SERVICE BULLETIN

Document ID:

SB286

Title:

Adapter Cables Between BLADE II™ or BLADE™ and a Skewed Conveyor

Affected machinery: BLADE II and BLADE saw

Distribution: Upon order of a new BLADE II while keeping an older Skewed Conveyor OR Upon order of a new Skewed Conveyor while keeping a BLADE II saw before frame 537 or a BLADE saw

Applies to: Customers with both a Skewed Conveyor and a BLADE II or BLADE saw

Sensitivity: Internal use only (Installed by MiTek)

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

Part # and Rev.	SB286
Print Date	5 June 2025
Effectivity	See above
	4/26/24
Revision Date	
Revised By	
Rev. Approved By	
Orig. Release Date	5 June 2025
Orig. Created By	M. Farmer
Orig. Approved By	R. Tucker

Purpose and Scope

This service bulletin shows the scenarios where different cable adapters are needed, and how to install the cables.

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 SB286KIT-A (Scenario 1)

Quantity	Description	Part #
1	Cable Assembly for BLADE II before Frame 537 and BLADE to current Skewed Conveyor	97131-501
1	Service bulletin document	SB286

Table 2: Parts in SB286KIT-B (Scenario 2)

Quantity	Description	Part #
1	Cable Assembly for BLADE II for Frame 537 and up to previous Skewed Conveyor	97131-502
1	Service bulletin document	SB286

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

Supplies Needed

Measuring tape - at least 14’

Cable cutting tools

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

To determine which scenario is applicable to your setup, look at the electrical enclosure on your skewed conveyor and take into consideration which BLADE saw you have, and its frame number.

Figure 2: Scenario 1, BLADE II before Frame 537 or BLADE

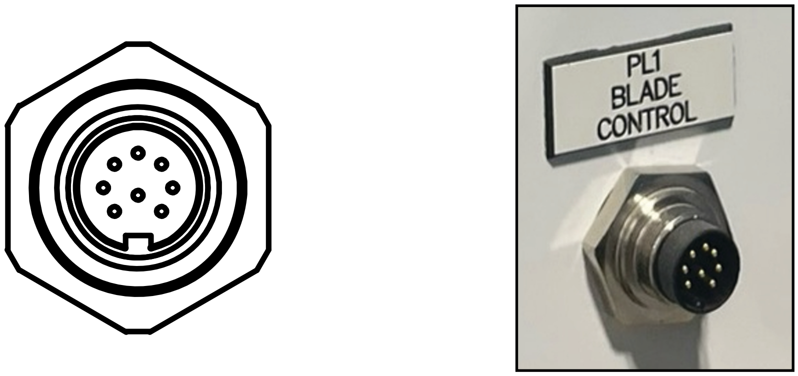


Figure 3: Scenario 1 Cables

Figure 4: Scenario 2, BLADE II Frame 537 and Up

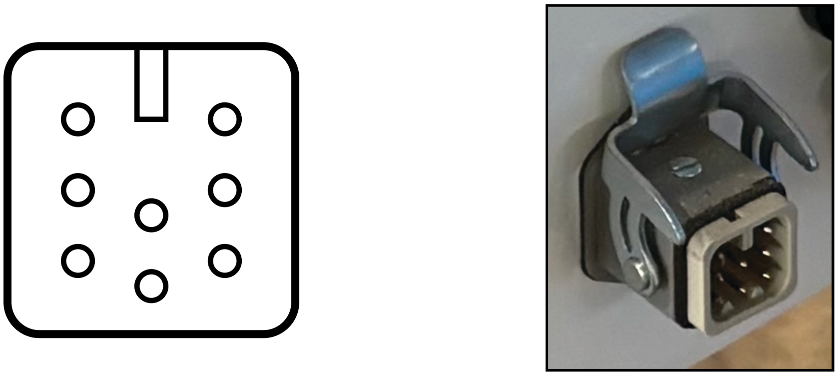
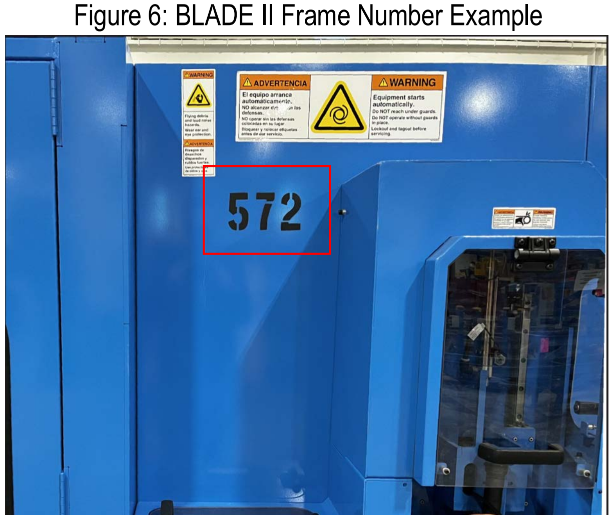


Figure 5: Scenario 2 Cables

Figure 6: BLADE II Frame Number Example



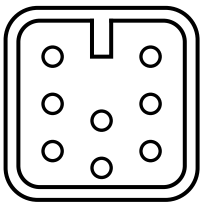
Preparing the Cables

Strip about 2” of cable insulation and about 3/8” of insulation on each individual conductor. Follow the tables below to connect the wires inside the cables to the pins of the connectors.

