

## INSTALLATION INSTRUCTIONS WINCH MOUNTING KIT

Part Number: 73680

Application:

Polaris Sportsman 2004: 400, 500, 600 and 700 Polaris Sportsman 2005-2010: 400, 450, 500, 600,

700, 800, 850 and X2

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judg-

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE, READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. WARNING and CAUTION are signal words that identify the level of hazard. These signal words mean:

AWARNING signals a hazard that could cause serious injury or death, if you do not follow recommendations. ACAUTION signals a hazard that may cause minor to moderate injury, if you do not follow recommendations.

This guide uses NOTICE to call attention to important mechanical information, and Note: to emphasize

general information worthy of special attention.

#### **AWARNING**

	INJURY HAZARD				
	Failure to observe these instructions could lead to severe injury or death.				
0	Always use extreme caution when drilling on any vehicle. Make sure that all fuel lines, brake lines, electrical wires, and other objects are not punctured or damaged when / if drilling on the vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged. Failure to inspect the area to be drilled may result in vehicle damage, electrical shock, fire or personal injury.				
	Always wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.				
	Always use extreme caution when cutting and trimming during fitting.				
	Always remove jewelry and wear eye protection.				
	Never lean over battery while making connections.				
	Never route electrical cables:				
	Across any sharp edges.				
	Through or near moving parts.				
	Near parts that become hot.				
	Always insulate and protect all exposed wiring and electrical terminals.				
	Always install terminal boots as directed in installation instructions.				
	Always use appropriate and adequate care in lifting components into place.				
	Always insure components will remain secure during installation and operation.				
	Always tighten all nuts and bolts securely, per the installation and operation.				
	Always perform regular inspections and maintenance on the winch, winch mount and related hardware.				

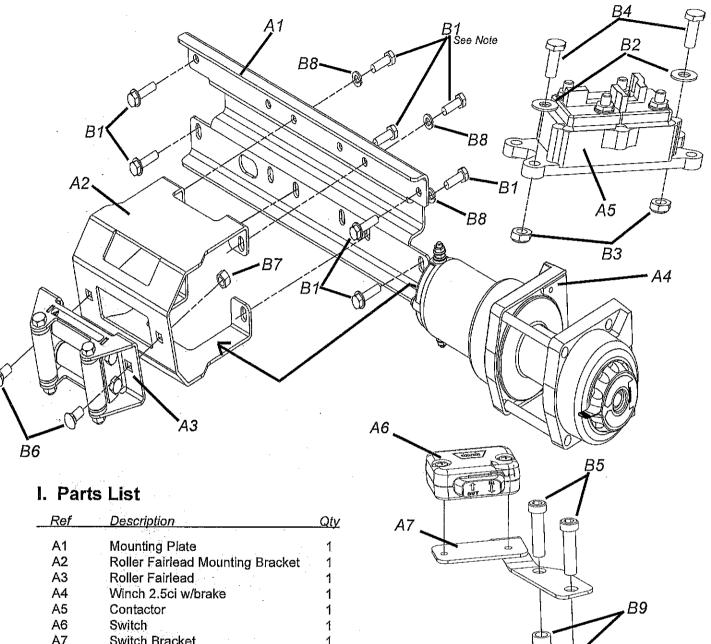
Never operate this WARN product with damaged or missing parts.

<b>A</b> Caution				
Moving Parts Entanglement Hazard				
Failure to observe these instructions could lead to minor or moderate injury.				
☐ Always take time to fully read and understand the installation and Operations Guide included with this product.				
□ Never operate this product if you are under 16 years of age.				
☐ Never operate this product when under the influence of drugs, alcohol or medications.				
Read installation and operating instructions thoroughly.				
Notice				
Equipment Damage				
Always refer to the Installation and Specification Guide, supplied in the winch kit, for all wiring schematics and specific details on how to wire this WARN product to your vehicle.				

Read installation and operating instructions thoroughly.

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Ref	Description C	Qt <u>y</u>
A1	Mounting Plate	1
A2	Roller Fairlead Mounting Bracket	1
A3	Roller Fairlead	1
A4	Winch 2.5ci w/brake	1
A5	Contactor	1
A6	Switch	1
A7	Switch Bracket	1
В1	5/16-18 X 1 1/4 SELF-TAPPING	8
B2	1/4" flat washer	2
В3	1/4-20 lock nut	2
B4	1/4-20 x 1 hex cap screw	2
B5	1/4-20 x 1 1/2 soc. hd cap screw blk	2
B6		2
B7	3/8-16 locking hex nut	2
. B8	5/16-18 lock washer	4
B9	Spacer .38 OD x .26 ID x .35	2

Note: When installing the XT or RT winch use the hardware that came with the winch. The XT and RT winch use metric fasteners, see page 5 of these insturctions.

