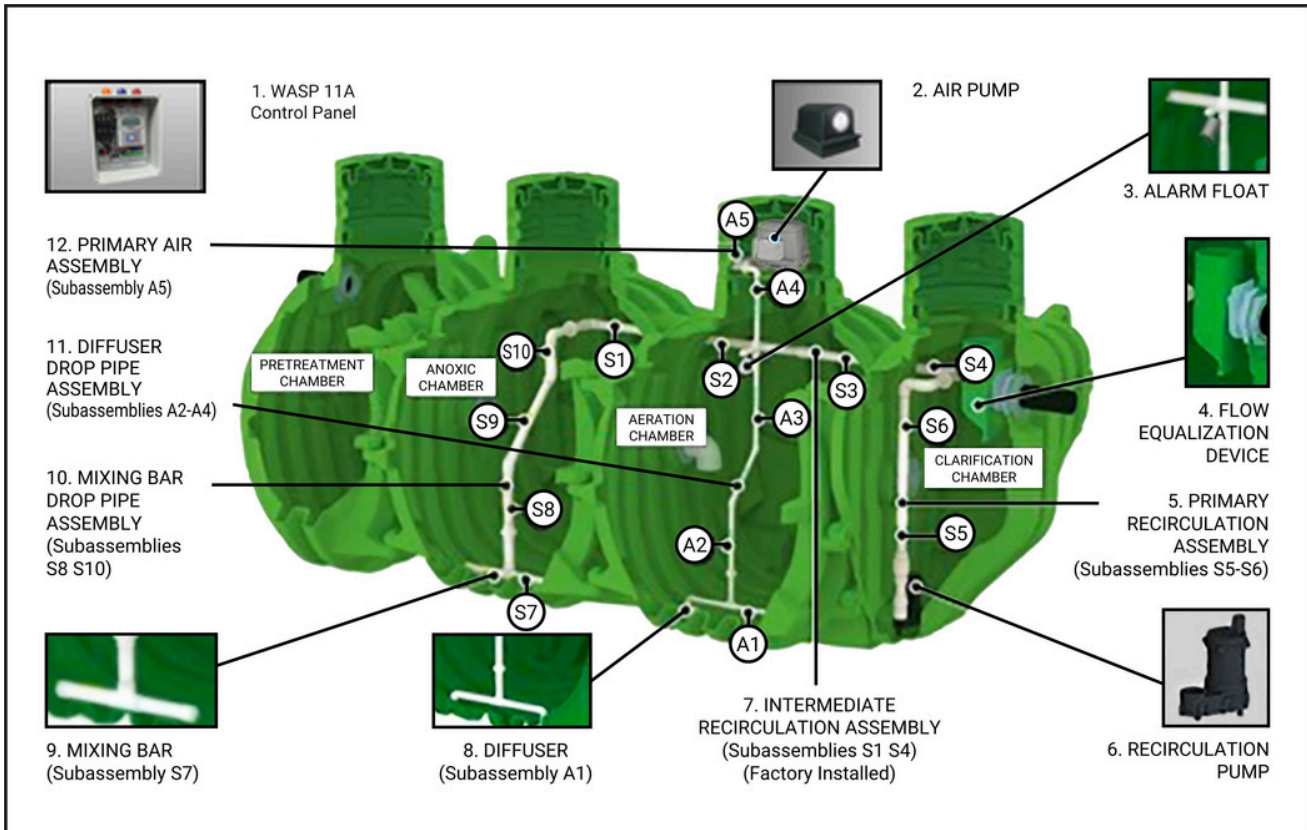


norweconY

HYDRO-KINETIC® GREEN

INSTALLATION INSTRUCTIONS



TANK DELIVERY AND SETTING

1. Before the tank setting begins, verify that the excavation is level and free of sharp stones and construction debris. Clear out any objects that could come in contact with the tank. When installing a Hydro-Kinetic Green system, first check the length, width and depth of the excavation. The excavation should have sufficient overdig to allow between 18" to 24" of clearance around the entire perimeter of the Hydro-Kinetic Green system. In addition, the excavation should allow for a minimum of 6" and a maximum of 18½" of cover over the top of the tank. For deeper installations, consult the Deeper Burial Requirements section of this guide. Failure to follow the excavation and backfilling guidelines may result in tank damage and will void the system warranty. Safe working conditions must be established and maintained during the entire installation procedure.

PLEASE NOTE: The Hydro-Kinetic Green tank is constructed of high-density polyethylene. All joints have been factory-sealed for your convenience. This will minimize tank loading, unloading and setting time at the site. The Hydro-Kinetic Green tank has been designed for underground use only. Do not install the tank in a location that is subject to vehicular traffic.

2. Prepare the excavation to the appropriate depth based on the elevation of the building sewer line. Allow 1/8" of fall per foot from the building to the system. Fall through the system is 5" from inlet invert to outlet invert.

3. Before installing the Hydro-Kinetic Green tank, inspect for signs of damage that may have occurred during transportation or handling. Damaged tanks could leak and should not be installed. Check the inlet and outlet couplings for any signs of damage that would prevent solvent welding to the plumbing. Inspect all risers and access covers to ensure no damage has occurred. Verify that all riser and access cover fasteners are securely attached.

