



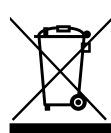
TITAN WINCH OWNERS MANUAL

WINCH MODELS:

25TTAA12-CAD , 35TTAA12-CAD
45TTAA12-CAD , 45TTSU12-CAD
60TTAA12-CAD , 60TTSU12-CAD

ENGLISH

Register your product online



Doc-rev 20250123

SAVE THESE INSTRUCTIONS. This manual contains important safety precautions which should be read and understood before operating the product. Failure to do so could result in serious injury. Specifications, descriptions and images in this manual are as accurate as known at the time of publication, but are subject to change without notice.

INTRODUCTION

Congratulations on your purchase of a winch. We design and build winches to strict specifications and with proper use and maintenance your winch should bring you years of satisfying service.

Every effort has been made to ensure the accuracy and completeness of the information in this manual at the time of publication, and we reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

SAFETY DEFINITIONS

Your winch can develop tremendous pulling forces and if used unsafely or improperly could result in property damage, serious injury or death. Throughout this manual, you will find the following symbols for caution, warning and danger. Pay particular attention to the notes preceded by these symbols as they are written for your safety. Ultimately, safe operation of this device rests with you, the operator.

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).

GETTING TO KNOW YOUR WINCH

Your winch is a powerful piece of machinery. It is important that you understand the basics of its operation and specifications so that when you need to use it, you can use it with confidence and safety. Below is a list of the components of your winch and their uses.

1. This winch is engineered for maximum line pull with only one layer of cable spooled onto the winch drum (the first layer).
2. Motor: The motor is powered by a 12-volt battery and provides power to the gear assembly which turns the drum and winds the wire rope in a direction.
3. Winch Drum: The winch drum is the cylinder on which the wire rope is stored. It can be spooled In or Out by use of the remote lead switch.
4. Winch Rope: Your winch been supplied with galvanized aircraft steel cable or synthetic rope and is designed specifically for load capacity of the rated line pull of this winch. The cable feeds on from underneath the drum position, it is looped at one end to accept the hook.
5. Fairlead (Supplied with selective models): For when using the winch at an angle the roller fairlead acts to guide the rope onto the drum evenly and minimizes damage to the rope or winch from abrasion.
6. Gear Assembly System: The reduction gears convert the winch motor power into extreme pulling forces.
7. Braking System: Braking action is automatically applied to the winch when the winch motor is stopped or there is a load on the wire rope. This is achieved by a separate external mechanical brake which applies the braking action. (Brakes are NOT designed as securing devices and the winch cables should never be left attached when vehicle / equipment is in transport).
8. Free Spooling Clutch: The clutch allows the operator to manually disengage ("CLUTCH OUT") the spooling drum from the gear train. This is called free spool. Engaging the clutch ("CLUTCH IN") locks the winch into the gear system.
9. Solenoid: Power from the vehicle battery flows through the weatherproof switch before being directed to the winch motor.
10. Wired Remote lead Switch: The remote switch leads have a dual switch for powering in or powering out your winch drum. The remote control allows you to stand clear of the wire rope when the winch is under load.
11. Wireless remote (Supplied on selective models): This is designed and offered for 'Offroad' or 'None Commercial' use only and is not included in any warranty offered, This allows the operator to always control the winch from up to 50 Ft away.
12. Pulley/Snatch Block: (Optional) If your winch is supplied with a pulley/snatch block which can double the pulling power of the winch, or change the pulling direction without damaging the wire rope. We recommend you to use a double line and snatch block for pulling over 70% of the rated line pull.

IMPORTANT SAFETY INSTRUCTIONS

DANGER

DO NOT EXCEED RATED CAPACITY.

INTERMITTENT USE ONLY - COOL BETWEEN USES.

DO NOT use winch for lifting/moving people or live animals.

A minimum of five wraps of cable around the drum barrel is necessary for pulling and holding the rated load. The cable clamp is not designed to hold the load without the 5 wraps of cable around the drum. (Usually marked red on the drum end of the cable)

DANGER

Keep yourself and others a **SAFE DISTANCE** to the side of the cable when under tension.

NEVER stand or step over a cable, or near a cable under load using a winch blanket or sail is strongly recommended.

DON'T move the vehicle to pull a load (towing) on the winch cable. This could result in cable breakage.

Disconnect the remote control and isolate when not in use.

DANGER

DO NOT exceed maximum pull rating. Avoid “shock loading” by using the remote lead switch intermittently to take up the slack in the wire rope. “Shock loading” can far exceed the rated capacity for the wire rope and drum and will result in damaging winch and brake. By doing so will void any warranty.

DANGER

DO NOT use you winch as securing device it is not designed for this and will result in damaging winch and brake and will void any warranty.

DO NOT exceed maximum line pull ratings shown on the tables.

DO NOT use as a hoist. Do not use for overhead lifting.

DANGER

NEVER cut, weld, or modify any part of the winch or cable. By doing so will void any warranty

DANGER

When re-spooling the cable Ensure that the cable spools in the under-wind position with the cable entering the drum from the bottom, not the top. To re-spool correctly, and while wearing gloves, keep a slight tension on the cable while pushing the remote control button to draw in the cable. Walk toward the winch **NEVER** allowing the winch cable to slide through your fingers or hands.

DO NOT let your hands get within 12”(30cm) of the winch while re-spooling. Turn off the winch and repeat the procedure until a few feet of cable is left. Disconnect the remote control and finish spooling by hand by rotating the drum manually with the clutch disengaged. Keep hands clear of the fairlead and drum while the winch is under power.

DANGER

Failure to read and understand these warnings may result in personal injury and/or property damage.

Always use gloves to protect hands when handling any type of cable/rope. Never let the cable slide through your hands.

NEVER connect the cable back to itself.

Always apply blocks/chocks/straps to the wheels of the vehicle/equipment when on an incline and in transportation.

No modifications, alterations, or deviation to the winch are authorized by the manufacturer and **MUST NOT** be made. By doing so will void any warranty.

Duration of winching pulls should be kept as short as possible. If the motor becomes uncomfortably hot to the touch, stop winching immediately and let it cool down for approx 8 mins minutes. Do not winch for more than two minutes at or near the maximum rated load without resting for 8 minutes.

DANGER

If the motor stalls **DO NOT** maintain winching. Winches are designed and made for intermittent use and should be used in conjunction with their duty cycles.

NEVER release the free-spool clutch when there is a load on the winch as the load will roll backwards.

Use hand saver hook when handling the hook for spooling or unspooling the wire rope.

NOTICE

The winch and its all-derivative types are rated at rated capacity when spooling the first rope layer on the drum. Overloading can damage the winch / motor / or wire rope.

For loads over 70% of rated line pull, we recommend the use of the pulley block / snatch block to double the wire rope line and reduce the strain. This will aid in two ways:

It will reduce the number of rope layers on the drum and reduce the load on the wire rope by as much as 50%. When doubling the line back to the vehicle, always attach to the frame or another load bearing point..

NOTICE

The vehicle engine should always be kept running during winching operation to minimize battery drain and maximize power and speed of the winch. If the winch is used for a considerable amount of time with the engine switched off the battery will drain and be too weak to restart the vehicle engine. If this happens stop winching immediately, jump start the vehicle and charge the battery up before resuming winching operation.

NOTICE

Get to know your winch before you 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 and the way the cable spools on the drum, etc.

INSPECT the wire rope and equipment before each use. A frayed or damaged rope must be replaced immediately. Use only manufacturer's identical replacement rope with the exact specifications. (Ropes are not covered by any warranty offered)

INSPECT the winch installation and bolts to ensure that all bolts are tight before each operation or periodically.

NOTICE

Store the remote control lead inside your vehicle or in a safe place.

Never connect the winch cable back to itself. This will cause cable to damage. Always use a pulley, snatch block, sling or chain of suitable strength as shown in the illustrations.

NOTICE

Any winch that appears to be faulty, damaged, worn, or operates abnormally **MUST BE REMOVED FROM SERVICE UNTIL REPAIRED, REPLACED OR OVERHAULED**. It is recommended that the necessary repairs **ARE** made by a manufacturer's authorized repair facility **ONLY**.

NOTICE

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

- Only accessories, attachments and/or adapters supplied by the manufacturer shall be used.

CAUTION

When using the tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to the equipment. Read all these instructions before using this tool!

WARNING

Keep children away. Children must never be allowed in the work area. Do not let them handle machines, tools, extension cords or operate this tool.

WARNING

Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.

CAUTION

Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.

WARNING

Use eye and ear protection. Always wear impact safety goggles. Wear a full-face shield if you are producing metal filings or wood chips. Wear a dust mask or respirator when working around metal, wood, and chemical dusts, and mists.

CAUTION

Maintain this winch with care. Keep this tool dry and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect winch rope periodically and, if damaged, have them replaced immediately by an authorized technician. The handles must be kept clean, dry, and free from oil and grease always.

Disconnect or unplug remote switch when not in use.

DANGER

Stay alert, watch what you are doing, use common sense. Do not operate any tool when you are tired.

WARNING

Check for damaged parts. Before using this winch, any parts that appear worn or damaged should be carefully checked to determine that it will operate properly and perform to its intended function. Check for damage including alignments, binding of moving parts; mounting fixtures. Any part that is damaged should be properly repaired or replaced by a qualified person. Do not use the tool if any switch does not turn "On" and "Off" properly.

WARNING

Replacement parts and accessories. When repairing or servicing, only use identical replacement parts. The use of any other parts will void the warranty.

WARNING

Do not operate tool if under the influence of alcohol or drugs. Read warning labels on prescription to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

⚠ DANGER

Keep hands and body away from Fairlead (cable intake slot) when operating.

Always secure vehicle in position before using winch.

⚠ WARNING

Be certain the winch is properly bolted to a structure (or vehicle) that can hold the winches maximum rated load.

Do not use inappropriate attachments to extend the length of the winch cable.

⚠ DANGER

Never lift people or hoist loads over people or lift live animals.

Never come in between the winch and the load when operating.

⚠ WARNING

Do not apply any loads to the winch when cable is fully extended past the safety mark. Keep at least 5 full wraps of cable on the spool, (Usually marked red on the winch cable at the drum end.)

