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Client: STIEBEL ELTRON GMBH & CO. KG

Contact Information: Dr.-Stiebel-Strabe 33 D-37603 Holzminden

Test item(s): 198 materials

**Identification/
Model No(s):** HAND DRYER
ULTRONIC PLUS, ULTRONIC PREMIUM

Sample obtaining method: Sending by customer

Condition at delivery: Test item complete and undamaged.

Sample Receiving date: 2022-09-20, 2022-09-29, 2022-10-21

Testing Period: 2022-09-21 to 2022-10-26

Place of testing: Chemical laboratory Shenzhen

Test Specification:

Test result:

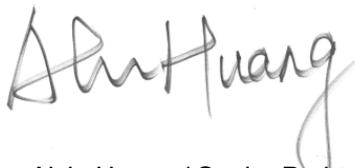
1. Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE), ROHS Phthalates (BBP, DBP, DEHP, DIBP)
According to RoHS(recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863

PASS

Other information:

Country of Origin: China

For and on behalf of
TÜV Rheinland (Shenzhen) Co., Ltd.



2022-11-02

Alvin Huang / Senior Project Engineer

Date

Name/Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.

This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

"Decision Rule" document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

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Material List:
Item: HAND DRYER
ULTRONIC PLUS, ULTRONIC PREMIUM

Material No.	Material	Color	Location
M001	Plastic	White	Refer to photo
M002	Plastic	Transparent	Refer to photo
M003	Plastic	Black	Refer to photo
M004	Foam	Black/ Transparent	Refer to photo
M005	Metal	Silvery	Refer to photo
M006	Metal	Coppery	Refer to photo
M007	Metal	Golden	Refer to photo
M008	Metal	Silvery	Refer to photo
M009	Plastic	Black	Refer to photo
M010	Metal	Silvery	Refer to photo
M011	Plastic	Black	Refer to photo
M012	Metal	Silvery white	Refer to photo
M013	PCB board	Green	Refer to photo
M014	Glue	White	Refer to photo
M015	Electronic components	Black	Refer to photo
M016	Solder	Silvery	Refer to photo
M017	Electronic components	Deep blue	Refer to photo
M018	Electronic components	Blue	Refer to photo
M019	Metal	Silvery	Refer to photo
M020	Electronic components	Black	Refer to photo
M021	Electronic components	Black	Refer to photo
M022	Magnet	Black	Refer to photo
M023	Electronic components	Black	Refer to photo
M024	Electronic components	Black	Refer to photo
M025	Plastic	White	Refer to photo
M026	Electronic components	Brown	Refer to photo
M027	Metal	Silvery	Refer to photo
M028	Electronic components	Black/ White	Refer to photo

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M029	Electronic components	Reddish brown	Refer to photo
M030	Electronic components	Black	Refer to photo
M031	Electronic components	Black	Refer to photo
M032	Electronic components	Black	Refer to photo
M033	Electronic components	Black	Refer to photo
M034	Magnet	Grey black	Refer to photo
M035	Metal	Coppery	Refer to photo
M036	Plastic + printing	Black/ White	Refer to photo
M037	Electronic components	Black	Refer to photo
M038	Electronic components	White/ Black	Refer to photo
M039	Plastic + printing	Blue/ White	Refer to photo
M040	Plastic	White	Refer to photo
M041	Metal	Golden	Refer to photo
M042	Glue	Black	Refer to photo
M043	Electronic components	Black	Refer to photo
M044	Electronic components	Black	Refer to photo
M045	Plastic	Grey	Refer to photo
M046	Glue	Black	Refer to photo
M047	Plastic	Black	Refer to photo
M048	Plastic	Maroon	Refer to photo
M049	Plastic	Black	Refer to photo
M050	Metal	Coppery	Refer to photo
M051	Magnet	Deep green	Refer to photo
M052	Plastic	Black	Refer to photo
M053	Metal	Silvery	Refer to photo
M054	Plastic + printing	Black/ White	Refer to photo
M055	Plastic	Black	Refer to photo
M056	PCB board	Green/ Brown	Refer to photo
M057	Solder	Silvery	Refer to photo
M058	Electronic components	Black/ Grey	Refer to photo
M059	Electronic components	Black	Refer to photo
M060	Plastic	Black	Refer to photo

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M061	Plastic + adhesive	Light yellow/ Transparent	Refer to photo
M062	Metal	Coppery	Refer to photo
M063	Magnet	Black	Refer to photo
M064	Electronic components	Blue	Refer to photo
M065	Electronic components	Khaki/ Red	Refer to photo
M066	Electronic components	Reddish brown	Refer to photo
M067	Metal	Silvery	Refer to photo
M068	Plastic	White	Refer to photo
M069	Metal	Silvery	Refer to photo
M070	Plastic + printing	White/ Blue	Refer to photo
M071	Electronic components	Black	Refer to photo
M072	PCB board	Green	Refer to photo
M073	Electronic components	Greenish yellow	Refer to photo
M074	Electronic components	Transparent	Refer to photo
M075	Solder	Silvery	Refer to photo
M076	Solder	Silvery	Refer to photo
M077	PCB board	Green	Refer to photo
M078	Electronic components	Black	Refer to photo
M079	Plastic	Transparent	Refer to photo
M080	Glue	White	Refer to photo
M081	Plastic	Black	Refer to photo
M082	PCB board	Green	Refer to photo
M083	Solder	Silvery	Refer to photo
M084	Plastic	Transparent	Refer to photo
M085	Plastic	Transparent	Refer to photo
M086	Plastic	Black	Refer to photo
M087	Plastic + printing	Red/ Black	Refer to photo
M088	Plastic + printing	Black/ Grey	Refer to photo
M089	Plastic + printing	White/ Grey	Refer to photo
M090	Plastic	Black	Refer to photo
M091	Metal	Golden	Refer to photo
M092	Metal	Silvery	Refer to photo

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M093	Glass	Transparent	Refer to photo
M094	Metal	Silvery	Refer to photo
M095	Coating	Black	Refer to photo
M096	Metal	Silvery grey	Refer to photo
M098	Plastic + printing	White/ Grey	Refer to photo
M099	Metal	Silvery grey	Refer to photo
M100	Component(s)	Silvery/ Grey	Refer to photo
M101	Metal	Golden	Refer to photo
M102	Metal	Golden	Refer to photo
M103	Metal	Silvery	Refer to photo
M104	Electronic components	Silvery	Refer to photo
M105	Plastic	Red	Refer to photo
M106	Metal	Silvery	Refer to photo
M107	Metal	Silvery	Refer to photo
M108	Metal	Metallic purple	Refer to photo
M109	Metal	Coppery/ Silvery	Refer to photo
M110	Metal	Coppery	Refer to photo
M111	Metal	Golden	Refer to photo
M112	Plastic	Black	Refer to photo
M113	Metal	Silvery	Refer to photo
M114	Plastic	Transparent	Refer to photo
M115	Metal	Coppery	Refer to photo
M116	Plastic	Yellow/ Green	Refer to photo
M117	Plastic	Blue	Refer to photo
M118	Plastic	Brown	Refer to photo
M119-1	Plastic	Black	Refer to photo(retest M119)
M120	Plastic	Blue	Refer to photo
M121	Metal	Silvery	Refer to photo
M122	Plastic + printing	Brown/ White	Refer to photo
M123	Metal	Dark silvery	Refer to photo
M124	Paper + plastic	Dark green/ Transparent	Refer to photo
M125	Plastic	White	Refer to photo

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M126	Plastic + adhesive	Transparent	Refer to photo
M127	Plastic + adhesive	Blue/ Transparent	Refer to photo
M128	Paper	Brown	Refer to photo
M129	Metal	Coppery	Refer to photo
M130	Solder	Silvery	Refer to photo
M131	Plastic + printing	White/ Grey	Refer to photo
M132	Plastic + printing	Fushcia/ Black	Refer to photo
M133	Plastic + printing	White/ Grey	Refer to photo
M134	Plastic + printing	Pink/ Black	Refer to photo
M135	Plastic	Transparent	Refer to photo
M136	Metal	Silvery	Refer to photo
M137	Plastic	Black	Refer to photo
M138	Carbon fibre	Black	Refer to photo
M139	Plastic	Black	Refer to photo
M140	Plastic + printing + adhesive	Silvery/ Black/ Transparent	Refer to photo
M141	Glue	Bright black	Refer to photo
M142	Plastic	Black	Refer to photo
M143	Plastic	Black	Refer to photo
M144	Metal	Silvery	Refer to photo
M145	Plastic	Black	Refer to photo
M146	Textile	Greenish yellow	Refer to photo
M147	Textile	White	Refer to photo
M148	Glue	Creamy	Refer to photo
M149	Plastic	Matt-black	Refer to photo
M150	Metal	Silvery grey	Refer to photo
M151	Metal	Silvery	Refer to photo
M152	Plastic	Black	Refer to photo
M153	Metal	Silvery	Refer to photo
M154	Metal	Silvery grey	Refer to photo
M155	Metal	Silvery blue	Refer to photo
M156	Metal	Silvery blue	Refer to photo
M157	Metal	Silvery	Refer to photo

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M158	Metal	Silvery	Refer to photo
M159	Metal	Silvery	Refer to photo
M160	Magnet	Silvery	Refer to photo
M161	Metal	Golden	Refer to photo
M162	Metal	Silvery	Refer to photo
M163	Metal	Pale golden	Refer to photo
M164	Metal	Silvery	Refer to photo
M165	Metal	Silvery	Refer to photo
M166	Plastic	Brown	Refer to photo
M167	Plastic	Black	Refer to photo
M168	Metal	Silvery	Refer to photo
M169	Metal	Deep coppery	Refer to photo
M170	Plastic	Black	Refer to photo
M171	Glue	Black	Refer to photo
M172	Plastic	White	Refer to photo
M173	Plastic + Textile	Transparent/ White	Refer to photo
M174	Electronic components	Silvery	Refer to photo
M175	Plastic	Transparent	Refer to photo
M176	Plastic	Wine red	Refer to photo
M177	Plastic	Blue	Refer to photo
M178	Plastic	Yellow	Refer to photo
M179	Metal	Silvery	Refer to photo
M180	Metal	Silvery blue	Refer to photo
M181	Metal	Silvery white	Refer to photo
M182	Metal	Silvery	Refer to photo
M183	Metal	Silvery	Refer to photo
M184	Plastic	Black	Refer to photo
M185	PCB board	Green	Refer to photo
M186	Solder	Silvery	Refer to photo
M187	Electronic components	White/ Black	Refer to photo
M188	Electronic components	Khaki	Refer to photo
M189	Electronic components	Blue	Refer to photo

