

MODELS

CJ 120V

CJ 120VA

HITACHI

POWER TOOLS

C

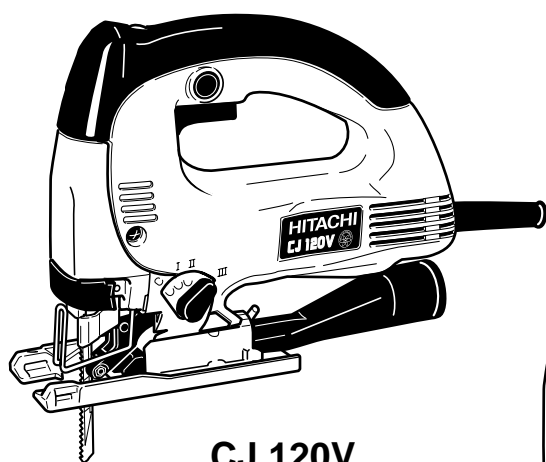
JIG SAW

CJ 120V/CJ120VA

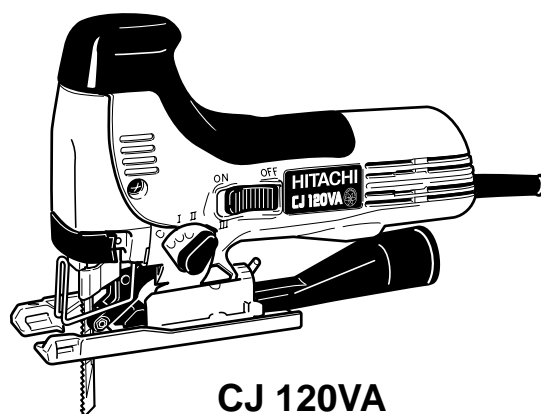
TECHNICAL DATA

AND

SERVICE MANUAL



CJ 120V



CJ 120VA

LIST Nos. CJ 120V: 0593
CJ 120VA: 0594

Nov. 2002

REMARK:

Throughout this TECHNICAL DATA AND SERVICE MANUAL, a symbol(s) is(are) used in the place of company name(s) and model name(s) of our competitor(s). The symbol(s) utilized here is(are) as follows:

Symbols Utilized	Competitors	
	Company Name	Model Name
B	BOSCH	GST100BCE
C	MAKITA	4340FCT
P	FESTO	PSB300EQ



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1. PRODUCT NAME

Hitachi Electronic Jig Saw, Models CJ 120V and CJ 120VA [120 mm (4-3/4")]

2. MARKETING OBJECTIVE

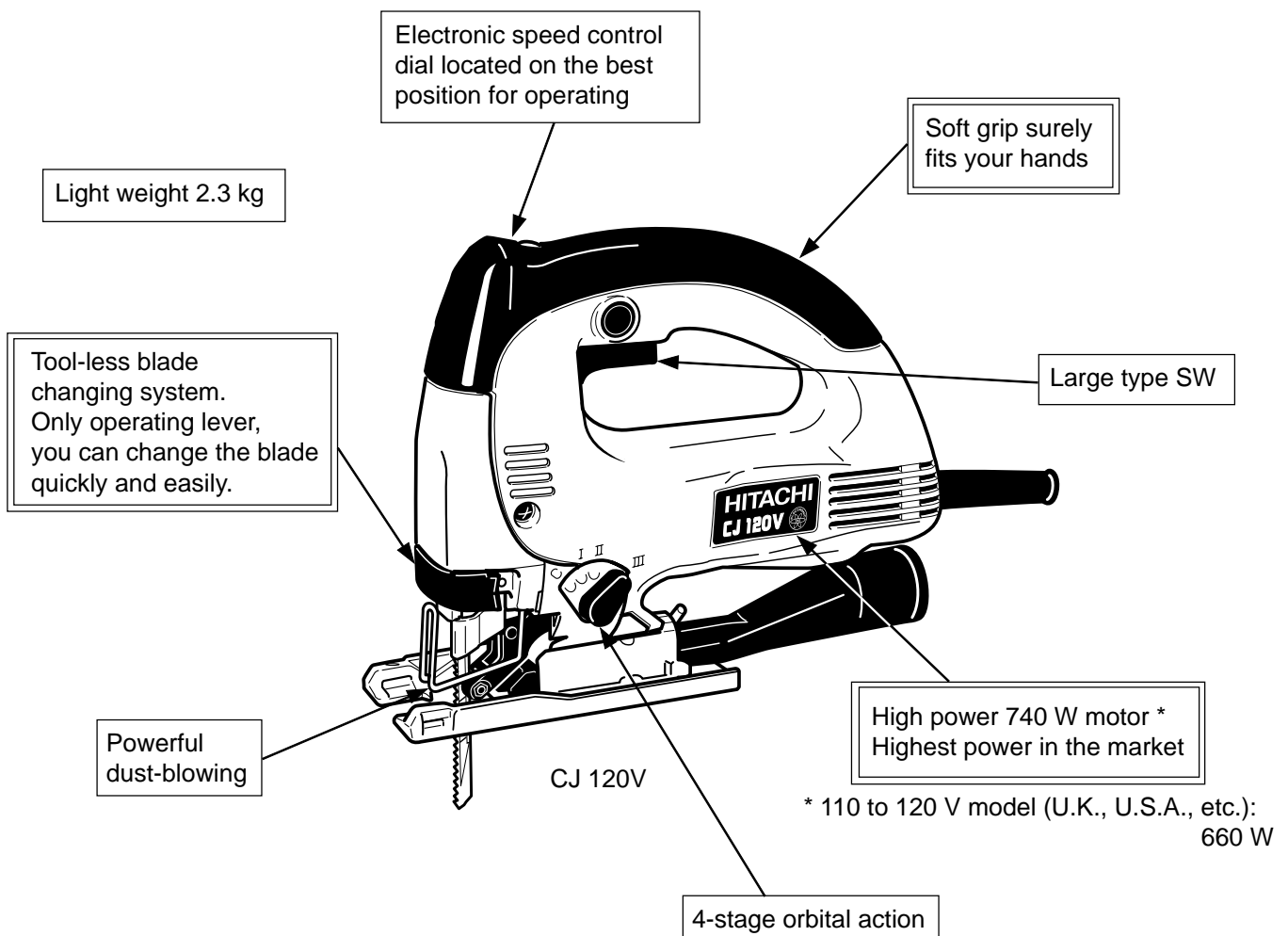
The Models CJ 120V and CJ 120VA have been developed based on the Models CJ 110V and CJ 110VA respectively. The key features of the Models CJ 120V and CJ 120VA are as follows:

- ① Tool-less blade changing system
- ② High power 740 W motor (except 110 to 120 V model)
- ③ Soft grip

3. APPLICATIONS

- Cutting or cutting out shapes in various types of wood workpieces
- Cutting various types of metals such as mild steel, aluminum and copper
- Cutting various types of synthetic resin materials such as bakelite and vinyl chloride
- Cutting various decorative sheets, and, thin and soft construction materials
- Cutting stainless steel sheets

4. SELLING POINTS



4-1. Selling Point Descriptions

(1) Tool-less blade changing system

The Models CJ 120V/VA require no tool for changing blades.

- (1) Open the lever up to the stop. (Fig. 1- I)
- (2) Remove fitted blade.
- (3) Insert new blade up to the stop in the blade holder. (Fig. 1- II)
- (4) Close the lever. (Fig. 1- III)

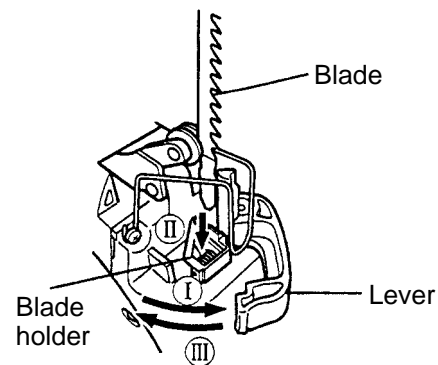
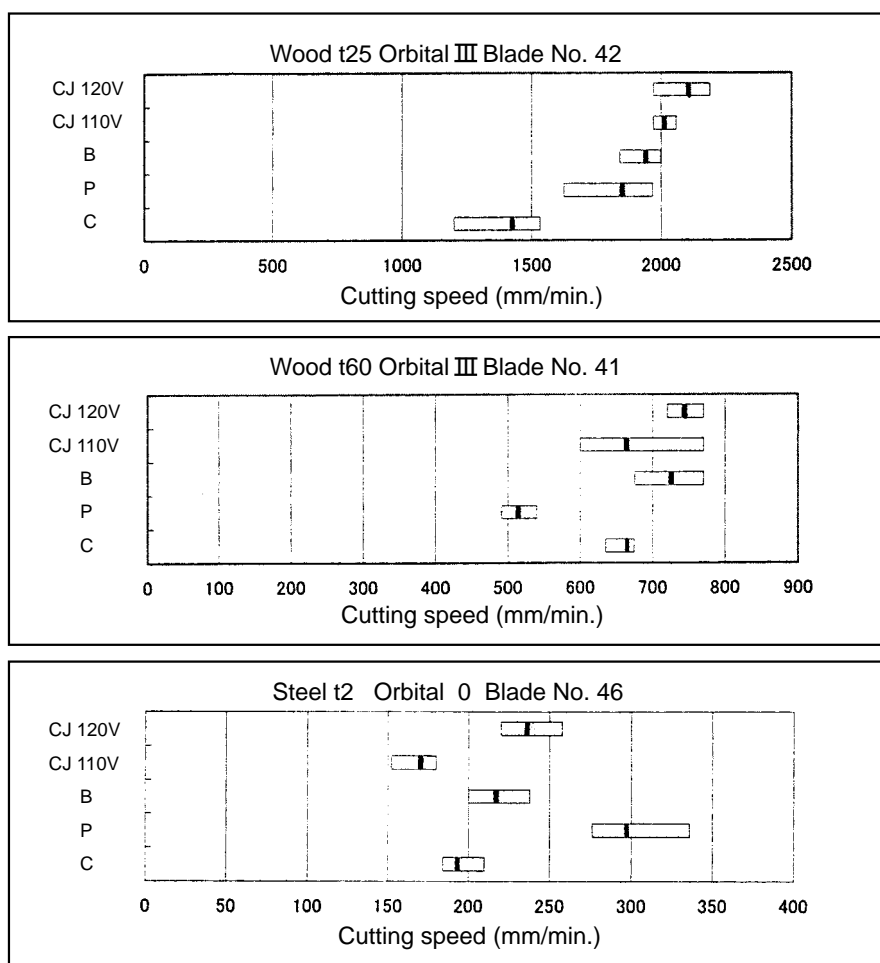


Fig. 1

(2) High power 740 W motor

The Models CJ 120V/VA have the highest power motor in current market (except 110 to 120 V model).

