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SeptiQuik [™]

Fast-Acting Septic Tank Cleaner

Original RustAid[®] Fast-Acting Rust Stain Remover



RustAid Plus[™]

Calcium, Lime and Rust Stain Remover

Original TileAid[®] For Mildew Stains, Soap Scum and Mineral Desposits

SOLUTIONEX

Solutionex 3986 Pembroke Rd., Hollywood, FL 33021 (954) 989-7990 www.solutionex.com



The Care and Feeding of Your SprinkleRite Rust Prevention and Fertilization System

- Installation
- Operation
- Maintenance



Congratulations!

If you're reading this, chances are pretty good you've just purchased the SprinkleRite Rust Prevention and Fertilization System[™] by Solutionex[™]. Which means the chances are also pretty good that either you've got some ugly rust stains on your property after months or years of sprinkling with well water, or your lawn has a tendency to brown, in spite of regular irrigation.

Not to worry! Thanks to your foresight and intelligence in purchasing the premier rust prevention and automatic fertilization system on the market today, both problems are well under way to being solved. Forever!

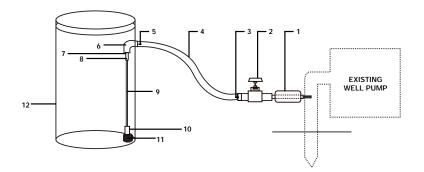
This manual will tell you everything you needed to know (and more) about how to get up and running in no time flat. Then, no more ugly rust stains. No more brown grass patches. Life is beautiful. Read on.

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*WARNING: DO NOT MIX BLEACH OR ANY CHLORINE-BASED PRODUCT WITH VERDAGRO OR ANY OTHER FERTILIZER PROD-UCT. SUCH MIXTURES ARE HIGHLY DANGEROUS AND HARMFUL.

What's Included With Your SprinkleRite System



С	CHECK VALVE ASSEMBLY		CHEMISTRY FEED ASSEMBLY		
1 2 3	Check Valve Metering Valve Adapter	5 6 7 8 9	Adapter with injector port 90° elbow Adapter 2" Vinyl tubing (6' length) 2' PVC feed pipe		
4 12	Vinyl tube (connects the two assemblies) Tank & cover	10 11	Foot Valve Strainer		

The SprinkleRite System box contains the following hardware. Please review this list and identify all items among the enclosed parts.

- 36 gallon HDPE Tank and Lid
- Chemistry feed assembly, including strainer, foot valve, feed pipe, tubing, adapter, elbow and injector port (pre-installed into tank)
- Check valve assembly, including check valve, metering valve and adapter

- Vinyl tube (6 feet)
- Cable ties (2)
- Water analysis sample vial and mailer tube
- Instruction manual
- 1/4 18 NPT tap

Before You Begin

(Rust Stain Control Only)

Send Us A Sample!

If you're planning on using the SprinkleRite System for rust stain control, you will be adding a chemical called Original No Rust[™] to your system tank. This chemical reacts with the iron in your well water to neutralize it and prevent future rust stains.



The thing about this chemical reaction is

that you have to add the right amount of Original No Rust to neutralize the iron. Too much, and you're wasting chemicals (which cost money). Too little, and you're not going to neutralize all of the iron.

That's why we ask you to mail us a sample of your well water in the enclosed 2 oz. bottle. We'll measure its iron content immediately upon receipt and advise you by phone (our nickel, er, make that quarter) how much Original No Rust to add to your tank.

- 1. To collect your sample, run your sprinkler for at least twenty minutes to be sure we're getting fresh well water that hasn't been standing in your rust-stained pipes.
- 2. Collect the well water in the 2 oz. bottle provided in the brown mailing tube.
- 3. Put the bottle into the mailing tube and mail it to us.
- 4. Install your system according to the instructions that follow and wait a few days for our instructions on adding Original No Rust.

Before You Begin

Before You Begin

Remove Existing Rust Stains

While we guarantee that Original No Rust will prevent future rust stains, IT WON'T REMOVE RUST STAINS THAT YOUR SPRINKLER SYS-TEM HAS ALREADY DEPOSITED! But don't worry. Lucky for you, Solutionex also makes a convenient, amazingly easy-to-use product (imagine that!) that will clean up ugly rust stains in minutes.