# II. Tools Required

Ratchet

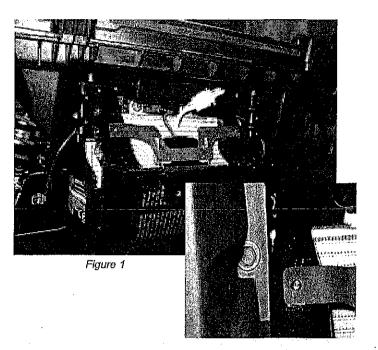
• Sockets: 10mm, 12mm, 7/16", 1/2", 9/16"

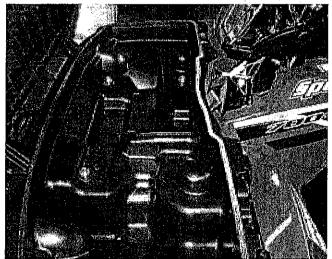
• Wrenches: 7/16", 1/2", 9/16"

### III. Polaris Sportsman Installation

Note: Please read all instruction and manuals that came with the winch and mounting kit before starting this installation. Take notice of all Warnings and Cautions.

- Begin by removing the seat and using a 10mm wrench disconnect the positive (red) and negative (black) wires from the battery.
- Disconnect the left-hand and right-hand headlight plugs. These are located just behind the headlights. Remove the bumper access cover by snapping out the bottom tabs, then lifting up. Remove the four bolts holding the front bumper, and remover the bumper see figure one
- Remove the three phillips head screws securing the upper headlight pod. Loosen the top to the pod. Remove the main access cover in the front storage box. Remove the front bulkhead access cover. This cover is located just below the headlight pod. Also remove the access panel in the front storage box, see figures two and three.
- Note: on X2 models only, remove the pre-installed winch mounting plate located on the front bumper support and discard.





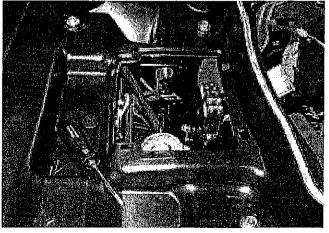


Figure 3

- 6. Attach the winch to the mounting plate and the fairlead support plate using the four 5/16-18 x 1 hex head capscrews and lock washer that came in the winch hardware kit. Use the illustration on page 3 as a guide to assembling the kit. Also at this time attach the roller fairlead to the fairlead bracket and attach the hook to the wire rope.
- NOTE: If installing an XT or RT winch metric hardware must be used when attaching the winch to the mounting plate. This hardware will be found in the hardware kit that came with the winch. Use the 8mm x1.25 x 25mm hex capscrews on the motor end of the winch and use the 8mm x 1.25 x 20mm on the clutch end of the winch.
- 7. The contactor will be located back near the battery. Suggested mounting location is inside the rear storage compartment, see figure 4. If attaching the contactor in the storage box, a hole will need to be cut into the back of the box to allow the cabling to be routed to the battery, winch, and handle bar switch.
- 8. After a location has been selected secure the contactor into position with the 1/4-20 hex cap screws, flat washers and hex nuts. Route the blue and yellow wires from the contactor location along the frame and up to the front of the ATV. The cables will need to be routed to come out on the right side of the ATV so they can be attached to the winch motor.

#### **■ A WARNING**

Avoid all moving and potentially hot components of ATV when routing electrical cables. Avoid areas where the wiring could be pinched when components are reinstalled. Failure to do so can result in product failure which can lead to vehicle damage and operator injury or death.

Route the red and black battery cables from the contactor location to the battery compartment. Do not connect at this time.

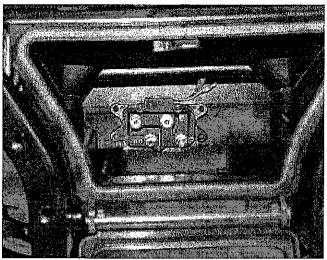


figure 4

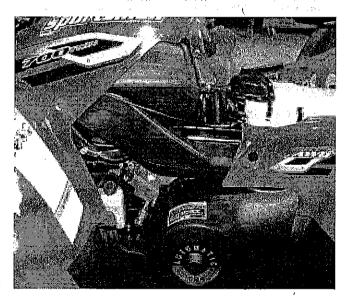


figure 5

- 10. Using the four 5/16-18 x 1 1/4 self tapping hex bolts attach the mounting plate with winch to the ATV frame as shown in figures six and seven. Take care not to pinch any wiring in the process.
- 11. Run the yellow and blue cables through the larger oval hole located in the mounting plate. Attach the yellow and blue cables to the appropriate motor terminals, the terminals are color coded. Note: before attaching the wire terminals to the motor terminals place an electrical boot over each cable. After the cable as been attached, slip the boot over the connection.

