

Assembly and Installation Manual #92122.202X



**AWARNING A** 

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

REQUIRED TOOLS: SAFETY GLASSES GLOVES TORQUE WRENCH 10 MM SOCKET 14 MM WRENCH 4 MM HEX (ALLEN®) KEY NEEDLE NOSE PLIERS



### 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 O-Series self-recovery winch. Individual safety messages and sections of this manual may be preceded by the safety alert symbol *I* [in triangle] and one of three signal words:



### **Unpacking:**

When unpacking, check to make sure all parts are included. Compare to photo below. If any part appears to be missing or broken, please call Quadratec Customer Service toll free at 800-745-6037 as soon as possible.





### **Assembly and 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. **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 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 black ground cable to motor terminal and black thermo relay wire with brass bolt. Tighten brass bolt onto terminal using a 14mm wrench.

### DO NOT OVER TIGHTEN.



### Assembly and Installation (Continued)

# **ACAUTION A**

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 the 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). **DO NOT** attach the 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.



Flange Head Whiz Bolt (10mm x 1.5mm x 35mm)

Winch Mount Plate or Bumper

### Winch Mounting

Mount the supplied Roller 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 winch 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. 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.

### Winch Hook Assembly (Figure 1)





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### **Installation** (Continued)

### Winch Hook Assembly (continued)

As shown in Figure 1, Pull the Cable through the Fairlead and connect the Hook and Safety Pin. Attach winch hook to the winch cable as shown using the cotter pin. Spread the cotter pin ends to secure the hook.

### **Clocking Instructions**

For some winch installations, it may be necessary to rotate the gear housing to make room for clutch handle operation. To rotate the gear housing, remove all the 11 socket cap screws using a 4mm allen key. Rotate the gear housing to the desired location and reinstall the 11 fasteners. Note: There are 12 different positions at 30° increments allowing a full 360° rotation.



Shown: Clocked at Zero Degrees from Factory

### 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 O Series **Winch Use Guide Booklet** 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 judgment at all times.** If you have a question specific to your purchase, our customer service staff is standing by. Call or toll free: (800) 745-6037 or visit our #1 rated website at quadratec.com



# **SPECIFICATIONS**



# Q9500i Winch

Rated Line Pull (Single Line)	9500 lbs (4309 kgs)
Gear Reduction Ratio	212:1
Motor (Series Wound)	12 Volt / 4.8 Hp (3.6 Kw)
Drum Size	2.64" x 9" (67mm x 228mm)
Cable Supplied	3/8" x 100'
Aircraft Cable	Minimum Break Force 14,400 lbs.
Overall Dimension	22.44" x 6.6" 11.22" (570mm x 168mm x 285mm)
Net Weight	94.8 lbs. (43 kgs)
Mounting Bolt Pattern	10" x 4.5" (254mm x 114.3mm)

# Q11500i Winch

Rated Line Pull (Single Line)	11500 lbs (5216 kgs)
Gear Reduction Ratio	295.75:1
Motor (Series Wound)	12 Volt / 4.8 Hp (3.6 Kw)
Drum Size	2.64" x 9" (67mm x 228mm)
Cable Supplied	3/8" x 100'
Aircraft Cable	Minimum Break Force 14,400 lbs.
Overall Dimension	22.44" x 6.6" 11.22" (570mm x 168mm x 285mm)
Net Weight	96.5 lbs. (43.8 kgs)
Mounting Bolt Pattern	10" x 4.5" (254mm x 114.3mm)



# TROUBLESHOOTING

Symptom	Possible Cause	Suggested Remedy
turn on connected proper	Switch assembly not connected properly	Insert switch assembly firmly to the connector.
	Loose battery cable connection	Tighten nuts on cable connectors.
		Tap Solenoid to free contact, applying 12V (for 12V motor) or 24V(for 24V motor) to coil terminal directly. Solenoid will make an audible clicking when activating.
	Defective switch assembly	Replace switch assembly.
	Defective motor	Check voltage at armature port with switch pressed. If voltage present, replace motor.
	Water has entered motor	Drain and dry. Run in short bursts without load until completely dry.
Motor runs too hot	long period of operation	Let winch cool down periodically.
Motor runs slow or lacking power	battery run down	Recharge battery by running vehicle engine.
		Clean, tighten or replace connector.
Motor runs but cable does not turn	Clutch not engaged	Push clutch handle into IN position, if that does not work, seek professional assistance.
Motor runs in one direction only Defective or stuck solenoid   Defective switch assembly	Tap solenoid to free contacts. Repair or replace solenoid if needed.	
		Replace switch assembly.



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# **Quadratec® Limited Warranty**

### for Q-Series Self-Recovery Winches

Your Q-series self-recovery winch is covered by the following **Limited Warranty** provided exclusively by Quadratec, Inc., 1028 Saunders Lane West Chester PA 19380.

This **Limited Warranty** is the only warranty made in connection with purchase. Quadratec<sup>®</sup> 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**.

### What is Covered:

### LIFETIME MECHANICAL & 1 Year Electrical

Subject to the terms, exclusions and limitations herein and with respect only to winches first sold in the United States, Quadratec® warrants to the initial retail purchaser only that your Q-series winch shall be free of defects in material and workmanship: (a.) for so long as your Q-Series winch is owned by the initial retail purchaser with respect to mechanical and other non-electrical components and (b.) for a period of 1 year from date of purchase with respect to all electrical components (ex: motor, solenoid & control). 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 1 year from date of initial retail sale. Quadratec® reserves the rights to: (a.) require invoice or other proof your winch 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 winch.

### What is Not Covered:

Your Quadratec<sup>®</sup> Limited Warranty does not cover products or parts Quadratec<sup>®</sup> determines to have been damaged by or subjected to: (a.) installation damage, alteration, modification, failure to maintain or attempted repair or service by anyone not authorized by Quadratec<sup>®</sup>, (b.) normal wear & tear, cosmetic damage or damage from moisture or water immersion, (c.) Acts of God, accidents, misuse (including overload & continuous pulls), 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 Quadratec® inspection and at Quadratec's option, be either repair or replacement of product or parts (new or refurbished) covered under this Limited Warranty. Customers requesting warranty consideration on Q-series self-recovery winches should first contact Quadratec® 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 Quadratec® nor any independent Quadratec® 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.

Note: An extra glovebox copy of the above warranty information is supplied on a separate 5" x 7" printed card. Please retain for your records.

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