

TRINQUETE 3/8" DE ION DE LITIO 16V CLIQUET 3/8" 16V LITHIUM-ION

# 16VLITHIUM-ION 3/8"RATCHET



Operating Instructions • Warning Information • Parts Breakdown

## SPECIFICATIONS

			MCL1638R
Free Speed		Length	11.5"
Maximum Torque	70 ft. lbs.	Length with battery	13.75"
Battery Type	16V Lithium Ion	Weight	2.6 lbs.
Compatible Battery	MCL1620LB	Weight with battery	
Compatible Charger	MCL16CHRG		

## **AWARNING**



ALWAYS READ INSTRUCTIONS BEFORE USING POWER TOOLS



ALWAYS WEAR SAFETY GOGGLES



ALWAYS WEAR HEARING PROTECTION



AVOID PROLONGED EXPOSURE TO VIBRATION

## **AWARNING**

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, 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.

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## **AWARNING**

## FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY.

## SAVE THESE INSTRUCTIONS!

## **GENERAL SAFETY INFORMATION** (FOR ALL BATTERY OPERATED TOOLS)

## WARNING:



Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire, explosion and/or serious personal injury. It is the responsibility of the owner to make sure all personnel read this manual prior to using the device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual or product labels are lost or not legible, contact Matco Tools for replacements. If the operator is not fluent in English, the product and safety instructions shall be read and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends its contents.

## **Work Area Safety**

- 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 and endanger others.

## **Electrical Safety**

- 4. A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery. A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- Use battery operated tool only with specifically designated battery pack. Use of any other batteries may create a risk of fire.

## **Personal Safety**

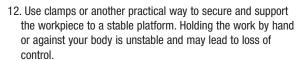


- 6. Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- 7. Dress properly. Do not wear 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.
- 8. Avoid accidental starting. Be sure switch is in the locked or "off" position before inserting battery pack. Carrying tools with your finger on the switch or inserting the battery pack into a tool with the switch on invites accidents.
- on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.



- 10. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enable better control of the tool in unexpected situations.
- 11. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

## **Tool Use and Care**



- 13. Do not force tool. Use the correct tool for your application.
- 14. Do not use tool if switch does not turn it on or off. A tool that cannot be controlled with the switch is dangerous and must be repaired.
- 15. Disconnect battery pack from tool or place the switch in the locked or "off" position before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- 16. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained



- 17. When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns, or a fire.
- 18. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 19. Use only impact sockets and accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

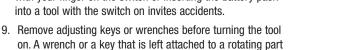


WARNING: This product can expose you to chemicals including nickel which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

#### Service

20. Tool service must be performed only by the MATCO authorized service centers listed. Service or maintenance performed by unqualified personnel may result in a risk of injury. Repair by unqualified personnel, use of unauthorized parts, and failure to follow maintenance instructions may create a risk of shock or injury.





## SAVE THESE INSTRUCTIONS!

## **SPECIFIC SAFETY RULES**

- DO NOT let comfort or familiarity with product replace strict adherence to cordless product safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.
- Hold tool by insulated gripping surfaces when performing an operation where the accessories may contact hidden wiring.
   Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.
- Be aware that this tool is always in operating condition, because it does not have to be plugged into an electrical outlet.
- 3. Always be sure you have firm footing.
- 4. Be sure no one is below when using the tool in high locations.
- 5. Hold the tool firmly and use both hands.

- 6. Keep hands and hair away from rotating parts.
- Do not leave the tool running. Do not force tool to stay in the "on" position. Operate the tool only when hand-held.
- Do not touch the impact socket or the workpiece immediately after operation; they may be extremely hot and could burn your skin.
- Some material contains chemicals which may be toxic. Take caution to prevent working dust inhalation and skin contact. Follow material supplier safety data.

#### **WARNING:**

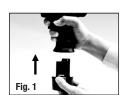
MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

## **OPERATING INSTRUCTION**

## **Installing Or Removing Battery Pack**

(See Fig.1, Fig.2)

- 1. Your new battery pack is not fully charged. You may need to charge it before use.
- 2. Make sure the switch is in the "off" position before insertion/removal of a battery pack.
- To remove a battery pack, depress both tabs on either side of the battery and pull downward.
- To insert a battery pack, align the battery with the tool housing and push battery inward until click indicating battery is fully installed.







## Charging The Battery Pack (See Fig.3)

- Battery may not charge when it is above a certain preset temperature limit. Allow temperature of battery to cool before charging.
- 2. The charge process will take less than one hour.
- 3. After charging, unplug the charger from the power source and stow away in a safe place.

