Encoder Installation

After carefully unpacking the encoder, inspect it and ensure that the motor shaft it will be mounted on is the correct size, straight, and free of all burrs or aberrations.

The maximum recommended user shaft axial endplay is ± 0.76 mm (0.030”). The user shaft radial runout is 0.13 mm (0.005”).

NOTE: For RMH/header units, EPC does not recommend mating the cable prior to mechanical installation. Doing so may result in connector damage.

Step 1:

Slide the encoder over the motor shaft. The encoder should be positioned so that the flex mount arms just touch the mounting surface. Install two screws through the holes in the flex mount and tighten securely (typical torque range of 115 to 160 oz-in or 0.812 N-m to 1.130 N-m). For additional security, a drop of Loctite 222 can be added to the threads of the screws.

Step 2:

Tighten the two set screws in the encoder’s shaft (typical torque range of 30 to 45 oz-in or 0.212 N-m to 0.318 N-m). For additional security, a drop of Loctite 222 can be added to the threads of the set screws. Do not allow Loctite to run into the bore or onto the bearings.

Electrical Installation

After mounting the encoder as outlined above follow these steps.

Step 3:

Route and secure the encoder cable. See the A36R Technical Reference Manual for cable strain relief and minimum bend radius specifications.

RMH/Header Units:

After securing the cable, mate the cable connector to the header on the encoder. An audible “click” of the locking tab on the cable connector indicates a proper mate.

NOTE: To de-mate the cable, depress the lock tab while gently pulling from the cable body (do not pull wires). See figure 1.
Step 4:
Connect the VBAT lines to power source if using Power Ready cable. Skip this step if Single Turn, Normal Power, or Embedded Battery cable.

NOTE: If power is not supplied to the VBAT lines before the encoder is powered on, an error condition will result which will require a reset.


Step 5: