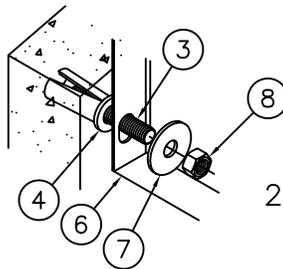
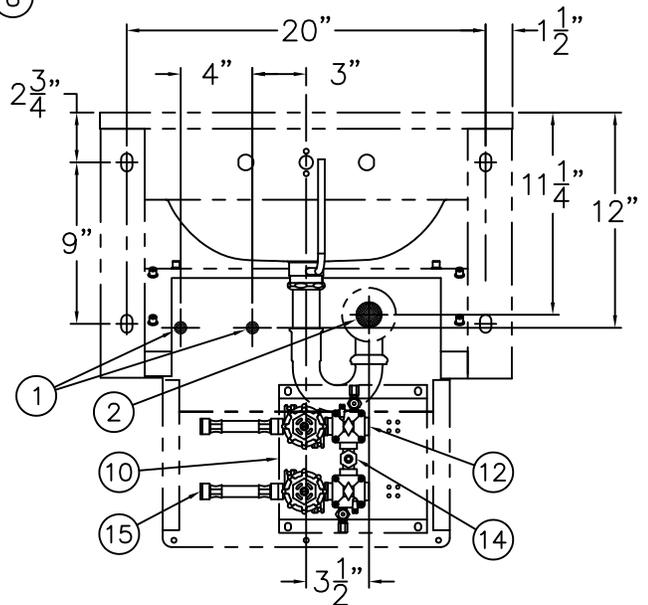


MOUNTING DETAIL



REFERENCE DRAWINGS	
HARDWARE PACKAGE	9957-900-001
-SW SLEEVE / MT TEMPLATE	9925-228-001
AIR CONTROL CONNECTION	9900-006-003
-4 AIR-CONTROL (HOT&COLD)	9905-000-003
-MVC1 S/T TIME-TROL	9900-001-004
-EVS1 S/T MASTER-TROL	9905-330-004



INSTALLATION INSTRUCTIONS

- A- ROUGH-IN FOR THE FOLLOWING CONNECTIONS:
 1/2" NPS LAVY SUPPLY CONNECTION(S) (1).
 1-1/2" OD PLAIN END WASTE OUTLET (2).
- B- SECURE 1/2"-13 UNC STUDS (3) PROVIDED TO INSTALLED WALL SLEEVE ANCHOR TAPPINGS OR TO WALL ANCHORS BY OTHERS (4) INSTALLED AS INDICATED.
- C- SEPARATE BOTTOM ENCLOSURE (5) AND POSITION FIXTURE (6) INTO PLACE. SECURE FIXTURE TO ANCHORING STUDS (3) WITH WASHERS (7) AND NUTS (8) PROVIDED.
- D- USING BOTTOM ENCLOSURE (5) AS A TEMPLATE, LOCATE AND INSTALL ENCLOSURE ANCHORING HARDWARE BY OTHERS (9).
- E- MAKE UP CONNECTION TO LAVY WASTE 1-1/2" OD PLAIN END (2) (SUITABLE FOR COMPRESSION CONNECTION).
- F- MOUNT OPTIONAL VALVE ASSEMBLY (10) TO WALL WITHIN FIXTURE.

- G- CONNECT 1/8" OD POLYETHYLENE AIR LINES (NOT SHOWN) TO PUSHBUTTON(S) (1) AND SERVOMOTOR (12). HAND TIGHTEN USING FERRULE NUTS PROVIDED. NOTE: WHEN METERING VALVES ARE SPECIFIED, THE AIR LINES CONNECT DIRECTLY TO THE TIMER.
- H- CONNECT 1/4" OD POLYETHYLENE WATER LINES (NOT SHOWN) TO BUBBLER (13) AND COMPRESSION NUT (14). HAND TIGHTEN: USING FERRULE NUTS PROVIDED.
- I- AFTER THOROUGHLY FLUSHING THE SUPPLY LINES (1) LINES. MAKE-UP SUPPLY CONNECTION(S) (1/2" NPS FEMALE). NOTE: SUPPLY INLET CONNECTION WILL ACCOMMODATE 1/2" NPT MALE ADAPTER. THREAD FLEX CONNECTOR HOSE (15) TO VALVE INLET AND TO SUPPLY STUB OUTS.

