

TORO®

MODEL NO. 09833 - S/N 80101 & Up

SET-UP, OPERATORS,
AND PARTS
MANUAL**HYDROTOTE™ TRAILER**
FOR USE WITH TORO HYDROJECT

To assure maximum safety, optimum performance, and to gain knowledge of the product, it is essential that you or any other operator of this equipment read and understand the contents of this manual. Pay particular attention to the **SAFETY INSTRUCTIONS** highlighted by the triangular safety alert symbol.



The safety alert symbol means CAUTION, WARNING, or DANGER — personal safety instruction. Failure to comply with the instruction may result in personal injury.



FOREWORD

You have purchased a product from the industry leader in maintenance excellence. Its future performance and dependability are of prime importance. TORO is also concerned about future use of the product and of safety to the user. Therefore, this manual must be read by you and those involved with the HYDROTOTE TRAILER to assure that safety, proper set-up, operation and maintenance procedures are followed at all times. The major sections of the manual are:

1. SAFETY INSTRUCTIONS
2. SET-UP INSTRUCTIONS

3. OPERATING INSTRUCTIONS
4. MAINTENANCE



SAFETY INSTRUCTIONS

Keep this Manual in the plastic tube behind the operator seat of the Tow Vehicle.

It is very important that all persons operating this equipment have easy access to these instructions at all times!

Carefully read and follow the "Set-up", "Safety" and "Operating" Instructions.



This safety-alert symbol is used to call attention to a dangerous situation, which could result in serious injury or death to the operator or bystander.

Safety, mechanical and some general information in this manual are emphasized. DANGER, WARNING and CAUTION identify safety messages. Whenever the triangular safety symbol appears, it is followed by a safety message that must be read and understood. For more details concerning safety, read the Safety Instructions in this Manual.

IMPORTANT identifies special mechanical information and NOTE identifies general information worthy of special attention. These instructions are provided as a guide for the safe set-up, operation and maintenance of this equipment. However, the operator's personal safety, as well as the persons in the work area, will depend on the careful actions and good judgement of the operator. To reduce the potential for injury or death, comply with the following safety instructions.

BEFORE OPERATING:

1. Operate this machine only after reading and understanding the contents of this manual. A replacement manual is available by sending complete model and serial number to: **The Toro Company, 8111 Lyndale Avenue South, Minneapolis, Minnesota 55420.**
2. Learn how to operate the HYDROTOTE TRAILER and how to use it properly. DO NOT let anyone operate this equipment without first receiving thorough instructions.
3. Keep all parts, safety devices and decals in place. If a part, safety device or decal is malfunctioning, illegible or damaged, repair or replace it before operating the machine.

WHILE OPERATING (TOWING):

1. This HYDROTOTE TRAILER is only intended for use with the HYDROJECT 3000 Aerator. The towing of other products may result in damage to axles and transmissions that continue to rotate when towed.
2. **USE ONLY A VEHICLE WITH THE PROPER TOW RATING.** The HYDROTOTE TRAILER, HYDROJECT and hose weight is approximately 1,350 lbs. Ensure that the Tow Vehicle has adequate braking and handling capacity by checking the recommendations of the vehicle manufacturer.
3. Ensure that the HYDROTOTE TRAILER is properly connected to the Tow Vehicle before loading or unloading the HYDROJECT to prevent sudden unintended tongue movement or flip up. Make certain everyone is clear of the HYDROJECT and HYDROTOTE TRAILER before loading.



