# MiTek SERVICE BULLETIN

# Document ID:

# Title: Replacing Fuse 9

Affected machinery: BLADE II Linear Saw

Distribution: Customers upon order

#### CAUTION:

MiTek recommends printing this document in high resolution using color ink. Many of the graphics may be unclear and may create an unsafe condition if this recommendation is not followed.

MiTek Automation Phone: 800-523-3380 Fax: 636-328-9218 www.mitek-us.com

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# **Purpose and Scope**

This service bulletin instructs how to replace fuse 9 used in the equipment referenced on the title page.

# **Overview**

### **Parts Included**

The parts included in this kit are shown in Table 1. Please make sure all parts and supplies are present before starting the procedure.

Table 1:	Parts in	SB268KIT
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Quantity	Description	Part #
3	Class J Fuse holder	516554
3	Class J Fuse - 30A	516492
1	Service bulletin document	SB268

If you have any questions, call MiTek Automation Support at 1-800-523-3380.



#### Supplies Needed

- Phillips screwdriver
- Flathead screwdriver
- Voltage tester or meter

# **Procedure**

## **Electrical Lockout/Tagout Procedure**

	ELECTROCUTION HAZARD.
	All electrical work must be performed by a qualified electrician.
77	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 personal protective equipment.

#### Procedure for Working Either on a Machine Inside the Machine's Main Electrical Enclosure or in the Electrical Transmission Line to the Machine.

- 1. Engage an E-stop on the machine.
- 2. Turn the machine's disconnect switch to the Off position. This is usually required to open the main electrical enclosure's door.
- 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 of a locked-out power source panel is shown in Figure 1.
- 4. Attach a lock and tag that meet OSHA requirements for lockout/ tagout to the electrical service entry panel.
- 5. Open the door to the enclosure to which you need access. Using a multimeter, verify that the power is off.

Figure 1: Lockout/Tagout on the Power Source Panel





# Removing the Old Fuse



\Lambda WARNING

MOVING PARTS CAN CRUSH AND CUT.

Always verify that power to the machine has been turned off and follow approved lockout/tagout procedures.

- 1. Once the power is locked out as previously described, wait 5 minutes to ensure the Servo Amplifier's capacitors are fully discharged.
- 2. Locate FU9, pointed out in the image below.

Figure 2: FU9 Location



3. Check there is no voltage, Line to Line or Line to Ground, at FU9 with a meter.

4. Loosen the terminal block screws circled in Figure 3. Remove wires 1L1, 1L2, and 1L3 from the top of FU9. Remove wires 1L1A, 1L2A, and 1L3A from the bottom of FU9.



Figure 3: Wires to Disconnect from FU9

5. Remove FU9 from the DIN Rail by pushing the top down and lifting the bottom of the fuse away from the rail. The holder will tip away from the rail.

Figure 4: Removing the Fuse from the DIN Rail



- 6. Remove the adjacent DIN stop from the DIN rail using a flathead screwdriver. You may need to remove the DIN stop from the right end of the DIN rail.
- 7. Shift adjacent fuses to make room for the new fuse holders.

#### Installing the New Fuse

- 1. Remove the front of each of the new fuse holders to access the terminal block screws. Loosen the screws by one and a half turns.
- 2. Interlock the bases of the fuse holders, see Figure 5. Install the fuse holder block onto the DIN rail by reversing the motion used to remove the old fuse holder block. A "clunk" will be heard when the fuse block is fully seated on the DIN rail.

Figure 5: Interlocking the Fuse Holders



3. Connect the 1L1, 1L2, and 1L3 to the left port on the top of each new fuse holder. Be sure to connect 1L1 to the leftmost fuse holder and 1L3 to the rightmost fuse holder. Tighten terminal block screws as necessary.

Figure 6: Installing Wire Connections



- 4. Then connect the 1L1A, 1L2A, and 1L3A wires to the left port of the bottom of each new fuse holder. Be sure to connect 1L1A to the leftmost fuse holder and 1L3A to the rightmost fuse holder. Tighten terminal block screws as necessary.
- 5. Gently tug on each wire to ensure the connections are secure.

6. Install the Class J 30A fuses in the front part of each fuse holder.

Figure 7: Front Part of the Fuse Holder



Install the front of the fuse holder with the fuse installed. See Figure 8.
Figure 8: Installed Class J Fuse Holders



8. Remove lockout/tagout devices, return power, and check for no Servo Faults on the *BLADE II* software.

#### END OF SERVICE BULLETIN