



# **MICRO RAIN**

*Traveling Sprinkler Systems*®

## **Instruction Manual for Operation & Maintenance**

# **MR32**



# Introduction

Thank you for purchasing a Micro Rain MR32 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. KID Group, Inc./ Micro Rain is not responsible for machine failure or personal injury if these procedures and operation instructions are not followed.

## Caution

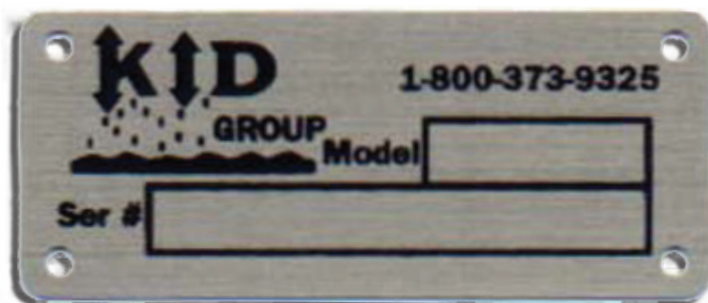
- **Do not operate your Micro Rain traveler without a serious overview of this manual**
- **Keep children and unauthorized people away from traveler**
- **Never allow children access to use the traveler**



**NO CHILDREN**

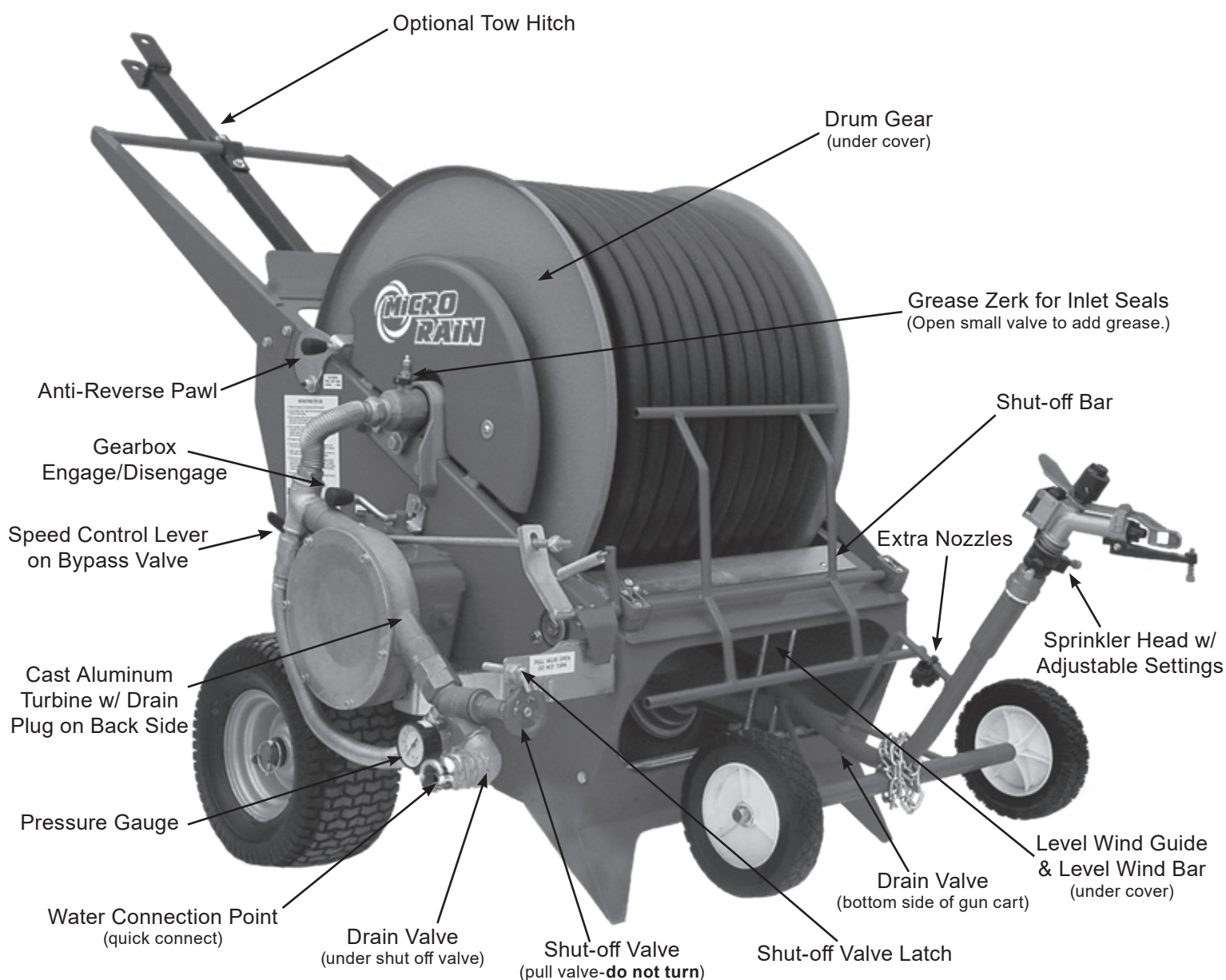
- **Use caution when disconnecting couplings**  
When the traveler shut-off valve activates, the supply hose remains pressurized at the end of the run. First, relieve the pressure with the relief valve, then disconnect the supply hose.
- **Use caution with the sprinkler heads**  
Pressurized water from 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 7 mph 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



