

p/n 2259-560

# **WILDCAT**

## **4000 LB WINCH KIT**

### **WITH WIRELESS CONTROL SYSTEM**



## **OPERATOR'S MANUAL**

## **INSTALLATION INSTRUCTIONS**

## **REPLACEMENT PARTS LIST**

## **LIMITED WARRANTY**

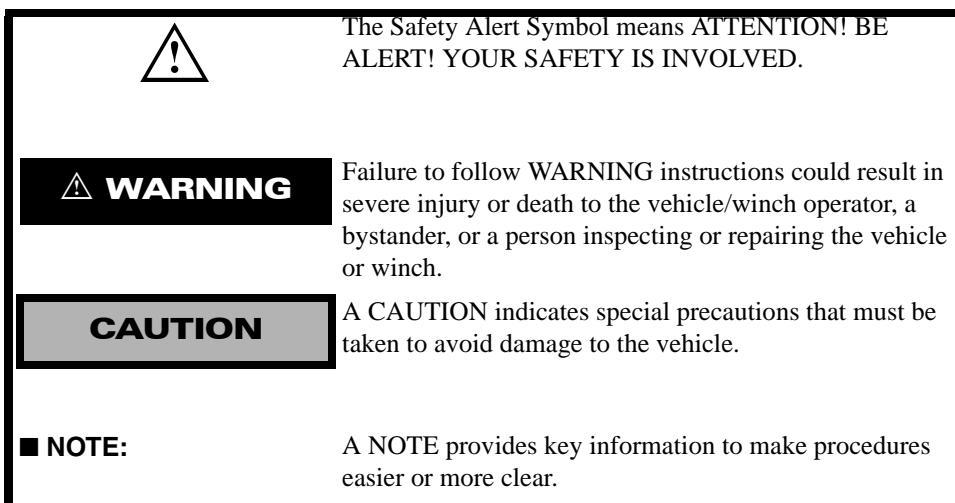
Arctic Cat Inc. (hereinafter referred to as Arctic Cat) extends a limited warranty on each new Arctic Cat / WARN® Winch sold by an authorized Arctic Cat dealer.

Arctic Cat warrants only the products it manufactures and/or sells and does not warrant that other products will function properly when used with an Arctic Cat vehicle or will not damage the vehicle. Arctic Cat does not assume any liability for incidental or consequential damages.

Arctic Cat will repair or replace, at its option, free of charge (including any related labor charges), any parts that are found to be warrantable in material or workmanship. This repair work MUST be done by an authorized Arctic Cat dealer. No transportation charges will be paid by Arctic Cat. The warranty is validated upon examination of said parts by Arctic Cat or an authorized Arctic Cat dealer. Arctic Cat reserves the right to inspect such parts at its factory for final determination if warranty should apply.

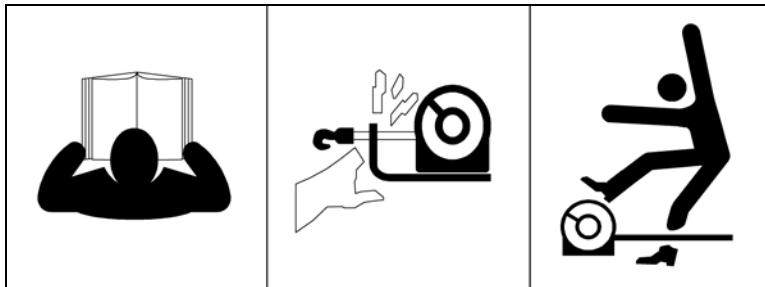
This warranty does not apply if the winch has been damaged by accident, abuse, misuse, collision, overloading, exhaust or misapplication, or has been improperly serviced. The finish and synthetic rope on the winch are excluded from warranty. In addition commercial or industrial use or application or any hoisting application voids the entire warranty.

In consideration of the foregoing, any implied warranty is limited in duration to the various warranty periods set forth. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or country to country. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.