It's called Original RustAid[®], and it's available at many home center, hardware and major retail stores, including, probably, the store where you bought your SprinkleRite System.

Just spray it on, and watch rust stains vanish in minutes before your very eyes!



Installation – It's really, really easy, we promise!

We give you three ways to install the SprinkleRite system. Option 1 will work with any setup. It's also our recommended approach, so let's start there.

Option 1. Drill and Tap. Your basic "garden variety" installation technique.

Tools Required: Electric drill, 7/16" drill bit, 1/4-18 NPT tap (included in box), wrench to turn tap.

 Place tank on level surface (concrete pad, blocks, pavers, etc.) within a foot or two of the well-water feed line to the sprinkler pump.



- 2. If your well has a pressure tank, turn off the electricity and open the water valve to release the pressure.
- 3. Drill a 7/16" hole into the well-water feed line above the well's check valve (usually at ground level or just underground). This hole should face the SprinkleRite tank.



4. Thread the hole by turning the 1/4-18 NPT tap with a ratchet wrench or pliers, either of which will be sufficient if your feed line is a PVC pipe. If your feed line is a metal pipe, you may need an actual tap wrench for the job.



5. Wrap plumber's tape on the check valve assembly threads to insure a proper seal. Don't use cement.





 Connect the vinyl tubing to the check valve assembly (slide tube over barb). Secure the tube by tightening a cable tie over the connection.



- 8. Cut the tube to size, allowing sufficient length to reach the barb that protrudes from the system tank with a little slack to spare.
- 9. Connect the tube to the system tank barb and secure with the other cable tie provided.
- **10.** Your system is now ready for operation! Go to the section entitled "Operating the SprinkleRite System".

Option 2. Direct Connection. Easiest of all if your pump has a drain plug!

This method will only work if you have a drain plug on your sprinkler pump and it provides suction to draw the solution from the tank. Not all sprinkler pumps have a drain plug and not all drain plugs have suction. Go figure. If yours has no drain plug, don't despair! Just use one of the other installation methods.

Tools Required: Plumber's tape

1. On the well pump head, locate and unscrew the drain plug. Turn on your sprinkler system.



 Place your finger on the drain hole. You should feel some suction. Don't worry, it won't slurp your finger in, but don't go shoving it in either! If you don't feel a fairly strong suction, you cannot use this method of installation! (Sorry.)



- 3. If you do feel a fairly strong suction in step (2), go ahead and turn off your sprinkler system. Otherwise you may be soaked by the time you finish reading these instructions. If you don't feel a fairly strong suction, this method is not going to work. Turn off your sprinkler system and pick another installation method.
- 4. Confirm that the check valve threads are the same size as the threads on the drain plug thread. If not, you'll need to purchase an adaptor. (Or just use one of the other installation methods. You'll be done in less time than it takes to make a trip to the hardware store.)
- 5. Confirm that the check valve assembly can be screwed into the drain plug hole without obstruction. If it can't, you'll have to use one of the other installation methods. (Does it sound like we're really pushing these other methods today?)
- Wrap plumber's tape around the threads of the check valve assembly to ensure a proper seal. Don't use cement.



7. Screw the check valve assembly into the drain hole (hand tighten only).



Installation

8. Connect the vinyl tubing to the check valve assembly (slide tube over barb). Secure the tube by tightening a cable tie over the connection.



- **9.** Cut the tubing to size, allowing sufficient length to reach the barb that protrudes from the system tank with a little slack to spare.
- **10.** Connect the tubing to the system tank barb and secure with the other cable tie provided.
- 11. Fill the tank with a few gallons of water and turn on your sprinkler system.



