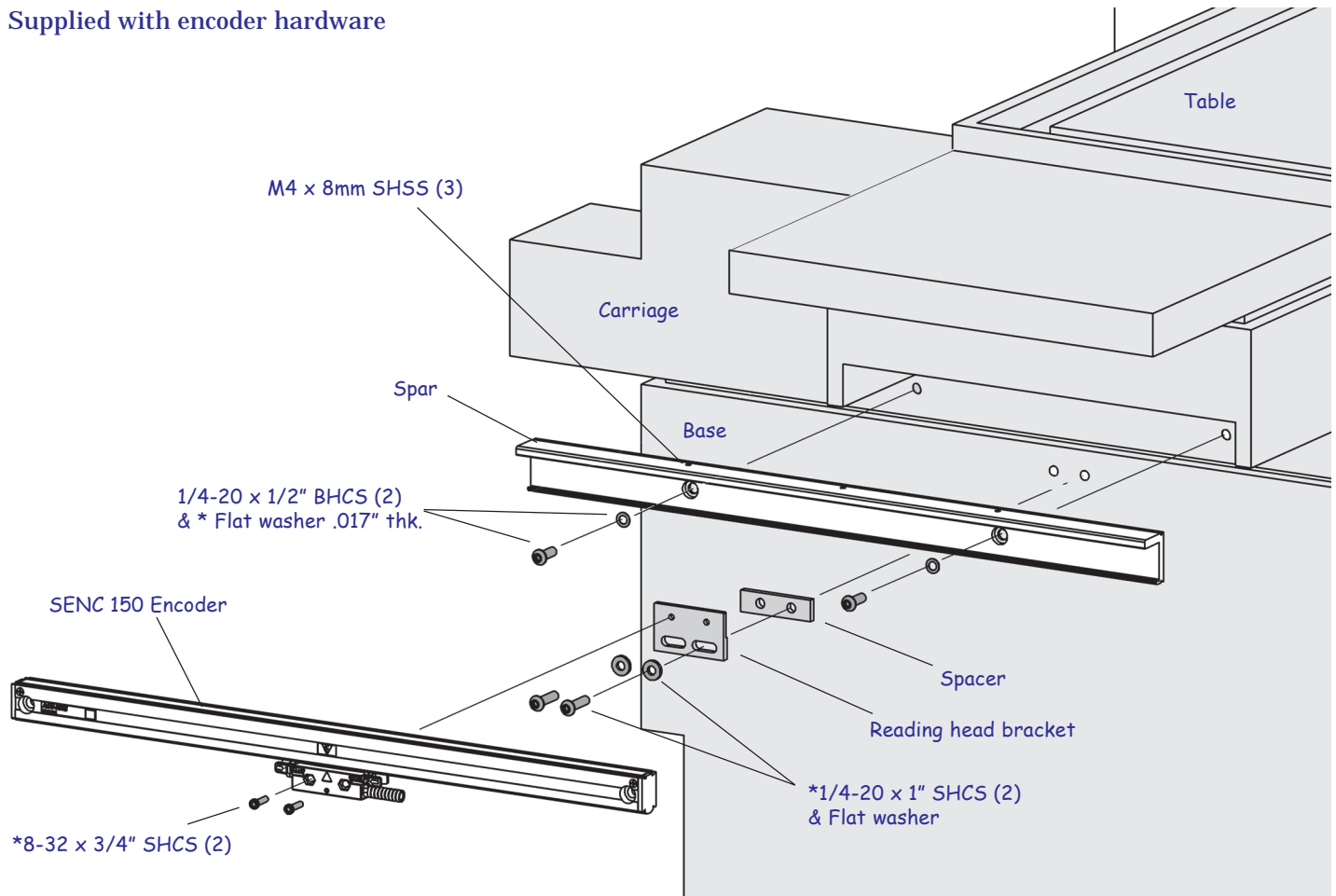


Cross Feed Installation ...

* 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 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 ...

