill holes as required.
5. Mount cabinet using all ten mounting holes (screws supplied by installer).

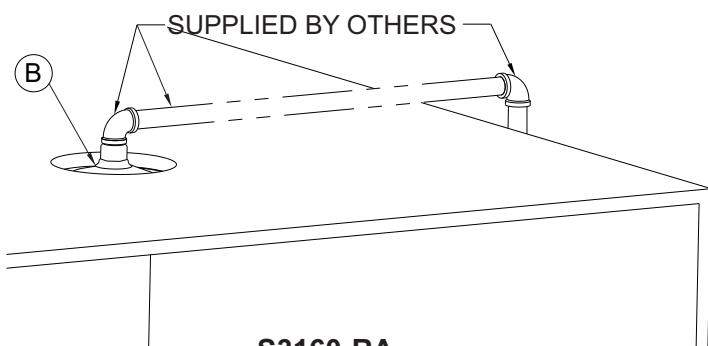
**S2260-RA**



### **STEP TWO:**

#### **SHOWER HEAD/DRAIN INSTALLATION**

1. Assemble components "B" & "C" or "B", "D" & "C" if necessary. Slide escutcheon component "E" over the pipe nipple. (N/A for S3160-RA).
2. Locate the shower head assembly at 82"-96" from the floor per rough-in. Drill hole through the wall/ceiling as required to fit a 1" NPT pipe. (For S3160-RA hole for recessed shower head will be required in ceiling).
3. Install the shower head assembly. the elbow and



**S3160-RA**

pipe nipple length(s) required will be supplied by installer.

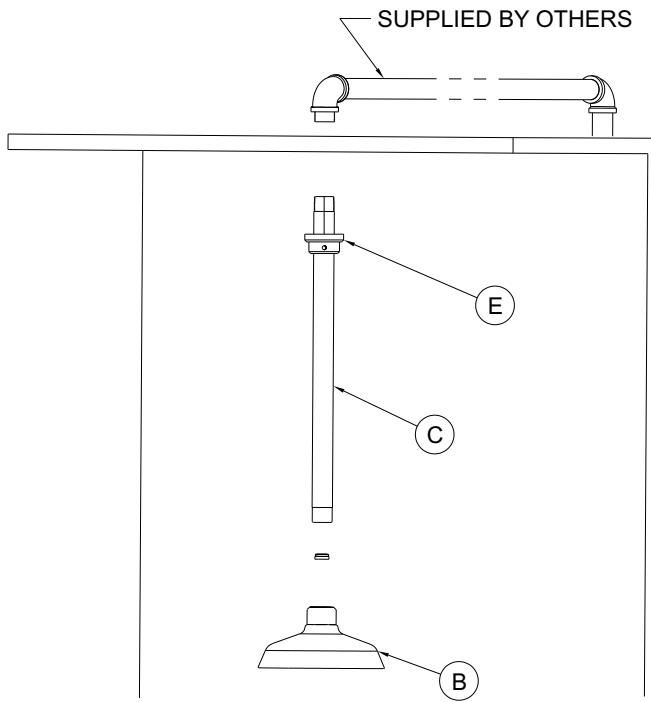
4. Slide escutcheon component "E" over to the wall/ceiling and tighten. (N/A for S3160-RA).
5. Make all further supply and drain connections to the bottom of the enclosure as required (supplied by others).
6. Re-install the access cover.

**Step three:**
**TEST**

1. Verify 1" supply valve for shower is turned OFF.
2. Turn on potable water supply.
3. Activate eye/face wash, inspect system for leaks and verify proper water flow.

**Step four:**
**SIGNAGE & INSPECTION**

1. Position sign with clear visibility, in close proximity to safety equipment and mark mounting hole locations.
2. Select appropriate 1/4" anchors, screws and washers (Supplied by others) to install signage
3. Attach inspection tag supplied, with plastic zip tie.


