



Models(RFX10042 & RFX10045 - 9,500lb)

### RFX SELF-RECOVERY WINCH Limited Two(2) Years Warranty

RFX Truck Accessories Div. of RTA Holdings Ltd warrants to the original purchaser that the mechanical and electrical components will be free of defects in material and workmanship for a period of two (2) years from the original date of purchase. This Warranty only applies to the original purchaser of the winch. To obtain warranty service you must provide RFX with proof of purchase such as a copy of your purchase receipt with a date of purchase acceptable to RFX. This warranty does not cover removal or reinstallation of the winch. RFX will, at its option, repair, replace, or refund the purchase price of a defective winch or component, provided you return the defective winch or component during the warranty period, transportation charges prepaid, to RFX Service Department or a Factory Authorized Service Center. Attach your name, address, telephone number, a description of the problem, and a copy of your receipt showing the RFX part # or serial # and the date of purchase.

This warranty does not apply 1) to finish 2) to wire rope 3) if the winch has been damaged by abuse, accident, misuse, overloading, collision, modification, misapplication, improper installation, or improper service 4) if used in commercial or industrial applications 5) if used as a hoist.

This warranty is void if any RFX serial number has been removed, defaced, or altered.

THE WARRANTY SET FORTH ABOVE IS THE ONLY WARRANTY. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

ANY IMPLIED WARRANTY WHICH BY LAW MAY NOT BE EXCLUDED IS LIMITED IN DURATION TO TWO (2) YEAR FROM THE DATE OF ORIGINAL RETAIL PURCHASE OF THE PRODUCT.

No RFX dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty. RFX SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS, DOWN TIME OR LOSS OF USE) UNDER ANY LEGAL THEORY, EVEN IF RFX WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the exclusion of implied warranties or the exclusion or limitation of liability for incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights that vary from state to state.

RFX reserves the right to change product design without notice. In situations which RFX has changed a product design, RFX shall have no obligation to upgrade or otherwise modify previously manufactured products.

Warranty inquiries and products returned for warranty service should be sent to:

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Made In China



## TRUCK WINCH RFX10042 & RFX10045 9500lb



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# RFX TRUCK ACCESSORIES

## OWNER'S MANUAL

Thank you for choosing a RFX Winch. Please read this manual carefully to obtain ideas on how to operate your winch safely and effectively.

Safe installation and operation of this winch is your responsibility. Careless operation can result in serious injury or property damage.

### CONTENTS

Features & Specifications .....	1
Safety Information .....	2
Installation .....	5
- winch mounting .....	5
- wiring .....	6
Operating Instructions .....	8
- switch .....	8
- clutch .....	8
- winch .....	8
- respooling .....	9
Safe operating positions .....	9
Stretching wire rope .....	9
Wire rope replacement .....	10
Maintenance .....	10
Troubleshooting .....	10
Parts List .....	11
Exploded View Diagram .....	12
Warranty .....	13

### CAUTION

**Safe installation and operation of this winch is your responsibility.  
Use caution at all times.**

## 9,500lb. (Model-RFX10042 & RFX10045)

Rated Line Pull:	9,500 lbs. (4309 kgs)
Motor:	12V DC 5.5hp (4.0 kW) Series Wound
Control:	Remote hand held with 12' (3.7m) lead
Gear Train:	3 stage Planetary
Gear Ratio:	265:1
Clutch:	Freespooling
Brake:	Automatic Load Hold
Drum Dia. X L:	2.5" x 8.8" (63.5mm x 223.5mm)
Battery Leads:	1ga x 6' (7.5mm x 1.83m)
Overall Dimensions (LxWxH):	21.7"x 6.3"x 8.6" (551.2 x 160 x 218.4mm)
Mounting Bolt Pattern:	10" x 4.5" (254 x 114.3mm)

### PART# RFX10042

Wire Rope Dia. x L:	21/64" x 100' (8.3mm x 30.48m)
Net Weight:	84 lbs. (38 kgs)

