JOHN DEERE

OPERATOR'S MANUAL

3 cu. ft Salt Spreader
X700 Click N' Go

LP87289
3-405
03/10/2026
English

Introduction

Using Your Operator's Manual

Read this entire operator's manual, especially the safety information, before operating.

This manual is an important part of your machine. Keep all manuals in a convenient location so they can be accessed easily.

Use the safety and operating information in the attachment operator's manual, along with the machine operator's manual, to operate and service the attachment safely and correctly.

If your attachment manual has a section called Preparing the Machine, it means that you will have to do something to your tractor or vehicle before you can install the attachment. The Assembly and Installation sections of this manual provide information to assemble and install the attachment to your tractor or vehicle. Use the Service section to make any needed adjustments and routine service to your attachment.

If you have any questions or concerns with the assembly, installation, or operation of this attachment, see your local John Deere dealer or call the Agri-Fab at 800-448-9282 for assistance.

Warranty information on this John Deere attachment can be found in the warranty that came with your John Deere tractor or vehicle.

Table of Contents

Product Identification

Product Compatibility

John Deere X700 series tractors with Click N' Go brackets.

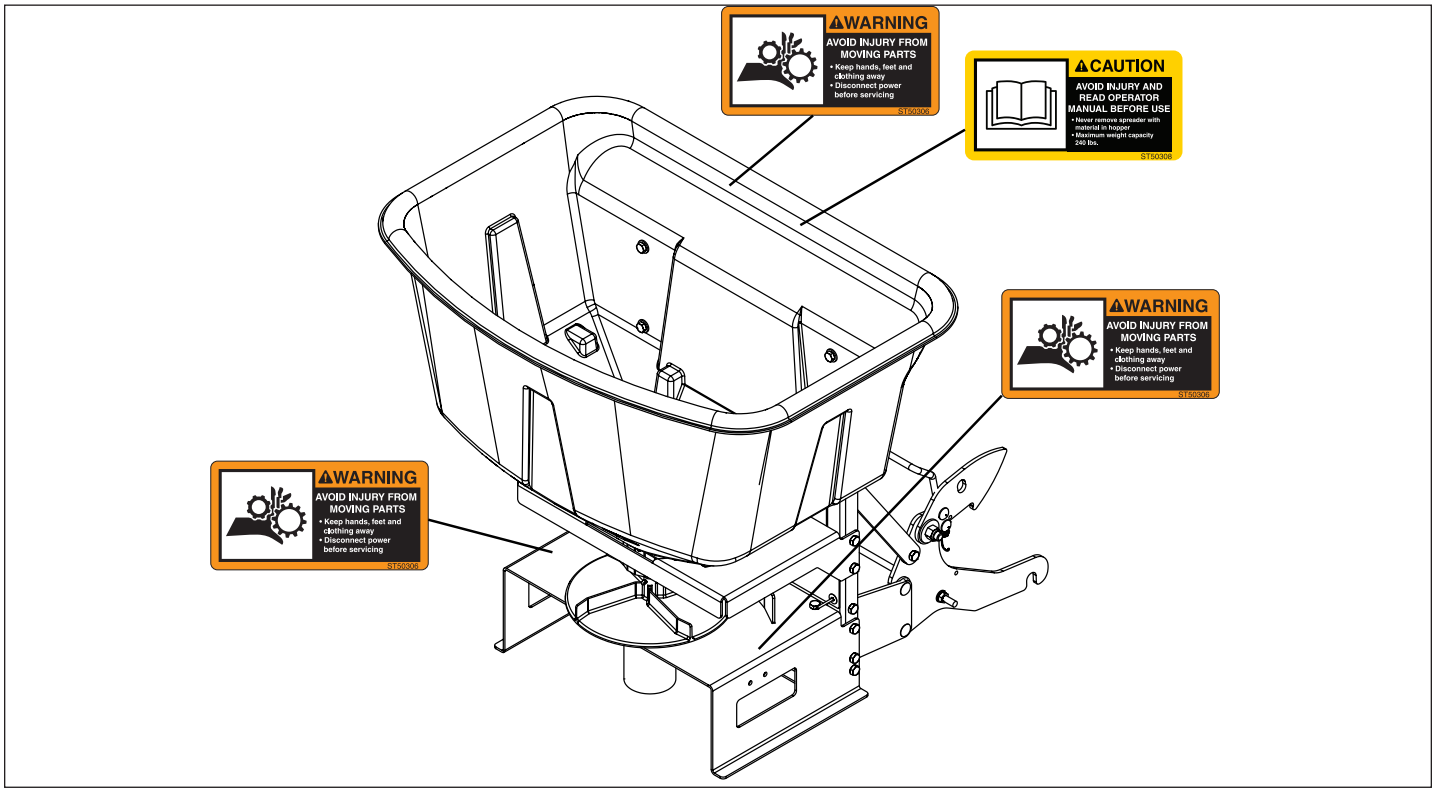
Original instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication.

The right is reserved to make changes at any time without notice.

Safety Labels

Safety Labels

Safety Label Location



Understanding The Machine Safety Labels

The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words **DANGER**, **WARNING**, and **CAUTION** are used with this safety-alert symbol. **DANGER** identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special messages that are identified with the word, **CAUTION**, and the safety-alert symbol.

Replace missing or damaged safety labels. Use this operator's manual for correct safety label placement.

There can be more safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

French or Spanish Safety Labels and Operator's Manual

Operator's manuals and safety labels with content in French or Spanish are available for this machine through authorized John Deere dealers.

Warning

Avoid Injury From Moving Parts

- Keep hands, feet and clothing away
- Disconnect power before servicing

Caution

Avoid Injury and Read Operator Manual Before Use

- Never remove spreader with material in hopper
- Maximum weight capacity 240 lb.

Safety

Read Safety in Machine Operator's Manual

Read the general safety operating precautions in your machine operator's manual for additional safety information.

Operating Safely

- Read the machine and attachment operator's manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the machine and disengage the controls quickly.
- This attachment is intended for use in sidewalk and property maintenance applications. Do not use for use other than intended by the manufacturer.
- Do not modify machine or safety devices. Unauthorized modifications to the machine or attachment may impair its function and safety.
- Do not let children or an untrained person operate machine.
- Make any necessary adjustments before you operate. Never attempt to make any adjustments while the engine is running, unless if recommended in adjustment procedure.
- Look behind machine before you back up. Back up carefully.
- Do not let anyone, especially children, ride on machine or attachment. Riders are subject to injury such as being struck by foreign objects and being thrown off. Riders may also obstruct the operator's view, resulting in the machine being operated in an unsafe manner.

Operating Safely

- Disengage any power to the attachment when the machine is transported or not in use.
- Never use wet materials or materials with foreign debris in the spreader. This unit is designed to spread dry, clean, free-flowing material.
- Never leave material in hopper when not in use.

Parking Safety

1. Stop machine on a level surface, not on a slope.
2. Disengage mower blades or any other attachments.
3. Lower attachments to the ground.
4. Lock the park brake.
5. Stop the engine.
6. Remove the key.
1. Wait for engine and all moving parts to stop before you leave the operator's seat.
2. Close fuel shut-off valve, if your machine is equipped.
3. Disconnect the negative battery cable or remove the spark plug wire(s) (for gasoline engines) before servicing the machine.

Practice Safe Maintenance

- Only qualified, trained adults should service this machine.
- Understand service procedure before doing work. Keep area clean and dry.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Never lubricate, service or adjust the machine or attachment while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.
- Keep hands, feet, clothing, jewelry, and long hair away from any moving parts, to prevent them from getting caught.
- Lower any attachment completely to the ground or to an existing attachment mechanical stop before servicing the attachment. Disengage all power and stop the engine. Lock park brake and remove the key. Let machine cool.
- Disconnect battery or remove spark plug wire (for gasoline engines) before making any repairs.
- Before servicing machine or attachment, carefully release pressure from any components with stored energy, such as hydraulic components and springs.
- Release hydraulic pressure by lowering attachment or cutting units to the ground or to a mechanical stop and move hydraulic control levers.
- Securely support any machine or attachment elements that must be raised for service work. Use jack stands or lock service latches to support components when needed.
- Never run engine unless park brake is locked.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Replace all worn or damaged safety and instruction decals.
- Check all hardware at frequent intervals to be sure the equipment is in safe working condition.
- Do not modify machine or safety devices. Unauthorized modifications to the machine or attachment may impair its function and safety.

Safety

Practice Safe Maintenance

- Do not put large clumps of material into the hopper. Never reach in to the hopper without disconnecting the power first. If a blockage occurs, follow the proper procedure in the Preventing and Clearing Blockages section of this manual.
- When lifting bagged material, use proper lifting technique. Lift the load using your leg muscles not your back. Do not lift bulky or heavy loads alone. Lift as a team.

Wear Appropriate Clothing

- Always wear eye protection when operating the machine.
- Wear close fitting clothing and safety equipment appropriate for the job.
- While operating this machine, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- Wear a suitable protective device such as earplugs. Loud noise can cause impairment or loss of hearing.

Read Chemical Container Label

- Chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soils or other property. Select the right chemical for the job and handle and apply with care.
- Read the instructions, precautions, and warnings on the container label before opening. Use the product strictly according to label directions for specific applications, in the amounts specified, at the times specified and only when needed.
- Keep the container closed tightly except when preparing the mix.
- Do not remove labels from chemical containers. Store all chemicals in their original containers.
- Do not mix chemicals unless stated on the container label.
- Store chemicals when not in use according to the container label.

Handle Chemical Products Safely

- Direct exposure to hazardous chemicals can cause serious injury.
- Potentially hazardous chemicals used with John Deere equipment include pesticides, herbicides and fungicides.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.
- The MSDS should be obtained from the chemical dealer at the time of the chemical purchase.
- Check the MSDS before beginning any job using a hazardous chemical. Know exactly what the risks are and how to do the job safely. Always wear recommended personal protection equipment.

