

Holz-Her Vertical Panel Saw Kit Installation Instructions:

For Vertical Scale, Horizontal Cuts

Please note this installation kit is designed solely for installation on Holz-Her Vertical Panel Saws, *Models 1205, 1220, 1265S, 1265, and 1270*. Accurate Technology manufactures kits for other vertical panel saws in which some or all of the components may be different. For more information about ProKits™ feel free to contact Accurate Technology.

SAFETY WARNING

To avoid injury: Before installing ProScale on a machine, turn off the machine and disconnect it from its power source.

Warranty

Accurate Technology, Inc., warrants ProKit™ systems against defective parts and workmanship for one year, commencing from the date of original purchase. Upon notification of a defect, Accurate Technology, Inc. shall have the option to repair or replace any defective part. Such services shall be the customer's sole and exclusive remedy. Expenses incidental to repair, maintenance, or replacement under warranty, including those for labor and material, shall be borne by Accurate Technology, Inc.

Except as expressly provided in this warranty, Accurate Technology, Inc., does not make any warranties with respect to the product, either expressed or implied, including implied warranties of merchantability or fitness for a particular purpose, except as expressly provided in this agreement.

Accurate Technology, Inc., shall not be liable for any special, incidental, or consequential damages or for loss, damage or expense directly or indirectly arising from the customer's use of or inability to use the equipment either separately or in combination with other equipment, or for personal injury or loss or destruction of other property, or from any other cause.

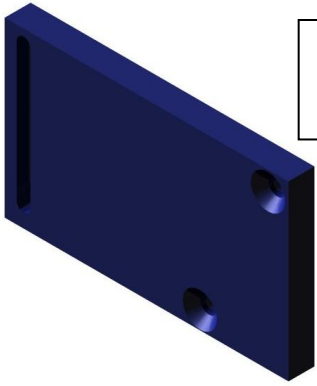
Tools Required

- Drill Motor
 - Center punch
 - Drill and tap for 8-32 machine screw
 - Phillips screwdriver
 - Flat head screwdriver
 - SAE (or metric equivalent) Allen wrench set
 - Tap handle
 - Small grinder/file*
 - Drill and tap for 6mm machine screw*
- * May not be necessary, depends on model

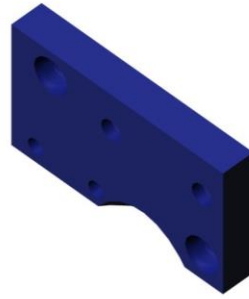
READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION!

(Some Holz-Her 1265 and 1270 models have been predrilled on the vertical beam.) **DO NOT USE THE PREDRILLED HOLES IN THE VERTICAL BEAM FOR INSTALLATION OF THIS KIT!**

Some of the parts for this installation kit may have been pre-assembled for your convenience by Accurate Technology.



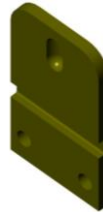
**Vertical Block Mount
(Part of Vertical) Assembly**
(Replacement part number 100-1042-002)



**Spacer Block
(1270 Models Only)**
(Replacement part number 100-1047-001)



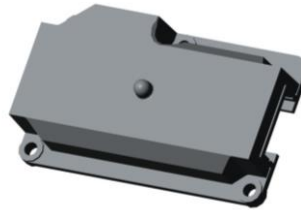
**Vertical Guide Clip Block
(Part of Vertical Assembly)**
(Replacement part number 100-1401-002)



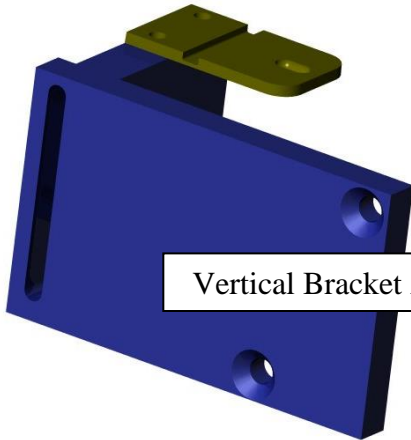
**Guide Clip
(Part of Vertical Assembly)**
(Replacement part number 100-1026-001)



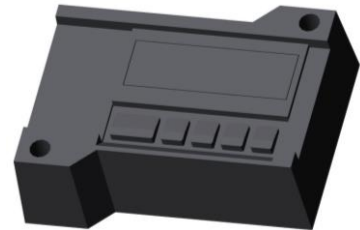
Display Hinge
(Replacement part number 700-1204-001)



