



SERVICE BULLETIN

**Subject: 24 Volt Hand Dryer Replacement Option
Conversion Kit Package 53-861077-000 24v Hand Dryer to
115v / 230v Hand Dryer**

Date: 1/17/18

Bulletin No. SB18-1

Brunswick no longer offers the 24 volt hand dryer fan, part number 53-100278-000. This fan was used in Brunswick ball racks and power lifts manufactured prior to the currently manufactured Brunswick Frameworkx ball rack and power lift.

As an option, customers can upgrade existing 24 volt hand dryer fans to the current 120 volt hand dryer fan, part number 53-861059-115 or 230 volt hand dryer fan, part number 53-861059-230. A conversion kit, part number 53-861077-000, will allow customers to use their existing electrical control box for the power lift and ball rack to power the replacement 120/230 volt hand dryer fan. Installation instructions for the fan conversion are included with this bulletin.

If you have questions regarding the information contained in this Service Bulletin, please contact Brunswick Technical Support at 1-800-937-2695 or 1-231-725-4966, FAX 231-725-4667, or email techsupport@brunswickbowling.com.

To speak with a Brunswick sales representative, call 1-800-937-2695, select option 2, then option 3 or visit our website at <http://www.brunswickbowling.com/contact/sales-rep>.

Visit <http://brunswickbowling.com/service-support/tech-support/> for electronic files of this and other service bulletins.

Charlie Etzel
Brunswick Technical Support

William P. Jager
Brunswick Knowledge Transfer Specialist

Fan Conversion Installation Instructions - Ball Rack & Hood with B2000, Astroline, and Gold Crown Ball Lifts

Packaging

1 ea.	53-861077-000	Package	
2	ea.	11-603105-000	Cable Tie, 7"
3	ea.	11-609551-000	Connector, In-line Splice
1	ea.	11-611009-000	Bushing, Strain Relief
1	ea.	53-520710-000	Assembly, Harness
1	ea.	53-900281-000	Instruction Sheet
5	ea.	11-680302-000	Terminal
1	ea.	11-680217-000	Connector Receptacle
5	ea.	11-680301-000	Terminal
1	ea.	11-680117-000	Connector
6	ea.	11-612451-000	Electrical Butt Splice



WARNING! Remove power from the ball lift control box and pinsetter before installation.

Fan Installation Procedure

1. Drill a 21/32" (18 mm) in the ball lift control box on the side with the most open area. Remove all metal debris left from the drilled hole. Refer to *Figure 1*.

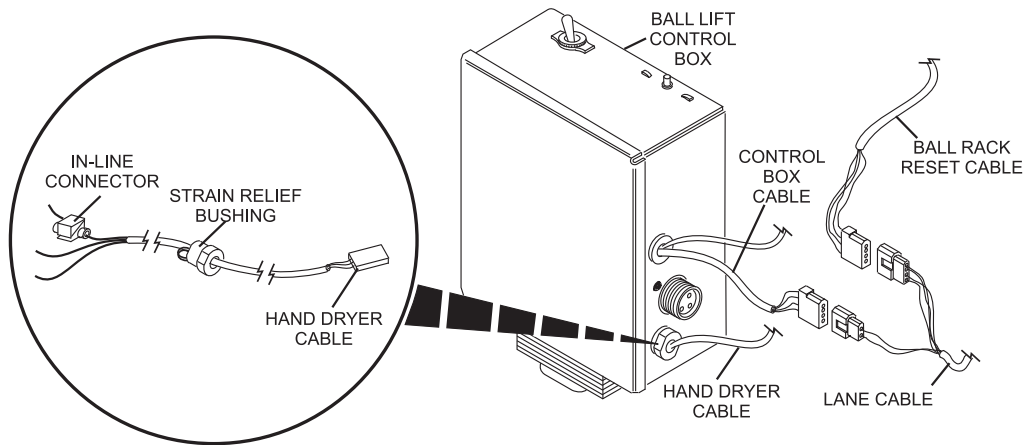


Figure 1

2. Slide the strain relief bushing onto the hand dryer cable assembly with the white red and black wires. Six to eight inches (152 mm to 203 mm) of the wire should extend beyond the bushing. Refer to *Figure 1*.
3. Run the end of the cable with the strain relief bushing through the hole previously drilled in the control box until the bushing snaps into place. Refer back to *Figure 1*.