# SAFETY PRECAUTIONS

## ⚠ WARNING



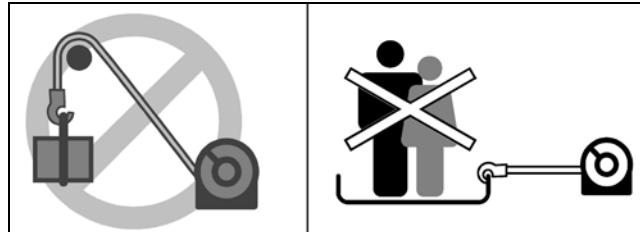
### MOVING PART HAZARD

#### TO PREVENT SERIOUS INJURY AND PROPERTY DAMAGE:

- Do not operate or install winch without reading and understanding the Operator's Manual.
- Keep hands clear of rope, hook, and fairlead opening during operation and when spooling.
- Stand clear of rope and load during operation.
- Keep others away.
- Always inspect winch installation and rope condition before operating winch.
- Do not exceed winch rated capacity.
- Never touch rope or hook while in tension.
- Always wear heavy leather gloves when handling rope.
- Always use supplied hook strap whenever spooling rope in or out, during installation, and during operation.
- Always use extreme caution when handling hook and rope during spooling operations.

## APPLICATION INFORMATION

## ⚠ WARNING



#### TO PREVENT SERIOUS INJURY:

- Never use winch to lift or move persons.
- Never use winch as a hoist or to suspend a load.

## CAUTION

#### TO AVOID INJURY AND PROPERTY DAMAGE:

- Do not use winch to secure a load during transport.
- Do not submerge in water.
- Do not use to tow other vehicles.
- Maximum single line pulling capacity: 4000 lb (1814 kg).
- Intermittent duty rating.
- 12 Volts DC.

## SYSTEM CHECK

Before using the winch, verify the following:

- Wiring to all components is correct. All loose wires are tie-wrapped tight.
- There are no exposed wiring or terminals, terminal boots, heat shrink tubing, or electricians' tape.
- The solenoid is properly grounded.
- Winch properly operates (see Testing the Winch and Controls sub-section).

### CAUTION

**KNOW THE WINCH:** Take time to fully understand the winch and the winching operation.

## Testing the Winch and Controls

1. With the key removed, turn the winch selector knob to the "freespool" position. Spool out approximately two to three feet of rope from the winch reel.
2. Turn the winch selector knob to the "ENGAGED" position; then insert the key into the ignition switch and turn to the "ON" position.
3. Place the winch control in the "IN" position and observe the movement of the winch rope. If the rope does not wind onto the reel in the proper direction, reverse the lead connections on the winch motor terminals and test the winch again.

■ **NOTE: The rope must wind and spool from the bottom of the reel.**

■ **NOTE: The rope must always spool onto the drum as indicated by the drum rotation decal on the winch housing.**

4. With the ignition key on, press both buttons on the remote control until the green light appears at the top. Test the winch using the remote control.



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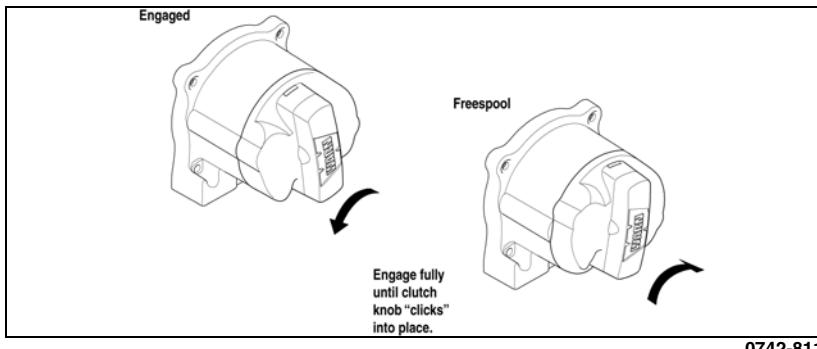
# OPERATING INSTRUCTIONS

## ⚠ WARNING

### TO PREVENT SERIOUS INJURY OR PROPERTY DAMAGE:

- Do not disengage clutch if winch is under load or rope is in tension.
- Always verify area is clear of fuel lines, fuel tank, brake lines, electrical wires, etc. when drilling.
- Always use extreme caution when handling hook and rope during spooling operations.
- Always use supplied hook strap whenever spooling rope in or out, during installation, and during operation.
- Always wear heavy leather gloves when handling rope.
- Never hook rope back onto itself. This damages the rope.
- Always select an anchor point as far away as possible. This will provide the winch with the greatest pulling power.
- Always ensure the clutch is fully engaged or disengaged.

