

MODEL

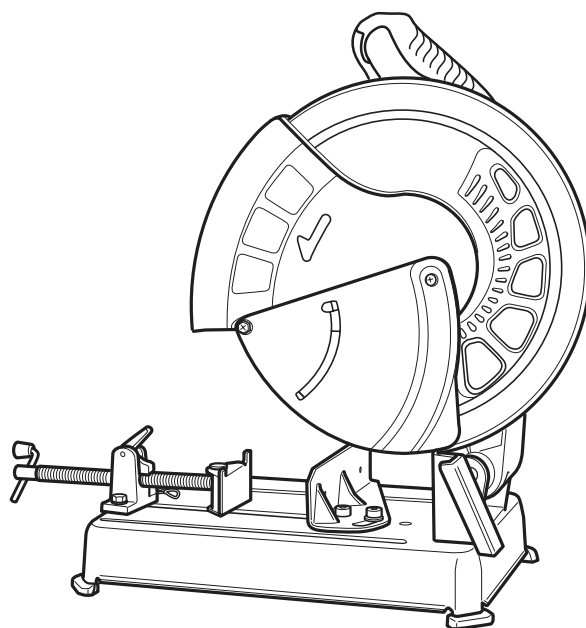
CC 14SF

Hitachi
Power Tools

C

CUT-OFF MACHINE
CC 14SF

TECHNICAL DATA
AND
SERVICE MANUAL



LIST No. E708

Nov. 2005

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
C	MAKITA	2414NB

CONTENTS



	Page
1. PRODUCT NAME	1
2. MARKETING OBJECTIVE	1
3. APPLICATIONS	1
4. SELLING POINTS	1
4-1. Selling Point Outlines	1
4-2. Selling Point Descriptions	2
5. SPECIFICATIONS	3
6. COMPARISON WITH SIMILAR PRODUCTS	4
7. PRECAUTIONS IN SALES PROMOTION	5
7-1. Handling Instructions	5
7-2. Precautions on the Name Plate	5
8. PRECAUTIONS IN OPERATIONS	5
8-1. Handling	5
8-2. Installation	5
8-3. Cut-off Wheels	6
8-4. Cutting Procedures	6
8-5. Cut-off Wheel Dismounting and Mounting	7
9. DISASSEMBLY AND REASSEMBLY GUIDE	8
9-1. Disassembly and Reassembly	8
9-2. Precautions in Reassembly	12
9-3. Wiring	12
9-4. Precautions in Wiring	12
9-5. Lubrication	13
9-6. Machine Accuracy	13
10. STANDARD REPAIR TIME (UNIT) SCHEDULES	14
Assembly Diagram for Model CC 14SF	

1. PRODUCT NAME

Hitachi 355 mm (14") High-speed Cut-off Machine, Model CC 14SF

2. MARKETING OBJECTIVE

The share of the current Model CC 14SE has been declining due to introduction of inexpensive competitors in the market. To address the severe situation, the Model CC 14SE has been upgraded to the Model CC 14SF.

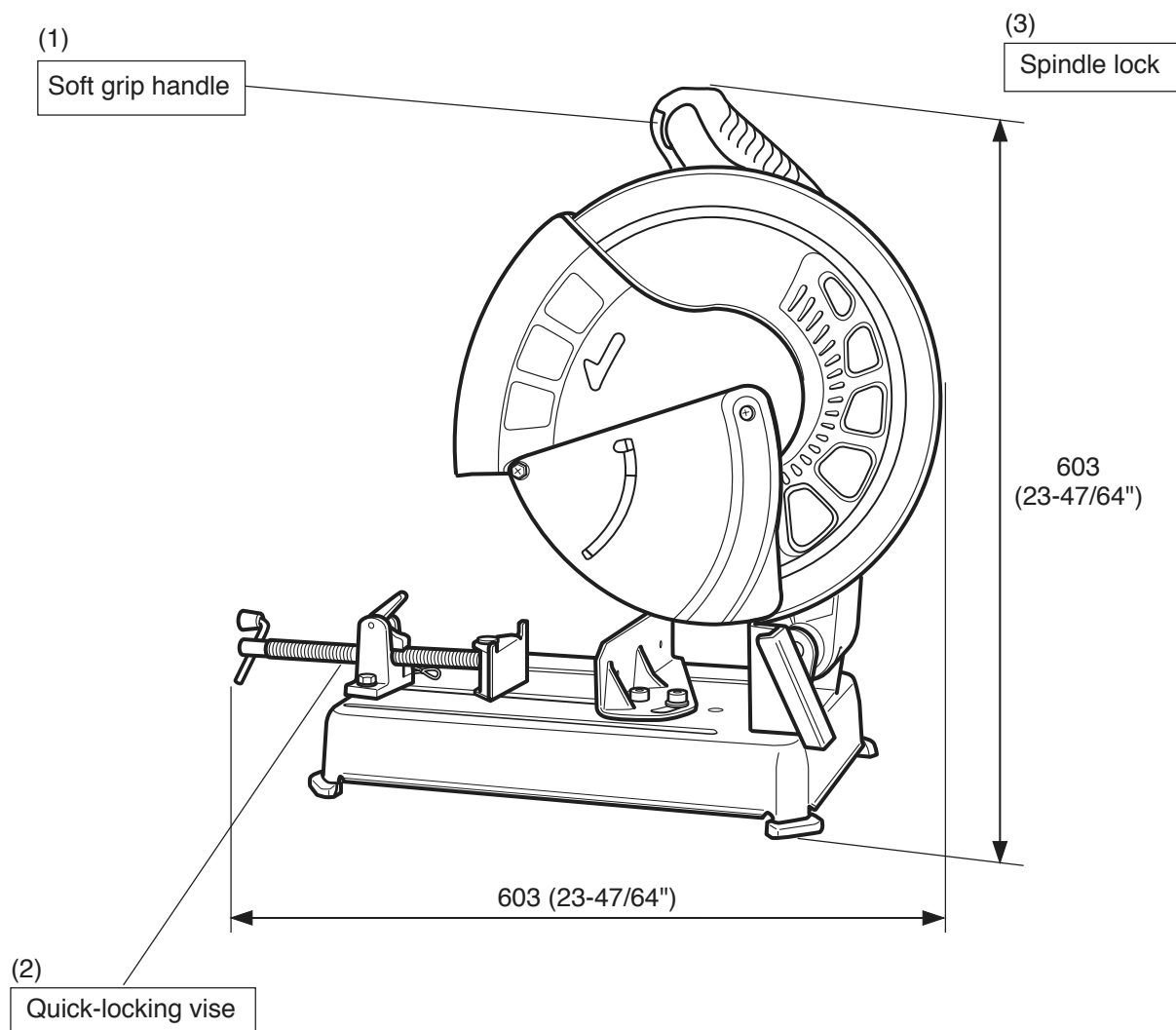
The new Model CC 14SF is competitively priced. In addition, the Model CC 14SF is equipped with the soft grip handle and the one-touch vise for better performance. Please promote the sales of the Model CC 14SF.

