



# NL4500G4 Edge

Walk-Around Guide



Building the best since 1939. New Leader Manufacturing is family owned and operated. Our business is built on honesty and integrity. We have a passion for what we do, and we firmly believe that we can make a better tomorrow by building the best today.



The leading brand of dry spinner spreader crop nutrient applicators, New Leader equipment is used to spread fertilizer, lime, and micronutrients. We partner with leading manufacturers such as AGCO, CNH, GVM, John Deere, RBR, and more.

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# Walk-Arounds

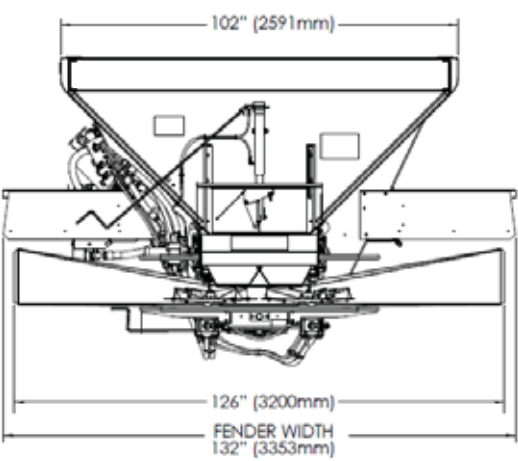
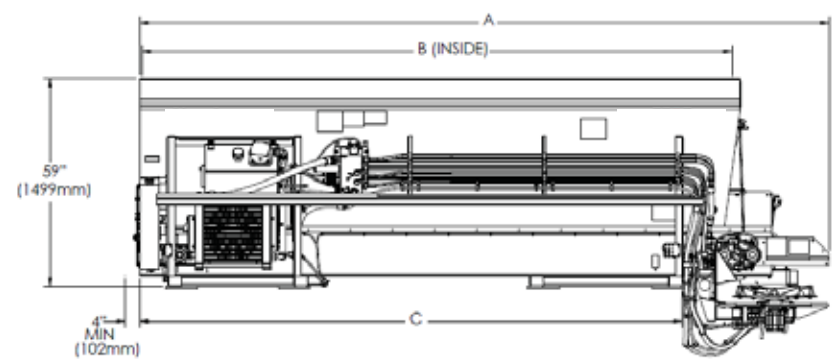
## Key Points

With so many new and updated features, the Edge capabilities should be properly shown to highlight the customer value. The value of the Edge revolves around 3 key items:

- Precision Application
- Ease of Use
- Ease of Maintenance



# Specifications



Unit Length	Overall Length A	Body Length B	Frame Length C	Approximate Weight Lbs (Kg)	Struck Capacity Cu Ft (Cu M)
12' (3.66m)	172" (4369mm)	144" (3658mm)	131" (3327mm)	4400 (1996)	253 (7.16)
13' (3.96m)	184" (4674mm)	156" (3962mm)	143" (3632mm)	4600 (2087)	276 (7.82)
14' (4.27m)	196" (4978mm)	168" (4267mm)	155" (3937mm)	4800 (2177)	298 (8.44)
15' (4.57m)	208" (5283mm)	180" (4572mm)	167" (4242mm)	5000 (2268)	321 (9.09)
16' (4.88m)	220" (5588mm)	192" (4877mm)	179" (4547mm)	5300 (2404)	343 (9.71)

## w/ MultiApplier

	With 5' MultiApplier	With 5' MultiApplier	With 7' MultiApplier	With 7' MultiApplier or MultiBin
Unit Length	Approximate Weight Lbs (Kg)	Bin 1 Struck Capacity Cu Ft (Cu M)	Approximate Weight Lbs (Kg)	Bin 1 Struck Capacity Cu Ft (Cu M)
12' (3.66m)	5200 (2359)	195 (5.52)	5400 (2449)	137 (3.88)
13' (3.96m)	5400 (2449)	224 (6.34)	5600 (2540)	166 (4.70)
14' (4.27m)	5600 (2540)	253 (7.16)	5800 (2631)	195 (5.52)
15' (4.57m)	5800 (2631)	282 (7.99)	6000 (2722)	224 (6.34)
16' (4.88m)	6200 (2812)	311 (8.81)	6400 (2903)	253 (7.16)

## w/ MultiBin

Unit Length	Approximate Weight Lbs (Kg)	Bin 1 Struck Capacity Cu Ft (Cu M)
12' (3.66m)	5800 (2631)	137 (3.88)
13' (3.96m)	6000 (2722)	166 (4.70)
14' (4.27m)	6200 (2812)	195 (5.52)
15' (4.57m)	6400 (2903)	224 (6.34)
16' (4.88m)	6800 (3084)	253 (7.16)

# The Edge Overview

## The Ultimate in Precision

The New Leader NL4500G4 Edge (Edge) is a hopper-type spreader intended for spreading free flowing granular agricultural materials such as dry fertilizers, agricultural limestone, gypsum, seeds, and cover crops.

This unit is powered hydraulically and provides independent variable speed control for the spinner and full automatic ground speed control for the conveyor.

