

Installation of the BP 663 Joystick Harness Update Kit

WARNING

Shut down the tractor and remove the key before repairing, servicing, lubricating or cleaning the machine.

Relieve all hydraulic pressure in the hoses. Disconnect the hydraulic hoses from the tractor before going near the machine.

Securely block the machine to avoid any movement while doing the work.

DANGER

DO NOT enter the tub while parts are rotating. Before entering the tub:

- Turn off the tractor and remove the key.
- Wait for rotating parts to stop.

Contact with the rotating flail drum will cause serious injury or death.



This instruction details the installation of the joystick control harness update kit on BP 663 (102) machines built prior to 2025.

1. Install the harness mounting plate onto the hose holder.
 - a. Remove all hydraulic hoses and electrical cables from the hose holder.
 - b. Line up the harness mounting plate (1), as shown in *Figure 1*. Mark the holes and drill for $\frac{3}{8}$ " hardware.
 - i. If desired, the hose holder can be removed from the machine by removing the hardware at the end of the hose holder arm. Save all hardware for re-use.
 - c. Install the harness mounting plate onto the hose holder using $\frac{3}{8}$ " x $1\frac{1}{4}$ " hex bolts and $\frac{3}{8}$ " flange lock nuts.
 - i. If the hose holder was removed for installation, re-attach the arm to the machine using the previously removed hardware.

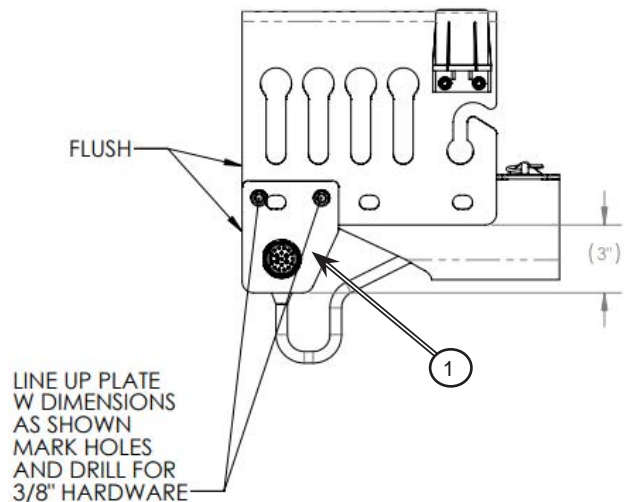


Figure 1: Drill holes in the hose holder to install the mounting plate

Installation of the BP 663 Joystick Harness Update Kit

2. Disconnect the current implement harness from the controller.
3. Remove the existing controller mount (1) from the frame, and remove the controller (2) from the mount; see *Figure 2*.
 - a. Save mount hardware for re-use.

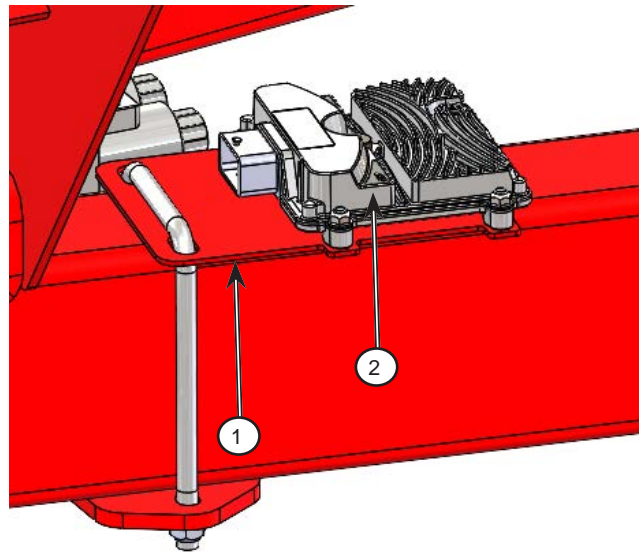


Figure 2: Remove the controller

4. Install the controller onto the new mount and install the new mount onto the frame; see *Figure 3*.
 - a. Fasten the controller to the mount (1) using $\frac{1}{4}$ " x 1" carriage bolts and $\frac{1}{4}$ " flange lock nuts.
 - i. Ensure that the controller connector is pointing towards the front of the machine.
 - b. Fasten the mount (1) to the frame using the existing front U-bolt and nuts, as well as a second U-bolt, bolt plate (2) and $\frac{1}{2}$ " flange lock nuts.

