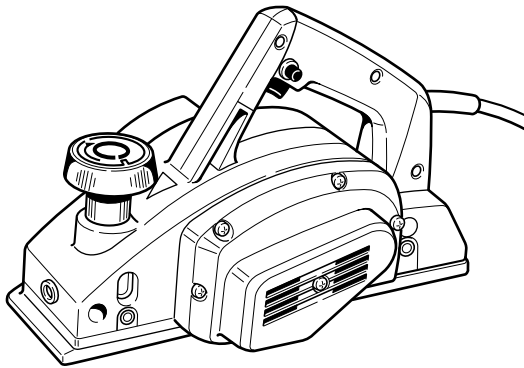


HITACHI

Planer

P 20SB





Read through carefully and understand these instructions before use.



Handling instructions

Hitachi Koki

	<p>Symbols ⚠ WARNING The following show symbols used for the machine. Be sure that you understand their meaning before use.</p>
	<p>Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.</p>
	<p>Only for EU countries Do not dispose of electric tools together with household waste material! In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.</p>

GENERAL POWER TOOL SAFETY WARNINGS

WARNING

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- Keep work area clean and well lit.**
Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool.**
Distractions can cause you to lose control.

2) Electrical safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.**
Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**
There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions.**
Water entering a power tool will increase the risk of electric shock.

- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.**
Damaged or entangled cords increase the risk of electric shock.
 - When operating a power tool outdoors, use an extension cord suitable for outdoor use.**
Use of a cord suitable for outdoor use reduces the risk of electric shock.
 - If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**
Use of an RCD reduces the risk of electric shock.
- #### **3) Personal safety**
- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.**
A moment of inattention while operating power tools may result in serious personal injury.
 - Use personal protective equipment. Always wear eye protection.**
Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.**
 - Remove any adjusting key or wrench before turning the power tool on.**
A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - Do not overreach. Keep proper footing and balance at all times.**
This enables better control of the power tool in unexpected situations.
 - Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.**
Loose clothes, jewellery or long hair can be caught in moving parts.
 - If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.**
Use of dust collection can reduce dust related hazards.
- #### **4) Power tool use and care**
- Do not force the power tool. Use the correct power tool for your application.**
The correct power tool will do the job better and safer at the rate for which it was designed.
 - Do not use the power tool if the switch does not turn it on and off.**
Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.**
Such preventive safety measures reduce the risk of starting the power tool accidentally.

- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.

Power tools are dangerous in the hands of untrained users.

- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation.

If damaged, have the power tool repaired before use.
Many accidents are caused by poorly maintained power tools.

- f) Keep cutting tools sharp and clean.
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.

Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Service

- a) Have your power tool serviced by a qualified repair person using only identical replacement parts.

This will ensure that the safety of the power tool is maintained.

PRECAUTION

Keep children and infirm persons away.

When not in use, tools should be stored out of reach of children and infirm persons.

PLANER SAFETY RULES

1. Wait for the cutter to stop before setting the tool down.

An exposed cutter may engage the surface leading to possible loss of control and serious injury.

2. Do not use the Planer with the blades facing upward (as stationary type planer).

3. Use dust collection adapter if need to reduce dust related hazards.

(1) Unscrew the left side screw on bearing cover (Item no. 23 show in assembly drawing) on housing.

(2) Mount dust collection adapter on housing with screws.

Dust collection adapter (Code no. 313928)

(3) Connect the dust extraction and collection facilities with the tube of dust collection adapter firmly.

(4) Wear dust mask additionally, if available.

SPECIFICATIONS

Voltage (by areas)*	(110V, 115V, 120V, 127V, 220V, 230V, 240V) ~
Power Input	570W*
Cutting Width	82mm
Max. Cutting Depth	1mm
Weight (without cord)	2.5kg
No-Load Speed	15000min ⁻¹

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

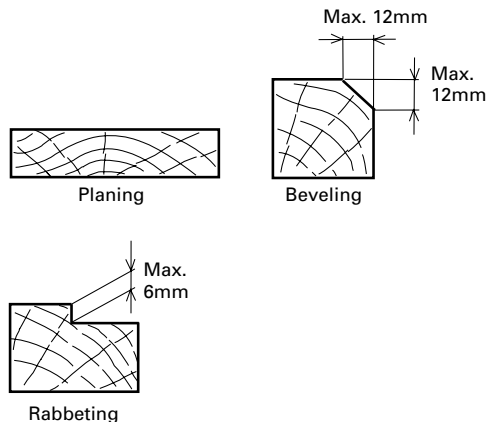
STANDARD ACCESSORIES

1. Box Wrench (for securing cutter blade) 1
2. Set Gauge (for adjusting cutter height) 1
3. Guide (with set screw) 1

Standard accessories are subject to change without notice.

