

Boost ST - Pin Bushing Upgrade (Package P1-070290-000)

Package Contents

4	11-052631-001	Carriage Bolt For Mounting Table (M10 x 65 mm)
1	55-089162-000	Front Table Mounting Frame
10	55-089711-000	Tall Upper Cones
4	55-279357-001	Table Spacers (15 mm)
0.5	63-861194-000	Pkg - 20 Pin Bushings (Kit Contains 10 Bushings)

Tools Needed

- 10 mm Wrench (For M6, string pulley mounting hardware)
- 13 mm Wrench (For M8, cone mounting hardware)
- 17 mm Wrench (For M10, table mounting hardware)
- Ratchet with 10 mm, 13 mm, and 17 mm sockets
- Pliers (For Assembling Pin Head Stop Assembly to Upper Cone)

1. Lower the pins to the pindeck.
2. Place the pinsetter's Stop/Run on the 360 Controller to the Stop position. Turn the main power switch on the 360 Controller box to the off position and lock the switch in the off position using an approved lockout device.
3. Remove the pins from their strings. Refer to *Figure 1*.

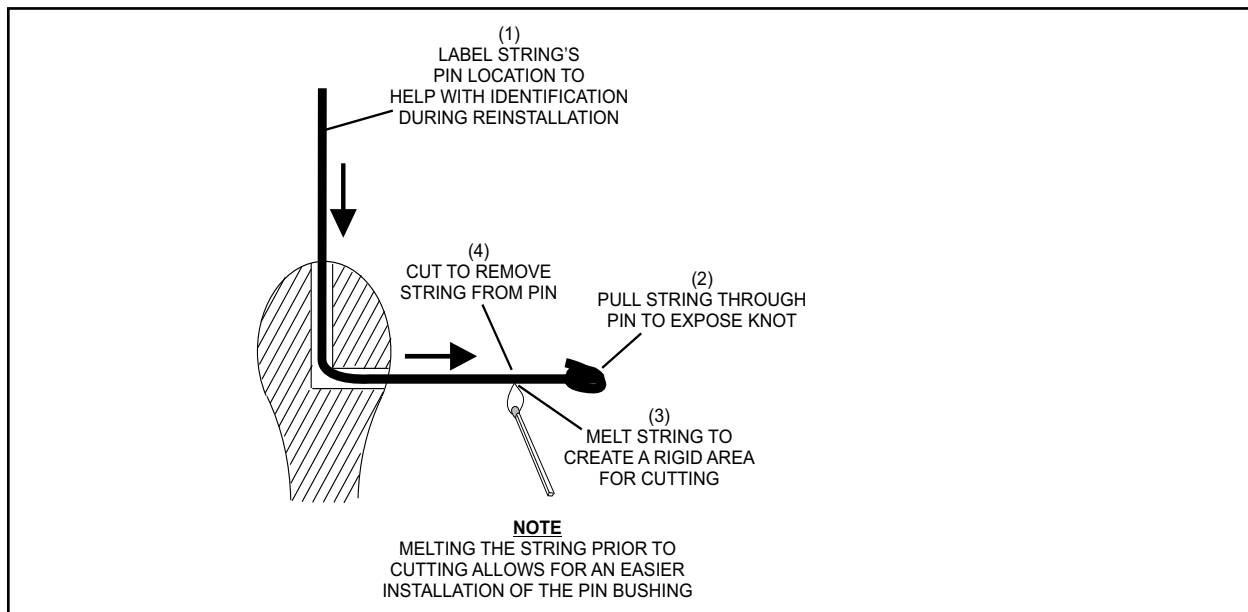


Figure 1. Remove Pins From Strings

4. Disconnect the gate string carabiner from the gate. Remove the string pulley/bracket from the setting platform and the setting platform from the pinsetter main frame. Move the setting platform to a convenient work location. Refer to *Figure 2*.

