

CONTRACTOR: Please leave this manual with the property owner.



SIPHONING SYSTEM OWNER'S MANUAL

Part No. 2650 and Part No. 2660



Prevent rust, control pests, and fertilize your lawn.
See pages 6 & 7 for product information.



QUESTIONS? NEED PARTS OR SUPPLIES?

Call **800-285-9176**

E-mail **info@proproducts.com**

Visit **www.proproducts.com**



Please complete your warranty registration to receive important product updates.

Scan QR code or visit
proproducts.com/warranty

CAUTION: Read all instructions carefully before beginning the installation.



MAXIMIZE YOUR IRRIGATION SYSTEM

Congratulations on your new American Hydro Systems 30-Gallon or 15-Gallon Siphoning Feeder System. With this system, you can easily prevent rust, provide gentle fertilization, and repel insects. Every time you water, our products are gradually released through the feeder system for a gentler impact on the environment.

From people, to pets, to pollinators, our products ensure a healthier outdoor living environment that is beautiful as it is beneficial. Our products are easily applied through an irrigation system to automatically prevent rust, fertilize your lawn and repel insects.

CONTENTS

Siphoning System Overview	3
Siphoning System Installation	4
Start Up, Final Check-out & Operation	5
Maintenance & Troubleshooting	5
American Hydro Treatment Options	6
Rid-O-Rust Rust Stain® Remover & Preventers	
GrassSoGreen® Fertilizers	
NatureShield® Insect & Pest Repellent	
Warranty	8
Return Policy on Metering Pumps	8

Please retain the following information for your records.

Date siphoning system installed:

System purchased from:

Installer's name:

Phone:

Email:

Well pump HP:

Results of well water test:

Iron (in PPM): _____

pH: _____

ADDITIONAL NOTES



SIPHONING SYSTEMS OVERVIEW

The American Hydro Systems® #2650 (30-gallon) or #2660 (15-gallon) Siphoning System consists of a 30-gallon or 15-gallon feed tank with top respectively and siphoning parts.

Siphoning systems are very simple, having no moving parts. They are installed on the intake side of a well pump. When the pump turns on, solution is automatically drawn from the feeder tank. Because siphoning feeder systems only work properly when installed on the intake side of a well pump, they can only be used with above-ground well pumps.

Location

We recommend your siphoning system be placed in a well ventilated location within 6 feet of the pump. You may hide the tank behind a wall, fence or shrubs. Set the tank on a smooth, level surface such as a patio block or concrete slab. We advise against burying the tank; you will not be able to see the water level in the tank and may find it difficult to service.

Questions? Call our customer care team at 1-800-285-9176.

- ✓ You must always shut off the electricity to the well pump and read all instructions.

Siphoning System, 30-Gallon

Part No. 2650

Feeds at approximately one gallon per hour

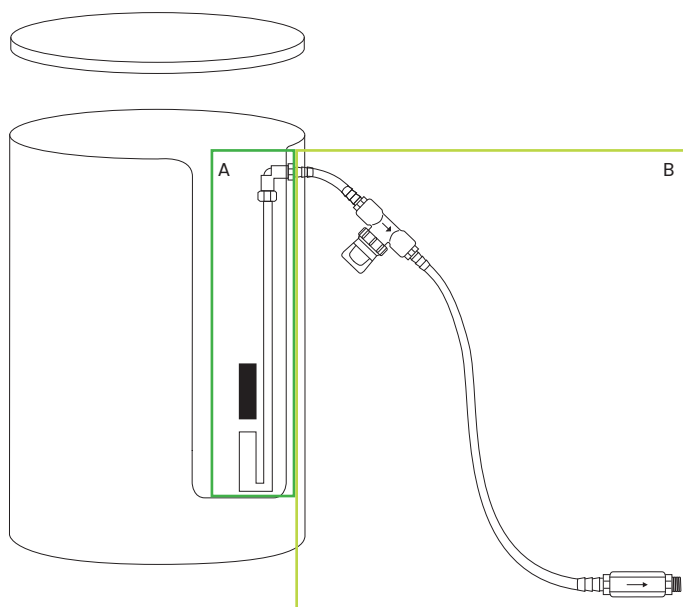
- Must be refilled after 30 hours of operation
- 32" high x 18" diameter; weighs 14 lbs.
- Includes necessary plumbing and 6 feet of discharge tubing