4. Using the three in-line connectors, splice the three fan cable wires into the three wires of the ball lift motor connector: Refer to *Figure 2*.
 - green to green
 - white to white
 - black to remaining wire (violet or black)

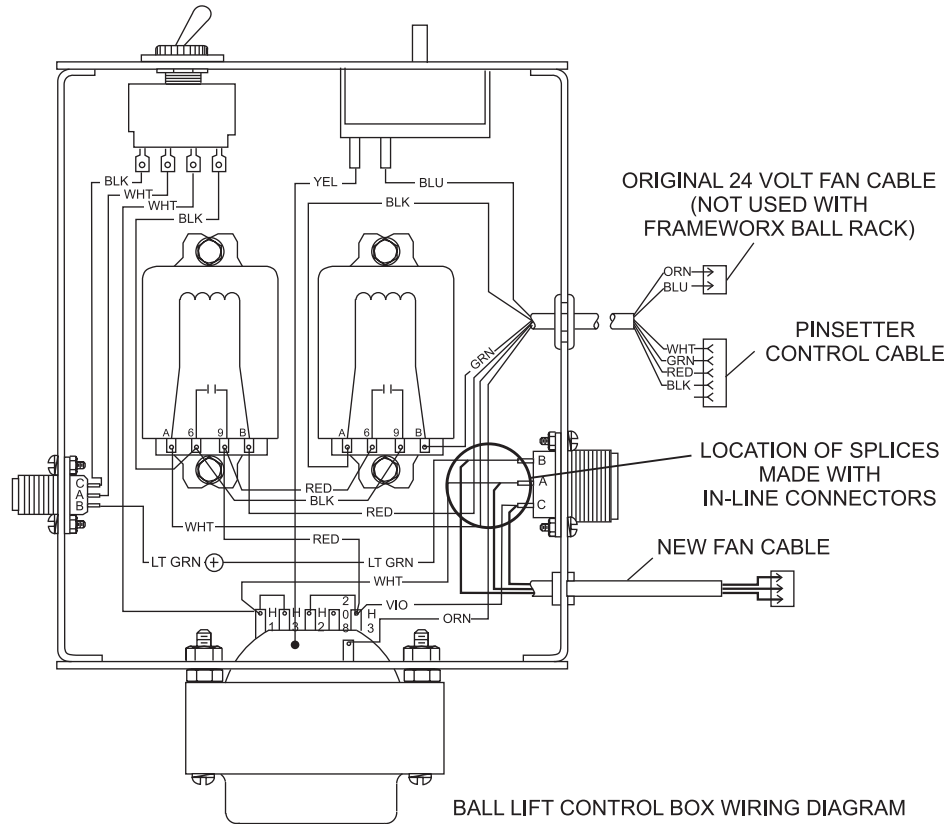


Figure 2

i **NOTE:** For black wire connection refer to dryer fan operating voltage.

5. Connect the four position Molex connector to the Molex connector on the hand dryer motor.
6. Using the cable ties, secure the fan harness to the ball lift and ball rack.



WARNING! Remove power from the ball lift control box and pinsetter before installation.

