Hitachi Power Tools

TECHNICAL DATA AND SERVICE MANUAL

LIST No. E525
Jun. 2010

PRODUCT NAME

Hitachi Jig Saw

Model 90 mm (3-1/2") CJ 90VST

C

MARKETING OBJECTIVE

The new power jig saw Model CJ 90VST is made less expensive than existing jig saw Model CJ 110MV by limiting its functions.

(1) Fastest cutting speed among jig saws using a high-power motor
(2) Blade holder of the quick-fit chuck type with stronger blade-holding force
(3) 4-stage orbital action

With the features above, the new jig saw will be released in order to increase its market share and sales.

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, soft construction materials
- Cutting stainless steel sheets

SELLING POINTS

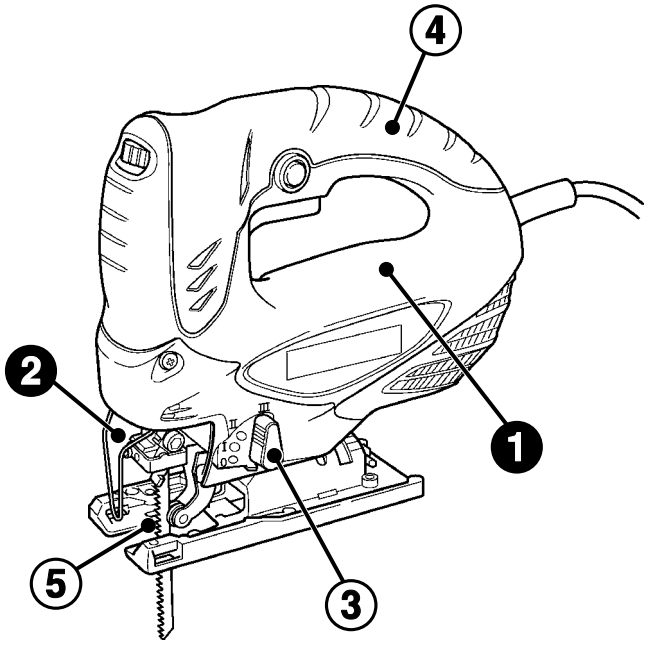
[NEW FEATURES]

❶ Fastest cutting speed among jig saws using a high-power motor
❷ Tool-less blade changing system

[SAME FEATURES AS THE CONVENTIONAL MODELS]

③ 4-stage orbital action
④ Soft grip handle
⑤ Blower mechanism for blowing away cutting dust

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.



HITACHI

Hitachi Koki Co., Ltd.
International Sales Division

REMARK:

● For more information about HANDLING INSTRUCTIONS, visit our website at:

http://www.hitachi-koki.com/manual_view_export/

● 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	GST75BE
C	RYOBI	EJS-600QEO
D	RYOBI	JS550LK

CONTENTS

SELLING POINTS

❶ Fastest cutting speed among jig saws using a high-power motor

Comparison of power input

Item \ Model	**CJ 90VST**	(Reference) CJ 110MV	B	C	D
Power input	705 W (*630 W)	720 W	650 W	600 W	(630 W)

* 120V and 127V model

Comparison of cutting speed (The cutting speed greatly depends on cutting conditions.)

● Material: Wood (24 mm thick), Blade: No.41, Orbital position: III, Thrust power: 1.5 (kg)

Maker	Model	Cutting speed (cm/min) 0 50 100 150 200
HITACHI	**CJ 90VST**	187
	CJ 110MV	231
B		117
C		68
D		165

● Material: Wood (49 mm thick), Blade: No.41, Orbital position: III, Thrust power: 2.0 (kg)

Maker	Model	Cutting speed (cm/min) 0 25 50 75 100
HITACHI	**CJ 90VST**	67
	CJ 110MV	85
B		65
C		16
D		55

● Material: Mild steel (2 mm thick), Blade: No.16, Orbital position: 0, Thrust power: 2.0 (kg)

Maker	Model	Cutting speed (cm/min) 0 10 20 30 40 50
HITACHI	**CJ 90VST**	44
	CJ 110MV	39
B		40
C		22
D		39

● Material: Stainless steel (3 mm thick), Blade: No.95,Orbital position: 0, Thrust power: 2.0 (kg)

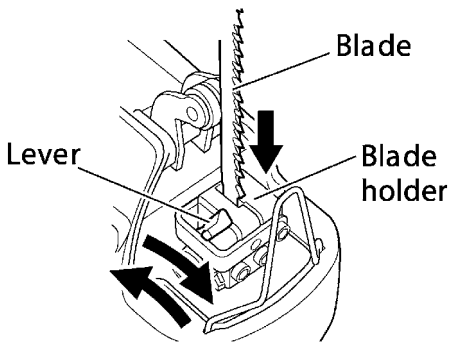
Maker	Model	Cutting speed (cm/min) 0 2 4 6 8 10
HITACHI	**CJ 90VST**	3.5
	CJ 110MV	5.2
B		10
C		3.2
D		4.9

❷ Tool-less blade changing system

The blade is easily replaceable because it can be attached and detached without using such tools as a spanner and wrench.

The blade can be attached and detached by simply pulling the lever. Pulling the lever pushes back the holder pin (via a built-in spring) that holds the blade in place. This allows the blade to be easily attached and detached.

The only usable competitive blade is BOSCH's blade having an attaching portion up to 1.7 mm thick or an equivalent blade of the same shape.



③ 4-stage orbital action

The Model CJ 90VST is equipped with an orbital mechanism that allows the blade to move up and down, and back and forward. This mechanism allows the blade to cut deeply into wood and other soft materials, and also discharges cutting chips well to achieve speedy cutting. For details, see “Blade movement” on page 6.

④ Soft grip handle

The handle of the Model CJ 90VST is completely covered with soft-touch elastomer (a rubber-like soft resin). It is slip resistant and securely fits in into palm of even a sweaty hand.

⑤ Blower mechanism for blowing away cutting dust

The Model CJ 90VST is equipped with a dust blower mechanism that blows off cutting dust into the air from the motor cooling fan.

