

# **Master Lock®**

## ***12 VOLT ELECTRIC WINCH OWNER'S MANUAL***



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## Introduction

Thank you for purchasing a Master Lock® electric winch. We hope you will be pleased with the performance and reliability of your winch. Your winch was designed for non-industrial use. All other applications may void warranty.

As with any power tool, there is a potential for personal injury if your winch is improperly installed or operated. To ensure safe operation of

your winch, it is extremely important that you read and understand this Owner's Manual prior to installing and operating this winch. Make sure that anyone else who operates your winch also reads and understands this manual.

## Save This Manual

You will need this manual for future reference. It is recommended that you keep your invoice for this winch inside the front cover of this manual and keep both in a safe, clean and dry place for future reference.

Replacement parts and accessories are not available for your winch. Should this product not function or be missing any parts, do not use it and return it to place of purchase. Always have a qualified technician perform all repairs on your winch, never attempt to repair your winch yourself.

## Performance Specifications

**Capacity:** 6,000lbs Rolling, 5,000lbs Marine, 2,000lbs Pulling Capacity,

Pull Strength Performance Ratings

Cable Layer	Capacity in lbs	Capacity in kg
1	2,000	907
2	1,510	685
3	1,210	549
4	1,010	458

**Max Boat Weight:** 5,000lbs

**Duty Cycle:**

Fully Loaded @ 2,000lbs, 6 to 8 minutes operation.  
Allow 5 minutes to cool before resuming use.

Light Load @ 150lbs, 6 to 8 minutes operation.  
Allow 1 minute to cool before resuming use.

