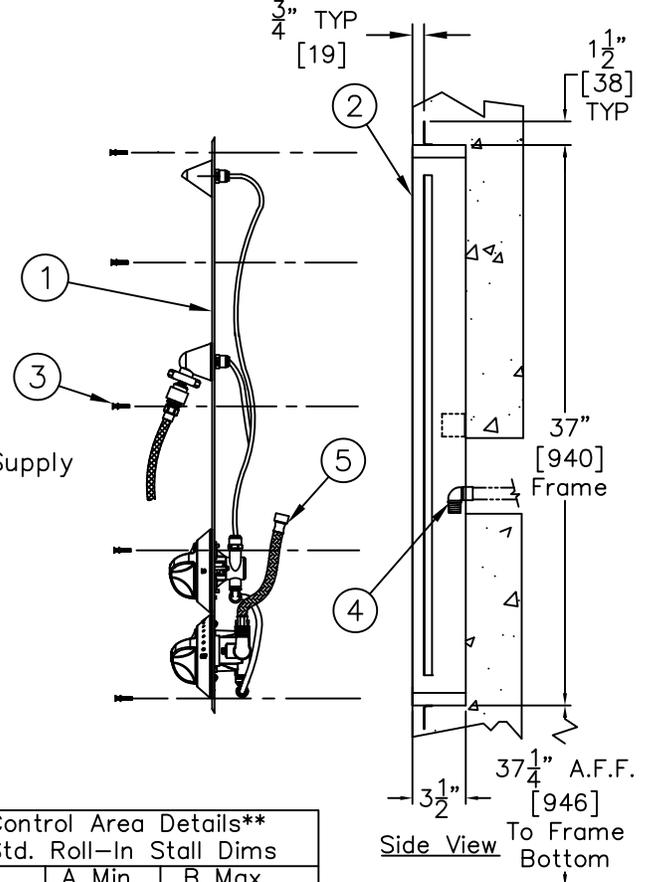
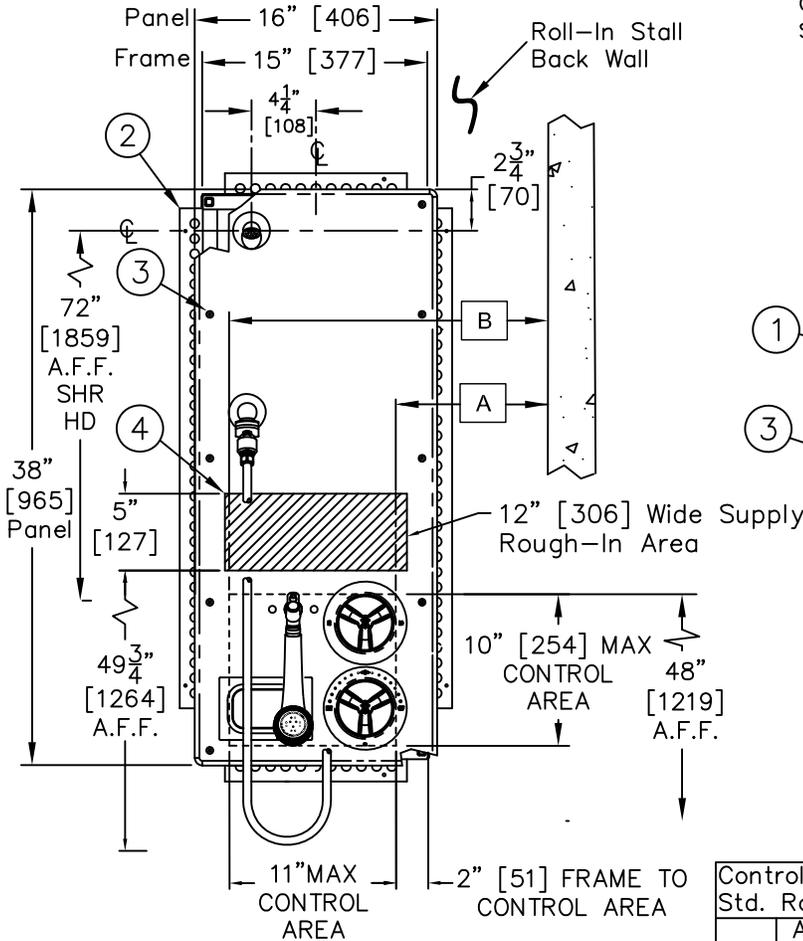




REFERENCE DRAWINGS

SHOWER HEAD	9970-140-001	T/P VALVE(SHOWN)	9975-005-002
HAND SHOWER	9918-043-001	T/P VALVE ADJUST	9900-007-001
DIVERTER	9975-080-002		

REFER TO ACCESSIBILITY GUIDELINES FOR COMPLETE INSTALLATION REQUIREMENTS. THIS FIXTURE COMPLIES WITH CBC REQUIREMENTS AND ADA ACCESSIBILITY GUIDELINES WHEN INSTALLED CORRECTLY. *ADA/CBC DIM SHOWN IS ROLL-IN STALL WITH SEAT.



