



INSTALLATION GUIDE

TALON[®] SERIES WINCH

**READ AND UNDERSTAND THIS MANUAL BEFORE
INSTALLATION AND OPERATION OF YOUR
SUPERWINCH.**

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SAFETY PRECAUTIONS

The responsibility for safe installation and operation of this winch ultimately rests with you, the operator. Read and understand all safety precautions and operating instructions before installing and operating the winch. Careless winch operation can result in serious injury and/or property damage. Never obscure or remove the warning or instruction labels.

Throughout this manual, you will find notations with the following headings:



Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. This notation is also used to alert against unsafe practices.

Note: Indicates additional information in the installation and operation procedures of your winch.

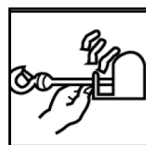
The following symbols on the product and in the Owners manual are used:



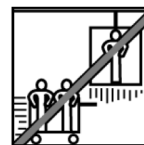
Read Owner's Manual



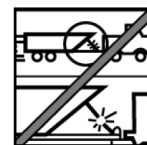
Always Use Handsaver



Keep clear of winch, rope and hook while operating



Never use winch to lift or move people



Never use winch to hold loads in place

Correct installation of your winch is a requirement for proper operation.

Please Note: Winch is designed primarily for intermittent applications. This winch is not designed to be used in industrial or hoisting applications and Superwinch does not warrant it to be suitable for such use. Superwinch manufactures a separate line of winches for industrial/commercial use. Please contact Customer Service Department for further information.

Congratulations on you choice!

AFTER READING AND UNDERSTANDING THIS MANUAL, LEARN TO USE YOUR WINCH. After installing the winch, practice using it so you will be familiar with it when the need arises.



MOUNTING YOUR WINCH

MOUNTING KITS

SUPERWINCH RECOMMENDS THE USE OF A MOUNT KIT FOR SECURE MOUNTING TO YOUR VEHICLE. For information on available kits, contact your Superwinch product dealer or go to www.superwinch.com for the most current list of kits.

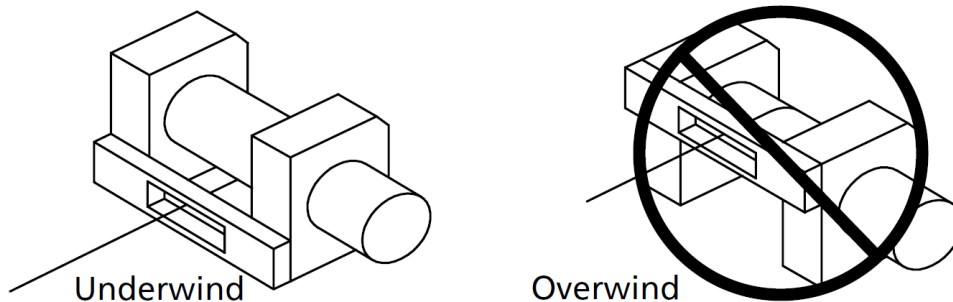
If you choose not to purchase a mounting kit, your Superwinch needs to be attached to a secure and flat mounting location. Note that your winch may not be able to be operated safely without some equipment included in the kit. If you choose not to purchase a mounting kit, contact Superwinch for recommended accessories and the name of a dealer near you.

Detailed mounting instructions for your specific vehicle are provided with each mounting kit. Read and follow directions carefully.

CAUTION

This winch must be mounted with the rope in the under wound direction (Fig. 1) Improper mounting could damage your winch and void your warranty.

Fig. 1



Note: Your winch is designed to ROPE IN and ROPE OUT in one direction. Do not attempt to reverse the operation of your winch.

CAUTION

Do not mount winch inverted (base upward) or put the winch mounting hardware in direct tension condition. In all installations, the unit must be mounted so the rope feeds through the hawse or roller fairlead on the front of the winch and does not rub across housings.

For winch capacities, a complete parts list, and an exploded diagram of your specific Superwinch, refer to the Technical Data Sheet included in this package.

For instructions on safe winch operation and tips for prolonging the life of your winch, refer to the User's Guide included in this package.

