

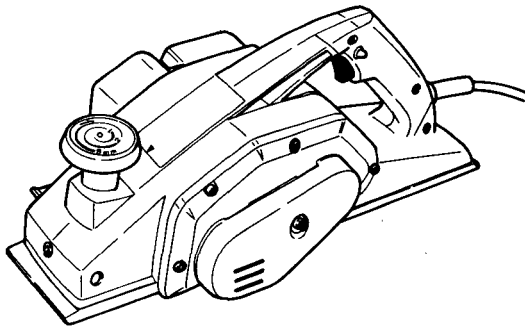


HITACHI

PLANER

MODEL F-30A

INSTRUCTION MANUAL



Note

Before using this Electric Power Tool, carefully read through this **INSTRUCTION MANUAL** to ensure efficient, safe operation. It is recommended that this **MANUAL** be kept readily available as an important reference when using this power tool.



DOUBLE INSULATION

We sincerely thank you for selecting a HITACHI ELECTRIC POWER TOOL. To operate this electric power tool safely and efficiently, please read this INSTRUCTION MANUAL carefully to get a good understanding of the precautions in operation, capacity of the electric power tool, use and the like.

IMPORTANT INFORMATION: SAFETY RULES FOR POWER TOOLS

WARNING: When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

1. KEEP WORK AREA CLEAN. Cluttered areas and benches invite injuries.

2. CONSIDER WORK AREA ENVIRONMENT.

Don't expose power tools to rain.

Don't use power tools in damp or wet locations.

Keep work area well lit.

Don't use tool in presence of flammable liquids or gases.

Power tools produce sparks during operation. They also spark when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzene, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.

3. GUARD AGAINST ELECTRIC SHOCK. Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.

4. KEEP CHILDREN AWAY. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.

5. STORE IDLE TOOLS. When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.

6. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was intended.

7. USE RIGHT TOOL. Don't force small tool or attachment to do the job of a heavy-duty tool.

Don't use tool for purpose not intended—for example—don't use circular saw for cutting tree limbs or logs.

8. DRESS PROPERLY. Do not wear loose clothing or jewelry. They can be caught in moving parts.

Rubber gloves and non-skid footwear are recommended when working outdoors.

Wear protective hair covering to contain long hair.

9. USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty.

All persons in the area where power tools are being operated should also wear safety eye protectors and face or dust masks.

10. DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.

- 11. SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- 12. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 13. MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance.
Follow instructions for lubricating and changing accessories.
Inspect tool cords periodically and if damaged, have repaired by authorized service facility.
Inspect extension cords periodically and replace if damaged.
Keep handles dry, clean, and free from oil and grease.
- 14. DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
- 15. REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 16. AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
- 17. OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- 18. STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- 19. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual.
Have defective switches replaced by authorized service center.
Do not use tool if switch does not turn it on and off.
- 20. AVOID USING A POWER TOOL FOR APPLICATIONS OTHER THAN THOSE SPECIFIED.** Never use a power tool for applications other than those specified in the instruction manual.
- 21. ENSURE SAFE OPERATION THROUGH CORRECT HANDLING.** Secure safe operation through correct handling by observing the instructions described herein.
Do not employ accessories other than those specified herein; otherwise, a hazardous condition may be created.
Never allow a power tool to be used by persons not familiar with correct handling (such as children) or by those who cannot handle the tool correctly.
- 22. CONFIRM THAT NO ITEMS SUCH AS AN ELECTRIC CABLE OR CONDUIT ARE BURIED INSIDE.** In places where live wiring may be hidden behind a wall, floor, ceiling, etc. do not hold or contact any metal parts of the tool. In such cases, metal parts could become electrically live and present a

serious shock hazard.

23. KEEP THE RIGHT PARTS IN THE RIGHT POSITIONS.

Do not remove covers and screws which have been factory-mounted. They perform important respective roles. Keep them in the right positions.

24. SHOULD THE PLASTIC HOUSING OR HANDLE OF A POWER TOOL BE CRACKED OR DEFORMED, DO NOT USE IT.

Since cracked or deformed parts may lead to an operator receiving an electric shock, do not use such a power tool. Immediately have it repaired.