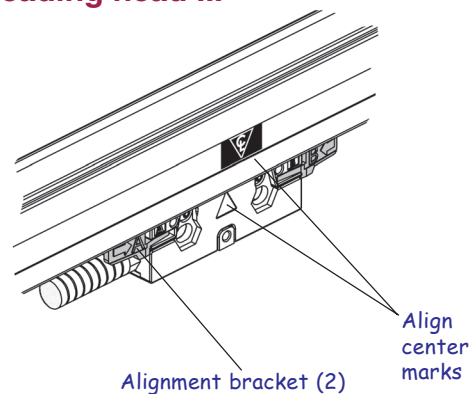
Machine

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

Encoder

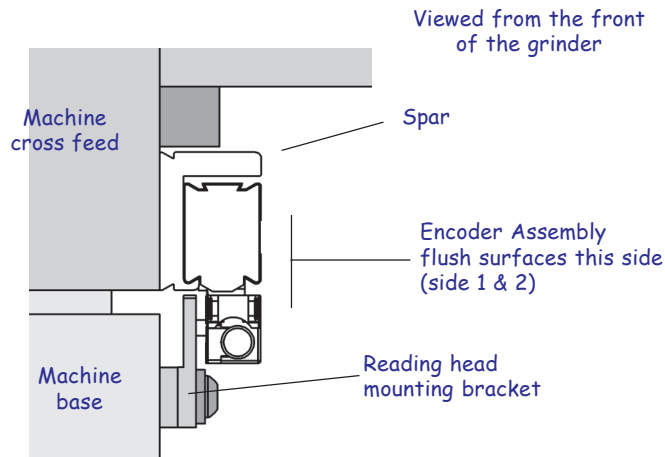
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head alignment brackets until instructed.

Center reading head ...



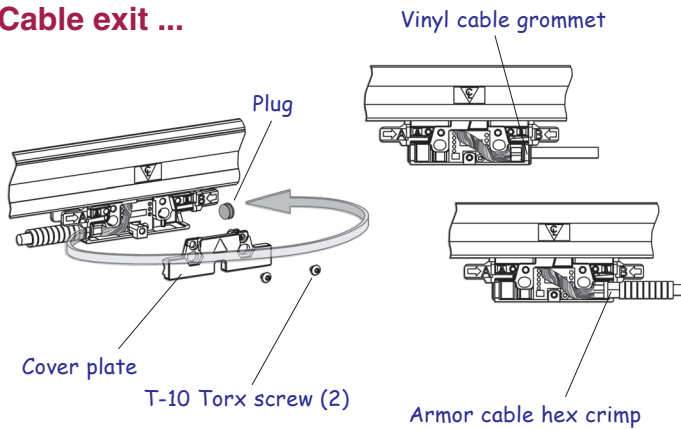
- Slide the reading head and brackets along the scale case until the center marks on the scale case and reading head are aligned.

Encoder orientation ...



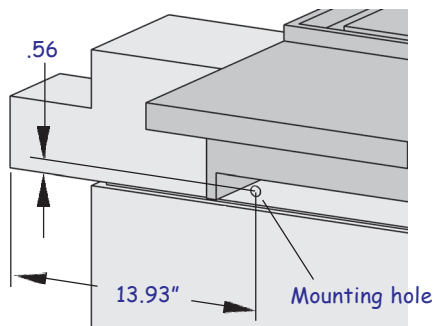
- These instructions will guide you through installing the encoder as shown in this view.

Cable exit ...

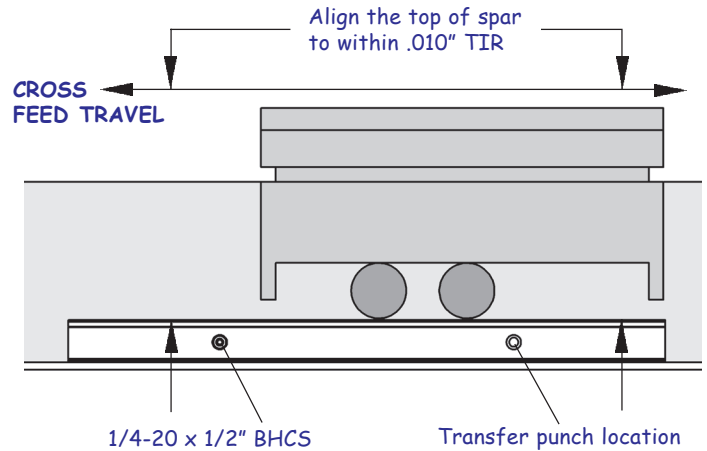


- Determine the cable exit direction before installing the encoder.
- To change the cable exit direction; remove the cover plate and rotate the cable 180°.