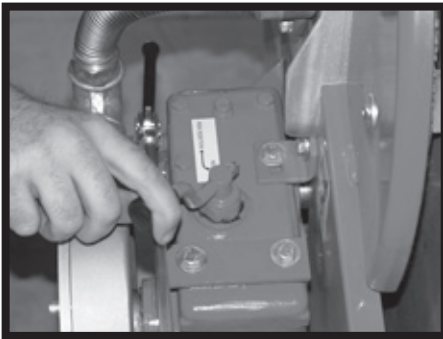
# Conditions For Machine Operation

The MR32 is designed for clean water suitable for irrigation. The machine is not designed for water that includes large pieces of debris or slurry/wastewater conditions.

## 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.



- 2) Place the gearbox engage/disengage lever in the neutral position to prepare for hose pull out.



- 3) Move anti-reverse lever to the disengage position as shown.



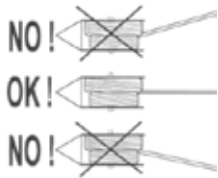
- 4) After steps 2 and 3 have been performed, the sprinkler cart can be pulled out. The cart may be pulled out by hand or by connecting the cart chain to a small garden tractor or ATV.

**IMPORTANT:** Always pull cart out straight and at a slow steady speed (about the pace of a walk). Leave 1-2 wraps on the drum to keep from pulling hose off the drum.

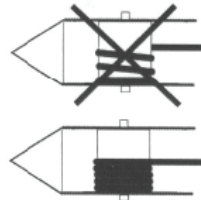


# Start-Up Procedure/Operation Continued

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



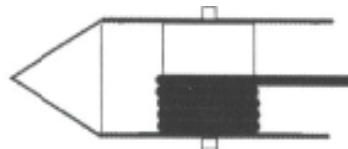
**ALWAYS PULL TUBE  
OUT STRAIGHT!**



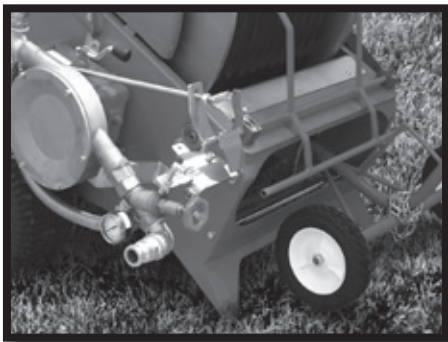
**KEEP WRAPS TIGHT!**



- 5) Move anti-reverse lever to the engage position as shown. Ratchet the drum by hand to remove any loose coils remaining on the drum. Any coils remaining on the drum should be packed over to the edge of the drum and tight!

