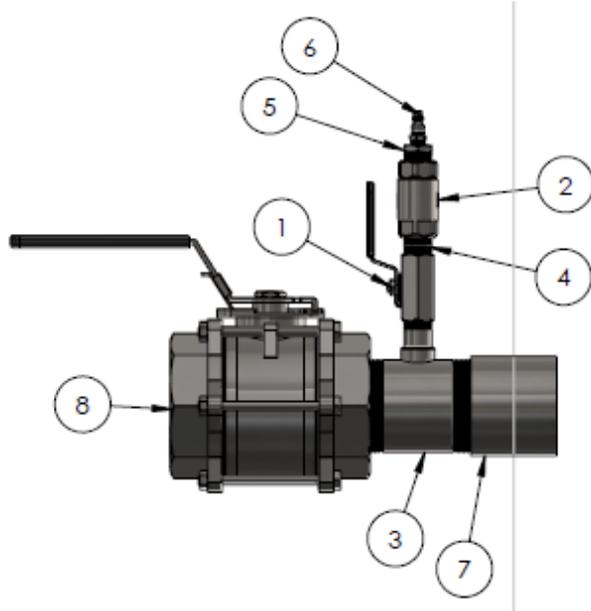


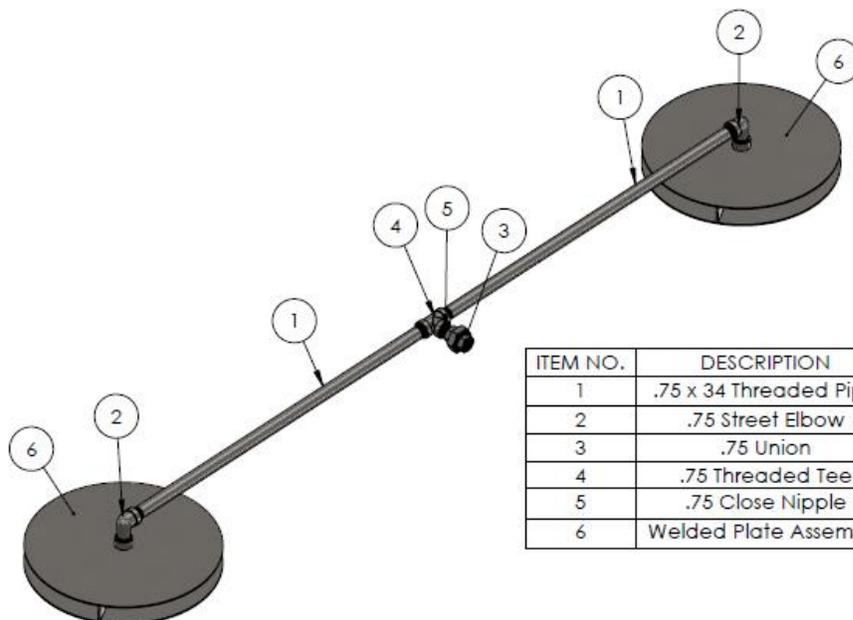
**Retrofit (DAS-R) - Installation**

1. Ensure tank is empty.
2. Remove the manway lid, 3" interior fill plumbing, 3" ball valve and close nipple.
3. Install exterior parts (see drawing) starting with parts closest to the tank. Ensure that the arrow on the check valve is pointing towards the ball valve. **Note:** Always use stainless steel Teflon tape and compound paste on all threads.



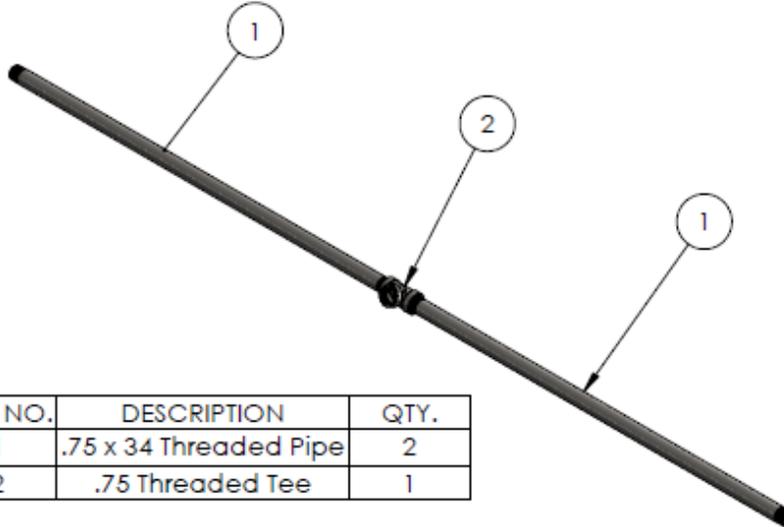
ITEM NO.	DESCRIPTION	QTY.
1	.75 Ball Valve	1
2	.75 Air Check Valve	1
3	DAS-R 3" Nipple Adaptor	1
4	.75 Close Nipple	1
5	.75 x .25 Reducer Bushing	1
6	Plug M Style .25 NPT Male	1
7	3" Fill Coupler (existing)	1
8	3" Ball Valve (optional)	1

