

6 - WORKING OPERATIONS

GENERAL INFORMATION

Installing attachments

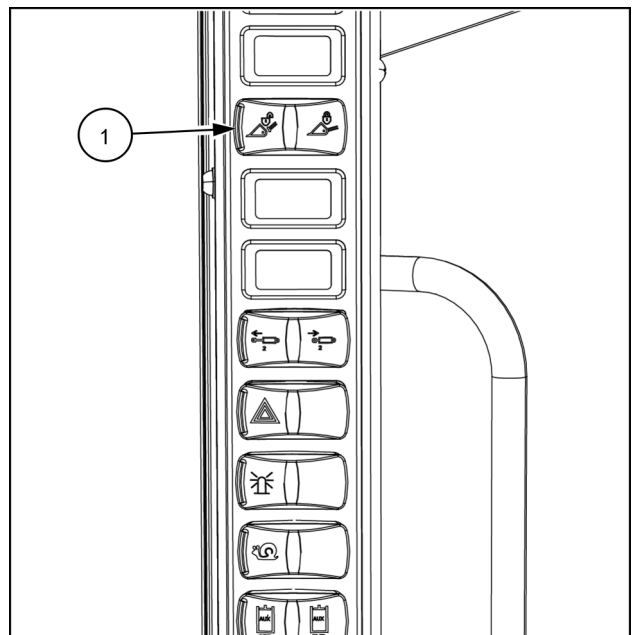
The hydraulic coupler allows the operator to remain in the operator seat and quickly change loader arm attachments.

The hydraulic coupler switch must be used in conjunction with the one of the three hydraulic functions (held to the end of its stroke). To simplify the instructions only one of the three hydraulic functions is mentioned.:

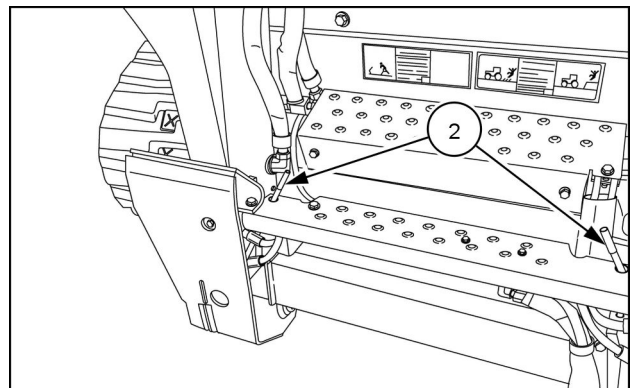
- The control lever's auxiliary switch
- The loader arm down operation
- The attachment curl-in operation

NOTE: *If you have any questions about installing attachments, contact your CASE CONSTRUCTION dealer.*

1. Confirm the red markings on the indicator pins (2) are visible (unlock position). If the red markings are not visible, press and hold the hydraulic coupler switch (1) in the unlock direction. With the other hand activate and hold the control lever's auxiliary switch until the red markings are visible and fully raised.
2. Tilt the hydraulic coupler forward.



RAIL21SSL0602BA 1



RAIL14SSL0840AA 2

3. Slowly move the machine toward the attachment until both tabs (3) on top of the coupler are underneath and in alignment with the attachment's mounting points (4).
4. Raise the loader arm enough to engage the attachment.
5. Curl the coupler back towards the machine until the attachment is completely resting on the coupler and off the ground.

NOTE: In the next step, if the indicator pins do not retract you may need to reposition the attachment on the coupler.

6. Activate the auxiliary switch on the control lever to the end of its control stroke. The indicator pins (2) on the coupler will retract into the lock position and the red markings will no longer be visible on the indicator pins.
7. Slowly raise and roll the attachment outward. Do not leave the operator seat but make a visual inspection from the cab that the hydraulic coupler's lower lock pins (1) extend fully into the attachment's lower tab slots.

8. **⚠ WARNING**

Falling object hazard!

