



SERVICE MANUAL Diamatic 555

VERSION 1.2
From off serial number 17029B

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1. Tools

Diamag grinding tools

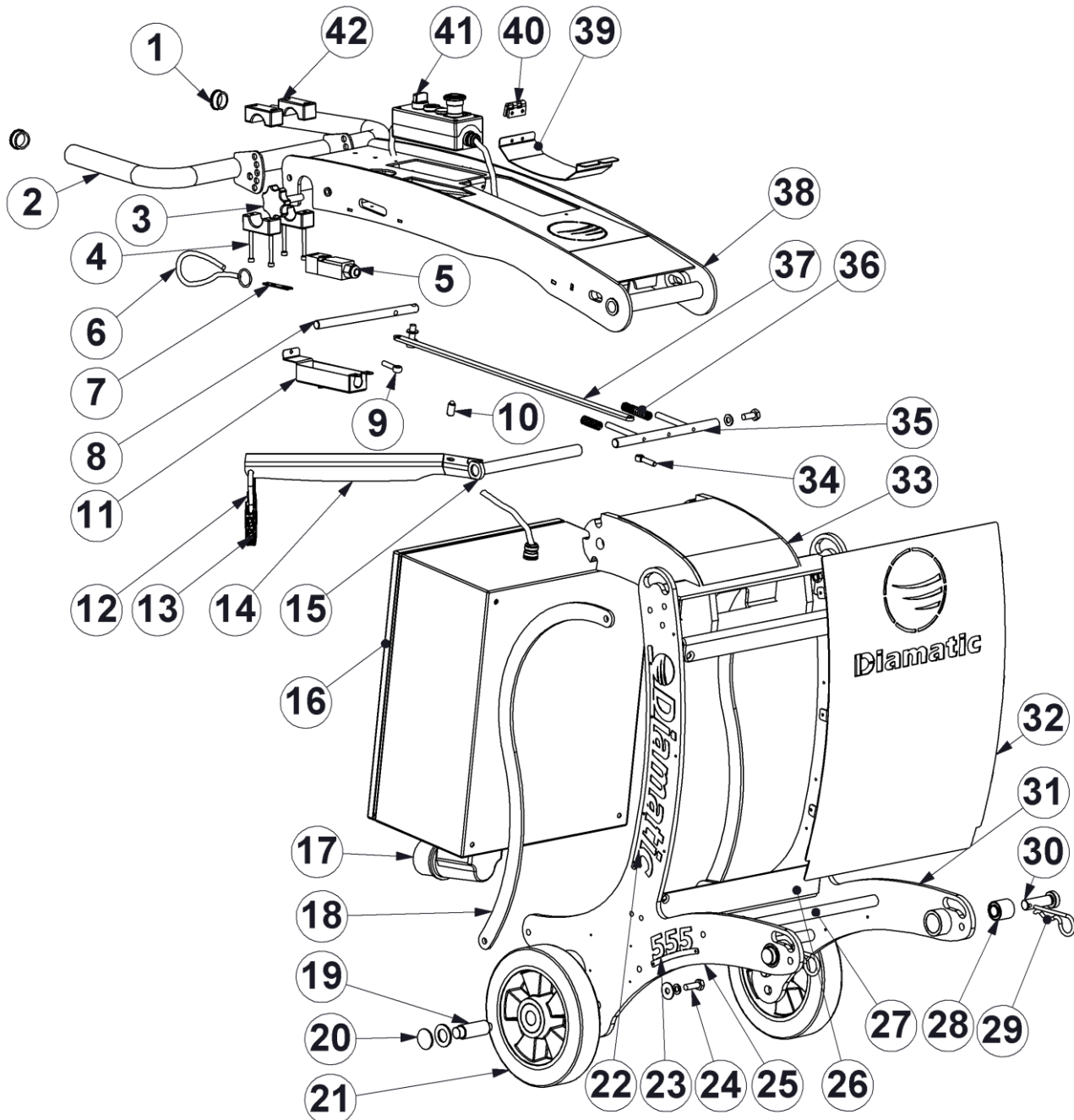
Part number	Description	Remarks	Qty
BG707301	Diamag wing red box 9 pieces 18/20		1
BG707302	Diamag wing red box 9 pieces 30/40		1
BG707303	Diamag wing red box 9 pieces 60/80		1
BG707304	Diamag wing red box 9 pieces 120/150		1
BG707311	Diamag wing green box 9 pieces 18/20		1
BG707312	Diamag wing green box 9 pieces 30/40		1
BG707313	Diamag wing green box 9 pieces 60/80		1
BG707314	Diamag wing green box 9 pieces 120/150		1
BG707321	Diamag wing blue box 9 pieces 18/20		1
BG707322	Diamag wing blue box 9 pieces 30/40		1
BG200997-1/SET	Wing PCD split	set of 9	1
BG200999-1/SET	Wing PCD 2 x ¼	set of 9	1
E09119-1/SET9	Bush hammer tools	set of 9	1
E07459	Cutter plate only 185mm		3
E07460	185mm cutter plate complete with bush hammer tools		3
BG300118-1	185mm cutter plate complete with star wheel cutters		3
E07185-1	DIAMAG 185mm adapter plate		3
E06447	DIAMAG adapter plate for polishing dots		9
E10691	185mm DIAMAG PCD plate		3

Diamag polishing tools

Part number	Description	Gritsize	Qty.
BG185001	Diamag polishing pad 185mm #1 Orange	#45	3
BG185002	Diamag polishing pad 185mm #2 Black	#100	3
BG185003	Diamag polishing pad 185mm #3 Blue	#200	3
BG185004	Diamag polishing pad 185mm #4 Red	#400	3
BG185005	Diamag polishing pad 185mm #5 White	#800	3
BG185006	Diamag polishing pad 185mm #6 Yellow	#1500	3
BG185007	Diamag polishing pad 185mm #7 Green	#3000	3
BG185M004	Diamag maintenance pad 185mm #4	#400	3
BG185M004	Diamag maintenance pad 185mm #5	#800	3
BG185M004	Diamag maintenance pad 185mm #6	#1500	3
BG185M004	Diamag maintenance pad 185mm #7	#3000	3
E09399/Fine	185mm Velcro plate for Polishing pads		3
E09399/Coarse	185mm Velcro plate for Maintenance pads		3

