

INSTALLATION, OPERATION, and MAINTENANCE GUIDE

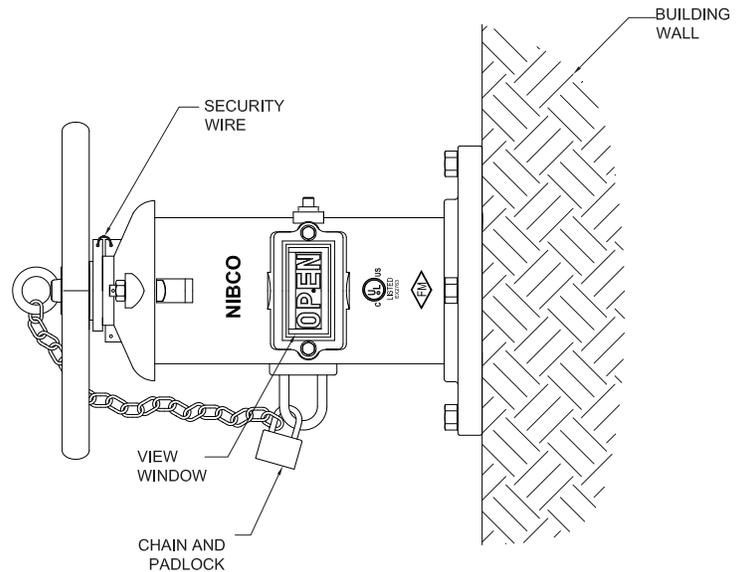
NIBCO Wall Mount Indicator Posts

Series NIP-2AW

- NIBCO Series NIP-2AW Wall Mount Indicator Posts are designed and manufactured to:
- Operate non-rising stem (NRS) post indicator valves (PIV) located through building walls
- Operate multi-turn post indicator valves (PIV) with an operating range from 10 to 50 turns
- Visually indicate if the valve is in the OPEN or SHUT position
- Provide a means to lock the valve into a desired position (usually OPEN)

NIBCO Indicator Posts are listed by Underwriters Laboratories Inc. (UL), Underwriters Laboratories Inc. for use in Canada (C-UL), and approved by Factory Mutual Research Corp. (FM).

It is important to follow the instructions below to assure proper installation and safe trouble-free operation. Failure to follow these instructions may result in reduced product performance and may cause loss of manufacturer's warranty.



1. Application

- 1.1 NIBCO Indicator Posts are primarily used with multi-turn non-rising stem (NRS) post indicator valves (PIV) controlling water supplies to sprinkler, deluge, water spray, foam, and standpipe systems used in fire protection service.
- 1.2 NIBCO Indicator Posts are designed for outdoor service and are coated with electrostatically applied fusion bonded epoxy resin to resist corrosion.
- 1.3 NIBCO Indicator Post view targets are adjustable to accommodate valves of various sizes.
- 1.4 NIBCO Indicator Posts are shipped for use with "left-hand" (counter-clockwise) opening valves.
- 1.5 NIBCO Indicator Posts are designed to allow the attachment of a Control Valve Supervisory Switch for electronic monitoring of the OPEN valve position. Simply follow the instructions provided with the Supervisory Switch for proper installation and operation.
- 1.6 NIBCO Wall Indicator Posts are designed to attach directly to the exterior of the building wall; four 3/4" holes on a 10 1/2" diameter bolt circle.
- 1.7 Indicator Posts should be inspected on a regular basis.

2. Indicator Post Selection

2.1 NIBCO Indicator Posts are designed to work with 4" thru 16" size NIBCO Resilient Wedge Gate Valves (RWGVs) and 4" thru 12" sizes NIBCO Iron Body Bronze Mounted (IBBM) Gate Valves. See Table 1 and Fig. 1 for valve dimensional data. They will also work with any manufacturers non-rising stem Post Indicator Valve (PIV) that operates from 10 to 50 turns, and a maximum operating torque of 900 ft.-lbs.

