# Safety rules

## ⚠ General safety rules ⚠

Use caution when you operate the machine on slopes. Raised equipment, full tanks and other loads will change the center of gravity of the machine. The machine can tip or roll over when near ditches and embankments or uneven surfaces.

Never permit anyone other than the operator to ride on the machine.

Never operate the machine under the influence of alcohol or drugs, or while you are otherwise impaired.

When digging or using ground-engaging attachments, be aware of buried cables. Contact local utilities to determine the locations of services.

Pay attention to overhead power lines and hanging obstacles. High voltage lines may require significant clearance for safety.

Hydraulic oil or diesel fuel leaking under pressure can penetrate the skin, causing serious injury or infection.

- DO NOT use your hand to check for leaks. Use a piece of cardboard or paper.
- Stop the engine, remove the key, and relieve the pressure before you connect or disconnect fluid lines.
- Make sure that all components are in good condition. Tighten all connections before you start the engine or pressurize the system.
- If hydraulic fluid or diesel fuel penetrates the skin, seek medical attention immediately.
- Continuous long term contact with hydraulic fluid may cause skin cancer. Avoid long term contact and wash the skin promptly with soap and water.

Keep clear of moving parts. Loose clothing, jewelry, watches, long hair, and other loose or hanging items can become entangled in moving parts.

Wear protective equipment when appropriate.

DO NOT attempt to remove material from any part of the machine while it is being operated or while components are in motion.

Make sure that all guards and shields are in good condition and properly installed before you operate the machine. Never operate the machine with shields removed. Always close access doors or panels before you operate the machine.

Dirty or slippery steps, ladders, walkways, and platforms can cause falls. Make sure these surfaces remain clean and clear of debris.

A person or pet within the operating area of a machine can be struck or crushed by the machine or its equipment. DO NOT allow anyone to enter the work area.

Raised equipment and/or loads can fall unexpectedly and crush persons underneath. Never allow anyone to enter the area underneath raised equipment during operation.

Never operate the engine in enclosed spaces as harmful exhaust gases may build up.

Before you start the machine, be sure that all controls are in neutral or park lock position.

Start the engine only from the operator's seat. If you bypass the safety start switch, the engine can start with the transmission in gear. Do not connect or short across terminals on the starter solenoid. Attach jumper cables as described in the manual. Starting in gear may cause death or serious injury.

Always keep windows, mirrors, all lighting, Slow-Moving Vehicle (SMV) emblem and Speed Identification Symbol (SIS) clean to provide the best possible visibility while you operate the machine.

Operate controls only when seated in the operator's seat, except for those controls expressly intended for use from other locations.

Do not make any adjustments (e.g. seat, steering, light, mirror, ...) while the machine is in motion. Ensure that all adjustments are locked prior to use. Check the tightness of the securing screws and that the adjustment controls are working properly. Fitting and/or repairing the seat shall only be performed by skilled personnel.

Modifications made to this machine may increase the likelihood or potential for debris accumulations that would normally not be present. Modifications include frame-mounted attachments, plates, screens, or other aftermarket equipment. Operators of modified machines must be aware of accumulations of organic debris and/or material and overall machine cleanliness.

Modified machines require additional and more frequent inspection and cleaning during usage. The machine may require inspection and cleaning multiple times per day during usage. Operators must be aware of the operating environment and conditions. Operators must take appropriate actions to maintain the machines during use. In particular, pay attention to the following machine areas:

- In and around the engine compartment
- Hot exhaust components
- Moving, turning, or rotating machine components

Operators that operate the machine in atypical applications and/or conditions must be aware of accumulations of organic debris and/or material and overall machine cleanliness. Pay particular attention where material accumulations are possible or may result.

Machines that operate in atypical applications or conditions require additional and more frequent inspection and cleaning during usage. The machine may require inspection and cleaning multiple times per day during usage. Operators must be aware of the operating environment and conditions. Operators must take appropriate actions to maintain the machines during use. In particular, pay attention to the following machine areas:

- In and around the engine compartment
- Hot exhaust components
- Moving, turning, or rotating machine components

Before you leave the machine:

1. Park the machine on a firm, level surface.
2. Put all controls in neutral or park lock position.
3. Engage the parking brake. Use wheel chocks if required.
4. Lower all hydraulic equipment — Implements, header, etc.
5. Turn off the engine and remove the key.

When, due to exceptional circumstances, you would decide to keep the engine running after you leave the operator's station, then you must follow these precautions:

1. Bring the engine to low idle speed.
2. Disengage all drive systems.
3. **⚠ WARNING**

   **Some components may continue to run down after you disengage drive systems.**
   **Make sure all drive systems are fully disengaged.**
   **Failure to comply could result in death or serious injury.**

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   Shift the transmission into neutral.
4. Apply the parking brake.

## ⚠ General maintenance safety ⚠

Keep the area used for servicing the machine clean and dry. Clean up spilled fluids.

Service the machine on a firm, level surface.

Install guards and shields after you service the machine.

Close all access doors and install all panels after servicing the machine.

Do not attempt to clean, lubricate, clear obstructions, or make adjustments to the machine while it is in motion or while the engine is running.

Always make sure that working area is clear of tools, parts, other persons and pets before you start operating the machine.

Unsupported hydraulic cylinders can lose pressure and drop the equipment, causing a crushing hazard. Do not leave equipment in a raised position while parked or during service, unless the equipment is securely supported.

Jack or lift the machine only at jack or lift points indicated in this manual.

Incorrect towing procedures can cause accidents. When you tow a disabled machine follow the procedure in this manual. Use only rigid tow bars.

Stop the engine, remove the key, and relieve pressure before you connect or disconnect fluid lines.

Stop the engine and remove the key before you connect or disconnect electrical connections.

Scalding can result from incorrect removal of coolant caps. Cooling systems operate under pressure. Hot coolant can spray out if you remove a cap while the system is hot. Allow the system to cool before you remove the cap. When you remove the cap, turn it slowly to allow pressure to escape before you completely remove the cap.

Replace damaged or worn tubes, hoses, electrical wiring, etc.

The engine, transmission, exhaust components, and hydraulic lines may become hot during operation. Take care when you service such components. Allow surfaces to cool before you handle or disconnect hot components. Wear protective equipment when appropriate.

When welding, follow the instructions in the manual. Always disconnect the battery before you weld on the machine. Always wash your hands after you handle battery components.

Do not climb on the machine. Do not use the attachment as a ladder, or platform for working at heights. Use appropriate means according to national/local safety rules (for example, an individual rolling platform, etc.) to access the areas of the machine not reachable from the ground level.

Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.

## ⚠ Wheels and tires ⚠

Make sure that tires are correctly inflated. Do not exceed any recommended load or pressure. Follow the instructions in the manual for proper tire inflation.

Tires are heavy. Handling tires without proper equipment could cause death or serious injury.

Never weld on a wheel with a tire installed. Always remove the tire completely from the wheel prior to welding.

Always have a qualified tire technician service the tires and wheels. If a tire has lost all pressure, take the tire and wheel to a tire shop or your dealer for service. Explosive separation of the tire can cause serious injury.

DO NOT weld to a wheel or rim until the tire is completely removed. Inflated tires can generate a gas mixture with the air that can be ignited by high temperatures from welding procedures performed on the wheel or rim. Removing the air or loosening the tire on the rim (breaking the bead) will NOT eliminate the hazard. This condition can exist whether tires are inflated or deflated. The tire MUST be completely removed from the wheel or rim prior to welding the wheel or rim.

Install stalk stompers, stubble mats, or other devices to prevent tire damage when:

- working on harvested fields with rough stubble
- working on harvested fields in dry conditions, when the stubble is harder and tougher

## ⚠ Driving on public roads and general transportation safety ⚠

Comply with local laws and regulations.

Use appropriate lighting to meet local regulations.

Make sure that the SMV emblem and Speed Identification Symbol (SIS) are visible.

Make sure that the brake pedal latch is engaged. You must lock brake pedals together for road travel.

Use safety chains for trailed equipment when safety chains are provided with machine or equipment.

Lift implements and attachments high enough above ground to prevent accidental contact with road.

When you transport equipment or a machine on a transport trailer, make sure that it is properly secured. Be sure the SMV and SIS on the equipment or machine are covered while being transported on a trailer.

Be aware of overhead structures or power lines and make sure that the machine and/or attachments can pass safely under.

Travel speed should be such that you maintain complete control and machine stability at all times.

Slow down and signal before turning.

Pull over to allow faster traffic to pass.

Follow correct towing procedure for equipment with or without brakes.

Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading.

Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.

## ⚠ Fire and explosion prevention ⚠

Fuel or oil that is leaked or spilled on hot surfaces or electrical components can cause a fire.

Crop materials, trash, debris, bird nests, or flammable material can ignite on hot surfaces.

Always have a fire extinguisher on or near the machine.

Make sure that the fire extinguisher(s) is maintained and serviced according to the manufacturer’s instructions.

At least once each day and at the end of the day, remove all trash and debris from the machine especially around hot components such as the engine, transmission, exhaust, battery, etc. More frequent cleaning of your machine may be necessary depending on the operating environment and conditions.

At least once each day, remove debris accumulation around moving components such as bearings, pulleys, belts, gears, cleaning fans, etc. More frequent cleaning of your machine may be necessary depending on the operating environment and conditions.

Inspect the electrical system for loose connections and frayed insulation. Repair or replace loose or damaged parts.

Do not store oily rags or other flammable material on the machine.

Do not weld or flame cut any items that contain flammable material. Clean items thoroughly with non-flammable solvents before welding or flame-cutting.

Do not expose the machine to flames, burning brush, or explosives.

Promptly investigate any unusual smells or odors that may occur during operation of the machine.

## ⚠ General battery safety ⚠

Always wear eye protection when you work with batteries.

Do not create sparks or have open flame near a battery.

Ventilate the area when you charge a battery or use a battery in an enclosed area.

Disconnect the negative (-) terminal first and reconnect the negative (-) terminal last.

When you weld on the machine, disconnect both terminals of the battery.

Do not weld, grind, or smoke near a battery.

When you use auxiliary batteries or connect jumper cables to start the engine, use the procedure shown in the operator's manual. Do not short across terminals.

Follow the manufacturer's instructions when you store and handle batteries.

Battery post, terminals, and related accessories contain lead and lead compounds. Wash hands after handling.

Battery acid causes burns. Batteries contain sulfuric acid. Avoid contact with skin, eyes, or clothing. Antidote (external): Flush with water. Antidote (eyes): flush with water for 15 minutes and seek medical attention immediately. Antidote (internal): Drink large quantities of water or milk. Do not induce vomiting. Seek medical attention immediately.

Keep out of reach of children and other unauthorized persons.

## ⚠ Passenger seat safety ⚠

Use on public roads:

- The passenger seat can be used for short term and occasional transport of only one person from the farm to the field.

Use on the field:

- It is allowed to use the passenger seat for only one person when training a new operator or when a service technician is diagnosing a mechanical problem.

When the passenger seat is occupied, the following precautions must be followed:

- Tractor should be driven only at slow speeds and over level ground.
- Avoid quick starts and stops.
- Avoid sharp turns.
- Always wear correctly adjusted seat belts.
- Keep doors closed at all times.

## ⚠ Operator presence system ⚠

Your machine is equipped with an operator presence system to prevent the use of some features while the operator is not in the operator's seat.

Never disconnect or bypass the operator presence system.

If the operator presence system is inoperable, then it must be repaired.

## ⚠ Power Take-Off (PTO) ⚠

PTO-driven machinery can cause death or serious injury. Before you work on or near the PTO shaft or service or clear the driven machine, put the PTO lever in the disengage position, stop the engine, and remove the key.

Whenever a PTO is in operation, a guard must be in place to prevent death or injury to the operator or bystanders.

When doing stationary PTO work, keep clear of all moving parts and make sure that appropriate guards are in place.

## ⚠ Reflectors and warning lights ⚠

You must use flashing amber warning lights, according to national/local safety rules, when you operate equipment on public roads.

## ⚠ Seat belts ⚠

Seat belts must be worn at all times.

Seat belt inspection and maintenance:

- Keep seat belts in good condition.
- Keep sharp edges and items than can cause damage away from the belts.
- Periodically check belts, buckles, retractors, tethers, slack take-up system, and mounting bolts for damage and wear.
- Replace all parts that have damage or wear.
- Replace belts that have cuts that can make the belt weak.
- Check that bolts are tight on the seat bracket or mounting.
- If the belt is attached to the seat, make sure that the seat or seat brackets are mounted securely.
- Keep seat belts clean and dry.
- Clean belts only with soap solution and warm water.
- Do not use bleach or dye on the belts because this can make the belts weak.

## ⚠ Operator protective structure ⚠

Your machine is equipped with an operator protective structure, such as: a Roll Over Protective Structure (ROPS), Falling Objects Protective Structure (FOPS), or a cab with a ROPS. A ROPS may be a can frame or a two-posted or four-posted structure used for the protection of the operator to minimize the possibility of serious injury. The mounting structure and fasteners forming the mounting connection with the machine are part of the ROPS.

The protective structure is a special safety component of your machine.

DO NOT attach any device to the protective structure for pulling purposes. DO NOT drill holes to the protective structure.

The protective structure and interconnecting components are a certified system. Any damage, fire, corrosion, or modification will weaken the structure and reduce your protection. If this occurs, THE PROTECTIVE STRUCTURE MUST BE REPLACED so that it will provide the same protection as a new protective structure. Contact your dealer for protective structure inspection and replacement.

After an accident, fire, tip over, or roll over, the following MUST be performed by a qualified technician before returning the machine to field or job-site operations:

- The protective structure MUST BE REPLACED.
- The mounting or suspension for the protective structure, operator's seat and suspension, seat belts and mounting components, and wiring within the operator's protective system MUST be carefully inspected for damage.
- All damaged parts MUST BE REPLACED.

DO NOT WELD, DRILL HOLES, ATTEMPT TO STRAIGHTEN, OR REPAIR THE PROTECTIVE STRUCTURE. MODIFICATION IN ANY WAY CAN REDUCE THE STRUCTURAL INTEGRITY OF THE STRUCTURE, WHICH COULD CAUSE DEATH OR SERIOUS INJURY IN THE EVENT OF FIRE, TIP OVER, ROLL OVER, COLLISION, OR ACCIDENT.

Seat belts are part of your protective system and must be worn at all times. The operator must be held to the seat inside the frame in order for the protective system to work.

## ⚠ Air-conditioning system ⚠

The air-conditioning system is under high pressure. Do not disconnect any lines. The release of high pressure can cause serious injury.

The air-conditioning system contains gases that are harmful to the environment when released into the atmosphere. Do not attempt to service or repair the system.

Only trained service technicians can service, repair, or recharge the air-conditioning system.

## ⚠ Personal Protective Equipment (PPE) ⚠

Wear Personal Protective Equipment (PPE) such as hard hat, eye protection, heavy gloves, hearing protection, protective clothing, etc.

## ⚠ Do Not Operate tag ⚠

Before you start servicing the machine, attach a 'Do Not Operate' warning tag to the machine in an area that will be visible.

## ⚠ Hazardous chemicals ⚠

If you are exposed to or come in contact with hazardous chemicals you can be seriously injured. The fluids, lubricants, paints, adhesives, coolant, etc. required for the function of your machine can be hazardous. They may be attractive and harmful to domestic animals as well as humans.

Material Safety Data Sheets (MSDS) provide information about the chemical substances within a product, safe handling and storage procedures, first aid measures, and procedures to take in the event of a spill or accidental release. MSDS are available from your dealer.

Before you service your machine check the MSDS for each lubricant, fluid, etc. used in this machine. This information indicates the associated risks and will help you service the machine safely. Follow the information in the MSDS, and on manufacturer containers, as well as the information in this manual, when you service the machine.

Dispose of all fluids, filters, and containers in an environmentally safe manner according to local laws and regulations. Check with local environmental and recycling centers or your dealer for correct disposal information.

Store fluids and filters in accordance with local laws and regulations. Use only appropriate containers for the storage of chemicals or petrochemical substances.

Keep out of reach or children or other unauthorized persons.

Applied chemicals require additional precautions. Obtain complete information from the manufacturer or distributor of the chemicals before you use them.

## ⚠ Utility safety ⚠

When digging or using ground-engaging equipment, be aware of buried cables and other services. Contact your local utilities or authorities, as appropriate, to determine the locations of services.

Make sure that the machine has sufficient clearance to pass in all directions. Pay special attention to overhead power lines and hanging obstacles. High voltage lines may require significant clearance for safety. Contact local authorities or utilities to obtain safe clearance distances from high voltage power lines.