SAFETY INSTRUCTIONS

4. The HYDROTOTE TRAILER adds extra towing weight to the vehicle. Drive the vehicle safely.
 - A. Do not drive on highway or public roads.
 - B. Always SLOW the Tow Vehicle when approaching and while making a turn.
 - C. Always SLOW the Tow Vehicle when driving in unfamiliar areas or over rough terrain.
 - D. Always SLOW the Tow Vehicle when changing direction of travel or preparing to stop.
 - E. When turning or driving on slopes, always SLOW the Tow Vehicle, then turn to prevent loss of control and possible upset.
 - F. **DO NOT** make sudden or sharp turns. **DO NOT** suddenly change direction of travel on an incline, ramp, grade, slope or similar surface.
 - G. Always adjust the Tow Vehicle speed to allow for existing ground conditions such as wet slick surfaces, loose sand or gravel and/or low visibility conditions such as dim or bright lighting, fog, mist or rain.
 - H. Be especially careful when driving a heavily loaded vehicle down an incline or slope. Drive the vehicle **UP** and **DOWN** the face of the slopes, inclines or grades whenever possible. **DO NOT DRIVE** across the face if at all possible. There is a risk of upsetting the vehicle, which can result in serious injury or death.
 5. Before backing up, look to the rear and assure no one is behind. Back up slowly and watch the HYDROTOTE TRAILER movement closely.
 6. Use extreme caution and slow speed when backing up the HYDROTOTE TRAILER with the HYDROJECT loaded and attached to Tow Vehicle. The steering characteristics are much different than a single axle trailer.
 7. Watch out for traffic when near or crossing roads. Always yield the right of way to pedestrians and other vehicles.
 8. If the HYDROTOTE TRAILER begins to vibrate abnormally, stop immediately. Shut off the Tow Vehicle engine. Repair all damage before commencing towing.
9. Before servicing or making any adjustments to the HYDROTOTE TRAILER:
 - A. Stop the Tow Vehicle and set the parking brake.
 - B. Shut off the Tow Vehicle's engine and remove key from ignition.
 10. Keep all nuts, bolts and other fasteners tightened securely. Replace any parts removed during servicing or adjustments.
 11. To assure optimum performance and continued safety of this product, always use genuine TORO replacement parts. Replacement parts and accessories made by other manufacturers may affect the product's operation, performance or durability. Such use could also void the warranty of The Toro Company.



SAFETY AND INSTRUCTION DECALS

NO RIDERS

75-5190

Part No. 75-5190 Located on Drawbar.

WARNING

**NOT FOR HIGHWAY USE.
MAXIMUM SPEED: 15 MPH**

Part No. 98-8763 Located on Drawbar.

CAUTION

USE TOW VEHICLE WITH PROPER DRAW BAR CAPACITY. DO NOT EXCEED THE MANUFACTURER'S RECOMMENDATIONS. DO NOT LOAD OR UNLOAD TRAILER UNLESS CONNECTED TO VEHICLE DRAWBAR.

Part No. 98-8765 Located on Drawbar.

CAUTION

- WET GRASS OR LOOSE SURFACES MAY BE SLIPPERY AND CAUSE LOSS OF CONTROL.
- LOSS OF CONTROL MAY CAUSE PERSONAL INJURY OR DEATH.
- USE EXTREME CAUTION WHEN TOWING ON HILLS OR ON SIDE SLOPES.

Part No. 98-8764 Located on Drawbar.

SET-UP INSTRUCTIONS

Refer to illustrated parts list for details of parts used in assembling the HYDROTOTE TRAILER. Loose parts are indicated by the asterisk (*)

NOTE: "Right", "Left", "Front" and "Rear" are referenced while sitting in the Tow Vehicle operator's seat.

MAIN FRAME ASSEMBLY:

1. Insert Axles, left and right as marked.
2. Set Cradle between Axles and assemble using 1/2" x 1 1/2" Carriage Hd Cap Screws and Locknuts.

