

RES-Q TETON Winch Series with Integrated Solenoid & Synthetic Winch Cable

Assembly and Installation Manual #92128-1001 & #92128-1101



! WARNING !

READ ALL SAFETY MESSAGES AND UNDERSTAND ALL INSTRUCTIONS AND PROCEDURE NOTICES BEFORE ATTEMPTING TO INSTALL OR USE THIS PRODUCT.

REQUIRED TOOLS:

Safety Glasses
Safety Gloves
Torque Wrench
13 MM Wrench

15 MM Socket
16 MM Wrench
2.5 MM Hex (Allen®) Key
#1 Phillips Head Screwdriver



A Few Words About Product Safety:

Your safety and the safety of others is very important. To help you avoid risks and make informed decisions this manual contains safety messages about your Q-Performance Series self-recovery winch. Individual safety messages and sections of this manual may be preceded by the safety alert symbol **⚠** and one of three signal words:

⚠ WARNING ⚠

A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY. YOU CAN BE KILLED OR SERIOUSLY HURT IF YOU DO NOT FOLLOW INSTRUCTIONS.

⚠ CAUTION ⚠

A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN MINOR OR MODERATE INJURY. YOU CAN BE MODERATELY HURT AND ALSO MAY SUFFER PROPERTY DAMAGE IF YOU DO NOT FOLLOW INSTRUCTIONS.

NOTICE

CAREFUL ATTENTION IS REQUIRED TO THIS INSTRUCTION OR OPERATION BUT DOES NOT GENERALLY RELATE TO PERSONAL INJURY. DAMAGE TO YOUR QUADRATEC® PRODUCT OR OTHER PROPERTY MAY RESULT IF YOU DO NOT FOLLOW INSTRUCTIONS.

UNPACKING:

When unpacking, check to make sure all parts are included. If any part is missing or broken, please call Quadratec Customer Service at 800-745-6037 as soon as possible.



ASSEMBLY & INSTALLATION:



FIRE/ELECTRICAL SPARK/CHEMICAL BURN HAZARDS:
CONNECTING WINCH TO BATTERY AND WINCH OPERATION MAY CAUSE ELECTRICAL ARCS.
NEVER INSTALL OR USE WINCH WHERE GASOLINE LEAKS, VAPORS OR OTHER FLAMMABLES ARE PRESENT.

CAUTION

ALWAYS WEAR EYE PROTECTION & REMOVE JEWELRY WHEN WORKING WITH BATTERY OR INSTALLING WINCH ELECTRICAL CABLES. PLAN CONNECTIONS TO AVOID FUEL LINES, HOT OR ROTATING PARTS. NEVER ROUTE ELECTRICAL CABLE OR WINCH CONTROLLER ACROSS SHARP EDGES, DOORS OR OTHER PINCH POINTS.



ALWAYS USE SUPPLIED TERMINAL BOOTS, INSULATE ANY OTHER EXPOSED CONNECTIONS AND NEATLY SUPPORT ALL WIRING. DEPENDING ON YOUR LEVEL OF KNOWLEDGE REGARDING ELECTRICAL WIRING, YOU MAY WISH TO HAVE THIS PROCEDURE PERFORMED BY A QUALIFIED TECHNICIAN.



Electric Cable Connection:

Attach the black (negative) ground cable to motor terminal and black solenoid ground wire with brass bolt. Tighten the brass bolt onto terminal using a 13mm wrench. Then attach positive and negative cables to their corresponding battery terminals.

DO NOT OVER TIGHTEN.



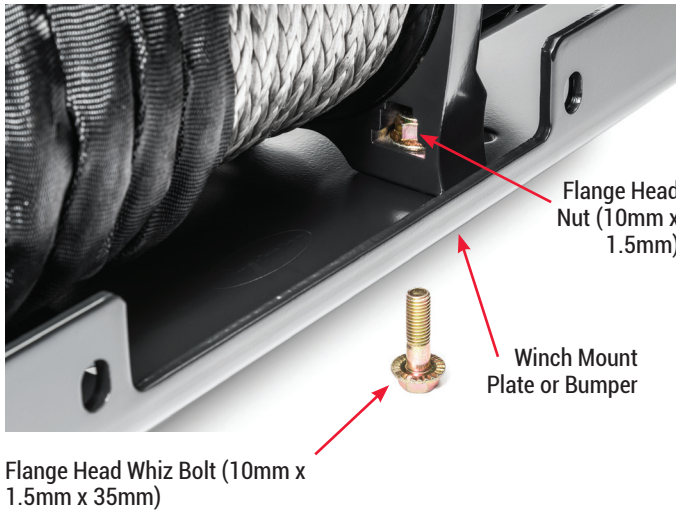
ASSEMBLY & INSTALLATION (CONTINUED):

⚠ CAUTION ⚠

BATTERY CABLES SHOULD NOT BE DRAWN TAUT. LEAVE SLACK FOR SOME CABLE MOVEMENT. THE BATTERY CABLES SHOULD BE SECURE, OUT OF THE WAY OF MOVING PARTS, ROAD DEBRIS, OR ANY POSSIBILITY OF BEING DAMAGED BY OPERATION OR MAINTENANCE OF VEHICLE. FOR EXAMPLE, THE BATTERY CABLES MAY BE ROUTED UNDER THE VEHICLE, ATTACHING THEM TO THE FRAME USING SUITABLE FASTENERS SUCH AS CABLE TIES (NOT INCLUDED).

⚠ CAUTION ⚠

DO NOT ATTACH BATTERY CABLES TO THE EXHAUST SYSTEM, DRIVE SHAFT, EMERGENCY BRAKE CABLE, FUEL LINE, OR ANY OTHER COMPONENTS WHICH MAY CAUSE DAMAGE TO THE BATTERY CABLES THROUGH HEAT OR MOTION, OR CREATE A FIRE HAZARD. IF A HOLE IS DRILLED THROUGH THE BUMPER OR ANY OTHER PART OF THE VEHICLE, MAKE SURE TO INSTALL A RUBBER GROMMET (NOT INCLUDED) IN THE HOLE TO PREVENT FRAYING OF THE BATTERY CABLES AT THAT POINT. THE USE OF AT LEAST A 650 COLD CRANKING AMPS (CCA) BATTERY IS HIGHLY RECOMMENDED.



Winch Mounting:

Mount the supplied Hawse Fairlead to the Mounting Frame (not included) using supplied Bolts and Nuts.

The winch MUST be properly secured to a winch mount bumper or an approved winch mount plate with the included 10mm nuts and bolts (qty 4/each).

There are machined pockets at each of the four inside base corners that fit a flange head whiz nut. Place a nut into each pocket and center the winch over the mounting base holes. Tip: a touch of bearing grease can hold the 4 nuts in place prior to fastening the flange head whiz bolts. In some rare mounting situations drilling for bolt holes may be required. Using a 15mm socket, thread the four 10mm x 1.5 x 35mm bolts through the bottom of the winch mount plate or bumper and into the whiz nuts.

Use a torque wrench and 10mm socket and torque each mounting bolt to 50 Ft-lbs.

Synthetic Winch Line Pre-Tensioning:

The winch line must be pre-tensioned prior to use. Do NOT use winch line without pretensioning it.

First, place clutch in Free Spool position and slowly pull all of the winch line from the drum.

Thread the winch line through the fairlead. You now need to pre-stretch winch line to ensure even stretching. To stretch winch line, begin with 5 or 6 snug wraps around the drum and set up a secure anchor point.

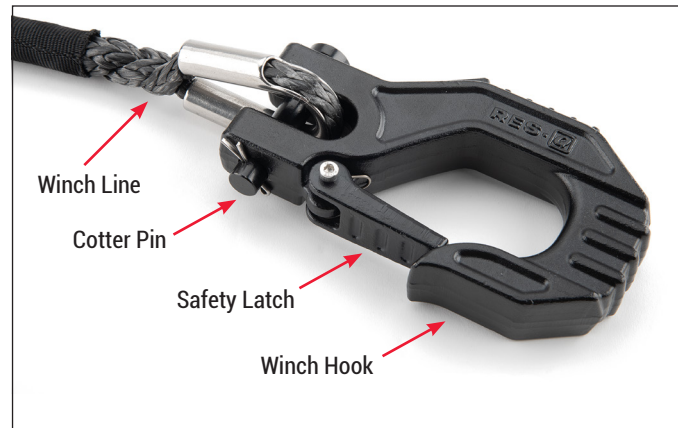
Pull vehicle (in neutral gear) with the winch up a slight flat incline. See your glovebox sized "Self-Recovery Winch Operator's Guide" to properly set up this pull with full understanding of all safety precautions. To fully stretch the winch line, you will need about 500 lbs. of tension on the cable during the operation. Once you have completed the pull, be sure to rewind cable in tight rows not allowing upper rows to intertwine with lower rows. Review Operator's Guide for this extremely important procedure.



