

These are instructions for mounting the SENC 150 encoder to the cross feed axis with the bottom mount bracket.

### Before proceeding:

- Please read the instructions completely.
- Keep the reading head centered during the installation.
- Clean all mounting surfaces.
- Save the shipping brackets with the Encoder Reference Manual after installation is completed.

### First Steps ...

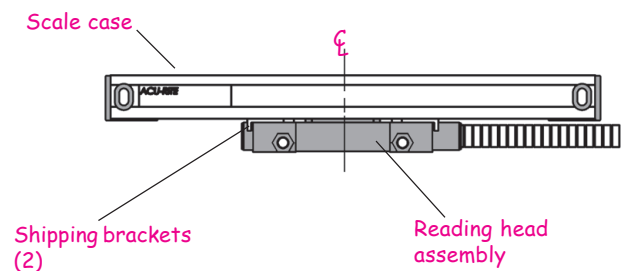
#### Machine

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

#### Encoder

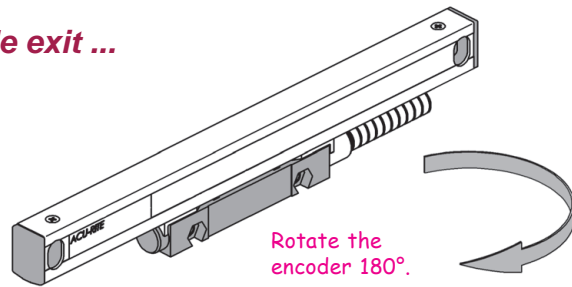
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head shipping brackets until instructed.

### Center reading head ...



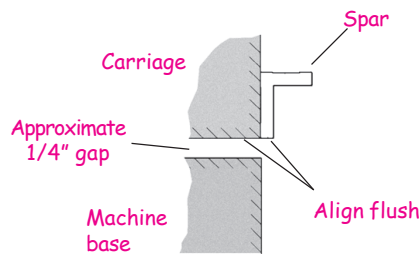
- Center the reading head on the scale case by sliding the head and shipping brackets together along the scale case.
- Insure shipping brackets stay fully engaged.

## Cable exit ...

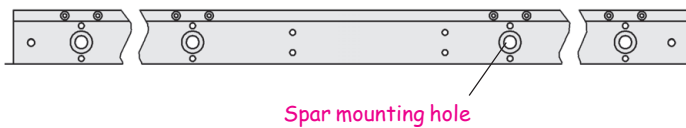


- Determine the cable exit direction before installing the encoder.
- To change the cable exit direction, rotate the encoder 180°. Encoder can be mounted from either side.

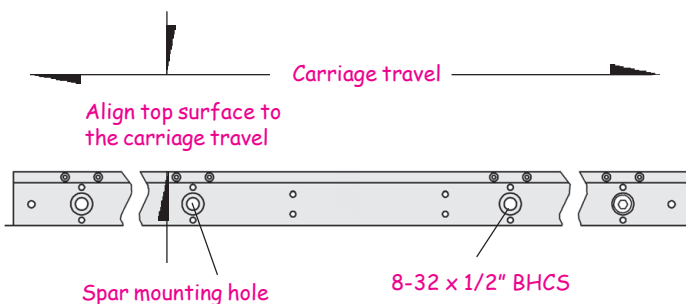
## Spar installation ...



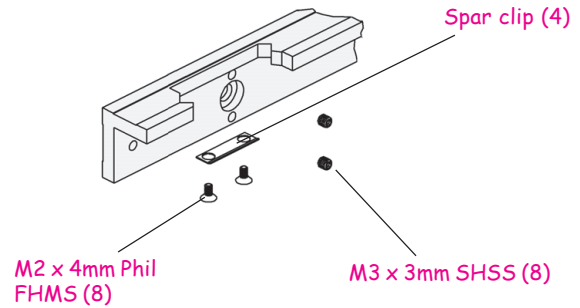
- **With the cross feed at it's center of travel**, hold the spar to the right side of the carriage, and position the bottom edge flush to the lower edge.