### PART# RFX10045

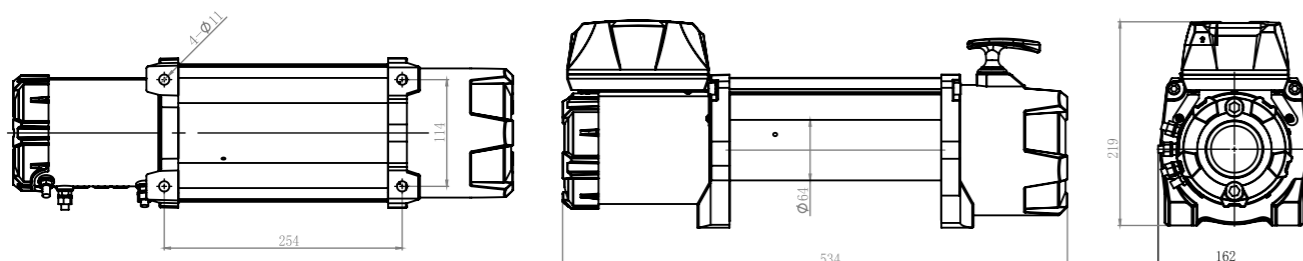
Rope Dia. x L:	9mm X 85'
Net Weight:	61lbs(28kgs)

### PULL, SPEED, AMPS

Line Pull lbs. (kgs)	Line Speed ft./min. (m/min.)	Current A
0	24.6 (7.5)	80
2,000 (907)	14.4 (4.4)	180
4,000 (1814)	10.6 (3.2)	240
6,000 (2722)	8.5 (2.6)	280
8,000 (3629)	7.0 (2.1)	330
9,500 (4309)	6.4 (2)	380

### LINE PULL AND ROPE CAPACITY IN LAYER

Layer	Rated Line Pull lbs. (kgs)	Total Rope on Drum ft. /m
1	9,500 (4309)	16.2 (4.9)
2	7,700 (3493)	39 (11.9)
3	6,500 (2948)	68.2 (21)
4	5,700 (2585)	100 (30.48)



## SAFETY INFORMATION

### CAUTION

Safe installation and operation of this winch is your responsibility. Use caution at all times.

### CAUTION

This winch has very high line speeds. Use extreme caution during spooling operations.

### WARNING

Read, study and understand this manual before installing or operating this winch.

Do not exceed maximum line pull ratings.

Never allow shock loads to be applied to the winch or wire rope. A shock load can occur when an increased force is suddenly applied to the wire rope.

Keep winching area clear of objects and persons. Stand clear of wire rope, hook and fairlead opening during operation.

Do not step over or near a wire rope under load.

To hold the rated load, a minimum of (5) wraps of wire rope around the drum barrel is necessary. The wire rope clamp IS NOT designed to hold the load.

NEVER touch wire rope or hook while in tension. NEVER put your finger through the hook. This can cause serious injury if trapped. NEVER guide the wire rope onto the drum with your hand.

ALWAYS use heavy leather gloves when working with wire rope to protect hands from burrs. Do not let wire rope slide through your hands, even when wearing gloves.

Dress properly. Don't wear loose clothing or jewelry that could get caught in moving parts. Non-skid footwear is recommended.

Use supplied hook strap when handling hook during spooling operation.

LET THE WINCH DO THE WORK ! Do not move the vehicle to help pull a load on the wire rope. This could break the wire rope or damage the winch.

Use wheel blocks when vehicle is on an incline.

The winch wire rope has a painted red warning indicator on the barrel end of the rope. This warns you that the wire rope has less than 5 turns remaining. No recovery should be attempted beyond this marking. The red paint may wear during normal use. If this occurs, repaint area to maintain this important safety feature.

Winch clutch should be disengaged when winch is not in use and fully engaged when in use. NEVER release the winch clutch when there is a load on the winch.

