

# Production Order: 500000294405



Production Order Document  
Production Order Qty: 500  
PC  
Sheet: 1 of 1

## Material: SA0155-01 Rev F

Material Type: ZFRT Description: Edwards Flex Shaft Commander 155885  
 Production Version: 7987 Order Type: ZSTD  
 Plant / Business Unit: 1213 / AC5 Project Phase:

Opr No.	Planned WorkCenter Description	Operation Details						Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
50	KITTING3 Kitting Devices 	Kitting Devices Perform Order Kitting, Load Minor Mandrels, Dry Extrusions, and Cut FEP Record Time Extrusions Enter Dryer (Initial/Time/Date): <u>09JAN24 10:30PM</u> Record Time Extrusions First Exit Dryer (Initial/Time/Date): <u>KP02 9:30am 10 Jan 24</u> Record Dryer Shelf #: <u>N/A</u>									
	Kitting Devices	Component Number	Req'd Rev Rev Used	UOM	Qty.	Batch No.	Actual Qty Used	N/A	N/A	09JAN24	KL27
		MM0179-01	D <u>D</u>	PC	500	<u>0000276172</u>	<u>500</u>				
		MM1536-01	B <u>B</u>	PC	500	<u>000028412</u>	<u>500</u>				

Notes: DA 2564, 2484.

N/A  
N/A

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Opr. No.	Planned WorkCenter Description	Operation Details						Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	N/A	RM0158-01	E	<u>E</u>	PC	200	<u>81054</u>	<u>N/A</u>	<u>N/A</u>		
		1000-1153-01	A	<u>A</u>	PC	594	<u>87110</u> <u>87218</u> <u>87222</u>	<u>N/A</u> <u>200</u> <u>200</u> <u>200</u>			
		1000-2053-01	A	<u>A</u>	PC	500	<u>0000278880</u> <u>000268040</u>	<u>400</u> <u>100</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		MM1537-02	A	<u>A</u>	PC	500	<u>0006276175</u>	<u>500</u>			
		TL0167-02	E	<u>E</u>	PC	70	<u>N/A</u> <u>N/A</u>	<u>Bulk</u> <u>Bulk</u>			
		TL0165-05	J	<u>J</u>	PC	5	<u>N/A</u> <u>N/A</u>	<u>Bulk</u> <u>Bulk</u>			
		TL0165-03	J	<u>J</u>	PC	5	<u>N/A</u> <u>N/A</u>	<u>Bulk</u> <u>Bulk</u>			

## Notes:

N/A  
N/A  
N/A

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N/A	N/A	141967-01	02	D2	PC	500	82899	468			
		RM7349-02	C	C	PC	543	85500 82332 82565 82566 82673/82678	41 100 50 50 200/106			
		RM7348-01	C	C	PC	500	78687	X031 11JAN24 550-450			
		RM4001-01	B	B	PC	125	82877 82094	100 100	N/A	N/A	N/A
		RM0607-01	D	D	PC	56	82459 71863	75 77			
		RM0498-01	C	C	PC	500	0000275489	483	N/A		
		RM0009-04	I	I	PC	1	82971 N/A	Bulk Bulk			
		RM0009-04	I	I	PC	1	82971	Bulk			

## Notes:

N/A  
N/A  
N/A

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N/A	N/A	MM1538-01	A	<u>A</u>	PC	500	<u>N/A</u>	<u>Bulk</u>			
		MM1537-01	A	<u>A</u>	PC	1000	<u>0000278970</u>	<u>500</u>			
							<u>N/A</u>	<u>N/A</u>			
		MM0177-01	C	<u>C</u>	PC	500	<u>0006281413</u>	<u>100</u>			
							<u>N/A</u>	<u>N/A</u>			
		MM0180-01	E	<u>E</u>	PC	500	<u>0006278966</u>	<u>500</u>			
							<u>N/A</u>	<u>N/A</u>			
		MM0178-01	E	<u>E</u>	PC	500	<u>0000282489</u>	<u>425</u>			
							<u>0000275691</u>	<u>100</u>			
		MM0176-01	D	<u>D</u>	PC	500	<u>0006276174</u>	<u>500</u>			
							<u>N/A</u>	<u>N/A</u>			
		MM0074-01	G	<u>G</u>	PC	500	<u>0000285404</u>	<u>294</u>			
							<u>0000286923</u>	<u>245</u>			

**Notes:**

NIA

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Opr No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	N/A	N/A	N/A	N/A	N/A	N/A
100	CATASY01  Catheter Assembly 1  	Line Clearance Perform Line Clearance and Heat Gun Setting	500	0	10Jan24	KL95
	Line Clearance					
	Confirmation Reqd(Milestone )					
150	CATASY01  Catheter Assembly 1  	Major and Minor Mandrel Assembly	500	0	10Jan24	NK62 AF54 AX05 PM96 CL30 Y04
	Major and Minor Mandrel Assembly					
<b>Notes:</b>						
N/A						
N/A						
N/A						