ASSEMBLY & INSTALLATION (CONTINUED):

Attach the Winch Hook to Synthetic Winch Line:

Attach as shown using the included cotter pin through the clevis pin. Spread the cotter pin ends to secure the hook. Be sure to keep the safety latch clean and lubricated at all times.



CAUTION

CAREFULLY STUDY WINCH USER GUIDE SUPPLIED WITH YOUR WINCH.

Learn to Winch Properly:

Your winch should add greater utility and enjoyment to your off-road adventures. Keep in mind, however, the weight of your vehicle and the forces required to move it create certain hazards. Self recovery that is safe for you, bystanders and the environment requires product knowledge, planning and practice. Be aware there are specific techniques and hazards associated with recovery winching. Begin by understanding ALL Safety Information found in this winch installation manual and then supplement your knowledge by studying the supplied glovebox-sized RES-Q Winch Operator's Guide Manual and also by learning from more experienced off-road enthusiasts. The broad conditions where winch-based self-recovery are required are discussed in the supplied glovebox sized guidebook. Keep the supplied booklet in the winch installed vehicle glovebox after winch installation as a handy reference. Develop and rely on your own good judgement at all times.

REMOTE CONTROLLER SETUP:



Charging the Winch Controller:

Your winch controller features an internal 3.7V lithium battery for wireless and wired operation. Before using the winch controller, plug the mini-USB cord into the bottom of the controller and the standard USB end into any USB port to ensure that the battery is fully charged. While charging, the red WIRELESS light will be illuminated. Once the red WIRELESS light is no longer illuminated, charging is complete and the controller is ready for use. NOTE: The winch controller can still be used in the wired mode if the battery is not charged, but the blue "WIRED" indicator light will not be illuminated.



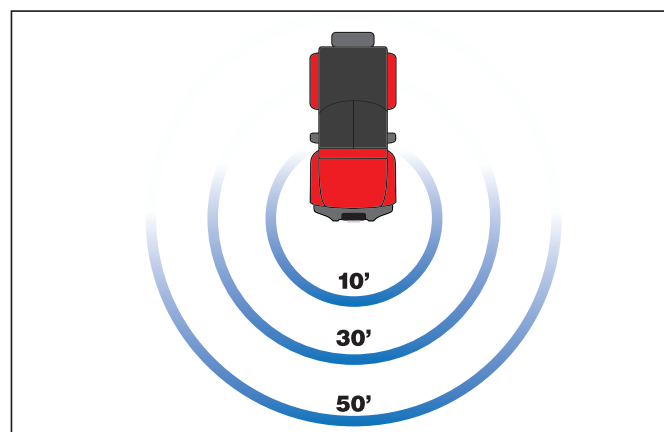
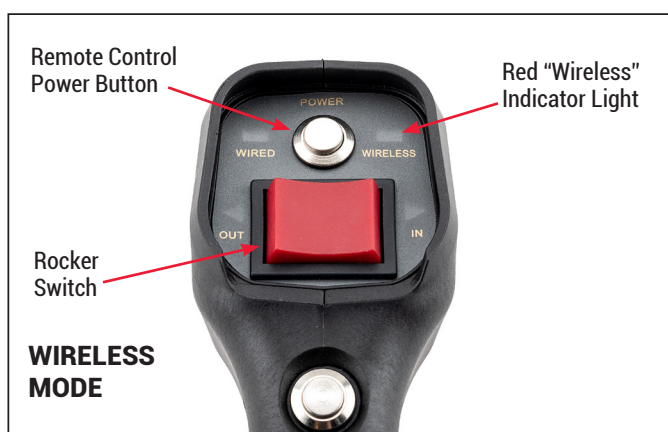
REMOTE CONTROL SETUP (CONTINUED):



Using the Winch Controller in Wired Mode:

When using the wired mode DO NOT activate the POWER button on the winch. The controller cannot function with the power button activated while the remote cable is attached to the winch. Unscrew the socket dust cap on the bottom of the remote controller handle. Plug the 12' long remote cable into the bottom of the controller by aligning the cable plug with the socket using the white index marks. Thread the securing collar onto the remote handle to ensure a proper connection. Loosen the rubber plug cover on the right-hand side of the winch (as you are facing the front of the winch). Plug the "D" shaped end of the remote cord into the socket and ensure that the plug is fully engaged. If your controller battery is fully charged, the Blue "WIRED" indicator light will be illuminated. You will also notice the white winch drum light.

NOTE: The AMBER winch drum light is NOT available while using the WIRED remote controller mode. With the winch in the FREE SPOOL mode, test the Line OUT and IN functions of the winch drum using the red rocker switch on the remote.



Depress the red rocker switch for only a few seconds out and in. Your winch is now activated and ready for use. The winch will remain powered up if the remote is plugged into the winch. The winch will automatically power down when the remote cord is disconnected. NEVER leave the remote controller plugged into the winch when the winch is unsupervised or not in use.

NOTICE	<p>THE POWER BUTTON MUST BE OUT FOR WIRED CONTROL OF THE WINCH.</p> <p>THE POWER BUTTON MUST BE IN FOR WIRELESS CONTROL OF THE WINCH.</p> <p>PRESSING AND RELEASING THE POWER BUTTON WHILE THE WINCH MOTOR IS ROTATING WILL IMMEDIATELY STOP ROTATION.</p>
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REMOTE CONTROLLER SETUP (CONTINUED):

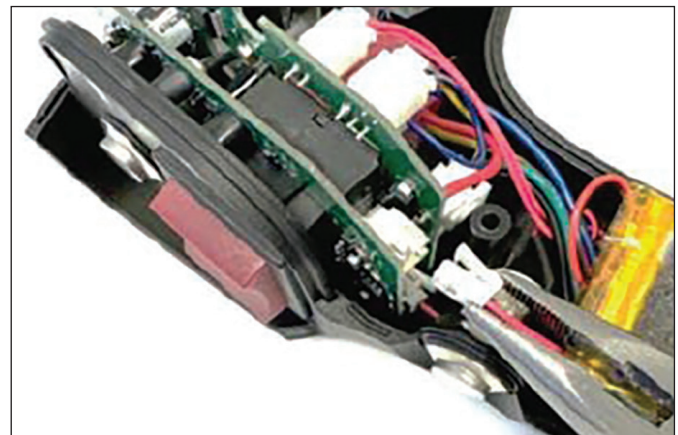
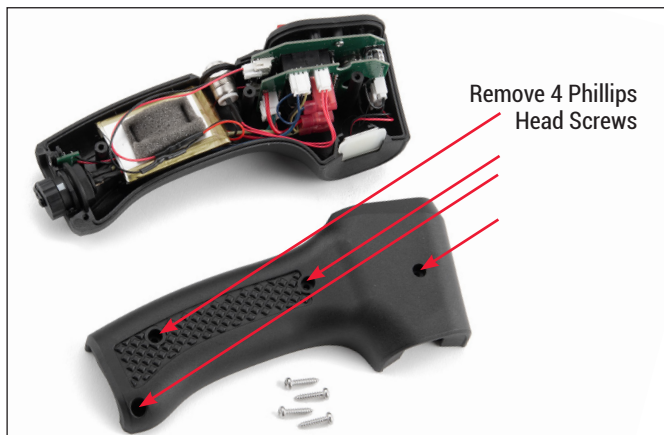
Using the Flashlight feature:

Press and release the lower power button on the controller handle to turn the flashlight feature on. Press and release the button again to turn the flashlight feature off.

Changing the Winch Drum Light Color:

The WIRELESS remote control mode allows you to change the winch drum color from white to amber. To change the drum light from the default white to the optional amber light, press and hold the secondary power button until the amber light is illuminated and release.

NOTE: The AMBER winch drum light option is NOT available when using the WIRED remote controller mode.

