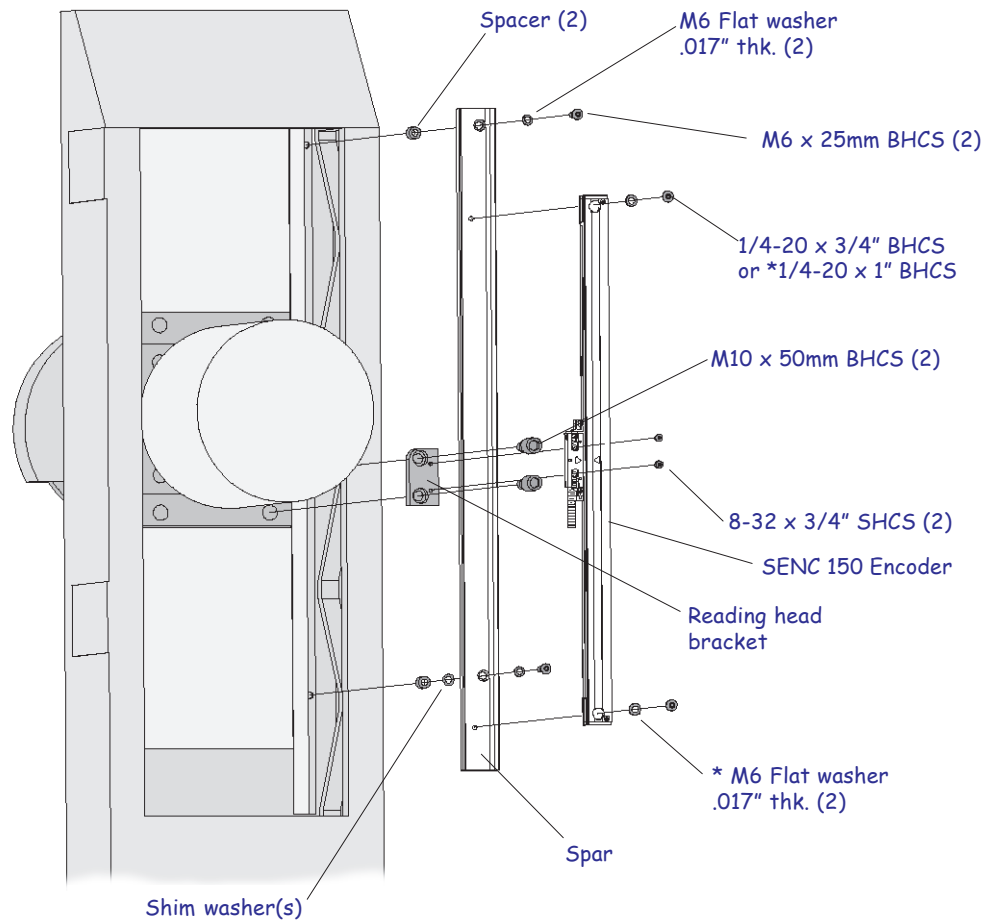


Down Feed Installation ...

* Supplied with encoder hardware



These are instructions for mounting the SENC 150 encoder to the down feed axis.

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 all mounting surfaces.
- Save the alignment bracket with the Encoder Reference Manual after installation is completed.

First Steps ...

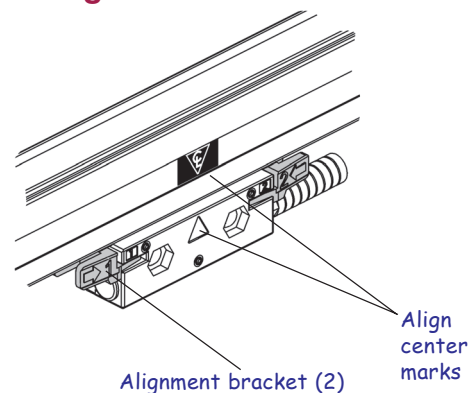
Machine

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

Encoder

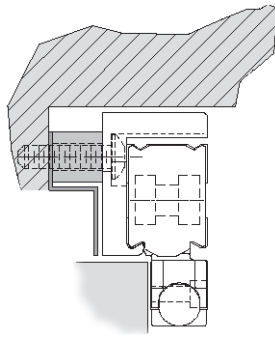
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head alignment brackets until instructed.

