QFR No - 8000890049

Defect Details

NC No.	8000890049
NC Date	05/09/2024
NC Submission Date	
Part No.	52DR00505O
Part Name	FASTENING CAP TAPPED-FINISHED C101 CBS
Supplier Name & Code	101261-BHOGALE AUTOMOTIVE PRIVATE LIM
ETL Plant	1120-ETL K-226/2 Disc Brakes
Defect Details	LENGTH OVERSIZE-LUG HEIGHT OVERSIZE

1. Problem Description

Defect Description	LENGTH OVERSIZE-LUG HEIGHT OVERSIZE
Detection Stage	Inprocess
Problem Severity	Fitment
NG Quantity	1020
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	nikhil.kulkarni@bhogaleauto.com
Plant Head/CEO Email ID	rajendra.randive@bhogaleauto.com
MD Email ID	

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	1076	0	0	1200	0	2276
Check Qty	1076	0	0	1200	0	2276
NG Qty	494	0	0	570	0	1064

Action taken on NG part

Scrap	0
Rework	1064
Under Deviation	0

Containment Action
1. Informed to production & inspection responsible. 2. 1076 nos verified for 1.5 mm distance at ETL.

3. Process Flow

Process Flow Description
Receipt inspection > Forging > Heat treatment > Trimming > Grinding > Drilling > Chamfering > Powder coating > Final inspection > Packaging & dispatch

4. Process Details

Process / Operation	Grinding
Outsource	No
Machine / Cell	Belt grinder
Machine / Cell No.	Belt grinder

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Belt supporting plate is not o	Supporting plate worn out and part on belt pressed in tapered manner	O
Method	Wrong holding of part for grinding	Due to wrong holding part grinding is tapered	O
Man	Part face ground tapered by operator	Due to manual process always possibility of taper.	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	10 nos

7. Root Cause Analysis (Occurance)

Why 1	After coating dimension 1.5 mm (i.e. lug heights difference) found undersized.
Why 2	In grinding lug heights and face not maintained.
Why 3	While grinding at lug bottom face, surface formed tapered.
Why 4	Grinding machine belt supporting plate worn out
Why 5	Belt supporting plate check point not available.
Root Cause (Occurance)	Grinding machine belt supporting plate worn out.

Root Cause Analysis (Outflow)

Why 1	After coating dimension 1.5 mm (i.e. lug heights difference) found undersized.
Why 2	Defect not trace out in final inspection
Why 3	In final inspection distance 1.5 mm checked as single point to point difference. Not con
Why 4	Point to point difference on tapered portion not measured on height gauge pointer.
Why 5	
Root Cause (Outflow)	Face to face difference on tapered portion not measured on height gauge pointer.

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Inspection by vernier caliper implemented	NSK	04/09/2024		Completed
Occurance	1. Belt supporting plate to be changed.	BAPL	05/09/2024		Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Inspection by vernier caliper implemented in final inspection till issue resolved.
Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	Belt supporting plate worn out due to friction with the belt while pressing the part. 1082_Occurance_Before.png
Occurance (After)	The supporting plate of belt grinder is to be replaced with new one. 1082_Occurance_After.png
Outflow (Before)	Measurement carried out by height gauge. 1082_Outflow_Before.png
Outflow (After)	Measurement method changed as vernier caliper from height gauge 1082_Outflow_After.png

11. Horizontal Deployment

Horizontal Deployment Required	No
Applicable Machine / Model / Plant	NA

12. Document Review

Documents	ControlPlan, PMCheckSheet
Specify Other Document	NA

13. Effectiveness Of Action

Reviewed Quantity	500
Reason for submission	Improvement found in current lots