Two-Piece Receiver 1700R Operator's Manual

Part No. 136981 rev. 1.00

Orchard-Rite®

orchard-rite.com

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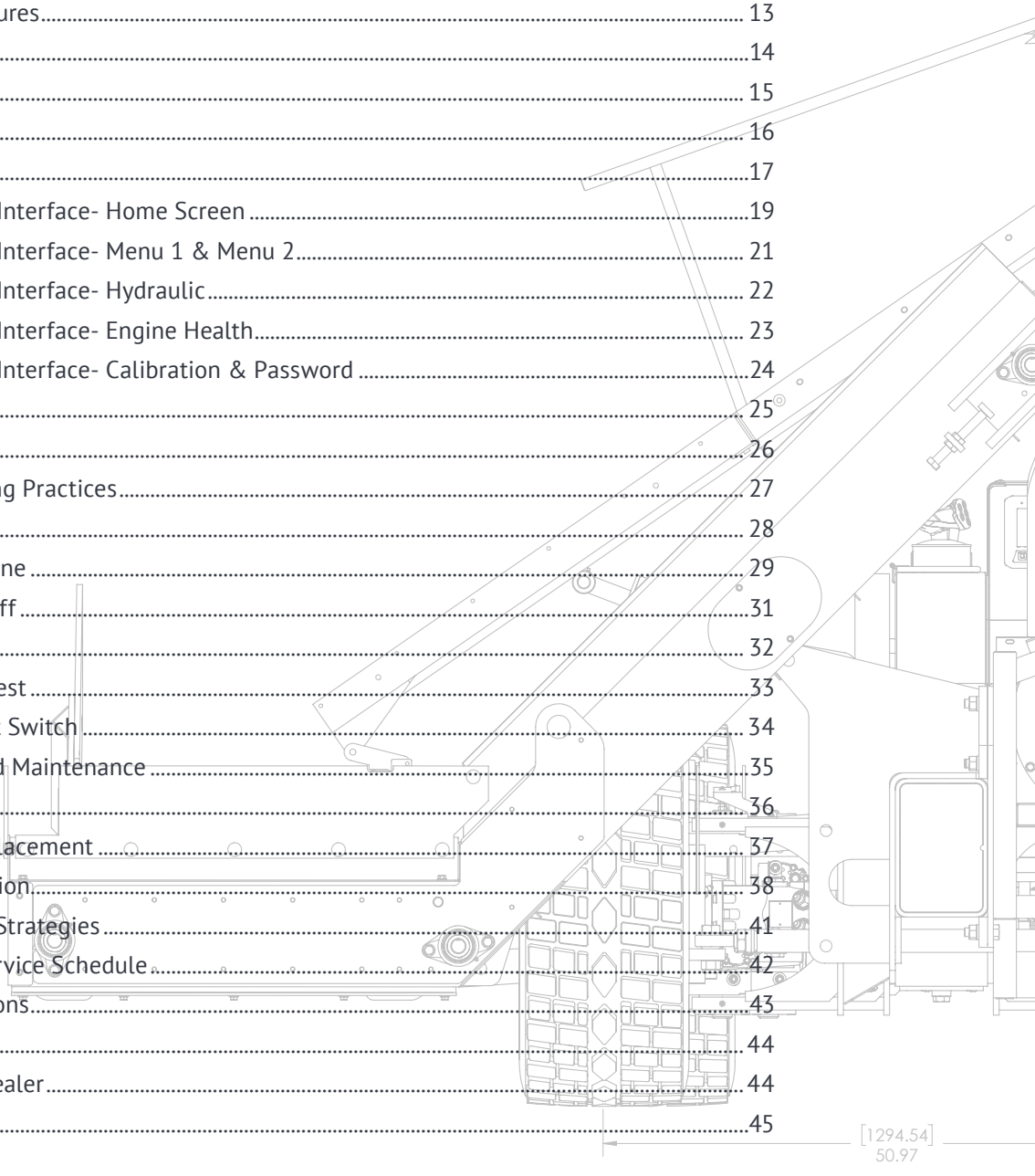
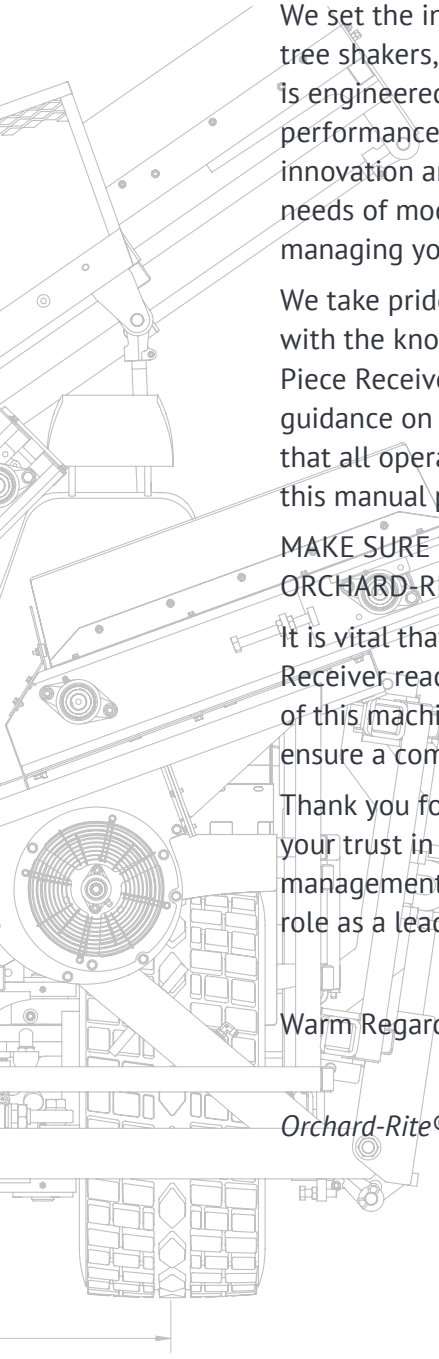


Orchard-Rite® Welcome Letter

Dear Valued Operator,

As the manufacturer of the Two-Piece Receiver 1700R, we are delighted to welcome you to the Orchard-Rite® family and are honored you chose our product to achieve your harvesting goals.

At Orchard-Rite®, we are dedicated to putting innovation to work for our customers. We set the industry standard for producing the highest quality and most innovative tree shakers, receivers, and wind machines. The Orchard-Rite® Two-Piece Receiver is engineered with cutting-edge components and technology, ensuring robust performance and reliability. This equipment exemplifies our commitment to innovation and excellence in orchard technology. It is crafted to meet the specific needs of modern orchards, providing you with an efficient and effective tool for managing your orchard operations.



We take pride in ensuring that those who operate our machines are well-equipped with the knowledge necessary for safe and effective use. The Orchard-Rite® Two-Piece Receiver Operator's Manual has been designed to provide comprehensive guidance on the operation and maintenance of this essential equipment. It is crucial that all operators and service personnel are well-acquainted with the contents of this manual prior to operating this machine.

MAKE SURE TO READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING THE ORCHARD-RITE® TWO PIECE RECEIVER.

It is vital that all those involved with the operation of the Orchard-Rite® Two-Piece Receiver read and understand this manual. If those involved with the operations of this machine are not proficient in the language this manual is printed in, please ensure a competent translator is provided.

Thank you for choosing the Orchard-Rite® Two-Piece Receiver. We deeply appreciate your trust in our technology and are committed to supporting your success in orchard management. At Orchard-Rite®, we continue to drive innovation and maintain our role as a leader in developing advanced solutions for the agriculture industry.

Warm Regards,

Orchard-Rite® Manufacturing Team

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Two-Piece Receiver Introduction

Orchard-Rite® would like to introduce you to the Two-Piece Receiver

Welcome to the future of orchard management with the Orchard-Rite® Two-Piece Receiver. This state-of-the-art machine is designed to revolutionize your harvesting operations, offering unparalleled efficiency and reliability. Whether you are harvesting stone, pome, or drupe fruits, or nuts like pistachios, the Orchard-Rite® Two-Piece Receiver is built to meet the demands of modern orchards.

Innovative Features and Technology

Engineered with cutting-edge components, the Two-Piece Receiver boasts advanced technology that ensures robust performance. From its durable chassis to its sophisticated control systems, every aspect of this machine is designed for optimal functionality and longevity.

Design and Construction

The Two-Piece Receiver features a modular design, making it easy to transport and versatile in various orchard settings. Constructed with high-quality materials, this machine is built to withstand the rigors of intensive orchard operations, ensuring you get the most out of your investment.

Operational Efficiency

Ease of use is at the heart of the Two-Piece Receiver's design. With intuitive controls and a user-friendly interface, operators can quickly become proficient in using the machine. The receiver's performance metrics set a new standard in the industry, helping you achieve faster, more efficient harvests.

Safety and Compliance

Safety is paramount at Orchard-Rite®. The Two-Piece Receiver is equipped with numerous safety features and complies with the highest industry standards. These measures ensure your operations are not only productive but also safe for all personnel involved.

Support and Maintenance

We stand by our products with a robust support network. Our authorized service representatives are always ready to assist you with any maintenance or operational queries. Regular maintenance schedules are provided in this manual to help you keep the machine in top condition.

Future-Proof Investment

Investing in the Two-Piece Receiver means investing in the future of your orchard. With its adaptability and potential for upgrades, this machine will continue to meet your needs for years to come.

Read Bulletin Updates for the latest regarding the Orchard-Rite® Two-Piece Receiver (see page 44 for more information).

Safety Precautions

Familiarity with Controls: Ensure the operator is fully familiar with all controls and their functions before attempting to start or run the equipment.

No Impairment: Do not operate the equipment while under the influence of alcohol, drugs, during illness, or while using medication that could impair hearing, vision, or judgment.

Safe Distance: Ensure all personnel, except the operator, remain at least 75 feet (23 meters) away from the equipment while the machine is in use.

Remain Seated: The operator must remain in the operator's seat while the equipment is running.

Avoid the Conveyor of Receiver: Never stand or place any part of your body on the conveyor, even when the engine is not running.

Clear Vision: Do not operate the equipment if the operator's vision is obscured for any reason.

Backup Safety: Always stop and look behind you before backing up.

Blind Spot: It is important to always remember the tarp obscures the left portion of the operator's field of view.

Public Road Use: Do not drive this equipment on public roads.

Lower The Conveyor: To prevent serious injury or death, always lower the conveyor to the ground before shutting down the equipment.

Maintenance Safety: Stop all equipment movement, lower the conveyor, shut off the engine, and remove the ignition key before starting maintenance or repair work.

Transport Limitations: Do not use the machine to transport additional personnel or equipment for which it is not designed.

Working Under the Machine: Never work beneath the machine unless the engine is off, it is on level ground, the wheels and/or receiver conveyor are blocked, and the ignition key is removed.

Always refer to this manual for detailed instructions and maintain regular communication with your service representative for any technical assistance.

SAFETY SHOULD ALWAYS BE THE TOP PRIORITY

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Environmental Impact & Sustainability

Operating the Orchard-Rite® Two-Piece Receiver with an awareness of its environmental impact and incorporating sustainable practices is crucial for maintaining an eco-friendly orchard. This section provides guidelines and tips on how to operate the machine sustainably and reduce its environmental footprint.

Fuel Efficiency

1. Optimized Operation:
    - Avoid idling the engine for extended periods. Turn off the machine when not in use to save fuel and reduce emissions.
    - Use the machine's throttle control to adjust the engine speed according to the task at hand, avoiding unnecessarily high RPMs.
2. Regular Maintenance:
    - Ensure regular maintenance of the engine, including timely oil changes and filter replacements, to keep it running efficiently.
    - Regularly check and maintain tire pressure to reduce fuel consumption caused by increased rolling resistance.
3. Efficient Route Planning:
    - Plan the machine's path through the orchard to minimize unnecessary travel and reduce fuel usage.
    - Avoid repeatedly covering the same ground by using a systematic harvesting approach.

Emission Control

1. Proper Engine Maintenance:
    - Keep the engine in good condition by following the maintenance schedule provided in this manual.
    - Regularly inspect and clean air filters to ensure optimal air flow and combustion efficiency.
2. Use of Quality Fuel:
    - Use high-quality fuel to minimize harmful emissions and prolong the engine's life.
    - Avoid overfilling the fuel tank. Spilled fuel creates a fire hazard and, as it evaporates, it releases volatile organic compounds (VOCs) that are harmful if inhaled and contribute to air pollution.
3. Emissions Monitoring:
    - Monitor the exhaust emissions for any signs of abnormal smoke or odors, which could indicate engine problems or the need for maintenance.
    - Adhere to local regulations and standards regarding emissions and ensure the machine complies with them.

Waste Management

1. Proper Disposal of Fluids:
    - Collect used oil, hydraulic fluid, and coolant in designated containers and dispose of them according to local environmental regulations.
    - Avoid disposing of these fluids in the soil or water sources to prevent contamination.
2. Recycling Components:
    - Recycle used filters, batteries, and other replaceable parts according to local recycling programs.
    - Encourage the use of recyclable or biodegradable materials for any packaging or consumables associated with the machine.
3. Minimize Chemical Use:
    - Use eco-friendly cleaning agents and lubricants whenever possible to reduce environmental impact.
    - Follow the manufacturer's recommendations for the use and disposal of any chemicals used in the maintenance of the machine.

Soil and Water Conservation

1. Minimize Soil Compaction
    - Avoid operating the machine on excessively wet soil to prevent compaction, which can harm soil health.
2. Water Management:
    - Be mindful of water use in the cleaning and maintenance of the machine. Use water-efficient methods and equipment to reduce waste.
    - Avoid washing the machine near water sources to prevent contamination from runoff.

