

23001 Industrial Blvd Rogers, MN 55374

Hardware List

QTY	Description
1	Mount Plate
2	1/4" x 1" x 1.5" u-bolt (42010)
4	1/4" flat washer
4	¼" nylock nut
2	8mm x 25mm hex head bolt
2	Spacers (5/16 ID x 3/4 OD x
	3/8")

VIPER WINCH INSTALLATION

- 1. Begin by removing the front skid plate located on the front of the ATV. Remove the four side 8mm bolts and four bottom 6mm bolts securing the front skid plate, figure 1. Save the fasteners as they will be used later to reinstall the front skid plate.
- 2. Remove the four plastic rivets on each side of the front plastic fascia, figure 2. Use a large screw driver to carefully remove the center rivet. After removing the center rivet, remove the rivet housing. Save the fasteners as they will be used to reinstall the front plastic fascia.
- 3. Remove the two 6mm bolts that attach the front plastic fascia to the bumper, figure 3. Remove the front plastic fascia at this time.



FIGURE 1



FIGURE 2



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FIGURE 3

- 4. Remove the two 6mm bolts that attach the front bumper to the plastic headlight assembly, figure 4. Save the fasteners as they will be used to reinstall the front bumper.
- 5. Remove the two top 8mm bumper bolts that attach the front bumper to the rack, figure 5. Save the fasteners; they will be used to reinstall the front bumper.
- 6. Remove the two bottom bumper bolts that attach the bumper to the bottom of the vehicle frame, figure 6. Save the fasteners as they will be used to reinstall the front bumper.



FIGURE 4



FIGURE 5



FIGURE 6

- 7. Remove the two middle bumper bolts that attach the bumper to the middle of the vehicle frame, figure 7. Remove the front vehicle bumper at this time
- 8. Attach the roller fairlead to the winch mounting bracket, figure 8. Use the two supplied 3/8" dia bolts, nuts, and lock washers provided with the winch as shown in figure 8. Tighten the two 3/8" dia bolts to a recommended torque of 34 N-m (25 ft-lb)
- 9. Mount your winch to the mounting bracket with four 5/16" dia bolts and lock washers supplied with the winch kit. Mount the winch so that the motor faces the right side of the vehicle, Tighten the bolts to a recommended torque of 17 N-m (12 ft-lb)



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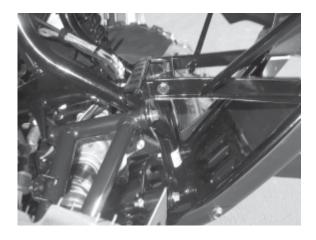


FIGURE 7

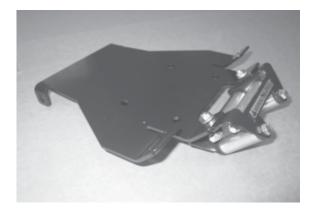


FIGURE 8

- 10. Place the winch, mounting plate and roller fairlead assembly into position on the front bumper, figure 10. Install two 1/4-20 x 1" x 1 1/2" U-bolts, four 1/4" flat washers and four 1/4-20 lock nuts that were supplied in the mounting kit, figure 10. Do not tighten fasteners at this time.
- 11. Place the front bumper with attached winch assembly back onto the vehicle frame. Reinstall the two top and two bottom bumper bolts that were removed in steps 5 & 6. Do not tighten at this time.12. Install the supplied 8mm-1.25 x 25mm bolts into the middle bumper mounting location, place the supplied spacer into postion between the ATV frame and the winch mounting bracket tab figure 11. Do not tighten at this time.

- 12. Reinstall the two 6mm bolts that were removed in step 4. Reinstall the four rivet fasteners that were removed in step 2. Reinstall the two 6mm bolts that were removed in step 3. Do not tighten at this time.
- 13. Reinstall the front plastic skid plate that was removed in step 1, four side 8mm bolts and four bottom 6mm bolts. Do not tighten at this time.
- 14. Tighten all fasteners to a recommended torque of: 6mm bolts 12 N-m (9 ft-lb) / 8mm bolts 37 N-m (27 ft-lb) 1/4" U-bolts 10 N-m (7 ft-lb)





FIGURE 11

WIRING INSTRUCTIONS

NOTE: When you go to connect the wires, please refer to our technicians' website at



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http://www.mettlers.biz/winchwiring.htm for further pictures and assistance.

Determine where to install the contactor (solenoid control relay). There is no right or wrong place. We recommend a dry place away from sharp or moving suspension parts. It can be hard to find a totally dry place on an ATV but just try to find the best spot. You may mount it in the front, back or under the seat. You may mount it with U-bolts (holes on contactor are metric.) or bolts. We usually install the contactor in the rear storage compartment if possible because it is dry there. When installing the contactor in the storage compartment, you should attach all the wires first, before bolting it down.

Figure 10

CAUTION: It is easy to reverse the polarity of the wires than you think, causing a voltage system short. Please make sure you read the wiring diagrams in your winch manual or refer to our technician's website above. The connections are color coded – from there you will need to determine the best location for mounting the contactor and running the wires on your machine. Zip ties and electrical tape can be quite helpful in the process.

If you have questions, do not hesitate to call us at Motoalliance: 1-866-527-7637. Also, you can view these instructions with photos at www.motoalliance.com. Enjoy your winch!