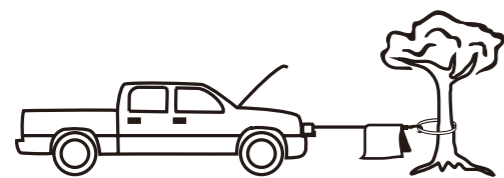
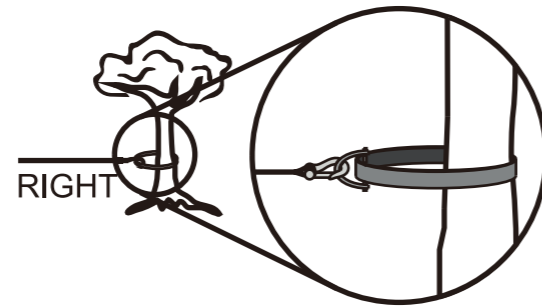
Inspect the winch installation and wire rope frequently. If wire rope is frayed, replace immediately. Use only factory authorized replacement parts (See replacement parts list). The use of another manufacturer's part could cause damage and/or injury and could void the warranty.

## SAFETY INFORMATION CONT'D

### ⚠ WARNING

Altering or modifying the winch (ie. machining or welding) in any way, will void the warranty.

NEVER hook the wire rope back onto itself. This could damage the wire rope. A tree saver is recommended.



### ⚠ WARNING

Ensure rated "Bow Shackle" is used in conjunction with approved tree saver to provide a safe connection and anchor point.  
When pulling heavy loads, put a rock bag, blanket or other heavy material over the wire rope near the hook end. If the wire rope should fail for any reason, there will be a barrier to help the rope from whipping and causing injury.  
Raise the hood of the vehicle for extra protection.

### ⚠ WARNING

Electric winches are for intermittent use only. They should not be used in constant duty applications. Keep the duration of your pulls to no more than one minute in length at or near rated load. The shorter the pull, the better. If motor becomes hot to the touch, shut off and let cool down for a 10 minutes. Do not maintain power to the winch if the motor stalls.

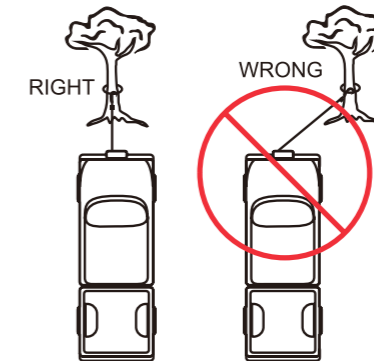
For loads over 1/2 rated capacity, use a pulley block to double line the wire rope. This will reduce the load on the winch and up to 50% of the strain on the wire rope. Attach to the frame or other load bearing part.



## SAFETY INFORMATION CONT'D

Keep your vehicle engine running during winch operation. This will maximize winch power and speed and help eliminate drain on the battery.

Avoid continuous pulls from extreme angles. This can cause the wire rope to bunch at one end of the drum resulting in damage to the wire rope or winch.



Any additional equipment used in the operation of your winch, such as straps, hooks, pulley blocks, etc., should be the proper size and capacity for the job. They should also be frequently inspected for damage or wear.

Always store the remote control assembly in a safe, dry place away from children to avoid unauthorized use and potential injury.

If working near the fairlead or winch drum, always unplug the remote control. This ensures that the winch cannot be started accidentally.

### ⚠ WARNING

To move a load, set vehicle in neutral, set parking brake and chock all wheels.  
Slowly take up the wire rope slack until taut.  
Stop and recheck all connections such as hooks and nylon slings.  
Do not use the winch to hold a load in place.  
To secure a load properly, use of tie down straps is recommended.  
**NEVER** connect winch to 110 Volt AC house current or 220V mains.  
Either incorrect connection could result in winch burnout or fatal shock.  
**NEVER** submerge your winch in water.  
**NEVER** operate a winch when under the influence of alcohol, drugs or medication.

## WINCH INSTALLATION

### ⚠ WARNING

Improper mounting can cause personal injury. It can also damage your winch and void the warranty.

### ⚠ CAUTION

A 60 AMP alternator and battery with 650 cold-cranking amperes capacity are the minimum recommended power sources.

### ⚠ CAUTION

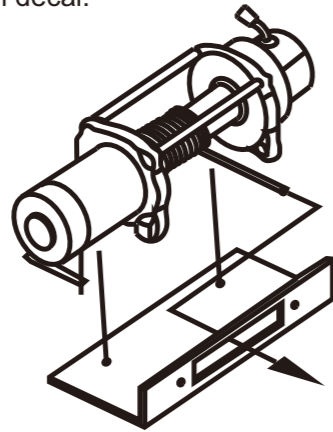
The winch electrical system should always be isolated when the winch is not in use.

