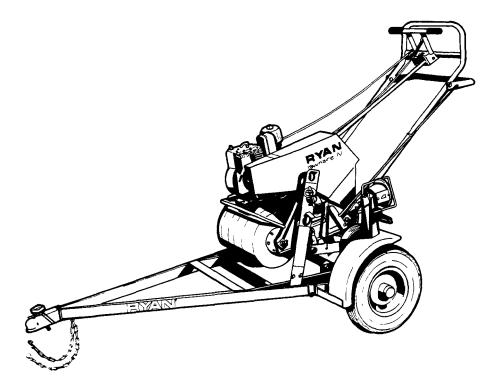
# RYAN

# **OPERATOR'S** & PARTS MANUAL



# TOTE TRAILER®

**MODEL 544856** 



This manual contains essential operating and safety information and must be within access of any operator. Persons renting this equipment should be shown this manual to aquaint them with all safety and operating procedures.





Part No. 521663 Rev. 5

#### IMPORTANT!

THIS MANUAL WILL AID YOU IN THE SAFE OPERATION AND PROPER MAINTENANCE OF YOUR RYAN® TOTE TRAILER. READ THE MANUAL THOROUGHLY BEFORE ATTEMPTING OPERATION. IF ANY PORTION OF THIS MANUAL IS NOT CLEARLY UNDERSTOOD, CONTACT AN AUTHORIZED RYAN DEALER FOR CLARIFICATION.

THE INFORMATION AND INSTRUCTIONS INCLUDED ALERT YOU TO CERTAIN THINGS YOU SHOULD DO VERY CAREFULLY. IF YOU DON'T, YOU COULD:

- HURT YOURSELF OR OTHERS.
- HURT THE NEXT PERSON WHO OPERATES THE EQUIPMENT.
- DAMAGE THE EQUIPMENT.

To make sure you are fully aware of safety and service information, the following two symbols are used throughout this manual.

This symbol (SAFETY WARNING) appears next to information (in bold type) which may help keep you and others from being hurt.

This symbol NOTE (NOTE) appears next to information or instructions which may help you operate and maintain your equipment properly.



#### SAFETY WARNING

 This manual contains essential operation and safety information and must remain with the Tote Trailer at all times, within easy access of any operator.

#### **IMPORTANT!**

THIS EQUIPMENT SHOULD NOT BE MODIFIED OR ADDED TO WITHOUT THE MANUFACTURER'S AUTHORIZATION.

Direct any inquiries to:
CUSHMAN INC. Engineering department
Attn. Chief Engineer
P.O. Box 82409
Lincoln, Nebraska 68501



 Altering this equipment in any manner which adversely affects the operation, performance, durability or use may cause hazardous conditions.

#### SERVICE PUBLICATIONS

Additional operators/parts manuals are available for a minimum charge at this address:

CUSHMAN INC.

Attn. Ryan Service Department P.O. Box 82409 Lincoln, Nebraska 68501

#### PRODUCT REFERENCE

When reference is made in this manual to a brand name, number, product or specific tool, an equivalent product may be used unless stated otherwise.

# ILLUSTRATIONS & SPECIFICATIONS

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of printing. Cushman reserves the right to make changes at any time without notice.

#### OWNER REGISTRATION

Cushman makes every effort to keep owners informed of all safety related information, therefore, changes in address and/or ownership are to be reported to the MANU-FACTURER. Your RYAN dealer has REGISTRATION CHANGE forms which will be filled out and:

- Returned to the MANUFACTURER,
- Filed by the DEALER for his record.

If you are unable to locate your RYAN dealer, write directly to:

Warranty Service Department CUSHMAN INC. P.O. Box 82409 Lincoln, Nebraska 68501

#### INDEX

Page

ACCESSORIES 15
Lawnaire V Mounting Masts 15
ASSEMBLY
ELECTRICAL DIAGRAM
LOADING
Jr. Sod Cutter
Lawnaire IV
Lawnaire V S
PARTS LIST
Fenders and Light Kit
Paint 11
Trailer
TORQUE SPECIFICATIONS 16
WARRANTY 20

#### **ASSEMBLY**



#### SAFFTY WARNING

- To prevent malfunction and/or injury to the operator and/or bystanders, use only genuine RYAN parts or parts with equivalent characteristics, including type, strength, and materials, when replacement parts are needed.
- Any warning label that becomes illegible should be replaced immediately.

#### MOUNTING WHEELS AND FENDERS



- Use the operators/or drivers side position when determining the referral to the left and/or right sides of any equipment referred to in this manual.
- Before mounting the wheels to the frame, pack the wheel bearings with a lithium based lubricant.
- Clean off any residue which may be accumulated on the axle shafts.

- Install the wheels to the axles with the seal side of wheel going on first and the valve stem facing outward.
- Install and tighten the nut, turning the wheel frequently until the wheel starts to drag. Back off the nut approximately 1/16" (2 mm) of a turn, or just enough to allow the cotter pin to fit through the end of the shaft.
- 3. Check the wheel for free rotation. Wheel should spin freely without any noticeable drag.
- 4. Install end cap on the hub.
- 5. Attach the fenders to their respective sides keeping the brackets tight against the frame while tightening the 5/16-18 x 3" and the 5/16-18 x 2" screws.
- 6. In the hole provided on top of the fender mounting brackets, center punch, then drill a 7/32" (6 mm) hole through the top of the frame only. Install a shakeproof lockwasher and a 1/4-20 x 1/2" (6.35 mm) self tapping screw to help secure fender brackets (See Figure 1).

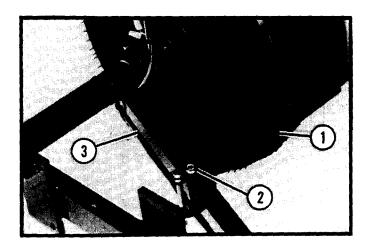


Figure 1

- 1. Fender Mounting Bracket
- 2. Self Tapping Screw and Shakeproof Lockwasher
- 3. Frame

#### **ELECTRICAL**

 Replace the lockwashers provided with the light kit with the shakeproof lockwashers provided with the hardware bag.

