

Ersatzteilliste

Spare parts list

INDUSTREX M37 PLUS

NDT - Film processor



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NDT - Film processor

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Abkürzungen und Erklärungen**Abbreviations and Definitions****Abkürzungen / abbreviations****Erklärungen****Definitions**

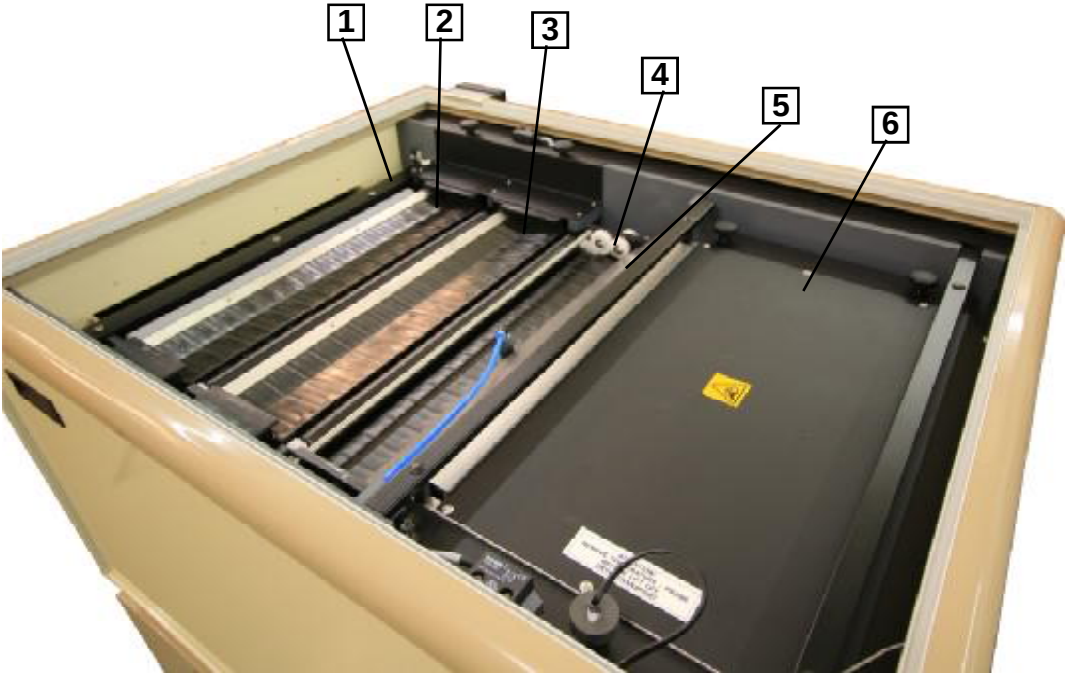
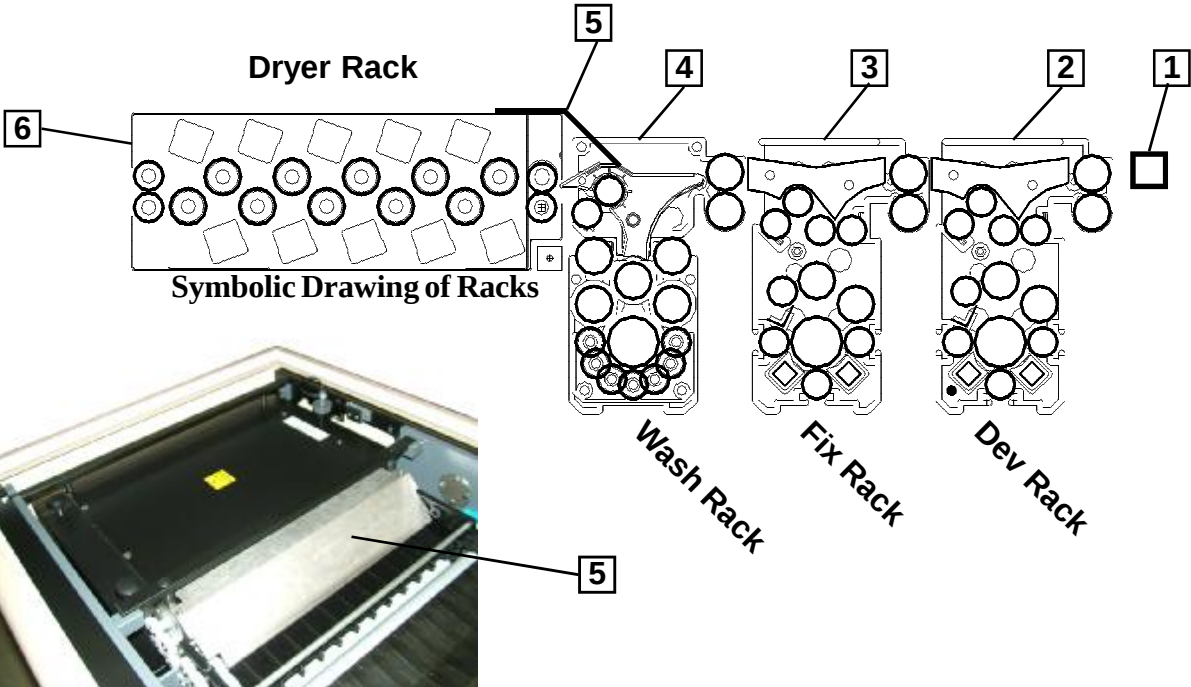
W		Wasser	Wash
E / Dev		Entwickler	Developer
F / Fix		Fixierer	Fixer
MW		Mittelwalzen	Centre rollers
M 5x20		Dimension laut DIN M = metrisch 5 = Außen-Ø 20= Länge	Dimension according to DIN M = metric 5 = outside-Ø 20= length
A 4		Material von Schrauben, Muttern, ...	Material of screws, nuts, ...
PT		Spezialschraube für Kunststoff	Special screw for plastic
PDB		Lastverteilung	Power distribution board
CPU		Rechereinheit	Central processor unit
PCB		Bedienteil	Control board
OL		Online	Online
Z= / T		Zähne	Teeth
m 1.5		Modul von Zahnradern	Tooth pitch
T5 B6		Teilung Breite	spacing width
		5mm 6mm	5mm 6mm
KS PA PE POM PP PVC	}	Materialien	Materials
EH		Eingabehöhe	Feed-level
TR		Trockner	Dryer

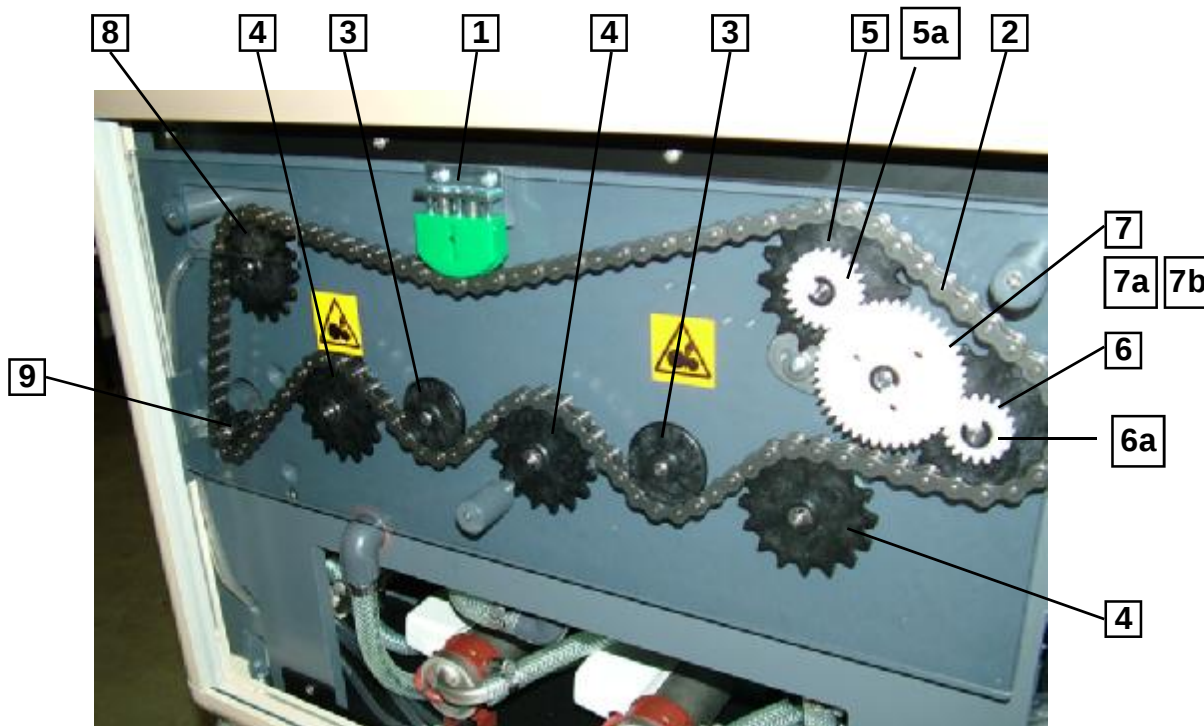


pos.	Teile Nr.:/part no.	Beschreibung	Description
1	504 370	Deckel M37 Plus	Main cover M37 Plus
2	504 379	Eingabebblech M37 Plus	Loading guide M37 Plus
3	504 381	Eingabeklappe M37 Plus	Loading lid M37 Plus
4	89 01 402	Griffschale klein	Handle small
5	89 01 403	Griffschale	Handle
6	500 560	Seitenverkleidung M37 Plus	Side panel M37 Plus
7	90 20 077	Hauptschalter	Main switch
8	90 30 904	Gerätestecker mit Netzfilter	Powersocket with emc-filter
9	90 43 685	Netzanschlußkabel	Power cord



pos.	Teile Nr.:/part no.	Beschreibung	Description
1	141 398	Filmkorb M37 Plus	Film basket M37 Plus
2	90 17 572	Stellfuß M37 Plus	Frame leg M37 Plus
3	504 386	Rahmen M37 Plus	Frame M37 Plus
4	90 00 042	Stellfuss M37 Plus	Levelling feet M37 Plus
5	90 21 102	Deckelmagnet	Magnet for main cover

			
			