TOW HITCH ASSEMBLY:

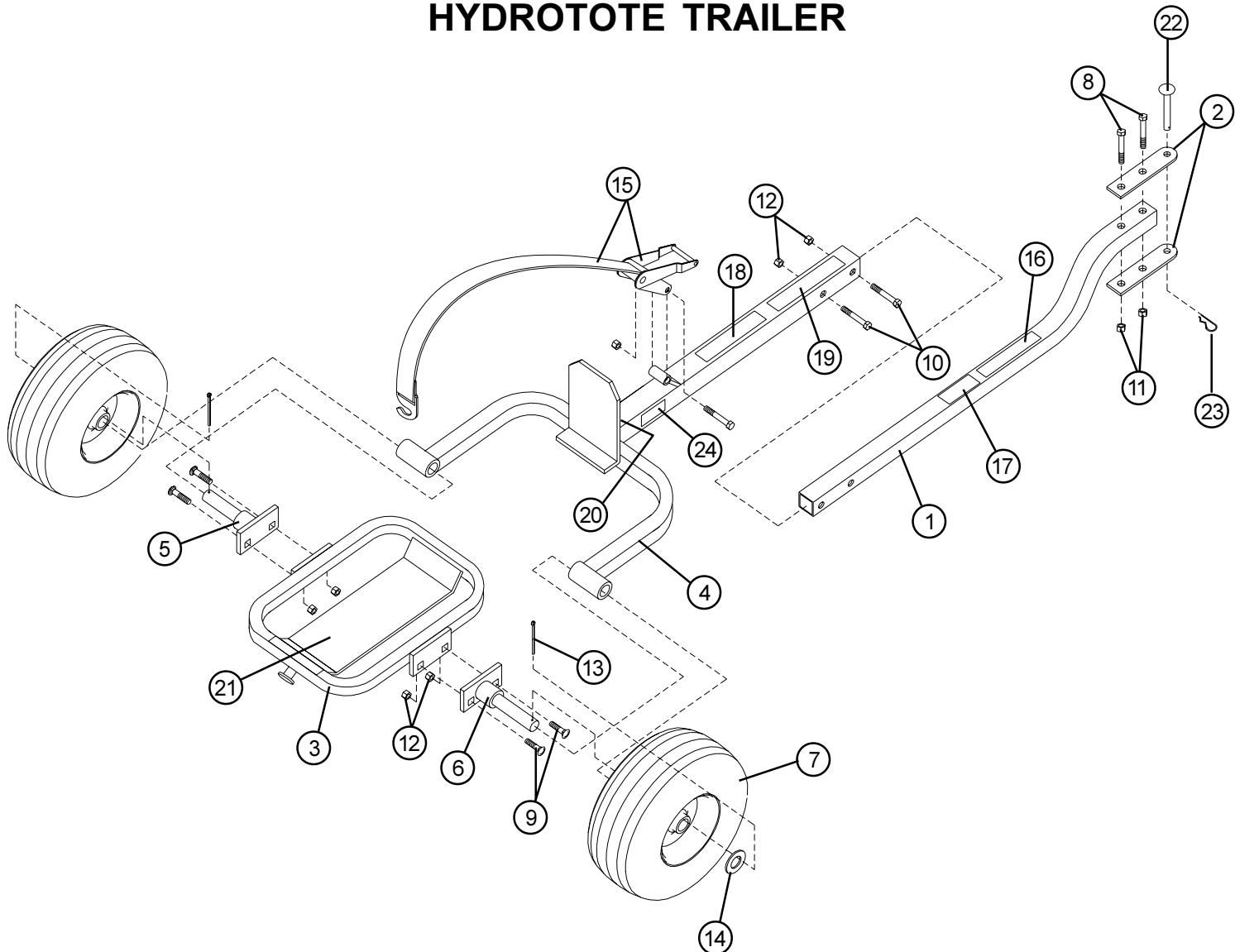
1. Assemble Hitch to Frame using 1/2" x 2 1/2" Hex Hd Cap Screws and Locknuts. The head of the Hex Hd Cap Screw should be on the side of the Frame tube with the larger hole and when tightened should recess into the hole until it contacts the Hitch tube.

