



MODEL NO. 44904

 INSTALLATION/OPERATING  
INSTRUCTIONS  
& PARTS LIST

## SPIKER KIT

(for Model No. 44902 Tri-Roller)

### SAFETY INSTRUCTIONS



The safety alert symbol means CAUTION, WARNING or DANGER - "personal safety instruction". Read and understand the instruction because it has to do with safety. Failure to comply with the instruction may result in personal injury.

A free replacement manual is available by sending complete Model and Serial Number to:

**The Toro Company**  
8111 Lyndale Ave. So.  
Minneapolis, MN 55420-1196

#### BEFORE OPERATING

1. Read and understand the contents of the manual for the Greensmaster® to which this attachment is installed. Become familiar with all controls and know how to stop quickly.

2. ALWAYS follow all safety precautions in the Greensmaster operator's manual pertaining to attachments.

### INSTALLATION INSTRUCTIONS

#### TRI-ROLLER SPIKER (44904)

The spiker is optional on the Tri-Roller. To install follow the instructions below.

1. For ease of assembly, Tri-Rollers should be removed from Greensmaster before beginning assembly of Spiker Kit.

2. Remove the 1/2" nut from the wheel shaft assembly and remove complete wheel assembly from Tri-Roller.

3. Set the Tri-Roller on a level surface.

4. Attach the Spiker Blade Assembly to the Tri-Roller using the 1/2" x 1-1/4" carriage bolts. See assembly drawing on parts page.

Tighten the right hand side but leave the left hand side loose. The left hand side has the rectangular slot instead of a square hole.

5. Move the Spiker Blade Assembly up and down on the left hand side until it is level with the surface it is sitting on.

6. Tighten the left hand side carriage bolt.

7. To lock the Spiker Assembly into position attach the 1/4" x 1" capscrew to the hole on the left hand side and secure. (See Fig. 1)

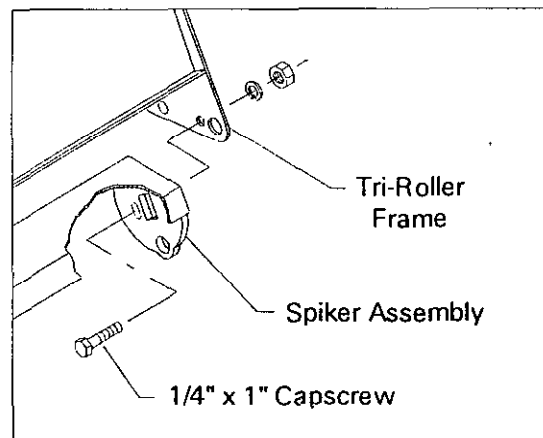


Figure 1

# OPERATING INSTRUCTIONS

1. The retainer and clamp assembly on each lift arm of the Greensmower may need to be adjusted to provide desired float or penetration of the spikers.

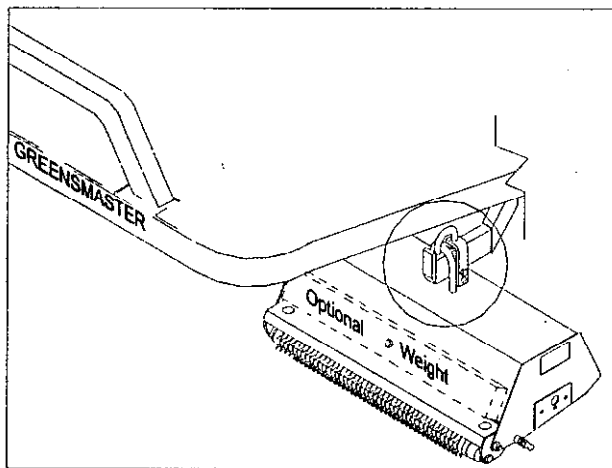
2. The optional weight can be installed on the front face of the Tri-Roller housing to obtain more effective penetration.

**NOTE:** The Retainer and Clamp have two holes allowing for usage on newer or older Lift Arms. Install the fasteners through the top hole if adequate clearance exists.

3. Since the conditions of moisture and compaction vary with each climatic condition, region of the country and type of soil, the operator must use and/or adjust the optional weight and retainer clamp assemblies to obtain the desired result.

4. When storing or switching back to cutting unit, remove Retainers from Greensmower and attach to Tri-Roller Lift Bails for convenience and later use.

**IMPORTANT:** It is important to raise the roller/spiker unit when making a turn to begin another lap. Do not turn the with the roller/spiker unit in the down position as turf damage will result.



