

Report No.: 0164057815a 001

Client: DRAGON LABORATORY INSTRUMENTS LIMIT
No. 31, Yu An road, Area B, Konggang Industrial Development Zone,
Shunyi District, Beijing, P. R. China

Test item(s): 564 materials

Identification/ Please refer to page 2

Model No(s):

Sample Receiving date: 2016-02-22, 2016-02-26, 2016-03-31, 2016-05-31, 2016-06-03

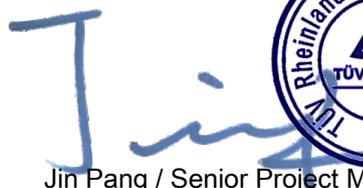
Testing Period: 2016-03-18 - 2016-06-15

Test Specification:	Test result:
1. Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU	PASS

Other information:

According to customer's requirement, only the appointed materials have been tested.

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





2016-07-01

Jin Pang / Senior Project Manager

Date

Name/Position

*Test result is drawn according to the kind and extent of tests performed.
This test report relates to the a. m. 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.*

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型号	名称
TC1000-G	Thermo Cyclers
TC1000-S	Thermo Cyclers
HCM100-Pro	Thermo Mix
HM100-Pro	Thermo Mix without cooling
HC110-Pro	Dry bath with cooling
MicroPette	Mechanical Pipettes
MicroPette multi-channel	Mechanical Pipettes
MicroPette plus	Mechanical Pipettes
MicroPette plus multi-channel	Mechanical Pipettes
TopPette	Mechanical Pipettes
TopPette multi-channel	Mechanical Pipettes
Pipette Stands	Pipette Stands
dPette	Electronic Pipette
dPette+	Electronic Pipette

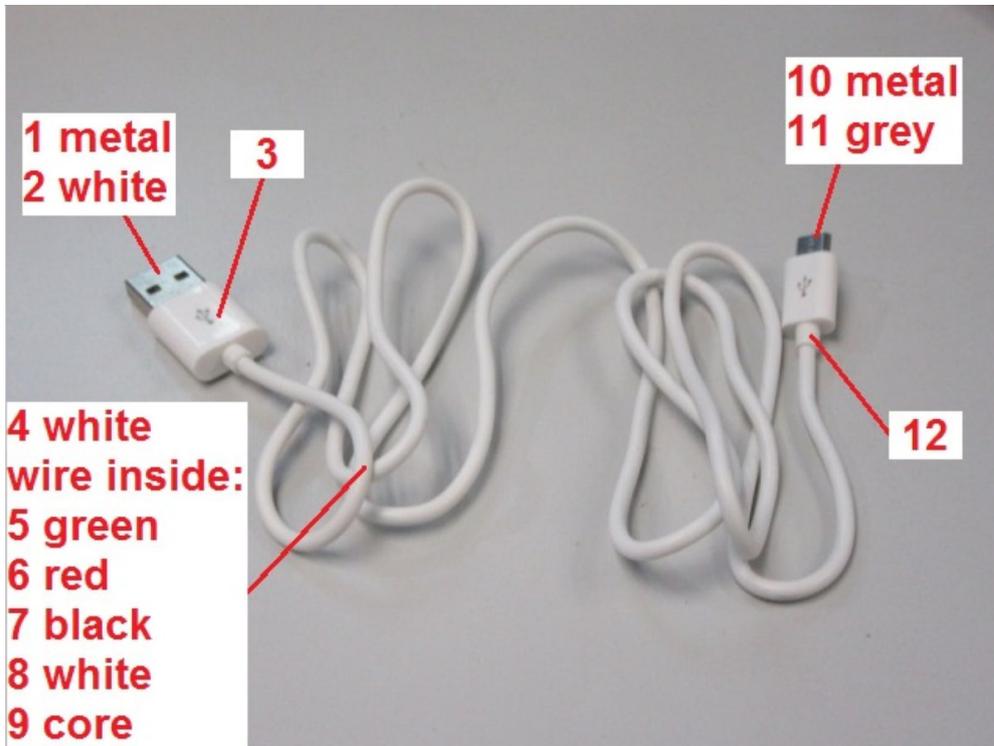


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1. Screening Test by XRF spectroscopy

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

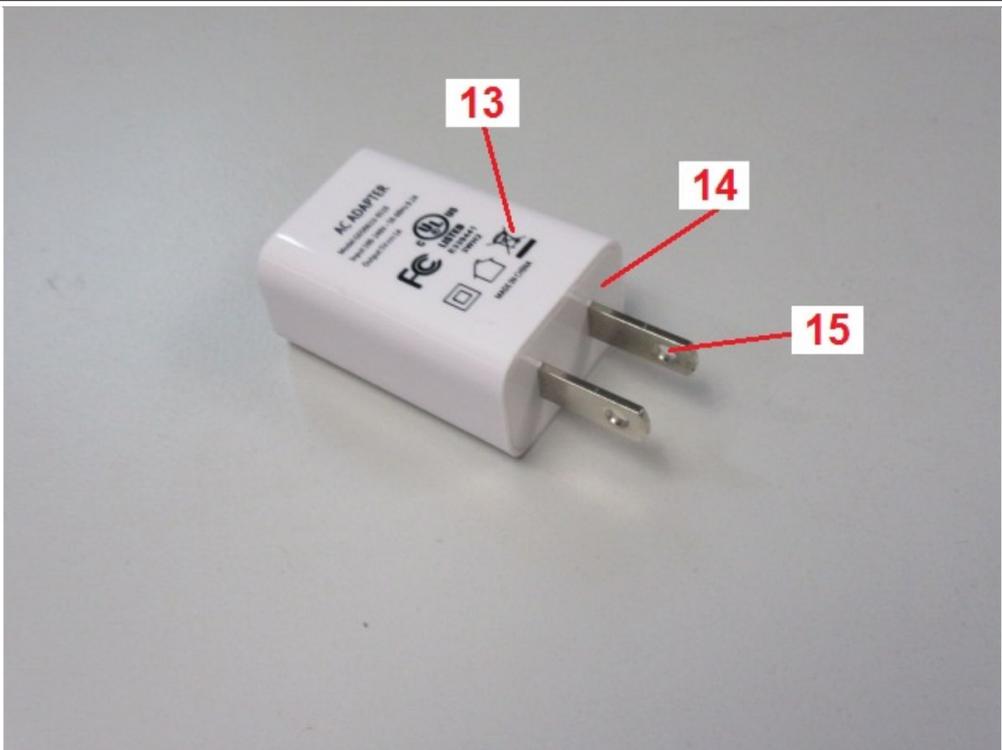
Test Result:



Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M001	n.d.	d(*3)	n.d.	n.d.	n.a.
M002	n.d.	n.d.	n.d.	n.d.	n.d.
M003	n.d.	n.d.	n.d.	n.d.	n.d.
M004	n.d.	n.d.	n.d.	n.d.	n.d.
M005	n.d.	n.d.	n.d.	n.d.	n.d.
M006	n.d.	n.d.	n.d.	n.d.	n.d.
M007	n.d.	n.d.	n.d.	n.d.	n.d.
M008	n.d.	n.d.	n.d.	n.d.	n.d.
M009	n.d.	d(*3)	n.d.	n.d.	n.a.
M010	n.d.	d(*3)	88	n.d.	n.a.
M011	n.d.	n.d.	n.d.	n.d.	66
M012	n.d.	n.d.	n.d.	n.d.	n.d.



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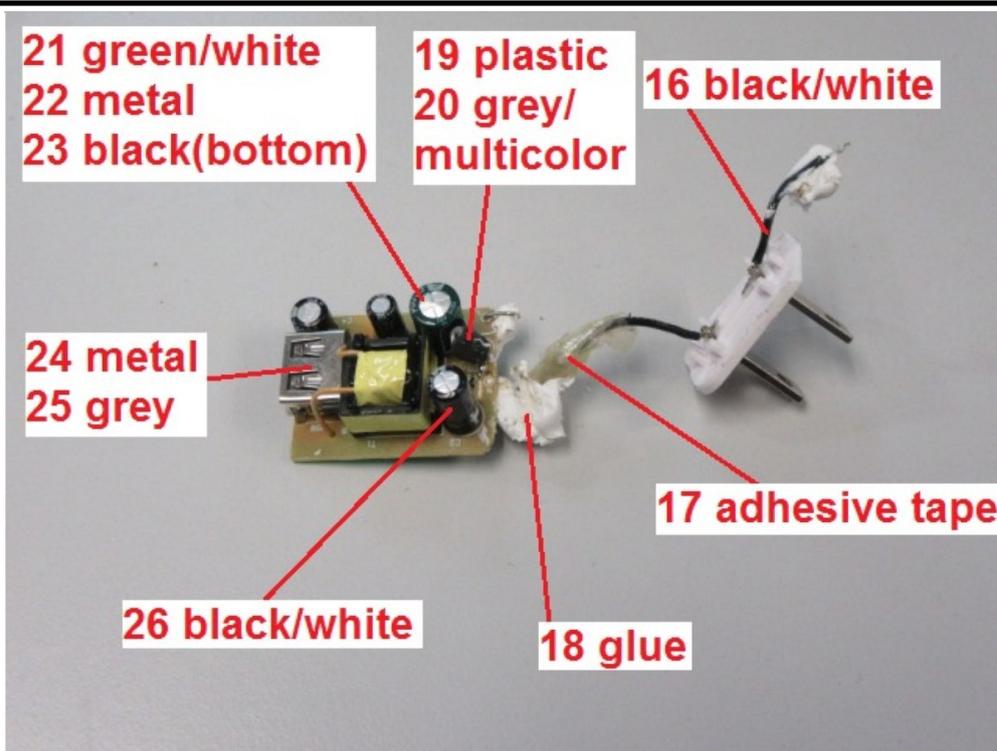


Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M013	n.d.	n.d.	n.d.	n.d.	n.d.
M014	n.d.	n.d.	n.d.	n.d.	n.d.
M015	n.d.	d(*3)	n.d.	n.d.	n.a.



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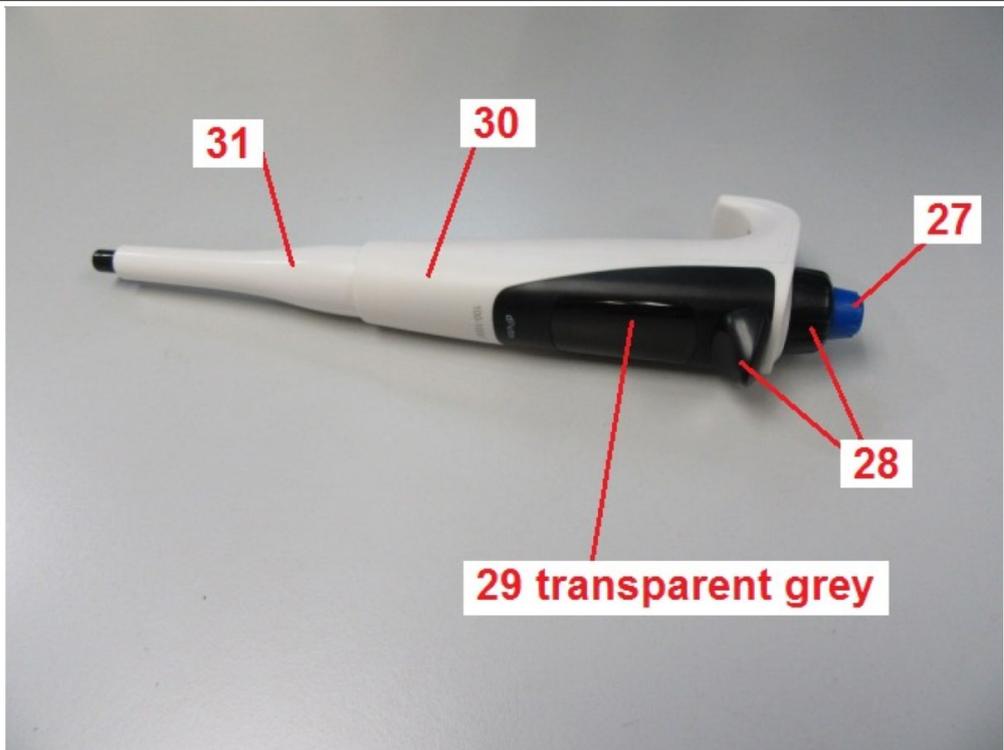
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Material No.	Cd	Cr^	Pb	Hg	Br^
M016	n.d.	n.d.	n.d.	n.d.	n.d.
M017	n.d.	n.d.	n.d.	n.d.	24
M018	n.d.	n.d.	n.d.	n.d.	n.d.
M019	n.d.	n.d.	n.d.	n.d.	n.d.
M020	n.d.	n.d.	35	n.d.	n.d.
M021	n.d.	n.d.	n.d.	n.d.	n.d.
M022	n.d.	d(*3)	n.d.	n.d.	n.a.
M023	n.d.	n.d.	n.d.	n.d.	n.d.
M024	n.d.	d(*3)	96	n.d.	n.a.
M025	n.d.	n.d.	n.d.	n.d.	48
M026	n.d.	n.d.	n.d.	n.d.	n.d.



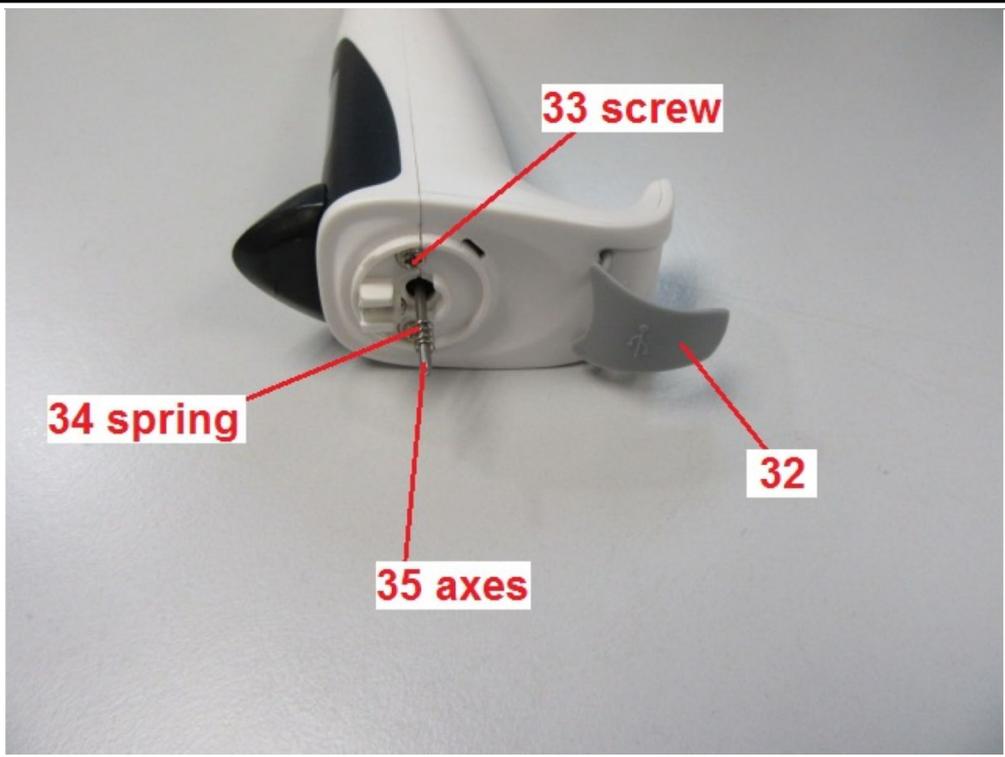
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Material No.	Cd	Cr^	Pb	Hg	Br^
M027	n.d.	n.d.	n.d.	n.d.	n.d.
M028	n.d.	n.d.	n.d.	n.d.	177
M029	n.d.	n.d.	n.d.	n.d.	n.d.
M030	n.d.	n.d.	n.d.	n.d.	n.d.
M031	n.d.	n.d.	n.d.	n.d.	n.d.



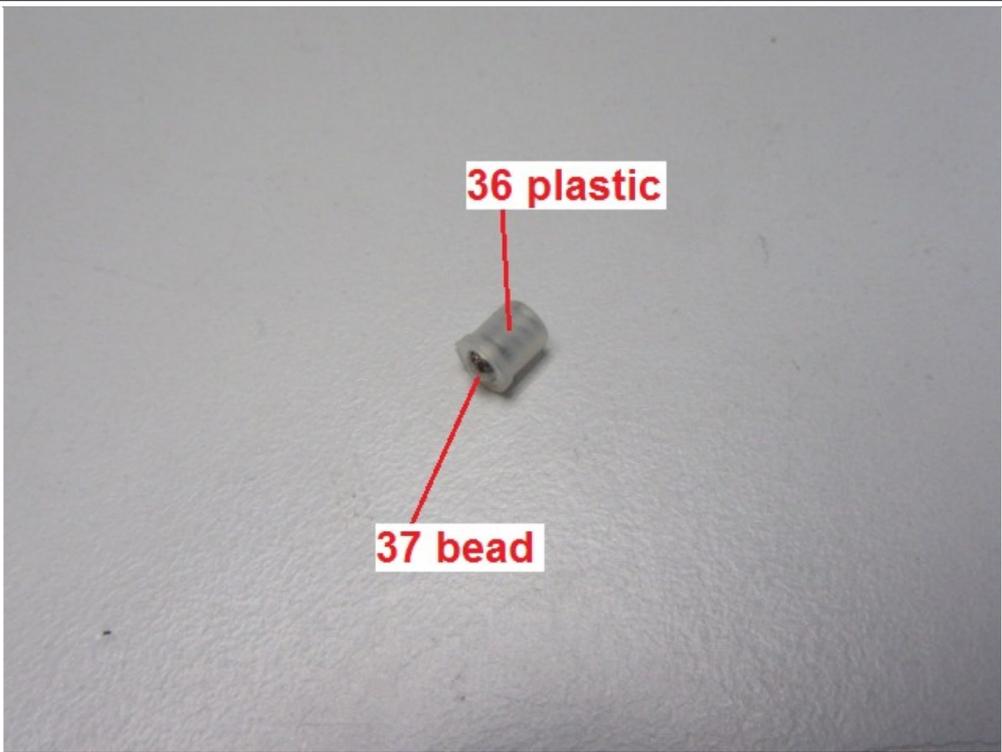
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Material No.	Cd	Cr^	Pb	Hg	Br^
M032	n.d.	n.d.	n.d.	n.d.	n.d.
M033	n.d.	d(*3)	n.d.	n.d.	n.a.
M034	n.d.	d(*3)	n.d.	n.d.	n.a.
M035	n.d.	d(*3)	n.d.	n.d.	n.a.

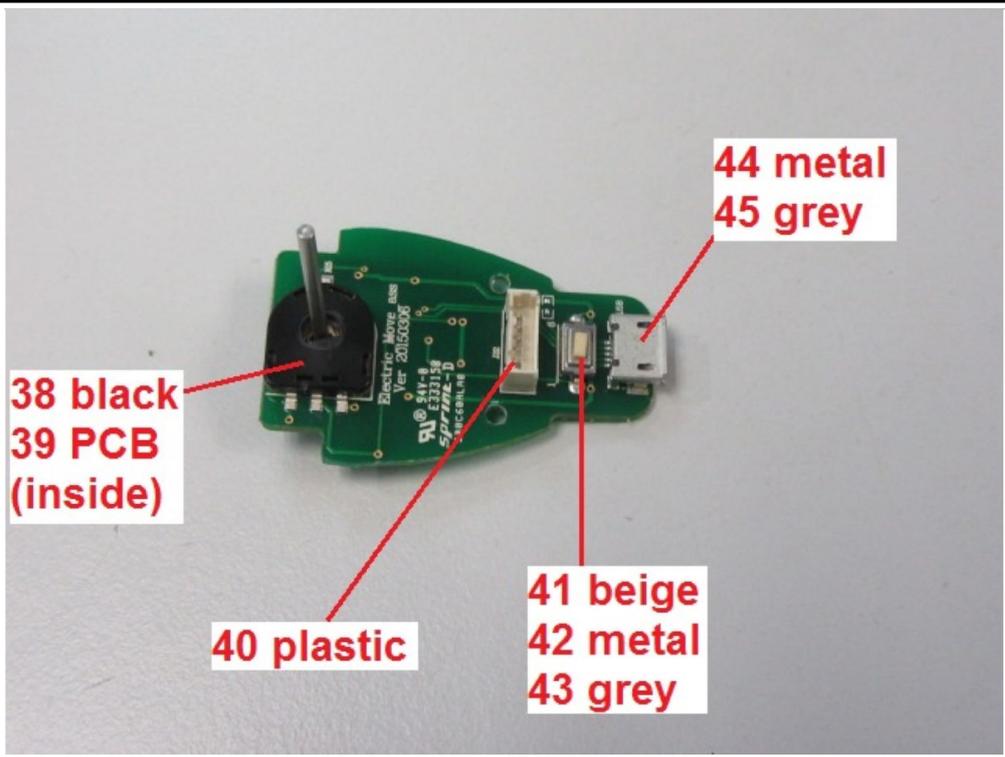


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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M036	n.d.	n.d.	n.d.	n.d.	n.d.
M037	n.d.	d(*3)	n.d.	n.d.	n.a.

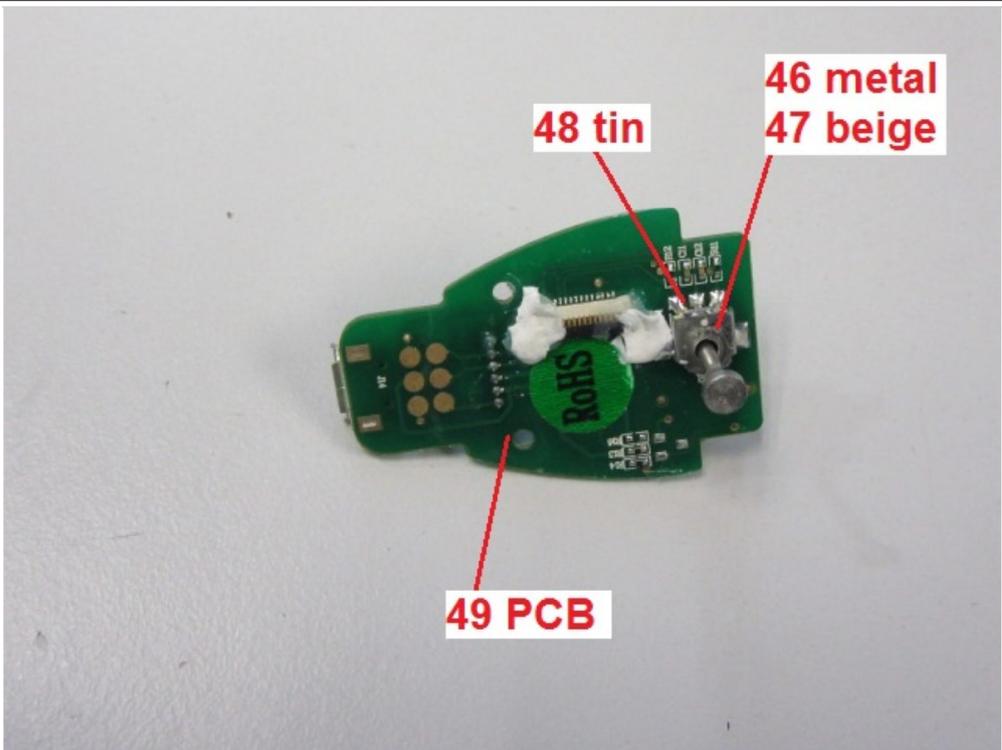




Material No.	Cd	Cr^	Pb	Hg	Br^
M038	n.d.	n.d.	n.d.	n.d.	n.d.
M039	n.d.	n.d.	n.d.	n.d.	n.d.
M042	n.d.	d(*3)	104	n.d.	n.a.
M043	n.d.	n.d.	n.d.	n.d.	n.d.
M044	n.d.	d(*3)	n.d.	n.d.	n.a.
M045	n.d.	n.d.	n.d.	n.d.	19
M040	n.d.	n.d.	n.d.	n.d.	n.d.
M041	n.d.	13	n.d.	n.d.	n.d.



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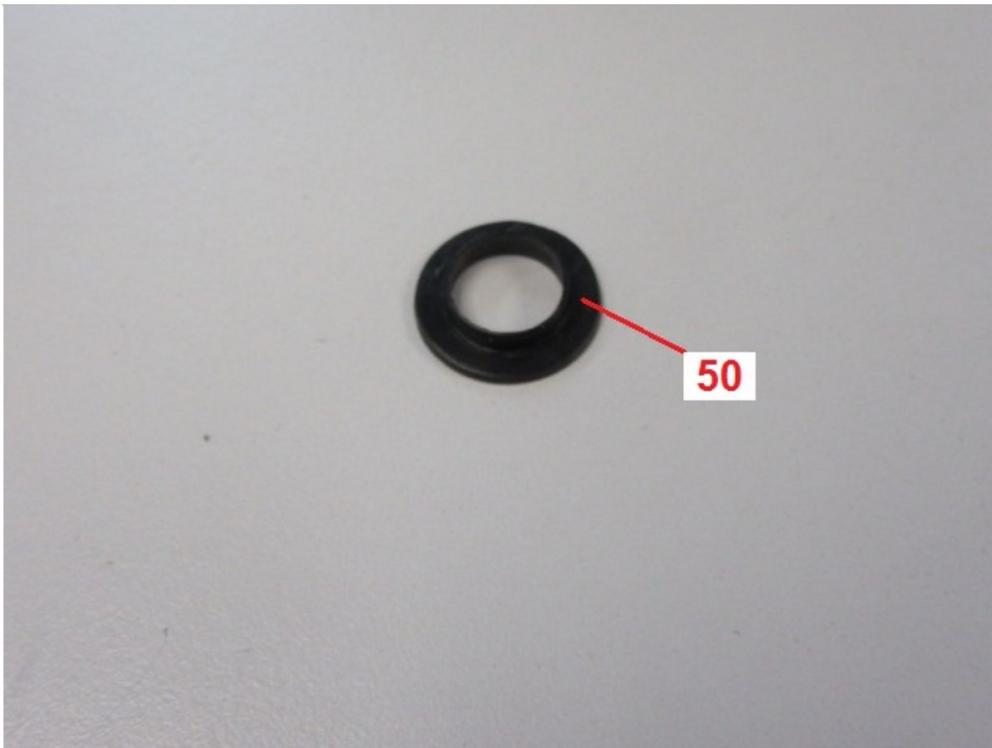


Material No.	Cd	Cr^	Pb	Hg	Br^
M046	n.d.	d(*3)	n.d.	n.d.	n.a.
M047	n.d.	n.d.	12	n.d.	n.d.
M049	n.d.	n.d.	n.d.	n.d.	d(*1)
M048	n.d.	d(*3)	n.d.	n.d.	n.a.



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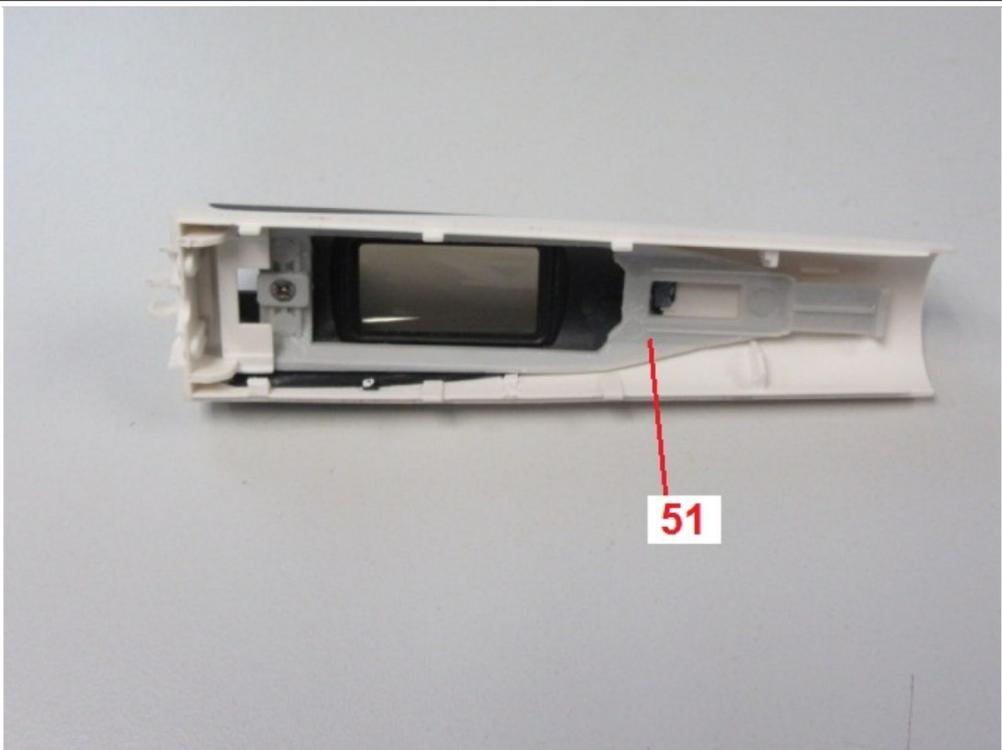
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M050	n.d.	n.d.	21	n.d.	n.d.



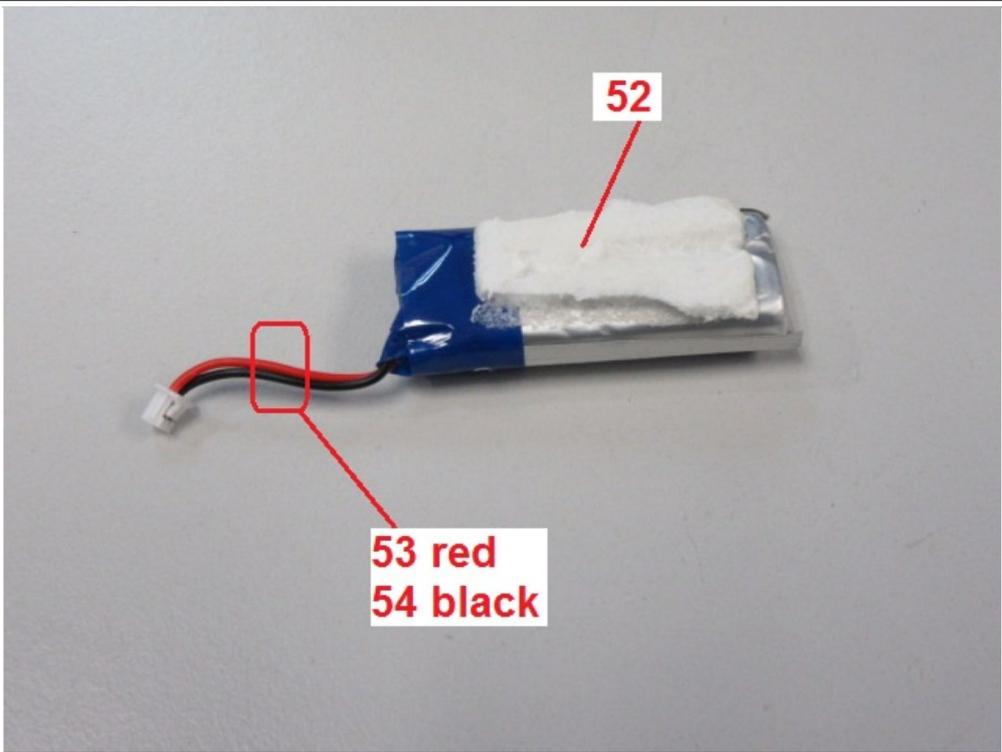
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M051	n.d.	n.d.	n.d.	n.d.	n.d.



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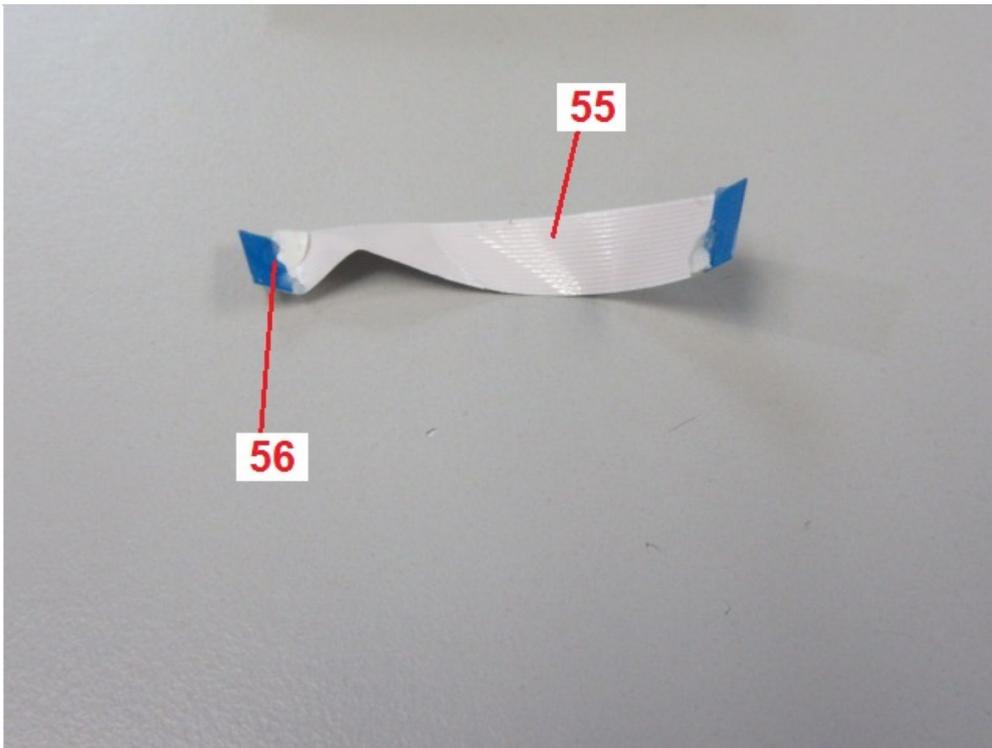


Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M052	n.d.	n.d.	n.d.	n.d.	n.d.
M053	n.d.	n.d.	n.d.	n.d.	n.d.
M054	n.d.	n.d.	14	n.d.	n.d.



