



## STU Standard Technology Union Co., Ltd.

No.202, Building A, Jingye Sanjie, Yushu Industrial Park, Guangzhou  
Economic & Technology Development Zone, Guangzhou, Guangdong, China  
Telephone : +86 (0) 20 82019555  
Fax : +86 (0) 20 82019556  
Email : marketing@stu-lab.com  
Website : www.stu-lab.com

Report No.: STUCS0015052103478TX  
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# TEST REPORT

Applicant's Name:

Applicant's Address:

Sample Description: Raclette Grill

Item No.: /

Client's reference No.: 9905WS0201, 9905WS040, 9905WS041, 9905WS060, 9905WS061, 9905WS080, 9905WS081, 9905WS082, 9905WS100, 9905WS101, 9905WC060, 9905WC061, 9905WC080, 9905WC081, 9905WC082, 9905WE080, 9905WE081, 9905WE082, 9905DE082, 9905DC082, 9905DS102

Sample Receipt Date: May 21, 2015

Test Period: May 21, 2015 to May 26, 2015

Test Standard: With reference to RoHS Directive 2011/65/EU and its subsequent amendments.

Test Method:

1. Tests was performed for the samples indicated by the photos in the report with test methods reference to IEC 62321:2008 and IEC 62321:2013, Procedures for the determination of Levels of Six Regulated substances in Electrotechnical Products
  - (1), Screening by XRF Spectroscopy
  - (2), Wet Chemical Test Method
    - a. Determination of Lead and Cadmium by ICP-OES or AAS
    - b. Determination of Mercury by ICP-OES
    - c. Determination of Hexavalent Chromium by Spot test or Colorimetric method
    - d. Determination of PBBs and PBDEs by GC-MS
2. The tested parts are preferentially chosen according to the definition of homogenous materials by European Union Technical Adaptation Committee (TAC).
3. According to the request of client, industrial high risk points are preferentially chosen as the scanned position.

Signed for and on behalf of  
STU Ltd.



Terry Yang  
Section Manager

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf.

This report details the results of the testing carried out on the sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the STU PRODUCT CERTIFICATION MARK. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of STU International Electrical Approvals or testing done by STU International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by STU International Electrical Approvals in writing.

All test results in this report can be traceable to National or International Standards.



Test Result:                      Please refer to next page(s).

Test Conclusion:                1) These results on these positions are BELOW LIMIT

Position:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,  
29,30,31,32,33,34,35,36,37,38,39,40

2) These results on these positions are OVER LIMIT

Position:NO

**Test Results:**

Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
1	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
2	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
3	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
4	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
5	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	



Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
6	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
7	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
8	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
9	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
10	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	



Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
11	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
12	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
13	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
14	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
15	Cd	BL	---	Comply	May 22,2015 May 25,2015
	Pb	OL	3182#	Exempted	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	



Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
16	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
17	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
18	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
19	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
20	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	



Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
21	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
22	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
23	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
24	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
25	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	



Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
26	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
27	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
28	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
29	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
30	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	





Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
31	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
32	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
33	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
34	Cd	BL	---	Comply	May 22,2015 May 25,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	IN	Negative	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
35	Cd	BL	---	Comply	May 22,2015 May 25,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	IN	Negative	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	



Part No.	Restricted Substances	Results of EDXRF(1)	Results of Wet Chemical Testing(2)	Conclusion on RoHS	Sample Submitted Date
36	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	
37	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
38	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
39	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	---	---	NA	
	PBDEs	---	---	NA	
40	Cd	BL	---	Comply	May 22,2015
	Pb	BL	---	Comply	
	Hg	BL	---	Comply	
	Cr(VI)	BL	---	Comply	
	PBBs	BL	---	Comply	
	PBDEs	BL	---	Comply	



See Figure 1 to 11 as shown

For item 15

#According to 2011/65/EU, Annex, exemptions were granted to a few materials and Clause 6 is reiterated here "Lead as an alloying element in copper alloy containing up to 4 % lead by weight." The sample as received was provided by the client to be copper alloy, therefore, this material containing the found heavy metals level should be exempted.



