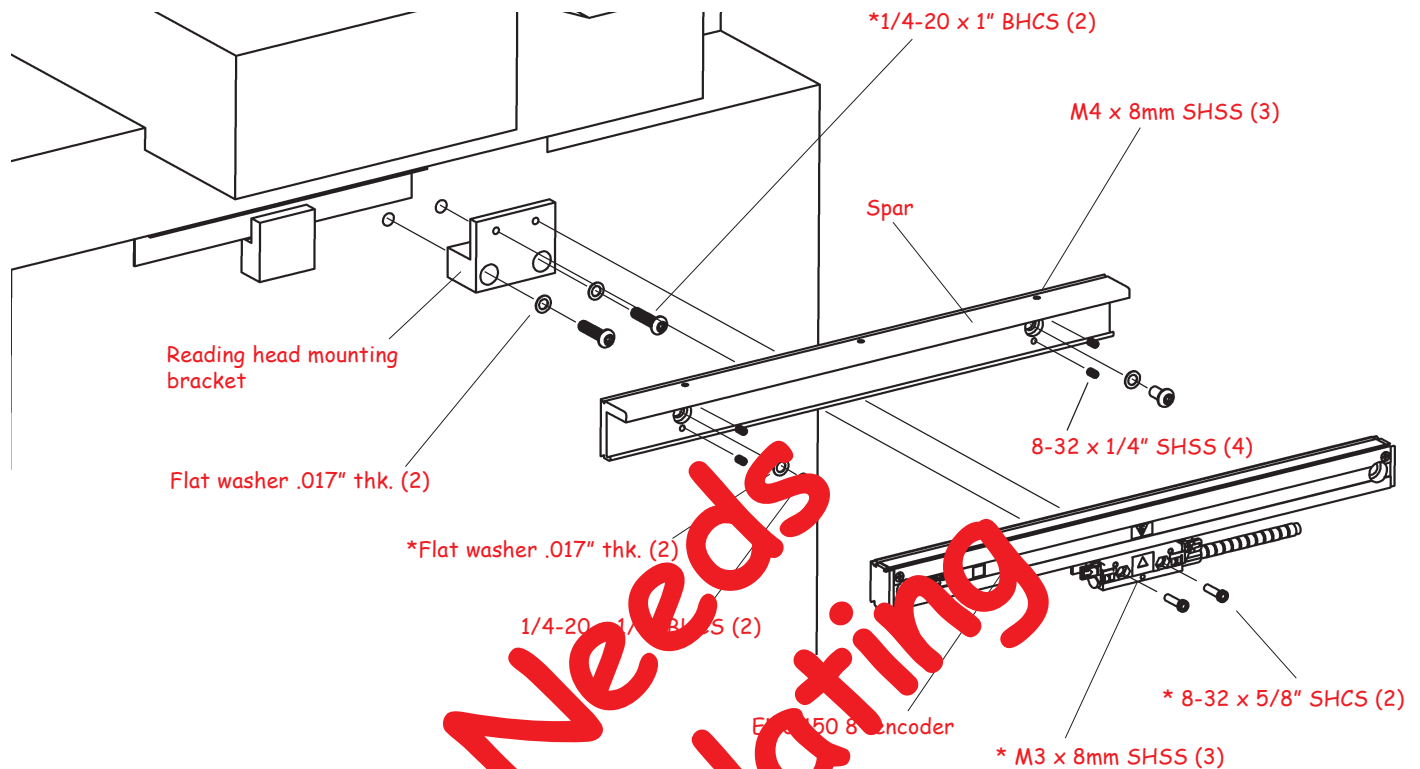


Cross Feed Installation ...

* Supplied with encoder hardware



Needs Updating

Mounting information ...

These instructions are for mounting the ENC 150 encoder to the Cross Feed "Y" axis.

