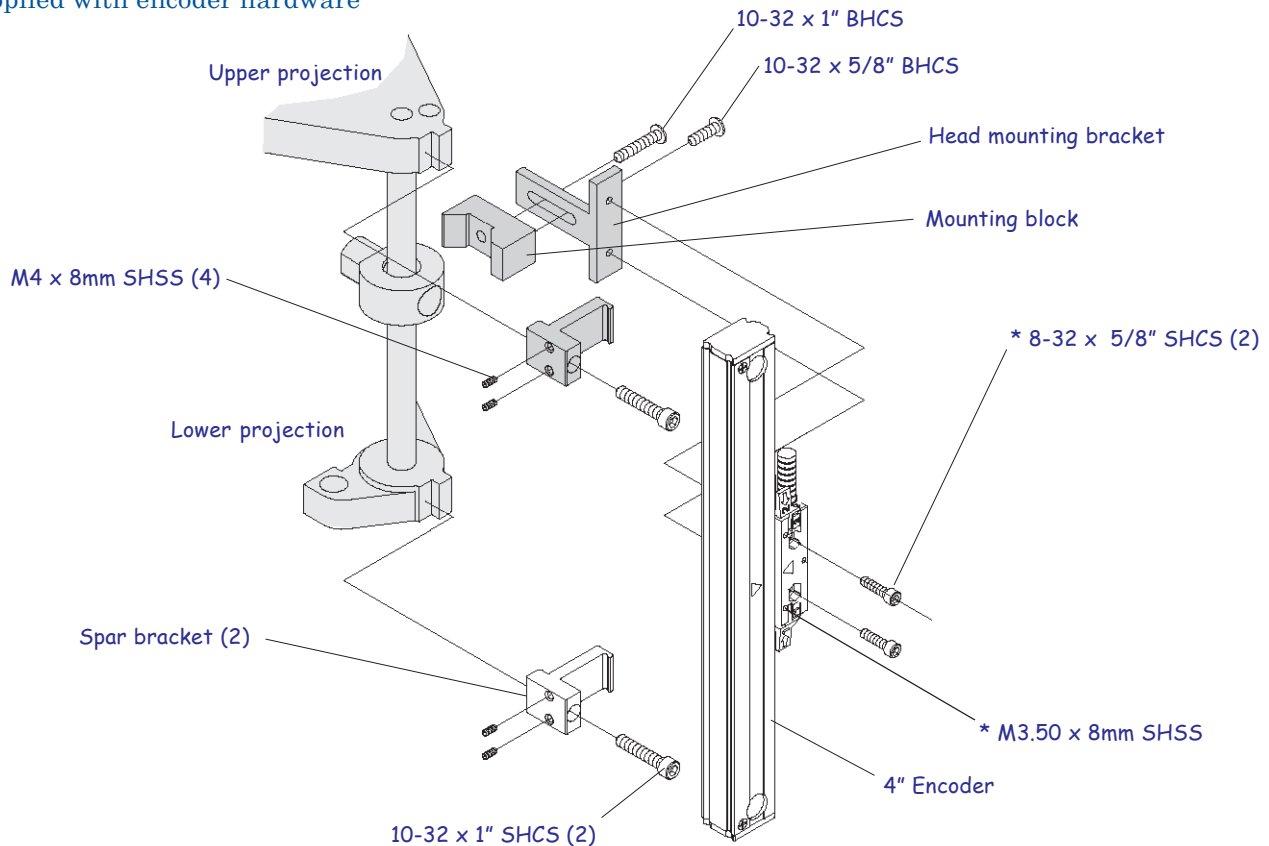


Quill Installation ...

* Supplied with encoder hardware



Mounting Information...

These are application instructions for mounting the quill "Z" axis SENC 150 encoder.

Before proceeding:

- Please read the instructions completely.
- Ensure that the correct length encoder is being used for the total axis 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 ...

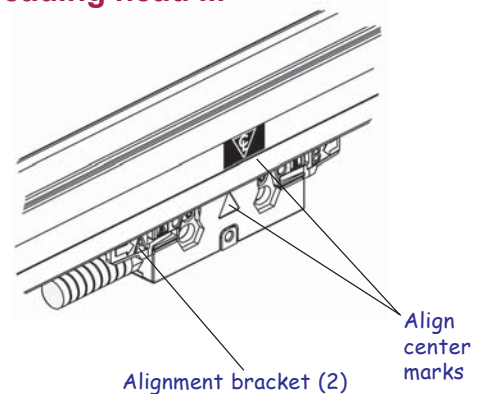
Machine

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

Encoder

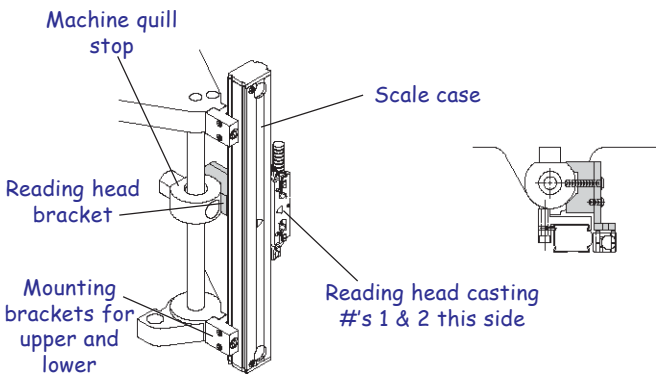
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head alignment brackets until instructed.