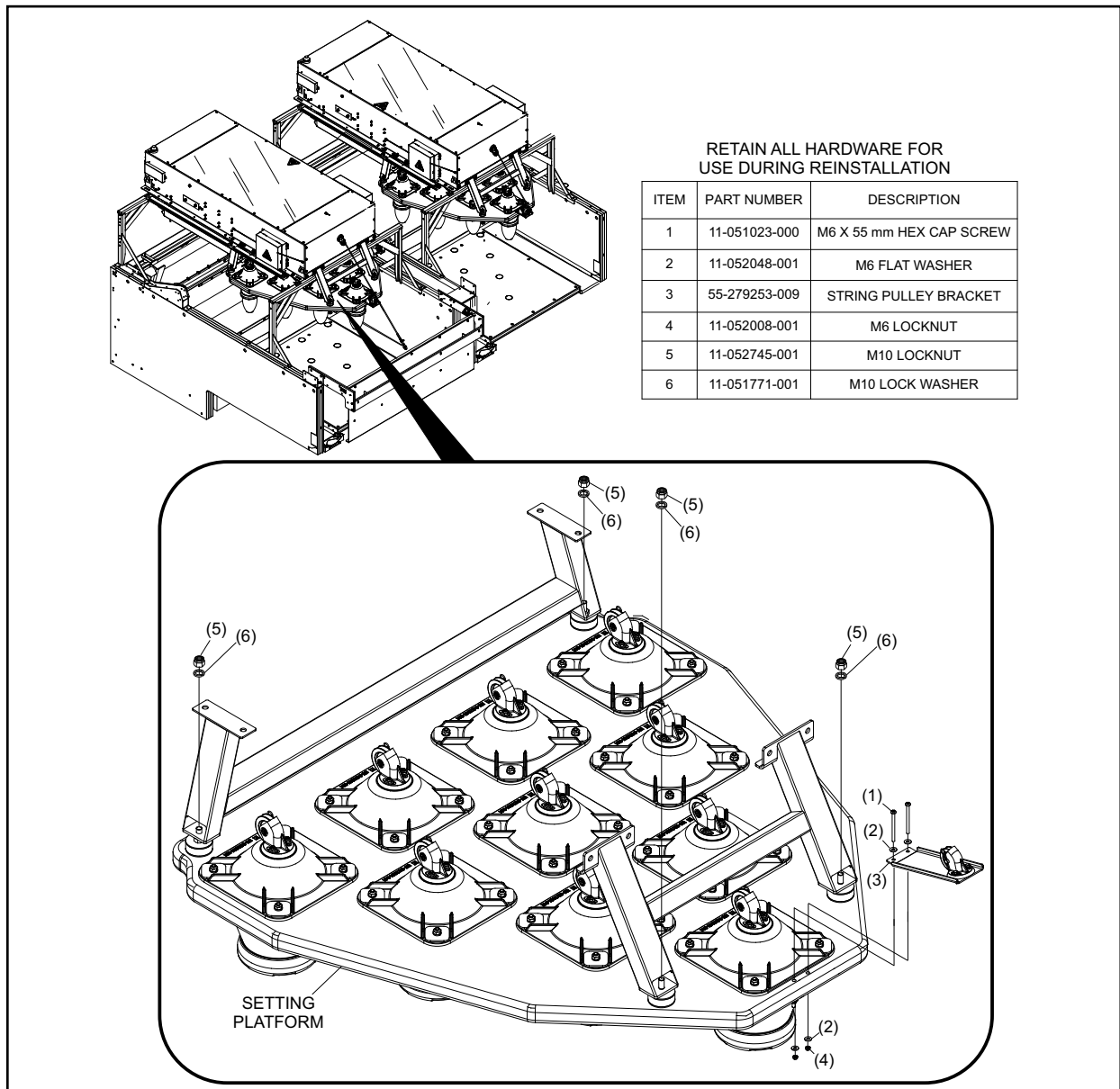


Figure 2. Remove Setting Platform

5. Replace the existing front table mounting frame from the pinsetter main frame with mounting frame, p/n 55-089162-000. Use the existing mounting hardware to secure the replacement frame. Refer to *Figure 3*.