Before proceeding:

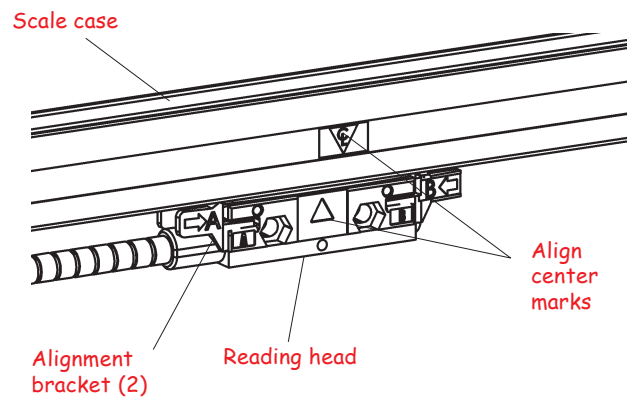
- Please read the instructions completely.
- Insure that the correct length encoder is being used for the total carriage travel.
- Keep the reading head centered on the encoder and the machine axis at its center of travel when locating the installation position.
- Clean all mounting surfaces.
- Save the alignment brackets with the Encoder Reference Manual following the completion of the installation.

First Steps ...

Encoder

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

Center the reading head ...

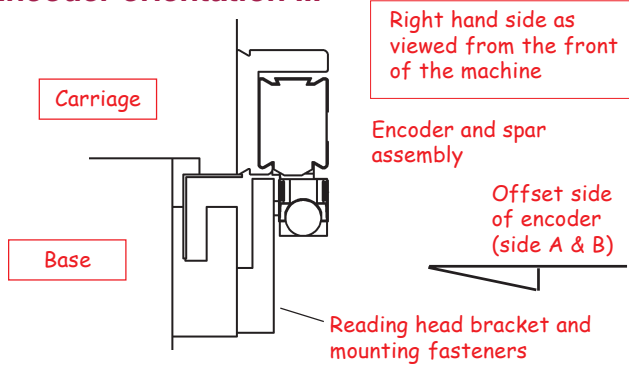


- Slide the reading head and brackets along the scale case until the center marks on the scale and the reading head are aligned.

Machine

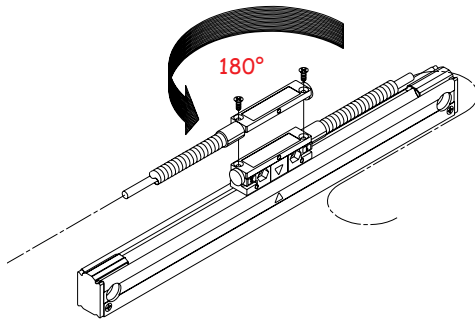
- ✓ Move the carriage to its center of travel and mark the location so that it can be re-centered easily.

Encoder orientation ...



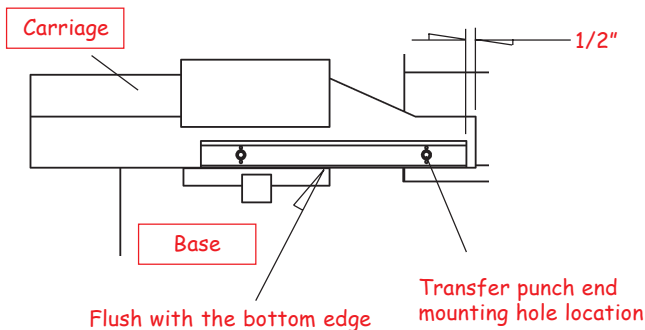
- Encoder will be positioned on the right hand side of the carriage as shown. Note the orientation for the encoder assembly.

Cable Exit

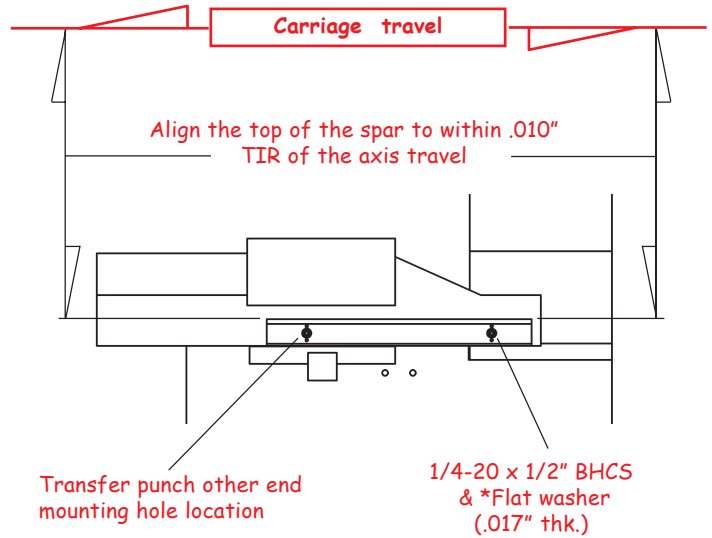


- Determine the cable exit direction preferred before installing the encoder.
- To change cable exit direction; remove the base and rotate it 180°.

