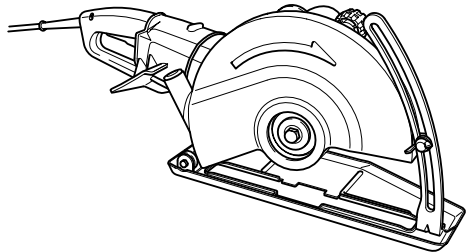




Angle Cutter

MODEL 4112H



004012



I N S T R U C T I O N M A N U A L

⚠ WARNING:

For your personal safety, READ and UNDERSTAND before using.
SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

www.makitatools.com

SPECIFICATIONS

Model	4112H
Wheel diameter	305 mm (12")
Max cutting capacity	100 mm (4")
No load speed (RPM)	5000/min
Overall length	648 mm (25-1/2")
Net weight	10.2 kg (22.2 lbs)

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

GENERAL SAFETY RULES

USA002-2

(For All Tools)

 **WARNING:**
Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **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.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

4. **Double insulated tools are equipped with 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 a polarized outlet. Do not change the plug in any way.** Double insulation  eliminates the need for the three wire grounded power cord and grounded power supply system.

-
5. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
 6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
 7. **Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.** Damaged cords increase the risk of electric shock.
 8. **When operating a power tool outside, use an outdoor extension cord marked “W-A” or “W”.** These cords are rated for outdoor use and reduce the risk of electric shock.

Personal Safety

9. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
10. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
11. **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
12. **Remove adjusting keys or wrenches before turning the tool on.** A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
13. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

14. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Ordinary eye or sun glasses are NOT eye protection.

Tool Use and Care

15. **Use clamps or other practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
16. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
17. **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
18. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
19. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.
20. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
21. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.
22. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool, may become hazardous when used on another tool.

SERVICE

23. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

24. When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of electric shock or injury.

USE PROPER EXTENSION CORD: Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Table 1: Minimum gage for cord

Ampere Rating		Volts	Total length of cord in feet			
		120 V	25 ft.	50 ft.	100 ft.	150 ft.
More Than	Not More Than	AWG				
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

SPECIFIC SAFETY RULES

USB080-1

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to cutter safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

1. Always use proper guard with wheel. A guard protects operator from broken wheel fragments.

2. Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running over rated speed can fly apart and cause injury.

3. Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a “live” wire will make exposed metal parts of the tool “live” and shock the operator.
4. Always use safety glasses or goggles. Ordinary eye or sun glasses are NOT safety glasses.

5. Check the wheel carefully for cracks or damage before operation. Replace cracked or damaged wheel immediately. Run the tool (with guard) at no load for about a minute, holding tool away from others. If wheel is flawed, it will likely separate during this test.

-
6. Use only flanges specified for this tool.
 7. Be careful not to damage the spindle or the flange (especially the installing surface). Damage to these parts could result in wheel breakage.
 8. NEVER use tool with wood cutting blades or other sawblades. Such blades when used on a grinder frequently kick and cause loss of control leading to personal injury.
 9. Hold the tool firmly.
 10. Keep hands away from rotating parts.
 11. Make sure cord is clear of wheel. Do not wrap cord around your arm or wrist. If control of tool is lost, cord may become wrapped around you and cause personal injury.
 12. Make sure the wheel is not contacting the workpiece before the switch is turned on.
 13. Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced wheel.
 14. Watch out for flying sparks. Hold the tool so that sparks fly away from you and other persons or flammable materials.
 15. Do not leave the tool running. Operate the tool only when hand-held.
 16. Do not touch the workpiece immediately after operation; it may be extremely hot and could burn your skin.
 17. ALWAYS wear proper apparel including long sleeve shirts, leather gloves and shop aprons to protect skin from contact with hot cuttings.
 18. Use of this tool to cut some products could expose user to dust containing hazardous substances. Use appropriate respiratory protection.
 19. The tool must be used only for dry cutting. DO NOT use water.

SAVE THESE INSTRUCTIONS

 **WARNING:**
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS

USD291-2

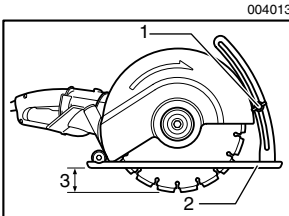
The followings show the symbols used for tool.