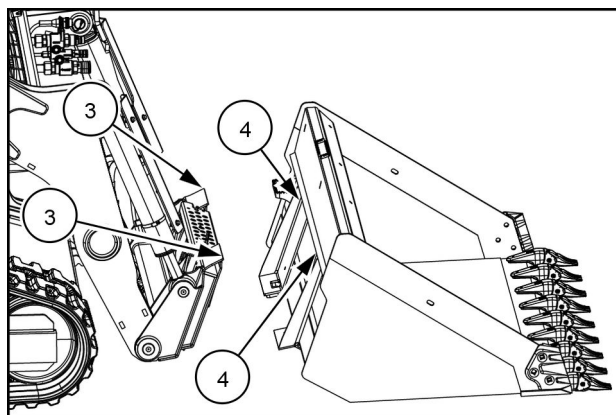
Before operating the machine, always make sure the bucket or attachment is securely locked into the coupler. A loader bucket or attachment that is not securely locked into the coupler could come off during loader operation.

Failure to comply could result in death or serious injury.

W0947A

Make sure that the attachment is secure and safe to use. Operate the attachment through the full range of motions before you begin normal work operations.

9. If applicable, make the hydraulic and/or electrical connection from the attachment to the auxiliary hydraulic connectors. See "Auxiliary hydraulics" 6-4 or "Enhanced High Flow (EHF) auxiliary hydraulics" 6-5.



RAIL21SSL0591BA 3

Removing attachments

The hydraulic coupler allows the operator to remain in the operator seat and quickly change loader arm attachments.

The hydraulic coupler switch must be used in conjunction with the one of the three hydraulic functions (held to the end of its stroke):

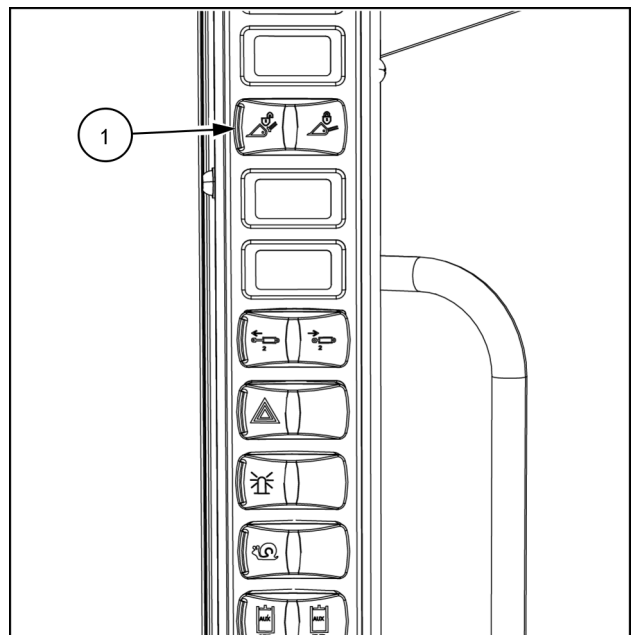
- The control lever's auxiliary switch
- The loader arm down operation
- The attachment curl-in operation

To simplify the instructions only one of the three hydraulic functions is mentioned.

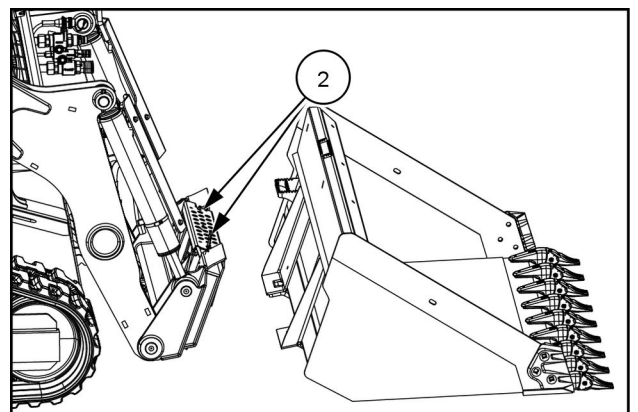
NOTE: If you have any questions about installing or removing attachments, contact your CASE CONSTRUCTION dealer.

