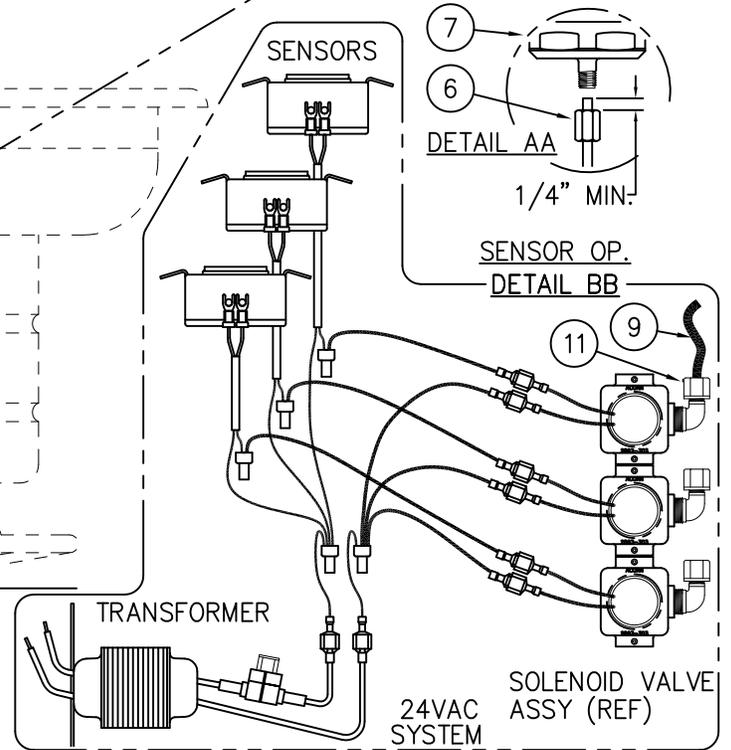
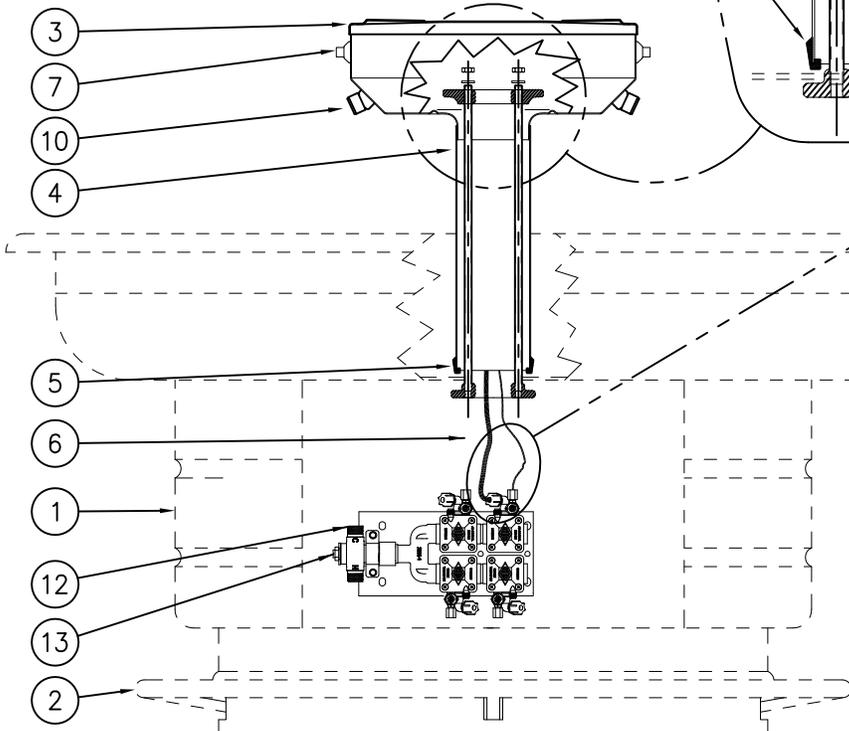
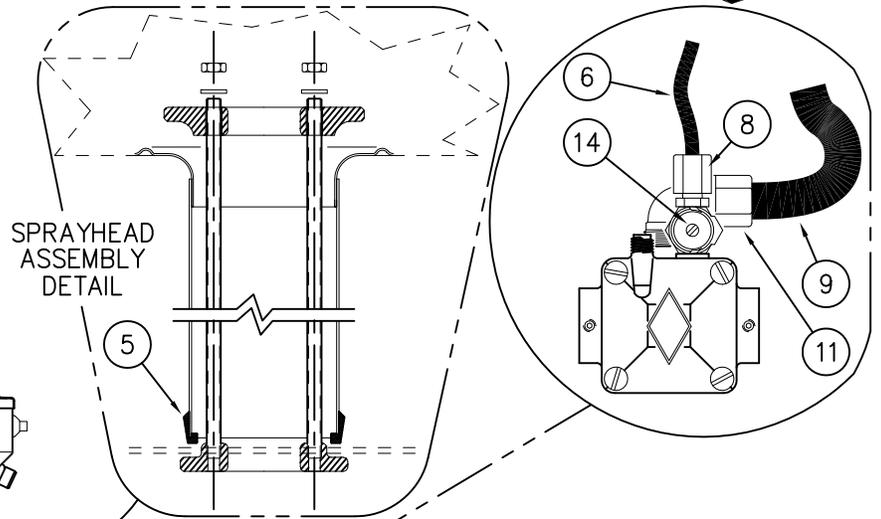