	A Min.	B Max.
ADA	0"	*27" [686]
CBC	16" [406]	27" [686]

**ADA dim shown is Roll-In Stall with Seat. Refer to Guidelines for complete details.

Front View Roll-In Type Compartment Shown
Model # WH418ADA-WHCHS-R Shown

RIGHT HAND VALVE ORIENTATION SHOWN
LEFT HAND VALVE ORIENTATION OPPOSITE

INSTALLATION INSTRUCTIONS:

- A- DISASSEMBLE SHOWER PANEL ASSEMBLY ① FROM WALL MOUNTING FRAME ② BY REMOVING VANDAL RESISTANT SCREWS ③ FROM THE PANEL.
- B- PREPARE WALL AND OPENING FOR MOUNTING FRAME. NOTE PLASTER FLANGES PROVIDED ON ALL 4 SIDES. PROVIDE SUPPLY ROUGH-INS ④ WHERE INDICATED.
- C- INSTALL MOUNTING FRAME ②. FRAME BOTTOM MUST BE AT 37-1/4" ABOVE FINISHED FLOOR WITH THE FACE FLUSH WITH THE FINISHED WALL. ENSURE POSITION CONFORMS W/ACCESSIBILITY REQUIREMENTS.

- D- THOROUGHLY FLUSH WATER SUPPLY INLETS. MAKE UP SUPPLY CONNECTIONS TO 1/2" NPS ⑤ END INLETS WHILE SUPPORTING PANEL OFF THE FLOOR. NOTE: SUPPLY INLET CONNECTION WILL ACCOMMODATE A 1/2" NPT MALE ADAPTER.
- E- ASSEMBLE THE SHOWER PANEL ① TO THE MOUNTING FRAME ② USING SCREWS PROVIDED.

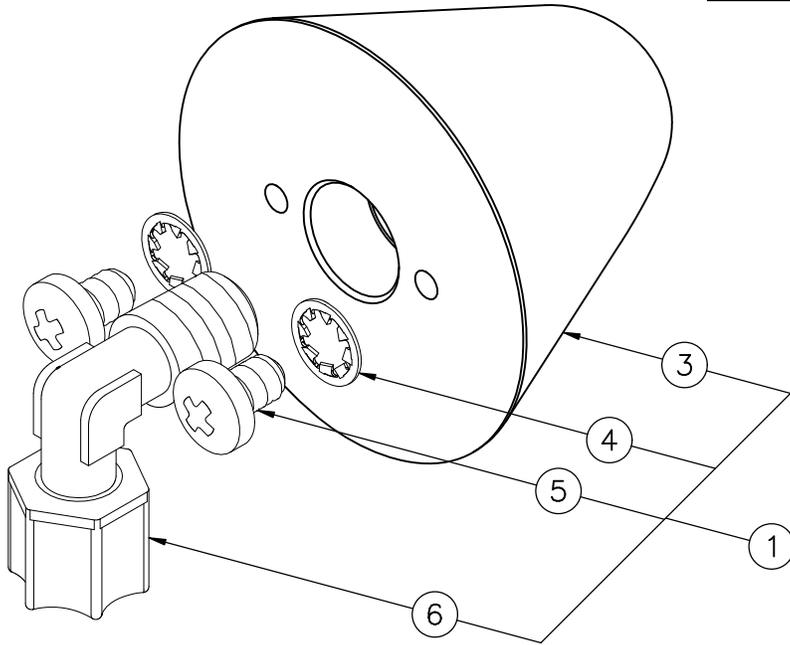
NOTE: MAXIMUM RECOMMENDED WORKING PRESSURE IS 100 PSI, 130° F INLET TEMPERATURE & 105° F MAXIMUM OUTLET TEMPERATURE.

WARNING: PRIOR TO COMPLETING INSTALLATION SUPPLY LINES MUST BE FLUSHED OF ALL FOREIGN MATERIAL SUCH AS PIPE DOPE, CHIPS SOLDER ETC. VALVE MUST BE DRAINED PRIOR TO BEING SUBJECTED TO FREEZING TEMPERATURES.

WHITEHALL MANUFACTURING P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 968-6661 FAX (626) 855-4862	TITLE LIGATURE RESISTANT WALL SHOWER, WH418ADA-WHCHS SERIES	
	MANUFACTURE DATE MARCH 2022 TO PRESENT	DATE ISSUED 03/01/23 DATE REVISED

