



GROOMER & MAINTENANCE PRODUCTS

Hydraulic Sweeper

OWNERS/OPERATING MANUAL

Manufactured by Sportsfield Specialties, Inc.



CONGRATULATIONS

Thank you for purchasing a FIELDSPEC® Synthetic Infill Turf Grooming product. This piece of equipment has been designed for specific use on, in-filled, artificial grass system. To ensure years of dependable service this product has been designed and manufactured to the highest quality standards available in the industry today.

This Grooming Equipment is designed with safety in mind, however if the equipment is operated carelessly and not as instructed it can be dangerous. With this in mind we recommend that each and every operator of this equipment familiarize themselves with the operating manual prior to initial use. The upfront time spent on acquainting them with the safe operation, performance and minimal required maintenance, will ensure long life of this equipment.

Our goal is to ensure that you as the end user are satisfied with this grooming product. While the design and illustrations used in this manual were current at the time of manual printing, we reserve the right to incorporate design improvements in future products without changing products previously manufactured. These improvements are important to ensure that customer feedback and industry changes are incorporated into future products.

SAFETY SYMBOLS



This is a standard safety alert symbol meaning **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



CAUTION Indicates hazardous situation, injury may occur, used to alert against carelessness.



WARNING Indicates potentially hazardous situation. Death or serious injury may occur if proper procedures are not followed.



DANGER Indicates most hazardous situation. Death or serious injury will occur if proper procedures are not followed

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SAFETY INFORMATION



WARNING

This unit contains a rotating brush which operates at high speed, always wear eye protection when operating this unit. Never place feet or hands under the unit when being operated.



DANGER

The Hydraulic Sweeper is not designed to carry human occupants. Doing so is at the owner's risk. The manufacturer of this unit is not responsible for injuries, permanent disabilities or fatalities that may be a result of this occurrence.



CAUTION

The Hydraulic Sweeper is not designed to be towed at high speed across non-turf surfaces. Excessive speed can damage the unit and create an unsafe condition.

MACHINE SETUP

Uncrating – The HYDRAULIC SWEEPER is packaged to ensure that damage does not occur during the shipping process. While the packaging is more than adequate to handle the normal bumps and shifts in loads during transit, in rare cases damage may occur.

Upon receipt of the SWEEPER please inspect the packaging and unit to ensure that they are damage free. It is the customer's responsibility to document damage prior to the departure of the shipping company and file a claim if appropriate.

After inspecting the unit, carefully remove the packaging/crating.



CAUTION

Wood crating contains nails and may splinter during removal from the sweeper system. Operator should wear gloves and eye protection to minimize potential for injury.

3-Point Hitch to Tow Vehicle – The Hydraulic Sweeper is designed to be towed by a 16-20 hp tractor with turf tires, 3 point hitch capability and an on-board hydraulic system with a minimum capability of supplying 5 to 7 gallons per minute of fluid. The Sweeper uses 7/8" lift pins and a 7/8" threaded hitch pin (provided) for attachment to the tow vehicle. Once the pins are connected and the 1/4" Linch Pins (provided) are in place the unit can be safely lifted.

The unit can also be towed utilizing a standard hitch-tounge arrangement. Simply rotate the hitch forward and attach to the tow vehicle's tongue with a 1/2" x 2 1/2" pin, not provided.



WARNING

The Hydraulic Sweeper weighs 325 lbs., without including the weight of debris in the hopper. It is critical that all locking pins are in place and locked. This will minimize the potential for the unit to disengage during the lifting process. Never place feet or hands under the unit when in the lifted position.



CAUTION

The brushes on the Sweeper operate at high speeds resulting in airborne debris. While the unit is designed to capture this debris it is possible that some may escape the confines of the unit. Always wear eye protection when operating this unit and any other unit of this type.



CAUTION

The Hydraulic Sweeper is not designed to be towed at high speed across non-turf surfaces. Excessive speed can damage the unit and create an unsafe condition.