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M190	Electronic components	Black/ Grey	Refer to photo
M191	Glue	Transparent	Refer to photo
M192	Electronic components	Black	Refer to photo
M193	Plastic + printing	Green/ Golden	Refer to photo
M194	Metal	Silvery	Refer to photo
M195	Plastic	Black	Refer to photo
M196	Plastic + adhesive	Light yellow/ Transparent	Refer to photo
M197	Plastic	Black	Refer to photo
M198	Magnet	Black	Refer to photo
M199	Metal	Coppery	Refer to photo

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1.Screening Test by XRF spectroscopy

 Test Method: Cadmium, Lead, Mercury, Chromium, Bromine
 -- With reference to IEC 62321-3-1:2013

Test Result:

Material No.	Cd	Cr	Pb	Hg	Br
M001	BL	BL	BL	BL	BL
M002	BL	BL	BL	BL	BL
M003	BL	BL	BL	BL	BL
M004	BL	BL	BL	BL	BL
M005	BL	BL	BL	BL	n.a.
M006	BL	BL	d.(*1)	BL	n.a.
M007	BL	BL	d.(*1)	BL	n.a.
M008	BL	d.(*1)	BL	BL	n.a.
M009	BL	BL	BL	BL	d.(*1)
M010	BL	BL	d.(*1)	BL	n.a.
M011	BL	BL	BL	BL	d.(*1)
M012	BL	BL	BL	BL	n.a.
M013	BL	BL	BL	BL	d.(*1)
M014	BL	BL	BL	BL	BL
M015	BL	BL	d.(*1)	BL	BL
M016	BL	BL	BL	BL	n.a.
M017	BL	BL	BL	BL	BL
M018	BL	BL	BL	BL	BL
M019	BL	BL	BL	BL	n.a.
M020	BL	BL	d.(*1)	BL	BL
M021	BL	BL	BL	BL	BL
M022	BL	d.(*1)	BL	BL	n.a.
M023	BL	BL	BL	BL	BL
M024	BL	BL	BL	BL	BL
M025	BL	BL	BL	BL	BL
M026	BL	BL	BL	BL	BL
M027	BL	BL	BL	BL	n.a.
M028	BL	BL	BL	BL	BL
M029	BL	BL	BL	BL	BL
M030	BL	BL	d.(*1)	BL	d.(*1)
M031	BL	BL	BL	BL	BL
M032	BL	BL	BL	BL	BL
M033	BL	BL	BL	BL	BL
M034	BL	BL	BL	BL	n.a.
M035	BL	BL	BL	BL	n.a.
M036	BL	BL	BL	BL	d.(*1)
M037	BL	BL	BL	BL	BL

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M038	BL	d.(*1)	d.(*1)	BL	BL
M039	BL	BL	BL	BL	d.(*1)
M040	BL	BL	BL	BL	d.(*1)
M041	BL	BL	BL	BL	n.a.
M042	BL	BL	BL	BL	d.(*1)
M043	BL	BL	BL	BL	BL
M044	BL	BL	BL	BL	BL
M045	BL	BL	BL	BL	d.(*1)
M046	BL	BL	BL	BL	d.(*1)
M047	BL	BL	BL	BL	d.(*1)
M048	BL	BL	BL	BL	BL
M049	BL	BL	BL	BL	BL
M050	BL	BL	BL	BL	n.a.
M051	BL	BL	BL	BL	n.a.
M052	BL	BL	BL	BL	BL
M053	BL	BL	BL	BL	n.a.
M054	BL	BL	BL	BL	BL
M055	BL	BL	BL	BL	BL
M056	BL	BL	BL	BL	d.(*1)
M057	BL	BL	BL	BL	n.a.
M058	BL	BL	d.(*1)	BL	d.(*1)
M059	d.(*1)	BL	d.(*1)	BL	BL
M060	BL	BL	BL	BL	BL
M061	BL	BL	BL	BL	BL
M062	BL	BL	BL	BL	n.a.
M063	BL	BL	BL	BL	n.a.
M064	BL	BL	BL	BL	d.(*1)
M065	BL	BL	BL	BL	BL
M066	BL	BL	BL	BL	BL
M067	BL	BL	BL	BL	n.a.
M068	BL	BL	BL	BL	BL
M069	BL	BL	BL	BL	n.a.
M070	BL	BL	BL	BL	BL
M071	BL	BL	BL	BL	BL
M072	BL	BL	BL	BL	d.(*1)
M073	BL	BL	BL	BL	BL
M074	BL	BL	BL	BL	BL
M075	BL	BL	BL	BL	n.a.
M076	BL	BL	BL	BL	n.a.
M077	BL	BL	BL	BL	d.(*1)
M078	BL	BL	BL	BL	BL
M079	BL	BL	BL	BL	BL
M080	BL	BL	BL	BL	BL

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M081	BL	BL	BL	BL	BL
M082	BL	BL	BL	BL	d.(*1)
M083	BL	BL	BL	BL	n.a.
M084	BL	BL	BL	BL	d.(*1)
M085	BL	BL	BL	BL	d.(*1)
M086	BL	BL	BL	BL	d.(*1)
M087	BL	BL	BL	BL	BL
M088	BL	BL	BL	BL	BL
M089	BL	BL	BL	BL	BL
M090	BL	BL	BL	BL	BL
M091	BL	BL	BL	BL	n.a.
M092	BL	BL	BL	BL	n.a.
M093	BL	BL	BL	BL	n.a.
M094	BL	BL	BL	BL	n.a.
M095	BL	BL	BL	BL	BL
M096	BL	BL	BL	BL	n.a.
M098	BL	BL	BL	BL	BL
M099	BL	BL	BL	BL	n.a.
M100	BL	BL	BL	BL	BL
M101	BL	BL	BL	BL	n.a.
M102	BL	BL	BL	BL	n.a.
M103	BL	d.(*1)	BL	BL	n.a.
M104	BL	BL	BL	BL	n.a.
M106	BL	BL	BL	BL	n.a.
M107	BL	BL	BL	BL	n.a.
M108	BL	BL	BL	BL	n.a.
M109	BL	BL	BL	BL	n.a.
M110	BL	BL	BL	BL	n.a.
M111	BL	BL	BL	BL	n.a.
M112	BL	BL	BL	BL	BL
M113	BL	BL	BL	BL	n.a.
M114	BL	BL	BL	BL	BL
M115	BL	BL	BL	BL	n.a.
M116	BL	BL	BL	BL	BL
M117	BL	BL	BL	BL	BL
M118	BL	BL	BL	BL	BL
M120	BL	BL	BL	BL	d.(*1)
M121	BL	BL	BL	BL	n.a.
M122	BL	BL	BL	BL	BL
M123	BL	d.(*1)	BL	BL	n.a.
M124	BL	BL	BL	BL	BL
M125	BL	BL	BL	BL	d.(*1)
M126	BL	BL	BL	BL	BL

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M127	BL	BL	BL	BL	BL
M128	BL	BL	BL	BL	BL
M129	BL	BL	BL	BL	n.a.
M131	BL	BL	BL	BL	BL
M132	BL	BL	BL	BL	BL
M133	BL	BL	BL	BL	BL
M134	BL	BL	BL	BL	d.(*1)
M135	BL	BL	BL	BL	BL
M136	BL	BL	BL	BL	n.a.
M137	BL	BL	BL	BL	d.(*1)
M138	BL	BL	BL	BL	BL
M139	BL	BL	BL	BL	BL
M140	BL	BL	BL	BL	BL
M141	BL	BL	BL	BL	BL
M142	BL	BL	BL	BL	BL
M143	BL	BL	BL	BL	d.(*1)
M144	BL	BL	BL	BL	n.a.
M145	BL	BL	BL	BL	d.(*1)
M146	BL	BL	BL	BL	BL
M147	BL	BL	BL	BL	BL
M148	BL	BL	BL	BL	BL
M149	BL	BL	BL	BL	BL
M150	BL	BL	BL	BL	n.a.
M151	BL	BL	BL	BL	n.a.
M152	BL	BL	BL	BL	BL
M153	BL	BL	BL	BL	n.a.
M154	BL	BL	BL	BL	n.a.
M155	BL	BL	BL	BL	n.a.
M156	BL	d.(*1)	BL	BL	n.a.
M157	BL	BL	BL	BL	n.a.
M158	BL	BL	BL	BL	n.a.
M159	BL	d.(*1)	BL	BL	n.a.
M160	BL	BL	BL	BL	n.a.
M161	BL	BL	d.(*1)	BL	n.a.
M162	BL	d.(*1)	BL	BL	n.a.
M163	BL	BL	BL	BL	n.a.
M164	BL	d.(*1)	BL	BL	n.a.
M165	BL	d.(*1)	BL	BL	n.a.
M166	BL	BL	BL	BL	BL
M167	BL	BL	BL	BL	BL
M168	BL	d.(*1)	BL	BL	n.a.
M169	BL	BL	BL	BL	n.a.
M170	BL	BL	BL	BL	d.(*1)

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M171	BL	BL	BL	BL	BL
M172	BL	BL	BL	BL	BL
M173	BL	BL	BL	BL	BL
M174	BL	BL	BL	BL	n.a.
M175	BL	BL	BL	BL	BL
M176	BL	BL	BL	BL	BL
M177	BL	BL	BL	BL	BL
M178	BL	BL	BL	BL	BL
M179	BL	BL	BL	BL	n.a.
M180	BL	d.(*1)	BL	BL	n.a.
M181	BL	BL	BL	BL	n.a.
M182	BL	BL	BL	BL	n.a.
M183	BL	d.(*1)	BL	BL	n.a.
M184	BL	BL	BL	BL	d.(*1)
M185	BL	BL	BL	BL	d.(*1)
M186	BL	BL	BL	BL	n.a.
M187	BL	d.(*1)	d.(*1)	BL	BL
M188	BL	BL	BL	BL	d.(*1)
M189	BL	BL	d.(*1)	BL	BL
M190	BL	BL	d.(*1)	BL	BL
M191	BL	BL	BL	BL	BL
M192	BL	BL	BL	BL	d.(*1)
M193	BL	BL	BL	BL	BL
M194	BL	BL	BL	BL	n.a.
M195	BL	BL	BL	BL	BL
M196	BL	BL	BL	BL	BL
M197	BL	BL	BL	BL	BL
M198	BL	BL	BL	BL	n.a.
M199	BL	BL	BL	BL	n.a.
M105	BL	BL	BL	BL	d.(*1)
M119-1	BL	BL	BL	BL	BL
M130	BL	BL	BL	BL	n.a.