2. Assemble Tongue to Hitch tube using 3/8" x 2 1/2" Hex Hd Cap Screws and Locknuts

WHEEL ASSEMBLY:

1. Assemble Wheel Assemblies and 1" Machine Washers onto Axles. Retain with 3/16" cotter pins.
2. Assemble Retaining Strap Assembly to Frame using 5/16" x 2 1/2" Hex Hd Cap Screw and Locknut.

HYDROTOTE TRAILER



Ref	Part No.	Description	Qty	Ref	Part No.	Description	Qty
1	99-0107	Hitch	1*	12	32146-13	Locknut, 1/2" UNC	6*
2	99-0108	Tongue	2*	13	3272-23	Cotter Pin, 3/16" x 1 1/2"	2*
3	-----	Cradle	1*	14	99-0114	Machine Washer, 1"	2*
4	-----	Frame	1*	15	99-0110	Retaining Strap Assembly	1*
5	99-0109	Axle, Left	1*	16	75-5190	Decal, No Riders	1
6	99-0112	Axle, Right	1*	17	98-8763	Decal, Not for highway use ...	1
7	-----	Wheel Assembly Including:	2*	18	98-8764	Decal, Wet grass surface ...	1
----	94-8695	Tire, 15 x 6.00 – 6.00 Turf Rib – 1 of	----	19	98-8765	Decal, Use Tow Vehicle with proper capacity ...	1
----	99-0115	Rim, 6" x 4.5" 3 1/4 Offset Hub – 1 of	----	20	99-0104	Decal, TORO HYDROTOTE	1
----	99-0113	Bushing, 1" Flanged – 2 of	----	21	99-0111	Anti-slip material, 6" x 18"	1
8	323-12	Hex Hd Cap Screw, 3/8" UNC x 2 1/2"	2*	22	283-55	Hitch Pin, 1/2" x 3"	1*
9	3233-2	Carriage Hd Cap Screw, 1/2" UNC x 1 1/2"	4*	23	328967	Hair Pin, 1/8" x 2"	1*
10	325-10	Hex Hd Cap Screw, 1/2" UNC x 2 1/2"	2*	24	-----	Serial Plate	1
11	3296-59	Locknut, 3/8" UNC	2*	----	-----	Set-up, Operator and Parts Manual	1*

* Loose parts

OPERATING INSTRUCTIONS

ATTACHING THE HYDROTOTE TRAILER TO TOW VEHICLE:



CAUTION

- Use only a proper Hitch Pin and retaining Hair Pin.
- Failure to use a proper Hitch Pin or to retain the Hitch Pin with a Hair Pin could allow the HYDROTOTE TRAILER to become detached from the Tow Vehicle which could cause personal injury or death to the operator or a bystander.

1. Align the HYDROTOTE TRAILER Hitch with the Tow Vehicle tow hitch tongue so that the Tow Vehicle tongue is between the two HYDROTOTE TRAILER Hitch Tongues.

2. Insert Hitch Pin through the HYDROTOTE TRAILER Hitch and the Tow Vehicle's tow hitch tongue.

3. Insert the Hair Pin in Hitch Pin.

LOADING HYDROJECT ONTO HYDROTOTE TRAILER:



CAUTION

- Attach the HYDROTOTE TRAILER to a Tow Vehicle before loading the HYDROJECT.
- Failure to attach the HYDROTOTE TRAILER to a Tow Vehicle prior to loading the HYDROJECT could allow the HYDROTOTE TRAILER to move uncontrollably.
- Uncontrolled movement of the HYDROTOTE TRAILER could cause personal injury or death to the operator or a bystander.

1. Tilt Cradle down as far as possible.

2. Position Retaining Strap to left side of Cradle to keep out of way.

3. Drive HYDROJECT onto cradle allowing the Cradle to pivot until the HYDROJECT drive wheel stops against the front of trailer.

4. Engage HYDROJECT Parking Brake and turn off engine.

5. Slide Retaining Strap onto center of tire and tighten Retaining Strap securely with ratchet.

6. Disengage HYDROJECT Parking Brake.

IMPORTANT: Failure to disengage Parking Brake could cause premature wear or failure of the Parking Brake.