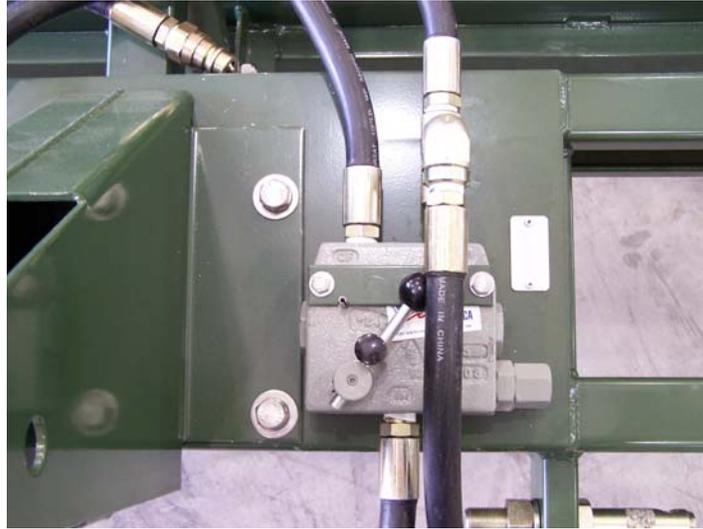


DANGER

The Hydraulic Sweeper is not designed to carry human occupants. Doing so is at the owner's risk. The manufacturer is not responsible for injuries, permanent disabilities or fatalities that may be a result of this occurrence.

HYDRAULIC SWEEPER OPERATION

Hydraulic Hose Attachment - Once the Hydraulic Sweeper is attached to the 3-Point Hitch of the tow vehicle it is necessary to route the 60” hydraulic hoses from the sweeper to the connection points on the tow vehicle. The supply and return hydraulic hoses are attached to the sweeper at the adjustable flow control valve, **Picture 1**. The opposite end of the hose has an ISO 5675 compliant hydraulic fitting, standard for most tow vehicle hydraulic systems. The quick connect size can be changed if necessary.



Picture 1

The hydraulic system of the sweeper is fully tested under operational conditions during manufacture to ensure the shipment of a leak-free unit. The system is charged with hydraulic fluid and is ready for use once the hydraulic hoses are attached to the tractor.



CAUTION

Route the hoses from the tow vehicle to the Hydraulic Sweeper in a way that keeps the hoses clear of pinch points and off the synthetic infill turf. Hydraulic fluid is under pressure, leaks must be fixed immediately.

Adjusting Brush Height and Speed – After the unit is safely attached to the 3-point hitch and the hydraulic hoses in place, tow the vehicle to the infill synthetic turf filed for brush height adjustment.

The brush height is determined by the height of the infill as compared to the synthetic turf. This adjustment will be operator and owner dependent so experimentation may be necessary to achieve optimum results for your specific application. To do this remove the hopper from the unit, **Picture 2a & 2b**, so that the rear of the brush is in full view.



Picture 2a



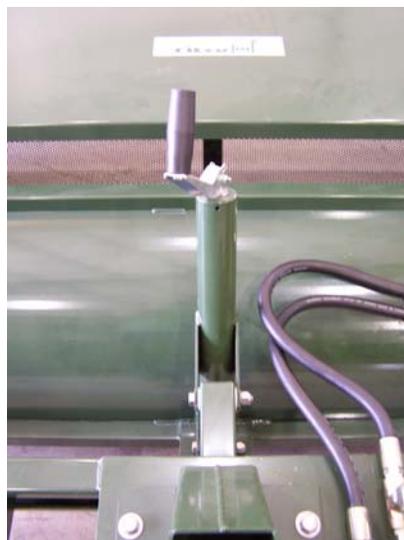
Picture 2b



WARNING

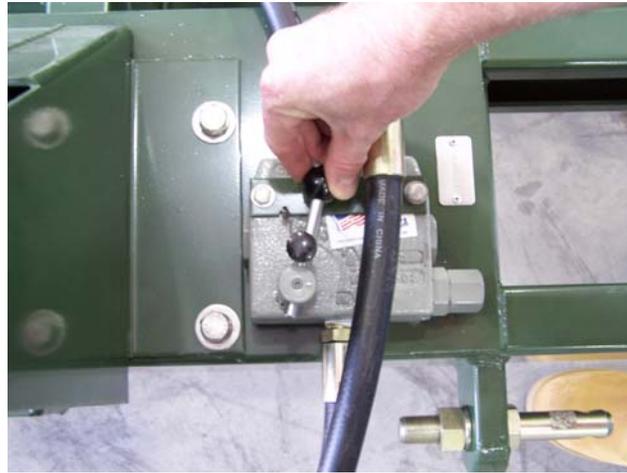
The hopper is designed to either be rotated to be emptied or completely removed from the unit. The hopper with debris and infill can become quite heavy. Always ensure that two people are present when emptying or removing the hopper from the unit.

