



SERVICE BULLETIN

Document ID:

SB256

Title:

Replacing Light Curtains

Affected machinery: *RoofTracker II™* and *RoofTracker I™* roller press

Distribution: Customers upon order

Applies to: All *RoofTracker II* and *RoofTracker I* roller presses with discontinued light curtains

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

Copyright © 2026 MiTek®
All rights reserved.

| | |
|--------------------|---------------|
| Part # and Rev. | SB256 rev. B |
| Print Date | 13 April 2026 |
| Revision Date | 8 April 2026 |
| Revised By | A. McIntire |
| Orig. Release Date | 12 April 2022 |
| Created By | A. McIntire |
| Approved By | R. Tucker |



CAUTION: The document should only be printed in color with adequate resolution.
Graphics may be unclear and could create an unsafe condition if this recommendation is not followed.

Purpose and Scope

This service bulletin instructs how to replace the discontinued light curtains previously used in the *RoofTracker II* or *RoofTracker I* with updated light curtains.

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 SB256KIT

| Quantity | Description | Part # |
|----------|-------------------------------------|-----------|
| 2 | Emitter and receiver light curtains | 92311-501 |
| 2 | Emitter cable (5 pin) | 515709 |
| 2 | Receiver root cable (8 pin) | 515719 |
| 2 | Receiver extension cable (8 pin) | 515708 |
| 4 | Adjustment brackets | 515714 |
| 4 | Light curtain bracket | 67319 |
| 8 | 3/8" washers | 364042 |
| 8 | Bolts 3/8"-16x1 | 354011 |
| 16 | Bolts 1/4"-20x1/2 | 354012 |
| 1 | 5/32" tamper proof hex key | 354015 |
| 1 | 7/32" tamper proof hex key | 354004 |
| 4 ft | Blue wire 18g | 508003-06 |
| 1 | Service bulletin document | SB256 |

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





Supplies Needed

- Diagonal wire cutter
- Flat blade or terminal block screwdriver
- Hex key set

Procedure

Electrical Lockout/Tagout Procedure

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

Before opening the main electrical enclosure or attempting to repair or replace an electrical transmission line, 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. 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.

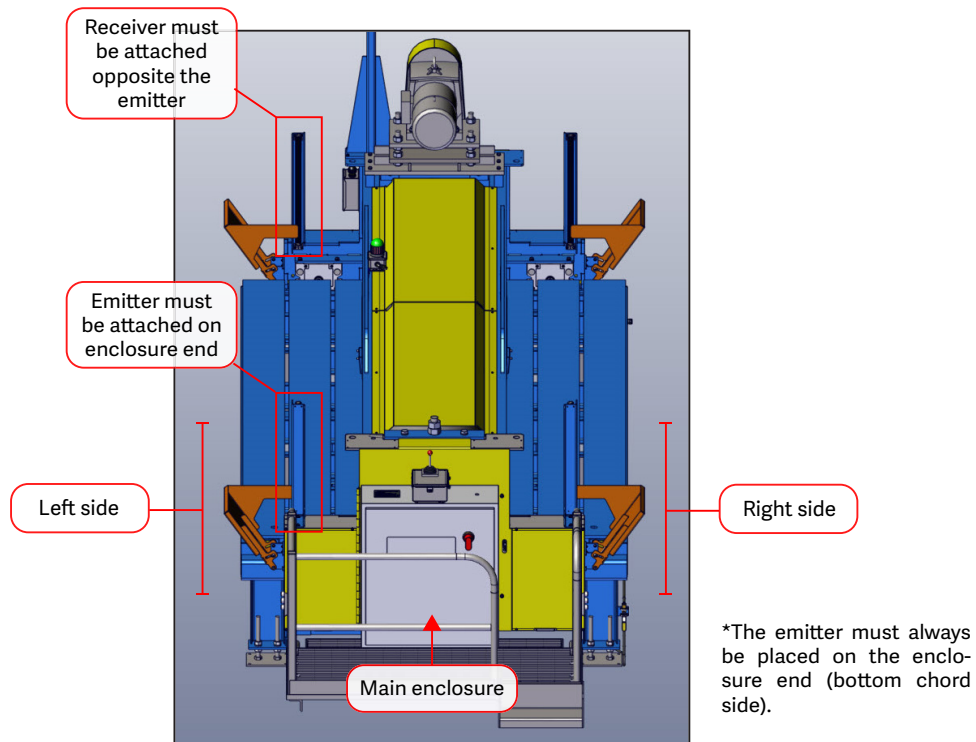
Figure 1: Lockout/Tagout on the Power Source Panel



Overview


The overview graphic in Figure 2 identifies important configuration information and components referenced in these instructions. Light curtains are secured to mounting brackets on the left and right sides of the machine (2 on each side). Left and right is determined from the perspective on the main enclosure end.

