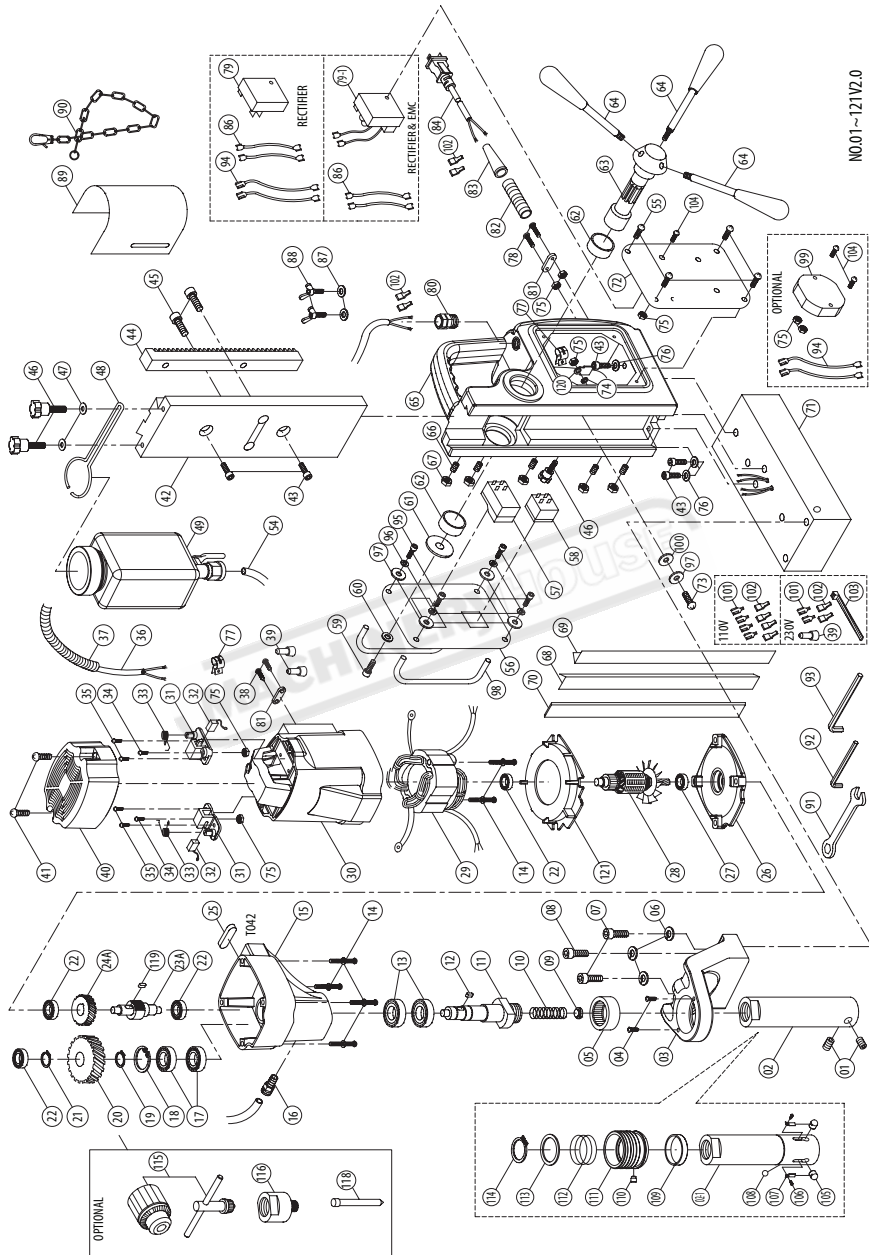


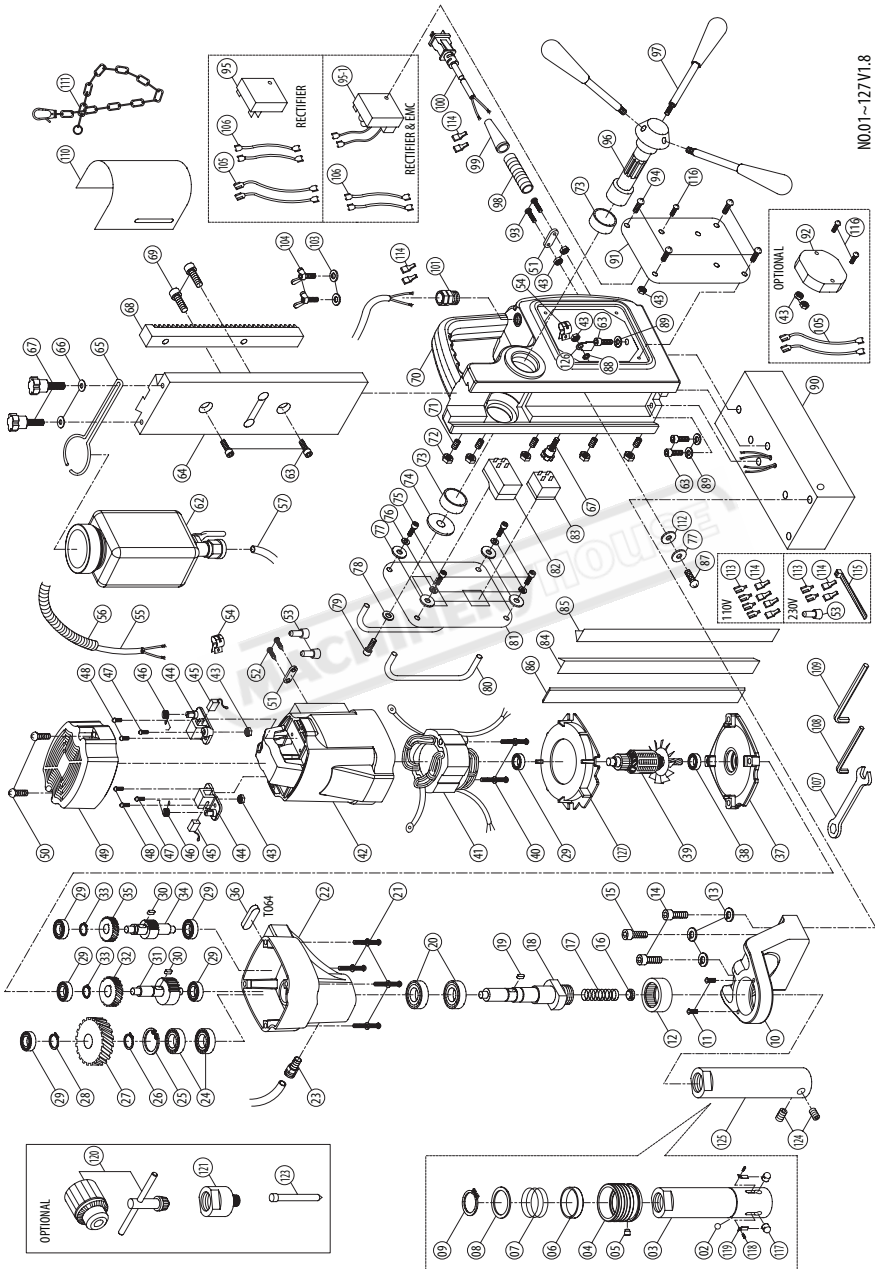
# 1 Speed Drilling System Exploded View & Parts list



NO.01~121V2.0

NO.	Parts Name	QTY	63	CRANK SPINDLE	1
1	SET SCREW M8 x 7	2	64	CRANK LEVER	3
2	ARBOR	1	65	STAND BODY	1
2-1	QUICK RELEASE ARBOR SHAFT	1	66	GIB SET SCREW M5 x 20	5
3	ARBOR SUPPORT BRACKET	1	67	GIB LOCK NUT M5	5
4	TRUSS HEAD SCREW M5 x 8	2	68	GIB WEAR STRIP - LEFT	1
5	BEARING HK3516	1	69	GIB WEAR STRIP - RIGHT	1
6	SPRING WASHER M8	3	70	GIB TENSIONER 260 x 11 x 2.3	1
7	SOCKET CAP BOLT M8 x 55	2	71	ELECTROMAGNET 164 x 80 x 48	1
8	SOCKET CAP BOLT M8 x 30	1	72	SIDE PANEL	1
9	COOLANT SEAL	1	73	SCREW M4 x 16	1
10	SPRING	1	74	STAR WASHER M5	1
11	SPINDLE	1	75	NUT M4 x 8	8
12	PARALLEL KEY 5 x 5 x 10	1	76	SPRING WASHER M6	3
13	OIL SEAL Ø28 x Ø40 x 7	2	77	CABLE CLAMP	2
14	SCREW M5 x 60	6	78	SCREW M4 x 30	2
15	GEAR CASE	1	79	RECTIFIER	1
16	PUSH LOCK FITTING	1	79-1	RECTIFIER & EMC	1
17	BEARING 6003 zz	2	80	CABLE GLAND	1
18	INTERNAL CIRCLIP R-35	1	81	CABLE CLIP	2
19	EXTERNAL CIRCLIP S-17	1	82	STRAIN RELIEF 7cm	1
20	OUTPUT GEAR 52T	1	83	CORD ARMOR	1
21	EXTERNAL CIRCLIP S-15	1	84	POWER SUPPLY CABLE	1
22	BEARING 608 zz	4	85	N/A	-
23A.)	INPUT PINION 8T	1	86	LEAD WIRE	2
24A.)	INPUT GEAR 50T	1	87	FLAT WASHER Ø6 x Ø13 x 1	2
25	PARALLEL KEY 4 x 4 x 30	1	88	BUTTERFLY SCREW M6 x 10	2
26	GEAR PLATE	1	89	CHIP GUARD	1
27	BEARING 609-2RS EZO	1	90	SAFETY CHAIN	1
28	ARMATURE 7T	1	91	COMBINATION WRENCH-M8 M8	1
29	STATOR	1	92	L-HEX KEY-M2.5 M2.5	1
30	MOTOR HOUSING	1	93	L-HEX KEY-M4 M4	1
31	BRUSH HOLDER	2	94	LEAD WIRE	4
32	CARBON BRUSH 7 x 11 x 17	2	95	SOCKET CAP SCREW M4 x 16	4
33	BRUSH SPRING	2	96	SPRING WASHER M4	4
34	SCREW M4 x 10	2	97	FLAT WASHER Ø4 x Ø10 x 1	5
35	SCREW M4 x 12	4	98	SWITCH GUARD BAR	2
36	MOTOR CABLE 1.25 x 2C x 65CM	1	99	OVER LOAD PROTECTION (OPTIONAL)	1
37	CABLE PROTECTOR 40CM	1	100	RUBBER WASHER Ø4 x Ø11 x 1	1
38	SCREW M4 x 14	2	101	SPADE TERMINAL FDV1-250	4
39	END SPLICE TERMINAL C4	3	102	TERMINAL COVER	8
40	MOTOR TAIL COVER	1	103	ZIP TIE	1
41	SCREW M4 x 25	2	104	SCREW M4 x 25	3
42	SLIDE PLATE 230cm	1	105	LOCK PIN	2
43	SOCKET CAP BOLT M6 x 20	5	106	SCREW M3 x 4	2
44	GEAR RACK	1	107	LOCKING PIN SPRING	2
45	SOCKET CAP BOLT M8 x 16	2	108	CHECK BALL Ø8	1
46	THUMB SCREW M5 x 16	3	109	RUBBER RING	1
47	FLAT WASHER Ø5 x Ø12 x 1	2	110	COLLAR PIN	1
48	COOLANT TANK BRACKET	1	111	QUICK-RELEASE COLLAR	1
49	COOLANT TANK ASSEMBLY	1	112	SPRING Ø39 x Ø43 x 3T x 30L	1
50-53	N/A	-	113	SPRING SEAT RING Ø35.1 x Ø44.5 x 2	1
54	COOLANT TUBE 15cm	1	114	EXTERNAL CIRCLIP S-35	1
55	SCREW M4 x 8	4	115	CHUCK (OPTIONAL) 1/2"	1
56	SWITCH PANEL	1	116	CHUCK ADAPTOR (OPTIONAL)	1
57	MOTOR SWITCH	1	117	N/A	-
58	MAGNET SWITCH	1	118	PILOT PIN (OPTIONAL) TCTx91LxØ8	1
59	SOCKET CAP BOLT M6 x 16	1	119	PARALLEL KEY 4 x 4 x 8	1
60	FLAT WASHER Ø6 x Ø25 x 1	1	120	EARTHING MARKING	1
61	FLAT WASHER Ø6 x Ø40 x 2.5	1	121	FAN BAFFLE	1
62	BUSHING Ø28 x Ø32 x 12	2			

