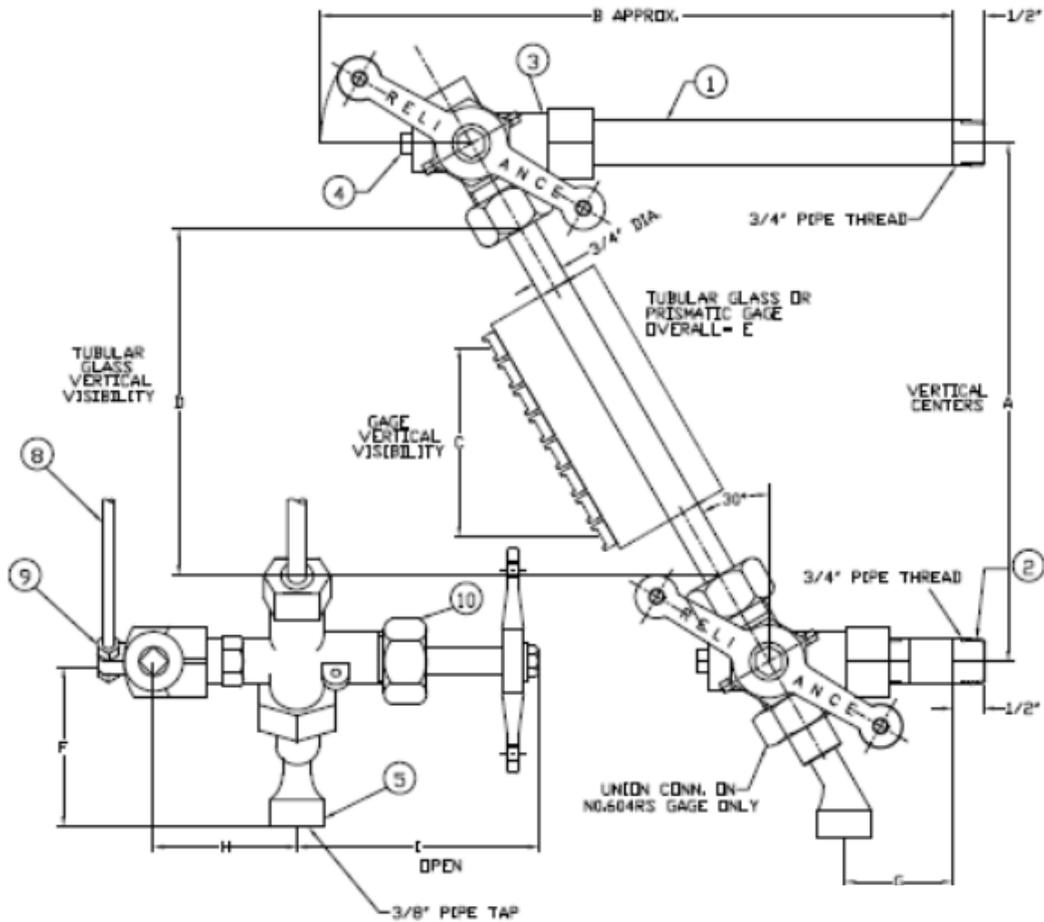


## Procedure to change TG603RS /TG604RS Tiltview Gage from Right Hand Assembly to Left Hand Assembly



**Caution:** Before proceeding, follow any and all plant lock out - tag out procedures required. Verify that all power is turned off to the probes. If under pressure, the equipment should be isolated, or the boiler should be shut down *before* proceeding with the installation. Open drain valve to eliminate any trapped pressure. Any trips or alarms connected to the controller should be bypassed. All inspection and installation steps should be performed by a qualified technician and should be executed in accordance with all applicable national and local codes.

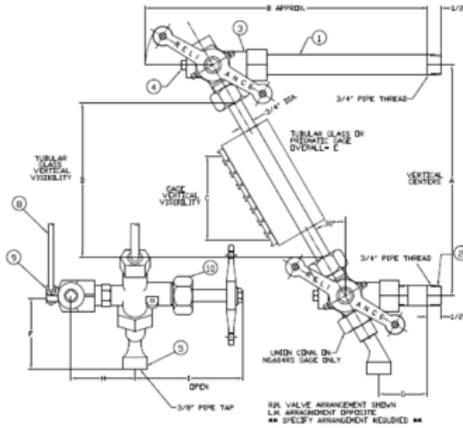
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16633 Foltz Parkway • Strongsville, OH 44149 USA Telephone: +1 (440) 572-1500  
www.clark-reliance.com • sales@clark-reliance.com

WATER GAGE #	F		G		H		I	
	IN	MM	IN	MM	IN	MM	IN	MM
ND663RS	2-3/4	70	2-3/4	70	3-1/4	83	6	15
ND664RS	3-3/4	95	2-1/4	57	3-1/4	83	6	15

