

Q-Series Electric Winch

Assembly and Installation Manual
#92122.200X



⚠ WARNING ⚠

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
10 MM WRENCH

13 MM WRENCH
14 MM WRENCH
4 MM HEX (ALLEN®) KEY
5 MM HEX (ALLEN®) KEY
P2 PHILLIPS HEAD SCREW DRIVER
NEEDLE NOSE PLIERS



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

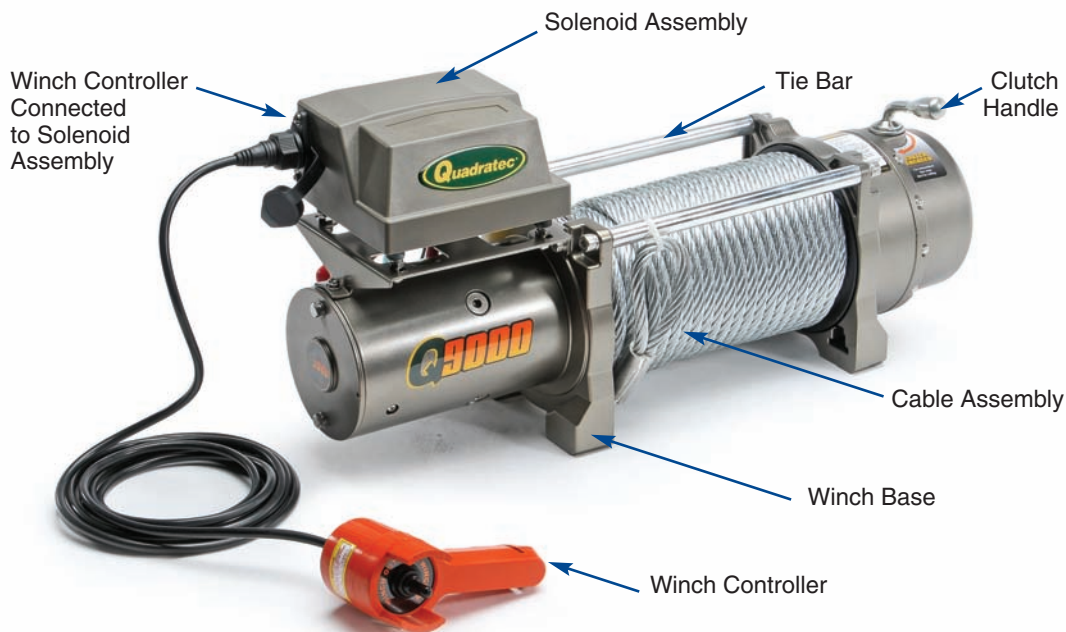
⚠ WARNING ⚠ You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

⚠ CAUTION ⚠ You CAN be HURT if you don't follow instructions.

NOTICE Other important information regarding a safe assembly or operation procedure may be emphasized by a NOTICE signal.

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.



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Assembly and Installation:

Attach the solenoid pack to the side mount solenoid bracket using a flat washer, split lock washer and nut for each of the four studs. Tighten using a 10mm wrench.

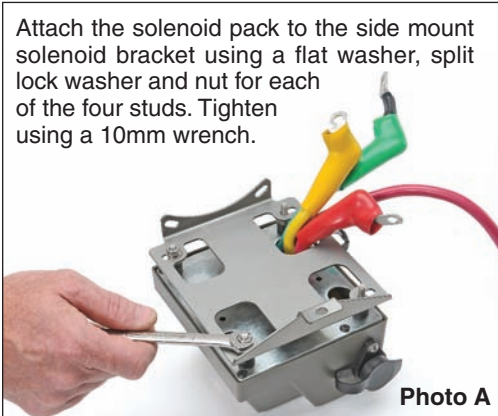


Photo A

Solenoid (Side Mount) Installation

Photo A. Carefully study the relationship between the solenoid pack and the side mount bracket. Run the four cables and black thermal relay ground wire through the bracket along with the four mounting studs as shown. Place a flat washer, lock washer and nut onto each stud and tighten with a 10mm wrench.

Photo C. Fasten a machine screw with a split lock washer followed by a flat washer. Tighten all three solenoid mount fasteners now.

NOTICE

Q-Series Winches feature two mounting positions to suit your individual applications. The Above Side Mount Installation features a Heavy Duty Solenoid Bracket (Shown Right). Some bumpers with Grille Guards or Tubular Hoops require the Q-Series Winch to Be installed using the Top Mount Solenoid Brackets. To install Winch with Top Mount Bracket, please refer to page 4 for Installation.



Photo B

Tighten both 6mm x 1mm x 12 mm screws using a 5mm hex key.

Photo B. Fasten two socket cap screws with split lock washer and flat washer to attach the bracket to the winch base. There are tapped holes on each side of the motor mount. Do not tighten until the third fastener is in place.



Photo C

Tighten the third 5mm x 8mm x 12mm screw using a P2 Phillips Screw Driver.



