

# Service Bulletin

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**Machinery Affected:** *RoofTracker™* Roof Truss Roller Press  
**Document:** SB171  
**Title:** Adding an Operator Platform  
**Applies To:** Frames 51 and Lower



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## *Purpose and Scope*

This Service Bulletin procedure applies to customers using a *RoofTracker™* roller press with a frame number of 51 or lower.

Customers can retrofit their machine with an operator platform. After adding the platform, users can elect to keep their pendant control or replace the pendant control with a joystick, depending on which kit was ordered. Instructions for connecting both controls to the new operator platform are provided in this Service Bulletin.

## Overview

Table 1 lists the kits and the items included in each kit.

**Table 1: SB171 Kits**

| Kit         | Control | Quantity | Part Number | Description  |
|-------------|---------|----------|-------------|--|
| SB171 KIT-A | Pendant | 1        | SB171       | Service Bulletin 171, includes Drawings 63830-501, 63630-502, 90544-510, 90544, and 90644. |
|             |         | 1        | 63800-501   | Platform assembly  |
|             |         | 4        | 327881      | 1/2-13x3-1/4" hex head cap screw   |
|             |         | 4        | 361609      | 1/2-13" hex nut  |
|             |         | 4        | 364050      | 1/2" lock washer   |
|             |         | 4        | 365134      | 1/2" flat washer   |
|             |         | 1        | 515122      | Safety switch  |
|             |         | 2        | 364026      | #10 lock washer  |
|             |         | 2        | 341106      | 10-32x3/4" slotted screw   |
|             |         | 2        | 361910      | #10-32 hex nut   |
|             |         | 1        | 515109      | Safety switch adapter  |
|             |         | 1        | 511488      | Cable connector, straight  |
|             |         | 1        | 508854      | .370 cable, 10'  |
|             |         | 1        | 511502      | Cable connector, 90°   |

**Table 1: SB171 Kits (Continued)**

| Kit        | Control  | Quantity         | Part Number | Description  |
|------------|----------|------------------|-------------|--|
| SB171KIT-B | Joystick | 1                | SB171       | Service Bulletin 171, includes Drawings 63830-501, 63630-502, 90544-510, 90544, and 90644. |
|            |          | 1                | 63800-501   | Platform assembly  |
|            |          | 4                | 327881      | 1/2-13x3-1/4" hex head cap screw   |
|            |          | 4                | 361609      | 1/2-13" hex nut  |
|            |          | 4                | 364050      | 1/2" lock washer   |
|            |          | 4                | 365134      | 1/2" flat washer   |
|            |          | 1                | 515122      | Safety switch  |
|            |          | 2                | 364026      | #10 lock washer  |
|            |          | 2                | 341106      | 10-32x3/4" slotted screw   |
|            |          | 2                | 361910      | #10-32 hex nut   |
|            |          | 1                | 515109      | Safety switch adapter  |
|            |          | 1                | 511488      | Cable connector, straight  |
|            |          | 1                | 508854      | .370 cable, 10'  |
|            |          | 1                | 90544-510   | Joystick assembly  |
|            |          | 1                | 504577      | 10 amp, 440-V plug   |
|            |          | 1                | 504576      | Top entry hood   |
|            |          | 4                | 327161      | 1/4-20x1" hex head screw   |
| 4          | 364034   | 1/4" lock washer |             |  |
| 4          | 365632   | 1/4" flat washer |             |  |

Table 2 lists the supplies needed to complete this procedure.

**Table 2: Tools and Supplies**

| Description                                     |
|---|
| Screwdriver set                                 |
| Drill   |
| .531" drill bit                                 |
| .875" drill bit (or appropriate knockout punch) |
| Multimeter                                      |
| Wrench set                                      |
| Phillips head screwdriver set                   |


## Procedure

### ***Disconnecting Electrical Power***

1. Turn off all power to the **RoofTracker**, following your company's approved lockout/tagout procedures (See also OSHA 29 CFR 1910.147).
  - a) Engage an E-stop.
  - b) Lockout/tagout all power to the main electrical enclosure.
2. Using a multimeter, verify that the power is off.