Retract raised or extended components, if necessary. Remove or lower radio antennas or other accessories. Should a contact between the machine and an electric power source occur, the following precautions must be taken:

- Stop the machine movement immediately.
- Apply the parking brake, stop the engine, and remove the key.
- Check if you can safely leave the cab or your actual position without contact with electrical wires. If not, stay in your position and call for help. If you can leave your position without touching lines, jump clear of the machine to make sure that you do not make contact with the ground and the machine at the same time.
- Do not permit anyone to touch the machine until power has been shut off to the power lines.

## ⚠ Electrical storm safety ⚠

Do not operate machine during an electrical storm.

If you are on the ground during an electrical storm, stay away from machinery and equipment. Seek shelter in a permanent, protected structure.

If an electrical storm should strike during operation, remain in the cab. Do not leave the cab or operator's platform. Do not make contact with the ground or objects outside the machine.

## ⚠ Mounting and dismounting ⚠

Mount and dismount the machine only at designated locations that have handholds, steps, and/or or ladders.

Do not jump off of the machine.

Make sure that steps, ladders, and platforms remain clean and clear of debris and foreign substances. Injury may result from slippery surfaces.

Face the machine when you mount and dismount the machine.

Maintain a three-point contact with steps, ladders, and handholds.

Never mount or dismount from a moving machine.

Do not use the steering wheel or other controls or accessories as handholds when you enter or exit the cab or operator's platform.

## ⚠ Working at heights ⚠

When tractor maintenance requires you to work at heights:

- Correctly use tractor steps, ladders, and/or hand holds.
- Do not stand on tractor areas that are not designed as steps or platforms.
- When necessary, use appropriate means according to national/local safety rules (for example, an individual rolling platform, etc.) to reach components such as mirrors, rotating beacons, air filters, GPS receivers, or other components not reachable from the ground.
- Never use steps, ladders, and/or hand holds when the tractor is in motion.

Do not use the tractor as a lift, ladder, or platform for working at heights.

## ⚠ Lifting and overhead loads ⚠

Never use loader buckets, forks, etc. or other lifting, handling, or digging equipment to lift persons.

Do not use raised equipment as a work platform.

Know the full area of movement of the machine and equipment and do not enter or permit anyone to enter the area of movement while the machine is in operation.

Never enter or permit anyone to enter the area underneath raised equipment. Equipment and/or loads can fall unexpectedly and crush persons underneath it.

Do not leave equipment in raised position while parked or during service, unless securely supported. Hydraulic cylinders must be mechanically locked or supported if they are left in a raised position for service or access.

Loader buckets, forks, etc. or other lifting, handling, or digging equipment and its load will change the center of gravity of the machine. This can cause the machine to tip on slopes or uneven ground.

Load items can fall off the loader bucket or lifting equipment and crush the operator. Care must be taken when lifting a load. Use proper lifting equipment.

Do not lift load higher than necessary. Lower loads to transport. Remember to leave appropriate clearance to the ground and other obstacles.

Equipment and associated loads can block visibility and cause an accident. Do not operate with insufficient visibility.

# Remote valve controls

**⚠ WARNING**

**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading. Failure to comply could result in death or serious injury.**

**W1587A**

**⚠ WARNING**

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer. Failure to comply could result in death or serious injury.**

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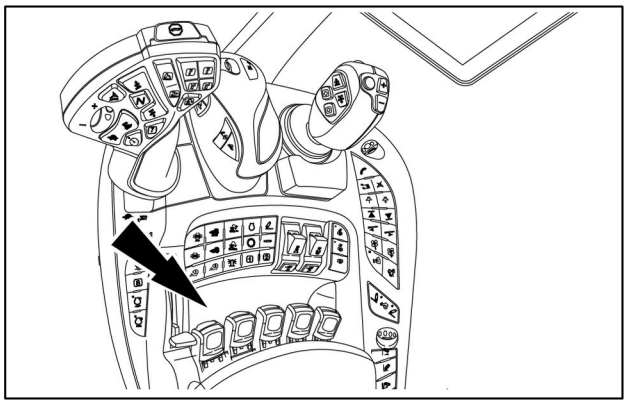
## Remote levers

Located at the front and rear of the armrest console, individual remote levers for up to seven remote valves offer precise flow control.



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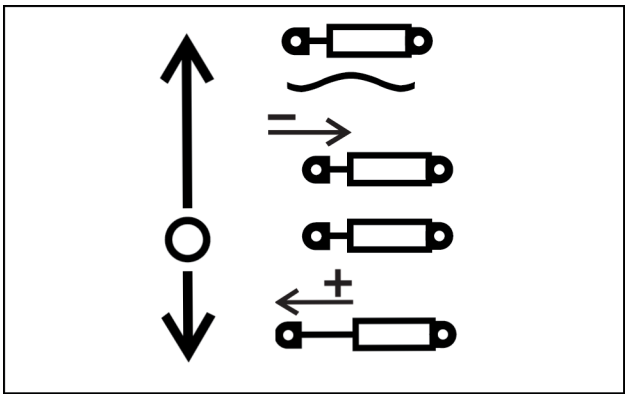

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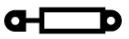
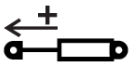


Neutral – The lever returns to the center, neutral position when released, except when it is in float position.



Extend (Raise) – Raise the lever to provide proportional flow to extend the cylinder. Flow is proportional to lever movement and the flow setting for the selected remote valve. Flow stops when the lever is released.

When a timer is active, if a lever is moved to the soft detent extend position and then released, flow continues until the timer expires or the lever is moved out of neutral.

Retract (Lower) – Lower the lever to provide proportional flow to retract the cylinder. Flow is proportional to lever movement and the flow setting for the selected remote valve. Flow stops when the lever is released.

When a timer is active, if a lever is moved to the soft detent retract position and then released, flow continues until the timer expires or the lever is moved out of neutral.

Float – Push the lever fully down to engage the float detent position. The valve remains in float position until the lever is moved to the Neutral position. Float allows a hydraulic cylinder to extend or retract freely, allowing equipment such as scraper blades or markers to follow the ground contour.

The Remotes screen on the display provides individual controls for each remote valve:

- for setting extend target flow and retract target flow by percentage of available flow,
- for setting the extend and retract timers from **0 – 60 s** or to infinite,
- for separate learning modes for both the extend and retract timers,
- and on/off controls for Lock, Timer and Motor Mode functions.



Press the remote valve button on the primary navigation panel to access the setup screen for the front and rear remote valves.

Remote levers are color-coded and backlit for easy identification. The label on the remote coupler for the valves color coordinates with its control lever.

***NOTE:*** *An unassigned lever is not illuminated.*

A default lever layout is provided but the operator can change that layout at any time.

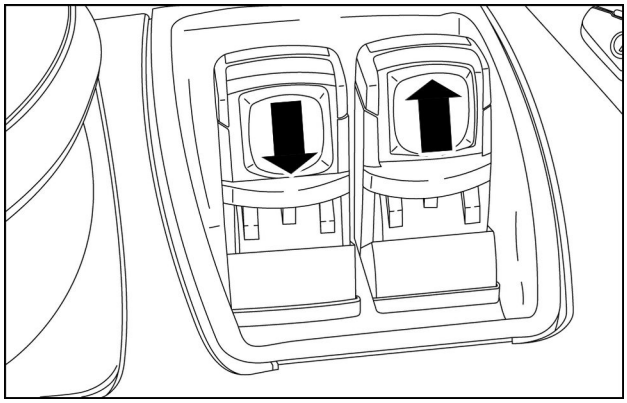
Press the setup access button on the main navigation panel for access to the screen for pairing remote levers with remote valves.

| Swatch | Color name | Default pairing |
|---|---|---|
| | Tomato red | R1 |
| | Signal blue | R2 |
| | Sulfur yellow | R3 |
| | Emerald green | R4 |
| | Dahlia yellow | R5 |
| | Signal white | F1 |
| | Tele magenta | F2 |
| | Sky blue | Isobus |

To prevent accidental engagement, a remote lever can be physically locked.

Slide the tab downward with your thumb and forefinger to lock the lever. An additional light bar appears on top of the lever to indicate its locked state.

Slide the tab upward to release the lever.



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Go to Chapter 6 for more complete information on remote valve controls.

# Multifunction Handle

**⚠ WARNING**

**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading. Failure to comply could result in death or serious injury.**

**W1587A**

**⚠ WARNING**

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer. Failure to comply could result in death or serious injury.**

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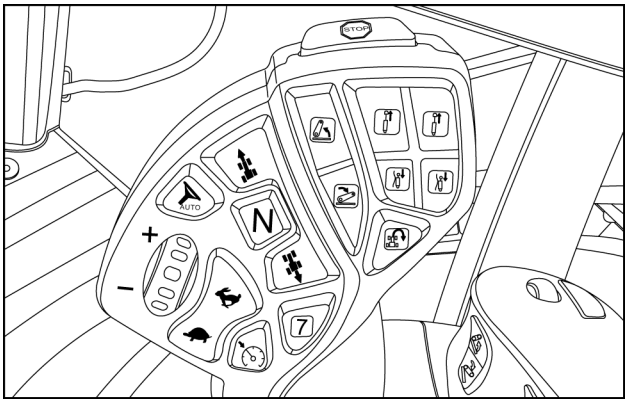
The Multifunction Handle has two main functions:

- to adjust forward or reverse tractor ground speed
- and to act as a shuttle control.

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Lever movement is momentary: the lever automatically returns to the rest position when released. Move the lever forward against spring pressure to engage forward drive, move the lever rearward to engage reverse drive.

In auto mode, how far the lever is moved forward/rearward selects the ground speed within the range. The further the lever is moved before it is allowed to return to the rest position, the higher the tractor speed will be. To achieve the target speed of the range, the lever is held forward/rearward until the ground speed is achieved. The aggressiveness setting and how far the lever is moved determine the speed command.

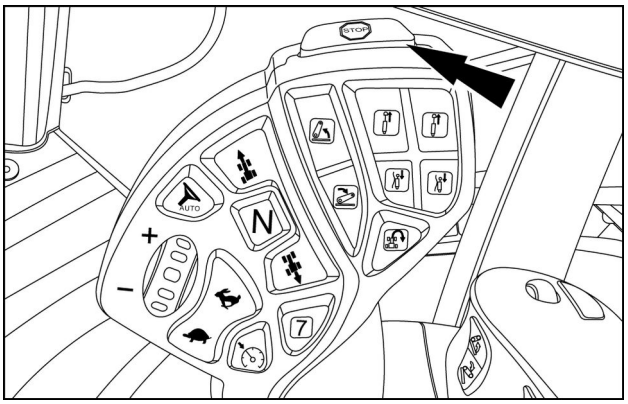
Similarly in auto mode, how far the lever is moved in the opposite direction of travel determines the speed command. Holding the lever in the opposite direction of travel reduces speed, and if held long enough, brings the tractor to a stop.

In cruise mode, the tractor accelerates immediately to achieve the full target speed of the forward or reverse range selected. The tractor must be moving to enter cruise mode. Only the aggressiveness setting determines the rate of acceleration.

## Multifunction Handle controls

The Multifunction Handle permits one handed operation of key controls. These functions are briefly explained here and described in more detail as you read through the manual.

**Stop button**

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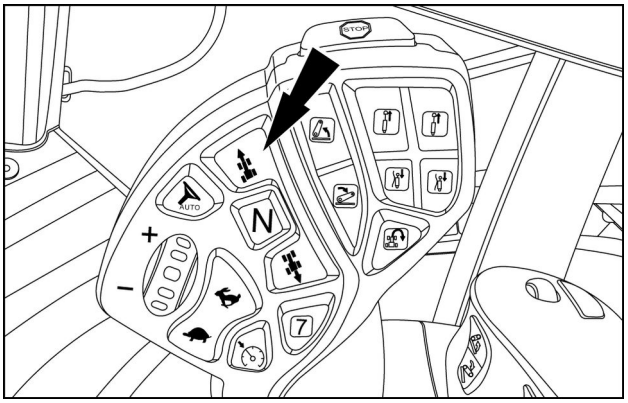
Press the stop button:

1. to stop rear and/or front hitch movement,
2. to disengage the rear and/or front Power Take-Off (PTO),
3. to deactivate ISOBUS automation,
4. and/or to stop flow to the remote valves.

**Shuttle shift and neutral buttons**

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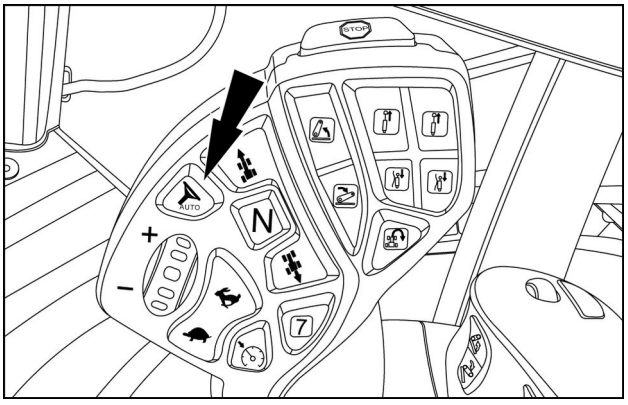
Press the forward shuttle shift button to command forward travel. Press and hold the button for anti jack knife braking when traveling in forward direction. Anti jack knife braking commands the transmission to maintain ground speed as the trailer brakes are applied, maintaining control of the towed load.

Press the reverse shuttle shift button to command reverse travel. Press and hold the button for anti jack knife braking when traveling in reverse direction. Anti jack knife braking commands the transmission to maintain ground speed as the trailer brakes are applied, maintaining control of the towed load.

**N** Press the neutral button to shift the transmission into neutral.

***NOTE:*** *Initial drive direction must always be selected using the transmission control lever. Subsequent direction changes may be made with the buttons on the Multifunction Handle.*

**Autoguidance engage**




RAIL18TR00383AA 4

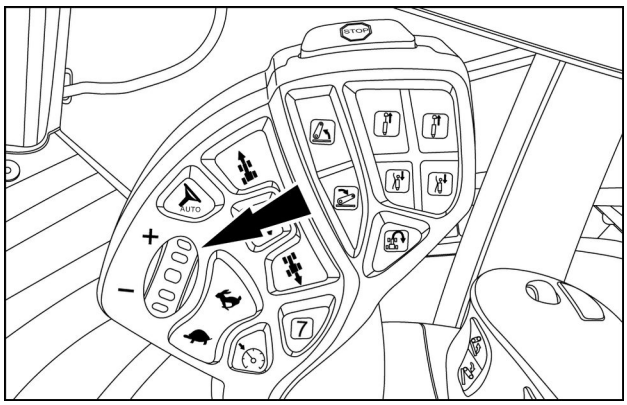
Press the autoguidance button to engage automatic steering if all the conditions for engagement are met. This also applies for automatic steering over ISOBUS.
Turn the steering wheel to disengage automatic steering. Pressing the button again does not disengage automatic steering.

***NOTE:*** *Once the safety message has been read and accepted by the operator on the display, the operator can engage autoguidance with this button. Autoguidance can always be disengaged by turning the steering wheel.*

**Thumb wheel**

+
−

Rotate the thumb wheel to increase or decrease the maximum settings of the current speed range.

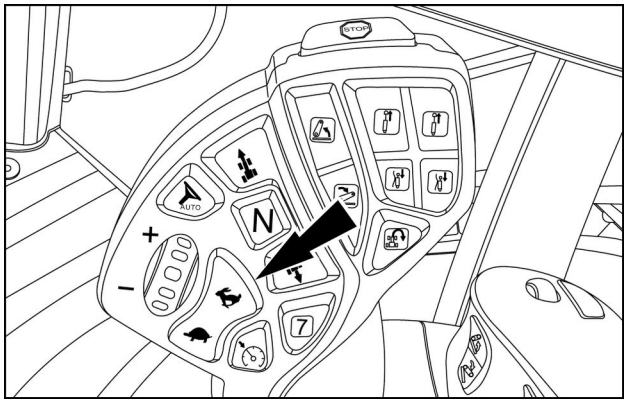


RAIL18TR00383AA 5

**Speed range selector**

Press the switch upward to select the next higher speed range for the transmission.

