

WINCH/WINCH PLATE INSTALLATION INSTRUCTIONS

Max IV

WarnWinch Max IV RT/XT 25 toggle.doc
2/7/07
PN 66107 B2

Tools Required:

| | | |
|------------------|--------------------|----------------|
| Drill Motor | Two 9/16" Wrenches | 1/2" Socket |
| 1/8" Drill Bit | Ratchet | 7/16" Socket |
| 13/32" Drill Bit | Ruler | 7/16" Wrench |
| 11/32" Drill Bit | Scribe | 3/8" Wrench |
| 9/32" Drill Bit | Wire Cutters | 5/16" Wrench |
| 9/16" Socket | Felt Tip Pen | Pliers |
| Center punch | Black Paint | 5/8" Spade Bit |
| 1/2" Wrench | 3/16" Hex Wrench | 6" Extension |
| 3/16" Drill Bit | 1/2" Drill Bit | Rivet Gun |

Procedure:

1. Read through all instructions and identify all necessary parts.
2. Remove the rear engine cover. Disconnect negative (ground) cable from the battery.
3. Drain all of the fuel from the gas tank into an appropriate container. **USE CAUTION - GASOLINE IS VERY FLAMMABLE. DO NOT SMOKE OR DRAIN TANK IN ANY AREA WITH A SPARK OR OPEN FLAME.** Remove the fuel tank from the front of the Max IV by loosening the two 1/4" bolts holding the tank straps at the base of the tank. Then remove the fuel gauge/cap. Leaving the fuel line connected, swing the tank out from under the dash. Remove the center body lip bolt from the body.
4. Place the winch mount in the center of the front of the body, resting on the front lip. See Figure III. Hold the winch mount firmly against the body.
5. Mark the four holes on front grill area of the body along with the two outermost holes on the front body lip area with a felt tip pen. Remove the center body lip bolt.

6. Remove winch mount and again check to be sure mount will be centered on body when holes are drilled.
7. Drill holes with the 3/16" drill bit and then re-drill the four holes in the grill area with a 13/32" drill bit and the two holes in the lip with an 11/32" drill bit.
8. Remove the winch, the fairlead mounting bracket, and the hardware kit from the winch kit. Place the fairlead mounting bracket and winch onto the winch mount. See Figure V. Using two M8 – 1.25 x 20mm flat head bolts and two M8 – 1.25 x 25mm bolts and lock washers, secure the winch and fairlead mounting bracket to the winch mount.
Note: The flat head bolts should be used in the rear two holes in the winch mount. These holes are countersunk so the bolt head will be flush with the bottom of the winch mount. The winch should be oriented such that the winch motor is on the right (passenger) side of the vehicle.
9. Bolt the winch mount support to the backside of the front lip of the winch mount using three 5/16-18 x 1 1/4" bolts, 5/16" lock washers, and 5/16" nuts. Wrap the holes at the bottom of the winch mount support with strip caulk so the strip caulk will be between the lower body and the winch mount support. See Figure IV.
10. Place the back plate on the inside of the body. Place a flat washer on the head of the four 3/8" bolts and slide the bolts through the backing plate, through the upper body and through the winch mount. Place a flat washer, lock washer, and a nut on each bolt and tighten them down.
11. Place a 5/16-18 x 1 3/4" bolt down through each of the two holes in the winch mount and through the lip area of the front of the vehicle. Place the reinforcing bar under the lip of the vehicle and onto the two 5/16-18 x 1 3/4" bolts. Secure the reinforcing bar with 5/16" flat washers, lock washers, and nuts. See Figure IV.
12. Using the three holes at the bottom of the winch mount support as guides, drill three 11/32" holes through the lower body. Place a 5/16"-18 x 1 1/2" bolt through each hole and in through the lower body. Wrap the threads of each bolt with strip caulk at the area where the bolt comes through the lower body. Place the winch mount support

bar onto these bolts and secure the bar with lock washers and nuts.

