

# Production Order: 500000294024



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	Order Type: ZSTD
Production Version:	7987		Project Phase:
Plant / Business Unit:	1213 / AC5		

Opr No.	Planned WorkCenter Description	Operation Details	Comp Qty.	Scrap Qty & Desc.	Date Comp.	Initials																							
50	KITTING3  Kitting Devices    Kitting Devices	Kitting Devices Perform Order Kitting, Load Minor Mandrels, Dry Extrusions, and Cut FEP Record Time Extrusions Enter Dryer (Initial/Time/Date): <u>GS85 5:15AM</u> 04 Jan 24 Record Time Extrusions First Exit Dryer (Initial/Time/Date): <u>GS85 9:00AM</u> 04 JAN 24 Record Dryer Shelf #: <u>N/A</u>		N/A	N/A	01JAN24 BV57																							
		<table><thead><tr><th>Component Number</th><th>Req'd Rev Rev Used</th><th>UOM</th><th>Qty.</th><th>Batch No.</th><th>Actual Qty Used</th></tr></thead><tbody><tr><td>MM0179-01</td><td>D D</td><td>PC</td><td>500</td><td>0000276172</td><td>400</td></tr><tr><td></td><td></td><td></td><td></td><td>0000272345</td><td>100</td></tr><tr><td>MM1536-01</td><td>B B</td><td>PC</td><td>500</td><td>0000271063</td><td>500</td></tr></tbody></table>	Component Number	Req'd Rev Rev Used	UOM	Qty.	Batch No.	Actual Qty Used	MM0179-01	D D	PC	500	0000276172	400					0000272345	100	MM1536-01	B B	PC	500	0000271063	500			
Component Number	Req'd Rev Rev Used	UOM	Qty.	Batch No.	Actual Qty Used																								
MM0179-01	D D	PC	500	0000276172	400																								
				0000272345	100																								
MM1536-01	B B	PC	500	0000271063	500																								

Notes: DA 2564, 2484

N/A

N/A

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	RM0158-01	E	<u>E</u>	PC	200	<u>81054</u>	<u>00002631015</u>	<u>0-10</u>			
								<u>200</u>			
							<u>n/a</u>	<u>n/a</u>			
	1000-1153-01	A	<u>A</u>	PC	594	<u>86756</u>	<u>86757</u>	<u>200</u>			
						<u>86758</u>		<u>200</u>			
	1000-2053-01	A	<u>A</u>	PC	500	<u>0000278880</u>		<u>400</u>			
							<u>00002680410</u>	<u>100</u>			
	MM1537-02	A	<u>A</u>	PC	500	<u>0000276175</u>		<u>500</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
							<u>n/a</u>	<u>n/a</u>			
	TL0167-02	E	<u>E</u>	PC	70		<u>n/a</u>	<u>Bulk</u>			
							<u>n/a</u>	<u>Bulk</u>			
	TL0165-05	J	<u>J</u>	PC	5		<u>n/a</u>	<u>Bulk</u>			
							<u>n/a</u>	<u>Bulk</u>			
	TL0165-03	J	<u>J</u>	PC	5		<u>n/a</u>	<u>Bulk</u>			
							<u>n/a</u>	<u>Bulk</u>			

## Notes:

n/an/an/a

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①Am 08 05 Jan 24

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Opr No.	Planned WorkCenter Description	Operation Details						Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
		141967-01	02	02	PC	500	85678	519			
		RM7349-02	C	C	PC	543	82836 82871 82870 82869	82866 82864 82727 84584	95185① 95144 95135 95 500	N/A	
		RM7348-01	C	C	PC	500				N/A	
		RM4001-01	B	B	PC	125	81965		7525①	N/A	
		RM0607-01	D	D	PC	56	78315		200	N/A	N/A N/A
		RM0498-01	C	C	PC	500	0000287519		472	N/A	
		RM0009-04	I	I	PC	1	82971		Bulk	N/A	
		RM0009-04	I	I	PC	1	82971		Bulk	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
	MM1538-01	A	A	PC	500	<u>N/A</u>	<u>Bulk</u>				
						<u>0000271052</u>	<u>500</u>				
	MM1537-01	A	A	PC	1000	<u>N/A</u>	<u>N/A</u>				
						<u>0000281413</u>	<u>1,190</u>				
	MM0177-01	C	C	PC	500	<u>N/A</u>	<u>N/A</u>				
						<u>0000278966</u>	<u>500</u>				
	MM0180-01	E	E	PC	500	<u>0000287541</u>	<u>40</u>				
						<u>0000275691</u>	<u>100</u>				
						<u>①000027115</u>					
	MM0178-01	E	E	PC	500	<u>0000271050</u>	<u>500</u>				
						<u>N/A</u>	<u>N/A</u>				
	MM0176-01	D	D	PC	500	<u>0000281411</u>	<u>500</u>				
						<u>0000260766</u>	<u>80</u>				
							<u>①0+00</u>				
	MM0074-01	G	G	PC	500	<u>0000286929</u>	<u>523</u>				
						<u>00002854104</u>	<u>40</u>				