When the clutch is engaged, the gear train is coupled to the rope drum and power may be transferred from the winch motor. When the clutch is in the “freespool” position, the gear train and rope drum are uncoupled allowing the drum to rotate freely. The clutch knob, located on the winch housing opposite the motor, controls the clutch position. To prevent damage, always fully engage or fully disengage the clutch knob.



## OVERLOADING/OVERHEATING

This winch is rated for intermittent duty. It should not be operated with the motor slowed down to a low RPM. When the motor approaches stall speed, a very rapid heat build-up occurs which may cause motor damage. To judge safe running time, stop winching and lay your hand on the motor. If the temperature is uncomfortable, shut down and cool the motor. This can be used as an opportunity to recharge the battery. Double line rigging will reduce the amperage draw from the motor allowing longer continual use (see Rigging sub-section).

## BATTERY RECOMMENDATIONS

A fully charged battery and good connections are essential to the proper operation of the winch. The minimum requirements for a 12 Volt DC battery is 10 AMP hours.

## ⚠ WARNING

### BATTERY HAZARDS

- Batteries contain gasses which are flammable.
- Wear eye protection.
- Remove all metal jewelry.
- Do not lean over battery while making connections.
- Failure to take proper precaution may result in fire or serious injury.

## MAINTENANCE

- No lubrication is required for the life of the winch.
- Check battery cables at 90 day intervals to be certain that they are clean and tight at all connections.
- Inspect the rope before and after each winching operation. Replace when damaged.

## OPERATING THE WINCH

■ **NOTE:** Read and understand the winch operating instructions before operating the winch. Keep the Winch Operator's Manual with the vehicle at all times.

### **WARNING**

Read, follow, and understand the operating procedures to ensure personal safety and long winch life. Extreme caution must be exercised when winching and spooling. Observe all caution and warning labels at all times. Read the Operator's Manual thoroughly before using the winch.

### **CAUTION**

Prolonged winch operation can lead to deep cycling of the battery. Failing to allow adequate charging time for the vehicle battery could result in power failure or damage.

### **Stretching Synthetic Rope**

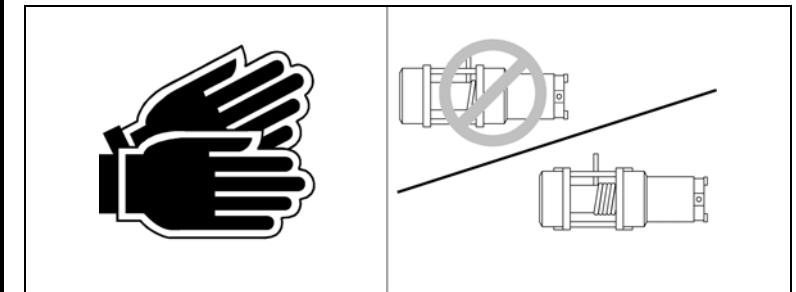
The life of a rope is directly related to the care and use it receives. During its first use, a new rope must be spooled onto its drum under a load of at least 227 kg (500 lb). Spool out the rope to the last 5 wraps on the drum; then power in the rope under a load of 227 kg (500 lb) or more.

■ **NOTE:** Stretching the new rope will help create an even and tight wire wrap around the drum. Failure to do so will cause binding and possible damage to the rope. rope damage is specifically excluded from warranty.

### **Spooling Out**

Freespooling is generally the quickest and easiest way to spool out rope. Before freespooling rope from the winch, power out enough rope to remove any cable tension; then turn the winch selector knob to the "freespool" position. Manually freespool out enough rope for the winching operation.

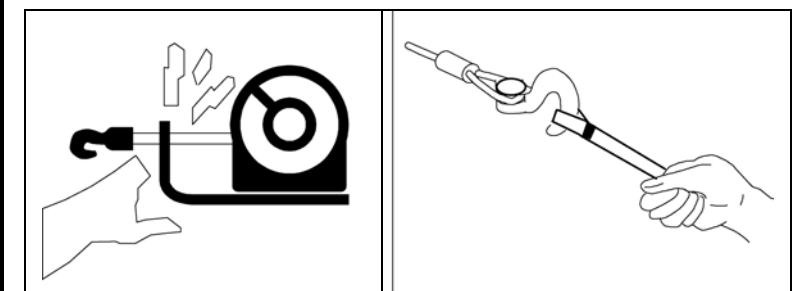
## ⚠️ WARNING



### TO AVOID INJURY AND PROPERTY DAMAGE:

- Wear heavy leather gloves when handling rope.
- Never winch with less than 5 wraps of rope around drum.
- Rope could come loose from the drum, as the rope attachment to the drum is not designed to hold a load.

