

# Reel Green

RG20

Instruction Manual for Operation & Maintenance



# Introduction

Thank you for purchasing a ReelGreen RG20 Traveling Sprinkler System. Please read this manual carefully before operation in order to become familiar with all components and their function. Safety is the main priority and failure to follow these instructions may cause serious injury. Neither ReelGreen nor BigSprinkler.com are to be responsible for machine failure or personal injury if these procedures and operation instructions are not followed.

## Caution

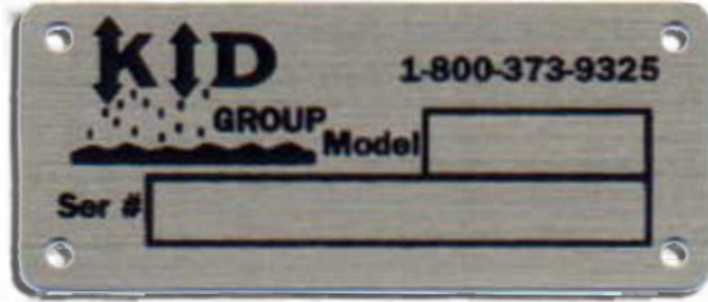
- Do not operate your ReelGreen traveler without a serious overview of this manual.
- Do Not move machine with the supply hose connected.
- Keep children and unauthorized people away from traveler.
- Never allow children access to use the traveler.



NO CHILDREN

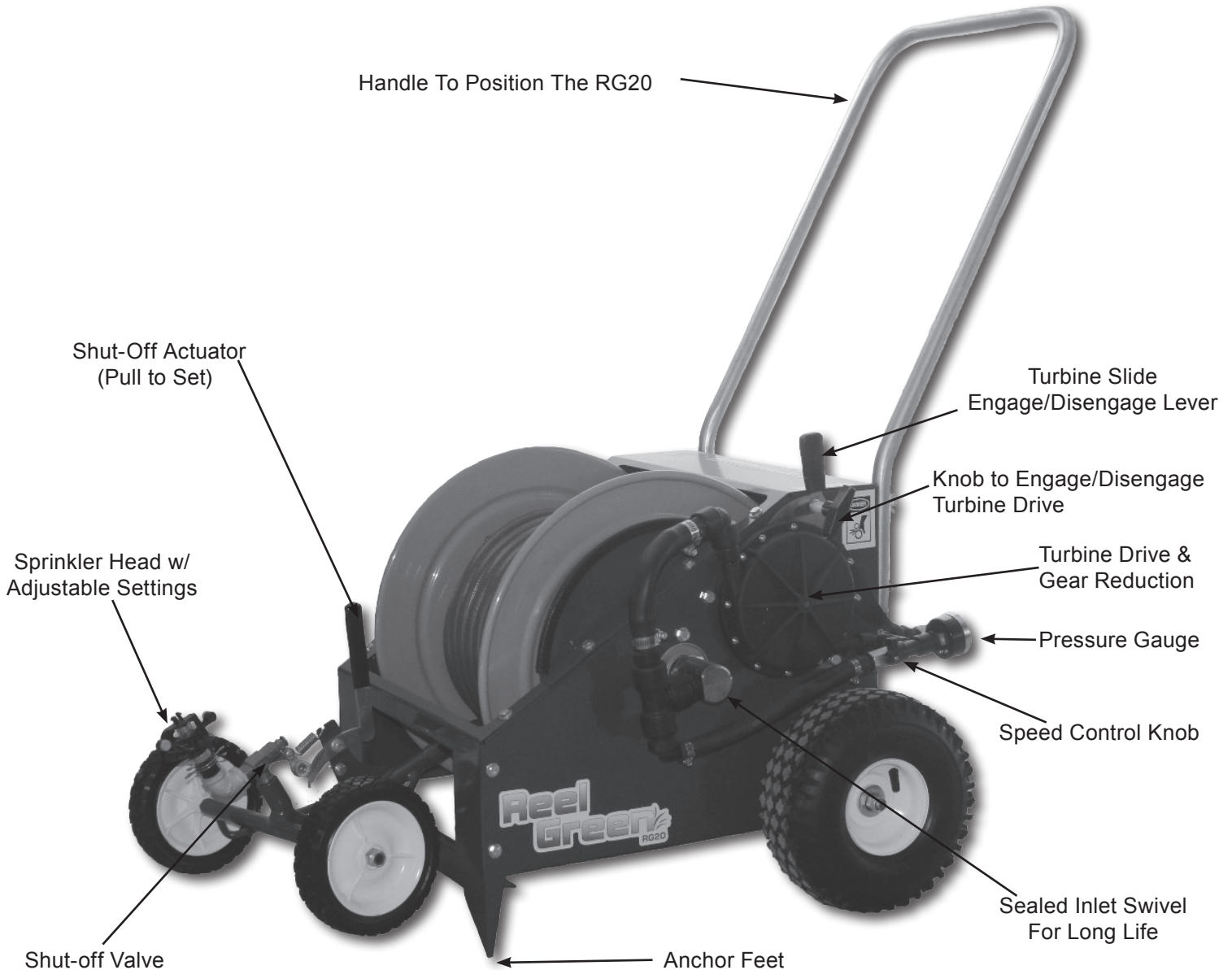
- **Use caution when disconnecting couplings**  
When the traveler shut-off valve activates, the supply hose remains pressurized at the end of the run. First, relieve the pressure with the relief valve, then disconnect the supply hose.
- **Use caution with the sprinkler heads**  
Pressurized water from the sprinkler head could cause serious damage to people or objects.
- **Use caution during transport**  
Travelers are not made for public transit. Do not exceed 7mph on flat roads, or 2 mph on steep inclines.
- **Never service the traveler when it is in operation**  
Before servicing, stop the traveler and disconnect the supply line. All safety guards and shields must be in place while operating the traveler.
- **Beware of power lines**  
Irrigation water should never contact power lines or any other power source. Never let any part of the traveler or any irrigation pipe get in contact with power source.