Notes:

N/A

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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  Line Clearance  Confirmation Reqd(Milestone )	500	0	04Jan24	KL95
150	CATASY01  Catheter Assembly 1  	Major and Minor Mandrel Assembly	500	0	04Jan24	NKCZ AF54 AX05 pm96 SK60 Y014
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
200	CATASY01  Catheter Assembly 1  	Loading Braid Stock    Loading Braid Stock  Confirmation Reqd(Milestone )	500	0	04Jan24	MV50 ST96 h35
250	CATASY01  Catheter Assembly 1  	Trim Braid Wire at Proximal End	500	0	04Jun24	VPG2 CL30 CL05 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 )	N/A	N/A	N/A	N/A	N/A
300	CATASY01  Catheter Assembly 1    Insert Cut Hypo Tube  Confirmation Reqd(Milestone )	Insert Cut Hypo Tube	500	0	04Jan24	DV39 LM46 AS31 GS22
350	CATASY01  Catheter Assembly 1	Load Tubing	500	0	04Jan24	WJ25 LM46 CP32 CH05

Notes:

N/A

N/A

N/A

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Opn 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	<b>CATASY01</b> Catheter Assembly 1   Reflow   Confirmation Reqd(Milestone)	Reflow	500	O	04Jan24	RN27 AF54 AR05 pm96 SY41 SHSS
450	<b>CATASY01</b> Catheter	FEP Removal	500	O	04Jan24	Pm96 JY90

Notes:

N/A

N/A

N/A

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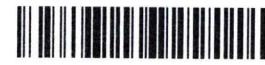


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Opr No.	Planned WorkCenter Description	Operation Details	Comp Qty.	Scrap Qty & Desc.	Date Comp.	Initials
N/A	Assembly 1 	N/A	N/A	N/A	N/A	N/A
N/A	FEP Removal					
N/A	Confirmation Reqd(Milestone )					
500	CATASY01 Catheter Assembly 1 	In-process Inspection and Rework Material Consumed: Part #: 1000-1153-01 Batch #: 86497 Qty: 20 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	490	OF-HH111 EW-11 10	04Jun24	SK11 VC09 CB81 T266 CL05 TD45
N/A	In-process Inspection and Rework					
N/A	Confirmation Reqd(Milestone )					
N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes:						
N/A						
N/A						
N/A						

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Op. 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 )	490	0	04Jan24	LL61 VA96 FB01 SV46 PP40
600	CATASY01  Catheter Assembly 1  	Distal Tip Assembly	478	MAS-HTII NIS-HTI DL-11 EH-111  12	04Jan24	FB01 ML38 MM02 HL85

Notes:

N/A

N/A

N/A

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① AT39 04Jan24

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N/A	Reqd(Milestone)	N/A	N/A	N/A	N/A	N/A
650	CATASY01 Catheter Assembly 1 	Loading Heat Shrink  Loading Heat Shrink  Confirmation Reqd(Milestone)	478	0	04Jan24	DV39 DX37
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	0	04Jan24	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  	<p>Tip Inspection/ Flash Removal Material Consumed:</p> <table> <tr> <td>Part #: <u>Rm4001-01</u></td> <td>Batch #: <u>81965</u></td> <td>Qty: <u>8</u></td> </tr> <tr> <td>Part #: <u>Rm0607-01</u></td> <td>Batch #: <u>78315</u></td> <td>Qty: <u>5</u></td> </tr> <tr> <td>Part #: <u>N/A</u></td> <td>Batch #: <u>N/A</u></td> <td>Qty: <u>N/A</u></td> </tr> <tr> <td>Part #: <u>N/A</u></td> <td>Batch #: <u>N/A</u></td> <td>Qty: <u>N/A</u></td> </tr> <tr> <td>Part #: <u>N/A</u></td> <td>Batch #: <u>N/A</u></td> <td>Qty: <u>N/A</u></td> </tr> </table> <p>Tip Inspection/ Flash Removal</p> <p>Confirmation Reqd(Milestone )</p>	Part #: <u>Rm4001-01</u>	Batch #: <u>81965</u>	Qty: <u>8</u>	Part #: <u>Rm0607-01</u>	Batch #: <u>78315</u>	Qty: <u>5</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>	475	EH-11 FM-1  ③	PH59 MV78 04Jan24
Part #: <u>Rm4001-01</u>	Batch #: <u>81965</u>	Qty: <u>8</u>																		
Part #: <u>Rm0607-01</u>	Batch #: <u>78315</u>	Qty: <u>5</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>																		
800	CATASY01  Catheter Assembly 1  	Major Mandrel Removal	472	ACD-111  ③	04Jan24	SS44														

Notes:

N/A

N/A

N/A

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N/A	Major Mandrel Removal  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>passed</u> 2. <u>passed</u> 3. <u>passed</u> 4. <u>passed</u> 5. <u>passed</u>	472	0	04.Jan24	MJ85
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 ML46 SH04 HT72 PP40
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 )	<p>Re-Inspect after re-work.</p> <p>Required Inspection Visual/OD Inspection Record Inspection Data in SAP ROS Record Laser Micrometer Information: TMI: 0700-01 Cal Due: 31MAY24 TMI: N/A Cal Due: N/A TMI: N/A Cal Due: N/A Material Consumed: Part #: 1000-1153-01 Batch #: 86497 Qty: 5 Part #: RM0607-01 Batch #: 78315 Qty: 3 Part #: RM0158-01 Batch #: 81054 Qty: 2 Part #: N/A Batch #: N/A Qty: N/A Part #: N/A Batch #: N/A Qty: N/A</p>	448	DIS HH III MAR HH I DEL-1 FM-1 EW-11 #60US-III/I #70S-11 24	04.Jan.24	KL67 YGB6
950	QUALITY1  Quality Inspection & Review	<p>Quality Inspection &amp; Review Borescope Inspection Record Inspection Data in SAP ROS Record Tip Gage Information: TMI: N/A Cal Due: N/A Record Caliper Information:</p>	N/A	N/A	N/A	N/A

Notes:

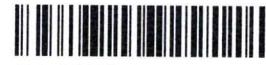
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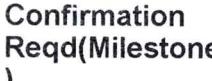
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Opr No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
	 Quality Inspection & Review   Confirmation Reqd(Milestone )	TMI: <u>N/A</u> Cal Due: <u>N/A</u> Record DIM02 Go/No-Go Gage Information: TMI: <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>	417	DIS(SP) HHH dis-HHHHH SHR-HHHHH HHH  <u>(31)</u>	04Jan24	KL67 Y936
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>31MAY24</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>	412	LT - HHH OAL - 1  <u>(5)</u>	04Jan24	KL67

Notes:

N/A

N/A

N/A

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**Notes:**

NIA  
NIA  
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Opr No.	Planned WorkCenter Description	Operation Details	Comp. Qty.	Scrap Qty & Desc.	Date Comp.	Initials
	Confirmation Reqd(Milestone )		M	M	M M	
1150	PACKINT1  Packing assembly    Package  Confirmation Reqd(Milestone )	Package Package, Label, and Ship Finished Parts	384	0	05-Jan-24	bag

Notes:

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Batch Number: 0000294 024

By: BA71

Date: 05 Jan 24

Reviewed By: T413

Date: 05 JAN 24

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Part 6

Requestor Name: Uddhesh Kanadnis

**CONTROLLED COPY** DEVIATION AUTHORIZATION NUMBER: 2484  
*X See attached sheet for deviation to 2*

**IZATION FORM** B7en3 to 23C4T33233 525  
\* See attached email extension to 24SEP23  
1512 24AUG23 525

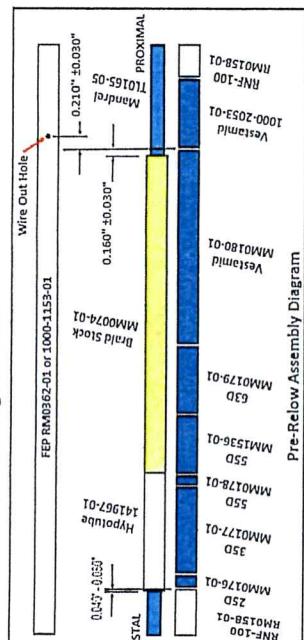
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Requestor Name: Udhesh Kapadnis	Document Number Affected	Revision
	3107610	L

