

# **OPERATOR'S MANUAL**

## **Model E100**

### **Serial Number 570,000+**

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# Introduction

## Thank you for purchasing a Kifco Water-Reel!

Please read this manual carefully to learn how to operate and service your Water-Reel properly before operating your machine for the first time. Failure to do so can result in personal injury and/or property damage.

If you have any problems or are unclear regarding any of the instructions contained herein, contact your local dealer or Kifco prior to operation.

Record the model & serial number of your machine in a safe location. Should you ever require product support assistance from our factory; the process will be much quicker if you have this information available.

This manual is a permanent part of your Water-Reel and should always be available for reference by the operator. This manual should remain with the Water-Reel at all times. Additional copies of this manual are available on our website at [www.kifco.com](http://www.kifco.com).

## Measurements

In this manual all measurements are in U.S. SAE units unless otherwise noted.

## Warranty

A standard Kifco Water-Reel warranty is provided. Please see the specific warranty statement in this manual for full details. Neither Kifco Dealers nor their representatives are authorized to make exceptions to any warranty policy. Any deviations from the standard warranty require written authorization from Kifco, Inc.

The warranty specifically excludes:

- Alterations or modifications to any part of your new machine not previously approved by Kifco in writing.
- Irrigation tube that is longer, larger in diameter, or made from non-approved materials will void the warranty on the entire machine.
- Damage caused by normal wear, accident, lack of reasonable care and maintenance, neglect or abuse.
- Transportation, mailing, service call, diagnostic costs.
- Labor for repairs is also excluded unless unusual circumstances exist and then only if pre-approved.

**Current Parts & Operator's Manuals are always available online at [www.kifco.com](http://www.kifco.com).**

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# Safety

## Owner's Responsibilities

The owner is responsible for the safe operation of this product. The important safeguards and instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense and caution should be used at all times by all operators to prevent damage or injury to the operator.

The owner is responsible for:

- Reading and understanding this manual. If any instructions remain unclear contact your local dealer or Kifco for further instructions.
- Operating the machine strictly according to prescribed limitations.
- Properly training others who may be permitted to operate the machine.
- Heed the rules of safety, including but not limited to those in these instructions.
- Exercising good judgment relating to safe operation and safe conduct by operators and spectators whether invited or not.
- Always bringing the safety decals and placards on the machine to the attention of operators and spectators.
- **Keeping all shields and guards in place!**

## Read and Heed The Special Messages!

This safety alert symbol is used to indicate messages related to safety. When you see this safety symbol, obey the safety message to avoid personal injury, property damage, or both.



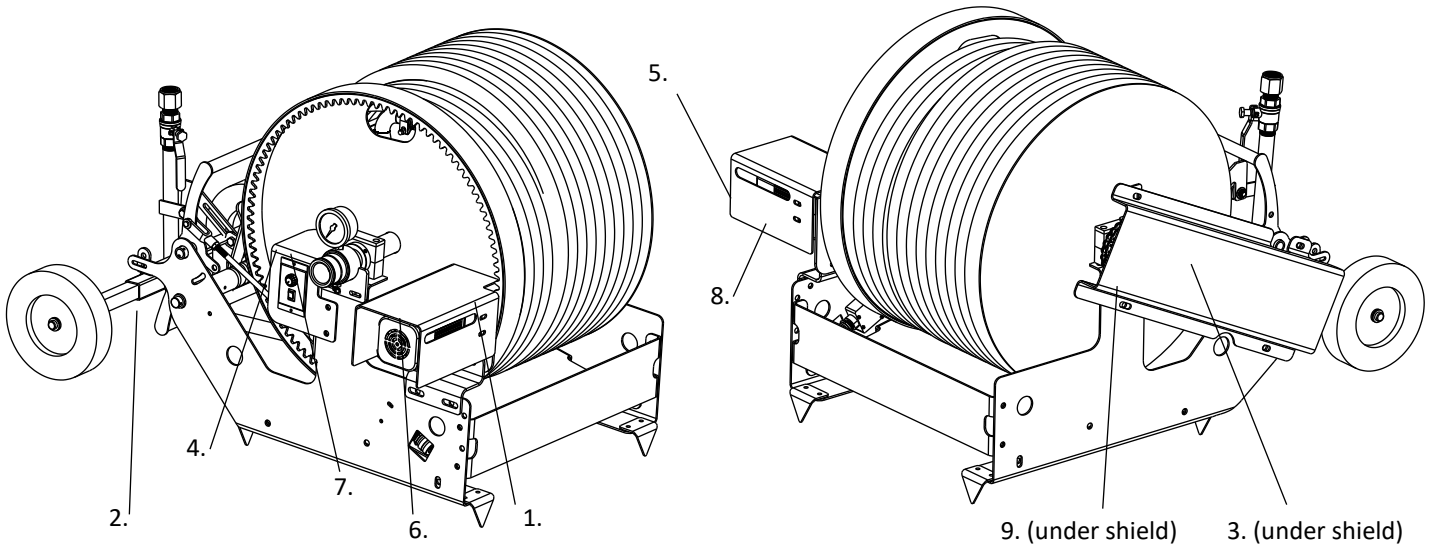
A **“Caution”** message in this manual or on a machine placard means that you could be injured and/or equipment or property may be damaged if you do not follow instructions.

A **“Warning”** message in this manual or on a machine placard means that a hazard exists that could result in severe personal injury or death.

A **“Danger”** message in this manual or on a machine placard means that a hazard exists that will result in severe personal injury or death.

# Safety Decals

All Water Reels are supplied with a variety of safety decals. These decals must be properly maintained, including replacing any that become illegible or are missing. When replacing safety decals, make sure to install them into the correct location as outlined below.



1.



6.



2.



7.



3.



8.



4.



5.



9.



# **Safety Precautions**

## **Learn To Be a Safe Operator**

### **Read This Manual**

- Know the controls on the Water-Reel and how to stop the water supply.
- Do not allow anyone to operate this Water-Reel without proper instruction.

### **General Precautions**

- **Never attempt to service the Water-Reel while it is operating.**
- **Never attempt to make adjustments to the equipment while it is operating.**
- Perform recommended maintenance at suggested intervals.

### **Protect Children**

- Do NOT allow children to operate the Water-Reel.
- Keep children away while operating the Water-Reel.
- Do not allow children to operate the tractor that is positioning the Water-Reel.
- Never allow children to climb or ride on the machine at any time.

### **Use Caution Around Pressurized Lines**

- For your own protection, always take care when working with or around pressurized equipment. Shut off the unit and water supply before working with any components. This includes the supply lines, machine or any related equipment.
- Be sure the pressure is relieved from any supply line before it is disconnected.
- When the automatic sprinkler shut-off is used, pressurized water may be trapped in the system tube.
- Never service the equipment while it is pressurized or in operation.



### **Stay Away from Operating Sprinklers**

- Stay away and keep others away from the sprinkler head during operation. Pressurized water from a sprinkler can inflict serious injury to bystanders.

## **Safety Precautions**

### **Learn To Be a Safe Operator**

#### **Keep Hands and Clothing Away**

- Do not reach into any part of the Water-Reel while it is in operation.
- All operators and spectators should keep a safe distance from all moving parts during operation.



#### **Keep All Guards and Shields in Place**

- Never Operate this Machine with Safety Guards Removed!
- Should a shield or guard become damaged or lost, replace it prior to operation.

#### **Electric Shock Hazard**

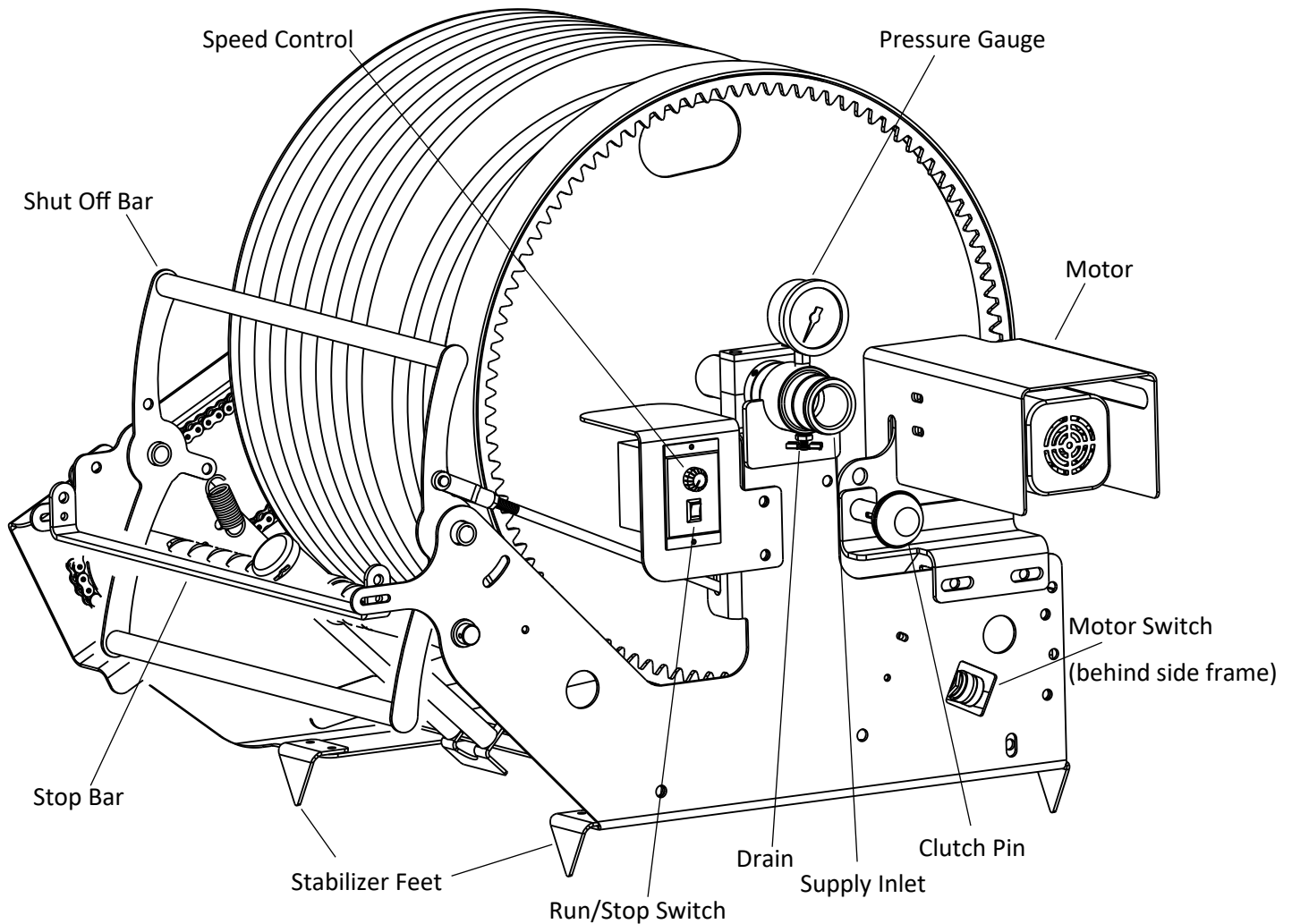
- Always connect this unit to a grounded outlet equipped with a ground fault circuit interruption device (GFCI).
- Before installing this unit, have a licensed or certified electrician inspect the outlet to be sure the outlet is correctly grounded.
- Do not remove or modify the round ground prong on the power cord plug or use an adapter (cheater plug) that eliminates the ground prong. A shock hazard is created and serious injury can result.
- Do not plug in power cord when wet or while standing on damp/wet ground.
- Do not use an extension cord to power your Water-Reel.
- Do not operate if power cord is damaged or compromised.
- Do not attempt to service the Water-Reel while it is connected to an electrical power supply.



