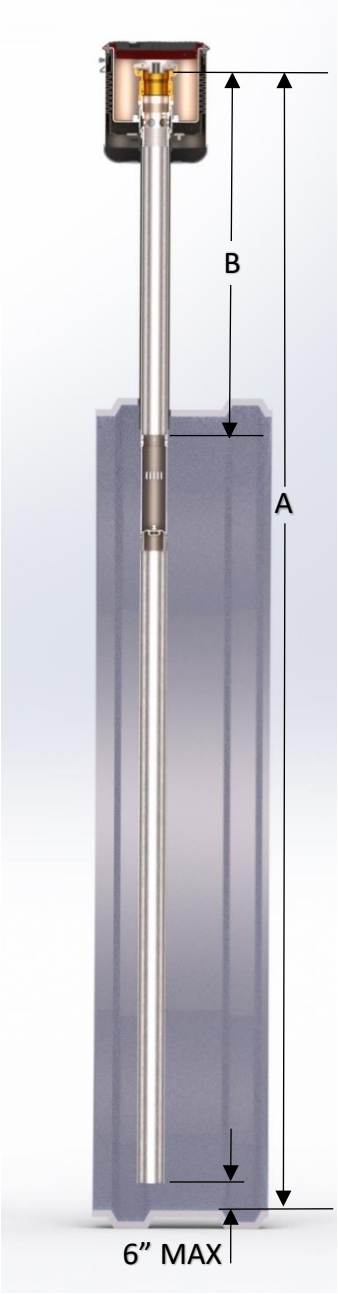
A1100 Overfill Prevention Valve

493734SXL, 493734SXXL Extension/ Lowering Kits

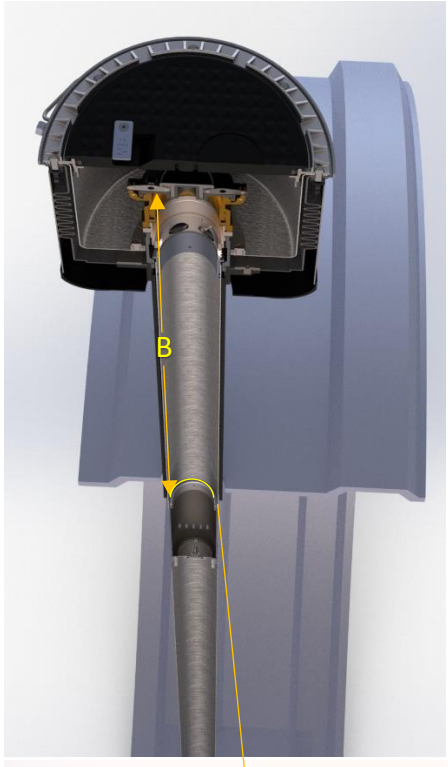


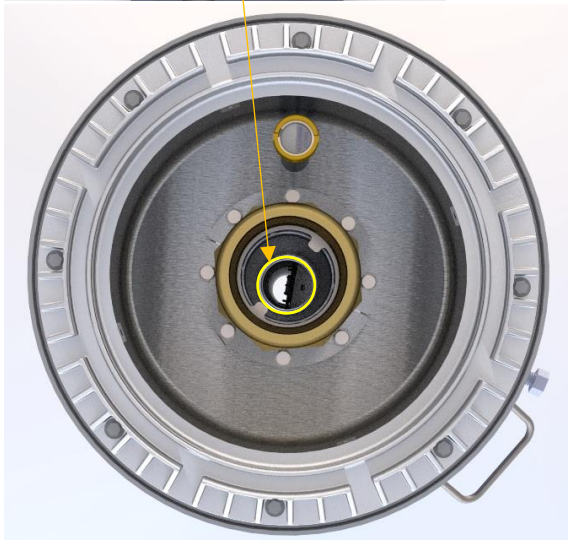
Measurement A:

Extend tape measure to the bottom of the tank and record the distance to the top of the fill adapter. This is distance A.

Measurement B:

Extend tape measure to top of the A1100 inside the drop tube and record the distance to the top of the fill adapter. This is distance B.





Measurement C:

Measurement C is the distance from the bottom of the tank to the closing flapper on the valve. This distance should correspond to the 95% fill dimension of the tank.

C (measured) = A – B – 4.50”

Example:
8’ diameter 10,000 gallon tank
A = 139.75”
B = 46.25”
C (measured) = 139.75” – 46.25” – 4.50”
C (measured) = 89”

Compare installed shut-off C (measured) to the manufacturer’s tank chart C (from chart).

10,000 gallons X .95 (95%) = 9,500 gallons. Find fluid length in the tank matching 9,500 gallons.

At 9,500 gallons C (from chart) would be between 86” and 87”. Since C (measured) is 89”, the valve is installed higher than the 95% shut-off requirement so it must be lowered 3”.

1	18	41	4086	81	9026
2	50	42	4218	82	9122
3	94	43	4350	83	9214
4	140	44	4482	84	9304
5	200	45	4614	85	9390
6	260	46	4748	86	9472
7	328	47	4880	87	9552
8	400	48	5014	88	9628
9	474	49	5146	89	9700
10	554	50	5280	90	9766
11	638	51	5412	91	9828
12	724	52	5544	92	9884
13	812	53	5678	93	9934
14	906	54	5810	94	9976
15	1000	55	5942	95	10008

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Measurement D:

Measurement D is the required change in height of the valve or the difference of the current measurement C and the tank chart's measurement C.