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Opr. No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	Confirmation Reqd(Milestone )	N/A	N/A	N/A	N/A	N/A
200	CATASY01 Catheter Assembly 1  Loading Braid Stock Confirmation Reqd(Milestone )	Loading Braid Stock	500	0	10 Jan 24	MY50 SXII ST96 hy35
250	CATASY01 Catheter Assembly 1  Trim Braid Wire at Proximal End		500	0	10 Jan 24	VP62 SXII CP&E V078

Notes:

N/A

N/A

N/A

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Opr No.	Planned WorkCenter Description	Operation Details	Comp Qty.	Scrap Qty & Desc.	Date Comp.	Initials
NIA	Trim Braid Wire at Proximal End  Confirmation Reqd(Milestone )	NIA	NIA	NIA	NIA	NIA
300	CATASY01  Catheter Assembly 1  	Insert Cut Hypo Tube  Insert Cut Hypo Tube  Confirmation Reqd(Milestone )	500	0	10 Jan 24	W25 LMub SXer AS31
350	CATASY01  Catheter Assembly 1	Load Tubing	500	0	10 Jan 24	C497 DX35 GS22 SH23
Notes:						
NIA						
NIA						
NIA						

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Opr No.	Planned WorkCenter Description	Operation Details	Comp Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	Load Tubing Confirmation Reqd(Milestone )	N/A	N/A	N/A	N/A	N/A
400	CATASY01 Catheter Assembly 1  Reflow	.	500	0	10 Jan 24	RN27 AF54 AX05 NL62 pm96 SX60 SH85
450	CATASY01 Catheter	FEP Removal	500	0	10 Jan 24	pm96
Notes:						
N/A						
N/A						
N/A						

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Opr No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
	Assembly 1  N/A  FEP Removal  Confirmation Reqd(Milestone )	N/A	N/A	N/A	N/A	N/A
500	CATASY01  Catheter Assembly 1  In-process Inspection and Rework  Confirmation Reqd(Milestone )	In-process Inspection and Rework Material Consumed: Part #: 1000-1153-01 Batch #: 87106 Qty: 21 Part #: N/A Batch #: N/A Qty: N/A Part #: N/A Batch #: N/A Qty: N/A Part #: N/A Batch #: N/A Qty: N/A Part #: N/A Batch #: N/A Qty: N/A	488	EW - III OF - III EW - III 10 Jan 24 12	LL61 VC 09 CB81 TA 36 P66 PP40	
N/A	N/A	N/A N/A N/A N/A	N/A	N/A	N/A	N/A
Notes:						

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Opr. No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
550	CATASY01  Catheter Assembly 1  	Remove Heat Shrink & Mandrel  Remove Heat Shrink & Mandrel  Confirmation Reqd(Milestone )	488	0	10 Jan 24	VAP6 RS23 AX82 ML38 CL05
600	CATASY01  Catheter Assembly 1  	Distal Tip Assembly	478	DL- II MAH - I MAS- III ID- III EH- I  10	11 Jan 24 ①	FSOJ AX82 RS23 SV46 CL05

Notes:

N/A  
N/A  
N/A

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OPY 46 11 Jan 24  
Late entry

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N/A	Reqd(Milestone )	W/A	N/A	N/A	N/A	N/A
650	CATASY01  Catheter Assembly 1  	Loading Heat Shrink	478	O	10 Jan 24	AX82 mvt
	Loading Heat Shrink					
	Confirmation Reqd(Milestone )					
700	CATASY01  Catheter Assembly 1  	Tipping Record Tipping Oven Information: TMI: 0521 Cal Due: 31 May 24 TMI: 0386 Cal Due: 31 May 24 TMI: 2083C Cal Due: 31 May 24 TMI: 0936A Cal Due: 31 May 24  Tipping	478	O	10 Jan 24	Hv36
Notes:						
N/A						
N/A						
N/A						

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Opr No.	Planned WorkCenter Description	Operation Details	Comp Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	Confirmation Reqd(Milestone )	N/A	N/A	N/A	N/A	N/A
750	CATASY01  Catheter Assembly 1    Tip Inspection/ Flash Removal  Confirmation Reqd(Milestone )	Tip Inspection/ Flash Removal Material Consumed: Part #: <u>PM4001-01</u> Batch #: <u>82094</u> Qty: <u>15</u> Part #: <u>PM0007-01</u> Batch #: <u>71863</u> Qty: <u>8</u> Part #: <u>N/A</u> Batch #: <u>N/A</u> Qty: <u>N/A</u> Part #: <u>N/A</u> Batch #: <u>N/A</u> Qty: <u>N/A</u> Part #: <u>N/A</u> Batch #: <u>N/A</u> Qty: <u>N/A</u>	478	O  10Jan24	STX48 mm² M18	
800	CATASY01  Catheter Assembly 1    Major Mandrel Removal		473	ACD-HH  10Jan24  ⑤	SS44	
Notes:						
N/A						
N/A						
N/A						

