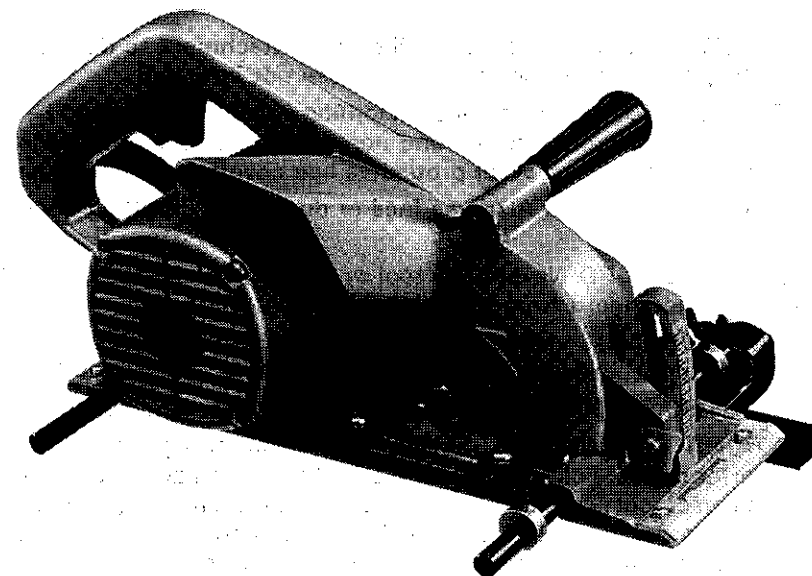


Makita

Groove Cutter

MODEL 3800N-A
Equipped with Electric Brake

INSTRUCTION MANUAL



SPECIFICATIONS

Capacities		No load speed (RPM)	Overall length	Net weight
Max. cutter blade size	Max. cutting depth			
36 mm x 120 mm (1-7/16" x 4-3/4")	30 mm (1-1/8")	8,500	398 mm (15-3/4")	7.5 kg (16.5 lbs)

- * Manufacturer reserves the right to change specifications without notice.
- * Note: Specifications may differ from country to country.

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883283 — 980

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IMPORTANT SAFETY INSTRUCTIONS

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 use power tools in damp or wet locations. Keep work area well lit. Don't expose power tools to rain. Don't use tool in presence of flammable liquids or gases.
3. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Don't let visitors contact tool or extension cord.
4. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.
5. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
6. **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.
7. **DRESS PROPERLY.** Don't 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.
8. **USE SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty.
9. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
10. **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.
11. **DON'T OVERREACH.** Keep proper footing and balance at all times.
12. **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.
13. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
14. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is OFF when plugging in.
16. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.

17. **STAY ALERT.** Watch what you are doing, use common sense. Don't operate tool when you are tired.
18. **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. Don't use tool if switch does not turn it on and off.
19. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
20. **PROPER GROUNDING.** This tool should be grounded while in use to protect the operator from electric shock.
21. **EXTENSION CORDS:** Use only three-wire extension cords which have three-prong grounding-type plugs and three-pole receptacles which accept the tool's plug. Replace or repair damaged or worn cord immediately.

VOLTAGE WARNING: Before connecting the tool to a power source (receptacle, outlet, etc.) be sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that specified for the tool can result in **SERIOUS INJURY** to the user — as well as damage to the tool. If in doubt, **DO NOT PLUG IN THE TOOL.** Using a power source with voltage less than the nameplate rating is harmful to the motor.

ADDITIONAL SAFETY RULES

1. Inspect for and remove nails or foreign matter from the workpiece before operation.
2. Check the cutter blade carefully for cracks or damage before operation. Replace cracked or damaged cutter blade immediately.
3. Secure the workpiece firmly.
4. Do not wear gloves during operation.
5. Hold the tool firmly with both hands.
6. Keep hands away from the underside of the belt cover and the cutter blade. Also keep the cord away from them.
7. Never force the tool or cut too fast for existing conditions.
8. Release the switch immediately if the cutter blade binds or the tool stalls.
9. Never remove the tool from a cut while the cutter blade is rotating.
10. The cutter blade will coast after turning the tool off. Always wait for the cutter blade to come to a complete stop before setting the tool down.
11. Never attempt to cut with the tool held upside down in a vise. This is extremely dangerous and can lead to serious accidents.
12. Switch off and unplug the tool and wait for the cutter blade to come to a complete stop before removing wood chips if wood chips are jammed in the chip chute. Always use a wooden stick, etc. to remove them.