Noise and Vibration Reduction

1. Operating Practices:
    - Operate the machine at lower RPMs when high power is not needed to reduce noise levels.
    - Use hearing protection to safeguard the operator's health and comply with noise regulations.
2. Maintenance:
    - Keep the machine's components well-lubricated and maintained to reduce operational noise and vibrations.
    - Regularly inspect and replace worn parts that can contribute to increased noise and vibration levels.

By following these guidelines, operators can minimize the environmental impact of using the Orchard-Rite® Two-Piece Receiver and contribute to more sustainable orchard management practices. Prioritizing sustainability not only protects the environment but also enhances the long-term viability and productivity of the orchard.

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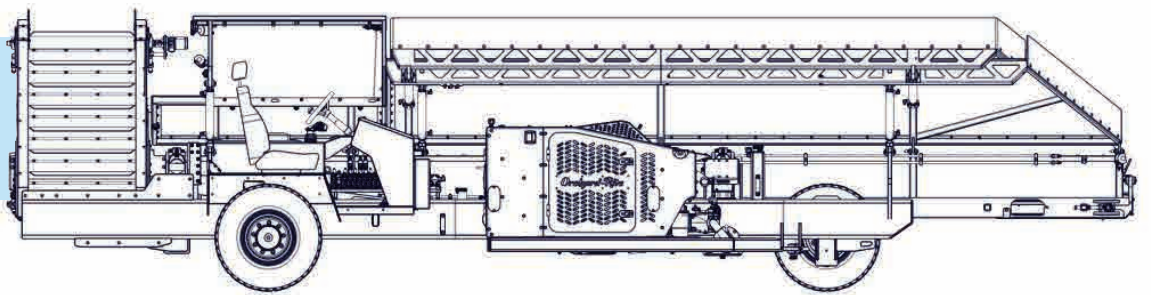
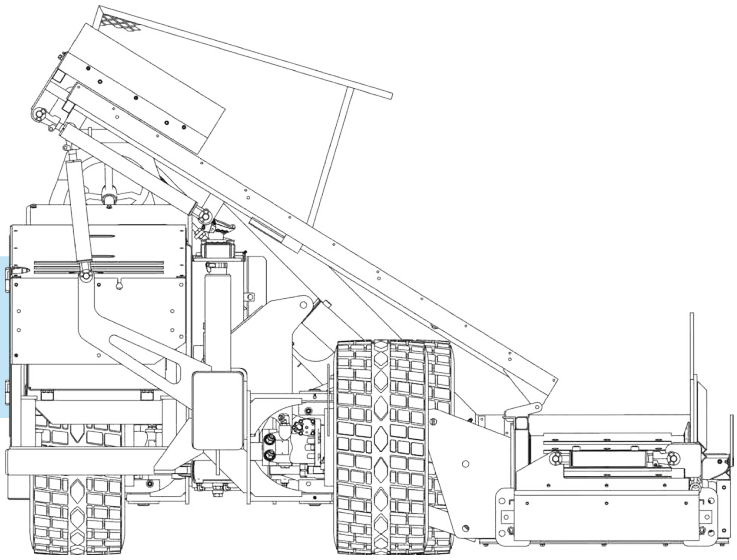
Machine Characteristics

*Each machine is equipped with attachments that add to machine characteristics (for more information see page 9).

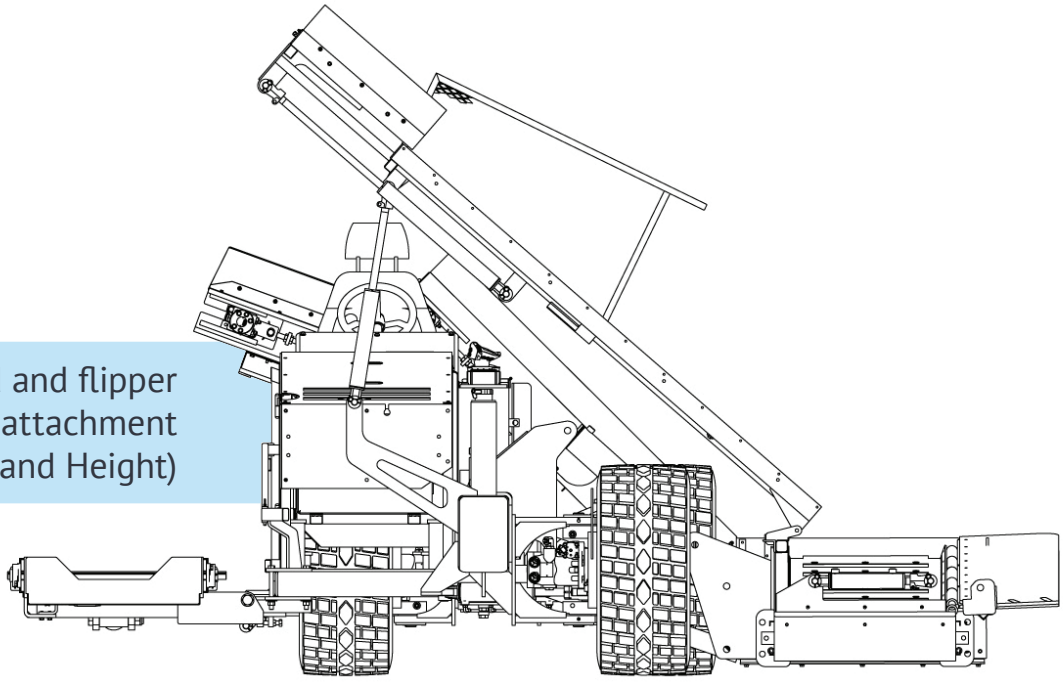
Two-Piece Receiver

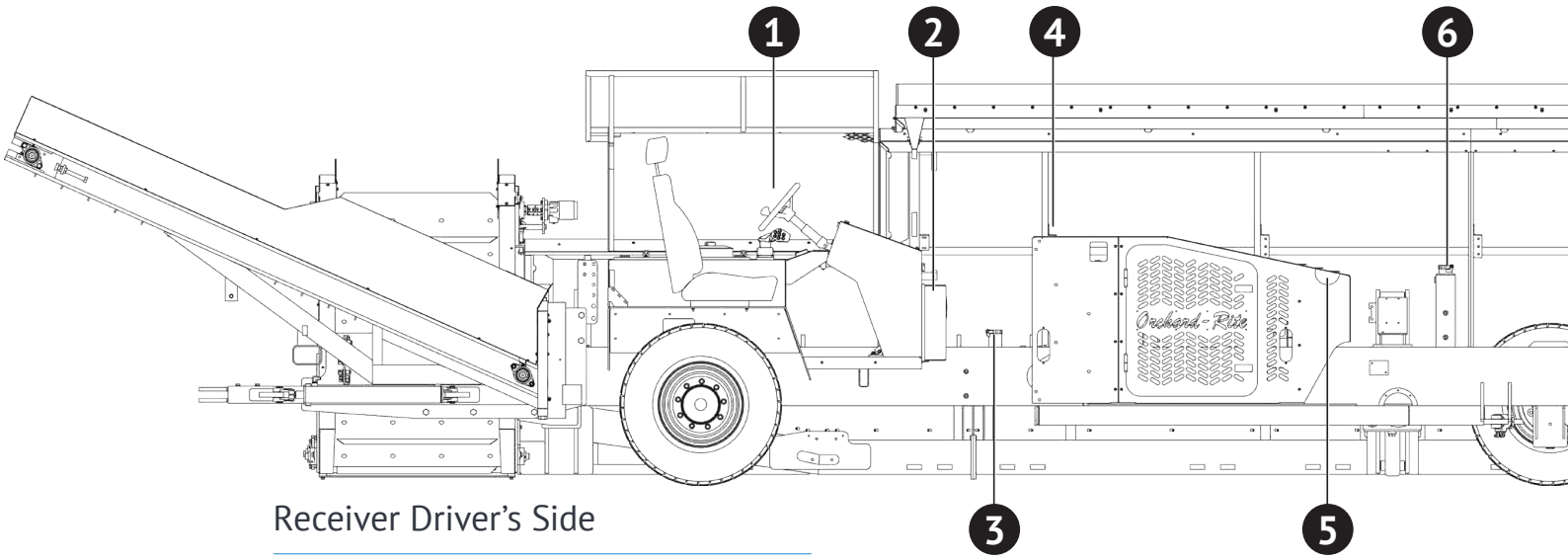


Canopy retracted and flipper up W/O attachment (Min Width and Height)



Canopy extended and flipper out with bin rack attachment (Max Width and Height)





Receiver Driver's Side

1. Operator Station
2. Fuse Box
3. Diesel Fuel Input
4. Coolant
5. DEF Input
6. Hydraulic Oil Input

Wheelbase	4.4 m / 14ft. 6 in.
Tire Size	33 L x 15.5, 14-ply
Engine	CAT 3.6 120 HP
Drive	Fully hydrostatic with 3 separate wheel motors
Electric Power	12 V DC
Noise Emissions	85< dB during 1700S shake cycle in operator seat (hearing protection required for operation)

Dimensions	Base Configuration	Bin Rack & Short Conveyor	Cherry Forks	Bulk Conveyor
Min Height (approx.)	2.1 m / 7 ft.	Same as Base Configuration		2.3 m / 7 ft 8 in.
Max Height (approx.)	2.7 m / 8 ft. 11 in.			2.7 m / 8 ft. 11 in.
Min Width (approx.)	2.87 m / 9 ft. 5 in.	3.2 m / 10 ft. 6 in.	3.6 m / 11 ft. 10 in.	3.24 m / 10 ft. 8 in.
Max Width (approx.)	3.14 m / 10 ft. 4 in.	4.24 m / 13ft. 10 in.	3.87 m / 12 ft. 8 in.	3.51 m / 11 ft. 6 in.
Length (approx.)	8.96 m / 29 ft. 4 in.	Same as Base Configuration		10.24 m / 33 ft. 7 in.
Weight	14,000 lb. / 6350 kg	Adds 1,870 lb. / 848 kg	Adds 1,230 lb. / 558 kg	Adds 1,275 lb. / 578 kg

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Attachments

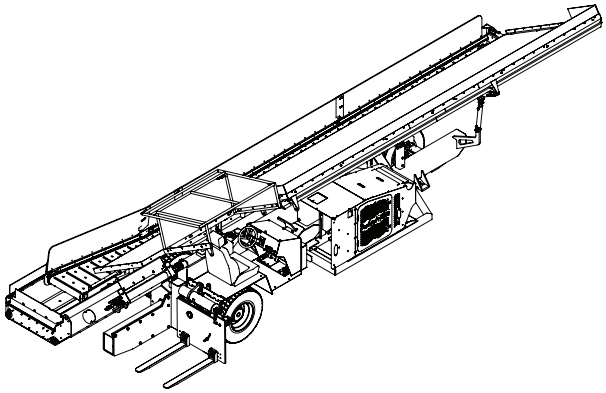
The Orchard-Rite® Two-Piece Receiver is equipped with three main attachments designed to enhance its functionality for different harvesting operations. Understanding each attachment and its specific use is crucial for efficient and safe machine operation.

1. Cherry Bin Attachment:

Purpose: Designed specifically for harvesting cherries.

Function: Facilitates the transport of cherry bins for collection of cherries.

Features: Equipped with three cylinders to position forks based on the unique terrain and collect cherries efficiently without damaging the delicate fruit.



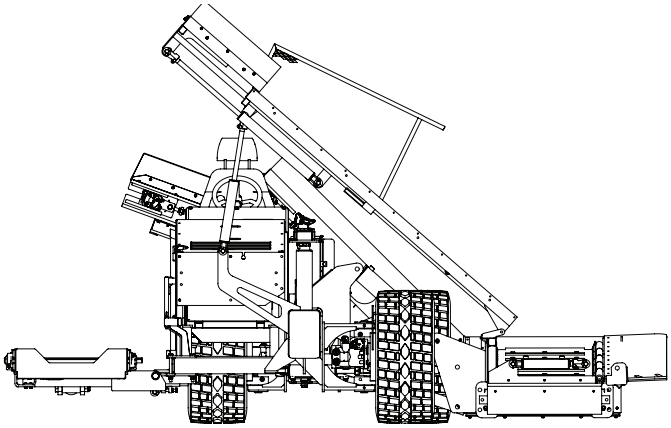
By following these guidelines, operators can ensure the attachments on the Orchard-Rite® Two-Piece Receiver operate efficiently and safely, enhancing the machine's functionality for various harvesting operations.

2. Bin Rack and Short Conveyor Attachment:

Purpose: Suitable for various types of fruit harvesting while carrying multiple bins.

Function: Uses a chain mechanism to move empty bins seamlessly into position to be filled, then off-loads full bins behind the machine as it continues to harvest.

Features: Holds up to five standard bins at a time.

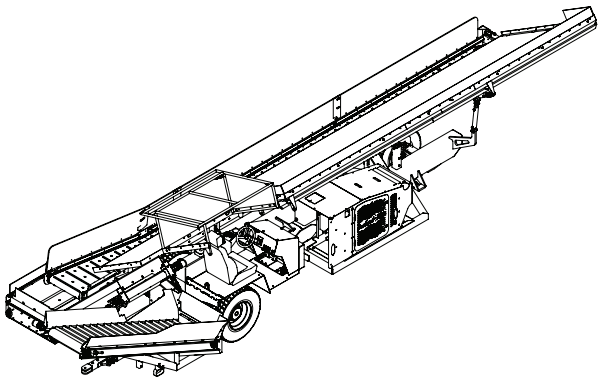


3. Bulk Cart Attachment

Purpose: Harvesting into a pull behind cart.

Function: Transfer product to cart that is attached to hitch point.

Features: Hydraulic hook-up to driver augers in bulk cart and hook-up for powering drive hubs with equipped carts.



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Operator Station

The operator station of the Orchard-Rite® Two Piece Receiver is designed to ensure operator comfort, safety, and ease of use. The following is a detailed description of the various features and components located within the cab area.