DIMENSIONAL DATA FOR NIBCO RWGV AND IBBM GATE VALVES

VALVE SIZE	NIBCO RESILIENT WEDGE GATE VALVES (RWGV)							NIBCO IRON BODY BRONZE MOUNTED GATE VALVES (IBBM)						
	TURNS TO OPEN	A		B		1/2 PIPE OD		TURNS TO OPEN	A		B		1/2 PIPE OD	
		INCH	MM	INCH	MM	INCH	MM		INCH	MM	INCH	MM	INCH	MM
4"	13	13.46	342	10.12	257	2.40	61	9	14.13	359	10.47	266	2.40	61
6"	15.7	17.01	432	13.78	350	3.45	88	13.5	18.54	471	16.30	414	3.45	88
8"	17.3	20.47	520	17.32	440	4.53	115	17.5	22.13	562	18.11	460	4.53	115
10"	21.4	23.82	605	20.71	526	5.50	140	30.3	25.75	654	21.89	556	5.50	140
12"	25.3	27.01	686	23.86	606	6.60	168	38.3	29.49	749	24.57	624	6.60	168
14"	44	31.81	808	28.58	726	7.65	194							
16"	50	34.21	869	30.98	787	8.70	221							

Table 1

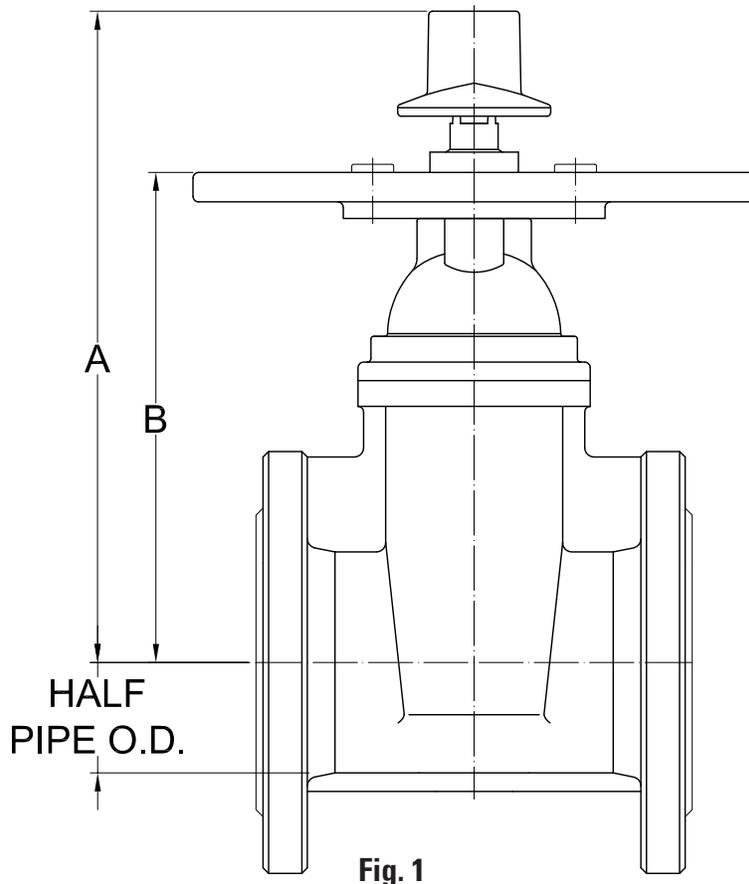


Fig. 1

3. Installation of Wall Mount Style Indicator Post

- 3.1 Fully OPEN the gate valve to which the Indicator Post is being attached.
- 3.2 Remove 1" square Operating Rod (26) with attached Coupling (25) from Indicator Post by sliding it out from bottom, See Fig. 2.
- 3.3 Insert Operating Rod (26) thru exterior wall and fully engage Coupling onto Operating Nut of Valve as shown in Fig. 3. Mark the Operating Rod (26) at a distance of 12¼" from exterior face of wall. Remove Operating Rod (26) from wall and cut-off the top section of the 1" square Rod at location you just marked. Remove any sharp edges from the Rod with a file.
- 3.4 Reinstall the shortened Operating Rod (26) into the Wall Indicator Post by sliding it into the 1" square pocket in bottom side, See Fig. 2.
- 3.5 Lift Wall Indicator Post assembly and insert Operating Rod (26) thru exterior wall and fully engage Coupling (25) onto Operating Nut of valve as shown in Fig. 4. Rotate and Orient Wall Post assembly until desired location of View Windows is obtained. Align and level Operating Rod with valve Operating Nut then mark position of 4 wall mounting holes thru Flange (27).