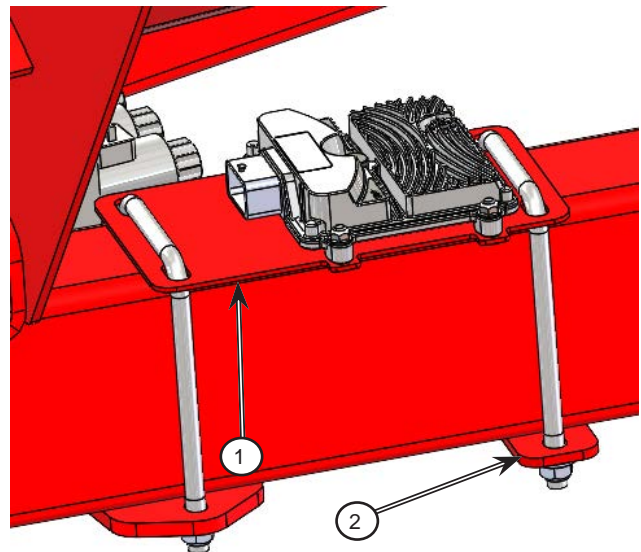


Figure 3: Install the new controller mount

5. At the hitch, disconnect the current implement harness (1) from the current joystick harness (2); see *Figure 4*.
6. Disconnect and remove the current implement harness (1) from the machine; see *Figure 4*.
 - a. Remove cable ties as necessary, making note of their locations.

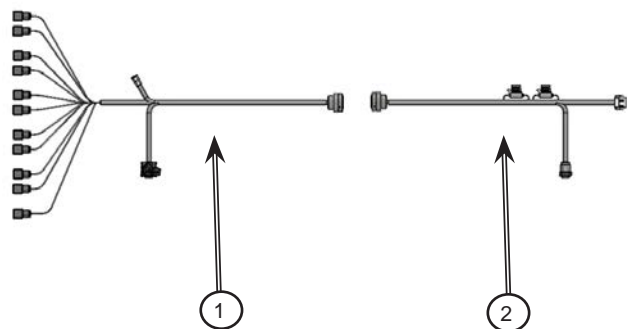


Figure 4: Current implement and joystick harnesses

Installation of the BP 663 Joystick Harness Update Kit

7. Connect the new implement harness, shown in *Figure 5*, to the appropriate connection points.
 - a. All connection points on the harness are labeled.
 - i. Note: All connection points on the updated harness are labeled "C", whereas the connection points on the previously removed harness are labeled "X".
 - b. *Figure 6* shows where each connector should be connected to the valve block.
 - i. Be sure to note the orientation of the valve block in *Figure 6*. Ensure that the connectors are connected in the correct locations.
 - c. Connect the C2 CTR connector to the controller.
 - d. Secure with cable ties as necessary, ensuring to keep away from any moving parts.