1. If applicable disconnect the attachments hydraulic and electrical connections. See "Auxiliary hydraulics" **6-4** or "Enhanced High Flow (EHF) auxiliary hydraulics" **6-5**.
2. Position the attachment above the dismount surface.
3. Press and hold the hydraulic coupler switch **(1)** in the unlock direction. With the other hand activate and hold the control lever's auxiliary switch.
4. Continue to hold the switches as you watch for the red markings on the indicator pins **(2)** to appear. Visible red markings indicate the coupler is in the unlock position.
5. Release the control lever's auxiliary switch and the hydraulic coupler switch.
6. Place the attachment on the dismount surface, roll the coupler out, and back the machine away from the attachment.
7. Roll the coupler back after clearing the attachment.

NOTICE: Do not roll the coupler out when the loader arm is down against the loader arm stops and no attachment is connected to ensure that the coupler pins do not contact the ground.



RAIL21SSL0602BA 1



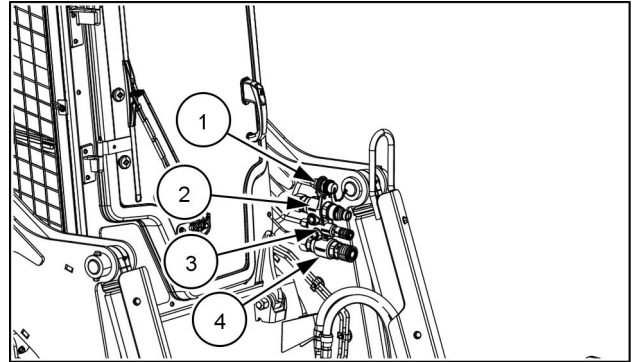
RAIL21SSL0591BA 2

Auxiliary hydraulics

Follow the attachment's operator's manual on specific installation procedures, operation, and removal procedures. The auxiliary hydraulic feature provides hydraulic oil pressure and flow to the auxiliary circuit.

Auxiliary hydraulic couplers are located on the left-hand loader arm. These connections will provide **91 L/min (24 US gpm)** with Standard flow auxiliary hydraulics enabled or **155 L/min (41 US gpm)** with High flow auxiliary hydraulics (default setting) enabled, both at **238 bar (3450 psi)**. Refer to "Implement Auxiliary Flow Control" under the "Machine Settings" **3-51** for more details on auxiliary flow activation.

- Electrical connection **(1)**, if equipped.
- Male work port **(2)** – 3/4 inch coupler size
- Case drain port **(3)** – 3/8 inch coupler size
- Female work port **(4)** – 3/4 inch coupler size

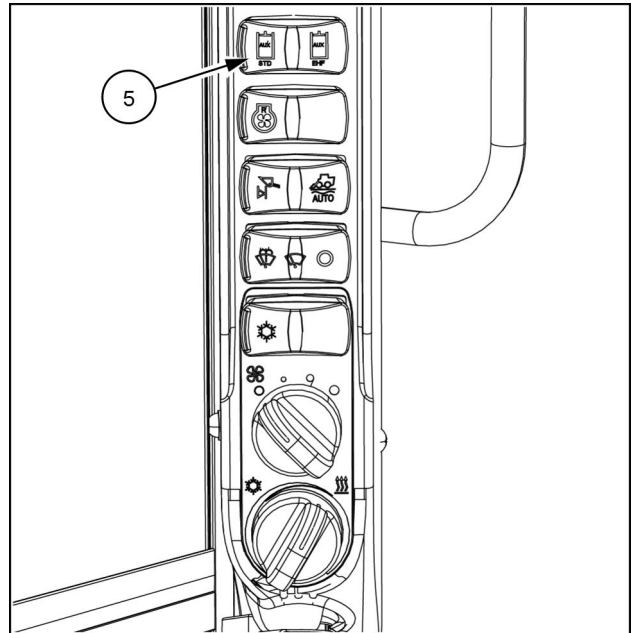


RAIL21SSL0705AA 1

Use the Proportional Auxiliary thumbwheel on the right-hand control lever to operate the attachment connected to the auxiliary hydraulics ports. See "Control lever switch configurations" **3-20** for more details.