**Cable Length:** 30ft (29ft working length)

**Power Cable:** 20'

**Mounting Plate:** 8-3/4" x 4-15/16" x 5/32"

**Net Weight:** 27lbs

**Max Boat Size:** 18ft

**Line Speed:** 6 Feet/Minute with Load

**Power Supply:** 12 Volts

**Stall Load:** 2,100lbs

**Current Draw:**

@150lbs: 4 to 6 amps

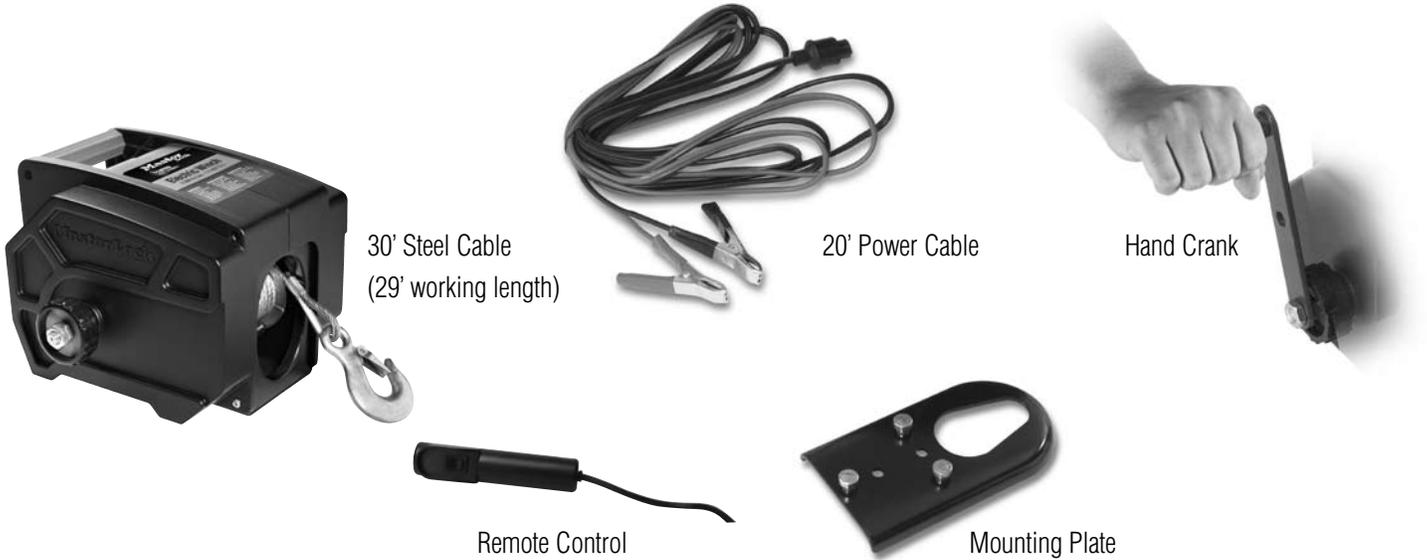
@2,000lbs: 20 amps

**Remote Control Cord:** 9'9" long

**Overall Dimensions:** 9-1/2" x 7-1/2" x 10"

## Included Accessories

1. Power cord, fitted with water sealed plug for safe operation.
2. Remote control with water sealed plug, for safe operation.
3. 30' steel cable with attached hook.
4. Mounting plate for trailer hitch.
5. Hand crank and adjustable clutch.



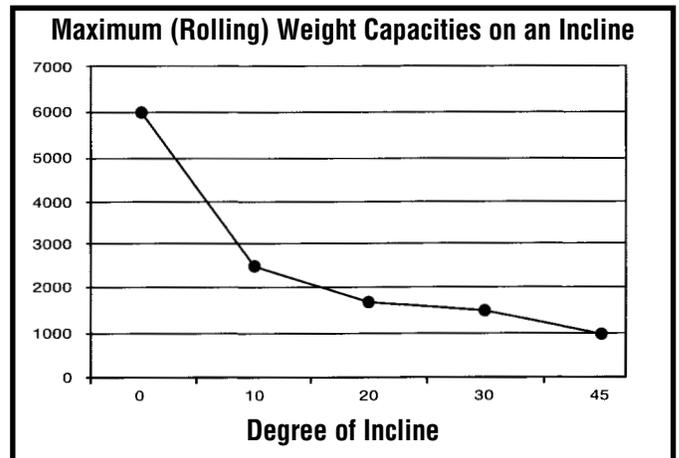
## Product Features

1. Convenient, portable power for pulling boats, stuck vehicles and other heavy items.
2. Powerful 2,000lbs. pulling power.
3. 12 volt powered for convenient use without extension cords or small gas engines.
4. Portable, with built-in carrying handle and quick-attach mounting plate.

## Pulling Capacity

Your winch has a capacity of 2,000lbs. Applying this measurement to practical applications, you can use this winch to move the following:

1. Move a load from a dead stop of up to 2,000lbs on level ground.
2. Move a water borne craft of up to 5,000lbs.
3. Maintain movement of a wheeled vehicle of up to 6,000lbs. Pulling capacity is reduced as incline increases. For example, rolling capacity is reduced from 6,000lbs on flat ground to 1,100lbs on a 45° incline. Please refer to the following chart for estimated pulling capacity (rolling weight) on various inclines.



## General Safety Information

**WARNING: FAILURE TO READ AND FOLLOW THE SAFETY INSTRUCTIONS IN THIS OWNER'S MANUAL BEFORE INSTALLING OR USING YOUR ELECTRIC WINCH COULD RESULT IN DAMAGE TO YOUR WINCH AND SERIOUS OR FATAL INJURY!!**

