



# Parallel Straightedge

## Assembly and Maintenance Instructions

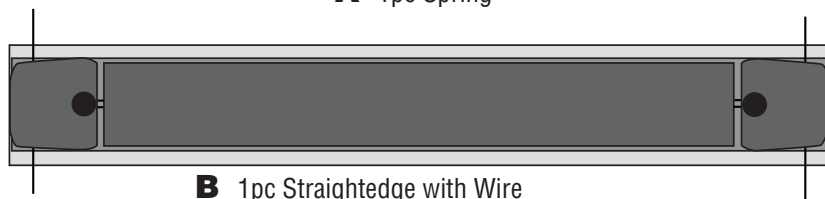
For model series  
1101 and 2201

**Tools Required:** Phillips screwdriver and a drill with 1/16" bit

### Parts Included:



**A** 1pc Spring



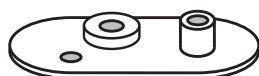
**B** 1pc Straightedge with Wire



**C** 2pcs Front Wire Connectors



**D** 1pc Left Rear Wire Connector



**E** 1pc Right Rear Wire Connector



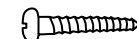
**F** 2pcs Rear Pulleys



**G** 1pc Rear Adjustment Knob



**H** 1pc 1/2" Clinch Stud



**J** 6pcs 3/4" Screws



**K** 2pcs 3/8" Washers

### To Assemble:

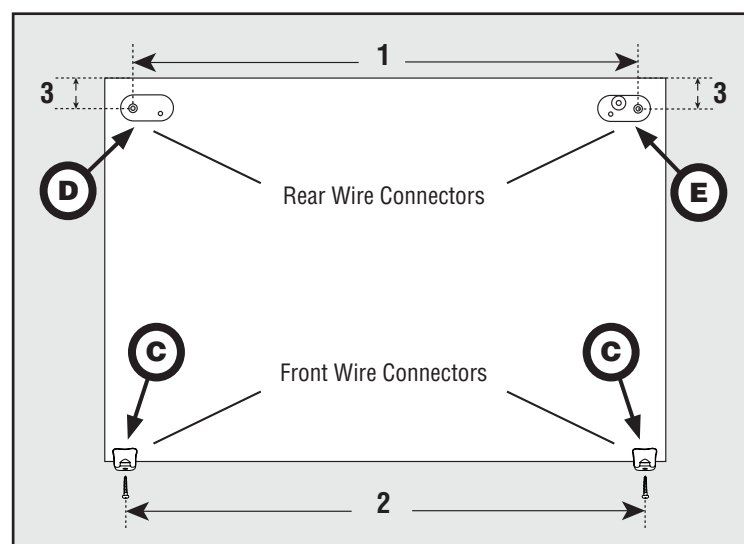
- 1 Verify that all parts shown in parts list are included.
- 2 Check that drawing board has a solid outer frame to hold screws and that it is not warped. Alvin straightedges will not work properly on warped boards.
- 3 Position front and rear wire connectors (**C**, **D**, **E**) on top of drawing board as shown in **Figure 1**. Use chart below to determine proper spacing. Center the straightedge (**B**) on the board.

For Straightedge Length	Dimension 1	Dimension 2	Dimension 3
30"	27 <sup>3</sup> / <sub>4</sub> "	28 <sup>3</sup> / <sub>4</sub> "	3/ <sub>4</sub> "
36"	33 <sup>3</sup> / <sub>4</sub> "	34 <sup>3</sup> / <sub>4</sub> "	3/ <sub>4</sub> "
42"	39 <sup>3</sup> / <sub>4</sub> "	40 <sup>3</sup> / <sub>4</sub> "	3/ <sub>4</sub> "
48"	45 <sup>3</sup> / <sub>4</sub> "	46 <sup>3</sup> / <sub>4</sub> "	3/ <sub>4</sub> "
60"	57 <sup>3</sup> / <sub>4</sub> "	58 <sup>3</sup> / <sub>4</sub> "	3/ <sub>4</sub> "

