



R35i Modular Encoder Mounting Instructions

Click on your selection from list below to view appropriate instructions

[R35i Data Only](#)

[R35i Static Alignment](#)

[R35i Dynamic Alignment](#)

**R35i - Data Only
Mounting instructions**

Verify that you received the following items:

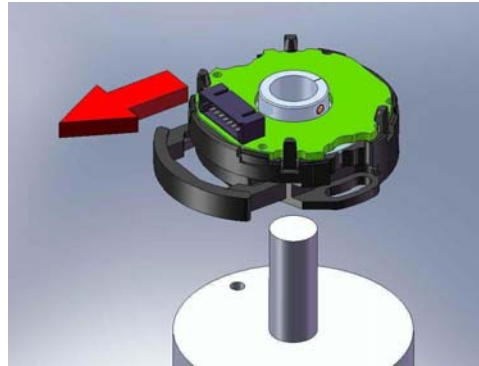
- Encoder
- Cover
- Setscrew wrench
- M2.5 or #2-56 Torx Head Mounting Screws with Captive Washer for C or H option
- M2.5 or #4-40 Socket Head Cap Screws for C4 or H4 option

Before you begin:

The following instructions are for random index location with respect to the shaft. If the index output needs to be aligned to the shaft, please contact factory for appropriate method for your motor type.

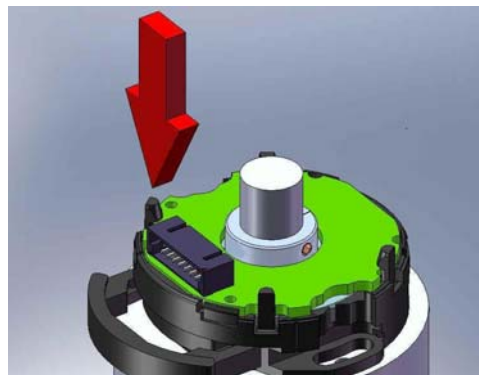
CAUTION ---- ESD Precautions Apply ---- CAUTION

Encoder Preparation



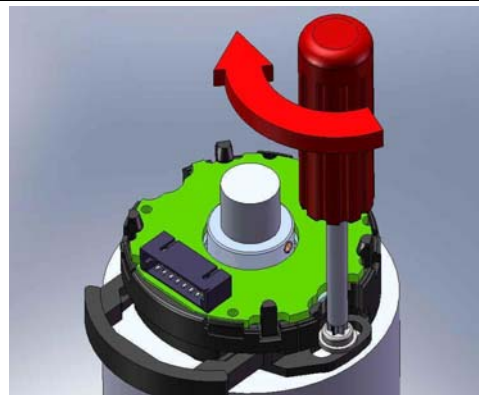
Verify that the slide lock mechanism is fully extended. If needed, apply thread locker to the mounting holes.

Step1



Slide encoder onto the motor shaft.

Step 2




Install mounting screws finger tight, then torque to 35-40 oz-in.

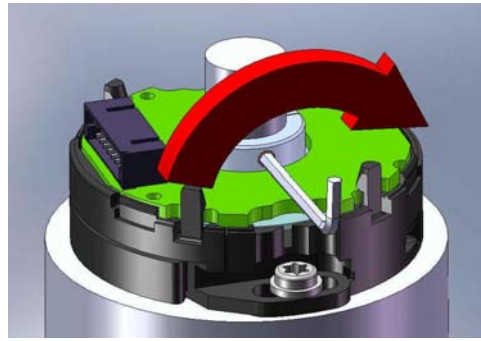
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Change:

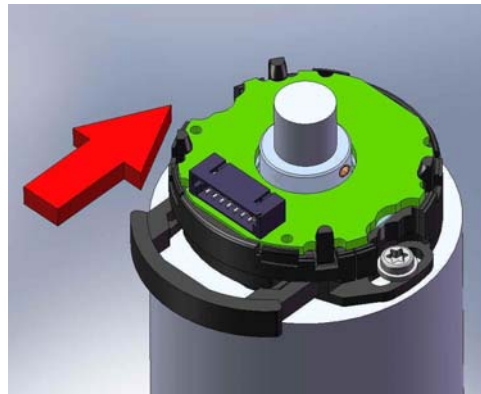
	Release-no.		Created	Responsible	Released	Version	Rev.	Sheet	Page
	07698	Name	Powell		Rhodes	D548176 - 01 - A - 01			1/
		Date	19.11.2009		14.12.2009	Document no.			2

