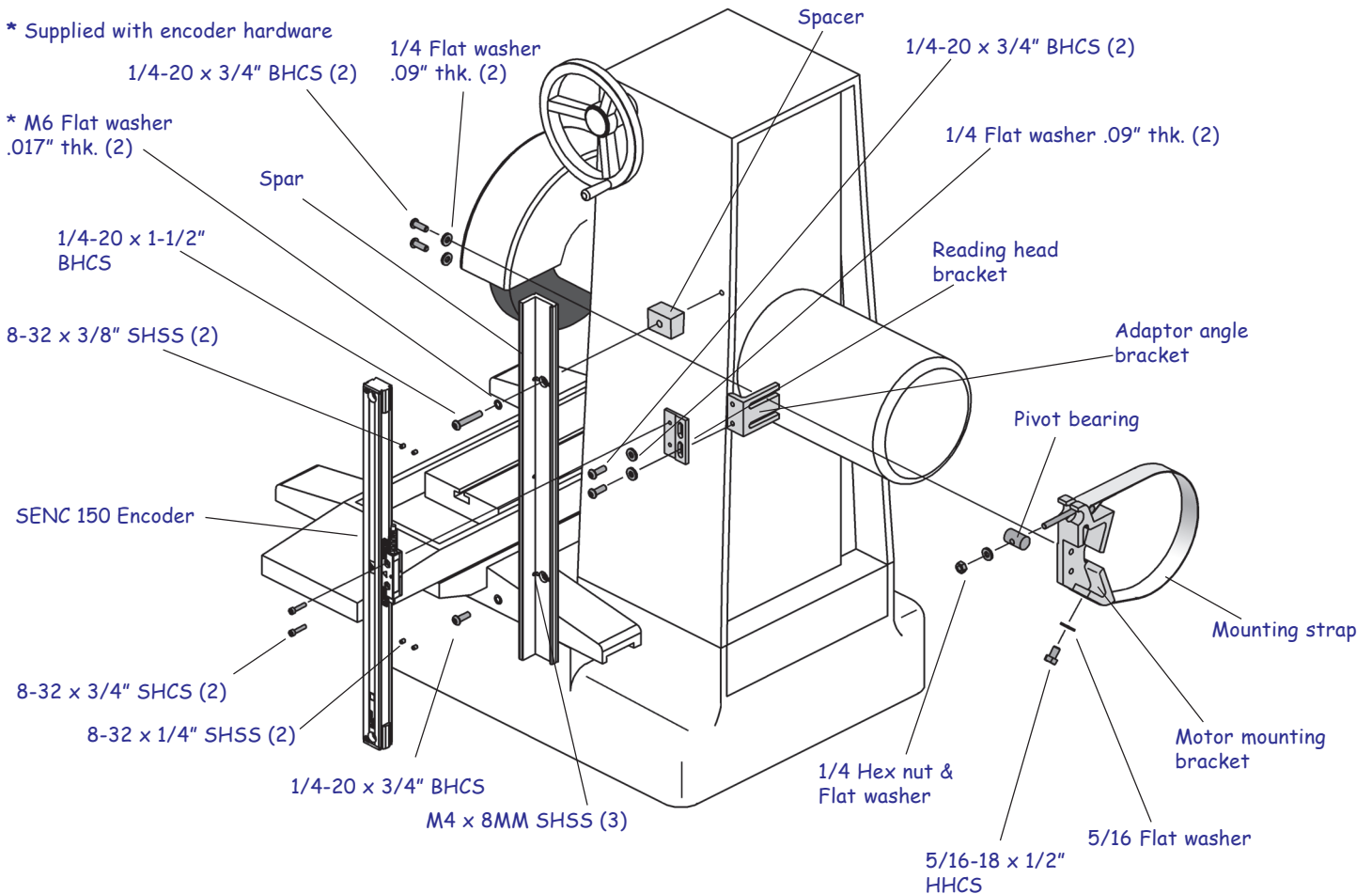


Down feed Installation ...

* Supplied with encoder hardware

* M6 Flat washer
.017" thk. (2)



Mounting Information...