### ***Attaching the Operator Platform***

1. Remove the end guard from the gantry head.
2. Drill two 17/32-in. (.531-in.) holes on the vertical tube of the end frame at 2 in. and 8 in. from the bottom of the tube. See Drawing 63830-501.
3. Repeat step 2 for the vertical tube on the opposite side of the end frame.

| <b>CAUTION</b>  |   |
|---|---|
|  | <p><b>The operator platform weighs approximately 241 lb. A fork truck should be used to hold the platform while it is being attached to the frame.</b></p> <p><b>Failure to exercise care may result in injury to personnel and/or damage to equipment.</b></p> |

4. Attach the operator platform to the end frame using the four (4) 1/2-13x3-1/4-in. hex head cap screws (PN327881), flat washers (PN365134), lock washers (PN364050), and hex nuts (PN361609) provided in your kit. Each lock washer should be in contact with the cap screw head and the flat washer in contact with the nut.
5. Reattach the end guard.

## Connecting the Control Mechanism

| <b>DANGER</b>   |  |
|---|--|
|  | <p><b>ELECTRICAL HAZARD.</b></p> <p><b>All electrical work must be performed by a certified electrician and must conform to all applicable national electrical codes.</b></p> <p><b>Follow approved lockout/tagout procedures (OSHA 29 CFR 1910.147).</b></p> <p><b>Do not turn on electrical power until you have completed the entire procedure.</b></p> |

### Pendant Control

If you elect to keep the pendant control, an additional safety switch must be added. If you choose to install a joystick, proceed to page 8.

1. Turn off all power to the *RoofTracker* press, following your company’s approved lockout/tagout procedures.
  - a) Engage an E-stop.
  - b) Lockout/tagout all power to the main electrical enclosure.
2. Using a multimeter, verify power is off before disconnecting the wiring.
3. Screw the adapter (PN515109) into the safety switch (PN515122).
4. Screw the cable connector (PN511488) into the adapter.
5. Remove the two screws holding the cover onto the safety switch.
6. Open the cover of the safety switch.
7. Run the cable (PN508854) through the cable connector and adapter into the safety switch.
8. Wire the cable to the safety switch. See Table 3 and Drawing 63830-501.

**Table 3: Terminal Connections**

| Wire Color | Safety Switch Terminal | Main Enclosure Terminal |
|------------|------------------------|-------------------------|
| Black      | 21                     | 44                      |
| Red        | 41                     | 46                      |
| Blue       | 22                     | 48                      |
| Orange     | 42                     | 47                      |

9. Drill a .875-in. hole in the bottom of the main electrical enclosure.
10. Screw the 90° cable connector (PN511502) into the hole.
11. Run the other end of the cable through the 90-degree connector and into the enclosure.
12. Remove the jumpers labeled J2 and J3 in Drawing 63830-501.
13. Wire the safety switch cable into terminals 46-47, and into terminals 44-48. See Table 3 and Drawing 90544.
14. Attach the safety switch to the bracket on the bottom of the operator platform using two (2) 10-32x3/4-in. slotted screws (PN341106), two (2) lock washers (PN364026) and two (2) hex nuts (PN361910). Each lock washer should be in contact with the slotted screw head.

**Joystick**

Complete this section if you are replacing a pendant control with a joystick.

1. Turn off all power to the *RoofTracker* press, following your company’s approved lockout/tagout procedures.
  - a) Engage an E-stop.
  - b) Lockout/tagout all power to the main electrical enclosure.
2. Using a multimeter, verify power is off before disconnecting the wiring.
3. Screw the adapter (PN515109) into the safety switch (PN515122).
4. Screw the cable connector (PN511488) into the adapter.
5. Remove the two (2) screws holding the cover onto the safety switch.
6. Open the cover of the safety switch.
7. Run the cable (PN508854) through the cable connector and adapter into the safety switch.
8. Wire the cable to the safety switch. See Table 4 and Drawing 90644.

