

Felder Rip Fence Digital Retrofit Installation Instructions:

Please note this installation kit is designed solely for installation on Felder K700 series Rip fences. Accurate Technology manufactures kits for other machines in which some or all of the components may be different. For more information about these kits please 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 this product 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.





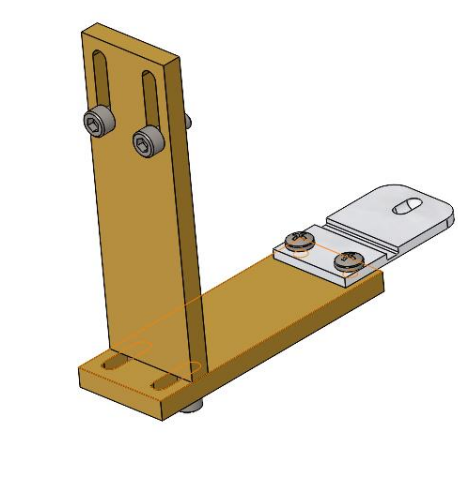
Accurate Technology, Inc., shall not be liable for any special, incidental, or consequential damages or for loss, damage or expense directly or indirectly arising from the customer's use of or inability to use the equipment either separately or in combination with other equipment, or for personal injury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

Tools Required

- 0-1" Adjustable wrench
- Metric and SAE Hex wrench sets
- Pencil or marking pen
- Center punch
- Drill Motor
- #21 drill bit
- Tap handle
- 10-32 tap
- ¼" countersink
- Phillips screw driver
- Optional: Drill and tap for 8-32 threads

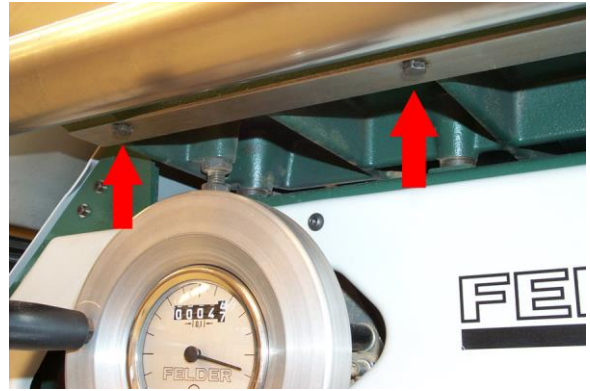
Please note: Some of the parts for this installation kit may have been pre-assembled for your convenience before shipment.

**READ THROUGH ALL INSTRUCTIONS BEFORE
BEGINNING INSTALLATION**

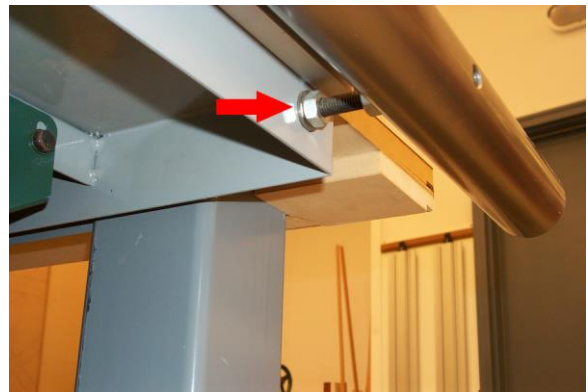
Electronic Scale:	 A long, thin, silver-colored metal scale bar with a black strip on top. The black strip contains the text "Inductive Series II", "www.proscale.com", and "+1 828 654 7920".
Encoder/sensor:	 A black, rectangular electronic component with a cable extending from one end. It has a small label on top.
Guide clip	 A small, L-shaped metal component with two circular holes, one on the vertical leg and one on the horizontal leg.
Digital readout :	 A grey, rectangular digital readout (DRO) unit. It features a central LCD screen displaying "10.63mm". To the left of the screen are buttons labeled "ABS", "INC", "SEND", "F1", "F2", "F3", and "F4". Below the screen are buttons labeled "ON/OFF", "UNITS", "+", "DATUM", and "-".
Bracket Assembly	 A 3D CAD model of a yellow L-shaped bracket assembly. It consists of a vertical leg with two circular holes and a horizontal leg with a slot. A silver-colored metal plate is mounted on the horizontal leg with two screws.

