

## Defect Details

<b>NC No.</b>	7000839961
<b>NC Date</b>	01/06/2022
<b>NC Submission Date</b>	
<b>Part No.</b>	550LG06202
<b>Part Name</b>	SEAT PIPE -K23A/PRFH-006
<b>Supplier Name &amp; Code</b>	100929-HARSHAD ENGINEERING COMPANY
<b>ETL Plant</b>	1116-ETL K-120 Suspension
<b>Defect Details</b>	RUN OUT MORE-concentricity not ok (0.35 Ageins 0.1max)

## 1. Problem Description

<b>Defect Description</b>	Threading run out NG concern reported in PRFH Seat pipe. Run out observed up to 0.4 mm against required of 0.1 mm.
<b>Detection Stage</b>	Receipt
<b>Problem Severity</b>	Function
<b>NG Quantity</b>	2000
<b>Is Defect Repeatative?</b>	Yes
<b>Defect Sketch / Photo</b>	

## Supplier Communication Details

<b>Quality Head Email ID</b>	qaharshad@miteshauto.com
<b>Plant Head/CEO Email ID</b>	qaharshad@miteshauto.com
<b>MD Email ID</b>	auto.mitesh@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>	9200	3200	0	2100	3400	17900
<b>Check Qty</b>	9200	3200	0	2100	3400	17900
<b>NG Qty</b>	3800	0	0	0	3400	7200

## Action taken on NG part

<b>Scrap</b>	3800
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

100% sorting done for Thread conc.

## 3. Process Flow

**Process Flow Description**

1. Cutting 2. Draw 3. Header (Cold forging) 4. Rough Grinding 5. CNC &amp; SPM (Head, boring &amp; Tapping) 6. Punching 7. Finish Grinding

**4. Process Details**

<b>Process / Operation</b>	CNC Boring & Tapping
<b>Outsource</b>	No
<b>Machine / Cell</b>	SPM (Boring & Tapping) & CS
<b>Machine / Cell No.</b>	SPM 1, 2, 3 & 4, 151

**5. Problem Analysis**

Type	Possible Cause	Fact Verification	Jud
Machine	Drilling Spindle TR Bad	Found upto 0.07 mm, spec. 0.05 mm	X
Machine	Face cutter TR Bad	Found ok within 0.02 against 0.05 mm	O
Machine	Collet TR wrt Tapping Spindle not ok	Found upto 0.03 against 0.05 mm	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>	IS 2500

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

<b>Why 1</b>	Concentricity found oversize
<b>Why 2</b>	Bore conc. wrt Shank Dia. found Oversize
<b>Why 3</b>	Boring Spindle alignment wrt Collet found disturb 0.10 against 0.02 mm
<b>Why 4</b>	Indexing table repeatability not ok
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	Indexing table repeatability not ok

**Root Cause Analysis (Outflow)**

<b>Why 1</b>	Concentricity found oversize
<b>Why 2</b>	During production, only TPG conc. check point available
<b>Why 3</b>	Inspection freq. is 5 nos/2 hr
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	Inspection freq. is 5 nos/2 hr

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Indexing table replaced & Collet alignment done with Spindle	D. Jople	01/09/2022	01/09/2022	Completed
Outflow	Collet--wise runout checked every 2 hrs	Ashish Moharir	17/08/2022	01/09/2022	Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	No
<b>Change Details</b>	NA
<b>Inspection Method</b>	Gauge
<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>	13 nos

## 10. Evidence of Countermeasure

<b>Occurance (Before)</b>	Collet alignment with spindle found disturb <a href="#">160_Occurance_Before.jpg</a>
<b>Occurance (After)</b>	Old turret replace by New One <a href="#">160_Occurance_After.jpg</a>
<b>Outflow (Before)</b>	Runout checking done 5 nos every 2 hrs <a href="#">160_Outflow_Before.pdf</a>
<b>Outflow (After)</b>	Runout checking done collet-wise after every 2 hrs <a href="#">160_Outflow_After.pdf</a>

## 11. Horizontal Deployment

<b>Horizontal Deployment Required</b>	Yes
<b>Applicable Machine / Model / Plant</b>	CNC, Tapping & SPM

## 12. Document Review

<b>Documents</b>	WISOP, InspCheckSheet
<b>Specify Other Document</b>	NA

## 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	200
<b>Reason for submission</b>	Completed.