



OPW Installation and Maintenance Instructions

OPW 1-3100 Series Thread-On Double Wall Grade Level Spill Containers

IMPORTANT: Please read these warnings and use the assembly instructions completely and carefully before starting. Failure to do so may cause product failure, or result in environmental contamination due to liquid leakage into the soil, creating hazardous spill conditions.

IMPORTANT: The OPW 1-3100 Spill Container is pre-assembled for your convenience and ease of installation. Check to make sure the unit is intact and undamaged and all parts have been supplied. Never substitute parts for those supplied. Doing so may cause product failure.

WARNING-DANGER: Using electrically operated equipment near gasoline or gasoline vapors may result in a fire or explosion, causing personal injury and property damage. Be sure that the working area is free from such hazards, and always use proper precautions.

NOTE: At all times when product is in the storage tank keep the riser pipe capped, so the vapors cannot escape into the environment.

Notice: OPW products must be used in compliance with applicable federal, state, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Prices, materials, and specification are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation.

Standard Product Warranty

OPW warrants that products sold by it are free from defects in materials and workmanship for a period of one year from the date of manufacture by OPW (ECO products two years from date of manufacture.) Proof of purchase may be required. As the exclusive remedy under this limited warranty, OPW, will at its sole discretion, repair, replace, or issue credit for future orders for any product that may prove defective within the one year date of manufacture period (repairs, replacements, or credits may be subject to prorated warranty for remainder of the original warranty period, complete proper warranty claim documentation required.) This warranty shall not apply to any product that has been altered in any way, which has been repaired by any party other than a service representative authorized by OPW, or when failure is due to misuse, or improper installation or maintenance. OPW shall have no liability whatsoever for special, incidental or consequential damages to any party, and shall have no liability for the cost of labor, freight, excavation, clean up, downtime, removal, reinstallation, loss of profit, or any other cost or charges.

For any product certified to California 2001 standards, OPW warrants that product sold by it are free from defects in material and workmanship for a period of one year from date of manufacture or one year from date of registration of installation not to exceed 15 months from date of manufacture by OPW.

THIS WARRANTY IS IN LIEU OF ALL OTHER

WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

In some states it is prohibited to use spill container drain valves on spill containers that are exclusively used for vapor return risers. Install only 1-3100 Series Thread-On spill container models equipped with a drain plug.

WARNING: If the snowplow ring is removed, for any reason, follow the Operation and Maintenance instruction as noted. Replace o-rings and seals and install new ones. Never reuse damaged o-rings or seals as it may result in an improper seal. Only qualified, competent, well-trained technicians should perform maintenance. Common sense and good judgment should always be exercised. The contractor's understanding of all related site conditions prior to starting the project is essential. If the contractor does not have a clear understanding of the required work and site conditions, the contractor is advised to seek clarification prior to starting any portion of the project.

NOTICE TO DELIVERY DRIVER: All delivery drivers MUST inspect the inside of the container for water or contaminants other than fuel prior to delivery. If water or contaminants are present, then they MUST be removed before proceeding. Dispose of towels and debris safely and per all applicable local, state, and federal codes. After delivery is complete, the driver MUST drain any excess fuel that may have spilled into the container from their delivery hose.

1-3100 Series Performance Specifications:

This Spill Container drain valve has been manufactured and tested to the following specifications: Leak Rate to be less than or equal to 0.17 CFH @ 2.0 " W.C.

Torque Specification:

Spill Container 4" NPT, 125 ft-lbs minimum to 250 ft-lbs maximum.

4" Nipple: 4" NPT, 125 ft-lbs minimum to 250 ft-lbs maximum.

Note: All 4" NPT threads are to be torqued progressively lower from the tank up.

Drain Valve clamps: 5/16-18 UN thread, 11.5 ft-lbs minimum to 13.5 ft-lbs maximum.

Ring and Nipple Adaptor Bolts: 3/8-16 UN, 20 ft-lbs minimum to 25 ft-lbs maximum.