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Opr No.	Planned WorkCenter Description	Operation Details	Comp Qty.	Scrap Qty & Desc.	Date Comp.	Initials
	Major Mandrel Removal  N/A  Confirmation Reqd(Milestone )	N/A	N/A	N/A	N/A	N/A
850	CATASY01  Catheter Assembly 1  	Cut to Length Record DIM05 gage result for the first 5 parts at the start of operation: 1. <u>PASS</u> 2. <u>PASS</u> 3. <u>PASS</u> 4. <u>PASS</u> 5. <u>PASS</u>  Cut to Length  Confirmation Reqd(Milestone )	SKV - 1  472		10Jan24 ML65 Y936	
900	QUALITY1  Quality Inspection & Review	Quality Inspection and Review Perform Quality Inspection per QIP Document #3107610 Record Data in SAP ROS	N/A	N/A	N/A	MV33 TRN VX41 SH04 ML66
<b>Notes:</b>						
N/A						
N/A						
N/A						

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Opr No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	Quality Inspection & Review  Confirmation Reqd(Milestone )	<p>Re-Inspect after re-work.</p> <p>Required Inspection Visual/OD Inspection Record Inspection Data in SAP ROS Record Laser Micrometer Information:</p> <p>TMI: 0700-01 Cal Due: 31 May 24</p> <p>TMI: N/A Cal Due: N/A</p> <p>Material Consumed:</p> <p>Part #: 100-1153-01 Batch #: 87106 Qty: 12</p> <p>Part #: RM4001-01 Batch #: 82094 Qty: 15</p> <p>Part #: RM0607-01 Batch #: 71863 Qty: 10</p> <p>Part #: RM0158-01 Batch #: 81054 Qty: 8</p> <p>Part #: N/A Batch #: N/A Qty: N/A</p>	428	DIS-HH-HH HHH DISC-1 BW-11 ACD-1 EW-1 DS-1 MAR-1 #10S-1 #6US-111 #60S-HH 1111 #70S-HH #9US-1 #90S-1	10Jan24	HT72 XL91 KL61
950	QUALITY1  Quality Inspection & Review	<p>Quality Inspection &amp; Review Borescope Inspection Record Inspection Data in SAP ROS Record Tip Gage Information:</p> <p>TMI: N/A Cal Due: N/A</p> <p>Record Caliper Information:</p>	N/A	N/A	N/A	N/A

Notes:

N/A  
N/A  
N/A

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Opr No.	Planned WorkCenter Description	Operation Details	Comp Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	 Quality Inspection & Review Confirmation Reqd(Milestone)	TMI: <u>N/A</u> Cal Due: <u>N/A</u> Record DIM02 Go/No-Go Gage Information: TMI: <u>0691</u> Cal Due: <u>30Sep25</u> TMI: <u>0692</u> Cal Due: <u>30Sep25</u> Record DIM02 Inspection Results N = 54: Pass: <u>54</u> Fail: <u>0</u>	405	DIS(SP)HHT DIS-HH HHT STR-HH	10Jan24	XL91 Y936 KL67
1000	 QUALITY1 Quality Inspection & Review   Quality Inspection & Review Confirmation Reqd(Milestone)	Quality Inspection & Review Leak Test Record Inspection Data in SAP ROS Record Leak Tester Information: TMI: <u>1056</u> Cal Due: <u>31 May 24</u> Record Length Gage Information: TMI: <u>0889D</u> Cal Due: <u>30Sep24</u> Record Calibrated Ruler Information: TMI: <u>0629</u> Cal Due: <u>30Sep24</u>	377	OAL-1 LT - HH HHT HHT HHT HHT II	10Jan24	XL91 Y936 KL67

Notes:

N/A

N/A

N/A

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Opr No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	Confirmation Reqd(Milestone )	N/A	N/A	N/A	N/A	N/A
1150	PACKINT1  Packing assembly    Package  Confirmation Reqd(Milestone )	Package Package, Label, and Ship Finished Parts	350	0 12 Jan 24	AP10	

Notes:

N/A AP10 12 Jan 24

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Batch Number: 000294405

By: AB10

Date: 12 Jan 24

Reviewed By:

RB29

Date:

12 JAM 24

Notes:

N/A AB10 12 Jan 24 /

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Ergonomics at work 11/2008



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Extends to 22 November 2023 3228 FORB33  
11/22/2023 - DEVIATION A

**Requestor Name:** Udhesh Kapadnis

CONTROLLED COPY DEVIATION AUTHORIZATION NUMBER: 2484

**IZATION FORM** Extension to 23 Oct 2023 522  
\* See attached email extension to 24 Sep 2023 151  
24 Aug 23

**DEVIATION AUTHORIZATION FORM Between to 23 Oct 2023**

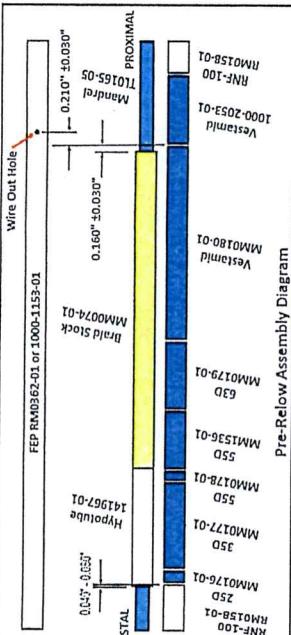
Requestor Name: Udhesh Kapadnis		Revision
Document Number Affected		
3107610		L

Deviation From:

QIP3107610, Section 8.0 Inspection Requirements  
(Supplemental Visual Inspection) OP 1050:  
Current QIP3107610 does not state to inspect for the  
incorrect extrusion configuration.

### **Deviation To:**

This DA allows addition inspection for correct assembly of extrusion material MM0179-01 and MM1536-01 during performing QIP3107610, Section 8.0 Inspection Requirements (Supplemental Visual Inspection) OP 1050. See instructions attached to this DA.



**Justification:** Recently it has been found that operators are incorrectly assembling MM0179-01 and MM1536-01. The event documents in NC-26390, and NC-26426. Only few of experienced inspectors can detect finished unit that contains incorrect extrusion configuration, and inexperienced inspectors may not which potential non-conformance unit sent to customer. Interim correction action has been implemented at OP 250, 300, 350 to detect unit built with out of oriented extrusions. This DA is adding another layer of inspection at final QC inspection to avoid incorrect assembly defects.

Part Number Affected	Revision	
SA0155-01	H	
Start Date:	End Date:	Lot Number:
26 Jul 2023	25 Aug 2023	N/A

## Risk Assessment:

Is there any potential risk(s) that may occur as a result of the proposed deviation including the following:  
Control Plans    Yes    No   FMEA's    Yes    No   Validations    Yes    No  
Details (if any): N/A

If yes to any of the above, what controls are being put in place to mitigate the risk.

**Corrective Action Required:**  Yes  No

**If no, explain:** No corrective action is required for this event as there are no changes to the current process, consumption of material, or how the product is produced. This added inspection guidelines are to avoid incorrect extrusion assembly defects.

**If no, explain:** No corrective action is required for this event as there are no changes to the current process, consumtion of material, or how the product is produced. This added inspection guidelines are to avoid incorrect extrusion assembly defects.

**Training Required:**  Yes  No **If no, explain:**

① UK55, 23JW 2023



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## Group Training Record

**Description/Objectives of Training:**  
DA- Inspection at final QC, Op#1050.

### Procedure:

- 100% inspection at Op#1050 per the instructions below.
- Inspect 1 part at a time.
- Inspection is focused on the correct MM0179-01 and MM1536-01 assembly.
- Use the example MM0179-01 and ~~MM1536-02~~<sup>D</sup> fixture for inspection. (See image 1)  
**① MM0179-01** **10AUG23**



Image- 1

### Step 1:

- Visually locate the MM0180-01 (Vestamid) transition to MM0179-01 on the completed part approximately 9.75" from the distal end using magnification light 2.25X minimum.
- Align the fixture MM0179-01 extrusion proximal end to the Vestamid transition on completed part. (See image 2)



Image- 2

- Visually verify the MM0179-01 distal end of the fixture is approximately at the same location on the completed part. (See image 3)

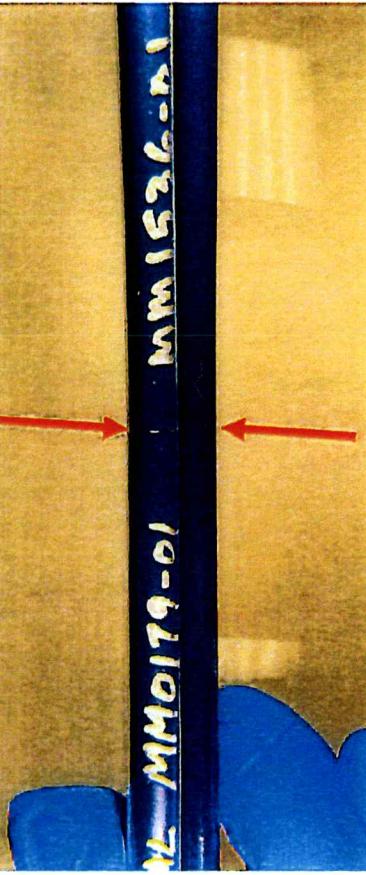


Image- 3

- Scrap the part if the transition is not approximately aligned. Save the scrapped parts for Engineer review.
- If the part transition is aligned, move to Step 2.

