

	Doc or ECO #:	ECO-70044-002	Date:	2/6/2019	Author:	JK
	Rev. #:	C				
Engineering Change Order (ECO)	Engineering Approval:	Aeg	Date:	2/6/2019	Quality Approval	DO

P/N #:	70044	Effective Date:	February 6, 2019
Title:	Camera Assembly Servo Replacement, Drawing/BOM Update		

1.0 Purpose / Summary

The serial number label was added to the drawing/bom. Both were updated.

The Hitec servo is EOL and is being replaced in the assembly with MKS DS75K all metal servo. Updates to three parts where required for compatibility with the MKS servo.

2.0 Parts Affected

Part Number	Notes	Removed	Added	Modified	REV
70044	Added Label to BOM	☐	☐	☒	C
70078	Metric Aluminum Unthreaded Spacer 4.5 mm OD, 2mm Length, M2.5 Screw Size	☒	☐	☐	-
70606	Update BOM, Replace Hitec with MKS Servo, Update Exploded View, Balloons	☐	☐	☒	C
70608	Remove Aluminum Spacers, Update Exploded View, Update BOM, Balloons	☐	☐	☒	C
70609	Major Geometry Update for Compatibility with MKS Servo, Update Tolerances, Views, and Notes	☐	☐	☒	C
70611	Major Geometry Update for Compatibility with MKS Servo, Update Drawing Views, Burrs Edge Break Tolerance	☐	☐	☒	B
70620	Update for Compatibility with MKS Servo, Update Views, Tolerance	☒	☐	☒	C
71808	Serial Number Label – MSS HD Camera Module	☐	☒	☐	-
70065	Old servo removed from BOM	☒	☐	☐	-
71816	New servo	☐	☒	☐	-

3.0 Detail

The Serial Number Label – MSS HD Camera Module **[71808]** was not accounted for previously. The part number was created, and the drawing was updated to include the label and to show where to affix it to the camera assembly.

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The HiTec HS-35HD Analog Servomotor **[70065]** has had a substantial number of field failures presumably from impact during shipping. The HiTec HS-35HD Analog Servomotor has now gone end of life (EOL). This servo is being replaced with MKS DS75K Analog Servomotor **[71816]** which is all metal construction and has approximately three times the rated torque output. This should alleviate both the failure due to impact and lack of availability of the Hitec Servo. The integration required modifications to three parts in the assembly, the update of three assemblies/subassemblies, and the removal of one part.

4.0 Disposition of Material

70078: all inventory to be transferred to Engineering.

70609: all rev B inventory to be transferred to Engineering

70611: all rev A inventory to be transferred to Engineering

70620: all rev B inventory to be transferred to Engineering

70065: any remaining to be transferred to Engineering

70044, 70606, 70608: completed assemblies/subassemblies can be used, incomplete assemblies/subassemblies should be reworked to the following revision standards:

70044 Rev C

70606 Rev D

70608 Rev C

5.0 Action Items

Action	Department	Acknowledgement Initials
Update BOM In Epicor	Engineering	RN
Update Part and Assembly Revisions in Epicor	Engineering	RN
Inhouse fabrication Qty 10+ for transfer to stock	Engineering	JK
Rework Incomplete Assemblies	Production	KK
Remove Legacy Parts from Inventory	Inventory Control	SL

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6.0 Modified / Referenced Documents:

Document	Current Revision
BOM-70044-m5sCAM720ipt	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
2/6/2019	-	Initial Release	JK
2/8/2019	2, 4	Minor clarification on disposition of old servos	AEG
2/11/2019	2	Correct p/n for new servo	aeg
3/15/2019	4	Update Revision for 70606 to synchronize with Epicor, no changes were made to the assembly	JK