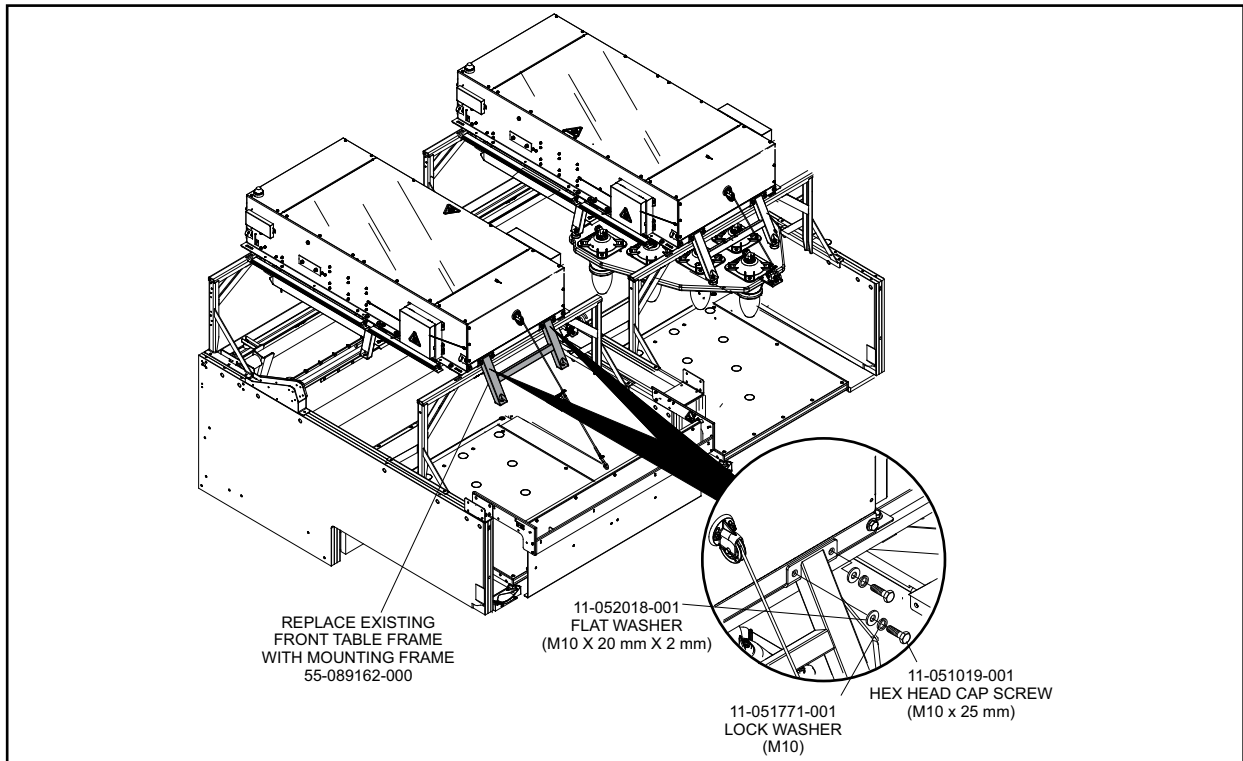


Figure 3. Replace Front Table Mounting Frame

6. Install 15 mm table mounting spacers, p/n 55-279357-001 under each of the table mounting bumpers. Use the existing hardware along with the included M10 x 65 mm Carriage Bolts to secure the spacer and bumper to the platform. Refer to *Figure 4*.

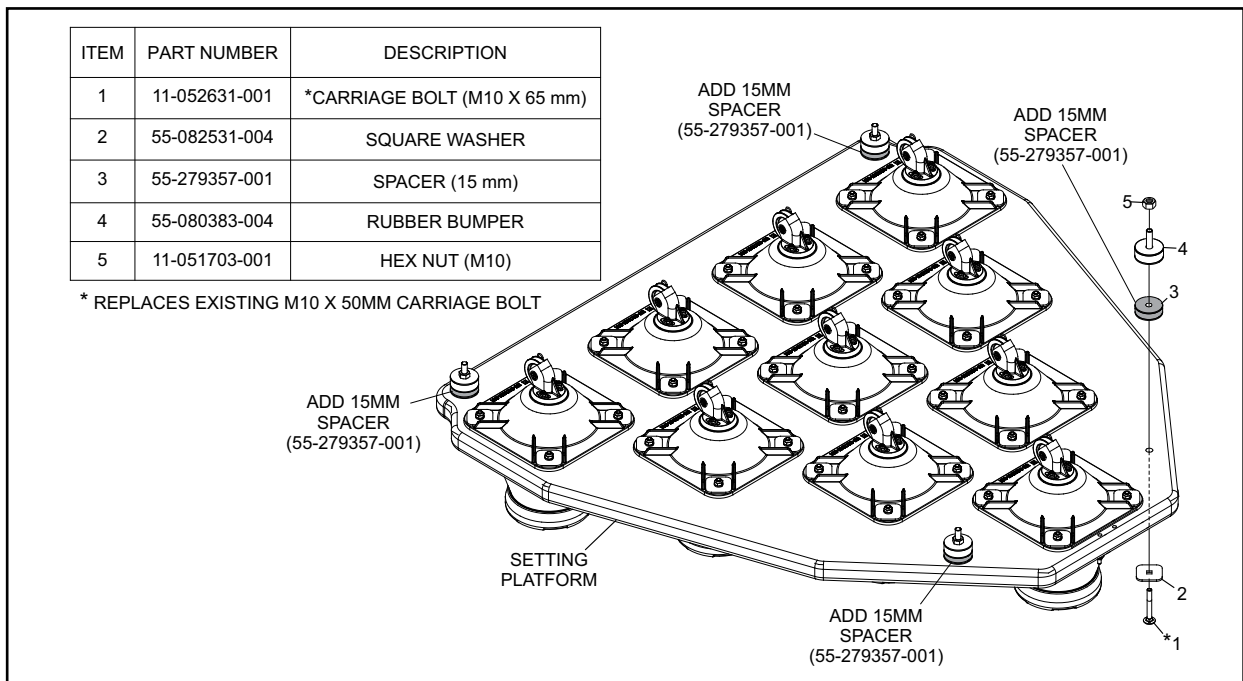


Figure 4. Install 15 mm Spacers Under Rubber Bumpers

7. Replace the existing upper cone at each pin location with Tall Upper Cone, p/n 55-089711-000.

a. Remove the centering cone from the setting platform. Retain hardware for reuse.