## CONTROLLED COPY

### Step 2:

- Visually verify the MM1536-01 distal end of the fixture is approximately at the same location on the completed part. (See image 4)

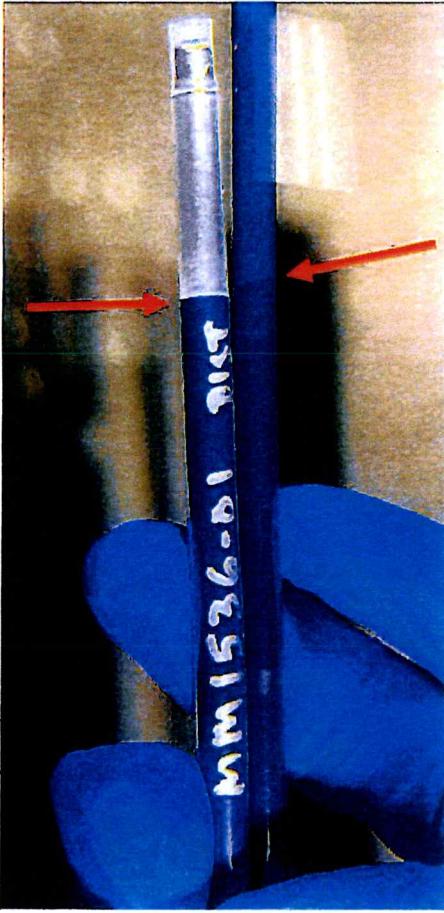


Image- 4

- Scrap the part if the transition is not approximately aligned. Save the scrapped parts for Engineer review.
- If the part transition is aligned, the part passes inspection.
- Use Image 5 as a guide for GOOD and BAD extrusion transition alignment.

1	MM0179-01  GOOD PART	MM1536-01
2	MM1536-01	MM0179-01  MM0179-01 and MM1536-01 Wrong Order - BAD PART
3	MM0179-01  Two MM0179-01 - BAD PART	MM0179-01
4	MM1536-01  Two MM1536-01 - BAD PART	MM1536-01

Image - 5

Title	Approval Name	Approval Signature	Date
Mgr. Quality Engineering	Hai Nguyen		25 Jul 2023
Mgr. Manufacturing Engineering	Jake Stanislawski		25 Jul 2023
Mgr. Operations	Matthew Benson		25 Jul 2023

FM0002.RevF Deviation Authorization

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Edited to HINN04 D28 12/12/2023

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DEVIATION AUTHORIZATION NUMBER: DA2564

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## DEVIATION AUTHORIZATION FORM

Requestor Name:	Krishna Selvaraj		
Document Number Affected	Revision		
Doc #3005206 (MPI0238)	BP		
Deviation From:	Deviation To:		
Doc #3005206 (Flex Commander MPI0238): <b>OPER850.11:</b>	Doc #3005206 (Flex Commander MPI0238): <b>OPER850.11:</b>		
Using a laser micrometer, check the DIM06 outer diameter. Position the laser indicator as close to the distal edge as possible. Start the measurement, then slowly move the part through the laser micrometer until reaching the lower edge of the shoulder.			

### Justification:

TM10602 lasermic which is currently used in SA0155-01 Flex commander product at OPER850 for Dim 6 inspection has mechanical failure and confirmed as not usable.

TM10700-01 lasermic is used at OPER900 for 100% inspection for Dim 1, Dim 6 and Dim 9. Since TM10700-01 is already qualified to inspect Dim 6 per ES0647: Laser micrometer equivalency test, there is no additional risk in using TM10700-01 for OPER850 Dim 6 inspection till TM10602 issue is resolved.