3. APPLICATIONS

- Cutting of various steel materials such as pipes, shaped steel, round bars, etc.

4. SELLING POINTS

4-1. Selling Point Outlines



4-2. Selling Point Descriptions

(1) Soft grip handle

The Model CC 14SF has a soft grip handle integrally molded with rubber material. The soft grip handle is more comfortable and the vibration transmitted to the operator's hand during cutting is lower than the conventional model.

(2) Quick-locking vise

The Model CC 14SF is equipped with a one-touch vise system for quick feeding and easy tightening. This vise system is the same as the current Model CC 14SE.

[High speed feeding of the vise]

Vise (A) can be fed quickly by pushing or pulling the screw handle with the clutch of the one-touch vise disengaged. (Fig. 1)

[Tightening and loosening of the vise]

The workpiece is tightened with the vise by turning the screw handle clockwise and loosened by turning the screw handle counterclockwise with the clutch of the one-touch vise engaged. (Fig. 2)

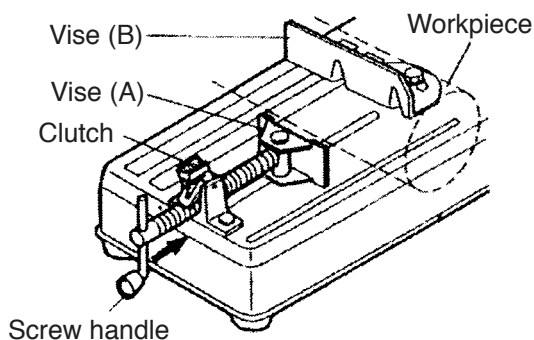


Fig. 1 High speed feeding

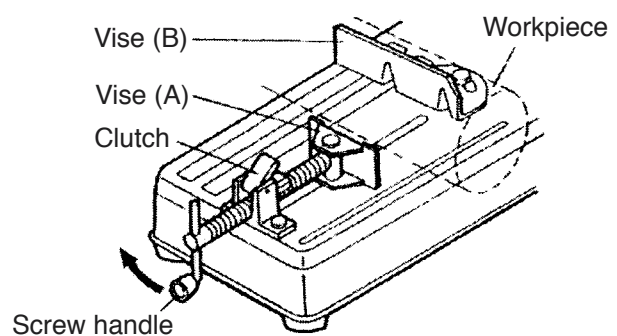


Fig. 2 Tightening/loosening

(3) Spindle lock construction

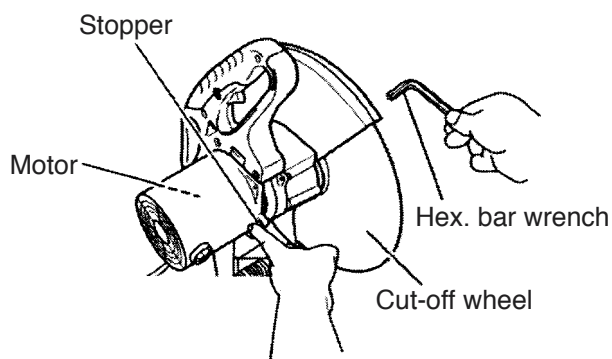


Fig. 3

The Model CC 14SF is equipped with the spindle lock system that is convenient for mounting and dismantling the cut-off wheel. Push in the stopper pin to secure the spindle. Then the cut-off wheel can be easily mounted or dismantled with the 8 mm hex. bar wrench (standard accessory). (Fig. 3)

5. SPECIFICATIONS

Item			Model	CC 14SF				
* 1 Maximum cutting dimension	Right angle	Round pipe	Outside dia. 120 mm (4-47/64")					
		Rectangular type	Width 130 (5-1/8") x Height 115 mm (4-17/32") Width 235 (9-1/4") x Height 70 mm (2-49/64")					
			Round bar	Outside dia. 65 mm (2-9/16")				
	45°	Round pipe	Outside dia. 100 mm (3-15/16")					
		Rectangular type	Width 106 (4-11/64") x Height 106 mm (4-11/64")					
		Round bar	Out dia. 45 mm (1-25/32")					
			Angle cutting range			Right angle to 45°		
Max. opening width of vise			240 mm (9-29/64")					
Motor	Type		AC single phase commutator motor					
	Power source		AC single phase 50/60 Hz					
	Voltage		100 V	120 V	220 V	230 V	240 V	
	Full-load current		15 A	15 A	9 A	9 A	10 A	
	Input *2		1640 W	1750 W	2000 W	2000 W	2400 W	
Cut-off wheel	Type		Reinforced resinoid cut-off wheel					
	Dimensions		Outside dia. 355 (14") x Thickness 2.8 (7/64") x Hole dia. 25.4 mm (1")					
	Max. working peripheral speed		4,800 m/min (16,000 ft/min)					
No-load rotation speed			3,800 min ⁻¹					
No-load peripheral speed			4,240 m/min (13,900 ft/min)					
Type of switch			Trigger switch					
Cord			2 conductor type cabtire cable 2.3 m (8 ft)					
Main body dimensions			Length 603 mm (23-47/64") x Width 318 mm (11-7/32") x Height 603 mm (23-47/64")					
Weight	Product		16.5 kg (36 lbs.)					
	Packaged		19.0 kg (41.8 lbs.)					
Standard accessories			Cut-off wheel 1 pc. Hex. bar wrench (8 mm) 1 pc.					

*1: The maximum cutting height of Australia becomes low 15 mm. (Round pipe is 115 mm dia.)

*2: Power input is subject to change by areas.