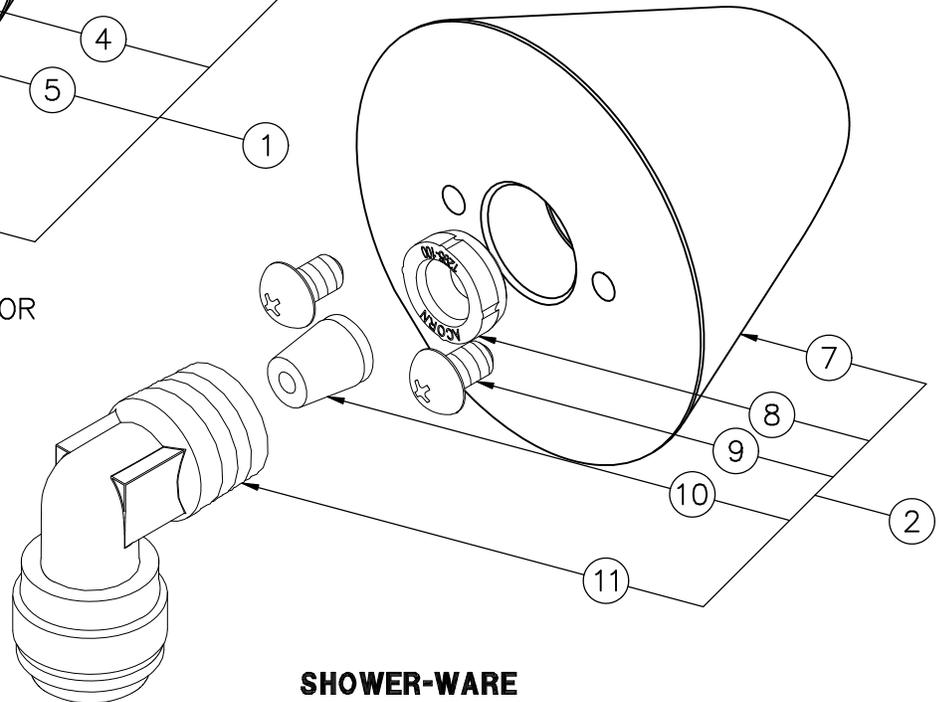


FLOW CONTROL	DESCRIPTION
0469-014-000	1.4 GPM FLOW CONTROL
0469-016-000	1.6 GPM FLOW CONTROL
0469-020-000	2.0 GPM FLOW CONTROL
0469-025-000	2.5 GPM FLOW CONTROL



PENAL-WARE

*NOTE: FLOW CONTROL RESTRICTOR LOCATED ON VALVE ASSEMBLY

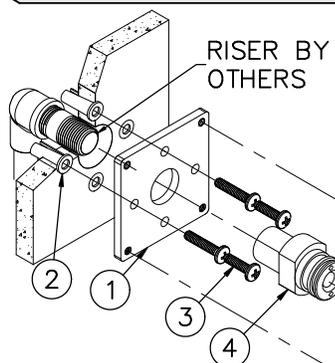


SHOWER-WARE

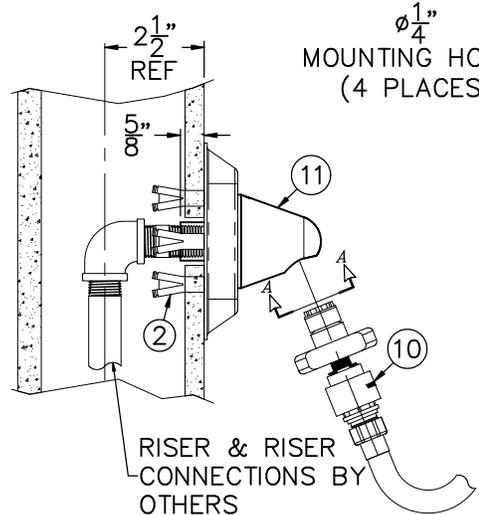
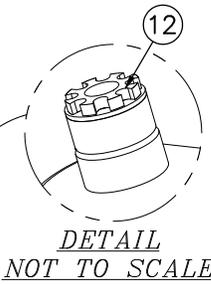
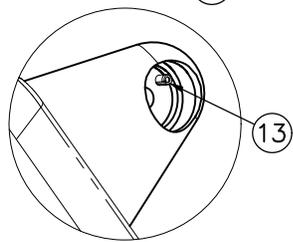
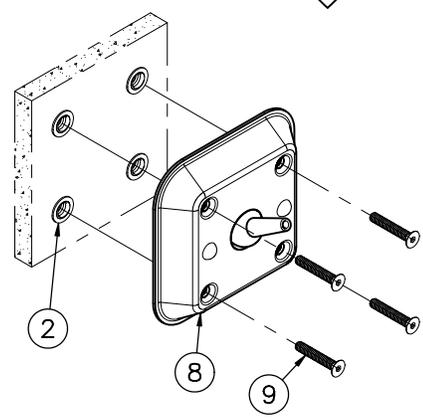
1	1146-002-001	CONICAL SHOWER HD ASSY, PENAL-WARE	7	1146-012-002	CONICAL SHOWER HEAD SUB ASSY
2	1146-012-001	CONICAL SHOWER HD ASSY, SHOWER-WARE	8	1295-100-000	FLOW CONTROL RETAINER
3	1146-002-002	CONICAL SHOWER HEAD SUB ASSY	9	0116-011-000	#10-32 x 5/16" SS PHIL RD HD SCREW
4	0321-003-000	1/4" STAR WASHER	10	SEE B/M	CLACK FLOW CONTROL RESTRICTOR
5	0126-504-000	PHILLIPS PAN HEAD SCREW, 1/4-20 x .375	11	1895-706-000	3/8" NPT x 3/8" OD PUSH-IN ELBOW
6	1895-152-000	1/4" NPT X 1/4" OD TUBE FITTING			
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION

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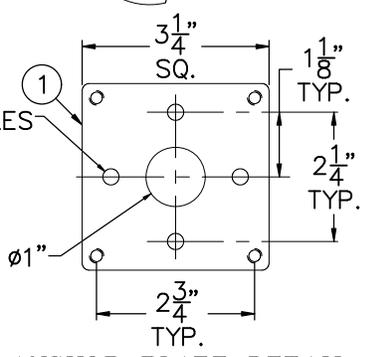
TITLE		
-CSH SUICIDE RESISTANT CONICAL SHOWER HEAD -HOUSING MOUNTED		
MANUFACTURE DATE	DATE ISSUED	DRAWING NUMBER
JUNE 1999	07/19/01	9970-140-001
TO PRESENT	02/20/07	



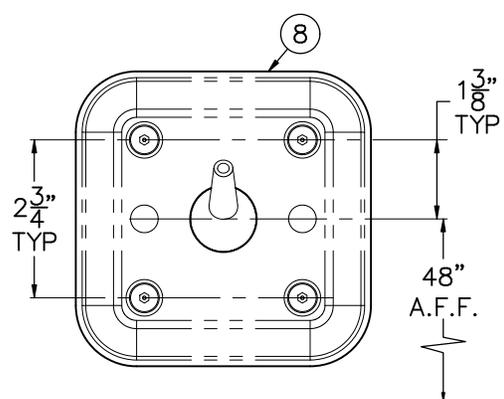
NOTE:
USE OF TEFLON TAPE ON ALL THREADED CONNECTIONS IS RECOMMENDED



$\phi 1/4$ "
MOUNTING HOLES
(4 PLACES)



ANCHOR PLATE DETAIL
SCALED x 1-1/2



HANDHELD SHOWER HANGER
MOUNTING DETAIL SCALED x 1-1/2

REFER TO ADA GUIDELINES OR LOCAL CODE AUTHORITY FOR COMPLETE INSTALLATION REQUIREMENTS FOR YOUR COMPARTMENT.
COMPLIANCE IS SUBJECT TO THE INTERPRETATION AND REQUIREMENTS OF THE LOCAL CODE AUTHORITY.

INSTALLATION INSTRUCTIONS:

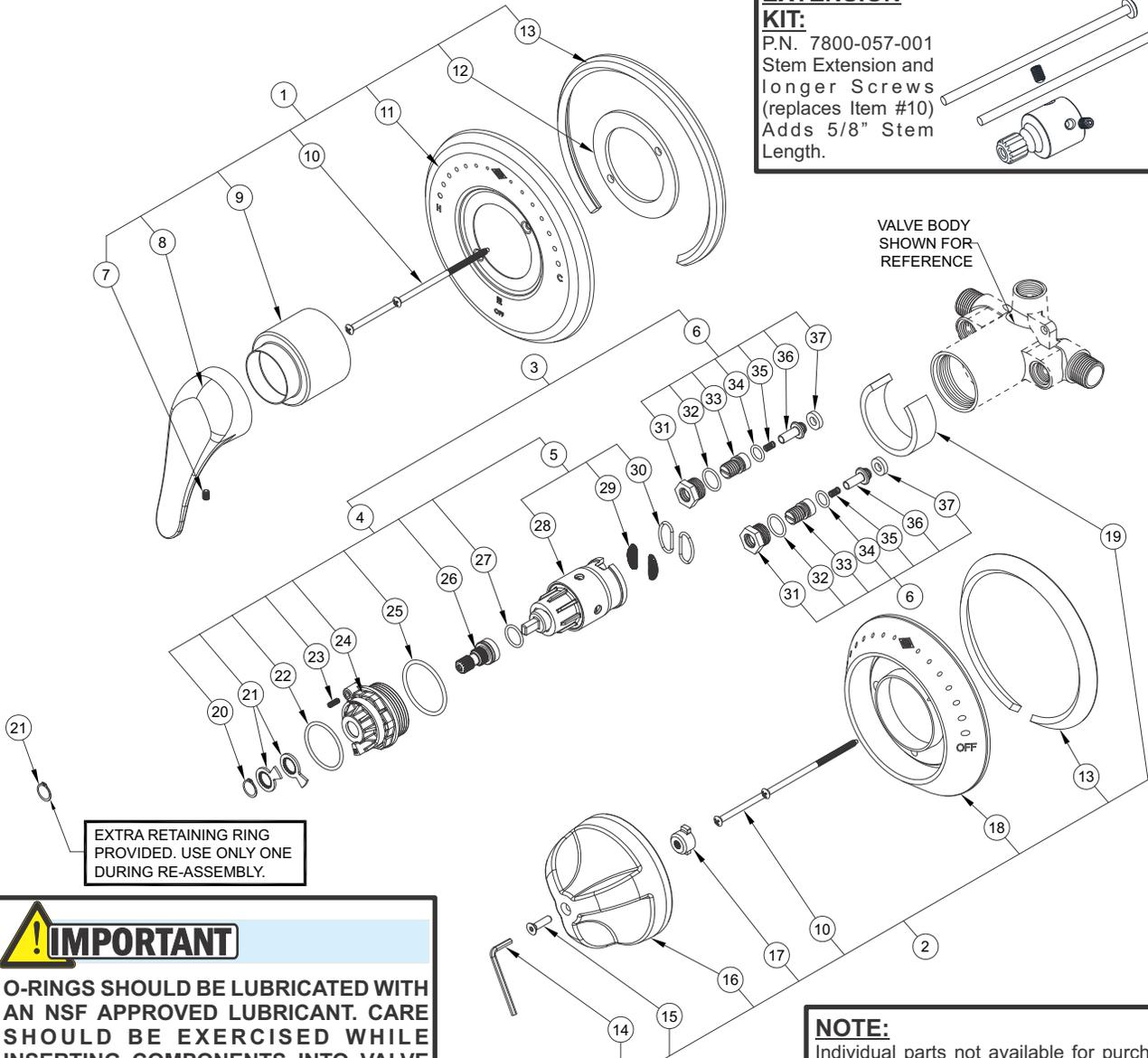
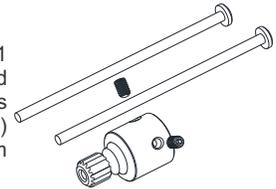
- A- PRIOR TO MAKING UP CONNECTIONS TO VALVE ASSEMBLY, FLUSH SUPPLY LINES THOROUGHLY.
- B- USING ANCHOR PLATE (1) AS A TEMPLATE, LOCATE AND MARK MOUNTING POINTS TO INSTALL WALL ANCHOR (2) BY OTHERS FOR 1/4"-20 x 1-1/4" LONGS SCREWS (3) PROVIDED.
- C- SECURE ANCHORING PLATE (1) TO WALL USING SCREWS (3) PROVIDED.
- D- MAKE UP SHOWER RISER CONNECTION FROM VALVE TO 1/2" NPT SHOWER ADAPTER (4).
- E- INSTALL AND SECURE SHOWERHEAD (5) ONTO WALL ANCHORING PLATE (1) USING SCREWS (6) AND SET SCREW (7) PROVIDED.
- F- USE THE HANDHELD SHOWER HANGER BRACKET (8) TO MARK LOCATIONS FOR INSTALLER PROVIDED WALL ANCHORS (2) FOR PROVIDED 1/4"-20 UNC x 1-1/2" LONG SCREWS (9).
- G- SECURE HANDHELD SHOWER HANGER BRACKET (8) WITH PROVIDED 1/4"-20 UNC x 1-1/2" LONG SCREWS (9).
- H- INSERT HANDHELD SHOWER EXPANSION PLUG (10) INTO SHOWERHEAD (11) ENSURING THE ANTI-ROTATION SLOT (12) LINES UP WITH ANTI-ROTATION PIN (13) AND TURN KNOB (14) CLOCKWISE UNTIL HAND TIGHT, IF LEAKING TIGHTEN FURTHER.
- I- TURN KNOB (14) COUNTER-CLOCKWISE TO LOOSEN AND REMOVE HANDHELD SHOWER EXPANSION PLUG (10)

<p>WHITEHALL MANUFACTURING P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 968-6681 FAX (626) 855-4862</p>	<p>TITLE WHCHS LIGATURE RESISTANT CONICAL HANDHELD SHOWER</p>	
	<p>MANUFACTURE DATE APRIL 2019 TO PRESENT</p>	<p>DATE ISSUED 04/20/19</p> <p>DATE REVISED</p>

REPAIR PARTS:

STEM EXTENSION KIT:

P.N. 7800-057-001
Stem Extension and longer Screws (replaces Item #10)
Adds 5/8" Stem Length.



EXTRA RETAINING RING PROVIDED. USE ONLY ONE DURING RE-ASSEMBLY.

! IMPORTANT
O-RINGS SHOULD BE LUBRICATED WITH AN NSF APPROVED LUBRICANT. CARE SHOULD BE EXERCISED WHILE INSERTING COMPONENTS INTO VALVE BODY DURING RE-ASSEMBLY.

NOTE:
Individual parts not available for purchase, sold in Repair Kits only. Parts called out for reference only.