Refer to the Technical Data and Service Manual of the current Model CJ 110MV for the following:

CJ 110MV / List No. E511

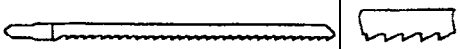
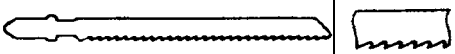
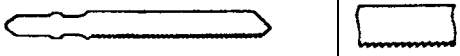
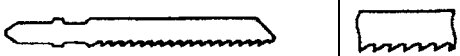
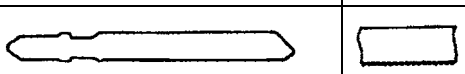
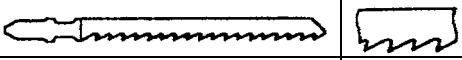
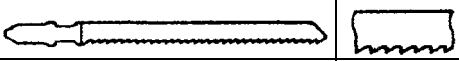
SPECIFICATIONS

1. Specifications

Item \ Model		CJ 90VST
Capacity	Max. cutting size	Wood 90 mm (3-1/2")
		Mild Steel 8 mm (5/16")
No-load speed		850 to 3,000 min^{-1}
Type of power source		Single-phase AC 50/60 Hz
Voltage and current		110 V 6.7 A / 120 V 5.5 A / 127 V 5.2 A / 220 V 3.3 A / 230 V 3.2 A / 240 V 3.0 A
Power input		705 W (120 V, 127 V model: 630 W)
Length of stroke		20 mm (3/4")
Min. cutting radius		25 mm (1")
Max. cutting radius		45° (right and left)
Type of motor		Single-phase AC commutator motor
Insulation method		Double insulation
Type of switch		Trigger switch
Enclosure		Housing ---------- Glass fiber reinforced nylon resin (black) and thermoplastic elastomer (green) Side cover --------- Aluminum alloy die casting (painted silver) Base ---------- Aluminum alloy die casting (Ni-plated)
Weight	Net	2.2 kg (4.9 lbs) (without cord)
	Gross	3.5 kg (7.7 lbs) (with plastic case)
Overall length, overall height and overall length		228 mm x 202 mm x 66 mm (8-63/64" x 7-61/64" x 2-41/64")
Length of cord		2.5 m (8.2 ft.)
Standard accessories		● Blade for wood (No. 41) ----------1 ● 3 mm hex. bar wrench ----------1 ● Carrying Case ----------1

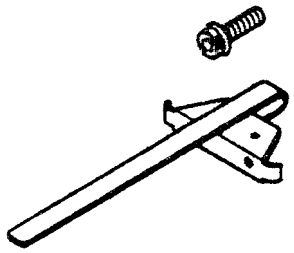
2. Optional Accessories

(1) Blades

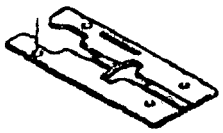
Blade shape	Application	Blade No.	Pitch	Code No.	Per pkg.
	Wood	No.1 (Super)	6	321878	3
	Wood, pulp, synthetic resin	No.11	8	879336	5
		No.12	20	879337	5
	Steel pulp, nonferrous metal, synthetic resin	No.15	8	879338	5
		No.16	25	879339	5
	Wood, pulp, synthetic resin	No.21	6	879340	5
		No.22	10	879341	5
	Stainless steel	No.97	21	963400	5

NOTE: Standard blade No. 41 and optional blade No. 21 have the same shape.

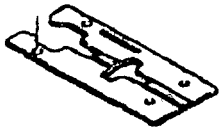
(2) Guide

	Code No.
	321593

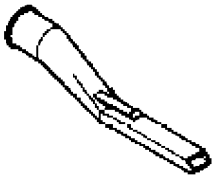
(3) Sub base (A) (steel)

	Code No.
	321992

(4) Sub base (B) (resin)

	Code No.
	321993

(5) Dust collector

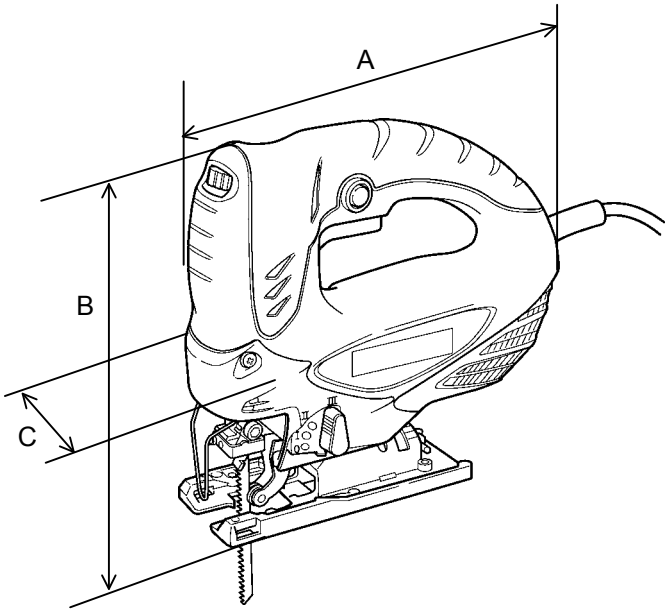
	Code No.
	321591

COMPARISON WITH SIMILAR PRODUCTS

1. Comparison of Specifications

(Superior specifications:)

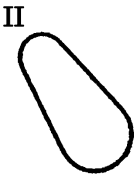
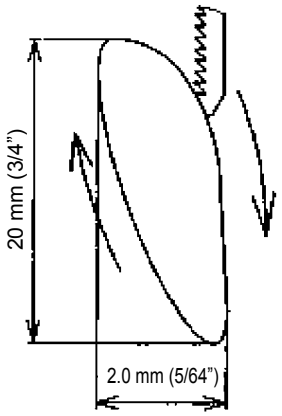
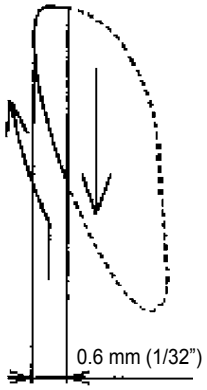
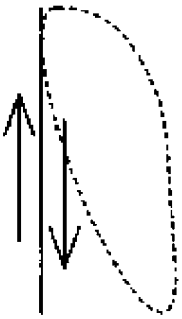
Item \ Maker / Model		HITACHI CJ 90VST	(Reference) CJ 110MV	B	C	D
Cutting capacity	Wood	90 mm (3-1/2")	110 mm (4-5/16")	90 mm (3-1/2")	75 mm (3")	75 mm (3")
	Mild steel	8 mm (5/16")	10 mm (3/8")	10 mm (3/8")	8 mm (5/16")	Not available
Length of stroke		20 mm (3/4")	26 mm (1")	2 3 mm (29/32")	20 mm (3/4")	25 mm (1")
Power input ( ): for 120V and 127V model		705 W (630 W)	720 W	650 W	600 W	(630 W)
No-load speed	min^{-1} (/min)	850 to 3,000	850 to 3,100	500 to 3,100	0 to 2,600	0 to 3,200
Orbital action		Provided	Provided	Provided	Provided	Provided
Tool-less blade attachment		Provided	Provided	Provided	Provided	Provided
Soft grip handle		Provided	Provided	Provided	Provided	Provided
Material of base		Aluminum	Aluminum	Steel plate	Aluminum + Resin plate	Aluminum + Steel plate
Dimension	Length (A)	228 mm (8-63/64")	246 mm (9-41/64")	232 mm (9-9/64")	225 mm (8-55/64")	238 mm (9-3/8")
	Height (B)	202 mm (7-61/64")	206 mm (8-7/64")	204 mm (8-1/32")	219 mm (8-5/8")	202 mm (7-61/64")
	Width (C)	66 mm (2-41/64")	68 mm (2-11/16")	80 mm (3-5/32")	70 mm (2-3/4")	80 mm (3-5/32")
Weight (excluding cord)		2.2 kg (4.9 lbs)	2.2kg (4.9 lbs)	2.3 kg (5.1 lbs)	2.2 kg (4.9 lbs)	2.7 kg (6.0 lbs)
No-load noise level		84.5 dB	86 dB	84 dB	87 dB	87 dB



ORBITAL MECHANISM AND BLADE

1. Blade Movement

In the Model CJ 90VST, the orbital mechanism moves the blade up and down, and back and forward. The amount of fore-and-aft blade movement can be adjusted by simply switching the change knob to any of the four settings. The table below shows the modeled orbits of blade movement at each orbital position (change knob position).

