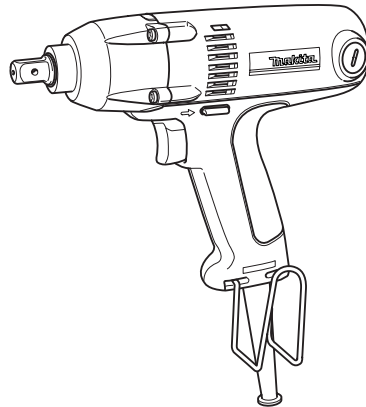




Impact Wrench

MODEL 6953



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

Capacities		No load speed (RPM)	Impacts per minute	Max. fasten- ing torque	Overall length	Net weight
Standard bolt	High tensile bolt					
10mm - 16mm (3/8" - 5/8")	8mm - 12mm (5/16" - 1/2")	0 - 3000/min.	0 - 3000	150 N • m (111ft • lbs)	233 mm (9-1/8")	1.4 kg (3 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

USB003-2

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

1. 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 tool “live” and shock the operator.
2. Wear ear protectors.
3. Check the socket carefully for wear, cracks or damage before installation.
4. Hold the tool firmly.
5. Always be sure you have a firm footing. Be sure no one is below when using the tool in high locations.
6. The proper fastening torque may differ depending upon the kind or size of the bolt. Check the torque with a torque wrench.

SAVE THESE INSTRUCTIONS

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

SYMBOLS


USD202-2

The followings show the symbols used for tool.


V volts

A amperes


Hz hertz

 alternating current

n₀no load speed

Class II Construction

.../min.....revolutions or reciprocation per minute

 number of blow

FUNCTIONAL DESCRIPTION

⚠ CAUTION:

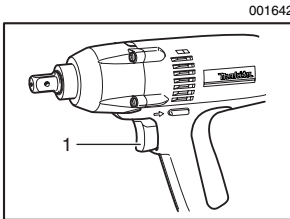
- Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

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.

To start the tool, simply pull the switch trigger. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.



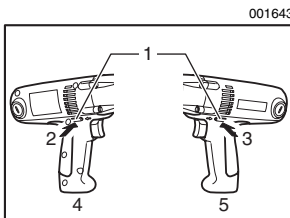
1. Switch trigger

Reversing switch action

⚠ CAUTION:

- Always check the direction of rotation before operation.
- Use the reversing switch only after the tool comes to a complete stop. Changing the direction of rotation before the tool stops may damage the tool.

This tool has a reversing switch to change the direction of rotation. Depress the reversing switch lever from the A side for clockwise rotation or from the B side for counterclockwise rotation.



1. Reversing switch lever
2. A side
3. B side
4. Clockwise
5. Counterclockwise

ASSEMBLY

⚠ CAUTION:

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

Selecting correct socket

Always use the correct size socket for bolts and nuts. An incorrect size socket will result in inaccurate and inconsistent fastening torque and/or damage to the bolt or nut.

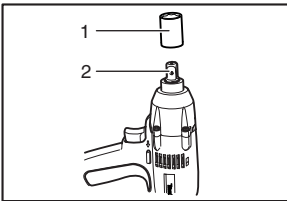
Installing or removing socket

⚠ CAUTION:

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

To install the socket, push it onto the anvil of the tool until it locks into place. To remove the socket, simply pull it off.

001644



1. Socket
2. Anvil

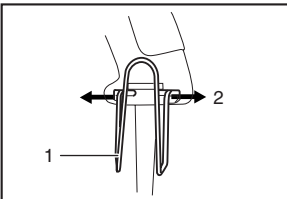
Hook

The hook is convenient for temporarily hanging the tool. This can be removed without using a tool. This can be installed on either side of the tool.

Installing and removing hook

Expand the upper part of the hook in both directions and remove it. To install the hook, follow the removal procedure in reverse.

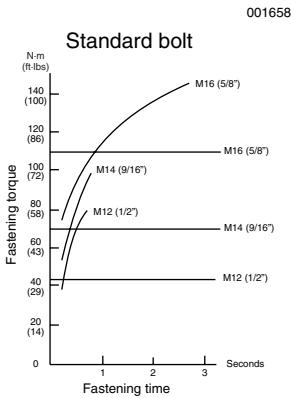
001645



1. Hook
2. Expand

OPERATION

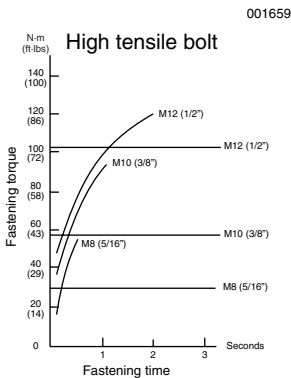
The proper fastening torque may differ depending upon the kind or size of the bolt. The relation between fastening torque and fastening time is shown in the figures.