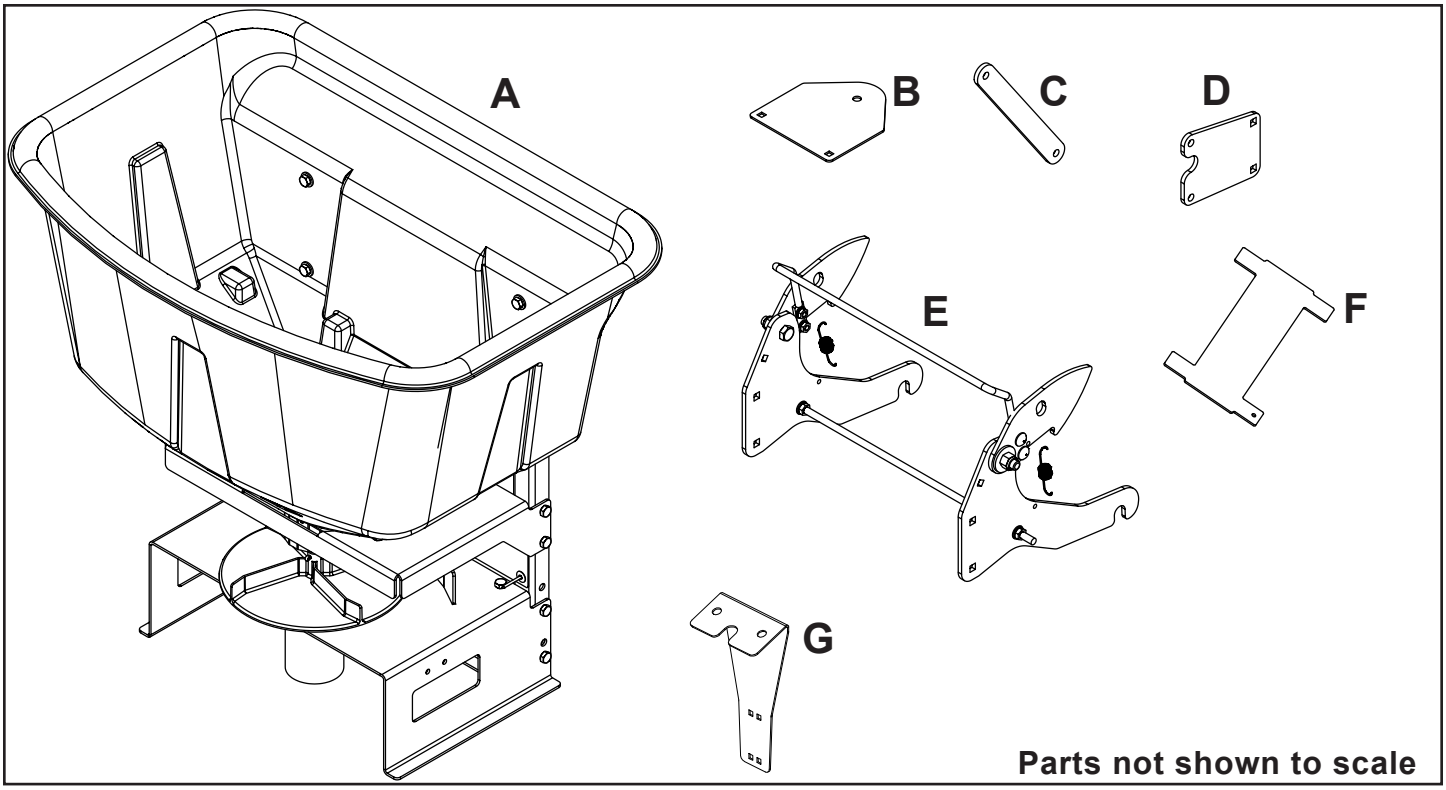
Handling Waste Product and Chemicals

Waste products, such as, used oil, fuel, coolant, brake fluid and batteries, can harm the environment and people:

- Do not use beverage containers for waste fluids -someone may drink from them.
- See your local Recycling Center or authorized dealer to learn how to recycle or get rid of waste products.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques. The seller of the chemical products used with your machine is responsible for providing the MSDS for that product.

Assembly

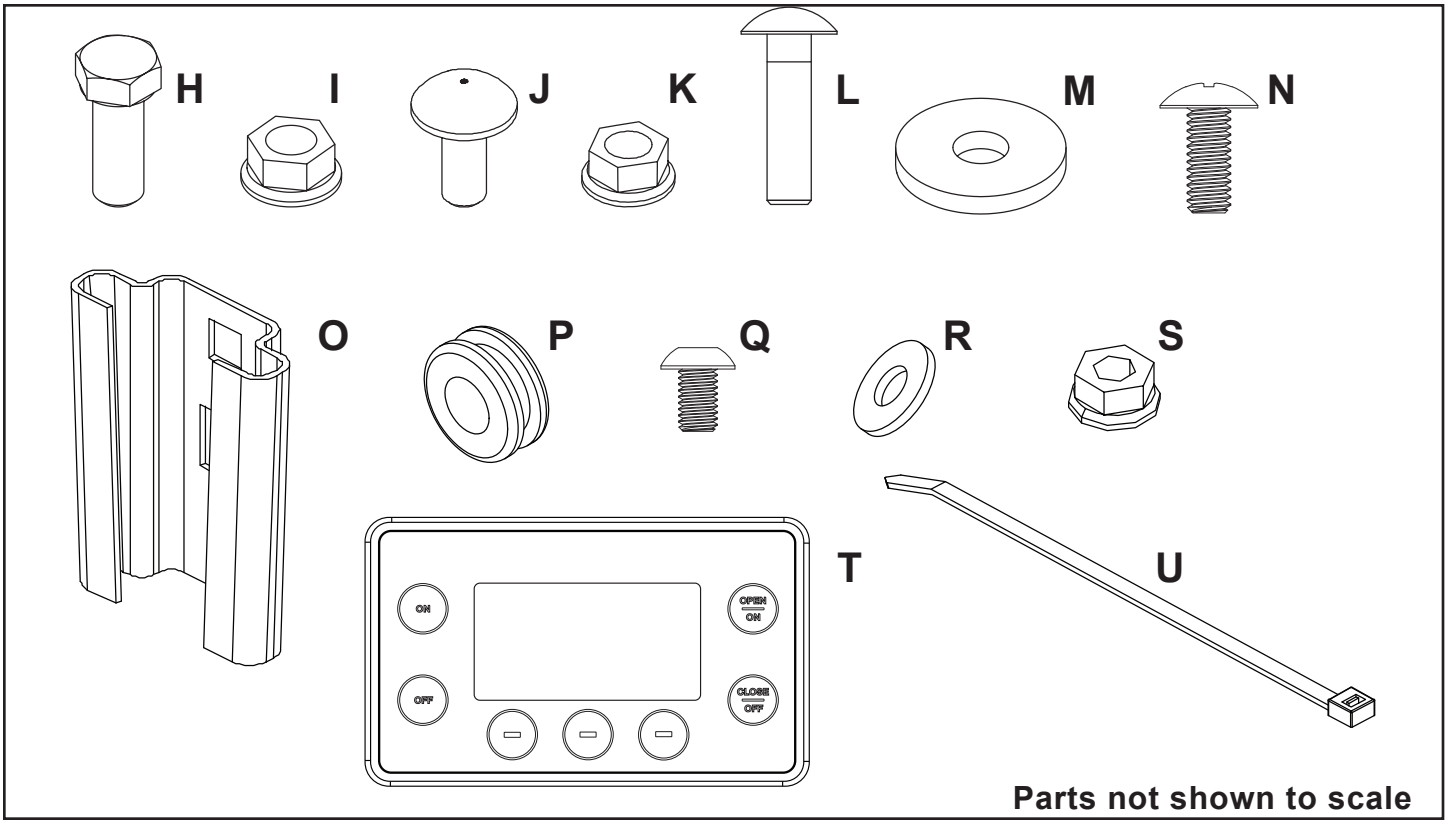
Parts in Kit



Description	Letter	Qty
Spreader	A	1
GNSS Bracket	B	1
Hitch Bracket	C	2
Hitch Support Bracket	D	2
Hitch Assembly	E	1
Material Flow Diverter	F	1
Display Bracket	G	1
Hopper Cover	Not Shown	1
Spreader Harness	Not Shown	1
Aux Power Harness	Not Shown	1
M12-M - M12F Cable	Not Shown	1

Assembly

Parts in Hardware Kit

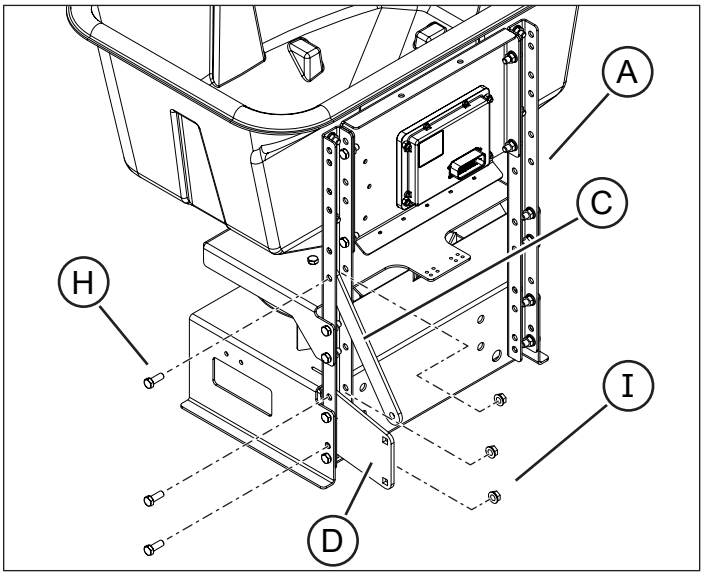


Description	Letter	Qty
Bolt, Hex 3/8-16 X 1 SS	H	8
Nut, Flange 3/8 SS	I	12
Bolt, Carr SN 5/16 X 3/4 SS	J	2
Nut, Flange 5/16 SS	K	2
Bolt, Carr SN 3/8-16 X 1-1/4 SS	L	4
Washer, 1-1/4 OD	M	6
Screw, 5/16-18 x 3/4 Threaded	N	2
Spade Mount	O	1
Grommet, 1/2 ID, 3/4 OD	P	1
Screw, M5 X 8 Button Head	Q	2
Washer, 1/2 OD	R	2
Nut, 5/16 Hex Whiz Lock	S	2
Display	T	1
Wire Tie, #18 Black Nylon UV	U	6

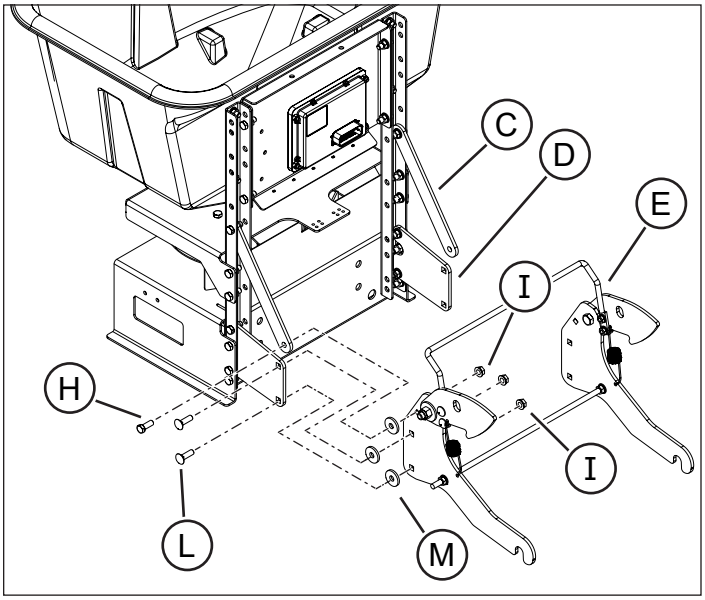
Assembly

Assembly

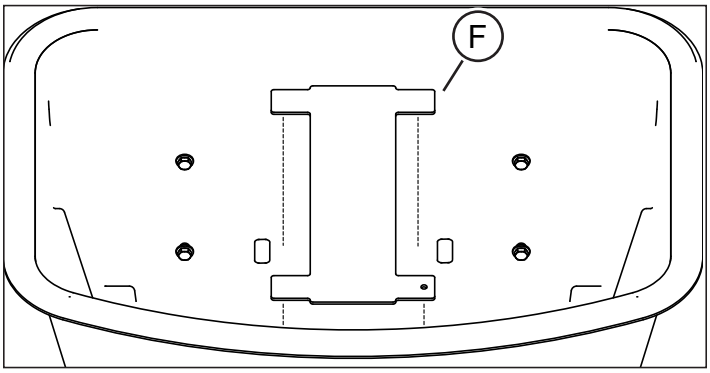
1. Install Hitch Bracket (C) to the spreader (A) using one 3/8-16 x 1” hex bolt (H) and one 3/8” flange nut (I).
2. Install Hitch Support Bracket (D) to the spreader (A) using two 3/8-16 x 1” hex bolts (H) and two 3/8” flange nuts (I).
3. Repeat for other hitch bracket and hitch support bracket.



4. Install the Hitch Mount (E) to the Hitch Bracket (C) using two 3/8-16 x 1” hex bolts (H), two washers (G) and two 3/8” flange nuts (I).
5. Install the Hitch Mount (E) to the Hitch Support Bracket (D) using four 3/8-16 x 1-1/4” carriage bolts (L), four washers (M) and four 3/8” flange nuts. (I).