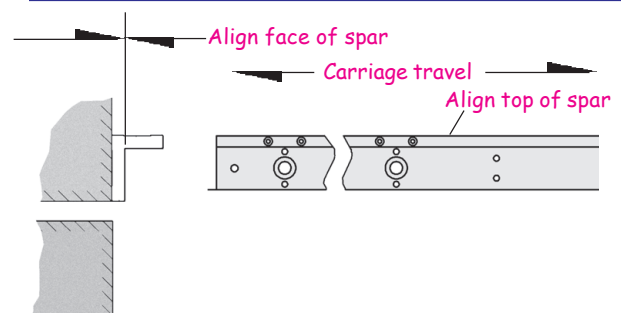
- Locate one end mounting hole to the carriage and remove the spar.
- Drill and tap the hole location for an 8-32 x 1/2" deep.



- Fasten the spar to the carriage.
- Align the top surface of the spar to within .005" TIR of the carriage travel.
- Transfer punch the remaining mounting holes and remove the spar.
- Drill and tap hole locations for an 8-32 x 1/2" deep.

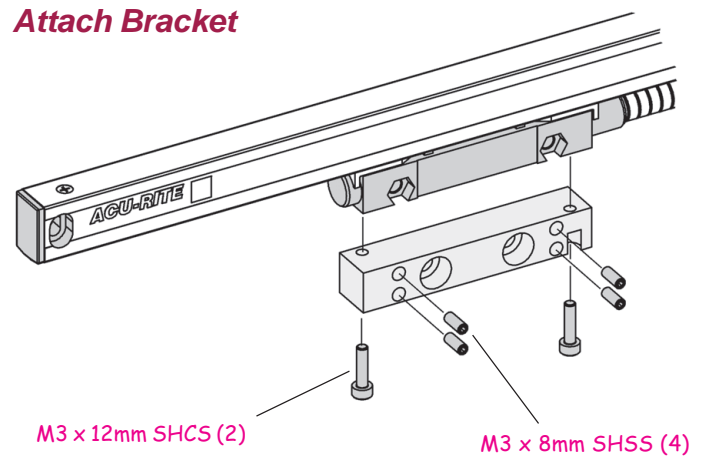


- Install two M3 x 3mm SHSS at each mounting hole location, and set flush with the back surface of the spar.
- Attach the spar clips to the lower leg of the spar only.

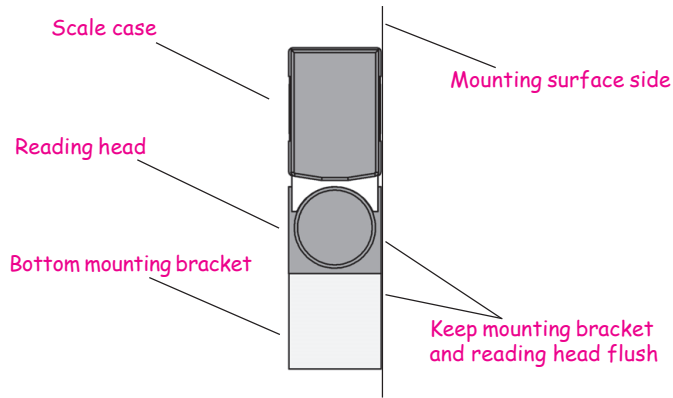


- Attach the spar to the carriage with the 8-32 x 1/2" BHCS.
- Align the face of the spar to the carriage travel to within .005" TIR. Use the M3 spar set screws to aid with this alignment.
- Align the top of the spar to within .005" TIR to the carriage travel. Secure spar in place maintaining both alignments.