Mounting the Scale:

1. Locate and remove the M6 Hex head bolts shown in the photo.
2. Align the holes in the electronic scale to the holes in the table.
3. Mount the electronic scale using the round aluminum spacers, and the M6 x 55mm Flathead Socket Bolts. Mount the scale in at least two locations. (See photo, below left.)



4. An additional bracket is provided for mounting the electronic scale on the far right side (optional). Loosen the nut shown in the photo, slide the bracket under the nut, and re-tighten. Mount the scale to this bracket using the M6 x 12mm bolt. (See photo, below right.)



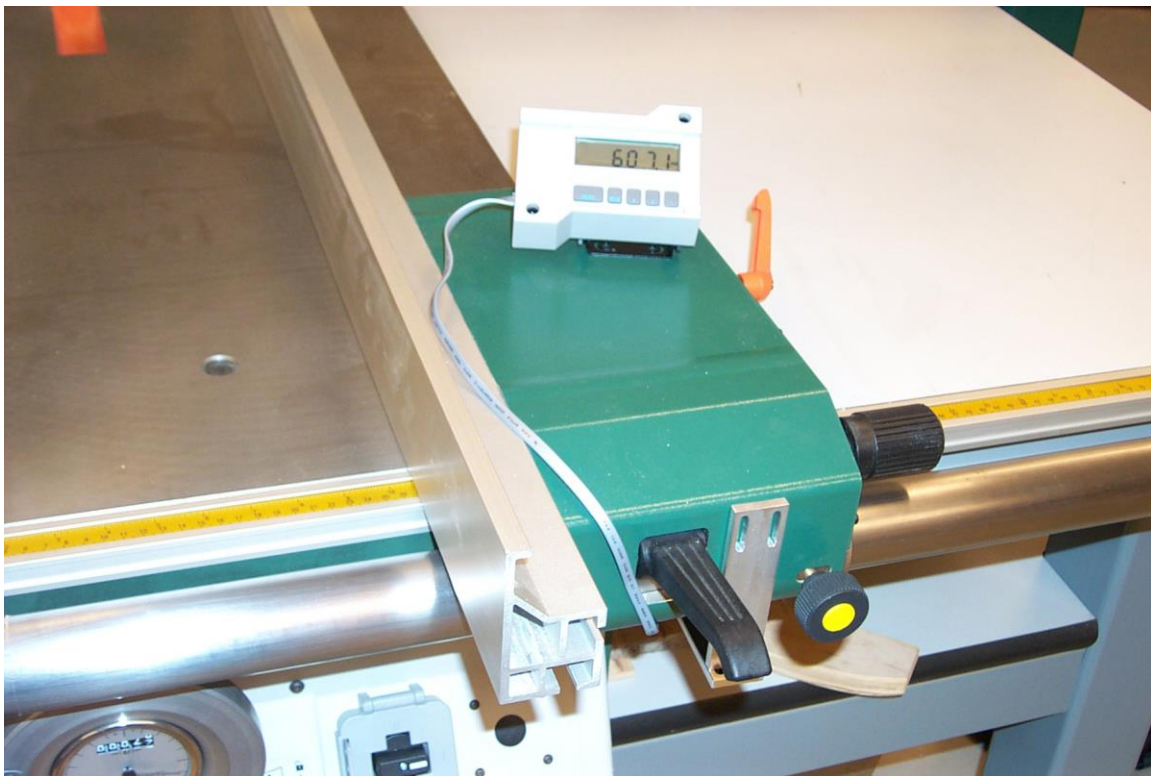
Installing the Adapter Brackets:

5. Position the Adapter Bracket Assembly against the fence as shown below. Mark the center of the vertical slots. Use a center punch to mark these locations for drilling. Drill into the casting using a #21 drill. Tap both holes using a 10-32 tap. Bolt the Adapter Bracket Assembly into place.
6. Slide the encoder back onto the electronic scale if it has been removed. The cable should exit towards the rear of the saw. **IMPORTANT:** The assembly should be adjusted so the post on the encoder is in the rounded slot in the plastic Guide clip. The guide clip should exert some pressure upward, onto the encoder. (When properly set, the guide clip will deflect by approximately .050”.



