

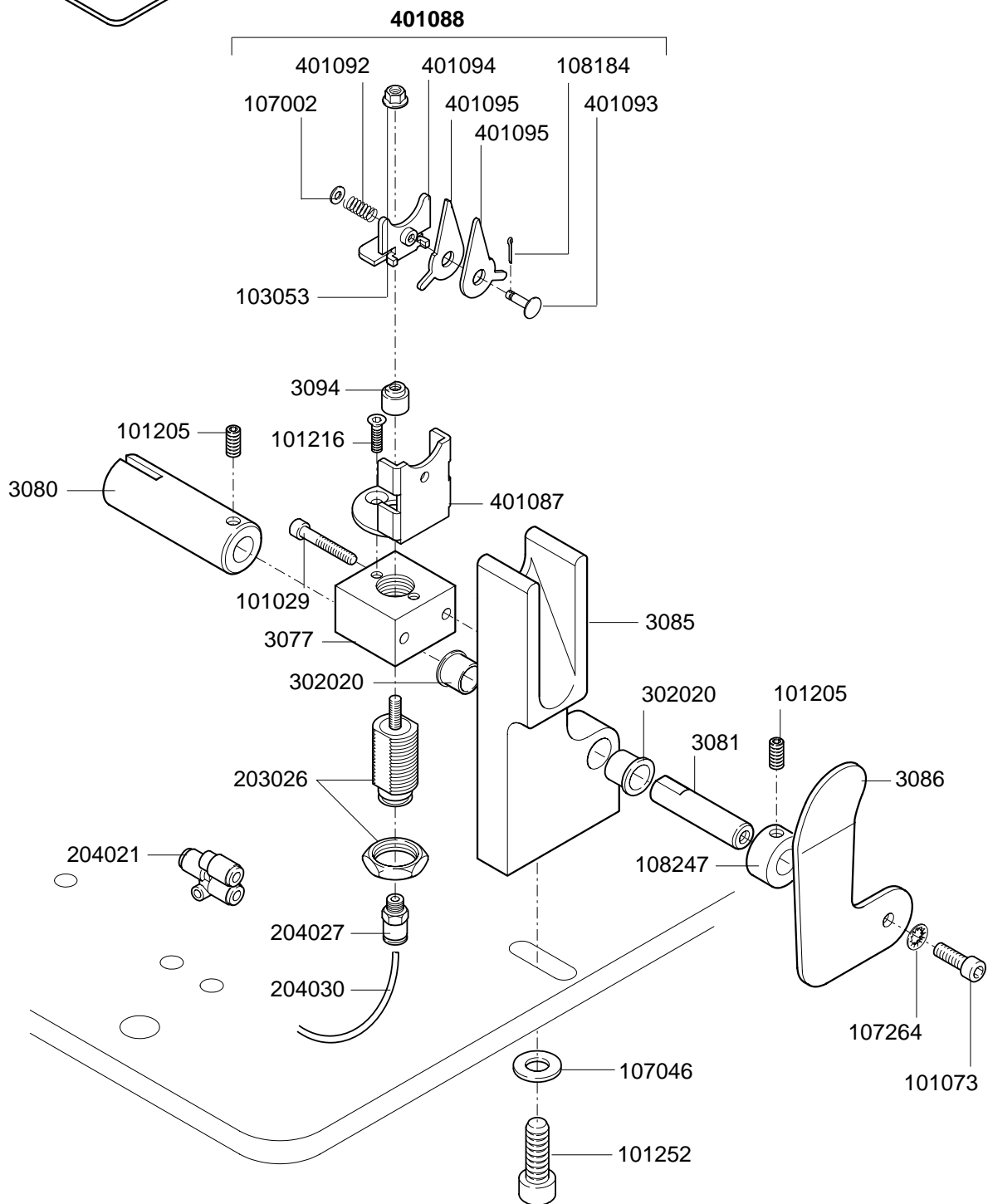
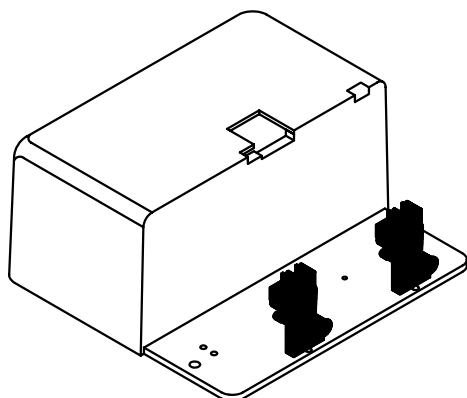


Contents

1. Scissors assy.	2-3
2. Thread guide and eccentric drive	2-5
3. Tucker plate assy.	2-7
4. Bobbin table with setting elements	2-9
5. Secondary shaft with ejection elements	2-11
6. Main drive	2-13
7. Spindle shafts	2-15
8. Housing and covers	2-17
9. Control system	2-19
10. Pneumatic system	2-23



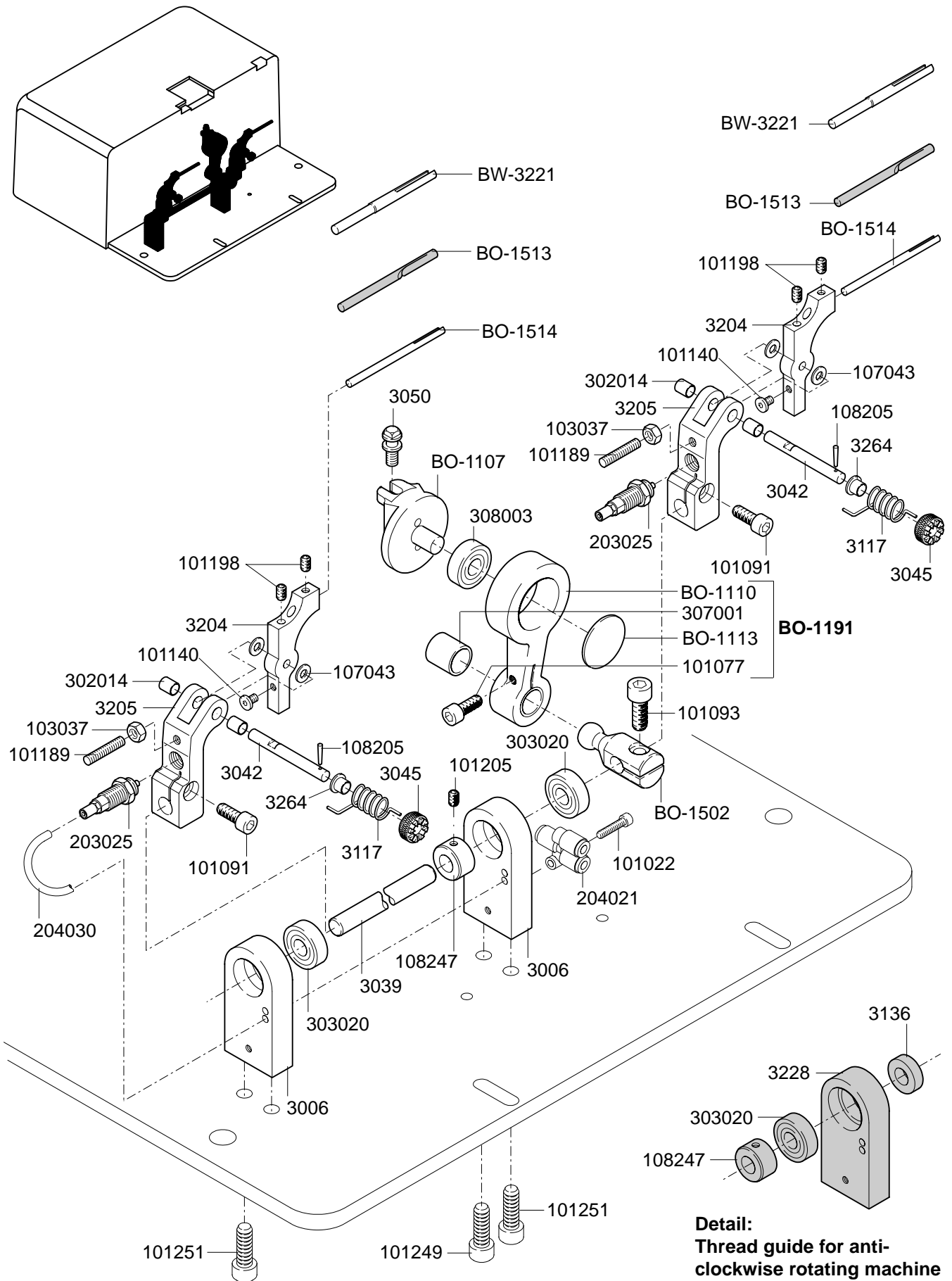
Modules consisting of several sub-assemblies are indicated by bold printed item nos.