- 13.** Place the roller fairlead (with the warning label facing up) on the front of the fairlead mounting bracket. Line up the holes with the roller fairlead and the fairlead mounting bracket. Secure the roller fairlead to the fairlead mounting bracket using two M10-1.5 x 25mm bolts, 3/8" lock washers, and M10 – 1.5 jam nuts. See Figure V.
- 14.** Feed the winch cable through the roller fairlead and install the hook to the end of the cable.
- 15.** Locate the contactor in the winch kit. This will be mounted on the engine stand to the right (passenger side) of the engine. See Figure VI for the mounting hole locations. Mark the location on the engine stand and drill four 9/32" holes. Touch up these holes with black paint to avoid corrosion. Mount the contactor to the engine stand using the hardware provided. The contactor should be oriented with the long side front to back and with the rocker switch leads and the yellow wire stud towards the rear.
- 16.** Make a mark on the front of the body 4 1/4" from the winch plate towards the right side of the vehicle (passenger side when sitting in the vehicle) and 1 1/4" and 2 1/2" up from the lip of the upper body. See Figure III. Drill a 5/8" hole at these two marks using the spade drill bit. Insert the plastic grommets supplied with the winch mounting kit into this hole. These holes will be used for the winch wires.
- 17.** Re-install the fuel tank in the reverse order in which it was removed.
- 18.** The winch switch is to be mounted on the upper body, above or below (depending on your serial number), to the right to the key switch and choke knob. See Figure VII. Draw a vertical line 1 3/4" to the right of the center of the key switch. Now draw a horizontal line 1 3/4" up from the center of the key switch for serial numbers 18819 and greater, or draw a horizontal line 4 3/4" below the center of the key switch for vehicles with a serial number of 18818 and lower. Where these two lines cross, drill a 3/16" hole followed by a 1/2" hole. Remove the round nut from the toggle switch. This will be discarded. Insert the toggle switch into this hole from the backside of the dash. Slide

the winch switch plate over the toggle switch rotating the switch if necessary to allow the groove in the switch to line up with the groove in the plate. This will allow proper switch orientation. Install the rubber switch boot onto the toggle switch. Square the winch switch plate to the dash and secure the toggle switch by tightening the switch boot with a pair of pliers. Using the switch plate as a template and being sure it is square, drill the two plate holes through the body using a 1/8" drill bit. Secure the plate using the two 1/8" rivets. **Note:** You may install the toggle switch in any convenient location if any other accessory occupies this space.

19. Refer to winch installation instructions for proper wiring. Also, refer to Figures I and II of this manual for winch and toggle switch installation. The toggle switch should be wired as follows: The green wire will plug into the top terminal (once the switch is installed) and plug into the green wire on the contactor, the black wire will plug into the bottom terminal of the toggle and to the black wire on the contactor, and the red wire will plug into the center terminal on the toggle switch and will be splice into a wire that is hot only when the key switch is in the lights/run, run, or start position. **Note:** A toggle switch and plate are used in place of the rocker and/or remote switch.
20. Using the supplied cable ties, secure the wires so they are clear of any moving parts and sharp edges. Use the supplied wire loom against any sharp edges if necessary.
20. Double check all wire connections and re-connect the negative battery cable.
21. Refer to Warn's ATV Guide to Winching for operation and safety guidelines.