- Attach the taillight with the clear lens and the license plate bracket to the left fender. Make sure the clear lens is pointing down to light the license plate. Attach the other taillight to the right fender. Be sure to use the shakeproof lockwashers when mounting the taillights (See Figure 4).
- Take the longest piece of the three-strand electrical wire, provided with the light kit, solder the electrical terminal from the hardware bag, onto the end of the white wire.
- 4. Locate and drill one 7/32" (6 mm) hole on the top of the left frame member approximately 3" (76 mm) from the back of the trailer hitch. Scrape the paint off the frame around the hole to ensure a good ground. Attach terminal (on white wire) to frame using a 1/4 -20 x 1/2" (6.35 mm) self tapping screw. Secure the wires with a wire tie just in front of the terminal (See Figure 2).

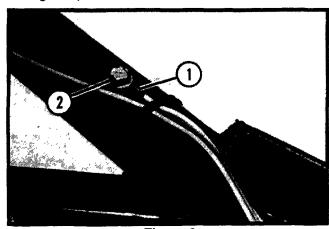


Figure 2

- 1. Electrical Terminal
- 2. Self Tapping Screw
- Run the length of the three-strand wire towards the rear, staying on the inside of the left frame member and going under any cross-members. Pass the wire behind the bolt of the fender bracket.
- 6. Beginning behind the electrical terminal and decal, on the front of frame, wrap another wire tie and continue towards the rear using three more wire ties. Hold the wire near the axle and run it along the fender bracket and fender making sure there is enough wire to attach to the wires leading from the taillight. Cut off the excess wire. Wrap a wire tie around the wire and frame close to the axle.
- 7. Push the brown and green (or black and green) twostrand electrical wire through the black tubing (from

- the hardware bag) leaving an equal amount of wire exposed at each end of the black tubing.
- 8. Referring to the wiring diagram (Figure 3) attach the two-strand wire to the right taillight using connectors provided. Run the wire and tubing down the fender bracket and over the front side of the axle. Place two wire clips onto the taillight bracket and two onto the fender bracket. Slip the wire into these clips keeping the wire taut to avoid any unnecessary slack. Keep the wire connectors within the taillight bracket (See Figure 4).



- Make sure the black tubing covering the electrical wire is against any edge which may cause the wiring to be cut or damaged.
- Place the wire and tubing along the bottom side of the axle and secure with wire ties. Place one wire tie near the frame member closest to the wheel, one in the center and one near the frame member on the left side.

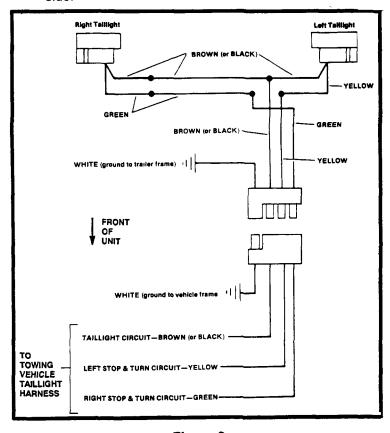


Figure 3
Wiring Diagram



- Place the remaining wire ties so they do not interfere with the adjustment of the wheel stops. Refer to the appropriate equipment illustration to determine the approximate wheel stop spacing (Page 5 - Figure 9, Page 8 - Figure 15, Page 10 - Figure 20) .
- 10. Wire the left taillight according to the wiring diagram (Figure 3). Place wire clips and connectors in similar locations to the right taillight.

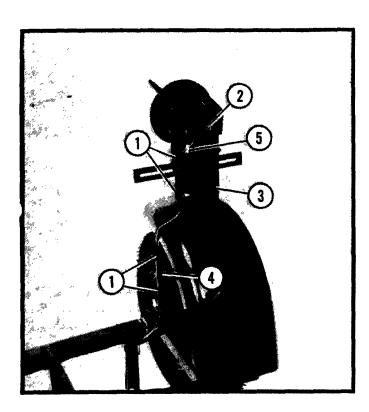


Figure 4

- 1. Wire Clips
- 3. Taillight Bracket
- 4. Fender Bracket 2. Shakeproof lockwasher 5. Wire Connector
- 11. Referring to the wiring diagram (Figure 3) attach the trailer's wire leads to the vehicle. Turn on the headlights and check the trailer lights, only the taillights should be lighted. Depress the brake pedal to see if the brake lights are working properly. Turn on each turn signal and check to see if they are working properly. If the turn signals and/or the taillights do not

work, check all the grounds for proper contact and review the wiring diagram to be sure all wires are correctly connected.



The taillights in the kit are provided with 12-volt bulbs. If the towing vehicle is equipped with a 6-volt battery replace each stop and tail bulb with a number 1154 bulb. These bulbs are available at most garages and service stations.

#### HITCH ASSEMBLY

- 1. Slide the bolt through the ball clamp so that the head of the bolt is positioned in between the slots on the bottom side of the clamp (this is to prevent the bolt from turning while tightening the hitch into position on the transporting vehicle).
- 2. Place the spring over the bolt and onto the top of the ball clamp. From underneath the hitch end, push the locking lever handle through the square hole leaving the evelet inside the hitch (See Figure 5). Push the bolt assembly, from below, through the eyelet of the locking lever and on through the hitch end. Install the handle to complete the assembly (See Figure 6).