Press the STD side of the auxiliary hydraulic switch **(5)** on the left-hand front console to activate Standard Flow auxiliary hydraulics.

Press the STD side of the auxiliary hydraulic switch **(5)** again to deactivate Standard Flow auxiliary hydraulics. High flow auxiliary is the default setting.

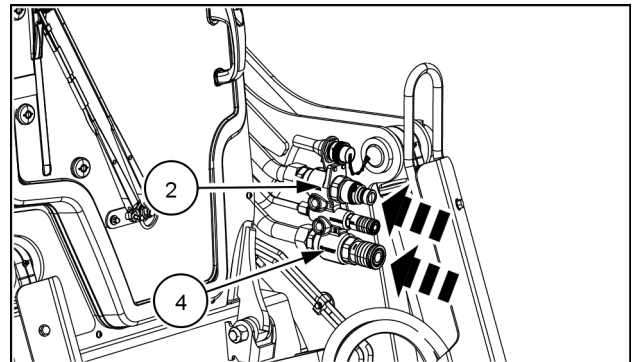


RAIL21SSL0601BA 2

Relieve pressure before connecting attachment hoses

Machines are built with a Connect-Under-Pressure (CUP) valve for the auxiliary hydraulic quick disconnects. Follow this procedure to relieve the pressure prior to connecting the hydraulic hoses from the attachment:

1. Using the palm of your hand push the 3/4 inch female quick disconnect coupling **(4)** toward CUP valve. When done properly, the coupling will move about **10 mm (0.4 in)**, relieving the stored pressure.
2. Perform the same action for the 3/4 inch male quick disconnect coupling **(2)**, relieving the stored pressure.



RAIL21SSL0709AA 3

Enhanced High Flow (EHF) auxiliary hydraulics

The optional Enhanced High Flow (EHF) auxiliary hydraulic feature provides **155 L/min (41 US gpm)** at **283 bar (4100 psi)** to the auxiliary circuit. Follow the attachment's operator's manual on specific installation procedures, operation, and removal procedures.

NOTE: The Enhanced High Flow setting can only be used with approved attachments and is controlled by a circuit interlock installed at the multifunction plug with the attachment.

NOTE: All approved Enhanced High Flow (EHF) attachments will have an electrical connection. This prevents operating attachments that are not approved to handle **283 bar (4100 psi)** in EHF mode.

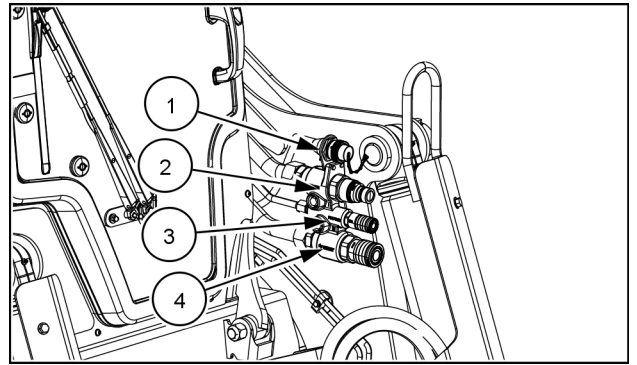
NOTICE: If the circuit interlock connection is not made with the attachment and the EHF mode switch is engaged, only standard High Flow will be available on the EHF couplers.

NOTICE: The proportional auxiliary thumbwheel must stay in the neutral position when not in use or required. Overheating of the hydraulic oil or poor attachment operation may occur.

Refer to "Implement Auxiliary Flow Control" under the "Machine Settings" **3-51** for more details on auxiliary flow control activation.