Part Number Affected	Revision		
SA0155-01	H		
Start Date:	End Date:	Lot Number:	
16 Nov 23	15 DEC 23	N/A	
<b>Risk Assessment:</b> Is there any potential risk(s) that may occur as a result of the proposed deviation including the following: Control Plans <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No FMEA's <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Validations <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Details (if any): N/A			
If yes to any of the above, what controls are being put in place to mitigate the risk – N/A			
Corrective Action Required:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>If no, explain:</b> This is a temporary change to use TM10700-01. DA will be removed once the lasermic TM10602 issues are resolved and accepted for usage.			
Training Required:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If no, explain:</b> N/A	
Title	Approval Name	Approval Signature	Date
Engineering Manager	Jake Stanislowski		16 Nov 2023
Quality Manager	Jay Zabel		16 Nov 2023
Operations Manager	Matthew Benson		16 Nov 2023



**Document No:** 5105589  
**FM5104665 Rev:** C  
**Document Type:** Manufacturing Form  
**Title:** SA0155-01 Reflow Log Sheet Form

PRODUCTION ORDER# 500000294405

OP 400

① V07810Jan 24



PRODUCTION ORDER# 500000294405

OP 400

Oven #	Cycle #	Time In	Temp. In (Actual)	Initials	Date	Time Out	Temp. Out (Actual)	Initials	Date	Qty
Tm10745	44	9:46 am	430	RN27	10Jan24	9:58 am	415	RN27	10Jan24	16
Tm10745	44	11:10am	430	AX05	10Jan24	11:22am	415	AX05	10Jan24	16
Tm10745	44	11:40am	430	AX05	10Jan24	11:52am	415	AX05	10Jan24	16
Tm10745	44	12:15pm	430	AX05	10Jan24	12:27pm	415	AX05	10Jan24	16
Tm10745	44	12:40pm	428	AX05	10Jan24	12:52pm	415	AX05	10Jan24	16
Tm10745	44	1:45pm	430	OS21	10Jan24	1:57pm	415	OS21	10Jan24	16
Tm10745	44	2:12pm	429	RN27	10Jan24	2:24pm	415	RN27	10Jan24	16
Tm10745	44	2:39pm	430	RN27	10Jan24	2:51pm	415	AX05	10Jan24	16
Tm10745	44	3:00pm	428	AX05	10Jan24	3:12pm	415	AX05	10Jan24	15
Tm10745	44	4:29pm	430	SG88	10Jan24	4:41pm	415	SG88	10Jan24	16
Tm10745	44	5:01pm	429	SX60	10Jan24	5:13pm	415	SX60	10Jan24	16
Tm10745	44	5:30pm	428	V078	10Jan24	5:42pm	415	AT39	10Jan24	13



Document No: 5105589  
FM5104665 Rev: C  
Document Type: Manufacturing Form  
Title: SA0155-01 Reflow Log Sheet Form

**PRODUCTION ORDER#** 500000294405

OP 400



Document No: 5105589  
FM5104665 Rev: C  
Document Type: Manufacturing Form  
Title: SA0155-01 Reflow Log Sheet Form

PRODUCTION ORDER# 500000294405

OP 400

Oven #	Cycle #	Time In	Temp. In (Actual)	Initials	Date	Time Out	Temp. Out (Actual)	Initials	Date	Qty
TM10942	44	9:35am	427	KL95	10Jan24	9:47 am	415	RN27	10Jan24	16
TM10942	44	10:00am	430	OS21	10Jan24	10:12am	415	OS21	10Jan24	14
TM10942	44	10:59am	430	AX05	10Jan24	11:11am	415	AX05	10Jan24	16
TM10942	44	11:25am	428	AX05	10Jan24	11:37am	415	AX05	10Jan24	16
TM10942	44	11:55am	430	AX05	10Jan24	12:07pm	415	AX05	10Jan24	16
TM10942	44	1:25pm	430	OS21	10Jan24	1:37pm	415	OS21	① 10Jan24	16
TM10942	44	1:55pm	430	OS21	10Jan24	2:17pm	415	OS21	10Jan24	16
TM10942	44	2:20pm	430	RN27	10Jan24	② 2:42pm 2:35pm	415	RN27	10Jan24	16
TM10942	44	4:21pm	430	SH85	10Jan24	4:33pm	415	SH85	10Jan24	16
TM10942	44	4:40pm	430	SH85	10Jan24	4:52pm	415	SH85	10Jan24	16
TM10942	44	5:17pm	430	SX60	10Jan24	5:29pm	415	A739	10Jan24	16
TM10942	44	6:25pm	430	SX60	④ 10Jan24	6:37pm	415	SG88	10Jan24	16

① SX60 10Jan24

② OS21 10Jan24



Document No: 5106073  
Rev: E  
Document Type: Manufacturing Form  
Title: SA0155-01 Visual Rework Form

PO #: 500000294405

OP #: 500 Shift #: 1<sup>st</sup>

Total Parts Reworked:		40	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	N/A
EH	Exposed Hypotube		12
EW	Exposed Wire		30
MP	Micropores	N/A	N/A
SCR	Scratch		1
SKV	Skive Marks	N/A	N/A
VD	Voids		5
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		CB81, VC09	10 Jan 24

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only.