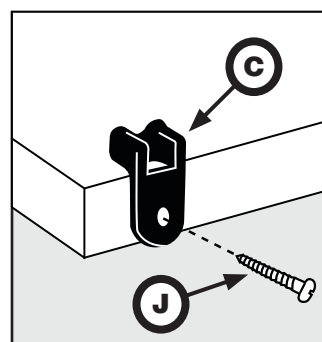
- 4 Mark screw positions for front and rear wire connectors and pre-drill pilot holes about 1/4" deep using a 1/16" drill bit. Use care not to drill through the board.

**TIP** Wrap masking tape 1/4" from drill tip to set drilling depth.

- 5 Fasten front wire connectors to front edge of board as shown in **Figure 2** using 3/4" screws (**J**). Fasten screws half way. Do not fully tighten.



**Figure 1**



**Figure 2**

# 1101 and 2201 Assembly and Maintenance Instructions

- 6** Assemble right rear wire connector as shown in **Figure 3** and fasten to board using 3/4" screws (**J**). Fasten screws securely. Rear pulleys (**F**) are designed to be tight fitting and do not spin freely.
- 7** Assemble left rear wire connector as shown in **Figure 4** and fasten to board. Fasten screws securely. Rear pulleys are designed to be tight fitting and do not spin freely.
- 8** Place straightedge in center of board parallel to front edge as shown in **Figure 5**. Loop upper wires around rear pulleys in rear wire connectors making sure that spring is centered.
- 9** Thread lower left and lower right wires through front wire connectors. Wire should pass between connector and board as shown in **Figure 6**. With spring still centered at top, pull slack out of wire passing through lower left connector and wrap wire around mounting screw. Fasten screw securely. Repeat on the right side, using care to set spring tension as directed in **Figure 5** for best performance.
- 10** Excess wire can be trimmed off but leave several inches for future adjustment.

