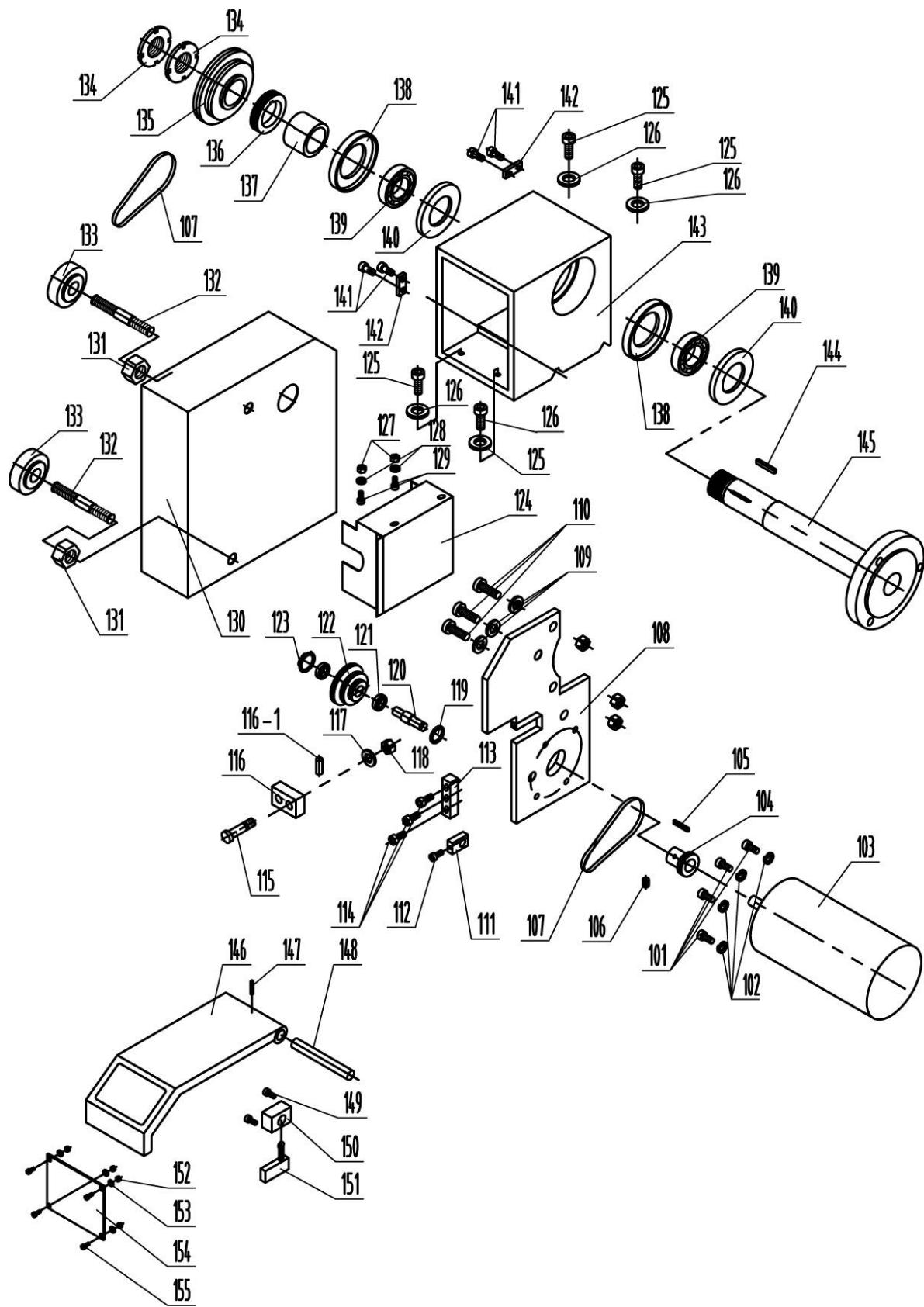


## 15.0 Replacement Parts

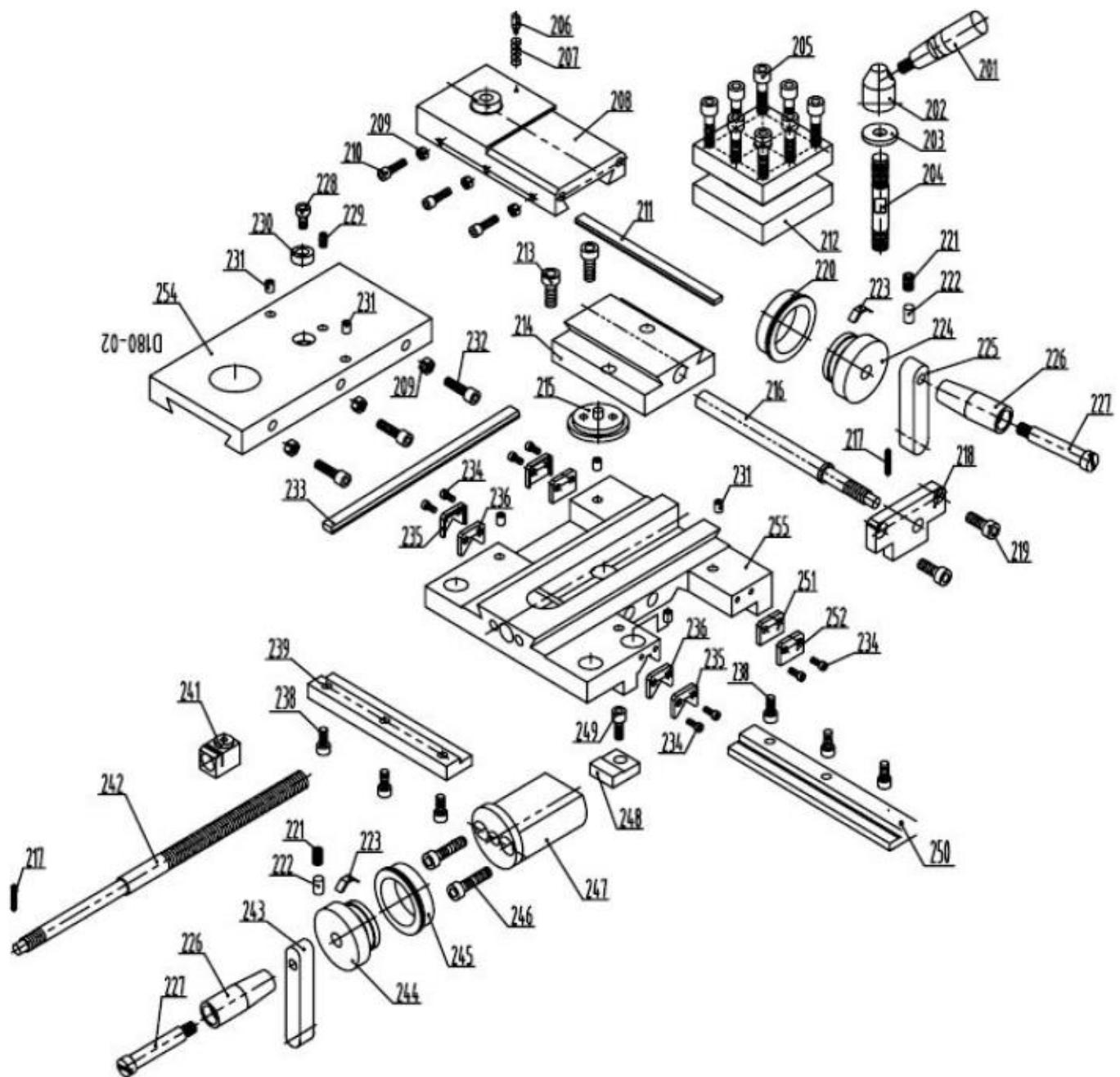
BD-7VS Assembly Breakdown -1



## BD-7VS Parts List for Breakdown -1

Index	Part No.	Description	Size	Qty.
101.....	BD7VS-1 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M5x25 .....	4.	
102.....	BD7VS-2 .....	SPLIT WASHER DIN 127 .....	5 .....	4.
103.....	BD7VS-103 .....	D.C.MOTOR .....	1.	
.....	BD7VS-103B .....	Brush for D.C MOTOR (not shown) .....	2.	
104.....	BD7VS-104 .....	V-BELT PULLEY ENGINE .....	1.	
105.....	BD7VS-3 .....	FEATHER KEY .....	DIN 6885-A4x4x20 .....	1.
106.....	BD7VS-4 .....	SET SCREW DIN 915.....	M6x8.....	1.
107.....	BD7VS-107 .....	SYNCHRONOUS BELT.....	Gates 5M-365 .....	2.
108.....	BD7VS-108 .....	SUPPORTING PLATE.....		1.
109.....	BD7VS-5 .....	DISK .....	8 .....	3
110.....	BD7VS-6 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M8x20 .....	3.	
111.....	BD7VS-111 .....	SLIDING PAD .....		1.
112.....	BD7VS-7 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M6x30 .....	1.	
113.....	BD7VS-113 .....	THRUST BEARING .....		1.
114.....	BD7VS-8 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M6x20 .....	2.	
115.....	BD7VS-115 .....	AXIS .....		1
116.....	BD7VS-116 .....	BEARING BLOCK-INTER-MEDIATE WHEEL .....		1.
116- 1...	BD7VS-9 .....	ALIGNMENT PIN .....	4x22 .....	1.
117.....	BD7VS-10 .....	DISK .....	8 .....	1
118.....	BD7VS-11 .....	HEXAGON NUT .....	M8 .....	3.
119.....	BD7VS-12 .....	LOCKING RING .....	DIN 471-8 x0.8 .....	1.
120.....	BD7VS-120 .....	COUNTERSHAFT .....		1.
121.....	BD7VS-121 .....	DEEP GROOVE BALL BEARING .....	608-RZ .....	2.
122.....	BD7VS-122 .....	PULLEY COUNTERSHAFT .....		1.
123.....	BD7VS-13 .....	LOCKING RING .....	DIN 471-22x1 .....	1.
124.....	BD7VS-124 .....	BOTTOM COVER .....		1.