And with new orbital system, the Models CJ 120V/VA can make speedy cutting as below.



(3) Soft grip

The Models CJ 120V/VA have large rubber area for surely gripping.

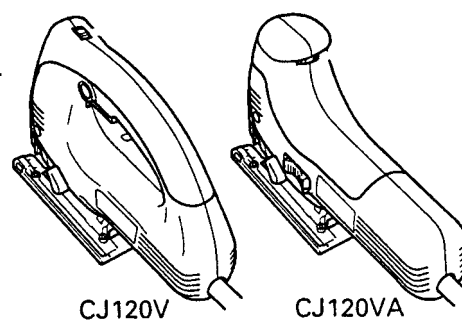


Fig. 2

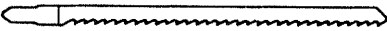
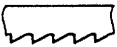

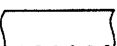
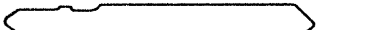
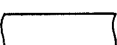
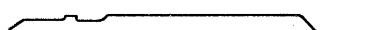
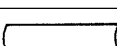
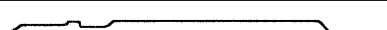
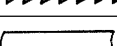

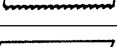
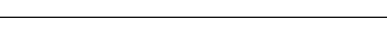

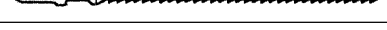

5. SPECIFICATIONS

	CJ 120V/CJ 120 VA			
Capacities	Max. cutting thickness	Wood	120 mm (4-3/4")	
		Mild steel	10 mm (3/8")	
Min. cutting radius	25 mm (1")			
Type of power source	Single-phase AC 50/60 Hz			
<div><div><div>Voltage *</div><div>Rated current</div></div></div>	<div><div>110 V</div><div>6.4 A</div></div>	<div><div>120 V</div><div>5.8 A</div></div>	<div><div>230 V</div><div>3.4 A</div></div>	<div><div>240 V</div><div>3.3 A</div></div>
Type of motor	Single-phase AC commutator motor			
Insulation method	Double insulation			
Enclosure	HousingPolycarbonate resin (with rubber) Gear cover, upper coverAluminum alloy die casting (silver painted)			
Type of switch	Trigger switch (CJ 120V), snap switch (CJ 120VA)			
Power input *	740 W (110 to 120 V model: 660 W)			
Output (about)	110 V: 350 W, 120 V: 300 W, 230 V: 400 W, 240 V: 430 W			
Number of strokes per minute	No load	850 — 3,000 /min.		
	Full load (about)	110 V: 1,900 min ⁻¹ , 120 V: 2,200 min ⁻¹ , 230 to 240 V: 2,070 min ⁻¹		
Length of stroke	26 mm (1")			
Max. cutting angle	45° (right and left)			
Weight	Net 2.3 kg (5.1 lbs.) [actual weight: 2.37 kg (5.3 lbs.)] Gross 2.7 kg (6.0 lbs.) [3.9 kg (8.6 lbs.) with plastic case]			
Packaging	• Corrugated cardboard box with plastic case			
Cord	Length 2.5 m (8.2 ft)			
Standard accessories	Blade (No. 41, No. 42, No. 123X) Each 1 pc. Splinter guard 1 pc. Dust collector 1 pc. Chip cover 1 pc. Shutter 1 pc.			

* Be sure to check the Name Plate on product as it is subject to change by areas.

Optional Accessories

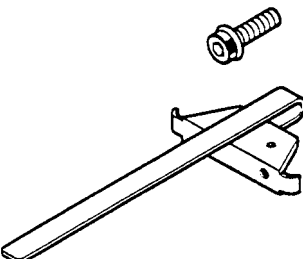
(1) Blades

Blade shape		Application	Blade No.	Pitch	Code No.	Per pkg.
		Wood	No. 1 (Long)	6	321879	3
		Wood, pulp, synthetic resin	No. 11	8	879336	5
					963390	10
			No. 12	20	879337	5
					963391	10
		Steel, pulp, nonferrous metal, synthetic resin	No. 15	8	879338	5
					963392	10
			No. 16	25	879339	5
					963393	10
		Wood, pulp, synthetic resin	No. 21	6	879340	5
					963394	10
			No. 22	10	879341	5
					963395	10
		Stainless steel	No. 97	21	963400	5

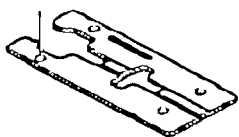
NOTE:

- The shapes of the standard blade No. 41 and the optional blade No. 21 are the same.
- The shapes of the standard blade No. 42 and the optional blade No. 12 are the same.

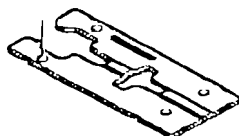
(2) Guide

	Code No.
	321593

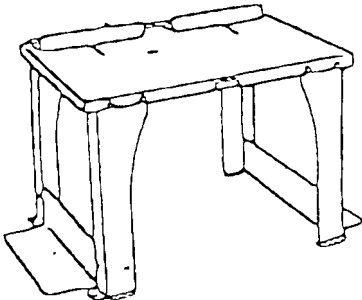
(3) Sub base A (steel)

	Code No.
	The code number will be informed on Technical News at a later date.

(4) Sub base B (resin)

	Code No.
	The code number will be informed on Technical News at a later date.

(5) Bench stand

	Type
	TR 12-B

6. COMPARISONS WITH SIMILAR PRODUCTS

Maker				HITACHI		B	C	P
Model name				CJ 120V/VA	CJ 110V/VA			
Cutting capacity	Wood	mm	120 (4-3/4")	110 (4-1/4")	110 (4-1/4")	135 (5-5/16")	120 (4-3/4")	
	Mild steel	mm	10 (3/8")	10 (3/8")	10 (3/8")	10 (3/8")	10 (3/8")	
Min. cutting radius		mm	25 (1")	25 (1")	25 (1")	25 (1")	25 (1")	
Length of stroke		mm	26 (1")	26 (1")	26 (1")	26 (1")	26 (1")	
Power input		W	740*	570	650	720	720	
No-load speed		/min.	850 — 3,000	700 — 3,200	500 — 3,000	800 — 2,800	1000 — 2,900	
No-load noise level		dB	85	85	87	85	83	
Tool-less blade attachment			Equipped	None	Equipped	Equipped	Equipped	
Soft grip			Equipped	None	None	None	None	
Constant speed control			None	None	Equipped	Equipped	Equipped	
Dimensions	Handle type (CJ 120V)	Length	mm	240 (9-7/16")	217 (8-9/16")	241 (9-29/64")	220 (8-43/64")	218 (8-19/32")
		Height	mm	200 (7-7/8")	202 (7-15/16")	199 (7-27/32")	205 (8-5/64")	200 (7-7/8")
		Width	mm	68 (2-11/16")	72 (2-13/16")	67 (2-41/64")	73 (2-7/8")	64 (2-33/64")
	Barrel type (CJ 120VA)	Length	mm	258 (10-5/32")	267 (10-1/2")	237 (9-21/64")	262 (10-5/16")	259 (10-13/64")
		Height	mm	178 (7-1/64")	190 (7-15/32")	189 (7-7/16")	189 (7-7/16")	186 (7-21/64")
		Width	mm	68 (2-11/16")	72 (2-13/16")	67 (2-41/64")	73 (2-7/8")	64 (2-33/64")
Weight		kg	2.3 (5.1 lbs.)	2.4 (5.3 lbs.)	2.3 (5.1 lbs.)	2.4 (5.3 lbs.)	2.4 (5.3 lbs.)	
Actual weight			2.4 (5.3 lbs.)	2.7 (6.0 lbs.)	2.3 (5.1 lbs.)	2.5 (5.5 lbs.)	2.5 (5.5 lbs.)	
Shipping weight		kg	3.9 (8.6 lbs.)	4.2 (9.3 lbs.)	—	—	—	
Unit per master carton		Unit	5	5	—	—	—	

* Be sure to check the Name Plate on product as it is subject to change by areas.

7. ORBITAL MECHANISM

7-1. Blade Movement

In the Models CJ 120V and CJ 120VA, the orbital mechanism moves the blade up-and-down and forward-and-backward in the same manner as the Models CJ 110V and 110 VA. This makes the blade dig well into wood and other soft materials and also discharges cutting chips well to achieve speedy cutting. The amount of fore-and-aft blade movement can be adjusted just by turning the change knob to any of the four settings. The following table shows the modeled orbits of blade movement at each orbital position (change knob position).

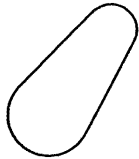
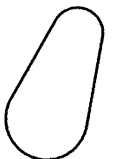
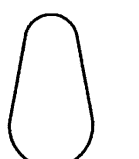
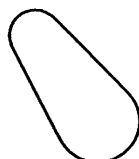
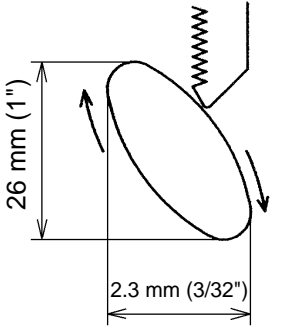
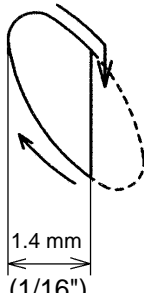
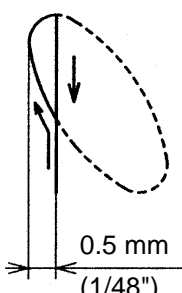
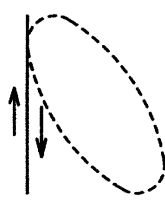
	III	II	I	0
Orbital position				
Blade edge movement	 (At guide roller position)	 (1/16")	 (1/48")	 Perpendicular movement only

Table 1 Blade movement illustration

7-2. Orbital Position Selection

Selection of the most appropriate orbital position for each cutting job is essential to achieve the best efficiency for cutting. However, as the best orbital position depends on such factors as the hardness and thickness of the workpiece, the desired finish of the cut surface, and so on, it is not practical to set a single, simple standard for best orbital position selection. Table 2 can be used as a general guide for appropriate orbital position selection based on various factors.