Deviation From:

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

Wife Out Hole



## 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.

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**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

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

<b>Corrective Action Required:</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>If no, explain:</b> 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, consumption 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

2484  
2468  
DA

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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~~ fixture for inspection. (See image 1)  
**① MM01536-01 type connection TS12 10AUG-23**



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)

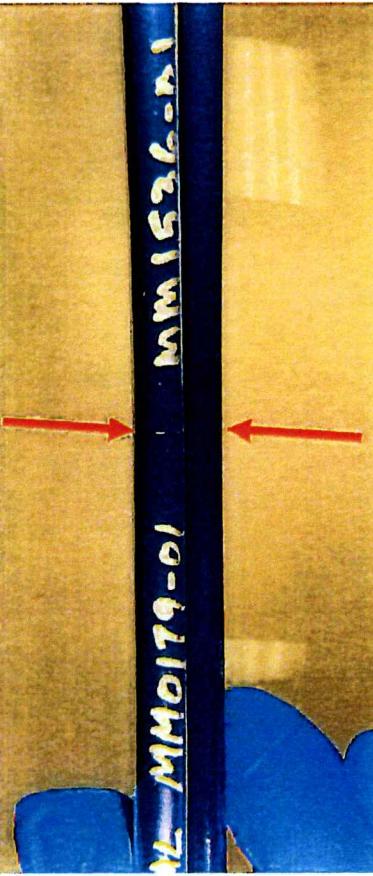


Image- 3

- 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)

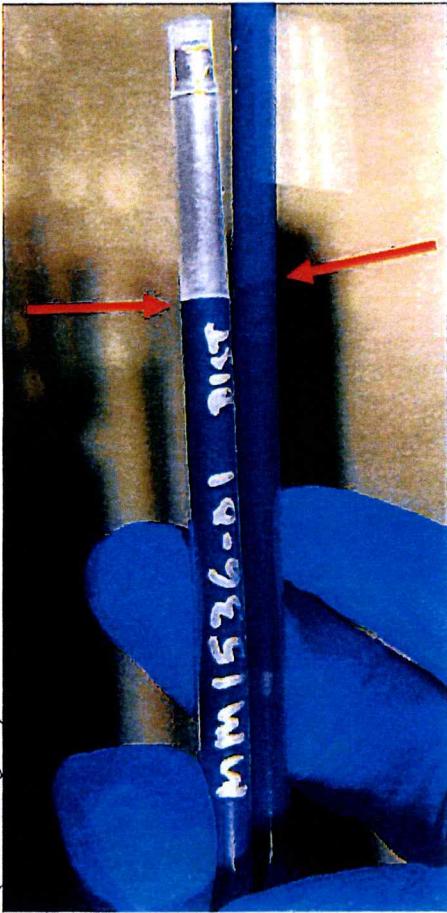


Image- 4

- 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 <b>MM0179-01 and MM1536-01 Wrong Order - BAD PART</b>
3	MM0179-01	MM0179-01 <b>Two MM0179-01 - BAD PART</b>
4	MM1536-01	MM1536-01 <b>Two MM1536-01 - BAD PART</b>

Image - 5

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

FM0002.RevF

Deviation Authorization

**CONTROLLED COPY**



CONTROLLED COPY

## DEVIATION AUTHORIZATION FORM

<b>Requestor Name:</b> Krishna Selvaraj	
<b>Document Number Affected</b>	<b>Revision</b>
Doc #3005206 (MPI0238)	BP
<b>Deviation From:</b>	<b>Deviation To:</b>
<b>Doc #3005206 (Flex Commander MPI0238): OPER850.11:</b>	<b>Doc #3005206 (Flex Commander MPI0238): OPER850.11:</b>
<p>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.</p>	

**Justification:**

TMI0602 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.  
 TMI0700-01 lasermic is used at OPER900 for 100% inspection for Dim 1, Dim 6 and Dim 9. Since TMI0700-01 is already qualified to inspect Dim 6 per ES0647: Laser micrometer equivalency test, there is no additional risk in using TMI0700-01 for OPER850 Dim 6 inspection till TMI0602 issue is resolved.