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Avoid all moving and potentially hot components of ATV when routing electrical cables. Avoid areas where the wiring could be pinched when components are reinstalled. Failure to do so can result in product failure which can lead to vehicle damage and operator injury or death.

12. Place the bumper back into position and attach using the factory hardware removed in step two, see figure eight.

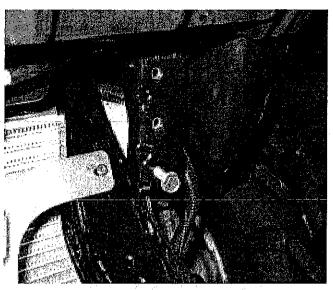


figure 6

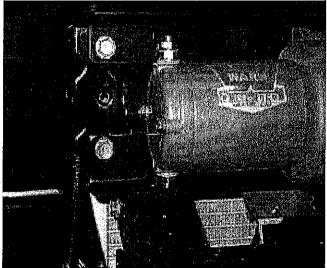


figure 7

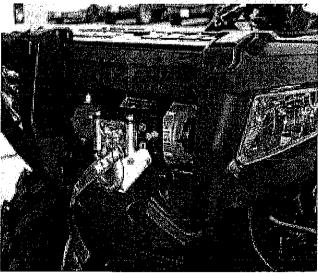


figure 8

- 13. Attach switch to the switch bracket as indicted in figure 9 and the illustration on page 3. The hardware to attach the switch housing to the bracket will be located with the switch brackets located in the winch hardware kit.
- 14. Attach the switch bracket to the handle bar as indicated in figure nine and ten, using the 1/4-20 socket head cap screws and spacers. This hardware was included with the mounting kit.
- 15. Route the switch wiring down the handle bars and under the head light pod. Make sure that the wiring does not interfere with the movement of the handle bars.

#### **AWARNING**

Avoid all moving and potentially hot components of ATV when routing electrical cables. Avoid areas where the wiring could be pinched when components are reinstalled. Failure to do so can result in product failure which can lead to vehicle damage and operator injury or death.

- Route the switch wiring back along the frame to where the contactor is mounted. Attach the switch wiring to the appropriate connectors on the contactor.
- 17. Attach the wiring to the corresponding color coded terminals on the contactor. Note: there is rubber boots that will fit over the wiring connections, make sure to place the boots on the cables before attaching to the contactor. Attach the black and red cable from the battery to the contactor and the blue and yellow motor cables to the contactor. Then cover the connections with the protective boots.

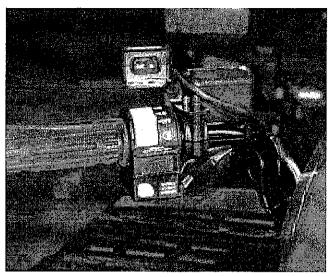


figure 9

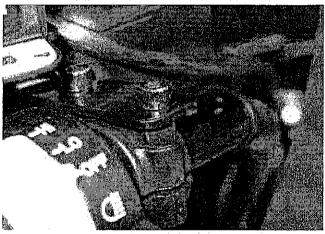


figure 10

- 18. Using the wire splice provided in the winch hardware kit, splice the red wire coming off of the switch to the accessory wire located under the head light pod, see figure 11.
- Make all connections back at the battery and test the system. Make sure that the winch is running in the proper direction according to the label located on the winch switch.
- Check all connections and make sure everything as been tightened securely. Replace all covers, winch installation is complete.



Tighten all nuts and bolts securely. Failure to check all nuts and bolts prior to use can result in product failure which can lead to vehicle damage and operator injury or death.



Please refer to the Installation and Specification Guide, supplied in the winch kit, for all wiring schematics and specific details on how to wire the winch to the ATV.

#### A WARNING

Avoid all moving and potentially hot components of ATV when routing electrical cables. Avoid areas where the wiring could be pinched when components are reinstalled. Failure to do so can result in product failure which can lead to vehicle damage and operator injury or death.



figure 11

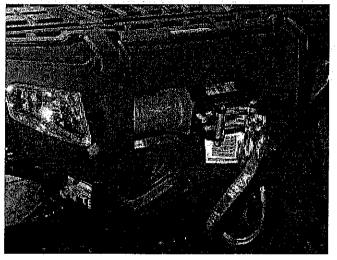


figure 12

#### V. Maintenance/Care

- Inspect all metal parts on the winch, winch mount, and related hardware. Replace all that appears rusted, cracked or deformed prior to use.
- Inspect all nuts and bolts on the winch, winch mount, and related hardware prior to each use. Tighten all nuts and bolts that are loose. Missing, stripped, fractured, or bent bolts or nuts need to be replaced immediately.
- Check all cables prior to use. Replace cables that are worn or frayed.
- Check all moving and rotating parts. Remove debris that may inhibit the part from moving freely.