Abbreviation:

Pb	=	Lead
Cd	=	Cadmium
Hg	=	Mercury
Cr	=	Chromium
Br	=	Bromine
n.a.	=	Not applicable
BL	=	Below limit
OL	=	Over limit
d.	=	Detected

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Remark:

- (*1) The screening result was detected in the inconclusive region or over limits, thus the further wet chemistry tests are suggested.
- (*2) Component(s)/ materials(s) with an area of less than 2 mm x 2 mm will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.
For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.
Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.
All other materials will be sampled and tested at one test point representatively.
- (*3) The Chromium (Cr) and Bromine (Br) in the above result table indicate the total chromium and total bromine by means of XRF screening. PBBs, or PBDEs content shall be further confirmed with reference to IEC 62321-6:2015. Chromium (VI) shall be further confirmed with reference to IEC 62321-7-1:2015, IEC 62321-7-2:2017 or EN ISO 17075-1:2017.

XRF Screening limits for different matrices :

Material	Concentration (%)				
	Cd	Cr	Pb	Hg	Br
Polymeric	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	BL≤0.029<X
Metallic	BL≤0.006<X<0.014≤ OL	BL≤0.064<X	BL≤0.067<X<0.133≤ OL	BL≤0.066<X< 0.134≤OL	n.a.
Composite materials	BL≤0.004<X<0.016≤ OL	BL≤0.044<X	BL≤0.047<X<0.153≤ OL	BL≤0.046<X< 0.154≤OL	BL≤0.024<X

Remark: The symbol "X" marks the region where further investigation is necessary.

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Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)

Test Method: Total Cadmium, Lead, Mercury, Chromium
- Ref. to IEC 62321-4:2013+AMD1:2017 and IEC 62321-5:2013

Chromium (VI)
- For Metal material - Ref. to IEC 62321-7-1:2015
- For Plastic or Electronic material - Ref. to IEC 62321-7-2:2017
- For Leather material - Ref. to EN ISO 17075-1:2017

PBBs, PBDEs - Ref. to IEC 62321-6:2015

Test Result:

	Cd	Cr(VI)	Pb	Hg	PBBs (*)	PBDEs (*)
Maximum Permissible Limit (%)	0.01	0.1	0.1	0.1	0.1	0.1

Material No.	(%)					
	Cd	Cr[^]	Pb	Hg	PBBs (*)	PBDEs (*)
	RL (%)					
	0.001	0.001	0.001	0.001	0.01	0.01
M006	n.a.	n.a.	2.63(*4)	n.a.	n.a.	n.a.
M007	n.a.	n.a.	2.91(*4)	n.a.	n.a.	n.a.
M009	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M010	n.a.	n.a.	3.01(*4)	n.a.	n.a.	n.a.
M011	n.a.	n.a.	n.a.	n.a.	< RL	DecaBDE:0.0238; others: <RL
M013	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M015	n.a.	n.a.	1.10(*5)	n.a.	n.a.	n.a.
M020	n.a.	n.a.	2.89(*5)	n.a.	n.a.	n.a.
M030	n.a.	n.a.	2.59(*5)	n.a.	< RL	< RL
M036	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M038	n.a.	n.a.	0.0690	n.a.	n.a.	n.a.
M039	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M040	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M042	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M045	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M046	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M047	n.a.	n.a.	n.a.	n.a.	< RL	< RL

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M056	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M058	n.a.	n.a.	1.72(*5)	n.a.	< RL	< RL
M059	< RL	n.a.	0.834(*5)	n.a.	n.a.	n.a.
M064	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M072	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M077	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M082	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M084	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M085	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M086	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M105	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M120	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M125	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M134	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M137	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M143	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M145	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M161	n.a.	n.a.	1.86(*4)	n.a.	n.a.	n.a.
M170	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M184	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M185	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M187	n.a.	n.a.	0.115(*5)	n.a.	n.a.	n.a.
M188	n.a.	n.a.	n.a.	n.a.	< RL	< RL
M189	n.a.	n.a.	1.99(*5)	n.a.	n.a.	n.a.
M190	n.a.	n.a.	1.89(*5)	n.a.	n.a.	n.a.
M192	n.a.	n.a.	n.a.	n.a.	< RL	< RL

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Material No.	Hexavalent Chromium Content ($\mu\text{g}/\text{cm}^2$) (*1) RL: 0.10 $\mu\text{g}/\text{cm}^2$
M008	Negative
M022	Negative
M103	Negative
M123	Negative
M156	Negative
M159	Negative
M162	Negative
M164	Negative
M165	Negative
M168	Negative
M180	Negative
M183	Negative

Material No.	Hexavalent Chromium Content (%) (*2) RL: 0.01%
M038	< RL
M187	< RL

Abbreviation:

- Pb = Lead
- Cd = Cadmium
- Hg = Mercury
- Cr = Chromium
- Cr (VI) = Chromium (VI)
- PBBs = Total Polybrominated Biphenyls
- PBDEs = Total Polybrominated Diphenyl Ethers
- < = Less than
- RL = Reporting Limit
- n.a. = Not Applicable
- ^ = The total Chromium have been determined
- % = Percentage

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Remark:

(*) The reporting limit for each individual PBBs and individual PBDEs are :

Reporting Limit (%)		
PBBs	Bromobiphenyl	0.01
	Dibromobiphenyl	0.01
	Tribromobiphenyl	0.01
	Tetrabromobiphenyl	0.01
	Pentabromobiphenyl	0.01
	Hexabromobiphenyl	0.01
	Heptabromobiphenyl	0.01
	Octabromobiphenyl	0.01
	Nonabromobiphenyl	0.01
	Decabromobiphenyl	0.01
PBDEs	Bromodiphenylether	0.01
	Dibromodiphenyl ether	0.01
	Tribromodiphenyl ether	0.01
	Tetrabromodiphenyl ether	0.01
	Pentabromodiphenyl ether	0.01
	Hexabromodiphenyl ether	0.01
	Heptabromodiphenyl ether	0.01
	Octabromodiphenyl ether	0.01
	Nonabromodiphenyl ether	0.01
	Decabromodiphenyl ether	0.01

(*1) The total chromium content in Metal sample was found to be exceeded the maximum permissible limit (0.1%). Thus, the Chromium (VI) content in surface layer have been confirmed with reference to IEC 62321-7-1:2015 Annex.

	Chromium (VI) concentration	Qualitative result
Negative	<0.1µg/cm ²	The sample is negative (-ve) for Cr(VI). The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating
Inconclusive	≥0.1µg/cm ² and ≤0.13 µg/cm ²	The result is considered to be inconclusive. Unavoidable coating variations may influence the determination. Recommendation: if additional samples are available, perform a total of 3 trials to increase sampling surface area. Use the averaged result of the 3 trails for the final determination.
Positive	>0.13 µg/cm ²	The sample is positive (+ve) for Cr(VI). Concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

(*2) The total chromium content in plastic sample or electronic sample was found to be exceeded the maximum permissible limit (0.1%). Thus, the Chromium (VI) content have been confirmed with reference to IEC 62321-7-2:2017

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- (*4) According to (EU) 2018/741 and Annex III of directive 2011/65/EU, 6(c), as a copper alloy containing up to 4% lead by weight are exempted from requirement. This exemption applies to testing sample No.: M006, M007, M010, M161.
- (*5) According to (EU) 2018/736 and Annex III of directive 2011/65/EU, 7(c)-I, Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound is exempted from requirement. This exemption applies to testing sample No.: M015, M020, M030, M058, M059, M187, M189, M190.