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	140 848	Sensorbar M37 Plus kompl.	Sensorbar M37 Plus assy
2	141 157	Entwicklerrack M37 Plus kompl	Dev Rack assy M37 Plus
3	141 369	Fixierrack M37 Plus kompl.	Fix Rack assy M37 Plus
4	141 410	Wasserrack M37 Plus kompl.	Wash Rack assy M37 Plus
5	503 736	Schutzblech M37 Plus	Protection cover M37 Plus
6	140 812	Trocknerrack M37 Plus kompl.	Dryer Rack assy M37 Plus



pos.	Teile Nr.:/part no.	Beschreibung	Description
1	89 07 453	Kettenspanner	Chain tensioner
2	90 61 255	Kette mit Kettenschloss kompl.	Chain with lock assy
3	90 17 361	Kettenumlenkrad Ø 45 Z16	Chain idler wheel Ø 45 Z16
4	90 12 040	Kettenrad Z16/D -Loch	Chain gear 16T D-hole
5	500 587	Zahnradpaar Z16 / D-60Z	Gear assy 16T / D-60Z
5a	500 586	Zahnrad Z21 D-Bor	Gear T-21 D-BOR
6	501 132	Zahnradpaar Z16 / D-60Z	Gear assy 16T / D-60Z
6a	501 393	Zahnrad Z-17 D-BOR	Gear T-17 D-BOR
7	501 062	Platte	mounting plate
7a	501 063	Welle	Shaft
7b	90 17 304	Zahnrad Z-41 D-BOR	Gear T-41 D-BOR
8	90 12 041	Kettenrad Z16/O -Loch	Chain gear 16T O-hole
9	90 17 615	Kettenrad Z8	Main drive chain gear 8T

locking washer plastic



90 12 116

locking washer metal



90 81 881



1

3

2

pos.	Teile Nr.:/part no.	Beschreibung	Description
1	109686 90 45 032	Filtergehäuse M37 Plus kompl. Filtereinsatz	Filterhousing M37 Plus assy Filter
2	90 17 431	Abwassersammler M37 Plus	Sewage collector M37 Plus
3	90 45 061	Absperrhahn	Stop cock

Snapper weiss / white

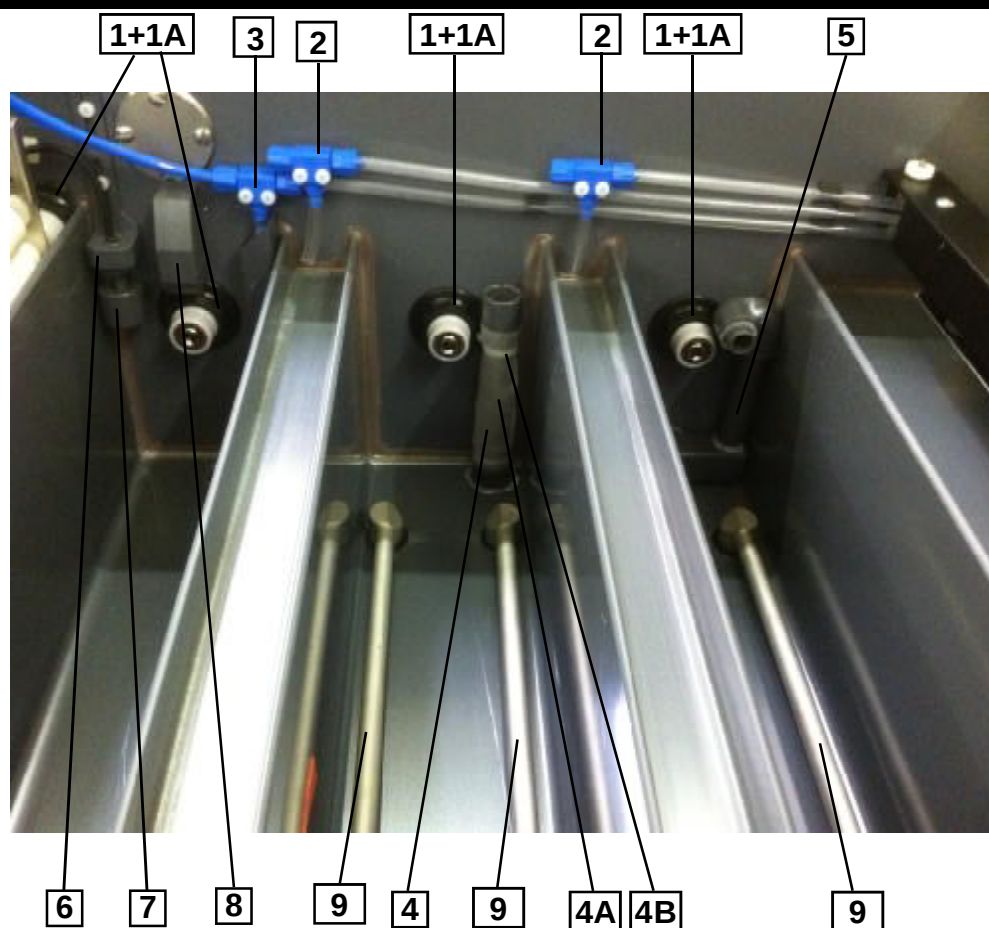
6	90 81 751
8	90 81 752
10	90 81 753
12	90 81 754
14	90 81 756