1. Scissors assy.

Item No.	Designation	including	Pcs.
BW-3077	Cylinder support for scissors		2
BW-3080	Sliding collar	101205	2
BW-3081	Arbor		2
BW-3085	Chute		2
BW-3086	Shutter	302020	2
BW-3094	Bushing		2
101029	Screw		4
101073	Screw		2
101205	Thread plug		4
101216	Screw		4
101252	Screw		2
103053	Lock nut		2
107002	Washer		2
107046	Washer		2
107264	Serrated lock washer		2
108184	Split pin		2
108247	Locating ring	101205	2
203026	Pneumatic cylinder with nut		2
204021	Distributor		1
204027	Connector		2
204030	PU tubing \varnothing 4 mm		m
302020	Slide bearing		4
401087	Guide angle plate		2
401088	Knife head assy.	401092, 401093, 401094, 401095, 107002, 108184	2
401092	Spring		2
401093	Bolt		2
401094	Knife support		2
401095	Knife		4



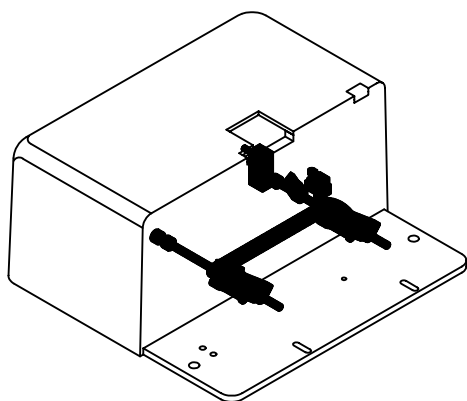
Detail:
Thread guide for anti-clockwise rotating machine



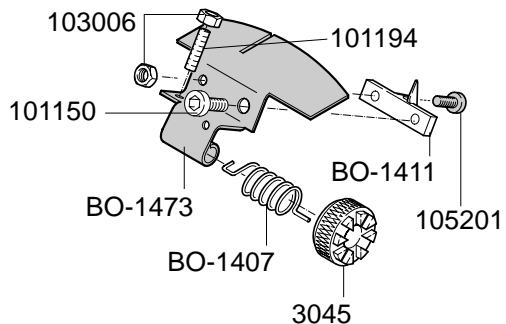
2. Thread guide and eccentric drive

Item No.	Designation	including	Pcs.
BO-1107	Eccentric		1
BO-1110	Connecting rod		1
BO-1113	Cover		1
BO-1191	Connecting rod	BO-1110, BO-1113, 101077, 307001	1
BO-1502	Ball-shaped lever	101093	1
BO-1514	Thread guide for clockwise rotating machine		2
BW-3006	Thread guide support for clockwise rotat. mach.		2
BW-3039	Drive shaft for thread guide		1
BW-3042	Shaft of thread guide lever	108205	2
BW-3045	Spring locating ring		2
BW-3050	Set screw for eccentric		1
BW-3117	Spring for thread guide lever		2
BW-3204	Thread guide lever	101140, 101198, 107043	2
BW-3205	Hinged lever for thread guide	101091,101189,103037,302014	2
BW-3221	Thread guide ceramic for clockwise rotat. mach.		2
BW-3264	Protective bushing for thread guide spring		2
101022	Screw		1
101077	Screw		1
101091	Screw		2
101093	Screw		1
101140	Screw		2
101189	Thread plug		2
101198	Thread plug		4
101205	Thread plug		1
101249	Screw		1
101251	Screw		3
103037	Nut		2
107043	Spacer		4
108205	Taper pin		2
108247	Locating ring	101205	1
203025	Pneumatic cylinder	Nut	2
204021	Distributor		1
204030	PU tubing ø 4 mm		m
302014	Slide bearing		4
303020	Ball bearing		2
307001	Inner ring		1
308003	Ball bearing		1

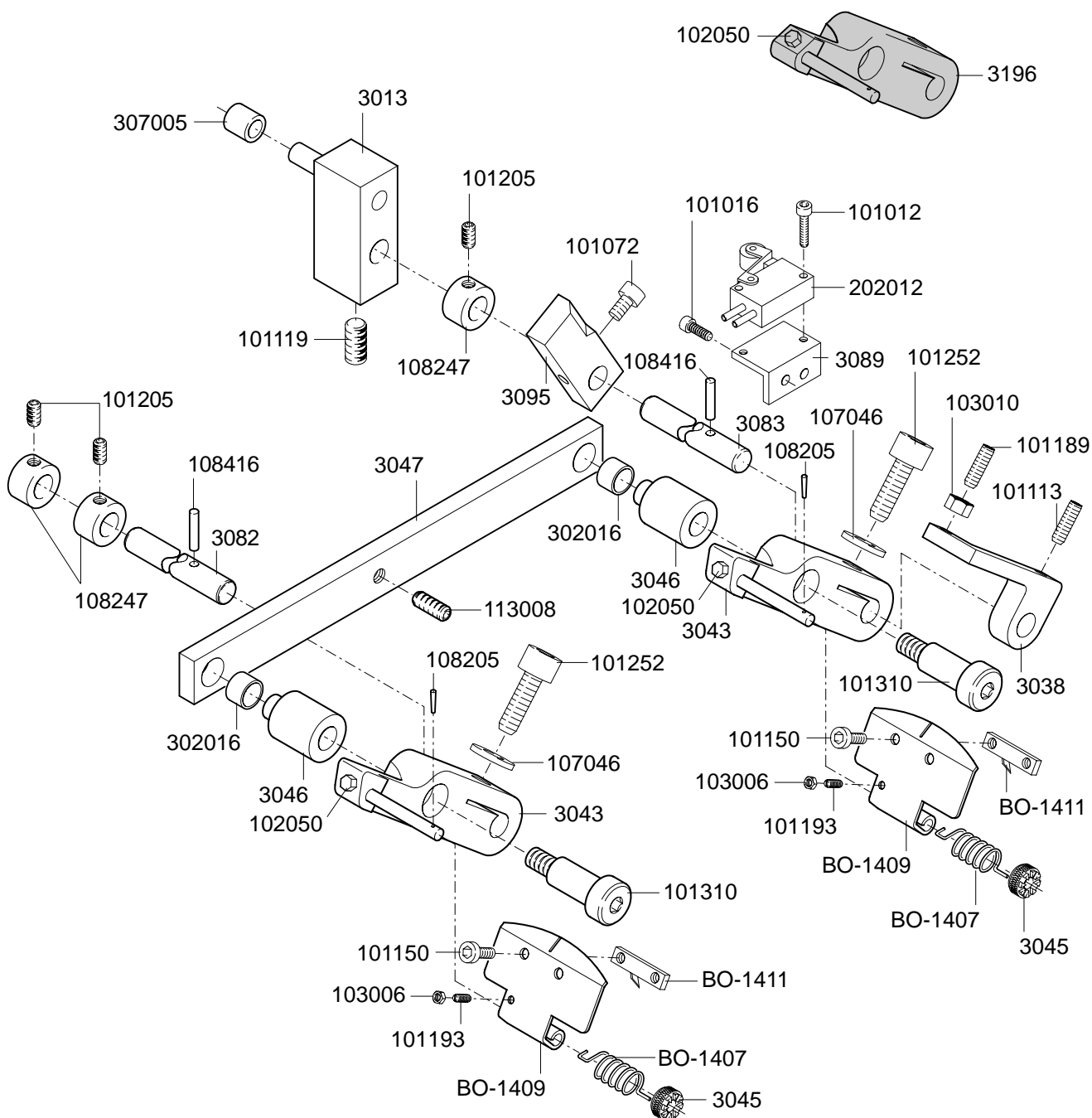
Anti-Clockwise			
BO-1513	Thread guide for anti-clockwise rotating machine		2
BW-3136	Spacer		1
BW-3228	Thread guide support for anti-clockwise rotating machine		1



