

GUARDIAN™ SELF-PROPELLED FRONT BOOM SPRAYERS



SP380F



Never look back.

Ascend into a Guardian™ front boom sprayer from New Holland and never look back. Guardian™ front boom sprayers cover ground faster, reduce downtime and maximize hectares sprayed per hour. In short, they allow you to do more with every minute of your time.

Front boom — the easier way to spray

With the boom in front, you get the best visibility without looking over your shoulder. Nozzles are located behind the front boom, so you have a complete, unrestricted view of every nozzle. Greater visibility means you can run the boom closer to the ground to reduce drift.

Comfort zone

The state-of-the-art Guardian™ cab offers an array of features to make long days feel shorter. A wider and longer cab gives you more room for maximum comfort. An enhanced glass area with curved rear cab windows allows you to see behind the sprayer and from the front tires to the left and right boom, providing superior visibility.

Choice of cab, display and four-wheel steering

New Holland allows you to choose either the Guardian™ Deluxe cab or the upgraded Luxury cab option for even greater functionality and comfort. You can further customize your Guardian™ sprayer with optional equipment, including the IntelliView™ IV display, a Raven display, and four-wheel steering that minimizes crop damage when turning on headlands.



Power and size for maximum productivity

The industry-leading SP380F maximizes your productivity with up to 382 horsepower, a tank up to 6050 L and a boom up to 41 meters wide. A next generation planetary drive system on New Holland Guardian sprayers — delivers increased torque and maximum power transfer to the ground.

Models	Guardian SP380F 1200	Guardian SP380F 1400	Guardian SP380F 1600
Engine, Tier 3	FPT 8.7 Liter		
Horsepower hp (kW)	322 (240)		
With Power Bulge hp (kW)	382 (284)		
Chassis length m (ft)	9.2 (30.3)		
Wheelbase in. mm (in)	4496 (177)		
Tank size l (gal.)	4500 (1200)	5300 (1400)	6050 (1600)
Tank material	Stainless Steel		
Boom size m (ft)	27-30-36-40-41 (90-100-120-132-135)		



Natural, efficient control

All controls are situated perfectly for easy operation. The new multi-function handle puts all critical function controls at your fingertips for precise, efficient control of the transmission, throttle, boom and individual sections. The convenient armrest command console is mounted on the seat and moves with the operator. Large switches are backlit and dimmable so they are easy to see and use. The engine/transmission monitor located at the front of the armrest provides clear, on-the-go information. These controls combined with automatic section control, boom height control and auto-guidance systems make the Guardian™ sprayers convenient to operate while reducing input costs and the ability to cover more ground faster than ever.



Multi-function handle

High Productivity.

It's all about doing more in less time. Guardian™ front boom sprayers cover ground faster, reduce downtime and maximize hectares sprayed per hour. These sprayers feature the highest ground clearance up to 1,93 m, tightest turning radius 4.57m and smoothest suspension in the industry. Combining these outstanding features with the high performance engine and largest tank size ensures maximum spraying productivity.

Many boom options up to 41 meters to cover hectares fast

In addition to the rugged mono-boom in 27, 30 and 36 mt, front boom Guardian™ sprayers can also be configured with truss-style booms in 36 - 40- and 41 meters widths. The Spray-Air® boom is also available in widths up to 36 meters for crops demanding maximum spray coverage and crop canopy penetration. All boom options feature hydraulic suspension that allows the boom to stay level to the ground for accurate spraying even on rough terrain — so the operator can work at higher ground speeds while still achieving consistent product application. For smooth and level automatic boom height control, all Guardian™ sprayers can be equipped with the optional Raven AutoBoom® UltraGlide system with 3 or 5 sensors positioned along the boom bar.



Season-long versatility

A 50/50 weight distribution allows each tire to share the load equally, maximizing power to the ground while minimizing ground compaction. All components are equally placed to ensure the tires and axles do not sink in wet areas. This eliminates the need for duals on the rear axle and minimizes crop damage.

Maneuverability

The SP380F 4 wheel steering model feature an exceptional 4.57m turning radius for reduced crop damage, faster spraying around corners and safe, efficient movement in tight situations around the farm. For ultimate maneuverability, four-wheel steering is available as an option on all models which allows front and rear wheel tracks to align, reducing crop damage.