REFERENCE DRAWINGS	
VALVE INSTALLATION	9912-252-001
T/P BALANCE MIXER (-MXTP)	9975-034-001
SPRAY NOZZLES	9971-001-001
MULTI-PURPOSE WRENCH	9951-000-001
SOAP DISPENSERS	
POWDERED SOAP (-DP)	9965-200-001
LIQUID / LOTION SOAP (-DV)	9965-230-001



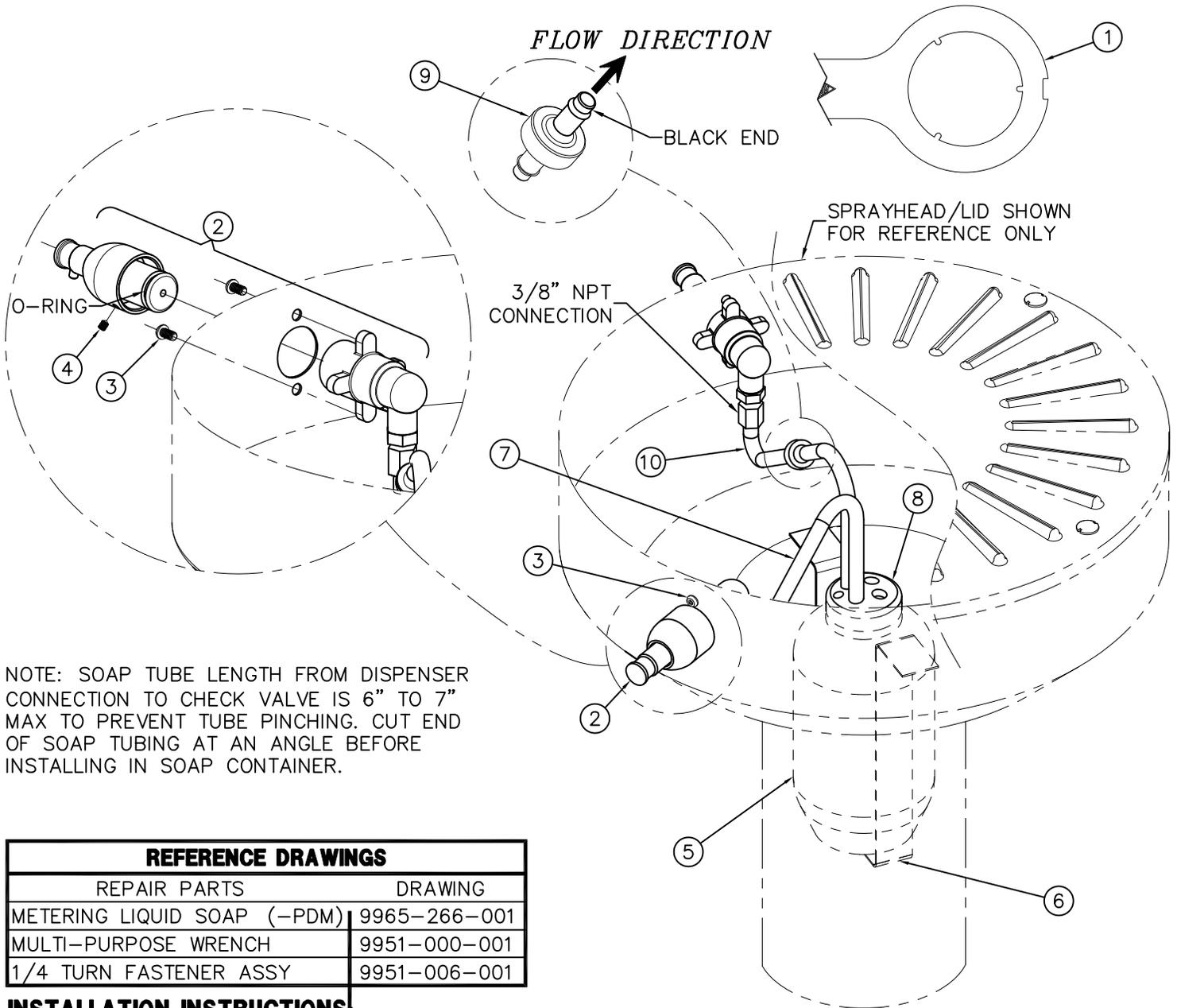
INSTALLATION INSTRUCTIONS

- A- Remove existing sprayhead and valve assembly (not shown). Access through a removable pedestal skirt ①. Prior to valve assembly removal shut off water supply to unit.
 - B- Remove any existing foot ring assembly ②.
 - C- Remove sprayhead lid from Retro-pak assembly ③. Install Retro-pak sprayhead assembly ④ per sprayhead assembly detail. Install gasket ⑤ as shown.
 - D- From within pedestal base ① connect 1/8" O.D. polyethylene air line ⑥ from pushbutton ⑦ to Air-control valve servomotor timer ⑧ hand tight using ferrule nuts provided. See detail AA.
 - E- Connect 1/4" O.D. polyethylene water line ⑨ from nozzle ⑩ to servomotor compression nut ⑪ hand tight using ferrule nuts provided.
- NOTE: All tubing is color coded. Assemble appropriate pushbuttons, servomotors and nozzles.