Safety Switch Installation with Astroline and Gold Crown Ball Lifts

1. Locate the two 24 volt pinsetter cables coming out of the ball lift control box. Refer to *Figure 3*.

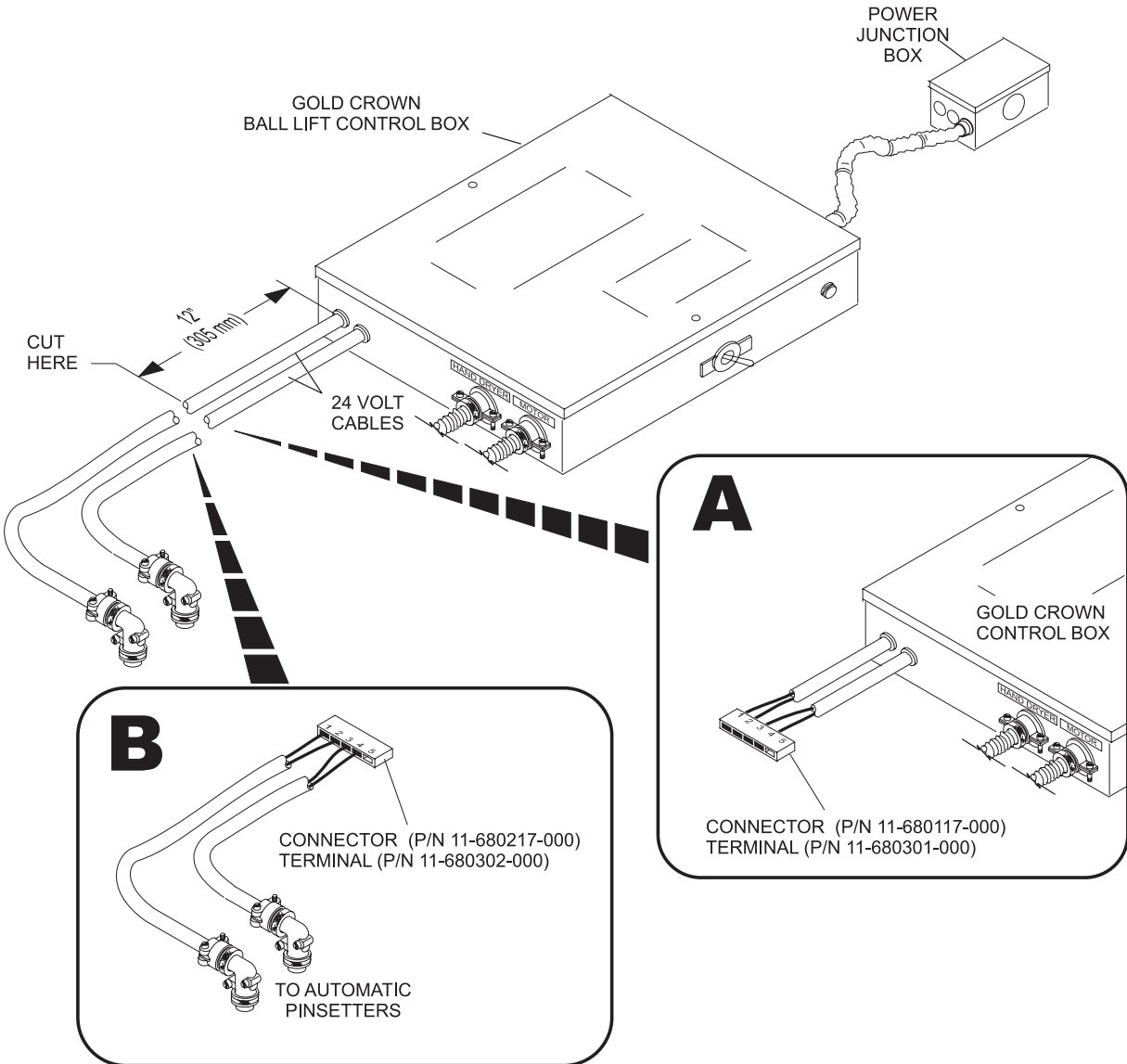


Figure 3

2. Cut the 24 volt cables approximately 12" (305 mm) from where they enter the ball lift control box. Refer to *Figure 3*.
3. Strip all four wire ends to accept the new terminals.
4. Install terminals (P/N 11-680301-000), on the two 24 volt cables going into the ball lift control box. Refer to *Figure 3 Inset A*.
5. Install terminals (P/N 11-680302-000), on the two 24 volt cables that go back to the pinsetter. Refer to *Figure 3 Inset B*.

6. Install connector (P/N 11-689117-000), on the two 24 volt cables coming from the ball lift control box. Refer to *Figure 3 Inset A*.

