



TEST REPORT

Report No...... : WTF23F08176227A1C

Applicant..... : Jieyang BADA Hardware Electric Appliances Co., Ltd

Address..... : Tangpu Thoroughfare, Jieyang Testment Zone, Jieyang City, Guangdong Province, China

Manufacturer..... : Jieyang BADA Hardware Electric Appliances Co. , Ltd

Address..... : Tangpu Thoroughfare, Jieyang Testment Zone, Jieyang City, Guangdong Province, China

Sample Name..... : Hair Dryer

Sample Model..... : RCY-325

Reference Model No...... : Refer to next page (s)

Date of Receipt sample..... : 2023-08-11 & 2023-08-29

Testing period..... : 2023-08-11 to 2023-08-21 & 2023-08-29 to 2023-09-01

Date of Issue..... : 2023-09-04

Test Result..... : Refer to next page (s)

Prepared By:

Waltek Testing Group (Foshan) Co., Ltd.

Address: No.13-19, 2/F., 2nd Building, Sunlink International Machinery City,
Chencun, Shunde District, Foshan, Guangdong, China

Tel:+86-757-23811398 Fax:+86-757-23811381 E-mail:info@waltek.com.cn

Signed for and on behalf of

Waltek Testing Group (Foshan) Co., Ltd.

Swing.Liang





Report No.: WTF23F08176227A1C

Test Requested : In accordance with the RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863.

Test Method : 1) With reference to IEC 62321-2:2021, disassembly, disjunction and mechanical sample preparation
2) With reference to IEC 62321-3-1:2013, screening - Lead, mercury, cadmium, total chromium and total bromine by X-ray fluorescence spectrometry
3) With reference to IEC 62321-4:2013+AMD1:2017 CSV, determination of Mercury by ICP-OES
4) With reference to IEC 62321-5:2013, determination of Lead and Cadmium by ICP-OES
5) With reference to IEC 62321-7-2: 2017 and IEC 62321-7-1: 2015, determination of Hexavalent Chromium by UV-Vis
6) With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS
7) With reference to IEC 62321-8:2017, determination of Phthalates content by GC-MS.

Test Conclusion : **Pass** (Based on the performed tests on the submitted samples, the results comply with the RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863)

Reference Model No.
RCY-998, RCY-7009, RCY-365, RCY-361, RCY-8617A, RCY-388B, RCY-325A, RCY-1000, RCY-7005, RCY-7010, RCY-329, RCY-2010, RCY-1200, RCY-7003, RCY-1200A, RCY-1200B, RCY-1200C, RCY-362, RCY-363, RCY-387, RCY-7001, RCY-7002, RCY-7004, RCY-1420, RCY-2421, RCY-7011, RCY-7012, RCY-7013, RCY-7016, RCE-3314, RCE-3211, RCE-3311, RCE-6005, RCE-8603, RCE-8608, RCE-8610, RCE-8612, RCE-8888, RCE-8900, RCE-8908, RCE-8910, RCE-8915, RCE-8916, RCE-8917, RCE-8918, RCE-8919, RCE-8920, RCE-8921, RCE-8922, RCE-8923, RCE-8930, RCE-8931, RCE-8935, RCE-8937, RCE-8938, RCE-8940, RCE-8942, RCE-8943, RCE-8944, RCE-8945, RCE-8946, RCE-8947, RCE-8948, RCE-8949, RCE-8950, RCE-8951, RCE-8952, RCE-8953, RCE-8954, RCE-8955, RCE-8956, RCE-8957, RCE-8958, RCE-8959, RCE-8960, RCE-8961, RCE-8962, HB-27, RCE-1800, RCE-1800A, RCE-369A, RCE-1500B



Report No.: WTF23F08176227A1C

Sample Photo(s):