⚠ WARNING *Improper mounting can cause personal injury. Improper mounting could damage your winch and void the warranty.*

MINIMUM ELECTRICAL REQUIREMENTS

A 60 amp. alternator and battery with 440 cold-cranking amperes capacity are the minimum recommended power sources. If the winch is in heavy use, an auxiliary battery is recommended.

Under some circumstances, it may be appropriate to install additional circuit protection devices (circuit breakers). If in doubt, seek appropriate advice.

Superwinch recommends that all winch electrical systems can be readily and quickly isolated from their electrical supply in the event of an emergency. The winch electrical's system should always be isolated when the winch is not in use.

1. Install mounting kit or structural support for the winch.
2. Mount the winch to a mounting plate or to a mount that you have properly designed.

If not using a Superwinch mounting accessory, follow the general guidelines listed below.

For 9.5 and 12.5 models: (see Fig 2 insert) Mounting plate must be minimum 1/4" (6.3mm) thick. Mounting bolt threads must fully engage nut, but bolt must not contact opposite side of nut pocket in casting. All 4 mounting bolts must be used to secure the winch.

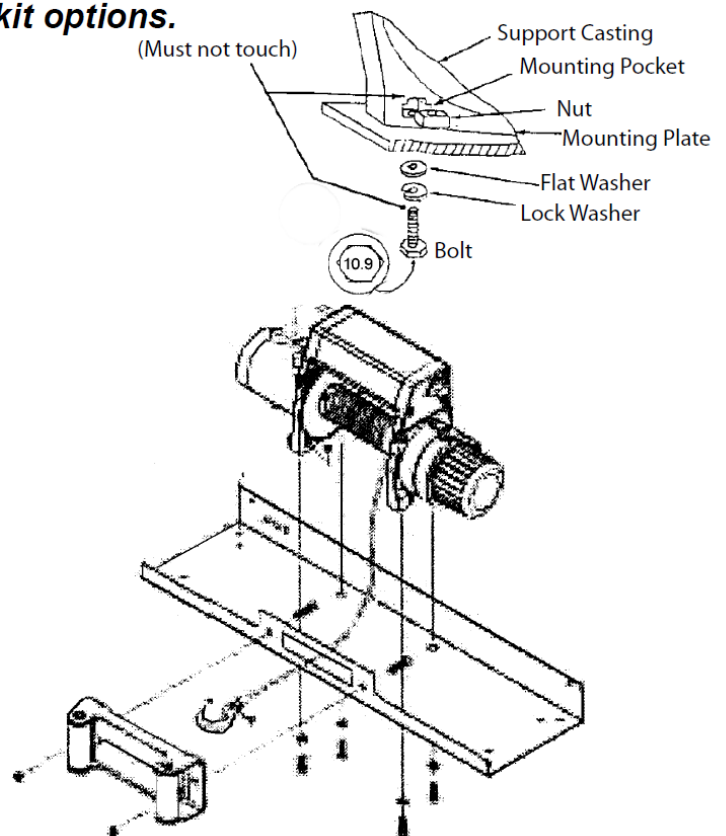
For 14.0 and 18.0 models:

Mounting hardware supplied with winch is sized for a 5/16" (8mm) thick mounting plate. For thicker mounting plates, minimum 18mm (0.700") bolt engagement in casting is required. Bolts must not bottom out in the tapped holes before being fully tightened. All 8 mounting bolts should be used when possible. Minimum of 4 bolts required. 6.5" x 10" (165.1mm x 254mm) pattern is preferred. 4.5" x 10" (114.3mm x 254mm) pattern is acceptable.

⚠ WARNING Your winch is a very powerful machine. To protect yourself and property, the winch must be properly mounted to a structural support capable of withstanding the high pulling capacity of the winch.

⚠ WARNING *Do not substitute any strength grade weaker than SAE Grade 8 (ISO 10.9).*

⚠ CAUTION *When mounting your winch in a foot - forward position, the solenoid pack can be rotated to be on top of the motor or can be remote-mounted. To rotate the solenoid box, remove the two motor screws and solenoid box bracket screws. Rotate the motor and solenoid box upwards and reinstall the screws. If remote mounting, the solenoid pack may be mounted in any configuration EXCEPT inverted (i.e. solenoid studs facing down). Inverted mounting may cause erratic operation. Use properly sized wire or contact Superwinch for remote mount kit options.*



INSTALLATION

Figure 2

⚠ WARNING If different length bolts, nuts, washers and other hardware are required for your installation, always use hardware that equals or exceeds the strength grade of the supplied hardware. In no circumstance should the end of the mounting bolts touch the inside of the casting mount pockets.