Measure the distance between the bottom of the brush to a point just above the infill material. The brush height is adjusted by rotating the jack handle in the appropriate direction, see **Picture 3**. It is not necessary for the brush to be in contact with the turf fiber, but rather slightly above it. Again, experimentation is required.



Picture 3

The rotational speed of the brush is adjusted by the Adjustable Flow Control Valve located on the top shelf at the front of the Sweeper, **Picture 4**. This valve has a preset, maximum speed stop which should never be exceeded as this could result in hazardous operating conditions. After multiple uses of the sweeper the owner will have a better feel for the appropriate speed for their conditions.



Picture 4



WARNING

Never manually bypass the maximum speed stop on the Flow Control Valve as this could result in Hazardous Operating Conditions.

Verifying the Rotational Direction of the Brush – With the debris hopper removed from the unit, verify brush direction by moving the Adjustable Flow Control Valve until the brush begins to slowly rotate. The brush should rotate in a clockwise direction (viewed from the drive side) meaning that the bottom of the brush assembly should rotate towards the tow vehicle. A decal is provided indicating proper brush direction.

If rotation is incorrect, swap hydraulic hoses on the vehicle, ensuring proper rotation.

Emptying and Removal of the Debris Hopper – The debris hopper is designed so that it can be emptied by simply rotating the hopper over a dumpster or plastic tarp, by removing the hopper from the unit and manually emptying.



WARNING

Never attempt to remove the hopper while the brush system is rotating, serious injury could occur.

To empty into a dumpster or on a plastic sheet placed on the ground, tow vehicle or tractor should have the unit lifted high enough to clear but not so high that operators cannot reach the handles to rotate the hopper upwards. To rotate the hopper each operator should firmly grab the handles located at the rear of the hopper, **Picture 5**, and rotate upwards forcing the debris to fall forward and over the front ledge of the hopper. Once empty slowly rotate the hopper down to its resting position, recognizing that some debris will remain in the hopper.



Picture 5

To remove the hopper from the unit for emptying remove the two safety lynch pins on either side of the unit, **Picture 6a & 6b**, and with two operators lift the entire hopper up and out of the unit. The hopper can then be carried to a location for emptying. Even though the hopper is designed to allow infill materials to filter back through to the field in certain cases leaves or other debris may cover the screen resulting in a buildup of infill material. Since this material can be reused it is suggested that the hopper be emptied at a location which will allow the recovery of the infill material. To reinstall the hopper reverse these instructions ensuring that the safety lynch pins are replaced and locked on both sides of the unit.



Picture 6a



Picture 6b



WARNING

The hopper is designed to either be rotated to be emptied or completely removed from the unit. The hopper with debris and infill can become quite heavy. Always ensure that two people are present when emptying or removing the hopper from the unit.

Checking the Drag Brush for Wear – Periodically check brush length to determine if replacement is warranted.

Maintenance – The Hydraulic Sweeper requires minimum maintenance, however periodic inspection is recommended to ensure that parts have not come loose, the hydraulics are not leaking and that components are lubricated properly. Use the following check list to ensure proper operation and long life of the unit:

1. Check **Before Each Use** for leaks in the hydraulic system on both the sweeper and the tow unit. These must be repaired prior to use on the synthetic infill turf field.
2. Check **Weekly** for loose hardware, tighten as necessary.
3. Lubricate **Monthly or as required** for all moving components. Pay particular attention to the grease fitting located on the non-drive side of the brush axle.

Frequency of Use – The Hydraulic Sweeper is designed to remove litter, debris and seeds from the synthetic infill turf field. This unit **can be used as often as necessary** to keep the field in pristine condition.

It should be noted that the sweeper is designed to allow infill to be picked up by the brush and returned to the field via perforated holes in the metal hopper. It may be necessary to empty the hopper several times, depending on conditions, to stop any leaves or debris from clogging the screen.

HYDRAULIC SWEEPER Specifications

Dimensions

Overall Width	82.563"
Width of Sweep Brush	69.000"
Length	49.000"
Height	29.563"

Weight 325 lbs.

