

MODEL

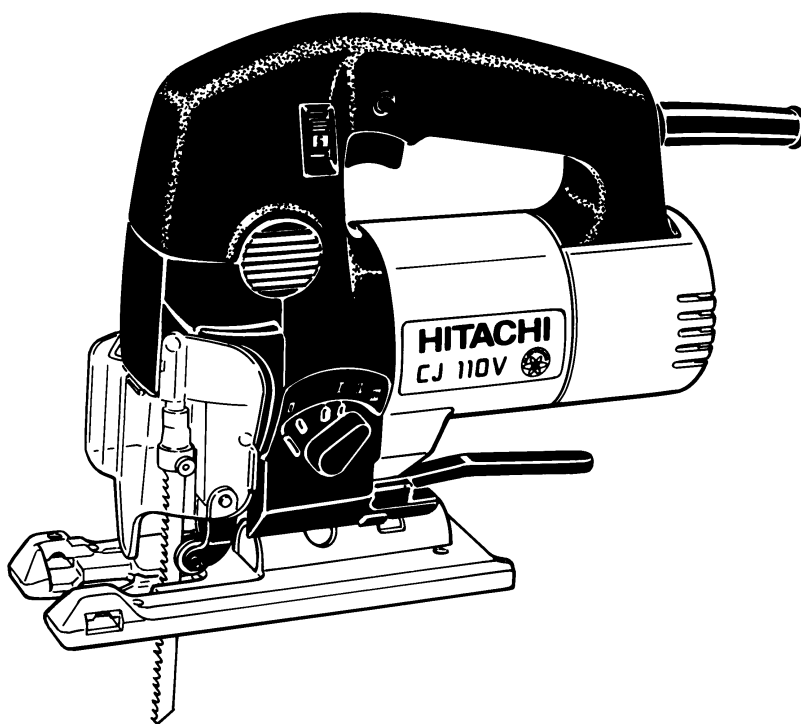
CJ 110V

HITACHI
POWER TOOLS

JIG SAW
CJ 110V

TECHNICAL DATA
AND
SERVICE MANUAL

C



LIST No. 0583

Revised Sep. 1999

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

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	GST85PBAE
C	MAKITA	4304T

Notice for use

Specifications and parts are subject to change for improvement.
Refer to the Hitachi Power Tool Technical News for further information.

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1. PRODUCT NAME

Hitachi Electric Jig Saw, Model CJ 110V [110 mm (4-1/4")]
[100 mm (3-7/8") for Europe]

2. MARKETING OBJECTIVE

The Model CJ 110V has been developed based on the Model CJ 65V2. The key features of the Model CJ 110V are as follows:

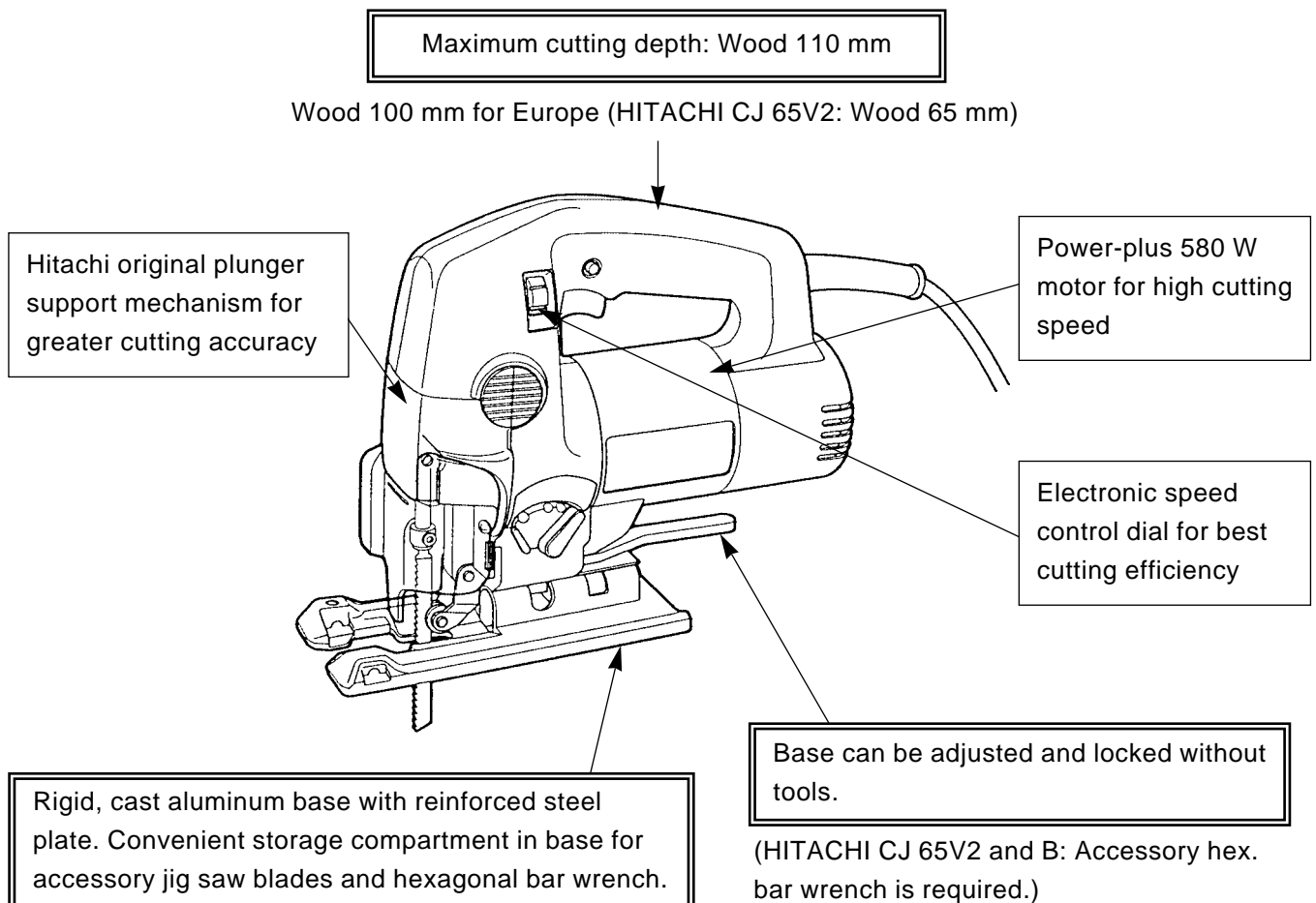
- ① Base can be adjusted and locked without tools
- ② Maximum cutting depth: 110 mm (4-1/4") [100 mm (3-7/8") for Europe, in compliance with standards]
[When using the No. 1 (Long) blade]

The Model CJ 110V is added to Hitachi's jig saw lineup together with the Model CJ 65V2.

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) Adjusting and locking the base

The base must be adjusted when cutting in a circle using the optional circular guide, when cutting out shapes, or when bevel cutting. The Model CJ 110V requires no tool for adjusting and locking of the base. Adjust and lock the base according to the following procedure.

- ① Turn the base handle just under the housing about 90° to loosen (Fig. 1).
- ② Move the base forward or backward if necessary. For bevel cutting, align the horizontal groove on the half-round portion of the base to the mark on the gear cover to incline the base. The base can be inclined to either side (right or left) up to 45°. The half-round portion is calibrated from 0° to 45° in increments of 15°. The base can be easily inclined by adjusting the ▽ mark on the gear cover to the desired calibration (Fig. 2).
- ③ Turn the base handle about 90° in the direction opposite to ① to lock the base and secure the base handle to the original position just under the housing (Fig. 1).