Siphoning System, 15-Gallon

Part No. 2660

Differs from #2650 in the following ways:

- Must be refilled after 15 hours of operation
- 24" high x 14.5" in diameter; weighs 10 lbs.
- Does not include inline filter

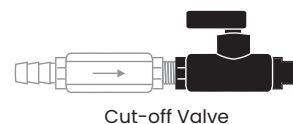


In-line Filter

The In-line filter assembly, with metering jet positioned after the filter, prevents the metering jet from being blocked by well water sediment.

Cut-off Valve (optional)

The cut-off valve is installed after the check valve and enables the user to disengage the siphoning system entirely. This is particularly useful when a feeder system is being used to fertilize or repel pests only.



Cut-off Valve

Replacement Parts

Key No.	Part No.	Description
A	265070	Inside Parts
B	265071	Outside Parts
A and B	265072	The Works (Inside & Outside Parts)

There are two easy ways to install your siphoning system. Be sure to install on the intake (suction) side of an above-ground centrifugal pump. If installed on the discharge side, it will create a leak in the irrigation system.

A	Tank Top	G	In-line Filter
B	Tank	H	Metering Jet
C	Foot Valve Sleeve	I	6" Tubing
D	Foot Valve	J	Check Valve
E	Threaded Nylon Fitting	K	Saddle Clamp
F	6" Tubing		

The diagram illustrates the components and wiring of a fire alarm system. It includes a fire alarm control panel (A, B), a fire alarm bell (C, D), a fire alarm pull station (E, F), a fire alarm control unit (G, H), a fire alarm control unit (I, J), a fire alarm control unit (K), and a fire alarm control unit (L). The system is designed to detect a fire and activate the alarm bell and other notification devices.

The diagram illustrates a well pump system. A vertical pipe (A) descends into a well (B). A pump (C) is located at the bottom of the well. A discharge pipe (D) leads from the pump to a well check valve. The pipe then continues to a sprinkler system, which includes a control valve and a main line leading to the sprinklers. The flow path is indicated by an arrow pointing towards the sprinklers.

Tools needed: Drill with 1/4" bit, Phillips head screwdriver, plumbers tape and saddle clamp. NOTE: Saddle clamp works only with 1-1/4" PVC pipe.

1. Using a Phillips head screwdriver, attach the saddle clamp (K) to the suction line of the well pump. The saddle clamp should be placed between the check valve for the well (Note: This may be underground) and the intake side of the well pump.
2. Drill a 1/4" hole into the center of the threaded opening of the installed saddle clamp. (Note: If your pump has a pressure tank, turn power off to pump and open any water valve to relieve pressure from your water line before drilling into pipe).
3. Screw the check valve (J) into the saddle clamp. (Note: Add several wraps of plumber's tape to the check valve threads to ensure a proper seal).
4. Your pump will need to be re-primed. Refer to your irrigation pump manual for re-priming instructions.
5. Go to "Start Up."

Tools needed: PVC or hack saw, PVC Tee (SXF) suction line size 1/2", PVC glue & primer.

NOTE: If your pump has a pressure tank, turn the power off to the pump and open any water valve to relieve pressure from your water line before cutting the pipe.

1. Cut vertical section of suction pipe between pump intake & well check valve. You may need to remove a small section of pipe to accommodate tee. Reposition pump.
2. Glue tee onto pipe run using PVC primer and glue.
3. Screw the check valve (J) into the tee. (Note: Add several wraps of plumber's tape to the check valve threads to ensure a proper seal).
4. Your pump will need to be re-primed. Refer to your irrigation pump manual for re-priming instructions.
5. Go to "Start-Up."