- Electrical connection **(1)**.
- Male work port **(2)** – 3/4 inch coupler size
- Case drain port **(3)** – 3/8 inch coupler size
- Female work port **(4)** – 3/4 inch coupler size

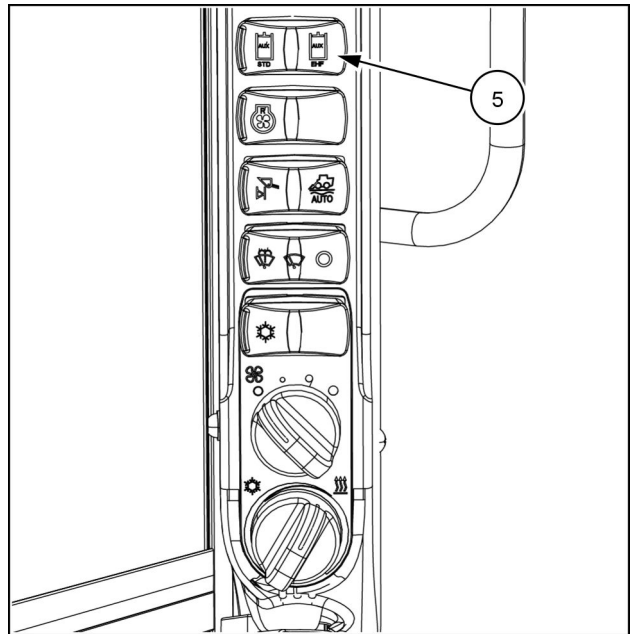
Before operating the approved attachment, confirm the electrical connection **(1)** is secured in place.



RAIL21SSL0709AA 1

Press the EHF side of the auxiliary hydraulic switch **(5)** on the left-hand front console to activate Enhanced High Flow.

Press the EHF side of the auxiliary hydraulic switch **(5)** again to deactivate Enhanced High Flow. High flow hydraulics is the default setting.

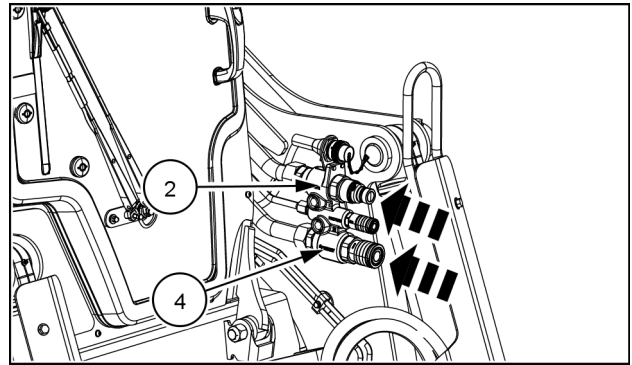


RAIL21SSL0601BA 2

Relieve pressure before disconnecting the attachment hoses

NOTICE: Before removing attachments, make sure that you relieve pressure from the hydraulic system **BEFORE** disconnecting the auxiliary hoses. If the pressure is not relieved, you **WILL NOT** be able to reattach hoses.

1. Lower the loader arm all the way down and ensure that the loader arm or attachment is not supporting the weight of the machine with the front wheels off the ground.
2. Place all controls in the neutral position.
3. Press the Operate button to deactivate the hydraulic system and ground drive system.
4. Stop the engine.
5. Move the controls to ensure that the hydraulic interlock is engaged and the loader arm and bucket cylinders do not move.
6. Raise the restraint bar, unfasten the seat belt, and safely exit the machine.
7. Disconnect the electrical connector and install the cap.
8. Prior to disconnecting the attachment hoses, grab the hose connected to the female coupling and push it toward the Connect-Under-Pressure (CUP) valve. When done properly, the coupling will move about **10 mm (0.4 in)**, relieving the stored pressure.
9. Perform the same action for the 3/4 inch male quick disconnect coupling **(2)**.
10. Disconnect the attachment hydraulic hoses from the Connect-Under-Pressure (CUP) valve quick disconnects.
11. Install the coupler covers, if equipped.