These are application instructions for mounting the Down feed "Z" axis SENC 150 encoder. These instructions apply to Mitsui grinders produced prior to the year 2000.

Before proceeding:

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

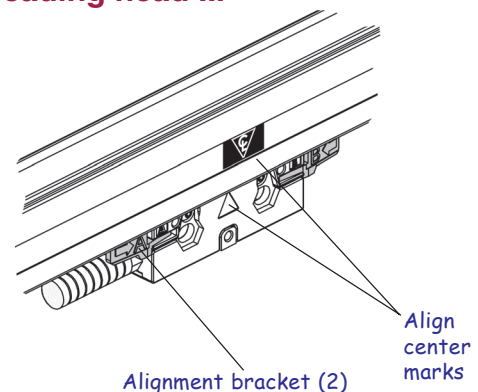
Machine

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

Encoder

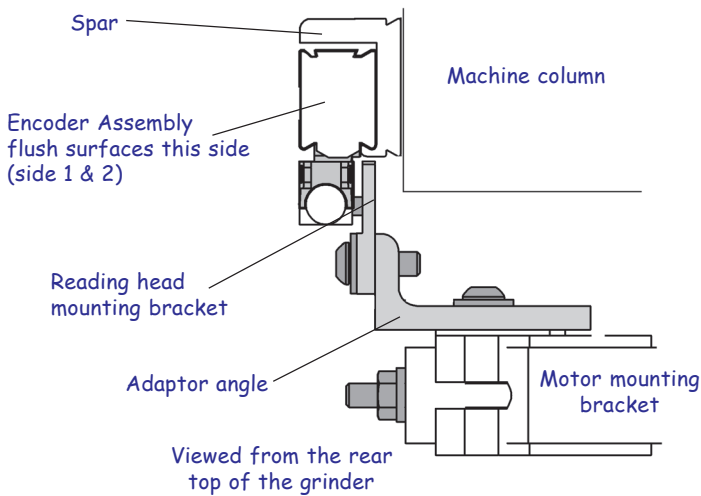
- ✓ Unpack encoder in a safe, convenient location.
- ✓ Do not remove the reading head alignment brackets until instructed.

Center reading head ...



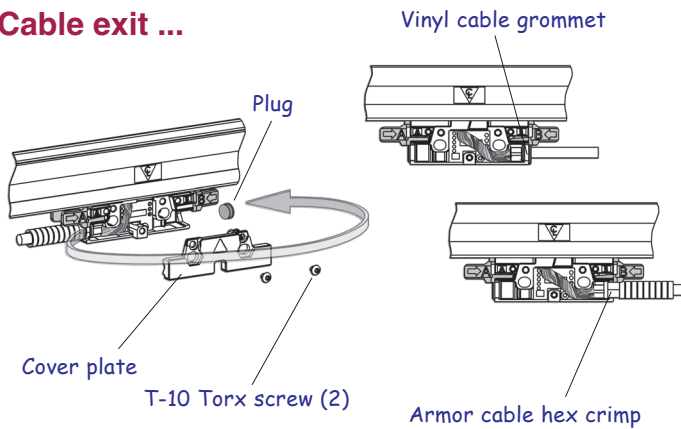
- Slide the reading head and brackets along the scale case until the center marks on the scale case and reading head are aligned.

Encoder orientation ...



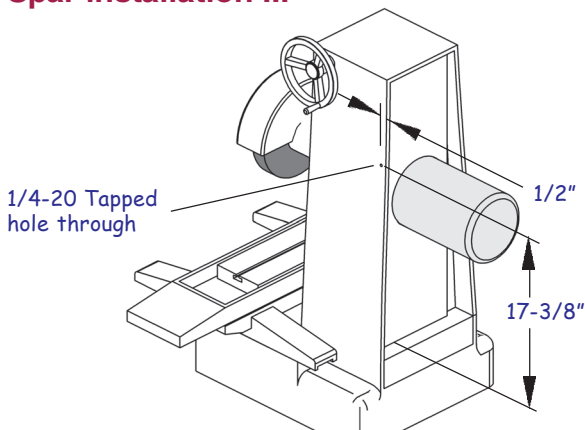
- These instructions will guide you through installing the encoder as shown in this view.