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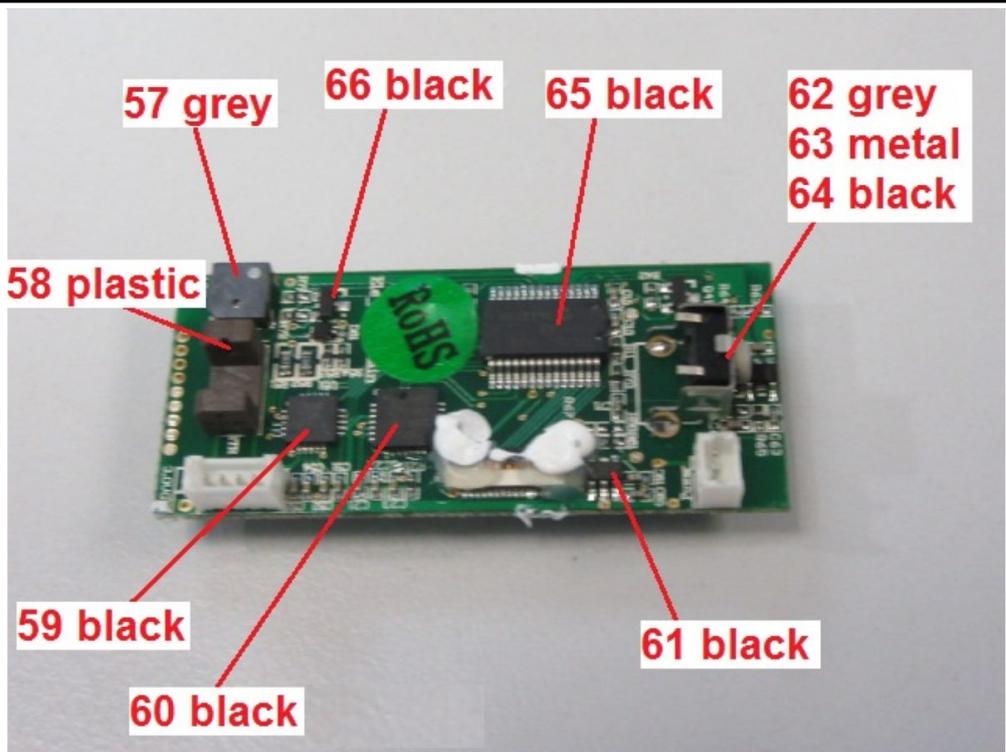
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M056	n.d.	n.d.	n.d.	n.d.	n.d.
M055	n.d.	n.d.	81	n.d.	d(*1)



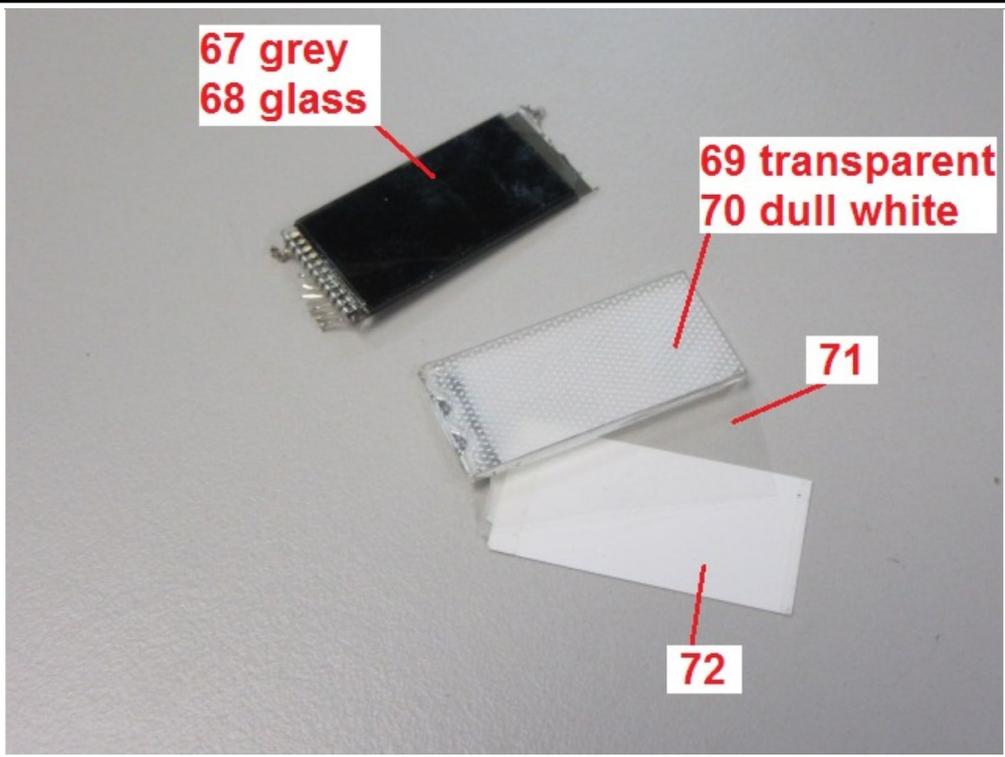
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Material No.	Cd	Cr^	Pb	Hg	Br^
M057	n.d.	n.d.	n.d.	n.d.	n.d.
M058	n.d.	n.d.	n.d.	n.d.	n.d.
M059	n.d.	n.d.	n.d.	n.d.	n.a.
M060	n.d.	n.d.	n.d.	n.d.	n.a.
M061	n.d.	n.d.	12	n.d.	n.a.
M062	21	117	n.d.	n.d.	n.d.
M063	n.d.	d(*3)	n.d.	n.d.	n.a.
M064	n.d.	n.d.	n.d.	n.d.	n.d.
M065	n.d.	n.d.	n.d.	n.d.	n.a.
M066	n.d.	n.d.	n.d.	n.d.	n.a.



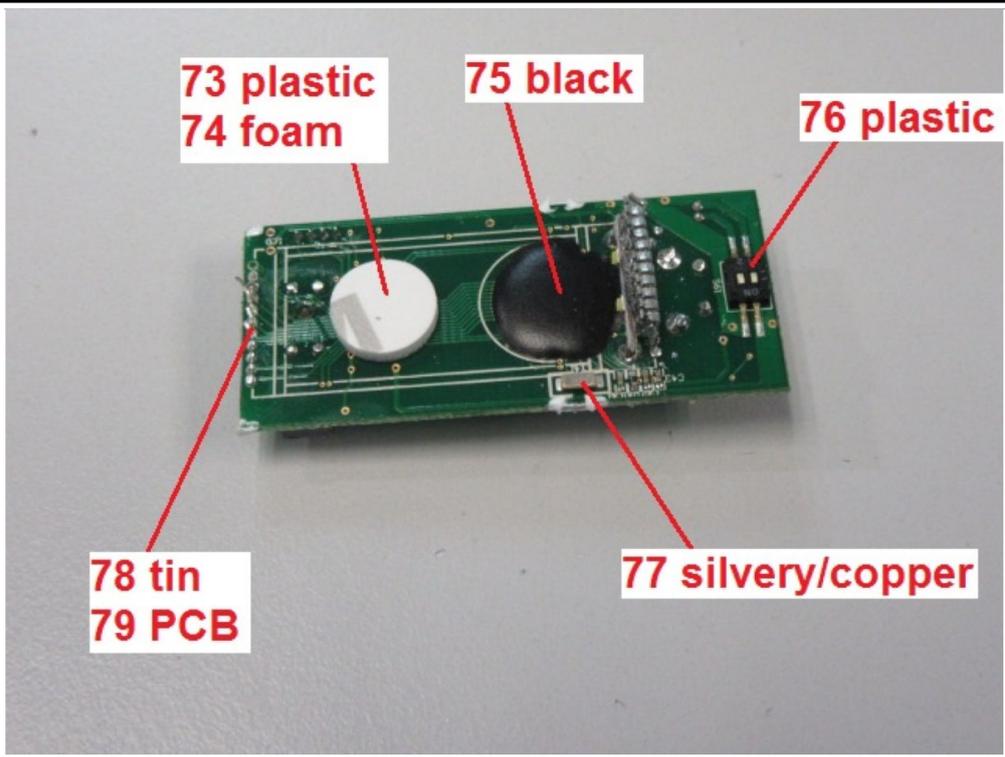
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Material No.	Cd	Cr^	Pb	Hg	Br^
M067	n.d.	n.d.	n.d.	n.d.	n.d.
M068	n.d.	n.d.	n.d.	n.d.	n.a.
M069	n.d.	n.d.	n.d.	n.d.	n.d.
M070	n.d.	n.d.	n.d.	n.d.	n.d.
M071	n.d.	n.d.	n.d.	n.d.	n.d.
M072	n.d.	n.d.	n.d.	n.d.	n.d.



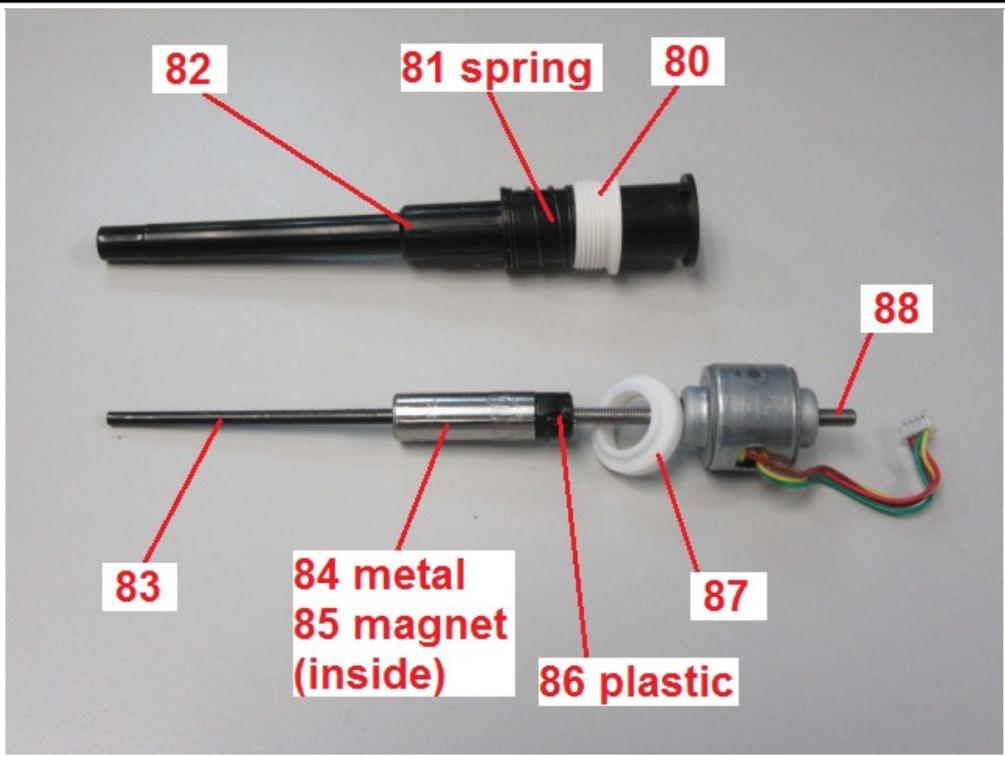
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M073	n.d.	n.d.	n.d.	n.d.	n.d.
M074	n.d.	n.d.	n.d.	n.d.	n.d.
M075	n.d.	n.d.	n.d.	n.d.	n.a.
M076	n.d.	n.d.	n.d.	n.d.	n.d.
M077	n.d.	d(*3)	n.d.	n.d.	n.a.
M078	n.d.	d(*3)	n.d.	n.d.	n.a.
M079	n.d.	n.d.	n.d.	n.d.	d(*1)



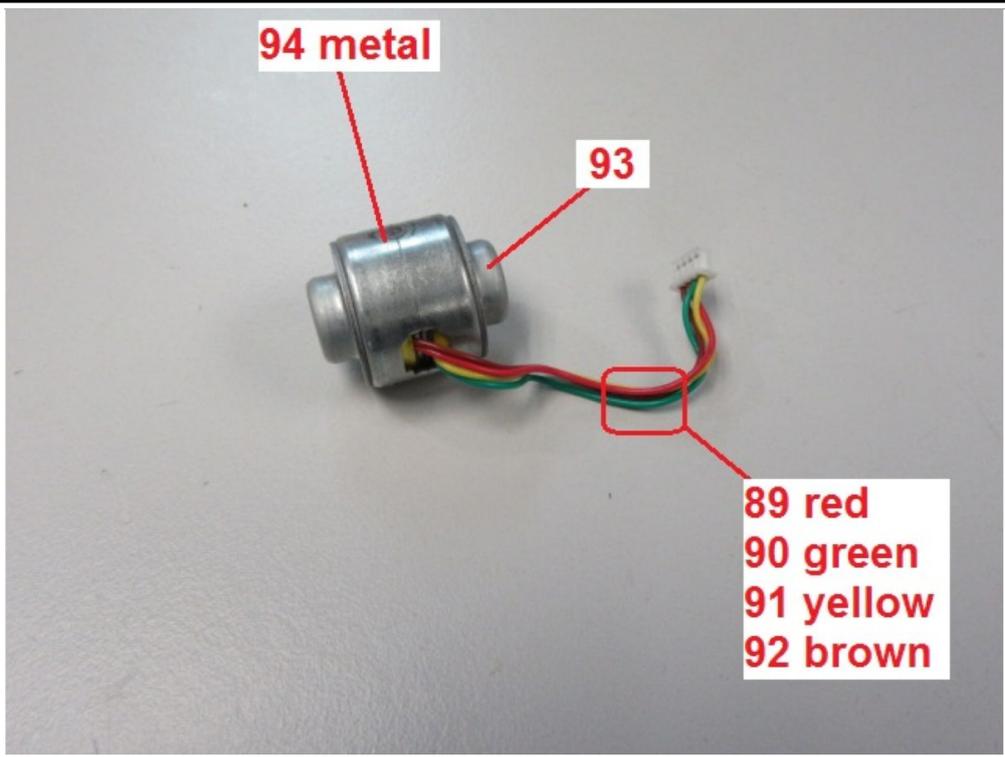
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Material No.	Cd	Cr^	Pb	Hg	Br^
M080	n.d.	n.d.	n.d.	n.d.	n.d.
M082	n.d.	n.d.	n.d.	n.d.	n.d.
M083	n.d.	n.d.	n.d.	n.d.	n.d.
M084	n.d.	d(*3)	n.d.	n.d.	n.a.
M085	n.d.	d(*3)	n.d.	n.d.	n.a.
M086	n.d.	n.d.	n.d.	n.d.	n.d.
M087	n.d.	n.d.	n.d.	n.d.	n.d.
M088	n.d.	d(*3)	165	n.d.	n.a.
M081	n.d.	d(*3)	117	n.d.	n.a.



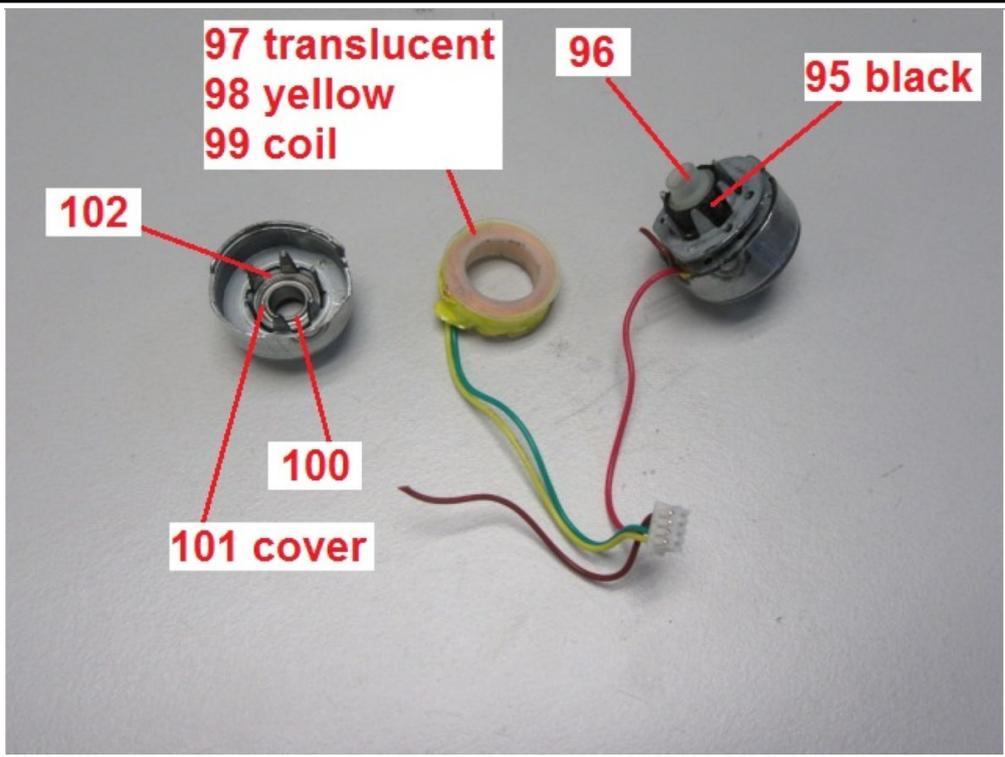
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Material No.	Cd	Cr^	Pb	Hg	Br^
M089	n.d.	n.d.	n.d.	n.d.	n.d.
M090	n.d.	n.d.	n.d.	n.d.	n.d.
M091	n.d.	n.d.	n.d.	n.d.	n.d.
M092	n.d.	n.d.	n.d.	n.d.	n.d.
M093	n.d.	d(*3)	n.d.	n.d.	n.a.
M094	n.d.	d(*3)	312	n.d.	n.a.



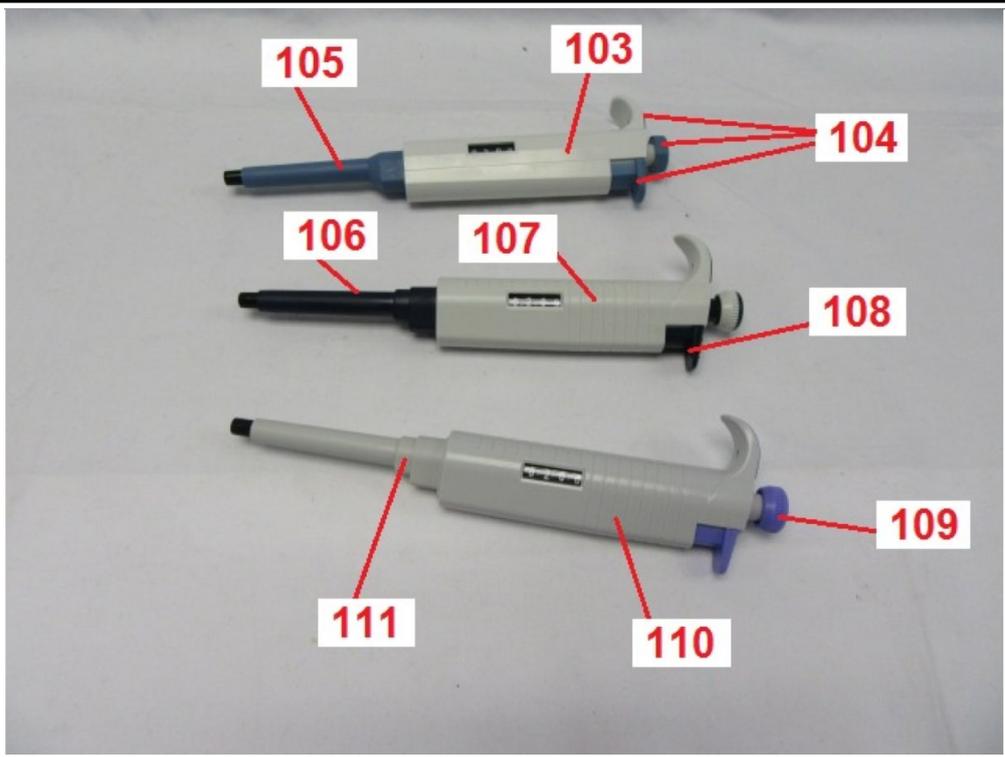
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Material No.	Cd	Cr^	Pb	Hg	Br^
M095	n.d.	d(*3)	n.d.	n.d.	n.a.
M096	n.d.	n.d.	n.d.	n.d.	n.d.
M097	n.d.	n.d.	n.d.	n.d.	n.d.
M098	n.d.	n.d.	n.d.	n.d.	n.d.
M099	n.d.	d(*3)	n.d.	n.d.	n.a.
M100	n.d.	d(*3)	n.d.	n.d.	n.a.
M101	n.d.	d(*3)	165	n.d.	n.a.
M102	n.d.	d(*3)	n.d.	n.d.	n.a.



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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M103	n.d.	n.d.	n.d.	n.d.	n.d.
M104	n.d.	n.d.	n.d.	n.d.	n.d.
M105	n.d.	n.d.	n.d.	n.d.	n.d.
M106	n.d.	n.d.	n.d.	n.d.	n.d.
M107	n.d.	n.d.	n.d.	n.d.	n.d.
M108	n.d.	n.d.	n.d.	n.d.	n.d.
M109	n.d.	n.d.	n.d.	n.d.	n.d.
M110	n.d.	n.d.	n.d.	n.d.	n.d.
M111	n.d.	n.d.	n.d.	n.d.	n.d.



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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M112	n.d.	d(*3)	n.d.	n.d.	n.a.



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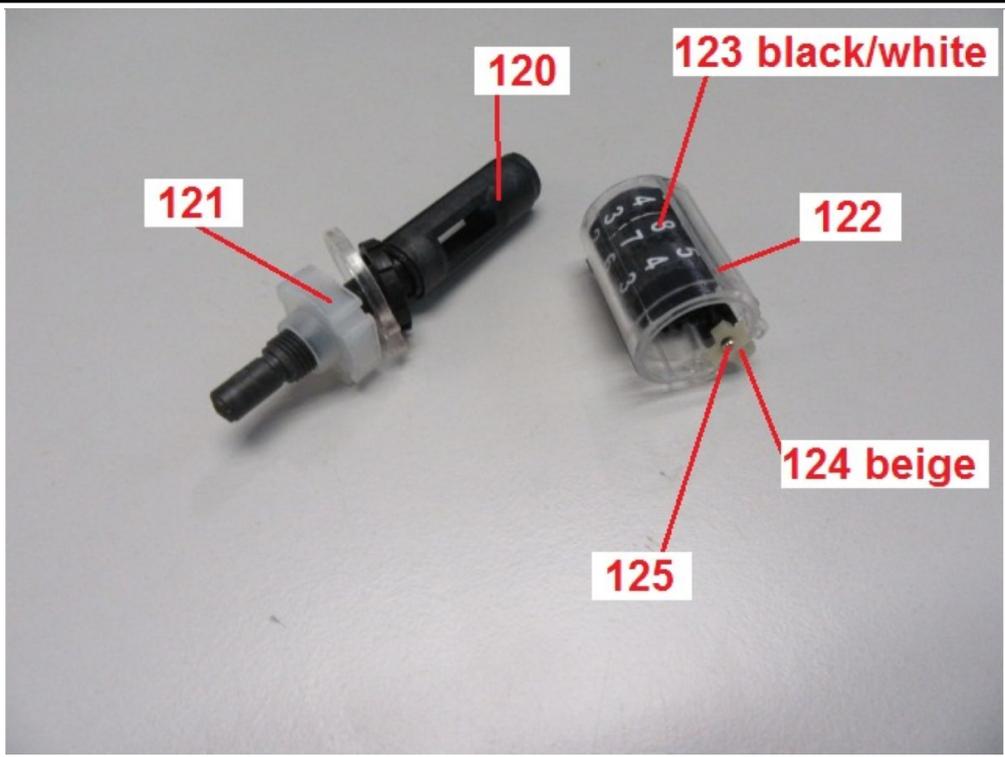
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M113	n.d.	n.d.	n.d.	n.d.	n.d.
M114	n.d.	n.d.	n.d.	n.d.	12
M115	n.d.	d(*3)	n.d.	n.d.	n.a.
M116	n.d.	d(*3)	n.d.	n.d.	n.a.
M117	n.d.	n.d.	n.d.	n.d.	n.d.
M118	n.d.	n.d.	n.d.	n.d.	133
M119	n.d.	n.d.	n.d.	n.d.	n.d.



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Material No.	Cd	Cr^	Pb	Hg	Br^
M120	n.d.	n.d.	n.d.	n.d.	n.d.
M121	n.d.	n.d.	n.d.	n.d.	n.d.
M122	n.d.	n.d.	n.d.	n.d.	n.d.
M123	n.d.	n.d.	n.d.	n.d.	n.d.
M124	n.d.	n.d.	n.d.	n.d.	n.d.
M125	n.d.	d(*3)	n.d.	n.d.	n.a.



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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M126	n.d.	n.d.	n.d.	n.d.	n.d.



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Material No.	Cd	Cr^	Pb	Hg	Br^
M127	n.d.	n.d.	n.d.	n.d.	n.d.
M128	n.d.	n.d.	n.d.	n.d.	n.d.



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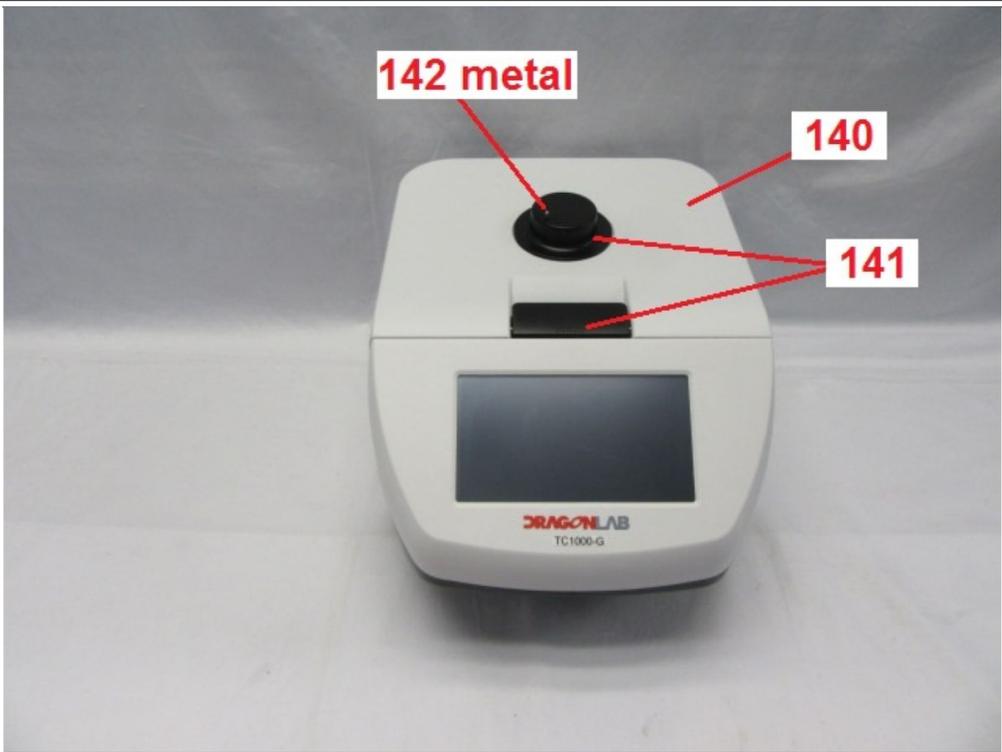
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M129	n.d.	n.d.	n.d.	n.d.	n.d.
M130	n.d.	n.d.	n.d.	n.d.	d(*1)
M131	n.d.	d(*3)	n.d.	n.d.	n.a.
M132	n.d.	n.d.	n.d.	n.d.	n.d.
M133	n.d.	n.d.	n.d.	n.d.	n.d.
M134	18	n.d.	n.d.	n.d.	n.d.
M135	n.d.	n.d.	n.d.	n.d.	n.d.
M136	n.d.	d(*3)	n.d.	n.d.	n.a.
M137	n.d.	n.d.	n.d.	n.d.	n.d.
M138	n.d.	n.d.	14	n.d.	d(*1)
M139	n.d.	d(*3)	n.d.	n.d.	n.a.



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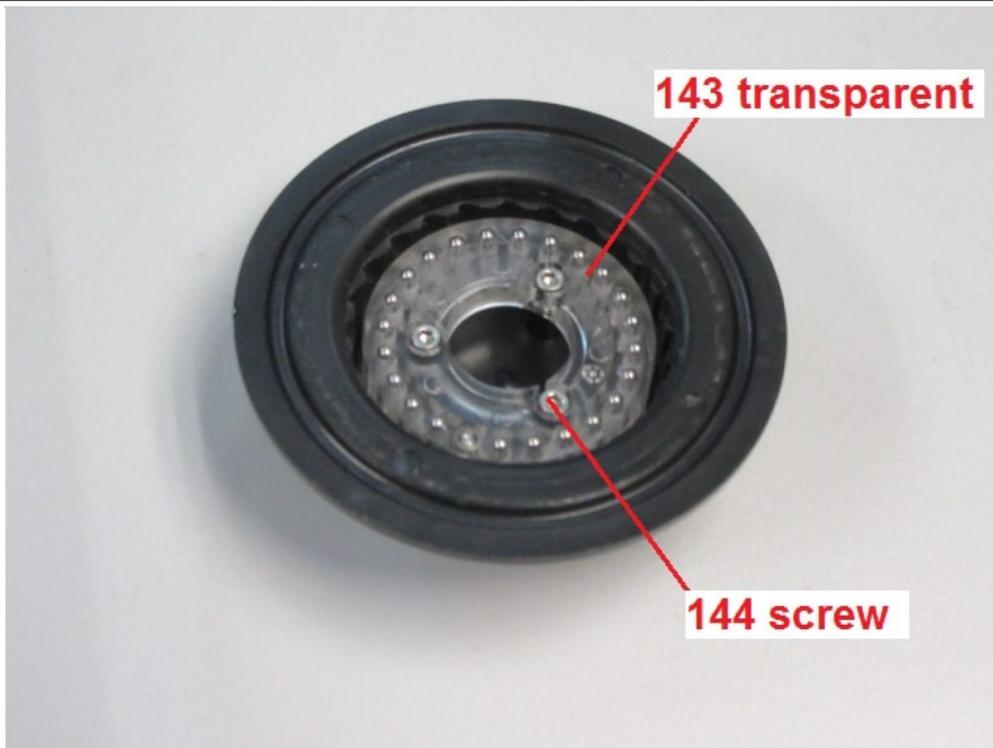


Material No.	Cd	Cr^	Pb	Hg	Br^
M140	n.d.	n.d.	n.d.	n.d.	d(*1)
M141	n.d.	n.d.	n.d.	n.d.	n.d.
M142	n.d.	d(*3)	n.d.	n.d.	n.a.



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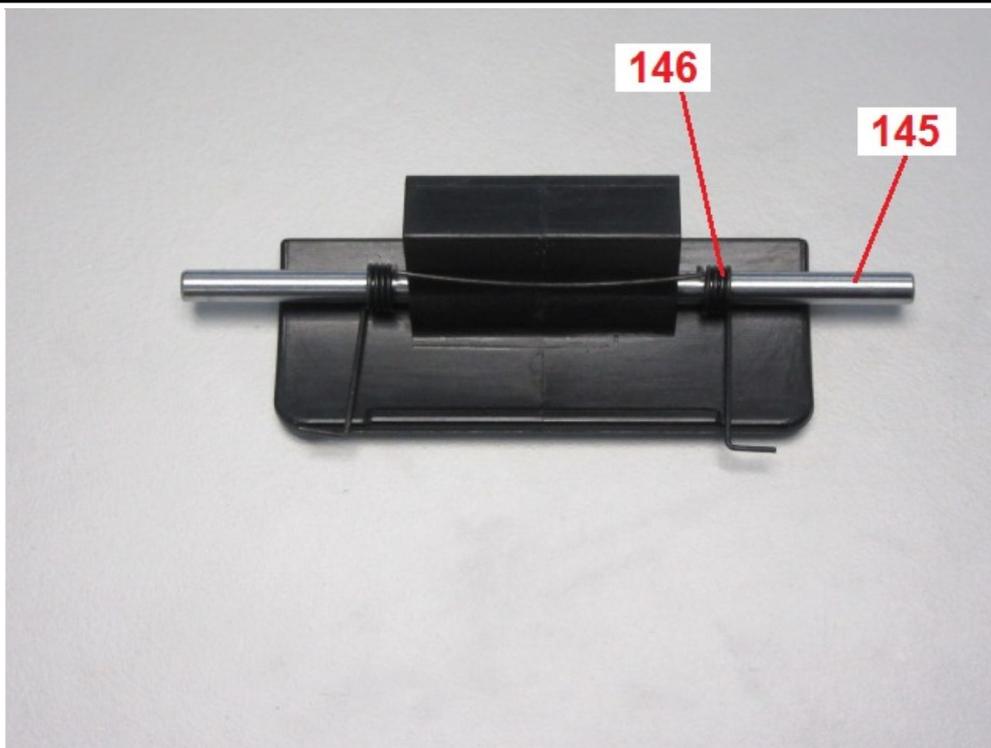


Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M143	n.d.	n.d.	n.d.	n.d.	n.d.
M144	n.d.	d(*3)	n.d.	n.d.	n.a.