Remark:

- (1). (a) It is the result on total Br while test on Restricted Substances is PBBs/PBDEs, It is result on total Cr while test item onrestricted Substances is Cr(VI).
- (b) Result are obtained by XRF for primary screening, and further chemical testing by ICP(for Cd, Pb, Hg), UV-VIS(for Cr(VI)), and GC-MS(for PBBs, PBDEs) is recommended to be performed, if the concentration Exceeds the below warning value according to IEC 62321(unit:mg/kg).

Element	Polymer Materials	Metallic Materials	Composite Materials
<b>Cd</b>	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
<b>Pb</b>	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
<b>Hg</b>	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
<b>Br</b>	$BL \leq (300-3\sigma) < X$	Not Applicable	$BL \leq (250-3\sigma) < X$
<b>Cr</b>	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

(c) BL= Below limit, OL= Over Limit, IN=Inconclusive, LOD=Limit of Detection,

(d) The XRF Screening test for RoHS elements- the reading may be different to the actual content in the Sample be of non-uniformity composition.

(2).(a) mg/kg= ppm=0.0001%, ND= Not Detected(<MDL), ---= Not Conducted. NA= Not Applicable

(b) Unit and Method Detection Limit (MDL) in wet chemical test.

Test Items	Pb	Cd	Hg
Units	mg/kg	mg/kg	mg/kg
MDL	2	2	2

The MDL for single compound of PBBs & PBDEs is 5 mg/kg, and MDL of Cr(VI) is 2 mg/kg.

\* Due to the few amount of sample, MDL OF Cr(VI) is 10 mg/kg.

(c).According to IEC 62321, result on Cr(VI) for metal sample is show as Positive/Negative,  
Negative= Absence of Cr(VI) coating; Positive= Presence of Cr(VI) coating.

