# **SERVICE BULLETIN**

## Affected machinery:

*MatchPoint*® *BLADE* Wood Processing System and *RailRider Pro*®, *RoofTracker II*™, and *RoofTracker III*™ gantries

## **Document:**

SB233 rev. A

## **Title:**

Replacing an ABB ACS880 VFD Memory Module

# **Application:**

Any saw or gantry with an ABB ACS880 VFD

# **Distribution:**

**Customers upon order** 

MiTek Machinery Division 301 Fountain Lakes Industrial Drive St. Charles, MO 63301 Phone: 1-800-523-3380 www.mitek-us.com

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## **Purpose and Scope**

This document explains how to replace a memory module for an ABB ACS880 VFD (variable frequency drive).

## **Overview**

The parts included in this kit are shown below.

#### Table 1: Parts

Quantity	Description	Part #
1	Service bulletin document	SB233

Before beginning the procedure, gather the supplies listed here:

- Torx driver set
- Flathead screwdriver set

If you have any questions, call MiTek Machinery Division Customer Service at 1-800-523-3380.

# Procedure

## **Electrical Lockout/Tagout Procedure**

	ELECTROCUTION HAZARD.
	All electrical work must be performed by a qualified electrician.
14	Verify that all power to the machine has been turned off and follow approved lockout/tagout safety procedures before performing any maintenance.
	If it is absolutely necessary to troubleshoot an energized machine, follow NFPA 70E for proper procedures and person protective equipment.

Before opening the main electrical enclosure or attempting to repair or replace any electrical device within the enclosure, lockout/tagout the machine properly. Follow your company's approved lockout/tagout procedures, which should include, but are not limited to, the steps here.

1.Engage an E-stop on the machine.

- 2. Turn the machine's disconnect switch to the Off position.
- 3. Shut the power to the machine off at the machine's power source, which is usually an electrical service entry panel on the facility wall. One example is shown in Figure 1.
- 4. Attach a lock and tag that meet OSHA requirements for lockout/tagout to the electrical service entry panel.

# Figure 1: Lockout/Tagout on the Power Source Panel



### **Removing the Old Module**

1. Open the door to the main electrical enclosure to locate the VFD.

- 2. Remove the cover from the VFD. See Figure 2 for a VFD with its cover removed.
  - Some VFD covers are attached by a pair of screws that must be removed with a Torx driver.
  - Some VFD covers have a latch on the front that must be pushed upward with a flathead screwdriver.

#### Figure 2: Removing Cover from the VFD



Sample photographs from the RoofTracker III

 Flip the keypad upward to locate the memory module. See Figure 3. The exact location of the memory module may vary depending on the specific VFD, so the memory module may be accessible without moving the keypad.

#### Figure 3: Memory Module Location



4. Slide the latch on the right-hand side of the module retainer out. See Figure 4.Figure 4: Sliding Latch to Remove Memory Module



5. Pull the memory module from the VFD.

## Installing the New Module

- 1. Reverse steps 1 through 5 to install the new memory module. Install the new memory module with the blue label facing away from the latch.
- 2. Remove the lock and tag from the electrical service entry panel.
- 3. Restore power.

## Starting the Machine

1. Before the machine runs for the first time, the VFD prompts you to select the correct program. Choose the correct program for the VFD by using the following steps.

A	All electrical work must performed by a qualified electrician following NFPA 70E for proper procedures and personal protective equipment.

A	Do NOT make contact with the wires or any components in the electrical enclosure, other than the keypad of the VFD, while the machine is energized.
	Touching an energized circuit may result in severe injury or death.

- a) Open the door to the main electrical enclosure.
- b) Locate the screen on the VFD keypad. The VFD keypad display shows a Select Drive menu with two options.
- c) By default, the name of the machine-specific program is selected. Press the right-hand selection key, shown in yellow in Figure 5, to select the machine-specific program.

Do NOT select Drive List Clean-Up from the Select Drive menu.

#### Figure 5: VFD Program Selection



- 2. At this point, an error message may appear.
  - If you do not recieve an error message, close the electrical enclosure door and cycle power.
  - If you receive an error message, see page 7 to resolve it. Once the error message is resolved, close the electrical enclosure door and cycle power.
- 3. Perform the safety tests detailed in the machine's manual to make sure that the machine functions properly.
  - If the machine passes the safety tests, resume normal operation.
  - If the machine does not pass any part of the safety tests, lockout/tagout the machine and call Machinery Division Customer Service. Once the problem is resolved and the machine passes its safety tests, resume normal operation.



Machinery Division Customer Service is available at 800-523-3380 Monday through Friday.

## **Resolving Error Messages**

If the VFD has an error message, the error identification code appears in the center of the VFD screen, underneath a description.

#### **Resolving Error 5093**

If your machine displays error 5093, cycle power to the machine by using the disconnect switch. Cycling power resolves the error. Proceed to step 3 on page 6 to continue with the procedure.

#### **Resolving Error A6A6**

If your machine displays error A6A6, resolve it using the following steps. Use Figure 6 for reference if necessary.



Figure 6: Keypad Control Identification

1. Press the left-hand selection key to select Back. See Figure 7. Selecting Back hides the error message but does not resolve the error.

#### Figure 7: Error A6A6



 Use the right-hand selection key to select *Menu > Parameters > Complete List*. See Figure 8.



#### Figure 8: Accessing a Complete List of Parameters

3. Press the down arrow until you reach 95 HW Configuration. Press the right-hand selection key to select 95 HW Configuration. See Figure 9.

#### Figure 9: Parameter 95 HW Configuration



4. Press the right-hand selection key again to select 95.01 Supply voltage. See Figure 10.

#### Figure 10: 95.01 Supply Voltage



- 5. Set the supply voltage according to the following.
  - If the machine is a 460V *RoofTracker III*, set the parameter to 500V.
  - If the machine is any other machine, set the parameter to the voltage range that contains the machine's operating voltage.

Figure 11: Supply Voltage Selection

	Remote	RTIII_208V_1	735.0 00	
	95.01 Sup	ply voltage		
	[0] Not g	given		
	111 208	240.1/		
	11 200	240 V		
	[1] 200	240 V		
	[1] 200	240 4		
	[1] 200	240 4		
	[1] 200	69.06 a.m.	Save	
	Cancel	09.06 a.m.	Save	

- 6. Press the right-hand selection key to select Save.
- 7. Use the left-hand selection key to navigate back to the main screen.
- 8. See step 3 on page 6 to continue with the procedure.