#### **Stay Away From Power Lines**

- Avoid letting water contact power lines. Be careful not to contact power lines with irrigation pipe or mechanical equipment while operating or transporting you Water-Reel.

# E100 Components



**Shut Off Bar** - Controls the motor shut off at the end of an irrigation run or in case of tube mis-wrap

**Speed Control**– Controls the retraction speed of the gun cart

**Pressure Gauge** - Displays inlet pressure

**Motor** - Electric 110V Motor

**Motor Switch** - Controls power to the motor while switch is in “run” position

**Clutch Pin**- Engages the pinion gear into place to drive, and away from drive ring gear for pull out

**Supply Inlet** - Used to attach the supply hose to the machine

**Drain** - Used to relieve pressure from the supply hose and to winterize

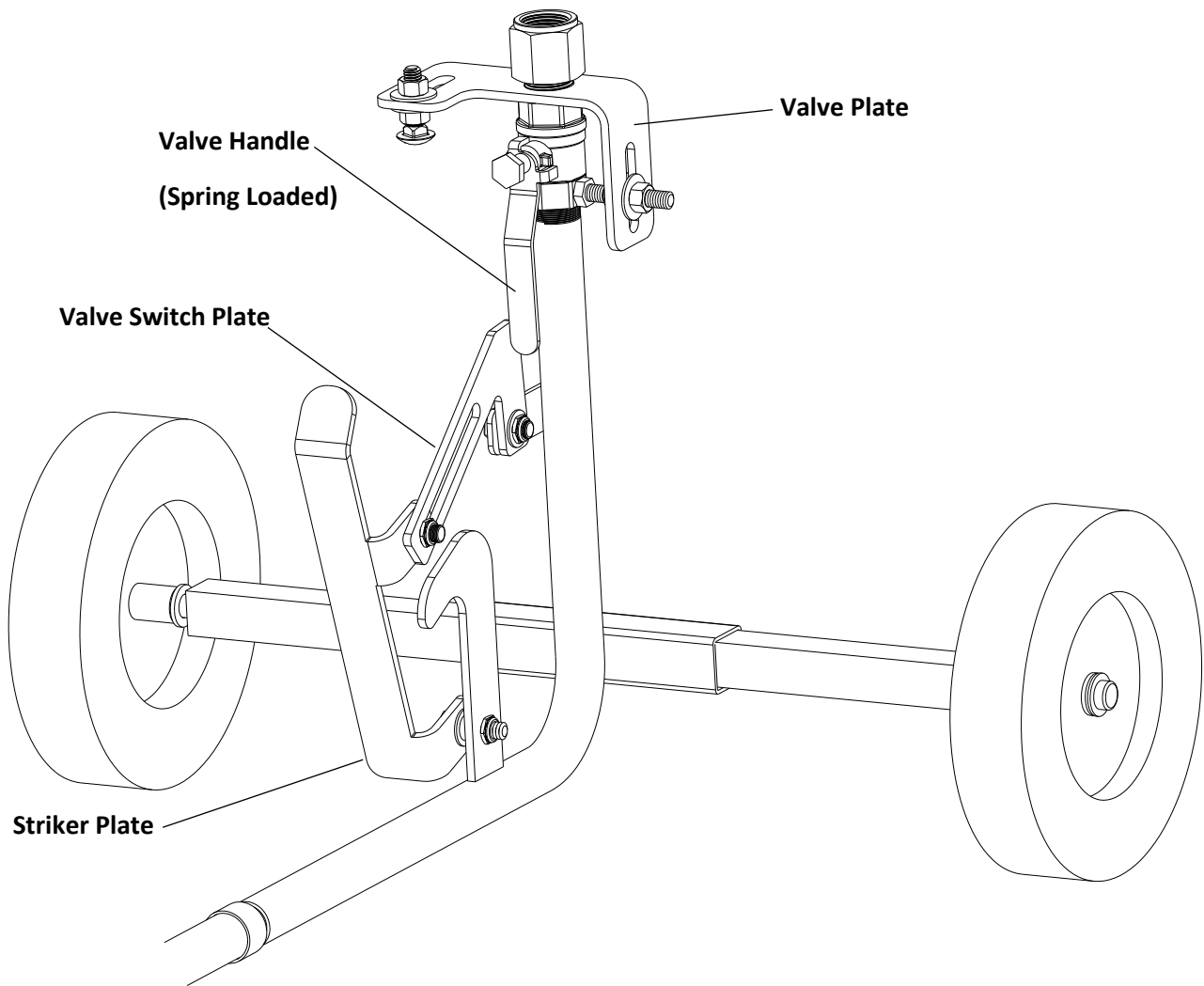
**Run/Stop Switch** - Controls power to the motor

**Stabilizer Feet** - Secures base to the surface of the ground.

**Stop Bar** - Engages the gun cart upon its arrival and shuts water off the sprinkler



# Gun Cart Components



**Valve Handle** - Turns water off to sprinkler after irrigation run

**Striker Plate** - Engages Shut Off Bar on reel to shut machine motor off & engage Valve Switch Plate

**Valve Switch Plate** - Engages the Valve Handle to turn water off

**Valve Plate** - Ensures that the Valve Handle closes in the correct position after irrigation run

## Handling the Polyethylene Tube

The polyethylene irrigation tube is a durable product that will operate reliably for many years if handled properly and given a reasonable amount of care.

Medium Density Polyethylene is a semi-rigid product that retains its shape when it is not pressurized but can also be wound on a drum or spool without damage. This characteristic makes it feasible to pump fluid through it while it is rolled up on a reel.

A few simple precautions need to be observed to prevent damaging the tube when operating your Water-Reel.

1. **When starting a new Water-Reel for the first time, you must pull the tube all the way out in order to correctly tighten the new tube on the spool. It is also important to follow the timing Instructions on Pages 32-33 of this manual.**
2. **Never transport the Water-Reel with the Pawl Disengage Rod in the up position! The tubing will become loose and tangled.** Do not attempt to operate your Water-Reel if there are any coils of tube that are loose or misplaced. If loose coils of tube are noticed, they must be tightened by rotating the spool by hand. If this is not possible, pull all of the tube out before attempting to rewind the tube.
3. Never try to move or relocate the machine if the tube is not fully rewound onto the machine.
4. Never pull the tube off the machine other than by pulling on the sprinkler cart (straight out from the machine).
5. Never run over the tube with any kind of vehicle and avoid pinching or pulling the tube around objects. Never bend the tube sharper than 25 times the inner diameter of the tube (See page 12).
6. If the tube is frequently pulled out only a portion of its complete length the tube remaining on the drum will become loose. Occasionally it will be necessary to pull all the tube off the drum to tighten the remaining coils.

Be careful when operating other equipment near the tube. Make sure the tube doesn't get gouged or punctured.

**REMEMBER, polyethylene tube is semi-rigid and subject to being kinked. Those foregoing precautions will reduce the possibility of kinking or damaging your tube. Throughout the irrigation industry the words 'tube' and 'hose' are used interchangeably in connection with hard hose traveling machines.**

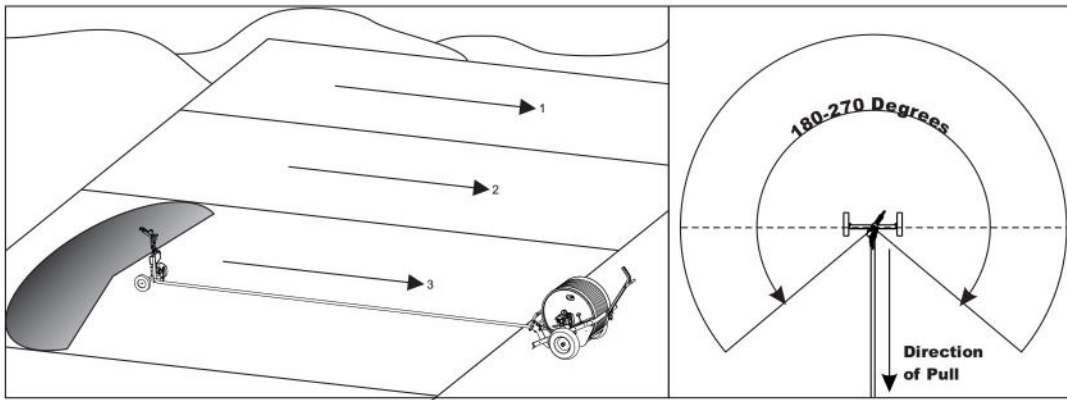
## E100 Water-Reel Start-Up & Operation

The success of the Water-Reel irrigation system depends a great deal on the operator's understanding of the proper pull out and start up procedure. Do not attempt to operate this Water-Reel until you read and understand the preceding section titled "Handling the Polyethylene Tube"!

Decide on the proper nozzle size to be used for the irrigation run which thus will also determine the irrigation lane spacing that will be needed (see page 15 for sprinkler performance).

Set the desired arc to be used on the sprinkler gun.

