QFR No - 8000884332

Defect Details

NC No.	8000884332
NC Date	26/07/2024
NC Submission Date	
Part No.	550BZ05802
Part Name	CAP OIL LOCK -PRFH006
Supplier Name & Code	101255-MAHAVIR INDUSTRIES
ETL Plant	1117-ETL K-228/9 Suspension
Defect Details	GRINDING MARK-OD GRINDING MARK

1. Problem Description

Defect Description	Tool mark on OD
Detection Stage	Receipt
Problem Severity	Function
NG Quantity	270
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@mahavirind.co.in
Plant Head/CEO Email ID	planthead@mahavirind.co.in
MD Email ID	

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	1035	0	0	1380	0	2415
Check Qty	1035	0	0	1380	0	2415
NG Qty	270	0	0	0	0	270

Action taken on NG part

Scrap	270
Rework	0
Under Deviation	0

Containment Action
All Suspected material Segregation at Customer End

3. Process Flow

Process Flow Description
RM Inward - Store- Pilot Drilling on Traub Machine - Bottom Side Chamfer - Main bore ID and Taper Machining on CNC- OD Grinding On CLG- plating - Final Inspection - Dispatch

4. Process Details

Process / Operation	OD Grinding
Outsource	No
Machine / Cell	GRINDING section
Machine / Cell No.	CLG-4

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Tool	Wrong Grade Grinding Wheel use	Correct Grade & Cumi made Grinding Wheel Use	O
Material	Wrong grade &Hard Material use	Material Grade-EN1A and Hardness -87HRB	O
Machine	Machine Condition Not Ok	Yes , Control Wheel Spindle Bearing Loose	X
Man	Unskilled operator	Skilled Operator On Grinding Machine	O
Method	OD Grinding Process wrong and Run Out Gauge Not Available	OD Grinding Process is ok But Runout Fixture Not Available	X

6. Inspection Method Analysis (Current)

Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	20Nos/Bin

7. Root Cause Analysis (Occurance)

Why 1	RINDING MARK-OD GRINDING MARK
Why 2	Chatter mark On OD Surface
Why 3	Control Wheel Housing Bearing Play
Why 4	The check nut on the control wheel spindle is loose due to thread wear.
Why 5	Check for thread wear due to the use of only a single check nut assembled on the control wheel spindle
Root Cause (Occurance)	Check for thread wear due to the use of only a single check nut assembled on the control wheel spindle.

Root Cause Analysis (Outflow)

Why 1	RINDING MARK-OD GRINDING MARK
Why 2	During Sampling OD chatter Mark not detect on machine to operator.
Why 3	Runout fixture Not Available In OLC Grinding Section
Why 4	
Why 5	
Root Cause (Outflow)	Runout fixture Not Available In OLC Grinding Section

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Control Wheel Spindle Lock nut Replace and Double Lock Nut Arrangement	Production Head	03/08/2024	05/08/2024	Completed
Outflow	New Spl. Run out Fixture Arrange at grinding section.	Quality Head	06/08/2024	07/08/2024	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Run Out Fixture Arrange at OLC Grinding Section
Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	20Nos /Bin

10. Evidance of Countermeasure

Occurance (Before)	Control Wheel Spindle Bearing Play Due to Single Locknut 973_Occurance_Before.jpg
Occurance (After)	Double Lock Nut arrangement to Control Wheel Spindle 973_Occurance_After.jpg
Outflow (Before)	Runout fixture Not Available 973_Outflow_Before.jpg
Outflow (After)	Runout Fixture Arrangement In Grinding Section For OD Run Out Inspection. 973_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All OLC and Cap Oil Lock Models

12. Document Review

Documents	ControlPlan, PFMEA, JHCheckSheet
Specify Other Document	no

13. Effectiveness Of Action

Reviewed Quantity	50
Reason for submission	ok