
MiTek[®]

SERVICE BULLETIN

Document ID:

SB290

Title:

Replacing the Encoder Switch (Dip Switches)

Affected machinery: BLADE™ saw and BLADE II™ saw

Distribution: Customers upon order

Applies to: All encoder switches being replaced by a Motrona® GV210 encoder switch.

Sensitivity: Approved for Customer Use

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.

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Purpose and Scope

This service bulletin instructs how to replace an existing encoder switch (dip switches) on the BLADE saw or BLADE II saw with a Motrona® GV210 encoder switch. The orientation the dip switches must be set to for this encoder switch is also indicated at the end of this service bulletin.

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 SB290KIT

Quantity	Description	Part #
1	ENCODER CROSS/SPLITTER SWITCH, GV210(MONTRONA)	504214
1	Service bulletin document	SB290

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



Lockout/Tagout Instructions

Electrical Lockout/Tagout Procedure

The lockout/tagout instructions for the electrical systems will be referenced as necessary in this document. Service Bulletin instructions start on [page 4](#).

	 WARNING
	ELECTROCUTION HAZARD. All electrical work must be performed by a qualified electrician. 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.

1. If applicable, close machine software and shut down the PC using the **Power > Shut down** method in Windows.
2. Engage an E-stop on the machine.



3. Turn the machine's disconnect switch to the Off position. This is usually required to open the main electrical enclosure's door.
4. 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](#).
5. Attach a lock and tag that meet OSHA requirements for lockout/tagout to the electrical service entry panel.
6. 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



Procedure

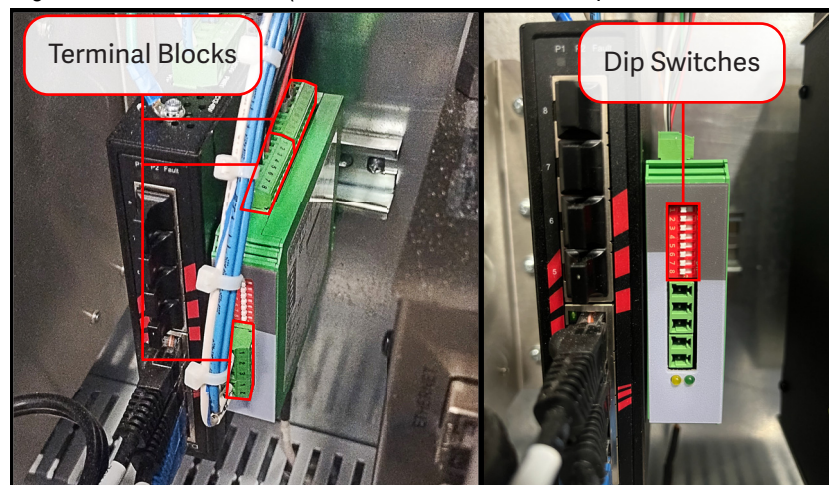
Replacing the Encoder Switch (Dip Switches)



	 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. Lockout/tagout the electrical and pneumatic systems of the machine using the [Lockout/Tagout Instructions on page 2](#).
2. With power locked out as previously described, open the printer's electrical enclosure (BLADE) or the saw's main electrical enclosure (BLADE II).
3. Remove the existing encoder switch, located at the bottom-right (BLADE) or bottom-left (BLADE II) of the enclosure, by disconnecting the green terminal blocks from it (See left side of [Figure 2](#)).

Figure 2: Encoder Switch (With Terminal Blocks and Dip Switches Called Out)



4. Check to ensure that each of the eight dip switches (shown on the right side of [Figure 2](#)) on the new encoder switch are all in the "OFF" position (set to the left side).
 - *Note: BLADE frames 1-289 were built using Matthews® V84i Print Controllers. These older style print controllers require the encoder switch's top two dip switches (#1 & #2) to be set to the "ON" position.*
5. Seat the new encoder switch and reconnect the terminal blocks.
6. Remove lockout/tagout devices and test the machine to ensure it operates without issue.

END OF SERVICE BULLETIN