## Mounting Your Winch

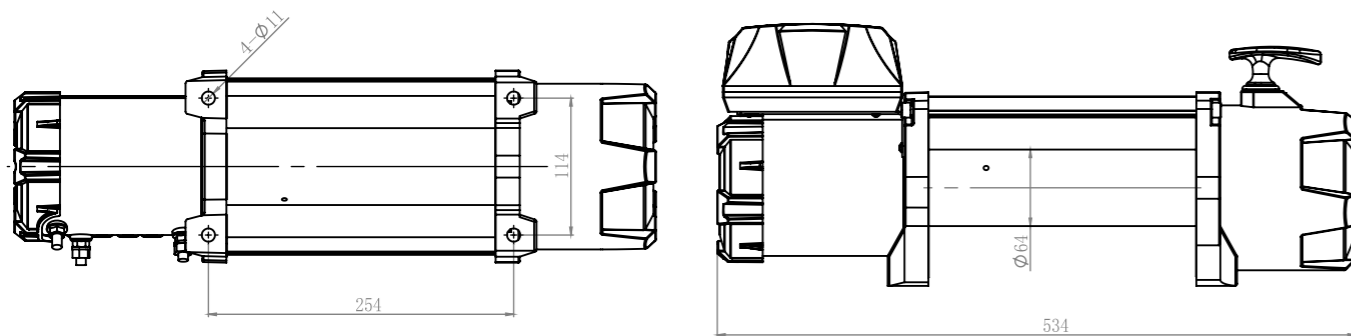
The winch in this manual is exclusively designed to be mounted on a vehicle for non-industrial applications. Any other application will void the warranty.

Choose a location to mount the winch that is strong enough to withstand the loads you intend to winch. It must be mounted on a flat surface so the motor end, drum and gear housing end are properly aligned.

The diagram below shows proper orientation for safe winching. The wire rope must always spool onto the drum as shown on the drum rotation decal.



1. Install the mounting kit or structural support for the winch.
2. The dimensions below will assist you in creating a safe mounting plate. A poorly designed mount may void the warranty.
3. The mounting plate should be a minimum of 1/4" thick (6.3mm). The ends of the mounting bolts must not bottom out on the winch frame.



### WARNING

Use protective eyewear during installation.

### CAUTION

Do not substitute any strength grade hardware weaker than U.S. SAE Grade 8.

### CAUTION

To prevent vibration during operation, use provided bolt and lock washer combinations and make sure they are secure.