Data Uploaded for Engineering Review (Check):



Document No: 5106073  
Rev: E  
Document Type: Manufacturing Form  
Title: SA0155-01 Visual Rework Form

PO #: 50000294405 OP #: 500 Shift #: 2<sup>nd</sup>

Total Parts Reworked:		35	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	N/A
EH	Exposed Hypotube		3
EW	Exposed Wire		21
MP	Micropores	N/A	N/A
SCR	Scratch		5
SKV	Skive Marks	N/A	N/A
VD	Voids		10
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		MM02	10 Jan 24

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only.

Data Uploaded for Engineering Review (Check):



Document No: 5106073  
Rev: E  
Document Type: Manufacturing Form  
Title: SA0155-01 Visual Rework Form

PO #: 500000294405

OP #: 500 Shift #: 2nd

Total Parts Reworked:		31	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	N/A
EH	Exposed Hypotube	N/A	N/A
EW	Exposed Wire	XXXX XXXX XXX XXX / /	27
MP	Micropores		
SCR	Scratch	N/A	
SKV	Skive Marks	PP40 10 Jan 24	
VD	Voids		4
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		PP 40 10 Jan 24	

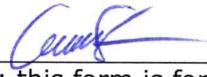
Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only.

Data Uploaded for Engineering Review (Check):



Document No: 5106073  
Rev: E  
Document Type: Manufacturing Form  
Title: SA0155-01 Visual Rework Form

PO #: 50000294405 OP #: 500 Shift #: 2

Total Parts Reworked:		36	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	0
EH	Exposed Hypotube		6
EW	Exposed Wire		31
MP	Micropores	N/A	0
SCR	Scratch	N/A	0
SKV	Skive Marks	/	1
VD	Voids		4
N/A	N/A	N/A	0
Inspected By (Sign and Date):		 10 Jun 24	

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only.

Data Uploaded for Engineering Review (Check):



Document No: 6102646  
Rev: A  
Document Type: Manufacturing Form  
Title: SA0155-01 Tipping Rework Form

PO #: 500000294405 OP #: 750 Shift #: 1st

Total Parts Reworked:		26	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
DIM07 OS / WO	DIM07 Oversized (Window Open)		5
DIM07 US / WC	DIM07 Undersized (Window Closed)		2
EH	Exposed Hypotube		8
N/A	Glue, stopper		11
Inspected By (Sign and Date):		Hv36 10 Jan 24	

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only. DIM01 OS, DIM09 OS, Foreign Material, and Cracks are not reworkable per MPI0238.

Data Uploaded for Engineering Review (Check):



PO #: 500000294405

**OP #:** 750 **Shift #:** 2nd

**Document No: 6102646**  
**Rev: A**  
**Document Type: Manufacturing Form**  
**Title: SA0155-01 Tipping Rework Form**

Total Parts Reworked:		34	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
DIM07 OS / WO	DIM07 Oversized (Window Open)		21
DIM07 US / WC	DIM07 Undersized (Window Closed)		9
EH	Exposed Hypotube		4
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		SV46 10 Jan 24	

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only. DIM01 OS, DIM09 OS, Foreign Material, and Cracks are not reworkable per MPI0238.

**Data Uploaded for Engineering Review (Check):**

PO #: 500000294405OP #: 750 Shift #: 2<sup>nd</sup>

Document No: 6102646  
Rev: A  
Document Type: Manufacturing Form  
Title: SA0155-01 Tipping Rework Form

Total Parts Reworked:		37	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
DIM07 OS / WO	DIM07 Oversized (Window Open)		15
DIM07 US / WC	DIM07 Undersized (Window Closed)		14
EH	Exposed Hypotube		8
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		MMO 2	10 Jan 24

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only. DIM01 OS, DIM09 OS, Foreign Material, and Cracks are not reworkable per MPI0238.

Data Uploaded for Engineering Review (Check):