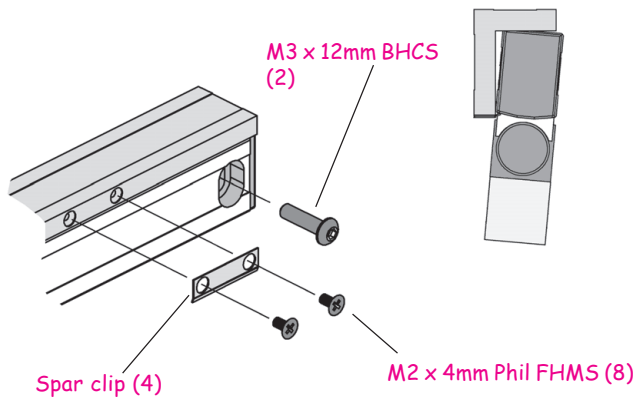
## Attach Bracket



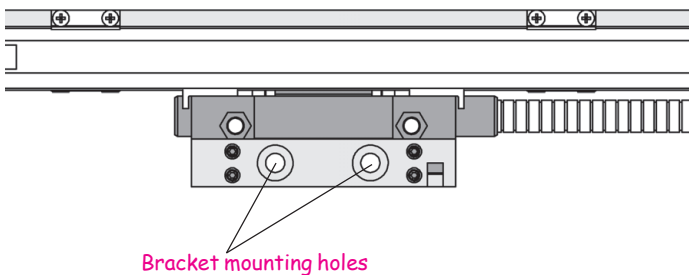
- Insert the four M3 x 8mm SHSS into the bracket and set flush with the back side surface.
- Attach the bracket to the underside of the reading head and secure in place.



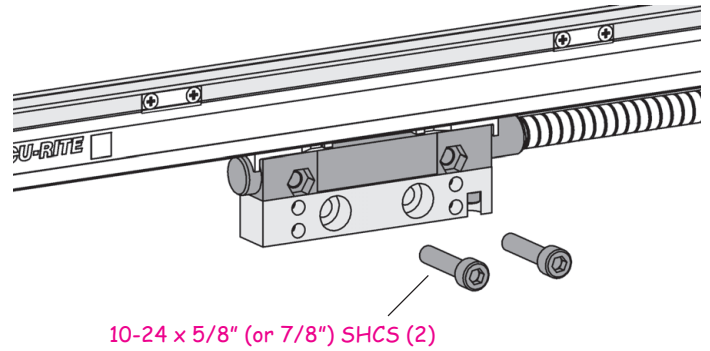
- Align the mounting surface side of the bracket flush with the reading head surface. Tighten bracket in place.



- Place the lower back edge of the scale case onto the bottom spar clips. Push on the front upper edge of the encoder to seat the scale case in the spar.
- Attach the front spar clips and tighten securely.
- Attach both ends of the scale case to the spar using the M3 x 12mm BHCS.

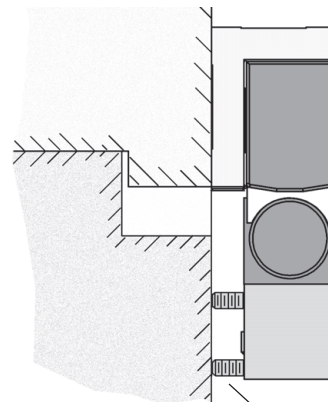


- With the reading head and cross feed at its center of travel, transfer punch the two bracket mounting holes to the base of the machine.
- Move the axis to expose the hole locations. Drill and tap locations for a 10-24 x 1/2" deep.



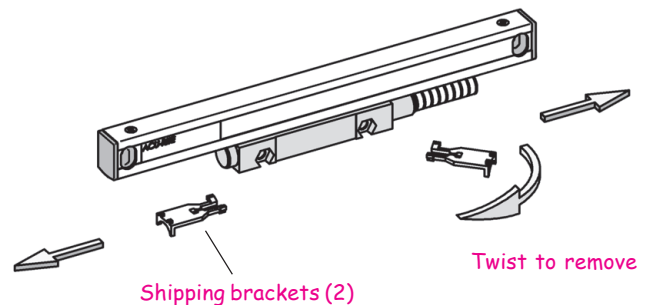
10-24 x 5/8" (or 7/8") SHCS (2)

- Move the axis to align the bracket with the mounting holes and lock the cross feed in place.
- Attach the bracket to the machine but **do not tighten the fasteners.**



M3 x 8mm SHSS (4)

- Adjust the leveling screws by placing a .0015" -.003" feeler gage between each leveling screw and the machine base. Tighten each leveling screw until a slight drag is felt on the gage.
- Fully tighten the 10-24 x 5/8" (or 7/8") SHCS.



- Slide the shipping brackets away from the reading head and twist to remove from the scale case. Save brackets with the reference manual.
- Follow the "Checking the installation" procedure in the encoder Reference Manual to complete the installation.