GUARDIAN™ SELF-PROPELLED FRONT BOOM SPRAYERS



SP.295F | SP.300F | SP.345F | SP.400F



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 acres 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 SP.400F maximizes your productivity with up to 400 horsepower, a tank up to 1,600 US gallons and a boom up to 135 feet wide. A next generation planetary drive system on New Holland's three top models — the SP.400F, SP.345F and SP.300F — delivers increased torque and maximum power transfer to the ground.

Guardian™ Front Boom Sprayers							
Models		SP.295F	SP.300F	SP.345F	SP.400F		
Engine, Tier 4B		6.7-liter QSB	6.7-liter QSB	8.9-liter QSL	8.9-liter QSL		
Horsepower	hp (kW)	300 (224)	300 (224)	320 (239)	380 (283)		
With Power Bulge	hp (kW)	310 (231)	310 (231)	345 (257)	400 (298)		
Chassis length	ft. (m)	28.2 (8.6)	30.3 (9.2)	30.3 (9.2)	30.3 (9.2)		
Wheelbase	in. (mm)	153 (389)	177 (450)	177 (450)	177 (450)		
Tank size	gal. (l)	1000 or 1200 (3785 or 4542) Poly or Stainless Steel	1200, 1400 or 1600 (4542, 5300 or 6057) Stainless Steel	1200, 1400 or 1600 (4542, 5300 or 6057) Stainless Steel	1200, 1400 or 1600 (4542, 5300 or 6057) Stainless Steel		
Boom size	ft. (m)	90, 100, 120, 132 and 135 (27, 30, 37, 40 and 41)	90, 100, 120, 132 and 135 (27, 30, 37, 40 and 41)	90, 100, 120, 132 and 135 (27, 30, 37, 40 and 41)	90, 100, 120, 132 and 13 (27, 30, 37, 40 and 41)		



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-thego information. These controls combined with automatic section control, boom height control and auto-guidance systems make the GuardianTM sprayers convenient to operate while reducing input costs and the ability to cover more ground faster than ever.

Check out the entire Guardian™ Series

With four front boom models, two rugged rear boom models, plus the SP.300C dry/liquid Combo unit, New Holland offers the widest range of self-propelled sprayer models to fit all your needs. Your New Holland dealer is ready to answer questions and support you with trusted parts and service. Visit your local New Holland dealer today to check out the entire Guardian™ Sprayer lineup.



More acres per hour.

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

Up to 400 horsepower with power bulge

The Guardian™ front boom sprayer line-up includes four models up to an industry-leading 400 horsepower with power bulge. Choose from two chassis sizes and three engine horsepower levels at 300, 320, and 380 horsepower.

Tanks up to 1,600 gallons

For the SP.295F model, choose a 1,000- or 1,200-gallon tank in poly or stainless steel. For the SP.300F, SP345F and SP.400F models, choose a 1,200-, 1,400- or industry-leading 1,600-gallon stainless steel tank for fewer refill stops.

Many boom options up to 135 feet to cover acres fast

In addition to the rugged mono-boom options, front boom Guardian™ sprayers can also be configured with truss-style booms in 120-, 132- and 135-foot widths. The Spray-Air® boom is also available in widths up to 120 feet 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.



Ideal balance

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.

Turn on a dime

The SP.295F model boasts an industry-leading, 2-wheel steer, 13.5-foot turning radius. The larger frame SP.300F, SP.345F and SP.400F models feature an exceptional 15-foot 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.



Next-generation nozzle technology

GuardianTM sprayers can also take advantage of the new, revolutionary IntelliSprayTM 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 industry-leading 76" 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 GuardianTM 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 2 to 5 gallons per acre for herbicides, and generally from 5 to 10 gallons per acre 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 industry-leading 20 inches of independent wheel suspension travel provided by the Hydralink™ suspension. Hydralink™ takes the pounding of uneven terrain and reduces stress on sprayer and operator thanks to its nitrogen charged accumulator coupled to a hydraulic cylinder at each corner. It also improves spraying accuracy, by minimizing ground inputs that are transmitted through the chassis to the boom and maintains all-wheel stability and traction enabling you to cover more ground in the most challenging conditions.

Guardian™ models 300F, 345F and 400F now come with full time, automatic traction control

Our new automatic traction control system keeps all four wheels connected to the ground for superior traction and unlocks 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.



Rugged drive systems

The SP.300F, SP.345F and SP.400F feature the next generation of planetary drive systems consisting of Danfoss wheel motors combined with Oerlikon Fairfield Torque Hub® gearbox drives for ultimate power transfer to the ground. The SP.295F features the efficient Poclain® wheel motor direct-drive system.



Poclain® Drive - SP.295



Planetary Drive - SP.300F/SP.345F/SP.400F



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 craning 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 76" 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, 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 with set-and-forget automatic climate control, and the new Grammer Evolution high-back suede leather seat that is fully adjustable, heated and vented. The steering wheel is also leather-wrapped, and you get USB charge ports, RAM X-Grip® mount for cell phones and a rear back-up camera, as well as enhanced radio with XM Satellite™, Bluetooth® and more luxury features.





