GED Integrated Solutions	GED Integrated Solutions, Inc 31100 DIAMOND PKWY GLENWILLOW, OH 44139	Document No.: APN-0207 Revision: A	Date: 02/28/19

Description: **RC2000 VFD REPLACEMENT**			
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Revision History:	Changed By:	Release No.:	Date:
A) Original Release		05120	02/28/19

The RC2000 robotic cleaning system utilizes robots programmed with tool paths. These tool paths may involve movements that twist the robot in a manner unlike conventional cleaners that generally use x-y motion only.

Some customers have experienced VFD faults generated by premature motor failure or other causes which create a short circuit on the output side of the VFD. Sometimes these faults are catastrophic and cannot be reset, requiring the VFD to be replaced.

In order to prevent the downtime created by having to replace a VFD, GED is implementing a change on all new machines, and a field installation kit, which replaces the ABB VFDs with Invertek VFDs.

This kit contains parts for the floating head drive motor and both fixed head & floating head saw motor VFDs.

This kit includes the following components (quantity):

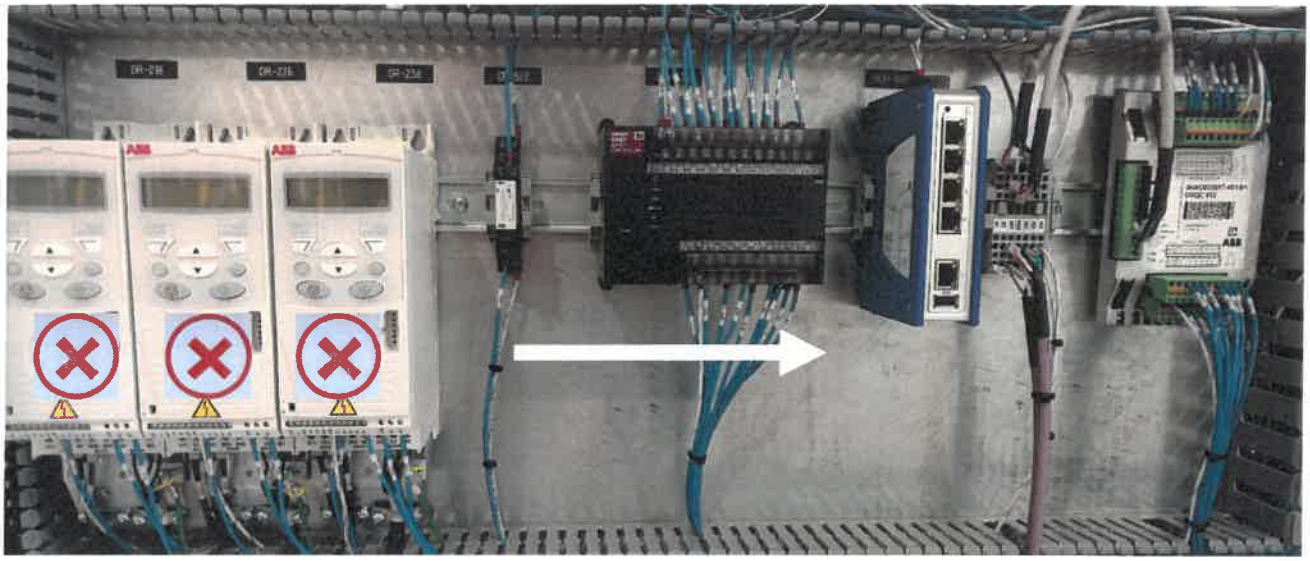
100-7926 1HP VFD, quantity 2
100-7948 2HP VFD, quantity 1
100-2396 14AWG Green/Yellow Wire, quantity 10'
100-3931 Ring Terminal, quantity 3

Refer to electrical schematic 3-091918, revision M, for installation and wiring.

NOTE: VFD (Variable Frequency Drive) will be referred to as "drive" in the following instructions.

Shut off and lock out machine before commencing installation!

