

	Doc or ECO #:	ECO-70188-001	Date:	9/11/2019	Author:	GD
	Rev. #:	001				
Engineering Change Order (ECO)	Engineering Approval:	Aeg	Date:	11/22/2019	Quality Approval	DO

P/N #:	70188	Effective Date:	November 22, 2019
Title:	Replacing obsolete M100 modem		

1.0 Purpose / Summary

The M100 Ethernet Modem Board (De-cased) (VR PN: 50153) is obsolete and a new modem assembly, RAK Modem G100 MSS Subsea Assembly (72247), has been introduced to replace the outgoing M100 modem used inside M5 Comms Module Board Assembly (70188).

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
70188	M5 Comms Module Board Assembly	☐	☐	☒	F
50153	M100 Ethernet Modem Board (De-cased)	☒	☐	☐	A
72247	RAK Modem G100 MSS Subsea Assembly	☐	☒	☐	A
70196	Nylon Unthreaded Spacer, 1/4" x 11/16" Length	☒	☐	☐	N/A
72297	ROUND UNTHREADED SPACER M3 NYLON 6MM	☐	☒	☐	N/A
70191	M5 Communication Module	☐	☐	☐	C
71006	Pro5 Power and Comms Box Assembly	☐	☐	☐	D

3.0 Detail

The M100 modem is used on M5 Comms Module Board Assembly to convert 4 wire Ethernet to 2 wire Ethernet and vice versa for Ethernet communication between the ROV and the top side ICB panel. The M100 has become obsolete and a new modem assembly based on LX200V30 (RAK) Modem has been designed to replace the M100 modem. This ECO deals with all changes involved is the replacement of M100 modem with new RAK modem assembly. The M5 Communication Module (70191) and Pro5 Power and Comms Box Assembly (71006) listed under part affected as these modules get M5 Comms Module Board Assembly (70188) which is captured in this ECO.

4.0 Disposition of Material

The remaining (If any) stock of M100 should be used in production.

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5.0 Action Items

Action	Department	Acknowledgement Initials
UPDATE BOM-70188	ENGR	GD
EPICOR BOM UPDATE	ENGR	RN
UPDATE WI-70191-MSS Communication Module	ENGR	GD
UPDATE 70188.PDF- M5 Comms Module Board Assembly Drawing	ENGR	JV
UPDATE WI-71006- Pro5 Power and Comms Box Assembly	ENGR	GD

6.0 Modified / Referenced Documents:

Document	Current Revision
WI-70191-MSS Communication Module	F
74427.PDF - RAK modem G100 MSS Subside Assembly Drawing	A
70188.PDF- M5 Comms Module Board Assembly Drawing	F
WI-71006 - Pro5 Power and Comms Box Assembly	C

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
9/11/2019		Initial release	GD