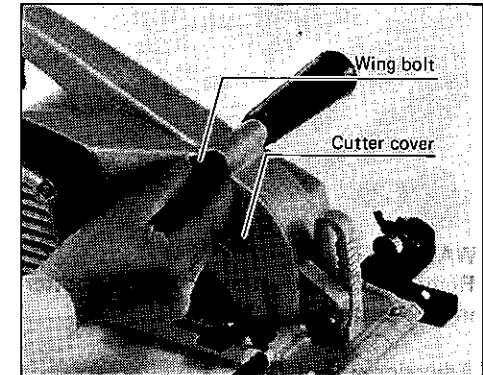
SAVE THESE INSTRUCTIONS.

Removing or installing cutter blade

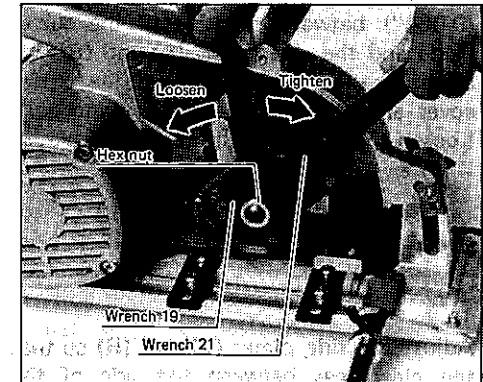
WARNING:

Always be sure that the tool is switched off and unplugged before removing or installing the cutter blade.

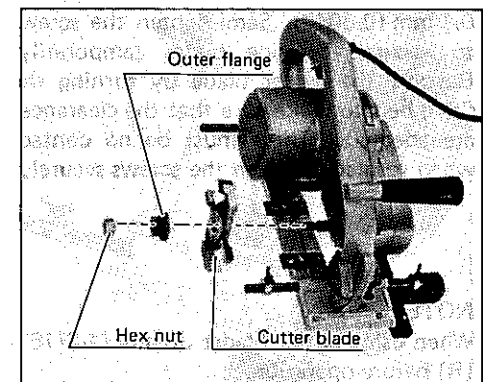
To remove the cutter blade, loosen the wing bolt and take off the cutter cover.



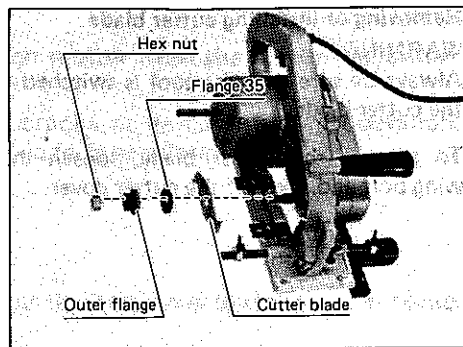
Hold the outer flange with wrench 21 and loosen the hex nut with wrench 19. Remove the hex nut, outer flange and cutter blade.



To install the cutter blade, mount the cutter blade, outer flange and hex nut onto the spindle in that order, making sure that the cutter blade is installed with teeth pointing up at the front of the tool. Use the two wrenches to tighten the hex nut securely.



When using cutter blades 7.5 mm (5/16") wide or less, install flange 35 between the cutter blade and the outer flange.

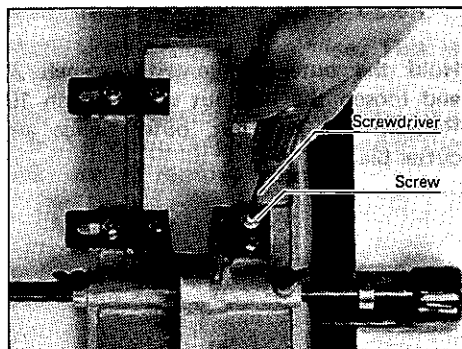


WARNING:

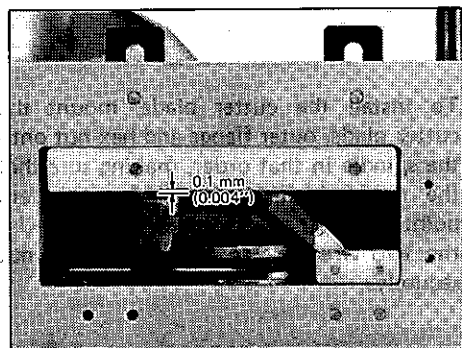
Remove all wood chips or foreign matter adhering to the spindle or flange before installing the cutter blade.

