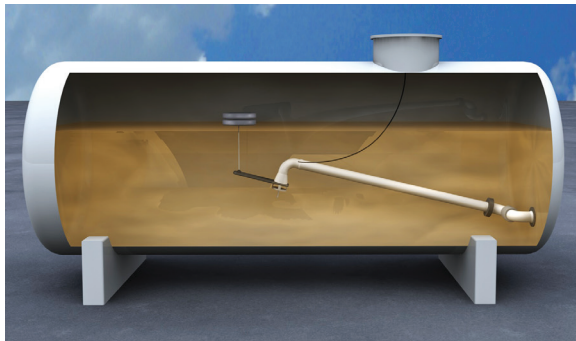


OPW 763/764 Floating Suction Unit General Installation & Maintenance Instructions

This booklet covers the general assembly and maintenance instructions for OPW 763/764 Floating Suction Units and their components.

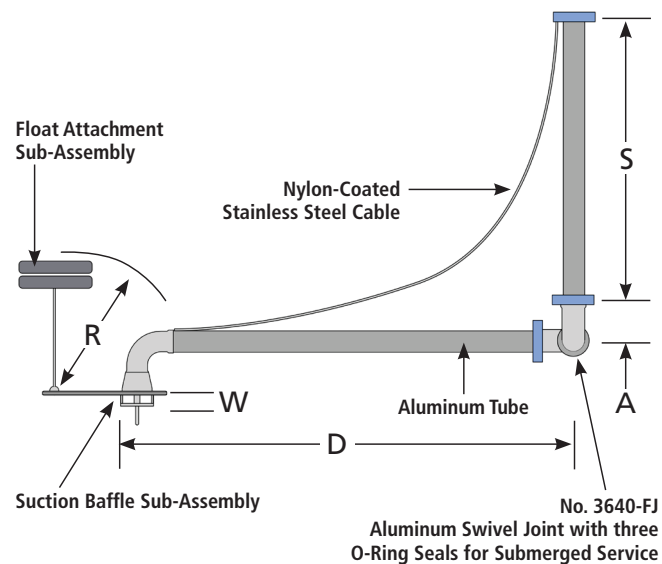
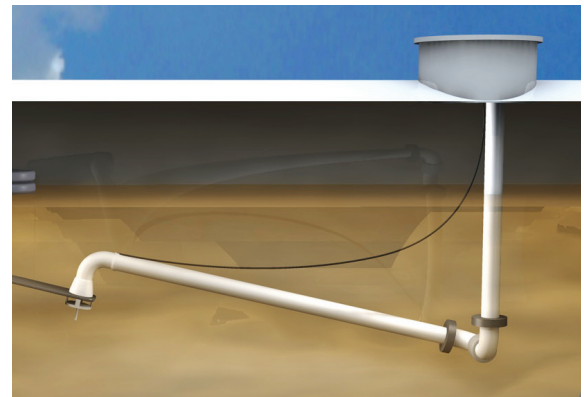
NOTE: The standard No. 764 is designed for use in horizontal tanks that are 10 to 15 feet in diameter, and should be mounted with the center of the swivel at least 18" from the bottom of a 10- to 12-foot diameter tank, or no more than 130" from the top of a 12- to 15-foot diameter tank. For tanks of other sizes or configurations, consult factory for necessary modifications.

763/764

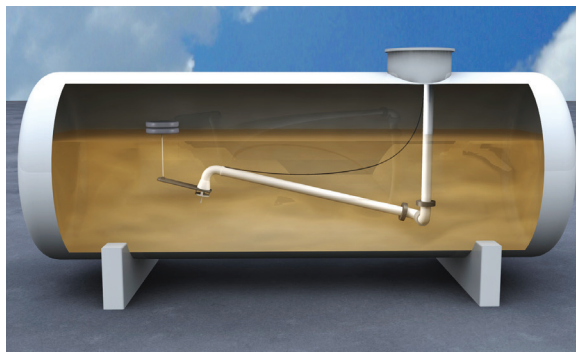


Model 763: for horizontal tanks under 10' in diameter
Model 764: for horizontal tanks 10' to 15' in diameter

The OPW 763/764 Floating Suction Unit does **NOT** include the vertical pipe.



763-V/764-V



Model 763-V: for tanks under 10' in diameter
Model 764-V: for tanks 10' to 15' in diameter