	III	II	I	0
Orbital position				
Blade edge movement				 Perpendicular movement only

2. Orbital Position Selection

Selecting the most appropriate orbital position for each cutting job is essential to achieve the best possible cutting efficiency. However, as the best orbital position depends on workpiece hardness and thickness, the desired finish of the cut surface, and other factors, setting a single, simple standard for selecting the best orbital position is not practical. Table 1 below can be used as a general guide for the appropriate selection of orbital position based on various factors.

Table 1 General guide for appropriate selection of orbital position

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 finish	Rough finish acceptable (splintering, chipping acceptable)	Fine finish
Material stability	Unstable	Very stable

* Set the orbital position to "0" independently of the cutting speed when cutting a small arc or curved line by using a guide (sold separately).

3. Blades

Proper blade selection is very important for achieving maximum performance of the Model CJ 90VST. The table below can be used as a handy reference for selecting the optimum blade based on the type and thickness of material to be cut.

Material to be cut	Blade / Material quality	No.1 (Long)	No. 1 (Super Long)	No. 11	No. 12, 42	No. 15	No. 16, 46	No. 21	No. 22	No. 41	No. 97	123X
		Thickness of material (mm)										
Lumber	General lumber	Below 90	Below 90	10 to 55	Below 20			10 to 55	5 to 40	10 to 65		
	Plywood			5 to 30	Below 10			5 to 30	3 to 20			
Iron plate	Mild steel plate					3 to 6	Below 3				2 to 5	1.5 to 8
	Stainless steel plate										1.5 to 2.5	
Nonferrous metal	Aluminum copper, brass					3 to 12	Below 3				Below 5	
	Aluminum sash					Height up to 25					Height up to 25	Height up to 30
Plastics	Phenol resin, melamin resin, etc.					5 to 20	Below 6	5 to 15	Below 6		5 to 15	
	Vinyl chloride, acryl resin, etc.			5 to 30	Below 10	5 to 20	Below 5	5 to 30	3 to 20		5 to 15	
	Foamed polyethylene, foamed styrol			10 to 55	3 to 25	5 to 25	3 to 25	10 to 55	3 to 40		5 to 25	
Pulp	Card board, corrugated paper			10 to 55	3 to 25			10 to 55	3 to 40			
	Hardboard					3 to 25	Below 6				3 to 25	
	Fiberboard						Below 6					

NOTE: The minimum cutting radius of the No. 1 (Long), No. 1 (Super long), No. 21, No. 22, and No. 41 blades is 100 mm.

PRECAUTIONS ON SALES PROMOTION

1. Safety Instructions

In the interest of promoting the safest and most efficient use of the Model CJ 90VST Jig Saw by all of our customers, it is very important when concluding a sale that salesperson carefully ensure that the buyer seriously recognizes the importance of the Handling Instructions, and fully understands the precautions listed on the Caution Plate attached to each tool.

A. 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 on the use of electric power tools, and specific precautions and suggestions on the use of the jig saw are listed in the Handling Instructions to enhance the safe, efficient use of the tool by the customer. Salespersons must be thoroughly familiar with the Handling Instructions in order to offer appropriate guidance to the customer during sales promotion activities.

B. Name Plate

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

[For Australia and New Zealand]

CAUTION
● Read thoroughly HANDLING INSTRUCTIONS before use.

[For the USA and Canada]

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

[For China]

注意：使用前请仔细阅读使用说明书

[For Mexico and Panama]

ADVERTENCIA
●Lea las instrucciones de manejo antes de usar.

[For Taiwan]

注意 ● 使用前請詳讀使用說明書

[For Europe and Russia]

REPAIR GUIDE

Before attempting disassembly or reassembly, always remember to turn off the power switch and disconnect the plug from the power source outlet. And be sure to remove the blade to prevent damage to its cutting edge or personal injury due to the blade.

1. Precautions on Disassembly and Reassembly

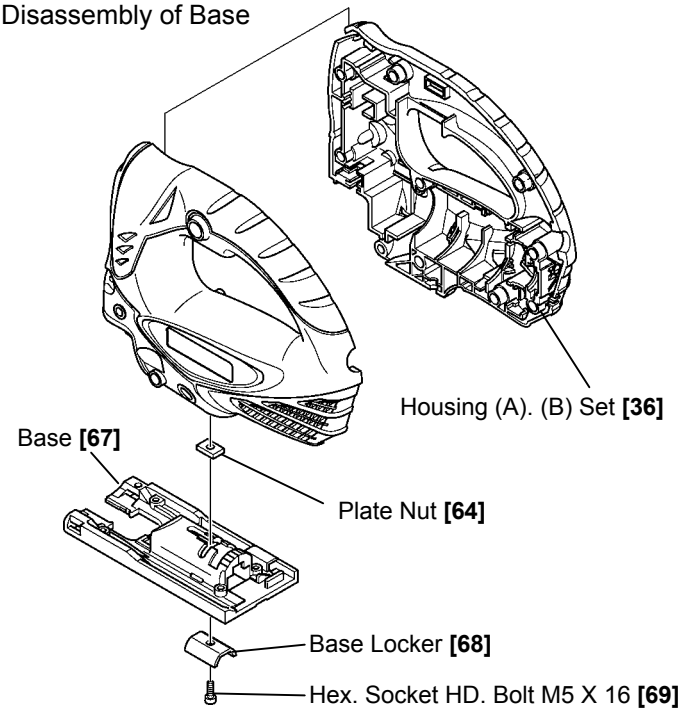
[Bold] numbers in the descriptions below correspond to numbers in the Parts List and exploded assembly diagrams for the Model CJ 90VST.

Disassembly

1. Disassembly of Base

Loosen Hex. Socket HD. Bolt M5 X 16 **[69]** and remove it together with Base Locker **[68]** from Plate Nut **[64]** mounted on Housing (A).(B) Set **[36]**.