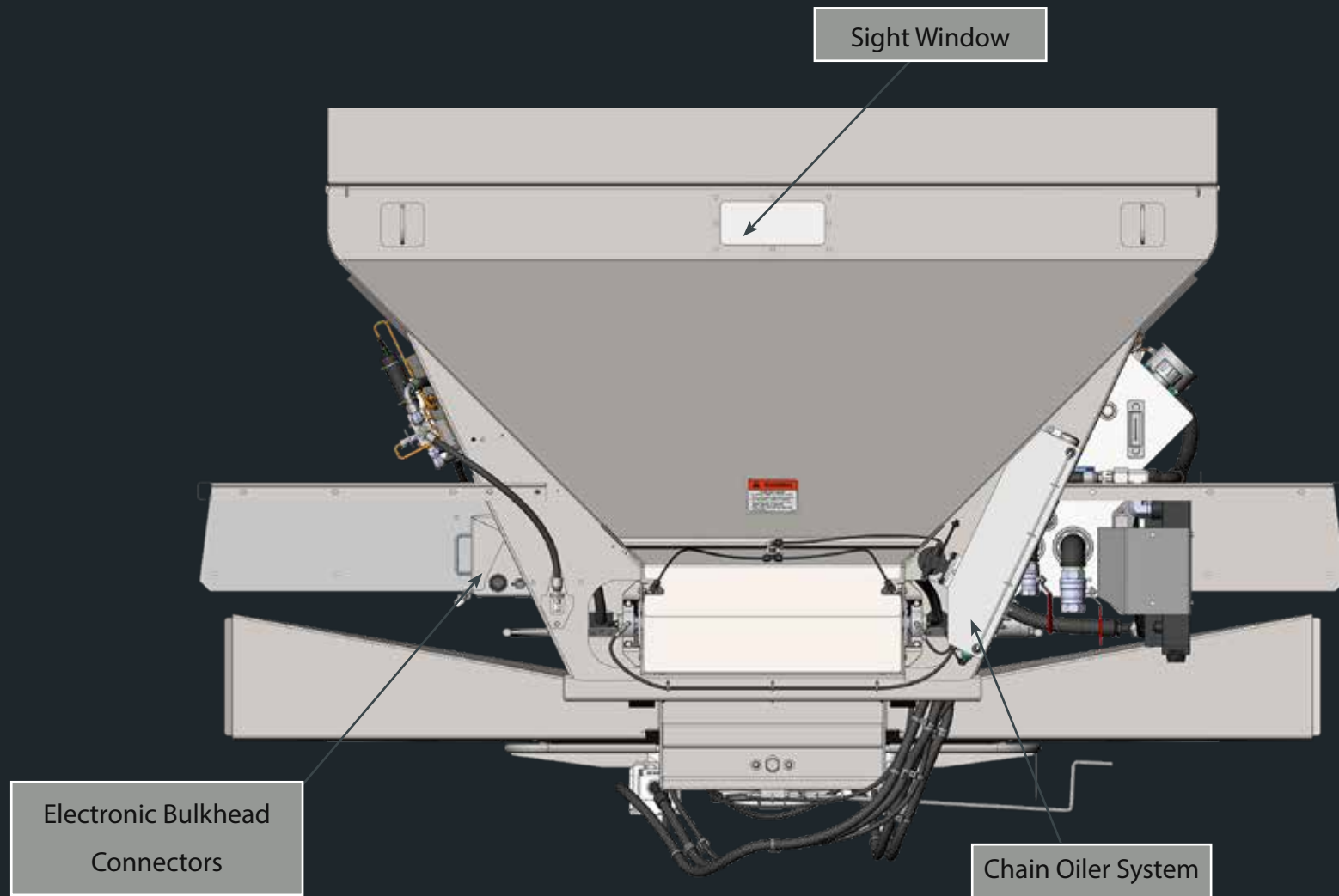
The conveyor delivers material to the spinners through an adjustable metering gate at the rear of the hopper body. Hydraulic motors mounted to 6-to-1 ratio gear case drive the conveyor. The conveyor is a belt-over-chain-type, having parallel strands of pintle-type (#4) chain joined by cross bars every other link.

The spinner assembly has two 24-inch diameter dished discs. Each disc has four formed and heat treated fins that are adjustable to radial angle. The spinner assembly is fully adjustable by means of a rotating handle.

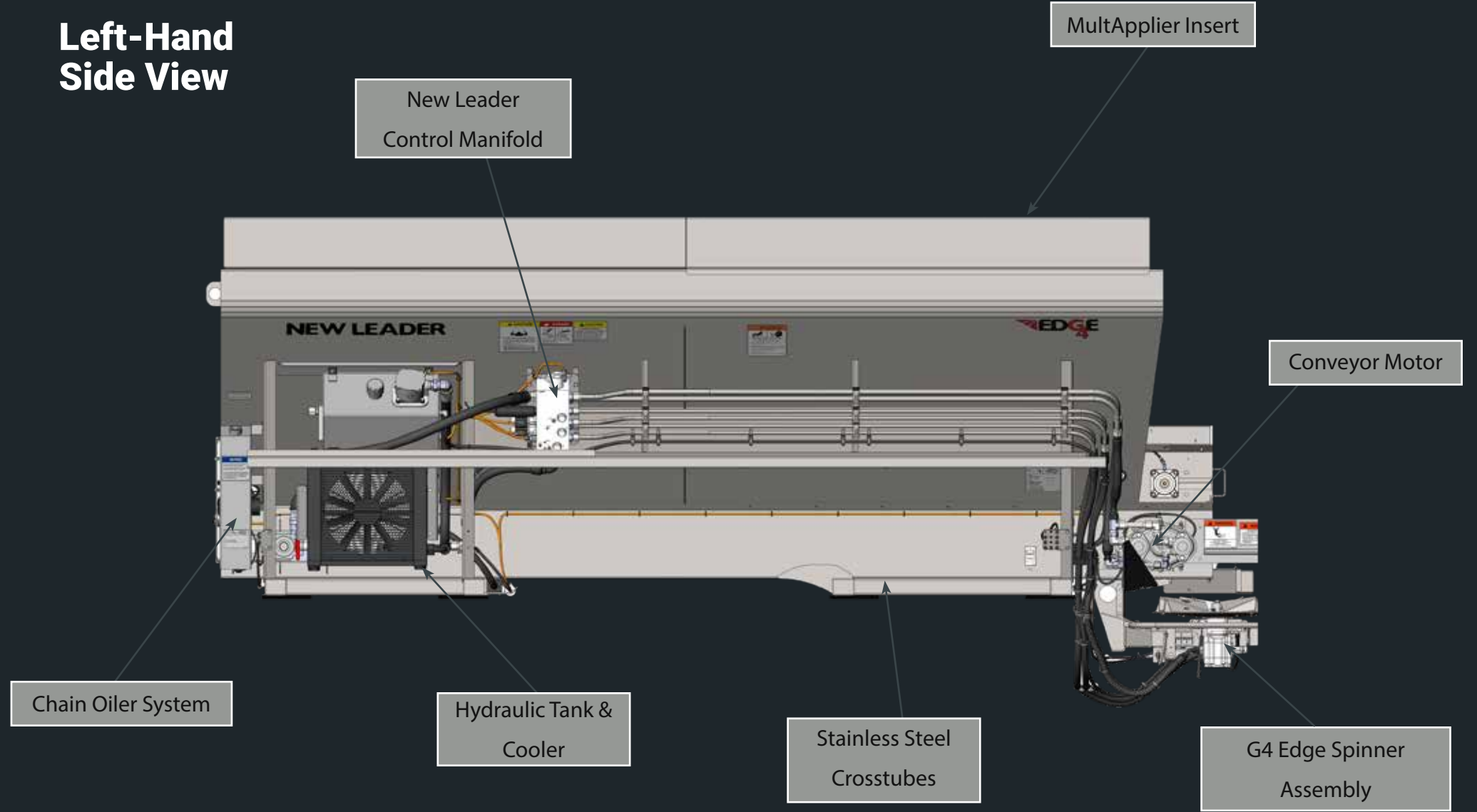
The optional 304 stainless steel hopper-style spreader MultiApplier or MultiBin may be inserted in the main bin.

