

Holz-Her Vertical Panel Saw Kit Installation Instructions:

For Horizontal Measuring Scale - Vertical Cuts

Please note this installation kit is designed solely for installation on Holz-Her Vertical Panel Saws, Models 1205, 1215, 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.

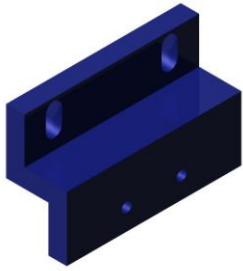
Accurate Technology, Inc., shall not be liable for any special, incidental, or consequential damages or for loss, damage or expense directly or indirectly arising from the customer's use of or inability to use the equipment either separately or in combination with other equipment, or for personal injury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

Tools Required

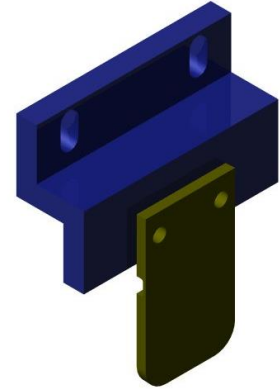
- Drill Motor*
 - Center punch*
 - Drill and tap for 4mm machine screw*
 - Tap handle*
 - Metric Allen wrench set
 - Phillips screw driver
- * May not be necessary, depends on model

READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION!

*Most Holz-Her 1265 and 1270 models have been predrilled and tapped for mounting kit parts. For this reason, it may not be necessary to use some of these tools for installation. Please note that Holz-Her Model 1265S has *not* been predrilled and must be drilled and tapped before installation. Some of the parts for this installation kit may have been pre-assembled for your convenience by Accurate Technology.



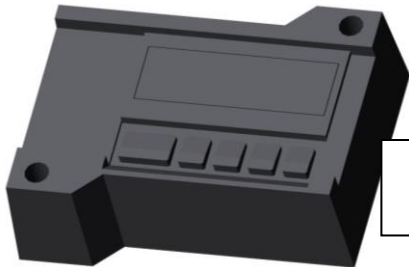
"Z" Bracket
(Part of Horizontal Bracket Assembly)
(Replacement part number: 750-6400-001)



Guide Clip
(Part of Horizontal Bracket Assembly)
(Replacement part number 100-1026-001)



Encoder/Readhead (cable not shown)
(Replacement part number 701-1900-012)



General Purpose DRO
(Replacement part number 700-1600-235)



Horizontal Digital Scale
(Replacement part number 700-3009-003)

Getting Started:

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

Installing the Horizontal Scale:

1. Remove the screws that attach Holz-Her's horizontal tape measure. Remove the tape measure and set it aside for now.
2. Place the digital scale onto the back of the saw scale bar (towards the rear of the machine), aligning the holes in the digital scale with the pre-drilled holes in the bar. Using three 4mm screws, mount the ProScale to the bar.
(Note: If the bar does not have the three pre-drilled holes, center the digital scale even with the top edge of the scale bar. Use a center punch to mark the drilling locations. Drill and tap holes for M4 threads.)

Horizontal Bracket Assembly:

3. Connect the guide clip to the Z-mount bracket using the 8-32 x 3/8" Phil. Pan screws.
4. Mount the bracket assembly onto the back of the Holz-Her scale stop mechanism. Line up the two remaining holes on the Z bracket with the two holes on the back of the scale stop mechanism. Screw on the Z bracket using the 5mm Socket Head Cap screws.
5. Re-install the encoder onto the scale if it has been removed.
6. Remount the Holz-Her scale onto the saw and re-install the sliding stop mechanism.
7. Slide the encoder along the digital scale until it nears the guide clip. Slip the encoder under the guide clip, making sure the small notch on the underside of the clip fits over

