

RH HIGH FLOW UPGRADE KIT



Revision History

rev. level 01_12.18.2013 rev. level 02_03.20.2015 rev. level 03_04.06.2016



Inlet Hopper Assembly



High Flow Lower Hopper Assembly

Remove the RH High Flow Upgrade Kit #81734658 from shipping carton. Inspect for damaged or missing parts. • Inlet Hopper Weldment

• High Flow Lower Hopper Weldment



Required assembly tools

- 7/16" wrench and socket
- 5/16" wrench and socket
- 90° Phillips screwdriver (alternative 12" Long Phillips screw driver)
- 5/32" Allen wrench
- Channel locks or adjustable crescent wrench
- Chemical resistant gloves



assemblies.





CAPACITIVE SEED SENSOR

Step 1: Disconnect the seed wheel power cord from the On Demand control panel (lower left pictures).

Step 2: Disconnect the yellow signal cable from the capacitive seed sensor (lower right image). Make note of the position of the sensor in the seed wheel housing.

Step 3: Use a channel locks to loosen the nut and unscrew the sensor.

Step 4: Remove the capacitive sensor and the sensor seal plate from the seed wheel housing and set aside.











SEED WHEEL HOUSING END PLATES **Step 1:** Remove the front and back seed wheel housing end panels.

Step 2: Use a 1/2" wrench and socket to remove 10 5/16" bolts from each end panel.

Step 3: Remove each panel and set aside, including hardware. The seed wheel will be exposed, as shown in the image below.





SEED INLET TRANSITION Step 1: Put on a pair of chemical resistant gloves.

Step 2: Place one hand on the transition and use the other to unlatch the three clamps holding the transition onto the bottom of the Atomizer section.

Step 3: Remove the Transition and set aside.





EXISTING INLET HOPPER WELDMENT

Step 1: Use a 90° Phillips screwdriver and 7/16" wrench to remove the four 1/4" bolts that hold the inlet hopper onto the seed wheel section.

Step 2: Lift the inlet housing up off the seed wheel and set aside, including hardware.





ATOMIZER MOTOR Step 1: Disconnect the Atomizer Motor Power Cord from the On Demand Main Control panel (lower image).



ATOMIZER MOTOR

Step 1: Unscrew the atomizer motor cord connector, the internal seed cone and plastic cap from the motor cord tube, as shown above.

Step 2: Slide all components of the cord connector away from the motor cord tube to the end of the power cord.





ATOMIZER MOTOR

Step 1: Use a 5/16" wrench to remove the two 10-32 bolts holding the motor cord tube assembly to the atomizer housing.

Step 2: Slide the motor cord tube assembly away from the atomizer housing along the atomizer power cord, as shown above.



CHEMICAL INLET ASEMBLY

Step 1: Put on a pair of chemical resistant gloves. Have a rag handy in case chemical drips from the end of the chemical inlet tube.

Step 2: Use a 5/16" wrench to remove the two 10-32 bolts holding the chemical inlet tube assembly to the atomizer housing.

Step 3: Slide the chemical inlet assembly out of the atomizer housing and set the assembly and hardware aside.



DISPERSION CONE

Step 1: Use a 5/16" wrench to loosen the 10-32 bolt holding the white dispersion cone on top of the internal hopper.

Step 2: Pull the dispersion cone out of the internal hopper, set aside.

Step 3: Use a 7/16" wrench to loosen the 1/4-20 bolt that holds the seed cone onto the bottom of the Lower Hopper Weldment. The dispersion cone will slide out from under the lower hopper weldment, pulling the atomizer motor power cord through the opening on the side of the atomizer housing.

Step 4: Set the dispersion cone and hardware aside.



ATOMIZER HOUSING / LOWER HOPPER WELDMENT Step 1: Use a 7/16" wrench and 5/32" Allen wrench to remove 12 1/4-20 bolts from the sides of the atomizer housing. These bolts hold the lower hopper weldment inside of the atomizer housing.



EXISTING LOWER HOPPER WELDMENT

Step 1: Remove the existing Lower Hopper Weldment from the atomizer housing: pull it down and out through the bottom of the atomizer housing.



NEW HIGH FLOW LOWER HOPPER WELDMENT

Step 1: Insert the new High Flow Lower Hopper Weldment with larger seed flow opening inside the atomizer housing.

Step 2: Insert it up through the bottom of the atomizer housing. Ensure the correct orientation of the lower hopper cone hanger bracket is perpendicular in relation to the chemical inlet and atomizer motor cord tube, as shown in the illustration below.





ATOMIZER HOUSING

Step 1: Use a 7/16" wrench and 5/32" Allen wrench to replace 12 1/4-20 bolts and washers on the sides of the atomizer housing. These bolts hold the new high flow lower hopper weldment inside of the atomizer housing.



DISPERSION CONE

Step 1: Slide the dispersion cone up into the lower hopper weldment.

