MODELS

W 6VM W 6V4 W 6VA4

# Hitachi Power Tools

**TECHNICAL DATA** 

AND

SERVICE MANUAL

SCREW DRIVER W 6VM W 6V4 W 6VA4

LIST Nos. W 6VM: 0798 W 6V4: E701 W 6VA4: E702 Nov. 2004

W

## 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:

#### Model W 6VM

Symbol Litilized	Competitor			
Symbol Otilized	Company Name	Model Name		
С	ΜΑΚΙΤΑ	6825		
Р	DeWALT	DW255 (DW275K)		

#### Model W 6V4

Symbol Litilized	Competitor			
Symbol Otilized	Company Name	Model Name		
С	MAKITA	6824		
В	BOSCH	1404VSR (GSR6-40TE)		
Р	DeWALT	DW272		

#### Model W 6VA4

Symbol Litilized	Competitor			
Symbol Othized	Company Name	Model Name		
С	MAKITA	6823		
В	BOSCH	1405VSR (GSR6-25TE)		
E	Milwaukee	6740-20		

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## **1. PRODUCT NAME**

Hitachi Screw Driver, Models W 6VM, W 6V4 and W 6VA4

## 2. MARKETING OBJECTIVE

The Models W 6V4 and W 6VA4 screw drivers are upgraded versions of the current Models W 6V3 and W 6VA3, equipped with strong aluminum gear cover and inner cover and ergonomical housing and handle cover with soft grip. The Model W 6VM screw driver is newly added to respond to the increasing market demand for a screw driver operable at 6,000 rpm. Our market share is expected to grow with the release of these new models which broaden our lineup of screw drivers.

## **3. APPLICATIONS**

Drywall screws: Fastening metal studs and drywall

 Interior construction
 Installation of ceilings, paneling or partitions in offices, shops supermarkets, apartment houses, schools, factories, etc.

Hex. and Teks screws: Fastening metal to metal, or metal to wood

- Exterior construction Installation of siding on buildings
  - Installation of galvanized iron sheet or corrugated sheet roofing
- Plate assembly
- Assembly and mounting of advertising billboards
- Assembly of metal frames for vinyl greenhouses
- Assembly and installation of automobile stamped sections
- Various other interior/exterior construction and plate assembly jobs

## 4. SELLING POINTS



#### 4-1. Selling Point Descriptions

The new Models W 6VM, W 6V4 and W 6VA4 are more comfortable and easier to operate than the current models and competitors. The outstanding selling points are as follows.

1) Short length of grip portion

(Measuring point of the length of grip portion)

The Models W 6VM, W 6V4 and W 6VA4 have a handle that is shaped in good weight balance according to the ergonomical design. In addition, the length of the grip portion is shortest in the class. The handle grip is very comfortable and it efficiently reduces operator fatigue. Table 1 shows a comparison of the length of grip portion.



Maker	er		0	_		
Model		W 6VM	C	Р		
The length of grip portion	The length of grip portion mm		212 (8-11/32")	210 (8-1/4")		
Maker		HITACHI				_
Model		W 6V4	W 6V3	C	В	Р
The length of grip portion	The length of grip portion mm		218 (8-19/32")	212 (8-11/32")	210 (8-1/4")	210 (8-1/4")
Malaa						
Maker		HIIACHI			P	-
Model		W 6VA4	W 6VA3	C	В	E
The length of grip portion	mm	206 (8-1/8")	218 (8-19/32")	212 (8-11/32")	210 (8-1/4")	208 (8-3/16")

#### Table 1 Comparison of the length of grip portion

#### 2) Ergonomical design for better operation

The Models W 6VM, W 6V4 and W 6VA4 are equipped with the following four parts as a result of pursuance of the ergonomical design.

1 Soft grip housing and handle cover

The entire body is covered with the uniquely designed elastomer and the grip portion is uneven and mattefinished to make it resistant to slipping. Thus the grip is very comfortable and it efficiently reduces operator fatigue.



#### 2 Big switch trigger

A new big switch trigger is adopted for easier switch operation. The switch trigger is rounded for better feel of triggering.



③ Soft protect cover on gear cover and inner cover

A transparent protect cover made of elastomer is added to cover the surfaces of the gear cover and the inner cover made of aluminum. It is easily detachable just by removing the locator. The protect cover has the following two features.

- The material of the protect cover has extremely lower thermal conductivity than aluminum. Therefore, the protect cover lessens feeling of coldness or hotness even if the gear cover is touched with bare hands under the severe temperature environment such as in the severely cold areas (Russia, Eastern Europe and Northern Europe) or the severely hot areas (Middle East and South-East Asia).
- The protect cover is soft because it is made of elastomer. In addition, the aluminum gear cover protects from damages even if the Models W 6VM, W 6V4 and W 6VA4 are hit against wall materials.

(Mounting the protect cover)



housing to secure the protect cover.

4 One motion detachable locator

The locator is used for adjusting the screw head depth. The current Models W 6V3 and W 6VA3 require the operator to pull the lock sleeve and turn the locator for adjustment. The Models W 6VM, W 6V4 and W 6VA4 are easier to adjust just by turning the locator. W 6V3



#### 3) Low noise

A new fan developed by the 3-D digital analysis technology is adopted. Thanks to the optimized air passage, the noise level of the Models W 6VM, W 6V4 and W 6VA4 is the lowest in the class. Table 2 shows a comparison of the no-load noise level.

Maker		HITACHI	0	D		
Model		W 6VM	U	Р		
No-load noise level*	dB (A)	76	79	82		
Makor						
IVIANEI		HIIACHI		C	B	Р
Model		W 6V4	W 6V3		В	•
No-load noise level*	dB (A)	76	79	79	78	82
	Т			[		1
Maker		HITA	ACHI	<u> </u>	D	F
Model		W 6VA4 W 6VA3		U	D	L
No-load noise level*	dB (A)	76	79	79	78	80

#### Table 2 Comparison of the no-load noise level

\*: Rotational direction is R.

#### 4) Robust aluminum gear cover and inner cover

Material of gear cover and inner cover

The Models W 6VM, W 6V4 and W 6VA4 have the gear cover and the inner cover made of aluminum, while those of the current Models W 6V3 and W 6VA3 are made of resin. This is to ensure the specified durability and strength of the Models W 6VM, W 6V4 and W 6VA4 even under the severe environment. Table 3 shows a comparison of the material of gear cover and inner cover.

