

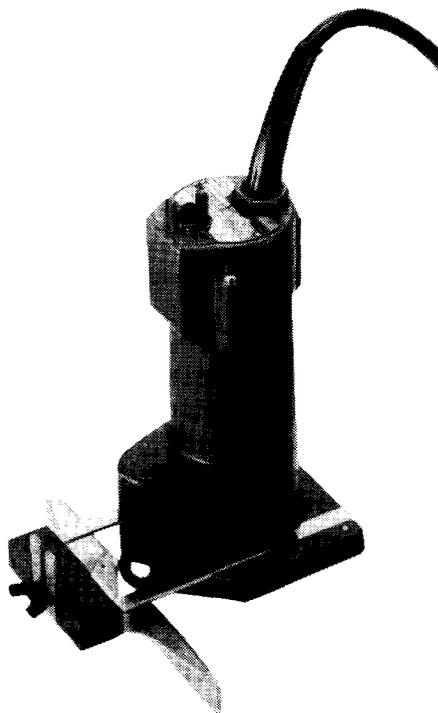
# Makita

アメリカ

## Trimmer

1/4" MODEL 3705

### INSTRUCTION MANUAL



 **DOUBLE  
INSULATION**

#### SPECIFICATIONS

Collet chuck capacity	No load speed (RPM)	Overall length	Net weight
1/4"	23,000	215 mm (8-7/16")	1.8 kg (4 lbs)

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

# **IMPORTANT SAFETY INSTRUCTIONS**

## **(For All 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 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. **REPLACEMENT PARTS.** When servicing, use only identical replacement parts.
21. **POLARIZED PLUGS.** To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

**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. Wear hearing protection during extended periods of operation.**
- 2. Handle the bits very carefully.**
- 3. Check the bit carefully for cracks or damage before operation.  
Replace cracked or damaged bit immediately.**
- 4. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.**
- 5. Hold the tool firmly.**
- 6. Keep hands away from rotating parts.**
- 7. Make sure the bit is not contacting the workpiece before the switch is turned on.**
- 8. Before using the tool on an actual workpiece, let it run for a while.  
Watch for vibration or wobbling that could indicate improperly installed bit.**
- 9. Be careful of the bit rotating direction and the feed direction.**
- 10. Do not leave the tool running. Operate the tool only when hand-held.**
- 11. Always switch off and wait for the bit to come to a complete stop before removing the tool from workpiece.**
- 12. Do not touch the bit immediately after operation; it may be extremely hot and could burn your skin.**
- 13. Don't smear the tool base carelessly with thinner, gasoline, oil or the like.  
They may cause cracks in the tool base.**

**SAVE THESE INSTRUCTIONS.**

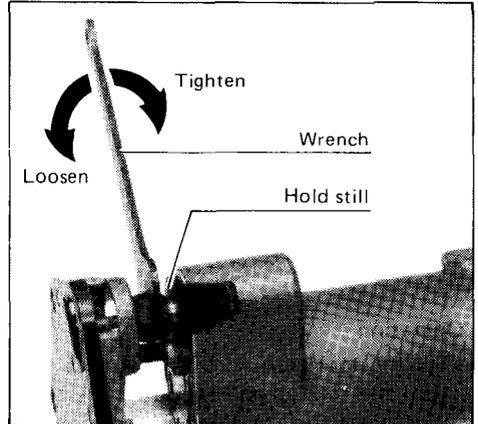
## Installing or removing trimmer bit

### CAUTION:

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

Use the hex wrench to loosen the clamp bolt and lower the tool base. Insert the bit all the way into the collet cone and tighten the collet nut securely with the two wrenches.

To remove the bit, follow the installation procedure in reverse.