Detail: Tucker plates for anti-clockwise rotating machine



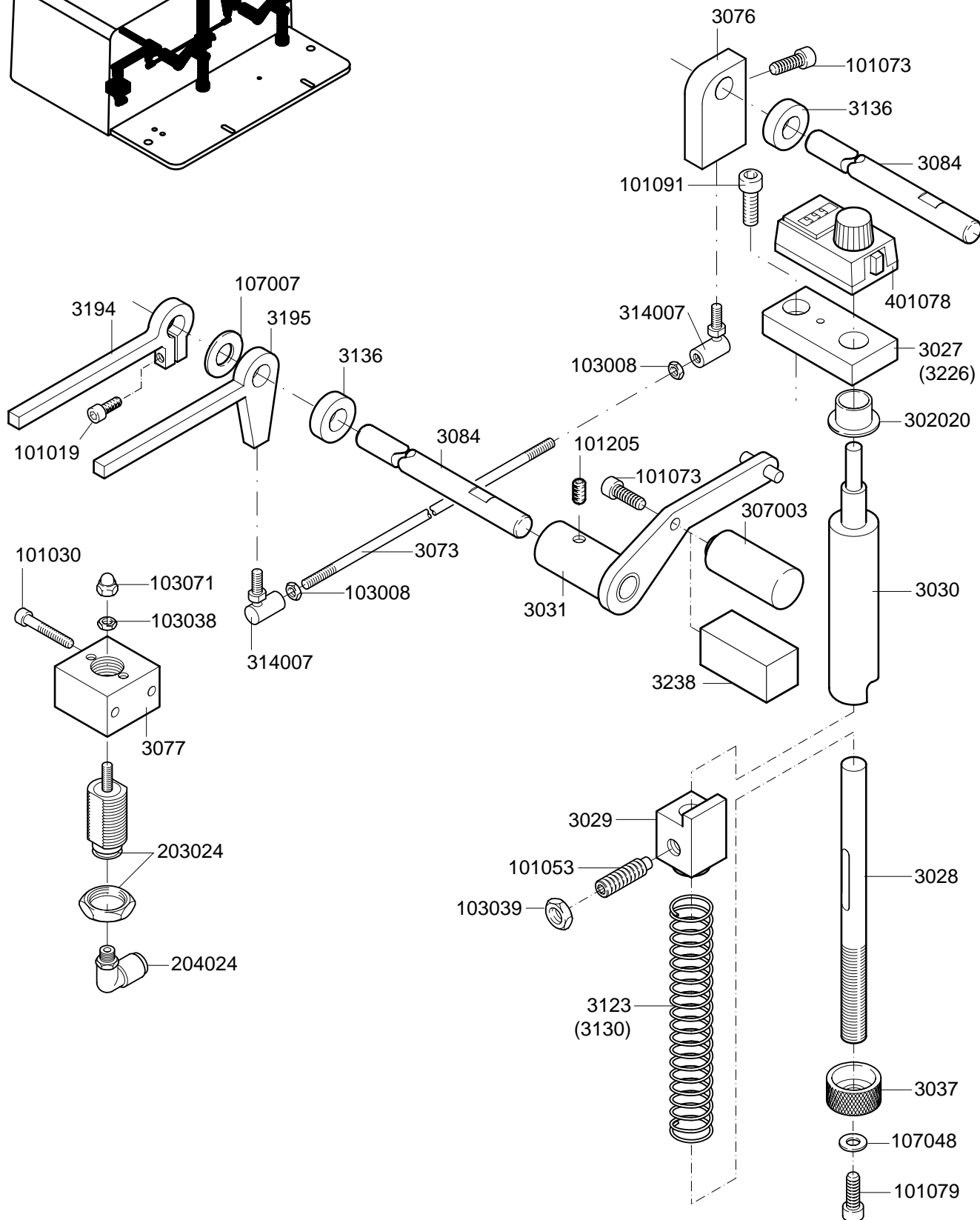
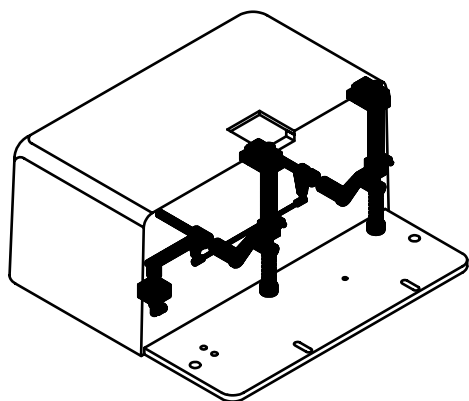
Detail: Undertucking lever for anti-clockwise rotating machine



**3. Tucker plate assy.**

Item No.	Designation	including	Pcs.
BO-1407	Spring of tucker plate		2
BO-1409	Tucker plate for clockwise rotating machine	101193, 103006	2
BO-1411	Undertucker		2
BW-3013	Cam lever	101119, 307005	1
BW-3038	Undertucker setting lever	101113, 101137, 103010	1
BW-3043	Undertucking lever for clockwise rotating machine	101252,107046,108205,102050	2
BW-3045	Spring locating ring		2
BW-3046	Joint bolt		2
BW-3047	Joint lever	302016	1
BW-3082	Shaft of untucking lever, left	108416	1
BW-3083	Shaft of untucking lever, right	108260	1
BW-3089	Support for cam lever valve		1
BW-3095	Switch lever for lifting thread guide	101072	1
101012	Screw		2
101016	Screw		2
101072	Screw		1
101113	Thread plug		1
101119	Thread plug		1
101150	Screw		4
101189	Thread plug		1
101193	Thread plug		2
101205	Thread plug		3
101310	Screw		2
101252	Screw		2
102050	Screw		2
103010	Nut		1
103006	Nut		2
107046	Washer		2
108205	Pin		2
108247	Locating ring	101205	3
108416	Pin		2
113008	Threaded plug (polyamide)		1
202012	Roller lever valve		1
302016	Slide bearing		2
307005	Inner ring		1

