QFR No - 8000873531

## Defect Details

| | |
|---|---|
| **NC No.** | 8000873531 |
| **NC Date** | 06/05/2024 |
| **NC Submission Date** | |
| **Part No.** | F2LG07102B |
| **Part Name** | SEAT PIPE - J1D |
| **Supplier Name & Code** | 101263-SINGLA PRECISION SCREWS |
| **ETL Plant** | 1117-ETL K-228/9 Suspension |
| **Defect Details** | NOT AS PER SPECIFICATION-TOTAL LENGTH UNDERSIZE |

## 1. Problem Description

| | |
|---|---|
| **Defect Description** | TOTAL LENGTH UNDERSIZE |
| **Detection Stage** | Inprocess |
| **Problem Severity** | Fitment |
| **NG Quantity** | 1 |
| **Is Defect Repeatative?** | No |
| **Defect Sketch / Photo** | |

## Supplier Communication Details

| | |
|---|---|
| **Quality Head Email ID** | quality@singlaprecision.com |
| **Plant Head/CEO Email ID** | quality@singlaprecision.com |
| **MD Email ID** | aditya@singlaprecision.com |

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

| Location | ETL End | Warehouse | Transit | Supplier FG | Supplier WIP | Total |
|---|---|---|---|---|---|---|
| **Total Qty** | 600 | 0 | 0 | 0 | 0 | 600 |
| **Check Qty** | 600 | 0 | 0 | 0 | 0 | 600 |
| **NG Qty** | 1 | 0 | 0 | 0 | 0 | 1 |

Action taken on NG part

| | |
|---|---|
| **Scrap** | 1 |
| **Rework** | 0 |
| **Under Deviation** | 0 |

| Containment Action |
|---|
| STOCK CHECK 100% AT OUR END |

## 3. Process Flow

| Process Flow Description |
| --- |
| 1-RM 2- FORGING 3-PUNCHING -IST 4-ROUGH CLG 5-CNC-IST 6-CNC-II 7-PUNCHING -II 8-I.D CHIP REMOVE 9-REAMING IST 10-REAMING-IIND 11-TAPPING 12-FINAL GRINDING 13-ALKLINE WASHING 14- FINAL INSPECTION 15 - PACKING |

## 4. Process Details

| | |
| --- | --- |
| **Process / Operation** | CNC -2ND OPERATION |
| **Outsource** | No |
| **Machine / Cell** | CNC-MACHINE |
| **Machine / Cell No.** | CNC -5 |

## 5. Problem Analysis

| Type | Possible Cause | Fact Verification | Jud |
| --- | --- | --- | --- |
| Material | RM GRADE AND SIZE NOT OK | VALIDATED AND FOUND OK | O |
| Man | UNAWARENESS OF OPERATOR | VALIDATION AND FOUND MACHINE OPERATOR ABOUT TOOL LIFE FRQ NOT AWARENESS | X |
| Tool | TOOL MAY BE WEAR | VALIDATE AND FOUND WEAROUT | X |
| Method | INSPECTION METHOD NOT EFFECTIVE | VALIDATION AND FOUND TOTAL LENTH CHECKING INSTRUMENT NOT FOUND IN MACHINE | X |
| Machine | MACHINE PM NOT EFFECTIVE | MACHINE AIR GUN NOT WORKING CHIPS NOT CLEAN ON COLLECT | X |

## 6. Inspection Method Analysis (Current)

| | |
| --- | --- |
| **Inspection Method** | Instrument |
| **Other Inspection Method** | |
| **Check Point at Final Inspection** | Yes |
| **Checking Freq.** | 100% |
| **Sampling** | No |
| **Sample Size** | NO |

## 7. Root Cause Analysis (Occurance)

| | |
| --- | --- |
| **Why 1** | TOTAL LENGTH UNDERSIZE |
| **Why 2** | Due to the presence of a chip in the collect chips the part was not properly set on place |
| **Why 3** | Operator Air gun not use |
| **Why 4** | OPERATOR WI NOT ADD PART PER CYCLE AIR GUN USE IN COLLET |
| **Why 5** | OPERATOR NOT AWRE THIS TYPE OF PROBLEM |
| **Root Cause (Occurance)** | OPERATOR WI NOT ADD PART PER CYCLE AIR GUN USE IN COLLET |

## Root Cause Analysis (Outflow)

| | |
| --- | --- |
| **Why 1** | TOTAL LENGTH UNDERSIZE |
| **Why 2** | INSPECTION PLAN WAS NOT EFFECTIVE |
| **Why 3** | AS PER SAMPLING PLAN PART CHECKING IN FINAL INSPECTION |
| **Why 4** | LENGTH DIAL GAUGE NOT AVAILABLE IN MACHINE AND FINAL INSPECTION |
| **Why 5** | NG PART SKIPPED FROM INSPECTION AND MACHINE |

| | |
|---|---|
| **Root Cause (Outflow)** | LENGTH DIAL GAUGE NOT AVAILABLE IN MACHINE AND FINAL INSPECTION |

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

| Type | Countermeasure Details | Responsibility | Target Date | Actual Date | Status |
|---|---|---|---|---|---|
| Outflow | DIAL LENGTH GAUGE PROVIDE TO MACHINE AND FINAL INSPECTION | MR GANESH MAURYA | 09/05/2024 | 09/05/2024 | Completed |
| Occurance | OPERATOR WI NOT ADD PART PER CYCLE AIR GUN USE IN COLLET | ASHISH SINGH | 09/05/2024 | 09/05/2024 | Completed |

## 9. Inspection Method After Customer Complaint

| | |
|---|---|
| **Change In Inspection System** | Yes |
| **Change Details** | DIAL LENGTH GAUGE PROVIDE TO MACHINE AND FINAL INSPECTION |
| **Inspection Method** | Sp. Gauge |
| **Other Inspection Method** | |
| **Check Point at Final Inspection** | Yes |
| **Checking Freq.** | Sampling |
| **Sampling** | No |
| **Sample Size** | 50/1200 |

## 10. Evidance of Countermeasure

| | |
|---|---|
| **Occurance (Before)** | OPERATOR WI NOT ADD PART PER CYCLE AIR GUN USE IN COLLET<br>784_Occurance_Before.xlsx |
| **Occurance (After)** | OPERATOR WI ADD PART PER CYCLE AIR GUN USE IN COLLET<br>784_Occurance_After.xlsx |
| **Outflow (Before)** | Gauge not implements<br>784_Outflow_Before.xlsx |
| **Outflow (After)** | 100% gauge implements<br>784_Outflow_After.xlsx |

## 11. Horizontal Deployment

| | |
|---|---|
| **Horizontal Deployment Required** | Yes |
| **Applicable Machine / Model / Plant** | CNC -05 PLANT NO -177 |

## 12. Document Review

| | |
|---|---|
| **Documents** | PokayokeCheckSheet, PFMEA |
| **Specify Other Document** | NO |

## 13. Effectiveness Of Action

| | |
|---|---|
| **Reviewed Quantity** | 100 |

| | |
|---|---|
| **Reason for submission** | Due to the presence of a chip in the collect chips the part was not properly set on place - Use pokayoke or interlocking like- 1. Seat check pokayoke required to ensure perfect seating/ resting of part 2. Provision of coolant flow with 5 bar pressure interlock with machine cycle. 3. Share pokayoke details |