1. Arm Rest

- Storage Area: Includes a secure place to store important documents such as the operator's manual, maintenance logs, and safety checklists.
- Cup Holder: Provides a convenient place for beverages, making it easier for the operator to stay hydrated during long hours of operation.

2. Steering Wheel

- Navigation: Standard control mechanism for navigating the machine and designed for responsive operational guidance.

3. Dashboard (see page 12 for more details)

- Display Panel: Displays critical machine information and allows for adjustment of operational settings.
- Light Switches: Controls machine's lights ensuring visibility during low light conditions and operation.
- Ignition: Used to start and stop the engine.
- USB Port: Allows for charging electronic devices.

4. Joystick (see page 14 for more details)

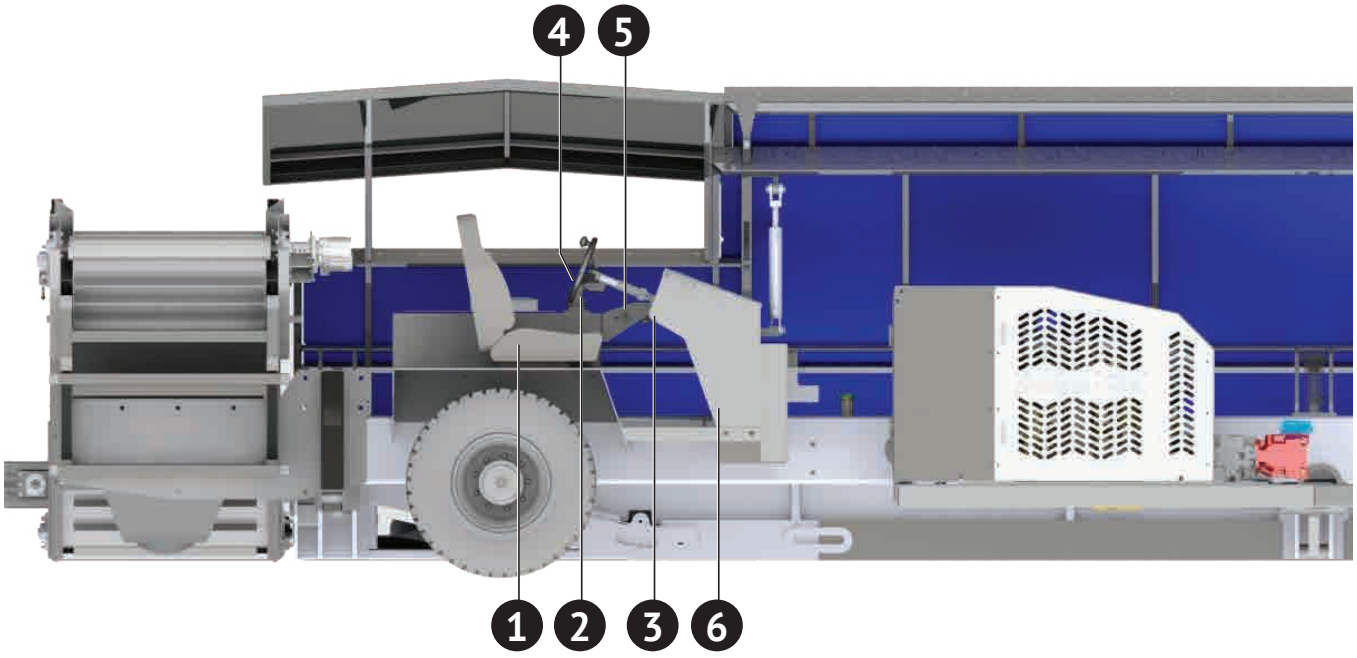
- Toggle Control: Used for maneuvering the machine's attachments.
- Buttons: Control various aspects of the machine's operations.

5. Key Pad (see page 15 for more details).

- Buttons: Additional operational control and attachment commands.

6. Foot Controls (see page 16 for more details)

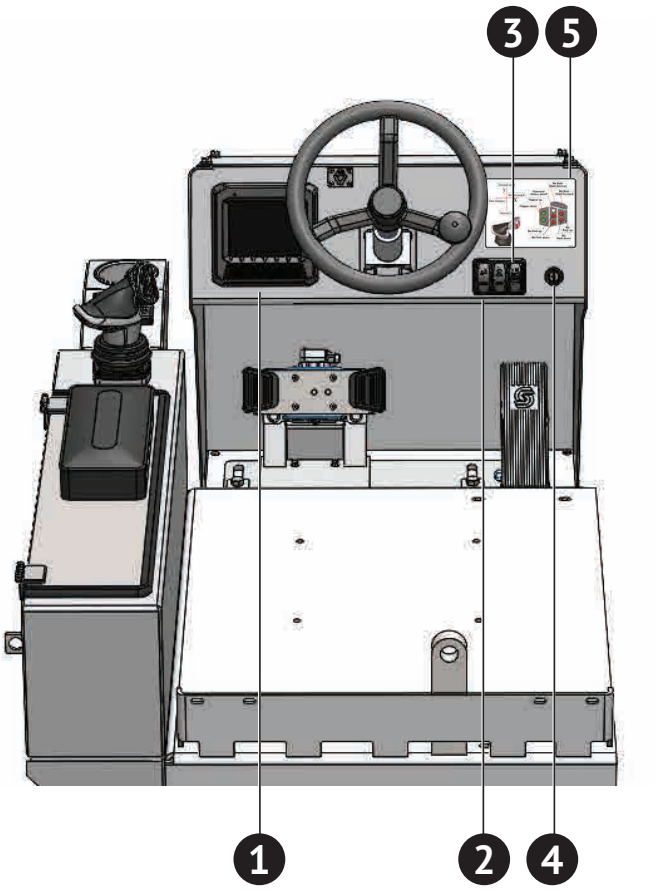
- Foot Pedal Assembly: Includes pedals for throttle control and reverse. The assembly is designed to be intuitive and responsive, ensuring precise control of the machine.
- Throttle Pedal: Allows the operator to control the engine speed.



By familiarizing yourself with these components and their functions, you can ensure the safe and efficient operation of your Orchard-Rite® Two Piece Receiver.

Dashboard

The cab dashboard of the Orchard-Rite® Two Piece Receiver is designed to provide the operator with comprehensive control and monitoring capabilities, ensuring safe and efficient operation. Below is a detailed description of the components and features on the dashboard.



Components and Features:

1. Display Interface (see page 19 for further instruction)

- Primary Panel: The display serves as the main control hub, offering a user-friendly interface for accessing and managing various machine functions.
- Operational Data: Displays real-time data such as engine status, hydraulic pressure, fuel levels, and other critical parameters.
- Settings Access: Allows the operator to adjust settings, calibrate controls, and monitor system performance.
- Parking Brake Toggle: Engages or disengages the parking brake to secure the machine when stationary.

2. USB Port

- Charging: Provides a convenient location to charge mobile devices or other electronic equipment.

3. Light Switches

- Headlight Switch: Controls the machine's headlights, ensuring visibility during low-light conditions.
- Working Light Switch: Activates additional lights for improved visibility during operations in darker environments.

4. Ignition Switch

- Engine Control: The ignition switch is used to start and stop the engine. It is conveniently located for easy access by the operator.
- Safety Feature: Key provided with machine required to start machine.

5. Joystick Instruction Decal

- A decal provides a quick reference guide to the functions of each button and control, ensuring the operator can easily understand and utilize all features.

By understanding the locations and features of the cab dashboard, operators can effectively manage the Orchard-Rite® Two Piece Receiver, ensuring optimal performance and safety.

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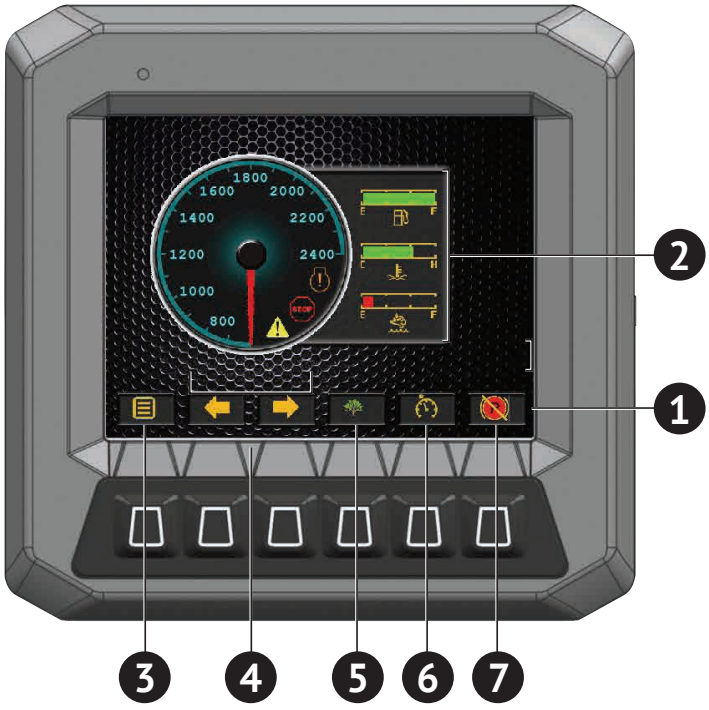
Display Panel Features

The display panel of the Orchard-Rite® Two-Piece Receiver serves as a vital control hub, providing operators with an intuitive interface to manage the machine's functions and monitor its performance. Understanding the display panel's features and controls is essential for efficient and safe operation.

1. Primary Panel:
    - The display acts as the main control hub, offering a user-friendly interface for accessing and managing various machine functions.
2. Operational Data:
    - The panel displays real-time data such as engine status, hydraulic pressure, fuel levels, alerts, and other critical parameters, allowing operators to monitor the machine's performance continuously.
3. Menu Access:
    - Operators can adjust settings, calibrate controls, and monitor system performance through the settings menu. This ensures the machine operates according to specific requirements and preferences.
4. Interface Controls:
    - The interface includes buttons for adjusting machine settings and navigating between different pages on the display. These controls provide easy access to various functions and information.
5. Drive Mode Control:
    - This control switches between field and road speed settings, optimizing the machine's performance based on the current operation. Using the correct speed setting improves efficiency and safety during transportation and fieldwork.
6. Throttle Control:
    - Buttons for adjusting the engine throttle allow the operator to increase or decrease engine speed as needed when the machine is in idle. Proper throttle management is essential for efficient operation and fuel consumption.
7. Parking Brake Toggle:
    - This control engages or disengages the parking brake to secure the machine when it is stationary. Ensuring the brake is properly set enhances safety during operation and maintenance.

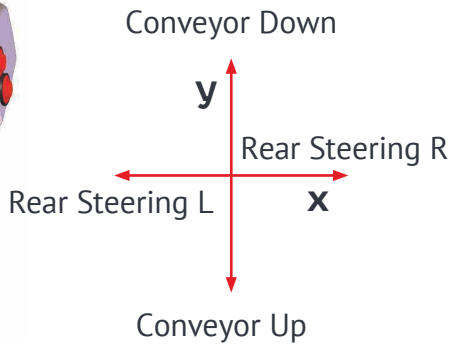
For further instructions on operating the Display Panel interface see page 19.



By familiarizing yourself with the display panel's features and functions, you can ensure the Orchard-Rite® Two-Piece Receiver operates efficiently and safely. The display panel's intuitive design provides comprehensive control and monitoring capabilities, essential for effective orchard management.

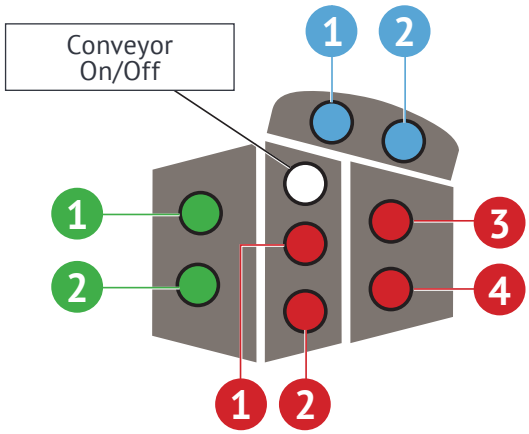
Joystick

The Orchard-Rite® Two Piece Receiver is equipped with advanced control mechanisms designed to provide operators with precise and intuitive handling of the machine. This section details the functions and features of the joystick, essential for efficient operation.



Joystick Movement:

1. Joystick Movement:
    - Forward: Lowers the conveyor.
    - Backward: Raises the conveyor.
    - Left: Rotates rear steering to the left.
    - Right: Rotates rear steering to the right.
2. Green Buttons:
    - Green Button 1: Moves the flipper up.
    - Green Button 2: Moves the flipper down.
3. White Button:
    - Turns the conveyor motors off and on.
4. Red & Blue Buttons:
    - See chart below.



Based on Machine Attachment

	Bin Rack	Cherries	Bulk Cart
Red Button 1	Fork Up	Fork Up	Auger On/Off
Red Button 2	Fork Down	Fork Down	
Red Button 3	Bin Rack Up	Fork Tilt Up	Cart Steer Left
Red Button 4	Bin Rack Down	Fork Tilt Down	Cart Steer Right
Blue Button 1	Bins Move to Rear	Fork Roll Retract	Hitch Extend
Blue Button 2	Bins Move to Front	Fork Roll Extend	Hitch Retract

By understanding and effectively using the joystick and foot pedals, operators can maximize the performance and safety of the Orchard-Rite® Two Piece Receiver.

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Keypad

The key pad on the Orchard-Rite® Two-Piece Receiver provides operators with centralized control over various machine functions. It is designed for ease of use, allowing quick and efficient operation of the machine's components.

Keypad Buttons and Functions

Button 1:

- Function: Raises canopies.

Button 2:

- Function: Lowers canopies.

