

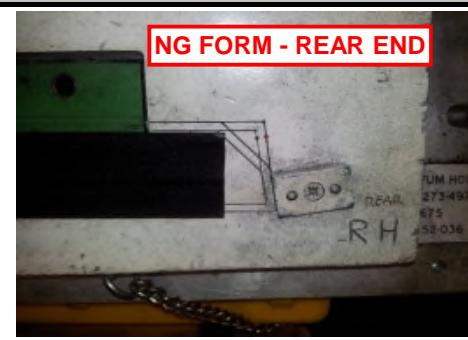
Supplier Name & Code	BURTON POWER LTD.
Part Name	FOOT-REST MOULDING
Part No.	49874/5 NX44G

Completed by	J. Bloggs	Approved by	B. Smith
Position	Production / Quality Tech	Position	QA Manager
Date	02/03/2019	Date	02/03/2019

1. Concern Details

Description (include photograph or sketch):

1 off Concern part found measured too short.



Report No.	SUP2013-33		
Rank	B		
Incident Date &	08/05/2013		
Time			
Model	X11E		
Quantity Affected	1		
Affected Lot No's.			
Recurrence	Y	✓	N

2. Similar Part Consideration

Can the concern appear on other parts?

Consider:	Yes	No	Comment / Result
- Other models		✓	P12C & B12G variant - single combination tooling; different tooling arrangement to X11E.
- Generic parts		✓	
- Other colours		✓	
- Opposite hand	✓		RH / LH variants - common tooling arrangement
- Front / Rear	✓		Fr / Rr Dr variants - common tooling arrangement
- Other (please state):		✓	

3. Initial Analysis

Where should the non-conforming parts have been detected?	Yes	No	Reason for non-detection
- During process / manufacture?		✓	
- After manufacture (e.g. Final Inspection)	✓		Comparative length check not performed (part not datumed).
- Prior to dispatch		✓	
- Other (please state):		✓	

4. Temporary Countermeasures - Immediate Action

What actions have been taken to prevent the delivery of reject parts to Nissan plants?

Consider:	Actions Taken	Qty. OK	Qty. NG	% Effective
- Work in progress		---	---	---
- Stores stock		240	0	100%
- Warehouse stock		---	---	---
- Service parts		---	---	---
- Other (please state): R-Tek	RH / LH variants verified - 100% checked to confirm correct length and end cut form.	960	0	100%

Temporary Countermeasure Details:

R-Tek finished-goods stock 100% checked to confirm correct length and end-cut form.

100% TL over check on all B33 parts.

Delivery Date for 1st OK parts after temporary countermeasure

09/05/2013

Delivery Ref. for 1st OK parts after temporary countermeasure

n/a

How are OK parts identified?

[Blue] ' Q ' marked on SNP label

5. Final Analysis

5 WHY Analysis to identify root cause:

Consider: Man, Material, Machine, Method, Who, Where When Why, How, Process settings, Rework, Maintenance etc. Attach extra detail sheets where necessary

1	Why was the non conformity made?	2	3	4	Why was the non conformity not detected? (Press 2)	5	Why was the non conformity not detected? (Final inspection jig)
Why?	1 off Concern part found measured too short.	Why?	Why?	Why?	1 off Concern part found measured too short.	Why?	1 off Concern part found measured too short.
Why?	Because: The parts was not in the correct position when the press was cycled.	Why?	Why?	Why?	Note: This is a 2 press process. Press 1 cuts the location tabs and press 2 cuts the end lengths. Because: The part was not detected during the end cut operation on press 2.	Why?	Because: The concern part was not identified on the final inspection jig
Why?	Because: When the part has been placed in the tool, the ejector has been fully extended.	Why?	Why?	Why?	Because: The tool which cuts the part to the correct length has 2 poka yoke switches, one at the front and another at the rear, these detect that the part is in the correct position. These were not effective for the concern part.	Why?	Because: On completing a line review with the operator it was discovered that the SOP was not being following as written. As a result, the error (short part) was not identified to the operator.
Why?	Because: The cycle from the previous pressing had not completed and the ejector had not returned home.	Why?	Why?	Why?	Because: On investigation no issues were found with the poka yoke switches which means that the short part was not detected due to the poka yoke switches being overridden.	Why?	Because: The operator, at some point in time had started doing the check away from the SOP.