**S2160-PE21-RA**

## **OPERATION INSTRUCTIONS:**

Employees who work with hazardous materials should become familiar with the location and operation of the nearest emergency plumbing fixture. Emergency plumbing fixtures stations are simple to use and require hands free operation once the station is activated. Regular instruction regarding proper care and use will increase confidence that the units are accessible and function properly.

The route and area surrounding the Eye Wash should be clear and unobstructed; the sooner eyes are flushed, the less likelihood of damage. Eye Wash stations should be located in close proximity to the hazard and take no more than 10 seconds to reach. In the case of severe eye contamination the victim may require assistance to the Eye Wash station and help flushing their eyes.

Safety plumbing fixture equipment should be operated weekly for a period long enough to verify operation, clear the supply line of any sediment build-up and minimize microbial contamination due to sitting water.

1. To start the Eye Wash, swing spray nozzle assembly down horizontally over the basin or fully "ON" position. Flushing should start, popping the spray nozzle caps open.
2. Lower both eyes into flow. Both eyes should be flushed to prevent contamination from one eye from being delivered to unaffected eye. Personnel who wear contact lenses should remove them immediately prior to or during the flush to prevent the contamination from remaining against the cornea possibly causing unnecessary damage or pain.
3. Using thumb and forefingers, fully open eyelids and flush eyes thoroughly for approximately 15 minutes or until medical personnel arrive. Be prepared to let the doctor know what type of contamination has entered the eye.
4. When finished swing spray nozzle assembly up or fully "OFF" position. Flushing fluid should stop. Once flushing fluid has stopped flowing, return spray nozzle lids to the closed position to protect from airborne contaminates.

## **MAINTENANCE GUIDE:**

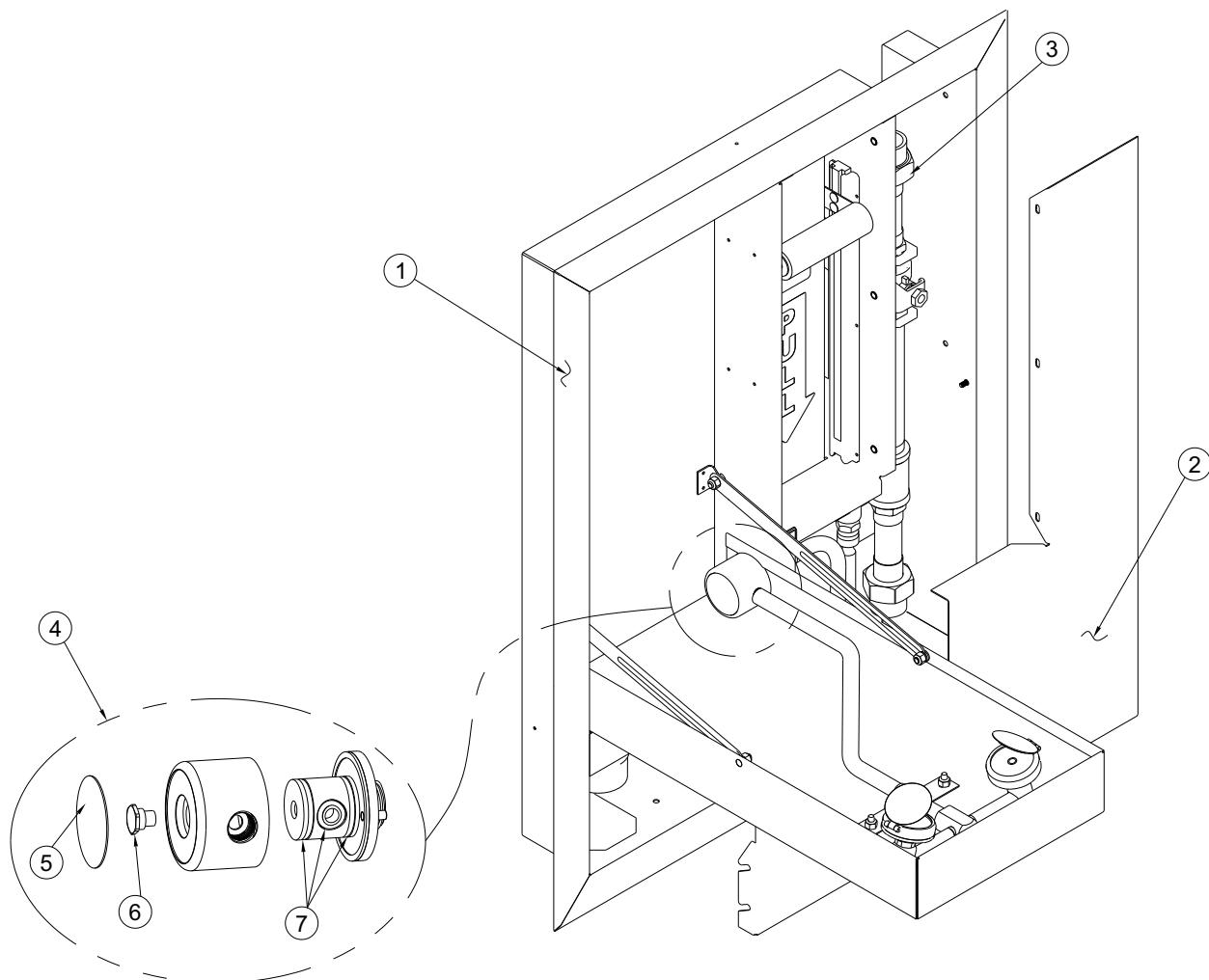
Maintain and inspect in accordance with ANSI Z358.1-2009