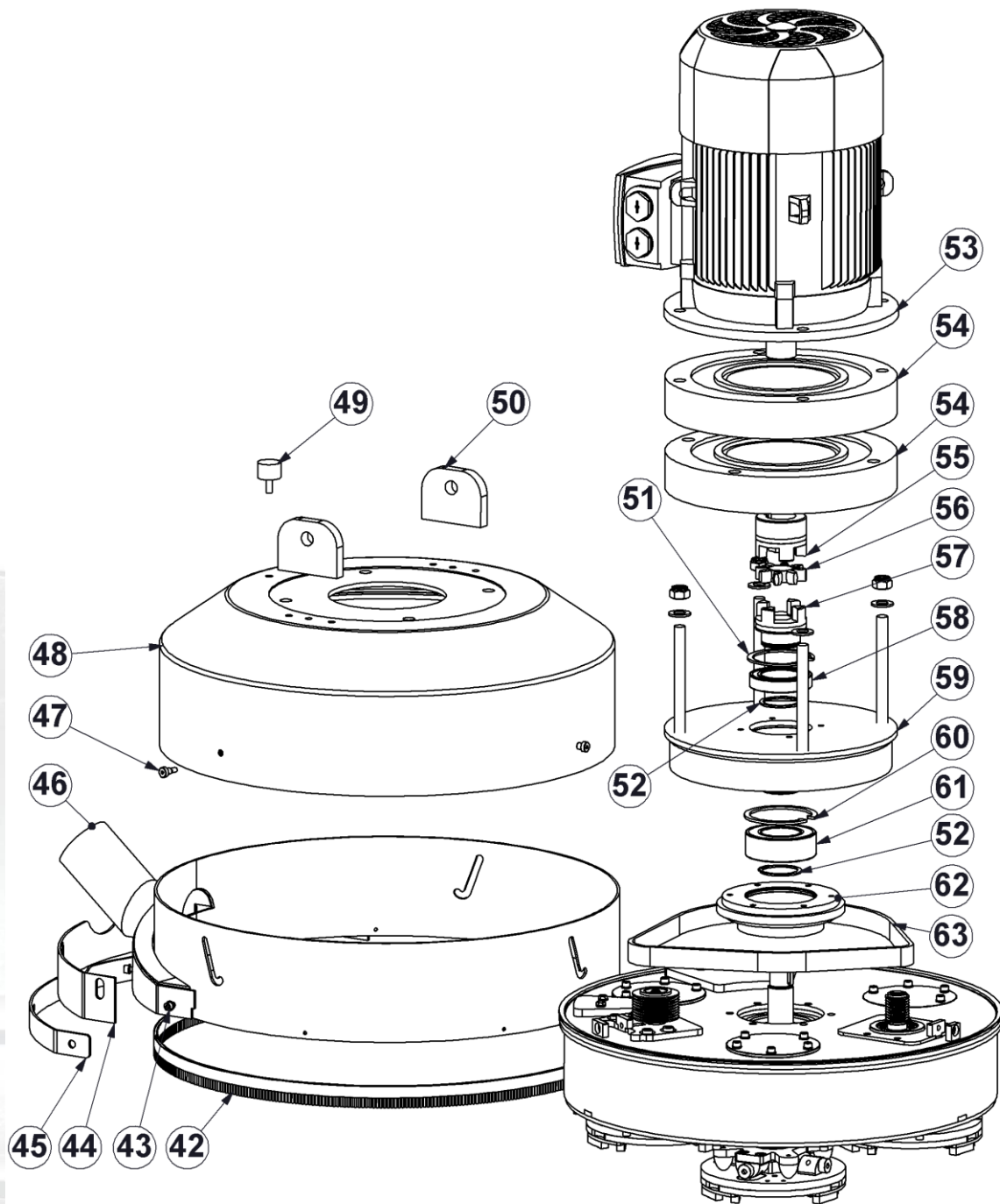
2. Spare parts

Frame complete

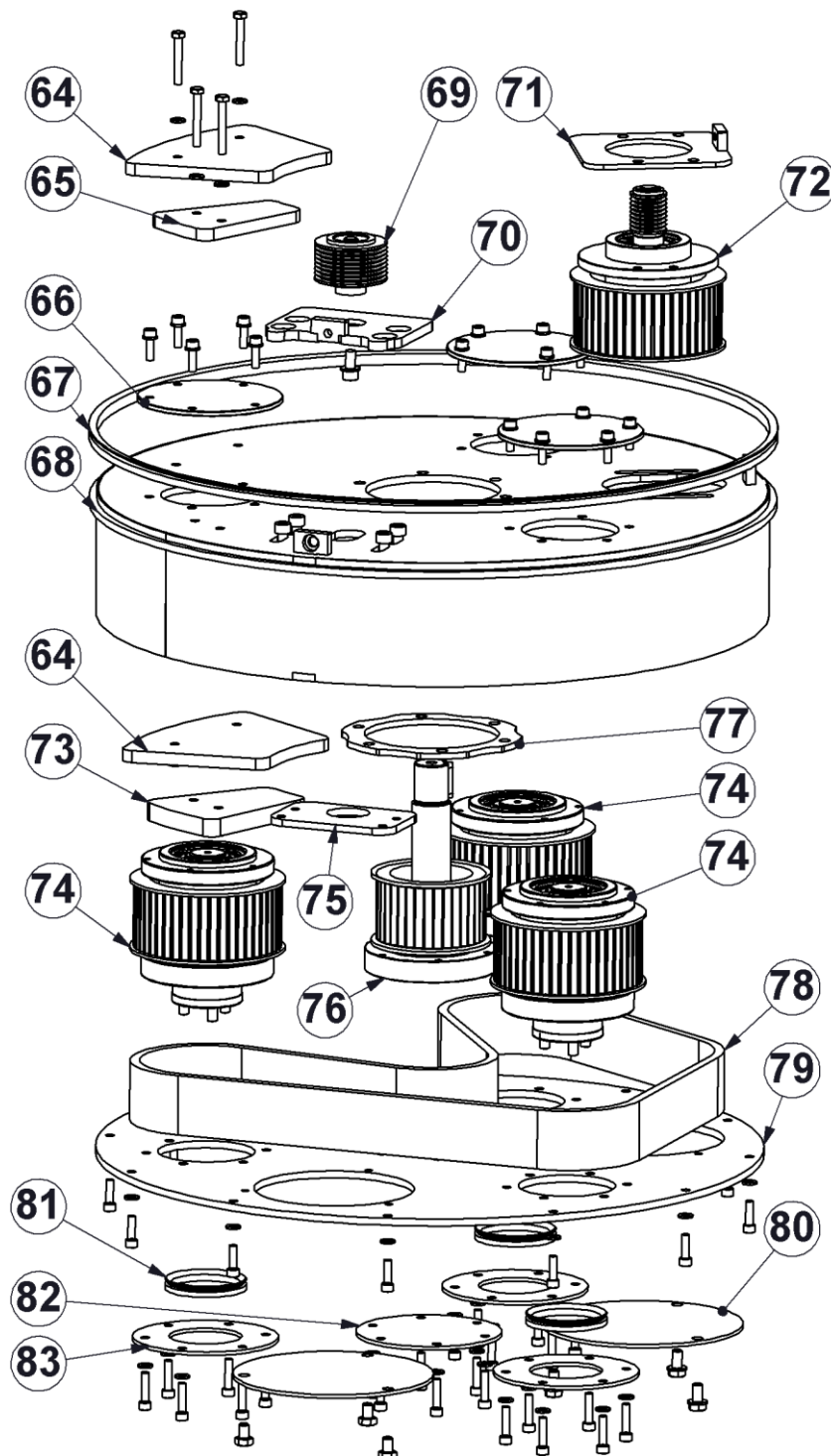




Item	Part number	Description	Remarks	Qty.
1	BG005841_7	Tube cap round		2
2	E11229_RD	Steer handle		1
3	BE0721	Knob M10		2
4	BE0191	M6x50 hexagon socket head bolt	DIN 912	4
5	BG11760	Deadman switch		1
6	BG11758	Cord for deadman switch		1
7	BG11759	Key for deadman switch		1
8	E11227	Unlocking handle		1
9	BE0702	M8x40 eye bolt		2
10	E11284	Baal attachment		1
11	E11226	Deadman switch cover		1
12	BE0653	Hook		2
13	E07008	Chain (11links)		1
14	E11222	Hose arm		1
15	E11228	Handle mounting shaft		1
16	E10182	Electrobox 5,5kW 1x230V		1
17	BG11920/32	Electrical inlet 32A		1
18	E11217	Electrobox bumper strip		1
19	E11236	Wheel shaft - BMG		2
20	BE0097	Starlock ring diam.20 with cap		2
21	E01491	Wheel		2
22	E11231	Diamatic logo red		2
23	E11059_RD	555 logo red		2
24	BE0040	M10x30 bolt		2
25	E11215	Right side of frame		1
26	E11230	Bottom electrobox bracket		1
27	E11218	Stiffening shaft		3
28	E01492	Megi bush		2
29	E11119	Spring lock 5mm		2
30	E11121	Hinge bolt		2
31	E11216	Left side of frame		1
32	E11235	Front cover Diamatic		1
33	E11219	Handle mounting bracket		1
34	BE0702	M8x40 eye bolt		2
35	E11220	Locking shaft		1
36	E09237	Spring 14, 8x64x2,0		2
37	E10380	Push strip		1