INTELLISPRAY



Next-generation nozzle technology

Guardian™ sprayers can also take advantage of the new, revolutionary IntelliSpray™ nozzle system, which features its own individual pulsing valve to control each nozzle. This technology provides more flexibility to select operating speed, with the added benefit of increased spray consistency and maximum crop coverage. In addition, the system includes nozzle-by-nozzle turn compensation as standard equipment.



Season-long versatility

With 1.93 m ground clearance you can spray all crops at any time during the growing season. When crop variety warrants a tread width change, you can respond quickly with standard in cab controlled, hydraulically adjustable track width. With the quick attach option you can handle double duty, by adding the flexibility to mount the Injection Toolbar, to your Guardian™ front boom sprayer.

SPRAY-AIR™

The Air Nozzle blasts the spray droplets deep into the crop canopy, ensuring complete top-to-bottom leaf surface coverage. No other application technology can measure up to the total plant coverage from the Spray-Air™ nozzle. Because of the smaller controlled droplets and directed air blast, the Air Nozzle allows for a very efficient use of water, often in the range of 15 to 50 liters per hectare for herbicides, and generally from 50 to 100 liters per hectare with fungicides.

Rugged, reliable, comfortable.

Spray when you need to, for as long as you need to. Incredibly reliable, Guardian™ front boom sprayers are known to increase uptime and maintain their dependability and value for years to come.

Hydralink™ suspension

Guardian™ front boom sprayers are the smoothest, most comfortable riding sprayers on the market thanks to the independent wheel suspension travel provided by the Hydralink™ suspension.

Suspension is about more than comfort. The SP380F is known for its great ride, but our Hydralink™ system does so much more. It ensures accurate spraying even at high speed, less overall machine stress and better boom stability. The all-wheel suspension, connected in an X pattern, gives you a great ride in the toughest conditions, meaning you will be covering more hectares in a day. The four-wheel independent suspension is hydraulically controlled and allows for a suspension travel on each wheel of 51 cm, meaning you will easily tame the toughest conditions and the roughest terrain. Four leveling valves keep the SP380F balanced even in hand turns.

Guardian™ comes with full time, automatic traction control

Our new automatic traction control system keeps all four wheels connected to the ground for superior traction and features cruise control with anti-stall. Guardian™ sprayers electronically control ground speed in all terrains. When a soft spot starts to become a mud hole, anti-stall kicks in. This feature decreases ground speed when engine speed drops below a threshold to allow the engine to recover. Once through a tough spot, cruising speed will resume.

Performance is not only moving forward, but coming to a stop as well. Guardian™ Integrated Speed Limiting keeps the engine from overspeeding when hydrobraking eliminating those dangerously high RPMs.





Single-pass cooling system

The New Holland single-pass cooling system allows for more efficient and cooler air flow than a “layered” system. Instead of front to back modules, ours are stacked, so all receive the benefit of cool air flow. The high-volume fan pulls air through the entire system in a single pass, allowing cool air through all the cores for maximum efficiency.

The cooling fan is in the rear of the sprayer and is equipped with a Variable Speed Fan that is hydraulically driven. Variable speed fan only runs as fast as is required to keep the system cool: systems warm up faster in cool weather, uses less power, engine uses a little less fuel and is quieter when it runs slower keeping external machine noise to a minimum - the noise level in the cab is quieter also.

Reversing Fan kit is available as option and is suggested to purge the intake screens from debris allowing air to flow through the system uninterrupted especially when is spraying in tall crops or dusty conditions.



Clear, intelligent control with easy service.

Guardian™ front boom sprayers are efficiently designed to make operators more comfortable during those long hours on the job.

An easy view to all nozzles

Don't miss a minute — nozzles are located behind the front boom where you can see them clearly, without straining your neck or shifting in your seat. Additionally, an in-cab adjustable sunscreen gives shade while providing a clear unobstructed view of the front boom assembly.



More room, more glass

Guardian™ cabs are wider and longer with more glass area for exceptional visibility from the tires to the left and right boom tips. Curved rear cab windows also improve your visibility if there is ever a need to look over your shoulder.

Industry-leading ride

Expect the best in operator comfort and ride with reduced machine stress. These features combined with better boom stability provide unmatched spray accuracy at high speeds.