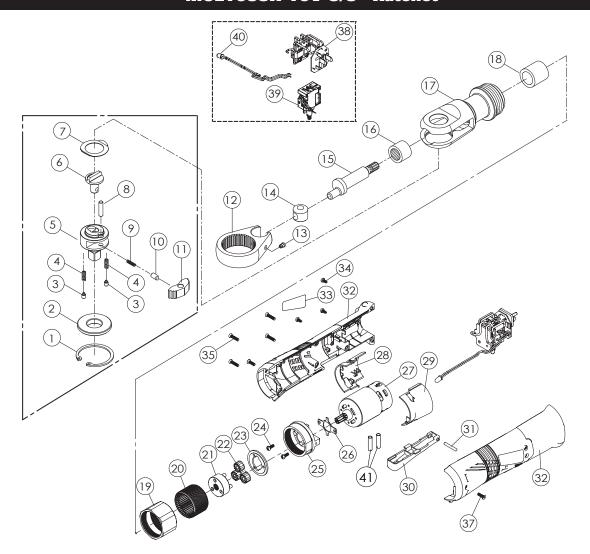
#### **Tool Operation:**

- Always be sure that the tool is switched off and the battery cartridge is removed before installing or removing the impact socket.
- To install the impact socket, push the impact socket onto the anvil as far as it will go.
- To remove the impact socket, simply pull the impact socket from the anvil.
- To start the tool, simply pull the trigger. Release the trigger to stop.
- For reversing the tool, use the forward/reverse switch on the drive unit. The directions of the rotation are also shown on the face of the switch.
- 5. Always check the direction of rotation before operation...
- 6. Use the forward/reverse switch only after the tool comes to a

- complete stop. Changing the direction of rotation before the tool stops may damage the gears.
- Hold the tool firmly in place, make sure the impact socket is completely over the nut or bolt. Apply forward pressure to the tool to the extent that the impact socket will not slip off the nut or bolt. Pull the trigger to begin.

#### NOTE:

- Use the proper impact socket size for the nut that you intend to install or remove.
- Hold the tool pointed straight at the nut. If you tighten the nut for a time longer than it needs, the nut or point of the driver impact socket may be overstressed, stripped, damaged, etc. When tightening a standard nut in a steel plate, the proper tightening torque can be obtained in an extremely short time (approx. 0.1-0.2 seconds).
- Turn the tool off as soon as the impact sound is heard.
- When tightening nut M6 or smaller, carefully adjust pressure on the switch trigger so that the nut is not damaged.
- 8. The tightening torque is affected by a wide variety of factors including the following.
- When the battery cartridge is discharged almost completely, voltage will drop and the tightening torque will be reduced.
- Driver bit or impact socket bit: Failure to use the correct size driver bit or impact socket bit will cause a reduction in the tightening torque.
- Driving a bolt: Even though the torque coefficient and the class of bolt are the same, the proper tightening torque will differ according to the diameter of the bolt.
- Even if the diameter of the bolts are the same, the proper tightening torque will differ according to the torque coefficient, the class of the bolt and the bolt length.
- 10. The manner in which the tool is held or the driving position of the material to be tightened will affect the torque. Make sure that the ratchet is turned off and the battery cartridge is removed before carrying out any work on the tool. To maintain product safety and reliability, repairs, maintenance or adjustments should be carried out by a Matco authorized service center.



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	*	Retainer Ring	1
2	*	3/8" Thrust Washer	1
3	*	Pin	2
4	*	Spring	2
5	*	3/8" Anvil	1
6	*	Reverse Button	1
7	*	Washer	1
8	*	Pin	1
9	*	Spring	1
10	*	Lock Pin	1
11	*	Ratchet Pawl	1
12	RS285434	Ratchet Yoke (includes #13)	1
13		Grease Fitting (Included with	#12)1
14	RS285433	Drive Bushing	1
15	RS285432	Crank Shaft	1
16	RS285431	Needle Bearing	1
17	RS285430	Ratchet Housing	1
18	RS285429	Bushing	1
19	RS163801	Clamp Nut	1
20	RS163802	Internal Gear	1
21	RS163803	Planet Gear Carrier	1
22	RS1238R28	Planet Gear	3