38	E11221	Main handle		1
39	E11224	Control box cover		1
40	E11124	Hinge 40x40		1
41	E06861	Operating box complete	Star/delta	1
	E07882	Operating box complete	Speed control	1
	E01543	Emergency stop		
	E00360	Signal light red complete		
	E01318	Start button		
	E01323	Left/right switch		
	E05130	Make contact (green)		
	E05131/1	Potential (meter speed switch)		
42	999-9156	Pipe clamp set		2

Machine complete

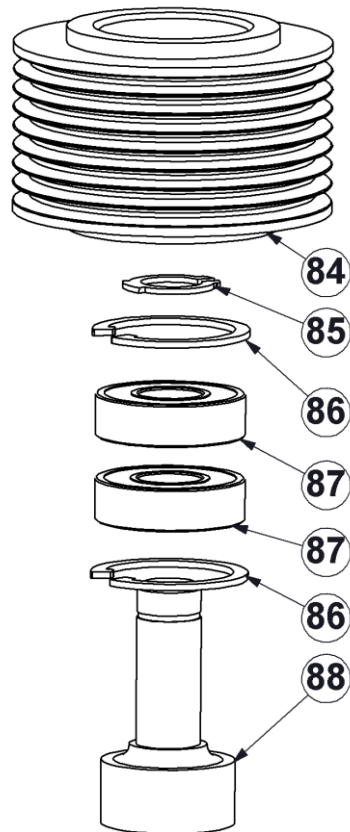
Item	Part number	Description	Remarks	Qty.
42	BG-BRUSH20mm	Synth. Brush for 550		2m
43	BE0020	M6x20 Hexagon socket head cap		4
44	E11028	Rubber seal of floating shroud		1
45	E11027	Tightening steel strip		1
46	E11014	Floating shroud BMG-55		1
47	BE0642	M6 8x8 hex. Socket head shoulde		1
48	E11008	Protection cover BMG-555		1
49	E11187	Rubber bumper 30-20		1
50	E11120	Holder		2
51	BE0107	Retaining ring for bore Ø 80mm		1
52	BE0126	Retaining ring for shaft Ø 50mm	DIN 471	2
53	E07277/Dual/RD	Motor 5,5kW 3x230/400/1500rpm B5	1500RPM	1
54	E10231	Fill-up block BMG-555	(Steel)	2
55	E11012_3	Top coupling		1
56	E11012_2	Spider for totex 28		1
57	E11012_1	Bottom coupling		1
58	E11058	Bearing		1
59	E11010	Main pulley-BMG-555		1
60	E03993	Retaining ring for bore Ø 90mm		1
61	E11057	Bearing		1
62	E06048	Cental bearing housing top		1
63	E11030	Top drive belt		1

