

## Defect Details

<b>NC No.</b>	8000820735
<b>NC Date</b>	16/02/2023
<b>NC Submission Date</b>	
<b>Part No.</b>	520FZ01902
<b>Part Name</b>	HUB CLUTCH K70
<b>Supplier Name &amp; Code</b>	100656-MADHURA DIE CAST PVT.LTD
<b>ETL Plant</b>	1132-ETL K-226/1 TRANSMISSION
<b>Defect Details</b>	TAPPING O/SIZE.-CRACK & HEAVY TEPAR MACHINING

## 1. Problem Description

<b>Defect Description</b>	Tapper Machining (Dimn 28.2±0.1 mm found up to 27.89~28.48 mm)
<b>Detection Stage</b>	Receipt
<b>Problem Severity</b>	Fitment
<b>NG Quantity</b>	2
<b>Is Defect Repeatative?</b>	No
<b>Defect Sketch / Photo</b>	<a href="#">oalbh4q0u5jzx4ubsgt2ova.jpg</a>

## Supplier Communication Details

<b>Quality Head Email ID</b>	madhuradiecast@gmail.com
<b>Plant Head/CEO Email ID</b>	madhuradiecast@gmail.com
<b>MD Email ID</b>	madhuradiecast@gaikegroup.in

## 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	500	600	2100
<b>Check Qty</b>	1000	0	0	500	600	2100
<b>NG Qty</b>	2	0	0	1	1	4

## Action taken on NG part

<b>Scrap</b>	4
<b>Rework</b>	0
<b>Under Deviation</b>	0

## Containment Action

1.100% All material segregation at customer end and inhouse end with identification blue marking.

## 3. Process Flow

**Process Flow Description**

1.Casting 2.fetling 3. CNC 1st Set-up 4.CNC 2nd Set-up 5.Broaching 6.Final Inspection

**4. Process Details**

<b>Process / Operation</b>	CNC 2nd Set-up
<b>Outsource</b>	No
<b>Machine / Cell</b>	CNC
<b>Machine / Cell No.</b>	05

**5. Problem Analysis**

Type	Possible Cause	Fact Verification	Jud
Method	Component was not rest proper in jaw	Check and verify possibility component rest inproper	X
Man	Unskilled operator was operate machine	Skill Matrix verify found Level-04 operator operate machine	X
Tool	Jaw loose in running	Check and verify found ok	O
Material	Burr and flash on resting face	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>	1:25

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

<b>Why 1</b>	Tapper Machining (Dimn 28.2±0.1 mm found up to 27.89~28.48 mm)
<b>Why 2</b>	In 2nd side machining Component was not properly resting in jaw.
<b>Why 3</b>	While operator resting the component in the jaw not properly rest.
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Occurance)</b>	While operator resting the component in the jaw not properly rest.

**Root Cause Analysis (Outflow)**

<b>Why 1</b>	Inspection done by height gauge
<b>Why 2</b>	Inspection frequency was less
<b>Why 3</b>	
<b>Why 4</b>	
<b>Why 5</b>	
<b>Root Cause (Outflow)</b>	Inspection frequency was less

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	Auto loader mechanism is implemented on 2nd side machining stage.	Production supervisor	15/03/2023	28/02/2023	Completed
Outflow	1.Special dial gauge implemented for Taper machining checking 2.Training and awareness given to inspector for checking 100% Taper Machining Checking.	QA Supervisor	15/03/2023	28/02/2023	Completed

## 9. Inspection Method After Customer Complaint

<b>Change In Inspection System</b>	Yes
<b>Change Details</b>	Started 100% Checking on special dial gauge
<b>Inspection Method</b>	Sp. Gauge
<b>Other Inspection Method</b>	
<b>Check Point at Final Inspection</b>	Yes
<b>Checking Freq.</b>	100%
<b>Sampling</b>	No
<b>Sample Size</b>	1:1

## 10. Evidance of Countermeasure

<b>Occurance (Before)</b>	Auto loader not available for component resting. <a href="#">372_Occurance_Before.pdf</a>
<b>Occurance (After)</b>	Auto loader mechanism is implemented on 2nd side machining stage. <a href="#">372_Occurance_After.pdf</a>
<b>Outflow (Before)</b>	Taper machining Dim checked by Height gauge <a href="#">372_Outflow_Before.jpeg</a>
<b>Outflow (After)</b>	Taper machining Dim checked by Sp Dial gauge <a href="#">372_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>	PokayokeCheckSheet, InspCheckSheet
<b>Specify Other Document</b>	NA

## 13. Effectiveness Of Action

<b>Reviewed Quantity</b>	1000
<b>Reason for submission</b>	OK -(Remark-Wrong Defect image upload -Wheel clutch photo upload instead of Hub clutch)

