



Simple Dimple Seeder Mark II Model: B-SDS-4-H

Operation and Parts Manual

GORDON BANNERMAN LIMITED

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Simple Dimple Seeder Mark II Model: B-SDS-4-H

Dear Owner,

Welcome to Bannerman, the Home of Sports Turf Magic.

The **Bannerman Simple Dimple Seeder** is designed to use on fine to regular turf areas. Whether it's golf, soccer, football, or polo fields, parks, playgrounds, or racecourses, the **Bannerman Simple Dimple Seeder** is versatile and easy to use. With an operating width of 50 inches and a dimpling feature that does not interrupt play, this fine-tuned seeding unit is a popular choice.

When in need of replacement parts, specify the model and serial number of your new **Bannerman Simple Dimple Seeder**. To give you many years of service, regular preventative maintenance is required. If you do not fully understand the instructions contained within this booklet, or need any further information to obtain the best performance from this machine, please contact Bannerman Ltd.

Regards,

George Bannerman
Corporate Secretary

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Warranty

Bannerman Ltd warranties all Bannerman B-SDS-4-H Simple Dimple Seeders, when applied and installed, to be free from defects in material and workmanship under normal use and service for a period of 1 year from date of use. We must receive the Warranty Card and Declaration or Delivery Card filled out in its entirety, via post, fax, or email within 15 days of date of sale. It is the responsibility of the end user to make sure that the Warranty Card has been filled out and submitted to Bannerman Ltd. This warranty does not guarantee a particular service life of the



products. Service life will vary with application, operating environment, level of maintenance and other factors beyond our control.

Bannerman Ltd's sole responsibility for the **Bannerman B-SDS-4-H Simple Dimple Seeder**, or parts determined to be defective and covered by this warranty, is limited to repairing the product or part. *An allowance is to be applied to the labour cost for the removal and replacement.*

Prior authorization from **Bannerman Ltd** must be obtained before replacing or returning any parts, or incurring any cost of labour. No charges for expense incurred in parts, labour or transportation by unauthorized persons will be allowed under this warranty. **Bannerman Ltd** reserves the right of any part or Bannerman assembly (with transportation prepaid) claimed to be covered under this warranty.

Bannerman Ltd shall not be liable, in event, for proximate, incidental, consequential, special or other damages. This includes, but it not limited to, damages for loss of production, loss of profit, loss of opportunity, or injury to persons arising out of any breach in this warranty.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, OR ANY OTHER WARRANTY EXTENDING BEYOND THAT SET FORTH ABOVE.

GORDON BANNERMAN LIMITED

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CONTACT US:

CAN 1-800-325-4871 USA 1-800-665-2696 info@sportsturfmagic.com

Specification Chart

B-SDS-4 Simple Dimple Seeder – Three Point Hitch

Overall Width	162.5 cm	64 inches	
Working Width	128 cm	50-1/4 inches	
Length	60 cm	23-1/2 inches	
Height	80 cm	31-1/2 inches	
Weight	162 kg	357 lbs	
Hopper Capacity	0.14 square meters	0.17 square yards	
Seed Spacing	3.5 cm x 5 cm	1-1/2 inches by 1-3/4 inches	
Coverage Rates	Rates 8450 square meters/hour 10.106 square yards/hou		
Recommended Tractor	10 kw	14 hp	

B-SDS-4-H Simple Dimple Seeder – Hydraulic Lift/Tow Behind

Overall Width	168.5 cm 66 inches		
Working Width	128 cm	50-1/4 inches	
Length	162.56 cm	64 inches	
Length with tow tongue	2.79m	110 inches	
Height	106.68 cm	42 inches	
Weight	207 kg	457 lbs	
Hopper Capacity	0.14 square meters	0.17 square yards	
Seed Spacing	3.5 cm x 5 cm	1-1/2 inches by 1-3/4 inches	
Coverage Rates	8450 square meters/hour	our 10.106 square yards/hour	
Recommended Tractor	10 kw	14 hp	
Tires	18 – 9:50 x	8 Turf Tires	

Work Safely - Follow These Rules!

