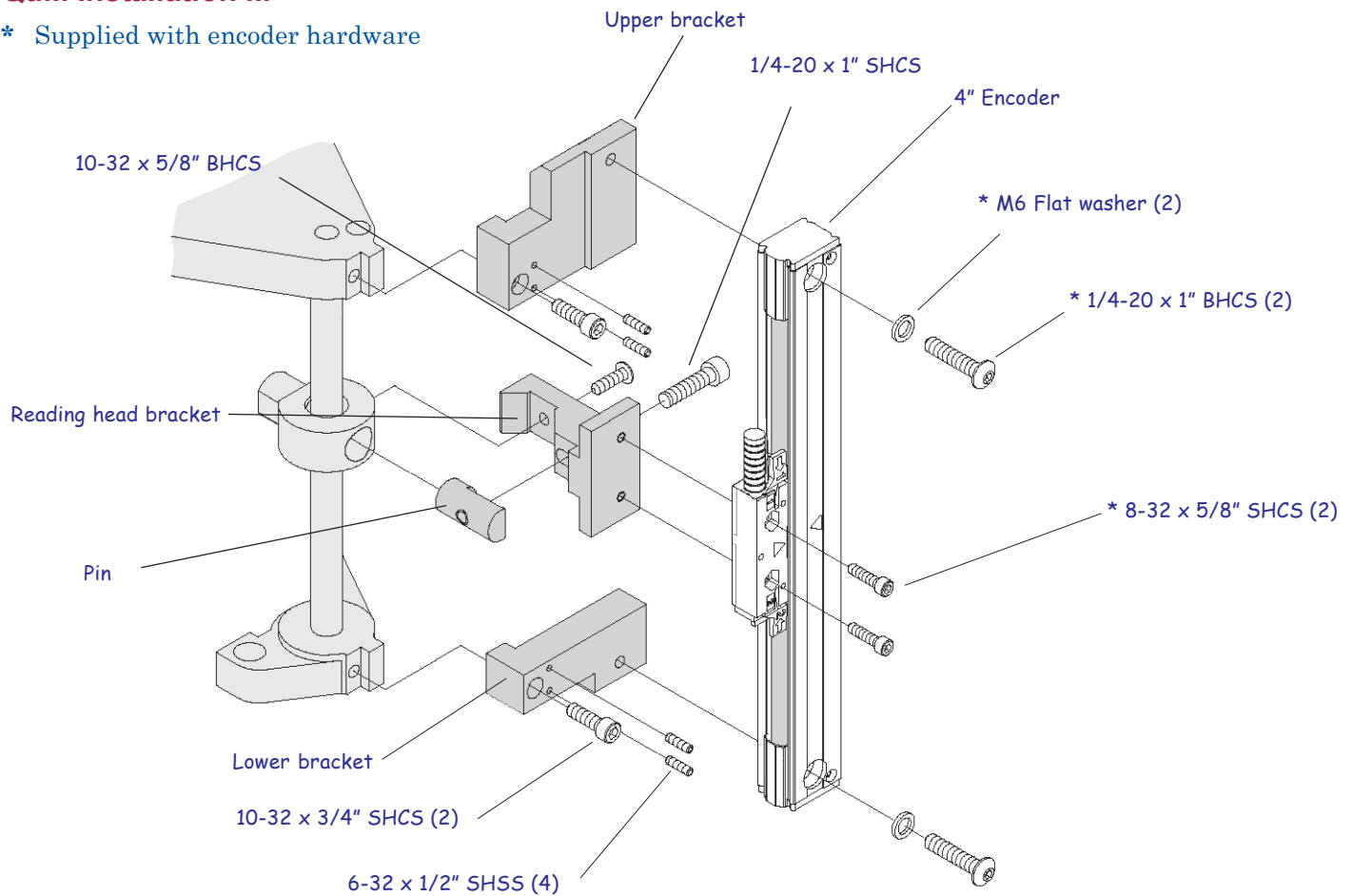


Quill Installation ...

* 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 ...