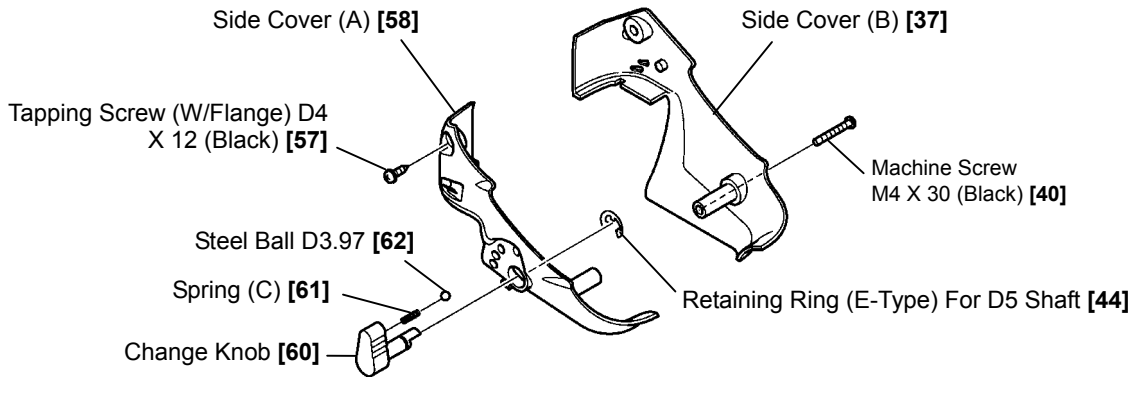
● Disassembly of Base



2. Disassembly of Side Cover (A)

Loosen two Tapping Screws (W/Flange) D4 X 12 (Black) **[57]** and Machine Screw M4 X 30 (Black) **[40]**, and then remove Side Cover (B) **[37]**. To remove Side Cover (A) **[58]**, open Housing (A).(B) Set **[36]**, detach Retaining Ring (E-Type) For D5 Shaft **[44]**, and then remove Change Knob **[60]**, Spring (C) **[61]**, and Steel Ball D3.97 **[62]**. Side Cover (A) **[58]** then comes off.
Be careful not to lose Spring (C) **[61]** and Steel Ball D3.97 **[62]**.

● Disassembly of Side Cover (A)

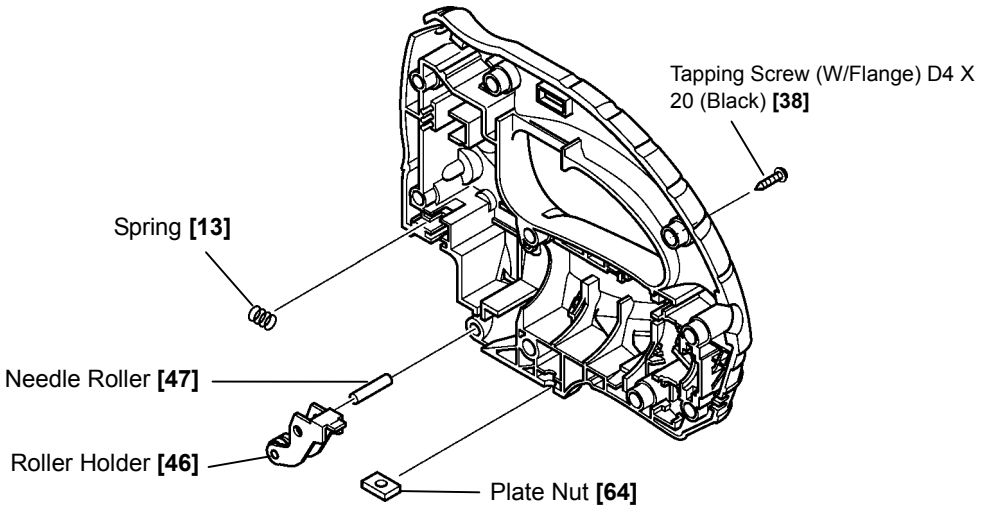


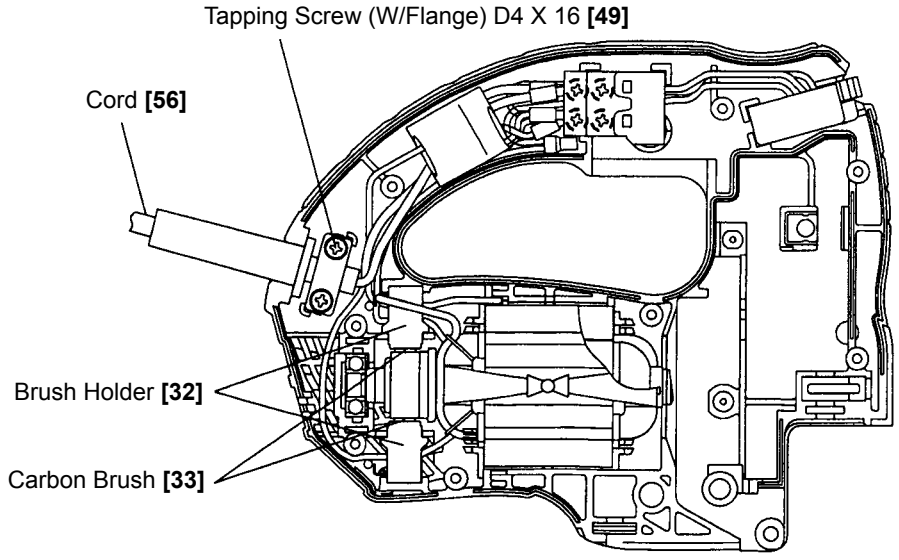
3. Disassembly of Housing (A).(B) Set

(1) Loosen eight Tapping Screws (W/Flange) D4 X 20 (Black) **[38]** and open Housing (A). (B) Set **[36]**.

(2) Loosen two Tapping Screws (W/Flange) D4 X 16 **[49]**, disconnect Cord **[56]**, and then remove Spring **[13]**, Plate Nut **[64]**, Roller Holder **[46]**, Needle Roller **[47]**, Brush Holder **[32]**, and Carbon Brush **[33]** from Housing (A).(B) Set **[36]**. The other half of Housing (A).(B) Set **[36]** can then be removed from the main body.