-A careful operator is the best insurance against an accident-



<u>Warning</u>: Read this operation manual carefully and understand the controls before handling any equipment or commencing work.

- 1. Do not wear loose fitting clothing that may catch in moving parts.
- 2. Always read operating instructions carefully and understand the controls before commencing work.
- 3. Before starting work always visually check machines for damage or wear to working parts such as blades or tines.
- 4. Do not allow any unauthorized person to handle machines in any way at any time.
- 5. Before and during operation the area should be checked to assure that the area is clear if obstacles, hazards, and personnel.
- 6. Extreme caution should be exercised when operating close to ditches, fences or hill sides.
- 7. Always look behind before starting to reverse.
- 8. Switch off the power before making adjustments or repairs and never lift or carry a machine whilst any parts are moving.

Operating Instructions

Read the instructions carefully. Familiarize yourself with the controls and with the correct operation of the equipment. Never allow the seeder to be used by children or by persons who are unfamiliar with these instructions. Never operate the machine when others, in particular children or animals are in the vicinity. Always remember that it is the operator who is responsible for accidents or injuries caused to other persons or property.

The Simple Dimple Seeder's tine shaft is driven by the forward motion of the machine when the dimpling roller is in contact with the ground. The studded dimpling shaft in turn drives the seed shaft at a given rate through a variable seed speed lever box for your seeding requirements. The dimple shaft creates thousands of little "plant pots" to receive the grass seed which is metered simultaneously. The framework has provision for additional weights if required for extra depth in hard conditions.

Connecting to Tractor Using the Three Point Hitch

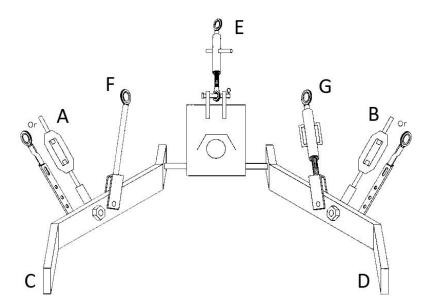
Connect the **Simple Dimple Seeder** to the tractors three point hitch link arms, ensuring that stabilizers are fitted. Adjust the top link so that the seeder is parallel to the ground.

Extra weight may be required to assist penetration in hard conditions. Always fit weights when machine is attached to the tractor. Always remove weights before disconnecting machine from the tractor.

Hooking Up the Three Point Hitch

- 1. Select a tractor 18 horsepower or greater equipped with the standard Category "1" Three Point Hitch.
- 2. Free up all linkages and pivot ball joints with adequate caution to ensure proper movement of the linkage. This ensures that hookup is quicker and safer.
- 3. With both the tractor and seeder on a level firm surface, first measure the distance from the two rear Three Point Hitch arms "C" and "D" to the ground with the arms in the lowest position, ground clearance should be no greater than 6" (15cm). Adjustment to the vertical tractor lift links "F" and "G" may be necessary.
- 4. Safely reverse tractor to seeder, and shut off the tractor engine. Connect the left hand tractor hitch arm "C" onto the seeder frame, and install lynch pin in the hole of the lift pin.
- 5. Connect the right hand tractor hitch arm "D" onto the seeder, using the same method as the other side.
- 6. Connect tractor adjustable top link "E" to tractor and to the top hole in the "A" frame of the seeder. Be sure that the snap pins are in cross holes of connecting pins, use hardened pins, **not** bolts. **Note**: Top link "E" can be either manual adjustable or hydraulic type.
- 7. Start tractor engine, raise seeder to height of 2 ft. (60 cm.) off the ground. Ensure parking brake is on before leaving the tractor seat. With the unit raised up, adjust "side sway" turn buckles or sliding link "A" and "B" to prevent side-to-side movement of the seeder. Be sure when adjusting side sway to center the seeder to tractor to ensure seeder follows in a straight line of cultivation behind the tractor.
- 8. While the seeder is in raised position, level the seeder horizontally to the rear axle of the tractor using the RH link G.
- 9. Safely and slowly lower the seeder to the ground. When the seeder is resting on the ground, adjust the tractor top link "E", either in or out to ensure the mainframe is 90 degrees to the rear of the tractor. Also check the skid shoe under the lever box clearance to the ground.

