

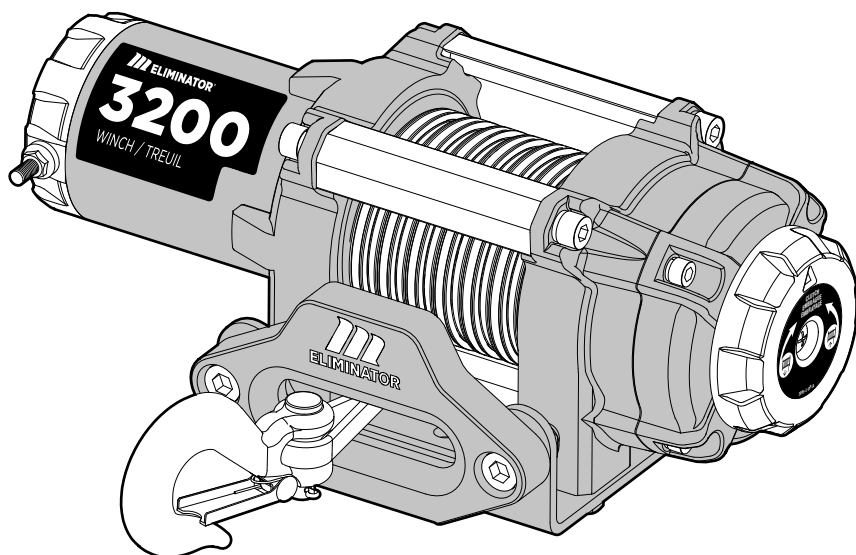


**MOTOMASTER**

# ELIMINATOR<sup>®</sup>

## ATV WINCH KIT

3200 lb (1451 kg)



model no. 140-0049-2

### IMPORTANT:

Please read this manual carefully before using this winch and save it for reference. Keep this instruction manual for future use. Should this product be passed on to a third party, this instruction manual must be included.

## INSTRUCTION MANUAL

model no. 140-0049-2 | contact us 1-888-942-6686



For problems or questions,  
DO NOT RETURN TO STORE. Please  
contact one of our Customer  
Service Agents who would be  
happy to assist you.



For customer assistance please call

**CANADA: 1-888-942-6686**

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## INTRODUCTION

This MotoMaster® Eliminator ATV Winch Kit includes everything you need to start winching, including cables, contactor, mounting channel, aluminum hawse, a wiring kit and mini-rocker switch. This winch kit is the perfect combination of power and performance to use with your ATV, trailer, boat or snowmobile.

This manual will explain how to use the winch safely and effectively. Please read and follow these instructions and precautions carefully.

## SAFETY DEFINITIONS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and their explanations, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

### **DANGER**

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

### **WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

### **CAUTION**

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

### **NOTICE**

NOTICE indicates information considered important, but not hazard-related (e.g., messages relating to property damage).

## IMPORTANT SAFETY INSTRUCTIONS



### WARNING!

- Never use winch to lift or move persons or animals.
- Never use winch as a hoist or to suspend a load.
- Never step over the cable/rope when operating under load.
- Never operate winch with less than 5 wraps of rope around the drum. Rope could come loose from the drum as the rope attachment to the drum is not designed to hold a load.



### WARNING!

- Never exceed the rated capacity. Be aware that the cable/rope may break before the motor stalls.
- For heavy loads at or near rated capacity, always use a snatch block to reduce the load on the cable/rope.



### WARNING!

- Do not use the winch to secure or hold a vehicle for an extended period of time.
- Always apply stop blocks to the wheels of the vehicle when on an incline.
- Do not use the winch to secure a vehicle for transporting purposes.
- Never move the vehicle to pull a load (towing) when operating the winch cable/rope.
- Never release the free-spool clutch when there is a load on the winch.



### WARNING!

Disconnect the mini-rocker switch and battery leads when not in use.



### WARNING!

Avoid "shock loads" by using the control switch intermittently to take up the slack in the cable/rope. "Shock loads" can exceed the rated capacity of the cable/rope and drum.



### WARNING!

When re-spooling the cable/rope, ensure that it spools in the under-wind position with the cable/rope entering the drum from the bottom, not the top.

To re-spool correctly, and while wearing gloves, keep a slight load on the cable/rope while pushing the mini-rocker switch button to draw in the cable/rope. Walk toward the winch not allowing the cable/rope to slide through your hands. Do not let your hands get within 12" (30 cm) of the winch while re-spooling. Turn off the winch and repeat the procedure until a few feet of cable/rope are left. Disconnect the mini-rocker switch and finish spooling by rotating the drum by hand with the clutch disengaged. Keep hands clear of the fairlead and drum while the winch is under power.

**WARNING!**

- Always use extreme caution when handling hook and cable/rope during spooling operations.
- Always use supplied hand strap whenever spooling rope in or out, during installation and during operation.

**WARNING!**

Always wear heavy leather gloves when handling cable/rope.

**CAUTION!**

Do not wrap the cable/rope around any object and hook it back onto itself.

**CAUTION!**

Duration of winching pulls should be kept as short as possible.

If the motor becomes excessively hot to the touch, stop winching immediately and let it cool down for 5 minutes. Do not pull for more than one minute at or near the rated load.



**CAUTION!**

If the motor stalls, do not maintain power to the winch.

Electric winches are designed and made for intermittent use and should not be used in constant duty applications.







## SAFETY SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.

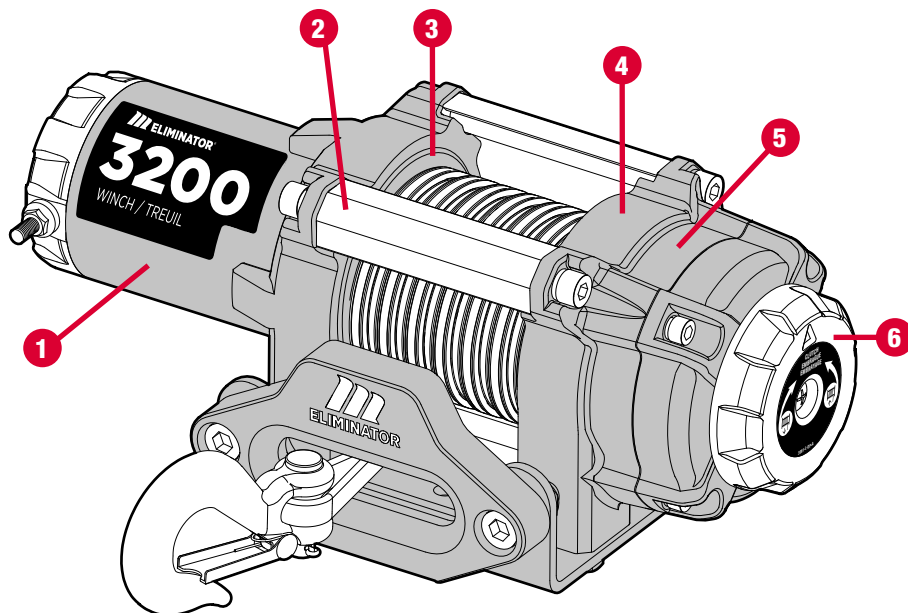
SYMBOL	MEANING
	Read and understand this instruction manual thoroughly before using the product. It contains important information for your safety as well as operating and maintenance advice.
	Always keep hands clear of cable/rope, hook loop, hook and hawse fairlead opening during installation, operation and when spooling in or out.
	<ul style="list-style-type: none"> <li>• Always use extreme caution when handling hook and cable/rope during spooling operations.</li> <li>• Always use supplied hand strap whenever spooling rope in or out, during installation and during operation.</li> <li>• Always wear heavy leather gloves when handling cable/rope.</li> </ul>