Center reading head ...



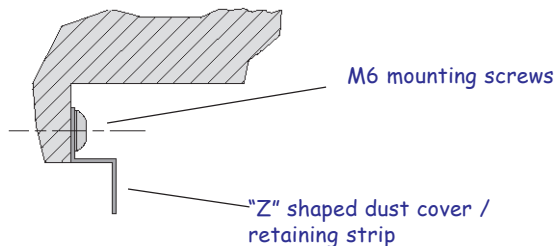
- Slide the reading head and brackets along the scale case until the center marks on the scale case and reading head are aligned.

Encoder orientation ...



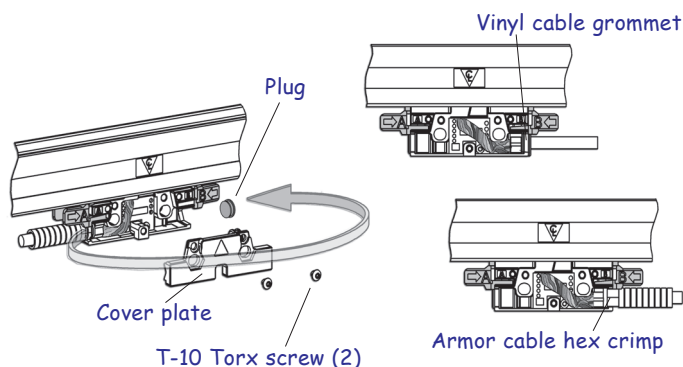
- These instructions will guide you through installing the encoder as shown in this view.

Spar installation ...

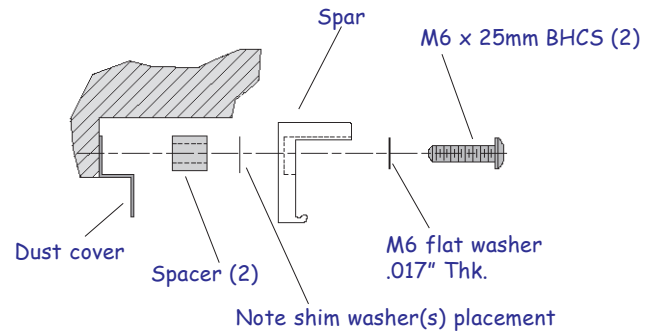


- Top view of right hand inside column as viewed from the back side.
- Spar will attach to the column using the dust cover mounting holes.

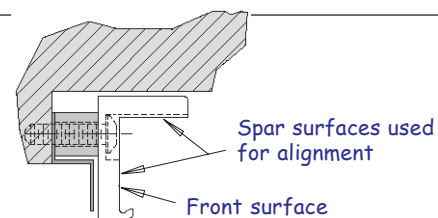
Cable exit ...



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

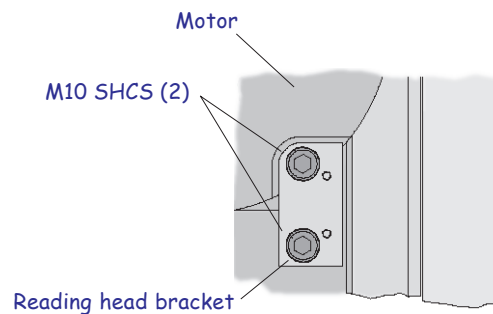


- Remove the two M6 screws and attach the spar with two spacers using the screws and washers provided.



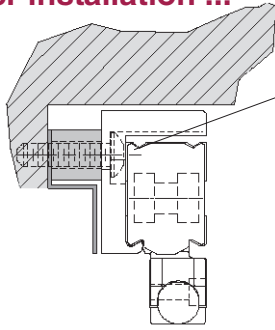
- Align front surface to the motor travel to within .010" TIR. Use shim washer(s) as needed.
- Align leg surface and secure spar in place maintaining alignment.

Reading head bracket installation ...



- Move the motor to the top of its travel.
- Remove the M10 SHCS from the lower right hand side of the motor mount and one from the slide.
- Attach the reading head bracket as shown replacing the screws with two M10 x 50mm SHCS. Fully tighten M10 fasteners.