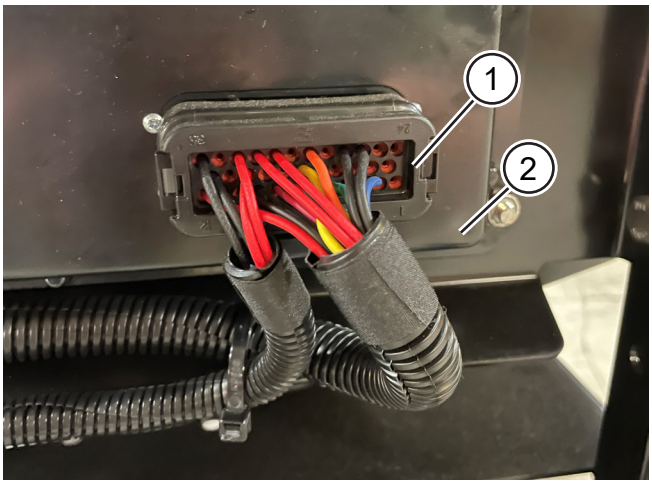


6. Install the material flow diverter (F) into the hopper in between the plastic notches.

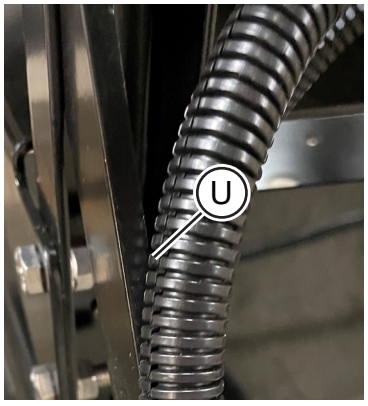


Installing the Spreader Harness

1. Install the large rectangular plug (1) into the connector on the control module (2). (Make sure you hear the plug snap in)
2. Secure both cable bundles with a zip tie (U) to the hole on the back plate.

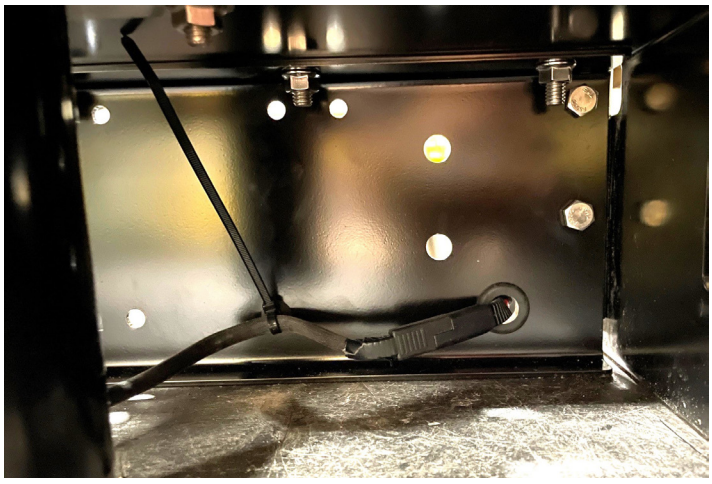


3. Route the cables towards the right side of the spreader. (Passenger side of the vehicle)
4. Route the smaller cable bundle down the side of the channel and securing with a zip tie (U). See picture below.



5. Route the connector from small cable bundle through the grommet. Just enough to be able to connect the harness to the motor harness.

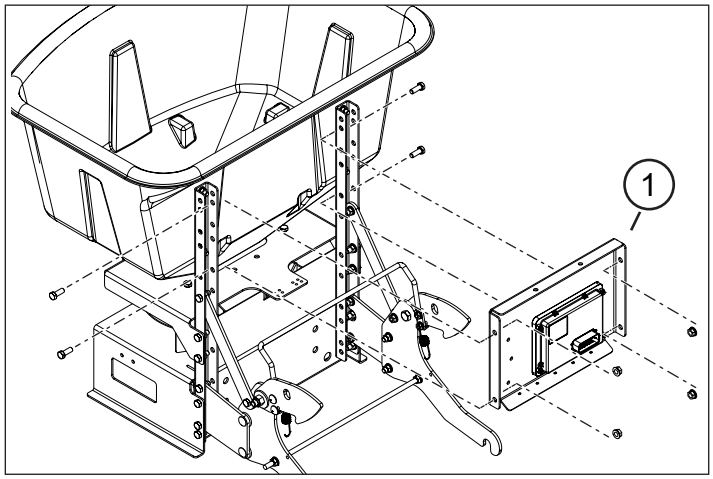
6. Connect the harness connector to the motor harness connector.



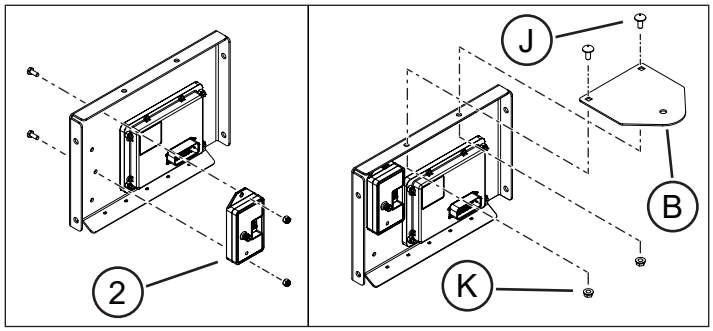
7. Route the larger cable bundle down the hitch bracket (C) and secure with a zip tie (U)

Installing the GNSS Module (Optional)

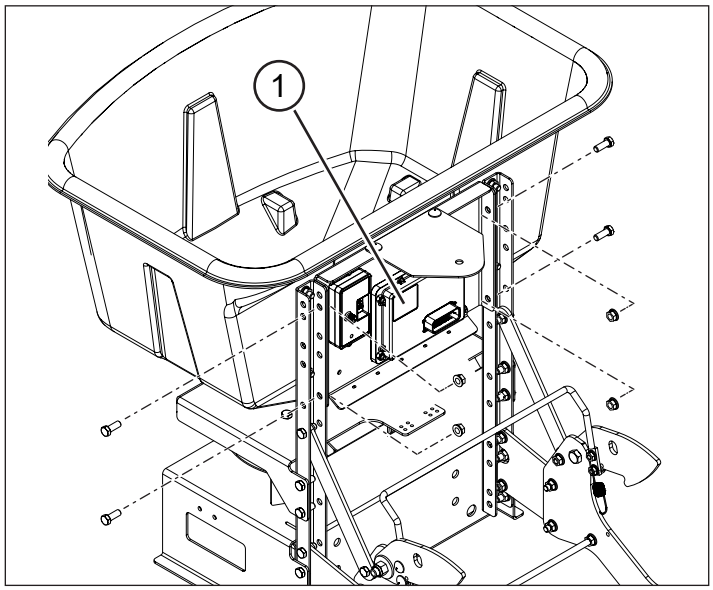
1. Remove the back plate (1) from the spreader frame.



2. Install the GNSS module (2) to the back plate using two 1/4" hex bolts and two 1/4" nylock nuts. Install the GNSS bracket (B) to the back plate using two carriage bolts (J) and two flange nuts (K).

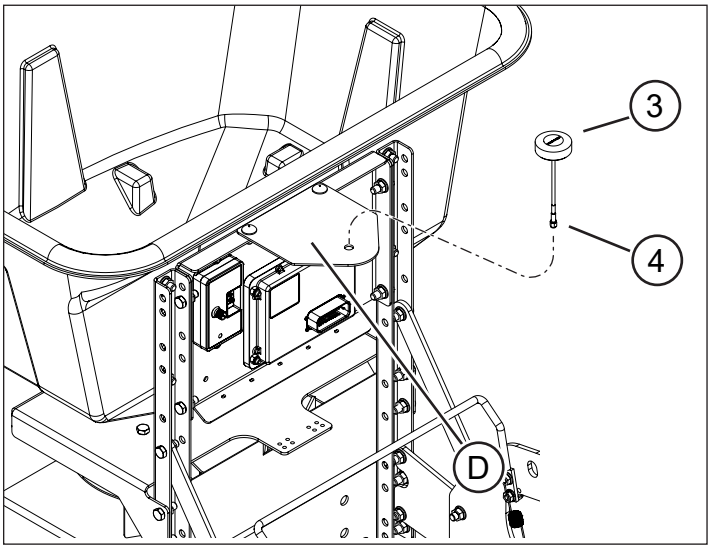


3. Reinstall the back plate (1) to the spreader frame.



Assembly

5. Remove nut (4) from threaded post on the bottom of the GNSS antenna (3). Route cable through the hole in the top of bracket (D).
6. Reinstall the nut on the antenna. Tighten with a wrench until the rubber gasket is partially compressed.



Installing the GNSS Wiring

1. Create a drip loop with the antenna cable by looping it in a circle. Connect cable to the coaxial connector making sure the connector is fully seated. Hand tighten and snug connector with a wrench if needed.
2. Route the 5-pin M12 cable from the spreader harness to the GNSS Module and secure with wire ties as needed. Align the locating notch on the cable with the connector on the GNSS Module and thread the connector until it is hand tight.

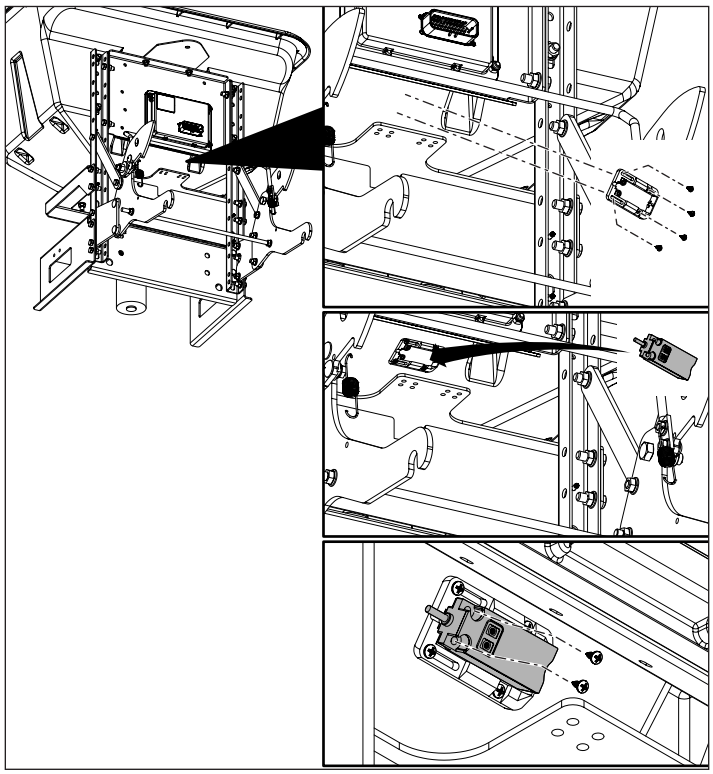
NOTE: Hand tighten the connector coupling nut to 0.5 - 1.0 ft-lb. Be careful not to cross thread the nut on the plastic threads. Do not twist the overmolded portion of the connector, only twist the metal coupling nut or damage may occur to the GNSS Module connector pins.

Installing the Low-Level Sensor (Optional)

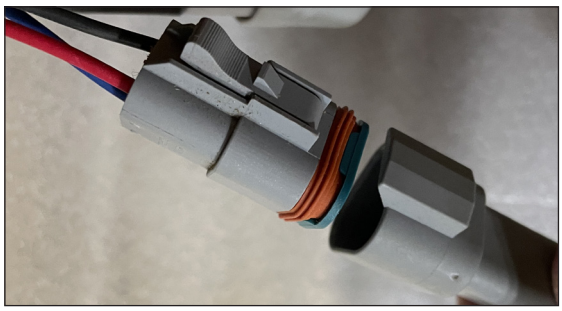
1. Install the low-level sensor bracket to the spreader (A) using four screws (provided) at the location shown.
2. Clip the low-level sensor to the bracket.