125.....	BD7VS-14 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M8x25 .....	4.	
126.....	BD7VS-15 .....	DISK .....	8 .....	4
127.....	BD7VS-16 .....	NUT. M5 .....	2 .....	
128.....	BD7VS-17 .....	DISK .....	5 .....	2
129.....	BD7VS-18 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M8x25 .....	2.	
130.....	BD7VS-130 .....	PROTECTIVE COVER CHANGE GEAR WHEELS .....	1.	
131.....	BD7VS-19 .....	NUT. M10 .....	2 .....	
132.....	BD7VS-132 .....	THREADED BOLT .....	M10x80 .....	2.
133.....	BD7VS-20 .....	KNURLED NUT .....	M10 .....	2.
134.....	BD7VS-134 .....	GROOVE NUT .....	DIN 1804- M27x1-w .....	2.
135.....	BD7VS-135 .....	DRIVE PULLEY .....		1.
136.....	BD7VS-136 .....	TOOTHED WHEEL .....	(Z=40) .....	1.
137.....	BD7VS-137 .....	CONTACT PRESSURE SLEEVE/COLLET .....		1.
138.....	BD7VS-138 .....	BEARING COVER .....		2.
139.....	BD7VS-139 .....	TAPERED ROLLER BEAR-ING .....	30206/P5 .....	2.
140.....	BD7VS-140 .....	BEARING COVER .....		2.
141.....	BD7VS-21 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x10 .....	4.	
142.....	BD7VS-142 .....	FIXING PLATE PROTEC-TIVE COVER CHANGE WHEELS .....		2.
143.....	BD7VS-143 .....	HOUSING HEADSTOCK .....		1.
144.....	BD7VS-22 .....	FEATHER KEY .....	DIN 6885-A3x3x15 .....	1.
145.....	BD7VS-145 .....	SPINDLE .....		1.
146.....	BD7VS-146 .....	CHUCK GUARD .....		1.
147.....	GB87986-3-20 .....	ROLL PIN .....	3 x 20 mm .....	1.
148.....	BD7VS-148 .....	SHAFT .....		1.
149.....	GB7085-5-12 .....	SOCKET HD SCREW .....	M5 x 12 mm .....	2.
150.....	BD7VS-150 .....	BRACKET .....		1.
151.....	BD7VS-151 .....	MICRO SWITCH .....		1.
152.....	GB617286-4 .....	HEX NUT (THIN) .....	M4 .....	4.
153.....	GB97185-4 .....	WASHER .....	4 .....	4.
154.....	BD7VS-154 .....	ARCRYLIC GLASS .....		1.
155.....	GB7085-4-10 .....	SOCKET HD SCREW .....	M4 x 10 mm .....	4.