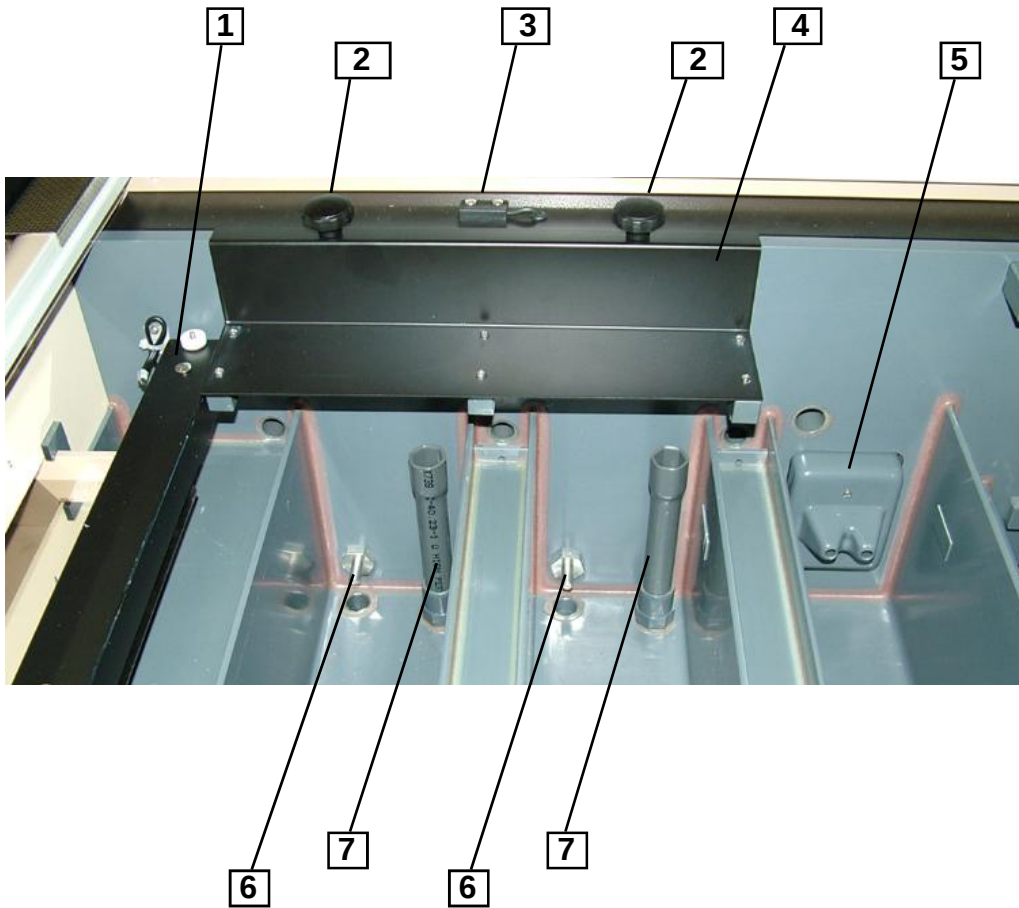
Schlauchschelle / Hose clamp

8-16	90 81 822
12-22	90 81 826
16-27	90 81 827
25-40	90 81 825

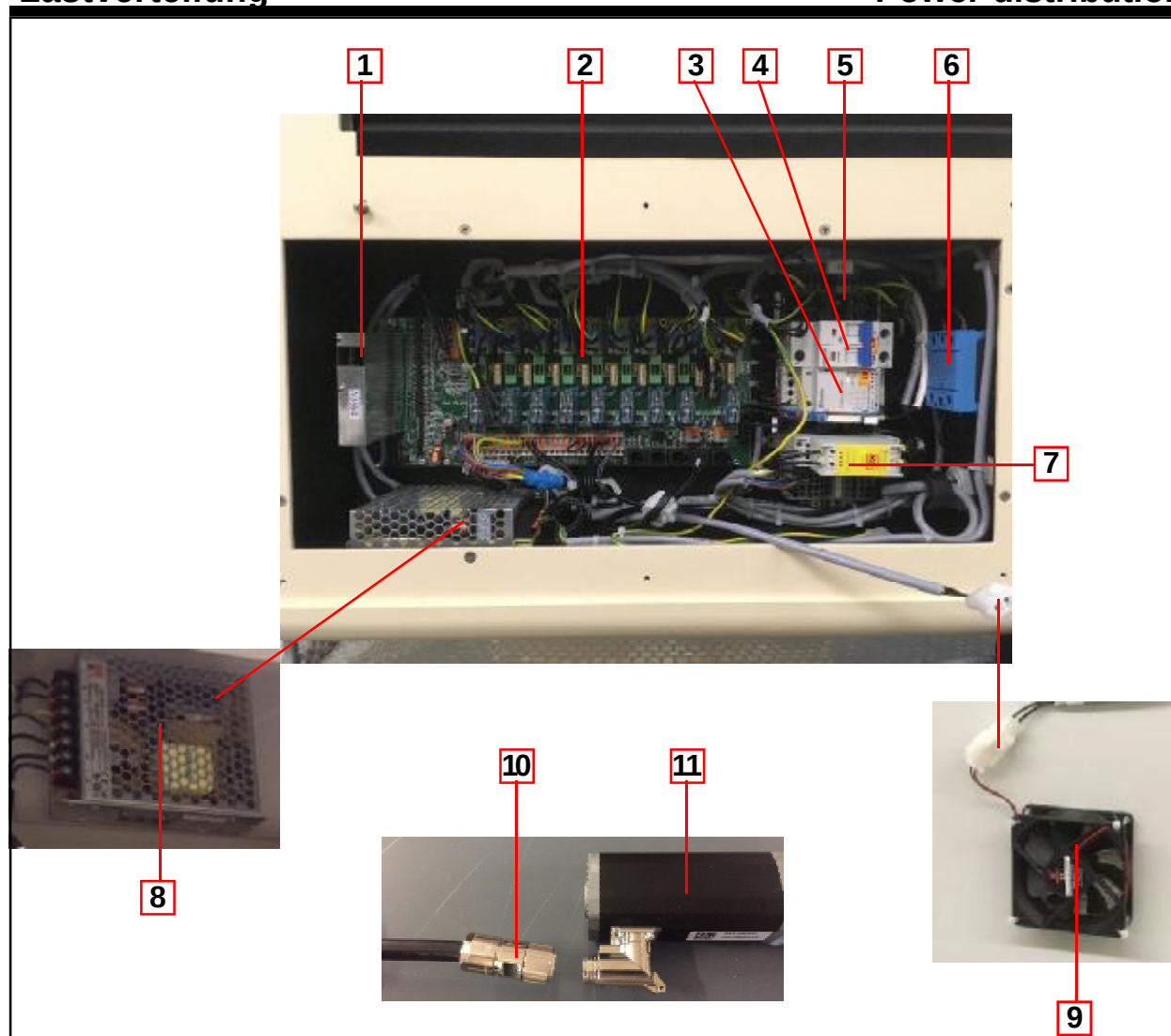




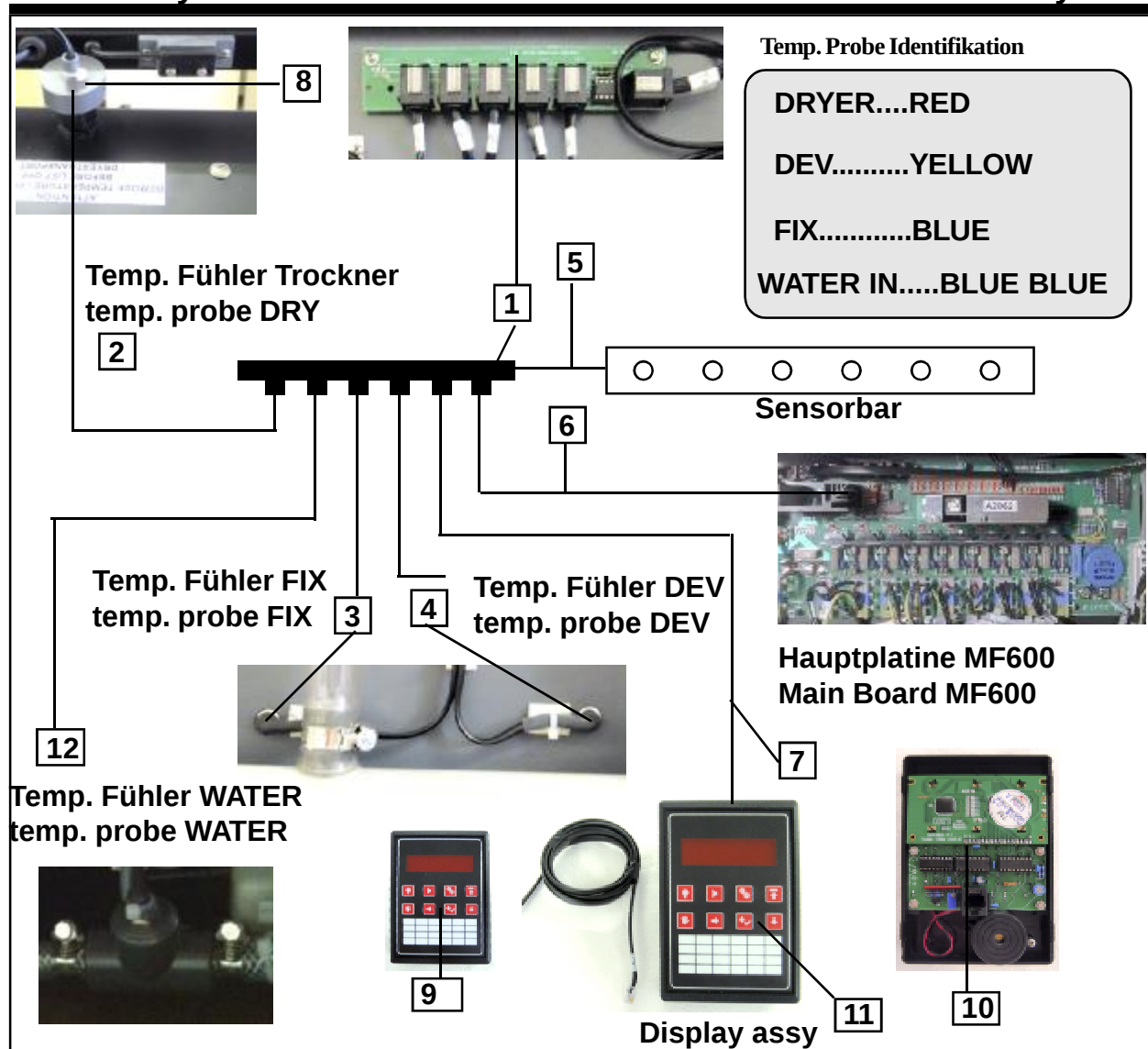
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	90 12 170	Rackantriebslager	Main drive bearing
1A	90 12 169	Flanschmutter	Flange nut
2	90 14 184	Einströmdüse L	Water inlet „L“ Fitting
3	90 45 070	Einströmdüse T	Water inlet „T“ Fitting
4	109 679	Einströmrrohr FIX M37 Plus	Circulation tube FIX M37 Plus
4A	88 00 085	Filterschlauch M37 Plus	
4B	90 81 810	Kabelband T18R	
5	141 052	Einströmblock DEV M37 Plus	Circulation block DEV M37 Plus
6	90 17 855	Level Sensor Halterung	level sensor holder
7	90 20 200	Level Sensor	level sensor
8	90 17 856	PVC Abstandhalter	PVC spacer
9	90 17 957	Kühlschlange DEV/FIX	Cooling Pipe DEV/FIX



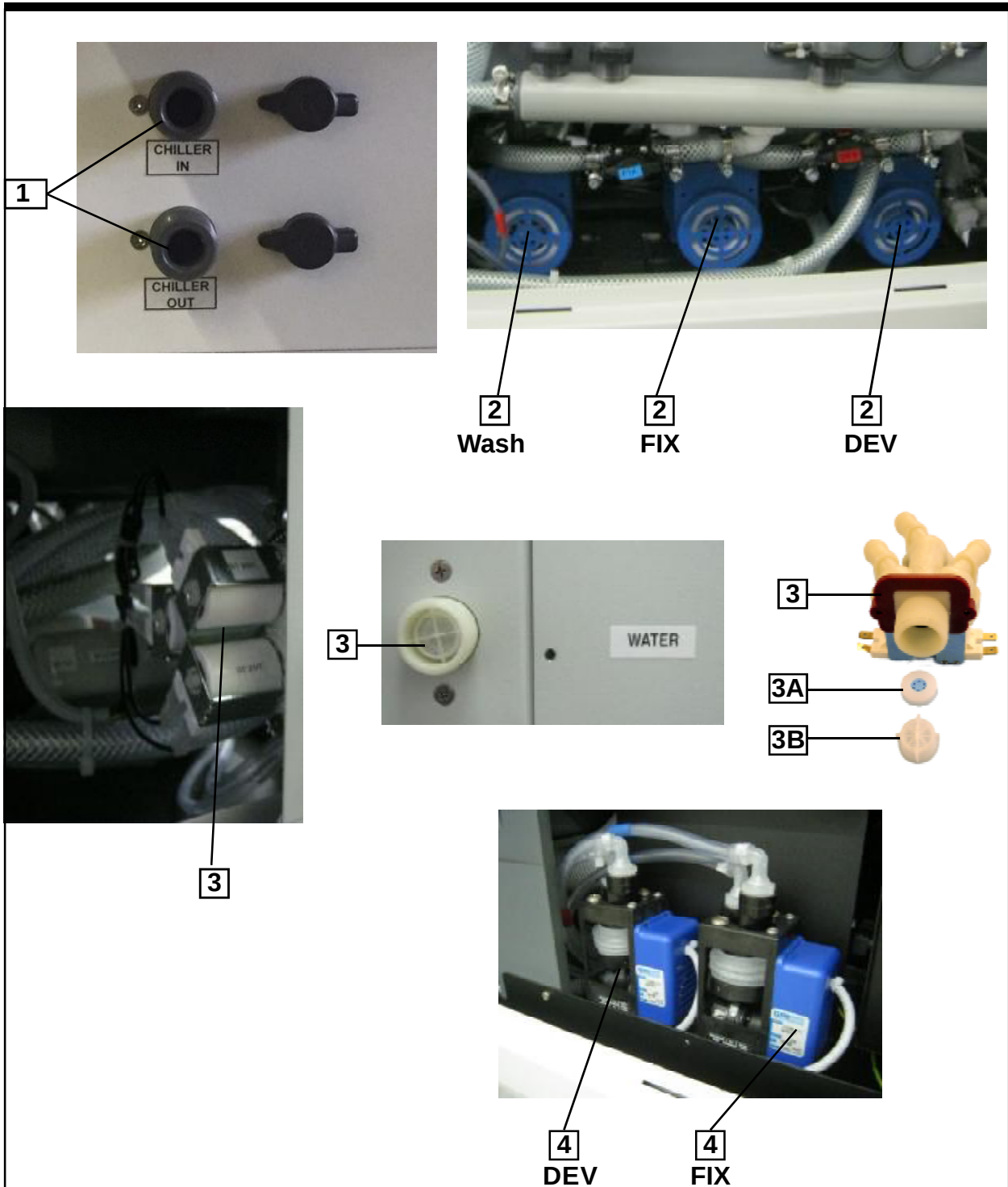
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	140 848	Sensorbar M37 Plus kompl.	Sensorbar M37 Plus assy
2	90 81 681	Multisterngriff M6	Rack locking M6
3	90 21 101	Magnetdeckelschalter	Magnetic switch for cover
4	500 576	Fixierblech für Racks M37 Plus	Rack fixing guide M37 Plus
5	99 09 002H	Sprühschacht	PVC circulation injector
6	90 16 265	Temp.-fühlergehäuse	Temp.-probehousing
7	141 051	Überlaufrohr DEV/FIX	Overflow tube DEV/FIX