Construction Type Steel

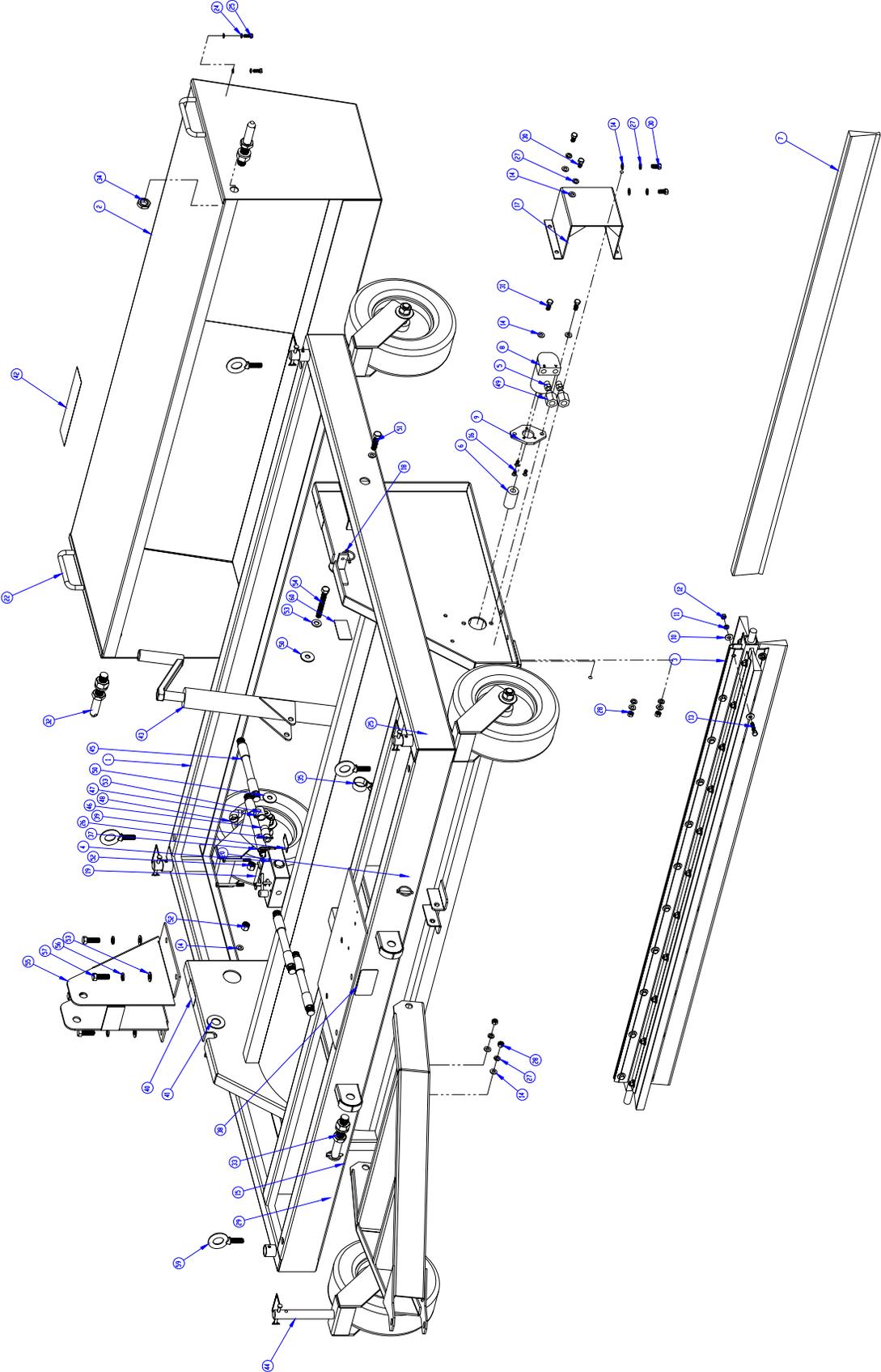
Coating Type Powder

Brush Specifications Poly

Hydraulic System Requirement	(Tow Vehicle)	4-6 GPM
Hydraulic Hose Size	(1/2-10, NPT Male)	1/2"
Hydraulic Drive		Sauer Danfoss
Hydraulic Speed Control		Prince Valve

Hitch Pin, Threaded (Included) 7/8"x 3"

GENERAL ASSEMBLY (Pictorial)



GENERAL ASSEMBLY (Bill of Material)