## OPERATION SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to more safely operate the product.

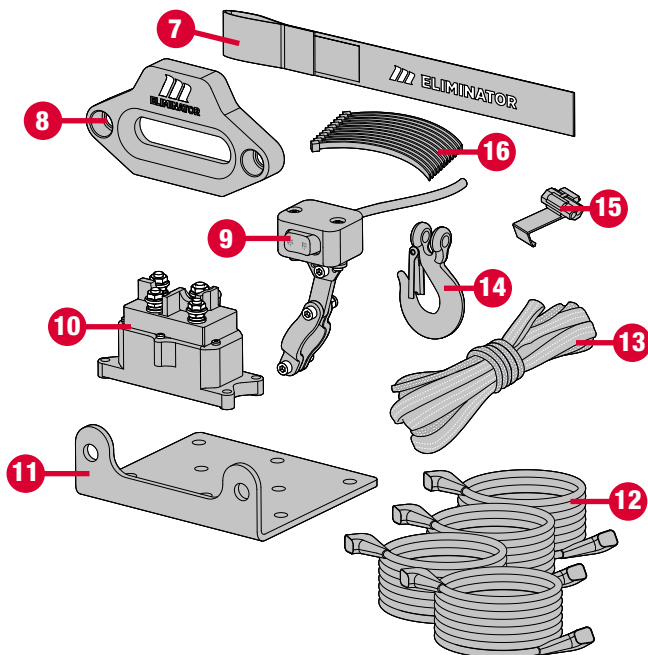
SYMBOL	MEANING
	Turn the clutch to the "IN" position to retract the rope.
	Turn the clutch to the "OUT" position to release the rope.
	Positive battery terminal
	Negative battery terminal
	Positive winch terminal
	Negative winch terminal

## KEY PARTS DIAGRAM



1. **Motor** – 1.5 HP (1.0 kW) 12V DC motor provides power to the planetary gear mechanism.
2. **Tie Bars** – Durable all-metal construction tie bars for increased structural rigidity.
3. **Winch Drum** – The winch drum is the cylinder on which the synthetic rope is stored. It can feed or wind the rope depending on the remote winch switch.
4. **Braking System** – Braking action is automatically applied to the winch drum when the winch motor is stopped and there is a load on the synthetic rope.
5. **Planetary Gear System** – The reduction gears convert the winch motor power into extreme pulling forces. This system allows high torque while maintaining compact size and light weight.
6. **Clutch** – The clutch allows the operator to manually disengage (“Out”) the spooling drum from the gear train, free spool. Engaging the clutch (“In”) locks the winch into the gear system.





7. **Hand Strap** – Used to assist synthetic rope feed.
8. **Aluminum Hawse** – When using the winch at an angle the hawse acts to guide the synthetic rope onto the drum and minimizes damage to the synthetic rope from abrasion on the winch mount or bumper.
9. **Mini-rocker Switch** – Rocker switch with handlebar mount for powering the synthetic rope in or out of your winch drum.
10. **Solenoid/Contactor** – Power from the vehicle battery flows through the weather sealed contactor before being directed to the winch motor.
11. **Mounting Channel** – Winch mount to attach the winch to your vehicle.
12. **Winch Connection Cables** – Used to connect the contactor to the winch motor and the contactor to the vehicle battery.
13. **Synthetic Rope** – 45' 11 1/8" x 3/16" (14 m x 4.8 mm) Synthetic rope designed specifically for load capacity of 3,200 lb (1,451 kg). The synthetic rope feeds onto the drum in the "under wind" position through the aluminum hawse and is looped at the end to accept the clevis hook pin.
14. **Clevis Hook** – Provides a means for connecting the looped ends of cables to an anchor.
15. **Wire Tap** – Allows the ability to splice the end of the red wire on the mini-rocker switch to an ignition or keyed controlled power source.
16. **Cable Ties** – Attaches the mini-rocker switch cable to the chassis of your vehicle.

## KEY PARTS LIST

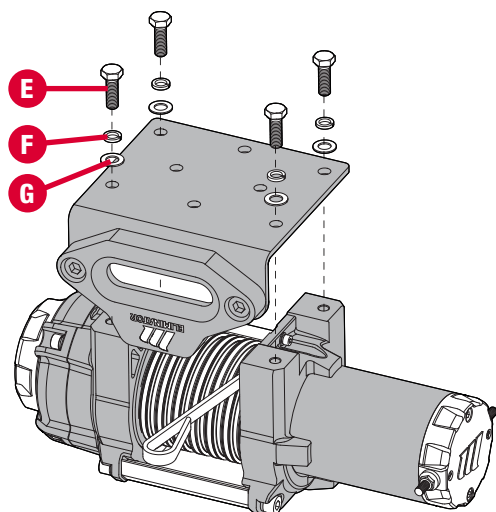
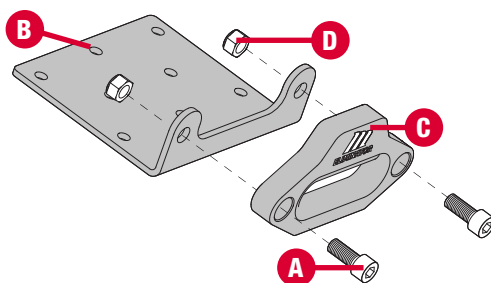
PART	PART QTY.	HARDWARE	HARDWARE QTY.	TOOL(S) NEEDED	TORQUE lbf-ft (Nm)
Winch Body	1	Hexagon Head Bolt M8 x 25	4	1x 13 mm wrench	6.1–7 (8.2–9.5)
		Flat Washer Ø8	4		
		Flat Washer Ø8	4		
Mounting Channel	1				
Aluminum Hawse	1	Hexagon Socket Set Screw M10 x 25	2	1x 8 mm wrench	11.8–12.6 (16–17.1)
		Lock Nut M10	2	1x 16 mm wrench	
Mini-rocker Switch	1	Hexagon Socket Head Screw M5 x 18	1	1x 4 mm wrench	2.2–3 (3–4)
		Hexagon Socket Head Screw M5 x 25	2	1x 4 mm wrench	
		Flat Washer Ø5	3		
		Nut M5	3	1x 8 mm wrench	
Wire Tap	1				
Contactor	1	Hexagon Head Bolt M6 x 25	4	1x 10 mm wrench	4.1–4.9 (5.6–6.6)
		Flat Washer Ø6	4		
		Lock washer Ø6	4		
		Lock Nut M6	4	1x 10 mm wrench	
Battery Wire — Red	1				
Battery Wire — Black	1				
Winch Wire — Yellow	1				
Winch Wire — Blue	1				
Clevis Hook	1			Needle nose pliers	
Hand Strap	1				

## ASSEMBLY

### MOUNTING THE WINCH

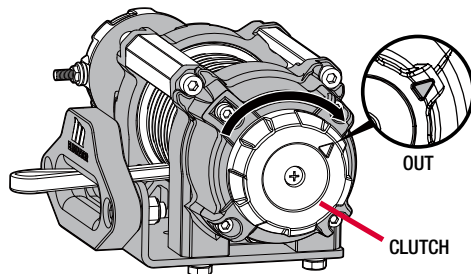
The MotoMaster® Eliminator ATV Winch Kit is designed with a bolt pattern that is standard in this class of winch. Many winch mounting kits are available that utilize this bolt pattern for the most popular trucks, SUVs and ATVs.

- 1** Insert M10×25 (A) bolts through the mounting channel (B) holes and attach the aluminum hawse (C) to the mounting channel with the M10 lock nuts (D) provided.

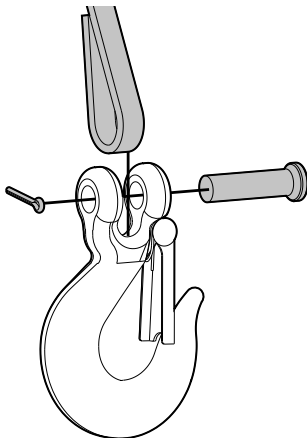


- 2** Turn the winch upside down. Place the mounting channel on the winch, making sure the winch is centred in the middle of it.
- 3** Thread the M8×25 (E) bolts through the Ø8 lock (F) and flat washers (G), and then thread through the mounting channel. Tighten the bolts. DO NOT overtighten.