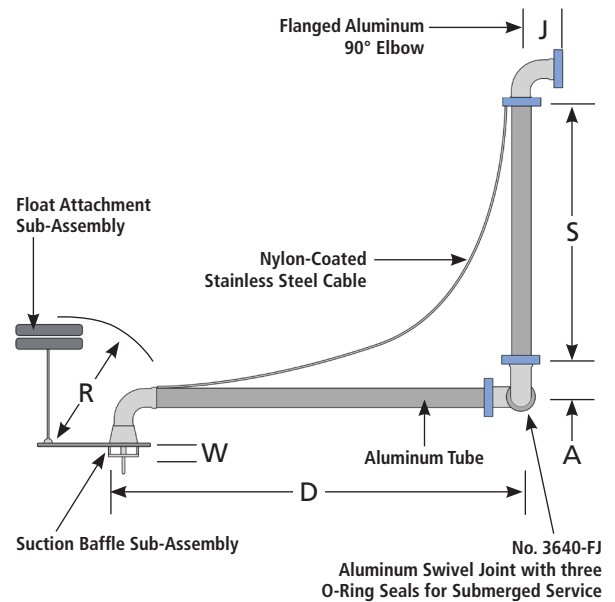
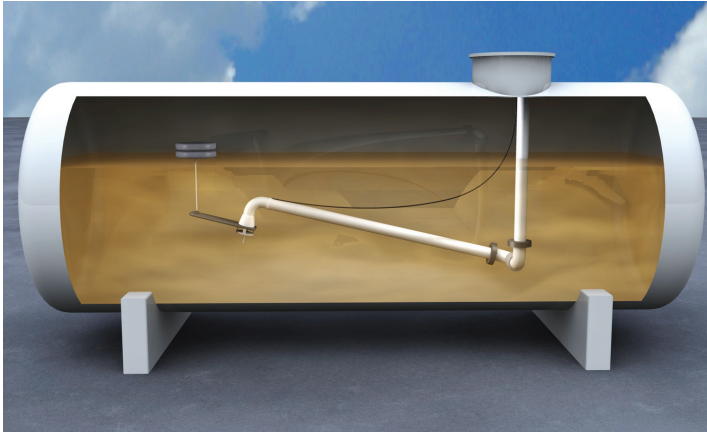
The OPW 763-V/764-V Floating Suction Assembly includes the vertical pipe.

NUMBER OF FLOATS REQUIRED	
2"	One
3"	Two
4"	Two
6"	Four

DIMENSIONS														
SIZE	A		D (763)		D (764)		R		W		S (763V)		S (764V)	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
2"	5 1/2	140	69	1753	121 1/4	3080	18 3/8	467	6 1/2	165	60	1524	108	2743
3"	5	127	69	1753	121 1/4	3080	18 3/8	467	6 1/4	159	60	1524	108	2743
4"	6 1/16	154	69	1753	121 1/2	3086	23 3/8	594	6 1/2	165	60	1524	108	2743
6"	7 3/4	197	69	1753	102 1/8	3051	23 3/8	594	6 3/4	171	60	1524	108	2743

764-VE

The OPW 764-VE Floating Suction Unit includes the vertical pipe, flange and the flanged welding-neck elbow.



DIMENSIONS												
SIZE	A		D		J		R		S		W	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
2"	5 1/2	140	121 1/2	3080	5 1/2	140	18 3/8	467	111	2819	6 1/2	165
3"	5	127	121 1/2	3080	7 1/4	184	18 3/8	467	112 1/2	2857	6 1/4	159
4"	6 1/16	154	121 1/2	3080	9	229	23 3/8	594	114	2896	6 1/2	165
6"	7 3/4	197	120 1/8	3051	12 1/2	318	23 3/8	594	117	2972	6 3/4	171

NUMBER OF FLOATS REQUIRED	
2"	One
3"	Two
4"	Two
6"	Four

Installation Instructions

1. Tools Required:

- a) Two 10" adjustable wrenches.
- b) A pair of pliers.

2. Remove all parts from cartons and make sure they are clean.

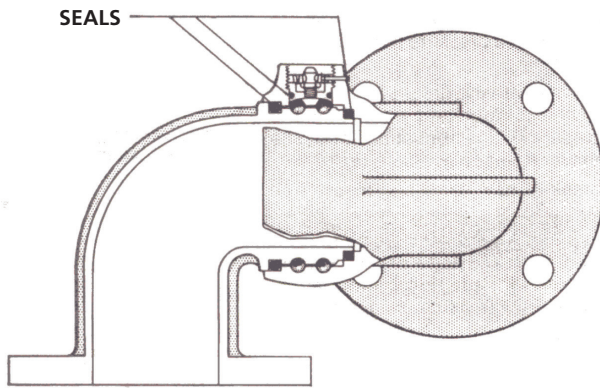
3. Using the drawing provided assemble all parts in order listed below:

- a) **On 764-V and 764-VE ONLY** – Install flanged riser pipe to piping system.
- b) **OPW 3640-FJ Swivel Joint** – Assemble to mating flange.
- c) **Suction baffle sub-assembly** – Assemble to swivel joint using bolts and nuts provided. Make sure flange gasket is in place.

d) Float attachment sub-assembly – Install stem and pivot on outboard end of channel using pin provided. Secure cotter pin in position. Adjust floats to desired height above the suction baffle sub-assembly and lock in position on the stem with locknuts.

e) Cable assembly – Permanently attach the cable between the elbow of the suction baffle sub-assembly and a tank manhole. Thread the cable through the small piece of straight tubing then through the long piece of straight tubing. Bend the long piece of tubing into a "U" shape and loop through the eyelet of the elbow. Thread the cable back through the small piece of tubing and crimp tubing with pliers. Repeat the above process at the manhole. Your OPW 764 Floating Suction Unit is now ready for service.