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BBP, DBP, DEHP, DIBP content

Test Method: Ref. to IEC 62321-8:2017

Test Result:

	BBP	DBP	DEHP	DIBP
Maximum permissible Limit (%)	0.1	0.1	0.1	0.1

Test No.	Material No.	RL (%)			
		RL (%)			
		BBP	DBP	DEHP	DIBP
		0.005	0.005	0.005	0.005
T001	M001 + M002 + M003	< RL	< RL	< RL	< RL
T002	M009 + M011 + M013	< RL	< RL	< RL	< RL
T003	M025 + M039 + M040	< RL	< RL	< RL	< RL
T004	M042 + M045 + M046	< RL	< RL	< RL	< RL
T005	M047 + M048 + M049	< RL	< RL	< RL	< RL
T006	M052 + M054 + M056	< RL	< RL	< RL	< RL
T007	M060 + M068 + M072	< RL	< RL	< RL	< RL
T008	M077 + M079 + M082	< RL	< RL	< RL	< RL
T009	M084 + M085 + M086	< RL	< RL	< RL	< RL
T010	M105 + M112 + M120	< RL	< RL	< RL	< RL
T011	M124 + M125 + M137	< RL	< RL	< RL	< RL
T012	M139 + M141 + M142	< RL	< RL	< RL	< RL
T013	M143 + M145 + M152	< RL	< RL	< RL	< RL
T014	M166 + M170 + M171	< RL	< RL	< RL	< RL
T015	M014 + M036 + M055	< RL	< RL	< RL	< RL
T016	M061 + M070 + M080	< RL	< RL	< RL	< RL
T017	M081 + M087 + M088	< RL	< RL	< RL	< RL
T021	M122 + M126 + M127	< RL	< RL	< RL	< RL
T022	M131 + M132 + M133	< RL	< RL	< RL	< RL
T023	M134 + M135 + M140	< RL	< RL	< RL	< RL
T024	M148 + M149 + M167	< RL	< RL	< RL	< RL

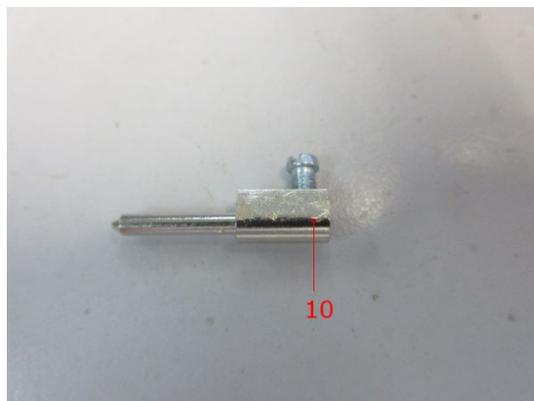
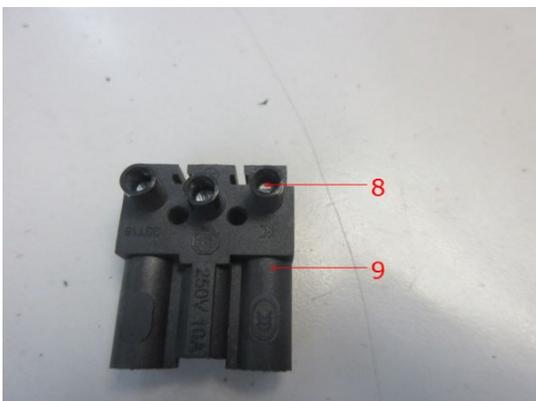
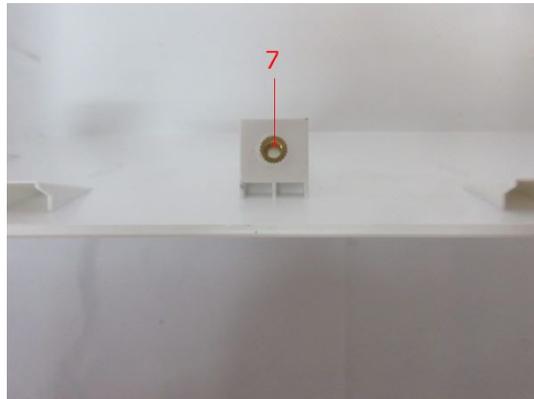
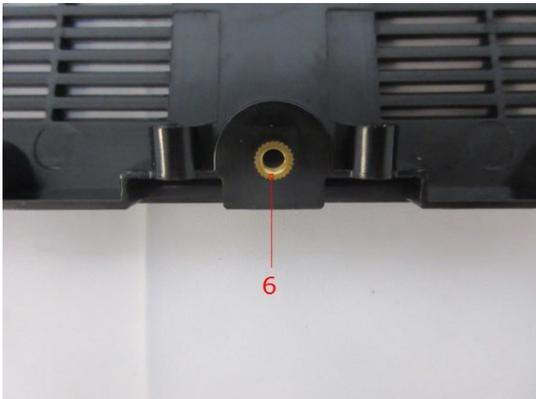
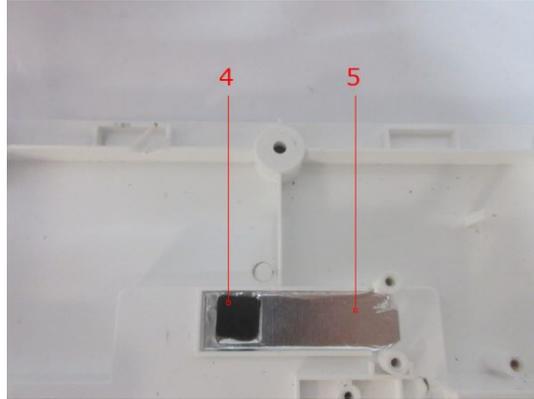
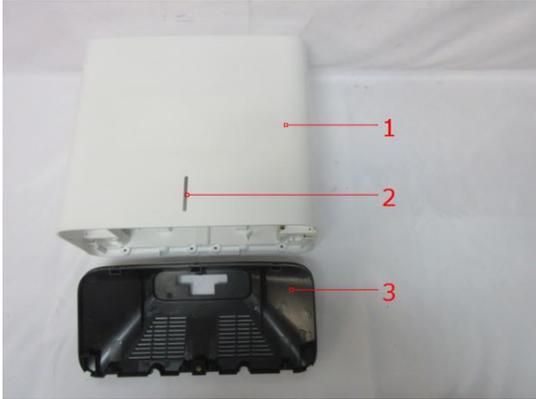
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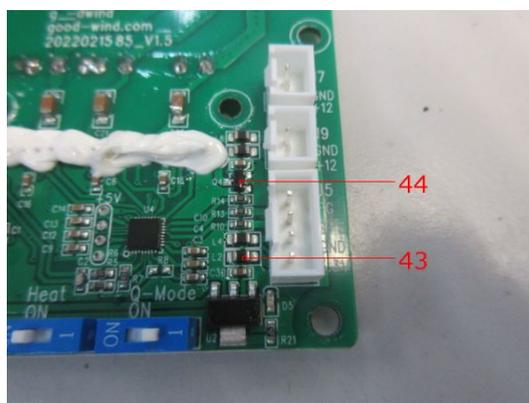
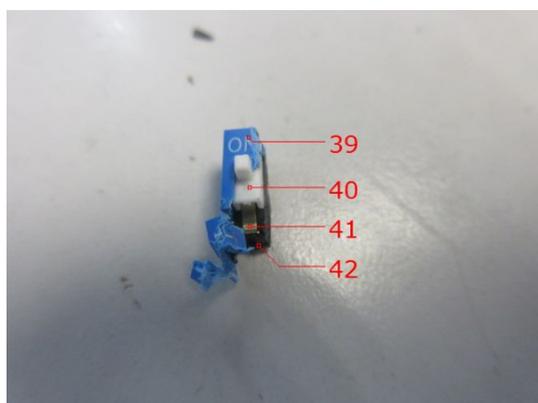
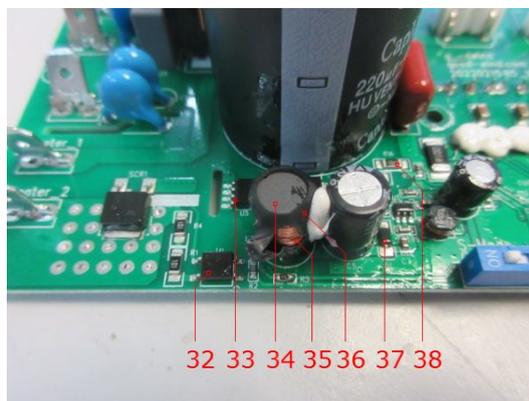
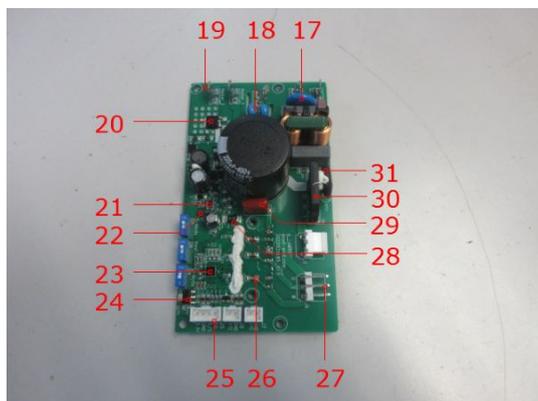
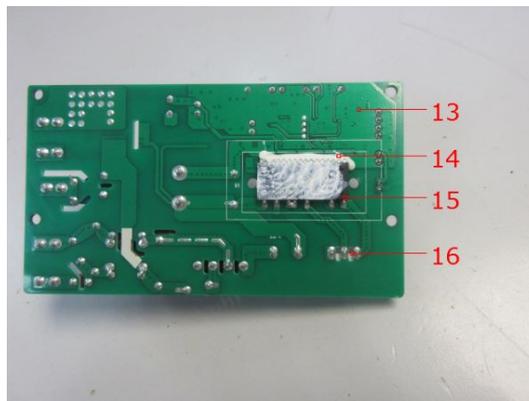
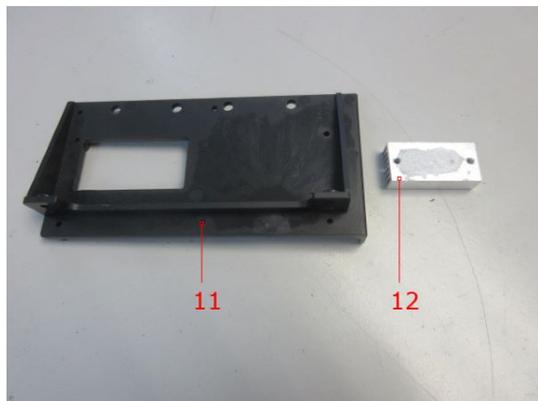
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T027	M173 + M184	< RL	< RL	< RL	< RL
T028	M095	< RL	< RL	< RL	< RL
T029	M089	< RL	0.012	< RL	< RL
T030	M090	< RL	0.010	< RL	< RL
T032	M098	< RL	< RL	< RL	< RL
T033	M114	< RL	< RL	< RL	< RL
T034	M116	< RL	0.070	< RL	< RL
T035	M117	< RL	0.041	< RL	< RL
T036	M118	< RL	0.012	< RL	< RL
T038	M185 + M191 + M193	< RL	< RL	< RL	< RL
T039	M195 + M196 + M197	< RL	< RL	< RL	< RL
T040	M119-1	< RL	< RL	< RL	< RL