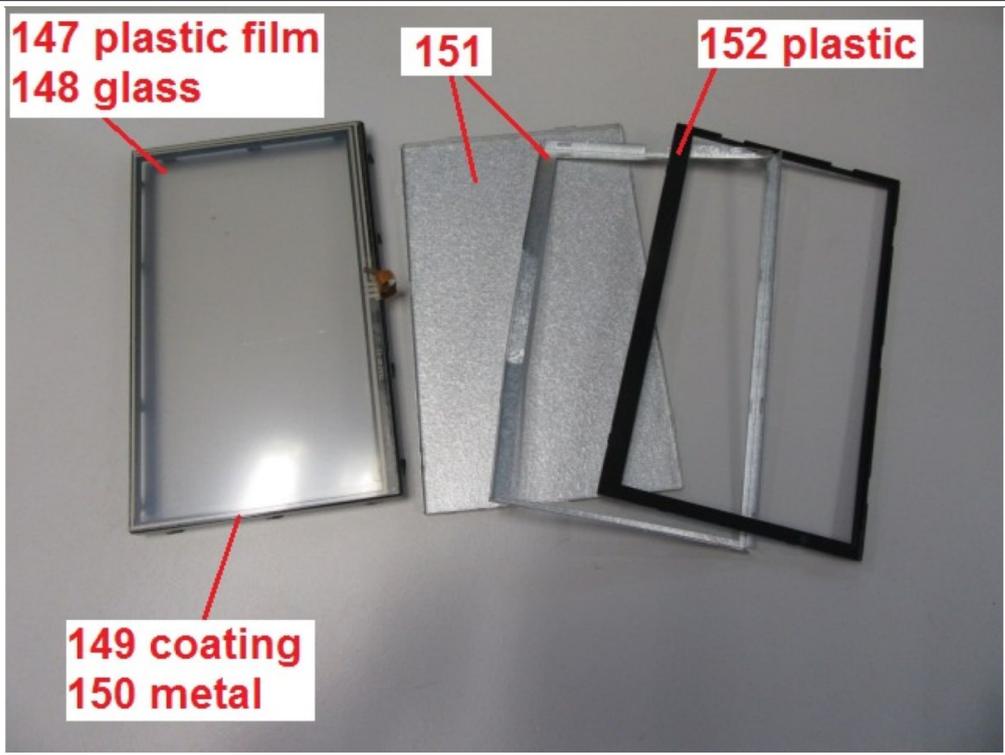
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M145	n.d.	d(*3)	220	n.d.	n.a.
M146	n.d.	d(*3)	d(*1)	n.d.	n.a.

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Material No.	Cd	Cr^	Pb	Hg	Br^
M147	n.d.	n.d.	n.d.	n.d.	n.d.
M148	n.d.	n.d.	n.d.	n.d.	n.a.
M149	n.d.	n.d.	n.d.	n.d.	n.d.
M150	n.d.	d(*3)	d(*1)	n.d.	n.a.
M151	n.d.	d(*3)	n.d.	n.d.	n.a.
M152	n.d.	n.d.	n.d.	n.d.	145



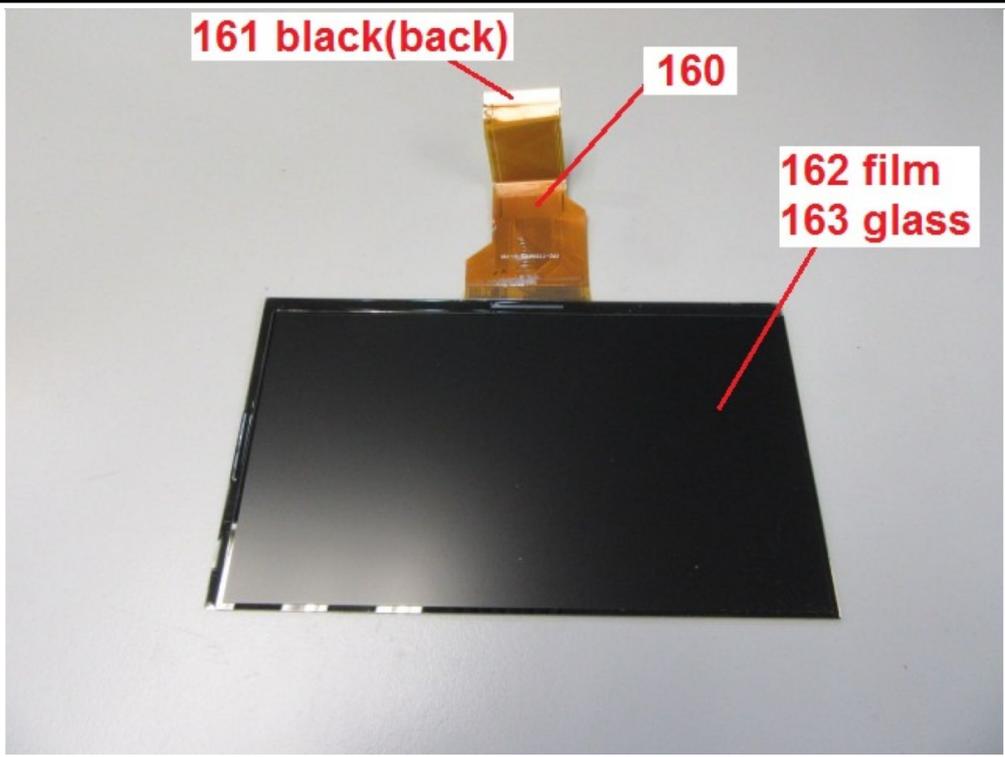
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Material No.	Cd	Cr^	Pb	Hg	Br^
M153	n.d.	n.d.	n.d.	n.d.	n.d.
M154	n.d.	n.d.	n.d.	n.d.	n.d.
M155	n.d.	n.d.	n.d.	n.d.	n.d.
M156	n.d.	n.d.	n.d.	n.d.	n.d.
M157	n.d.	n.d.	n.d.	n.d.	n.d.
M158	n.d.	n.d.	n.d.	n.d.	n.d.
M159	n.d.	n.d.	35	n.d.	d>(*1)



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Material No.	Cd	Cr^	Pb	Hg	Br^
M160	n.d.	n.d.	n.d.	n.d.	n.d.
M161	n.d.	n.d.	n.d.	n.d.	n.d.
M162	n.d.	n.d.	n.d.	n.d.	n.d.
M163	n.d.	n.d.	n.d.	n.d.	n.d.



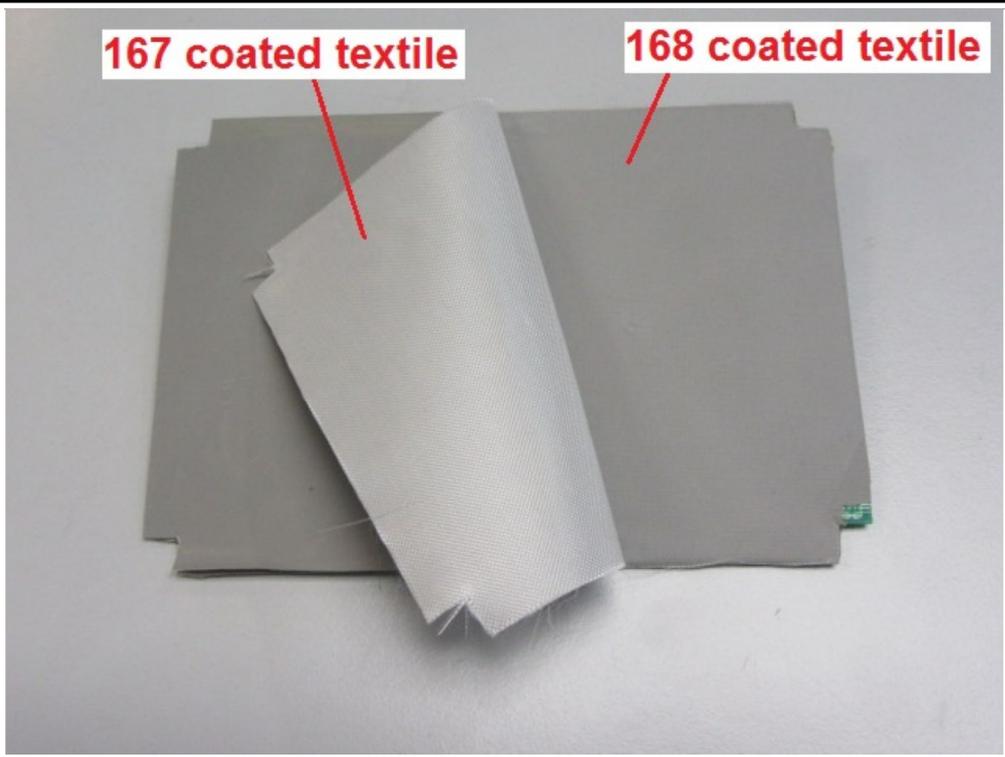
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M164	n.d.	d(*3)	n.d.	n.d.	n.a.
M165	n.d.	n.d.	n.d.	n.d.	n.d.
M166	n.d.	d(*3)	n.d.	n.d.	n.a.

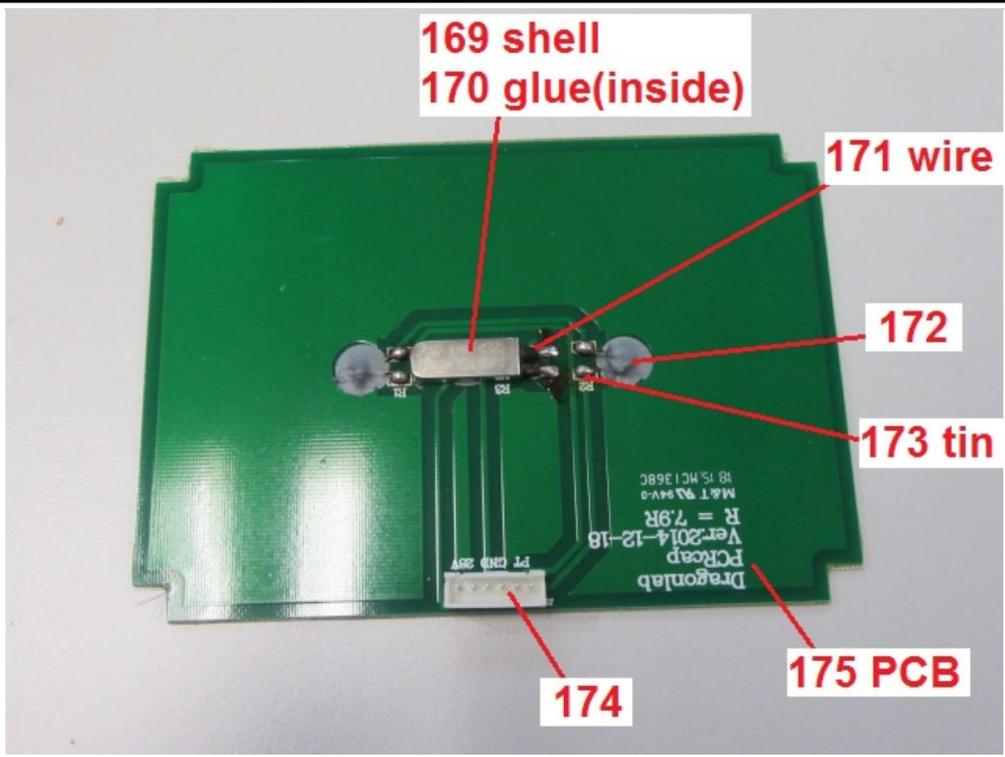
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M167	n.d.	n.d.	n.d.	n.d.	n.d.
M168	n.d.	n.d.	n.d.	n.d.	n.d.



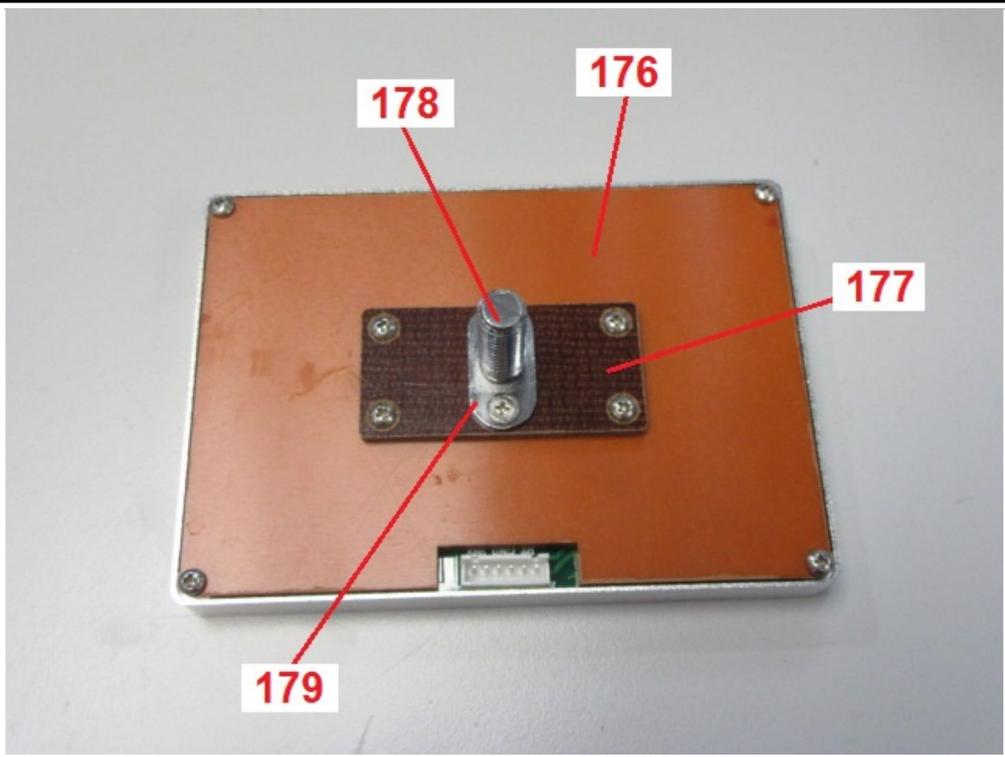
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Material No.	Cd	Cr^	Pb	Hg	Br^
M169	n.d.	d(*3)	n.d.	n.d.	n.a.
M170	n.d.	n.d.	n.d.	n.d.	15
M171	n.d.	n.d.	n.d.	n.d.	n.d.
M172	n.d.	n.d.	n.d.	n.d.	n.d.
M173	n.d.	d(*3)	n.d.	n.d.	n.a.
M174	n.d.	n.d.	n.d.	n.d.	n.d.
M175	n.d.	n.d.	n.d.	n.d.	d(*1)



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Material No.	Cd	Cr^	Pb	Hg	Br^
M176	n.d.	n.d.	32	n.d.	n.d.
M177	n.d.	n.d.	n.d.	n.d.	n.d.
M178	n.d.	d(*3)	n.d.	n.d.	n.a.
M179	n.d.	d(*3)	117	n.d.	n.a.



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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M180	n.d.	d(*3)	n.d.	n.d.	n.a.
M181	n.d.	372	n.d.	n.d.	n.d.

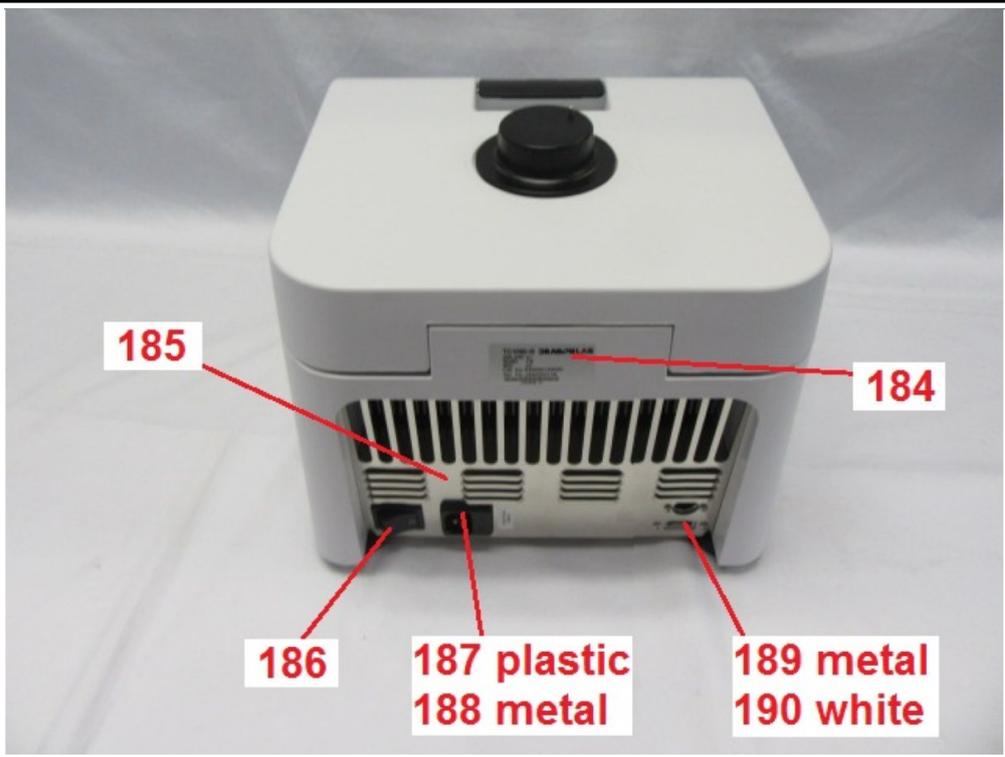
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M182	n.d.	d(*3)	337	n.d.	n.a.
M183	n.d.	d(*3)	n.d.	n.d.	n.a.



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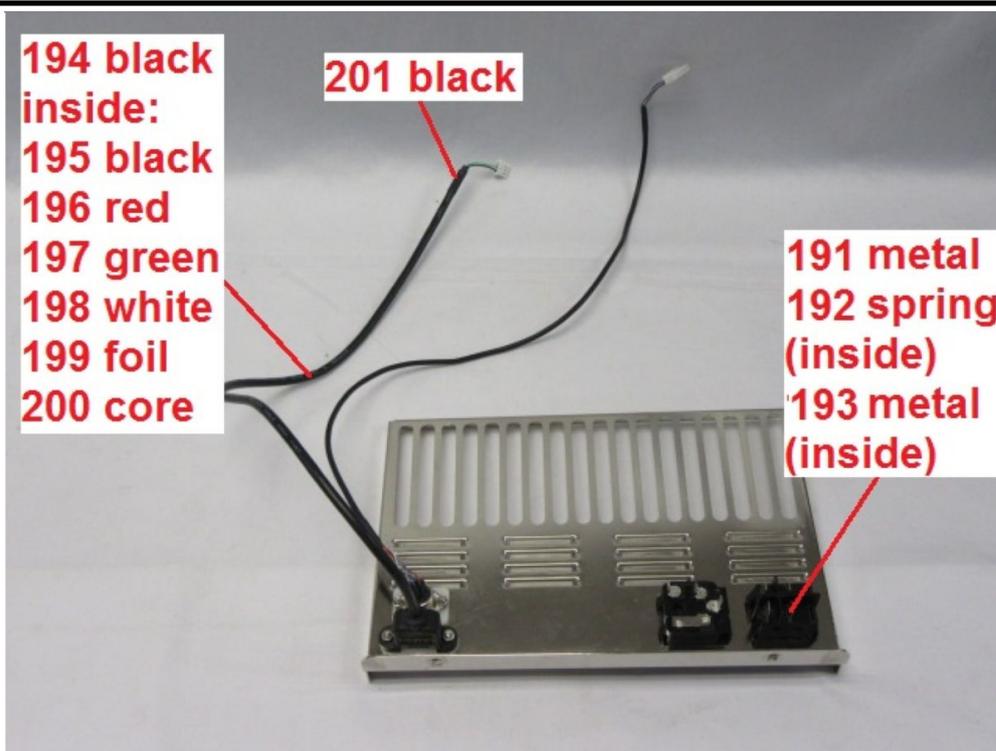


Material No.	Cd	Cr^	Pb	Hg	Br^
M184	n.d.	n.d.	n.d.	n.d.	n.d.
M185	n.d.	d(*3)	n.d.	n.d.	n.a.
M186	n.d.	n.d.	n.d.	n.d.	n.d.
M187	n.d.	n.d.	n.d.	n.d.	n.d.
M188	n.d.	d(*3)	n.d.	n.d.	n.a.
M189	n.d.	d(*3)	n.d.	n.d.	n.a.
M190	n.d.	n.d.	n.d.	n.d.	n.d.



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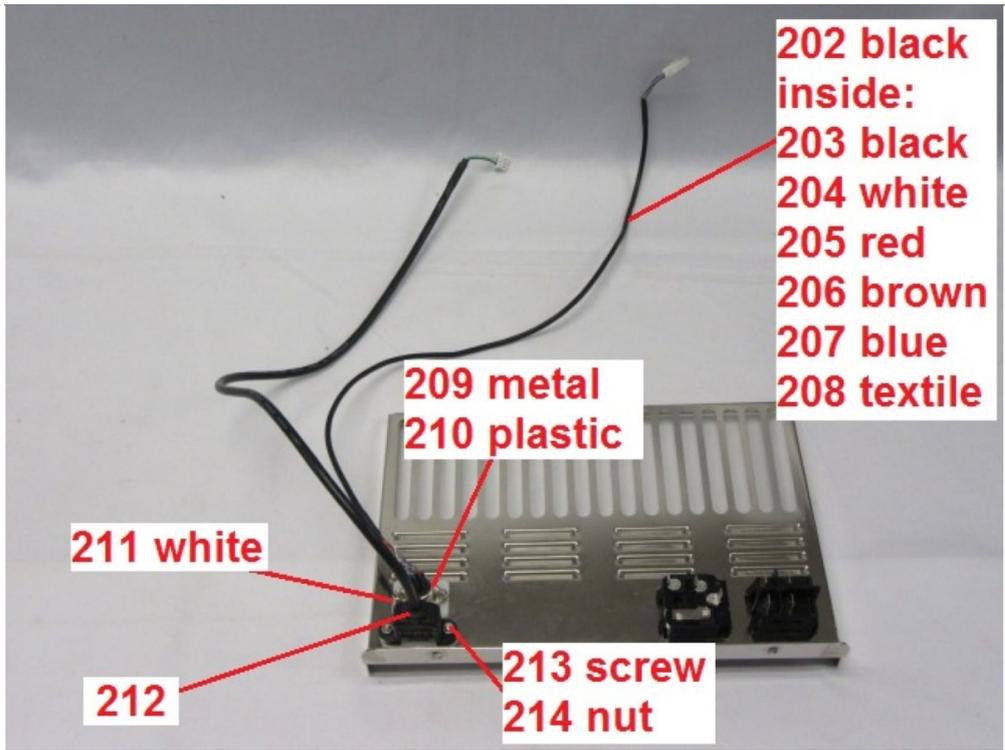
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M191	d(*1)	d(*3)	n.d.	n.d.	n.a.
M193	n.d.	d(*3)	n.d.	n.d.	n.a.
M194	n.d.	n.d.	n.d.	n.d.	n.d.
M195	n.d.	n.d.	n.d.	n.d.	n.d.
M196	n.d.	n.d.	n.d.	n.d.	n.d.
M197	n.d.	n.d.	n.d.	n.d.	n.d.
M198	n.d.	n.d.	n.d.	n.d.	n.d.
M199	n.d.	n.d.	n.d.	n.d.	n.d.
M200	n.d.	d(*3)	n.d.	n.d.	n.a.
M201	n.d.	n.d.	n.d.	n.d.	n.d.
M192	n.d.	d(*3)	57	n.d.	n.a.



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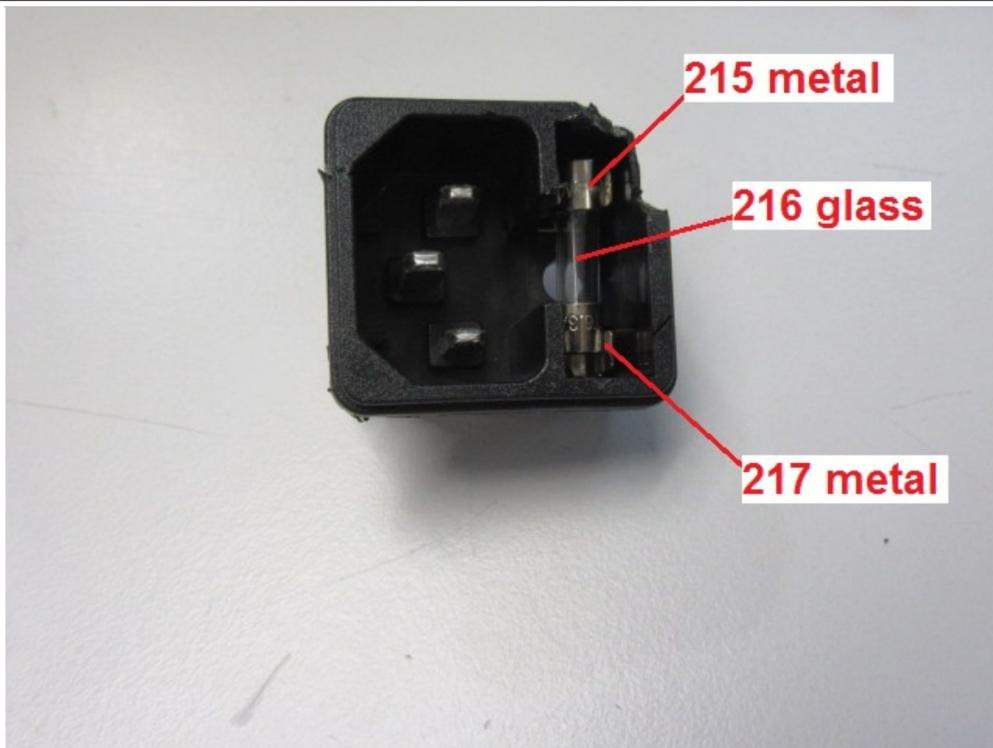


Material No.	Cd	Cr^	Pb	Hg	Br^
M203	n.d.	n.d.	292	n.d.	n.d.
M204	n.d.	n.d.	n.d.	n.d.	n.d.
M206	n.d.	n.d.	229	n.d.	n.d.
M208	n.d.	n.d.	n.d.	n.d.	n.d.
M209	n.d.	d(*3)	n.d.	n.d.	n.a.
M211	n.d.	n.d.	n.d.	n.d.	n.d.
M212	15	n.d.	n.d.	n.d.	n.d.
M213	n.d.	d(*3)	105	n.d.	n.a.
M214	n.d.	d(*3)	n.d.	n.d.	n.a.
M202	n.d.	n.d.	n.d.	n.d.	n.d.
M205	n.d.	n.d.	n.d.	n.d.	n.d.
M207	n.d.	n.d.	n.d.	n.d.	n.d.
M210	n.d.	n.d.	n.d.	n.d.	n.d.



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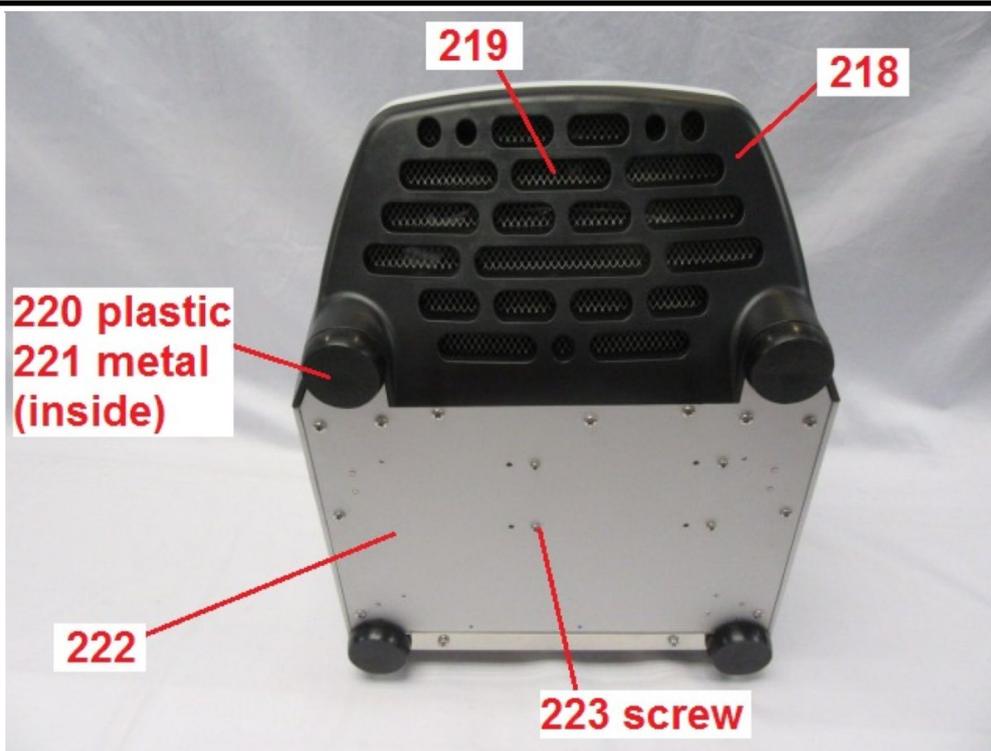
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M215	n.d.	d(*3)	n.d.	n.d.	n.a.
M216	n.d.	n.d.	d(*1)	n.d.	n.a.
M217	n.d.	d(*3)	n.d.	n.d.	n.a.

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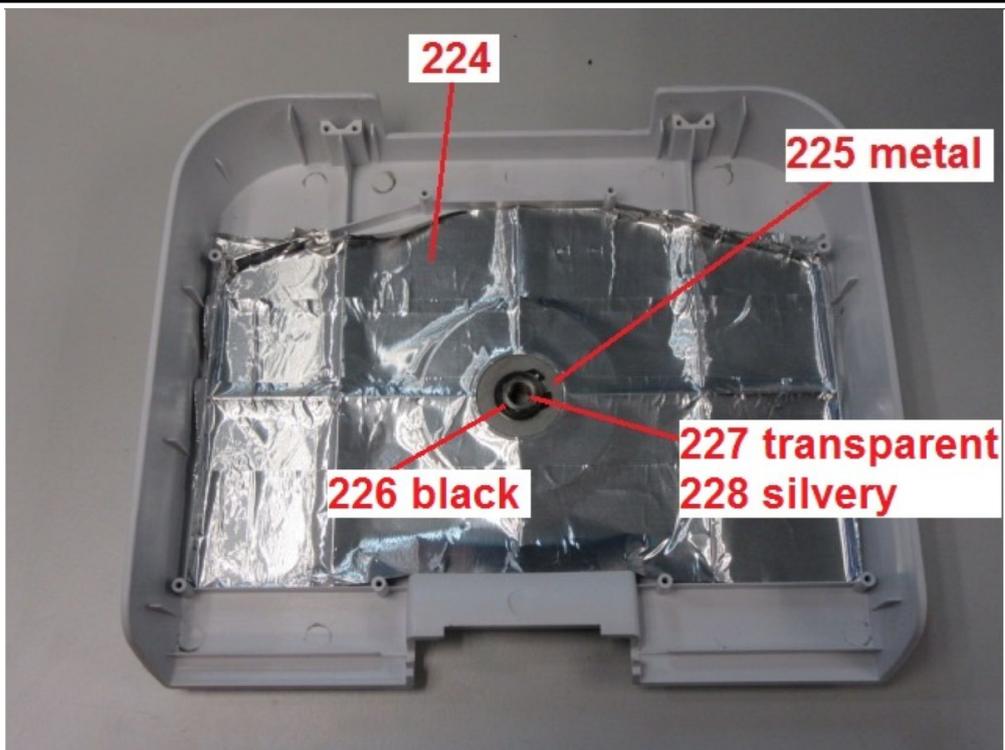
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M218	n.d.	n.d.	n.d.	n.d.	d(*1)
M219	n.d.	d(*3)	n.d.	n.d.	n.a.
M220	n.d.	n.d.	16	n.d.	n.d.
M221	n.d.	d(*3)	d(*1)	n.d.	n.a.
M222	n.d.	d(*3)	n.d.	n.d.	n.a.
M223	n.d.	d(*3)	114	n.d.	n.a.



