

## Sensor Installation

The installation procedure is required to configure the monitor to the sensors attached to it.

The operator may have to redo the installation if:

- 1) An extra tank is added to the Air Cart.
- 2) Replacing or adding sensors.
- 3) Replacing monitor with a new monitor.

## Installation Precautions

- 1) During installation the monitor has a predetermined order in which it wants the sensors attached. The installer must be sure that the proper sensor is plugged in the proper sequence.
  - i.e. If during installation the installer plugs in the Front Shaft and Ground Speed sensors in the wrong order, the monitor would not know this. The monitor would interpret Front Shaft rpm from the Ground Speed shaft and vice versa.
- 2) There may be occasions when the operator will not have use of all the sensors.
  - i) During sensor installation when the monitor prompts for an unused sensor to be plugged in, the operator can press the SELECT key to skip over the sensor. **The sensor will be assigned a disabled status.** A sensor disabled by this method can only be enabled by repeating the installation procedure.
  - ii) During operation the operator can disable shaft sensors by setting the pulses per revolution to zero. When pulses are set to zero alarms for that sensor and corresponding Bin Level sensor are ignored and no monitoring occurs.
- 3) Blockage modules attached to the harness are handled differently than the sensors attached to the harness. See Assembly Section "Blockage Module".

**Pin Sensors** - the blockage module **does not have to be removed from the harness** during initial system installation.

**Optical Sensors** - the blockage modules **have to be unplugged from the harness** before sensor installation can be performed and are connected like the other sensors requested by the monitor during sensor installation.

**Note:** Each monitor is unique to the sensors installed. If monitor is moved to another Air Cart it has to be reprogrammed to match the sensors.

Sensor Installation Order
Speed (Ground)
Fan
Shaft 1
Shaft 2
Shaft 3
Tank 1
Tank 2
Tank 3
VarCon (Variable Rate) (Unit calls for installation only if var controller is installed)
Optical Blockage Modules



# Ground Drive

## Sensor Installation - Continued

### Installation Procedure

1. **Disconnect** all the sensors (3 pin connector) from the harness before turning monitor on.

Turn monitor on. With no sensors found, the monitor proceeds to the "Startup menu" screen.

Use the Up/Down keys to select "Learn New System". Press the soft key below SELECT to enter the "Install New System" mode.

2. The monitor will ask if you want to proceed or exit.

With "Proceed" highlighted, press the SELECT key to enter the "Install New System" mode.

3. The display will indicate to install the speed sensor indicating that the ground speed sensor may now be connected. Connect the ground speed sensor.

The monitor will give a double beep when it acknowledges the sensor.

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## Sensor Installation - Continued

### Installation Procedure - Continued

- The display will indicate to install the fan sensor indicating that the fan sensor may now be connected. Connect the fan sensor.

The process is the same for rest of the sensors in the sequence.

- When the monitor requests a sensor that **will not be used** in the configuration, use the Up/Down keys to select "Skip this Sensor" and press the soft key below SELECT and the monitor will skip the sensor and advance to the next one in the sequence.

**Note:** There are **12 Blockage Modules**. To skip past the blockage modules use the Up/Down keys to select "Skip this Type of Sensors" and press the SELECT key, the monitor will skip all of the blockage modules and advance to the next type of sensor in the sequence.

- When all sensors in the list have either been learned or skipped, the monitor will display "Installation Complete". Use the Up/Down keys to select "Exit" press the SELECT key to return to the main "Startup Menu".

To verify the installation, turn the monitor off, then turn it on again. The monitor will now proceed to the "Operating" screen.



OR



# VRT Drive

## Sensor Installation

The installation procedure is required to configure the monitor to the sensors attached to it.

The operator may have to redo the installation if:

- 1) An extra tank is added to the Air Cart.
- 2) Replacing or adding sensors.
- 3) Replacing monitor with a new monitor.