● Disassembly of Housing (A).(B) Set



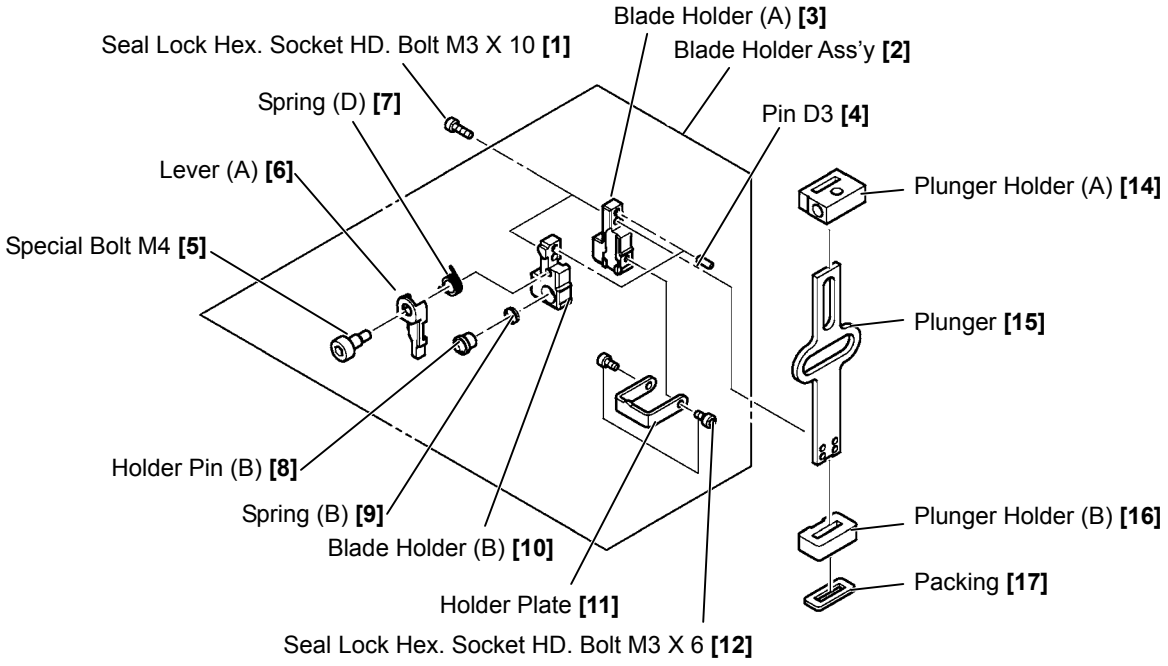


4. Disassembly of Plunger Holder (A) and Blade Holder Assembly

(1) Remove Plunger **[15]**, Plunger Holder (A) **[14]**, Plunger Holder (B) **[16]**, and Packing **[17]** together.

(2) Loosen two Seal Lock Hex. Socket HD. Bolts M3 X 10 **[1]**, remove Blade Holder Ass'y **[2]**, and then pull out Packing **[17]** and Plunger Holder (B) **[16]**.

● Disassembly of Plunger Holder (A) and Blade Holder Assembly



5. Disassembly of Gear Holder Assembly and Armature

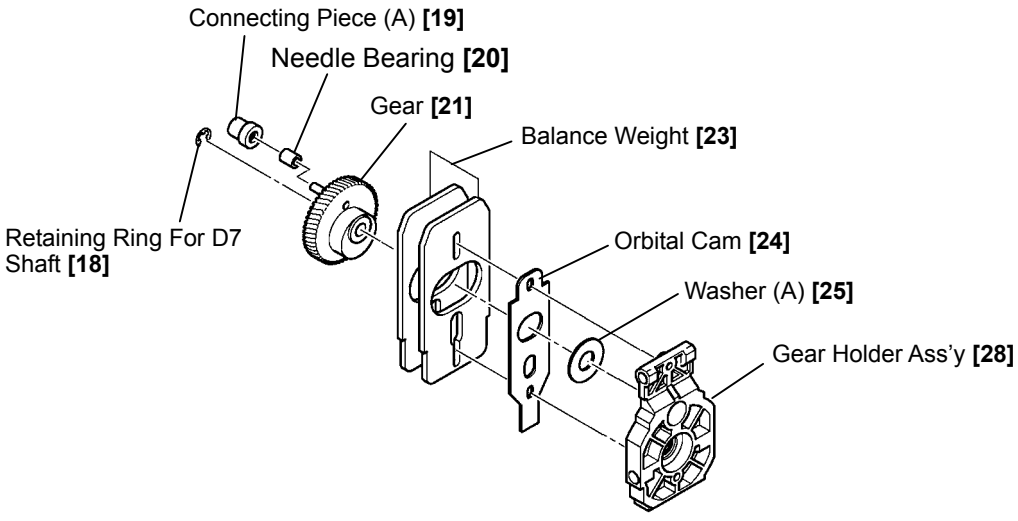
(1) Pull out Connecting Piece (A) **[19]** and Needle Bearing **[20]** from Gear **[21]**.

(2) Remove Retaining Ring For D7 Shaft **[18]** at the tip of the spindle.

(3) Remove Gear **[21]**, Balance Weight **[23]**, Orbital Cam **[24]**, and Washer (A) **[25]** in this order.

(4) Pull out press-fitted Armature **[31]** from Gear Holder Ass'y **[28]**.

● Disassembly of Gear Holder Assembly and Armature



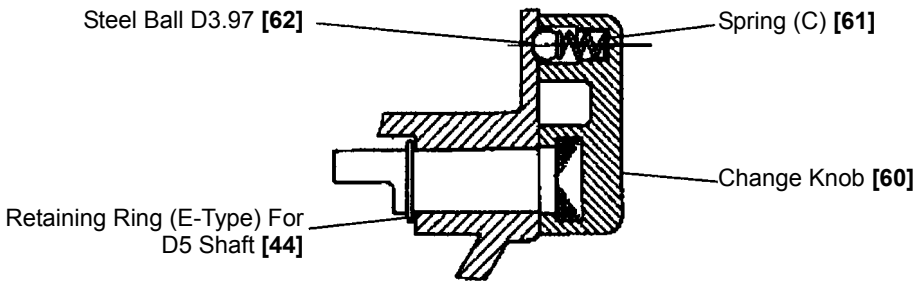
Reassembly

Reverse the disassembly procedures above to reassemble the jig saw. However, pay particular attention when reassembling the jig saw.

1. Reassembly of Change Knob

(1) Reassemble Spring (C) **[61]** and Steel Ball D3.97 **[62]** in Change Knob **[60]** as shown in the following diagram:

● Reassembly of Change Knob



2. Checking Insulator length

Do not strip too much insulation from the end of each lead wire for connection.
Be careful not to let the lead wire be clamped by the joint of Housing (A).(B) Set **[36]**.

3. Other precautions

(1) Make sure Earth Terminal **[54]** is completely inside Housing (A).(B) Set **[36]** before closing the set. Otherwise, the set will be deformed.

(2) Be sure to reassemble Spring **[13]** and Plate Nut **[64]**, which are often overlooked and not mounted.