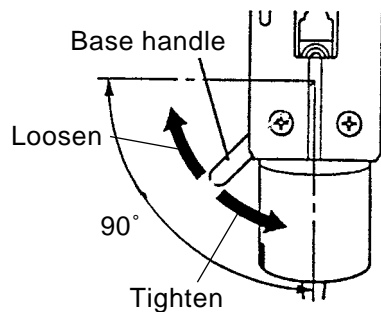


Fig. 1

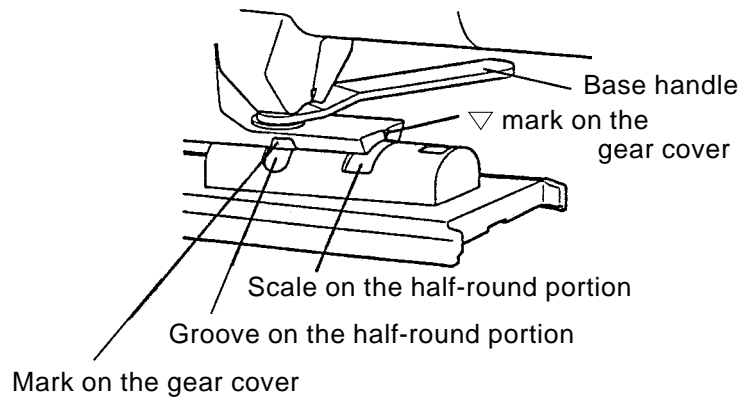


Fig. 2






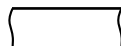
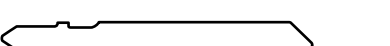
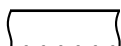
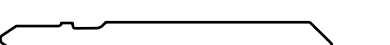
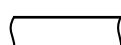
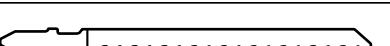
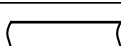
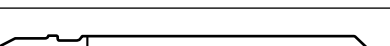
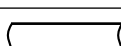


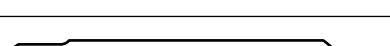

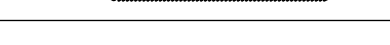
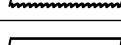

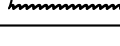
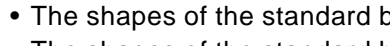
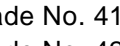
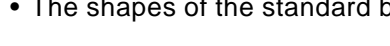
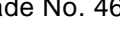
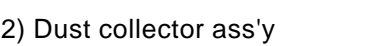









5. SPECIFICATIONS

	CJ 110V		
Capacities	Max. cutting thickness	Wood	110 mm (4-1/4")
		Mild steel	10 mm (3/8")
	(For Europe: Wood 100 mm (3-7/8") in compliance with standards)		
Min. cutting radius	25 mm (1")		
Type of power source	Single-phase AC 50/60 Hz		
<div><div>⎧ Voltage *</div><div>⎧ Rated current</div></div>	<div><div>⎧ 110 V</div><div>⎧ 5.2 A</div></div>	<div><div>⎧ 115 V</div><div>⎧ 5.2 A</div></div>	<div><div>⎧ 230 V</div><div>⎧ 2.6 A</div></div>
Type of motor	Single-phase AC commutator motor		
Insulation method	Double insulation		
Enclosure	Housing, Handle, Tail coverPolyamid resin Gear cover, Upper coverAluminum alloy die casting (Black)		
Type of switch	Trigger switch		
Power input *	570 W (U.K. 110 V: 540 W)		
Output	About 345 W		
Number of strokes per minute	No load	700 – 3,200 /min	
	Full load	2,450 /min	
Length of stroke	26 mm (1")		
Max. cutting angle	45° (right and left)		
Weight	Net	2.4 kg (5.3 lbs) [actual weight: 2.6 kg (5.7 lbs)]	
	Gross	2.8 kg (6.2 lbs) [4.2 kg (9.3 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. 46).....Each 1pc. Splinter guard.....1 pc.		

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

Optional Accessories

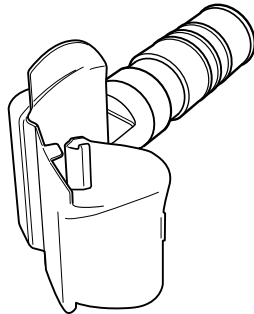
(1) Blades

Blade shape		Application	Blade No.	Pitch	Code No.	Per pkg.
		Wood	No. 1 (Long)	6	879227	3
		Wood, Pulp Synthetic resin	No. 11	8	879336	5
			No. 12	20	963390	10
			No. 12	20	879337	5
			No. 12	20	963391	10
		Steel, Pulp Nonferrous metal Synthetic resin	No. 15	8	879338	5
			No. 15	8	963392	10
			No. 16	25	879339	5
			No. 16	25	963393	10
		Wood, Pulp Synthetic resin	No. 21	6	879340	5
			No. 21	6	963394	10
			No. 22	10	879341	5
			No. 22	10	963395	10
		Stainless steel	No. 95	18	950482	5
			No. 95	18	950483	10
			No. 96	32	950480	5
			No. 96	32	950481	10
			No. 97	21	963400	5

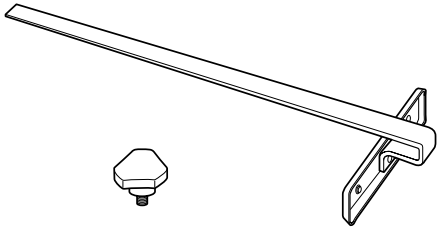
NOTE:

- 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.
- The shapes of the standard blade No. 46 and the optional blade No. 16 are the same.

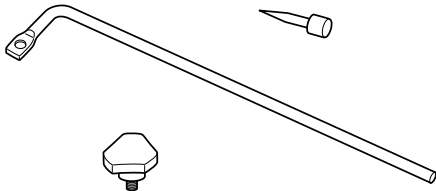
(2) Dust collector ass'y

	Code No.
	316126

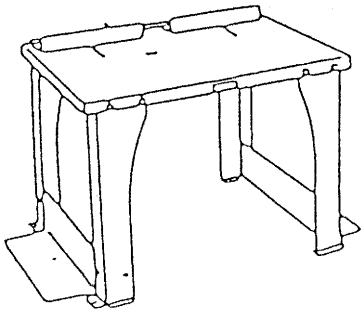
(3) Straight guide ass'y

	Code No.
	305955

(4) Circular guide ass'y

	Code No.
	305956

(5) Bench stand

	Type
	TR 12-B

6. COMPARISONS WITH SIMILAR PRODUCTS

Maker			HITACHI		B	C
Model name			CJ 110V	CJ 65V2		
Cutting capacity	Wood	mm	110 (4-1/4") 100 (3-7/8") for E.U.	65 (2-1/2")	85 (3-11/32")	110 (4-1/4")
	Mild steel	mm	10 (3/8")	10 (3/8")	10 (3/8")	10 (3/8")
Min. cutting radius		mm	25 (1")	25 (1")	—	—
Length of stroke		mm	26 (1")	26 (1")	26 (1")	26 (1")
Power input		W	570*	570	580	600
No-load speed		/min	700 – 3,200	700 – 3,200	500 – 3,100	500 – 3,000
No-load noise level		dB	87	87	81	95
Tool-less blade attachment			None	None	Equipped	Equipped
Tool-less base adjustment			Equipped	None	None	Equipped
Max. bevel angle of base (right and left)			45°	45°	45°	45°
Dimensions	Length	mm	217 (8-9/16")	217 (8-9/16")	250 (9-27/32")	230 (9-1/16")
	Height	mm	202 (7-15/16")	190 (7-5/16")	203 (8")	204 (8")
	Width	mm	72 (2-13/16")	72 (2-13/16")	79 (3-1/8")	73 (2-7/8")
Weight		kg	2.4 (5.3 lbs)	2.4 (5.3 lbs)	2.4 (5.3 lbs)	2.4 (5.3 lbs)
Actual weight			2.6 (5.7 lbs)	2.5 (5.5 lbs)	2.6 (5.7 lbs)	2.6 (5.7 lbs)
Shipping weight		kg	4.2 (9.3 lbs)	4.0 (8.8 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 Model CJ 110V, the orbital mechanism moves the blade up-and-down and forward-and-backward in the same manner as the Model CJ 65V2. 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).

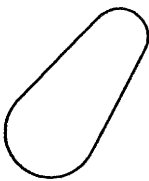


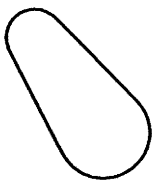
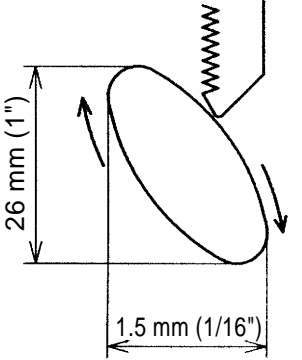
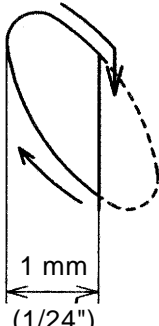
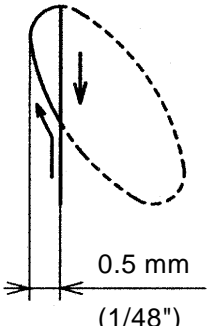
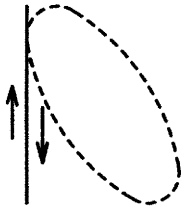
	III	II	I	0
Orbital position				
Blade edge movement	 (At guide roller position)	 (1/24")	 (1/48")	 Perpendicular movement only

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. The table (next page) can be used as a general guide for appropriate orbital position selection based on various factors.