Table 2 General guide for appropriate orbital position selection

Factor	Orbital position			
	III	II	I	0
Material hardness	Soft material		Hard material	
Material thickness	Thick		Thin	
Cutting speed	Faster cutting		Slower cutting	
Straight cutting or curved cutting	Straight cutting		Curved cutting	
Surface finishing	Rough finish acceptable (splintering, chipping acceptable)		Fine finishing	
Material stability	Unstable		Very stable	

8. BLADES

Proper blade selection is very important to obtain the maximum performance of this model. The table below, based on type and thickness of the material to be cut, can be used as a handy reference in selecting the optimum blade.

Material to be cut	Blade Material quality	No. 1 (Long)	No. 11	No. 12, 42	No. 15	No. 16, 46	No. 21, 41	No. 22	No. 97	123X
		Thickness of material: inch (mm)								
Lumber	General lumber	Below 4-3/4 (120)	3/8-2 - 11/32 (10 - 60)	Below 3/4 (20)			3/8 - 2-11/32 (10 - 60)	3/16 - 1-9/16 (5 - 40)		3/8 - 2 (10 - 50)
	Plywood		3/16 - 1-3/16 (5 - 30)	Below 3/8 (10)			3/16 - 1-3/16 (5 - 30)	1/8 - 1-3/4 (3-20)		3/16 - 1-3/16 (5 - 30)
Iron plate	Mild steel plate				1/8 - 3/8 (3 - 10)	Below 1/8 (3)			5/54 - 3/16 (2 - 5)	1/8 - 3/8 (3 - 10)
	Stainless steel plate								1/16 - 5/32 (1.5 - 2.5)	
Nonferrous metal	Aluminum copper, brass				1/8 - 15/32 (3 - 12)	Below 1/8 (3)			Below 3/16 (5)	1/8 - 15/32 (3 - 12)
	Aluminum sash				Height up to 1-3/16 (30)				Height up to 1-3/16 (30)	Height up to 1-3/16 (30)
Plastics	Phenol resin, melamin resin, etc.				3/16 - 3/4 (5 - 20)	Below 1/4 (6)	3/16 - 19/32 (5 - 15)	Below 1/4 (6)	3/16 - 19/32 (5 - 15)	3/16 - 3/4 (5 - 20)
	Vinyl chloride, acryl resin, etc.		3/16 - 1-3/16 (5 - 30)	Below 3/8 (10)	3/16 - 3/4 (5 - 20)	Below 3/16 (5)	3/16 - 1-3/16 (5 - 30)	1/8 - 3/4 (3 - 20)	3/16 - 19/32 (5 - 15)	3/16 - 1-3/16 (5 - 30)
	Foamed polyethylene, foamed styrol		3/8 - 2-11/32 (10 - 60)	1/8 - 1-3/16 (3 - 30)	3/16 - 1-3/16 (5 - 30)	1/8 - 1-3/16 (3 - 30)	3/8 - 2-11/32 (10 - 60)	1/8 - 1-1/2 (3 - 40)	3/16 - 1-3/16 (5 - 30)	3/8 - 2 (10 - 50)
Pulp	Cardboard, corrugated paper		3/8 - 2-11/32 (10 - 60)	1/8 - 1-3/16 (3 - 30)			3/8 - 2-11/32 (10 - 60)	1/8 - 1-1/2 (3 - 40)		3/8 - 2 (10 - 50)
	Hardboard				1/8 - 1-3/16 (3 - 30)	Below 1/4 (6)			1/8 - 1-3/16 (3 - 30)	1/8 - 1-3/16 (3 - 30)
	Fiberboard					Below 1/4 (6)				

NOTE:

- The minimum cutting radius of No. 1 (Long), No. 21, No. 22 and No. 41 blades is 3-15/16" (100 mm).
- No. 1 (Long), No. 11, No. 12, No. 15, No. 16, No. 21, No. 22 and No. 97 blades are sold separately.

9. PRECAUTIONS IN SALES PROMOTION

In the interest of promoting the safest and most efficient use of the Models CJ 120V/VA Jig Saw by all of our customers, it is very important that at the time of sale the salesperson carefully ensures that the buyer seriously recognizes the importance of the contents of the Handling Instructions, and fully understands the meaning of the precautions listed on the Caution Plate attached to each tool.

9-1. Handling Instructions

Although every effort is made in each step of design, manufacture, and inspection to provide protection against safety hazards, the dangers inherent in the use of any electric tool cannot be completely eliminated. Accordingly, general precautions and suggestions for the use of electric power tools, and specific precautions and suggestions for the use of the Jig Saw is listed in the Handling Instructions to enhance the safe, efficient use of the tool by the customer. Salespersons must be thoroughly familiar with the contents of the Handling Instructions to be able to offer appropriate guidance to the customer during sales promotion.

9-2. Name Plate

Each tool is provided with a Name Plate which lists the following basic safety precautions in the use of the tool.

(1) For U.S.A. and Canada

-WARNING-
●To reduce the risk of injury, user must read and understand instruction manual.
AVERTISSEMENT ●Afin de réduire le risque de blessures, l'utilisateur doit lire et bien comprendre le mode d'emploi.

(2) For other countries

CAUTION
●Read thoroughly **HANDLING INSTRUCTIONS** before use.

10. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY

The **[Bold]** numbers in the descriptions below correspond to the item numbers in the Parts Lists and exploded assembly diagram for the Model CJ 120V. And the numbers included in () like as **([99])** means that of the Model CJ 120VA.

10-1. Disassembly

(1) Disassembly of the Base **[70]** **([73])** (Fig. 3)

Remove the Hex. Socket Hd. Bolt M5 x 14 **[72]** **([75])** by attached Hex Bar Wrench 4 mm **[73]** **([76])**. Then the Base **[70]** **([73])** and the Base Locker **[71]** **([74])** can be removed from the Gear Cover **[45]** **([48])**.

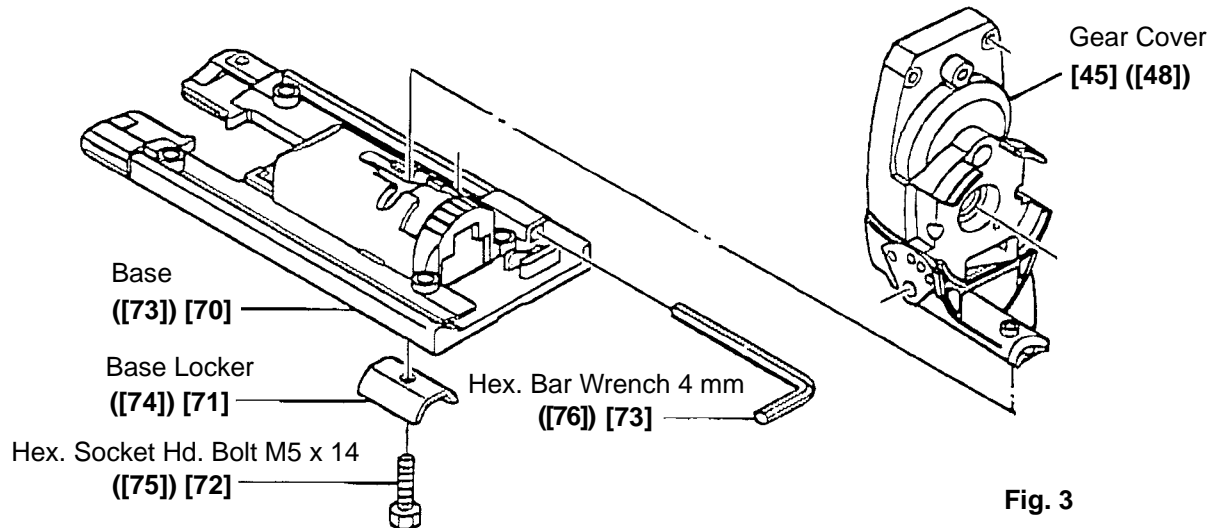


Fig. 3

(2) Disassembly of Housing (A). (B) Set **[1]** for the Model CJ 120V (Figs. 4 and 5)

Remove the Seal Lock Screw (W/Washer) M4 x 10 **[18]**, Tapping Screws (W/Flange) **[4]** **[5]**, and open one side of the housing. (Fig. 4) Then remove two Tapping Screws (W/Flange) D4 x 16 **[15]**, Brush Holder **[23]** with Carbon Brush **[22]**, so the other side of the housing can also be separated from other assemblies.

(Fig. 5)

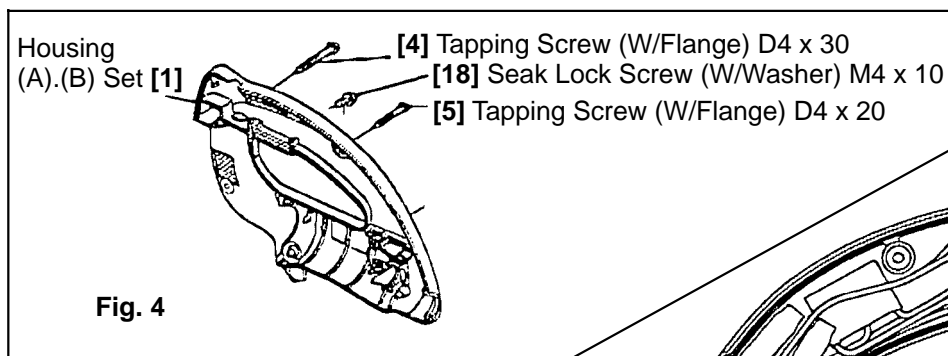


Fig. 4

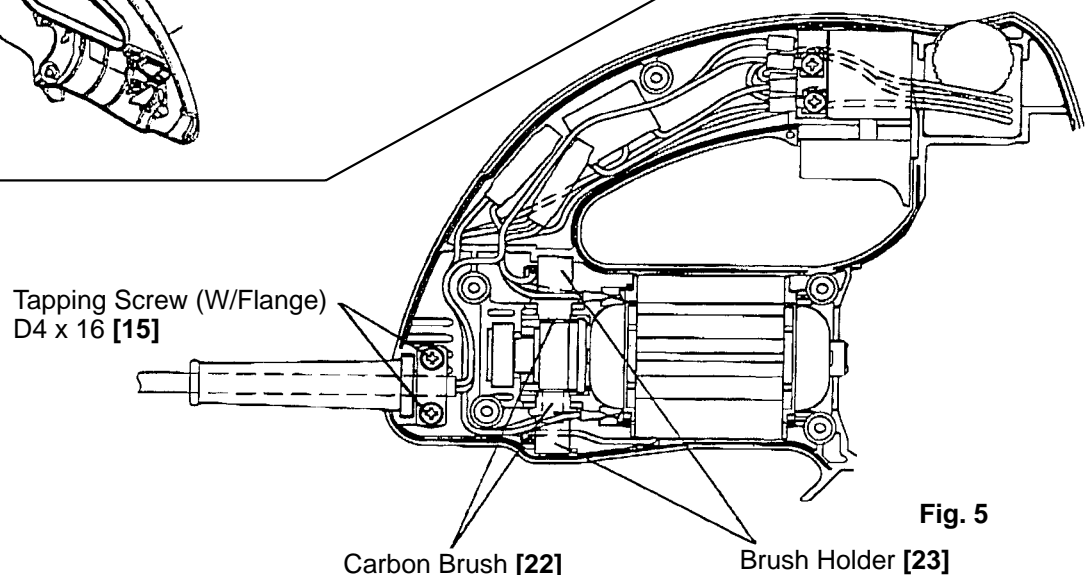


Fig. 5

(3) Disassembly of Housing (A).(B) Set [1] for the Model CJ 120VA (Figs. 6 and 7)