Application of Lubricant

(1) Apply Nippeco SEP-3A grease to the following:
- Entire Gear **[21]**, particularly its teeth
- Both sides of Washer (A) **[25]**
- Both sides of Orbital Cam **[24]**
- Both sides of Balance Weight **[23]**
- Periphery of Connecting Piece (A) **[19]**
- Tooth plane of Armature **[31]**
- Contacting parts of Spindle **[26]** and Steel Ball D3.97 **[62]**
- Entire Plunger **[15]**
- Sliding part of Roller Holder **[46]** and Needle Roller **[47]**

(2) Apply Molub-Alloy No.777-1 grease to the following:
- Inner diameter part of the gear assembly (metal part, grease stopper groove, and needle bearing part: 1.0 g)
- Inner periphery of Connecting Piece (A) **[19]** (0.5 g)

Screw Tightening Torque

- Tapping Screw (W/Flange) D4 **[38][49][57]** ---------- 1.96 ± 0.49 N•m (20 ± 5 kgf•cm)
- Machine Screw (W/Washer) M4 X 8 (Black) **[65]** ---------- 1.96 ± 0.49 N•m (20 ± 5 kgf•cm)
- Machine Screw M4 X 30 (Black) **[40]** ---------- 1.96 ± 0.49 N•m (20 ± 5 kgf•cm)
- Seal Lock Hex. Socket HD. Bolt M3 **[1][12]** ---------- 2.45 ± 0.49 N•m (25 ± 5 kgf•cm)
- Hex. Socket HD. Bolt M5 X 16 **[69]**---------- 3.43 to 6.37 N•m (35 to 65 kgf•cm)
- Special Bolt M4 **[5]**---------- 4.4 ± 1.0 N•m (45 ± 10 kgf•cm)
- Machine Screw (W/Washer) M3.5 X 6 **[42]**---------- 0.6 ± 0.15 N•m (6 ± 1.5 kgf•cm)

Checking after Reassembly

Check the following after reassembly:

(1) Confirm normal switching operation of Switch (E) (1p Screw Type) W/Lock **[41]**.

(2) Confirm that the stroke speed changes depending on the turning amount of Controller **[43]**.

(3) Confirm that the blade can be attached securely.

Insulation Test

Upon completing disassembly and repair, measure the insulation resistance and conduct an insulation test (dielectric strength test).

Insulation resistance: 7 MΩ or more with 500 V DC megohm tester.

Dielectric strength: AC 4,000 V for 1 minute, with no abnormalities ---- 110 V, 220 V, 230 V, 240 V

AC 2,500 V for 1 minute, with no abnormalities ---- 120 V

No-load Current

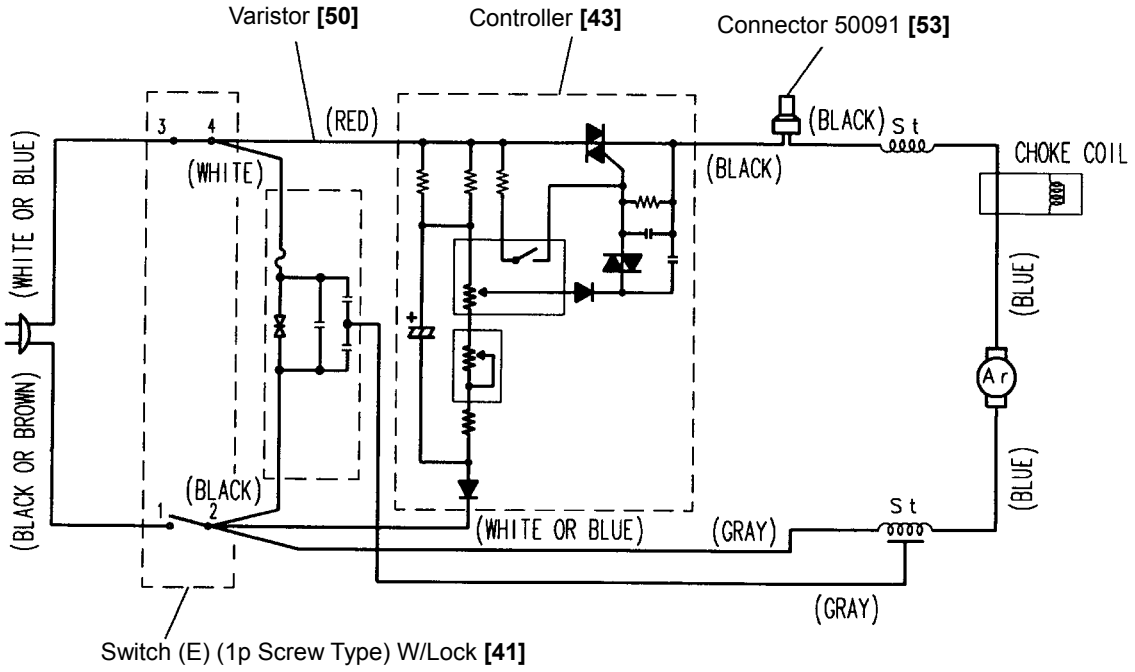
After no-load operation for 30 minutes, the no-load current value should be as specified below at a frequency of 50/60 Hz.

Voltage (V)	110	120	220	230	240
Current (A) Max.	4.0	3.0	1.8	1.8	1.8

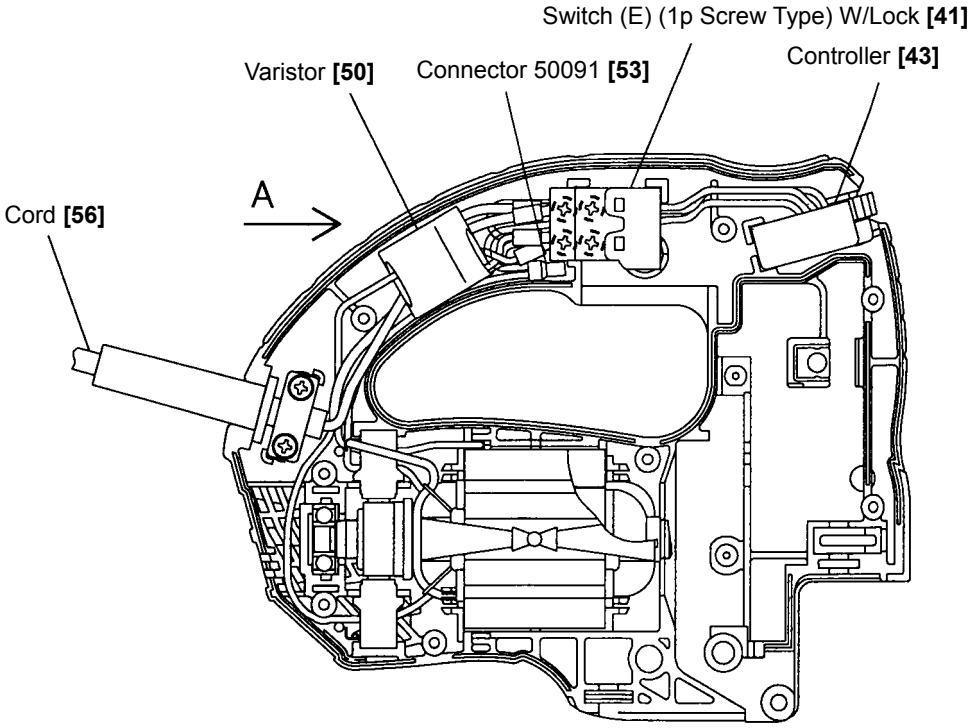
Wiring Diagram

Carefully ensure that wiring is accomplished as illustrated below, because incorrect wiring will result in inadequate or reverse rotation.

