Creo Products Inc.

Engineering Change Order

ECO#: B739

Originator: Yun Lam Li **Page:** 1

Department: CTP **Date: 97Aug08**

Engineering Changes

Part #	Rev/Status From	To	Description	Product	ECRs	Back Comp?	Reason for chg.	Serv. Class	Prod. Class
57-4822A	-	A	FAB,CLAMP,CABLE TRAY,ENGINE	CTP	-	-	7	F	2
10-3671A	-	A	CAB,ASSY,LAS-PWR/EH-PDB	CTP	-	-	7	F	2
11-0404A	Y	Z	ASSY,EM,ENGINE MODULE	CTP	-	yes	7	F	2
10-0747B	X	Y	ASSY,ELEC,POWER DISTRIBUTION BOX	CTP	-	yes	7	F	2
32-4004A	B	C	ASSY,EO,EXPOSURE HEAD, LARGE, HRX	cross products	-	yes	5	-	4
16-3845 (updated by B974)			CAB,ASSY,COAX,RG223,SMA-SMA						

Copies To:	Title:	Signature:	Date:	Code Descriptions			
Field Service Manufacturing Electrical	Design Eng.	Yun Lam Li	97Aug08	Status	Service	Production	Reason
	Production Eng.			AC - ACTIVE IN - INACTIVE OB - OBSOLETE PR - PREREL.	R-RETROFIT S-NEXT CALL F-NEXT FAIL T-THEIR COST N-NOT UP-GRADABLE NA-NOT APPL.	1-RETROFIT ALL UNITS 2-FINISHED GOODS 3-WIP 4-FUTURE 5-DOCUMENT ONLY	1-DESIGN 2-MANUFACT 3-ASSEMBLY 4-DOCUMENT 5-COST 6-MAINT. 7-RELAIBIL. 8-SOFTWARE 9-OTHER
	Field Service Eng.						
	Project Eng.						
	Project Manager						
	Product Manager						

Details of Problem and the Changes

PRODUCT: 3244 Automatic

PROBLEM #1: CABLE BREAKAGE IN UNIVERSAL CABLE BUNDLE.

CAUSE(S):

1. Too many cables in the Universal Cable bundle. Cables are tightly packed.
2. Two bulky power cables assemblies (10-3088A and 10-0781B) which take up lot of room in the track.
3. No cable clamp to secure cable bundle.
4. The solid core RF cable 16-3532 is not suitable for flexing application.
5. The bend radius is too small for the RF cable 16-3532.

SOLUTION:

1. Coil up unused cables and store in an antistatic bag. Place bag in a safe location behind the cable tray.
2. Replace the two power cables (10-3088A and 10-0781B) with a 12-conductor x 14 AWG flat cable (10-3671A).
3. Install cable clamp 57-4822A at the cable tray end.

Note: cable clamp should be installed at both ends of the track. Due to the mechanical restriction, cable clamp can not be installed on the Exposure Head side of the track.

4. Use stranded core RF cable 16-3845.

PROBLEM #2: REMOVE ADLAS LARGE LASER CONTROL CABLE 10-0989A

REASON(S) :

1. Reduce number of cables in the engine flex track.
2. Adlas is no longer support the large laser. The delivery is long and high price tag for the cable.

SOLUTION :

Update BOMs for 11-0404A and 32-4004A.

Manufacturing

Future production

Remove Adlas power and control cable 10-0989A from the Engine Module (11-0404A) BOM and add it to the HRX large laser (32-4004A) BOM.

In progress

Return Adlas cable to stock.

Field Service

Remove 10-0989A from cable track. Coil up cable and store in an antistatic bag. Place bag in a safe location behind the cable tray.

ACTION

FIELD SERVICE

Parts required for implementing this ECO

Quantity	Part Number	Description	Remark
1	10-3671a	CAB, ASSY, LAS-PWR / EH-PDB	
1	57-4822A	FAB, CLAMP, CABLE TRAY	
130 MM	56-3279	TAPE, SPONGE, SILICONE, SELF-ADHESIVE	required for clamp
4	52-3049	NUT, M4	required for clamp
1	16-3845	CAB,ASSY,COAX	Micro-Coax part no. UFF147B-0-1800-30x30
30	18-3244	HDWR, SEPARATOR, CABLE TRACK	installed in cable track to separate flat cables from coax/twisted pair/air hose
1	AP-11-0404AZ	DOC,ENGINE MODULE	track installation procedure
1	ASSY DRAWING 11-0404AZ 4/4	ASSY,ENGINE MODULE	detail B on assembly drawing Sheet 4 of 4 show cable track arrangement.

DOCUMENTATION (Isabelle Fusey)

Please post ECO and drawing 11-0404AZ page 4/4 on wed site.