Figure 2: Overview Graphic



Replacing Light Curtains



| | |
|---|---|
| | ⚠ WARNING |
|  | <p>MOVING PARTS CAN CRUSH AND CUT.</p> <p>Always verify that power to the machine has been turned off and follow approved lockout/tagout procedures.</p> |

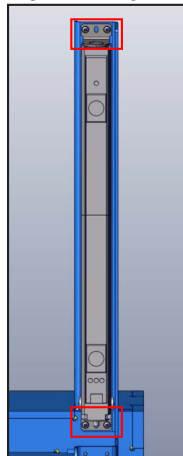
1. With power locked out as previously described, disconnect the cables from the bottom of the existing light curtains on the left and right sides of the machine. Standing at the main electrical enclosure, pull all existing emitter and receiver cables free of the machine. All cables will be fully disconnected from the enclosure at a later step.

Figure 3: Light Curtain Cable Location (*hardware may differ from image*)



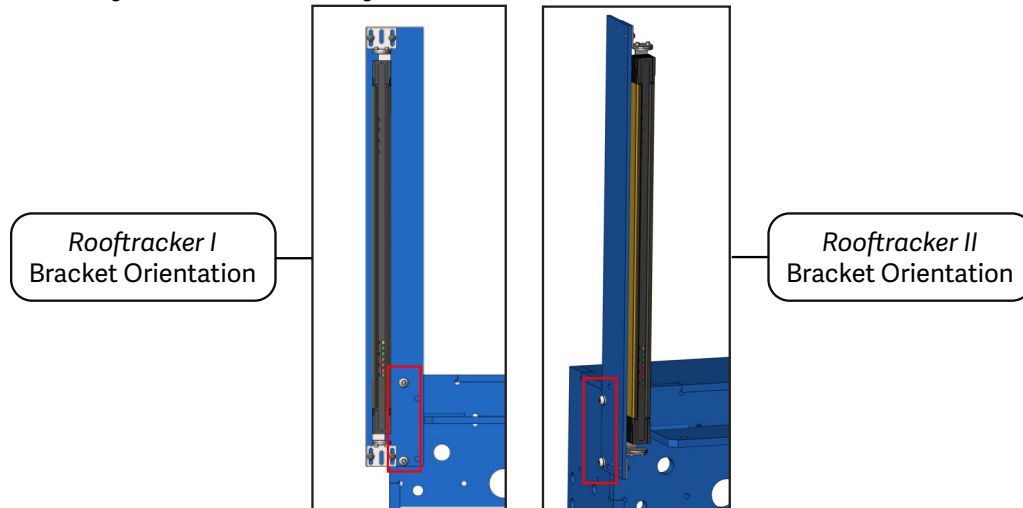
2. Use the 5/32" tamper-resistant hex key to remove the 4 bolts that secure the light curtains to the mounting brackets at the top and bottom of light curtain. Remove and set aside the light curtain. Repeat this step for each curtain (4 total).

Figure 4: Light Curtain Adjustment Bracket Location (*hardware may differ from image*)