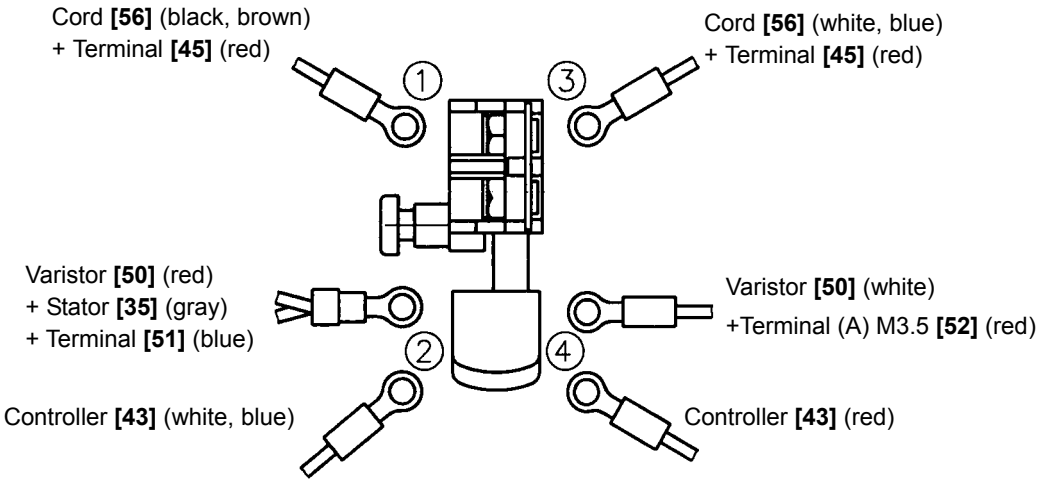
● Circuit diagram



● Wiring diagram



Connection to the switch (Viewed from A)
with the varistor ass'y



STANDARD REPIR TIME (UNIT) SCHEDULES

MODEL	Variable / Fixed	10	20	30	40	50	60 min.
CJ 90VST	General Assembly	Work Flow Base Base Locker Side Cover (A) Side Cover (B) Change Knob Blade Holder (A) Blade Holder (B) Lever (A) Holder Plate	Armature Ass'y Ball Bearing 608VVC2PS2L Ball Bearing 608VVC2PS2L Stator Switch (E) Controller Cord Cord Armor Gear Holder Ass'y Roller Holder	Housing (A). (B) Set Connecting Piece (A) Needle Bearing Gear Balance Weight Orbital Cam Washer (A) Plunger Holder (A) Plunger Plunger Holder (B) Packing Blade Holder Ass'y			

Hitachi Power Tools

LIST NO. E525

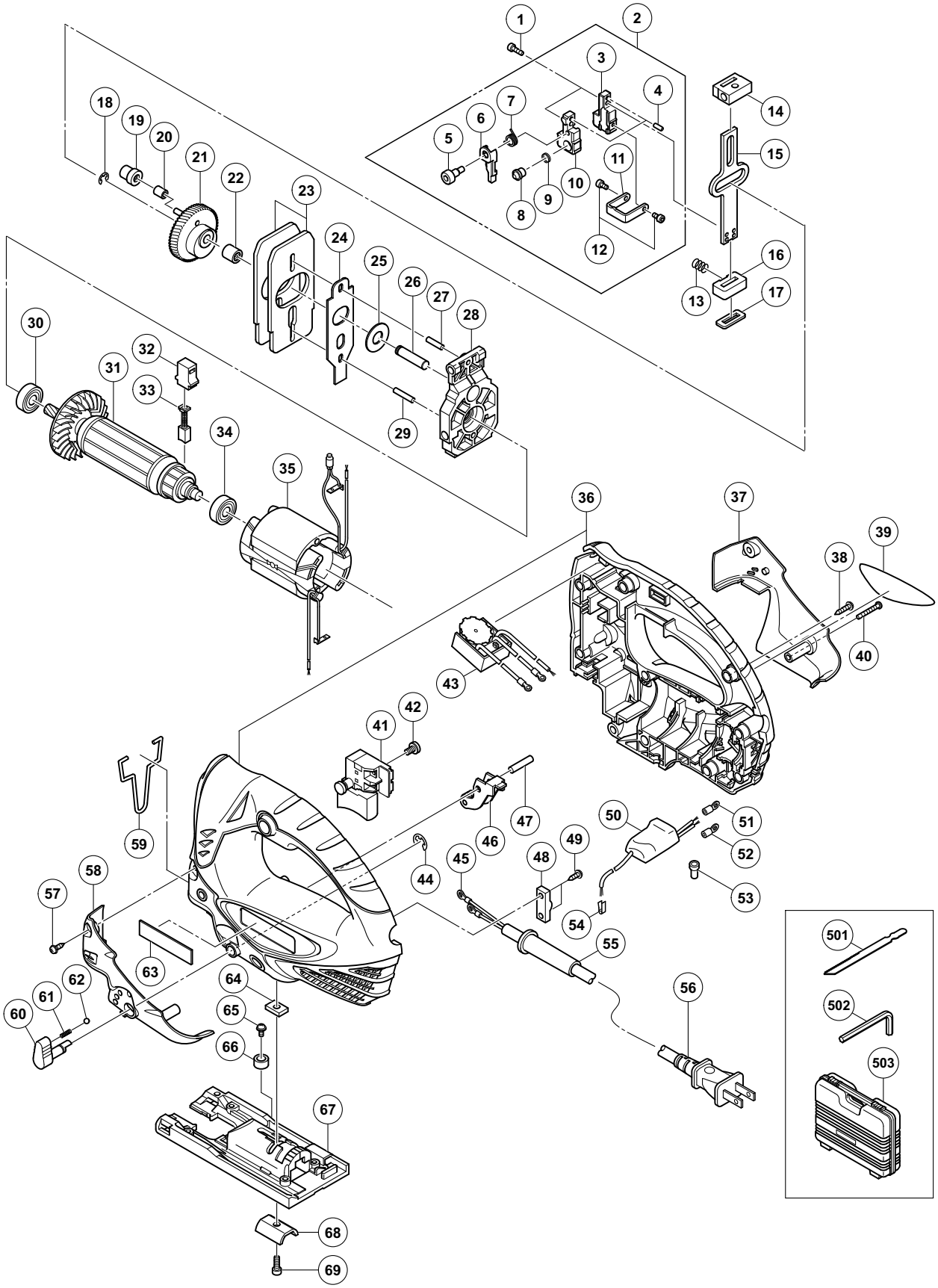
ELECTRIC TOOL PARTS LIST

■ JIG SAW

2010·6·14

Model CJ 90VST

(E1)



