

WINCH/WINCH PLATE INSTALLATION INSTRUCTIONS

Max II

WarnWinch Max II RT / XT 25 toggle.doc
2/07/07
PN 66106 C2

Requirements:

Max II

Tools Required:

Drill Motor	9/16" Wrench	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
3/16" Drill Bit	Wire Cutters	5/16" Wrench
9/16" Socket	Felt Tip Pen	Pliers
Center Punch	Black Paint	5/8" Spade Bit
9/32" Drill Bit	1/2" Drill Bit	Rivet Gun

Procedure:

1. Read through all instructions and identify all necessary parts.
2. Raise the Max II body. Also, remove the center bolt and wing nut from the front of the vehicle. This bolt and wing nut will be discarded.
3. Disconnect negative (ground) cable from the battery.
4. Place the winch mounting bracket in the center of the front of the body, resting on the front lip. See Figure III Front View.
5. Mark the four holes on front grill area of the body with a felt tip pen.
6. Remove winch plate and again check to be sure plate will be centered on body when holes are drilled.
7. Drill holes with the 9/32" drill bit and then re-drill them with the 13/32" drill bit.
8. Place the back plate on the inside of the body. Place washers in the indentation in the body between the back

plate and the front area on the indent. See diagram. There will be 7 washers for the bottom two holes and 5 washers for the top two. See Figure III Top View.

Note: Wrap the washers with some tape to secure them together as one large spacer. This will ease installation.

9. Place a 3/8" flat washer on each bolt and slide the four bolts through the back plate, washers (installed in step 8), front of body, and winch mounting bracket. See Figure III Side View.

Note: Use a 1 1/2" long bolt in the upper two holes, and a 1 3/4" long bolt in the two lower holes.

10. Place a 3/8" flat washer and a 3/8" lock washer on each bolt followed by a nut. Tighten the nuts down with a socket and a wrench.

11. Using the four holes in the base of the winch plate as guides, drill two 13/32" and two 11/32" holes through the upper and lower body. Take the reinforcing bar and place it under the lip on the front of the vehicle so the holes drilled line up with the holes in this bar. Using the 3/8" bolts, washers, and nuts supplied, fasten the winch plate to the reinforcing bar. Tighten the nuts down. See Figure III.

12. Remove the winch, roller fairlead assembly, and the fairlead mounting plate from the winch box. Also, locate and open the hardware kit in the winch box.

13. Mount the winch and fairlead mounting bracket to the winch mounting bracket using two M8-1.25 x 25mm bolts and two M8 – 1.25 x 40mm bolts and lock washers. The two M8 – 1.25 x 40mm bolts and lock washers go up through the reinforcing bar, the body lip, the winch mounting plate, the fairlead mounting plate, and into the base of the winch. The two M8 – 1.25 x 25mm bolts and lock washers go up through the front holes on the winch mounting bracket, the fairlead mounting bracket and into the front holes in the base of the winch. See Figure V.

Note: The winch is to be oriented such that the motor is on the right side (passenger side) of the vehicle.

14. Place a 3/8" flat washer on each of the two remaining 3/8 x 1 1/2" bolts. Slide these bolts down through the winch mounting plate, the body lip, and reinforcing bar installed

in step 13. Place a 3/8" flat washer, a 3/8" lock washer, and a nut on each bolt and tighten them down.

- 15.** Place the winch support bracket over the winch so the holes line up with the winch mounting bracket and the fairlead mounting bracket. Install two 3/8" – 16 x 1" bolts, flat washers, lock washers, and nuts into the holes at the top of the winch mounting bracket. Leave these nuts hand tight. See Figures IV and V.
- 16.** Place the roller fairlead (with the warning label facing up) on the front of the winch support bracket. Line up the holes with the fairlead, the fairlead mounting bracket, and the winch support bracket. Using two 3/8-16 x 1" bolts, lock washers, and Jam nuts, secure the roller fairlead to the fairlead mounting bracket and the winch support bracket. Tighten these down as well as the two 3/8" bolts installed at the top of the winch support bracket in step 14. See Figure V.
- 17.** Feed the winch cable through the roller fairlead and install the hook to the end of the cable.
- 18.** Locate the contactor in the winch kit. The contactor is to be mounted on the front, left side of the bulkhead. See Figure IV for the mounting hole locations. Mark the location on the bulkhead and drill four 9/32" holes. Touch up these holes with black paint to avoid corrosion. Mount the contactor to the bulkhead using the supplied hardware. Make sure to orient the contactor such that the rocker switch leads and the yellow wire stud are on the left side of the vehicle and the long side of the contactor runs left to right.
- 19.** Make a mark with the felt tip pen at the center of the second raised rib on the grill area of the right side (passenger side) of the vehicle. See Figure III. Drill a 5/8" hole using the spade drill bit. Mark and drill a second hole 1 1/4" below this hole. Insert the plastic grommets supplied with the winch mounting kit into these holes. These holes will be used for the winch wires.
- 20.** The winch switch is to be mounted on the upper body to the left to the key switch and choke knob. See Figure VII. Draw a vertical line 5 1/2" to the left of the center of the key switch. Now draw a horizontal line 1 1/4" down from the