6. COMPARISON WITH SIMILAR PRODUCTS

Model Item			HITACHI		C
			CC 14SF	CC 14SE	
*1 Maximum cutting dimension	Right angle	◎ Round pipe (Outside dia.)	120 mm (4-47/64")	115 mm (4-17/32")	115 mm (4-17/32")
		□ Square type (Width x Height)	119 mm x 119 mm (4-43/64" x 4-43/64")	119 mm x 119 mm (4-43/64" x 4-43/64")	119 mm x 119 mm (4-43/64" x 4-43/64")
		▭ Rectangular type (Width x Height)	130 mm x 115 mm (5-1/8" x 4-17/32")	130 mm x 115 mm (5-1/8" x 4-17/32")	130 mm x 115 mm (5-1/8" x 4-17/32")
			195 mm x 100 mm (7-43/64" x 3-15/16")	195 mm x 100 mm (7-43/64" x 3-15/16")	194 mm x 102 mm (7-41/64" x 4-1/64")
			235 mm x 70 mm (9-1/4" x 2-49/64")	235 mm x 70 mm (9-1/4" x 2-49/64")	233 mm x 70 mm (9-11/64" x 2-49/64")
		● Round bar (Outside dia.)	65 mm (2-9/16")	65 mm (2-9/16")	—
		└ Shape steel (Angle) (Width x Height)	130 mm x 130 mm (5-1/8" x 5-1/8")	130 mm x 130 mm (5-1/8" x 5-1/8")	137 mm x 137 mm (5-25/64" x 5-25/64")
Angle cutting range			Right angle to 45°		
Max. opening width of vise			240 mm (9-29/64")	240 mm (9-29/64")	240 mm (9-29/64")
Motor	Type		AC single phase commutator motor		
	Power source		AC single phase 50/60 Hz		
	*2 Input		2000 W	2000 W	2000 (2400) W
Insulation			Double (Mold HG)	Double (Aluminum HG)	Double (Mold HG)
Cut-off wheel	Type		Reinforced resinoid cut-off wheel		
	Dimensions		Outside dia. 355 (14") x Thickness 2.8 (7/64") x Hole dia. 25.4 mm (1")		
	Max. working peripheral speed		4800 m/min (16000 ft/min)		
No-load rotation speed			3800 min ⁻¹	3700 min ⁻¹	3800 min ⁻¹
No-load peripheral speed			4240 m/min (13900 ft/min)	4125 m/min (13540 ft/min)	4240 m/min (13900 ft/min)
Spindle lock			Available	Available	Available
Quick-locking vise			Available	Available	Available
Type of switch			Trigger switch		
Weight			16.5 kg (36.4 lbs.)	16.5 kg (36.4 lbs.)	16.2 kg (35.8 lbs.)

*1: The maximum cutting height of Australia becomes low 15 mm. (Round pipe is 115 mm dia.)

*2: Power input is subject to change by areas.

7. PRECAUTIONS IN SALES PROMOTION

In the interest of promoting the safest and most efficient use of the Model CC 14SF high-speed cut-off machine 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 Name Plate attached to each machine.

7-1. 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 high-speed cut-off machine cannot be completely eliminated. Accordingly, general precautions for the use of electric power tools, and specific precautions and suggestions for the use of the high-speed cut-off machine are listed in the Handling Instructions to enhance the safe, efficient use of the machine by the customer. Salesperson must be thoroughly familiar with the contents of the Handling Instructions to be able to offer appropriate guidance to the customer during sales promotion.

7-2. Precautions on the Name Plate

Each Model CC 14SF is furnished with a Name Plate that lists the following precautions.

CAUTION

- Read thoroughly HANDLING INSTRUCTIONS before use.
- Always wear eye protection.

- (1) Advise the customer to thoroughly read the Handling Instructions.
- (2) Protective glasses are intended to prevent chips, dust and sparks from flying into the eyes of the operator during operation. Carefully caution the customer to wear protective glasses whenever operating the cut-off machine.

8. PRECAUTIONS IN OPERATIONS

8-1. Handling

When transporting the cut-off machine by car or other vehicles, ensure that the motor section (the section where the cut-off wheel, wheel cover and sub cover are mounted) is fully lowered and that the provided chain is connected to the chain hook to secure it in that position. If the chain is not properly attached, the machine could fall, resulting in possible damage which could seriously effect its accuracy.

8-2. Installation

To ensure proper stability, instruct the customer to confirm that the cut-off machine is installed on a flat, firm surface.

8-3. Cut-off Wheels

(1) Cut-off wheel label indications

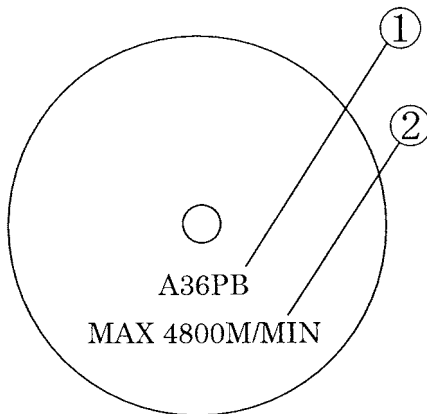


Fig. 4

- ① The cut-off wheel type, grain size and other information is indicated.

A: Type of abrasive material

36: Grain size

P: Degree of bonding

B: Bonding material

- ② Indicates the maximum working peripheral speed of the cut-off wheel. Instruct the customer to use cut-off wheels that have a maximum peripheral speed that is at least the applicable speed listed on the Name Plate of the cut-off machine.

(2) Amount of imbalance of cut-off wheel

Instruct the customer not to use cut-off wheels that have a high degree of imbalance. High imbalance will cause excessive vibration that could in turn cause the material to be cut to come loose. The customer should be advised to use genuine HITACHI cut-off wheels whenever possible.

8-4. Cutting Procedures

(1) Operation of the quick-locking vise

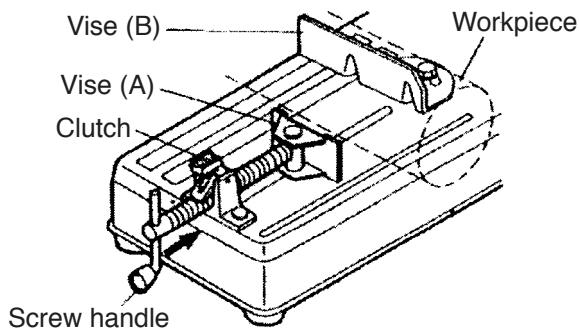


Fig. 5 High speed feeding

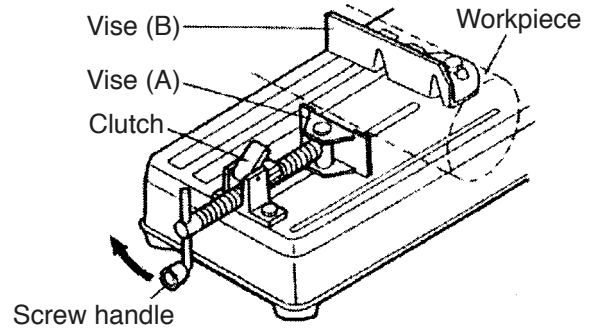


Fig. 6 Tightening/loosening

- ① With the clutch of the quick-locking vise raised, push in the screw handle by hand to bring vise (A) lightly into contact with the workpiece.
- ② Turn down the clutch to engage the screw threads, and turn the screw handle to securely tighten the workpiece. Removal of the material can be accomplished by following the above procedures in reverse; however, be sure to turn the screw handle slightly to loosen the material before raising the clutch.

