QFR No - 8000782917

Defect Details

NC No.	8000782917
NC Date	06/04/2022
NC Submission Date	
Part No.	F1GN01102B
Part Name	MAIN SPRING K86A
Supplier Name & Code	101225-HELICAL SPRINGS
ETL Plant	1136-ETL Suspension Sanand
Defect Details	HIGHT O/SIZE.-TOTAL HIGHT OVERSIZE

1. Problem Description

Defect Description	Total Length Over Size
Detection Stage	Inprocess
Problem Severity	Function
NG Quantity	7
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	arun@helicalsprings.in
Plant Head/CEO Email ID	Shaikhmoin@helicalsprings.in
MD Email ID	ataneja@helicalsprings.in

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	10000	0	0	0	8950	18950
Check Qty	10000	0	0	0	8950	18950
NG Qty	7	0	0	0	0	7

Action taken on NG part

Scrap	7
Rework	0
Under Deviation	0

Containment Action
100% inspection done for length at ETL & Warehouse.

3. Process Flow

Process Flow Description
Raw Material Receipt & Inspection, Coiling, Stress Relieving, End Grinding, Shot Peening, Scragging, Length & Wavyness checking, Strain-aging, Surface Finish-Oiling, Final Inspection/ PDI, Packing, Dispatch.

4. Process Details

Process / Operation	Coiling
Outsource	No
Machine / Cell	NA
Machine / Cell No.	NA

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Method	Improper material handing	Setup part mix with ok part	X
Material	As per Drawing	RMTC checked found ok	O
Machine	Herdon	Found ok	O
Man	Unskilled operator	Skill Matrix checked found ok	O

6. Inspection Method Analysis (Current)

Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	5 Nos

7. Root Cause Analysis (Occurance)

Why 1	length over size
Why 2	During setup length short spring coiled
Why 3	Setup quantity mix with the ok material
Why 4	No provision was available for setup part storage
Why 5	
Root Cause (Occurance)	Yellow bin introduced at coiling to keep suspected/setup part

Root Cause Analysis (Outflow)

Why 1	length over size
Why 2	Length gauge setting disturbed
Why 3	Improper locking of Length gauge
Why 4	No cross check method for length gauge verification
Why 5	
Root Cause (Outflow)	Dedicated length gauge will be introduced for K0LA main spring (fixed type)

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Dedicated length gauge will be introduced for K0LA main spring (fixed type)	Mr. Arun Kumar	30/04/2022	28/04/2022	Completed
Occurance	1.Yellow bin introduced at coiling to keep suspected/setup part 2.OPL displayed at coiling 3.Training provided to the operator and recorded the same	Mr. Nilesh Kapure	14/04/2022	12/04/2022	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	Free length will be introduced for K0LA main spring (fixed type)
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	30/Lot

10. Evidance of Countermeasure

Occurance (Before)	No 100% marking on springs. 44_Occurance_Before.pdf
Occurance (After)	100% marking on spring After free length checking. 44_Occurance_After.pdf
Outflow (Before)	Red bin & Yellow bin not cover properly. 44_Outflow_Before.pdf
Outflow (After)	Red bin & Yellow bin cover properly 44_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	All Similar Part.

12. Document Review

Documents	
Specify Other Document	Opl

13. Effectiveness Of Action

Reviewed Quantity	12000
Reason for submission	Found Ok