top edge of the dash so it will cross the other line. 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.

21. Refer to winch installation instructions for proper wiring. Also, refer to Figures I and II of this manual for winch installation 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.
22. 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.
23. Double check all wire connections and re-connect the negative battery cable.
24. Refer to Warn's ATV Guide to Winching for operation and safety guidelines.

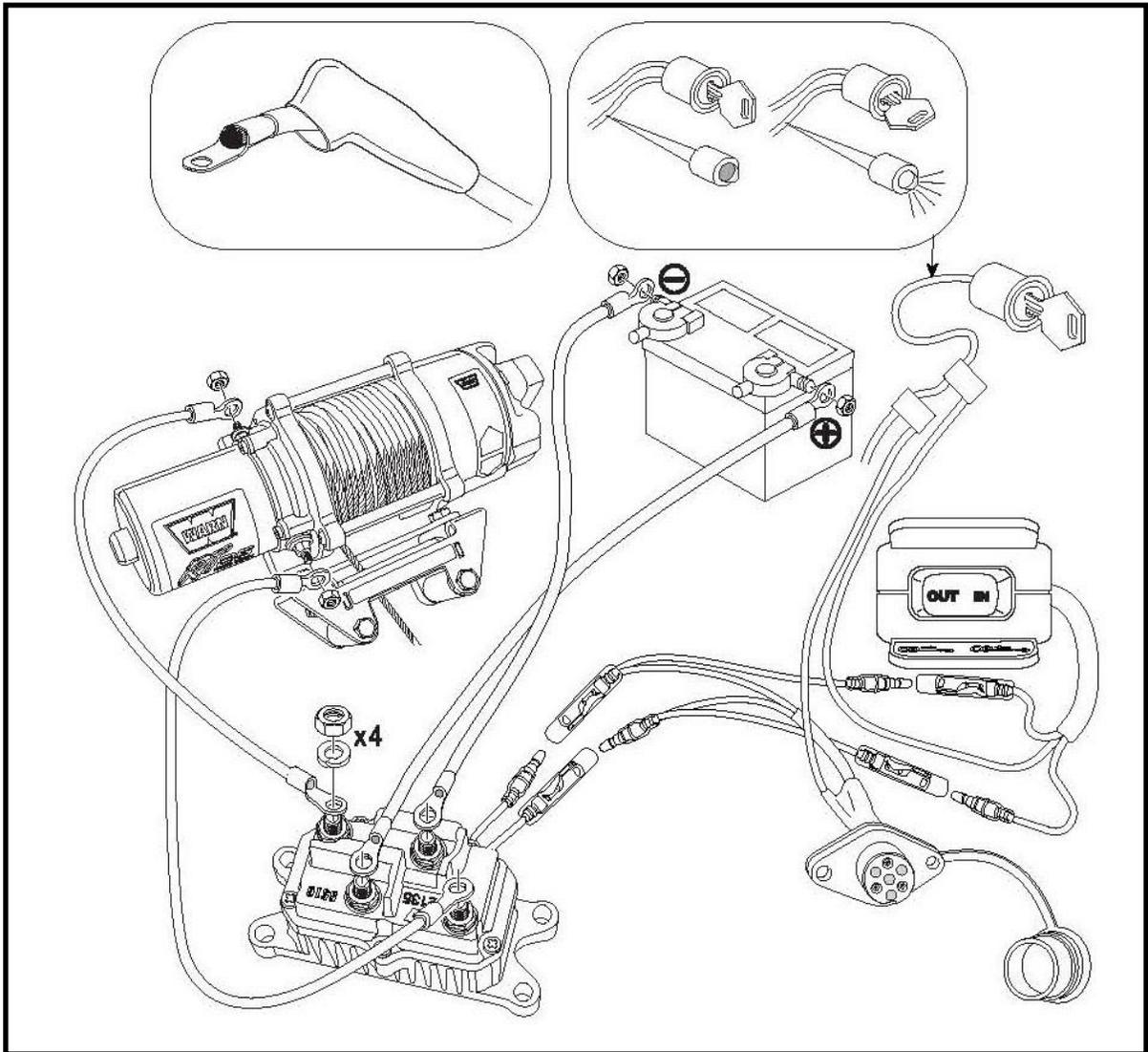


Figure I

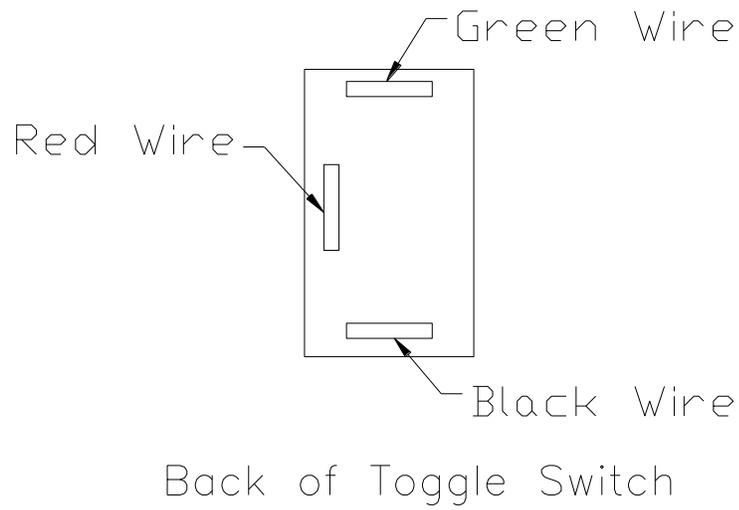
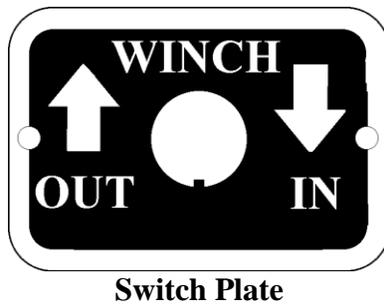