Drive system



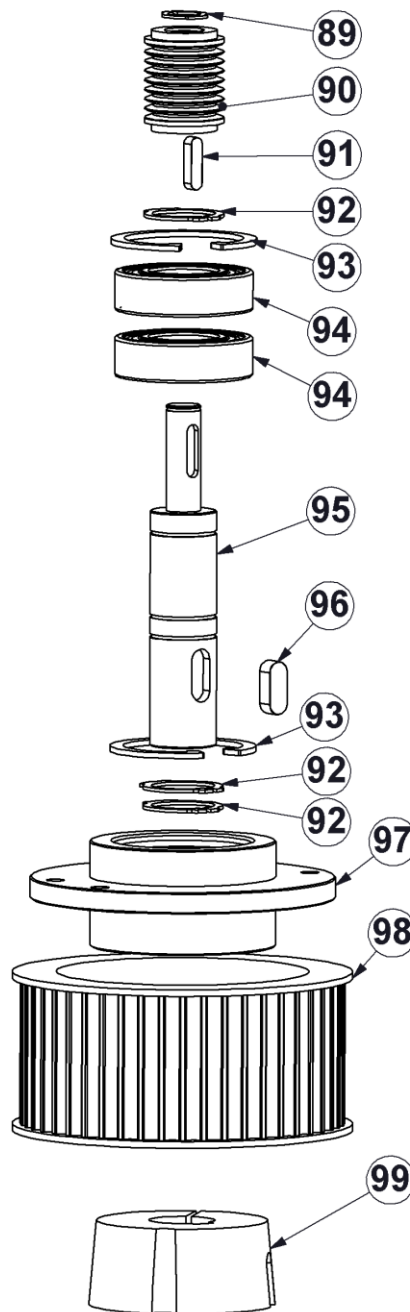
Item	Part number	Description	Remarks	Qty.
64	E11181	Balancing plate		2
65	E11182	Balancing plate-2		1
66	E11029	Plug for bearing housing		3
67	E11013	V-seal Low drive BMG-555		1
68	E09985	Housing BMG-555		1
69	E11061	Tension pulley assembly BMG-555		1
70	E11047	Cover plate tension pulley BMG-555		1
71	E11044	Cover plate contra pulley BMG-555		1
72	E11060	Contra pulley axle assembly BMG-555		1
73	E11183	Balancing plate-3		1
74	E11022	Pulley complete BMG-555		3
75	E11175	Tension pulley mount ring		1
76	E11006	Drive pulley compl.BMG-555		1
77	E01503	Centre ring		1
78	BG11905	HDT belt - drive		1
79	E11034	Lower plate BMG-555		1
80	BG007850	Inspection cover		2
81	BG11797	V-seal		3
82	BG005827	Cover		1
83	BG005826	Ring		3

Tension pulley assembly - E11061

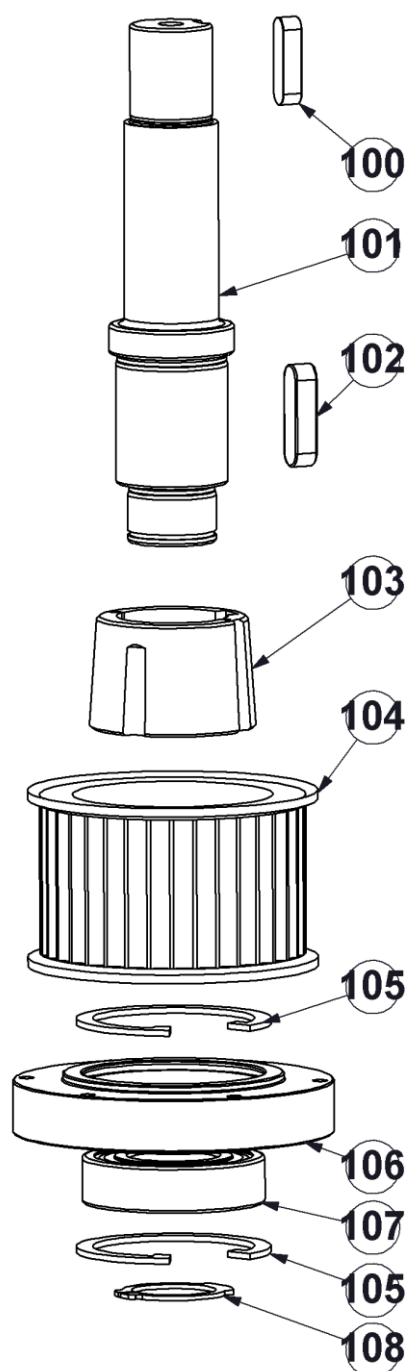


Item	Part number	Description	Remarks	Qty.
84	E06051	Pulley		1
85	BE0129	Retaining ring for shaft Ø 12	DIN 471	1
86	BE0128	Retaining ring for bore Ø 28	DIN 472	2
87	E06203	Bearing		2
88	E11046	Tension pulley axle (PK belt BMG-555)		1