- 4 Turn winch right side up. Disengage the clutch by moving the clutch to the “Out” position — the arrow will be to the back of the winch as shown. Release the synthetic rope and pull through the aluminum hawse.



- 5 Attach the clevis hook to the synthetic rope by removing cotter pin and pin, then thread through and reattach the pin and cotter pin.

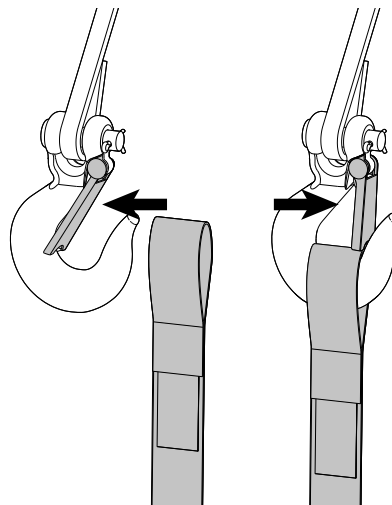
**CAUTION!**

See Key Parts List section for torque ratings. Mounting bolts must be SAE grade 5 or better and torqued to 34 lbf-ft (46 Nm).

**CAUTION!**

If utilizing a mounting plate, ensure that the three major sections (motor, drum and gear housing) are properly aligned. Proper alignment of the winch will allow for even distribution of the full rated load. The type of vehicle to which the winch and mounting channel will be applied, will dictate the type of mounting kit that should be used.

- 6** Add hand strap to the clevis hook.



### SOLENOID/CONTACTOR LOCATION

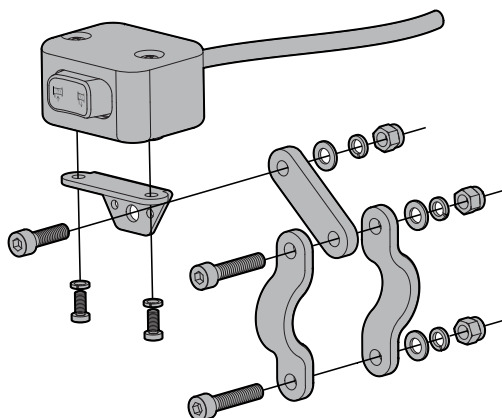
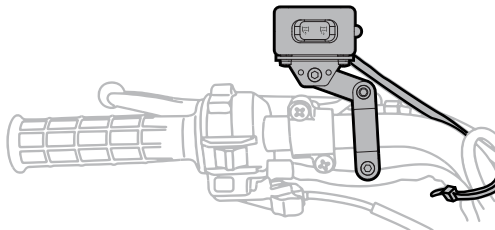
Find a location for the solenoid/contacter. It is recommended that the solenoid/contacter be mounted close to the battery in a clean, dry location. Make sure the location chosen allows for sufficient clearance from all metal components. Drill mounting holes if required. Once a location is found, DO NOT install the unit until all wiring is completed (see wiring section).

### NOTICE:

Terminals coming in contact with metal will cause a direct short, possibly causing solenoid/contacter and/or battery damage.

## INSTALLING THE MINI-ROCKER SWITCH

- 1 Decide which handlebar the mini-rocker switch will be mounted on. The mini-rocker switch is usually installed on the left handlebar.



- 2 Use a piece of electrical tape (not provided) around the handlebar to help prevent rotation of the mount.

Loosen the hardware and mount to the handlebar.

Tighten the mini-rocker switch in place. DO NOT overtighten or tighten/clamp over any hoses or cables.

Once the mini-rocker switch is mounted, the wires can be routed back to where the solenoid/contacter is located.

Make sure the handlebars have full range of motion and then secure the mini-rocker switch's cable with the supplied cable ties.

## WIRING THE WINCH

See the wiring diagram on the following page for these following steps

- 1** Connect the yellow and blue cables to the motor terminals on the winch (yellow to the positive (+) terminal of the motor; blue to the negative (-) terminal of the motor). Tighten the terminal nuts on the motor. **DO NOT** overtighten. Route the other ends to the solenoid/contacter location.
- 2** Connect the yellow and blue cables to the solenoid/contacter (yellow to yellow and blue to blue). **DO NOT** tighten nuts.
- 3** Connect the red and black cables to the solenoid/contacter (red to red and black to black). **DO NOT** tighten nuts. Route the other ends to the vehicle's battery.
- 4** Connect the red lead to the positive (+) terminal of the vehicle's 12V battery.
- 5** Connect the mini-rocker switch to the solenoid/contacter (black to black and green to green).
- 6** Splice the end of the red wire on the mini-rocker switch to an ignition (keyed) controlled power source using the supplied wire tap.
- 7** Once all wiring is connected to the solenoid/contacter, it can then be mounted using the supplied M6 hardware.
- 8** Tighten the solenoid/contacter terminal nuts. **DO NOT** overtighten.
- 9** Connect the black lead to the negative (-) terminal of the vehicle's 12V battery.
- 10** Place all terminal boots over terminals and secure all cables with cable ties or electrical tape (not included).



### CAUTION!

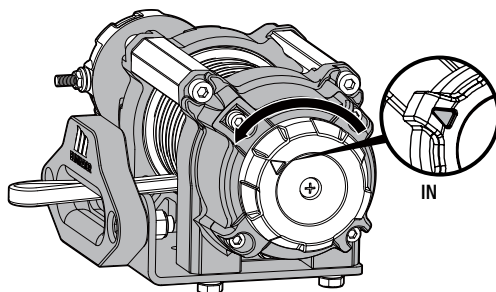
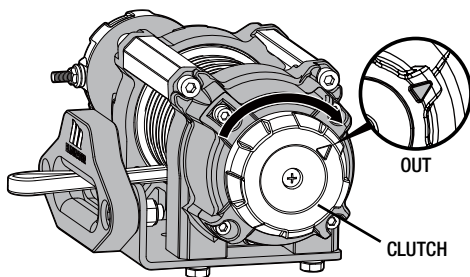
NEVER route electrical cables across any sharp edges, through and/or near moving parts, or near parts that may become hot.

Battery cables should NOT be drawn tight. Leave some slack for cable movement.

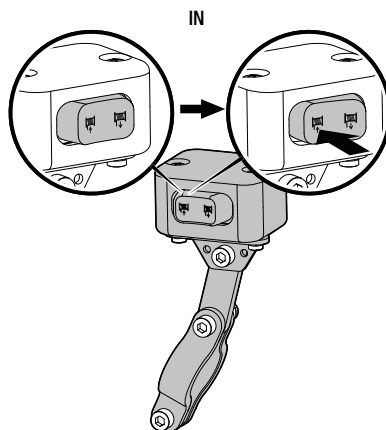
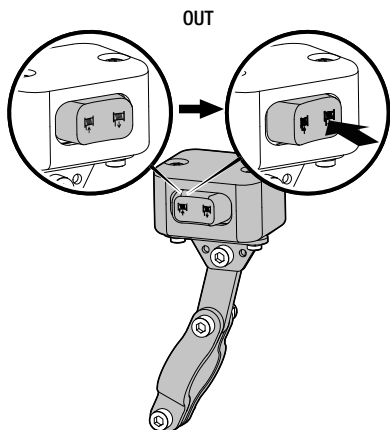
### NOTICE:

You may need to use a test light to locate a suitable wire. The wire should only have power when the key is in the ON position.

- 11** Check for proper drum rotation. Turn the clutch to the “Out” position (free spooling). Pull out some cable from the drum, and then turn the clutch to the “In” position to engage the gears.



