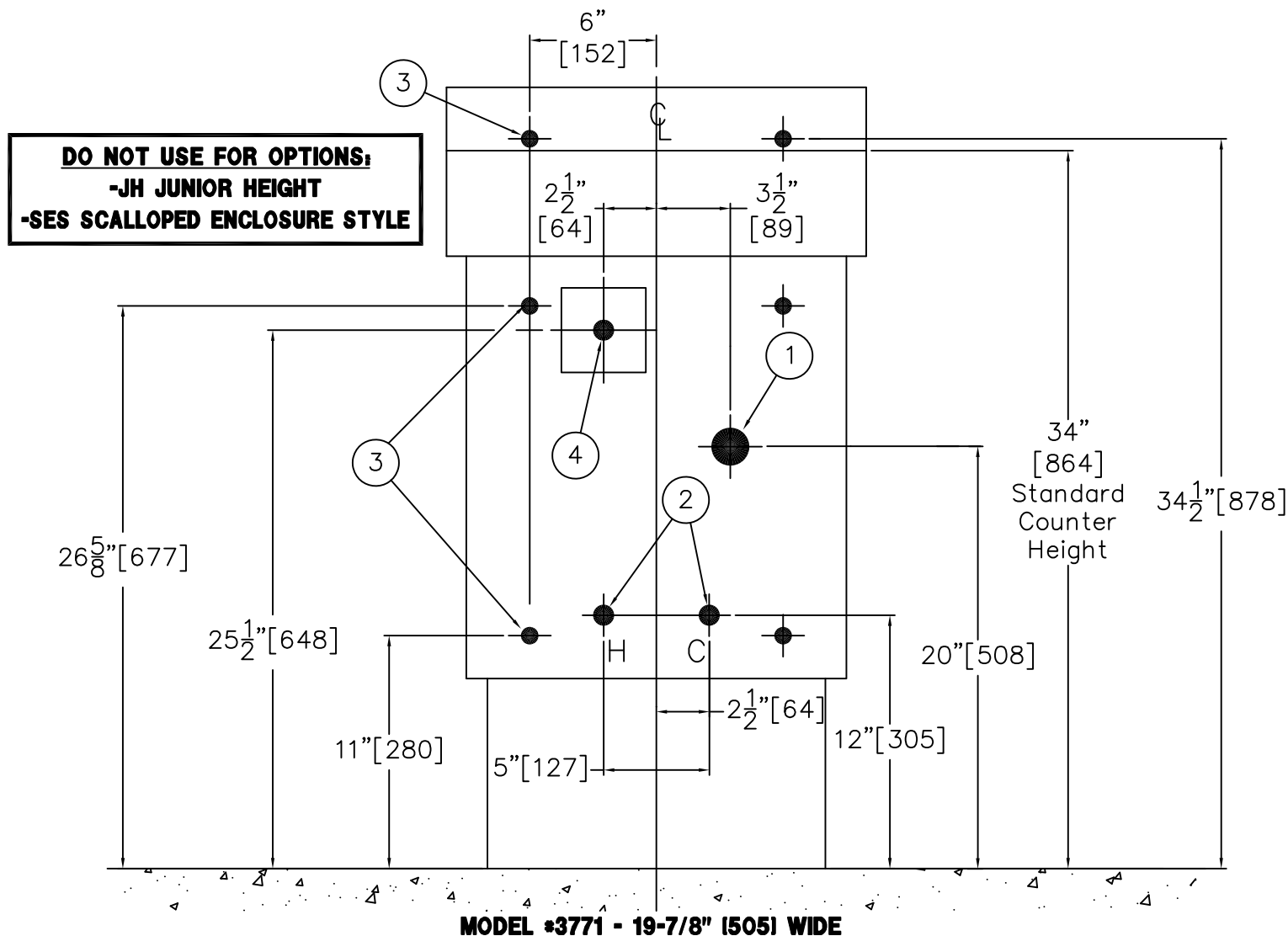




**NOTE:** UNITS WITH 34" STANDARD HEIGHT COUNTERTOP MEET ANSI, UFAS, AND ADA ACCESSIBILITY REQUIREMENTS. REFER TO APPLICABLE GUIDELINES FOR COMPLETE INSTALLATION REQUIREMENTS.



#### ROUGH-IN FOR THE FOLLOWING:

- 1- LAVY WASTE OUTLET - 1-1/2" O.D. TUBE FOR COMPRESSION CONNECTION.
- 2- MIXING VALVE INLETS - 1/2" NPT HOT AND COLD VALVE SUPPLIES.
- 3- MOUNTING LOCATIONS - 9/16" DIAMETER MOUNTING HOLES (6) PLACES. RECOMMENDED 3/8" UNC MOUNTING HARDWARE.
- 4- FOR -SO/-PBE OPERATED CONTROLS. PROVIDE 120V/60Hz/3 AMPS(MAX.) ELECTRIC RECEPTACLE TO CONNECT FACTORY SUPPLIED 9 VOLT PLUG-IN TRANSFORMER. **NOTE:** RECEPTACLE MUST BE WIRED TO A GFI PROTECTED CIRCUIT. FIXTURE MUST BE EARTH GROUNDED PER N.E.C. (NATIONAL ELECTRICAL CODE).

#### INSTALLATION INSTRUCTIONS:

SOME AVAILABLE OPTIONS FOR THIS UNIT MAY ALTER THESE ROUGH-IN INSTRUCTIONS CONTACT FACTORY FOR DETAILS UNIT INTENDED FOR INSTALLATION ON A FINISHED WALL WITH APPROPRIATE WALL BACKING. MODELS #3771-2 ARE SUPPORTED ON THE FLOOR. MODELS #3771-1 ARE WALL HUNG. 3/8" UNC WALL ANCHORS AND

MOUNTING HARDWARE NOT INCLUDED. UNIT INCLUDES WASTE PIPING, 1-1/2" TUBULAR P-TRAP, AND VALVE ASSEMBLY. **NOTE:** UNITS WITH OPTIONAL -EC EXTENDED COUNTERTOP ON SIDE SPECIFIED. DO NOT USE THE DRAWING FOR -SES OR -JH OPTIONS.



ACORN ENGINEERING COMPANY  
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15125 Proctor Ave Industry, CA 91746  
(626) 336-4561 FAX (626) 961-2200

