

Defect Details

NC No.	8000831177
NC Date	01/06/2023
NC Submission Date	
Part No.	B2RU00402O
Part Name	PISTON SEAL DIA. 28 MM (MODIFIED)
Supplier Name & Code	100713-FUKOKU INDIA PVT.LTD.
ETL Plant	1120-ETL K-226/2 Disc Brakes
Defect Details	FITTMET NOT OK.-CRACK OBSERVED IN ID

1. Problem Description

Defect Description	Crack observed in seal
Detection Stage	Inprocess
Problem Severity	Function
NG Quantity	5
Is Defect Repeatative?	No
Defect Sketch / Photo	

Supplier Communication Details

Quality Head Email ID	d_dumbre@fukoku.co.in
Plant Head/CEO Email ID	s_tomii@fukoku-rubber.co.jp
MD Email ID	p_joshi@fukoku.co.in

2. Stock Details & action taken for NG parts

Location	ETL End	Warehouse	Transit	Supplier FG	Supplier WIP	Total
Total Qty	5000	5000	0	1000	0	11000
Check Qty	5000	5000	0	1000	0	11000
NG Qty	5	0	0	0	0	5

Action taken on NG part

Scrap	5
Rework	0
Under Deviation	0

Containment Action

Visual by squeezing the ID of Piston Seal

3. Process Flow

Process Flow Description

Receipt of Tube --> Inspection of Tubes --> Storage of Tubes --> Grinding of Tubes --> Cutting of Tubes --> Washing --> Inspection - Quality --> Appearance Inspection --> Packaging & Dispatched

4. Process Details

Process / Operation	Cutting
Outsource	No
Machine / Cell	Cutting Machine
Machine / Cell No.	Line 01

5. Problem Analysis

Type	Possible Cause	Fact Verification	Jud
Tool	No Possible causes as No trouble found from FIPL	No trouble found from FIPL	O

6. Inspection Method Analysis (Current)

Inspection Method	Other
Other Inspection Method	Visual
Check Point at Final Inspection	Yes
Checking Freq.	100%
Sampling	No
Sample Size	Each Part

7. Root Cause Analysis (Occurance)

Why 1	After verification of our different process we observed that, in our past we don't have such past trouble history for this type of defect
Why 2	After verification of our different process we observed that, in our past we don't have such past trouble history for this type of defect
Why 3	
Why 4	
Why 5	
Root Cause (Occurance)	After verification of our different process we observed that, in our past we don't have such past trouble history for this type of defect

Root Cause Analysis (Outflow)

Why 1	There is no any possibility of ID corner cut in our any process
Why 2	There is no any possibility of ID corner cut in our any process
Why 3	
Why 4	
Why 5	
Root Cause (Outflow)	There is no any possibility of ID corner cut in our any process

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

Type	Countermeasure Details	Responsibility	Target Date	Actual Date	Status
Occurance	After verification of our different process we observed that, in our past we don't have such past trouble history for this type of defect. There is no any possibility of ID corner cut in our any process. (Pt. 1 & 2) We observed there is running cut mark (one is deep and other is small at Pt.3) on the side wall of piston seal which can not be occurred in our process as the slicing is done at cutting process where the marked area doesn't come in to the picture of process. While inspecting the Cut area we feel that the cuts are generated by sharp external object. By the measurement result on said part , all the fit / Function parameters are within Spec., so there could be some other reasons for the leakage, which is beyond our scope of investigation. So, we feel that such defect could have generated while removing the seal from Seal Groove as it is difficult to remove by fingers and so ,is not a cause of assy. leakage.	FIPL	16/06/2023		Completed
Outflow	After verification of our different process we observed that, in our past we don't have such past trouble history for this type of defect. There is no any possibility of ID corner cut in our any process. (Pt. 1 & 2) We observed there is running cut mark (one is deep and other is small at Pt.3) on the side wall of piston seal which can not be occurred in our process as the slicing is done at cutting process where the marked area doesn't come in to the picture of process. While inspecting the Cut area we feel that the cuts are generated by sharp external object. By the measurement result on said part , all the fit / Function parameters are within Spec., so there could be some other reasons for the leakage, which is beyond our scope of investigation. So, we feel that such defect could have generated while removing the seal from Seal Groove as it is difficult to remove by fingers and so ,is not a cause of assy. leakage.	FIPL	16/06/2023		Completed

9. Inspection Method After Customer Complaint

Change In Inspection System	No
Change Details	No Change
Inspection Method	Other
Other Inspection Method	Visual
Check Point at Final Inspection	No
Checking Freq.	100%
Sampling	No
Sample Size	Each Part

10. Evidance of Countermeasure

Occurance (Before)	Action Closure 461_Occurance_Before.ppt
Occurance (After)	Action Closure 461_Occurance_After.pdf
Outflow (Before)	Action Closure 461_Outflow_Before.pdf

Outflow (After)

Action Closure

[461_Outflow_After.pdf](#)

11. Horizontal Deployment

**Horizontal Deployment
Required**

No

**Applicable Machine /
Model / Plant**

Line 02

12. Document Review

Documents**Specify Other Document**

No

13. Effectiveness Of Action

Reviewed Quantity

1000

Reason for submission

No crack found