Tools Recommended:

1-3100-TOOL – Torque Installation Tool
DW-VAC-TEST – Vacuum Test Equipment
(or 202310 Test Adaptor)

OPW NO. 1-3100 SERIES GRADE LEVEL SPILL CONTAINER INSTALLATION INSTRUCTIONS:

Step 1: (See Figures 1 & 2)

Determine riser pipe height. "L" is the distance between the top of the riser pipe and finish grade.

Note: The spill container height (from riser to grade) is $L + 1"$.

Model Series

1-3100, 5 Gal. (Cast Iron Base)

"L" Dimension

$L = 15 \frac{5}{8}"$ (40cm)

Step 2:

De-burr and thoroughly clean riser pipe. Apply pipe dope to riser threads. Pipe dope to be a non-hardening, gasoline resistant pipe thread seal compound.

Step 3:

Install gravel guard on riser pipe. Leave band clamp loose.

Note: Ground riser pipe to nearest grounding rod.

Step 4:

Install spill container by rotating the mounting ring until hand tight.

Note: Do NOT attempt to completely tighten the container using the mounting ring. Doing so may cause the unit to fail.

Step 5: (See Figure 2)

Finish tightening the spill container secondary base using the wrenching boss or with the 1-3100-TOOL. Torque to 125 ft-lbs min. to 250 ft-lbs max (4" NPT). 1-3100-TOOL can be used to set final torque (see 1-3100-TOOL instructions).

Step 6: (See Figures 2 & 3)

Remove Nipple Adaptor from spill container. Apply pipe dope to nipple and install in Nipple Adaptor. Pipe dope to be a non-hardening, gasoline resistant pipe thread seal compound. Use only factory made nipples. Torque nipple to 125 ft-lbs min. to 250 ft-lbs max. (4" NPT). 1-3100-TOOL can be used to set final torque. Torque value is based on rotation at the center of pipe. For standard covers install rotatable adaptor and dust cap per manufacturers' instructions. For sealable cover (1SC) models, install a standard 4" pipe cap to support adjustment system. (Adaptor and dust cap must be installed in sealable cover (SC) models after concrete has dried. Install drop tube, overfill prevention valve and/or loose jack screw assembly if used (61JSK-44CB) per manufacturers' instructions. Reinstall the Nipple Adaptor in spill container. Torque Nipple Adaptor bolts to 20 ft-lbs minimum to 25 ft-lbs maximum.

Note: Nipple length is determined by measuring from the bottom of the threaded portion of the base to the bottom of the cover. Then subtract 2" minimum for clearance, height of adaptor and height of cap. Range of nipple lengths that can be used in all of the OPW spill containers: 4" minimum to 9" maximum. See Figure 6.