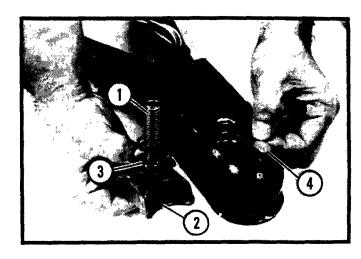


Figure 5

1. Bolt

- 3. Spring
- 2. Ball Clamp
- 4. Locking Lever



Figure 6
Ball Hitch Assembled

#### LOADING

#### Lawnaire IV



- Do not attempt to load the unit on the trailer until you have read and understand the Operation and Transportation section.
- To prevent possible injury, load and unload the trailer on a level surface.
- To prevent possible injury from the trailer tongue raising suddenly and striking the operator, maintain a firm grip on the trailer tongue while removing the locking shaft while loading or unloading equipment.
- To keep the trailer from rolling and causing serious injury, place blocks in front and back of both tires before loading and unloading any unit from the trailer.



- When tipping the trailer to load and unload, use care to avoid taillight damage.
- 1. Attach the mounting masts to the forward mounting tabs on the trailer frame using the  $5/16-18 \times 1 \frac{1}{4}$ "

screws and locknuts. Secure the center hole on the bottom of mounting mast to the bottom forward hole on the mounting tab. Lean mast rearward and secure upper holes in mast to upper holes in forward mounting tab. The slotted holes on the masts go toward the rear and the three tabs on the left mounting mast face outward. Only three bolts for each mast will be used with this application (See Figure 7).

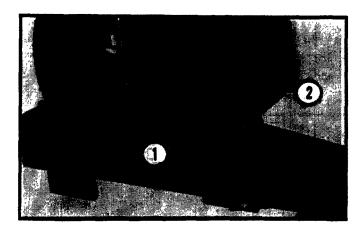


Figure 7

- 1. Forward Mounting Tab
- 2. Mounting Mast

#### **IMPORTANT!**

IF YOUR TOTE TRAILER MODEL IS 1992 OR NEWER, THE LOCKING LEVER WILL HAVE TWO HOLES DRILLED IN IT. THE LOWER HOLE IS FOR USE WITH THE LAWNAIRE V ONLY (SEE FIGURE 8).

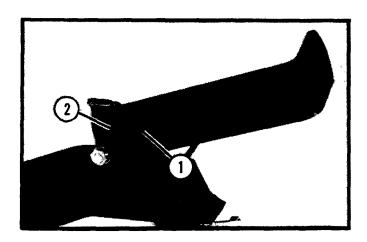


Figure 8

- 1. Upper Hole For Lawnaire IV And Jr. Sod Cutter
- 2. Lower Hole For Lawnaire V

2. Mount the wheel stops onto the frame using the 3/8-16 x 2 1/4" screws and nuts. Do not tighten. The bottom screw will pass between the frame and the electrical wiring. The left wheel stop will be located on the inside of the frame member, the right wheel stop (with locking lever in the up position) will be located on the outside of the frame member (See Figure 9). The Lawnaire IV (when mounted) will be slightly off center but will still transport without any problems. If the Lawnaire IV is equipped with narrow tires, the stop brackets will both be located on the inside of the frame members.

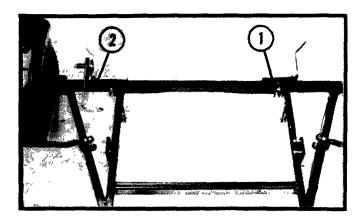


Figure 9

- 1. Left Wheel Stop
- 2. Right Wheel Stop With Locking Lever (Positioned For Wide Tires)
- 3. Remove the plug from Lawnaire IV's water drum and drain. While the water is draining, remove the weight bar from the center of the Lawnaire IV and remove the locking shaft from the mounting masts on the trailer. After the drum has drained, tip the Lawnaire IV back until the handlebars support the aerator on the ground.
- 4. Holding the hitch end of the tote trailer push trailer to the aerator and tipping the trailer back, center the Lawnaire IV between the mounting masts. Align the center holes on the mounting masts with the hole in the center of the Lawnaire IV frame (where weight bar was located). Once holes are aligned, slide the locking shaft through from the right side and secure the locking pins (See Figure 11).



 To keep the trailer from rolling and causing serious injury, place blocks in front and back of both tires before loading and unloading any unit from the trailer.

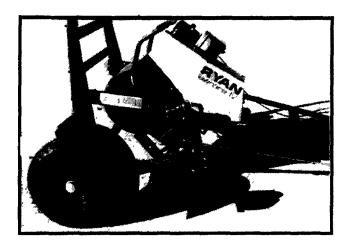


Figure 10
Mounting Lawnaire IV

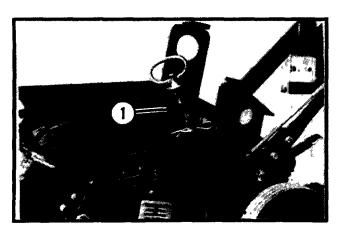


Figure 11

- 1. Locking Shaft With Pins
  (Using Center Hole On Mounting Masts)
- 5. Pull down on the hitch of the trailer and lower the hitch to the ground. Position the Lawnaire IV so that it aligns with the stop assemblies. Adjust the stop assemblies to leave approximately a 1/4" (6 mm) space between the stop assembly and the wheel. Tighten stops securely. Place the wheel locking lever over the right wheel (See Figure 12) and prepare tote trailer for towing. Refer to the instructions and precautions for transporting the tote trailer.

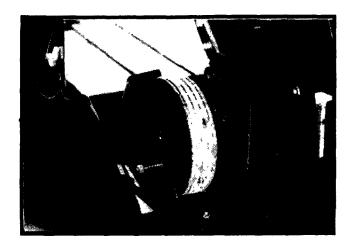


Figure 12
Wheel Lock (Closed)

#### **TRANSPORTING**

Attach the tote trailer to the towing vehicle for transporting to the job site. After the ball- hitch is properly secured, connect the electrical plugs and secure the chains to the towing vehicle with sufficient slack to allow trailer to turn.