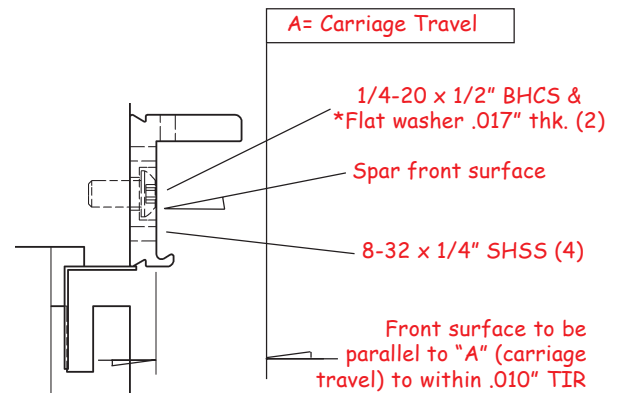
Spar Installation ...



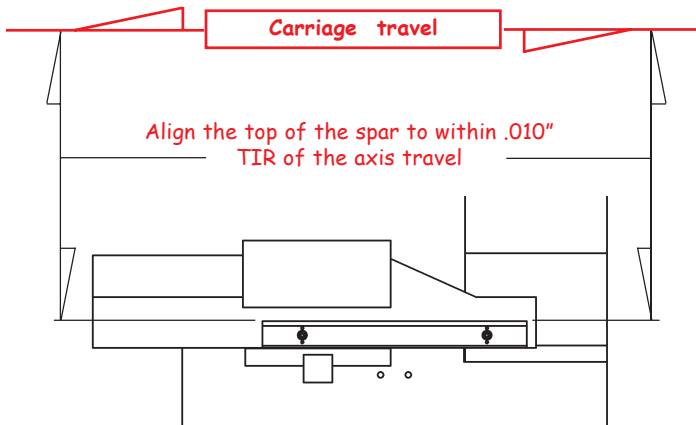
- Position the spar approximately .5" in from the back edge of the carriage.
- The bottom edge of the spar should be flush with the lower edge of the casting.
- Transfer punch one spar mounting hole to the carriage.
- Remove the spar, drill and tap hole location for a 1/4-20 x 1/2" deep.



- Fasten the spar at one end.
- Align the top of the spar to the carriage travel.
- Transfer punch the other end mounting hole.
- Remove the spar, drill and tap for a 1/4-20 x 1/2" deep.

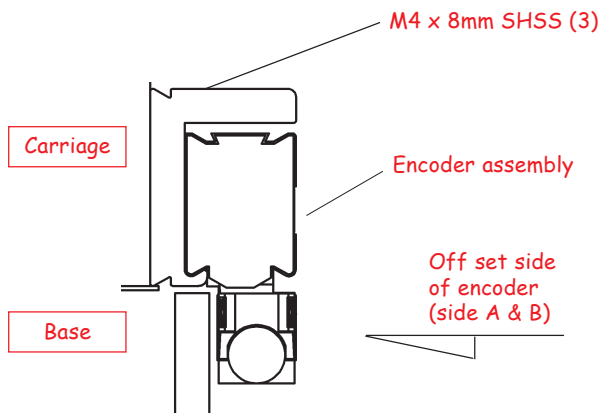


- Attach the spar to the carriage.
- Insert the four 8-32 x 1/4" SHSS.
- Align the front of the spar to the carriage travel to within .010" TIR. Measure along spar face, next to each end mounting hole location.
- Use the SHSS to aid with this alignment.



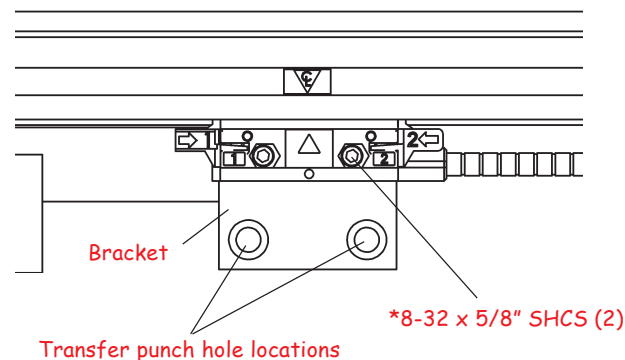
- Align the top surface of the spar to the carriage travel to within .010" TIR measuring over each end mounting hole location.
- Secure the spar in place maintaining both alignments.