Center reading head ...



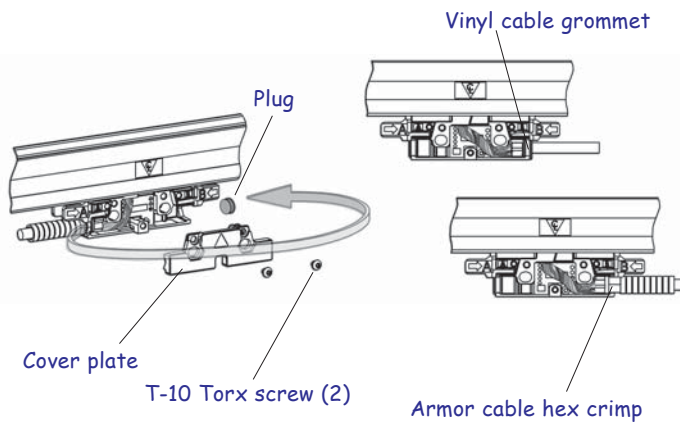
- Slide the reading head and brackets along the scale case until the center marks on the scale case and reading head are aligned.

Encoder orientation ...



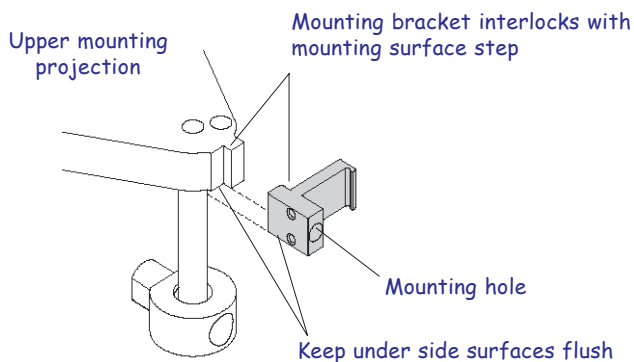
- These instructions will guide you through installing the encoder as shown in this view.

Cable exit ...

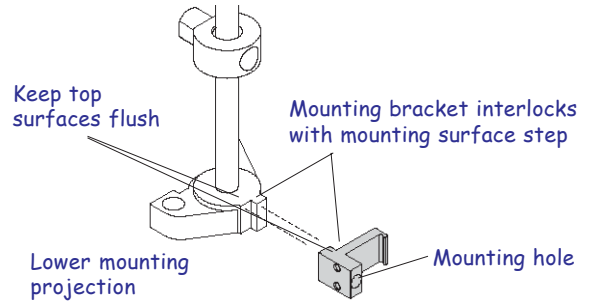


- Determine the cable exit direction before installing the encoder.
- To change the cable exit direction, remove the cover plate and rotate the cable 180°.

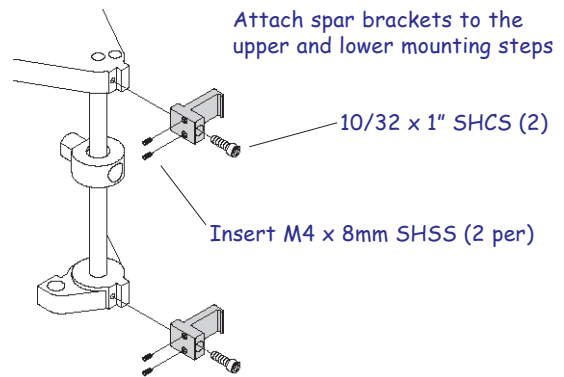
Encoder Installation ...



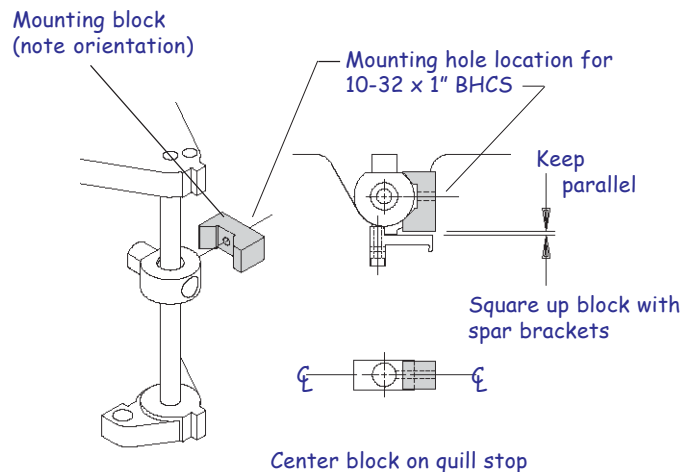
- Locate bracket to the upper mounting position.
- Transfer punch mounting hole location.
- Drill and tap hole location for a 10-32 x 3/8" deep.