Adjusting side plates

Clearances should be approx. 0.1 mm (0.004") between the side of the cutter blade and the side plates (L) and (R). To adjust the clearances, remove the cutter cover and the depth adjusting wing bolt. Loosen the screws securing the side plates.



Adjust the side plates (L) and (R) so that the clearances between the side of the cutter blade and the side plates are approx. 0.1 mm (0.004"). Semi-tighten the screws to secure the side plates temporarily. Revolve the cutter blade by turning the drive belt to make sure that the clearances are adequate. There must be no contact when rotated. Tighten the screws securely.

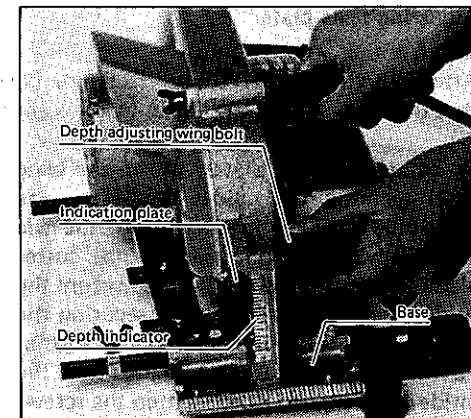


NOTE:

When using cutter blades 30 mm (1-3/16") wide or more, remove the side plates (L) and (R) before operation.

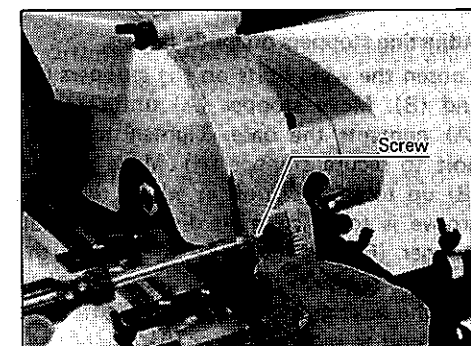
Adjusting depth of cut

Loosen the depth adjusting wing bolt. Move the base up or down until the indication plate indicates the desired graduation on the depth indicator. Tighten the depth adjusting wing bolt securely. Each increment on the depth indicator indicates 3 mm (1/8") cutting depth. Make a trial cut on a piece of stock that is similar to the workpiece to check for proper adjustment.



Zero setting for depth of cut

Loosen the depth adjusting wing bolt. Move the base up or down until the indication plate indicates "0". Revolve the cutter blade by turning the drive belt to make sure that the cutter blade tips are flush with the underside of the base. If the cutter blade tips protrude below the underside of the base or retract from the underside of the base, loosen the depth adjusting wing bolt and move the base up or down until the cutter blade tips are flush (even) with the underside of the base. Tighten the depth adjusting wing bolt. Loosen the screw securing the indication plate and align the indication plate with "0" on the depth indicator. Tighten the screw to secure the indication plate at the "0" position.

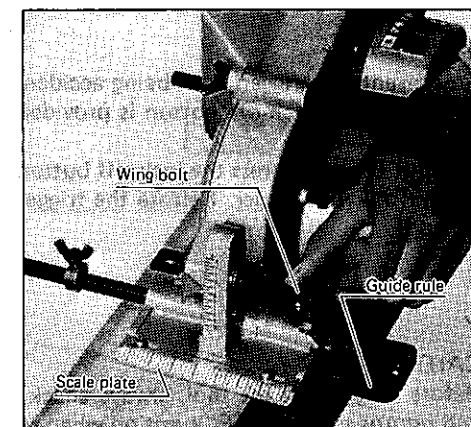


Adjusting the cutting position

Loosen the wing bolts securing the guide rule and move the guide rule until the inside of the guide rule aligns with the desired graduation (3 mm; 1/8" per graduation) on the scale plates.

NOTE:

The inner side of the cutter blade is aligned with "0" on the scale plates.