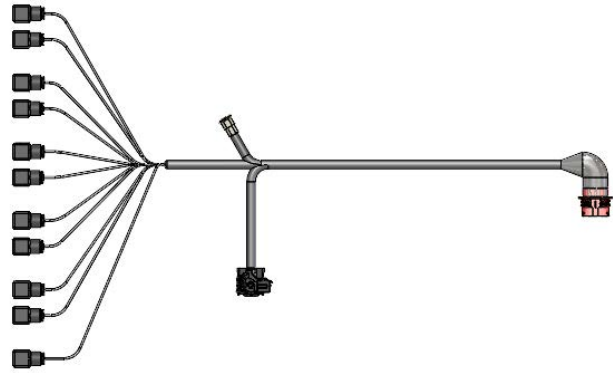


Figure 5: Updated implement harness

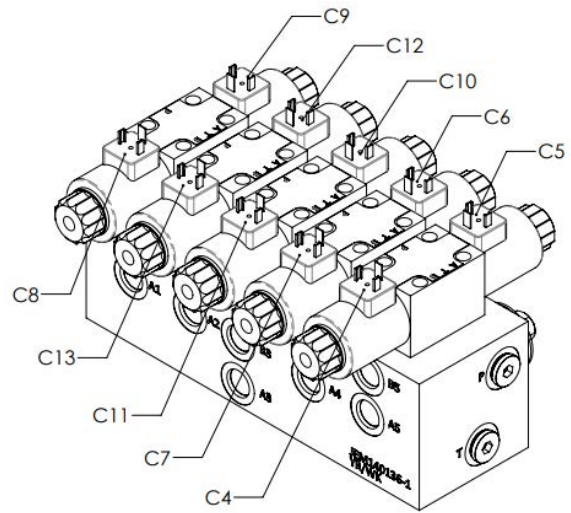


Figure 6: Layout of harness connectors to valves

8. Feed the new implement harness through the hose holder, following the previous routing, and insert the C1 Hitch Connector (1) into the harness mounting plate (2), shown in *Figure 7*.
 - a. Remove the washer and connecting nut from the C1 Hitch Connector and insert into the harness mounting plate (2). Ensure that the anti-rotation feature on the connector aligns with the flat portion of the connector cut-out on the mounting plate.
 - b. Replace the washer and connecting nut onto the C1 Hitch Connector and tighten.
 - c. Ensure there is adequate drip-loop on the harness.
 - d. Note: The connector cover should be used whenever the implement and joystick harnesses are disconnected.

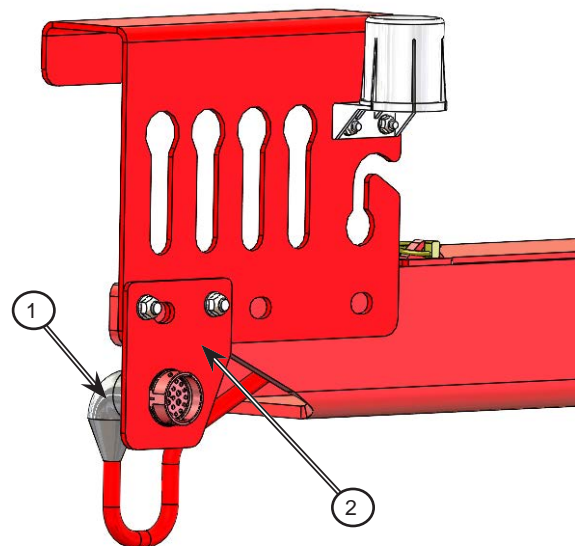


Figure 7: Insert the C1 Hitch Connector into the harness mounting plate

Installation of the BP 663 Joystick Harness Update Kit

9. Disconnect and remove the current joystick harness (2 in *Figure 4*).

a. Remove cable ties, if necessary.

10. Feed the new joystick harness, shown in *Figure 8*, into the cab of the tractor and connect it to the appropriate connection points.

a. All connection points on the harness are labeled.

i. Note: All connection points on the updated harness are labeled "C", whereas the connection points on the previously removed harness are labeled "X".

b. Connect the C7 Hitch Connector to the C1 Hitch Connector on the implement harness.

c. Connect the C5 Pendant Connector to the joystick cable.

d. Connect the C6 AUX PWR connector to the tractor power.

e. Secure with cable ties as necessary, ensuring to keep away from any moving parts.

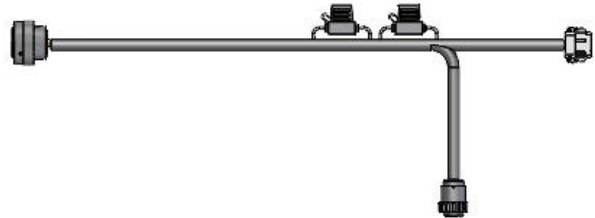


Figure 8: Updated joystick harness

Important

Connect the joystick cable **BEFORE** connecting to the tractor power.