Cable exit ...

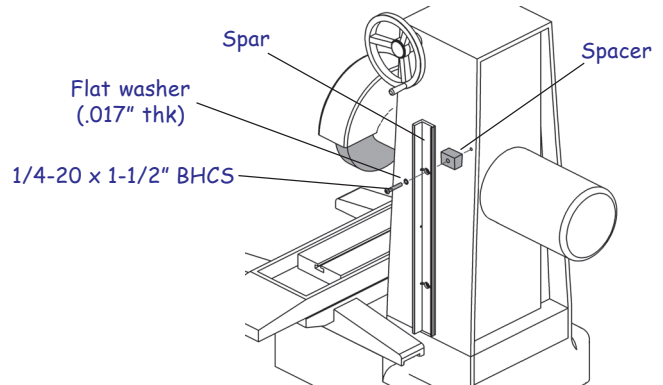


- Determine the cable exit direction before installing the encoder.
- To change the cable exit direction; remove the cover plate and rotate the cable 180°.

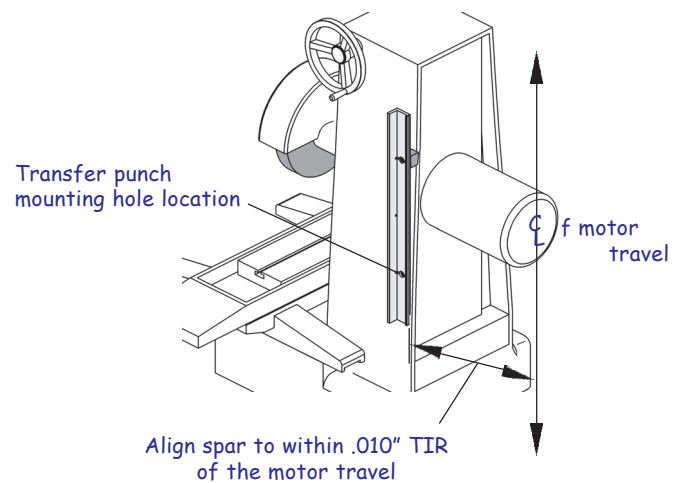
Spar installation ...



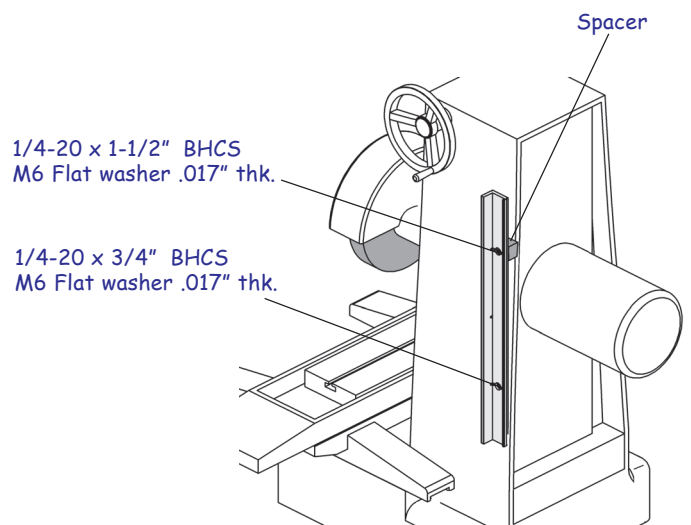
- Locate the mounting hole using the dimensions shown.
- Drill and tap for a 1/4-20 through.



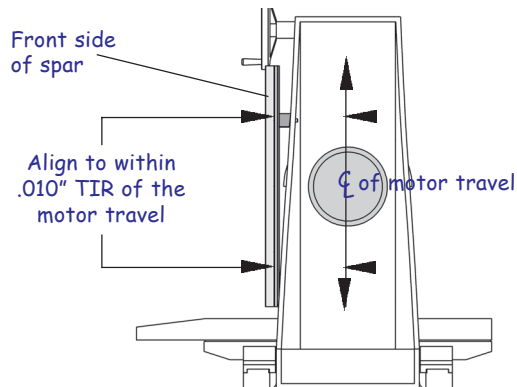
- Attach the spar to the column.