## ⚠️ WARNING



### TO PREVENT SERIOUS INJURY:

- Keep hands clear of rope, hook, and fairlead opening during operation.
- Always use the hook strap to hold hook when spooling.
- Always use extreme caution when handling hook and rope during spooling operations.
- Always use supplied hook strap whenever spooling rope in or out, during installation, and during operation.
- Always wear heavy leather gloves when handling rope.

## Spooling In Under Load

- The rope must always spool onto the drum as indicated by the drum rotation decal on the winch.
- Power in the rope evenly and tightly on the drum. This prevents the outer wire wraps from drawing into the inner wraps, binding, and damaging the rope.
- Avoid shock loads when spooling by using the control switch intermittently to take up rope slack. Shock loads can momentarily far exceed the winch and rope ratings.
- When powering in rope during side pull operations, the rope will stack up at one end of the drum. Eventually, this stack will become large enough to cause serious damage to the winch. To prevent damage, line up pulls as straight ahead as possible and stop winching if the rope comes close to the tie rods or mounting plate. To correct an uneven stack, spool out that section of the rope and reposition it to the opposite end of the drum which will free up space for continued winching.

## Spooling In Under No Load

- **Assisted:** Have an assistant hold the hook with a hook strap or rag putting as much constant tension on the synthetic rope as possible. While keeping tension, the assistant should walk toward the winch while you operate the control switch spooling in the rope. Release the switch when the hook is a minimum of 4 ft (1.2 m) from the fairlead opening. Spool in the remainder for storage.
- **Unassisted:** Arrange the rope to be spooled so it will not kink or tangle when spooled. Be sure any rope on the drum is tightly and evenly layered. Spool enough rope to complete the next full layer on the drum. Tighten and straighten the layer. Repeat process until the hook is a minimum of 4 ft (1.2 m) from the fairlead. Spool in the remainder for storage.

## Spooling Remainder For Storage

Keep hands clear of rope, hook, and fairlead opening. Always use the hook strap to hold hook when spooling under no load. Carefully power in the remaining rope jogging the control switch to take up the last of the slack. Secure the hook to a suitable anchor point near the winch. Be careful not to over-tighten or damage may occur to the rope or anchor point.

### **WARNING**

#### **TO PREVENT SERIOUS INJURY:**

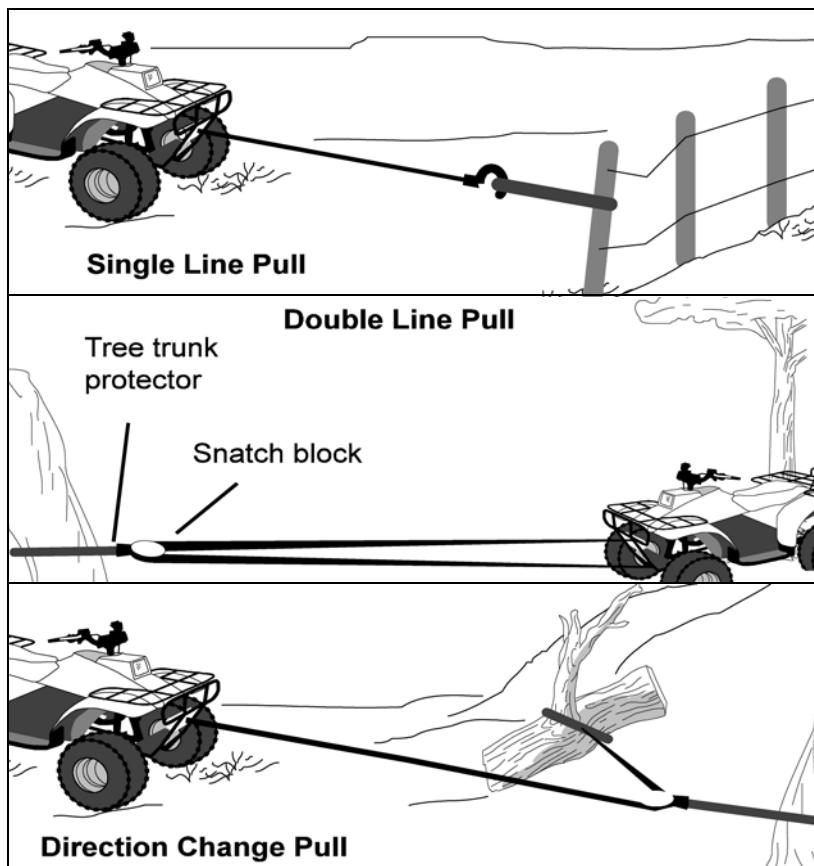
- Stand clear of rope and load during operation.
- Be certain the anchor will withstand the load.
- Always use a choker chain, wire choker rope, or tree trunk protector on the anchor.
- Take your time; sloppy rigging causes accidents.