Figure II

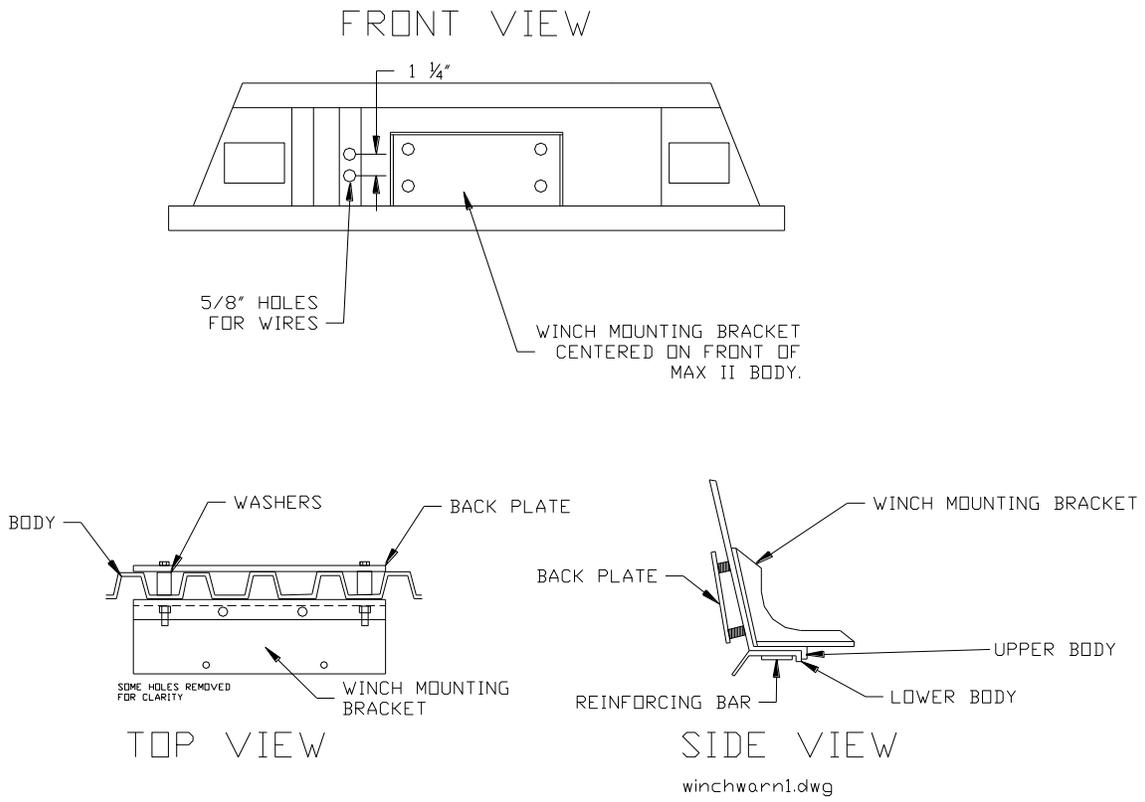


Figure III

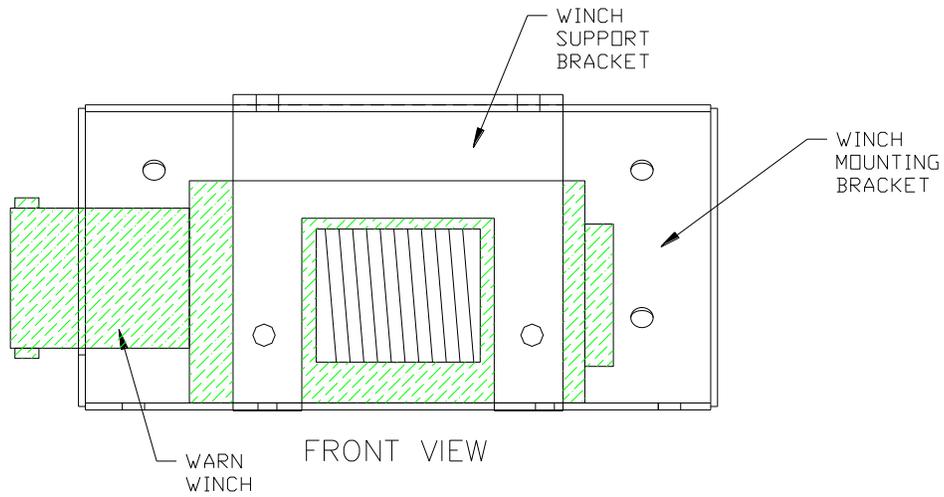