Note: Verify buttons are facing outward.

3. Secure low-level sensor to the bracket with provided screws.



4. Plug the low-level sensor into the wiring harness and secure with wire ties as needed.



Installation

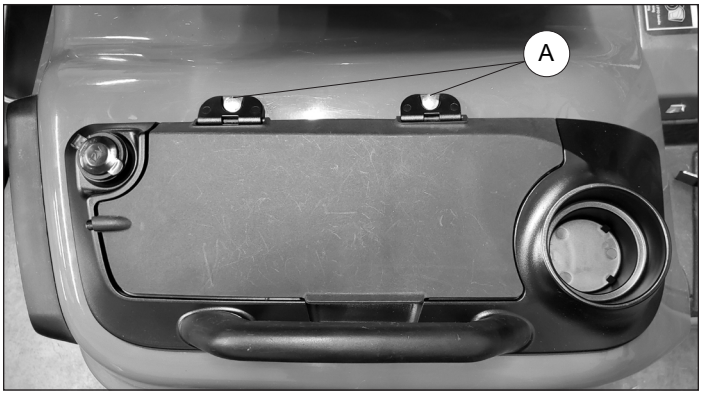
Prepare Machine

Install Ballast

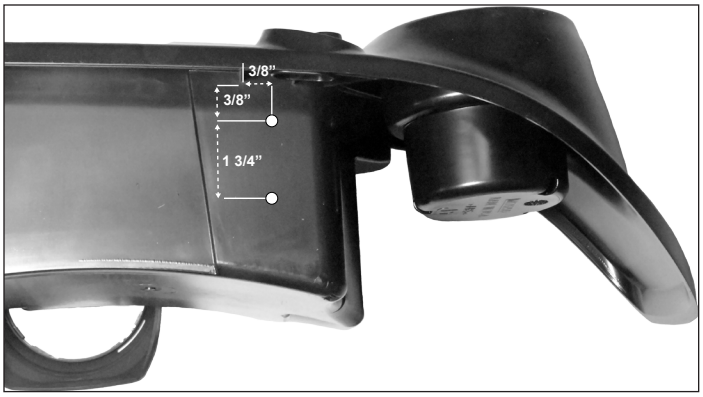
If no front attachment is installed on tractor, ballast is required to stabilize machine. X700 Series tractors require four front suitcase weights, 18Kg (40 lbs) each.

Install Display and Wiring

1. Remove the toolbox by removing two M10 Nuts (A) from the toolbox and two M13 Nuts from the handle. Disconnect the vehicle wire harness from the 12V Aux outlet.

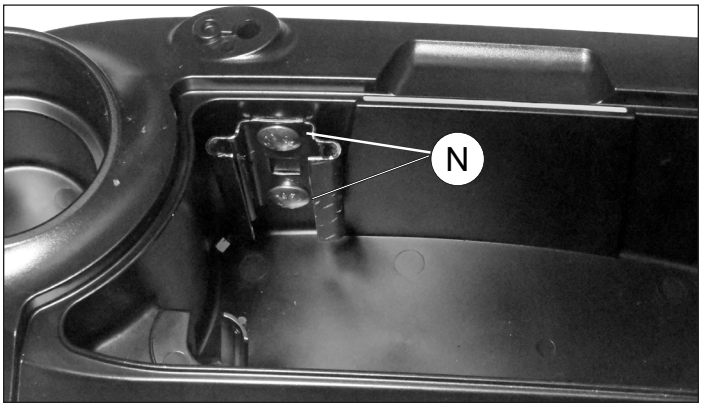


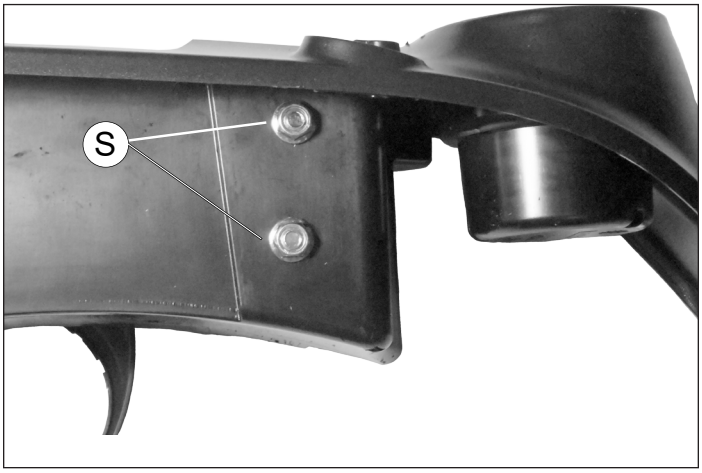
2. Locate the left support rib on the underside of the toolbox flange. Mark the top hole 3/8” to the right and 3/8” down. The bottom hole is 1-3/4” below the top hole. Drill a 7/16” hole at both locations.



3. Install the spade mount (O) on the inside of the toolbox using two 5/16” truss head screws (N) and two 5/16” whiz lock nuts (S).

NOTE: Orient the mount with the wider opening facing up.

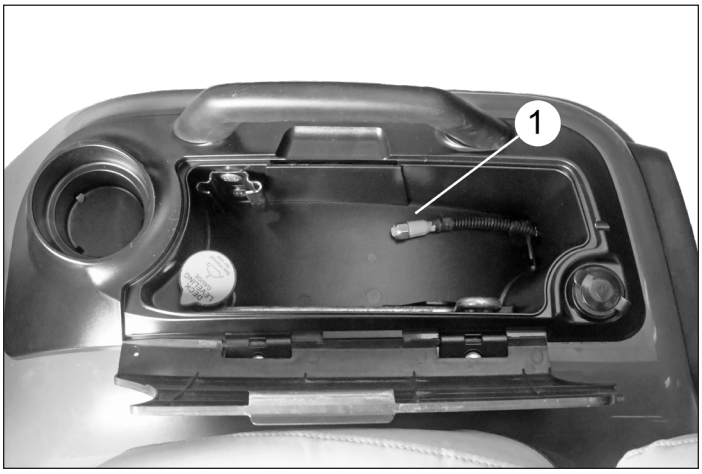




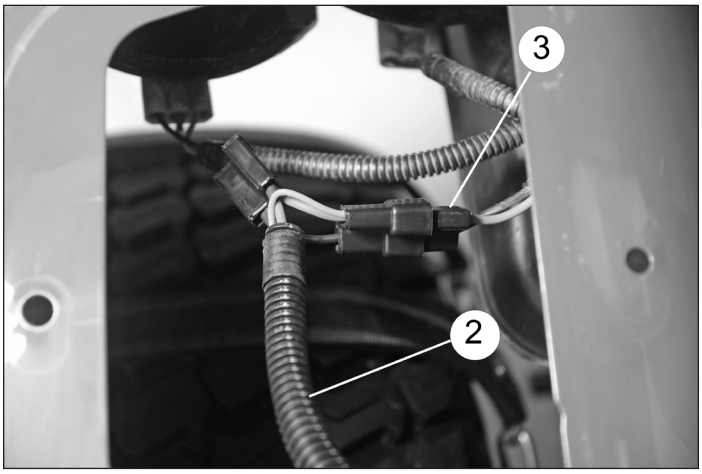
4. Starting at the lower right corner on the rear of the tool box, measure up 1/2” to 3/4” and left 1/2” to 3/4” and drill a 3/4” hole.

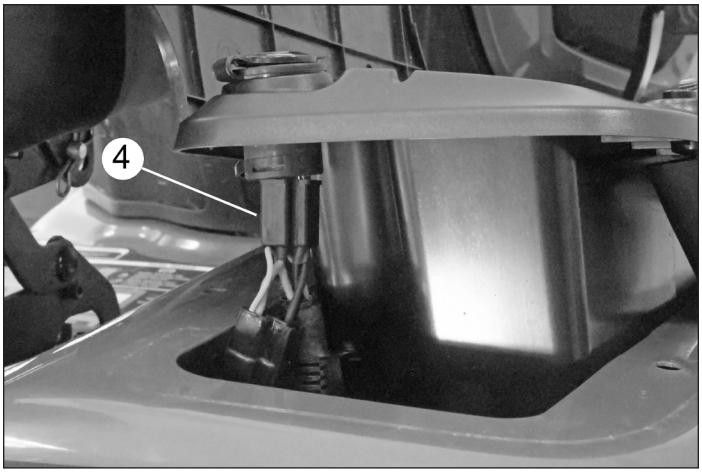
Installation

5. Install grommet over circular connector on the power harness (1) and feed harness through the hole in the rear of the tool box seating the grommet in the hole.

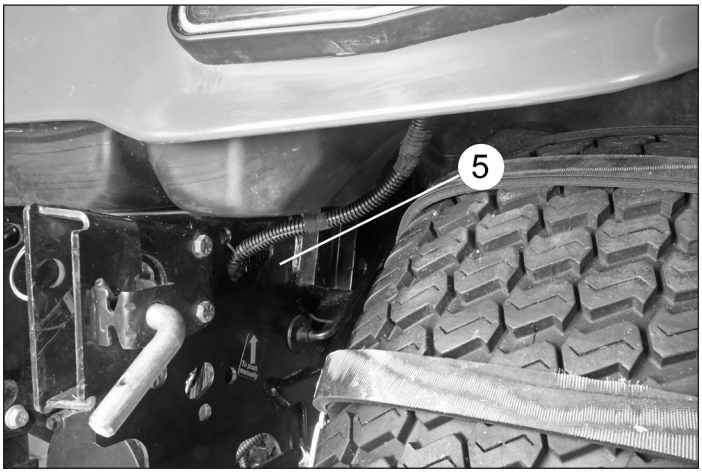


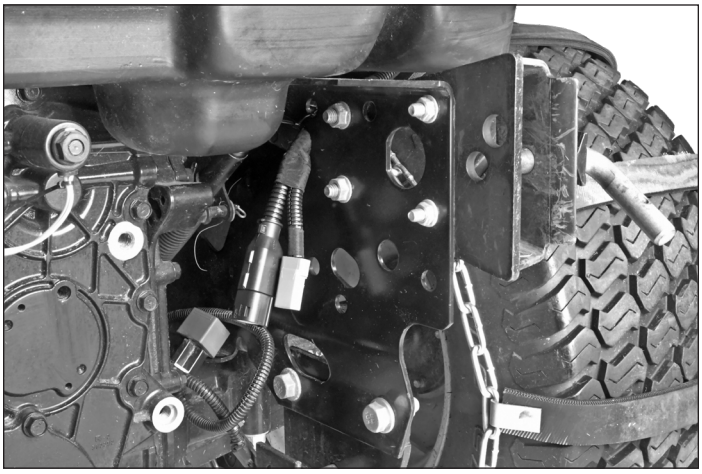
6. Install the power harness (2) in between the vehicle wire harness (3) and 12V Aux outlet (4). Ensure that the connectors are fully seated.





7. Reinstall the toolbox and tighten the M10 nuts on toolbox and the M13 nuts on the handle. Route the two connectors on the free end of the power harness through the elliptical hole in the frame (5) and secure with a wire tie through a nearby hole. Remove any slack in the harness by pulling on the circular connector in the toolbox.