# Identification Data



The identification plate includes the model and serial number for your machine.

# Machine Controls & Components



# Conditions For Machine Operation

The RG20 is designed for clean water suitable for irrigation. The machine is not designed for water that includes large pieces of debris or foreign objects.

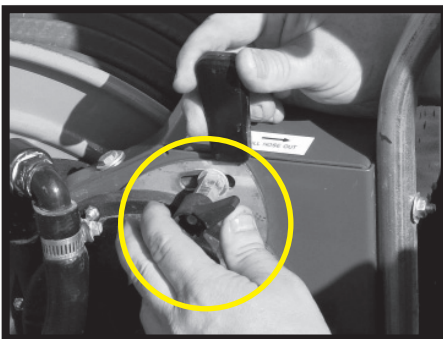
## Start-Up Procedure/Operation



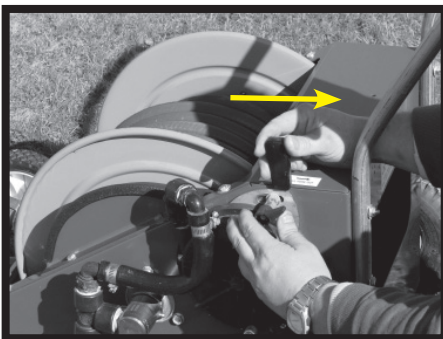
1) Push the machine to the desired location. Position the machine with the sprinkler cart facing the direction to be irrigated. Insure that the machine is sitting level in order for the tube to wrap properly. **IMPORTANT:** *Reel type traveling sprinklers should always be placed on level ground and always pull the hose out straight away from the machine as shown in Step 5. This will ensure that your machine will wrap correctly.*



2) Attach garden hose to the inlet as shown to the left. **IMPORTANT:** *Always make sure hose is free of any debris that may clog the inlet filter screen. Flush hose with water if necessary. Never move the machine with supply hose connected.*



3) Loosen turbine drive wing knob several turns so that the drive assembly is free to slide as shown in yellow circle to the left.



