#### QFR No - 8000782048

#### **Defect Details**

NC No.	8000782048
NC Date	27/03/2022
NC Submission Date	
Part No.	F1GN01102B
Part Name	MAIN SPRING K86A
Supplier Name & Code	101048-STUMPP SCHUELE AND SOMAPPA SPR
ETL Plant	1136-ETL Suspension Sanand
Defect Details	HIGHT U/SIZETOTAL HIGHT UNDERSIZE

## 1. Problem Description

Defect Description	Total Length Under Size i.e. 213.23, 214.18 etc.
Detection Stage	Receipt
Problem Severity	Fitment
NG Quantity	68
Is Defect Repeatative?	Yes
Defect Sketch / Photo	

## Supplier Communication Details

Quality Head Email ID	pathan.ak@ssssprings.com	
Plant Head/CEO Email ID	udham.singh@ssssprings.com	
MD Email ID	rln@ssssprings.com	

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	2000	0	0	0	1005	3005
Check Qty	2000	0	0	0	1005	3005
NG Qty	3	0	0	0	1	4

#### Action taken on NG part

Scrap	4
Rework	0
Under Deviation	0

#### **Containment Action**

Available internal parts segregated 100 %. Available Qty of 1005 nos checked, 1 part found having length undersize. All the Bins are identified with inspection tag, the inspection is again carried out to ensure correct length of main spring.

#### 3. Process Flow

#### **Process Flow Description**

Recipt & inspection - Visual - Storage of material - Winding RH - Stress Relieving - Grinding - Shot peening - Scragging - Lo,OD,e1 & bend sorting and correction - Stress Relieving (LTA) - Oiling - Final Inspection - Packing

#### 4. Process Details

Process / Operation	Length Correction
Outsource	No
Machine / Cell	Scragging
Machine / Cell No.	Scragging

## 5. Problem Analysis

Туре	Possible Cause	Fact Verification	Jud
Machine	Length Undersize from grinding stage	Verified the record and length found within specification at grinding stage.	0
Method	Part mix up at correction stage	Verfied and found the possibility of mix up at correction stage	Х
Tool	Wrong magazine plate at Grinding stage	Verified and found the correct magazine plate for grinding of this part	0
Man	Unskilled Operator	Skilled operator deputed at Grinding stage	0
Method	Wrong set up of Gauge	Verified and found the possibility of wrong set up of gauge since adjustable length gauge was used f	х

#### 6. Inspection Method Analysis (Current)

Inspection Method	Sp. 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	Length short part mixed with OK parts
Why 2	Part was hold for re-correction for length at the same inspection table
Why 3	Separate bin was not used to Hold the length correction part
Why 4	
Why 5	
Root Cause (Occurance)	Separate bin was not used to Hold the length correction part

## Root Cause Analysis (Outflow)

Why 1	Length undersize part passed from final inspection	
Why 2	Length gauge not set properly	
Why 3	Adjustable length gauge used for inspection	

Why 4	
Why 5	
Root Cause (Outflow)	Adjustable length gauge used for inspection

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

Туре	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Separate bin provided to contain the hold part for Length correction.	Mr. Dixit	05/04/2022	05/04/2022	Completed
Outflow	Length gauge to get set & verified by Quality person, once / shift.	Mr. Maulesh	04/04/2022	04/04/2022	Completed
Outflow	nplace of adjustable length gauge, Fix length gauge to be implemented at line to avoid the setting mistakes of length gauge.	Mr. Shashank	04/04/2022	04/04/2022	Completed

# 9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	in place of adjustable length gauge, Fix length gauge to be implemented at line to avoid the setting mistakes of length gauge.
Inspection Method	Sp. Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

# 10. Evidance of Countermeasure

Occurance (Before)	Separate bin was not used to Hold the length correction part 24_Occurance_Before.png
Occurance (After)	Separate bin provided to contain the hold part for Length correction 24_Occurance_After.png
Outflow (Before)	Adjustable length gauge used for inspection 24_Outflow_Before.jfif
Outflow (After)	In place of adjustable length gauge, Fix length gauge to be implemented at line to avoid the setting mistakes of length gauge. 24_Outflow_After.jfif

# 11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	Fix gauge introduced for all the ETL springs.

## 12. Document Review

Documents	ControlPlan

## 13. Effectiveness Of Action

Reviewed Quantity 1000	
Reason for submission Accepted	