12. Turn the metering valve one half turn counterclockwise.



- **13.** Visually confirm that the water is being drawn from the tank through the vinyl tubing.
- 14. If water is not moving through the tube, continue to turn the metering valve counterclockwise for a full turn. If you still do not notice water moving through the tube, the suction at the drain hole is insufficient. Turn off your sprinkler and use one of the other installation methods. (You can't say we didn't warn you.)
- 15. If water IS being drawn through the tubing, hallelujah! Turn the metering valve clockwise slowly until you can see an intermittent drip (or trickle). Your system is now ready for operation! Go to the section entitled "Operating the SprinkleRite System."



Option 3. Reducing T. For the weekend warrior who likes to play with PVC and pipe glue.

By the way, we're assuming that your pipes are made of PVC. If they're metal and you still want to try this, you're on your own!

Tools Required: PVC reducing T (1 1/2" to 1/2"), PVC bushing (1/2" to 1/4" x 18), PVC cleaner and glue, saw or pipe cutter, box wrench.



- 1. If your well has a pressure tank, turn off the electricity and open the water valve to release the pressure.
- Cut the well-water feed line between the pump and the well's check valve. Be sure to cut the pipe in a place that allows enough room for the reducing T to be inserted.
- 3. Insert the reducing T in place to test the fit.
- 4. Clean the pipe with a PVC cleaner and glue the reducing T in place with the female fitting facing the SprinkleRite tank.
- 5. Screw in the bushing.



6. Wrap plumber's tape around the threads of the check valve assembly to ensure a proper seal. Don't use cement.



7. Screw the check valve assembly into the bushing (hand tighten only).



8. Connect the vinyl tubing to the check valve assembly (slide tube over barb). Secure the tube by tightening a cable tie over the connection.



- 9. Cut the tubing to size, allowing sufficient length to reach the barb that protrudes from the system tank with a little slack to spare.
- **10.** Connect the tubing to the system tank barb and secure with the other cable tie provided.
- 11. Your system is now ready for operation! Go to the section entitled, "Operating the SprinkleRite System."



Operating the SprinkleRite System

As easy as it was to install the SprinkleRite system (we hope you're not laughing), it's even easier to run it correctly. Just follow the steps below.

1. Using system chemicals

(a) For Rust Stain Control

Using the table below, look up the proper amount of Original No Rust Sprinkler-Dispensed Rust Stain Preventer to add to the system tank. The correct mixture rate is based on two factors.

The first factor is the iron concentration in your well water, measured in parts per million. If you've been following these instructions, you've already sent your sample off to us for analysis. Or you can always get it analyzed at a lab of your own choosing.

The other factor is either your pump's flow rate OR its horsepower rating. These elements are directly related to each other, so you only need to know one or the other.

Mixture table

Amount of Original NoRust required for SprinkleRite Rust Prevention and Fertilization System[™] ... Determined by Iron PPM (parts per million), and flow rate GPH (gallons per hour) and/or HP (horsepower of pump).

Amount of Original No Rust to Use in 36 Gallon Tank

IRON PARTS PER MILLION		1	2	3	4	5
GPH FLOW	PUMP HP					
1000 GPH	1/2 HP	2 Gal.	3 Gal.	4 Gal.	5 Gal.	6 Gal.
2000 GPH	1 HP	4 Gal.	5 Gal.	6 Gal.	7 Gal.	8 Gal.
3000 GPH	1-1/2 HP	6 Gal.	7 Gal.	8 Gal.	9 Gal.	10 Gal.
4000 GPH	2 HP	8 Gal.	9 Gal.	10 Gal.	11 Gal.	12 Gal.

To use table, select the PPM of iron that your well water con tains and go down that column to corresponding row for flow/pump size to determine correct amount of No Rust to put in the tank. EXAMPLE: A well containing 2-PPM iron and a 1-1/2 hp pump would have a value of 7. Charge the tank with 7 gallons of No Rust and 29 gallons of TAP water and mix.

Tank Refill For 36 Gallon Tank

# DAYS - WEEK	TOTAL # MINUTES SPRINKLING PER DAY - ALL ZONES					
SPRINKLER ON	60 Min.	90 Min.	120 Min.			
3	28 Weeks	18 Weeks	12 Weeks			
4	20 Weeks	13 Weeks	9 Weeks			
5	16 Weeks	10 Weeks	7 Weeks			

If system is used 90 minutes (1-1/2 hours) a day, 3 days per week, the refill table shows tank life is approximately 18 weeks.

