



Page 1

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	





Task Force

Page 2



Problem solving team					
Team Leader:					
內部成員:	外部成員:				
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

Containment Action 立即\阻截措施 Perform the activity to reduce the possible impact on products in customers, stock and WIP.

1.客戶端庫存品: OPCS

2.在途品: 0PCS

3.廠內庫存品: OPCS



□ <u>D4</u>. 确定并验证根本原因



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

Page 5

>>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.(其中一個無訊線)↔

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.↩

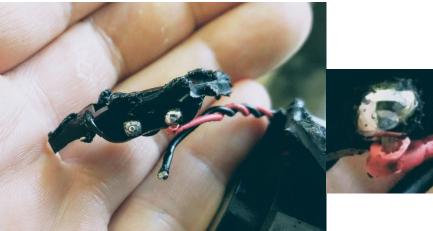
Then try to heat pin with red wire and pin was melt out from plastic but red wire was soldering well to pin.

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爆、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)。



- 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



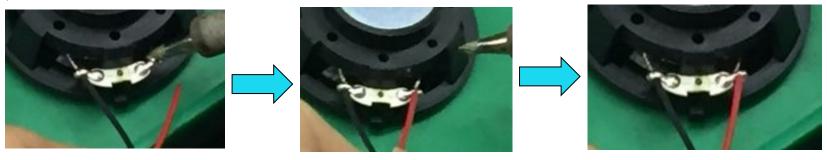
Corrective Action 改善對策

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.







²k±µSOP



D5. 选择和验证永久纠正措施

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

Page 7

>Corrective action:

>2: Enhance the quality check rate of the soldering bit, IPQC should check the appearance per hour. Temperature QC notice: It cannot overlap the speaker while soldering, and have to clean the solder bit every 5 times, can't work it

immediately, must wait for the temperature light shows and to work.



製造軍號/ 機種型號 工序及客戶	檢驗 時間	檢驗類型		様本數	物料 半成品 膠循刻度 每小時 FO 核對 檢查 線				
名稱	-3144	首檢	巡檢		外觀	氣壓	膠水及 有效期	焊鐵頭	實
							/		
		_			/				
		1							
		1			/				
		_	_		/				
加線組段		_							

組段: 2019 年 07月 05日 時間:

>3: Educate the operating staff, managers should train them and ask the staff to obtain the certificate.

理程名稿	W 50	(HERA)	56.83	名格·汉	特权对何 。
No. CO. Co. Co.		授课时间		單位	099.07.05
100 000	基是	14:00-14:30	考模方式:	Dak O	
			培训效果		
姓 名	工號	签判	良好	-40	60.00
8 + 7	62497	A 4 4	V		
2013	673/0	de st	/	-	-
推工項	142730	果工油	-	-	_
PAR	14-27	W 24	1	_	_
254	Sin	本有 8	1		
04-	1	10 1 10			
		-			
		_	_	_	_
	_	_	_	_	_
	-	_	_		+
	_	_	_	-	_
	_		_	-	+
	-		_	-	_
	-			_	17
分加配收价分配 如果他的收益的 概定。60的分为 如果他的收益的 是特许公此次的 計算公式為(())	5格・6分以下為 成内容為第一的事 一般・80分以上為 成内容為口試・即 同項目是否合格数 良町人数/一般人動	: 3位間部分・実際分列の表 型度・60回分為一般・回 点度 は成實際操作等は・同は一 は成實 は 成別 は 成別 は の は の の の の の の の の の の の の の	付した。 を有に無常けた でありは単し点が である。 でる。 でる。 でる。 でる。 でる。 でる。 でる。 で	・ 一般・軟単二個 ・ 一般・軟単二個 体は下者此次相談	部の海白株・部分以下) 単級単元記 (利為千合格
知人数:		- The second		m: 6	
部門人歌: 部計:麻籽:		6 -10:	高利人	8230:	
			76	exac,	



技能等组	汲证书 <	
(57564) 于 2019年 07月	05 日经本公司。	照
认定考核具备 <u>焊接工種勝任證</u> 書	.	片。
特发此证	有效期为6个月	1+
VECO TS16949 z.	Vanson Electronics (Nan 佛山鋐利電子看	
技能等级证书第 2019101603。		

-----Dpt/PD 段賢 2019/07/05



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.







Thank You!