- 3.6 Remove Wall Indicator Post assembly from the wall. Drill exterior wall as marked for appropriate size (customer supplied) mounting bolts.
- 3.7 Reinstall Wall Indicator Post assembly onto wall making sure the Coupling (25) is fully engaged on Operating Nut of valve. Secure Post assembly to wall with 4 bolts.

Table 2

WALL MOUNT STYLE INDICATOR POST PARTS LIST

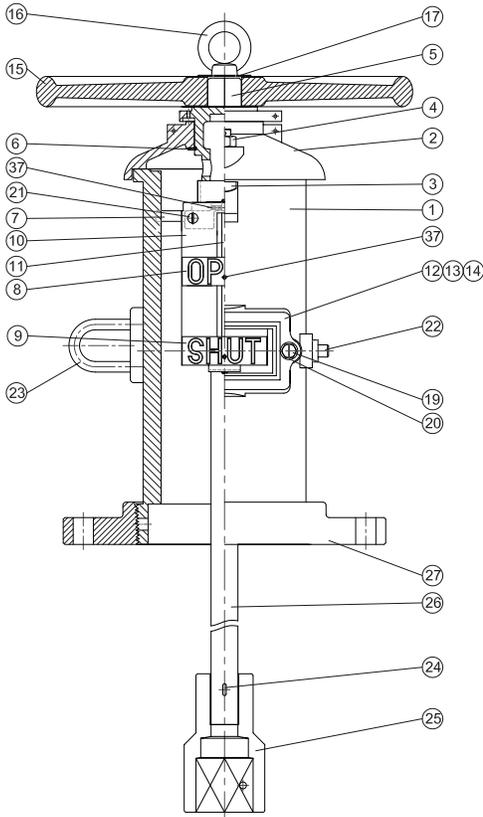


Fig. 2

NO.	DESCRIPTION	MATERIAL	SPECIFICATION	QTY.
1	UPPER BODY	DUCTILE IRON	ASTM A536 Gr. 65-45-12	1
2	CAP	DUCTILE IRON	ASTM A536 Gr. 65-45-12	1
3	T-HEAD BOLT, CAP	STEEL, ZINC PLATED	ASTM A105	2
4	NUT, CAP	STEEL, ZINC PLATED	ASTM A105	2
5	OPERATING STEM	BRONZE	ASTM B584 C84400 / B62 C83600	1
6	RETAING RING, STEM	STAINLESS STEEL	ASTM A276 S30400	1
7	LEADING BOGIE	BRONZE	ASTM B584 C84400 / B62 C83600	1
8	TARGET PLATE, OPEN	ALUMINUM	ASTM B26	2
9	TARGET PLATE, SHUT	ALUMINUM	ASTM B26	2
10	EXTENSION PLATE	STEEL, PAINTED BLACK	ASTM A1008	2
11	TARGET ROD	BRASS	ASTM B16 C36000	2
12	VIEW WINDOW	POLYCARBONATE	COMMERCIAL	2
13	GASKET, WINDOW	RUBBER	ASTM D2000 EPDM	2
14	GUARD, WINDOW	CAST IRON	ASTM B124 Gr. B	2
15	HANDWHEEL	DUCTILE IRON	ASTM A536 Gr. 65-45-12	1
16	EYEBOLT, HANDWHEEL	FORGED STEEL, ZINC PL.	ASTM A105	1
17	WASHER, H.W. RETAINER	STEEL, ZINC PLATED	COMMERCIAL	1
19	SCREW, HEX HEAD CAP	STAINLESS STEEL	S30400	4
20	WASHER	STAINLESS STEEL	S30400	4
21	SCREW, SLOTTED FLAT HD.	STAINLESS STEEL	S30400	4
22	PLUG, 1/2" PIPE	STEEL, ZINC PLATED	COMMERCIAL	1
23	U-BOLT	FORGED STEEL	ASTM A105	1
24	COTTER PIN	STAINLESS STEEL	S30400	1
25	COUPLING, OPERATING ROD	DUCTILE IRON	ASTM A536 Gr. 65-45-12	1
26	OPERATING ROD	STEEL	ASTM A105	1
27	FLANGE, THREADED	DUCTILE IRON	ASTM A536 Gr. 65-45-12	1
37	SCREW, SOCKET HD. SET	STAINLESS STEEL	S30400	6