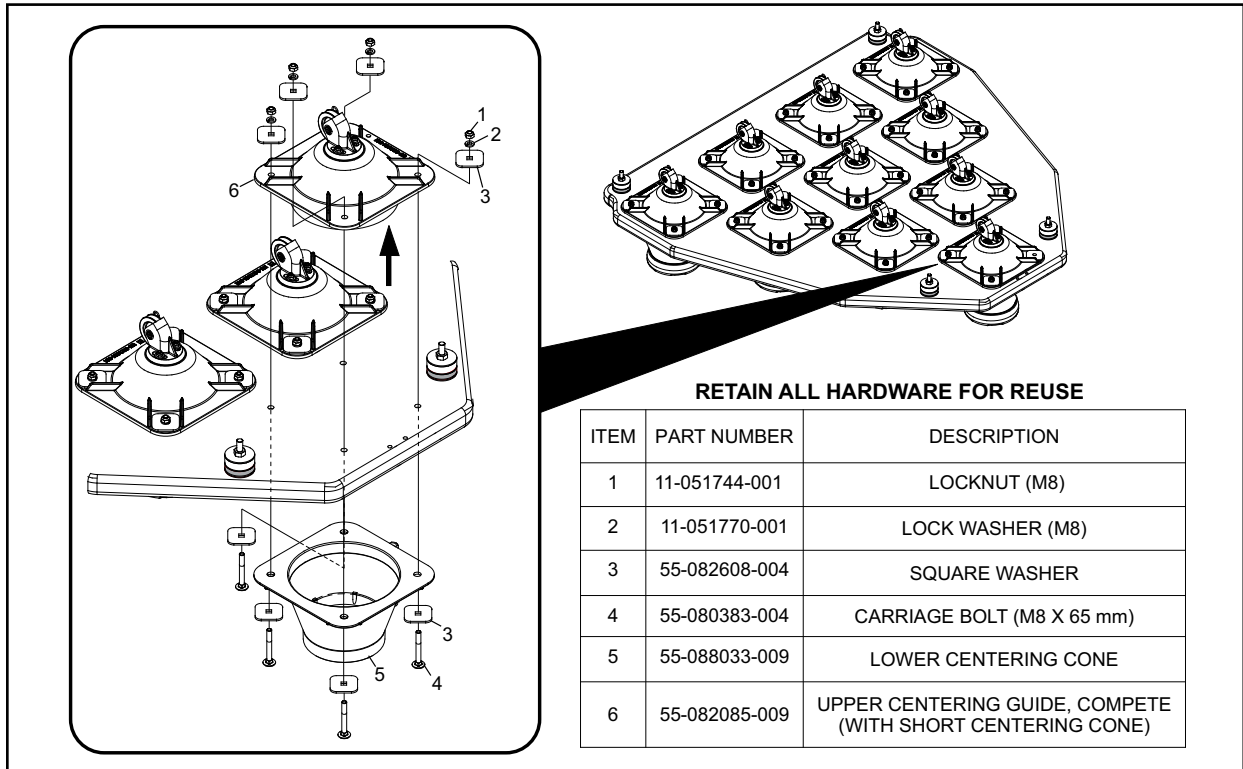


Figure 4. Remove Centering Cones

b. Disassemble the centering guide assembly. Replace the short upper cone of the with a tall upper cone, p/n 55-089711-000, and reassemble. Repeat for all 10 pin locations.