Tension pulley assembly – E11060

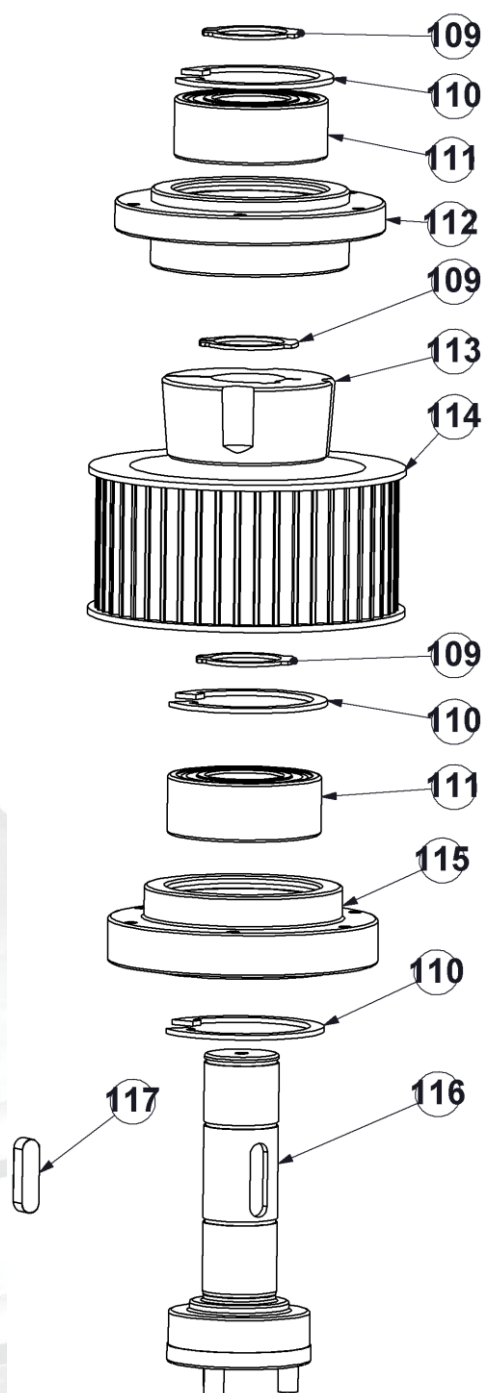


Item	Part number	Description	Remarks	Qty.
89		Retaining ring for shaft Ø 13	DIN 471	1
90	E06050	Pulley		1
91		Key 5x5x20	DIN 6885A	1
92	BE0076	Retaining ring for shaft Ø 25	DIN 471	3
93	BE0077	Retaining ring for bore Ø 52	DIN 472	2
94	222-2321-E	Bearing		2
95	E09986	Contra pulley axle – BMG-555		1
96	BE0109	Key 8x7x20	DIN 6885A	1
97	E11005	Bearing housing contra pulley – BMG-555		1
98	RB165-2	Pulley		1
99	E11062	Taper lock		

Drive pulley E11006

Item	Part number	Description	Remarks	Qty.
100	BE0256	Key 8x7x30	DIN 6885A	1
101	E11011	Central axle BMG-555		
102		Key 10x8x35	DIN 6885A	1
103	E00718	Taper lock		1
104	E10312	Pulley		1
105	E00951	Retaining ring for bore Ø 62	DIN 472	2
106	E11040	Bearing house		1
107	B20404	Bearing		1
108	B21631	Retaining ring for shaft Ø 30	DIN 471	1

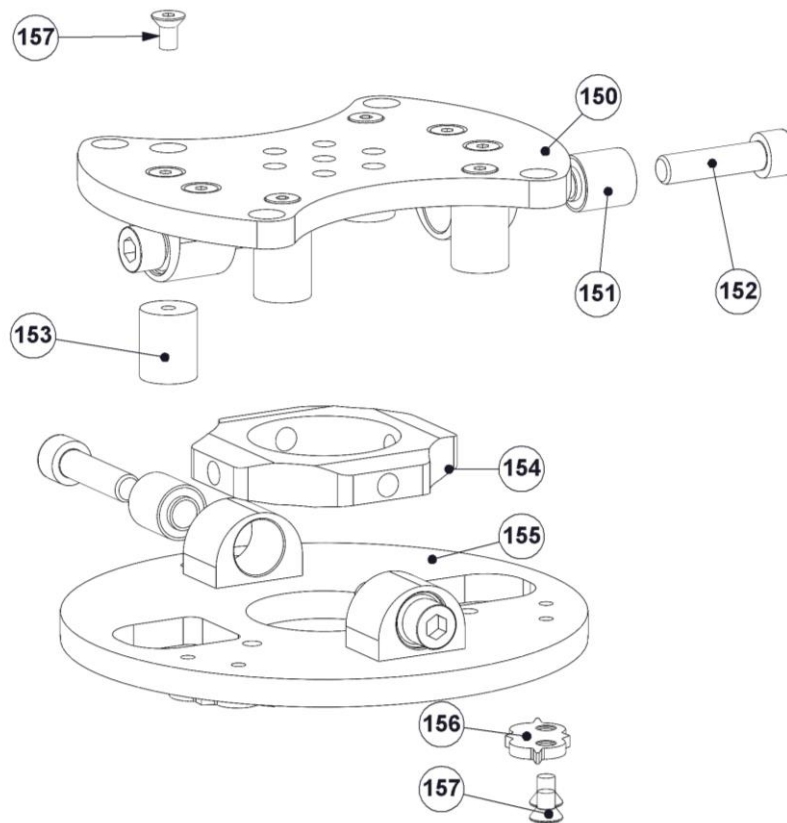
Pulley (3x) E11022



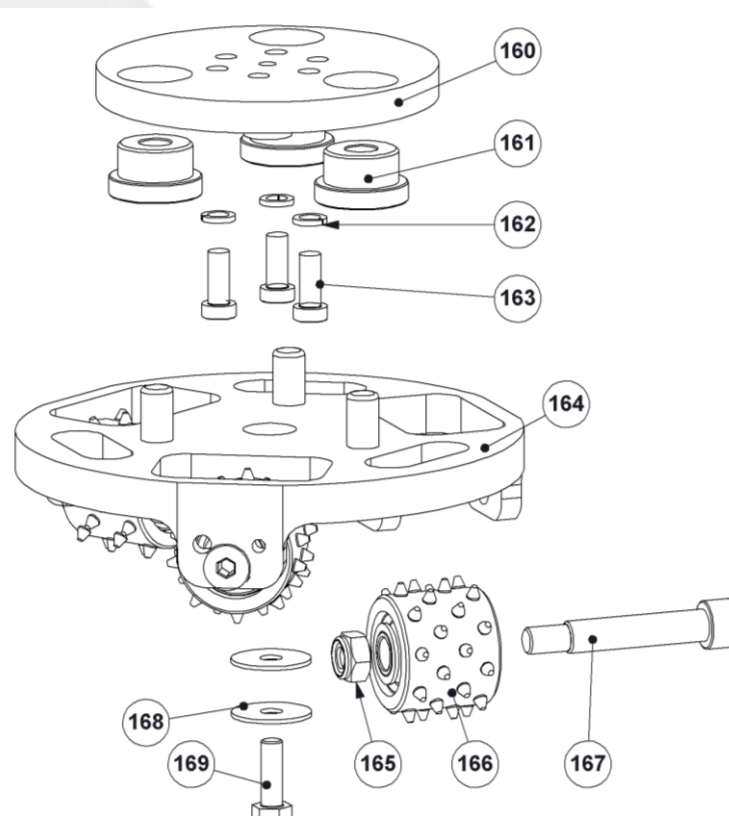
Item	Part number	Description	Remarks	Qty.
109	B21631	Retaining ring for shaft Ø30	DIN 471	3
110	E00951	Retaining ring for bore Ø62	DIN 472	3
111	BG11817	Bearing		2
112	E11023	Bearing housing		
113	RB100A3-350	Taper lock		1
114	RB165-2	Pulley		1
115	BG005817	Bering housing		1
116	E09992	Axle pulley compl. BMG-555		1
117	BE0256	Key 8x7x30	DIN 6885A	1