- Use caution when inflating a tire, or bringing a low tire up to recommended pressure. Use a pressure gauge to check the pressure in a partially inflated tire before connecting an air hose.
   Due to the low air volume requirements of small tires, over-inflation may be reached in a matter of two or three seconds, which may cause the tire to explode.
- 2. Proper tire inflation is 20 psi (138kPa). Improper inflation will shorten the life of the tire and could cause the tote trailer to pull erratically.
- Maximum towing speed is 35 mph (56 km/h).

#### UNLOADING

- With tote trailer on a level surface, unhook the trailer from the towing vehicle and move the trailer so there is enough room to tip the trailer up without injuring the operator or damaging any property.
- Make sure the wheel stops are not against the wheels to prevent the Lawnaire IV from swinging freely. Block the tires as instructed in the safety warning.



#### SAFETY WARNING

- After the trailer is positioned and the locking shaft is in place (prior to lifting the aerator off the ground) place blocks in front and back of both tires, to prevent the trailer from rolling while lifting aerator off the ground. Before unloading the aerator block the tires to prevent possible injury.
- 3. Grasping the hitch of the trailer slowly tip the trailer up until the unit is resting on the ground. Remove the locking pins from the locking shaft and tip the trailer so there is no pressure on the locking shaft. Slide the locking shaft out of the aerator and pull the trailer away from the unit.
- 4. Install the weight bar on the Lawnaire IV. Fill the water drum and check engine and reduction case oil levels before beginning to aerate. Visually inspect aerator for loose or broken parts and tighten or replace if necessary.
- After completion of job, clean and service aerator according to instructions in the Lawnaire IV Operator's / Parts Manual.

#### LOADING

#### Jr. Sod Cutter



## SAFETY WARNING

 Do not attempt to load the unit on the trailer until you have read and understand the Operation and Transportation section.

- To prevent possible injury, load and unload the trailer on a level surface.
- To keep the trailer from rolling and causing serious injury, place blocks in front and back of both tires before loading and unloading any unit from the trailer.
- To prevent possible injury from the trailer tongue raising suddenly and striking the operator, maintain a firm grip on the trailer tongue while removing the locking shaft when loading or unloading equipment.

NOTE

- When tipping the trailer to load and unload use care to avoid taillight damage.
- Using four 5/16-18 x 1 1/4" screws and locknuts, attach the mounting masts to the rear mounting tabs on the trailer frame. The tabs on the left mounting mast face outward. The slotted bolt holes on the masts will be toward the rear. Secure masts to the mounting tabs (See Figure 13).

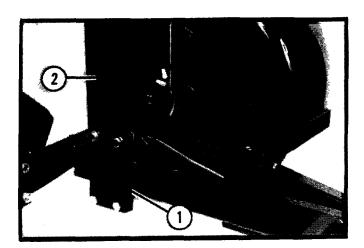


Figure 13

- 1. Rear Mounting Tab
- 2. Mounting Mast

#### IMPORTANT!

IF YOUR TOTE TRAILER MODEL IS 1992 OR NEWER, THE LOCKING LEVER WILL HAVE TWO HOLES

DRILLED IN IT. THE LOWER HOLE IS FOR USE WITH THE LAWNAIRE V ONLY (SEE FIGURE 14).

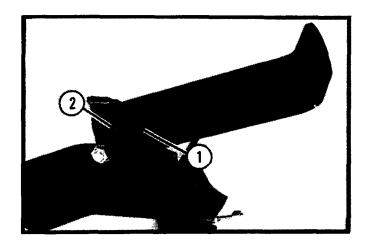


Figure 14

- 1. Upper Hole For Lawnaire IV and Jr. Sod Cutter
- 2. Lower Hole For Lawnaire V
- Using the 3/8-16 x 2 1/4" screws and locknuts mount the wheel stops to the rear axle frame. Do not tighten. Position the wheel stops on the inside of the frame members the approximate width of the tires on the sod cutter. (See Figure 15).
- With the locking shaft removed from the mounting masts on the trailer, grasp the hitch of the trailer and push it towards the sod cutter. Tip trailer so the sod cutter is centered between the mounting masts.
- 4. Tip the trailer until the top mounting holes on the mounting masts are aligned with the mounting holes in the sod cutter's A-frame. Slide the locking shaft, from the right side, into place and secure with the locking pins (See Figure 16).



### SAFETY WARNING

After the trailer is positioned and the locking shaft is in place (prior to lifting the sod cutter off the ground) place blocks in front and back of both tires, to prevent the trailer from rolling while lifting sod cutter off the ground. Before unloading the sod cutter, block the tires to prevent possible injury.

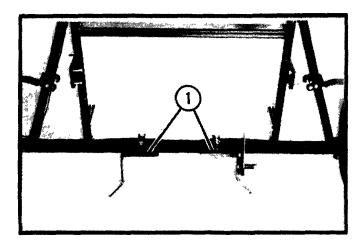


Figure 15

1. Wheel Stops Inside Frame Members

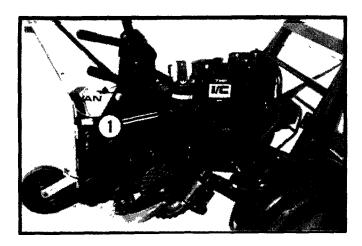


Figure 16

- 1. Locking Shaft in Top Hole Of Mounting Mast
- 5. Pull down on the trailer lifting the sod cutter off the ground and lower the trailer hitch to the ground.
- 6. Center the sod cutter on the trailer then adjust the wheel stops so there is approximately a 1/4" (6 mm) space between the stop and the wheels. Tighten the wheel stops and lock the wheel locking lever into position (See Figure 17).

#### **TRANSPORTING**



 To prevent injury or property damage, make sure the safety chains are securely attached to the towing vehicle.

