# American Eagle

## Anchoring System Installation & Warranty Information

**Keep this guide along with your purchase reciept as proof of purchase. All American Eagle anchoring systems Include a 3 Year Recreational Warranty on the motor, gearbox, solenoid, and switch gear.**

### Manufacturing Guarantee

American Eagle products are assembled in Australia under strict Quality Control conditions. We guarantee this product to be free from Mechanical & Electrical defect upon the date of purchase.

### Using your Winch Safely

-Do Not use your anchor winch for any purpose other than retrieving your anchor.
-Do Not jam the anchor into the bow sprit (anchor davit) upon retrieval. Repeatedly doing so can shorten the life of your transmission and damage your vessel. When the anchor is close just tap the switch until fully raised.
-Do Not engage the up switch after the anchor is fully locked in to the bow sprit. This may damage the bow sprit, your vessel, or cause the transmission to lock up.
-Do Not attempt to free a fouled anchor without tying the anchor line off first. This may damage your vessel, bow sprit, or the winch.
-Do not tie an anchor line to the stern when attempting to free a fouled anchor.
-Do Not engage the winch while the boat is underway. Doing so will most certainly cause damage to the vessel and could cause injury or death.
-Keep hands and pets away from the winch while in use.
-Do not attempt to winch in a fouled anchor in ocean swell. Doing so can swamp and sink your boat.
- Loose rope coils can cause a tangle. Keep the line tight upon deployment & retrieval.
-Do not continue to pay out loose rope once the anchor is on the bottom. Motor the boat in reverse while paying out extra line.

### Accident & Injury Disclaimer

**These products have moving parts with powerful motors and can cause inquiry if mis-used.**
**Electus Distribution, Road Tech Marine, & its affiliates claim no liability in the event of accident, injury, or death due to the use or mis-use of this product.**
**Electus Distribution, Road Tech Marine, & its affiliates claim no liability in the event vessel damage due to the use or mis-use of this product.**

### Maintenance

-Always dis-engage the circuit breaker when the winch is not in use.
-Lightly rinse your winch & chain with freshwater periodically after use.
-A light spray with inox or other lubricant annually over the unit is ideal for moored vessels, vessels little regular washing, or before layup periods.
-Check cable connections at battery and on circuit breaker and solenoid every season. Connections must be tight for optimal operation.
-Release tension on the winch & dis-engage the circuit breaker before putting the boat away for extended periods of time.
-Apply dielectric or white litium grease to exposed motor terminals annually.

# Installation

## Anchor Winch

-Centre of drum should be centered to the middle of the bow sprit.
-Once the correct postion is found, mark four holes and drill with an 8.5mm drill.
-Use nickle paste when doing up nuts and bolts to prevent a cold weld.
-There are 8 possible motor orientations. To change the motor orentation remove the 3 bolts from collar to cradle. Rotate to new oreintation and replace. Note some positions will only allow the replacement of 3 bolts as the 4th will be in the void above the drum shaft, this is ok, only 3 are required.
-To change the motor position on the gearbox remove the hex head bolts connecting the gearbox mounting flange to motor. Spin the motor to desired orientation in 90 degree increments and replace the bolts. There is no need to remove the motor completley from the gearbox.
-For deck mounts face the motor to stern and keep the electrical terminals facing the deck.
-For mounts inside a closed anchor well face the motor up or forward. Do not point the motor directly down in an anchor locker.
-For mounts in an open anchor well keep the motor up with terminals facing the rear. If the motor must be mounted angled forward in an open well rotate the motor with the terminals facign away from sun and spray.
- Rubber lug covers filled with silicon can be used over the motor lugs at the time of installation. This will prevent the need for yealy maintenance of the motor terminals with dielectric or white litium grease.
-Do not overtighten cable lugs to motor.
-Do not attempt to dissasemble motor, gearbox, or remove oil fill bolts from the gearbox.

