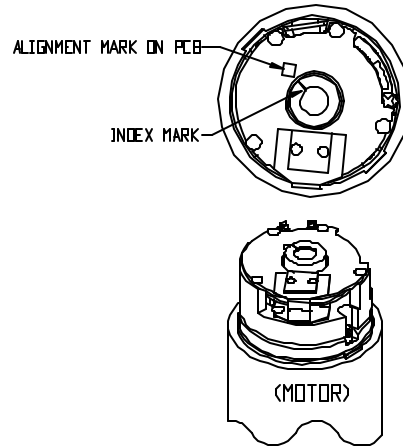
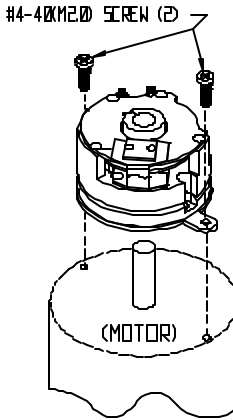
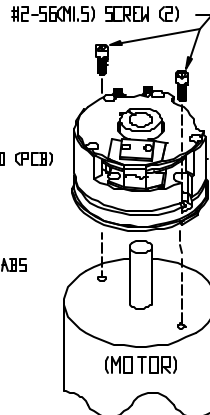
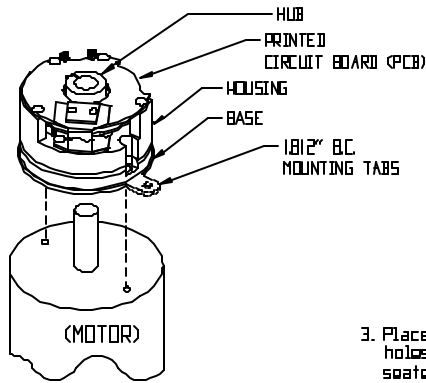


1. Lock the motor shaft at a fixed position. If 1.812" B.C. mounting holes will not be used, carefully cut or break the tabs at the score line.

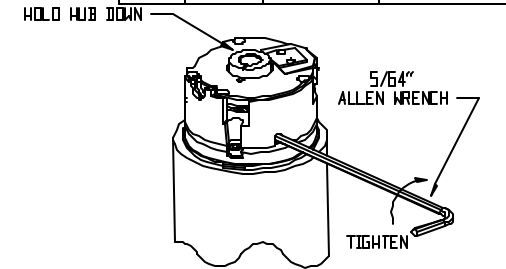


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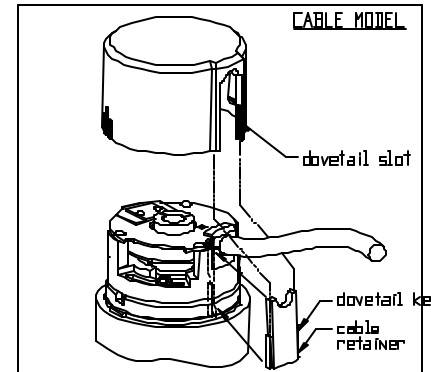
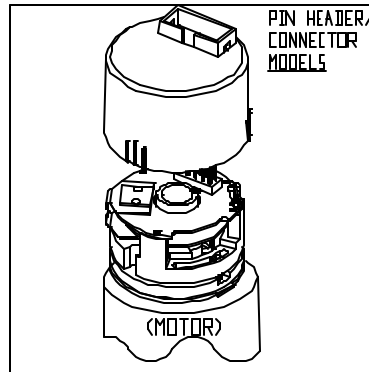
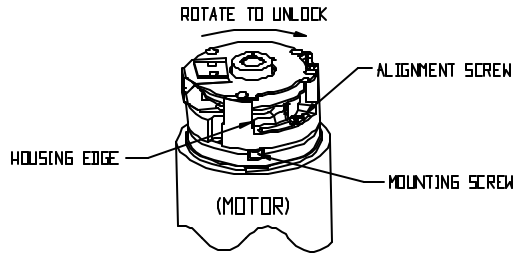
2. Seat the hub in the plastic base. Place the hub over the motor shaft and push on the hub until the base meets the motor.

3. Place one pair of mounting screws through holes in base, hold the hub firmly seated in the base and tighten to 1.5-2.0 lb-in. (16-22 N-cm) for #2-56(M1.5) or to 2.0-2.5 lb-in. (22-28 N-cm) for #4-40 (M2.0)

4. Rotate the hub until the index mark on the hub is aligned with the square silver alignment mark on the PCB



5. Insert wrench carefully into hole in housing. Hold the hub seated in the base and tighten the clamp screw to 3 lb-in (34 N-cm). Pull wrench straight out to remove.



6. Loosen the alignment screw (1/4 turn CCW) and rotate the encoder housing clockwise 35° until the housing edge is aligned with the mounting screw.