	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	1	332-446	SEAL LOCK HEX. SOCKET HD. BOLT M3 X 10	2		
	2	332-443	BLADE HOLDER ASS'Y	1	INCLUD. 3-12	
	3	332-429	BLADE HOLDER (A)	1		
	4	332-436	PIN D3	2		
	5	332-434	SPECIAL BOLT M4	1		
	6	332-432	LEVER (A)	1		
	7	332-438	SPRING (D)	1		
	8	332-435	HOLDER PIN (B)	1		
	9	332-439	SPRING (B)	1		
	10	332-430	BLADE HOLDER (B)	1		
	11	332-426	HOLDER PLATE	1		
	12	325-077	SEAL LOCK HEX. SOCKET HD. BOLT M3 X 6	2		
	13	332-437	SPRING	1		
	14	332-427	PLUNGER HOLDER (A)	1		
	15	332-422	PLUNGER	1		
	16	332-428	PLUNGER HOLDER (B)	1		
	17	332-441	PACKING	1		
	18	994-251	RETAINING RING FOR D7 SHAFT	1		
	19	332-829	CONNECTING PIECE (A)	1		
	20	325-242	NEEDLE BEARING	1		
	21	332-445	GEAR	1		
	22	332-983	NEEDLE BEARING	1		
	23	332-424	BALANCE WEIGHT	2		
	24	332-423	ORBITAL CAM	1		
	25	957-540	WASHER (A)	1		
	26	332-828	SPINDLE	1		
	27	998-426	NEEDLE ROLLER	1		
	28	332-444	GEAR HOLDER ASS'Y	1	INCLUD. 26, 27, 29	
	29	943-364	NEEDLE ROLLER D4 X 20	1		
	30	608-VVM	BALL BEARING 608VVC2PS2L	1		
*	31	360-893C	ARMATURE 110V	1		
*	31	360-893U	ARMATURE ASS'Y 120V-127V	1	INCLUD. 30, 34	
*	31	360-893E	ARMATURE 220V-240V	1		
	32	955-203	BRUSH HOLDER	2		
	33	999-041	CARBON BRUSH (1 PAIR)	2		
	34	608-VVM	BALL BEARING 608VVC2PS2L	1		
*	35	340-773C	STATOR 110V	1		
*	35	340-774C	STATOR 110V	1	FOR TPE, GBR (110V)	
*	35	340-773D	STATOR 120V	1		
*	35	340-774E	STATOR 220V-240V	1		
*	35	340-773E	STATOR 220V-240V	1	FOR BRA, PAN (220V), THA, INA, SIN,	
					HKG, KUW, IND	
	36	332-442	HOUSING (A). (B) SET	1		
	37	332-419	SIDE COVER (B)	1		
	38	301-653	TAPPING SCREW (W/FLANGE) D4 X 20 (BLACK)	8		
	39		NAME PLATE	1		
	40	332-447	MACHINE SCREW M4 X 30 (BLACK)	1		
	41	325-085	SWITCH (E) (1P SCREW TYPE) W/LOCK	1	INCLUD. 42	
	42	305-499	MACHINE SCREW (W/WASHER) M3.5 X 6	4		
*	43	332-831	CONTROLLER 110V	1		

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
*	43	332-834	CONTROLLER 120V-127V	1		
*	43	332-832	CONTROLLER 220V-230V	1		
*	43	332-833	CONTROLLER 240V	1		
	44	673-489	RETAINING RING (E-TYPE) FOR D5 SHAFT	1		
	45	980-063	TERMINAL	2		
	46	332-448	ROLLER HOLDER	1		
	47	332-433	NEEDLE ROLLER	1		
	48	960-266	CORD CLIP	1		
	49	984-750	TAPPING SCREW (W/FLANGE) D4 X 16	2		
*	50	332-835	VARISTOR	1	FOR TPE, NZL, AUS, GBR, SAF, EUROPE,	
					FIN, NOR, SWE, DEN, AUT, TUR, SUI, CHN, LIB	
*	51	311-741	TERMINAL	1	FOR TPE, NZL, AUS, GBR, SAF, EUROPE,	
					FIN, NOR, SWE, DEN, AUT, TUR, SUI, CHN, LIB	
	52	960-356	TERMINAL (A) M3.5 (10 PCS.)	1		
	53	959-140	CONNECTOR 50091 (10 PCS.)	1		
*	54	302-488	EARTH TERMINAL	1	FOR TPE, NZL, AUS, GBR, SAF, EUROPE,	
					FIN, NOR, SWE, DEN, AUT, TUR, SUI, CHN, LIB	
*	55	930-487	CORD ARMOR D8.2	1		
*	55	930-026	CORD ARMOR D10.2	1		
*	56	500-234Z	CORD	1	(CORD ARMOR D8.2)	
*	56	500-247Z	CORD	1	(CORD ARMOR D8.2) FOR FIN, NOR, SWE, DEN	
*	56	500-240Z	CORD	1	(CORD ARMOR D8.2) FOR USA, CAN,	
					PAN (120V), MEX	
*	56	500-439Z	CORD	1	(CORD ARMOR D8.2) FOR NZL, AUS	
*	56	500-455Z	CORD	1	(CORD ARMOR D8.2) FOR THA, CHN	
*	56	500-450Z	CORD	1	(CORD ARMOR D8.2) FOR GBR (230V), HKG	
*	56	500-423Z	CORD	1	(CORD ARMOR D8.2) FOR SIN, KUW	
*	56	323-974	CORD	1	(CORD ARMOR D10.2) FOR VEN, TPE	
*	56	500-461Z	CORD	1	(CORD ARMOR D8.2) FOR GBR (110V)	
*	56	500-447Z	CORD	1	(CORD ARMOR D8.2) FOR SUI	
*	56	500-487Z	CORD	1	(CORD ARMOR D8.2) FOR BRA	
	57	325-083	TAPPING SCREW (W/FLANGE) D4 X 12 (BLACK)	2		
	58	332-418	SIDE COVER (A)	1		
	59	332-440	GUARD BAR	1		
	60	332-421	CHANGE KNOB	1		
	61	982-454	SPRING (C)	1		
	62	959-155	STEEL BALL D3.97 (10 PCS.)	1		
	63		HITACHI LABEL	1		
	64	332-425	PLATE NUT	1		
	65	315-500	MACHINE SCREW (W/WASHER) M4 X 8 (BLACK)	1		
	66	321-576	RUBBER BUSHING	1		
	67	321-573	BASE	1		
	68	321-575	BASE LOCKER	1		
	69	949-821	HEX. SOCKET HD. BOLT M5 X 16 (10 PCS.)	1		

STANDARD ACCESSORIES

CJ 90VST

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	501	879-357	JIG SAW BLADES NO. 41 (5 PCS.)	1		
	502	944-458	HEX. BAR WRENCH 4MM	1		
*	503	332-420	CASE	1	EXCEPT FOR VEN, TPE, THA, INA,	
					SIN, HKG, KUW, CHN, IND, LIB	

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	963-400	JIG SAW BLADES NO. 97 FOR STAINLESS (5PCS)	1		
608	321-593	GUIDE	1		
609	321-992	SUB BASE (A) SET (STEEL)	1	INCLUD. 611	
610	321-993	SUB BASE (B) SET (PLASTIC)	1	INCLUD. 611	
611	321-996	SPECIAL BOLT	4		
612	321-591	DUST COLLECTOR	1		
613	325-149	GREASE (MOLUB-ALLOY NO. 777-1) 75G	1		
614	321-590	TABLE INSERT	1		