Low noise

It's quieter on board a Guardian™ front boom sprayer so you can actually hear yourself think. With the engine mounted in the rear, the noise level is extra quiet, reducing fatigue and allowing you to easily focus on the work ahead.

Work later in the season

Up to 1.93 m of clearance results in minimum crop damage when spraying late in the season.



Two cab packages

The roomy, quiet Guardian™ cab is available in two configurations: Deluxe or Luxury.

- **The Deluxe cab** is pre-wired from the factory for New Holland IntelliSteer™ auto-guidance and offers an instructor's seat, radio with CD player and weather band, auxiliary power outlet, automatic climate control, USB charge ports, as well as enhanced radio with XM Satellite™, Bluetooth®, an adjustable tilting and telescoping steering column, and active charcoal filtration with in-cab secondary filter.
- **The Luxury cab package** takes your comfort a step further the new Grammer Evolution leather trimmed seat that is fully adjustable, heated and vented. The steering wheel is also leather-wrapped. A large refrigerator is located under the instructional seat. RAM X-Grip® mount for cell phones and a rear back-up camera, integrated self charging flashlight, Auto on/off head lights 110 volt power outlet and more luxury features.



Make adjustments conveniently right from the cab

The Guardian SP380F allows you to adapt to changing needs without leaving your seat. When spraying fungicide, there's no need to leave the cab to activate the rear fungicide boom.

Operation of the standard electric rinse system can be done from either the cab or from the ground. For even more convenience, order the optional auto rinse system.

Next-level monitoring systems provide information on the go.

- A **right hand console chassis monitor**, mounted on an adjustable swing arm, is where operators control many functions of the sprayer and select what is displayed on the monitoring screen.
- A **headliner chassis monitor** continually displays operating functions of the chassis including speed, rpm, pressures, temperatures and fuel level. It is mounted on the ceiling where it does not disrupt the operator's line of sight to the spray boom.
- The **ultra-wide 10.4-inch IntelliView™ IV color touchscreen display or Raven Viper 4+** is mounted to a swing arm so operators can position it exactly where they want it.

A new **spray info bar** with light-up section display is mounted to the ceiling and lets you know which boom systems are operating.

Right hand console chassis monitor



Headliner chassis monitor



IntelliView™ IV color touchscreen display





Quick turnaround

The fill station located at the front of the sprayer makes turnaround fast. Just pull up to your water truck and all fill controls are easy to reach and located at ground level in one area.

Options improve productivity

- **Pressure washer** keeps machine clean.
- **Under sprayer belly pan** for late season spraying of tall crops such as tasseling corn.
- **Boom blow out system** for quick transition between products and for convenient storage.

Easy access

Guardian™ sprayers make every minute count with easy maintenance access. The automatic retracting rear ladder is wider and longer than previous models for easier climbing and dismount. A large platform and easy engine access from above or below reduce maintenance time and increase safety and accessibility to all major sprayer components.

A removable sealed toolbox is available.

Saving your neck

With the New Holland front boom sprayer, you can confidently see your work. Visibility and sight lines are so good you'll see every nozzle, from tip to tip. No guesswork or wondering if all is well, and no craning your neck to see what's happening behind you. By the end of your long days, you won't be feeling the worse for wear.

Auto Adjust Tread Width

The axle width is adjustable from 304 to 406 cm, depending on crop spacing requirements or transport requirements. The axles move in or out on both sides at the same rate which keeps the operator in the center of the machine.



Accurate dual fertilizer application that saves time and minimizes costs.





A Easy on and off — perfect for split application

The NutraBoss system utilizes a single point hookup on the sprayer boom for fast conversions and minimal cost. Small mounting brackets remain on the boom after the drops are removed, so it's easy to attach and remove them as needed. It's ideal for split applications of nitrogen — making two or more fertilizer applications during the growing season instead of delivering all of your crop's nitrogen requirement before or during planting. Split application enhances nutrient efficiency and yields, and reduces the loss of nutrients due to volatilization or leaching. With the NutraBoss system, you can respond quickly when the time is right.

B Lightweight and rugged construction

NutraBoss components are constructed of stainless steel for corrosion resistance and long life. Each unit weighs only 4.08 kilograms, so there is little weight or fatigue on the boom, which allows for widths up to 36 mt.

C Moves easily through crops

The double jointed placement tool design moves easily through the crop canopy so you can use the system at different stages of crop growth.