Button 3:

- Function: Extends the top canopy out.

Button 4:

- Function: Retracts the top canopy in.

Button 5:

- Function: Moves the conveyor belt forward.

Button 6:

- Function: Moves the conveyor belt backward.

Button 7:

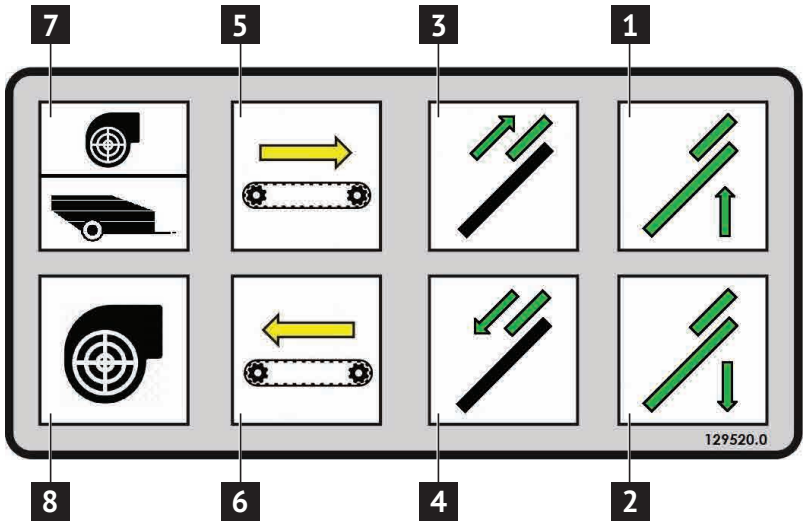
- Function: Turns on the augers on the bulk cart (only auxiliary function this button activates).

Button 8:

- Function: Activates the blower for clearing debris.

Using the keypad:

- Ensure the machine is in a safe and stable position.
- Regularly check the status of each function to ensure proper operation.
- When shutting off the engine, lower the canopy, stop the conveyor, and deactivate all attachments.



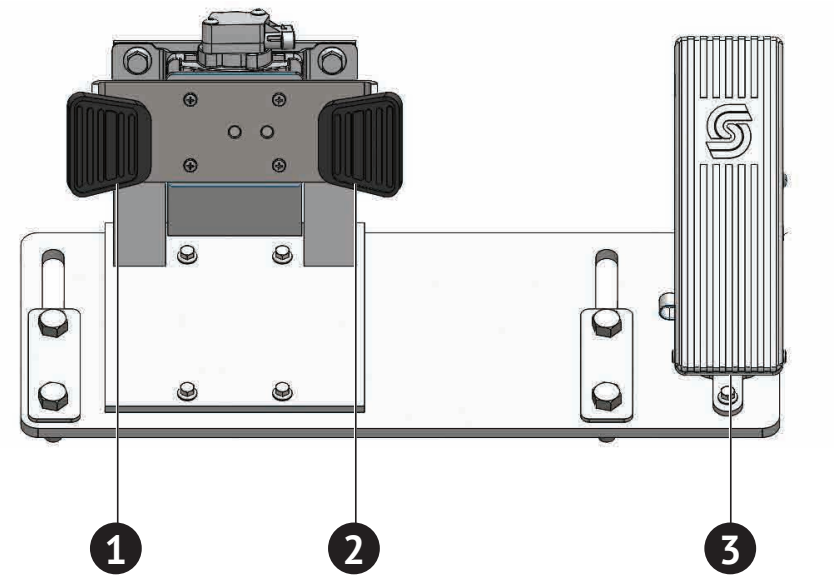
By following these guidelines, operators can ensure the switch panel on the Orchard-Rite® Two-Piece Receiver operates efficiently and safely, allowing for smooth and controlled operation of the machine.

Foot Controls

The foot control of the Orchard-Rite® Two-Piece Receiver consists of a pedal assembly located on the floor of the driver's cab, which serves as forward, reverse and throttle. This section provides essential information on the operation, safety precautions, and use of the foot pedal controls.

Components and Features

1. Forward: Controls forward movement.
2. Reverse: Controls reverse movement.
3. Throttle: Controls the RPM or engine speed.



Function: This pedal assembly controls forward, reverse and throttle, allowing the operator to control direction and speed. Pressing down on the forward or reverse pedal determines the machine's direction of movement. Pressing down on the throttle pedal increases speed.

Important Note: Operation is performed at slow speeds. Removing the foot from the directional pedal will act as a brake on this machine. It is important to release the foot off the pedal slowly for smooth deceleration. The parking brake is found on the display panel.

Throttle Sensitivity

After long periods of storage the Operator may notice that the throttle has lost sensitivity. The Two-Piece Receiver is designed for the Operator to have the ability to calibrate the throttle to capture desired sensitivity for harvesting. To calibrate the throttle see the Display Interface- Calibration section of this manual (Page 24).

By following these guidelines, operators can ensure the foot controls on the Orchard-Rite® Two-Piece Receiver operate efficiently and safely, providing precise control over the machine's speed and movement.

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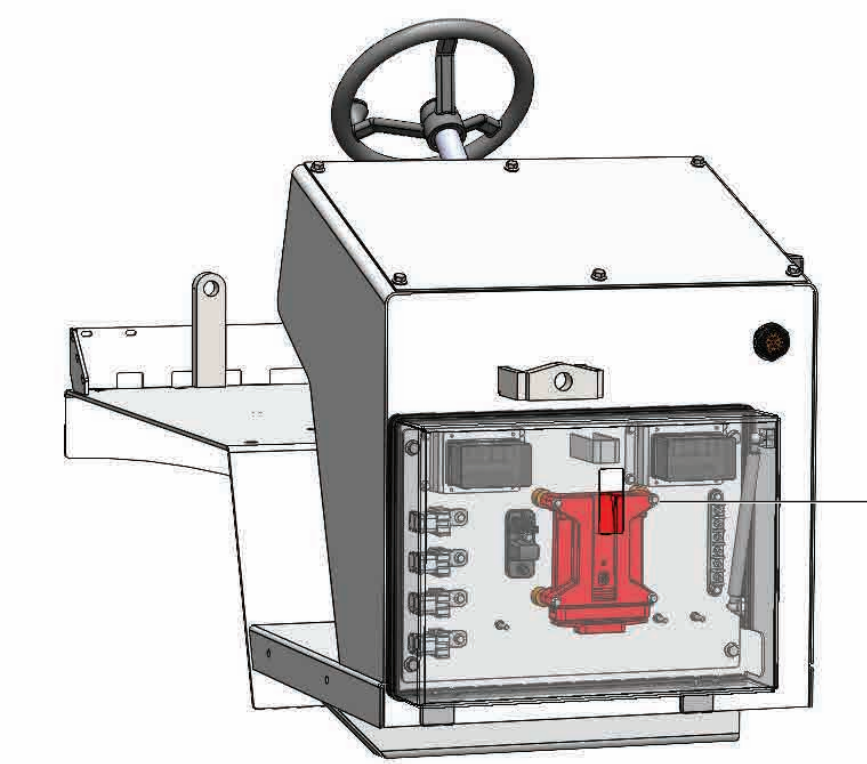
Fuse Panel

The fuse panel in the Orchard-Rite® Two-Piece Receiver is designed to protect the electrical system by preventing overloads and short circuits. Proper understanding of the fuse panel is crucial for the safe and efficient operation of the machine.



Open hinged cover to access the fuse panels.

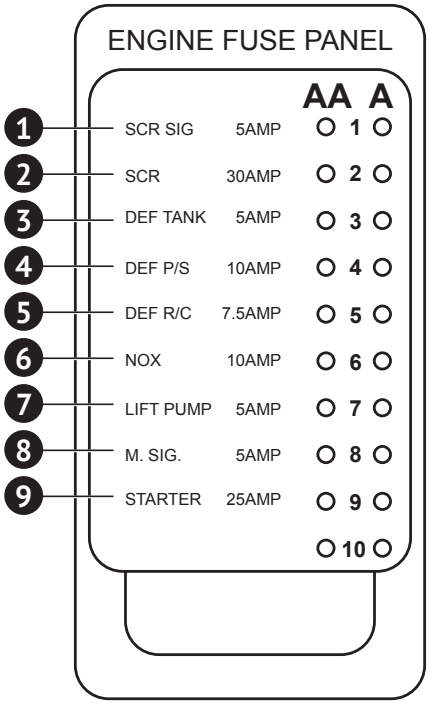
Fuse Panel Location:

- Location: The fuse panel is situated in front of the operator's station.
- Access: Secured with a cover that can be easily opened for inspection and replacement of fuses.

Precautions

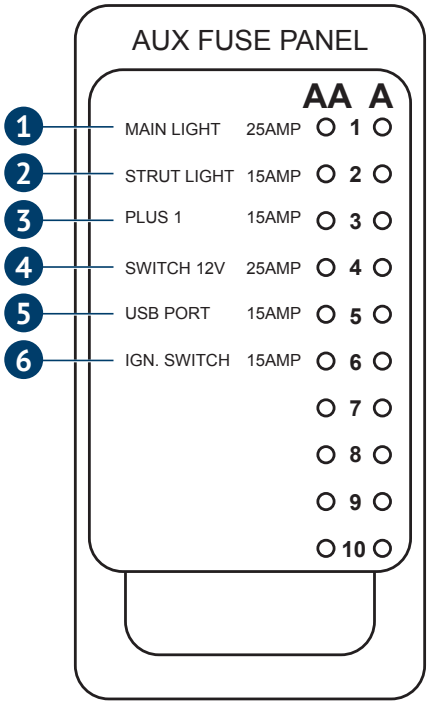
1. Power Off: Always turn off the machine and remove the ignition key before inspecting or replacing fuses.
2. Proper Replacement: Only replace fuses with ones of the same type and rating to avoid electrical damage.
3. No Improvisation: Never bypass a fuse or use improvised materials as a replacement.
4. Regular Inspection: Regularly inspect the fuse panel for signs of wear, damage, or corrosion.

By following these guidelines, operators can ensure the fuse panel on the Orchard-Rite® Two-Piece Receiver operates efficiently and safely, protecting the machine's electrical system from damage.



Engine Fuse Panel Diagram

1. SCR Signal.....5 AMP
2. SCR..... 30 AMP
3. DEF Pump/Tank.....5 AMP
4. DEF Pressure/Suction ..10 AMP
5. Def Return/Coolant .....7.5 AMP
6. NOX.....10 AMP
7. Fuel Lift Pump.....5 AMP
8. Main Signal .....5 AMP
9. Starter..... 25 AMP



Aux Fuse Panel Diagram

1. Head Light..... 25 AMP
2. Working Light..... 15 AMP
3. Plus 1 ..... 15 AMP
4. Switch 12V ..... 25 AMP
5. USB Port..... 15 AMP
6. Ignition Switch ..... 15 AMP

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Operating Display Interface- Home Screen

Display Interface

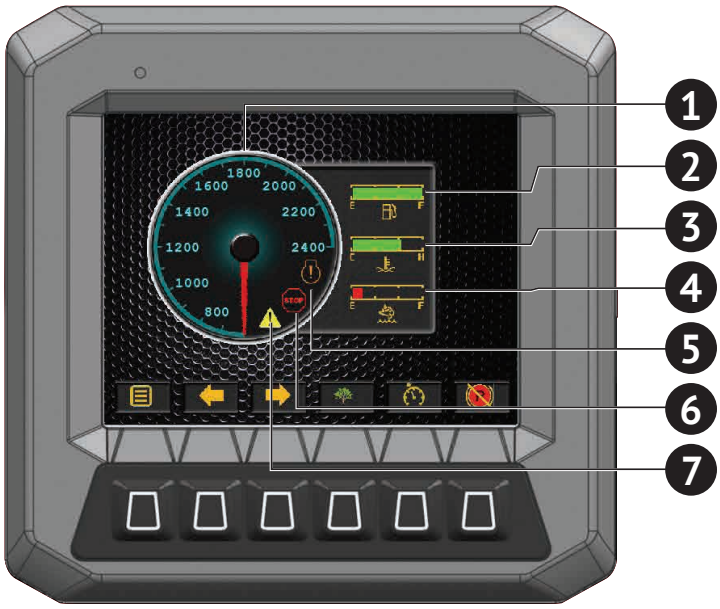
The Display Interface on the Orchard-Rite® Two-Piece Receiver is designed to provide operators with comprehensive control and monitoring capabilities, ensuring safe and efficient operation. This section details the various screens and functions available on the Display Interface.