TITLE

**CORTERRA UNI-BASIN STANDARD HEIGHT ROUGH-INS - MODEL #3771-1/3771-2**

MANUFACTURE DATE

**DECEMBER 1997  
TO PRESENT**

DATE ISSUED

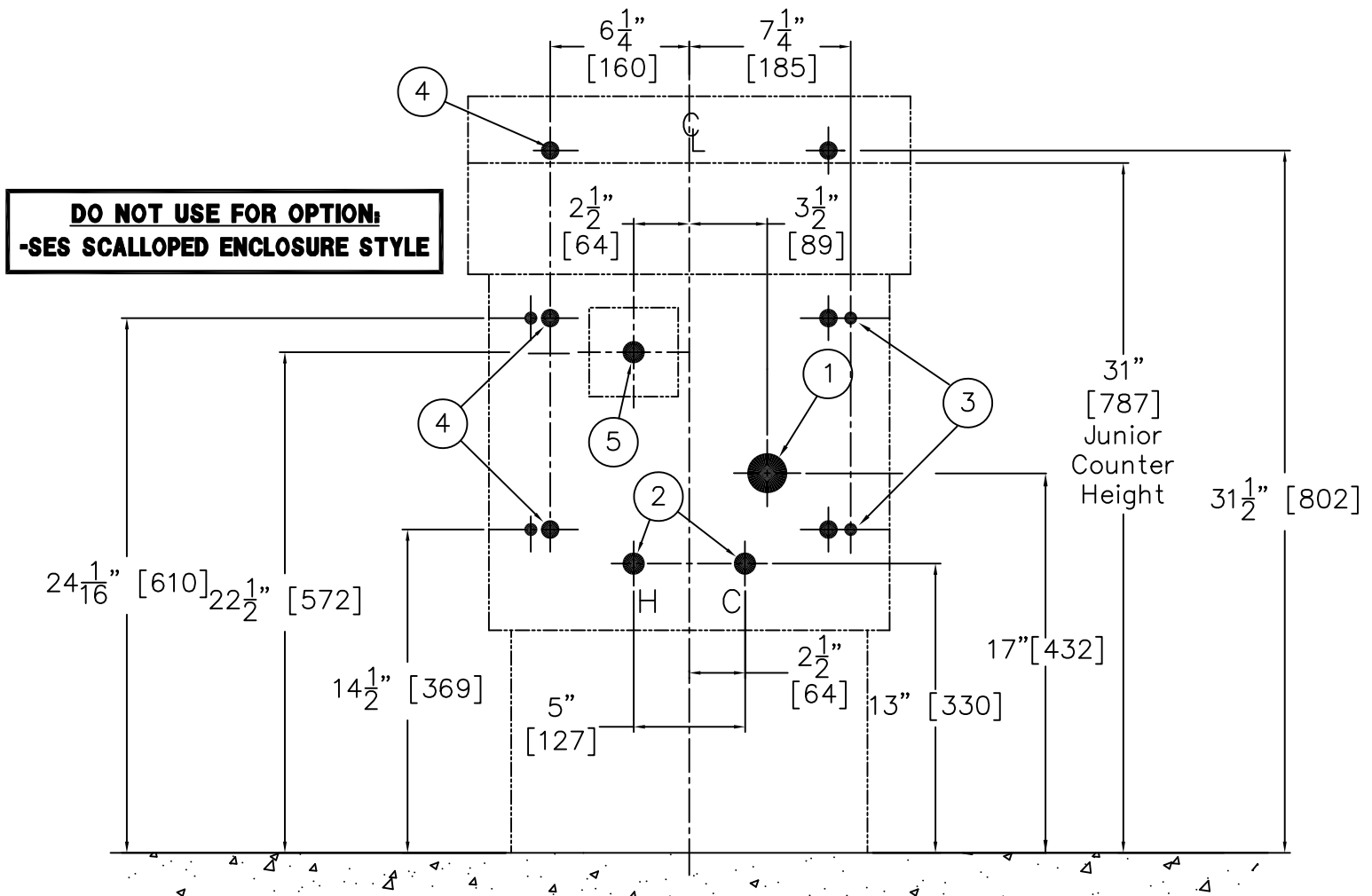
**12/10/97**

DATE REVISED

**01/11/19 C**

DRAWING NUMBER

**9927-090-001**



**MODEL #3771-JH - 19-7/8" [505] WIDE**

**ROUGH-IN FOR THE FOLLOWING:**

- 1- LAVY WASTE OUTLET - 1-1/2" O.D. TUBE FOR COMPRESSION CONNECTION.
- 2- MIXING VALVE INLETS - 1/2" NPT HOT AND COLD VALVE SUPPLIES.
- 3- OPTIONAL ANCHORING - 9/16" DIA. MOUNTING HOLES (4) PLACES. RECOMMENDED 3/8" UNC MOUNTING HARDWARE.
- 4- PRIMARY ANCHORING - 9/16" MOUNTING HOLES (4) PLACES. RECOMMENDED 3/8" UNC MOUNTING HARDWARE.
- 5- FOR -SO SENSOR OPERATED CONTROLS. PROVIDE 120V/60Hz/3 AMPS(MAX.) ELECTRIC RECEPTACLE TO CONNECT FACTORY SUPPLIED 9 VOLT PLUG-IN TRANSFORMER. NOTE: RECEPTACLE MUST BE WIRED TO A GFI PROTECTED CIRCUIT. FIXTURE MUST BE EARTH GROUNDED PER N.E.C. (NATIONAL ELECTRICAL CODE).

**INSTALLATION INSTRUCTIONS:**

SOME AVAILABLE OPTIONS FOR THIS UNIT MAY ALTER THESE ROUGH-IN INSTRUCTIONS CONTACT FACTORY FOR DETAILS UNIT INTENDED FOR INSTALLATION ON A FINISHED WALL WITH APPROPRIATE WALL BACKING. MODELS #3771-2 ARE SUPPORTED ON THE FLOOR. MODELS #3771-1

ARE WALL HUNG. 3/8" UNC WALL ANCHORS AND MOUNTING HARDWARE NOT INCLUDED. UNIT INCLUDES WASTE PIPING, 1-1/2" TUBULAR P-TRAP, AND VALVE ASSEMBLY. NOTE: UNITS WITH OPTIONAL -EC EXTENDED COUNTERTOP ON SIDE SPECIFIED. DO NOT USE THE DRAWING FOR -SES OPTION.



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TITLE

**CORTERRA UNI-BASIN JUNIOR HEIGHT ROUGH-INS - MODEL #3771-1-JH/3771-2-JH**

MANUFACTURE DATE

**DECEMBER 1997  
TO PRESENT**

DATE ISSUED

**6/19/98**

DATE REVISED

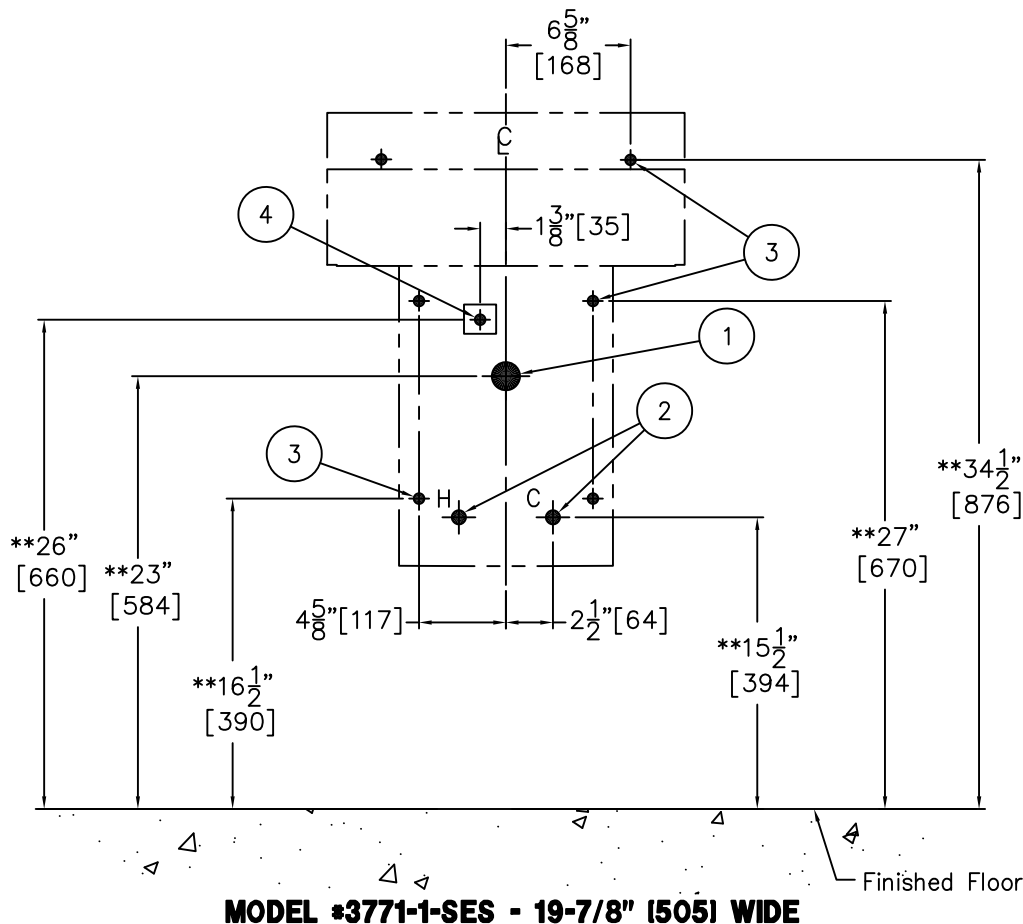
**01/11/19 C**

DRAWING NUMBER

**9927-091-001**



**NOTE:** UNITS WITH 34" STANDARD HEIGHT COUNTERTOP MEET ANSI, UFAS AND ADA ACCESSIBILITY REQUIREMENTS. REFER TO APPLICABLE GUIDELINES FOR COMPLETE INSTALLATION REQUIREMENTS. FOR UNITS WITH RIM HEIGHTS OTHER THAN STANDARD. SUBTRACT DIFFERENCE FROM ALL VERTICAL DIMENSIONS INDICATED WITH \*\*.



