

	Doc or ECO #:	70023-002	Date:	7/30/18	Author:	JK
	Rev. #:	A				
Engineering Change Order (ECO) Add Isolation Washers	Engineering Approval:	AEG	Date:	08/01/18	Quality Approval	DO

P/N #:	70023	Effective Date:	August 1, 2018
Title:	Add Isolation Washers		

1.0 Purpose / Summary

The M2 Stainless Steel Cap Screws was piercing the solder mask of the LED Emitter Board creating a short circuit. The addition of Flat Washer M2 Polycarbonate eliminates this issue.

2.0 Parts Affected

Part Number	Notes	Removed	Added	New	Modified	Inactive
71413	Flat Washer M2 Polycarbonate , Initial Check In	☐	☒	☒	☐	☐
70023	Remove Individual Potted Volumes, Add Washers	☐	☐	☐	☒	☐

3.0 Detail

The Type 18-8 Stainless Steel Socket Head Cap Screw M2 Thread, 3mm Length, 0.4mm Pitch **[70267]** was piercing the solder mask of the LED Emitter Board **[70019]** creating a short circuit. The adjacent LED Emitters no longer illuminate once the short occurs.

The addition of Flat Washer M2 Polycarbonate **[71413]** between the Type 18-8 Stainless Steel Socket Head Cap Screw M2 Thread, 3mm Length, 0.4mm Pitch **[70267]** and the LED Emitter Board **[70019]** reduces the risk of solder mask damage due to the increased surface area and the relatively soft nature of the thermoplastic.

The risk of a short circuit is eliminated due to the nonconductive property of Polycarbonate.

4.0 Disposition of Material

No rework or disposal of any completed stock.

Any pre-potted work in progress should have this modification applied.

5.0 Action Items

Action	Department	Acknowledgement Initials
--------	------------	--------------------------

	Doc or ECO #:	70023-002	Date:	7/30/18	Author:	JK
	Rev. #:	A				
Engineering Change Order (ECO) Add Isolation Washers	Engineering Approval:	AEG	Date:	08/01/18	Quality Approval	DO

Build M5 LED Module Assembly [70023] to conform with the ECO	Production	KK, KM
Update BOM in Epicor	Engineering	RN

6.0 Modified / Referenced Documents:

Document	Current Revision
BOM-70023	B
WI-70023	A

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
7/30/2018	ALL	Initial Release	JK