Step 3



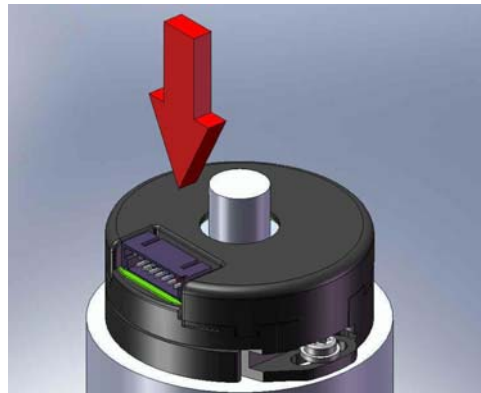
**Torque set screw to 20 oz-in.
Bond hub to shaft for high
acceleration or deceleration
applications.**

Step 4



Push in slide lock mechanism.

Step 5




Install cover.

Step 6



Install cable.

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		Date	19.11.2009		14.12.2009	Document no.			2

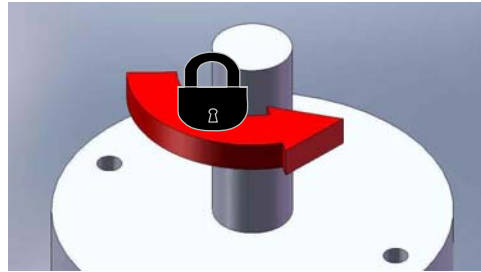
**R35i - Static Alignment
Mounting instructions**

Verify that you received the following items:

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

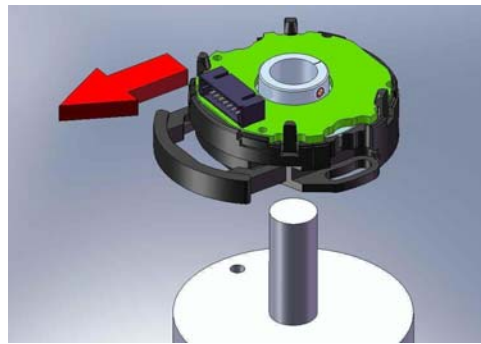
CAUTION ---- ESD Precautions Apply ---- CAUTION

Motor Preparation



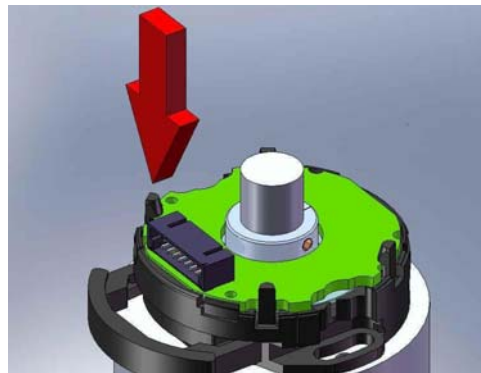
Energize motor U winding with sufficient voltage and current to lock motor rotor. Motor shaft will return to same position when rotated in either direction by hand.

Encoder Preparation



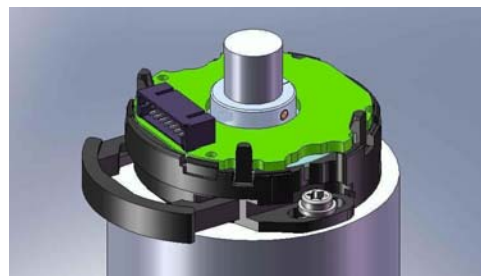
IMPORTANT! Do not apply power to the encoder at this time.
Verify that the slide lock mechanism is fully extended and the setscrew is in the 3 o'clock position. This will put the index and U commutation underneath the sensors within ± 10 mechanical degrees. If needed, apply thread locker to the mounting holes.

Step 1



Slide encoder onto the motor shaft.