Table 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	←————→	Fine finishing
Material stability	Very stable	←————→	Unstable

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. 95	No. 96	No. 97
		Thickness of material [mm (inch)]									
Lumber	General lumber	Below 110 (4-1/4)	10 (3/8) – 60 (2-11/32)	Below 20 (3/4)			10 (3/8) – 60 (2-11/32)	5 (5/16) – 40 (1-9/16)			
	Plywood		5 (3/16) – 30 (1-3/16)	Below 10 (3/8)			5 (3/16) – 30 (1-3/16)	3 (1/8) – 20 (1-3/4)			
Iron plate	Mild steel plate				3 (1/8) – 10 (3/8)	Below 3 (1/8)			3 (1/8) – 6 (1/4)	Below 3 (1/8)	2 (5/14) – 5 (3/16)
	Stainless steel plate								1.5 (1/16) – 2.5 (3/32)	0.5 (1/64) – 1.5 (1/16)	1.5 (1/16) – 2.5 (3/32)
Nonferrous metal	Aluminum copper, brass				3 (1/8) – 12 (15/32)	Below 3 (1/8)			3 (1/8) – 12 (15/32)	Below 3 (1/8)	Below 5 (3/16)
	Aluminum sash				Height up to 30 (1-3/16)				Height up to 30 (1-3/16)		Height up to 30 (1-3/16)
Plastics	Phenol resin, melamin resin, etc.				5 (3/16) – 20 (3/4)	Below 6 (1/4)	5 (3/16) – 15 (19/32)	Below 6 (1/4)	5 (3/16) – 20 (3/4)	Below 6 (1/4)	5 (3/16) – 15 (19/32)
	Vinyl chloride, acryl resin, etc.		5 (3/16) – 30 (1-3/16)	Below 10 (3/8)	5 (3/16) – 20 (3/4)	Below 5 (3/16)	5 (3/16) – 30 (1-3/16)	3 (1/8) – 20 (3/4)	5 (3/16) – 20 (3/4)	Below 5 (3/16)	5 (3/16) – 15 (19/32)
	Foamed polyethylene, foamed styrol		10 (3/8) – 60 (2-11/32)	3 (1/8) – 30 (1-3/16)	5 (3/16) – 30 (1-3/16)	3 (1/8) – 30 (1-3/16)	10 (3/8) – 60 (2-11/32)	3 (1/8) – 40 (1-1/2)	5 (3/16) – 30 (1-3/16)	3 (1/8) – 30 (3/16)	5 (3/16) – 30 (1-3/16)
Pulp	Cardboard, corrugated paper		10 (3/8) – 60 (2-11/32)	3 (1/8) – 30 (1-3/16)			10 (3/8) – 60 (2-11/32)	3 (1/8) – 40 (1-1/2)			
	Hardboard				3 (1/8) – 30 (1-3/16)	Below 6 (1/4)			3 (1/8) – 30 (1-3/16)	Below 6 (1/4)	3 (1/8) – 30 (1-3/16)
	Fiberboard					Below 6 (1/4)					

Note

- The minimum cutting radius of No. 1 (Long), No. 21, No. 22 and No. 41 blades is 100 mm (4").
- No. 1 (Long), No. 11, No. 12, No. 15, No. 16, No. 21, No. 22, No. 95, No. 96 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 Model CJ 110V 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

**DOUBLE INSULATED - When servicing,
use only identical replacement parts.**

- For safe operation, see instruction manual.

**AVERTISSEMENT ● Lire avec attention la notice
d'utilisation.**

(2) For New Zealand

CAUTION

- Read thoroughly **HANDLING INSTRUCTIONS** before use.

10. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY

The circled numbers and the **[Bold]** numbers in the descriptions below correspond to the item numbers in the Parts Lists and exploded assembly diagram for the Model CJ 110V.

10-1. Disassembly

(1) Disassembly of the Base **[82]** (Fig. 3)

Remove the four M5 Nylock Flat Hd. Screws **[79]** and remove the Sub Base **[78]** from the Base **[82]**. Remove the two M4 x 8 Hex. Socket Hd. Bolts **[81]** together with the two Washers **[80]**. Holding the Base Handle **[77]** with a hand, loosen and remove the Base Bolt **[84]** with a flat head screwdriver. Now, the Base **[82]**, the Base Locker **[83]**, the Washer **[76]** and the Base Handle **[77]** can be removed from the Gear Cover **[51]**.

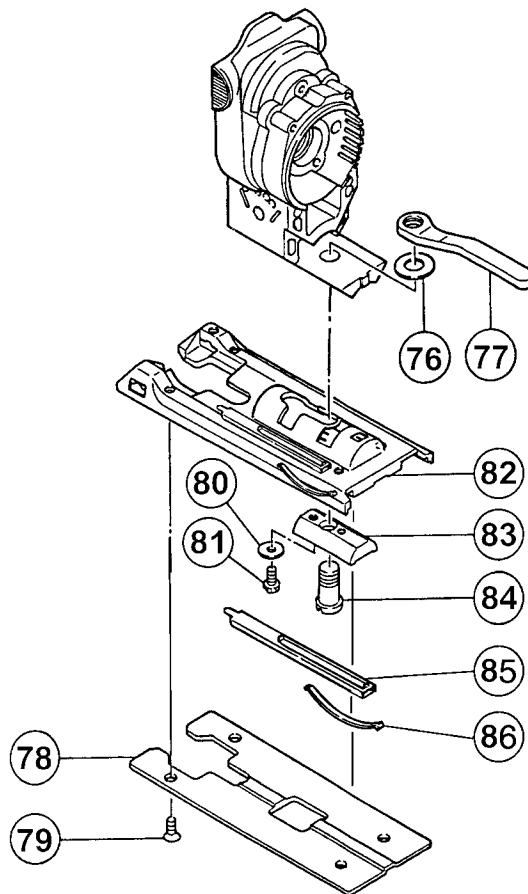


Fig. 3

(2) Disassembly of Handle (A) **[1]** and Handle (B) **[8]** (Fig. 4)

Remove the D4 x 20 Tapping Screw **[10]**, and disassemble the Tail Cover **[30]**. Then loosen the D4 x 25 Tapping Screw **[9]**, the two D4 x 20 Tapping Screws **[10]** and the two D4 x 16 Tapping Screws **[11]**. Handle (A) **[1]** and Handle (B) **[8]** can be removed.

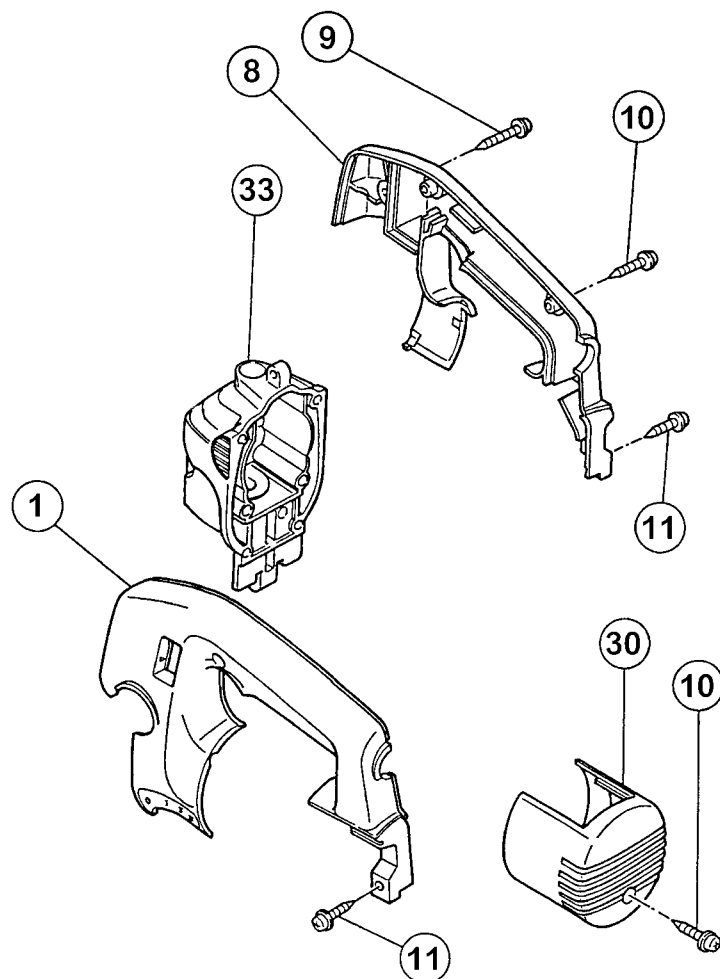


Fig. 4

(3) Removal of the Upper Cover [33] (Fig. 5)

Remove the Special Screw [53] and then remove the Chip Cover [54]. Remove the two M4 x 16 Machine Screws [32] and the two D4 x 65 Tapping Screws [31]. Then move the Upper Cover [33] in the forward direction to remove it together with the Plunger [58A] and related parts.