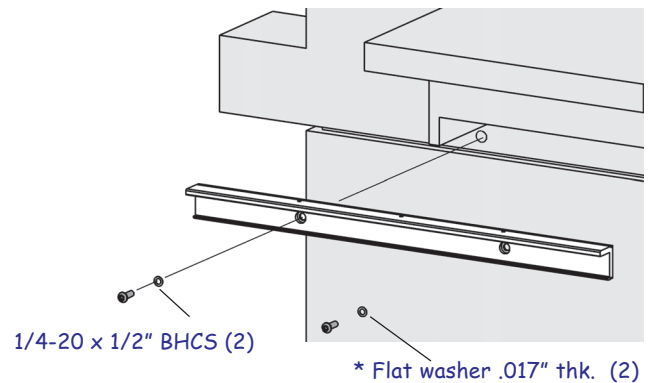
Spar installation ...



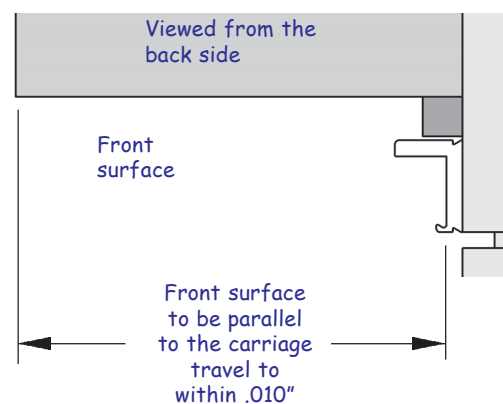
- Locate the spar mounting hole using the dimensions shown.
- Drill and tap for a 1/4-20 x 1/2" deep.



- Fasten the spar at one end, and align the top surface to the cross feed travel.
- Transfer punch the other end mounting hole.
- Drill and tap location for a 1/4-20 x 1/2" deep.

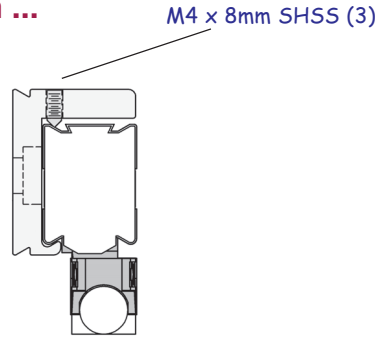


- Attach the spar to the cross feed.



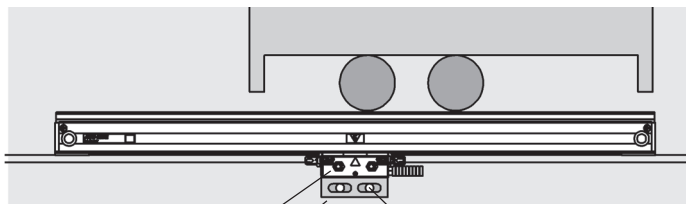
- Align the front surface of the spar, shim if required between the spar and machine if necessary.
- Align the top surface of the spar as done previously to within .010" TIR to the cross feed travel.
- Secure spar in place maintaining alignment.

Encoder installation ...