- Use caution when inflating a tire, or bringing a low tire up to recommended pressure. Use a pressure gauge to check the pressure in a partially inflated tire before connecting an air hose. Due to the low air volume requirements of small tires, over-inflation may be reached in a matter of two or three seconds, which may cause the tire to explode.
- Attach the tote trailer to the towing vehicle for transporting to the job site. After the ball-hitch is properly secured, connect the electrical plugs and secure the chains to the towing vehicle with sufficient slack to allow trailer to turn.
- Proper tire inflation is 20 psi (138kPa). Improper inflation will shorten the life of the tire and could cause the tote trailer to pull erratically.
- 3. Maximum towing speed is 35 mph (56 km/h).

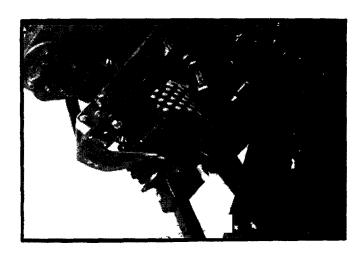


Figure 17
Wheel Locking Lever Closed

#### **UNLOADING**

- With tote trailer on a level surface, unhook the trailer from the towing vehicle and move the trailer so there is enough room to tip the trailer up without injuring the operator or damaging property.
- Make sure the wheel stops are not against the wheels to prevent the sod cutter from swinging freely.





- To keep the trailer from rolling and causing serious injury, place blocks in front and back of both tires before loading and unloading any unit from the trailer.
- 3. Grasping the hitch of the trailer slowly tip the trailer up until the unit is resting on the ground. Remove the locking pins from the locking shaft and tip the trailer so there is no pressure on the locking shaft. Slide the shaft out of the sod cutter and pull the trailer away from the unit.
- Check engine and gear case oil levels before beginning operation of sod cutter. Visually inspect sod cutter for loose or broken parts and tighten or replace if necessary.
- After completion of job, clean and service the sod cutter according to instructions in the Sod Cutter Operator's / Parts Manual.

#### LOADING

Lawnaire V



- Do not attempt to load the unit on the trailer until you have read and understand the Operation and Transportation section.
- To prevent possible injury from the trailer tongue raising suddenly and striking the operator, maintain a firm grip on the trailer tongue while removing the locking shaft while loading or unloading equipment.
- To prevent possible injury, load and unload the trailer on a level surface.

 When tipping the trailer to load and unload, use care to avoid damage to the taillights.

#### Accessory Kit

 Attach the mounting masts to the forward mounting tabs on the trailer frame using three 5/16-18 x 11/4" screws and nuts. Use the center bolt hole on the bottom of the masts for the bottom forward hole position. Lean the masts toward the rear. The slotted holes on the masts go toward the rear and the tab on the left mounting mast faces outward (See Figure 18).

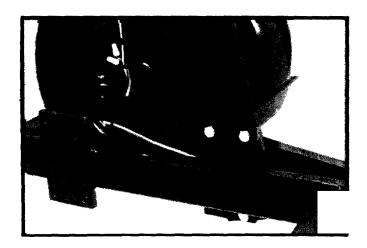


Figure 18

- 1. Mounting Mast
- 2. Forward Tab

#### IMPORTANT!

IF YOUR TOTE TRAILER MODEL IS 1991 OR PRIOR, PROCEED WITH ASSEMBLY STEPS 2 THRU 5. IF YOUR TOTE TRAILER MODEL IS 1992 OR NEWER, CHECK THE HOLE POSITION OF THE LOCKING LEVER ON THE WHEEL STOP. IF IT IS NOT CORRECT FOR YOUR APPLICATION REFER TO THE FOLLOWING INSTRUCTIONS FOR REMOVAL AND INSTALLATION.

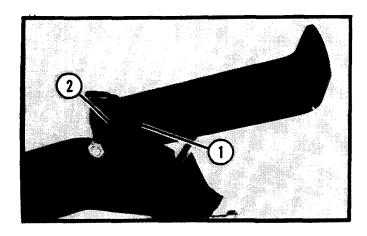


Figure 19

- 1. Upper Hole For Lawnaire IV And Jr. Sod Cutter
- 2. Lower Hole For Lawnaire V
- 2. Remove the locking lever from the wheel stop provided with the tote trailer. Remove the 3/8-16 x 2 1/4" screw, locknut and spring securing the locking lever to the wheel stop.
- Using the locking lever provided with the Lawnaire V
   Accessory Kit, attach the locking lever onto the wheel
   stop using the BOTTOM hole of the locking lever. Re verse the procedure in Step 2 for installation (See
   Figure 19 For Finished Assembly).
- 4. Mount the wheel stops onto the frame positioned at their farthest allowable width. Do not tighten (See Figure 20).

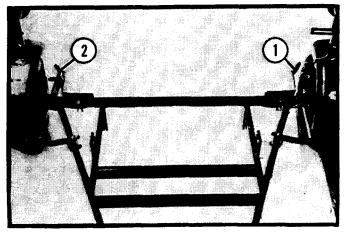


Figure 20

- 1. Wheel Stop
- 2. Wheel Stop With Locking Lever

- 5. Remove the plug from Lawnaire V's water drum and drain all the water. While the water is draining, remove the weight bar from the center of the Lawnaire V and remove the locking shaft from the mounting masts on the trailer. When the drum is drained, tip the Lawnaire V back until the handlebars support the aerator on the ground.
- 6. Holding the hitch end of the tote trailer push it to the aerator. Tip the trailer back and center the Lawnaire V between the mounting masts. Align the holes on the mounting masts with the hole in the center of the Lawnaire V frame (where weight bar was located). Once holes are aligned, slide the locking shaft through from the right side. Secure shaft with the locking pins (See Figure 21).



#### SAFETY WARNING

 To keep the trailer from rolling and causing serious injury, place blocks in front and back of both tires before loading and unloading any unit from the trailer.