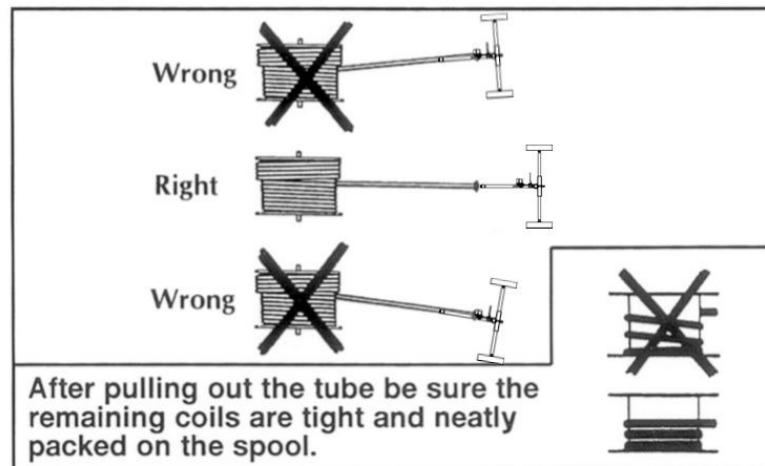
NOTE: Arc settings where the sprinkler never distributes water forward of the gun cart (towards pull), could create undesired tracking results. This is caused by the continuous thrust of the sprinkler, which pushes the tube towards the Water-Reel. It is recommended that the arc be set to create some tension on the tube greater than 180°).



Note: Your Kifco Water-Reel is equipped to irrigate on a gradual arc if necessary. Arced irrigation can only be performed after the first 25% of the tube is pulled out straight from the machine and then the gradual arc cannot exceed 90 degrees over the remaining 75%. Depending on the soil or vegetation the gun cart may or may not follow the arc back to the machine. Higher friction (furrows, tall grass) will greatly assist with the gun cart tracking the arc.

Failure to observe this limitation can also place an excessive side load on the Level-Wind mechanism which could result in equipment failure and/or tube damage.

**The gun/tube must be pulled straight for at least 25% of the tube length.**



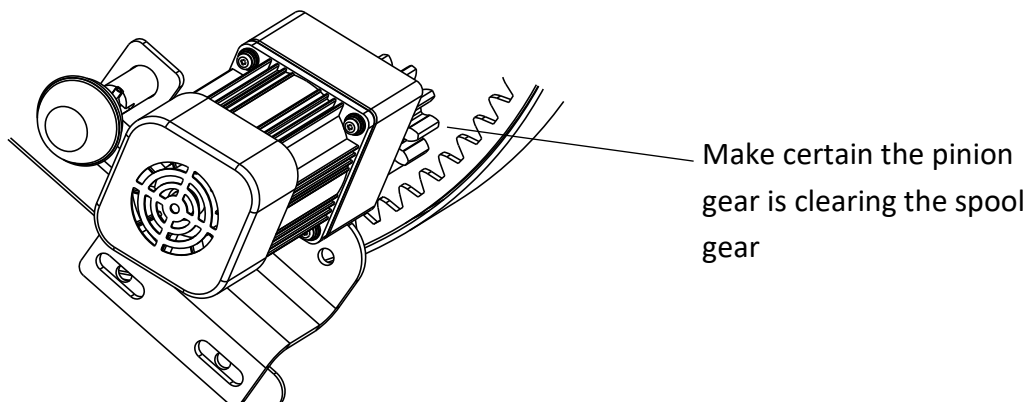
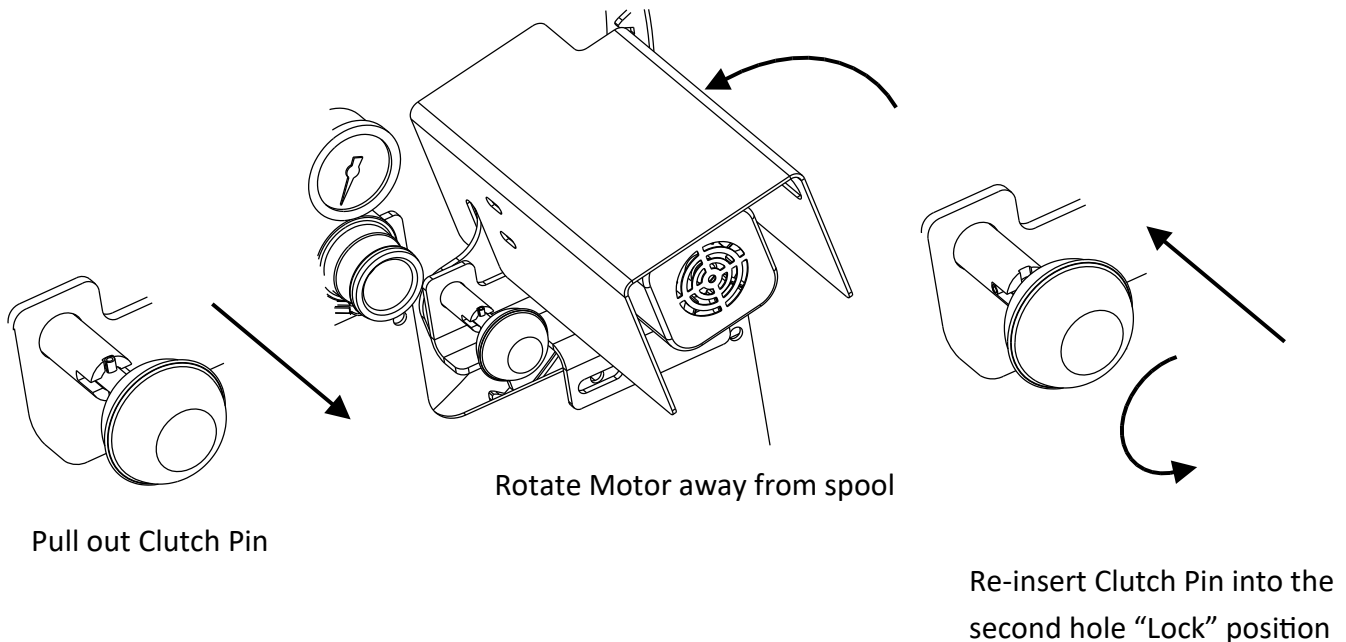
## E100 Water-Reel Start-Up & Operation

Set your Water-Reel into position with the Gun Cart towards the run to be irrigated. Be especially careful to have the machine square and in good alignment with the irrigation path.

Connect the power cord on the Water-Reel to a grounded outlet equipped with a ground fault circuit interruption device (GFCI). Do not use extension cords!

With the Motor Switch in the STOP position, attach the water supply hose to the water source and Water-Reel to confirm that all lines reach and the Water-Reel is set in the proper place. Do not turn on the water.

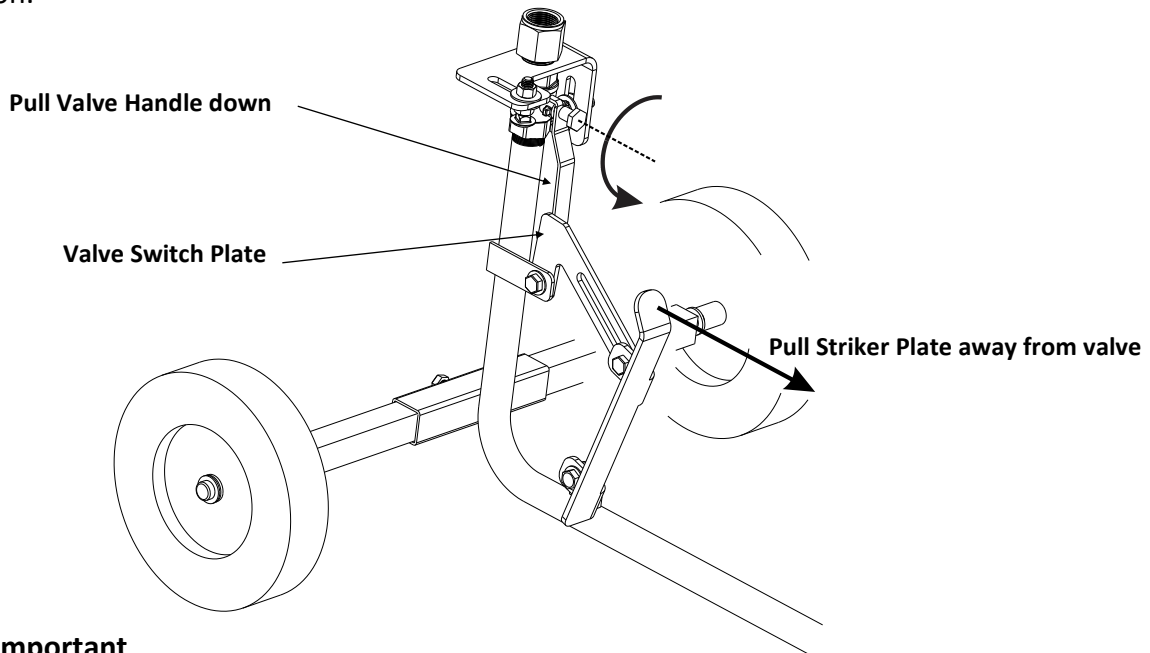
Disengage the Motor Drive by pulling the pin out and rotating the motor away from the spool edge. Push the pin back into locking position once disengaged.



Pull the Gun Cart out the desired distance. Pull the tube out slowly (do not exceed 3 mph) and avoid sudden stops and erratic movement during pull out. Tighten the remaining tube on the spool by rotating spool and packing coils together.

## E100 Water-Reel Start-Up & Operation

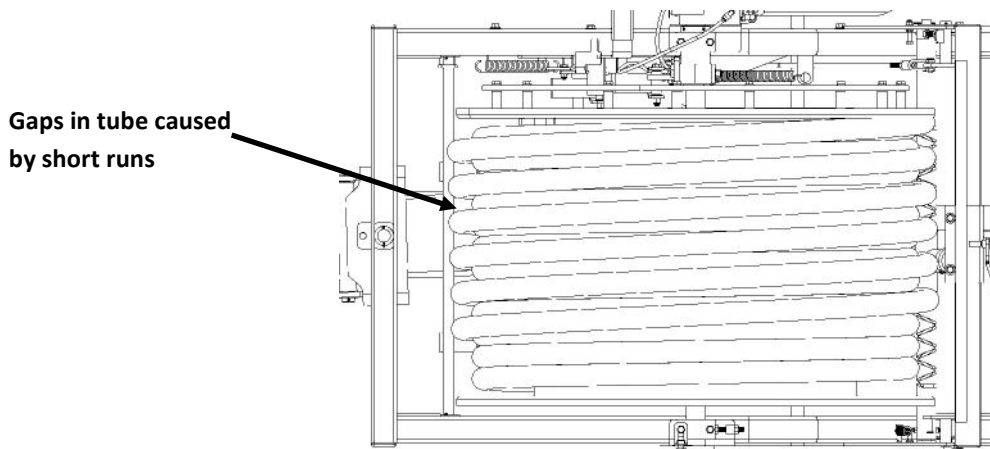
Once the Gun Cart is pulled to the desired position: firmly pull down on the Valve Handle while simultaneously pulling the Striker Plate away from the valve. Once the Valve Switch Plate has fully contacted the Valve Handle and has secured it; release the Striker Plate and the Gun Cart will be ready for operation.



