

SP31129
SP31130
SP31131

TOW BEHIND DRUM SPIKE AERATOR



Instruction & Assembly

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

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GENERAL WARNINGS

READ and UNDERSTAND this manual completely before using the Spike Aerator.

Operator must read and understand all safety and warning information, operating instructions, maintenance and storage instructions before operating this equipment. Failure to properly operate and maintain the aerator could result in serious injury to the operator or bystanders.

Operation Warnings

- Do not at any time carry passengers, sit or stand on the aerator.
- Do not allow children to play on, stand upon or climb on the aerator.
- Always inspect the aerator before using to assure it is in good working condition.
- Replace or repair damaged or worn parts immediately.
- Always check and tighten hardware and assembled parts before operation.
- Do not exceed rated capacity – **36”/280lb, 48”/375lb & 60”/ 460lb.**
- Avoid large holes and ditches when operating the equipment.
- Be careful when operating the aerator on steep grades (hill).
- ALWAYS operate at reduce speed in rough terrain, along creeks, ditches and on hillsides.
- Do not operate close to creeks, ditches and public highways.
- To avoid personal injury and/or equipment damage **DO NOT EXCEED 5MPH.**
- Only tow with recommended vehicles (Lawn/Garden Tractors and ATVs).
- Always refer to the vehicle owner’s manual for proper towing.
- Aerator is not designed to be used with zero-turn mowers.
- Always secure and lock aerator to the vehicle hitch before operating.

Crush and Cut Hazards

- Always keep hands and feet clear from moving parts while operating the equipment.
- Always clear and keep work area clean when operating.
- Always wear safety gear, eye protection, gloves and work boots when operating the aerator.

WARNING

The warnings, cautions, and instructions outlined in this instruction manual cannot cover all possible conditions or situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product and must be supplied by the operator.

PROP 65 WARNING

This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm.

Assembly Is Required

This product requires assembly before use. See “Assembly” section for instructions. Because of the weight and/or size of the aerator, it is recommended that another adult be present to assist with the assembly. **INSPECT ALL COMPONENTS** closely upon receipt to make sure no components are missing or damaged.

Hazard Signal Word Definitions

	<p>This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.</p>
	<p>DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.</p>
	<p>WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.</p>
	<p>CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</p>
	<p>CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.</p>

ABOUT YOUR SPIKE AERATOR

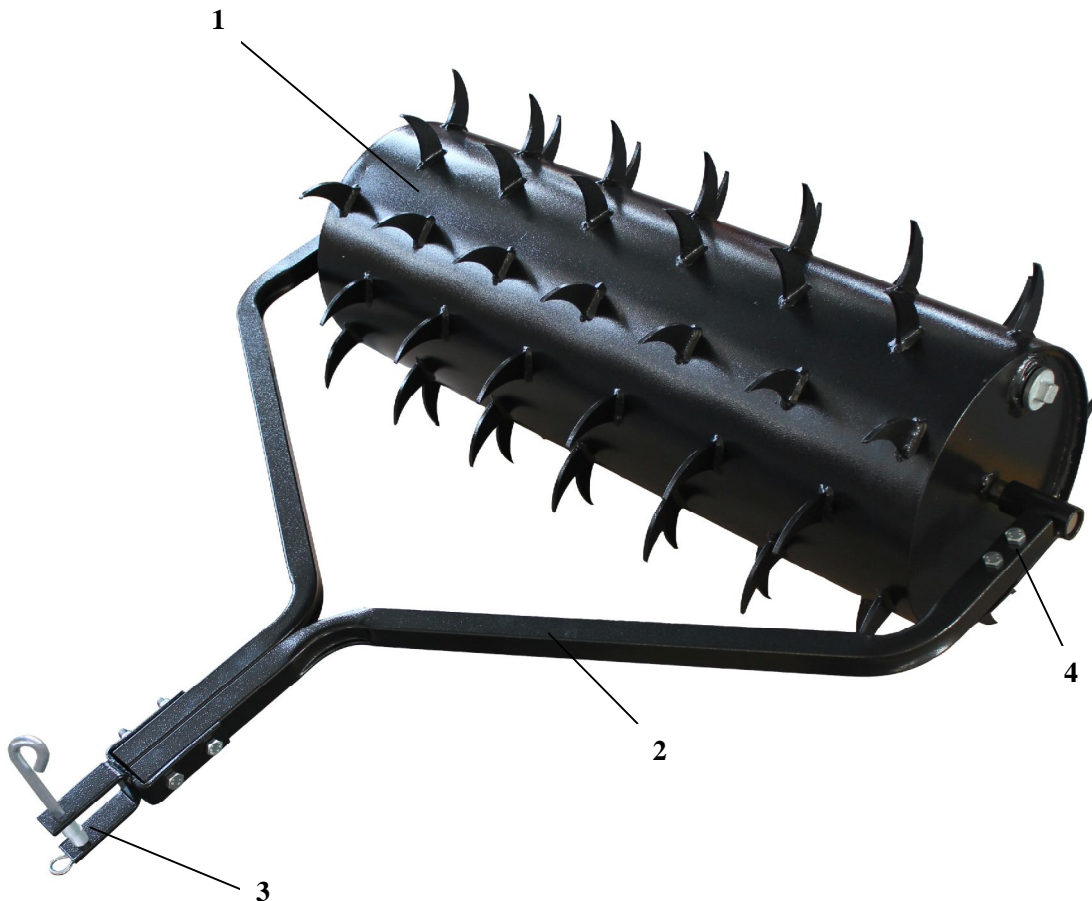
This spike aerator has a roughed steel construction and is designed to penetrate the soil up to 2.5" in depth, allowing for compact soil to be loosen. Aerators promote a health lawn by opening up the ground to allow water, air and nutrients to reach your lawns root system. It is ideal for heavy-traffic areas (playgrounds and sports fields) and burned out, drought-damaged lawns. The steel roller will accommodate either water or sand depending on the operators needs. When using water always drain and remove the fill/drain plug to avoid freezing. The roller must be drained at temperatures below 32°F (0°C) to prevent damage.