- 12** Press the “Out” button on the mini-rocker switch. If the drum is turning and releasing more cable/rope, then your connections are accurate. If the drum is turning and collecting more cable/rope then reverse the leads on the motor. Repeat and check rotation. Press the “In” button on the mini-rocker switch as a final test.

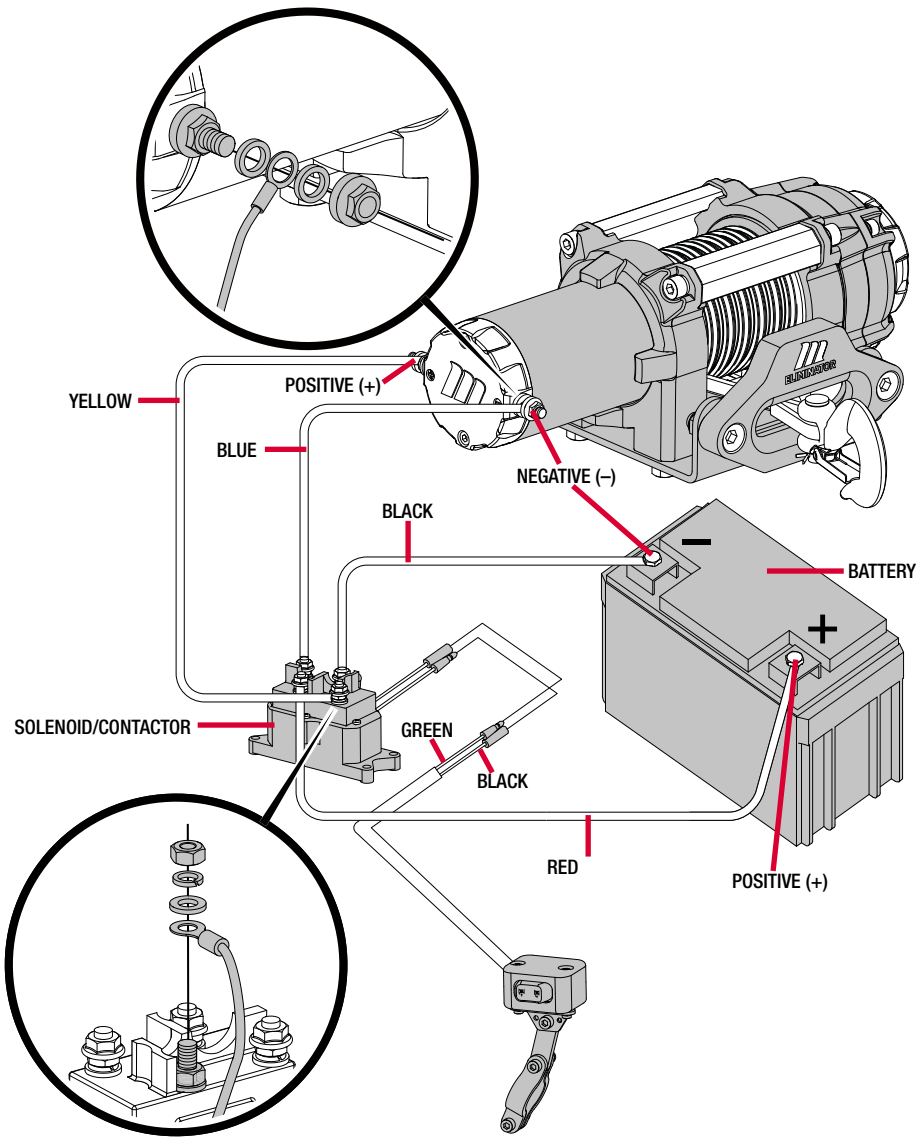


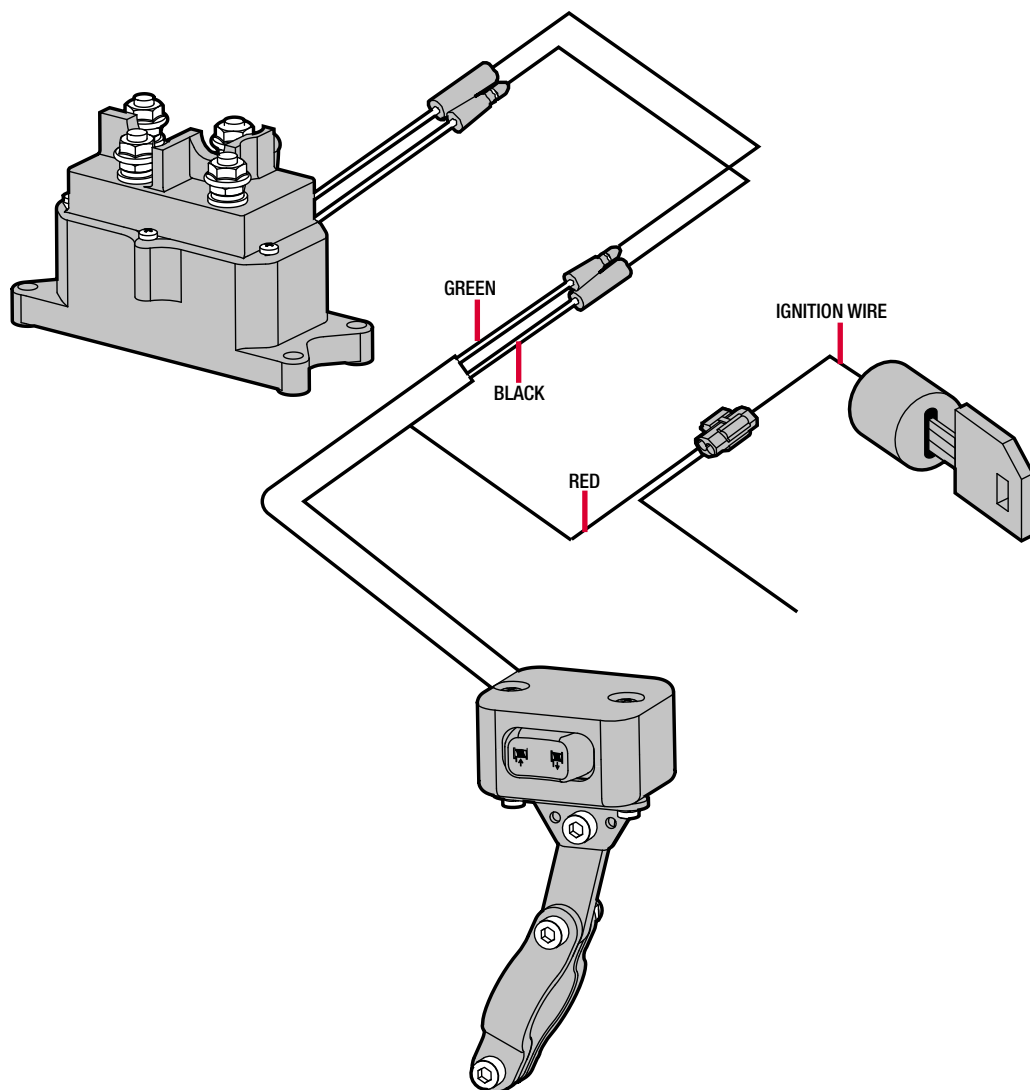
### NOTICE:

Depending on the location of the solenoid/contacter, you may need to use the black and red cables in place of the yellow and blue, and the yellow and blue in place of the red and black.



# WIRING DIAGRAM



**SWITCH WIRING DIAGRAM**

## OPERATION

### GENERAL TIPS FOR SAFE OPERATION

Your winch is rated at a 3,200 lb (1,451 kg) capacity in first layer (max.) when spooling the first rope layer on the drum. Overloads can damage the winch, motor and/or synthetic rope. For loads over 1,750 lb (794 kg), we recommend the use of the pulley block/snatch block to double the synthetic rope line. This will aid in two ways:

- Reduce the number of rope layers on the drum; as well as
- Reduce the load on the rope by as much as 50%.