⚠ WARNING *Automobile batteries contain gasses which are flammable and explosive. Wear eye protection during installation and remove all metal jewelry. Do not lean over battery while making connections.*

3. Disconnect the vehicle negative and positive battery leads. Route the long red and black color coded wires to the battery. To ensure against insulation abrasion and/or cutting, apply several layers of electrical tape where wiring may come in contact with sharp parts on the vehicle. Attach the red color coded wire to the battery positive and reattach the terminal to the battery.

If your vehicle is equipped with side pole terminals, it may be necessary to obtain auxiliary side terminal bolts from your local auto parts dealer to make these connections.

Connect the black color coded wire to the battery negative terminal, then connect the terminal to the battery.

4. Pull and turn the freespool clutch lever to the, “disengaged” position. Pull several feet of wire rope off the drum. Return the clutch lever back to the, “engaged” position. Plug in remote pendant control. Push button momentarily to check rope drum rotation direction. If drum rotates in the wrong direction, recheck your wiring.

OPERATION

PENDANT OPERATION

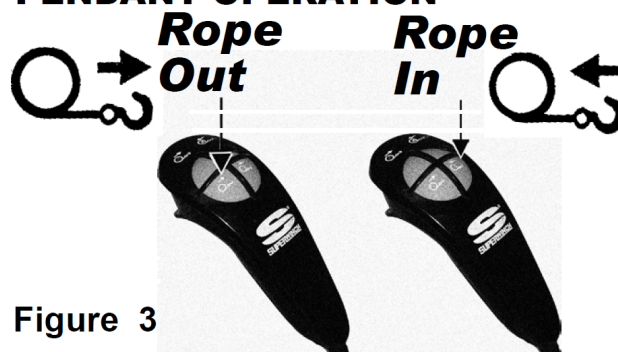


Figure 3

The handheld pendant switch activates a solenoid that activates power to the winch motor.

To connect pendant control, remove the cover on the plug receptacle and insert the plug end of the remote switch.

The plug on the pendant control cord is keyed and will fit into the socket only one way. Lock the plug by rotating the plug collar clockwise. To remove, first unlock the plug by rotating collar in the opposite direction. The switch returns to the “off” position when released. To change direction, press the button for the other direction.

PENDANT BATTERY INSTALLATION

To install the AAA batteries into the handheld pendant, remove the battery door on the back of the pendant and insert the batteries as noted on the graphic inside the battery compartment. Replace the battery door.

⚠ CAUTION *The switch assembly must be kept free of dirt and moisture to ensure safe operation.*

⚠ WARNING *The wire rope may break before the winch stalls. For heavy loads use a pulley block to reduce the load on the wire rope.*

⚠ CAUTION *If the winch motor stalls, do not continue to apply power to the winch.*

⚠ CAUTION *To prevent unauthorized use of the winch, remove the pendant control and store it in a clean dry area such as the glove box.*

PULLING OUT THE WIRE ROPE

The wire rope has been installed on your winch under minimal load at the factory. The wire rope must be respooled onto the drum under load so that the outer layers will not draw down into the inner layers thereby damaging the wire rope.

1. Pull and rotate the clutch lever to the, "Disengaged" position as shown in Figure 4. If there is a load on the wire rope, the clutch lever may not turn easily. **DO NOT FORCE THE CLUTCH LEVER.** Release tension on the wire rope by jogging out some of the wire rope, then try releasing the clutch.
2. Pull out the wire rope and secure it to anchor or load.
3. Check that there are at least five (5) turns of wire rope or eight (8) turns of synthetic rope left on the drum.
4. Re-engage the drum by rotating the clutch lever to the, "Engaged" position (see Figure 4).

CAUTION

Lever must be in position and locked before winching.