WALTEK

**Test Results:****1. Lead, Mercury, Cadmium, Hexavalent Chromium, PBBs and PBDEs**

Part No.	Part Description	Result of XRF					Result of Wet Chemical Testing (mg/kg)
		Cd	Pb	Hg	Cr	Br	
1	Black plastic handle	BL	BL	BL	BL	BL	NA
2	White plastic ring	BL	BL	BL	BL	BL	NA
3	Light blue plastic shell	BL	BL	BL	BL	BL	NA
4	Grey transparent plastic shell	BL	BL	BL	BL	BL	NA
5	Black plastic part	BL	BL	BL	BL	BL	NA
6	Silvery metal screw	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
7	Silvery metal screw	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
8	Black plastic wire jacket	BL	BL	BL	BL	BL	NA
9	Black plastic jacket (plug)	BL	BL	BL	BL	BL	NA
10	Black plastic core (plug)	BL	BL	BL	BL	BL	NA
11	Silvery metal pin (plug)	BL	OL	BL	BL	--	#Pb : 2.04×10 ⁴
12	Transparent soft plastic tube	BL	BL	BL	BL	BL	NA
13	Blue plastic wire covering	BL	BL	BL	BL	BL	NA
14	Brown plastic wire covering	BL	BL	BL	BL	BL	NA
15	Coppery metal wire	BL	BL	BL	BL	--	NA
16	Semi-transparent plastic fan blade	BL	BL	BL	BL	BL	NA
17	White fibrous tube	BL	BL	BL	BL	BL	NA
18	Silvery mica sheet	BL	BL	BL	BL	BL	NA
19	White plastic wire covering	BL	BL	BL	BL	BL	NA



Report No.: WTF23F08176227A1C

Part No.	Part Description	Result of XRF					Result of Wet Chemical Testing (mg/kg)
		Cd	Pb	Hg	Cr	Br	
20	Silvery metal spring	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
21	Black heat-shrinkable tube	BL	BL	BL	BL	BL	NA
22	Coppery metal contact	BL	BL	BL	BL	--	NA
23	Silvery metal sheet	BL	BL	BL	BL	--	NA
24	Silvery metal contact	BL	BL	BL	BL	--	NA
25	Golden metal rivet	BL	BL	BL	BL	--	NA
26	White ceramic sheet	BL	BL	BL	BL	--	NA
27	Coppery metal sheet	BL	BL	BL	BL	--	NA
28	Golden metal pin	BL	BL	BL	BL	--	NA
29	Silvery metal screw	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
30	Silvery metal gasket	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
31	Semi-transparent plastic cover	BL	BL	BL	BL	BL	NA
32	Yellow capacitor	BL	BL	BL	BL	BL	NA
33	Golden metal part	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
34	Black sponge with adhesive	BL	BL	BL	BL	BL	NA
35	Dark grey carbon brush	BL	BL	BL	BL	BL	NA
36	Black diode	BL	BL	BL	BL	IN	PBBs : ND PBDEs : ND
37	Silvery metal pin	BL	BL	BL	BL	--	NA
38	Solder	BL	BL	BL	BL	--	NA
39	Silvery metal shell	BL	BL	BL	BL	--	NA



Part No.	Part Description	Result of XRF					Result of Wet Chemical Testing (mg/kg)
		Cd	Pb	Hg	Cr	Br	
40	Coppery metal ring	BL	BL	BL	BL	--	NA
41	Dark grey magnetic ring	BL	BL	BL	BL	--	NA
42	Silvery metal strip	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
43	Pink plastic shell	BL	BL	BL	BL	IN	PBBs : ND PBDEs : ND
44	Black plastic button	BL	BL	BL	BL	BL	NA
45	Solder	BL	BL	BL	BL	--	NA
46	Black diode	BL	BL	BL	BL	IN	PBBs : ND PBDEs : ND
47	Silvery metal spring	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
48	Silvery metal axle	BL	BL	BL	BL	--	NA
49	Coppery metal sheet	BL	BL	BL	BL	--	NA
50	Dark grey plastic core	BL	BL	BL	BL	BL	NA
51	Green coating	BL	BL	BL	BL	BL	NA
52	Silvery silicon steel sheet	BL	BL	BL	IN	--	Cr ⁶⁺ : Negative
53	White plastic gasket	BL	BL	BL	BL	BL	NA
54	Solder	BL	IN	BL	BL	--	Pb :452
55	Coppery varnished wire	BL	BL	BL	BL	BL	NA
56	Golden metal ring	BL	BL	BL	BL	--	NA
57	Yellow plastic shell (capacitor)	BL	BL	BL	BL	IN	PBBs : ND PBDEs : ND
58	Yellow epoxy resin (capacitor)	BL	BL	BL	BL	BL	NA
59	Silvery plastic film (capacitor)	BL	BL	BL	BL	BL	NA