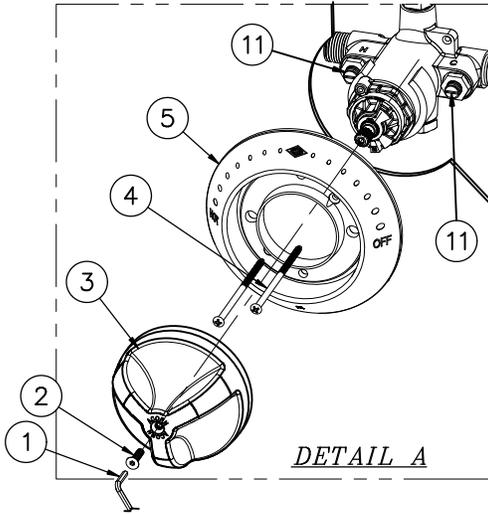
ITEM	KIT NUMBER	DESCRIPTION	ITEM	KIT NUMBER	DESCRIPTION
1	7800-503-001	TRIM REPLACEMENT, LEVER HANDLE	4	7800-502-001	CARTRIDGE & BONNET REPLACEMENT
2	7800-186-001	TRIM REPLACEMENT, LIGATURE RESISTANT	5	7800-175-001	CARTRIDGE REPLACEMENT
3	7800-500-001	COMPLETE REBUILD KIT	6	7800-504-001	CHECK-STOP REBUILD KIT

ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
7	CUP POINT SET SCREW	18	LIGATURE RESISTANT ESCUTCHEON	29	STAINLESS STEEL SCREENS (x2)
8	LEVER HANDLE	19	SLEEVE GASKET (SV16 ONLY)	30	CARTRIDGE SCREEN O-RINGS (x2)
9	VALVE SLEEVE	20	RETAINING RING (x2)	31	CHECK CAP (x2)
10	OVAL HEAD SCREWS (x2)	21	TEMPERATURE STOP RINGS (x2)	32	CHECK CAP O-RING (x2)
11	ESCUTCHEON, LEVER HANDLE	22	EXTERNAL BONNET O-RING	33	CHECK ADJUST SCREW (x2)
12	TRIM PLATE CENTER GASKET	23	SET SCREW	34	CHECK ADJUST SCREW O-RING (x2)
13	ESCUTCHEON GASKET	24	VALVE BONNET	35	CHECK SPRING (x2)
14	5/32" CENTER REJECT ALLEN WRENCH	25	BONNET O-RING	36	CHECK PLUNGER (x2)
15	LIGATURE RESISTANT HANDLE SCREW	26	VALVE STEM	37	CHECK SEAL (x2)
16	LIGATURE RESISTANT HANDLE	27	VALVE STEM O-RING	38	
17	STEM INSERT	28	CARTRIDGE		

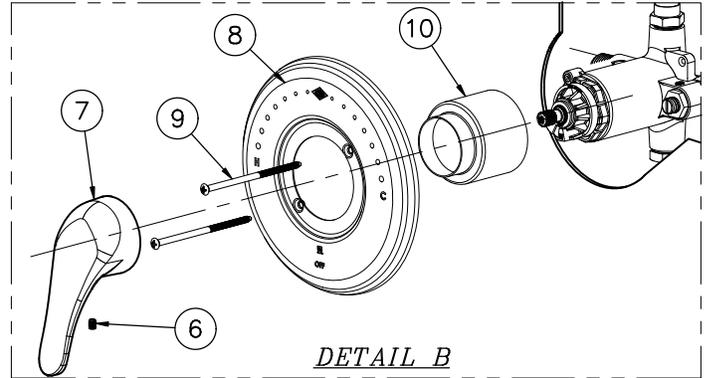


REFERENCE DRAWINGS

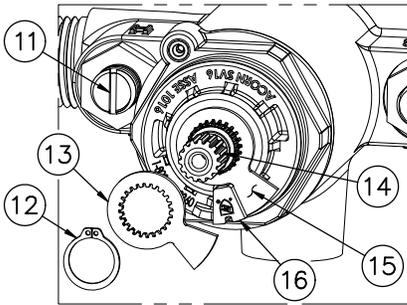
ASSEMBLIES	NUMBER
T/P VALVE	9975-005-002



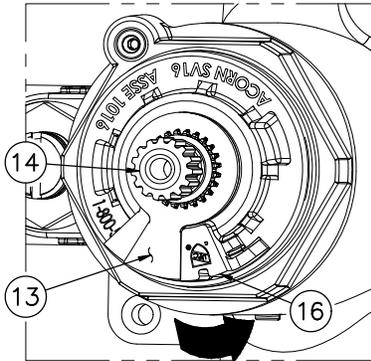
DETAIL A



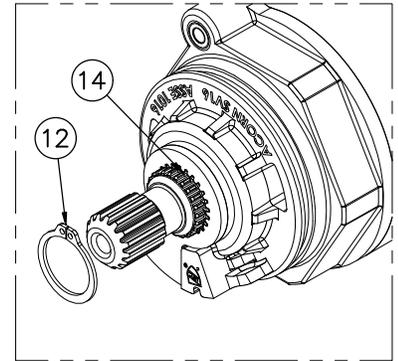
DETAIL B



DETAIL C



DETAIL D



DETAIL E

INSTRUCTIONS:

A-REMOVE TRI-LEVER HANDLE TRIM: SEE DETAIL A

- a- USING CENTER REJECT ALLEN WRENCH (1) REMOVE HANDLE SCREW (2) AND REMOVE HANDLE (3).
- b- REMOVE ESCUTCHEON (4) BY REMOVING SCREWS (5).

