

	Doc or ECO #:	ECO-70269-001	Date:	08/25/2020	Author:	SL
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	09/1/2020	Quality Approval:	aeg

P/N #:	50269	Effective Date:	September 1, 2020
Title:	PRO4 Rotating Manipulator Whip Improvements		

1.0 Purpose / Summary

- The purpose of this ECO is to increase the durability of the Rotating Manipulator Whip and simplify the assembly procedure.

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
50269	Top Level Assembly	☐	☐	☒	C
52078	PAM Potting Housing Modified for alignment	☐	☐	☒	B
50212	IE55 Connector Whip Vendor Swap	☐	☐	☒	B

3.0 Detail

- The IE55 Connector Whip [50212] from Inuktun is of low quality and results in repeated failures from debonding. The over molding is poorly adhered to the cable jacket allowing water ingress. In the picture below that you can see the over molding is not adhered to the metal sleeve nor the cable jacket itself.



- To resolve this issue, we have switched manufactures to Underwater Systems and will be adapting the cable found on the Mission Specialist Systems to the Pro 4 Rotating Manipulator Cable Assembly.

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- The PAM housing has been updated to include a cutout for PAM positioning as well as increasing the hole size to thread the IE55 Cable.

4.0 Disposition of Material

- N/A

5.0 Action Items

Action	Department	Acknowledgement Initials
Update BOMs	Engineering	SL
Updated GA	Engineering	JV
Update Epicor	Purchasing	SL
Update WI	Engineering	SL

6.0 Modified / Referenced Documents:

Document	Current Revision
BOM-50269	Click here to enter text.
ME-50269	C
ME-52078	B

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
10/14/2020		Initial Release	SL