Because: Due to issues with the press, it is currently being run in 'inch' mode and not automatic. Note: Even with the press in 'inch' mode the poka yoke switches are active.	Why?		Why?		Because: The operator did not understand why the press would not cycle and therefore used the override key.	Why?	
Root Cause:							
1 Operator manually overriding Poka Yoke switch and not controlling the resultant part.	2 Resp. JC Dept. Prod		3 Resp. Dept.		4 Resp. Dept.	5 Resp. JC Dept. Prod	SOP not followed due to lack of training.

6. Permanent Countermeasures

What actions have been taken to prevent the manufacture of reject parts in the future?

Consider: Error proofing, Testing, Process Control etc.

Actions		Resp.	Dept.	Timing
1) Complete a full 4M audit of the line, including training records and SOP's.		MR	QA	10-May
2) Re-create concerns. Secondary line review to be completed with the tool in the press to interrogate why 2 set of Poka Yoke appeared to have failed.		MR	QA	10-May
3) Complete a briefing ensuring that operators on B33 are clear what the procedure is when dealing with 'Non Standard work'. (ie press stopping without completing its cycle)		JC	Prod	10-May
4) Review with the operators the use of the final checking fixture and its related SOP.		JC / MR	Prod / QA	10-May
5) Modify the SOP for the final checking jig to be in line with the current process.		JC	Prod	21-May
6) Modify the final checking jig so that any error, short or long, will be detected. (Red Zone both sides)		JC	Prod	21-May
7) Tally chart to be created which will record how often the key is being used to override the poka yoke switches. This will run for a period of 2 weeks with all of the data being passed to tool room / maintenance to generate an improvement plan.		JC	Prod	17-May
8) Maintenance / Toolroom to, based on the finding from the data collection activity, to create an improvement plan which will minimise the need for the operator to override the system.		TP / AW	Main / Toolroom	10-Jun
9) Maintenance to investigate why press one is currently being run in 'Inch mode'.		TP	Main	31-May
10) Production to implement a system which ensures that all operators must inform their TL and record the use of the override key.		JC	Prod	10-Jun

7. Countermeasure Confirmation

Have the countermeasures implemented been confirmed as effective?

Action	Confirmation method
Genba control applied to witness & confirm satisfactory process conditions and adherence to Standard Operations.	Production Team Leader on-line observation via Genba Kanri.
1) 4M Audit	Completed and attached to this concern response
2) Re-create concern.	Defect part successfully recreated during line trial
3) Non Standard Work Briefing	Confirmed by JC
4) Review final inspection jig	Review completed and additional actions raised
5) Modify SOP B33-08 to reflect current final check procedure.	Item ongoing.
6) Modify final check jig with agreed improvements	Item ongoing.
7) Tally chart to collect data	Tally chart completed. Data to be collected.
8) Analysis of data and improvements	Item ongoing
9) Press running on Inch mode	Investigation ongoing
10) Override key log	Item ongoing, to be implemented when improvements completed.

8. Follow-up Actions (Lessons Learned / Recurrence Prevention Activities)

Review the following documentation and update as a result of this concern.

Please attach relevant data, e.g. Dimensional Report, Capability study, Attribute data, Fault tree analysis etc.

Consider:	Updated?	Details	Resp.	Dept.	Timing
- DFMEA					
- Drawing / CAD data					
- Design / Development / QA Standards					
- Special Characteristics & Key Features Diagram					
- PFMEA					
- Process Flow Chart					
- Control Plan / Chart					
- In house Work / Inspection Instructions	Yes	SOP B33-08	JC	Prod	21-May
- Gauges / MSA					
- Sub-supplier Follow-up					

Have the countermeasures taken been horizontally deployed to similar parts, processes and other plants?

Countermeasure Action	Deployment? (Yes / No)	Details
All actions	ongoing	These actions will benefit all part ran through Cell B33.