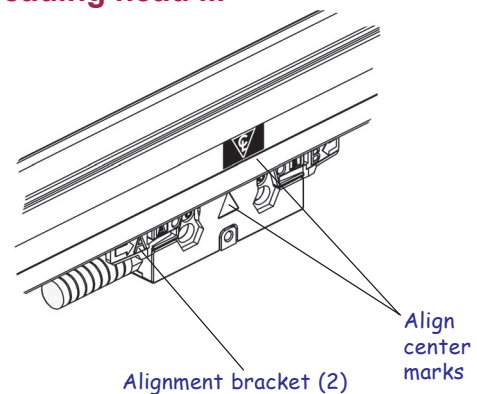
Machine

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

Encoder

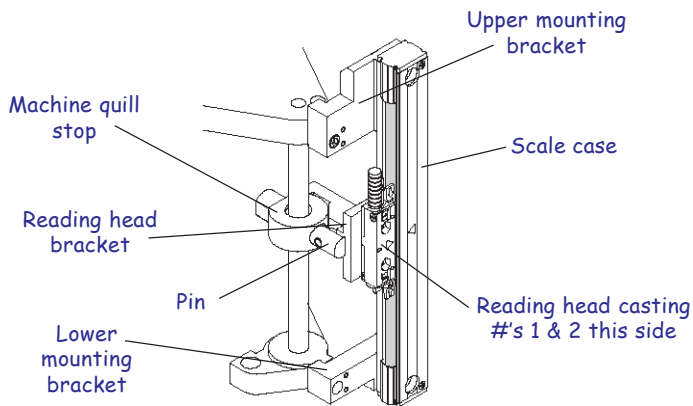
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head alignment brackets until instructed.

Center reading head ...



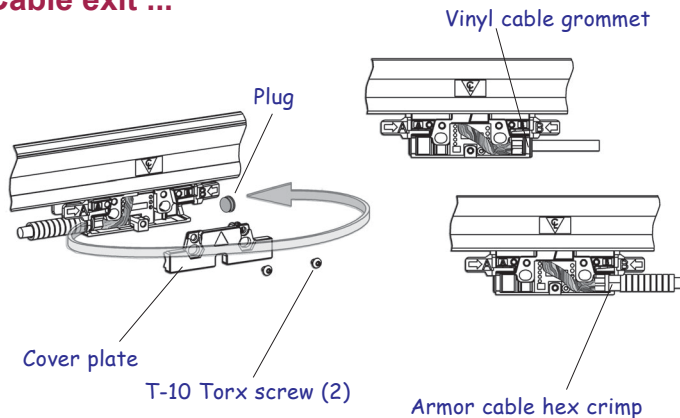
- Slide the reading head and brackets along the scale case until the center marks on the scale case and reading head are aligned.

Encoder orientation ...



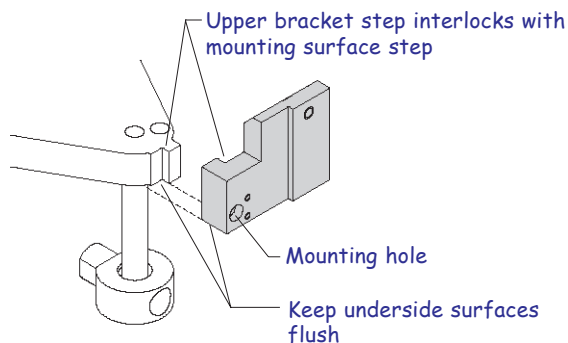
- These instructions will guide you through installing the encoder as shown in this view.

Cable exit ...

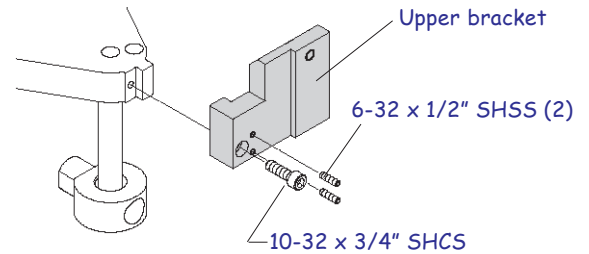


- Determine the cable exit direction before installing the encoder.
- To change the cable exit direction, remove the cover plate and rotate the cable 180°.

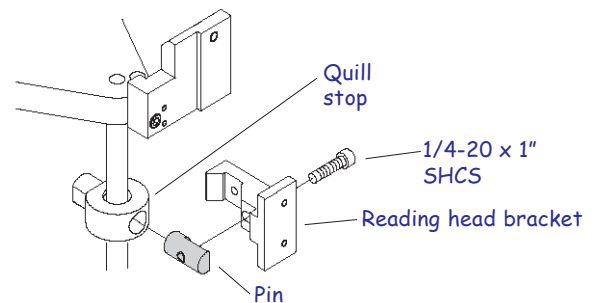
Encoder Installation ...