**APPENDIX**  
**Photo Index For The Tested Positions**  
General view



Figure 1

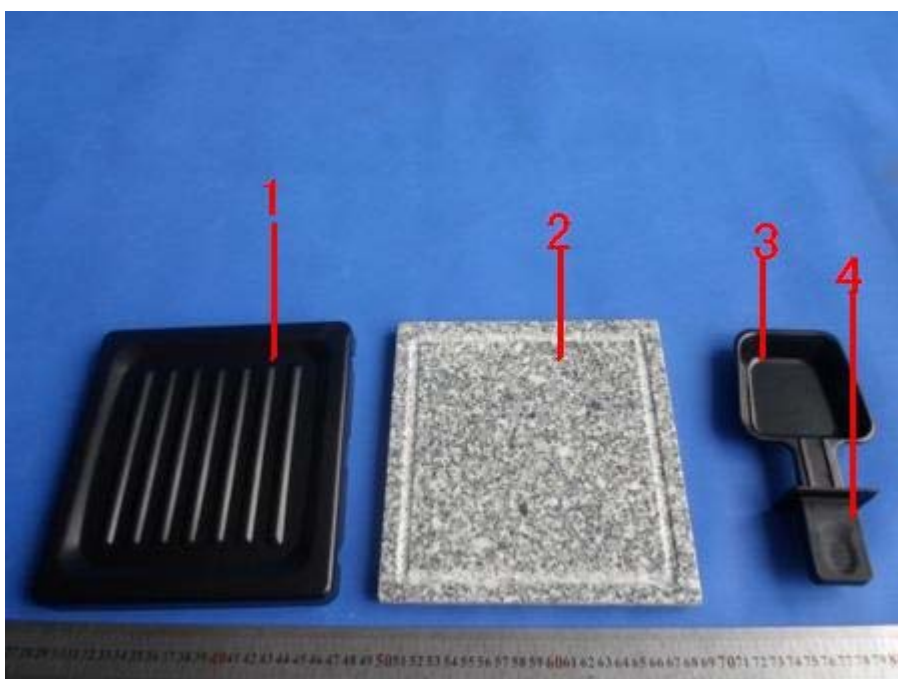


Figure 2

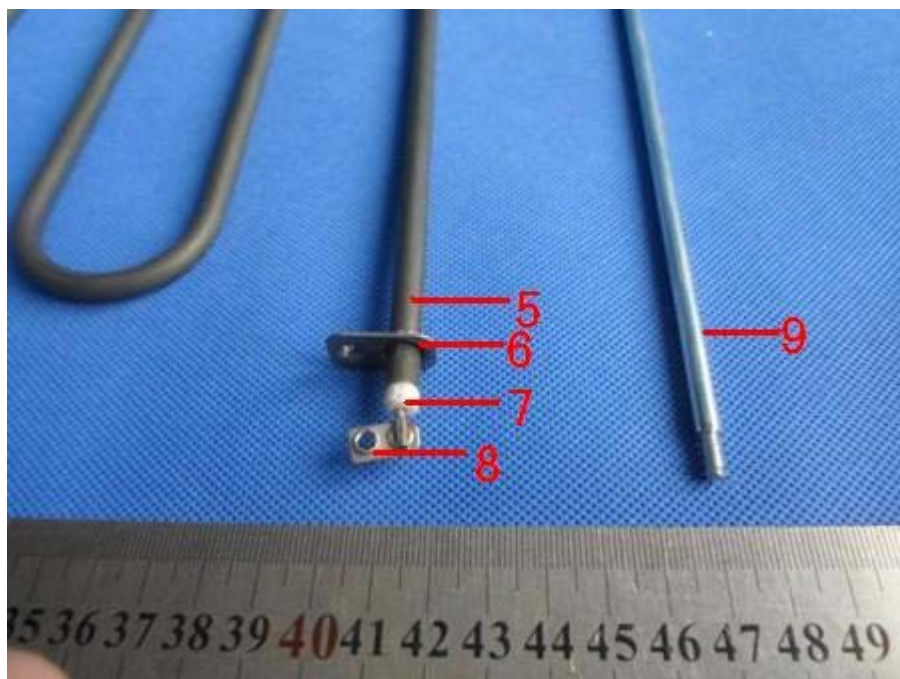