Remove the Seal Lock Screw (W/Washer) M4 x 10 [20], Tapping Screws (W/Flange) [7] [8], and open one side of the housing. (Fig. 6)

Then remove two Tapping Screws (W/Flange) D4 x 16 [14], Brush Holder [26] with Carbon Brush [25], so the other side of the housing can also be separated from other assemblies except the Slide Knob [21] and the Slide Bar [4]. (Fig. 7)

By pushing the Slide Knob [21] with a thin screwdriver, these parts can be separated from the housing. (Fig. 6)

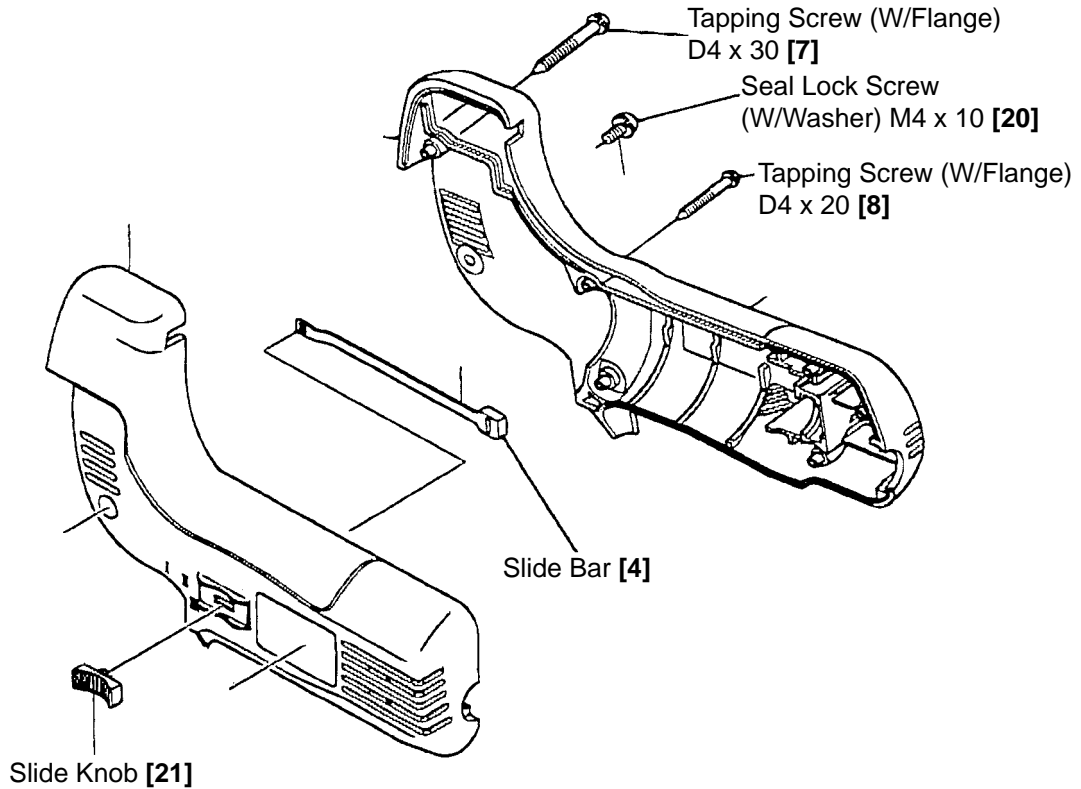


Fig. 6

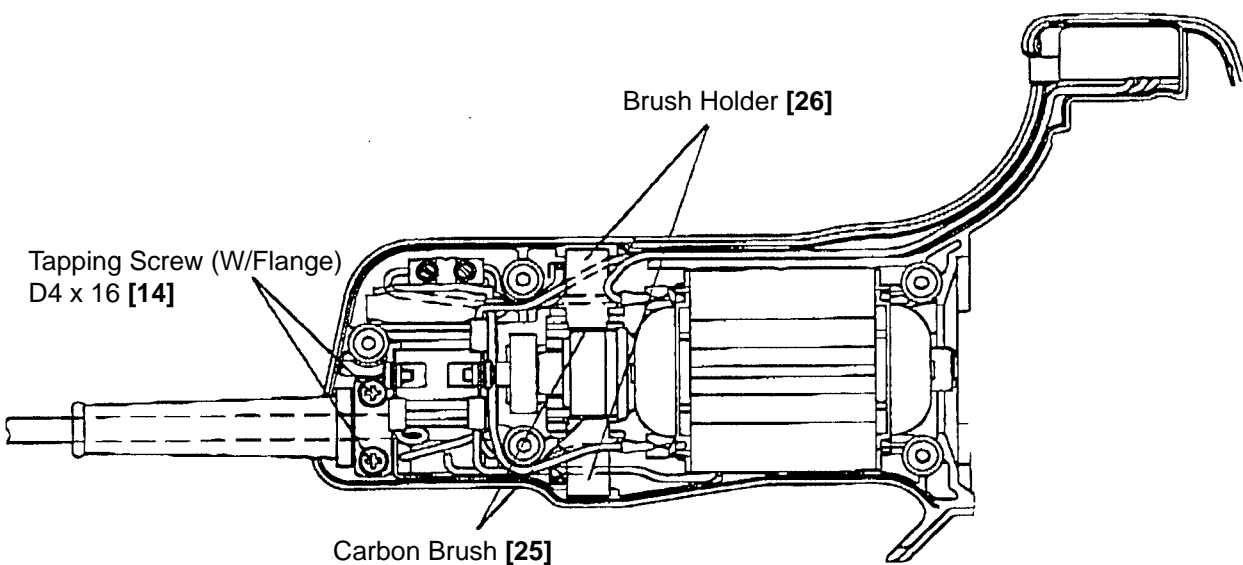


Fig. 7

(4) Disassembly of the Upper Cover [29] ([32]) (Fig. 8)

Remove the Lever Bolt [62] ([65]) and Machine Screw (W/Sp. Washer) M4 x 8 [57] ([60]), then Lever [61] ([64]), Lever Spring [60] ([63]), and Fence [56] ([59]) can be separated from the Upper Cover [29] ([32]).

Then remove the four Machine Screws M4 x 12 [46] ([49]) (then Guard Bar [28] ([31]) and Packing [38] ([41]) can be separated) and disassemble the Upper Cover [29] ([32]) from the Gear Cover [45] ([48]).

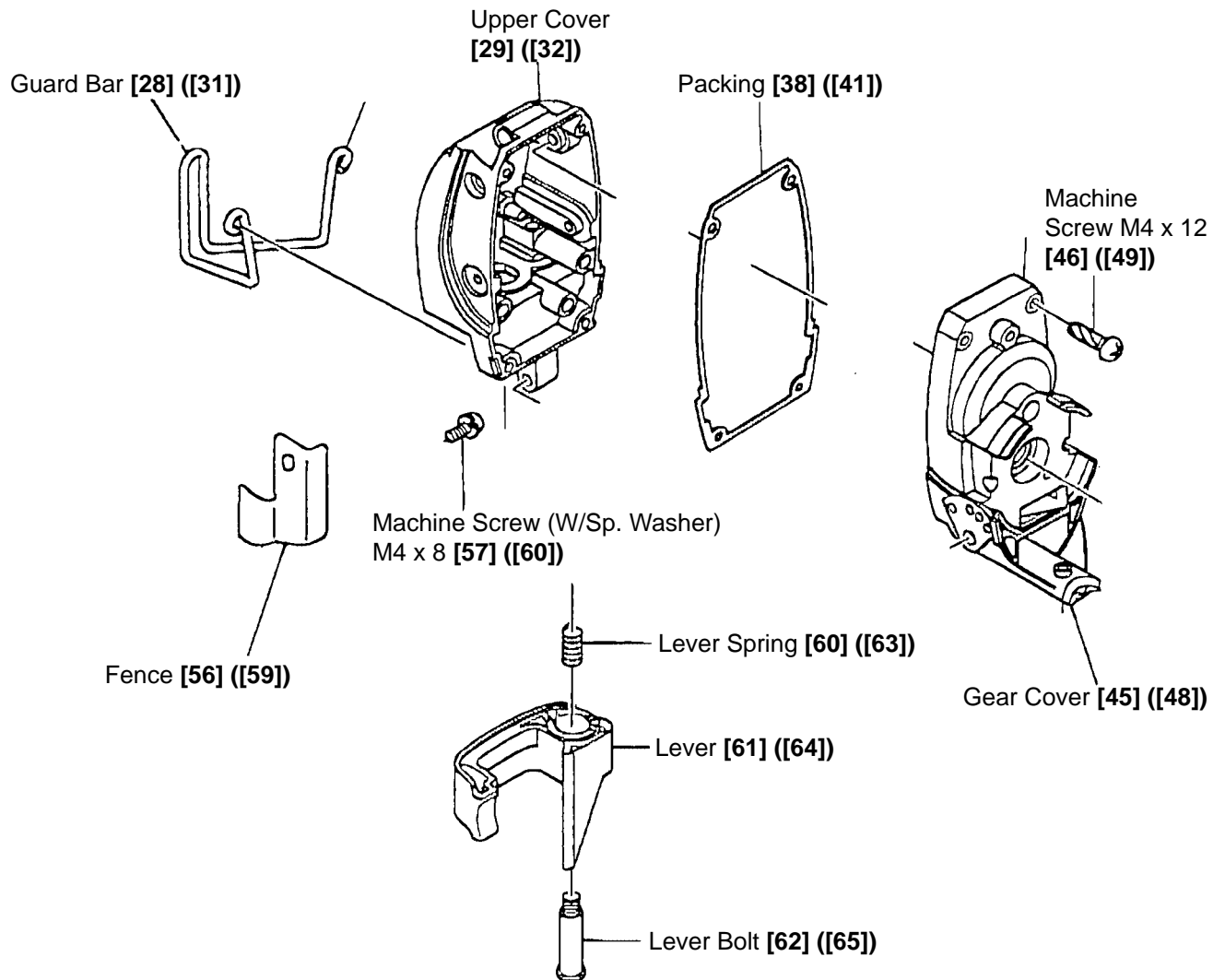


Fig. 8

(5) Disassembly of the Plunger [67] ([70]) and the Plunger Holder Ass'y [65] ([68]) (Fig. 9)

Remove the two Seal Lock Flat Hd. Screws M5 x 10 [50] ([53]) and then remove the Connector [31] ([34]). Pull out the Pin D6 [63] ([66]) from the Upper Cover [29] ([32]). Pull out the Plunger [67] ([70]) downward from the Upper Cover [29] ([32]). Remove the Plunger Holder Ass'y [65] ([68]) together with the O-ring [66] ([69]) from the Upper Cover [29] ([32]). Remove the Connector Holder [30] ([33]) and two Springs [49] ([52]) from the Upper Cover [29] ([32]).