- Inserting the MultiApplier allows for two materials to be spread simultaneously. It features a 24-inch 409 stainless steel belt-over-chain-type conveyor having parallel strands of 409 stainless steel pintle type (#4) chain joined by cross bars every other link. The direct driven conveyor is also controlled independently enabling the delivery of material at variable rates through the adjustable gate at the rear of the hopper body. The MultiApplier also features rate match capabilities for greater productivity. The waterfall divider improves material placement on the spinner for a more effective spread pattern.
- Inserting the MultiBin will convert the spreader to a 3- or 4-hopper unit, which can be used independently or together for straight and variable rate applications. The front two hoppers dispense fertilizer products while the single or dual hopper at the rear dispense(s) micronutrients or seeding products. The rear bin(s) are sloped forward to improve chassis weight distribution. Material is delivered from the front bin by conveyor and from the rear bin(s) by passing through a stainless steel metering wheel, material dividers and main spinner assembly. Bin sensors are installed to warn when materials are low in each micronutrient bin.
  - The MultiBin also comes equipped with an upper and lower material divider which improves material placement on the spinner for a more effective spread pattern.
  - An optional micronutrient stainless steel cover which opens and closes with a stainless steel air cylinder is available.
  - Screens installed on micronutrient bins keep large chunks of material out of the bins by breaking the material up as it enters the bins.

