

Master Lock®

12 VOLT DC 1500LB ELECTRIC UTILITY AND ATV SPORT WINCH OWNER'S MANUAL



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Introduction

Thank you for purchasing the Master Lock® electric utility and ATV winch. We hope you are 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.

Included Accessories

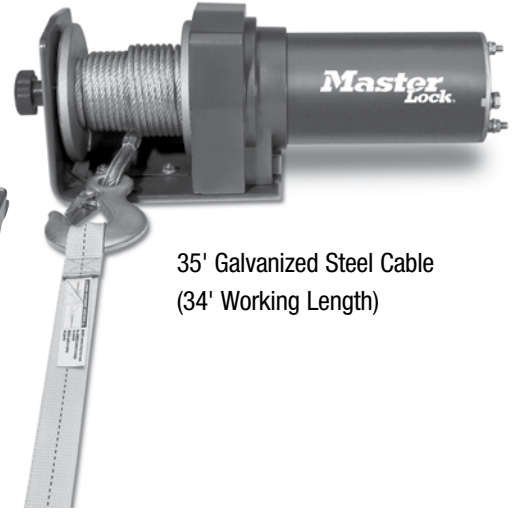
1. Power cord fitted with water sealed plug for safe operation
2. Remote control with water sealed plug for safe operation
3. 35' (34' working length) galvanized steel cable with attached winch hook and Handsaver strap
4. Mounting Plate for trailer hitch



Mounting Plate

Power Cord 64"

Remote Control Cable 42"



35' Galvanized Steel Cable
(34' Working Length)

Handsaver Strap

Product Features

1. Convenient power for pulling stuck vehicles and other heavy items
2. Powerful 1,500lbs pulling power
3. 12 Volt DC powered for convenient use without extension cords or small gas engines
4. Forward/Reverse operation
5. Free spooling function

Performance Specifications

Capacity:

Pull Strength Performance Ratings

Cable Layer	Peak Pulling	Capacity lbs/kg
1	1500	680
2	1225	556
3	1025	465
4	900	408
5	800	363

Duty Cycle:

Fully Loaded @ 1,500lbs (weight of object)
@ 2.5 minutes of operation. Allow 8 minutes to cool before resuming use.

Light Load @ 250lbs (weight of object) @
2.5 minutes of operation. Allow 2 minutes to cool before resuming use.

Cable Length: 35ft (34ft working length) 5/32" galvanized steel cable resists corrosion.

Maximum Designed Stall Load: 1875lbs/850kg

Current Draw:

@560lbs Load: 10.3 amps

@1,500lbs Load: 27 amps

Power Cable: 64" length

Remote Control Cable: 42" length

Net Weight: 13.7lbs

Line Speed: 6.4 ft/minute (No load)

Power Supply: 12 Volt DC

Overall Dimensions: 4-1/2" x 4-5/16" x 12-5/8"

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 1,500lbs. 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 1,500lbs. 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 five turns of cable on the winch drum. The usable cable length is approximately 34 feet.
- ▲ **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 DC winch operates from a low voltage DC power source (e.g., an ATV, car, or truck battery). Never connect your winch to a 120 Volt AC power source.
- ▲ **WARNING:** To prevent entanglement and/or lacerations of hands, keep hands off of winch cable and winch hook when spooling or operating. Always use handsaver strap when spooling or operating. Never remove handsaver strap from hook.
- ▲ **WARNING:** Remove all jewelry, loose clothing, or anything that may get caught in the motor's moving parts prior to operating you winch.
- ▲ **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:** 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:** 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.
- ▲ **WARNING:** Mounting Bolts: DO NOT USE any bolts weaker than ISO grade 5.
- ▲ **WARNING:** Use an approved nylon recovery strap to "snatch" or pull out a stuck vehicle. Nylon webbing will absorb the shock of heavy weight pulls.
- ▲ **WARNING:** Damaged wire cable must be replaced to safely operate any winch.
- ▲ **WARNING:** Never engage or disengage the clutch if winch is under load, wire cable is under tension or wire cable drum is moving.
- ▲ **WARNING:** Prolonged winching without allowing the winch motor to cool will damage the motor. Prolonged winching may drain the battery faster than it is charging even if the engine is idling.