When doubling the line back to the vehicle, attach to the tow hook, frame or other load-bearing part. The vehicle engine should be kept running during operation of the winch to minimize battery drain and maximize power and speed of the winch. If the winch is used for a considerable time with the engine off, the battery may be drained and too weak to restart the motor.

Get to know your winch before you actually need to use it. We recommend that you set up a few test runs to familiarize yourself with rigging techniques, the sounds your winch makes under various loads, the way the cable/rope spools on the drum, etc.

Inspect the synthetic rope and equipment before each use. A frayed or damaged cable/rope must be replaced immediately. Use only manufacturer's identical replacement rope with the exact specifications.

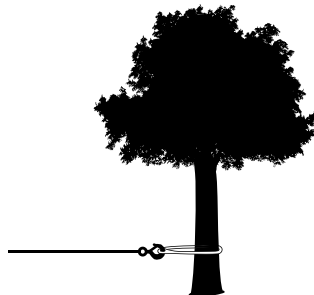
Always inspect the winch installation and bolts to ensure that all bolts are tight before each operation.

Any winch that appears to be damaged in any way, or operates abnormally **MUST BE REMOVED FROM SERVICE UNTIL REPAIRED**. It is recommended that the necessary repairs be made by a manufacturer's authorized repair facility.

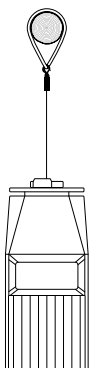
Pull only on areas of the vehicle as specified by the vehicle manufacturer.

**SELF RECOVERY**

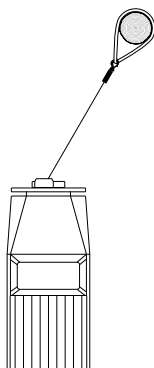
Locate a suitable anchor such as a strong tree trunk or boulder. Always use a sling as an anchor point.



CORRECT



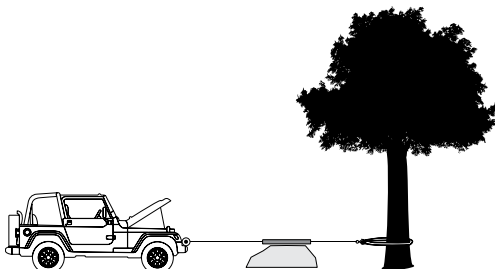
INCORRECT



Your winch is equipped with a aluminum hawse to help guide the synthetic rope and to reduce binding on short side pulls. Do not winch from an acute angle as the synthetic rope will pile up on one side of the drum causing damage to synthetic rope and the winch.

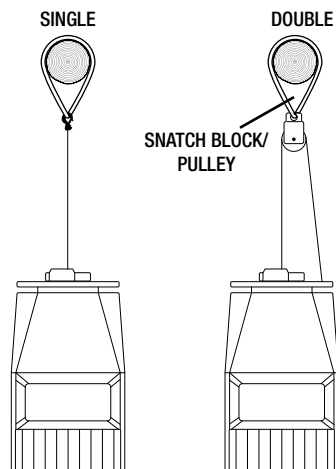
Short pulls from an angle can be used to straighten the vehicle. Long pulls should be done with the synthetic rope at a 90° angle to the winch/vehicle. When pulling a heavy load, place a blanket or jacket over the synthetic rope 5 – 6' (1.5 – 1.8 m) from the hook.

In the event of a broken cable/rope it will dampen the snap back.



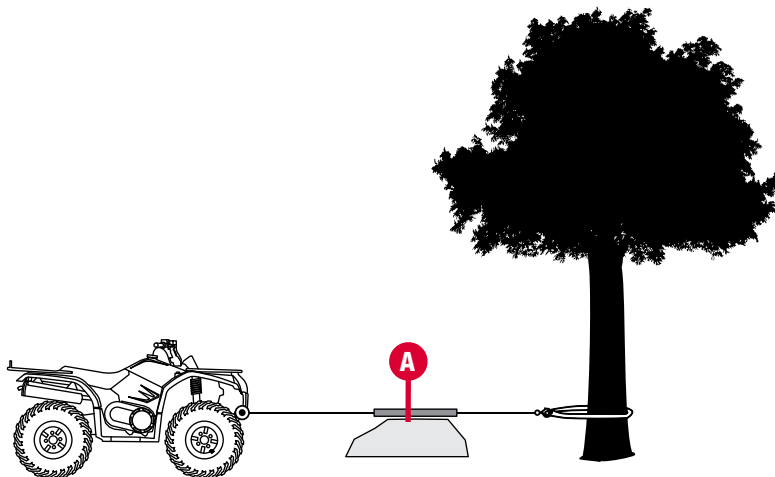
For additional protection open the hood of the vehicle. For pulls over 1,750 lb (794 kg), we recommend the use of the snatch block/pulley block to double line the synthetic rope.

This reduces the load on the winch and the strain on the rope by approximately 50%.



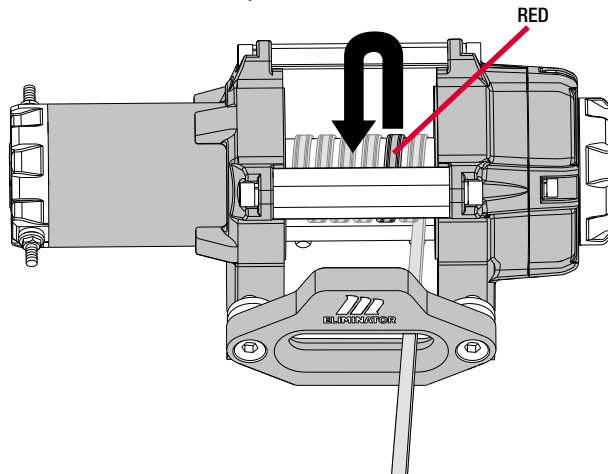
### SYNTHETIC ROPE ABRASION SLEEVE

The winch should be set up to avoid any rough surface from contacting the rope. If that is not possible, the abrasion sleeve (A – not included) can be used to help protect the rope.



**WINCHING TECHNIQUES A-Z**

- A. Take time to assess your situation and plan your pull.
- B. Always wear heavy leather gloves when handling cable/rope.
- C. Disengage the clutch to allow free-spooling and also save battery power.
- D. Always use supplied hand strap whenever spooling rope in or out, during installation and during operation.
- E. Pull out the cable/rope to your desired anchor point using the hand strap.
- F. Secure the clevis hook to the anchor point: Sling, chain or snatch block. Do not attach the hook back onto the synthetic rope.
- G. Engage the clutch.
- H. Connect the mini-rocker switch to the winch.
- I. Start your engine to ensure power is being replenished to the battery.
- J. Drape a blanket or jacket over the synthetic rope approximately 5 – 6' (1.5 – 1.8 m) from the hook. Open the hood for added protection.
- K. Power in the synthetic rope guiding the rope under tension to draw up the slack in the rope. Once the rope is under tension, stand clear. Never step over the synthetic rope.
- L. Double check your anchors and make sure all connections are secure.
- M. Inspect the synthetic rope. Make sure there are at least 5 wraps of synthetic rope around the winch drum. Your rope is marked with red on wrap 5 to 6 as a visual indicator.