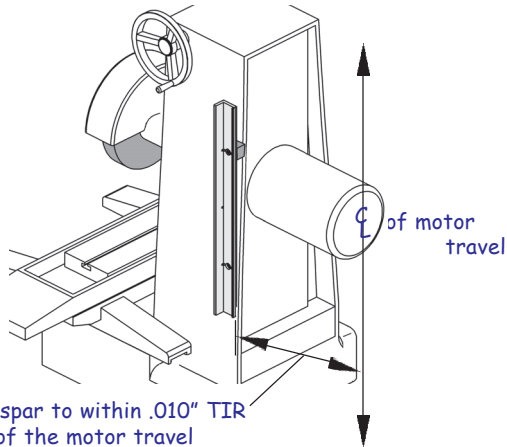
- Align the side of the spar to the motor travel.
- Transfer punch the second end mounting hole, remove spar, drill and tap for a 1/4-20 x 1/2" deep.



- Attach the spar to the column.

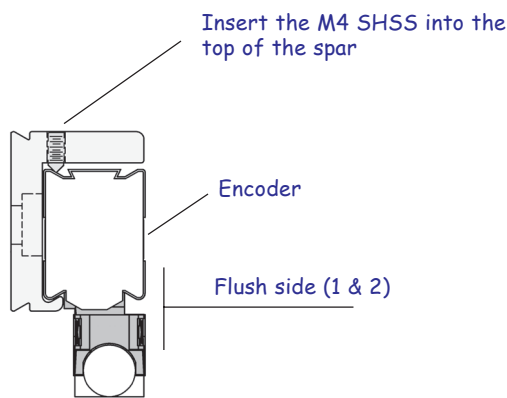


- Insert the four 8-32 x 1/4" SHSS into the spar (see exploded view on front page).
- Align the front of the spar to the motor travel, use the leveling set screws for adjustment.



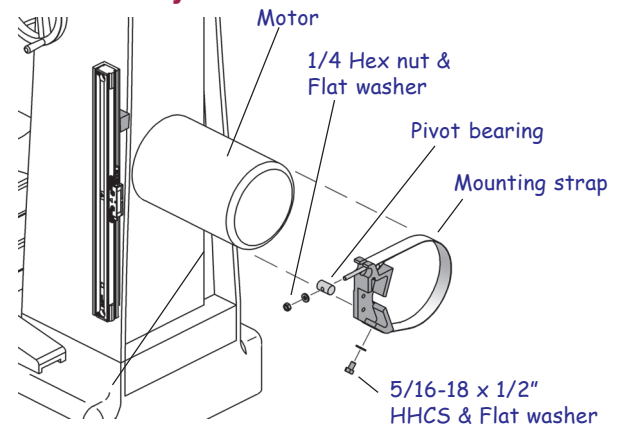
- Align the side of the spar to the motor travel.
- Secure the spar in place maintaining spar alignment.

Encoder installation ...

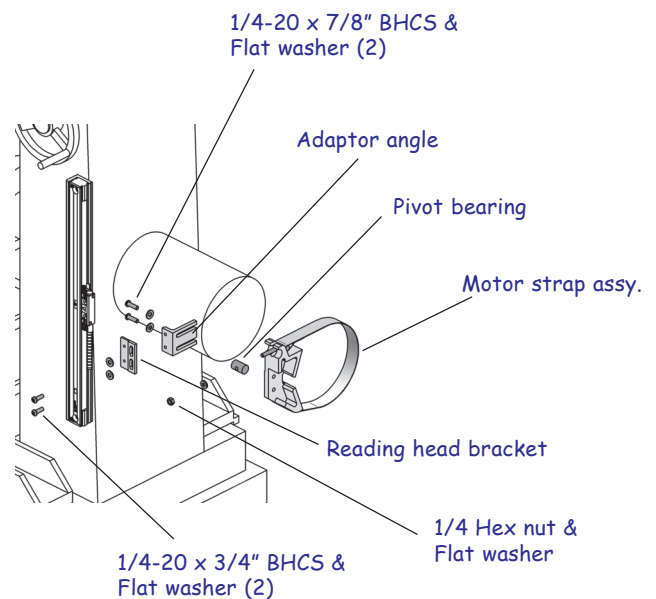


- Insert the encoder into the spar as shown, and center from end to end. Tighten the center set screw only.

