

	Doc or ECO #:	71006-004	Date:	7/8/20	Author:	GD
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	7/8/20	Quality Approval	aeg

P/N #:	71006	Effective Date:	July 13, 2020
Title:	New mounting scheme for communication PCB [70192]		

1.0 Purpose / Summary

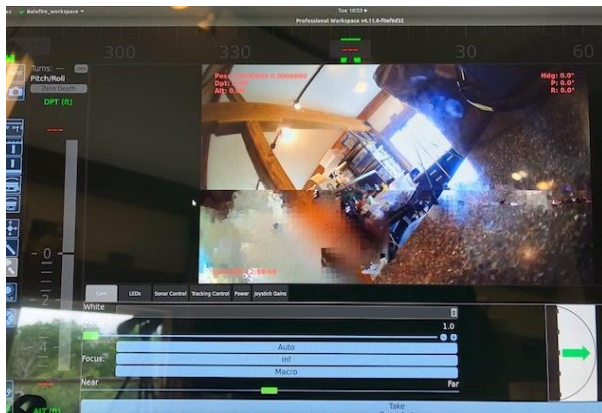
This modification is designed to rectify intermittent video noise that can be noticed at higher thruster loads. The rectification involved a new mounting scheme for communication PCB **[70192]** and re-routing of related wires.

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
71006	Top level assembly	☐	☐	☒	D

3.0 Detail

It was noticed, during wet testing at production, an intermittent video noise at high thruster loads as shown below.



An extensive troubleshooting revealed the noise is due to interference between the 8 port ethernet hub **[70197]** mounted underneath the communication PCB **[70192]** and the DCM signals created at the power converter PCB **[70155]** located directly under the communication PCB. The interference is worse at max power load at the power converter board.

To minimize the above said noise interference it was necessary to change the position of the 8 port Ethernet hub by rotation the communication board by 180 degrees. As a result, all 9 port wires and the 9

	Doc or ECO #:	71006-004	Date:	7/8/20	Author:	GD
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	7/8/20	Quality Approval	aeg

jumper wires (which connects power converter PCB and communication PCB) have to be re-routed & repositioned.

This ECO addresses all changes involved including new work instructions about re-routing wires etc.

Work instructions have been updated, but following two photos show the difference in position of the communication PCB [70192]

Old:



New: (after rotating communication board by 180 degrees and re-routing wires)

	Doc or ECO #:	71006-004	Date:	7/8/20	Author:	GD
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	7/8/20	Quality Approval	aeg



No changes to drawings or bill of materials is required for this ECO.

4.0 Disposition of Material

All Pro5 Combo box modules [71006] in stock should be updated to meet the modification listed in this ECO

5.0 Action Items

Action	Department	Acknowledgement Initials
Train production and implement the modification	Engineering	GD
Update WI	Engineering	GD

6.0 Modified / Referenced Documents:

Document	Current Revision
WI-70016	E

	Doc or ECO #:	71006-004	Date:	7/8/20	Author:	GD
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	7/8/20	Quality Approval	aeg

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
7/13/2020	-	Initial Release	GD