#### Table 3 Comparison of the material of gear cover and inner cover

Maker	HITACHI	0	
Model	W 6VM	C	Р
Material of gear cover and inner cover	Aluminum	Aluminum	Plastic

Maker	HITACHI		0	P	P	
Model	W 6V4	W 6V3	C	В	Р	
Material of gear cover and inner cover	Aluminum	Plastic	Aluminum	Plastic	Aluminum	
Maker	HITACHI		0			
Model	W 6VA4	W 6VA3		В		

Plastic

Aluminum

Plastic

Aluminum

#### 5) 7.5 m (24.6 ft.) long cord (for U.S.A., Canada, Europe, Russia and Oceania)

Aluminum

The 7.5 m (24.6 ft.) long cord of the Models W 6VM, W 6V4 and W 6VA4 eliminates the inconvenience of connecting an extension cord or carrying a cord reel in the work site.

#### 6) High power motor

The motor of the Models W 6VM, W 6V4 and W 6VA4 is more powerful than the current Models W 6V3 and W 6VA3 with the class-top power input. Table 4 shows a comparison of the power input.

waker	ər		HITACHI	C	В	
Model	Model		W 6VM	0		
Power	U.S.A., Canada	W	750 (120 V, 6.6 A)	710 (115 V, 6.5 A)	680 (120 V, 6.0 A)	
input	Other areas	W	620	570	540	

## Table 4 Comparison of the power input

Maker			HITA	ACHI	0	Р	D	
Model			W 6V4 W 6V3				Г Г	
Power	U.S.A., Canada	W	750 (120 V, 6.6 A)	680 (115 V, 6.4 A)	710 (115 V, 6.5 A)	550 (120 V, 4.8 A)	720 (120 V, 6.3 A)	
input	Other areas	W	620	600	570	500		
Maker			HITA	HITACHI		Р	E	
Model			W 6VA4	W 6VA3	C	D	E	
Power	U.S.A., Canada	W	750 (120 V, 6.6 A)	680 (115 V, 6.4 A)	710 (115 V, 6.5 A)	550 (120 V, 4.8 A)	740 (120 V, 6.5 A)	
input	Other areas	W	620	600	570	500		

# **5. SPECIFICATIONS**

# 5-1. Specifications

Model		W 6VM	W 6V4	W 6VA4	
Canacity	Drywall screw	6 mm (1/4")			
Capacity	Self-drilling screw	6 mm (1/4")			
Bit mounting size	1		6.35 mm (1/4")		
Power source		Single	e phase, AC 50 Hz or	60 Hz	
Type of motor		Single	phase, AC commutato	r motor	
	U.S.A., Canada		6.6 A (120 V)		
Full-load current	Other areas	2.9 A (220 V) 5.9 A (110 V) 2.8 A (230 V) 2.7 A (240 V)			
Power input	U.S.A., Canada	750 W			
Other areas		620 W			
No-load rotation		0 - 6,000 /min 0 - 4,500 /min 0 - 3,000 /min			
Enclosure		Housing and handle cover       Polyamide resin and thermo plastic elastomer         Gear cover and inner cover       Aluminum alloy         Protect cover       Thermo plastic elastomer         Locator and hook       Polyamide resin			
Switch		Variable switch with reversing switch			
Handle		Pistol grip handle			
Weight		Net			
Packaging*1		Corrugated cardboard box			
	Туре	Two	o-core cabtire cable		
Cord Overall length		U.S.A., Canada, Europe, Russia, Oceania			
Standard accessory		Magnetic bit holder       1         No. 2 Phillips driver bit       1         Sub-stopper       1			

\*1: Packaging may vary depending on the market.\*2: Standard accessories may vary depending on the market.

#### 5-2. Optional Accessories

#### (1) For hex-head screws

Hex-s	socket	Sub-stopper (B)
Magnetic type	Non magnetic type	
H = 6.35 mm	H = 6.35 mm	H 1/4
H = 7.94 mm	H = 7.94 mm	H 5/16
H = 9.53 mm H = 9.53 mm		H 3/8
H = 10 mm	H = 10 mm	110/0

(2) For other screws



(3) Plastic case



Optional accessories are subject to change without notice.

#### 6. COMPARISONS WITH SIMILAR PRODUCTS

## 6-1. W 6VM

		HITACHI	<u> </u>	Р	
		W 6VM	C	F F	
Drywall screw	mm	6 (1/4")	5 (3/16")	4 (5/32")	
Self-drilling screw m		6 (1/4")	6 (1/4")	-	
U.S.A., Canada	W	750 (120 V, 6.6 A)	710 (115 V, 6.5 A)	680 (120 V, 6.0 A)	
Other areas W		620	570	540	
No-load rotation		0 - 6,000	0 - 6,000	0 — 5,300	
No-load noise level *1		76	79	82	
with long bit holder mm		328 (12-7/8")	202 (11 7/0!!)	310 (12-13/64")	
with short bit holder	mm	294 (11-19/32")	302 (11-778 )	510 (12-15/04 )	
U.S.A., Canada, Europe, Russia and Oceania	m	7.5 (24.6 ft.)	U.S.A.: 2.5 (8.2 ft.)	U.S.A.: 2.5 (8.2 ft.)	
Asia, Africa and other areas	m	2.5 (8.2 ft.)	Europe: 4.2 (13.8 ft.)	Europe: 4.2 (13.8 ft.)	
	kg	1.4 (3.1 lbs.)	1.4 (3.2 lbs.)	1.4 (3.2 lbs.)	
	Drywall screw Self-drilling screw U.S.A., Canada Other areas ation ise level *1 with long bit holder with short bit holder U.S.A., Canada, Europe, Russia and Oceania Asia, Africa and other areas	Drywall screwmmSelf-drilling screwmmU.S.A., CanadaWOther areasWation/minise level *1dB (A)with long bit holdermmwith short bit holdermmU.S.A., Canada, Europe, Russia and OceaniamAsia, Africa and other areasmkg	HITACHI           W 6VM           Drywall screw         mm         6 (1/4")           Self-drilling screw         mm         6 (1/4")           U.S.A., Canada         W         750 (120 V, 6.6 A)           Other areas         W         620           ation         /min         0 – 6,000           ise level *1         dB (A)         76           with long bit holder         mm         328 (12-7/8")           with short bit holder         mm         294 (11-19/32")           U.S.A., Canada, Europe, Russia and Oceania         m         7.5 (24.6 ft.)           Asia, Africa and other areas         m         2.5 (8.2 ft.)           kg         1.4 (3.1 lbs.)         Kg	$\begin{tabular}{ c c c c } \hline HITACHI & HITACHI & C & W 6VM & \\ \hline W 6VM & & & & & & & & & & & & & & & & & & &$	

\*1: Rotation direction is R.

\*2: Weight excludes cord and means actual weight.