- ▲ **WARNING:** Never operate your winch when under the influence of drugs, alcohol or medication.
- ▲ **WARNING:** Never use your winch to lift or move human beings. Do not use for scaffolding, elevators, or any other application in which human beings could be positioned on or under the load at any time.
- ▲ **WARNING:** Never use your winch in any vertical lifting or lowering application. Your winch should not be used as an overhead hoist, or to suspend a load.
- ▲ **WARNING:** Your winch is a power tool that is capable of creating high forces that can pose significant safety hazards. Never allow children or anyone who is not familiar with this Owner's Manual to operate your winch.
- ▲ **WARNING:** Your winch must be securely attached to a structural member or frame of a vehicle that is capable of sustaining loads in excess of the winch capacity. When attaching the winch to a vehicle, make sure the mounting area is rigidly supported by the vehicle frame.
- ▲ **WARNING:** Never modify or alter any part of your winch. Modifications and alterations may weaken the structural integrity of your winch and lead to failure of your winch. Modification or alteration of your winch may also void your warranty, cause winch damage, or serious personal injury.
- ▲ **WARNING:** Never install your winch with substituted hardware or components that are different from those supplied with your winch. Substitutions of inferior equipment and/or hardware may void your warranty, or cause winch damage or serious personal injury.
- ▲ **WARNING:** Never exceed the maximum rated winch pulling capacity of 2000 lbs. If overloaded, your winch has enough power to potentially snap loose or break the winch cable, creating serious safety hazards. Avoid shock loads created by turning your winch on and off intermittently to take up cable slack. Shock loads can momentarily far exceed the winch and cable ratings.
- ▲ **WARNING:** Your winch is equipped with a high-quality cable capable of handling a load of 2,000lbs. Do not use vehicle pulling power to increase the pulling capacity of your winch. When a cable snaps loose or breaks under tension, the cable tends to whip toward the winch area. It is recommended that a blanket or rug be placed over the cable during winching operations to minimize whipping action in case the cable slips or breaks.
- ▲ **WARNING:** Never apply a load to your winch with the cable fully extended. Keep at least three turns of cable on the winch drum. The usable cable length is approximately 29ft.
- ▲ **WARNING:** Always keep the winching area free of all bystanders and clutter. Never stand between the load being pulled and your winch.
- ▲ **WARNING:** Your 12 volt D.C. winch operates from a low voltage D.C. power source (e.g., a car or truck battery). Never connect your winch to a 120 volt A.C. power source.
- ▲ **WARNING:** Remove all jewelry, loose clothing, or anything that may get caught in the motor's moving parts prior to connecting wiring to the battery.
- ▲ **WARNING:** Never use your winch to support a load when winching operation has been completed. Always secure the load properly, using tie down straps or chains.
- ▲ **WARNING:** The hand crank provided with your winch is for emergency use only (i.e., in case of a power failure). Never use the hand crank to assist your winch when it is running. Always remove the hand crank when your winch is not in use. Do not operate your winch or allow the winch drum to free wheel with the hand crank installed.
- ▲ **WARNING:** Always wear safety glasses and heavy gloves when operating your winch. Keep hands and fingers clear of the winch drum and cable area during operation. Do not attempt to guide the cable by hand as it spools in or out or rewinds on the winch drum.
- ▲ **WARNING:** When releasing a load with the clutch, maintain control of the speed. Excess speed could result in winch damage and serious personal injury.
- ▲ **WARNING:** Pull only on areas of the vehicle as specified by the vehicle manufacturer.
- ▲ **WARNING:** Only attachments and/or adapters supplied by the manufacturer shall be used.

## Mounting Instructions

*Your winch is designed to be mounted permanently or temporarily. No Hardware Included.*

### Permanent Mounting

1. Select a mounting site on the bumper of your vehicle, truck bed, boat trailer winch stand or other suitable location. Never install your winch in a location that obscures its warning and instruction labels.



Your winch can generate 2,000lbs of pulling force so be sure that the mounting site selected can withstand a load well in excess of the 2,000lbs pulling force.

- ▲ **WARNING:** You may need to use steel reinforcement plates, or weld on additional bracing on your vehicle, depending on the mounting site you select. Do not mount the winch where there would be the possibility of it being submerged in water. The winch is weather resistant but not water proof.

2. Align the winch with the adapter mounting plate attached in desired location, and mark for drilling the locations of the four holes on the mounting plate of the winch.

- ▲ **WARNING:** Prior to drilling, always verify that the marked locations for drilling are clear of fuel lines, fuel tank, brake lines, electrical wires, etc. Drill the four marked locations on your vehicle.

3. Attach the winch to the desired location using four bolts, nuts, washers, and lock washers. Be sure that the winch is positioned so that the cable does not rub the front opening of the winch or across sharp edges, corners, or moving parts of the vehicle or any other object.
4. If you are installing your winch on a boat trailer, the winch should be attached on the winch stand at the same height or slightly higher than the trailer-bow stop and the bow of the boat when the boat is fully loaded on the trailer. Be sure that the trailer-bow stop is located far enough back so that the cable hook is not drawn into the winch drum when the boat is fully loaded on the trailer.

### Temporary Mounting on Ball Mount/Hitch Ball

1. Index the heads of the plate stud bolts into the keyhole slots on the back of the winch.



2. Attach the winch adapter mounting plate assembly to your trailer hitch, by inserting the trailer hitch ball through the shaped hole in the adapter mounting plate.