## Rigging

Always spool out as much rope as possible when preparing rigging. Pick an anchor as far away as practical. This provides the winch with its greatest pulling power.

Rigging a double line with a snatch block will reduce the load on the winch to half without significant loss of spooling speed.

Natural anchors such as trees, stumps, and rocks are the handiest when available. Attach the choker chain, wire choker cable, or tree trunk protector on the anchor as low as possible to avoid pulling the anchor down. If several possible anchors are available but they are not strong enough individually, it may be practical to attach a wire or chain choker around several anchors to form a strong collective anchor point.



# INSTALLATION INSTRUCTIONS

■ **NOTE:** Read the installation instructions thoroughly before beginning the installation process.

p/n	Qty	Description
2259-560	1	Winch Manual
2441-151	1	4000 lb Winch
2441-113	1	Synthetic Rope
2441-101	1	Cable, Winch-to-Solenoid - Blue/ Yellow (90-in.)
2441-100	1	Cable, Winch-to-Solenoid - Blue/Yellow (72-in.)
2441-102	1	Cable, Winch-to-Winch Cables - Blue/Yellow (28-in.)
2441-103	1	Cable, Battery-to-Solenoid - Black (15.5-in.)
2441-104	1	Cable, Battery-Solenoid - Red (12-in.)
2441-105	1	Hook Kit
2441-110	1	Solenoid Kit
2411-111	1	Solenoid
0409-068	1	Switch, Winch
2441-107	1	Wireless Control Kit
2441-108	1	Wireless Control Transmitter (Remote)
2441-109	1	Wire Harness
2441-106	1	Hardware Kit
1441-449	1	Winching Guide

## Installing Winch Cables, Solenoid, and Winch Harness

■ **NOTE:** A front and/or rear mounting location should be established before installing this kit.

■ **NOTE:** On Wildcat models not equipped with a Style 21 accessory plug connection point near the battery, an Accessory Extension Wire Harness (p/n 0486-467) is required for but not included in this kit and must be ordered separately.

1. Put the vehicle in Park and remove the ignition key.
2. Remove both seats, and the four screws securing the arm rest/battery cover; then disconnect the battery.

### ⚠ WARNING

**Always disconnect the negative (-) battery cable first.**

#### FIRE HAZARD

**Failure to observe these instructions could lead to severe injury or death.**

**Never route electrical cables:**

- Across any sharp edges.
- Through or near moving parts.
- Near parts that get hot.