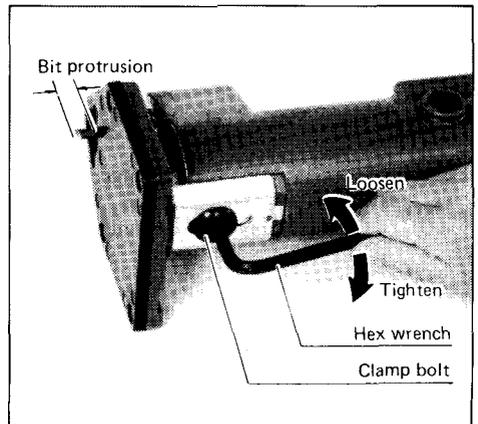


### CAUTION:

Do not tighten the collet nut without inserting a bit, or the collet cone will break.

## Adjusting depth of cut

Place the tool on a flat surface. Loosen the clamp bolt and move the tool body until the bit just touches the flat surface. Tighten the clamp bolt slightly. Place the tool on its side and loosen the clamp bolt. Move the tool base until the desired depth of cut is obtained. Depth of cut can be checked with the scale label (1mm or about 3/64" per graduation) on the tool. Then tighten the clamp bolt securely.

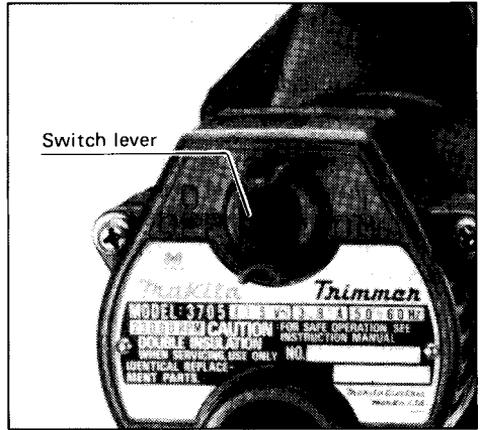


### CAUTION:

Since excessive cutting may cause overload of the motor or difficulty in controlling the tool, the depth of cut should not be more than 3 mm (1/8") at a pass when cutting grooves. When you wish to cut grooves more than 3 mm (1/8") deep, make several passes with progressively deeper bit settings.

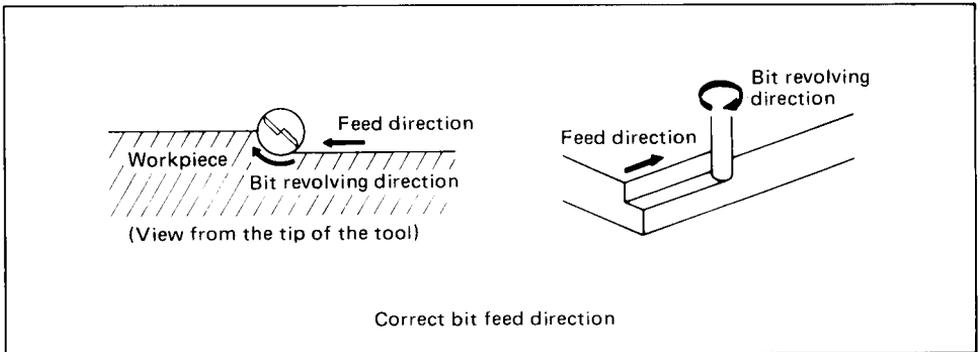
### Switch action

To start the tool, move the switch lever to the "ON" position. To stop, move the switch lever to the "OFF" position.