**Table 4: Terminal Connections**

| Wire Color | Safety Switch Terminal | Plug Pin |
|------------|------------------------|----------|
| Black      | 21                     | 2        |
| Red        | 41                     | 4        |
| Blue       | 22                     | 1        |
| Orange     | 42                     | 3        |

9. Run the other end of the cable through the hood (PN504576).
10. Loosen the cover on the plug (PN504577) by squeezing the plastic tabs together and pulling away from the base of the plug.
11. Loosen the four (4) screws that have been uncovered.
12. Wire the cable to the plug. See Table 4.
13. Close the plug cover.
14. Insert the plug into the hood so that the threaded holes line up.
15. Plug the safety switch assembly into the joystick assembly (PN90544-510). See Drawing 63830-502.



16. Disconnect the pendant control wiring from the main electrical enclosure.
17. Wire the joystick assembly cable into the electrical enclosure. Some wires will not be connected. See Table 5 and Drawing 90544-510.

**Table 5: Main Enclosure Terminal Connections**

| Wire Color   | Enclosure Terminal |
|--------------|--------------------|
| Black        | 5-2                |
| Red          | 12-1               |
| Blue         | 16-2               |
| Yellow       | 20-1               |
| Brown        | 26-2               |
| Blue/Black   | 30-1               |
| Orange/Black | 43                 |
| Yellow/Black | 44                 |
| Brown/Black  | 45                 |
| Black/Red    | 46                 |

18. Mount the joystick to the joystick bracket on the operator platform using four (4) 1/4-20x1-in. hex head screws (PN327161), four (4) lock washers (PN364034), and four (4) flat washers (PN365632).
19. Attach the safety switch to the bracket on the bottom of the operator platform using two (2) 10-32x3/4-in. slotted screws (PN341106), two (2) lock washers (PN364026) and two (2) hex nuts (PN361910). Each lock washer should be in contact with the slotted screw head.

### ***Testing the Safety Switch***

1. Restart the machine.
2. Engage an E-stop by tripping the safety switch you just installed on the bottom of the operator platform.
3. Press the right directional button on the pendant control or pull right on the joystick. The gantry head should not move.
4. Press the left directional button on the pendant control or pull right on the joystick. The gantry head should not move.
5. If the machine fails the test, perform the test again. If the test fails again, repair the machine.



## ***Page Updates***

The following three pages, labeled CN001, contain information about the platform and the joystick, as well as replacement parts. These pages should be added to your *RoofTracker* Operation and Maintenance Manual in an appropriate place.

Please call MiTek Customer Service at 1-800-523-3380 with any questions you may have concerning this Service Bulletin.

**END OF SERVICE BULLETIN**

## Operator Platform Bumpers

The operator platform bumpers require a manual reset after they've been actuated. The gantry head bumpers automatically reset themselves when fully extended.

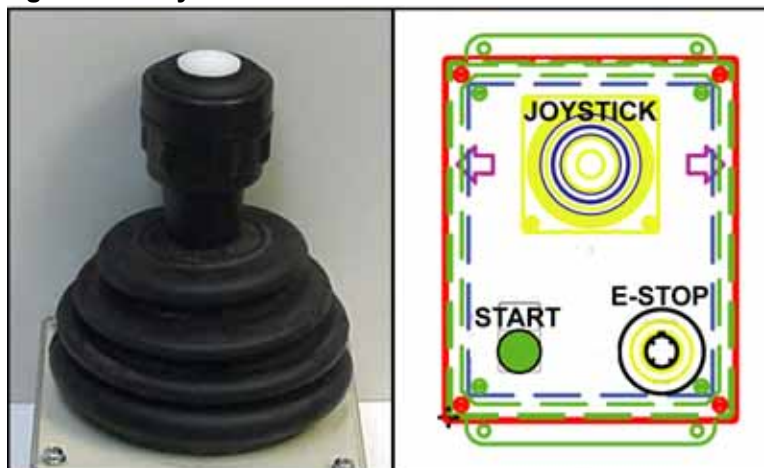
## Operator Control Interface Mechanisms

### Getting to Know Your Joystick Controller and Operator Platform

Your *RoofTracker* press is operated by a joystick or an optional pendant control station. The joystick is mounted on a panel attached to the gantry head. See Figure 3-1. If your machine has the optional pendant control station, it replaces the joystick and is discussed on page 78.