Pin 1 - L.H. pinsetter 24 AC power
Pin 2 - L.H. pinsetter 24 AC power
Pin 3 - R.H. pinsetter 24 AC power
Pin 4 - R.H. pinsetter 24 AC power
Pin 5 - N.C.

7. Install connector (P/N 11-680217-000), on the two 24 volt cables going to the cannon connectors. Refer to *Figure 3 Inset B*.

Pin 1 - L.H. pinsetter 24 AC power
Pin 2 - L.H. pinsetter 24 AC power
Pin 3 - R.H. pinsetter 24 AC power
Pin 4 - R.H. pinsetter 24 AC power
Pin 5 - N.C.

8. Install safety switch cable (P/N 53-400089-000) by connecting it to the control box and the automatic pinsetters. Refer to *Figure 4*.

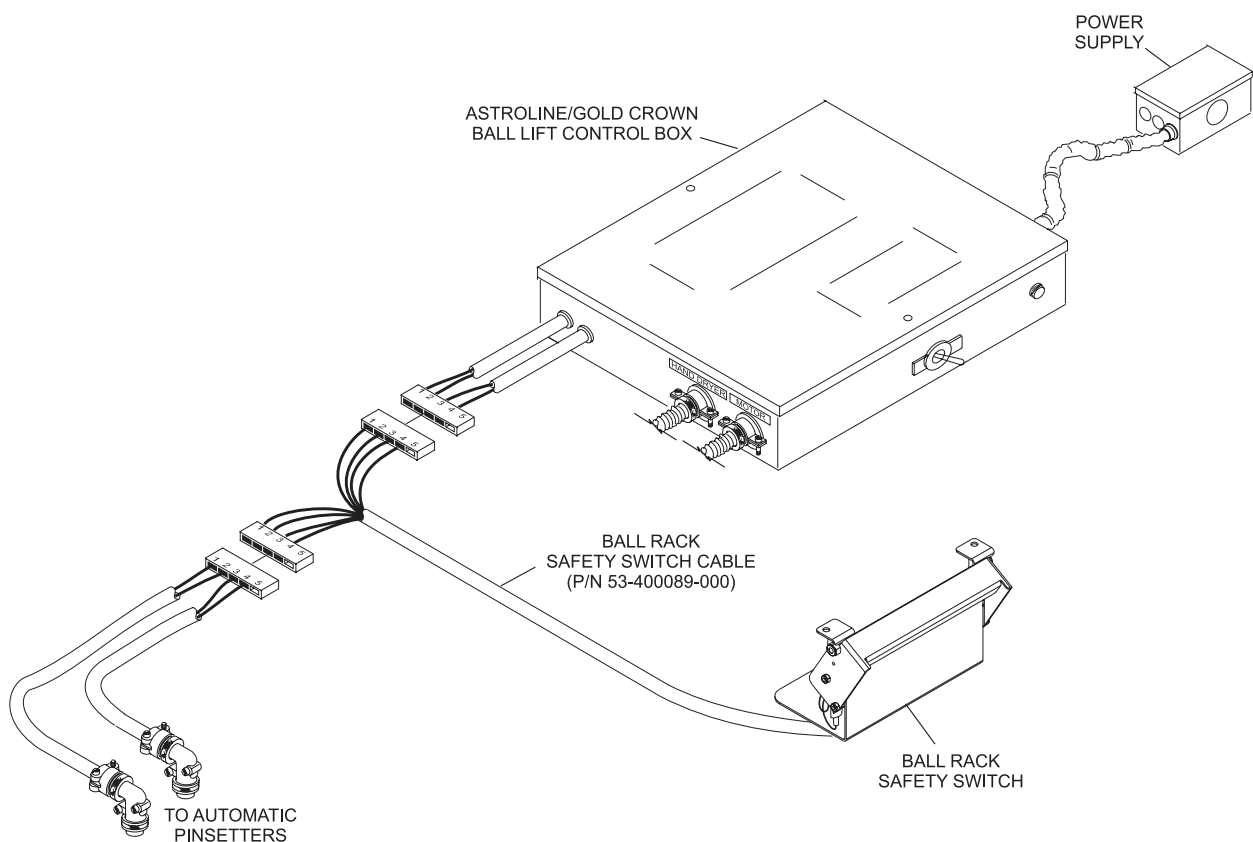


Figure 4



WARNING! Remove power from the ball lift control box and pinsetter before installation.

