

	Doc or ECO #:	ECO-70044-003	Date:	1/8/21	Author:	JV
	Rev. #:	A				
Engineering Change Order (ECO)	Engineering Approval:	aeg	Date:	1/8/21	Quality Approval	aeg

P/N #:	70044	Effective Date:	December 31, 2020
Title:	EOL Ipro Lens replacement		

1.0 Purpose / Summary

The previous camera lens went EOL so a replacement lens was chosen; mating parts were also revised to suit the new lens. The S/N tag was updated to the metalized tag and a cable label was officially added within the assembly.

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
70044	Overall housed camera assembly	☐	☐	☒	D
70606	Camera guts assembly	☐	☐	☒	F
70620	Internal camera assembly – front plate drive	☐	☐	☒	D
70608	Lens / camera sensor assembly	☐	☐	☒	D
70609	Lens Bracket	☐	☐	☒	D
71808	Internal serial number label replaced with metalized label	☐	☐	☒	A
70983	Ipro lens, EOL	☒	☐	☐	A
70614	Revised qty from 4 to 2	☐	☐	☒	A
70984	Spring disc washers; no longer needed	☒	☐	☐	A
70641	Ipro lens fixture plate	☒	☐	☐	A
72839	Flathead screws for lens adapter; Not a new PN.	☐	☒	☐	A
73163	New lens; Ulanzi Iphone fisheye lens	☐	☒	☐	A
73131	New threaded lens fixture plate	☐	☒	☐	A
73169	O-Ring for thread retention	☐	☒	☐	A
72986	Cable label added to BOM & GA	☐	☒	☐	A

3.0 Detail

The Ipro fisheye lens went EOL from our supplier. Various other lenses we purchased, tested and compared against our EOL lens. Without many compatible options, the current lens was chosen. The angle of view is slightly less than the Ipro lens. Our range of view is also somewhat reduced with the current lens.

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The current lens was built into the assembly and tested with 5000 repetitive servo actuations. The full camera assembly was also packaged in a case and drop tested to 38", the camera remained operational.

4.0 Disposition of Material

70044 assemblies should be built as rev D

All stock of 70620 should be modified to current revision – DONE

All stock of 70609 should be modified to current revision - 20 modified for first go; rest of stock to follow

The last batch of 70044 assemblies to be built as rev C is S/N: 703, 704, 705, 707

The first 70044 assembly to built as rev D is S/N: 708 & everything after

Old assemblies of 70044 that return for rework, do not need to be reworked to the new lens if their components are in useable condition. If any of the lens components are damaged, update the assembly to the newest revision.

Some remaining 70044 Rev C parts will be stored at the barn.

5.0 Action Items

Action	Department	Acknowledgement Initials
Place order of latest revision parts & ask for FA pieces	Purchasing	RM
Epicor Update	ENGR	JV

6.0 Modified / Referenced Documents:

Document	Current Revision
70044 outline drawing --- Will be posted shortly; awaiting assembly wet/dry weights	D
70044 assembly drawing	D
70606 assembly drawing	F
70608 assembly drawing	D
70044 Brady Serial number Template	D
WI-70044-MSS camera assembly instructions	D
QC-70044 - in process checksheet	D

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Document	Current Revision
QC-70044 - completed assembly checklist	F
QC-WI-70044 – QC checklist instructions	B
WI-70389 - Dome replacement instructions	Not modified

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
12/22/2020	ALL	Initial creation	JV