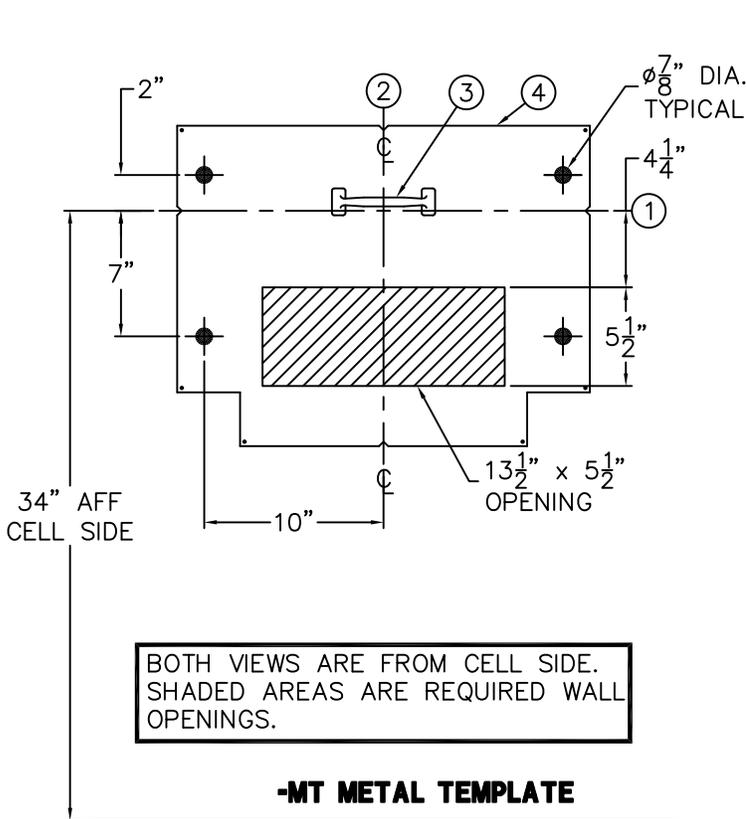
NOTE: RECOMMENDED WATER FLOW PRESSURE 25 PSI MINIMUM & 100 PSI MAXIMUM. MAXIMUM WORKING WATER SUPPLY TEMPERATURE IS 130° F.

WARNING: PRIOR TO MAKING 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. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105° F.



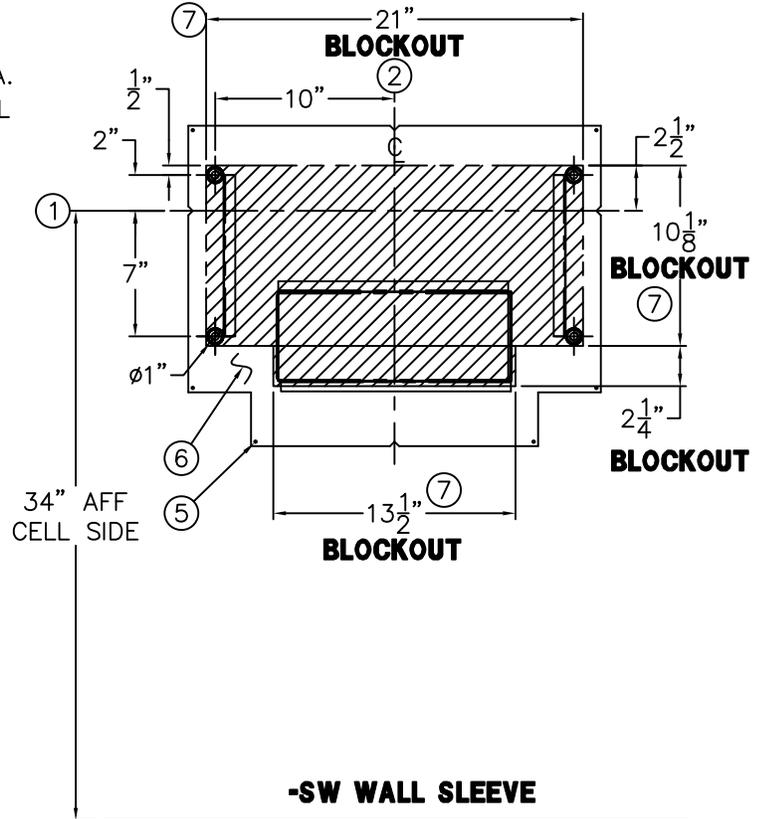
ACORN ENGINEERING COMPANY
 P.O. BOX 3527 Industry, CA 91744
 15125 Proctor Ave Industry, CA 91746
 (626) 336-4561 FAX (626) 961-2200