ITEM NO.	QTY.	PART NO.	STOCK SIZE	DESCRIPTION
1	1	HDSweeper-Frame		Frame, Sweeper
2	1	HDSweeper-Hopper		Hopper, Sweeper
3	1	HDSweeper-BrushMount		70" Brush Mounting Shaft
4	1	114-5PP06		Prince Adjustable Flow Control Valve (RD-150-16)
5	2	114-2F419		Swivel Reducer Pipe Fitting, 9/16-18 to 3/8-18 NPTF
6	1	114-75241877	2.250" Long	Rigid Sleeve Reducing Coupling, 3/4 to 5/8
7	4	114-01-9299	69.000" Long	69" Strip Brush
8	1	50-151G0034	0.790 cu. in; 5/8" Shaft	SAUER DANFOSS OMM 151G0034
9	1	HDSweeper-48		FLANGE, MOTOR MOUNT
10	88	110-FLW5_16-SS		5/16-18 S.S. FLAT WASHER
11	44	110-SLW5_16-SS		5/16-18 S.S. LOCK WASHER
12	44	107-HXN5_16-18-SS		5/16-18 S.S. Hex Nut
13	44	101-HHC5_16-18X1.5-SS	1 1/2" LONG	5/16-18 SS HEX HEAD BOLT X 1.500 LONG
14	14	110-FLW3_8-SS		3/8-16 S.S. FLAT WASHER
15	1	114-88041546		3/4" Two Bolt Cast Iron Flange Bearing
16	3	104-FHS1/4-28X5/8-PH-SS	5/8" Long	1/4-28 S.S. FL. HD. PHILLIPS SCREW X 5/8" LONG
17	1	HDSweeper-Guard		Pump Guard
18	4	114-90170A212		Linch Pin, 1/4" Dia, 1-9/16 OA Length
19	1	Valve Stop		Valve Stop Assy
20	1	Valve Stop-01		Strip, Valve Stop
21	2	101-HHC1_4-20X3.00-SS	3.000" Long	1/4-20 SS Hex Head Bolt X 3.000" Long
22	2	Hopper Handle	8.500"	Handle, Hopper
23	8	110-FLW1_4-SS		1/4-20 S.S. FLAT WASHER
24	4	110-SLW1_4-SS		1/4-20 SS LOCK WASHER
25	6	101-HHC1_4-20X.750-SS	3/4" Long	1/4-20 SS Hex Head Bolt X .750 Long
26	1	90-1632T22		ID Tag
27	8	110-SLW3_8-SS		3/8-16 S. S. Lock Washer
28	4	107-HXN3_8-16-SS		3/8-16 STAINLESS STEEL HEX NUT
29	2	101-HHC3_8-16X1.25-SS	1.25"	3/8-16 SS HEX BOLT X 1.250 LONG

ITEM NO.	QTY.	PART NO.	STOCK SIZE	DESCRIPTION
30	4	101-HHC3_8-16X.75-SS	3/4" LONG	3/8-16 SS HEX BOLT X .750 LONG
31	2	101-HHC3_8-16X1-SS	1.000" LONG	3/8-16 SS HEX BOLT X 1.000 LONG
32	2	114-28330 w/o Lock Washer		Lift Arm Pin, 7/8" Dia., 6-3/16" OAL
33	2	114-28330 w/ Lock Washer		Lift Arm Pin, 7/8" Dia., 6-3/16" OAL
34	2	106-HXN7_8-14JAM-STL		7/8-14 Steel Jam Nut (3/8" Thickness)
35	4	114-8863T16		Steel loop strap w/ vinyl coating for 3/4" OD
36	2	107-HXN1_4-20NYLOCK-SS		1/4-20 STAINLESS STEEL NYLOCK NUT
37	2	52-M5342		Danger - Moving Machinery Label
38	1	52-DK6004		Manufactured By Label
39	2	114-97447A130		Rivet, Aluminum (.313"-.375")
40	2	52-28985		"Pinch Point" Labels
41	2	114-NYL1X1_8FLW		1" NYLON WASHER
42	1	52-FTDECAL		Field Turf Decal
43	1	HDSweeper-Jack		Jack Weldment
44	4	HDSweeper-Wheel		Wheel Assembly
45	2	114-00441444	1/2" x 60" Lg.	Hose Assembly 60" OAL, 1/2-14 NPT male thread
46	1	114-2F459		Nipple Pipe Fitting, 1/2-14 NPTF
47	1	114-2F479		"Tee" Pipe Fitting, 1/2-14 NPTF
48	1	114-2F473		90 Deg. Elbow Pipe Fltting, 1/2-14 NPTF
49	2	114-5232T361		Stainless Steel Pipe Fitting, 3/8-18 to 1/2-14 NPTF
50	6	114-NYL1_2X1_5Z125FLW		1/2" NYLON WASHER
51	2	101-HHC1_2-13X2-SS	2.000" LONG	1/2-13 SS HEX HEAD BOLT X 2.000 LONG
52	4	107-HXN1_2-13NYLOCK-SS		1/2-13 Stainless Steel Nylock Nut
53	8	110-FLW1_2-SS		1/2-13 S.S. FLAT WASHER
54	2	101-HHC1_2-13X4-SS	4.000" LONG	1/2-13 SS HEX HEAD BOLT X 4.000 LONG
55	1	HDSweeper-Upper-Mount		Mount, Upper
56	4	110-SLW1_2-SS		1/2-13 S.S. LOCK WASHER
57	4	101-HHC1_2-13X1.5-SS	1 1/2" LONG	1/2-13 SS HEX HEAD BOLT X 1.50 LONG
58	1	HDSweeperl_Tongue		