- It may require adjustment of the top link E as the seeder will appear to slope away from the rear of the tractor.
- 10. Lift the seeder for transport to approximately 18" (46 cm.) of height and proceed to the area to be groomed.



Connecting the Dimple Seeder to a Turf Vehicle

- 1. Reverse the turf vehicle to the towing tongue. Stop and adjust the height of the tongue on the seeder by folding the screw jack.
- 2. Make sure the clevis on the tongue straddles the towing plate on the turf vehicle. Using a 5/8" diameter towing pin, secure the seeder to the turf vehicle. Lift and fold the screw jack located on the seeder tongue.
- 3. With the turf vehicle shut off, release any inline hydraulic pressure at the hydraulic valve on the vehicle. Connect the two hydraulic hoses to the turf vehicle hydraulic ports.
- 4. Start the engine and activate the hydraulic valve on the vehicle to move the rear wheels in a downward direction. This will allow the hydraulic lift cylinder locking yoke to be folded away from the cylinder shaft. Now the seeder can be lowered to a ground engagement position.
 Note: It is important to adjust the manual link on the seeder tongue so the seeder is sloped slightly at the rear, approximately 5 degrees lower than the front of the seed hopper.

Seeding Rates

To alter the seed rate, unlock the control lever on the gearbox by turning the red knob as indicated on the top of the control lever. Move the lever to the correct position and lock firmly.

Different lower rates can be achieved by moving the lever from "A" toward the "B", "C", and "D" marks, A being the highest rate and D being the lowest rate. Lower rates are available past "D" down to zero. When using pure bent seed the Bent Seed Roller must be fitted.

Note: All seed rates are approximate. Seed grain size and ground conditions will affect rate of application. Accurate seed rates can only be obtained by on-site calibration

Suggested Seeding Rate Calibration

- 1. Determine the recommended seeding rate from the seed supplier (ei: lbs of seed per 1000 square feet.)
- 2. With this rate in mind, use stakes to mark out a 250ft length to act as a test area. As the working width of the seeder is close to 48" (4ft), this calculation will estimate the lbs. of seed needed per 1000 square feet.
- 3. Place the given weight of seed (ie. 4lbs per square feet for rye grass seed) evenly across the bottom of the seed hopper.
- 4. Set the lever box to 1/3 open (marked in a "V" pattern on top of the speed lever box).
- 5. Pull the machine to the start of the 250ft test area. Lower the seeder so the dimplers are resting on the ground, and drive slowly to the other end of the test area.
- 6. If there is no remaining seed in the hopper, than the desired rate of 4lbs per 1000sq feet has been achieved. If the hopper is empty prior to reaching the far end of the test area, move the lever on the variable speed lever box to the 1/4 way mark.
- 7. Place 4lbs of seed evenly in the hopper and traverse the test area again. Conversely, if there is seed remaining in the hopper, move the lever on the variable seed lever box to the 3/4 way mark.

Note: Often it is necessary to test the seed rate with 3 or more test runs.

Storage

Always remove seed from the hopper before storage. Always keep seed dry and free of vermin.

Seeding Rates Guide

	With Rye/Kent	Blue Grass ucky Blue Grass Roller	Fescue Grass With Rye/Kentucky Blue Grass Seed Roller			Grass ass Seed Roller
Setting	gms/square meter	oz/ square yard	gms/square meter	oz/ square yard	gms/square meter	oz/ square yard
Α	30	0.88	18	0.52	7.8	0.88
В	20	0.588	12.8	0.37	5	0.588
С	8.8	0.25	6.2	0.18	2	0.25
D	5	0.14	3	0.08	1	0.14