4. Next install the interior parts into sub-assemblies. These sub-assemblies can be assembled outside of the tank. Tighten parts with a pipe wrench. **Note:** Always use stainless steel Teflon tape and compound paste on all threads.
  - a. Side Assemblies – 2ea



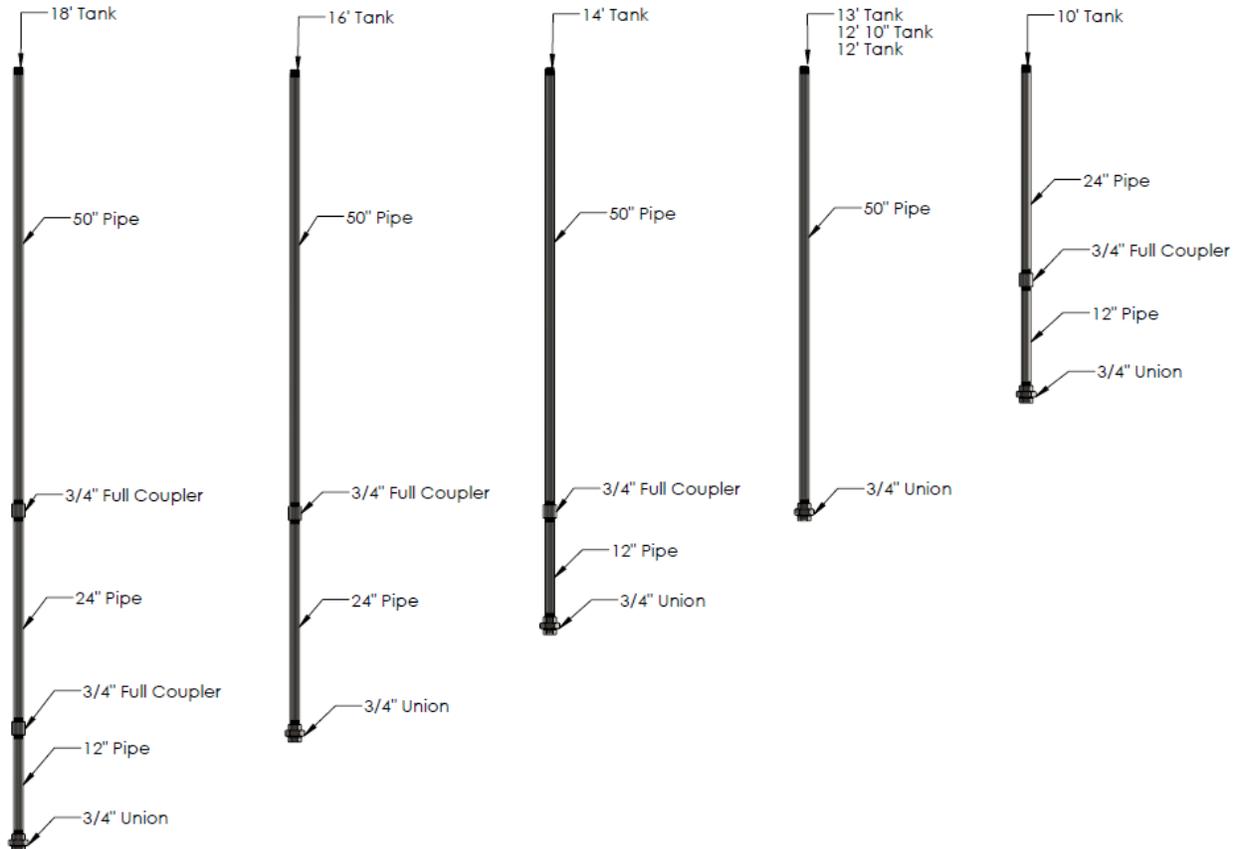
ITEM NO.	DESCRIPTION	QTY.
1	.75 x 34 Threaded Pipe	2
2	.75 Street Elbow	2
3	.75 Union	1
4	.75 Threaded Tee	1
5	.75 Close Nipple	1
6	Welded Plate Assembly	2