After moving any piece of equipment with the winch, secure the equipment in place. Do not rely on the winch to hold for an extended period of time nor whilst in transport, winches are not securing device, By doing so will void any warranty

⚠ CAUTION

Examine winch before using. Components may be affected by exposure to chemicals, salts, and rust.

Do not cross over or go underneath winch cable when under load.

Use gloves while handling cable.

⚠ WARNING

Never operate winch if cable shows any signs of weakening, such as knotting or kinking. If it does you must replace immediately.

⚠ DANGER

Do not move your vehicle with the cable extended and attached to the load. You could easily exceed the winch rating and snap the cable.

When the vehicle is parked on an incline you should use wheel chocks.

⚠ CAUTION

Always re-spool cable neatly after any operation this will avoid any winch cable misalignment for the next use

⚠ CAUTION

The winch cable must be wound onto the drum under a load of at least 10% of the rated line pull or the outer wraps will draw into inner wraps and damage winch cable.

Before operating the winch under load you should check proper function of the winch by engaging and disengaging the clutch, by operating the directional controls, and operating the speed controls. This will ensure that the winch is working properly and will help prevent unintended damage and injury. Cycling the winch prior to loading will also ensure the gears are properly aligned.

⚠ CAUTION

Batteries contain gases which are flammable and explosive. Wear eye protection during installation and remove all jewelry. Do not lean over battery while making connections.

⚠ WARNING

It is **strongly recommended** a battery isolator is installed to protect vehicle, equipment and user from hazardous situations, if one isn't supplied it is recommended one is purchased and installed before operation of the winch.

Failure to install a battery isolator or safety cut off could result in damage to the vehicle, equipment and(or) operator and will result in voiding any warranty offered.

WINCH ASSEMBLY AND MOUNTING

1. Your winch 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 vehicle and mounting channels. If you cannot find a kit locally, contact us and we will provide you with the name of a dealer near you. If you utilize the mounting channel, you must ensure that it is mounted on a flat surface so that the three major sections (motor, drum and gear housing) are properly aligned. Proper alignment of the winch will allow even distribution of the full rated load and reduce the chance of damaging winch or equipment. Poor installation contributes to approx 90% equipment or winch damage.
2. Start by connecting the Roller Fairlead to the Mounting Channel (Included) using 2 each of the Cap Bolt, Flat Washer, Lock Washer and securing nut. Make sure the bolt is placed through the mounting channel and roller fairlead from inside the channel. This will allow enough clearance for the winch to be placed in the channel without obstruction.
3. Assemble the winch to the supplied mounting Channel by first pulling and releasing the clutch knob to "Out" position (Free Spooling). Pull out a few inches of cable from the drum and feed the wire loop through the opening in the front of the mounting channel and roller fairlead. Now, using the remaining Cap Bolts, Flat Washer, Lock Washer, and Nut secure the winch to the mounting channel.
4. Connect the battery and motor leads (Please see page 10). Remember every type of winch is different.

CAUTION

Batteries contain gases which are flammable and explosive. Wear eye protection during installation and remove all jewelry. Do not lean over battery while making connections.

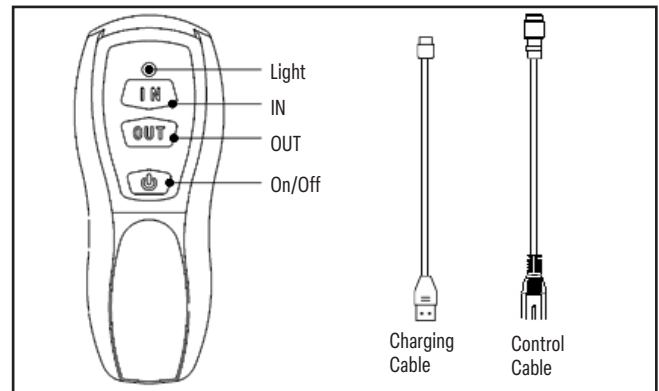
5. Assemble the Clevis Hook to the cable. Take off the pin from the Clevis Hook, connect the Clevis Hook to the cable and mount the pin back to the Clevis Hook.
6. Always use the Hand Saver (Optional) when free-spooling and re-spooling the wire rope. Using the Hand Saver keeps your hands and fingers away from the rotating drum.
7. Check for proper drum rotation. Pull or turn the clutch knob to the "OUT" "Disengage" position (Free-spooling). Pull out some cable from the drum, and then turn the clutch knob to the "IN" "Engage" position to engage the gears. Press the cable out button on the remote lead switch. If the drum is turning and releasing cable, then your connections are accurate. If the drum is turning and collecting more cable, then reverse the leads on the motor. Repeat and check rotation.

REMOTE CONTROL

This wireless remote control system integrates both wired and wireless technology to create a multi functional handset complete with a Rechargeable handset for easy use. Other features include lower power draw, automatic shutdown, stable performance and connection.

Technical Parameters

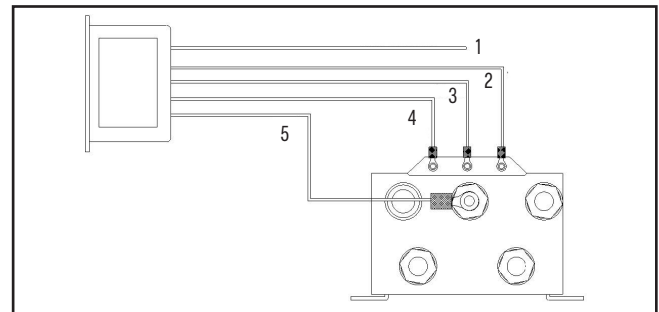
- Transmitter battery type: Lithium battery (3.7v)
- Receiver operating voltage: 9V-24V
- Remote control operating distance: 0-98Ft (0-30m)
- Remote control angle: 0-360°
- Temperature environment: -4°F - 104°F (-20°C - +40°C)
- Relative humidity: ≤95%RH 77°F (25°C)
- Charge time: 2-3 hrs
- Battery capacity 800mAh



Remote Installation

Receiver Installation

Complete the Wiring as below before connecting to the power supply.



1. Blue Antenna
2. White
3. Black B-
4. Yellow
5. Red B+

NOTICE

If winch winds OUT when you press IN on the remote and visa versa, then exchange the white and yellow lines connection to correct this.

LED Light Indicator

FLASH MODE	MEANING
Solid Green	Wired Connection Made
Green (Fast Flash)	Wireless Function Activated
Green (Slow Flash)	Out of range

OPERATION

Wireless

1. Press the power button for 2-3 seconds, and the LED light will flash green (slow flash).
2. Press the IN or OUT button on the remote control, and the LED light will flash green and power the winch (fast flash).

Wired Control

1. Connect the transmitter and control box using the supplied control cable. When the LED light is solid green, the winch can be operated.

Pairing:

When the transmitter or receiver needs to be replaced, use the following method:

1. Turn off power to receiver (Isolate/disconnect battery '+' terminal.)
2. Replace receiver following the wiring instructions
3. Turn power back onto receiver.
4. Press and hold IN & OUT button for 5-10 secs to pair the transmitter to receiver.
5. When you hear the sound of the relay closing the pairing is complete.
6. Press power button to turn on the transmitter.

Charging

The transmitter can be charged by USB Type C 

1. Connect charging lead to transmitter (Handset) supplied.
2. Plug in to a USB Type 'C' port (Fast charge port is not available).
3. Charge for minimum 2 hrs
4. Remove charge lead and use either with wireless or wired function.

Precautions

1. The maximum distance for the wireless remote transmitter is approx. 30 m. If you exceed the distance, the transmitter indicator light will flash GREEN slowly; move back in range, press ON/OFF power button to re-connect, the green LED indicator will light up solid (Wired) or Flash (Wireless) again and operation can resume as normal.
2. The maximum operating voltage of remote control system is 24v, Do Not exceed this voltage, use a correct choice of power source. Overloading the voltage will cause damage to components in the receiver and void any warranty.
3. Always make sure the transmitter is power OFF when not in use. (Leaving on will drain the battery faster).
4. The transmitter and receiver of the remote control system are paired and cannot be interchanged unless they are recoded (paired)
5. If you do not use the remote control for a long time period 6-12 months, you should periodically charge the transmitter.

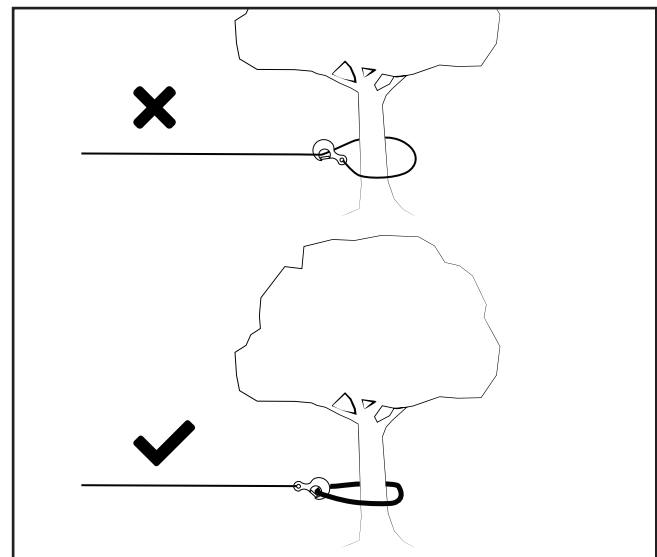
RIGGING TECHNIQUES

Locate a suitable anchor such as a strong tree trunk or boulder.

ALWAYS use a sling or strap as an anchor point on a object, Never use the cable or hook as an anchor point attached to an object.

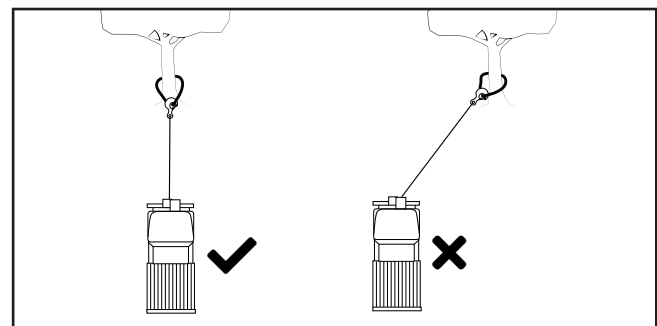
⚠ CAUTION

NEVER attach the clevis hook back onto the winch cable as this could cause damage to the cable.