### Operation

- Set the tool base on the workpiece to be cut without the bit making any contact. Then turn the tool on and wait until the bit attains full speed. Move the tool forward over the workpiece surface, keeping the tool base flush and advancing smoothly until the cutting is complete.
- When doing edge cutting, the workpiece surface should be on the left side of the bit in the feed direction. (See the figure below)

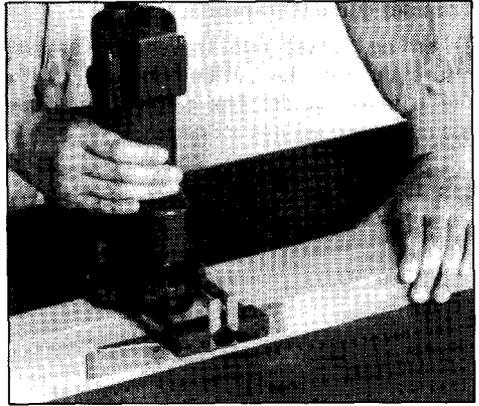


### NOTE:

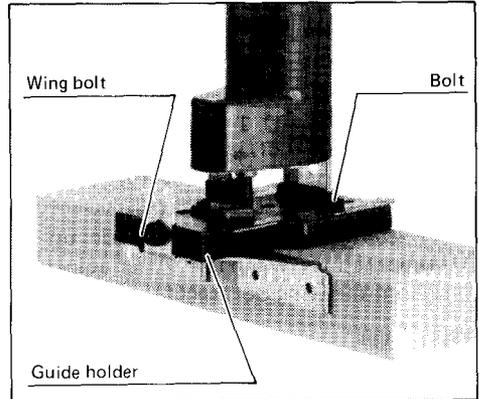
- Moving the tool forward too fast may cause a poor quality of cut, or damage to the bit or motor. Moving the tool forward too slowly may burn and mar the cut. The proper feed rate will depend on the bit size, the kind of workpiece and depth of cut. Before beginning the cut on the actual workpiece, it is advisable to make a sample cut on a piece of scrap lumber. This will show exactly how the cut will look as well as enable you to check dimensions.
- When using the straight guide or the trimmer guide, be sure to install it on the right side in the feed direction. This will help to keep it flush with the side of the workpiece.

### Straight guide (Optional accessory)

The straight guide is effectively used for straight cuts when chamfering or grooving.

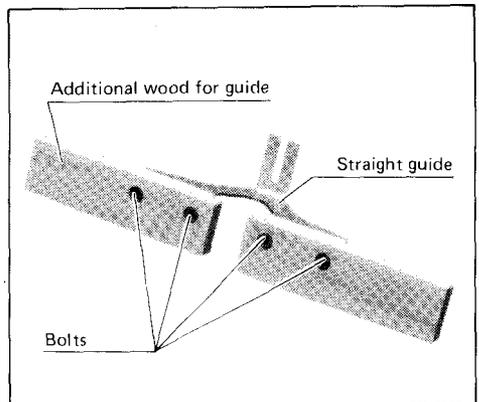


Install the straight guide on the guide holder with the wing bolt. Then use the hex wrench to loosen the bolts on the tool base and insert the guide holder into the grooves in the tool base. Adjust the distance between the bit and the straight guide and tighten the bolts securely. When adjusting the straight guide up or down, loosen the wing bolt. After adjusting it, tighten the wing bolt securely.



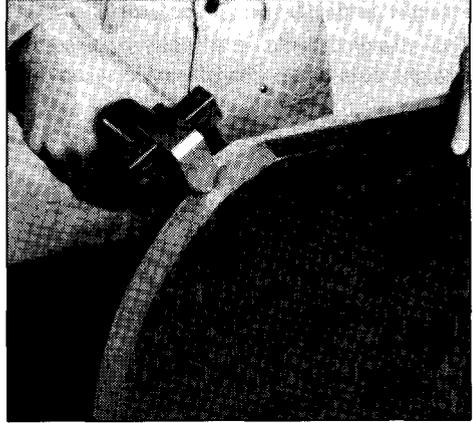
When cutting, move the tool with the straight guide flush with the side of the workpiece.

Wider straight guide of desired dimensions may be made by using the convenient holes in the guide to bolt on extra pieces of wood.

