Precision Spray 100
Precision Spray 160
(Suspended Boom Option)

Pull-Type Sprayer

OPERATOR'S MANUAL

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CASE IH AGRICULTURE

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Explanation of Operation

NOTE: *Refer to page* ***4-16*** *for the sprayer control diagram.*

Main Tank Supply Valve **(1)** - This valve controls the main flow from the sprayer tank sump to the pump. Open the valve fully while in operation and close fully when the machine is left sitting or unhooked.

Agitation Valve **(2)** - This valve controls the flow to the tank agitators. Open the valve fully to ensure adequate flow to the tank agitators. Close the valve fully when the machine is left sitting or unhooked. When increased spraying pressure is needed, this valve can be used to throttle flow to the agitators. Agitation will be reduced.

Water Transfer Valve **(3)** - Nurse Tank - This valve allows fluid from an external source to be pumped into the main tank with the spray system's pump or with a nurse tank pump.

Tank Return Valve **(4)** - This valve allows fluid to be pumped to the tank.

Induction Tank Supply Valve (Optional) **(5)** - This valve provides water from the pressure side of the pump to the bottom of the induction tank used for mixing chemicals.

Induction Tank Suction Valve (Optional) **(6)** - This valve allows chemical from the induction tank to be drawn into the main tank through the venturi.

Electric Ball Valves **(7)** - These provide on/off control to the spray nozzles. They are controlled by the sprayer controller.

Chemical Container Rinse Valve (Optional) **(8)** - This valve allows flushing of the chemical containers into the induction tank.

Main Tank Rinse Nozzle Valve **(9)** - This valve allows flushing of the main spray tank though the main tank rinse nozzle.

Rinse Tank Supply Valve **(10)** - This valve controls the flow from the rinse tank to the pump.

Rinse Wand Valve (Optional) **(11)** - This valve controls the water supply to the rinse wand.

Throttle Valve (Optional) **(12)** - This valve controls the volume of flow to the spray nozzles.

Induction Tank Drain Valve **(13)** - The valve allows the induction tank suction line to be fully drained.

Electronic Pressure Sensor **(14)** - This sensor indicates the pressure at the electric ball valves.

Flow Sensor (Optional) **(15)** - This sensor indicates the actual volume flow to the spray nozzles.

Pump Drive **(16)** - Pumps are hydraulically driven.

NOTICE: *Never run a centrifugal pump dry for more than a few seconds or the pump seal will be damaged. If the pump will not prime or runs out of fluid, shut it off promptly.*

NOTICE: *To prevent accidental spraying or sprayer pump damage, always transport the sprayer with the pump drive disengaged.*

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MAINTENANCE CHART

Maintenance chart

Interval	Page Nb.	Maintenance Action	Nb. of pts	Adjust	Tighten	Cleaning	Check	Grease	Drain fluid
ADJUSTMENTS	5-4	Front hitch		X					
	5-6	Tank strap			X				
	5-7	Front rest adjustment		X					
	5-8	Outer boom rest adjustment		X					
	5-9	Wing boom alignment		X					
	5-10	Break-away boom alignment		X					
	5-11	Break-away boom alignment		X					
	5-12	Outer boom alignment		X					
	5-12	Inner to middle boom alignment		X					
	5-13	Upper spring adjustment		X					
	5-13	Upper spring adjustment		X					
	5-14	Lower break-away latch adjustment		X					
	5-15	Transport cradle adjustment		X					
	5-16	Outer boom lock pin adjustment		X					
Every 10 hours or daily	5-17	Main tank and induction tank				X			
	5-17	Nozzle strainer and line strainer					X		
	5-17	Nozzles					X		
	5-17	Spray pipe and hoses			X				
	5-17	Wheel bolt torque					X		
	5-17	Plumbing components					X		
	5-17	Tank hold down straps					X		
Every 50 hours	5-18	Parallel link arm pivots						X	
	5-18	Universal joints						X	
	5-19	Boom tilt pivots						X	
	5-19	Inner to outer boom hinge joints						X	
	5-19	Break-away hinge						X	
	5-19	Tire pressure					X		
Yearly	5-20	Wheel bearings						X	
SPRAYER PLUMBING CLEANING AND STORAGE	5-21	General tank cleaning				X			
	5-22	Tank cleaning with ammonia				X			
	5-23	Changing chemicals				X			
	5-24	Nozzle cleaning				X			
	5-25	Line strainer cleaning				X			
	5-26	Windscreen cleaning				X			
	5-27	Draining procedure							X

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7 - SPECIFICATIONS

General specifications

Agitators

MODEL	AGITATOR
Precision Spray 100	four horizontal jet type **4.76 mm** (**3/16 in**), blue
Precision Spray 160	four horizontal jet type **6.35 mm** (**1/4 in**), white