Step 2




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

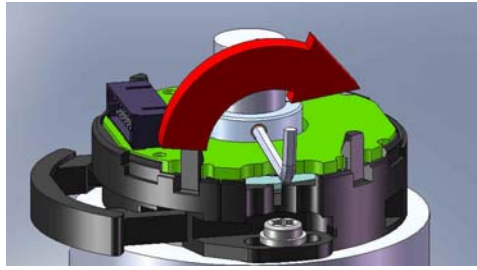
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Change:

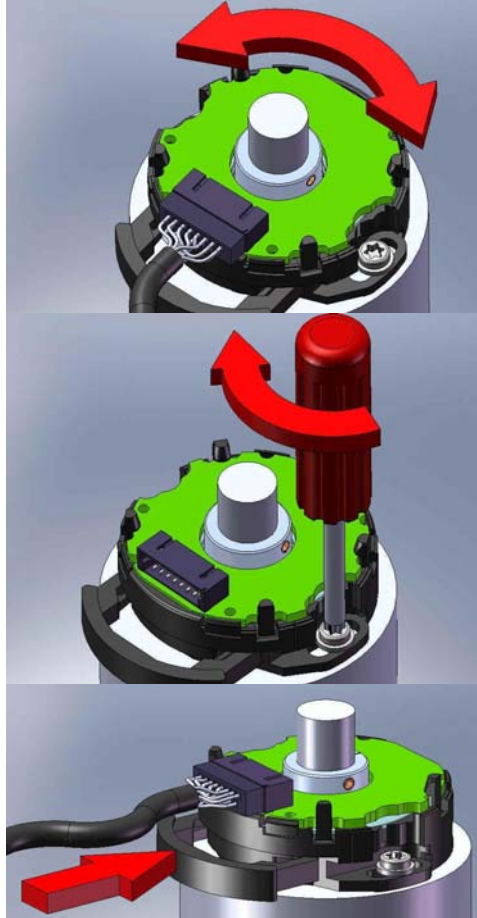
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	07698	Name	Powell		Rhodes	D548178 - 01 - A - 01			1/
		Date	20.11.2009		14.12.2009	Document no.			2

Step 3



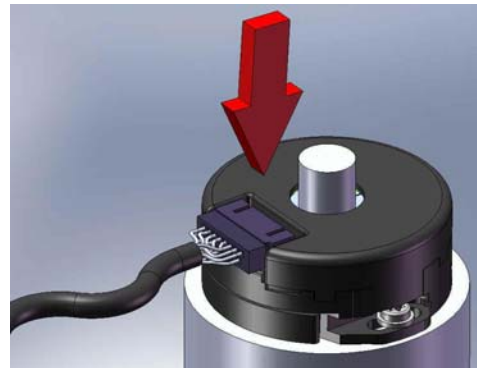
Secure the hub setscrew with 20 oz-in torque.

Step 4




Install test cable to encoder for commutation alignment. Apply power to the encoder. Rotate the encoder body until a transition on U. Rotate the opposite direction until the opposite transition. Find the midpoint, then torque the mounting screws to 35-40 oz-in. Push in slide. Bond hub to shaft for high acceleration or deceleration applications.

Step 5



Remove test cable and install cover. Install cable assembly.

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		Date	20.11.2009		14.12.2009	Document no.			2

**R35i - Dynamic Alignment
Mounting instructions**

Verify that you received the following items:

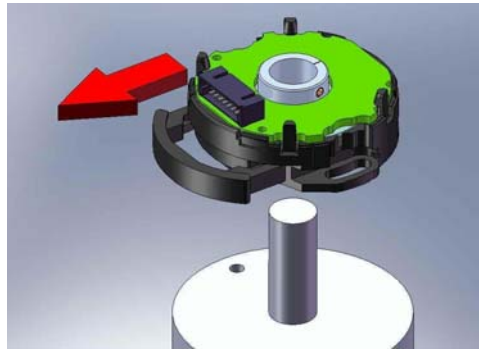
- Encoder
- Cover
- Setscrew wrench
- M2.5 or #2-56 Torx Head Mounting Screws with Captive Washer

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.

