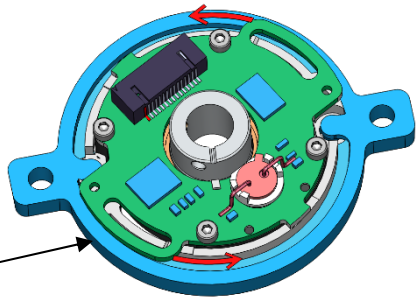
QM35/QML35 ASSEMBLY INSTRUCTIONS FOR 1.812” BOLT CIRCLE

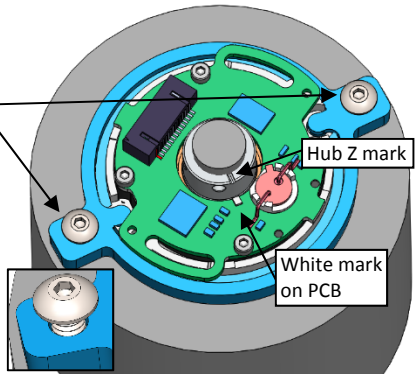
(QM35 Connector shown in illustrations)

STEP 1:
Rotate printed circuit board (PCB) as shown. This is the Lock position. Note – The outside ring with 1.812” bolt holes may be lose.



STEP 2:
a.) Install mounting screws through encoder into mounting/motor surface. Insert 1-2 turns. DO NOT tighten screws.

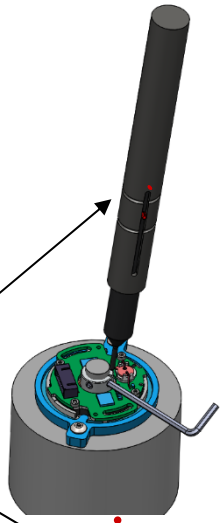
b.) Align Z mark on hub to White mark on PCB if commutation U, V and W is used.



STEP 3:
a.) Press down on the hub with a force between 150gr (.33lbs) and 700gr (1.5lbs). This will center the encoder assembly to the motor shaft.

b.) Using slight forefinger and thumb force, verify no radial (side-to-side) movement of the encoder occurs. Illustrated is accessory Q-Scale.

Proper downward force is indicated when pin is between the force lines.

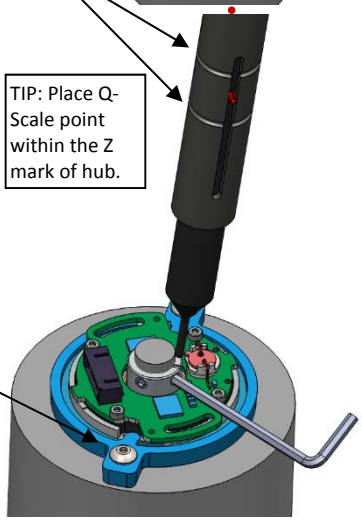


STEP 4:
a.) Tighten hub set screws to motor shaft.
3-48x1/16” screw = 18-22oz-in
3-48x3/32” screw = 28-32oz-in

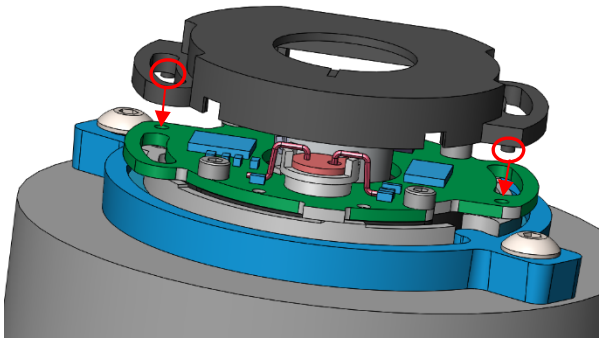
b.) The downward force on the hub can be removed.

c.) Tighten mounting screws to 45-51oz-in.

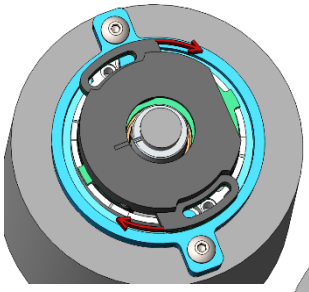
TIP: Place Q-Scale point within the Z mark of hub.



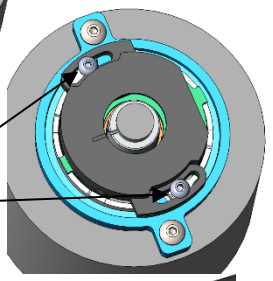
STEP 5:
Place cover on encoder. Observe the cover dowel pins positioned into mating PCB holes.



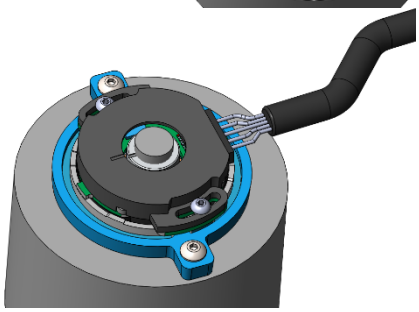
STEP 6:
a.) Twist cover/ PCB to expose screw holes for cover screws.



b.) Install cover screws and tighten to 37-43oz-in.



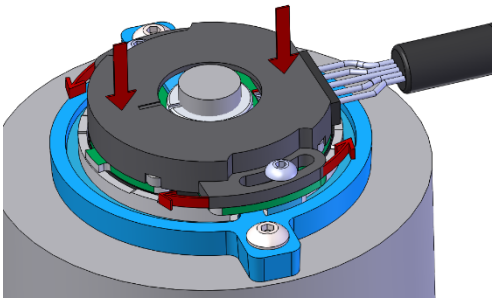
c.) Install cable to complete installation.



DYNAMIC ALIGNMENT OF U, V, AND W COMMUTATION CHANNELS:

a.) Loosen the cover screws slightly, to allow the encoder body to be rotated.

b.) Maintain a slight downward pressure on the cover.



c.) Rotate encoder to align commutation channels to motor windings. Tighten cover screws to 37-43oz-in.

 Rev. 170516