Most machines with a joystick operator control interface also have a platform attached to the gantry head for the operator to stand on.

**Figure 3-1: Joystick and Control Panel**



#### Start

The green START button enables all safety monitoring devices. The operator must press START before the directional indicator lights will come on.

#### Joystick

To operate the equipment with a joystick, press the green START button on the operator's panel. Then, press and hold the white button on the joystick handle while pushing the handle in the direction the gantry head should move. The operator must keep the white button on the joystick depressed for movement to continue.

To stop motion, release the white button on the joystick handle. The gantry head decelerates and eventually comes to a complete stop.

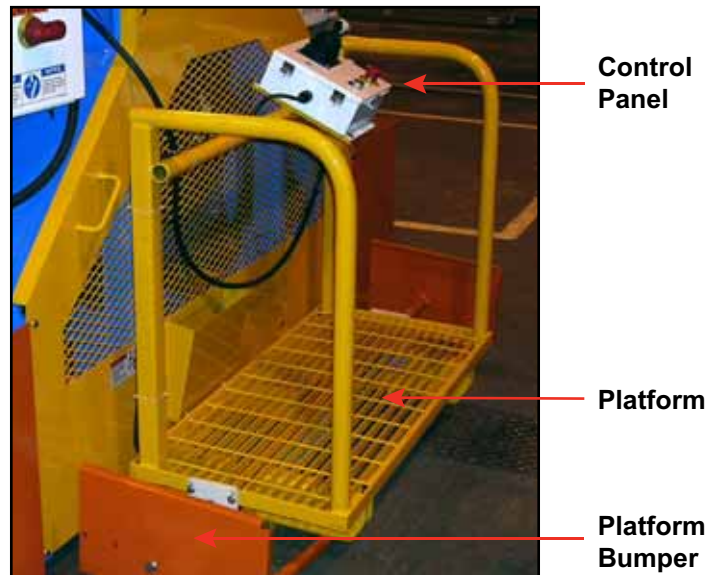
## Operator Platform

The operator platform is a standard feature with a joystick operator control interface. It is a raised platform connected to the operator end of the gantry head. The operator stands on the platform and rides along with the gantry head as it travels.

Bumpers on both ends of the operator platform cause the gantry head to stop motion if the bumper retracts. Once a platform bumper retracts, the operator must manually pull the retracted bumper back into place to allow the limit switch to return to its extended position. One (1) limit switch controls both platform bumpers, and it is located under the platform floor.

The platform bumpers do not require you to press the START button to reset them like the gantry head bumpers do.

**Figure 3-2: Operator Platform**



**Table 3-1: Mechanical Replacement Parts on Gantry Head**

| Part Location     | MiTek Part # | Part Description   | Refer to Drawing Number | Keep in Stock |
|-------------------|--------------|--|-------------------------|---------------|
| Operator Platform | 161013       | Ball catcher for platform bumpers  | 63800                   |               |
| Operator Platform | 161012       | Ball plunger for platform bumpers  | 63800                   |               |
| Operator Platform | 411290       | Bearing, ball bearing for platform wheels  | 63800                   |               |
| Operator Platform | 63800-501    | Entire assembly  | 63800                   |               |
| Operator Platform | 63800-501    | Platform for operator, entire assembly (See Dwg. 63800-501 for individual parts) | 63826                   |               |
| Operator Platform | 64515        | Wheel assembly   | 63800                   |               |
| Operator Platform | 64517        | Wheel only   | 63800                   |               |
| Take-Up Bearing   | 532011       | Bearing on take-up bearing   | 63721                   |               |
| Take-Up Bearing   | 63721-501    | Take-up bearing assembly (to adjust press roller height)                         | 63750 or 63826          |               |