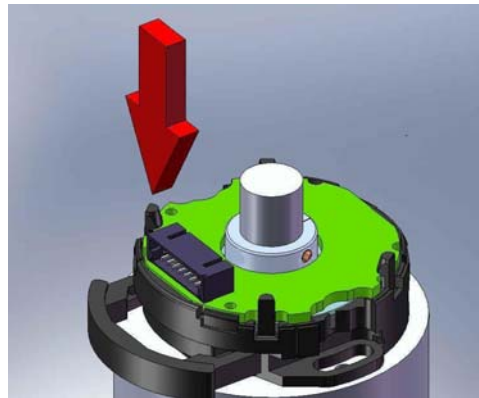
Encoder Preparation



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

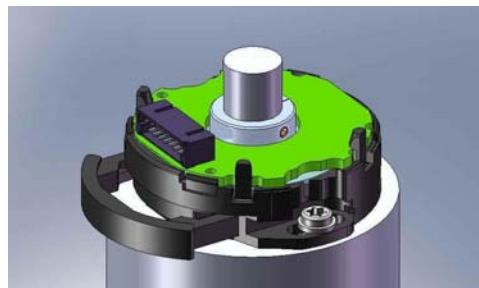
Verify that the slide lock mechanism is fully extended and the setscrew is in the 3 o'clock position. This will put the index and U commutation underneath the sensors within ± 10 mechanical degrees. If needed, apply thread locker to the mounting holes

Step 1



Slide encoder onto the motor shaft.

Step 2




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

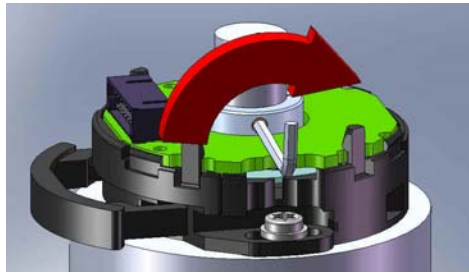
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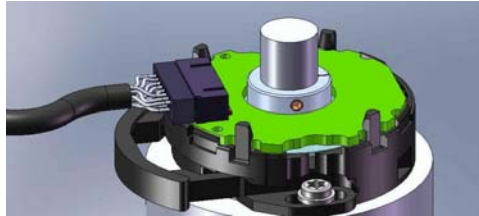
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	07698	Name	Powell		Rhodes	D548177 - 01 - A - 01			1/
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Step 3



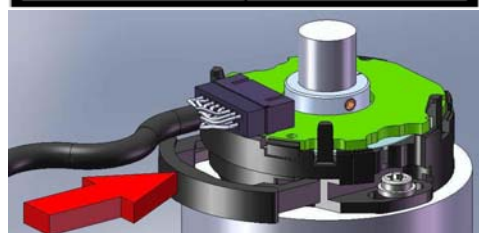
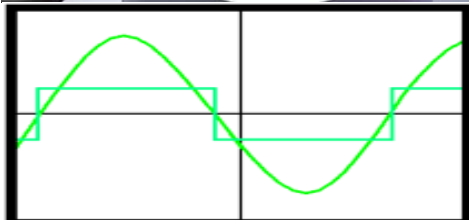
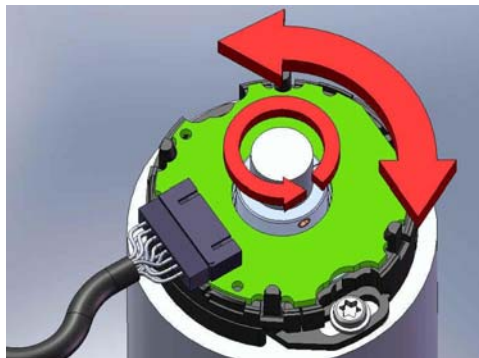
Secure the hub setscrew with 20 oz-in torque.

Step 4



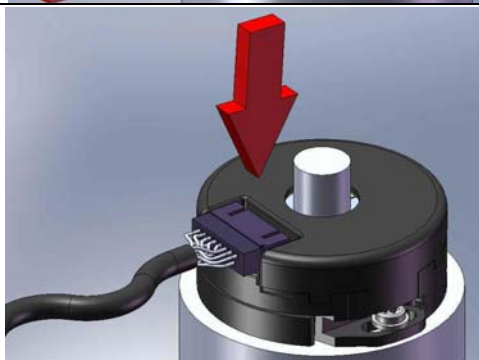
Install test cable and apply power to the encoder. Connect encoder U to channel 1 and trigger on this channel. While holding encoder body firmly, back drive motor counter clockwise (500 RPM MAX for 1 minute MAX).

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 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.



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