Never install your winch in a way that obscures its warning and instruction labels.

## Wiring Instructions

*Your winch is designed to be wired temporarily.*

### Temporary Wiring

1. Plan a route for the wiring from the point of the vehicle where the winch is mounted. Route the wiring from the winch to the battery, being careful to avoid contacting hot or sharp surfaces that may damage the wiring, tangle it in moving equipment, or cause a tripping hazard.

2. Attach the black clamp to the frame of your vehicle, making sure to establish a clean and tight ground connection. Attach the red clamp to the positive (+/red) terminal of your battery.

- ▲ **WARNING:** Always wear eye protection when working around a battery. Do not lean over the battery while making connections. Remove all jewelry, loose clothing, or anything that may get caught in the motor's moving parts prior to connecting wiring to the battery.

- ▲ **WARNING:** Be sure you are using a 12 volt automotive battery or equivalent, in good condition.

3. Open the plastic door, and plug the cord socket of the wiring into the wiring plug on the right side of the winch body.

- ▲ **WARNING:** Always disconnect the remote control when your winch is not in use. Store the remote control unit and cord in your vehicle's truck or a similar dry and safe place when it is not in use. This prevents tampering, misuse, or damage to the remote control unit and cord.



## Operating Instructions

The following operating instructions are intended to provide you with a basic understanding of your electric winch and to teach you the basics of proper winching techniques. Users must understand that every winching situation has the potential for personal injury. In order to minimize the risk to you and others in the area, it is important for you to read and understand this Owner's Manual, familiarize yourself with the operation of your winch prior to having to use it, carefully analyze each particular situation you are putting the winch to use, and constantly be aware of the importance of safety.

### Getting to Know the Components of Your Winch



Your winch contains the following component parts:

- 1 Motor:** The winch motor is powered by your vehicle's 12 volt D.C. battery. The winch motor provides power to the gear mechanism which turns the winch drum and spools the winch cable in towards the winch only.
- 2 Winch Drum:** The winch drum is the cylinder onto which the winch cable is stored when the drum spools the cable in or out of the winch. The winch drum is driven by the winch motor and gear drive train.
- 3 Winch Cable:** The winch cable is the metal cable that is wrapped around the winch drum. The winch hook is permanently attached to the end of the winch cable.
- 4 Winch Hook:** The winch hook is used to attach the winch cable to the load to be pulled. The hook should be attached onto the load using a pulling point, tow strap, or chain. Never wrap the winch cable around the object to be pulled and hook the winch hook onto the winch cable itself.
- 5 Clutch Knob:** The clutch knob allows you to manually disengage the winch drum from the motor and gear mechanism, enabling the winch drum to rotate freely (known as "free spooling"). Engaging the clutch, "locks" the winch drum back onto the motor and gear mechanism. You must loosen the clutch knob to spool the cable out of the winch housing.
- 6 Remote Control:** The remote control enables you to operate the winch drum while standing clear of the winching process. Specifically, it allows you to start and stop towards the winch only.
- 7 Power Cable**

## Using Your Winch

1. Put on heavy gloves and safety glasses. Take your time, analyze your situation, and plan your pull carefully.

**▲ WARNING:** Never operate or install a winch without reading and understanding the operation manual. Practice using your winch before having to use it in a real situation. A real situation is no time to be learning how to use your winch.

**▲ WARNING:** Always inspect winch installation and winch cable condition before performing a winching operation. Never operate your winch if it is loose or damaged or when the winch cable is frayed, kinked, or damaged.

**▲ WARNING:** Always remove jewelry, loose clothing, or anything else that may get entangled in moving parts of winch.

**▲ WARNING:** Always wear heavy gloves and keep hands clear of winch cable, winch hook, and winch drum during winching operation.

2. Be sure that all unnecessary bystanders and clutter do not remain in the area during winching operations.

3. Put your vehicle in neutral (never leave your vehicle in park or in gear as this may damage its transmission) apply your vehicle's emergency brake and block the wheels from rolling using wheel chocks. Leave your vehicle's engine running on to ensure that its battery is not run down.