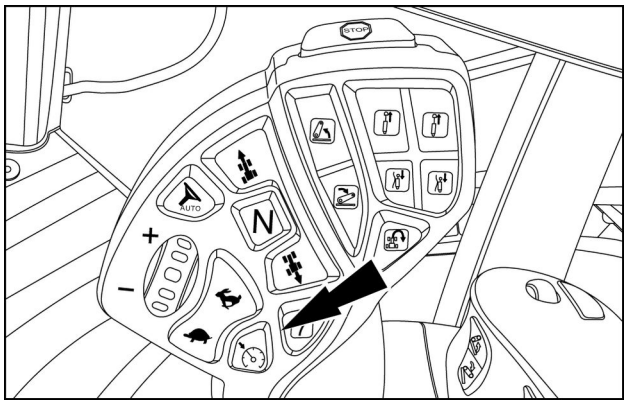
Press the switch downward to select the next lower speed range for the transmission.



RAIL18TR00383AA 6

**Maximum speed/cruise**

Press the button to switch to cruise mode.



RAIL18TR00383AA 7

**Configurable button**

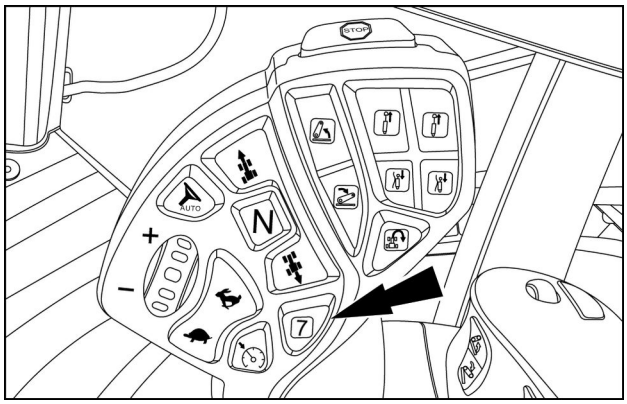
7

The operator assigns a function to the button using the button configuration screen on the display.

If a function is assigned, pressing the button commands the function.

If a function is not assigned, pressing the button displays the button configuration screen.

Button assignments may be changed as required.

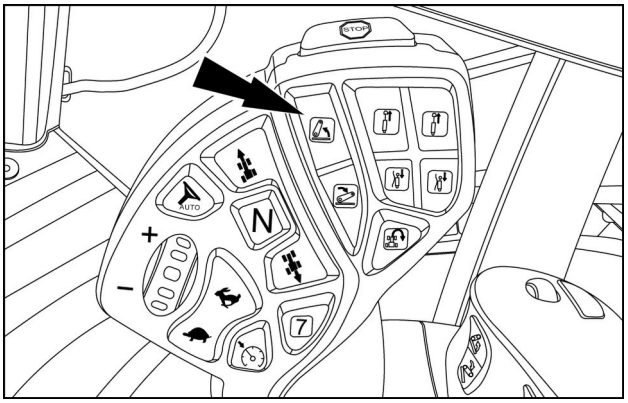


RAIL18TR00383AA 8

### Hitch express buttons

Press the hitch express raise button to raise the rear hitch to the upper limit. Hold the second function button while pressing to command the front hitch.

Press the hitch express lower button to lower the rear hitch to working depth. Hold the second function button while pressing to command the front hitch.




RAIL18TR00383AA 9

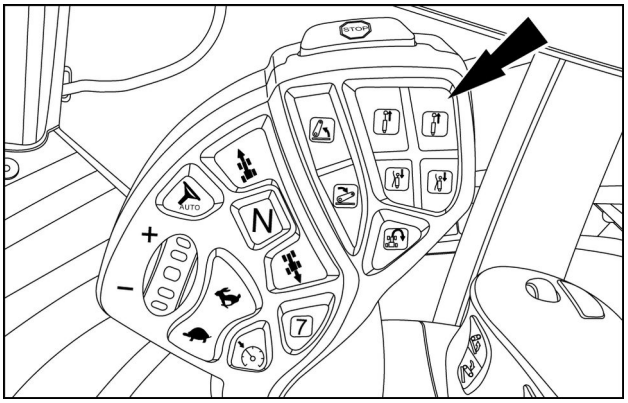
### Remote valve buttons

The left-hand extend button starts an extend timer if enabled or extend flow as long as the button is held. First remote is the default, user-selectable.

The left-hand retract button starts a retract timer if enabled or retract flow as long as the button is held. Press with the second function button to command float. First remote is the default, user-selectable

The right-hand extend button starts an extend timer if enabled or extend flow as long as the button is held. Second remote (or fifth remote, if present) is the default, user-selectable.

The right-hand retract button starts retract timer if enabled or retract flow as long as the button is held. Press with the second function button to command float. Second remote (or fifth remote, if present) is the default, user-selectable



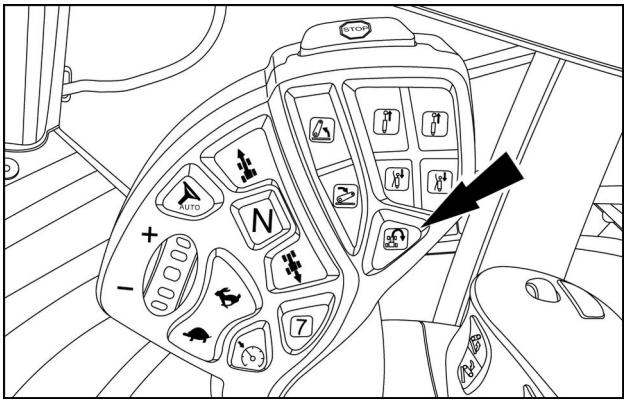

RAIL18TR00383AA 10

### Headland Turn Sequence (HTS)

Press the HTS step button to advance to the next step in current headland sequence.

***NOTE:*** *The sequence must be started with the HTS display screen or the playback function can be assigned to a user defined button.*

When no HTS sequence is active the button switches between ESM 1 and ESM 2, see page **Engine speed controls (55.525)**.



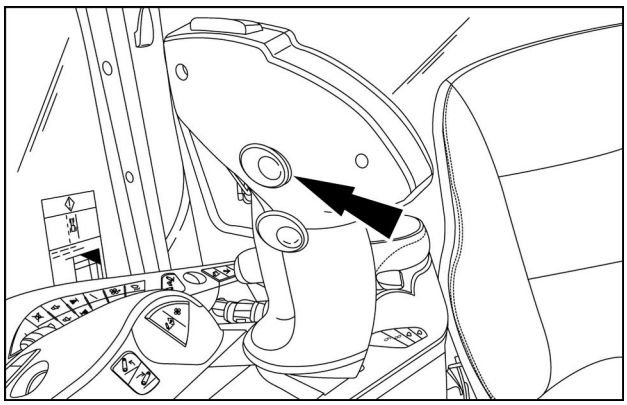

RAIL18TR00383AA 11

## Second function button

The second function button is located on the side of the Multifunction Handle facing the windshield.

The second function button is used to extend the functionality of another button. For example, press the second function button with the hitch express raise or lower button to command the front hitch rather than the rear hitch.

The second function button is also used to start calibration procedures, see pages **Overview** and the following, or to activate ISObus automation, see pages **ISOBUS automation and Tractor Implement Management (TIM) activation (55.905)**.



RAIL18TR00381AA 12

# Joystick (where fitted)

**⚠ WARNING**

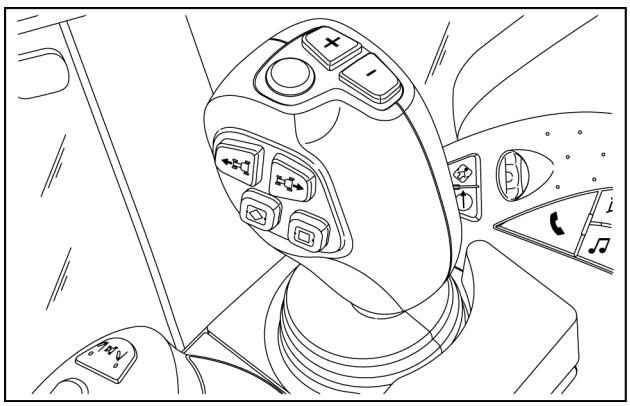
**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading.**
**Failure to comply could result in death or serious injury.**

**W1587A**

**⚠ WARNING**

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.**
**Failure to comply could result in death or serious injury.**

**W1789A**



RAIL19TR00621AA 1

What the joystick controls depends:

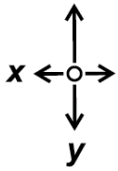
- on how many front and rear remote valves are available,
- on how the joystick is configured,
- and on whether the tractor is equipped with a front hitch or front loader

The front hitch option requires either a front or rear remote valve. Typically, EHR F1 is assigned to front hitch operation. Two additional front remote valves are optionally available for other front mounted equipment functions.

The front end loader option requires the joystick and minimum of five remote valves on the tractor.

Using the configuration screen on the color display, the controls of the joystick can be assigned to the rear remote valves, the front remote valves as well as the rear hitch and the front hitch in conjunction with the front remote valves.

Press the setup access button for quick access to the joystick setup screen.



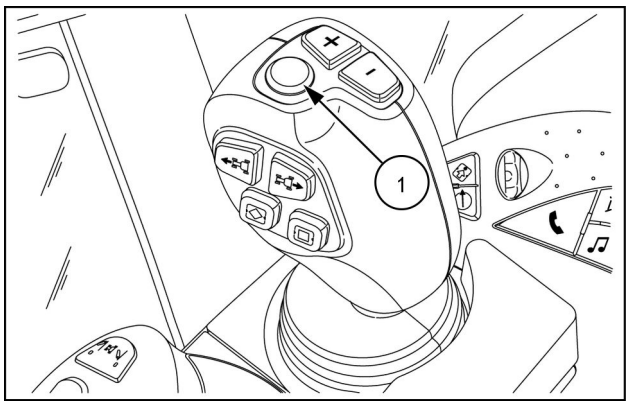

The joystick controls up to six separate remote valves:

- a remote on the y-axis,
- a remote on the x-axis,

- a remote on the y-axis with the second function button **(1)** pressed,
- a remote on the x-axis with the second function button **(1)** pressed,

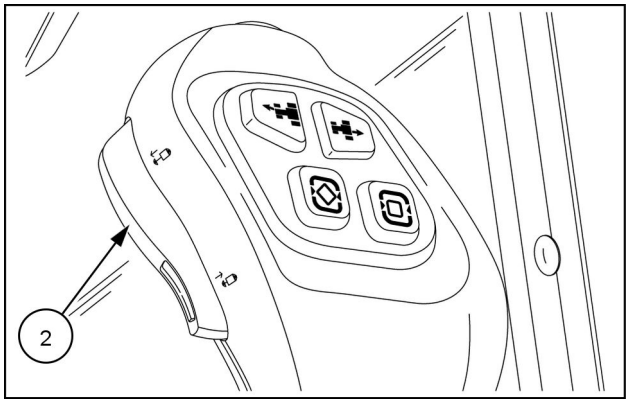
***NOTE:*** *Press the second function button and then move the joystick out of the neutral to engage the second function. Release the button and the second function remains active until the joystick is returned to neutral.*

***NOTE:*** *The x- or y-axis with the second function button can be configured to "rattle" the bucket and assist emptying. Flow pulses between* ***50%*** *extend and retract to approximate wiggling the joystick back and forth rapidly.*



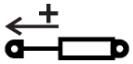

RAIL19TR00621AA 2

- a remote with the front rocker switch **(2)**,
- and a remote with the front rocker switch **(2)** and the second function button pressed.



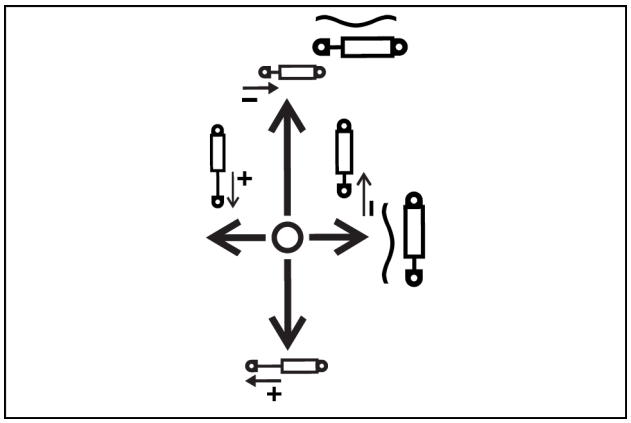

RAIL19TR00620AA 3

The joystick returns to the center, neutral position when released, except when it is in float position.



Extend (Raise) – Move the joystick to provide proportional flow to extend the cylinder. Flow is proportional to joystick movement and the flow setting for the selected remote valve. Flow stops when the joystick is released.

When a timer is active, if the joystick is moved to the extend detent position and then released, flow continues until the timer expires or the joystick is moved out of neutral.



RAIL19TR00623AA 4

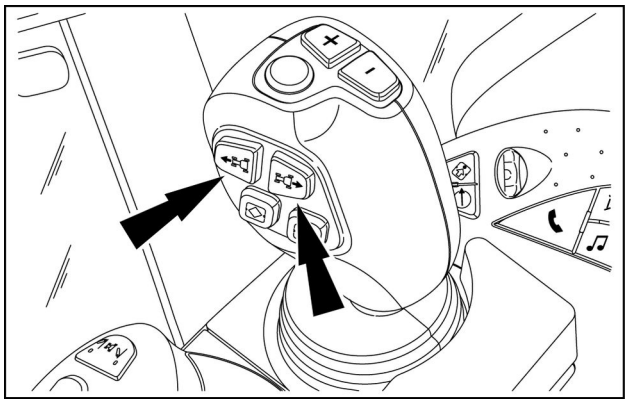
Retract (Lower) – Move the joystick to provide proportional flow to retract the cylinder. Flow is proportional to joystick movement and the flow setting for the selected remote valve. Flow stops when the joystick is released.

When a timer is active, if the joystick is moved to the retract detent position and then released, flow continues until the timer expires or the joystick is moved out of neutral.

Float – Move the joystick to engage the float detent position. The valve remains in float position until the joystick is moved to the neutral position. Float allows a hydraulic cylinder to extend or retract freely, allowing equipment to follow the ground contour.

***NOTE:*** *With a rear hitch function assigned to a joystick control, the Float detent position commands Fast Dig. See* ***Rear hitch controls (37.110)*** *for more information on the rear hitch controls.*

The joysticks shares some buttons with the multi function handle. Buttons with the same or similar icon function exactly the same between the two controls.



RAIL19TR00621AA 5

**Shuttle shift buttons**

Press the forward shuttle shift button to command forward travel. Press and hold the button for anti jack knife braking while traveling in forward direction. Anti jack knife braking commands the transmission to maintain ground speed as the trailer brakes are applied, maintaining control of the towed load.

Press the reverse shuttle shift button to command reverse travel. Press and hold the button for anti jack knife braking while traveling in reverse direction. Anti jack knife braking commands the transmission to maintain ground speed as the trailer brakes are applied, maintaining control of the towed load.

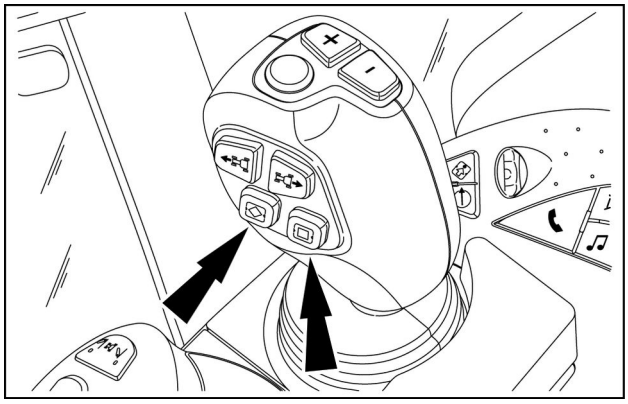
**Configurable buttons**

The operator assigns a function to the button using the button configuration screen on the display.

If a function is assigned, pressing the button commands the function.

If a function is not assigned, pressing the button displays the button configuration screen.

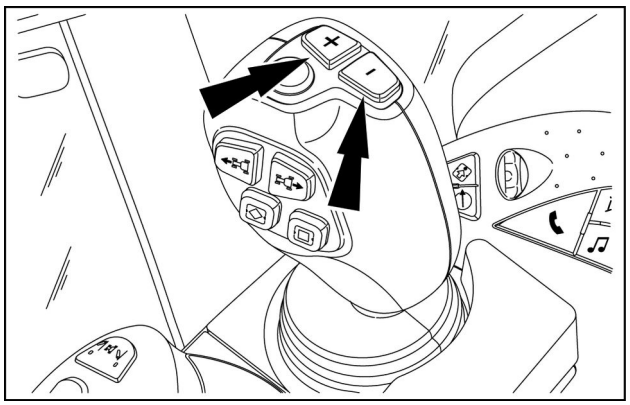
Button assignments may be changed as required.