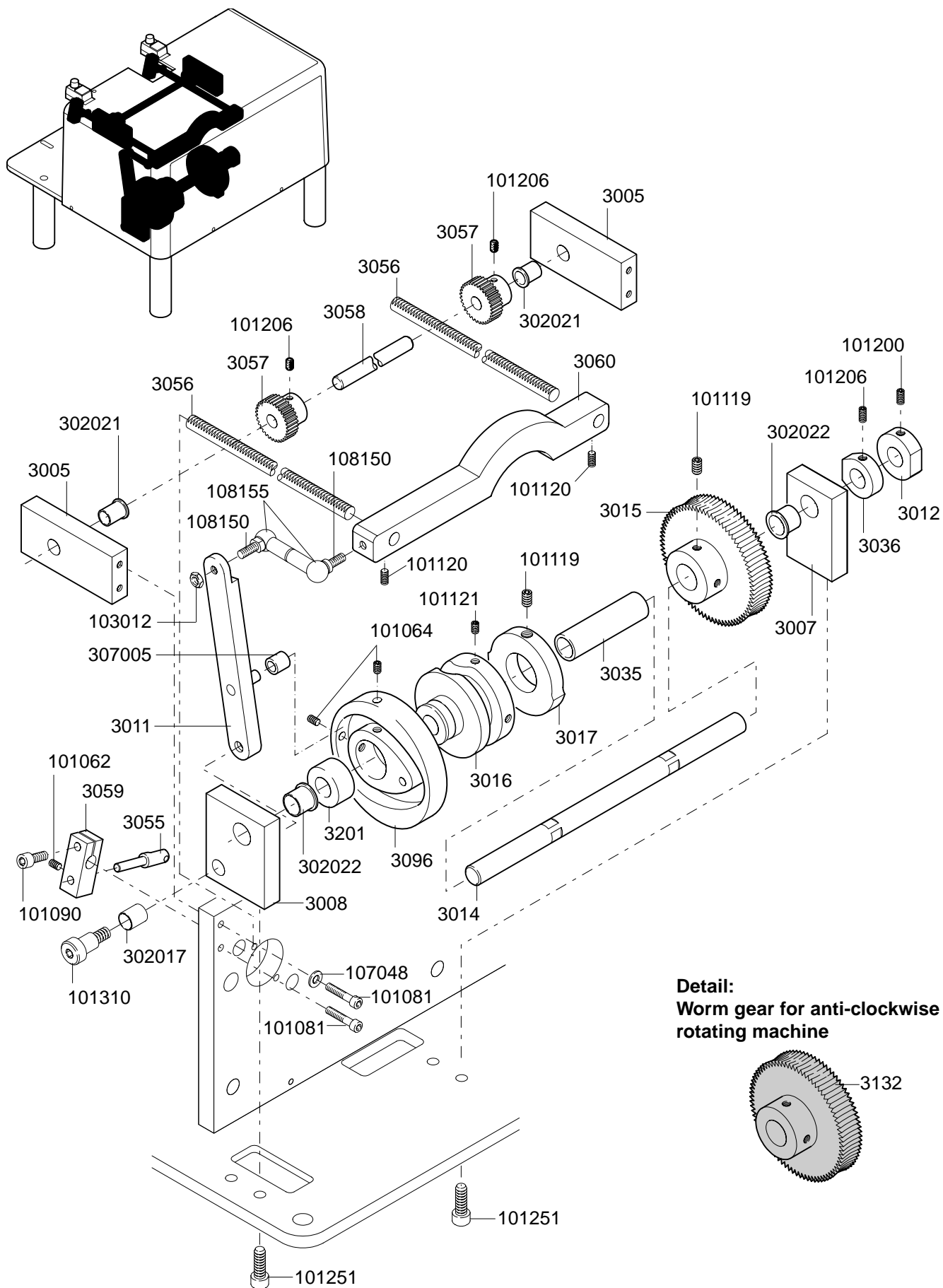
Anti-Clockwise			
BO-1473	Tucker plate for anti-clockwise rotating machine	101193, 103006	2
BW-3196	Undertucking lever for anti-clockwise rot. mach.	101252,107046,108205,102050	2
101150	Screw		1
101194	Thread plug		1
103006	Nut		1
105201	Screw		2





4. Bobbin table with setting elements

Item No.	Designation	including	Pcs.
BW-3027	Support for bobbin table setting assy, right	302020	1
BW-3028	Spring guide for bobbin table lever		2
BW-3029	Spring stop for bobbin table lever	101053, 103039	2
BW-3030	Stop for bobbin table lever		2
BW-3031	Bobbin table lever	101205	2
BW-3037	Adjusting nut for bobbin table spring		2
BW-3073	Switch lever link		1
BW-3076	Clamp lever	101073	1
BW-3077	Cylinder support		1
BW-3084	Shaft for bobbin table lever		2
BW-3123	Spring of bobbin table (normal)		2
BW-3130	Spring of bobbin table (soft)		2
BW-3136	Spacer of shaft for bobbin table lever		2
BW-3194	Bobbin table lever, left	101019	1
BW-3195	Bobbin table lever, right		1
BW-3226	Support for bobbin table setting assy, left	302020	1
BW3238	Slide table	101073	2
101019	Screw		1
101030	Screw		2
101053	Thread plug		2
101073	Screw		3
101079	Screw		2
101091	Screw		2
101205	Thread plug		2
103008	Nut		2
103038	Nut		1
103039	Nut		2
103071	Acorn nut		1
107007	Washer		1
107048	Washer		2
203024	Pneumatic cylinder	nut	1
204024	Elbow connector		1
302020	Slide bearing		2
307003	Bobbin table	101079	2
314007	Angle joint		2
401078	Digital display unit		2





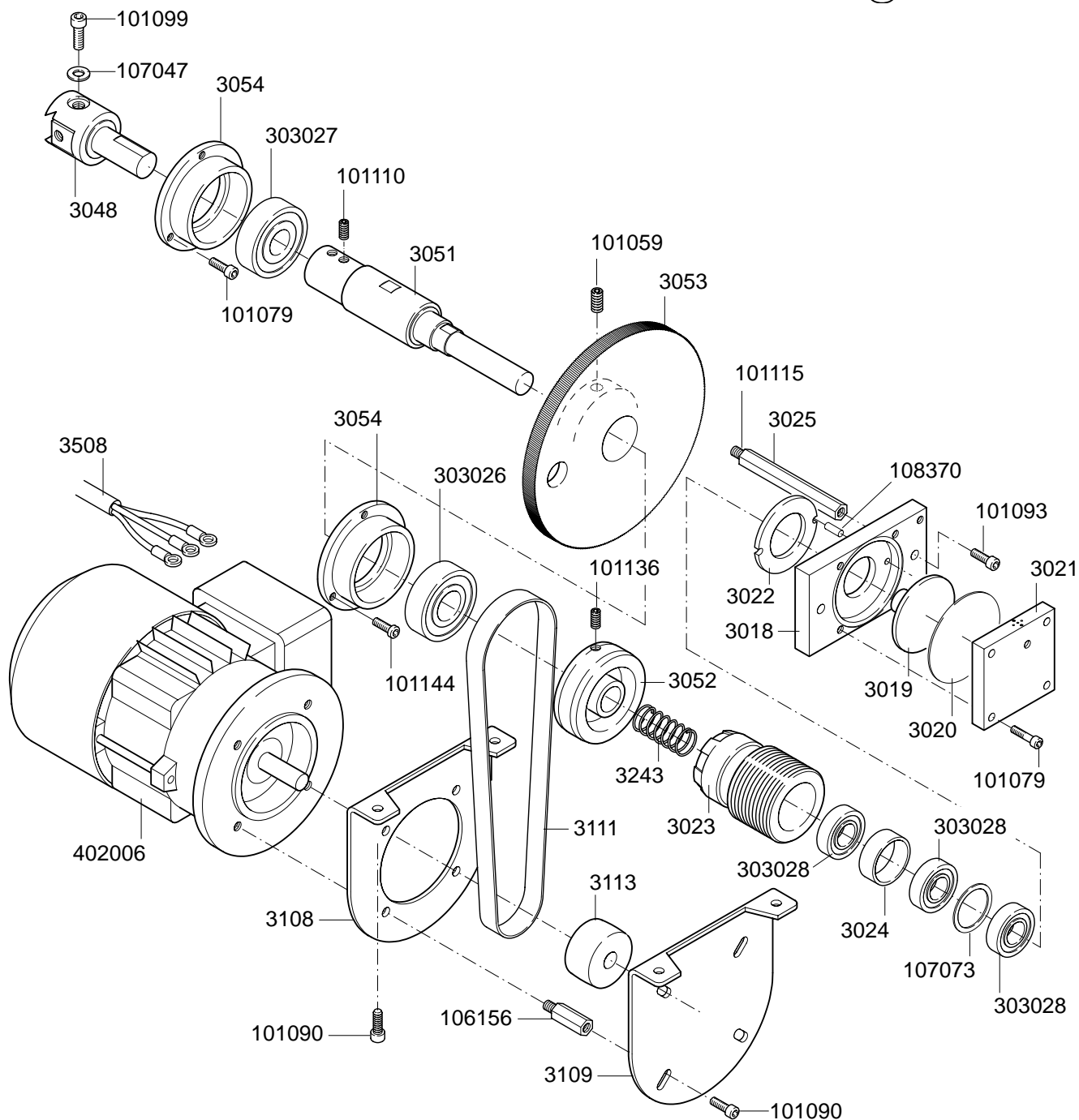
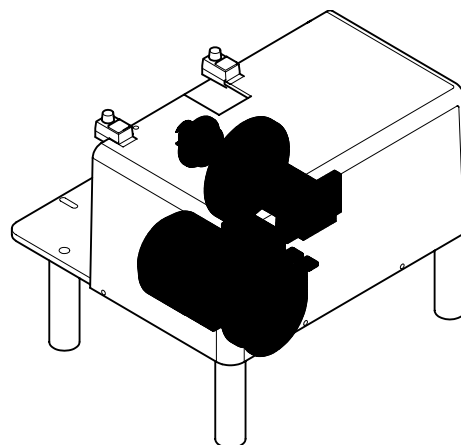
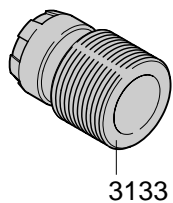
5. Secondary shaft with ejection elements