FOR OPTIONAL -LVR LEVER HANDLE TRIM: SEE DETAIL B

- a- REMOVE SET SCREW (6) AND HANDLE (7).
- b- REMOVE ESCUTCHEON (8) BY REMOVING SCREWS (9).
- c- PULL OFF VALVE SLEEVE (10).

TEMPERATURE ADJUSTMENT:

- B- ENSURE MAIN WATER SUPPLY IS ON.
- C- ENSURE CHECK STOPS (11) ARE OPEN.
- D- ENSURE VALVE IS IN THE OFF POSITION.
- E- USING SNAP RING PLIERS REMOVE RETAINING RING (12) AND THE FIRST TEMPERATURE LIMIT WASHER (13) ONLY FROM VALVE STEM (14). SEE DETAIL C.

NOTE: IF SECOND TEMPERATURE LIMIT WASHER (15) COMES OFF, RESETTING OF THE OFF STOP MAY BE REQUIRED, KEY AS CLOSE AS POSSIBLE ON THE COUNTER-CLOCKWISE SIDE OF BONNET STOP (16). USING HANDLE (3) OR (7) SLIGHTLY OPEN AND CLOSE VALVE TO ENSURE WATER WILL SHUT OFF. DETAIL C.

TEMPERATURE ADJUSTMENT: CONTINUED:

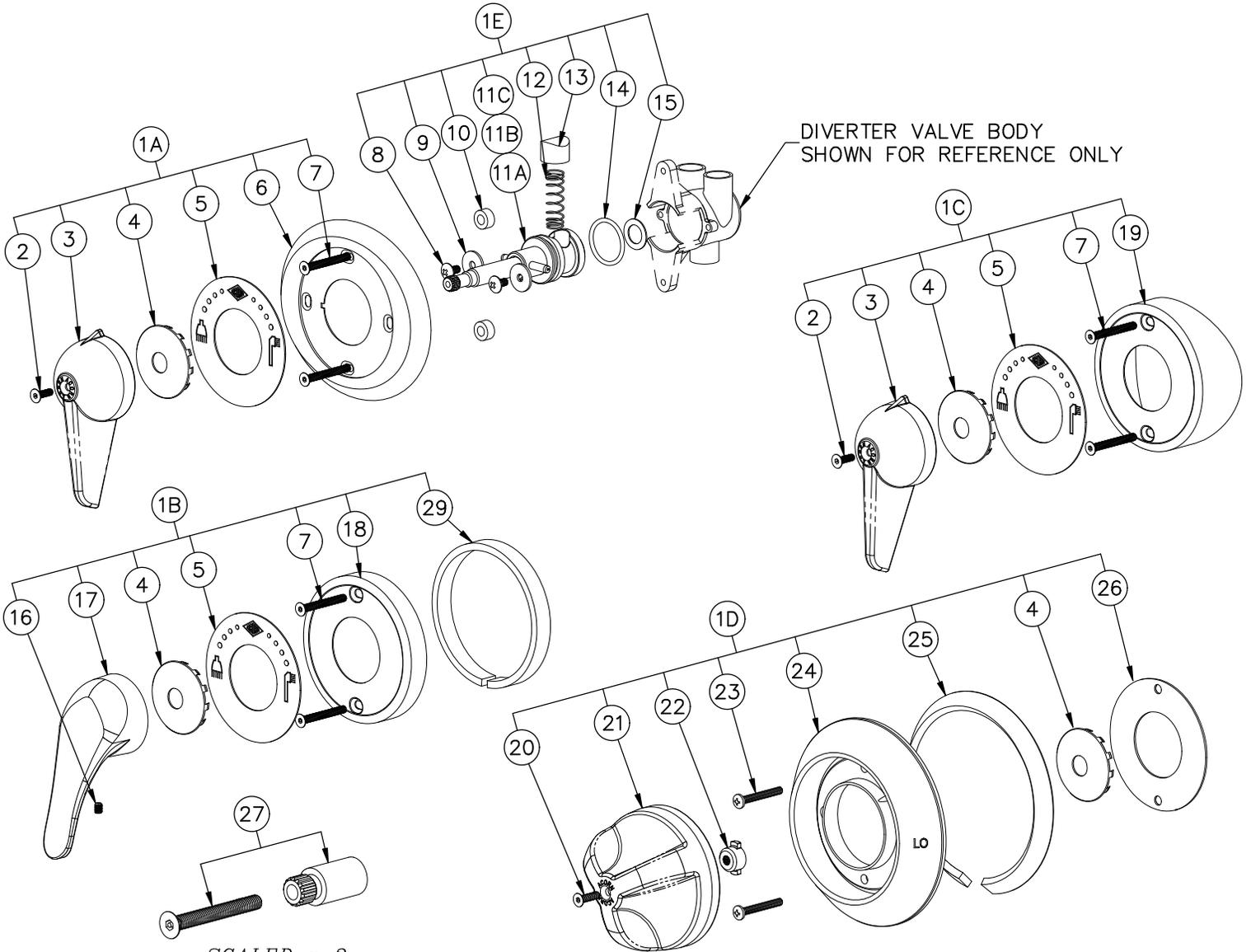
- F- USING HANDLE (3) OR (7) TURN VALVE STEM (14) COUNTER-CLOCKWISE TO INCREASE HOT, CHECKING OUTLET TEMPERATURE UNTIL DESIRED TEMPERATURE IS REACHED (RECOMMENDED 105° TO 110°). SLIDE FIRST TEMPERATURE LIMIT WASHER (9) OVER VALVE STEM (13) AND ENSURE SIDE OF WASHER RESTS AS CLOSE AS POSSIBLE TO CLOCKWISE SIDE OF BONNET LIMIT STOP (16). DETAIL D.
- G- WITH VALVE IN THE "ON" POSITION AND WATER RUNNING, USING SNAP RING PLIERS INSTALL RETAINING RING (12). ENSURE RETAINING RING (12) IS INSERTED PROPERLY INTO GROOVE ON VALVE STEM (14). DETAIL E.
- H- REINSTALL TRIM IN REVERSE ORDER.