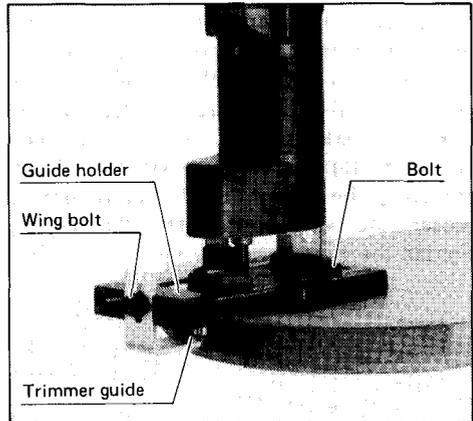


### Trimmer guide (Optional accessory)

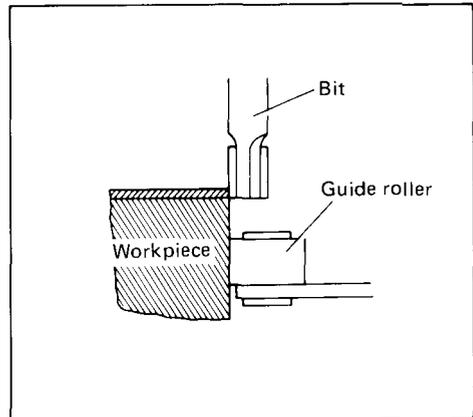
Trimming, curved cuts in veneers for furniture and the like can be done easily with the trimmer guide. The guide roller rides the curve and assures a fine cut.



Install the trimmer guide on the guide holder with the wing bolt. Then use the hex wrench to loosen the bolts on the tool base and insert the guide holder into the grooves in the tool base. Adjust the distance between the bit and the trimmer guide and tighten the bolts securely. When adjusting the trimmer guide up or down, loosen the wing bolt. After adjusting it, tighten the wing bolt securely.

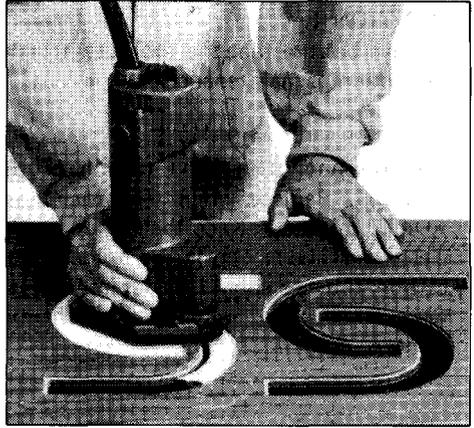


When cutting, move the tool with the guide roller riding the side of the workpiece.

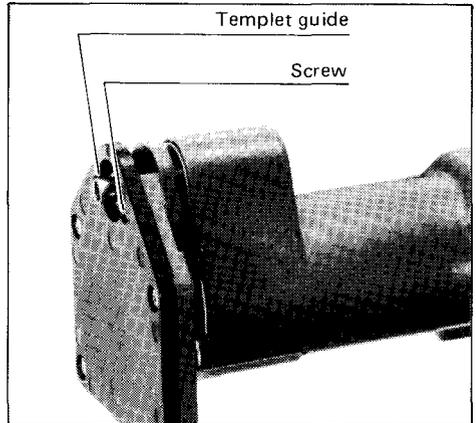


### Templet guide

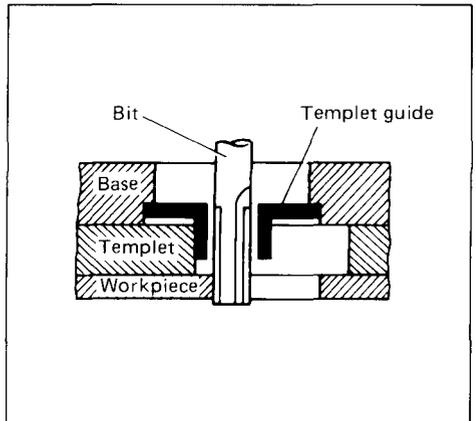
The templet guide provides a sleeve through which the bit passes, allowing use of the trimmer with templet patterns.



