QFR No - 7000860787

Defect Details

NC No.	7000860787
NC Date	03/09/2022
NC Submission Date	
Part No.	S2KH03702B
Part Name	REBOUND SPRING B105L
Supplier Name & Code	100185-HELICAL SPRINGS
ETL Plant	1118-ETL E-92,93 Suspension
Defect Details	DIMN.U/SIZE.-I/D UNDER AIZE SPE=11.20+0.30OBSER=10.88

1. Problem Description

Defect Description	Rebound Spring B105L= I/D UNDER SIZE OBSER=10.88
Detection Stage	Receipt
Problem Severity	Fitment
NG Quantity	10000
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	Prabhat@helicalsprings.in
Plant Head/CEO Email ID	awadhwa@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	8000	10000	0	5000	0	23000
Check Qty	8000	0	0	5000	0	13000
NG Qty	2500	0	0	0	0	2500

Action taken on NG part

Scrap	2500
Rework	0
Under Deviation	0

Containment Action
100% at lying material at our end at your end.

3. Process Flow

Process Flow Description
R/M->Coiling->SR-1->Grinding->Shot -peening->SR-2->Final Inspection-> Packing-> Despatch

4. Process Details

Process / Operation	Machine
Outsource	No
Machine / Cell	HTC-80
Machine / Cell No.	HTC-80

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Man	Competency of operator	verify skill matrix found >3 year exp.	O
Method	Inadequate gauge used	found Ng	X
Material	wire grade wrong used	log verify found ok	O
Machine	Setting error	Physically verify found ok	O
Tool	slide bolt was loose	physical verify found not ok	X

6. Inspection Method Analysis (Current)

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

7. Root Cause Analysis (Occurance)

Why 1	inner dia at spring body under size
Why 2	Slide displacement unevenness
Why 3	Excess play of slide
Why 4	Slide bolt loose
Why 5	checking frequency of bolt tightening only start of shift
Root Cause (Occurance)	Uneven displacement of slide at coiling stage.

Root Cause Analysis (Outflow)

Why 1	Inner dia at spring body under size
Why 2	Gauge was not adequate
Why 3	Only checked the 100% inner dia 10.65~10.85
Why 4	
Why 5	
Root Cause (Outflow)	Only checked the Inner dia 100% with gauge dim 10.65~10.85 mm

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	bolt tightening frequency revised now we checked the bolt tightening twice in a day.	sumer	07/09/2022	06/09/2022	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Both ID checked with assembly gauge.
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidance of Countermeasure

Occurance (Before)	Before we checked the bolt tightening once in a day 241_Occurance_Before.png
Occurance (After)	Now we checked the bolt tightening twice in a day. 241_Occurance_After.jpg
Outflow (Before)	We used a adequate gauge 241_Outflow_Before.jpg
Outflow (After)	we used assembly gauge . 241_Outflow_After.jpg

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Bolt tightening frequency Revised for all part

12. Document Review

Documents	ControlPlan
Specify Other Document	NO

13. Effectiveness Of Action

Reviewed Quantity	5000
Reason for submission	Evidence of Occurrence Countermesure Before & After are same (Need To Correct) However No Defective Parts Observed after Action Taken.