APPLICATIONS

- Planing various wooden planks and panels.



PRIOR TO OPERATION

1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.

2. Power switch

Ensure that the power switch is in the OFF position. If the plug is connected to a receptacle while the power switch is in the ON position, the power tool will start operating immediately, which could cause a serious accident.

3. Extension cord

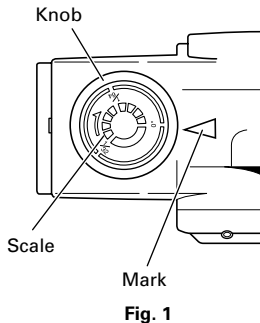
When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

4. Prepare a stable wooden workbench suitable for planing operation. As a poorly balanced workbench creates a hazard, ensure it is securely positioned on firm, level ground.

PLANING PROCEDURES

1. Adjusting the cutter depth:

- (1) Turn the knob in the direction indicated by the arrow in **Fig. 1** (clockwise), until the triangular mark is aligned with the desired cutting depth on the scale. The scale unit is graduated in millimeters.
- (2) The cutting depth can be adjusted within a range of 0-1mm.



2. Surface cutting

Rough cutting should be accomplished at large cutting depths and at a suitable speed so that shavings are smoothly ejected from the machine. To ensure a smoothly finished surface, finish cutting should be accomplished at small cutting depth and at low feeding speed.

3. Beginning and ending the cutting operation:

As shown in **Fig. 2**, place the front base of the planer on the material and support the planer horizontally. Turn ON the power switch, and slowly operate the planer toward the leading edge of the material. Firmly depress the front half of the planer at the first stage of cutting, as shown in **Fig. 3**, depress the rear half of the planer at the end of the cutting operation. The planer must always be kept flat throughout the entire cutting operation.

Beginning of cutting operation

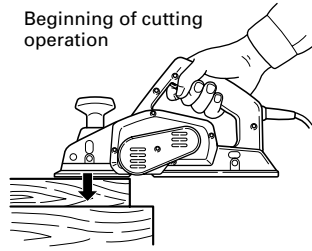


Fig. 2

End of cutting operation

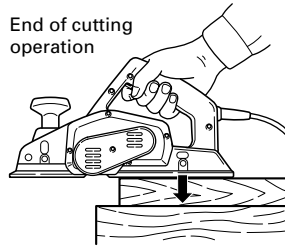


Fig. 3

4. Precaution after finishing the planing operation:

When the planer is suspended with one hand after finishing the planing operation, ensure that the cutting blades (base) of the planer do not contact or come too near your body. Failure to do so could result in serious injury.

CARBIDE BLADE ASSEMBLY AND DISASSEMBLY AND ADJUSTMENT OF CUTTER BLADE HEIGHT (FOR DOUBLE EDGED BLADE TYPE)

1. Carbide blade disassembly:

- (1) As shown in **Fig. 4**, loosen the blade holder with the attached box wrench.

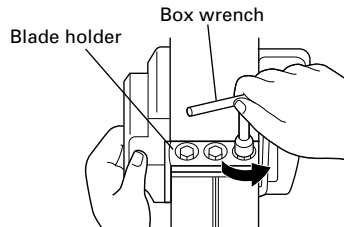


Fig. 4

- (2) As shown in **Fig. 5**, remove the carbide blade by sliding it with the attached box wrench.

Carbide blade (Double edged blade type)

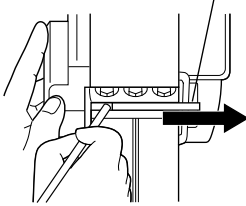


Fig. 5

- (4) Turn the cutter block over, and set the other side in the same manner.

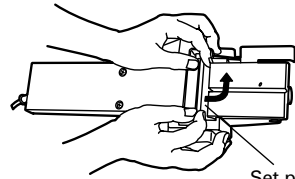
3. Adjustment of carbide blade height:

CAUTION

- If the carbide blade's heights are inaccurate after above procedures have been completed, carry out the procedures described below.

- (1) As shown in **Fig. 4**, use the box wrench to loosen the three bolts used to retain the carbide blade, and remove the blade holder.

- (2) As shown in **Fig. 9**, after removing the carbide blade, slide set plate (B) in the direction indicated by the arrow to disassemble set plate (B).



Set plate (B)

Fig. 9

- (3) Loosen the 2 screws holding on the carbide blade and set plate (A), set plate (B).