To install the templet guide, loosen the screws on the tool base, insert the templet guide and then tighten the screws.



Fix the templet to the workpiece. Move the tool with the templet guide sliding along the side of the templet.



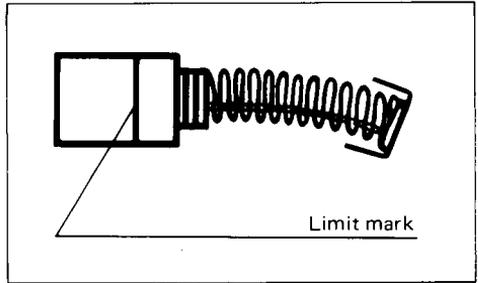
# MAINTENANCE

## CAUTION:

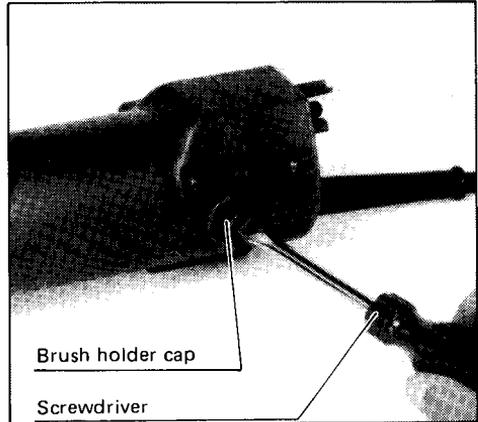
Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

### 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 identical 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.