RAIL19TR00621AA 6

**Speed range selector**

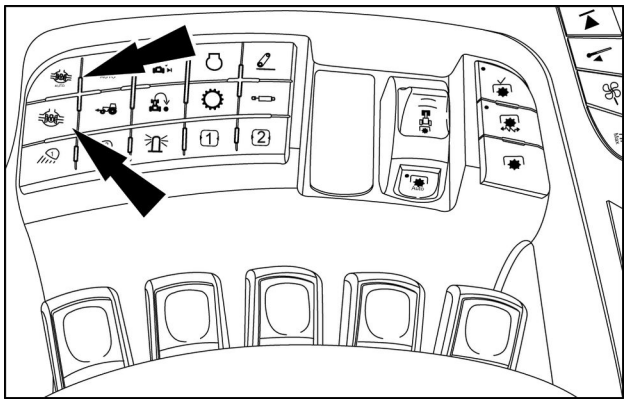
+ Press the plus button to select the next higher speed range for the transmission. Press the minus button to select the next lower speed range for the transmission. There are three speed ranges.



RAIL19TR00621AA 7

# Center armrest controls

## TerraLock™ controls



RAIL18TR00373AA 1

Press and release the Auto **TerraLock™** button to enable automatic **TerraLock™** operation.


The LED on the button confirms the active mode. The **TerraLock™** icon on the instrument cluster indicates its current state.

Press and hold the Auto button to access its setup screen on the display.

Thereafter, auto **TerraLock™** engagement is determined by:

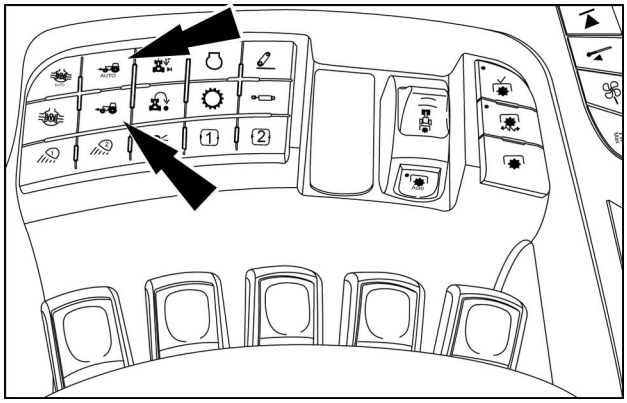
- brake application,
- ground speed,
- and the steering engagement zone selected with the display screen.

Press the manual button to manually engage or disengage **TerraLock™**.

The LED on the button confirms the active mode. The **TerraLock™** icon on the instrument cluster indicates its current state.

When a **TerraLock™** mode is active, pressing the other mode button does not turn **TerraLock™** off. The other mode is enabled.

## Four Wheel Drive (4WD) / Mechanical Front Drive (MFD) controls



RAIL18TR00373AA 2

Press and release the Auto MFD button to enable **TerraLock™** automatic MFD operation.


The LED on the button confirms the active mode. The MFD icon on the instrument cluster indicates its current state.

Press and hold the Auto button to access its setup screen on the display.

Thereafter, Auto MFD engagement is determined by:

- ground speed,
- and the steering engagement zone selected with the display screen.

Press the manual button to manually engage or disengage MFD.

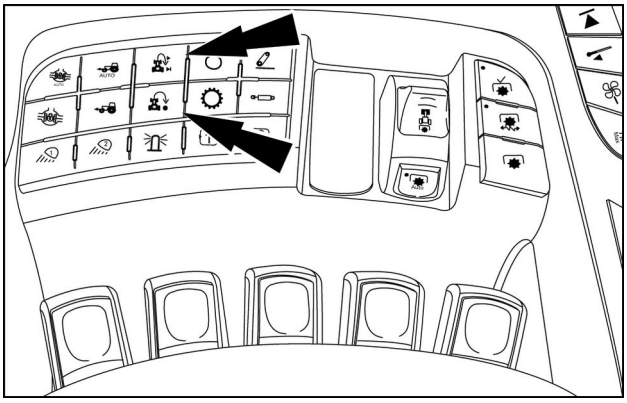
The LED on the button confirms the active mode. The MFD icon on the instrument cluster indicates its current state.

When a MFD mode is active, pressing the other mode button does not turn MFD off. The other mode is enabled.

## Headland Turn Sequence (HTS) controls

Press and release to start recording a headland turn sequence.

Press once to toggle automatic playback of a headland turn sequence on or off. Double press to turn manual playback of a headland turn sequence on or off.



RAIL18TR00373AA 3

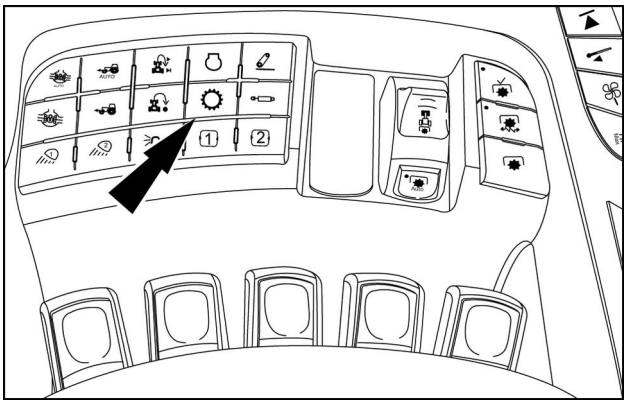
## Quick access buttons

Press and release to access the engine settings screen on the display.

Press and release to access the transmission settings screen on the display.

Press and release to access the rear and front hitch settings screen on the display.

Press and release to access the rear and front remote valve settings screen on the display.



RAIL18TR00373AA 4

## Work lamp and beacon buttons

Press and release the memory 2 button to turn on or off the work lamps associated with the button on the tractor lighting screen on the display.

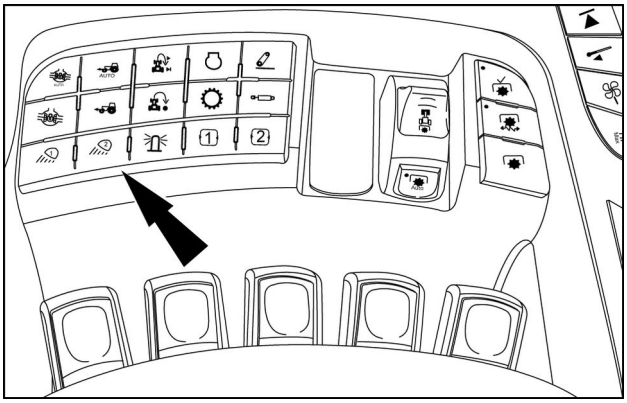
Press and hold the button to access the tractor lighting screen.

Press and release the memory 1 button to turn on or off the work lamps associated with the button on the tractor lighting screen on the display.

Press and hold the button to access the tractor lighting screen.

Press and release the beacon button to turn on or off the beacon lamps.

Press and hold the button to access the tractor lighting screen on the display.



RAIL18TR00373AA 5

## Configurable buttons

**⚠ WARNING**

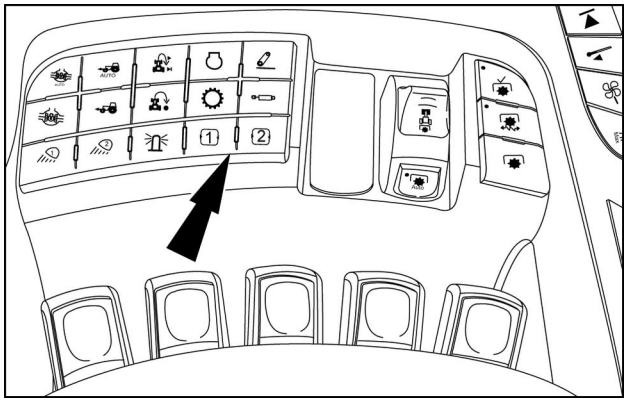
**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading.**
**Failure to comply could result in death or serious injury.**

**W1587A**

**⚠ WARNING**

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.**
**Failure to comply could result in death or serious injury.**

**W1789A**



RAIL18TR00373AA 6

1

The operator assigns a function to the button using the button configuration screen on the display.

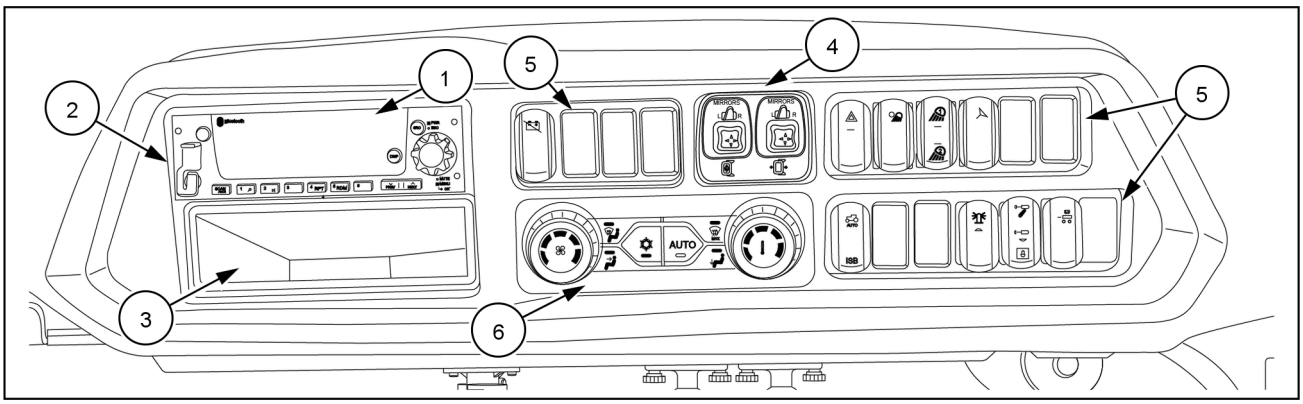
If a function is assigned, pressing the button commands the function.

2

If a function is not assigned, pressing the button displays the button configuration screen.

Button assignments may be changed as required.

# Headliner console




SVIL20TR01502EB 1

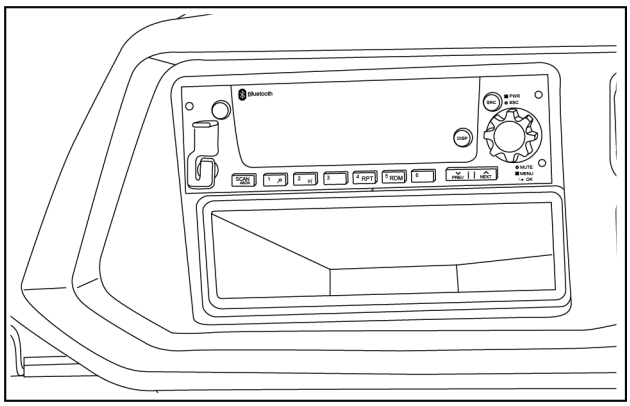
The headliner console contains:

- the DAB radio **(1)** and USB input port **(2)**,
- a small storage compartment **(3)**,
- the power mirror controls **(4)**,
- and three control pads for standard or optional switches **(5)**,
- the cab climate control pad **(6)**

## DAB Radio

Some cab options now offer an enhanced radio which features:

- Auxiliary input (for MP3 players, iphones, android phones, etc),
- USB input.
- Bluetooth pairing capability,

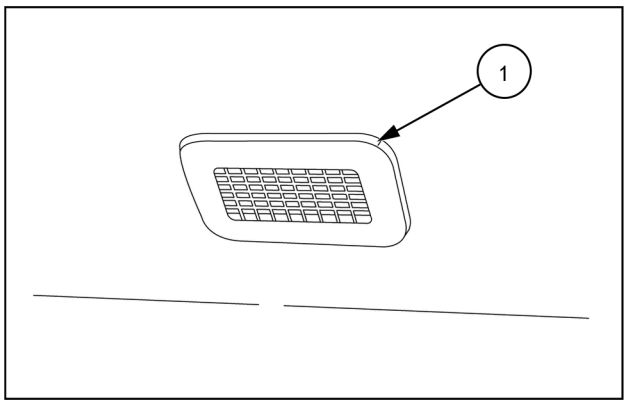


SVIL20TR02012AA 2

For instructions on using any of the radio features, refer to radio manual included with your other tractor printed manuals.

The microphone **(1)** for the Bluetooth radio, where fitted, is located in the cab headliner slightly in front of the operator's position.

The radio works with the key switch in the off or accessory position.



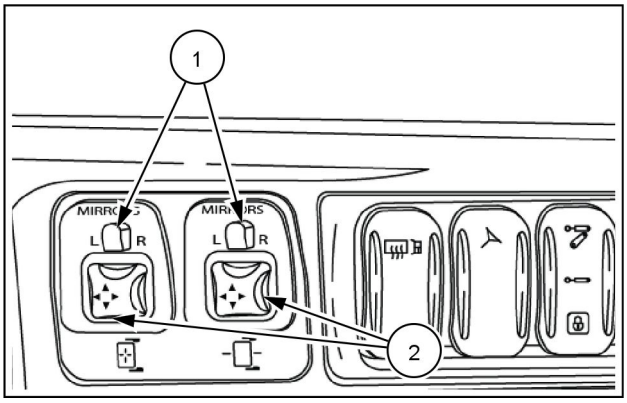

RAIL19TR01115AA 3

## Power mirrors (where fitted)

### Tilt controls

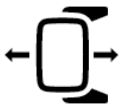
Use the three-position L-R control **(1)** to select the left-hand or right-hand upper mirror for adjusting. The center position is the off position.

Use the four-position control **(2)** to adjust the vertical and/or horizontal tilt of the selected upper mirror.




SVIL21TR00332AA 4

### Mirror extend/retract controls

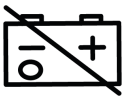


Use the three-position L-R control **(1)** to select the left-hand or right-hand upper mirror for adjusting. The center position is the off position.

Use the lower control **(2)** to retract or extend the mirror assembly.

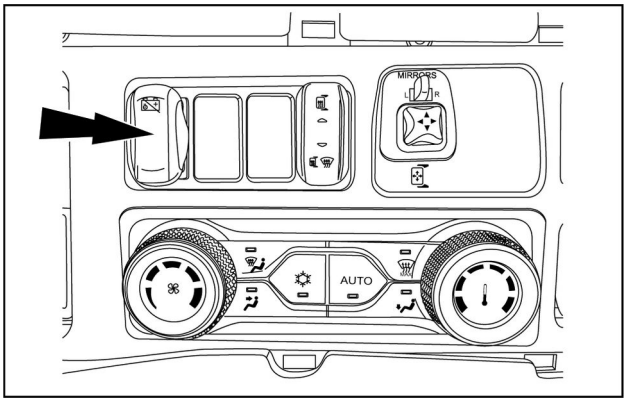
## Wake-up disable switch

The Wake-up disable switch toggles the automatic battery isolator function on/off. See page **Battery isolator functionality (55.302)** for more information.



Depress the top of the Wake-up disable switch to prevent the battery from being re-connected automatically.

Depress the bottom of the Wake-up disable switch to allow the battery to be reconnected automatically

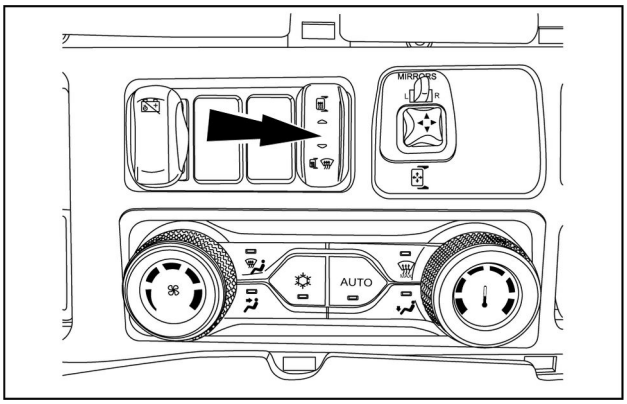



SVIL20TR01839AA 5

## Mirror/rear window defrost switch (where fitted)

Press the top of the switch to toggle the defrosters for the power mirrors and the rear window on or off. A green lamp on the switch illuminates when the switch is on.

Settings on the display HVAC screen offer further controls for these functions.