Part No.	Part Description	Result of XRF					Result of Wet Chemical Testing (mg/kg)
		Cd	Pb	Hg	Cr	Br	
60	Yellow resistor with multicolour printing	BL	BL	BL	BL	BL	NA
61	Solder	BL	BL	BL	BL	--	NA

Remark:

- (1) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP (for Cd, Pb, Hg), UV-VIS (for Cr⁶⁺) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1: 2013 (unit: mg/kg)

Element	Polymer	Metal	Composite Materials
Cd	$BL \leq (70-3\sigma) < IN < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < IN < (130+3\sigma) \leq OL$	$LOD < IN < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < IN < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < IN < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < IN < (1500+3\sigma) \leq OL$
Cr	$BL \leq (700-3\sigma) < IN$	$BL \leq (700-3\sigma) < IN$	$BL \leq (500-3\sigma) < IN$
Br	$BL \leq (300-3\sigma) < IN$	--	$BL \leq (250-3\sigma) < IN$

BL= Below Limit OL= Over Limit LOD = Limit of Detection -- = Not Regulated

- (2) "IN" expresses the inconclusive region, and further chemical testing to confirm whether it complies with the requirement of RoHS Directive.
- (3) The XRF screening test for RoHS elements – the reading may be different to the actual content in the sample be of non-uniformity composition.
- (4) mg / kg =milligram per kilogram=ppm, $\mu\text{g}/\text{cm}^2$ = Micrograms per square centimetre.
- (5) ND = Not Detected or lower than limit of quantitation.
- (6) NA = Not Applicable, as the XRF screening test result was below the limit or as the XRF screening directly determine that test result was over the limit, it was not need to conduct the wet chemical testing.
- (7) LOQ = Limit of quantitation.

Test Items	Pb	Cd	Hg	Cr ⁶⁺		PBB	PBDE
Units	mg/kg	mg/kg	mg/kg	mg/kg	$\mu\text{g}/\text{cm}^2$	mg/kg	mg/kg
LOQ	2	2	2	8	0.1	5	5

The LOQ for single compound of PBBs and PBDEs is 5mg/kg, LOQ of Cr⁶⁺ for polymer and composite sample is 8mg/kg and LOQ of Cr⁶⁺ for metal sample is 0.1 $\mu\text{g}/\text{cm}^2$.



Report No.: WTF23F08176227A1C

(8) RoHS Requirement

Restricted Substances	Limits
Cadmium (Cd)	0.01% (100 mg/kg)
Lead (Pb)	0.1% (1000 mg/kg)
Mercury (Hg)	0.1% (1000 mg/kg)
Chromium (VI) (Cr ⁶⁺)	0.1% (1000 mg/kg)
Polybrominated Biphenyls (PBBs)	0.1% (1000 mg/kg)
Polybrominated Diphenyl Ethers (PBDEs)	0.1% (1000 mg/kg)

- (9) According to IEC 62321-7-1:2015, determined of Cr⁶⁺ on metal sample by boiling water extraction test method, and result is shown as Positive/Negative.

Boiling water extraction:

Negative = Absence of Cr⁶⁺ coating, the detected concentration in boiling water extraction solution is less than 0.10ug/cm².

Positive = Presence of Cr⁶⁺ coating, the detected concentration in boiling water extraction solution is greater than 0.13ug/cm².

Information on storage conditions and production date of the tested sample is unavailable and thus Cr⁶⁺ results represent status of the sample at the time of testing.