### ROUGH-IN FOR THE FOLLOWING:

- 1- LAVY WASTE OUTLET – 1-1/2" O.D. TUBE FOR COMPRESSION JOINT.
- 2- MIXING VALVE INLET – 1/2" NPS HOT AND COLD VALVE SUPPLIES.
- 3- MOUNTING LOCATIONS – 9/16" DIAMETER MOUNTING HOLES (6) PLACES, RECOMMENDED 3/8" UNC HARDWARE.
- 4- FOR –SO SENSOR OPERATED CONTROLS. PROVIDE 120V/60Hz/3 AMPS (MAX.) ELECTRIC RECEPTACLE TO CONNECT FACTORY SUPPLIED 9VDC/100mA PLUG-IN TRANSFORMER. **NOTE:** RECEPTACLE MUST BE WIRED TO A GFI PROTECTED CIRCUIT. FIXTURE MUST BE EARTH GROUNDED PER N.E.C. (NATIONAL ELECTRICAL CODE).

### INSTALLATION INSTRUCTIONS:

SOME AVAILABLE OPTIONS FOR THIS UNIT MAY ALTER THESE ROUGH-IN INSTRUCTIONS. CONTACT FACTORY FOR DETAILS. UNIT IS INTENDED FOR INSTALLATION ON A FINISHED WALL WITH APPROPRIATE WALL BACKING. 3/8" UNC WALL

ANCHORS AND MOUNTING HARDWARE ARE NOT INCLUDED. UNIT INCLUDES WASTE PIPING AND 1-1/2" TUBULAR P-TRAP. VALVE ASSEMBLY IS SHIPPED LOOSE FOR MOUNTING TO WALL. INCLUDES VALVE AND TRAP ENCLOSURE, SHIPPED LOOSE.



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TITLE

**CORTERRA UNI-BASIN STD. HEIGHT ROUGH-INS # 3771-1-SES**

MANUFACTURE DATE

**JULY 2007**

**TO PRESENT**

DATE ISSUED

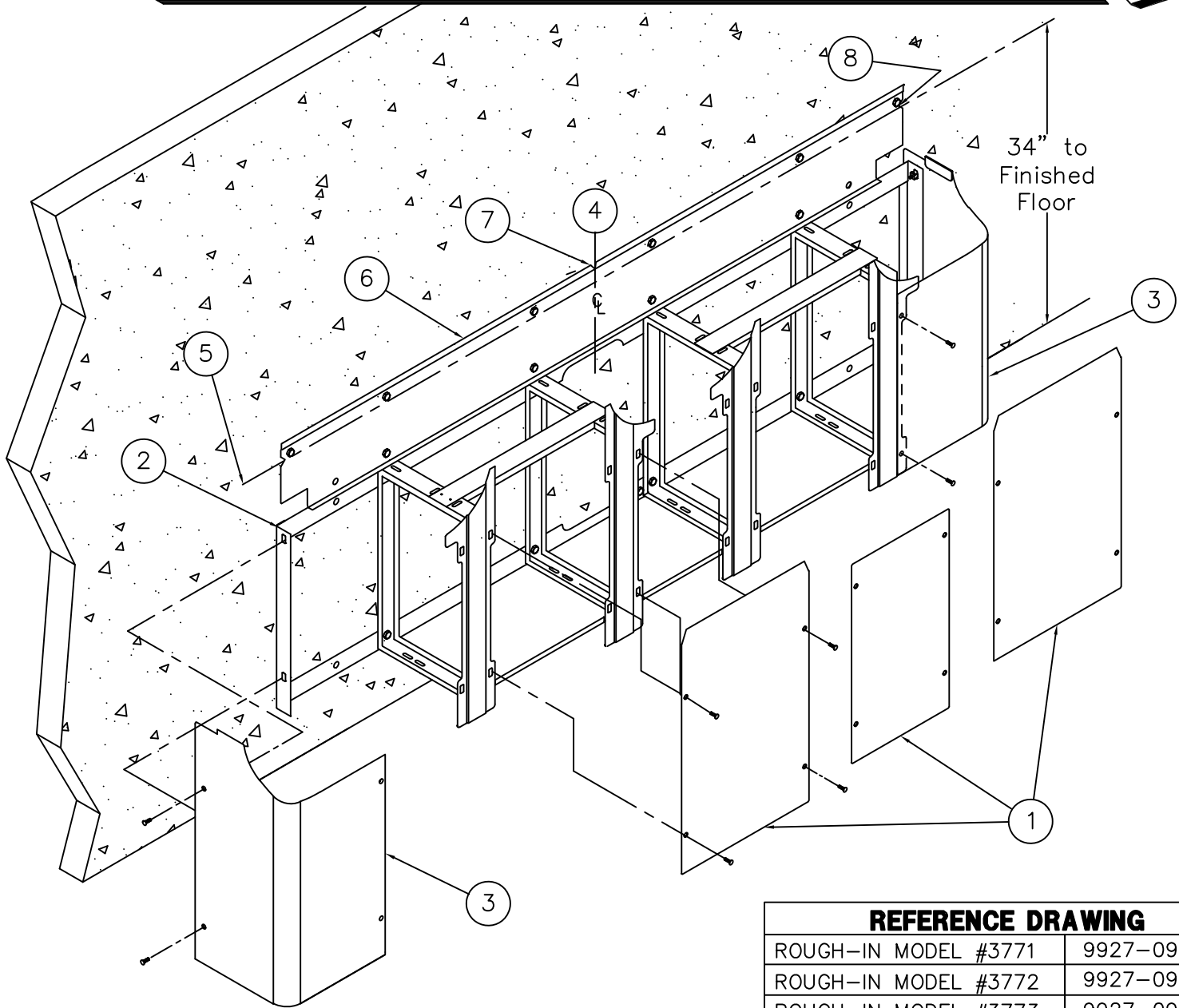
**08/21/07**

DATE REVISED

**01/11/19 D**

DRAWING NUMBER

**9927-092-001**



### REFERENCE DRAWING

ROUGH-IN MODEL #3771	9927-090-001
ROUGH-IN MODEL #3772	9927-094-002
ROUGH-IN MODEL #3773	9927-098-002

### INSTALLATION INSTRUCTIONS:

- A- REMOVE FRONT PANELS ① FROM THE PEDESTAL FRAME ②. DO NOT REMOVE SIDE PANELS ③ UNLESS EXTRA MOUNTING POINTS WILL BE NECESSARY.
- B- STRIKE A VERTICAL CHALK LINE ④ ON THE WALL AT CENTERLINE OF WHERE FIXTURE IS TO BE INSTALLED.
- C- STRIKE A HORIZONTAL CHALK LINE ⑤ ON THE WALL AT 34" ABOVE THE FINISHED FLOOR.
- D- SEE APPROPRIATE DRAWING FOR ROUGH-IN INFORMATION. INSTALL WALL ANCHORS, AND MAKE APPROPRIATE WASTE, VALVE, AND ELECTRICAL ROUGH-INS.
- E- PLACE PEDESTAL FRAME ② AND TEMPLATE ⑥ AGAINST THE WALL. LINE UP CENTER NOTCH ⑦ WITH CHALK LINE. LEVEL TEMPLATE BY ALIGNING SIDE NOTCHES ⑧ WITH HORIZONTAL CHALK LINE ⑤ AT 34".
- F- ANCHOR TEMPLATE ⑥ AND PEDESTAL FRAME ② TO WALL ANCHORS (FASTENERS AND ANCHORS BY OTHERS).
- G- INSTALLATION INSTRUCTIONS CONTINUE ON DRAWING # 9927-157-001.