**Always** insulate and protect all exposed wiring and electrical terminals.

**Always** install terminal boots as directed in installation instructions.

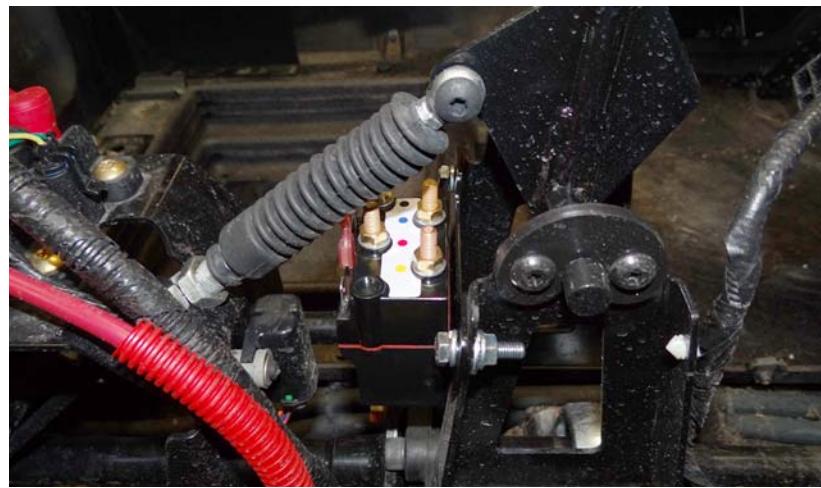


3. Remove the shift knob; then remove all torx-head screws securing the center console to the vehicle; then remove the console making sure to disconnect the override switch and the accessory outlet wires.
4. Secure the solenoid mounting plate to the solenoid using the two supplied philip head screws (M4 x 8mm). Tighten securely.



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5. Secure the solenoid assembly to the back of the shift gate using two cap screws, two lock washers, two flat washers, and two nuts. Tighten securely.



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**■ NOTE: Both the front and rear winch cable assemblies do not need to be installed together for the winch to work. IE.,If only installing the winch on the rear of the vehicle; then only the rear cable assembly may be installed.**

6. If installing the front cables, route the front winch cable assembly along the right side of the front drive shaft and along the frame up to the front left side of the vehicle making sure to secure the cables away from the drive shaft.



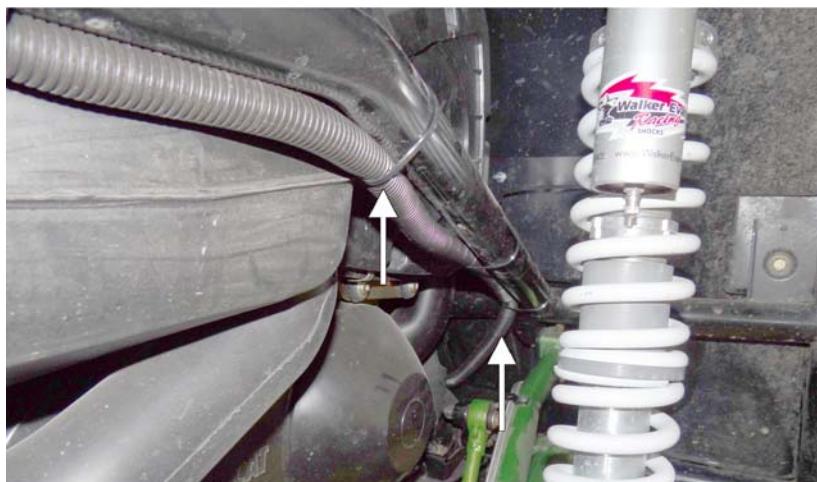
ROV-092A



ROV-094A

7. If installing rear cables, route the rear winch cable assembly under the rear panel and along the frame to the passenger side taillight making sure to secure the cables away from all moving components.

**■ NOTE: If installing the rear cables on a Wildcat 4, Rear Cable Harness Extension (p/n 1436-697) must be ordered separately. This extension will allow the cables to reach the winch if mounted on the rear of a Wildcat 4.**

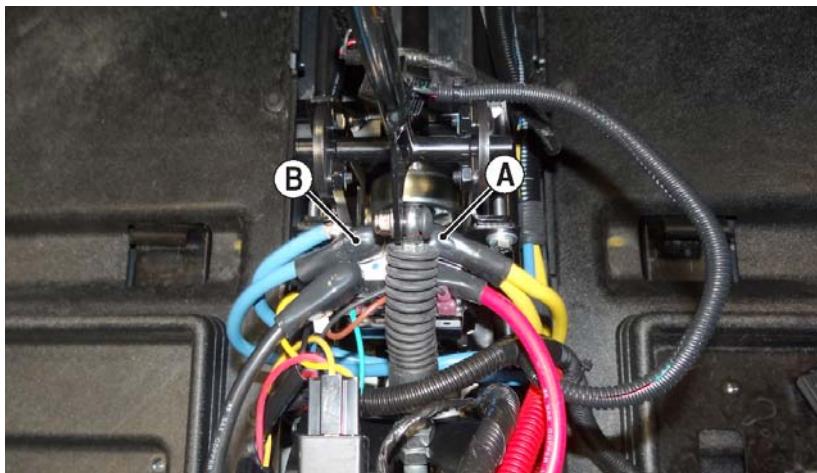


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ROV-096A

8. Secure the front and/or rear yellow winch cables (A) to the solenoid using a nut and lock washer; then secure the front and/or rear blue winch cables (B), and brown solenoid wire to the solenoid using a nut and lock washer. Torque to 35 in.-lb.