Figure 3

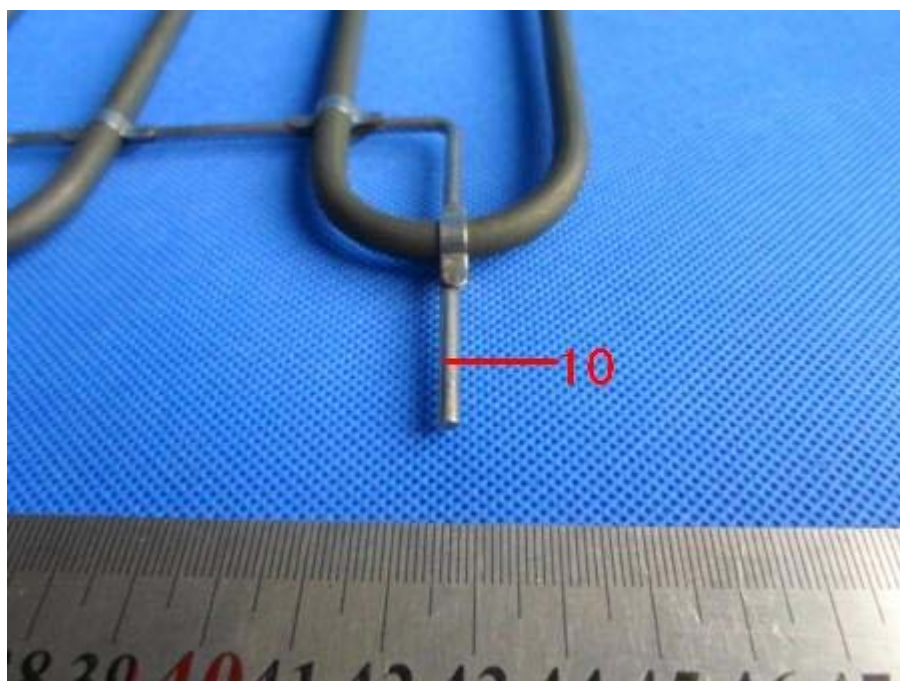


Figure 4





Figure 5

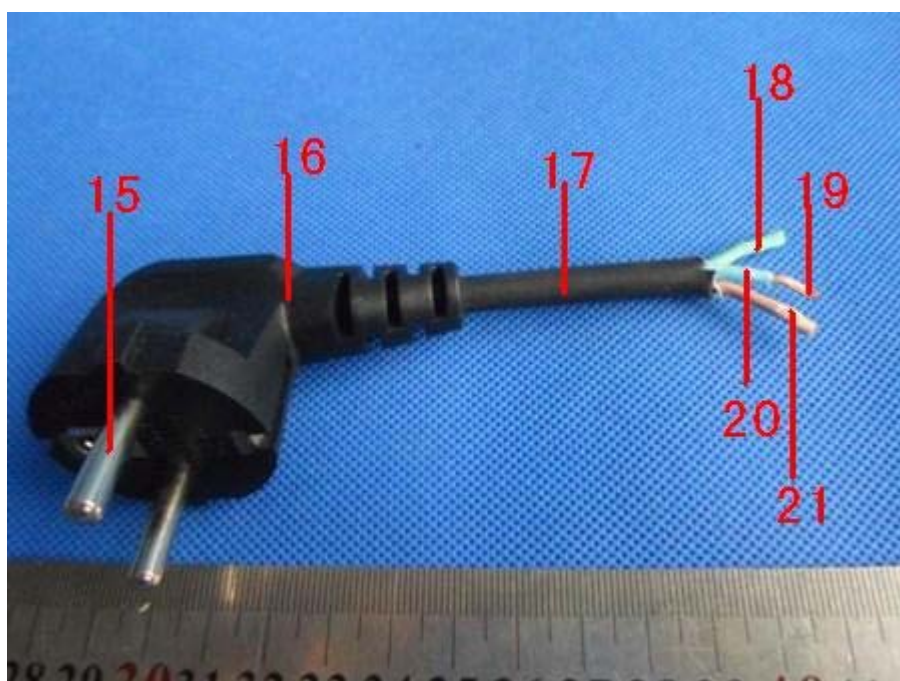


Figure 6

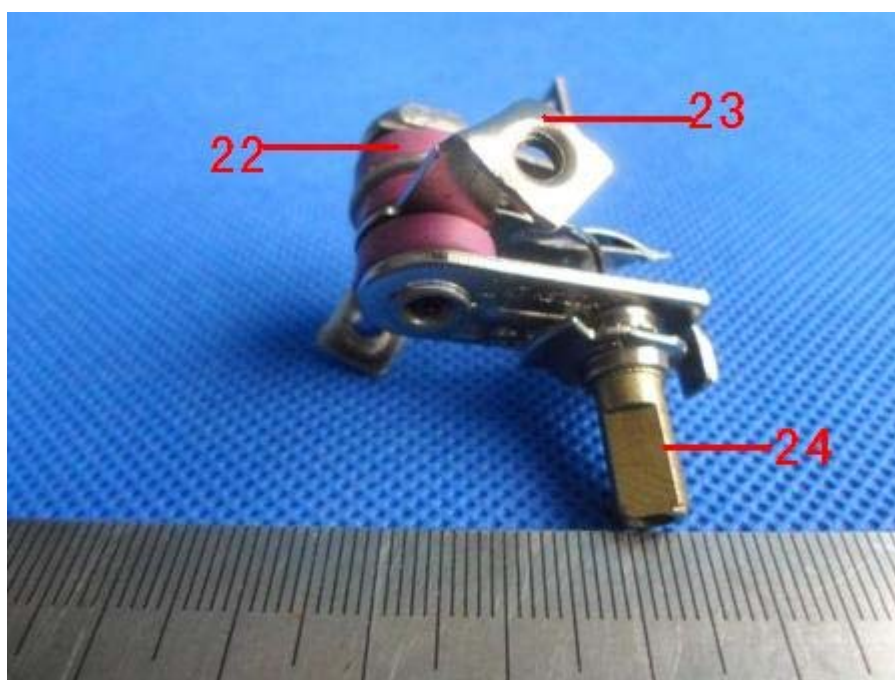