- F- After thoroughly flushing supply lines, make up supply connection ⑫ 1/2" NPT male. Adjust the mixing valve ⑬ to desired temperature. Set timing from 5 to 60 seconds by turning the timing screw ⑭.
- NOTE: FOR -SO SENSOR OPERATION:** Locate electrical stubout within unit. Supply 110V 60Hz 3 Amps (max) to transformer provided with junction box. Transformer must be wired to a GFI protected circuit. Connect wiring from sensor as shown in detail BB. Connect water lines per installation paragraph E. Fixture must be earth grounded per N.E.C. (National Electrical Code)

ACORN ENGINEERING COMPANY
 P.O. BOX 3527 Industry, CA 91744
 15125 Proctor Ave Industry, CA 91746
 (626) 336-4561 FAX (626) 961-2200

TITLE RETRO-PAK REPLACEMENT ASSY. CAT.# 3350 - 3351		
MANUFACTURE DATE JANUARY. 1990 TO PRESENT	DATE ISSUED 06/08/95	DRAWING NUMBER 9925-745-001
	DATE REVISED 09/27/13	



NOTE: SOAP TUBE LENGTH FROM DISPENSER CONNECTION TO CHECK VALVE IS 6" TO 7" MAX TO PREVENT TUBE PINCHING. CUT END OF SOAP TUBING AT AN ANGLE BEFORE INSTALLING IN SOAP CONTAINER.

REFERENCE DRAWINGS	
REPAIR PARTS	DRAWING
METERING LIQUID SOAP (-PDM)	9965-266-001
MULTI-PURPOSE WRENCH	9951-000-001
1/4 TURN FASTENER ASSY	9951-006-001