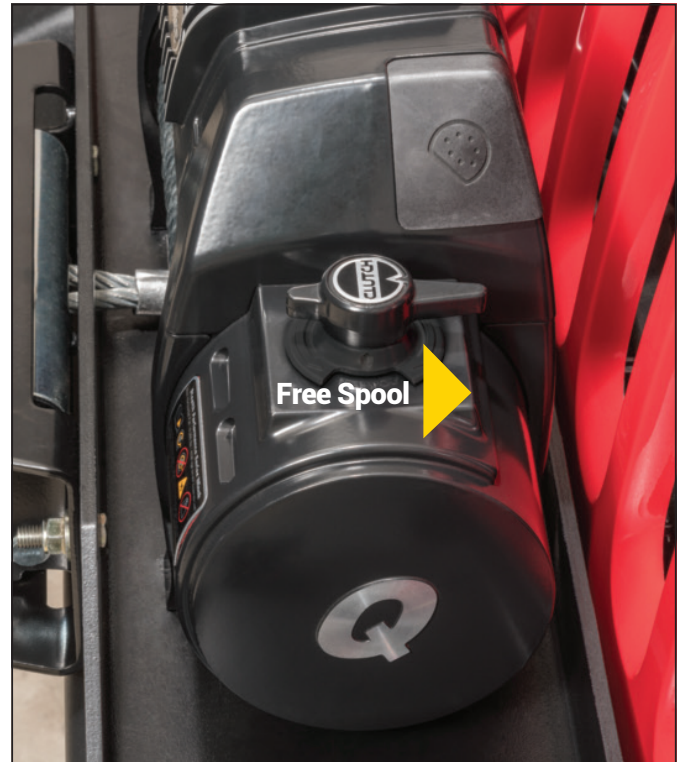


Remote Controller Battery Replacement:

Remove the four (#4 size) Phillips head screws that attach the winch controller halves. Carefully separate the halves of the controller body to access the battery. Remove the battery by disconnecting the battery terminal at the circuit board. A small pair of needle nose pliers may assist to gently release the connector. Remove the 603450 Lithium 3.7V battery and replace with new. Gently align and position the controller halves together ensure the lens.



WINCH CLUTCH OPERATION:



There are two positions of the clutch handle. The Clutch is either “engaged” or “free spooling”. Clutch allows operator to manually engage or disengage the spooling drum from the gearset using the clutch lever.

⚠ WARNING ⚠

NEVER ENGAGE OR DISENGAGE CLUTCH IF THE WINCH IS UNDER LOAD, THE WINCH ROPE IS UNDER TENSION OR THE SPOOL IS MOVING IN ANY WAY.

CLUTCH HANDLE REMOVAL (OPTIONAL):

NOTE: Our Patent Pending removable Clutch Handle doubles as a “key” that can be temporarily removed to deter winch Line theft, vandalism and pranksters. Once the Clutch Handle is removed, it can be stored in the vehicles glove box or console and used only when winching.

Clutch handle removal is optional.



Rotate Clutch Handle to the “FREE SPOOL” position to reveal the set screw that holds the handle in place. Using a 2.5 MM Allen wrench, back out the set screw until the Clutch Handle lifts off but do not remove the handle at this time. Rotate the clutch selector to the “ENGAGED” position. You may remove the Clutch Handle now and keep it in a safe place. We suggest keeping the Clutch Handle somewhere in the vehicle.



Note: If the handle is not present when winching is needed, a standard 3/8” drive socket wrench extension can be used to rotate the clutch selector mechanism.

⚠ WARNING ⚠

DO NOT KEEP THE CLUTCH HANDLE ON THE WINCH UNLESS THE SET SCREW IS FULLY ENGAGED TO SECURE THE HANDLE IN PLACE.

US PATENT PENDING



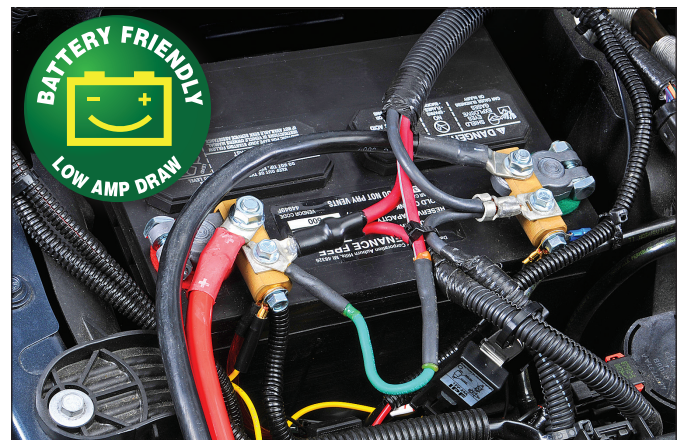
WINCH CARE AND MAINTENANCE:



Do not direct very high-pressure water at your winch. Use low-pressure (normal) car wash soap and water to clean your winch. With the remote control disconnected and the protective boots covering the remote control socket and Power Button sockets, wash normally with your vehicle. During winter exposure to road salt, wash the winch as soon as possible to avoid corrosion. Always wash per the recommendations above.

Battery Requirements:

Our powerful series wound motors and class-leading low gear ratios give fast line speeds with a "Battery Friendly" low current draw that will get the most winching time from your battery's available charge state. A fully charged battery and good connections are essential to the proper operation of your winch. The minimum requirement for a 12 volt automotive DC battery is 650 Cold Cranking Amps. Ask your Quadratic sales representative for details about heavy-duty batteries and terminals for your vehicle.



General Maintenance:

All moving parts within the winch have been lubricated at the factory using high temperature lithium grease. No internal lubrication is required. Check battery cables and electrical connections at regular 3 month intervals to be certain they are clean and tight at all connection points. Inspect winch line before & after each winching operation.



SPECIFICATIONS:



RES-Q TETON 10 Winch Series with Synthetic Winch Cable

Rated Line Pull (Single Line)	10,000 lbs (4536 kgs)
Gear Reduction Ratio	210:1
Motor (Series Wound)	12 Volt / 4.9 hp (3.65 kW)
Drum Size	2.64" x 8.35" (67mm x 212mm)
Steel Winch Cable	3/8" x 82'
Overall Dimension	21" x 6.375" x 10" (533.4 mm x 162 mm x 254 mm)
Net Weight	69 lbs (31.3 kgs)
Mounting Bolt Pattern	10" x 4.5" (254mm x 114.3mm)

RES-Q TETON 12 Winch Series with Synthetic Winch Cable

Rated Line Pull (Single Line)	12,000 lbs (5443 kgs)
Gear Reduction Ratio	294:1
Motor (Series Wound)	12 Volt / 4.9 hp (3.65 kW)
Drum Size	2.64" x 8.35" (67mm x 212mm)
Steel Winch Cable	3/8" x 82'
Overall Dimension	21" x 6.375" x 10" (533.4 mm x 162 mm x 254 mm)
Net Weight	69 lbs (31.3 kgs)
Mounting Bolt Pattern	10" x 4.5" (254mm x 114.3mm)



TROUBLESHOOTING:

Problem	Possible Cause	Possible Solution
When remote control switch is activated, a clicking sound occurs and winch does not operate in either the power in or power out mode.	Battery is inadequate or defective.	Replace battery with 650 cold cranking amp rating or greater.
	Battery is not fully charged.	Charge the battery.
	Faulty battery cable or connections.	Clean & tighten all battery connections.
	Poor electrical grounding of thermo relay wire.	Be sure connections are clean and tight.
	Worn or damaged motor brushes.	Replace winch motor.
	Vehicle not running.	Start vehicle & keep running during winching.
Winch lacks power, pulls slower than normal, stalls or does not run at all.	Ground and power cables are loosely connected to battery or winch terminals.	Be sure connections are clean & tight.
	Battery is not fully charged.	Charge the battery.
	Battery is inadequate or defective.	Replace battery with 650 cold cranking amp rating or greater.
	Battery terminals are corroded.	Clean battery terminals.
	Vehicle not running.	Start vehicle & keep running during winching.
When winch control is activated, the winch operates only in one direction.	Remote control is damaged.	Check remote control & it's cable. Check all connections & replace if necessary.
	Ground & power cables are loosely connected to battery or winch terminals.	Be sure connections are clean & tight.
	Battery is not fully charged.	Charge the battery.
	Battery is inadequate or defective.	Replace battery with 650 cold cranking amp rating or greater.