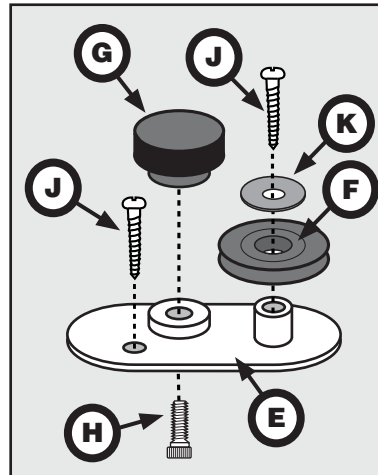


Figure 3

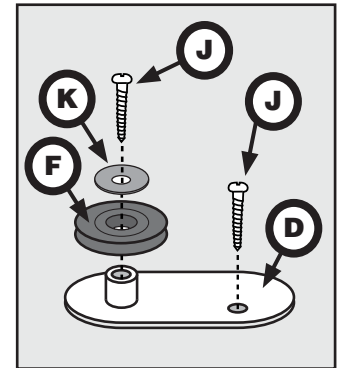


Figure 4

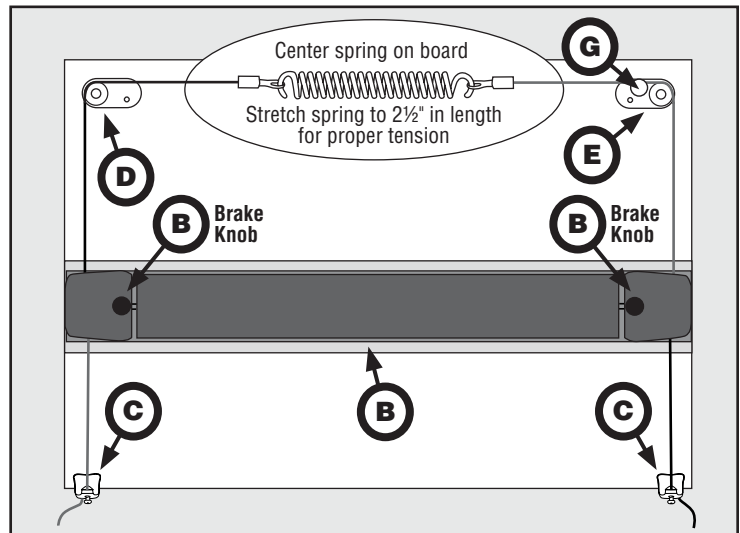


Figure 5

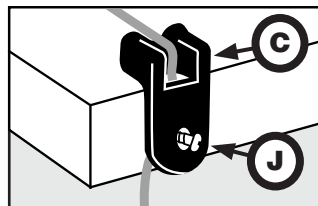


Figure 6

## To Adjust & Lock Parallel Straightedge Position:

- 1** Be sure both brake knobs (**B**) and rear adjustment knob (**G**) are free and loose. (See **Figure 5** for knob locations.)
- 2** Grasp one end of straightedge and hold firmly against drawing board.
- 3** Gently pivot other end of straightedge up or down until desired parallel position is reached.
- 4** Secure wire under rear adjustment knob in upper right corner to maintain parallel positioning.
- 5** With straightedge in desired position, gently tighten both left and right brake knobs.

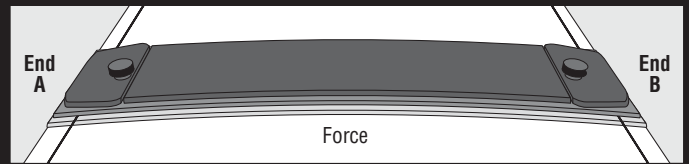
**CAUTION** Do not overtighten. Overtightening brake screws will damage wires.

# 1101 and 2201 Assembly and Maintenance Instructions

## To Maintain:

Due to the Laminar construction of this straightedge, it is possible to have the center bowed if the straightedge is subjected to any sizeable force acting in the vertical direction (See **Figure 7**).

To correct, lift ends **A** or **B** while holding down the center of the straightedge just enough to offset the bow.

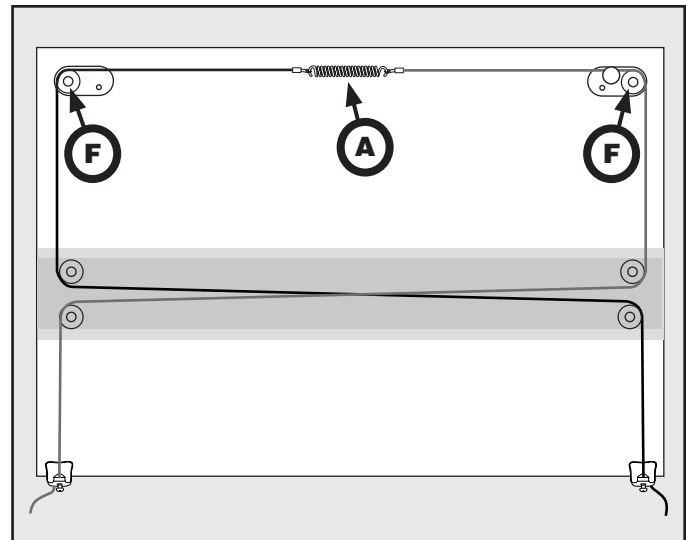


**Figure 7**

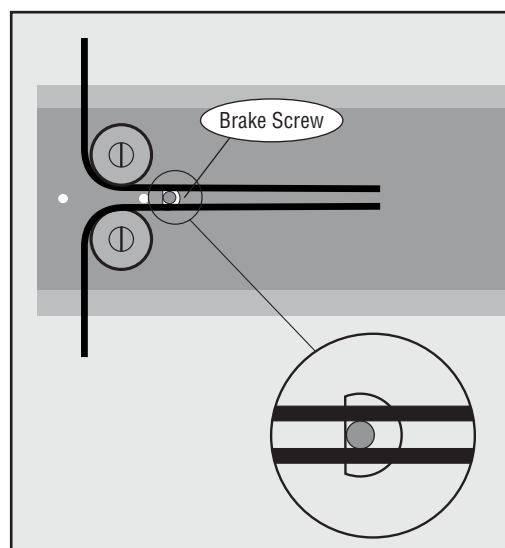
## To Rewire:

If your wire ever breaks or needs to be replaced, follow these steps:

- 1** Release left and right end caps of the straightedge by removing screws from below. Be sure not to remove screws that keep top and bottom layers of straightedge blade together.
- 2** Remove all old wires.
- 3** Fold new replacement wire in half and thread folded end through center of straightedge blade. Pull through until wire is equal length on each side of the straightedge blade. Cut wire at fold. There are now two independent wires running through straightedge blade.
- 4** Grasp either wire on left side, pass around straightedge blade pulley and brake screw as shown in wiring **Figure 9** and pass it around rear pulley (**F**) in upper left corner of board. Connect to spring at top (**A**).
- 5** Grasp the wire on right side not connected to spring from left side. Trial and error method will be required here. Pass this wire around straightedge blade pulley and brake screw, then pass it around pulley in upper right corner of board. Connect to spring at top.
- 6** Pass lower left and lower right wires around straightedge blade pulleys and brake screws as shown in wiring **Figure 9**.
- 7** To confirm wires have been strung correctly, hold straightedge in place with one hand and pull gently on lower left wire with other hand. The spring at top should move to the right. Repeat by pulling the lower right wire and the spring should move to the left.
- 8** Replace straightedge end caps and secure with screws from below. Be sure that wires remain properly threaded around pulleys and brake screws and pass properly through exit slots in end caps. Do not over tighten or strip screws.
- 9** Follow steps 8 through 10 of assembly instructions to finish installation.



**Figure 8**



**Figure 9**

# Replacement Parts

## #SEK15 – Replacement Straightedge End Caps for Models 1101 and 2201 made after 2015

### Contains:

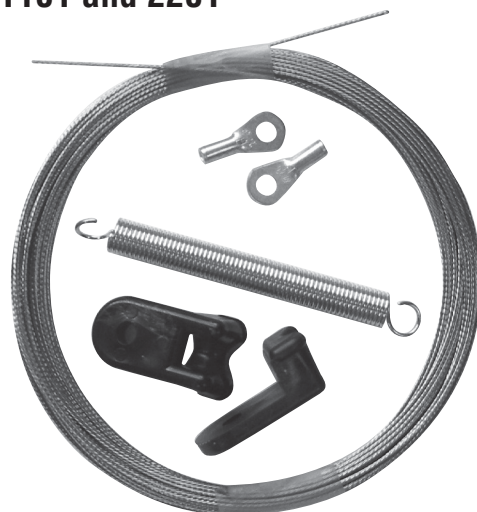
- 2 End Caps
- 2 T-Shaped Screws
- 2 Brake Knobs



## #PEP-2 – Straightedge Rewiring Kit for Model Series 1101 and 2201

### Contains:

- 1 Spring
- 2 Eyelets
- 2 Front Wire Connectors
- 27½' of Wire (for straightedges 30" to 60" in length)



## #SH15 – Straightedge Hardware Kit for Model Series 1101 and 2201 made after 2015

### Contains:

- 2 Front Wire Connectors
- 2 Rear Wire Connectors
- 2 Rear Pulleys
- 2 Washers
- 1 Clinch Stud
- 1 Rear Adjustment Knob
- (6) 3/4" Screws



*Wire not included and must be ordered separately (item PEP-2).*



1101-42 in use with  
Alvin® ONX40-4  
drafting table