- (4) As shown in **Fig. 10, 11**, press the turned surface of set plate (A) to the wall surface (B) while adjusting the carbide blade edge to the wall surface a of the set gauge. Then, tighten them with the 2 screws.

CAUTION

- Be careful not to injure your hands.

2. Carbide blade assembly:

CAUTION

- Prior to assembly, thoroughly wipe off all swarf accumulated on the carbide blade.

- (1) As shown in **Fig. 6**, lift set plate (B) and insert the new carbide blade between cutter block and set plate (B).

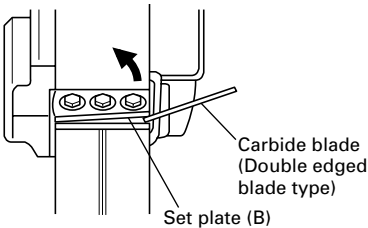


Fig. 6

- (2) As shown in **Fig. 7**, mount the new carbide blade by sliding it on the set plate (B) so that the blade tip projects by 1mm from the end of the cutter block.

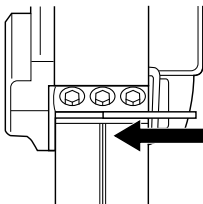


Fig. 7

- (3) As shown in **Fig. 8**, fix the bolts at the blade holder after blade replacement has been completed.

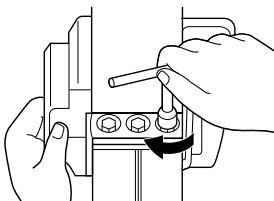


Fig. 8

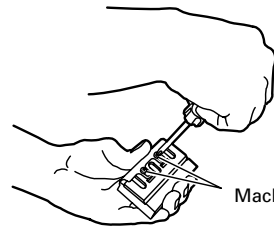


Fig. 10

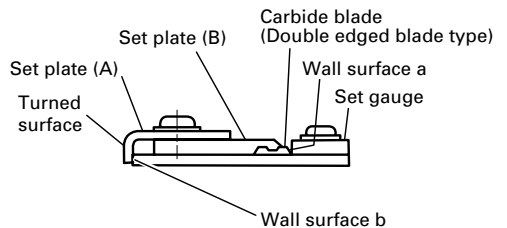


Fig. 11

- (5) As shown in **Fig. 12, 13**, insert a turned portion of set plate (A) attached to set plate (B) into a groove on the flat portion of the cutter block.

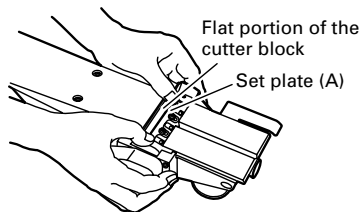


Fig. 12

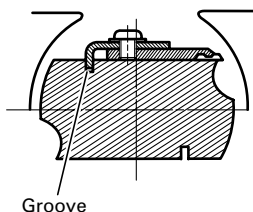


Fig. 13

- (6) As shown in **Fig. 14**, place the blade holder on the completed assembly and fasten it with the three bolts. Ensure that the bolts are securely tightened. Follow the same procedures for the opposite side carbide blade.

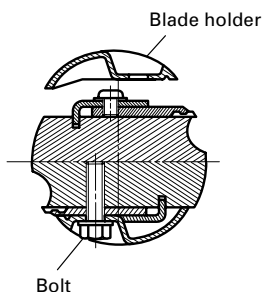


Fig. 14

MAINTENANCE AND INSPECTION

1. Inspecting the blades:

Continued use of dull or damaged cutter blades will result in reduced cutting efficiency and may cause overloading of the motor. Sharpen or replace the cutter blades as often as necessary.

2. Handling

CAUTION

- The front base, rear base, and cutting depth control knob are precisely machined to obtain specifically high precision. If these parts are roughly handled or subjected to heavy mechanical impact, it may cause deteriorated precision and reduced cutting performance. These parts must be handled with particular care.

3. Inspecting the mounting screws:

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

4. Inspecting the carbon brushes (Fig. 15)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush can result in motor trouble, replace the carbon brushes with new ones having the same carbon brush No. shown in the figure when it becomes worn to or near the "wear limit". In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

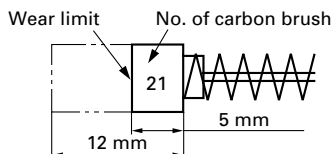


Fig. 15

5. Replacing carbon brushes:

Disassemble the brush caps with a slotted-head screwdriver. The carbon brushes can then be easily removed.