START UP, FINAL CHECK-OUT & OPERATION

Start Up:

1. Attach the free end of the 6" of clear vinyl tubing (F) to the barbed end of the threaded nylon fitting (E) on the side of the tank and attach the free end of the 6' of tubing (I) to the barbed end of the check valve (J). Secure both ends with provided zip ties.
*For 15-gallon system, 4" and 4' respectively.
2. Fill the tank 1/2 full of water. It is preferable to use municipal or soft water when available.
3. Turn on the sprinkler pump. Watch the clear vinyl tubing (I) and the clear housing of the in-line filter (G). Water should appear in about 30 seconds to a minute as a thin continuous stream from the metering jet (H) that is attached to the in-line filter. If it does, your system is ready to run.
4. If it does not, the foot valve (D) in the tank is likely not operating correctly. Shut off the pump. Tap the foot valve vigorously, against the side of the tank. This will purge trapped air from the foot valve and free the float ball that is enclosed in the foot valve housing.

5. Add chemical according to dosage recommendations in your owner's manual (page 6) or on proproducts.com. Fill the tank up to the mark at the top. Note: Make sure to have your well water tested to ensure you have the correct Rid-O-Rust formula for your water (Well Water Analysis Form).
6. When the tank is full, add 2 cups of household bleach to prevent algae growth in the tank. CAUTION: Bleach may be added ONLY after the mixture is fully diluted. Adding bleach directly to the formula will cause a gas release.

Final Check-out and Operation:

1. Turn on the sprinkler system. Watch for a thin stream of solution flowing from the metering jet (H) into the clear tubing (I) by letting your sprinkler system run for several minutes. Turn off the pump to see if the liquid level in the clear tubing holds. If the well pump's check valve and the siphoning system check valve (J) are installed properly, the solution in the clear tubing will not continue to siphon out.
2. Generally, the liquid level in the tank will drop one gallon per hour of operation (based on a one horse power pump). To ensure continuous treatment, refill the tank before it drops below the top of the foot valve (D) in the bottom of your tank.

MAINTENANCE & TROUBLESHOOTING

Maintenance

(Refer to Parts List Diagram at left)

1. The holding tank should be cleaned out on a regular basis with soapy water and bleach to achieve maximum performance from your system.
2. Add 2 cups of household bleach each time the tank is refilled to prevent algae from forming inside the tank. CAUTION: Bleach may be added ONLY after the mixture is fully diluted. Adding bleach directly to the formula will cause a gas release.
3. Remove clear filter housing from in-line filter (G) and wash filter screen with soapy water and bleach on a regular basis to ensure the metering jet (H) stays free of dirt and algae.

Troubleshooting

(Refer to Parts List Diagram at left)

1. No Chemical Flow from Tank:
 - A. Foot valve closed (D): Shake foot valve or tap it against the inside wall of tank to purge trapped air or remove clear tubing (H) from outside of tank and blow through opening to free the ball in foot valve housing.
 - B. Metering jet clogged (H): Remove and clean the opening with a thin wire. Note: Do not enlarge jet opening. Replace if needed.
 - C. Clogged filter (G): Remove clear filter housing and wash filter.

- D. Check valve closed (J): Remove clear hose (F) from metering jet (H). Put thumb over hose opening and turn on well pump to see if you have suction. If there is suction, there is no problem with the check valve. If there is no suction, remove the check valve, wash it out with soapy water and screw it back in. Perform steps again to confirm that you now have suction.
2. Solution in Tank Drops to a Certain Level and Stops:
 - A. Check fittings to see if they are secure. Fittings may be too loose, allowing air to be sucked into the line from the ends of the tubing so the vacuum is lost. Secure fittings with nylon ties or hose clamps.
 3. Tank Empties Too Fast:
 - A. Enlarged Metering Jet (H): Remove and replace with new metering jet (2650-KIT) or all outside parts kit (265071)
 - B. Well pump check valve malfunctioning. If the well pump has not been able to hold prime prior to the time the feeder system was installed, there is a strong possibility that the check valve in the pump suction line is old and needs to be replaced. In any event, check valves in older pumps can fail and cause solution to be siphoned out of the tank after the well pump stops pumping.