INSTALLATION INSTRUCTIONS

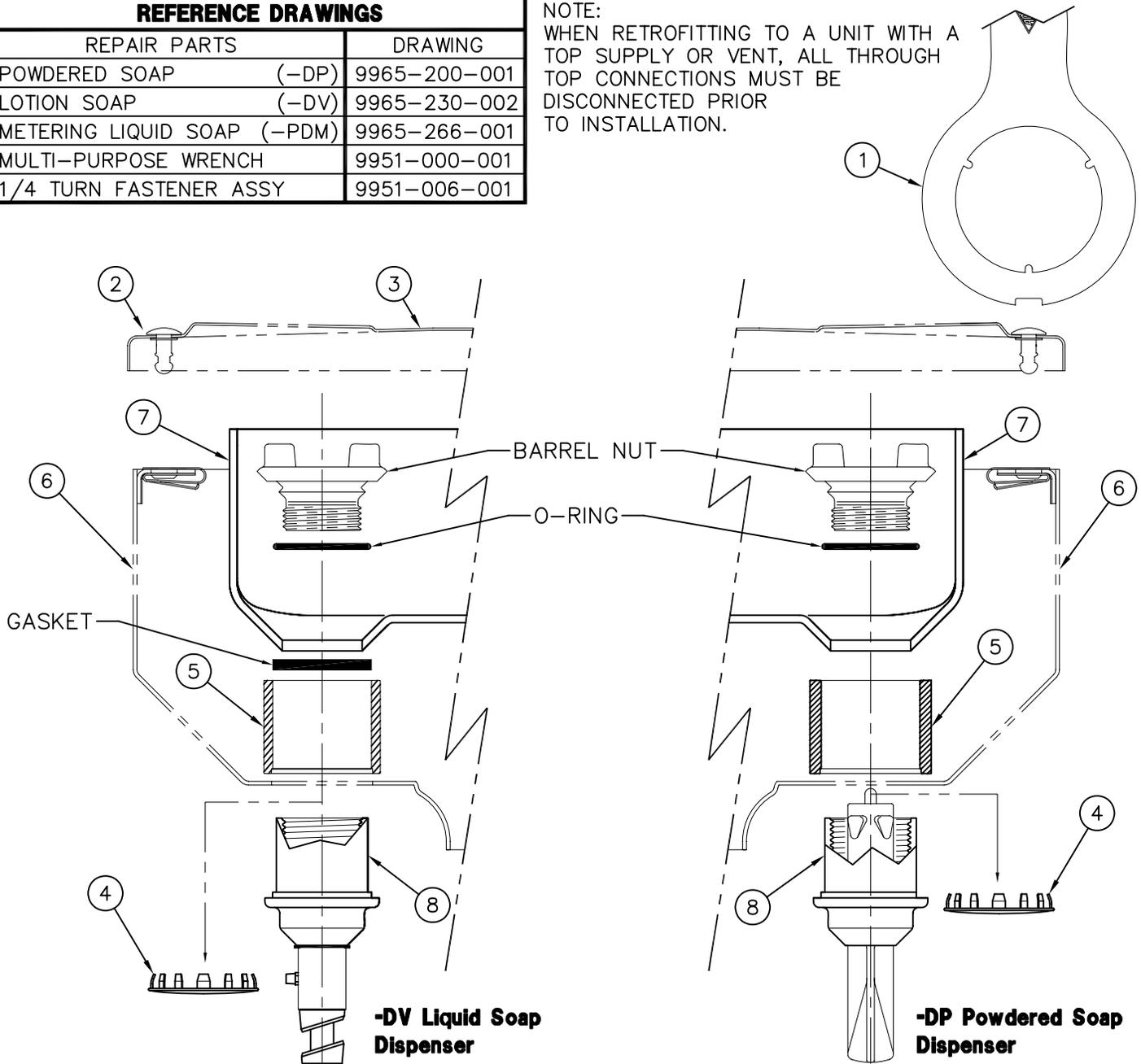
- A- WITH WRENCH (1) PROVIDED REMOVE THE SPRAYHEAD LID.
- B- ASSEMBLE LIQUID PUMP SOAP DISPENSER (2) AND MOUNT ONTO SPRAYHEAD AS SHOWN ABOVE USING CENTER SET SCREW (3) AND POINT HEAD SET SCREW (4).
- D- PLACE LIQUID SOAP CONTAINER (5) INSIDE SPRAYHEAD ONTO THE LIQUID SOAP CONTAINER BRACKET (6).
- E- INSERT 3/8" OD VINYL TUBE (7) INTO LIQUID SOAP CONTAINER (5) THROUGH HOLES ON CONTAINER LID (8) AND CONNECT OTHER END TO CHECK VALVE (9).
- F- CONNECT 3/8" OD VINYL TUBE (10) FROM CHECK VALVE (9) TO LIQUID SOAP PUMP DISPENSER (2).
- G- FILL LIQUID SOAP CONTAINER (5) WITH LIQUID SOAP AND PRIME LIQUID SOAP PUMP (2).
- H- SECURE SPRAYHEAD LID USING WRENCH PROVIDED (1) & TURNING FASTENERS (2) 1/4 TURN CLOCKWISE.