**Encoder/Readhead
(cable not shown)**
(Replacement part number 701-1900-024)



Vertical Bracket Assembly



**General Purpose
Digital Readout**
(Replacement part number 700-1600-235)



**Vertical Digital Scale (kits made
after August 2005 may use a custom
scale assembly instead)**

Installation:

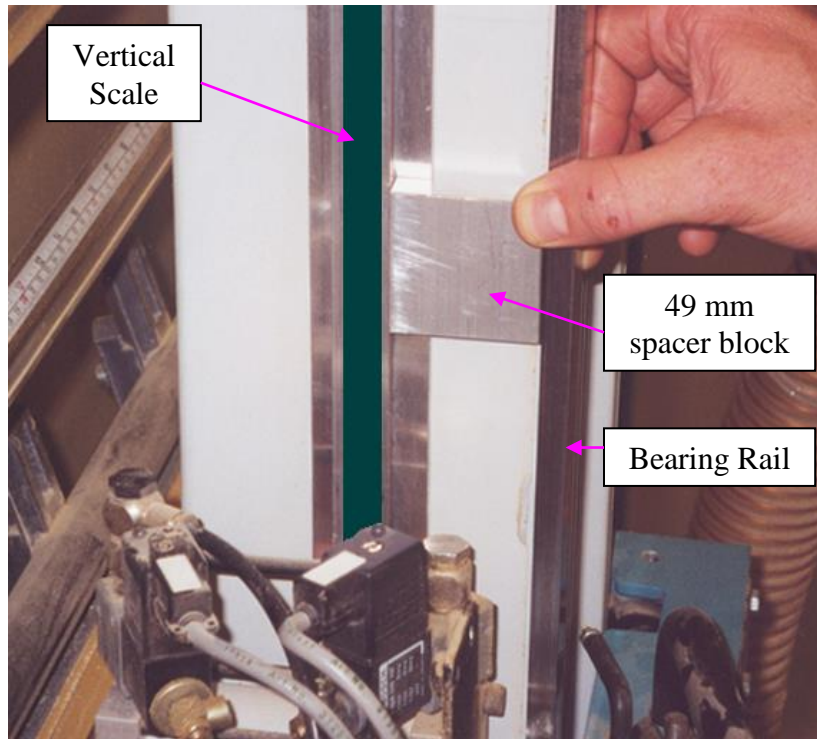
Be sure to keep the parts for the horizontal and vertical kits separate if you have purchased both. **Note that the vertical scale kit measures vertically (up and down) while the saw cuts horizontally.** The encoder has been shipped on the scale, and should remain on the scale if possible.

Installing the Vertical Scale:

Use the picture as a reference.

NOTE: The Digital Scale for 1265/1270 kit is 94" long and the scale for 1205/1265S kit is 83" long.

1. The Digital Scale attaches to the left side of the saw carriage. The center portion of the scale should be spaced 49mm from the back of the bearing rail. (See the figure at right for more details.) Two aluminum spacing blocks have been included in this installation kit. Use one at the upper end of the scale and one at the lower end – to ensure the scale is evenly spaced from the bearing rail. The top edge of the scale should be even with the top edge of the carriage.



2. Clamp the scale in place.
3. Mark the hole locations with a center punch or a transfer punch.
4. Remove the scale from the vertical beam. Drill and tap (8-32) the vertical beam in all marked places. Attach the scale using the 8-32 x 1/4" Flathead screws.

Vertical Bracket Assembly:

(Use the picture on page 2 for reference.)

5. Connect the Vertical Block Mount and the Vertical Guide Clip Block using the 10-32 Socket Cap Screws. Mount the guide clip to the Vertical Guide Clip Mount (as shown) using the 8-32 x 3/8" screws.
6. Attach the Vertical Block Mount to the milled surface on the top of the saw carriage. For the 1265S and 1205 saws, these holes may not be present, and must be made. Drill and tap for 6mm screws if necessary. When positioned correctly; the guide clip will properly engage the encoder on the scale.
7. Mount the assembly using the 6mm Flathead screws.
NOTE: Installation onto 1270 models requires replacement of the Holz-Her spacer, part 114.7152, with the included Spacer Block.

8. Carefully re-install the encoder onto the scale if it has been removed.
9. Slide the encoder along the scale until it nears the guide clip. Slip the encoder under the guide clip, making sure the small notch on the guide clip fits over the knob on the outside of the encoder. The encoder should be held firmly in place yet be able to easily slide along the scale.

