# MAXIMUM

1/2" (12.7 mm)

**Heavy-duty Impact Wrench** 



#### **IMPORTANT:**

Please read this manual carefully before using this product, and save it for reference.

INSTRUCTION MANUAL



# **MAXIMUM**

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**NOTE:** If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-888-670-6682.



#### **SAVE THESE INSTRUCTIONS**

This manual contains important safety and operating instructions. Read all instructions and follow them with use of this product.

#### **TECHNICAL SPECIFICATIONS**

VOLTAGE	120 V 60 Hz AC
AMPS	8.5 A
NO-LOAD SPEED	2100 RPM
IMPACT RATE	2700 BPM
MAXIMUM FASTENING TORQUE	400 ft-lb (542 J)
DRIVE	Square 1/2" (12.7 mm)
PROTECTION CLASS	<b>□</b> /II
CORD LENGTH	10' (3 m)
MACHINE WEIGHT	7 lb (3.18 kg)

**MAXIMUM**<sup>™</sup>

#### **WORK AREA SAFETY**

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 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.
- Keep children and bystanders away while operating a power tool. Distractions
  can cause you to lose control.



#### **WARNING!**

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known 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.
- 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.



#### **WARNING!**

This product may contain lead, phthalates or other chemicals known to cause cancer, birth defects and other reproductive harm. Please wash your hands after use.



#### **WARNING!**

Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term power tool in the warnings refers to your electric (corded) power tool or battery-operated (cordless) power tool.

#### **ELECTRICAL SAFETY**

- Power tool plugs must match the outlet. Never modify the plug in any way. Do
  not use any adapter plugs with grounded power tools. Unmodified plugs and
  matching outlets will reduce risk of electric shock.
- 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.
   Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

#### **PERSONAL SAFETY**

- Stay alert, watch what you are doing and use common sense when operating a
  power tool. Do not use a power tool while you are tired or under the influence
  of drugs, alcohol or medication. A moment of inattention while operating
  power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective
  equipment such as dust mask, non-skid safety shoes, hard hat, or hearing
  protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up, or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on. A
  wrench or a key left attached to a rotating part of the power tool may result in
  personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

#### **POWER TOOL USE AND CARE**

Do not force the power tool. Use the correct power tool for your application.
 The correct power tool will do the job better and safer at the rate for which it was designed.

- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.
   Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the power tool, accessories and tool bits etc., in accordance with these
  instructions and in the manner intended for the particular type of power tool,
  taking into account the working conditions and the work to be performed. Use
  of the power tool for operations other than those intended could result in a
  hazardous situation.

#### **SERVICE**

 Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

# ADDITIONAL SAFETY RULES FOR YOUR SCREWDRIVERS AND IMPACT WRENCHES

Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord. Fasteners contacting a live wire may make exposed metal parts of the power tool live and could give the operator an electric shock.

Hold your tool firmly in both hands.

Do not use damaged or worn driver bits.

Use clamps or a vice to hold workpiece, if possible.

#### SAVE THESE INSTRUCTIONS

Refer to them frequently and use them to instruct others who may use this tool. If someone borrows this tool, make sure they have these instructions.

Your risk to 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.
- Work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles.

Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

#### **IMORTANT NOTE**

Be sure the supply is the same as the voltage given on the rating plate. The tool is fitted with a two-core cable and plug.

Remove the mains plug from socket before carrying out any adjustment or servicing.



#### **WARNING!**

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

- Lead from lead-based paint.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.



#### **WARNING!**

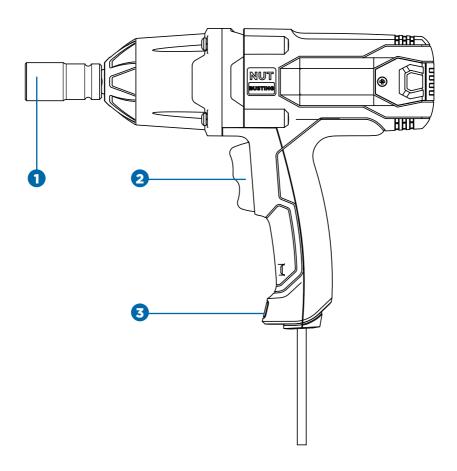
Use of this tool can generate and/or disburse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