Figure 21
1. Locking Shaft With Pins

7. Pull down on the hitch of the trailer and lower the hitch to the ground. Position the Lawnaire V so that it aligns with the stop assemblies. Adjust the stop assemblies to leave approximately a 1/4" (6 mm) space between the stop assembly and the wheel. Tighten stops securely. Place the wheel locking lever over the right wheel (See Figure 22) and prepare tote trailer for towing. Refer to the instructions and precautions for transporting the tote trailer.

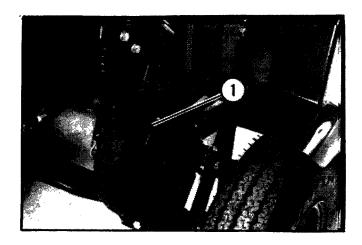


Figure 22

1. Wheel lock (Closed Position)

#### **TRANSPORTING**

- Attach the tote trailer to the towing vehicle for transporting to the job site. After the ball- hitch is properly secured, connect the electrical plugs and secure the chains to the towing vehicle with sufficient slack to allow trailer to turn.
- 2. Proper tire inflation is 20 psi (138kPa). Improper inflation will shorten the life of the tire and could cause the tote trailer to pull erratically.
- 3. Maximum towing speed is 35 mph (56 km/h).



- Use caution when inflating a tire, or bringing a
  low tire up to recommended pressure. Use a
  pressure gauge to check the pressure in a partially inflated tire before connecting an air hose.
  Due to the low air volume requirements of small
  tires, over-inflation may be reached in a matter of
  two or three seconds, which may cause the tire to
  explode.
- To prevent injury or property damage, make sure the safety chains are securely attached to the towing vehicle.

#### UNLOADING

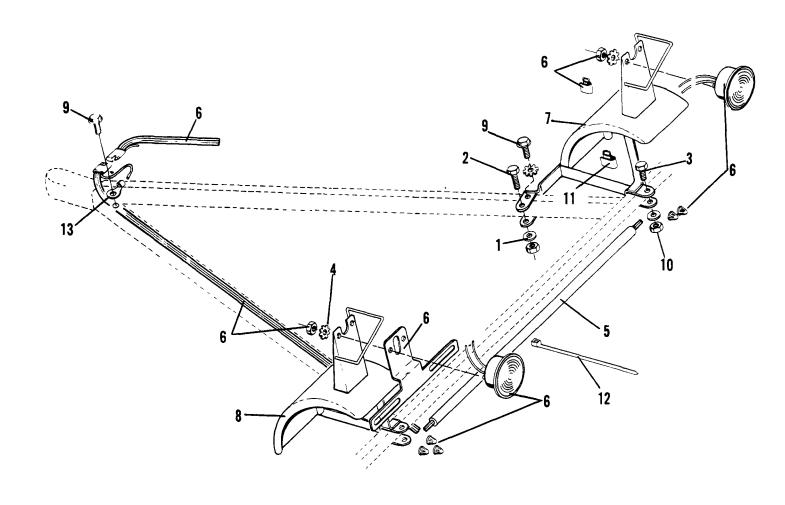


- To keep the trailer from rolling and causing serious injury, place blocks in front and back of both tires before loading and unloading any unit from the trailer.
- With tote trailer on a level surface, unhook the trailer from the towing vehicle and move the trailer so there is enough room to tip the trailer up without injuring the operator or damaging property.
- Make sure the wheel stops are not against the wheels preventing the sod cutter from swinging freely.
- 3. Grasping the hitch of the trailer slowly tip the trailer up until the unit is resting on the ground. Remove the locking pins from the locking shaft and tip the trailer so there is no pressure on the locking shaft. Slide the shaft out of the sod cutter and pull the trailer away from the unit.
- 4. Check the engine and gear case oil levels before beginning operation of sod cutter. Visually inspect sod cutter for loose or broken parts and tighten or replace if necessary.
- After completion of job, clean and service the sod cutter according to instructions in the Sod Cutter Operator's / Parts Manual.

#### TOUCH UP PAINT

Evergreen Green (Dark Green)
16 oz. (0.5L) Spray Order No. 825361
1 qt. (0.95L) Can Order No. 825363