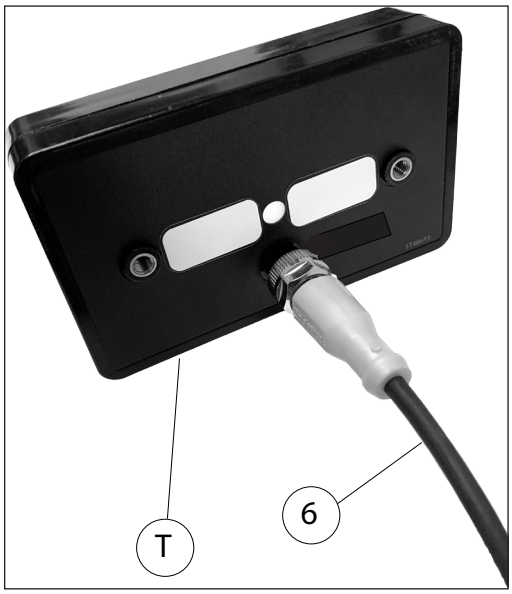




Installation

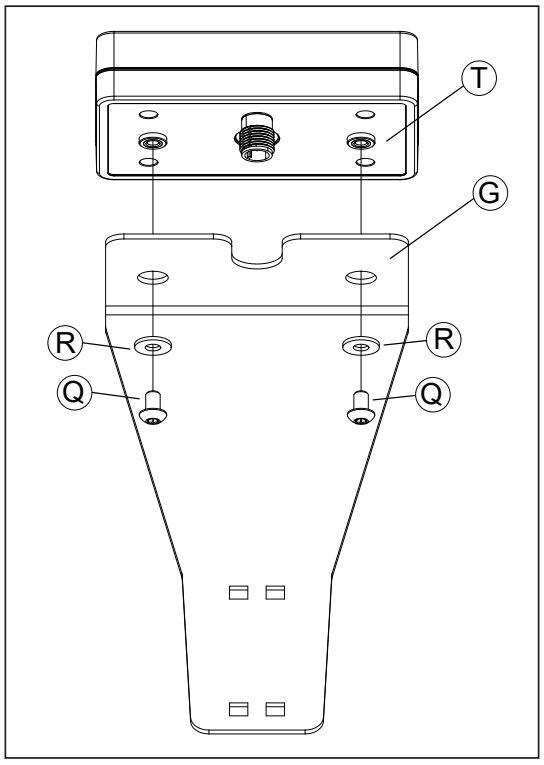
8. Attach the display harness (6) to the connector on the rear of the display (T).

NOTE: Hand tighten the connector coupling nut to 0.5-1.0 ft-lb. Be careful not to cross thread the nut on the plastic threads. Do not twist the overmolded portion of the connector, only twist the metal coupling nut or damage may occur to the display connector pins.

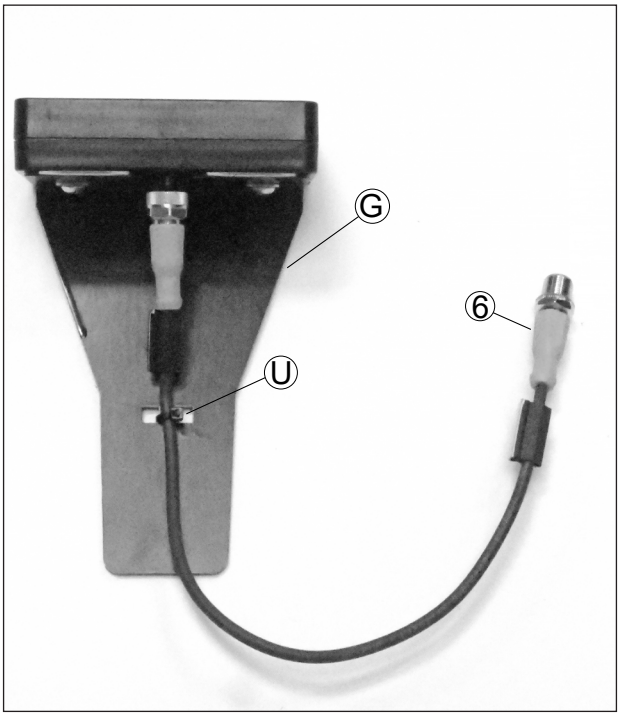


9. Install the Display (T) to the Mounting Bracket (G) using two M5 x 8 pan head screwS (Q) and two washers (R).

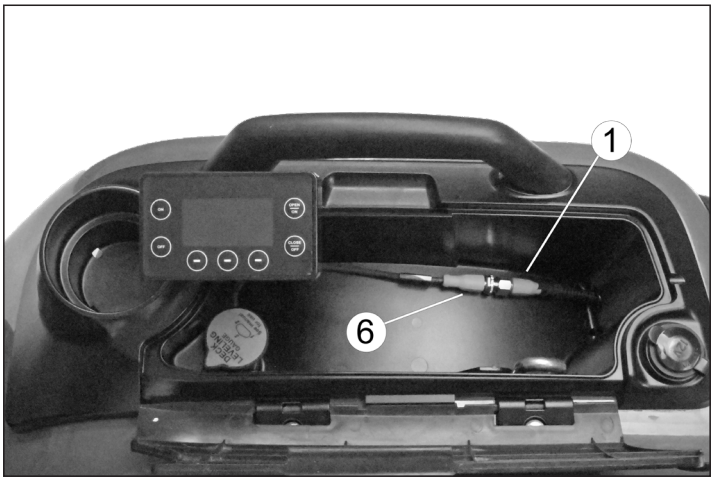
NOTE: Tighten the screws to 4-5 ft-lb. Do not over tighten or damage may occur to the threaded inserts and plastic housing.



10. Secure the Display Harness (6) to the Mounting Bracket (G) with a zip tie (U) through the holes on either side of the harness.



11. Mount the Display by sliding the Mounting Bracket (G) into the spade mount (O) and pressing down firmly. Attach the display harness (6) to the power harness (1).

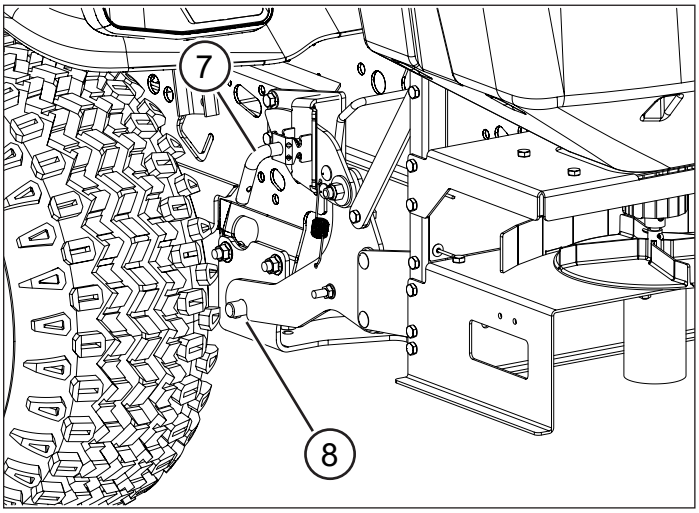


Installation

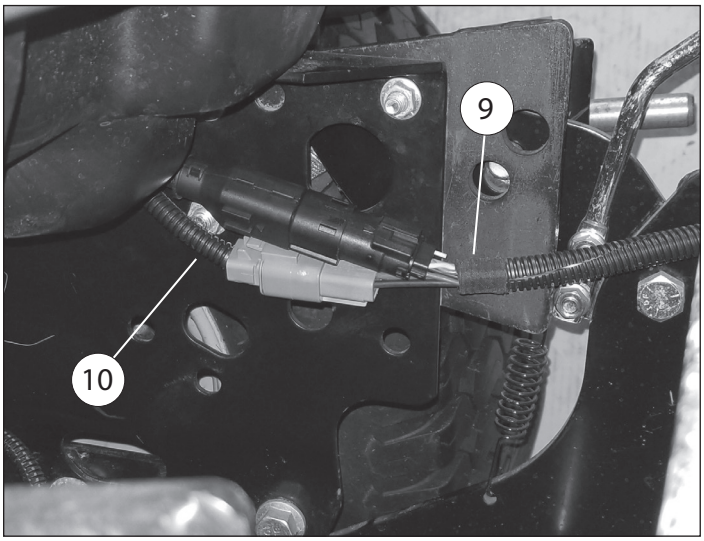
Attaching Spreader

NOTE: It is recommended that two people lift the spreader for this installation.

1. With pins (7) locked out, lean spreader back and place lower mount slots over studs (8)
2. Lift the rear of the spreader until it clicks into position. Release pins (7) verify full pin engagement for proper securement.



3. Connect Spreader Harness (9) to Power Harness (10).



Low Level Sensor Calibration

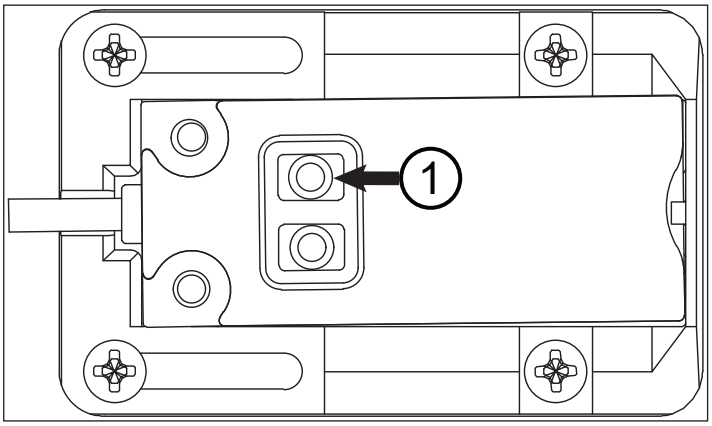
NOTE: Only needed if low level sensor is installed.

NOTE: Low Level Sensor only needs calibrated one time. Low Level Sensor will turn on when you power on the vehicle the spreader is attached to.

1. Power on the vehicle and make sure the display powers on.
2. Verify the hopper is empty.
3. Press the ON button (1) for minimum 2 seconds and maximum 6 seconds.

- LED will flash slowly while button is pushed. LED will be continuously lit when button is released.

4. The sensor is now calibrated.



Operation

Spreader Components

Hopper	3 cu. ft. capacity, high density, polypropylene molded hopper.
Spinner Motor	Variable speed 12V DC motor drives a 12in spinner disk to distribute material.
Controller	12V DC motor driver controls the spinner, and motor.
Display	2.42in monochrome OLED display with 7 buttons.

Spreader Features

Auto start/stop feature (Requires a LP85897 GNSS Module)
Variable speed spinner for spread width control.
Spreader Shield.
Detailed error/diagnostic messages

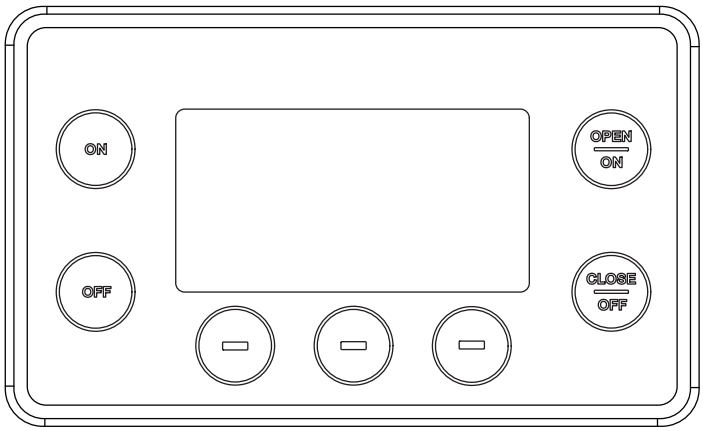
Turning On Spreader

The vehicle key must be in the “On” or “Run” position and the 12V accessory port switch turned “On” for the display to turn on.

When turning on, a splash screen will appear as the software loads. The operation page will appear when loading is complete. The spreader is now ready to operate.