(2) Cutting at angles

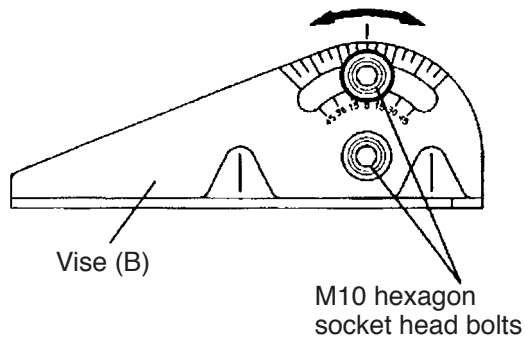


Fig. 7

To cut off the material at some desired angle, loosen the two M10 hexagon socket head bolts, align the desired angle setting on vise (B) with the mark engraved on the upper surface of the base, and retighten the two M10 hexagon socket head bolts. Cutting at any angles can be accomplished at any desired angle from a right angle up to 45°. When wide material is to be cut at an angle, it should be firmly clamped by fixing a steel board to vise (B).

(3) Clamping of particularly materials

When the machine is shipped from the factory, the vise is set to the back in the vise slide channel of the base. If a change of the vise opening is required, move vise (B) forward to the desired location, after unscrewing two M10 hexagon socket head bolts. The maximum possible opening width of the vise is 240 mm (9-29/64").

(4) Cutting procedures

When cutting of materials with the high-speed cut-off machine, too much pressure applied on the handle during cutting can reduce cutting efficiency. Instruct the customer that the best cutting efficiency is obtained when a great many sparks are generated during cutting.

8-5. Cut-off Wheel Dismounting and Mounting

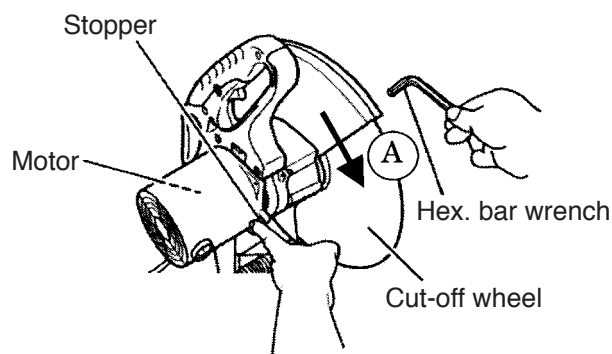


Fig. 8

Rotate the safety cover, to the up position. While pushing the stopper pin located at the gear housing, the cut-off wheel is locked and will not rotate. When the cut-off wheel is locked, use the standard accessory wrench (hex. bar wrench 8 mm), and turn the wrench in the direction indicated by arrow ① to loosen and remove the flange bolt that secures the cut-off wheel. Then, remove the wheel washer, and detach the cut-off wheel.

To mount a cut-off wheel, follow the above procedures in reverse. However, before attempting to operate the machine, ensure without fail that the stopper pin is retracted to its original position.

CAUTION:

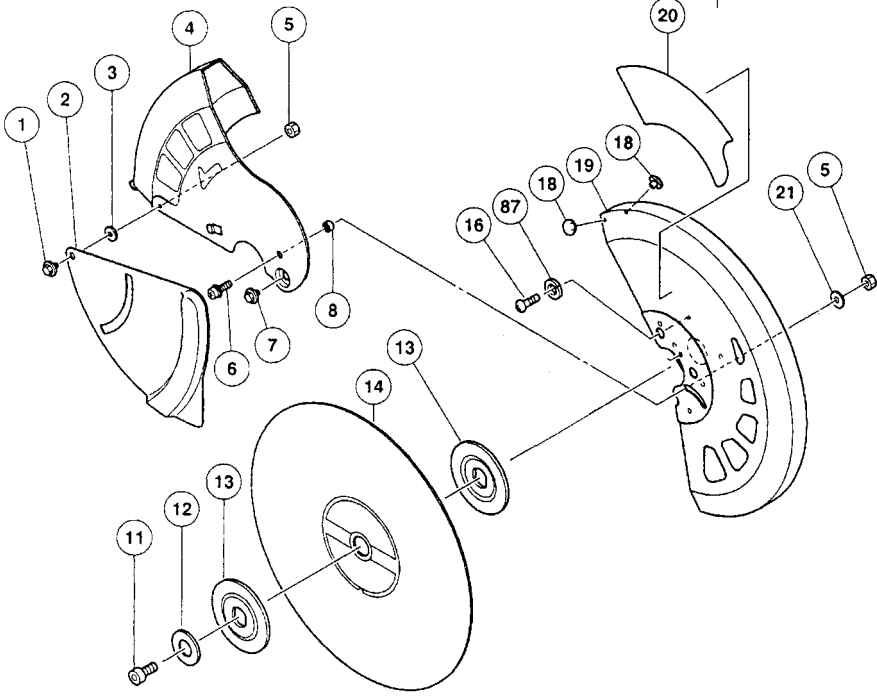
- Always turn off the trigger switch and disconnect the power plug from the receptacle before removing or installing a wheel, to prevent accidental injury.
- Tighten the flange bolt so that it doesn't come loose during operation of the wheel. Confirm that the flange bolt has been properly tightened before the electric tool is started.

9. DISASSEMBLY AND REASSEMBLY GUIDE

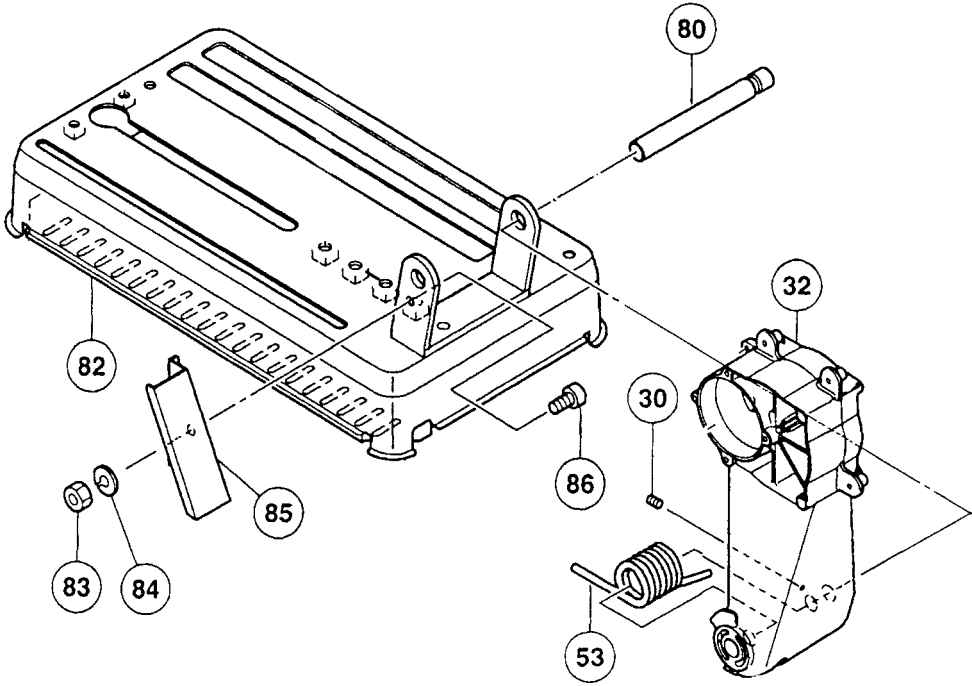
Item requiring particular attention in disassembly and reassembly are described herein. The **[Bold]** numbers and the circled numbers in the descriptions below correspond to the item numbers in the Parts List and exploded assembly diagrams. Before attempting disassembly or reassembly, ensure without fail that the switch is turned off and the plug is removed from the power source outlet.