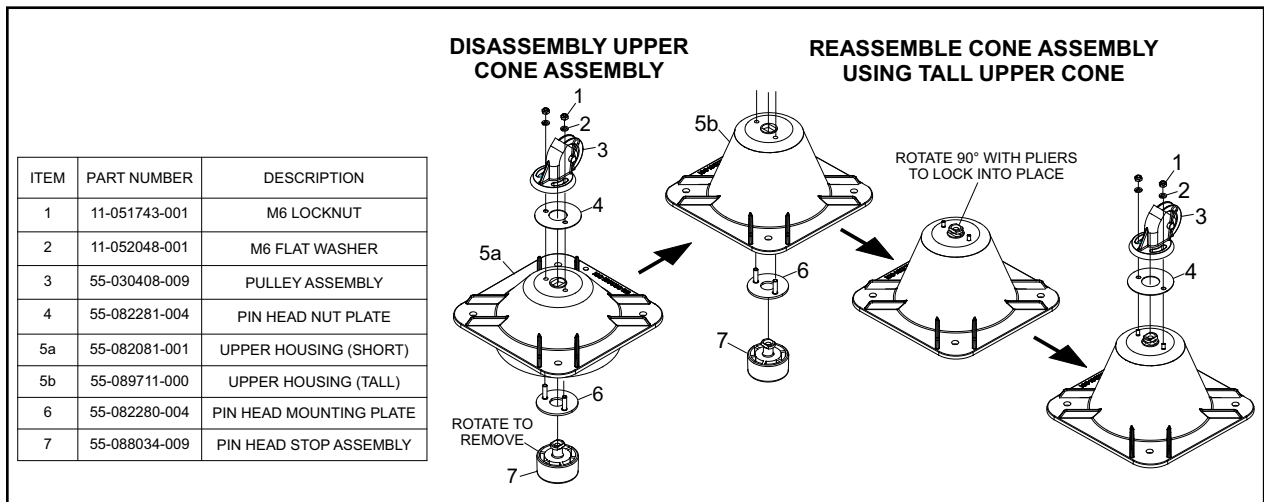


Figure 5. Replace Upper Cone

c. Reinstall the centering cones on the setting platform using the hardware retained in step 7a.

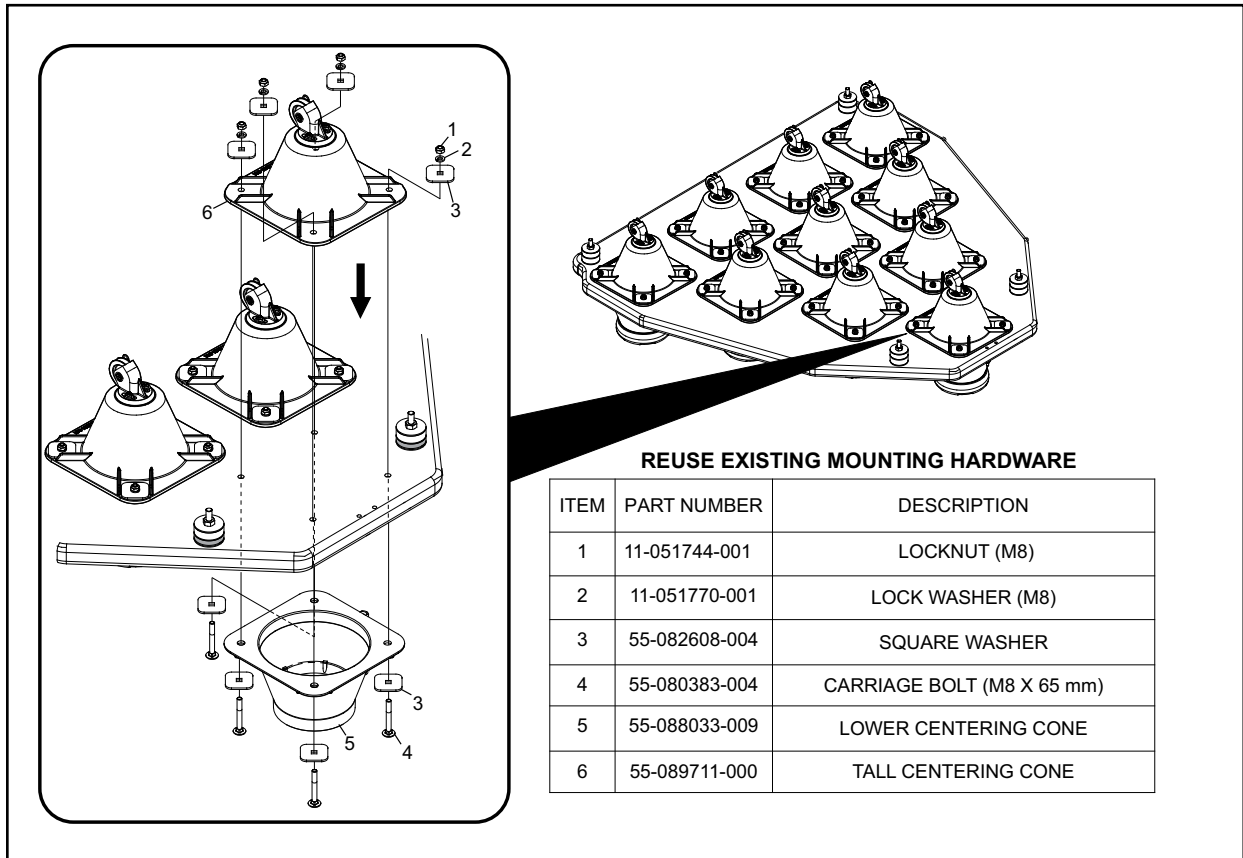


Figure 6. Reinstall Centering Cones

8. Using the hardware retained in step 4, secure the setting platform to the front and rear table mounting frames and the string pulley/bracket to the front of the setting platform, Reattach the gate string carabiner to the gate. Refer to *Figure 7*.

