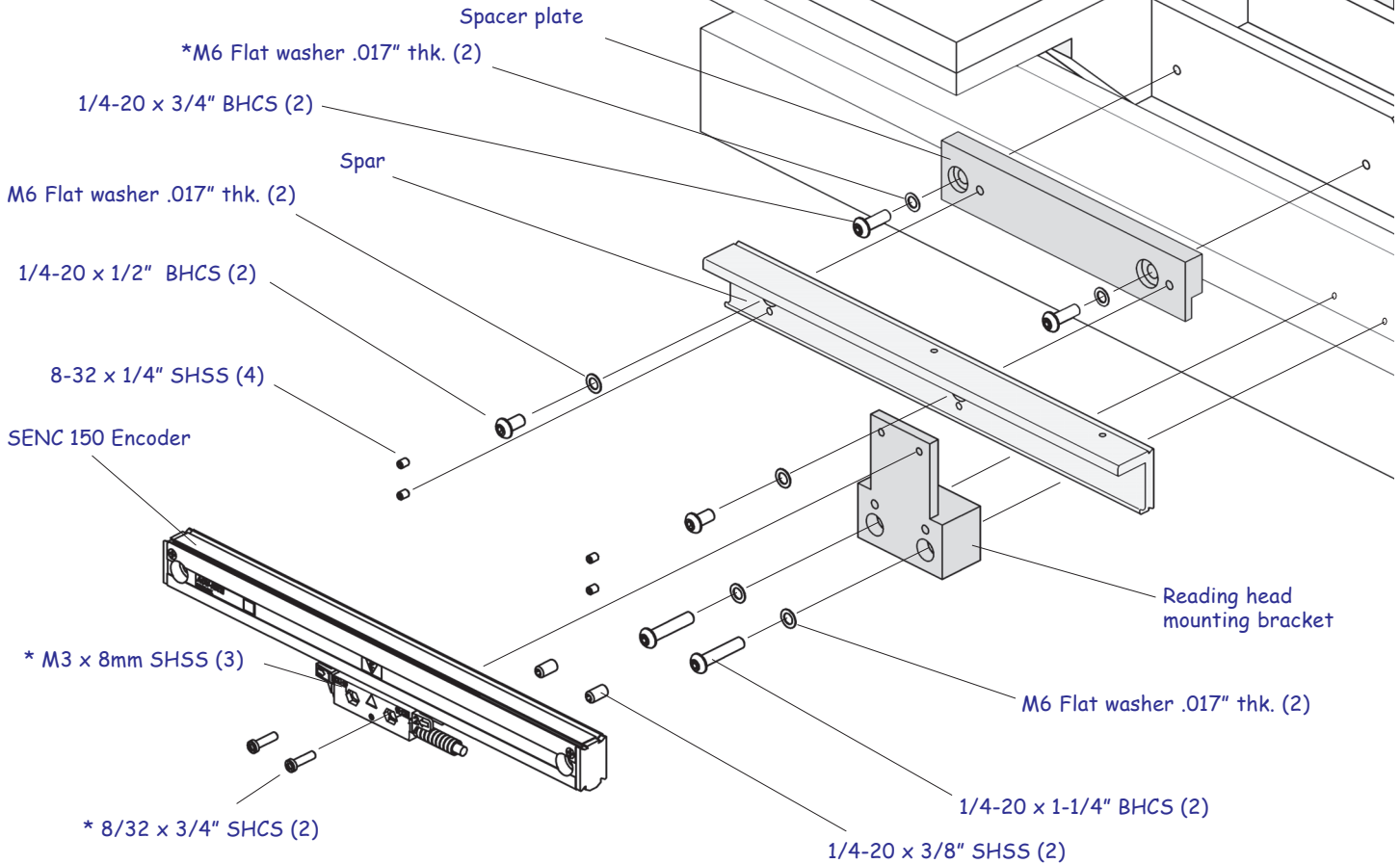


Cross Feed Installation ...

* Supplied with encoder hardware



Mounting Information...

These are application instructions for mounting the Cross feed "X" axis SENC 150 encoder.

Before proceeding:

- Please read the instructions completely.
- Insure that the correct length encoder is being used for the total axis travel.
- Keep the reading head centered during installation.
- Clean the mounting surfaces.
- Save the alignment brackets with the Encoder Reference Manual after installation is completed.