pos.	Teile Nr.:/part no.	Beschreibung	Description
1	90 34 000	Platine CPU 06_2017	CPU 06_2017
2	90 34 002	Hauptplatine MF600 R06.17 V2	Main board MF600 R06.17.V2
3	90 21 109	Hauptschütz 4 pol 25A	Main relay 4pol 25A
4	90 20 702	Sicherungsautomat C13/2	Circuit breaker C13/2
5	90 20 778	Klemmleiste komplett	Clamp terminal complete
6	90 30 381	Solid state relay	Solid state relay
7	90 21 106	Sicherheitsrelais	Safety relay
8	90 90 106	Netzteil 24V	power supply 24V
9	90 32 030	Lüfter für Elektrobox	Fan for electronicbox
10	90 21 049	Antriebsmotor Kabel 1,5m	main drive motor cable 1,5m
11	90 21 048	Antriebsmotor kompl MF600.	Main drive motor assy MF600



pos.	Teile Nr.:/part no.	Beschreibung	Description
1	90 32 534	Verteilerplatine I2C	Distribution board I2C
2	140 325	Temp. Fühler 2 TROCKNER	Temp. probe 2 DRY MF-800
3	140 324	Temp. Fühler 1 FIXIER	Temp. probe 1 FIX
4	140 323	Temp. Fühler 0 ENTWICKLER	Temp. probe 0 DEV
5	140 322	Kabel Sensorbar / I2C 60	Cable sensorbar / I2C 60
6	140 038	Kabel PDB / I2C 125	Cable PDB / I2C 125
7	140 037	Kabel Bedienteil 110	Cable control panel 110
8	90 16 678	Temp.-fühlergehäuse Trockner	Temp. probe housing dryer
9	500 147	Bedienfeldfolie MF800 - rot	Control panel foil MF800 - red
10	141 343	Bedienteilplatine SMD	Control panel SMD
11	140 002	Bedienteil kompl.	Control panel assy
12	141 400	Temp. Fühler 4 WATER IN	Temp. probe 4 WATER IN

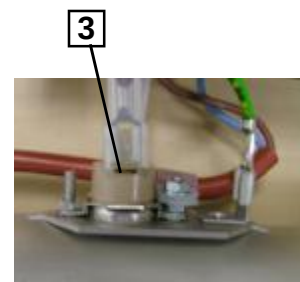
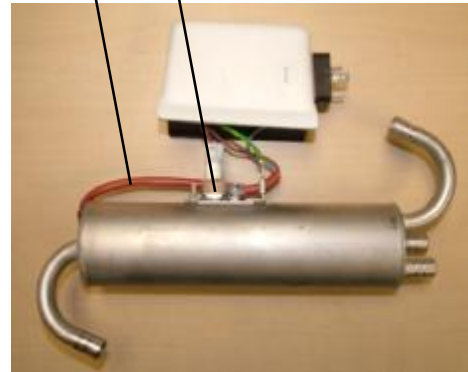


pos.	Teile Nr.:/part no.	Beschreibung	Description
1	140 306	Anschlüsse ext. Kühlung	Connection for external Cooling
2	90 61 153	Umwälzpumpe NDP 14/2	Circulation pump NDP 14/2
3	90 20 259	3-fach Magnetventil	3-way water solenoid
3A	90 20 321	Durchflußreduzierung 2L	Flow reduction 2L
3B	90 45 141	Filtersieb	Filter
4	90 61 236	Regenerierpumpe kompl.	Replenishment pump assy

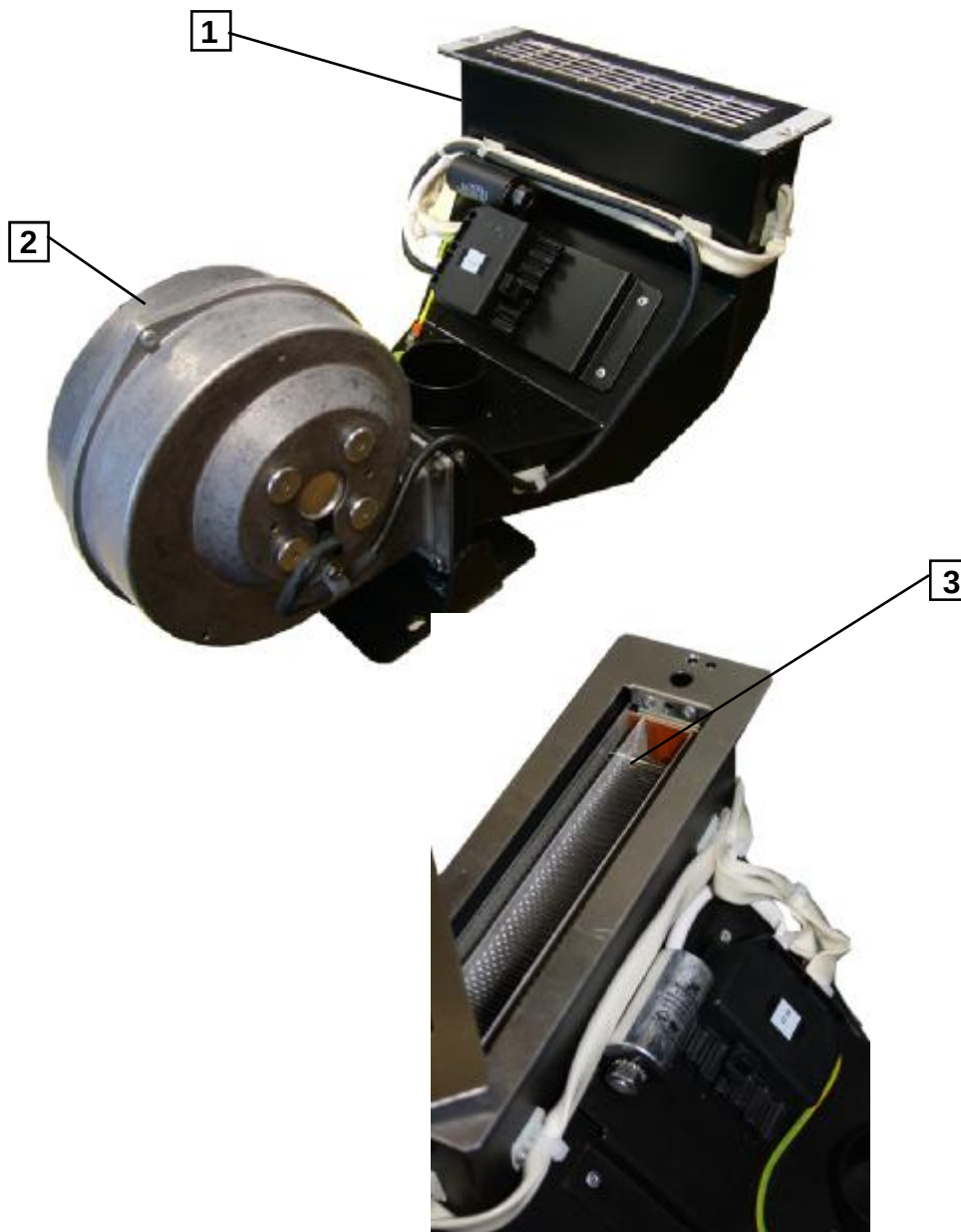


1
DEV

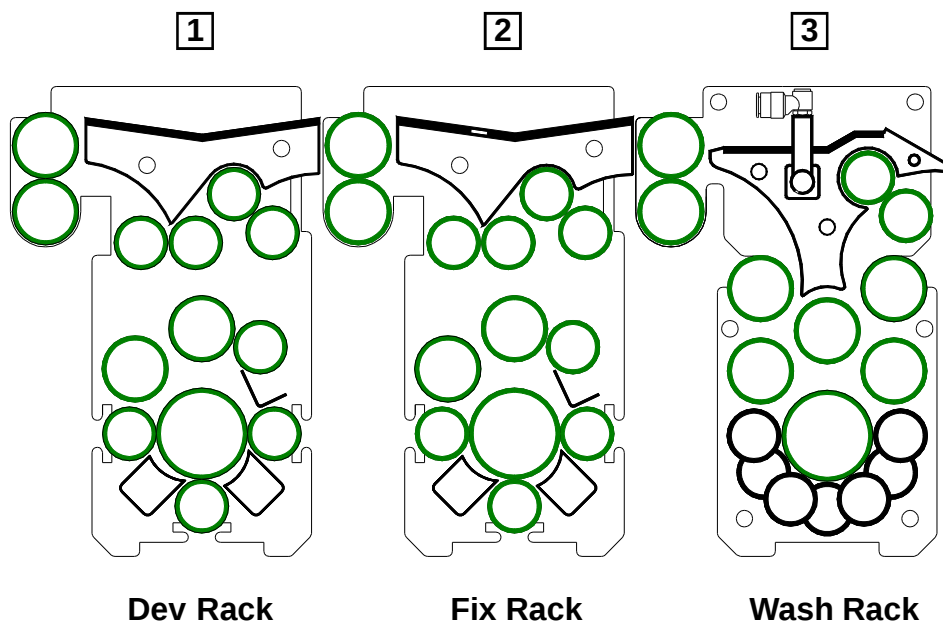
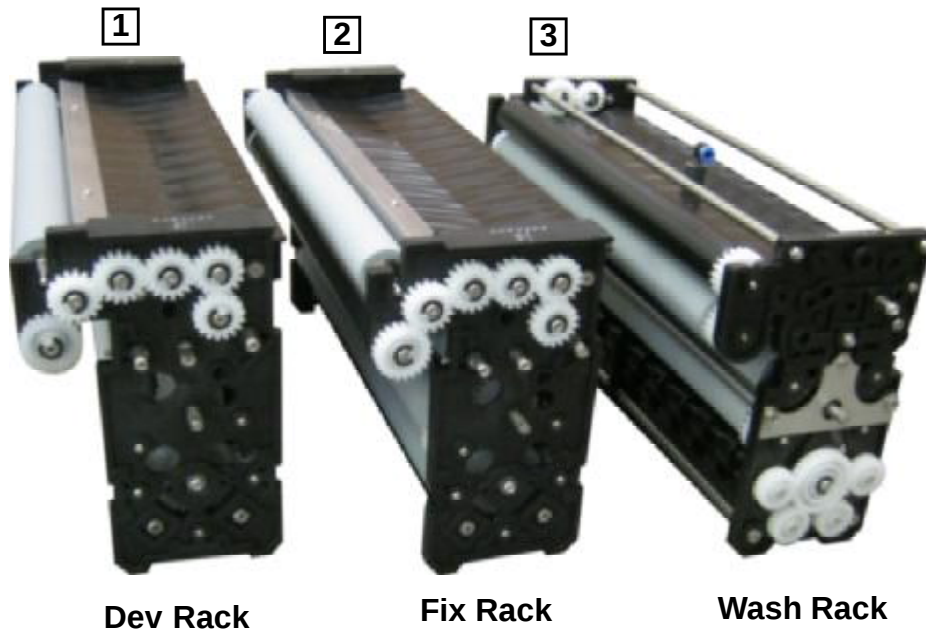
1
FIX