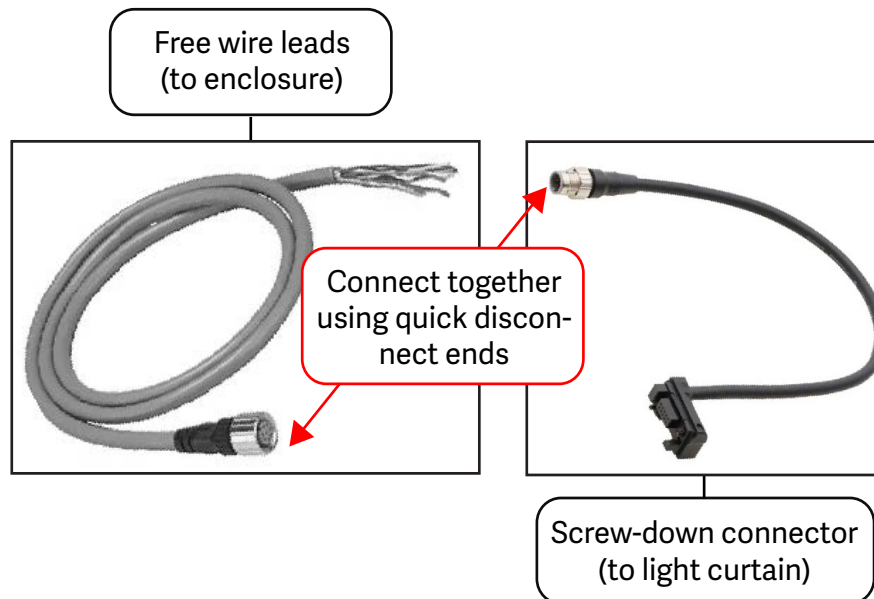
3. Remove existing light curtain bracket from *RoofTracker II* or *RoofTracker I*.
4. Use the 7/32" tamper-resistant hex key to install the new light curtain brackets (4 total) using supplied 3/8" bolts and washers. The orientation of the brackets will differ depending on the *RoofTracker* model (see Figure 5).

Figure 5: Orientation of Light Curtain Brackets



5. Connect the 8-pin root and extension receiver cables together via quick disconnect before proceeding to the next step (see Figure 6).

Figure 6: Connecting Root and Extension Receiver Cables



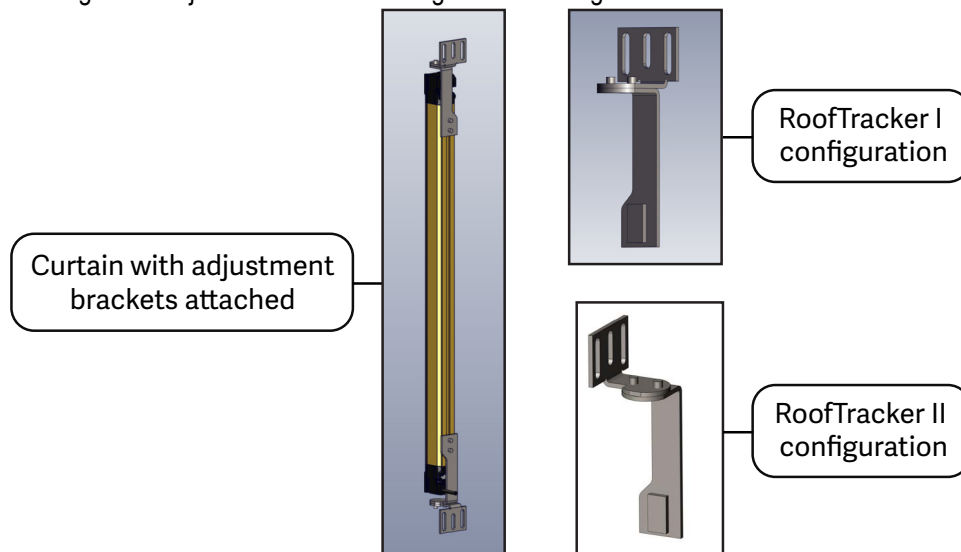
6. Attach the (now combined) receiver cables to both light curtains labeled RECEIVER and the supplied emitter cables (5 pin) to the light curtains labeled EMITTER (see Figure 7).
 - The emitter may be referred to as a transmitter in electrical schematics.

Figure 7: Attaching Receiver and Emitter Cables to Light Curtains



7. Locate and properly orient the supplied adjustment brackets (see Figure 8).
8. Use a standard hex key to loosen the adjustment brackets. Slide them into place using the grooves on the back of the curtains. Tighten the adjustment brackets to secure them in place. See Figure 8 for example of a curtain with the brackets properly installed.