Display Navigation

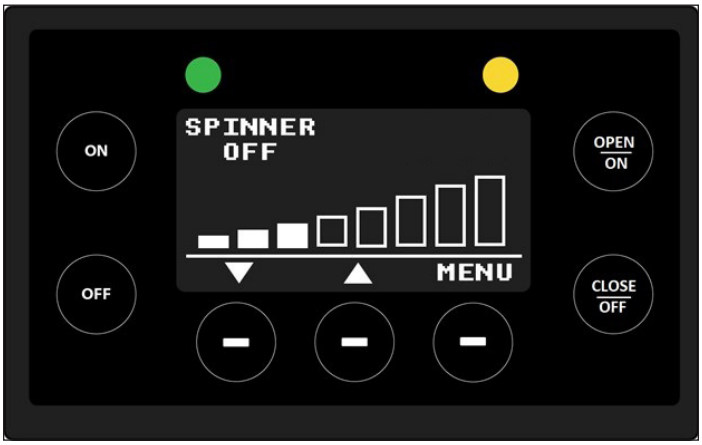
Control the spreader using the buttons on the display. Button functionality is described in the table below and varies by screen.

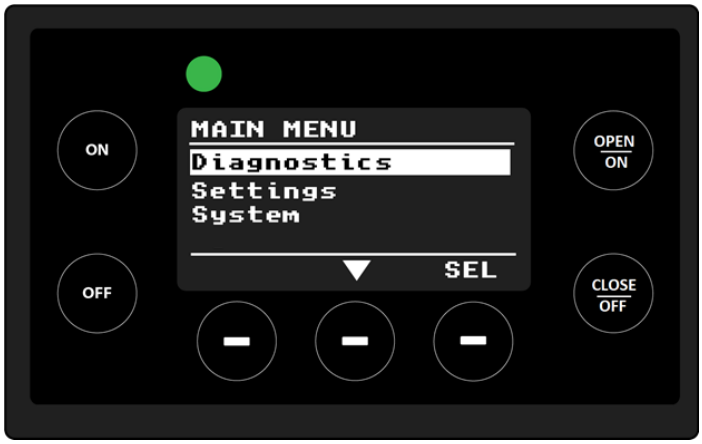


Button #	Button Functions		
1	ON	Spinner	Press the “ON” button to turn on the spinner.
2	OFF	Spinner	Press the “OFF” button to turn off the spinner.
3	OPEN/ ON	N/A	
4	CLOSE/ OFF	N/A	
5	▼	Down Arrow	Press to decrease the speed of the spinner.
6	▲	Up Arrow	Press to increase the speed of the spinner.
7	MENU	Menu Button	Press to enter the menu.

Operation

From the operation page, an operator can power on the spreader, enter the menu, or change the spinner. speed.





Default Spreader Controls

Starting and Stopping the Spreader	Press the ON button to turn on the spinner. Press the OFF button to turn off the spinner.
Adjusting Motor Speed	Press the bottom left button (down arrow) to decrease the speed of the motor in 11% increments. Press the bottom mid button (up arrow) to increase the speed of the motor in 11% increments.
Entering the Menu	Press the bottom right button (menu) to enter the menu.

Main Menu

Pressing the menu button will enter the main menu.

Once in the main menu, the user can select the following:

Menu Options	
Diagnostics	Review the warning and fault list.
Settings	Adjusts the parameters of the display.
System	Display system's voltage and temperature.
Support	Displays support information.
Controller Info	Displays controller information.
Display Info	Displays system information.
GNSS Info	Will only be visible if GNSS is installed
Exit	Returns to the home page.

Operation

Display Screen Messages

During operation, a message may appear describing a potential issue or problem.

Motor Over Current	A motor is drawing too much current. Spreader will shut down, display an error message, and prompt the operator to reset the spreader.The spinner disk may be jammed and needs to be cleared.
Motor Open Circuit	This message is displayed when a motor is disconnected. Ensure that all harnesses are installed correctly, and connectors are fully seated. Ensure that the status light on the motor controller is green.
Voltage High	This message is displayed when the controller is receiving a voltage higher than 16V. Please check battery voltage.
Voltage Low	This message is displayed when the controller is receiving a voltage lower than 9V. Please check battery voltage.
No Comm	This message is displayed when there is a loss of communication with the motor controller. Ensure that all harnesses are installed correctly, and connectors are fully seated. Ensure that the status light on the motor controller is green.
Low Level (Only if low level sensor is installed)	Pressing ACK will allow operation to continue.
Lost Speed MSG (Only if GNSS Module is installed)	Pressing ACK will allow operation to continue. If Auto Mode was active the spreader will switch to manual mode. Will need to re-enable Auto Mode.
Satellite Lost (Only if GNSS Module is installed)	Pressing ACK will allow operation to continue. If Auto Mode was active the spreader will switch to manual mode. Will need to wait to reacquire satellite connection or restart the spreader. Will also need to re-enable Auto Mode.

Settings Menu

Selecting settings from the main menu will enter the settings menu.

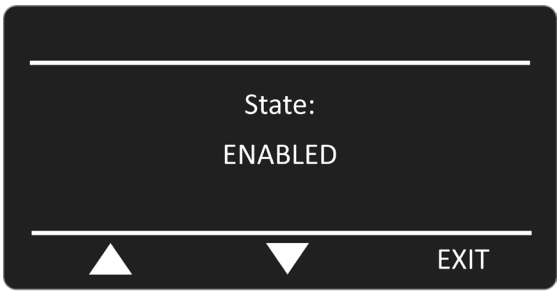
From the settings menu, the user can select the following:

- Display, to select the brightness level
- CAN, to enable/disable the CAN terminator resistor (dealer use only).
- Auto Mode, to enable/disable Auto Mode.
- Exit, go back to main menu.

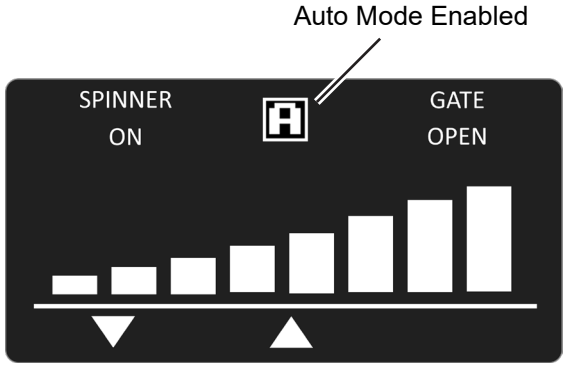
Turning on AUTO MODE

Note: Feature is only available when the GNNS module is installed.

1. Go to the Settings Menu on the display.
2. Go down to Auto Mode press the button below SEL.
3. Use button below Up or Down arrow to scroll between Enabled or Disabled. (If NO SPEED SIGNAL is displayed check the GNSS module)



When enabled the spreader will stop the spinner automatically when vehicle speed is below 2 MPH and start the spinner when speed is above 2 MPH.



Maintenance

Servicing Spreader

When servicing is necessary, perform it in a protected area. Do not use power tools in rain or snow because of danger of electrical shock or injury. Keep area well lighted. Use proper tools. Keep the area of service clean to help avoid accidents.

Disconnect electricity to spreader before servicing.

The controller is a solid state electronic unit and is not serviceable. Any attempt to service will void warranty. When replacing parts, use only original manufacturer's parts. Failure to do so will void warranty.

Use dielectric grease on all electrical connections to prevent corrosion at the beginning and end of the season and each time power plugs are disconnected.

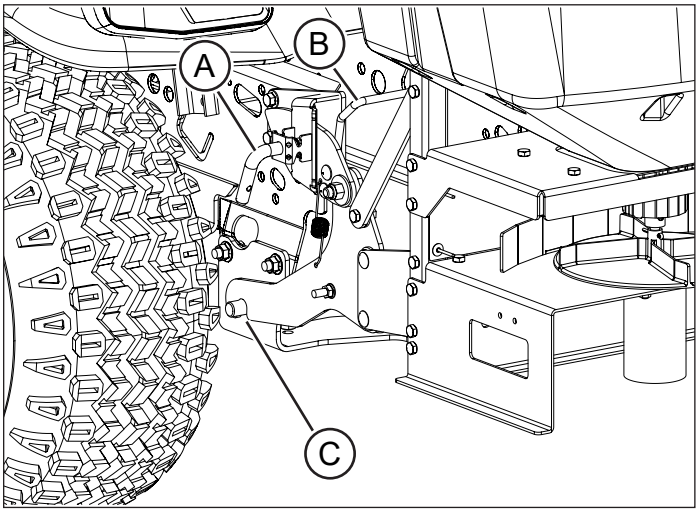
Wash unit after each use to prevent material build-up and corrosion. Do NOT spray motor directly. Paint or oil all bare metal surfaces at the end of the season.

Removal and Storage

Removing Spreader

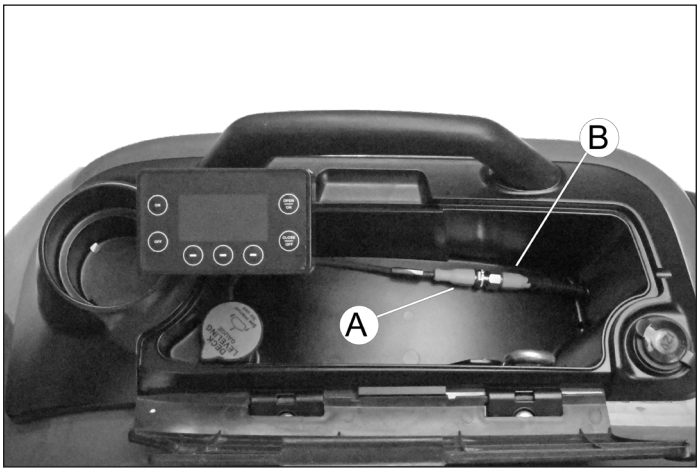
NOTE: It is recommended that two people lift the spreader for this removal.

1. Disconnect the Spreader Harness from the Power Harness.
2. Move the upper pins (A) to the locked out position.
3. Lift the spreader slightly and pull back on the release bar (B) and lower the spreader to the ground.
4. Disengage lower mount slots (C) and slide spreader away from vehicle.



Remove Display

1. Disconnect Display Harness (A) from Power Harness (B)
2. Remove display by sliding bracket out of mount inside toolbox.
3. Store display in dry location.



Storage

1. Wash spreader and allow to dry.
2. Apply dielectric grease on all electrical connections to prevent corrosion.
3. Cover spreader and store.

Troubleshooting

The Display Module and Control Module work as a system and communicate with each other over the CAN bus. Both modules should be powered up at the same time for proper functionality.