4) While holding the drive slide handle, slide the drive assembly towards you as shown in the image at left and re-tighten the drive wing knob so that it holds the entire drive assembly in the “disengaged” position. With drive in this position, the drive teeth are disengaged which allows the sprinkler cart and hose to be pulled out.

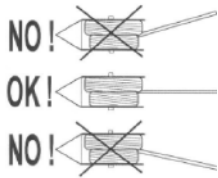
Image at right shows the drive slide handle in the “disengaged” position for hose pull out.



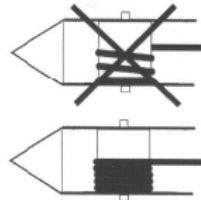


# Start-Up Procedure/Operation Continued

**\*\*Important:** Always pull cart out straight and tighten loose wraps before start



**ALWAYS PULL TUBE  
OUT STRAIGHT!**



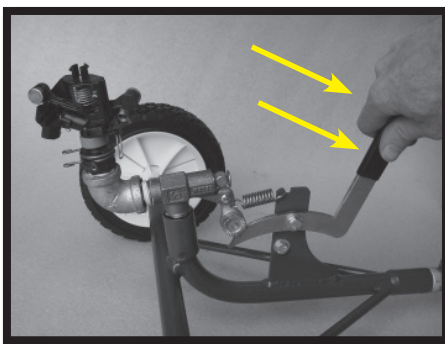
**KEEP WRAPS TIGHT!**



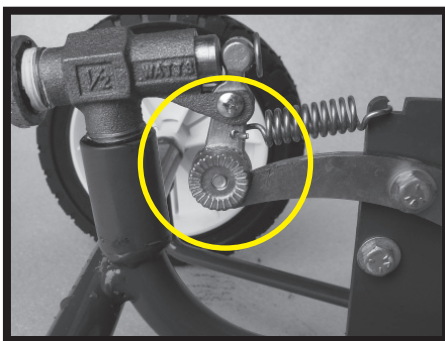
5) Cart and hose may now be pulled out in a straight line away from the machine. Set the cart down after hose has been pulled out.



6) Leave a wrap or two on the reel as shown so that the wrapping sequence starts correctly.

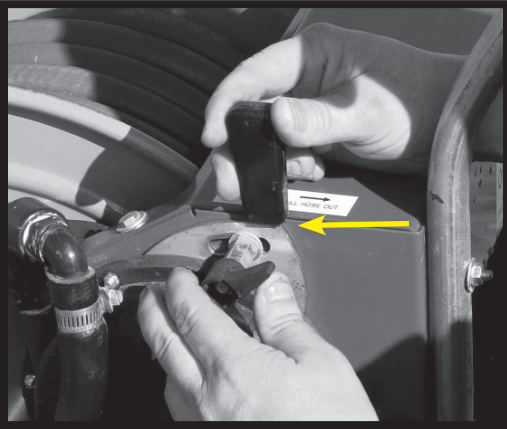


7) After cart and hose have been pulled out, you must set the shut off valve to the OPEN position to allow water through the system. Push the black handle on the shut off lever downward as shown.



8) This image shows the shut off valve set in the OPEN position and ready to operate.

## Start-Up Procedure/Operation Continued

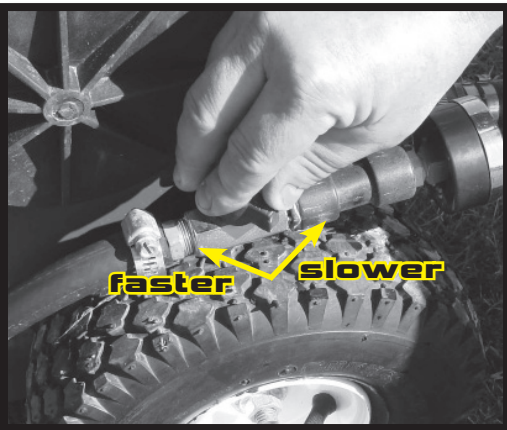


9) With cart and hose pulled out, proceed back to the unit and re-engage the drive assembly by again loosening the drive wing knob and sliding the drive handle back towards the sprinkler end of the machine as shown in left image. Once the drive slide handle is re-engaged, re-tighten the drive wing knob to hold drive assembly in the engaged position.