- N. Clear the area. Make sure all spectators stand clear and that no one is directly in front or behind the vehicle or anchor point.
- O. Begin winching. Be sure that the synthetic rope is winding evenly and tightly around the drum. The vehicle that is being winched can be slowly driven to add assistance to the winching process. Avoid shock loads; keep the synthetic rope under tension.
- P. The vehicle to be winched should be placed in neutral and the emergency brake released. Only release the brake pedal when under full tension. Avoid shock loads to the winch. This can damage the winch, rope and vehicle.
- Q. The winch is meant for intermittent use. Under full load with a single line rig do not power in for more than a minute without letting the motor cool down for a few minutes and then resume the winching operation.
- R. The winching operation is complete once the vehicle is on stable ground and is able to drive under its own power.
- S. Secure the vehicle. Be sure to set the brakes and place the vehicle in park.
- T. Release the tension on the synthetic rope. The winch is not meant to hold the vehicle for long periods of time.
- U. Disconnect the synthetic rope from the anchor.
- V. Rewind the synthetic rope. Make sure that any rope already on the drum has spooled tightly and neatly. If not, draw out the rope and re-spool from the point where the rope is tight.
- W. Always keep hands clear of cable/rope, hook loop, hook and hawse fairlead opening during installation, operation, and when spooling in or out.
- X. Secure the hook and hand strap.
- Y. Disconnect the mini-rocker switch.
- Z. Clean and inspect connections and mounting hardware for next winching operation.

## MAINTENANCE

The owner/operator is responsible for all periodic maintenance.

Complete all scheduled maintenance in a timely manner. Correct any issue before operating the winch.

### BEFORE FIRST OPERATION

Take time to fully read winching techniques in order to understand your winch and operations.

Check fasteners and make sure they are tight and to proper torque. Replace damaged fasteners.

Verify wiring to all components is correct and be certain that all connections are tight.

Verify there is no exposed/bare wiring, terminals or cable insulation damage. Cover any terminals with terminal boots. Repair or replace damaged electrical cable.

Inspect winch cable/rope, hook, and other parts. Frayed, kinked or damage cable/rope must be replaced immediately.

### AFTER EACH USE

Inspect winch cable/rope, hook, and other parts. Frayed, kinked or damage cable/rope must be replaced immediately. Periodically rinse the synthetic cable/rope with water to remove any sand, dirt, mud, or debris that can build up and become embedded in the cable/rope during use.

Keep winch cable/rope and controls free from contaminants. Use a clean rag to remove any dirt or debris.

If winch is submerged in water, power winch cable/rope out and back to about 30' (9 m) to dry out the winch cable/rope properly.

### EVERY 90 DAYS

Check fasteners and make sure they are tight and to proper torque. Replace damaged fasteners.

Verify wiring to all components is correct and be certain that all connections are tight.

Verify there is no exposed/bare wiring, terminals or cable insulation damage. Cover any terminals with terminal boots. Repair or replace damage electrical cable.

Inspect winch cable/rope, hook, and other parts. Frayed, kinked or damage cable/ropes must be replaced immediately.



### WARNING!

Never operate a damaged or defective winch.

Improper maintenance will void your warranty.

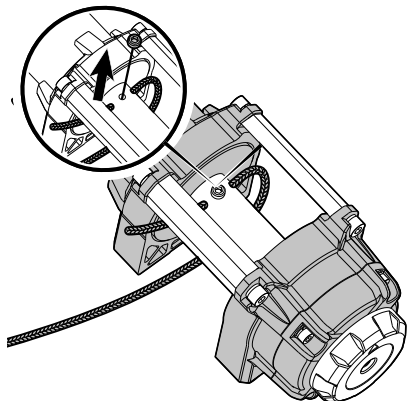
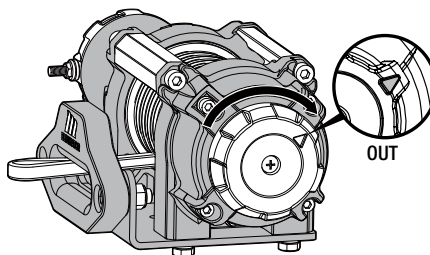


## LUBRICATION

All moving parts within the winch have been lubricated using high temperature lithium grease at the factory. No internal lubrication is required.

## SYNTHETIC ROPE REPLACEMENT

- 1 Move the clutch to the “Out” position.



- 2 Remove clevis hook, pin, cotter pin and hand strap. Remove hawse to allow easier access. Remove protective sleeve, as applicable.
- 3 Extend the synthetic cable/rope to its full length manually. A set screw will need to be removed to fully remove the cable/rope from the drum. Remove old synthetic cable/rope.

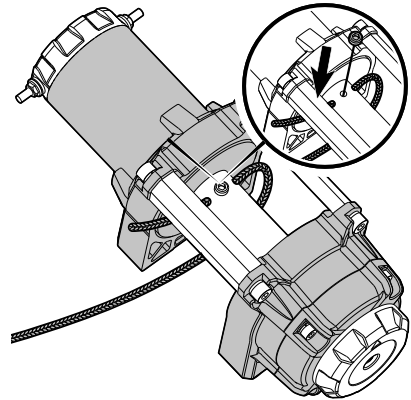
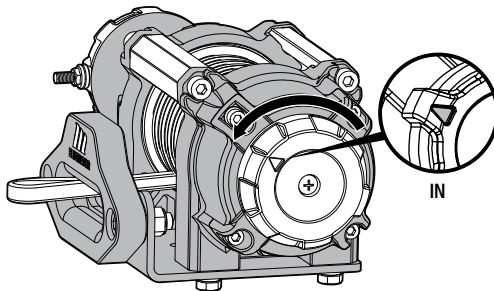
- 4 Check protective sleeve for fraying. Remove protective sleeve from old cable/rope, and slide onto or replace on new cable/rope. Slide protective sleeve to the end.

- 5** Feed your new synthetic cable/rope through the hole in the drum and knot accordingly.

The cable/rope may not be knotted as the end is wrapped. If the new cable/rope isn't wrapped, knot accordingly.

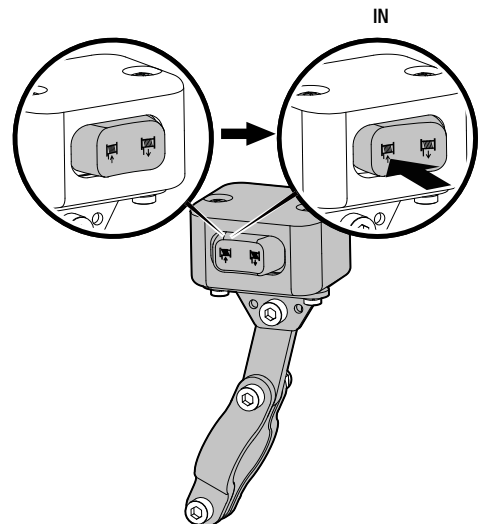
When re-spooling the cable/rope, ensure that it spools in the under-wind position with the cable/rope entering the drum from the bottom, not the top.

- 6** Replace set screw and tighten to 3.7–4.4 lbf-ft (5–6 Nm).



- 7** Move the clutch to the "In" position.

- 8** To re-spool correctly, and while wearing gloves, keep a slight load on the cable/rope while pushing the mini-rocker switch button "In" to draw in the cable/rope.



- 9 Walk toward the winch not allowing the cable/rope to slide through your hands. Do not let your hands get within 12" (30 cm) of the winch while re-spooling. Turn off the winch and repeat the procedure until a few feet of cable/rope are left. Disconnect the mini-rocker switch and finish spooling by rotating the drum by hand with the clutch disengaged; set clutch to "Out." Keep hands clear of the hawse and drum while the winch is under power.
- 10 Once completed, set clutch back to "In" and do a few tests with the cable/rope in and out to make sure operation is as expected.
- 11 Reattach the clevis hook to the synthetic cable/rope by adding the pin and reattach the cotter pin.

**WARNING!**

Never operate winch with less than 5 wraps of rope around the drum. Rope could come loose from the drum, as the rope attachment to the drum is not designed to hold a load.