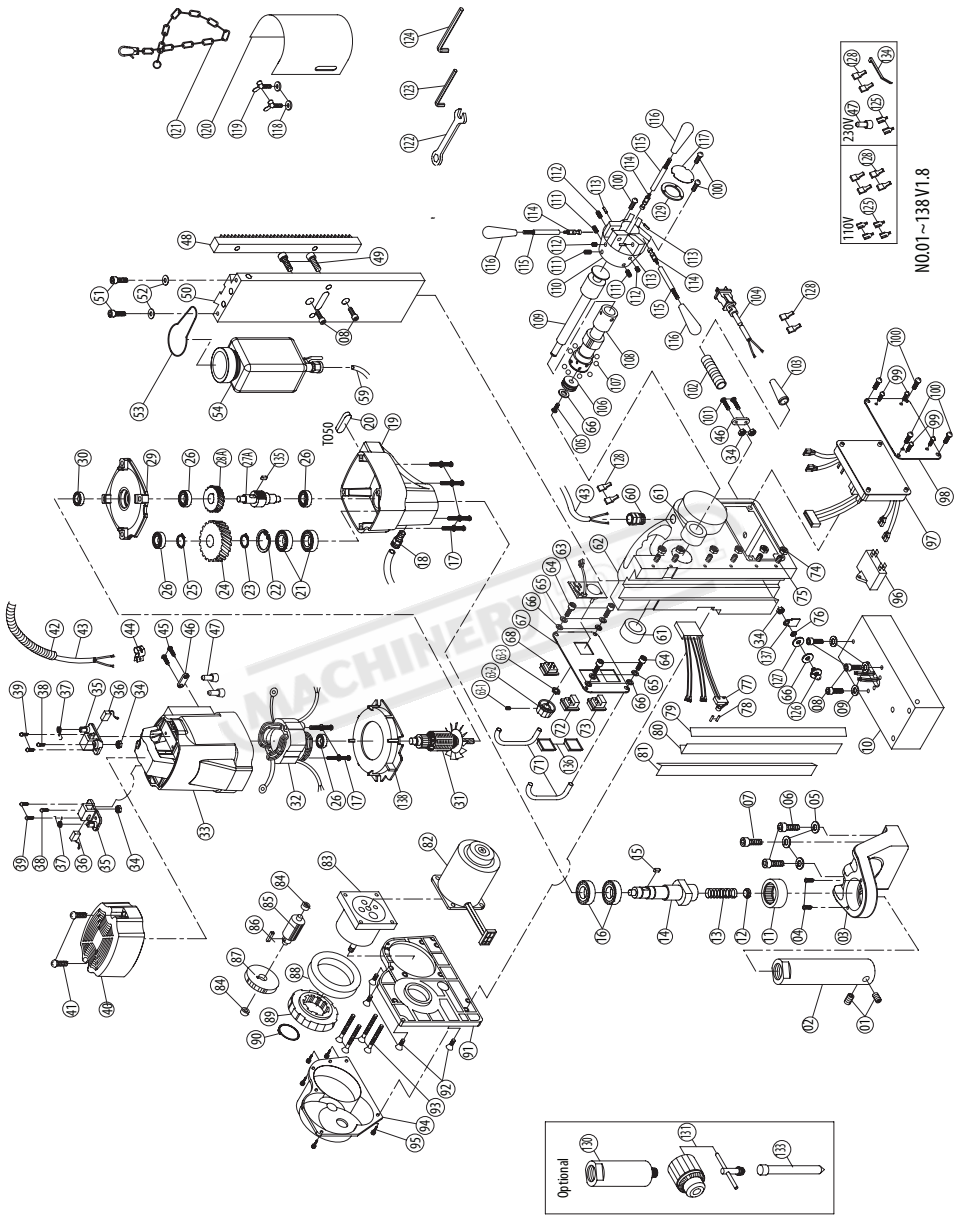
# 1 Speed Drilling System Exploded View & Parts list (N)