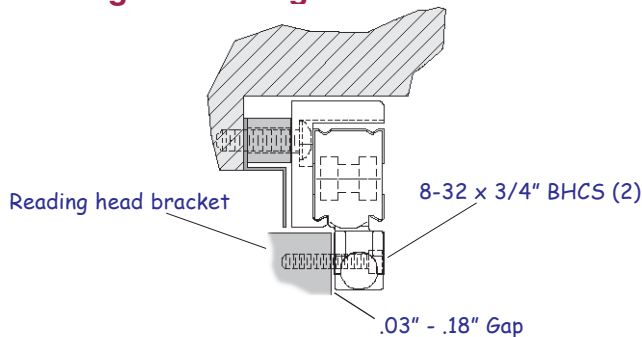
Encoder installation ...



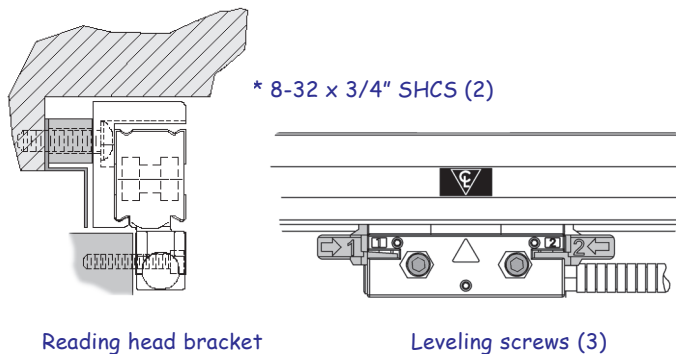
1/4-20 3/4" BHCS
or
*1/4-20 x 1" BHCS (2)
&
M6 Flat washer (.017)
thk.

- Insert the encoder into the spar, insure that the encoder interlocks with the lip of the spar. Attach with the fasteners provided.
- Prior to tightening the encoder fasteners, fully seat the encoder into the lip of the spar then secure in place.

Attaching the reading head ...



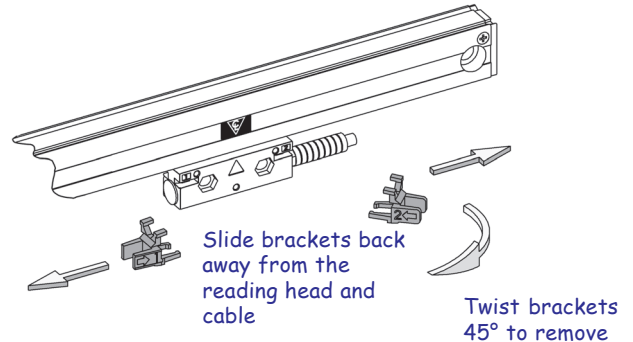
- Align the reading head mounting holes with the threaded holes in the bracket.
- Attach the reading head to the bracket but do not tighten the screws.
- There will be a gap between the bracket and the reading head.



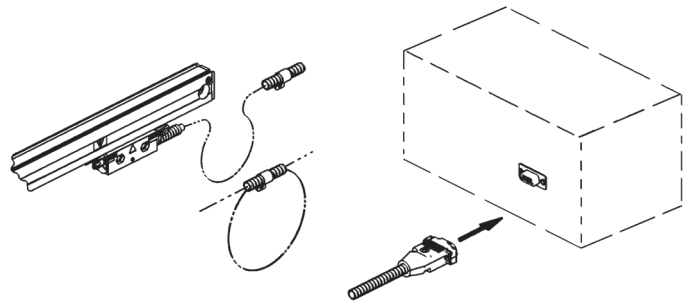
- Insert and set each leveling screw by placing a .001" - .003" feeler gage between the set screw and the bracket.

- Adjust each set screw until a slight drag is felt on the feeler gage.
- **Evenly tighten** the two 8-32 SHCS.

Encoder button up ...



- The reading head bracket will prevent the upper alignment bracket from being removed. It will not pose any problems to leave the bracket attached.
- Use allen wrench from set screw adjustment to slide alignment brackets away from the reading head.
- Remove alignment brackets and save for possible future use.
- Move the axis through its full travel. Confirm that the assembly does not interfere with the machine movement.



- With the longitudinal axis installation complete, 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".