### **Important**

When using the automatic water shutoff feature, be sure the water can be shut off automatically without damaging the water supply or the Water-Reel! Stopping the flow of water can damage a pump or water lines and excessive pressure can be created. A qualified person should confirm if you could safely utilize the automatic water shut-off.

**IMPORTANT:** If the standard irrigation run does not require the use of 100% of the tube on the Water-Reel; it will be necessary to occasionally pull the entire length of tube off of the Water-Reel and retract the tube under pressure to ensure the concentric shape of the tube. During short runs of the Water-Reel, the remaining tube on the spool will tend to gradually loosen. Over time, gaps in the tube on the spool will create Level Wind to tube mis-alignment causing the machine to become out of time or the possibility of the tube mis-wrapping causing damage to the Water-Reel and the tube. This can be corrected by making a full run (pull 100% of the tube out) occasionally.



## E100 Water-Reel Start-Up & Operation

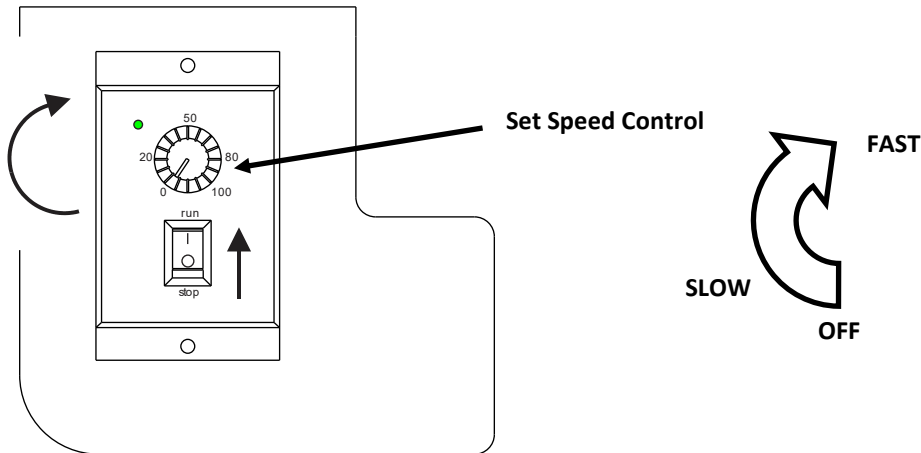
Engage the Motor Drive by pulling the pin out and rotating the motor. Push the pin back into locking position once engaged.

Turn on the water supply.

Turn the Motor Switch to the RUN position.

Wait for all of the air to be purged from the system and for the sprinkler to operate smoothly. Confirm the sprinkler is operating as expected and in the desired arc.

Set the Speed Control to the desired retraction speed.



When the Gun Cart completes the irrigation run, the striker plate will first shut off the water to the sprinkler then continue on and contact the Shut Off Bar. The retraction of the tube will stop.

With the irrigation run complete, turn the Motor Switch to the STOP position.

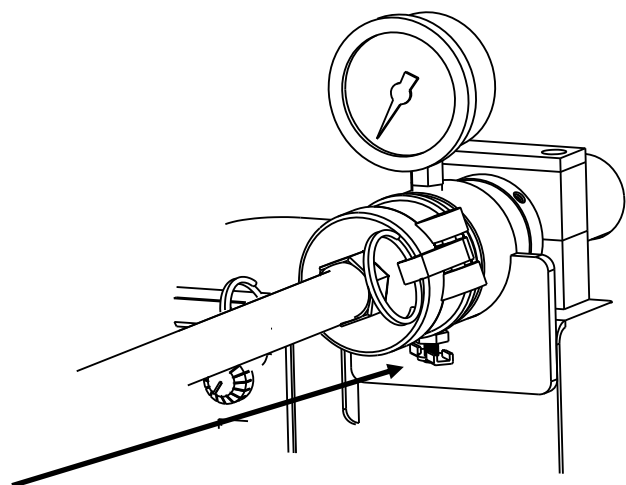
Turn off the water supply.

Open the drain under the entry fitting to relieve pressure. Disconnect the water supply hose.

Disconnect the power cord from the outlet.



**Important**  
**Open Drain to relieve pressure on Supply**  
**Hose after turning off water supply**



**Open Drain under Inlet to relieve water**  
**pressure after machine shutdown**

# Water Application Rate & Travel Speed

## Depth Of Water Applied:

The depth of water applied by the Water-Reel is regulated by the retraction speed (speed the sprinkler is moving over the ground). It is also affected by the amount of water being discharged by the sprinkler head. The sprinkler nozzle size and the water pressure determine the amount of discharged water. These two factors are determined by the available water and the capability of the water pump at the water supply. The selection of the sprinkler nozzle needs to be made based on the water supply and pump performance.

## Travel Speed Settings - Using the Performance Guide:

Example: With a Sime Silver sprinkler, determine the inlet pressure, speed settings and sprinkler nozzle size required to apply 0.35 - 0.37 inches of water. (See Illustration)

Note: The inlet PSI is the pressure reading while the machine is running and the sprinkler is operating. If the pressure drops while running, use the chart to determine the performance at the new inlet pressure. If the pressure drops below the lowest inlet pressure shown, consider using a smaller size nozzle. (Inlet PSI is always read at the Water Reel )


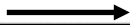
As shown below, a variety of settings can accomplish 0.03 - 0.44 inches of water application.

\*With a .4mm nozzle and an inlet PSI of 46; 0.11" can be applied at a rate of 50 ft. per hour.

\*With a .4mm nozzle and an inlet PSI of 61; 0.20" can be applied at a rate of 30 ft. per hour. Example shown below

\* With a .6mm nozzle and an inlet PSI of 56; 0.08" can be applied at a rate of 160 ft. per hour.

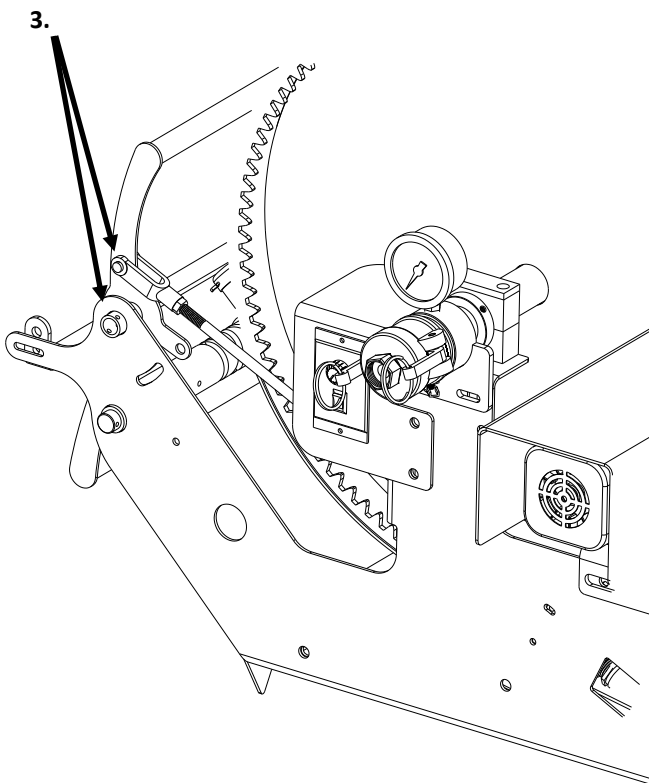
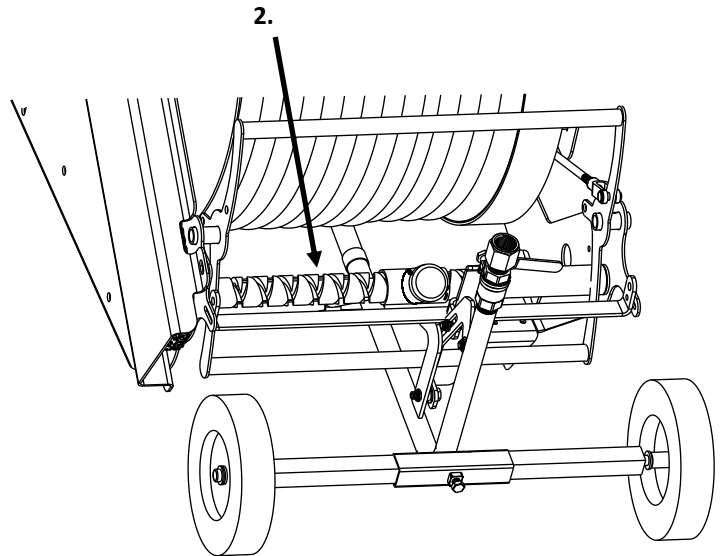
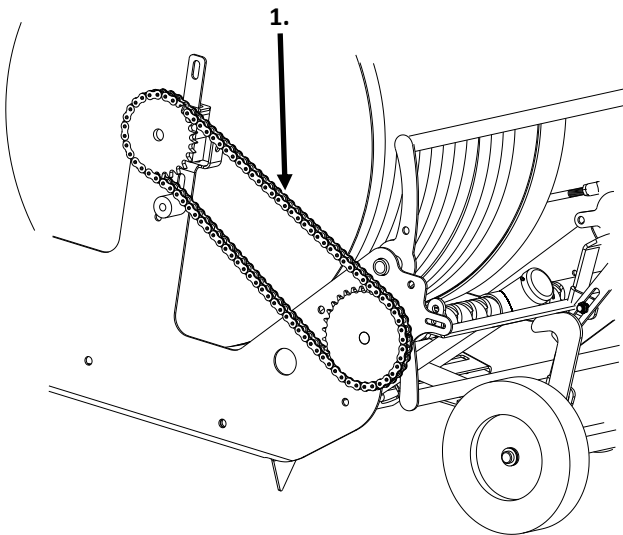
Variances with inlet pressures and nozzle sizes will give different application speed rates and irrigated areas.