Hold the tool firmly and place the socket over the bolt or nut. Turn the tool on and fasten for the proper fastening time.

NOTE:

- When fastening screw M8 (5/16") or smaller, carefully adjust pressure on the switch trigger so that the screw is not damaged.
- Hold the tool pointed straight at the bolt or nut without applying excessive pressure on the tool.
- If you fasten the bolt for a time longer than shown in the figures, the bolt or the socket may be overstressed, damaged, etc. Before starting your job, always perform a test operation to determine the proper fastening time for your bolt. Especially for the bolt over than M8 (5/16"), perform the above test operation to prevent the trouble on socket or bolt, etc.



The fastening torque is affected by a wide variety of factors including the following. After fastening, always check the torque with a torque wrench.

1. Socket

- Failure to use the correct size socket will cause a reduction in the fastening torque.
- A worn socket (wear on the hex end or square end) will cause a reduction in the fastening torque.

2. Bolt

- Even though the torque coefficient and the class of bolt are the same, the proper fastening torque will differ according to the diameter of bolt.
- Even though the diameters of bolts are the same, the proper fastening torque will differ according to the torque coefficient, the class of bolt and the bolt length.

3. The manner of holding the tool or the material of driving position to be fastened will affect the torque.

4. Operating the tool at low speed will cause a reduction in the fastening torque.

MAINTENANCE

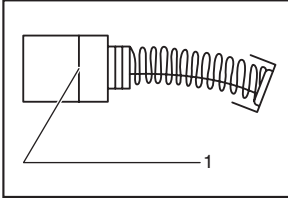
⚠ CAUTION:

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

Replacing carbon brushes

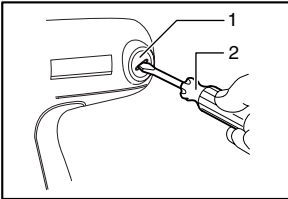
Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

001145



1. Limit mark

001646



1. Brush holder cap
2. Screwdriver

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.

- Extension bar
- Universal joint
- Bit adapter
- Phillips bits (#2, #3)

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

FACTORY SERVICE CENTERS

1-800-4-MAKITA

RETAIN THIS PORTION FOR YOUR RECORDS

ALABAMA

2365 Pelham Parkway
Pelham, AL 35124
(205) 620-1791

ARIZONA

3707 E. Broadway Rd., Ste. 6
Phoenix, AZ 85040
(602) 437-2850

ARKANSAS

Shackelford Shopping Center
240 South Shackelford Rd.,
Ste. C
Little Rock, AR 72211
(501) 224-5733

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) 522-9089

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
(858) 278-4471

1714 E. McFadden Ave., Unit M
Santa Ana, CA 92705
(714) 667-5066

1565 Winchester B.
Campbell, CA 95008-0501
(408) 379-0377

16735 Satcoy St., Ste. 105
Van Nuys, CA 91406
(818) 782-2440

COLORADO

11839 E. 51st Ave.
Denver, CO 80239-2709
(303) 371-2850

CONNECTICUT

508 Spring St.
Windsor Locks, CT 06096
(860) 292-6405

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

GEORGIA

4680 River Green Parkway
Duluth, GA 30096-2566
(770) 476-8911

HAWAII

4510 Salt Lake Blvd., Suite A7
Honolulu, HI 96818
(808) 847-0038

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

LOUISIANA

5626 Jefferson Hwy.
Harahan, LA 70123
(504) 733-4138

MARYLAND

7541 - 45 Ritchie Highway
Glen Burnie, MD 21061
(410) 590-0160

MASSACHUSETTS

232 Providence Hwy.
Westwood, MA 02090
(617) 461-9754

MICHIGAN

37454 Ann Arbor Trail
Livonia, MI 48150
(313) 432-1012

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

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

NEW MEXICO

5805 Menaui Blvd. NE
Albuquerque, NM 87110
(505) 881-4619

NEW YORK

4917 Genessee Street
Cheektowaga, NY 14225
(716) 685-9503

131-35 31st Ave.
Flushing, NY 11354
(718) 866-0971

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

OKLAHOMA

552 E. Memorial Road
Oklahoma City, OK 73114
(405) 275-2655

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

PUERTO RICO

200 Guayama St.
Hato Rey, PR 00917
(787) 250-8776

TENNESSEE

4655 Nolensville Rd.
Nashville, TN 37211
(615) 331-9922

TEXAS

4655 Stemmons Fwy Ste. 809
Farmers Branch, TX 75234
(972) 243-1150

12701 Directors Dr.
Stafford, TX 77477-3701
(281) 955-8665

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

VIRGINIA

5760 Northampton Blvd., Ste.
102
Virginia Beach, VA 23455
(757) 460-0280

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

CUSTOMER'S RECORD

<p>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.</p>	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