First Steps ...

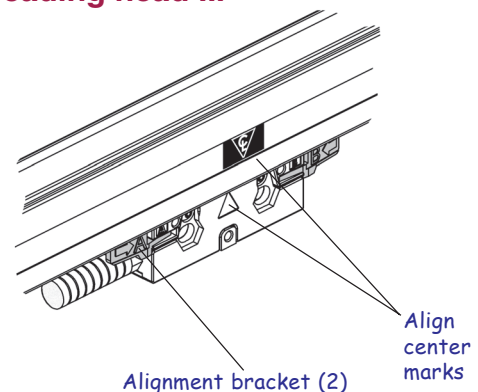
Machine

- ✓ Move the carriage to its center of travel.
- ✓ Mark the axis so that it can be re-centered easily.

Encoder

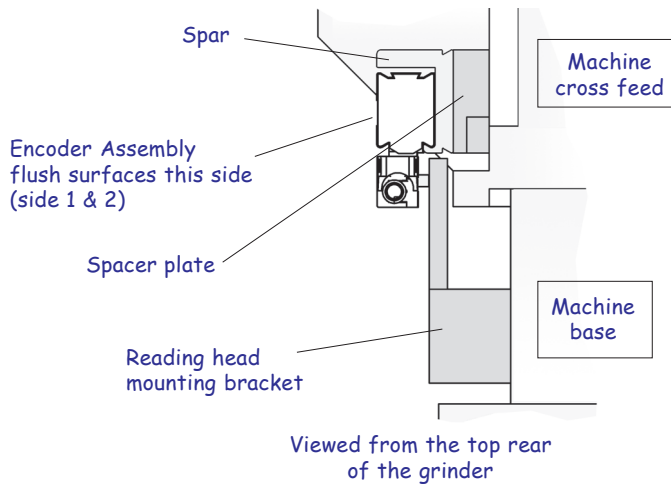
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head alignment brackets until instructed.

Center reading head ...



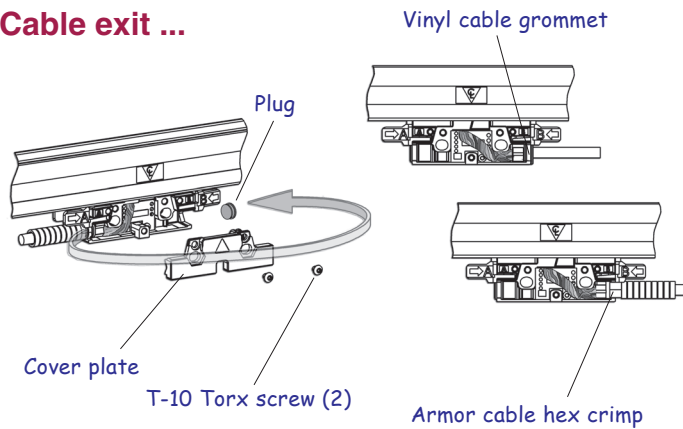
- Slide the reading head and brackets along the scale case until the center marks on the scale case and reading head are aligned.

Encoder orientation ...



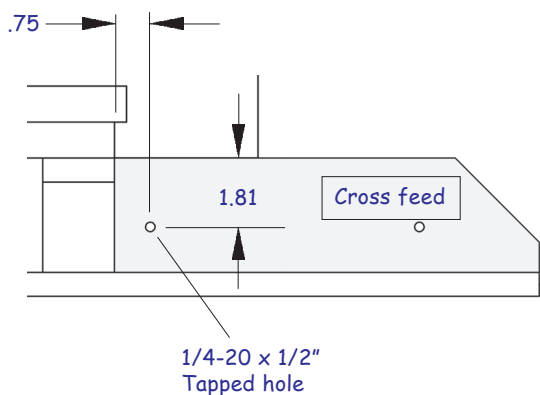
- These instructions will guide you through installing the encoder as shown in this view.

Cable exit ...