b. Tee Joiner Section – 1ea

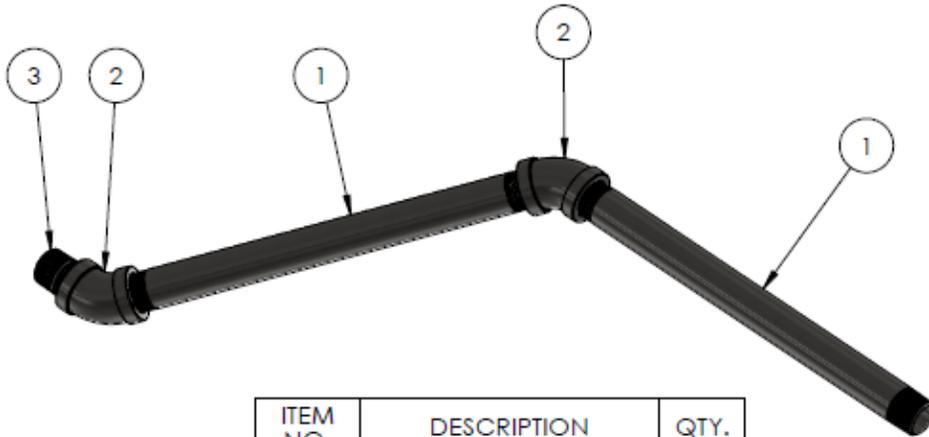


ITEM NO.	DESCRIPTION	QTY.
1	.75 x 34 Threaded Pipe	2
2	.75 Threaded Tee	1

c. Center Joiner Section – 1ea (choose the appropriate assembly according to the tank diameter the DAS-R is to be install in)