TITLE 23" WIDE FRONT ACCESS HANDICAP LAVY, #LR1653FA		
MANUFACTURE DATE JANUARY 2017 TO PRESENT	DATE ISSUED 10/05/17	DRAWING NUMBER 9925-313-001
	DATE REVISED 12/29/17 A	



BOTH VIEWS ARE FROM CELL SIDE.
SHADED AREAS ARE REQUIRED WALL
OPENINGS.

-MT METAL TEMPLATE



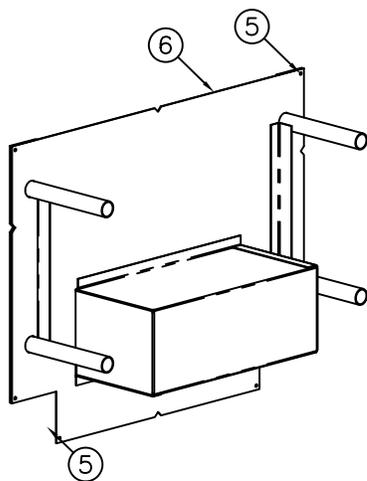
-SW WALL SLEEVE

-MT METAL TEMPLATES

- A-METAL TEMPLATES ARE USED TO LAYOUT REQUIRED WALL OPENINGS FOR SUBSEQUENT FLAME CUTTING OR CORE DRILLING.
- B-STRIKE A HORIZONTAL CHALK LINE ON THE WALL 34" ABOVE FINISHED FLOOR. THIS WILL LOCATE CENTERLINE FOR HORIZONTAL NOTCHES ① ON THE TEMPLATE.
- C-STRIKE A VERTICAL CHALK LINE ON THE WALL TO INDICATE THE CENTERLINE OF FIXTURE. THIS WILL LOCATE THE VERTICAL NOTCHES ② ON THE TEMPLATE.
- D-USING HANDLE ③ ON THE TEMPLATE ④. PLACE TEMPLATE AGAINST THE WALL. ALIGN NOTCHES ON CHALK LINES & MARK FOR WALL OPENINGS.