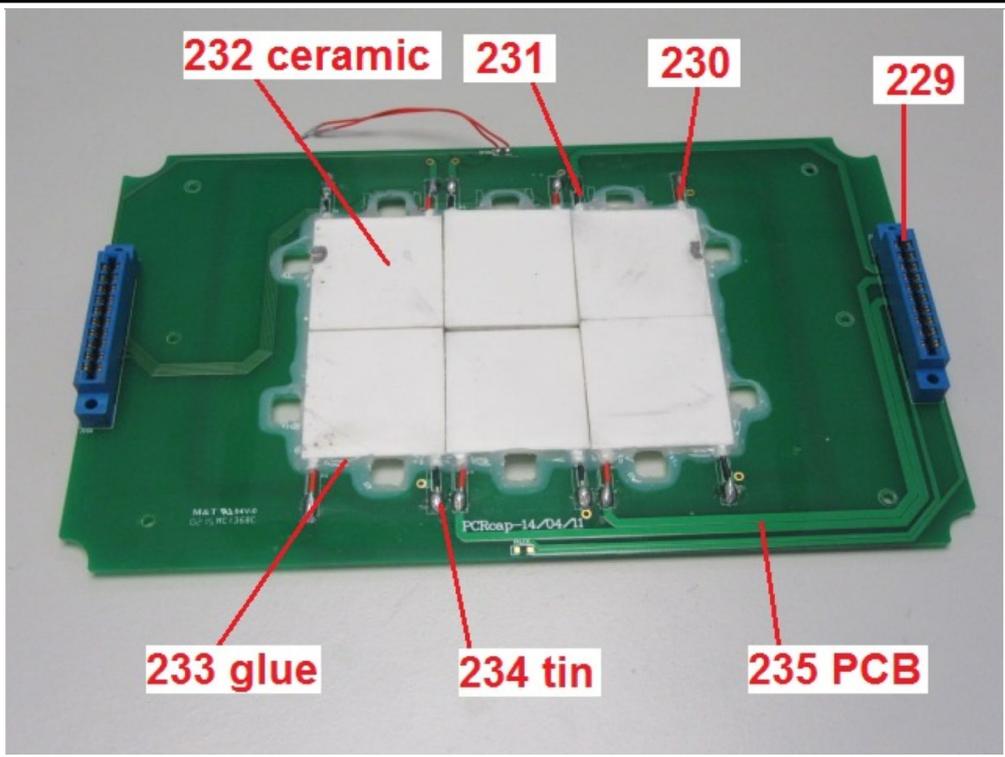
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Material No.	Cd	Cr^	Pb	Hg	Br^
M224	n.d.	d(*3)	n.d.	n.d.	n.a.
M225	n.d.	d(*3)	98	n.d.	n.a.
M227	n.d.	n.d.	n.d.	n.d.	n.d.
M228	n.d.	d(*3)	206	n.d.	n.a.
M226	n.d.	d(*3)	242	n.d.	n.a.



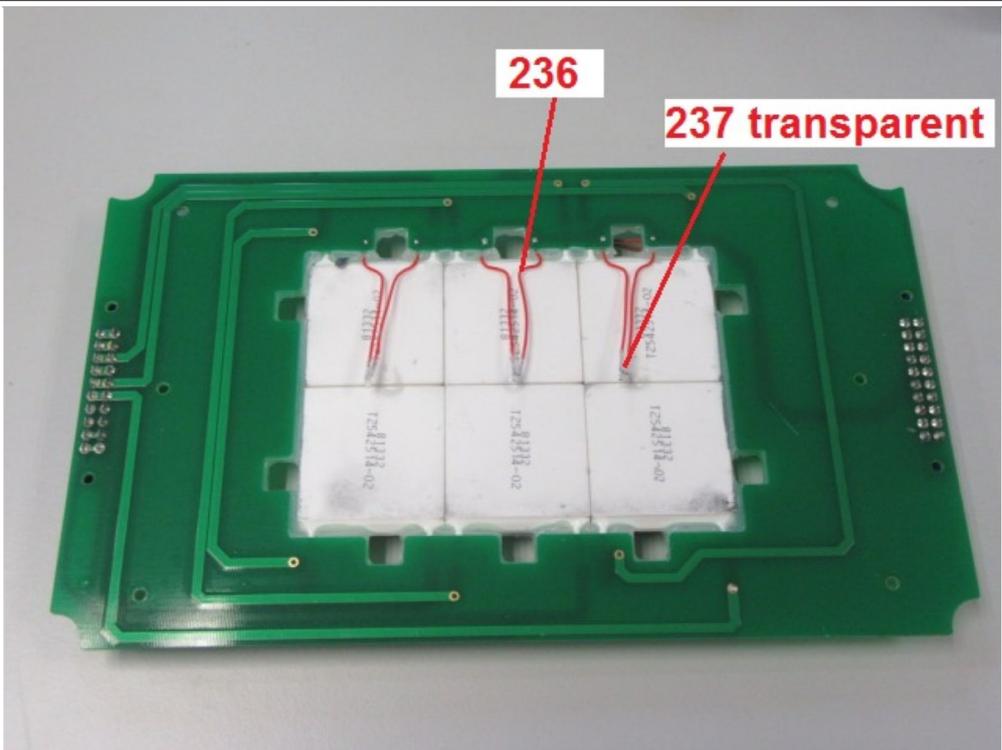
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Material No.	Cd	Cr^	Pb	Hg	Br^
M229	n.d.	n.d.	n.d.	n.d.	d(*1)
M230	n.d.	n.d.	n.d.	n.d.	n.d.
M232	n.d.	n.d.	n.d.	n.d.	n.d.
M233	n.d.	n.d.	n.d.	n.d.	n.d.
M234	n.d.	d(*3)	n.d.	n.d.	n.a.
M235	n.d.	n.d.	n.d.	n.d.	d(*1)
M231	n.d.	862	n.d.	n.d.	n.d.



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Material No.	Cd	Cr^	Pb	Hg	Br^
M236	n.d.	n.d.	n.d.	n.d.	n.d.
M237	n.d.	n.d.	17	n.d.	n.d.



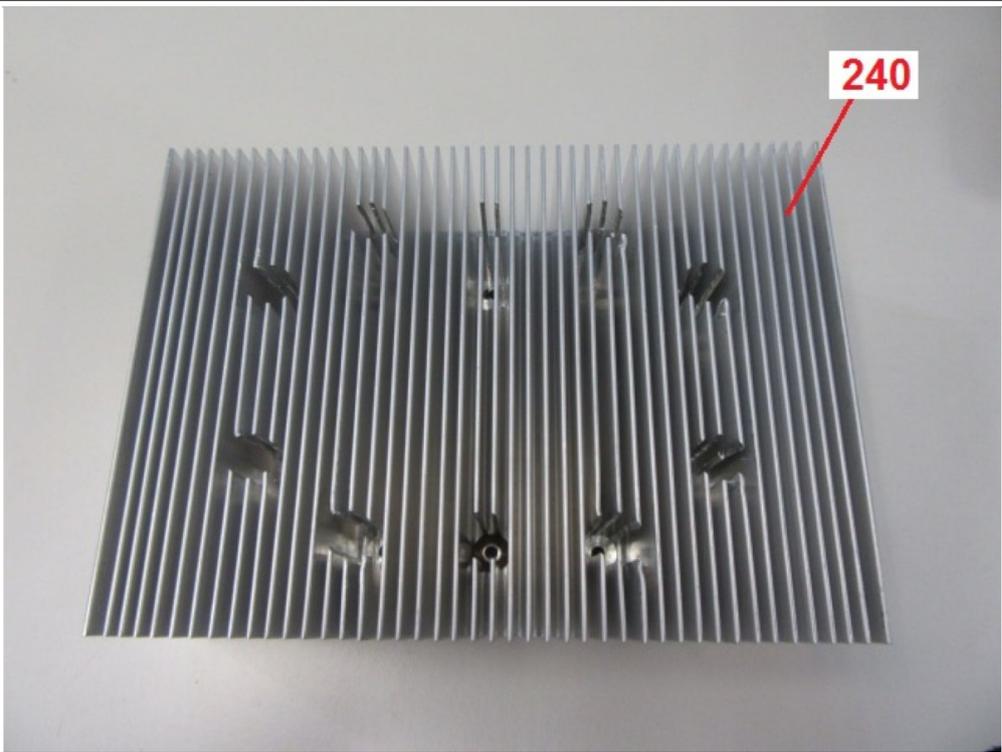
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M239	n.d.	n.d.	n.d.	n.d.	n.d.



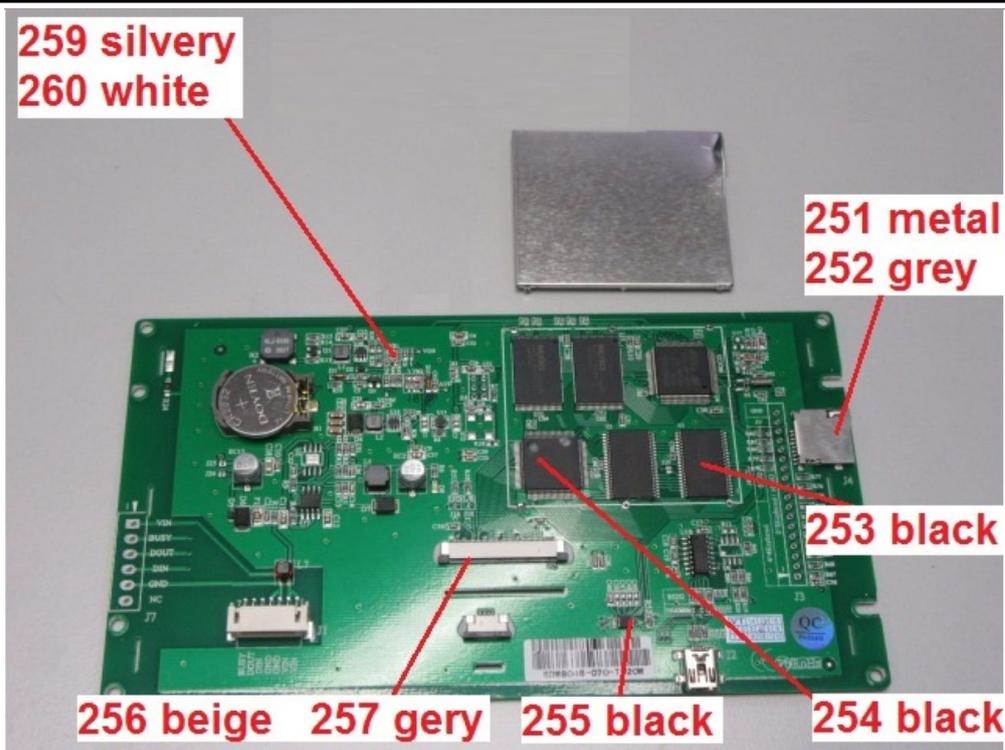
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Material No.	Cd	Cr^	Pb	Hg	Br^
M240	n.d.	d(*3)	n.d.	n.d.	n.a.



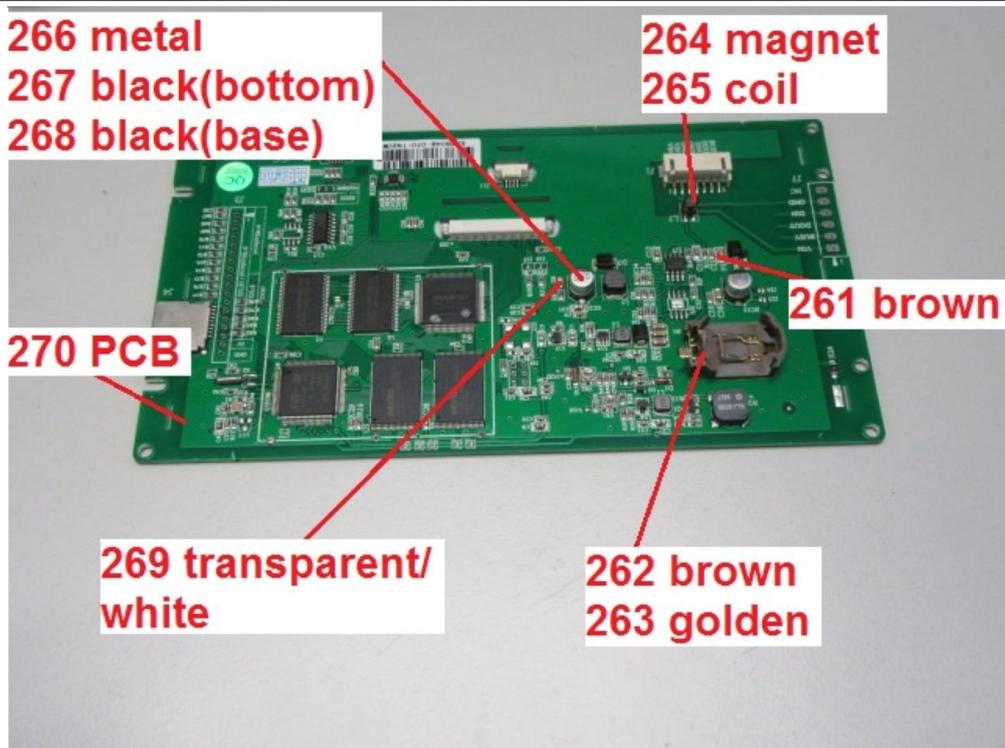
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Material No.	Cd	Cr^	Pb	Hg	Br^
M251	n.d.	d(*3)	n.d.	n.d.	n.a.
M252	n.d.	n.d.	n.d.	n.d.	n.d.
M253	n.d.	n.d.	n.d.	n.d.	n.a.
M254	n.d.	n.d.	13	n.d.	n.a.
M255	n.d.	n.d.	n.d.	n.d.	n.a.
M256	n.d.	n.d.	n.d.	n.d.	n.d.
M257	n.d.	n.d.	n.d.	n.d.	n.d.
M259	n.d.	d(*3)	n.d.	n.d.	n.a.
M260	n.d.	n.d.	81	n.d.	n.a.



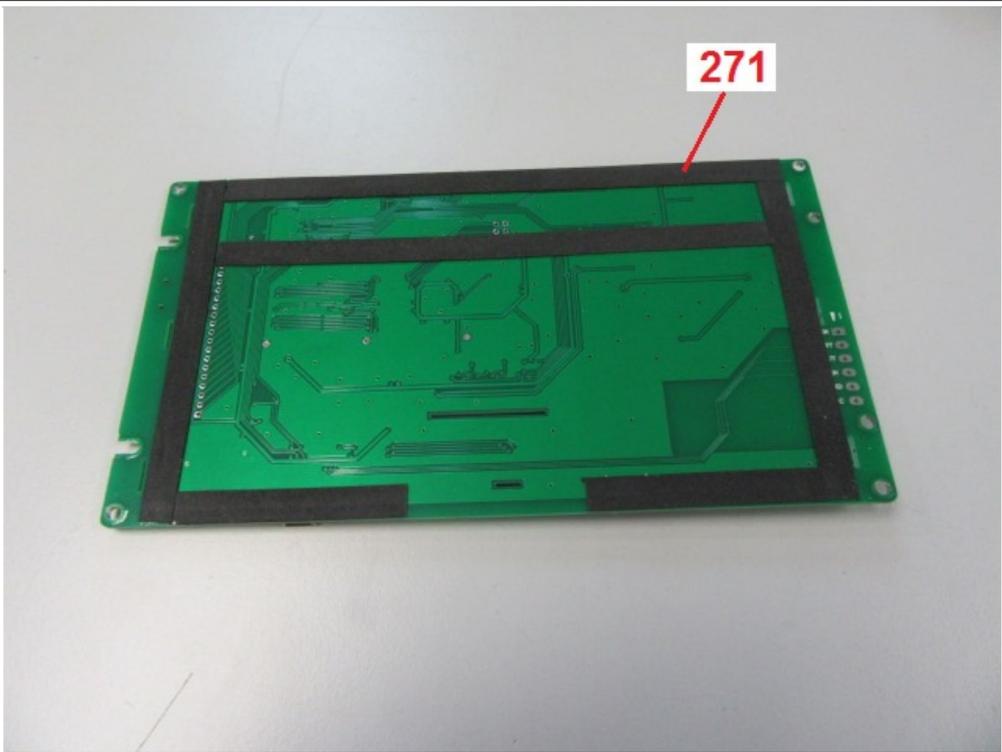
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Material No.	Cd	Cr^	Pb	Hg	Br^
M261	n.d.	n.d.	n.d.	n.d.	n.a.
M262	n.d.	n.d.	n.d.	n.d.	n.d.
M263	n.d.	d(*3)	n.d.	n.d.	n.a.
M264	n.d.	n.d.	n.d.	n.d.	n.d.
M265	n.d.	d(*3)	n.d.	n.d.	n.a.
M266	n.d.	d(*3)	n.d.	n.d.	n.a.
M267	n.d.	n.d.	n.d.	n.d.	n.d.
M268	n.d.	n.d.	n.d.	n.d.	n.d.
M269	n.d.	n.d.	n.d.	n.d.	n.a.
M270	n.d.	n.d.	n.d.	n.d.	d(*1)



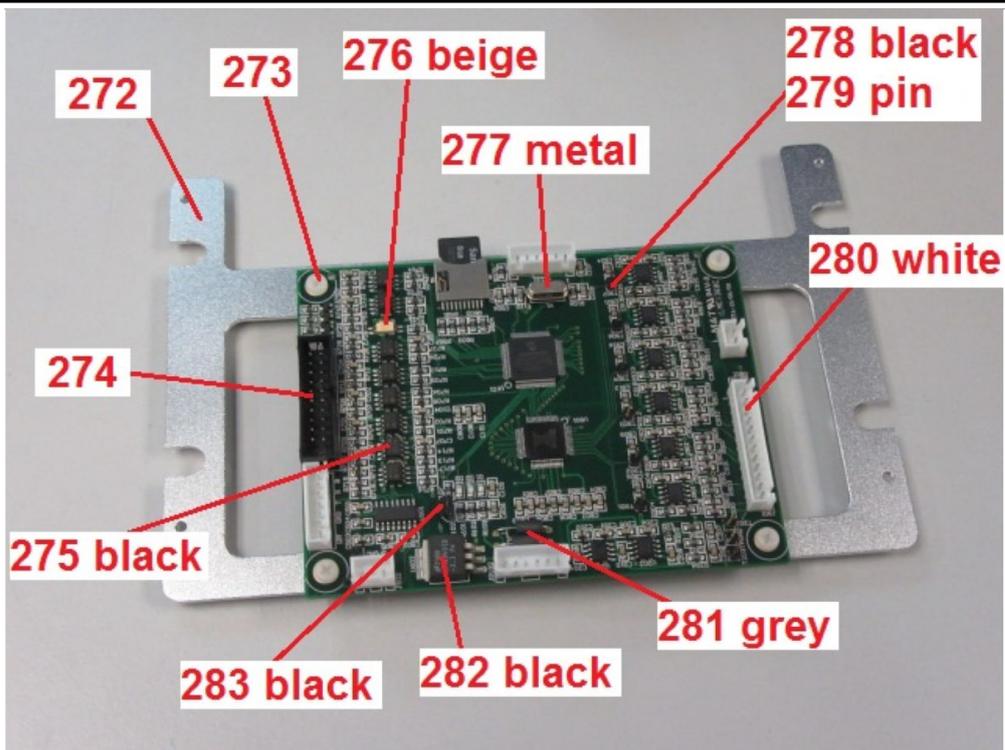
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M271	n.d.	n.d.	10	n.d.	n.d.



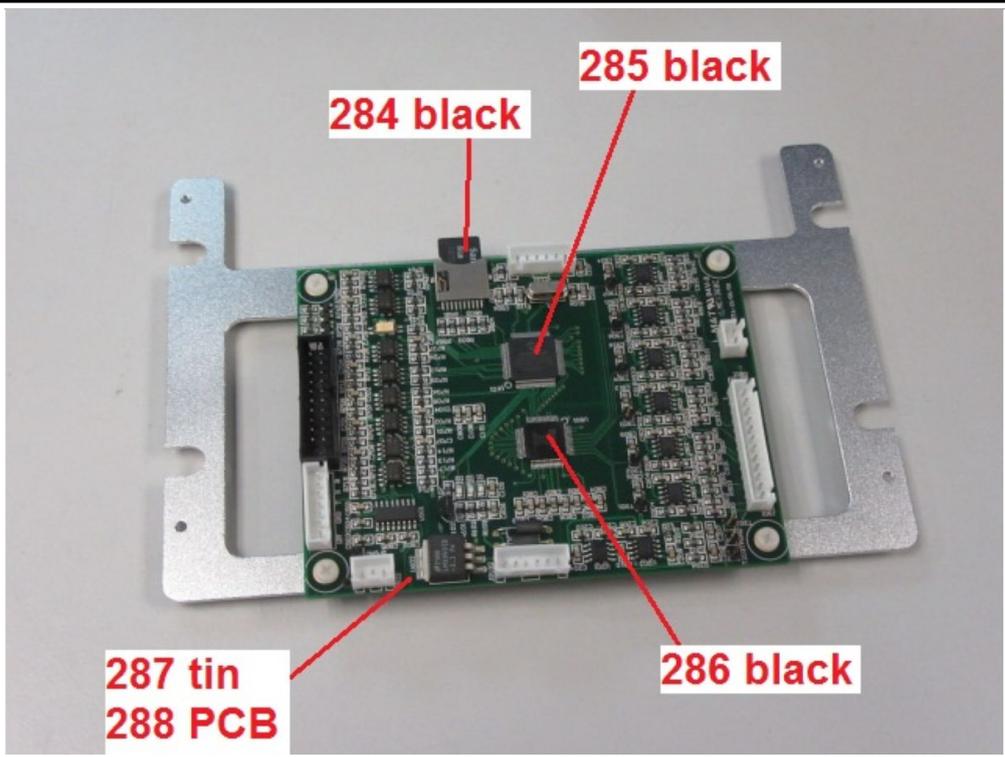
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Material No.	Cd	Cr^	Pb	Hg	Br^
M272	n.d.	d(*3)	n.d.	n.d.	n.a.
M273	n.d.	n.d.	n.d.	n.d.	n.d.
M274	21	n.d.	22	n.d.	d(*1)
M275	n.d.	n.d.	n.d.	n.d.	n.a.
M276	n.d.	n.d.	30	n.d.	n.a.
M277	n.d.	d(*3)	n.d.	n.d.	n.a.
M278	n.d.	n.d.	n.d.	n.d.	d(*1)
M279	n.d.	d(*3)	n.d.	n.d.	n.a.
M280	n.d.	n.d.	n.d.	n.d.	n.d.
M281	n.d.	d(*3)	202	n.d.	n.a.
M282	n.d.	n.d.	38	n.d.	n.a.
M283	n.d.	n.d.	n.d.	n.d.	n.a.



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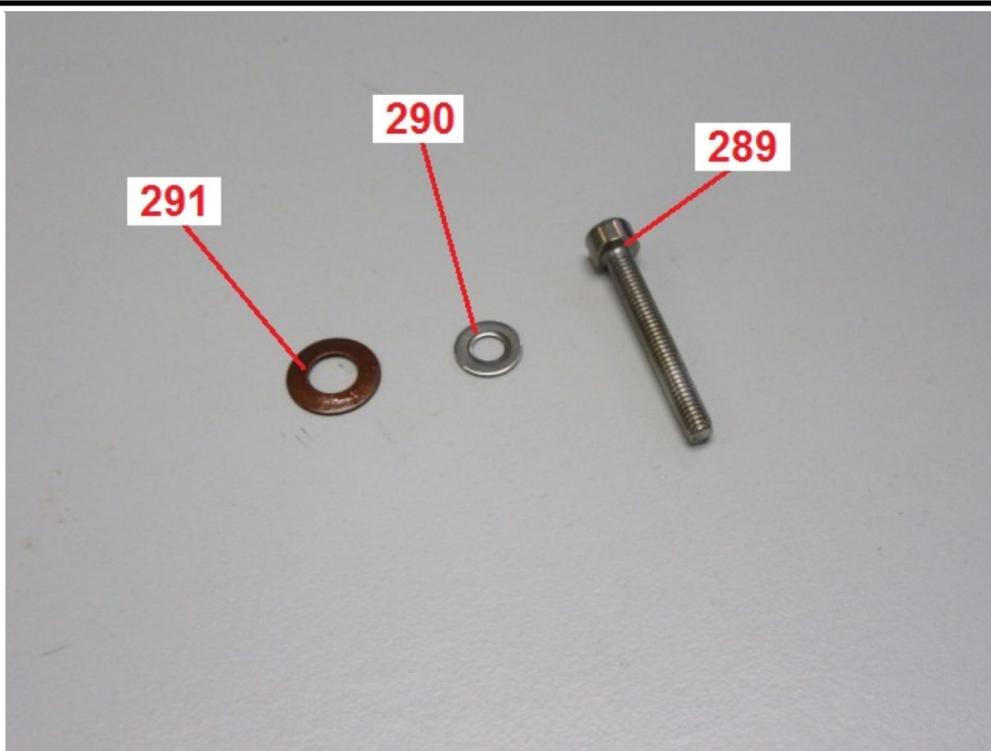


Material No.	Cd	Cr^	Pb	Hg	Br^
M284	n.d.	n.d.	n.d.	n.d.	n.a.
M285	n.d.	n.d.	n.d.	n.d.	n.a.
M286	n.d.	n.d.	n.d.	n.d.	n.a.
M287	n.d.	d(*3)	n.d.	n.d.	n.a.
M288	n.d.	n.d.	n.d.	n.d.	d(*1)



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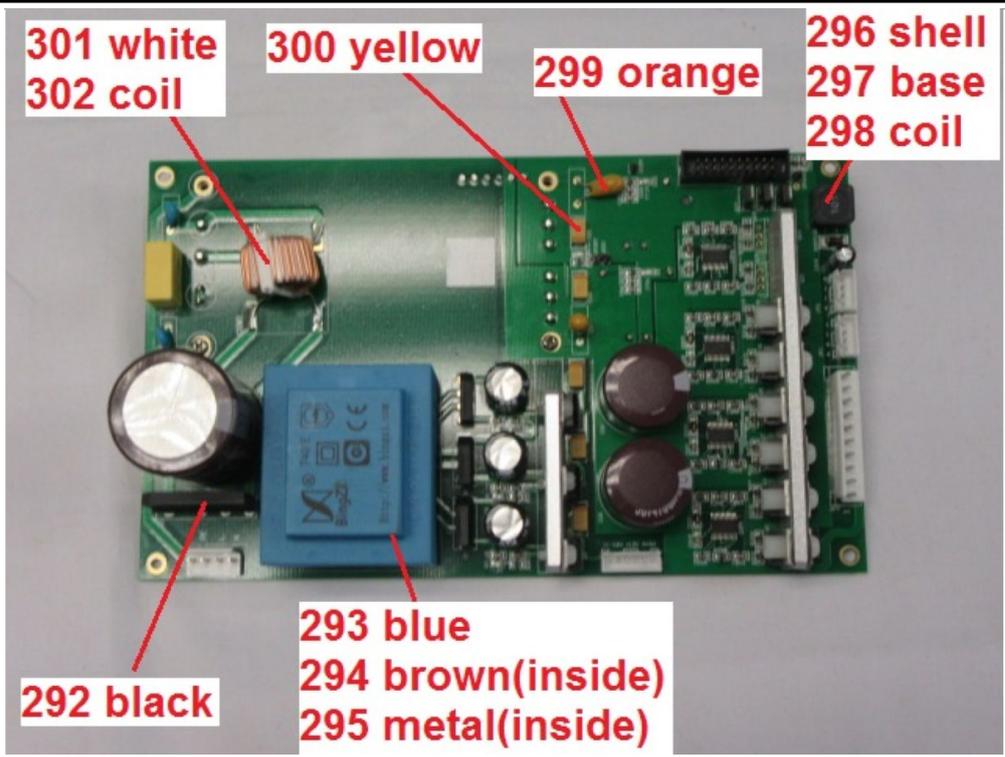
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M289	n.d.	d(*3)	n.d.	n.d.	n.a.
M290	n.d.	d(*3)	n.d.	n.d.	n.a.
M291	n.d.	d(*3)	204	n.d.	n.a.



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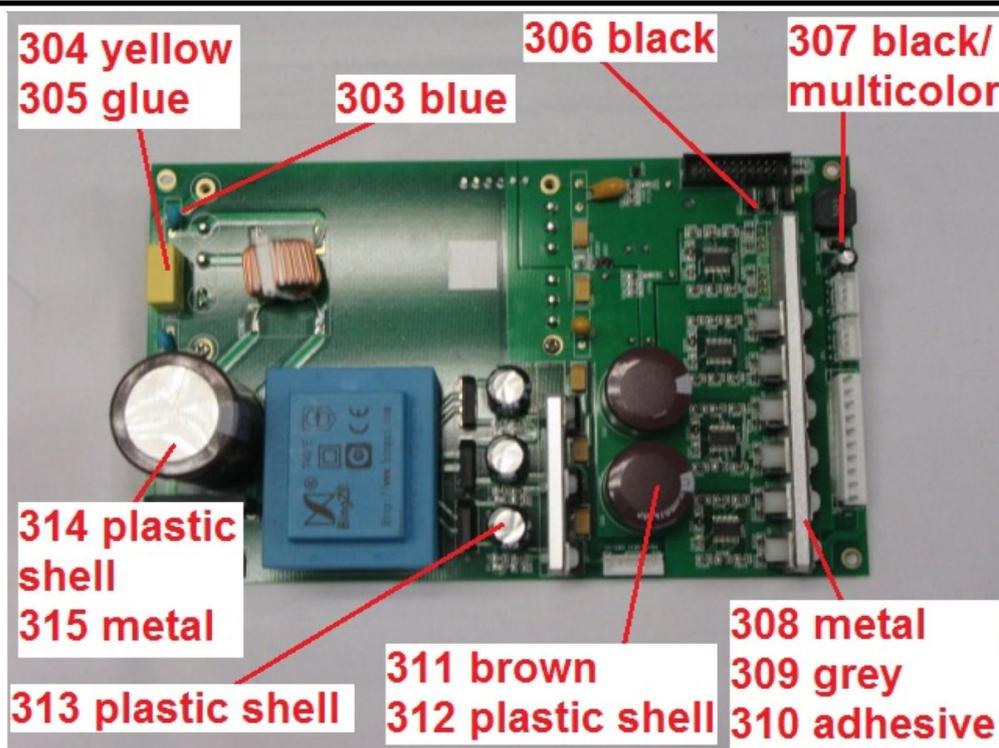


Material No.	Cd	Cr^	Pb	Hg	Br^
M292	n.d.	n.d.	n.d.	n.d.	n.a.
M293	n.d.	n.d.	20	n.d.	d(*1)
M294	n.d.	n.d.	79	n.d.	n.d.
M295	n.d.	d(*3)	n.d.	n.d.	n.a.
M296	n.d.	d(*3)	d(*1)	n.d.	n.a.
M297	n.d.	n.d.	n.d.	n.d.	n.d.
M298	n.d.	d(*3)	n.d.	n.d.	n.a.
M299	n.d.	n.d.	36	n.d.	n.a.
M300	n.d.	n.d.	n.d.	n.d.	n.a.
M301	n.d.	n.d.	n.d.	n.d.	d(*1)
M302	n.d.	d(*3)	n.d.	n.d.	n.a.



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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M303	n.d.	n.d.	103	n.d.	n.a.
M304	n.d.	n.d.	18	n.d.	d(*1)
M305	n.d.	n.d.	n.d.	n.d.	n.d.
M306	n.d.	n.d.	48	n.d.	n.a.
M307	n.d.	n.d.	29	n.d.	n.a.
M308	n.d.	d(*3)	n.d.	n.d.	n.a.
M309	n.d.	n.d.	n.d.	n.d.	n.d.
M310	n.d.	n.d.	n.d.	n.d.	10
M311	n.d.	n.d.	n.d.	n.d.	163
M312	n.d.	n.d.	n.d.	n.d.	n.d.
M313	n.d.	n.d.	n.d.	n.d.	n.d.
M314	n.d.	n.d.	n.d.	n.d.	n.d.
M315	n.d.	d(*3)	n.d.	n.d.	n.a.