INSTALLATION LAYOUT

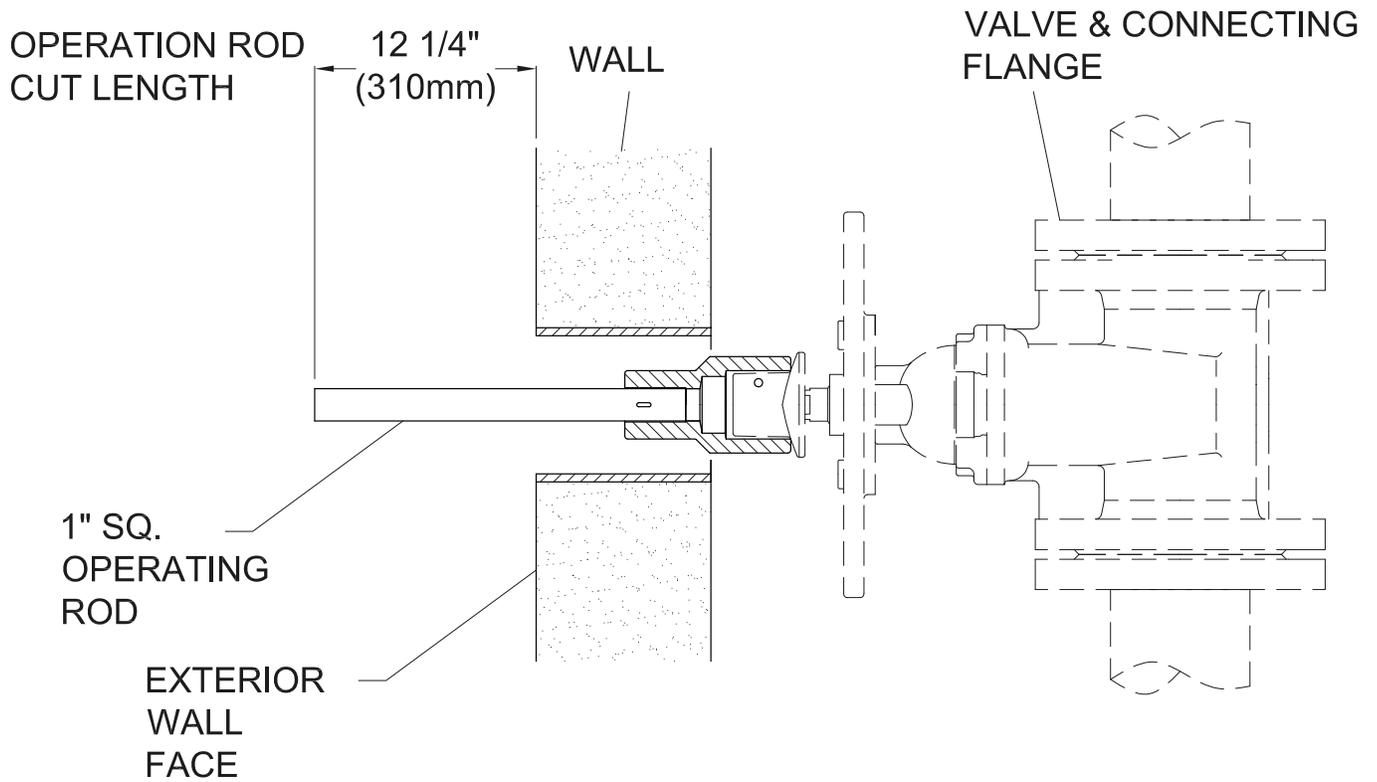


Fig. 3

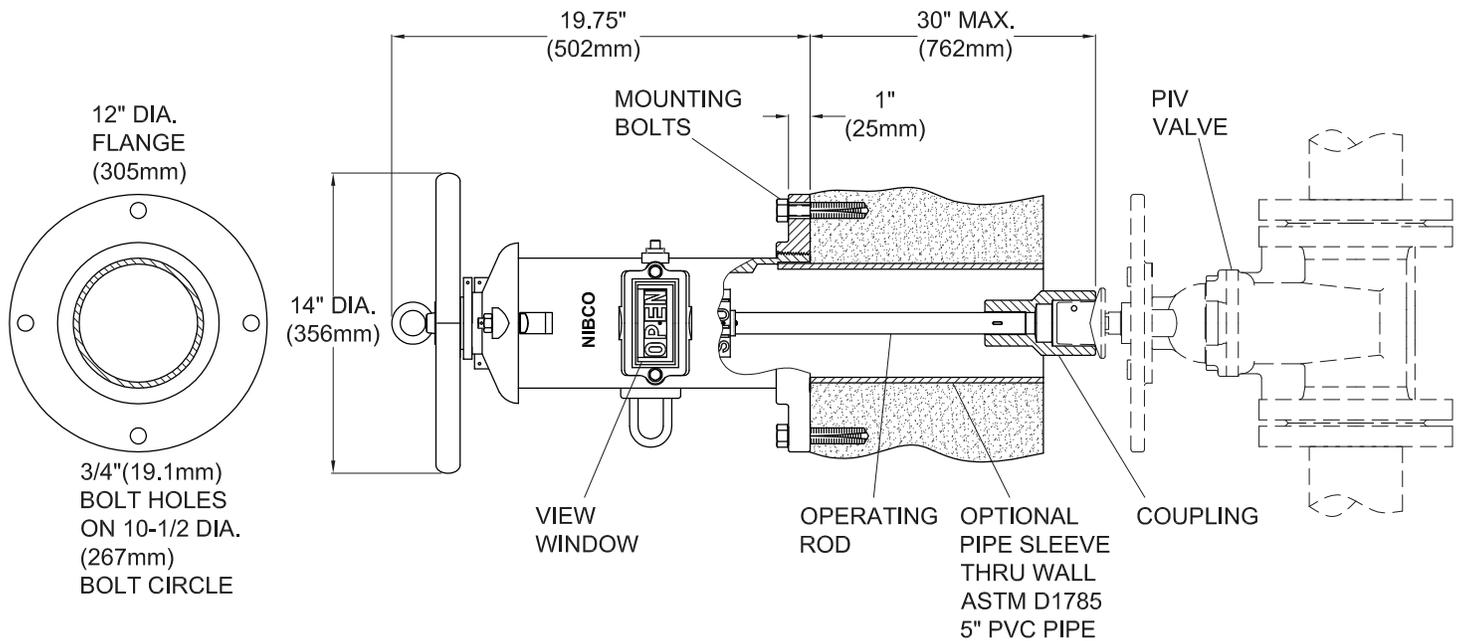


Fig. 4

4. OPEN and SHUT Target Adjustment

- 4.1 All NIBCO Indicator Posts are shipped for use with “left-hand” (counter-clockwise) opening valves.
- 4.2 Remove 2 Nuts (4) and 2 T-Head Bolts (3) that secure Cap (2) to Indicator Post. See Fig. 2.
- 4.3 Grasp Cap (2) and remove from Indicator Post by lifting upward until Target assembly is clear.
- 4.4 Target Plates (8 & 9) must be positioned with the OPEN Plate (8) above the SHUT Plate (9) for “left-hand” (counter-clockwise) opening valves. See Fig. 5.

