

INFORMATION NOTICE


DOCUMENT NUMBER: 600870-000038

SUBJECT: END OF YEAR CLEANING - ENGAGE® ZONE CONTROL

DATE: SEPTEMBER 1, 2020

This information notice describes the importance of and how to properly clean the Engage® Zone Control Bin Kit at the end of the season.

Affected Parts

PART NAME	IAS PART NUMBER	IMAGE	PROBLEM
Engage Zone Control unit	153510-000121		Improper cleaning can lead to excessive motor corrosion

Document References

The content in this information notice and additional maintenance instructions are found in the Engage® Zone Control Maintenance Manual (600840-000047). This document and all other Intelligent Ag support documentation is found at www.intelligentag.com/support.

About

Motors within the Engage Zone Control unit (153510-000121) can excessively corrode if allowed to sit in fertilizer residue during long term storage, as shown below.



This buildup is shown primarily on the faceplate of the motor assemblies and on the area around the gates within the unit enclosure, as shown below.



Intelligent Ag implemented improvements to the motor in spring 2020, including a corrosion resistant coating; **however**, the best protection against severe corrosion is the proper cleaning and maintenance of unit. This will help ensure motor corrosion is minimal and reduces the likelihood that a replacement will be needed next season.

If proper maintenance of the units is not performed, warranty may be voided on the motors.

Tools Needed

- 15 mm socket, ratchet, and extension
- 15 mm wrench
- Torque wrench
- ¼" hex drive (for ground wire screw)
- Shop vac (recommended) or compressed air
- Wire brush (such as a bore brush) or plastic scraper
- Cleaning tool (included)

Corrective Actions

Disassembling the Engage® Zone Control Unit (Performed prior to End-of-Season Maintenance)

TIP: Refer to the diagram on page 8 of the Maintenance Manual for labelled part names.

1. Cycle the gates open and closed through the tractor's virtual terminal.
2. Unplug the bin harness that plugs into the Engage® Zone Control unit enclosure.

NOTE: Be careful not to damage the gasket when removing the lid.

3. Clean off any dirt from the enclosure lid. Remove the pin from the latches on the sides of the unit and undo the latches. Then, slide the lid off.
4. Unplug all connections from the motor controller harness.
5. Unscrew the screw holding the ground wire to the motor mount and remove the ground wire.

IMPORTANT: Before removing the motor mounts, make note of the serial number of each motor controller and if it is installed on the left side or right side of the enclosure. The motor controllers must be reinstalled in their original position.

6. Remove the 2 bolts holding each motor mount to the enclosure and remove the motor mounts.



CAUTION: Engage® Zone Control unit gates are sharp. Use caution when handling gates.

7. Pull the gates toward the back of the enclosure and remove them. Do not pry the gates out.

End-of-Season Maintenance

1. Disassemble the Engage® Zone Control unit by following the instructions in the previous section.
2. Use a shop vac (recommended) or compressed air to remove any residue inside the enclosure and on the end stop (see diagram on page 8 of the Maintenance Manual). Use a wire brush or scraper to get any remaining residue.
3. Clean residue from the gates and motors using a wire brush or scraper.
4. Insert the provided cleaning tool through each gate slot. Use the tool to scrape the sides and the end stop to remove any residue or debris buildup. Thoroughly clean the end stop to ensure proper functioning of the gates.
5. Use a shop vac (recommended) or compressed air to clean out any additional dirt that was loosened in the previous step.

BEFORE STORAGE: Reassembling the Engage® Zone Control Unit

After cleaning, follow the suggestions below for storing your system, depending on if you'll be storing your air seeder indoors or outdoors.

If you store your air seeder indoors:

1. Push the gates back into the gate slots with the two tabs on the gates facing up.
2. Re-position the motor mounts in their original position in the enclosure (left or right side of the enclosure).

Ensure that the nut holding clips rest on top of the short side of the gates (as seen in the diagram on page 8 of the Maintenance Manual) and that the magnet is facing up. You can move the nut holding clips to align with the gates, or pull the gates out to meet the position of the nut holding clips.

TIP: It is easier to align the nut holding clips if you position the motor mount at an angle and align the nut holders individually from one side to the other.

IMPORTANT: Use care when reinstalling the motors so that you do not bend the lead screws.

3. Tighten the 2 bolts on the motor mounts. Torque to 31 ft-lbs.
4. Re-attach the ground wire to the motor mount, making sure that the serrated tooth washer is between the ring terminal and the motor mount.
5. Plug all connections of the motor controller harness back into their respective connections. Refer to the motor controller harness connections diagram at the end of this document.

NOTE: Ensure that that harness is routed toward the back of the enclosure.

6. Place the lid back on the enclosure, but do not latch the lid until you are ready to use the system again next season.
7. Plug the bin harness into the Engage® Zone Control unit enclosure.
8. Cycle the gates open and closed through the tractor's virtual terminal.

If you store your air seeder outdoors:

1. Do not re-install the gates or motor mounts. Place the lid back on the enclosure and secure the lid with the latch.
2. Store the gates and motor mounts indoors or in a climate-controlled area to prevent condensation on electrical components. Ensure that the motor mounts are protected so that the lead screws do not get bent.

IMPORTANT: At the beginning of the next season, perform the steps found in the Maintenance Manual before using the system.

Contact

Questions? Contact Intelligent Ag Product Support

Canadian Product Support: 1-306-993-1156

United States Product Support: 1-701-436-1219

Or email us at support@intelligentag.com