<b>Part Number Affected</b>	<b>Revision</b>	
SA0155-01	H	
<b>Start Date:</b>	<b>End Date:</b>	<b>Lot Number:</b>
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		
<b>Corrective Action Required:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>If no, explain:</b> This is a temporary change to use TMI0700-01. DA will be removed once the lasermic TMI0602 issues are resolved and accepted for usage.		
<b>Training Required:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>If no, explain:</b> N/A		
<b>Title</b>	<b>Approval Name</b>	<b>Approval Signature</b>
Engineering Manager	Jake Stanislowski	
Quality Manager	Jay Zabel	
Operations Manager	Matthew Benson	



**PRODUCTION ORDER#** 50000294024

OP 400

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



Document No: 5105589

FM5104665 Rev: C

Document Type: Manufacturing Form

Title: SA0155-01 Reflow Log Sheet Form

PRODUCTION ORDER# 500000294024

OP 400

Oven #	Cycle #	Time In	Temp. In (Actual)	Initials	Date	Time Out	Temp. Out (Actual)	Initials	Date	Qty
Tm10942	44	9:30am	430	AF54	04Jan24	9:42am	415	AF54	① 04Jan24 04Jan23	16
Tm10942	44	10:55am	430	OS21	04Jan24	11:17am	415	OS21	04Jan24	16
Tm10942	44	11:25am	429	AF54	04Jan24	11:37am	415	AF54	① AF54 04Jan24	16
Tm10942	44	11:55am	430	AF54	04Jan24	12:07pm	415	AF54	04Jan24	16
Tm10942	44	1:25pm	429	PM96	04Jan24	1:37pm	415	PM96	04Jan24	16
Tm10942	44	1:43pm	430	RN27	04Jan24	1:55pm	415	RN27	04Jan24	16
Tm10942	44	2:34pm	430	NK62	04Jan24	2:46pm	415	NK62	04Jan24	16
Tm10942	44	3:00pm	430	OS21	04Jan24	3:12pm	415	OS21	04Jan24	13
Tm10942	44	4:30pm	430	JY90	04Jan24	4:42pm	415	JY90	04Jan24	16
Tm10942	44	5:10pm	430	SY47	04Jan24	5:22pm	415	SY47	04Jan24	16
Tm10942	44	7:08pm	429	SY47	04Jan24	7:20pm	415	SY47	04Jan24	16
Tm10942	44	7:34pm	428	SH85	04Jan24	7:46pm	415	SY47	04Jan24	16

① AF54 04Jan24



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

PRODUCTION ORDER# 500000294024

OP 400



Document No: 5105589

FM5104665 Rev: C

Document Type: Manufacturing Form

Title: SA0155-01 Reflow Log Sheet Form

PRODUCTION ORDER# 50000294024

OP 400

Oven #	Cycle #	Time In	Temp. In (Actual)	Initials	Date	Time Out	Temp. Out (Actual)	Initials	Date	Qty
TM10745	44	9:25am	430	OS21	04Jan24	9:37am	415	OS21	04Jan24	16
TM10745	44	9:49 am	430	RN27	04 Jan 24	10:01 am	415	RN27	04 Jan 24	16
TM10745	44	11:10 am	430	AF54	04 Jan 24	11:22 pm	415	AF54	04 Jan 24	16
TM10745	44	11:40am	430	AF54	04 Jan 24	11:52 am	415	AF54	04 Jan 24	16
TM10745	44	12:20pm	430	OS21	04Jan24	12:32pm	415	OS21	04Jan24	16
TM10745	44	1:28PM	430	PM96	② 04 Jan 24 04 Jan 23	1:40 pm	415	PM96	04 Jan 24	16
TM10745	44	2:10PM	430	AK05	04Jan24	2:22PM	415	AK05	04Jan24	16
TM10745	44	2:45PM	430	OS21	04Jan24	2:57pm	415	OS21	04Jan24	16
TM10745	44	4:15pm	430	SY47	04Jan24	4:27pm	415	SY47	04Jan24	16
TM10745	44	4:45pm	430	SY47	04Jan24	4:57pm	415	SY47	04Jan24	16
TM10745	44	5:30pm	430	V078	04Jan24	5:42PM	415	SA07	04Jan24	16
TM10745	44	6:23 pm	430	SY47	04Jan24	6:35pm	415	SY47	04Jan24	16