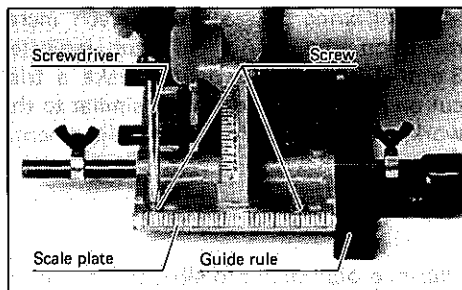


Adjusting scale plate

NOTE:

After installing cutter blades 16.5 mm (11/16") wide or less, adjust the scale plates so that the inner side of the cutter blade is aligned with "0" on the scale plates.

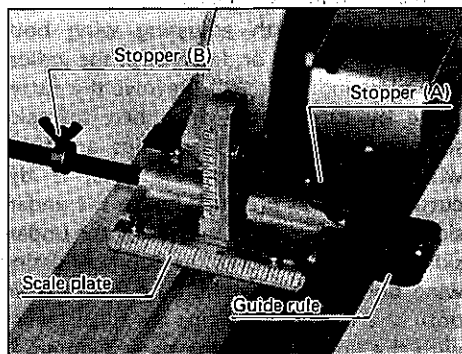
To adjust the scale plates, loosen the wing bolts securing the guide rule. Move the guide rule until the inside of the guide rule is flush with the inner side of the cutter blade. Tighten the wing bolts to secure the guide rule. Loosen the screws securing the scale plates. Move the scale plates so that "0" on the scale plates are aligned with the inside of the guide rule. Tighten the screws to secure the scale plates.



Adjusting stoppers on guide rule

Loosen the wing bolts on the stoppers (A) and (B). Move stopper (A) until stopper (A) contacts the base. Tighten the wing bolt to secure stopper (A). Move stopper (B) up to the position at which the next groove is to be cut. The distance between stopper (B) and the base is equal to the distance between "0" on the scale plate and the next groove to be cut. Tighten the wing bolt to secure stopper (B).

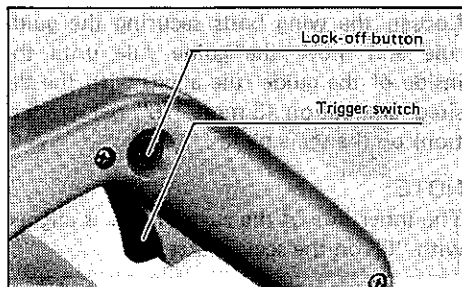
Now you can make a pair of cuts repeatedly for production grooving work. When cutting the first groove, move the guide rule until stopper (A) contacts the base. When cutting the next groove, move the guide rule until stopper (B) contacts the base.



Switch action

To prevent the trigger from being accidentally pulled, a lock-off button is provided as a safety feature.

To start the tool, press the lock-off button in and pull the trigger. Release the trigger to stop.

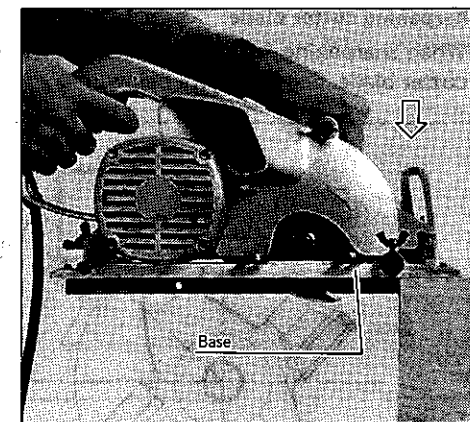


CAUTION:

Before plugging in the tool, always check to see that the trigger switch actuates properly and returns to the "OFF" position when released.

Operation

Rest the front end of the base on the workpiece surface with the guide rule contacting flush with the side of the workpiece and without the cutter blade making any contact with the workpiece. Switch on and wait until the cutter blade attains full speed. Then move the tool gently forward.