Step 2: Work the atomizer motor power cord back through the opening on the side of the atomizer housing. Note the orientation of the dispersion cone so that it properly aligns with the chemical inlet assembly and the motor cord tube assembly (see images below). The small bolt pre-drilled hole faces the motor cord tube side and aligns with the pre-drilled hole on the lower hopper weldment (see inset photo).





DISPERSION CONE

Step 1: Align the top bolt hole on the dispersion cone with the pre-drilled holes on the lower hopper weldment (see inset photo).

Step 2: Use a 7/16" wrench to tighten the 1/4-20 bolt and three washers holding the dispersion cone in the lower hopper weldment.

Step 3: Insert the white plastic dispersion cone on the lower hopper weldment.

Step 4: Use a 5/16" wrench to tighten the 10-32 bolt and washer.



CHEMICAL INLET ASSEMBLY

Step 1: Slide the chemical inlet assembly into the atomizer housing and dispersion cone. Note the orientation of the chemical inlet assembly (see images below).

Step 2: Use a 5/16" wrench to tighten the two 10-32 bolts and washers to fasten the chemical inlet tube assembly to the atomizer housing.



New Style Chemical Inlet Assembly





ATOMIZER MOTOR

Step 1: Slide the motor cord tube assembly into from the atomizer housing along the atomizer power cord, as shown above. Note the orientation of the motor cord tube assembly (see inset image).

Step 2: Use a 5/16" wrench to tighten the two 10-32 bolts and washers to fasten the motor cord tube assembly to the atomizer housing.



ATOMIZER MOTOR Step 1: Slide all components of the cord connector towards the motor cord tube, as shown above.

Step 2: Screw the atomizer motor cord connector, the internal seed cone and plastic cap onto the motor cord tube (see inset image).



ATOMIZER MOTOR Step 1: Connect the Atomizer Motor Power Cord to the On Demand Main Control panel (lower image).





NEW HIGH FLOW INLET HOPPER WELDMENT

Step 1: Set the new high flow inlet hopper in position above the seed wheel (see image, lower left). Allow adequate room on either side (one finger thickness, see image, lower right).

Step 2: Use a 90° Phillips screwdriver and 7/16" wrench to replace the four 1/4" bolts and washers that hold the inlet hopper onto the seed wheel section.

Step 3: Securely tighten in place.







SEED INLET TRANSITION

Step 1: Replace the Transition under the Atomizer Housing. Align the Transition to the back lip of the Housing and ensure each clamp is in line with the grooves on the transition.

Step 2: Close each Clamp to securely fasten the transition to the bottom of the Atomizer Housing, as shown below.







SEED WHEEL HOUSING END PANELS **Step 1:** Replace the front and back seed wheel housing end panels.

Step 2: Use a 1/2" wrench and socket to connect 10 5/16" bolts and washers on each end panel





CAPACITIVE SEED SENSOR Step 1: Replace the capacitive sensor and the sensor seal plate in the seed wheel housing.

Step 2: Use a channel locks to tighten the nut.

- Step 3: Connect the yellow signal cable onto the capacitive seed sensor (lower center image).
- Step 4: Connect the seed wheel power cord on the On Demand control panel (lower left picture).







Step 1: Open the On Demand Main Control panel door.

For On Demand controllers, the following must be done:

1. Set tFr@75Hz

- Press center button (see inset image 1.a) a.
- Scroll to CONFG, press center button b.
- Scroll to FULL, press center button (this allows access to the full parameter menu) c.
- Scroll to drC, press center button d.
- Scroll to tFr, press center button e.
- f. Change to 75 Hz, press center button to save (default is 72HZ)
- Press Escape many times to get out of the menu (see inset image 1.g) g.

Now set HSP at 75Hz 2.

- Press center button a.
- Scroll to CONFG, press center button b.
- Scroll to HSP and set at 75 HZ c.

OD Seedwheel - VFD1 parameters to allow operation up to 75Hz (2500 lbs/min soybeans)

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MAIN SCREEN - LOGIN POP-UP

Step 1: Touch the Login button icon: displays the Login pop-up touch pad, shown above.

Step 2: Touch the USER & PASSWORD fields to enter a protected User name and Password.

Step 3: Touch the Enter button icon: Login pop-up closes.

Step 4: Touch the Setup button icon: navigates to the System Configuration Screen **O**



SYSTEM CONFIGURATION SCREEN

Step 1: Touch the Seed Wheel button icon: navigates to the System Configuration - Seed Wheel Screen **2**





SYSTEM CONFIGURATION - SEED WHEEL SCREEN

Step 1: Touch the box next to 'Enable Seed Wheel High Speed/Flow' (an X will appear in the box).

Step 2: Touch Exit graphic box: navigates to the System Configuration Screen **O**

Step 1: Touch Exit graphic box: navigates to the Main Screen **O**

SYSTEM CONFIGURATION SCREEN



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MAIN SCREEN

Step 1: System is now configured for High Flow seed treatment application





Bayer Crop Science Division 1451 Dean Lakes Trail Shakopee, Minnesota 55379 USA For fast and easy access to our website scan the code with your smartphone and an appropriate app.

www.seedgrowth.bayer.com