#### **Defect Details**

NC No.	8000879789
NC Date	25/06/2024
NC Submission Date	
Part No.	550KH03002
Part Name	REBOUND SPRING-PRFH-006
Supplier Name & Code	101245-SAGAR SPRINGS PVT LTD
ETL Plant	1146-ETL Suspension Narasapura
Defect Details	BEND-

## 1. Problem Description

Defect Description	Rebound Spring bend issue .
<b>Detection Stage</b>	Inprocess
Problem Severity	Fitment
NG Quantity	2
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

# Supplier Communication Details

Quality Head Email ID quality@sagarsprings.com	
Plant Head/CEO Email ID	sagarsprings@gmail.com
MD Email ID	

## 2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	15000	0	0	5000	0	20000
Check Qty	15000	0	0	5000	0	20000
NG Qty	2	0	0	0	0	2

## Action taken on NG part

Scrap	2
Rework	0
Under Deviation	0

Containment Action	
Scrap	

#### 3. Process Flow

#### Process Flow Description

Coiling - Tempering - Grinding - Shot Peening - Tempering - Oiling - Packing

#### 4. Process Details

Process / Operation	Material Handling / Movement between operations
Outsource No	
Machine / Cell	Material Handling / Movement between operations
Machine / Cell No. Trolley	

## 5. Problem Analysis

Туре	Possible Cause	Fact Verification	Jud
Man	Untrained operator	Trained operators working at all process stages	0
Method	Spring bend during material handling	Material handled / moved in trolleys and potential chances of bend	Х
Man	New operator	Experienced operators working at all process atages	0

## 6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Sampling inspection
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	sample pla

#### 7. Root Cause Analysis (Occurance)

Why 1	Spring bend during material handling
Why 2 Material handling in trolleys caused bend	
Why 3	During material unloading springs fallen on ground and trolly wheel passed on spring and same springs got mixed up with lot
Why 4 Material handling trolley design constrain	
Why 5	
Root Cause (Occurance)	Material handling trolley design constrain

## Root Cause Analysis (Outflow)

Why 1	Spring Bend
Why 2 Spring bend problem could not able to detect at final inspection	
Why 3	Sampling inspection
Why 4	
Why 5	
Root Cause (Outflow)	Sampling inspection

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

Туре	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	New model trolley designed to handle / move rebound springs to prevent bend	SSPL	30/06/2024	30/06/2024	Completed
Outflow	Visual inspection will be done after final inspection for free from bend & before oiling and packing	SSPL	30/06/2024	30/06/2024	Completed

## 9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Visual Inspection
Inspection Method	Other
Other Inspection Method	Visual Inspection
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100% Visua

## 10. Evidance of Countermeasure

Occurance (Before)	Material handling trolley design constraint causing spring bend during unloading springs 886_Occurance_Before.pptx		
Occurance (After)	Trolley design modified to prevent spring bend issue 886_Occurance_After.pptx		
Outflow (Before)	At final Inspection sampling inspection followed caused non detection of spring bend 886_Outflow_Before.pptx		
Outflow (After)	After final inspection visual inspection before coiling to detect spring bend issue 886_Outflow_After.pptx		

# 11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Action applicable for all rebound springs

#### 12. Document Review

Documents	PFMEA
Specify Other Document	OPL

## 13. Effectiveness Of Action

Reviewed Quantity	10000
Reason for submission	Reviewed next two lots found ok no issue .