Golf Course Usage Guide

	Sowing Rate (> more than)		Cutting Height (< less than)		an)	
	gms/square meter	oz/square yard	millim	millimeters inches		ches
Bent or Fescue	35	1.015	< 5r	nm	<	20 in
Bent or Fescue	35	1.015	< 4mm	< 8mm	< .16 in	< .31 in
Bent or Fescue	35	1.015	< 5r	nm	<	20 in
Bent	6 to 12	.174 to .348	< 4mm	< 8mm	< .16 in	< .31 in
Creeping Bent	4 to 6	.116 to .174	< 3.5mm	< 8mm	< .14 in	< .31 in
Bent or Fescue	30	0.87	< 4mm	< 8mm	< .16 in	< .31 in
Bent or Fescue	30	0.87	< 7r	nm	<	20 in
Bent or Fescue	20	0.58	< 4r	nm	<	16 in
Bent or Fescue	30	0.87	< 10mm < .39		39 in	
Bent or Fescue	30	0.87	< 12mm < .47		47 in	
Bent or Fescue	30 to 35	.87 to 1.015	< 12	mm	< . >	47 in
Bent or Fescue	25 to 35	.725 to 1.015	< 15	mm	<	59 in

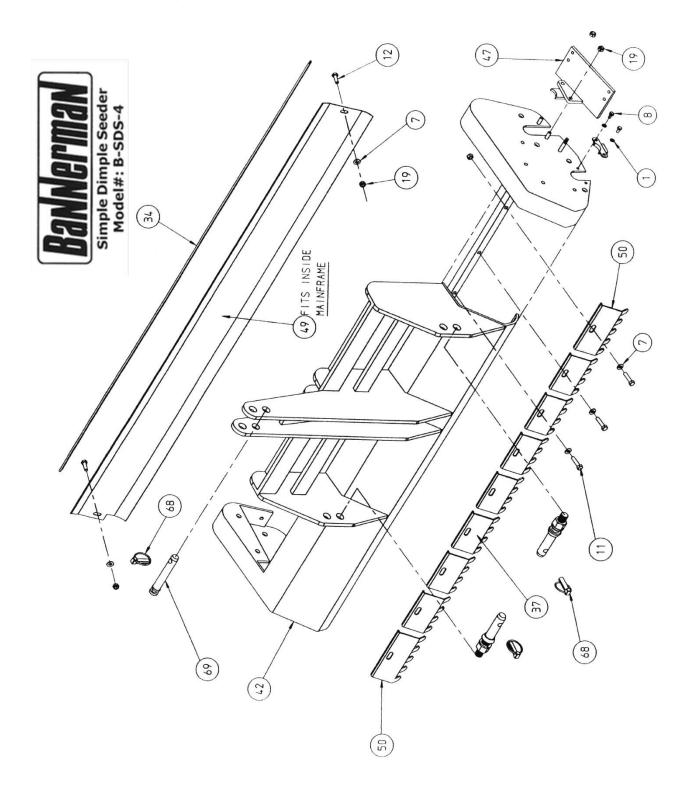
Cricket Usage Guide

	Sowing Rate (> more than)		Cutting Height (< less than)			ın)
	gms/square meter	oz/square yard	millimeters inche		hes	
Bent or Fescue	30	0.87	< 5mm	< 35mm	< .20 in	< 1.38 in
Bent or Fescue	35	1.015	< 10	mm	< .3	39 in
Bent or Fescue	30	0.87	< 7	mm	< .2	28 in