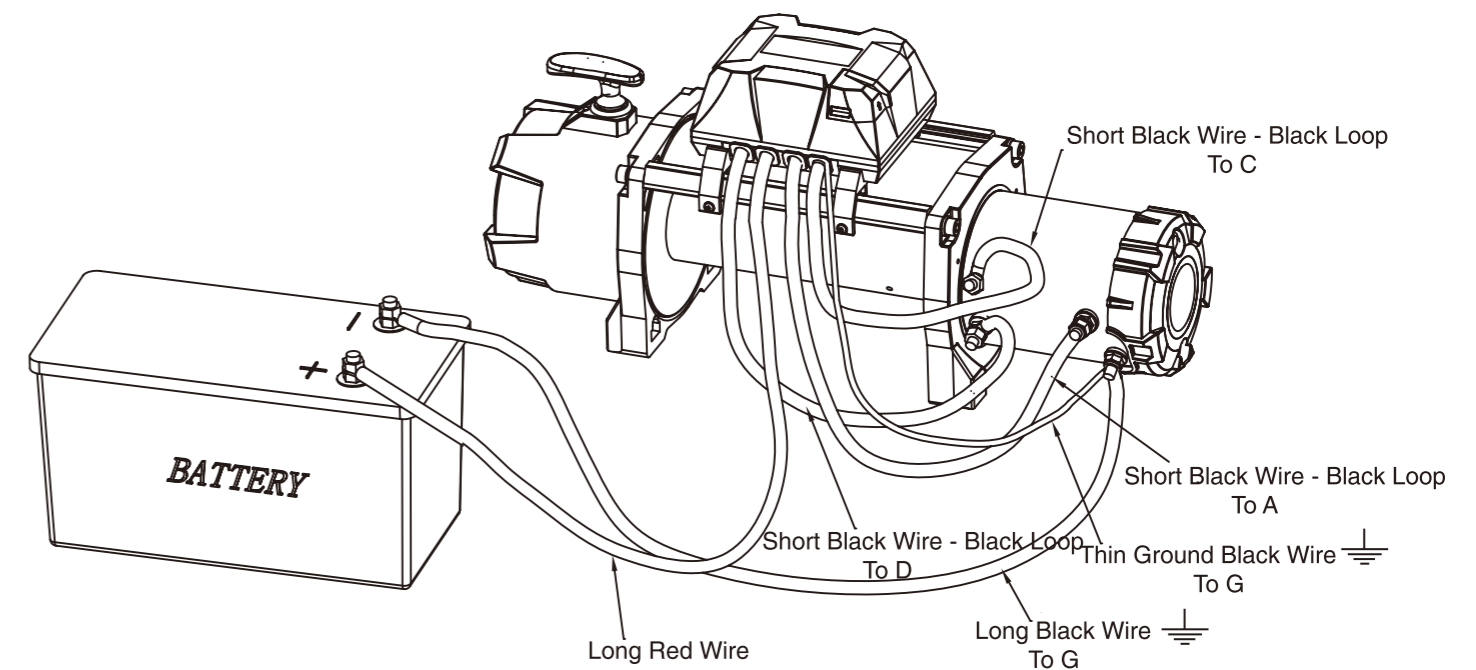
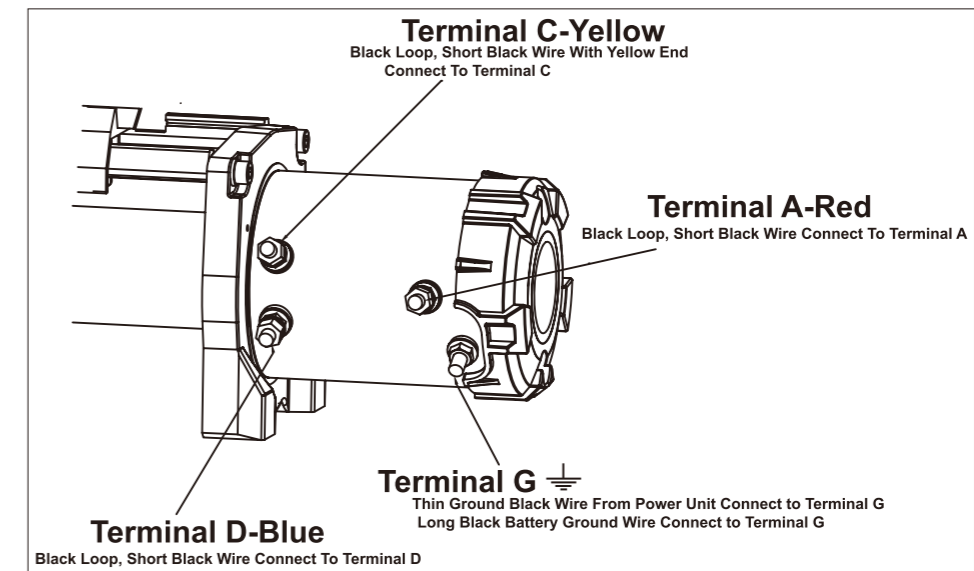
4. Attach fairlead to base plate / mounting channel, using two 12mm x 25mm bolts, two 12mm nuts, two 12mm flat and lock washers. Note: Place bolt heads on winch side of plate, Clearances may be tight.
5. Attach the winch to the base plate. Place square 10mm nuts inside slot on feet of winch. Thread 10mm x 30mm bolts with 10mm lock and flat washers through mounting holes and into nuts.
6. Put end of wire rope through fairlead and attach clevis hook. Use clevis pin and cotter pin to secure.

## WIRING

For normal self-recovery work, your existing electrical system should be adequate. A fully charged 650 cca battery and proper connections are essential. It is important to run the vehicle engine during the winching operation to keep the battery charged.