REF. NO.	PART NO.	DESCRIPTION	QTY.
23	RS163806	Washer	1
24	RS163827	Screw	2
25	RS1238R09	Motor Connector	1
26	RS1238R10	Washer	1
27	RS163817	Motor Assembly	1
28	RS12R19	Insulation - R	1
29	RS12R18	Insulation - L	1
30	RS163814	Trigger	1
31	RS163823	Pin	1
32	RS163805	Housing Assembly (L&R)	1
33	RS163822	Housing-Label-R	1
34	RS108R18	Screw	3
35	RS108R20	Screw (M3x12L)	4
37	RS108R19	Screw (M3x10L)	2
38	RS163811	Discharge Protector	1
39	RS12R09	Main Switch	1
40	RS1238R12	LED Assembly	1
41	RS163821	Heat Shrinkage Tube	2
	RSMCL1638RPLK	Product Label Kit	1

<sup>\*</sup> Available only as MT2854RHK Ratchet Head Kit

## **AWARNING**

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## **SAVE THESE INSTRUCTIONS!**

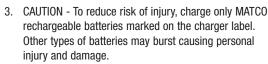
# SAFETY INSTRUCTIONS FOR BATTERY CHARGER AND BATTERY PACK

## **DANGER! READ CAREFULLY**

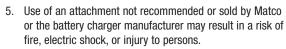
120 Volts present at charging terminal. Absolutely DO NOT probe with conductive objects.

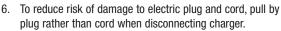


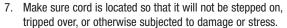
- CAREFULLY READ AND UNDERSTAND THESE INSTRUCTIONS
   This manual contains critical safety and operating instructions for the tool, battery charger, and battery.
- 2. Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.











- 8. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
  - a. That pins on plug of extension cord are the same number size, and shape as those of plug on charger;
  - b. That extension cord is properly wired and in good electrical condition;
  - That wire size is at least as large as the one specified in the table below.

# Table 1: RECOMMENDED MINIMUM AWG SIZE FOR EXTENSION CORDS FOR BATTERY CHARGERS

Length of Cord (Feet) 25 50 75 100 150 AWG Size of Cord 18 18 16 14 12

- Do not operate charger with damaged cord or plug replace them immediately.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a MATCO AUTHORIZED service facility.
- Do not disassemble charger or battery cartridge; take it to your MATCO AUTHORIZED distributor service facility. Incorrect reassembly may result in a risk

of electric shock or fire.

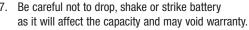
- To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
- The battery charger is not intended for use by young children or infirm persons without supervision.
- 14. Young children should be supervised to ensure that they do not play with the battery charger.

## OPERATIONAL GUIDELINES FOR BATTERY CHARGER AND BATTERY PACK

- Do not attempt to use a step-up transformer, an engine generator or DC power receptacle.
- 2. Do not allow anything to cover or clog the charger vents.
- 3. Always cover the battery terminals with the box or cover when the battery cartridge is not used.
- 4. Do not short the battery cartridge:
  - Do not touch the terminals with any conductive material.
  - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, screws, coins, etc.
  - (3) Do not expose battery cartridge to water or rain. A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
- Do not store the tool and Battery Cartridge in locations where the temperature may reach or exceed 50°C (122°F).



 Do not incinerate the Battery Pack even if it is severely damaged or is completely worn out.
 The battery cartridge can explode in a fire.





- Do not charge inside a box or container of any kind. The charger and battery are ventilated devices and must NOT be placed next to a heat source or in exposure to radiating heat.
- 9. Place charger on a solid and sturdy surface as there are vents on the bottom side of the charger.
- Always unplug the charger from the power supply when a charging sequence is not taking place.



## MATCO CORDLESS BATTERY USE AND CARE GUIDE

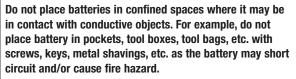
## IMPORTANT!

All rechargeable batteries have a finite lifespan and will slowly lose storage capacity as they age and are cycled. Rechargeable batteries are consumable items and should be carefully treated to ensure proper operation during its limited lifespan. Please read the following guide carefully for tips that may maximize the performance of your Matco rechargeable batteries. Batteries should be handled with care and disposed through proper authorities.



## **WARNING! MUST READ!**

Do not crush or incinerate batteries as it may cause danger from explosion.





Only charge in Matco chargers and never attempt to wire to alternative charging sources

Danger of explosion, electric shock, fire, and electrocution may result from:

- Abuse, misuse, and severe shock
- Subjecting the unit to conductive particles, objects, and liquids
- Connecting two chargers together
- Charging Matco batteries with other chargers
- Using the Matco charger to charge other batteries
- Operating the charger with a damaged cord or nlug

## PROPER CARE WILL MAXIMIZE PRODUCT LIFE

Please note that there are differences in the care of Lithium-lon and Nickel-Cadmium batteries.