		MODEL E		100G	X	180	PERFORMANCE								Part # 52100190	
  Model E100 X 180' SIME Silver  	Nozzle size	Sprinkler			Irrigated Width 80% Wetted Diameter			Inlet PSI	Travel Speed - Feet Per Hour							
		PSI	GPM	DIA	Width		Length		30	50	80	110	140	160		
		Depth of Application (Inches)														
	4mm	22	3	72	58	X	209	23	0.17	0.10	0.06	0.05	0.04	0.03		
	4mm	44	4	85	68	X	214	46	0.19	0.11	0.07	0.05	0.04	0.04		
	4mm	58	5	98	78	X	219	61	0.20	0.12	0.08	0.06	0.04	0.04		
	Area covered may vary depending on wind conditions, field dimensions & use of different sprinklers. Specifications are subject to change without notice.	5mm	44	7	92	73	X	217	50	0.31	0.18	0.11	0.08	0.07	0.06	
5mm		58	8	105	84	X	222	66	0.32	0.19	0.12	0.09	0.07	0.06		
6mm		44	10	98	78	X	219	56	0.42	0.25	0.16	0.12	0.09	0.08		
6mm		58	12	108	86	X	223	73	0.44	0.26	0.17	0.12	0.09	0.08		
Part #52100190				Hours for Full Run:				6.0	3.6	2.3	1.6	1.3	1.1			

# Maintenance & Repair

Maintenance Procedures: Inspect and perform any maintenance procedure after 100 hours of use.

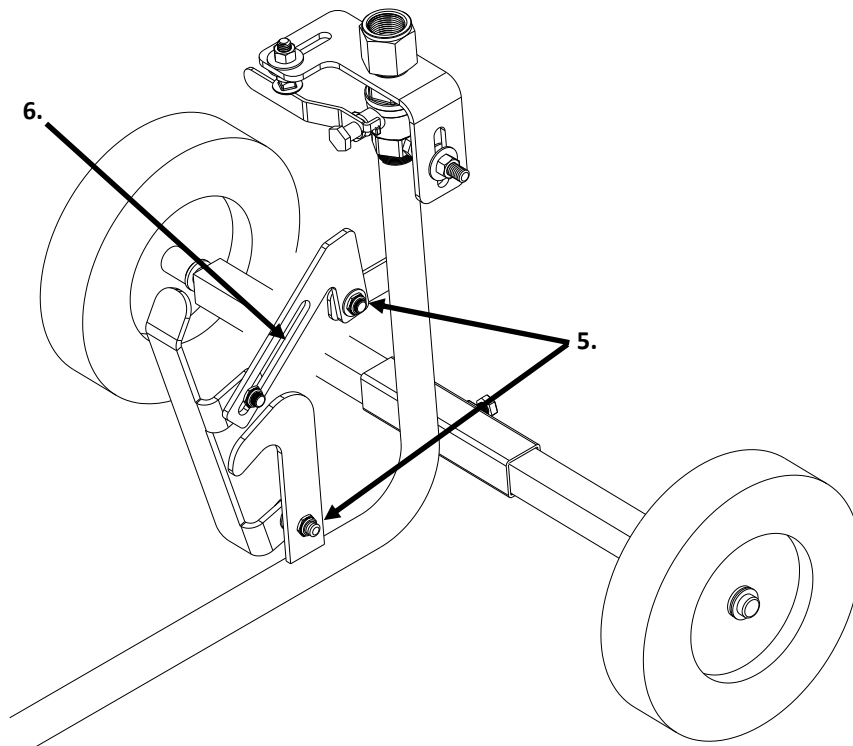
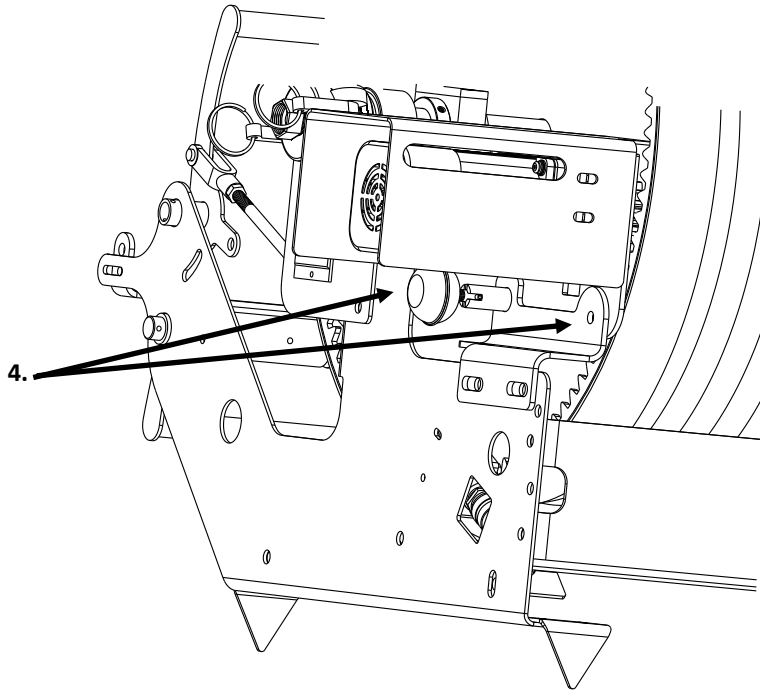
1. Level Wind Chain - Oil periodically
2. Level Wind Screw - Check for excessive wear and grease Level Wind Screw
3. Shut Off Bar & Linkage - Grease if necessary





## Maintenance & Repair

4. Motor Disengage Pin & Motor pivot point- Grease if necessary
5. Oil both the pivot areas of the Striker Plate & the Valve Switch Plate
6. Grease the slide area of the Valve Switch Plate



# Polyethylene Tube Repair

Tube menders can be purchased from your Kifco Dealer



**Warning!** Installing fittings or repairing polyethylene tube used on your Water-Reel is hazardous! The tube has a memory from being coiled on a reel and will try to coil back up if the tube is loosened from one end or cut in two. The condition possesses a serious hazard to person and/or property. The tube must be restrained any time there is a loose end!

## Polyethylene Tube Repair

Screw-in menders are an excellent alternative to butt-fusion welding for the repair of polyethylene tube. The compact design allows a mender to be wound onto the spool without damaging itself or the adjacent coils of tube. They can be installed in the field and the tube can be put into service immediately after the repair is made. The menders are designed to be fitted at ambient temperature. Never try to apply heat to assist installation. Menders must be installed straight and concentric with the tube to prevent premature failure.

### Installation Instructions

#### Step 1:



Cut the tube on either side of the damaged area. Make good, straight cuts. Use a block of wood or soft hammer to tap the collar fully on to the end of the tube.

#### Step 2:



Chamfer the tube internally with a knife or coarse file so that the end of the screw-in mender will enter the tube.

#### Step 3:



**Important:** Please note the mender threads are different on each end. One is left hand and one is right hand. Screw the mender about 2/3rds into the end of the tube using a wrench on the center knurled shoulder. Then unscrew it. Repeat the procedure for the other end. Watch for the left hand thread.

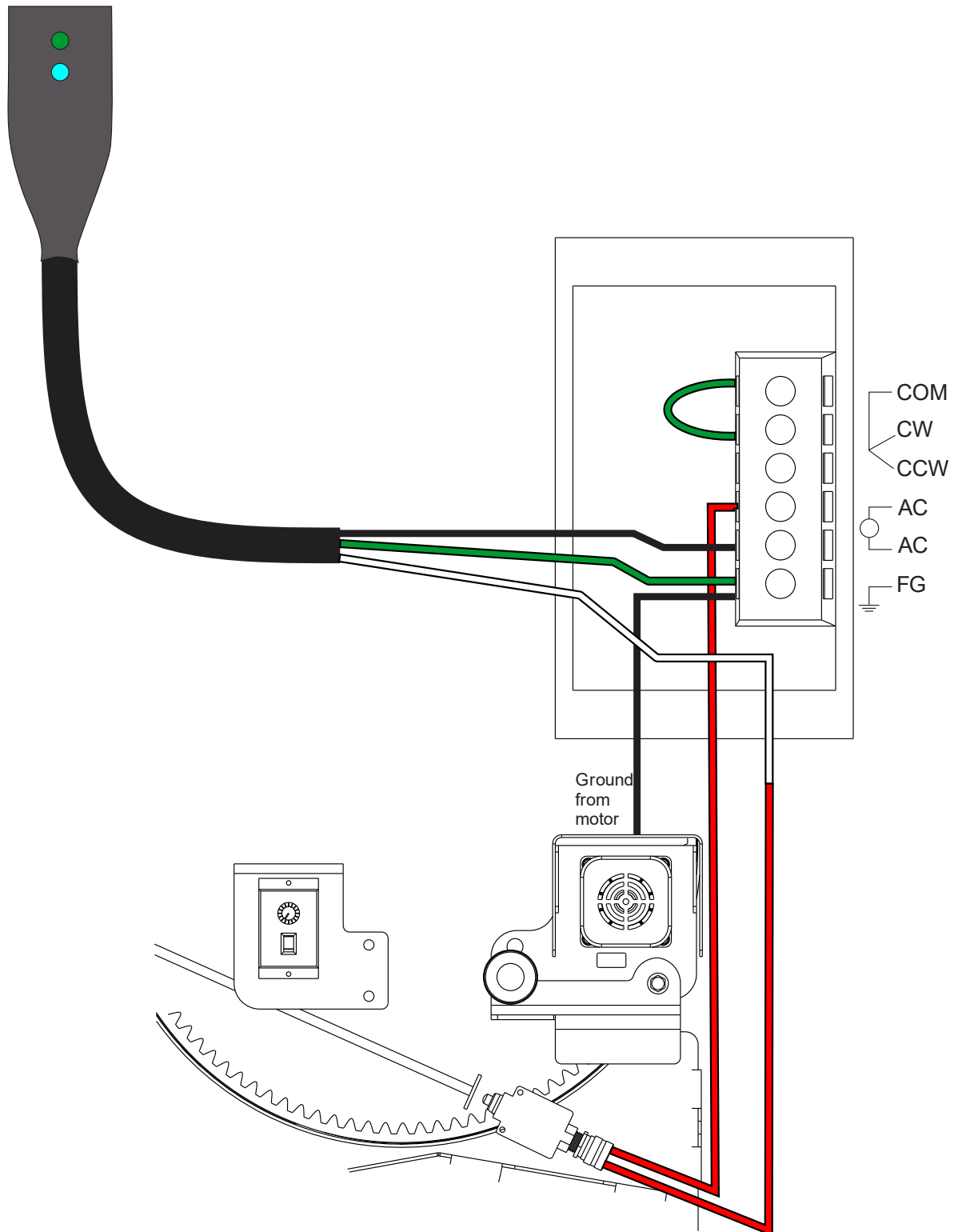
#### Step 4:



Now start the mender in both ends simultaneously. As it screws in, it will draw both ends of the tube to the center. This time, screw it all the way to the shoulder. The tube should now be ready to go immediately back into service.