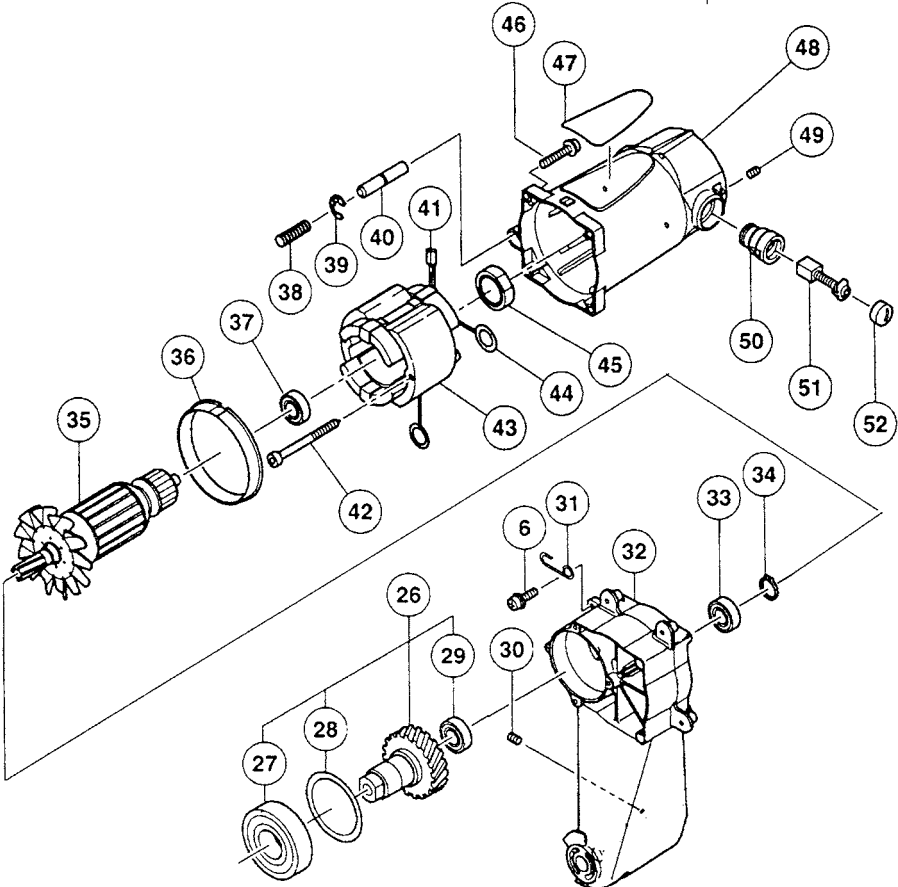
9-1. Disassembly and Reassembly

The descriptions herein are mainly concerned with disassembly. Reassembly can be accomplished by following the disassembly procedures in reverse, except where noted otherwise.

No.	Disassembly Reassembly	Working procedures	Necessary tools
1	Cut-off Wheel [14] Wheel Washer [13] Wheel Cover (A) [19] Sub Cover (A) [4]	 <p>(1) Turn up Sub Cover (A) [4].</p> <p>(2) Pressing the Stopper Pin [40] on the Gear Case [32], loosen the Hex. Socket Hd. Bolt M10 x 20 [11] that secures the Cut-off Wheel [14].</p> <p>(3) Remove Washer (A) [12], Wheel Washer [13], Cut-off Wheel [14] and Wheel Washer [13] in order.</p> <p>(4) Loosen Bolt (A) (W/Flange) [7] and Machine Screw (W/Washers) M5 x 16 (Black) [6] and remove Sub Cover (A) [4] together with Sub Cover (B) [2].</p> <p>(5) Loosen the four Machine Screws M5 x 12 [16] and remove Wheel Cover (A) [19].</p> <p>NOTE: Before mounting the Cut-off Wheel [14], remove chips and dust from the Wheel Washer [13], Hex. Socket Hd. Bolt M10 x 20 [11] and Washer (A) [12].</p>	<p>8 mm hex. bar wrench (standard accessory)</p> <p>17 mm wrench</p> <p>Phillips screwdriver</p>

No.	Disassembly Reassembly	Working procedures	Necessary tools
2	Handle [54] Handle Cover [61] Switch (2P Pillar Type) W/Lock [55] Cord [68]	<p>(1) Loosen the three Machine Screws (W/Washers) M5 x 35 [46] and three Tapping Screws D4 x 20 [62]. Remove the Handle Cover [61] from the Handle [54].</p> <p>(2) Loosen the Tapping Screw (W/Flange) D4 x 12 [56] and remove the Switch (2P Pillar Type) W/Lock [55] from the Handle [54].</p> <p>(3) Disconnect the two internal wires of the Stator Ass'y [43] and two internal wires of the Cord [68] from the Switch (2P Pillar Type) W/Lock [55].</p> <p>(4) Loosen the two Tapping Screws (W/Flange) D4 x 16 [66] and remove the Cord Clip [65] and the Cord [68] from the Handle [54].</p>	Phillips screwdriver Phillips screwdriver Flat-blade screwdriver Phillips screwdriver

No.	Disassembly Reassembly	Working procedures	Necessary tools
3	Spark Shoot [85] Hinge Shaft [80] Spring [53]	 <p>(1) Lower the Gear Case [32] and loosen the Lock Nut M8 [83]. Remove the Spring Washer M8 [84], Spark Shoot [85] and Hex. Socket Hd. Bolt M8 x 20 [86].</p> <p>(2) Raise the Gear Case [32] and loosen the Seal Lock Hex. Socket Set Screw M5 x 16 [30]. Remove the Hinge Shaft [80] and the Spring [53].</p>	<p>13 mm wrench 6 mm hex. bar wrench</p> <p>4 mm hex. bar wrench</p>