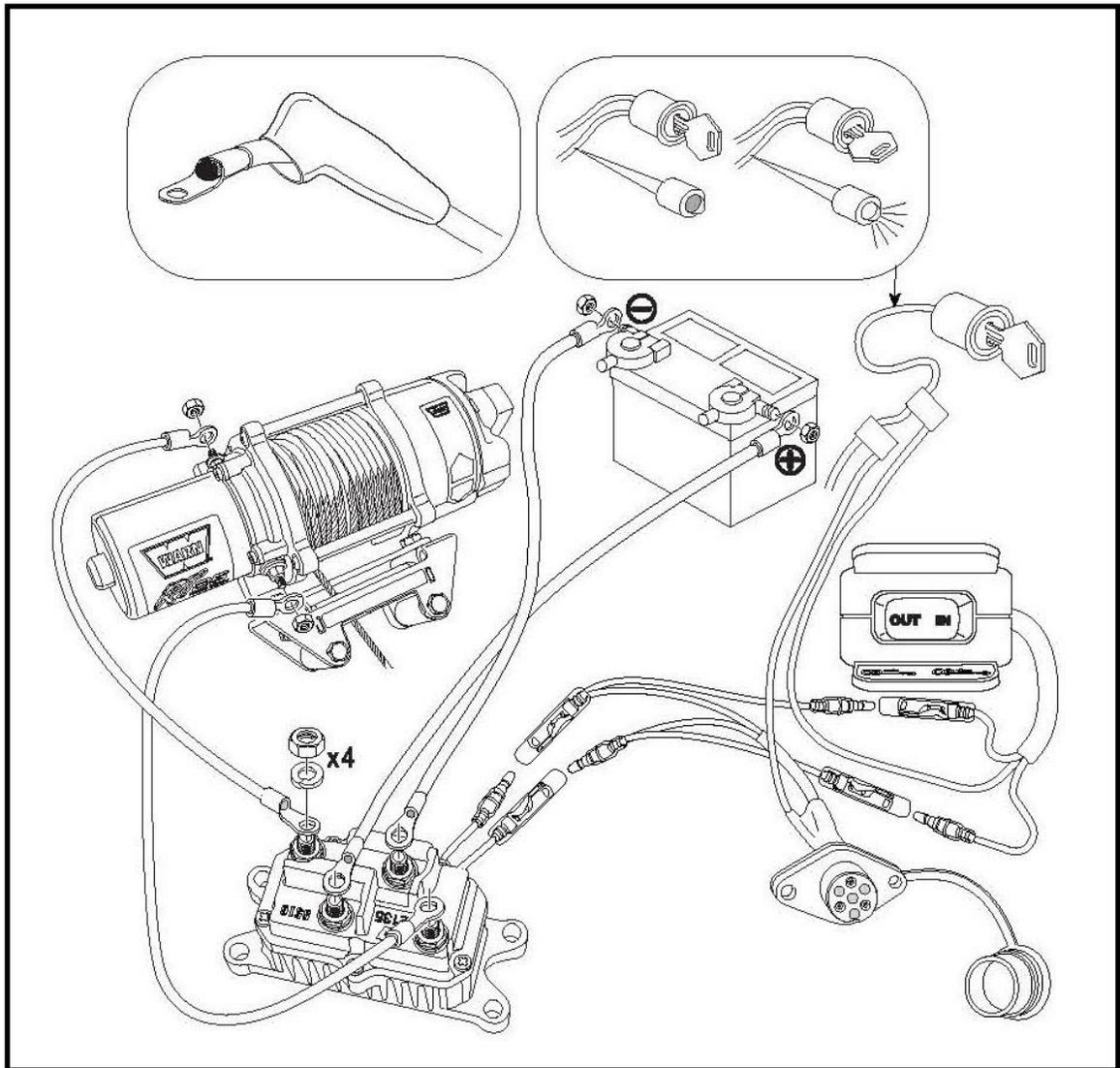
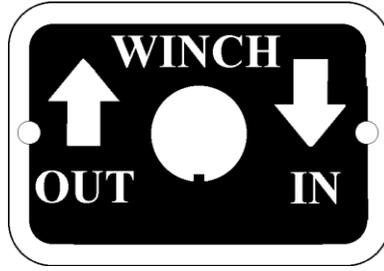
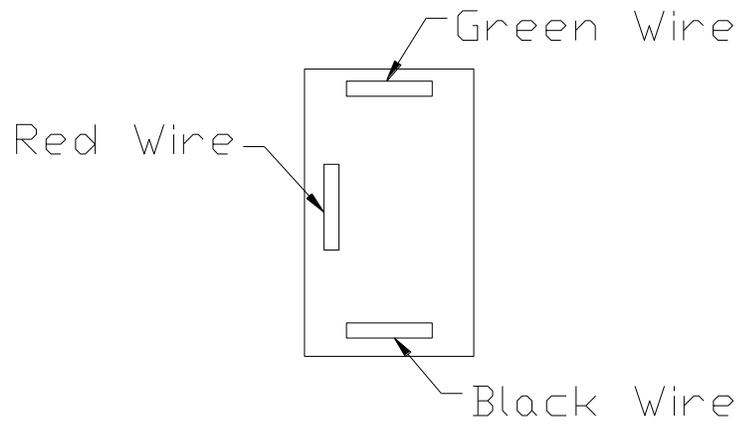