25. SECURELY MOUNT ACCESSORIES AND BLADES TO THE TOOL MAIN BODY. Extra care must be taken when using tools on elevated location (such as a roof ladder, scaffold, or the like) to prevent injury to someone on a lower level in the event the tool and/or accessory should drop.

26. ALWAYS KEEP THE MOTOR AIR VENT FULLY OPENED.

A constantly open motor air vent is necessary to allow air to come in and out for cooling the motor. Do not allow it to become clogged up, even if dust is blown through it.

27. OPERATE POWER TOOLS AT THE RATED VOLTAGE.

Operate power tools at voltages specified on their nameplates.

28. NEVER TOUCH THE MOVING PARTS.

Never touch the moving parts such as blades, bits, cutters and others.

29. STOP OPERATION IMMEDIATELY IF ANY ABNORMALITY IS DETECTED.

Should a power tool be detected as out of order or should other abnormalities be observed during operation, stop using the tool immediately.

30. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.

Don't leave tool until it comes to a complete stop.

31. CAREFULLY HANDLE POWER TOOLS.

Should a power tool be dropped or struck against hard materials inadvertently, it may be deformed, cracked, or damaged.

32. DO NOT WIPE PLASTIC PARTS WITH SOLVENT.

Solvents such as gasoline, thinner, benzene, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with such solvents. Wipe plastic parts with a soft cloth lightly dampened with soapy water.

33. WHEN REPLACING A COMPONENT PART, ADOPT THE SAME TYPE.

When replacing a component part with a new one, adopt the same type of new part. Also, never attempt to repair a power tool yourself.

34. SAVE THESE INSTRUCTIONS.

SERVICE AND REPAIRS

All quality tools will eventually require servicing or replacement of parts due to wear from normal use. These operations should **ONLY** be performed by an **AUTHORIZED HITACHI POWER TOOL REPAIR SHOP**.

REPLACEMENT PARTS

When servicing use only identical replacement parts.

DOUBLE INSULATION SYSTEM ENHANCES SAFE OPERATION

To enhance safe operation of this electric power tool, HITACHI has adopted a double insulation system. The term "double insulation" used here denotes an insulation system with two insulations physically separated and arranged between the electrically conductive material connected to the power supply and the outer frame subject to contact by the operator. Thus, the power tool is termed double insulated and both the "□" mark and "Double insulation", or either one is indicated on the name plate. While no external grounding is required with this system, normal safety precautions as outlined in this manual must still be followed.



DOUBLE INSULATION

To maintain the effectiveness of the double insulation system, follow the precautions described below:

1. Always contact your dealer or an authorized HITACHI power tool repair shop when assembling, disassembling or replacing parts other than accessories or carbon brushes. Improper assembly and/or replacement with wrong parts may result in eliminating the double insulation-feature.
2. Clean the exterior of the tool with a soft cloth moistened with soapy water, and dry thoroughly. Chloric solvent, gasoline, and thinner will cause plastic components to dissolve.

PRECAUTION ON USING PLANER

○ Do not use the planer with the blades facing upward (as a stationary type planer).

NAME OF PARTS

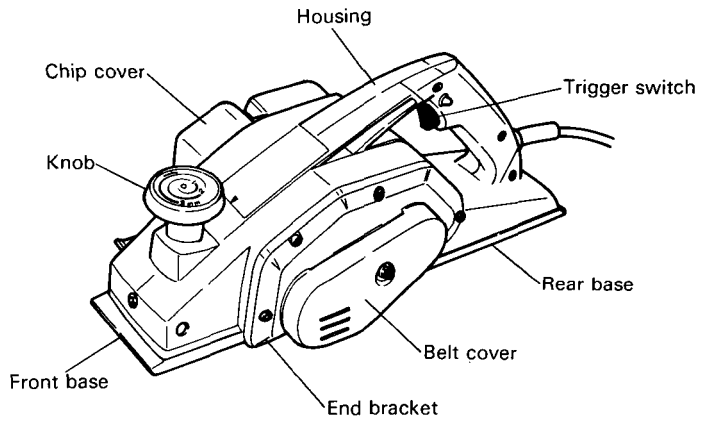


Fig. 1

SPECIFICATIONS

Motor	Single-Phase, Series Commutator Motor
Power Source	Single-Phase 115V AC 60Hz
Current	8.3A
Cutting Width	3-5/8"
Max. Cutting Depth	1/8"
Weight	9.3lbs

ACCESSORIES

Cautions: Recommended accessories for this Electric Power Tool are mentioned in this manual. The use of any other attachment or accessory might be hazardous.