E10172 - 185mm buffer plate (3x per machine)



E12112 - 185mm bush hammer set up (3x per machine)





Tool plates

3x per machine

Item	Part number	Description	Remarks	Qty.
150-157	E10172	185mm buffer system		1
150	BE0168	Upper hinge plate		1
151	E12054	Torque bush		4
152	BE0722	M10x40 hexagon shoulder screw	12,9	4
153	E12065	Shock absorber		4 / 8
154	E10169	Middle hinge plate		1
155	E10171	Lower hinge plate		1
156	BG11811	Centering star (part of E10171)		3
157	BE0187	M6x12 hexagon countersunk screw (part of E10171)		10/14
160-169	E12112	185mm Bush hammer set up 555		1
160	BG11805	Buffer plate		1
161	BG11806	Buffer soft blue		3
162	BE0725	M8x20 hexagon socket thin head cap		3
163	BE0204	M8 spring lock washer small		3
164	E07459	Cutterplate 185mm only		1
165	BE0023	M10 locking nut		3
166	E09119-1	Bush hammer heavy incl. bolt & nut		3
167	BE0723	M10 12x55 hexagon socket head cap screw		3
165-167	E09119-1	Bush hammer heavy incl. bolt & nut		3
	E09119-1/SET9	Bush hammer set of 9		
	E09119-1/SET15	Bush hammer set of 15		
168	BE0314	M8x30 plain washer		2
169	BE0030	M8x25 hexagon head screw		1
164-167	E07460	Cutter plate c.w. bush hammer 185		1
	BG300118-1	Cutter plate c.w. star wheels		1
	E07185-1	DIAMAG 185mm adapter plate		1
	E09399/fine	Velcro plate 185mm fine		1
	E09399/coarse	Velcro plate 185mm coarse		1
	E10691	185mm Diamag PCD plate		1
	BG200994	Plate for wings 185mm		1
	BG200989	Dry polish dot holder 185mm		1
	E06447	DIAMAG adapter plate for dots		3
	BG185001 – BG185007	Polishing pads 185mm		1
	BG185M004 – BG185M007	Maintenance pads 185mm		1

4. Fault diagnose frequency drive

For a complete overview of faults and how to resolve them, check the operating manual of the frequency drive or the CD, which are delivered with the machine.

If you put the CD in the computer, it will automatically go to the manuals.

Does the inverter shows an "INF" fault, reset the machine.

If the machine does not work after that, call you distributor.

To reset the machine, put out the power supply and wait 5 minutes.

Then start up the machine again. Call a technician if the machine still not works.

Fault	Name	Probable cause	Remedy
A I 2 F	[AI2 input]	<ul style="list-style-type: none"> Non-conforming signal on analog input AI2 	<ul style="list-style-type: none"> Check the wiring of analog input AI2 and the value of the signal
A n F	[Load slipping]	<ul style="list-style-type: none"> The encoder speed feedback does not match the reference 	<ul style="list-style-type: none"> Check the motor, gain and stability parameters Add a braking resistor Check the size of the motor/drive/load Check the encoder's mechanical coupling and its wiring
b D F	[DBR overload]	<ul style="list-style-type: none"> The braking resistor is under excessive stress 	<ul style="list-style-type: none"> Check the size of the resistor and wait for it to cool down Check the [DB Resistor Power] (brP) and [DB Resistor value] (brU) parameters, page 211
b r F	[Brake feedback]	<ul style="list-style-type: none"> The brake feedback contact does not match the brake logic control 	<ul style="list-style-type: none"> Check the feedback circuit and the brake logic control circuit Check the mechanical state of the brake
b U F	[DB unit sh. Circuit]	<ul style="list-style-type: none"> Short-circuit output from braking unit 	<ul style="list-style-type: none"> Check the wiring of the braking unit and the resistor Check the braking resistor
C r F 1	[Precharge]	<ul style="list-style-type: none"> Load relay control fault or charging resistor damaged 	<ul style="list-style-type: none"> Switch the drive off and then back on again Check the internal connections
C r F 2	[Thyr. soft charge]	<ul style="list-style-type: none"> DC bus charging fault (thyristors) 	<ul style="list-style-type: none"> Inspect/repair the drive
E C F	[Encoder coupling]	<ul style="list-style-type: none"> Break in encoder's mechanical coupling 	<ul style="list-style-type: none"> Check the encoder's mechanical coupling
E E F 1	[Control Eeprom]	<ul style="list-style-type: none"> Internal memory fault, control card 	<ul style="list-style-type: none"> Check the environment (electromagnetic compatibility) Turn off, reset, return to factory settings
E E F 2	[Power Eeprom]	<ul style="list-style-type: none"> Internal memory fault, power card 	<ul style="list-style-type: none"> Inspect/repair the drive
E n F	[Encoder]	<ul style="list-style-type: none"> Encoder feedback fault 	<ul style="list-style-type: none"> Check [Number of pulses] (PGI) and [Encoder type] (EnS), page 22 Check that the encoder's mechanical and electrical operation, its power supply and connections are all correct If necessary, reverse the direction of rotation of the motor ([Output Ph rotation] (PHr) parameter, page 88) or the encoder signals
F C F 1	[Out. contact. stuck]	<ul style="list-style-type: none"> The output contactor remains closed although the opening conditions have been met 	<ul style="list-style-type: none"> Check the contactor and its wiring Check the feedback circuit