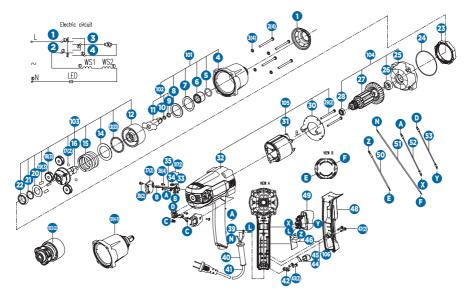
# MAX1MUM<sup>™</sup>

#### **SYMBOLS**

	To reduce the risk of injury, user must read instruction manual
	Double insulation
<u>^</u>	Warning
	Wear ear protection
	Wear eye protection
	Wear dust mask
	Don't use in the rain

No.	Description
1	Coupler
2	Rocker switch
3	LED light





No.	Description
1	Rubber Sleeve
2	Self Tapping Screw
3	Washer
4	Fore Housing Body
5	O Ring
6	Shaft Cover
7	Washer 5
8	Washer 4
9	Lock Wahser
10	O Ring
11	Spindle
12	Ram
13	Steel Ball 2
14	Washer 3
15	Compression Spring
16	Transfer Shaft
17	Stell Ball
18	Planet Gear
19	Pin
20	Washer 2
21	Washer 1
22	Ball Bearing 61804
23	Inner Gear
24	O Ring
25	Gear Case Cover
26	Ball Bearing 6000
27	Rotor
28	Ball Bearing 607
29	Self Tapping Screw

30

Baffle

No.	Description
31	Stator
32	Housing
33	Brush Holder
34	Spiral Spring
35	Carbon Brush(pair)
36	Self Tapping Screw
37	Brush Cover
38	Self Tapping Screw
39	Terminal
40	Cable Protector
41	Power Cord
42	Cord Clamp
43	Self Tapping Screw
44	PCB 2
45	Light Cover
46	PCB 1
47	Self Tapping Screw
48	Handle Cover
49	Switch
50	Inter Wire
51	Inter Wire
52	Inter Wire
53	Inter Wire
101	Fore Cover
102	Spindle Assembly
103	Driving Rotor
104	Mid Cover Assembly
105	Housing Assembly
106	Led Assembly
107	Brush Holder Assembly

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#### **INTENDED USE**

The impact wrench is intended for tire changing, shock absorber replacement, exhaust system work, lawn mower repair and small engine work. Subject range of wrested nut or bolt is M17 (43/64") to M23 (29/32").

#### **INSTALL/REMOVE SOCKET (See Fig. A, B)**

To install a suitable socket (a, not supplied) that matches the nut, align the hole of the socket with the steel ball on coupler and push the socket into the coupler.

To remove the socket from the coupler, simply pull out the socket from coupler.

#### **OPERATION THE SWITCH (See Fig. C)**

Depress the rocker switch (2) to operate the impact wrench, and release the rocker switch to switch the impact wrench off.

Press the bottom of the switch to forward (clockwise). Press the top of the switch to reverse (counter-clockwise). Release switch to stop.

#### **USING YOUR IMPACT WRENCH**

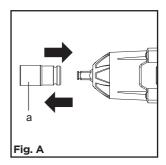
Install the socket. Push the impact wrench just enough to allow the socket to fit the nut or bolt. Then switch the impact wrench on. After nut is screwed down, impacting time of wrench can not more 5 seconds to prevent the screw thread of the nut or bolt from being damaged.

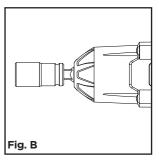
Always hold the impact wrench straight on the nut or bolt to be tightened.

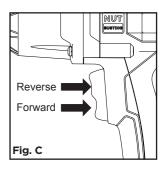
The tightening torque depends on the duration of the impacting/tightening action. The largest tightening torque is achieved after approximately 4 to 5 seconds impacting/tightening action.

#### **LED LIGHT**

The LED sight light (3) allows you to keep a clear view under less-illuminated circumstances.







### MAXIMUM

#### **MAINTAIN TOOLS WITH CARE**

Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.

The socket should be checked regularly. If worn or broken, the socket can slip or decrease the efficiency of the motor. Replace a worn or broken socket with a new one.

Your power tool requires no additional lubrication or maintenance. There are no user-serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust. Occasionally you may see sparks through the ventilation slots. This is normal and will not damage your power tool.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly-qualified persons in order to avoid a hazard.

This MAXIMUM product is guaranteed for a period of 5 years from the date of original retail purchase against defects in workmanship and materials only and is subject to the following components:

- a) Component A: Batteries/chargers can be repaired or replaced due to defects in workmanship and materials for a period of 3 years from the date of original retail purchase;
- b) Component B: The carrying case is guaranteed for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.
- c) Component C: Accessories, including drill bits and saw blades, do not carry a warranty.



Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at the sole discretion of the Maximum Canada authorized repair centre ("Service Provider"). We will bear the cost of any repair or replacement and any costs of labour relating thereto.