Abbreviation: BBP= Benzylbutyl phthalate
 DBP= Dibutyl phthalate
 DEHP= Bis(2-ethylhexyl) phthalate
 DIBP= Diisobutyl phthalate
 < = less than
 RL = Reporting Limit
 N.A. = Not Applicable
 %= percentage

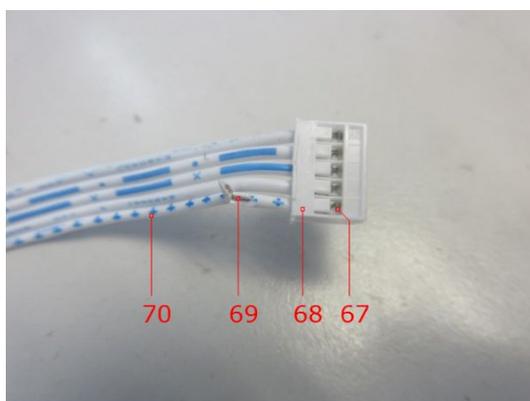
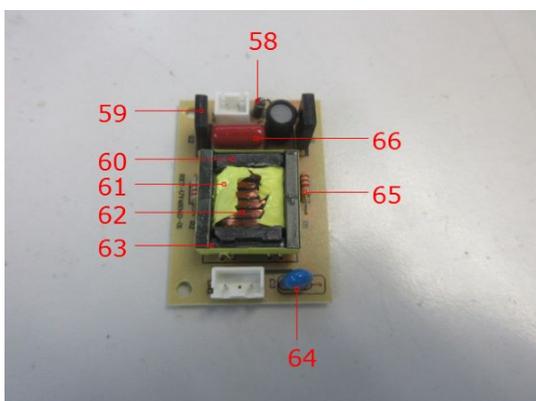
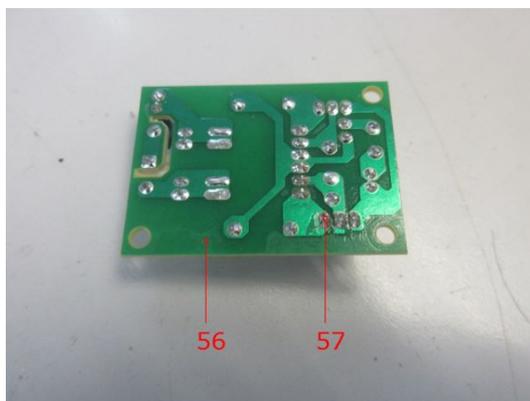
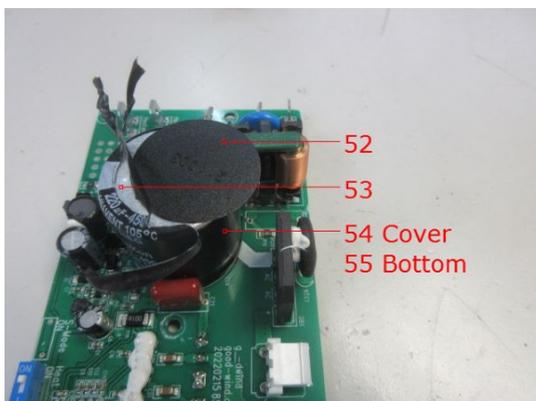
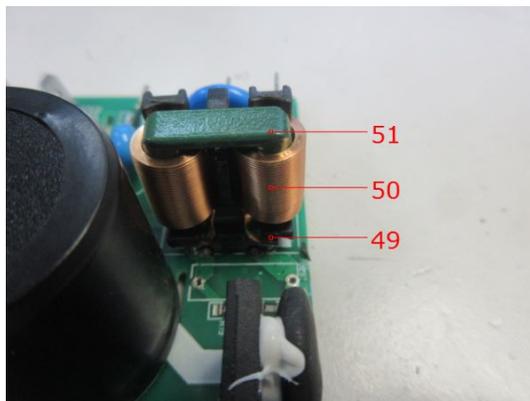
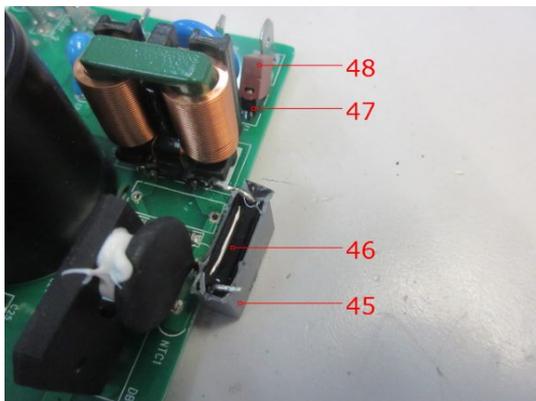
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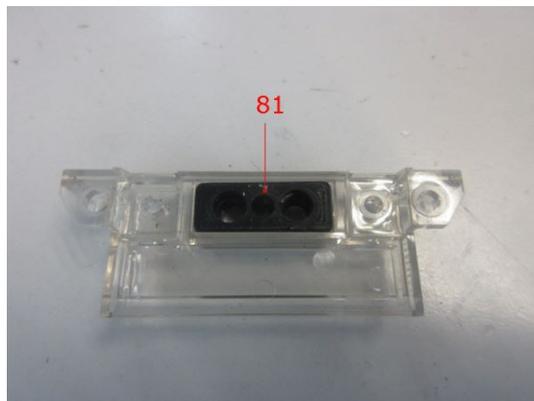
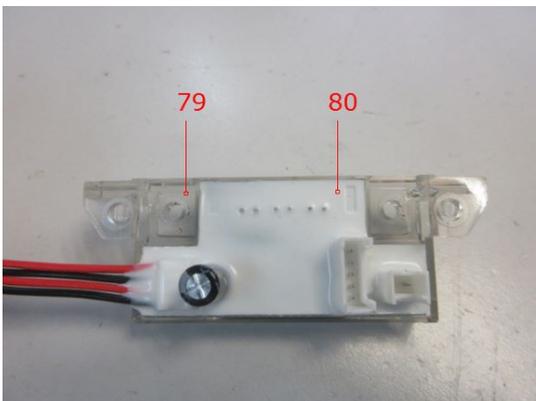
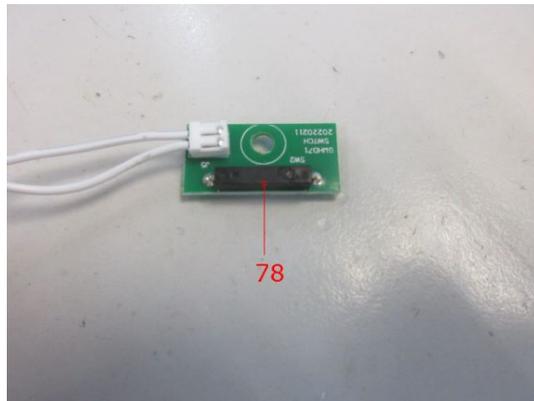
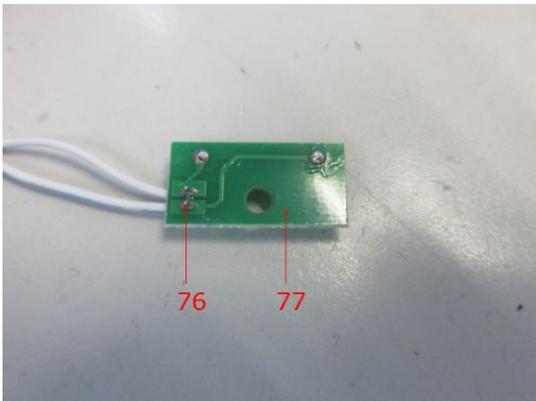
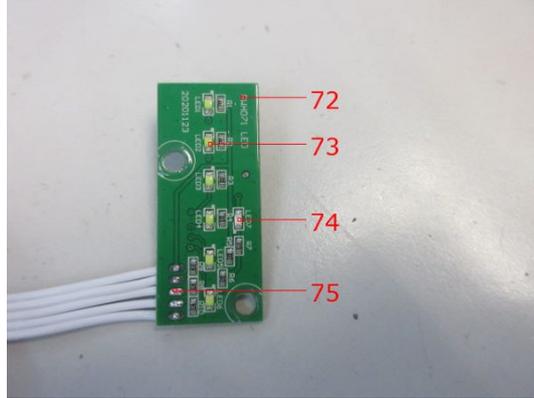
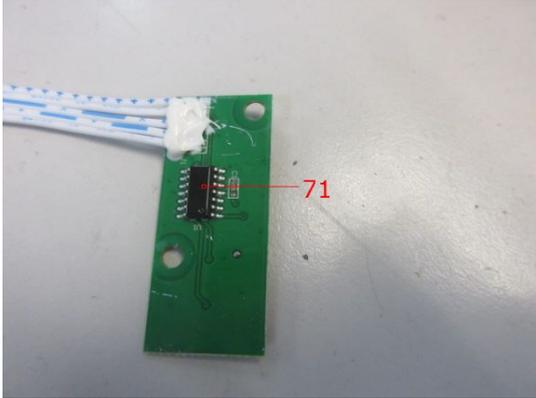
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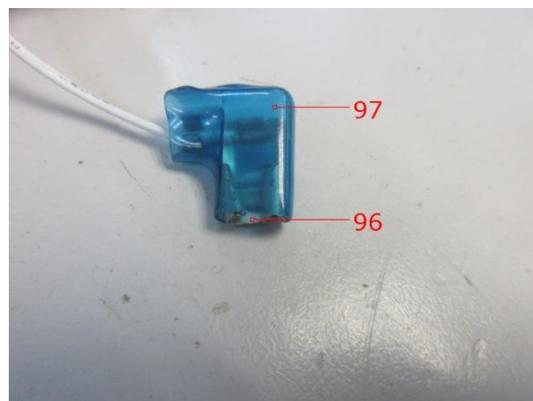
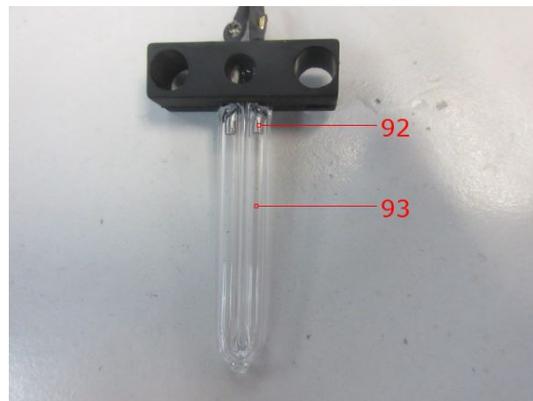
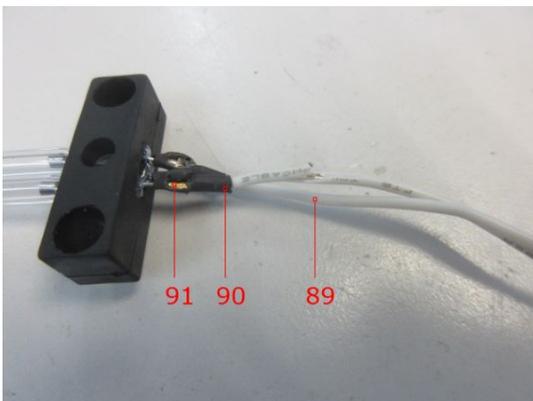