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TITLE

**SOLID SURFACE OFF-FLOOR MOUNTING FRAME - MODEL #3771/3772/3773-1**

MANUFACTURE DATE

**DECEMBER 1997**

**TO PRESENT**

DATE ISSUED

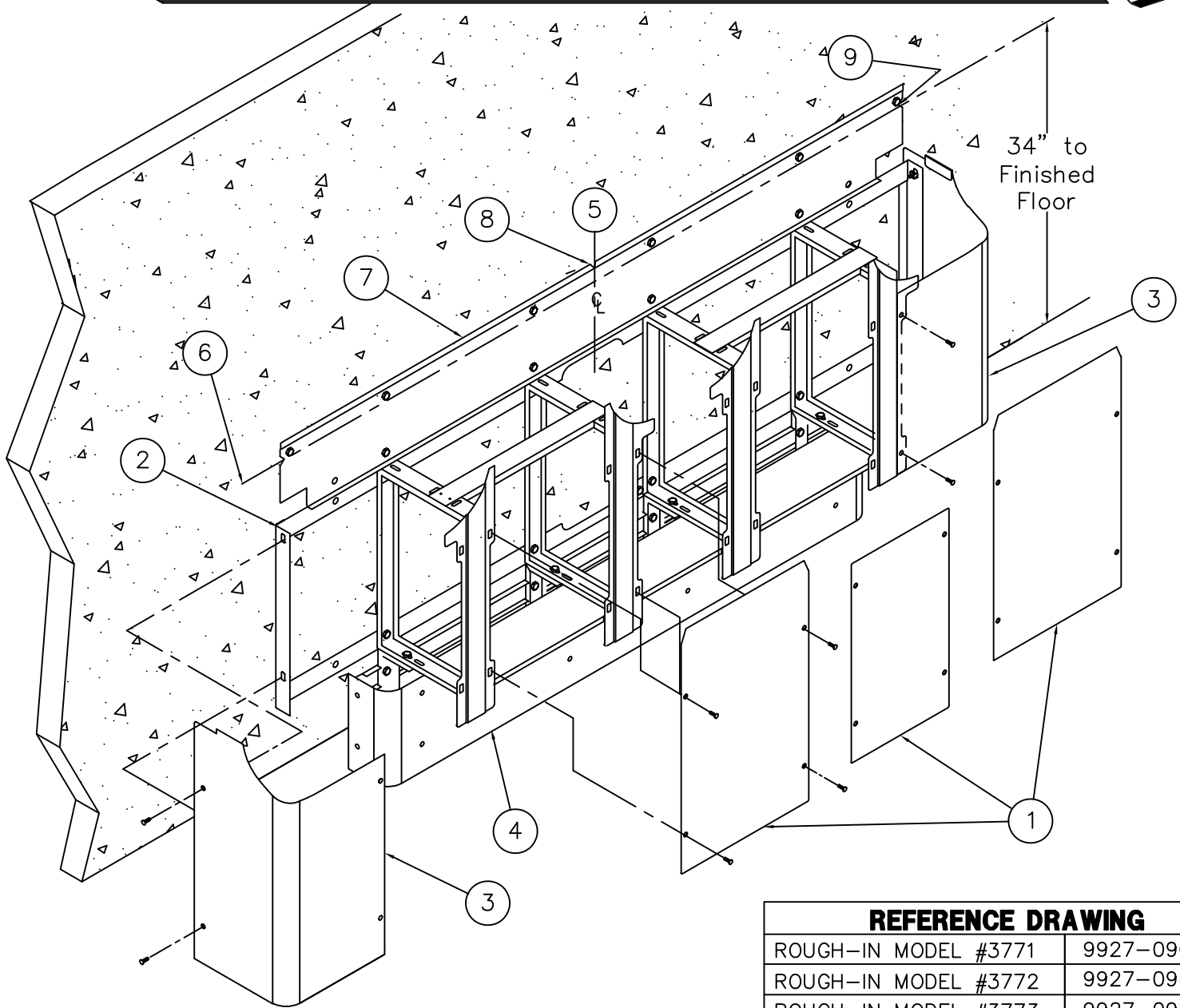
**05/24/99**

DATE REVISED

**01/11/19 A**

DRAWING NUMBER

**9927-151-001**



### REFERENCE DRAWING

ROUGH-IN MODEL #3771	9927-090-001
ROUGH-IN MODEL #3772	9927-094-002
ROUGH-IN MODEL #3773	9927-098-002

### INSTALLATION INSTRUCTIONS:

- A- REMOVE FRONT PANELS ① FROM THE PEDESTAL FRAME ② . DO NOT REMOVE SIDE PANELS ③ OR SCUFF PANEL ④ UNLESS EXTRA MOUNTING POINTS WILL BE NECESSARY.
- B- STRIKE A VERTICAL CHALK LINE ⑤ ON THE WALL AT CENTERLINE OF WHERE FIXTURE IS TO BE INSTALLED.
- C- STRIKE A HORIZONTAL CHALK LINE ⑥ ON THE WALL AT 34" ABOVE THE FINISHED FLOOR.
- D- SEE APPROPRIATE DRAWING FOR ROUGH-IN INFORMATION. INSTALL WALL ANCHORS, AND MAKE APPROPRIATE WASTE, VALVE, AND ELECTRICAL ROUGH-INS.

- E- PLACE PEDESTAL FRAME ② AND TEMPLATE ⑦ AGAINST THE WALL. LINE UP CENTER NOTCH ⑧ WITH CHALK LINE. LEVEL TEMPLATE BY ALIGNING SIDE NOTCHES ⑨ WITH HORIZONTAL CHALK LINE ⑥ AT 34".
- F- ANCHOR TEMPLATE ⑦ AND PEDESTAL FRAME ② TO WALL ANCHORS (FASTENERS AND ANCHORS BY OTHERS).
- G- INSTALLATION INSTRUCTIONS CONTINUE ON DRAWING # 9927-157-001.



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TITLE

**SOLID SURFACE ON-FLOOR MOUNTING FRAME - MODEL #3771/3772/3773-2**

MANUFACTURE DATE

**DECEMBER 1997**  
**TO PRESENT**

DATE ISSUED

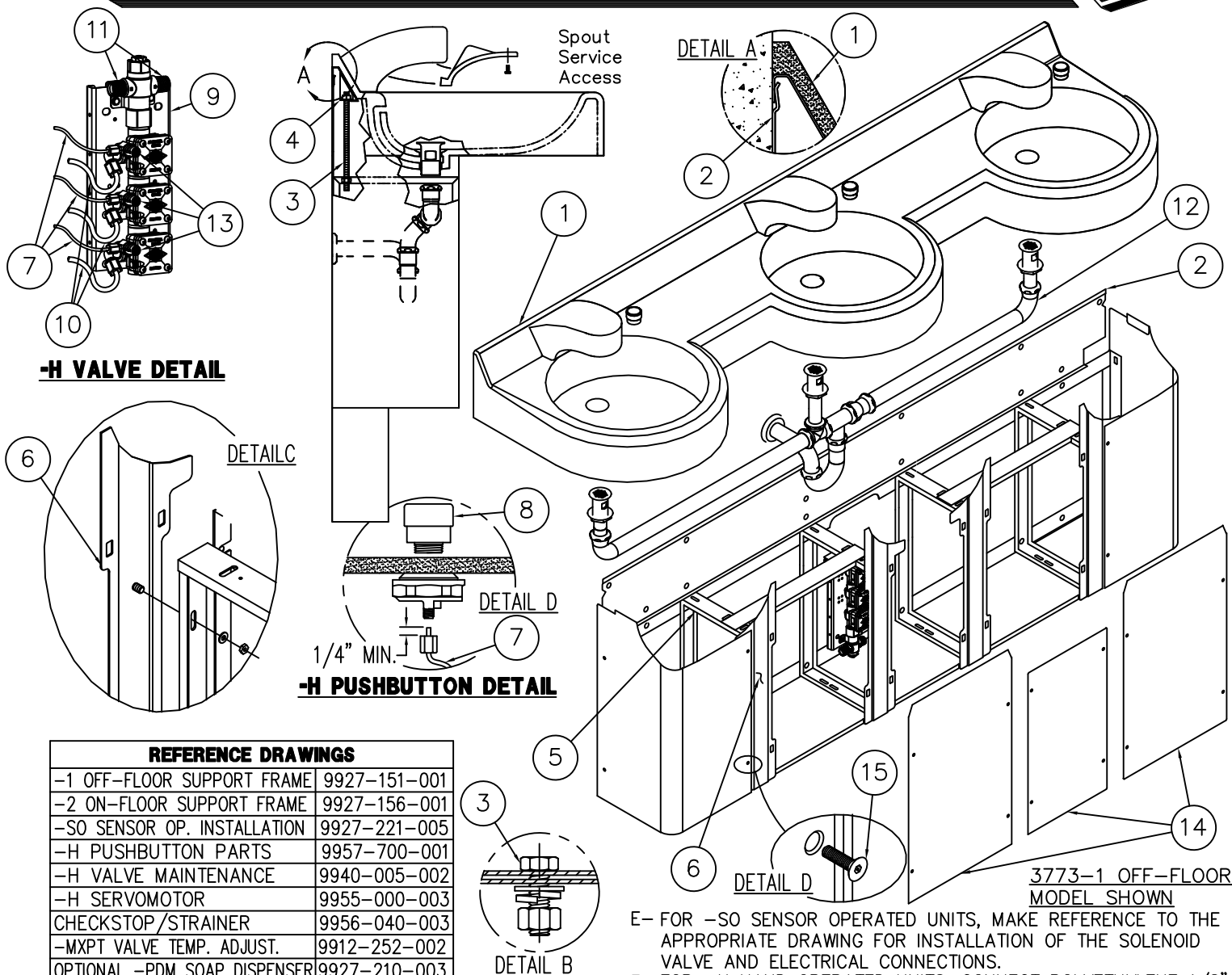
**2/13/98**

DATE REVISED

**01/11/19 A**

DRAWING NUMBER

**9927-156-001**

**-H VALVE DETAIL****-H PUSHBUTTON DETAIL****REFERENCE DRAWINGS**

-1 OFF-FLOOR SUPPORT FRAME	9927-151-001
-2 ON-FLOOR SUPPORT FRAME	9927-156-001
-SO SENSOR OP. INSTALLATION	9927-221-005
-H PUSHBUTTON PARTS	9957-700-001
-H VALVE MAINTENANCE	9940-005-002
-H SERVOMOTOR	9955-000-003
CHECKSTOP/STRAINER	9956-040-003
-MXPT VALVE TEMP. ADJUST.	9912-252-002
OPTIONAL -PDM SOAP DISPENSER	9927-210-003
WASTE PIPING	9985-356-001
MISCELLANEOUS HARDWARE	9951-005-001