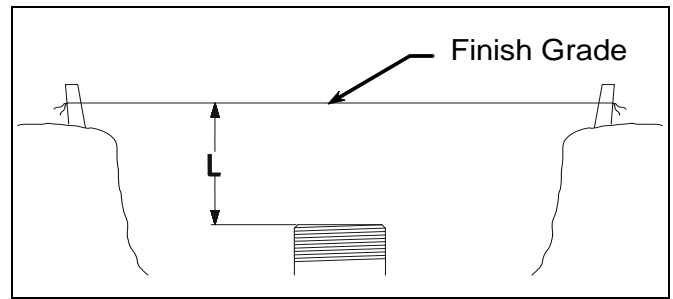


Figure 1

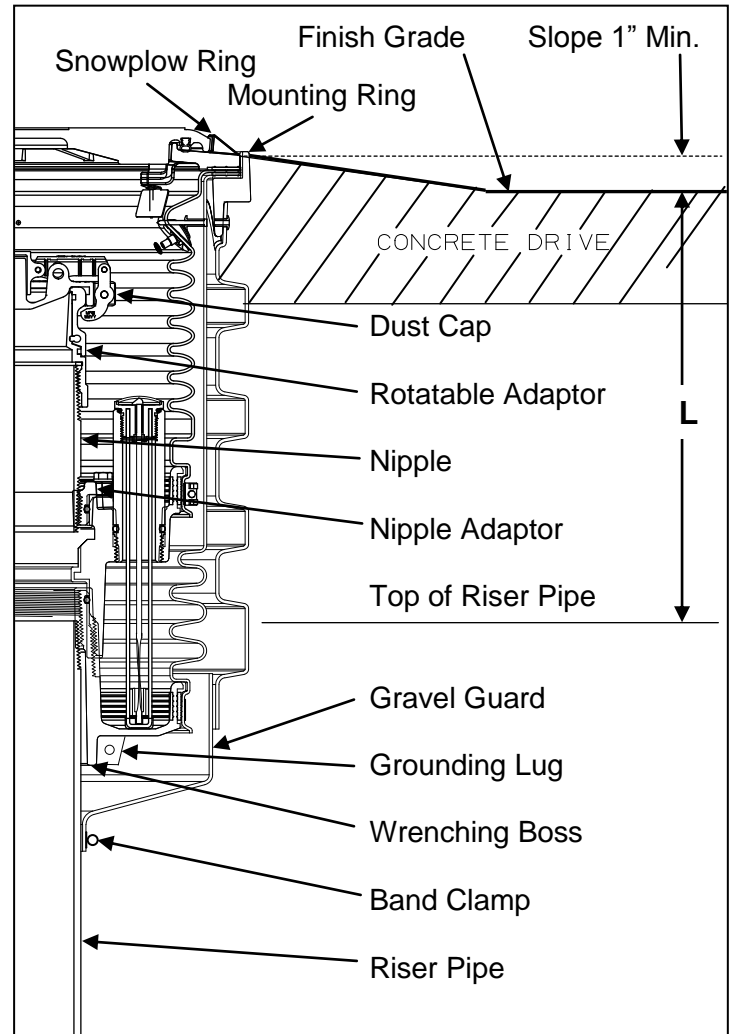


Figure 2

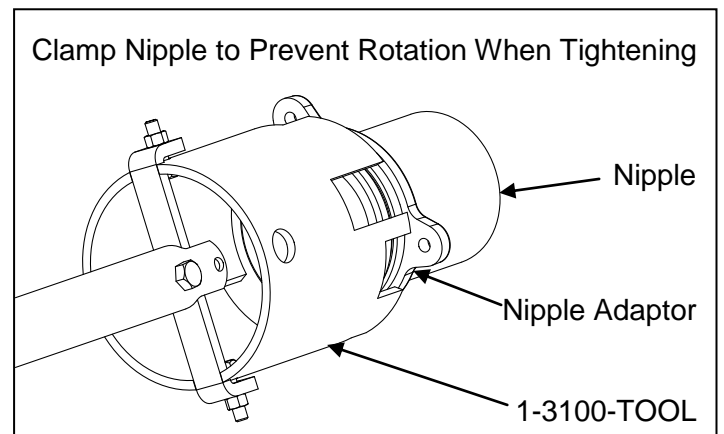


Figure 3

Step 7: (See Figure 4 & 8)

If necessary, the height of the spill container can be adjusted by ± 1 " (2.5cm). If it is necessary to increase height, install adjusting system (sold separately, part number 203931) beneath tabs on mounting ring. See Figure 4 for standard cover models and Figure 8 for sealable cover models. Add shims as needed and adjust with screw (shims must be cut to size for sealable cover models).

Note: *The adjustment should not be more than 1" from the initial length of the unit.*

Step 8:

Where applicable, upon preliminary installation perform the CARB Test Procedure TP-201.1C or equivalent. This Test Procedure will check the seals between the drain valve, nipple, bases, and rotatable adapter.

Note: *Follow all state and local required testing on the primary and secondary buckets.*

Step 9: (See Figure 7)

Verify torque on mounting ring bolts. Torque to be 20 ft-lbs minimum to 25 ft-lbs maximum.