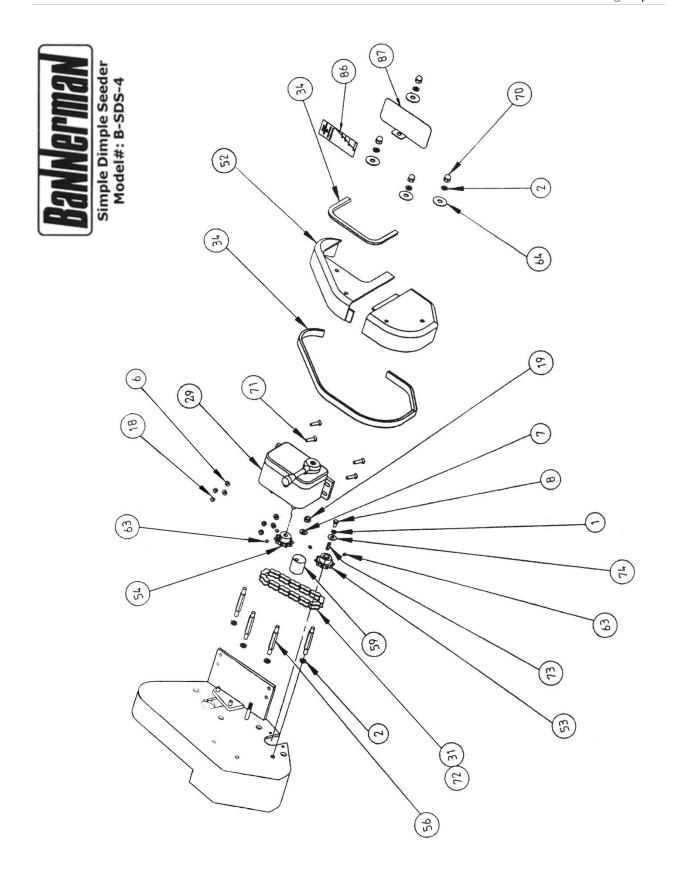
Sportsturf Usage Guide

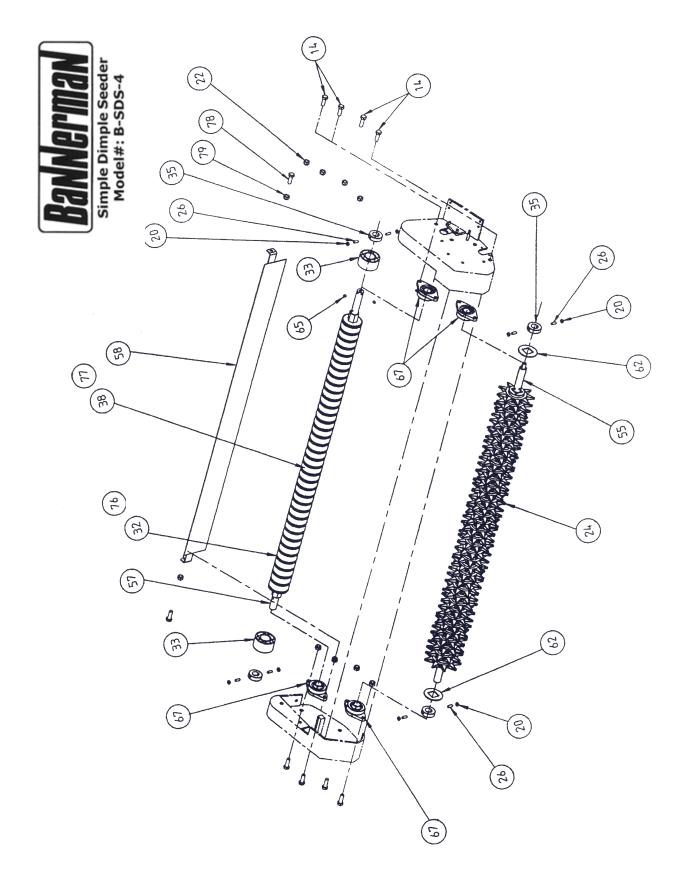
	Sowing Rate (> more than)		Cutting Height	(< less than)
	gms/square meter	oz/square yard	millimeters	inches
Rye Grass	35	1.015	< 25mm	< .98 in
Rye Grass or Fescue	35	1.015	< 30mm	< 1.18mm
Rye Grass or Fescue	35	1.015	< 10mm	< .39mm