⚠ CAUTION

Do not winch from an acute angle as the wire rope will bind up on one side of the drum causing damage to wire rope (Bird Nesting) and cause major damage to winch and possible equipment.



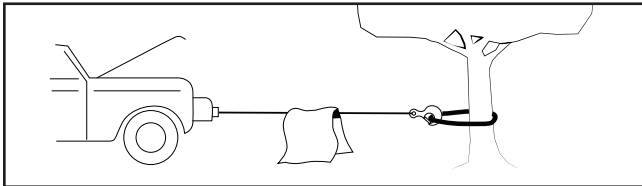
🗨 NOTICE

Short pulls from an angle can be used to straighten the vehicle/ equipment. Long pulls should be done with the wire rope in a straight line to winch/vehicle, see above illustration.

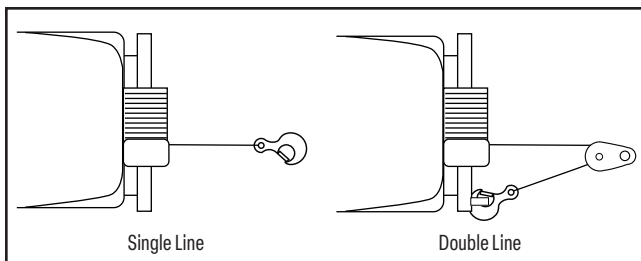
⚠ CAUTION

When pulling a heavy load, place a blanket or jacket over the wire rope five or six feet from the hook because in the event of a broken cable it will dampen the force.

For additional protection open the hood/bonnet of the vehicle as shown.

**💬 NOTICE**

For pulls over 70% rated line pull, we recommend the use of the snatch/pulley block to double line the wire rope. This reduces the load on the winch and the strain on the rope.

**⚠ DANGER**

Never use your winch for overhead hoisting, lifting of people, moving people or moving of live animals.

**WINCHING TECHNIQUES A-Z**

- a. Take time to assess your situation and plan your pull.
- b. Put on gloves to protect your hands.
- c. Disengage the clutch where possible to allow free-spooling and also save battery power.
- d. (If supplied) Attach the hand saver hook to the clevis hook.
- e. Pull out the wire rope to your desired anchor point safely.
- f. Secure the clevis hook to the anchor point: Sling, chain or snatch block. Do not attach the hook back onto the wire rope.
- g. Engage the clutch.
- h. Connect the remote control lead to the winch.
- i. Start your engine to ensure power is being replenished to the vehicle battery.
- j. Power in the wire rope guiding the wire under tension to draw up the slack in the wire. Once the wire is under tension stand well clear. Never stand or step over the wire rope under tension.
- k. Double check your anchors and make sure all connections are secure.
- l. Inspect the wire rope. Make sure there are at least 5 wraps of wire rope around the winch drum. (usually marked with red)
- m. Drape a blanket or sail (Sold separately) over the wire rope approximately 5 to 6 feet from the hook. Open the hood/bonnet for added protection.
- n. Clear the area. Make sure all people, spectators are well back and that no one is directly in front or behind the vehicle or anchor point.
- o. Begin winching. Be sure that the wire rope is winding evenly and tightly around the drum. If needed, the vehicle that is being winched can be slowly driven to add assistance to the winching process. Avoid shock loading; keep the wire 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 loading 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 8 minutes 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 or can 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 wire rope. The winch is NOT designed as securing device and should NEVER hold a load or secure whilst in transport, winch cable MUST be released when equipment or vehicle is secure. Not doing so will possibly damage the brake and winch and void any warranty.
- u. Disconnect the wire rope from the anchor and NEVER leave connected.
- v. Rewind the wire rope. Make sure that any wire already on the drum has spooled tightly and neatly. If not, draw out the wire and re-spool from the point where the rope is tight.
- w. Keep your hands clear of the winch drum and fairlead as the wire rope is being drawn in.

- x. Secure the hook and hook strap.
- y. Disconnect the remote control lead and store in a clean, dry place.
- z. Clean and inspect connections and mounting hardware for next winching operation.

MAINTENANCE

1. Periodically check the tightness of mounting bolts and electrical connections. Remove all dirt or corrosion and always keep clean.
2. Do not attempt to disassemble the gear box. Repairs should be done by the manufacturer or an authorized repair center.
3. The gear box has been lubricated using a high temperature lithium grease and is sealed at the factory. No internal lubrication is required.

REPLACING THE WIRE ROPE

If the wire rope has become worn or is beginning to show signs of fraying, it must be replaced before being used again.

1. Turn the clutch to the "CLUTCH OUT" position.
2. Extend cable to its full length. Note how the existing cable is connected to the drum.
3. Remove old cable assembly and attach new one as the old cable connected to the drum. Insert the end of the new rope and secure the screw M8x10.
4. Ensure that the new cable wraps in the same rotation direction as the old one. The cable should exit the drum from the bottom, under the drum. (Underwind).
5. Turn the clutch to the "CLUTCH IN" position.
6. Winch cable onto drum, first five wraps being careful not to allow kinking, then winch cable must be wound onto the drum under a load of at least 10% rated line pull.

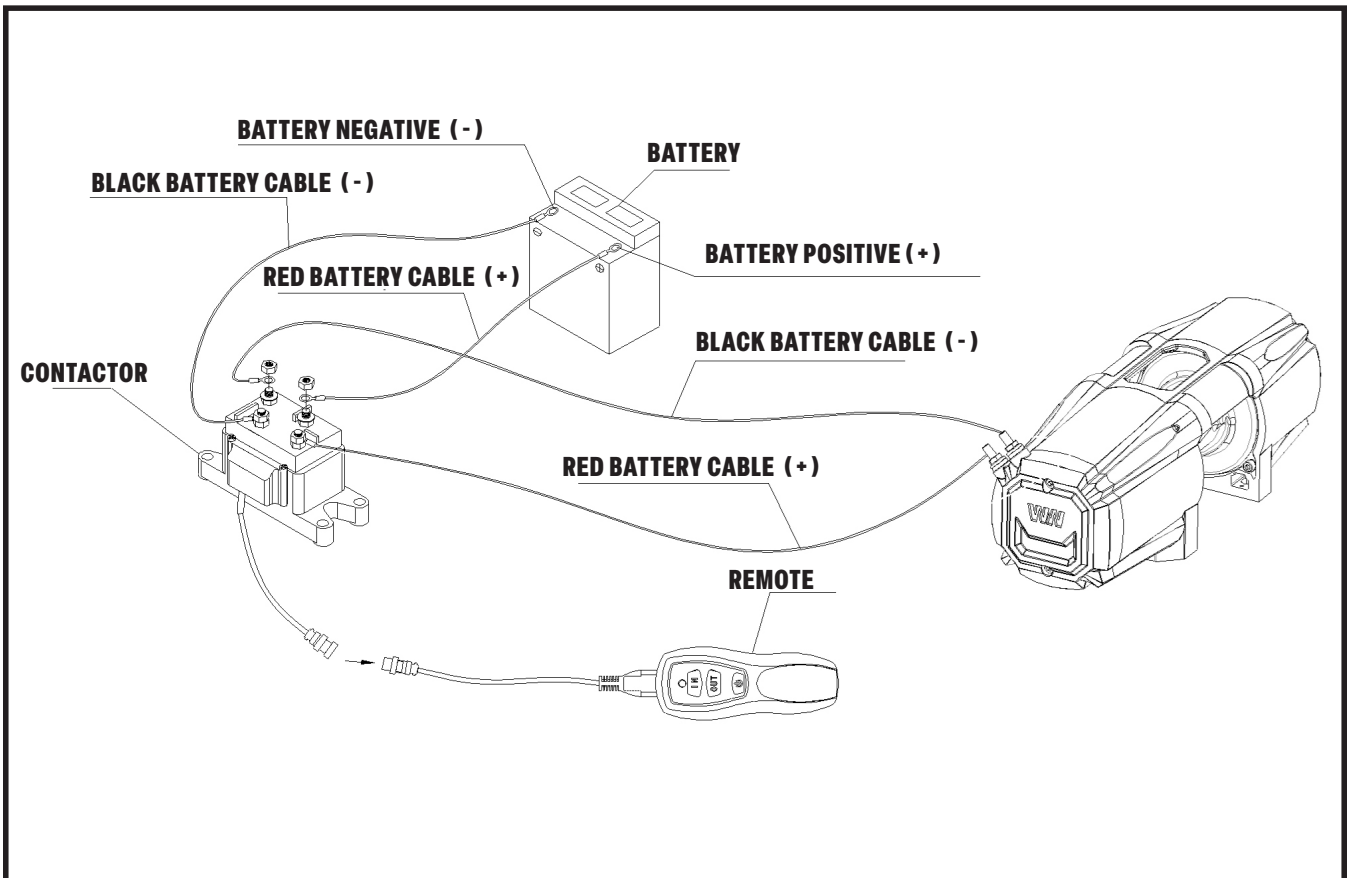
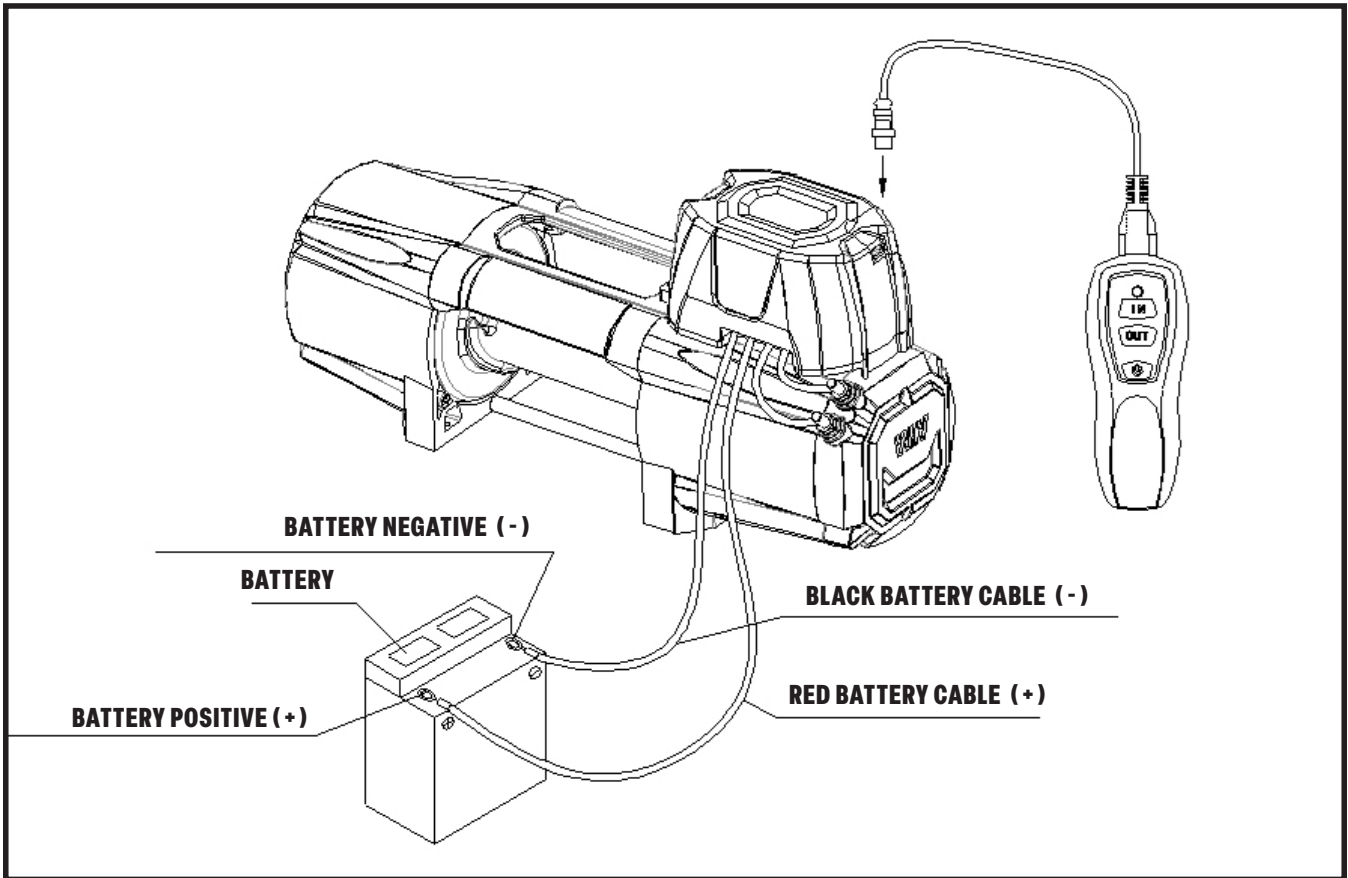
WARNING