Using OPW DW-VAC-TEST (or 202310 Test Adaptor), perform a vacuum test on the spill container. An initial vacuum of 15" of water should be attained and the spill container must retain a vacuum of at least 12" of water after 5 minutes. (See DW-VAC-TEST Instructions.)

Step 10: (See Figure 2)

Install gravel guard at final height as shown in Figure 2 and tighten band clamp to 30 in-lbs. Where applicable, per California SB-989, all metal must be protected from direct contact with the elements. Coat stainless steel band clamp with the following approved coatings: OPW SL-1100, 3M Underseal 08883 or Polyguard Mastic CA-9.

Step 11: (See Figures 2 & 5)

Before pouring concrete, place plastic over the cover and Mounting Ring protecting them from concrete splash and tighten the clamp on the gravel guard mounted on the riser pipe. Double check that the unit is level and at proper grade height. Pour concrete per Figure 5. Ramp or dome the concrete away from the mounting ring. There should be a minimum of 1" slope to finish grade.

Note: *Do not stand on spill container before concrete sets up.*

Remove plastic from cover after concrete has dried. Remove adjustment system. Re-test the spill containers for leaks as described in step 9, after the concrete has set up.

Operation and Maintenance:

After each fuel delivery, the operator must remove any standing fuel from the container. Fuel can be removed by actuating the drain valve or with a gasoline absorbing disposable towel. If access to drop tube or overfill valve is required remove Nipple Adaptor from primary bucket.

Weekly: Perform a visual inspection of the interior of

the primary containment bucket for water or other contaminants and check the secondary containment bucket by checking the gauge in the base of the spill container. If water or other contaminants are found they must be disposed of with disposable towels.

Dispose of towels safely and per all applicable local, state and federal codes. Check that cover is in good condition and properly identified. Replace cover and seal as necessary. Inspect the bucket walls for cracks, bulges or holes. If any exist, have that spill container barricaded and contact maintenance personnel immediately for repairs.

Semiannually: Follow all state and local required hydrostatic or vacuum testing on the primary and secondary buckets. Inspect and clean the interior of the spill container and drain valve screen. Remove accumulated dirt and grit. Where applicable, test the drain valve using CARB procedure TP-201.1C or TP-201.1D. If the drain valve passes testing no further maintenances required. If the drain valve fails testing, remove the valve, soak in water and use high-pressure air, if needed, to clean. Reinstall the drain valve to its proper position and where applicable, test the valve with CARB procedure TP-201.1C or TP-201.1D. If problems persist, replace the drain valve with P/N 1DK-2100-EVR (specified torque 11.5 ft-lbs min to 13.5 ft-lbs max, 5/16-18 UN thread). The sealable cover (1SC) adjustment nut is set at the factory, but due to environmental conditions it may be necessary to adjust it to either improve sealing or ease cover removal.

Important: *Leave these instructions with Station Operator.*

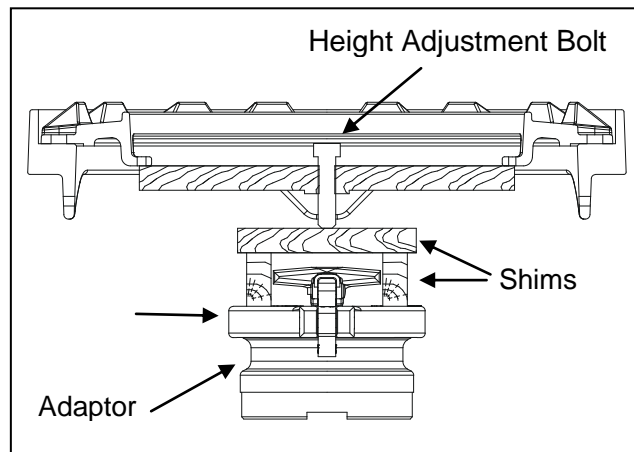
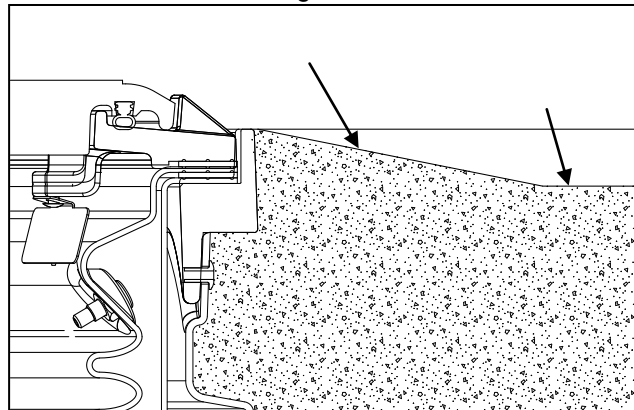