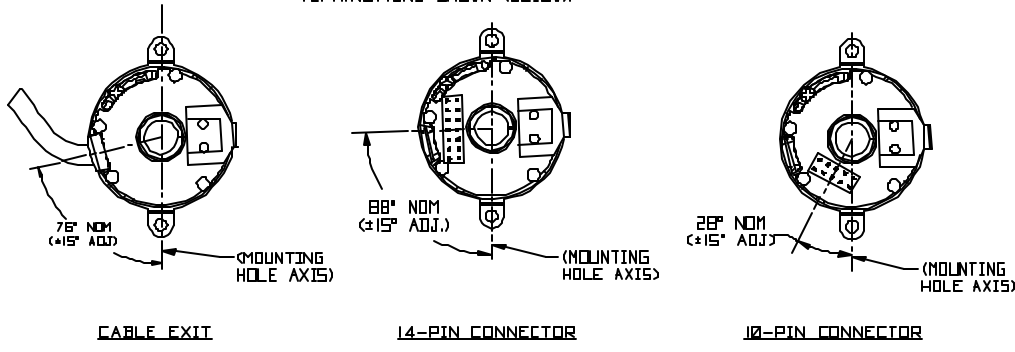
7. If fine adjustment of index-to-shaft alignment is NOT necessary, tighten the alignment screw to 2 lb-in. (23 N-cm); For cable models with covers, place the cable retainer under the cable. Then position the opening in the cover with the cable or connector. On cable covers, be sure to engage the dovetails and slots. Then, press down firmly and evenly until the three cover snaps are engaged.

CAUTION: Handle encoder by black plastic housing only.
Do not push on flexible circuit or printed circuit board.
Avoid contacting edge of glass code disk when installing mounting screws.

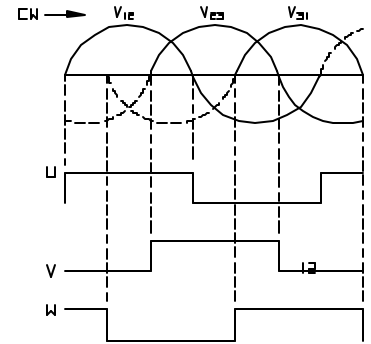
TOLERANCES UNLESS INDICATED:			DIMENSIONS IN INCHES UNLESS SPECIFIED		TITLE INSTALLATION INSTRUCTIONS, M			
.XXX	.XX	ANGLES	MAT'L	FINISH	FILE NAME	SCALE	COMPLIANCE REQUIRED	
±	±	±			20063801	1:1.43	UL	OC5A
© 1998 D.T.C. "B" size Danaher Controls					DRAWN	DATE	APPLICATION	
					MEB	7/14/98	MIS	
					CHECKED	DATE	DWG. NO.	
					MEB	7/22/98	200638-0001	
					RELEASED	DATE	REV	
					MEB	7/22/98	A	

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1. Select a desirable cable exit or connector location, using the offsets between the mounting hole axis and the terminations shown (below).

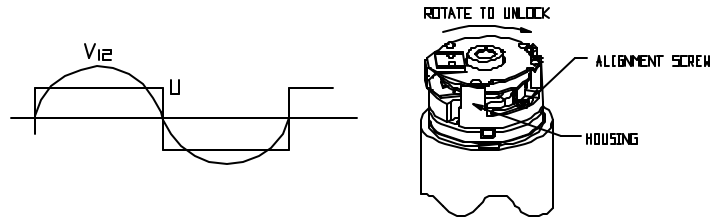


2. The relationship of the brushless DC motor windings to the commutation channels is shown (below). Lock the motor rotor to hold the shaft in a fixed position for alignment to the commutation channels.



3. Install the encoder as shown in 200638-0001 steps 1 through 6. After installation, the encoder commutation channels will be in coarse alignment with the motor windings at the positive-going edge of the U channel.

4. Alignment can be checked by turning the motor shaft and comparing the transition points of the back EMF signals generated by the V windings with U, the U windings with V, or the V windings with W as shown below. If necessary, loosen the alignment screw (1/4 turn CCW) and rotate the housing to adjust the position of the commutation channels to the motor windings.



Apply a current limited DC power source to the #2 (or equivalent) terminal of the motor, and the DC return to the #1 terminal, to position and hold the rotor at the positive-going transition of U.

5. After fine adjustment tighten the alignment screw and install the cover as shown in 200638-0001 (Step 7).

CAUTION: Handle encoder by black plastic housings only. Do not push on flexible circuit or printed circuit board. Avoid contacting edge of glass code disk when tightening alignment screw.

TOLERANCES UNLESS INDICATED: XXX ± .XX XX ± .XX ± .001		DIMENSIONS IN INCHES UNLESS SPECIFIED MATERIAL / FINISH		TITLE ALIGNMENT INSTRUCTIONS, MIS COMMUTATION	
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DRAWN: MEH		DATE: 07/21/98		APPLICATION: MIS	
CHECKED:		DATE:		DWG. NO. 200638-0002	
RELEASED:		DATE:		REV	