(b) For Fertilization

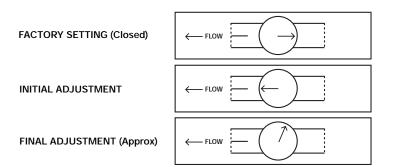
This one is easier. For every 2,000 square feet of lawn, add a gallon of VerdaGRO Sprinkler-Dispensed Lawn Fertilizer.

(c) Remember: you can use Original No Rust and VerdaGRO by themselves or mixed together in the SprinkleRite tank.

To use them separately, add the proper amount of the one chemical you want to use, as determined above, and fill the rest of the tank with water.

To use them together, add the proper amounts of both chemicals as determined above, one after the other, and then fill the rest of the tank with water.

- 2. Adjusting the Metering Valve.
 - (a) Put the lid back on the tank and turn on your sprinkler system.
 - (b) Support the metering valve assembly with one hand, and open the valve with the other by turning counterclockwise approximately 1/2 turn. (See illustration below.) Now the valve is sufficiently open.



Hand tighten only! When you have turned the knob as far clockwise as possible, the valve is fully closed. Do not use force (with hand or tools) to close valve. Over tightening or constant tightening of the valve could cause damage that will cause it to lose the ability to control flow rate.

- (c) Close the valve gradually (turn it clockwise), and observe the flow of solution (i.e., an intermittent flow or trickle) through the vinyl tubing. Reduce the flow by about half, to a trickle. (A steady flow will use excessive amounts of chemicals, wasting your money.)
- (d) This is the normal flow rate to prevent rust staining under normal conditions. Since specific conditions do vary with every installation, you may need to adjust the flow further as you observe the system's performance.

Constant adjustment and/or closing of metering valve can damage the metering valve needle, preventing proper flow and operation. So try to handle the valve with care and only adjust when truly necessary. Maintenance

Maintenance

- 1. Visually inspect your tank frequently to be sure you have enough solution in it to operate properly.
- 2. Visually inspect the vinyl tubing regularly to be sure that solution is flowing through it while the sprinklers are running.
- 3. If algae begin to build up in the tank, the flow can be blocked. Flush any fertilizer mixture that may be in the tank completely out, then add 2 cups of bleach to clean the system out. Then flush the tank <u>completely</u> with fresh water. Once the bleach has been completely flushed, you may add the VerdaGRO again.

WARNING: DO NOT MIX BLEACH OR ANY CHLORINE-BASED PRODUCT WITH VERDAGRO OR ANY OTHER FERTILIZER PRODUCT. SUCH MIXTURES ARE HIGHLY DANGEROUS AND HARMFUL.

- 4. Make sure that your tank cover is always securely in place, preventing leaves, dust, grass or insects from plugging up the system.
- 5. Inspect all parts and unions regularly to ensure that connections are secure and clean.
- 6. Be sure to run the sprinkler regularly to keep the system operating smoothly and to prevent algae formation.

Trouble Shooting

If your SprinkleRite system does not prevent rust staining or green your grass please review the following:

- 1. If your problem is rust staining, and if your sprinkler system is an older system, there could be a buildup of iron compounds inside your sprinkler system. Check this by removing a sprinkler head and placing your little finger into the now open hole. If your finger brings up a lot of goop, this is the problem. Only persistent use of Original No Rust over a period of time will cure the problem without drastic measures.
- 2. It is also a possibility that all or part of the staining could be from another source, e.g. tannin. Original No Rust will not prevent tannin staining. Tannin stains resemble rust-stains to the untrained eye and frequently occur when drawing water from retention ponds or surface water sources. Tannin stains may be removed by using bleach.
- 3. If there is solution in the external vinyl tubing, and:
 - (a) Solution is flowing, recheck the mixture table to be sure you are using the correct amount of Original No Rust in the tank mixture (for rust stain problems). Or recheck that you have properly measured your lawn's square footage in determining the amount of VerdaGRO to add to the tank (for brown grass problems).