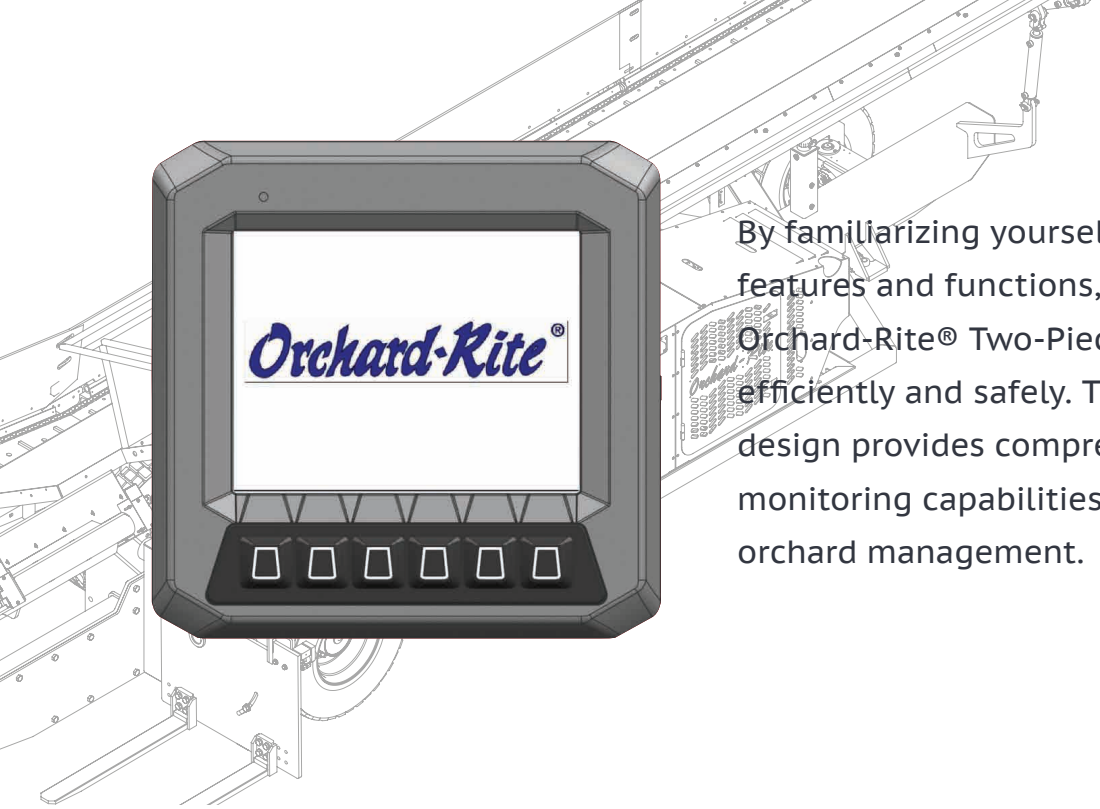
Home Screen

The Home Screen provides essential information and controls for efficient machine operation. Understanding the various indicators and settings on the Home Screen is crucial for safe and effective use. From the Home Screen, an operator can navigate between menus and make important changes and adjustments.

Home Screen Display

1. RPM Gauge: Displays the current engine revolutions per minute (RPM), indicating the engine's operating speed.
2. Fuel Level: Shows the current fuel level in the tank, helping operators monitor fuel consumption and plan refueling.
3. Engine Temperature: Indicates the engine's temperature, allowing operators to ensure the engine is operating within safe limits.
4. DEF Level: Displays the current levels in the DEF tank, helping the operator monitor DEF consumption and plan resupplying.
5. Caution (CAT) Code: Alert that indicates a potential issue requiring prompt attention.
6. Stop Engine: Alert that indicates a serious issue with the engine and shutting down the engine is required.
7. Fault Code: Indicates a specific issue with the machine that needs immediate attention.





By familiarizing yourself with the display panel's features and functions, you can ensure the Orchard-Rite® Two-Piece Receiver operates efficiently and safely. The display panel's intuitive design provides comprehensive control and monitoring capabilities, essential for effective orchard management.

Home Screen Navigation

A. Menu 1 Icon: From the Display Interface Home Screen, this Menu Icon changes Display Interface to Menu 1.

B. Left Arrow: Decreases the idle of resting RPMs when throttle mode is activated.

C. Right Arrow: Increases the idle of resting RPMs when throttle mode is activated.

D. Drive Mode:

- Tree Icon: Indicates the machine is in Field Mode and has a lower max speed.
- Road Icon: Indicates the machine is in Road Mode and has a higher max speed.

WARNING: The machine will automatically disengage the parking brake when in Road Mode.

E. Throttle Mode:

- Set Throttle Icon: Throttle Mode is locked, and RPMs are set. Once a function is activated, the machine will automatically increase RPMs.
- Foot Throttle Icon: Allows the idle throttle to be adjusted and allows the operator to manually control RPMs.

F. Parking Brake:

- Green Icon: Indicates that the parking brake is disengaged and the machine can move.
- Red Icon: Indicates that the parking brake is engaged and the machine will not move.

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Operating Display Interface - Menu 1 & Menu 2

Menu1

*The operational data remains the same as Home Screen and the navigation icons change.

Menu 1 Navigation

A. Menu Icon: From the Display Interface- Menu 1 screen, pressing this Menu Icon will take you to Display Interface- Menu 2.

B. Hydraulic Icon: Pressing this icon will take you to the Hydraulic Display Interface where information is available, and additional adjustments can be made.

C. Engine Icon: Pressing this icon will take you to the Engine Health Display Interface where information is available, and additional adjustments can be made.

D. Warning Icon: Pressing this icon will take you to the Danfoss System Codes Display Interface. These codes are used by trained service professionals for advanced troubleshooting.

E. Parking Brake Icon:

- Green Icon: Indicates the parking brake is disengaged and the machine can move.
- Red Icon: Indicates the parking brake is engaged and the machine will not move.

Menu 1 Display

Menu 2

*The operational data remains the same as Home Screen and the navigation icons change.

Menu 2 Navigation

A. Menu Icon: From the Display Interface- Menu 2 screen, pressing the Menu Icon will take you back to the Display Interface- Home Screen.

B. CAL Icon: Pressing the CAL icon will take you to the Calibration Display Interface, only accessible by a passcode.

C. Parking Brake Icon:

a. Green Icon: Indicates the parking brake is disengaged and the machine can move.

b. Red Icon: Indicates the parking brake is engaged and the machine will not move.

Menu 2 Display

Danfoss System Codes Display Interface

These codes are used by trained service professionals for advanced troubleshooting.

Operating Display Interface- Hydraulic

Hydraulic Screen Display

1. Low Oil Level Indicator: A yellow triangle will appear when the hydraulic oil levels are low.
2. Hydrostatic Pump Pressure (represented by Hydro): Measured in PSI.
3. AUX Pressure (represented by AUX): Measured in PSI.
4. Charge Pressure (represented by CHG): Measured in PSI.
5. Hydraulic Temperature (represented by Oil Temperature Icon): Measured in Fahrenheit (F).

Hydraulic Screen Navigation

A. Left Arrow Icon 1: Pressing this icon will take you back to the Menu 1 Display Interface.

B. Left Arrow Icon 2: Decreases conveyor fan speed.

C. Right Arrow Icon 1: Increases conveyor fan speed.

D. Left Arrow Icon 3: Decreases auger speed.

E. Right Arrow Icon 2: Increases auger speed.

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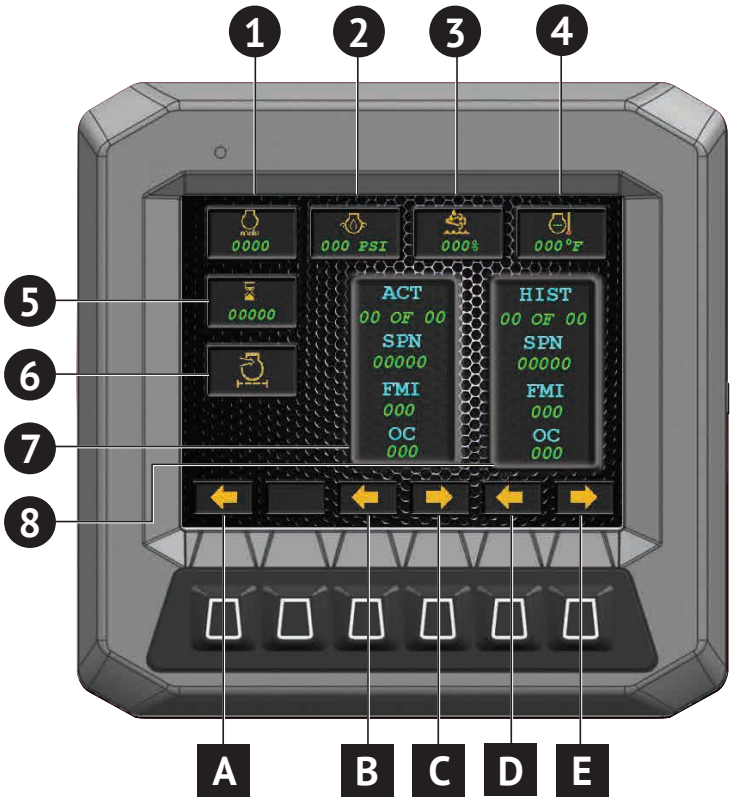
Operating Display Interface- Engine Health

Engine Health Display

1. Bulb Icon: RPM of the engine.
2. Oil Pressure Icon: Engine Oil Pressure (measured in PSI).
3. DEF Icon: DEF level measured by %.
4. Coolant Icon: Coolant Temperature (measured in Fahrenheit).
5. Time Icon: Hours spent operating the machine.
6. Air Filter Icon: Air Filter health (change or clean) - Icon changes to indicate the difference.
7. Group 1 Indicators
   - ACT (00 of 00): Active or number of codes.
   - SPN (0000): Suspected Parameter Numbers.
   - FMI (000): Failure Mode Identifier.
   - OC (000): Occurrences or number of faults.
8. Group 2 Indicators
   - HIST (00 of 00): Number of resolved codes.
   - SPN (0000): Suspected Parameter Numbers.
   - FMI (000): Failure Mode Identifier.
   - OC (000): Occurrences or number of faults.



Engine Health Navigation

A. Left Arrow Icon 1: Pressing this icon will take you back to the Menu 1 Display Interface.

B. Left Arrow Icon 2: Toggles down to next active code (example: 02 will move to 01).

C. Right Arrow Icon 1: Toggles up to next active code (example: 02 will move to 03).

D. Left Arrow Icon 3: Same as left arrow icon 2 except for resolved codes.

E. Right Arrow Icon Same as right arrow icon 1 except for resolved codes.

Operating Display Interface- Calibration & Password

Password REQUIRED Display

The manufacturer password is preset to 1111.

Calibration Display

1. Calibration column including steering, propulsion and throttle.

a. Column that is activated is indicated by an orange title text.

2. The current sensor voltage.

3. Current calibration reading.

4. Calibration settings.

a. Select the value: A blinking value indicates the setting being calibrated.

b. Calibration: Use the table below for specific controls to adjust calibration.

Calibration Navigation

A. Menu Icon: Pressing this icon will take you back to the Menu 2 Display Interface.

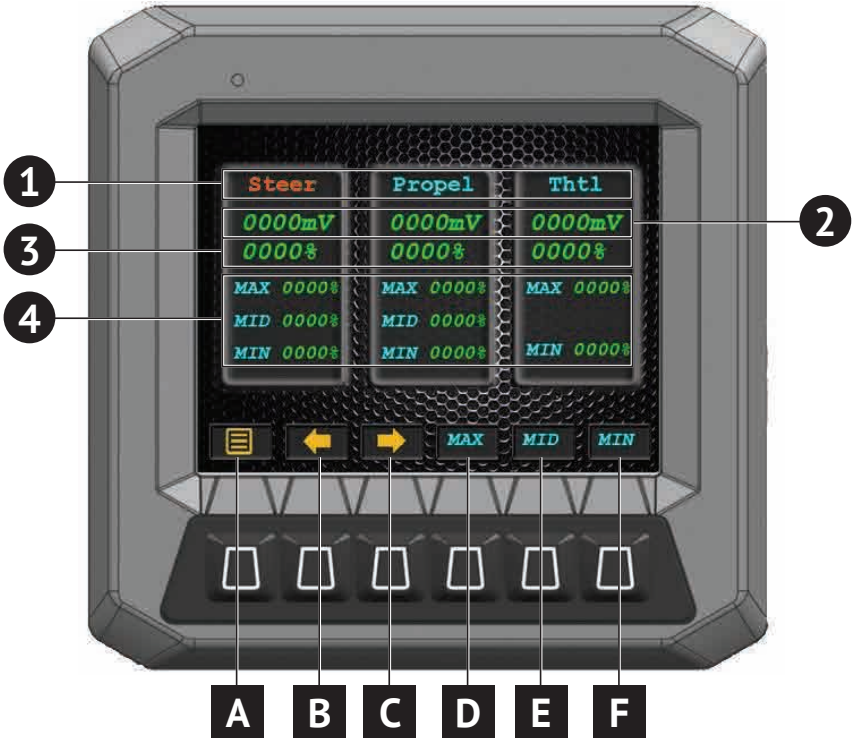
B. Left Arrow Icon: Navigate left between selections.

C. Right Arrow Icon: Navigate right between selections.

D. MAX button: Identifies the maximum value in the selected column that will be calibrated.

E. MID button: Identifies the middle value in the selected column that will be calibrated.

F. MIN button: Identifies the minimum value in the selected column that will be calibrated.



	Steer	Propel	Thtl*
Feature	Joystick (Rear Steering)	Propulsion Pedal (forward and reverse pedal).	Throttle Pedal
MAX	Move the joystick to the left.	Press on the left pedal.	Pressing down on the pedal accelerates.
MID	Joystick in resting position.	Pedal is resting position.	N/A
MIN	Move the joystick to the right.	Press on the right pedal.	Releasing the pedal decelerates.

* Propulsion and throttle should be calibrated when the engine is off but steering calibration must be done with the engine on.

By familiarizing yourself with these interfaces and controls, you can ensure the safe and efficient operation of your Orchard-Rite® Two-Piece Receiver. Always refer to this manual for detailed instructions and follow all safety guidelines to maintain optimal performance and safety.

