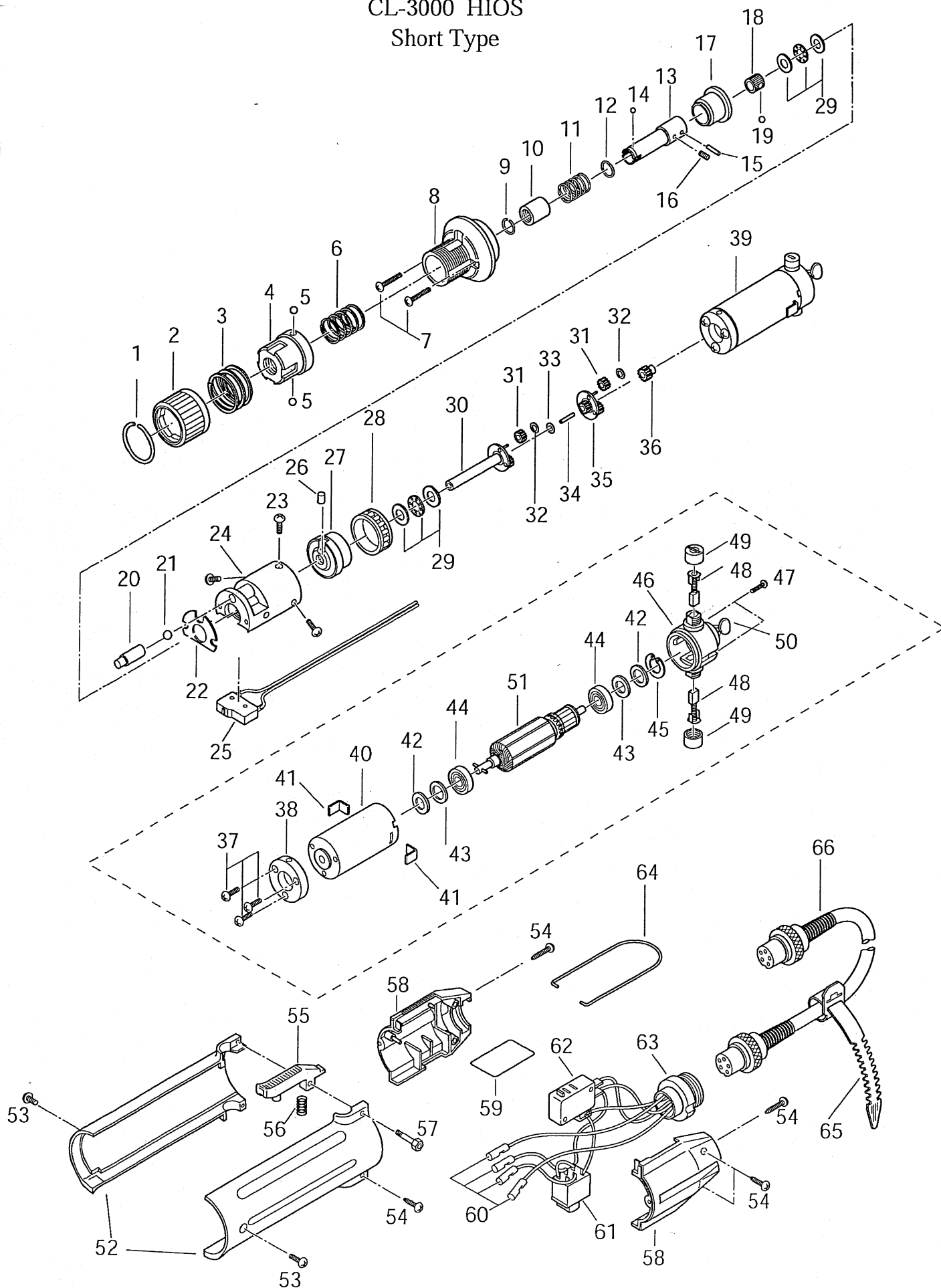


CL-3000 HIOS
Short Type

PARTS LIST OF CL-3000
(HIOS SHANK, SHORT TYPE)

ISSUED: November,1991
REVISED: April, 2001

PARTS NAME	PARTS NO.	PARTS NAME	PARTS NO.
Transmission Assembly 1 - 36 (W/O 25)	CL3-TM	Upper Planet Cage Assembly 31, 32, 35	CL4-3310
Torque Adjusting Nut Assembly 1 - 5	CL4-NT		
1 Nut Cover Stopper	CL4-0010	35 Upper Planet Cage	CL4-0310
2 Nut Cover	CL4-0020	36 Pinion Gear	CL4-0320
3 Nut Cover Spring	CL4-0030	Motor	
4 Torque Adjusting Nut	CL4-0040		
5 Steel Ball 3.0φ	BALL-03	37 Set Screw 3x5	STP30X050
6 Torque Adjusting Spring 1.2φ (Blue)	CL3-0060	38 Motor Front Panel	CL4-0350
Torque Adjusting Spring 1.0φ (Gold)	CL3-0060-1	39 Motor (Short Size)	CL3-0360
7 Set Screw 2.6x10	STP26X100	40 Magnet Case	_____
8 Torque Adjusting Bolt	CL3-0080	41 _____	_____
9 Collar Stopper	CL4-0090	42 Wave Washer	CL4-0370
10 Joint Shaft Collar	CL4-0100	43 Rotor Adjusting Washer 0.1	CL4-0380-1
11 Collar Spring	CL4-0110	Rotor Adjusting Washer 0.2	CL4-0380-2
12 Support Washer for Spring	CL3-0620	Motor End Cover Assembly 44 - 50	CL3-3400
13 Joint Shaft	CL3-0130		
14 Steel Ball 2.0φ	BALL-02	44 Motor Bearing	CL4-0450
15 Joint Shaft Lock Pin 2x7	SR20X070	45 Stop Ring	CL4-0390
16 _____	_____	46 Motor End Cover	CL3-0400
17 Clutch Supporter	CL3-0160	47 Set Screw 1.7X10	STP17X100
18 Slide Ball Bearing	CL3-0630	48 Carbon Brush	A45-0420
19 Ball	_____	49 Carbon Brush Cap	A45-0430
Gear Assembly 20 - 36 (W/O 25)	CL3-GR	50 Capacitor	CL4-0441
20 Clutch Ball Rod	CL4-0180	51 Rotor	CL3-0460
21 Steel Ball 5.0φ	BALL-05	52 Body Case A & B (Off White)	CL3-0471
22 Gear Case Plate	CL4-0200	53 Set Screw 2.6x6	STP26X060
23 Set Screw 2.6x5	STP26X050	54 Set Screw 2.6x12	STPB26X120
24 Gear Case	CL3-0210	55 Switch Lever	CL4-0500
25 Limit Switch	CL4-0230	56 Switch Lever Spring	CL4-0510
26 Internal Gear	CL3-0240	57 Switch Lever Plunger	CL4-0521
27 Cam Roller	CL4-0250	Switch Assembly 23, 58 - 64	CL3-SW1
28 Needle Ball Bearing	CL3-0640	58 Switch Cover A & B (Off White)	CL3-0531
29 Thrust Bearing 5x11	CL4-0170	59 Name Plate	CL3-0540
Lower Planet Cage Assembly 30 - 32	CL4-3260	60 Terminal Holder	CL4-0550
30 Lower Planet Cage	CL4-0260	61 For/Rev Switch	CL4-0560
31 Planet Gear	CL4-0270	62 Starting Switch	CL4-0570
32 E-Ring	CL4-0280	63 5-Pin Connector	CL4-0580
33 Thrust Washer	CL4-0290	64 Hanger	CL4-0590
34 Center Pin	CL4-0300	65 Free-Up Belt	CL4-0600
		66 5-Core Cord W/Connectors In Both Ends	CL4-0611