## SPECIFICATIONS

### PERFORMANCE SPECIFICATIONS

Rated Pull .....	3,200 lb (1451 kg)
Gear Reduction Ratio .....	171:1
Motor .....	Permanent Magnet 1.5 HP / 1.0 kW (12V DC)
Drum Size .....	3 1/8" (L) x 1 1/2" (D) [80 mm (L) x 38 mm (D)]
Cable .....	45' 11 1/8" (L) x 3/16" (D) [14 m (L) x 4.8 mm (D)]
Gross Weight .....	23 lb 2 oz (10.5 kg)
Net Weight .....	20 lb 15 oz (9.5 kg)
Height .....	4 3/4" (12.0 cm)
Width .....	4 3/8" (11.1 cm)
Length .....	13" (33.1 cm)
Bolt Pattern .....	4 7/8 x 3" (12.4 cm x 7.6 cm)

#### LINE SPEED AND MOTOR CURRENT (FIRST LAYER)

<b>Line Pull</b>	lb	0	1000	1500	2000	2500	3200
	kg	0	454	680	907	1134	1451
<b>Line Speed (12V DC)</b>	FPM	9.8	8.5	7.2	6.2	5.9	3.6
	MPM	3	2.6	2.2	1.9	1.8	1.1
<b>Motor Current (12V DC)</b>	amps	18	70	100	130	165	210
<b>Running Time*</b>	minutes	1	1	1	1	1	1
<b>Cooling Time*</b>	minutes	5	5	5	5	5	5

#### LINE PULL AND CABLE/ROPE CAPACITY PER LAYER

<b>Line of Cable/Rope</b>		1	2	3	4	5
<b>Rated Line Pull</b>	lb	3200	2611	2207	1911	1685
	kg	1451	1184	1001	867	764
<b>Cable/Rope Capacity</b>	ft	6.6	14.7	24.3	35.1	45.9
<b>Running Time*</b>	minutes	2.0	4.4	7.4	10.7	14

\*If the motor becomes uncomfortably hot to the touch, stop winching immediately and let it cool down for 5 minutes.  
Do not pull for more than one minute at or near the rated load.

\*\*Electric winches are designed and made for intermittent use and should not be used in constant duty applications.



## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Motor does not turn on	Loose battery cable connections	Tighten nuts on all cable connections.
	Defective switch assembly	Replace switch assembly.
	Defective motor	Check for voltage at armature port with switch pressed. If voltage is present, replace motor.
	Water has entered motor	Check for voltage at armature port with switch pressed. If voltage is present, replace motor.
Motor runs but cable drum does not turn	Clutch not engaged	Move clutch to the "In" position. If problem persists, a qualified technician needs to check and repair.
Motor runs slowly or without normal power	Insufficient current or voltage	The battery is weak, recharge. Run winch with vehicle motor running (battery should have a strong charge).
	Loose or corroded battery cable connections.	Clean, tighten, or replace.
Motor overheating	Winch running time too long	Allow winch to cool down periodically.
Motor runs in one direction only	Defective switch assembly	Replace switch assembly.

## WARRANTY

**MotoMaster® Canada**

### 2 YEAR LIMITED WARRANTY

#### WARRANTY QUALIFICATIONS

This MotoMaster® product carries a two (2) year warranty against defects in workmanship and materials.

At its discretion, MotoMaster® Canada agrees to have any defective part(s) repaired or replaced free of charge, within the stated warranty period, when returned by the original purchaser with proof of purchase.

This product is not guaranteed against wear or breakage due to misuse and/or abuse.

#### THIS WARRANTY DOES NOT COVER:

1. Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration;
2. The unit, if it has not been operated and/or maintained in accordance with the instruction manual;
3. Normal wear parts like winch cable/rope, battery cables, aluminum hawse, etc., except as noted below;
4. Routine maintenance items such as cable/rope maintenance;
5. Normal deterioration of the exterior finish due to use or exposure, like cosmetic defects such as paint, labels, etc.;
6. Failures due to acts of God and other force majeure events beyond the manufacturer's control; and
7. Problems caused by parts that are non OEM parts.

#### FULL 180-DAY WARRANTY ON NORMAL WEAR PARTS:

Normal wear parts are defined as winch cable/rope, battery cables, aluminum hawse, etc. These parts are warranted to the original purchaser to be free from defects in material and workmanship for a period of one hundred and eighty (180) days from the date of retail purchase.

#### HOW TO OBTAIN SERVICE:

Warranty service is available by calling the toll-free helpline at 1-888-942-6686

We will not accept the return of a complete unit unless prior written permission has been extended by MotoMaster® Canada.

#### DO NOT RETURN THE UNIT TO THE PLACE OF PURCHASE

#### TRANSPORTATION CHARGES:

Transportation charges for the movement of the winches or accessories are the responsibility of the purchaser. The purchaser must pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by MotoMaster® Canada.

#### OTHER WARRANTIES:

All other warranties, express or implied, including any implied warranty of merchantability is limited in its duration to that set forth in this express limited warranty. The provisions as set forth in this warranty provide the sole and exclusive remedy of MotoMaster® Canada obligations arising from the sale of its products.

**NOTICE TO CONSUMER**

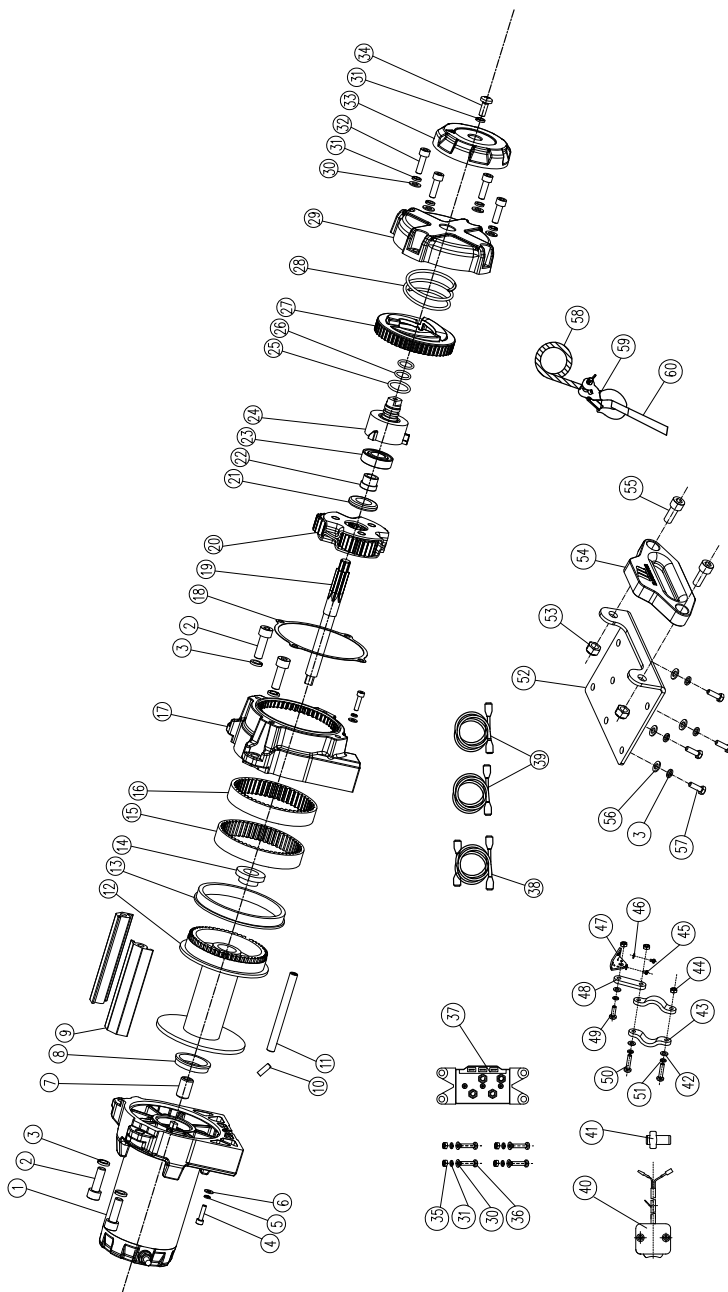
This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal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