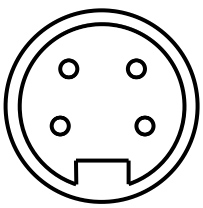
Figure 7: Scenario 1 Wiring

Scenario 1

Male ends:



Cut to 12” long



cut to 14’ long

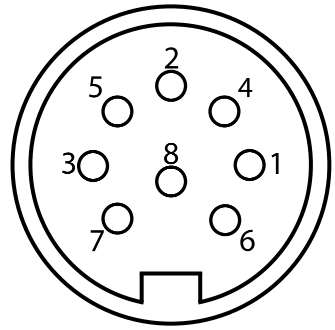
Signal Cable

Wire Color	Pin
White	1
Brown	2
Green	3
Yellow	4
Gray	5
Pink	6
Blue	7
Red	8

Power Cable

Wire	Wire Color	Pin
L1	Black	1
L2	White	2
L3	Red	3
Gnd	Grn/Yel	4

Female ends (to wire):



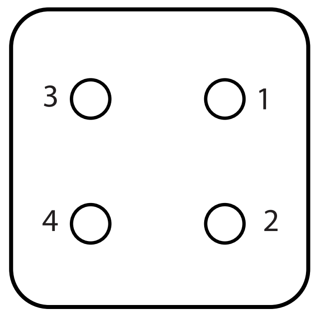
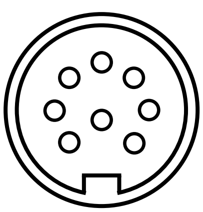


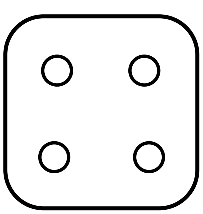
Figure 8: Scenario 2 Wiring

Scenario 2

Male ends:



Cut to 12” long



cut to 14’ long

Signal Cable

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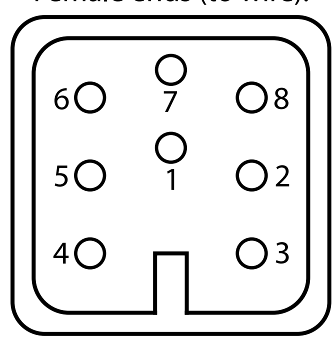
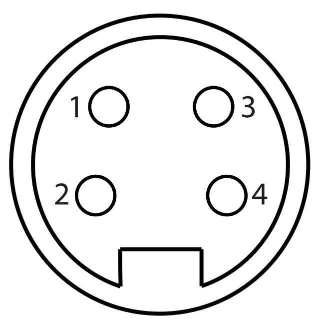




