

**R35i Mounting Instructions - Dynamic Alignment**  
**Montageanleitung**

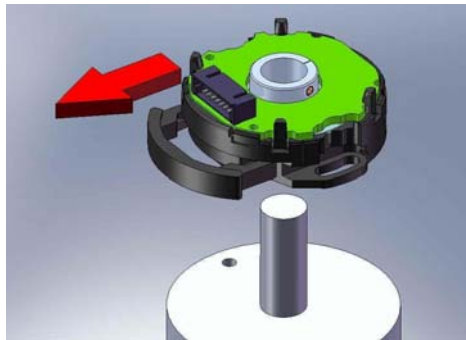
**Verify that you received the following items:**

- Encoder
- Cover
- Setscrew wrench
- M2.5 or #2-56 UNC Torx Head Mounting Screws with Captive Washer

**CAUTION ---- ESD Precautions Apply ---- CAUTION**

**Motor Preparation:** Dynamic alignment requires a second motor to backdrive the target motor. Connect motor winding U to channel 2 of an oscilloscope.

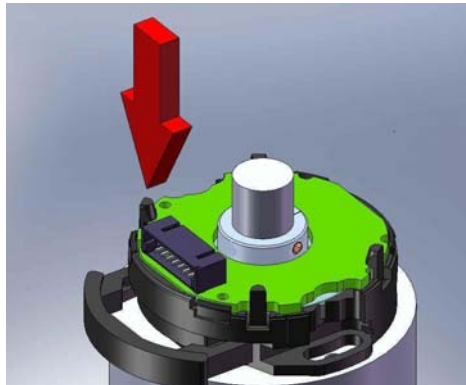
**Encoder Preparation**



**IMPORTANT! Do not apply power to the encoder at this time.**

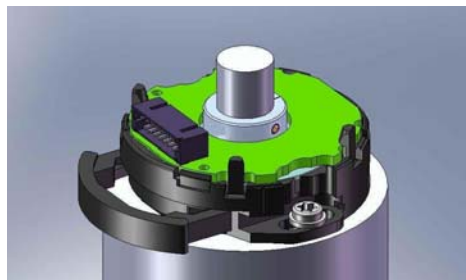
Verify that the slide lock mechanism is fully extended and the setscrew is in the 3 o'clock position. This will put the index and U commutation underneath the sensors within  $\pm 10$  mechanical degrees. If needed, apply thread locker to the mounting holes

**Step 1**



Slide encoder onto the motor shaft.

**Step 2**




Install mounting screws finger tight, allowing encoder housing to rotate.

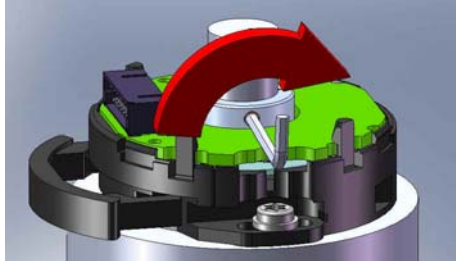
This document is the property of RENCO Encoders and is submitted in confidence. Disclosure, reproduction or publication without written authorization is prohibited.

542543

Change: Metrical torque values are added.

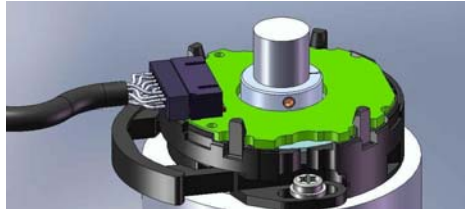
	Release-no.		Created	Responsible	Released	Version	Rev.	Sheet	Page
	<b>C00125</b>	Name	Obermayer	Obermayer	Tresenreiter	<b>D548177 - 02 - A - 01</b>			1/
		Date	10.04.2014	01.10.2010	15.04.2014	Document no.			3

**Step 3**



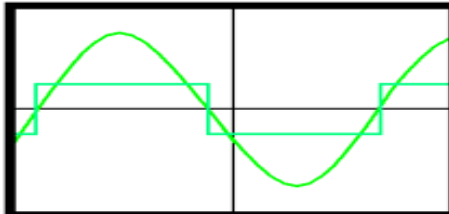
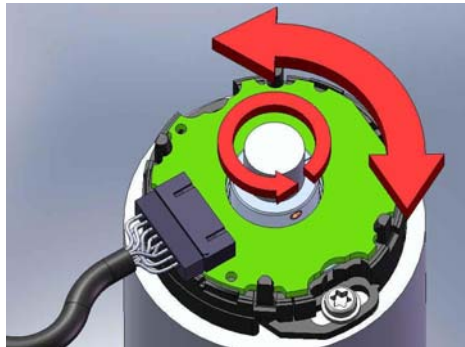
Secure the hub setscrew with  $0,16 \pm 0,03$  Nm (20 oz-in) torque.