TECHNICAL HELP

If none of the above troubleshooting steps produce results, please call your local installer or American Hydro Systems at 1-800-285-9176.

AMERICAN HYDRO SYSTEMS® TREATMENT OPTIONS

Rid-O-Rust Rust Stain Remover & Preventers

Many well-based irrigation systems create stains and other deposits on walls, driveways, sidewalks and even on vegetation, depending on the minerals present in the water. Rid-O-Rust® products remove and prevent sprinkler stains with maximum results and minimal effort.

Step 1: Remove Existing Rust Stains



Rid-O-Rust Rust Stain Remover

NOT FOR USE IN IRRIGATION SYSTEM

- ✓ Quickly dissolves existing rust stains on exteriors and hardscapes
- ✓ Just rinse - no scrubbing or power washing

Step 2: Prevent Future Rust Stains



Option 1:

Rid-O-Rust® Rust Stain Preventer

- ✓ Prevents rust and limescale stains caused by well-based irrigation



Option 2:

Rid-O-Rust® Rust Preventer - Extreme Water

- ✓ Prevents rust and limescale staining caused by well-based irrigation; for low pH conditions



Option 3:

Rid-O-Rust® Calcium Scale Preventer

- ✓ Prevents limescale staining & drip emitter buildup from irrigation
- ✓ Prevents hard water spots on glass, vehicles, brick and more

Rid-O-Rust Dosage

IMPORTANT:

To use this chart you MUST know the feed rate of the feeder system. The chart below is based on using:

- A. 30-gallon feeder tank and
- B. 25-gallon-per-minute flow rate for the irrigation system

If your application has a different tank size or flow rate, the dosage figure must be adjusted. For faster, easier results, use our online dosage calculator at www.proproducts.com or call 1-800-285-9176.

Number of Bottles of 1/2 Gallon Rid-O-Rust Preventer to Add to Siphoning Feeder Tank

Parts per Million Iron	25 GPM Flow Rate and 30-gallon Feeder Tank
1	0.5
2	1.0
3	1.5
4	2.0
5	2.5
6	3.0
7	3.5
8	4.0

Water Testing: Which Rid-O-Rust® Preventer Should I Use?

STEP 1: Test well water for pH and iron.

Your irrigation contractor should be able test your water for pH and iron content. If you need a test, we can help. Scan the QR code or go to proproducts.com/pages/american-hydro-water-test-request. We'll test your water for free and match you with the right products.



American Hydro Water Test Request

NOTE: We recommend well water be tested annually at a minimum, and preferably every six months.

pH: The measurement of well water's relative acidity or alkalinity. Neutral pH is 7.0; lower than 7.0 is on the acidic side and a reading higher than 7.0 is on the alkaline side.

Iron: Iron content is measured in parts per million (ppm). One part per million (1 ppm) will produce a noticeable rust stain.

Step 2: Choose the proper formula.

If well water is at a pH of 6.0 or lower, you MUST use Rid-O-Rust Rust Preventer - Extreme Water (RR2).

For other well water, use Rid-O-Rust Rust Preventer (RRI).

For hard water in which calcium and limescale is the issue rather than rust, use Rid-O-Rust Calcium & Scale Preventer (RRC).

NatureShield® Insect & Pest Repellent

NatureShield® is made with a blend of cedar, cinnamon and castor essential oils to repel mosquitoes and aid in the suppression of fleas, fire ants and biting midges (no-see-ums). It can be used as a stand-alone solution or combined with Rid-O-Rust rust preventer and GrassSoGreen fertilizer. Unlike harmful chemical pesticides, NatureShield provides an effective pest barrier designed with people, pets and pollinators in mind.

Multiple Applications:

- ✓ American Hydro feeder systems
- ✓ Pump sprayer: Use 2 oz. per gallon of water
- ✓ Hose-end sprayer: Fill and set application rate to 2 oz.
- ✓ May also be used in spray rigs

Natureshield Dosage

Simply add 1 gallons per tank fill to start. Conditions around your property (e.g. bodies of water, high humidity) may lead to higher pest populations and therefore greater dosage.