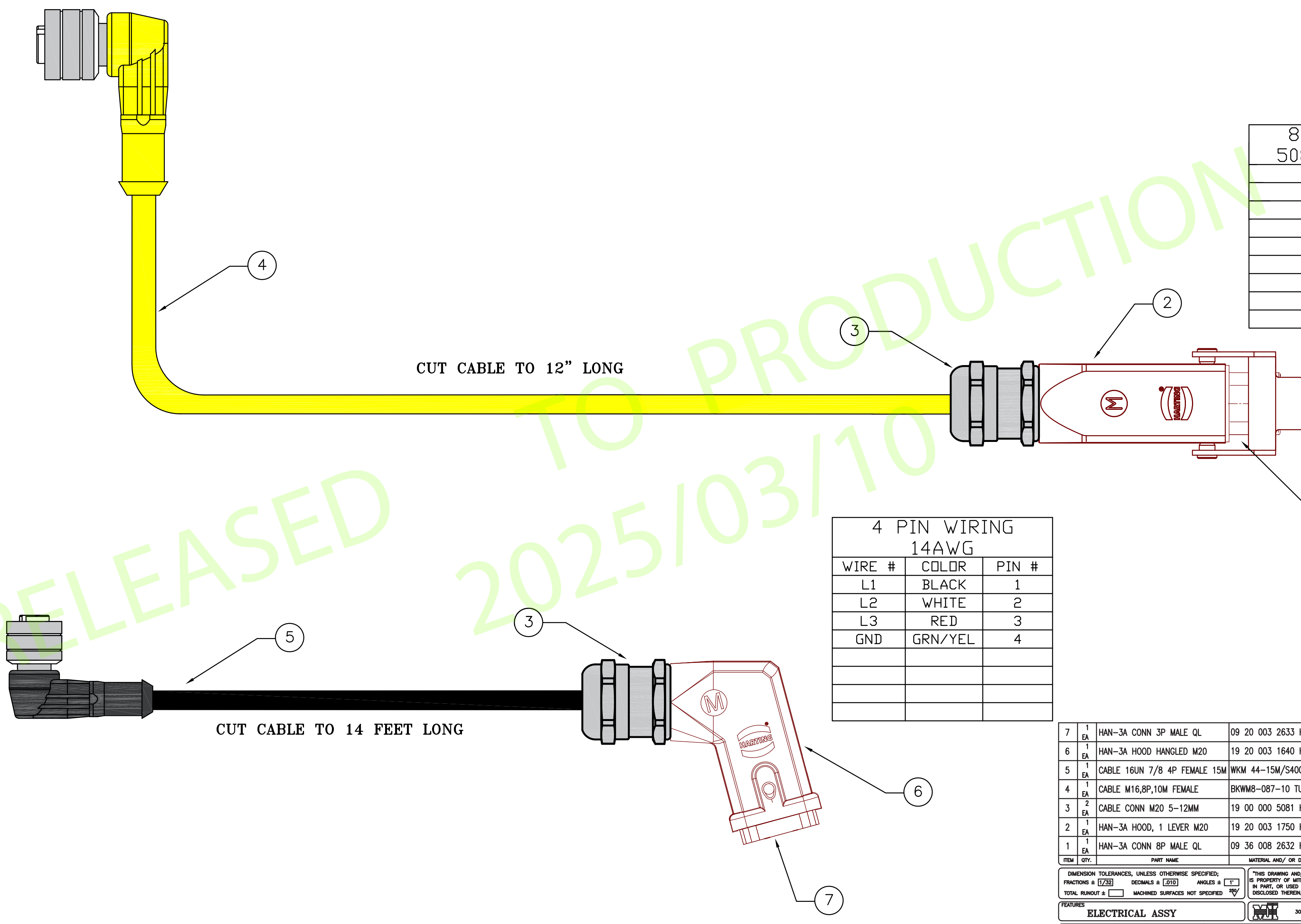
Installing the Cables

	⚠ **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 3.
2. With power locked out as previously described, match the cable ends to the ports on the skewed conveyor electrical enclosure and the BLADE saw electrical enclosure.
3. Secure cables to the frame using cable ties.
4. Remove lockout/tagout devices and test the functionality of the skewed conveyor.

END OF SERVICE BULLETIN

REV.	DATE	DESCRIPTION	BY	CHK'D	APP'D	DATE
–	2025/3/5	INITIAL RELEASE				RLS



8 PIN WIRING 508228 (TURCK)		
	COLOR	PIN #
	WHITE	1
	BROWN	2
	GREEN	3
	YELLOW	4
	GRAY	5
	PINK	6
	BLUE	7
	RED	8

4 PIN WIRING 14AWG		
WIRE #	COLOR	PIN #
L1	BLACK	1
L2	WHITE	2
L3	RED	3
GND	GRN/YEL	4

ITEM	QTY.	PART NAME	MATERIAL AND/ OR DESCRIPTION	LENGTH	CODE	DWG.NO./PART NO.
7	1 EA	HAN-3A CONN 3P MALE QL	09 20 003 2633 HARTING	X	P	504790
6	1 EA	HAN-3A HOOD HANGLED M20	19 20 003 1640 HARTING	X	P	504778
5	1 EA	CABLE 16UN 7/8 4P FEMALE 15M	WKM 44-15M/S4000 TURCK	X	P	508229
4	1 EA	CABLE M16,8P,10M FEMALE	BKWM8-087-10 TURCK	X	P	508228
3	2 EA	CABLE CONN M20 5-12MM	19 00 000 5081 HARTING	X	P	504759
2	1 EA	HAN-3A HOOD, 1 LEVER M20	19 20 003 1750 HARTING	X	P	504798
1	1 EA	HAN-3A CONN 8P MALE QL	09 36 008 2632 HARTING	X	P	504792

DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED;
FRACTIONS ± 1/32 DECIMALS ± .010 ANGLES ± 1°
TOTAL RUNOUT ± MACHINED SURFACES NOT SPECIFIED 250