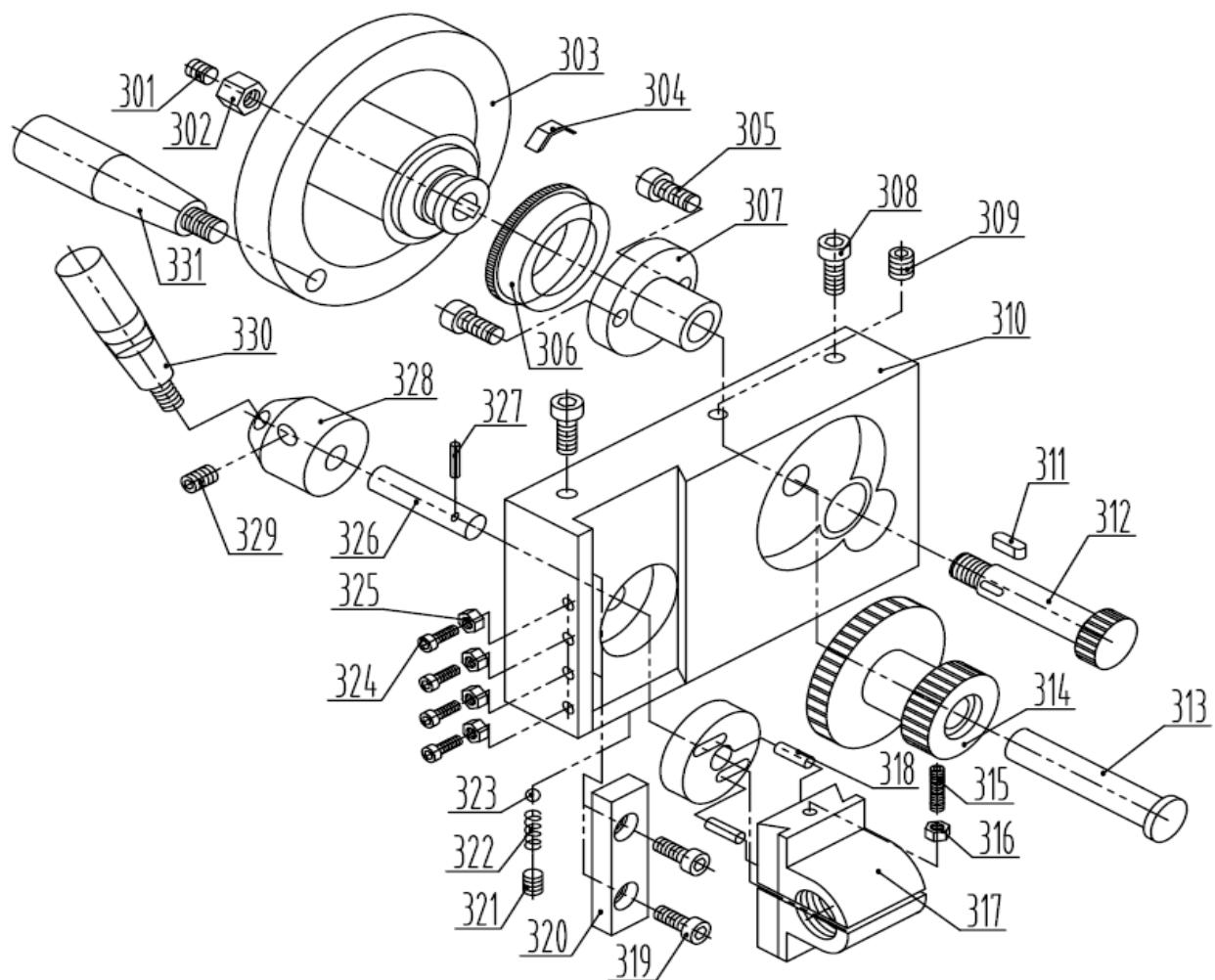
**BD-7VS Assembly Breakdown -2**



## BD-7VS Parts List for Breakdown -2

Index	Part	Description	Size	Qty.
No.	No.			
201	BD7VS-201	HANDLE .....		1.
202	BD7VS-202	TIGHTENING NUT QUADRUPPLICATE TOOL HOLDER.....		1
203	BD7VS-203	WASHER QUADRUPPLICATE TOOL HOLDER.....		1.
204	BD7VS-204	THREADED BOLT QUADRUPPLICATE TOOL HOLDER .....		1
205	BD7VS-23	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M6x25 .....		8.
206	BD7VS-206	STOP BOLT TOOL HOLDER .....		1.
207	BD7VS-207	SPRING.....	Ø5xØ10xØ1 .....	1.
208	BD7VS-208	TOP SLIDE .....		1.
209	BD7VS-24	HEXAGON NUT .....	M4 .....	1.
210	BD7VS-25	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x14 .....		3.
211	BD7VS-211	ADJUSTING GIB.....		1.
212	BD7VS-212	QUADRUPPLICATE TOOL HOLDER .....		1.
213	BD7VS-26	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M5x30 .....		2.
214	BD7VS-214	DOVETAIL GUIDE TOP SLIDE .....		1.
215	BD7VS-215	SWIVEL TOP SLIDE .....		1.
216	BD7VS-216	SPINDLE TOP SLIDE .....		1.
217	BD7VS-27	DOWEL PIN .....	3x12 .....	2.
218	BD7VS-218	BEARING BLOCK SPIN-DLE TOP SLIDE.....		1.
219	BD7VS-28	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M5x12 .....		2.
220	BD7VS-220	GRADUATED COLLAR HANDWHEEL TOP SLIDE .....		1.
221	BD7VS-29	SET SCREW DIN 915.....	M6x6 .....	2.
222	BD7VS-222	PIN .....	2 .....	
223	BD7VS-30	SPRING STEEL SHEET .....		2.
224	BD7VS-224	GUIDING DISK GRADUATED COLLAR TOP SLIDE.....		2.
225	BD7VS-225	LEVER TOP SLIDE.....		1.
226	BD7VS-226	GRIP COLLAR.....		2.
227	BD7VS-227	FIXING SCREW GRIP COL-LAR .....		2.
228	BD7VS-31	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x8 .....		1.
229	BD7VS-32	SET SCREW DIN 914.....	M5x10 .....	1.
230	BD7VS-230	COLLAR .....		1.
231	BD7VS-33	OILER .....	D .....	6mm6
232	BD7VS-34	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x20 .....		3.
233	BD7VS-233	ADJUSTING GIB COM-POUND SLIDE .....		1.
234	BD7VS-35	TALLOW-DROP SCREW .....	M3x8 .....	8.
235	BD7VS-235	HANDLE FRONT STRIPPER .....		2.
236	BD7VS-236	FRONT STRIPPER.....		2.
238	BD7VS-36	HEXAGON SOCKET SCREW DIN 912 .....	M5x10 .....	3.
239	BD7VS-239	FASTENING GIB FRONT LATHE SADDLE .....		1.
241	BD7VS-241	SPINDLE NUT COMPOUND SLIDE .....		1.
242	BD7VS-242	SPINDLE COMPOUND SLIDE .....		1.
243	BD7VS-243	LEVER COMPOUND SLIDE.....		1.
244	BD7VS-244	GUIDE DISK GRADUATED COLLAR .....		1.
245	BD7VS-245	GRADUATED COLLAR COMPOUND SLIDE.....		1.
246	BD7VS-37	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M6x50 .....		2.
247	BD7VS-247	BEARING BLOCK SPIN-DLE COMPOUND SLIDE .....		1.
248	BD7VS-248	CLAMPING PLATE LATHE SLIDE .....		1.
249	BD7VS-38	HEXAGON SOCKET SCREW DIN 912.....	M8x25 .....	1.
250	BD7VS-250	FIXING GIB REAR LATHE SLIDE.....		1.
251	BD7VS-251	REAR STRIPPER .....		2.
252	BD7VS-252	HANDLE REARD STRIPPER .....		2.
254	BD7VS-254	COMPOUND SLIDE.....		1.
255	BD7VS-255	DOVETAIL GUIDE COM-POUND SLIDE .....		1.