Art. Nr.	Bezeichnung	inklusive	Stück
BW-3005	Gear distance plate	302021	2
BW-3007	Cam support, centre	302022	1
BW-3008	Cam support, side	302017, 302022	1
BW-3011	Ejector lever	307005	1
BW-3012	Control cam	101200	1
BW-3014	Secondary shaft		1
BW-3015	Worm gear for clockwise rotating machine	101119	1
BW-3016	Undertucker cam	101121	1
BW-3017	Spindle stop ring	101119	1
BW-3035	Spacer bushing		1
BW-3036	Control cam for scissors	101206	1
BW-3055	Ejector bolt		2
BW-3056	Push bar		2
BW-3057	Toothed gear	101206	2
BW-3058	Synchronizing shaft		1
BW-3059	Ejector head	101090, 101062	2
BW-3060	Ejector yoke	101120	1
BW-3096	Ejector cam	101064	1
BW-3201	Spacer		1
101062	Thread plug		2
101064	Thread plug		2
101081	Screw		4
101090	Screw		2
101119	Thread plug		3
101120	Thread plug		2
101121	Thread plug		2
101200	Thread plug		1
101206	Thread plug		3
101251	Screw		4
101310	Screw		1
103012	Nut		1
107048	Washer		1
108150	Ball journal		2
108155	Ball cup		2
302021	Slide bearing		2
302022	Slide bearing		2
302017	Slide bearing		1
307005	Inner ring		1

	Anti-Clockwise		
BW-3132	Worm gear for anti-clockwise rotating machine	10119	1



Detail:
Worm for anti-clockwise rotating machine

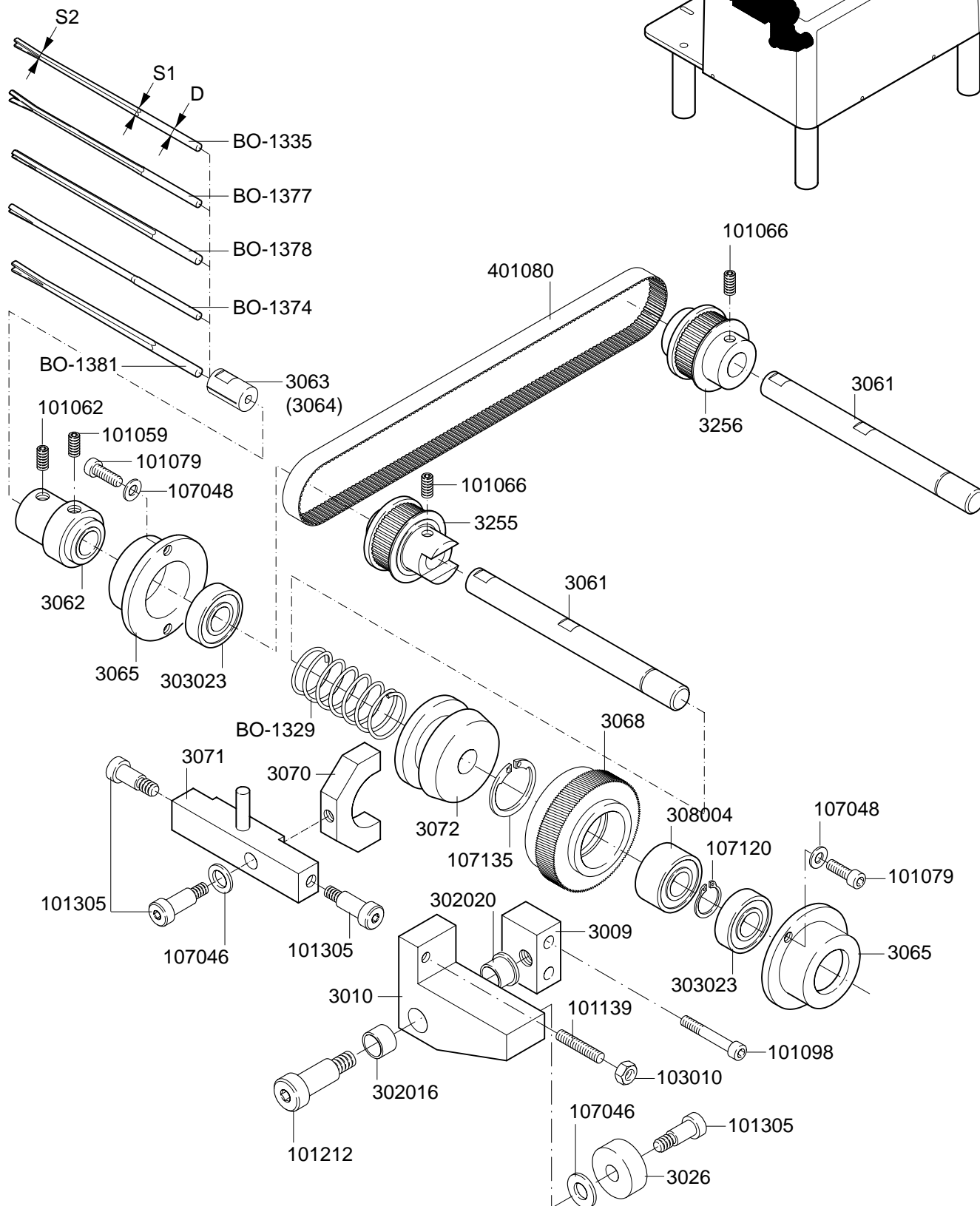
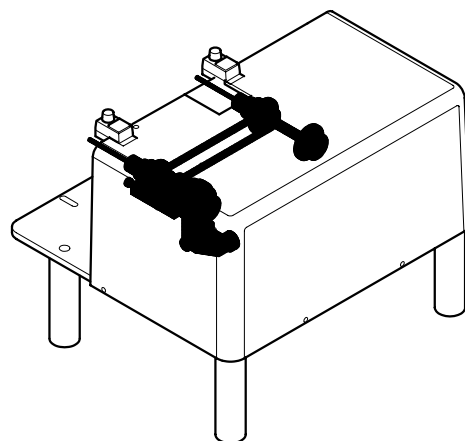




6. Main drive

Item No.	Designation	including	Pcs.
BW-3018	Clutch support	108370	1
BW-3019	Clutch pressure bolt		1
BW-3020	Diaphragm		1
BW-3021	Clutch cover		1
BW-3022	Brake lining		1
BW-3023	Worm for clockwise rotating machine	BW-3024, 107073, 303028	1
BW-3024	Spacer bushing		1
BW-3025	Spacer	101115	1
BW-3048	Main shaft head	101099, 107047	1
BW-3051	Main shaft	101110	1
BW-3052	Pulley for main shaft	101136	1
BW-3053	Precision toothed gear	101059	1
BW-3054	Main bearing flange		2
BW-3108	Motor base plate		1
BW-3109	Motor support plate		1
BW-3111	Belt		1
BW-3113	Motor pulley		1
BW-3243	Spring		1
BW-3508	Motor connection cable		1
BW-3526	Motor assy. SIGMA	BW-3108, BW-3113, BW-3508, 106156, 402006	1
101059	Thread plug		1
101079	Screw		7
101090	Screw		8
101093	Screw		2
101099	Screw		1
101110	Thread plug		2
101115	Thread plug		2
101136	Thread plug		1
101144	Screw		3
106156	Spacer		4
107047	Washer		1
107073	Shim		1
108370	Dowel pin		2
303026	Ball bearing		1
303027	Ball bearing		1
303028	Ball bearing		3
402006	Electric motor		1