Only replace the wire rope with the identical replacement part recommended by the manufacturer. Steel or synthetic ropes are NOT covered by any warranty offer and are sole responsibility of the owner or user to maintain and replace if necessary.

TROUBLESHOOTING

Problem	Cause	Solution
Motor does not turn on	Remote assembly not connected properly	Check remote lead and connections.
	Loose battery cable connections	Check battery and connections.
	Defective remote assembly	Replace remote lead assembly.
	Defective motor	Check for voltage at armature port with Switch pressed. If no voltage is present, replace motor.
	Water has entered motor	Allow to drain and dry. Run winch until completely dry.
Motor runs but drum does not turn	Clutch not engaged	Turn clutch to the "In" position. If problem persists, ask a technician to check and repair.
Motor runs slowly or without normal power	Insufficient current or voltage	Operate winch while vehicle motor running
Motor overheating	Winch running for too long	Allow winch to cool down periodically.
Motor runs in one direction only	Loose or corroded battery cable or motor cable connections.	- Clean and tighten. -Repair or replace switch assembly.

WINCH WIRING DIAGRAM



WARRANTY*

We at Warrior understand the importance of warranty for service & repair, we offer a minimum 5-year warranty on all of our Industrial grade winches defined below; An Industrial winch is deemed as such:

- Any winch regardless of capacity that is used in a commercial setting for the purposes of receiving monetary compensation or earning a livelihood.
- Any winch regardless of capacity that is fastened to a commercial trailer or towing vehicle.
- Winch Range Warranties: Gladiator Range 7 years / JR Range 5 years / JP Range 5 years / Terminator range 5 years / Samurai range 5 years / NH range 5 years / YP Range 5 years / RV Range 5 years
- For the avoidance of doubt our Trojan, Stealth and Ninja ranges are defined as non-industrial, therefore have a 3 year warranty.
- Titan winches are given a 5 year warranty.

WARRANTY FOR WARRIOR WINCHES

Warrior Winches warrants to the original retail buyer for Commercial & Industrial use only that any mechanical or electrical component of a genuine WARRIOR WINCH is free of defects for a period of minimum 5 years (winch dependent as per above)

The Warranty DOES NOT cover the cost of transportation / shipping charges to our repair center, labor, replacement or installation of defective parts. If a product is deemed unusable and needs to be replaced, we do not offer a new winch for old policy and the item will be replaced with a similar specification & age to the one that was submitted for repair.

Any product we determine to be defective will be repaired or replaced at our sole discretion without charge to the Buyer upon Buyer's compliance with this procedure. The Seller or its Authorized Agent may make reasonable charges for parts and for labor for repairs not covered by this 5-year warranty. The warranties set forth herein are exclusive and in lieu of all other warranties, whether oral, written, expressed or implied.

WARRANTY EXCLUSIONS

This warranty excludes:

- Cosmetic defects such as paint, decals, etc.,
- Worn parts due to improper use.
- Steel ropes
- Armortek Ropes outside of 6 months / Armortek Extreme Ropes outside of 12 months.
- Any Accessory part including roller fairleads, hooks and mounting plates.
- Failures due to acts of God and other force major events beyond the manufacturer's control
- Problems caused by parts that are not original WARRIOR WINCH parts
- Alteration or modification(s) made by any party other than the manufacturer.
- Remotes, Solenoids and Contactors and isolations switches outside of 12 months.

- Any third party equipment
- Batteries

Warrior Winches shall not be responsible or liable for any indirect or consequential damages. These consequential damages may include, but are not limited to, lost profits or loss of use and down time.

To obtain service under this warranty, the Buyer must follow the warranty claim process which requires such details as; (1) a photograph(s)/video of the issue with the winch (2) a written description of the problem, (3) Buyers name, address and contact number, (4) copy of the original purchase receipt. Please see warranty process for more details. Prior approval must be obtained before the winch is returned; a unique reference will be given for each return. Any returns outside of this process may not be processed.

This warranty does not apply to defects of the Product caused by; (1) normal wear and tear, (2) failure to comply with any installation or maintenance instructions provided by the Seller, including but not limited to subjecting the Product to loads in excess of the loads listed in any instructions, Owners Manual or as detailed upon the Sellers website, (3) alteration or modification by any parties other than the Seller, (4) misuse, abuse, neglect, accidents, Acts of God, terrorism or (5) other causes beyond the control of the Seller after delivery of the Product to the Sellers Authorized Agent.

Warrior Winches reserves the right to replace any part or whole unit with a newer design of the same function.

Any purchase bought prior to the revision of this document will hold its current warranty length from the time it was purchased.

SPECIFICATIONS 25TTAA12-CAD

Rated line pull	2500 lbs (1134 kgs)
Gear reduction ratio	166:1
Motor	12V: Input: 1.9kW / 2.6hp; Output: 0.9kW / 1.2hp
Drum size	Ø1.97"×3.7" (Ø50mm×94 mm)
Overall dimensions	13.7"×5.0"×5.1" 349mm×127mm×129 mm
Cable	Ø 1/5"×45.9' (Ø 5mm×14m)
Mounting bolt pattern	4.88" x 3.0" (124 mm x 76.2 mm) ;4-M8

Line Pull, Line Speed, Amperes, Duty Cycle (First layer)

Line Pull lbs (kgs)	Line Speed ft/min (m/min)	Motor current Amps (Max) 12V DC
0	17(5.2)	25
1000(454)	14.4(4.4)	50
2000(907)	10.2(3.1)	130
2500(1134)	8.8(2.7)	160

Layers, Line Pull and Rope Capacity

Layer	Rated line pull lbs (kgs)	Total rope on the drum ft (m)
1	2500(1135)	8.5(2.6)
2	2129(966)	19.7(6)
3	1854(842)	32.8(10)
4	1642(745)	45.9(14)

SPECIFICATIONS 35TTAA12-CAD

Rated line pull	3500 lbs (1588 kgs)
Gear reduction ratio	166:1
Motor	12V: Input: 2.4kW / 3.2hp; Output: 1.0kW / 1.3hp
Drum size	Ø1.97"×3.7" (Ø50mm×94 mm)
Overall dimensions	13.7"×5.0"×5.1" 349mm ×127mm ×129 mm
Cable	Ø 1/5"×45.9' (Ø 5mm×14m)
Mounting bolt pattern	4.88" x 3.0" (124 mm x 76.2 mm) ;4-M8

Line Pull, Line Speed, Amperes, Duty Cycle (First layer)

Line Pull lbs (kgs)	Line Speed ft/min (m/min)	Motor current Amps (Max) 12V DC
0	17(5.2)	25
1000(454)	14.4(4.4)	50
2000(907)	10.2(3.1)	130
3500(1588)	5.9(1.8)	200

Layers, Line Pull and Rope Capacity

Layer	Rated line pull lbs (kgs)	Total rope on the drum ft (m)
1	3500(1588)	8.5(2.6)
2	2932(1331)	19.7(6)
3	2523(1145)	32.8(10)
4	2214(1005)	45.9(14)