<p>ACORN ENGINEERING COMPANY P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200</p>	<p>TITLE -PDM METERING LIQUID SOAP INSTALLATION DETAIL</p>		
	<p>MANUFACTURE DATE</p> <p>MARCH 2013</p> <p>TO PRESENT</p>	<p>DATE ISSUED</p> <p>03/20/13</p>	<p>DRAWING NUMBER</p> <p>9912-263-001</p>
		<p>DATE REVISED</p>	



REPAIR PARTS		DRAWING
POWDERED SOAP	(-DP)	9965-200-001
LOTION SOAP	(-DV)	9965-230-002
METERING LIQUID SOAP	(-PDM)	9965-266-001
MULTI-PURPOSE WRENCH		9951-000-001
1/4 TURN FASTENER ASSY		9951-006-001

NOTE:
WHEN RETROFITTING TO A UNIT WITH A TOP SUPPLY OR VENT, ALL THROUGH TOP CONNECTIONS MUST BE DISCONNECTED PRIOR TO INSTALLATION.



SOAP DISPENSER/TANK INSTALLATION DETAIL

- A- WITH WRENCH ① PROVIDED GIVE LID FASTENERS ② A QUARTER TURN COUNTERCLOCKWISE AND REMOVE LID ③.
- B- REMOVE SOAP DISPENSER PLUGS ④. (DISCARD)
- C- POSITION BARREL STANDOFFS ⑤ OVER HOLES IN SPRAYHEAD ⑥.
- D- PLACE SOAP TANK ⑦ INSIDE SPRAYHEAD ALIGNING OPENINGS IN TANK WITH STANDOFFS ⑤.

- E- ASSEMBLE SOAP DISPENSERS ⑧ FROM INSIDE SOAP TANK AND BELOW SPRAYHEAD AS SHOWN ABOVE.
- F- FILL SOAP TANK ⑦ WITH SOAP.
- G- SECURE LID ③ USING SPECIAL WRENCH ① & TURNING FASTENERS ② 1/4 TURN CLOCKWISE.

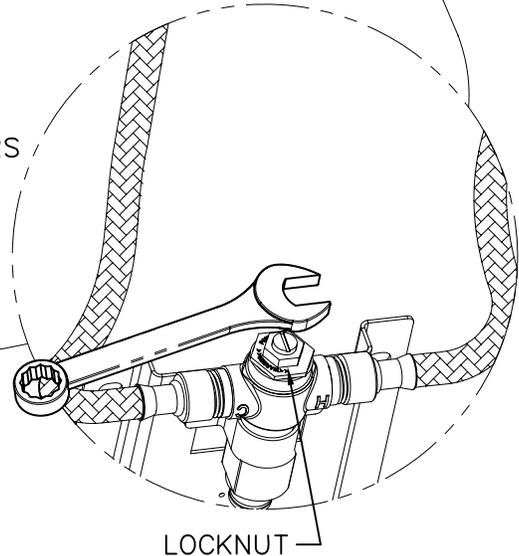
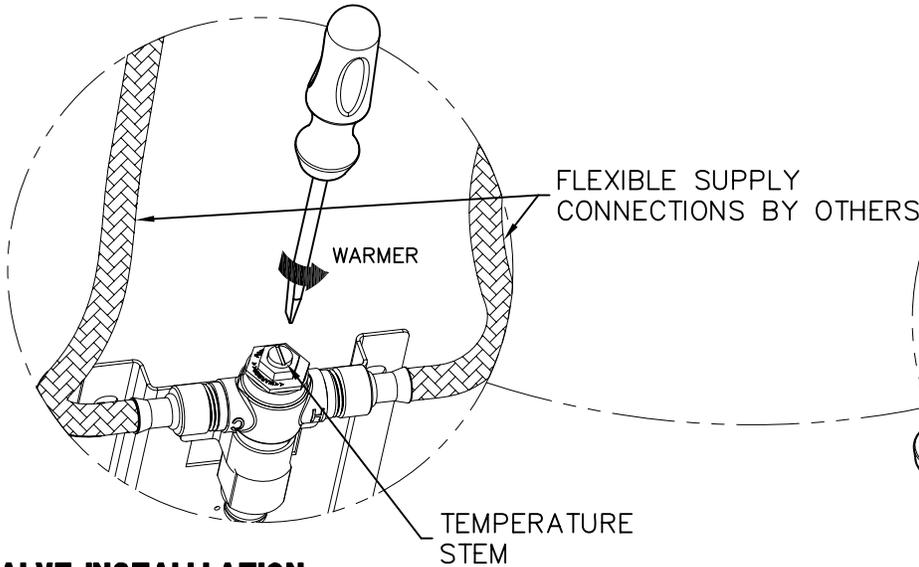
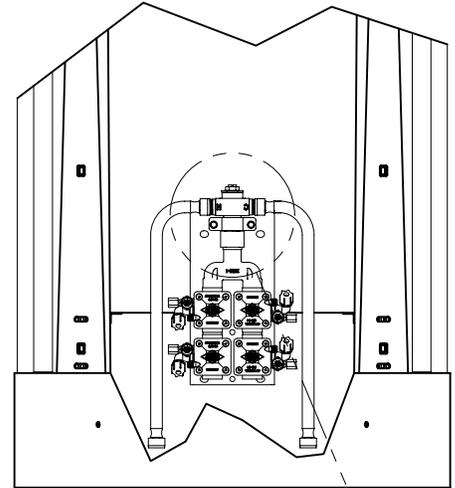


