

# Parallel Straightedge Assembly Instructions

For Models 1101 and 2201

Parts List



- 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 on top of drawing board as shown in **Figure 1**. Use chart below to determine proper spacing. Center the straightedge on the board.

For Straightedge Length	<b>Dimension A</b>	<b>Dimension B</b>	Dimension C
30"	27¾"	28¾"	3⁄4"
36"	33¾"	34¾"	3⁄4"
42"	39¾"	40¾"	3⁄4"
48"	45¾"	46¾"	3⁄4"
60"	57¾"	58¾"	3⁄4"

Proceed to step 4 on next page.



- Mark screw positions for front and rear connectors and pre-drill pilot holes about ¼" deep using a ¼16" drill bit. TIP: Wrap masking tape ¼" from drill tip to set drilling depth. Use care not to drill through tabletop.
- 5. Fasten front connectors to front edge of board as shown in **Figure 2** using <sup>3</sup>/<sub>4</sub>" screws. Fasten screws half way. Do not fully tighten.
- 6. Assemble right rear connector as shown in **Figure 3** and fasten to board. Select screw length based upon board thickness.\* Fasten screws securely.

\*For board thicknesses of 5/8" or less: If your board is 5%" thick or less please use the

5%" screws in place of the 3%" screws as shown in **Figures 3 and 4.** Do not use 3%" screws included with hardware kit since they might break through bottom of board.

- Assemble left rear connector as shown in Figure 4 and fasten to board. Fasten screws securely. Pulleys are designed to be tight fitting and do not spin freely.
- 8. Place straightedge in center of drawing board parallel to front edge as shown in Figure 5.
- **9.** Loop upper wires around pulleys in rear wire connectors making sure that spring is centered.
- Thread lower left and lower right wires through front wire connectors. Wire should pass between connector and board as shown in Figure 6.
- **11.** 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.
- 12. Pull slack out of wire passing through lower right connector until spring at top is stretched to about 2½" in length. Wrap wire around mounting screw and fasten screw securely. Use care to set spring tension as directed for best performance.
- **13.** Excess wire can be trimmed off leaving several inches for future adjustment.



3⁄4"

Screws'

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Left Rear

Connector

## Figure 3



\*Use the 5/8" screws in place of the 3/4"screws for boards 5/8" thick or less.



Figure 6



#### **ADJUSTMENTS**

- To Adjust Parallel Position:
- 1. Be sure all three brake knobs are free and loose. (See Figure 5 on previous page for brake locations.)

Diagram 1

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- 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 thumbscrew brake in upper right corner to maintain parallel.

#### To Lock Straightedge In Place:

1. With straightedge in desired position, gently tighten both left and right thumbscrew brakes. Caution: Do not overtighten. Overtightening brake screws will damage wires.

#### **REWIRING INSTRUCTIONS**

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

- 1. Release left and right end caps by removing screws from below. Be sure not to remove screws that keep top and bottom layers of blade together.
- 2. Remove all old wires.
- **3.** Fold new replacement wire in half and thread folded end through center of blade. Pull through until wire is equal length on each side of the blade. Cut wire at fold. There are now two independent wires running through blade.
- Grasp either wire on left side, pass around blade pulley and brake screw as shown in wiring Diagram 2 and pass it around pulley in upper left corner of board. Connect to spring at top.
- 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 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 blade pulleys and brake screws as shown in wiring **Diagram 2.**
- 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 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.

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9. Follow steps 8 through 13 on previous page to finish installation.

# **ALVIN Replacement Parts**

## #HD4

## Straightedge Hardware Kit for Models 1101, 1102, and 2201

#### Contains:

- 2 Front wire connectors
- 2 Rear pulley assemblies

Wire not included and must be ordered separately.



#### #PEP-2

# Straightedge Rewiring Kit for Models 1101, 1102, and 2201



#### Contains:

- 1 Spring
- 2 Eyelets
- 2 Front wire connectors

30 Feet of wire to string straightedges from 30" to 72" in length

### #KN3

# Replacement Brake Knobs for Models 1101, 1102, and 2201



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