

PB46CUG04X-3-7AAG

8D FA report

承認	確認	作成
王水學	馮偉龍	雷業耀
2019/07/05	2019/07/05	2019/07/05



Problem solving team	
Team Leader :	
内部成员 :	外部成员 :
QM: 王水學	
QE: 雷業耀	
IPQC: 陈雪丽	
生产课长: 趙軍梅	
生产组长: 段賢	



問題描述：

What happened	喇叭無訊號
When detected	2019/07/03
Where detected	Production Assemble line
Why detected	One speaker function test no signal
How many	1 PCS
How detected	Remove Speaker and Wire cold soldering of black wire to pin



D3. 实施并验证临时或围堵措施

Containment Action 立即\阻截措施

Perform the activity to reduce the possible impact on products in customers, stock and WIP.

Page 4

1. 客戶端庫存品: 0PCS

2. 在途品: 0PCS

3. 廠內庫存品: 0PCS

**Define/Verify Cause 原因分析**

How was failure detected? What's the root cause (Break down to the actual source of issue)? Categorize the root cause, e.g.: Material, machine, methods, manpower, maintenance and environment

>>客戶反饋詳細如下:

Now we assembling P46 speakers we got. (我們開始組裝 P46)

Production line test each speaker after assy cable. (產線焊接後檢驗每個喇叭)

They found one P46 with no signal. (其中一個無訊號)

Open this P46 to find out the problem. (試著打開機殼)

Speaker head is OK, wires black & red are OK. (喇叭頭是好的, 黑紅線也是好的)

Problem is cold soldering of black wire to pin! (問題點在於黑色線冷焊)

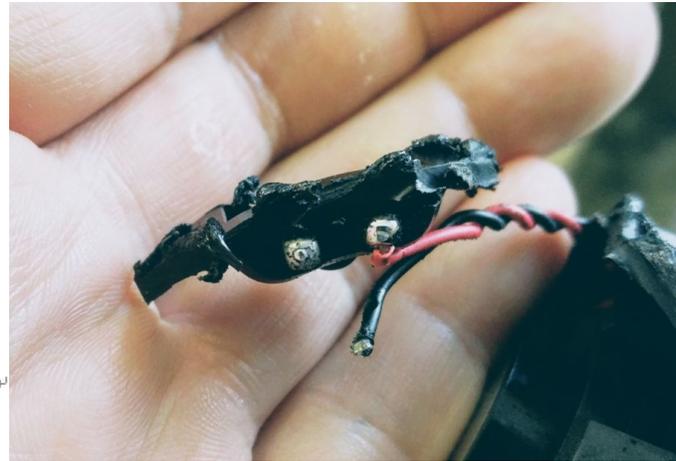
So this wire was in the open air and has no contact to pad. (如附件, 並未焊接在 PAD 上)

Picture is in attach.

Then try to heat pin with red wire and pin was melt out from plastic but red wire was soldering well to pin.

Please ask VECO to pay more attention for cold soldering of wires to pins because it is very critical parameter. (日後生產請務必注意冷焊、空焊問題)

If we test speaker and all be OK but after install in the car it will defect we will have a BIG BIG problem with that. (若日後組裝在車體內仍有此現象會造成很嚴重的問題)

**>>針對客戶反饋的冷焊不良, 宣導生產主管各相關主管分析討論, 對焊接工站進行排查, 結果如下:**

1. Operator is not so good skilled need to training
2. Operator pull or remove wire during soldering
3. Solder head, leave too much tin without clean
4. Although testing voice pass well, but cold sold cause parts wire remove during transpotation



Corrective Action 改善對策

Describe who, what, when and how you will implement change in material, manpower, methods, etc to totally eliminate the root cause of the problem

>Corrective action:

In connection with cold soldering, the following are the qualities control of non-wetting:

>1: Check the soldering bit and the wire in the beginning, as soldering wire, bare wire of the connector must solder into tin. It should stay for 2S when finish one side, while the other side become cold than solder it. To do this is to prevent one side not cold enough and to affect the connection of the solder. After soldering, put the speaker on the tooling (do not hold the wire) then to work on the flowline.



*k±μSOP

**Verify Effectiveness of Action 措施效果验证及追踪**

Describe verification results in quantifiable terms. Show evidence by using Hypotheses Testing.

措施驗證及追蹤：

1. 針對改善后產品，QA進行全檢3批次，如無發現不良，則改善有效，反則，繼續改善。
2. QE追蹤改善后批次客戶端使用情況。

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Thank You !