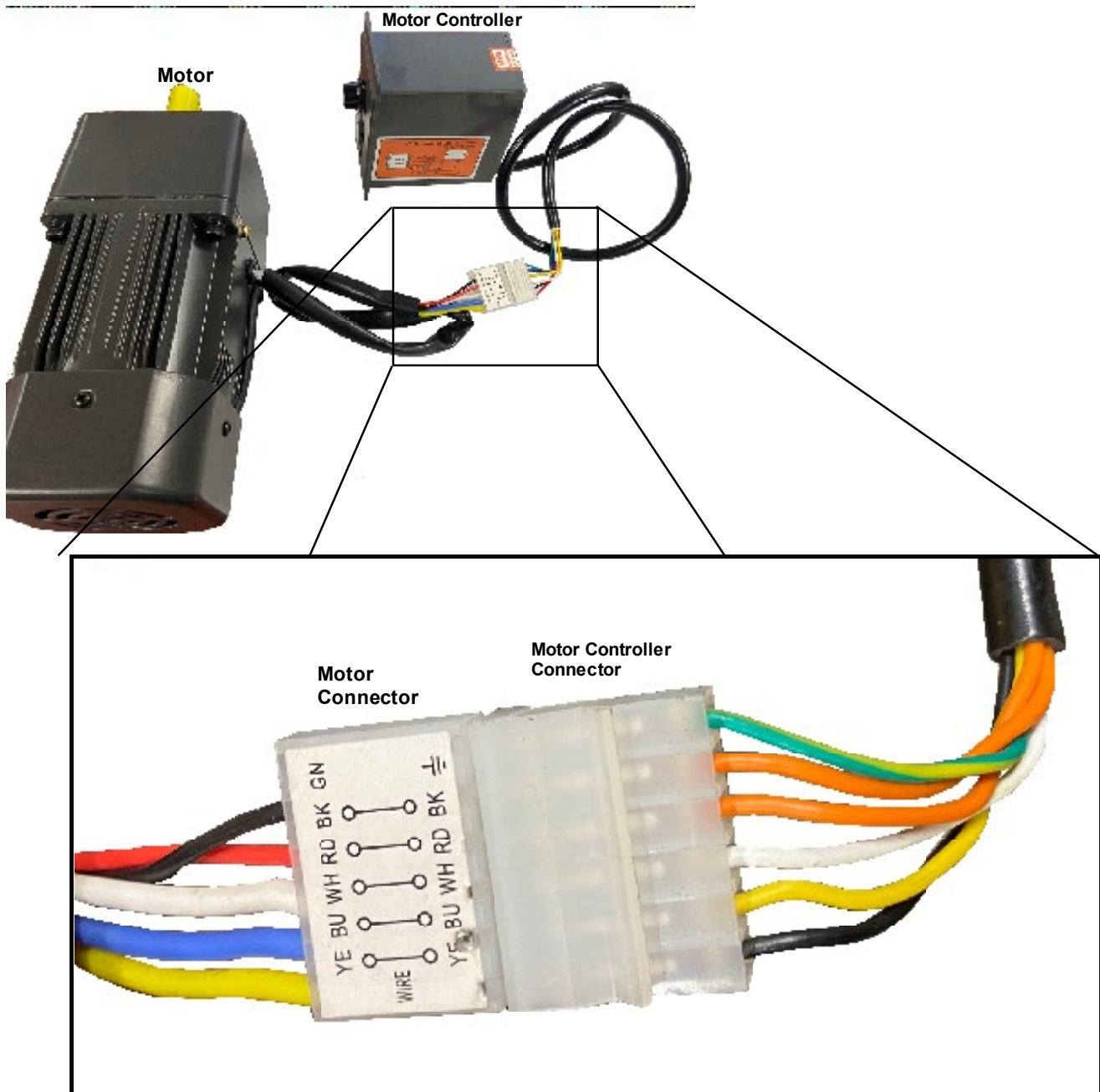
## Maintenance & Repair

### Wiring Diagram - Power Cord & Shut Off Switch



# Maintenance & Repair

## Wiring Diagram - Motor Controller to Motor



Motor Connector		Motor Controller Connector	
	empty	GREEN/ YELLOW	
	BLACK	ORANGE	
	RED	ORANGE	
	WHITE	WHITE	
	BLUE	YELLOW	
	YELLOW	BLACK	

# Machine Winterization

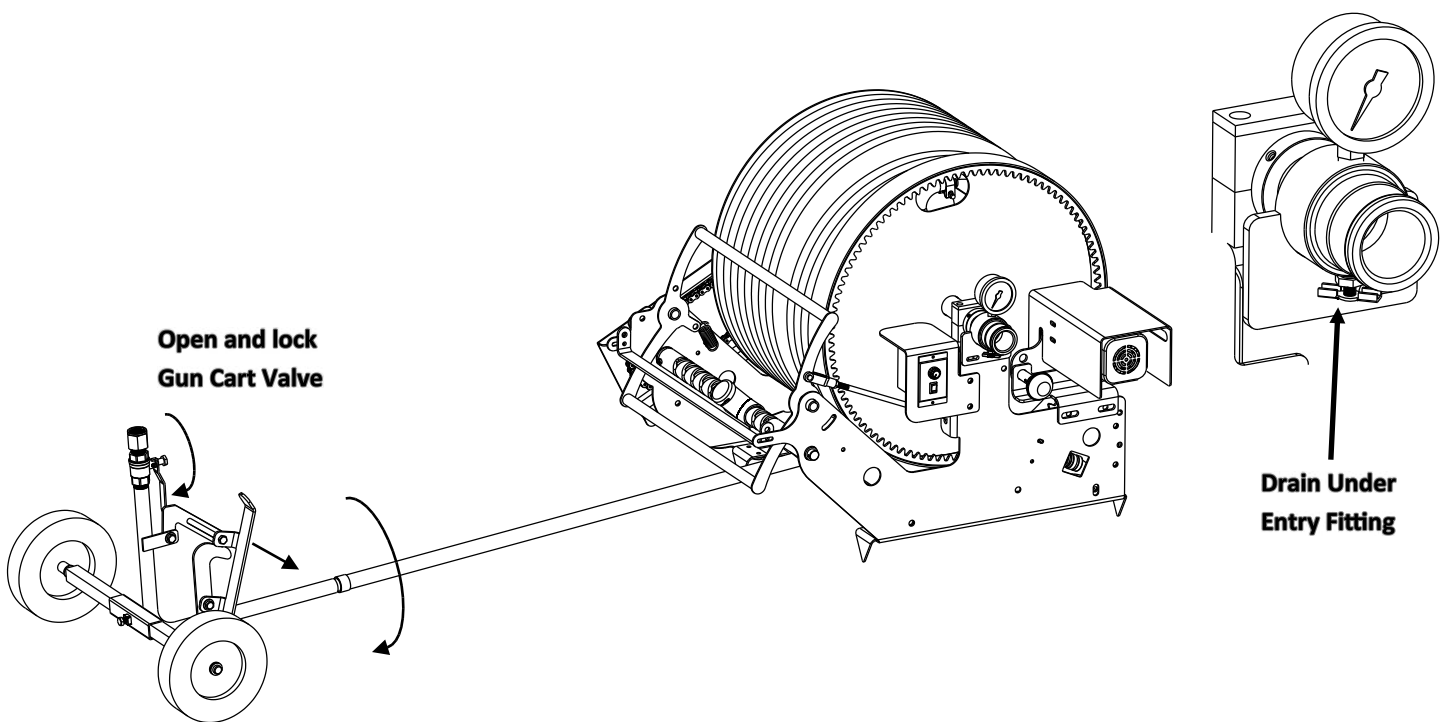
Freezing will not damage the type of Polyethylene tube used on your Water-Reel. Even though the tube does not need to be drained you must drain all metal parts.

Completely remove the Supply Hose from the Inlet fitting

Open the drain underneath the entry fitting on the Water-Reel

**Gun Cart** - Pull the Gun Cart out until approximately 3-4 coils of tube is off the spool. Open and lock Valve.

**GENTLY** lift and turn the Gun Cart over to drain excess water. **DO NOT BEND THE HOSE AT ANY EXCESSIVE ANGLE!!**

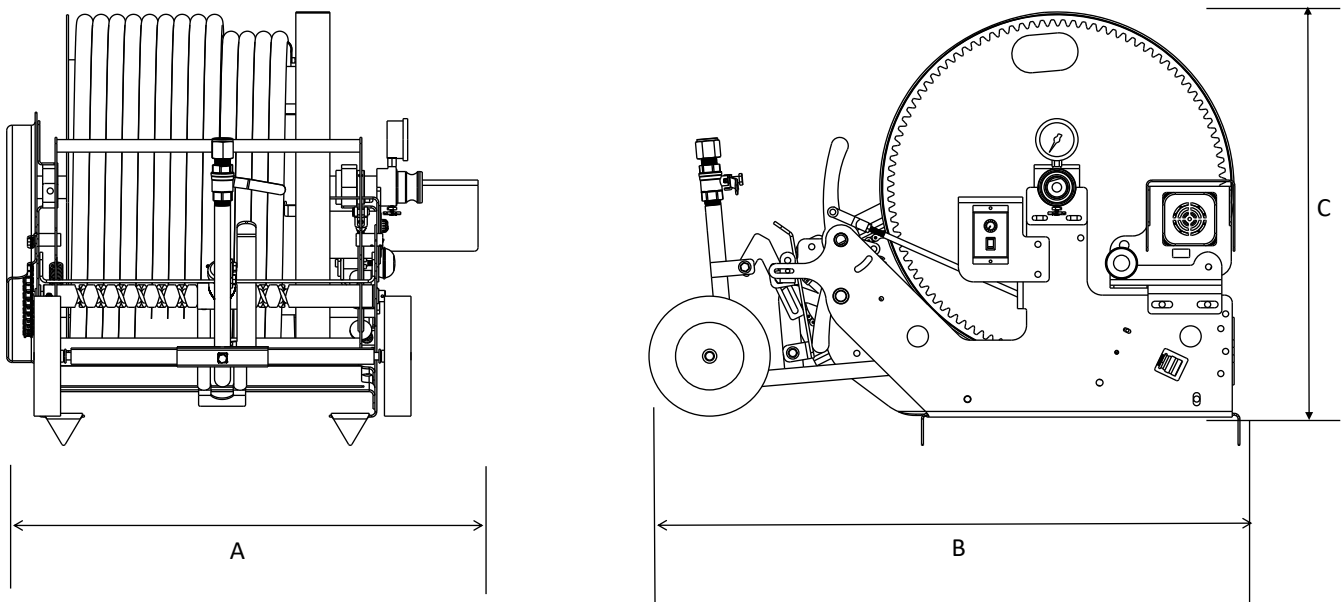


## Storage & Specifications

1. Lubricate all points in the lubrication chart to prevent rust and corrosion from forming.
2. Store the Water-Reel away from direct sunlight
3. Make sure all openings such as the water inlet are plugged so rodents and insects cannot bring foreign materials into the Water-Reel
4. When taking the Water-Reel out of storage, be sure there are no rodent or insect nests present that may plug valves, the sprinkler, etc..