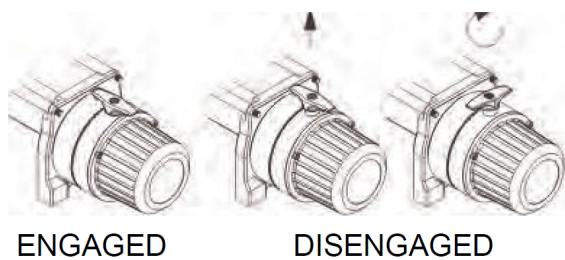


Figure 4

OPERATING TIPS

1. **KEEP A TIGHTLY WOUND WIRE ROPE DRUM.** Do not allow the wire rope to become loosely wound. A loosely wound drum allows a wire rope under load to work its way down into the layers of wire rope on the drum. When this happens, the wire rope may become wedged within the body of the windings damaging the wire rope. To prevent this problem, keep the wire rope tightly

and evenly wound on the drum at all times. A good practice is to rewind the wire rope under tension, after each use. One way to do this is to attach the hook to a stationary object at the top of a gradual incline and winch your vehicle up the incline.

2. **DO NOT ALLOW THE WINCH MOTOR TO OVERHEAT.** Remember, the winch is for intermittent use only. During long or heavy pulls, the motor will get hot. The internal parts will be hotter than the case. To check the temperature, stop winching and carefully touch the motor case.
If the motor is uncomfortable to touch, allow the motor to cool before continuing. KEEP THE ENGINE RUNNING TO RECHARGE THE BATTERY during this break.

3. To maximize winch and wire rope life, use a pulley block to double line heavier loads.
4. The pull required to start a load moving is often much greater than the pull required to keep it moving. **AVOID FREQUENT STOPPING AND STARTING** during pull.
5. **INSPECT WIRE ROPE AND EQUIPMENT FREQUENTLY. A FRAYED WIRE ROPE WITH BROKEN STRANDS SHOULD BE REPLACED IMMEDIATELY.**

6. Never allow shock loads to be applied to the winch or rope.

When wire rope is removed from the drum, as in bringing the hook to the load, the freewheel feature of the winch should be used.

BRAKE OPERATION

Your winch operates a proportional friction-type brake. After winching in a load, this mechanism holds the load up to the rated capacity of the winch. While powering-out a load, the winch controls the rate of speed by applying the brake in proportion to the amount of the load on the winch cable. This results in heavier

loads powering out more slowly than lighter loads.

Similar to the friction-type brakes in your automobile, which can generate heat if used for a long period of time, the winch brake can generate heat if used to power-out a load for a long period of time. **To ensure optimum winch performance, always limit powering-out of a load to 2 minutes and allow the brake to cool for 15 minutes before continuing to winch.**

Under normal use, the brake mechanism should not require any adjustment. Should the brake fail to hold a load or maintain a constant rate of speed during power-out operation, the brake pad may be worn and require replacement.

⚠ WARNING *After extended periods of powering out loads against the brake, the gearbox housing may become hot.*

MAINTENANCE

Periodically check tightness of mounting bolts and electrical connections. Remove any dirt or corrosion that may have accumulated on the electrical connections.

Repairs should be done by Authorized Superwinch Repair Centers ONLY. Do not attempt to disassemble the gearbox. Disassembly will void warranty.

LUBRICATION

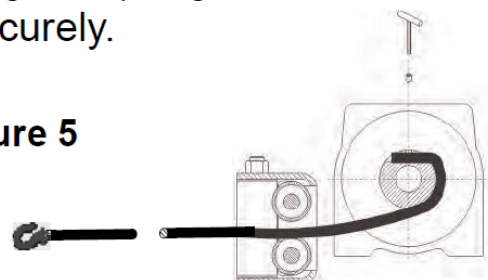
The gearbox and drum bearing are permanently lubricated with a high performance gear lube.