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9. On Wildcat 2 models, place the wireless control transmitter to the rear panel behind the left-seat and mark all four mounting locations; then using a 1/4 in. drill bit, drill all four locations. Secure the module to the rear panel using four cap screws and four nuts. Tighten securely. Install switch harness to the module.

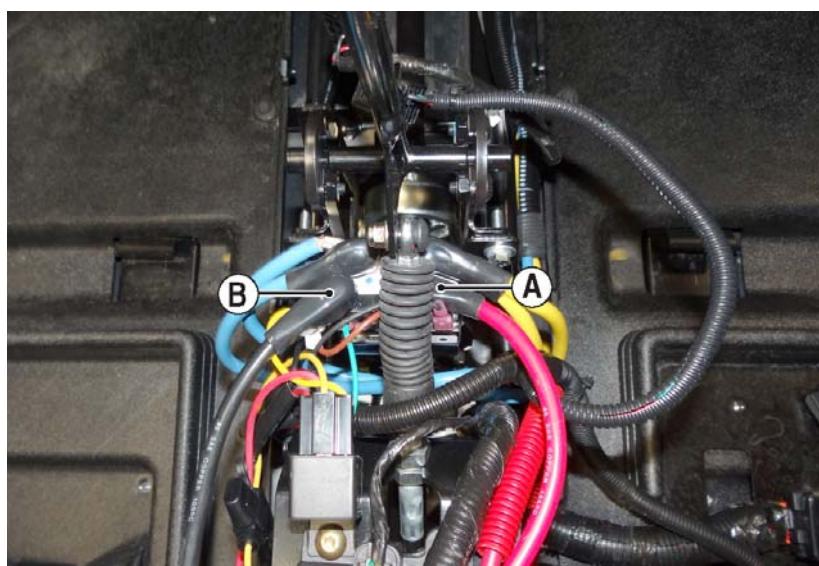


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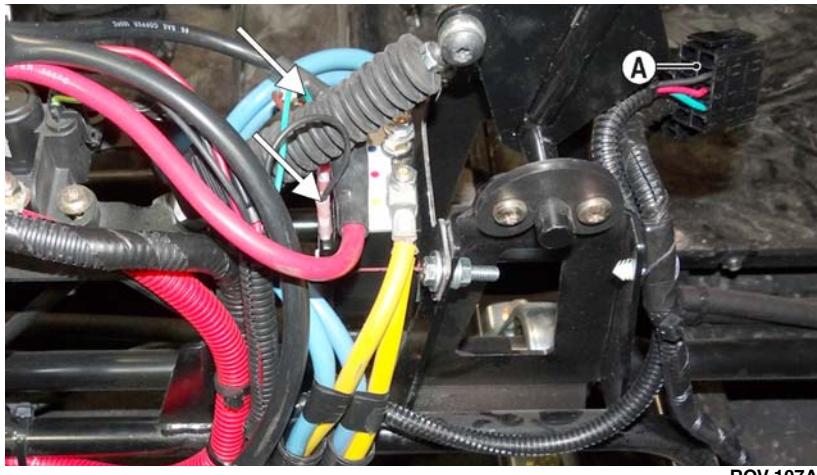
10. On Wildcat 4 models, place the wireless control transmitter to the rear console behind the front passenger seat belt and mark all four mounting locations; then using a 1/4 in. drill bit, drill all four locations. Secure the module to the rear console using four cap screws and four nuts. Tighten securely. Install switch harness to the module and secure using cable ties.