(10) Abbreviation:

"Pb" denotes Lead, "Cd" denotes Cadmium, "Hg" denotes Mercury, "Cr" denotes Chromium, "Cr (VI)" denotes Hexavalent Chromium, "Br" denotes Bromine, "PBBs" denotes Total Polybrominated Biphenyls, "PBDEs" denotes Total Polybrominated Diphenyl Ethers.

- (11)[#] = According to the declaration from client, the source of lead in test sample is from copper alloy while lead as copper alloy containing up to 4% lead by weight is exempted by Directive 2011/65/EU ANNEX III.

2. Phthalates:

Serial No.	Part No.	Result (mg/kg)			
		DBP	BBP	DEHP	DIBP
T01	1+2+3+4+5 [△]	ND	ND	ND	ND
T02	6	--	--	--	--
T03	7	--	--	--	--
T04	8	ND	ND	ND	ND
T05	9	ND	ND	ND	ND
T06	10+16+31+43+44 [△]	ND	ND	ND	ND
T07	11	--	--	--	--
T08	12	776	ND	178	ND
T09	13	131	ND	ND	ND
T10	14	337	ND	ND	ND
T11	15	--	--	--	--
T12	17	ND	ND	ND	ND
T13	18	ND	ND	ND	ND
T14	19	ND	ND	ND	ND
T15	20	--	--	--	--



Report No.: WTF23F08176227A1C

Serial No.	Part No.	Result (mg/kg)			
		DBP	BBP	DEHP	DIBP
T16	21	ND	ND	ND	ND
T17	22	--	--	--	--
T18	23	--	--	--	--
T19	24	--	--	--	--
T20	25	--	--	--	--
T21	26	--	--	--	--
T22	27	--	--	--	--
T23	28	--	--	--	--
T24	29	--	--	--	--
T25	30	--	--	--	--
T26	32+36+46+60 [△]	ND	ND	ND	ND
T27	33	--	--	--	--
T28	34	ND	ND	ND	ND
T29	35	ND	ND	ND	ND
T30	37	--	--	--	--
T31	38	--	--	--	--
T32	39	--	--	--	--
T33	40	--	--	--	--
T34	41	--	--	--	--
T35	42	--	--	--	--
T36	45	--	--	--	--
T37	47	--	--	--	--
T38	48	--	--	--	--
T39	49	--	--	--	--
T40	50	ND	ND	ND	ND
T41	51	ND	ND	ND	ND
T42	52	--	--	--	--
T43	53	ND	ND	ND	ND
T44	54	--	--	--	--
T45	55	ND	ND	ND	ND
T46	56	--	--	--	--
T47	57+58 [△]	ND	ND	ND	ND
T48	59	ND	ND	ND	ND
T49	61	--	--	--	--

Note:

- (1) mg/kg = milligram per kilogram= ppm
- (2) ND = Not Detected or lower than limit of quantitation.
- (3) -- = Not Regulated.
- (4) LOQ = Limit of quantitation.

Test Items	DBP	BBP	DEHP	DIBP
Units	mg/kg	mg/kg	mg/kg	mg/kg
LOQ	50	50	50	50



Report No.: WTF23F08176227A1C

(5) Abbreviation:

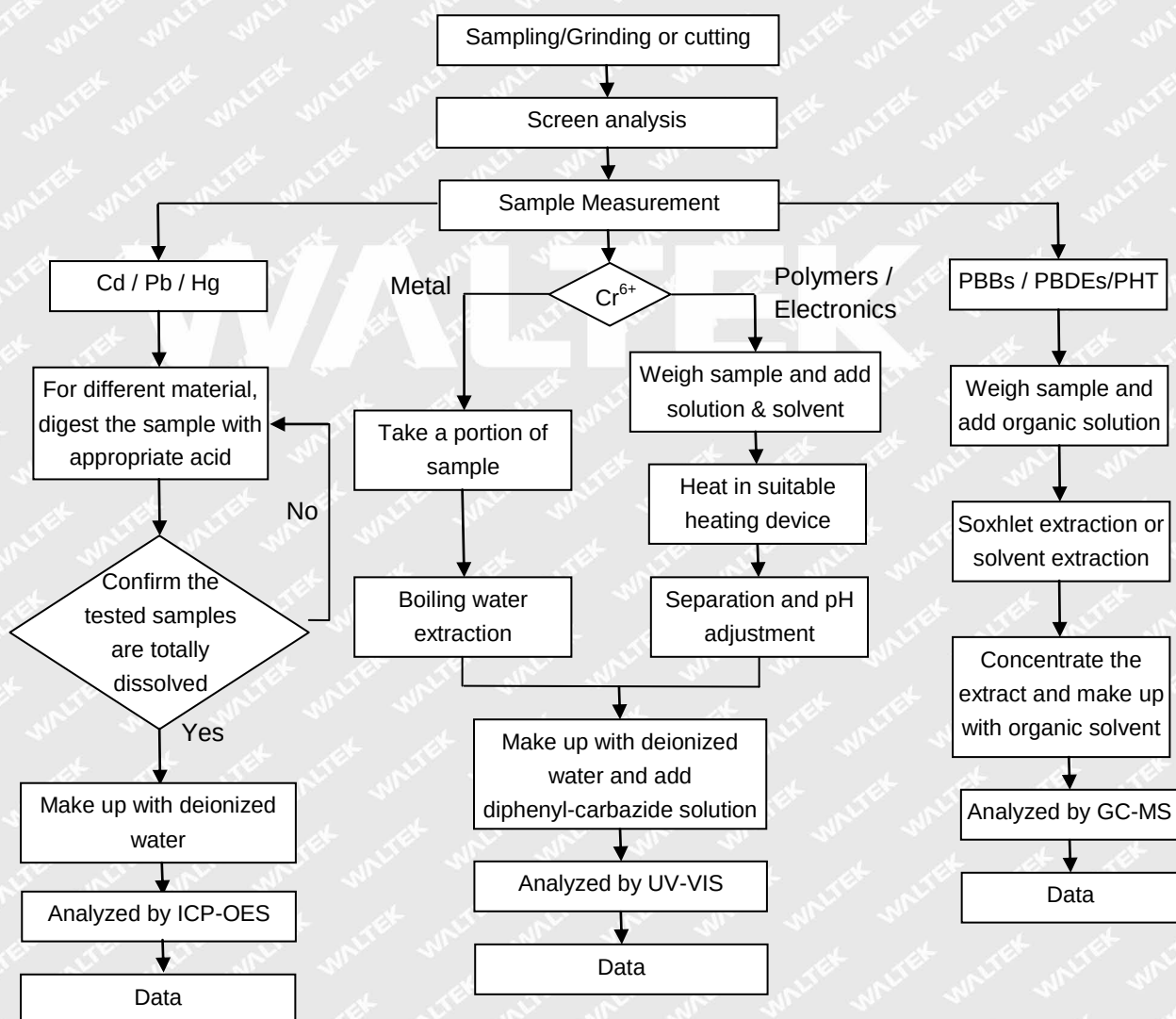
“DBP” denotes Dibutyl phthalate, “BBP” denotes Benzyl butyl phthalate (BBP), “DEHP” denotes Bis(2-ethylhexyl)-phthalate, “DIBP” denotes Diisobutyl phthalate, “PHT” denotes Phthalates.

(6) RoHS requirement

Restricted Substances	Limits
Dibutyl phthalate (DBP)	0.1% (1000 mg/kg)
Benzyl butyl phthalate (BBP)	0.1% (1000 mg/kg)
Di(2-ethylhexyl) phthalate (DEHP)	0.1% (1000 mg/kg)
Di-iso-butyl phthalate (DIBP)	0.1% (1000 mg/kg)

(7) “△”= As client’s requirement, the testing was conducted based on mixed components. Results are calculated by the minimum weight of mixed components.