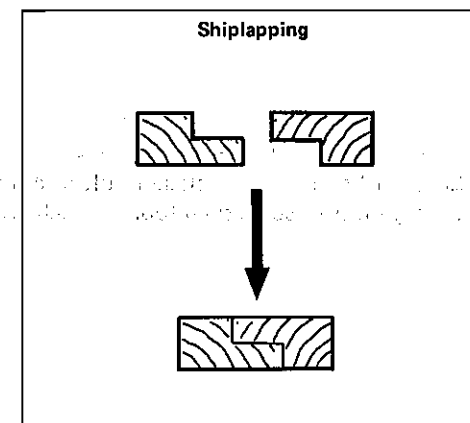
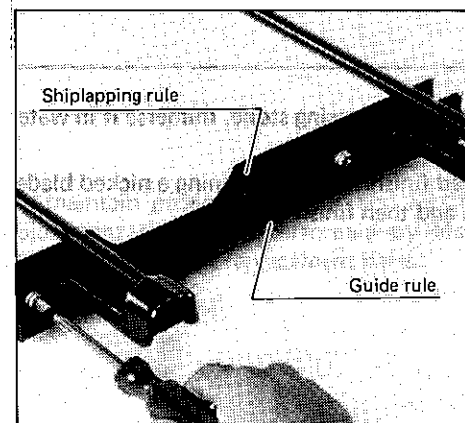


NOTE:

If the tool is tilted at the start or the end of cutting, the end of the workpiece will be badly gouged. Hold the base of the tool flush with the workpiece at all times.

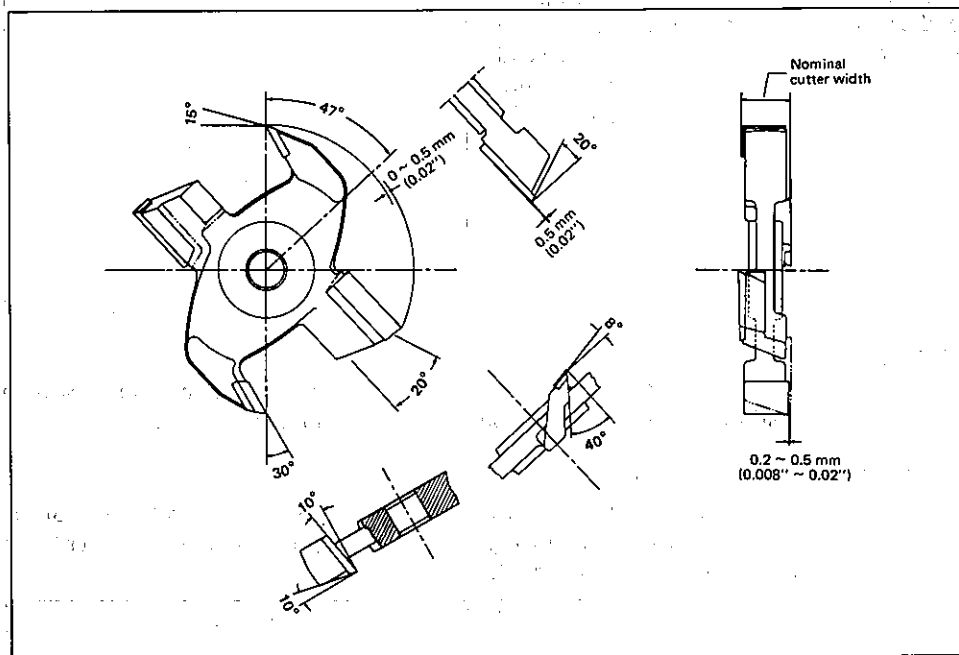
Shiplapping rule (standard equipment)

Attach the shiplapping rule to the guide rule and slide the guide rule into the base of the tool. Move the guide rule to set the cutting width, i.e., the protrusion of the cutter blade in relation to the side of the shiplapping rule.



Sharpening cutter blade

- When sharpening, be careful to maintain the identical blade configurations as the original cutter blade. See the figure below.



- When sharpening by hand, use the standard equipped dressing stone. Immerse it in water for 2 or 3 minutes before sharpening.
- Large nicks in a cutter blade result in a marred finish. When sharpening a nicked blade, use a grinder or some such tool to rough-grind and then finish both sides.

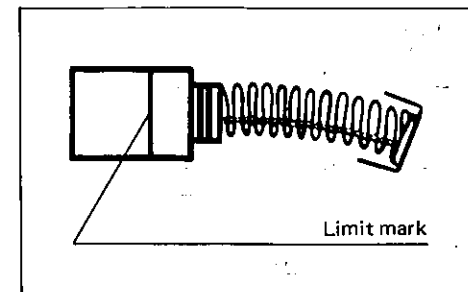
MAINTENANCE

CAUTION:

Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only Makita carbon brushes.



Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.



To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

ACCESSORIES

CAUTION:

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. The accessories or attachments should be used only in the proper and intended manner.

• Cutter blade

Dia. 120 mm (4-3/4")

Part No.	Width (mm)
793021-6	2.4 (3/32")
793022-4	3.0 (1/8")
793024-0	3.9 (5/32")
793025-8	4.5 (3/16")
793026-6	5.5 (7/32")
793027-4	6.0 (1/4")
793028-2	7.5 (5/16")
793029-0	9.0 (3/8")
793030-5	10.5 (7/16")
793031-3	12.0 (1/2")
793032-1	13.5 (9/16")
793039-7	15.0 (5/8")
793040-2	16.5 (11/16")
793041-0	18.0 (3/4")
793042-8	21.0 (7/8")
793043-6	30.0 (1-1/8")
793044-4	33.0 (1-5/16")
793045-2	36.0 (1-3/8")



Part No.	Width (mm)
793312-5	3.0 (1/8")
793314-1	3.9 (5/32")
793315-9	4.5 (3/16")
793316-7	5.5 (7/32")
793317-5	6.0 (1/4")
793318-3	7.5 (5/16")
793319-1	9.0 (3/8")
793320-6	10.5 (7/16")
793328-3	12.0 (1/2")
793321-4	13.5 (9/16")
793129-6	15.0 (5/8")
793134-3	16.5 (11/16")
793130-1	18.0 (3/4")
793128-8	21.0 (7/8")
793131-9	30.0 (1-1/8")
793132-7	33.0 (1-5/16")
793133-5	36.0 (1-3/8")



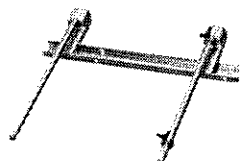
For dado cutting
Dia. 110 mm (4-3/8")

Part No.	Width (mm)
793313-3	39.0 (1-7/16")
793135-1	46.0 (1-13/16")



• Guide rule

Part No. 164191-2 (For groove cutting)
Part No. 164582-7 (For dado cutting)



• Shiplapping scale

Part No. 133474-1



• Flange 35

Part No. 224051-1

[For cutter blade width 2.4 mm (3/32") – 7.5 mm (5/16")]

Part No. 224002-4

[For width 9.0 mm (3/8") – 46 mm (1-13/16")]