STANDARD ACCESSORIES

- (1) Cutter Blades (Attached to the tool) (Code No. 958867) 1
- (2) Box Wrench (for securing cutter blade) (Code No. 940542) 1
- (3) Set Gauge Ass'y (for adjusting cutter height) (Code No. 958890) 1
- (4) Guide Ass'y (With set screw) (Code No. 958886) 1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORY — Sold separately.

- (1) Blade sharpening Ass'y (Code No. 958889)
- Optional accessory is subject to change without notice.

APPLICATIONS

- o Planing various wooden planks and panels

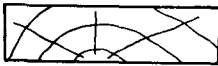


Fig. 2-A (Planing)

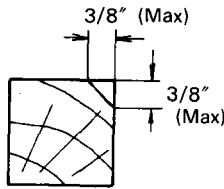


Fig. 2-B (Beveling)

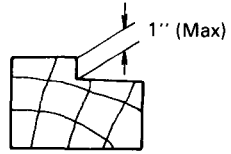


Fig. 2-C (Rabbeting)

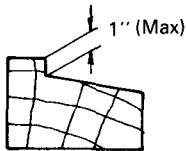


Fig. 2-D (Tapering)

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 power receptacle while the power switch is in the ON position, the power tool will start operating immediately, inviting 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. Confirming condition of the environment

Confirm that the work site is placed under appropriate conditions confirming to prescribed precautions.

5. Confirm the power receptacle

If the power receptacle only loosely accepts the plug, the receptacle must be repaired. Contact the nearest electric store for repair service.

If such a faulty receptacle is used, it may cause overheating resulting in a serious hazard.

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

7. Confirm that the cutter blades are securely tightened

The cutter blade is securely bolted at the factory, rendering the machine immediately usable on site; however, use a box wrench to retighten the bolts prior to operation.

PLANING PROCEDURES

1. Adjusting the cutter depth:

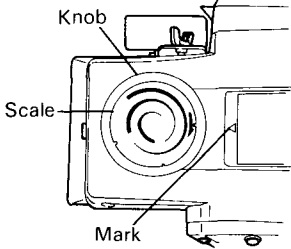


Fig. 3

Turn the knob in the direction indicated by the arrow in Fig. 3 (clockwise), until the triangular mark is aligned with the desired cutting depth on the scale.

The cutting depth can be adjusted within a range of 0 ~ 1/8".

2. Surface cutting:

Rough cutting should be accomplished at large cutting depth 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 speed.

3. Beginning and ending the cutting operation:

As shown in Fig. 4, place the front base of the planer on the workpiece and support the planer horizontally. Turn ON the power switch, and slowly operate the planer toward the leading edge of the workpiece. Firmly depress the front half of the planer at the first stage of cutting and, as shown in Fig. 5, 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.

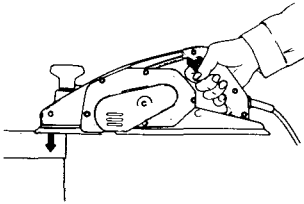


Fig. 4 Beginning of cutting operation

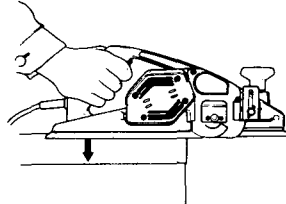


Fig. 5 End of cutting operation

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.