SPECIFICATIONS 45TTAA12-CAD, 45TTSU12-CAD

Rated line pull	4500 lbs (2041 kgs)	
Gear reduction ratio	166:1	
Motor	12V: Input: 2.5kW / 3.4hp; Output: 1.1 kW / 1.4hp	
Drum size	Ø1.97"×5.4" (Ø50mm×138mm)	
Overall dimensions	45TTAA12-CAD	45TTSU12-CAD
	15.5"×5.0"×5.1" 393mm ×127mm ×129 mm	15.5"×5.0"×7.7" 393mm ×127mm ×195 mm
Cable	Ø15/64"×49.2' (Ø6mm×15m)	Ø15/64"×47.6' (Ø6mm×14.5m)
Mounting bolt pattern	6.6"×3.0" (168mm×76.2 mm) 4-M8	

Line Pull, Line Speed, Amperes, Duty Cycle (First layer)

Line Pull lbs (kgs)	Line Speed ft/min (m/min)	Motor current Amps (Max) 12V DC
0	13.8(4.2)	25
1000(453)	11.8(3.6)	55
2500(1134)	8.8(2.7)	125
4500(2041)	5.6(1.7)	230

Layers, Line Pull and Rope Capacity

Layer	Rated line pull lbs (kgs)	Total rope on the drum ft (m)
1	4500(2041)	11.5(3.5)
2	3700(1678)	26.2(8)
3	3150(1428)	42.6(13)
4	2740(1242)	49.2(15)

SPECIFICATIONS 60TTAA12-CAD, 60TTSU12-CAD

Rated line pull	6000 lbs (2722 kgs)	
Gear reduction ratio	202:1	
Motor	12V:Input: 2.5kW / 3.4hp; Output: 1.1kW / 1.4hp	
Drum size	Ø 1.97"×5.4" (Ø 50mm×138mm)	
Overall dimensions	60TTAA12-CAD	60TTSU12-CAD
	15.5"×5.0"×5.1" 393mm ×127mm ×129 mm	15.5"×5.0"×7.7" 393mm ×127mm ×195 mm
Cable	Ø9/32"×45.9' (Ø7mm×14m)	Ø13/51"×45.9' (Ø6.5mm×14m)
Mounting bolt pattern	6.6"×3.0" (168mm×76.2 mm) 4-M8	

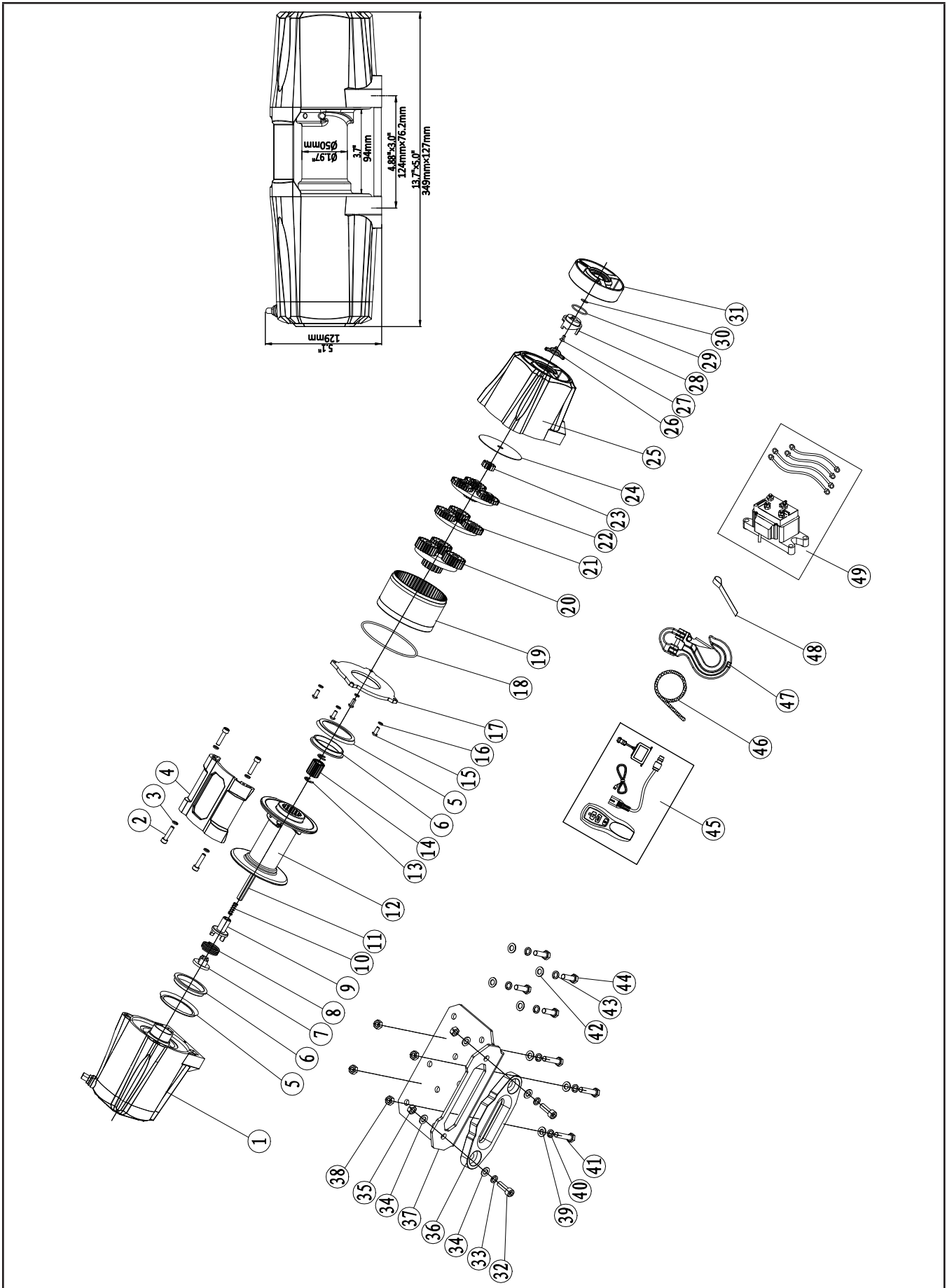
Line Pull, Line Speed, Amperes, Duty Cycle (First layer)

Line Pull lbs (kgs)	Line Speed ft/min (m/min)	Motor current Amps (Max) 12V DC
0	13.8(4.2)	22
2500(1134)	7.8(2.4)	95
4500(2041)	6.6(2.0)	170
6000(2722)	3.3(1.0)	220

Layers, Line Pull and Rope Capacity

Layer	Rated line pull lbs (kgs)	Total rope on the drum ft (m)
1	6000(2722)	10.8(3.3)
2	4877(2212)	24.6(7.5)
3	4109(1864)	40.7(12.4)
4	3549(1610)	45.9(14)

WINCH ASSEMBLY DRAWING 25TTAA12-CAD

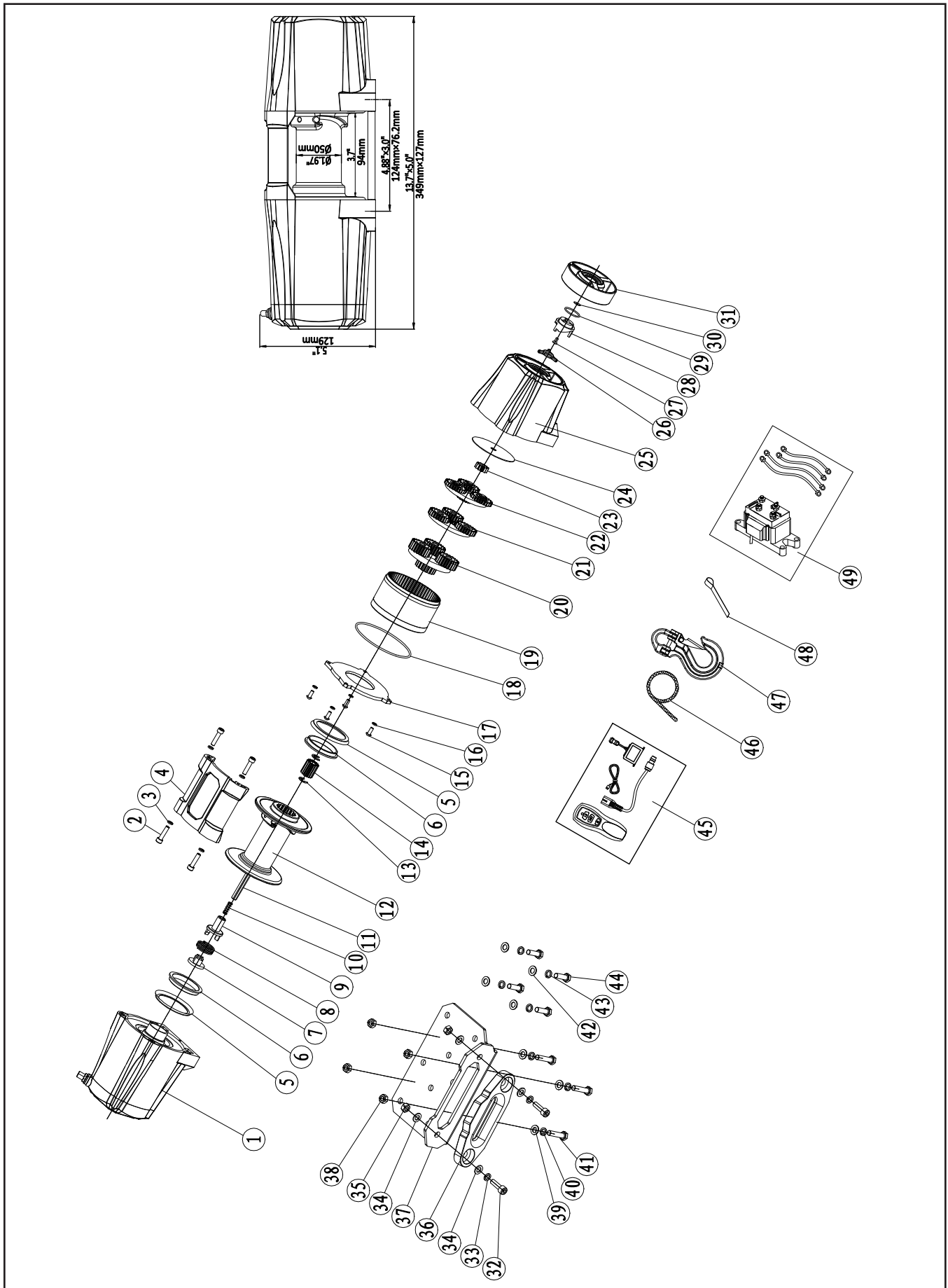


WINCH PARTS LIST (25TTAA12-CAD)