No.	Disassembly Reassembly	Working procedures	Necessary tools
4	Gear Case [32] Spindle Ass'y [26] Armature Ass'y [35] Stator Ass'y [43]	 <p>(1) After the above step No. 1, loosen the two Brush Caps [52] and remove the two Carbon Brushes (1 Pair) [51].</p> <p>(2) Loosen the four Machine Screws (W/Washers) M5 x 35 [46] and remove the Housing Ass'y [48] and the Fan Guide [36] from the Gear Case [32].</p> <p>(3) Remove the Stopper Pin [40] and the Gauge Spring [38].</p> <p>(4) Pull out the Spindle Ass'y [26] and the Armature Ass'y [35] from the Gear Case [32].</p> <p>(5) Disconnect the internal wire of the Stator Ass'y [43] from the Brush Holder [50] of the Housing Ass'y [48]. Loosen the two Hex. Hd. Tapping Screws D5 x 75 [42] and remove the Stator Ass'y [43] from the Housing Ass'y [48].</p>	<p>Flat-blade screwdriver</p> <p>Phillips screwdriver</p> <p>Plastic hammer</p> <p>Phillips screwdriver Plastic hammer</p>

9-2. Precautions in Reassembly

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

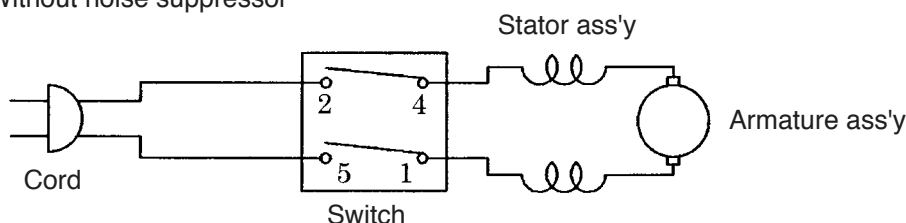
- (1) Prior to reassembly, measure the insulation resistance of the Armature Ass'y [35], Stator Ass'y [43], Switch (2P Pillar Type) W/Lock [55] and other electrical components, and confirm that the insulation resistance of each part is 5 M Ω or more.
- (2) When replacing the Spring [53], apply 5 grams of grease (Hitachi Motor Grease is recommended) to its inner circumference.
- (3) When replacing the armature ass'y and the spindle, apply grease (Cosmo Molybdenum No. 2) to the gear section of the armature ass'y and the spindle.

9-3. Wiring

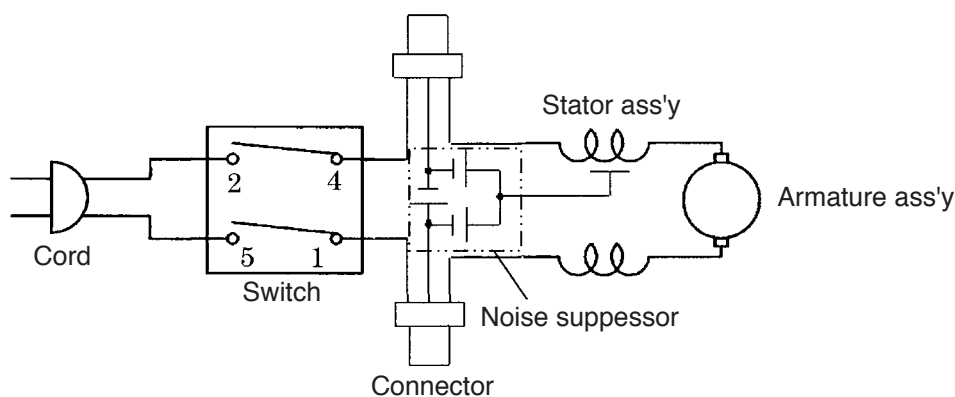
Ensure that the wiring is performed as shown below.

(1) Wiring diagram

① Without noise suppressor



② With noise suppressor



9-4. Precautions in Wiring

When connecting internal wires, be very careful not to remove any more of the insulation covering than is absolutely necessary. In particular, carefully avoid exposed wire cores protruding from connectors, and ensure that no internal wires become pinched between the mounting surfaces of the Handle [54] and the Handle Cover [61].

9-5. Lubrication

Advise the customer to lubricate the machine about once a month, and to ensure that any cutting dust, dirt or other foreign matter is thoroughly wiped away with a clean cloth prior to applying lubricant.

(1) Rotating portion of the gear case:

Apply machine oil to the hinge sliding surface of the Gear Case [32] and the Base [82].

(2) Vise section:

Apply machine oil to the screw portion and the rotating portion of the Screw [70], and the female screw of the Screw Holder [71].

9-6. Machine Accuracy

On completion of reassembly, confirm that machine accuracy is within the tolerance standards below.

No.	Item	Tolerance standard
1	Deflection of dummy disc	0.3 mm or less/300 mm
2	Rectangularity between base and dummy disc	0.3 mm or less/100 mm
3	Rectangularity between vise (B) and dummy disc	0.3 mm or less/100 mm