Table 3

TARGET ASSEMBLY PARTS LIST

NO.	DESCRIPTION	MATERIAL	SPECIFICATION	QTY.
7	LEADING BOGIE	BRONZE	ASTM B584 C84400 / B62 C83600	1
8	TARGET PLATE, OPEN	ALUMINUM	ASTM B26	2
9	TARGET PLATE, SHUT	ALUMINUM	ASTM B26	2
10	EXTENSION PLATE	STEEL, PAINTED BLACK	ASTM A1008	2
11	TARGET ROD	BRASS	ASTM B16 C36000	2
21	SCREW, SLOTTED FLAT HD.	STAINLESS STEEL	S30400	4
37	SCREW, SOCKET HD. SET	STAINLESS STEEL	S30400	6

TARGET ASSEMBLY

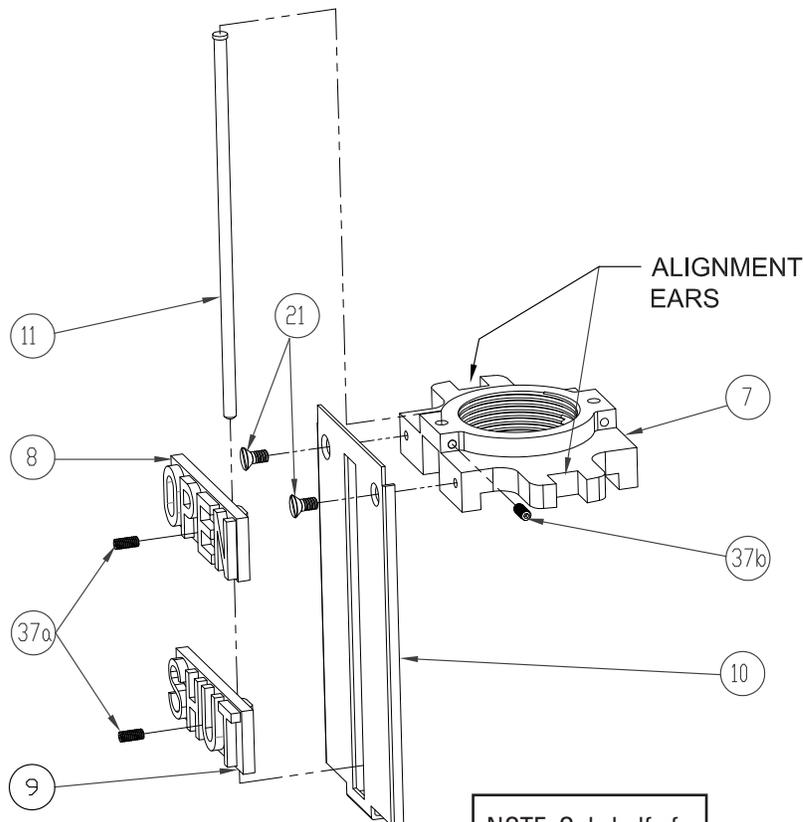


Fig. 5

NOTE: Only half of assembly is shown

- 4.5 Position OPEN Target Plates (8) so they are in the full upward position for “left-hand” (counter-clockwise) opening valves. Secure OPEN Target Plates (8) by tightening Screws (37a). See Fig. 6.
- 4.6 Determine the number of turns required to fully open the valve. See Table 1 for NIBCO valves. You should always confirm actual turns required to open the valve by counting them.
- 4.7 Using Table 6, choose the closest “Number of Turns to Open Valve” and the corresponding “Distance Between Targets” dimension “X”.
- 4.8 Measure and position both SHUT Target Plates (9) at dimension “X” from OPEN Target Plates (8). See Fig. 6.
- 4.9 Secure both SHUT Target Plates (9) by tightening Screws (37a) with an Allen wrench.