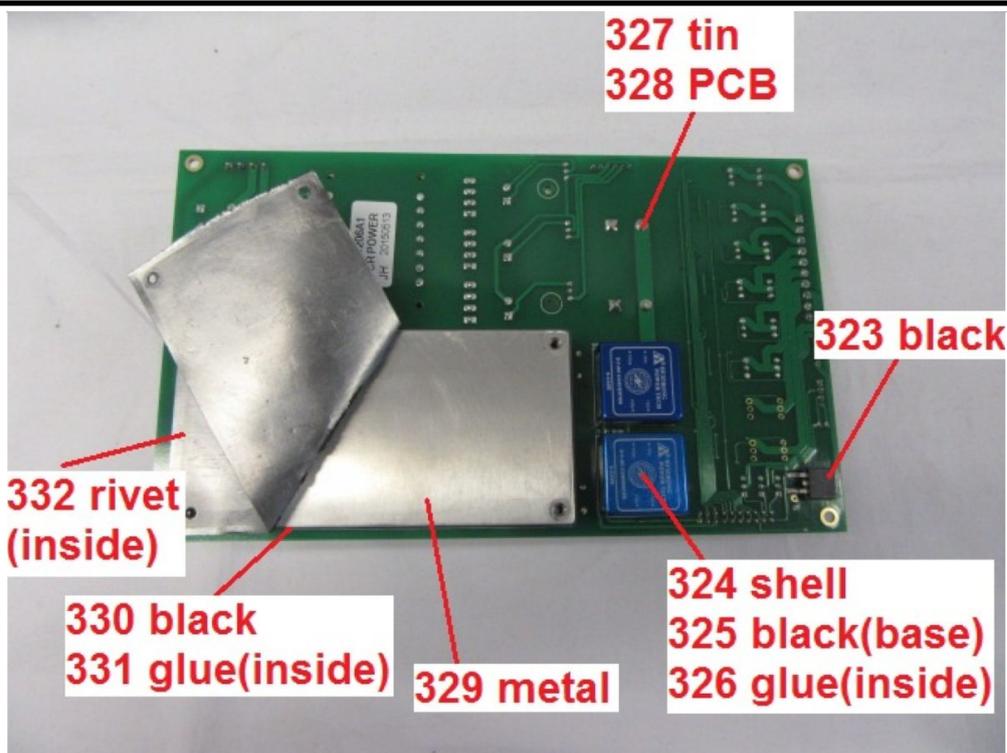
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Material No.	Cd	Cr^	Pb	Hg	Br^
M316	n.d.	n.d.	n.d.	n.d.	n.d.
M317	n.d.	n.d.	n.d.	n.d.	n.d.
M318	n.d.	d(*3)	n.d.	n.d.	n.a.
M319	n.d.	d(*3)	n.d.	n.d.	n.a.
M320	n.d.	n.d.	n.d.	n.d.	n.d.
M321	n.d.	n.d.	n.d.	n.d.	n.d.
M322	n.d.	n.d.	n.d.	n.d.	n.d.

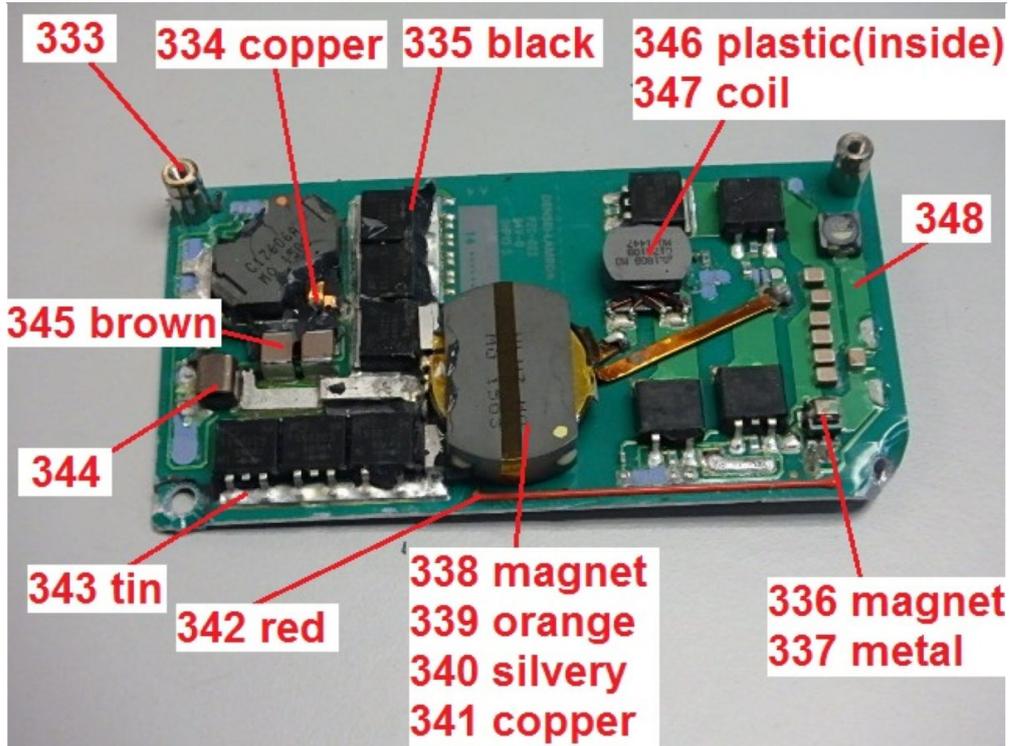
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Material No.	Cd	Cr^	Pb	Hg	Br^
M323	n.d.	n.d.	n.d.	n.d.	n.a.
M324	n.d.	d(*3)	n.d.	n.d.	n.a.
M325	n.d.	n.d.	12	n.d.	158
M326	n.d.	n.d.	n.d.	n.d.	n.d.
M328	n.d.	n.d.	n.d.	n.d.	d(*1)
M329	n.d.	d(*3)	n.d.	n.d.	n.a.
M330	n.d.	n.d.	n.d.	n.d.	n.d.
M331	n.d.	n.d.	n.d.	n.d.	n.d.
M332	n.d.	d(*3)	n.d.	n.d.	n.a.
M327	n.d.	d(*3)	n.d.	n.d.	n.a.



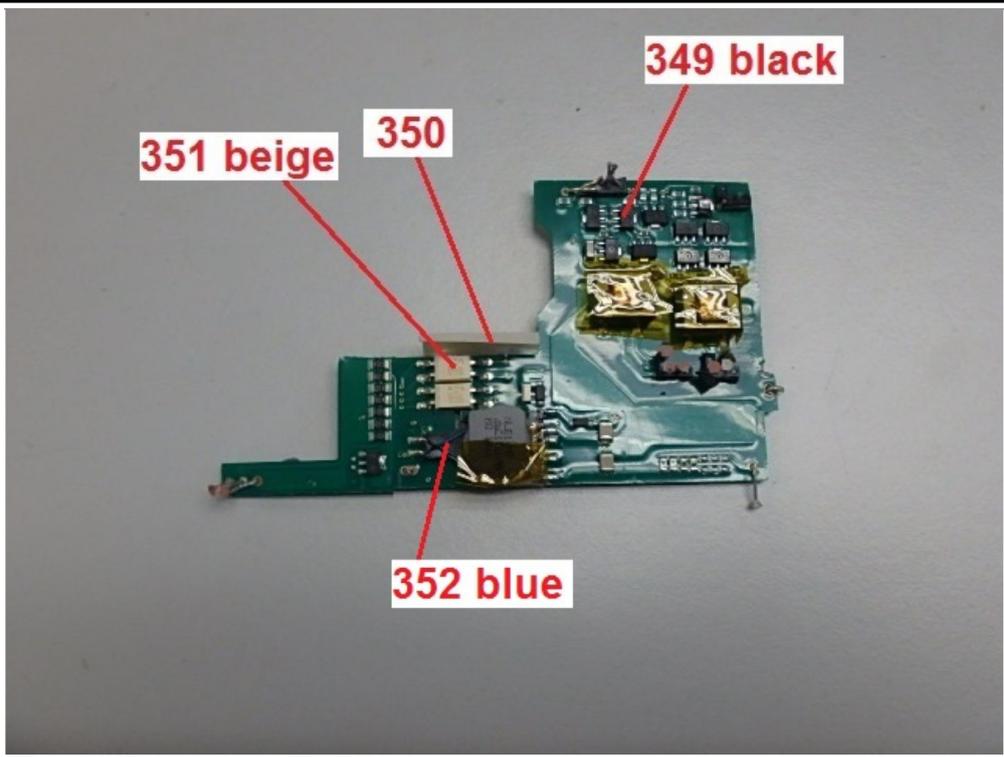
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Material No.	Cd	Cr^	Pb	Hg	Br^
M333	n.d.	d(*3)	n.d.	n.d.	n.a.
M334	n.d.	d(*3)	n.d.	n.d.	n.a.
M335	n.d.	n.d.	n.d.	n.d.	n.a.
M336	n.d.	d(*3)	n.d.	n.d.	n.a.
M337	n.d.	d(*3)	n.d.	n.d.	n.a.
M338	n.d.	d(*3)	n.d.	n.d.	n.a.
M339	n.d.	n.d.	n.d.	n.d.	n.d.
M340	n.d.	d(*3)	n.d.	n.d.	n.a.
M341	n.d.	d(*3)	n.d.	n.d.	n.a.
M342	n.d.	n.d.	n.d.	n.d.	n.d.
M343	n.d.	d(*3)	n.d.	n.d.	n.a.
M344	n.d.	d(*3)	n.d.	n.d.	n.a.
M345	n.d.	d(*3)	n.d.	n.d.	n.a.
M346	n.d.	n.d.	n.d.	n.d.	n.d.
M347	n.d.	d(*3)	n.d.	n.d.	n.a.
M348	n.d.	d(*3)	n.d.	n.d.	n.a.



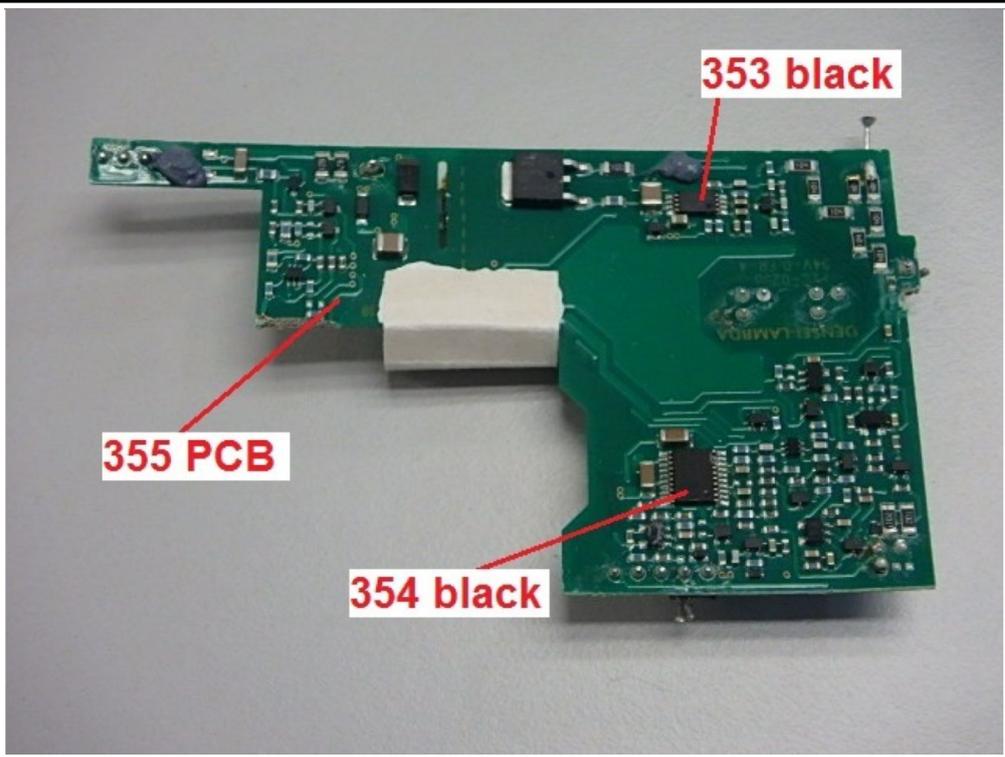
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Material No.	Cd	Cr^	Pb	Hg	Br^
M349	n.d.	n.d.	196	n.d.	n.a.
M350	n.d.	n.d.	n.d.	n.d.	n.d.
M351	n.d.	n.d.	n.d.	n.d.	n.a.
M352	n.d.	n.d.	n.d.	n.d.	n.d.



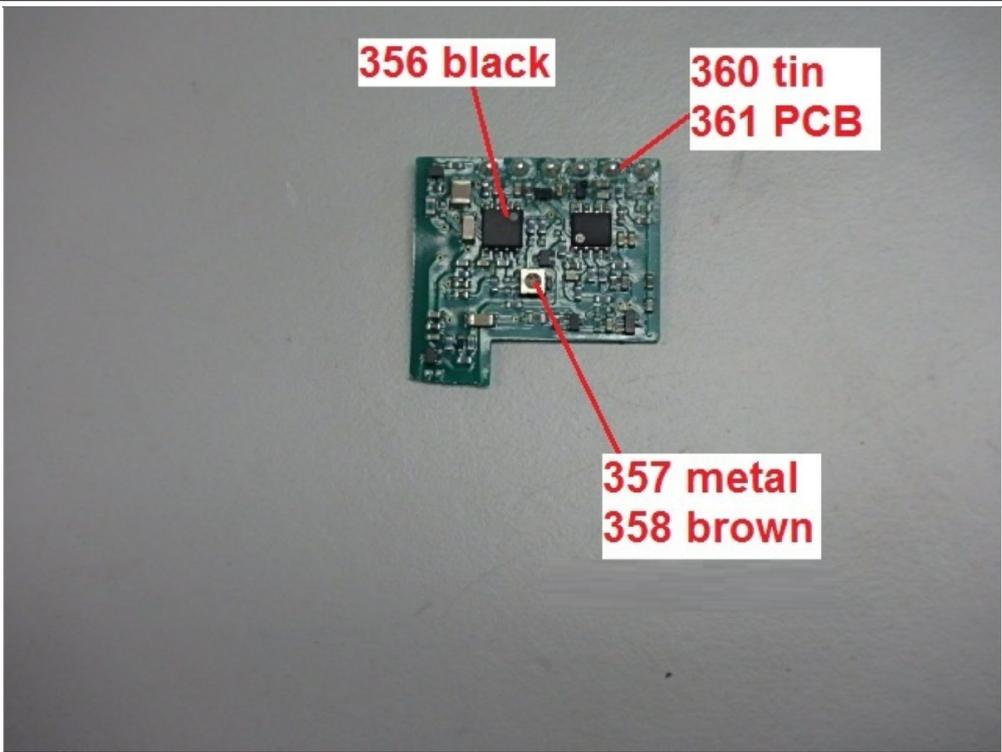
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Material No.	Cd	Cr^	Pb	Hg	Br^
M353	n.d.	n.d.	n.d.	n.d.	n.a.
M354	n.d.	n.d.	n.d.	n.d.	n.a.
M355	n.d.	n.d.	n.d.	n.d.	d(*1)



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Material No.	Cd	Cr^	Pb	Hg	Br^
M356	n.d.	n.d.	14	n.d.	n.a.
M357	n.d.	d(*3)	n.d.	n.d.	n.a.
M358	n.d.	n.d.	n.d.	n.d.	n.d.
M360	n.d.	d(*3)	n.d.	n.d.	n.a.
M361	n.d.	n.d.	n.d.	n.d.	121



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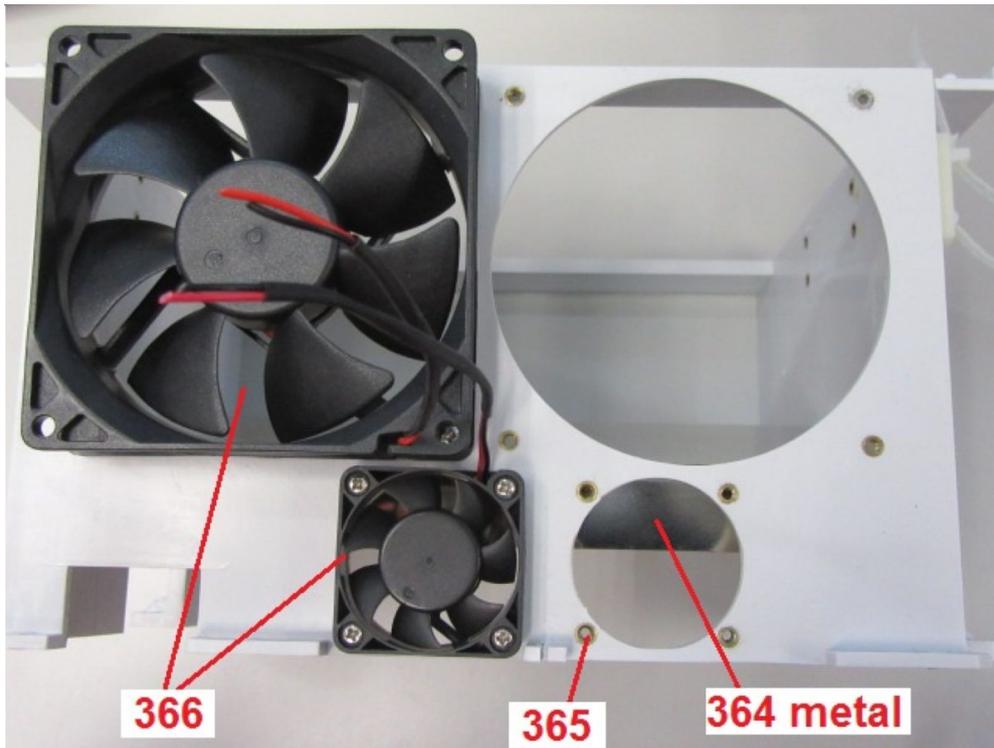


Material No.	Cd	Cr^	Pb	Hg	Br^
M362	n.d.	n.d.	n.d.	n.d.	n.d.
M363	n.d.	n.d.	n.d.	n.d.	d(*1)



Test Report No.: 0164057815a 001

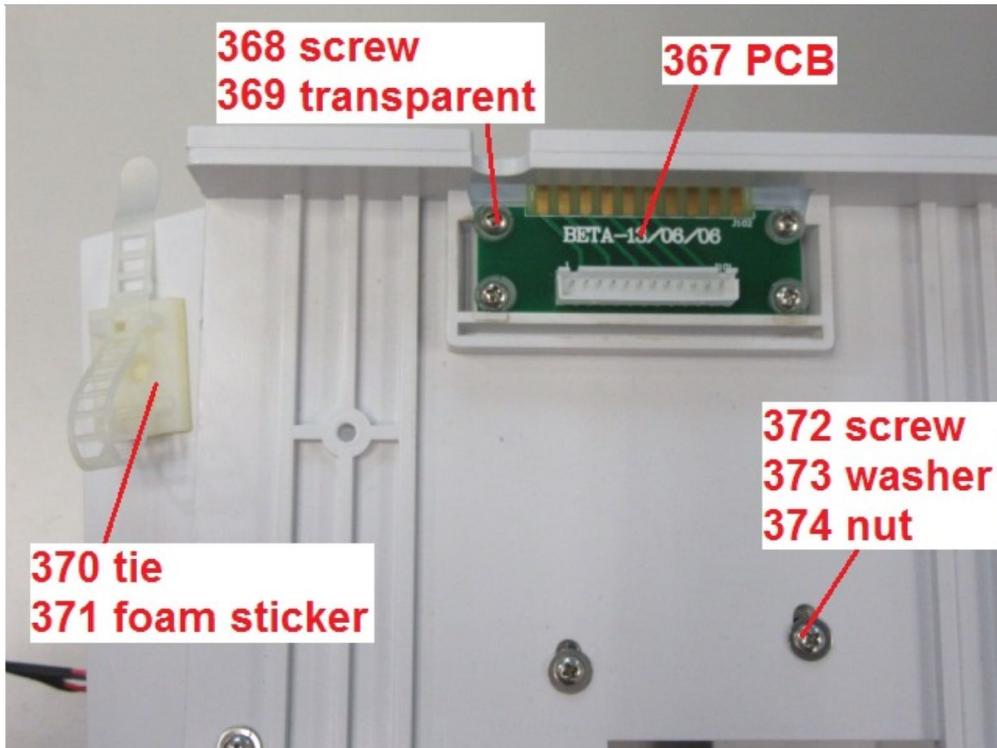
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M364	n.d.	d(*3)	n.d.	n.d.	n.a.
M366	n.d.	n.d.	n.d.	n.d.	d(*1)
M365	d(*1)	d(*3)	d(*1)	n.d.	n.a.



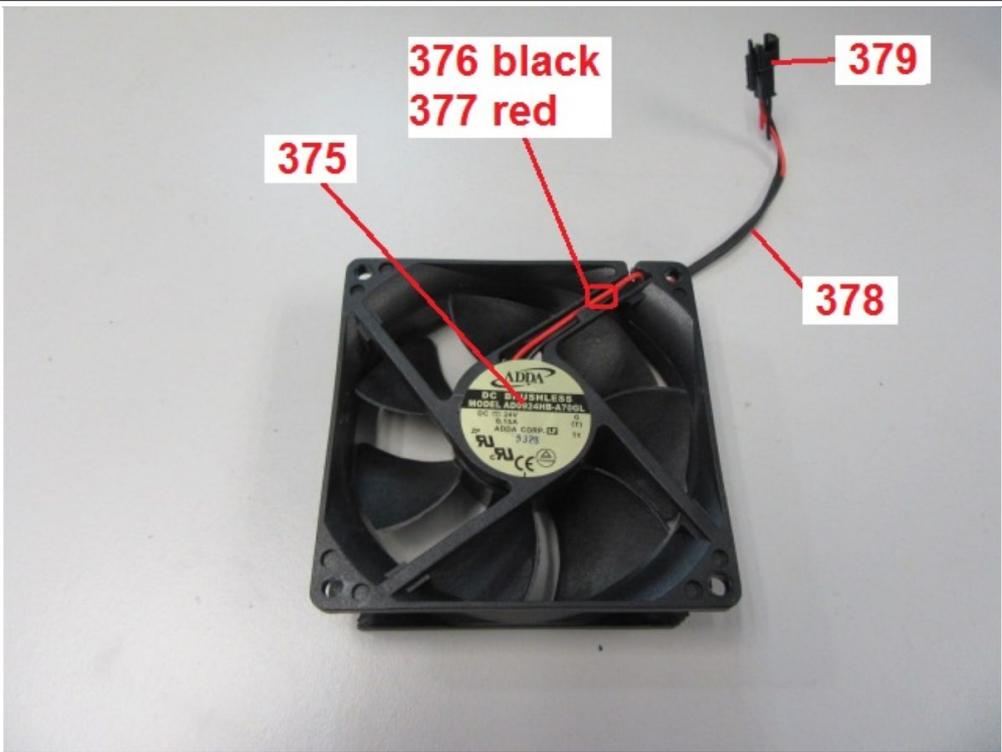
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Material No.	Cd	Cr^	Pb	Hg	Br^
M367	n.d.	n.d.	n.d.	n.d.	d(*1)
M368	n.d.	d(*3)	d(*1)	n.d.	n.a.
M369	n.d.	n.d.	n.d.	n.d.	n.d.
M370	n.d.	n.d.	n.d.	n.d.	n.d.
M371	n.d.	n.d.	n.d.	n.d.	19
M372	n.d.	d(*3)	n.d.	n.d.	n.a.
M373	n.d.	d(*3)	195	n.d.	n.a.
M374	n.d.	d(*3)	138	n.d.	n.a.

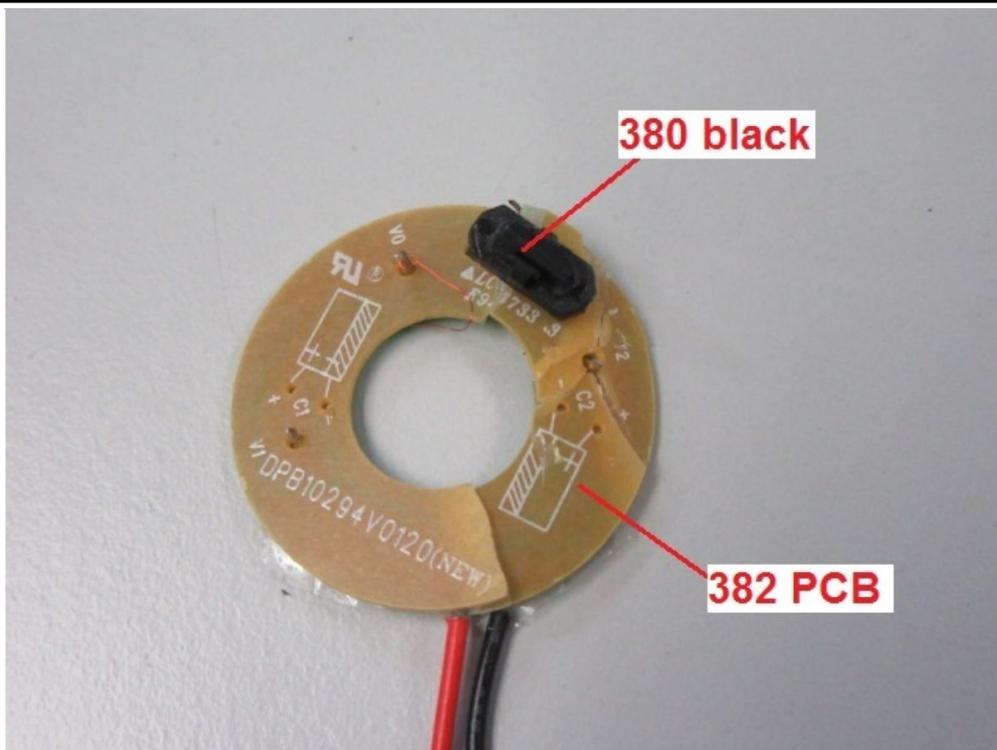


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Material No.	Cd	Cr^	Pb	Hg	Br^
M375	n.d.	n.d.	n.d.	n.d.	n.d.
M376	n.d.	n.d.	n.d.	n.d.	n.d.
M377	n.d.	n.d.	n.d.	n.d.	n.d.
M378	n.d.	n.d.	11	n.d.	n.d.
M379	n.d.	n.d.	14	n.d.	40

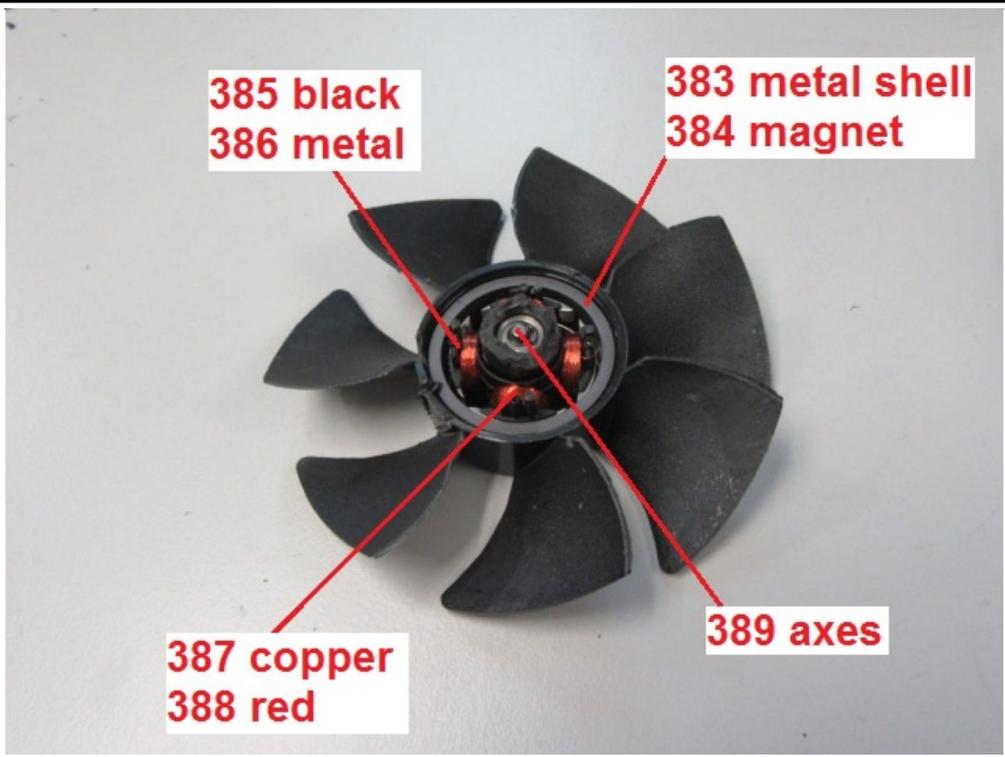




Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M380	n.d.	n.d.	n.d.	n.d.	n.a.
M382	n.d.	n.d.	n.d.	n.d.	d(*1)



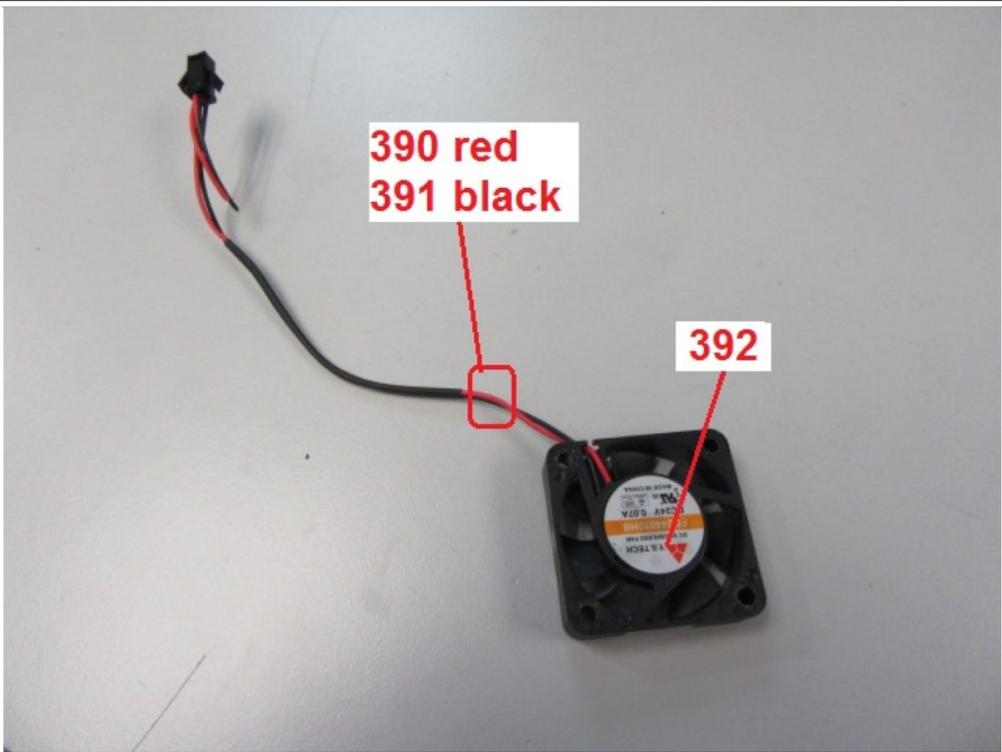
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Material No.	Cd	Cr^	Pb	Hg	Br^
M383	n.d.	d(*3)	159	n.d.	n.a.
M384	n.d.	d(*3)	n.d.	n.d.	n.a.
M385	n.d.	n.d.	n.d.	n.d.	d(*1)
M386	n.d.	d(*3)	n.d.	n.d.	n.a.
M387	n.d.	d(*3)	n.d.	n.d.	n.a.
M388	n.d.	d(*3)	n.d.	n.d.	n.a.
M389	n.d.	d(*3)	n.d.	n.d.	n.a.



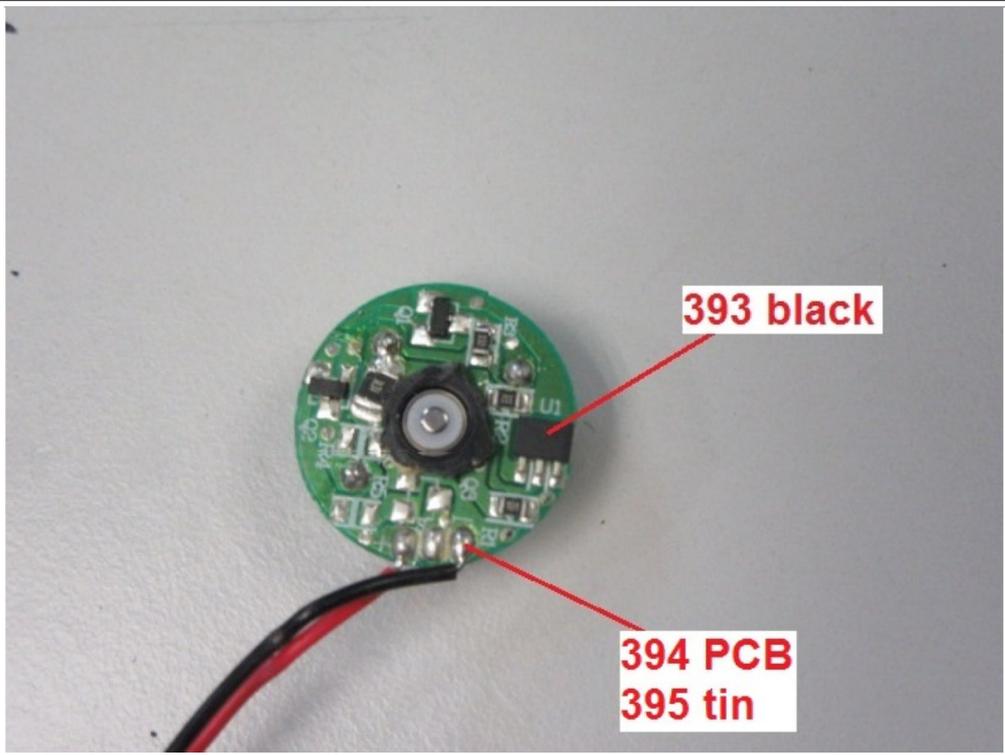
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Material No.	Cd	Cr^	Pb	Hg	Br^
M390	n.d.	n.d.	n.d.	n.d.	n.d.
M391	n.d.	n.d.	n.d.	n.d.	n.d.
M392	n.d.	n.d.	n.d.	n.d.	n.d.