① AF54 04 Jan 24  
② TM96 04 Jan 24



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

PO #: 500000294024 OP #: 500 Shift #: 1st

Total Parts Reworked:		<u>49</u>	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	N/A
EH	Exposed Hypotube		11
EW	Exposed Wire		38
MP	Micropores	N/A	N/A
SCR	Scratch	N/A	N/A
SKV	Skive Marks	N/A	N/A
VD	Voids	N/A	N/A
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		<u>VC09</u> , <u>SX11</u> <u>04 Jan 24</u>	

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 #: 500000294024

OP #: 500 Shift #: 2nd

Total Parts Reworked:		14	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	N/A
EH	Exposed Hypotube		1
EW	Exposed Wire		9
MP	Micropores	N/A	N/A
SCR	Scratch	N/A	N/A
SKV	Skive Marks	//	2
VD	Voids		2
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		PP40 04 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 #: 500000294024

OP #: 500 Shift #: 2

Total Parts Reworked:		15	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles		
EH	Exposed Hypotube		
EW	Exposed Wire		13
MP	Micropores	N/A	N/A
SCR	Scratch	N/A	N/A
SKV	Skive Marks	N/A	N/A
VD	Voids		3
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		Chong Ior 04 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 #: 500000294024 OP #: 500 Shift #: 2

Total Parts Reworked:		22	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	0
EH	Exposed Hypotube		1
EW	Exposed Wire		5
MP	Micropores	N/A	0
SCR	Scratch		2
SKV	Skive Marks		3
VD	Voids		5
N/A	N/A	N/A	0
Inspected By (Sign and Date):		HT72	DX35 04 Jan 23

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 #: 500000294024

OP #: 500 Shift #: 2

Total Parts Reworked:		32	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	//	2
EH	Exposed Hypotube	//	2
EW	Exposed Wire		25
MP	Micropores	N/A	0
SCR	Scratch	N/A	0
SKV	Skive Marks	N/A	0
VD	Voids	//	8
N/A	N/A	N/A	0
Inspected By (Sign and Date):		04 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: 6102646

Rev: A

Document Type: Manufacturing Form

Title: SA0155-01 Tipping Rework Form

PO #: 500000294024

OP #: 750 Shift #: 2nd

Total Parts Reworked:		41	
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)		25
EH	Exposed Hypotube		11
N/A	N/A	N/A	N/A
Inspected By (Sign and Date):		PP 40	04 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):



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

PO #: 500000204024

OP #: 750 Shift #: 2

Total Parts Reworked:		42	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
DIM07 OS / WO	DIM07 Oversized (Window Open)	H H H	23
DIM07 US / WC	DIM07 Undersized (Window Closed)	HH H H	12
EH	Exposed Hypotube	HH	7
N/A	N/A	N/A	N/A

Inspected By (Sign and Date):

MV18 04 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# 50000294024

OP 800

Oven #	Cycle #	Time In	Temp. In (Actual)	Initials	Date	Time Out	Temp. Out (Actual)	Initials	Date	Qty
TM10409	N/A	2:55pm	190°F	SS4H	04 Jan 24	4:05 PM	190°F	AT39	04 Jan 24	10
TM10409	N/A	4:30pm	190°F	AT39	04 Jan 24	5:45pm	190°F	AT39	04 Jan 24	44
TM12036	N/A	5:60pm	190°F	AT39	04 Jan 24	6:10pm	190°F	AT39	04 Jan 24	33
TM10409	N/A	5:47pm	190°F	AT39	04 Jan 24	6:57pm	190°F	AT39	04 Jan 24	28
TM12036	N/A	6:35pm	190°F	AT39	04 Jan 24	7:45pm	190°F	AT39	04 Jan 24	31
TM10409	N/A	7:00pm	190°F	AT39	04 Jan 24	8:10pm	190°F	AT39	04 Jan 24	30
TM12036	N/A	7:38pm	190°F	ML65	04 Jan 24	8:48pm	190°F	ML65	04 Jan 24	47
TM10409	N/A	8:15pm	190°F	AT39	04 Jan 24	9:25pm	190°F	AT39	04 Jan 24	31
TM10409	N/A	9:30pm	190°F	AT39	04 Jan 24	10:40PM	190°F	AT39	04 Jan 24	33
TM12036	N/A	10:10pm	190°F	AT39	04 Jan 24	11:20PM ① 11:50PM	190°F	AT39	04 Jan 24	38
TM10409	N/A	10:26 pm	190°F	AT39	04 Jan 24	11:36 pm	190°F	AT39	04 Jan 24	35
TM12036	N/A	11:22pm	190°F	AT39	04 Jan 24	12:32AM	190°F	AT39	05 Jan 24	66
TM12036	N/A	11:45pm	190°F	AT39	04 Jan 24	12:55AM	190°F	AT39	05 Jan 24	44