Figure I



Switch Plate



Back of Toggle Switch

Figure II

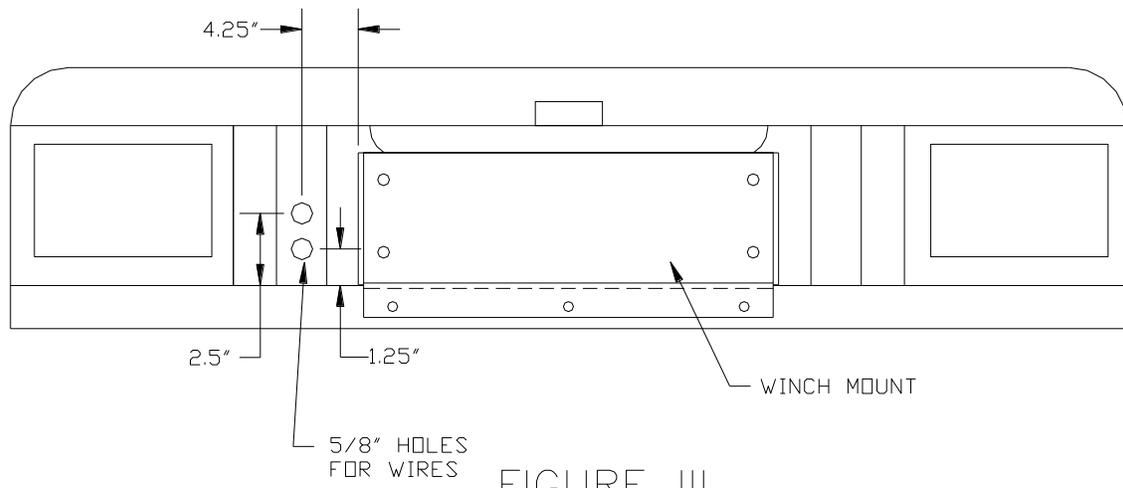


FIGURE III

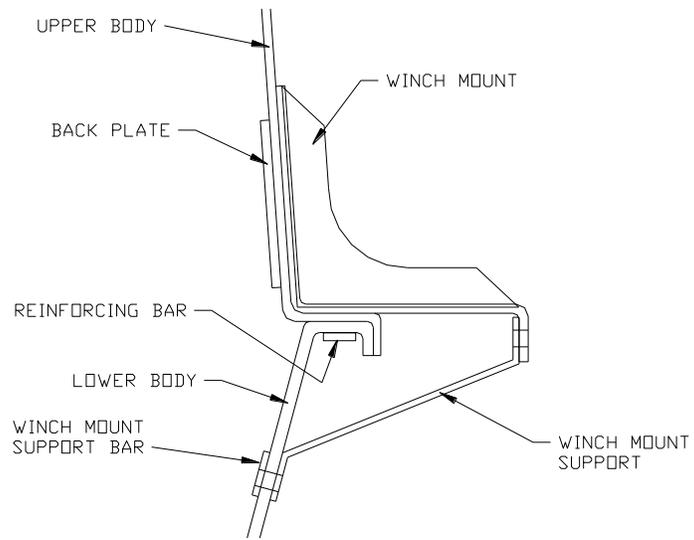