Refer to the diagram for proper electrical cable connections.

After you have completed the wiring, "disengage" the freespool clutch lever. Pull a few feet of wire rope off the drum. Return the clutch back to the "engaged" position and plug in the remote control. Start the remote briefly to check that the direction of the drum rotation is correct.



## OPERATING INSTRUCTIONS

### Remote Control

Plug the remote control into the socket on the top of the power unit. Check directions by running winch forward and reverse. Make sure that the motor has stopped fully before changing directions.

Always unplug the remote control when winch is not in use.

### Clutch

The clutch shifter is located on the gear housing end of the winch. The clutch has two positions. "OUT" or disengaged and "IN" engaged.

In the "OUT" position, the clutch is disengaged and wire rope may now be freespoiled off the drum easily for hooking onto the load or anchor point.

In the "IN" position, the clutch is engaged and the winch is now ready for pulling.

#### CAUTION

Always fully "engage" or "disengage" the clutch shifter during operation.

#### CAUTION

Always leave the clutch in the "OUT" or disengaged position when not in use.

### Winch

Make a few test runs with your winch before you actually need to use it. Watch and listen to your winch. Learn the sound of a light steady pull, a heavy pull and the sound of a load jerking or shifting. Gaining confidence will come with practice.

1. Ensure the vehicle is secure by applying the parking brake or chocking the wheels.
2. Put the clutch on the winch in the "OUT" position and pull out the wire rope to desired length and connect to anchor point.
3. Check all rigging before proceeding.
4. Plug in the remote control to the power unit assembly.
5. To begin, start engine, put vehicle in neutral.
6. Operate the remote control until the vehicle has been retrieved.
7. Only use intermittent short bursts. Check on a regular basis that the wire rope is winding onto the drum evenly.

#### CAUTION

**NEVER WINCH WITH YOUR VEHICLE IN GEAR OR IN PARK. THIS COULD DAMAGE YOUR VEHICLE'S TRANSMISSION.**

### Respooling

It is necessary to keep a slight load on the wire rope to respool correctly. With heavy gloves, hold the remote control in one hand and the wire rope in the other. Being as far away from the winch as possible and as much in the center as you can, power the winch up and start walking toward it, keeping a slight load on the wire rope. Do not allow the wire rope to slip through your hands. Do not approach the winch too closely.

Turn off the winch and repeat until all the wire rope is spooled except a few feet. Disconnect the remote control switch and spool remaining wire rope by rotating the drum by hand with the clutch disengaged or "OUT".

For hidden winches, spool in wire rope under power using the supplied hook strap.

## SAFE OPERATING POSITIONS

Always operate the winch in a safe position while pulling a load.

Safe areas include:

- a perpendicular position to the wire rope
- in the vehicle with the hood up (if winch is mounted on front of vehicle)

Operate the winch:

- at the end of the remote control cable or at least 10' (3m) from the winch in operation

This will prevent the wire rope from becoming entangled with the fairlead and keep the operator out of danger during pulling.

#### DANGER

Stay clear of wire rope under load.

## STRETCHING WIRE ROPE

#### DANGER

Clutch should be in the "OUT" or disengaged position.

The use and care of the wire rope will directly affect its lifespan. When using the wire rope for the first time, spool out the wire rope to the last 5 wraps on the drum. Under a load of 550 lbs (230kg) or more, reel in the rest of the wire rope under power. This will provide a good wire wrap around the drum, making it less likely to bind and cause damage to the wire rope.



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## BRAKE

This winch is equipped with an automatic load hold brake in the drum. It automatically activates when the winch is in gear and rotates in the OUT direction. It does not activate when the winch is spooled out in FREESPOOL mode. We recommend Powering OUT should be limited in use to only when necessary to maximize life of brake.