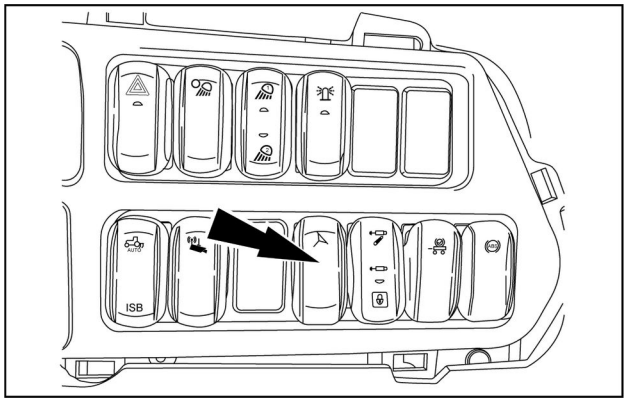

SVIL20TR01839AA 6

## Advanced steering system field/road switch (where fitted)

### ⚠ WARNING

**Loss of control!**
**Always make sure that the Field/Road switch is set to Road mode while operating the vehicle on public roads. Do not engage autoguidance while operating the vehicle on public roads.**
**Failure to comply could result in death or serious injury.**

**W1588A**




SVIL20TR01837AA 7

Press the top of the switch for field mode:

- to enable all autoguidance functions,
- to enable all advanced steering systems.

Press the bottom of the switch for road mode:

- to disable all autoguidance functions,
- to disable all advanced steering systems while driving on public roads.

***NOTE:*** *Always switch to road mode and disable autoguidance functions before driving on public roads. This prevents accidental engagement of any autoguidance functions.*

## Hydraulic master switch

**⚠ WARNING**

**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading.**
**Failure to comply could result in death or serious injury.**

**W1587A**

**⚠ WARNING**

**Misuse hazard!**
**Always use the Hydraulic Master switch to disable the rear hitch. A Drop Rate Setting of 0% is not intended to be a safety lock mechanism.**
**Failure to comply could result in death or serious injury.**

**W1603A**

**⚠ WARNING**

**Misuse hazard!**
**Always use the hydraulic master switch to disable the front hitch. A Drop Rate Setting of 0% is not intended to be a safety lock mechanism.**
**Failure to comply could result in death or serious injury.**

**W1792A**

**⚠ WARNING**

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.**
**Failure to comply could result in death or serious injury.**

**W1789A**

Use the roading switch to prevent unintended movement of hitch-mounted or remote valve-driven implements when working or traveling. When locked, the switch locks the hitch and remote valve controls and prevents the operator from accidentally lowering the implement.

***NOTE:*** *Hitch ride control, if enabled, remains active when the roading lock is active.*

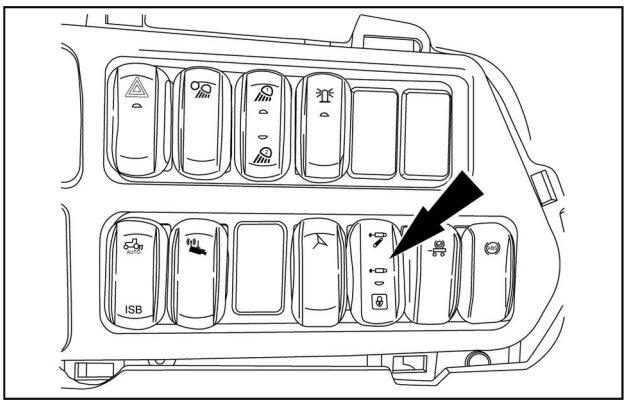
Press the top of the switch to unlock the hitch and remote valve controls.

Move the switch to the middle position to unlock the remote valve controls, but not the hitch controls.

Press the bottom of the switch to lock the hitch and remote valve controls.

A green lamp on the switch illuminates when the hitch or the hitch/remote valves are unlocked.

The lamps on the rear hitch inching buttons reflect the status of the hitch: red when locked and green when unlocked.

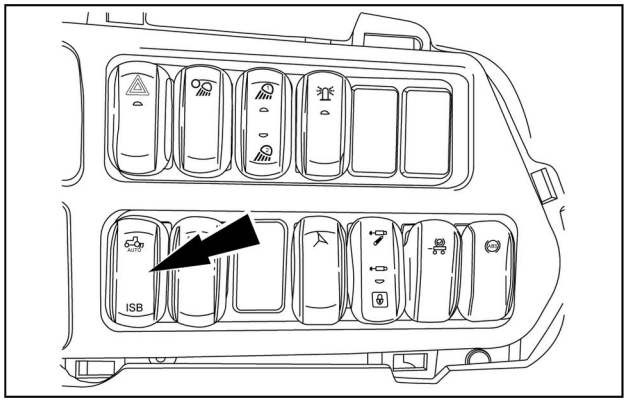



SVIL20TR01837AA 8

## ISOBUS switch (where fitted)


Press the top of the switch to enable tractor's functions control from an ISOBUS implement.

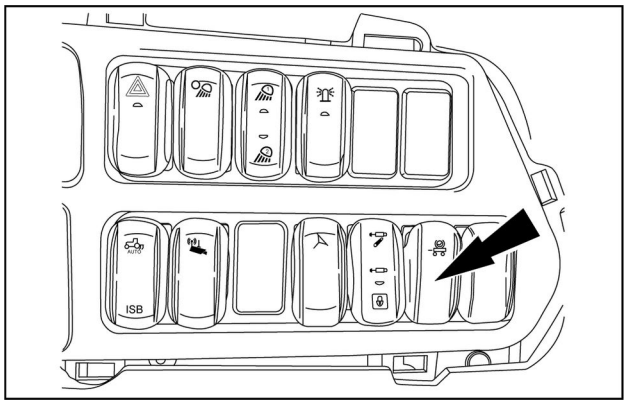

Press the bottom of the switch to disable implement actions, if the implement supports the ISB feature.




SVIL20TR01837AA 9

## Trailer brake test switch (where fitted)

Use the trailer brake release switch to determine whether the tractor park brake and trailer brakes can hold the tractor/trailer stationary as equipped.




SVIL20TR01837AA 10

To perform this test proceed as follows:

1. Stop the combination on an up or down incline.
2. Keep the engine “ON”.
3. Engage the parking brake of the tractor.
4. Check the stability of the braked combination. Only continue this test if the combination is in a safe condition.
5. Stay seated on the operator’s seat.
6. Do not depress the brake pedals during this test. Depress and hold the trailer brake release switch to momentarily disconnect the trailer’s brake performance from the tractor.

The test stops after **10 s** even if the switch is being depressed. The trailer brake re-engages and the warning symbols disappears.

If the combination does not move and stays in a safe condition, the tractor’s parking brake system alone is able to hold the combination in place. If the combination starts moving after the switch has been depressed, immediately bring the switch back into rest position. In this case, the tractor’s parking brake performance is not sufficient to hold the combination and it is not permitted to park the combination at this place.

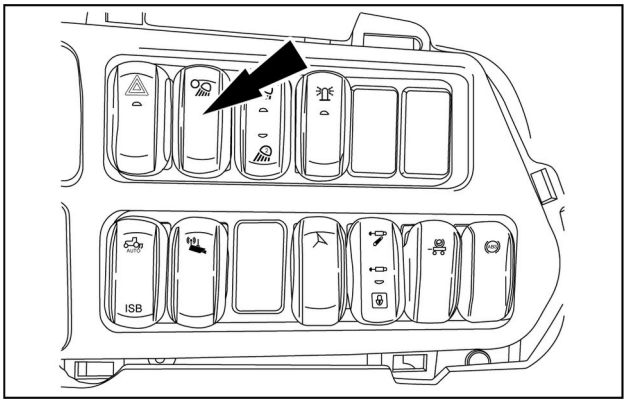
***NOTICE:*** *The tractor must remain connected to the trailer to maintain stability: the tractor parking brake may be holding part of the trailer mass. A disconnected trailer may start rolling over time damaging property and itself.*

***NOTICE:*** *For long term storage on an incline, install wheel wedges on the trailer wheels.*

## Work lamp master off switch

Press the top of the single position switch to turn all work lamps off.

***NOTE:*** *Refer to page* ***Tractor lighting (55.404)*** *for more information on working lamp controls and their interaction.*




SVIL20TR01837AA 11

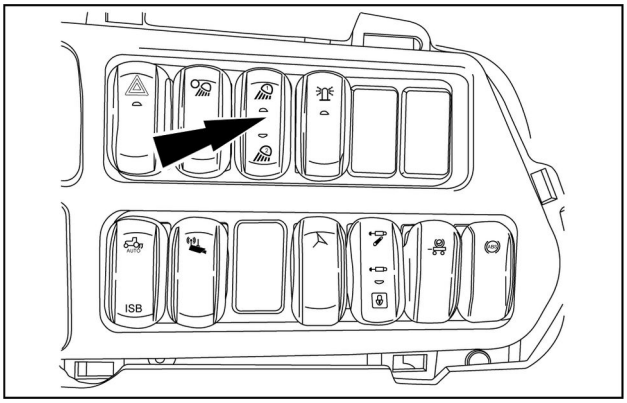
## Work lamp (Memory 1 or Memory 2)

Press the top of the switch to turn on the work lamps associated with memory 1 on the display lighting screen.

Press the bottom of the switch to turn on the work lamps associated with memory 2 on the display lighting screen.

A separate green lamp for each memory on the switch illuminates when on.

***NOTE:*** *Refer to page* ***Tractor lighting (55.404)*** *for more information on working lamp controls and their interaction.*



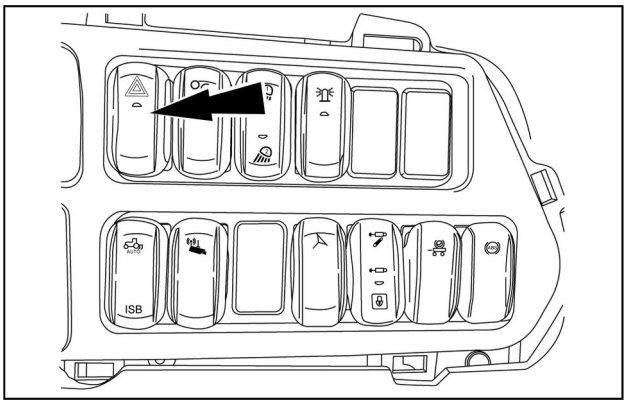

SVIL20TR01837AA 12

## Hazard lamp switch

Press the top of the switch to toggle the flashing amber warning lamps on or off.

***NOTE:*** *Hazard lamps include the front position lamps, the rear fender lamps, and the optional marker arms lamps, where fitted*

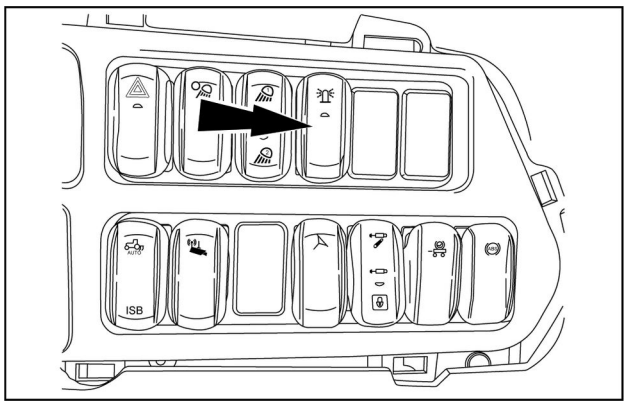
The hazard lamps illuminate even if the key switch and main lighting control are in the off position. A green lamp on the switch illuminates when the switch is on.




SVIL20TR01837AA 13

## Beacon(s) on/off switch (where fitted)

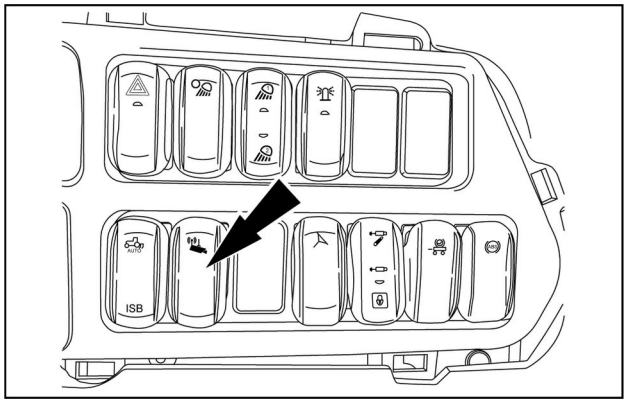
Press the top of the switch to toggle the beacon(s) on or off. A green lamp on the switch illuminates when the switch is on.




SVIL20TR01837AA 14

## Wireless camera pairing (where fitted)

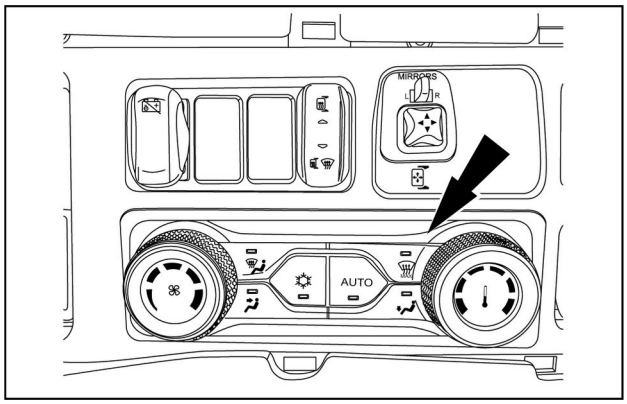
Press the top of the switch to switch the receiver into connection mode and pair a wireless camera. See page **Wireless camera (where fitted) (55.530)** for more information.




SVIL20TR01837AA 15

## Cab climate controls

Refer to page **Cab climate controls (50.200)** in this chapter for complete information on the cab climate controls.




SVIL20TR01839AA 16

# Rear three-point hitch - Operating

**⚠ WARNING**

**Misuse hazard!**
**Always use the Hydraulic Master switch to disable the rear hitch. A Drop Rate Setting of 0% is not intended to be a safety lock mechanism.**
**Failure to comply could result in death or serious injury.**

**W1603A**

The electronic hitch system has two modes of operation: Position control and Draft control.

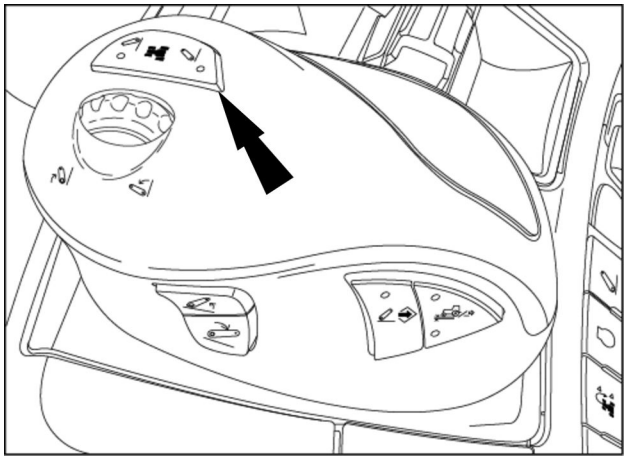
In Position control, the mouse wheel proportionally moves the linkage position.

In draft control, the hitch system adjusts hitch height to maintain a constant implement draft load on the tractor in changing soil conditions and over varying terrain.

***NOTE:*** *Ride control and wheel slip are two auxiliary modes which can be active during position control or draft control.*

## Front / rear hitch control

The front / rear hitch control selects which hitch is active. A green LED next to the icon indicates its active status. The rear hitch is active at key on by default.



RAIL18TR00411BA 1

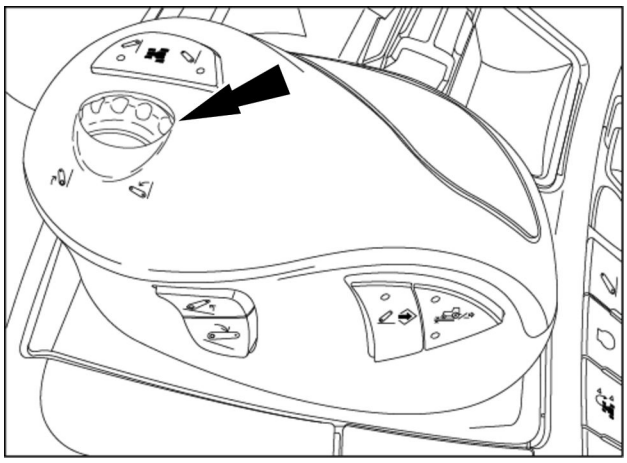
Press the front hitch icon to move control of the thumbwheel and associated functions to the front hitch, or the rear hitch icon to assign control to the rear hitch. Toggling the control will switch between the front and the rear hitch linkage. After key-OFF, the control will default to the rear hitch.