CUTTER BLADE ASSEMBLY AND DISASSEMBLY AND ADJUSTMENT OF CUTTER BLADE HEIGHT

1. Cutter blade disassembly:

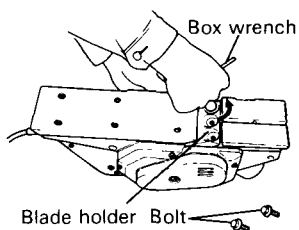


Fig. 6

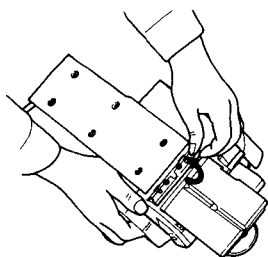


Fig. 7

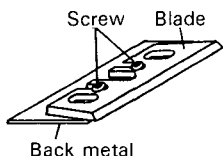


Fig. 8

2. Cutter blade assembly:

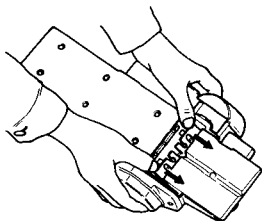


Fig. 9

(1)As shown in Fig. 6 use the accessory box wrench to withdraw the three bolts used to retain the cutter blade, and remove the cutter blade holder.

(2)As shown in Fig. 7 slide the rear side of the cutter blade in the direction indicated by the arrow to disassemble the cutter blade.

CAUTIONS

- Be careful not to injure your hands.
- It is not necessary to disassemble the back metal from the cutter blade. (See Fig. 8)
- Disassembling the back metal from the cutter blade is to be made only at grinding the cutter blade.

CAUTION

- Prior to assembly, thoroughly wipe off all swarf accumulated on the cutter blade.
- (1) Turn the cutter block flat surface sideways, and assemble the adjusted cutter blade as shown in Fig. 9. Ensuring that the leaf spring on the cutter block is correctly fitted to the hole on the rear plate, push the back of the cutter blade with a fingertip in the direction indicated by the arrow, until the edge of the back metal is properly fitted to the cutter block surface. Correct installation is illustrated in Fig. 10.

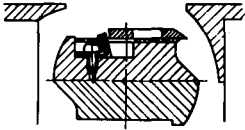


Fig. 10 (Correct installation)

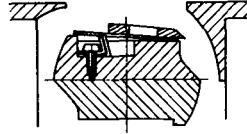


Fig. 11 (Erroneous installation)

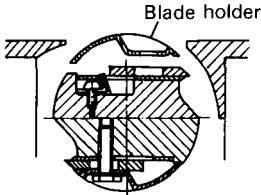


Fig. 12

- (2) Place the blade holder on the completed assembly, as shown in Fig. 12, and fasten it with the three bolts. Ensure that the bolts are securely tightened.
- (3) Turn the cutter block over, and set the other side in the same manner.

3. Adjustment of cutter blade height:

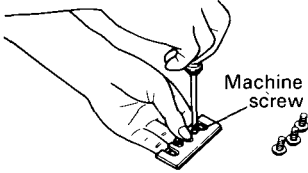


Fig. 13

CAUTION

○ As the set gauge has been accurately factory adjusted, never attempt to loosen it.

- (1) After attaching the back metal to the cutter blade, temporarily fasten them together with machine screws, as shown in Fig. 13.
- (2) Insert the set gauge plate spring into the hole on the back metal and heavily push the plate spring in the direction indicated by the arrow in Fig. 14 until it snaps into the correct position.
- (3) Holding the set gauge with the blade edge facing downward as shown in Fig. 15, loosen the temporarily fastened machine screws and lightly push the cutter blade with a thumb until the cutter blade gently touches Plate.

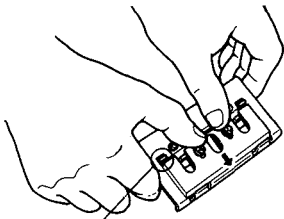


Fig. 14

Align the back metal end with on extruded portion.

CAUTION

○ Do not push the blade with excessive pressure. Excessive pressure could cause maladjustment of the blade height.

- (4) Finally, retighten the machine screws to securely fasten the cutter blade and the back metal, thereby completing the blade height adjustment procedure.
- (5) Holding the set gauge as shown in Fig. 16, push upward on the back metal and remove it from the set gauge.

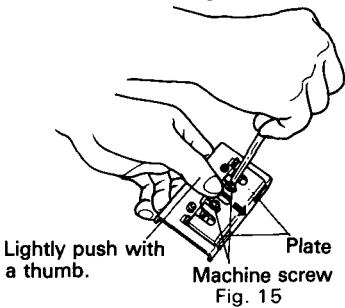


Fig. 15

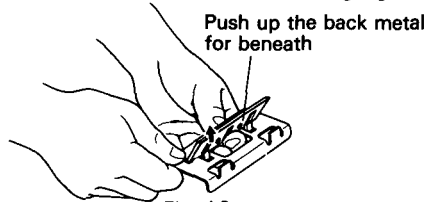


Fig. 16

(6) The cutter blade is now ready to be mounted on the planer as described in the section on cutter blade assembly.