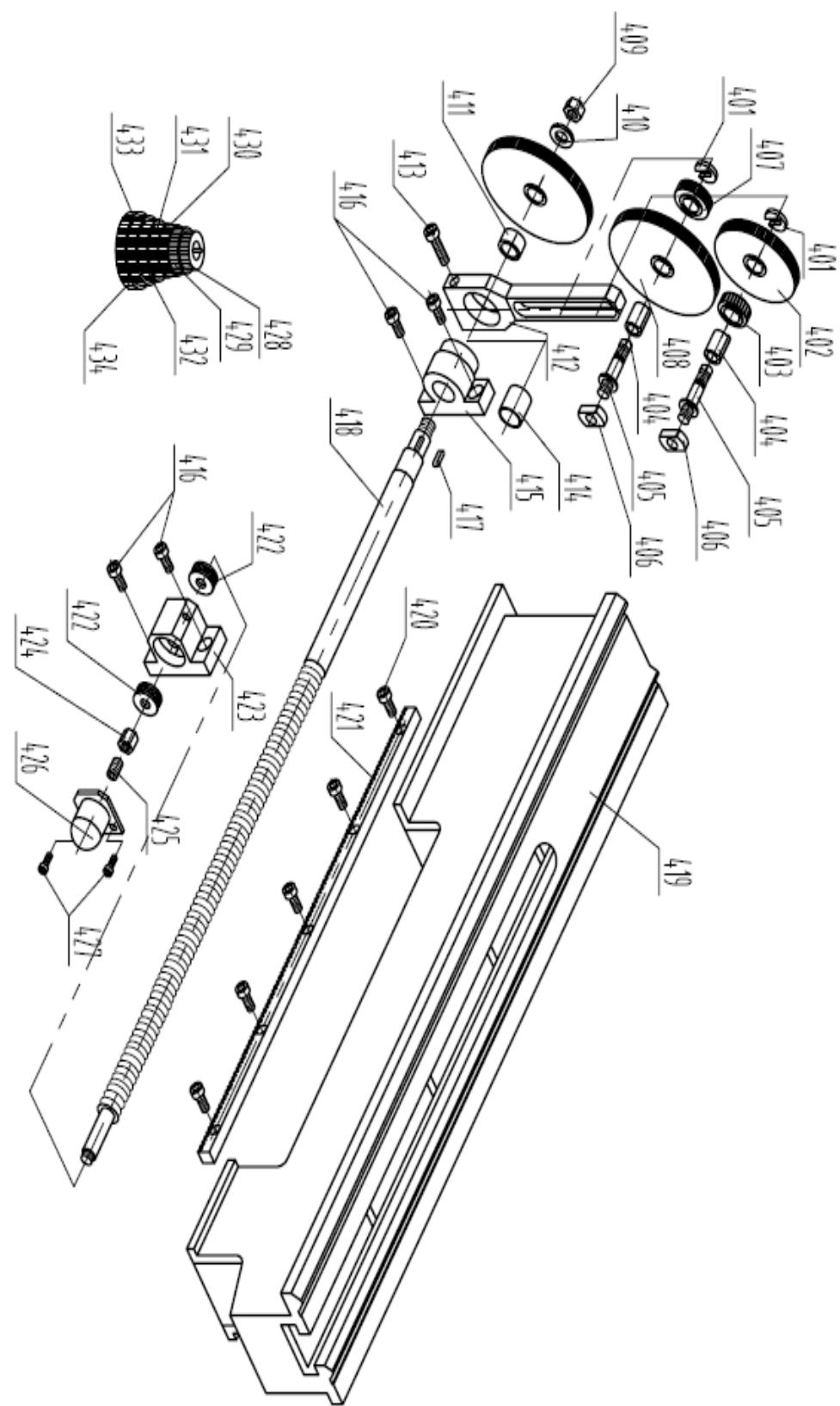
**BD-7VS Assembly Breakdown -3**



### BD-7VS Parts List for Breakdown -3

Index No.	Part No.	Description	Size	Qty.
301.....	BD7VS-39 .....	SET SCREW DIN 914.....	M8x8 .....	1
302.....	BD7VS-302 .....	FIXING NUT HANDWHEEL.....	M8, H=16mm .....	1
303.....	BD7VS-303 .....	HANDWHEEL LATHE SLIDE .....	.....	1
304.....	BD7VS-40 .....	SPRING PIECE.....	.....	1
305.....	BD7VS-41 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M5x10 .....	2	
306.....	BD7VS-306 .....	GRADUATED COLLAR HANDWHEEL LATHE SLIDE .....	.....	1
307.....	BD7VS-307 .....	TRACK BED SHAFT HANDWHEEL LATHE SLIDE .....	.....	1
308.....	BD7VS-42 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M8x25 .....	2	
309.....	BD7VS-43 .....	SET SCREW DIN 914.....	M5x8 .....	1
310.....	BD7VS-310 .....	APRON .....	.....	1
311.....	BD7VS-44 .....	FEATHER KEY .....	DIN 6885-A3x3x8 .....	1
312.....	BD7VS-312 .....	SPLINE .....	Z=14, Module 1 .....	1
313.....	BD7VS-313 .....	SHAFT .....	.....	1
314.....	BD7VS-314 .....	GEAR SET 44/21 THEETH .....	Module 1 .....	1
315.....	BD7VS-45 .....	SET SCREW DIN 914.....	M4x35 .....	1
316.....	BD7VS-46 .....	NUT. M4 .....	1	
317.....	BD7VS-317 .....	LEADSCREW NUT .....	.....	1
318.....	BD7VS-47 .....	ALIGNMENT PIN .....	?4x10 .....	2
319.....	BD7VS-48 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x10 .....	2	
320.....	BD7VS-320 .....	READJUSTING GIB LEAD-SCREW NUT .....	.....	1
321.....	BD7VS-49 .....	SET SCREW DIN 913.....	M6x8 .....	1
322.....	BD7VS-50 .....	SPRING .....	0.6x3.5x12 .....	1
323.....	BD7VS-51 .....	STEEL BALL .....	4.5 .....	1
324.....	BD7VS-52 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x12 .....	4	
325.....	BD7VS-53 .....	NUT. M4 .....	4	
326.....	BD7VS-326 .....	SHAFT .....	.....	1
327.....	BD7VS-54 .....	DOWEL PIN DIN 1481 .....	3x30 .....	1
328.....	BD7VS-328 .....	TURNING KNOB ENGAGING LEVER .....	.....	1
329.....	BD7VS-55 .....	SET SCREW DIN 914.....	M5x6 .....	1
330.....	BD7VS-330 .....	ENGAGING LEVER .....	.....	1
331.....	BD7VS-331 .....	GRIP HANDWHEEL LATHE SLIDE .....	.....	1