## Front View

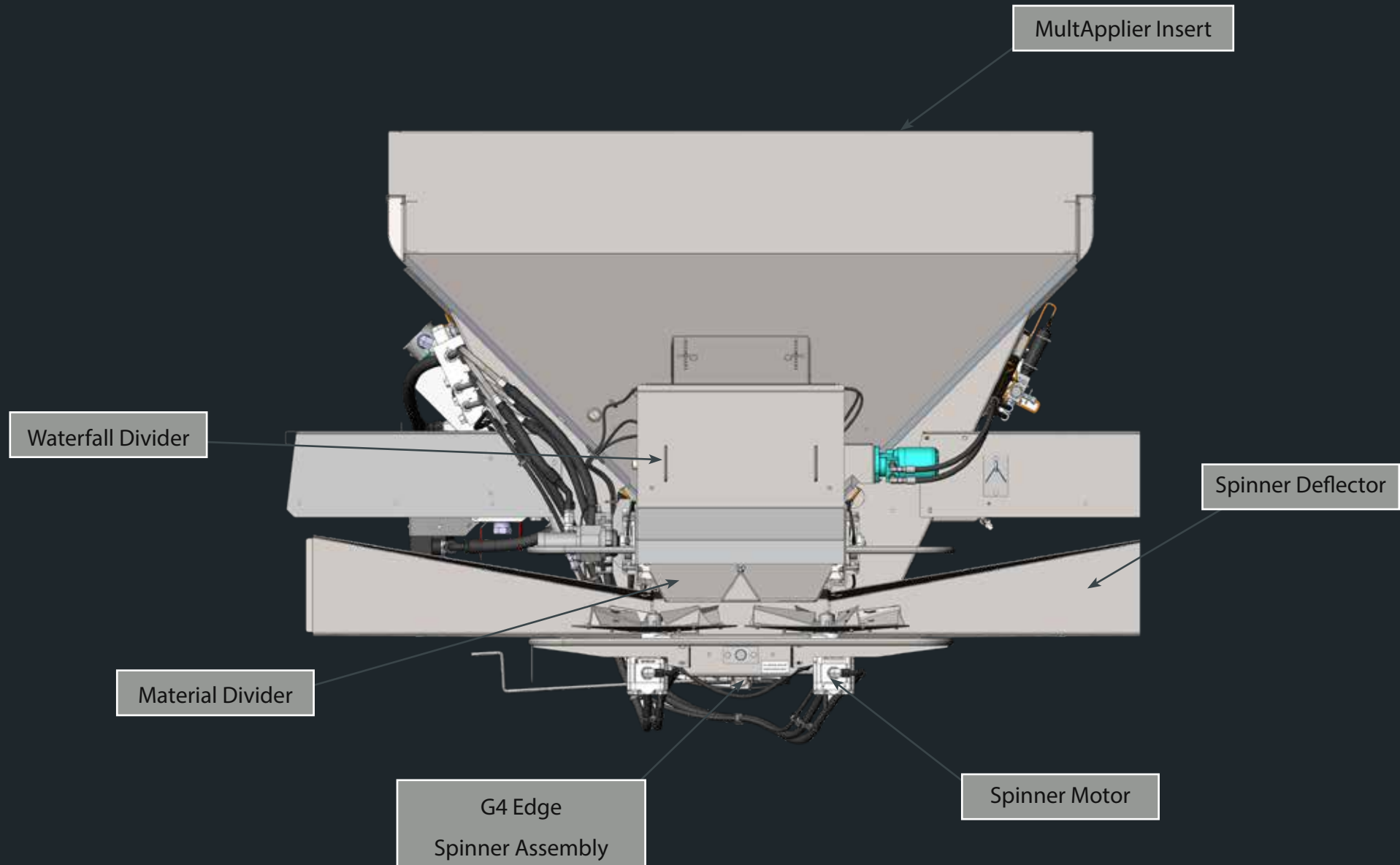


**Left-Hand  
Side View**



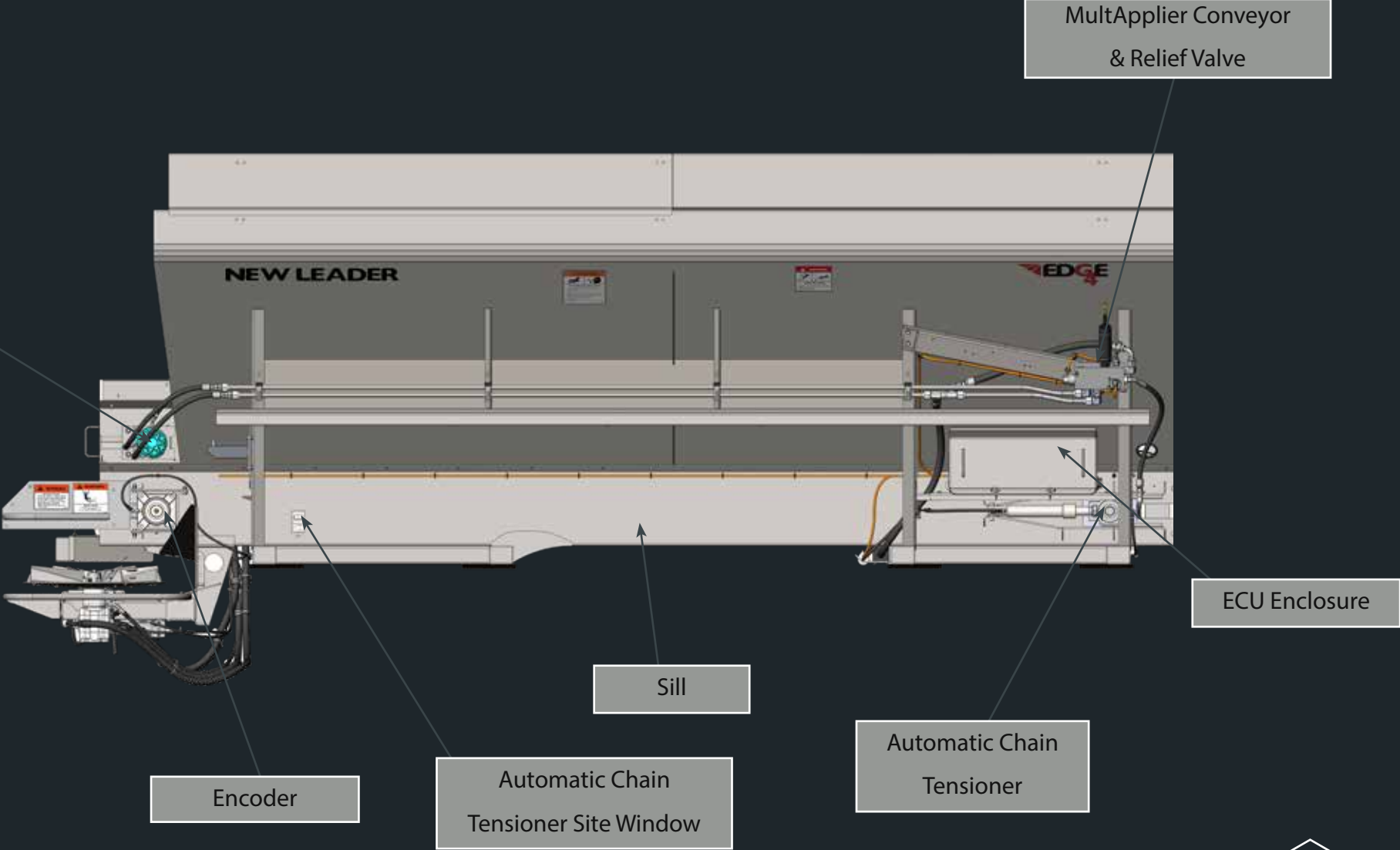


## Rear View





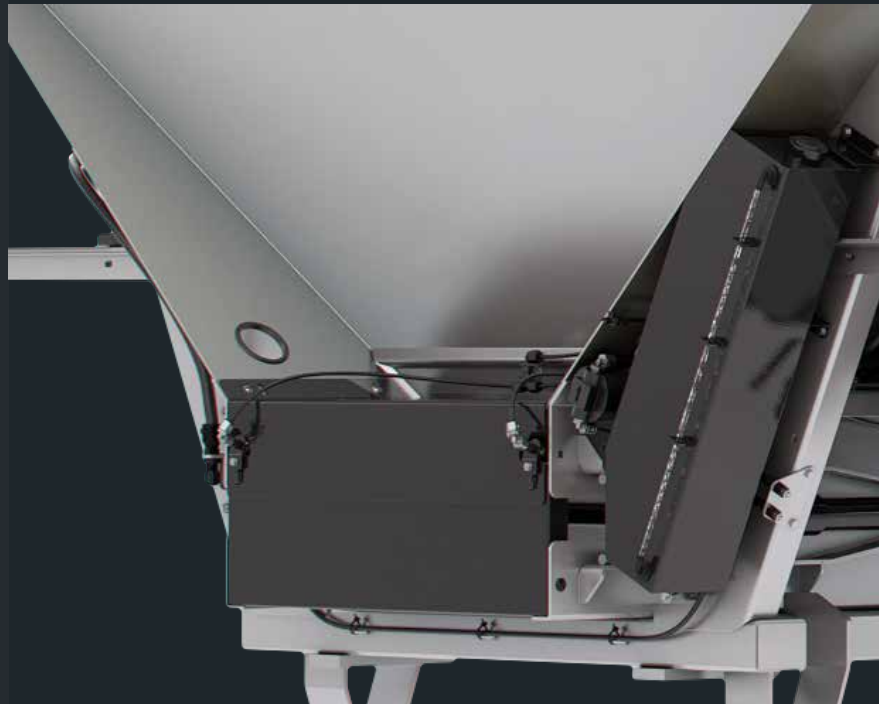
**Right-Hand  
Side View**



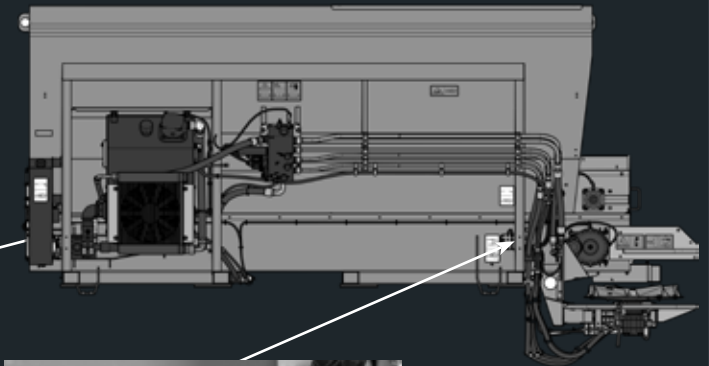
# Chain Oiler and Lubrication

## Key Points

- In cab and automated conveyor chain oiler controls and simplifies daily maintenance
- Extends chain life on one of the most expensive consumable components
- Centralized lubrication points for easy and quick maintenance



The pressurized chain oiler is for performing lubrication service of the belt-over-chain conveyor. This system is operated through the controller, and accessed through the display. By setting oiling reminders, the operator is notified when the set