REPLACING THE WIRE ROPE

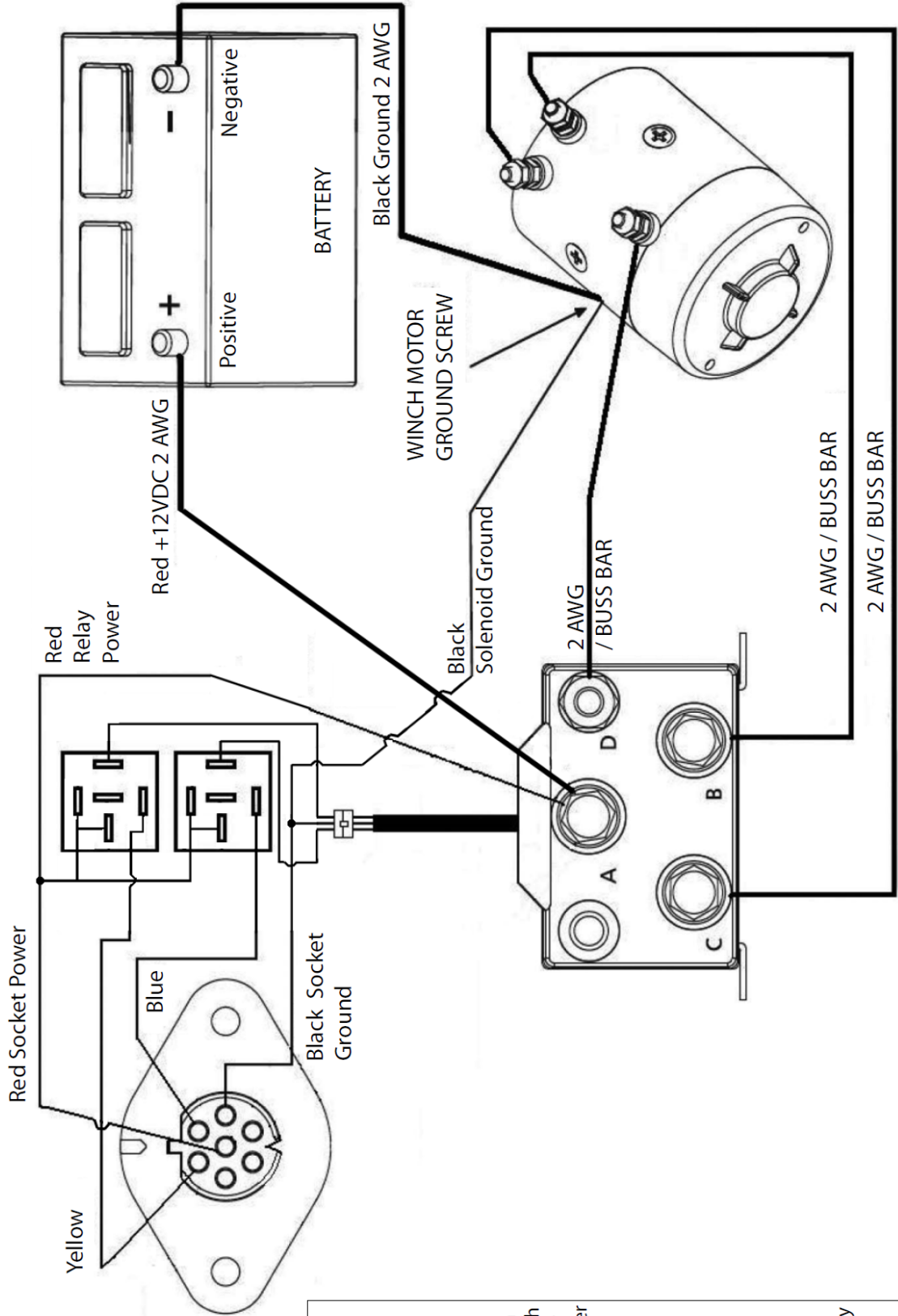
Never substitute a heavier or lighter wire rope. When installing synthetic winch rope, use only Superwinch winch rope, and be sure to follow all instructions and safety precautions supplied with the rope.

Always replace damaged wire rope with manufacturer's identical replacement part, (see Replacement Parts List). Pass attaching end of wire rope through the fairlead (if equipped) and attach it to the drum. When inserting the wire rope into the drum, insert it in the correct end of the hole provided (Figure 5). Tighten the set screw securely.

Figure 5



WIRING DIAGRAM



Handheld Control:

Black-to-Yellow = IN
(Red LED on)

Black-to-Blue = OUT
(Green LED on)

CAUTION

Talon Winch

switching circuit is designed for use with the handheld controller that comes with the winch. It may not be compatible with other winch controllers, wired or wireless.

Use only controls from Superwinch that are designed for use with TALON winch products. Use of any other manufacturer's control system will void your warranty and may cause damage to the winch and/or accessory systems.