

Engineering Department

Engineering Change Order (ECO)

ECO #: ECO-Serial Numbers-001

Effective Date: August 15, 2017

Title: Serialization

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Date: August 15, 2017

Engineering Approval: aeg

Date: August 15, 2017

Operations Approval: aeg

Date: August 15, 2017

Summary:

Pro4, Pro4 Ultra, IP65, MSS, TDS and Hand controller systems will include serial numbers for identification and trackability purposes

Parts Affected:

Part Number	Notes	Removed	Added	Modified
SUB-PRO4-N		☐	☐	☒
SUB-PRO4-P		☐	☐	☒
SUB-PRO4-NI-N		☐	☐	☒
SUB-PRO4-NI-P		☐	☐	☒
51001		☐	☐	☒
51010		☐	☐	☒
51011		☐	☐	☒
51004		☐	☐	☒
51005		☐	☐	☒
51006		☐	☐	☒

51007	Click here to enter text.	☐	☐	☒
51008		☐	☐	☒
51009		☐	☐	☒
PN4-U		☐	☐	☒
50261		☐	☐	☒
52362		☐	☐	☒
70218		☐	☐	☒
THR-TDS-STD		☐	☐	☒
THR-TDS-XCAP		☐	☐	☒
70452		☐	☐	☒
THR-N-250 THR-N-250-KIT THR-N-330 THR-N-330-KIT THR-N-410 THR-N-410-KIT THR-N-500 THR-N-500-KIT THR-N-750-KIT THR-N-CUS THR-N-CUS-KIT THR-N-FT THR-NEG-1000 THR-NEG-1000-KIT THR-NEG-15 THR-NEG-250-KIT THR-NEG-330 THR-NEG-330-KIT THR-NEG-500	All Tether part numbers	☒	☐	☒

THR-NEG-500-KIT THR-NEG-660-KIT THR-NEG-750 THR-NEG-750-KIT THR-NEG-CUS THR-NEG-CUS-KIT THR-NEG-FT THR-PER-130 THR-PER-130-KIT THR-PER-200 THR-PER-200-KIT THR-PER-65 THR-PER-65-KIT THR-PER-CUS THR-PER-CUS-KIT 70384				
71161		☐	☐	☒
71652	Added serial number	☐	☐	☒

Detail:

Currently Pro4, Pro4 Ultra and IP65 ICBs include the ROV serial number as a form of identification. This can cause potential issues when tracking each individual component in the field. As an improvement, all ICBs will have a unique serial number to identify them independently from the ROV. Furthermore, panels within the ICBs will have a unique serial number for trackability purposes.

To follow the same format, hand controllers will be assigned unique serial numbers before placing in inventory. Label with serial number should be placed under the hand controller.

The following prefixes have been established for each system:

New products start at S/N 125.

In general, unless otherwise noted
[AAA]#####

So 0-3 alpha's and 6 digit numeric.

NAV000448 is an example for the ahrs.

This matches what the provisioning tools use for the MSS modules.

Pro4

Pro4 ROV:	Jyearxxx
Pro4 ICB:	ICByearxxx
Pro4 Panel:	PPI serial number

Pro4 Ultra

Pro4 Ultra ICB:	UCByearxxx
Pro4 Panel:	UPyearxxx

IP65

IP65 ICB:	IPyearxxx
IP65 Panel:	IPPyearxxx

MSS

MSS ICB:	Myearxxx
MSS Panel:	MPyearxxx
MSS Alpha ROV:	APH-xxxx
MSS Defender ROV:	DEFyearxxx
PRO5 ROV:	PRO5year####

TDS

Standard TDS: TDSyearxxx
 Extended TDS: TDEyearxxx
 MSS Fiber Winch: TDWFyearxxx

Tether:

MSS Fiber: TFOyearxxx
 Seacon: SMproductionid-xx (i.e *SM230432-10*)
 Teledyne: TCSDxxxxxxx (i.e *TCSD453798*)
 Precision Assemblers: yyxxx (i.e *18067*)

Hand Controller:

Standard Hand Controller: HCyearxxx

MISC:

Battery box power supply: BByear###
 4K SD view camera: 4KYear###

Action Item:

Action	Department	Acknowledgement Initials
- Generate and keep track of assigned serial numbers for each system. - Create an excel sheet with serial number and customer name to temporarily track systems, until a system is established for long term tracking. - Stamp all systems when shipping with appropriate serial numbers following the prefix stated above.	Production	KK
Follow updated "Pro4 Final Rev.B" and "Pro 4 ULTRA Manual Rev.B" QC sheet on every Pro4 system being shipped.	QC	KK

Modified / Referenced Documents:

Document	Current Revision
Pro 4 Manual Check Sheet	B
Pro 4 ULTRA Manual Check Sheet	B
Explorer-Scout-Voyager Manual Check Sheet	B

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
8/15/2017	All	Init	CH
4/6/2017	ALL	Added spec for tether and winch	aeg
10/18/2018	Detail	Added pro5, 4K camera, and battery boxes	aeg
4/11/2019	Detail, Parts Affected	Added Hand Controller Serial Number	CH
8/22/2019	Detail	Add general note	AEG

-- END OF ORDER --