Do not over-engage the turbine; too much pressure causes unnecessary friction.



10) Turn on the water source to the RG20. The sprinkler equipped with the RG20 can be set to water a full circle pattern or any part of a circle. It is generally recommended to water a half circle pattern behind the cart, away from the direction of travel.

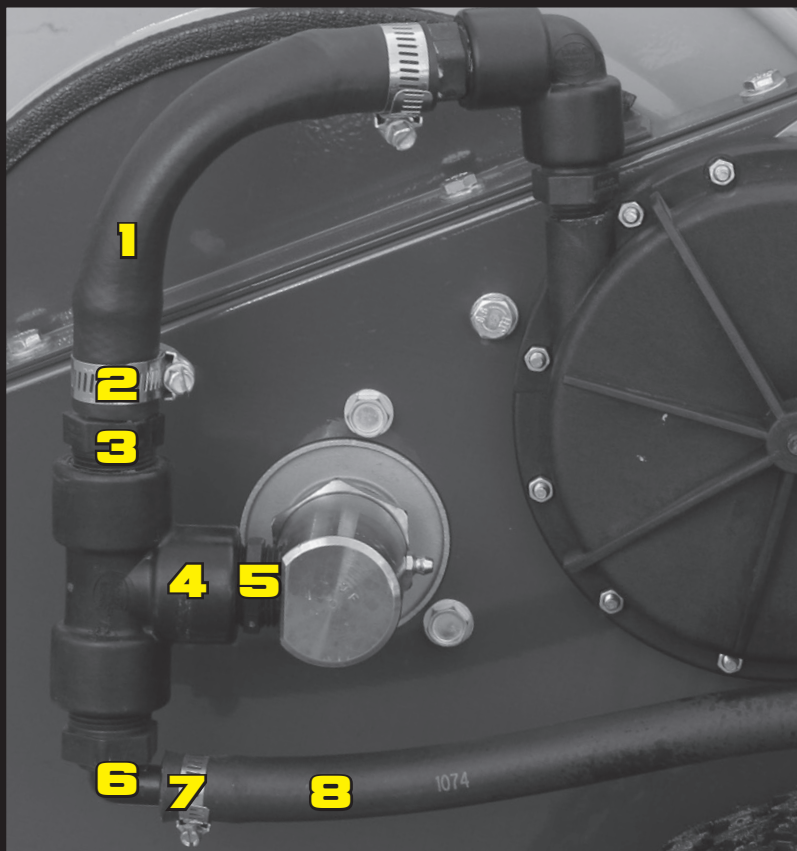


11) Adjust the speed of cart retraction by moving the bypass lever or speed control lever in the directions shown by the arrow. Closing this valve will increase retraction speed and opening the bypass valve will slow down the retraction speed