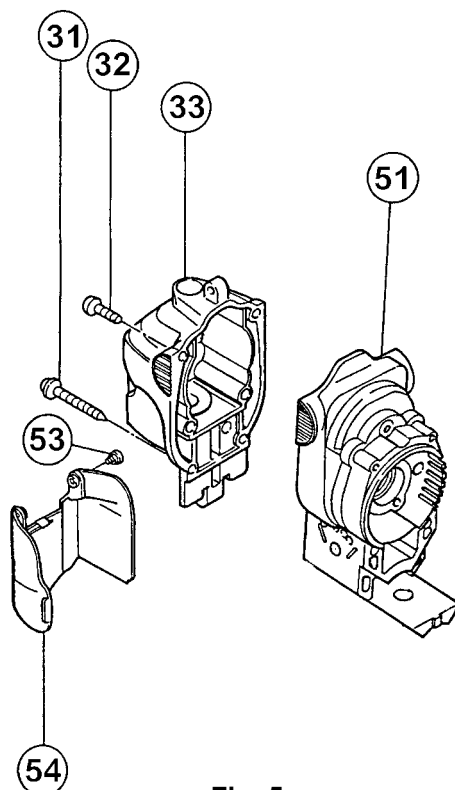


Fig. 5

- (4) Removal of the Plunger [58A] and the Plunger Holder Ass'y [35] from the Upper Cover [33] (Fig. 6)
- Remove the Rubber Cushion [37]. Remove the two M4 Seal Lock Flat Hd. Screws [66] and then remove the Connector [39]. Pull out the D6 x 47 Pin [36] from the Upper Cover [33]. Pull out the Plunger [58A] downward from the Upper Cover [33]. Remove the Plunger Holder Ass'y [35] together with the O-ring [57] from the Upper Cover [33]. Remove the Connector Holder [38] and the two Springs [34] from the Upper Cover [33].

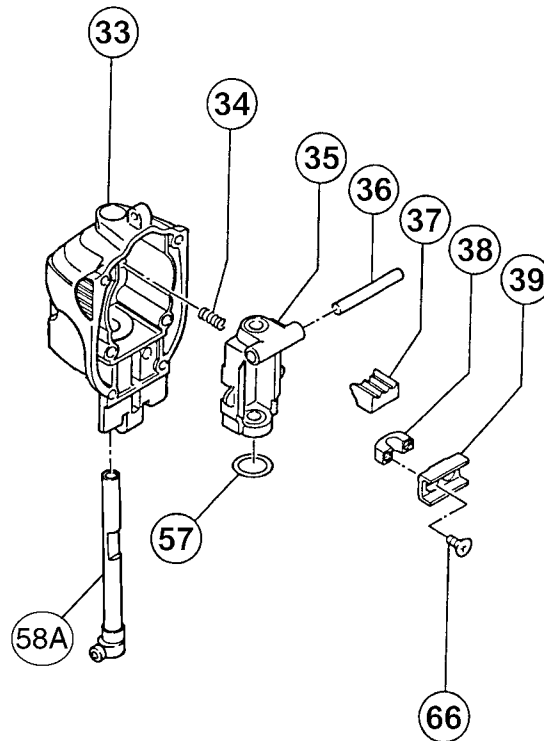


Fig. 6

- (5) Disassembly of the Guide Roller [56] from the Upper Cover [33] (Fig. 7)
- Extract the D5 x 19.8 Needle [55] which is press-fitted into the Upper Cover [33], and remove the Guide Roller [56].

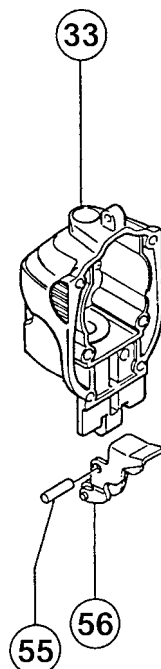


Fig. 7

(6) Disassembly of the Weight Holder [43] from the Gear Cover [51] (Fig. 8)

First, remove the D8 Retaining Ring [67] from the end of the Spindle [49]. Then, being very careful not to lose the Orbital Pin [70], pull out the Weight Holder [43] together with the Gear [47], the three Balance Weights [45], and related parts from the Gear Cover [51].

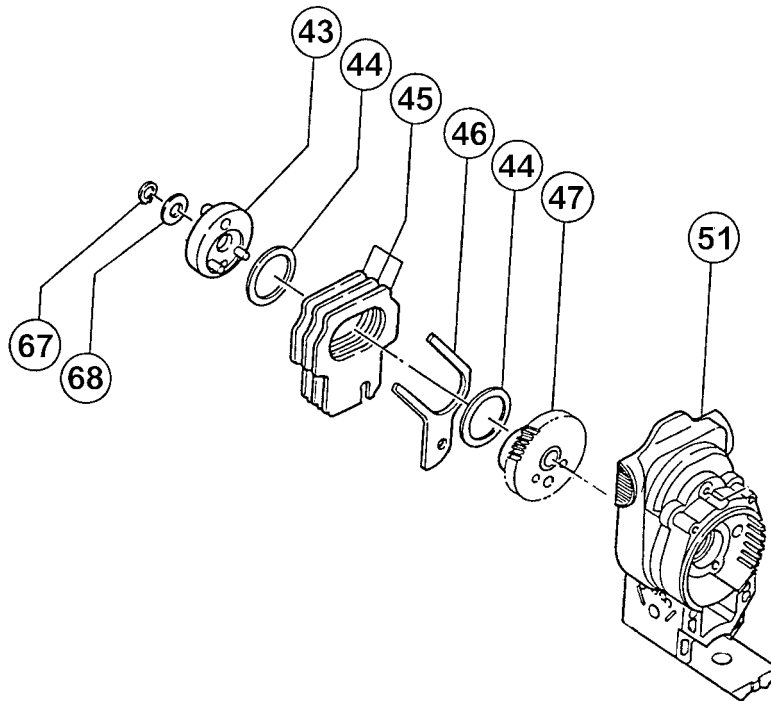


Fig. 8

(7) Disassembly of the Weight Holder [43] from the Gear Cover [51] (Fig. 9)

Remove the M5 x 12 Hex. Socket Hd. Bolt [69] from the Weight Holder [43]. Washer (A) [44], the three Balance Weights [45], the Orbital Cam [46], and then Washer (A) [44] can be removed in that order.

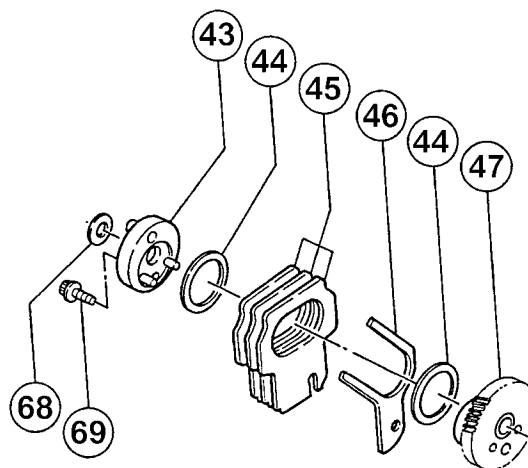


Fig. 9

(8) Disassembly of the Gear Cover [51] and the Housing [25] (Fig. 10)

Prior to disassembly, remove the two Carbon Brushes [29] as described in the Instruction Manual. Remove the two D4 x 30 Tapping Screws [50] from inside the Gear Cover [51]. Then move the Gear Cover [51] toward the front to remove it together with the Armature [19].