# PROPER CARE FOR MATCO INFINIUM LITHIUM-ION (LI-ION) BATTERIES

- All Li-ion batteries are sensitive to high temperature and should be kept cool, dry, and out of direct light exposure. Ideal temperature range for operation and storage is between 32 and 75 °F. Li-ion batteries may be stored in the refrigerator, but freezers are not recommended.
- Do not leave batteries unused for extended periods of time, especially when it is fully charged or fully discharged. Bring a Li-ion battery to approximately 50% charge level before storing.
- Li-ion batteries are sensitive to shock. Avoid dropping, hitting, or exposure to vibration.
- Li-ion can be charged frequently and recharged before it is fully depleted. Li-ion, in fact, is ideally recharged before it is completely depleted. Recharging when there is 25%-50% capacity remaining in the battery may prolong its lifespan.
- Contaminants can adversely affect the performance and life

of Li-ion batteries. Minimize the battery's exposure to dust, dirt, and small particles.

 Recharge Matco Li-ion batteries only in Matco recharging devices that are designed specifically for the battery type.
 Never subject batteries to any other quick-charging, quick-discharging, or quick-restoring devices.

# PROPER CARE FOR MATCO NICKEL-CADMIUM (NI-CD) BATTERIES

- Ni-Cd batteries are sensitive to high temperatures and should be kept cool, dry, and out of direct light exposure. Ideal operating and storage temperature is between 32 and 70 °F.
   Ni-Cd batteries may be stored in a refrigerator, but freezers are not recommended.
- Do not leave batteries unused for extended periods of time. Store Ni-Cd batteries fully discharged in a cool and dry place.
- Ni-Cd batteries are sensitive to shock. Avoid dropping, hitting, or exposure to vibration.
- Ni-Cd batteries should be fully discharged inside the tool before recharging. Furthermore, the battery should be fully charged before it is removed from the charger. Frequent charges and removals at intermitting levels may reduce the capacity of the battery.
- Perform the "Refresh Cycle" for Ni-Cd batteries inside the Matco MUCHRG1 Universal Charger on a monthly basis. For light usage, perform this function once every three months. Note that this feature is not applicable or necessary for Li-ion batteries.
- Contaminants can adversely affect the performance and life of Ni-Cd batteries. Minimize the battery's exposure to dust, dirt, and small particles.
- Recharge Matco Ni-Cd batteries only in Matco recharging devices that are designed specifically for the battery type. Never subject batteries to other quick-charging, quick-discharging, or quick-restoring devices.

## MATCO CORDLESS WARRANTY

#### MATCO MCL1638R 16V 3/8" Ratchet

Matco Tools warrants this 16V tool to be free from defects for a period of (1) year from the original date of purchase. Registration is required through your local authorized Matco distributor and/or by submission of completed registration form included with the product. Defective products must be returned and analyzed by Tri-County Power Tool, Inc. for the United States or HT Pneumatic Rebuilders for Canada, at the addresses listed below, freight prepaid. Any tool that has been serviced by the user or by an unauthorized service center will subsequently void the warranty of the tool.

## MATCO 16V LITHIUM-ION BATTERY MCL1620LB / CHARGER MCL16CHRG

Matco Tools warrants its 16V Lithium-ion (battery/charger) to be free from defects in material and workmanship for a period of (2) years from the original date of purchase. Registration is required through your local authorized Matco distributor and/or by submission of completed registration form included with the product. If the battery/charger should fail within the warranty period, it must be returned and analyzed by Tri-County Power Tool, Inc. for the United States or HT Pneumatic Rebuilders for Canada, at the addresses listed below, freight prepaid. A battery capacity defect could be defined as the battery no longer accepting a charge, or holding a charge for the battery manufacturing specified period as determined by Matco Tools Repair center. Based on the evaluation, Matco Tools, at their discretion, will either repair or replace any batteries to be found defective in material or workmanship at no charge. Please see Matco Battery Care Guide in the Cordless Operating Manual for any of the Infinium products. You will find helpful tips that may maximize the useful life of your battery.

#### Address for Returns as follows:

## TRI-COUNTY POWER TOOL, INC.

1300 Brookpark Rd. Cleveland, 0H 44109 (216) 398-6120 Fax: (216) 398-6121

Toll Free: 1-866-873-8278

#### HT PNEUMATIC REBUILDERS

22 Goodmark Place Unit #8 Toronto, ON M9W6R2 (416) 213-0172