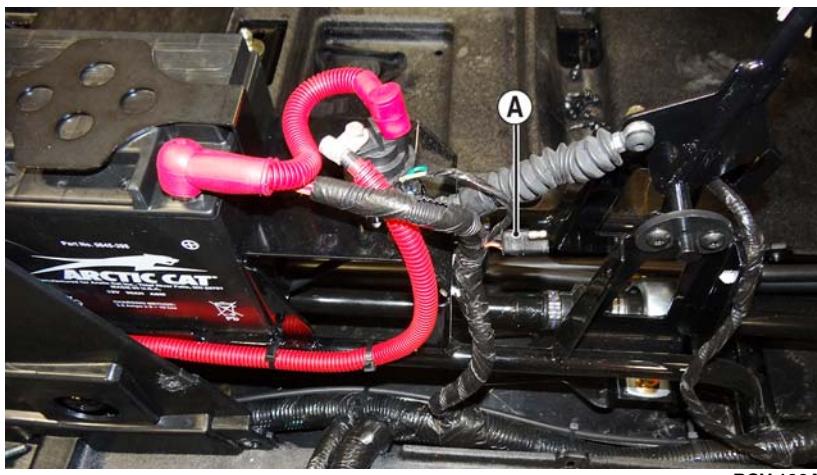
11. Secure the short red battery cable (A) to the red terminal on the solenoid and the short black battery cable (B) to the black terminal and secure using nuts and lock washers. Torque to 35 in.-lb.



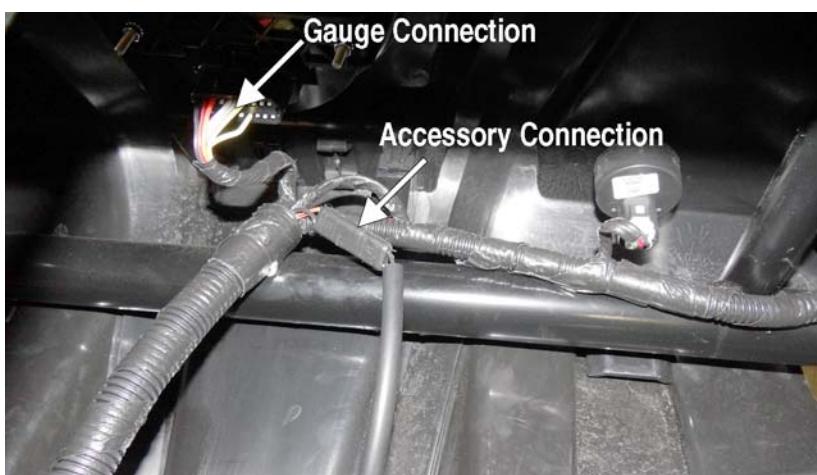
12. Install the green and black wire spade terminals from the switch harness to the solenoid and route the switch connector (A) toward the override connector.



■ **NOTE:** On Wildcat models not equipped with a Style 21 accessory plug (A) connection point near the battery, an Accessory Extension Wire Harness (p/n 0486-467) is required but not included in this kit and must be ordered separately.



13. If the Wildcat does not have an accessory connection near the battery, install Accessory Harness (p/n 0486-467) to the accessory plug near the back of the gauge and route to the switch harness. Connect to the switch harness. Secure away from all moving components.



14. Remove the plug in the console near the over ride switch; then install the winch switch into the console until it snaps into place.
15. Install the console making sure to connect all wires and secure using the existing machine screws.

## Installing the Winch

1. Secure the winch to the mounting location or Winch Carrier with four M8 x 20 mm cap screws and lock washers. Tighten to 20 ft-lb.
- NOTE: Retain the warning label and winch tightening instructions tied for future reference.**
2. Turn the winch selector knob to the “freespool” position. Pull the synthetic rope loop through the front opening of the bumper plate only until the loop is approximately 3 to 4 inches past the winch; then turn the winch selector knob to the “engaged” position.
3. Pull the loop through the Roller Fairlead at this time. Align the mounting holes in the roller fairlead with the holes in the winch carrier; then secure the roller fairlead with two M10 cap screws and two M10 nuts. Tighten the cap screws to 20 ft-lb.
4. Place the clevis end of the tow hook onto the winch loop and secure with the clevis pin. Insert the pin into the clevis pin to secure.

**■ NOTE: It may be necessary to remove or loosen body panel components to aid in routing and securing battery cables to the frame and harness.**

5. Slide a boot over the end of the blue and yellow leads. Connect the blue lead to the blue terminal on the winch and slide a boot over the winch motor connection. Repeat this step with the yellow lead, connecting it to the yellow terminal on the winch motor.



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6. Connect the red (+) battery terminal, then the black (-) battery terminal.



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7. Install the console making sure to connect both switches and the accessory outlet and secure using the existing torx-head screws; then test winch and inspect wiring.