

	Doc or ECO #:	70160-004	Date:	7/08/2020	Author:	aeg
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	7/08/2020	Quality Approval	Aeg

P/N #:	70160	Effective Date:	July 20, 2020
Title:	Switch to non-snap ring locking sleeve		

1.0 Purpose / Summary

The Birns locking sleeve snap ring will cam out if there is tension on the sleeve and a twisting side load applied. This ECO switches to the Seacon locking sleeve which does not use a snap ring. A work around for fielded units is described as well.

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
70160	Replace locking sleeve and snap ring	☐	☐	☒	G
CLS-001F	Birns locking sleeve	☒	☐	☐	COTS
THR-SNP-RNG	Birns locking sleeve snap ring	☒	☐	☐	COTS
72909	Seacon locking sleeve MC-DLS-F	☐	☒	☐	COTS
72912	Power Module Locking Sleeve Strain Relief Kit NOTE not on 70160 BOM	☐	☒	☐	COTS
72911	Cable Clamp, ID 3/8, Length 7/8", Polyethylene, NOTE not on 70160 BOM	☐	☒	☐	COTS
72910	O-RING; 016; Silicone Rubber; Duro 50A NOTE not on 70160 BOM	☐	☒	☐	COTS
70881	PLASTITE #6 X 1/2" 18-8 SS NOTE not on 70160 BOM	☐	☒	☐	COTS

3.0 Detail

This ECO replaces the birns locking sleeve [**CLS-001F and THR-SNP-RNG**] with the seacon locking sleeve [**72909**]. The locking sleeves are cross compatible, but the seacon version is a single molded piece where the birns uses a snap ring for retention.

Note that the seacon locking sleeve cannot be used for field repairs or rework, in which case the older assembly should be used.

In addition to the ECO modifying the power module locking sleeve, a new assembly kit was made to ameliorate the problem on fielded units and units that required rework.

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The Power Module Locking Sleeve Strain Relief Kit **[72912]** Is a kit containing a small o-ring **[72910]** and a cable clamp assembly **[72911 and 70881]**. This can be used on existing power modules equipped with the birns locking sleeve **[CLS-001F]** to help prevent the snap ring from popping out. See below.



Note that no modification to the work instructions were done.

4.0 Disposition of Material

All new power modules should be built to Rev G using the new locking sleeve.

Stock in hand should be equipped with 72192.

CLS-001F can be used for other assemblies that do not rigidly mount the 8 pin connector, this includes the tethers and the 8-pin extension. 72910 can optionally be used with those assemblies.

5.0 Action Items

Action	Department	Acknowledgement Initials
Update BOM in Epicor	Engineering	aeg
Update drawing	Engineering	aeg
Order new parts for 70160 and 72912 production	Purchasing	JB

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6.0 Modified / Referenced Documents:

Document	Current Revision

7.0 Revision History

Date Revised (mm-dd-yyyy)	Location of Change (section, paragraph no., step no., etc.)	Description of Change Made	Name of Person making the Change
7/10/2020	-	Initial Release	aeg