Mounting Instructions

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

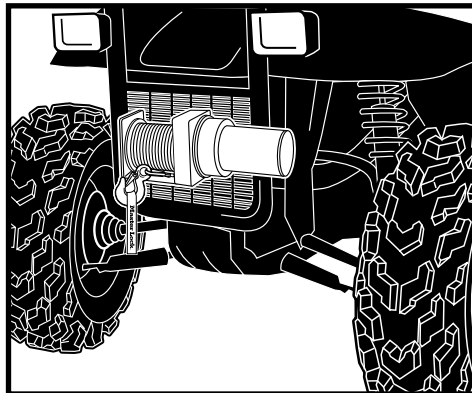
Permanent Mounting

1. Select a mounting site on the front or rear of your ATV vehicle, truck bed, or other suitable locations. Never install your winch in a location that obscures its warning and instruction labels. Your winch can generate 1,500lbs of pulling force so be sure that the mounting site selected can withstand a load well in excess of the 1,500lb 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.

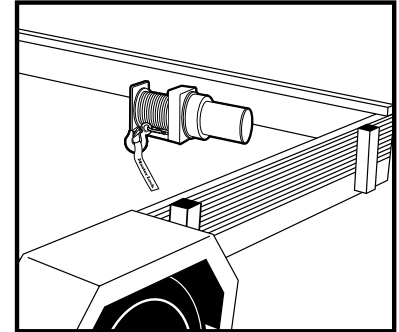
2. Position winch in desired location, and mark for drilling the locations of the holes on the mounting plate of the winch.

▲ 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 marked locations on your vehicle.



3. Attach the winch to the desired location using bolts, nuts, washers, and lock washers. Do not use any bolts weaker than ISO grade 5.

4. 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.



Temporary Mounting on Ball Mount/Hitch Ball

1. Bolt winch to mounting plate using bolts and nuts provided.
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 permanently.

Plan a route for the electrical wiring from the point of the vehicle where the winch is mounted. Route the electrical wiring from the winch to the battery being careful to avoid contacting hot or sharp surfaces. Make sure that the electrical wiring is secured along its route with appropriate fasteners in a location clear of moving parts, road or trail debris or any possibility of being damaged by operation or maintenance of the vehicle.

Connect wire #3, black wire of shorter wire pair, to (-) winch motor terminal.

Connect wire #1, red wire of shorter wire pair, to (+) winch motor terminal.

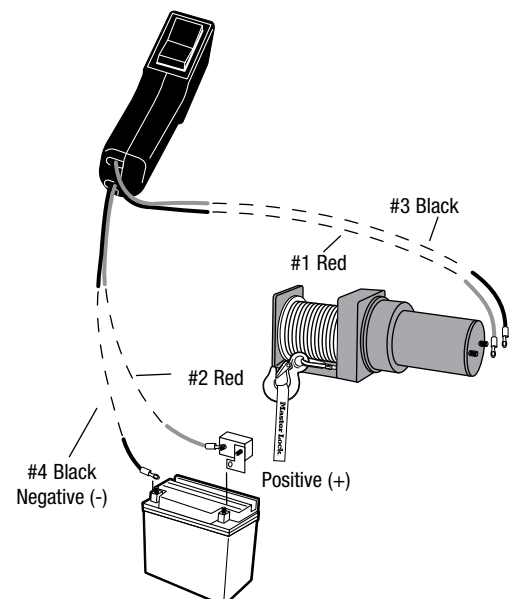
Connect wire #4, black wire of longer wire pair, to (-) battery post.

Connect metal plate exiting from overload relay to positive battery post. Note that opposite side of overload relay should have been previously connected to wire #2, red wire of longer wire pair.