4. To pull out the winch cable, turn the clutch knob counterclockwise.

This will disengage the winch clutch and allow the winch drum to free wheel. Pull out the amount of cable as needed from the freespooling winch drum using a winch hook strap or hand saver bar. Always leave at least three turns of the cable on the winch drum to prevent the cable from pulling out of the winch.

**▲ WARNING:** Always make sure that the clutch is fully disengaged.

**▲ WARNING:** Winch clutch should be disengaged when the winch motor is off. Never leave winch clutch engaged when winch is not in use. Never engage or disengage the winch clutch if the winch motor is on, winch is under load, or winch cable is under tension.

**▲ WARNING:** Never have remote control plugged into winch while free spooling, attaching winch cable to object to be winched, or sitting idle.

5. Pull the winch cable to the object to be pulled or moved. Be sure to keep tension on the winch cable to prevent it from becoming twisted or over-wrapped when slackened and potentially damaged.

**▲ WARNING:** Always maintain at least three turns of the winch cable on the winch drum to prevent the cable from pulling off the drum under load.

**▲ WARNING:** Never attach cable, rope, chains or other objects to the winch hook to increase the length of a pull.

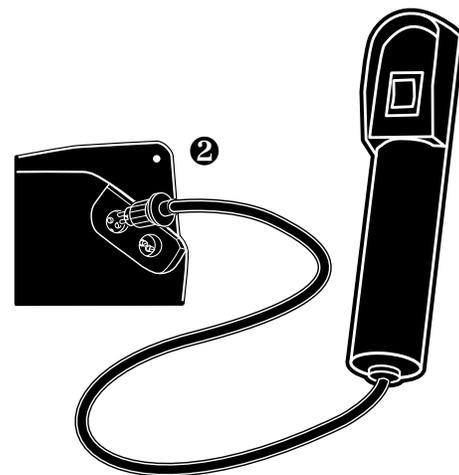
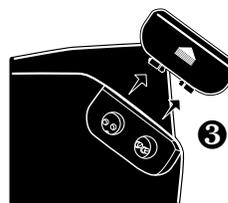
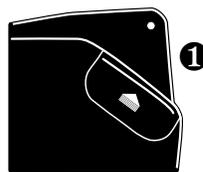
6. Hook the winch hook onto the object using a pulling point, tow strap, or chain. It is best to hook the winch hook on the object to be winched as low as possible. It is also important to align the vehicle and winch in a straight line with the object to be pulled. This allows the winch cable to wind tightly and evenly onto the winch drum when it is pulled into the winch. Neat, tight spooling avoids cable binding. Never pull a load at extreme angles.

**▲ WARNING:** Never wrap the cable around the object and hook the winch hook onto the cable itself. This can cause damage to the object being pulled and kink, fray, or otherwise damage the winch cable.

**▲ WARNING:** If the winch cable becomes bound on the winch drum (i.e., pinched between successive turns of the cable), alternatively power the winch cable in and out a few inches. Never use your hands to attempt to free a bound cable under load.

7. When ready to begin winching, connect the remote control unit and cable into the left side of the winch body with the clutch knob disengaged. Be careful not to let the remote control cable dangle in front of the winch or create a trip hazard.

**▲ WARNING:** Always keep remote control cord clear of the winch drum, winch cable, and winch hook.



## Using Your Winch (continued)

8. Re-tighten the clutch knob by rotating it clockwise when winch is not operating. This will engage the winch and lock the winch drum.

**▲ WARNING:** Always make sure clutch is fully engaged.

**▲ WARNING:** Never engage clutch with motor running. Winch clutch should always be fully engaged when winch is in use.



9. Using the winch remote control, slowly wind the winch cable until there is no slack in the cable. Stop, unplug the remote control, and make sure all winching connections are secure and properly seated.

**▲ WARNING:** Always remove the remote control before working around the winch cable or winch drum so that your winch cannot be turned on accidentally.

10. Always operate your winch with an unobstructed view of the winching operation. Prior to continuing the pull make sure that everyone is well clear of the area and that you are standing in an area with unobstructed access to, and clear view of the winch, its labels, and its controls. Once the winch cable is under tension, stand to the side of the cable and well clear of it. Never step over or under the winch cable when it is under tension.