Figure IV

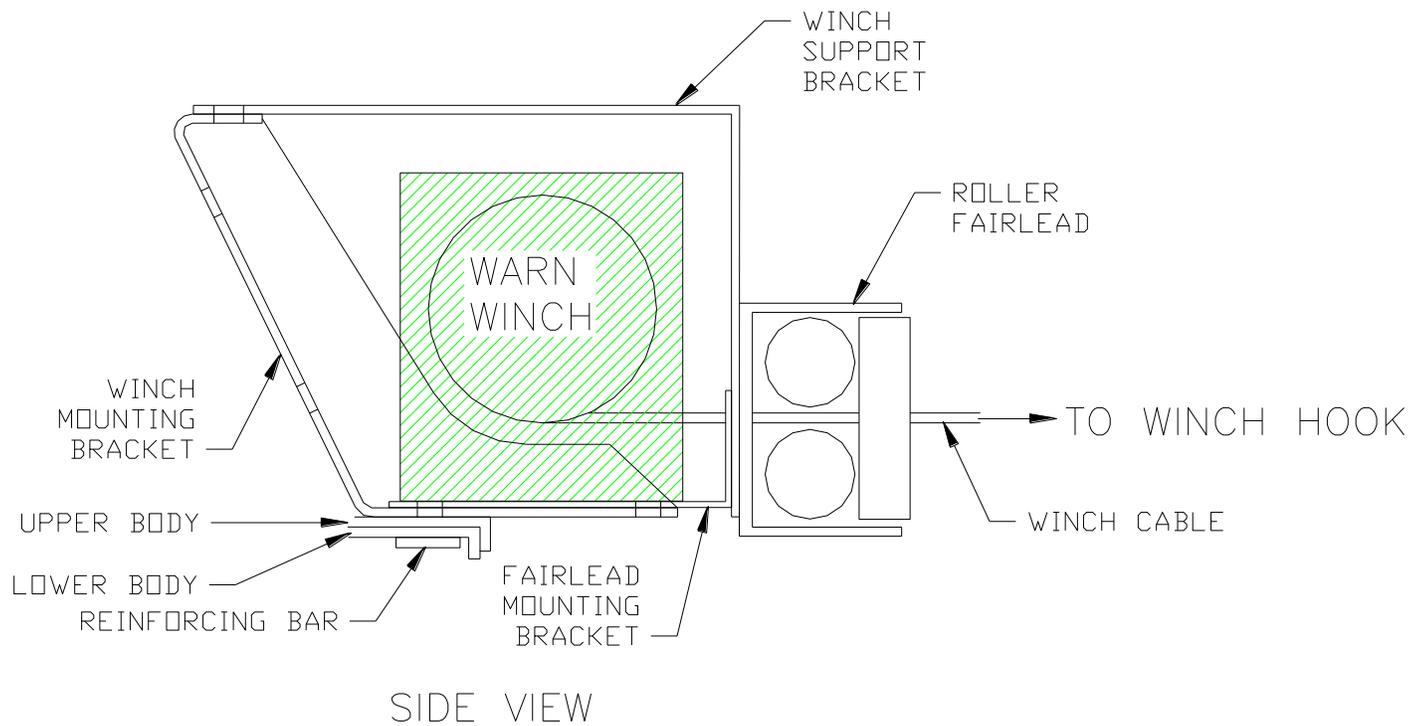


Figure V