1. Remove the 3 ABB drives and move components on DIN rail to the right, as needed, to make room for the new Invertek drives.

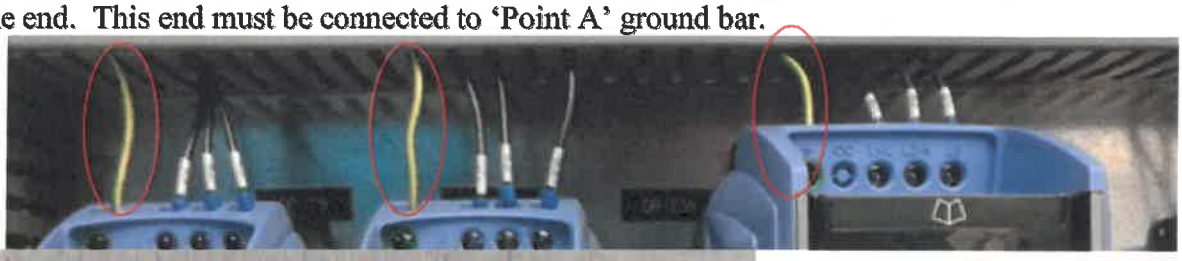


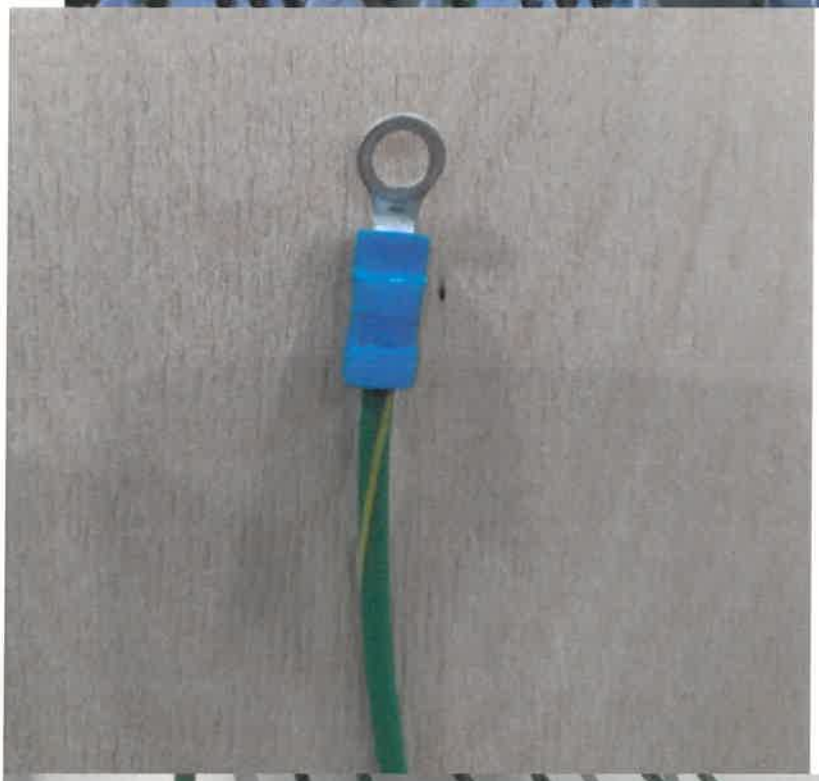
2. Install new drives. Move drive labels if necessary. The larger drive is the 2HP replacement. Route LINE power wires to top of drives. Motor connections remain at bottom of drive.