BILL OF MATERIAL				
ITEM	PART #	PCS	DESCRIPTION	DWG. NO.
1	TG603-1	1	STEAM CONN. TUBE-3/4" SCH. 80 PIPE ASTM A-106	A-5844
2	TG603-2	1	WATER CONN. TUBE-3/4" SCH. 80 PIPE ASTM A-106	A-5844
3	TG603RS-1	2	ADAPTORS- BRONZE PATT. NO. A-7457 ASTM B-61	A-7457
4	TG603-7	2	3/8" PIPE PLUGS- STEEL	-
5	TG603-8	1	BLOWOFF ELBOW 3/8" PIPE TAP- BRONZE ASTM B-61	A-3724
6	TG603-9	1	TILTVIEW MANIPULATOR	A-4855
7	TG603-10	2	ROUND HD. SCREW, 6-32 X 1/8" - BRASS	-
8	TG603RS-2	1	TIE BAR	B-7533
9	X2550	4	JAM NUTS - 1/2-13	-
10	RG454RS	1	SETCP. ND454RS BRONZE W/G. VALVE -663RS TV	B-4869
10	RG454RS	1	SETCP. ND454RS BRONZE W/G. VALVE -664RS TV	B-4726
		2	SFT. LENGTHS- STEEL CHAIN	-
		2	CHAIN HANDLES- PATT. NO. A-6282	A-6282



A		B		PRESHRINK GAGE #		C		D		E	
IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
12	303	14	354	16	406	18	457	20	508	22	559
13	330	14	354	17	430	19	481	21	532	23	583
14	354	15	381	18	457	20	508	22	559	24	610
15	381	16	406	19	481	21	532	23	583	25	635
16	406	17	430	20	508	22	559	24	610	26	660
17	430	18	457	21	532	23	583	25	635	27	688
18	457	19	481	22	559	24	610	26	660	28	713
19	481	20	508	23	583	25	635	27	688	29	740
20	508	21	532	24	610	26	660	28	713	30	762
21	532	22	559	25	635	27	688	29	740	31	790
22	559	23	583	26	660	28	713	30	762	32	813
23	583	24	610	27	688	29	740	31	790	33	838
24	610	25	635	28	713	30	762	32	813	34	860
25	635	26	660	29	740	31	790	33	838	35	885
26	660	27	688	30	762	32	813	34	860	36	910
27	688	28	713	31	790	33	838	35	885	37	935
28	713	29	740	32	813	34	860	36	910	38	960
29	737	30	762	33	838	35	885	37	935	39	985
30	762	31	790	34	860	36	910	38	960	40	1010
31	787	32	813	35	885	37	935	39	985	41	1035
32	813	33	838	36	910	38	960	40	1010	42	1060

- 1) If installed and under pressure, isolate the Tiltview valves. Open drain valve to eliminate any trapped pressure. The valves must not be under pressure during removal.
- 2) If installed, remove the Tubular Glass Gage or Armored type gage from the gage valves.
  - a) Loosen the upper and lower nipple packing nuts.
  - b) Grasp the gage firmly and push up into the upper (steam) valve. This action will disengage the water gage from the lower (water) valve.
  - c) Carefully swing the gage off to one side and drop it out from the upper valve.
- 3) Remove Tie Bar by removing 1/2-13 Jam Nuts (P/N X171500) from both ends with a 3/4" wrench.
- 4) Remove the upper and lower bronze valves from the Tiltview Adaptor. Note that the angular orientation of the valves is 30 degrees from vertical.
- 5) Rotate the top and bottom Tiltview Adaptors (P/N TG603RS-1) 180 degrees so the 3/4" FNPT water gage valve connection is now on the left side.
- 6) Assemble the water gage valves into the 3/4" FNPT water gage valve connections on the Tiltview Adaptors, making sure the lower valve (with 3/8" FNPT drain connection) is on the bottom adaptor. Adjust the Blow-off elbow on the lower valve drain connection to the correct orientation.
- 7) Align the valves so they are 30 degrees from vertical (Ref. Dwg. B-7535).
- 8) Re-install the Tie Bar with the 1/2-13 Jam Nuts into the Tiltview Adaptor.
- 9) To reassemble the gage glass, replace the packing material and repeat the steps in Step #2 in reverse. Retighten the packing nuts before (and after, if required) the gage glass is returned to service.
- 10) Slowly open the isolation valves and inspect for any leakage. Before retightening any connection, isolate the valves, relieve the pressure, and then tighten the connections if required.

Any additional questions should be directed to your local Clark-Reliance Representative, or to the Factory. Phone: (440) 572-1500 or email [www.relianceappeng@clark-reliance.com](mailto:www.relianceappeng@clark-reliance.com).