#### 6-2. W 6V4

Maker			HITA	ACHI	6	D	P	
Model			W 6V4	W 6V3		D	F	
Conseitu	Drywall screw	mm	6 (1/4")	6 (1/4")	5 (3/16")	6 (1/4")	4 (5/32")	
Capacity	Self-drilling screw	mm	6 (1/4")	6 (1/4")	6 (1/4")	—	_	
Power	U.S.A., Canada	W	750 (120 V, 6.6 A)	680 (115 V, 6.4 A)	710 (115 V, 6.5 A)	550 (120 V, 4.8 A)	720 (120 V, 6.3 A)	
input	Other areas	W	620	600	570	500	—	
No-load rot	rotation /min		0 - 4,500	0 — 4,000	0 - 4.500	0 - 4,000	0 - 4,000	
No-load no	-load noise level *1 dB (A		76	79	79	78	82	
Overall	with long bit holder	mm	328 (12-7/8")	302 (11-7/8")	202 (11 7/0!!)	210 (10 10/64!!)		
length	with short bit holder	mm	294 (11-19/32")	268 (10-19/32")	302 (11-7/8)	310 (12-13/64 )	312 (12-9/32)	
Cord	U.S.A., Canada, Europe, Russia and Oceania	m	7.5 (24.6 ft.)	7.5 (24.6 ft.) *3	U.S.A.: 2.5 (8.2 ft.)	25(22ft)	25(82ft)	
length	Asia, Africa and other areas	m	2.5 (8.2 ft.)	2.5 (8.2 ft.)	Europe: 4.2 (13.8 ft.)	urope: 4.2 (13.8 ft.)		
Weight *2		kg	1.4 (3.1 lbs.)	1.3 (2.9 lbs.)	1.4 (3.2 lbs.)	1.5 (3.3 lbs.)	1.4 (3.2 lbs.)	

\*1: Rotation direction is R.

\*<sup>2</sup>: Weight excludes cord and means actual weight.
\*<sup>3</sup>: U.S.A. only. Europe, Russia and Oceania are 2.5 m.

#### 6-3. W 6VA4

Maker			HITA	CHI	6	D	E	
Model			W 6VA4	W 6VA3		D	E	
Conscitu	Drywall screw	mm	6 (1/4")	6 (1/4")	5 (3/16")	6 (1/4")	-	
Capacity	Self-drilling screw		6 (1/4")	6 (1/4")	6 (1/4")	—	-	
Power	U.S.A., Canada	W	750 (120 V, 6.6 A)	680 (115 V, 6.5 A)	710 (115 V, 6.5 A)	550 (120 V, 4.8 A)	740 (120 V, 6.5 A)	
input	Other areas		620	600	570	500	-	
No-load rot	No-load rotation		0 - 3,000	0 — 2,600	0 - 2,500	0 - 2,500	0 - 2,500	
No-load no	ise level *1	dB (A)	76	79	79	78	80	
Overall	with long bit holder	mm	328 (12-7/8")	302 (11-7/8")	302 (11-7/8")	320 (12-10/32")	335 (13-13/64")	
length	with short bit holder	mm	294 (11-19/32")	268 (10-19/32")	002 (11-770)	320 (12-19/32)	000 (10 10/04 )	
Cord	U.S.A., Canada, Europe, Russia and Oceania         m         7.5 (24.6 ft.)         2.5 (8.2 ft.)         U.S.A.: 2.5 (8.2 ft.)           Asia, Africa and other areas         m         2.5 (8.2 ft.)         2.5 (8.2 ft.)         Europe: 4.2 m (13.8 ft.)		7.5 (24.6 ft.)	25 <i>(</i> 82ft)	U.S.A.: 2.5 (8.2 ft.)	25(82ft)	30(08ft)	
length			Europe: 4.2 m (13.8 ft.)	2.3 (0.2 11.)	0.0 (0.0 11.)			
Weight *2		kg	1.4 (3.1 lbs.)	1.3 (2.9 lbs.)	1.5 (3.3 lbs.)	1.6 (3.5 lbs.)	1.4 (3.2 lbs.)	

\*1: Rotation direction is R.

\*2: Weight excludes cord and means actual weight.

## 7. PRECAUTIONS IN SALES PROMOTION

In the interest of promoting the safest and most efficient use of the Models W 6VM, W 6V4 and W 6VA4 electric screwdrivers by all of our customers, it is very important that at the time of sales 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.

#### 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 electric power 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 electric screwdriver are listed in the Handling Instructions to enhance the safe and 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.

#### 7-2. Caution Plates

The following basic safety precautions are listed on the Name Plate attached to the main body of each tool. However, these precautions are not listed for European countries.

• For Asia and Oceania

#### CAUTION

• Read thoroughly HANDLING INSTRUCTIONS before use.

• For the U.S.A. and Canada

#### WARNING

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

## 7-3. Screw Driving-depth Adjustment

Information and suggestions for screw driving-depth selection for applicable screws are described in the Handling Instructions. The salesperson must be thoroughly familiar with screw driving-depth adjustment procedures to be able to instruct the customer/user in performing adjustment so that the screw neither protrudes above nor sinks excessively below the surface of the workpiece into which the screw is driven.

Specific adjustment procedures are as follows.

(1) Head of screw protrudes above workpiece surface (Fig. 1).

If dimension A in Fig. 3 is excessively small, the head of the driven screw will protrude above the surface of the workpiece material as shown in Fig. 1. To adjust dimension A, rotate the locator clockwise as viewed from the screw mounting end (see Note below). Repeat adjustment as necessary until the head of the driven screw is properly aligned with the surface of the workpiece.



#### (2) Head of screw sinks below workpiece (Fig. 2).

If dimension A in Fig. 3 is excessively large, the head of the driven screw will sink below the surface of the workpiece as shown in Fig. 2. To perform adjustment, follow the procedures described in item (1) above, but rotate the locator counter-clockwise.

Should Hex. and Teks screws be driven when dimension A is excessively large, both the screws and bits may be easily damaged. Instruct customers/users to perform adjustment correctly without fail.

(NOTE) By turning the locator clockwise or counter-clockwise, dimension A in Fig. 3 can be adjusted within a maximum dimension of 1.5 mm (0.059"). One complete rotation of the locator is divided into twelve settings, each setting permitting an adjustment of 0.125 mm (0.005"). Accordingly, if dimension B in Fig. 1 is 0.25 mm (0.010"), rotate the locator by two settings.

#### 7-4. Self-drilling Screws

Self-drilling screws are most suitable for joining wooden and metal materials, mounting metallic components onto iron sheets, or installing roofing materials. Self-drilling and self-tapping, they are commonly employed in the construction industry because:

- Separate drilling and tapping processes are not required when securing wooden materials to metal materials.
- Consequently, job costs and processes can be drastically reduced.