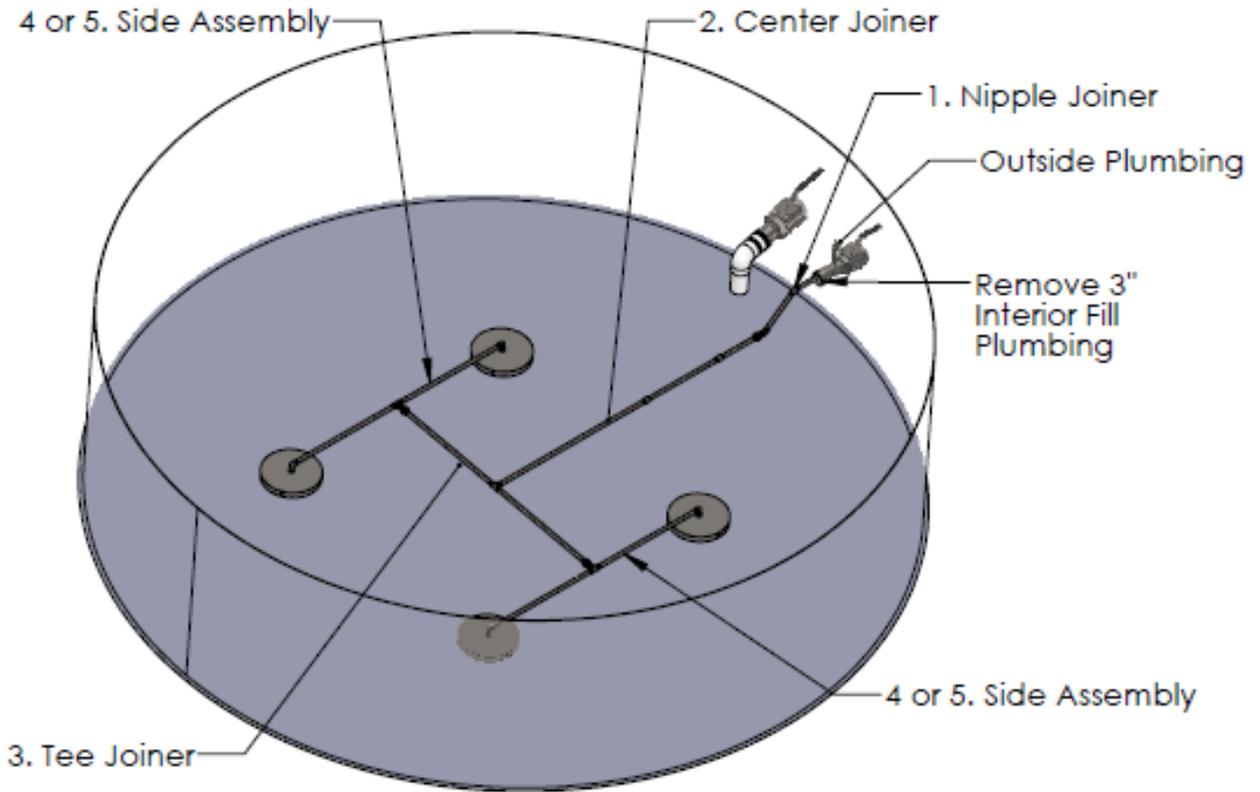


d. Nipple Joiner Section – 1ea



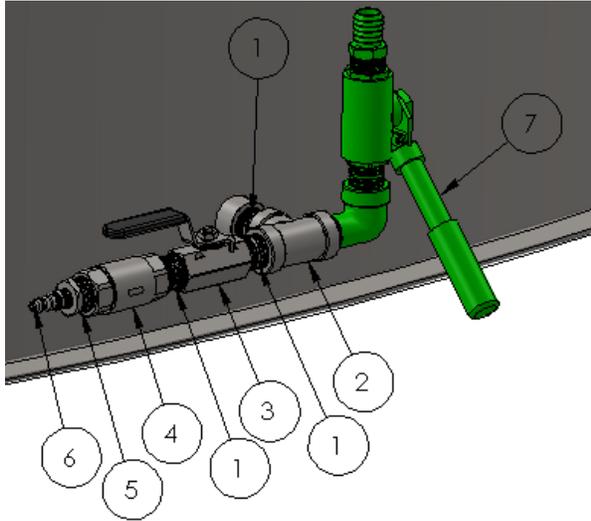
ITEM NO.	DESCRIPTION	QTY.
1	.75 x 12 Threaded Pipe	2
2	.75 45 Degree Elbow	2
3	.75 Close Nipple	1

5. Move the sub-assemblies into the tank. Continue to use Teflon Tape and compound paste to install the sub-assemblies as shown starting with the Nipple Joiner section.



**Factory Install (DAS-F) - Installation**

1. Ensure the tank is empty.
2. Install exterior parts (see drawing) starting with parts closest to the tank. Ensure that the arrow on the check valve is pointing towards the ball valve. **Note:** Always use stainless steel Teflon tape and compound paste on all threads.



ITEM NO.	DESCRIPTION	QTY.
1	.75" Close Nipple	3
2	.75" Threaded Tee	1
3	.75" Ball Valve	1
4	.75" Air Check Valve	1
5	.75" x .25" Reducer Bushing	1
6	Plug M Style .25" NPT Male	1
7	Sight Tube Parts	1

**Installation – Control Box**

1. Bolt hanging bracket to the control box and attach the supplied 6’ airline to the control box.
2. Hang the box on the manway of the tank for convenience.
3. Connect the 6’ airline to the air fitting on the tank and plug in the box (make sure the box is turned off).
4. Connect air compressor to the control box. Turn on the air compressor. The air compressor should be able to run 4-8 CFM at 100-120 psi (Do not run outside these ranges).
5. Open the 3/4” ball valve that is attached to the check valve (make sure all other valves are closed). Turn on the control box. It will pulse 1.5 seconds on, and 1.5 seconds off.
6. Adjust the CFM gauge on the control box so that it reads between 4-8 CFM.
7. Turn of control box and air compressor, close valves and unplug air lines and power cords.
8. Store control box indoors when not in use.

**Running the System**

1. Turn on the pulse box and open the ball valve attached to the check valve. All other valves should be closed.
2. Let the system run for 16-24 hours. Do not leave system running unattended.
3. Turn the system off and close the ball valve.
4. Take a sample of the product and have it tested to ensure it is properly mixed.

### Yearly Maintenance before Use

1. Close all valves.
2. Connect airline directly from air compressor to air fitting on tank.
3. Allow the air compressor to build up pressure (120-200psi).
4. Open the  $\frac{3}{4}$ " ball valve that is connected to the check valve to allow air into the tank.
5. Let air flow for 10 second and then close the valve.
6. Repeat this process several times to insure the air ports are clear.
7. Disconnect the air line.
8. Open the  $\frac{3}{4}$ " ball valve that is connected to the check valve. If liquid leaks out of the air fitting, the check valve may need replacing before use.
9. If all is good, close the ball valve and your system is ready to use.

**Caution:** Always follow proper confined space procedures when entering a tank.

**Caution:** Do not exceed 120 psi through the control box.

**Caution:** Always insure that all ball valves are closed before starting system.

**Caution:** The tank should not be filled into the roof. If product comes out of the roof vent, stop the system and lower the fluid level.

**Caution:** Ensure the roof vent is open and free of debris.