## Installation Precautions

- 1) During installation the monitor has a predetermined order in which it wants the sensors attached. The installer must be sure that the proper sensor is plugged in the proper sequence.
  - i.e. If during installation the installer plugs in the Front Shaft and Ground Speed sensors in the wrong order, the monitor would not know this. The monitor would interpret Front Shaft rpm from the Ground Speed shaft and vice versa.
- 2) There may be occasions when the operator will not have use of all the sensors.
  - i) During sensor installation when the monitor prompts for an unused sensor to be plugged in, the operator can press the SELECT key to skip over the sensor. **The sensor will be assigned a disabled status.** A sensor disabled by this method can only be enabled by repeating the installation procedure.
  - ii) During operation the operator can disable shaft sensors by setting the pulses per revolution to zero. When pulses are set to zero alarms for that sensor and corresponding Bin Level sensor are ignored and no monitoring occurs.
- 3) Blockage modules attached to the harness are handled differently than the sensors attached to the harness. See Assembly Section “*Blockage Module*”.

**Pin Sensors** - the blockage module **does not have to be removed from the harness** during initial system installation.

**Optical Sensors** - the blockage modules **have to be unplugged from the harness** before sensor installation can be performed and are connected like the other sensors requested by the monitor during sensor installation.

**Note:** Each monitor is unique to the sensors installed. If monitor is moved to another Air Cart it has to be reprogrammed to match the sensors.

Sensor Installation Order
Speed (Ground)
Fan
Shaft 1
Shaft 2
Shaft 3
Tank 1
Tank 2
Tank 3
VarCon (Variable Rate) (Unit calls for installation only if var controller is installed)
Optical Blockage Modules



# VRT Drive

## Sensor Installation - Continued

### Installation Procedure

1. **Disconnect** all the sensors (3 pin connector) from the harness on the air cart (**Black Coloured Connectors**).

**Note: Do not disconnect the VRT sensors (Blue Colored Connectors).**

**Disconnect** the Variable Rate Console (3 pin connector) from the harness.

**Connect** the harness (3 pin connector) into the monitor.

2. Turn on the controller switch.

Turn monitor on. With no sensors found, the monitor proceeds to the "Startup menu" screen.

Use the Up/Down keys to select "Learn New System". Press the soft key below SELECT to enter the "Install New System" mode.

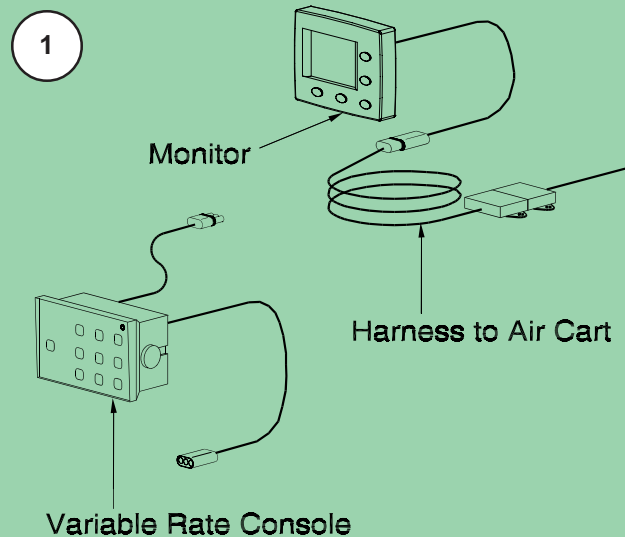
3. The monitor will ask if you want to proceed or exit.

With "Proceed" highlighted, press the SELECT key to enter the "Install New System" mode.

4. The display will indicate to install the speed sensor indicating that the ground speed sensor may now be connected. Connect the ground speed sensor.

The monitor will give a double beep when it acknowledges the sensor.