## Hitch position / Draft load control

***NOTE:*** *The mouse wheel adjusts linkage position. If Draft mode is enabled it adjusts draft load.*

Rotate the wheel forward to lower the hitch or increase draft load.

Rotate the wheel rearward to raise the hitch or decrease draft load.



RAIL18TR00411BA 2

Rolling the thumbwheel forwards or rearwards for 1 or 2 clicks while pressing down on the wheel provides Positional control of the linkage, even if Draft mode is selected. Rolling the wheel by 1 click provides slow linkage movement. Pressing and rolling the wheel by 2 clicks provides faster linkage movement.

The instrument cluster shows the position of each hitch as a percentage of travel as equipped.

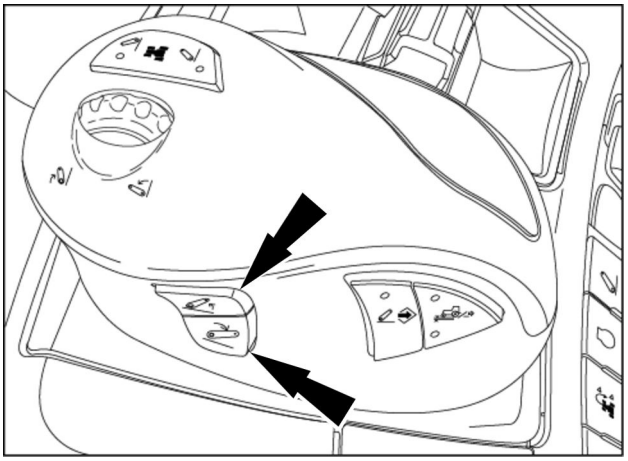
## Fast raise / hitch express lower switches

Press and release the upper switch to raise the hitch to the upper limit (out of work height) at the current raise rate setting.

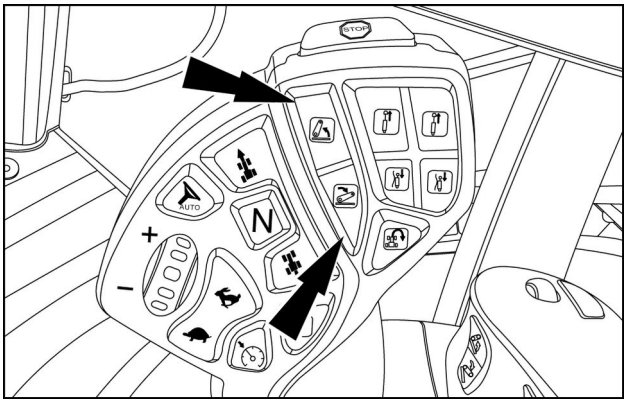
Press and release the bottom switch to lower the hitch to return the implement to work. This could be a lower limit, a stored value or the draft load, depending on operation.

Press and hold the hitch express lower switch for fast dig mode:

- Fast dig overrides any lower limit, the hitch lowers until the switch is released.
- The hitch returns to working position when released.



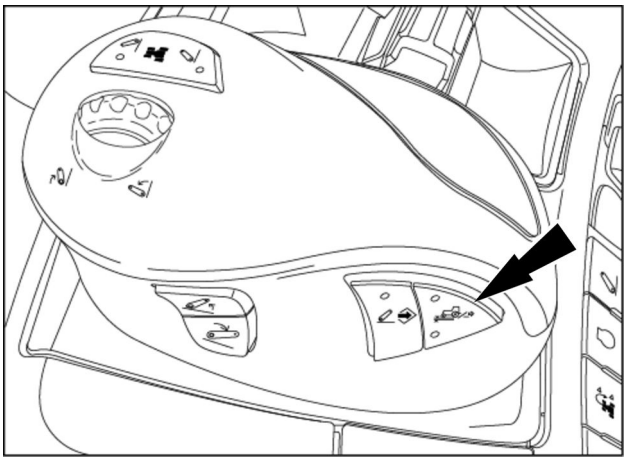
RAIL18TR00411BA 3



RAIL18TR00383AA 4

## Position / Draft Selection

Position Control:
No LED illuminated indicates that the wheel controls Position control
Draft Control:
Press once to turn Draft mode on. The LED will either flash if out of work or be steady if in work. The mouse wheel now controls Draft load
Draft Control with Auto Maximum Depth:
Pressing the control for 3 seconds enables Draft mode with the addition of an Auto Maximum Depth (AMD) lower limit. The second LED will illuminate.



RAIL18TR00411BA 5

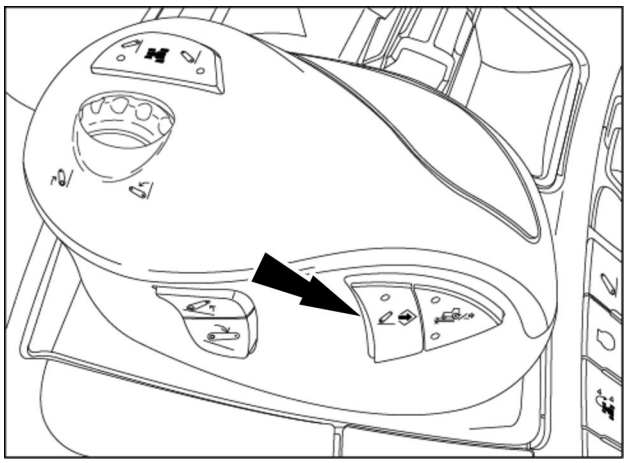
## Store Function

To store a working depth, either in Position or Draft control, the store button is pressed for **3 s**. A green bar will appear within the display bar.

Once a value is stored a momentarily press will enable or disable the value. The LED will be steady if the linkage is at the required stored value, if it not equal to the value the LED will flash.

Pressing the express lower hitch switch aligns the linkage position to a stored value. If LED is off then no stored value is active.

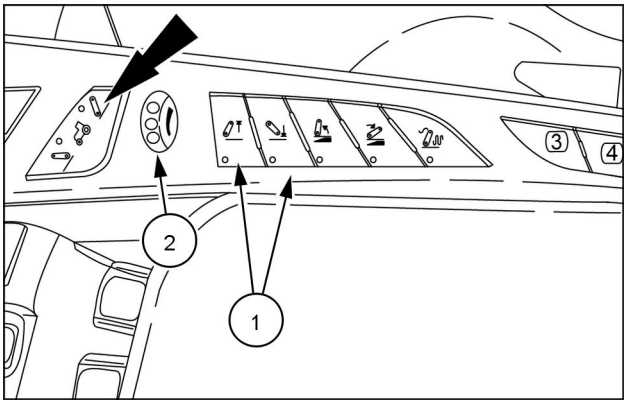
To establish a new stored value at any time press the store button again for **3 s**.



RAIL18TR00411BA 6

## Armrest Hitch Limit Controls

A front or rear control selects which linkage will be adjusted. A green LED indicates the active linkage. Toggling the control will switch between front or rear linkage.

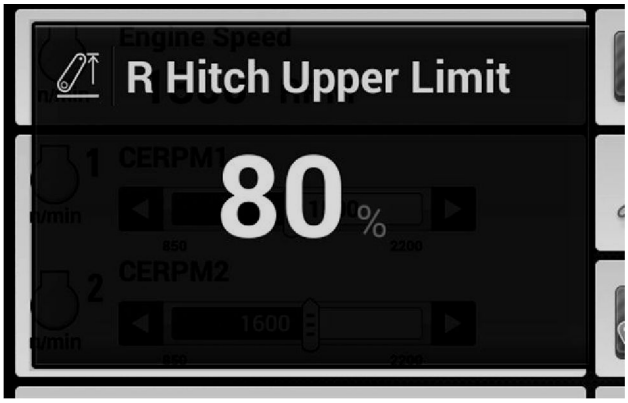



RAIL19TR00109AA 7

To adjust settings:

- Select the limit that you wish to adjust using the hitch limit buttons **(1)**. A green LED will illuminate and the current value will show on the display as a pop up
- Rotate the thumbwheel **(2)** away to increase a value and towards the seat to decrease a value. Each wheel click is 1% change in value
- Pressing down on the wheel and then rotating changes value by 5% points

A pop-up appears on the color display when a limit is selected or a value changed.




SVIL21TR00433AA 8

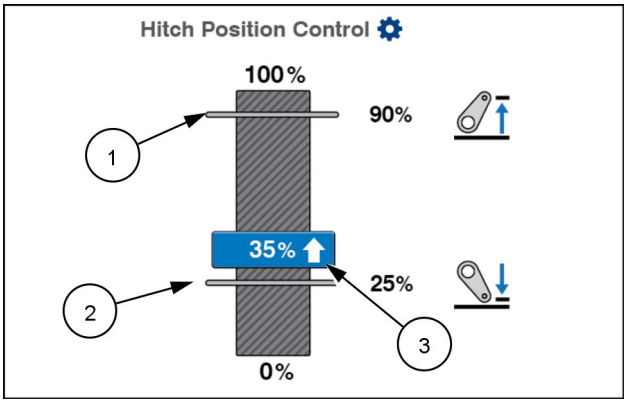
Hitch upper limit - Restricts the maximum lift height. Range is **50 – 100%**. Represented by the upper line **(1)** on the Position display.

Hitch lower limit - Restricts the lowest position of the linkage. This could be equal to the working depth if in Position control , or a lower limit below a Draft implement. Indicated by line **(2)**. Range is **0 – 99%**.

Hitch raise rate - The rate at which the linkage raises when the fast raise control is used. Range is **0 – 100%**.

Hitch drop rate - Adjusts the lowering rate when the return to work control is used. Range is **0 – 100%**

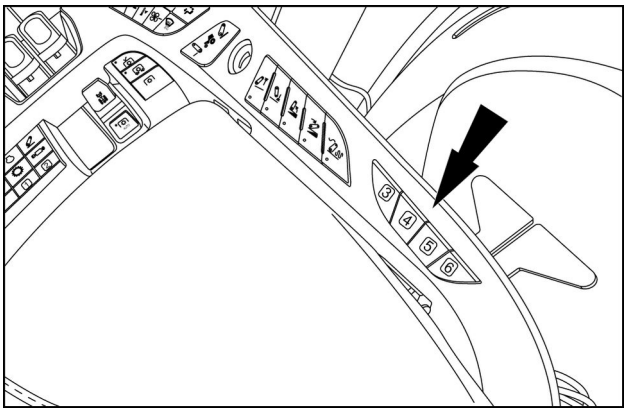
Sensitivity - The sensitivity setting applies to the draft system. The setting determines the frequency of hitch corrections to maintain a draft load. Minimum sensitivity allows a wider variation in load, fewer corrections. Maximum sensitivity would see a small load variation causing a correction, more corrections. Range is **1 – 100%**.
To assist sensitivity set up any small linkage movement is visualized within the blue bar on the display by a directional arrow **(3)**.




SVIL21TR00434AA 9

## Configurable controls

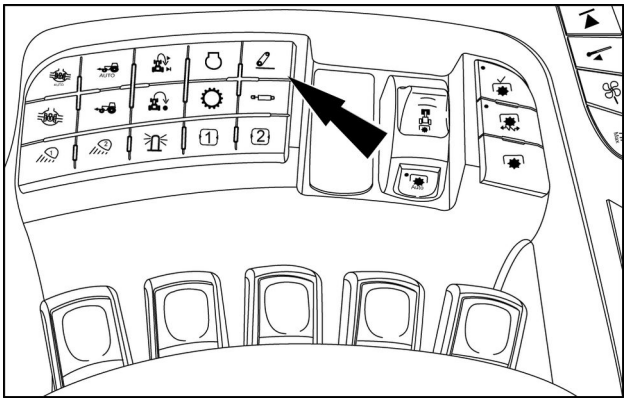
For convenience, when looking rearwards and hitching an implement, the configurable controls on the rear of the armrest can be assigned to raising or lowering the rear linkage.



RAIL18TR01036AA 10

## Hitch controls on the color display

Press the hitch button on the center armrest panel to access the rear hitch settings screen on the display. Pressing twice will toggle the display to the front linkage screen.



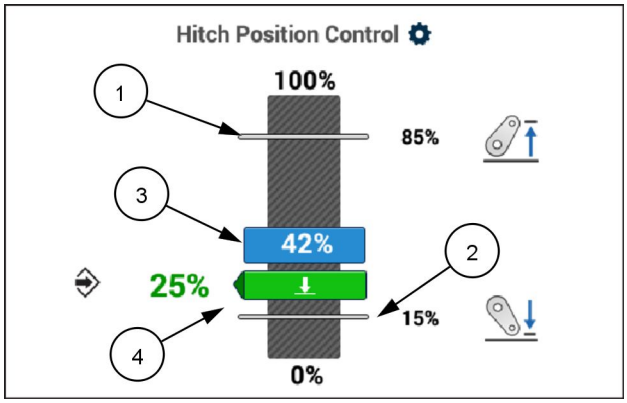
RAIL18TR00373AA 11

***NOTE:*** *Using the joystick configuration screen on the color display, rear hitch functions can be paired with the joystick controls. See* ***Armrest control configuration (90.151)****.*

## Position control display

The left side of the display graphically shows the hitch parameters:

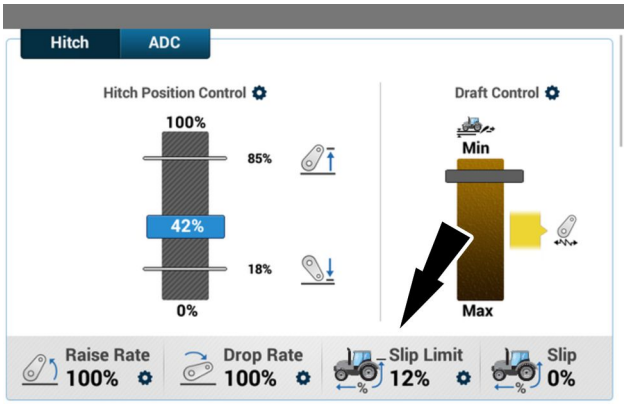
- Hitch upper limit **(1)** as a percentage of hitch travel,
- Hitch lower limit **(2)** as a percentage of hitch travel,
- Current hitch position **(3)**,
- If active, a stored hitch position is indicated by the green bar and value **(4)**.




RAIL19TR02020PA 12

The reporting window below the position control content indicates:

- the current raise rate,
- the current drop rate,
- the current slip limit setting,
- and the current wheel slip.

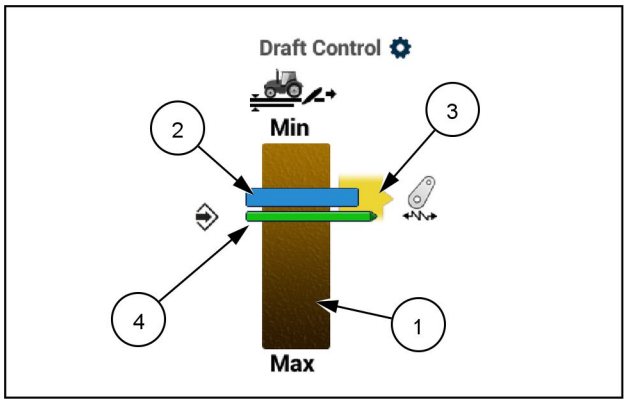



RAIL19TR02022PA 13

## Draft Control display

The right display graphically shows the Draft load and sensitivity parameters

- Draft load is shown by the graduated brown scale, the darker the shading the higher the requested load, the deeper the implement will go **(1)**
- The blue bar represents the current draft load on the linkage **(2)**
- The yellow band **(3)** illustrates how far the draft load is allowed to vary before the linkage reacts, the sensitivity.
- If active, a stored draft load is indicated by the green bar **(4)**

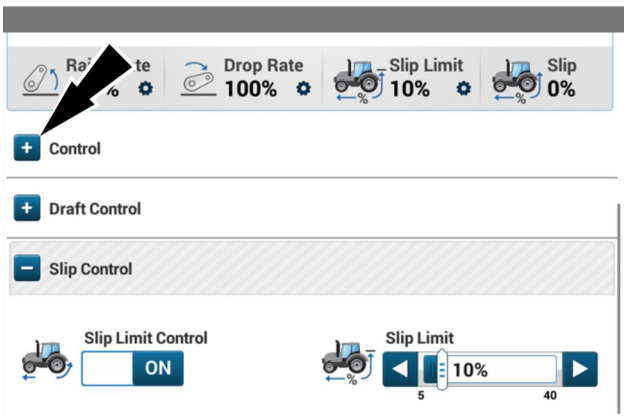



SVIL21TR00437AA 14

## Linkage display

Swiping the screen upwards will expose the hitch values in detail.

