

RCM15 Mounting Instructions

Verify that you received the following items:

- Encoder
- Snap-on Cover
- .035 Hex Wrench

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

RCM15 Preparation

Remove encoder from anti-static package.

Ensure that the slide lock mechanism is pushed in completely and rotate hub until setscrew aligns with reference pin. This pin is located on the edge of the pc board, 90° counter-clockwise from connector, midpoint between the two mounting screws.

Install servo cleats and screws in mounting holes and turn flats on cleats toward motor shaft so that the RCM15 encoder base will clear the cleats.

When setscrew is aligned with reference pin, S1 will be near the transition point on encoder disk.

Step 1

With the slide lock mechanism pushed in completely, align hub with motor shaft and gently press down on hub to insure it is resting on mounting surface. Rotate cleats and tighten cleat screws to hold encoder in place.

Do not push down on encoder, push on hub only!

Step 2

Plug mating cable into RCM15 connector. Supply power to commutation channel power inputs. On single supply units, data channels will also be energized.


Care must be taken to prevent shorting out encoder outputs!

With the motor energized, the encoder commutation tracks can now be aligned with the motor windings.

Step 3

Pull out slide lock mechanism. Rotate encoder hub until S1 output state transitions. Secure hub to shaft by rotating setscrew clockwise until setscrew makes contact to shaft.

Change: Initial Release

	Release-no.		Created	Responsible	Released	Version	Rev.	Sheet	Page
	23110	Name	Dupuis	Dupuis	Setbacken	D00548180 - 00 - A - 01			1/
		Date	05/11/2005	07/13/2006	07/13/2006	Document no.			2

Observe the short leg of hex wrench and rotate an additional 1/4" clockwise to apply 20 oz-inches of torque.

Caution: Overtightening the setscrew will cause damage to the shaft, which will make it difficult to remove the encoder, if necessary.

Step 4

Verify S1 track alignment. The commutation tracks are aligned properly when a slight twisting of the motor shaft in one direction causes S1 to transition high and a slight twist of the motor shaft in the opposite direction causes S1 to transition low. If alignment is incorrect, loosen setscrew and repeat Step 3.

Push slide lock mechanism in completely.

Step 5


Remove cable assembly.
 Install snap-on cover.
 Reinstall cable assembly.
 If desired, bond hub to shaft using an approved method. (Consult factory).

Encoder Removal

Remove cover.
 Loosen cleat screws but do not remove. If hub was bonded to shaft, debond using recommended method.(Consult factory for details.)
 Loosen setscrew in hub.
 Ensure that slide-lock mechanism is pushed in completely.
 Rotate cleats to allow removal of RCM15 encoder.
 Remove encoder.

[RETURN TO TOP](#)

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	Release-no.		Created	Responsible	Released		Version	Rev.	Sheet	Page
	23110	Name	Dupuis	Dupuis	Setbacken	D00548180 - 00 - A - 01			2/	
		Date	05/11/2005	07/13/2006	07/13/2006		Document no.		2	