▲ 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.

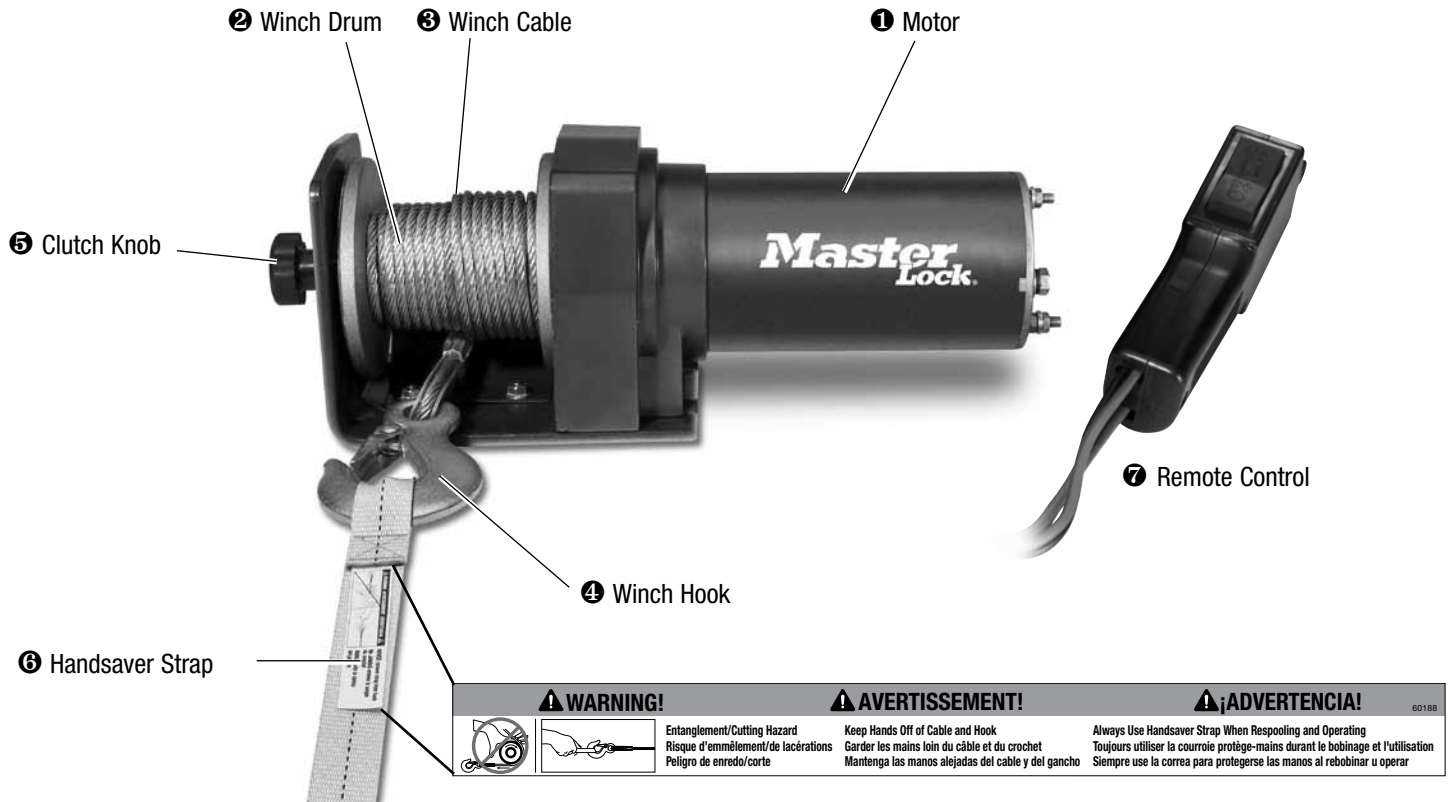
▲ WARNING: Be sure you are using a 12 volt automotive battery or equivalent, in good condition.