ACORN ENGINEERING COMPANY
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TITLE SOAP DISPENSER/TANK INSTALLATION DETAIL		
MANUFACTURE DATE MARCH 1987 TO PRESENT	DATE ISSUED 08/24/09	DRAWING NUMBER 9912-260-002
	DATE REVISED	



REFERENCE DRAWINGS		
REPAIR PARTS		DRAWING
NON-METERING SERVOMOTOR	(-F)	9955-001-002
METERING SERVOMOTOR	(-H)	9955-000-003
AIR-CONTROL VALVE BODY		9975-090-001
CHECKSTOP	(-ST)	9956-040-003
SENSOR/SOLENOID	(-SO) (24VAC)	9955-015-002
SENSOR/SOLENOID/PBE	(-SO) (9VDC)	9955-019-001
HAND BUTTON		9957-300-001
FOOT BUTTON		9957-200-001



VALVE INSTALLATION:

- A- MX-T/P VALVES: AFTER THOROUGHLY FLUSHING SUPPLY LINES, MAKE UP CONNECTIONS TO SUPPLY STUB OUTS AND VALVE INLETS WITH INSTALLER PROVIDED FLEXIBLE HOSE. NOTE: MX-T/P VALVE SUPPLY INLETS ARE 1/2" NPT.
- B- OPTIONAL -ST: AFTER THOROUGHLY FLUSHING SUPPLY LINES, MAKE UP CONNECTIONS TO SUPPLY STUB OUTS AND VALVE INLETS WITH FLEXIBLE HOSE PROVIDED. NOTE: -ST VALVES INCLUDE FLEXIBLE HOSE WITH 1/2" NPSI CONNECTIONS. FLEXIBLE HOSE ENDS WILL ACCOMMODATE 1/2" NPT MALE ADAPTER.
- C- SEE APPROPRIATE SERVOMOTOR REFERENCE DRAWINGS FOR VALVE DETAILS AND TIMING INSTRUCTIONS.

MX T/P TEMPERATURE VALVE ADJUSTMENT

- D- LOOSEN LOCKNUT SHOWN.
- E- TURN ON FIXTURE AND RUN WATER FOR AT LEAST 2 MINUTES. ALLOW WATER TO STABILIZE.
- F- USE A FLAT TIPPED SCREWDRIVER TO TURN TEMPERATURE STEM COUNTER-CLOCKWISE FOR WARMER OR CLOCKWISE FOR COOLER OUTLET WATER TEMPERATURE.
- G- TIGHTEN LOCKNUT TO PREVENT ACCIDENTAL OR UNAUTHORIZED TEMPERATURE ADJUSTMENT.
- H- RE-CHECK OUTLET TEMPERATURE.

ACORN ENGINEERING COMPANY P.O. BOX 3527 INDUSTRY, CA. 91744 (626) 336-4561 FAX (626) 961-2200	TITLE VALVE INSTALL & MIXING VALVE ADJUSTMENT		
	MANUFACTURE DATE JUNE 2009 TO PRESENT	DATE ISSUED 07/01/09	DRAWING NUMBER 9912-252-001
		DATE REVISED 10/12/09	