RAIL21SSL0709AA 3

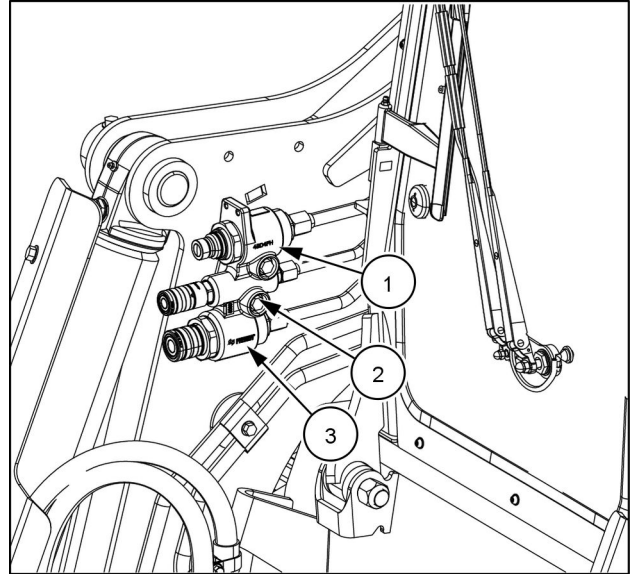
2nd auxiliary hydraulics (if equipped)

The 2nd auxiliary hydraulic feature provides hydraulic oil pressure and flow to an additional auxiliary circuit. The 2nd auxiliary hydraulic couplers are located on the right-hand loader arm. These connections will provide **30 L/min (8 US gpm)** at **238 bar (3450 psi)** with STD or HIGH flow and **283 bar (4100 psi)** with Enhanced High Flow (EHF) selected. Follow the attachment's operator's manual on specific installation procedures, operation, and removal procedures.

The 2nd auxiliary hydraulics connections are on the right-hand loader arm.

- Male work port **(1)** – 1/2 inch coupler size
- Case drain port **(2)** – 3/8 inch coupler size
- Female work port **(3)** – 1/2 inch coupler size

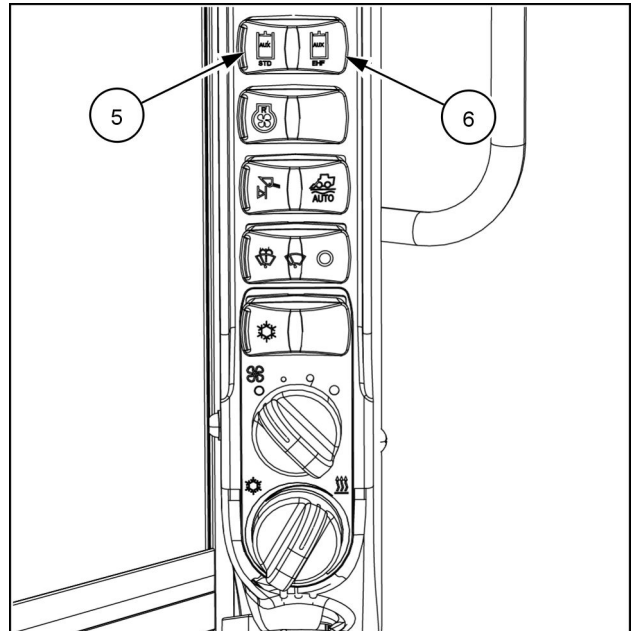
Before operating the approved attachment, confirm the electrical connection on the right-hand loader arm is secured in place.



RAIL21SSL0073BA 1

Use the 2nd auxiliary momentary buttons on the left-hand side control lever to operate the auxiliary attachment connected to the 2nd auxiliary hydraulic ports. See "Control lever switch configurations" **3-20** for more details.

Use either the Standard (STD) **(5)** or Enhanced High Flow (EHF) **(6)** auxiliary flow hydraulics with the 2nd auxiliary hydraulics option.