#### 7-5. Drywall Screws

Drywall screws are most suitable for interior decorating and construction utilizing such materials as gypsum board and plastic board. Their main features are:

- Like Hex. and Teks screws, drywall screws are self-drilling, and can reduce work time.
- Wall panels can be mounted cleanly without cracks or chips.
- Drywall screws display far stronger holding power than conventional screws when applied to materials composed of powder or particles, such as gypsum board.

#### 7-6. Variable-speed Switch

This switch is equipped with a variable speed control circuit. Through the control circuit, the speed can be controlled up to 65 % of maximum speed according to the degree at which the switch is depressed. A disadvantage of this system is that if the bit becomes locked resulting in stoppage of the motor, the speed control circuit may be burnt out. In such a case, the switch should be released immediately or turned OFF. To avoid damage to the switch circuit, the customer should be advised to increase driving speed gradually until the screw is driven approximately halfway into the workpiece, then depress the trigger to obtain optimum speed.



**Fig. 4** Switch characteristics (Approximately shown converted into the linear line)

## 8. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY

The numbers in the descriptions below correspond to the item numbers in the Parts List and exploded assembly diagram. The **[BOLD]** numbers are for the Model W 6VM, the **<Bold>** numbers for the Models W 6V4 and W 6VA4.

#### 8-1. Disassembly

- A. Disassembly of the parts within the handle
  - (1) Removal of the Handle Cover [46] <45>

Loosen the three Tapping Screws (W/Flange) D4 x 20 (Black) [47] <46>, and remove the Handle Cover [46] <45>.

(2) Removal of the Carbon Brush (Auto Stop Type) (1 Pair) [30] <29>

With a small flat-blade screwdriver, lift up on the spring, and pull the Carbon Brush (Auto Stop Type) (1 Pair) **[30] <29>** out from Brush Holder (A) **[29] <28>** slightly. Next, pull out the terminal portion of Carbon Brush (Auto Stop Type) (1 Pair) **[30] <29>** from the Brush Holder (A) **[29] <28>**. Remove the carbon brushes from both sides in the same manner.

(3) Removal of the Cord [38] <37>

After loosening the two speed control switch retaining screws, loosen the two Tapping Screws (W/Flange) D4 x 16 **[40] <39>** which retain the Cord Clip **[39] <38>**, and remove the Cord **[38] <37>** together with the Cord Armor D8.8 **[37] <36>**.

- B. Removal of the armature and stator
  - (1) Removal of the Armature [21] <20>

Remove the three Tapping Screws D4 x 25 (Black) **[7]** <7> from the Gear Cover (A) Ass'y **[8]** <8>, and remove the Inner Cover Ass'y **[20]** <19> with the Armature **[21]** <20> from the housing. And as illustrated in Fig. 5, the Inner Cover Ass'y **[20]** <19> can be removed from the Armature **[21]** <20> by utilizing a J-130 sleeve (special repair tool, Code No. 970908) and a J-131 plate (special repair tool, Code No. 970909).

(2) Removal of the Stator [24] <23>

First, remove the Fan Guide [22] <21> from the inside of the housing.

Then, loosen the two Hex. Hd. Tapping Screws D4 x 50 [23] <22>, and lightly tap the end surface of the Housing [36] <35> with a wooden hammer to loosen and remove the Stator [24] <23>.





- C. Removal of socket (A) ass'y and gear ass'y
  - (1) Remove Gear Cover (A) Ass'y [8] <8> and the Inner Cover Ass'y [20] <19>, then Socket (A) Ass'y [11]
    <11>, Gear Set [14] <14> and Clutch Disc [12] <12> can be removed. If the Gear Set [14] <14> is hard to remove, lightly tap the end surface of the Inner Cover Ass'y [20] <19> with a wood hammer. Be careful not to lose the Spring [13] <13> on the outer circumference of the Gear Set [14] <14> and Washer (A) [16]
    <16>. As shown in Fig. 5, insert two flat-blade screwdrivers between the Inner Cover Ass'y [20] <19> and the Gear Set [14] <14> at each side and remove the Gear Set [14] <14> and Ball Bearing 608VVC2PS2L
    [15] <15 > from the Inner Cover Ass'y [20] <19> as a single unit.





#### 8-2. Reassembly

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

- (1) Fan side Ball Bearing [18] <15> for the Armature [21] <20> in the Inner Cover Ass'y [20] <19> should be renewed in disassembling the Armature [21] <20>.
- (2) Lubrication

Grease: Hitachi Motor Grease (Code No. 930035)

Application:

- (a) Fill a moderate amount of grease in Gear Cover (A) Ass'y [8] <8>. (If Gear Cover (A) Ass'y [8] <8> is new, fill it with 7 g of grease.)
- (b) Outer circumference and clutch of Socket (A) Ass'y [11] <11>
- (c) Teeth and clutch of the Gear Set [14] <14>
- (d) Outer circumference of the Gear Set [14] <14>
- (e) Clutch and inner circumference of the Clutch Disc [12] <12>
- (f) Pinion of the Armature [21] <20>

# (3) Tightening torque

Handle cover retaining screws	1.5 – 2.5 N·m {15 – 25 kg·cm (13.0 – 21.7 in-lbs)}
Cord clip retaining screws	······1.5 – 2.5 N·m {15 – 25 kg·cm (13.0 – 21.7 in-lbs)}
Gear cover retaining screws	······ 1.5 – 2.5 N·m {15 – 25 kg·cm (13.0 – 21.7 in-lbs)}
Stator retaining screws	······ 1.5 – 2.5 N·m {15 – 25 kg·cm (13.0 – 21.7 in-lbs)}
Speed control switch retaining screws ······	······0.4 − 0.8 N•m {4 − 8 kg•cm (3.5 − 6.9 in-lbs)}
Inner cover truss screws	1.4 – 2.2 N·m {14 – 22 kg·cm (12.0 – 18.9 in-lbs)}

## 8-3. Wiring Diagrams

(1) Products with noise suppressor



Fig. 7

(2) Products without noise suppressor



Fig. 8

#### 8-4. Internal Wire Arrangement and Wiring Work

#### A. Internal wire arrangement

(1) Products with noise suppressor



#### (2) Products without noise suppressor



Fig. 9 Schematic diagram

#### **B.** Additional wiring work

General internal wiring can be accomplished by referring to paragraph 8-3 and 8-4-A. The following are special instructions for switch connection.