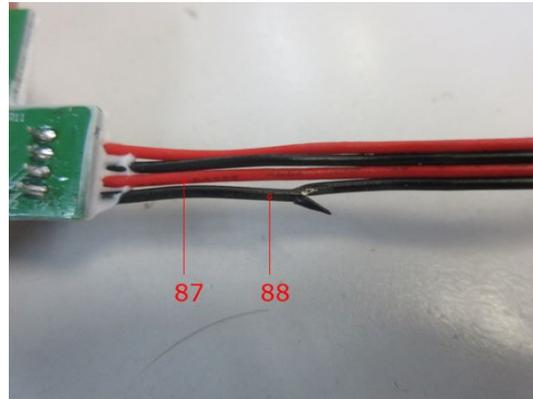
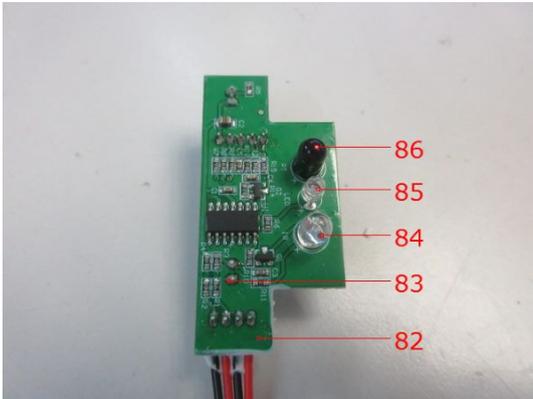
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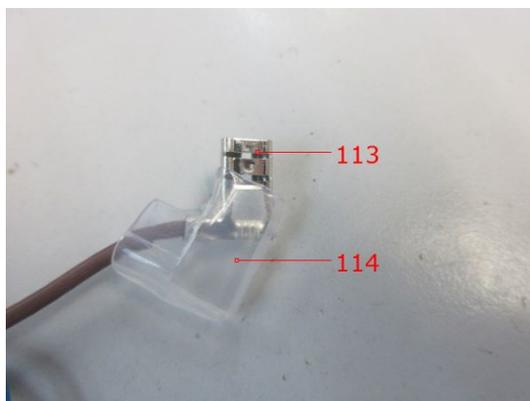
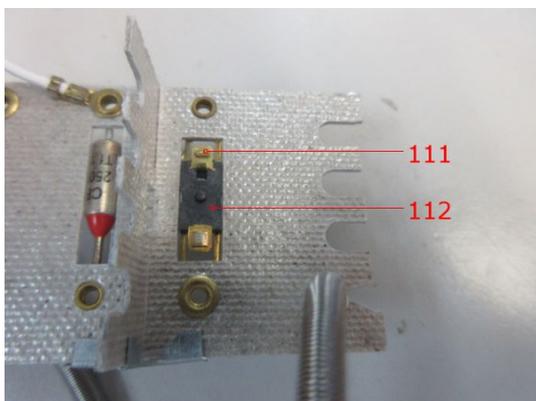
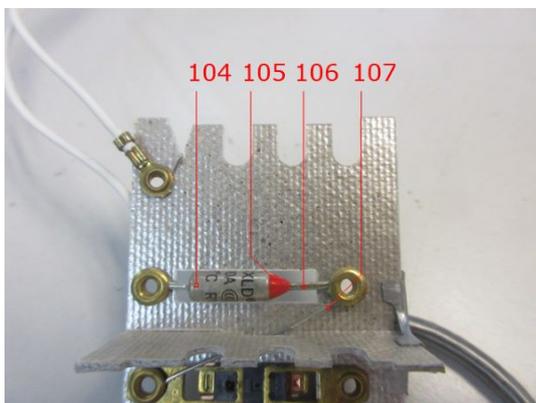
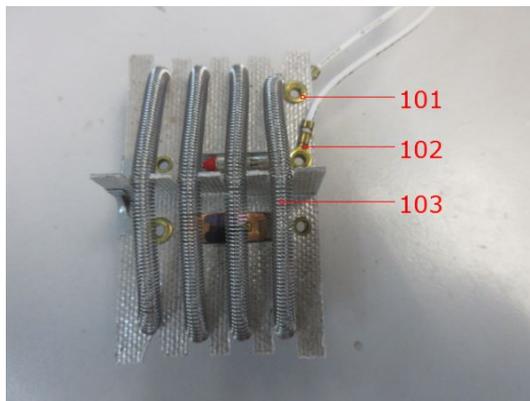
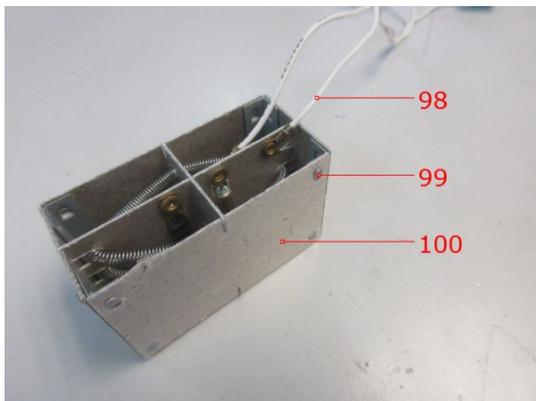
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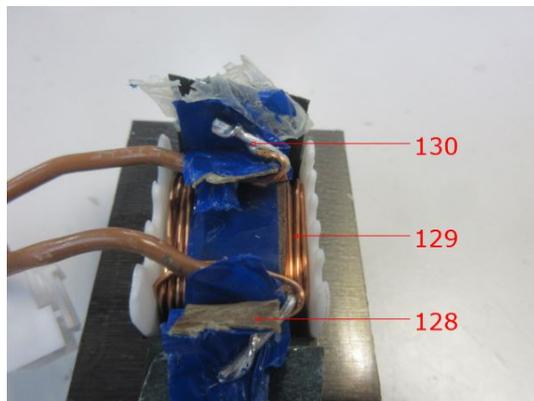
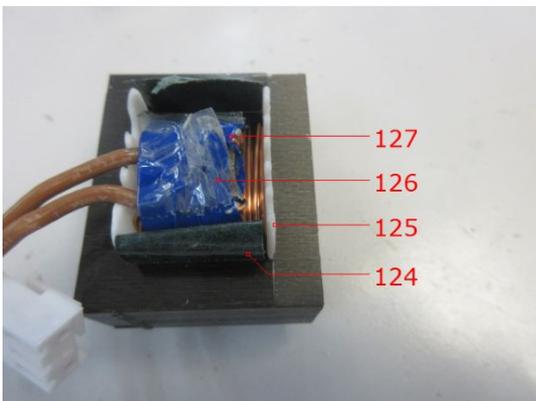
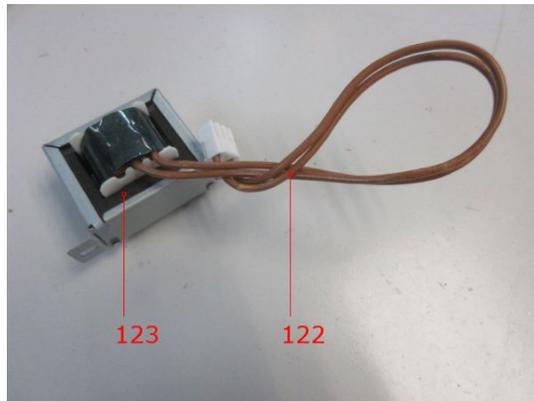
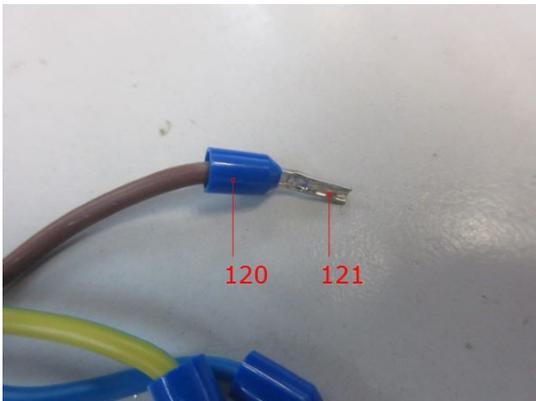
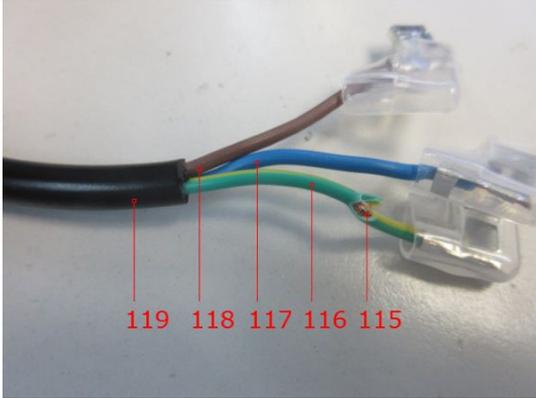
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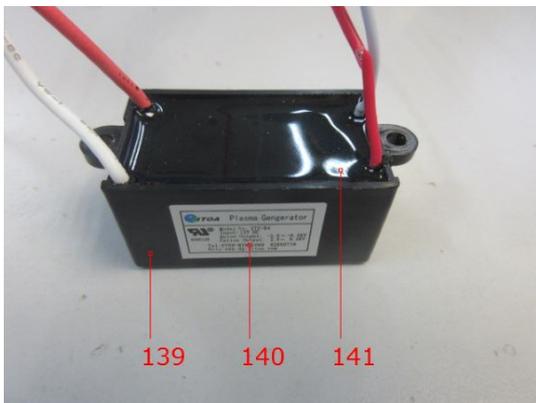
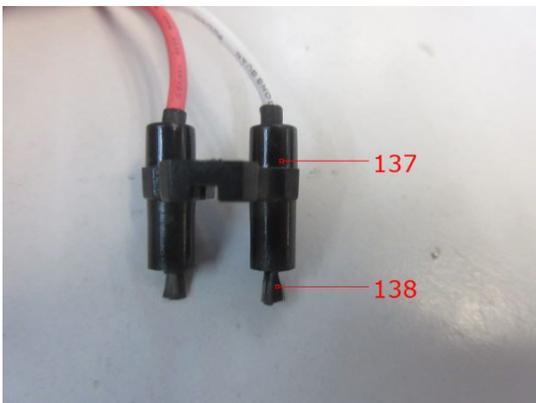
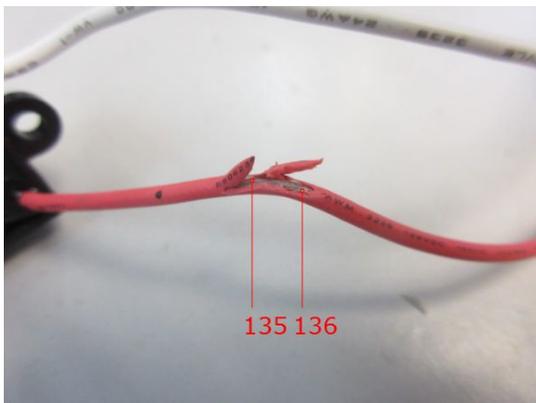
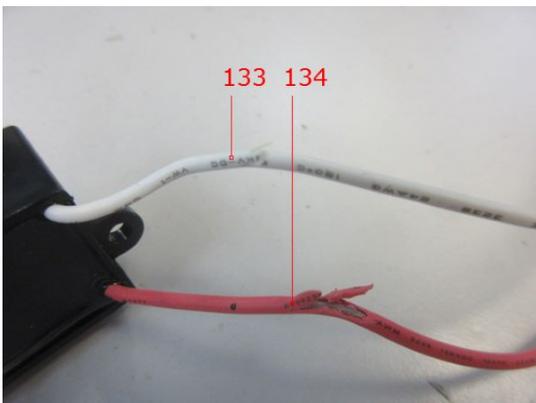
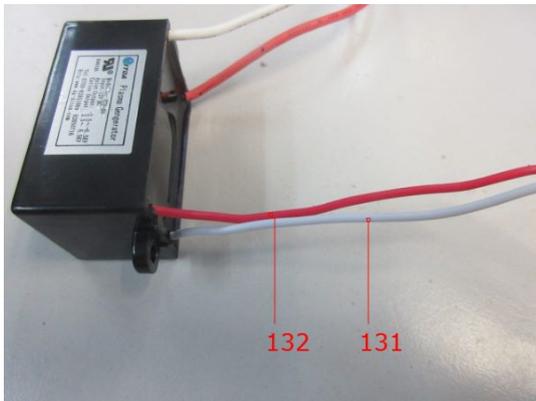
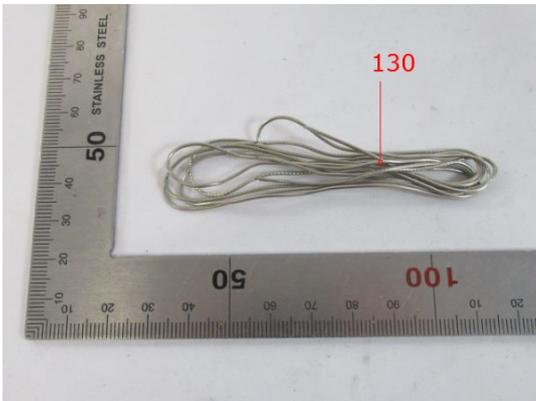