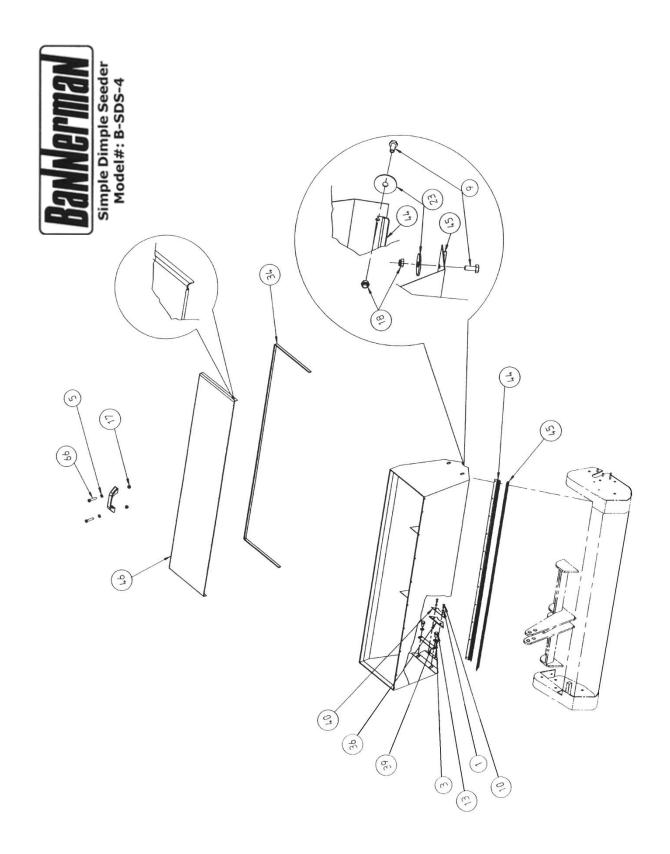
Simple Dimple Seeder - Parts Breakdown



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Outside Brush

36803

Inside Brush

36802

Hopper

36801

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B-SDS-4 Simple Dimple Seeder – Parts Breakdown

Item No.	Part No.	Part Description	Qty.	Item No.	o
1	1/1061	Spring Washer	7	26	
2	1/1062	Spring Washer	8	27	
3	1/1065	Spring Washer	4	28	
5	1/1070	Washer	2	29	
9	1/1071	Washer	4		
7	1/1072	Washer	13	00 3	
8	1/1094	Setscrew	3	31	
6	1/1095	Setscrew	22	32	
10	1/1096	Setscrew	4	33	
11	1/1104	Setscrew	6	34	
12	1/1105	Setscrew	3	35	
13	1/1152	Setscrew	4	36	
14	1/1154	Setscrew	7	37	
15	1/1155	Setscrew	1	38	
17	1/1217	Nylock Nut	2	39	
18	1/1218	Nylock Nut	45	40	
19	1/1220	Nylock Nut	15	42	
20	1/1221	Lock Nut	8	43	
22	1/1228	Nylock Nut	8	2 2	
23	1423	Mudguard Washer	22	† -	
24	C153	Tine Wheel	37	45	

4.5m

Rubber Strip

3171

Spacer

31293

4

7

7

19

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37

Seed Wheel (Rye and Blue)

31291

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Zer Max Drive (Gear Box)

22016

Button Head Screw

22026

Chain

22031

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Part Description

Part No.

7

Lower Link Pin

20327

Handle

20491

Grub Screw

1938

36

Spacer (Rye and Blue)