	Anti-Clockwise		
BW-3133	Worm for anti-clockwise rotating machine	BW-3024, 107073, 303028	1

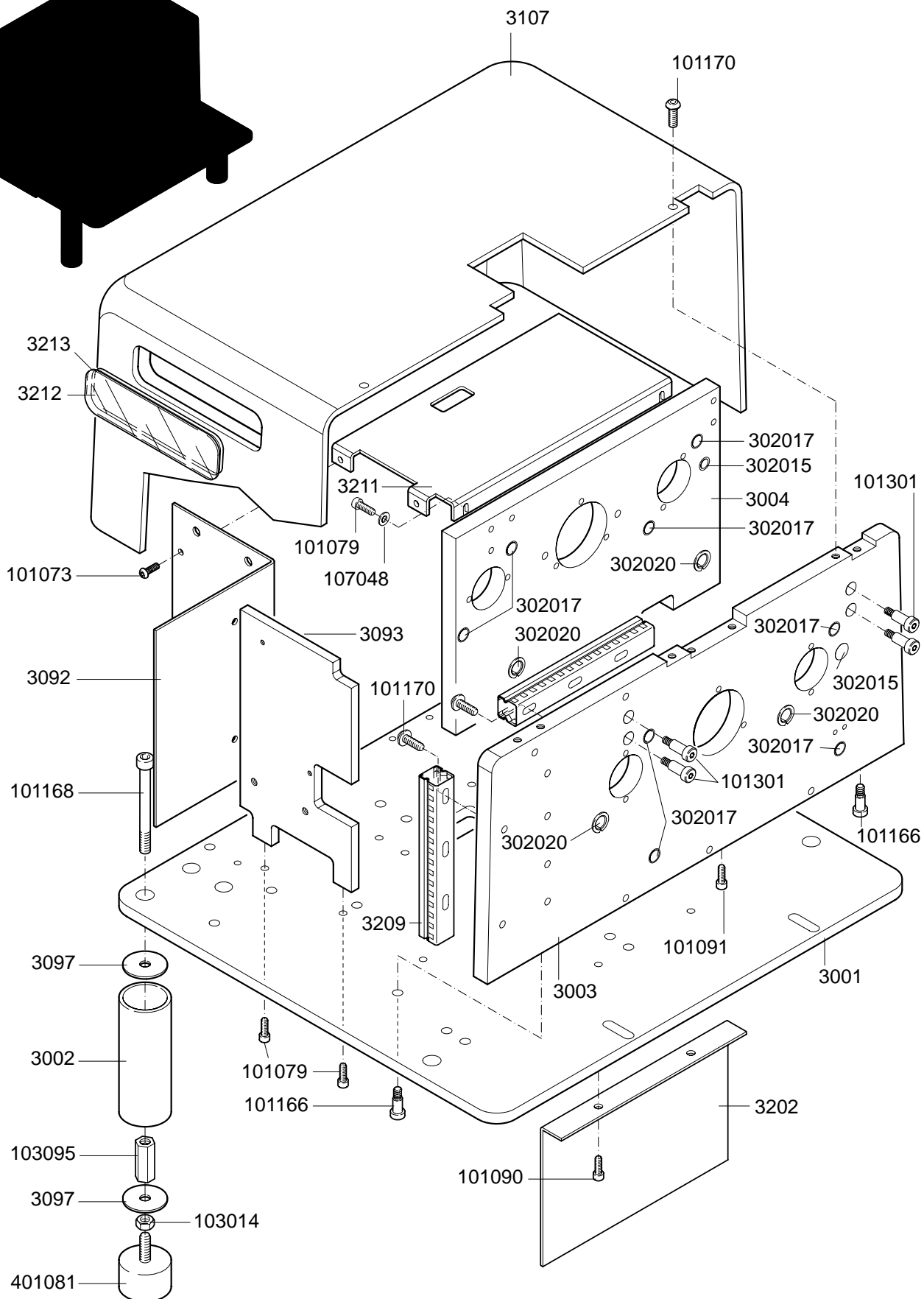
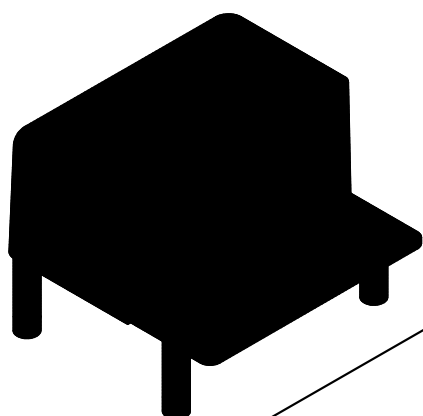




7. Spindle shafts

Item No.	Designation	including	Pcs.
BO-1329	Spring of spindle shaft clutch		1
BW-3009	Support for clutch lever		1
BW-3010	Clutch lever	302016, 302020	1
BW-3026	Cam roller for ejector lever		1
BW-3061	Spindle shaft		2
BW-3062	Adapter sleeve	101059, 101062	2
BW-3063	Collet chuck 4-mm-dia		2
BW-3064	Collet chuck 3.5-mm-dia		2
BW-3065	Bearing flange		2
BW-3068	Clutch gear		1
BW-3070	Sliding block		1
BW-3071	Sliding block pusher		1
BW-3072	Clutch cone		1
BW-3255	Toothed belt gear with Clutch dog	101066	1
BW-3256	Toothed belt gear	101066	1
101059	Thread plug		2
101062	Thread plug		2
101066	Thread plug		2
101079	Screw		8
101098	Screw		2
101139	Thread plug		1
101212	Fitting screw		1
101305	Fitting screw		4
103010	Nut		1
107046	Washer		2
107048	Washer		8
107120	Snap ring		1
107135	Snap ring		1
302016	Slide bearing		1
302020	Slide bearing		1
303023	Ball bearing		4
308004	Ball bearing		1
401080	Toothed belt		1