time limit is reached and the chain needs to be lubricated. This reduces wear of the chain and deterioration from rust. Utilize a mixture of 75% diesel fuel and 25% clean oil.

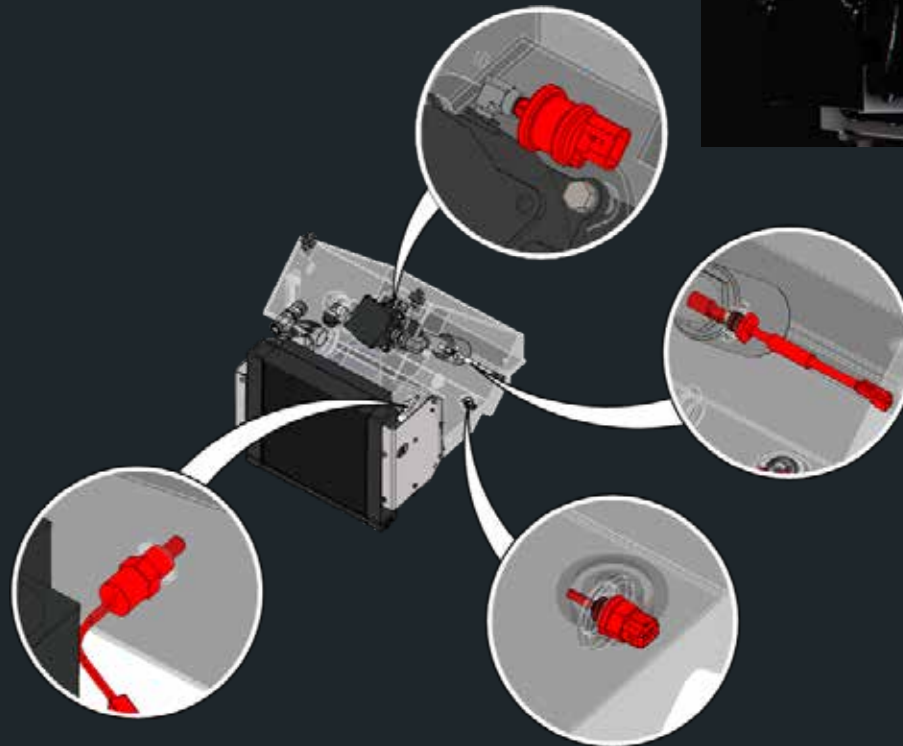
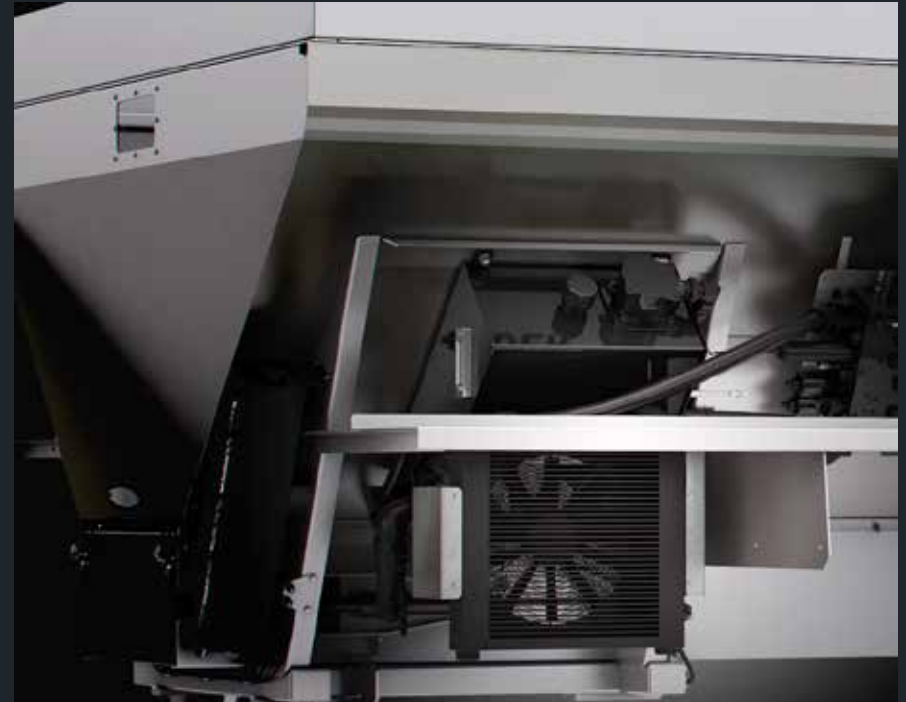


## Hydraulic Reservoir & Cooler

### Key Points

- Thermostatically-controlled cooler maintains proper working temperatures, improving efficiencies
- Temperature, filter, and low fluid sensors

The hydraulic reservoir and cooler ensures that proper fluid conditions are met. With higher output capabilities, the duty cycles are much greater. With a thermostatically-controlled cooler, the system will maintain a set working temperature, providing a more efficient working system and extended hydraulic component life.



