QFR No - 8000808079

Defect Details

NC No.	8000808079
NC Date	17/10/2022
NC Submission Date	
Part No.	S2HT68607B
Part Name	OUTER SPRING K23L
Supplier Name & Code	101069-SAGAR SPRINGS PVT LTD
ETL Plant	1116-ETL K-120 Suspension
Defect Details	HOOK MARK-TOUCHUP NOT OK

1. Problem Description

Defect Description	Powder coating observed not OK in almost all model & on daily basis. In K23L Outer spring supplied for expert, due to hook mark concern, end customer raising complaint on frequently.
Detection Stage	Inprocess
Problem Severity	Aesthetic
NG Quantity	28
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	quality@sagarsprings.com
Plant Head/CEO Email ID	ajai.singh@sagarsprings.com
MD Email ID	sagar@sagarsprings.com

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	1500	5000	0	1600	0	8100
Check Qty	1500	5000	0	1600	0	8100
NG Qty	28	450	0	100	0	578

Action taken on NG part

Scrap	0
Rework	578
Under Deviation	0

Containment Action
Segregation carried out at warehouse as well as FG and spring hook mark reworked

3. Process Flow

Process Flow Description
Coiling – Tempering – Grinding - Shot Pinning – Tempering – Scragging – Sq correction/ht checking –Pre treatment-Powder coating- Inspection-Dispatch

4. Process Details

Process / Operation	Inspection
Outsource	No
Machine / Cell	Inspection and touch up table
Machine / Cell No.	130

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Material	Improper hook	Found hook used are of appropriate design	O
Method	Spring not hanged properly	Spring are hanged properly on hanger and locked properly	O
Material	Hook get deformed while locking of spring	In case of using used hook, some time hook shape get deformed	X
Method	Used hook with powder used	Found hook used are bared not powder coated	O
Man	Loading person negligance	Found some loading operators not properly loading spring	X

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Visual Inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

7. Root Cause Analysis (Occurance)

Why 1	Hook get deformed while locking of spring
Why 2	Hook strength of some hooks get weakens because of excessive reuse
Why 3	Used hook with more than 4 cycle get mixed
Why 4	
Why 5	
Root Cause (Occurance)	Used hook with more than 4 cycle get mixed with other hook

Root Cause Analysis (Outflow)

Why 1	Spring is not hanged properly and locked properly
Why 2	Loading operator negilgence
Why 3	Absence of awareness in loading person
Why 4	
Why 5	
Root Cause (Outflow)	Absence of awareness in loading person result in improper loading

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Proper arrangement of hook made to identify it burning frequency and it status	PC-Supervisor	22/10/2022	22/10/2022	Completed
Outflow	Refresher training will be given to loading operator for checking loading pattern and proper locking	PC-Supervisor	19/10/2022	19/10/2022	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Proper visual inspection at loading stage
Inspection Method	Other
Other Inspection Method	Visual inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	Hook of more than 3 burnt get mix and deformed hook get used on line 287_Occurance_Before.pdf
Occurance (After)	Hook are properly tracked and it freq could be identified it remain well arranged 287_Occurance_After.pdf
Outflow (Before)	Lack of awareness to Loading person and Inspector 287_Outflow_Before.pdf
Outflow (After)	Operators and inspectors are well understood and loading spring properly and identify hook mark defective spring 287_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Applicable to all the powder coated springs

12. Document Review

Documents	ControlPlan, PFMEA, WISOP
Specify Other Document	OPL

13. Effectiveness Of Action

Reviewed Quantity	1000
Reason for submission	Completed