Symptom	Troubleshooting Guide
Control Module Does Not Power ON (No Status Light)	1. Remove connector from control module and check for +12V at pins 31 and 32. If No Voltage: • Fuse on Vehicle • Ensure connectors are fully seated • Check for broken wires 2. Check for continuity between pins 26 and 27 to the battery negative terminal, If No Continuity: • Ensure connectors are fully seated • Check for broken wires 3. Check for +12V on pin 29 when vehicle is switched on, If No Voltage: • Fuse on Vehicle • Ensure connectors are fully seated • Check for broken wire 4. If 1-3 check out, replace control module
Display Does Not Power ON	835/865 and 845/875 gators the display is powered directly from the vehicle 1. Remove display harness from rear attachment port and check for +12v at pins A-J with vehicle switched on. If No Voltage: • Vehicle power issue 2. Reattach display harness and check for +12V across pins 2 and 3 on display side of connector • If No Voltage: Replace harness • If Voltage is correct: Replace display All other vehicles the display is powered from the control module 1. Remove connector and check for +12V across pins 2 and 3 on display side of connector, If No Voltage: • Make sure control module is powered and status light is ON • Ensure connectors are fully seated • Check for broken wires
Control Module and/or Display Communication Error (Status Light Flashing Blue)	1. Check for continuity from control module connector pin 5 to display connector pin 4 and from control module connector pin 4 to display connector pin 5. If No Continuity on either wire: • Ensure connectors are fully seated • Check for broken wires 2. Check CAN termination plug and settings. a. If spreader is installed on 835/865 make sure the CAN termination plug has been removed (see installation section) b. If spreader is installed on any other vehicle make sure the CAN termination plug is installed and the CAN termination is enabled in the display settings menu

Troubleshooting

Display Module Error Codes

SPN	Error	Description	Troubleshooting Guide
1100	High Temperature Fault	Internal Temperature above 75C	The module will stop operating the spreader if the internal temperature rises above 75C. This is a latching fault to protect the electronics. Reduce the module's exposure to high temperatures to allow its internal temperature to fall below 75C. The module must be power cycled to recover from a high temperature fault.
1101	High Temperature Warning	Internal temperature above 65C	No action is necessary. The module will continue operating the spreader with an internal temperature between 65C and 75C but will stop operating the spreader if the internal temperature rises above 75C.
1102	Low Temperature Fault	Internal temperature below -30C	The module will stop operating the spreader if the internal temperature falls below -30C. This is a latching fault to protect the electronics. Reduce the module's exposure to low temperatures to allow its internal temperature to rise above -30C. The module must be power cycled to recover from a low temperature fault.
1103	Low Temperature Warning	Internal temperature below -20C	No action is necessary. The module will continue operating the spreader with an internal temperature between -20C and -30C but will stop operating the spreader if the internal temperature falls below -30C.
1104	High Voltage Fault	System voltage above 19V	The module will stop operating the spreader if the system voltage rises above 19V. This is a latching fault to protect the electronics. The module must be power cycled to recover from a high voltage fault. Note that the Interface Module high voltage fault is not the same as the Control Module high voltage fault.
1105	High Voltage Warning	System voltage above 18V	No action is necessary. The module will continue operating the spreader with a system voltage between 18V and 19V but will stop operating the spreader if the system voltage rises above 19V. Note that the Interface Module high voltage warning is not the same as the Control Module high voltage warning.
1106	Low Voltage Fault	System voltage below 6.5V	The module will stop operating the spreader if the system voltage falls below 6.5V. This is a latching fault to protect the electronics. The module must be power cycled to recover from a low voltage fault. Note that the Interface Module low voltage fault is not the same as the Control Module low voltage fault.
1107	Low Voltage Warning	System voltage below 7V	No action is necessary. The module will continue operating the spreader with a system voltage between 7V and 6.5V but will stop operating the spreader if the system voltage falls below 6.5V. Note that the Interface Module low voltage warning is not the same as the Control Module low voltage warning.
1108	Lost Communication Fault	Lost CAN communication	The module will stop operating the spreader if the CAN communication with the Motor Controller is lost. Make sure all wiring harness connections are secure and all wiring is intact and undamaged. The modules must be power cycled to recover from a lost communication fault.
9999	Unknown Fault	Unknown Fault	Contact Agri-Fab for support.

Troubleshooting

Control Module Error Codes

The Control Module for the Salt Spreader contains one motor driver: MD2 controls the spinner. The errors that reference MD2 are related to the spinner.

SPN	Error	Description	Troubleshooting Guide
6100	MD1 Open Circuit	Motor Driver 1 output is disconnected	The motor driver checks if a load is connected between the positive and negative motor driver outputs before attempting to drive the motor. This is a latching fault to protect the electronics. Verify that the connections at the controller terminals are properly secured, the wiring harnesses are not damaged, and all wiring harness connectors are properly connected. Verify that the motor is not damaged. The module must be power cycled to recover from the open circuit fault.
6101	MD1 Over Current	Motor Driver 1 current draw above 15A	The motor driver will stop operating the spreader if the output current goes above 20A. This is a latching fault to protect the electronics. Verify that the motor is not damaged. A heavily loaded or jammed spinner can result in a very high current draw. Reduce the load on the spinner or clear the jam before power cycling the module to recover from the over current fault.
6102	MD1 Short to Battery	Motor Driver 1 output shorted to battery positive	The motor driver checks if the positive or negative motor driver outputs are shorted to battery positive (12V) before attempting to drive the motor. This is a latching fault to protect the electronics. Verify that the connections at the controller terminals are not being bridged by any conductive material. Verify that the wiring harnesses are not damaged and all wiring harness connectors are properly connected.
6103	MD1 Short to Ground	Motor Driver 1 output shorted to battery negative	The motor driver checks if the positive or negative motor driver outputs are shorted to battery negative (ground or 0V) before attempting to drive the motor. This is a latching fault to protect the electronics. Verify that the connections at the controller terminals are not being bridged by any conductive material. Verify that the wiring harnesses are not damaged and all wiring harness connectors are properly connected.
6104	MD1 TLE OverTemp Fault	Motor Driver 1 internal temperature above 75C	The module will stop operating the spreader if the internal temperature rises above 75C. This is a latching fault to protect the electronics. Reduce the module's exposure to high temperatures to allow its internal temperature to fall below 75C. The module must be power cycled to recover from a high temperature fault.
6105	MD1 TLE OverTemp Warning	Motor Driver 1 internal temperature above 65C	No action is necessary. The module will continue operating the spreader with an internal temperature between 65C and 75C but will stop operating the spreader if the internal temperature rises above 75C.
6106	MD1 FET Overtemp Fault	Motor Driver 1 FET temperature above 75C	The module will stop operating the spreader if the internal temperature rises above 75C. This is a latching fault to protect the electronics. Reduce the module's exposure to high temperatures to allow its internal temperature to fall below 75C. The module must be power cycled to recover from a high temperature fault.

Troubleshooting

SPN	Error	Description	Troubleshooting Guide
6107	MD1 FET Overtemp Warning	Motor Driver 1 FET temperature above 65C	No action is necessary. The module will continue operating the spreader with an internal FET temperature between 65C and 75C but will stop operating the spreader if the internal FET temperature rises above 75C.
6108	MD1 High VBAT Fault	Motor Driver 1 voltage above 18V	The module will stop operating the spreader if the system voltage rises above 18V. This is a latching fault to protect the electronics. The module must be power cycled to recover from a high voltage fault. Note that the Control Module high voltage fault is not the same as the Interface Module high voltage fault.
6109	MD1 High VBAT Warning	Motor Driver 1 voltage above 16V	No action is necessary. The module will continue operating the spreader with a system voltage between 16V and 18V but will stop operating the spreader if the system voltage rises above 18V. Note that the Control Module high voltage warning is not the same as the Interface Module high voltage warning.
6110	MD1 Low VBAT Fault	Motor Driver 1 voltage below 8V	The module will stop operating the spreader if the system voltage falls below 8V. This is a latching fault to protect the electronics. The module must be power cycled to recover from a low voltage fault. Note that the Control Module low voltage fault is not the same as the Interface Module low voltage fault.
6111	MD1 Low VBAT Warning	Motor Driver 1 voltage below 9V	No action is necessary. The module will continue operating the spreader with a system voltage between 8V and 9V but will stop operating the spreader if the system voltage falls below 8V. Note that the Control Module low voltage warning is not the same as the Interface Module low voltage warning.
6112	MD1 No Communication	Motor Driver 1 is not responding at power up	The module will not operate if it cannot communicate with the internal motor driver at power up. Power cycle the module. If the error is still active contact Agri-Fab for support.
6113	MD1 Lost Communication	Motor Driver 1 has lost communication for 10 seconds	The module will stop operating if it loses communication with the internal motor driver for more than 10 seconds. Power cycle the module. If the error is still active contact Agri-Fab for support.
6400	Motor Driver Mismatch Version	Motor Driver 1 and Motor Driver 2 have different software versions	The module will not operate if the software loaded in the motor drivers does not match. Power cycle the module. If the error is still active contact Agri-Fab for support.
6401	Spreader Type Memory Corruption	Spreader Type stored in memory is not valid	The module will not operate if the software does not load the proper spreader type from internal memory. Power cycle the module. If the error is still active contact Agri-Fab for support.

Wiring Diagram

Spreader Harness Connections

2 pin Connector

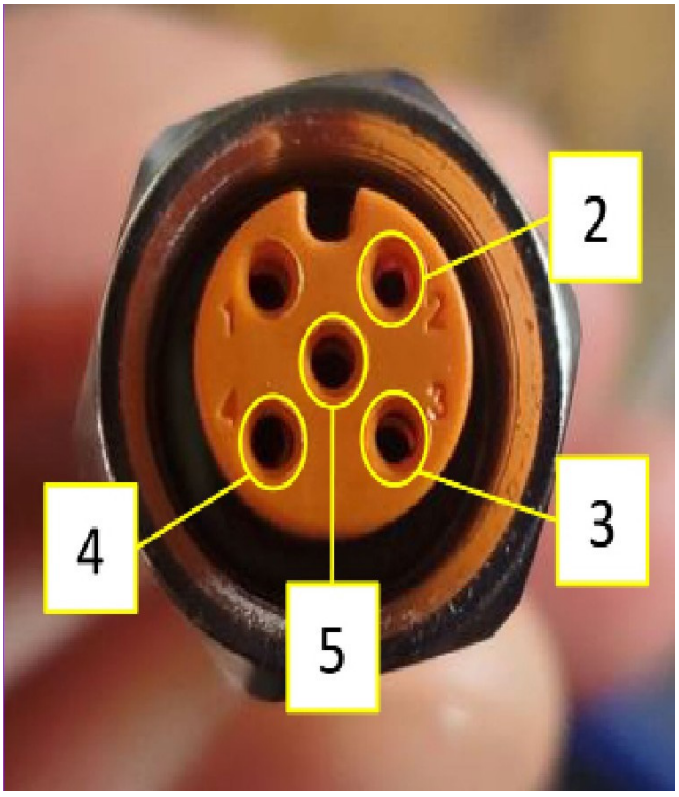
pin 1	Battery Positive
pin 2	Battery Negative

6 pin Connector

pin 1	Switched Battery Positive
pin 2	Battery Negative
pin 3	Ignition
pin 4	CAN-
pin 5	CAN+
pin 6	No Connect

Display Harness Connector

Pin 1	No Connect
Pin 2	Switched +12V
Pin 3	Ground
Pin 4	CAN High
Pin 5	CAN Low
Pin 6	No Connect



Specifications

Spreader

Hopper Volume	3 cu ft (85 L)
Hopper Capacity	240 lb (109 kg)

Spinner Motor

Type	12V Brushed DC
Current Draw	8.3 Amps
Speed	Variable, 540 max. RPM
Ratio	14:1
Spread Width	Up to 25 ft (7.62 m)

Dimensions

Length	30 in (76.2 cm)
Width	30 in (76.2 cm)
Height	32 in (81.3 cm)

Weight

Empty	22 kg (50 lb.)