V	volts	n₀	no load speed
A	amperes		Class II Construction
	alternating or direct current	.../min	revolutions or reciprocation per minute

FUNCTIONAL DESCRIPTION

CAUTION:

- Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

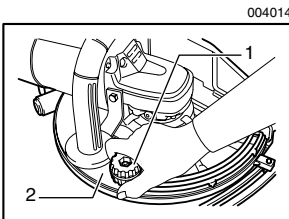


1. Wing bolt
2. Base
3. Cutting depth

Adjusting the depth of cut

Loosen the wing bolt on the depth guide and move the base up or down. At the desired depth of cut, secure the base by tightening the wing bolt.

Only case you adjust the cutting depth to the maximum one, always be sure to do the adjustment after adjustment of the wheel guard.



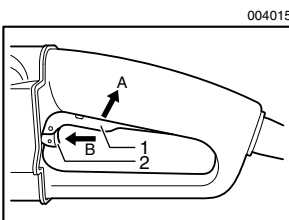
1. Clamping nut
2. Wheel guard

Securing wheel guard

CAUTION:

- The wheel guard must be adjusted on the tool so that the closed side of the guard always points toward the operator.

The wheel guard can be adjusted about 80 degrees, after you loosen the clamping nut. Adjust to the desired angle, then secure the clamping nut.



1. Switch trigger
2. Lock lever

Switch action

CAUTION:

- Before plugging in the tool, always check to see that the switch trigger actuates properly and returns to the “OFF” position when released.
- Switch can be locked in “ON” position for ease of operator comfort during extended use. Apply caution when locking tool in “ON” position and maintain firm grasp on tool.

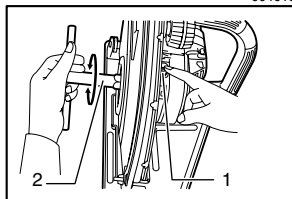
To start the tool, simply pull the switch trigger.(A direction)
Release the switch trigger to stop.

For continuous operation, pull the switch trigger (A direction) and then push in the lock lever.(B direction)

To stop the tool from the locked position, pull the switch trigger (A direction) fully, then release it.

ASSEMBLY

004016



1. Shaft lock
2. Socket wrench

⚠ CAUTION:

- Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.

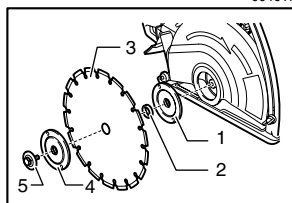
Installing or removing the wheel

To remove the wheel, depress the shaft lock to hold the shaft stationary, then loosen the hex bolt clockwise with the socket wrench.

To install a wheel, place flange with its partly elevated side facing the tool, and then place ring before installing a wheel onto the spindle (shaft) and another flange with partly elevated side facing outward.

Be sure to fully tighten the hex bolt counterclockwise after mounting the new wheel, or operation will be dangerous.

004017

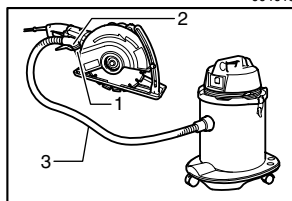


1. Flange
2. Ring
3. Wheel
4. Flange
5. Hex bolt

⚠ CAUTION:

- Use only the Makita wrench to install or remove the wheel.

004018



1. Dust nozzle
2. Elbow joint
3. Hose

Connecting to vacuum cleaner

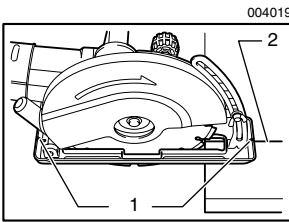
When you wish to perform cleaner operation, connect a vacuum cleaner to your tool. Connect a hose of vacuum cleaner to the dust nozzle via an elbow joint (accessory).

OPERATION

CAUTION:

Be sure to pull the tool when cutting a workpiece.

- Use this tool for straight line cutting only. Cutting curves can cause stress cracks or fragmentation of the diamond wheel and abrasive cut-off wheel resulting in possible injury to persons in the vicinity.
- After operation, always switch off the tool and wait until the wheel has come to a complete stop before putting the tool down.
- When cutting concrete blocks, tiles or masonry materials, do not make a cut in depth more than 60 mm (2-3/8"). When you need to cut a workpiece over 60 mm (2-3/8") up to 100 mm (4"), make more than two passes of cuts. The depth of the most efficient cut is about 40 mm (1-9/16").