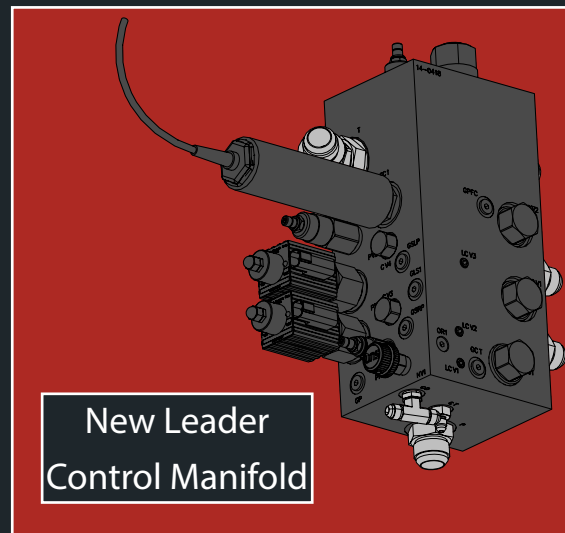
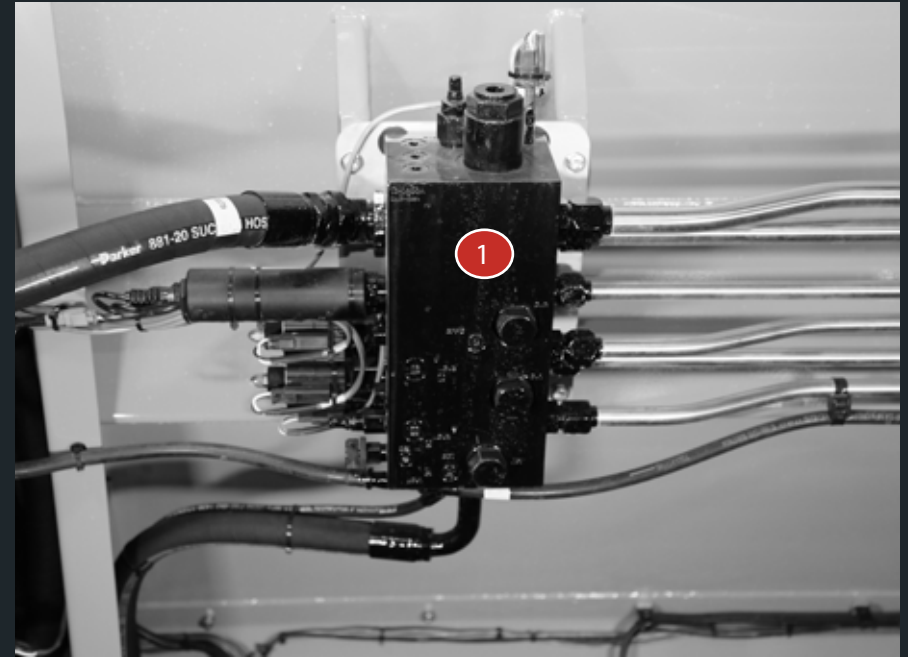
With low fluid, filter, and temperature sensors, monitoring the Edge system is simple. All readings are able to be displayed on the monitor and warnings let the operator know when the system is not performing properly.

# Hydraulic Manifold

## Key Points

- Improved efficiencies and control via common manifold
- Hydraulic test ports
- Anti-cavitation valves that smooth spinner shutdown
- Automatic chain tensioner

All of the main hydraulic functions are tied into a monoblock hydraulic manifold. The New Leader Control Manifold (1) controls the main conveyor, the spinners, and automatic chain tensioning.



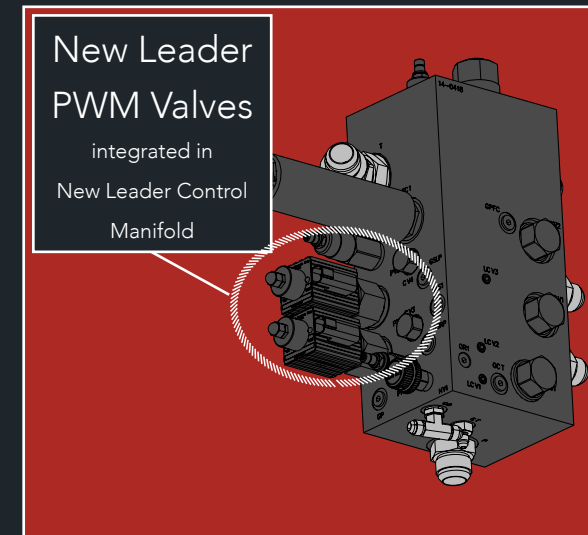
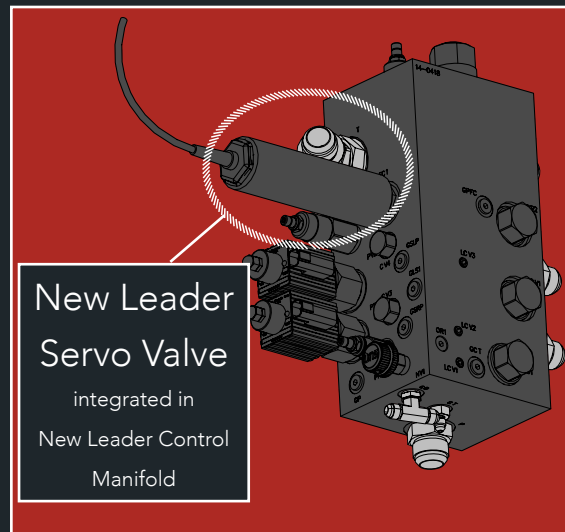


# PWM Valves and Spinner Control

## Key Points

- Integrated into New Leader Control Manifold
- Maintains constant spinner speeds for consistent spread width
- Closed loop system that adjusts for oil temperature, viscosity, and pressure
- Fast reaction servo valve for high speed applications and quick rate changes

The PWM valves for each spinner are integrated into the New Leader Control Manifold. The electronic PWM hydraulic valve is automatically adjusted by the controller to maintain the target spinner speed programmed from the controller. This ensures a consistent and uniform spread pattern at all times.