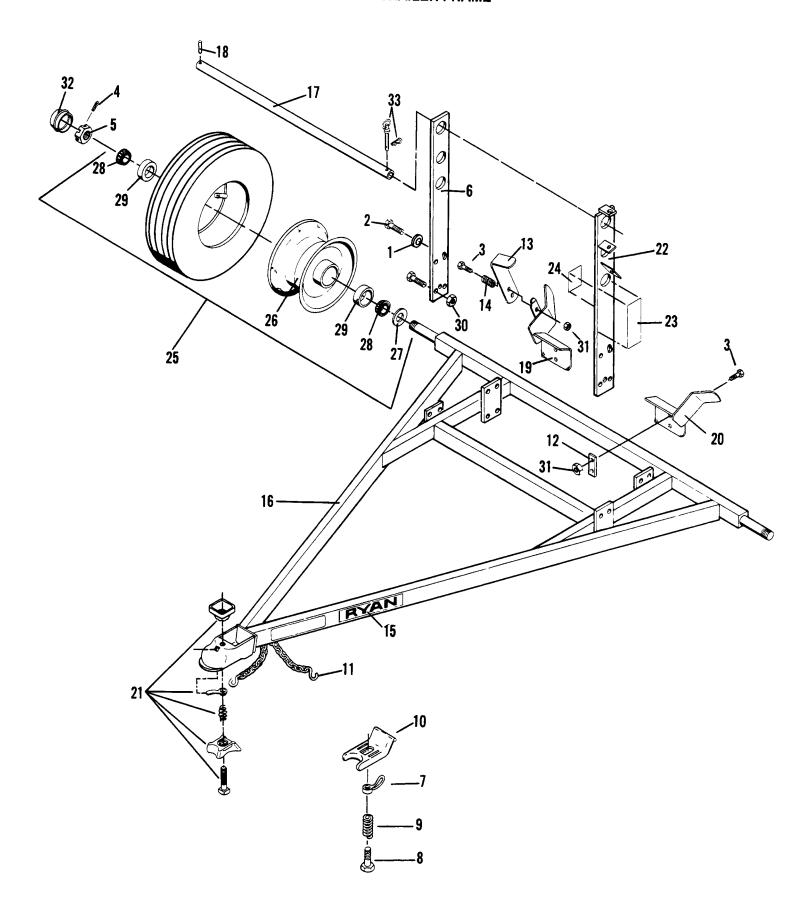
#### FENDER AND LIGHT KIT ASSEMBLY



#### FENDER AND LIGHT KIT ASSEMBLY

Ref. No.	Part No.	Description	No. Reg'd	Ref. No.	Part No.	Description	No. Req'd
1 2 3 4 5 6 7	131590 306424 306488 521418 545429	Washer, 5/16"	2 2 orf 6 1	8 9 10 11 12 13	548013 548048 809122 823549	Fender, left	3

#### TRAILER FRAME

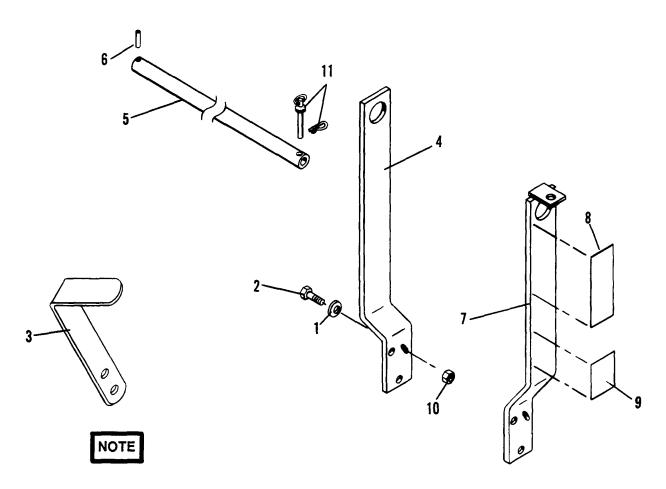


#### TRAILER FRAME

Ref. No.	Part No.	Description	No. Reg'd	Ref. No.	Part No.	Description	No. Reg'd
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	306435 306836 325109 515013 519300 520213 520214 520215 520216 520997 521628 521631 521659 523295 545037		8	18 19 20 21 22 23 24 25 26 27 28 29 31 32 33	545490 545491 545502 545509 521658 521660 547057 547058 830772 814473 814474 548048 548052 548585	Pin, roll 1/4 x 2 1/4" Stop, right Stop, left Kit, coupler repair Mast , mounting Decal, operating Decal, safety Wheel assembly, complete Rim, wheel Seal, oil Cone, bearing Cup, bearing Nut, 5/16"- 18 Nut, 3/8"- 16 Cap, end Pin, hitch	1 1 1 1 2 2 2 2 2 2

INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

 $\Diamond$  MODELS 7710 & Prior f MODELS 7810 & Later



 This locking lever will replace the locking lever provided with tote trailer, models 1991 and prior.

#### LAWNAIRE V MOUNTING ASSEMBLY PART NO. 549316

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1 2 3\$ 4 5 6	306435 521631 539001 549313	Washer, 5/16" Screw, 5/16-18 x 1 1/4" Locking lever	6 1 1	7 8 9 10 11	521658 521660 548048	Mast, mounting, LH Decal, operating	1

INDENTED PART NAME INDICATES THESE PARTS ARE PART OF PRECEDING ASSEMBLY

<sup>\$\</sup>delta\$ If ordering an accessory kit for models 1991 and prior, this locking lever will replace the locking lever that was provided with the trailer.

# **TORQUE SPECIFICATIONS**

HEX HEAD CAP SCREWS

The torque values shown should be used as a general guideline when specific torque values are not given.

#### U.S. Standard Hardware

	Shank Size (Diameter in inches, fine or coarse thread)													
Grade		1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8		
SAE	ftibs.	9	18	31	50	75	110	150	250	378	583	782		
grade 5 *	N∙m	12	24	42	68	102	150	203	339	513	790	1060		
SAE grade	ftlbs.	13	28	46	75	115	165	225	370	591	893	1410		
8 **	N∙m	18	38	62	108	156	224	305	502	801	1211	1912	1	
Flangelock Screw w/ Flangelock Nut	ftlbs.		24	40			]							
	N∙m		33	54										

\* Grade 5 marking -



Minimum commercial quality (Lower quality not recommended).

\*\* Grade 8 marking



#### Metric Standard Hardware

	ze (Di	amete	meter in millimeters, fine or coarse thread)												
Grade		M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27
Grade	ftlbs.	2	4	7	11	18″	32	58	94	144	190	260	368	470	707
8.8*	N·m	1.5	3	5.2	8.2	13.5	24	43.5	70.5	108	142	195	276	353	530
Grade	ftlbs.	3	6	10	16	25	47	83	133	196	269	366	520	664	996
10.9**	N·m	2.2	4.5	7.5	12	18.8	35.2	62.2	100	147	202	275	390	498	747
Grade	ftlbs.	3.6	7	11	20	29	58	100	159	235	323	440	628	794	1205
12.9 ***	N·m	2.7	5.2	8.2	15	21.8	43.5	75	119	176	242	330	471	596	904

\* Grade 8.8 marking -

\*\* Grade 10.9 marking

\*\*\* Grade 12.9 marking

### **SERVICE**

DATE	SERVICE DONE	INITIAL

N	O	TE	ES	
---	---	----	----	--

### -NOTES-

#### RYAN® LIMITED WARRANTY

CUSHMAN INC., a Ransomes Company, warrants for one (1) year all new Ryan turf care products, 8910 and later. All previous models (8910 and prior) with the exception of LA 28, GA 24 and GA 30, have a 90 day warranty. The Ryan LA 28, GA 30 and GA 24 models (8810 and prior) have a (1) year warranty. All new Ryan products are warranted according to the following terms:

This warranty extends to the original retail purchaser only and commences on the date of original retail purchase. Accordingly this warranty is not transferable to any subsequent purchasers. Any part of the Ryan Product or accessory manufactured by Cushman Inc. and found in the reasonable judgement of Cushman Inc. to be defective in material or workmanship will be repaired or replaced by an authorized Ryan distributor without charge for parts and labor.