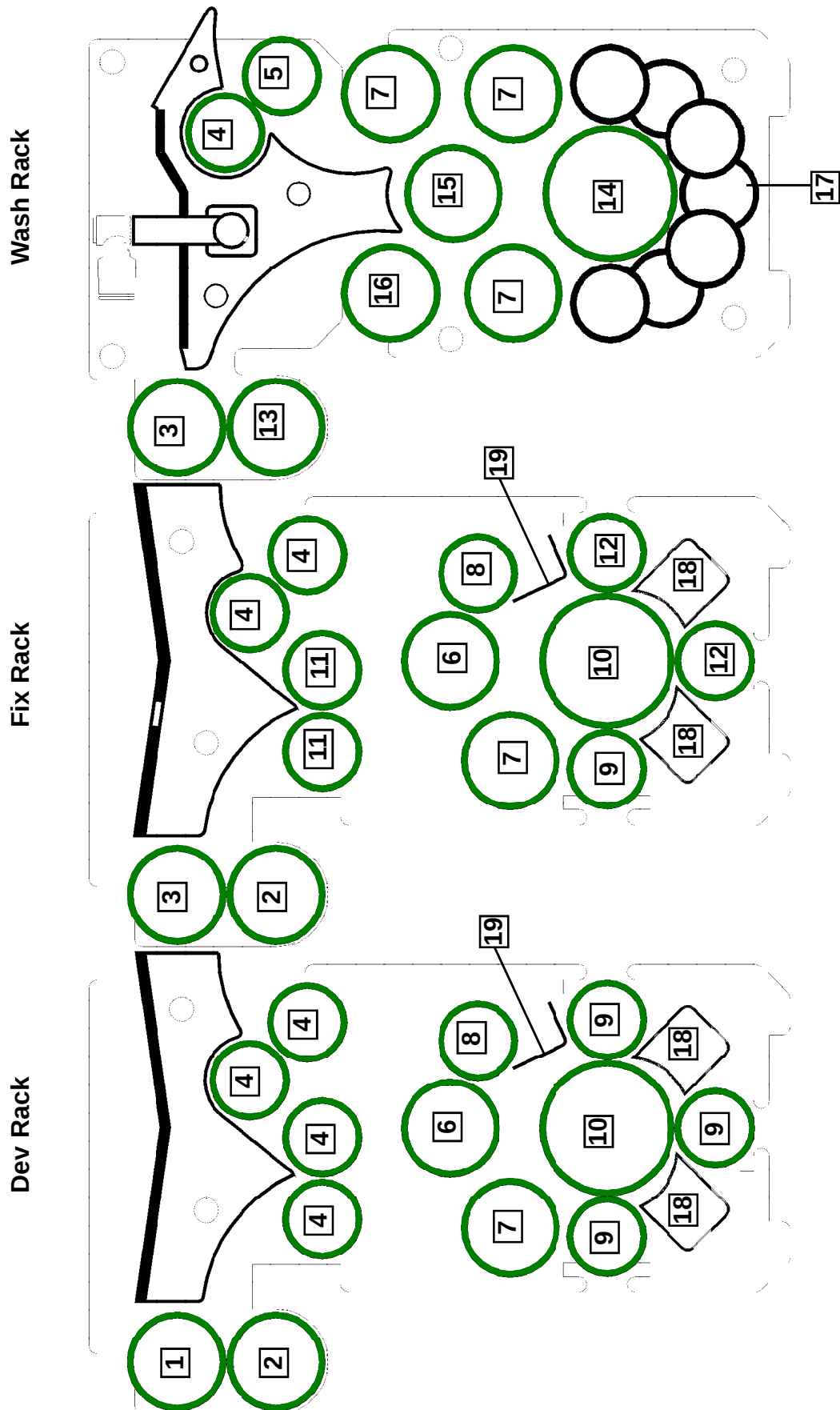
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	141 414	Wärmetauscher kompl. 350 W längeres Kabel	Heat exchanger assy 350 W
2	90 61 059	Heizeinsatz 350 W E+F	Heating element housing 350 W E+F
3	90 20 216	Übertemperatursicherung	Overtemperature thermistor



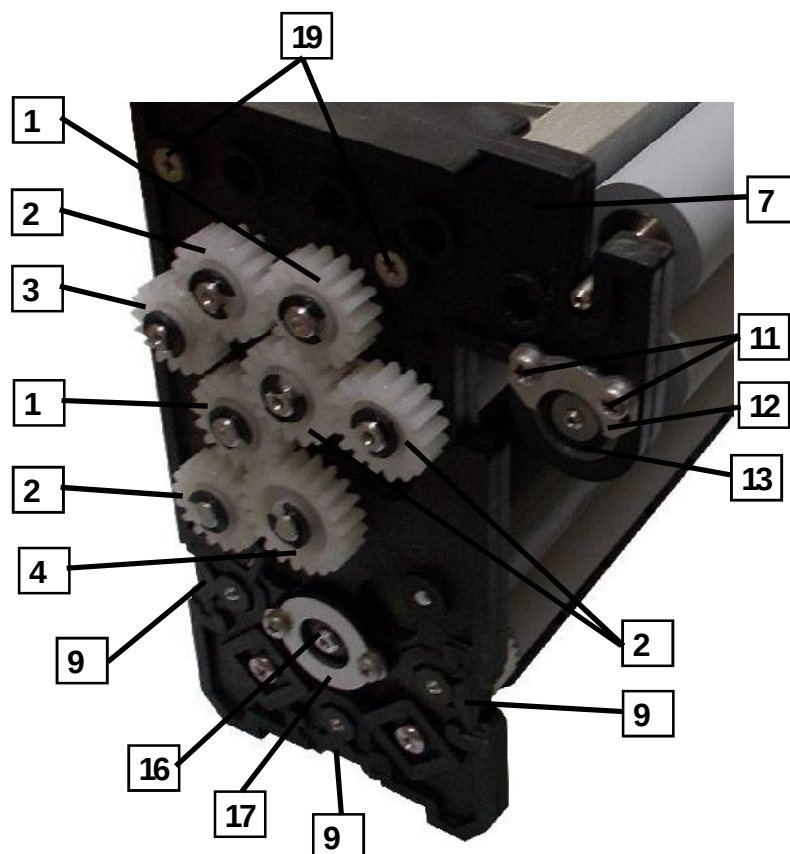
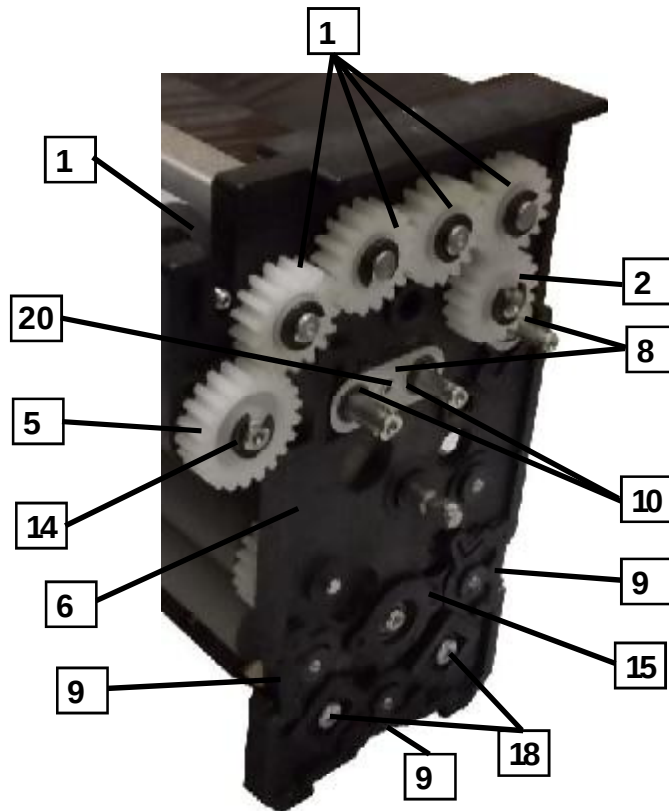
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	109 676	Lüftereinheit kompl. M37 Plus	Dryer fan assy M37 Plus
2	90 21 024	Lüfter	Fan
3	90 20 367	Heizeinsatz Trockner M37 Plus	Heating element Dryer M37 Plus