The New Leader Servo Valves for the main conveyor control is integrated into the New Leader Control Manifold . The servo valve has a fast reaction time to meet high demands when operators are traveling at higher application speeds.

# Chain Tensioner

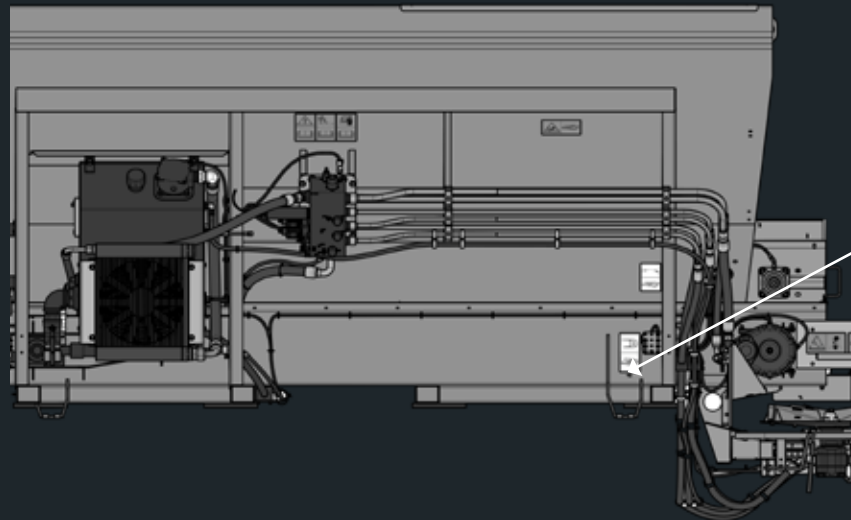
## Key Points

- Maintains proper conveyor tension at all times during operation
- Reduces maintenance requirements
- 304 stainless steel front idler tensioning brackets



The auto-chain tensioning feature maintains proper conveyor tension and reduces maintenance requirements. When the system pump is engaged, both tensioning cylinders are actuated, or pressurized. During extended periods of non-use, the cylinders will relax.

A chain tension sight window is located near the rear of the spreader. When the conveyor is running, the top edge of the chain should be visible between the MIN and MAX lines in the sight window.



Chain Tension Sight Window

# Edge Boundary Control

## Key Points

- Edge of field pattern adjustment
- Independent spinner speed



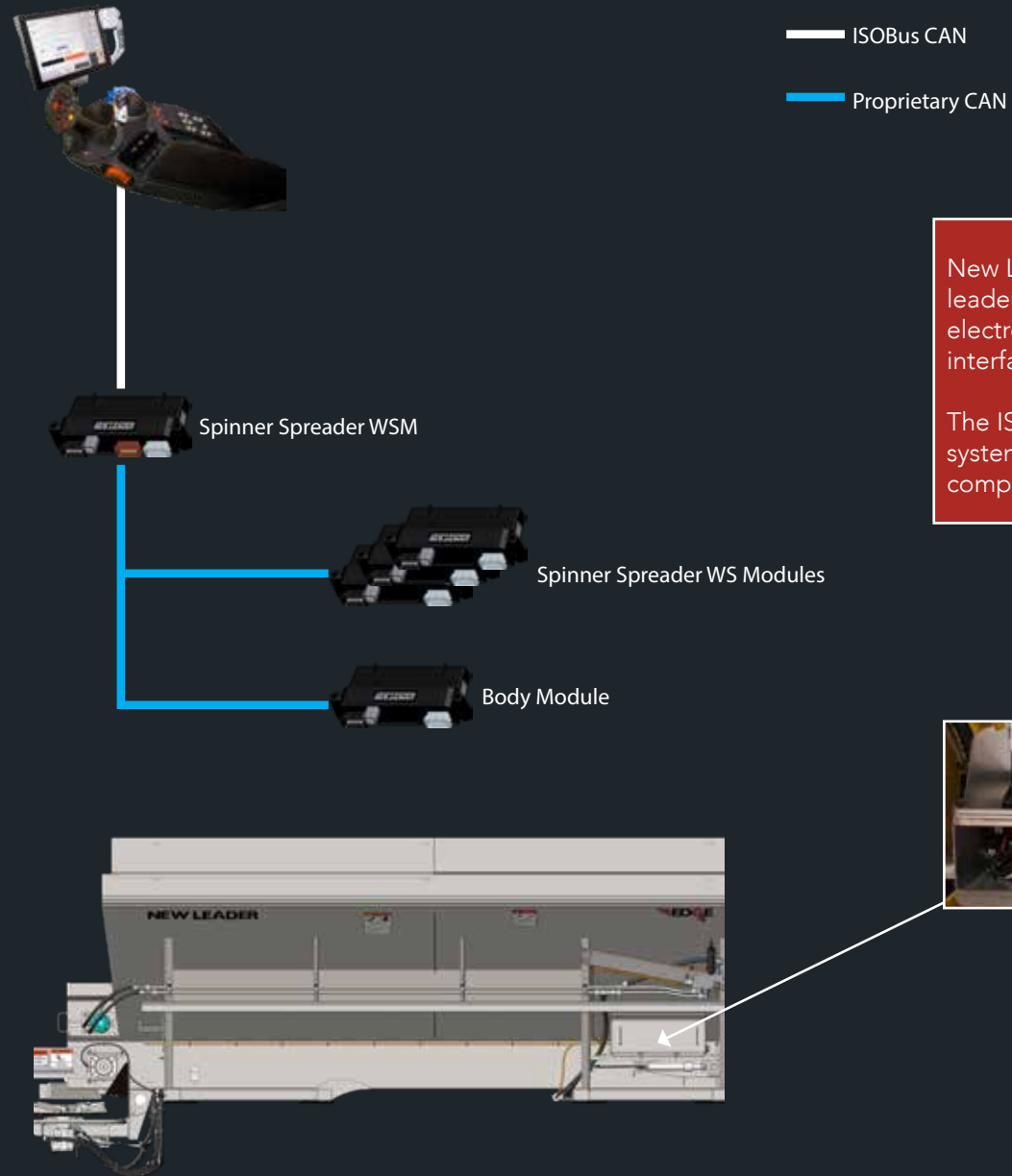
Edge Boundary Control

The Edge utilizes patented G4 spinner technology, which is proven to spread materials fast, wide, and with increased accuracy and consistency. Equipped with dual RPM sensors and dual PWM valves, the Edge will maintain a precise RPM on each individual spinner. Flip a switch, and the Edge allows operators to apply materials along a boundary line, resulting in improved nutrient placement and leading to improved yields.