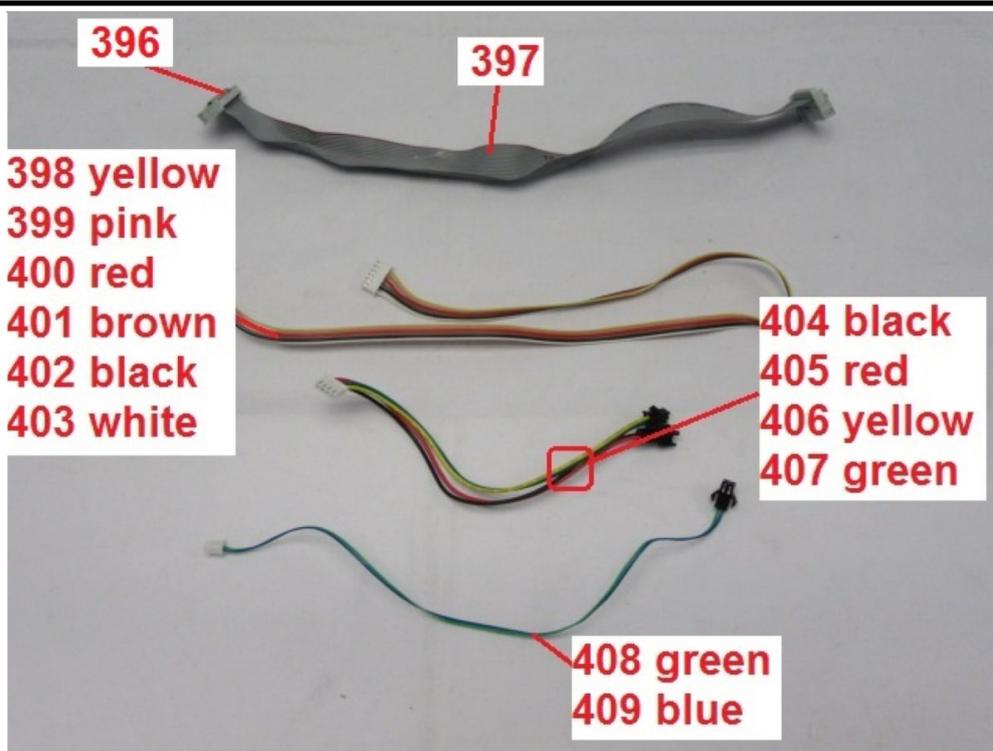
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Material No.	Cd	Cr^	Pb	Hg	Br^
M393	n.d.	n.d.	n.d.	n.d.	n.a.
M394	n.d.	n.d.	n.d.	n.d.	d(*1)
M395	n.d.	d(*3)	n.d.	n.d.	n.a.



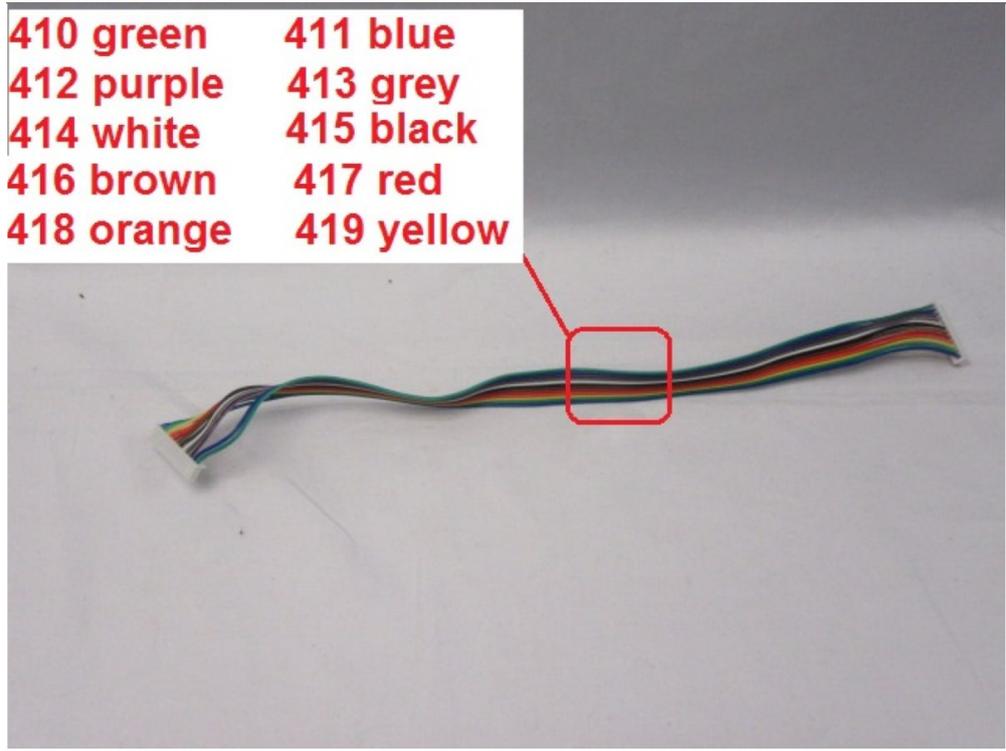
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Material No.	Cd	Cr^	Pb	Hg	Br^
M396	n.d.	n.d.	n.d.	n.d.	d>(*1)
M397	n.d.	n.d.	n.d.	n.d.	n.d.
M398	n.d.	n.d.	n.d.	n.d.	n.d.
M399	n.d.	n.d.	n.d.	n.d.	n.d.
M400	n.d.	n.d.	n.d.	n.d.	n.d.
M401	n.d.	n.d.	n.d.	n.d.	n.d.
M402	n.d.	n.d.	n.d.	n.d.	n.d.
M403	n.d.	n.d.	n.d.	n.d.	n.d.
M404	n.d.	n.d.	n.d.	n.d.	n.d.
M405	n.d.	n.d.	n.d.	n.d.	n.d.
M406	n.d.	n.d.	n.d.	n.d.	n.d.
M407	n.d.	n.d.	n.d.	n.d.	n.d.
M408	n.d.	n.d.	n.d.	n.d.	n.d.
M409	n.d.	n.d.	n.d.	n.d.	n.d.



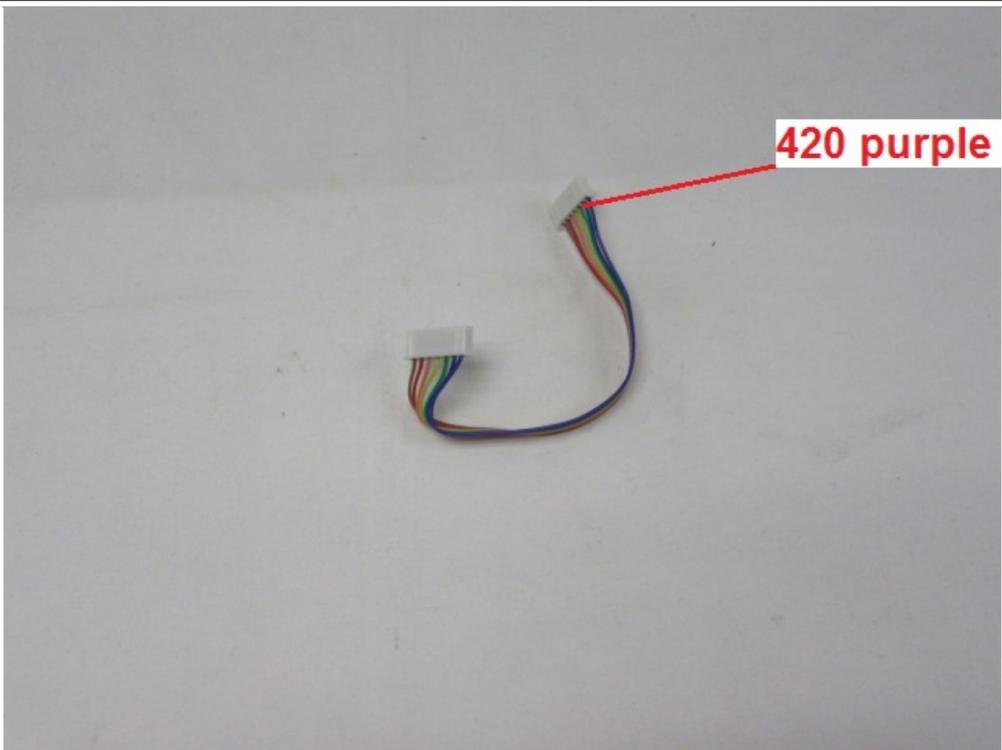
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M410	n.d.	n.d.	n.d.	n.d.	n.d.
M411	n.d.	n.d.	n.d.	n.d.	n.d.
M412	n.d.	n.d.	n.d.	n.d.	n.d.
M413	n.d.	n.d.	n.d.	n.d.	n.d.
M414	n.d.	n.d.	n.d.	n.d.	n.d.
M415	n.d.	n.d.	n.d.	n.d.	n.d.
M416	n.d.	n.d.	n.d.	n.d.	n.d.
M417	n.d.	n.d.	n.d.	n.d.	n.d.
M418	n.d.	n.d.	n.d.	n.d.	n.d.
M419	n.d.	n.d.	n.d.	n.d.	n.d.



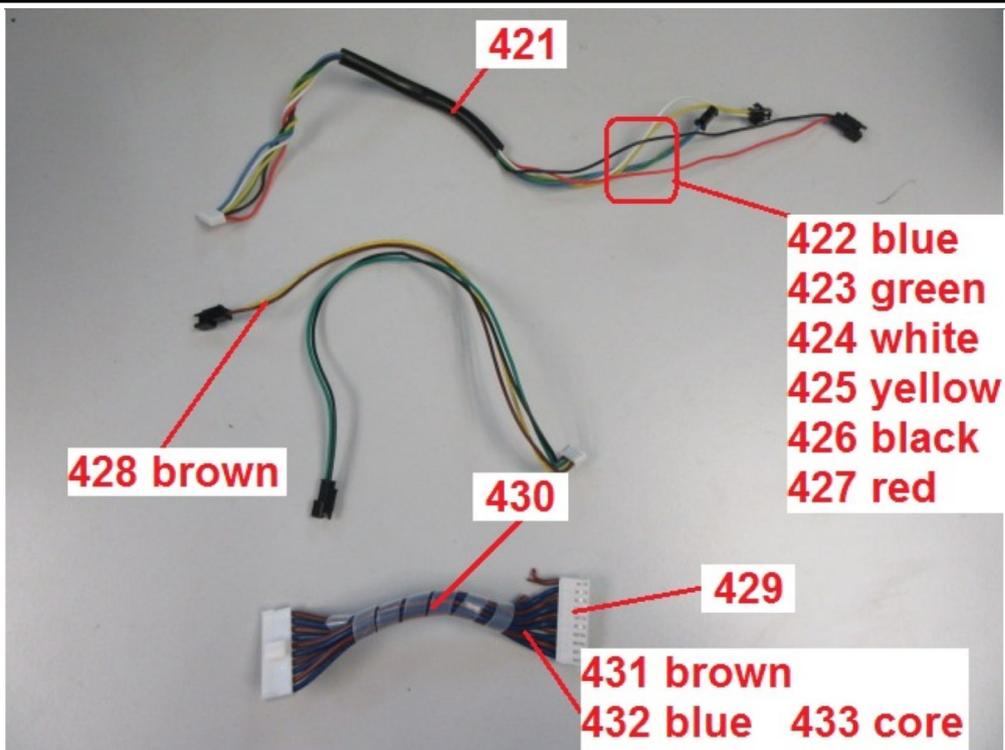
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Material No.	Cd	Cr^	Pb	Hg	Br^
M420	n.d.	n.d.	n.d.	n.d.	n.d.



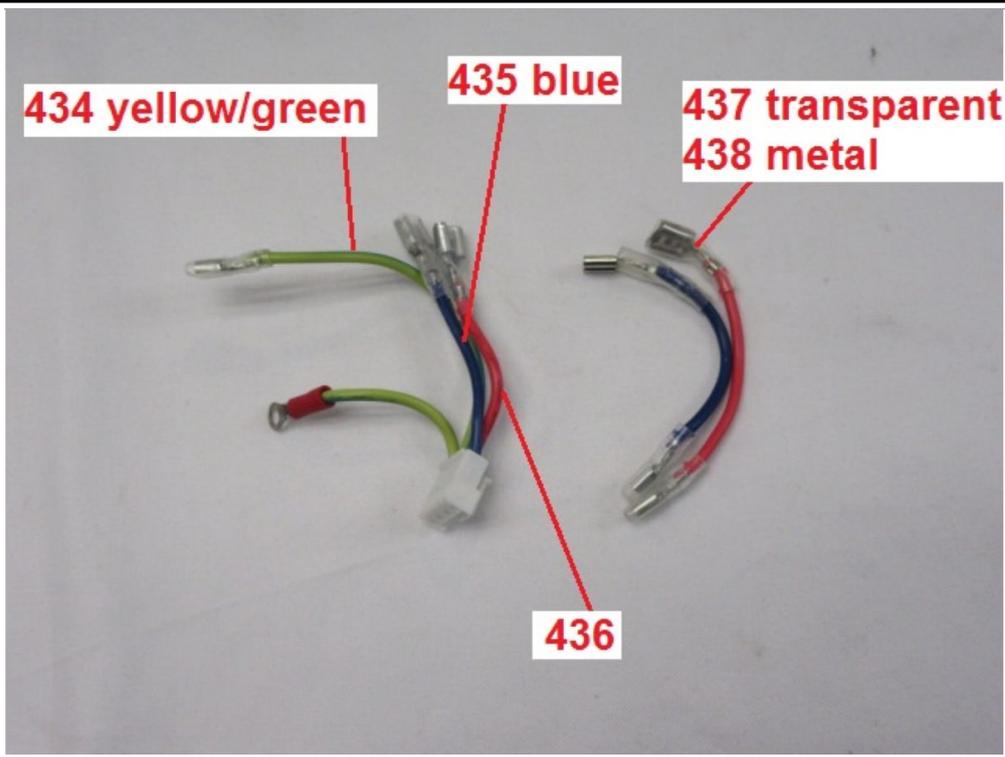
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Material No.	Cd	Cr^	Pb	Hg	Br^
M422	n.d.	n.d.	n.d.	n.d.	n.d.
M423	n.d.	n.d.	n.d.	n.d.	25
M424	n.d.	n.d.	n.d.	n.d.	n.d.
M425	n.d.	n.d.	n.d.	n.d.	n.d.
M426	n.d.	n.d.	n.d.	n.d.	n.d.
M427	n.d.	n.d.	n.d.	n.d.	n.d.
M428	n.d.	n.d.	n.d.	n.d.	n.d.
M429	n.d.	n.d.	n.d.	n.d.	n.d.
M430	n.d.	n.d.	n.d.	n.d.	n.d.
M431	n.d.	n.d.	14	n.d.	n.d.
M432	n.d.	n.d.	n.d.	n.d.	n.d.
M433	n.d.	d(*3)	n.d.	n.d.	n.a.
M421	n.d.	17	n.d.	n.d.	n.d.



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Material No.	Cd	Cr^	Pb	Hg	Br^
M434	n.d.	n.d.	n.d.	n.d.	n.d.
M435	n.d.	n.d.	n.d.	n.d.	n.d.
M436	n.d.	n.d.	n.d.	n.d.	n.d.
M437	n.d.	n.d.	n.d.	n.d.	n.d.
M438	n.d.	d(*3)	178	n.d.	n.a.



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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M439	n.d.	n.d.	n.d.	n.d.	n.d.



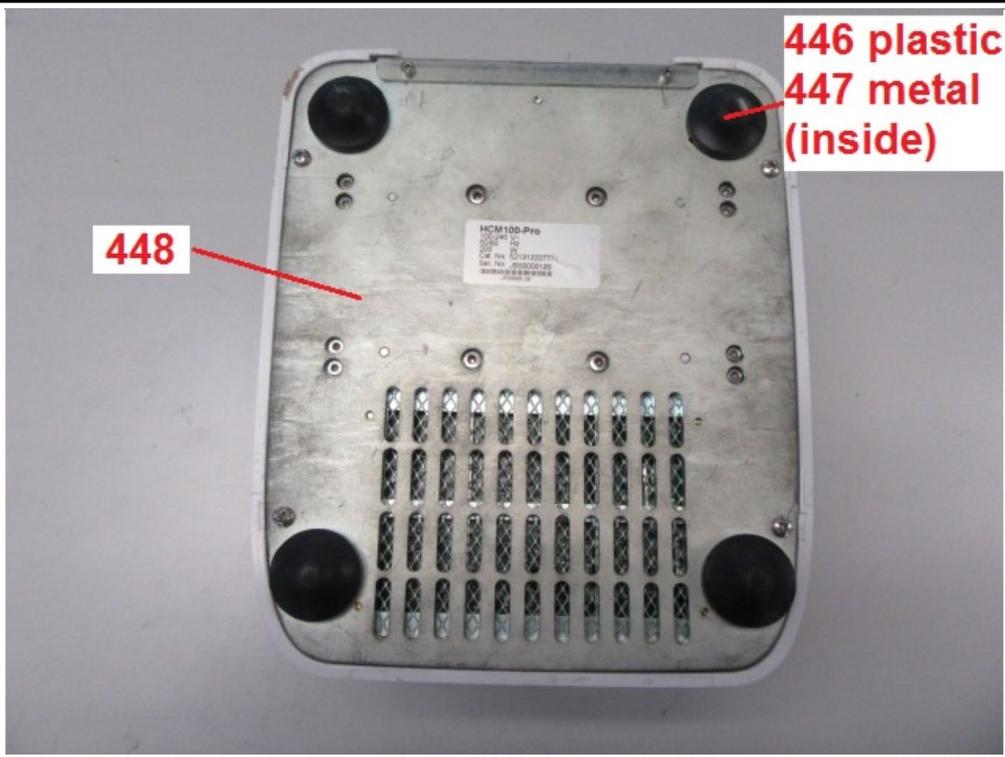
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Material No.	Cd	Cr^	Pb	Hg	Br^
M440	n.d.	n.d.	n.d.	n.d.	n.d.
M441	n.d.	n.d.	n.d.	n.d.	n.d.
M442	n.d.	d(*3)	n.d.	n.d.	n.a.
M443	n.d.	n.d.	n.d.	n.d.	n.d.
M444	n.d.	n.d.	n.d.	n.d.	n.d.
M445	n.d.	n.d.	n.d.	n.d.	d(*1)



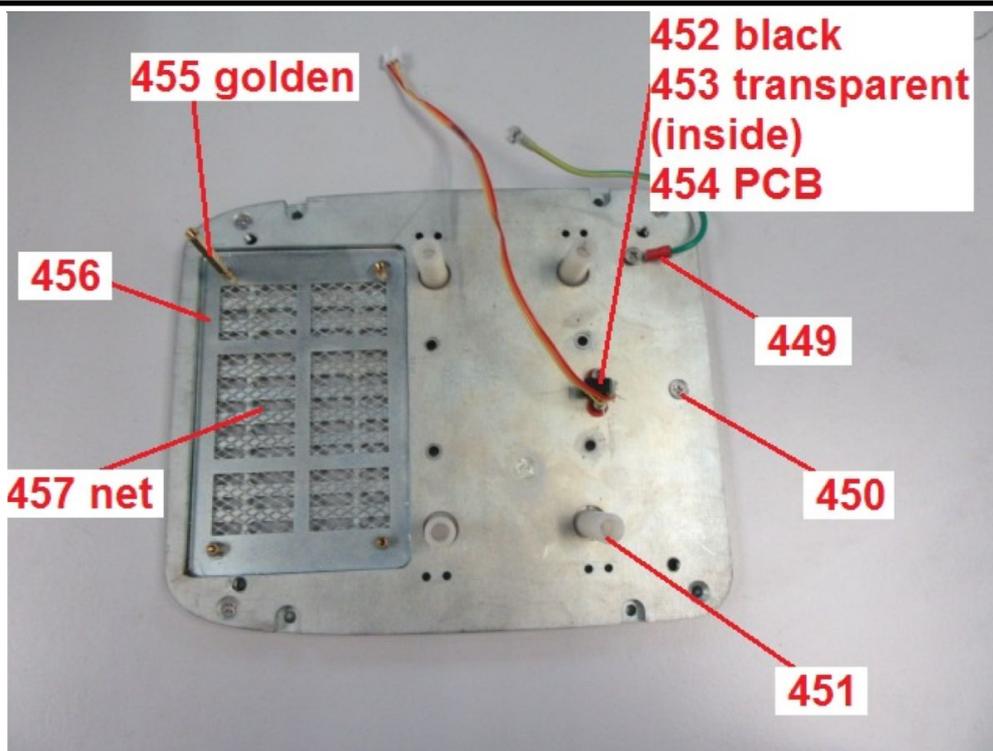
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Material No.	Cd	Cr^	Pb	Hg	Br^
M446	n.d.	n.d.	n.d.	n.d.	n.d.
M447	n.d.	d(*3)	382	n.d.	n.a.
M448	n.d.	d(*3)	142	n.d.	n.a.



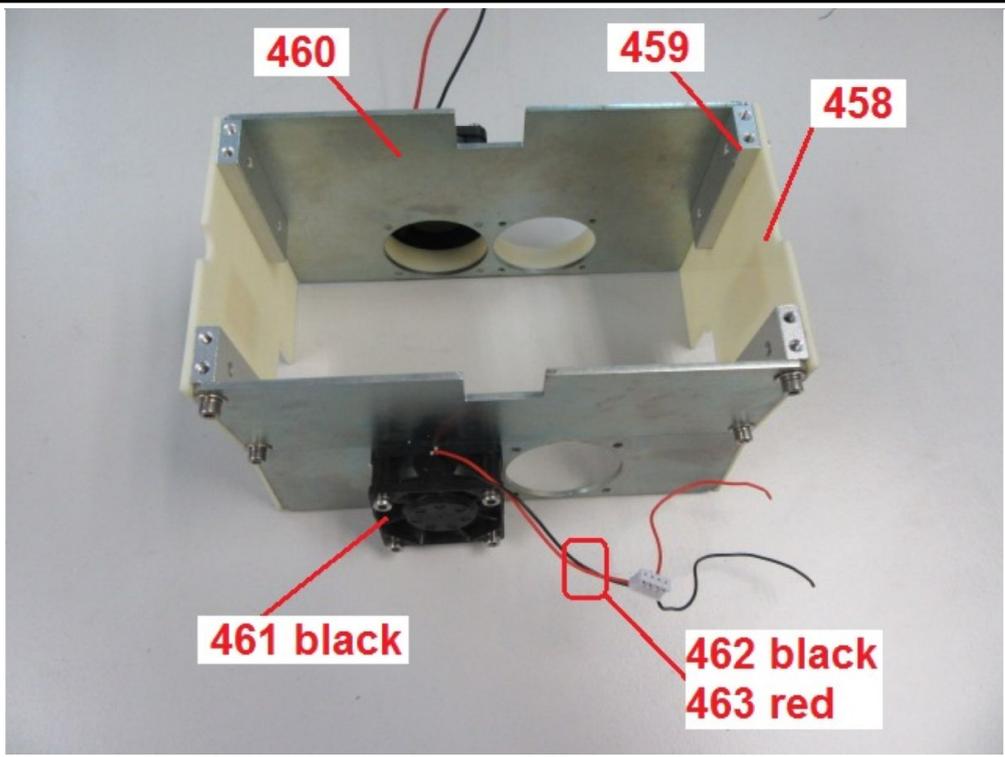
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M449	n.d.	n.d.	11	n.d.	n.d.
M450	n.d.	d(*3)	n.d.	n.d.	n.a.
M451	n.d.	n.d.	n.d.	n.d.	n.d.
M452	n.d.	n.d.	n.d.	n.d.	n.d.
M453	n.d.	n.d.	n.d.	n.d.	n.d.
M454	n.d.	n.d.	n.d.	n.d.	d(*1)
M455	n.d.	d(*3)	d(*1)	n.d.	n.a.
M456	n.d.	d(*3)	n.d.	n.d.	n.a.
M457	n.d.	d(*3)	n.d.	n.d.	n.a.



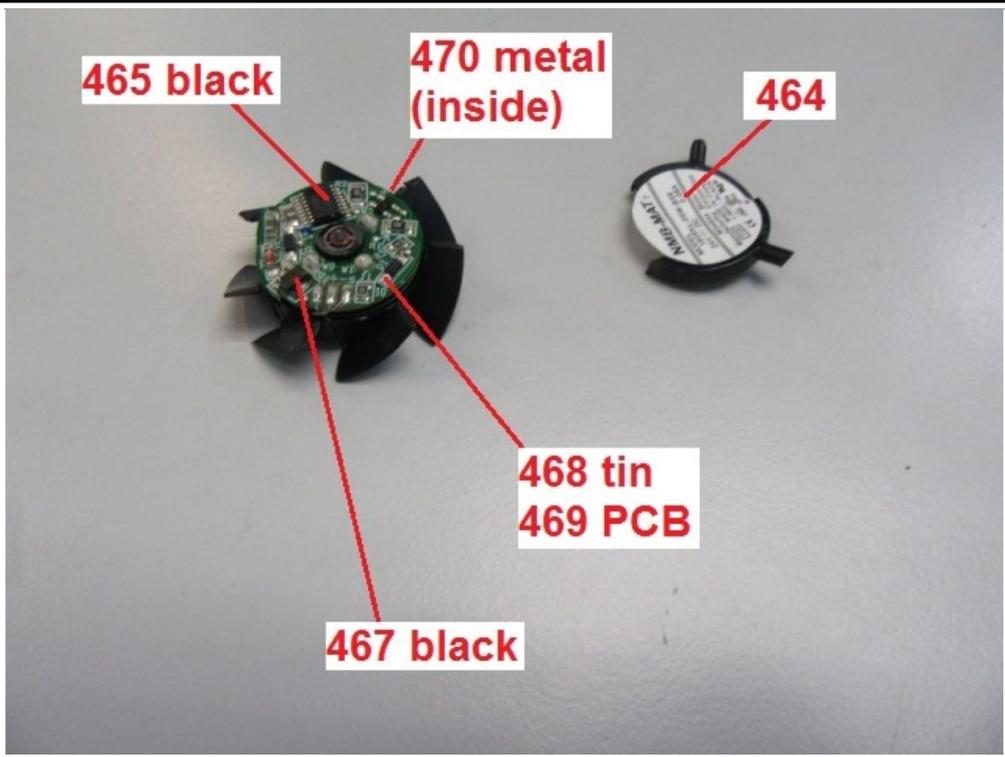
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Material No.	Cd	Cr^	Pb	Hg	Br^
M458	n.d.	n.d.	n.d.	n.d.	n.d.
M459	n.d.	d(*3)	n.d.	n.d.	n.a.
M460	n.d.	d(*3)	n.d.	n.d.	n.a.
M461	n.d.	n.d.	n.d.	n.d.	d(*1)
M462	n.d.	n.d.	n.d.	n.d.	n.d.
M463	n.d.	n.d.	n.d.	n.d.	n.d.



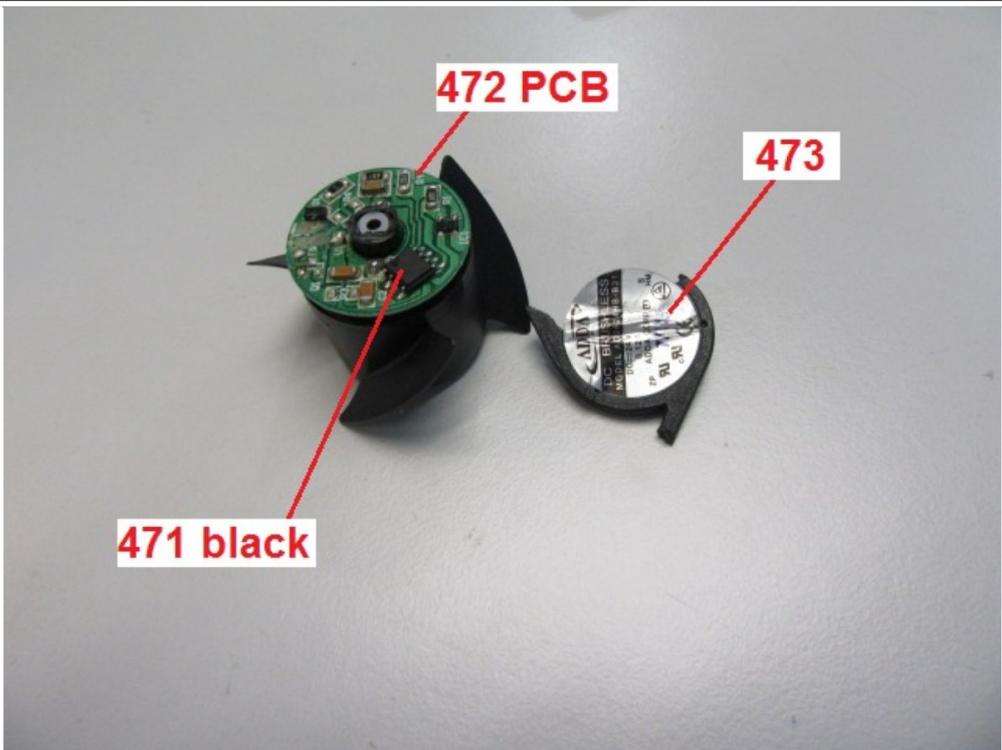
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Material No.	Cd	Cr^	Pb	Hg	Br^
M464	n.d.	n.d.	n.d.	n.d.	n.d.
M465	n.d.	n.d.	n.d.	n.d.	n.a.
M467	n.d.	n.d.	23	n.d.	n.a.
M468	n.d.	d(*3)	n.d.	n.d.	n.a.
M469	n.d.	n.d.	n.d.	n.d.	d(*1)
M470	n.d.	d(*3)	n.d.	n.d.	n.a.