Table 4

ADJUSTMENT OF TARGET PLATES

NUMBER OF TURNS TO OPEN VALVE	DISTANCE BETWEEN TARGETS	
	X	
	INCH	MM
10	0.000	0.0
11	0.050	1.3
12	0.150	3.8
13	0.250	6.4
14	0.350	8.9
15	0.450	11.4
16	0.550	14.0
17	0.650	16.5
18	0.750	19.1
19	0.850	21.6
20	0.950	24.1
21	1.050	26.7
22	1.150	29.2
23	1.250	31.8

NUMBER OF TURNS TO OPEN VALVE	DISTANCE BETWEEN TARGETS	
	X	
	INCH	MM
24	1.350	34.3
25	1.450	36.8
26	1.550	39.4
27	1.650	41.9
28	1.750	44.5
29	1.850	47.0
30	1.950	49.5
31	2.050	52.1
32	2.150	54.6
33	2.250	57.2
34	2.350	59.7
35	2.450	62.2
36	2.550	64.8
37	2.650	67.3

NUMBER OF TURNS TO OPEN VALVE	DISTANCE BETWEEN TARGETS	
	X	
	INCH	MM
38	2.750	69.9
39	2.850	72.4
40	2.950	74.9
41	3.050	77.5
42	3.150	80.0
43	3.250	82.6
44	3.350	85.1
45	3.450	87.6
46	3.550	90.2
47	3.650	92.7
48	3.750	95.3
49	3.850	97.8
50	3.950	100.3
51	4.050	102.9