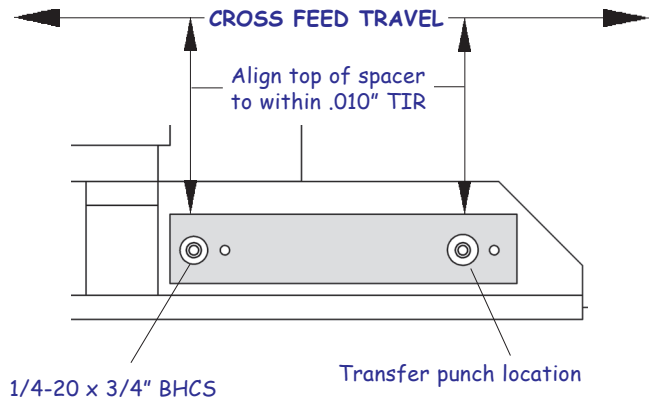


- Determine the cable exit direction before installing the encoder.
- To change the cable exit direction; remove the cover plate and rotate the cable 180°.

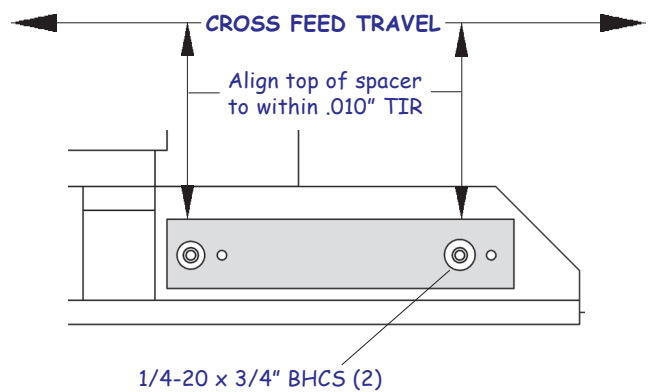
Spacer plate installation ...



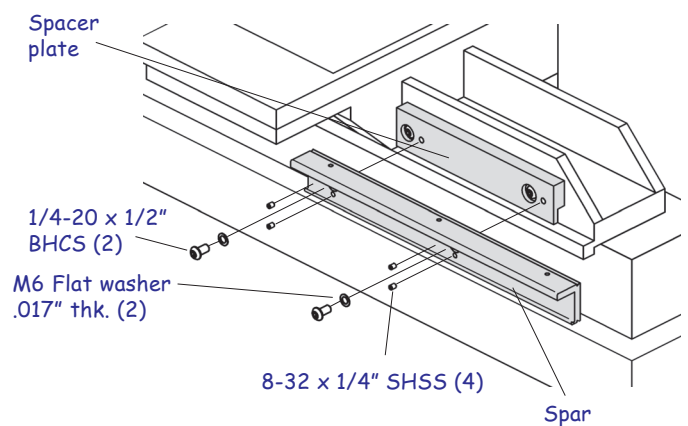
- Locate the spacer plate mounting hole using the dimensions shown.
- Drill and tap for a 1/4-20 through.



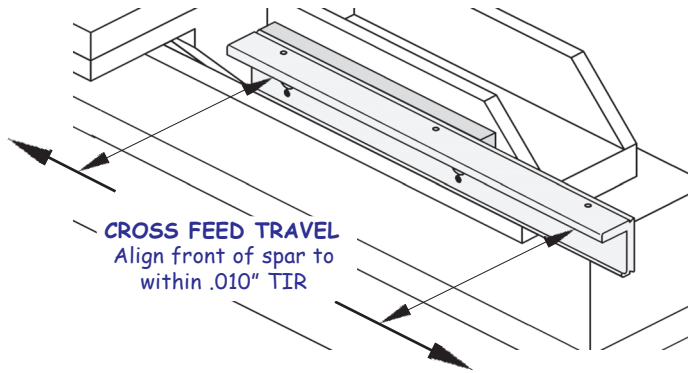
- Fasten the spacer at one end, and align the top surface.
- Transfer punch the other end mounting hole.
- Drill and tap location for a 1/4-20 through.