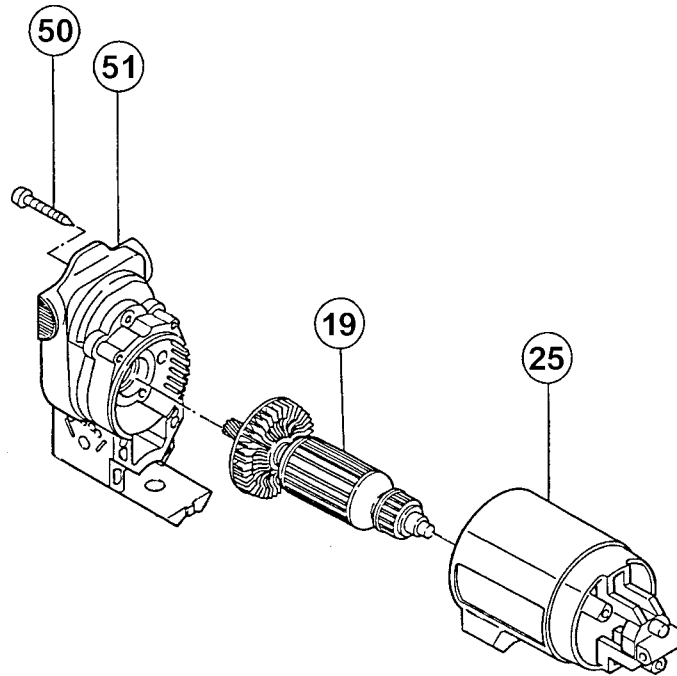


Fig. 10

(9) Disassembly of the Change Knob [72] from the Gear Cover [51] (Fig. 11)

Being very careful not to lose Spring (C) [73] and the D3.97 Steel Ball [74] inside the Change Knob [72], remove the D5 Retaining Ring (E-Type) [75] from the end of the Change Knob [72], and remove the Change Knob from the Gear Cover [51].

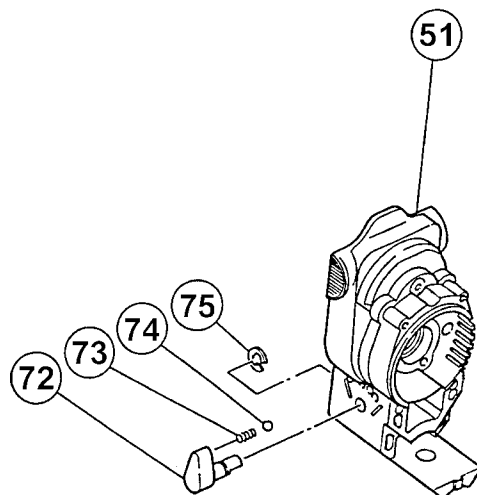


Fig. 11

(10) Removal of the Carbon Brushes [29] from the Housing [25]

For removal of the Carbon Brushes [29], please refer to the Handling Instructions.

(11) Removal of Wiring Block (C) [28] (Fig. 12)

Remove the two D4 x 16 Tapping Screws [15]. Wiring Block (C) [28] can then be removed by pulling it toward the rear while holding the Housing [25].

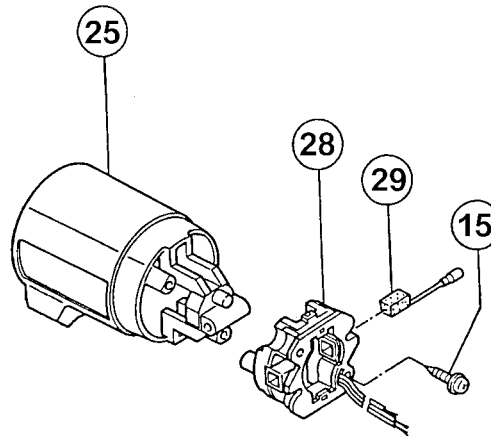


Fig. 12

10-2. Reassembly

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

(1) Installation of the Carbon Brushes [29]

For installation of the Carbon Brushes [29], please refer to the Instruction Manual.

(2) Assemble Spring (C) [73] and the D3.97 Steel Ball

[74] in the Change Knob [72] as shown in Fig. 13.

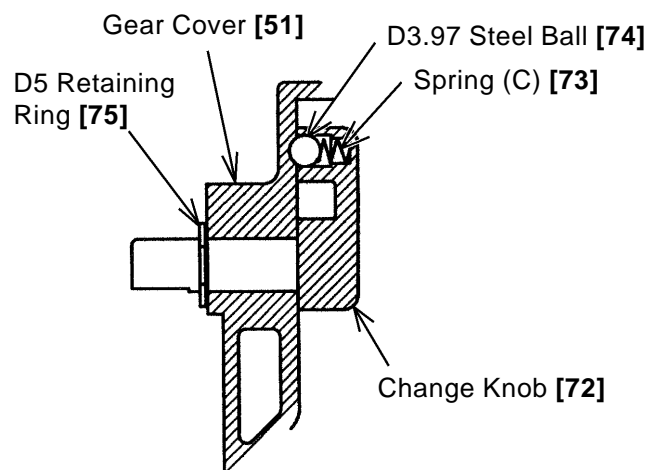


Fig. 13

- (3) Carefully ensure that two Washers (A) [44], the Orbital Cam [46], and the three Balance Weights [45] are assembled as shown in Fig. 14.

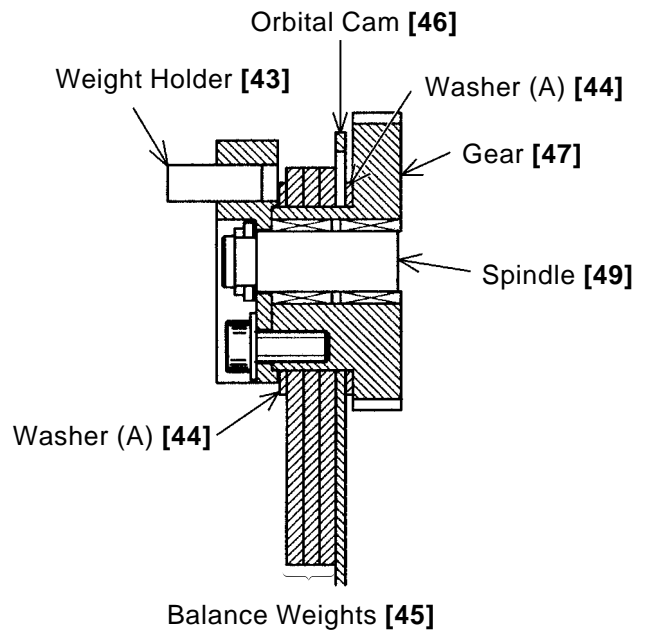


Fig. 14

- (4) During reassembly, be very careful not to forget to install the Felt [71] at the lower portion of the Orbital Cam [46], as shown in Fig. 15.

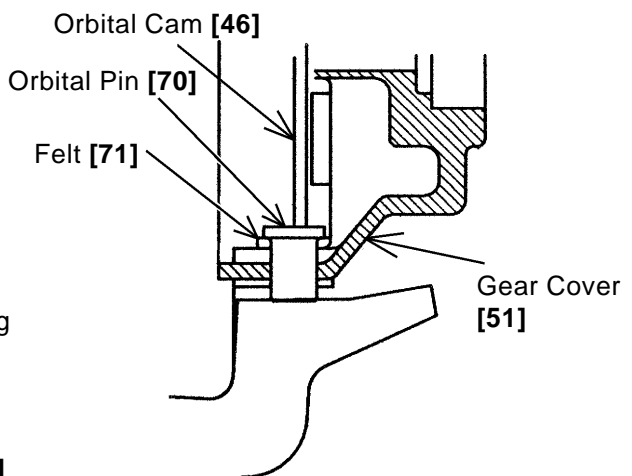


Fig. 15

- (5) Grease

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

- the teeth of the Gear [47]
- the slide contact portions of the Balance Weights [45]
- inside of the Needle Bearing [42]
- inside of the Connector [39]
- the slide contact portions of the Plunger [58A]
- the Plunger Holder Ass'y [35] surfaces in sliding contact with the Connector [39]

- (6) When installing the Plunger Holder Ass'y [35]

in the Upper Cover [33], ensure that the O-Ring [57] is properly mounted at the lower portion of the Plunger Holder Ass'y [35], as shown in Fig. 16. Also, ensure that the two Springs [34] are properly mounted between the Plunger Holder Ass'y [35] and the Upper Cover [33] (Fig. 16).