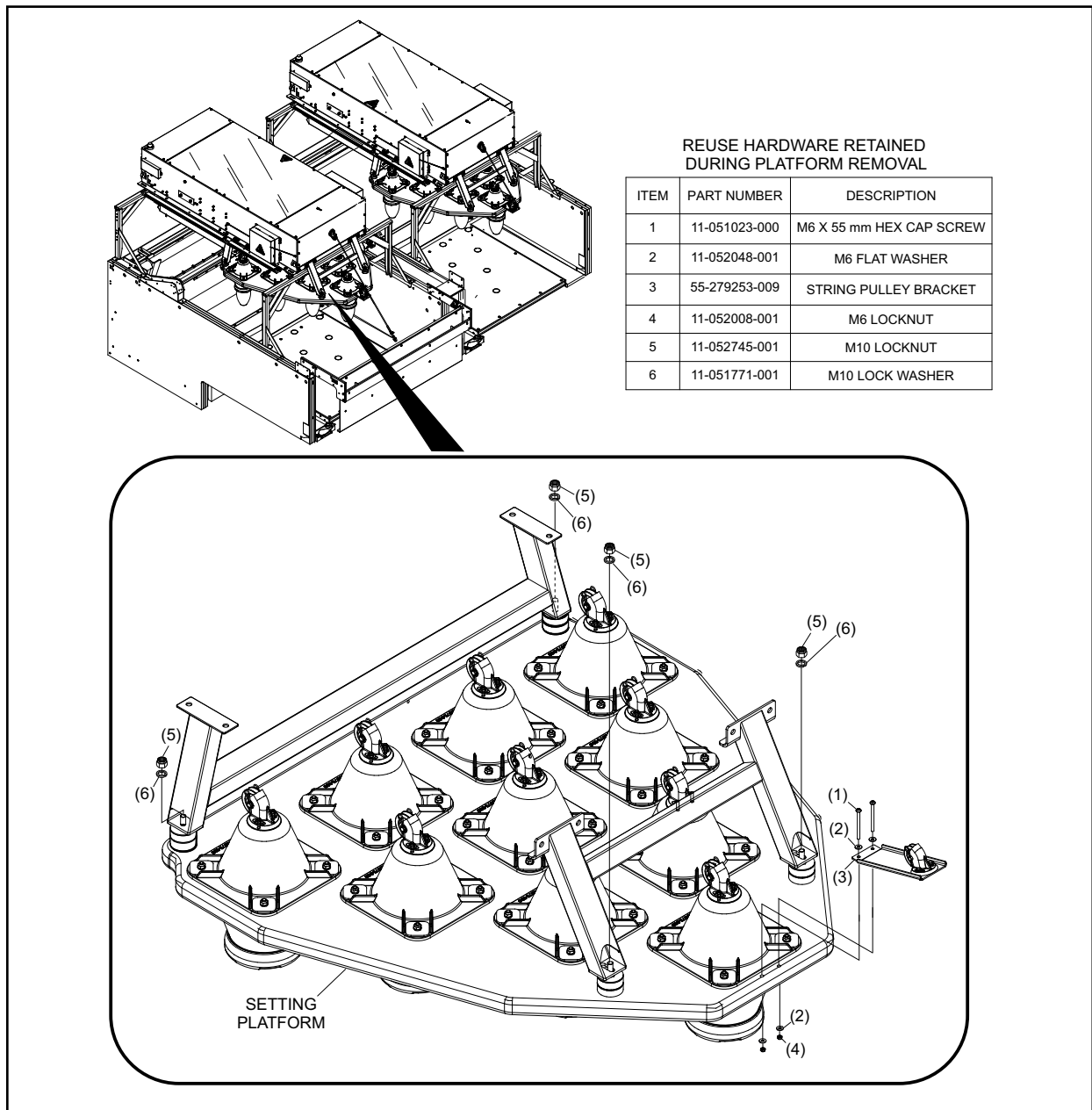


Figure 7. Install Setting Platform

8. Reattach the strings to the pins.
 - a. Route string through the centering cone assembly. Thread the string through a Pin Bushing and head of the pin. Refer to *Figure 8*.

i **IMPORTANT:** Make sure the Pin Bushing is positioned with its wide end toward the head of the pin.

- b. Tie a knot in the string leaving an excess of 1/2" (13 mm). As needed, melt the end of the string eliminate fraying of the string.
 - c. Pull the knot back into the pin and verify the pin is held securely to the string.