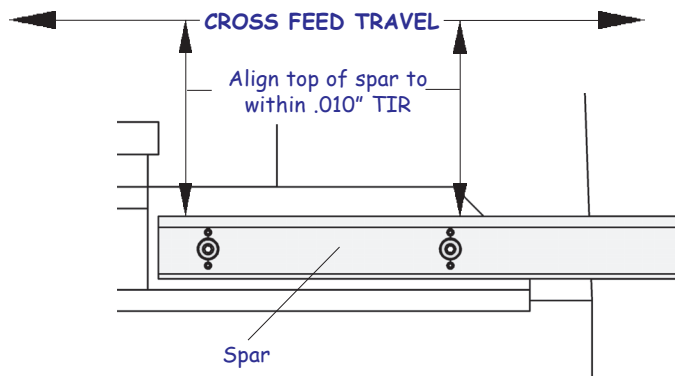
- Attach the spacer plate to the cross feed.
- Align the top of the spacer plate to the cross feed travel, and secure in place.



- Insert the four 8-32 x 1/4" SHSS into the spar, flush with the spar face.
- Attach the spar to the spacer plate.

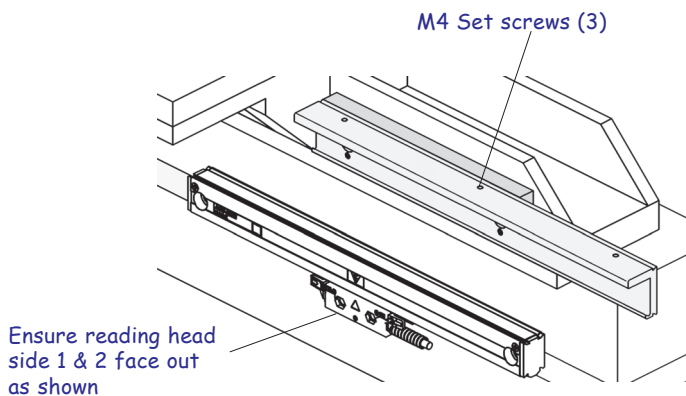


- Align the front surface of the spar, use the leveling set screws to assist with this alignment.
- Secure spar in place maintaining alignment, ensure all leveling screws are flush or below the spar face surface.



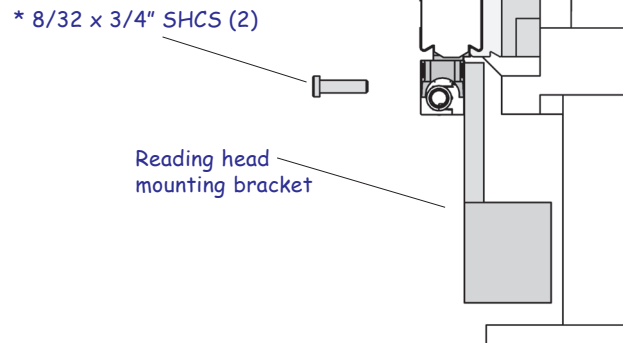
- Align the top of the spar to the cross feed travel, and secure in place.

Encoder installation ...



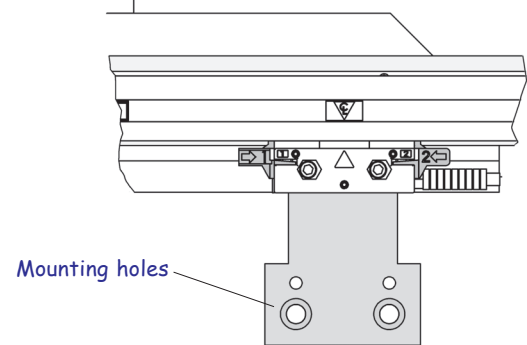
- Insert three M4 x 8mm SHSS into the top of the spar.
- Insert the encoder into the spar as shown.
- Center the encoder in the spar from end to end.
- Lock in place by tightening the M4 set screws.

Bracket assembly ...

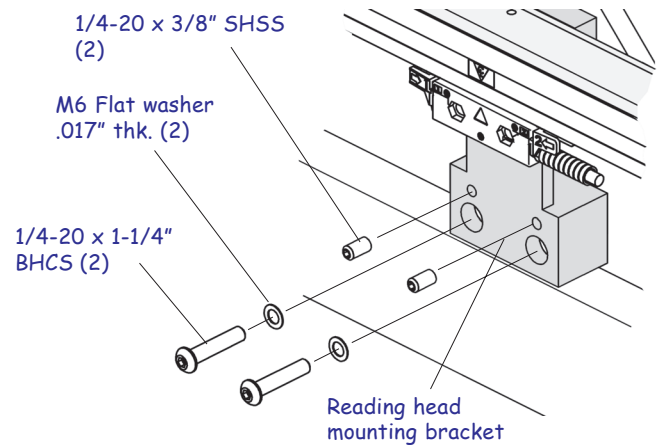


- Center the reading head on the scale case, and move the cross feed to its center of travel (lock in place).
- Attach the reading head bracket to the reading head.