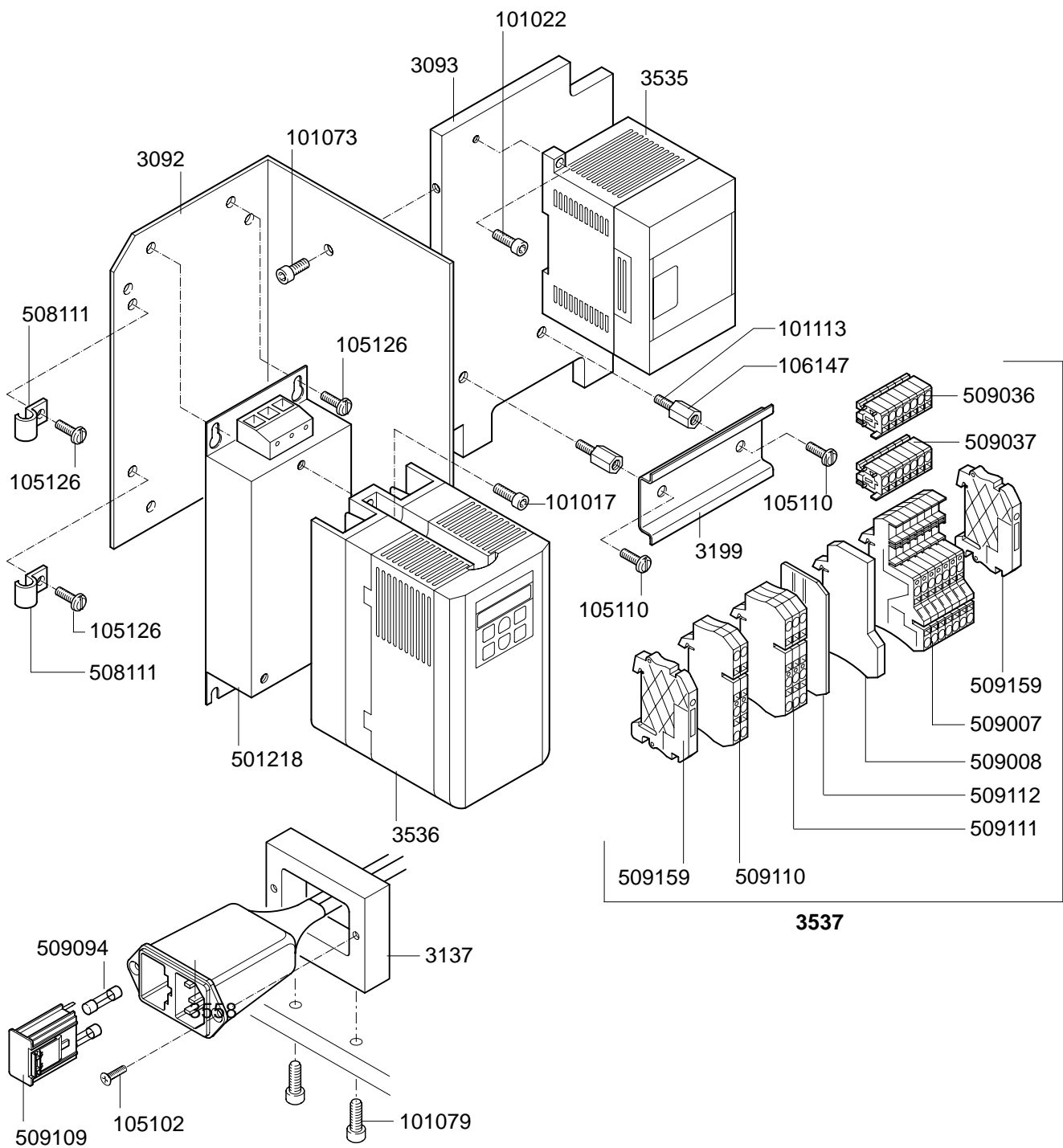
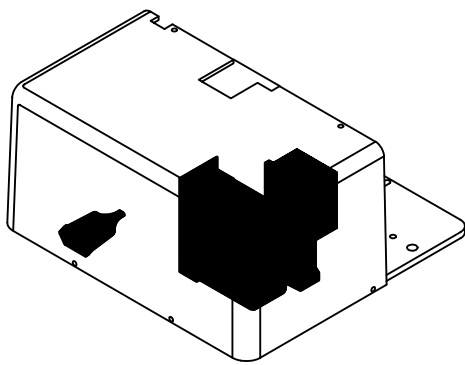
Item No.	Spindle designation	Dimensions in mm			Pcs.
		D	S1	S2	
BO-1335	Square spindle	3,5	2,4	2,0	2
BO-1377	Hexagon spindle	3,5	2,9	2,4	2
BO-1378	Hexagon spindle	4,0	3,5	3,0	2
BO-1374	Round spindle	3,5	2,9	2,4	2
BO-1381	Square spindle	4,0	3,0	2,5	2





8. Housing and covers

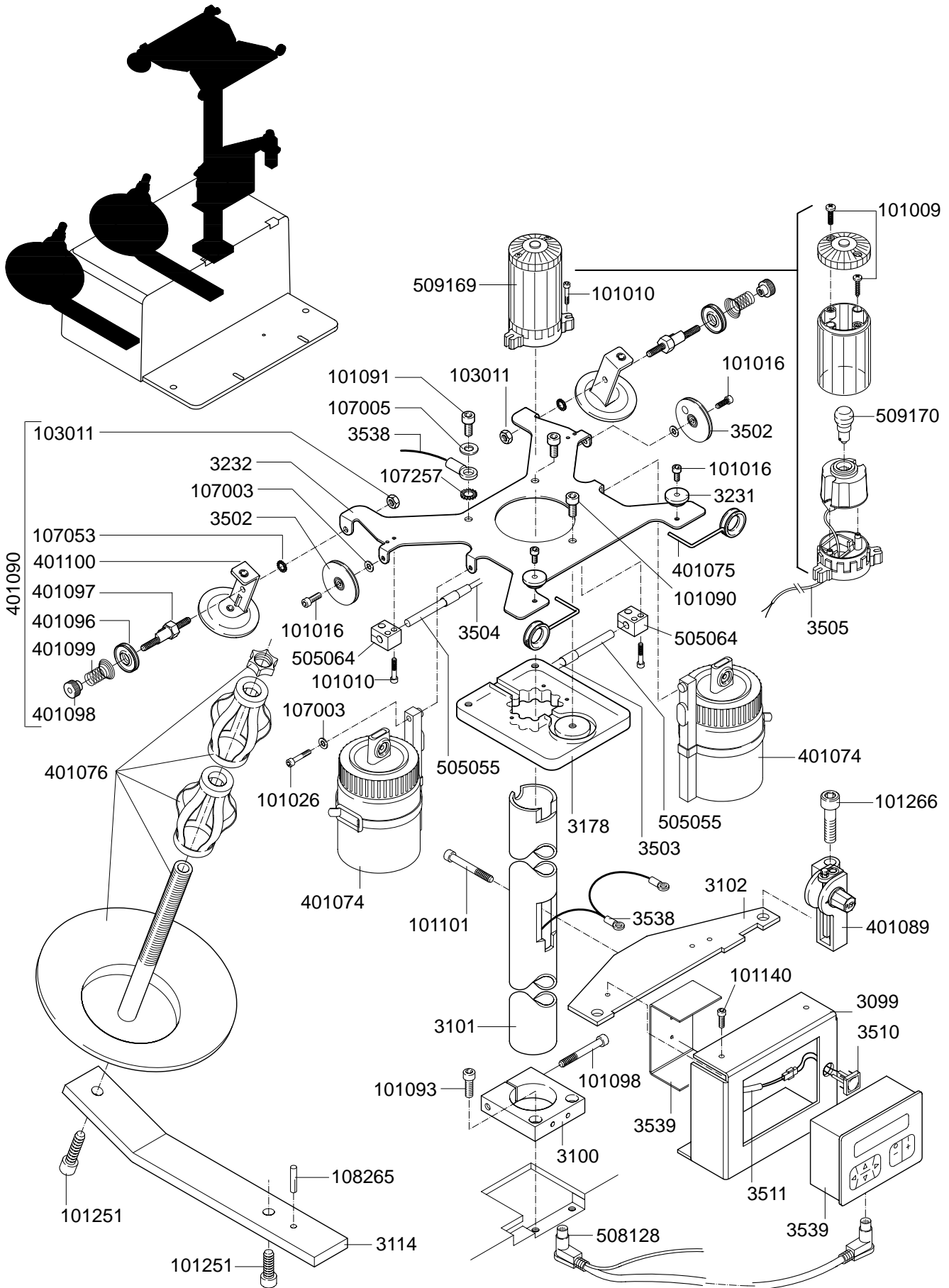
Item No.	Designation	including	Pcs.
BW-3001	Base plate		1
BW-3002	Base tube		4
BW-3003	Front gear plate	302015, 302017, 302020	1
BW-3004	Rear gear plate	302015, 302017, 302020	1
BW-3092	Separating plate		1
BW-3093	Support		1
BW-3097	Centring ring for base tube		8
BW-3107	Machine cover SIGMA	BW-3212, BW-3213	1
BW-3202	Protective plate		1
BW-3209	Cable guide		2
BW-3211	Stiffening plate		1
BW-3212	Viewing glass		1
BW-3213	Rubber chord		–
101073	Screw		3
101079	Screw		1
101090	Screw		2
101091	Screw		2
101166	Fitting screw		4
101168	Screw		4
101170	Screw		10
101301	Fitting screw		4
103014	Nut		4
103095	Nut		4
107048	Washer		1
302015	Slide bearing		2
302017	Slide bearing		8
302020	Slide bearing		8
401081	Rubber base		4