6. Maintenance of the motor

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

7. Service parts list

- A: Item No.
- B: Code No.
- C: No. Used
- D: Remarks

CAUTION

Repair, modification and inspection of Hitachi Power Tools must be carried out by an Hitachi Authorized Service Center.

This Parts List will be helpful if presented with the tool to the Hitachi Authorized Service Center when requesting repair or other maintenance.

In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

MODIFICATIONS

Hitachi Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts (i.e. code numbers and/or design) may be changed without prior notice.

GUARANTEE

We guarantee Hitachi Power Tools in accordance with statutory/country specific regulation. This guarantee does not cover defects or damage due to misuse, abuse, or normal wear and tear. In case of complaint, please send the Power Tool, undismantled, with the GUARANTEE CERTIFICATE found at the end of this Handling instruction, to a Hitachi Authorized Service Center.

NOTE

Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

IMPORTANT**Correct connection of the plug**

The wires of the main lead are coloured in accordance with the following code:

Blue: -- Neutral

Brown: -- Live

As the colours of the wires in the main lead of this tool may not correspond with the coloured markings identifying the terminals in your plug proceed as follows: The wire coloured blue must be connected to the terminal marked with the letter N or coloured black.

The wire coloured brown must be connected to the terminal marked with the letter L or coloured red.

Neither core must be connected to the earth terminal.

NOTE

This requirement is provided according to BRITISH STANDARD 2769: 1984.

Therefore, the letter code and colour code may not be applicable to other markets except The United Kingdom.

Information concerning airborne noise and vibration

The measured values were determined according to EN60745 and declared in accordance with ISO 4871.

Measured A-weighted sound power level: 100 dB (A).

Measured A-weighted sound pressure level: 89 dB (A).

Uncertainty KpA: 3 dB (A).

Wear hearing protection.

Vibration total values (triax vector sum) determined according to EN60745.

Planing softwood:

Vibration emission value $a_h = 2.5 \text{ m/s}^2$

Uncertainty K = 1.5 m/s^2

WARNING

- The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used.
- To identify the safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

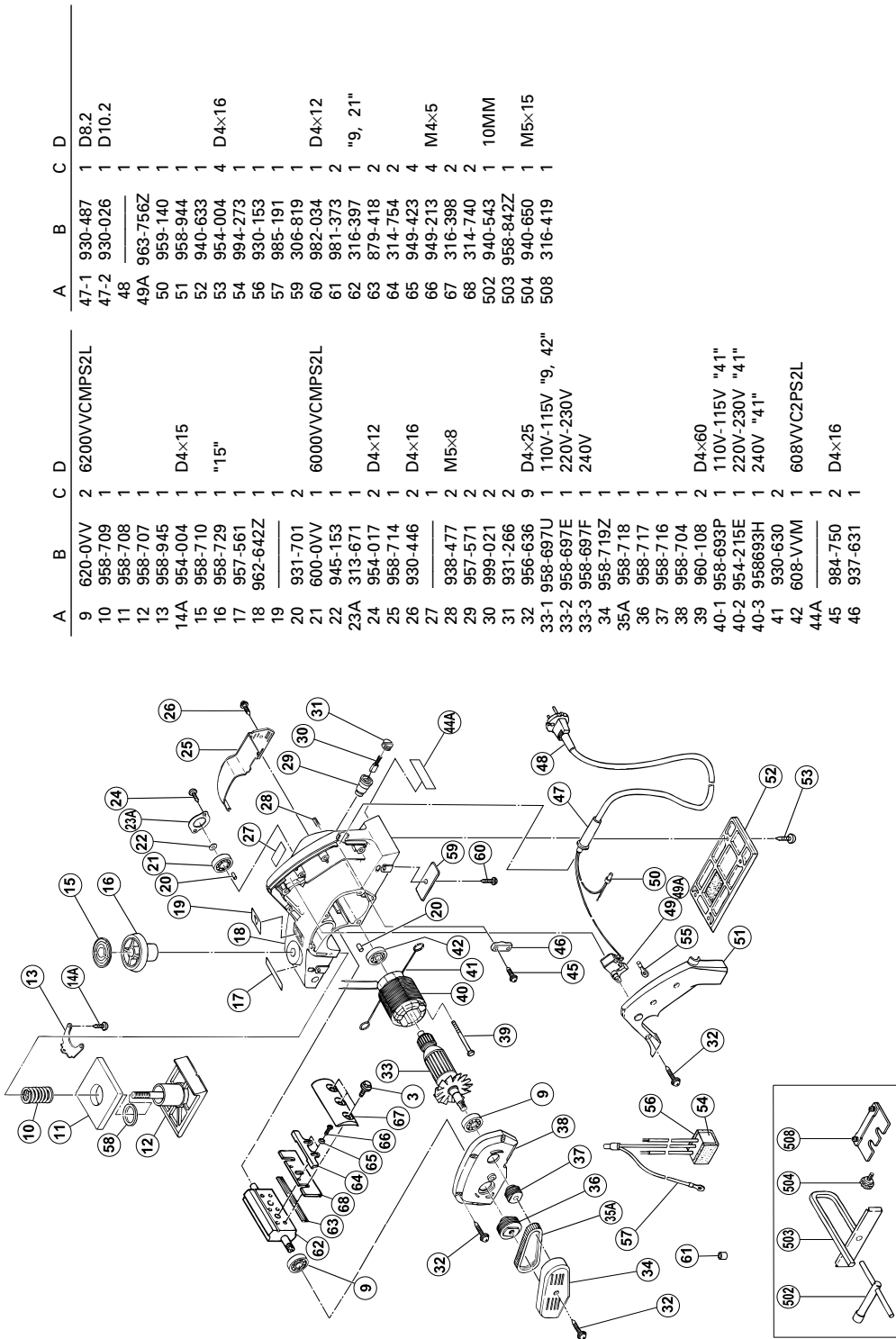
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United Kingdom