GrassSoGreen® Fertilizer

GrassSoGreen® liquid fertilizers are applied through an American Hydro feeder system in continuous, small doses, breaking the feast-or-famine cycle caused by dry fertilizers.

All Purpose Formula 7-0-2, OMRI Listed

- ✓ OMRI Listed for organic use
- ✓ For use on new and established lawns, trees, shrubs and gardens
- ✓ Can be used to transition landscapes from a synthetic to organic program

Maintenance Formula 19-0-0

- ✓ Gentle replenishment of lost nitrogen for a thicker, greener, healthier lawn.

GrassSoGreen Dosage

(Coverage Area: ____ sq. ft./1,000) X .25 gallons = ____ X # of months to deplete 30-gallon tank = ____ gallons per tank fill

Example: 10,000 sq. Ft./1,000 X .25 gallons = 2.5 gallons
2.5 gallons x 2 months = 5 gallons per tank fill



INSTRUCTIONS FOR USING PRODUCTS IN YOUR IRRIGATION FEEDER SYSTEM



RID O' RUST



NATURESHIELD



GRASS SO GREEN
19-0-0



IRRIGATION FEEDER SYSTEM

The American Hydro Systems irrigation feeder system was designed so you can mix Rid-O-Rust® rust preventer, GrassSoGreen® fertilizer and NatureShield® insect & pest repellent in the same tank.

NOTE: Use of any other chemicals not manufactured by American Hydro Systems will void the warranty.

Once the tank contains the proper amount of formula, the remainder of the tank should be filled with water.

CAUTION: When the tank is full, you may add 2 cups of bleach to prevent algae growth in the tank. **ONLY add bleach after the mixture is fully diluted with water. Adding bleach directly to the formula before it is thoroughly mixed will cause a gas release.**

The feeder tank should be placed in a well ventilated location.

GENERAL WARRANTY STATEMENT

Due to the nature of the water treatment business, we can warranty our hardware — the pumps, tanks and parts that feed chemicals — but cannot make a blanket guarantee as to the performance of our chemicals in the field. We do warranty that we have provided the appropriate amount of ingredients and that under stated conditions, they should perform as represented. Many factors over which we have no control affect the performance of our products. Actual well conditions, for instance, may differ from those represented to us when we recommend dosage rates. We have no control over the equipment installation, or the maintenance and service provided to sustain the performance of a water treatment system. A blanket guarantee of performance, given these conditions, would be impossible.

One-Year Parts Warranty

For one year from the date of purchase, we will replace any defective part of a feeder system, free of charge. This warranty extends to five years on certain molded tanks and a lifetime for the PumpHaus™ pump cover. We reserve the right to provide reconditioned parts as replacements. Warranty service is available by contacting your nearest American Hydro Systems supplier. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

A Note on Rust Stain Prevention

Our solutions work to prevent rust stains and corrosion by sequestering and chelating ferrous (clear water) iron in well water. To the extent that there is ferric iron in the well water, we will not be able to prevent a stain.

Generally speaking, ferric iron can be produced in two ways:

1. By introducing air, chlorine or any other oxidizing agent into the well water prior to the point that our formulas are injected.
2. By the presence of iron-related bacteria in the well water that produces ferric iron as a by-product of propagation.

It is difficult to test well water to determine the amount of ferric iron present. Iron bacteria, on the other hand, signifies its presence by reddish tinged water, slime on pipes and slime and sludge build-up around the edges and corners of an irrigation system.

Please note that lake water or any other bodies of water exposed to the atmosphere can have substantial amounts of ferric iron that we cannot treat.

As noted elsewhere in our literature, stains are also caused by tannin in the well water. We find that stains can appear with tannin in excess of 3 ppm. Our products do not prevent stains of an organic nature and tannins are organic.

A final point is that mother nature can interfere with the best application charts through changes in the water table. We would recommend users test their water each year to monitor changes in iron, hardness and pH levels.



6714 Pointe Inverness Way, Suite 200
Fort Wayne, IN 46804

TO PLACE ORDERS

Call 1-800-285-9176

Fax 260-490-9431

E-mail info@proproducts.com

proproducts.com