**INSTALLATION INSTRUCTIONS:**

**NOTE:** SOME AVAILABLE OPTIONS MAY AFFECT INSTALLATION PROCEDURES. REFER TO ALL SPECIFIED OPTIONS INSTALLATION SHEETS BEFORE PROCEEDING.

A- PROVIDE REQUIRED ROUGH-INS AND INSTALLATION OF WASHBASIN SUPPORT FRAME AS INSTRUCTED ON APPROPRIATE DRAWINGS.

B- INSTALL WASHBASIN (1) MAKING SURE THAT RETURN ON UNDERSIDE OF BACKSPASH ENGAGES ACROSS WASHBASIN LENGTH OVER "S" JOGGLE ON TOP OF TEMPLATE (2). SEE DETAIL A.

C- LEVEL THE WASHBASIN IN BOTH DIRECTIONS. USE 1/4"-20 UNC HARDWARE (3) PROVIDED TO ANCHOR BACKSPASH BRACKETS (4) TO PEDESTAL FRAME (5). SEE DETAIL B.

D- IF NECESSARY ADJUST HEIGHT OF THE FRONT FACE PLATES (6) TO CLEAR BOTTOM OF THE WASHBASIN. SEE DETAIL C.

E- FOR -SO SENSOR OPERATED UNITS, MAKE REFERENCE TO THE APPROPRIATE DRAWING FOR INSTALLATION OF THE SOLENOID VALVE AND ELECTRICAL CONNECTIONS.

F- FOR -H HAND OPERATED UNITS, CONNECT POLYETHYLENE 1/8" O.D. AIR LINES (7) TO PUSHBUTTONS (8) AND TO AIR-CONTROL VALVE ASSEMBLY (9) BY HAND TIGHTENING THE FERRULE NUTS PROVIDED. SEE DETAIL D.

G- CONNECT 1/4" O.D. WATERLINES (10) FROM WASHBASIN SPOUTS TO VALVE (9) WATERTIGHT WITH FERRULE NUTS PROVIDED.

H- AFTER THOROUGHLY FLUSHING SUPPLY LINES, CONNECT INSTALLER PROVIDED CONNECTION (11) (1/2" NPS FEMALE) FROM VALVE (9) INLETS TO SUPPLY STUB-OUTS. (NOTE: SUPPLY INLET CONNECTIONS WILL ACCOMMODATE 1/2" NPT MALE ADAPTERS).

I- ALL WASTE PIPING (12) AND CONNECTIONS TO WALL ARE FACTORY PROVIDED. ASSEMBLE WASTE PIPING AND MAKE-UP LAVY WASTE CONNECTION (1-1/2" O.D. COMPRESSION). SEE APPROPRIATE REFERENCE DRAWING FOR PARTS.

J- TURN ON WATER SUPPLY. CHECK FOR LEAKS. ON -H VALVE (9) ADJUST TIMERS (13) TO GET DESIRED WATER CYCLE LENGTH.

K- ASSEMBLE PANELS (14) TO PEDESTAL FRAME (5) WITH VANDAL RESISTANT FASTENERS (15) PROVIDED. SEE DETAIL E.

3773-1 OFF-FLOOR  
MODEL SHOWN



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TITLE

**SOLID SURFACE MULTI-BASIN - MODEL \* 3771, 3772, & 3773 (ALL MODELS)**

MANUFACTURE DATE

**DECEMBER 1997****TO PRESENT**

DATE ISSUED

**02/13/98**

DATE REVISED

**01/11/19 F**

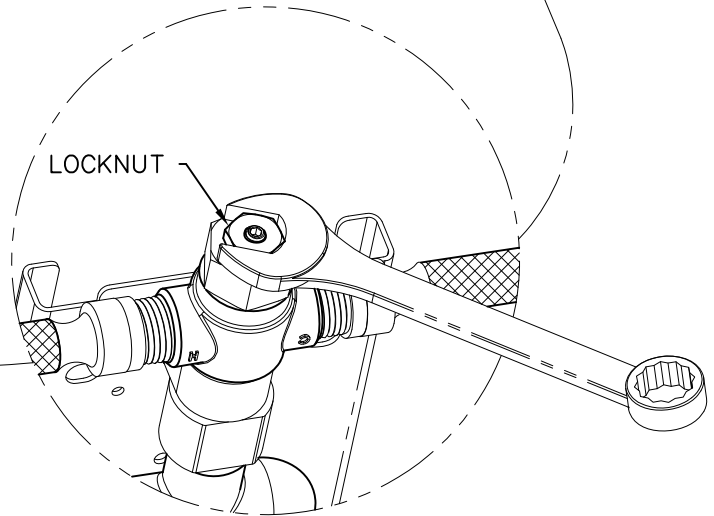
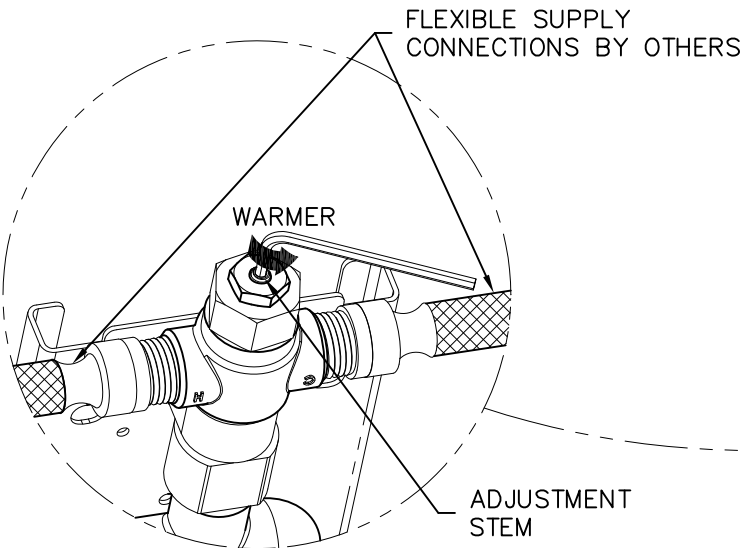
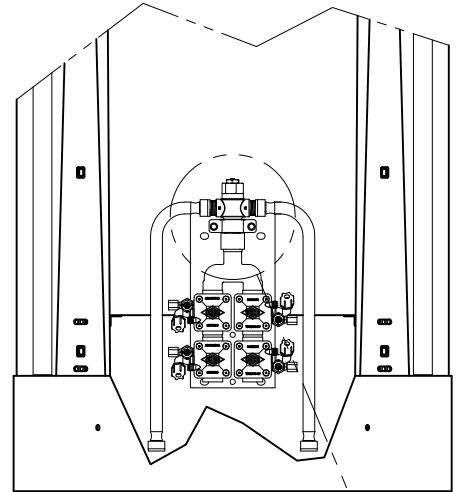
DRAWING NUMBER

**9927-157-001**



### REFERENCE DRAWINGS

REPAIR PARTS	DRAWING
NON-METERING SERVOMOTOR (-F)	9955-001-003
METERING SERVOMOTOR (-H)	9955-000-003
AIR-CONTROL VALVE BODY	9975-090-001
CHECKSTOP (-ST Single Temp. Only)	9956-040-003
SENSOR/SOLENOID (-SO) (24VAC)	9955-015-002
SENSOR/SOLENOID/PPZ (-SO) (9VDC)	9955-019-002
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 (Single Temp): AFTER THOROUGHLY FLUSHING SUPPLY LINE, MAKE UP CONNECTION TO SUPPLY STUB OUT AND VALVE INLET 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 AN 1/8" ALLEN WRENCH TO TURN ADJUSTMENT 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.