#### (1) Wiring of reversing switch

Insert the lead wire (brown) coming from the brush holder into the terminal (1) of the reversing switch, and the lead wire (blue) into the terminal (2) as shown in Fig. 10. Insert the lead wire (gray) coming from the stator into the terminal (3) and the lead wire (red) into the terminal (4). After insertion, pull each lead wire slightly to check that the lead wires do not come off. To disconnect the lead wires, insert a small flat-blade screwdriver into the slots near the terminals and pull out the lead wires.

(2) Wiring of variable speed control switch Insert each cord into the terminal 1↓ and terminal 2↓ of the speed control switch as shown in Fig. 11, and tighten the screw [tightening torque: 0.6 ± 0.2 N·m (6 ± 2 kgf·cm, 5.2 ± 1.7 in-lbs.)]. Insert the lead wire (yellow) coming from the stator into the terminal M1 and the lead wire (white) into the terminal M2. Insert each lead wire (white) coming from the noise suppressor into the terminal C1 and C2. After insertion, pull each lead wire slightly to check the lead wires, insert a small flat-blade screwdriver into the slots near the terminals and pull out the lead wires.



Fig. 10 Wiring of reversing switch



Fig. 11 Wiring of speed control switch

#### 8-5. Insulation Tests

On completion of reassembly after repair, measure the insulation resistance and conduct the dielectric strength test.

## 8-6. No-load Current Values

After no-load operation for 30 minutes, the no-load current value should be as follows.

Voltage (V)	110	115	120	220	230	240
Current (A) max.	2.5	2.5	2.5	1.2	1.2	1.1

# 9. STANDARD REPAIR TIME (UNIT) SCHEDULES







	PAF	RTS				W 6VM
	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	1	876-031	O-RING (S-16)	1		
	2	323-487	LOCATOR ASS'Y	1	INCLUD.3	
	3	323-488	CLICK SPRING	1		
	4	971-468	FRINGER (A)	1		
	5	317-662	O-RING (F)	1		
	6	323-558	PROTECT COVER (A)	1		
	7	321-057	TAPPING SCREW D4X25 (BLACK)	3		
	8	323-486	GEAR COVER (A) ASS'Y	1	INCLUD. 5	
	9	872-573	SET RING	1		
	10	959-148	STEEL BALL D3.175 (10 PCS.)	2		
*	11	323-491	SOCKET (A) ASS'Y	1	INCLUD. 9, 10	
*	11	323-482	SOCKET (A) ASS'Y	1	INCLUD. 9, 10 FOR HKG, THA, TPE, KOR	
	12	323-476	CLUTCH DISC	1		
	13	306-024	SPRING	1		
	14	323-504	GEAR SET	1		
	15	608-VVM	BALL BEARING 608VVC2PS2L	1		
	16	933-545	WASHER (A)	2		
	17	323-556	SLOTTED HD. SCREW (SEAL LOCK) M4X8	2		
	18	690-0VV	BALL BEARING 6900VV2MPS2L	1		
	19	323-557	FELT (A)	1		
	20	323-503	INNER COVER ASS'Y (B)	1	INCLUD. 15-19	
*	21	360-676	ARMATURE (C) 110V	1		
*	21	360-677U	ARMATURE ASS'Y (C) 120V	1	INCLUD. 18, 25	
*	21	360-677E	ARMATURE (C) 220V-230V	1		
*	21	360-677F	ARMATURE (C) 240V	1		
	22	323-472	FAN GUIDE	1		
	23	961-672	HEX. HD. TAPPING SCREW D4X50	2		
*	24	340-599C	STATOR 110V-120V	1		
*	24	340-599E	STATOR 220V-240V	1		
	25	608-VVM	BALL BEARING 608VVC2PS2L	1		
	26		NAME PLATE	1		
	27	323-471	ноок	1		
	28		HITACHI LABEL	2		
	29	323-512	BRUSH HOLDER (A)	2		
	30	999-091	CARBON BRUSH (AUTO STOP TYPE) (1 PAIR)	2		
*	31	323-489	INTERNAL WIRE (BROWN)	1	FOR USA, CAN, KUW, HKG, THA	
*	32	323-480	CHOKE COIL (W/INTERNAL WIRE) BROWN	1	EXCEPT FOR USA, CAN, KUW, HKG, THA	
	33	323-479	SWITCH (1P PILLAR TYPE) W/LOCK	1		
*	34	323-490	INTERNAL WIRE (BLUE)	1	FOR USA, CAN, KUW, HKG, THA	
*	35	323-481	CHOKE COIL (W/INTERNAL WIRE) BLUE	1	EXCEPT FOR USA, CAN, KUW, HKG, THA	
	36	323-483	HOUSING	1		
	37	953-327	CORD ARMOR D8.8	1		
*	38	323-559	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8)	
*	38	500-423Z	CORD	1	(CORD ARMOR D8.8) FOR KUW	
*	38	323-560	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR GBR (230V)	
*	38	323-562	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR GBR (110V)	
*	38	500-435Z	CORD	1	(CORD ARMOR D8.8) FOR HKG	
*	38	320-130	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR USA, CAN	
*	38	323-561	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR AUS	
*	38	500-468Z	CORD	1	(CORD ARMOR D8.8) FOR THA	
*	38	500-470Z	CORD	1	(CORD ARMOR D8.8) FOR TPE	

	PAF	RTS				W 6V
	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
*	38	500-409Z	CORD	1	(CORD ARMOR D8.8) FOR KOR	
	39	937-631	CORD CLIP	1		
	40	984-750	TAPPING SCREW (W/FLANGE) D4X16	2		
*	41	959-140	CONNECTOR 50091 (10 PCS.)	2	EXCEPT FOR USA, CAN, KUW, HKG, THA	
*	42	930-039	NOISE SUPPRESSOR	1	EXCEPT FOR USA, CAN, KUW, HKG, THA	
*	43	994-273	NOISE SUPPRESSOR	1	EXCEPT FOR USA, CAN, KUW, HKG, THA	
*	44	317-667	INTERNAL WIRE	2	EXCEPT FOR USA, CAN, KUW, HKG, THA	
*	45	992-635	EARTH TERMINAL	1	EXCEPT FOR USA, CAN, KUW, HKG, THA	
	46	323-484	HANDLE COVER	1		
	47	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	3		

# STANDARD ACCESSORIES

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
*	501	323-352	SUB STOPPER (G)	1	EXCEPT FOR USA, CAN, AUS, HOL, HKG	
	502	971-511Z	+ DRIVER BIT (A) NO.2 25L	1		
*	503	317-674	MAGNETIC BIT HOLDER ASS'Y (41L)	1	INCLUD. 502	
*	503	323-353	MAGNETIC BIT HOLDER ASS'Y (81.1L)	1	INCLUD. 502 FOR HKG	
*	503	982-554Z	MAGNETIC BIT HOLDER (75L)	1	FOR HOL, AUS	
*	503	323-354	MAGNETIC BIT HOLDER ASS'Y (47.1L)	1	INCLUD. 502 FOR THA,KOR	
*	504	323-351	SUB STOPPER (F)	1	FOR USA, CAN, AUS, HOL, HKG	
*	505	310-904	CASE	1	FOR ESP	