POSITIONING OF OPEN TARGET PLATES FOR VIEW WINDOW

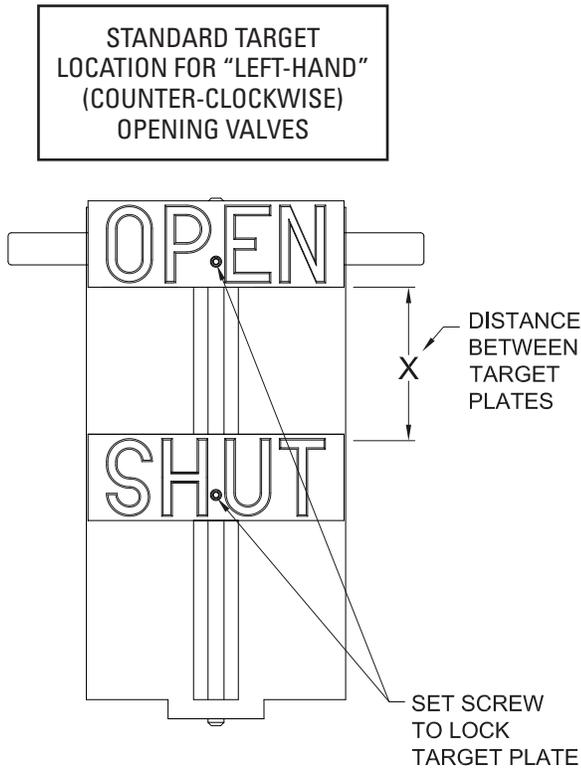


Fig. 6

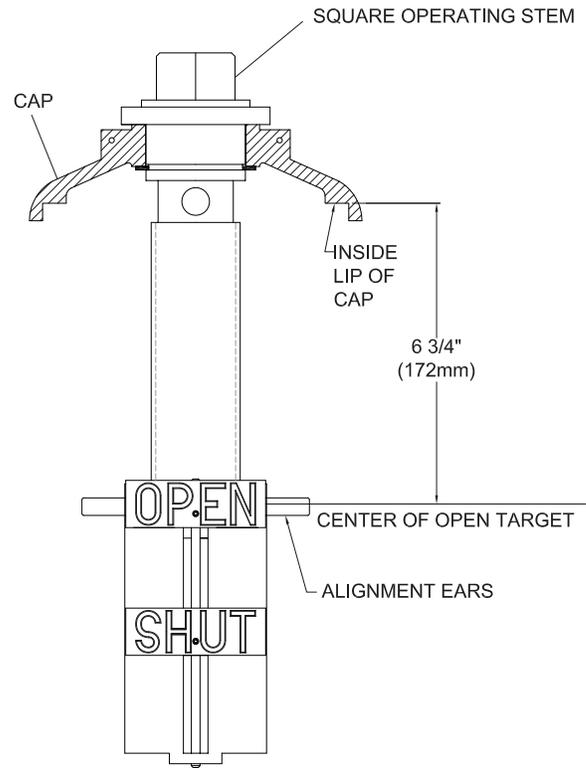


Fig. 7

6. Positioning of Targets in View Window

- 6.1 Rotate Square Operating Stem (5) positioning the center of the OPEN Target Plate (8) until it is located 6¾" from the inside lip of Cap (2). See Fig. 7.
- 6.2 Verify that the valve is in full OPEN position.
- 6.3 Reinstall the Cap (2) & Target assembly into the Upper Body (1) making sure both alignment ears on bronze Leading Boogie (7) straddle the guides cast on the inside of the Upper Body. See Fig. 2.
- 6.4 Reinstall 2 T-Head Bolts (3) in Cap and secure with 2 Nuts (4).
- 6.5 Check to assure that the OPEN Target Plate (8) is centered in both sides of the view window.

7. Operation

- 7.1 The post indicator valve (PIV) can be opened or shut by rotating Handwheel (15) in the desired direction. To open the valve, turn in the counter-clockwise direction as indicated on Cap (2). To shut the valve, turn in the clockwise direction. See Fig. 2.
- 7.2 The Target Plates (8) (9) can be visually checked in the view windows to determine if PIV is open or shut.
- 7.3 After installation, the PIV should be cycled to the full shut position and both view windows should be visually inspected to assure the SHUT target plates are centered. The PIV should then be cycled to the full open position and both view windows should be visually inspected to assure the OPEN target plates are centered.
- 7.4 Valve position can be secured by placing a customer supplied chain through U-bolt (23), and Handwheel (15). A customer supplied lock can be installed into the chain and U-bolt securing Handwheel, preventing valve operation.
- 7.5 NIBCO Indicator Posts have provisions to add a Security Wire thru the Cap T-bolts (3) and Operating Stem (5) to prevent valve operation.

8. Maintenance

- 8.1 Lubrication should be added to oil hole located in top of Operating Stem (5) on an annual basis. Note: it is necessary to remove Eyebolt (16), Washer (17), and Handwheel (15) to expose the oil hole.
- 8.2 Periodic visual inspection is recommended.
- 8.3 Exercising (cycling) of the valve to assure proper function is recommended.

9. Repair Parts

- 9.1 Some specialty components are available for replacement if needed. See Table 5.
- 9.2 Common fasteners such as nuts, bolts, and washers are available at your local hardware.

Table 5

REPAIR PARTS WALL MOUNT STYLE

NO.	DESCRIPTION	PART NO.
3	T-HEAD BOLT	NP1AU10
12	VIEW WINDOW	NP1AU06
13	WINDOW GASKET	NP1AU09
14	WINDOW GUARD	NP1AU07
15	HANDWHEEL	NP2AW31

NO.	DESCRIPTION	PART NO.
24	COTTER PIN	NP1AU21
25	OPERATING ROD COUPLING	NP1AU22
26	OPERATING ROD 36"	NP2AW16
26	OPERATING ROD 72"	NP1AU16
26	OPERATING ROD 90"	NP1AU16E