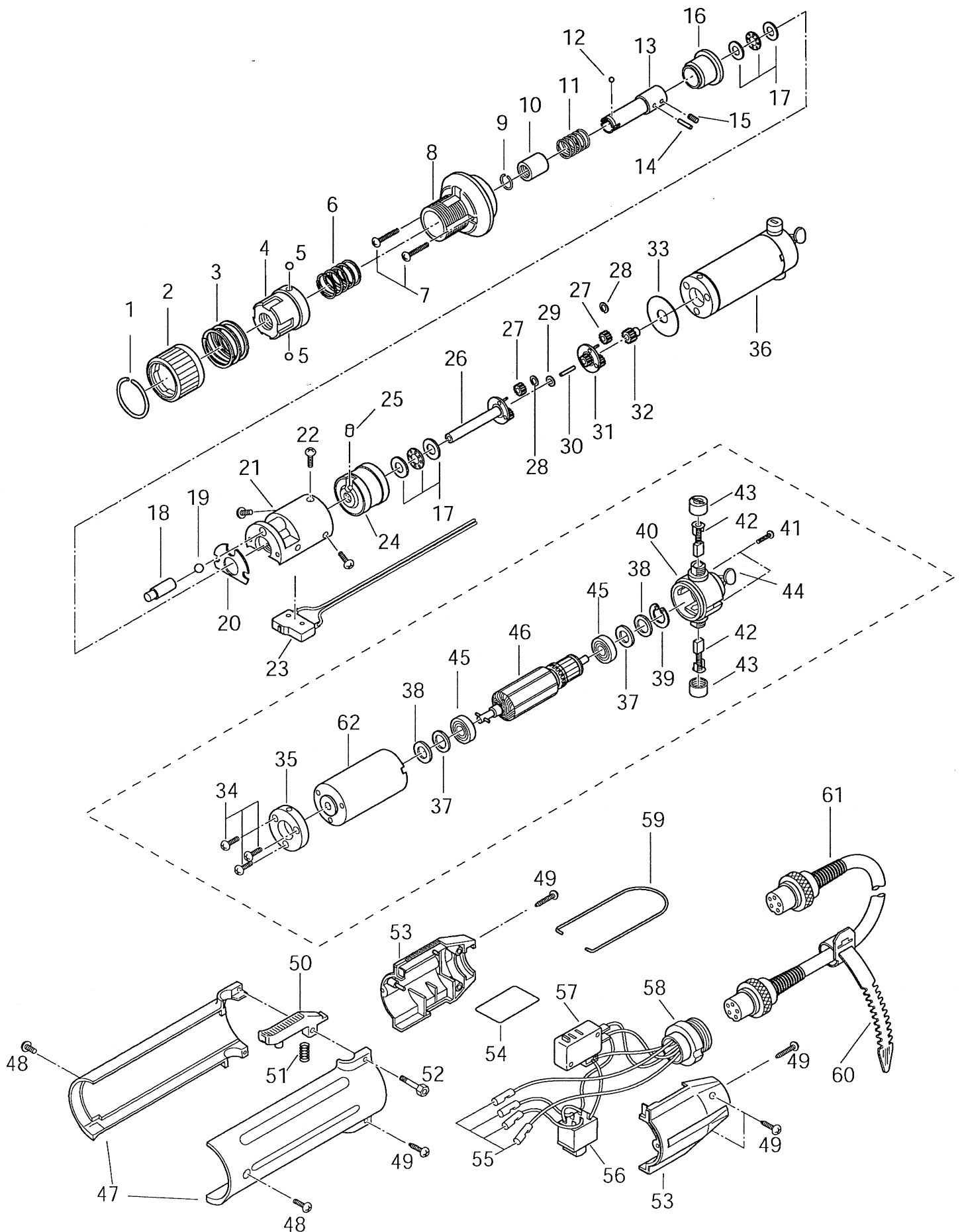


CL-4000 HIOS



PARTS LIST OF CL-4000
(HIOS SHANK)