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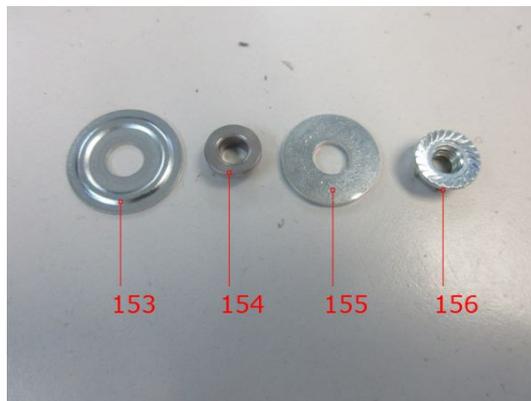
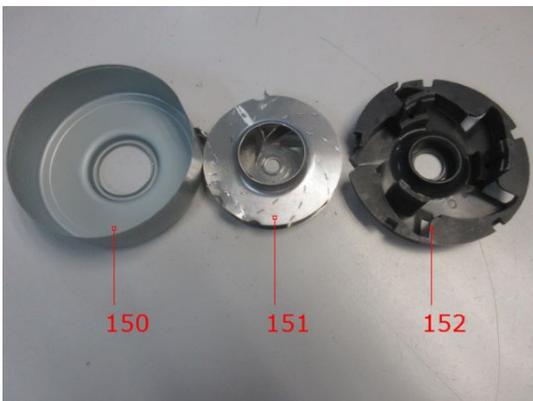
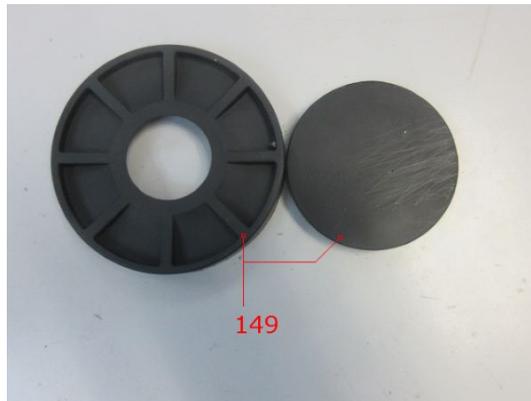
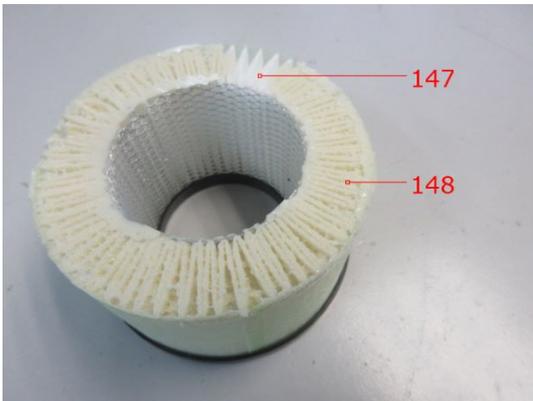
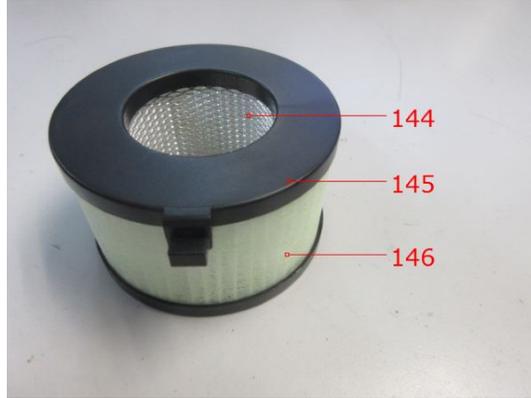