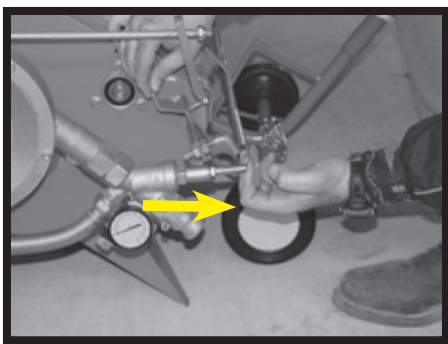


**Keep remaining wraps tight!!**



- 6) Attach supply hose provided to the inlet of the machine and lock into place as shown

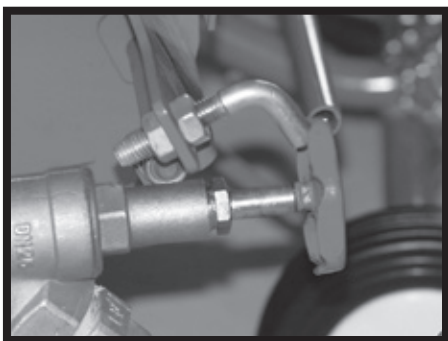
**IMPORTANT:** MAKE SURE SUPPLY HOSE IS CLEAN AND FREE OF FOREIGN OBJECTS THAT WOULD PLUG THE TURBINE SYSTEM OR SHUT OFF VALVE!



- 7) Open shut off valve by pulling the valve handle and latching into the open position.

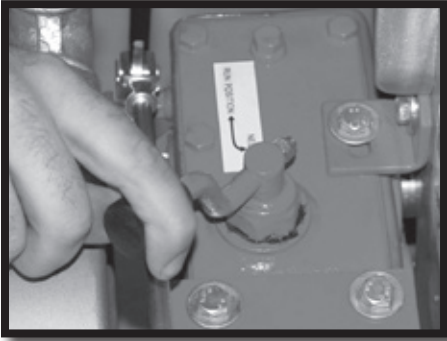
**IMPORTANT:** PULL VALVE, DO NOT TURN!

**NOTE:** DO NOT PULL VALVE OPEN UNDER PRESSURE. OPENING UNDER PRESSURE WILL DAMAGE VALVE!

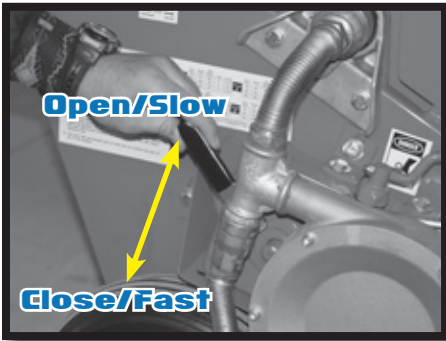


**VALVE SHOWN IN OPEN, LATCHED POSITION**

## Start-Up Procedure/Operation Continued



- 8) Turn on the water source to the MR32. The sprinkler equipped with the MR32 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. Next engage the gearbox lever to the run position.



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



- 10) Once the speed is set, the MR32 will automatically roll the tube on the drum and stop at the end of the run utilizing the shut-off valve.

## Maintenance Schedule

**Inlet Seals:** Grease inlet seals every 100 hours.

**Drum Gear:** Grease drum gear every 100 hours.

**Level Wind:** Replace turbine seals every 500 hours or once a season. Consult your dealer for more information.

**Gearbox:** Change gearbox oil once a season with 30W oil.

# Troubleshooting

## 1) PROBLEM: NO WATER AT THE SPRINKLER

- SOLUTION:
1. Make sure shut-off valve is open.
  2. Potential blockage—clean inlet screen/sprinkler nozzle.

## 2) PROBLEM: MACHINE WILL NOT ROLL UP

- SOLUTION:
1. Make sure gearbox is in the engaged or run position.
  2. Turbine bypass valve (speed control valve) is opened too far. Close valve to increase speed.
  3. Turbine impeller not turning—open turbine housing and check for obstructions.

## 3) PROBLEM: MACHINE STOPPED DURING RETRACTION

- SOLUTION:
1. Water flow stopped or was lowered during retraction, causing the turbine to stall. Simply turn the bypass valve closed to start retraction once again and adjust speed as needed.
  2. The machine's mis-wrap safety shut down the retraction. Put the gearbox in neutral, disengage the anti-reverse lever and pull the tube out all the way again. The level wind timing may have been interrupted by too many loose wraps on the machine. This is corrected by starting over and making sure the level wind guide is lined up correctly. Call your Micro Rain servicing dealer with any questions regarding machine timing.