ISSUED: November, 1991
REVISED: April, 2001

PARTS NAME	PARTS NO.	PARTS NAME	PARTS NO.
Transmission Assembly 1 - 33 (W/O 23)	CL4-TM	Upper Planet Cage Assembly 27, 28, 31	CL4-3310
Torque Adjusting Nut Assembly 1 - 5	CL4-NT	31 Upper Planet Cage	CL4-0310
1 Nut Cover Stopper	CL4-0010	32 Pinion Gear	CL4-0320
2 Nut Cover	CL4-0020	33 Grease Seal	CL4-0330
3 Nut Cover Spring	CL4-0030	Motor	
4 Torque Adjusting Nut	CL4-0040	34 Set Screw 3x5	STP30X050
5 Steel Ball 3.0 ϕ	BALL-03	35 Motor Front Panel	CL4-0350
6 Torque Adjusting Spring 1.2 ϕ (Blue)	CL3-0060	36 Motor	CL4-0360
Torque Adjusting Spring 1.5 ϕ (Red)	CL4-0060	62 Magnet Case	
7 Set Screw 2.6x10	STP26X100	37 Wave Washer	CL4-0370
8 Torque Adjusting Bolt	CL4-0080	38 Rotor Adjusting Washer 0.1	CL4-0380-1
		Rotor Adjusting Washer 0.2	CL4-0380-2
Joint Shaft Assembly 9 - 13	CL4-JS	Motor End Cover Assembly 39 - 45	CL4-3400
9 Collar Stopper	CL4-0090	39 Stop Ring	CL4-0390
10 Joint Shaft Collar	CL4-0100	40 Motor End Cover	CL4-0400
11 Collar Spring	CL4-0110	41 Set Screw 1.7X10	STP17X100
12 Steel Ball 2.0 ϕ	BALL-02	42 Carbon Brush	CL4-0421
13 Joint Shaft	CL4-0130	43 Carbon Brush Cap	CL4-0430
14 Joint Shaft Lock Pin 2x9	SR20X090	44 Capacitor	CL4-0441
15 Set Screw 3x3	SH30X030	45 Motor Bearing	CL4-0450
16 Clutch Supporter	CL4-0160	46 Rotor	CL4-0460
		47 Body Case A & B	CL4-0470
Gear Assembly 17 - 33 (W/O 23)	CL4-GR	48 Set Screw 2.6x6	STP26X060
17 Thrust Bearing 5x11	CL4-0170	49 Set Screw 2.6x12	STPB26X120
18 Clutch Ball Rod	CL4-0180	50 Switch Lever	CL4-0500
19 Steel Ball 5.0 ϕ	BALL-05	51 Switch Lever Spring	CL4-0510
20 Gear Case Plate	CL4-0200	52 Switch Lever Plunger	CL4-0521
21 Gear Case	CL4-0210		
22 Set Screw 2.6x5	STP26X050	Switch Assembly 22, 53 - 59	CL4-SW
23 Limit Switch	CL4-0230	53 Switch Cover A & B	CL4-0530
		54 Name Plate	CL4-0540
24 Internal Gear	CL4-0240	55 Terminal Holder	CL4-0550
25 Cam Roller	CL4-0250	56 For/Rev Switch	CL4-0560
		57 Starting Switch	CL4-0570
Lower Planet Cage Assembly 26 - 28	CL4-3260	58 5-Pin Connector	CL4-0580
		59 Hanger	CL4-0590
26 Lower Planet Cage	CL4-0260		
27 Planet Gear	CL4-0270	60 Free-Up Belt	CL4-0600
28 E-Ring	CL4-0280	61 5-Core Cord W/Connectors In Both Ends	CL4-0611
29 Thrust Washer	CL4-0290		
30 Center Pin	CL4-0300		