Safety Switch Installation with B2000 Ball Lifts

1. Locate the lane cable, 53-520588-000. Refer to *Figure 5*.

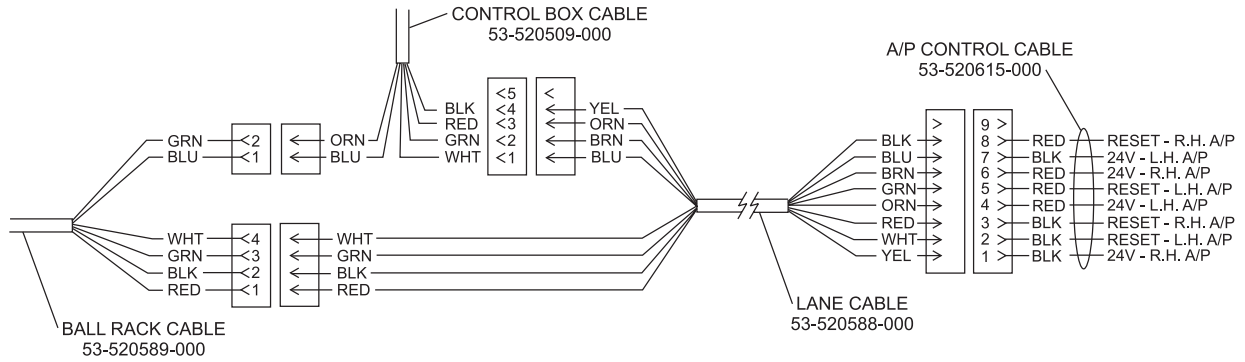


Figure 5

2. Locate the 5 pin connector on the ball lift control box. Refer to *Figure 6*.

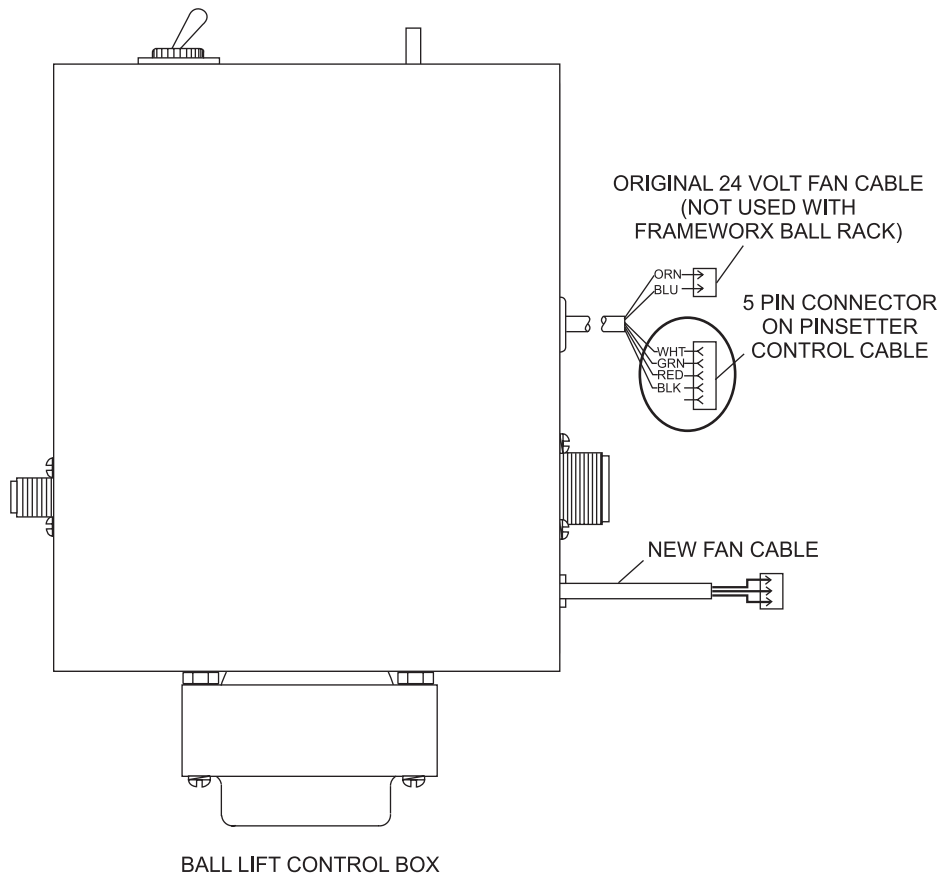


Figure 6

3. Cut off the 5 pin connector on the lane cable and ball lift control box. Refer to *Figure 7*.

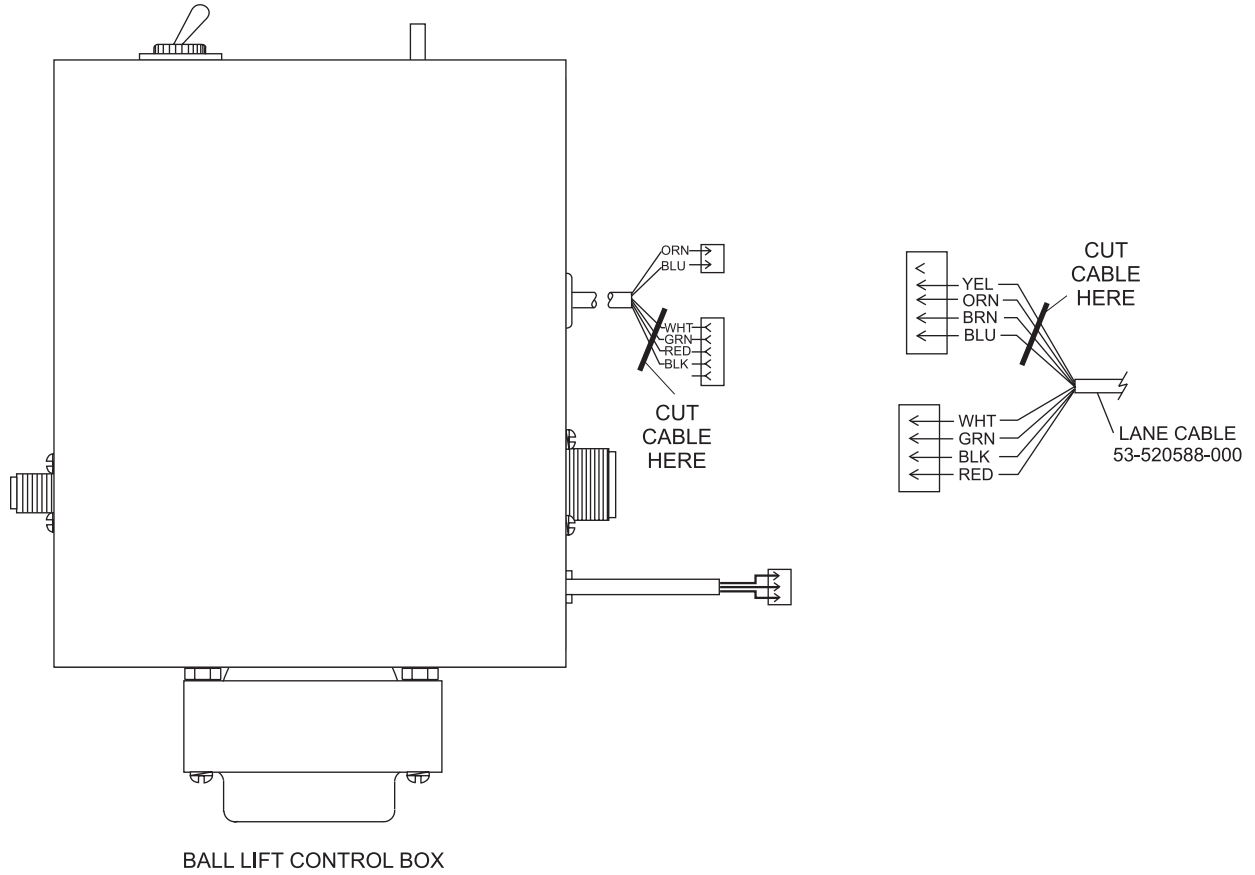


Figure 7

4. Install terminals, (P/N 11-680301-000) on the cable from the ball lift control box. Refer to *Figure 8, Inset A*.
5. Install terminals, (P/N 11-680302-000) on the lane cable, 53-520588-000. Refer to *Figure 8, Inset B*.
6. Install the connector (P/N 11-689117-000), on the cable from the ball lift control box. Refer to *Figure 8, Inset A*. Pin the connector as follows:

- Pin 1 – White
- Pin 2 – Green
- Pin 3 – Red
- Pin 4 – Black
- Pin 5 - NC

7. Install the connector (P/N 11-689217-000), on the cable from the ball lift control box. Refer to *Figure 8, Inset B*. Pin the connector as follows:

- Pin 1 – Blue
- Pin 2 – Brown
- Pin 3 – Orange
- Pin 4 – Yellow
- Pin 5 - NC

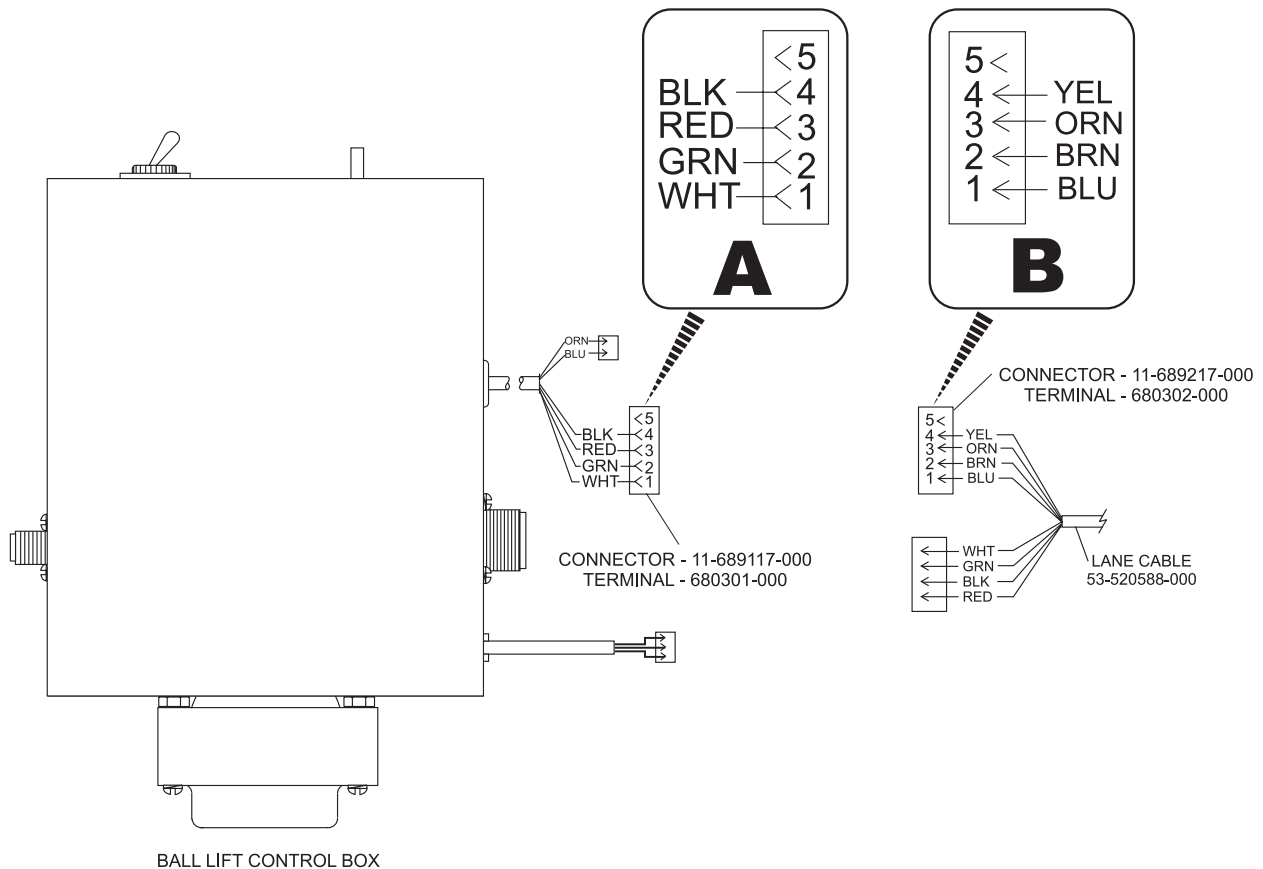


Figure 8

8. Install the safety switch, (P/N 53-400089-000) by connecting it to the control box and the automatic pinsetter. Refer to *Figure 9*.