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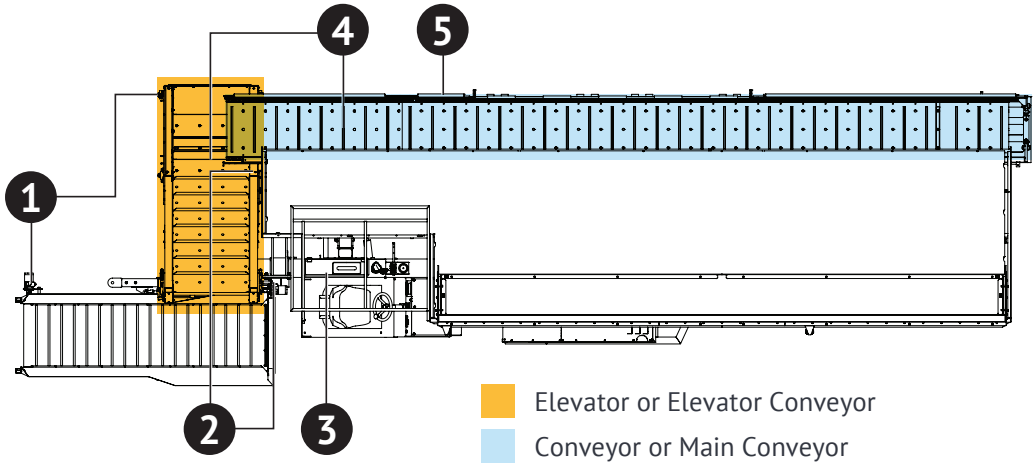
Conveyor

The conveyor system on the Orchard-Rite® Two-Piece Receiver is designed to enhance the efficiency and ease of fruit harvesting. It is engineered for durability, ease of maintenance, and operational efficiency, ensuring optimal performance during intensive orchard operations.

Components and Features

1. Rollers and Bearings
2. Drive Motors
3. Conveyor Speed Adjustment
4. Conveyor Belt
5. Conveyor Frame



Operation

1. Preparation:
   - Ensure the area around the conveyor is clear of personnel and obstacles.
   - Perform a visual inspection to check for any signs of damage or wear.
2. Activate:
   - Use the keypad to move the conveyor forward and backward.
   - Use the joystick to move the conveyor up and down.
   - Observe the conveyor's operation to ensure smooth and uninterrupted movement.
3. Adjustments:
   - Use the flow control valves next to arm rest to control conveyor speed.
   - Regularly check the tension and alignment of the conveyor belt during operation.
4. Deactivate:
   - Use the keypad and/or joystick to deactivate the conveyor.
   - Ensure the conveyor comes to a complete stop before performing any further actions.
5. Inspection:
   - Conduct a post-operation inspection to check for any signs of wear or damage.
   - Clean the conveyor belt and remove any debris to prepare for the next use.

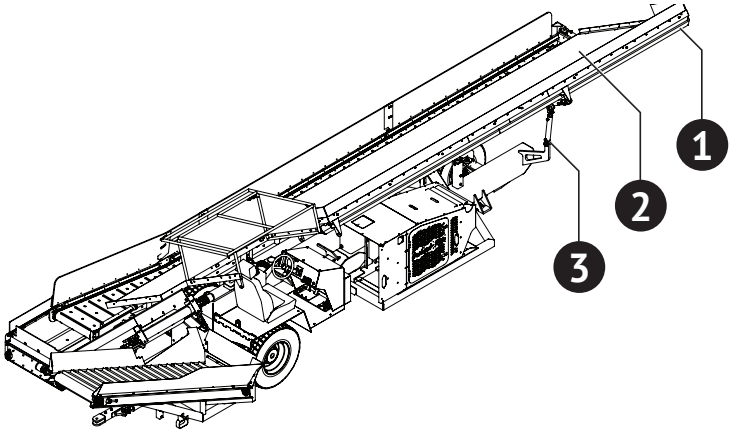
By following these guidelines, operators can ensure the conveyor system on the Orchard-Rite® Two-Piece Receiver operates efficiently and safely, reducing downtime and increasing productivity during harvest seasons.

Canopy

The canopy of the Orchard-Rite® Two-Piece Receiver is designed to capture the desired crop efficiently during harvesting operations. Proper use and maintenance of the canopy are essential for optimal performance and safety.

Components and Features

1. Canopy Frame:
    - The sturdy structure that supports the canopy cover and ensures stability during operation.
2. Canopy Cover:
    - The material that captures and directs the harvested crop onto the conveyor.
3. Hydraulic Actuators:
    - Mechanisms that control the raising and lowering of the canopy, providing smooth and precise adjustments.



Operation

1. Preparation:
    - Ensure the area around the machine is clear of personnel and obstacles.
    - Perform a visual inspection to check for any signs of damage or wear on the canopy and its components.
2. Control:
    - Use the designated keypad to lower and raise the canopy.
    - Observe the canopy's movement to ensure it operates smoothly without obstructions.
3. Adjustments:
    - Adjust the height and angle of the canopy as needed using the keypad.
    - Regularly check the hydraulic actuators for smooth and controlled operation.
4. Positioning:
    - Lower the canopy to the desired position for operation or transport.
    - Ensure the canopy is aligned properly and not obstructing any machine components.
5. Inspection:
    - Conduct a final inspection to ensure the canopy is securely locked and there are no loose or damaged parts.

By following these guidelines, operators can ensure the canopy system on the Orchard-Rite® Two-Piece Receiver operates efficiently and safely, providing the necessary capability for effective harvesting operations.

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Standard Harvesting Practices

When operating the Orchard-Rite® Two-Piece Receiver, it is crucial to follow standard operating practices to ensure efficiency, safety, and optimal performance during harvesting operations. The following guidelines provide a comprehensive overview of best practices for driving and operating the machine while harvesting.

Harvesting Operations

Machine Positioning:

- Position the machine in the orchard, ensuring it is on stable and level ground.
- Avoid operating on excessively steep slopes to prevent rollovers or tipping.

Engaging the Conveyor:

- Use the joystick to lower the conveyor to the appropriate height for harvesting.
- Ensure the conveyor is properly aligned with the rows of trees to maximize efficiency.

Operating the Receiver:

- Align the Machine: Position the receiver in alignment with the first tree in the row to be harvested. Adjust the canopy to not hit branches.
- Transfer the Product: Once the flappers of the accompanying tree shaker machine retract, extend the flapper up on the receiver to transfer the product to the conveyor.
- Check Conveyor Height: Ensure the conveyor height is not touching the ground before proceeding to the next tree.
- Drive to the Next Tree: Move the machine at a steady pace between trees.
- Monitor the Dashboard: Keep an eye on the dashboard display for real-time data on engine status, hydraulic pressure, and other critical parameters.

Using Attachments:

- Utilize the joystick buttons to control various attachments, such as blowers or additional conveyors, as needed.
- Follow specific instructions for each attachment to ensure proper use and safety.

Safety Precautions During Operation

Visibility:

- Ensure the operator's field of vision is clear before moving the machine.
- Use the machine's lights during low-light conditions for better visibility.

Alertness:

- Remain alert and attentive to any unusual noises, warning indicators, or changes in machine performance.
- Stop the machine immediately if any issues are detected and address them before continuing.

Personnel Safety:

- Keep all personnel at a safe distance from the machine while it is in operation.
- Ensure communication with ground personnel is clear and effective to prevent accidents.

Public Road Use:

- Do not drive the machine on public roads due to its size and limited visibility.
- Transport the machine using appropriate vehicles designed for heavy equipment and follow all state and federal transportation laws, such as using any needed oversized load signs.

By following these standard operating practices, operators can ensure the safe and efficient use of the Orchard-Rite® Two-Piece Receiver, leading to more productive and successful harvesting operations.

Safety Checklist

Before operating the Orchard-Rite® Two-Piece Receiver, it is essential to perform a thorough safety check to ensure the machine is in optimal working condition and to minimize the risk of accidents. Use this checklist before each operation:

Operator's Safety Checklist

Operator's Seat:

- Adjust the seat and pedals for proper reach and access.

Conveyor System:

- Inspect the conveyor for any signs of damage or wear.
- Ensure the conveyor belt is properly tensioned and aligned.

Hydraulic System:

- Inspect all hydraulic hoses and connections for leaks or damage.
- Ensure that the hydraulic oil level is adequate and the oil is clean.
- Ensure all cylinders are still pinned securely.

Electrical System:

- Check all wiring and connections for signs of wear or damage.
- Test all lights and indicators to ensure they are working correctly.

Tires and Wheels:

- Verify tire pressure and look for any damage or excessive wear.
- Ensure all wheel lug nuts are fastened tightly.

Surrounding Area:

- Clear the area where the machine will be operating and remove debris or obstacles.
- Ensure that all personnel are aware of the machine's operation and are at a safe distance.

Reporting:

- Report any maintenance needs or concerns to the appropriate personnel immediately.

Following this safety checklist will help ensure that the Orchard-Rite® Two-Piece Receiver operates safely and efficiently, reducing the risk of accidents and prolonging the life of the equipment. Always prioritize safety and do not operate the machine if any issues are found during the inspection.

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Starting the Machine

Properly starting the Orchard-Rite® Two Piece Receiver is crucial for ensuring optimal performance and safety. This section provides step-by-step instructions for starting the machine.

Important Operation Reminder

- Do Not Operate Under Impairment: Never operate the machine while under the influence of alcohol, drugs, or medication that impairs judgment, hearing, vision, or reaction times.
- Alertness: Remain alert and attentive to any unusual noises or warning indicators during startup.
- Safety: Perform Operations Safety Checklist (see page 28 for details).

Operator's Pre-Start Checklist

Before starting the Two-Piece Receiver, perform the following checks:

1. Visual Inspection: Conduct a thorough walk-around inspection of the machine. Check for any visible damage, loose bolts, or fluid leaks.
2. Fluid Levels: Ensure all fluid levels (engine oil, hydraulic oil, coolant, and fuel) are within the recommended ranges.
3. Airflow: Check the radiator screen and make sure the engine is clear of debris.
4. Battery: Check the battery for proper charge and secure connections.
5. Safety Guards: Verify that all safety guards and shields are in place and securely fastened.
6. Operator's Seat: Adjust foot pedal distance for comfort and ensure proper access of functions.

Starting Procedure

Follow these steps to start the Orchard-Rite® Two Piece Receiver:

1. Enter the Cab
    - Ensure the area around the machine is clear of personnel and obstacles.
    - Climb into the cab using the designated handholds and steps.
2. Ergonomics
    - Operator should be seated in an ergonomically correct position.
    - Adjustment can be made to foot pedals if needed to ensure correct positioning.
3. Ignition
    - Insert your Two-Piece Receiver key into the ignition switch located on the dashboard.
    - Turn the key to the "ON" position. Wait for the dashboard indicators to illuminate and perform their self-checks.
4. Pre-Start Warm-Up
    - Observe the dashboard for any warning lights or messages. Address any issues before proceeding.
    - Allow the machine's systems to complete their initialization process.
5. Engine Start
    - Turn the ignition key to the "START" position. Hold it until the engine starts, then release the key, allowing it to return to the "ON" position.
    - If the engine does not start within 10 seconds, release the key, wait for one minute, and then try again. Avoid continuous cranking to prevent starter damage.
6. Initial Idle
    - Once the engine starts, allow it to idle for a few minutes. This warm-up period ensures that the engine oil circulates properly and that the hydraulic system reaches the optimal operating temperature.
    - During this time, check the display interface for operating parameters (e.g., oil pressure, temperature, and fuel levels).
7. Check Controls
    - Test the functionality of the joystick and foot pedals to ensure they are responsive.
8. Calibration
    - Make any needed calibration adjustments (see page 24 for instruction).

Troubleshooting

If the machine fails to start, consider the following:

- Battery Check: Ensure the battery is fully charged and the connections are secure. Also ensure that the battery disconnect is in the "ON" position.
- Fuel Supply: Verify there is sufficient fuel in the tank.
- Electrical System: Check for blown fuses.
- Engine Diagnostics: Refer to the engine diagnostic codes displayed on the dashboard. Consult a service representative for further guidance.

By following these steps and safety precautions, you can ensure a smooth and safe start to your Orchard-Rite® Two Piece Receiver operations. Always refer to this manual for detailed instructions and maintain regular communication with your service representative for any technical assistance.

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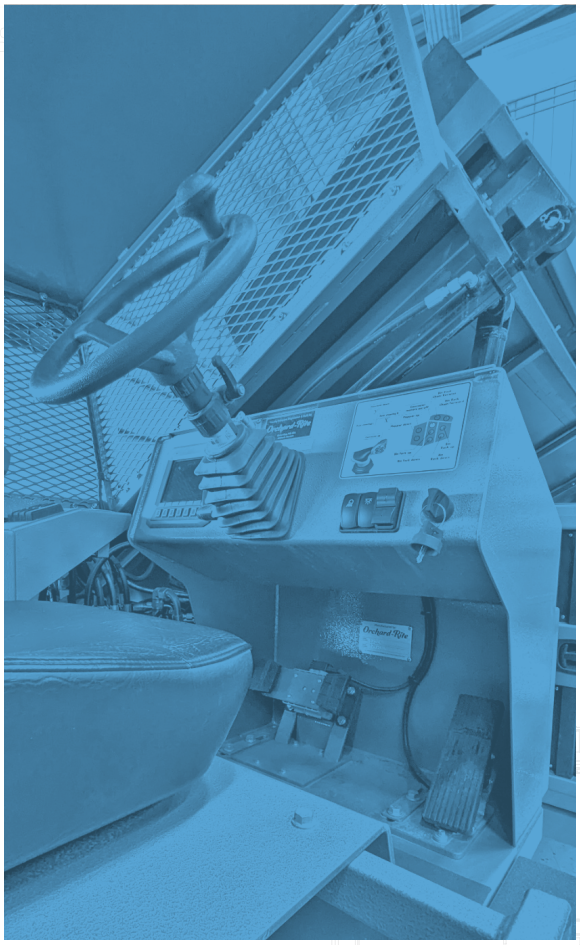

Turning The Machine Off

Shutting Down:

- Bring the machine to a complete stop and lower the conveyor to the ground.
- If machine has been running at RPM's higher than 1200 for an extended period of time, let machine idle below 1200 RPM for a couple minutes before turning engine off.
- Turn off the engine and remove the key from the ignition.

Inspection and Maintenance:

- Conduct a post-operation inspection to identify any issues or required maintenance.
- Report any maintenance needs to the appropriate personnel.

Cleaning:

- Clean the machine, removing any debris from the conveyor and other components.
- Ensure all moving parts are free of obstructions.