SP31129 - 36" Spike Aerator Max Capacity 280lb (127kg)
 SP31130 - 48" Spike Aerator Max Capacity 375lb (170kg)
 SP31131 - 60" Spike Aerator Max Capacity 460lb (209kg)

Technical specifications on the spike aerator are provided in the "Specifications" section of this manual.

Controls and Features Identification

Read this owner's manual before operating the equipment. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.



- 1) **Steel Drum Body** – Use water or sand do not exceed listed rated capacity.
- 2) **Hitch Bracket** – Attaches to Steel Drum Body.
- 3) **Hitch** – Pin-type design use only with approve vehicles.
- 4) **Joint Bushing / Grease Fitting** – Grease before using.



CAUTION

Read and follow all instructions for assembly and operation. Failure to properly assemble this equipment could result in serious injury to the user or bystanders, or cause equipment damage.

SPIKE AERATOR COMPONENT PARTS AND ASSEMBLY

Take all parts out of the shipping crate and inspect components to ensure there are no missing pieces before starting to assemble the spike aerator.

TOOLS REQUIRED

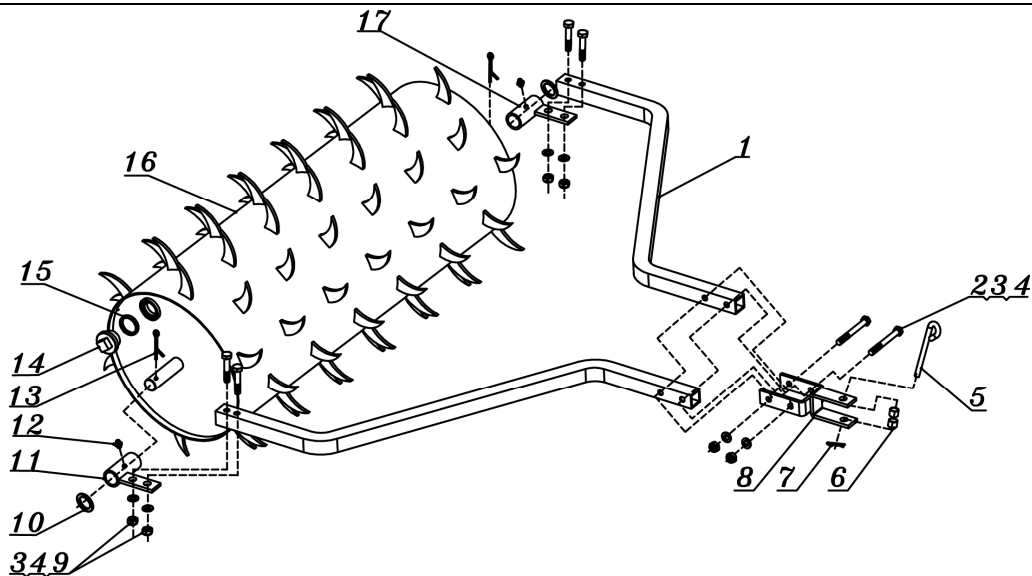
- 10mm Wrench
- 17mm Wrench
- Large Adjustable Wrench (Fill/Drain Plug)

Assembly Instructions



CAUTION

When assembling or using the aerator exercise caution at all times, the spikes are sharp and may result in serious injury to the user or bystanders.