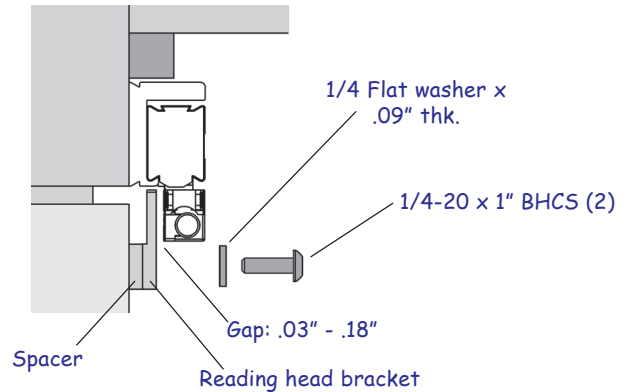
- Insert the encoder into the spar as shown.
- Center the encoder in the spar from end to end.
- Lock in place by tightening the M4 set screws.

Attaching the reading head ...

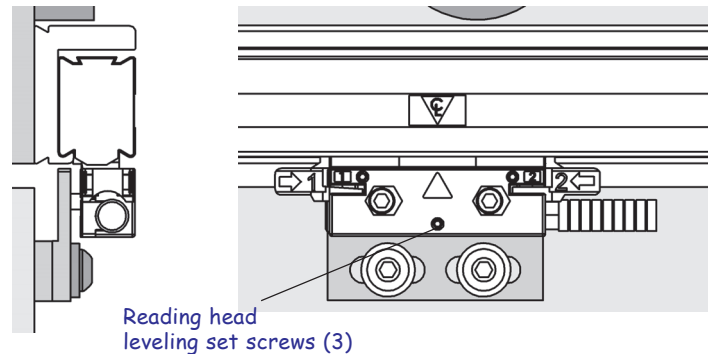


*8-32 x 5/8" SHCS (2)
Reading head bracket and spacer
Transfer punch hole locations (2)
Drill and tap for 1/4-20 x 1/2" deep

- With the carriage at the center of travel, attach the bracket to the reading head.
- Transfer punch the two mounting hole locations to the base using the spacer as a guide.
- Remove the bracket, drill and tap the locations for 1/4-20 x 1/2" deep.

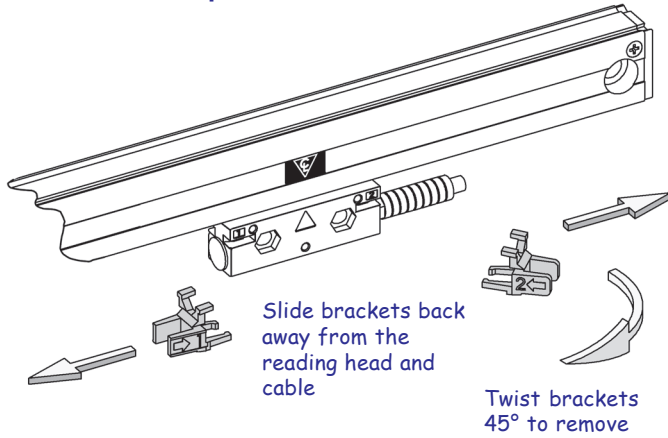


- Attach the bracket with the spacer to the base.
- A gap of .03" - .18" will exist between the reading head and the bracket.
- Adjust the bracket so that the head mounting holes align with the bracket and secure in place.

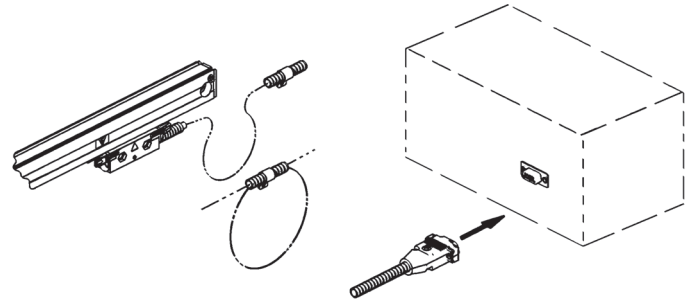


- Insert the *8-32 x 5/8" SHCS, but do not tighten.
- There will be a gap of .03" - .18" between the bracket and the reading head.
- Insert and set each leveling screw by placing a .001" - .003" feeler gage between the set screw and the bracket.
- Adjust each set screw until a slight drag is felt on 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".