NO.01-127V1.8

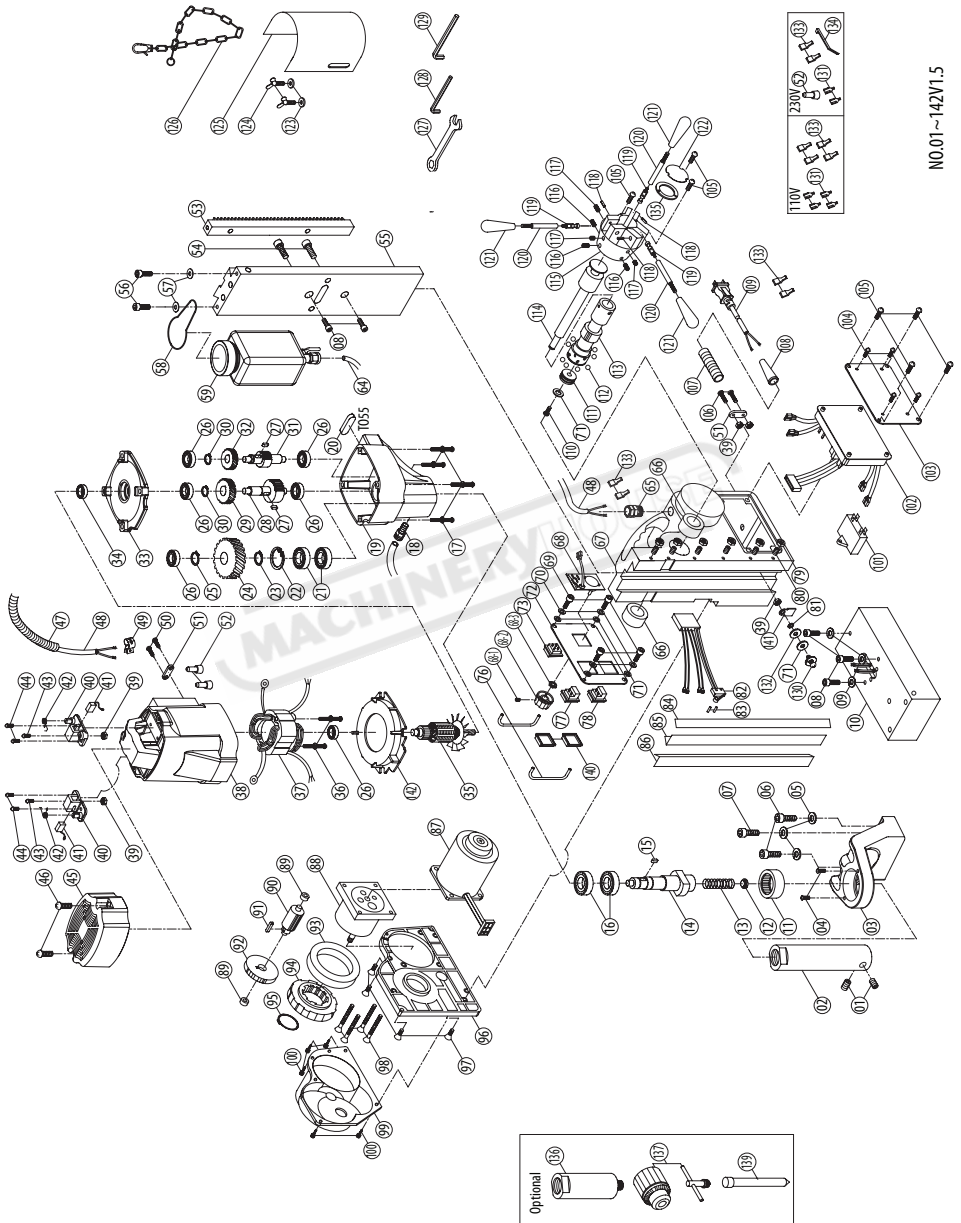
NO.	Parts Name	Q'TY	66	FLAT WASHER 05 x 012 x 1	2
1	N/A	-	67	THUMB SCREW M5 x 16	3
2	CHECK BALL Ø8	1	68	GEAR RACK	1
3	QUICK RELEASE ARBOR SHAFT	1	69	SOCKET CAP BOLT M8 x 16	2
4	QUICK-RELEASE COLLAR	1	70	STAND BODY	1
5	COLLAR PIN	1	71	GIB SET SCREW M5 x 20	5
6	RUBBER RING Ø40 x Ø44 x 9	1	72	GIB LOCK NUT M5	5
7	SPRING Ø2 x Ø39 x Ø43 x 30L x 3T	1	73	BUSHING Ø28 x Ø32 x 12	2
8	STEEL RING Ø35.1 x Ø44.5 x 2	1	74	FLAT WASHER Ø6 x Ø40 x 2.5	1
9	EXTERNAL CIRCLIP S-35	1	75	SOCKET CAP SCREW M4 x 16	4
10	ARBOR SUPPORT BRACKET	1	76	SPRING WASHER M4	4
11	TRUSS HEAD SCREW M5 x 8	2	77	FLAT WASHER Ø4 x Ø10 x 1	5
12	BEARING HK3516	1	78	FLAT WASHER Ø6 x Ø25 x 1	1
13	SPRING WASHER M8	3	79	SOCKET CAP BOLT M6 x 16	1
14	SOCKET CAP BOLT M8 x 55	2	80	SWITCH GUARD BAR	2
15	SOCKET CAP BOLT M8 x 30	1	81	SWITCH PANEL	1
16	COOLANT SEAL	1	82	MOTOR SWITCH	1
17	SPRING	1	83	MAGNET SWITCH	1
18	SPINDLE	1	84	GIB WEAR STRIP - LEFT	1
19	PARALLEL KEY 5 x 5 x 10	1	85	GIB WEAR STRIP - RIGHT	1
20	OIL SEAL Ø28 x Ø40 x 7	2	86	GIB TENSIONER 260 x 11 x 2.3	1
21	SCREW M5 x 70	4	87	SCREW M4 x 16	1
22	GEAR CASE	1	88	STAR WASHER M5	1
23	PUSH LOCK FITTING	1	89	SPRING WASHER M6	3
24	BEARING 6003 zz	2	90	ELECTROMAGNET 164 x 80 x 48	1
25	INTERNAL CIRCLIP R-35	1	91	SIDE PANEL	1
26	EXTERNAL CIRCLIP S-17	1	92	OVER LOAD PROTECTION (OPTIONAL)	1
27	OUTPUT GEAR 37T	1	93	SCREW M4 x 30	2
28	EXTERNAL CIRCLIP S-15	1	94	SCREW M4 x 8	4
29	BEARING 608 zz	6	95	RECTIFIER & EMC	1
30	PARALLEL KEY 4 x 4 x 8	2	95-1	RECTIFIER & EMC	1
31	INTERMEDIATE GEAR PINION 12T	1	96	CRANK SPINDLE	1
32	INTERMEDIATE GEAR 34T	1	97	CRANK LEVER	3
33	EXTERNAL CIRCLIP S-10	2	98	STRAIN RELIEF 7cm	1
34	INPUT PINION 9T	1	99	CORD ARMOR	1
35	INPUT GEAR 30T	1	100	POWER SUPPLY CABLE	1
36	PARALLEL KEY 4 x 4 x 30	1	101	CABLE GLAND	1
37	GEAR PLATE	1	102	N/A	-
38	BEARING 6001-LLU	1	103	FLAT WASHER Ø6 x Ø13 x 1	2
39	ARMATURE 7T	1	104	BUTTERFLY SCREW M6 x 10	2
40	SCREW M5 x 60	2	105	LEAD WIRE	4
41	STATOR	1	106	LEAD WIRE	2
42	MOTOR HOUSING	1	107	M8 COMBINATION WRENCH M8	1
43	NUT M4 x 8	8	108	M2.5 L-HEX WRENCH M2.5	1
44	BRUSH HOLDER	2	109	M4 L-HEX WRENCH M4	1
45	CARBON BRUSH 7 x 11 x 17	2	110	CHIP GUARD	1
46	BRUSH SPRING	2	111	SAFETY CHAIN	1
47	SCREW M4 x 10	2	112	RUBBER WASHER M4	1
48	SCREW M4 x 12	4	113	SPADE TERMINAL FDV1-250	4
49	MOTOR TAIL COVER	1	114	TERMINAL COVER	8
50	SCREW M4 x 25	2	115	ZIP TIE	1
51	CABLE CLIP	2	116	SCREW M4 x 25	3
52	SCREW M4 x 14	2	117	LOCK PIN	2
53	END SPLICE TERMINAL C4	3	118	SCREW M3 x 4	2
54	CABLE CLAMP	2	119	LOCKING PIN SPRING	2
55	MOTOR CABLE 1.25 x 2C x 65CM	1	120	CHUCK (OPTIONAL) 1/2"	1
56	CABLE PROTECTOR 40cm	1	121	CHUCK ADAPTOR (OPTIONAL)	1
57	COOLANT TUBE 15cm	1	122	N/A	-
58-61	N/A	-	123	PILOT PIN (OPTIONAL) TCTx91LxØ8	1
62	COOLANT TANK ASSEMBLY	1	124	SET SCREW M8 x 7	2
63	SOCKET CAP BOLT M6 x 20	5	125	ARBOR	1
64	SLIDE PLATE 238cm	1	126	EARTHING MARKING	1
65	COOLANT TANK BRACKET	1	127	FAN SHROUD	1

# Semi Auto Feed Drilling System Exploded View & Parts list



NO.	Parts Name	QTY	69~70	N/A	-
1	SET SCREW M8 x 7	2	71	SWITCH GUARD	2
2	ARBOR	1	72	MOTOR ON SWITCH (GREEN)	1
3	ARBOR SUPPORT BRACKET	1	73	MOTOR OFF SWITCH (RED)	1
4	TRUSS HEAD SCREW M5 x 8	2	74	NUT M5	6
5	SPRING WASHER M8	3	75	SET SCREW M5 x 20	6
6	SOCKET CAP BOLT M8 x 55	2	76	STAR WASHER M5	1
7	SOCKET CAP BOLT M8 x 30	1	77	LIMIT SWITCH	1
8	SOCKET CAP BOLT M6 x 20	5	78	PIN Ø2.2 x 10	2
9	SPRING WASHER M6	3	79	GIB TENSIONER 260 x 11 x 2.3	1
10	ELECTROMAGNET 164 x 80 x 48	1	80	GIB STRIP - RIGHT 260L	1
11	BEARING HK 3516	1	81	GIB STRIP - LEFT 260L	1
12	COOLANT SEAL	1	82	FEED MOTOR	1
13	SPRING	1	83	FEED MOTOR GEAR BOX	1
14	SPINDLE	1	84	BUSHING Ø8 x Ø12 x 6	2
15	PARALLEL KEY 5 x 5 x 10	1	85	FEED INTERMEDIATE GEAR 10T	1
16	OIL SEAL Ø28 x Ø40 x 7	2	86	PARALLEL KEY 4 x 4 x 10	1
17	SCREW M5 x 60	6	87	FEED OUTPUT GEAR 80T	1
18	PUSH LOCK FITTING	1	88	BEARING 6809 zz	1
19	GEAR CASE	1	89	ENGAGEMENT GEAR 63T	1
20	PARALLEL KEY 4 x 4 x 30	1	90	EXTERNAL CIRCLIP 5-29	1
21	BEARING 6003 zz	2	91	FEED SUPPORT BASE	1
22	INTERNAL CIRCLIP R-35	1	92	FLAT HEAD SCREW M5 x 15	4
23	EXTERNAL CIRCLIP 5-17	1	93	FLAT HEAD SCREW M5 x 30	4
24	OUTPUT GEAR 52T	1	94	AUTO FEED COVER	1
25	EXTERNAL CIRCLIP 5-15	1	95	SCREW M5 x 20	5
26	BEARING 608 zz	4	96	CAPACITOR	1
27A	INPUT PINION 8T	1	97	ELECTRONICS BOARD	1
28A	INPUT GEAR 50T	1	98	SIDE PLATE	1
29	GEAR PLATE	1	99	SCREW M3.5 x 6	4
30	BEARING 609 zz	1	100	SCREW M4 x 8	7
31	ARMATURE 7T	1	101	SCREW M4 x 30	2
32	STATOR	1	102	CABLE PROTECTOR 7CM	1
33	MOTOR HOUSING	1	103	CORD ARMOR	1
34	NUT M4 x 8	5	104	POWER SUPPLY CABLE	1
35	BRUSH HOLDER 7 x 11	2	105	SCREW M4 x 10	1
36	CARBON BRUSH 7 x 11 x 17	2	106	SELECTOR CAM	1
37	SPRING	2	107	BALL Ø5	8
38	SCREW M4 x 10	2	108	CRANK SPINDLE	1
39	SCREW M4 x 12	4	109	SELECTOR ROD	1
40	MOTOR TAIL COVER	1	110	CRANK HUB	1
41	SCREW M4 x 25	2	111	SET SCREW M8 x 10	3
42	CABLE PROTECTOR 40CM	1	112	DETEN UNIT M6 x 13	3
43	MOTOR CABLE 1.25 x 2C x 80CM	1	113	SPRING PIN Ø4.2 x 25	3
44	CABLE CLAMP	1	114	CRANK LEVER TIP	3
45	SCREW M4 x 14	2	115	CRANK LEVER	3
46	CORD CLIP	2	116	CRANK GRIP	3
47	END SPLICE TERMINAL C-4	3	117	HUB COVER	1
48	GEAR RACK	1	118	FLAT WASHER Ø6 x Ø13 x 1	2
49	SOCKET CAP BOLT M8 x 16	2	119	BUTTERFLY SCREW M6 x 10	2
50	SLIDE PLATE	1	120	CHIP GUARD	1
51	SOCKET CAP SCREW M5 x 16	2	121	SAFETY CHAIN	1
52	FLAT WASHER Ø5 x Ø12 x 1	2	122	COMBINATION WRENCH-M8 M8	1
53	COOLANT TANK BRACKET	1	123	L-HEX KEY-M2.5 M2.5	1
54	COOLANT TANK ASSEMBLY	1	124	L-HEX KEY-M4 M4	1
55~58	N/A	-	125	SPADE TERMINAL	4
59	COOLANT TUBE 15CM	1	126	SCREW M4 x 16	1
60	CABLE GLAND	1	127	WASHER 4 x 11 x 1	1
61	BUSHING Ø28 x Ø32 x 12	2	128	TERMINAL COVER	8
62	STAND BODY	1	129	HUB PLATE	1
63	SPEED CONTROL BOARD	1	130	CHUCK ADAPTOR (OPTIONAL)	1
63-1	SCREW	1	131	CHUCK (OPTIONAL) 1/2"	1
63-2	SELECTOR SWITCH	1	132	N/A	-
63-3	NUT	1	133	PILOT PIN (OPTIONAL) Tctx91LxØ8	1
64	SOCKET CAP SCREW M4 x 16	4	134	ZIP TIE	1
65	SPRING WASHER M4	4	135	PARALLEL KEY 4 x 4 x 8	1
66	FLAT WASHER Ø4 x Ø10 x 1	6	136	SWITCH COVER	2
67	SWITCH PLATE	1	137	EARTHING MARKING	1
68	MAGNET SWITCH	1	138	FAN BAFFLE	1