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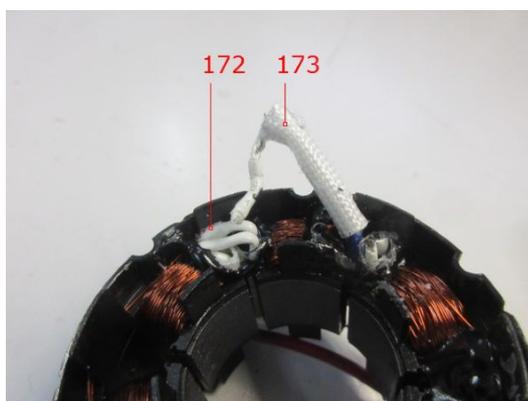
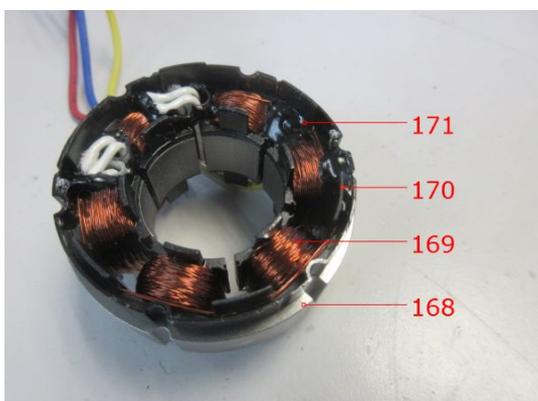
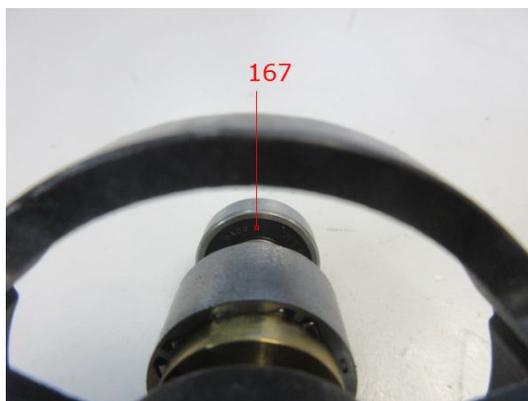
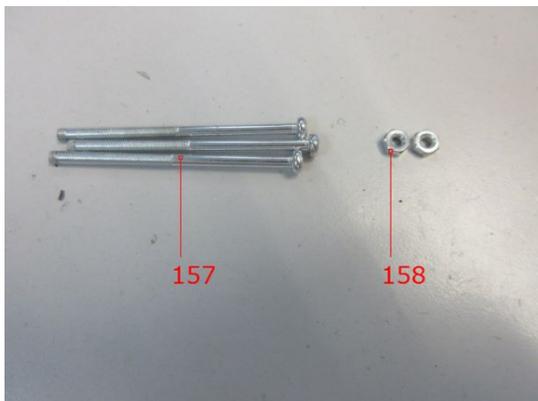
Sample Photos



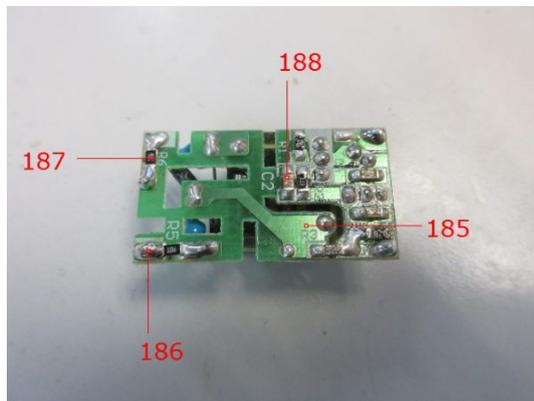
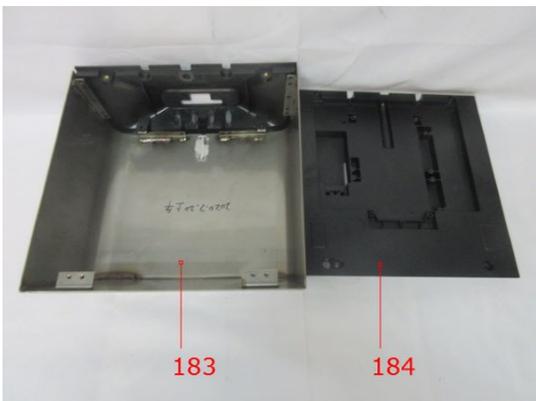
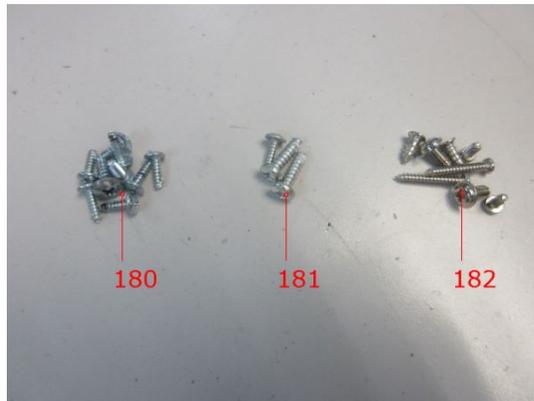
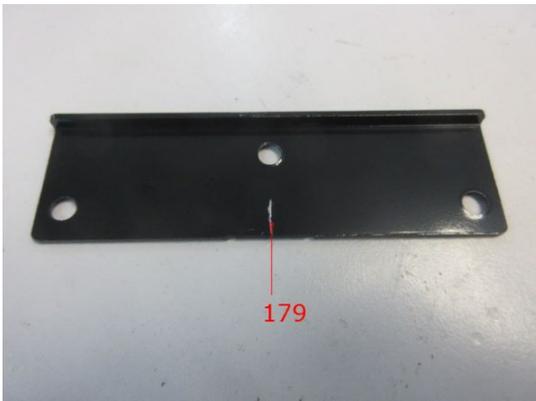
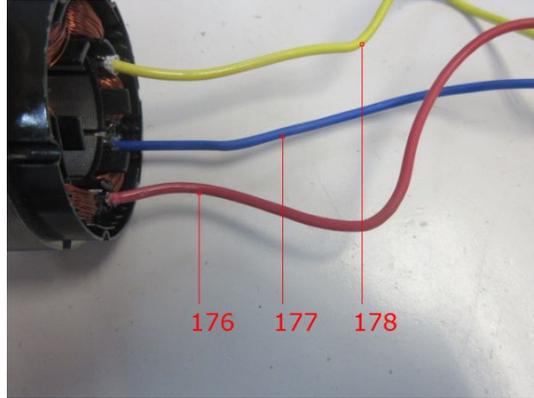
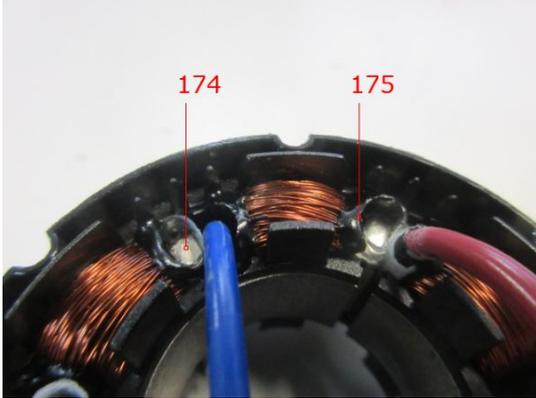
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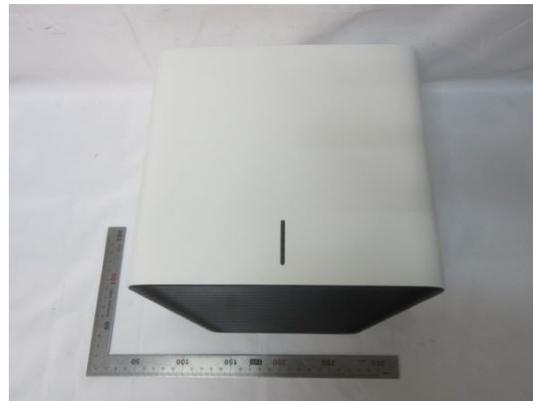
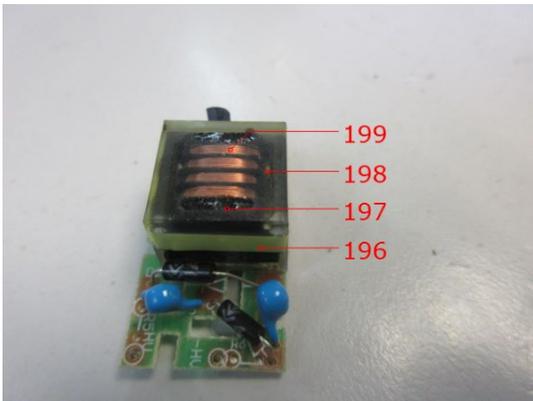
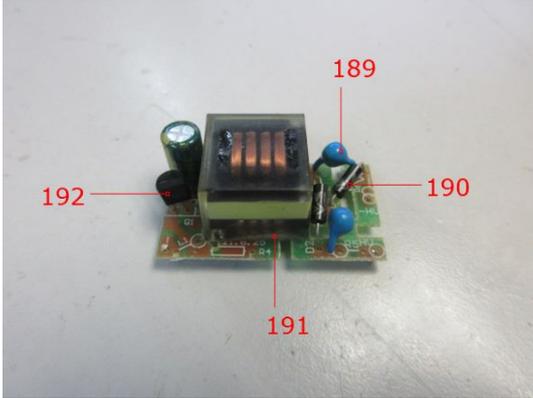
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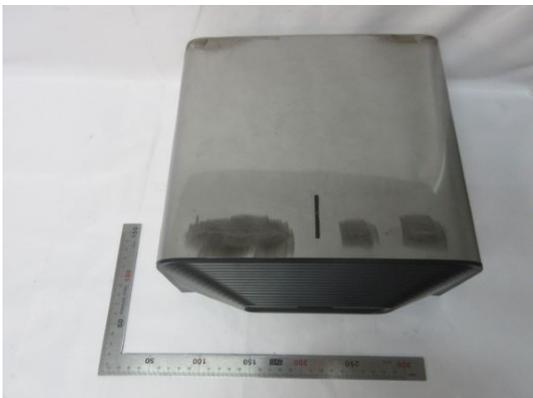
Sample Photos



Sample Photos



Product



Product

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