## POWER OUT

use Power out sparingly. Typical use of Power Out would be for adjusting load position. Over use of Power Out will prematurely wear out brake in drum

## WIRE ROPE REPLACEMENT PROCEDURES

If wire rope replacement is needed, follow these instructions using Bulldog authorized replacement parts. (See attached replacement parts list)

1. Make sure there is **NO** power to the winch.
2. Unwind wire rope along the ground to avoid kinking.
3. Remove old wire rope, noting how it's attached to the drum flange.
4. Wrap the drum end of the new wire rope with electrical tape to prevent fraying.
5. With no power to the winch, reverse the removal process to attach the wire rope and wire rope clamp to the drum. Use Loctite ® 222 to prevent loosening of the clamp screw.
6. Wind 5 wraps of wire rope onto the drum. Wind the rest of the wire rope by pulling a light load. This will ensure a constant tension. (Follow "Stretching Wire Rope" section)

## BATTERY RECOMMENDATIONS

A fully charged battery and proper connections are needed to effectively operate your winch. The minimum requirement for a 12 volt DC battery is 650 Cold Cranking Amperes.

## MAINTENANCE

Your winch has been lubricated at the time of assembly. No additional lubrication is required. Occasionally you may want to lubricate the wire rope with penetrating oil for smoother operation.

Inspect the wire rope frequently. If it shows signs of wear or damage, such as broken strands, replace immediately. (See Replacement Parts List)

Periodically check the tightness of mounting bolts to ensure smooth operation.

Corrosion on electrical components can reduce your winch's performance. Check battery cables and all electrical connections monthly, making sure they are tight and clean. A silicone sealer can be used for extra protection.

Corrosion of internal motor components may occur due to condensation. To minimize this, power the winch occasionally to generate heat to help dissipate any moisture build-up.



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## TROUBLESHOOTING GUIDE

Condition	Possible Cause	Correction
MOTOR RUNS IN ONE DIRECTION ONLY	Defective or stuck solenoid	Take cover off solenoid assembly and tap each solenoid to free contacts. Apply power, listen for a clicking noise when energized.
	Defective remote control	Replace remote control. Contact Customer Service.
MOTOR RUNS EXTREMELY HOT	Too long period of operation	Cool off for 10 minutes and try again. (Winch is for intermittent use only)
	Insufficient battery	Check battery terminal voltage under load. If 10 volts or less, replace or parallel another battery to it.
MOTOR RUNS, BUT INSUFFICIENT POWER, OR LOW LINE SPEED	Bad connection	Check battery cable for corrosion. Clean and grease.
	Insufficient charging system	Replace with larger capacity charging system / alternator.
MOTOR RUNS, BUT DRUM DOES NOT TURN	Clutch not engaged	If clutch engaged but symptom still exists, contact Customer Service.
MOTOR WILL NOT OPERATE	Defective or stuck solenoid	Tap each solenoid to free contacts. Apply power, listen for a clicking noise when energized.
	Defective remote control	Contact Customer Service.
	Defective motor	If solenoids operate, check for voltage at terminal B of the motor. If voltage is okay, contact Customer Service.
	Loose connections	Clean and tighten all connections.
MOTOR WATER DAMAGED	Water from a high pressure car wash	Allow to drain and dry completely. Run motor without load in short bursts to dry windings.

## PART LIST

Item No.	Qty	Description
1	4	Hexagon socket head cap screw M8*25
2	1	motor end cap
3	1	motor
4	4	nut M4 assy
5	1	motor base
6	2	sliding bearing
7	2	seal ring
8	1	break assy
9	1	rope
10	10	screw M4*16
11	10	spring washer $\phi$ 4
12	1	drive shaft
13	1	sun gear
14	1	oil bearing
15	1	gear box
16	1	clutch knob assy
17	1	gear carrier, input
18	1	gear carrier inmediate
19	1	washer
20	1	gear carrier,output
21	1	clutch gear
22	1	gasket
23	1	gear box base
24	1	drum
25	2	tie bar
26	2	nut assy
27	1	roller fairlead
28	1	3/8 hook
29	1	hand saver strap
30	1	switch assy
31	1	control box bottom cover
32	1	solenoid
33	2	screw M6*6
34	1	control box top cover
35	1	screw M3*12
36	1	water proof cover
37	1	socket
38	2	nut M3
39	4	protecting bush
40	2	bracket
41	2	screw M4*24
42	2	control box mounting hardware
43	1	left bracket
44	1	right bracket
45	2	screw M5*10
46	8	screw M4*6