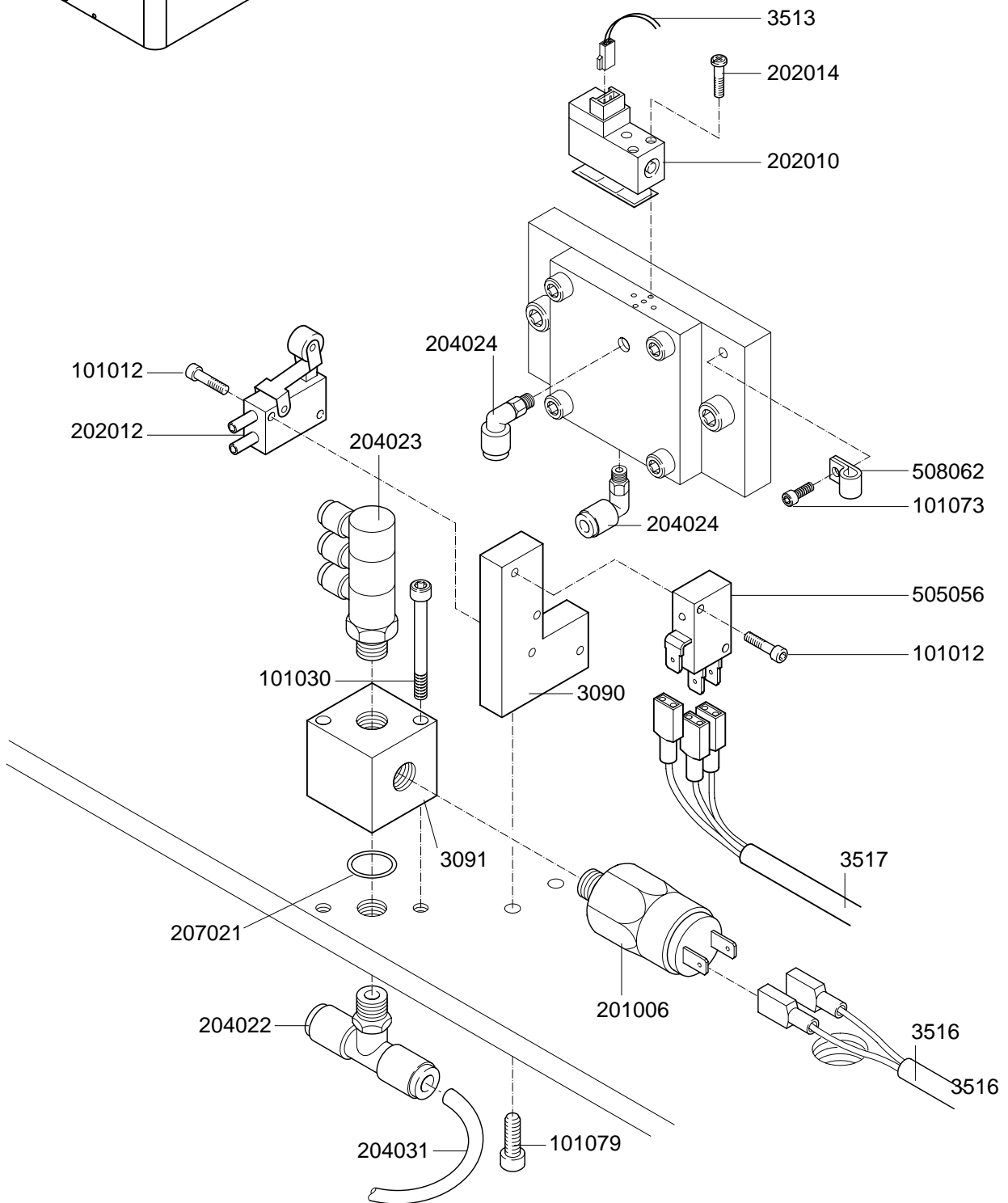
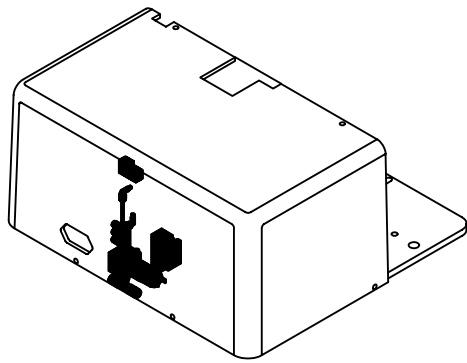
9. Control system

Item No.	Designation	including	Pcs.
BW-3092	Separating plate		1
BW-3093	Support		1
BW-3137	Console		1
BW-3199	Connection bar		1
BW-3506	Control system assy.	BW-3092, BW-3093, BW-3535 BW-3536, BW-3537, 501218	1
BW-3535	SPC		1
BW-3536	Frequency converter		1
BW-3537	Terminal block assy.	BW-3199, 509159,509110, 509111, 509112, 509008, 509007, 509037, 509036	1 1
BW-3558	Mains connection	Cable	1
101017	Screw		3
101022	Screw		2
101073	Screw		2
101079	Screw		2
101113	Thread plug		2
105102	Screw		2
105110	Screw		2
105126	Screw		6
106147	Spacer		2
501218	Line filter		1
508111	Cable clamp		2
509007	Base element		7
509008	End plate		1
509036	Terminal element (brown)		7
509037	Terminal element (blue)		7
509094	Microfuse time-delay 4 A, 5x20		2
509109	Fuse module		1
509110	Protective conductor terminal		2
509111	Terminal block		3
509112	End plate		1
509159	End plate		2



**9. Control system (contd.)**

Item No.	Designation	including	Pcs.
BW-3099	Case for control panel SIGMA	101140	1
BW-3100	Clamping base	101098	1
BW-3101	Tube for thread tree		1
BW-3102	Compensator support	101101	1
BW-3178	Base for thread guide		1
BW-3114	Support for cone holders	108265	2
BW-3231	Thread guide clamp		2
BW-3232	Thread guide plate		1
BW-3502	Pulse generator wheel	101016, 107003	2
BW-3503	Initiator cable, right		1
BW-3504	Initiator cable, left		1
BW-3505	Lamp cable		1
BW-3510	Reset button		1
BW-3511	Reset cable		1
BW-3538	Earth cable		1
BW-3539	Control panel SIGMA		1
101009	Screw		2
101010	Screw		7
101016	Screw		4
101026	Screw (option)		2
101090	Screw		2
101091	Screw		1
101093	Screw		2
101098	Screw		1
101101	Screw		1
101140	Screw		2
101251	Screw		4
101266	Screw		2
103011	Nut		2
107003	Washer (2 pcs. option)		4
107005	Washer		1
107053	Serrated lock washer		2
107257	Serrated lock washer		1
108265	Pin		2
401074	Oiling device (option)	101026, 107003	2
401075	Thread guiding eye		2
401076	Cone holder		2
401089	Compensator		2
401090	Inlet brake	401096,401097,401098,401099 401100,103011,107053	2
401096	Ceramic disc		2
401097	Ceramic peace with noise		2
401098	Hand nut		2
401099	Compression spring		2
401100	Support		2
505055	Initiator		2
505064	Clamp		2
508128	MAC cable		1
509169	Signal lamp	509170	1
509170	LED		1





10. Pneumatic system

Item No.	Designation	including	Pcs.
BW-3090	Support for initiator and valve		1
BW-3091	Support for pressure switch		1
BW-3513	Valve cable		1
BW-3516	Pressure switch cable		1
BW-3517	Initiator cable		1
101012	Screw		4
101030	Screw		2
101073	Screw		1
101079	Screw		4
201006	Pressure switch		1
202010	Solenoid valve	screws	1
202012	Roller lever valve		1
202014	Screw and seal		1
204022	T-connector		1
204023	Multi-distributor		1
204024	Elbow connector		2
204031	Nylon hose \varnothing 8 mm		m
207021	O-ring		1
505056	Initiator		1
508062	Cable clamp		1