Figure 7

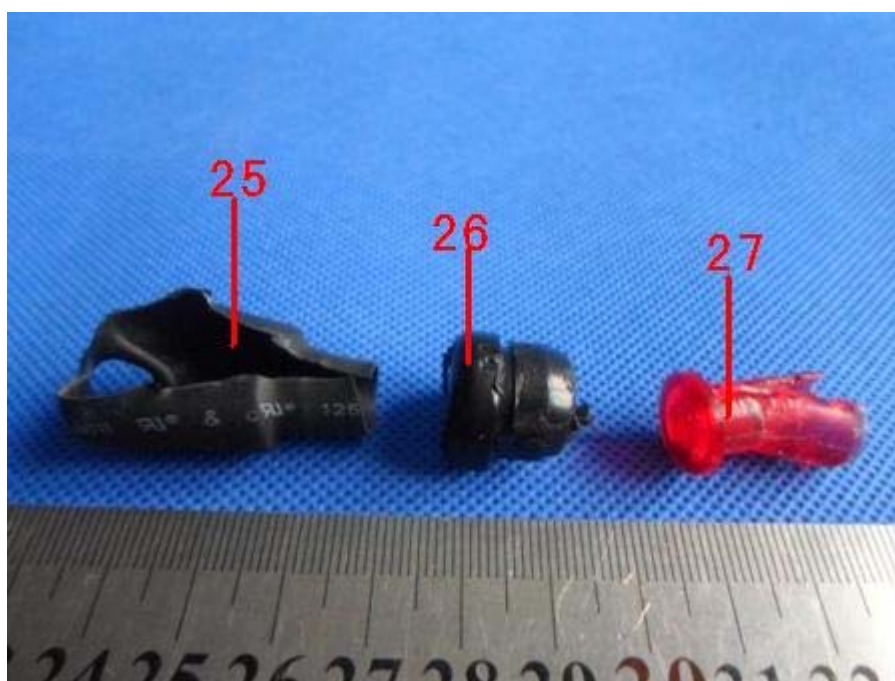


Figure 8



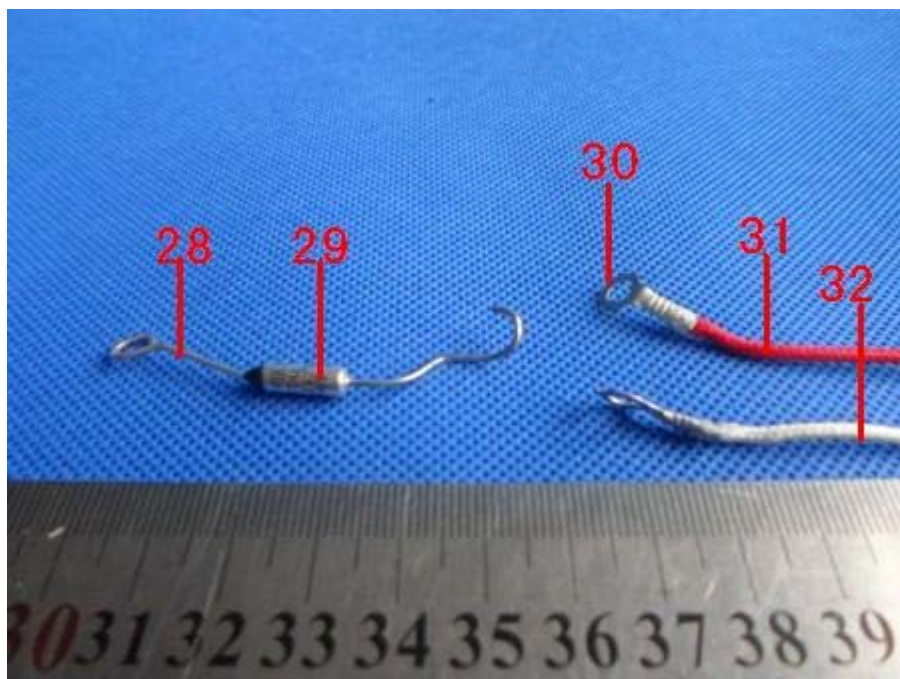


Figure 9

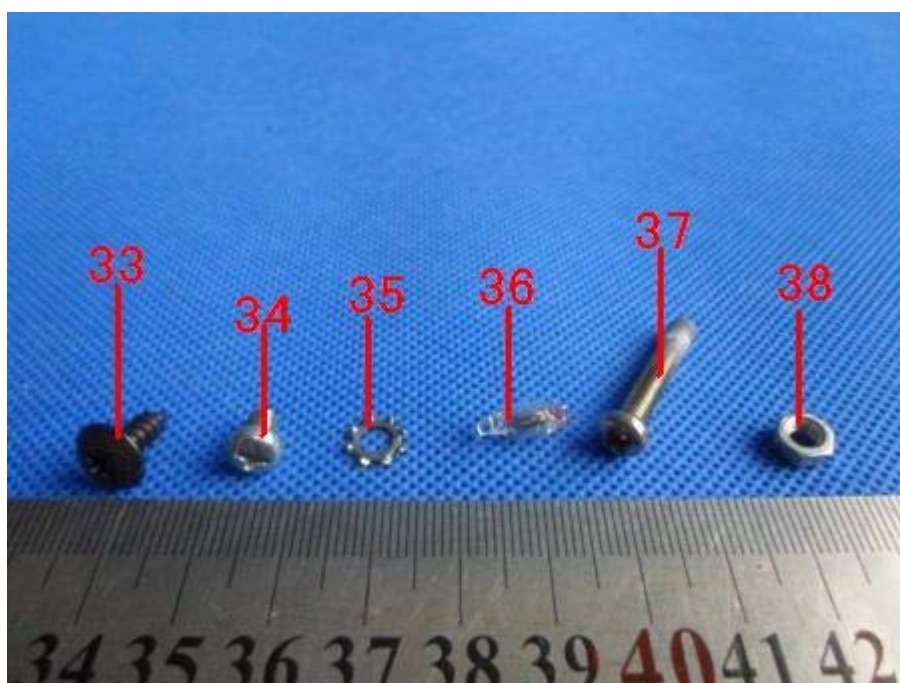