# Semi Auto Feed Drilling System Exploded View & Parts list (N)

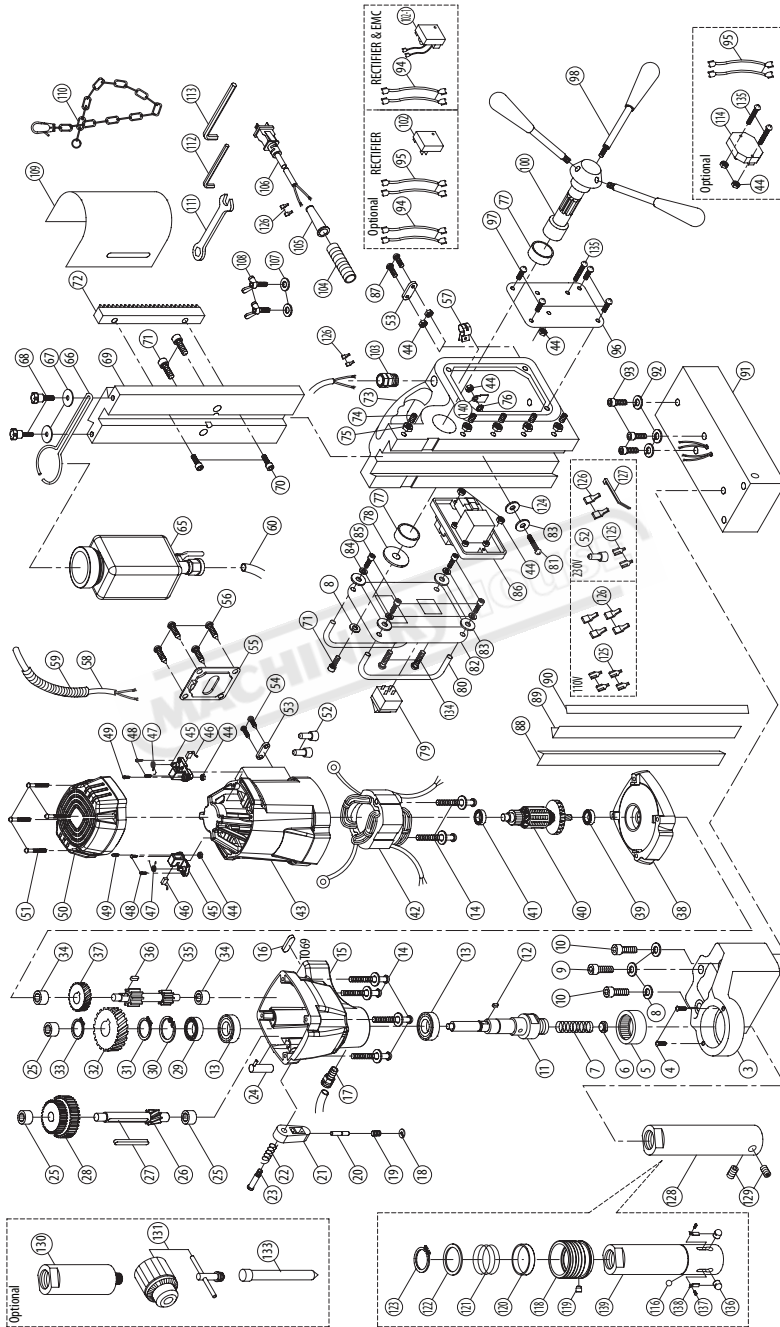


NO.01~142V1.5

NO.	Parts Name	QTY	71	FLAT WASHER 04x010x1	6
1	SET SCREW M8 x 7	2	72	SWITCH PLATE	1
2	ARBOR	1	73	MAGNET SWITCH	1
3	ARBOR SUPPORT BRACKET	1	74-75	N/A	-
4	TRUSS HEAD SCREW M5 x 8	2	76	SWITCH GUARD	2
5	SPRING WASHER M8	3	77	MOTOR ON SWITCH (GREEN)	1
6	CAP BOLT M8 x 55	2	78	MOTOR OFF SWITCH (RED)	1
7	CAP BOLT M8 x 30	1	79	NUT M5	6
8	CAP BOLT M6 x 20	5	80	SET SCREW M5 x 20	6
9	SPRING WASHER M6	3	81	STAR WASHER M5	1
10	MAGNET	1	82	LIMIT SWITCH	1
11	BEARING HK 3516	1	83	PIN 02.2 x 10	2
12	COOLANT SEAL	1	84	GIB TENSIONER 260 x 11 x 2.3	1
13	SPRING	1	85	GIB STRIP - RIGHT	1
14	SPINDLE	1	86	GIB STRIP - LEFT 260L	1
15	WOODRUFF KEY 5 x 5 x 10	1	87	FEED MOTOR	1
16	OIL SEAL 028 x 040 x 7	2	88	FEED MOTOR GEAR BOX	1
17	SCREW M5 x 70	4	89	BUSHING 08 x 012 x 6	2
18	PUSH LOCK FITTING	1	90	FEED INTERMEDIATE GEAR 10T	1
19	GEAR CASE	1	91	PARALLEL KEY 4 x 4 x 10	1
20	PARALLEL KEY 4 x 4 x 30	1	92	FEED OUTPUT GEAR 80T	1
21	BEARING 6003 zz	2	93	BEARING 6809 zz	1
22	INTERNAL CIRCLIP R-35	1	94	ENGAGEMENT GEAR 63T	1
23	EXTERNAL CIRCLIP S-17	1	95	EXTERNAL CIRCLIP S-29	1
24	OUTPUT GEAR 37T	1	96	FEED SUPPORT BASE	1
25	EXTERNAL CIR CLIP S-15	1	97	FLAT HEAD SCREW M5 x 15	4
26	BEARING 608 zz	6	98	FLAT HEAD SCREW M5 x 30	4
27	PARALLEL KEY 4 x 4 x 8	2	99	AUTO FEED COVER	1
28	INTERMEDIATE GEAR PINION 12T	1	100	SCREW M5 x 20	5
29	INTERMEDIATE GEAR 34T	1	101	CAPACITOR	1
30	EXTERNAL CIRCLIP S-10	2	102	ELECTRONICS BOARD	1
31	INPUT PINION 9T	1	103	SIDE PLATE	1
32	INPUT GEAR 30T	1	104	SCREW M3.5 x 6	4
33	GEAR PLATE	1	105	SCREW M4 x 8	7
34	BEARING 6001-LLU	1	106	SCREW M4 x 30	2
35	ARMATURE 7T	1	107	CABLE PROTECTOR 7CM	1
36	SCREW M5 x 60	2	108	CORD ARMOR	1
37	STATOR	1	109	POWER SUPPLY CABLE	1
38	MOTOR HOUSING	1	110	SCREW M4 x 10	1
39	NUT M4 x 8	5	111	SELECTOR CAM	1
40	BRUSH HOLDER 7 x 11	2	112	BALL 05	8
41	CARBON BRUSH 7 x 11 x 17	2	113	CRANK SPINDLE	1
42	SPRING	2	114	SELECTOR ROD	1
43	SCREW M4 x 10	2	115	CRANK HUB	1
44	SCREW M4 x 12	4	116	SET SCREW M8 x 10	3
45	MOTOR TAIL COVER	1	117	DETENT UNIT M6 x 13	3
46	SCREW M4 x 25	2	118	SPRING PIN 04.2 x 25	3
47	CABLE PROTECTOR 40CM	1	119	CRANK LEVER TIP	3
48	MOTOR CABLE 1.25 x 2C x 80CM	1	120	CRANK LEVER	3
49	CABLE CLAMP	1	121	CRANK GRIP	3
50	SCREW M4 x 14	2	122	HUB COVER	1
51	CORD CLIP	2	123	FLAT WASHER 06 x 013 x 1	2
52	WIRE CONNECTOR C-4	3	124	BUTTERFLY SCREW M6 x 10	2
53	GEAR RACK	1	125	CHIP GUARD	1
54	SCREW M8 x 16	2	126	SAFETY CHAIN	1
55	SLIDE PLATE	1	127	M8 COMBINATION WRENCH M8	1
56	SOCKET CAP BOLT M5 x 16	2	128	M2.5 L-HEX WRENCH M2.5	1
57	FLAT WASHER 05 x 012 x 1	2	129	M4 L-HEX WRENCH M4	1
58	COOLANT TANK BRACKET	1	130	SCREW M4 x 16	1
59	COOLANT TANK ASSEMBLY	1	131	SPADE TERMINAL	4
60-63	N/A	-	132	RUBBER WASHER 04 x 011 x 1	1
64	COOLANT TUBE 15CM	1	133	TERMINAL COVER	8
65	CABLE GLAND	1	134	ZIP TIE	1
66	BUSHING 028 x 032 x 12	2	135	HUB PLATE	1
67	STAND BODY	1	136	CHUCK ADAPTOR(OPTIONAL)	1
68	SPEED CONTROL BOARD	1	137	CHUCK(OPTIONAL)	1
68-1	SCREW	1	138	N/A	1
68-2	SELECTOR SWITCH	1	139	PILOT PIN(OPTIONAL) TCTx91Lxp8	1
68-3	NUT	1	140	SWITCH PROTECTIVE COVER	2
69	SOCKET CAP SCREW M4 x 16	4	141	EARTHING MARKING	1
70	SPRING WASHER M4	4	142	FAN SHROUD	1



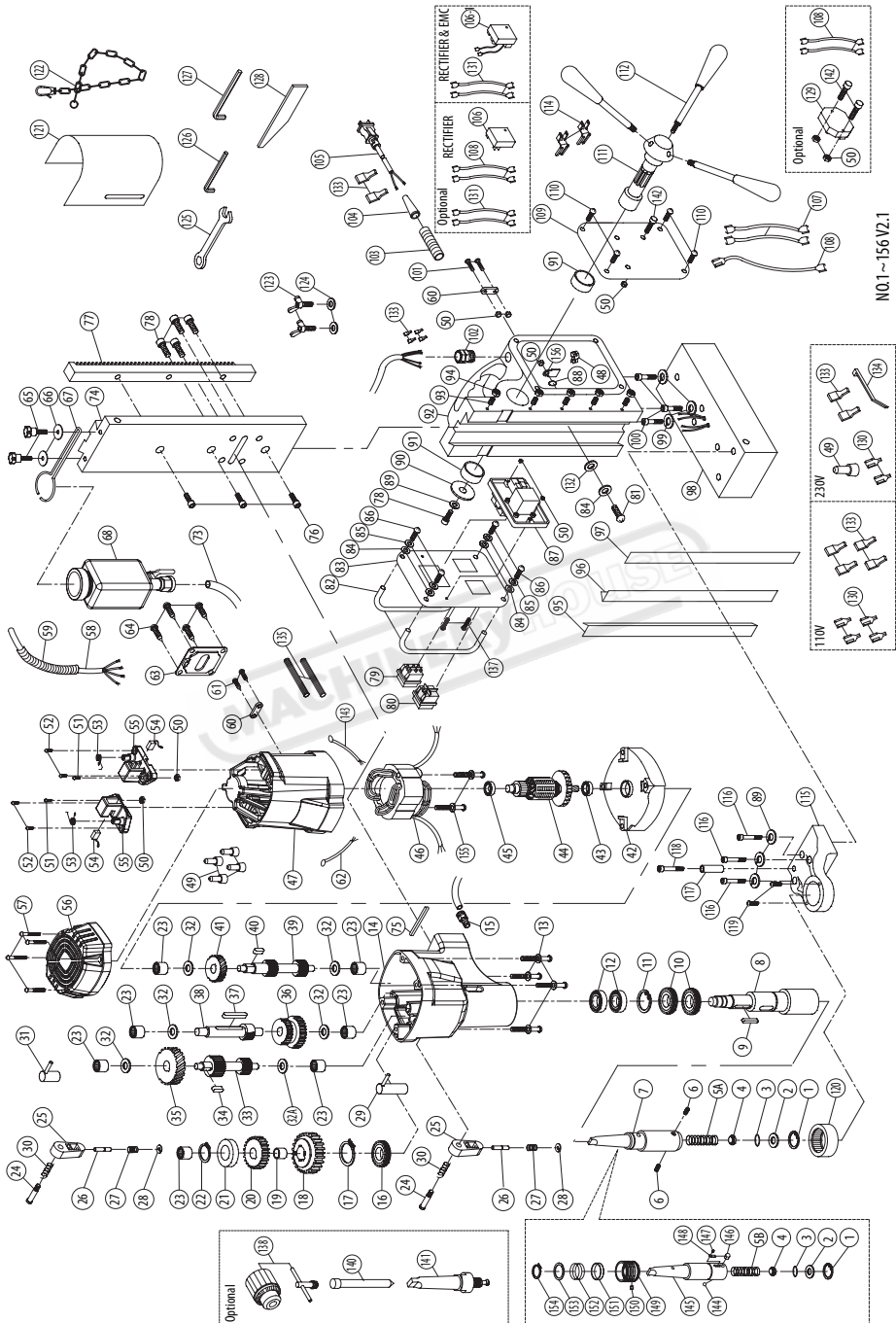
# 2 Speed Drilling System Exploded View & Parts list



NO.1~140 V1.9

NO.	Parts Name	QTY	73	STAND BODY	1
1~2	N/A	-	74	SET SCREW M5 x 25	5
3	ARBOR SUPPORT BRACKET	1	75	NUT M5	5
4	TRUSS HEAD SCREW M4 x 6	2	76	STAR WASHER M5	1
5	BEARING HK 3516	1	77	BUSHING Ø32 x Ø38 x 12	2
6	COOLANT SEAL	1	78	FLAT WASHER Ø8 x Ø40 x 2.5	1
7	SPRING	1	79	MAGNET SWITCH	1
8	SPRING WASHER M8	4	80	GUARD BAR	2
9	SOCKET CAP BOLT M8 x 60	1	81	SCREW M4 x 16	1
10	SOCKET CAP BOLT M8 x 70	2	82	SWITCH PANEL	1
11	SPINDLE	1	83	FLAT WASHER Ø4 x Ø10 x 1	5
12	PARALLEL KEY 5 x 5 x 12	1	84	SPRING WASHER M4	4
13	OIL SEAL Ø22 x Ø37 x 7	2	85	SOCKET CAP SCREW M4 x 16	4
14	SCREW M5 x 60	6	86	MOTOR SWITCH	1
15	GEAR CASE	1	87	SCREW M4 x 30	2
16	PARALLEL KEY 4 x 4 x 30	1	88	GIB STRIP-LEFT	1
17	PUSH LOCK FITTING	1	89	GIB STRIP-RIGHT	1
18	E-CLIP E-3	1	90	GIB TENSIONER	1
19	SPRING	1	91	MAGNET BASE	1
20	DETENT PIN	1	92	SPRING WASHER M6	3
21	SELECTOR TAB	1	93	SOCKET CAP BOLT M6 x 20	3
22	SPRING	1	94	LEAD WIRE	2
23	SHOULDER SCREW	1	95	LEAD WIRE	4
24	SELECTOR FORK	1	96	SIDE PLATE	1
25	BEARING HK 1010	3	97	SCREW M4 x 8	4
26	INTERMEDIATE GEAR PINION 10T	1	98	CRANK HANDLE 140mm	3
27	PARALLEL KEY 5 x 5 x 50	1	99	N/A	-
28	INTERMEDIATE GEAR 30T x 33T	1	100	CRANK SPINDLE	1
29	BEARING 6204 zz	1	101	N/A	-
30	INTERNAL CIRCLIP R-47	1	102	RECTIFIER	1
31	EXTERNAL CIRCLIP S-20	1	102-1	RECTIFIER & EMC	1
32	OUTPUT GEAR 39T	1	103	CABLE GLAND	1
33	EXTERNAL CIRCLIP S-15	1	104	STRAIN RELIEF 7CM	1
34	BEARING HK Ø810	2	105	CORD ARMOR	1
35	INPUT PINION 10T x 13T	1	106	POWER SUPPLY CABLE	1
36	PARALLEL KEY 5 x 5 x 8	1	107	FLAT WASHER Ø6 x Ø13 x 1	2
37	INPUT GEAR 29T	1	108	BUTTERFLY SCREW M6 x 10	2
38	GEAR PLATE	1	109	CHIP GUARD	1
39	BEARING 6202-2RS	1	110	SAFETY CHAIN	1
40	ARMATURE	1	111	M8 COMBINATION WRENCH M8	1
41	BEARING 6200-LLU	1	112	M2.5 L-HEX KEY M2.5	1
42	STATOR	1	113	M4 L-HEX KEY M4	1
43	MOTOR HOUSING	1	114	OVER LOAD PROTECTION (OPTIONAL)	1
44	NUT M4 x 8	10	115	N/A	-
45	BRUSH HOLDER 7 x 17 x 17	2	116	CHECK BALL Ø8	1
46	CARBON BRUSH 7 x 17 x 17	2	117	N/A	-
47	BRUSH SPRING	2	118	COLLAR	1
48	SCREW M4 x 12	4	119	COLLAR PIN	1
49	SCREW M4 x 10	2	120	RUBBER RING	1
50	MOTOR TAIL COVER	1	121	SPRING Ø2 x Ø39 x Ø43 x 3T x 30L	1
51	SCREW M4 x 20	4	122	STEEL RING Ø35.1 x Ø44.5 x 2	1
52	END SPLICE TERMINAL C-4	3	123	EXTERNAL CIRCLIP S-35	1
53	CORD CLIP	2	124	RUBBER WASHER Ø4 x Ø11 x 1	1
54	SCREW M4 x 16	2	125	SPADE TERMINAL	4
55	MOTOR COVER PLATE (PLASTIC)	1	126	TERMINAL COVER	8
56	FLAT HEAD SCREW M5 x 12	4	127	ZIP TIE	1
57	CABLE CLAMP	1	128	ARBOR SHAFT	1
58	MOTOR CABLE 2.0 x 2C x 90CM	1	129	SET SCREW M8 x 7	2
59	CABLE PROTECTOR 50CM	1	130	CHUCK ADAPTOR (OPTIONAL) M27x3-5/8"x16	1
60	COOLANT TUBE 18CM	1	131	CHUCK (OPTIONAL) 5/8"	1
61~64	N/A	-	132	N/A	-
65	COOLANT TANK ASSEMBLY 400cc	1	133	PILOT PIN (OPTIONAL) TCTx112LxØ8	1
66	COOLANT TANK BRACKET	1	134	SCREW M4 x 20	2
67	FLAT WASHER Ø5 x Ø12 x 1	2	135	SCREW M4 x 25	3
68	THUMB SCREW	2	136	LOCK PIN 11.7mm	2
69	SLIDE PLATE	1	137	SCREW M3 x 4	2
70	SOCKET CAP BOLT M8 x 20	2	138	LOCKING PIN SPRING	2
71	SOCKET CAP BOLT M8 x 16	3	139	QUICK RELEASE ARBOR SHAFT	1
72	GEAR RACK	1	140	EARTHING MARKING	1

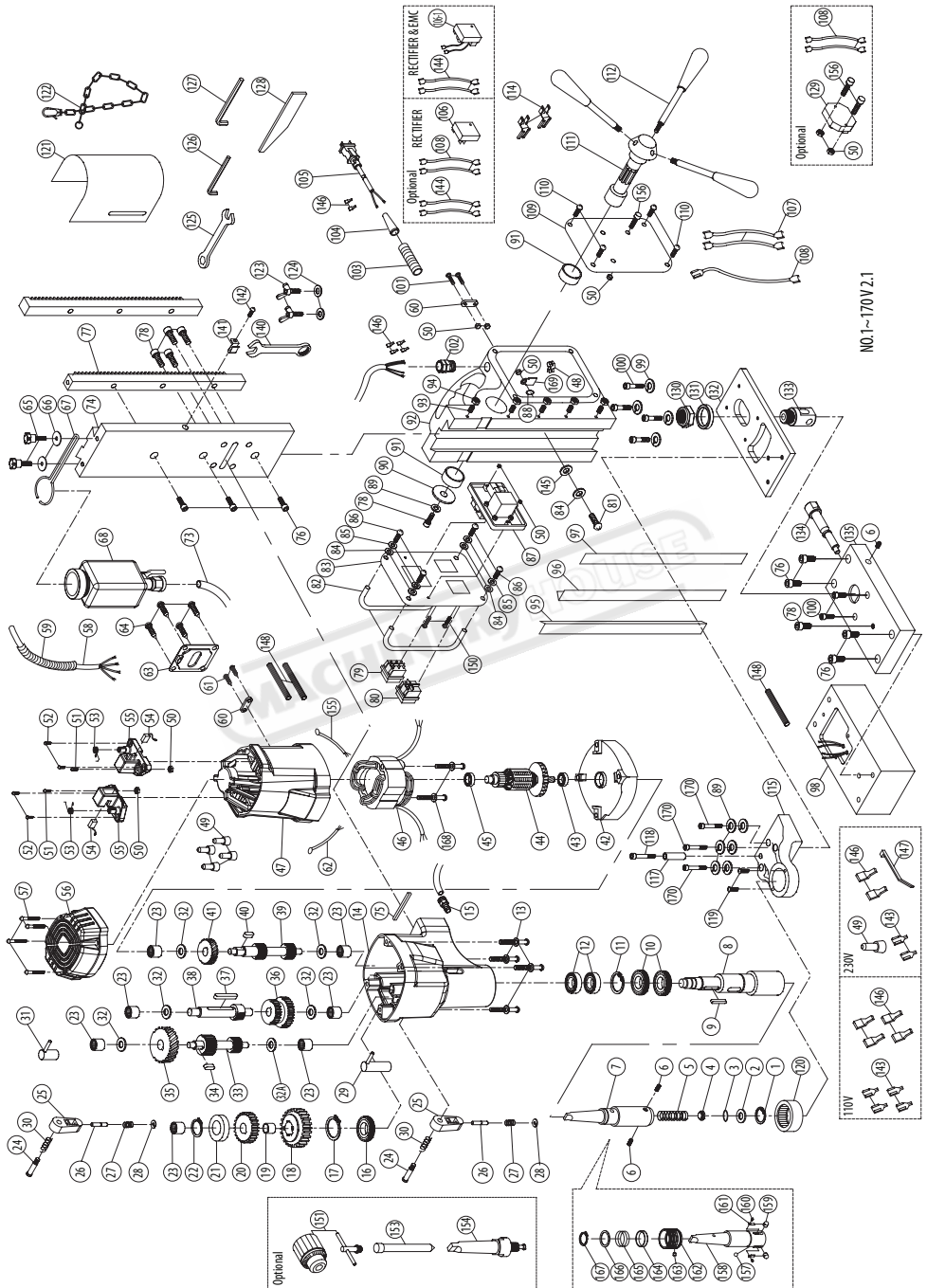
# 4 Speed Drilling System Exploded View & Parts list



NO.1~156V2.1

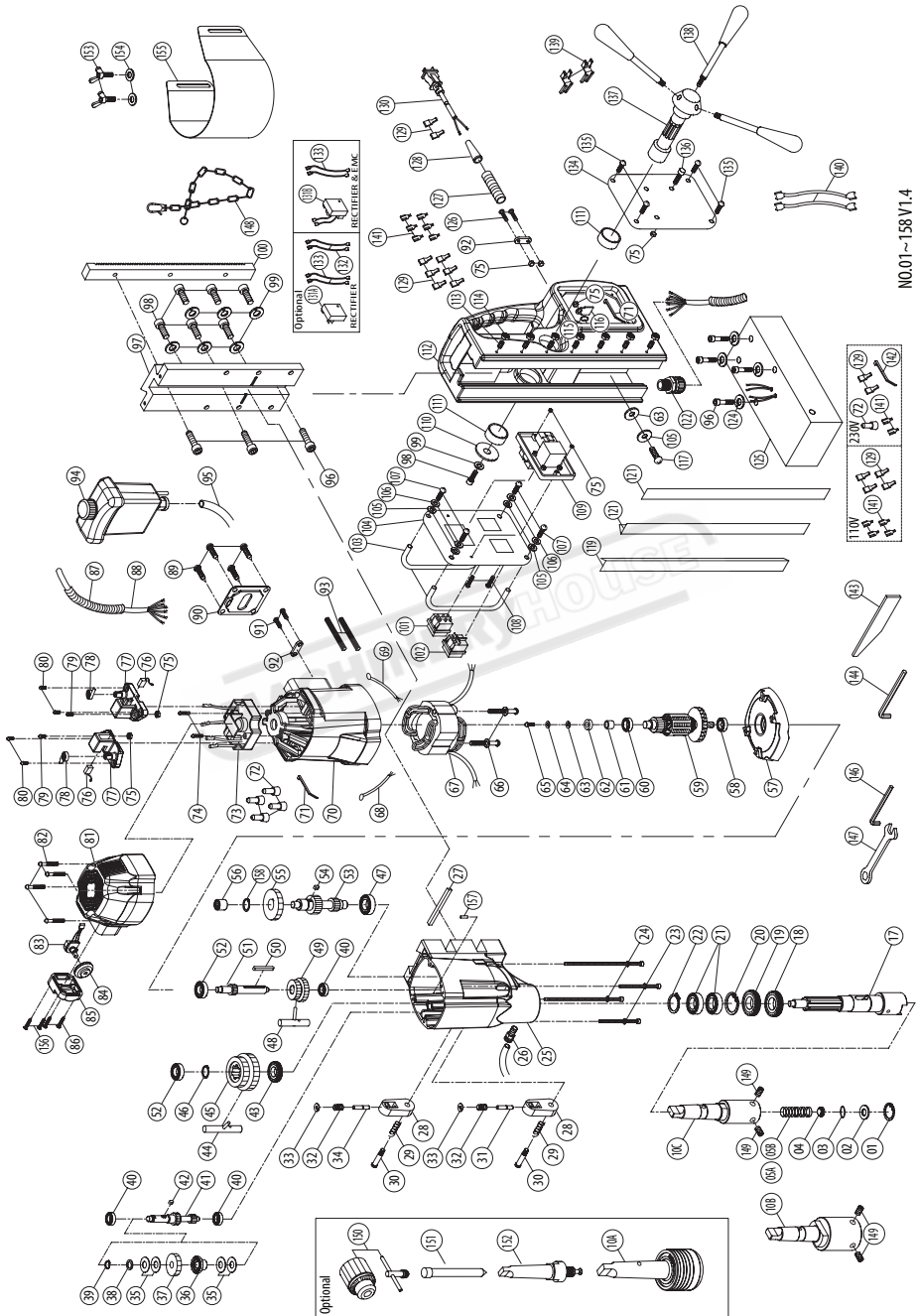
NO.	Parts Name	Q'TY	80	MAGNET SWITCH	1
1	INTERNAL CIRCLIP R-19	1	81	SCREW M4 x 16	1
2	ARBOR WASHER Ø10 x Ø18.5 x 0.8	1	82	GUARD BAR	2
3	O-RING Ø12 x 4	1	83	SWITCH PANEL	1
4	COOLANT SEAL Ø12 x Ø10.2 x 15	1	84	FLAT WASHER Ø4 x Ø10 x 1	5
5A	SPRING Ø1.2 x Ø10 x Ø12.4 x 24T x 140L	1	85	SPRING WASHER M4	4
5B	SPRING Ø1.2 x Ø10 x Ø12.4 x 15T x 100L	1	86	SOCKET CAP SCREW M4 x 16	4
6	SET SCREW M8 x 7	2	87	MOTOR SWITCH	1
7	MT3 ARBOR	1	88	STAR WASHER M5	1
8	SPINDLE	1	89	SPRING WASHER M8	4
9	PARALLEL KEY 5 x 5 x 40	1	90	FLAT WASHER Ø8 x Ø40 x 2.5	1
10	OIL SEAL Ø40 x Ø55 x 7	2	91	BUSHING Ø32 x Ø38 x 12	2
11	INTERNAL CIRCLIP R-55	1	92	STAND BODY	1
12	BEARING 6006 LLB	2	93	SET SCREW M5 x 25	5
13	SCREW M5 x 65	4	94	NUT M5	5
14	GEAR CASE 75/KG	1	95	GIB STRIP-LEFT 308mm	1
15	PUSH LOCK FITTING	1	96	GIB STRIP-RIGHT 308mm	1
16	OIL SEAL Ø30 x Ø45 x 5	1	97	GIB STRIP TENSIONER 308 x 1.5 x 2.3	1
17	EXTERNAL CIRCLIP S-30	1	98	MAGNET BASE	1
18	LOW SPINDLE GEAR 21T	1	99	SPRING WASHER M6	3
19	BUSHING Ø18 x Ø20 x 11.5	1	100	SOCKET CAP BOLT M6 x 20	3
20	HIGH SPINDLE GEAR 25T	1	101	SCREW M4 x 30	2
21	SPACER	1	102	CABLE GLAND	1
22	INTERNAL CIRCLIP S-14	1	103	STRAIN RELIEF 7CM	1
23	BEARING HK 1010	7	104	CORD ARMOR	1
24	SHOULDER SCREW	2	105	POWER SUPPLY CABLE	1
25	SELECTOR TAB	2	106	RECTIFIER & EMC(OPTIONAL)	1
26	DETENT PIN	2	106-1)	RECTIFIER & EMC(OPTIONAL)	1
27	SPRING Ø0.6 x Ø5.3 x Ø6.5 x 5T x 17L	2	107	WIRE LEADS	2
28	E-CLIP E-3	2	108	WIRE LEADS	5
29	FIRST SELECTOR FORK	1	109	SIDE COVER	1
30	SPRING Ø1 x Ø9 x Ø11 x 4T	2	110	SCREW M4 x 8	4
31	SECOND SELECTOR FORK	1	111	CRANK SPINDLE	1
32	FLAT WASHER 1024	5	112	CRANK HANDLE 140mm	3
32A	THRUST WASHER Ø13 x Ø24 x 1	1	113	N/A	-
33	IDLER PINION 16T x 7T	1	114	THREE WAY CONNECTOR	2
34	PARALLEL KEY 5 x 5 x 10	1	115	ARBOR SUPPORT BRACKET	1
35	IDLER GEAR 36T	1	116	SOCKET CAP BOLT M8 x 25	3
36	INTERMEDIATE GEAR 28T x 30T	1	117	TRAVEL STOP	1
37	PARALLEL KEY 5 x 5 x 50	1	118	SOCKET CAP BOLT M6 x 45	1
38	COUNTERSHAFT PINION 12T	1	119	TRUSS HEAD SCREW M4 x 8	2
39	INPUT PINION 10T x 12T	1	120	BEARING HK 3516	1
40	PARALLEL KEY 5 x 5 x 8	1	121	CHIP GUARD	1
41	INPUT GEAR 29T	1	122	SAFETY CHAIN	1
42	GEAR PLATE	1	123	BUTTERFLY SCREW M6 x 10	2
43	BEARING 6202-2RS	1	124	FLAT WASHER Ø6 x Ø13 x 1	2
44	ARMATURE	1	125	M8 COMBINATION WRENCH M8	1
45	BEARING 6200-LLU	1	126	M2.5 L-HEX KEY M2.5	1
46	STATOR	1	127	M4 L-HEX KEY M4	1
47	MOTOR HOUSING	1	128	DRIFT	1
48	CABLE CLAMP	1	129	OVERLOAD(OPTIONAL)	1
49	END SPlice TERMINAL C4	5	130	SPADE TERMINAL	4
50	NUT M4 x 8	10	131	WIRE LEADS(OPTIONAL)	2
51	SCREW M4 x 10	2	132	RUBBER WASHER Ø4 x Ø11 x 1	1
52	SCREW M4 x 12	4	133	TERMINAL COVER	10
53	BRUSH SPRING	2	134	ZIP TIE	1
54	CARBON BRUSH 7 x 17 x 17	2	135	SILICON TUBE M4 x 12CM	2
55	BRUSH HOLDER 7 x 17 x 17	2	136	N/A	-
56	MOTOR TAIL COVER	1	137	SCREW M4 x 20	2
57	SCREW M4 x 20	4	138	CHUCK(OPTIONAL) 5/8"	1
58	MOTOR CABLE 2.0 x 4C x 86cm	1	139	N/A	-
59	CABLE PROTECTOR 50cm	1	140	PILOT PIN(OPTIONAL) TCTx112LxØ8	1
60	CORD CLIP	2	141	MT3 CHUCK ADAPTOR(OPTIONAL)	1
61	SCREW M4 x 16	2	142	SCREW M4 x 25	3
62	WIRE LEADS	1	143	WIRE LEADS	1
63	MOTOR COVER PLATE (PLASTIC)	1	144	CHECK BALL Ø8	1
64	SCREW M5 x 12	4	145	QUICK-RELEASE ARBOR	1
65	THUMB SCREW M5 x 16	2	146	LOCK PIN	1
66	FLAT WASHER Ø5 x Ø12 x 1	2	147	SCREW M3 x 4	1
67	COOLANT TANK BRACKET	1	148	LOCK PIN SPRING	1
68	COOLANT TANK ASSEMBLY	1	149	QUICK-RELEASE COLLAR	1
69-72	N/A	-	150	COLLAR PIN	1
73	COOLANT TUBE 18cm	1	151	RUBBER RING	1
74	SLIDE PLATE 348mm	1	152	SPRING Ø2 x Ø39 x Ø43 x 30L x 3T	1
75	PARALLEL KEY M4 x 4 x 30	1	153	STEEL RING Ø35.1 x Ø44.5 x 2	1
76	SOCKET CAP BOLT M8 x 20	3	154	EXTERNAL CIRCLIP S-35	1
77	GEAR RACK 270cm	1	155	SCREW M5 x 60	2
78	SOCKET CAP BOLT M8 x 16	5	156	EARTHING MARKING	1
79	REVERSING SWITCH	1			

# 4 Speed Swivel Base Drilling System Exploded View & Parts list



NO.	Parts Name	Q'TY	86	SOCKET CAP SCREW M4x16	4
1	INTERNAL CIRCLIP R-19	1	87	MOTOR SWITCH	1
2	ARBOR WASHER Ø10 x Ø18.5 x 0.8	1	88	STAR WASHER M5	1
3	O-RING 12 x 4	1	89	SPRING WASHER M8	7
4	COOLANT SEAL Ø10.2 x Ø12 x 15	1	90	FLAT WASHER Ø8 x Ø40 x 2.5	1
5	SPRING Ø1.2 x Ø10 x Ø12.4 x 24T x 140L	1	91	BUSHING Ø32 x Ø38 x 12	2
6	SET SCREW M8 x 7	3	92	STAND BODY	1
7	M3 ARBOR	1	93	SET SCREW M5 x 25	5
8	SPINDLE	1	94	NUT M5	5
9	PARALLEL KEY 5 x 5 x 40	1	95	GIB STRIP-LEFT 308mm	1
10	OIL SEAL Ø40 x Ø55 x 7	2	96	GIB STRIP-RIGHT 308mm	1
11	INTERNAL CIRCLIP R-55	1	97	GIB STRIP TENSIONER 308 x 1.5 x 2.3	1
12	BEARING 6006-2LLB	2	98	MAGNET	1
13	SCREW M5 x 65	4	99	SPRING WASHER M6	4
14	GEAR CASE	1	100	SOCKET CAP BOLT M6 x 20	6
15	PUSH LOCK FITTING	1	101	SCREW M4 x 30	2
16	OIL SEAL Ø30 x Ø45 x 5	1	102	CABLE GLAND	1
17	EXTERNAL CIRCLIP S-30	1	103	STRAIN RELIEF 7CM	1
18	LOW SPINDLE GEAR 21T	1	104	CORD ARMOR	1
19	BUSHING Ø18 x Ø20 x 11.5	1	105	POWER SUPPLY CABLE	1
20	HIGH SPINDLE GEAR 25T	1	106	RECTIFIER & EMC(OPTIONAL)	1
21	SPACER	1	106-1	RECTIFIER & EMC(OPTIONAL)	1
22	INTERNAL CIRCLIP S-14	1	107	WIRE LEADS	2
23	BEARING HK 1010	7	108	WIRE LEADS	5
24	SHOULDER SCREW	2	109	SIDE COVER	1
25	SELECTOR TAB	2	110	SCREW M4 x 8	4
26	DETENT PIN	2	111	CRANK SPINDLE	1
27	SPRING Ø0.6 x Ø5.3 x Ø6.5 x 5T x 17L	2	112	CRANK HANDLE 140mm	3
28	E-CLIP E-3	2	113	N/A	-
29	FIRST SELECTOR FORK	1	114	THREE WAY CONNECTOR	2
30	SPRING Ø1.0 x Ø9 x Ø11 x 4T	2	115	ARBOR SUPPORT BRACKET	1
31	SECOND SELECTOR FORK	1	116	N/A	-
32	THRUST WASHER 1024	5	117	TRAVEL STOP	1
32A	THRUST WASHER Ø13xØ24x1	1	118	SOCKET CAP BOLT M6 x 45	1
33	IDLER PINION 16T x 7T	1	119	TRUSS HEAD SCREW M4 x 8	2
34	PARALLEL KEY 5 x 5 x 10	1	120	BEARING HK 3516	1
35	IDLER GEAR 36T	1	121	CHIP GUARD	1
36	INTERMEDIATE GEAR 28T x 30T	1	122	SAFETY CHAIN	1
37	PARALLEL KEY 5 x 5 x 50	1	123	BUTTERFLY SCREW M6 x 10	2
38	COUNTERSHAFT PINION 12T	1	124	FLAT WASHER Ø6 x Ø13 x 1	2
39	INPUT PINION 10T x 12T	1	125	M8 COMBINATION WRENCH M8	1
40	PARALLEL KEY 5 x 5 x 8	1	126	M2.5 L-HEX KEY M2.5	1
41	INPUT GEAR 29T	1	127	M4 L-HEX KEY M4	1
42	GEAR PLATE	1	128	DRIFT	1
43	BEARING 6202-2NSE	1	129	OVERLOAD	1
44	ARMATURE	1	130	NYLOCK NUT M22	1
45	BEARING 6200-LLU	1	131	WASHER Ø30.1 x Ø40 x 5	1
46	STATOR	1	132	SWIVEL PLATE	1
47	MOTOR HOUSING	1	133	LOCKING POST	1
48	CABLE CLAMP	1	134	LOCKING LUG	1
49	END SPLICE TERMINAL C4	5	135	MOUNTING PLATE	1
50	NUT M4 x 8	10	136	SOCKET SET SCREW M8 x 7	1
51	SCREW M4 x 10	2	137~139	N/A	-
52	SCREW M4 x 12	4	140	M17 OPEN-END WRENCH M17	1
53	BRUSH SPRING	2	141	CLIP	1
54	CARBON BRUSH 7 x 17 x 17	2	142	SCREW M5 x 8	4
55	BRUSH HOLDER 7 x 17 x 17	2	143	SPADE TERMINAL	1
56	MOTOR TAIL COVER	1	144	WIRE LEADS	2
57	SCREW M4 x 20	4	145	RUBBER WASHER Ø4 x Ø11 x 1	1
58	MOTOR CABLE 2.0 x 4C x 86cm	1	146	TERMINAL COVER	10
59	CABLE PROTECTOR 50cm	1	147	ZIP TIE	1/1000
60	CORD CLIP	2	148	SILICON TUBE M4 x 12CM 3	6/100
61	SCREW M4 x 16	2	149	N/A	-
62	WIRE LEADS	1	150	SCREW M4 x 20	2
63	MOTOR COVER PLATE (PLASTIC)	1	151	CHUCK(OPTIONAL) 5/8"	1
64	SCREW M5 x 12	4	152	N/A	-
65	THUMB SCREW	2	153	PILOT PIN(OPTIONAL) 112L	1
66	FLAT WASHER Ø5 x Ø12 x 1	2	154	M13 CHUCK ADAPTOR(OPTIONAL)	1
67	COOLANT TANK BRACKET	1	155	WIRE LEADS	1
68	COOLANT TANK ASSEMBLY	1	156	SCREW M4 x 25	3
69~72	N/A	-	157	CHECK BALL Ø8	1
73	COOLANT TUBE 18cm	1	158	QUICK-RELEASE ARBOR	1
74	SLIDE PLATE 348mm	1	159	LOCK PIN	2
75	PARALLEL KEY 4 x 4 x 30	1	160	SCREW M3 x 4	2
76	SOCKET CAP BOLT M8 x 20	7	161	LOCKING PIN SPRING	1
77	GEAR RACK 270cm	1	162	QUICK-RELEASE COLLAR	1
78	SOCKET CAP BOLT M8 x 20	6	163	COLLAR PIN	1
79	REVERSING SWITCH	1	164	RUBBER RING Ø40 x Ø44 x 9	1
80	MAGNET SWITCH	1	165	SPRING Ø2 x Ø39 x Ø43 x 30L x 3T	1
81	SCREW M4 x 16	1	166	STEEL RING Ø35.1 x Ø44.5 x 2	1
82	GUARD BAR	2	167	EXTERNAL CIRCLIP S-35	1
83	SWITCH PANEL	1	168	SCREW M5 x 60	2
84	FLAT WASHER Ø4 x Ø10 x 1	5	169	EARTHING MARKING	1
85	SPRING WASHER M4	4	170	SOCKET CAP BOLT M8 x 25	3

# 4 Speed Variable Motor Speed Drilling System Exploded View & Parts List



NO.01~158 V1.4

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	INTERNAL CIRCLIP R-19	1	83	RHEOSTAT	1
2	ARBOR WASHER 010 x 018.5 x 0.8	1	84	THUMB WHEEL	1
3	O-RING 12 x 4	1	85	SPEED ADJUSTOR COVER	1
4	COOLANT SEAL 012 x 010.2 x 15	1	86	FLAT HEAD SCREW M4 x 16	2
5A	SPRING-for 10B.) 01.2 x 010.1 x 012.5 x 15T x 100L	1	87	CABLE PROTECTOR 65cm	1
5B	SPRING-for 10C.) 01.2 x 010 x 012.4 x 24T x 140L	1	88	MOTOR CABLE 90cm	1
6-9	N/A	-	89	SCREW M5 x 10	4
10A	3/4" QUICK-RELEASE ARBOR-MT3(M3)(LOCKING PIN 12.3mm,11.7mm)	1	90	COVER PLATE	1
10B	1-1/4" CUTTER ARBOR-MT3 31.7mm	1	91	SCREW M4 x 16	2
10C	3/4" CUTTER ARBOR-MT3 19MM	1	92	CORD CLIP	2
11-15	N/A	-	93	CABLE SHEATH M4 x 12CM	2
16	EXTERNAL CIRCLIP S-35	1	94	COOLANT TANK ASSEMBLY	1
17	SPINDLE	1	95	COOLANT TUBE 40cm	1
18	OIL SEAL 040 x 058 x 8	1	96	SOCKET CAP BOLT M8 x 20	7
19	OIL SEAL 040 x 055 x 7	1	97	SLIDE	1
20	INTERNAL CIRCLIP R-55	1	98	SOCKET CAP BOLT M8 x 16	7
21	BALL BEARING 6006-LLB	2	99	SPRING WASHER M8	7
22	EXTERNAL CIRCLIP S-30	1	100	GEAR RACK 270cm	1
23	SCREW M5 x 80	2	101	REVERSING SWITCH	1
24	SCREW M5 x 150	2	102	MAGNET SWITCH	1
25	GEAR CASE	1	103	GUARD BAR	2
26	PUSH LOCK FITTING	1	104	SWITCH PANEL	1
27	MOUNTING TENON M4 x 4 x 60	1	105	FLAT WASHER 04 x 010 x 1	5
28	SELECTORTAB	2	106	SPRING WASHER M4	4
29	SPRING 01 x 09 x 011 x 4T	2	107	SOCKET CAP BOLT M4 x 16	4
30	SHOULDER SCREW	2	108	SCREW M4 x 20	2
31	DETENT PIN	1	109	MOTOR SWITCH	1
32	SPRING 00.6 x 05.3 x 06.5 x 5T x 17L	2	110	FLAT WASHER 08 x 040 x 2.5	1
33	E-CLIP E-3	2	111	CRANK BUSHING 032 x 038 x 12	2
34	DETENT PIN	1	112	STAND BODY	1
35	DISC SPRING 012.4 x 027.9	4	113	SET SCREW M5 x 35	7
36	TOOTH CLUTCH	1	114	NUT M5	7
37	CLUTCH GEAR	1	115	STAR WASHER M5	1
38	THRUST WASHER 012.1 x 018 x 1.6	1	116	EARTHING MARKING	1
39	EXTERNAL CIRCLIP E-10	1	117	SCREW M4 x 16	1
40	BALL BEARING 608 zz	3	118	N/A	-
41	INPUT PINION M1.25 x 15T & 10T	1	119	GIB STRIP-LEFT 394mm	1
42	PARALLEL KEY M5 x 5 x 10	1	120	GIB STRIP-RIGHT 394mm	1
43	OIL SEAL 028 x 038 x 7	1	121	GIB STRIP TENSIONER 394 x 15 x 1.2	1
44	FIRST SELECTOR FORK	1	122	CABLE GLAND	1
45	SPINDLE GEAR M1.75 x 27T M2.0 x 29T	1	123	N/A	-
46	INTERNAL CIRCLIP S-25	1	124	SPRING WASHER M6	4
47	BALL BEARING 6202 zz Z2	1	125	MAGNET BASE	1
48	SECOND SELECTOR FORK	1	126	SCREW M4 x 30	2
49	INTERMEDIATE GEAR M1.25 x 27T & 32T	1	127	STRAIN RELIEF 7CM	1
50	PARALLEL KEY 5 x 5 x 45	1	128	CORD ARMOR	1
51	COUNTERSHAFT PINION 12T	1	129	TERMINAL COVER	12
52	BALL BEARING 6200 zz Z2	2	130	POWER SUPPLY CABLE	1
53	IDLER PINION M1.75 x 17T M2.0 x 9T	1	131A	RECTIFIER & EMC(OPTIONAL)	1
54	PARALLEL KEY M5 x 5 x 8	1	131B	RECTIFIER & EMC(OPTIONAL)	1
55	IDLER GEAR M1.25 x 43T	1	131B	RECTIFIER & EMC(OPTIONAL)	1
56	NEEDLE BEARING TLA 1212	1	132	WIRE LEADS	2
57	GEAR PLATE	1	133	WIRE LEADS(OPTIONAL) 1015-16#18CM	2
58	BALL BEARING 6202-2NSE	1	134	SIDE COVER	1
59	ARMATURE	1	135	SCREW M4 x 8	4
60	BALL BEARING 6200-LLU	1	136	SCREW M4 x 25	1
61	SPACER 08 x 012 x 10.5	1	137	CRANK PINION	1
62	PICKUP MAGNET 08 x 015 x 5	1	138	CRANK HANDLE	3
63	PLASTIC WASHER 04 x 011 x 1	2	139	3 WAY CONNECTOR	2
64	FLAT WASHER 04 x 010 x 1	1	140	WIRE LEADS	2
65	SCREW M4 x 10	1	141	SPADE TERMINAL	10
66	SCREW M5 x 60	2	142	ZIP TIE	1
67	STATOR	1	143	DRIFT	1
68	WIRE LEADS	1	144	L HEX KEY (OPTIONAL) 5mm M5	1
69	WIRE LEADS	1	145	N/A	-
70	MOTOR HOUSING	1	146	L HEX KEY 2.5mm M2.5	1
71	ZIP TIE 2.5mmX160mm	2	147	M8 COMBINATION WRENCH M8	1
72	END SPLICE CONNECTOR C4	5	148	SAFETY CHAIN	1
73	ELECTRONICS UNIT(110V,220V)	1	149	SOCKET SET SCREW M10 x 10	2
74	SCREW M4 x 25	2	150	CHUCK(OPTIONAL) 5/8"	1
75	NUT M4 x 8	8	151	PILOT PIN(OPTIONAL) TCTx112Lx08	1
76	CARBON BRUSH 7 x 17 x 17	2	152	M3 CHUCK ADAPTOR(OPTIONAL)	1
77	BRUSH HOLDER 7 x 17 x 17	2	153	BUTTERFLY BOLT M6 x 10	2
78	BRUSH SPRING	2	154	FLAT WASHER 06 x 013 x 1	2
79	SCREW M4 x 10	2	155	CHIP GUARD	1
80	SCREW M4 x 12	4	156	FLAT HEAD SCREW M4 x 20	2
81	MOTOR TAIL COVER	1	157	PIN 05 x 10	1
82	SCREW M4 x 30	4	158	INTERNAL CIRCLIP S-20	1