① AT39 04 Jan 24

PO #: 500000294024OP #: 900 Shift #: 2

Document No: 6102619

Rev: B

Document Type: Manufacturing Form

Title: SA0155-01 Dimensional/Visual Rework Form

Total Parts Reworked:		73	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	/	1
EH	Exposed Hypotube		2
EW	Exposed Wire		23
MP	Micropores	n/a	n/a
SCR	Scratch		69
SKV	Skive Marks	/	1
VD	Voids		7
DIM01 US	DIM01 OD Undersized		
DIM06 US	DIM06 OD Undersized		
DIM06 OS	DIM06 OD Oversized		
DIM09 US	DIM09 OD Undersized		
Inspected By (Sign and Date):		HT72 04 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 #: 500000294024 OP #: 900 Shift #: 2nd

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

Total Parts Reworked:		67	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	N/A	0
EH	Exposed Hypotube	N/A	0
EW	Exposed Wire		10
MP	Micropores	N/A	0
SCR	Scratch		42
SKV	Skive Marks	N/A	0
VD	Voids		1
DIM01 US	DIM01 OD Undersized	N/A	0
DIM06 US	DIM06 OD Undersized		19
DIM06 OS	DIM06 OD Oversized		1
DIM09 US	DIM09 OD Undersized	N/A	0
Inspected By (Sign and Date):		See H 04 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 #: 500000294024

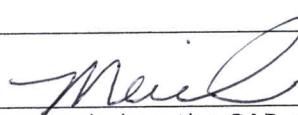
OP #: 900 Shift #: 2nd

Document No: 6102619

Rev: B

Document Type: Manufacturing Form

Title: SA0155-01 Dimensional/Visual Rework Form

Total Parts Reworked:		78	
Router Code	Defect Failure Mode	Reworkable Defects (Tally)	Total Defects
AB	Air Bubbles	NA	0
EH	Exposed Hypotube	NA	0
EW	Exposed Wire		22
MP	Micropores	NA	0
SCR	Scratch		55
SKV	Skive Marks		11
VD	Voids		4
DIM01 US	DIM01 OD Undersized	NA	0
DIM06 US	DIM06 OD Undersized		3
DIM06 OS	DIM06 OD Oversized	NA	0
DIM09 US	DIM09 OD Undersized	NA	0
Inspected By (Sign and Date):			04 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)

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	26.52	24.9	26.92	25.48	27.52	27.38	25.39	26.74	26.61	28.43	26.589	1.0821527	4.378	21.8513355	8.542	PASS
Seg B	58.48	59.7	56.99	75.16	60.91	66.31	55.1	59.04	58.66	59.53	60.988	5.7649994	3.981	38.0375375	8.542	PASS
Seg C	78.84	71.94	74.42	72.87	77.32	75.43	75.39	77.18	72.94	78.5	75.483	2.4407424	2.911	68.377999	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

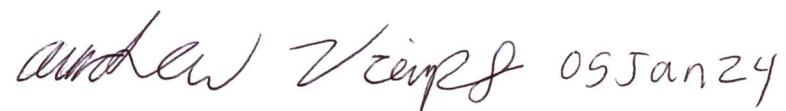
LOT #: 500000294024

Date:05JAN24

Inspector Name:Andrew Wipf

Equipment ID: TMI0311B

Cal Due Date: 27 OCT 24



05Jan24