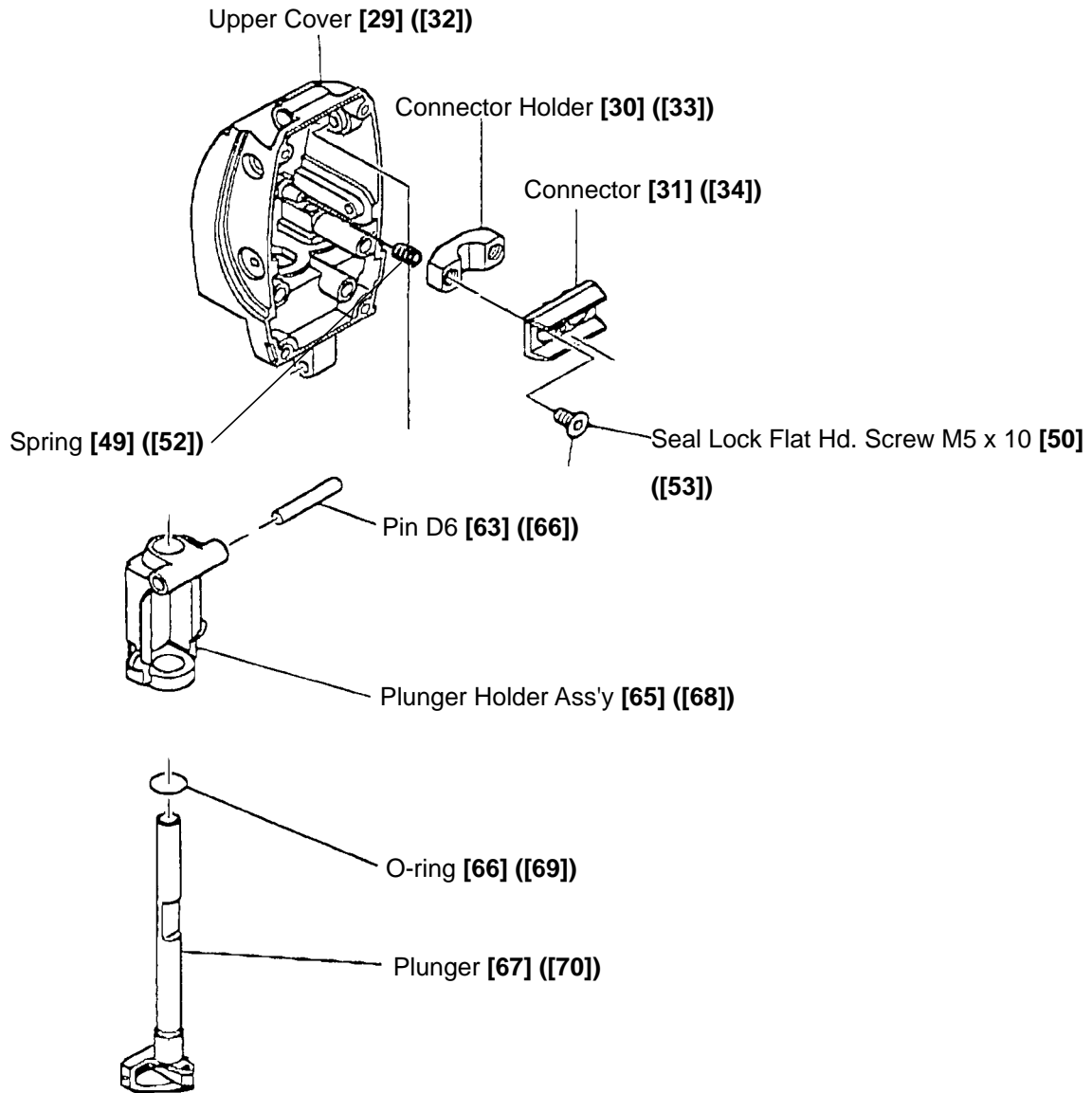


Fig. 9

(6) Disassembly of the Roller Holder [59] ([62]) (Fig. 10)

Extract the Needle D5 x 19.8 [58] ([61]) which is press-fitted into the Upper Cover [29] ([32]), and remove the Roller Holder [59] ([62]).

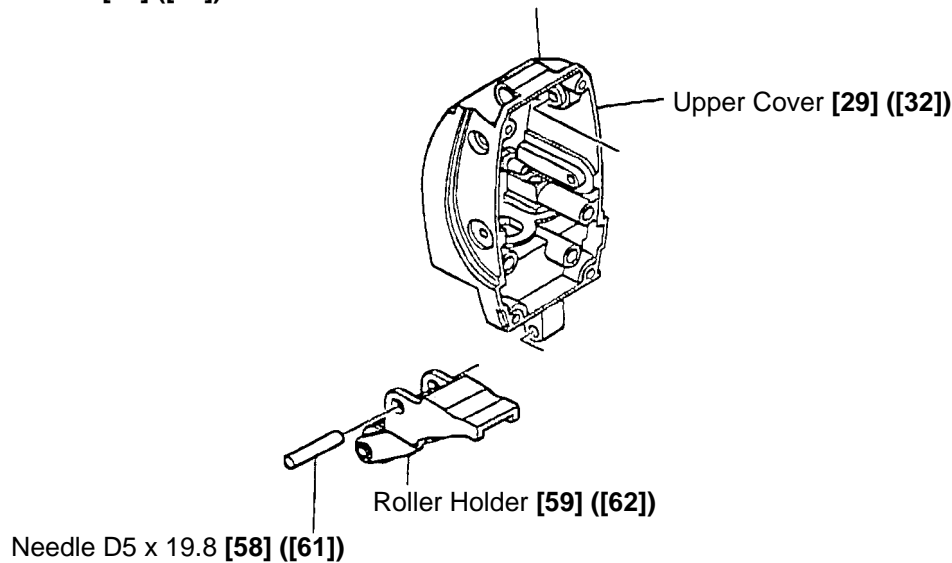


Fig. 10

(7) Disassembly of the Weight Holder [36] ([39]) and Armature [21] ([24]) (Fig. 11)

First, remove the Retaining Ring for D8 Shaft [34] ([37]) from the end of the Spindle. And remove the Hex. Socket Hd. Bolt (W/Flange) M5 x 12 [51] ([54]) from the Weight Holder [36] ([39]). Then Washer (A) [39] [42] ([42]) ([45]), Gear [41] ([44]), Orbital Cam [40] ([43]), Balance Weight [37] ([40]) and Weight Holder [36] ([39]) can be separated from the Gear Cover [45] ([48]). And then remove the Orbital Pin [43] ([46]), Felt [44] ([47]) and the Armature [21] ([24]) from the Gear Cover [45] ([48]).

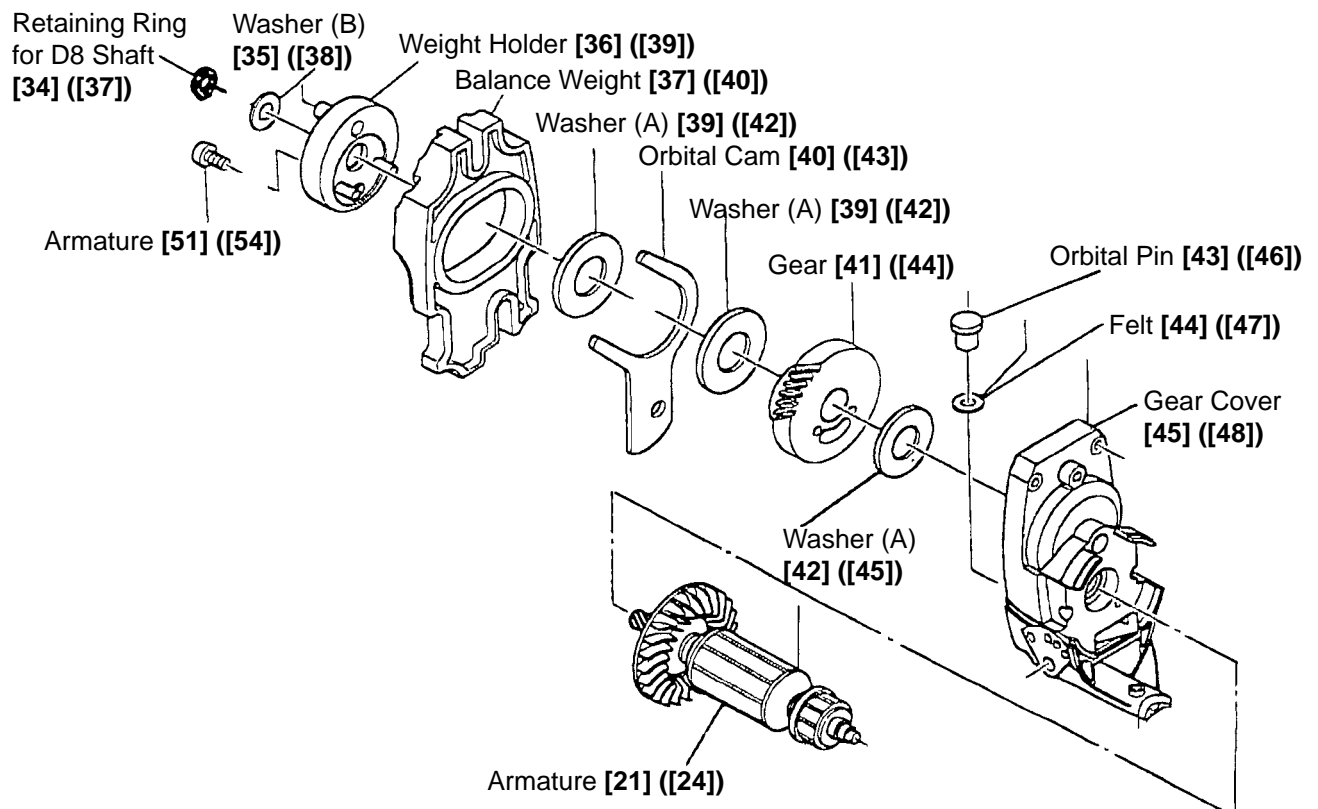


Fig. 11

(8) Disassembly of the Change Knob [52] ([55]) (Fig. 12)

Being very careful not to lose Spring (C) [53] ([56]) and the Steel Ball D3.97 [54] ([57]) inside the Change Knob [52] ([55]), remove the D5 Retaining Ring (E-type) for D5 Shaft [47] ([50]) from the end of the Change Knob [52] ([55]), and remove the Change Knob [52] ([55]) from the Gear Cover [45] ([48]).