Encoder / Spar assembly ...



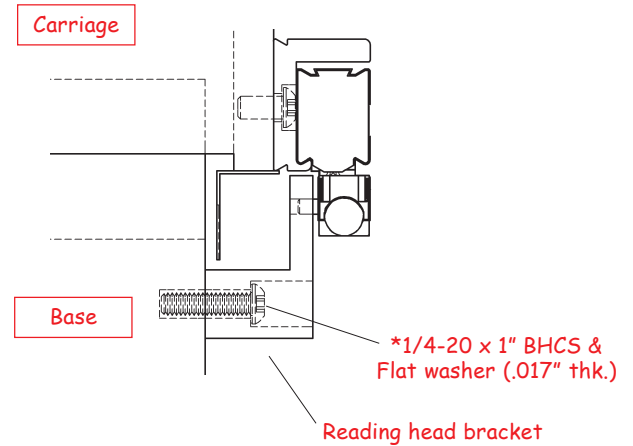
- Insert the encoder into the spar as shown and center with ends.
- Lock in place by tightening the spar set screws.

Bracket install ...

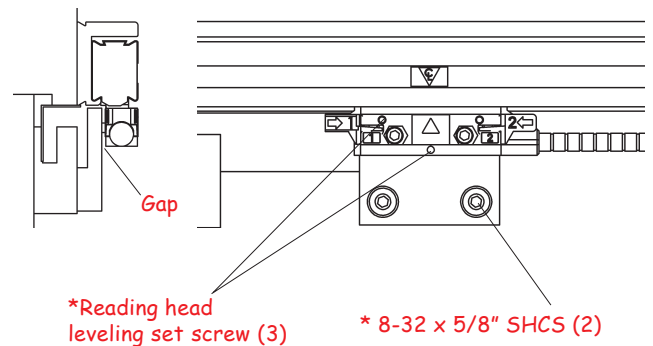


- Return the axis to its center of travel .
- Attach the bracket to the reading head.

- Transfer punch bracket hole locations to the machine base.
- Remove the bracket from the reading head, drill and tap locations for a 1/4-20 x 1/2".

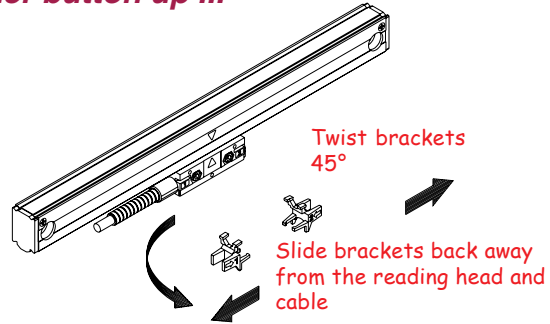


- Attach the reading head bracket to the machine base.
- Move the axis to its center of travel, adjust the bracket to align with the reading head mounting holes.
- Secure the bracket to the machine base.



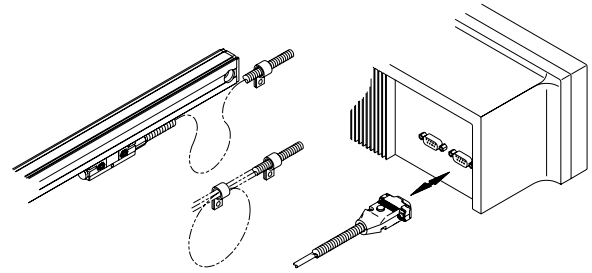
- A gap will exist between the reading head and the bracket.
- Attach the reading head with the two 8-32 x 5/8" SHCS, but **Do Not Tighten**.
- Set each reading head leveling screw by placing a .001 - .003" feeler gage between the screw and reading head mounting plate.
- Adjust each screw until a slight drag is felt on the feeler gage.
- **Evenly tighten** the two 8-32 SHCS 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 with the "Encoder Reference Manual".
- Move the axis through its full travel. Confirm that the assembly does not interfere with the machine movement.

Completing the installation ...



- Secure the cables from the encoder by fastening with clips or ties.
- Route the cable providing sufficient slack loops for machine movement to the readout.
- Attach the encoder connector to the readout.