Fault	Name	Probable cause	Remedy
H d F	[IGBT desaturation]	<ul style="list-style-type: none"> Short-circuit or grounding at the drive output 	<ul style="list-style-type: none"> Check the cables connecting the drive to the motor, and the insulation of the motor Perform the diagnostic tests via the [1.10 DIAGNOSTICS] menu
I L F	[Internal com. link]	<ul style="list-style-type: none"> Communication fault between option card and drive 	<ul style="list-style-type: none"> Check the environment (electromagnetic compatibility) Check the connections Check that no more than 2 option cards (max. permitted) have been installed on the drive Replace the option card Inspect/repair the drive
I n F 1	[Rating error]	<ul style="list-style-type: none"> The power card is different from the card stored 	<ul style="list-style-type: none"> Check the reference of the power card
I n F 2	[Incompatible PB]	<ul style="list-style-type: none"> The power card is incompatible with the control card 	<ul style="list-style-type: none"> Check the reference of the power card and its compatibility
I n F 3	[Internal serial link]	<ul style="list-style-type: none"> Communication fault between the internal cards 	<ul style="list-style-type: none"> Check the internal connections Inspect/repair the drive
I n F 4	[Internal MFG area]	<ul style="list-style-type: none"> Internal data inconsistent 	<ul style="list-style-type: none"> Recalibrate the drive (performed by Schneider Electric Product Support)
I n F 5	[Internal-option]	<ul style="list-style-type: none"> The option installed in the drive is not recognized 	<ul style="list-style-type: none"> Check the reference and compatibility of the option
I n F 7	[Internal-hard init.]	<ul style="list-style-type: none"> Initialization of the drive is incomplete 	<ul style="list-style-type: none"> Turn off and reset
I n F 8	[Internal-ctrl supply]	<ul style="list-style-type: none"> The control power supply is incorrect 	<ul style="list-style-type: none"> Check the control power supply
I n F 9	[Internal- I measure]	<ul style="list-style-type: none"> The current measurements are incorrect 	<ul style="list-style-type: none"> Replace the current sensors or the power card Inspect/repair the drive
I n F A	[Internal-mains circuit]	<ul style="list-style-type: none"> The input stage is not operating correctly 	<ul style="list-style-type: none"> Perform the diagnostic tests via the [1.10 DIAGNOSTICS] menu Inspect/repair the drive
I n F b	[Internal- th. sensor]	<ul style="list-style-type: none"> The drive temperature sensor is not operating correctly 	<ul style="list-style-type: none"> Replace the temperature sensor Inspect/repair the drive
I n F C	[Internal-time meas.]	<ul style="list-style-type: none"> Fault on the electronic time measurement component 	<ul style="list-style-type: none"> Inspect/repair the drive
I n F E	[Internal- CPU]	<ul style="list-style-type: none"> Internal microprocessor fault 	<ul style="list-style-type: none"> Turn off and reset. Inspect/repair the drive
O C F	[Overcurrent]	<ul style="list-style-type: none"> Parameters in the [SETTINGS] (SEt-) and [1.4 MOTOR CONTROL] (drC-) menus are not correct Inertia or load too high Mechanical locking 	<ul style="list-style-type: none"> Check the parameters Check the size of the motor/drive/load Check the state of the mechanism
P r F	[Power removal]	<ul style="list-style-type: none"> Fault with the drive's "Power removal" safety function 	<ul style="list-style-type: none"> Inspect/repair the drive
S C F 1	[Motor short circuit]	<ul style="list-style-type: none"> Short-circuit or grounding at the drive output Significant earth leakage current at the drive output if several motors are connected in parallel 	<ul style="list-style-type: none"> Check the cables connecting the drive to the motor, and the insulation of the motor Perform the diagnostic tests via the [1.10 DIAGNOSTICS] menu Reduce the switching frequency Connect chokes in series with the motor
S C F 2	[Impedant sh. circuit]		
S C F 3	[Ground short circuit]		
S O F	[Overspeed]	<ul style="list-style-type: none"> Instability or driving load too high 	<ul style="list-style-type: none"> Check the motor, gain and stability parameters Add a braking resistor Check the size of the motor/drive/load
S P F	[Speed fdbck loss]	<ul style="list-style-type: none"> Encoder feedback signal missing 	<ul style="list-style-type: none"> Check the wiring between the encoder and the drive Check the encoder
t n F	[Auto-tuning]	<ul style="list-style-type: none"> Special motor or motor whose power is not suitable for the drive Motor not connected to the drive 	<ul style="list-style-type: none"> Check that the motor/drive are compatible Check that the motor is present during auto-tuning If an output contactor is being used, close it during auto-tuning

Fault	Name	Probable cause	Remedy
A P F	[Application fault]	<ul style="list-style-type: none"> Controller Inside card fault 	<ul style="list-style-type: none"> Please refer to the card documentation
b L F	[Brake control]	<ul style="list-style-type: none"> Brake release current not reached Brake engage frequency threshold [Brake engage freq] (bEn) only regulated when brake logic control is assigned 	<ul style="list-style-type: none"> Check the drive/motor connection Check the motor windings Check the [Brake release I FW] (lbr) and [Brake release I Rev] (lrd) settings, page 148. Apply the recommended settings for [Brake engage freq] (bEn)
C n F	[Com. network]	<ul style="list-style-type: none"> Communication fault on communication card 	<ul style="list-style-type: none"> Check the environment (electromagnetic compatibility) Check the wiring Check the time-out Replace the option card Inspect/repair the drive
C D F	[CAN com.]	<ul style="list-style-type: none"> Interruption in communication on the CANopen bus 	<ul style="list-style-type: none"> Check the communication bus Check the time-out Refer to the CANopen user's manual
E P F 1	[External flt-LI/Bit]	<ul style="list-style-type: none"> Fault triggered by an external device, depending on user 	<ul style="list-style-type: none"> Check the device, which caused the fault, and reset
E P F 2	[External fault com.]	<ul style="list-style-type: none"> Fault triggered by a communication network 	<ul style="list-style-type: none"> Check for the cause of the fault and reset
F C F 2	[Out. contact. open.]	<ul style="list-style-type: none"> The output contactor remains open although the closing conditions have been met 	<ul style="list-style-type: none"> Check the contactor and its wiring Check the feedback circuit
L C F	[input contactor]	<ul style="list-style-type: none"> The drive is not turned on even though [Mains V. time out] (LCt) has elapsed 	<ul style="list-style-type: none"> Check the contactor and its wiring Check the time-out Check the line/contactor/drive connection
L F F 2 L F F 3 L F F 4	[AI2 4-20mA loss] [AI3 4-20mA loss] [AI4 4-20mA loss]	<ul style="list-style-type: none"> Loss of the 4-20 mA reference on analog input AI2, AI3 or AI4 	<ul style="list-style-type: none"> Check the connection on the analog inputs
O b F	[Overbraking]	<ul style="list-style-type: none"> Braking too sudden or driving load 	<ul style="list-style-type: none"> Increase the deceleration time Install a braking resistor if necessary Activate the [Dec ramp adapt.] (brA) function, page 127, if it is compatible with the application
O H F	[Drive overheat]	<ul style="list-style-type: none"> Drive temperature too high 	<ul style="list-style-type: none"> Check the motor load, the drive ventilation and the ambient temperature. Wait for the drive to cool down before restarting
O L F	[Motor overload]	<ul style="list-style-type: none"> Triggered by excessive motor current 	<ul style="list-style-type: none"> Check the setting of the motor thermal protection, check the motor load. Wait for the drive to cool down before restarting
O P F 1	[1 output phase loss]	<ul style="list-style-type: none"> Loss of one phase at drive output 	<ul style="list-style-type: none"> Check the connections from the drive to the motor

