

Defect Details

NC No.	8000819845
NC Date	09/02/2023
NC Submission Date	
Part No.	520FW04702
Part Name	CLUTCH HOUSING FULL FINISHED-K70
Supplier Name & Code	100656-MADHURA DIE CAST PVT.LTD
ETL Plant	1132-ETL K-226/1 TRANSMISSION
Defect Details	RUN OUT MORE-Ø36 MM BOSS R/O UPTO 0.4 MM

1. Problem Description

Defect Description	Boss Ø36 mm Run out found Oversize up to 0.45 mm again 0.04 mm (Customer Return Housing Clutch)
Detection Stage	Customer End
Problem Severity	Fitment
NG Quantity	1
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

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

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	800	0	0	500	1000	2300
Check Qty	800	0	0	500	1000	2300
NG Qty	1	0	0	3	1	5

Action taken on NG part

Scrap	5
Rework	0
Under Deviation	0

Containment Action

100% Inspection done at ETL End by dial and mandrel with blue dot marking on OD.

3. Process Flow

Process Flow Description

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

4. Process Details

Process / Operation	CNC 2nd Set-up
Outsource	No
Machine / Cell	CNC CELL
Machine / Cell No.	CNC 01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Machine	Center bolt of Chuck was loose	JH Sheet is verify but retightening point not updated in sheet.	X
Man	Unskilled operator was operating machine	Level -03 operator is operate machine.	O
Material	Burr on clamping area	Verify the component found ok	O
Tool	component was not clamp properly in jaw	Jaw pressure found not ok running condition	X

6. Inspection Method Analysis (Current)

Inspection Method	Instrument
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	Sampling
Sampling	No
Sample Size	1:50

7. Root Cause Analysis (Occurance)

Why 1	Concentricity Of Outer Diameter 36.00 mm wrt ID 22.0 mm Found 0.4 mm against 0.02 mm.
Why 2	In 2nd setup CNC machining Job gets loose in running.
Why 3	Fixture locator boss was loose.
Why 4	
Why 5	
Root Cause (Occurance)	In machine running condition, the center bolt in the chuck was gets loose.

Root Cause Analysis (Outflow)

Why 1	Inspector checking method was sampling basis
Why 2	gauging checking frequency was less
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	gauging checking frequency was less

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Outflow	Training and awareness given to inspector for checking 100% Concentricity Of Outer Diameter 36.00. wrt ID 22.0 With reading on job in micron.	QA Engineer	10/02/2023	10/02/2023	Completed
Occurance	Additional tightening arrangement by Grub Screw provided for Centre bolt of locator boss to avoid the centre bolt loose issue	Production Supervisor	10/02/2023	10/03/2023	Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	Yes
Change Details	Started 100% Concentricity Of Outer Diameter 36.00. wrt ID 22.0 With reading on job in micron.
Inspection Method	Gauge
Other Inspection Method	
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	100%

10. Evidence of Countermeasure

Occurance (Before)	JH Sheet is not updated for Centre bolt retightening 359_Occurance_Before.pdf
Occurance (After)	JH Sheet is updated for Centre bolt retightening frequency and method 359_Occurance_After.pdf
Outflow (Before)	Concentricity checking frequency is sample basis. 359_Outflow_Before.pdf
Outflow (After)	Concentricity checking frequency change sample to 100% and reading mentioned on part. 359_Outflow_After.pdf

11. Horizontal Deployment

Horizontal Deployment Required	Yes
Applicable Machine / Model / Plant	CLUTCH HOUSING FULL FINISHED-3W4S

12. Document Review

Documents	ControlPlan, JHCheckSheet, InspCheckSheet
Specify Other Document	NO

13. Effectiveness Of Action

Reviewed Quantity	2000
Reason for submission	OK