Spike Aerator Assembly

1. Locate and layout all hardware and component parts.
2. Attach the U- Roller bracket (#1) to the joint bushing (#11& #17) using flat washer Ø10 (#3), nylon lock nut M10 (#4) and hex bolt M10x55 (#9).
3. Attach the joint bushing (#11& #17) to the axle of steel roller (#16), put a flat washer Ø24 (#10), then insert a cotter pin (#13).
4. Attach the hitch bracket (#8) to the U-Roller bracket (#1) using hex bolt M10x85 (#2), flat washer Ø10 (#3), nylon lock nut M10 (#4).
5. Insert hitch pin with 2 bushing (#6) and R pin (#7).
6. Tighten the grease fitting (#12) to the joint bushing (#11 & #17).
7. Securely tighten all hardware before using.
8. Fill roller with water or sand do not exceed rated capacity.
9. Place Washer (15) over hole and secure with Fill/Drain Plug (14) and tighten.
10. Grease or oil bushings before using.

Operation Instructions

WARNING

Before operating or using the spike aerator, review the instructions below and safety information. Failure to follow these instructions may result in property damage or injury to the operator or bystanders.

IMPORTANT:

Aerating is putting small holes in the soil up to 2.5 inches in depth to create small reservoirs that will bring oxygen, fertilizer and water down to the roots. For best aerating results follow the soil/lawn preparation and operating aerator procedures.

SOIL AND LAWN PREPARATION

1. Remove large and small debris from work area.
2. If the ground is hard and dry, it is recommended the ground be sprinkled or watered for one or two hours prior to aerating.
3. If the ground is wet or muddy **DO NOT** attempt to aerate.
4. Mow lawn and remove loose clippings before aerating.

USING YOUR PLUG AERATOR

1. **DO NOT** at any time carry passengers, sit or stand on the spike aerator.
2. Never attach a garden hose to the fill/drain hole when filling the roller. Dangerous pressure build up can occur.
3. Only tow with recommended vehicles (Lawn/Garden Tractors and ATVs).
4. Refer to the vehicle owner's manual for proper safety and towing instructions.
5. Always secure and lock the aerator to the vehicle hitch before operating.
6. Always make sure that the tow vehicle and the combined weight of the operator **MUST BE** greater than the load of the lawn roller for proper control.
7. Start vehicle engine with the controls in neutral position, put throttle at the slowest engine speed. Put transmission in low gear first, allowing spikes to enter the ground. Increase the speed as work conditions permit.
8. Vehicle braking and stability may be affected with the attachment of this equipment.
9. Never exceed 5mph when towing the aerator.
10. Aerate in the straightest line as possible making overlapping passes to increase the spike point pattern.
11. **DO NOT** make sharp turns that may cause the vehicles tires to rub against the aerator.
12. Avoid extremely sharp turns when using the aerator to prevent damage to lawn.
13. **DO NOT** cross over walks or drives with the spike aerator.
14. On sloped lawns, always aerate in an up and down direction. **DO NOT** attempt to aerate across the slope always go in an up and down direction.
15. Always use caution when backing the aerator to avoid "jack-knifing". Always back up in a straight line.
16. Do not exceed rated capacity.

WARNING

The spike aerator must be drained at temperatures below 32°F (0°C) to prevent damage.

When the roller is not being used always drain the water out and leave the fill/drain plug out.

Maintenance and Storage



WARNING

Improper maintenance and storage of the spike aerator may void your warranty.

MAINTENANCE

- ALWAYS disconnect equipment from towing vehicle when cleaning or servicing the unit.
- After each use drain water and leave plug out.
- Rinse/dry the lawn roller after each use.
- Before using, grease axle and all moving parts as needed.
- Periodically check all fasteners for tightness.
- Annually clean and lightly lubricate parts.
- Use a glossy enamel spray paint to touch up scratched or worn painted metal surfaces.
- Never exceed the rated capacity of the lawn roller, it will do damage.

IMPORTANT:

If a part needs replacement, only use parts that meet the manufacturer's specifications. Replacement parts that do not meet specifications may result in a safety hazard or poor operations.