Maintenance Instructions



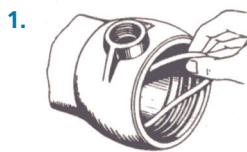
To replace seals the swivel joint must be disassembled by removing the ball bearings and then pulling the body and tail sections apart to access the seal chamber.

Exercise caution so as not to lose any balls when removing them from the swivel joint during disassembly. Flushing the grease chamber with a suitable non-flammable solvent will allow the balls to fall out freely. Be sure the same number of clean balls are returned to each raceway.

Before installing new seals, care should be taken to see that all machined surfaces are clean and that there are no nicks, scratches or burrs. Thoroughly grease new seals before installation.

The types of seals used in OPW swivel joints eliminate any packing take-up adjustment and ensure friction-free operation with positive seal against leaks.

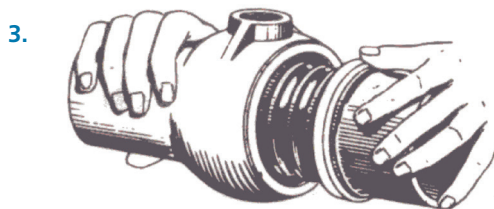
The illustrations below show the simple step-by-step method used to replace the main seal and dust seal in OPW swivel joints.



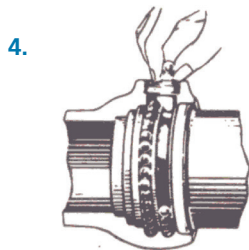
Clean chamber carefully, grease O-ring main seal and place in seal chamber of swivel-joint body.



Clean bearing and seal surfaces and install greased lip seal or O-ring into groove in swivel-joint tail with lip opening (if applicable) away from grease chamber.



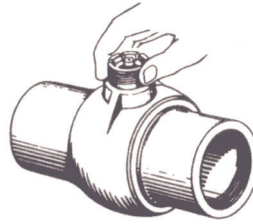
Insert tail into body. Slight hand pressure is required to force tail into body.



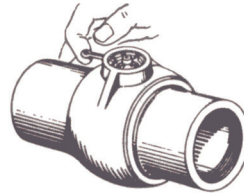
Ball grooves in tail must be in line with ball grooves in body to allow easy entry of balls into races. Place balls into hopper-like ball entry. Slowly rotate tail back and forth until both grooves are filled to capacity with balls.

Maintenance Instructions (Cont.)

5. Grease O-ring and place into groove in ball-retaining plug. Insert plug into body using care not to nick O-ring on threads. Thread in ball retaining plug until contact is made with balls.



6. Back off ball-retaining plug so that nearest slot is in line with the cotter-pin hole. This prevents sticking or binding. Lock in position with cotter pin.



7. Lubrication fitting is not supplied for submerged service. To lubricate, remove the small grease plug from the ball retainer and either:
- Install a clean grease fitting - (1/4 - 28 UNF thread) making sure it is loose enough to permit captive air to escape, thus avoiding a pressure buildup internally.

- Use a low-pressure flexible grease nozzle inserted into the grease plug hole to prevent pressure buildup. Fill chamber with OPW 880 lubricant or a good grade No. 2 cup grease and replace grease plug to seal swivel. Lubrication should be performed periodically depending upon service. Replace grease plug.

8. Rotate swivel through 5 to 15 revolutions to break in new seals and ensure free operation.
9. Should replacement parts be needed, please specify the OPW part number, if available; otherwise please specify the OPW product, size and name of part. Specify liquid being handled if other than gasoline or fuel oils. For additional information, please contact your OPW distributor; if you don't know his name, please contact OPW.

Replacement Parts For OPW Submersible Swivel Joints

PART NUMBER	3640 FJ-0202	3640 FJ-0302	3640 FJ-0402	3640 FJ-0602
	2"	3"	4"	6"
Main Seal Fluorocarbon (O-Ring)	H-31929-M	H-31437-M	H-00793-M	H-2414-M
Ball Plug Seal Fluorocarbon (O-Ring)	H-30657-M	H-30657-M	H-30657-M	H-2271-M
Environmental Seal Fluorocarbon (O-Ring)	H-01082-M	H-31882-M	H-31036-M	H-30227-M (Poly Pak)
Ball – Stainless Steel	H-01171-M	H-01171-M	H-01171-M	H-30036-M

IMPORTANT: OPW products should be used in compliance with applicable federal, state, provincial, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and materials to be handled. OPW MAKES NO WARRANTY OF FITNESS FOR A PARTICULAR USE. All illustrations and specifications in this literature are based on the latest product information available at the time of publication. OPW reserves the right to make changes at any time in prices, materials, specifications and models and to discontinue models without notice or obligation.