Figure 10

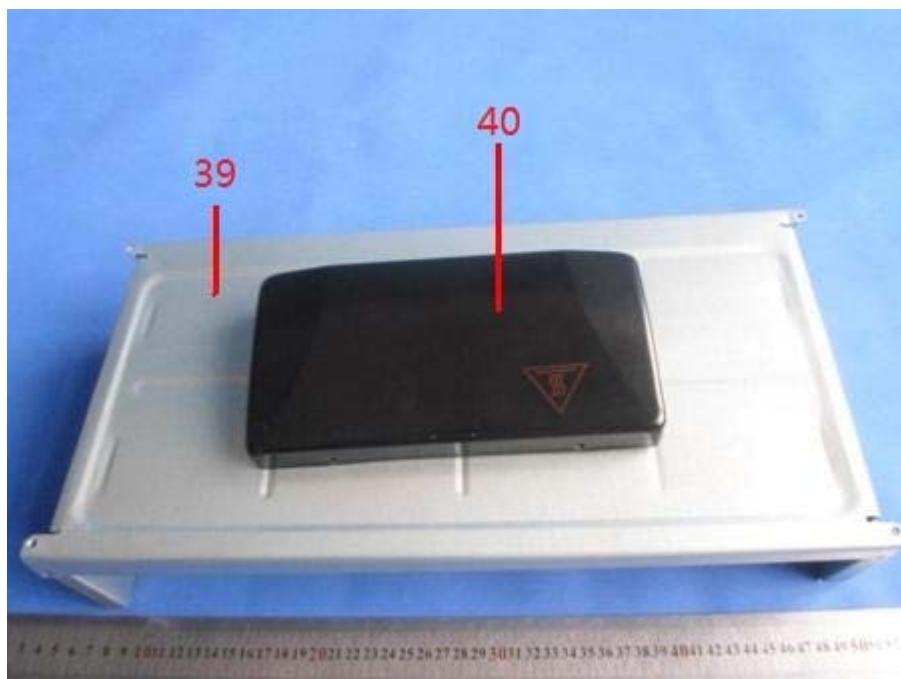


Figure 11

STU authenticate the photo on original report only

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