TROUBLESHOOTING:

Problem	Possible Cause	Possible Solution
When winch control is activated, the winch operates only in one direction (Continued).	Battery terminals are corroded.	Clean battery terminals.
	Solenoid inside the control pack is stuck or damaged.	Replace solenoid Module.
	Vehicle not running.	Start vehicle & keep running during winching.
Winch does not hold a load.	Winch line is spooled onto winch drum in the wrong direction.	Winch line must exit from the bottom of the drum. Re-Spool in the proper direction.
	Load exceeds winch rating.	DO NOT exceed the line pull rating shown the the ID label on the winch motor. Refer to the winch operator's manual for correct rating.
	Brake inside the winch drum is badly worn or broken.	Replace entire drum & brake assembly.
Winch line has difficulty spooling off the winch drum by hand.	Bent drum side flange.	Replace drum.
	Worn drum bearing surfaces.	Replace motor sub-assembly and/or clutch sub-assembly.
	Free spool clutch is damaged.	Remove & inspect gear carrier assembly. Inspect output gear, intermediate gear, input gear, sun gear ring & gear ring output. Remove burns with file.
	Winch is not mounted correctly or square on the winch plate.	Check mounting hole measurements for consistency & squareness. Be sure that mounting surface is flat & mounting bolts are tight.
	Internal damage to the ring gear.	Disassemble gear assembly, inspect for damage, clean & grease or replace worn or damaged parts.



RES-Q Exclusive Three Year Limited Warranty

Your Res-Q branded accessories are covered by the following Limited Warranty provided exclusively by Res-Q, 1028 Saunders Lane, West Chester PA 19380.

This **Limited Warranty** is the only warranty made in connection with your purchase. Res-Q neither assumes nor authorizes any vendor, retailer or other person or entity to assume for it any other obligation or liability in connection with this product or Limited Warranty. This Limited Warranty does not apply and is not cumulative to any accessory or part distributed by Res-Q for which the Manufacturer provides a separate written warranty.

What is Covered:

Subject to the terms, exclusions and limitations herein and with respect only to Res-Q branded accessories first sold in the United States, Res-Q warrants to the initial retail purchaser only that your Res-Q accessory shall be free of defects in material and workmanship: for a period of three (3) years from date of retail purchase.

This **Limited Warranty** is not assignable and shall terminate upon sale of the vehicle upon which the Res-Q accessory is installed or other transfer to third persons.

All other warranties are hereby disclaimed, except to the extent prohibited by applicable law in which case any implied warranty of merchantability or fitness for a particular purpose on this product is limited to three (3) years from date of initial retail sale. Res-Q reserves the rights to: **(a.) require invoice or other proof your accessory is within the terms of this Limited Warranty as a condition of warranty service and, (b.) make future revisions to this product and Limited Warranty without prior notice or obligation to upgrade your product.**

What is Not Covered:

Your Res-Q Limited Warranty does not cover products or parts Res-Q determines to have been damaged by or subjected to:

(a.) installation damage, alteration, modification, combination with other parts, failure to maintain or improper repair or service, (b.) normal wear & tear, cosmetic damage or damage from moisture or water immersion, (c.) Acts of God, accidents, misuse, negligence, inadequate mounting or impact with vehicle(s), obstacles or other aspects of the environment, (d.) theft, vandalism or other intentional damage.

Remedy Limited to Repair/Replacement:

The exclusive remedy provided hereunder shall, upon Res-Q inspection and at our option, be either repair or replacement of product or parts (new or refurbished) covered under this Limited Warranty. Customers requesting warranty consideration should first contact Res-Q to obtain a RGA number (610-701-3336). All labor, removal, shipping and installation costs are customer's responsibility.

Other Limitations - Exclusion of Damages - Your Rights Under State Law:

In consideration of the purchase price paid, neither Res-Q nor any independent Res-Q distributor/licensee are responsible for any time loss, rental costs, or for any incidental, consequential, punitive or other damages you may have or incur in connection with any part or product purchased. Your exclusive remedy hereunder for covered parts is repair/replacement as described above.

This **Limited Warranty** gives you specific rights. You may also have other rights that vary from state to state. For example, some states do not allow limitations of how long an implied warranty lasts and /or do not allow the exclusion or limitation of incidental or consequential damages, so the limitations and exclusions herein may not apply to you.

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A4 Version 7/26/23

Instructions Part #12999-3303





RECOVERY GEAR