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TITLE

### VALVE INSTALL & MIXING VALVE ADJUSTMENT

MANUFACTURE DATE

**MARCH 2014  
TO PRESENT**

DATE ISSUED

**03/25/14**

DATE REVISED

DRAWING NUMBER

**9912-252-002**



# CORTERRA

## SOLID SURFACE

### MAINTAINING CORTERRA:

CORTERRA SHOULD BE KEPT CLEAN AT ALL TIMES. IF MAINTAINED, CORTERRA SURFACES WILL RETAIN THEIR NEW, CLEAN APPEARANCE INDEFINITELY.

IN ORDER TO REMOVE ANY UNWANTED STAINS, WASH WITH SOAPY WATER THEN RINSE.

IN ORDER TO PREVENT WATER STAINS FROM OCCURRING, DRY SURFACE RIGHT AFTER RINSING. IF THE STAIN PERSISTS, USE A SCOTCH BRITE PAD AND AN ACORN CAN ALSO USE A SOLUTION CONSISTING OF HOUSEHOLD BLEACH AND WATER (1 PART WATER TO 1 PART BLEACH). RINSE AND WIPE SURFACE DRY.

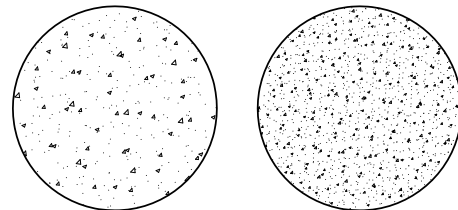
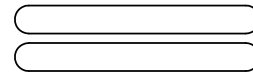
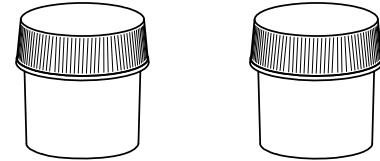
### REPAIRING CORTERRA:

TO REMOVE CUTS AND SCRATCHES USE 400 GRIT SANDPAPER, FOLLOWED BY AN ABRASIVE CLEANER AND SCOTCH BRITE PAD.

### TO REPAIR CHIPPED CORTERRA:

(USING REPAIR KIT AVAILABLE FROM ACORN) DO THE FOLLOWING:

- 1- PUT ON GLOVES PRIOR TO HANDLING ANY OF THE MATERIALS IN THE KIT, AND ENSURE ADEQUATE VENTILATION.
- 2- ADD CONTENTS OF "B" (LIQUID RESIN) TO LARGER CONTAINER "A" (SOLID FILLER). MIX COMPLETELY USING WOODEN STICK.
- 3- ADD TUBE OF "C" (LIQUID CATALYST). MIX FOR TWO (2) MINUTES.  
**CAUTION:** CATALYST GEL TIME AT 75° F IS 15 MINUTES.
- 4- APPLY MIXED MATERIAL TO DAMAGED AREA USING WOODEN STICK.  
**NOTE:** APPLY ONLY AS MUCH PATCH AS REQUIRED.
- 5- LET CURE APPROXIMATELY 3-4 HOURS.  
**NOTE:** FOR A "FAST CURE" OF APPROXIMATELY 10 MINUTES, USE A LAMP WITH A 100 WATT LIGHT BULB SHINING ON PATCHED AREA ABOUT 2-1/2" FROM PATCH.
- 6- USE COARSE GRAINED SANDPAPER TO SAND OFF EXTRA MATERIAL ONCE PATCH IS HARD.
- 7- USE MEDIUM GRAINED SANDPAPER FOR FINER FINISH.
- 8- USE FINE GRAINED SAND PAPER FOR "POLISHED" FINISH.
- 9- DISCARD EXTRA PATCH MATERIAL



KIT NUMBERS	COLOR
6206-456-001	PEPPERCORN (OCC06)
6206-530-001	SMOKEY GRANITE (OCC01A)
6206-531-001	IVERSTONE (OCC02A)
6206-532-001	SAHARA (OCC03A)
6204-533-001	SUNSET STONE (OCC05A)
6206-535-001	IMPERIAL JADE (OCC07A)
6206-536-001	MIDNIGHT SAPPHIRE (OCC08A)
6206-537-001	OBSIDIAN (OCC09A)
6206-538-001	ANTIQUÉ LACE (OCC10A)

**WARNING!** REPAIR KIT MATERIALS ARE FLAMMABLE, KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. AVOID WITH SKIN. WASH WITH SOAP AND WATER AFTER SKIN CONTACT. IN CASE OF EYE CONTACT, FLUSH WITH WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION. HARMFUL IF SWALLOWED. KEEP OUT OF REACH OF CHILDREN.



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TITLE

### CORTERRA MAINTENANCE & REPAIR SHEET

MANUFACTURE DATE

**DECEMBER 1997**  
**TO PRESENT**

DATE ISSUED

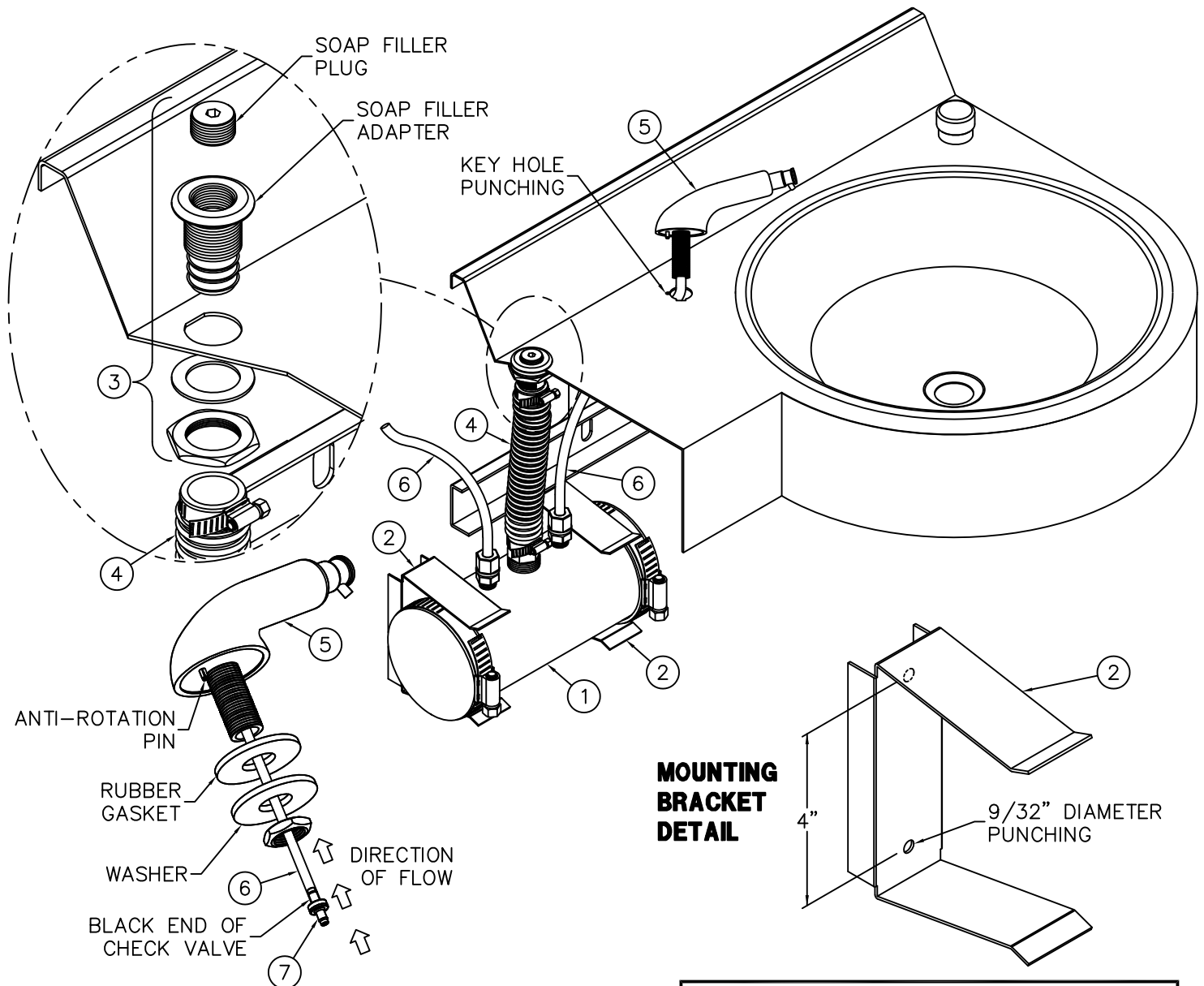
**05/18/12**

DATE REVISED

DRAWING NUMBER

**9927-160-002**





FOR BEST RESULTS INSTALL SOAP RESERVOIR FILL HOLE DIRECTLY BELOW SOAP FILLER ON DECK WITH REFILL TUBE AS SHORT AND STRAIGHT AS POSSIBLE TO FACILITATE REFILL OF SOAP WITHOUT BACKUP OR OVERFLOW.