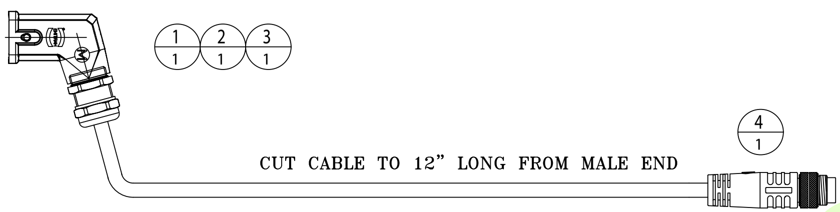
FEATURES
ELECTRICAL ASSY

MiTek®
301 FOUNTAIN LAKES INDUSTRIAL DRIVE
ST. CHARLES, MO. 63301

MANUAL X X X
PAGE X X X

APPROVED	DATE	MFG.	CABLE ASSY BLADE 1 MACH TO BLADE 2 SKEW					
CHECKED	DATE	DRAWN RLS	DATE 3/5/25	FINISH PAINT X	SCALE NONE	PAGE 1 OF 1	97131-501 DASH NO. X	REV. –

REV.	DATE	DESCRIPTION	BY	CHK'D	APP'D	DATE
-	2025/5/1	INITIAL RELEASE				DTR



8 PIN WIRING 508228 (TURCK)		
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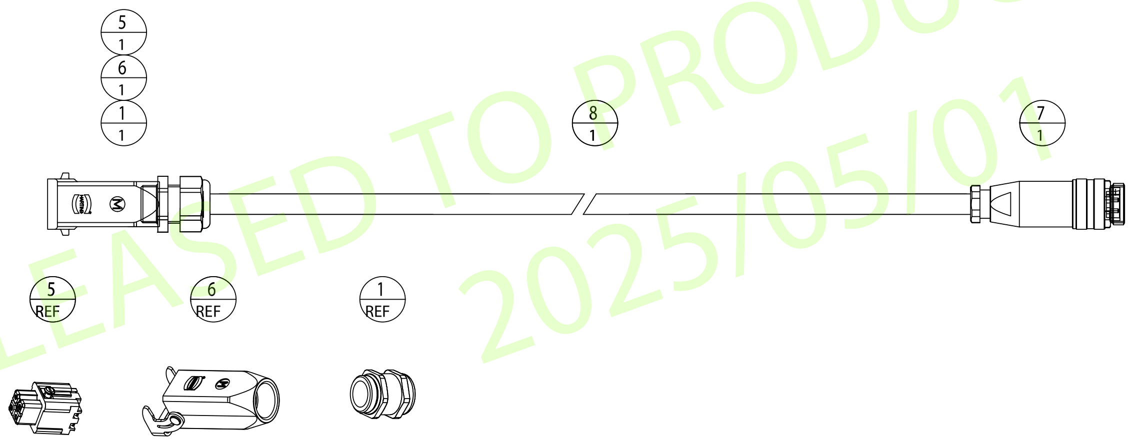
	BROWN	2
	GREEN	3
	YELLOW	4
	GRAY	5
	PINK	6
	BLUE	7
	RED	8



4 PIN WIRING 16AWG		
WIRE #	COLOR	PIN #
L1	BLACK	1
L2	WHITE	2
L3	RED	3
GND	GRN/YEL	4

ITEM	QTY.	PART NAME	MATERIAL AND/OR DESCRIPTION	LENGTH	CODE	DWG.NO./PART NO.
8	1 FT	CABLE,16/4,SOW	(DIA=.430)	X	P	508112
7	1 EA	FIELD WIREABLE, 7/8-16, 4P	BCC070C (BALLUFF)	X	P	509975
6	1 EA	HAN-3A HOOD,1 LEVER,M20	19 20 003 1750 (HARTING)	X	P	504798
5	1 EA	HAN-3A CONN 3P FMALE,QL	09 20 003 2733 (HARTING)	X	P	504791
4	1 EA	CABLE M16,8P,10M, M2F	BSMV BKMV8-087-10 (TURCK)	X	P	508233
3	1 EA	HAN-3A CONN 8P FMALE,QL	09 36 008 2732 (HARTING)	X	P	504793
2	1 EA	HAN-3A HOOD ANGLED M20	19 20 003 1640 (HARTING)	X	P	504778
1	2 EA	CABLE CONN,M20,5-12mm	19 00 000 5081 (HARTING)	X	P	504759

DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED:
FRACTIONS ± 1/32 DECIMALS ± .010 ANGLES ± 1°
TOTAL RUNOUT ± MACHINED SURFACES NOT SPECIFIED

FEATURES: ELECTRICAL ASSY

MiTek®
301 FOUNTAIN LAKES INDUSTRIAL DRIVE
ST. CHARLES, MO. 63301

MANUAL X X X PAGE X X X

APPROVED	DATE	MFG.	CABLE ASSY BLADE 1 SKEW TO BLADE 2 MACH.					
CHECKED	DATE	DRAWN DTR	DATE 5/1/25	FINISH PAINT X	SCALE NONE	PAGE 1 OF 1	97131-502	DASH NO. X / REV. -