Pressing the + symbol opens the controls and values can be adjusted on the screen if required.

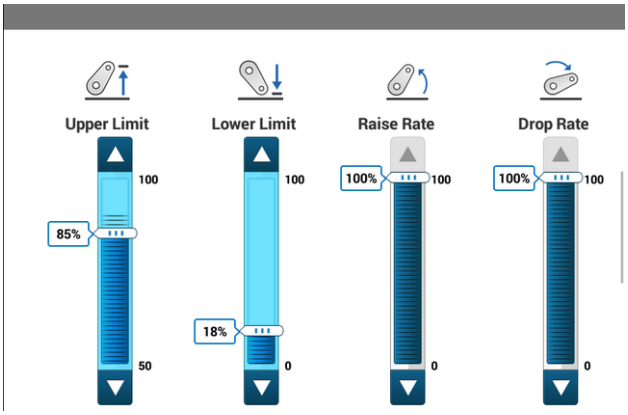



RAIL19TR02323PA 15

The slider controls on the display screen for the rear hitch show the current settings:

- for the upper limit, the height to which the hitch will raise when it is out of work,
- for the lower limit, the set point to which the hitch will lower when in work,
- for the raise rate, the speed at which the hitch will raise,
- for the drop rate, for the speed at which the hitch will drop.

The settings can be changed with the slider controls on the display or the hitch setting controls on the armrest.




RAIL19TR02330PA 16

## Roading

### ⚠ WARNING

**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading.**
**Failure to comply could result in death or serious injury.**

W1587A

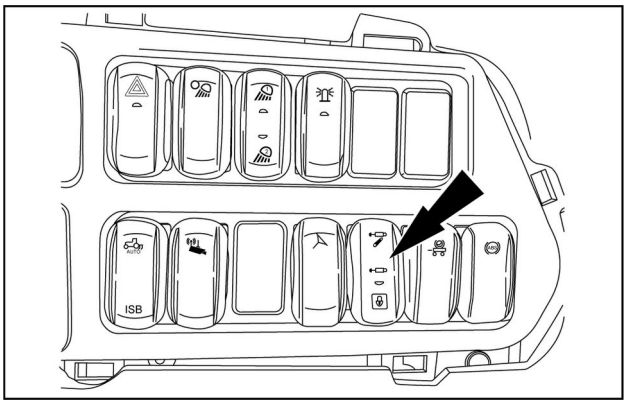
### ⚠ WARNING

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.**
**Failure to comply could result in death or serious injury.**

W1789A

Always fully raise the hitch for road transport.

Use the Hydraulic master switch in the headliner to lock the hitch and remote valves during road transport.




SVIL20TR01837AA 17

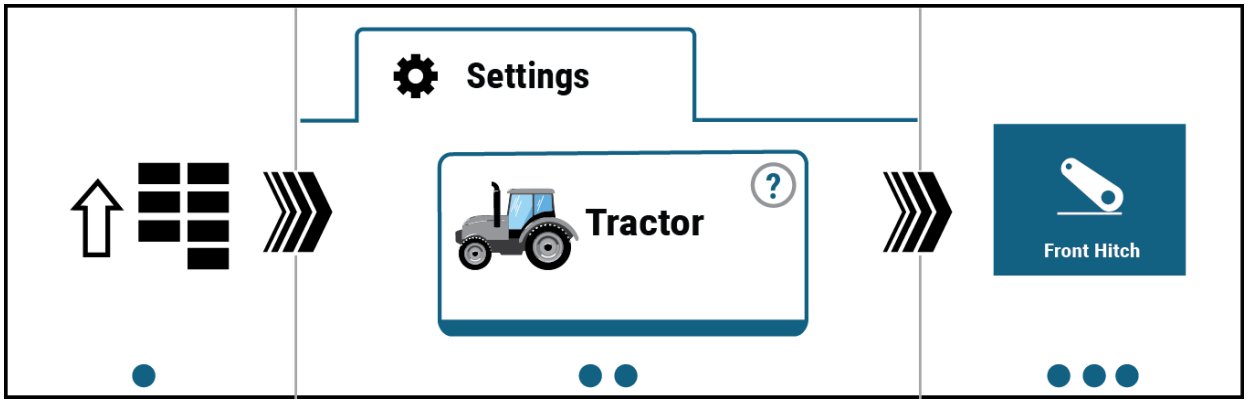
# Front hitch operation

**⚠ WARNING**

**Misuse hazard!**
**Always use the hydraulic master switch to disable the front hitch. A Drop Rate Setting of 0% is not intended to be a safety lock mechanism.**
**Failure to comply could result in death or serious injury.**

W1792A

## Navigation




RAIL19TR00292SA 1

***NOTE:*** *Navigate to the display front hitch settings screen.*

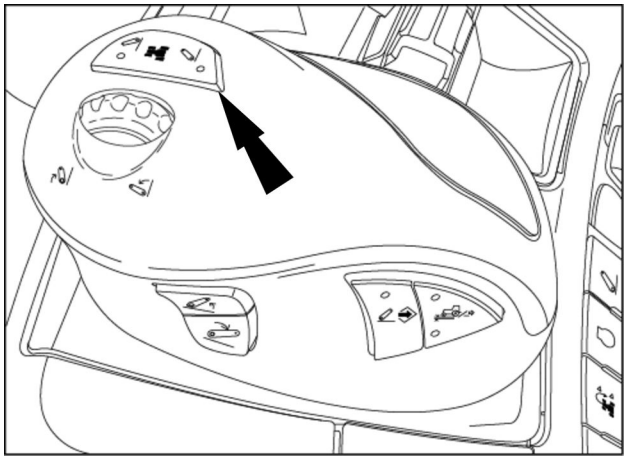
The front hitch system works in position control mode only and requires either a front or rear remote valve.

In position control, the hitch mirrors the movement of the thumbwheel position control on the mouse.

***NOTE:*** *Draft control, ride control and slip limit control are not available for the front hitch system.*

## Front/rear hitch control

The front/rear hitch control selects which hitch is active. A green LED next to the icon indicates its active status. The rear hitch is active at key on by default.



RAIL18TR00411BA 2

Press the front hitch icon to make the front hitch active for **5 s**. If a control is not pressed within **5 s**, the rear hitch becomes active.

Press and hold the front hitch icon for **5 s** to latch control to the front hitch. The front hitch remains active until the rear hitch is selected or key off.

## Hitch position control (where fitted)

Rotate the thumbwheel forward to lower the hitch.

Rotate the thumbwheel rearward to raise the hitch.

While rotating the control, press and hold down the thumbwheel to move the hitch at the speed of the selected drop or raise rate.

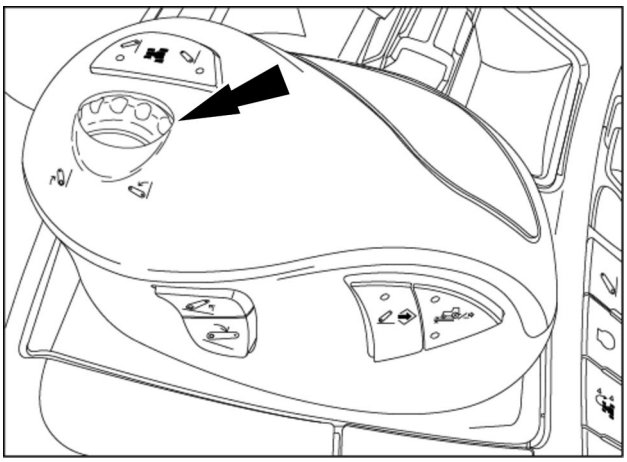
Rotating the control unpressed moves the hitch **1%** with each click. Spinning the thumbwheel moves the hitch continuously.

The instrument cluster shows the position of the front hitch as a percentage of travel.

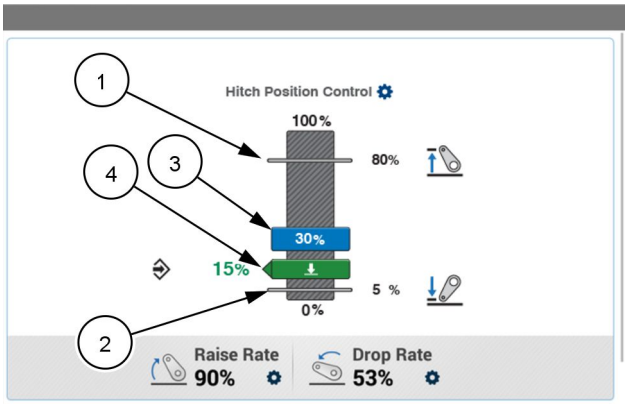
The front hitch display screen indicates:

- with the upper gray line **(1)**, the selected upper limit (out of work height) as a percentage of hitch travel,
- with the lower gray line **(2)**, the set point (working depth) as a percentage of hitch travel,
- with the blue line **(3)**, the current position of the hitch as a percentage of calibrated travel,
- with the green line **(4)**, the Recall set point (working depth) setting.

The UDW for front hitch position control can be placed on a Run screen.



RAIL18TR00411BA 3



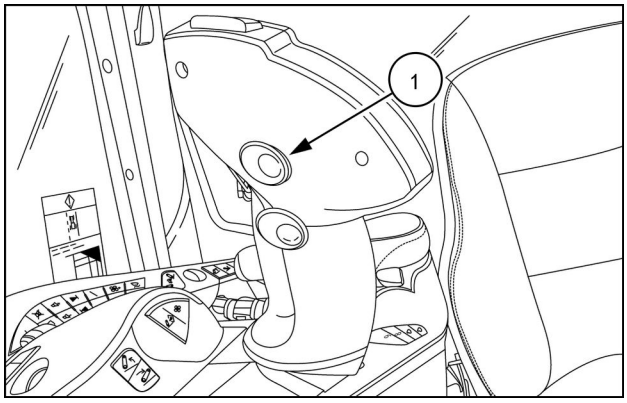

RAIL19TR02331PA 4

## Express buttons

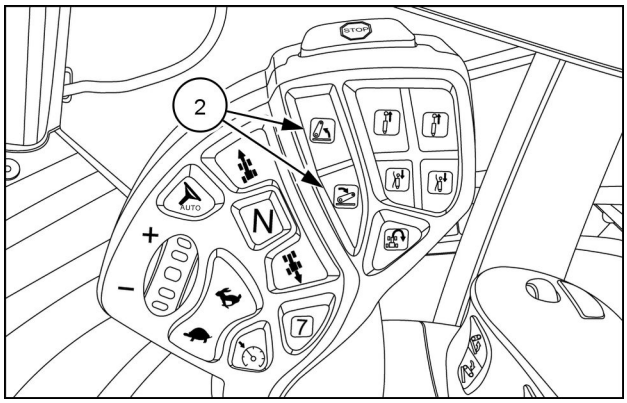
Use the second function button **(1)** with the hitch express raise and lower buttons **(2)** on the multi function handle to command the front hitch.

Press the hitch express raise button, while holding the second function button, to raise the front hitch to the upper limit (out of work height) at the current raise rate setting.

Press the hitch express lower button, while holding the second function button, to lower the front hitch to the set point (working depth) at the current drop rate setting.




RAIL18TR00381AA 5

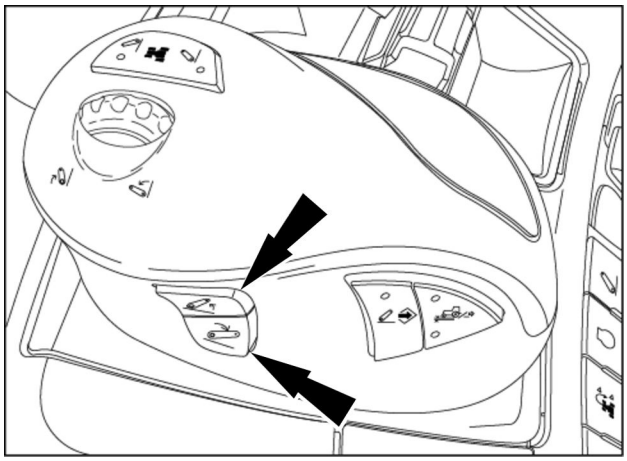



RAIL18TR00383AA 6

Alternatively, select the front hitch, and then use the hitch express raise and lower buttons on the mouse to command the front hitch.

Press and release the top of the control to raise the hitch to the upper limit (out of work height) at the current raise rate setting.

Press and release the bottom of the control to lower the hitch to the lower limit (set point) at the current drop rate setting.



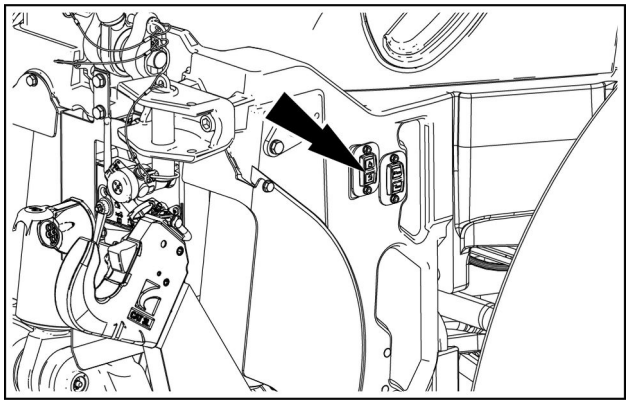
RAIL18TR00411BA 7

Use the front hitch inching controls, located on the left-hand side of the front hitch, to make small adjustments to hitch position. The inching range is bounded by the upper and lower limit settings. The inching controls only function when the tractor is stationary.

Press and release the lower inching control to lower the hitch a small increment. Press and hold the control to slowly lower the hitch as long as the control is held.

Press and release the raise inching control to raise the hitch a small increment. Press and hold the control to slowly raise the hitch as long as the control is held.

***NOTE:*** *When necessary, the front axle can be lowered by releasing and depressing the lower inching control again after the hitch has reached it's minimum height.*

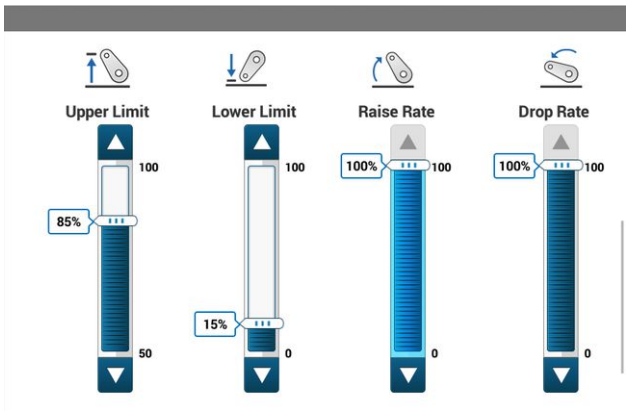


SVIL22TR01827AA 8

The slider controls on the display screen for the front hitch show the current settings:

- for the upper limit, the height to which the hitch will raise when it is out of work,
- for the lower limit, the set point to which the hitch will lower when in work,
- for the raise rate, the speed at which the hitch will raise,
- for the drop rate, for the speed at which the hitch will drop.

The settings can be changed with the slider controls on the display or the hitch setting controls on the armrest.

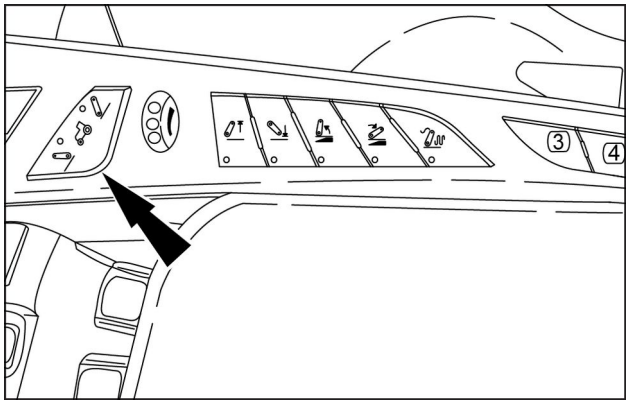



RAIL19TR02021PA 9

## Lower right-hand armrest controls

The front/rear hitch control selects which hitch is active. A green LED next to the icon indicates its active status. The rear hitch is active at key on by default.