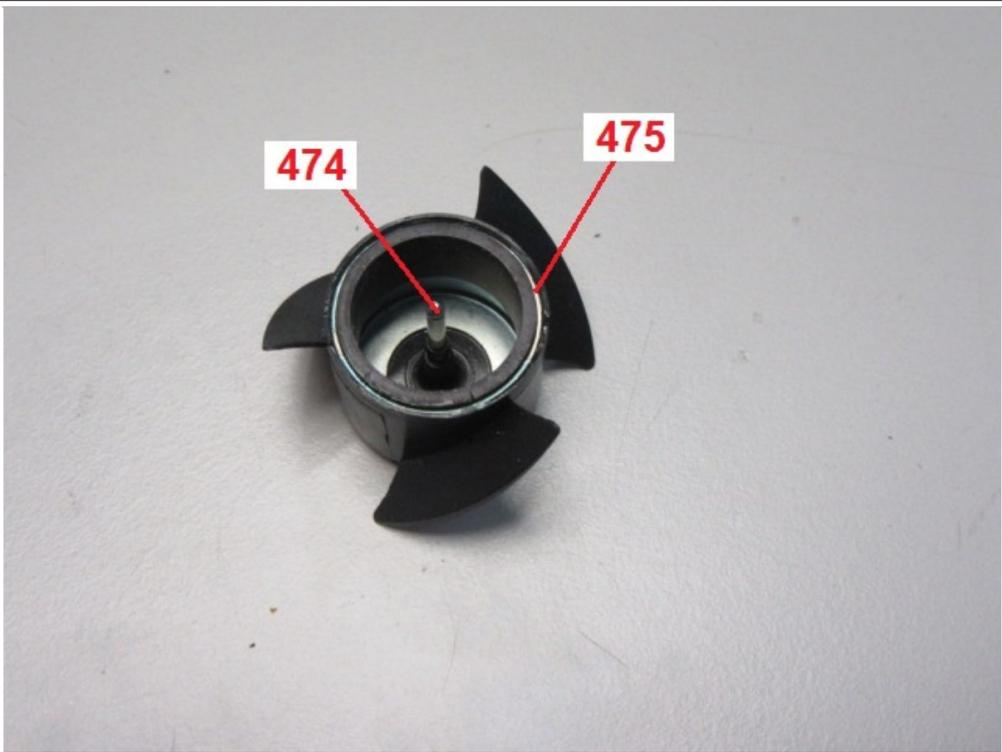
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Material No.	Cd	Cr^	Pb	Hg	Br^
M471	n.d.	n.d.	14	n.d.	n.a.
M472	n.d.	n.d.	n.d.	n.d.	d(*1)
M473	n.d.	n.d.	n.d.	n.d.	13



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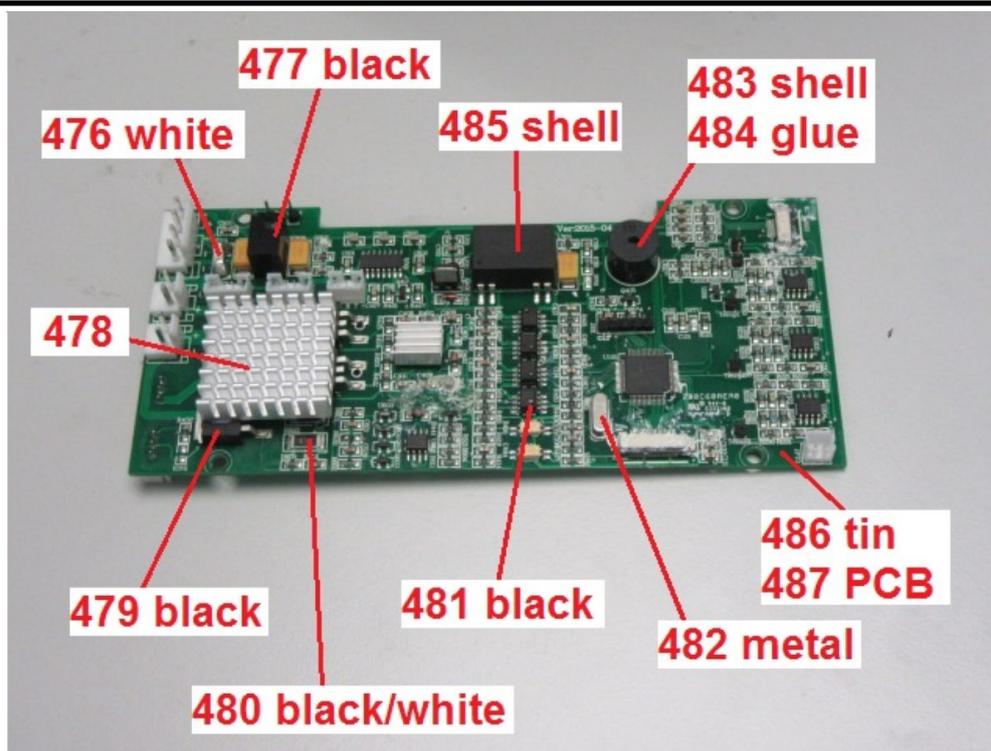


Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M474	n.d.	d(*3)	189	n.d.	n.a.
M475	n.d.	d(*3)	146	n.d.	n.a.



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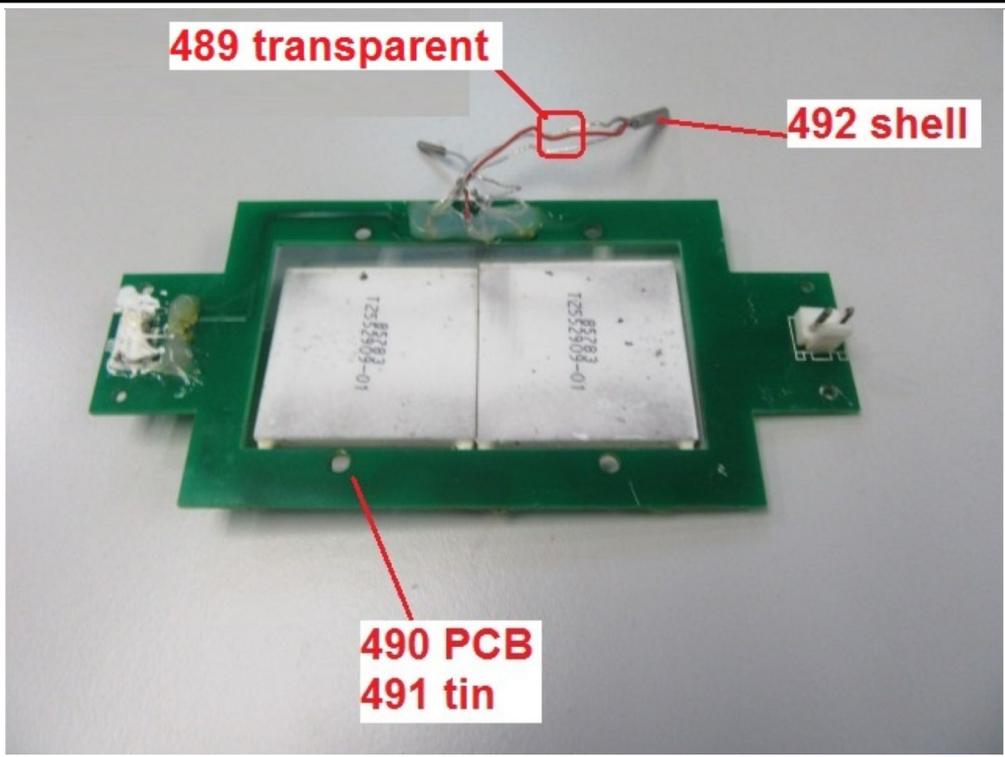
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M476	n.d.	n.d.	13	n.d.	n.a.
M477	n.d.	n.d.	n.d.	n.d.	n.a.
M478	n.d.	d(*3)	n.d.	n.d.	n.a.
M479	n.d.	n.d.	13	n.d.	n.a.
M480	n.d.	n.d.	71	n.d.	n.a.
M481	n.d.	n.d.	n.d.	n.d.	n.a.
M482	n.d.	d(*3)	n.d.	n.d.	n.a.
M483	n.d.	n.d.	n.d.	n.d.	d(*1)
M484	n.d.	n.d.	29	n.d.	46
M485	n.d.	n.d.	n.d.	n.d.	n.a.
M487	n.d.	n.d.	n.d.	n.d.	d(*1)
M486	n.d.	d(*3)	n.d.	n.d.	n.a.



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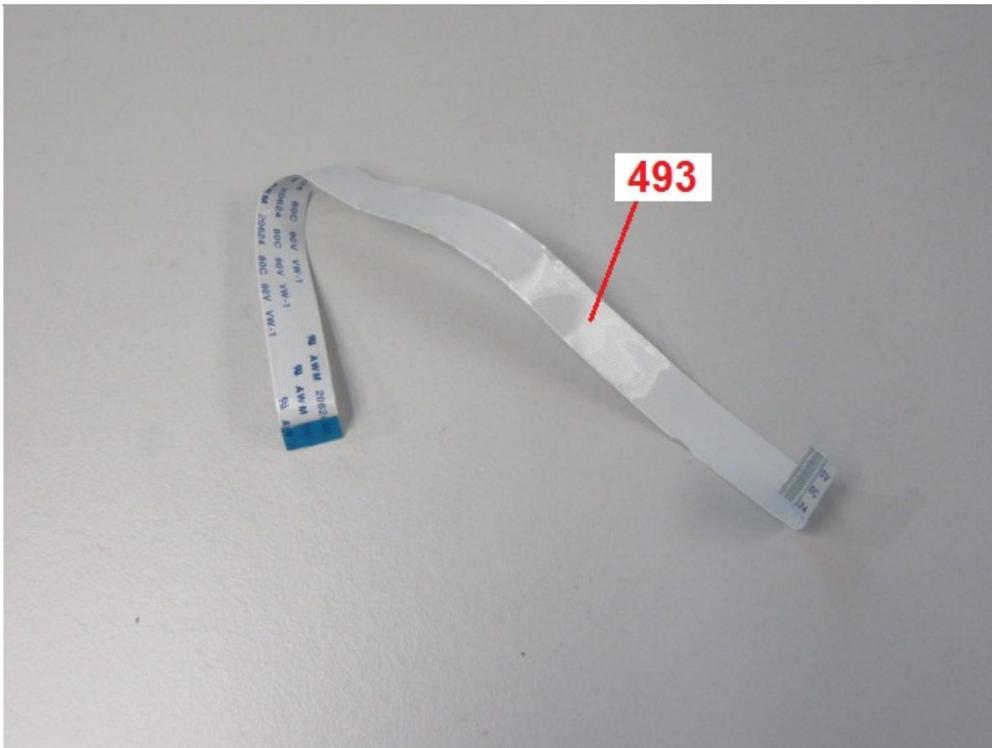


Material No.	Cd	Cr^	Pb	Hg	Br^
M489	n.d.	n.d.	n.d.	n.d.	n.d.
M490	n.d.	n.d.	19	n.d.	d(*1)
M492	n.d.	d(*3)	n.d.	n.d.	n.a.
M491	n.d.	d(*3)	n.d.	n.d.	n.a.



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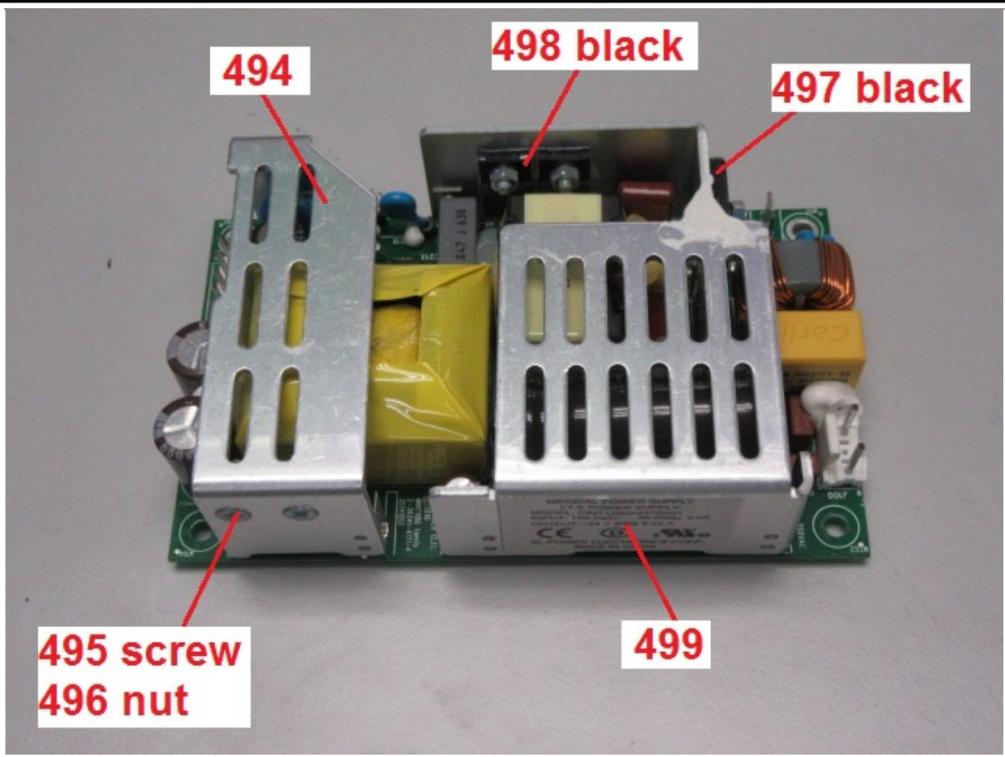
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M493	n.d.	n.d.	n.d.	n.d.	d(*1)



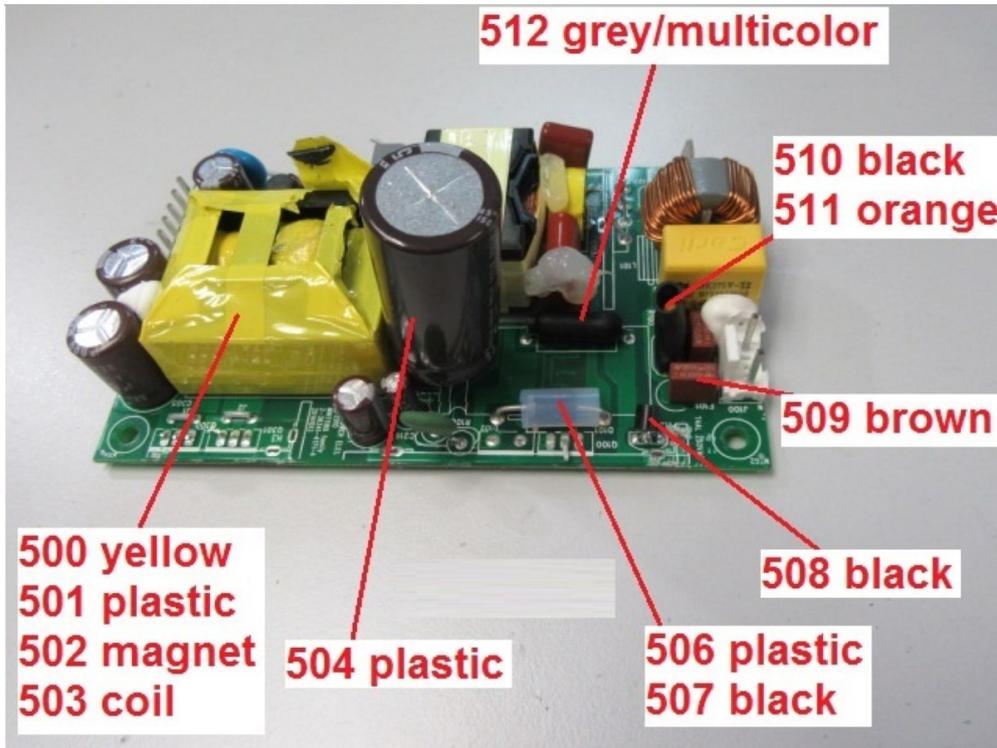
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Material No.	Cd	Cr^	Pb	Hg	Br^
M494	n.d.	n.d.	n.d.	n.d.	n.d.
M495	n.d.	d(*3)	n.d.	n.d.	n.a.
M496	n.d.	d(*3)	128	n.d.	n.a.
M497	n.d.	n.d.	n.d.	n.d.	n.a.
M498	n.d.	73	n.d.	n.d.	n.a.
M499	n.d.	n.d.	n.d.	n.d.	n.d.



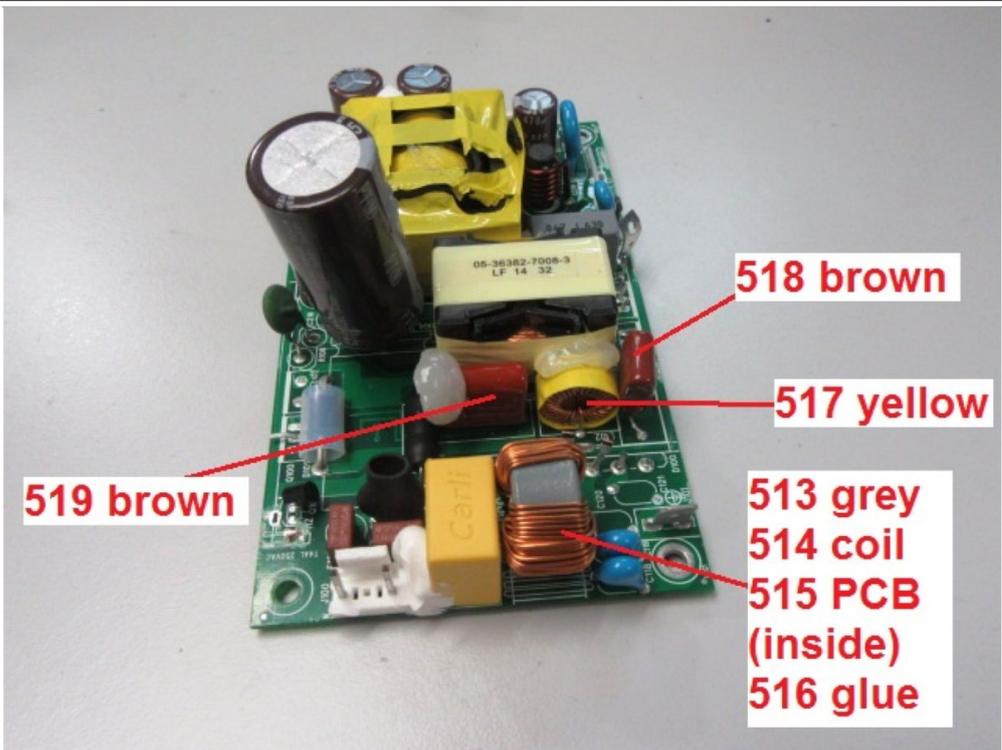
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M500	n.d.	n.d.	n.d.	n.d.	n.d.
M501	n.d.	n.d.	n.d.	n.d.	n.d.
M502	n.d.	d(*3)	n.d.	n.d.	n.a.
M503	n.d.	d(*3)	n.d.	n.d.	n.a.
M504	n.d.	n.d.	n.d.	n.d.	n.d.
M506	n.d.	n.d.	n.d.	n.d.	n.d.
M507	n.d.	n.d.	n.d.	n.d.	n.a.
M508	n.d.	n.d.	n.d.	n.d.	n.a.
M509	n.d.	n.d.	n.d.	n.d.	22
M510	n.d.	n.d.	11	n.d.	n.d.
M511	n.d.	n.d.	n.d.	n.d.	n.a.
M512	n.d.	265	n.d.	n.d.	n.a.



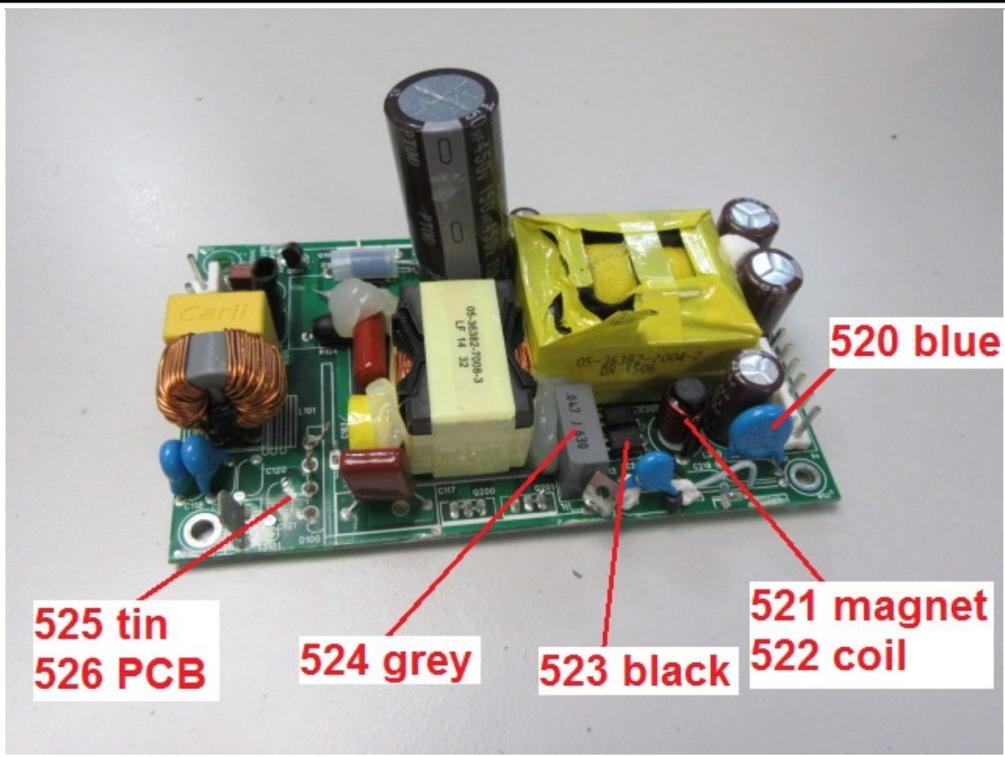
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Material No.	Cd	Cr^	Pb	Hg	Br^
M513	n.d.	d(*3)	n.d.	n.d.	n.a.
M514	n.d.	d(*3)	n.d.	n.d.	n.a.
M515	n.d.	n.d.	n.d.	n.d.	d(*1)
M516	n.d.	n.d.	n.d.	n.d.	n.d.
M517	n.d.	d(*3)	n.d.	n.d.	n.a.
M518	n.d.	n.d.	n.d.	n.d.	n.a.
M519	d(*1)	n.d.	n.d.	n.d.	n.a.



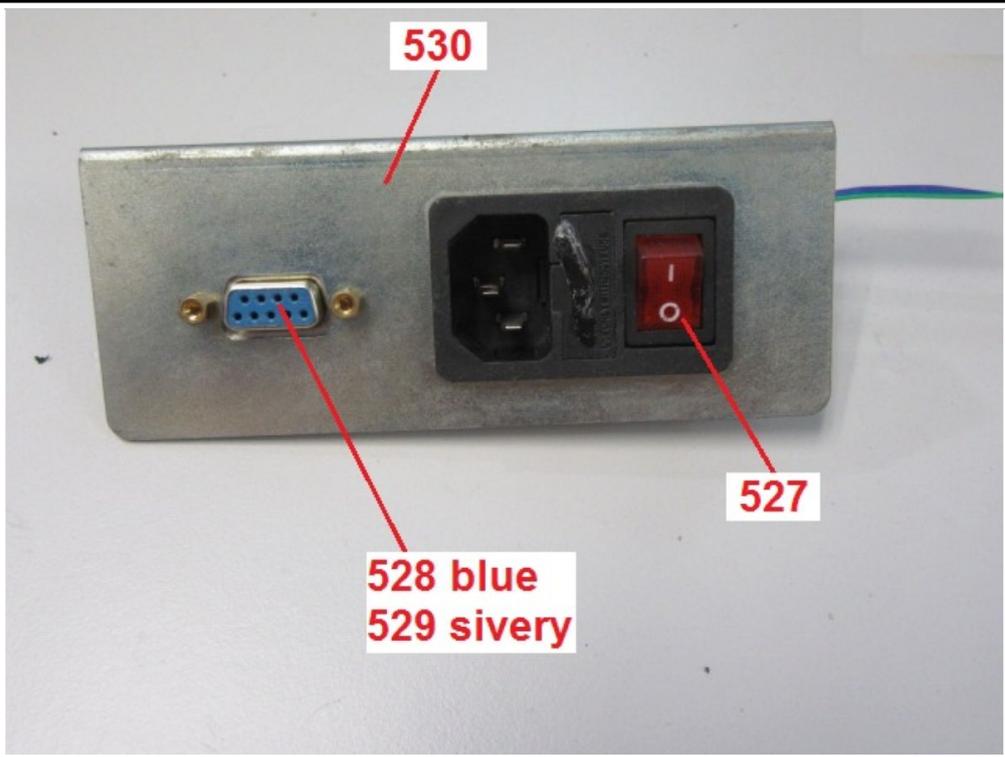
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Material No.	Cd	Cr^	Pb	Hg	Br^
M520	n.d.	n.d.	n.d.	n.d.	n.a.
M521	n.d.	d(*3)	n.d.	n.d.	n.a.
M522	n.d.	d(*3)	n.d.	n.d.	n.a.
M523	n.d.	n.d.	n.d.	n.d.	n.a.
M524	n.d.	n.d.	35	n.d.	n.a.
M525	n.d.	d(*3)	n.d.	n.d.	n.a.
M526	n.d.	n.d.	n.d.	n.d.	121



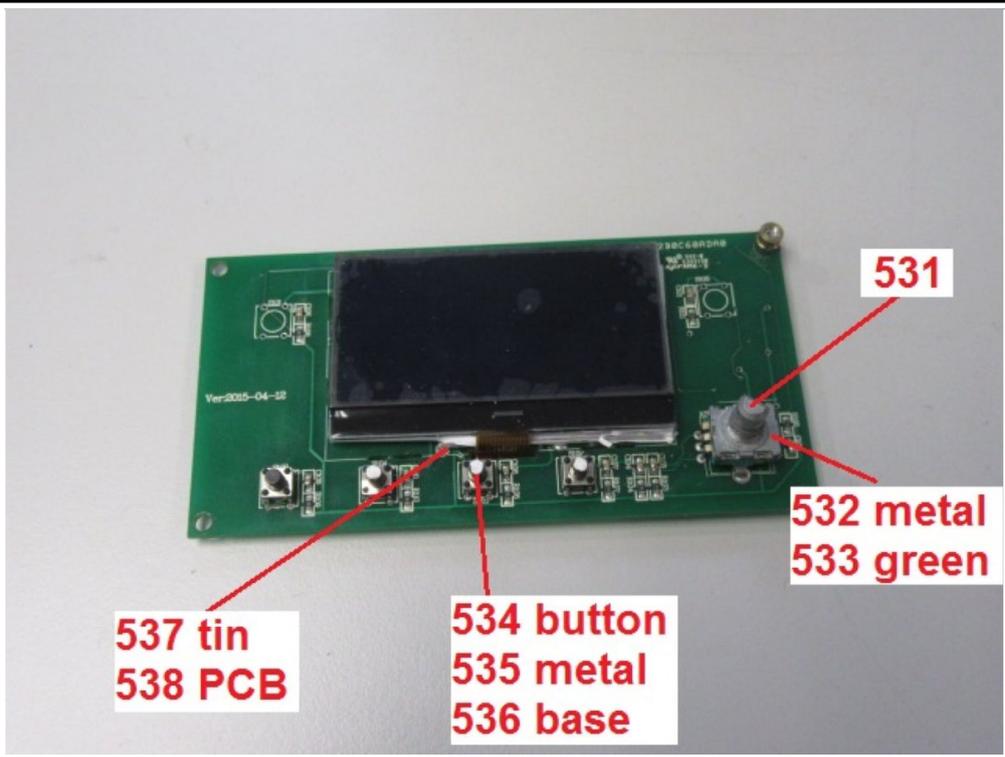
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M527	n.d.	n.d.	n.d.	n.d.	d(*1)
M528	n.d.	n.d.	n.d.	n.d.	209
M529	n.d.	d(*3)	171	n.d.	n.a.
M530	n.d.	d(*3)	n.d.	n.d.	n.a.



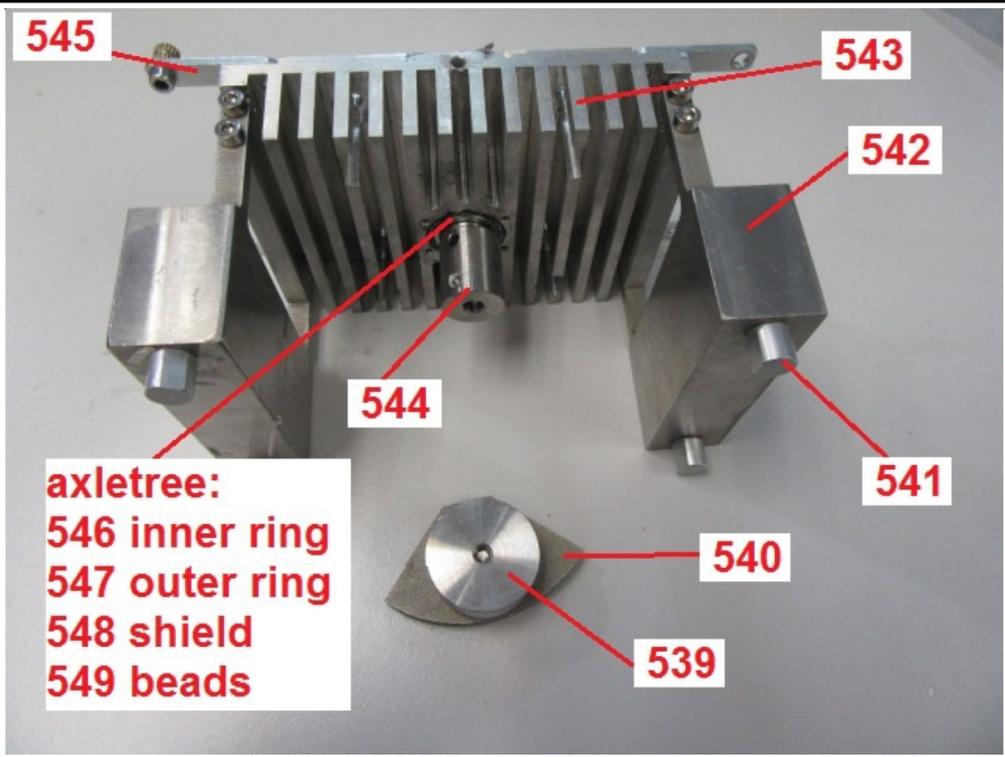
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Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M531	n.d.	d(*3)	d(*1)	n.d.	n.a.
M532	n.d.	d(*3)	167	n.d.	n.a.
M533	n.d.	n.d.	17	n.d.	d(*1)
M534	n.d.	d(*3)	n.d.	n.d.	n.a.
M535	n.d.	d(*3)	219	n.d.	n.a.
M536	n.d.	n.d.	n.d.	n.d.	n.a.
M538	n.d.	n.d.	n.d.	n.d.	d(*1)
M537	n.d.	d(*3)	n.d.	n.d.	n.a.



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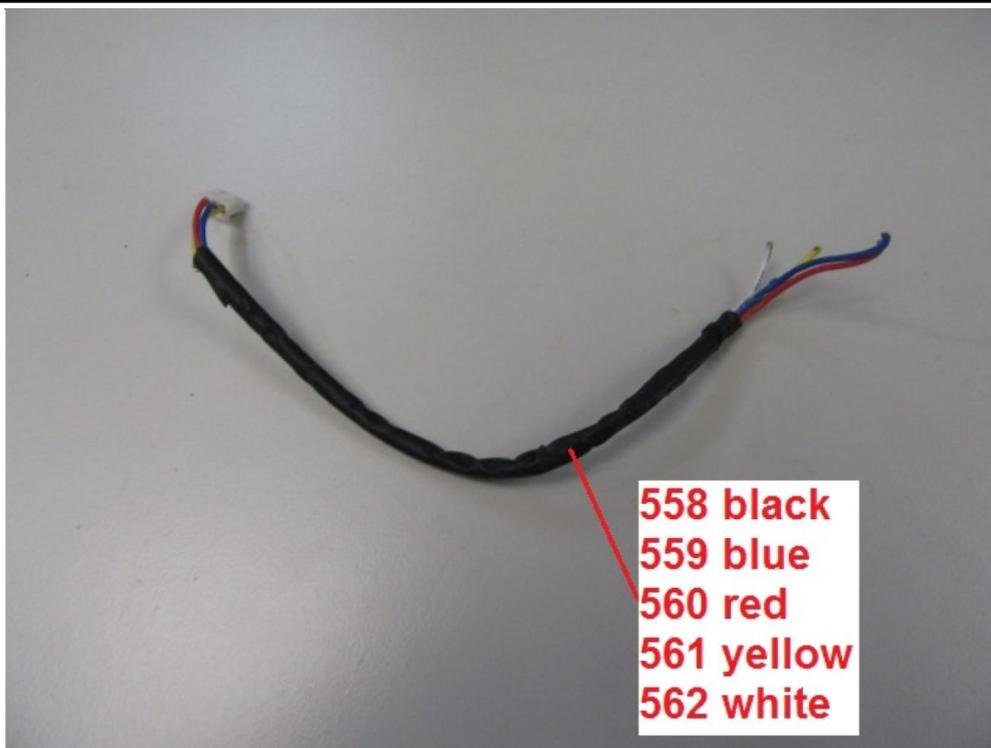


Material No.	Cd	Cr [^]	Pb	Hg	Br [^]
M539	n.d.	d(*3)	n.d.	n.d.	n.a.
M540	n.d.	d(*3)	n.d.	n.d.	n.a.
M541	n.d.	d(*3)	n.d.	n.d.	n.a.
M542	n.d.	d(*3)	n.d.	n.d.	n.a.
M543	n.d.	d(*3)	n.d.	n.d.	n.a.
M544	n.d.	d(*3)	n.d.	n.d.	n.a.
M545	n.d.	d(*3)	n.d.	n.d.	n.a.
M546	n.d.	d(*3)	n.d.	n.d.	n.a.
M547	n.d.	d(*3)	n.d.	n.d.	n.a.
M548	n.d.	d(*3)	n.d.	n.d.	n.a.
M549	n.d.	d(*3)	172	n.d.	n.a.