- A- INSTALL SOAP RESERVOIR (1) TO WALL INSIDE THE TRAP ENCLOSURE USING THE MOUNTING BRACKETS (2) PROVIDED. WALL ANCHORS AND FASTENERS ARE BY OTHERS.
- B- INSTALL SOAP FILLER ASSEMBLY (3) TO DECK.
- C- ATTACH THE 1-1/4" O.D. REFILL TUBE (4) TO SOAP FILLER ASSEMBLY (3) & SOAP RESERVOIR (1) WITH THE HOSE CLAMPS PROVIDED.

- D- INSTALL SOAP DISPENSER(S) (5) ONTO DECK BY ALIGNING ANTI-ROTATION PIN WITH KEY HOLE. NOTE THAT GASKET AND WASHER ARE LOCATED BENEATH THE DECK.
- E- ATTACH THE 3/8" O.D. TUBING (6) TO THE DISPENSER(S) (5) & RESERVOIR (1). NOTE: CHECK VALVE(S) (7) MUST BE FIELD SPLICED INTO TUBING (6) & INSTALLED WITH RESPECT TO DIRECTION OF FLOW.
- F- TO FILL SOAP RESERVOIR, REMOVE THE FILLER PLUG FROM THE SOAP FILLER ADAPTER. SLOWLY POUR SOAP DOWN OPENING AND REPLACE PLUG.

REFERENCE DRAWING

ASSEMBLY	NUMBER
SOAP DISPENSER	9965-075-002

TITLE -PDM SOAP DISPENSER INSTALLATION DETAIL

MANUFACTURE DATE

JUNE 2001  
TO PRESENT

DATE ISSUED

08/24/01

DATE REVISED

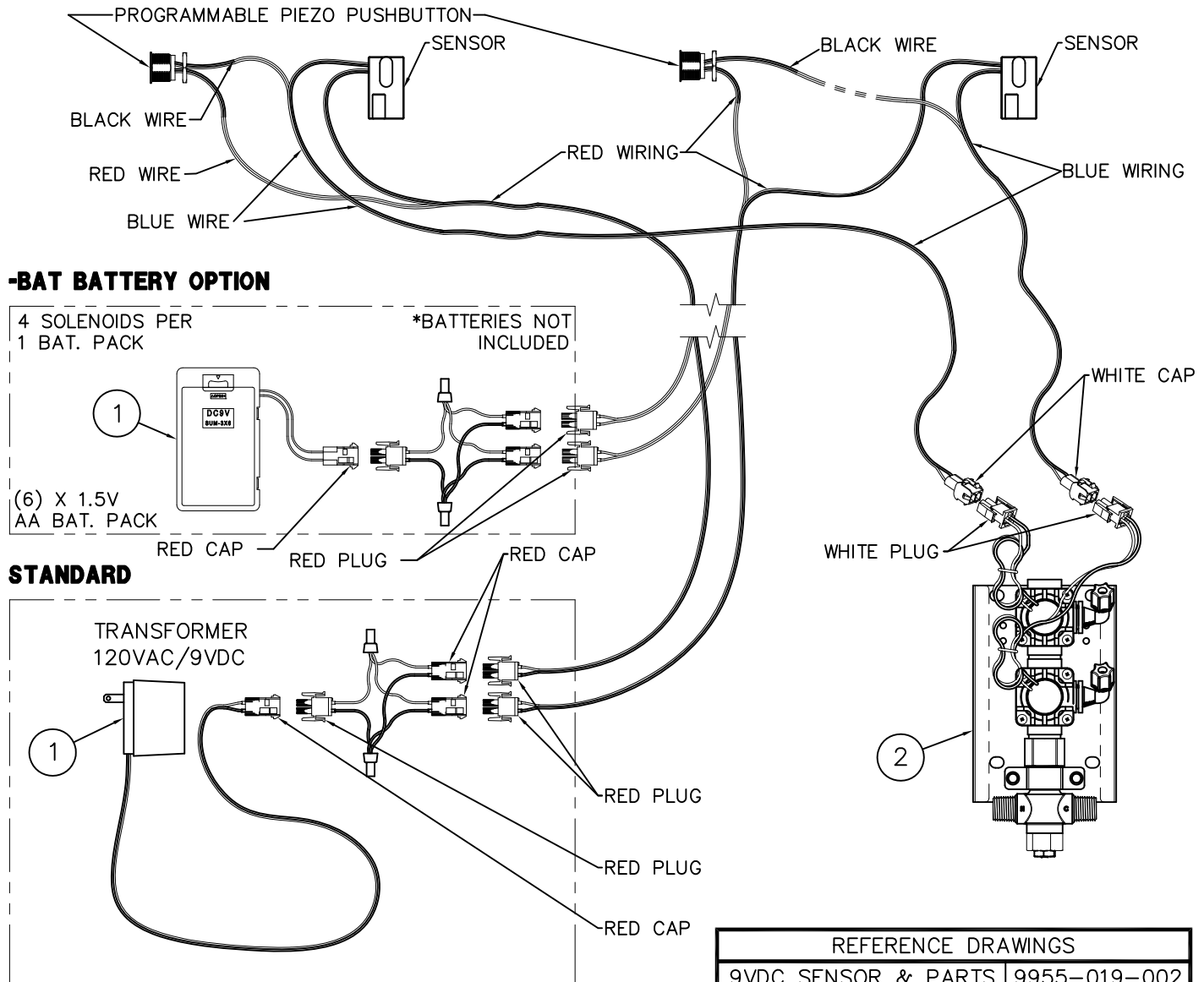
06/22/04

DRAWING NUMBER

9927-210-003



## TWO STATION WIRING DIAGRAM SHOWN



## REFERENCE DRAWINGS

9VDC SENSOR & PARTS	9955-019-002
PIEZO PB PROGRAMMING	9940-009-001

## INSTALLATION INSTRUCTIONS:

A- USING APPROPRIATE INSTALLATION INSTRUCTIONS, MOUNT FIXTURE TO WALL AND MAKE-UP WASTE PIPING CONNECTIONS. SENSOR OR ELECTRONIC PUSHBUTTON ARE FACTORY INSTALLED. POWER SUPPLY ① AND VALVE ② SHIPPED LOOSE.

B- INSTALL SOLENOID VALVE ASSEMBLY ② ON THE WALL (FASTENERS AND WALL ANCHORS BY OTHERS), MAKING SURE THAT THE VALVE WILL BE WITHIN BOTTOM ENCLOSURE.

C- CONNECT WATER SUPPLY (AFTER FLUSHING LINES) TO VALVE, AND VALVE RISER TO SPOUTS AS PER UNIT INSTALLATION INSTRUCTIONS.

D- CONNECT SOLENOID VALVE, POWER SUPPLY AND SENSOR WIRING AS SHOWN ON DETAIL.

E- COMPLETE THE INSTALLATION OF THE UNIT ACCORDING TO THE UNITS INSTALLATION INSTRUCTIONS.

## NOTE:

1- PLUG-IN TRANSFORMER INCLUDES BUILT-IN SECONDARY FUSE. IN THE EVENT OF POWER SURGE TRANSFORMER MAY REQUIRE REPLACEMENT.

2- ELECTRICAL RECEPTACLE MUST BE WIRED TO A GFI PROTECTED CIRCUIT. FIXTURE MUST BE EARTH GROUNDED PER N.E.C. (NATIONAL ELECTRICAL CODE).