Intelliview™ IV Monitor

The IntelliView™ IV color, 10.5-inch touchscreen display is a factory option that gives you fingertip control of boom height, section controls, prescription applications and auto-guidance (if so equipped) — all using one intuitive monitor. Direct USB connectivity allows you to collect data and generate summaries of product applied and area worked — by farm, by field, by operator, by crop and more.

Raven display option

Guardian™ sprayers can be equipped with Raven precision options factory installed. Choose the Raven Viper® IV + controller for full precision application, mapping and datalogging.

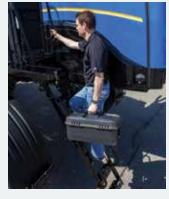


Quick turnaround

The fast 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.



Standard equipment includes the upgraded 7-inch touchscreen which displays important information such as engine, DEF, electronics, transmission and plumbing operations. In addition, the display works in conjunction with the rear backup camera that comes with the Luxury Cab option.

Feed your corn-where and when it needs it most.

The New Holland Guardian™ Injection Toolbar applies liquid fertilizer between the corn rows and into the soil root zones, precisely where your crop needs it most. Designed for Guardian™ front boom sprayers, the Injection Toolbar fuels corn growth by applying liquid Nitrogen just before maximum uptake and during critical growth periods prior to tasseling.

No crop burning

Unlike broadcasting liquid or dry fertilizer, the Injection Toolbar incorporates liquid Nitrogen into the soil to prevent crop burning. Coulters on the Injection Toolbar eliminate leaf contact and potential vapor damage to leaves and roots caused by Nitrogen.

Minimize fertilizer loss. Manage input costs

Surface-applied liquid fertilizer is at risk of loss due to volatilization. Without sufficient rainfall, 30% may be lost within two weeks of the application. Nutrients may also be tied up in surface residue. With the Injection Toolbar, you can adjust or increase application rates in favorable growing conditions or, in poor conditions, forego the cost of applying and wasting expensive fertilizer.





The convenient Guardian $^{\rm TM}$ Quick-Attach option allows you to separate the Injection Toolbar from the chassis quickly and easily.



 $\label{thm:light} \mbox{High lift clearance helps the coulters clear crops and obstacles at the headlands, minimizing the potential for damaging corn stalks.}$



The Guardian $\ensuremath{^{\text{TM}}}$ Injection Toolbar folds for convenient road or field transport.



The Injection Toolbar delivers precise injection of fertilizer into the root zone, where your crop needs it most.

Models	26 Foot	36 Foot	38 Foot	41 Foot			
	11 standards at 30" spacing Hydraulic fold Four gauge wheels Transport width — 18 ft. (5.5 m)	15 standards at 30" spacing Hydraulic fold Four gauge wheels Transport width — 18 ft. (5.5 m)	12 standards at 40" spacing for 20" rows Four gauge wheels Transport width — 19 ft. (5.8 m)	11 standards at 44" spacing for 22" rows Four gauge wheels Transport width — 18 ft. (5.5 m)			
Toolbar	7 x 7 inch rigid toolbar. 2 - 7.50 x 14 gauge wheels on center toolbar. 2 - 7.50 x 20 gauge wheels on wings. 66 inch (1.7 m) crop clearance. All widths come with parking stands.						
Product Circuit	2 in. cam-loc connection to Guardian™ chassis. Two-section electric ball valves. 3/4 in. hoses. 4 in. glycol-filled gauge. Diaphragm check (TeeJet nozzle body) on every standard 3/8 in. feed lines.						
Coulters	11/2" hi-tensile steel shaft and ductile castings. 20 in. Clymer blades. 1/2 in. fluted. 1200 lb down-pressure spring. Spring reset break-away nozzle bracket. Stainless-steel industrial solid stream tip. 20 gpa /10 mph / 20 psi (0015). Poly depth bands help prevent soil buildup.						
Lighting and Safety	2 halogen field lights. 2 amber road flashers. Red and amber reflectors. Hydraulic front fold on all models. Optional foamer uses standard Guardian™ mix chambers and bells.						

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 nine pounds, so there is little weight or fatigue on the boom, which allows for widths up to 120 feet.

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.