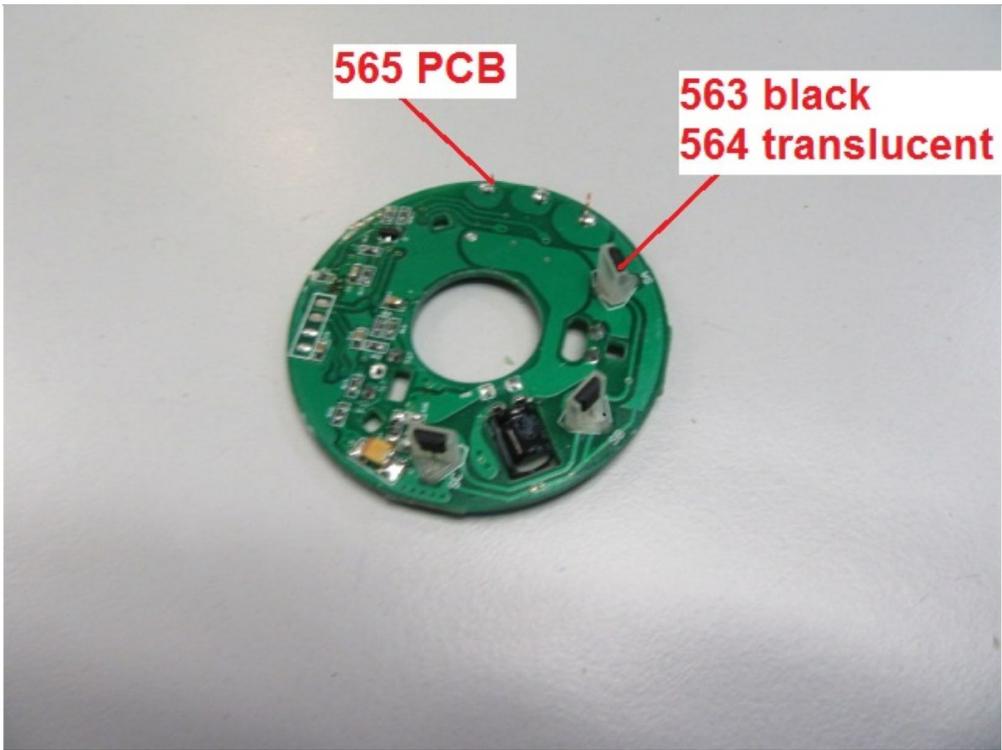
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Material No.	Cd	Cr^	Pb	Hg	Br^
M558	n.d.	n.d.	10	n.d.	n.d.
M559	n.d.	n.d.	n.d.	n.d.	n.d.
M560	n.d.	n.d.	n.d.	n.d.	n.d.
M561	n.d.	n.d.	n.d.	n.d.	n.d.
M562	n.d.	n.d.	n.d.	n.d.	n.d.

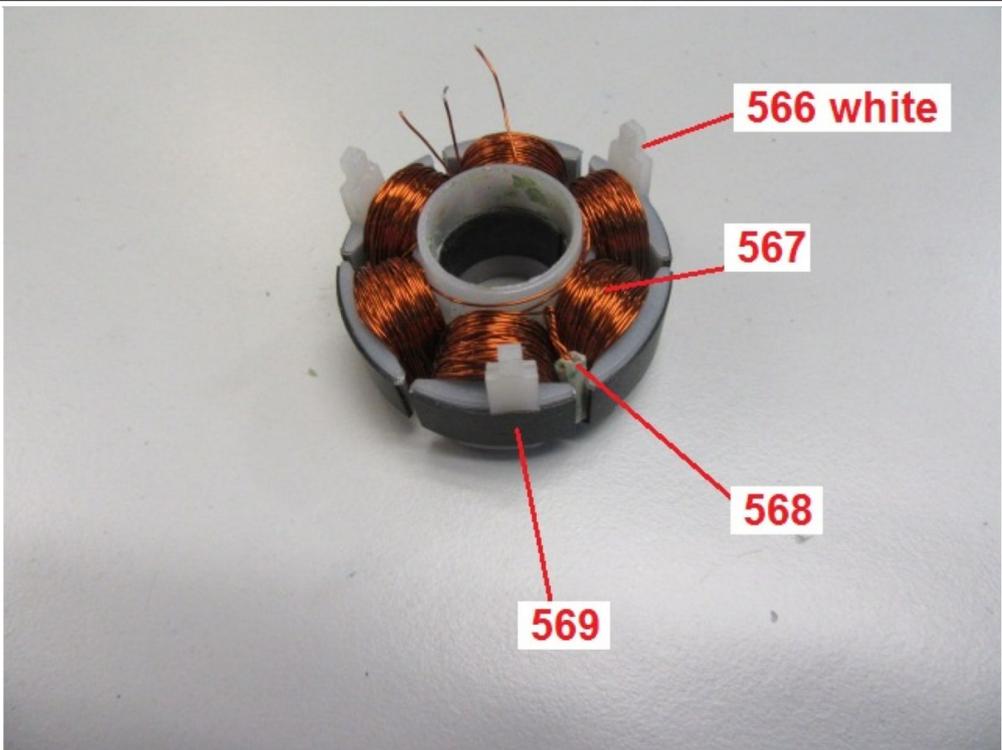
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Material No.	Cd	Cr^	Pb	Hg	Br^
M563	n.d.	n.d.	n.d.	n.d.	n.a.
M564	n.d.	n.d.	n.d.	n.d.	n.d.
M565	n.d.	n.d.	n.d.	n.d.	d(*1)

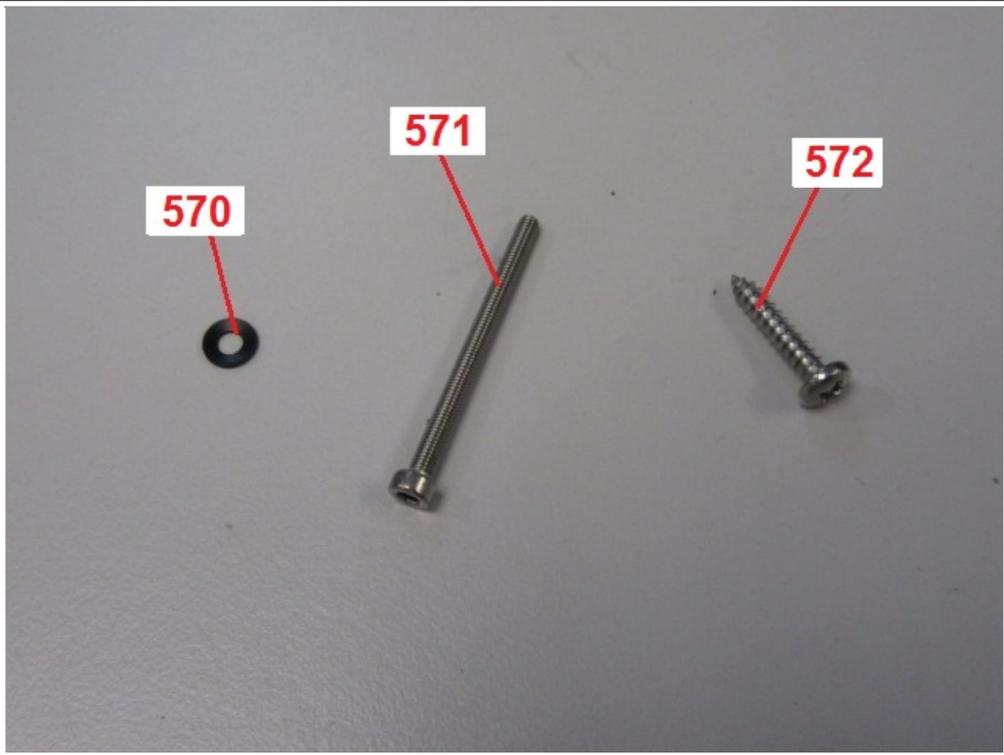


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Material No.	Cd	Cr^	Pb	Hg	Br^
M566	n.d.	n.d.	n.d.	n.d.	n.d.
M567	n.d.	d(*3)	n.d.	n.d.	n.a.
M568	n.d.	n.d.	n.d.	n.d.	n.d.
M569	n.d.	d(*3)	n.d.	n.d.	n.a.





Material No.	Cd	Cr^	Pb	Hg	Br^
M570	n.d.	d(*3)	164	n.d.	n.a.
M571	n.d.	d(*3)	n.d.	n.d.	n.a.
M572	n.d.	d(*3)	n.d.	n.d.	n.a.

Abbreviation: Pb = Lead
 Cd = Cadmium
 Hg = Mercury
 Cr = Chromium
 Br = Bromine
 n.a. = not applicable
 n.d.= not detected
 d.= detected

Material No.	Boiling-water-extraction for Cr(VI) (*3)
M001	negative
M009	negative
M010	negative
M015	negative
M022	negative
M024	negative



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M033	negative
M034	negative
M035	negative
M042	negative
M044	negative
M046	negative
M063	negative
M077	negative
M078	negative
M084	negative
M085	negative
M088	negative
M093	negative
M094	negative
M095	negative
M099	negative
M100	negative
M101	negative
M102	negative
M112	negative
M115	negative
M116	negative
M125	negative
M131	negative
M136	negative
M139	negative
M142	negative
M144	negative
M145	negative
M146	negative
M150	negative
M151	negative
M164	negative
M166	negative
M169	negative
M173	negative
M178	negative
M179	negative
M180	negative
M182	negative
M183	negative



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M185	negative
M188	negative
M189	negative
M191	negative
M193	negative
M200	negative
M209	negative
M213	negative
M214	negative
M215	negative
M217	negative
M219	negative
M221	negative
M222	negative
M223	negative
M224	negative
M225	negative
M228	negative
M234	negative
M240	negative
M241	negative
M247	negative
M251	negative
M259	negative
M263	negative
M265	negative
M266	negative
M272	negative
M277	negative
M279	negative
M281	negative
M287	negative
M289	negative
M290	negative
M291	negative
M295	negative
M296	negative
M298	negative
M302	negative
M308	negative
M315	negative



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M318	negative
M319	negative
M324	negative
M329	negative
M332	negative
M333	negative
M334	negative
M336	negative
M337	negative
M338	negative
M340	negative
M341	negative
M343	negative
M344	negative
M345	negative
M347	negative
M348	negative
M357	negative
M360	negative
M364	negative
M368	negative
M372	negative
M373	negative
M374	negative
M383	negative
M384	negative
M386	negative
M387	negative
M388	negative
M389	negative
M395	negative
M433	negative
M438	negative
M442	negative
M447	negative
M448	negative
M450	negative
M455	negative
M456	negative
M457	negative
M459	negative



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M460	negative
M468	negative
M470	negative
M474	negative
M475	negative
M478	negative
M482	negative
M492	negative
M495	negative
M496	negative
M502	negative
M503	negative
M513	negative
M514	negative
M517	negative
M521	negative
M522	negative
M525	negative
M529	negative
M530	negative
M531	negative
M532	negative
M534	negative
M535	negative
M539	negative
M540	negative
M541	negative
M542	negative
M543	negative
M544	negative
M545	negative
M546	negative
M547	negative
M548	negative
M549	negative
M550	negative
M552	negative
M554	negative
M555	negative
M557	negative
M567	negative



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M569	negative
M570	negative
M571	negative
M572	negative
M037	negative
M048	negative
M081	negative
M192	negative
M226	negative
M486	negative
M491	negative
M537	negative
M327	negative
M365	negative

Remark:

- (*1) The screening result was found in the inconclusive region, thus the further wet chemistry tests are suggested.
- (*3) For metal sample, the Chromium (VI) content has been confirmed with reference to IEC 62321-7-1:2015.
- (*5) Component(s)/ material(s) with an area of less than 2mm x2 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.

^ The result will reflect the total chromium and total bromine present in the sample. The presence or absence of hexavalent chromium, PBB, or PBDE shall be confirmed with reference to IEC 62321-6:2015.

XRF Screening limits for different matrices :

Material	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
Metallic	P ≤ 60 < X ≤ 140 < F	P ≤ 640 < X	P ≤ 670 < X ≤ 1330 < F	P ≤ 660 < X ≤ 1340 < F	NA
Polymeric	P ≤ 60 < X ≤ 140 < F	P ≤ 640 < X	P ≤ 670 < X ≤ 1330 < F	P ≤ 660 < X ≤ 1340 < F	P ≤ 290 < X
Electronic Components	P ≤ 40 < X ≤ 160 < F	P ≤ 440 < X	P ≤ 470 < X ≤ 1530 < F	P ≤ 460 < X ≤ 1540 < F	P ≤ 240 < X



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(HM) 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 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 62321:2008 Annex C
- For Leather material - Ref. to ISO 17075:2007

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

Material List:

Material No.	Material	Color	Location	Test plan
				A = Test HM only B = Test FR only C = Test HM + FR
M049	PCB board	Green	Refer to photo	B
M055	Plastic + printing	White/ blue	Refer to photo	B
M079	PCB board	Green	Refer to photo	B
M130	Plastic	White	Refer to photo	B
M138	Plastic	White	Refer to photo	B
M140	Plastic	White	Refer to photo	B
M146	Metal + plating	Black	Refer to photo	A
M150	Metal	Silvery	Refer to photo	A
M159	PCB board	White	Refer to photo	B
M175	PCB board	Green	Refer to photo	B
M191	Metal	Silvery	Refer to photo	A
M216	Glass	Transparent	Refer to photo	A
M218	Plastic	Black	Refer to photo	B
M221	Metal	Silvery	Refer to photo	A
M229	Plastic	Blue	Refer to photo	B
M235	PCB board	Green	Refer to photo	B
M270	PCB board	Green	Refer to photo	B
M274	Plastic	Black	Refer to photo	B
M278	Plastic	Black	Refer to photo	B
M288	PCB board	Green	Refer to photo	B
M293	Plastic + printing	Blue/ black	Refer to photo	B
M296	Ceramic	Black	Refer to photo	A
M301	Plastic	White	Refer to photo	B

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M304	Plastic	Yellow	Refer to photo	B
M328	PCB board	Green	Refer to photo	B
M355	PCB board	Green	Refer to photo	B
M363	Plastic	Black	Refer to photo	B
M365	Metal	Copper	Refer to photo	A
M366	Plastic	Black	Refer to photo	B
M367	PCB board	Green	Refer to photo	B
M368	Metal	Silvery	Refer to photo	A
M382	PCB board	Brown/ green	Refer to photo	B
M385	Plastic	Black	Refer to photo	A
M394	PCB board	Green/ brown	Refer to photo	B
M396	Plastic	Grey	Refer to photo	B
M445	Plastic	White	Refer to photo	B
M454	PCB board	Green	Refer to photo	B
M455	Metal	Golden	Refer to photo	A
M461	Plastic	Black	Refer to photo	B
M469	PCB board	Green/ brown	Refer to photo	B
M472	PCB board	Green/ brown	Refer to photo	B
M483	Plastic	Black	Refer to photo	B
M487	PCB board	Green	Refer to photo	B
M490	PCB board	Green	Refer to photo	B
M493	Plastic + printing	White/ blue	Refer to photo	B
M515	PCB board	Brown	Refer to photo	B
M519	Electronic components	Brown	Refer to photo	A
M527	Plastic + printing	Red/ white	Refer to photo	B
M531	Metal	Silvery	Refer to photo	A
M533	Plastic	Green	Refer to photo	B
M538	PCB board	Green	Refer to photo	B
M550	Metal	Silvery	Refer to photo	A
M565	PCB board	Green	Refer to photo	B

Abbreviation: HM (Heavy metal) = Cd, Pb, Hg, Cr (VI)
FR (Flame Retardant) = PBBs, PBDEs



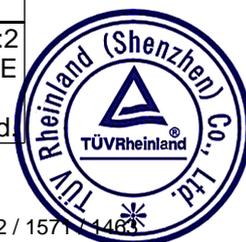
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Test Result:

	Cd	Cr(VI)	Pb	Hg	PBBs (*)	PBDEs (*)
Maximum Permissible Limit (mg/kg)	100	1000	1000	1000	1000	1000

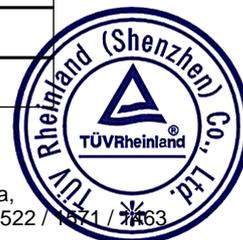
Material No.	(mg/kg)					
	Cd	Cr [^]	Pb	Hg	PBBs (*)	PBDEs (*)
	RL (mg/kg)					
	2	2	2	2	-- (*)	-- (*)
M049	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M055	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M079	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M130	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M138	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M140	n.a.	n.a.	n.a.	n.a.	n.d.	DecaBDE:6 , Others: n.d.
M146	n.a.	n.a.	41	n.a.	n.a.	n.a.
M150	n.a.	n.a.	32	n.a.	n.a.	n.a.
M159	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M175	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M191	5	n.a.	n.a.	n.a.	n.a.	n.a.
M216	n.a.	n.a.	142	n.a.	n.a.	n.a.
M218	n.a.	n.a.	n.a.	n.a.	n.d.	NonaBDE:9 ,DecaBDE: 113, Others: n.d.
M221	n.a.	n.a.	34	n.a.	n.a.	n.a.
M229	n.a.	n.a.	n.a.	n.a.	n.d.	DecaBDE:1 3, Others: n.d.
M235	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M270	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M274	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M278	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M288	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M293	n.a.	n.a.	n.a.	n.a.	n.d.	NonaBDE:2 0,DecaBDE :153, Others: n.d.



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M296	n.a.	n.a.	15	n.a.	n.a.	n.a.
M301	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M304	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M328	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M355	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M363	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M365	20	n.a.	26300(*2)	n.a.	n.a.	n.a.
M366	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M367	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M368	n.a.	n.a.	36	n.a.	n.a.	n.a.
M382	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M385	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M394	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M396	n.a.	n.a.	n.a.	n.a.	n.d.	NonaBDE:1 2,DecaBDE :102, Others: n.d.
M445	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M454	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M455	n.a.	n.a.	2570(*2)	n.a.	n.a.	n.a.
M461	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M469	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M472	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M483	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M487	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M490	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M493	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M515	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M519	n.d.	n.a.	n.a.	n.a.	n.a.	n.a.
M527	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M531	n.a.	n.a.	440	n.a.	n.a.	n.a.
M533	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M538	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.
M550	n.a.	n.a.	482	n.a.	n.a.	n.a.
M565	n.a.	n.a.	n.a.	n.a.	n.d.	n.d.



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Abbreviation: Pb = Lead
Cd = Cadmium
Hg = Mercury
Cr = Chromium
Cr (VI) = Chromium (VI)
PBBs = Total Polybrominated Biphenyls
PBDEs = Total Polybrominated Diphenyl Ethers
n.d. = Not Detected (<RL)
RL = Reporting Limit
n.a. = Not Applicable
^ = The total Chromium have been determined
mg/kg = milligram per kilogram



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Remark:

	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 According to Annex of 2011/65/EU, "Copper alloy containing up to 4 % lead by weight". is exempt from the requirements of Article 4(1). This exemption applies to testing sample No. M365, M455.

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

Reporting Limit (mg/kg)		
PBBs	Bromobiphenyl	1
	Dibromobiphenyl	1
	Tribromobiphenyl	1
	Tetrabromobiphenyl	1
	Pentabromobiphenyl	2
	Hexabromobiphenyl	2
	Heptabromobiphenyl	2
	Octabromobiphenyl	5
	Nonabromobiphenyl	5
	Decabromobiphenyl	5
PBDEs	Bromodiphenylether	1
	Dibromodiphenyl ether	1
	Tribromodiphenyl ether	1
	Tetrabromodiphenyl ether	1
	Pentabromodiphenyl ether	2
	Hexabromodiphenyl ether	2
	Heptabromodiphenyl ether	2
	Octabromodiphenyl ether	5
	Nonabromodiphenyl ether	5
	Decabromodiphenyl ether	5



Sample Photos



Article 1



Article 2



Article 3



Article 4



Article 5



Article 6

- END -



General Terms and Conditions of Business of TÜV Rheinland in Greater China

1. Scope

1.1 These General Terms and Conditions of Business of TÜV Rheinland in Greater China is made between the client and one or more member entities of TÜV Rheinland in Greater China as applicable as the case may be ("TÜV Rheinland").

1.2 The following terms and conditions apply to agreed services including consultancy services, information, deliveries and similar services as well as ancillary services and other secondary obligations provided within the scope of contract performance.

1.3 Any standard terms and conditions of the client of any nature shall not apply and shall hereby be expressly excluded. No standard contractual terms and conditions of the client shall form part of the contract even if TÜV Rheinland does not explicitly object to them.

2. Quotations

Unless otherwise agreed, all quotations submitted by TÜV Rheinland can be changed by TÜV Rheinland without notice prior to its acceptance and confirmation by the other party.

3. Coming into effect and duration of contracts

3.1 The contract shall come into effect for the agreed terms upon the quotation letter of TÜV Rheinland or a separate contractual document being signed by both contracting parties, or upon the works requested by the client being carried out by TÜV Rheinland. If the client instructs TÜV Rheinland without receiving a quotation from TÜV Rheinland (quotation), TÜV Rheinland is, in its sole discretion, entitled to accept the order by giving written notice of such acceptance (including notice sent via electronic means) or by performing the requested services.

3.2 The contract term starts upon the coming into effect of the contract in accordance with article 3.1 and shall continue for the term agreed in the contract.

3.3 If the contract provides for an extension of the contract term, the contract term will be extended by the term provided for in the contract unless terminated in writing by either party with a six-week notice prior to the end of the contractual term.

4. Scope of services

4.1 The scope of the services shall be decided solely by a unanimous declaration issued by both parties. If no such declaration exists, then the written confirmation of order by TÜV Rheinland shall be decisive.

4.2 The agreed services shall be performed in compliance with the regulations in force at the time the contract is entered into.

4.3 TÜV Rheinland is entitled to determine, in its sole discretion, the method and nature of the assessment unless otherwise agreed in writing or if mandatory provisions require a specific procedure to be followed.

4.4 On execution of the work there shall be no simultaneous assumption of any guarantee of the correctness (proper quality) and working order of either tested or examined parts nor of the installation as a whole and its upstream and/or downstream processes, organisations, use and application in accordance with regulations, nor of the systems on which the installation is based. In particular, TÜV Rheinland shall assume no responsibility for the construction, selection of materials and assembly of installations examined, nor for their use and application in accordance with regulations unless these questions are expressly covered by the contract.

4.5 In the case of inspection work, TÜV Rheinland shall not be responsible for the accuracy or checking of the safety programmes or safety regulations on which the inspections are based, unless otherwise expressly agreed in writing.

5. Performance periods/dates

5.1 The contractually agreed periods/dates of performance are based on estimates of the work involved which are prepared in line with the details provided by the client. They shall only be binding if being confirmed as binding by TÜV Rheinland in writing.

5.2 If binding periods of performance have been agreed, these periods shall not commence until the client has submitted all required documents to TÜV Rheinland.

5.3 Articles 5.1 and 5.2 also apply, even without express approval by the client, to all extensions of agreed periods/dates of performance not caused by TÜV Rheinland.

6. The client's obligation to cooperate

6.1 The client shall guarantee that all cooperation required on its part, its agents third parties will be provided in good time and at no cost to TÜV Rheinland.

6.2 Design documents, supplies, auxiliary staff, etc. necessary for performance of the services shall be made available free of charge by the client. Moreover, collaborative action of the client must be undertaken in accordance with legal provisions, standards, safety regulations and accident prevention instructions.

6.3 The client shall bear any additional cost incurred on account of work having to be redone or being delayed as a result of late, incorrect or incomplete information provided by or lack of proper cooperation from the client. Even where a fixed or maximum price is agreed, TÜV Rheinland shall be entitled to charge extra fees for such additional expense.

7. Invoicing of work

7.1 If the scope of performance is not laid down in writing when the order is placed, invoicing shall be based on costs actually incurred. If no price is agreed in writing, invoicing shall be made in accordance with the price list of TÜV Rheinland valid at the time of performance.

7.2 Unless otherwise agreed, work shall be invoiced according to the progress of the work.

7.3 If the execution of an order extends over more than one month and the value of the contract or the agreed fixed price exceeds €2,500.00 or equivalent value in local currency, TÜV Rheinland may demand payments on account or in instalments.

8. Payment terms

8.1 All invoice amounts shall be due for payment without deduction on receipt of the invoice. No discounts shall be granted.

8.2 Payments shall be made to the bank account of TÜV Rheinland as indicated on the invoice, stating the invoice and customer numbers.

8.3 In cases of default of payment, TÜV Rheinland shall be entitled to claim default interest at the applicable short term loan interest rate publicly announced by a reputable commercial

bank in the country where TÜV Rheinland is located. At the same time, TÜV Rheinland reserves the right to claim further damages.

8.4 Should the client default in payment of the invoice despite being granted a reasonable grace period, TÜV Rheinland shall be entitled to cancel the contract, withdraw the certificate, claim damages for non-performance and refuse to continue performance of the contract.

8.5 The provisions set forth in article 8.4 shall also apply in cases involving returned cheques, cessation of payment, commencement of insolvency proceedings against the client's assets or cases in which the commencement of insolvency proceedings has been dismissed due to lack of assets.

8.6 Objections to the invoices of TÜV Rheinland shall be submitted in writing within two weeks of receipt of the invoice.

8.7 TÜV Rheinland shall be entitled to demand appropriate advance payments.

8.8 TÜV Rheinland shall be entitled to raise its fees at the beginning of a month if overheads and/or purchase costs have increased. In this case, TÜV Rheinland shall notify the client in writing of the rise in fees. This notification shall be issued one month prior to the date on which the rise in fees shall come into effect (period of notice of changes in fees). If the rise in fees remains under 5% per contractual year, the client shall not have the right to terminate the contract. If the rise in fees exceeds 5% per contractual year, the client shall be entitled to terminate the contract by the end of the period of notice of changes in fees. If the contract is not terminated, the changed fees shall be deemed to have been agreed upon by the time of the expiry of the notice period.

8.9 Only legally established and undisputed claims may be offset against claims by TÜV Rheinland.

9. Acceptance

9.1 Any part of the work ordered which is complete in itself may be presented by TÜV Rheinland for acceptance as an instalment. The client shall be obliged to accept it immediately.

9.2 If the client fails to fulfil its acceptance obligation immediately, acceptance shall be deemed to have taken place 4 calendar weeks after completion of the work provided that TÜV Rheinland has specifically made the client aware of the aforementioned deadline upon completion of the work.

10. Confidentiality

10.1 For the purpose of these terms and conditions, "confidential information" means all information, documents, images, drawings, know-how, data, samples and project documentation which one party (the "disclosing party") hands over, transfers or otherwise discloses to the other party (the "receiving party"). Confidential information also includes paper copies and electronic copies of such information.

10.2 The disclosing party shall mark all confidential information disclosed in written form as confidential before passing it onto the receiving party. The same applies to confidential information transmitted by e-mail. If confidential information is disclosed orally, the receiving party shall be appropriately informed in advance and the disclosing party shall confirm in writing the confidentiality nature of the information within five working days of oral disclosure. Where the disclosing party fails to do so within the stipulated period, the receiving party shall not take any confidentiality obligations hereunder towards such information.

10.3 All confidential information which the disclosing party transmits or otherwise discloses to the receiving party during performance of work by TÜV Rheinland:

a) may only be used by the receiving party for the purposes of performing the contract, unless expressly otherwise agreed in writing by the disclosing party;

b) may not be copied, distributed, published or otherwise disclosed by the receiving party, unless this is necessary for fulfilling the purpose of the contract or TÜV Rheinland is required to pass on confidential information, inspection reports or documentation to the government authorities, judicial court, accreditation bodies or third parties that are involved in the performance of the contract;

c) must be treated by the receiving party with the same level of confidentiality as the receiving party uses to protect its own confidential information, but never with a lesser level of confidentiality than that which is reasonably required.

10.4 The receiving party may disclose any confidential information received from the disclosing party only to those of its employees who need this information to perform the services required for the contract. The receiving party undertakes to oblige these employees to observe the same level of secrecy as set forth in this confidentiality clause.

10.5 Information for which the receiving party can furnish proof that:

a) it was generally known at the time of disclosure or has become general knowledge without violation of this confidentiality clause by the receiving party; or

b) it was disclosed to the receiving party by a third party entitled to disclose this information; or

c) the receiving party already possessed this information prior to disclosure by the disclosing party; or

d) the receiving party developed it itself, irrespective of disclosure by the disclosing party, shall not be deemed to constitute "confidential information" as defined in this confidentiality clause.

10.6 All confidential information shall remain the property of the disclosing party. The receiving party hereby agrees to immediately (i) return all confidential information, including all copies, to the disclosing party, and/or (ii) on request by the disclosing party, to destroy all confidential information, including all copies, and confirm the destruction of this confidential information to the disclosing party in writing, at any time if so requested by the disclosing party but at the latest and without special request after termination or expiry of the contract. This does not extend to include reports and certificates prepared for the client solely for the purpose of fulfilling the obligations under the contract, which shall remain with the client. However, TÜV Rheinland is entitled to make file copies of such reports, certificates and confidential information that forms the basis for preparing these reports and certificates in order to evidence the correctness of its results and for general documentation purposes required by laws, regulations and the requirements of working procedures of TÜV Rheinland.

10.7 From the start of the contract and for a period of three years after termination or expiry of the contract, the receiving party shall maintain strict secrecy of all confidential information and

shall not disclose this information to any third parties or use it for itself.

11. Copyrights

11.1 TÜV Rheinland shall retain all exclusive copyrights in the expert reports, test results, calculations, presentations etc. prepared by TÜV Rheinland.

11.2 The client may only use such expert reports, test results, calculations, presentations etc. prepared within the scope of the contract for the contractually agreed purpose.

11.3 The client may use test reports, test results, expert reports, etc. only complete and unshortened. Any publication or duplication for advertising purposes needs the prior written approval of TÜV Rheinland.

12. Liability of TÜV Rheinland

12.1 Irrespective of the legal basis, in the event of a breach of contractual obligations or tort, the liability of TÜV Rheinland for all damages, losses and reimbursement of expenses caused by TÜV Rheinland, its legal representatives and/or employees shall be limited to: (i) in the case of a contract with a fixed overall fee, three times the overall fee for the entire contract; (ii) in the case of a contract for annually recurring services, the agreed annual fee; (iii) in the case of a contract expressly charged on a time and material basis, a maximum of 20,000 Euro or equivalent amount in local currency; and (iv) in the case of a framework agreement that provides for the possibility of placing individual orders, three times of the fee for the individual order under which the damages or losses have occurred. Notwithstanding the above, in the event that the total and accumulated liability calculated according to the foregoing provisions exceeds 2.5 Million Euro or equivalent amount in local currency, the total and accumulated liability of TÜV Rheinland shall be only limited to and shall not exceed the said 2.5 Million Euro or equivalent amount in local currency.

12.2 The limitation of liability according to article 12.1 above shall not apply to damages and/or losses caused by malice, intent or gross negligence on the part of TÜV Rheinland or its vicarious agents. Such limitation shall not apply to damages for a person's death, physical injury or illness.

12.3 In cases involving a fundamental breach of contract, TÜV Rheinland will be liable even where minor negligence is involved. For this purpose, a "fundamental breach" is breach of a material contractual obligation, the performance of which permits the due performance of the contract. Any claim for damages for a fundamental breach of contract shall be limited to the amount of damages reasonably foreseen as a possible consequence of such breach of contract at the time of the breach (reasonably foreseeable damages), unless any of the circumstances described in article 12.2 applies.

12.4 TÜV Rheinland shall not be liable for the acts of the personnel made available by the client to support TÜV Rheinland in the performance of its services under the contract, unless such personnel made available is regarded as vicarious agent of TÜV Rheinland. If TÜV Rheinland is not liable for the acts of the personnel made available by the client under the foregoing provision, the client shall indemnify TÜV Rheinland against any claims made by third parties arising from or in connection with such personnel's acts.

12.5 The limitation periods for claims for damages shall be based on statutory provisions.

12.6 None of the provisions of this article 12 changes the burden of proof to the disadvantage of the client.

13. Partial invalidity, written form, place of jurisdiction and dispute resolution

13.1 All amendments and supplements must be in writing in order to be effective. This also applies to amendments and supplements to this clause 13.1.

13.2 Should one or several of the provisions under the contract and/or these terms and conditions be or become ineffective, the contracting parties shall replace the invalid provision with a legally valid provision that comes closest to the content of the invalid provision in legal and commercial terms.

13.3 Unless otherwise stipulated in the contract, the governing law of the contract and these terms and conditions shall be chosen following the rules as below:

a) if TÜV Rheinland in question is legally registered and existing in the People's Republic of China, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of the People's Republic of China.

b) if TÜV Rheinland in question is legally registered and existing in Taiwan, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Taiwan.

c) if TÜV Rheinland in question is legally registered and existing in Hong Kong, the contracting parties hereby agree that the contract and these terms and conditions shall be governed by the laws of Hong Kong.

13.4 Any dispute in connection with the contract and these terms and conditions or the execution thereof shall be settled friendly through negotiations.

Unless otherwise stipulated in the contract, if no settlement or no agreement in respect of the extension of the negotiation period can be reached within two months of the arising of the dispute, the dispute shall be submitted:

a) in the case of TÜV Rheinland in question being legally registered and existing in the People's Republic of China, to China International Economic and Trade Arbitration Commission (CIETAC) to be settled by arbitration under the Arbitration Rules of CIETAC in force when the arbitration is submitted. The arbitration shall take place in Beijing, Shanghai, Shenzhen or Chongqing as appropriately chosen by the claiming party.

b) in the case of TÜV Rheinland in question being legally registered and existing in Taiwan, to Chinese Arbitration Association Taipei Branch to be arbitrated in accordance with its then current Rules of Arbitration. The arbitration shall take place in Taipei.

c) in the case of TÜV Rheinland being legally registered and existing in Hong Kong, to Hong Kong International Arbitration Centre (HKIAC) to be settled by arbitration under the HKIAC Administered Arbitration Rules in force when the Notice of Arbitration is submitted in accordance with these rules. The arbitration shall take place in Hong Kong.

The decision of the relevant arbitration tribunal shall be final and binding on both parties. The arbitration fee shall be borne by the losing party.