Installing the Readout Bracket:

7. Decide on a location for the digital readout.
8. Attach the adjustable hinge to the readout using the supplied 4-40 self-tapping screws.
9. The adjustable hinge may be mounted to the fence using the supplied Velcro, or by using the supplied 8-32 screws (drill and tap are necessary).
10. Connect the encoder to the readout. Verify the cable is secured to minimize the chance of interference or snagging (some wire clips and wire ties have been provided for this).
11. Verify the readout shows larger numbers when the fence is moved from left to right. If it does not, you can reverse the reading direction in the programming menu of the digital readout.



Calibration:

1. With the fence locked in position close to the saw, cut a small square board.
2. Measure this board with the most precise measuring tool available and write down the measurement.
3. Press the DATUM key on the readout.
4. Press and hold the PLUS key until the measured value is shown on the readout.
5. OPTIONAL: Lock the keypad:
 - a. Press and hold the ON/OFF key.
 - b. Press and quickly release the UNITS key.
 - c. Release the ON/OFF key.The keyboard is now locked. It can be unlocked by repeating this procedure.
6. The system should be re-calibrated when the saw blade is changed (kerf allowance), or when the battery in the readout is changed.

(An alternative method of calibration is to move the fence up against the saw blade and press the DATUM key on the readout. This method is not as accurate, but is quicker.)

Removing the Fence:

1. Disconnect the cable from the readout.
2. Slip the encoder out from under the guide clip.
3. Slide the encoder to the left.
4. Slide the fence to the right and remove from the table.
5. Fasten the loose end of the cable to prevent possible damage.
6. When re-installing the fence, be sure the encoder is placed back under the guide clip. Re-calibration will be necessary.

**If the digital readout is mounted using Velcro, remove the readout from the fence instead of disconnecting the cable. When the fence is re-installed, re-engage the guide clip to the encoder - recalibrating should not be necessary.

If the fence is removed often, the Guide Clip should be replaced every 6-12 months.

Maintenance:

1. The electronic scale should be cleaned of debris as needed. This will prevent premature damage to the scale or encoder. If the encoder assembly become difficult to move, check that the scale is clean.
2. The Digital Readout should be cleaned (as needed) with compressed air to remove any dust on the lens and keys.
3. All mounting fasteners should be checked for tightness.
4. Monthly: Inspect the electronic scale for any wear on the black laminate. If wear is found, the guide clip pressure (on the encoder) should be reduced. If wear continues, the encoder may need to be repaired or replaced.

Troubleshooting:

The reading is accurate close to the saw blade, but not accurate at larger distances:

- ❑ Check the alignment of the measuring system. The alignment *will* affect the measurements at larger distances.
- ❑ Also be sure to check the mounting of all components. Any loose bolts can allow for “slop” measurements.

The readout resets itself:

- ❑ 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 has not been accidentally pushed. If so, you will need to recalibrate the saw fence. Be sure to LOCK the keypad.

The display reads “No Enc”:

- ❑ Make sure the encoder’s connector is fully inserted into the readout. Also, be sure the encoder has not been removed from the scale. To clear the error, simply unplug the encoder for 10 seconds, then re-insert the connector into the readout. Recalibrate.
- ❑ The fence has been moved too quickly. To clear the error, simply unplug the encoder for 10 seconds, then re-insert the connector into the readout. Recalibrate.

The display shows only one line for the **battery symbol**:

- ❑ Your battery needs to be changed. The readout uses one CR123 lithium cell.

My problem is not listed-where do I get help?

- ❑ Read through all of the supplied manuals for answers to other commonly asked questions.
- ❑ Check Accurate Technology's web site for further information (www.proscale.com).
- ❑ Contact Accurate Technology at 828-654-7920. Have your retrofit kit information ready when calling (machine model, part number, date of purchase, and point of purchase).
- ❑ E-mail our service department at customerservice@proscale.com.