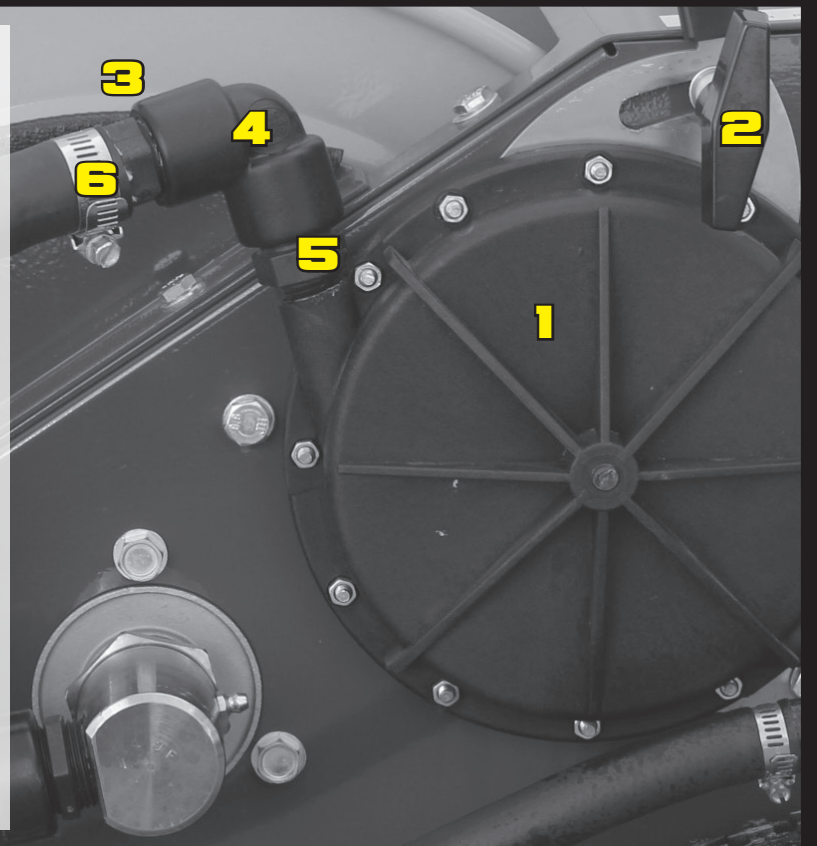
12) Once the speed is set, the RG20 will automatically roll the tube on the drum and stop at the end of the run utilizing the shut off valve.

# Parts Diagrams



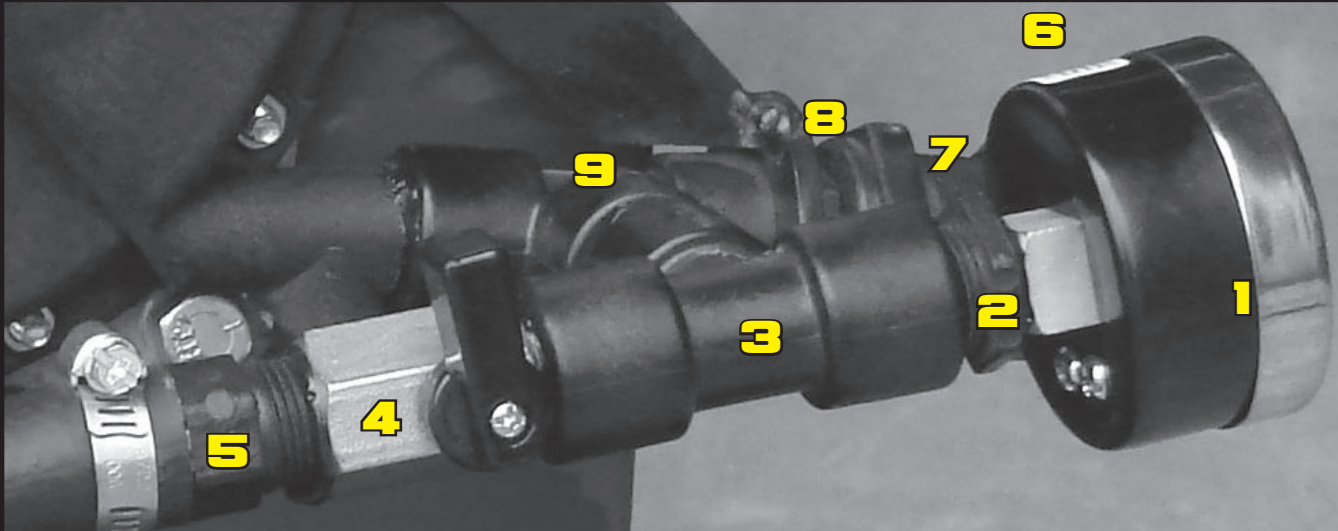
1. (3/4" Hose, 9<sup>1/4</sup>" Long)
2. 0176K (3/4" Hose Clamp)
3. 0169K
4. 0163K
5. 0171K
6. 0167K
7. (5/16" Hose Clamp)
8. (1/2" Hose, 9<sup>1/2</sup>" Long)