By following these standard operating practices, operators can ensure the safe and efficient use of the Orchard-Rite® Two-Piece Receiver, leading to more productive and successful harvesting operations. Always prioritize safety and adhere to the guidelines provided in this manual.

Storage

Proper post-harvest handling and storage of the Orchard-Rite® Two-Piece Receiver ensures the longevity and reliability of the machine. Follow these guidelines to maintain the machine in optimal condition and prepare it for the next harvesting season.

Preparation for Storage:

- Dry Storage Area: Store the machine in a dry, covered area to protect it from the elements. If indoor storage is not available, use a high-quality tarp to cover the machine securely.
- Stabilization: Park the machine on a level surface and engage the parking brake. Lower the conveyor to wood blocks to prevent rust and stabilize the machine.

Battery Care:

- Battery Disconnection: Disconnect the battery to prevent discharge during storage. Remove the battery and store it in a cool, dry place.
- Battery Maintenance: Check the battery charge periodically and recharge it as needed to maintain its condition.

Protection Against Rodents:

- Ensure all product is removed from the machine before storing as left over vegetation and fruit will attract rodents.
- Take measures to protect the machine from rodents, which can cause significant damage by chewing on wires and other components. Use rodent repellents or traps around the storage area.
- If the machine cannot be adequately protected from rodents, then remove the belts and store them in a protected area.

Periodic Checks:

- Monthly Inspection: Perform a monthly inspection of the stored machine to ensure it remains in good condition. Check for any signs of moisture, rust, or rodent activity. Turn on the machine and let it run for at least 30 minutes above 1200 RPMs to ensure system verification.
- Fluid Levels: Verify that fluid levels remain adequate and top off as necessary.

By adhering to these post-harvest and storage guidelines, you can maintain the Orchard-Rite® Two-Piece Receiver in excellent condition, ensuring reliable performance and longevity. Proper storage is essential to protect your investment and support successful harvesting operations in the future.

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Preparing for Harvest

Ensuring that the Orchard-Rite® Two-Piece Receiver is ready for the upcoming harvesting season involves several crucial steps. Proper preparation guarantees optimal performance, safety, and efficiency during operations. Follow these guidelines to prepare the machine for harvest.

Before preparing for harvest thoroughly read through this Operator's manual.

Pre-Season Inspection:

- Thorough Inspection: Conduct a comprehensive inspection of the machine well before the next harvesting season. Identify and address any issues that may have developed during storage.
- Fluid Replacement: Replace old fluids if necessary, following the manufacturer's recommendations.

Reinstall the Battery:

- Battery Connection: Reinstall the battery, ensuring secure and clean connections. Check the battery charge and recharge if needed.

Operational Check:

- Function Test: Start the machine and perform a function test to ensure all controls, hydraulics, and attachments are working correctly.
- Calibration: Calibrate any necessary components as per the machine's requirements and guidelines provided in the manual.

Safety Check:

- Safety Equipment: Verify that all safety equipment, including first aid kits, is in place and in good condition.
- Operator Training: Ensure that operators are refreshed on the machine's operation and safety procedures.

By following these preparation steps, you can ensure that the Orchard-Rite® Two-Piece Receiver is ready for the harvesting season. Proper preparation minimizes downtime, enhances safety, and maximizes the efficiency and effectiveness of your harvesting operations. Always prioritize safety and refer to this manual for detailed instructions and guidelines.

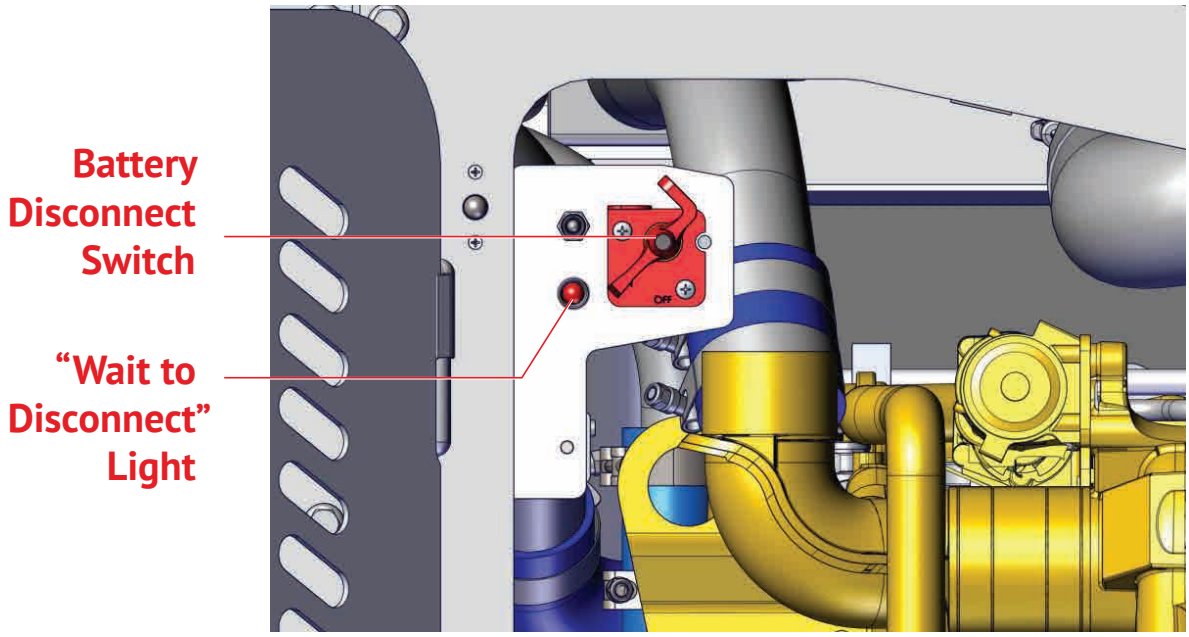
Battery Disconnect Switch

Switch Location

The battery disconnect switch is located on the inside of the engine compartment of the Two-Piece Reciever to the right of the top door hinge.

When to Use

The 'Wait to Disconnect' light indicates when it is safe to turn the battery disconnect switch to the off position. When the light is off, the battery disconnect switch can be turned off. If the light is illuminated, do not disconnect the battery wires or turn the battery disconnect off, as this can cause the DEF system to malfunction or fail. The battery disconnect switch should only be turned off while the light is on in emergency situations.



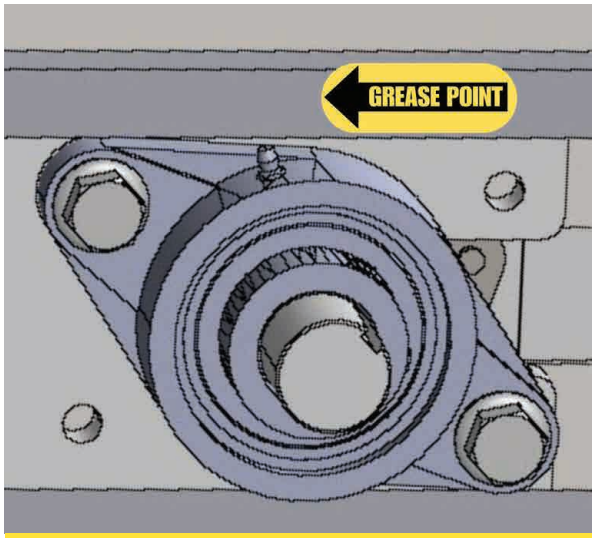
Lubrication & Fluid Maintenance

Proper lubrication and fluid maintenance are crucial for the optimal performance and longevity of the Orchard-Rite® Two-Piece Receiver. This section provides detailed information on the locations of grease and fluid points.

Grease Locations

Regular greasing is essential to keep the moving parts of your Two-Piece Receiver functioning smoothly. The following are common grease points on the machine:

1. Conveyor Bearings: Located at the conveyor ends. Grease these points regularly to ensure smooth conveyor operation.
2. Steering Joints: Found at the steering bearings on the top and bottom of the steering knuckle. Regular greasing ensures smooth and responsive steering.
3. Hydraulic Cylinder Pivots: Located at the pivot points of the hydraulic cylinders that attach the conveyor to the frame. These should be greased to prevent wear and ensure smooth operation.
4. Fan Bearing: Located inside the fans rotating components. Regular lubrication ensures that the fan will continue operating effectively.
5. Flapper Pivot: Located at the joints which allow flapper to extend out and in. These pivots should be greased to ensure the flapper works properly.
6. Conveyor Lift Arms: Found on the links that connect the conveyor and the frames together. These components should be lubricated to maintain the conveyor and its needed functions.
7. Attachment: Each attachment should be lubricated based on their unique needs.



Grease points are indicated by the above yellow sticker.

Fluid Locations

1. Engine Oil Fill Cap: The engine oil fill cap is located on the top of the engine, along with an additional side spout. Use only the recommended engine oil as specified in the maintenance section.
2. Hydraulic Oil Reservoir: The hydraulic oil reservoir is located near the engine compartment. Ensure the hydraulic oil level is within the recommended range.
3. Coolant Fill Cap: The coolant fill cap is found on the radiator or a separate coolant reservoir. Only check coolant levels when the engine is cool.
4. Diesel Fuel Tank: The diesel fuel tank inlet is located on the side of the machine between the operator station and the engine on the main frame of the machine. Use only the recommended diesel fuel.
5. DEF Tank: The Diesel Exhaust Fluid (DEF) tank inlet is typically marked and located near the end of the engine. Use only DEF that meets ISO 22241 standards.

Always check fluid levels before operating the machine. Top off as necessary with the recommended fluids. Make sure the machine is properly lubricated to ensure compatibility and performance. Ensure the fill caps and grease points are clean before servicing to prevent contamination. Regularly inspect for leaks and address them immediately to prevent damage and ensure safety. By adhering to these guidelines you can ensure the Orchard-Rite® Two-Piece Receiver remains in optimal condition, providing reliable performance and extending the machine's lifespan.

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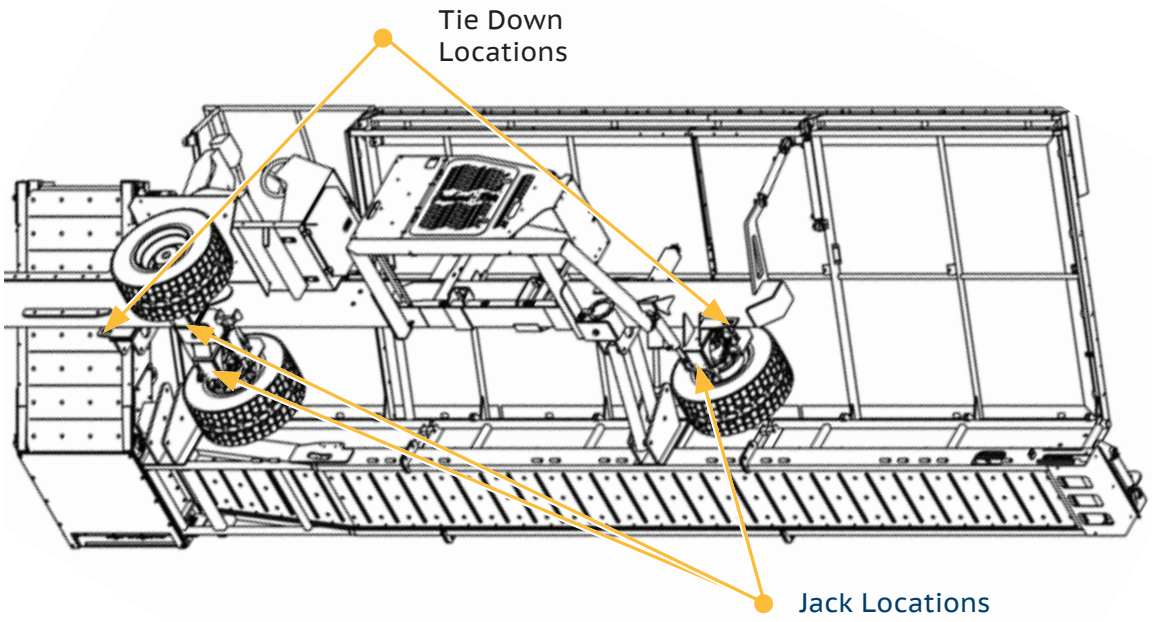
Tie Down & Jack Placement

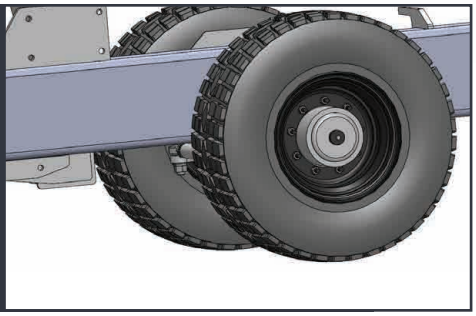
Ensuring the secure transportation and safe maintenance of the Orchard-Rite® Two-Piece Receiver requires proper tie down and jack placement. This section provides detailed instructions on the correct locations for securing the machine and for safe jacking during maintenance.

Safety Tips for Jacking and Tying Down

- Use Proper Equipment: Always use jacks and tie down equipment that are rated for the weight of the Two-Piece Receiver.
- Jack To Chassis: Ensure that jack is placed along the chassis indicated in the illustration below.
- Stable Ground: Ensure the ground is level and stable before jacking up the machine.
- Secure Machine: Use wheel chocks and ensure the machine is secure before starting any maintenance.
- Double Check: Verify that all tie downs are secure and tight before transporting the machine.



Drive configuration is enabled when the center pin is extended as seen in the image. To enable tow configuration push the drive pin in.



By following these guidelines for tie down and jack placement, you can ensure the safe transportation and maintenance of your Orchard-Rite® Two-Piece Receiver. Always refer to this manual for detailed instructions and follow all recommended safety protocols.

