This kit adds proportional valves to the header raise and lower circuits on Gleaner R65 and later combines for improved hydraulic response when running header control.
1 Installation

1.1 Safety Steps

1. Perform all combine and header manufacturer safety precautions for servicing header.

2. Insert stop to prevent movement of header.

3. Turn off combine and remove key from ignition.

4. Set combine parking brake.

5. Disconnect all drive shafts from the header.
1.2 Accumulator Valve Replacement

6. Fully open the ¼ turn valve.
7. Perform all combine and header manufacturer safety precautions for servicing the header.
8. Remove header from combine.
9. Insert stop to prevent movement of header.
10. Release all pressure in hydraulic cylinders.
   - Lower feeder house against lock and hold button for 30 seconds
11. Turn off combine and remove key from ignition.
12. Set combine parking brake.
13. Disconnect all drive shafts from header.
14. Find the accumulator.
   - It is located either near the left front wheel or on right side of combine near the hydraulic valve stack.
15. Loosen the hose (A) slowly, make sure there is no pressure left in the system. Remove hose.
16. Remove fitting (B) from valve (C).
17. Remove valve (C) from fitting (D). Do not remove (D) from the accumulator.
18. Install the new Needle Valve into fitting (D) using Teflon tape or pipe compound. The valve is bi-directional, install either way.
19. Replace fitting (B) and reinstall hose (A). Make sure all fittings are tight.
20. Close the accumulator all the way.
1.3 *Install Hydraulic Valves*

1. If not already done, close accumulator valve and lower feederhouse to ground.

2. Hold header lower for at least 30 seconds to relieve all pressure.

3. Open Right side combine panel.

4. Flip down step.

5. Remove shield behind front right tire.

6. THOROUGHLY clean front face of Main Hydraulic Valve assembly.

7. Disconnect the 2 Pin plugs from the Header Raise and Lower valves.

8. Remove the ¾” nut and slide the coils off the spools (coils and spools are identical.)

9. Clean around base of Spools.

10. Prepare the new spools for immediate insert.

11. Place oil pan under front face of valve assembly.

12. Remove the SV10-20 Raise spool, and install a new SP10-20 spool in its place.

13. Remove the SV10-20 Lower spool, and install a new SP10-20 spool in its place. (NOTE: Removing the Lower spool will allow the Reservoir to drain out the spool. Have the new spool ready to insert immediately.)

14. Tighten both spools to manufacturer recommended torque spec.
15. Loosen the jam nut on the Raise and Lower flow controls and use a ¼” Allen to turn the control fully open (CCW). Tighten the jam nut.

16. Plug the Proportional Driver Modules onto the coils, and secure with a zip tie.

17. Install one coil & driver assembly back onto the Raise spool. The driver should face OUT toward the tire. Make sure the driver does not contact any other components. Snug the ¾” nut to hold the coil in place.

18. Install the second coil & driver assembly back onto the Lower spool. The driver should face out toward the tire. Make sure the driver clears the plugs in the valve body. When properly positioned, the driver will be almost touching the Feeder Reverse coil. Snug the ¾” nut to hold the coil in place.
1.4 Install Harness

1. Connect Y526 to the Raise Driver Module.
   - Connect Y524 to the OEM Raise plug
2. Connect Y527 to the Lower Driver Module.
   - Connect Y525 to the OEM Lower plug
3. Route Y528 (3P) up following the existing harness, around the piping, and forward following the cable and hose bundle as shown.
4. Tie cable up well to prevent it getting caught in belting, etc.
5. Reinstall the Side Shield, flip up the step, and close the Right combine side panel.

1.5 Cab Access

1. Remove spring pin on right cab door latch and allow door to fully open
2. Remove three screw holding floor pan inside door and lift floor pan up.
3. Remove sound matting
4. If no access hole/grommet is already available, drill a 7/8 Diameter hole in the cab floor as shown
   - Check under the cab before drilling to make sure there is nothing obstructing underneath the hole
5. Insert the grommet provided into the hole, and route Y528 up thru the grommet.
6. Mount the cab controller
   - Remove the sheet metal panel on the back side of the arm console
   - Replace the nut clip shown with the new clip provided
   - Replace the sheet metal panel and mount the controller bracket using the 1/4 - 20 bolt provided.

7. Route the Cab Control cable back thru the grommet on the rear wall of the cab.

8. Connect the Cab control to Y528 behind the electrical panel area.

9. Ziptie cable and harness as needed in and under cab.

10. Reinstall sound matting

11. Replace floor pan and reinstall three screws.

12. Replace the spring pin in the door latch.
## 2 Settings

### 2.1 Controller Settings

1. Open accumulator 2-3 turns
2. Set control knobs to MAX (CW)
3. Start the motor. Install header on combine. Raise and lower the head manually. With the motor at full throttle, the head should travel full stroke in about 4 seconds both ways.
4. Turn the Control knobs to MIN (CCW). The head should move very slowly in either direction (typically 20-30 seconds full range).
5. Set the Raise rate control knob so that the head will raise full stroke in about 5-6 seconds.
6. Set the Lower rate control knob so the head lowers full stroke in about 8 seconds.

#### 2.1.1 Automatic Mode adjustment:

1. Open accumulator 2-3 turns
2. Set the Height Sensitivity at 5-6
3. Perform all the Setup and calibration steps found in the Headsight and AGCO Combine Manuals.
4. The raise and lower rate knobs in the cab replace the flow controls on the valve body to adjust raise and lower rates.
5. Enable HHC and tilt, and engage the system.
6. If the head is not responsive enough, increase the sensitivity and/or flow rates.
7. If the head is too responsive, reduce the lower rate and/or sensitivity.
3 System troubleshooting:

**NOTE:** Should the system quit working for any reason (wire cut, etc) the customer can restore original function by simply removing the adapter harness and driver module from that coil, and plugging the OEM harness plug directly into the coil. There is no need to change out the spool. Turn the Flow control screw back in fully and then open 3/4 of a turn.

1. If one function stops working, unplug and swap the entire coil/driver module assemblies-Raise to Lower. Reconnect the harness.
   - If the problem moves to the other function, swap just the driver module back.
     - If the problem returns to the original function, the driver is bad. Contact Headsight.
     - If the problem stays on the new function, the coil is defective (Agco PN 700728892)
   - If the problem stays on the original function, swap the Y526 w/Y527 (note: the manual switches will reverse function).
     - If the problem changes to the other function, Suspect a bad cab control or damaged harness. Contact Headsight.
     - If the problem stays on the original function, Swap Y524 w/Y525 (note: the manual switches will reverse function).
       1. If the problem stays on the original function: Replace that spool.*
       2. If the problem swaps to the other function...check the OEM combine wiring or controls for 12V when the function is selected. Plug the OEM plug directly to the coil and see if it works.

*A replacement SP10-20 spool can be ordered from Headsight or thru your local AGCO Dealer. SP10-20 Spool PN: 700732325*