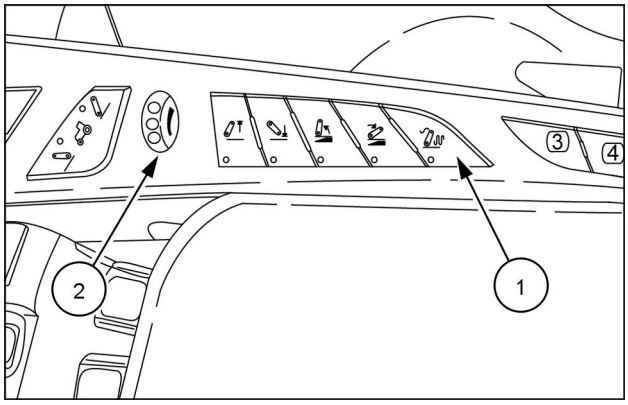
Press the front hitch icon to move control of the thumb-wheel and associated functions to the front hitch, or the rear hitch icon to assign control to the rear hitch. Toggling the control will switch between the front or rear hitch linkage. At key-Off, the setting will default to the rear hitch.




RAIL19TR00109AA 10

To adjust hitch settings:

- Press the button **(1)** for the setting which requires adjustment.
- Rotate the thumbwheel **(2)** away from the seat to increase a setting value.
- Rotate the thumbwheel toward the seat to decrease a setting value.




RAIL19TR00109AA 11

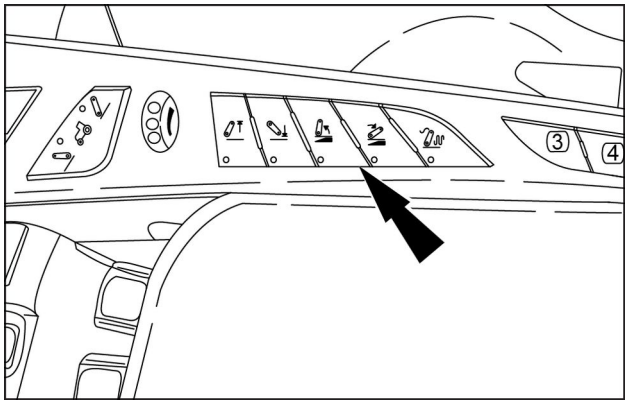
Use the thumbwheel control to select a new value.

Hitch upper limit. The upper limit setting adjusts the out of work height for the hitch. Available range is **50 – 100%**.

Hitch lower limit. The hitch lower limit adjusts the set point (working depth) of the implement. Available range is **0 – 99%**, but the top of the range is bounded by the current upper limit setting.

Hitch raise rate. The raise rate setting adjusts the speed at which the hitch raises. Available range is **0 – 100%**.

Hitch drop rate. The drop rate setting adjusts the speed at which the hitch drops when lowering. Available range is **0 – 100%**




RAIL19TR00109AA 12

If no button is selected on the switch panel, and the toggle button is assigned to the rear hitch, the thumbwheel on the switch panel **(1)** will control either the rear hitch position, or the draft setting, according to the mode selected.

## Setting save/recall

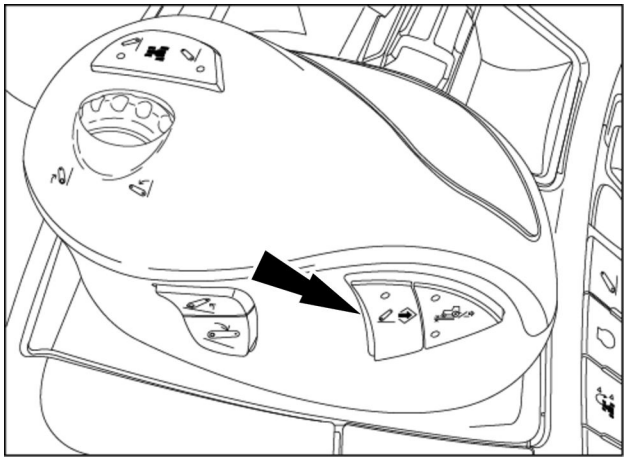
Press and release the button to toggle the saved set point on or off.

Press and hold the button for **3 s** to store the current set point.

The stored value is saved through key cycles until replaced.

The green LED on the button:

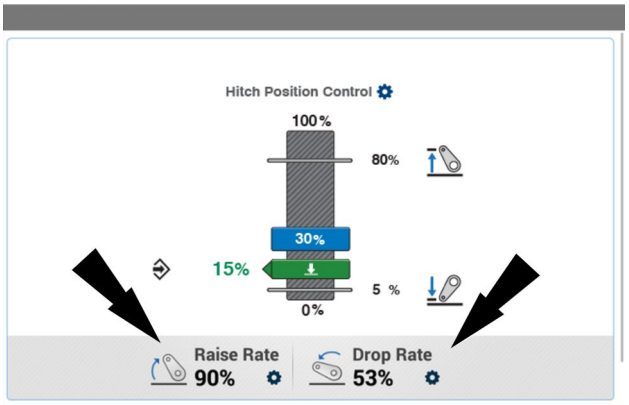
- illuminates steady when recall is active,
- blinks when the recall value is not equal to the current working depth,
- is off when recall is not active.



RAIL18TR00411BA 13

The reporting window below the position control content indicates:

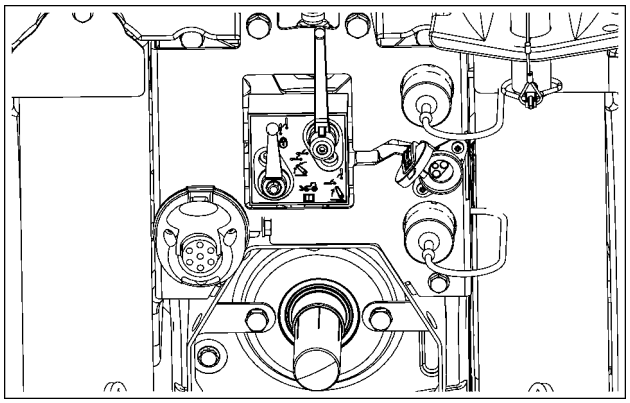
- the current raise rate,
- and the current drop rate.




RAIL19TR02331PA 14

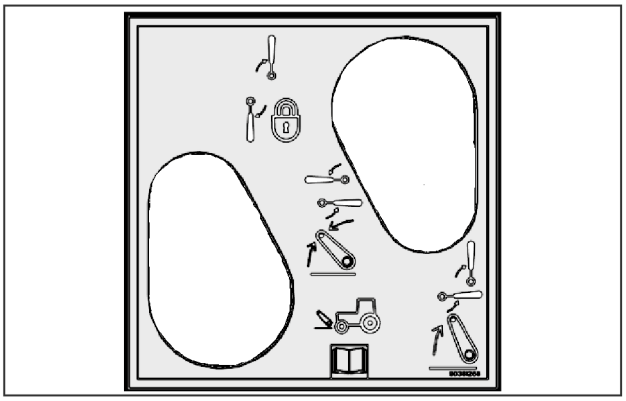
## Setting the Hitch Operating Mode with Standard axle

Located on the front of the hitch assembly, the two selector levers permit the front hitch to be operated in single-acting mode, double-acting mode, or to be set at a fixed height..



SVIL17TR01907AA 15

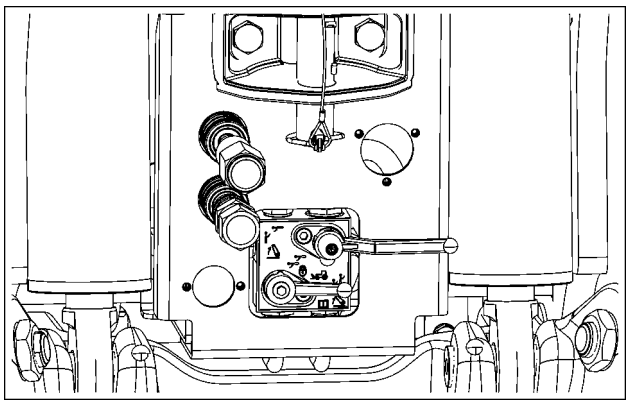
- Single-acting mode: Right-hand lever vertical, left-hand lever horizontal. Front hitch operates in single-acting mode being hydraulically raised but lowered using weight of implement.
- Lock position: Both levers vertical. With the levers in this position, both lift cylinders are hydraulically 'locked' preventing movement of the lower link arms. It is recommended this mode should be selected when transporting front mounted equipment on the highway.
- Double-acting mode: Both levers horizontal. Hitch operates in double-acting mode being hydraulically raised and lowered. Operating in this mode will provide additional penetration for ground engaging equipment in hard soil conditions or when using a front mounted scraper blade.



SVIL22TR02037AA 16

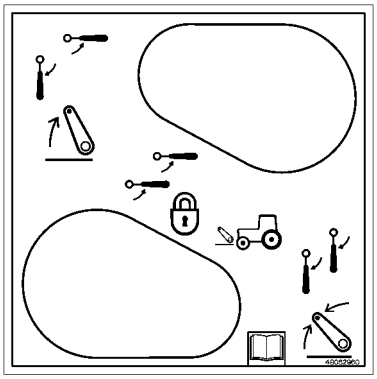
## Setting the Hitch Operating Mode with SuperSteer axle

Located on the front of the hitch assembly, the two selector levers permit the front hitch to be operated in single-acting mode, double-acting mode, or to be set at a fixed height..



SVIL17TR01906AA 17

- Single-acting mode: Upper lever vertical, lower lever horizontal. Front hitch operates in single-acting mode being hydraulically raised but lowered using weight of implement.
- Lock position: Both levers vertical. With the levers in this position, both lift cylinders are hydraulically 'locked' preventing movement of the lower link arms. It is recommended this mode should be selected when transporting front mounted equipment on the highway.
- Double-acting mode: Both levers horizontal. Hitch operates in double-acting mode being hydraulically raised and lowered. Operating in this mode will provide additional penetration for ground engaging equipment in hard soil conditions or when using a front mounted scraper blade.



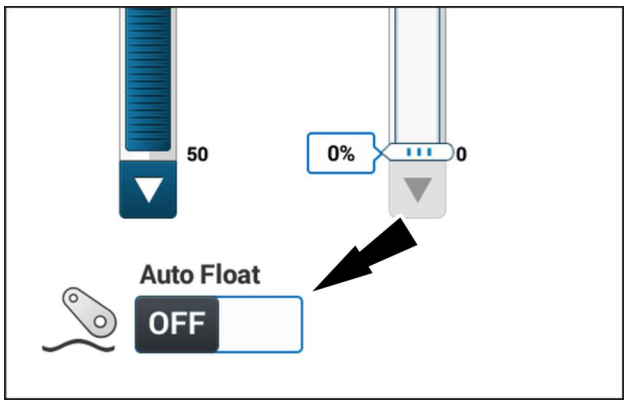
SVIL17TR00370AA 18

## Auto Float Mode (where fitted)

The front hitch uses the float feature of the front or rear remote valve which powers it to offer Auto Float mode for the front hitch.

When Auto Float is enabled:

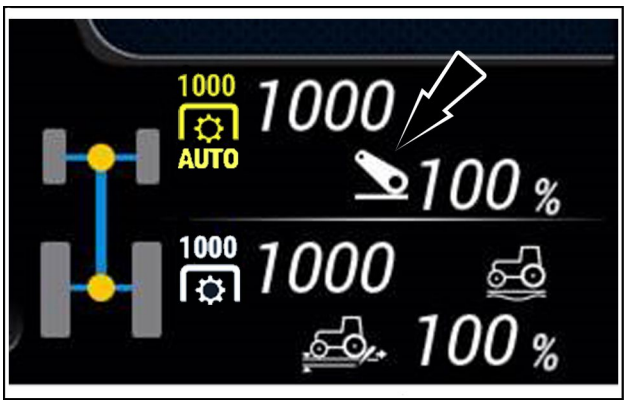
- the front hitch automatically enters float mode when lowered to within **2%** of its set point (working depth) with the express lower button,
- the front hitch moves up and down freely (within its mechanical limitations) to follow the ground contour.




RAIL19TR02336PA 19

Auto Float is toggled on/off with the control on the setting screen for the front hitch on the display.

The Auto Float icon displays on the instrument cluster whenever the mode is active.




SVIL20TR00781PA 20

Auto Float is disabled when the mode is toggled off with the display button or if the front hitch position is adjusted with any other control (other than the express raise and lower buttons).

## Roading

**⚠ WARNING**

**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading.**
**Failure to comply could result in death or serious injury.**

**W1587A**

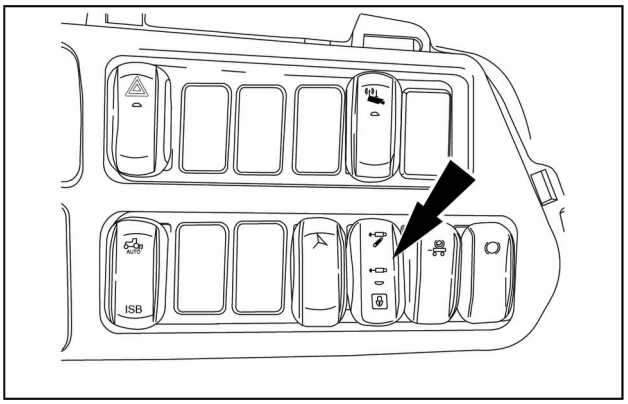
**⚠ WARNING**

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.**
**Failure to comply could result in death or serious injury.**

**W1789A**

Always fully raise the hitch for road transport.

Use the hydraulic master switch in the headliner to lock the hitch and remote valves during road transport.




SVIL21TR00475AA 21

# Hydraulic master switch

**⚠ WARNING**

**Moving parts!**
**Always use the Hydraulic Master switch to disable the hitch and remote valve controls before roading.**
**Failure to comply could result in death or serious injury.**

**W1587A**

**⚠ WARNING**

**Misuse hazard!**
**Always use the hydraulic master switch to disable the front hitch. A Drop Rate Setting of 0% is not intended to be a safety lock mechanism.**
**Failure to comply could result in death or serious injury.**

**W1792A**

**⚠ WARNING**

**Unexpected machine movement!**
**Always use the machine's locking devices to prevent any unintentional movements of the machine (mounted or towed) or parts of it that may occur while roading or servicing (unfold, swing out, or other). Read and follow all related instructions in the manual provided by the machine manufacturer.**
**Failure to comply could result in death or serious injury.**

**W1789A**

**⚠ WARNING**

**Misuse hazard!**
**Always use the Hydraulic Master switch to disable the rear hitch. A Drop Rate Setting of 0% is not intended to be a safety lock mechanism.**
**Failure to comply could result in death or serious injury.**

**W1603A**

When travelling between fields or on the highway, both the hitch and remote valve controls should be disabled.

Use the hydraulic master switch to prevent unintended movement of hitch-mounted or remote valve-driven implements. When locked, the switch locks the hitch and remote valve controls and prevents the operator from accidentally lowering the implement.

***NOTE:*** *Hitch ride control, if enabled, remains active when the roading lock is active.*

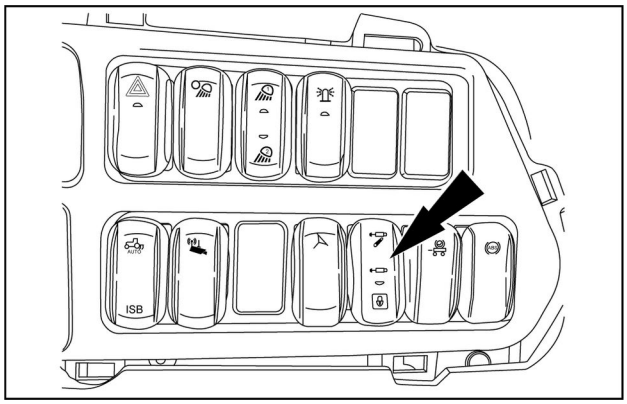
Press the top of the switch to unlock the hitch and remote valve controls.

Move the switch to the middle position to unlock the remote valve controls, but not the hitch controls.

Press the bottom of the switch to lock the hitch and remote valve controls.

A green lamp on the switch illuminates when the hitch or the hitch/remotes are unlocked.

The lamps on the rear hitch inching buttons reflect the status of the hitch: red when locked and green when unlocked.




SVIL20TR01837AA 1

This maintenance step below is required **EVERY 750 HOURS OR EVERY 2 YEARS**.

### Check the handbrake

The handbrake should be checked and adjusted by your authorized dealer as the procedures require the removal of some components.