# **OPTIONAL ACCESSORIES**

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	601	317-670	SUB STOPPER (B) FOR H3/8, H10 HEX. SOCKET	1		
	602	317-671	SUB STOPPER (B) FOR H5/16 HEX. SOCKET	1		
	603	317-827	SUB STOPPER (B) H1/4 HEX. SOCKET	1		
*	604	985-330	MAGNETIC HEX. SOCKET 3/8"X65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	605	985-321	MAGNETIC HEX. SOCKET 10MMX65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	606	985-322	MAGNETIC HEX. SOCKET 5/16"X65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	607	985-332	MAGNETIC HEX. SOCKET 1/4"X65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	608	985-326	NON-MAGNETIC HEX. SOCKET 3/8" 65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	609	985-329	NON-MAGNETIC HEX. SOCKET 10MM 65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	610	985-327	NON-MAGNETIC HEX. SOCKET 5/16" 65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	611	985-328	NON-MAGNETIC HEX. SOCKET 1/4" 65L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	612	982-563Z	NON-MAGNETIC BIT HOLDER	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	613	323-356	MAGNETIC HEX. SOCKET 5/16"X71.1L	1	EXCEPT FOR THA, HKG, TPE, KOR	
*	614	323-355	MAGNETIC HEX. SOCKET 10MMX71.1L	1	EXCEPT FOR THA, HKG, TPE, KOR	
	615	985-333	+ DRIVER BIT NO. 1 25L	1		
Ī	616	971-512Z	+ DRIVER BIT (A) NO. 3 25L	1		
	617	985-334	+ DRIVER BIT NO. 1 25L W/STEPPED ROD	1		
	618	985-335	+ DRIVER BIT NO. 2 25L W/STEPPED ROD	1		
	619	985-336	- DRIVER BIT 4MMX25	1		
	620	985-337	- DRIVER BIT 5MMX25	1		
	621	985-338	- DRIVER BIT 6MMX25	1		
	622	985-339	- DRIVER BIT 8MMX25	1		
	623	985-340	- DRIVER BIT 4MMX25 (W/STEPPED ROD)	1		
	624	985-341	- DRIVER BIT 5MMX25 (W/STEPPED ROD)	1		
	625	985-342	HEX. BIT 4MMX25L	1		
	626	985-343	HEX. BIT 5MMX25L	1		
	627	985-344	HEX. BIT 6MMX25L	1		
	628	310-904	CASE	1		
[						

\* ALTERNATIVE PARTS

(040825N)





	PAF	PARTS W 6V							
	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS				
	1	876-031	O-RING (S-16)	1					
	2	323-487	LOCATOR ASS'Y	1	INCLUD. 3				
	3	323-488	CLICK SPRING	1					
	4	971-468	FRINGER (A)	1					
	5	317-662	O-RING (F)	1					
Ī	6	323-558	PROTECT COVER (A)	1					
	7	321-057	TAPPING SCREW D4X25 (BLACK)	3					
	8	323-486	GEAR COVER (A) ASS'Y	1	INCLUD. 5				
ĺ	9	872-573	SET RING	1					
	10	959-148	STEEL BALL D3.175 (10 PCS.)	2					
*	11	323-491	SOCKET (A) ASS'Y	1	INCLUD. 9, 10				
*	11	323-482	SOCKET (A) ASS'Y	1	INCLUD. 9, 10 FOR TPE, THA, HKG, KOR				
	12	323-476	CLUTCH DISC	1					
	13	306-024	SPRING	1					
Ì	14	323-485	GEAR SET	1					
Ì	15	608-VVM	BALL BEARING 608VVC2PS2L	2					
ľ	16	933-545	WASHER (A)	1					
ľ	17	323-556	SLOTTED HD. SCREW (SEAL LOCK) M4X8	2					
	18	323-557	FELT (A)	1					
	19	323-473	INNER COVER ASS'Y (A)	1	INCLUD. 15-18				
*	20	360-672	ARMATURE (A) 110V	1					
*	20	360-673U	ARMATURE ASS'Y (A) 120V	1	INCLUD. 15. 24				
*	20	360-673E	ARMATURE (A) 220V-230V	1					
*	20	360-673F	ARMATURE (A) 240V	1					
	21	323-472	FAN GUIDE	1					
	22	961-672	HEX. HD. TAPPING SCREW D4X50	2					
*	23	340-599C	STATOR 110V-120V	1					
*	23	340-599E	STATOR 220V-240V	1					
	24	608-VVM	BALL BEARING 608VVC2PS2L	1					
	25			1					
	26	323-471	НООК	1					
	27			2					
	28	323-512	BRUSH HOLDER (A)	2					
	29	999-091	CABBON BRUSH (AUTO STOP TYPE) (1 PAIR)	2					
*	30	323-489		1	FOR THA HKG KUW USA CAN				
*	31	323-480	CHOKE COIL (W/INTERNAL WIRF) BROWN	1	EXCEPT FOR THA. HKG. KUW, USA, CAN				
ł	32	323-479	SWITCH (1P PILLAR TYPE) W/I OCK	1					
*	33	323-490	INTERNAL WIRE (BLUE)	1	FOR THA, HKG, KUW, USA, CAN				
*	34	323-481	CHOKE COIL (W/INTERNAL WIRF) BI LIF	1	EXCEPT FOR THA. HKG. KUW, USA, CAN				
	35	323-483	HOUSING	1					
ł	36	953-327	CORD ARMOR D8.8	1					
*	37	323-559	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8)				
*	37	500-4687	CORD	1	(CORD ARMOR D8.8) FOR THA				
*	37	500-423Z	CORD	1	(CORD ARMOR D8.8) FOR KUW				
*	37	320-130	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR USA CAN				
*	37	500-4357	CORD	1	(CORD ARMOR D8.8) FOR HKG				
*	37	500-4097	CORD	1	(CORD ARMOR D8.8) FOR KOR				
*	37	500-4707	COBD	1	(CORD ARMOR D8.8) FOR TPF				
*	37	323-561	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR ALLS				
*	37	323-562	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR GBR (110V)				
*	37	323-560	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR GBR (230V)				
L	•••								

