

## Defect Details

<b>NC No.</b>	8000868409
<b>NC Date</b>	22/03/2024
<b>NC Submission Date</b>	
<b>Part No.</b>	F2GN12502B
<b>Part Name</b>	MAIN SPRING J1A & J1D
<b>Supplier Name &amp; Code</b>	100180-BHALLA TECHTRAN INDUSTRIES LIM
<b>ETL Plant</b>	1117-ETL K-228/9 Suspension
<b>Defect Details</b>	NOT AS PER SPECIFICATION-PARELLELISM MORE

## 1. Problem Description

<b>Defect Description</b>	PARELLELISM MORE
<b>Detection Stage</b>	Inprocess
<b>Problem Severity</b>	Function
<b>NG Quantity</b>	91
<b>Is Defect Repeatative?</b>	Yes
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	sunilagarwal.btl@gmail.com
<b>Plant Head/CEO Email ID</b>	plant1@btlsprings.com
<b>MD Email ID</b>	amitbhalla.btl@gmail.com

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

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
<b>Total Qty</b>	2000	4500	4000	2000	0	12500
<b>Check Qty</b>	2000	4500	0	2000	0	8500
<b>NG Qty</b>	91	60	0	0	0	151

## Action taken on NG part

<b>Scrap</b>	0
<b>Rework</b>	151
<b>Under Deviation</b>	0

## Containment Action

Check the all material lying at ETL end and warehouse as well as inhouse

## 3. Process Flow

**Process Flow Description**

RM Receipt &amp; Inspection Coiling Stress relieving 1st End Grinding Shot Peening Stress relieving 2nd Scragging Final Inspection Packing &amp; Dispatch

**4. Process Details**

<b>Process / Operation</b>	End Grinding
<b>Outsource</b>	No
<b>Machine / Cell</b>	CNC Grinding
<b>Machine / Cell No.</b>	WNJ Grinding m/c

**5. Problem Analysis**

Type	Possible Cause	Fact Verification	Jud
Material	Wrong material grade used	Verify and found OK as per Drg.	O
Method	Grinding wheel dressing not as per decided freq.	Check wheel dressing record as per decided freq.	O
Tool	Grinding plate as per requirement	Found old grinding plate with hole size more	X
Man	New/Untrained operator	Verify operator skill matrix and found OK	O
Method	Grinding wheel alignment not ok	Check wheel alignment with block	O
Machine	Grinding feed more in programming	Verify and found OK	O

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

<b>Inspection Method</b>	Instrument
<b>Other Inspection Method</b>	
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	Sampling
<b>Sampling</b>	No
<b>Sample Size</b>	05 Nos/Lot

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

<b>Why 1</b>	Parallelism out of specification
<b>Why 2</b>	End grinding was in taper
<b>Why 3</b>	More clearance in grinding plate hole w.r.t. spring OD
<b>Why 4</b>	Old grinding plate used with hole size more
<b>Why 5</b>	No identification on grinding plate
<b>Root Cause (Occurance)</b>	Old grinding plate with hole size more used during grinding operation due to no identification on grinding plates

**Root Cause Analysis (Outflow)**

<b>Why 1</b>	Parallelism out of specification
<b>Why 2</b>	Not detect during PDI
<b>Why 3</b>	Sampling Inspection
<b>Why 4</b>	As per decided freq.
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	Defected parts not detect during PDI inspection due to sampling inspection

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Identify the grinding plates with No. and monthly validation started	Rajesh Choudhary	28/03/2024	28/03/2024	Completed
Occurance	Grinding plate hole size check point added in setup approval and in process inspection check sheet and verified by Q.C.	Rajesh Choudhary	27/03/2024	28/03/2024	Completed
Occurance	Separate racks made for storage of grinding plates with proper identification	Saudagar Prasad	28/03/2024	28/03/2024	Completed
Outflow	Sampling freq. increased in PDI stage (05 nos from each crates in place of 05 nos/lot)	Rajesh Choudhary	27/03/2024	28/03/2024	Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	Checking freq. increased in PDI stage
<b>Inspection Method</b>	Instrument
<b>Other Inspection Method</b>	
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	Sampling
<b>Sampling</b>	No
<b>Sample Size</b>	05 Nos/Bin

## 10. Evidance of Countermeasure

<b>Occurance (Before)</b>	Unidentified grinding plate <a href="#">725_Occurance_Before.jpg</a>
<b>Occurance (After)</b>	OPL displayed and provide training to all concerned <a href="#">725_Occurance_After.pdf</a>
<b>Outflow (Before)</b>	Less sampling freq. <a href="#">725_Outflow_Before.xls</a>
<b>Outflow (After)</b>	Sampling freq. increased and revised control plan <a href="#">725_Outflow_After.xls</a>

## 11. Horizontal Deployment

<b>Horizontal Deployment Required</b>	Yes
<b>Applicable Machine / Model / Plant</b>	All main spring in grinding operation

## 12. Document Review

<b>Documents</b>	ControlPlan, PFMEA, WISOP, InspCheckSheet
<b>Specify Other Document</b>	OPL

### 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	240
<b>Reason for submission</b>	Found ok