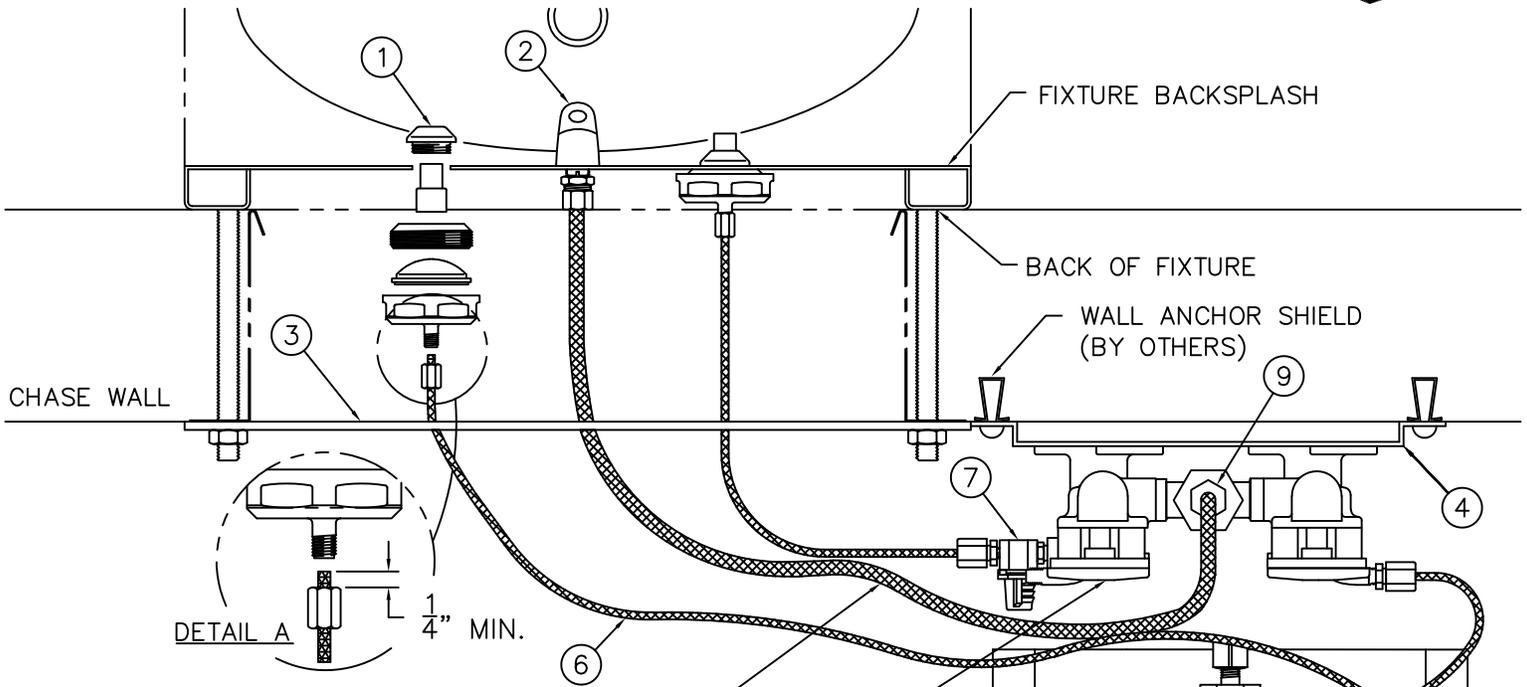
-SW WALL SLEEVES

- WALL SLEEVES ARE INSTALLED IN FORMS USING NAILS HOLES ⑤ PROVIDED OR GROUTED INTO BLOCK OR CEMENT WALLS BECOMING A PERMANENT PART OF THE WALL.
- NOTE: FOR POURED WALL CONSTRUCTION, TEMPORARY BRACING SHOULD BE INSTALLED WITHIN SLEEVE OPENING TO PREVENT DEFORMATION TO SLEEVE WHICH MAY OCCUR DURING POUR. DO NOT POUR CONCRETE DIRECTLY ON TOP OF WALL SLEEVE.
- A-INSTALL SLEEVE WITH FLANGE ⑥ ON CHASE SIDE OF WALL.
- B-POSITION AND ALIGN TOP AND BOTTOM NOTCHES ② WITH VERTICAL CENTERLINE OF FIXTURE LOCATION.
- C-WHEN SLEEVES ARE NOT AVAILABLE USE BLOCKOUT ⑦ DIMENSIONS SHOWN.