D Place nutrients closer to the root zone

The dual tube distribution provides more accurate product flow. Nutrient liquid is placed on either side of the plant, closer to the root zone, where it can be readily absorbed by plants.

MODELS**SP380F**

Engine		
Make / Displacement liter		FPT 8.7/Tier 3
Rated power	hp (kW)	322 (240)
Power bulge	hp (kW)	380 (283)
Alternator	Amp	200
Fuel tank capacity	L (U.S. Gal.)	568 (150)
Drive Train		
Transmission / Type		Hydrostatic drive with electronic controlled tandem Danfoss heavy-duty pumps
Speed ranges		Full range with 4 user defined speed ranges
Wheel motors		Danfoss H1 series drive motors with Oerlikon Fairfield Torque Hub® gearbox final drives
Service brakes		4 wheel internal wet disc
Parking brakes		All 4 wheels
Wheel drive		4-wheel drive
Leg profile	mm (in.)	Narrow 457 (18) profile
Ground speed with standard tires	km/h (mph)	0 to 51.5 (32)
Chassis		
Cab mount		Front-mount cab
Tank mount		Mid-mount tank
Engine mount		Rear-mount engine
Suspension		Hydraulic with accumulators
Turning Radius 2 wheel steer model	m (ft.)	4.57 (15)
Turning Radius 4 wheel steer model	m (ft.)	
In 2 wheel steer		6.40 (21)
In 4 wheel steer		4.57 (15)
Tire options		IF380/90R50 170 Goodyear VF380/90R50 175 Michelin IF380/105R50 177 Firestone VF420/95R50 177 Michelin 480/80R42 166 Goodyear IF520/85R42 169 Goodyear 650/65R42 170 Goodyear
Fenders		Standard
Tread width adjustment Note: Based on 380 tire options	mm (in.)	3048 to 4064 (120 to 160), Spread equal side to side
Wheel base	mm (in.)	4496 (177)
Crop clearance with standard tires	mm (in.)	1880 (74)
Crop clearance with 380/105R50 or 420/95R50 tires	mm (in.)	1930 (76)
Overall chassis length	m (ft.)	9.24 (30.3)
Overall width	m (in.)	3.25 (12.8)
Weight and balance front to back		50/50
Height max in transport	m (in.)	4.02 (13.6)
Liquid System		
Stainless steel tank	L (US gal.)	4500 (1200), 5300 (1400), 6050 (1600)
Tank agitation		Electrically controlled / Sparge tube
Rinse tank capacity	L (US gal.)	568 (150) with 2" quick fill connection
Rinse system		Electric or optional Auto Rinse
Chemical eductor (optional)	L (US gal.)	14 (3.6), stainless steel with rinse system
Fast fill		3" standard; 2" optional
Product Pump		
Make / Model	L/min (gpm)	Hypro 9306C up to 795 (210) at the pump
High flow option	L/min (gpm)	Hypro 9307C up to 1173 (300) at the pump

MODELS**SP380F**

Rate Control System	
Monitor options instead of Controller	IntelliView IV™ or Viper 4+
Flow control	RFM 100 / Optional RFM 60
AutoSteer	IntelliView IV - Nav II / Viper 4+ - RS1
Boom height control	optional Raven Ultraglide with ultrasonic sensors
Boom	
Boom mount	Front
Mono-boom widths	m (ft.) 27 (90), 30 (100), 36 (120)
Truss-boom widths	m (ft.) 36 (120), 40 (132), 41 (135)
Spray-Air® boom widths	m (ft.) 27 (90), 30 (100), 36 (120)
Height adjustment	cm (in.) 55.9 (22) – 299.7 (118)
Breakaway	On the secondary boom wing
Boom pipes diameter	mm (in.) 25 (1) stainless steel
Nozzle body spacing	cm (in.) 38.1 (15) or 50.8 (20)
Nozzle body spacing Spray-Air® only	cm (in.) 25.4 (10)
Nozzle body options	3 way, 5 way, IntelliSpray™
Electric fence line spray nozzle	Optional
Product section	5 sect. (10 section option)
Suspension nitrogen accumulators	Optional
Primary strainer with Hypro 9306C pump	50 or optional 80 mesh y-strainer
Boom in-line strainers	Optional 50 or 100 mesh

New Holland.
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