ASSEMBLED VIEW

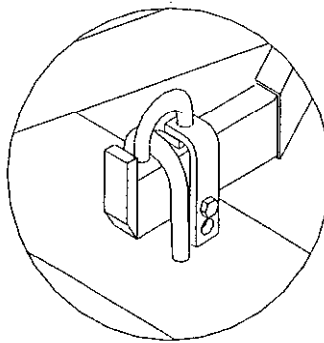
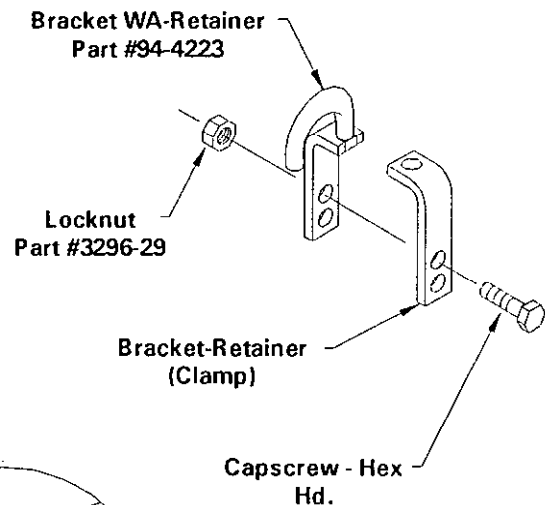


Figure 2

## MAINTENANCE

1. Remove the key from the ignition switch to prevent accidental starting of the engine when servicing, adjusting or storing the machine.

2. If major repairs are ever needed or assistance desired, contact an Authorized TORO Distributor.

3. Make sure machine is in safe operating condition by keeping nuts, bolts and screws tight.

## MAINTENANCE (Continued)

### LUBRICATION

Lubricate the self aligning bearings with No. 2 lithium based grease daily after operation or after washdown and cleaning of spiker units.

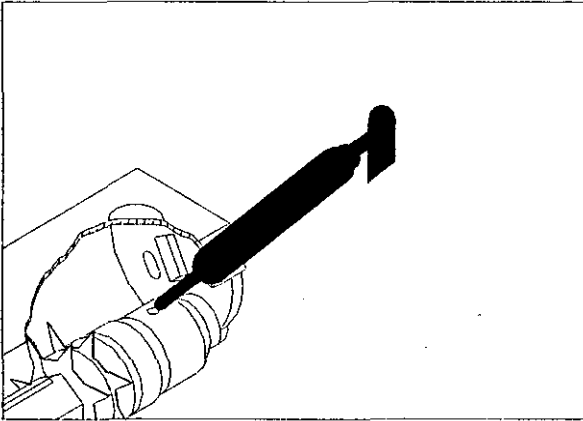


Figure 3

### SPIKER BLADE REPLACEMENT



#### CAUTION

Wear leather gloves when handling the roller as spikes are extremely sharp.

1. Remove blade shaft assembly from Spiker Housing.

2. Remove jam nut from the blade shaft.

3. Slide spacers and spiker blades off the hex shaft. Note the position of the spacers and blades for reassembly.

4. When installing spiker blades, rotate projection (small bump on each blade) one flat on hex shaft either counter-clockwise or clockwise, but direction of rotation must remain constant for complete assembly.