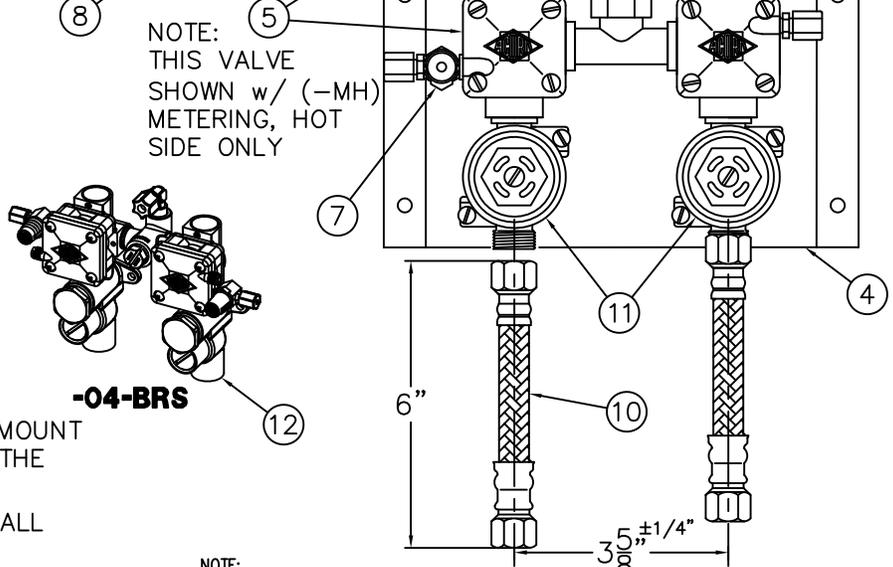


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TITLE -SW WALL SLEEVE & -MT METAL TEMPLATE-CAT #LR1653FA		
MANUFACTURE DATE MARCH, 2017 TO PRESENT	DATE ISSUED 10/06/17	DRAWING NUMBER 9925-228-001
	DATE REVISED	



REFERENCE DRAWINGS	
ASSEMBLIES	NUMBER
VALVE BODY	9955-005-003
CHECKSTOP	9956-040-003
FIXTURE TRIM	9957-050-001
-PBH/BPH TRIM	9957-060-001
AIR-CONTROL SERVOMOTORS	
METERING	9955-000-003
NON-METERING	9955-001-003



INSTALLATION INSTRUCTIONS:

- A- PRIOR TO INSTALLATION OF THE FIXTURE, MOUNT PUSHBUTTONS ① AND BUBBLER ② TO THE BACKSPASH.
- B- INSTALL THE PLUMBING FIXTURE TO THE WALL INCLUDING UPPER SUPPORT PLATE ③.
- C- MOUNT THE AIR-CONTROL VALVE ASSEMBLY ④. LOCATE AS REQUIRED. MAXIMUM ALLOWABLE DISTANCE BETWEEN PUSHBUTTON ① AND AIR-CONTROL SERVOMOTOR ⑤ IS 10 FEET. WALL ANCHORING HARDWARE ARE BY OTHERS.
- D- CONNECT 1/8" O.D. POLYETHYLENE AIR LINES ⑥ TO PUSHBUTTONS ① AND SERVOMOTOR ⑤. HAND TIGHTEN USING FERRULE NUTS PROVIDED. SEE DETAIL A. NOTE: WHEN METERING VALVES ARE SPECIFIED, AIR LINES CONNECT DIRECTLY TO VALVE TIMER ⑦.
- E- CONNECT 1/4" O.D. POLYETHYLENE WATER LINE ⑧ TO BUBBLER ② AND COMPRESSION NUT ⑨. HAND TIGHTEN USING FERRULE NUTS PROVIDED.

- NOTE:
 MAXIMUM RECOMMENDED WORKING WATER PRESSURE IS 100 PSI; TEMPERATURE IS 130° F; OUTLET TEMPERATURE IS RECOMMENDED AT A MAXIMUM OF 105° F.
 WARNING:
 PRIOR TO MAKING 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. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105° F.
- F- AFTER THOROUGHLY FLUSHING THE SUPPLY LINES, MAKE-UP 1/2" NPS FEMALE SUPPLY CONNECTIONS. NOTE: SUPPLY INLET CONNECTION WILL ACCOMODATE 1/2" NPT MALE ADAPTER. THREAD FLEX CONNECTOR HOSE ⑩ TO CHECKSTOPS ⑪ AND TO SUPPLY STUB OUTS. FOR OPTIONAL -04-BRS BRASS BODY VALVE, MAKE UP CONNECTION TO CHECK STOPS ⑫.
 - G- SEE APPROPRIATE SERVOMOTOR REFERENCE DRAWING FOR DETAILS AND TIMING INSRUCTIONS.