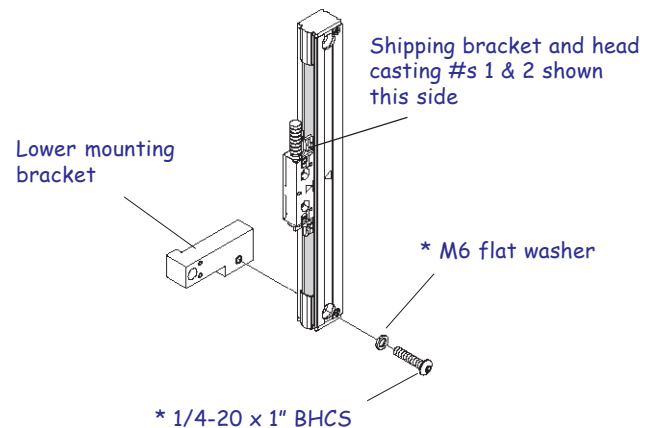
- Locate upper bracket to its mounting position.
- Transfer punch mounting hole location.
- Drill and tap hole location for a 10-32 x 3/8" deep.



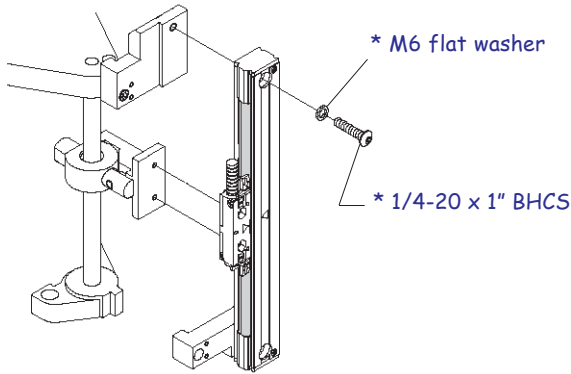
- Attach the bracket, interlocking it with the step, and secure in place.
- Insert the set screws, but do not tighten.



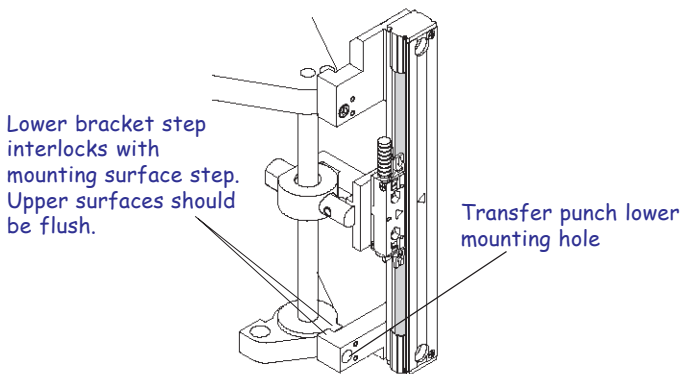
- Position the reading head bracket to the stop.
- Insert the correct pin (tightest fit) into the stop and attach the bracket securely.



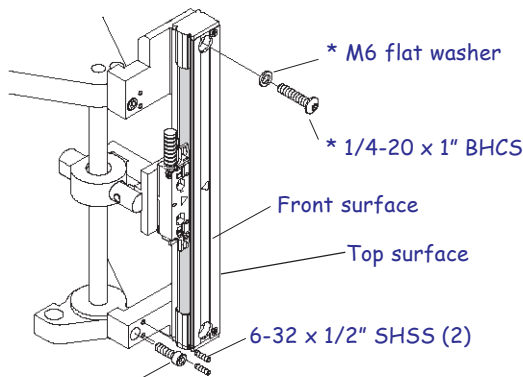
- Attach the lower mounting bracket to the encoder as shown. Encoder has the numbers 1 & 2 facing out.



- Attach the encoder assembly to the upper bracket.



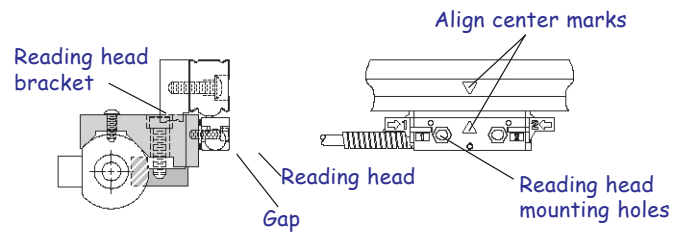
- Locate lower bracket to its mounting position.
- Transfer punch hole location, and remove assembly.
- Drill and tap location for a 10-32 x 3/8" deep.