10. STANDARD REPAIR TIME (UNIT) SCHEDULES

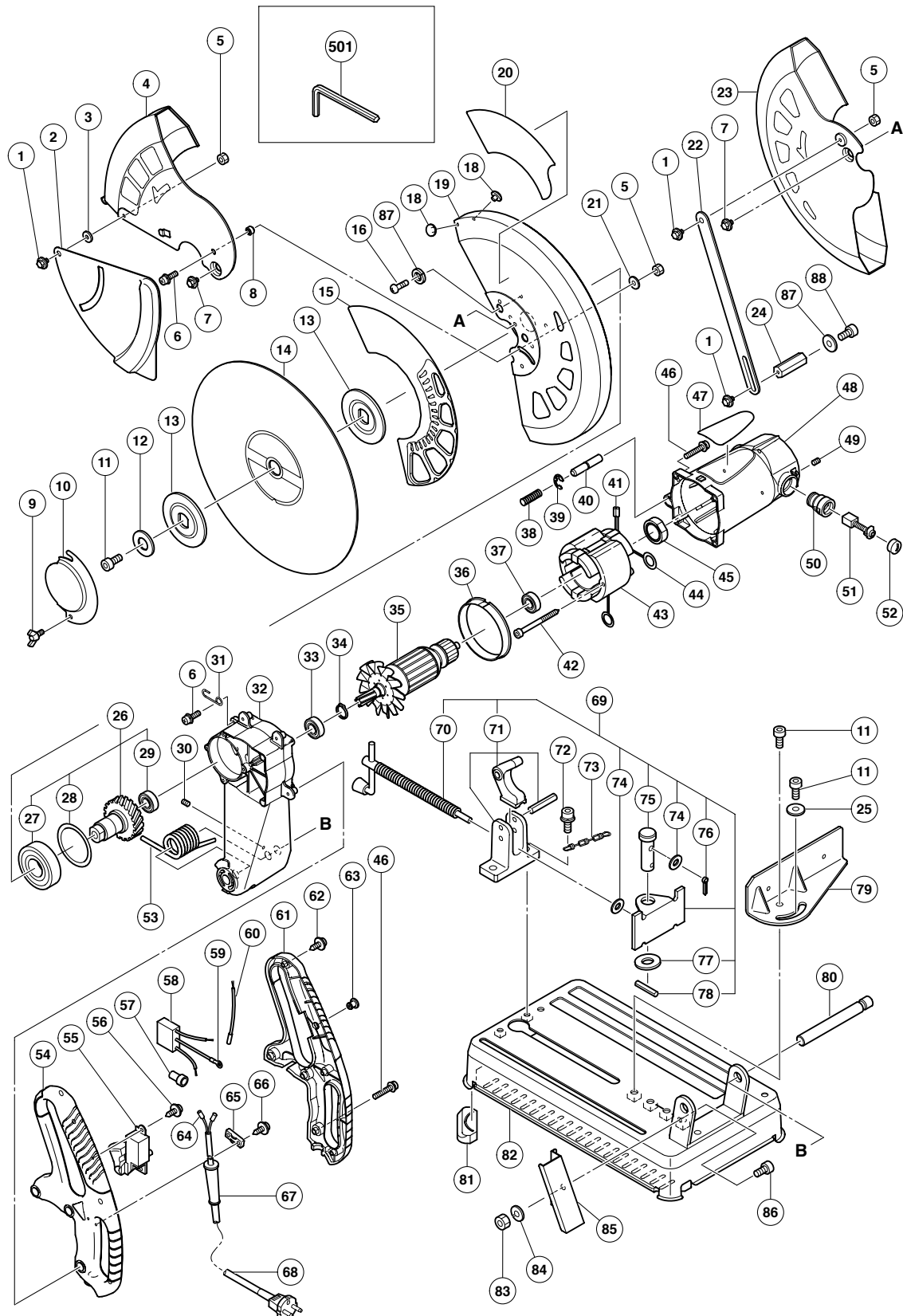
MODEL	Variable		10	20	30	40	50	60 min.
	Fixed							
CC 14SF	<div>General Assembly</div> <div>Fixed Cost</div> <div>Handle</div> <div>Handle Cover</div> <div>Wheel Cover</div> <div>Sub Cover</div> <div>0 min</div> <div>Cord</div> <div>10 min</div> <div>Others</div> <div>20 min</div>							
		Vise (B)						
		Quick Lock Vise Ass'y	Screw Screw Holder Ass'y					
			Vise (A)					
			Handle Handle Cover					
			Cord Switch					
			Hinge Shaft Spring	Base				
			Sub Cover	Wheel Cover	Stopper Pin Gauge Spring Gear Case Fan Guide Spindle Ass'y Ball Bearing 6208VV Ball Bearing 6000VV Armature Ass'y Ball Bearing 6002VV		Stator Ass'y Housing Ass'y	

ELECTRIC TOOL PARTS LIST

■ CUT-OFF MACHINE Model CC 14SF

2005 · 9 · 22

(E1)



PARTS

CC 14SF

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
* 1	325-133	BOLT (B) (W/FLANGE)	1	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR, SUI, AUS, NZL	
* 1	325-133	BOLT (B) (W/FLANGE)	2	FOR SAF	
* 2	325-132	SUB COVER (B)	1	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR, SUI, AUS, NZL	
* 3	949-433	BOLT WASHER M8 (10 PCS.)	1	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR, SUI, AUS, NZL	
* 4	325-128	SUB COVER (A)	1	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR, SUI, AUS, NZL	
* 4	325-129	SUB COVER (A)	1	FOR USA, CAN, VEN, SYR, INA, IND, KUW, HKG, TPE, SIN, THA, KOR	
* 5	949-566	LOCK NUT M5 (10 PCS.)	1	FOR USA, CAN, VEN, SYR, INA, IND, KUW, SAF, HKG, SIN, THA, KOR	
* 5	949-566	LOCK NUT M5 (10 PCS.)	2	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR, SUI, AUS, NZL	
* 6	307-294	MACHINE SCREW (W/WASHERS) M5X16 (BLACK)	2		
* 6	307-294	MACHINE SCREW (W/WASHERS) M5X16 (BLACK)	1	FOR SAF, CHN	
* 7	325-130	BOLT (A) (W/FLANGE)	1	EXCEPT FOR CHN	
* 8	325-131	COVER SPACER	1	EXCEPT FOR SAF, CHN	
* 9	949-394	WING BOLT M6X10 (10 PCS.)	2	FOR CHN	
* 10	325-119	SUB COVER	1	FOR CHN	
	11	949-844	HEX. SOCKET HD. BOLT M10X20 (10 PCS.)	3	
	12	965-724	WASHER (A)	1	
* 13	325-117	WHEEL WASHER (A)	2		
* 13	325-126	WHEEL WASHER (B)	2	FOR AUS	
	14		CUT-OFF WHEEL 355MM	1	
* 15	325-120	DESIGN COVER	1	FOR SAF	
	16	949-237	MACHINE SCREW M5X12 (10 PCS.)	4	
* 18	325-127	COVER BUSH	2	EXCEPT FOR CHN	
	19	325-105	WHEEL COVER (A)	1	
* 20		HITACHI LABEL (A)	1	FOR USA, CAN, VEN, SYR, INA, IND, KUW, CHN, HKG, TPE, SIN, THA, KOR	
* 21	949-431	BOLT WASHER M5 (10 PCS.)	1	EXCEPT FOR SAF, CHN	
* 22	325-136	LINK	1	FOR SAF	
* 23	325-134	SUB COVER (C)	1	FOR SAF	
* 24	325-135	SUPPORT	1	FOR SAF	
	25	949-434	BOLT WASHER M10 (10 PCS.)	2	
	26	325-103	SPINDLE ASS'Y	1	INCLUD. 27-29
	27	630-6VV	BALL BEARING 6306VVCMP2L	1	
	28	325-017	STOPPER PIN (B)	1	
	29	600-2VV	BALL BEARING 6002VVCMP2L	1	
	30	318-044	SEAL LOCK HEX. SOCKET SET SCREW M5X16	1	
	31	321-234	CHAIN HOOK	1	
	32	325-113	GEAR CASE	1	
	33	600-2VV	BALL BEARING 6002VVCMP2L	1	
	34	939-544	RETAINING RING FOR D15 SHAFT (10 PCS.)	1	
* 35	360-731	ARMATURE ASS'Y 100V-110V	1	INCLUD. 33, 34, 37	
* 35	360-732U	ARMATURE ASS'Y 120V	1	INCLUD. 33, 34, 37	
* 35	360-732	ARMATURE ASS'Y 200V-220V	1	INCLUD. 33, 34, 37	
* 35	360-732F	ARMATURE 230V-240V	1		
	36	325-112	FAN GUIDE	1	

