

Defect Details

NC No.	8000879355
NC Date	22/06/2024
NC Submission Date	
Part No.	F2DZ04603B
Part Name	FORK BOLT J1A & J1D
Supplier Name & Code	100189-SANGKAJ STEEL PVT LTD.
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	THREADING NOT OK-M10 THREAD MISSING

1. Problem Description

Defect Description	M10 THREAD MISSING
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	1
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	qualityassurance@sangkaj.com
Plant Head/CEO Email ID	steel@sangkaj.com
MD Email ID	anirudh.2007@hotmail.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	384	0	0	816	0	1200
Check Qty	384	0	0	816	0	1200
NG Qty	0	0	0	0	0	0

Action taken on NG part

Scrap	0
Rework	0
Under Deviation	0

Containment Action

Segregation of the Available stock at Customer End done. Rechecking of RF Material Completed.

3. Process Flow

Process Flow Description

RM inward - RM Inward Inspection - S/F Blank (Traub Machining) - CNC turning 1st - CNC Turning 2nd - Milling - Tapping- plating-Final Inspection-Packing & Dispatch

4. Process Details

Process / Operation	Tapping
Outsource	No
Machine / Cell	Tapping Cell
Machine / Cell No.	03

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Inadequate Inspection method	Sampling Inspection of M10 Threads is done along with 100% Visual Inspection	X
Method	Operation finished & unfinished parts Mix-up	Operator observed keeping both operation done & remained parts on machine	X
Tool	Tap Worn Out	Tap Condition Verified, Found Ok	O
Material	Input Material Drill ID Oversize	Drill ID found ok, Specified 8.50+0.1, observed 8.58mm	O
Machine	Stroke length set less	fixed c-type Stopper has been installed between the two Dodge to Set Tapping length	O
Man	Unskilled operator	Skilled Operator Deployed on Machine, Skill Level L2, Verified Skill matrix, Found Ok	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	05 Nos

7. Root Cause Analysis (Occurance)

Why 1	Part Without Threads found at Customer end
Why 2	Without operation part mixed up with finished part on machine
Why 3	Both operation Finished & unfinished parts are kept on Machine.
Why 4	Operator not Followed the Standard Work instruction.
Why 5	
Root Cause (Occurance)	Operator not Followed Standard Work Instruction.

Root Cause Analysis (Outflow)

Why 1	Part Without Threads found at Customer end
Why 2	Operation missing part Skipped from Final Inspection
Why 3	Sampling Inspection done for threading with TPG

Why 4	Inadequate sample size during Final inspection
Why 5	
Root Cause (Outflow)	Inadequate sample size during Final inspection

8. Countermeasure (Occurrence , Outflow & System side Actions)

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	1. Sample size Increased for Inspection with TPG & 100% Inspection with M10 thread Minor Dia. PPG. Training given to Inspector. Q- Alert Displayed on machine and at Final Inspection.	Mr. Anil Chaudhari	25/06/2024	25/06/2024	Completed
Occurance	1.Training given to operator about the Proper Working Method. 2.Output bin Kept within reach of operator near machine.	Mr. Santosh Raut	25/06/2024	25/06/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	100% Inspection of threading Minor Diameter with no-Go PPG along with visual inspection. Without operation parts will get Detected by PPG.
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidence of Countermeasure

Occurance (Before)	operator kept both input And output material on Machine 884_Occurance_Before.pptx
Occurance (After)	Training given to operator to Follow the Work Instruction and keep input /output material Separately to avoid the Chances of mixup. 884_Occurance_After.pptx
Outflow (Before)	100% Visual Inspection & Sampling Inspection done with TPG 884_Outflow_Before.pptx
Outflow (After)	100% Inspection with threading minor Diameter PPG to Detect the operation missing part. 884_Outflow_After.pptx

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All Fork Bolt

12. Document Review

Documents	ControlPlan, InspCheckSheet
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13. Effectiveness Of Action

Reviewed Quantity

250

Reason for submission

OK