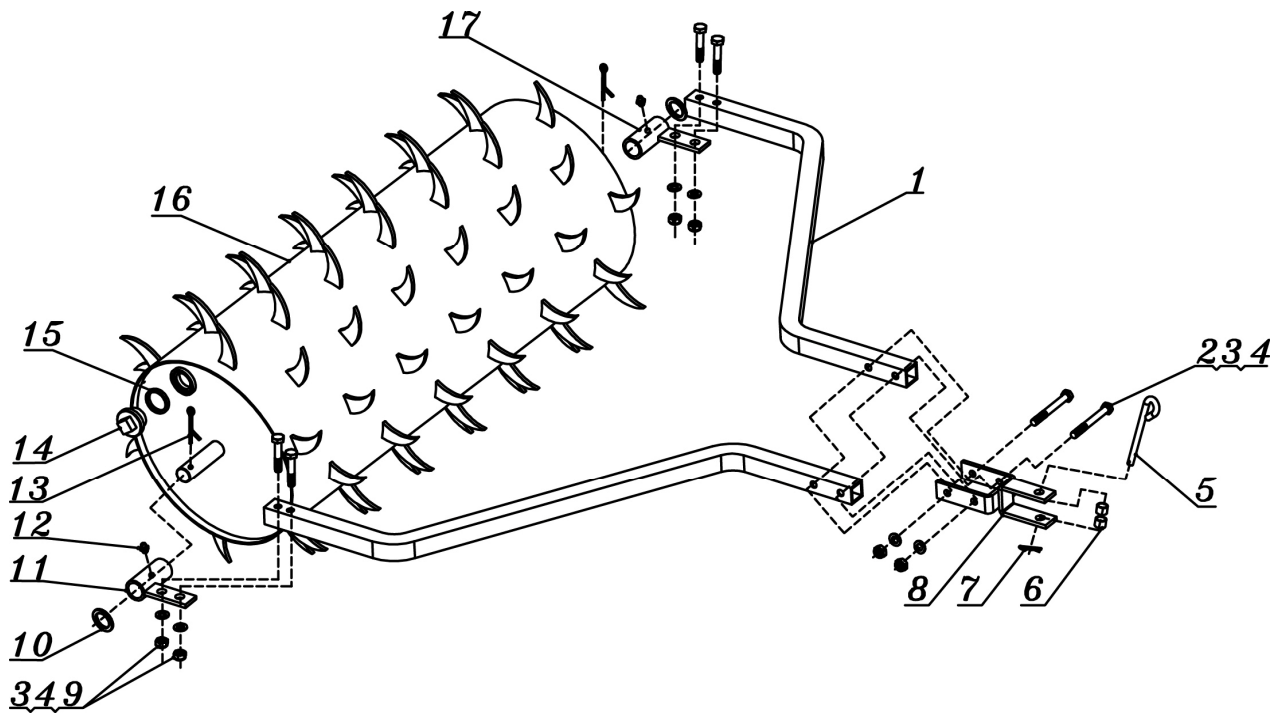
STORAGE

- Never leave water in the roller for extended periods of time.
- Remove fill/drain plug when storing.
- Always drain water from the roller to keep it from freezing.
- Before storing make sure the lawn roller is clean and dry for years of trouble free service.
- Store indoors or protected area during severe weather and winter months.

Specifications

36" Spike Aerator Load Capacity	280lb (127kg)
48" Spike Aerator Load Capacity	375lb (170kg)
60" Spike Aerator Load Capacity	460lb (209kg)
36" Spike Aerator Drum Dimension (L x W)	36"x14"
48" Spike Aerator Drum Dimension (L x W)	48"x14"
60" Spike Aerator Drum Dimension (L x W)	60"x14"
Construction	Steel
Max. Aeration Depth	2.5"
Hitch Type	Universal Pin Style

Parts Drawing & Parts List



Ref#	Drawing No.	Description	Qty
1	TR3614-00001	U- Roller Bracket	2
2	9101-10085-DX	Hex Bolt M10x85	2
3	9301-10000-DX	Flat Washer Ø10	6
4	9206-10000-DX	Nylon Lock Nut M10	6
5	N870-00011	Hitch Pin	1
6	N280-00026	Bushing	2
7	N021-00004-DX	R Pin	1
8	TR3614-01000	Hitch Bracket	1
9	9101-10055-DX	Hex Bolt M10x55	4
10	T328-20004	Back Plate Ø43xØ26x3	2
11	TR3614-03000	Joint Bushing (Right)	1
12	9701-06000	Grease Fitting	2
13	9404-05050-DX	Cotter Pin Ø5x50	2
14	N450-00001-DX	Fill/Drain Plug	1
15	N450-00002	Washer Ø40xØ33x5	1
16	TR3614A-01000	Steel Roller	1
17	TR3614-02000	Joint Bushing (Left)	1