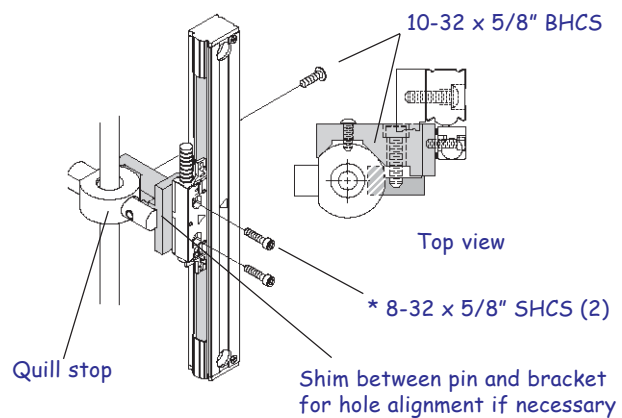
10-32 x 3/4" SHCS

- Attach the assembly, and align the scale case front surface to within .010" TIR of the axis travel. Use the leveling screws to aid with this alignment.
- Align the scale case top surface to within .010" TIR of the axis travel and secure encoder in place.

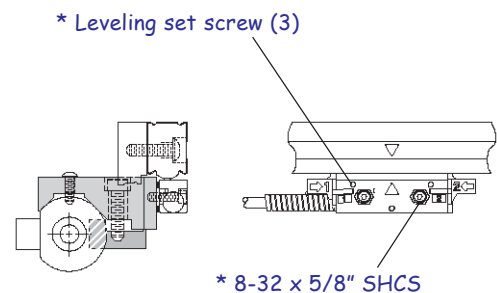
Reading head installation ...



- Slide the reading head to the center of the scale case. Align the bracket to the reading head mounting holes, and lock the quill in place.
- A gap will exist between the reading head and bracket.

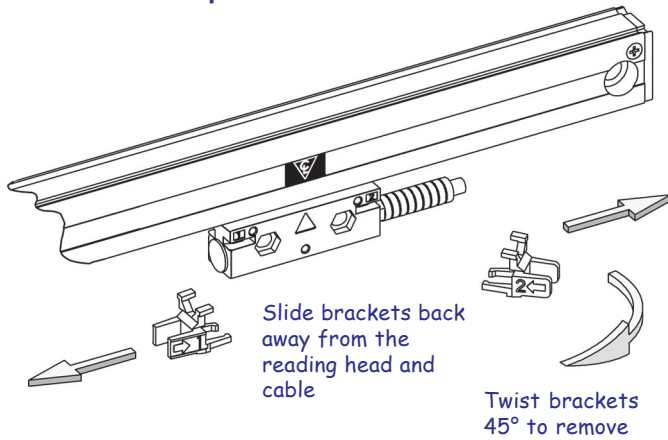


- Adjust the bracket parallel with the reading head; shim if necessary.
- Drill and tap for the 10-32 x 5/8" BHCS to lock the bracket in position.
- Attach the reading head to the bracket with two 8-32 x 5/8" SHCS. **Do not tighten fasteners.**

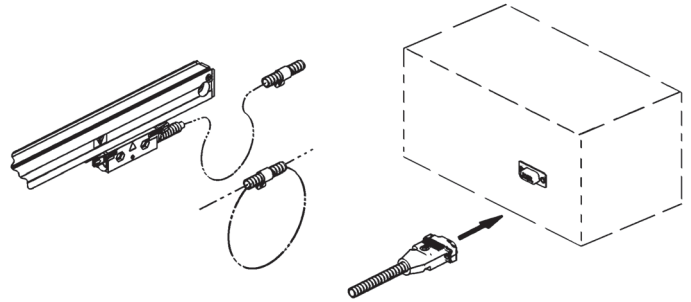


- Set each leveling set screw by placing a .001"-.003" feeler gage between the set screw and the bracket.
- Adjust each set screw until a slight drag is felt on the feeler gage.
- **Evenly tighten** the two 8-32 x 5/8" SHCS.

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”.