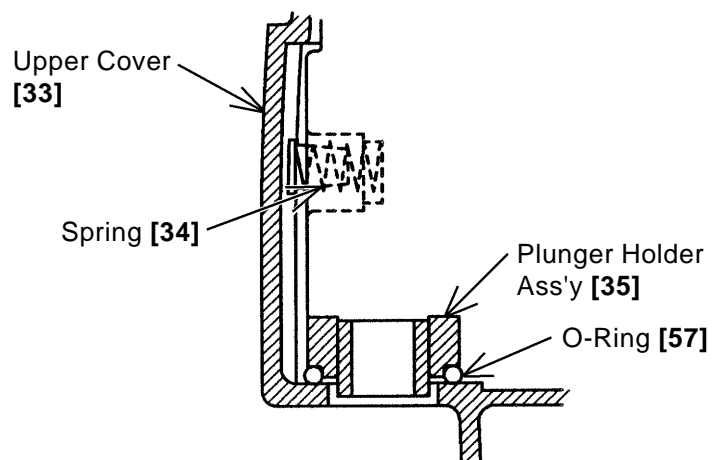


Fig. 16

- (7) After confirming that the Packing [40] and the Rubber Cushion [37] are properly installed, fit the Upper Cover [33] to the Gear Cover [51] so that the Connecting Piece [41] properly enters the Connector [39] (Fig. 17).

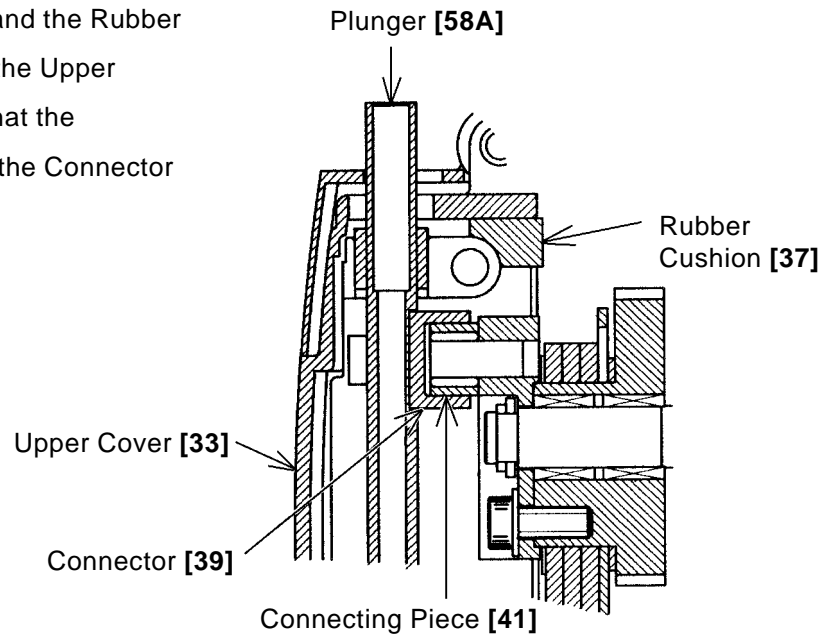


Fig. 17

- (8) Install Handle (A) [1] and Handle (B) [8] so that their pawls (two on Handle (A), one on Handle (B)) are properly inserted into the grooves provided on the Gear Cover [51] (Fig. 18).

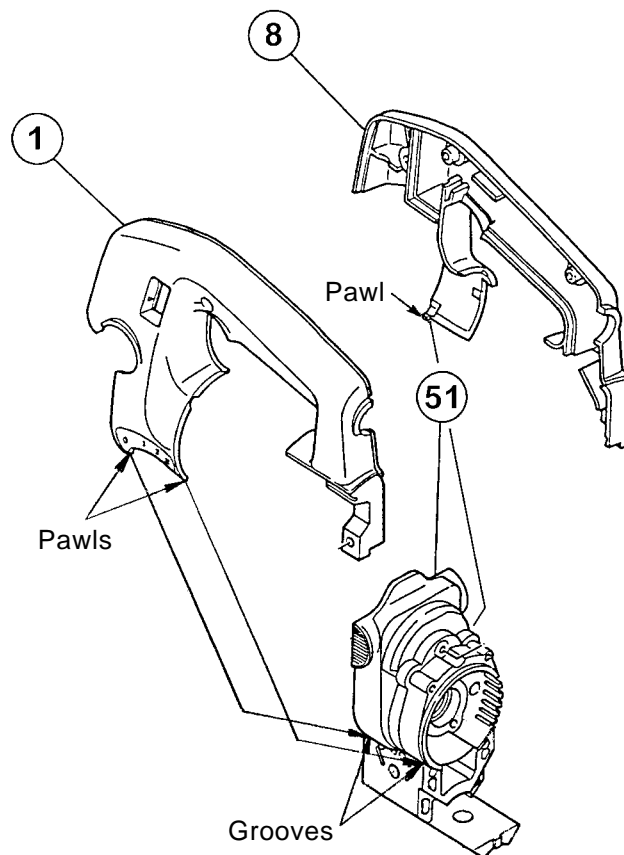


Fig. 18

(9) Fix the Base Handle [77] by tightening the Base Bolt [84] as shown in Fig. 19.

Mount the Base [82] to the main body positioning the handle at the back.

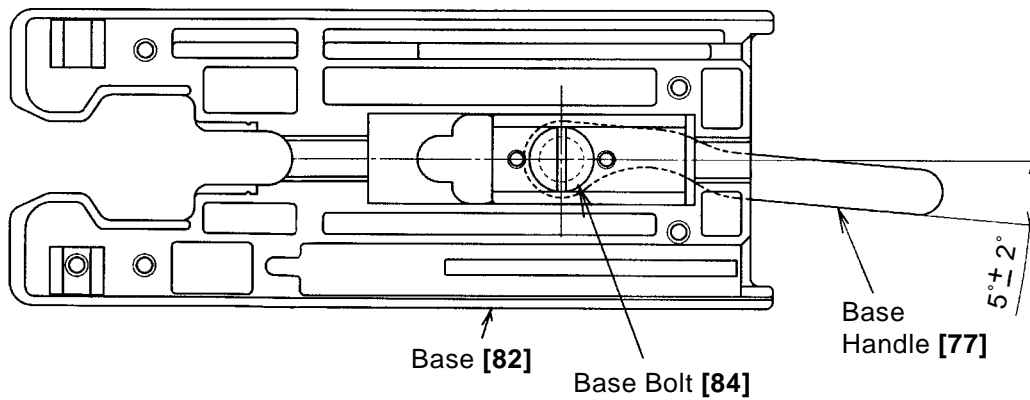


Fig. 19

(10) Tightening Torque of Screws and Bolts:

• M3 Special Screw [53]	$0.8 \pm 0.2 \text{ N}\cdot\text{m}$ [$8 \pm 2 \text{ kgf}\cdot\text{cm}$, $0.6 \pm 0.1 \text{ ft}\cdot\text{lb}$]
• D4 Tapping Screw [9][10][11][15][31][50]	$1.96 \pm 0.49 \text{ N}\cdot\text{m}$ [$20 \pm 5 \text{ kgf}\cdot\text{cm}$, $1.4 \pm 0.4 \text{ ft}\cdot\text{lbs}$]
• M4 x 16 Machine Screw [32]	$2.45 \pm 0.49 \text{ N}\cdot\text{m}$ [$25 \pm 5 \text{ kgf}\cdot\text{cm}$, $1.8 \pm 0.4 \text{ ft}\cdot\text{lbs}$]
• M4 x 10 Seal Lock Flat Hd. Screw [66]	$1.96 - 2.94 \text{ N}\cdot\text{m}$ [$20 - 30 \text{ kgf}\cdot\text{cm}$, $1.4 - 2.2 \text{ ft}\cdot\text{lbs}$]
• M4 x 6 Hex. Socket Hd. Bolt [52]	$2.94 - 4.41 \text{ N}\cdot\text{m}$ [$30 - 45 \text{ kgf}\cdot\text{cm}$, $2.2 - 3.3 \text{ ft}\cdot\text{lbs}$]
• M4 x 8 Hex. Socket Hd. Bolt [81]	$4.41 \pm 0.3 \text{ N}\cdot\text{m}$ [$45 \pm 3 \text{ kgf}\cdot\text{cm}$, $3.3 \pm 0.2 \text{ ft}\cdot\text{lbs}$]
• M5 x 10 Nylock Flat Hd. Screw [79]	$1.96 - 2.94 \text{ N}\cdot\text{m}$ [$20 - 30 \text{ kgf}\cdot\text{cm}$, $1.4 - 2.2 \text{ ft}\cdot\text{lbs}$]
• M5 x 12 Hex. Socket Hd. Bolt [69]	$3.92 - 5.88 \text{ N}\cdot\text{m}$ [$40 - 60 \text{ kgf}\cdot\text{cm}$, $2.9 - 4.3 \text{ ft}\cdot\text{lbs}$]
• Base Bolt [84]	$7.84 \pm 0.49 \text{ N}\cdot\text{m}$ [$80 \pm 5 \text{ kgf}\cdot\text{cm}$, $5.8 \pm 0.4 \text{ ft}\cdot\text{lbs}$]

10-3. Wiring Diagrams

For models without a noise suppressor, the wiring is in accordance with Fig. 20. For models with a noise suppressor, the wiring is in accordance with Fig. 21.

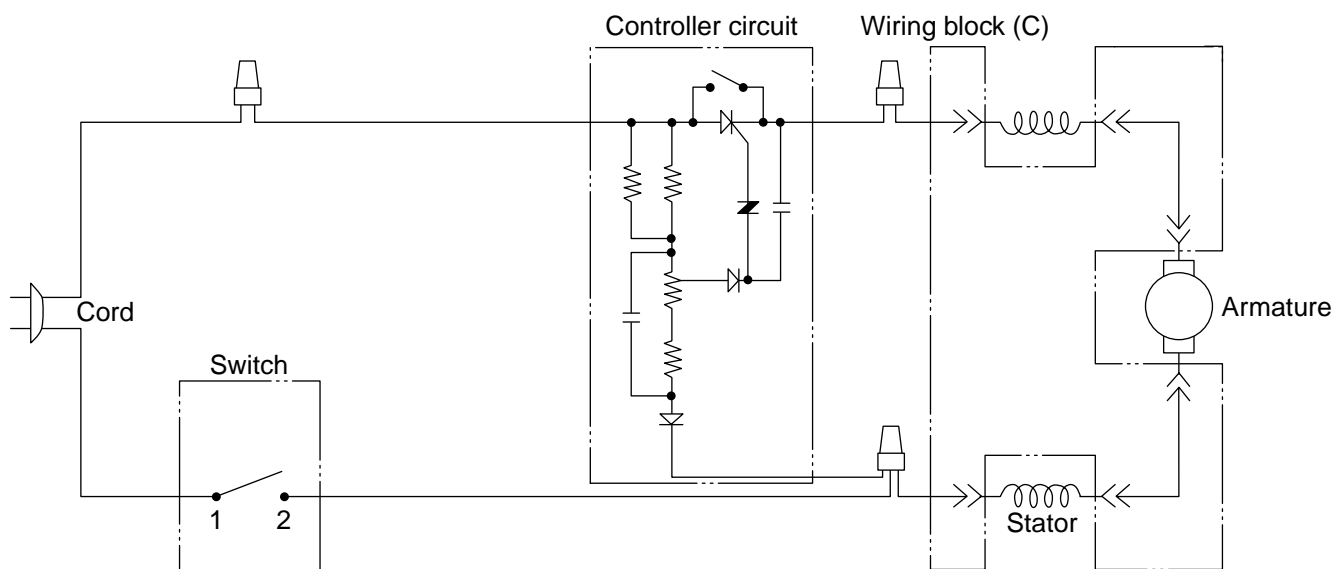


Fig. 20 Without noise suppressor

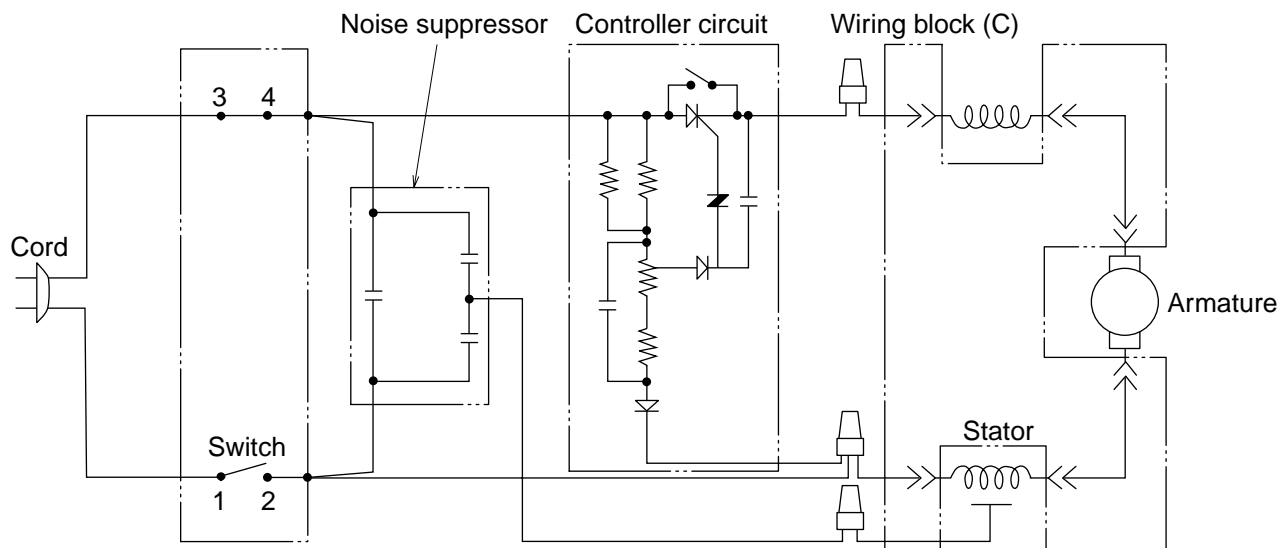


Fig. 21 With noise suppressor

10-4. Insulation Tests

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

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

Dielectric strength:

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

AC 2500 V/1 minute, with no abnormalities..... 115 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

