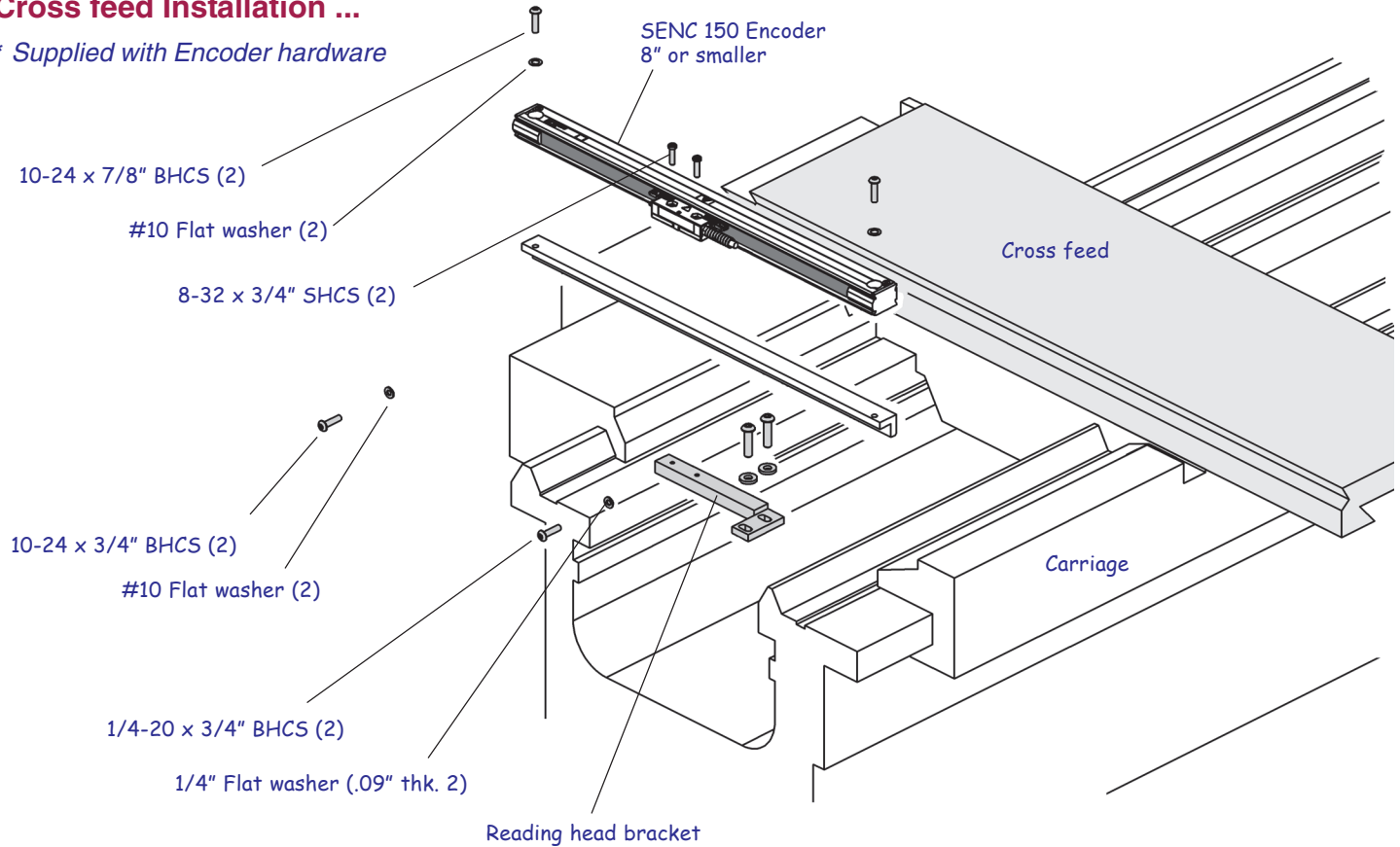


Cross feed Installation ...

* 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.
- Mount Z axis prior to installing the cross feed.
- 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 ...

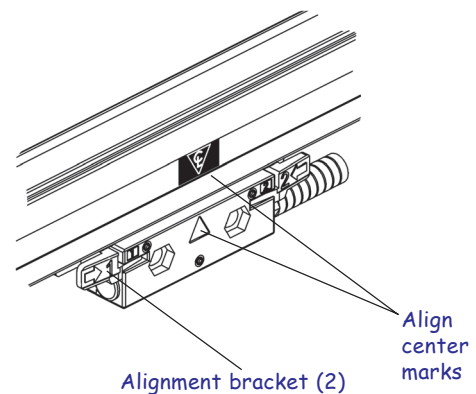
Machine

- ✓ Move the cross feed to its center of travel.
- ✓ Mark the location so that it can be re-centered easily.

Encoder

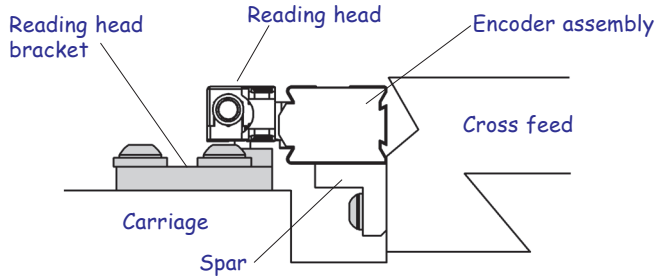
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head alignment brackets until instructed.