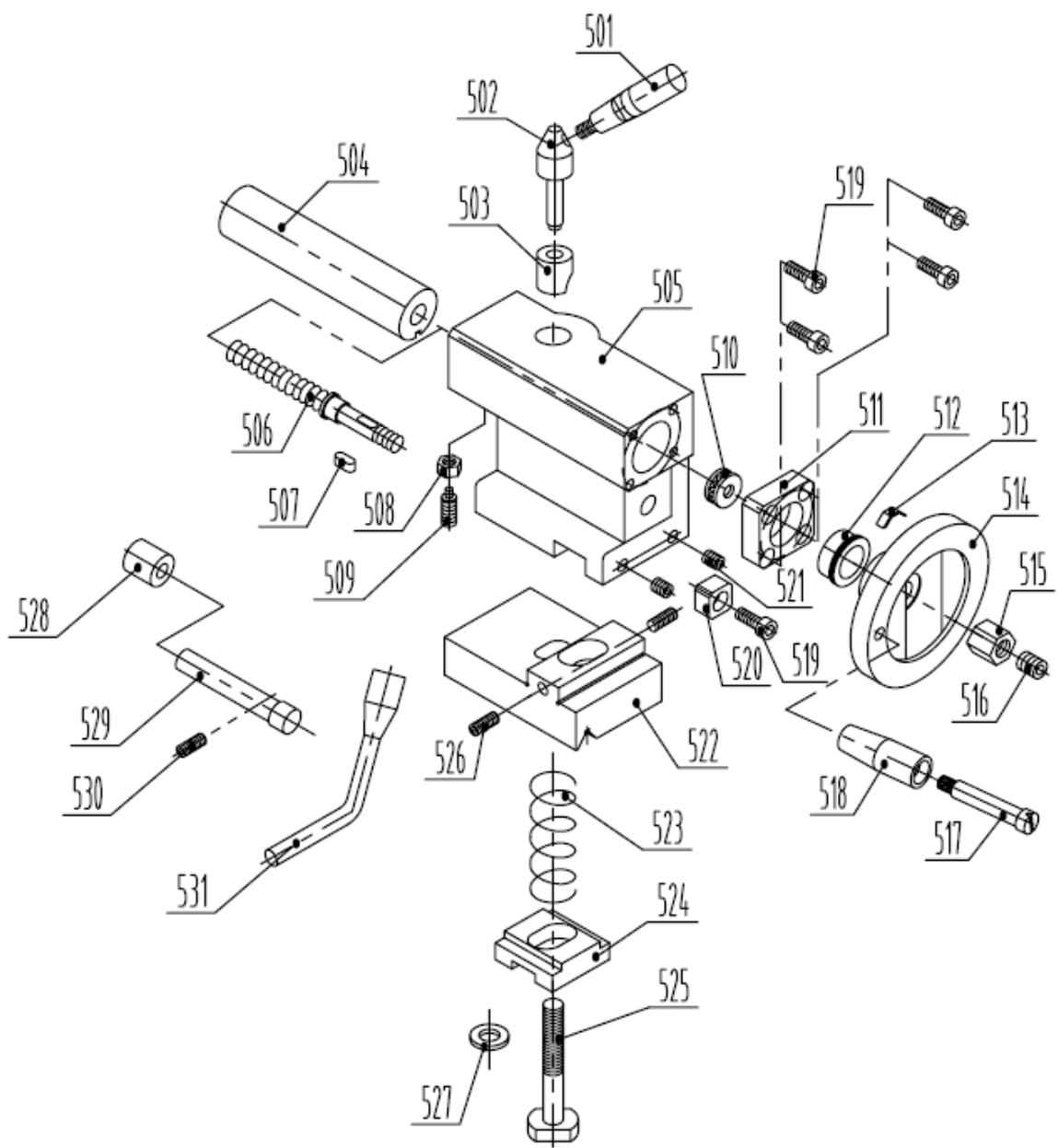
## BD-7VS Assembly Breakdown -4



## BD-7VS Parts List for Breakdown -4

Index No.	Part No.	Description	Size	Qty.
401.....	BD7VS-401 .....	LOCKING WAHSER .....		2
402.....	BD7VS-402 .....	TOOTHED WHEEL .....	Z=75	1
403.....	BD7VS-403 .....	TOOTHED WHEEL .....	Z=30	1
404.....	BD7VS-404 .....	COLLAR AXLE SHAFT .....		2
405.....	BD7VS-405 .....	AXIE SHAFT .....		2
406.....	BD7VS-406 .....	SLIDING BLOCK .....	M8	2
407.....	BD7VS-407 .....	TOOLTHED WHEEL.....	Z=20	1
408.....	BD7VS-408 .....	TOOLTHED WHEEL.....	Z=80	2
409.....	BD7VS-56 .....	NUT. M10 .....	1	
410.....	BD7VS-57 .....	DISK 10.....	1	
411.....	BD7VS-411 .....	COLLAR, SPREADER.....		1
412.....	BD7VS-412 .....	CHNGE GEAR GIB .....		1
413.....	BD7VS-58 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M6x35 .....		1
414.....	BD7VS-414 .....	SLIDE BEARING .....		1
415.....	BD7VS-415 .....	LEFT BEARING BLOCK, LEADING SPINDLE.....		1
416.....	BD7VS-59 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M6x14 .....		4
417.....	BD7VS-60 .....	FEATHER KEY .....	DIN 6885-A3x3x16 .....	1
418.....	BD7VS-418 .....	LEADING SPINDLE .....		1
419.....	BD7VS-419 .....	ENGINE BED .....		1
420.....	BD7VS-61 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x12 .....		5
421.....	BD7VS-421 .....	TOOTHED RACK .....		1
422.....	BD7VS-422 .....	AXIAL DEEP GROOVE BALL BEARING .....	51100 .....	2
423.....	BD7VS-423 .....	RIGHT BEARING BLOCK, LEADING SPINDLE .....		1
424.....	BD7VS-424 .....	FIXING NUT LEADING SPINDLE .....		1
425.....	BD7VS-62 .....	ADJUSTING SCREW SET SCREW DIN 915 .....	M8x6 .....	1
426.....	BD7VS-426 .....	PROTECTIVE COVER .....		1
427.....	BD7VS-63 .....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ...M4x10 .....		2
428.....	BD7VS-428 .....	TOOTHED WHEEL .....	Z=33 .....	1
429.....	BD7VS-429 .....	TOOTHED WHEEL .....	Z=35 .....	1
430.....	BD7VS-430 .....	TOOTHED WHEEL .....	Z=40 .....	1
431.....	BD7VS-431 .....	TOOTHED WHEEL .....	Z=42 .....	1
432.....	BD7VS-432 .....	TOOTHED WHEEL .....	Z=50 .....	1
433.....	BD7VS-433 .....	TOOTHED WHEEL .....	Z=52 .....	1
434.....	BD7VS-434 .....	TOOTHED WHEEL .....	Z=60 .....	1