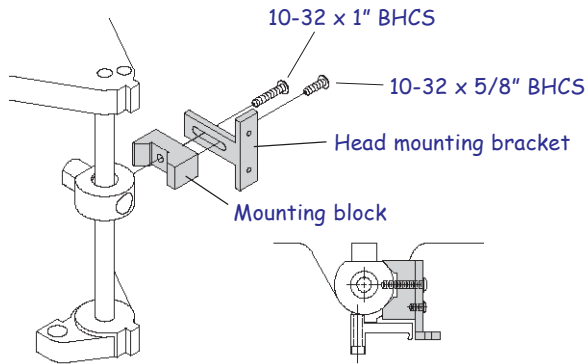
- Locate bracket to the lower mounting position.
- Transfer punch mounting hole location.
- Drill and tap hole location for a 10-32 x 3/8" deep.



- Push each bracket tight to the step on the projection and secure in place.

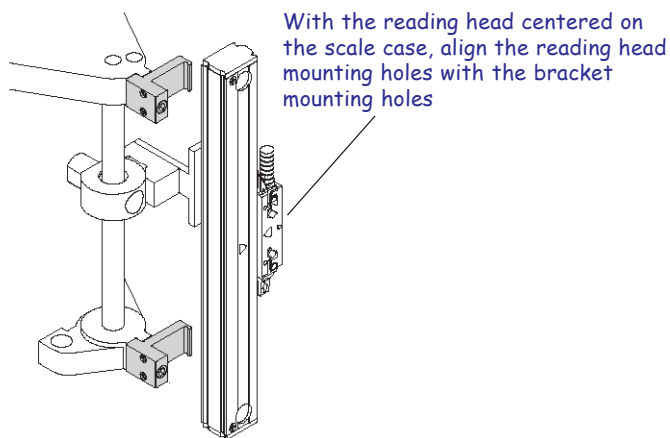


- Position the mounting block to the quill stop.
- Set the block square and parallel to the brackets.
- Transfer punch the mounting hole location to the stop.
- Remove block, drill thru stop wall and tap for a 10-32.

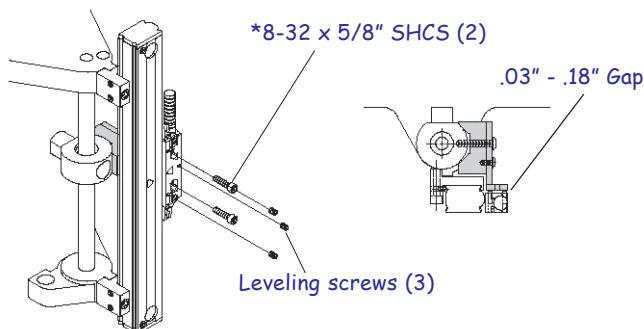


- Attach the reading head bracket assembly to the stop.
- Move the stop with the bracket assembly attached to its center of travel and lock in place.

Encoder installation ...



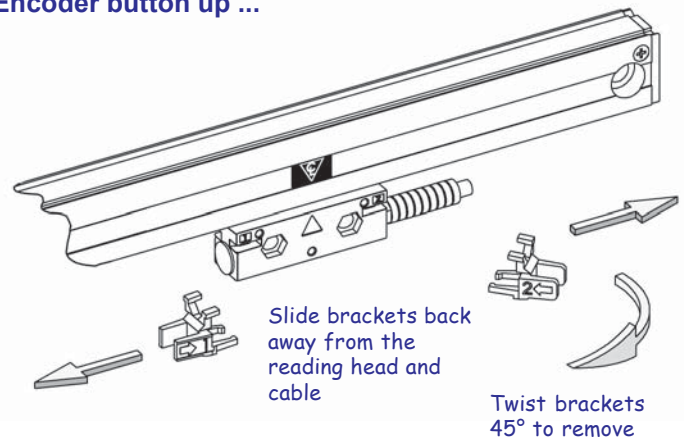
- Insert encoder into the brackets.
- Align reading head and bracket mounting holes.
- Lock encoder assembly in place by tightening the two set screws in each spar bracket.



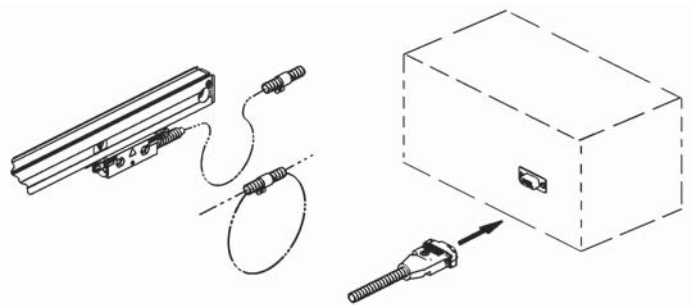
- Adjust the bracket so that there is a gap of .03" - .18".
- Attach the reading head to the bracket with two *8-32 x 5/8" SHCS. **Do not tighten fasteners.**
- Set each leveling set screw by placing a .001"-.003" feeler gage between the set screw and the bracket.

- Adjust each set screw until a slight drag is felt on the feeler gage.
- **Evenly tighten** the two 8-32 x 5/8" 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 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".