Bracket assembly ...

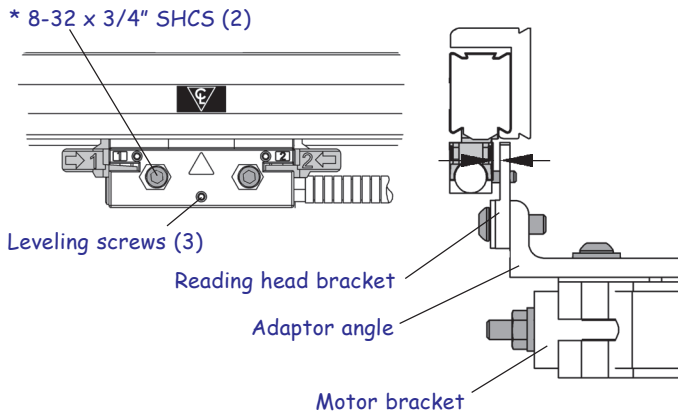


- Assemble the strap (threaded bolt end) to the bracket with the pivot bearing, nut, and washer.
- Thread nut approximately one third on to the strap bolt
- Hold the bracket on the motor and wrap the strap around the motor.
- Pull the strap tight over the lower end of the bracket and mark any excess for trimming.
- Remove the strap from the bracket and drill a 11/32" diameter hole on center a 1/2" from the trimmed end.
- Attach the strap to the bracket.



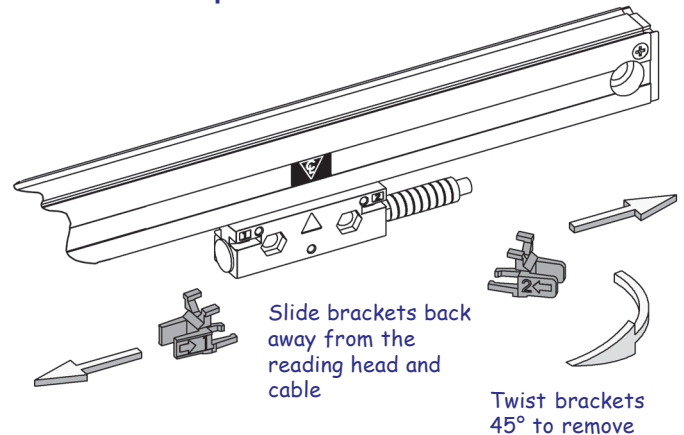
- Attach the assembly to the motor, but do not tighten.
- Attach the adaptor angle and reading head bracket to the motor mounting bracket assembly.
- With the motor and reading head centered, adjust the bracket assembly so that the reading head bracket aligns with the reading head mounting holes.

Attaching the reading head ...

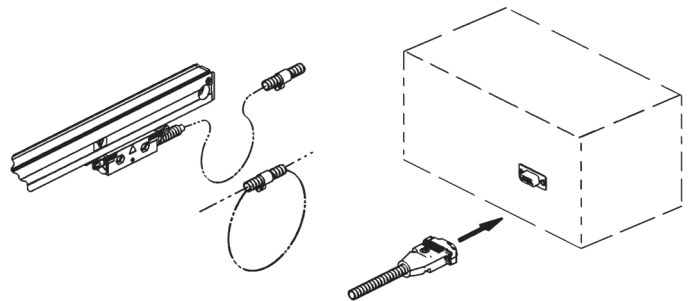


- Insert the *8-32 x 3/4" SHCS, but do not tighten.
- There will be a gap of .03" - .18" between the bracket and the reading head.
- Insert and set each leveling screw by placing a .001" - .003" feeler gage between the set screw and the bracket.
- Adjust each set screw until a slight drag is felt on the feeler gage.
- **Evenly tighten** the two 8-32 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".