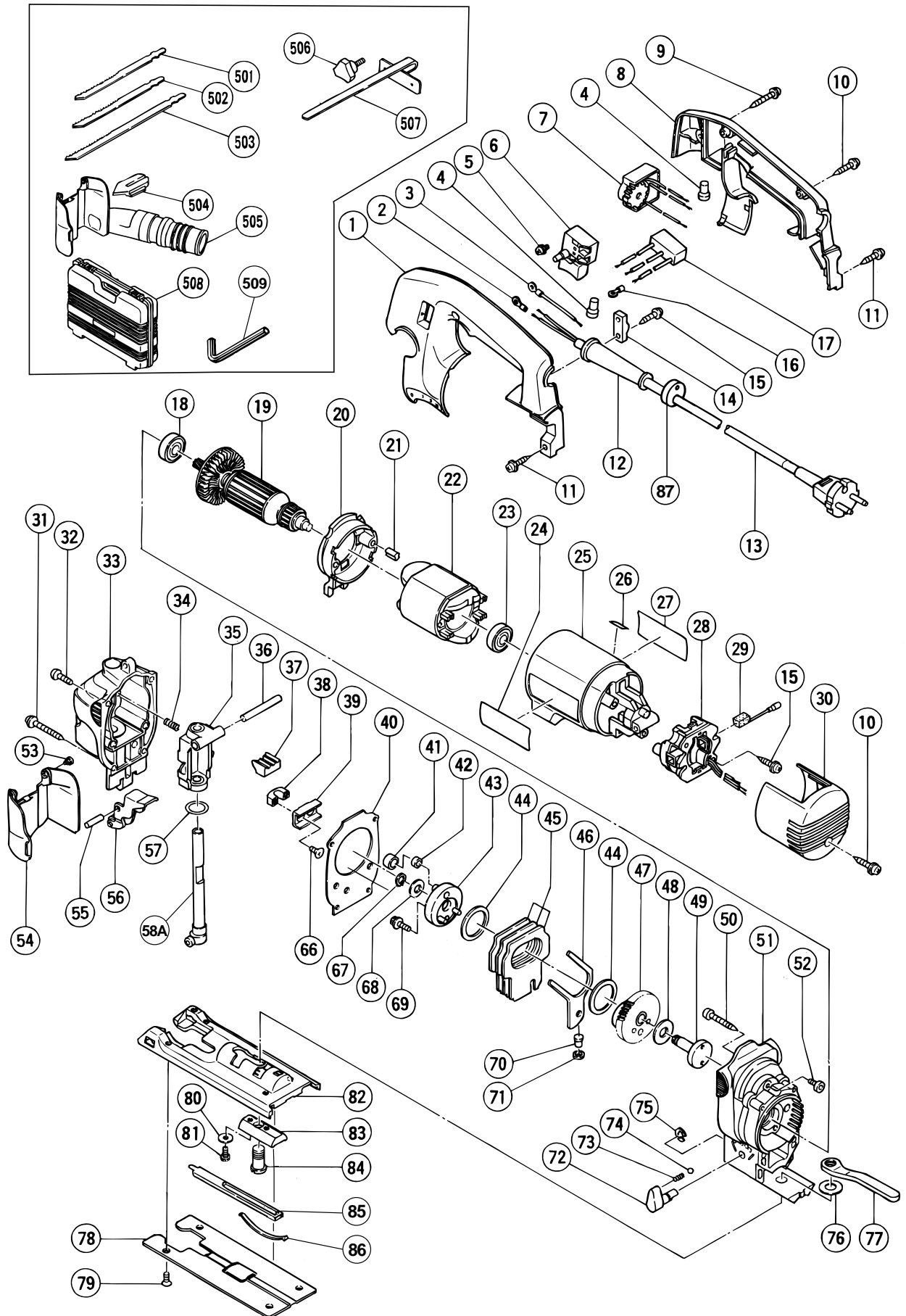
After no-load operation for 30 minutes, the no-load current value should be as specified below at a frequency of 50/60 Hz.

Voltage (V)	110	115	230
Current (A) Max.	2.7	2.6	1.3

11. STANDARD REPAIR TIME (UNIT) SCHEDULES

MODEL	Variable		10	20	30	40	50	60 min.
	Fixed							
CJ 110V		Work Flow						

Assembly Diagram for CJ 110V



PARTS
CJ 110V

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
1	305-800	HANDLE (A)	1		
2	980-063	TERMINAL	2	FOR CORD	
3	305-783	INTERNAL WIRE	1		
4	959-140	CONNECTOR 50091 (10 PCS.)	3		
5	305-499	MACHINE SCREW (W/WASHER) M3.5X6	4		
6	305-791	SWITCH (C) (2P SCREW TYPE) W/LOCK	1		
* 7	305-789	CONTROLLER CIRCUIT 220V-240V	1		
* 7	305-790	CONTROLLER CIRCUIT 110V-115V	1		
8	305-801	HANDLE (B)	1		
9	307-028	TAPPING SCREW (W/FLANGE) D4X25 (BLACK)	1		
10	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	3		
11	930-446	TAPPING SCREW (W/WASHER) D4X16	2		
12	953-327	CORD ARMOR D8.8	1		
* 13	500-234Z	CORD	1	(CORD ARMOR D8.8)	
* 13	500-439Z	CORD	1	(CORD ARMOR D8.8) FOR NZL	
* 13	500-436Z	CORD	1	(CORD ARMOR D8.8) FOR GBR	
* 13	500-395Z	CORD	1	(CORD ARMOR D8.8) FOR SUI	
* 13	500-432Z	CORD	1	(CORD ARMOR D8.8) FOR USA	
* 13	500-231Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (110V)	
14	960-266	CORD CLIP	1		
15	305-812	TAPPING SCREW (W/FLANGE) D4X16 (BLACK)	4		
16	980-063	TERMINAL	2	FOR NOISE SUPPRESSOR	
17	994-273	NOISE SUPPRESSOR	1		
18	608-DDW	BALL BEARING 608DDW	1		
* 19	360-277C	ARMATURE 110V-115V	1		
* 19	360-277E	ARMATURE 220V-230V	1		
20	305-782	FAN GUIDE ASS'Y	1	INCLUD.21	
21	994-343	RUBBER BUSHING	2		
* 22	340-249C	STATOR 110V-115V	1		
* 22	340-249E	STATOR 220V-230V	1		
23	608-DDM	BALL BEARING 608DDC2PS2L	1		
24		HITACHI LABEL	1		
25	305-784	HOUSING	1		
26		LABEL (CE MARK) (A)	1		
27		NAME PLATE	1		
* 28	305-785	WIRING BLOCK (C)	1		
* 28	305-786	WIRING BLOCK (C)	1	FOR USA	
29	999-075	CARBON BRUSH (AUTO STOP TYPE) (1 PAIR)	2		
30	305-799	TAIL COVER	1		
31	305-736	TAPPING SCREW (W/FLANGE) D4X65	2		
32	949-219	MACHINE SCREW M4X16 (10 PCS.)	2		
33	316-109	UPPER COVER	1		
34	305-752	SPRING	2		
35	316-110	PLUNGER HOLDER ASS'Y	1	INCLUD.57	
36	961-181	PIN D6X47	1		
37	305-751	RUBBER CUSHION	1		
38	316-112	CONNECTOR HOLDER	1		
39	316-111	CONNECTOR	1		
40	305-743	PACKING	1		
41	940-916	CONNECTING PIECE	1		
42	940-917	NEEDLE BEARING NTN K6X9X8T2	1		

CJ 110V

*

STANDARD ACCESSORIES

CJ 110V

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
501		BLADE NO.42	1		
502		BLADE NO.46	1		
503		BLADE NO.41	1		
504	306-363	TABLE INSERT (5 PCS.)	1		
* 505	316-126	DUST COLLECTOR	1	FOR GBR,FRG	
* 506	307-767	KNOB SCREW M5X10	1	FOR FRA	
* 507	305-955	GUIDE ASS'Y	1	INCLUD.506 FOR FRA	
508	317-262	CASE	1		
509	943-277	HEX. BAR WRENCH 3MM	1		

OPTIONAL ACCESSORIES

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
601	879-336	JIG SAW BLADES NO.11 (5 PCS.)	1		
602	879-337	JIG SAW BLADES NO.12 (5 PCS.)	1		
603	879-338	JIG SAW BLADES NO.15 (5 PCS.)	1		
604	879-339	JIG SAW BLADES NO.16 (5 PCS.)	1		
605	879-340	JIG SAW BLADES NO.21 (5 PCS.)	1		
606	879-341	JIG SAW BLADES NO.22 (5 PCS.)	1		
607	950-482	JIG SAW BLADES NO.95 FOR STAINLESS(5 PCS.)	1		
608	950-480	JIG SAW BLADES NO.96 FOR STAINLESS(5 PCS.)	1		
609	963-400	JIG SAW BLADES NO.97 FOR STAINLESS(5 PCS.)	1		
610	963-390	JIG SAW BLADES (A) NO.11 (10 PCS.)	1		
611	963-391	JIG SAW BLADES (A) NO.12 (10 PCS.)	1		
612	963-392	JIG SAW BLADES (A) NO.15 (10 PCS.)	1		
613	963-393	JIG SAW BLADES (A) NO.16 (10 PCS.)	1		
614	963-394	JIG SAW BLADES (A) NO.21 (10 PCS.)	1		
615	963-395	JIG SAW BLADES (A) NO.22 (10 PCS.)	1		
616	950-483	JIG SAW BLADES NO.95 FOR STAINLESS(10 PCS.)	1		
617	950-481	JIG SAW BLADES NO.96 FOR STAINLESS(10 PCS.)	1		
618	879-227	JIG SAW BLADES (LONG) 160MM (3 PCS.)	1		
620	305-955	GUIDE ASS'Y	1		
621	305-956	CIRCULAR GUIDE ASS'Y	1		
622	316-126	DUST COLLECTOR	1		
623		BENCH STAND (TR12-B)	1		