**▲ WARNING:** It is recommended that a heavy blanket, rug, or chain be placed over the midpoint of the winch cable prior to continuing the winching procedure. This will allow energy to be absorbed if the winch cable should snap loose or break.

11. Make sure that bystanders in the vicinity are at a safe distance and aware that you are going to start the pull.

12. With your vehicle's engine on and light tension on the winch cable, reconnect the remote control and begin winching slowly and steadily. Be sure that the winch cable is winding evenly and tightly around the winch drum.

**▲ WARNING:** Avoid shock loading the winch cable by using the remote control switch intermittently to take up cable slack. Shock loads can momentarily far exceed the winch and winch cable load ratings. For extended winching, stop at reasonable intervals to allow the winch motor to cool.

13. The electric motor attached to your winch is designed for intermittent use only and should not be used in constant duty commercial or industrial applications. Extended use of your winch without cooling off periods can cause overheating damage to the motor. A maximum run time of six to eight minutes is recommended.

14. If the motor becomes uncomfortably hot to the touch, stop and let it cool for a few minutes. If your winch stalls due to overload, disconnect it from the power supply.

15. Once the pull is complete and the object winched has been secured with tie down straps or chains, turn winch power off and disconnect the remote control from the winch. The winch cable tension can then be released by turning the clutch knob counterclockwise which will allow the cable to be removed from the object being pulled. Once the winch cable is free, re-tighten the clutch knob by rotating it clockwise this will engage the winch and lock the winch drum.

16. When you use your winch to trailer a boat, secure the boat onto the trailer with appropriate bow and transom tie down straps or chains. With the boat fully secured on the trailer, relieve the tension on the winch cable and respool to avoid damage to the winch and/or trailer due to high shock loads encountered when traveling.

**▲ WARNING:** A winch hook strap or hand saver bar should be used to hold the winch hook when spooling the winch cable in or out. A simple string or strap a few feet long can be tied onto the winch hook for this purpose.

17. To respool the winch cable correctly, reconnect the remote control and respool the winch cable. It is necessary to keep a slight load on the cable. This can be accomplished by holding (while wearing gloves) the winch hook with a winch hook strap or hand saver bar and applying a slight load on it while the cable is respooled. This ensures that the cable is wound tightly and evenly around the winch drum, and prevents the winch cable from slipping or kinking.

18. Disconnect the remote control and cable from the winch when the respooling is complete.

**▲ WARNING:** Always disconnect the remote control when your winch is not in use. Store the remote control unit in your vehicle's truck or a similar dry, clean and safe place when it is not in use. This prevents tampering, misuse, or damage to the remote control unit and cord.

## Using the Hand Crank

1. The hand crank provided with your winch is for emergency use only (i.e., in the event of a power failure). Always, remove the electrical power from the winch before using the hand crank.

**▲ WARNING:** Do not use the hand crank to assist an electronically operating winch. This may result in winch damage and severe personal injury.

2. Turn the clutch knob clockwise until hand tight. Do not force it or over tighten.

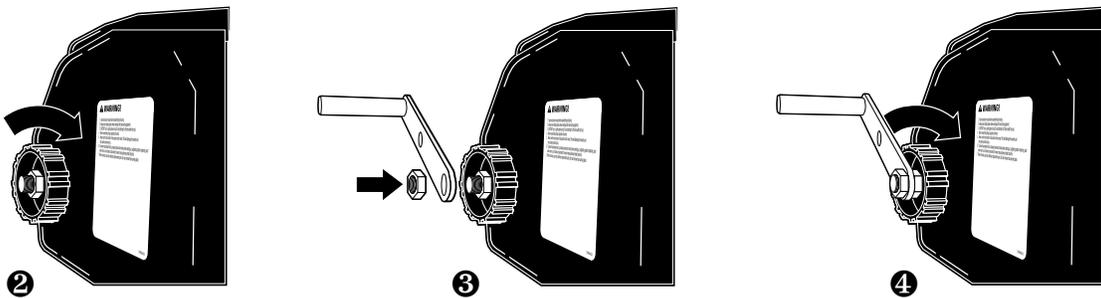
3. Place the end of the hand crank over the flattened end of the threaded shaft located in the center of the clutch knob.