### E100 Water-Reel Specifications

	PE Tube Inside Diameter	0.89"
	PE Tube Length	180 ft.
	Machine Weight (no water)	170 lbs
	Machine Weight (with water)	270 lbs
A	Machine Width	31-1/4"
B	Machine Length	38" Approx.
C	Machine Height	27"



# Adjustments



## Important

Never attempt to re-time the Water-Reel without first pulling all the tube out. Changing the timing with some of the tube still on the spool may result in damage to the irrigation tube and/or the Water-Reel.

## Level-Wind Timing:

Proper timing of the Level Wind mechanism is essential to the successful operation of the Water-Reel. Improper Level Wind timing will result in mis-wrapped tube. Travel will be interrupted because the auto Shutoff Bar will stop the motor in order to prevent damage to the irrigation tube. Do not continue to operate if the tube is not winding properly!



**Important!** Confirm that the timing is at fault before attempting to change the timing. Your Water-Reel was shipped from the factory with the tubing wound on it. The Level Wind timing was set at the factory prior to installing the tube. If there has been no disassembly of the Level Wind mechanism, or the tubing removed & reinstalled, it is very unlikely that the timing is wrong. If the tubing is loose on the spool the Level Wind system will appear to be out of time. (See page \_\_\_\_ for the brake adjustment).

Note: Review loose tube troubleshooting on page \_\_\_\_.

To re-time the Level Wind, these steps **must** be followed:

1. Pull all the irrigation tube out from the Water-Reel. You may wish to stop slightly before the elbow is exactly on the angle and turn the spool the last few degrees by hand. The barb to which the tube is fastened must be  $45^\circ$  to the ground as shown (See Figure 1).
2. Observe the position of the Tube Follower on the horizontal Level Wind Screw. The Tube Follower must be in its most extreme position (all the way to the end of the Level Wind Screw thread) and on the same side of the Water-Reel as the spool elbow (See Figure 2). Align the Timing Mark on the Level Wind Screw {single drilled hole) with the Timing Mark Decal arrow (See Figure 2).

Figure 1

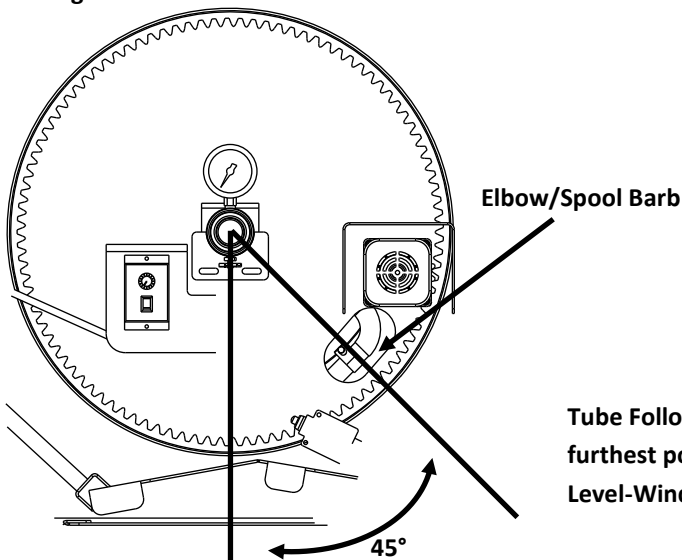
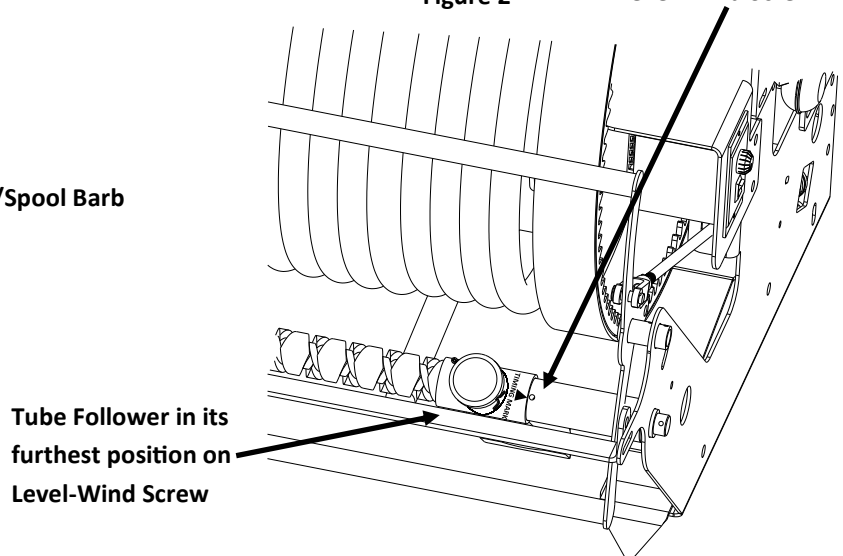


Figure 2  
Timing mark on Level-Wind Screw

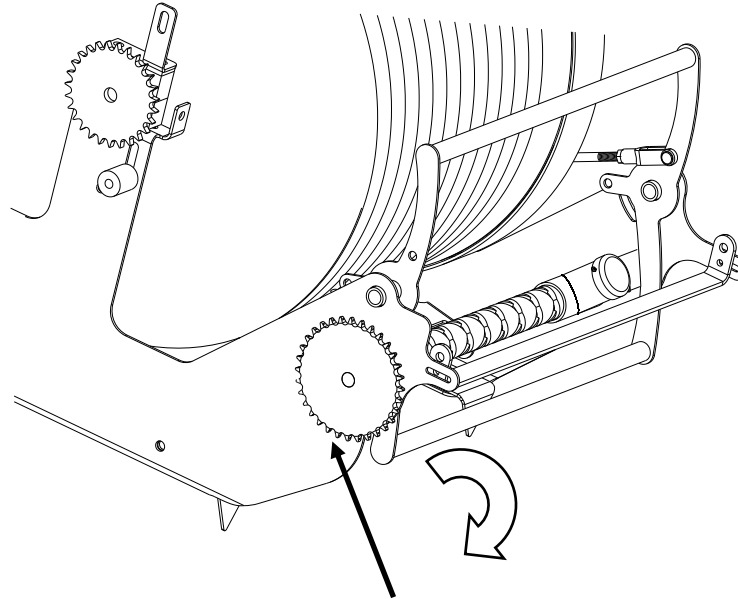


## Adjustments

### Re-time the Level Wind continued:

3. To change the timing, remove the Shield and disconnect the Level Wind Drive Chain from the Level Wind Sprockets. Rotate the Level Wind Input Sprocket until the Tube Follower is positioned as described in step #2. Reinstall the Level Wind Drive Chain and Shield.

The Level wind will now be in proper timing.

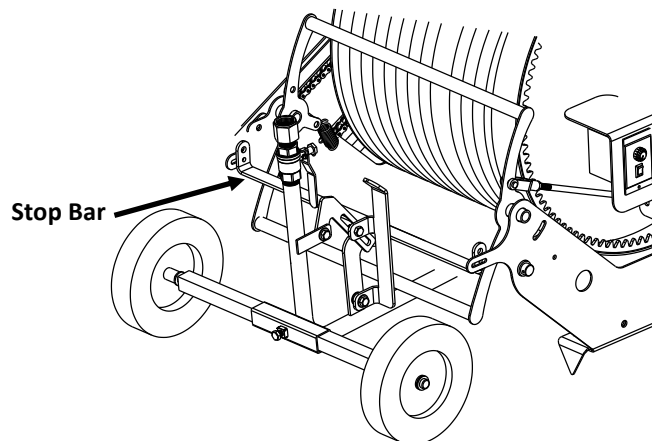


Turn Level Wind Input Sprocket to position  
Tube Follower

### Stop Bar:

The purpose of the Stop Bar is to stop the sprinkler operation prior to the stopping of the hose retraction.

1. Loosen both bolts to the Stop Bar.
2. Move the Stop Bar in a position to where it will fully activate the Striker Plate on the Gun Cart and still allow it further retraction into the Shut Off Bar.





# Adjustments

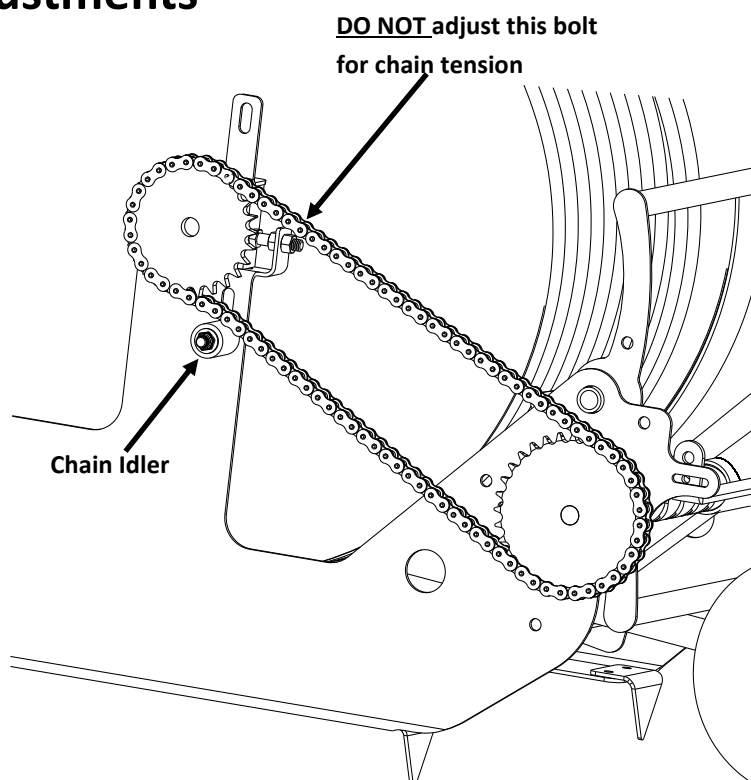
## Adjusting Level Wind Chain

The Level Wind chain tension is adjusted under the Level Wind Chain Guard

To adjust, loosen the bolt on the Chain Idler and move either up or down.