Hazards Classification

The Orchard-Rite® Two-Piece Receiver is designed to enhance the efficiency of harvesting operations while maintaining high safety standards. However, operators must be aware of various hazards associated with its operation. This section outlines the key hazards and their classifications to ensure safe usage and compliance with safety protocols.

DANGER: Indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

NOTICE: Indicates information considered important but not hazard-related.

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Mechanical Hazards

- Crushing Hazard: Risk of being crushed by moving parts, such as the conveyor or boom.
- Shearing Hazard: Potential for body parts to be caught between moving components.
- Entanglement Hazard: Possibility of clothing or body parts being caught in rotating parts or the conveyor.

Electrical Hazards

- Shock Hazard: Risk of electric shock from faulty wiring or exposed electrical components.
- Burn Hazard: Potential for burns from hot electrical components or wires.

Thermal Hazards

- Burn Hazard: Risk of burns from contact with hot surfaces, such as the engine, exhaust, or hydraulic components.

Chemical Hazards

- Toxic Exposure: Exposure to hazardous chemicals used in the hydraulic and fuel systems.
- Spill Hazard: Risk of chemical spills during maintenance or operation, leading to potential environmental contamination and personal injury.

Operational Hazards

- Visibility Hazard: Limited visibility from the operator's seat, especially with the canopy extended.
- Terrain Hazard: Risk of rollovers or tipping on uneven or sloped terrain.
- Public Road Use Hazard: Driving the equipment on public roads poses a significant danger due to its size and limited maneuverability.
- Noise Hazard: High noise levels during operation, which can lead to hearing damage. Hearing protection is required.
- Vibration Hazard: Prolonged exposure to vibrations from the machine can cause physical discomfort or injury.

Maintenance Hazards

- Mechanical Injury: Risk of injury while performing maintenance tasks if the machine is not properly shut down.
- Chemical Exposure: Potential for exposure to hazardous fluids during maintenance procedure.

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Hazard Mitigation Strategies

Mechanical Hazards:

- Ensure all safety guards and shields are in place before operating the machine.
- Never place any part of your body near moving parts while the machine is in operation.

Electrical Hazards:

- Regularly inspect electrical components and wiring for damage.
- Use appropriate personal protective equipment (PPE) when working with electrical systems.
- Use battery disconnect when working with electrical wiring.

Thermal Hazards:

- Allow the machine to cool down before performing maintenance on hot components.
- Use heat-resistant gloves when necessary.

Chemical Hazards:

- Use proper PPE when handling chemicals.
- Follow all safety guidelines for storing and disposing of hazardous materials.

Environmental Hazards:

- Always wear hearing protection during operation.
- Take regular breaks to mitigate the effects of vibration exposure.

Operational Hazards:

- Ensure the operator's field of vision is clear before moving the machine.
- Avoid operating the machine on excessively steep slopes.
- Do not drive the machine on public roads.

Maintenance Hazards:

- Shut down the machine and remove the ignition key before performing any maintenance.
- Follow proper procedures for handling and disposing of used fluids.

PPE: Always wear appropriate PPE, including hearing protection, safety glasses, and gloves.

By understanding and adhering to these hazard classifications and safety precautions, operators can significantly reduce the risk of accidents and injuries while using the Orchard-Rite® Two-Piece Receiver. Always prioritize safety and report any hazards or safety concerns to your supervisor immediately.

Maintenance & Service Schedule

	Hourly	Daily	250 Hours	Yearly	1500 Hours	Engine Manufacturer Recommendations
Clean radiator screen	x					
Visual walk around inspection	x					
Check fluid levels		x				
Ensure canopy coverings secured		x				
Check wheel lug nuts: Torque to 140 ft-lb for Auburn hubs, 160 ft-lb for Rexroth hubs		x				
Inspect all bolts & fasteners		x				
Inspect cylinders & belts		x				
Inspect wear plates on decks		x				
Inspect hydraulic hoses		x				
Clean radiator & oil cooler		x				
Clean engine air element DO NOT USE COMPRESSED AIR		x				
Service chassis grease fittings		x				
Check operating hydraulic pressure		x	x			
Check oil level in power wheels		x	x			
Inspect steering cylinder pins & bushings			x			
Replace engine inner & outer air filter elements			x			
Replace hydraulic filters				x		
Replace drive hub oil, check bearings & grease				x		
Inspect engine mounts				x		
Service battery				x		
Replace engine coolant					x	
Replace hydraulic oil					x	
Replace engine fuel filter						x
Replace engine oil & filter						x

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Service Specifications

DIESEL EXHAUST FLUID (DEF)

Type ..... DEF that meets or exceeds ISO 22241-1 requirements

Capacity ..... 19 L / 5 gal

Pump Filter ..... Orchard-Rite® 137058,Caterpillar® 378-3187

Tank Filter ..... Orchard-Rite® 137057, Caterpillar® 536-6756

Tank Screen ..... Orchard-Rite® 134219, Caterpillar® 451-2774

ENGINE OIL

Type ..... 15W-40 API,CJ-4, CK-4 (Caterpillar® approved)

Capacity ..... 10.4 L / 11 qt / 2.75 gal

Filter ..... Orchard-Rite® 135221, Caterpillar® 569-8036

ENGINE FUEL

Type ..... Ultra Low Sulfur Diesel

Capacity ..... 208.19 L / 55 gal

Fuel/Water Separator ..... Caterpillar® 523-6601

Replacement Element ..... Orchard-Rite® 135220, Caterpillar® 523-6602

COOLANT

Type ..... Extended Life Coolant that meets or exceeds ASTM D6210

Capacity ..... 8.7 L / 9.19 qt / 2.3 gal

ENGINE FAN BELT

Type ..... Caterpillar® 520-3849

HYDRAULIC SYSTEM

Type ..... AW 68 Hydraulic Oil

Capacity ..... 124.91 L / 33 gal

Charge Filter ..... Orchard-Rite® 124321, Donaldson® P163555

Return Filter ..... Orchard-Rite® 111304, HYDAC 02065628

Silicone Additive ..... Orchard-Rite® 125732

LUBRICATION

General ..... Lithium Complex NLGI Approved or Equivalent

DRIVE HUBS

Auburn Gears® Oil Type ..... API-GL-5 80W-90 Gear Oil

Auburn Gears® Capacity ..... 0.94 L / 1 qt

Rexroth® Oil Type ..... ISO 220 Gear Oil

Rexroth® Capacity ..... 1.41 L / 1.5 qt

Using parts from unknown sources could lead to machine operation issues and a shortened machine lifespan. It is highly recommended that any parts needed for repair or replacement be purchased from your nearest Orchard-Rite® authorized representative.

Bulletin Updates

Do you have operating questions regarding the Orchard-Rite® Two Piece Receiver that can not be answered within this manual?

This section provides direction to help answer questions or concerns that may arise which cannot be answered within the context of this manual.

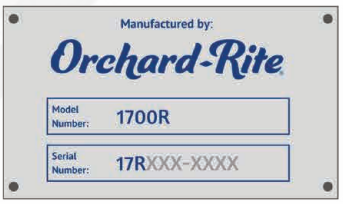
Orchard-Rite® Bulletin Updates

Orchard-Rite® issues Bulletin Updates to communicate essential safety and product updates to dealers and owners of our machinery. These Bulletin Updates are specific to each piece of machinery. Your Orchard-Rite® Two Piece Receiver is identified with a machine model and serial number. As a new owner of the Orchard-Rite® Two Piece Receiver, please ensure that you check with your nearest dealer for any Bulletin Updates applicable to your equipment.

Reading and complying with Orchard-Rite® bulletins are crucial for the safe and effective operation of your machinery.

Contacting Your Dealer

Orchard-Rite communicates directly with a team of authorized representatives at dealerships around the world. If you have questions and do not find the answer in this manual or in the Bulletin Updates, please contact your nearest Orchard-Rite® dealer. Please make sure to have your name and contact information ready, along with the model and serial number of your Orchard-Rite® Two Piece Receiver at hand. **The model and serial number can be found on the machine label (graphic shown below) located above the foot pedal assembly in the operator station.**



Essential reasons to contact your dealer include:

- Accident Reporting: To report any incidents involving your equipment.
- Product Applications or Safety Inquiries: If you have questions about how to use your Two Piece Receiver safely or effectively.
- Standards and Regulatory Compliance: For information about compliance with specific standards and regulations.
- Ownership Updates: To report changes in the ownership of the equipment or updates to owner contact details.

A current list of authorized representatives can be found on our website at www.orchard-rite.com

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Legal Information

1. Limitation of Liability

Orchard-Rite Ltd. Inc. and Pacific Distributing Inc. disclaim all liability for any personal injury or property damage resulting from the operation of the Orchard-Rite® Two Piece Receiver. The company will not be liable for indirect, special, incidental, consequential, punitive, or similar damages, including but not limited to damage to property, loss of profit, or loss of business.

2. Intellectual Property Rights

The name Orchard-Rite Ltd. Inc., and any other trademarks, service marks, logos, or symbols MAY NOT BE USED in any advertisement, publication, online or otherwise, without prior written approval from Orchard-Rite Ltd. Inc., unless authorized under applicable law and at the user's own risk of compliance with all aspects of applicable law.

3. Alterations and Revisions

Orchard-Rite Ltd. Inc. reserve the right to revise the terms, content, and materials in this manual at any time without any prior notice to users. The company may alter the design or manufacturing of its products at any time without any obligation to modify or alter units that have already been sold.

4. Compliance with Safety Standards

Orchard-Rite® products are designed to meet the highest safety standards. It is the responsibility of the operator and the owner to ensure compliance with all relevant safety standards and regulations. Failure to comply with safety guidelines may result in voiding the warranty and can lead to serious injury or death.

5. Documentation and Record-Keeping

Operators and owners must keep a detailed record of all maintenance and service activities performed on the Orchard-Rite® Two Piece Receiver. This documentation is crucial for validating warranty claims and ensuring the machine's long-term reliability and safety.

6. Reporting and Product Updates

Owners must stay informed about product updates, safety bulletins, and other important communications from Orchard-Rite Ltd. Inc. Regularly check with authorized representatives or the company's website for the latest information.

Trademark and Copyright Notice

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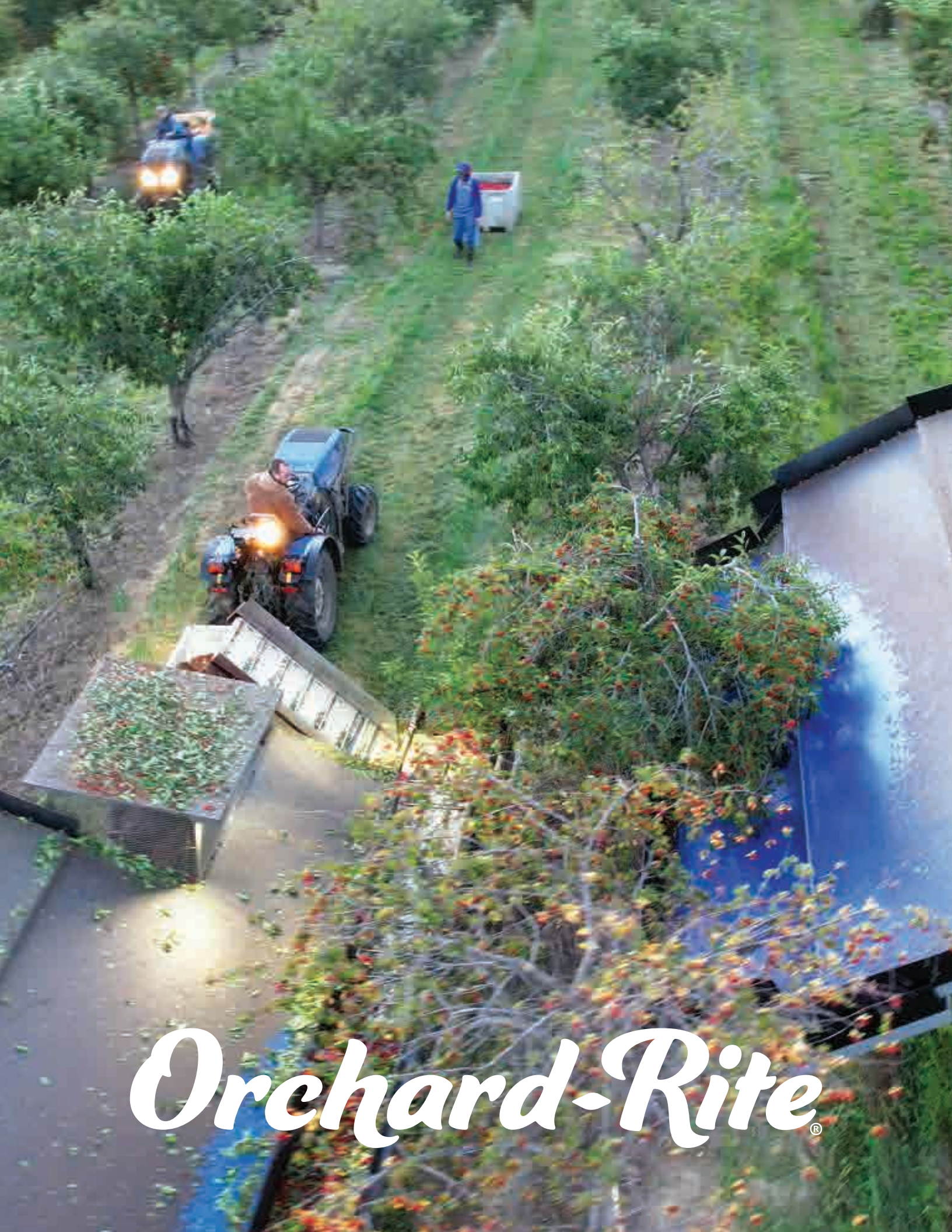
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