Bracket attachment ...

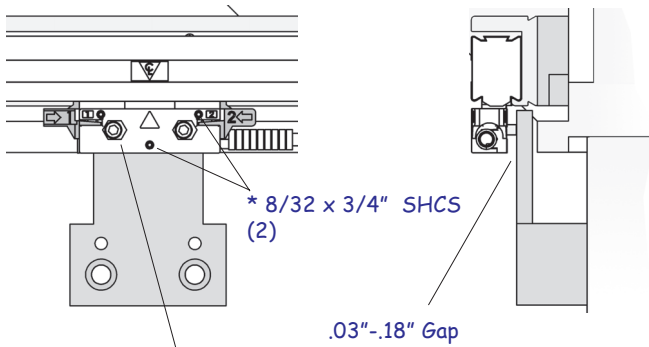


- Transfer punch the bracket mounting hole locations to the base of the machine, and then remove the bracket.
- Drill and tap hole both locations for a 1/4-20 x 1/2".



- Insert the 1/4-20 SHSS, and attach the reading head bracket to the machine base.
- Use the leveling screws to align the bracket parallel with the reading head.
- Align the reading head and bracket mounting holes, and secure the assembly in place.

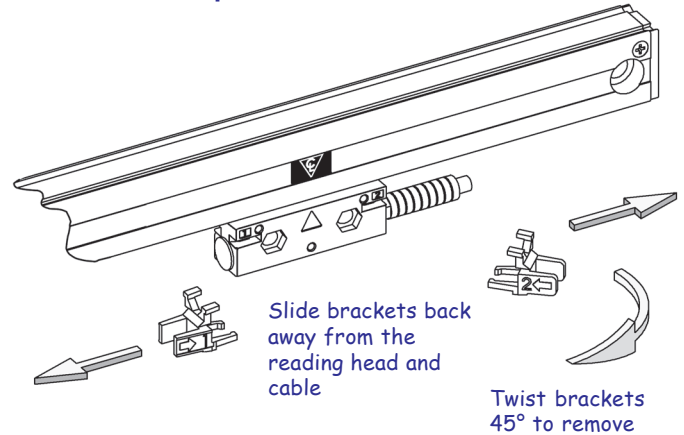
Attaching the reading head ...



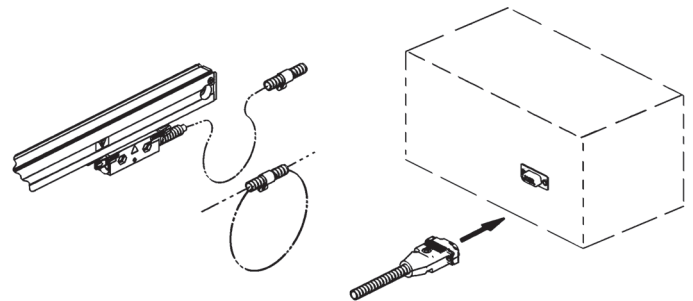
* M3 x 8mm SHSS (3)

- Insert the *8-32 x 3/4" SHCS, but do not tighten.
- There will be a gap of .03" - .18" between the bracket and the reading head.
- Insert and set each leveling screw by placing a .001" - .003" feeler gage between the set screw and the bracket.
- Adjust each set screw until a slight drag is felt on the feeler gage.
- **Evenly tighten** the two 8-32 SHCS.

Encoder button up ...



- Use allen wrench from set screw adjustment to slide alignment brackets away from the reading head.
- Remove alignment brackets and save.
- Move the axis through its full travel. Confirm that the assembly does not interfere with the machine movement.



- With the down feed axis installation complete (if used), route the cables providing sufficient slack loops for machine movement to the readout.
- Secure cables by fastening with clips or ties.
- Attach the linear encoder connectors to the readout.
- Complete the installation by following the steps in "Checking Your Installation" section in the encoder "Reference Manual".