NEW HOLLAND

SF110

SF115

FIELD SPRAYER

Suspended Boom Option

(Replaces All Previous Issues)

OPERATOR'S MANUAL

87045628 5/04

NEW HOLLAND

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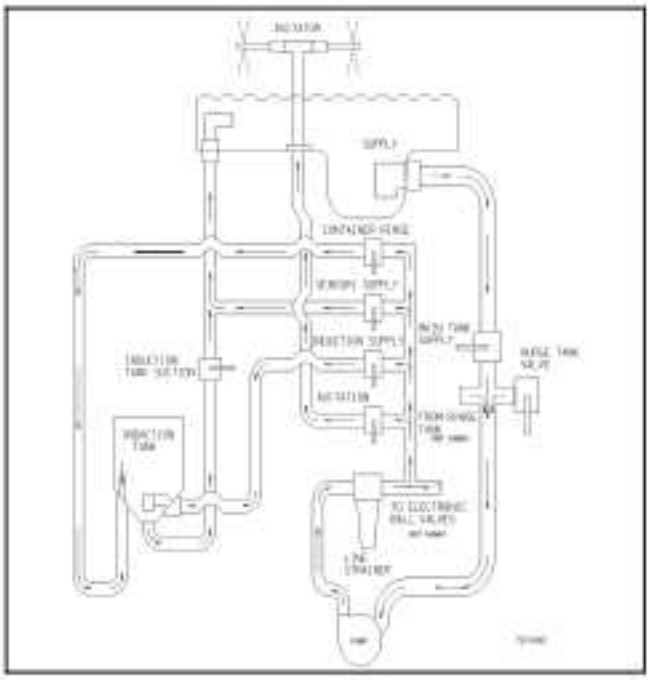
SPECIFICATIONS

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SETTING THE MAXIMUM SYSTEM PRESSURE ON PTO CENTRIFUGAL PUMPS

1. Check the equipment carefully.
   - Make sure that all components are clean and free of debris (i.e. the tank, pump, control valves, hoses, booms, strainers, nozzles and spray tips).
   - Make sure the PTO shaft is properly connected to the pump shaft and tractor PTO before activating the tractor PTO.
2. Be certain the agitator orifices are matched to the tank size. This will ensure proper agitation.
   - Too large an orifice will produce an agitation flow that it too high, reducing spray pressure.
   - Too small an orifice will produce an agitation flow that is too restrictive, resulting in spray pressure that is too high.
   - Refer to the table below for the correct orifice size.
3. When making initial adjustments on the sprayer, put approximately 450 Liters (100 gallons) of water in the sprayer tank.
4. Open the main supply, agitation and tank return valves fully. Close all other valves.
5. Prime the pump by opening the drain valve at the top of the volute casing until water flows out. Close the drain valve.



Control Schematic

6. Activate the pump with the tractor running at approximately operating rpm.
7. Switch on the electric ball valves for all boom sections by activating the boom switches on the control box or the monitor in the tractor.

IMPORTANT: Never run a centrifugal pump dry for more than a few seconds. Fluid is required at all times to cool the pump, preventing pump seal damage. If the pump will not prime or runs out of fluid, shut it off promptly.

Tank Size				Agitator	
Model	Imperial Gallons	US Gallons	Liters	Pump Type	Orifice Size
SF110	850	1020	3860	PTO Centrifugal	Four - 3/16"/4.76 mm (blue)
SF115	1250	1500	5675	PTO Centrifugal	Four - 1/4"/6.35 mm (white)

Orifice Size

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MAINTENANCE TABLE

Refer to the table below for routine maintenance and lubrication intervals. Service items below either daily, weekly, or annually; or after the hours of usage indicated in the table. Refer to this section for details on maintenance. Copy this maintenance table to continue recording maintenance information.

DATE	
SERVICED BY	
10 HOURS (DAILY)	
CHECK - Main Tank and Induction Tank	
CHECK - Line Strainer	
CHECK - Nozzles (Clean if necessary)	
CHECK - Plumbing Assembly for Leaks	
CHECK - Hose Connections and Clamps	
CHECK - Wheel Bolts for Tightness	
GREASE - PTO Shaft	
DATE	
SERVICED BY	
50 HOURS (WEEKLY)	
GREASE - Parallel link arm pivots	
GREASE - Inner fold cylinder ball socket	
GREASE - Universal joints	
GREASE - Tilt pivots	
GREASE - Inner/outer boom hinges	
GREASE - Break-away hinge	
DATE	
SERVICED BY	
100 HOURS (ANNUALLY)	
RE-PACK - Wheel Bearings	
GREASE - PTO Drive Bearings	
CHECK - Tire Pressures	