1. TUBAC20C (Turbine Drive Assembly-Complete)
2. (Knob 5/16")
3. 0168K
4. 0164K
5. 0172K
6. (1/2" Hose Clamp)
7. ORM10X2 (Turbine O-Ring) \*Not Shown
8. OR610X14X3 (Turbine Seal) \*Not Shown
9. GOR46250 (Turbine Cover Seal) \*Not Shown





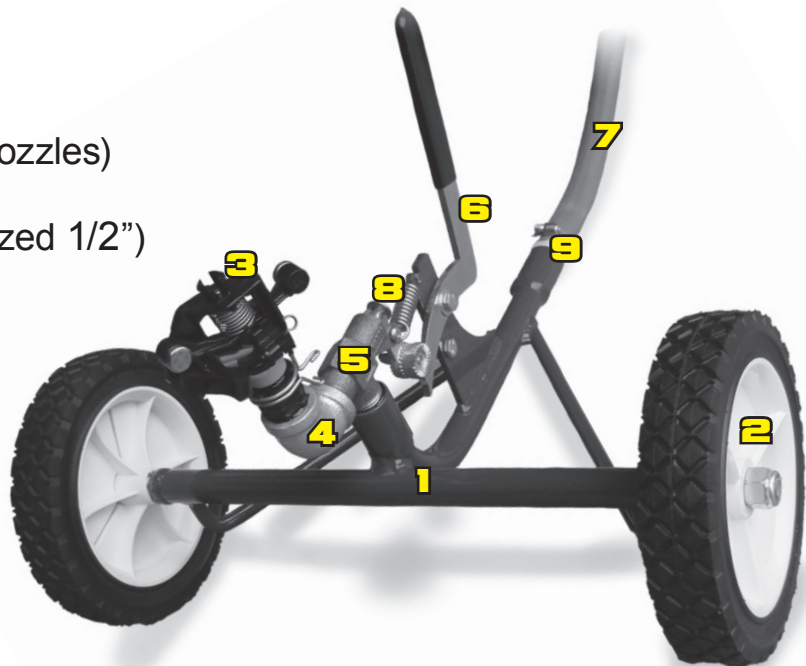
# Parts Diagrams



1. 0034K (100 PSI Back Mount Gauge)
2. 0161K
3. 0162K (Qty. 2)
4. 0174K
5. 0165K

6. 0059K (3/4" Swivel, Garden Hose Swivel)
7. 0058K (Filter Washer) \*Not Shown
8. 0160K
9. 0170K (3/8" Nipple)

1. CART20 (Cart Assembly-Complete)
2. 0115K (Wheel Assembly)
3. MB-08 (Sprinkler, 1/2" w/ Nozzles)
4. 050X90GE (Elbow, Galvanized 1/2")
5. 0149K (Valve, Shut-off)
6. 0156K (Handle, Shut-off)
7. 0145K (Hose, 5/8" x 100')
8. 0144K (Spring, Shut-off)
9. Clamp 5/8"





# Troubleshooting

## 1) PROBLEM: NO WATER AT THE SPRINKLER

### SOLUTION:

1. Make sure shut off valve on the sprinkler cart is open.
2. Potential blockage—clean inlet screen/sprinkler nozzle.

## 2) PROBLEM: MACHINE WILL NOT ROLL UP

### SOLUTION:

1. Make sure turbine is in the engaged or run position as shown in start up steps and drive teeth are making contact.
2. Turbine bypass valve (speed control valve) is opened too far. Close valve to increase speed.
3. Not enough pressure to initiate turbine drive.
4. Debris in inlet filter screen not allowing flow into the machine.

## 3) PROBLEM: MACHINE STOPPED DURING RETRACTION

### SOLUTION:

1. Water flow stopped or pressure has lowered during retraction, causing the turbine to stall. Simply turn the speed valve closed to start retraction once again and adjust speed as needed.
2. Clean debris from inlet filter screen.