#	Part Number	Description	Qty.
1	Q2500100	Motor Assembly	1
2	Q2500001	Screw M6 x 20	4
3	Q2500002	Locking Washer Ø6	4
4	Q2500003	Tie bar	1
5	Q2500004	Ring Seals	2
6	Q2500005	Bushing—Drum	2
7	Q2500006	CouplingI	1
8	Q2500007	Spring	1
9	Q2500008	CouplingII	1
10	Q2500009	Spring	1
11	Q2500010	Six Angle Bar	1
12	Q2500200	Drum Assembly	1
13	Q2500011	“E” Rings	2
14	Q2500012	Gear—Output Sun	1
15	Q2500013	Screw M5 x 12	4
16	Q2500014	Locking Washer Ø5	4
17	Q2500015	Cover Plate	1
18	Q2500016	“O” Rings	1
19	Q2500017	Gear-Ring	1
20	Q2500300	Gear Carrier Assembly(Output)	1
21	Q2500400	Gear Carrier Assembly(Intermediate)	1
22	Q2500500	Gear Carrier Assembly(Input)	1
23	Q2500018	Gear—Input Sun	1
24	Q2500019	Trust Washer	1
25	Q2500020	Gear—Housing	1
26	Q2500021	Clutch Slider	1
27	Q2500022	Screw M4 x10	1
28	Q2500023	Clutch Cam	1
29	Q2500024	“O” Rings	1
30	Q2500025	Ring Seals	1
31	Q2500026	Clutch Knob	1
32	Q2500027	Screw M10 x 25	2
33	Q2500028	Locking Washer Ø10	2
34	Q2500029	Thick Flat Washer Ø10	4
35	Q2500030	Nut M10	2
36	Q2500031	Aluminum Fairlead	1

#	Part Number	Description	Qty.
37	Q2500032	Mounting Panel	1
38	Q2500033	Nut M8	4
39	Q2500034	Thick Flat Washer Ø8	4
40	Q2500035	Locking Washer Ø8	4
41	Q2500036	Screw M8 x 35	4
42	Q2500037	Thick Flat Washer Ø8	4
43	Q2500038	Locking Washer Ø8	4
44	Q2500039	Screw M8 x 25	4
45	Q2500600	Switch	1
46	Q2500700	Synthetic Rope	1
47	Q2500800	Hook	1
48	Q2500040	Strap	1
49	Q2500900	Control Assembly	1

WINCH ASSEMBLY DRAWING 35TTAA12-CAD

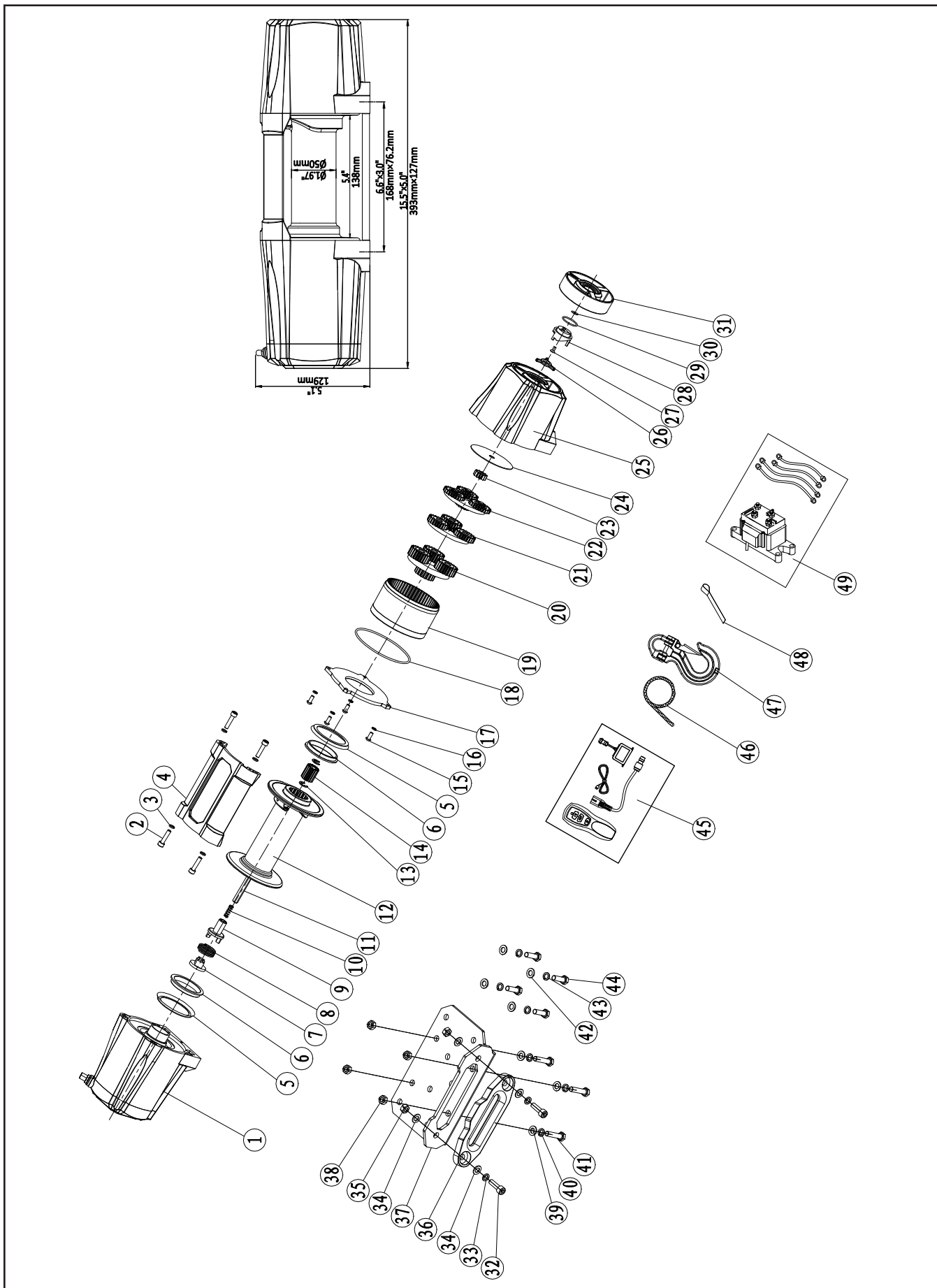


WINCH PARTS LIST (35TTAA12-CAD)

#	Part Number	Description	Qty.
1	Q3500100	Motor Assembly	1
2	Q3500001	Screw M6 x 20	4
3	Q3500002	Locking Washer Ø6	4
4	Q3500003	Tie bar	1
5	Q3500004	Ring Seals	2
6	Q3500005	Bushing—Drum	2
7	Q3500006	Coupling I	1
8	Q3500007	Spring	1
9	Q3500008	Coupling II	1
10	Q3500009	Spring	1
11	Q3500010	Six Angle Bar	1
12	Q3500200	Drum Assembly	1
13	Q3500011	“E” Rings	2
14	Q3500012	Gear—Output Sun	1
15	Q3500013	Screw M5 x 12	4
16	Q3500014	Locking Washer Ø5	4
17	Q3500015	Cover Plate	1
18	Q3500016	“O” Rings	1
19	Q3500017	Gear-Ring	1
20	Q3500300	Gear Carrier Assembly(Output)	1
21	Q3500400	Gear Carrier Assembly(Intermediate)	1
22	Q3500500	Gear Carrier Assembly(Input)	1
23	Q3500018	Gear—Input Sun	1
24	Q3500019	Trust Washer	1
25	Q3500020	Gear—Housing	1
26	Q3500021	Clutch Slider	1
27	Q3500022	Screw M4 x10	1
28	Q3500023	Clutch Cam	1
29	Q3500024	“O” Rings	1
30	Q3500025	Ring Seals	1
31	Q3500026	Clutch Knob	1
32	Q3500027	Screw M10 x 25	2
33	Q3500028	Locking Washer Ø10	2
34	Q3500029	Thick Flat Washer Ø10	4
35	Q3500030	Nut M10	2
36	Q3500031	Aluminum Fairlead	1

#	Part Number	Description	Qty.
37	Q3500032	Mounting Panel	1
38	Q3500033	Nut M8	4
39	Q3500034	Thick Flat Washer Ø8	4
40	Q3500035	Locking Washer Ø8	4
41	Q3500036	Screw M8 x 35	4
42	Q3500037	Thick Flat Washer Ø8	4
43	Q3500038	Locking Washer Ø8	4
44	Q3500039	Screw M8 x 25	4
45	Q3500600	Switch	1
46	Q3500700	Synthetic Rope	1
47	Q3500800	Hook	1
48	Q3500040	Strap	1
49	Q3500900	A Type Control Assembly	1