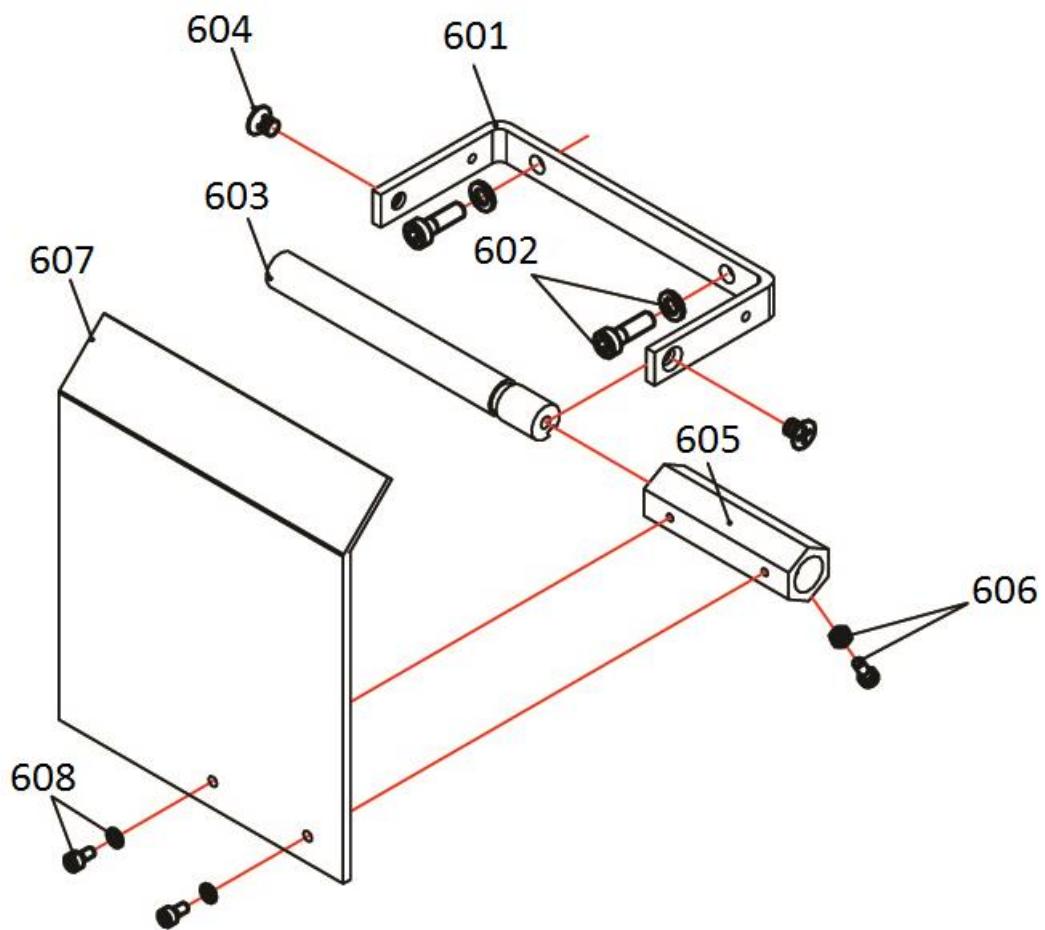
**BD-7VS Assembly Breakdown -5**



## BD-7VS Parts List for Breakdown -5

Index	Part		Size	Qty.
No.	No.	Description		
501 .....	BD7VS-501.....	CLAMPING LEVER TAIL-STOCK .....		1
502 .....	BD7VS-502.....	CLAMPING LEVER TAILSTOCK SLEEVE .....		1
503 .....	BD7VS-503.....	SPLIT TAPER SOCKET TAILSTOCK SLEEVE .....		1
504 .....	BD7VS-504.....	TAILSTOCK SLEEVE .....		1
505 .....	BD7VS-505.....	TAILSTOCK HOUSING .....		1
506 .....	BD7VS-506.....	TAILSTOCK SPINDLE .....		1
507 .....	BD7VS-64.....	FEATHER KEY.....	DIN 6885-A3x3x8 .....	1
508 .....	BD7VS-65.....	NUT .....	M6 .....	1
509 .....	BD7VS-66.....	SET SCREW DIN 915 .....	M6x14 .....	1
510 .....	BD7VS-510.....	AXIAL DEEP GROOVE BALL BEARING .....	51100 .....	1
511 .....	BD7VS-511.....	BEARING BLOCK TAILSTOCK SPINDLE .....		1
512 .....	BD7VS-512.....	GRADUATED COLLAR TAIL-STOCK .....		1
513 .....	BD7VS-67.....	SPRING STEEL SHEET .....		1
514 .....	BD7VS-514.....	HANDWHEEL TAILSTOCK .....		1
515 .....	BD7VS-515.....	FIXING NUT HANDWHEEL .....	M8 H=16mm .....	1
516 .....	BD7VS-68.....	SET SCREW DIN 914 .....	M8x6 .....	1
517 .....	BD7VS-517.....	FIXING SCREW GRIP COL-LAR .....		1
518 .....	BD7VS-518.....	GRIP COLLAR .....		1
519 .....	BD7VS-69.....	HEXAGON SOCKET HEAD CAP SCREW DIN 912 ..	M5x12 .....	5
520.....	BD7VS-520.....	STOP .....		1
521 .....	BD7VS-70.....	SET SCREW DIN 915 .....	M6x12 .....	2
522 .....	BD7VS-522.....	TAILSTOCK BOTTOM PART .....		1
523 .....	BD7VS-523.....	SPRING .....	1x12xL .....	1
524 .....	BD7VS-524.....	CLAMPING PLATE .....		1
525 .....	BD7VS-71.....	HEXAGON SCREW DIN 931 .....	M10x70 .....	1
526 .....	BD7VS-72.....	SET SCREW DIN 915 .....	M6x16 .....	2
527 .....	BD7VS-73.....	DISK .....		101
528 .....	BD7VS-528.....	COVER .....		1
529 .....	BD7VS-529.....	ECCENTRIC SHAFT .....		1
530 .....	BD7VS-74.....	SET SCREW DIN 915 .....	M5x8 .....	1
531 .....	BD7VS-531.....	LOCKING HANDLE .....		1