# The Edge Electronics

## Key Points

- Complete electronic package
- Co-developed with industry leader Ag Leader
- Factory installed and tested
- Diagnostic feedback
- Stainless steel component enclosure
- 2-year warranty for electronics and complete unit



New Leader partnered with industry leader Ag Leader to develop a complete electronic control system and user interface.

The ISO-ready system utilizes a CAN system with specialized modules to offer complete system control.

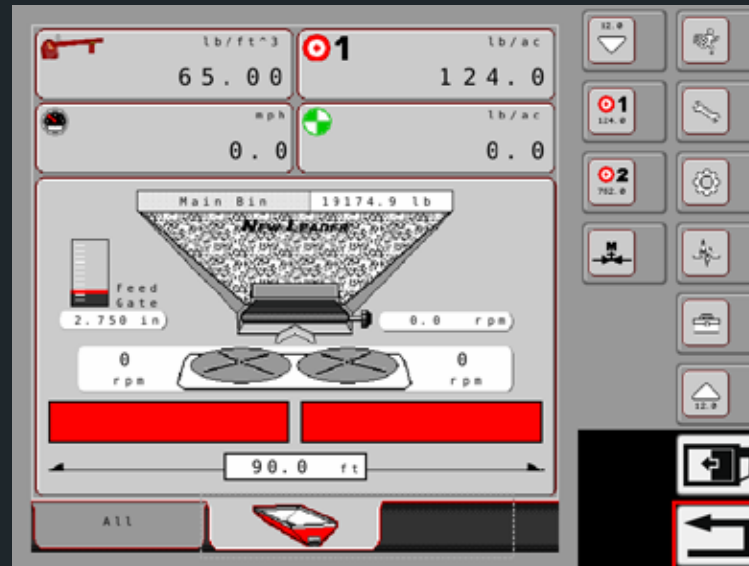




# New Leader User Interface

## Key Points

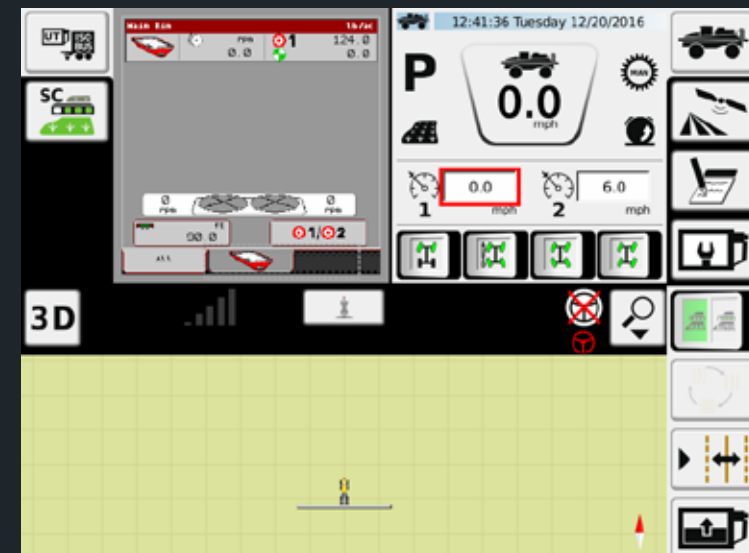
- Easy-to-use interface
- ISOBUS-ready
- Diagnostic feedback
- Automated service notifications
- Low bin countdown
- Feed gate optimizer



The Edge runs completely off New Leader software that is truly plug-and-play with an ISOBUS-ready display. Equipped with hardware to meet ISOBUS (11783) Platform, the New Leader User Interface is all about simplicity; simplicity for our OEM partners, simplicity for our dealers, and simplicity for our customers.

The New Leader User Interface allows us to add fully-tested improvements, and provide the best solution to meet our customers' needs while also providing complete support.

The New Leader User Interface allows customers to use any ISOBUS-ready display in the cab of their machine, and allows for complete machine control and monitoring in one simple, easy-to-use package from the factory.



# MultApplier

## Key Points

- Apply multiple products at once without the need to blend products
- With a MultApplier, apply two products at the same time with independent rates
- With a MultiBin, apply up to four products at once with independent rates



**MultApplier**

Reduce man hours, field compaction, and fuel consumption by applying two products in a single pass with the MultApplier, available in 5-ft or 7-ft sizes.

Independent conveyors allow two products to be applied at independent or variable rates at the same time.

Bolted-in endgate makes the MultApplier easy to install or remove.



**MultiBin**

Transform a single-bin spreader into a three or even four bin spreader with the MultiBin insert. This innovative design gives operators the power to broadcast materials independently or simultaneously, and at straight or variable rates.

The front two hoppers dispense fertilizer products, while the rear hopper dispenses micro-nutrients or seeding products. This rear hopper can also be split to create a fourth hopper.

The MultiBin can be easily removed from the main spreader for single-bin fertilizer or lime spreading.

## Value Statements

### Precision Application

- Boundary spreading
- Precise independent spinner control and monitoring
- Multiple product capabilities
- Improved waterfall divider for MultApplier
- Higher output MultApplier

### Ease of Use

- New Leader User Interface
- System sensors
- Feed gate optimizer
- Diagnostic feedback
- Complete controller package installed

### Ease of Maintenance

- Centralized lubrication
- Manufactured to reduce adjustments
- Automatic chain tensioner
- 304 stainless steel cross tubes, mounts, and take-up brackets
- Automatic chain oiling
- System sensors



"To radically improve the way dry nutrients are applied."



# NEW LEADER

MANUFACTURED BY

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