PRODUCTION ORDER# 500000294405

OP 800

Oven #	Cycle #	Time In	Temp. In (Actual)	Initials	Date	Time Out	Temp. Out (Actual)	Initials	Date	Qty
TM10409	N/A	2:10pm	190°F	SSH4	10 Jan 24	3:10 pm	190°F	SS44	10 Jan 24	18
TM12036	N/A	2:50pm	190°F	SS44	10 Jan 24	3:50pm	190°F	SS44	10 Jan 24	30
TM10409	N/A	3:20pm	190°F	ML65	10 Jan 24	4:20pm	190°F	ML65	10 Jan 24	21
TM12036	N/A	4:45pm	190°F	ML65	10 Jan 24	5:55pm	190°F	ML65	10 Jan 24	25
TM10409	N/A	4:21pm	190°F	ML65	10 Jan 24	5:31pm	190°F	ML65	10 Jan 24	34
TM1011001	N/A	6:21pm	190°F	ML65	10 Jan 24	7:31pm	190°F	ML65	10 Jan 24	34
TM12036	N/A	6:52pm	190°F	ML65	10 Jan 24	8:02pm	190°F	ML65	10 Jan 24	32
TM10409①	N/A	7:26pm	190°F	ML65	10 Jan 24	8:36pm	190°F	ML65	10 Jan 24	37
TM10409	N/A	8:45pm	190°F	AT39	10 Jan 24	9:55pm	190°F	AT39	10 Jan 24	52
TM12036②	N/A	9:25pm	190°F	AT39	10 Jan 24	10:35pm	190°F	AT39	10 Jan 24	34
TM10409	N/A	10:15pm	190°F	AT39	10 Jan 24	11:25pm	190°F	AT39	10 Jan 24	30
TM12036	N/A	10:36pm	190°F	AT39	10 Jan 24	11:46pm	190°F	AT39	10 Jan 24	32
TM10409	N/A	11:27pm	190°F	AT39	10 Jan 24	12:37am	190°F	AT39	11 Jan 24	41

① ML65 10 Jan 24

**PRODUCTION ORDER#** 500000294405

OP 800



**PO #:** 50000294405

**OP #: 900 Shift #: 2nd**

**Document No: 6102619**  
**Rev: B**  
**Document Type: Manufacturing Form**  
**Title: SA0155-01 Dimensional/Visual Rework Form**

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only. DIM01 OS, DIM09 OS, Foreign Material, and Cracks are not reworkable per MPI0238.

**Data Uploaded for Engineering Review (Check):**

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Status CURRENT Effective 5/8/2023

PO #: 500000294405OP #: 900 Shift #: 2nd

Document No: 6102619

Rev: B

Document Type: Manufacturing Form

Title: SA0155-01 Dimensional/Visual Rework Form

Total Parts Reworked:		54	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	0
EH	Exposed Hypotube		5
EW	Exposed Wire		8
MP	Micropores	N/A	0
SCR	Scratch		27
SKV	Skive Marks	N/A	0
VD	Voids	/	1
DIM01 US	DIM01 OD Undersized	N/A	0
DIM06 US	DIM06 OD Undersized		23
DIM06 OS	DIM06 OD Oversized	/	1
DIM09 US	DIM09 OD Undersized	N/A	0
Inspected By (Sign and Date):		See H 10 Jan 24	

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only. DIM01 OS, DIM09 OS, Foreign Material, and Cracks are not reworkable per MPI0238.

Data Uploaded for Engineering Review (Check):



**PO #:** 500000294405

**OP #: 900 Shift #:** 2

**Document No: 6102619**  
**Rev: B**  
**Document Type: Manufacturing Form**  
**Title: SA0155-01 Dimensional/Visual Rework Form**

Note: Indicate tally marks in groups of 5. Scrap is to be recorded on the SAP router; this form is for reworked parts only. DIM01 OS, DIM09 OS, Foreign Material, and Cracks are not reworkable per MPI0238.

**Data Uploaded for Engineering Review (Check):**

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Status CURRENT Effective 5/8/2023

1

**Maximum Force Reached During Tensile Test**  
(10 samples accepted from final inspection for each lot shall be selected and tensile tested)

Sample # →	1	2	3	4	5	6	7	8	9	10	Avg	St Dev	K	Calculated Lower bound	Min Spec	Pass / Fail
Seg A	23.47	24.44	25.24	26.55	28.38	25.49	27.09	23.89	28.25	26.24	25.904	1.7096861	4.378	18.4189941	8.542	PASS
Seg B	61.02	63.43	57.31	67.57	61.74	63.06	62.1	62.28	61.25	65.87	62.563	2.7823972	3.981	51.4862766	8.542	PASS
Seg C	80.5	82.5	80.39	77.82	77.01	73.77	80.19	80.17	80.02	78.63	79.1	2.4266987	2.911	72.03588	8.542	PASS

All Force Values are recorded in Pound-Force and Distance is in Inches  
Specification for lower bound is 38N was converted to 8.542Lbf  
First Peak Force was collected during test and has been included in the raw data file ( this information will not be captured / summarized in the DA due to it is not required to used for DA acceptance.

**EDW Commander Flex - Bend and Tensile Strength Testing**

LOT #: 500000294405

Date: 12JAN24

Inspector Name: Andrew Wipf

Equipment ID: TMI0311B

Cal Due Date: 27 OCT 24

*Andrew Wipf* 12 Jan 24