Made in China

Imported by

MotoMaster Canada Toronto, Canada M4S 2B8

## PARTS DIAGRAM






**ELIMINATOR<sup>TM</sup>**

## PARTS LIST

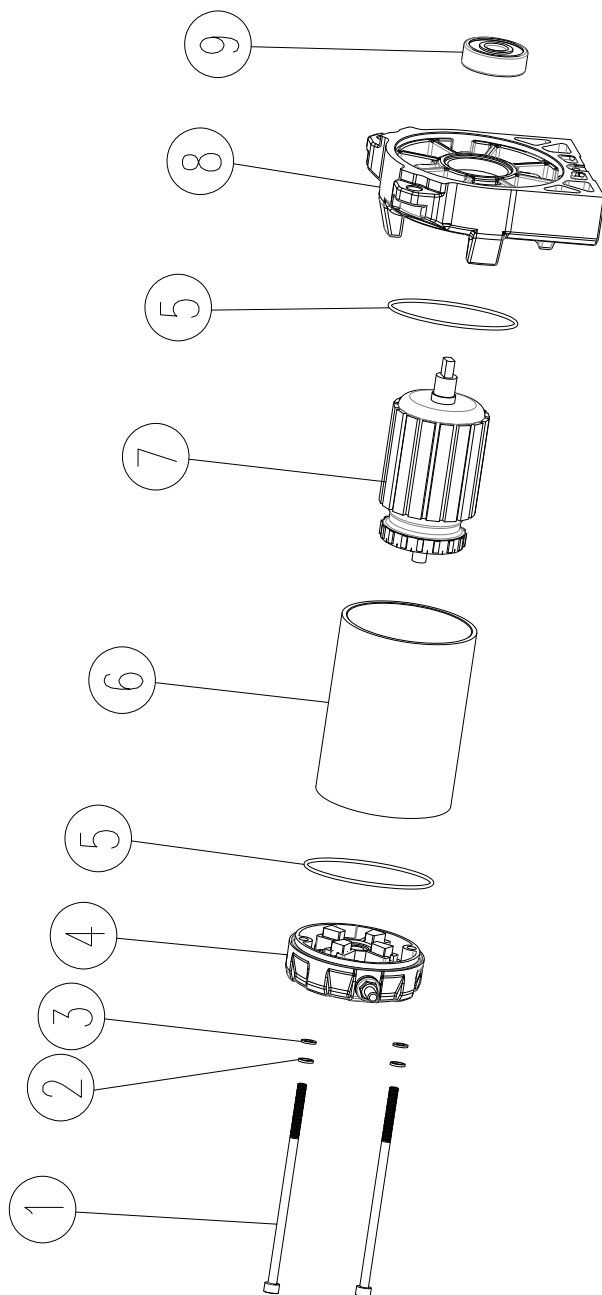
#	PART NUMBER	DESCRIPTION	QTY.
1	320100ME	Motor Assembly	1
2	550007XL	Hexagon Socket Head Screw M8 x 25 - Dacromet	2
3	300020-D	Lock Washer Ø8 - Dacromet	8
4	410018A	Bolt M4 x 16 - Dacromet	2
5	350002XL	Lock Washer Ø4 - Dacromet	2
6	350003XL	Flat Washer Ø4 - Dacromet	2
7	250004	Bushing Shaft	1
8	250071	Motor Bushing	1
9	320002ME	Aluminium Support Bar, Cool Gray 6C	2
10	500011	Hexagon Socket Set Screw with Cone Point M5 x 8	1
11	350006XL	Tie Bar Ø8, Dacromet	1
12	350200A-BF	Steel Drum - Black Flat	1
13	250008	Rear Bush Drum	1
14	250009	Front Thrust Washer	1
15	340002	Rear Ring Output	1
16	340004	Rear Ring	1
17	320003ME	Gear Housing Cover, Black, Crinkle Coating UJ51002	1
18	320004ME	Gasket	1
19	340001	Coupling Shaft	1
20	340003	Gear Carrier Assembly	1
21	250022	Above Clutch Axis Washer	1
22	250021	Clutch Bushing	1
23	GB2760BB-06002SS	Radial Ball Bearing 6002 Sealed	1

#	PART NUMBER	DESCRIPTION	QTY.
24	550004XL	Axis Support Bushing	1
25	500003	O-ring Ø19 x 2.4	1
26	500020	O-ring Ø13 x 2	2
27	250023	Cam Clutch Gear	1
28	250012	Spring	1
29	320005ME	Clutch Cover , Crinkle Coating UJ51002	1
30	250002-D	Flat Washer Ø6 - Dacromet	8
31	250017-D	Lock Washer Ø6 - Dacromet	9
32	P1011017-D	Hexagon Socket Head Screw M6 x 20 - Dacromet	4
33	320006ME	Clutch Cap, Cool Gray 6C	1
34	250018-D	Cap Screw M6 x 16 - Dacromet	1
35	400013-D	Lock Nut M6 - Dacromet	4
36	400011-D	Hexagon Head Bolt M6 x 25 - Dacromet	4
37	320007ME	Contacto	1
38	350003	Battery Wire - Red, 36" (L) / 7 GAUGE	1
	350004	Battery Wire - Black, 36" (L) / 7 GAUGE	1
39	410020	Winch Wire - Yellow, 72" (L) / 7 GAUGE	1
	410021	Winch Wire - Blue, 72" (L) / 7 GAUGE	1
40	320008ME	Mini-rocker Switch	1
41	400020	Wire Tap	1
42	400023-D	Flat Washer Ø5 - Dacromet	3
43	400026-BF	Mini-rocker Switch Clamp - Black Flat	2
44	400025-D	Nut M5 - Dacromet	3

model no. 140-0049-2 | contact us 1-888-942-6686

#	PART NUMBER	DESCRIPTION	QTY.
45	400027	Screw #6-32 x 9/32"	2
46	400028	Lock Washer Ø4	2
47	400029-BF	Mini-rocker Switch Mounting Angle - Black Flat	1
48	400030-BF	Mini-rocker Switch Extender - Black	1
49	400031-D	Hexagon Socket Head Screw M5 x 18 - Dacromet	1
50	400022-D	Hexagon Socket Head Screw M5 x 25 - Dacromet	2
51	400024-D	Lock Washer Ø5 - Dacromet	3
52	250086-BF	Mounting Channel - Black Flat	1
53	250036-D	Lock Nut M10 - Dacromet	2
54	320009ME	MME Aluminum Hawse - 124 mm	1
55	250087-D	Hexagon Socket Set Screw M10 x 25 - Dacromet	2
56	300019-D	Flat Washer Ø8 - Dacromet	4
57	450021-D	Hexagon Head Bolt M8 x 25 - Dacromet	4
58	320200ME	Synthetic Rope - 45' 11 1/8" (L) x 3/16 in. (D) [14 m (L) x 4.8 mm (D)], Grey (Smoke)	1
59	C20002	1/4" Clevis Hook	1
60	320010ME	Black Strap	1

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**MOTOR PARTS DIAGRAM**

MOTOR PARTS LIST

#	PART NUMBER	DESCRIPTION	QTY.
1	M3200ME-01	Hexagon Socket Head Screw M5 x 120	2
2	M3500XL-02	Copper Washer Ø5	2
3	M3500XL-03	Seal Washer	2
4	M3200ME-02	Motor Cap Assembly	1
5	M3500XL-07	O-ring Ø75 x 1.9	2
6	M3200ME-03	Stator Assembly	1
7	M3200ME-04	Rotor Assembly	1
8	M3200ME-05	Motor Housing	1
9	M3200ME-06	Bearing, 6301-2RS	1