ACORN ENGINEERING COMPANY
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15125 Proctor Ave Industry, CA 91746
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TITLE **-8 T/P TEMP/PRESS BALANCING MIXING VALVE - TEMPERATURE ADJUSTMENT**

MANUFACTURE DATE	DATE ISSUED	DRAWING NUMBER
APRIL 2014	05/01/14	9900-007-001
PRESENT	DATE REVISED	
	09/01/16 B	



SCALED x 2

1A	2919-020-001	DIVERTER TRIM KIT- TYPE 5 & 6 VALVES	12	1380-004-000	SPRING
1B	2919-065-001	DIVERTER TRIM KIT- TYPE 8 T/P STYLE	13	2919-004-000	PLUNGER
1C	2919-025-001	DIVERTER TRIM KIT- CAPITAL	14	0401-121-000	O-RING
1D	2919-070-001	DIVERTER TRIM KIT- -LRH LIG RESIS -8	15	0334-008-000	PHENOLIC FRICTION WASHER
1E	2919-000-001	DIVERTER VALVE ASSEMBLY -STD	16	0181-017-000	8-32 x 1/4" - ALLEN SET SCREW
2	0152-002-000	#10-32 x 1/2" SS, FHD CTR REJ, SCREW	17	7800-124-000	HANDLE - TYPE 8 VALVE
3	2421-001-199	LEVER HANDLE	18	2715-005-199	ESCUTCHEON - TYPE 8 VALVE
4	2418-001-199	SNAP RING	19	2715-002-199	ESCUTCHEON - CAPITAL
5	2917-010-000	DIVERTER DIAL PLATE	20	0152-006-000	10-32 x 3/4" FLAT HEAD CNTR REJ SCREW
6	2706-002-199	ESCUTCHEON	21	7800-187-000	LIGATURE RESISTANT HANDLE TYPE 8
7	0152-003-000	#10-32 x 1-1/2" SS, FHD CTR REJ, SCREW	22	7800-189-000	LIGATURE RESISTANT HANDLE STEM INSERT
8	0116-016-000	#10-32 x 3/8" SS, RD HD PHIL, SCREW	23	0116-115-000	10-32 x 1-1/2" PHIL PAN HEAD SCREW
9	0331-014-000	#10 FLAT WASHER	24	7800-191-000	LIGATURE RESIST ESCUTCHEON -DIVERTER
10	0365-015-000	SPACER	25	7800-139-000	GASKET, TRIM ESCUTCHEON
11A	2919-001-001	PISTON ASSEMBLY - APEX/ACME/-8 VALVE	26	2917-005-199	DIVERTER COVER PLATE -LRH
11B	2919-001-002	PISTON ASSEMBLY - ZENITH & CAPITAL	27	2408-000-001	1" STEM EXTENSION ASSEMBLY
11C	2919-005-001	PISTON ASSEMBLY - -LRH LIG RESISTANT			
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION

MORRIS GROUP INTL P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200	TITLE DIVERTER VALVE		
	MANUFACTURE DATE APRIL 1979 TO PRESENT	DATE ISSUED 02/01/14	DRAWING NUMBER 9975-080-002
		DATE REVISED 03/11/2022 C	