Center reading head ...



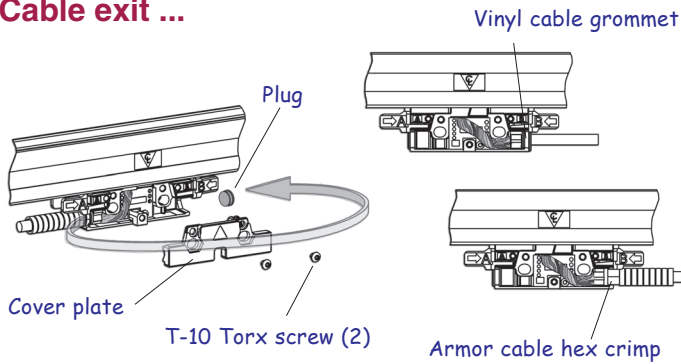
- Slide the reading head and brackets along the scale case until the center marks on the scale case and reading head are aligned.

Encoder orientation ...



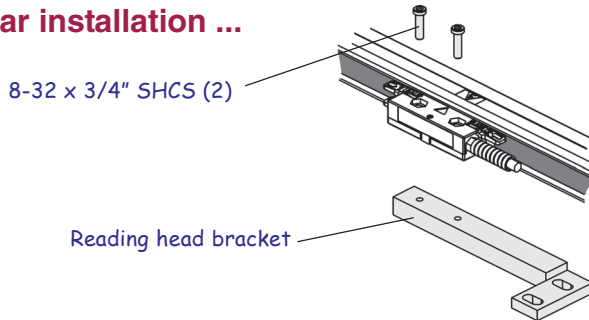
- These instructions will position the encoder assembly to the carriage and bed as shown.

Cable exit ...

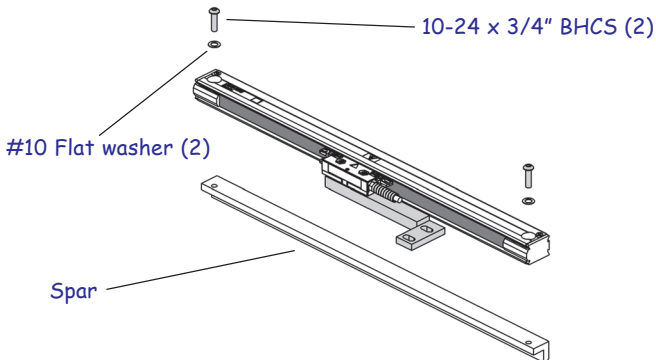


- Determine the cable exit direction before installing the encoder.
- To change the cable exit direction, remove the cover plate and rotate the cable 180°.

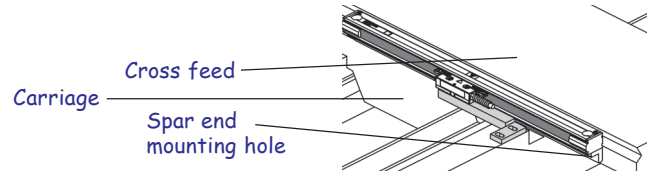
Spar installation ...



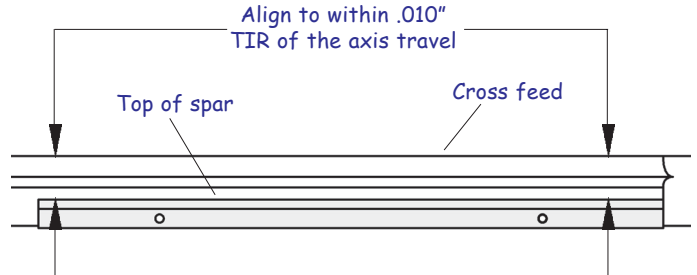
- Attach the reading head bracket to the reading head.
- Place a shim between the reading head and the bracket so that a gap of .030" - .060" is provided.



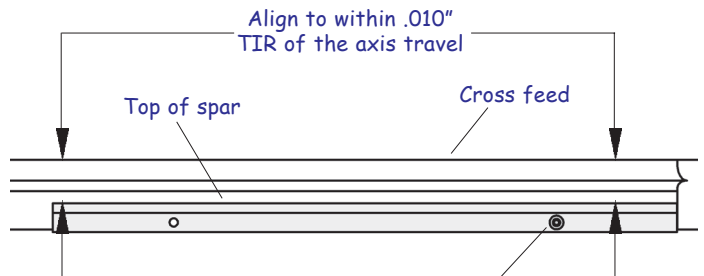
- Attach the encoder to the spar.