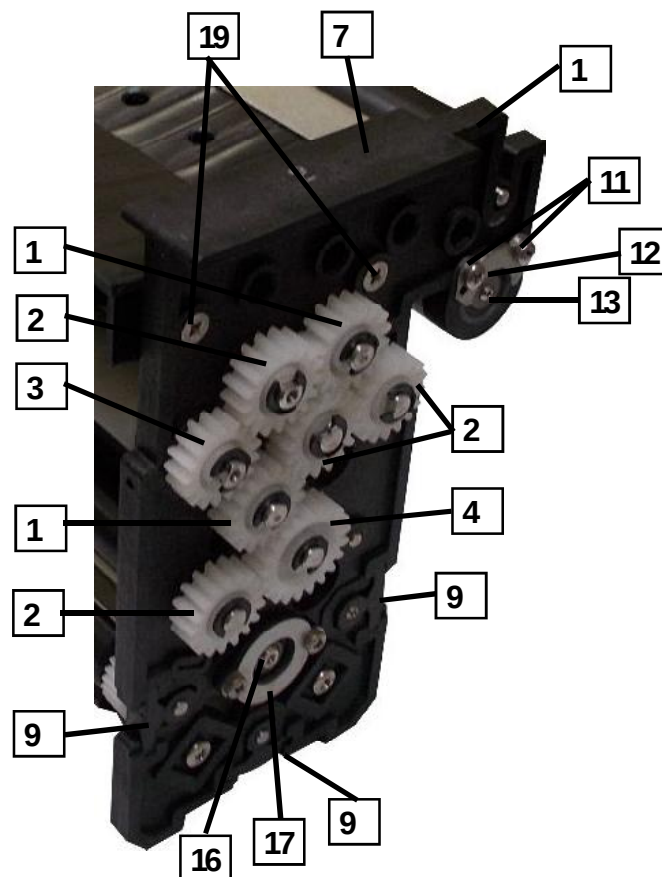
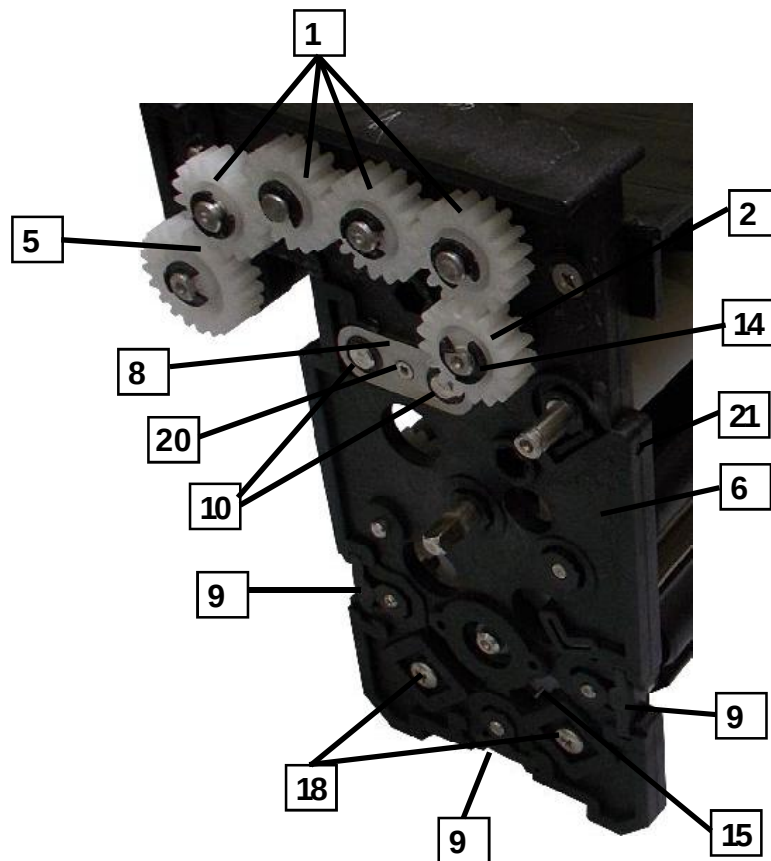
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	141 157	Entwicklerrack kompl	Dev Rack assy
2	141 369	Fixierrack kompl.	Fix Rack assy
3	141 410	Wasserrack mit Spray kompl.	Wash Rack assy with spray



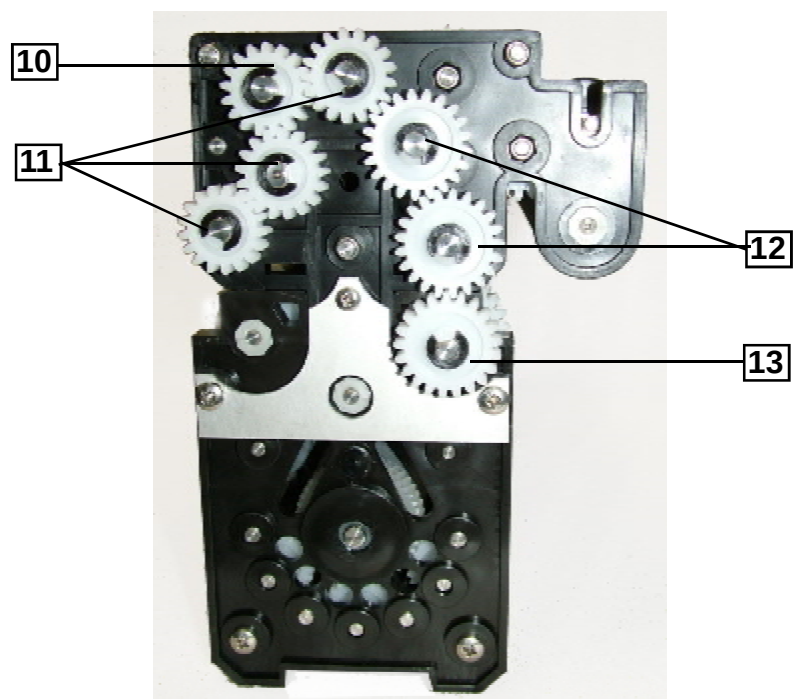
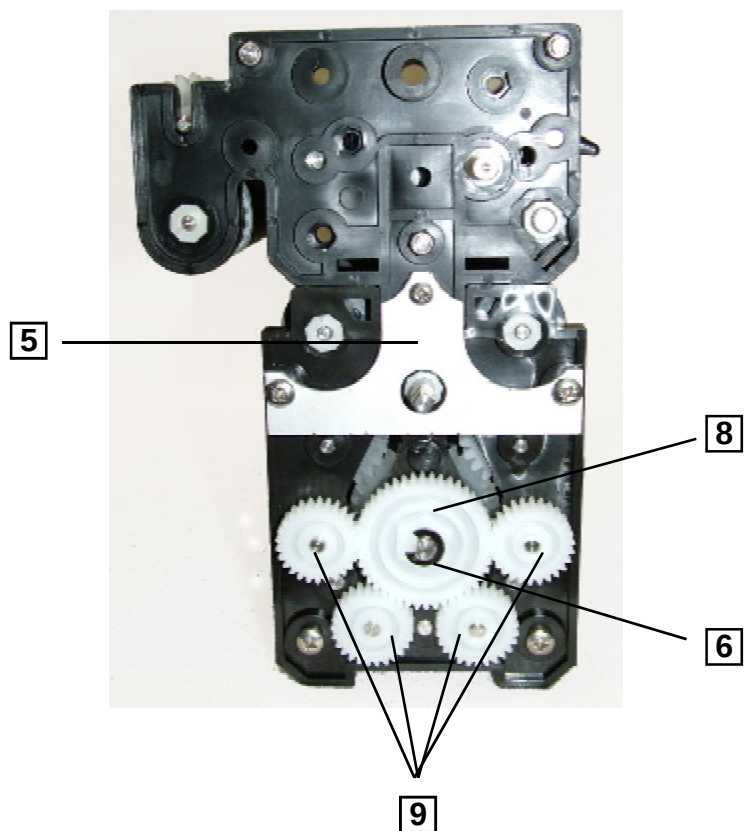
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	90 12 607	Abquetschwalze Gummi d32 oben / schwer	Squeeze roller rubber d32 top / heavy
2	90 12 642	Abquetschwalze Gummi d32 unten	Squeeze roller rubber d32 bottom
3	90 16 819	Abquetschwalze PE d32 unten, B4/B4	Squeeze roller PE d32 bottom, B4/B4
4	90 15 054	Abquetschwalze Gummi d32	Squeeze roller rubber d32
5	90 15 0541	Abquetschwalze Gummi d32 bearbeitet	Squeeze roller rubber d32 modified
6	90 16 970	Rackantriebswalze PVC d32 geschliffen, verstärkt, B3/B8	Rack Driveroller PVC d32 grounded, strengthened, B3/B8
7	90 12 648	Rackwalze PVC d32 verstärkt, Z-24	Rack roller PVC d32 strengthened, Z-24
8	90 16 686	Walze PE d25,9 E3/E5	Roller PE d25,9 E3/E5
9 (12pcs)	90 15 115	Umlenkwalze Gummi d26	Turn around roller rubber d26
10 (6pcs)	90 15 121	Umlenkwalze Gummi d44	Turn around roller rubber d44
11	90 17 896	Abquetschwalze PE d25,9 geschliffen, E3/E15	Sueeze roller PE d25,9 grounded, E3/E15
12 (6pcs)	90 15 149	Umlenkwalze PE d26	Turn around roller PE d26
13	90 12 6071	Abquetschwalze Gummi d32 oben / schwer, bearbeitet	Squeeze roller rubber d32 top / heavy, modified
14 (3pcs)	90 16 369	Umlenkwalze PVC d44 D-bor poliert	Turn around roller PVC d44 D-bor polished
15	90 16 375	Rackantriebswalze PVC d32 geschliffen, B7/B8	Rack Driveroller PVC d32 grounded, B7/B8
16	90 16 381	Rackantriebswalze PVC d32 geschliffen, B6/B9	Rack Driveroller PVC d32 grounded, B6/B9
17 (5pcs)	90 16 363	Rollenumlenkung kompl. 43	Roller turn around assy 43
18	90 61 211	Umlenkungseinheit 43	Turn around guide assy 43
19	90 15 198	Leitblech Umlenkung 43	Guide turn around 43