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## Sensor Installation - Continued

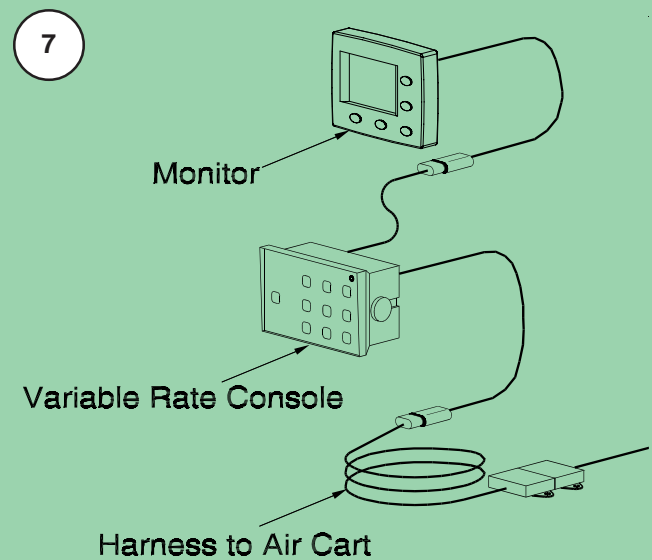
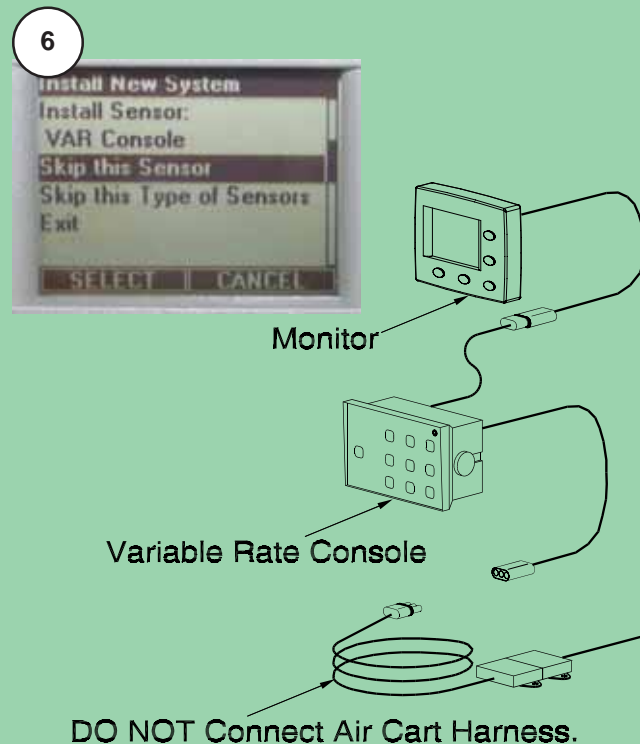
### Installation Procedure - Continued

5. The display will indicate to install the fan sensor indicating that the fan sensor may now be connected. Connect the fan sensor.

The process is the same for rest of the sensors in the sequence.

6. When the monitor displays **VAR Console**, disconnect the harness from the monitor and connect the Variable Rate Console into the monitor **only**.
7. Once monitor acknowledges the Console, the air cart harness can be plugged into the Variable Rate Console.

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# VRT Drive

## Sensor Installation - Continued

### Installation Procedure - Continued

- When the monitor requests a sensor that **will not be used** in the configuration, use the Up/Down keys to select "Skip this Sensor" and press the soft key below SELECT and the monitor will skip the sensor and advance to the next one in the sequence.

**Note:** There are **12 Blockage Modules**. To skip past the blockage modules use the Up/Down keys to select "Skip this Type of Sensors" and press the SELECT key, the monitor will skip all of the blockage modules and advance to the next type of sensor in the sequence.

- When all sensors in the list have either been learned or skipped, the monitor will display "Installation Complete". Use the Up/Down keys to select "Exit" press the SELECT key to return to the main "Startup Menu".

To verify the installation, turn the monitor off, then turn it on again. The monitor will now proceed to the "Operating" screen.



OR