**Step 4**

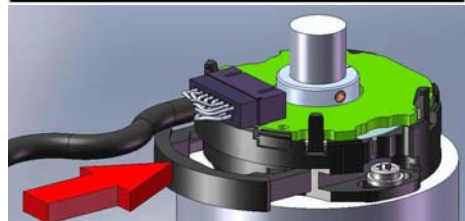


Install test cable and apply power to the encoder. Connect encoder U to channel 1 and trigger on this channel. While holding encoder body firmly, back drive motor counter clockwise (500 RPM MAX for 1 minute MAX).

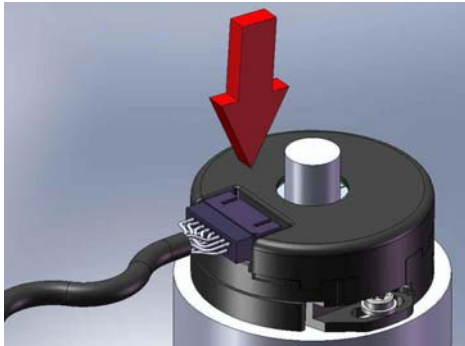
**Step 5**




Rotate housing until rising transition of commutation U occurs at the zero crossing of the motor back-emf signal of winding U. Torque the mounting screws to  $0,21 \pm 0,03$  Nm (35-40 oz-in). Push in slide lock mechanism. Bond hub to shaft for high acceleration or deceleration applications.



**Step 6**



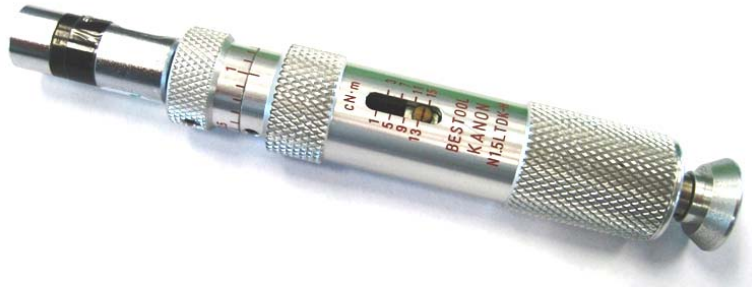
Remove test cable and install cover. Install cable assembly.

	Release-no.		Created	Responsible	Released	Version	Rev.	Sheet	Page
	<b>C001256-</b>		Obermayer	Obermayer	Tresenreiter	<b>D548177</b>	<b>- 02 - A - 01</b>		2/
		Date	10.04.2014	01.10.2010	15.04.2014	Document no.			3

This document is the property of RENCO Encoders and is submitted in confidence. Disclosure, reproduction or publication without written authorization is prohibited.

**Mounting accessories for Renco R35i:**

**350379-10 Torque driver with 1/4" bit holder**  
with adjustable torque range 0,02 Nm to 0,3 Nm



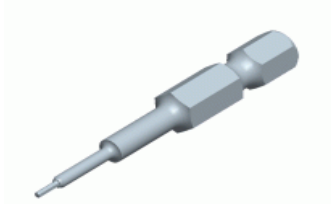
**825869-01 Special screwdriver bit set Bristol 4-Spline**  
for hub setscrew for following shaft diameters: 3/8 inch or 3/8+ inch

The screwdriver bit set includes following parts:

- 1/4" adapter with 0.048-4-Spline Bristol bit
- wrench for replacing the bit
- 10 units 0.048-4-Spline Bristol bits as spare parts




**756768-43 Special screwdriver bit 0.89 mm Hexagon**  
to tighten the hub setscrew for following shaft diameters:  
1/8, 1/8+, 3/16, 3/16+, 1/4, 1/4+, 5/16, 5/16+ inch,  
4mm, 5mm, 6mm, 8mm



**Support**

For Support in the U.S., Canada and Mexico, Please Contact

HEIDENHAIN Corporation  
Phone: 847-490-1191  
Fax: 847-490-3931  
Mail:renco@heidenhain.com  
333 State Parkway  
Schaumburg, IL 60173-5337

	Release-no.		Created	Responsible	Released	Version	Rev.	Sheet	Page
	<b>C001256-</b>	Name	Obermayer	Obermayer	Tresenreiter	<b>D548177 - 02 - A - 01</b>			3/
		Date	10.04.2014	01.10.2010	15.04.2014	Document no.			3