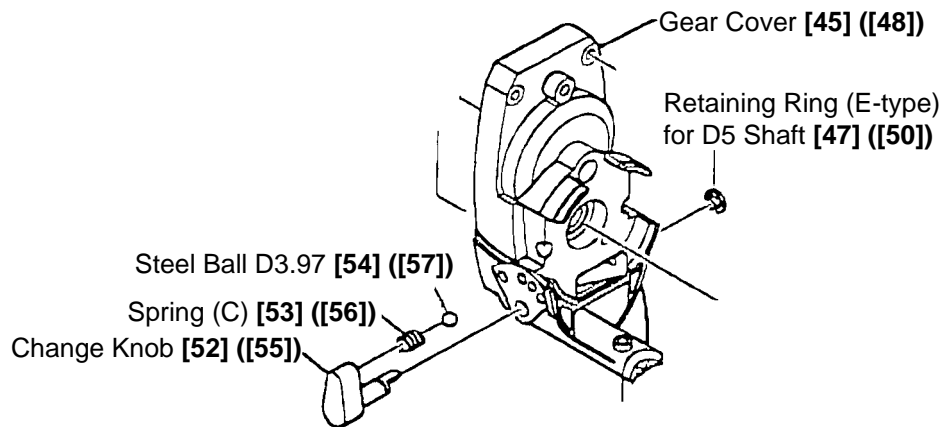


Fig. 12

10-2. Reassembly

Reassembly can be accomplished by following the disassembly procedures in reverse. However, special attention should be paid to the following points.

(1) Assemble Spring (C) [53] ([56]) and the Steel Ball [54] ([57]) in the Change Knob [52] ([55]) as shown in Fig. 13.

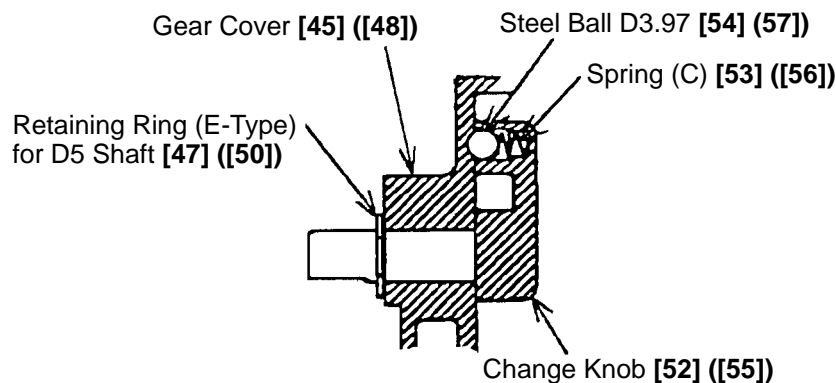


Fig. 13

(2) Confirm that the Connecting Piece [32] ([35]) surely fits into the Connector [31] ([34]) as shown Fig. 14.

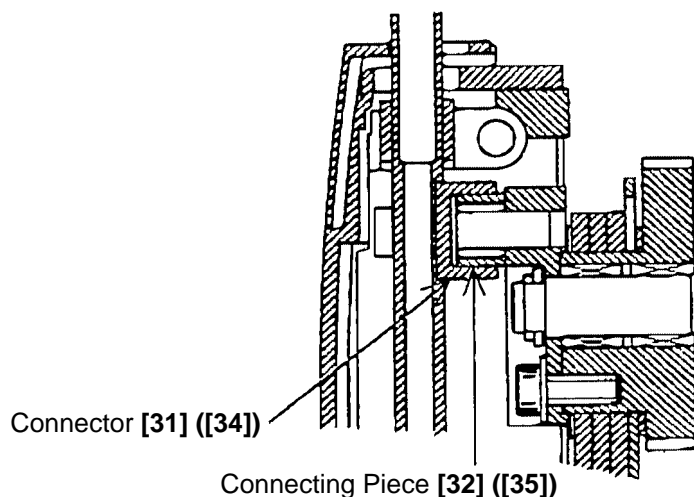


Fig. 14

- (3) Carefully ensure that two Washers (A) [39] ([42]), the Orbital Cam [40] ([43]), and the Balance Weights [37] ([40]) are assembled as shown in Fig. 15.
- (4) During reassembly, be very careful not to forget to install the Felt [44] ([47]) at the lower portion of the Orbital Cam [40] ([43]), as shown in Fig. 16.

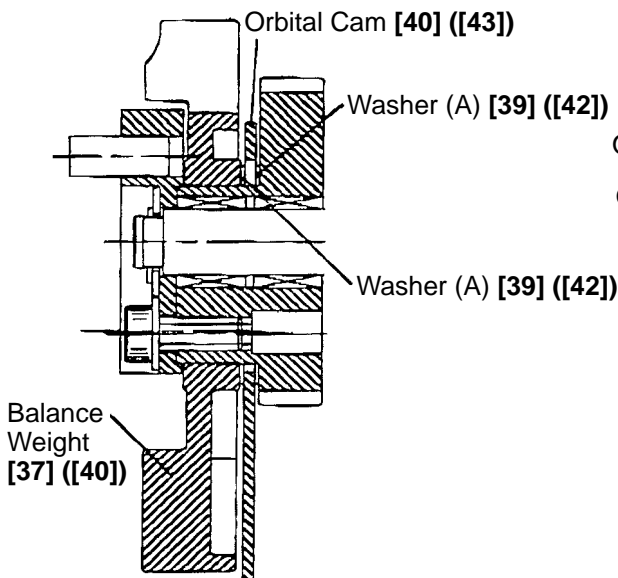


Fig. 15

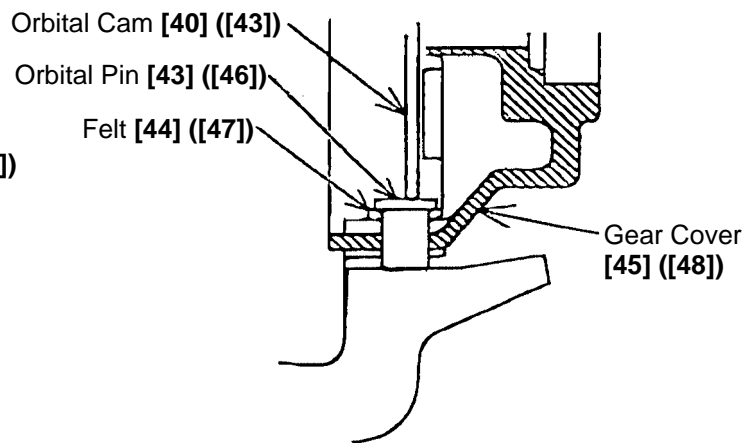


Fig. 16

(5) Grease

Insert 20 g of Nippeco SEP-3A Grease inside the gear cover. Also liberally apply grease to the following portions.

- Teeth of the Gear [41] ([44])
- Slide contact portions of the Balance Weights [37] ([40])
- Inside of the Needle Bearing [33] ([36])
- Inside of the Connector [31] ([34])
- Slide contact portions of the Plunger [67] ([70])
- Plunger Holder Ass'y [65] ([68]) surfaces in sliding contact with the Connector [31] ([34])
- Surface of the Spindle
- Surface of the Gear Cover [45] ([48]) in sliding contact with the Change Knob [52] ([55])
- Inside hole of the Roller Holder [59] ([62])

- (6) When installing the Plunger Holder Ass'y [65] ([68]) in the Upper Cover [29] ([32]), ensure that the O-Ring (P-16) [66] ([69]) is properly mounted at the lower portion of the Plunger Holder Ass'y [65] ([68]), as shown in Fig. 17. Also, ensure that the two Springs [49] ([52]) are properly mounted between the Plunger Holder Ass'y [65] ([68]) and the Upper Cover [29] ([32]) (Fig. 17).

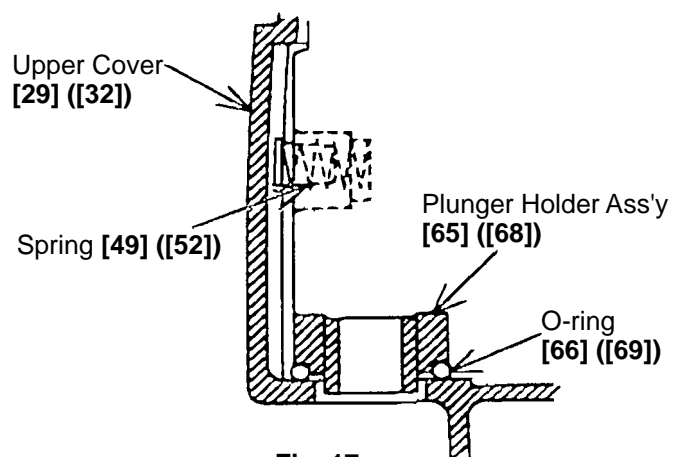


Fig. 17

(7) Tightening torque of screws and bolts:

• D4 Tapping Screws [4] [5] [15] ([7]) ([8]) ([14])	$1.96 \pm 0.49 \text{ N}\cdot\text{m}$ [$20 \pm 5 \text{ kgf}\cdot\text{cm}$, $1.4 \pm 0.4 \text{ ft}\cdot\text{lbs.}$]
• Machine Screw M4 x 12 [46] ([49])	$2.45 \pm 0.49 \text{ N}\cdot\text{m}$ [$25 \pm 5 \text{ kgf}\cdot\text{cm}$, $1.8 \pm 0.4 \text{ ft}\cdot\text{lbs.}$]
• M4 Screw [18] [57] [68] ([20]) ([60]) ([71])	$1.96 \pm 0.49 \text{ N}\cdot\text{m}$ [$20 \pm 5 \text{ kgf}\cdot\text{cm}$, $1.4 \pm 0.4 \text{ ft}\cdot\text{lbs.}$]
• Seal Lock Flat Hd. Screw M5 x 10 [50] ([53])	$3.92 - 5.88 \text{ N}\cdot\text{m}$ [$40 - 60 \text{ kgf}\cdot\text{cm}$, $2.9 - 4.3 \text{ ft}\cdot\text{lbs.}$]
• Hex. Socket Hd. Bolt M5 x 14 [72] ([75])	$3.92 - 5.88 \text{ N}\cdot\text{m}$ [$40 - 60 \text{ kgf}\cdot\text{cm}$, $2.9 - 4.3 \text{ ft}\cdot\text{lbs.}$]
• Hex. Socket Hd. Bolt (W/Flange) M5 x 12 [51] ([54])	$3.92 - 5.88 \text{ N}\cdot\text{m}$ [$40 - 60 \text{ kgf}\cdot\text{cm}$, $2.9 - 4.3 \text{ ft}\cdot\text{lbs.}$]
• Lever Bolt [62] ([65])	$2.45 \pm 0.49 \text{ N}\cdot\text{m}$ [$25 \pm 5 \text{ kgf}\cdot\text{cm}$, $1.8 \pm 0.4 \text{ ft}\cdot\text{lbs.}$]

10-3. Wiring Diagrams

The wiring is in accordance with Fig. 18 (CJ 120V) and Fig. 19 (CJ 120VA).

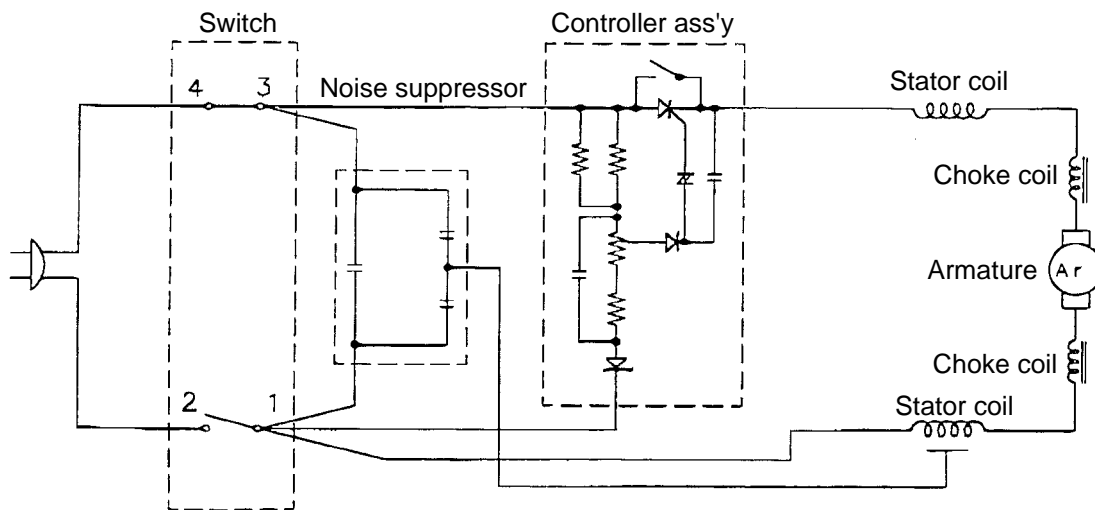


Fig. 18 CJ 120V

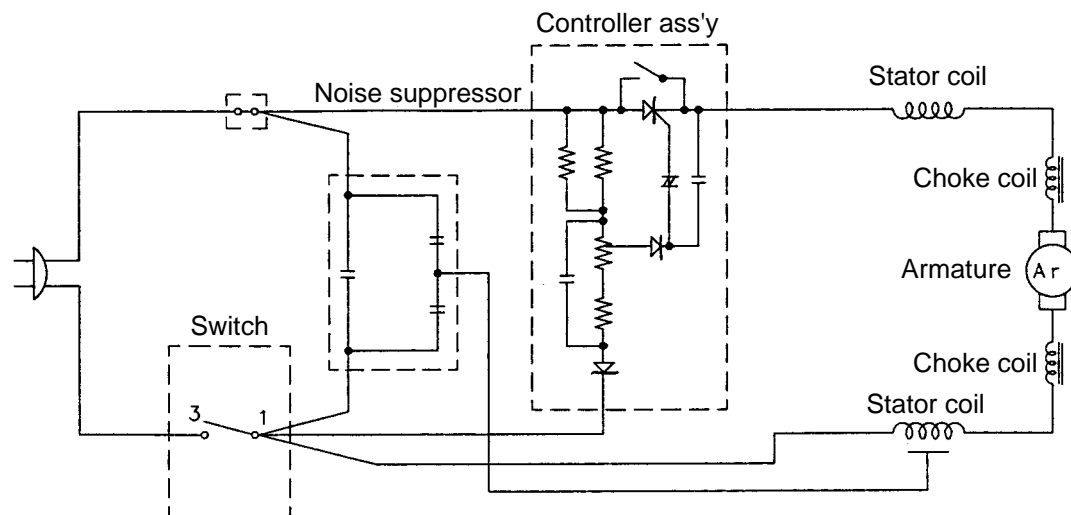


Fig. 19 CJ 120VA

10-4. Insulation Tests

On completion of disassembly and repair, measure the insulation resistance and conduct insulation tests (dielectric strength test).

Insulation resistance: 7 M Ω or more with 500 V DC Megohm Tester.

Dielectric strength:

AC 4000 V/1 minute, with no abnormalities 110 V, 230 V, 240 V

AC 2500 V/1 minute, with no abnormalities 120 V

CAUTION

- Ensure without fail that the insulation resistance measurement and dielectric strength test are conducted between the plug blade and some portion of the external metal frame such as the gear cover with main switch turned ON. Never carry out these tests between the two blades of the plug. This could cause burning out of the control element in the switch.

10-5. No-Load Current Value

After no-load operation for 30 minutes, the no-load current value should be as specified below at a frequency of 50/60 Hz.

Voltage (V)	110	120	230	240
Current (A) Max.	2.8	3.0	1.4	1.3

11. STANDARD REPAIR TIME (UNIT) SCHEDULES

MODEL	Variable		10	20	30	40	50	60 min.
	Fixed							
<div>CJ 120V</div> <div>CJ 120VA</div>		Work Flow						
		Base Base Locker						

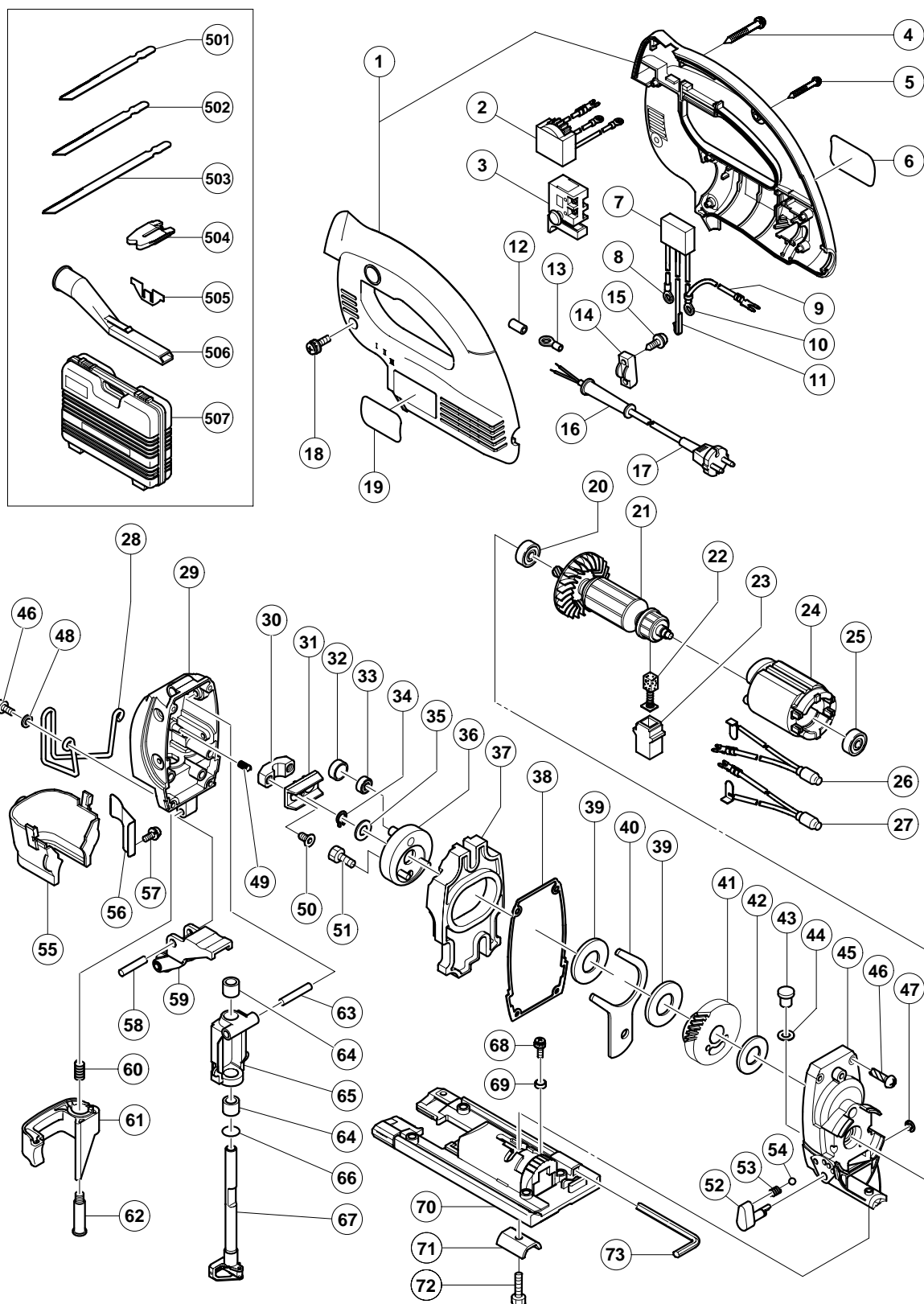
ELECTRIC TOOL PARTS LIST

■ JIG SAW

2002・11・30

Model CJ 120V

(E1)