Weight and balance front to back

Height

50/50

13.2 (335)

in. (mm)

50/50

13.6 (402)

50/50

13.6 (402)

50/50

13.6 (402)

MODELS		SP.295F	SP.300F	SP.345F	SP.400F
Liquid System					
Tank capacity	US gal. (L)	1000 (3785) or 1200 (4543) cross mounted	1200 (4543), 1400 (5300), 1600 (6057) cross mounted	1200 (4543), 1400 (5300), 1600 (6057) cross mounted	1200 (4543), 1400 (5300), 1600 (6057) cross mounted
Polyethylene tank	US gal. (L)	1000 (3785) or 1200 (4543)	_	_	_
Stainless steel tank	US gal. (L)	1000 (3785) or 1200 (4543)	1200 (4543), 1400 (5300), 1600 (6057)	1200 (4543), 1400 (5300), 1600 (6057)	1200 (4543), 1400 (5300), 1600 (6057)
Tank agitation		Poly - venturi style or SS - sparge tube	Sparge tube	Sparge tube	Sparge tube
Rinse tank capacity	US gal, in. (L, mm)	150 (567.8) with 2 (51) quick fill			
Rinse system		Manual or electric	Manual or electric	Manual or electric	Manual or electric
Chemical eductor	US gal. (L)	Optional 3.6 (14) SS w/ rinse system			
Fast fill	in. (mm)	3 (76); 2 (51) optional			
Solution Pump					
Make / Model	gpm (lpm)	Hypro 9306C Standard Up to 210 (795) at the pump	Hypro 9306C Standard Up to 210 (795) at the pump	Hypro 9306C Standard Up to 210 (795) at the pump	Hypro 9306C Standard Up to 210 (795) at the pump
High flow option	gpm (lpm)	Hypro 9307C up to 310 (1174) at the pump	Hypro 9307C up to 310 (1174) at the pump	Hypro 9307C up to 310 (1174) at the pump	Hypro 9307C up to 310 (1174) at the pump
Rate Control System					
Controller options		Viper® 4+ or IntelliView IV™			
Flow control		RFM 100 / Optional RFM 60			
GPS		0	0	0	0
Boom height control	optional	Raven Ultraglide with ultrasonic sensors	Raven Ultraglide with ultrasonic sensors	Raven Ultraglide with ultrasonic sensors	Raven Ultraglide with ultrasonic sensors
Boom					
Boom mount		Front	Front	Front	Front
Mono-boom widths	ft.	90/60, 100/60, 120/70	90/60, 100/60, 120/70	90/60, 100/60, 120/70	90/60, 100/60, 120/70
Truss-boom widths	ft.	120/73, 132/73, 135/73	120/73, 132/73, 135/73	120/73, 132/73, 135/73	120/73, 132/73, 135/73
Spray-Air® boom widths	ft.	90, 100, 120	90, 100, 120	90, 100, 120	90, 100, 120
Height adjustment	in. (mm)	22 (559) – 118 (2997)	22 (559) – 118 (2997)	22 (559) – 118 (2997)	22 (559) – 118 (2997)
Breakaway		On the secondary boom wing			
Boom pipes	in. (mm)	1 (25) stainless steel			
Nozzle body spacing	in. (mm)	15 (381) or 20 (508)			
Nozzle body spacing Spray-Air® only	in. (mm)	10 (254)	10 (254)	10 (254)	10 (254)
Nozzle body options		3 way, 5 way, 3+1			
Electric fence line spray nozzle		0	0	0	0
Sections		5 sect. (10 section option)			
Suspension nitrogen accumulators		0	0	0	0
Primary strainer	std. pump	50 or optional 80 mesh y-strainer			
Boom in-line strainers		Optional 50 or 100 mesh			
Foam Marker					
Capacity	US gal. (L)	Foam injection uses 150 (568) rinse water, holds 3 (11.4) of foam concentrate	Foam injection uses 150 (568) rinse water, holds 3 (11.4) of foam concentrate	Foam injection uses 150 (568) rinse water, holds 3 (11.4) of foam concentrate	Foam injection uses 150 (568) rinse water, holds 3 (11.4) of foam concentrate
Air compressor standard		Engine driven	Engine driven	Engine driven	Engine driven

ullet Standard ullet Optional - Not available



VALUE, SERVICE AND SOLUTIONS

There's a certain way of thinking that comes from living on a farm. Farming takes equal parts brain and brawn. Not to mention thick skin, calloused hands and a fair share of know how. Seasoned farmers know it helps to have equipment that's built by farmers, sold by farmers and used by farmers.

Support at every step. When you place your confidence in New Holland agricultural equipment, you get the finest in local support. Your New Holland dealer understands the many challenges you face and stands behind you at every step with the equipment, parts, service and financial solutions to make your job easier. Look to New Holland for a complete selection of equipment, including a full line of tractors, hay & forage equipment, harvesting, crop production and material handling equipment.

Quality parts and service. Turn to your New Holland dealer after the sale for expert, factory-trained service and genuine New Holland-branded parts. Your dealer has the very latest service updates and training to ensure your equipment keeps working productively season after season.

Financing solutions. Your New Holland dealer can tell you about smart ways to turn your financial challenges into opportunities with a portfolio of innovative financial services available through CNH Industrial Capital, including customized financing, leasing, insurance and the purchasing convenience of a Commercial Revolving Account.

For reliable equipment, parts and service — or just honest advice on farming and finance — turn to New Holland and your trusted New Holland dealer. We know. We're farmers, too.





We are proud to support the FFA.

Learn more at www.newholland.com/na

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