SHARPENING THE CUTTER BLADES

Use of the optional accessory Blade Sharpening Ass'y is recommended for convenience.

(1) Use of Blade Sharpening Ass'y.

As shown in Fig. 17, two blades can be mounted on the blade sharpening ass'y to ensure that the blade tips are ground at equal angles. During grinding, adjust the position of the cutter blades so that their edges simultaneously contact the grinding stone as shown in Fig. 18.

(2) Cutter blade sharpening intervals:

Cutter blade sharpening intervals depend on the type of wood being machined and the cutting depth. However, sharpening should generally be effected after each 1640ft of cutting operation.

(3) Grinding allowance of the cutter blades:

As illustrated in Fig. 19, a grinding allowance of 0.14" is provided for on the cutter blade. That is, the cutter blade can be repeatedly sharpened until its total height is reduced to 1-1/16"

(4) Grinding Stone

When a water grinding stone is available, use it after dipping it sufficiently in water since such a grinding stone may be worn during grinding procedures, flatten the upper surface of the grinding stone as frequently as possible.

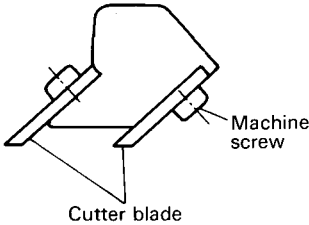


Fig. 17

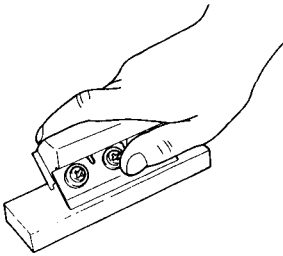


Fig. 18

Grinding allowance 9/64"

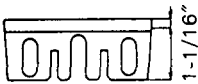


Fig. 19

MAINTENANCE AND INSPECTION

Caution: Be sure to switch power OFF and disconnect the plug during maintenance and inspection.

1. Inspecting the cutter 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. 20)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush could result in motor trouble, replace a carbon brush with a new one which has 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.