	PAF	RTS				W 6V
	ITEM NO	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	38	937-631	CORD CLIP	1		
	39	984-750	TAPPING SCREW (W/FLANGE) D4X16	2		
*	40	959-140	CONNECTOR 50091 (10 PCS.)	2	EXCEPT FOR THA, HKG, KUW, USA, CAN	
*	41	930-039	NOISE SUPPRESSOR	1	EXCEPT FOR THA, HKG, KUW, USA, CAN	
*	42	994-273	NOISE SUPPRESSOR	1	EXCEPT FOR THA, HKG, KUW, USA, CAN	
*	43	317-667	INTERNAL WIRE	2	EXCEPT FOR THA, HKG, KUW, USA, CAN	
*	44	992-635	EARTH TERMINAL	1	EXCEPT FOR THA, HKG, KUW, USA, CAN	
	45	323-484	HANDLE COVER	1		
	46	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	3		

8 – 04

# STANDARD ACCESSORIES

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
* [	501	323-352	SUB STOPPER (G)	1	EXCEPT FOR HKG, AUS, HOL, USA, CAN	
	502	971-511Z	+ DRIVER BIT (A) NO. 2 25L	1		
*	503	317-674	MAGNETIC BIT HOLDER ASS'Y (41L)	1	INCLUD. 502	
*	503	323-354	MAGNETIC BIT HOLDER ASS'Y (47.1L)	1	INCLUD. 502 FOR TPE, THA, KOR	
*	503	982-554Z	MAGNETIC BIT HOLDER (75L)	1	FOR AUS, HOL, USA, CAN	
* [	503	323-353	MAGNETIC BIT HOLDER ASS'Y (81.1L)	1	INCLUD. 502 FOR HKG	
*	504	323-351	SUB STOPPER (F)	1	FOR HKG, AUS, HOL, USA, CAN	
*	505	310-904	CASE	1	FOR ESP	

# **OPTIONAL ACCESSORIES**

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
Ī	601	317-670	SUB STOPPER (B) FOR H3/8, H10 HEX. SOCKET	1		
	602	317-671	SUB STOPPER (B) FOR H5/16 HEX. SOCKET	1		
	603	317-827	SUB STOPPER (B) H1/4 HEX. SOCKET	1		
* [	604	985-330	MAGNETIC HEX. SOCKET 3/8"X65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	605	985-321	MAGNETIC HEX. SOCKET 10MMX65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	606	985-322	MAGNETIC HEX. SOCKET 5/16"X65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	607	985-332	MAGNETIC HEX. SOCKET 1/4"X65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	608	985-326	NON-MAGNETIC HEX. SOCKET 3/8" 65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	609	985-329	NON-MAGNETIC HEX. SOCKET 10MM 65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	610	985-327	NON-MAGNETIC HEX. SOCKET 5/16" 65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	611	985-328	NON-MAGNETIC HEX. SOCKET 1/4" 65L	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	612	982-563Z	NON-MAGNETIC BIT HOLDER	1	EXCEPT FOR TPE, THA, HKG, KOR	
* [	613	323-355	MAGNETIC HEX. SOCKET 10MMX71.1L	1	FOR TPE, THA, HKG, KOR	
* [	614	323-356	MAGNETIC HEX. SOCKET 5/16"X71.1L	1	FOR TPE, THA, HKG, KOR	
ĺ	615	985-333	+ DRIVER BIT NO. 1 25L	1		
Ī	616	971-512Z	+ DRIVER BIT (A) NO. 3 25L	1		
	617	985-334	+ DRIVER BIT NO. 1 25L W/STEPPED ROD	1		
	618	985-335	+ DRIVER BIT NO. 2 25L W/STEPPED ROD	1		
	619	985-336	- DRIVER BIT 4MMX25	1		
	620	985-337	- DRIVER BIT 5MMX25	1		
	621	985-338	- DRIVER BIT 6MMX25	1		
	622	985-339	- DRIVER BIT 8MMX25	1		
	623	985-340	- DRIVER BIT 4MMX25 (W/STEPPED ROD)	1		
	624	985-341	- DRIVER BIT 5MMX25 (W/STEPPED ROD)	1		
	625	985-342	HEX. BIT 4MMX25L	1		
	626	985-343	HEX. BIT 5MMX25L	1		
	627	985-344	HEX. BIT 6MMX25L	1		
	628	310-904	CASE	1		
[						



	PARTS W 6VA					
	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	1	876-031	O-RING (S-16)	1		
	2	323-487	LOCATOR ASS'Y	1	INCLUD. 3	
	3	323-488	CLICK SPRING	1		
	4	971-468	FRINGER (A)	1		
	5	317-662	O-RING (F)	1		
	6	323-558	PROTECT COVER (A)	1		
	7	321-057	TAPPING SCREW D4X25 (BLACK)	3		
	8	323-486	GEAR COVER (A) ASS'Y	1	INCLUD. 5	
	9	872-573	SET RING	1		
	10	959-148	STEEL BALL D3.175 (10 PCS.)	2		
*	11	323-491	SOCKET (A) ASS'Y	1	INCLUD. 9, 10	
*	11	323-482	SOCKET (A) ASS'Y	1	INCLUD. 9, 10 FOR TPE, SIN, HKG	
	12	323-476	CLUTCH DISC	1		
	13	306-024	SPRING	1		
	14	323-474	GEAR SET	1		
	15	608-VVM	BALL BEARING 608VVC2PS2L	2		
	16	933-545	WASHER (A)	1		
	17	323-556	SLOTTED HD. SCREW (SEAL LOCK) M4X8	2		
	18	323-557	FELT (A)	1		
	19	323-473	INNER COVER ASS'Y (A)	1	INCLUD. 15-18	
*	20	360-670	ARMATURE (B) 100V-110V	1		
*	20	360-671U	ARMATURE ASS'Y (B) 120V	1	INCLUD. 15, 24	
*	20	360-671E	ARMATURE (B) 220V-230V	1	· · · · · · · · · · · · · · · · · · ·	
*	20	360-671F	ARMATURE (B) 240V	1		
	21	323-472	FAN GUIDE	1		
	22	961-672	HEX. HD. TAPPING SCREW D4X50	2		
*	23	340-599C	STATOR 110V-120V	1		
*	23	340-599E	STATOR 220V-240V	1		
	24	608-VVM	BALL BEARING 608VVC2PS2L	1		
	25		NAME PLATE	1		
	26	323-471	ноок	1		
	27		HITACHI LABEL	2		
	28	323-512	BRUSH HOLDER (A)	2		
	29	999-091	CARBON BRUSH (AUTO STOP TYPE) (1 PAIR)	2		
*	30	323-489	INTERNAL WIRE (BROWN)	1	FOR SAU, SIN, HKG, USA, CAN, IND	
*	31	323-480	CHOKE COIL (W/INTERNAL WIRE) BROWN	1	EXCEPT FOR SAU, SIN, HKG, USA, CAN, IND	
	32	323-479	SWITCH (1P PILLAR TYPE) W/LOCK	1		
*	33	323-490	INTERNAL WIRE (BLUE)	1	FOR SAU, SIN, HKG, USA, CAN, IND	
*	34	323-481	CHOKE COIL (W/INTERNAL WIRE) BLUE	1	EXCEPT FOR SAU, SIN, HKG, USA, CAN, IND	
	35	323-483	HOUSING	1		
	36	953-327	CORD ARMOR D8.8	1		
*	37	323-559	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8)	
*	37	500-409Z	CORD	1	(CORD ARMOR D8.8) FOR SAU. IND	
*	37	500-423Z	CORD	1	(CORD ARMOR D8.8) FOR SIN	
*	37	323-561	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR NZL. AUS	
*	37	500-247Z	CORD	1	(CORD ARMOR D8.8) FOR SAF. YEN	
*	37	320-130	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR USA. CAN	
*	37	500-435Z	CORD	1	(CORD ARMOR D8.8) FOR HKG	
*	37	500-470Z	CORD	1	(CORD ARMOR D8.8) FOR TPE	
*	37	323-562	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR GBR (110V)	
*	37	323-560	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR GBR (230V)	
				· · ·		