* Approximate metric equivalent

Spraybooms

2.5* cm polypropylene pipe
* Approximate metric equivalent

Controls

VALVE	SIZE and TYPE
Agitation Valve	**2.5* cm** (**1 in**) NPT quarter turn ball valve
Induction Tank Supply Valve	**2.5* cm** (**1 in**) NPT quarter turn ball valve
Supply Valve	**3.8* cm** (**1 1/2 in**) NPT quarter turn ball valve
Induction Tank Suction Valve	**3.8* cm** (**1 1/2 in**) NPT quarter turn ball valve
Venturi Supply Valve	**2.5* cm** (**1 in**) NPT quarter turn ball valve
Water Transfer Valve	**5.0* cm** (**2 in**) NPT quarter turn ball valve

* Approximate metric equivalent

Filter (Line)

5.0* cm (**2 in**) NPT , 80 mesh strainer
* Approximate metric equivalent

Fittings

GFP (glass filled polypropylene)

Hoses

HOSE	SIZE
Supply	**5.0* cm** (**2 in**)
Agitation	**2.5* cm** (**1 in**)
To Spray Boom	**2.5* cm** (**1 in**)
Tank Return	**3.8* cm** (**1 1/2 in**)
Boom Valve Supply	**3.2* cm** (**1 1/4 in**)
Pump to Plumbing	**3.8* cm** (**1 1/2 in**)

* Approximate metric equivalent

Nozzles

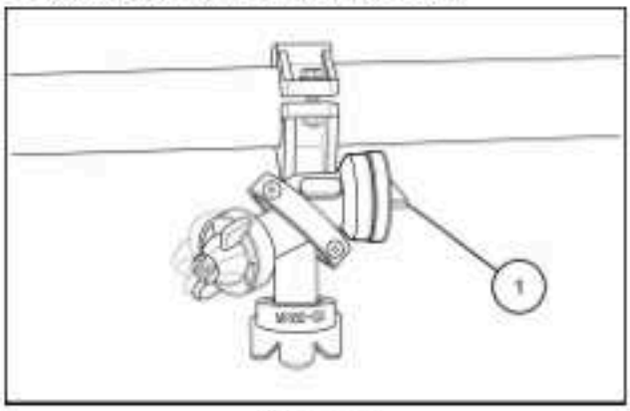
COMPONENT	TYPE
Nozzle Assemblies	Split eyelet diaphragm check type
	Swivel nozzle-split eyelet diaphragm check type
Nozzle Caps	Quick-connect color coded
Nozzle Tips	A wide range of **80 °** or **110 °** flat fan spray tips are available in TeeJet Visiflo stainless steel or Combo-Jet stainless steel.

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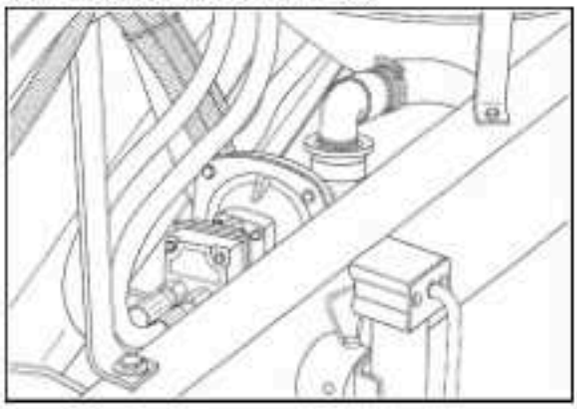
Shortcut to the field

These are reference items for Sprayer preparation. For more information on the items listed, refer to the indicated sections in the Operator's Manual and the controller Operator's Manual. Note that they do not deal with Sprayer set-up or maintenance.

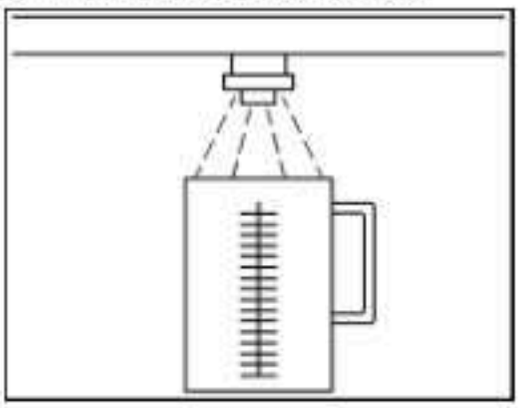
1. Select proper nozzles **(1)** (page **4-30**).



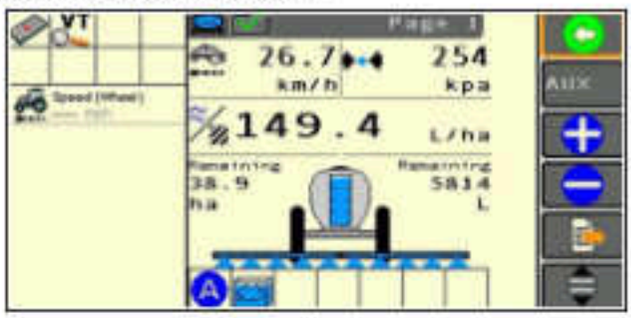
2. Set pump pressure (page **4-17**).



3. Perform nozzle calibration (page **4-27**).



4. Set the electronics. Refer to the controller Operator's Manual for more information.



For correct spraying:

- Check width for each boom section.
- Enter the intended application rate.
- Enter the rate step size.
- Perform flow and speed calibration.

5. Ready to go spraying

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