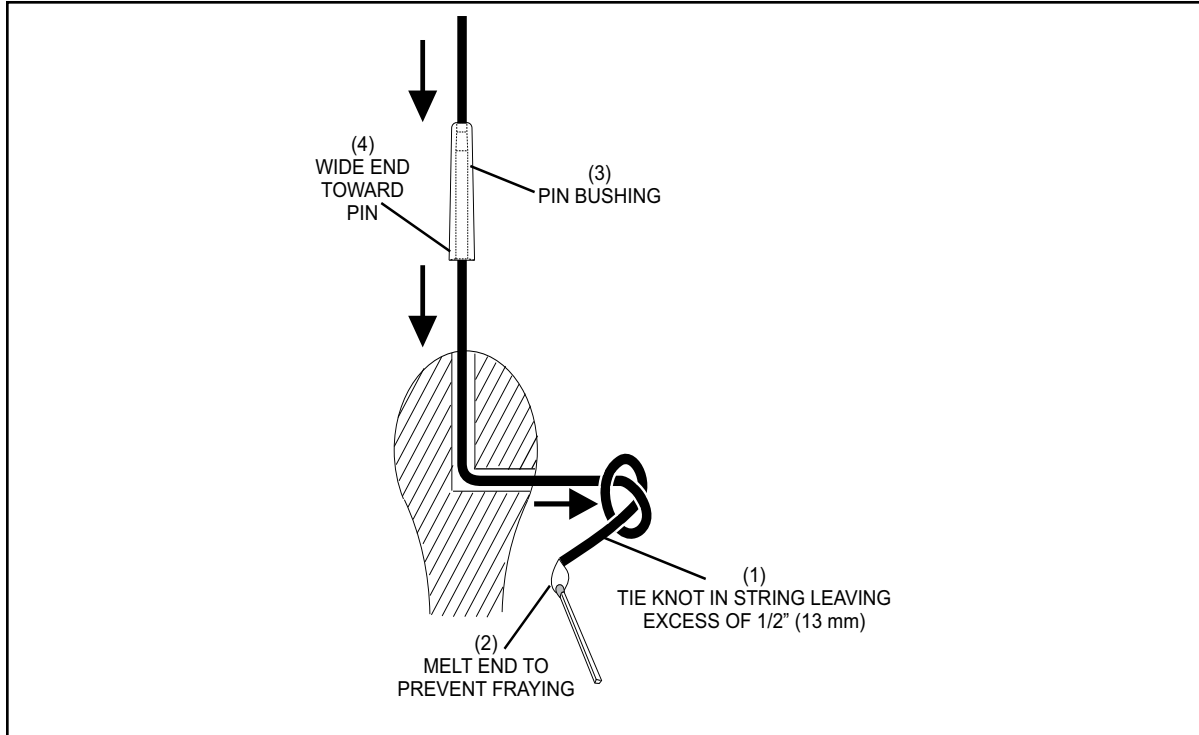


Figure 8. Pin String and Bushing Installation

9. Adjust the string tension for all 10 pins. Once the string tension adjustment has been done, run the pinsetter to verify proper operation.

String Tension Adjustment

i **IMPORTANT:** The string tension adjustment impacts the pin position when the string brake is engaged. After adjusting string tension, run the pinsetter to verify proper operation.

The string tension adjustment is accomplished by rotating the string spool to let more (or less) string out of the spool.

1. Return all pins to the pins up position:
 - a. Place the Stop/Run switch on the 360 Controller to the “Stop” position.
 - b. On the Pinsetter Mode drop down menu, select “Setup”. Refer to *Figure 9*.
 - c. Place the Stop/Run switch on the 360 Controller to the “Run” position and allow the string wagon to travel to the stop dogs.

i **NOTE:** The string wagon should stop on the stop dogs so that the pins are held in the up position. If the wagon does not catch on the stop dogs, verify the Pins Up switch is properly adjusted.