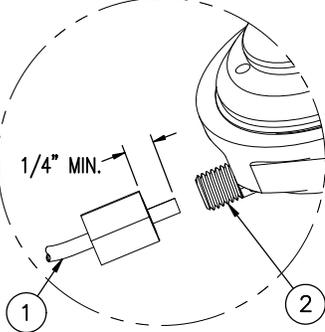
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TITLE **(04-SERIES) HOT & COLD AIR-CONTROL VALVE ASSEMBLY - NEW STYLE**

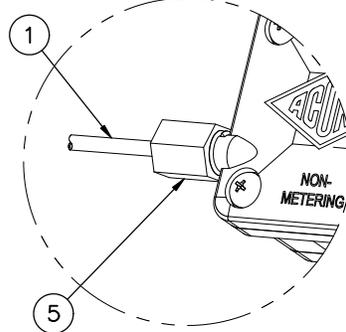
MANUFACTURE DATE	DATE ISSUED	DRAWING NUMBER
SEPT 1995	11/1/95	9905-000-003
TO PRESENT	DATE REVISED	
	11/18/13 F	



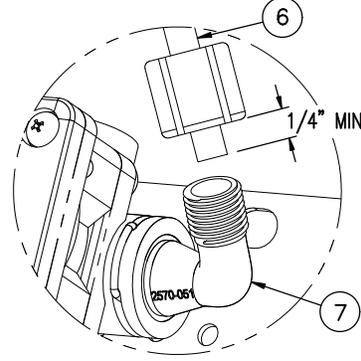
SIDE OUTLET SHOWN



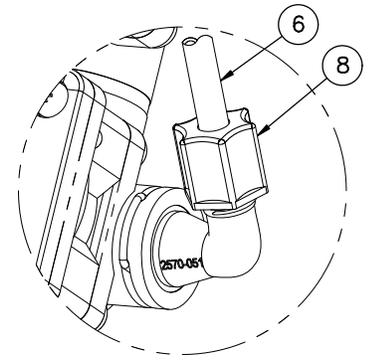
DETAIL "A"



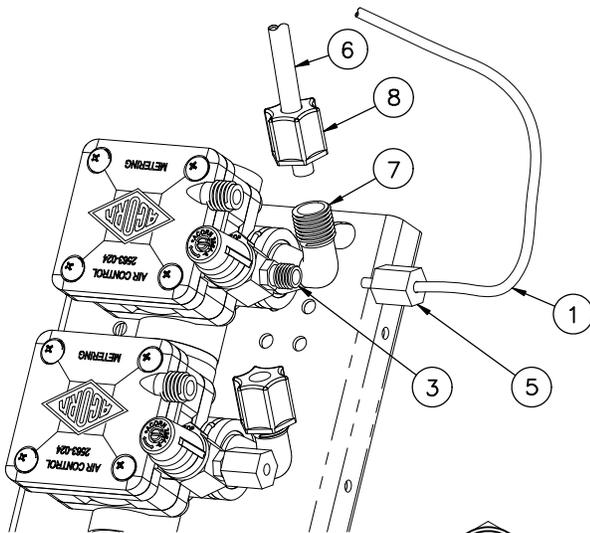
DETAIL "B"



DETAIL "C"



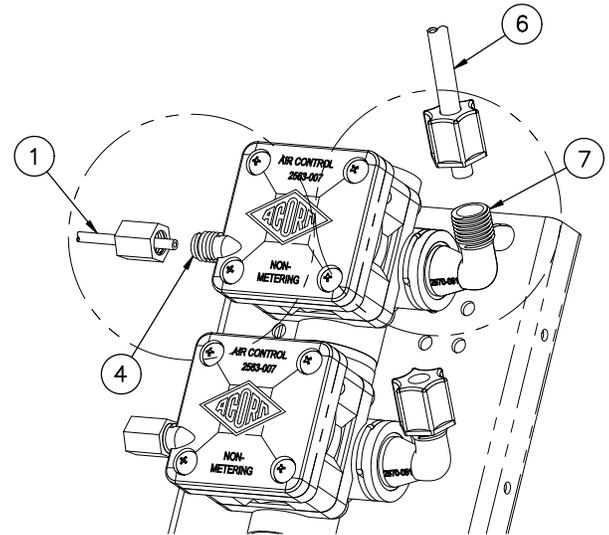
DETAIL "D"