1. Check for obvious signs of wear, broken or defective equipment. Re-paint if necessary. Replace missing or defective equipment such as broken push paddles, missing signs and inspection tags.
2. Remove strainer and washout any debris collected –replace as required.
3. Operate Eye Wash nozzles swinging the spray nozzle assembly down to place ball valve in the fully "ON" position checking for smooth operation of valve push paddle mechanism at the same time ensuring that the Eye Wash spray nozzle caps pop off immediately when actuated. If the ball valve does not operate smoothly check the actuating assembly for binding or missing parts. If the Eye Wash spray nozzle caps do not pop off immediately when actuated check for correct supply inlet pressure.
4. While in operation, inspect spray nozzles for clogs or debris correct or replace as required.
5. Swing spray nozzle assembly up to fully "OFF" position and swing back to stand by position. To prevent Eye Wash spray nozzles from becoming contaminated, always close nozzle lids after each use.

## Parts List

ITEM #	PART NUMBER	DESCRIPTION
1	7104-032-001	REC ACTIVATION COMBO ( INCLUDED ITEMS NO. 2, 3, &4)
	7104-200-001	REC ACTIVATION COMBO WITH PAN (INCLUDED ITEMS NO. 2, 3, & 4)
2	7104-140-199	ACCESS COVER, NO PAN
	7104-141-199	ACCESS COVER, PAN
3	7100-103-000	1" BALL VALVE
4	7104-040-001	SWING VALVE, CW ( INCLUDES ITEMS NO. 5, 6, & 7)
5	7104-045-150	COVER DISC
6	7104-043-000	RETAINING SCREW
7	7104-048-001	SEAL RING KIT

## -RA-PAN



## Parts List

ITEM#	PART NUMBER	DESCRIPTION
1	7102-320-199	ESCUTCHEON
2	1936-027-022	PIPE NIPPLE
3	7102-351-000	FLOW REGULATOR
4	7102-305-001	STN. STL. SHOWER HEAD ASSY ( INCLUDES ITEMS NO. 3)
5	7102-299-001	RECESSED SHOWER HEAD ASSY (INCLUDES ITEMS NO. 3)
6	7102-413-022	PIPE NIPPLE WITH ELBOW ASSY