PARTS

CC 14SF

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
37	600-0VV	BALL BEARING 6000VVCMP2L	1		
38	948-363	GAUGE SPRING	1		
39	955-479	RETAINING RING (E-TYPE) FOR D6 SHAFT	1		
40	321-239	STOPPER PIN	1		
41	981-373	TUBE (D)	2		
42	984-271	HEX. HD. TAPPING SCREW D5X75	2		
* 43	340-642	STATOR ASS'Y 100V-110V	1	INCLUD. 41, 44	
* 43	340-643G	STATOR ASS'Y 110V	1	INCLUD. 41, 44 FOR GBR (110V)	
* 43	340-643D	STATOR ASS'Y 120V	1	INCLUD. 41, 44	
* 43	340-643	STATOR ASS'Y 200V-220V	1	INCLUD. 41, 44	
* 43	340-643H	STATOR ASS'Y 230V-240V	1	INCLUD. 41, 44	
* 43	340-643F	STATOR ASS'Y 230V-240V	1	INCLUD. 41, 44 FOR IND, KUW	
44	998-744	BRUSH TERMINAL	2		
45	325-116	BEARING BUSHING	1		
46	312-298	MACHINE SCREW (W/WASHERS) M5X35	7		
47		NAME PLATE	1		
48	325-125	HOUSING ASS'Y	1	INCLUD. 45, 49, 50	
49	938-477	HEX. SOCKET SET SCREW M5X8	2		
50	980-487	BRUSH HOLDER	2		
51	999-044	CARBON BRUSH (1 PAIR)	2		
52	940-540	BRUSH CAP	2		
* 53	321-422	SPRING	1		
* 53	321-238	SPRING	1	FOR CHN	
54	325-123	HANDLE	1		
* 55	976-825	SWITCH (2P PILLAR TYPE) W/LOCK	1		
* 55	951-864	SWITCH (2P PILLAR TYPE) W/LOCK	1	FOR VEN, SYR, INA, IND, KUW, CHN, HKG, TPE, SIN, THA, KOR	
* 55	951-894	SWITCH (2P PILLAR TYPE) W/LOCK	1	FOR USA, CAN	
56	305-720	TAPPING SCREW (W/FLANGE) D4X12	1		
* 57	959-141	CONNECTOR 50092 (10 PCS.)	2	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR, SUI, SAF, AUS, NZL	
* 58	994-273	NOISE SUPPRESSOR	1	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR (230V), SUI, SAF, AUS, NZL	
* 58	930-039	NOISE SUPPRESSOR	1	FOR GBR (110V)	
* 59	938-108	TERMINAL	1	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR (230V), SUI, SAF, AUS, NZL	
* 60	321-423	INTERNAL WIRE	2	FOR EUROPE, AUT, FIN, DEN, SWE, NOR, GBR, SUI, SAF, AUS, NZL	
61	325-124	HANDLE COVER	1		
62	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	3		
* 63	951-895	LOCK-OFF BUTTON	1	FOR USA, CAN	
* 64	981-373	TUBE (D)	2	FOR CORD	
65	937-631	CORD CLIP	1		
66	984-750	TAPPING SCREW (W/FLANGE) D4X16	2		
* 67	953-327	CORD ARMOR D8.8	1		
* 67	938-051	CORD ARMOR D10.1	1		
* 68	500-247Z	CORD	1	(CORD ARMOR D8.8)	
* 68	500-435Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (230V), HKG	
* 68	500-461Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (110V)	
* 68	500-248Z	CORD	1	(CORD ARMOR D8.8) FOR SUI	
* 68	500-447Z	CORD	1	(CORD ARMOR D8.8) FOR SYR	

PARTS

CC 14SF

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
* 68	500-214Z	CORD	1	(CORD ARMOR D10.1) FOR VEN, TPE	
* 68	500-453Z	CORD	1	(CORD ARMOR D10.1) FOR USA, CAN	
* 68	500-439Z	CORD	1	(CORD ARMOR D8.8) FOR AUS, NZL	
* 68	500-455Z	CORD	1	(CORD ARMOR D8.8) FOR CHN	
* 68	500-423Z	CORD	1	(CORD ARMOR D8.8) FOR KUW, SIN	
69	325-101	WISE ASS'Y	1	INCLUD. 70, 71, 74-78	
70	321-226	SCREW	1		
71	325-102	SCREW HOLDER	1		
72	307-357	HEX. SOCKET HD. BOLT (W/WASHERS) M8X25	2		
73	968-520	CHAIN (6 LINK)	1		
74	949-433	BOLT WASHER M8 (10 PCS.)	2		
75	321-229	BOLT	1		
76	949-537	SPLIT PIN D3X15 (10 PCS.)	1		
77	321-232	WASHER M16	1		
78	949-681	ROLL PIN D5X25 (10 PCS.)	1		
79	325-100	WISE (B)	1		
80	321-237	HINGE SHAFT	1		
81	321-223	BASE RUBBER	4		
* 82	325-109	BASE	1		
* 82	325-121	BASE	1	FOR EUROPE, AUT, FIN, DEN, SWE,	
				NOR, GBR, SUI	
* 82	325-122	BASE	1	FOR SAF	
83	949-568	LOCK NUT M8 (10 PCS.)	1		
84	949-457	SPRING WASHER M8 (10 PCS.)	1		
85	325-108	SPARK SHOOT	1		
86	949-656	HEX. SOCKET HD. BOLT M8X20 (10 PCS.)	1		
87	949-454	SPRING WASHER M5 (10 PCS.)	4		
* 88	949-844	HEX. SOCKET HD. BOLT M10X20 (10 PCS.)	1	FOR SAF	
* 89	949-434	BOLT WASHER M10 (10 PCS.)	1	FOR SAF	

STANDARD ACCESSORIES

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
501	955-857	HEX. BAR WRENCH 8MM	1		

OPTIONAL ACCESSORIES

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
601	949-012	CUT-OFF WHEEL 355MM (10 PCS.)	1		