Figure 8: Adjustment Bracket Configurations for Light Curtains



9. With the adjustment brackets now attached to the light curtains, use the 5/32" tamper-resistant hex key to remove the 1/4" bolts for following steps (see Figure 5)
 - Attach the emitter curtains to mounting brackets on the main enclosure end

| <i>RoofTracker I</i> | <i>RoofTracker II</i> |
|----------------------|-----------------------|
| Grey 63 Bottom | Grey 63 Bottom |
| Blue 64 Bottom | Blue 64 Bottom |

16. Set aside the now loose **Left Receiver** cable.
17. Run the supplied receiver cable (8 pin) from the **Left Receiver** light curtain, using the same routing and bundling excess to keep clear of moving parts.
18. Using the 8-conductor receiver cable for the **Left Receiver**, connect all listed wires to respective terminal blocks:

| <i>RoofTracker I</i> | <i>RoofTracker II</i> |
|----------------------|-----------------------|
| Black 62 Bottom | Black Si0 Bottom |
| White 61 Bottom | White Si1 Bottom |
| Brown 41-2 Bottom | Brown 41-3 Bottom |
| Blue 42-2 Bottom | Blue 42-4 Bottom |
| Yellow 63 Bottom | Yellow 63 Bottom |
| Red 64 Bottom | Red 64 Bottom |

19. Disconnect the following wires for the **Right Emitter** from the enclosure end:

| <i>RoofTracker I</i> | <i>RoofTracker II</i> |
|----------------------|-----------------------|
| White 41-2 Bottom | White 41-4 Bottom |
| Brown 42-1 Top | Brown 42-5 Top |

20. Set aside the now loose **Right Emitter** cable.
21. Run the supplied receiver cable (5 pin) from the **Right Emitter** light curtain, using the same routing and bundling excess to keep clear of moving parts.
22. Using the supplied 5-conductor emitter cable for the **Right Emitter**, connect the following wires:

| <i>RoofTracker I</i> | <i>RoofTracker II</i> |
|----------------------------|----------------------------|
| Blue (0 VDC) 42-1 Top | Blue (0 VDC) 42-5 Top |
| Brown (24 VDC) 41-1 Bottom | Brown (24 VDC) 41-4 Bottom |

23. Disconnect the following wires for the **Right Receiver** from the enclosure end:

| <i>RoofTracker I</i> | <i>RoofTracker II</i> |
|----------------------|-----------------------|
| Yellow 71 Bottom | Yellow Si3 Bottom |
| Red 72 Bottom | Red Si2 Bottom |

| RoofTracker I | RoofTracker II |
|-----------------------------------|----------------------------|
| White 41-2 Bottom | White 41-4 Bottom |
| Pink and Brown 70 and 42-2 Bottom | Pink and Brown 42-5 Bottom |
| Blue 74 Bottom | Blue 74 Bottom |
| Grey 73 Bottom | Grey 73 Bottom |

24. Set aside the now loose **Right Receiver** cable.
25. Run the supplied receiver cable (8 pin) from the **Right Receiver** light curtain, using the same routing and bundling excess to keep clear of moving parts.
26. Using the 8-conductor receiver cable for the **Right Receiver**, connect all listed wires to respective terminal blocks:

| RoofTracker I | RoofTracker II |
|----------------------|-----------------------|
| White 71 Bottom | White Si3 Bottom |
| Black 72 Bottom | Black Si2 Bottom |
| Brown 41-2 Bottom | Brown 41-4 Bottom |
| Blue 42-2 Bottom | Blue 42-5 Bottom |
| Red 74 Bottom | Red 74 Bottom |
| Yellow 73 Bottom | Yellow 73 Bottom |

27. Disconnect and remove the following wires:

| RoofTracker I | RoofTracker II |
|--|---|
| White/Blue 42 (connected to terminal 22) on CR6 and CR8 (one end) and to 42-2 Top and 42-4 Top (other end) | White/Blue 42 (connected to terminal 22) on CR16 and CR15 (one end) and to 42-5 Top (other end) |

28. Use supplied blue wire to connect the following:

| RoofTracker I | RoofTracker II |
|--|---|
| CR6 (connected to terminal 12) to 41-2 | CR16 (connected to terminal 22) to 41-5 |

29. Use supplied blue wire to create a jumper:

| <i>RoofTracker I</i> | <i>RoofTracker II</i> |
|---|---|
| Between CR6 (connected to terminal 12) and CR8 (connected to terminal 12) | Between CR16 (connected to terminal 22) and CR15 (connected to terminal 22) |

30. Remove lockout/tagout devices and restore power to the machine.

Aligning Light Curtains

As long as the curtains are out of alignment, an E-stop will be active and prevent movement of the gantry. Make certain no other personnel interact with the gantry during the alignment process.