10. Adjust the position of the Vertical Guide Clip Block until the guide clip pressure is properly set (see diagram at right). Check to be sure the guide clip does not allow for any up/down movement of the encoder. Use the 8-32 x 3/4" screws and add washers/spacers to achieve the proper pressure if necessary. (If the guide clip puts too much pressure on the encoder, the encoder may wear out prematurely.)

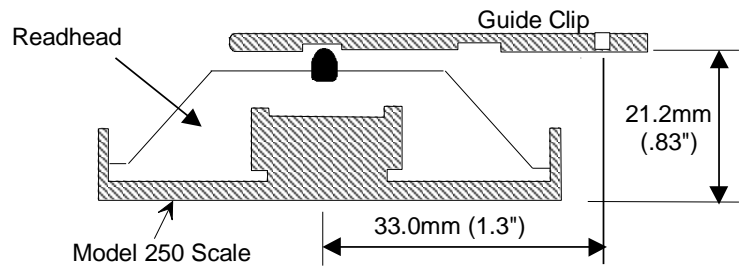
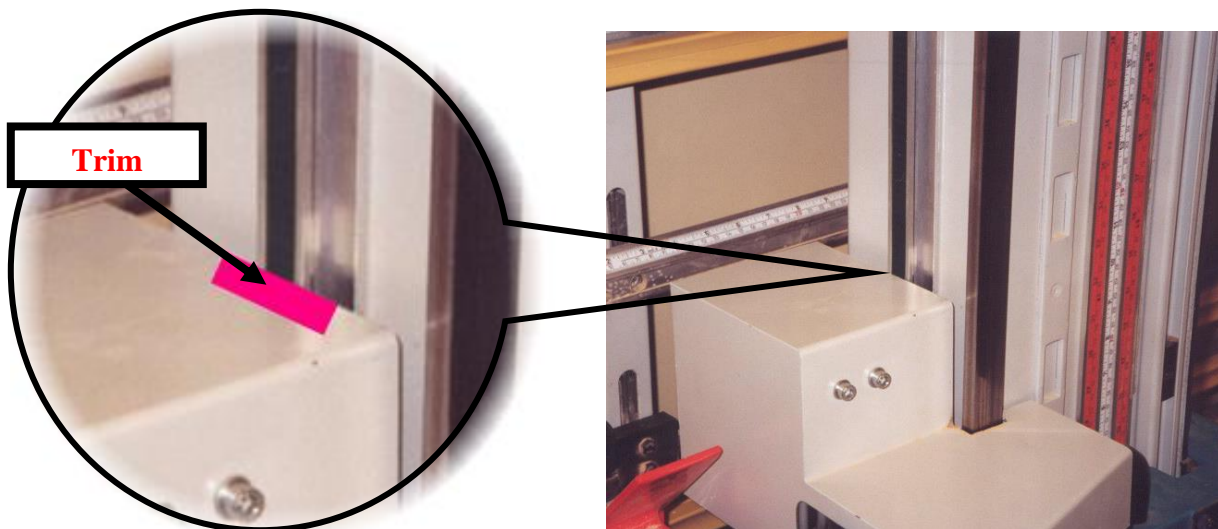


Figure 1.

11. Determine a mounting location for the digital readout. It should allow for easy viewing and for safe placement of the cable. Using the hinge, the 4-40 screws, and/or the Velcro, mount the readout in a location that will protect the cable from damage. Connect the cable from the encoder to the digital readout.

12. On models equipped with a cylinder guard, the guard may need to be trimmed (as shown below).



Final Installation Checklist:

1. Verify the scale is mounted flat against the beam.
2. Verify no part of the carriage or saw guard can touch or rub the vertical scale. Be sure to check all possible positions of the carriage, especially when the saw is pulled back to change from vertical to horizontal.
3. Verify the encoder is centered in the guide clip notch and has the correct pressure over the full travel of the carriage.
4. Verify electrical connections and cables are secured and dressed to minimize the chance of interference or snagging.

Calibration of the Digital Readout:

1. Lock the saw carriage in place just above the **mid-fence**. Verify the ABS indicator is displayed in the upper left corner of the LCD. (If the INC indicator appears instead, press and hold the ABS/INC key for 3-4 seconds.)
2. Enter the distance from the blade to the **mid-fence** using the PLUS, MINUS, and DATUM keys. NOTE: When pressing the PLUS or MINUS keys, the display will count slowly at first, then speed up every three seconds.
3. Lock the keypad. (This is done to prevent accidental changes to the calibration.)
 - a. Press and hold the ON/OFF key.
 - b. Tap the UNITS key (press and release in less than a second).
 - c. Release the ON/OFF key.
 - d. The keyboard is now locked. (**LOCK** will appear in the upper left corner of the display.)
The keyboard can be unlocked by repeating steps a-c.
4. The above calibration procedure should be repeated each time a saw blade is changed and when the battery in the digital readout is changed.