1. Notch
2. Cutting line

Hold the tool firmly with both hands. First keep the wheel without making any contact with a workpiece to be cut. Then turn the tool on and wait until the wheel attains full speed.

The cut is made by pulling the tool toward you (not by pushing away from you). Align the notch on the base with your cutting line when performing a cut.

Switch off the tool on the position posed when finishing a cut. Raise the tool after the wheel comes to a complete stop.

MAINTENANCE

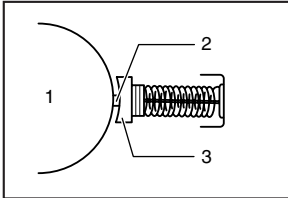
CAUTION:

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

Dressing diamond wheel

If the cutting action of the diamond wheel begins to diminish, use an old discarded coarse grit bench grinder wheel or concrete block to dress the diamond wheel. To do this, tightly secure the bench grinder wheel or concrete block and cut in it.

001146



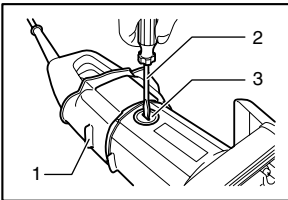
1. Commutator
2. Insulating tip
3. Carbon brush

Replacing carbon brushes

When the resin insulating tip inside the carbon brush is exposed to contact the commutator, it will automatically shut off the motor. When this occurs, both carbon brushes should be replaced. 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.

Pick up an end of the dust cover slightly with hands so that brush holder cap appears.

004020



1. Dust cover
2. Screwdriver
3. Brush holder cap

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. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- Diamond wheels (Dry type)
- Abrasive cut-off wheels
- Socket wrench 17
- Safety goggle
- Ring 20
- Elbow joint

Memo

[illegible]

Memo

[illegible]

Cut



First-Class
Postage
Required

Post Office will
not deliver
without proper
postage.

Makita U.S.A., Inc.
14930 Northam Street
La Mirada, CA 90638-5753



Fold

MAIL THIS PORTION

Your answers to the following questions are appreciated.

1. This product was purchased from:

☐ Home Center

☐ Hardware/Lumber Store

☐ Tool Distributor

☐ Industrial Supply

☐ Construction Supply

☐ Other ()

3. How did you learn about this product:

☐ Magazine

☐ From Dealer

☐ Newspaper

☐ Store Display

☐ Catalog

☐ Radio

☐ Exhibition

☐ From Friend

☐ Previous Usage

☐ Other ()

2. Use of the product is intended for:

☐ Construction Trade

☐ Industrial Maintenance

☐ Home Maintenance

☐ Hobby

☐ Other ()

4. Most favored points are:

☐ Design

☐ Features

☐ Size

☐ Price

☐ Makita Brand

☐ Repair Service

☐ Durability

☐ Power

☐ Other ()

5. Any comments:

DATE PURCHASED												MODEL NO.																	
MONTH				DAY				YEAR				SERIAL NO.																	
INTL.		LAST NAME / COMPANY NAME														STATUS Married Single				SEX M F									
STREET ADDRESS																													
CITY																													
STATE						ZIP CODE						PHONE						AREA CODE											
AGE:		☐ Under 19		☐ 20-29		☐ 30-39		☐ 40-49		☐ 50-60		☐ Over 60																	

BE SURE TO COMPLETE THE CUSTOMER'S PORTION OF THIS FORM AND RETAIN FOR YOUR RECORDS.

Please return this portion by facsimile or mail.