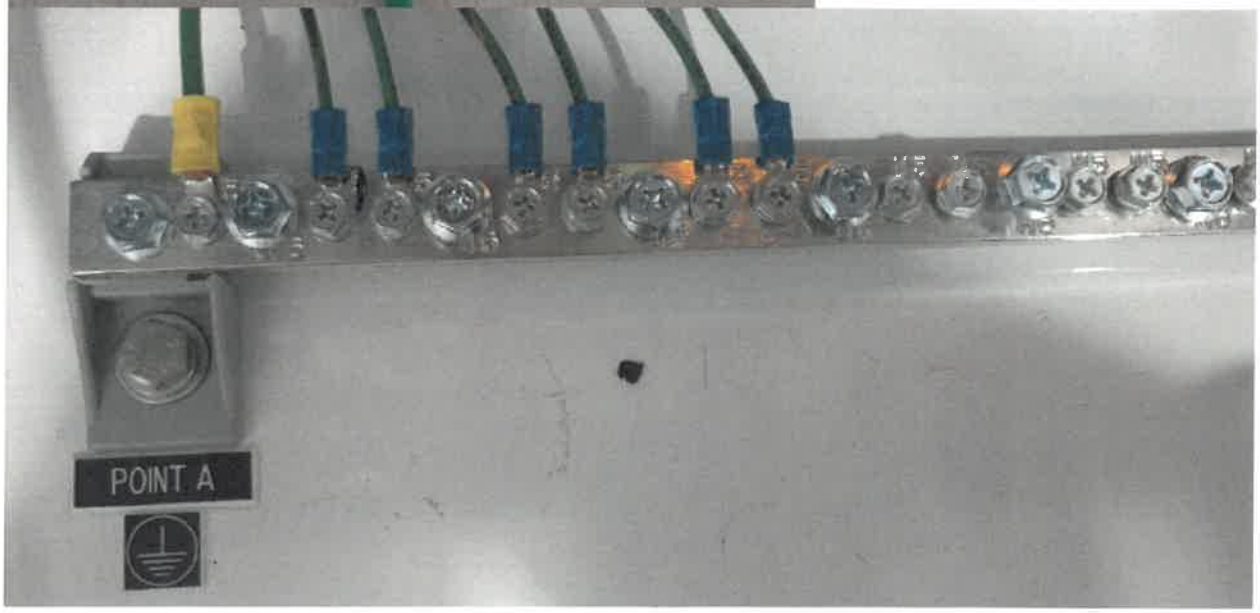
LINE SIDE

LOAD SIDE

3. Replace LINE side ground wire to each drive. Cut appropriate length and crimp a ring terminal onto one end. This end must be connected to 'Point A' ground bar.



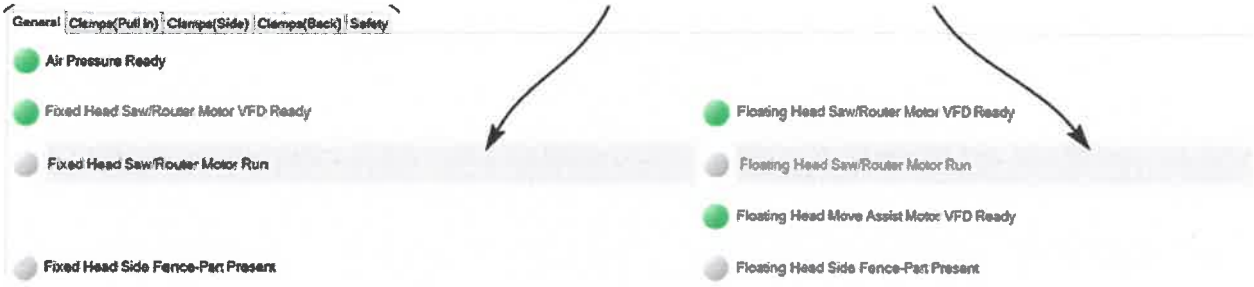




4. Connect control wires to drive terminals, as per schematics.
   Reference drawing 3-091918, revision M, pages 15, 16, and 17.

5. Turn on the power to the machine and verify/change the parameters for each VFD.
   Reference drawing 3-091918, revision M, pages 15, 16, and 17.

6. Check Fixed and Float Head motor rotation via the I/O Monitor screen.



7. Check Float Head Movement operation via Left/Right Jog buttons.