4. Rotate the handle in a clockwise direction to retract the winch cable. Continue to turn until the cable has been completely retracted.

**▲ WARNING:** If the clutch knob is placed in the free wheel position for hand cranking (by turning the clutch knob counterclockwise), be sure to maintain a firm grip on the hand crank at all times. Always remove the hand crank from the winch after use and store it in a clean and dry place where it will not be misplaced.

5. Always remove the hand crank from the winch after use.

**▲ WARNING:** Store the hand crank in your vehicle's trunk or a similar clean, dry and safe place when it is not in use. This prevents tampering, misuse, or damage to the hand crank.



## Maintenance Instructions

1. Always inspect winch installation and winch cable condition before performing a winching operation. Never operate your winch if it is loose or damaged or when the winch cable is frayed, kinked, or damaged. Inspect the winch installation, mounting bolts and electrical connections on a regular basis. Remove any dirt or corrosion that may have accumulated on the electrical connections, and ensure you have a clean, tight and secure electrical contact. Inspect the electrical wiring along its route and make sure that it is not damaged and is still secured with appropriate fasteners. Also make sure the electrical wiring is located in a location clear of hot or moving parts, road debris or any possibility of being damaged by operation or maintenance of the vehicle.

**▲ WARNING:** Always wear eye protection, heavy gloves and remove all jewelry, loose clothing, or anything that may get caught in the vehicle's moving parts prior to inspecting your winch.

2. Inspect the winch cable before and after each winching operation is performed. Make sure it is in good condition and is attached properly. If the cable has been kinked, frayed, or is abnormally stiff, the winch should not be used. The winch cable should be lubricated periodically with a light penetrating oil to improve the life of the cable. Be sure to also inspect the winch hook for signs of wear or damage. If the winch hook is damaged do not use the winch.

3. Always keep your winch, winch cable, and remote control and its

cord free from dirt or other contamination. Use a clean towel to remove any dirt or debris. It may be necessary to unwind the winch cable (leaving a minimum of three wraps on the winch drum), wipe, clean, oil with light penetrating oil, and properly rewind the winch cable.

4. Inspect your vehicle's battery because operating a winch for long periods of time places an extra burden on the battery. Be sure to check and maintain your battery and battery cables according to manufacturer guidelines. Inspect all electrical connections on the winch to ensure they are clean and tight fitting.

**▲ WARNING:** Always wear eye protection when working around a battery. Do not lean over the battery while inspecting connections. Remove all jewelry, loose clothing, or anything that may get caught in the motor's moving parts prior to inspecting the battery.

5. Inspect the remote control and its cord for wear and/or damage. If the remote control is damaged do not use the winch.

6. If damage or wear to any component of your winch is observed, do not use the winch and never attempt to repair it yourself. Always have a qualified technician perform all repairs on your winch.

### ***1 Year Limited Warranty***

Master Lock Company warrants to the original buyer (“you” or “your”) all component parts of your winch except the winch cable for a period of one (1) year from the provable date of purchase. If your winch fails due to a defect in materials or workmanship during the 1 year warranty, Master Lock Company will replace it free of charge. Simply contact Master Lock Company at [www.masterlock.com](http://www.masterlock.com) for replacement information. This warranty does not cover products which have been abused, altered, damaged, misused, cut or worn. This warranty is void if winch is used in commercial/industrial applications.

Limitation of Liability: The warranty set forth herein are exclusive, to the extent permitted by law, Master Lock Company disclaims all other implied or express warranties including all warranties of merchantability and/or fitness for a particular purpose. This warranty is your sole remedy and Master Lock Company shall not be liable for any damages, whether direct, indirect, incidental, special, consequential, exemplary, or otherwise, including lost revenues and lost profits, arising out of any theory of recovery, including statutory, contract or tort. In no event will Master Lock Company’s entire liability exceed the purchase price of this product. Some states and providences do not allow the exclusion or limitation of incidental or consequential damages so the above limitations or exclusions may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state and province to province.



[www.masterlock.com](http://www.masterlock.com)

**Master Lock Company LLC**, Milwaukee, WI 53154 U.S.A. | 800-308-9244  
Master Lock Canada, Oakville, Ontario L6H 5S7 Canada | 800-227-9599  
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