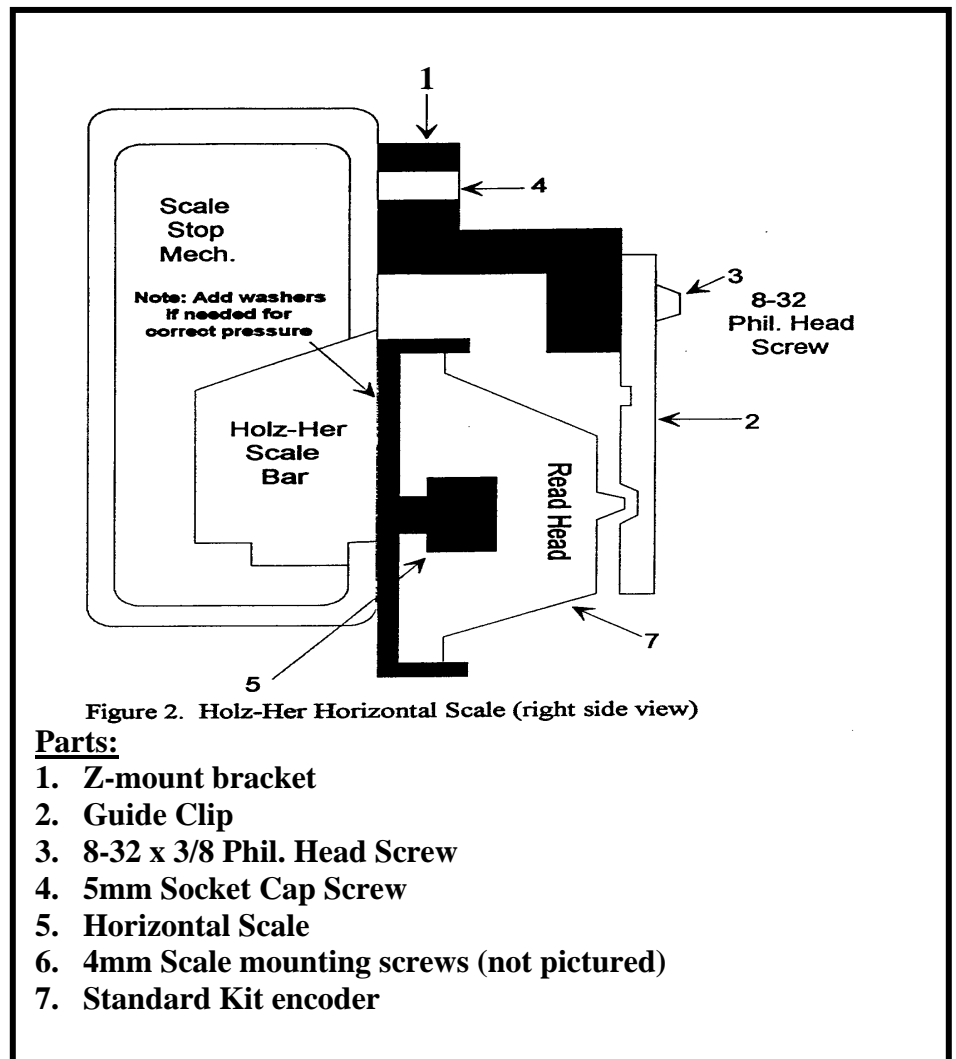


Figure 2. Holz-Her Horizontal Scale (right side view)

Parts:

1. Z-mount bracket
2. Guide Clip
3. 8-32 x 3/8 Phil. Head Screw
4. 5mm Socket Cap Screw
5. Horizontal Scale
6. 4mm Scale mounting screws (not pictured)
7. Standard Kit encoder

the knob on the outside of the encoder. The encoder should be held firmly in place, yet be able to easily slide along the digital scale.

8. Determine a location for the digital readout. The location should allow for easy viewing and for safe placement of the cable. Using the hinge, 4-40 screws, and/or the Velcro, mount the readout in a location that will protect the cable from damage. Route the encoder cable to the readout using the extension cable if necessary. Be sure its path is safe from the saw blade. Plug the cable into the readout.
9. Check the moving stop and encoder for smooth operation. Make adjustments as needed.
10. Check the displayed numbers for correct orientation:
 - a. Press the DATUM key on the readout.
 - b. Move the stop to the left. The displayed number should be a positive number.
 - c. If the displayed number is a negative number, programming parameter **Pr2** must be changed to a **1** in the digital readout. Refer to the Programming section in the *Operation Manual* for more information.

Calibration of the Digital Readout:

1. Lock the horizontal stop in place. 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 to the saw blade, using the PLUS, MINUS, and DATUM keys. The display will count slowly at first, then speed up.
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 “station offsets” to the displayed value. This allows the digital readout to track the correct distance to the stop for each cutting station.

Programming:

1. Change programming parameter **Pr30** in the digital readout (refer to the programming section of the *Operation Manual* for more information). The value for Pr30 should equal the number of vertical cutting stations on your machine.
 2. The distance from station 1 to station 2 should be programmed into parameter Pr31.
 3. The distance from station 1 to station 3 should be programmed into parameter Pr32.
 4. The distance from station 1 to station 4 should be programmed into parameter Pr33.*
 5. The distance from station 1 to station 5 should be programmed into parameter Pr34.*
- * ONLY IF YOUR MACHINE HAS THIS MANY STATIONS.

Operation:

Programming parameters Pr31, Pr32, and Pr33, and Pr34 were programmed to 40, 80, 120, and 160 inches, respectively, for this example.

1. The operator is making a vertical cut at the leftmost station. The readout shows 10.000 inches.
2. His next cut needs to be at station #2. He moves the gantry one station to the right, and presses the F1 key on the readout. The readout shows a **1** above the dimension, and the reading changes to 50.000 inches.
3. His next cut is at station #3. He moves the gantry one station to the right, and presses the F1 key again. The readout shows a **2** above the dimension, and the reading changes to 90.000 inches.
4. His next cut is at station #4. He moves the gantry one more station to the right, and presses the F1 key again. The readout shows a **3** above the dimension, and the reading changes to 130.000 inches.
5. His next cut is at station #5. He moves the gantry one more station to the right, and presses the F1 key again. The readout shows a **4** above the dimension, and the reading changes to 170.000 inches.
6. His last cut is back at station #1. He moves the gantry back to the first station and presses the F1 key. The readout shows 10.000 inches again.

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 are to be cut to a desired dimension.

Programming:

1. Determine the blade kerf.
2. Lock the stop 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 stop to blade).

Operation:

1. Load a panel into the machine and place it against the sliding stop.
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 sliding stop and adjust 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 3-4 as many times as needed.
6. Press the ABS/INC key for 3-4 seconds to return to the absolute distance (from stop to 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 1.0000.

The displayed measurement is off by 0.060 inches (1.52mm):

- ❑ 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 (1.52mm):

- ❑ 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 readout has been accidentally reset. Large voltage spikes from nearby motors, inverters, or dust collection systems can cause this. Be sure that all devices are properly grounded.
- ❑ 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 readout **displays a battery symbol**:

- ❑ The battery needs to be changed. ProScale uses one CR123A lithium cells. To change the battery, unscrew the top cover (two screws) and remove old battery. Recalibrate the readout after replacing the battery.