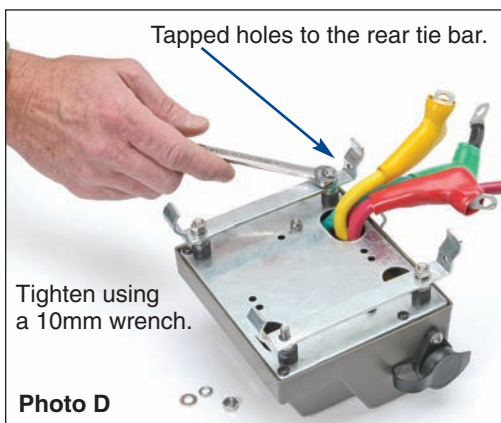
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Assembly and Installation (Continued)

⚠ CAUTION ⚠

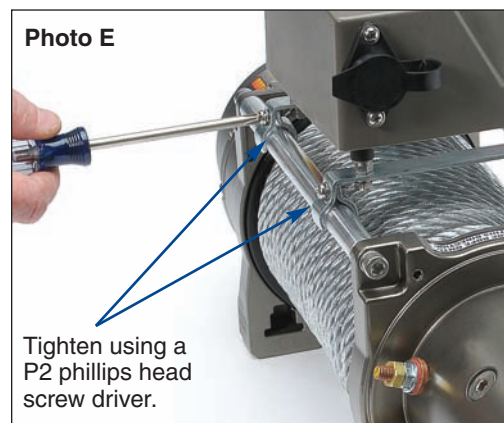
When the solenoid is mounted to the top of the tie bars, the winch power cables **MUST** be **PROPERLY** placed to the **OUTSIDE** of the rear tie bar as shown. Power cables **MUST NOT** come in contact with a rotating winch cable assembly or power cable insulation **MAY** be compromised and short circuit. Improper placement of power cables **MAY** result in damage to the winch or the vehicle.

Solenoid (Top Mount) Installation



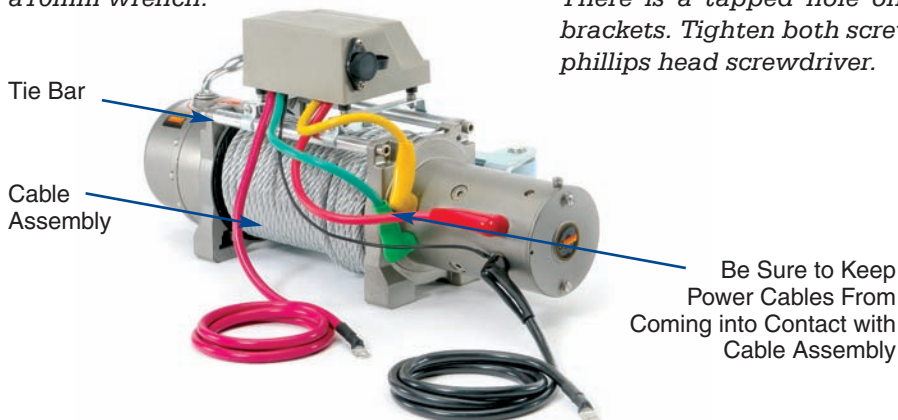
Attach solenoid pack to the top mount brackets using a flat washer, split lock washer and nut for each of the four studs.

Photo D. Note the relationship between the solenoid pack and the top mount brackets. Place a flat washer, lock washer and nut onto each stud and tighten with a 10mm wrench.



Attach the solenoid pack with mount brackets to tie bars using a phillips head screw with split lock washer.

Photo E. Center the solenoid pack onto the winch tie bars and fasten with two phillips head machine screws with split lock washers to attach the brackets. There is a tapped hole on each of the brackets. Tighten both screws using a P2 phillips head screwdriver.



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Assembly and Installation (Continued)