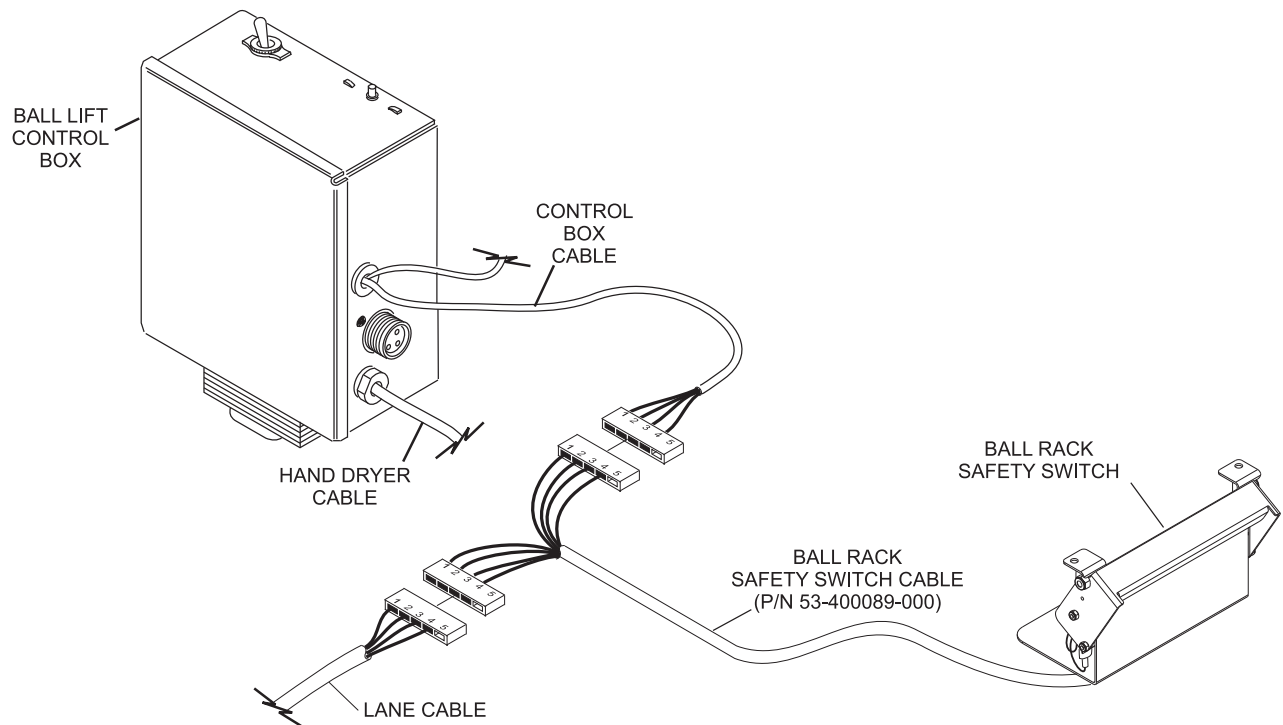


Figure 9

Reset Switches

1. Locate the existing reset switches on the existing ball rack.
2. Use the provided electrical butt splices, part number 11-612451-000, to connect the new Frameworx reset switches to the existing reset switch wiring.