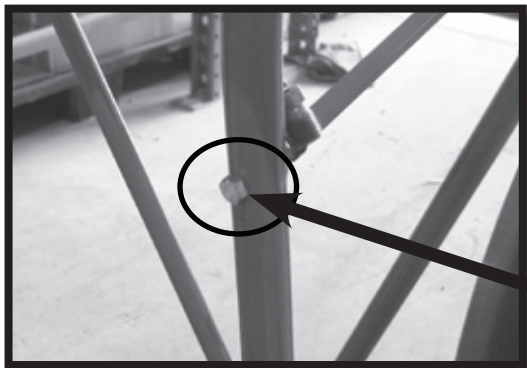
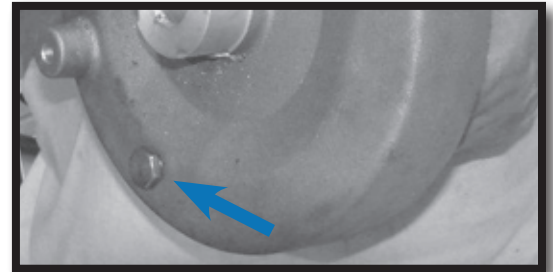
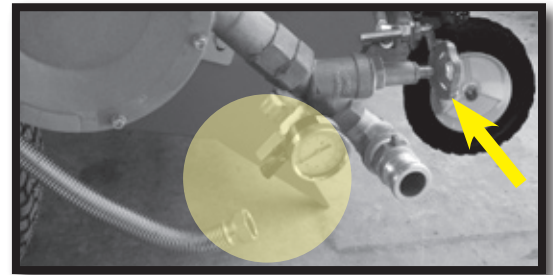
# Performance Chart

Micro Rain MR32 Performance Chart										
1" X 242'	INLET PSI	GPM	MAX WIDTH (FT)	80% ADJ WIDTH (FT)	MAX LENGTH (FT)	RUN TIME (HRS)				
						0.10 INCH	0.25 INCH	0.50 INCH	0.75 INCH	1.0 INCH
6 mm Nozzle	45	7.5	90	72	287	2.40	6.01			
	55	8.5	95	76	290	2.24	5.60			
	65	9.4	100	80	292	2.13	5.33			
	75	10.4	108	86	296	2.07	5.18			
	85	11.6	110	88	297	1.90	4.75			
7 mm Nozzle	50	9.8	92	74	288	1.89	4.73			
	60	11.1	98	78	291	1.76	4.40			
	70	12.2	106	85	295	1.75	4.36			
	80	13.7	112	90	298	1.65	4.11	8.23		
	90	14.8	118	94	301	1.59	3.98	7.96		
8 mm Nozzle	55	12.9	99	79	292	1.53	3.84	7.67		
	65	14.8	110	88	297	1.49	3.72	7.45		
	75	16	112	90	298	1.41	3.52	7.05	10.57	
	85	17.1	114	91	299	1.33	3.33	6.67	10.00	
	95	18.2	118	94	301	1.29	3.23	6.47	9.70	
9 mm Nozzle	65	16.4	108	86	296	1.31	3.28	6.57	9.85	
	75	17.3	113	90	299	1.30	3.26	6.52	9.77	
	85	18.8	118	94	301	1.25	3.13	6.26	9.39	12.53
	95	21	123	98	304	1.17	2.92	5.85	8.77	11.69
	105	23	130	104	307	1.13	2.83	5.66	8.50	11.33
10 mm Nozzle	75	19.5	108	86	296	1.10	2.76	5.52	8.29	11.05
	85	21.9	116	93	300	1.06	2.66	5.32	7.98	10.64
	95	23.2	120	96	302	1.04	2.59	5.18	7.77	10.37
	105	23.9	121	97	303	1.02	2.54	5.08	7.63	10.17

**NOTICE:** These specifications are for a guide only and are based on theoretical calculations and performance tests. This is to be used as a guide only, as performance may vary under field conditions.

# Winterization

1. Disconnect supply hose.
2. Open and leave shut-off valve in run position as shown by white arrow.
3. It is recommended to disconnect the flex bypass line at the location indicated in the highlighted circle area at the right.
4. Speed control valve handle must be in the open position as shown by the blue arrow to allow water above valve to escape.
5. Remove drain plug and allow water in lower portion of the turbine to drain as shown by red arrow.
6. Drain guncart by removing plug located on the underneath the side of the cart. Indicated by black arrow below.



Guncart drain location on MR32.

# Options



## MR32 Air Blow Out Fitting

For use with air compressor to winterize machine.



## MR32 Tow Hitch Option

Easy attach tow kit for use with ATV or small tractor.