The Ryan product including any defective part must be returned to an authorized Ryan distributor within the warranty period. The expense of returning the Ryan product to an authorized distributor for warranty service and the expense of returning it back to the owner after repair or replacement will be paid for by the owner. Cushman Inc.'s responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Ryan product. Proof of purchase will be required by the authorized Ryan distributor to substantiate any warranty claim. All warranty work must be performed by an authorized Ryan distributor.

Cushman Inc. makes no warranty with respect to engines, tires, or other parts not of their manufacture as such parts are usually warranted separately by their respective manufacturers.

This warranty does not include service items subject to normal wear, such as blades, tines, filters, spark plugs, ignition points, brake and clutch linings, or belts. This warranty does not cover any Ryan product that has been subject to misuse, neglect, negligence, or accident, or that has been operated or maintained in any way contrary to the operating or maintenance instructions as specified in the Ryan Operator's Manual. The warranty does not apply to any Ryan product that has been altered or modified so as to adversely affect the vehicle's operation, performance or durability or that has been altered or modified so as to change its intended use. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which in the reasonable judgement of Cushman Inc. are either incompatible with the Ryan product or adversely affect its operation, performance or durability.

Cushman Inc. reserves the right to change or improve the design of any Ryan product without assuming any obligation to modify any vehicle previously manufactured.

ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE APPLICABLE ONE YEAR PERIOD. aLL IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE ARE DISCLAIMED IN THEIR ENTIRETY AFTER THE EXPIRATION OF THE ONE YEAR WARRANTY PERIOD.

CUSHMAN INC.'S OBLIGATION UNDER THIS WARRANTY IS STRICTLY AND EXCLUSIVELY LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS, AND CUSHMAN INC. DOES NOT ASSUME OR AUTHORIZE ANYONE TO ASSUME FOR THEM ANY OTHER OBLIGATION.

CUSHMAN INC. ASSUMES NO RESPONSIBILITY FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, EXPENSE FOR GASOLINE, EXPENSE OF RETURNING THE RYAN PRODUCT TO AN AUTHORIZED DISTRIBUTOR AND EXPENSE OF RETURNING IT BACK TO THE OWNER. MECHANIC'S TRAVEL TIME, TELEPHONE OR TELEGRAM CHARGES, TRAILERING OR TOWING CHARGES, RENTAL OF A LIKE PRODUCT DURING THE TIME WARRANTY SERVICE IS BEING PERFORMED, TRAVEL, LODGING, LOSS OR DAMAGE TO PERSONAL PROPERTY, LOSS OF REVENUE, LOSS OF USE OF THE RYAN PRODUCT, LOSS OF TIME OR INCONVENIENCE.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to all Ryan products sold in the United States. Any products sold elsewhere are warranted by the affiliated marketing company of Cushman Inc.

CUSHMAN INC. • A RANSOMES COMPANY P.O. BOX 82409 Lincoln, Nebraska 68501–9971

9-22-91

#### WARRANTY SERVICE

To make a claim under warranty, contact the distributor immediately upon realizing a problem exists. We recommend having the warranty work performed by the distributor who originally sold you the product; however, warranty work can be sought from any authorized Ryan distributor. Remember, your Ryan product must be delivered to an authorized Ryan distributor within the warranty period, and all warranty work must be performed only by an authorized Ryan distributor. Proof of purchase will be required by the distributor to substantiate any warranty claim.

#### **EXAMPLES OF ITEMS NOT COVERED UNDER WARRANTY**

Provisions of the warranty will not apply to:

Normal service work over and above the repair and replacement of defective parts.

Products subject to misuse, neglect, negligence, or accident.

Products that have been altered or modified so as to adversely affect their operation, performance or durability or to change their intended use.

Repairs made necessary by the use of parts or accessories which are either incompatible with the vehicle or adversely affects the operation, performance or durability.

Products not operated or maintained in accordance with the instructions in the Ryan Operator's Manual.

Normal cleaning, adjusting or replacing of such items as filter, spark plugs, ignition points.

Periodic checking or adding of lubricants to the prducts or service check-up, tune-up or diagnosis.

Expense of delivering the product to the dealer and expense of returning the product back to the owner, mechanic's travel time, trailering or towing charges, or rental of a like product during the time warranty repairs are being performed.

Engines, tires, or parts manufactured by other than Ryan are not covered under this warranty as such parts are usually warranted by their respective manufacturers.

This warranty applies only to the original retail purchaser. Second-owner or subsequently owned products are not covered under warranty.

#### OWNER'S OBLIGATION AND RESPONSIBILITY

Normal maintenance service and replacement of service items are the responsibility of the owner and as such are not considered defects in material or workmanship within the terms of the warranty. Individual operating habits and usage contribute to the need for maintenance service.

See your Ryan distributor for proper maintenance and care of your product. Proper maintenance and care will assist in keeping your overall operating cost at a minimum.

To validate a warranty claim, it is the owner's responsibility to maintain all components in proper adjustment and service the product as specified in the Ryan Operator's Manual. It is the owner's responsibility to provide proper lubrication for all components and provide correct recommended fuel for the products. It is the owner's responsibility to maintain the correct tire pressures where applicable.