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TITLE

**-SO SENSOR/ -PPZ PIEZO ELECTRONIC PUSHBUTTON INSTALLATION**

MANUFACTURE DATE

**OCTOBER 2009**  
**TO PRESENT**

DATE ISSUED

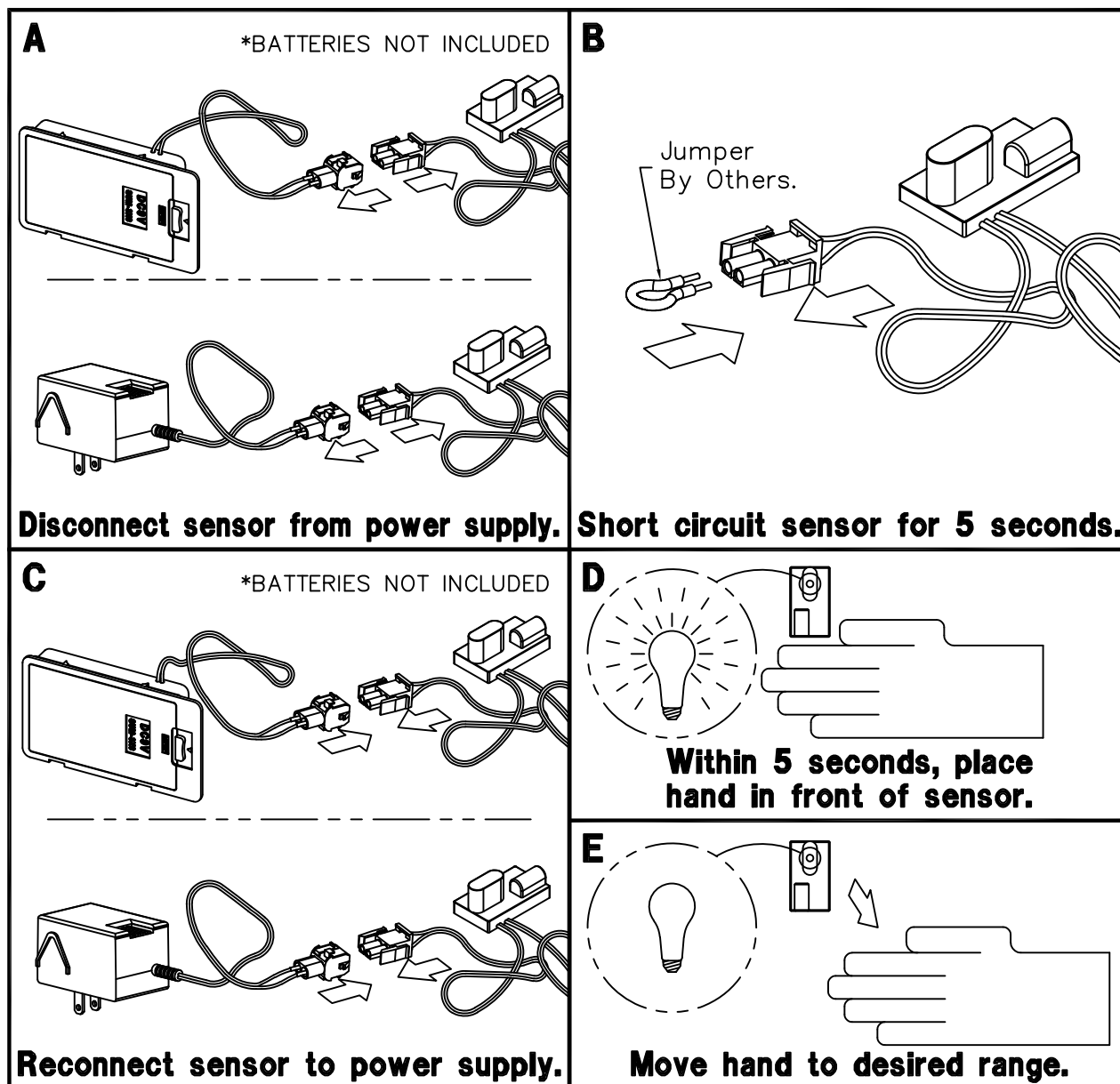
**09/06/13**

DATE REVISED

**03/25/14**

DRAWING NUMBER

**9927-221-005**



**NOTE:** THESE INSTRUCTIONS ONLY APPLY TO 9 VOLT SENSORS THAT DO NOT HAVE A RANGE ADJUSTMENT SCREW ON THE BACK. SEE DRAWING # 9927-222-001.

### INSTRUCTIONS:

- A- Disconnect sensor from power supply.
- B- Create a short circuit between the positive and negative connections on the sensor for five seconds. **WARNING:** Do not create a short circuit on the power supply or while the sensor is connected to the power supply.
- C- Reconnect the sensor to the power supply.

- D- Within 5 seconds of making the connection, place hand 2 to 4 inches from the sensor.
- E- Once red light begins flashing quickly, move hand to preferred distance and wait for light to stop flashing.
- F- Check distance. If unsatisfactory, repeat steps A through E.

 MORRIS GROUP INTERNATIONAL P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200	TITLE <b>9 VOLT DC SENSOR RANGE ADJUSTMENT</b>		
	MANUFACTURE DATE <b>SEPTEMBER, 2001 TO PRESENT</b>	DATE ISSUED <b>09/06/01</b>	DRAWING NUMBER <b>9927-222-002</b>
		DATE REVISED <b>02/18/14</b>	



## Programable Piezo Pushbutton Programming Instructions (Flow Time Adjustment)

The Button is factory set an 8 sec. timing cycle, if an 8 sec. cycle is adequate, then **no** programming adjustment is required.



NOTE: Read the entire document before trying to program the piezo pushbutton.

### THE TIME SETTINGS PROGRAM USES 3 DIFFERENT TIMING MODES:

- **1 second timing mode:** Each push of the button adds 1 second to the total timing cycle.
- **5 second timing mode:** Each push of the button adds 5 seconds to the total timing cycle.
- **20 second timing mode:** Each push of the button adds 20 seconds to the total timing cycle.

To program the piezo pushbutton, you will need to be able to see the back of the piezo pushbutton.

Prevision must be made to access the back of the piezo pushbutton. There is an LED on the back of the piezo pushbutton under a layer of transparent epoxy, used as a programming indicator light.



NOTE: This programming procedure moves along rapidly, there is only about 2 or 3 seconds between programming operations.

In order to start the programming the piezo pushbutton, the button must be powered down. Disconnect the red power cable and wait 20 seconds, then reconnect the red power cable.

As soon as the cable is reconnected the LED will start flashing, it will flash 4 times, then stays on for 3 seconds. During the 3 second period, push the piezo button once, the LED will go out, now you are in the **1 sec timing mode** and each time the button is pushed the LED will flash, adding 1 sec to the total timing cycle.

To move on to the **5 sec timing mode**, pause and wait for the LED to flash 2 times, now you are in the 5 sec timing mode. Each time the button is pushed the LED will flash, adding 5 sec to the total timing cycle.

To move on to the **20 sec timing mode**, pause and wait for the LED to flash 3 times, now you are in the 20 sec timing mode and each time the button is pushed the LED will flash, adding 20 sec to the total timing cycle. After programing is complete, pause and wait for the LED to flash 4 times and then 5 times, which completes the programming.

- When a **timing mode is not required** then **do not** push the button and wait for the next timing mode.
- Each timing mode (1 sec, 5 sec or 20 sec timing mode) can be sequenced up to 100 times, that is the number of times, the button can be pushed, to increase the total timing cycle in each timing mode.



## Programmable Piezo Pushbutton Programming Instructions (Flow Time Adjustment)

### WORKSHEET

**(FILL IN ALL BOXES, WHICH WILL SIMPLIFY THE PROGRAMMING PROCEDURE)**

Fill in all the  
Boxes below



Determine the  
number of seconds  
per timing cycle

#### PROGRAMING STEPS:

- Power down piezo button for 10 seconds.
- Reconnect power.
- LED flashes, then stay on.
- While the LED is steady on, push button.
- LED turns off.

1 Push = 1 Second

x 1 =  sec



- You are in the 1 sec timing mode, immediately push the button, 1 push equals 1 sec added to the total timing cycle.
- Pause and wait for the LED to flash 2 times.

**ADD**

1 Push = 5 Seconds

x 5 =  sec



- You are in the 5 sec timing mode, immediately push the button, 1 push equals 5 sec added to the total timing cycle.
- Pause and wait for the LED to flash 3 times.

**ADD**

1 Push = 20 Seconds

x 20 =  sec



- You are in the 20 sec timing mode, immediately push the button, 1 push equals 20 sec added to the total timing cycle.

**EQUALS**

Total timing cycle equals

seconds



# INSTALLATION, OPERATIONS & MAINTENANCE MANUAL

Please visit [www.acorneng.com](http://www.acorneng.com)  
for most current specifications.