# Maintenance Schedule

**Inlet Swivel Assembly:** Grease every 200 hours.

**Turbine Seals:** Replace turbine seals every 500 hours or once a season.  
Consult your dealer for information.

# Performance Chart

<b>Reel Green RG20 Performance Chart</b>			
<b>Inlet PSI</b>	<b>Gallons Per Minute</b>	<b>Wetted Length</b>	<b>Wetted Width</b>
30	3	125	64
40	4	138	76
50	5	140	82
60	6	143	86

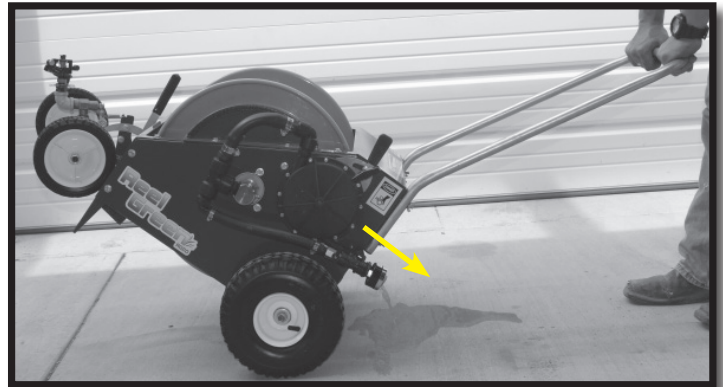
# Winterization



1. Remove hose clamp.
2. Separate the cart from the hose.
3. Open shut-off valve on the cart.
4. Allow both the hose and the cart to drain.
5. Reinstall hose to cart and retighten the clamp.



1. Hold machine handle and tilt machine back. Allow water to drain out of the inlet fitting.



# Options



## RG20 Air Blow Out Fitting

- For use with air compressor to winterize machine.



## RG20 Boost Pump Option

- 110v Booster kits to boost incoming pressures by 30 to 50 psi.
- Gas driven booster kits also available.
- Contact us at 800-373-9325 for details or visit [www.bigsprinkler.com](http://www.bigsprinkler.com)

# **BigSprinkler.com/ReelGreen**

## **Distributor, Dealer/Seller, Purchaser Agreement**

### **Limited Warranty and Remedy:**

#### **Warranty**

BigSprinkler.com, as distributor, warrants to the original purchaser only of the ReelGreen Irrigation Equipment described in the face hereof as of the date of the original invoice, that the equipment is merchantable and free from defects in material and workmanship.

This warranty does not apply to certain component parts used on ReelGreen equipment. Warranty shall be provided by the original manufacturer of these components. Such components include, but are not limited to tires and tubes, boost pump motors, PTO drive shafts, valves, and batteries.

#### **Remedy**

If BigSprinkler.com determines that the above warranty was breached with respect to any part or component provided by the manufacturer of ReelGreen equipment, (and if all conditions set forth below have been satisfied) then, BigSprinkler.com, will (at BigSprinkler.com's option) repair or provide purchaser replacement parts F.O.B. Yukon, OK. As follows:

All components of new ReelGreen system for 1 year from original equipment invoice, free of charge. BigSprinkler.com will repair or provide replacement polyethylene tube for any tube BigSprinkler.com determines has failed, due to defects in workmanship or materials for 3 years from the date of original invoice, free of charge.

All remedies provided herein are for parts only, no labor or freight allowance for return parts is implied.

This warranty extends only to the original purchaser of ReelGreen equipment purchased from BigSprinkler.com

#### **Conditions to Enforceability and Claims:**

Equipment has been maintained and operated within the guidelines outlined in ReelGreen owner's operation and maintenance manual.

Equipment warranty shall be considered void if any component or function of the equipment has been altered in any form other than what has been provided or intended by the original equipment manufacturer.

Any claim must be submitted on form provided by BigSprinkler.com in writing immediately and in no event longer than 20 days from occurrence.

Purchaser/Dealer must return all parts within 45 days of BigSprinkler.com's authorization date, that have been determined by BigSprinkler.com to be defective to the Purchaser/Dealer with Purchaser/Dealer being responsible for freight.

#### **Limitations:**

Neither BigSprinkler.com nor its affiliates shall be liable for any incidental or consequential damages (including but not limited to, damages for injury to the person, property or lost turf, crops or profits) by reason of any defect in the equipment or its manufacture, design, or function.