WINCH ASSEMBLY DRAWING 45TTAA12-CAD

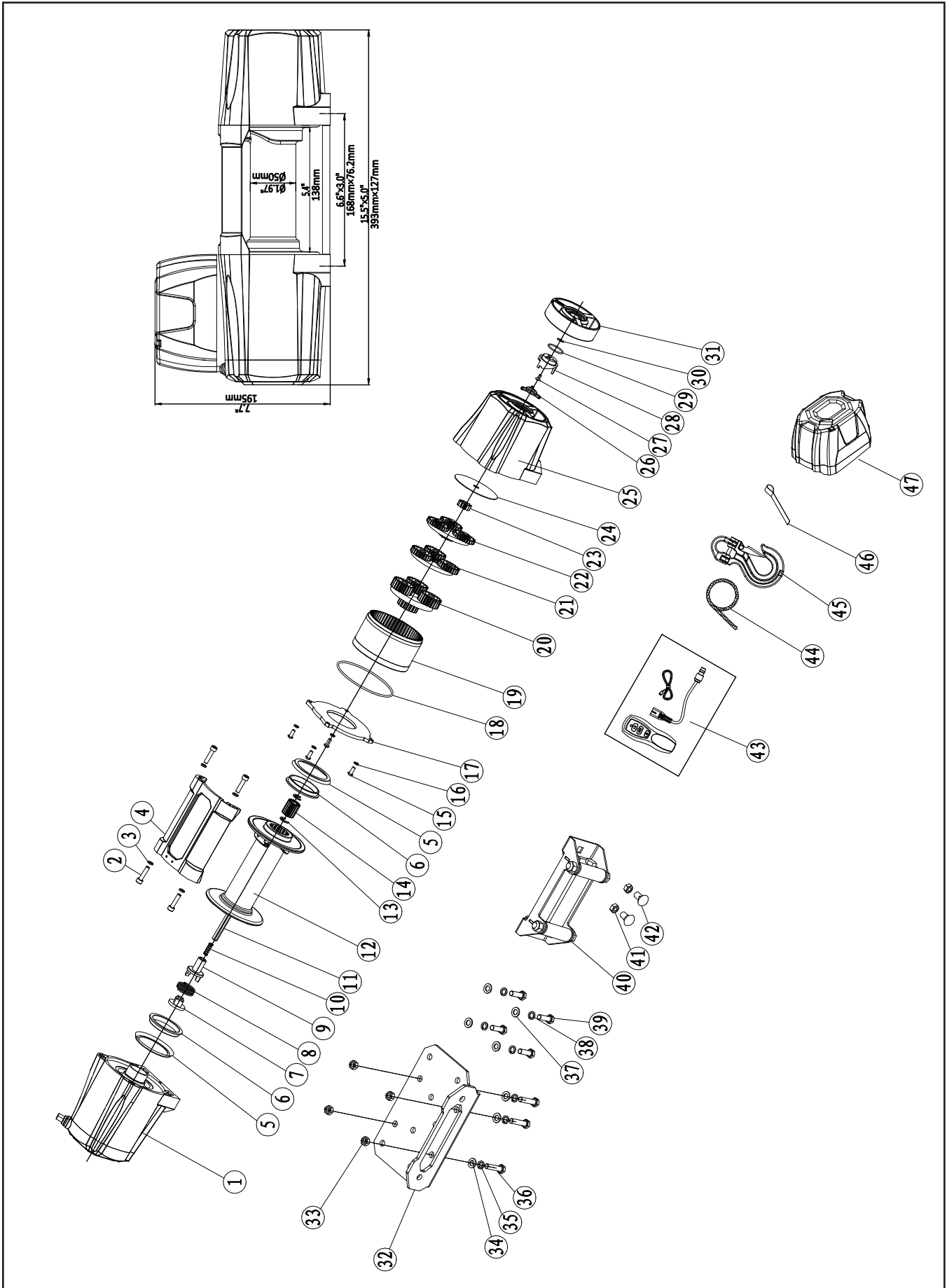


WINCH PARTS LIST (45TTAA12-CAD)

#	Part Number	Description	Qty.
1	Q4500100	Motor Assembly	1
2	Q4500001	Screw M6 x 20	4
3	Q4500002	Locking Washer Ø6	4
4	Q4500003	Tie bar	1
5	Q4500004	Ring Seals	2
6	Q4500005	Bushing—Drum	2
7	Q4500006	Coupling	1
8	Q4500007	Spring	1
9	Q4500008	Coupling	1
10	Q4500009	Spring	1
11	Q4500010	Six Angle Bar	1
12	Q4500200	Drum Assembly	1
13	Q4500011	“E” Rings	2
14	Q4500012	Gear—Output Sun	1
15	Q4500013	Screw M5 x 12	4
16	Q4500014	Locking Washer Ø5	4
17	Q4500015	Cover Plate	1
18	Q4500016	“O” Rings	1
19	Q4500017	Gear-Ring	1
20	Q4500300	Gear Carrier Assembly(Output)	1
21	Q4500400	Gear Carrier Assembly(Intermediate)	1
22	Q4500500	Gear Carrier Assembly(Input)	1
23	Q4500018	Gear—Input Sun	1
24	Q4500019	Trust Washer	1
25	Q4500020	Gear—Housing	1
26	Q4500021	Clutch Slider	1
27	Q4500022	Screw M4 x10	1
28	Q4500023	Clutch Cam	1
29	Q4500024	“O” Rings	1
30	Q4500025	Ring Seals	1
31	Q4500026	Clutch Knob	1
32	Q4500027	Screw M10 x 25	2
33	Q4500028	Locking Washer Ø10	2
34	Q4500029	Thick Flat Washer Ø10	4
35	Q4500030	Nut M10	2
36	Q4500031	Aluminum Fairlead	1

#	Part Number	Description	Qty.
37	Q4500032	Mounting Panel	1
38	Q4500033	Nut M8	4
39	Q4500034	Thick Flat Washer Ø8	4
40	Q4500035	Locking Washer Ø8	4
41	Q4500036	Screw M8 x 35	4
42	Q4500037	Thick Flat Washer Ø8	4
43	Q4500038	Locking Washer Ø8	4
44	Q4500039	Screw M8 x 25	4
45	Q4500700	Switch	1
46	Q4500800	Synthetic Rope	1
47	Q4500900	Hook	1
48	Q4500042	Strap	1
49	Q4501000	Control Assembly	1

WINCH ASSEMBLY DRAWING 45TTSU12-CAD

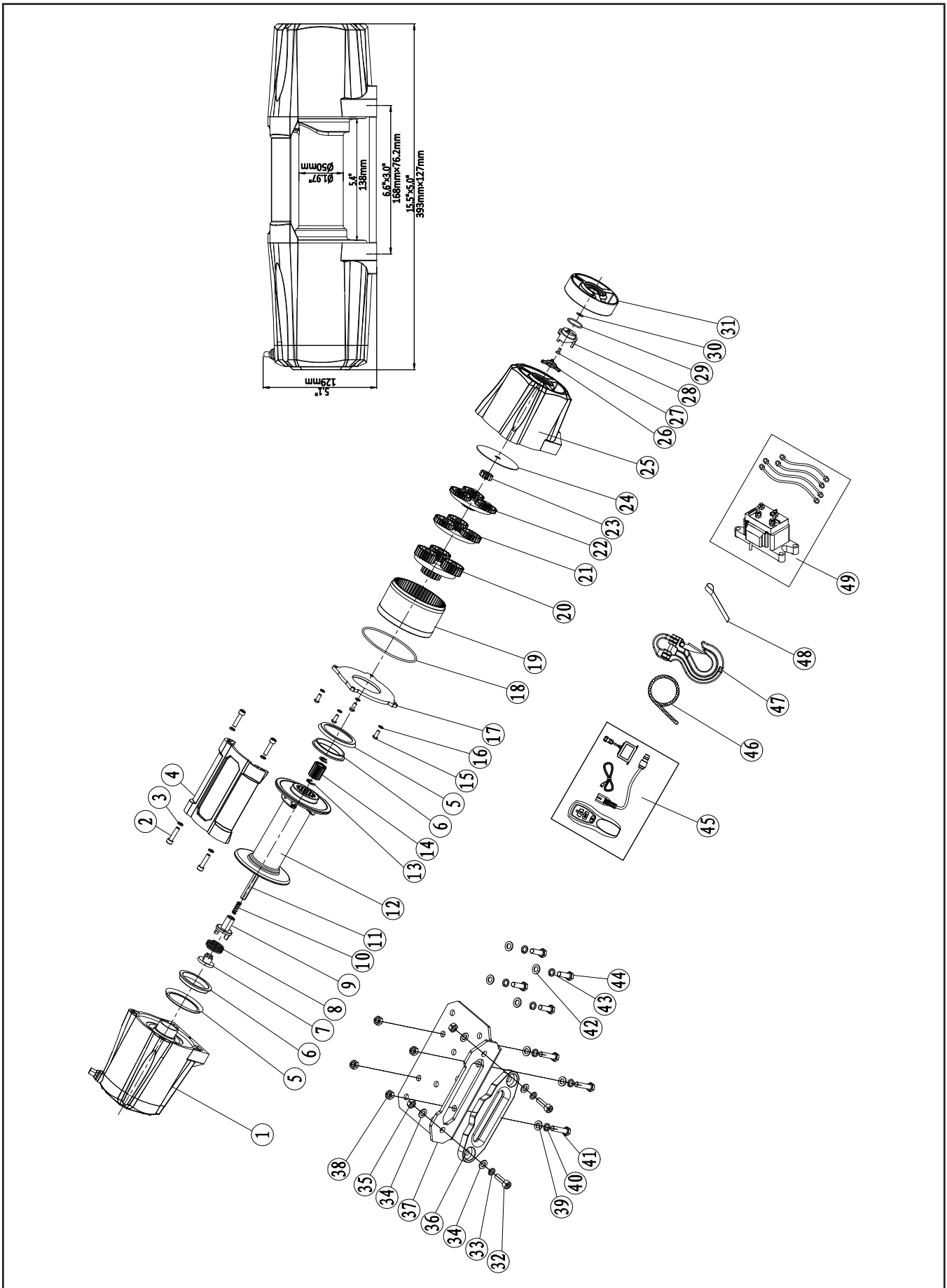


WINCH PARTS LIST (45TTSU12-CAD)

#	Part Number	Description	Qty.
1	Q4500100	Motor Assembly	1
2	Q4500001	Screw M6 x 20	4
3	Q4500002	Locking Washer Ø6	4
4	Q4500003	Tie bar	1
5	Q4500004	Ring Seals	2
6	Q4500005	Bushing—Drum	2
7	Q4500006	Coupling I	1
8	Q4500007	Spring	1
9	Q4500008	Coupling II	1
10	Q4500009	Spring	1
11	Q4500010	Six Angle Bar	1
12	Q4500200	Drum Assembly	1
13	Q4500011	“E” Rings	2
14	Q4500012	Gear—Output Sun	1
15	Q4500013	Screw M5 x 12	4
16	Q4500014	Locking Washer Ø5	4
17	Q4500015	Cover Plate	1
18	Q4500016	“O” Rings	1
19	Q4500017	Gear-Ring	1
20	Q4500300	Gear Carrier Assembly(Output)	1
21	Q4500400	Gear Carrier Assembly(Intermediate)	1
22	Q4500500	Gear Carrier Assembly(Input)	1
23	Q4500018	Gear—Input Sun	1
24	Q4500019	Trust Washer	1
25	Q4500020	Gear—Housing	1
26	Q4500021	Clutch Slider	1
27	Q4500022	Screw M4 x10	1
28	Q4500023	Clutch Cam	1
29	Q4500024	“O” Rings	1
30	Q4500025	Ring Seals	1
31	Q4500026	Clutch Knob	1
32	Q4500032	Mounting Panel	1
33	Q4500033	Nut M8	4
34	Q4500034	Thick Flat Washer Ø8	4
35	Q4500035	Locking Washer Ø8	4
36	Q4500036	Screw M8 x 35	4