## Deck Roller

-Deck Roller should be mounted on the edge of the anchor locker.
-In an anchor locker with a lid, a cutout must be made in the lid in order for rope & chain to pass through.
-Once the correct postion is found, mark four holes and drill with an 8.5mm drill.
-Use nickle paste when doing up nuts and bolts to prevent a cold weld.
-Deck Mounted anchor winches do not require a deck roller as the rope and chain should be run over the top of the drum and is away from the top deck.

## Solenoid

-Mount the solenoid behind the helm in a dry area.
-Do not get the solenoid wet.
-Mount the solenoid with terminals facign up.
-If mounting to an aluminium boat, first mount the soelnoid to teflon or other non-conductive material, them mount that to the vessel.
-Do not let the lugs on the top of the solenoid touch.

## Switch Panel & Circuit Breaker

-Switch Panel should be mounted to the side of the steering wheel opposite the throttle as you may need to operate the throttle and anchor winch at the same time.
-If mounting to aluminium, ensure cable lugs on the back of the circuit breaker do no touch the boat.
-Always disengage the circuit breaker when not in use.

## Wiring & Operation

-Ensure properly sized cable is used throughout installation (see diagram below).
-Once wired up, if the winch spins in the opposite direction than desired simply invert the two switching wires either on the solenoid or back of rocker switch.
-Motors are reverse polarity, there is no full time pos or neg from solenoid to circuit breaker.
-These units are direct drive, the winch will not operate if the rocker switch is not engaged. Push rocker switch down for anchor deployment and up to retrive.

## Warranty

**The motor, gearbox, solenoid, circuit breaker, spool, cradle, & bearing hubs are covered by a 3 Year Warranty for all purposes except what is stated below. Warranty begins from date of purchase.**

-Warranty does not cover rope, chain, or cable.
-Warranty does not cover improper installation.
-Warranty does not cover winches installed with incorrect cable size or type.
-Warranty does not cover motors or gearboxes which have been opened or tampered with without prior consent.
-Warranty does not cover solenoids or circuit breakers with water damage but it does cover them from internal failure.
-Warranty does not cover deck rollers.
-Warranty does not cover travel or labour in relation to removing, repairing, or repalcing parts inside or outside of the warranty period.
- Winches must be used for pulling anchors only.

## Warranty Claims and Procedure

All warranty claims are to be handled through your local RTM store. After diagnosing the issue (see troublehsootign guide below), remove the part that needs replacing and ring or call into your local RTM along with your proof of purchase. They will take the old part and order in the replacement for you. This will be free of charge for all parts inside the warranty period. You old part must be turned in in order to recive a new one inside the warranty period.

**RTM will not do entire winch swaps.** Parts must be diagnosed, removed, and replaced individually.

## Troubleshooting

**The most common issue on anchor winch installations is power supply & involves battery maintenance. Battery performance must be checked. Just because everything else if working ok on your boat does not ensure your battery is in optimal condition for winch operation. Nothing will draw more power on your boat than an anchor winch, as such this will the first item to reveal an issue with your battery or connections.**

1. **New Install-Winch not working: "I have installed the winch and it is not firing up."**

Please ensure all steps below have been taken in order before calling for assistance.

- Ensure all battery cable connections are tight.
- Ensure the circuit breaker is engaged.
- Ensure battery cable has been crimped with a swage or other device. If it has not you will not have a good connection and performance will suffer, you may also have sporadic issues.
- Ensure solenoid has not been mounted directly to aluminium. If the boat is aluminium, mount the solenoid to Teflon or other non-conductive material, then mount that to the boat.
- Ensure solenoid is mounted with terminals facing up.
- Ensure switching wire connections between rocker switch and solenoid are properly crimped and tight.
- Ensure a jumper lead is connected from AUX post on the circuit breaker to the middle spade pin on the back of the rocker switch.

1.2 **Previous Install-Winch not working: "Was working fine last season, but now it will not function."**

Is the solenoid engaging?