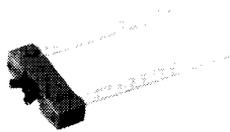
- **Templet guide**

Part No. 321912-7



- **Guide holder**

Part No. 122281-7



- **Straight guide**

Part No. 341947-2



- **Trimmer guide**

Part No. 163162-6



- **Hex wrench 6**

Part No. 783204-6



- **Wrench holder**

Part No. 410047-0



- **Wrench 10**

Part No. 781003-0



- **Wrench 17**

Part No. 781008-0



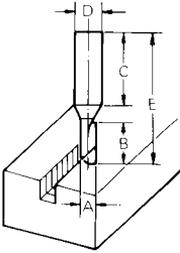
- **Collet cone 1/4"**

Part No. 763608-8



**Bits**

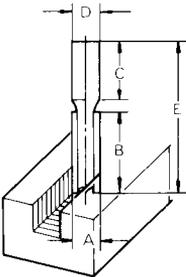
**STRAIGHT – Single Flute**



HIGH SPEED STEEL

PART NO.	A	B	C	D	E
733232-6A	1/8	5/16	1-1/8	1/4	1-5/8

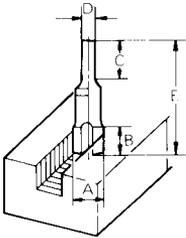
**STRAIGHT – 2 Flute**



CARBIDE TIPPED

PART NO.	A	B	C	D	E
733003-2A	3/16	7/16	1-3/8	1/4	2

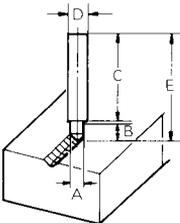
**HINGE MORTISING**



CARBIDE TIPPED

PART NO.	A	B	C	D	E
733006-9A	1/2	1/2	1-1/16	1/4	1-13/16

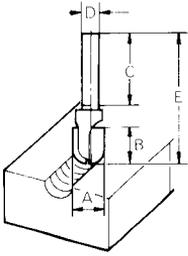
**VEINING – Single Flute**



SOLID CARBIDE

PART NO.	A	B	C	D	E
733007-8A	3/16	7/32	1-1/4	1/4	1-1/2

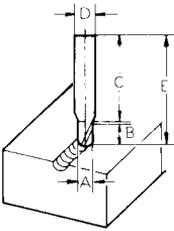
## ROUND NOSE



CARBIDE TIPPED

PART NO.	A	B	C	D	E
733008-2A	1/4	15/32	1-1/4	1/4	1-7/8
733008-4A	3/8	9/16	1-1/4	1/4	2

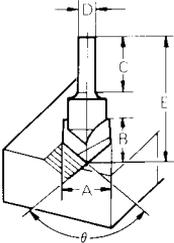
## CORE BOX



HIGH SPEED STEEL

PART NO.	A	B	C	D	E
733238-2A	1/4	1/4	1-3/16	1/4	1-1/2

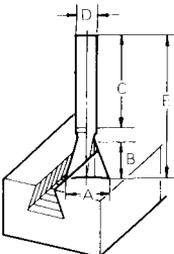
## VEE GROOVING



CARBIDE TIPPED

PART NO.	A	B	C	D	E	θ
733009-2A	3/8	1/2	1-3/16	1/4	2	90°
733009-4A	5/8	3/4	15/16	1/4	2	90°

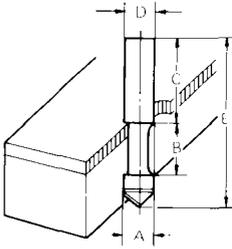
## 14° DOVETAIL



CARBIDE TIPPED

PART NO.	A	B	C	D	E
733009-6A	1/2	1/2	1-1/4	1/4	1-7/8

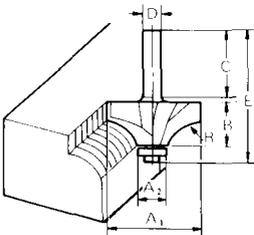
**PANEL PILOT**



HIGH SPEED STEEL

PART NO.	A	B	C	D	E
733236-0A	1/4	3/4	1	1/4	2-7/16

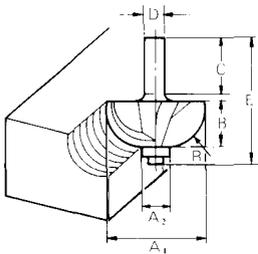
**CORNER ROUNDING**



HIGH SPEED STEEL -- Solid Pilot

PART NO.	A <sub>1</sub>	A <sub>2</sub>	B	C	D	E	R
733240-2A	11/16	3/16	1/2	1	1/4	1-3/4	1/4

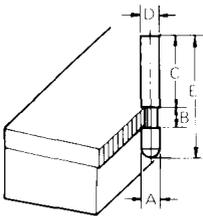
**COVE**



HIGH SPEED STEEL -- Solid Pilot

PART NO.	A <sub>1</sub>	A <sub>2</sub>	B	C	D	E	R
733242-6A	11/16	3/16	1/2	1	1/4	1-3/4	1/4