33803

Tine Scraper

33745

Side Seal

33741

Collar

36850

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Sealing Plate

35909

Clamp Plate

35905

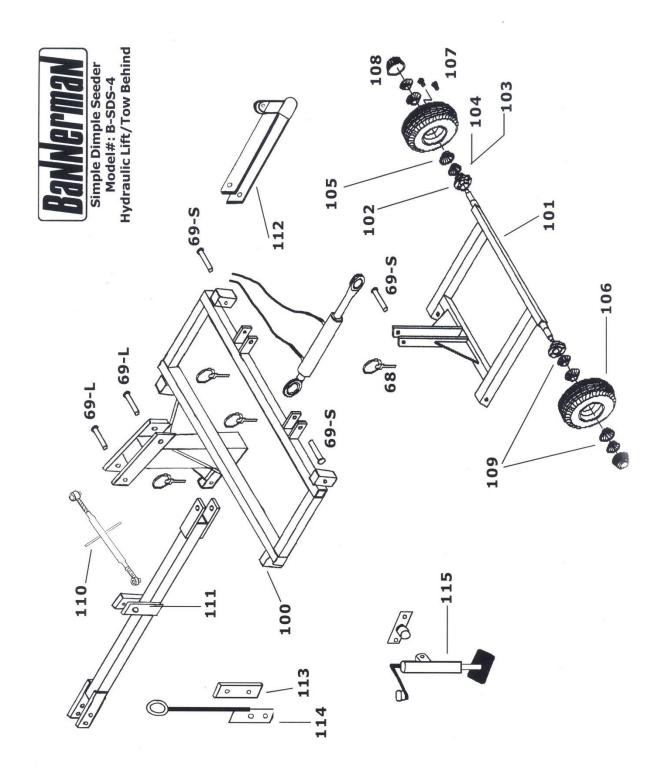
Main Frame

36800

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Item No.	Part No.	Part Description	Qty.
2 9	8538	Bearing	4
89	15045	Lynch Pin	10r3
S-69	08152	Top Link Pin for 3PH Model	3
1-69	08173	Top Link Pin for Hyd. Tow Model	1
20	8638	Dome Nut	4
71	20279	CSK Head Screw	1
72	9159	Chain Connecting Link	1
23	0E08	Кеу	1
9/	35678	Seed Wheel (Bent Grass)	37
22	35769	Spacer (Bent Grass)	36
78	1/1118	Set Screw	2
62	1/1223	Nylon Nut	2
86	36929	Decal - Calibration	Н

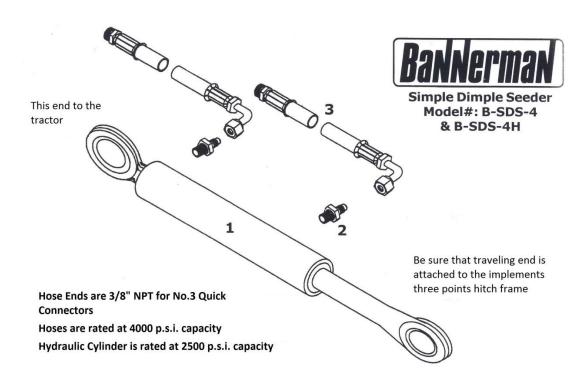
Item No.	Part No.	Part Description	Qty.
46	36804	Lid	1
4 7	30898	Gearbox Mount	1
87	90898	Shaft Cover	1
67	20898	Rear Guard	1
95	36808	Tine Scraper	2
25	36810	Chain Guard	1
23	36811	Drive Sprocket	1
24	36812	Driven Sprocket	1
55	36813	Tine Shaft	1
99	36814	Guard Stud	4
25	36815	Seed Wheel Shaft	1
89	36816	Seed Deflector	1
69	36817	Tension Block	1
79	7373	Square Washer	2
£9	8908	Grub Screw	4
64	8123	Mudguard Washer	4
29	8153	Grub Screw	2
99	8228	Cheese Head Screw	2



B-SDS-4 Simple Dimple Seeder – Hydraulic Lift/Tow Behind

Item No.	Part No.	Part Description	Qty.
68	15045	Lynch Pin	6
69-S	08152	Top Link Pin for 3PH Model	5
69-L	08173	Top Link Pin for Hyd. Tow Model	2
100	14001	Main Frame Assembly	1
101	08151	Trailing Assembly	1
102	08153	Hub Assembly	2
103	08159	Seal – Hub	4
104	08156	Bearing – Cone	4
105	08155	Bearing – Cup	4
106	R10525	Wheel Assembly	2

Item No.	Part No.	Part Description	Qty.
107	08129	Bolts	8
108	08157	Dust Cap	2
109	08153	Wheel Hub Assembly	2
110	08175	Top Link	1
111	14002	Tongue	1
112	08169	Top Link Lockout	1
113	08177	Pig Tail – Bracket	1
114	08178	Pig Tail - Plate	1
115	08556	Screwjack	1
107	08129	Bolts	8



Hydraulic Top Link

Item No.	Part No.	Part Description	Qty.
1	15150	Hydraulic Cylinder	1
2	08170	Hoses – 108" Long (BA-400/B-SDS)	2
3	15152	NPT to JIC Connectors	2



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For any Questions, Customer Support or General Inquiries, please email info@sportsturfmagic.com