CAUTION: Extreme care should be used in the vicinity of any excavation. A delivery vehicle can place excessive loading on excavation sidewalls and care must be taken in its positioning. Once installed, no vehicle should operate over the tank or any other part of the treatment system.

4. Make sure the delivery vehicle outriggers are firmly placed on stable soil at the excavation site. All personnel must be out of the excavation area and at a safe distance from the tank. Before lifting the tank, check all lifting chains, straps or cables to be sure they are properly secured. Lift the tank using at least four of the molded lifting lugs located on the Hydro-Kinetic Green tank. Carefully lower the tank into the excavation. Stop the tank several inches above the excavation floor and position it in the desired location. Lower the tank carefully until all tension is off the lifting device. Do not remove the lifting chains, straps or cables until tank leveling has been completed.

5. Connect the building sewer line to the pretreatment chamber inlet. Sewer line trenches must be smoothly excavated and free of debris or sharp objects. The trenches must allow sewer lines to be laid with 1/8" of fall per lineal foot. Influent and effluent sewer lines must be at least 4" in diameter. The influent and effluent lines should be PVC pipe and solvent welded into the Hydro-Kinetic Green tank inlet and outlet couplings. Influent and effluent lines must be laid continuously and unspliced from the tank to undisturbed earth beyond the tank excavation site.

6. Install risers as required to bring the access covers to grade.

REQUIRED PRIOR TO BACKFILLING

1. For installations where the air pump will not be located in the aeration riser, install a 3/4" Schedule 40 PVC air line from the air pump to the system. The air line should be buried in a trench at a recommended depth of at least 12 inches. Protect the air line in a casing pipe if heavy loading is anticipated.

2. Add a minimum of 12" (350 gallons total) of ballast water to the Hydro-Kinetic Green tank to prevent shifting in the excavation. Fill each chamber to an equal level.

BACKFILLING

1. The Hydro-Kinetic Green tank must be backfilled immediately after the sewer lines, underground electrical cable and ballast water are in place. Cover all openings, then begin backfilling the outlet end of the excavation under the effluent plumbing. Continue to backfill under and around the sloped clarifier of the Hydro-Kinetic Green tank until the interconnect plumbing is covered. Proceed to the inlet end of the pretreatment chamber and backfill until the inlet line is covered. Be sure that the backfill is free of rocks, sharp objects, large clumps of earth and construction debris. Never use clay for backfill material. The backfill must flow freely, and care should be taken to ensure that all recesses formed between the ribs and beneath the area between the pretreatment, anoxic and aeration chambers are completely filled. The underground electrical cables should have at least two feet of earth cover. If the proposed finished grade does not permit this coverage, the cables should be installed in an approved conduit from the tank to the building foundation. When backfilling over the tank, add fill to the area between the risers first.

2. Final grading should be 3" to 6" below the top of each access cover and should slope away from the tank so surface runoff will drain away from the Hydro-Kinetic Green system. Use extreme care when backfilling the excavation. Do not allow dirt or mud to enter any part of the Hydro-Kinetic Green system or sewer lines. If dirt or mud enters any portion of the system, it must be removed to insure proper system operation. Removing the dirt or mud may require repeated flushing and tank pumping.

3. The Hydro-Kinetic Green tank must be filled with clean water to the outlet invert immediately following backfilling. The water must be free of leaves, mud, grit or other materials that might interfere with system operation. When pumping or dewatering the Hydro-Kinetic Green tank, only pump the pretreatment chamber. Then, promptly refill the tank to capacity with clean water. Dewatering and leaving the Hydro-Kinetic Green tank empty will affect tank integrity and void the Hydro-Kinetic Green warranty.

FINAL CHECK AND SYSTEM STARTUP

1. Secure the access openings. Install a sealed access cover on the pretreatment, anoxic and clarification chamber risers. All-access covers must be secured with fasteners provided. Never allow access risers to be left uncovered or partially covered. Failure to secure access covers and safety nets could result in bodily injury, illness or death. Riser safety nets are available from Norweco for concrete or plastic risers.
2. Place the dedicated circuit breaker for the Hydro-Kinetic Green system in the main service panel in the "on" position.
3. To commission the telemetry system, first ensure the phone/network cable is properly installed. Place the control centre power switch in the "off" position. While holding the reset button, place the power switch in the "on" position. Continue to hold the reset button for 5 seconds. Release the reset button and allow the telemetry system up to 60 seconds to call out and complete the commissioning process. The phone/network light will illuminate during the call-out process. If commissioning is successful, the alarm light will flash 5 short flashes and stop as verification. If commissioning is unsuccessful, refer to the Service Pro Model 801P Installation and Operation Instructions.
4. If no telemetry system is installed, press and hold the **RESET** button on the control center for 5 seconds. The audible alarm should sound and the alarm light should illuminate.
5. The system is operational once all installation and startup steps have been completed.

DEEPER BURIAL REQUIREMENTS

Special consideration should be taken if the Hydro-Kinetic Green tank is buried deeper than 18 ½" below grade. However, the tank should never be buried deeper than 36 ½" below grade. If deep burial is required, first fill the tank with 12" of clean ballast water. Next, backfill around the entire tank up to the base of the risers. Fill the tank with clean water to the design flow line. Finally, backfill to grade with native soil.



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