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 DC battery. The winch motor provides power to the gear mechanism which turns the winch drum and spools the winch cable in or out of the winch.
- 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.
- 6 Winch Handsaver Strap: The winch handsaver strap is used to guide the winch cable. Always use when guiding winch cable in and out.
- 7 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, stop, and change the direction of the rotation of the winch drum.

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. 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.

▲ 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. Prolonged winching without allowing to cool will damage the motor. Prolonged winch operation may drain the battery faster than it is charging even if engine is idling.

4. To pull out the winch cable, pull and rotate clutch knob 90° so it is positioned out. 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 the handsaver strap. Always leave at least five turns of the winch cable on the winch drum to prevent the cable from pulling out of the winch.



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 five 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 winch 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 winch cable under load.

7. When ready to begin winching, be careful not to let the remote control cable dangle in front of the winch or create a tripping hazard.

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

▲ WARNING: Never put your finger through the hook. If your finger should become trapped in the hook, you could lose your finger. Always use the handsaver strap when guiding the winch cable in or out.

Entanglement/Cutting Hazard

- Keep hands off of winch cable and winch hook when spooling or operating.
- Always use handsaver strap when spooling or operating.
- Never remove handsaver strap from winch hook.



Using Your Winch (continued)

8. Re-engage the clutch knob by rotating it 90° so the pin snaps back into slot 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.

▲ WARNING: Never engage or disengage the clutch if the winch is under load, winch cable is under tension or winch drum is moving.

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

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 off and light tension on the winch cable, 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 too hot to the touch, stop and let it cool for a few minutes.

15. Once the pull is complete and the object winched has been secured with tie down straps or chains, use the remote control to release the tension on the winch cable with the remote control. Disconnect the remote control from the winch and disconnect the winch cable and hook from the pulling point, tow strap or chain connected to the object which was winched.

16. To respool the winch cable correctly, use the remote control to power in and respool the winch cable. It is necessary to keep a slight load on the cable. This is accomplished by holding (while wearing gloves) the winch hook with the handsaver strap 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.

Troubleshooting

Symptoms	Possible Cause(s)	Corrective Action
Motor will not operate or only in one direction	<ol style="list-style-type: none"> 1. Switch inoperative 2. Broken wires or bad connection 3. Damaged motor 	<ol style="list-style-type: none"> 1. Replace switch 2. Check for poor connections 3. Replace or repair motor
Motor runs extremely hot	<ol style="list-style-type: none"> 1. Long period of operation 2. Failed or removed overload 3. Damaged motor 	<ol style="list-style-type: none"> 1. Allow to cool 2. Replace or repair overload 3. Replace or repair motor
Motor runs, but with insufficient power or line speed	<ol style="list-style-type: none"> 1. Weak battery 2. Battery to winch wire too long 3. Poor battery connection 4. Poor ground 5. Damaged motor 	<ol style="list-style-type: none"> 1. Recharge or replace battery and check charging system 2. Keep winch within distance allowed by lead wires 3. Check battery terminals for corrosion and clean as required 4. Check and clean connections 5. Replace or repair motor
Motor runs but drum doesn't turn	<ol style="list-style-type: none"> 1. Clutch not engaged 	<ol style="list-style-type: none"> 1. Engage clutch
Winch runs backwards	<ol style="list-style-type: none"> 1. Motor wires reversed 2. Switch wires reversed 3. Battery switch installed incorrectly 	<ol style="list-style-type: none"> 1. Recheck wiring 2. Recheck wiring 3. Check battery connections
Winch coasts	<ol style="list-style-type: none"> 1. Excessive load 	<ol style="list-style-type: none"> 1. Reduce load or double line
Motor operates but stops	<ol style="list-style-type: none"> 1. Excessive load/overload 	<ol style="list-style-type: none"> 1. Allow to cool

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 five turns 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 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 provinces 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.



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