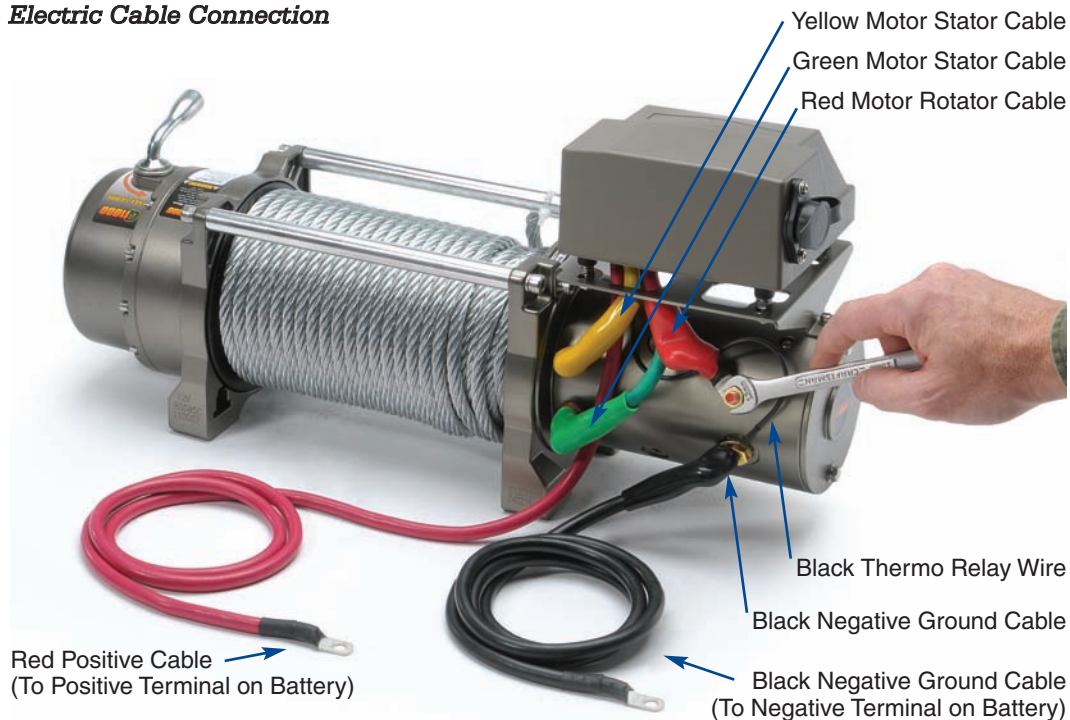
CAUTION



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 red, yellow and green short cables to motor terminals as shown. Note: The three copper terminal stud ends are color coded. Tighten all three brass nuts onto terminals using a 13mm wrench. **DO NOT OVER TIGHTEN.**

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.**

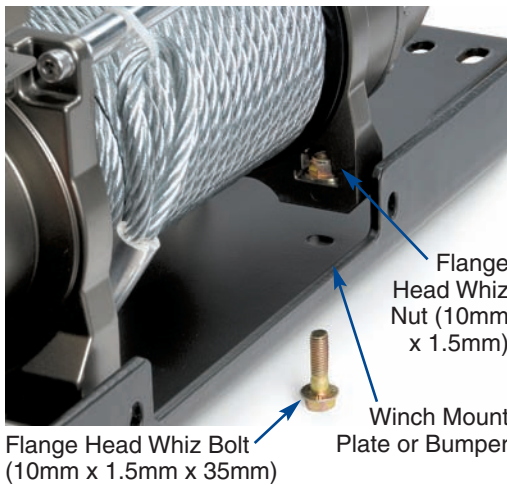


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Assembly and Installation (Continued)

⚠ 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 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.

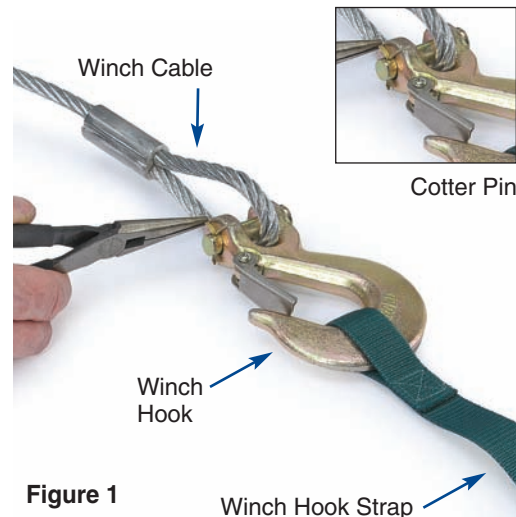


Winch Mounting

Mount the Roller Fairlead to the Mounting Frame (not included) using supplied Bolts, Nuts.

The winch **MUST** be properly secured to a winch mount bumper or an approved winch mount plate with the included 10m 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. Hint: 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.



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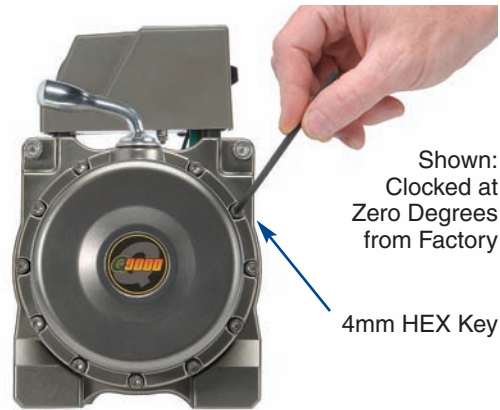
Installation (Continued)

Winch Hook Assembly

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.



Congratulations!

Thank you for purchasing your Quadratec® Q-Series self-recovery winch! 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. The broad conditions where self-recovery is required make it impractical for this manual to advise you of all techniques or

hazards associated with winching. Start with the Q-Series safety information found in this manual and supplement your knowledge by consulting off road technique manuals or more experienced Jeep® enthusiasts.

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 at our #1 rated website quadratec.com or toll free: (800) 745-6037.



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SPECIFICATIONS



Q9000 Winch

Rated Line Pull (Single Line)	9000 lbs (4090 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)

Q11000 Winch

Rated Line Pull (Single Line)	11000 lbs (5000 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	94.8 lbs. (43 kgs)
Mounting Bolt Pattern	10" x 4.5" (254mm x 114.3mm)



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TROUBLESHOOTING

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

Revised 2 / 2012



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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® 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® **Limited Warranty** does not cover products or parts Quadratec® 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®, (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 above warranty information is supplied on a separate 5" x 7" card. Please retain for your records.

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