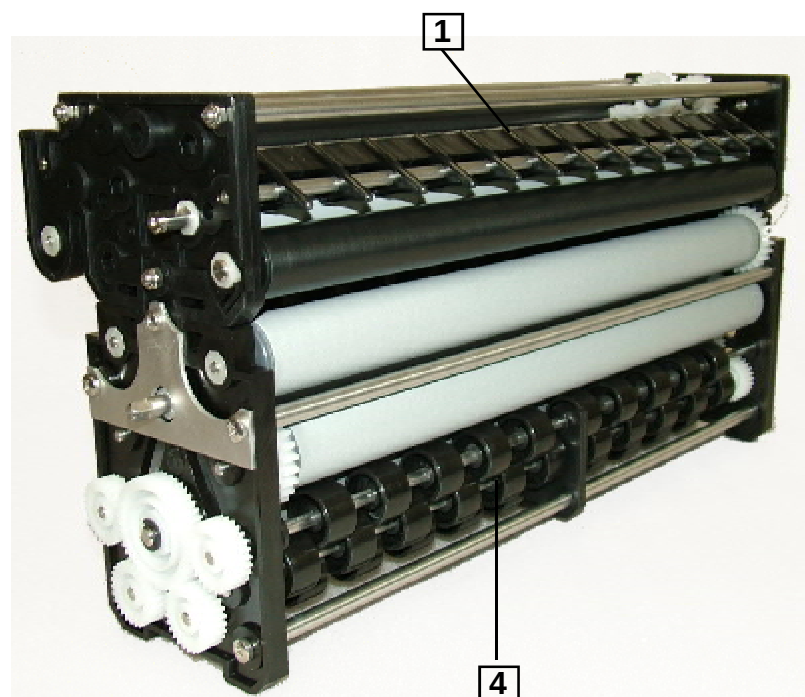
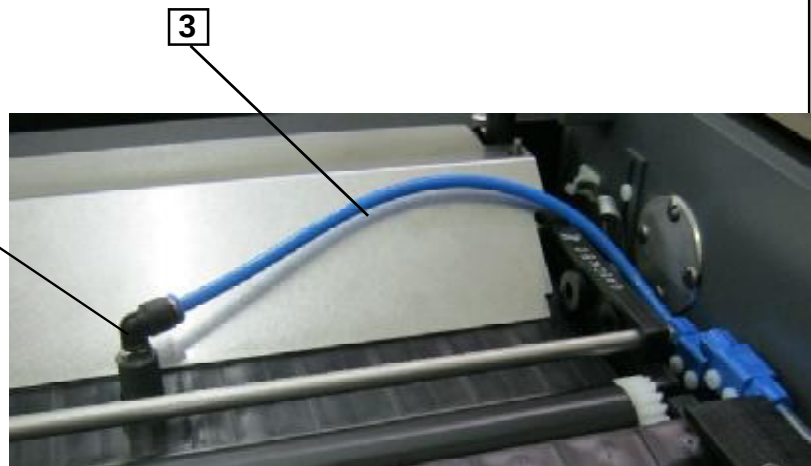
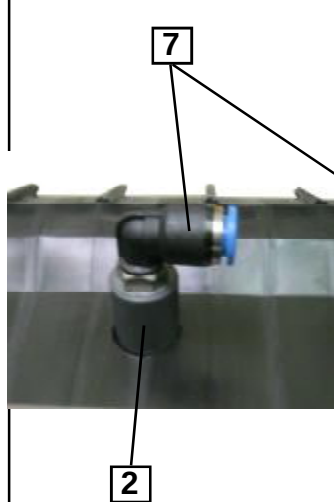
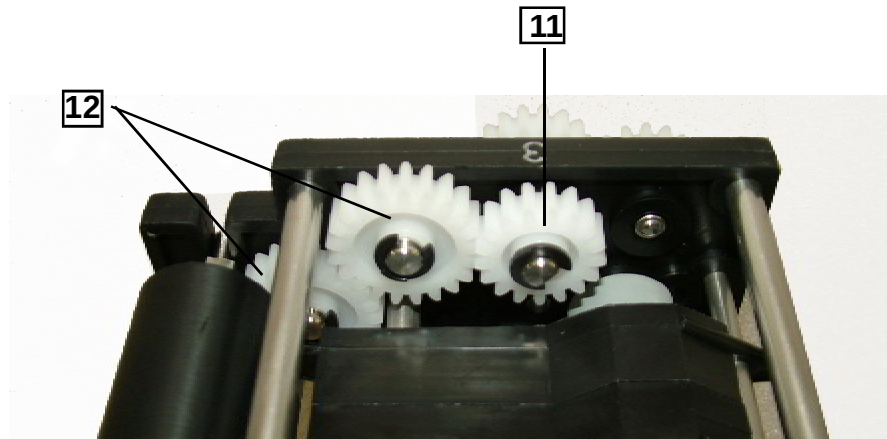


pos.	Teile Nr.:/part no.	Beschreibung	Description
1	90 14 103	Zahnrad Z=17 O-Bor m1,5 PP	Gear 17T O-hole m1,5 PP
2	90 14 104	Zahnrad Z=17 D-Bor m1,5 PP	Gear 17T D-hole m1,5 PP
3	90 12 003	Zahnrad Z=17 D-Bor m1,5 V-1	Gear 17T D-hole m1,5 V-1
4	90 14 108	Zahnrad Z=21 D-Bor m1,5 PP	Gear 21T D-hole m1,5 PP
5	90 14 116	Zahnrad Z=21 D-Bor m1,5 PP d33	Gear 21T D-hole m1,5 PP d33
6	90 17 341k	Seitenteil rechts 2MW mit spacer 0,3	Rack side panel right 2MW with spacer 0,3
7	90 17 340k	Seitenteil links 2MW mit spacer 0,3	Rack side panel links 2MW with spacer 0,3
8	502 014	Fixierung	Fixative
9	89 00 333	Gummifeder	Rubber-spring
10	504 328	Lagerbuchse 8eck 8,2 PE Fixierung	Bearing octogonal 8,2 PE Fixative
11	90 18 119	PT Schraube 4x10	PT screw 4x10
12	90 17 313	Haltebuegel Kugellager	Fixative Ball bearing
13	90 17 310	Kugellager d22.1 d5-7 HK21-2427	Ball Bearing d22.1 d5-7 HK21-2427
14	90 12 116	Sicherungsring KS	locking washer plastic KS
15	90 14 243	Zahnrad Z=44 O-Bor m1,0 PP d7,9 6kant	Gear 44T O-hole m1,0 PP d7,9 6kant
16	90 12 160	Kugellager KS	Ball Bearing KS
17	90 17 382	Fixierung Kugellager	Fixative Ball bearing
18	90 80 018	Schraube M5x10	Screw M5x10
19	90 80 104	Senkschraube M5x16	Screw M5x16
20	90 81 500	Senkschraube 2,9x9,5 DIN 7982	Screw 2,9x9,5 DIN 7982

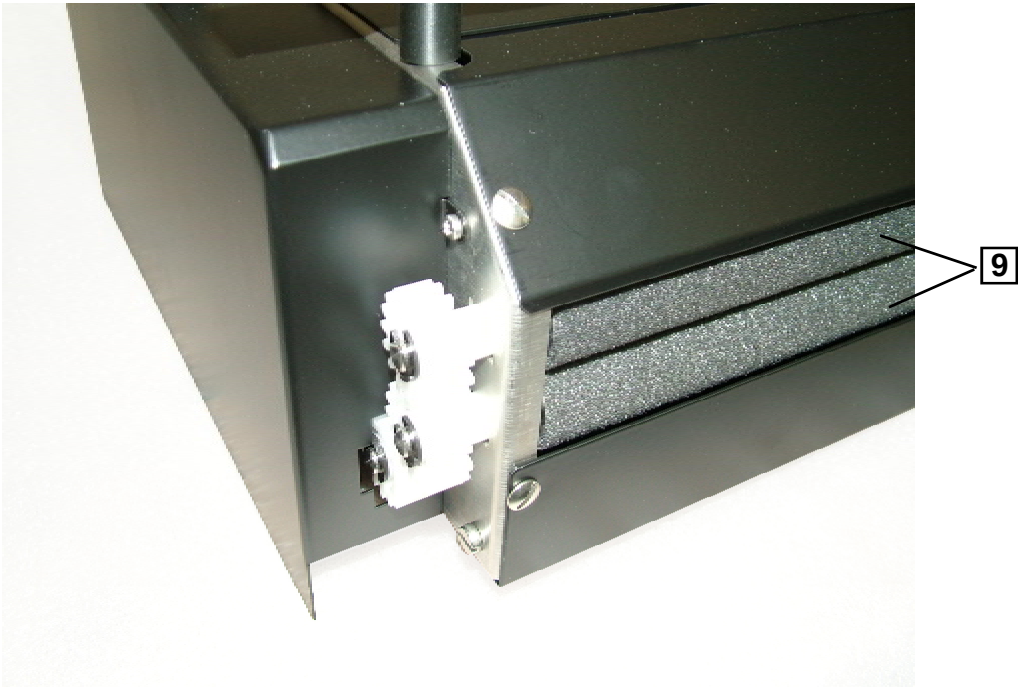


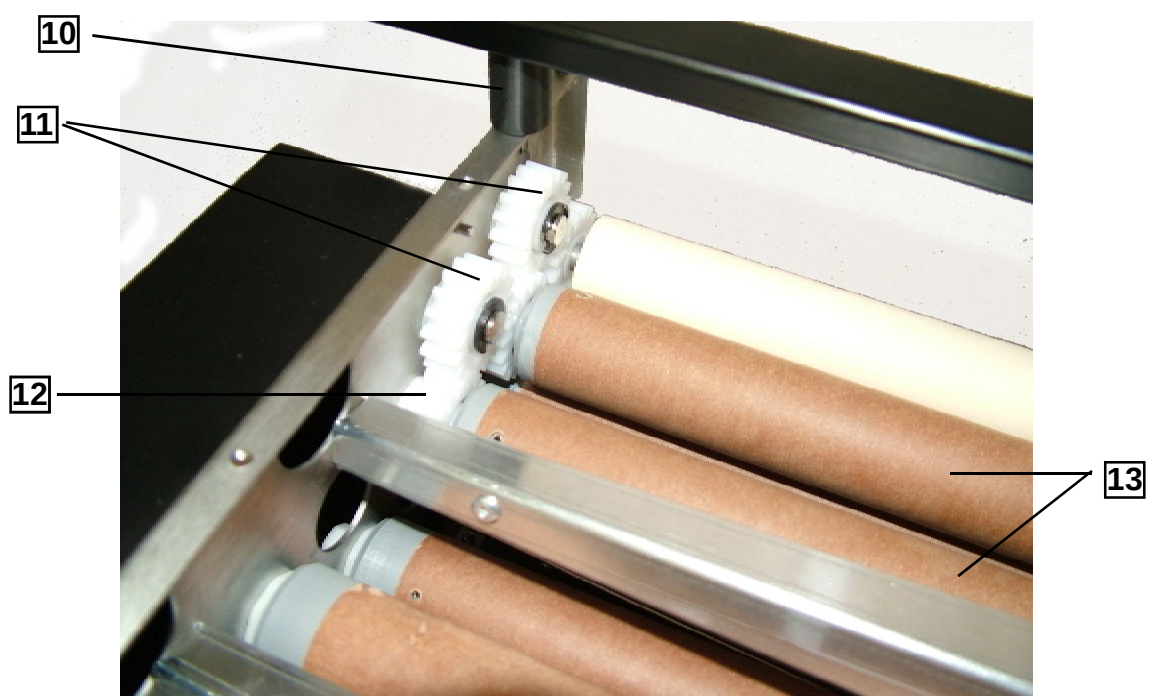
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	90 14 103	Zahnrad Z=17 O-Bor m1,5 PP	Gear 17T O-hole m1,5 PP
2	90 14 104	Zahnrad Z=17 D-Bor m1,5 PP	Gear 17T D-hole m1,5 PP
3	90 12 003	Zahnrad Z=17 D-Bor m1,5 V-1	Gear 17T D-hole m1,5 V-1
4	90 14 108	Zahnrad Z=21 D-Bor m1,5 PP	Gear 21T D-hole m1,5 PP
5	90 14 116	Zahnrad Z=21 D-Bor m1,5 PP d33	Gear 21T D-hole m1,5 PP d33
6	90 17 341	Seitenteil rechts 2MW mit spacer 0,3	Rack side panel right 2MW with spacer 0,3
7	90 17 340	Seitenteil links 2MW mit spacer 0,3	Rack side panel links 2MW with spacer 0,3
8	502 014	Fixierung	Fixative
9	89 00 333	Gummifeder	Rubber-spring
10	504 328	Lagerbuchse 8eck 8,2 PE Fixierung	Bearing octogonal 8,2 PE Fixative
11	90 18 119	PT Schraube 4x10	PT screw 4x10
12	90 17 313	Haltebuegel Kugellager	Fixative Ball bearing
13	90 17 310	Kugellager d22.1 d5-7 HK21-2427	Ball Bearing d22.1 d5-7 HK21-2427
14	90 12 116	Sicherungsring KS	locking washer plastic KS
15	90 14 243	Zahnrad Z=44 O-Bor m1,0 PP d7,9 6kant	Gear 44T O-hole m1,0 PP d7,9 6kant
16	90 12 160	Kugellager KS	Ball Bearing KS
17	90 17 382	Fixierung Kugellager	Fixative Ball bearing
18	90 80 018	Schraube M5x10	Screw M5x10
19	90 80 104	Senkschraube M5x16	Screw M5x16
20	90 81 500	Senkschraube 2,9x9,5 DIN 7982	Screw 2,9x9,5 DIN 7982
21	90 81 330	Gewindestift M4x10 DIN 914 A2	Grub screw M4x10 DIN 914 A2