ITEM NO.	QTY.	PART NO.	STOCK SIZE	DESCRIPTION
59	4	3014T255		
60	1	52-60551 Axle Rotation Decal		Decal, Axle Rotation
61	2	114-00441451	1/2" x 72" Lg.	Hose Assembly 72" OAL, 1/2-14 NPT male thread

REPLACEMENT PARTS

Your new grooming equipment was designed and manufactured with durability in mind, however certain “wear” components such as brushes, tines, tires, etc. will need to be replaced at some point during the equipment’s lifetime. Additionally, operator based accidents with this equipment can and will happen resulting in an almost immediate need for replacement parts.

Sportsfield Specialties is committed to maintaining available inventory to ensure that these damaged part emergencies and “wear” based replacements can be responded to immediately.

Please contact Sportsfield Specialties, Inc., on our support hotline, 888-975-3343 and request Grooming Products Parts Assistance. Utilize the information provided on the General Assembly pages to identify both part number and description.

SPORTSFIELD SPECIALTIES, INC. 888-975-3343

Part Number#: _____

Part Description: _____

To ensure quick turnaround we accept credit card transactions, typically resulting in same or next day shipment.

LIMITED WARRANTY

Sportsfield Specialties, Inc. warrants this product to be free of defects in materials and workmanship for a period of twelve months from the original delivery date. This warranty does not cover components or parts caused to be deficient due to normal wear, misuse, accidents, or lack of proper maintenance.

Any parts thought to be defective must be returned to Sportsfield Specialties along with the unit for warranty consideration. The owner/operator will be responsible for the expense of returning the above items to Sportsfield Specialties for warranty service as well as the expense for returning same after repair or replacement. A Return Authorization Number must be obtained and clearly marked on all packages of parts requiring return to the factory.

The obligation of Sportsfield Specialties, Inc under this limited warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE and any liability of incidental and consequential damages with respect to the sale or use of the items warranted. Such incidental and consequential damages shall include but not be limited to: transportation charges other than normal freight charges; cost of installation other than cost approved by Sportsfield Specialties, Inc.; duty; taxes; charges from normal service or adjustment; loss of synthetic carpet or any other income, ; rental of substitute equipment, expenses due to loss, damage, detention or delay in delivery of equipment or parts resulting from the acts beyond the control of Sportsfield Specialties, Inc.

LIMITED WARRANTY SHALL NOT APPLY:

1. If the Equipment has been subjected to misapplication, abuse, misuse, negligence, fire or other accident.
2. If parts not made by Sportsfield Specialties have been used in connection with the unit, if, in the sole judgment of Sportsfield Specialties, Inc. such use affects its performance, stability or reliability.
3. If the unit has been altered or repaired in a manner which, in the sole judgment of Sportsfield Specialties, Inc., affects its performance, stability, or reliability.
4. To normal maintenance service and normal replacement items such as brushes, tines, etc. or to normal deterioration of exterior finish due to use or exposure.
5. To expendable or wear items that in the company's sole judgment is a wear item.

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

**WARRANTY CARD TO BE COPIED AND MAILED OR FAXED TO
(Please retain copy for your records):**



SPORTSFIELD SPECIALTIES, INC.
ATTN: Warranty Department
PO BOX 231
41155 State Highway 10
Delhi, NY 13753
(607)746-8481 FAX
(888)975-3343 PHONE

Customer Name: _____

Customer Address: _____

Customer Contact Information:

Phone _____

FAX _____

Email _____

Date of Arrival at Customer Location: _____

Model Number (see serial plate): _____

Serial Number (see serial plate): _____

**THE ABOVE WARRANTY CARD MUST BE MAILED or FAXED
WITHIN 10 DAYS OF RECEIPT AT OWNERS FACILITY.**