PARTS

CJ 120V

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
1	321-585	HOUSING (A).(B) SET	1		
* 2	321-588	CONTROLLER CIRCUIT 230V-240V	1		
* 2	321-589	CONTROLLER CIRCUIT 110V	1	FOR GBR (110V)	
* 2	321-685	CONTROLLER CIRCUIT 120V	1	FOR USA, CAN	
3	314-887	SWITCH (2P SCREW TYPE) W/LOCK	1		
4	305-490	TAPPING SCREW (W/FLANGE) D4X30 (BLACK)	1		
5	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	5		
6		NAME PLATE	1		
7	994-273	NOISE SUPPRESSOR	1		
8	960-356	TERMINAL (A) M3.5 (10 PCS.)	1		
9	321-587	INTERNAL WIRE	1		
10	311-741	TERMINAL	1		
11	302-488	EARTH TERMINAL	1		
* 12	981-373	TUBE (D)	2	FOR GBR (110V)	
* 13	980-063	TERMINAL	2	FOR CORD	
14	960-266	CORD CLIP	1		
15	984-750	TAPPING SCREW (W/FLANGE) D4X16	2		
16	953-327	CORD ARMOR D8.8	1		
* 17	500-234Z	CORD	1	(CORD ARMOR D8.8)	
* 17	500-247Z	CORD	1	(CORD ARMOR D8.8) FOR NOR, SWE, DEN, FIN	
* 17	500-423Z	CORD	1	(CORD ARMOR D8.8) FOR SIN, MAL, SRI	
* 17	500-240Z	CORD	1	(CORD ARMOR D8.8) FOR USA, CAN	
* 17	500-439Z	CORD	1	(CORD ARMOR D8.8) FOR AUS, NZL	
* 17	500-450Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (230V)	
* 17	500-237Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (110V)	
* 17	500-447Z	CORD	1	(CORD ARMOR D8.8) FOR SUI	
18	321-577	SEAL LOCK SCREW (W/WASHER) M4X10	2		
19		HITACHI LABEL	1		
20	608-DDW	BALL BEARING 608DDW	1		
* 21	360-593U	ARMATURE ASS'Y 110V-120V	1	INCLUD. 20, 25	
* 21	360-593E	ARMATURE 230V	1		
* 21	360-593F	ARMATURE 240V	1		
22	999-041	CARBON BRUSH (1 PAIR)	2		
23	955-203	BRUSH HOLDER	2		
* 24	340-545C	STATOR 110V-120V	1		
* 24	340-545E	STATOR 230V-240V	1		
25	608-DDM	BALL BEARING 608DDC2PS2L	1		
26	321-609	CHOKE COIL	1		
27	321-608	CHOKE COIL	1		
28	321-582	GUARD BAR	1		
29	321-584	UPPER COVER	1		
30	321-572	CONNECTOR HOLDER	1		
31	321-570	CONNECTOR	1		
32	321-569	CONNECTING PIECE	1		
33	940-917	NEEDLE BEARING NTN K6X9X8T2	1		
34	940-079	RETAINING RING FOR D8 SHAFT	1		
35	963-351	WASHER (B)	1		
36	305-742	WEIGHT HOLDER	1		
37	321-565	BALANCE WEIGHT	1		
38	321-564	PACKING	1		
39	963-349	WASHER (A)	2		

PARTS

CJ 120V

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CJ 120V

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OPTIONAL ACCESSORIES

[illegible]

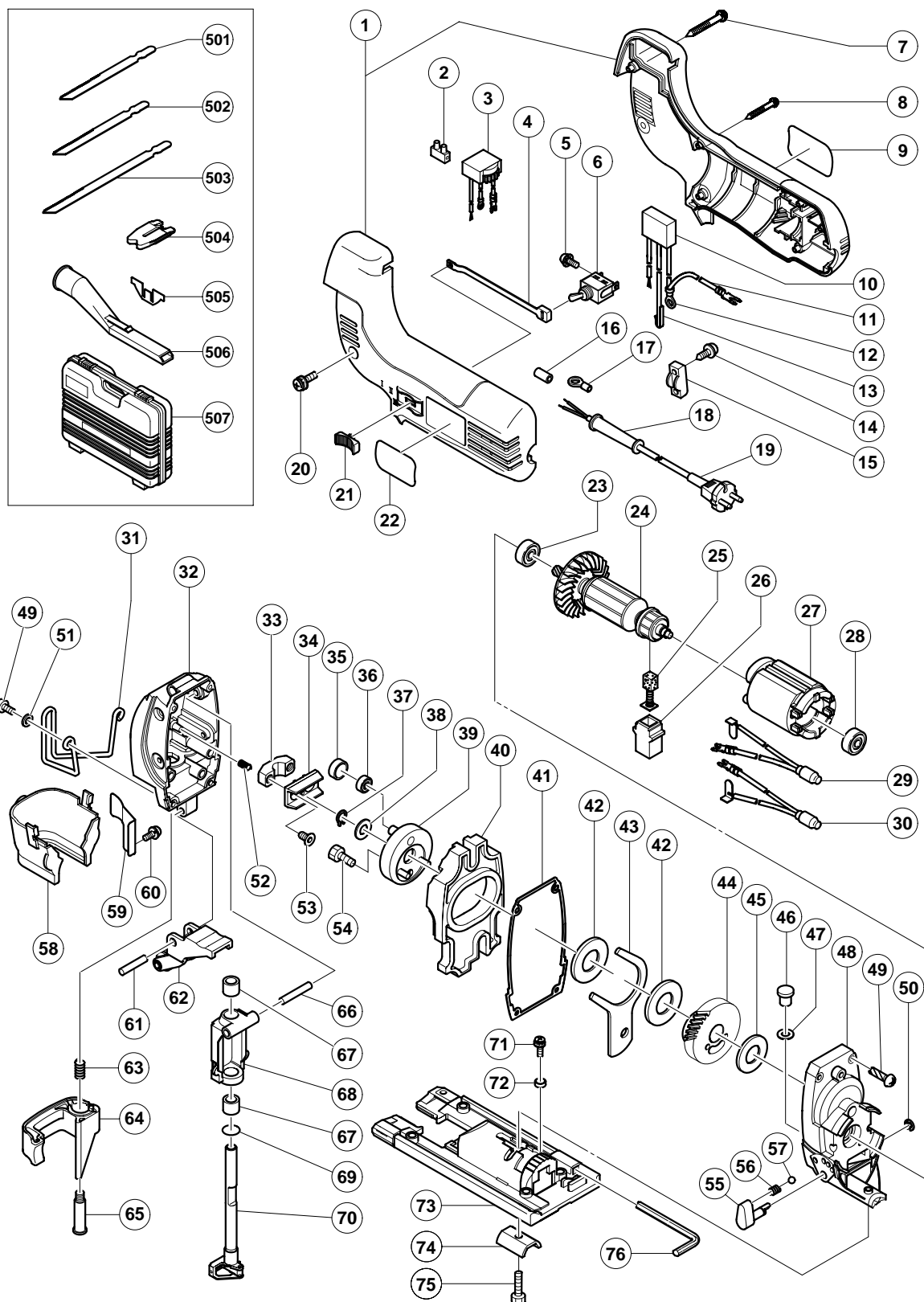
ELECTRIC TOOL PARTS LIST

JIG SAW

2002 • 11 • 30

Model CJ 120VA

(E1)



PARTS

CJ 120VA

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
1	321-616	HOUSING (A).(B) SET	1		
2	938-307	PILLAR TERMINAL	1		
* 3	321-596	CONTROLLER CIRCUIT 110V	1		
* 3	321-684	CONTROLLER CIRCUIT 120V	1		
* 3	321-597	CONTROLLER CIRCUIT 230V-240V	1		
4	321-594	SLIDE BAR	1		
5	305-499	MACHINE SCREW (W/WASHER) M3.5X 6	1		
6	955-509	SWITCH (1P SCREW TYPE)	1		
7	305-490	TAPPING SCREW (W/FLANGE) D4X30 (BLACK)	1		
8	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	5		
* 9		NAME PLATE	1		
10	994-273	NOISE SUPPRESSOR	1		
11	321-610	INTERNAL WIRE	1		
12	311-741	TERMINAL	1		
13	302-488	EARTH TERMINAL	1		
14	984-750	TAPPING SCREW (W/FLANGE) D4X16	2		
15	960-266	CORD CLIP	1		
* 16	981-373	TUBE (D)	1	FOR CORD	
17	980-063	TERMINAL	1		
18	953-327	CORD ARMOR D8.8	1		
* 19	500-247Z	CORD	1	(CORD ARMOR D8.8)	
* 19	500-423Z	CORD	1	(CORD ARMOR D8.8) FOR SIN	
* 19	500-234Z	CORD	1	(CORD ARMOR D8.8) FOR NZL, SAF, EUROPE	
* 19	500-439Z	CORD	1	(CORD ARMOR D8.8) FOR AUS	
* 19	500-450Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (230V)	
* 19	500-237Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (110V)	
* 19	500-447Z	CORD	1	(CORD ARMOR D8.8) FOR SUI	
* 19	500-240Z	CORD	1	(CORD ARMOR D8.8) FOR USA, CAN	
20	321-577	SEAL LOCK SCREW (W/WASHER) M4X10	2		
21	321-595	SLIDE KNOB	1		
22		HITACHI LABEL	1		
23	608-DDW	BALL BEARING 608DDW	1		
* 24	360-593U	ARMATURE ASS'Y 110V-120V	1	INCLUD. 23, 28	
* 24	360-593E	ARMATURE 230V	1		
* 24	360-593F	ARMATURE 240V	1		
25	999-041	CARBON BRUSH (1 PAIR)	2		
26	955-203	BRUSH HOLDER	2		
* 27	340-545C	STATOR 110V-120V	1		
* 27	340-545E	STATOR 230V-240V	1		
28	608-DDM	BALL BEARING 608DDC2PS2L	1		
29	321-599	CHOKE COIL	1		
30	321-598	CHOKE COIL	1		
31	321-582	GUARD BAR	1		
32	321-584	UPPER COVER	1		
33	321-572	CONNECTOR HOLDER	1		
34	321-570	CONNECTOR	1		
35	321-569	CONNECTING PIECE	1		
36	940-917	NEEDLE BEARING NTN K6X9X8T2	1		
37	940-079	RETAINING RING FOR D8 SHAFT	1		
38	963-351	WASHER (B)	1		
39	305-742	WEIGHT HOLDER	1		

PARTS

CJ 120VA

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CJ 120VA

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