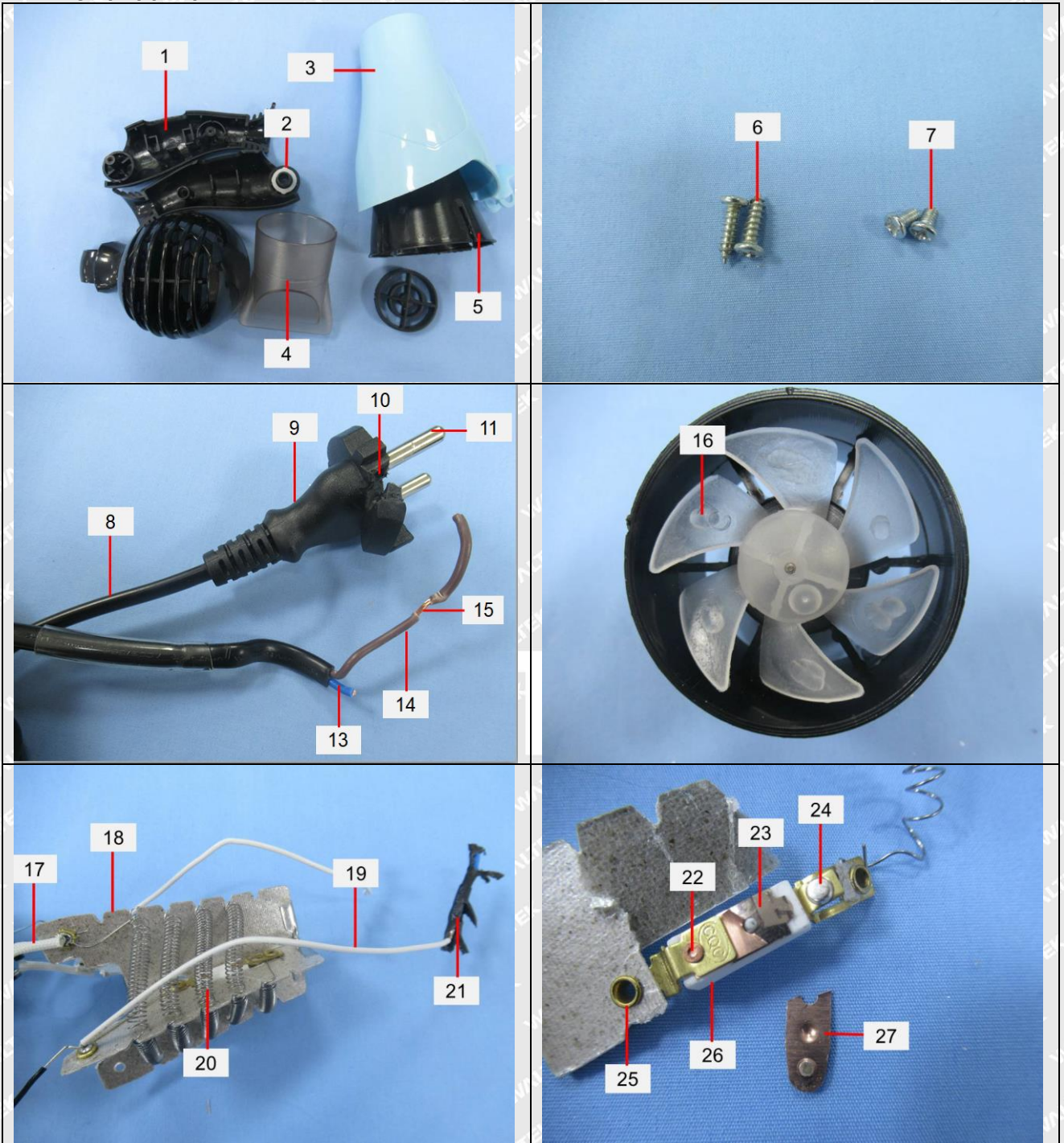
Measurement Flowchart:

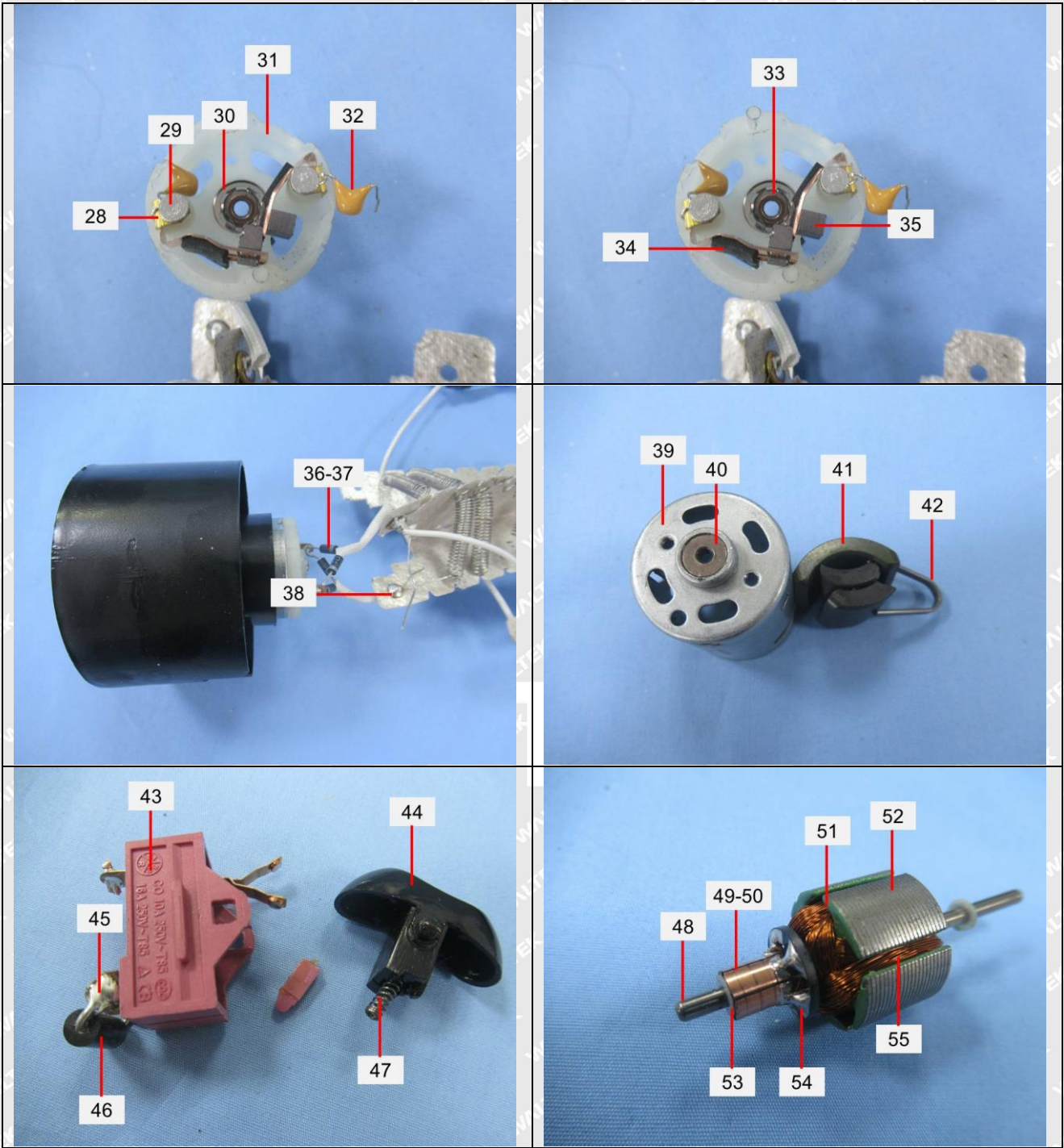


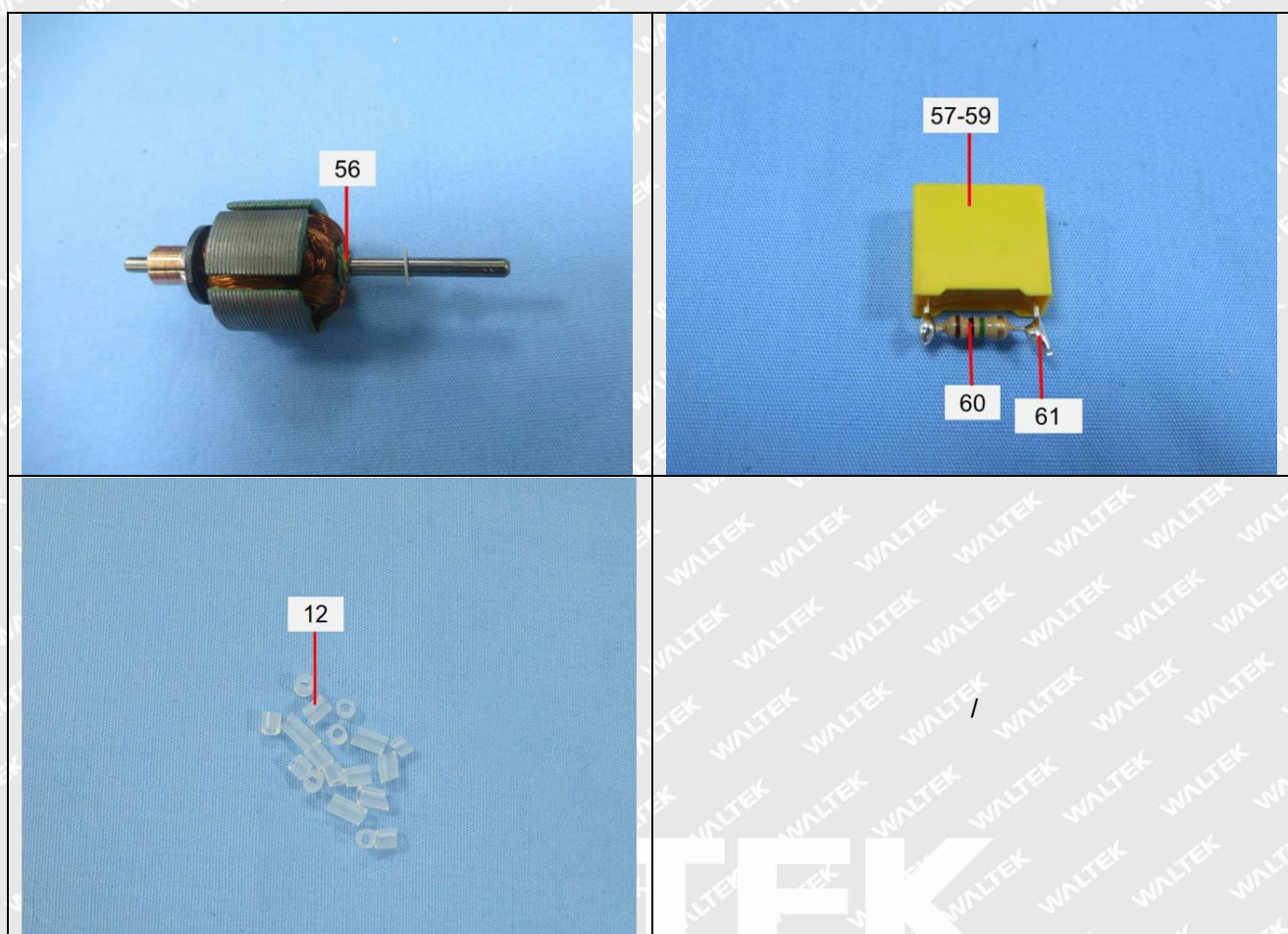


Report No.: WTF23F08176227A1C

Photograph(s) of parts tested:







Remarks:

1. The results shown in this test report refer only to the sample(s) tested;
2. This test report cannot be reproduced, except in full, without prior written permission of the company;
3. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver;
4. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which Waltek hasn't verified;
5. If the report is not stamped with the accreditation recognized seal, it will only be used for scientific research, education, and internal quality control activities, and is not used for the purpose of issuing supporting data to the society.
6. The sample material information (Model No. information) is provided by client, not verified by test laboratory. The samples of reference Model No. are not tested. Test laboratory not responsible for the accuracy, appropriateness, completeness and authenticity of the information provided by client.

===== End of Report =====