Tel: +44 1908 660663

Fax: +44 1908 606642

URL: <http://www.hitachi-powertools.co.uk>



A	B	C	D	A	B	C	D
9	620-0VV	2	6200VVCMP2S2L	47-1	930-487	1	D8.2
10	958-709	1		47-2	930-026	1	D10.2
11	958-708	1		48		1	
12	958-707	1		49A	963-756Z	1	
13	958-945	1		50	959-140	1	
14A	954-004	1	D4x15	51	958-944	1	
15	958-710	1		52	940-633	1	
16	958-729	1	"15"	53	954-004	4	D4x16
17	957-561	1		54	994-273	1	
18	962-642Z	1		56	930-153	1	
19		1		57	985-191	1	
20	931-701	2		59	306-819	1	
21	600-0VV	1	6000VVCMP2S2L	60	982-034	1	D4x12
22	945-153	1		61	981-373	2	
23A	313-671	1		62	316-397	1	"9, 21"
24	954-017	2	D4x12	63	879-418	2	
25	958-714	2		64	314-754	2	
26	930-446	2	D4x16	65	949-423	4	M4x5
27		1		66	949-213	4	
28	938-477	2	M5x8	67	316-398	2	
29	957-571	2		68	314-740	2	
30	999-021	2		502	940-543	1	10MM
31	931-266	2		503	958-842Z	1	M5x15
32	956-636	9	D4x25	504	940-650	1	
33-1	958-697U	1	110V-115V "9, 42"	508	316-419	1	
33-2	958-697E	1	220V-230V				
33-3	958-697F	1	240V				
34	958-719Z	1					
35A	958-718	1					
36	958-717	1					
37	958-716	1					
38	958-704	2					
39	960-108	1	D4x60				
40-1	958-693P	1	110V-115V "41"				
40-2	954-215E	1	220V-230V "41"				
40-3	958693H	1	240V "41"				
41	930-630	2					
42	608-VVM	1	608VVC2PS2L				
44A		1					
45	984-750	2	D4x16				
46	937-631	1					

HITACHI

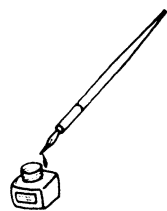
GUARANTEE CERTIFICATE

- ① Model No.
- ② Serial No.
- ③ Date of Purchase
- ④ Customer Name and Address
- ⑤ Dealer Name and Address (Please stamp dealer name and address)

①	
②	
③	
④	
⑤	







EC DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product is in conformity with standards or standardized documents EN60745, EN55014 and EN61000 in accordance with Council Directives 2004/108/EC and 98/37/EC.

This declaration is applicable to the product affixed CE marking.

Representative office in Europe

Hitachi Power Tools Europe GmbH

Siemensring 34, 47877 Willich 1, F. R. Germany



30. 1. 2009

Head office in Japan

Hitachi Koki Co., Ltd.

Shinagawa Intercity Tower A, 15-1, Konan 2-chome,
Minato-ku, Tokyo, Japan

A handwritten signature in black ink, appearing to read 'K. Kato', is written over a horizontal line.

K. Kato
Board Director

 **Hitachi Koki Co., Ltd.**