1. Verify the optical surface of the light curtain sensors are clean and that there are no interrupting objects in the detection zone of the sensors.
2. To adjust the light curtains, loosen (but do not remove) the adjustment and mounting bracket bolts as needed.
3. Rotate and move the emitter and receiver vertically until the following state is achieved:
 - The indicator lights on the receiver light curtain show 4 green dots at the top and three green at the bottom (see Figure 10).

Figure 10: Receiver Indicator Lights After Successful Alignment



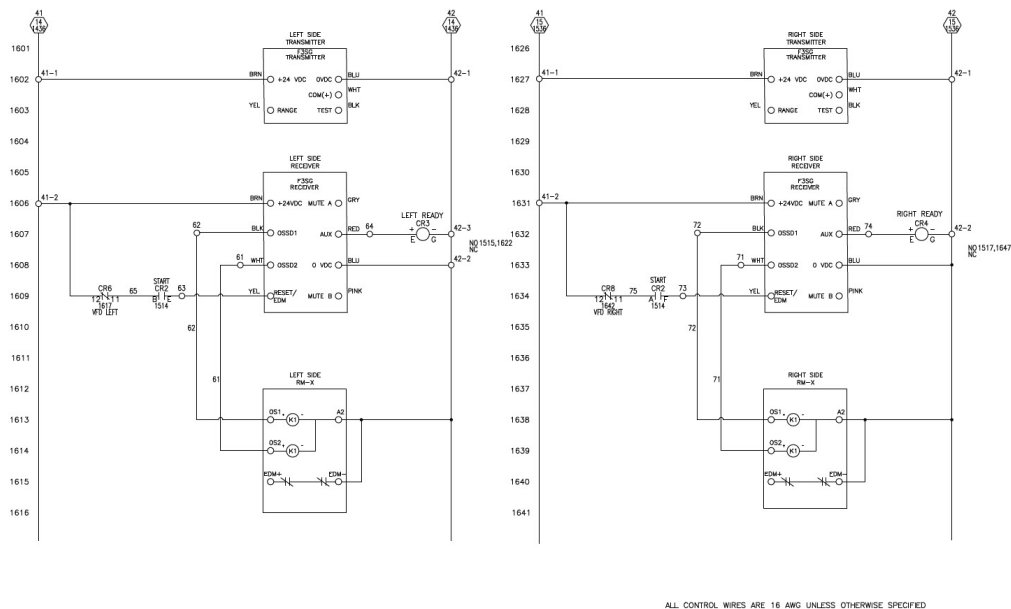
4. Once the light curtains are aligned, tighten the adjustment and mounting bracket bolts to secure alignment.
5. Clear E-stop according to instructions in the machine manual.

6. Run standard safety test according to instructions in the equipment manual.
 - If the machine does function per the manual description, lockout/tagout the machine and contact Automation Support (1-800-523-3380).

Appendix

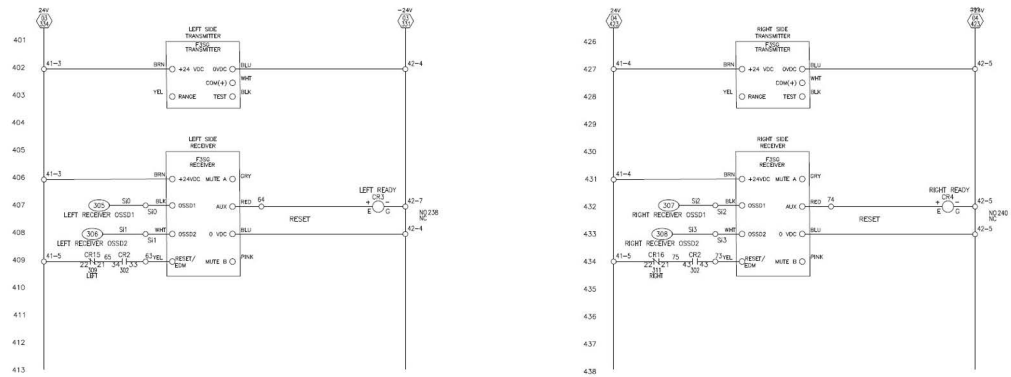
Updated *Rooftracker I* Schematics

Figure 11: Updated Light Curtain Wiring



Updated *Rooftracker II* Schematics

Figure 12: Updated Light Curtain Wiring



END OF SERVICE BULLETIN