FIGURE IV

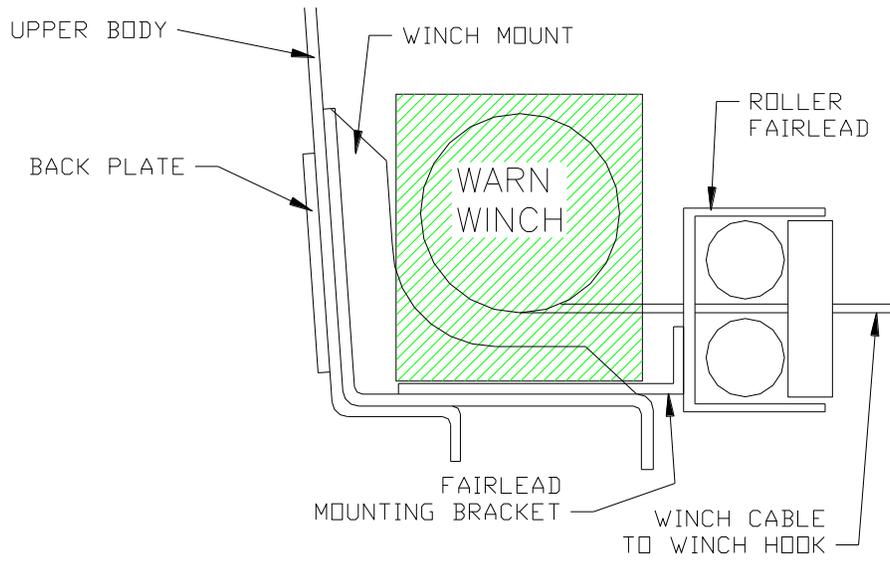


FIGURE V

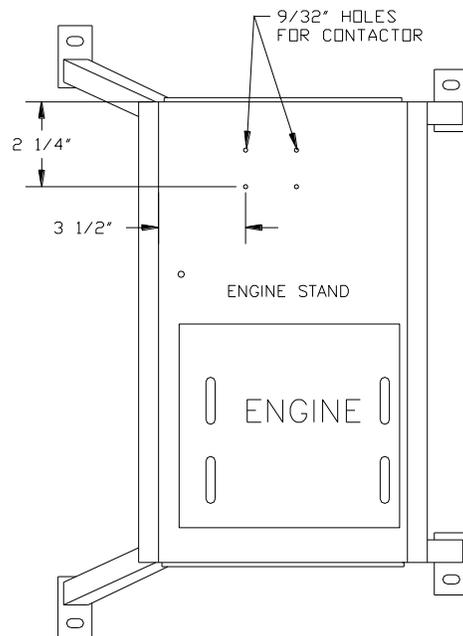


FIGURE VI

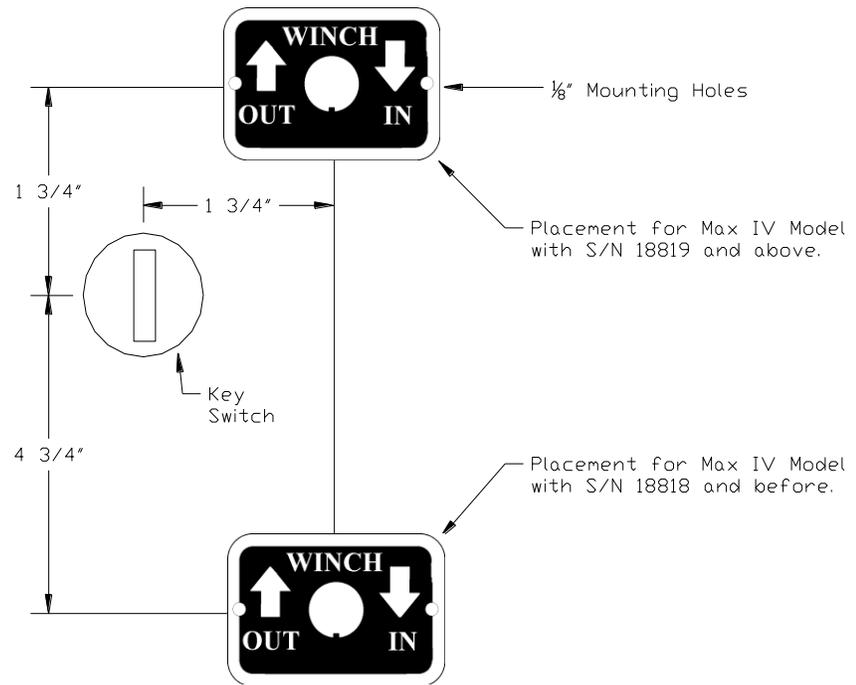


Figure VII