METERING



TIMING SCREW



NON-METERING DIRECT ACTING

LAVATORY VALVES ARE FACTORY PRESET WITH A 5-20 SECOND RUN TIME. THIS WILL PROVIDE LESS THAN 1/4 GALLON (1 LITER) PER CYCLE. IF IT IS NOTED THAT VALVES ARE RUNNING LONGER THAN THIS MAXIMUM RECOMMENDED CYCLE TIME PLEASE FOLLOW THESE INSTRUCTIONS TO CORRECT THE CYCLE TIME. WHEN SET, FAUCET SHOULD NOT PRODUCE MORE THAN 1/4 GALLON (1 LITER) PER CYCLE.

TIMING IS ADJUSTABLE FROM 5 TO 60 SECONDS AND IS ACCOMPLISHED BY ROTATING TIMING SCREW. TURNING THE SCREW CLOCKWISE INCREASES TIMING WHILE COUNTERCLOCKWISE DECREASES TIMING.

INSTALLATION INSTRUCTIONS:

- A- MOUNT FIXTURE IN ACCORDANCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- B- ASSEMBLE SPOUTS AND PUSHBUTTONS TO FIXTURE.
- C- CONNECT 1/8" O.D. POLYETHYLENE AIR LINE (1) TO PUSHBUTTON (2), AND VALVE TIMER ASSEMBLY (3) SEE DETAIL "A". NOTE: FOR DIRECT ACTING: ASSEMBLE TO AIR PORT (4), SEE DETAIL "B". HAND TIGHTEN FERRULE NUT (5) PROVIDED.
- D- CONNECT 1/4" O.D. POLYETHYLENE WATER LINES (6) TO VALVE ASSEMBLY ELBOW (7) SEE DETAILS "C", AND "D". HAND TIGHTEN FERRULE NUT (8) PROVIDED.
- E- AFTER THOROUGHLY FLUSHING SUPPLY LINES MAKE UP CONNECTIONS TO VALVE ASSEMBLY INLET(S) 1/2" NPT OR 1/2" NPS FLEX HOSE AS REQUIRED.

REFERENCE DRAWINGS

ASSEMBLIES	DRAWING
VALVE BODY	9955-006-003
CHECKSTOP	9956-040-003
FIXTURE TRIM	9957-051-001
FIXTURE TRIM -DMS	9957-055-001
AIR-CONTROL SERVOMOTORS	
METERING	9955-000-003
NON-METERING	9955-001-003

NOTE:

- 1) ALL TUBING SHOULD BE CUT SQUARE AND BE FREE OF BURRS OR DEFORMITIES TO ENSURE A WATER TIGHT CONNECTION.
- 2) EXTEND TUBING AT LEAST 1/4" BEYOND FERRULE NUT BEFORE INSERTING TUBING INTO CONNECTION OPENING BEFORE TIGHTENING.
- 3) TUBING SHOULD BE FREE OF KINKS FOR PROPER OPERATION
- 4) MAXIMUM RECOMMENDED WORKING WATER PRESSURE IS 100 PSI; TEMPERATURE IS 130° F; OUTLET TEMPERATURE IS RECOMMENDED AT A MAXIMUM OF 105° F.

WARNING:

PRIOR TO MAKING 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. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105° F.

MORRIS GROUP INTL P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200	TITLE HAND OPERATED, LAVATORY AIR-CONTROL VALVE CONNECTIONS	DATE ISSUED 04/22/10	DRAWING NUMBER 9905-006-001
	MANUFACTURE DATE JANUARY 1999 TO PRESENT	DATE REVISED 11/18/15	