5. When installing spiker blades, spike's vertical edge must be pointed in the direction of the rotation.

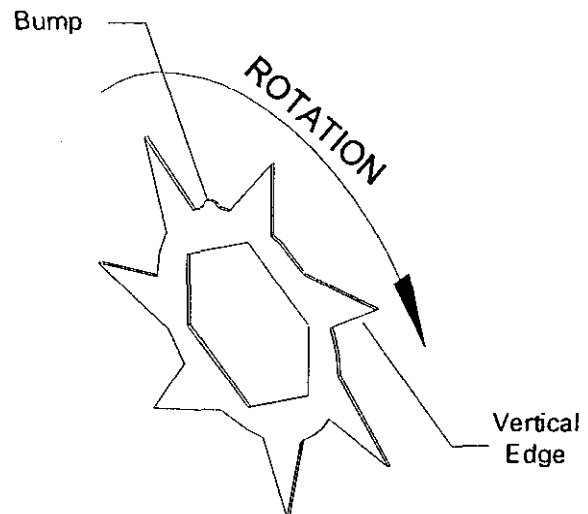


Figure 4

## STORAGE

1. Thoroughly clean the Tri-Roller. The rollers should be free of dirt, leaves and debris.

2. Tighten all fasteners.

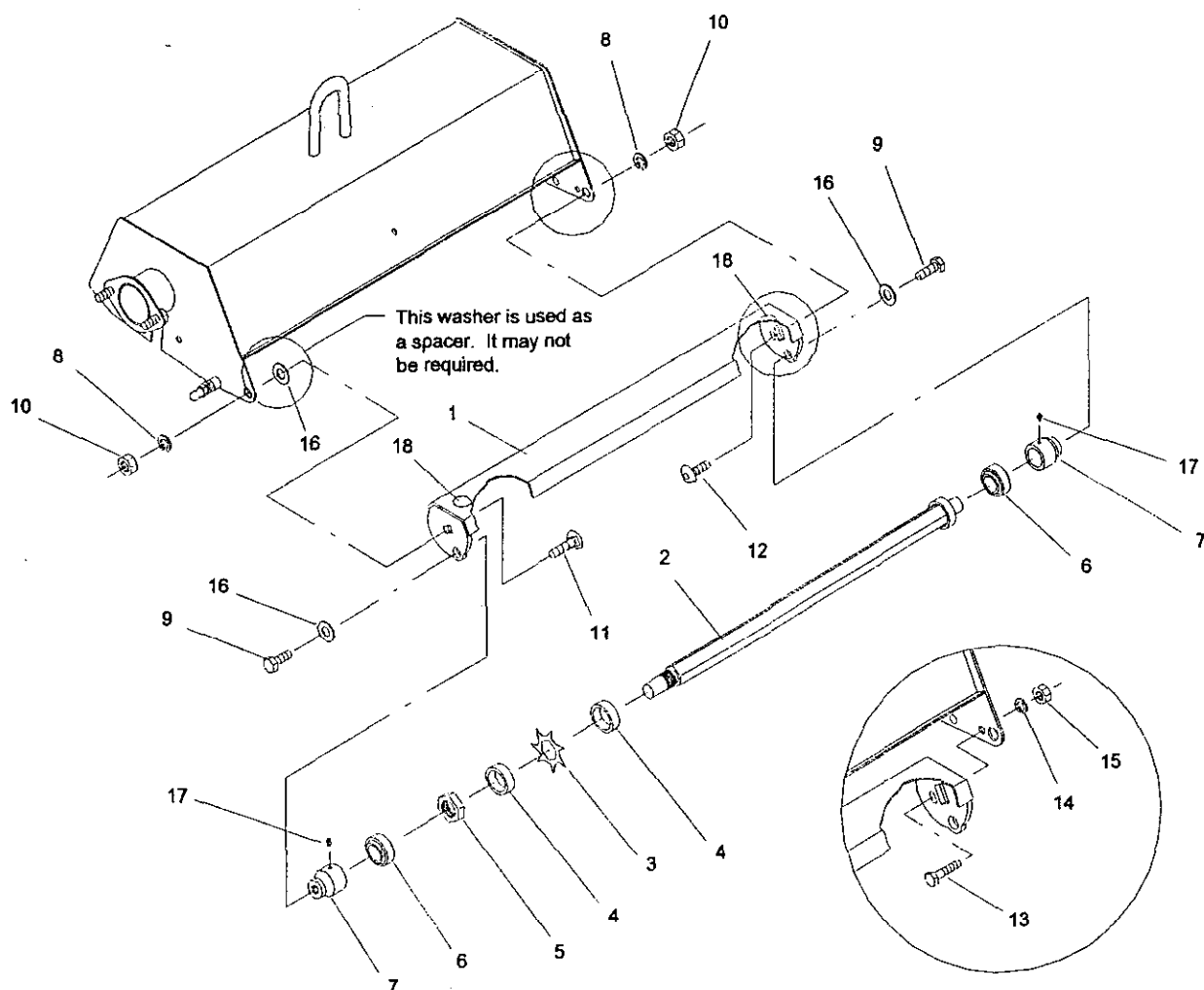
3. ALWAYS place protective mat under rollers when dismounting and storing.

## IDENTIFICATION AND ORDERING

To order replacement parts from an authorized TORO Distributor, supply the following information:

1. Part number, description and quantity of parts desired.

**Note:** Do not order by reference number if a parts catalog is being used; use the part number.



## PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	92-4499	Spiker Housing	3
2	92-4501	Spiker Shaft	3
3	57-0950	Blade - Spiker	102
4	26-1580	Spacer	105
5	3220-8	Jam Nut	3
6	94-5572	Bearing - Spiker	6
7	94-5570	Mounts - Spiker	6
8	3253-7	Lock Washer	6
9	325-2	Capscrew - Hex Hd.	6

Ref. No.	Part No.	Description	No. Used
10	3217-9	Hex Nut	6
11	3233-1	Carriage Bolt	3
12	92-4500	Carriage Bolt -Special	3
13	321-6	Capscrew - Hex Hd.	3
14	3253-3	Lock Washer	3
15	3217-5	Hex Nut	3
16	3256-26	"SAE" Flat Washer	9
17	302-5	Grease Fitting	6
18	58-6520	Decal - Grease	6

**NOTE: Quantities listed are for 3 spiker units**