- If the solenoid is making a single "click" when rocker switch is engaged in both directions it is most likely operating ok.
- If the solenoid is making a "brrrrrrr" sound of multiple partial clicks per second, this is a

power supply issue. It means your solenoid is not getting enough power through it to turn the winch motor. Most of the time this is due to:

- Bad connections either at the battery, circuit breaker, or solenoid.
- Low Battery Voltage.
- Corroded connections or cable inside the sheath.

Please check that all connections are tight, battery voltage, and ensure cable is not corroded inside the sheath before calling for assistance.

- If there is no click from the solenoid, and all checks for connection and power supply have been done then the solenoid is most likley at fault. Contact RTM for a repalcement.

1.3 **"Winch seems slow, low on power, or is tripping the circuit breaker often"**

This could be due to several issues including bad connections, faulty battery, faulty circuit breaker, or a damaged winch motor or transmission. To properly diagnose this issue perform these steps in order and **test operation after each step**.

- Ensure Battery is in good condition by having it load tested.
- Ensure all cable connections are tight & in good condition with no corrosion.
- Bypass the circuit breaker. This is done by removing the battery cable from the AUX post on the the back of the circuit breaker and additing it to the BATT post. If this is done and the winch performs as it should contact RTM for a new circuit breaker.
- Remove the winch leads from the solenoid. Grab a spare battery and take it to the area where the solenoid is mounted and touch each direclty to the pos and neg terminals. Then swap. If the winch fires up and oeprates at the correct speed the issue is in your solenoid. Contact RTM for a repalcement.
- If it does not operate as normal and there is a grinding sound or the drum stutters the issue is in your gearbox. Contact RTM for a replacment.
- If it continues to operate slow the issue with with your winch motor. Contact RTM for a replacment.

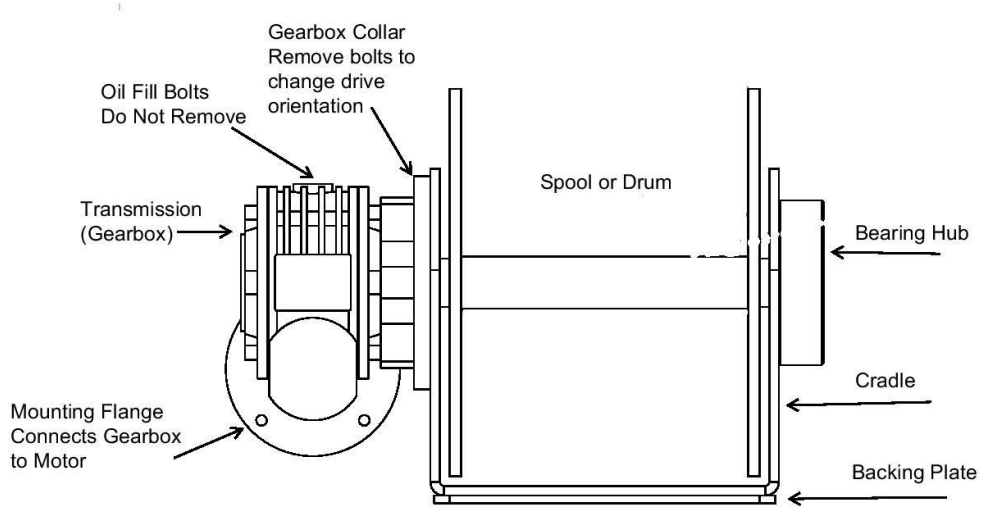
1.4 **"Winch is only working in one direction"**

This could either be a faulty connection on the switching wires from rocker switch to solenoid or a faulty solenoid.

- Ensure connections are secure on the switching wires from the back of the rocker switch to the solenoid.
- Ensure the rocker switch is wired as per diagram below.
- If connections are secure and the rocker switch is wired correctly the issue will be in the solenoid. Contact RTM for a repalcement.

1.5 **"There is a grinding noise, the spool shutters during operation, or I can hear the motor spinning but the drum is not moving"**

- All of the above point to an issue in the transmission. Contact RTM for a replacement.