Operation (Optional GNSS Module)

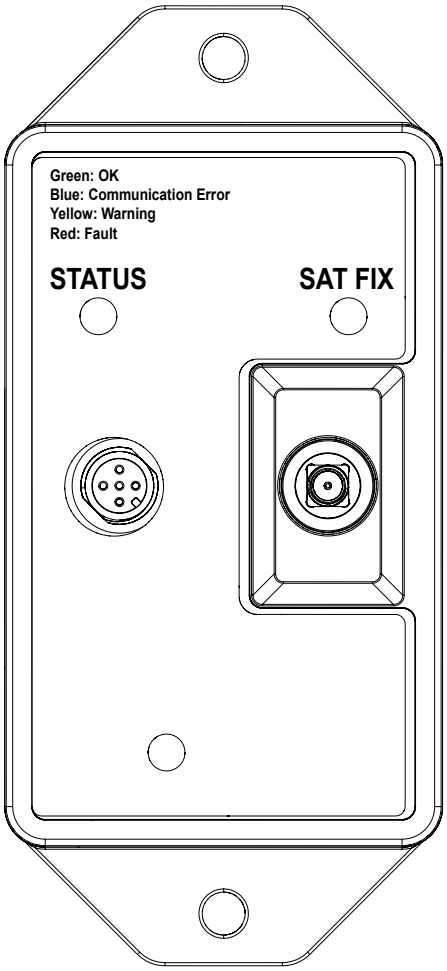
STATUS LED

OFF: Module is powered OFF
Solid Green: Normal Operation
Flashing Yellow: Active Warning
Flashing Red: Active Fault

NOTE: Warnings and faults will cause a popup on the display with the details related to the warning or fault.

SAT FIX LED

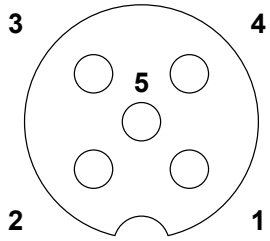
OFF: Antenna is OFF
Flashing: No Satellite Fix
On Solid: Satellite Fix Good.



Troubleshooting GNSS Module

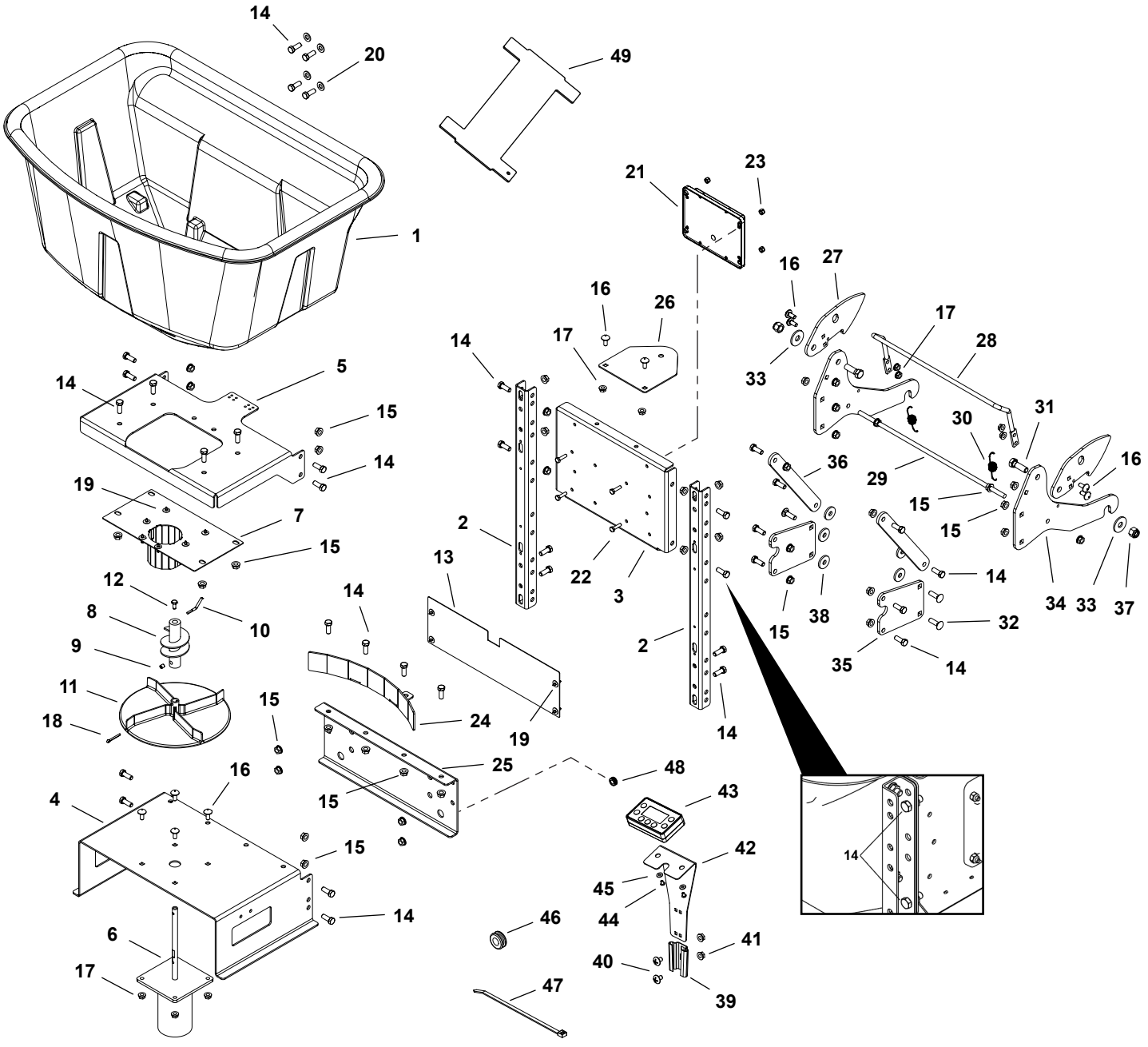
Wiring

Cavity	Wire Color	Function
1	Bare	Not Used
2	Red	+12V
3	Black	Ground
4	White	CAN H
5	Blue	CAN L



Symptom	Troubleshooting Guide
Difficulty threading M12 cable onto module?	• Make sure alignment tab and notch are aligned. • Hold overmolded portion of cable inline with connector while threading cable unto connector.
Module does not power on (STATUS LED OFF)?	• Make sure cable is fully seated unto connector. • Remove cable and check for approx 12V (system voltage) across pins 2 and 3.
SAT FIX LED constantly flashing?	• Initial sat fix can take up to 30 seconds. • Make sure antenna cable to fully seated unto connector • Move to location with clear view of sky. • Power cycle vehicle to restart module.

LP87289 Repair Parts



LP87289 Repair Parts

REF	QTY	PART NO	DESCRIPTION
1	1	2-961-001	HOPPER 3 CU FT
2	2	2-948BL3	CHANNEL
3	1	2-949BL3	BRACKET, MODULE
4	1	2-950BL3	BRACKET, MOUNT
5	1	2-951BL3	PLATE SUPPORT
6	1	2-952	MOTOR
7	1	6-1265BL3	ASS'Y, SALT PLATE
8	1	6-1266BL3C	ASS'Y, AUGER
9	1	HA115321	SCREW, 5/16-18 X 5/16 SOC
10	1	2-957	AGITATOR
11	1	2-958	SPINNER
12	1	ST65120	BOLT, HEX 1/4" X 5/8" SS
13	1	2-959	SHIELD
14	28	4-73	BOLT, HEX 3/8-16 X 1 SS
15	36	ST65126	NUT, FLANGE 3/8" SS
16	10	ST65122	BOLT, CARR SN 5/16 X 3/4 SS
17	10	ST65124	NUT, FLANGE 5/16" SS
18	1	41631	PIN, COTTER 5/32 X 1-1/4
19	10	41157	RIVET, POP 3/16 SSD 64 BS LF
20	4	ST65112	WASHER, FLAT 3/8" SAE S.S.316
21	1	6-1629	ASS'Y, MINI CONTROL MODULE
22	4	ST65224	BOLT, HEX 1/4" X 1"
23	4	49891	NUT, HEX 1/4-20 NYLOC SS
24	1	2-1135BL3	ASS'Y, SPREADER SHIELD
25	1	2-1134BL3	BRACKET, LOWER FRAME
26	1	2-960BL3	BRACKET, ANTENNA
27	2	ST50461BL3	ARM UPPER LATCH
28	1	ST50460	RELEASE BAR
29	1	ST43397	ROD 3/8"
30	2	ST50469	SPRING - CLICK N GO
31	2	43020	BOLT, HEX 1/2-13 X 1-1/2 GR5
32	4	ST65135	BOLT, CARR 3/8-16 X 1-1/4 SS
33	2	R19172410	WASHER, .531 X 1.5 X .134
34	2	ST50545BL3	HITCH ARM
35	2	2-1337BL3	BRACKET, HITCH
36	2	2-1338BL3	BRACKET, HITCH SUPPORT
37	2	41657	NUT,HEX1/2-13NYLOCK
38	6	42828	WASHER,.41X1.25X.156
39	1	ST48296	MOUNTING SOCKET
40	2	43814	SCREW, 5/16-18 X 3/4 TH
41	2	46584	NUT, HEX 5/16-18 WHIZ LOCK
42	1	ST50960BL3	BRACKET, DISPLAY
43	1	ST48613	DISPLAY
44	2	ST65275	SCREW, M5 X 8 BUTTON HEAD
45	2	43910	WASHER, .219 X .5 X .049
46	1	ST50980	GROMMET 1/2 ID, 3/4 OD
47	6	ST44006	WIRE TIE, 18# BLACK NYLON UV
48	1	ST43844	GROMMET
49	1	2-1410BL3	DIVERTER, MATERIAL FLOW
–	1	ST50974	CABLE, M12-M TO M12-F, 5 POLE
–	1	ST50941	HARNESS, AUX PWR/SIG, JD X700
–	1	2-1256	HARNESS, SALT SPREADER X700
–	1	ST48616	0.375” FIR TREE W/ZIP TIE, NYLON
–	1	2-963	JOHN DEERE 3 CU FT SPREADER COVER
–	3	ST50306	LABEL WARNING FOR SPREADER
–	1	ST50308	LABEL / READ MANUAL
–	1	JD5792	LABEL, LEAPING DEER
–	1	43818	LABEL, MODEL NUMBER
–	1	3-405	OWNERS MANUAL (LP87289)

LP85897 GNSS Module and Antenna Kit Repair Parts

REF	QTY	PART NO	DESCRIPTION
–	1	2-667	GPS ACTIVE ANTENNA
	1	2-861	GNSS MODULE
	2	49891	NUT, HEX 1/4-20 NYLOC SS
	2	ST65120	BOLT, HEX 1/4" X 5/8" SS

LP86633 Low Level Sensor Kit Repair Parts

REF	QTY	PART NO	DESCRIPTION
–	1	2-987	LEVEL SENSOR W/ CONNECTOR
	1	2-988	LEVEL SENSOR BRACKET
	4	4-77	SCREW, PH #4 X 5/16 SS

Good Quality Service

John Deere Quality Continues with Quality Service

John Deere provides a process to handle your questions or problems, should they arise, to ensure that product quality continues with quality parts and service support.

Follow the steps below to get answers to any questions you may have about your product.

Refer to your attachment and machine operator manuals.

In North America or Canada, call Agri-Fab at 800-448-9282 and provide product serial number (if available) and model number.

Warranty

Limited Warranty for New John Deere Licensed Products

Agri-Fab spreaders are guaranteed to be free from defects in material and workmanship from the date of purchase for 1 year residential use, 6 months commercial use, provided that the purchaser properly assembles, installs, uses and maintains the products in accordance with this manual.

Purchaser's failure to adhere to such requirements will void the warranty. To the extent permitted by applicable law, all other warranties, representations, obligations and conditions, expressed or implied, including but not limited to implied warranties of merchantability, fitness for any particular purpose and non-infringement, are hereby disclaimed and excluded.

Any product which does not meet warranty shall, as purchaser's sole and exclusive remedy, be repaired or replaced by Agri-Fab. This warranty is non transferable.

In addition, our warranty does not cover:

- Loss or consequential, incidental or special damages of any kind.

This product was manufactured by Agri-Fab, a John Deere Licensee, located at 809 S Hamilton St, Sullivan, IL 61951. If you have any questions or concerns with the assembly, installation, or operation of this attachment, see your local John Deere dealer or call Agri-Fab at 800-448-9282 for assistance.