

## Defect Details

|                                 |                             |
|---------------------------------|-----------------------------|
| <b>NC No.</b>                   | 8000891727                  |
| <b>NC Date</b>                  | 19/09/2024                  |
| <b>NC Submission Date</b>       |                             |
| <b>Part No.</b>                 | S2MJ01112B                  |
| <b>Part Name</b>                | SPRING SEAT K0AJ            |
| <b>Supplier Name &amp; Code</b> | 100106-SHARP ENGINEERS.     |
| <b>ETL Plant</b>                | 1118-ETL E-92,93 Suspension |
| <b>Defect Details</b>           | RUSTY-RUSTY                 |

## 1. Problem Description

|                               |                      |
|-------------------------------|----------------------|
| <b>Defect Description</b>     | Rusty issue observed |
| <b>Detection Stage</b>        | Receipt              |
| <b>Problem Severity</b>       | Aesthetic            |
| <b>NG Quantity</b>            | 352                  |
| <b>Is Defect Repeatative?</b> | No                   |
| <b>Defect Sketch / Photo</b>  |                      |

## Supplier Communication Details

|                                |                                  |
|--------------------------------|----------------------------------|
| <b>Quality Head Email ID</b>   | quality@sharp-engineers.com      |
| <b>Plant Head/CEO Email ID</b> | kurund.ma@sharp-engineers.com    |
| <b>MD Email ID</b>             | urkhandelwal@sharp-engineers.com |

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

| Location         | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|------------------|---------|-----------|---------|-------------|--------------|-------|
| <b>Total Qty</b> | 1000    | 0         | 0       | 1200        | 0            | 2200  |
| <b>Check Qty</b> | 1000    | 0         | 0       | 0           | 0            | 1000  |
| <b>NG Qty</b>    | 352     | 0         | 0       | 0           | 0            | 352   |

## Action taken on NG part

|                        |     |
|------------------------|-----|
| <b>Scrap</b>           | 0   |
| <b>Rework</b>          | 352 |
| <b>Under Deviation</b> | 0   |

## Containment Action

All pipeline material segregated at Customer end and Sharp end

## 3. Process Flow

**Process Flow Description**

RM Incoming-Parting-Rough lathe turning-Rough Drilling-CNC 1st-CNC 2nd-Plating -Final Inspection-Packing and forwarding

**4. Process Details**

|                            |              |
|----------------------------|--------------|
| <b>Process / Operation</b> | Plating      |
| <b>Outsource</b>           | Yes          |
| <b>Machine / Cell</b>      | Plating cell |
| <b>Machine / Cell No.</b>  | Plating cell |

**5. Problem Analysis**

| Type     | Possible Cause                           | Fact Verification  | Jud |
|----------|--|--|-----|
| Material | Incorrect RM grade                       | Third part inspection verified for chemical composition and hardness testing as per requirement.     | O   |
| Man      | Judgment error While checking            | Master sample/ Limit sample provided for Checking at final as well as process stage                  | O   |
| Machine  | Inadequate check Point in JH check sheet | Monthly JH check sheet available on machine and all the check point is being checked and recorded as | O   |
| Method   | Improper Plating Thickness               | Plating thickness defined as per drawing but at lower side   | X   |
| Tool     | Tool life monitoring                     | Tool life for all the tool i.e. forming tool, drill, tap and insert are defined and recorded as per  | 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>                     | 5 NOS PER  |

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

|                               |   |
|-------------------------------|---|
| <b>Why 1</b>                  | Rusty issue observed                                |
| <b>Why 2</b>                  | Moisture accumulated because of rainy season        |
| <b>Why 3</b>                  | Low plating thickness gets rusty                    |
| <b>Why 4</b>                  | low plating thickness upto 8mic against 8-12 micron |
| <b>Why 5</b>                  |   |
| <b>Root Cause (Occurance)</b> | low plating thickness upto 8mic against 8-12 micron |

**Root Cause Analysis (Outflow)**

|              |  |
|--------------|--|
| <b>Why 1</b> | Rusty issue observed                                     |
| <b>Why 2</b> | Moisture accumulated on the part because of rainy season |
| <b>Why 3</b> | Packaging in only Corrugated Box                         |
| <b>Why 4</b> |  |
| <b>Why 5</b> |  |

**Root Cause (Outflow)**

Packaging in only Corrugated Box

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

| Type      | Countermeasure Details                               | Responsibility      | Target Date | Actual Date | Status    |
|-----------|--|---------------------|-------------|-------------|-----------|
| Outflow   | Wrapping provided for Inner and outside              | Mr. Omkar Bhange    | 28/09/2024  | 28/09/2024  | Completed |
| Occurance | Started Marinating Plating Thickness Above 10 micron | Mr. Pradeep Bhagwat | 28/09/2024  | 28/09/2024  | Completed |

## 9. Inspection Method After Customer Complaint

|  |                                      |
|--|--------------------------------------|
| <b>Change In Inspection System</b>     | Yes                                  |
| <b>Change Details</b>                  | Sampling Size increased 5nos per Box |
| <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>                     | 5nos/ Box                            |

## 10. Evidence of Countermeasure

|                           |  |
|---------------------------|--|
| <b>Occurance (Before)</b> | low plating thickness upto 8mic against 8-12 micron<br><a href="#">1109_Occurance_Before.jpeg</a>                  |
| <b>Occurance (After)</b>  | Started Marinating Plating Thickness Above 10 -12 micron From next Lot<br><a href="#">1109_Occurance_After.png</a> |
| <b>Outflow (Before)</b>   | Packaging in only Corrugated Box<br><a href="#">1109_Outflow_Before.jpeg</a>                                       |
| <b>Outflow (After)</b>    | Wrapping provided for Inner and outside<br><a href="#">1109_Outflow_After.jpeg</a>                                 |

## 11. Horizontal Deployment

|   |    |
|---|----|
| <b>Horizontal Deployment Required</b>     | No |
| <b>Applicable Machine / Model / Plant</b> | NA |

## 12. Document Review

|                               |                   |
|-------------------------------|-------------------|
| <b>Documents</b>              | WISOP, PackingStd |
| <b>Specify Other Document</b> | NA                |

## 13. Effectiveness Of Action

|                              |                                   |
|------------------------------|-----------------------------------|
| <b>Reviewed Quantity</b>     | 200                               |
| <b>Reason for submission</b> | No any rust observed in this lot. |