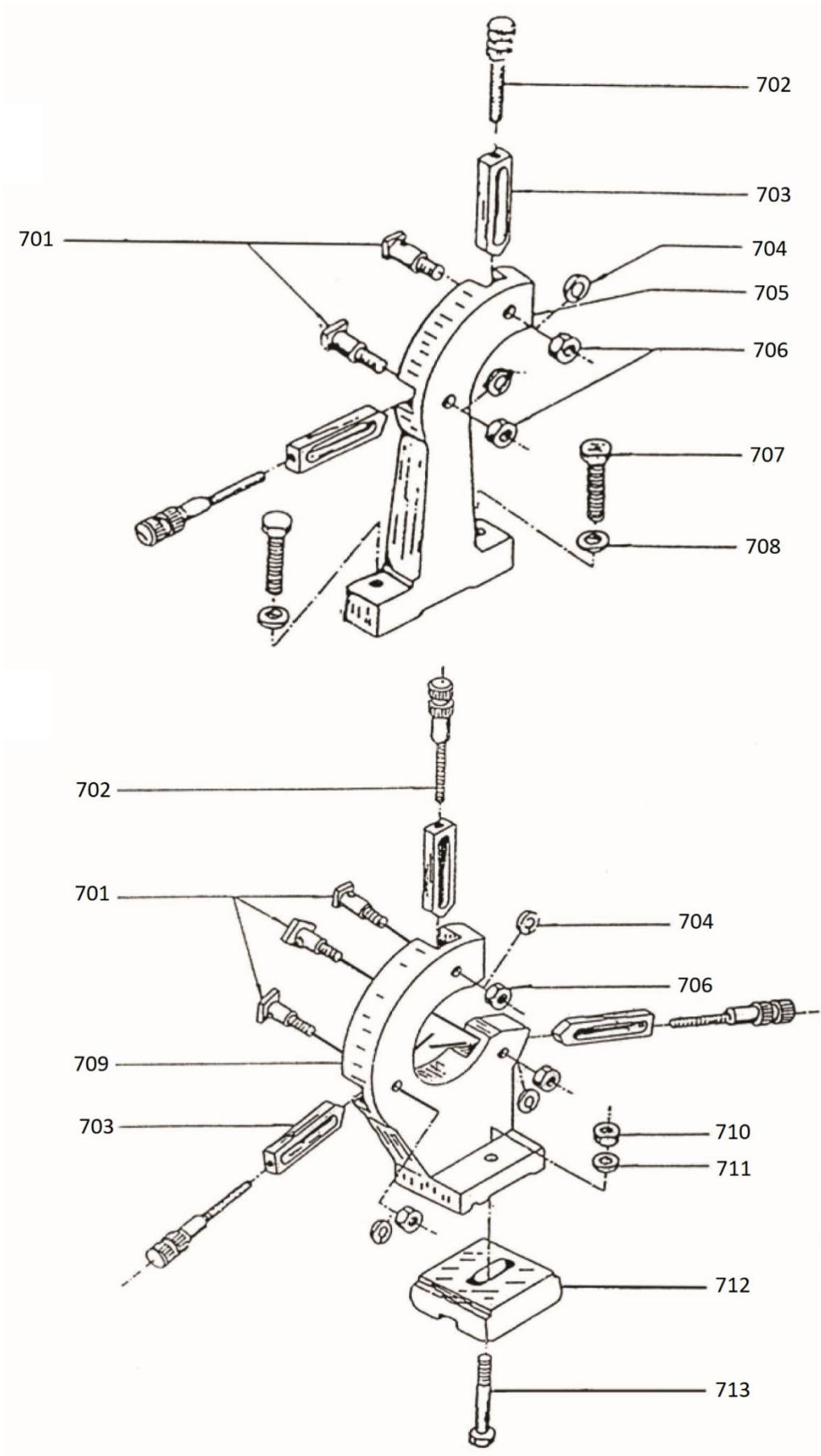
**BD-7VS Assembly Breakdown -6**



## BD-7VS Parts List for Breakdown -6

Index	Part	Description	Size	Qty.
No.	No.			
601	BD7VS-601	SUPPORT		1
602	GB7085-5-12	SOCKET HD SCREW	M5 x 12 mm	2
603	BD7VS-603	SHAFT		1
604	GB81985-5-6	CROSS RECESSED FLAT HD SCREW	M5 x 6 mm	2
605	BD7VS-605	HEX SLEEVE		1
606	GB7085-3-8	SOCKET HD SCREW	M3 x 8 mm	1
607	BD7VS-607	CHIP SHIELD		1
608	GB7085-3-6	SOCKET HD SCREW	M3 x 6 mm	2