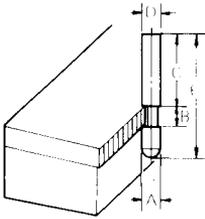
**FLUSH TRIMMER -- Self Piloting**



SOLID CARBIDE

PART NO.	A	B	C	D	E
733128-0A	1/4	1/4	1-1/16	1/4	1-9/16

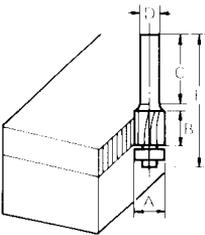
### 7° BEVEL TRIMMER – Self-Piloting



SOLID CARBIDE

PART NO.	A	B	C	D	E
733128-2A	3/16	1/4	1-1/16	1/4	1-9/16

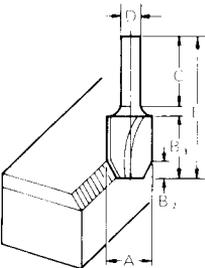
### 2 FLUTE FLUSH TRIMMER



CARBIDE TIPPED

PART NO.	A	B	C	D	E
733128-9A	1/2	1/2	1-1/4	1/4	2-1/16
REPLACEMENT BEARING – NO. 733132-4A					

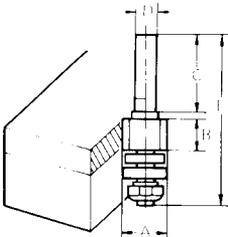
### COMBINATION FLUSH/22° BEVEL TRIMMER



CARBIDE TIPPED

PART NO.	A	B <sub>1</sub>	B <sub>2</sub>	C	D	E
733128-6A	7/16	1/2	3/16	1-1/4	1/4	1-3/4

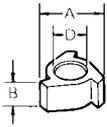
### 3 FLUTE FLUSH TRIMMER ASSEMBLY – Self Piloting



SOLID CARBIDE CUTTER

PART NO.	A	B	C	D	E
733129-2A	5/8	3/8	1-1/4	1/4	2-3/8
REPLACEMENT BEARING – NO. 733132-6A					

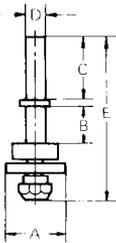
**FLUTE FLUSH REPLACEMENT CUTTER**



SOLID CARBIDE

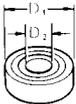
PART NO.	A	B	D
733129-6A	5/8	3/8	1/4
FOR FLUSH TRIMMER ASSEMBLY NO. 733129-2A			

**1/4" REPLACEMENT ARBOR**



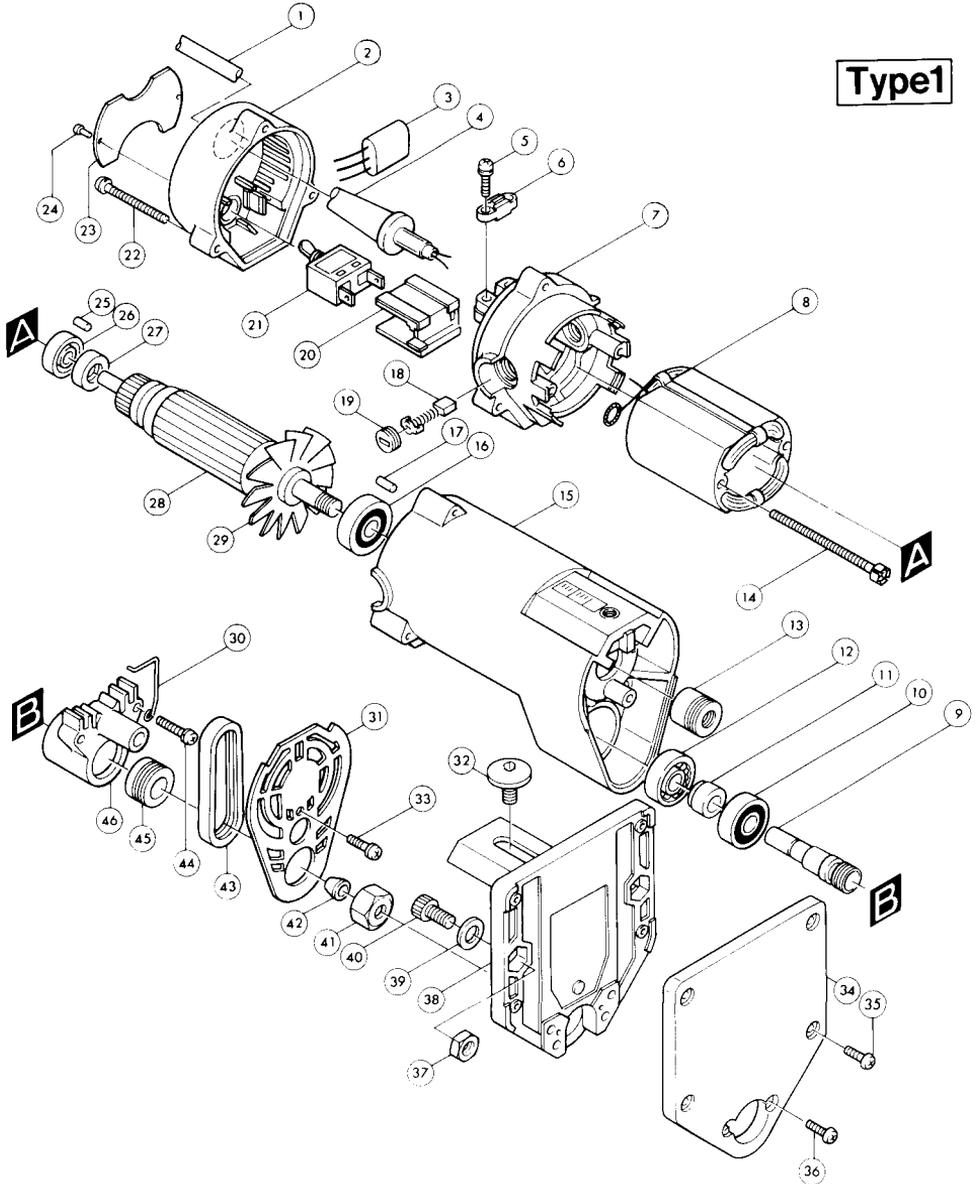
PART NO.	A	B	C	D	E
733131-2A	5/8	3/8	1-1/4	1/4	2-3/8
FOR FLUSH TRIMMER ASSEMBLY NO. 733129-2A					

