

5.6 Header lift and flotation circuit

The header lift switch is located in the ground speed lever. The header position switch has three positions; raise, hold, and lower.

To raise the header, pressure is applied to the rod end of the header lift cylinder (1). The cylinder retracts to raise the header.

In the hold position, flow to and from the header lift cylinders is blocked so the header is held in position.

The engine must be running and operating the charge pump to raise or lower the header.

To lower the header, the oil in the rod end of the cylinder is released by the header down valve (2) to the tank. The weight of the header extends the header lift cylinder.

The header flotation circuit is used to let the header follow the ground surface. The header flotation circuit includes two header flotation cylinders (3), accumulators (4), and the header lift and flotation valves. The flotation on each side of the header is controlled separately. The flotation pressure for the right-hand and left-hand sides of the header are shown on the main work screen of the terminal.

The automatic flotation setting on the console will enable or disable the flotation function if desired.

The accumulators are charged with dry nitrogen. During field operation, the header is supported by the flotation cylinders.

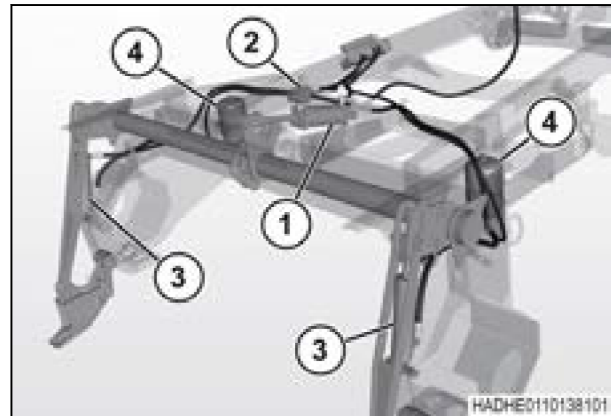


Fig. 15



DANGER:

Charging or replacing the accumulator must be performed by an authorized dealer only.



DANGER:

Use only dry nitrogen when charging the accumulator. Do not use air or oxygen that will cause an explosion.



DANGER:

Do not drop the accumulator. A charged accumulator contains nitrogen under pressure. If the charging valve breaks away from the accumulator, the escaping nitrogen will propel the accumulator at a high rate of speed.

In the float position, the header will rise and lower to follow the ground surface. As the surface of the ground becomes higher, the header is pushed up. The rising header extends the cylinders, pulling fluid into the cylinders from the accumulators. The nitrogen in the accumulators will expand a little. As the surface of the ground becomes lower, the header lowers. As the header lowers, the weight of the header retracts the cylinders. The cylinders force fluid back into the accumulators and the nitrogen is compressed into a little. The amount of force applied to the header flotation system remains almost constant through the complete float range.

The accumulators and the weight of the header can apply a large amount of pressure to the header flotation circuit. Relieve all pressure in the header flotation circuit before disconnecting any of the connections. Make sure the header is on the ground. Use the flotation dump function on the console to release the pressure. Make sure the flotation pressure shown on the console indicates 0 kPa (0 psi).

Before applying pressure to the circuit, make sure all connections are tight and the hydraulic hoses and hydraulic lines have not been damaged.



WARNING:

Hydraulic pressure escaping under pressure can have sufficient force to penetrate the skin, causing serious injury.

If injured by escaping fluid, see a doctor at once. If not treated immediately, serious infection or reaction can develop.

5.6.1 Header lift switch

Header lift switch

The header lift switch (1) controls the header position. The header lift switch has three positions: raise, center, and lower.

- Press the bottom of the switch to raise the header.
- Press the top of the switch to lower the header.

If one touch down is selected, the header will lower to the ground when the switch is pressed and released.

If one touch down is deselected, the header will only lower while the switch is pressed.

See the information for one touch down.




NOTE: The engine must be running to raise or lower the header.



Fig. 16


5.6.2 Adjusting the header flotation - both sides together

Procedure

1. Select  to open the header setting screen.
2. Change the flotation pressure target (1).
 - Select  to increase the flotation pressure target 345 kPa (50 psi).
 - Select  to decrease the flotation pressure target 345 kPa (50 psi).

NOTE:

The scroll wheel can also be used to the change target flotation pressure. Turn the scroll wheel until the target flotation pressure is highlighted. Press in and release the scroll wheel to select. Turn the scroll wheel to change the setting. Press in and release the scroll wheel to select.

3. Select  to return to the main work screen.

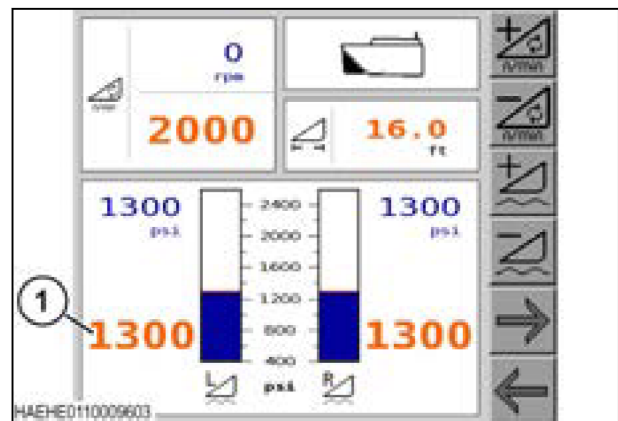


Fig. 17