• Screwdriver

Part No. 783002-8



• Wrench 19

Part No. 781206-6



• Dressing stone

Part No. 794063-3



• Wrench 21

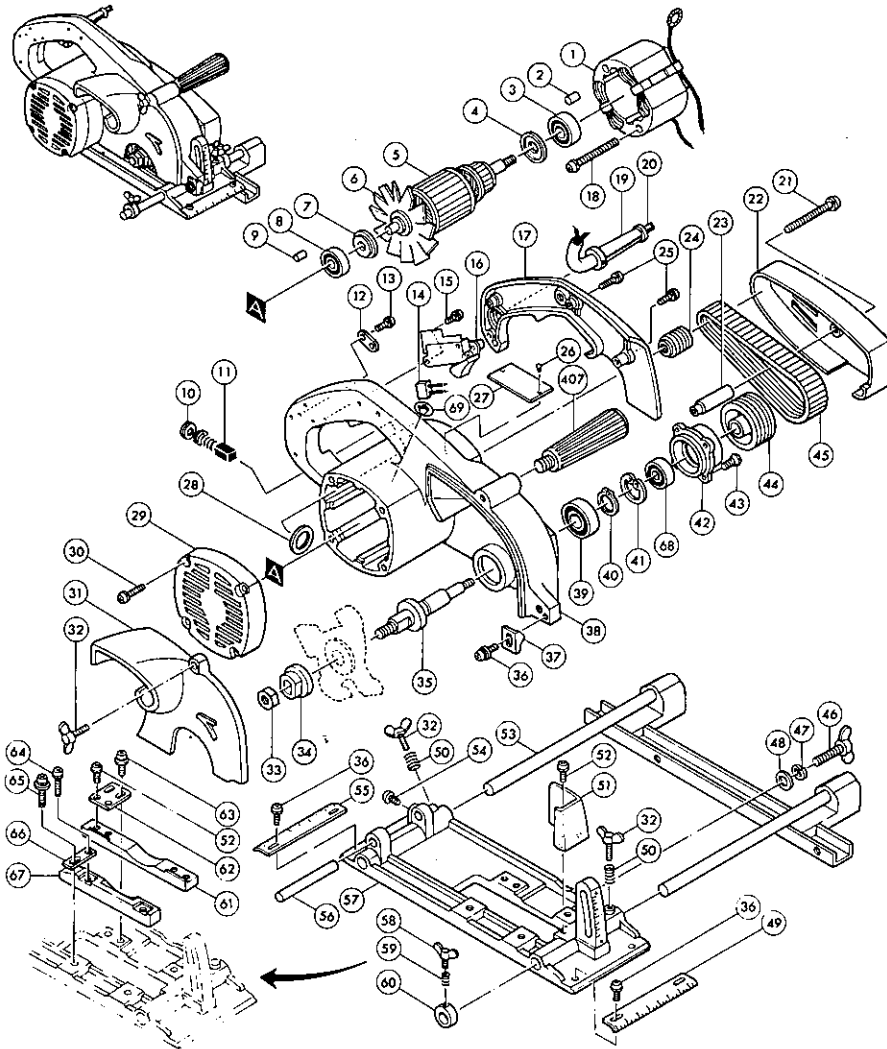
Part No. 781208-2



• Wooden carrying case

Part No. 181288-2

GROOVE CUTTER Model 3800N-A



Note: The switch, noise suppressor and other part configurations may differ from country to country.

MODEL 3800N-A

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
MACHINE			MACHINE		
1	1	FIELD ASSEMBLY	36	5	Pan Head Screw M4x8 (With Washer)
2	1	Rubber Pin 6	37	1	Indication Plate
3	1	Ball Bearing 6201LLB	38	1	Motor Housing
4	1	Dust Seal 12	39	1	Ball Bearing 6203LLB
5	1	ARMATURE ASSEMBLY (With Item 3 - 8)	40	1	Retaining Ring S-17
6	1	Fan 92	41	1	Retaining Ring R-32
7	1	Dust Seal 10	42	1	Bearing Box
8	1	Ball Bearing 6200LLB	43	4	Countersunk Head Screw M4x14 (With Washer)
9	1	Rubber Pin 4	44	1	V-Pulley 9-53
10	2	Brush Holder Cap	45	1	Poly V-Belt 9-374
11	2	Carbon Brush	46	1	Wing Bolt M8x30
12	1	Strain Relief	47	1	Spring Washer 8
13	2	Pan Head Screw M4x14 (With Washer)	48	1	Fiat Washer 8
14	1	Noise Suppressor	49	1	Scale Plate
15	2	Pan Head Screw M4x8 (With Washer)	50	2	Compression Spring 7
16	1	Switch	51	1	Chip Guide
17	1	Handle Cover	52	6	Pan Head Screw M4x10 (With Washer)
18	2	Pan Head Screw M5x65 (With Washer)	53	1	Guide Rule
19	1	Cord Guard	54	1	Pan Head Screw M5x10
20	1	Cord	55	1	Scale Plate
21	1	Pan Head Screw M5x60 (With Washer)	56	1	Pin 9.5
22	1	Belt Cover	57	1	Base
23	1	Sleeve 6-47	58	2	Wing Bolt M5x10
24	1	V-Pulley 9-23L	59	2	Compression Spring 6
25	4	Pan Head Screw M4x28 (With Washer)	60	2	Stopper
26	2	Rivet 0-5	61	1	Side Plate (L)
27	1	Name Plate	62	2	Arm Plate (L)
28	2	Insulation Washer	63	4	Pan Head Screw M5x10 (With Washer)
29	1	Bracket	64	2	Pan Head Screw M6x16 (With Washer)
30	4	Pan Head Screw M5x30 (With Washer)	65	2	Pan Head Screw M6x16 (With Washer)
31	1	Cutter Cover	66	2	Arm Plate (R)
32	3	Wing Bolt M6x20	67	1	Side Plate (R)
33	1	Hex. Nut M12	68	1	Ball Bearing 6201LLB
34	1	Outer Flange 35	69	1	Indication Label
35	1	Spindle	407	1	Grip 37

Note: The switch, noise suppressor and other part specifications may differ from country to country.