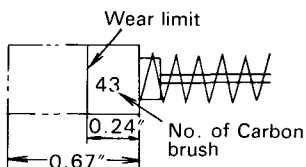


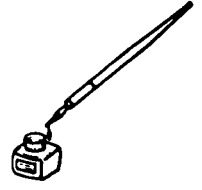
Fig. 20

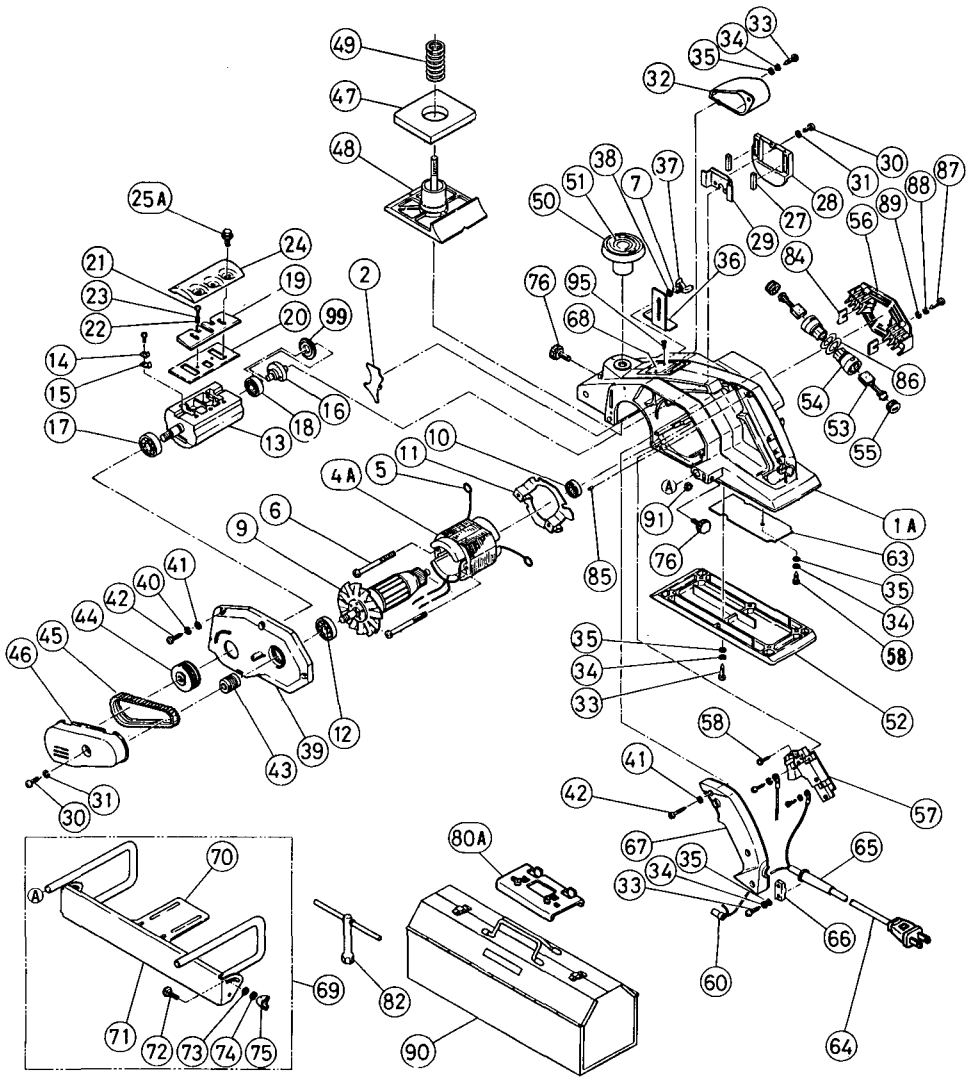
5. Replacing a carbon brush:

Disassemble the brush cap with a minus-head screwdriver. The carbon brush can then be easily removed.

Note:

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





F-30A

Item No.	Part Name	Item No.	Part Name
1A	Housing	48	Front Base
2	Fan Guide (A)	49	Spring
4A	Stator Ass'y	50	Knob
5	Brush Terminal	51	Scale
6	Hexagon Hd. Tapping Screw M5×65	52	Rear Base
7	Spring Lock Washer	53	Carbon Brush
9	Armature	54	Brush Holder
10	Ball Bearing (608ZZC2)	55	Brush Cap
11	Fan Guide (B)	56	Tail Cover
12	Ball Bearing (6200VVCM)	57	Switch
13	Cutter Block Ass'y	58	Tapping Screw D4×12
14	Holder Spring	59	Spring Lock Washer
15	Guard Plate (A)	60	Connector
16	Shaft (B)	63	Fiber Plate
17	Ball Bearing (6201ZZCM)	64	Cord
18	Ball Bearing (629DD)	65	Cord Armor
19	Blade	66	Cord Clip
20	Back Metal	67	Handle Cover
21	Machine Screw M4×8	68	Name Plate
22	Washer	69	Bevel Guide Ass'y
23	Spring Lock Washer	70	Guide
24	Blade Holder	71	Bevel Plate
25A	Bolt	72	Bolt M5×22
27	Magnet	73	Washer
28	Blade Cover	74	Spring Lock Washer
29	Cover	75	Wing Nut M5
30	Machine Screw M4×14	76	Stopper Screw
31	Spring Lock Washer	80A	Set Gauge
32	Chip Cover	82	Box Wrench
33	Tapping Screw D4×16	84	Rubber Piece
34	Spring Lock Washer	85	Bearing Lock
35	Washer	86	Fiber Washer (A)
36	Depth Guide	87	Tapping Screw D4×20
37	Wing Bolt M5×10	88	Spring Lock Washer
38	Washer	89	Washer
39	End Bracket	90	Steel Case
40	Spring Lock Washer	91	Nut M5
41	Washer	95	Rivet D2.5×3.2
42	Tapping Screw D4×25	99	Washer (A) D25
43	Pulley (A)		
44	Pulley (B)		
45	Belt		
46	Belt Cover		
47	Rubber Packing		

Parts subject to possible modification without notice due to improvements.

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