#### These warranties are subject to the following conditions and limitations:

- a) a bill of sale verifying the purchase and purchase date must be provided;
- defects in workmanship and material to be assessed and determined by the Service Provider
- this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions);
- d) this warranty does not apply to normal wear and tear or to expendable parts or accessories (including drill bits and saw blades) that may be supplied with the product that by their nature have a limited life span and are expected to become inoperative or unusable after a reasonable period of use;
- e) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, rubber o-rings, tune-ups or adjustments;
- f) this warranty excludes the following components that may accompany your product:
  - (1) Batteries/chargers, which can be repaired or replaced due to defects in workmanship or materials for a period of 3 years from the date of original retail purchase. Any defects with such battery and/or charger will be subject to repair or replacement as determined by the Service Provider.
  - (2) The carrying case, which is only for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.
  - (3) Accessories, including drill bits and saw blades, which do not carry a warranty of any kind.
- g) this warranty will not apply where damage is caused by repairs made or

- attempted by anyone other than the Service Provider (i.e. persons not authorized by the manufacturer), and any such unauthorized repairs or attempted repairs shall void this warranty in its entirety:
- this warranty will not apply to any parts other than original parts, except to the extent that the retailer or manufacturer or persons authorized by either of them have repaired or replaced them;
- this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);
- this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;
- this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and
- this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under that product manufacturer's warranty, if any;
- m) any products replaced by the retailer in attempt to fulfill warranty obligations is subject to the original product warranty conditions and related time period as initiated by the original date of purchase; if product is purchased in Quebec, the warranty term will be extended for a period equal to the time during which the Quebec retailer possesses the product in attempt to fulfill warranty obligations; replaced product will not default to new product warranty conditions; and
- n) The retailer and manufacturer's sole obligation and the purchaser's sole remedy under this warranty shall be as set out herein. The warranties contained herein are not transferable and are given only to the purchaser. FURTHER, THE WARRANTIES SET OUT HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, WHETHER EXPRESS, IMPLIED OR STATUTORY (INCLUDING SUCH AS ARISE UNDER THE SALE OF GOODS ACT OR THE INTERNATIONAL SALE OF GOODS ACT), ARISING OUT OF A COURSE OF DEALING OR USAGE OF TRADE OR OTHERWISE, INCLUDING, SUBJECT TO APPLICABLE LAW, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, MERCHANTABLE QUALITY, FITNESS OR ADEQUACY FOR A PARTICULAR PURPOSE OR USE, AND ALL OTHER SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED BY THE RETAILER AND MANUFACTURER.

#### **ADDITIONAL LIMITATIONS**

This warranty applies only to the original purchaser and may not be transferred.

This warranty applies for a period of 5 years from the date of original retail purchase, as indicated on the bill of sale.

Neither the retailer, Maximum Canada, nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

Under no circumstances shall the retailer, Maximum Canada, or manufacturer be liable to the purchaser for any claim for (a) indirect, special, punitive, incidental, exemplary, or consequential damages, (b) compensation for loss of profits, anticipated revenue, savings or goodwill, or other economic loss of the purchaser, (c) exemplary, aggravated or punitive damages howsoever incurred, (d) contribution or set-off in respect of any claims against the purchaser, (e) any damages whatsoever relating to third party products or services or the purchaser's materials, or (f) any damages whatsoever relating to interruption, delays, errors or omissions; in each case under any theory of law or equity, arising out of or in any way related to this warranty, even if advised of the possibility thereof. Notwithstanding any provision herein or entitlement of the purchaser at law, in equity or otherwise, in no event shall the liability of the retailer or manufacturer under this warranty, whether in contract, tort, product liability or otherwise, exceed, in the aggregate, the amount paid by the purchaser to the retailer for the product to which this warranty applies.

#### **NOTICE TO CONSUMER**

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.

In addition to the 5-Year Limited Warranty, this MAXIMUM product is covered by our:

#### 1-YEAR REPAIR WARRANTY

Maximum Canada will maintain this product and replace critical parts which have worn beyond reasonable use through normal use of such product, any time during the first year after purchase.

The following are excluded from this 1-Year Repair Warranty:

- a) Missing or damaged parts or components that are a result of abuse or misuse;
- b) Any wear and tear to non-critical parts or accessories that do not affect the core function of the product.

#### **90-DAY SATISFACTION GUARANTEE**

If you are not completely satisfied with the performance of your MAXIMUM product for any reason, you can return it within 90 days from the date of purchase with proof of purchase for exchange or a full refund.

Imported by MAXIMUM Canada Toronto, Canada M4S 2B8
Made in China