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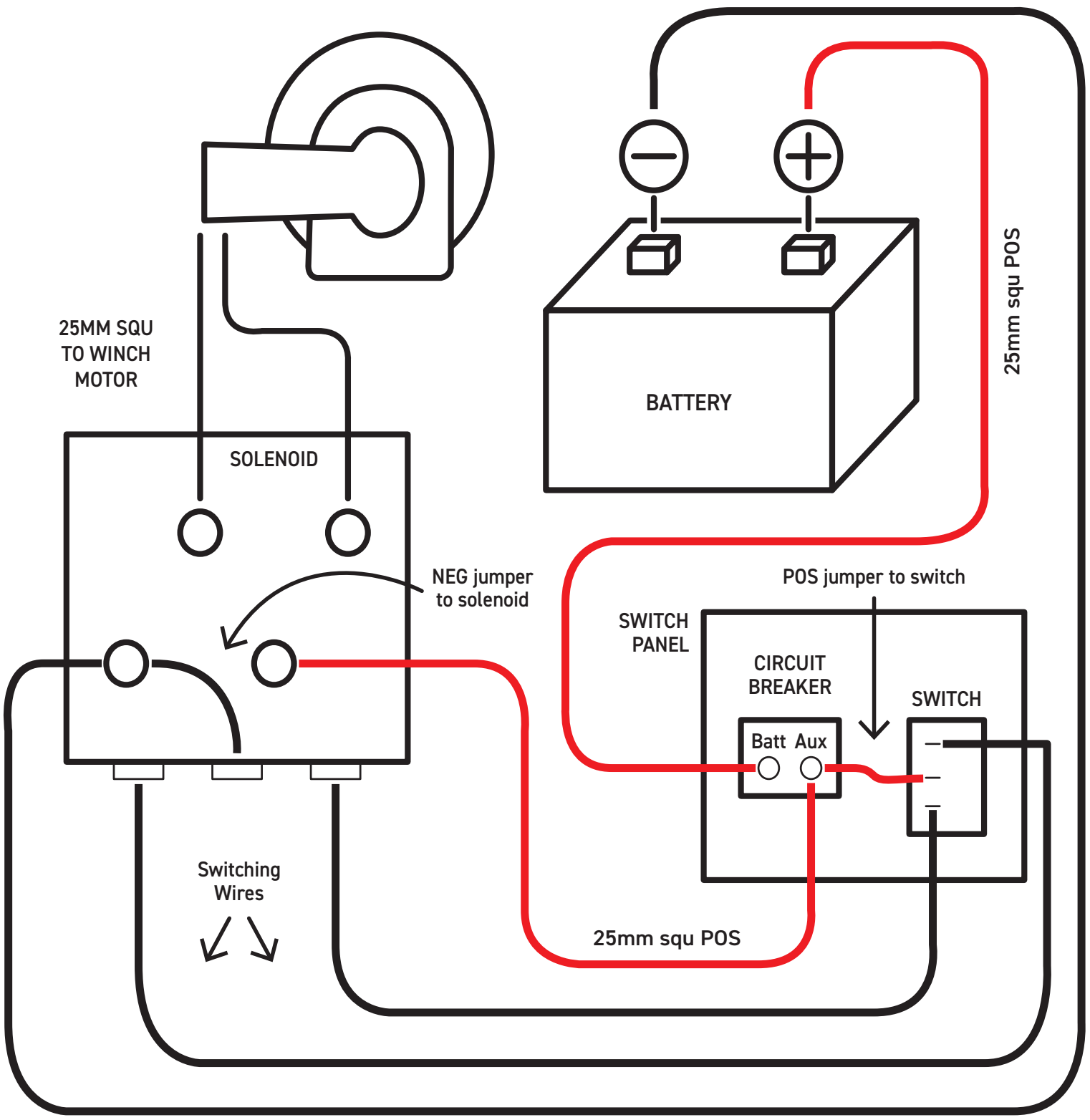


- Cable should be 25mm squ, tinned copper cable in most cases
- Winch motors are reverse polarity. There is no full time POS or NEG from solenoid to winch motor