D = C (measured) – C (from chart)

Example:
From above D = 89" – 86"
D = 3"

Measurement E:

Measurement E is the distance to the cut line from the top of the drop tube collar.

E = 10.7" – D (when using 493734SXL)
E = 20.7" – D (when using 493734SXXL)

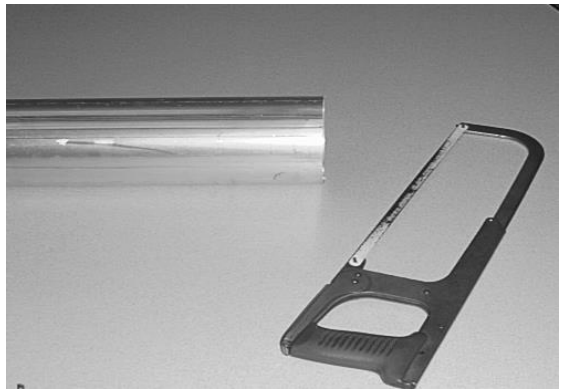
Example (493734SXL):
From above E = 10.7" – 3"
E = 7.7"

493734SXL E = 10.7"
493734SXXL E = 20.7"

Cutting the drop tube:

Step 1: mark the drop tube at measurement E.

Step 2: cut the drop tube at the mark using a fine tooth hacksaw. A hose clamp can be used as a guide if available.



Step 3: remove the hose clamp and file away cutting burrs from the edge.

Cutting the drop tube:

Step 4: slide on the 572719 drill fixture and drill four 13/64" diameter holes through the drop tube. Be sure the drill fixture does not rotate while drilling.

Step 5: file away burrs from the inside of the holes with a fine tooth file to prevent installation damage to the o-ring seal of the new collar.

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Connecting the collar to the drop tube:

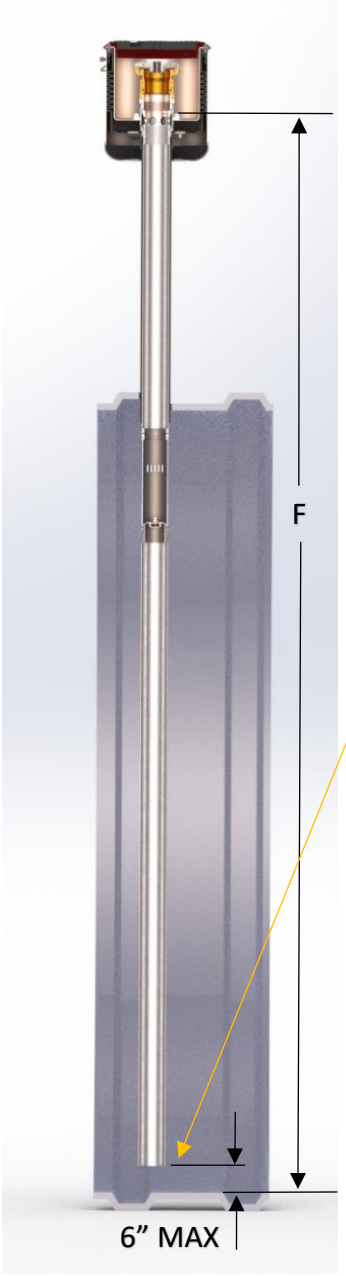
Step 1: apply a 1/2" bead of Seal-All Sealant around the 480049 o-ring (the outside area of the collar). Verify the o-ring is properly secured inside the machined groove. Do not apply sealant to the 569461 drop tube o-ring.

Step 2: slide the collar inside the top end of the drop tube and align the four holes. This will be a tight fit. If necessary use a wooden block across the collar to tap into place.

Connecting the collar to the drop tube:

Step 3: use a sharp blow on the indenter tool (part number 564416, supplied) to form the tube into each countersink on the collar.

Step 4: using only the factory supplied pop rivets, apply a generous amount of Seal-All Sealant around the base of each pop rivet before installing into each of the four holes. Using the pop rivet gun, permanently fasten the A1100 riser collar to the top of the drop tube.



Cutting the lower drop tube:

Step 1: the total tube length F should be a maximum of 6” above the bottom of the tank. Measure the total distance from the bottom of the tank to the drop tube collar seal surface and subtract 6”.
Cut length = F – 6”

Step 2: cut the bottom of the drop tube to the cut length above.

Optional 45º cut: the shortest point should start at the cut length above to maintain the 6” maximum clearance requirement at the bottom of the tank.

Installation of completed assembly into the tank:

Step 1: turn the completed assembly upside down and shake vertically to remove any metal chips left from the drilling process. Position the completed assembly vertically over the riser pipe. Carefully lower the assembly into the riser pipe until the collar rests on the sealing surface.

Step 2: use the extension spring to clamp the warning plate onto the riser. Make sure the label is facing up.

Step 3: reinstall the fill adapter onto the riser and tighten. Do not use pipe dope on the threads as the adapter seals on a gasket. Torque to 60-75 ft. lbs.