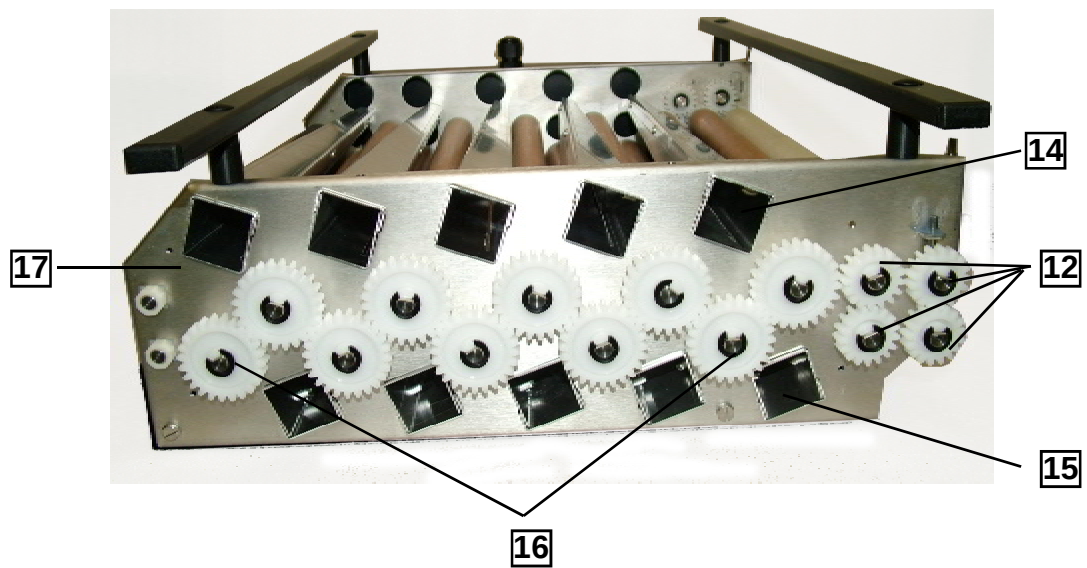
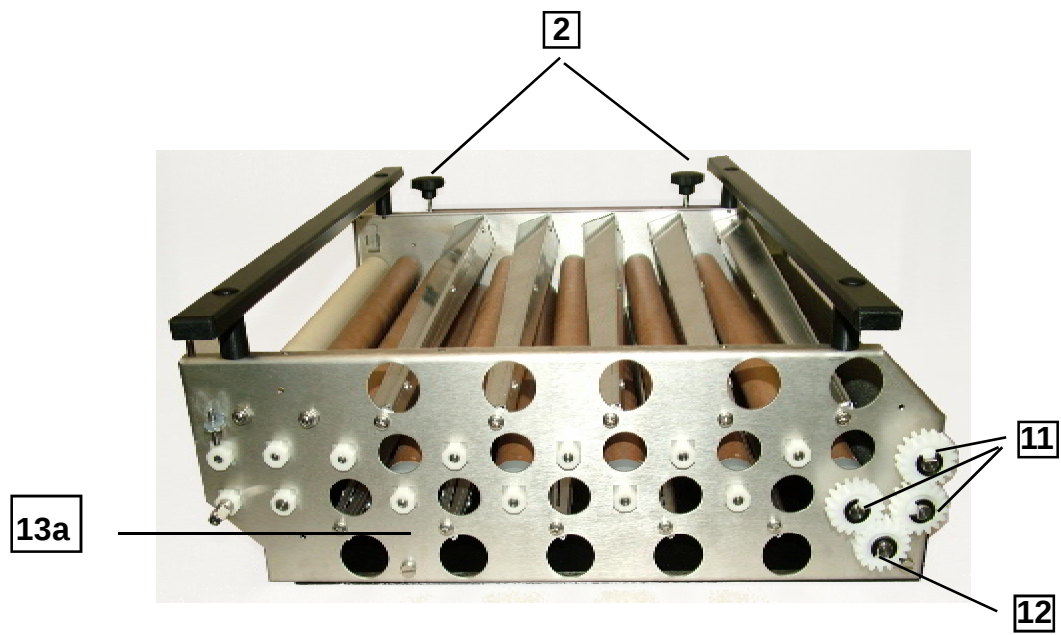




pos.	Teile Nr.:/part no.	Beschreibung	Description
1	141 411	Spraybar Wasser Rack	Spray Water Rack
2	90 45 173	PVC Knie d8 90°	PVC knee d8 90°
3	141 187	Schlauch PU-blau d6mm - 350mm	Hose PU-blue d6mm - 350mm
4	90 16 363	Rollenumlenkung komplett	Segmented underturn assy
5	90 14 345	Verschraubung Übergabe	Connector plate
6	90 12 116	Sicherungsring Kst.	Locking washer
7	503 723	L-Steckverschraubung QSRL-1/8-6	L-Plug connection QSRL-1/8-6
8	90 14 244	Zahnrad Z44 D-Bor m1.0 PP	Gear 44T D-hole m1.0 PP
9	90 14 242	Zahnrad Z26 O-Bor m1.0 PP	Gear 26T O-hole m1.0 PP
10	90 14 103	Zahnrad Z17 O-Bor m1.5 PP	Gear 17T O-hole m1.5 PP
11	90 14 104	Zahnrad Z17 D-Bor m1.5 PP	Gear 17T D-hole m1.5 PP
12	90 14 107	Zahnrad Z21 O-Bor m1.5 PP	Gear T21 O-hole m1.5 PP
13	90 14 108	Zahnrad Z21 D-Bor m1.5 PP	Gear 21T D-hole m1.5 PP





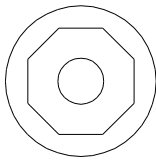




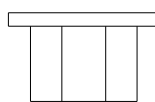
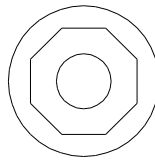
pos.	Teile Nr.:/part no.	Beschreibung	Description
1	503 847	Distanzstange	Distance bar
2	500 574	Multisterngriff verlängert	Star grip extended
3	500 580	Deckel links	Cover left
4	503 734	Verkleidung oben 1	Top cover 1
5	503 848	Distanzstange	Distance bar
6	503 735	Verkleidung oben 2	Top cover 2
7	503 733	Verkleidung unten	Bottom cover
8	500 581	Deckel rechts	Cover right
9	140 772	Schaumstoffwalze	Foam roller
10	501 050	POM Dstanz	POM distance
11	90 14 236	Zahnrad Z-17 O-BOR	Gear T-17 O-BOR
12	90 14 235	Zahnrad Z-17 D-BOR	Gear T-17 D-BOR
13	503 739	Phenolwalze	Phenolic roller
13a	500 579	Trocknerseitenteil rechts	Dryer side plate right
14	503 732	Luftkanal R	Air channel R
15	503 731	Luftkanal L	Air channel L
16	90 14 237	Zahnrad Z-24 D-BOR	Gear T-24 D-BOR
17	500 578	Trocknerseitenteil links	Dryer side plateleft
18	503 729	Abquetschwalze Silicon unten	Silicon squeeze roller bottom
19	503 742	Phenolwalze	Phenolic roller
20	503 740	Phenolwalze	Phenolic roller
21	503 741	Phenolwalze	Phenolic roller
22	503 728	Antriebswalze Silicon dryer	Dryer drive roller silicon

bearing octagonal

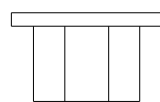
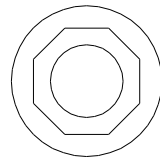
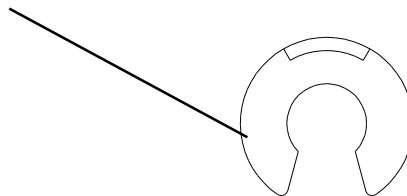
ø5.2

**90 12 111**

ø6.2

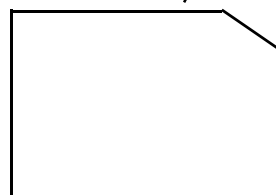
**90 12 112**

ø8.2

**90 12 113****90 12 116****locking washer plastic**

90 60 005 replenisher-tank DEV+FIX incl.
replenisher-tank-cover assy

90 60 006 antioxidation-cover for
DEV-replenisher-tank

**90 45 061 shut off valve**

Sicherungen auf Hauptplatine/ fuses on mainboard:

F1	90 20 048	Sicherung	T 3,15 A	FUSE T 3,15 A
F2	90 20 021	Sicherung	T 1,6 A	FUSE T 1,6 A
F3	90 20 054	Sicherung	T 2,5 A	FUSE T 2,5 A
F4	90 20 054	Sicherung	T 2,5 A	FUSE T 2,5 A
F5	90 20 011	Sicherung	T 630 mA	FUSE T 630 mA
F6	90 20 011	Sicherung	T 630 mA	FUSE T 630 mA
F7	90 20 054	Sicherung	T 2,5 A	FUSE T 2,5 A
F8	90 20 011	Sicherung	T 630 mA	FUSE T 630 mA

with internal water cooling:

F9W	90 20 011	Sicherung	T 630 mA	FUSE T 630 mA
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with external chiller chiller:

F9C	90 20 052	Sicherung	T 6,3 A	FUSE T 6.3 A
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