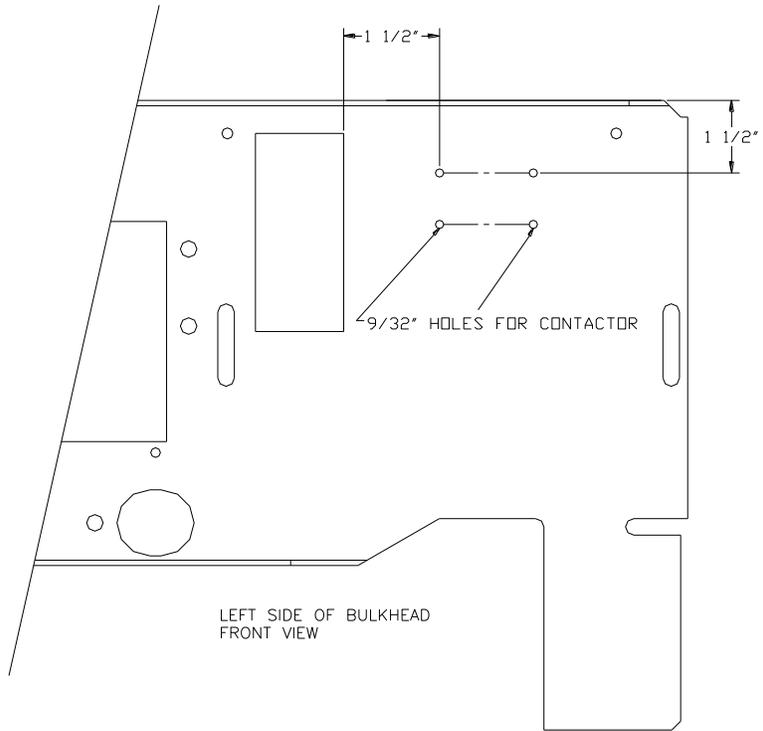


Figure VI

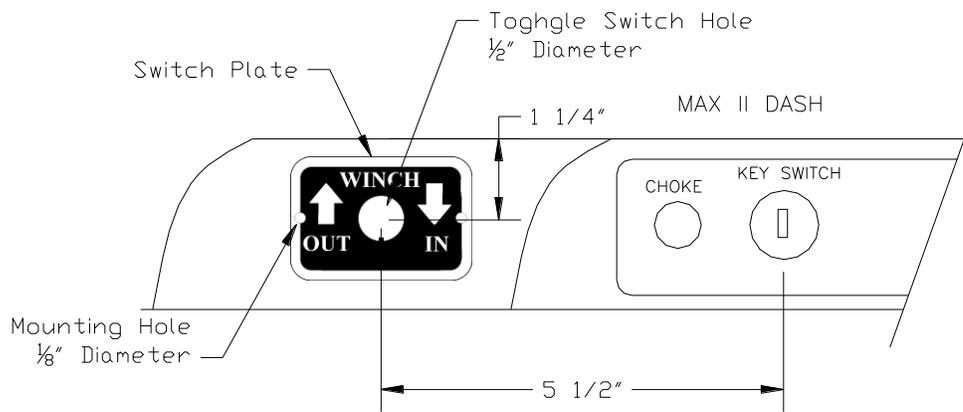


Figure VII