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6,800 kg (15, 000 lb) axles - SF110 Only									
Tire Size		Axle Offset (1)	Clearance (2)	Hitch Range (3)	Clearance (4)	Boom Clearance		Tire Tracking	
						Minimum (5)	Maximum (6)	Standard (7)	Extended (7)
18.4-26 R3 AWT	cm	15.2	71.1	36-53	38.4	50.3	185.2	203-244	254-305
	in.	6	28	14-21	15.1	20	73	80-96	100-120
18.4-26 R1Lug	cm	15.2	73.7	38-56	41.0	52.8	187.7	203-244	254-305
	in.	6	29	15-22	16.1	21	74	80-96	100-120
14.9-38 R1Lug	cm	15.2	78.7	43-61	46.0	58.4	193.0	203-244	254-305
	in.	6	31	17-24	18.1	23	76	80-96	100-120
14.9R46 Lug	cm	15.2	88.9	50-71	56.2	68.6	203.2	203-244	254-305
	in.	6	35	21-28	22.1	27	80	80-96	100-120
14.9-38 R1Lug	cm	7.6	71.1	36-53	38.4	50.3	185.2	213-244	254-305
	in.	3	28	14-21	15.1	20	73	84-96	100-120
14.9R46 Lug	cm	7.6	83.8	48-66	51.1	63.0	197.9	213-244	254-305
	in.	3	33	19-26	20.1	25	78	84-96	100-120
14.9R46 Lug	cm	3.8	78.7	43-61	46.0	57.9	192.8	N/A	295-366
	in.	1.5	31	17-24	18.1	23	76	N/A	116-144

Sprayer Dimensions for 6,800 kg (15, 000 lb) Axles - SF110 Only

***NOTE:** Total width of the sprayer in transport position is the tracking width plus the width of the tires.

Tire Size		9,090 kg (20,000 lb)Axles							
		Axle Offset (1)	Clearance (2)	Hitch Range (3)	Clearance (4)	Boom Clearance		Tire Tracking	
						Minimum (5)	Maximum (6)	Standard (7)	Extended (7)
18.4-26 R3 Model SF110	cm	15.2	71.1	36-53	38.4	50.3	185.2	213-244	254-305
	in.	6	28	14-21	15.1	20	73	84-96	100-120
18.4-26 R3 Model SF115	cm	15.2	71.1	36-53	38.4	50.3	185.2	244	254-305
	in.	6	28	14-21	15.1	20	73	96	100-120
18.4 - 38 R1 Lug	cm	3.8	78.7	43-61	46.0	57.9	192.8	N/A	295-366
	in.	1.5	31	17-24	18.1	23	76	N/A	116-144
14.9R46 Model SF110	cm	15.2	88.9	50-71	56.2	68.6	203.2	213-244	254-305
	in.	6	35	21-28	22.1	27	80	84-96	100-120
14.9R46 Model SF115	cm	15.2	88.9	50-71	56.2	68.6	203.2	N/A	254-305
	in.	6	35	21-28	22.1	27	80	N/A	100-120
14.9R46 Lug	cm	3.8	78.7	43-61	46.0	57.9	192.8	N/A	295-366
	in.	1.5	31	17-24	18.1	23	76	N/A	116-144

Sprayer Dimensions for 9,090 kg (20, 000 lb) Axles

***NOTE:** Total width of the sprayer in transport position is the tracking width plus the width of the tires.

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UNFOLDING

CAUTION!

Be sure the area is open enough for the wing booms to fold out. Be sure no one is within the danger area when unfolding the sprayer.

Electrocution Hazard - Be aware of overhead electrical lines during folding and unfolding.

DANGER!

Hitch Upending Hazard - Make sure the sprayer is securely fastened to a tractor while in field position. 'Negative Hitch Weight'. Serious injury or death will result.

IMPORTANT: To prevent sprayer damage, do not fold out the wing booms at an excessive speed. Turn down the tractor flow control valve or throttle down during the fold out cycle.

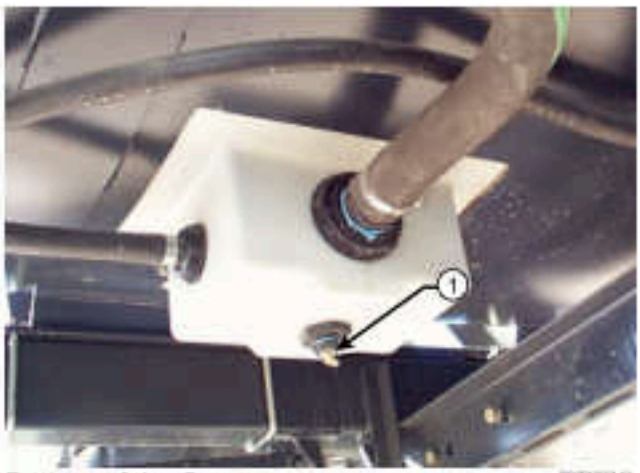
NOTE: All of the hydraulic functions on the suspended boom sprayer are controlled through one hydraulic circuit. The hydraulic valve system is flow restricted to 23 lpm (6 gpm) therefore flow control to this circuit may be reduced if your tractor has flow control. On open center tractors, be sure the open center dump solenoid valve option is installed.



Field Position

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3. Open the 1/4" drain valve (1) in the bottom of the sump to drain the sump completely.



Bottom of the Sump 797175M1

4. Open the 1/8" drain valve (1) in the bottom of the pump to drain the pump completely.

5. Remove the 1 1/2" induction tank drain line and allow it to drain.

6. Remove the agitation lines from the plumbing assembly and allow lines to drain.



Drain Valve 799037M1

7. Remove the line strainer bowl and drain (1). Open all valves. The line strainer can also be drained by opening the plug on the bottom of the strainer.

NOTE: Be prepared to catch any fluids that drain when the line strainer is removed or opened.



Line Strainer Bowl and Drain 700066M1

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