Figure 4



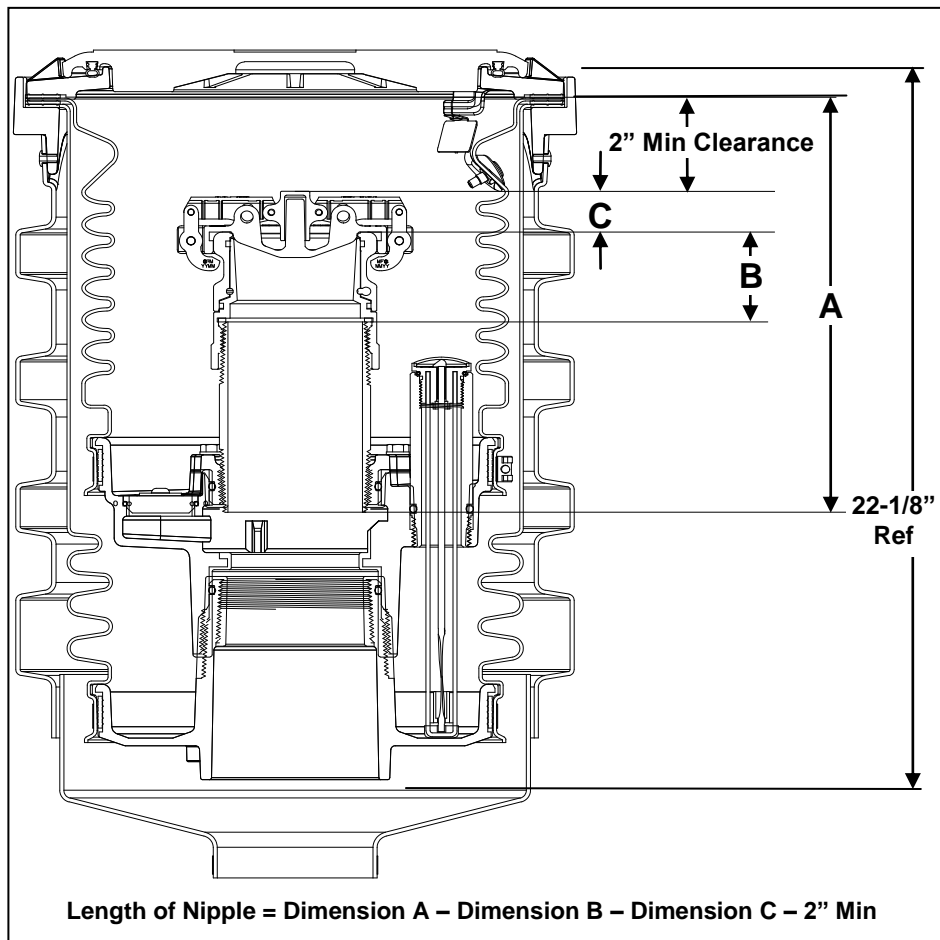


Figure 6

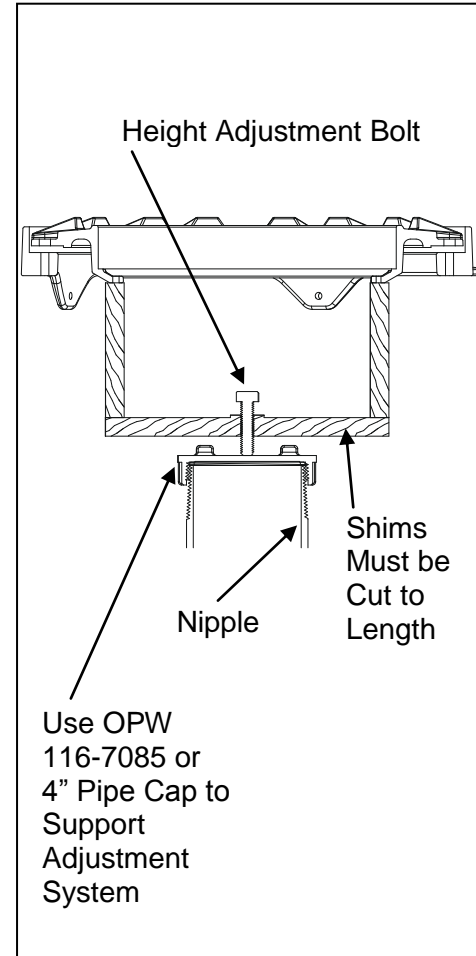


Figure 8

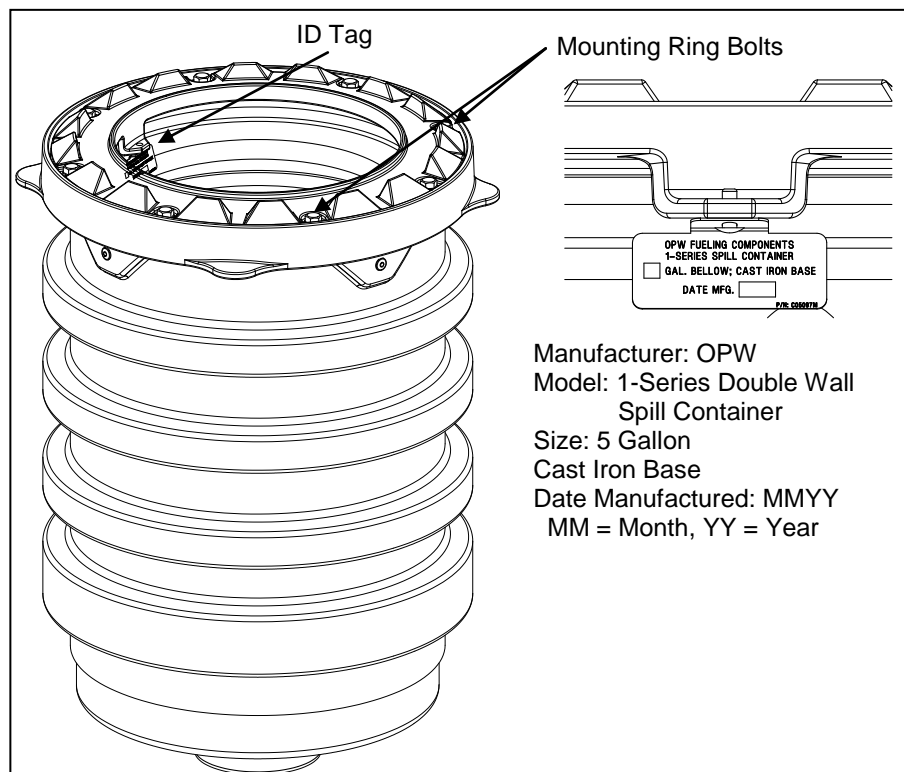


Figure 7



9393 Princeton-Glendale Rd.
Hamilton, Ohio 45011
1-800-422-2525 Domestically
513-870-3315 Internationally
www.opw-fc.com

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Cincinnati, OH
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