Programming the Digital Readout for different cutting stations:

The digital readout can be programmed to add “fence offsets” to the displayed value. This allows the digital readout to simultaneously track the correct distance to the bottom fence or to the mid-fence.

Programming:

1. Change programming parameter **Pr30** to a value of **1** in the digital readout (refer to the programming section of the *Operation Manual* for more information).
2. The distance from the bottom to the mid-fence should be programmed into parameter **Pr31**.

Operation:

Programming parameter Pr31 was programmed to 24 inches for this example.

1. The operator is making a horizontal cut with the panel supported at the bottom fence. The readout shows a dimension of 34.000 inches.
2. His next cut is smaller and he wants to use the middle fence instead. He loads a panel onto the middle fence, and presses the F1 key on the readout. The readout shows a **1** above the dimension, and the reading changes to 10.000 inches.
3. For each press of the F1 key, the readout cycles between each fence dimension.

Kerf compensation for repetitive cuts:

The digital readout can also be programmed to automatically compensate for the kerf when making repetitive cuts. This is done by programming the blade kerf into the ABS/INC key. This feature is useful when one or more strips need to be cut to a desired dimension without requiring the operator to account for kerf manually.

Programming:

1. Determine the blade kerf.
2. Lock the carriage in position. The readout should show the ABS indicator in the upper left corner.
3. Press the ABS/INC key (for one second or less). The ABS indicator will turn off, and the INC indicator will turn on.
4. Enter the blade kerf using the PLUS key.
5. Press the ABS/INC key again (for one second or less). The blade kerf is now programmed.
6. Press the ABS/INC key for 3-4 seconds to return to the absolute distance (from fence to blade).

Operation:

1. Load a panel into the machine onto the bottom or mid-fence.
2. Make a clean-up (squaring) cut if necessary.
3. Press the ABS/INC (for one second or less). The readout will display the kerf value.
4. Unlock the carriage and adjust it down to the desired cutoff dimension. Notice that the digital readout first counts off the kerf amount, then counts up to the cutoff dimension. Lock the stop in the desired position, and cut the panel.
5. Repeat steps 3 and 4 as many times as needed to make all the cuts.
6. Press the ABS/INC key for 3-4 seconds to return to the absolute distance (from the fence to the blade).

Troubleshooting:

The display does not change when the carriage is moved:

- The encoder is not properly engaged by the guide clip and is not moving. Check to be sure the encoder remains properly engaged.
- The digital readout has been programmed with a very small linear scaling factor. Reset the scaling factor to 1.00000.

The displayed measurement is off by 0.060 inches (1.524mm):

- There has been a very large static electricity discharge into the measuring system. Ensure the machine and its dust collection tubing is properly grounded. Recalibration is necessary.

The displayed measurement is off by a value other than 0.060 inches (1.524mm):

- Check that all bolts and fasteners are tight.
- Check that the saw blade has not been changed. If it has been changed (kerf changed), recalibration may be necessary.
- The plus, minus, or DATUM keys have been accidentally pressed. Recalibration is needed.
- The encoder is not properly engaged by the guide clip and is not moving. Check to be sure the encoder remains properly engaged.
- The digital readout has been programmed with an obscure linear scaling factor. Reset the scaling factor to 1.00000.
- There have been several very large static electricity discharges into the measuring system. Ensure the machine and its dust collection tubing is properly grounded. Recalibration is necessary.

ProScale resets itself while saw is running and the carriage is locked:

- The display has been accidentally reset. Large voltage spikes from nearby motors, inverters, or dust collection systems may cause this. Be sure that all devices are properly grounded.
- Also, extreme vibration may cause this. Mount the digital readout in a different location.
- Be sure the "DATUM" key or ABS/INC key have not been pressed. Recalibration is necessary.

ProScale resets itself while the saw is *not* running and the carriage is locked:

- Be sure the " DATUM " key or ABS/INC key have not been pressed. Recalibration is necessary.

ProScale readout reads "**No Enc**":

- The encoder has been removed from the scale, or its cable is damaged.
- The encoder is not connected to the readout.

The display **displays a battery symbol**:

- The battery needs to be changed. ProScale uses one **CR123** lithium battery. To change the battery, unscrew the top cover (two screws) and remove old battery. Recalibrate the readout after replacing the battery.