CAUTION

- When loading the HYDROJECT, always be aware of your surroundings. DO NOT operate near bystanders or other equipment.
- Load the HYDROJECT only on a level surface. Do not attempt to load the HYDROJECT on an incline, ramp, grade, slope or similar surface.
- Improper HYDROJECT loading or unloading procedures could cause personal injury or death to the operator or a bystander.

7. Use extreme caution and slow speed when backing up the HYDROTOTE TRAILER with the HYDROJECT loaded and attached to Tow Vehicle. The steering characteristics are much different than a single axle trailer.

TOWING THE HYDROTOTE TRAILER:

Refer to SAFETY INSTRUCTIONS



CAUTION

- Towing capacity (Weight of HYDROJECT, HYDROTOTE TRAILER and hose) is approximately 1,350 lbs. The Tow Vehicle must have adequate braking and handling capability.
- Refer to Tow Vehicle manual for specifications

MAINTENANCE

Wheel Assemblies should be greased daily with No. 2 general purpose lithium base grease.

Inspect the Retaining Strap regularly. If there are any cuts, tears or stitch deterioration the Retaining Strap Assembly should be replaced immediately.

The Toro Commercial Products Two Year Limited Warranty

The Toro Company warrants your 1996 or newer Toro Hydroject® 3000, Hydroject® 4000, Greens, or Fairway Aerator ("Product") purchased after January 1, 1997, to be free from defects in materials or workmanship for the period of time listed below*. Where a warrantable condition exists, Toro will repair the Product at no cost to you including diagnosis, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

Warranty Duration: Two years or 500 operational hours*, whichever occurs first.

*Product equipped with hour meter.

Owner Responsibilities:

As the Product owner, you are responsible for required maintenance and adjustments stated in your Owner's manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

Instructions for Obtaining Warranty Service:

You are responsible for notifying the Commercial Products Distributor or Authorized Commercial Products Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists.

If you need help locating a Commercial Products Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Toro Commercial Products Service Department
8111 Lyndale Avenue South
Minneapolis, MN 55420-1196
Telephone: (612) 888-8801
Facsimile: (612) 887-8258
E-Mail: Commercial.Service@Toro.Com

Maintenance Parts:

Parts scheduled for replacement as required maintenance ("Maintenance Parts"), are warranted for the period of time up to the scheduled replacement time for that part.

Items/Conditions Not Covered:

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. The items / conditions listed below are not covered by this warranty:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, modified, or unapproved accessories are not covered.
- Product failures which results from failure to perform required maintenance and/or adjustments are not covered
- Product failures which results from operating the Product in an abusive, negligent or reckless manner are not covered

- This warranty does not apply to parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, blades, reels, bedknives, tines, spark plugs, castor wheels, tires, filters, belts, etc.
- This warranty does not apply to failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, or chemicals, etc.
- This warranty does not apply to normal "wear and tear" items. Normal "Wear and Tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

Other Legal Disclaimers:

The above remedy of product defects through repair by an authorized distributor or dealer is the purchaser's sole remedy for any defect. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Except for the Emissions warranty referenced below, if applicable, there is no other express warranty. All implied warranties of merchantability and fitness for use are limited to the duration of the express warranty.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

The Toro Company Is not liable for indirect, incidental or consequential damages in connection with the use of the Product, including any cost or expense of providing substitute Product or service during periods of malfunction or non-use.

Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

Note to California residents: The Emissions Control System on your Product may be covered by a separate warranty meeting requirements established by the U.S. Environmental Protection Agency (EPA), or the California Air Resource Board (CARB). The hour limitations set forth above do not apply to the Emissions Control System Warranty. Refer to the California Emission Control Warranty Statement printed in your Owner's Manual or contained in the engine manufacturer's documentation for details.