**BALL BEARING PILOT**



PART NO.	D <sub>1</sub>	D <sub>2</sub>
733132-4A	1/2 O.D.	3/16 I.D.
733132-6A	5/8 O.D.	1/4 I.D.

# 1/4" TRIMMER Model 3705

**Type1**


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

ITEM NO.	NO. USED	DESCRIPTION	ITEM NO.	NO. USED	DESCRIPTION
<u>MACHINE</u>			<u>MACHINE</u>		
1	1	Cord	26	1	Ball Bearing 627LB
2	1	Rear Cover	27	1	Insulation Washer
4	1	Cord Guard	28	1	ARMATURE ASSEMBLY
5	2	Pan Head Screw M4x14 (With Washer)			(With Item 16, 26, 29)
6	1	Strain Relief	29	1	Fan 52
7	1	Motor Rear Housing	30	1	Torsion Bar
8	1	FIELD ASSEMBLY	31	1	Belt Cover
9	1	Drive Shaft	32	1	Hex. Socket Head Bolt M8x11
10	1	Ball Bearing 6000LB	33	1	Pan Head Screw M4x14 (With Washer)
11	1	Ring 10	34	1	Base Protector
12	1	Ball Bearing 6000LB	35	4	Binding Head Screw M4x12
13	1	V Pulley 3 19	36	2	Binding Head Screw M4x16
14	2	Hex. Bolt M4x70 (With Washer)	37	2	Hex. Nut M8
15	1	Motor Housing	38	1	Base
16	1	Ball Bearing 6200LLB	39	2	Flat Washer 8
17	1	Rubber Pin 4	40	2	Hex. Socket Head Bolt M8x12
18	2	Carbon Brush	41	1	Collet Nut
19	2	Brush Holder Cap	42	1	Collet Cone
21	1	Switch	43	1	Poly V Belt 3 170
22	3	Pan Head Screw M4x40 (With Washer)	44	2	Pan Head Screw M4x18 (With Washer)
23	1	Name Plate	45	1	V Pulley 3 23
24	2	Rivet O 5	46	1	Bearing Box
25	1	Rubber Pin 4			

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



## **MAKITA LIMITED ONE YEAR WARRANTY**

### **Warranty Policy**

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others;
- repairs are required because of normal wear and tear;
- The tool has been abused, misused or improperly maintained;
- alterations have been made to the tool.

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