Fault	Name	Probable cause	Remedy
D P F 2	[3 output phase loss]	<ul style="list-style-type: none"> Motor not connected or motor power too low Output contactor open Instantaneous instability in the motor current 	<ul style="list-style-type: none"> Check the connections from the drive to the motor If an output contactor is being used, parameterize [Output Phase Loss] (OPL) = [Output out] (OAC), page 201 Test on a low power motor or without a motor: In factory settings mode, motor phase loss detection is active [Output Phase Loss] (OPL) = [Yes] (YES). To check the drive in a test or maintenance environment, without having to use a motor with the same rating as the drive (in particular for high power drives), deactivate motor phase loss detection [Output Phase Loss] (OPL) = [No] (nO) Check and optimize the following parameters: [IR compensation] (UFR), page 70, [Rated motor volt.] (UnS) and [Rated mot. current] (nCr), page 85, and perform [Auto tuning] (tUn), page 88
D S F	[Mains overvoltage]	<ul style="list-style-type: none"> Mains voltage too high Disturbed mains supply 	<ul style="list-style-type: none"> Check the mains voltage
D t F 1	[PTC1 overheat]	<ul style="list-style-type: none"> Overheating of the PTC1 probes detected 	<ul style="list-style-type: none"> Check the motor load and motor size Check the motor ventilation Wait for the motor to cool before restarting Check the type and state of the PTC probes
D t F 2	[PTC2 overheat]	<ul style="list-style-type: none"> Overheating of the PTC2 probes detected 	
D t F L	[LI6=PTC overheat]	<ul style="list-style-type: none"> Overheating of PTC probes detected on input LI6 	
P t F 1	[PTC1 probe]	<ul style="list-style-type: none"> PTC1 probes open or short-circuited 	
P t F 2	[PTC2 probe]	<ul style="list-style-type: none"> PTC2 probes open or short-circuited 	<ul style="list-style-type: none"> Check the PTC probes and the wiring between them and the motor/drive
P t F L	[LI6=PTC probe]	<ul style="list-style-type: none"> PTC probes on input LI6 open or short-circuited 	
S C F 4	[IGBT short circuit]	<ul style="list-style-type: none"> Power component fault 	<ul style="list-style-type: none"> Perform a diagnostic test via the [1.10 DIAGNOSTICS] menu Inspect/repair the drive
S C F 5	[Motor short circuit]	<ul style="list-style-type: none"> Short-circuit at drive output 	<ul style="list-style-type: none"> Check the cables connecting the drive to the motor, and the motor's insulation Perform diagnostic tests via the [1.10 DIAGNOSTICS] menu Inspect/repair the drive
S L F 1	[Modbus com.]	<ul style="list-style-type: none"> Interruption in communication on the Modbus bus 	<ul style="list-style-type: none"> Check the communication bus Check the time-out Refer to the Modbus user's manual
S L F 2	[PowerSuite com.]	<ul style="list-style-type: none"> Fault communicating with PowerSuite 	<ul style="list-style-type: none"> Check the PowerSuite connecting cable Check the time-out
S L F 3	[HMI com.]	<ul style="list-style-type: none"> Fault communicating with the graphic display terminal 	<ul style="list-style-type: none"> Check the terminal connection Check the time-out
S r F	[Torque time-out]	<ul style="list-style-type: none"> The time-out of the torque control function is attained 	<ul style="list-style-type: none"> Check the function's settings Check the state of the mechanism
S S F	[Torque/current lim]	<ul style="list-style-type: none"> Switch to torque limitation 	<ul style="list-style-type: none"> Check if there are any mechanical problems Check the parameters of [TORQUE LIMITATION] (tLA-) page 171, and the parameters of fault [TORQUE OR I LIM. DETECT.] (tld-), page 210
t J F	[IGBT overheat]	<ul style="list-style-type: none"> Drive overheated 	<ul style="list-style-type: none"> Check the size of the load/motor/drive Reduce the switching frequency Wait for the motor to cool before restarting

Fault	Name	Probable cause	Remedy
C F F	[Incorrect config.]	<ul style="list-style-type: none"> Option card changed or removed Control card replaced by a control card configured on a drive with a different rating The current configuration is inconsistent 	<ul style="list-style-type: none"> Check that there are no card errors In the event of the option card being changed/removed deliberately, see the remarks below Check that there are no card errors In the event of the control card being changed deliberately, see the remarks below Return to factory settings or retrieve the backup configuration, if it is valid (see page 223)
C F I	[Invalid config.]	<ul style="list-style-type: none"> Invalid configuration The configuration loaded in the drive via the bus or communication network is inconsistent 	<ul style="list-style-type: none"> Check the configuration loaded previously Load a compatible configuration
H C F	[Cards pairing]	<ul style="list-style-type: none"> The [CARDS PAIRING] (PPI-) function, page 212, has been configured and a drive card has been changed 	<ul style="list-style-type: none"> In the event of a card error, reinsert the original card Confirm the configuration by entering the [Pairing password] (PPI) if the card was changed deliberately
P H F	[Input phase loss]	<ul style="list-style-type: none"> Drive incorrectly supplied or a fuse blown Failure of one phase 3-phase ATV71 used on a single-phase line supply Unbalanced load <p>This protection only operates with the drive on load</p>	<ul style="list-style-type: none"> Check the power connection and the fuses Use a 3-phase mains supply Disable the fault by [Input phase loss] (IPL) = [No] (nO) (page 202)
U S F	[Undervoltage]	<ul style="list-style-type: none"> Line supply too low Transient voltage dip Damaged pre-charge resistor 	<ul style="list-style-type: none"> Check the voltage and the parameters of [UNDERVOLTAGE MGT] (USb-), page 205 Replace the pre-charge resistor Inspect/repair the drive