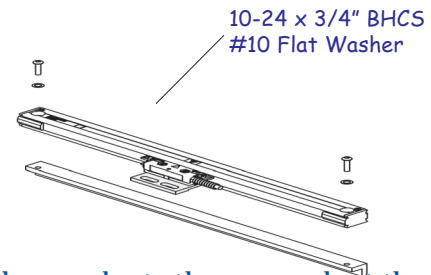
- Place the spar against the cross feed, and the reading head bracket to the carriage surface.
- Mark spar end mounting hole location to the cross feed.
- Remove the assembly from the cross feed.



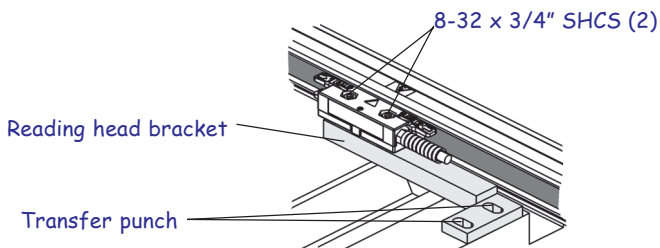
- Remove the spar and bracket from the encoder.
- Drill and tap hole location for a 10-24 x 1/2" deep, and fasten the spar at one end.
- Align the top surface of the spar to the axis travel or cross feed top surface.
- Transfer punch the second end mounting hole, and remove the spar.
- Drill and tap location for a 10-24 x 1/2" deep.



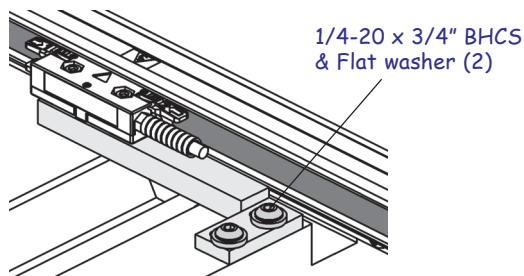
- Align the top of the spar to the axis travel.
- Secure the spar in place maintaining alignment.



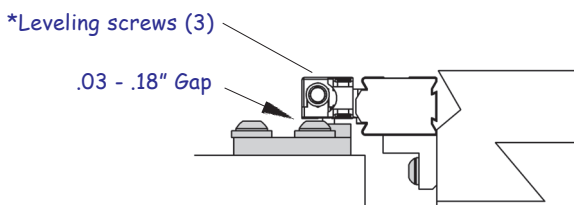
- Attach the encoder to the spar and set the encoder against the cross feed flush.
- Secure encoder in place maintaining alignment.



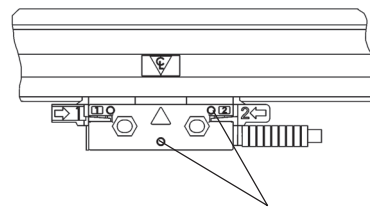
- Return the cross feed to its center of travel, and attach the bracket to the reading head.
- With the bracket positioned to the carriage, transfer punch the center of the mounting slots to the carriage.
- Remove the bracket from the reading head.
- Drill and tap the two bracket mounting hole locations for 1/4-20 x 1/2" deep.



- Attach the reading head bracket to the carriage, and align the bracket with the reading head casting mounting holes.
- Secure the bracket in place.
- Insert the two *8-32 x 5/8" SHCS, but do not tighten.

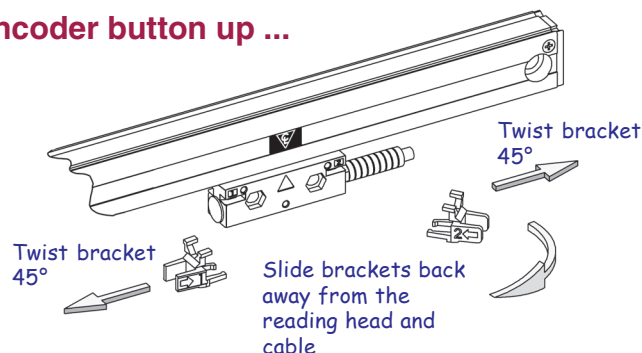


- A gap will exist between the reading head and bracket, and the leveling screws must be used.
- Set each leveling screw by placing a .001" - .003" feeler gage between the set screw and the bracket. Adjust each screw until a slight drag is felt on the feeler gage.
- **Evenly tighten the two 8-32 SHCS to secure the reading head in place.**

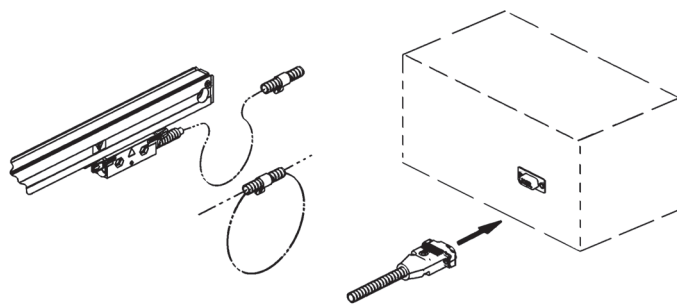


- Set each leveling screw by placing a .001 - .003" feeler gage between the screw and reading head mounting plate.
- Adjust each screw until a slight drag is felt on the feeler gage.
- **Evenly tighten to secure the reading head in place.**

Encoder button up ...



- 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 both axis installations 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".