Facsimile No: (714) 522-8133

FACTORY SERVICE CENTERS

1-800-4-MAKITA

RETAIN THIS PORTION FOR YOUR RECORDS

ALABAMA 2365 Pelham Parkway Pelham, AL 35124 (205) 620-1791	COLORADO 11839 E. 51st Ave. Denver, CO 80239-2709 (303) 371-2850	LOUISIANA 5626 Jefferson Hwy. Harahan, LA 70123 (504) 733-4138	NEW YORK 4917 Genessee Street Cheektowaga, NY 14225 (716) 685-9503 131-35 31st Ave. Flushing, NY 11354 (718) 886-0971	PUERTO RICO 200 Guayama St. Hato Rey, PR 00917 (787) 250-8776
ARIZONA 3707 E. Broadway Rd., Ste. 6 Phoenix, AZ 85040 (602) 437-2850	FLORIDA 620 Douglas Ave. Suite 1302 Altamonte Springs, FL 32714 (407) 774-6000 750 East Sample Road Pompano Beach, FL 33064 (954) 781-6333 Thompson Center Waters 5501 W. Waters Ave., Ste. 406 Tampa, FL 33634 (813) 886-8292	MARYLAND 7541 - 45 Ritchie Highway Glen Burnie, MD 21061 (410) 590-0160	NORTH CAROLINA 3501-G S. Tryon St. Charlotte, NC 28217 (704) 527-0611 OHIO 6253 E. Main St. Columbus, OH 43213 (614) 860-0222 6379 Pearl Road Parma Heights, OH 44130 (440) 843-7555 1617 E. Kemper Rd. Sharonville, OH 45246 (513) 771-0788	TENNESSEE 4655 Nolensville Rd. Nashville, TN 37211 (615) 331-9922 TEXAS 12801 Stemmons Fwy Ste. 809 Farmers Branch, TX 75234 (972) 243-1150 12701 Directors Dr. Stafford, TX 77477-3701 (281) 565-8665 3453 IH-35 North, Ste. 101 San Antonio, TX 78219 (210) 228-0676 UTAH 145 E. 1300 S., Ste. 101 Salt Lake City, UT 84115 (801) 359-3410
ARKANSAS Shackelford Shopping Center 240 South Shackelford Rd., Ste. C Little Rock, AR 72211 (501) 224-5733	GEORGIA 4680 River Green Parkway Duluth, GA 30096-2566 (770) 476-8911	MASSACHUSETTS 232 Providence Hwy. Westwood, MA 02090 (617) 461-9754 MINNESOTA 6427 Penn Ave. South Richfield, MN 55423 (612) 869-5199 MISSOURI 9876 Watson Road St. Louis, MO 63126-2221 (314) 909-9889 NEBRASKA 4129 S. 84th St. Omaha, NE 68127 (402) 597-2925	OKLAHOMA 552 E. Memorial Road Oklahoma City, OK 73114 (405) 752-2655 OREGON 828 19th Avenue., N.W. Portland, OR 97209 (503) 222-1823 PENNSYLVANIA Springwater Plaza 364 Wilmington W. Chester Pike Glen Mills, PA 19342 (610) 459-4122 6200 Babcock Blvd Pittsburgh, PA 15237 (412) 366-6363	WASHINGTON 22220 84th Ave. So., Bldg. A Kent, WA 98032 (253) 395-8055 WISCONSIN Lincoln Plaza Shopping Ctr. 2245 S. 108th St. West Allis, WI 53227 (414) 541-4776
CALIFORNIA 41850 Christy St. Fremont, CA 94538-5107 (510) 657-9881 1421 N. Clovis Ave., Ste. 112 Fresno, CA 93727 (559) 252-5166 14930 Northam St. La Mirada, CA 90638-5753 (714) 522-8088 1970 Fulton Avenue Sacramento, CA 95825 (916) 482-5197 1440 South "E" Street San Bernardino, CA 92408 (909) 885-1289 7674 Clairemont Mesa Blvd. San Diego, CA 92111 (658) 278-4471 1565 Winchester B. Campbell, CA 95008-0501 (408) 379-0377 16735 Salicoy St., Ste. 105 Van Nuys, CA 91406 (818) 782-2440	ILLINOIS 1450 Feehanville Dr. Mt. Prospect, IL 60056-6011 (847) 297-3100 INDIANA 8403 Michigan Road, Unit 1 Indianapolis, IN 46268 (317) 334-9980 KANSAS 8819 W. 95th St. Overland Park, KS 66212 (913) 642-1111 KENTUCKY 1215 S. Hurstbourne Parkway Louisville, KY 40222 (502) 326-3740	NEVADA 3375 S. Decatur Blvd. Suites. 22 - 24 Las Vegas, NV 89102 (702) 368-4277 NEW JERSEY 251 Herrod Blvd. Dayton, NJ 08810-1539 (609) 655-1212		

CUSTOMER'S RECORD

When you need service: Send complete tool (prepaid) to one of the Makita Factory Service Centers listed, or to an Authorized Makita Service Center. Be sure to attach a letter to the outside of the carton detailing the problem with your tool.	Date Purchased
	Dealer's Name & Address
	Model No.
	Serial No.

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Makita Corporation
3-11-8, Sumiyoshi-cho,
Anjo, Aichi 446-8502 Japan