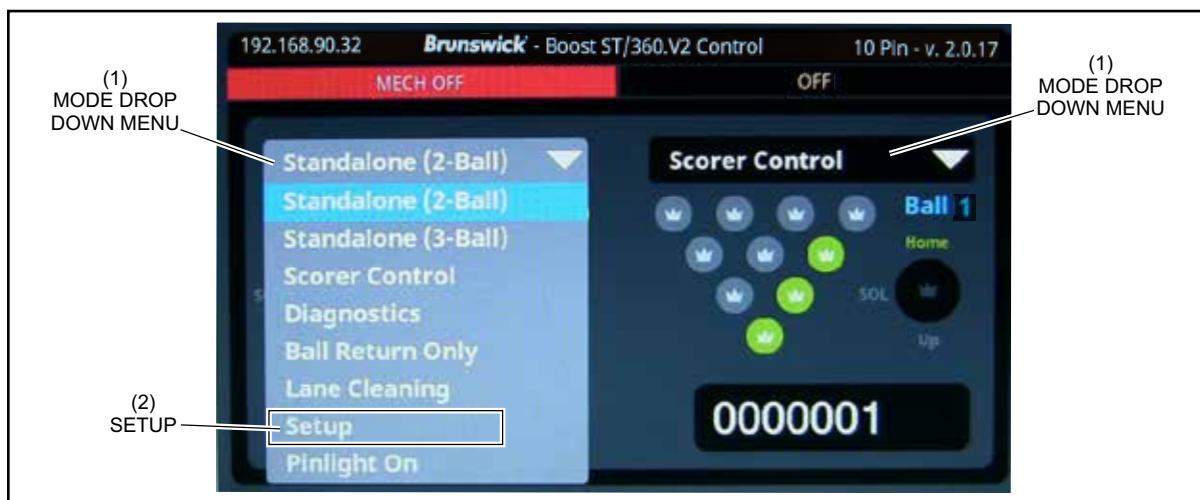


Figure 9. Select Setup Mode

2. Perform Lockout/Tagout (LOTO) on the pinsetter.
3. Open the top, rear door to gain access to the string spools.

4. Perform the following procedure for each string that requires adjustment. Refer to *Figure 10*.
 - a. Slide the string spool reel toward the spring to disengage the alignment hole from the spool locking pin.
 - b. Rotate the string reel to position the pin so it just touches the centering cone. Rotate the reel just far enough to securely position the pin in its centering cone. Do not stretch the string or the tension lever spring.
 - c. Lower the pin by rotating the string reel three (3) adjustment holes. Observe the pin motion to ensure the pin drops with each hole increment.
 - d. Release the string reel to reengage the alignment hole with the spool locking pin.

i **NOTE:** Rotating the spool towards the back of the machine will lower the pin, reducing the string tension. Rotating the spool toward the front of the machine will raise the pin and increase the string tension.

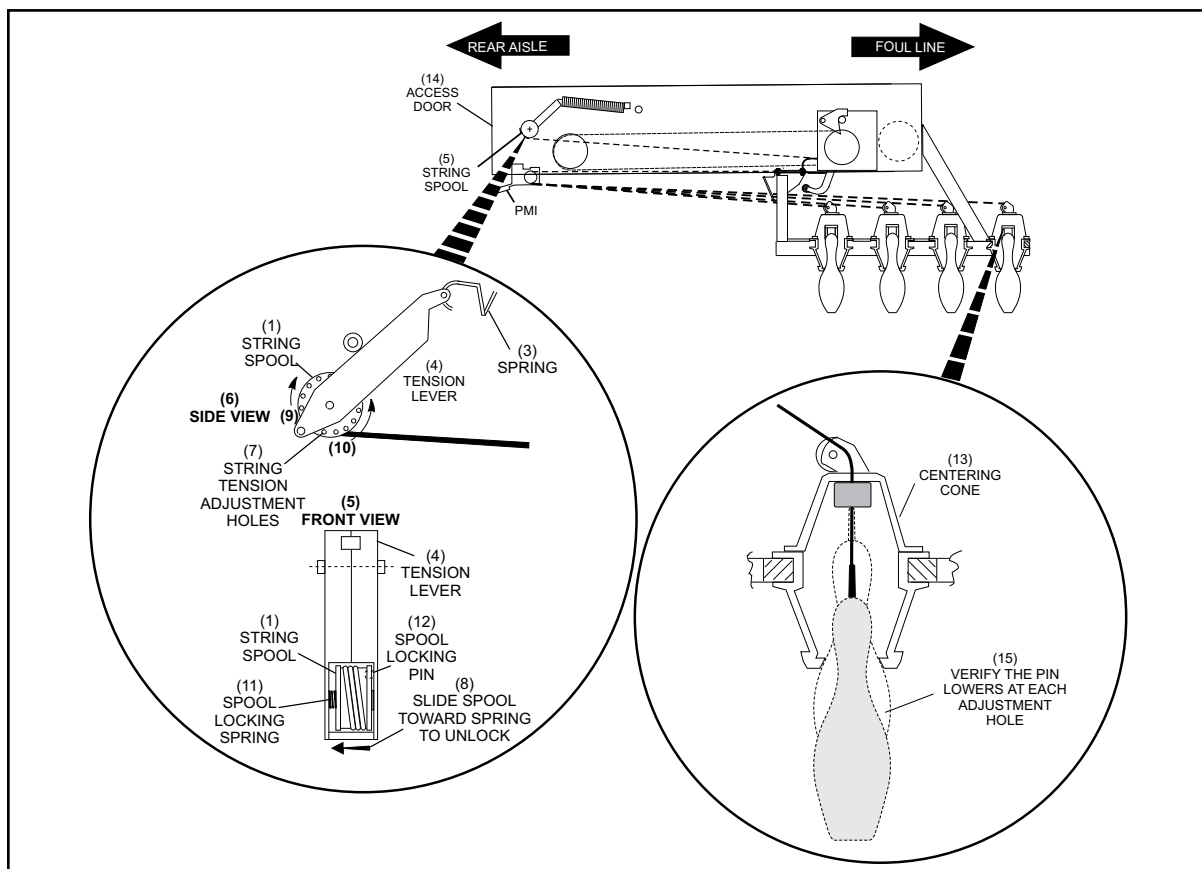


Figure 10. String Tension Adjustments

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