If the mixture amounts are correct, adjust the metering valve to increase solution flow.

- (b) **Solution is not flowing**, check the adjustable metering valve (part #2 on the parts diagram), check valve (#1), and adapter with injector port (#5), to determine if they are blocked. Clear any obstructions.
- 4. If there is no solution in the external vinyl tubing, visually check the internal 2-inch vinyl tubing (#8). This is located inside the tank and connects the 90° elbow (#6) to the feed rod (#9).
 - (a) If there is solution in the internal tubing, check the 90° adapter (#5) to determine if it is blocked. Clear any obstruction.

Trouble Shooting / How to Obtain Spare Parts

- (b) If there is no solution in the internal tubing, check the strainer (#11), foot valve (#10) and PVC pipe (#9) to determine if they are blocked. Clear any obstructions.
- 5. If your system is clear of blockages, but the solution does not flow, or if upon turning off the well pump the solution flows back through the tubing into the tank, check all unions and connections to assure they are tight and not leaking air. In a correctly fitted system, the solution should remain in both tubing locations when the well pump is turned off. Tighten connections as necessary.

Should these trouble shooting procedures not resolve the problem, contact Solutionex's Technical Service Department for assistance at (800) 842-4380.

ITEM	No. on Diagram(p.5)	PART NO.	PRICE	
Check Valve	1	SP-CHK	\$	8.95
Metering Valve	2	SP-MTR	\$	19.95
Adapter	3	SP-ADP	\$	1.95
2" Vinyl Tubing (6' length)	4	SP-TUBE	\$	2.95
Adapter With Injector Port	5	SP-INJ	\$	9.95
90° Elbow	6	SP-90L	\$	3.95
Adapter	7	SP-ADP	\$	1.95
2' PVC Feed Pipe	8	SP-PVC	\$	3.95
Foot Valve	10	SP-FTV	\$	8.95
Strainer	11	SP-STR	\$	6.95
Tank	12	SP-TNK	\$	69.95
Cover	N/A	SP-CVR	\$	19.95
Check Valve Assembly	1,2,3	SP-CVA	\$	25.00
Chemistry Feed Assembly	5,6,7,8,9,10,11	SP-CFA	\$	34.00

How To Obtain Spare Parts

TO ORDER PARTS, CALL (800) 842-4380

Prepayment required. Credit cards are accepted (Mastercard, Visa, American Express). An additional charge for shipping and handling will apply.

Replacement parts are not carried at the store level and must be ordered through us. Defective parts under warranty will be replaced at no charge. Simply return them to us along with your proof of purchase.

SprinkleRite Rust Prevention and Fertilization System Limited Warrantv

Solutionex[™] will provide parts to replace defective parts without charge for 12 months (1 year) from the date of original retail purchase by original purchaser and upon return of defective parts prior to shipment of replacement part. Copy of original reciept required as proof of purchase date.

- 1. What products are covered by this warranty? The Solutionex SprinkleRite Rust Prevention and Lawn Fertilization System
- 2. What is covered by this warrranty? Defects in material and workmanship which occur within the duration of the warranty period.
- 3. What is not covered under this warranty?
 - Implied warranties, including those of merchantability and fitness Α for a particular purpose are limited 12 months from the date of original purchase.
 - В Any incidental, indirect, or consequential loss, damage or expense that may result from any defect, failure or malfunction of the Solutionex[™] product.
 - С Any failure that results from an accident, abuse, neglect or failure to operate the system in accordance with the instructions provided in the owners manual, supplied with the product.

4. Responsibilities of the warrantor:

Repair or replace components that have failed within the duration of the warranty period. Shipping costs will be borne by the purchaser.

5. Responsibilities of purchaser:

Use reasonable care in operation and maintenance of the product as described in the owners manual. Use of chemicals in the system other than those specifically discussed in this manual is not recommended. Any such use will void the warranty.

Solutionex, 3986 Pembroke Rd., Hollywood, FL 33021 1-800-842-4380

Warranty