**NOTE: DO NOT** attempt to adjust the Level Wind chain tension with the Spool Bearing Bolt.

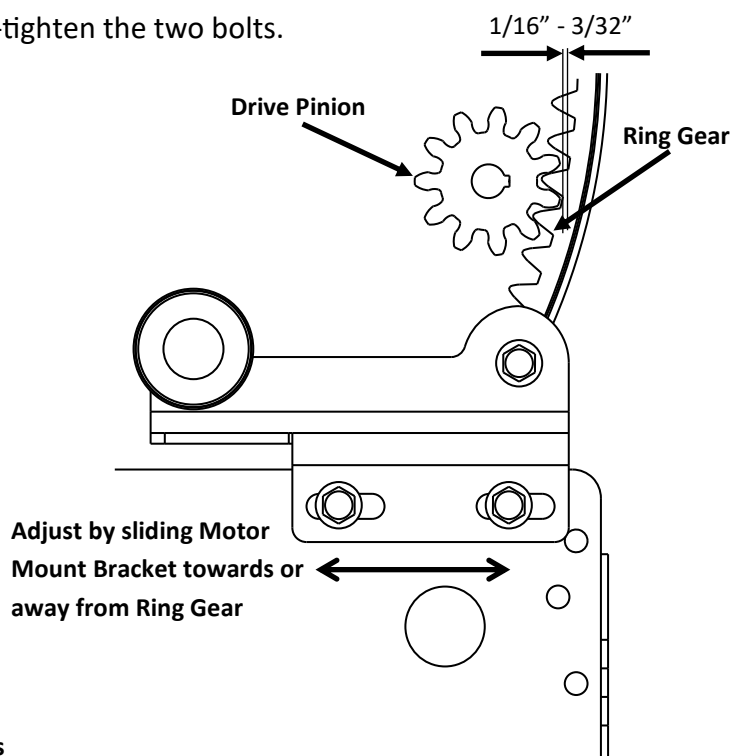
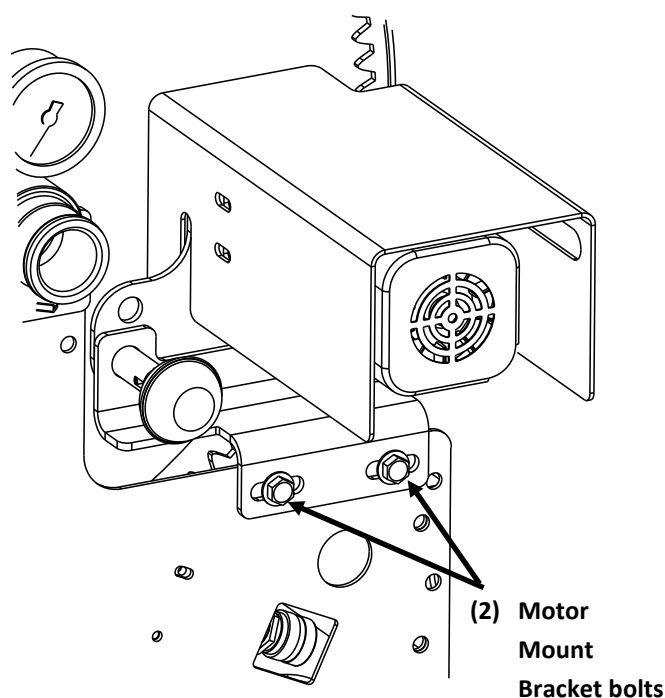


## Adjusting Motor Pinion-Ring Gear Distance

With the Motor Mount Pin engaged, the Drive Pinion to Ring Gear clearance should be  $1/16''$  to  $3/32''$  (.063" - .094").

Adjust the Drive Pinion clearance by loosening the two Motor Mount Bracket bolts on the side of the frame and sliding the Motor Mount Bracket in towards or away from the Ring Gear.

Once the correct clearance distance is acquired, re-tighten the two bolts.



## Sprinkler Options and Adjustment:

1) Nozzle

2) Part Circle Stops

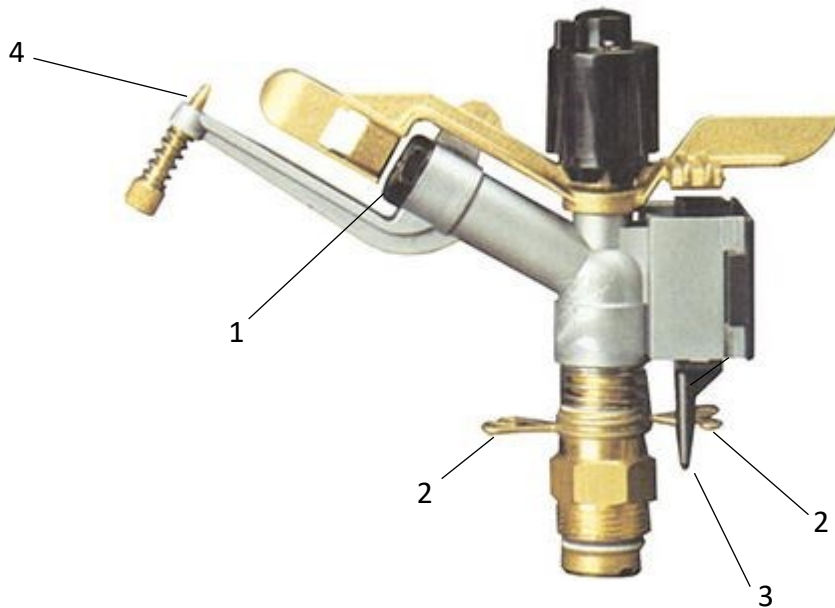
3) Part Circle Pin

4) Diffuser

### ***Sime Silver***

Part circle stops can be rotated to provide any desired arc of operation. To adjust the stop, squeeze the stop wire to loosen, move the stop and release the wire. Repeat this step for the other Part Circle Stop.

If less distance of the water is needed, simply screw the diffuser in further to disrupt the sprinkler water.





## **LIMITED WARRANTY**

KIFCO products are warranted to the original user for a period of one year from the date of his purchase invoice, that the equipment will be free from defects in material and workmanship subject to the following conditions:

Satisfaction of this warranty will be limited to the replacement, repair or modification of the equipment involved at the manufacturer's option. The manufacturer's obligation under this limited warranty shall be limited to a credit to the dealer or customer account for the parts or materials required for replacement, repair, or modification of the equipment.

Freight costs shall be paid by the dealer/customer.

This warranty does not apply to certain component parts used on KIFCO equipment. Such component parts are warranted by the original manufacturer and KIFCO'S responsibility is limited to communicating the need for warranty service to each to each manufacturer. Such component parts include, but are not limited to tires, batteries, gearboxes, transmissions, pumps and sprinklers.

This warranty shall be available only if:

KIFCO has received a properly executed delivery record,

KIFCO is notified in writing within 30 days upon discovery of an alleged defect and

KIFCO'S examination of the equipment discloses, to its satisfaction, that such alleged defect has not been caused by misuse, neglect, improper installation, improper operation, improper maintenance, repair or alteration, accident or unusual or extraordinary use demands.

THE FOREGOING WARRANTY SUPERSEDES AND IS IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESSED, IMPLIED OR STATUTORY, AND ALL OTHER LIABILITIES OR OBLIGATIONS ON THE PART OF KIFCO, INC.

KIFCO MAKES NO WARRANTY OF MERCHANTABILITY IN RESPECT TO THE EQUIPMENT.

KIFCO MAKES NO WARRANTY THAT THE EQUIPMENT IS FIT FOR ANY PARTICULAR PURPOSE.

### **LIMITATION OF LIABILITY**

KIFCO SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO, DAMAGES FOR INJURY TO THE PERSON OR PROPERTY OR LOST PROFITS) OR ANY INCIDENTAL OR SPECIAL DAMAGES AND/OR EXPENSES, OR CLAIMS FOR INDEMNIFICATION, BY REASON OF ANY DEFECT IN THE EQUIPMENT OR ITS MANUFACTURE, DESIGN OR FUNCTIONING, OR ANY INSTRUCTIONS CONCERNING THE EQUIPMENT.

No agent or representative of KIFCO or any of its dealerships has authority to waive, alter or add to the printed provisions of this warranty and limitations of liability.



700 S. Schrader Ave.

Havana, Illinois 62644



## Dealer Checklist

Owner's Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Model: \_\_\_\_\_ Serial No.: \_\_\_\_\_ Date Sold: \_\_\_\_\_

### Pre-delivery Checklist: Check below before delivery to customer.

- |          |                                 |          |                        |
|----------|---------------------------------|----------|------------------------|
| _____ 1. | Guards and shields are in place | _____ 5. | Sprinkler Nozzles      |
| _____ 2. | Decals are in place & legible   | _____ 6. | Supply Hose fittings   |
| _____ 3. | Lubrication (Page _____)        | _____ 7. | Touch up paint & clean |
| _____ 4. | Spool Brake adjustment          |          |                        |

### Delivery Checklist:

Review the operator manual with the user and explain the following:

- \_\_\_\_\_ 1. Kifco warranty policy and claims procedure
- \_\_\_\_\_ 2. Safe operation and service
- \_\_\_\_\_ 3. How to operate your Water-Reel
- \_\_\_\_\_ 4. Speed adjustment and effect on depth of water
- \_\_\_\_\_ 6. Effect of water pressure on Water-Reel performance
- \_\_\_\_\_ 7. Winterization and storage procedures
- \_\_\_\_\_ 8. Give the customer this manual and encourage the customer to read and study the information in the manual

Date Delivered \_\_\_\_\_

Name of Dealer \_\_\_\_\_

Dealer Phone Number \_\_\_\_\_