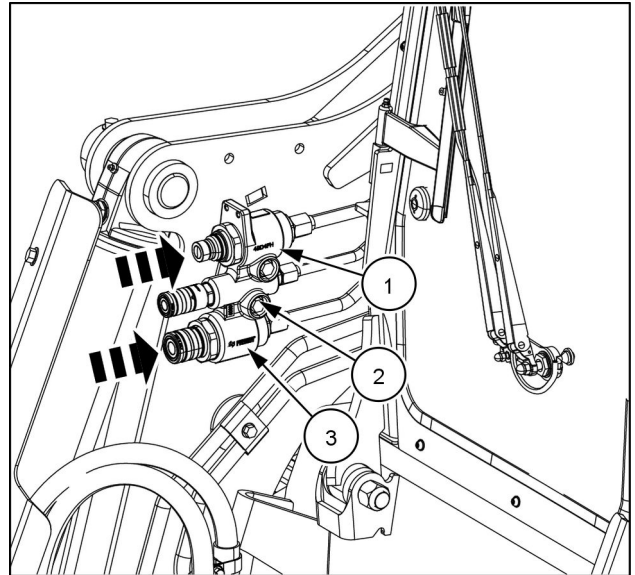


RAIL21SSL0601BA 2

Relieve pressure before disconnecting the attachment hoses

Machines are built with a Connect-Under-Pressure (CUP) valve for the auxiliary hydraulic quick disconnects. Follow this procedure to relieve the pressure prior to connecting the hydraulic hoses from the attachment:

1. Using the palm of your hand push the 1/2 inch female quick disconnect coupling **(3)** toward CUP valve. When done properly, the coupling will move about **10 mm (0.4 in)**, relieving the stored pressure.
2. Perform the same action for the 1/2 inch male quick disconnect coupling **(1)**, relieving the stored pressure.



RAIL21SSL0073BA 3

Auxiliary (Aux) Override

▲ WARNING

Equipment failure could cause accident or injury!

Use only authorized auxiliary hydraulic attachments. Always read and understand the manual or instructions supplied by the manufacturer to avoid injury or damage. Understand the operation and safety instructions before you attach, remove, or operate the attachment.

Failure to comply could result in death or serious injury.

W0231A

This machine can be used with attachments that require auxiliary hydraulics to be active while the operator is not in the cab. To use these types of attachments, the vehicle must be in a hydraulics enabled state with both control levers in the neutral position.

1. Connect the attachment to the auxiliary hydraulic ports on loader arm. Aux Override will work with Standard flow, High flow, Enhanced High Flow (if equipped), or 2nd auxiliary hydraulics.
2. Meet the following requirements to activate Aux Override:
 - ○ The operator is in the operator seat.
 - The machine is running.
 - The hydraulics are enabled.
 - The operator leaves the cab within **30 s** after turning "Aux Override" ON.

NOTE: *Hydraulics may become disabled automatically if operator does not exit within 30 s.*

3. On the display select Aux Override ON. See "Aux Override" under "Machine Settings" **3-51** on the display for more details.

4. **▲ WARNING**

Machine damage can cause accidents!

If you discover any problem or defect on the machine, repair it immediately or see your authorized dealer. Do not operate the machine until all problems are corrected.

Failure to comply could result in death or serious injury.

W0159A

Move the control levers in any direction the machine and loader arms should not move. If the machine moves or the loader arms move Aux Override is OFF repeat Step 3. Contact your dealer if the Aux Override does not stop machine or loader arm movement.

5. Exit the cab within **30 s** after turning "Aux Override" ON.

NOTE: *Hydraulics may become disabled automatically if operator does not exit within 30 s.*

6. Move the thumbwheel on the right-hand control lever in either direction until the detent position is engaged. The thumbwheel will stay in the detent position. See "Control lever switch configurations" **3-20** for more details.
7. Use the attachments external controls to operate the attachment.