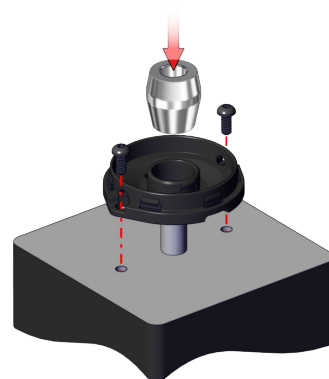


# EC35 Assembly and Timing Instructions

**Please Note:** The EC35 is designed for one-time installation.

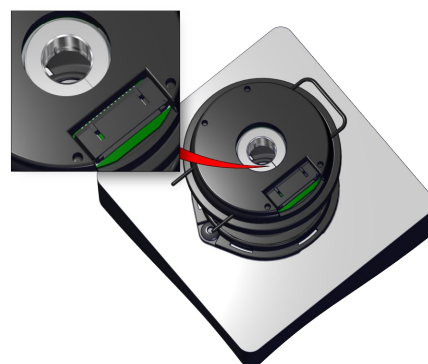
## Step 1:

Slip base and then centering tool over the shaft. Press down on the centering tool to secure the base in an aligned position on the mounting/motor surface and tighten the two mounting screws. Remove the centering tool.



## Step 2:

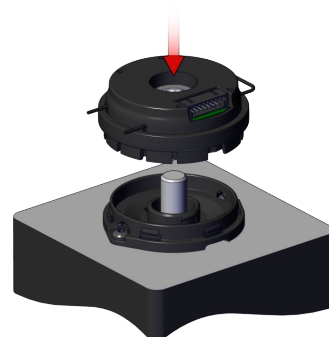
Energize the U phase motor winding with a positive DC voltage (relative to V or W) to lock the motor into position.



## Step 3:

Align assembled encoder over the motor shaft so that the mark on the hub is oriented in the desired direction for cable exit; this aligns the encoder's index and U signals to the motor's U winding. Note: The index marking on the disk is located ~180 deg. from the hub marking. Press the encoder onto the shaft until it snaps down on the previously mounted base. Press firmly near the cover through hole to ensure that the encoder gap is set.

**Caution:** Avoid pressing on the connector so as not to damage the connector shroud. To ensure a proper gap, be sure to support the motor shaft if there is any chance it can move axially in relationship to the encoder mounting surface during assembly.



## Step 4:

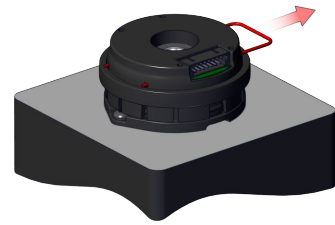
De-energize the U phase motor winding.

# EC35 Assembly and Timing Instructions

**Please Note:** The EC35 is designed for one-time installation.

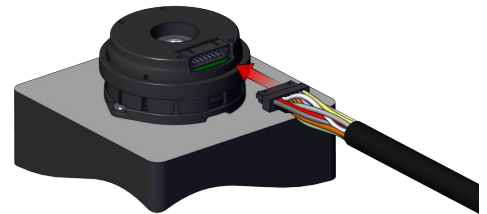
## Step 5:

Remove encoder spacer tool to free hubdisk. The encoder is now properly gapped.



## Step 6:

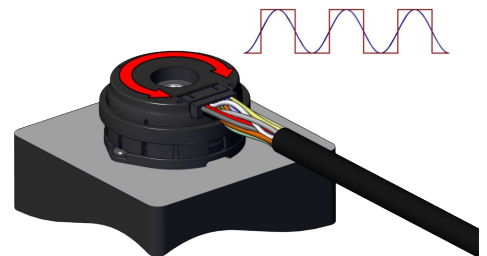
Attach the cable.



## Step 7:

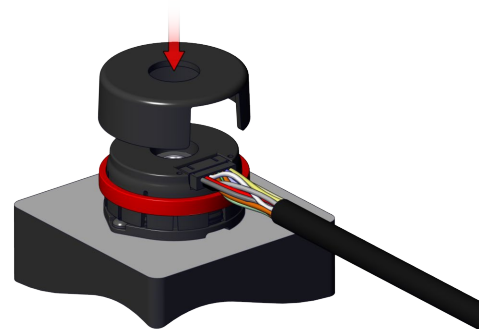
### Dynamic Timing

Connect motor U winding and encoder U output to separate channels of an oscilloscope. Use a second motor to back drive the target motor and rotate the encoder until the two signals are aligned with each other. Full 360° encoder rotation allows any instance of the U winding to be located.



## Step 8:

After the encoder is timed use the included tool to push the external ring all the way down, employing caution as not to rotate the encoder, until it bottoms out against the base. This will lock the encoder into its final position. Remove tool.



# EC35 Assembly and Timing Instructions

**Please Note:** The EC35 is designed for one-time installation.

## Step 9 (optional):

Apply the center-hole encoder cover to seal the opening.