## MR32 Depth Control Plate

Keeps front of machine level in loose soil conditions.



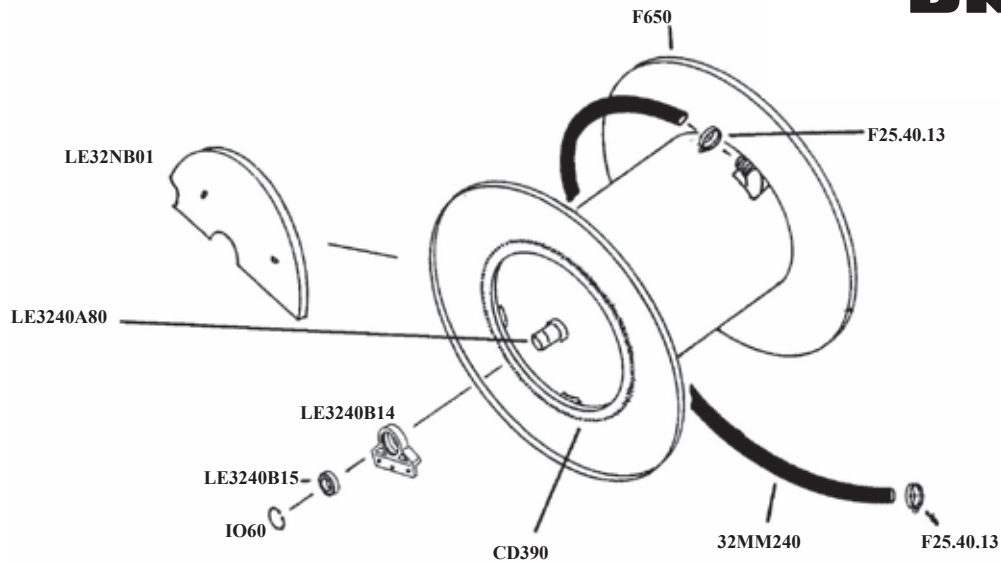
## MR32 Boost Pump Option

- 110v Booster kits to boost incoming pressures by 30 to 50 PSI.
- Gas driven booster kits also available.
- Contact us at 1-800-373-9325 for details or visit [www.microrrainet.net](http://www.microrrainet.net)

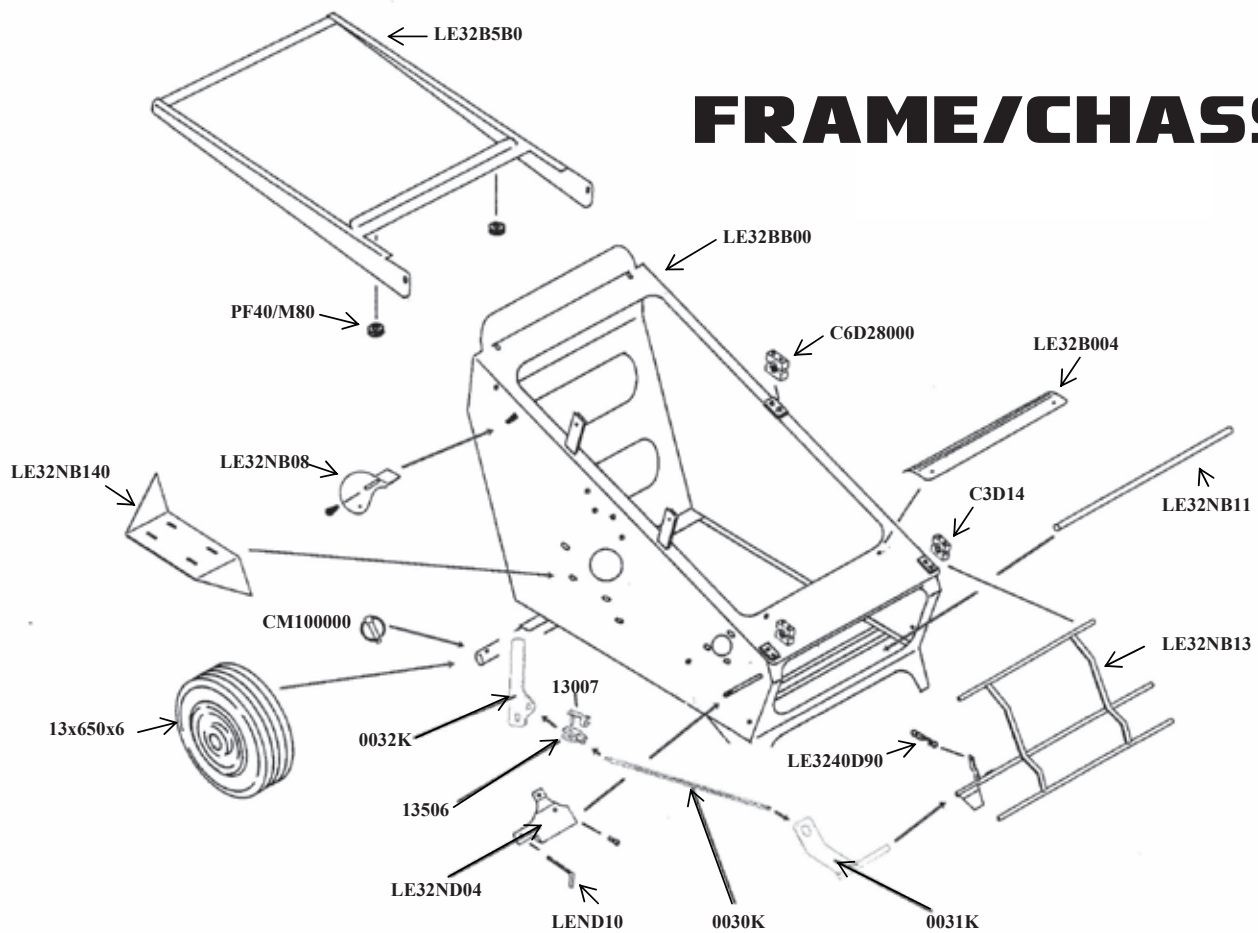


# Parts Diagrams

## DRUM

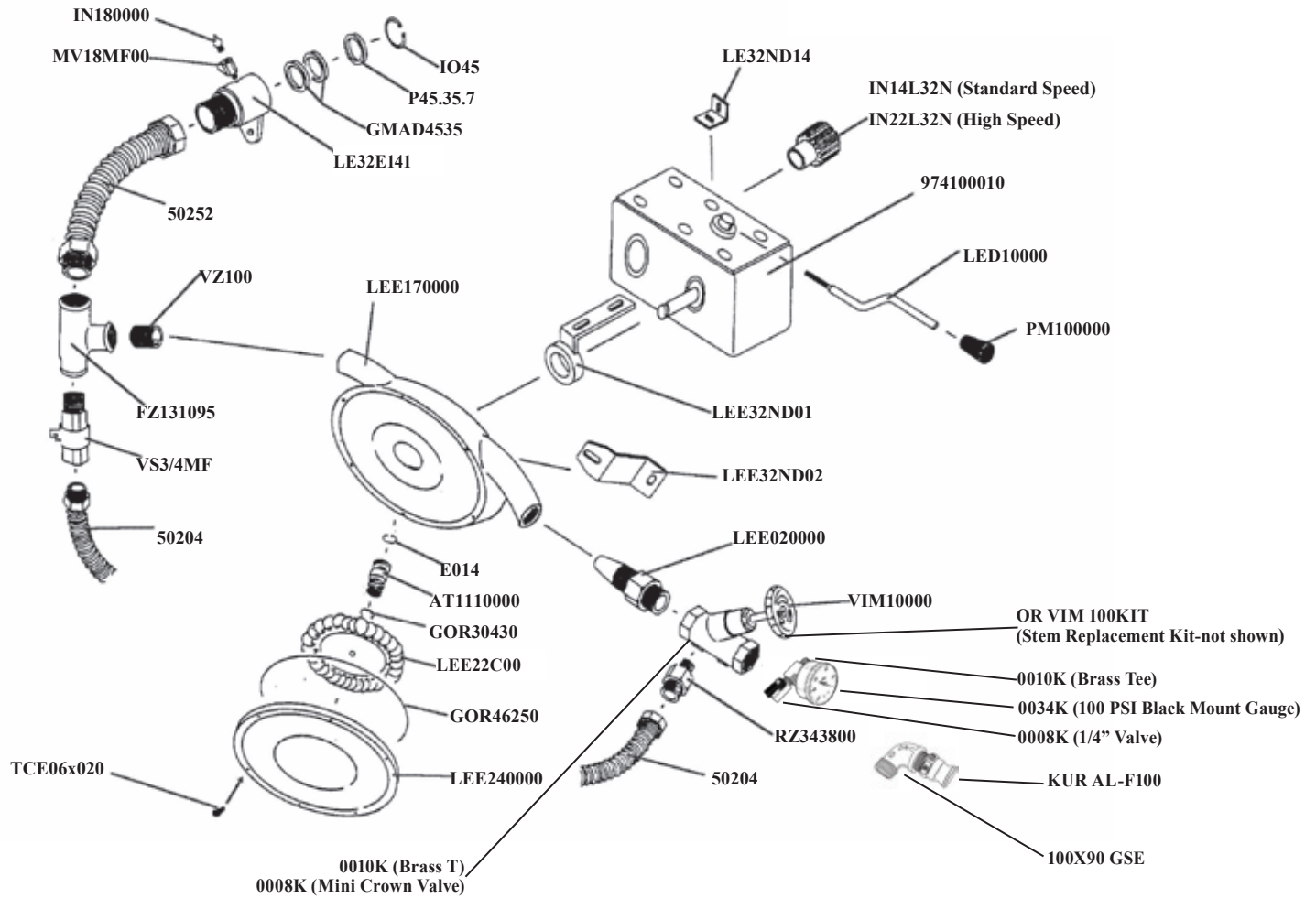


## FRAME/CHASSIS

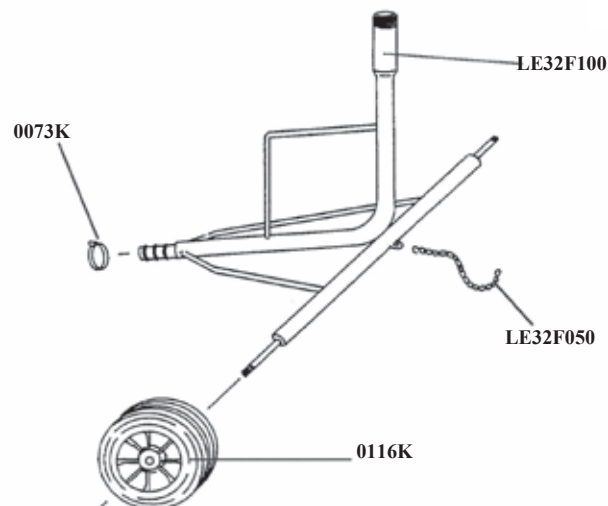


# Parts Diagrams

## DRIVE SYSTEM

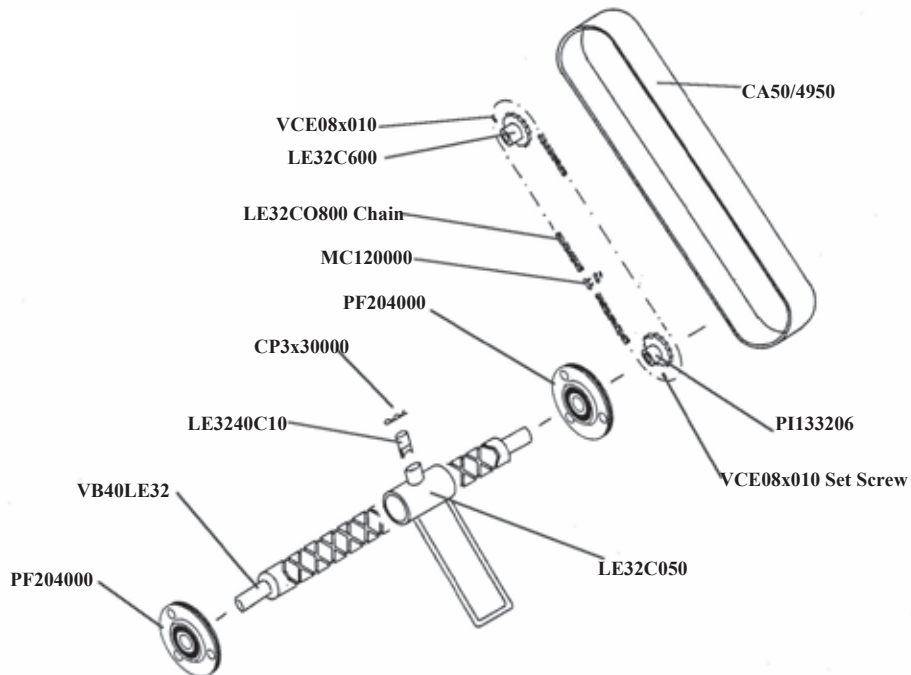


## SPRINKLER CART

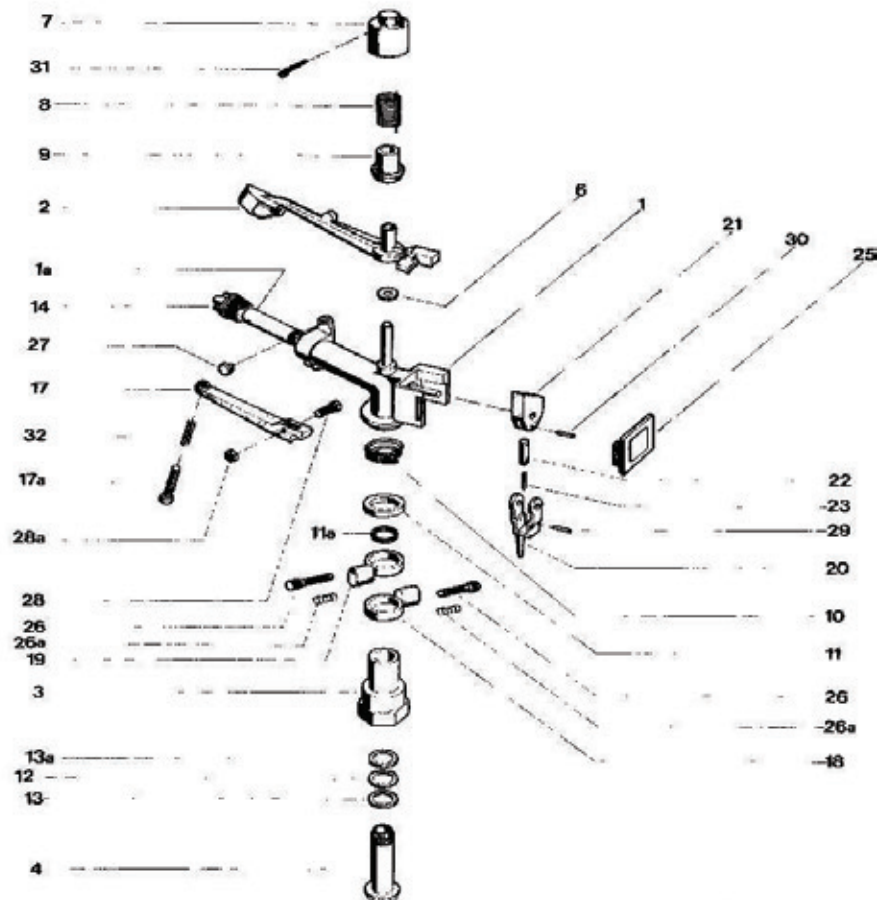


# Parts Diagrams

## LEVEL WIND ASSEMBLY



## FUNNY SPRINKLER



# **KID Group, Inc.**

## **DISTRIBUTOR, DEALER/SELLER, PURCHASER AGREEMENT**

### **LIMITED WARRANTY AND REMEDY:**

#### **WARRANTY:**

KID Group, Inc. as distributor, warrants to the original purchaser only of the Micro Rain 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 Micro Rain 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 KID Group, Inc. determines that the above warranty was breached with respect to any part or component provided by the manufacturer of Micro Rain equipment, (and if all conditions set forth below have been satisfied) then, KID Group, Inc. will (at KID Group, Inc.'s option) repair or provide purchaser replacement parts F.O.B. Yukon, OK. As follows:

All components of new Micro Rain system for 1 year from original equipment invoice, free of charge.

KID Group, Inc. will repair or provide replacement polyethylene tube for any tube KID Group, Inc. 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 Micro Rain equipment purchased from an authorized Micro Rain dealership.

#### **CONDITIONS TO ENFORCEABILITY AND CLAIMS:**

Equipment has been maintained and operated within the guidelines outlined in Micro Rain 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 KID Group, Inc. in writing immediately and in no event longer than 20 days from occurrence.

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

#### **LIMITATIONS:**

Neither KID Group, Inc. nor Dealer/Seller 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.