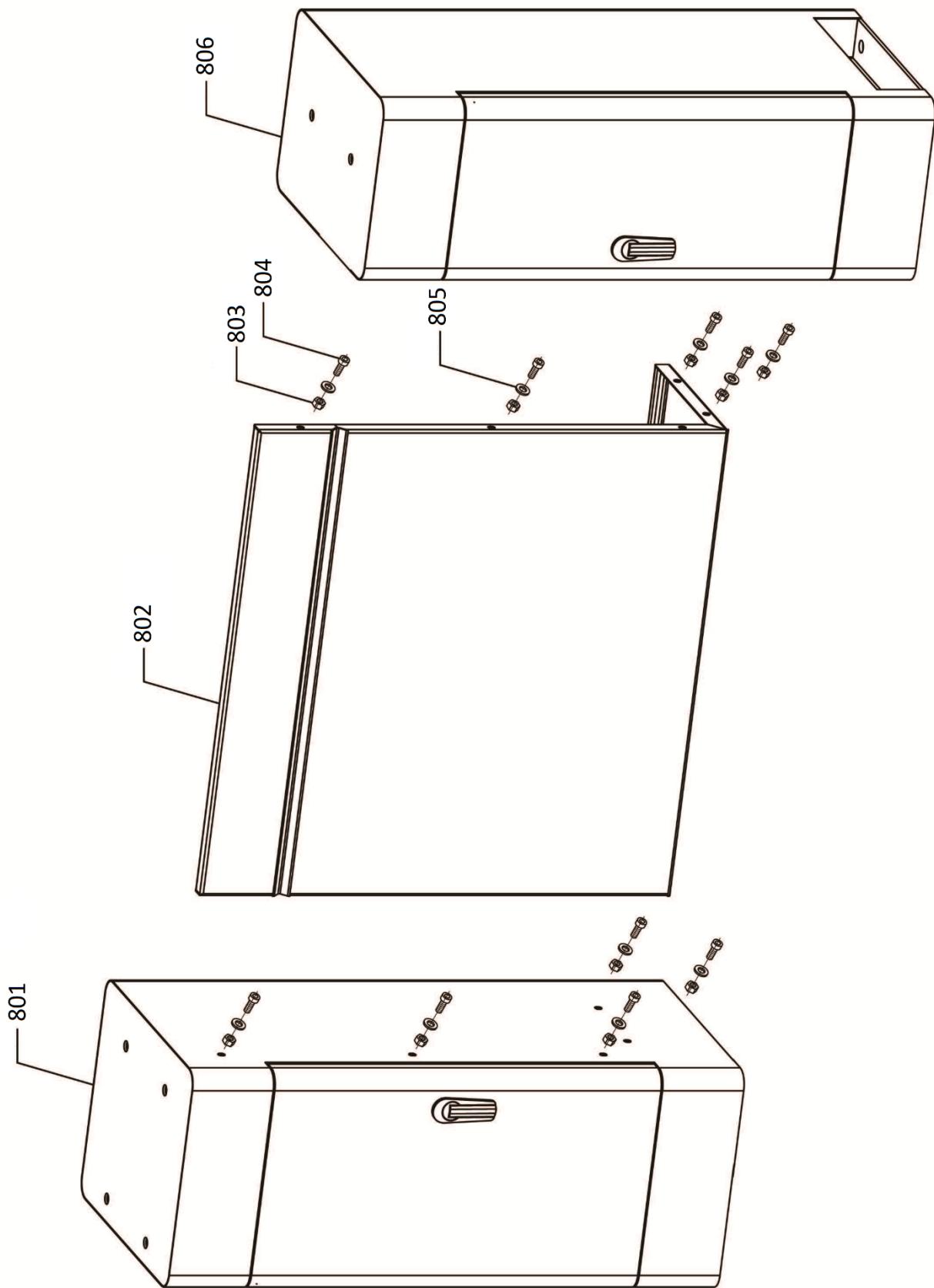
## BD-7VS Assembly Breakdown -7



## BD-7VS Parts List for Breakdown -7

Index No.	Part No.	Description	Size	Qty.
701 .....	BD7VS-701.....	SCREW.....		5
702 .....	BD7VS-702.....	TIGHTENING SCREW .....		5
703 .....	BD7VS-703.....	SLIDE JAW .....		5
704 .....	GB9387-5.....	SPRING WASHER (STD) .....	8 .....	5
705 .....	BD7VS-705.....	FOLLOW REST .....		1
706 .....	GB617086-8.....	HEX NUT.....	M8 .....	5
707 .....	GB578186-8-20 .....	HEX HD SCREW .....	M8 x 20 mm .....	2
708 .....	GB97185-8.....	WASHER .....	8 .....	2
709 .....	BD7VS-709.....	STEADY REST .....		1
710 .....	GB617086-10.....	HEX NUT.....	M10 .....	1
711 .....	GB97185-10.....	WASHER .....	10 .....	1
712 .....	BD7VS-712.....	CLAMPING PLATE.....		1
713 .....	GB578186-10-45 .....	HEX HD SCREW .....	M10 x 45 mm .....	1
	BD7VS-714.....	FOLLOW REST KIT.....		1
	BD7VS-715.....	STEADY REST KIT .....		1

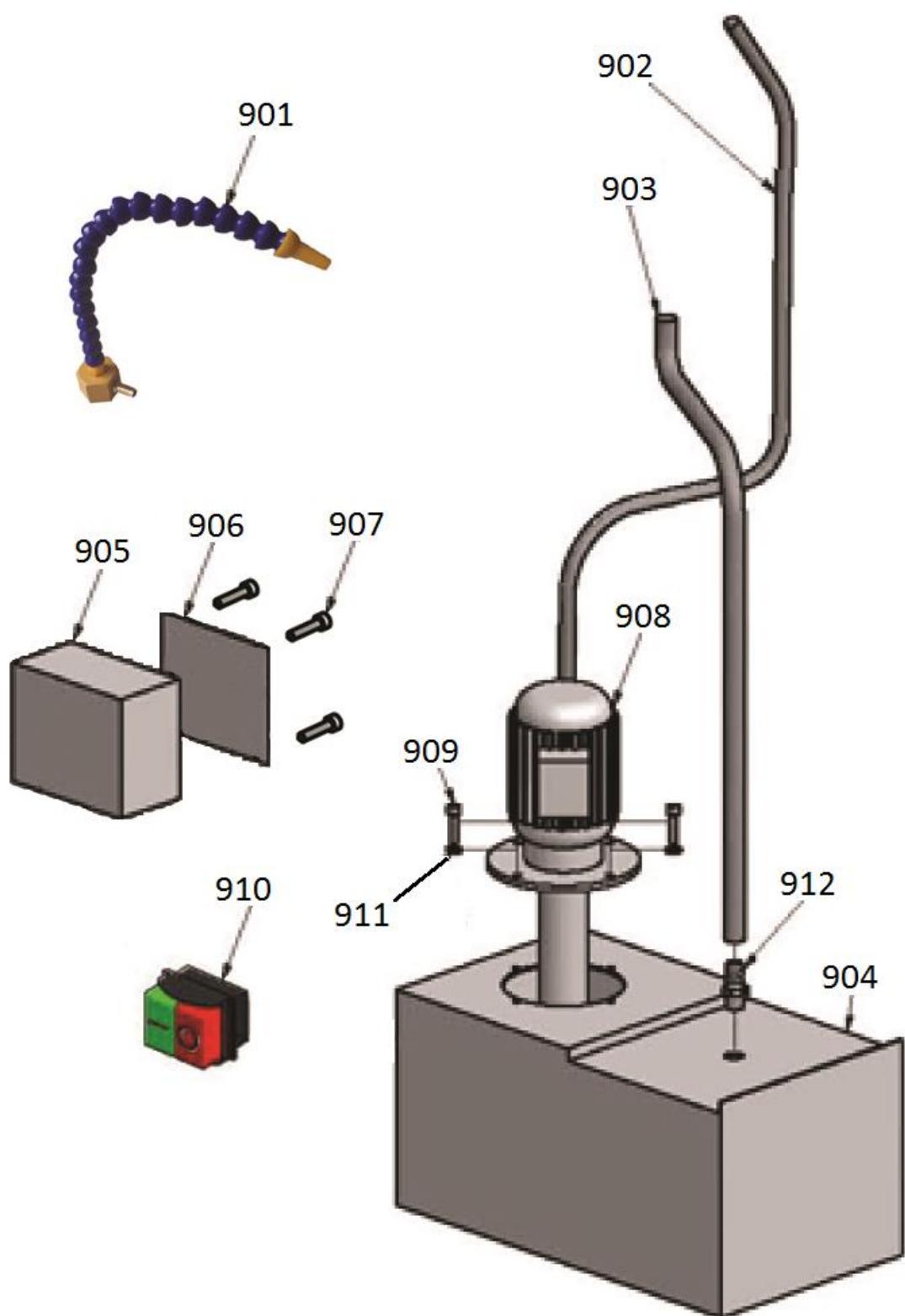
**BD-7VS Assembly Breakdown -8**



## **BD-7VS Parts List for Breakdown -8**

<b>Index</b>	<b>Part</b>		<b>Size</b>	<b>Qty.</b>
<b>No.</b>	<b>No.</b>	<b>Description</b>		
801 .....	BD7VS-801.....	LEFT STAND .....		1
802 .....	BD7VS-802.....	CONNECTING PLATE .....		1
803 .....	GB617086-8.....	HEX NUT .....	M8 .....	10
804 .....	GB7085-8-16 .....	SOCKET HD SCREW .....	M8 x 16 mm.....	10
805 .....	GB97185-8.....	WASHER .....	8 .....	10
806 .....	BD7VS-806.....	RIGHT STAND .....		1
	..... BD7VS-807.....	STAND KIT .....		1

**BD-7VS Assembly Breakdown -9**



## BD-7VS Parts List for Breakdown -9

Index No.	Part No.	Description	Size	Qty.
901 .....	BD7VS-901.....	NOZZLE.....		1
902 .....	BD7VS-902.....	OUTLET PIPE.....		1
903 .....	BD7VS-903.....	RETURNING PIPE.....		1
904 .....	BD7VS-904.....	WATER TANK.....		1
905 .....	BD7VS-905.....	ELECTRICAL BOX.....		1
906 .....	BD7VS-906.....	ELECTRICAL BOX COVER.....		1
907 .....	GB7085-5-30 .....	SOCKET HD SCREW .....	M5 x 30 mm.....	4
908 .....	BD7VS-908.....	COOLANT PUMP .....		1
909 .....	GB7085-5-12 .....	SOCKET HD SCREW .....	M5 x 12 mm.....	4
910 .....	BD7VS-910.....	SWITCH .....	KJD17B.....	1
911 .....	GB97185-5.....	WASHER .....	5 .....	4
912 .....	BD7VS-912.....	HOSE CLIP.....		1
	..... 59500112 .....	COOLANT PUMP KIT .....		1

## 16.0 Wiring Diagrams

BD-7VS .....1~230V, PE, 50Hz