	PAF	RTS				W 6VA
	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
*	37	323-563	CORD (LENGTH 7.5M)	1	(CORD ARMOR D8.8) FOR SUI	
	38	937-631	CORD CLIP	1		
	39	984-750	TAPPING SCREW (W/FLANGE) D4X16	2		
*	40	959-140	CONNECTOR 50091 (10 PCS.)	2	EXCEPT FOR SAU, SIN, HKG, USA, CAN, IND	
*	41	930-039	NOISE SUPPRESSOR	1	EXCEPT FOR SAU, SIN, HKG, USA, CAN, IND	
*	42	994-273	NOISE SUPPRESSOR	1	EXCEPT FOR SAU, SIN, HKG, USA, CAN, IND	
*	43	317-667	INTERNAL WIRE	2	EXCEPT FOR SAU, SIN, HKG, USA, CAN, IND	
*	44	992-635	EARTH TERMINAL	1	EXCEPT FOR SAU, SIN, HKG, USA, CAN, IND	
	45	323-484	HANDLE COVER	1		
	46	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	3		

# STANDARD ACCESSORIES

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
•	501	323-352	SUB STOPPER (G)	1	EXCEPT FOR HKG, NZL, AUS, USA, CAN, TPE	
٢	502	971-511Z	+ DRIVER BIT (A) NO. 2 25L	1	EXCEPT FOR TPE	
٢	503	317-674	MAGNETIC BIT HOLDER ASS'Y (41L)	1	INCLUD. 502 EXCEPT FOR TPE, SIN, HKG,	
					NZL, AUS, USA, CAN	
٢	503	982-554Z	MAGNETIC BIT HOLDER (75L)	1	FOR NZL, AUS, USA, CAN	
٢	503	323-354	MAGNETIC BIT HOLDER ASS'Y (47.1L)	1	INCLUD. 502 FOR SIN	
۲	503	323-353	MAGNETIC BIT HOLDER ASS'Y (81.1L)	1	INCLUD. 502 FOR HKG	
۲	504	323-356	MAGNETIC HEX. SOCKET 5/16"X71.1L	1	FOR TPE	
۲	505	317-671	SUB STOPPER (B) FOR H5/16 HEX. SOCKET	1	FOR TPE	
۰	506	323-351	SUB STOPPER (F)	1	FOR HKG, NZL, AUS, USA, CAN	
۲	507	310-904	CASE	1	FOR ESP	

# **OPTIONAL ACCESSORIES**

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
Ī	601	317-670	SUB STOPPER (B) FOR H3/8, H10 HEX. SOCKET	1		
ĺ	602	317-671	SUB STOPPER (B) FOR H5/16 HEX. SOCKET	1		
ĺ	603	317-827	SUB STOPPER (B) H1/4 HEX. SOCKET	1		
*	604	985-330	MAGNETIC HEX. SOCKET 3/8"X65L	1	EXCEPT FOR TPE, SIN, HKG	
*	605	985-321	MAGNETIC HEX. SOCKET 10MMX65L	1	EXCEPT FOR TPE, SIN, HKG	
*	606	985-322	MAGNETIC HEX. SOCKET 5/16"X65L	1	EXCEPT FOR TPE, SIN, HKG	
*	607	985-332	MAGNETIC HEX. SOCKET 1/4"X65L	1	EXCEPT FOR TPE, SIN, HKG	
*	608	985-326	NON-MAGNETIC HEX. SOCKET 3/8" 65L	1	EXCEPT FOR TPE, SIN, HKG	
*	609	985-329	NON-MAGNETIC HEX. SOCKET 10MM 65L	1	EXCEPT FOR TPE, SIN, HKG	
*	610	985-327	NON-MAGNETIC HEX. SOCKET 5/16" 65L	1	EXCEPT FOR TPE, SIN, HKG	
*	611	985-328	NON-MAGNETIC HEX. SOCKET 1/4" 65L	1	EXCEPT FOR TPE, SIN, HKG	
*	612	982-563Z	NON-MAGNETIC BIT HOLDER	1	EXCEPT FOR TPE, SIN, HKG	
*	613	323-355	MAGNETIC HEX. SOCKET 10MMX71.1L	1	FOR TPE, SIN, HKG	
*	614	323-356	MAGNETIC HEX. SOCKET 5/16"X71.1L	1	FOR SIN, HKG	
	615	985-333	+ DRIVER BIT NO. 1 25L	1		
	616	971-512Z	+ DRIVER BIT (A) NO. 3 25L	1		
	617	985-334	+ DRIVER BIT NO. 1 25L W/STEPPED ROD	1		
	618	985-335	+ DRIVER BIT NO. 2 25L W/STEPPED ROD	1		
	619	985-336	- DRIVER BIT 4MMX25	1		
	620	985-337	- DRIVER BIT 5MMX25	1		
	621	985-338	- DRIVER BIT 6MMX25	1		
	622	985-339	- DRIVER BIT 8MMX25	1		
	623	985-340	- DRIVER BIT 4MMX25 (W/STEPPED ROD)	1		
	624	985-341	- DRIVER BIT 5MMX25 (W/STEPPED ROD)	1		
	625	985-342	HEX. BIT 4MMX25L	1		
	626	985-343	HEX. BIT 5MMX25L	1		
	627	985-344	HEX. BIT 6MMX25L	1		
	628	310-904	CASE	1		