#	Part Number	Description	Qty.
37	Q4500037	Thick Flat Washer Ø8	4
38	Q4500038	Locking Washer Ø8	4
39	Q4500039	Screw M8 x 25	4
40	Q4500600	Roller Fairlead	1
41	Q4500040	Nut M10	2
42	Q4500041	Screw M10 x 20	2
43	Q4500700	Switch	1
44	Q4500800	Steel Rope	1
45	Q4500900	Hook	1
46	Q4500042	Strap	1
47	Q4501000	Control Assembly	1

WINCH ASSEMBLY DRAWING 60TTAA12-CAD

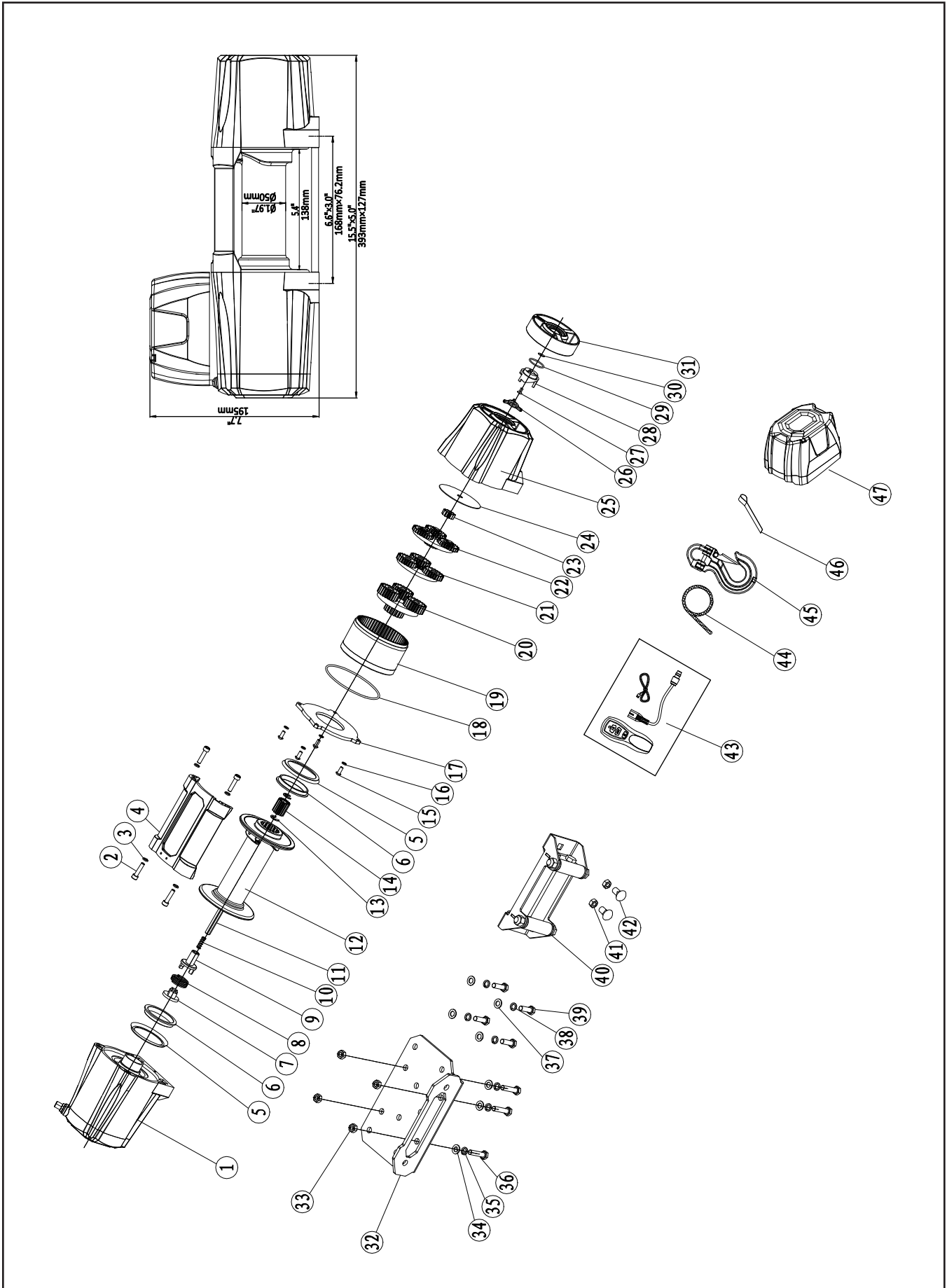


WINCH PARTS LIST (60TTAA12-CAD)

#	Part Number	Description	Qty.
1	Q6000100	Motor Assembly	1
2	Q6000001	Screw M6 x 20	4
3	Q6000002	Locking Washer Ø6	4
4	Q6000003	Tie bar	1
5	Q6000004	Ring Seals	2
6	Q6000005	Bushing—Drum	2
7	Q6000006	Coupling I	1
8	Q6000007	Spring	1
9	Q6000008	Coupling II	1
10	Q6000009	Spring	1
11	Q6000010	Six Angle Bar	1
12	Q6000200	Drum Assembly	1
13	Q6000011	“E” Rings	2
14	Q6000012	Gear—Output Sun	1
15	Q6000013	Screw M5 x 12	4
16	Q6000014	Locking Washer Ø5	4
17	Q6000015	Cover Plate	1
18	Q6000016	“O” Rings	1
19	Q6000017	Gear-Ring	1
20	Q6000300	Gear Carrier Assembly(Output)	1
21	Q6000400	Gear Carrier Assembly(Intermediate)	1
22	Q6000500	Gear Carrier Assembly(Input)	1
23	Q6000018	Gear—Input Sun	1
24	Q6000019	Trust Washer	1
25	Q6000020	Gear—Housing	1
26	Q6000021	Clutch Slider	1
27	Q6000022	Screw M4 x10	1
28	Q6000023	Clutch Cam	1
29	Q6000024	“O” Rings	1
30	Q6000025	Ring Seals	1
31	Q6000026	Clutch Knob	1
32	Q6000027	Screw M10 x 25	2
33	Q6000028	Locking Washer Ø10	2
34	Q6000029	Thick Flat Washer Ø10	4
35	Q6000030	Nut M10	2
36	Q6000031	Aluminum Fairlead	1

#	Part Number	Description	Qty.
37	Q6000032	Mounting Panel	1
38	Q6000033	Nut M8	4
39	Q6000034	Thick Flat Washer Ø8	4
40	Q6000035	Locking Washer Ø8	4
41	Q6000036	Screw M8 x 35	4
42	Q6000037	Thick Flat Washer Ø8	4
43	Q6000038	Locking Washer Ø8	4
44	Q6000039	Screw M8 x 25	4
45	Q6000700	Switch	1
46	Q6000800	Synthetic Rope	1
47	Q6000900	Hook	1
48	Q6000042	Strap	1
49	Q6001000	Control Assembly	1

WINCH ASSEMBLY DRAWING 60TTSU12-CAD



WINCH PARTS LIST (60TTSU2-CAD)

#	Part Number	Description	Qty.
1	Q6000100	Motor Assembly	1
2	Q6000001	Screw M6 x 20	4
3	Q6000002	Locking Washer Ø6	4
4	Q6000003	Tie bar	1
5	Q6000004	Ring Seals	2
6	Q6000005	Bushing—Drum	2
7	Q6000006	Coupling I	1
8	Q6000007	Spring	1
9	Q6000008	Coupling II	1
10	Q6000009	Spring	1
11	Q6000010	Six Angle Bar	1
12	Q6000200	Drum Assembly	1
13	Q6000011	“E” Rings	2
14	Q6000012	Gear—Output Sun	1
15	Q6000013	Screw M5 x 12	4
16	Q6000014	Locking Washer Ø5	4
17	Q6000015	Cover Plate	1
18	Q6000016	“O” Rings	1
19	Q6000017	Gear-Ring	1
20	Q6000300	Gear Carrier Assembly(Output)	1
21	Q6000400	Gear Carrier Assembly(Intermediate)	1
22	Q6000500	Gear Carrier Assembly(Input)	1
23	Q6000018	Gear—Input Sun	1
24	Q6000019	Trust Washer	1
25	Q6000020	Gear—Housing	1
26	Q6000021	Clutch Slider	1
27	Q6000022	Screw M4 x10	1
28	Q6000023	Clutch Cam	1
29	Q6000024	“O” Rings	1
30	Q6000025	Ring Seals	1
31	Q6000026	Clutch Knob	1
32	Q6000032	Mounting Panel	1
33	Q6000033	Nut M8	4
34	Q6000034	Thick Flat Washer Ø8	4
35	Q6000035	Locking Washer Ø8	4
36	Q6000036	Screw M8 x 35	4

#	Part Number	Description	Qty.
37	Q6000037	Thick Flat Washer Ø8	4
38	Q6000038	Locking Washer Ø8	4
39	Q6000039	Screw M8 x 25	4
40	Q6000600	Roller Fairlead	1
41	Q6000040	Nut M10	2
42	Q6000041	Screw M10 x 20	2
43	Q6000700	Switch	1
44	Q6000800	Steel Rope	1
45	Q6000900	Hook	1
46	Q6000042	Strap	1
47	Q6001000	Control Assembly	1

**For warranty inquiries, please contact us at
technical@warriorwinches.com**