SPORTSMAN WINCH KIT

P/N 2889469; 2889470; 2889471

BEFORE YOU BEGIN

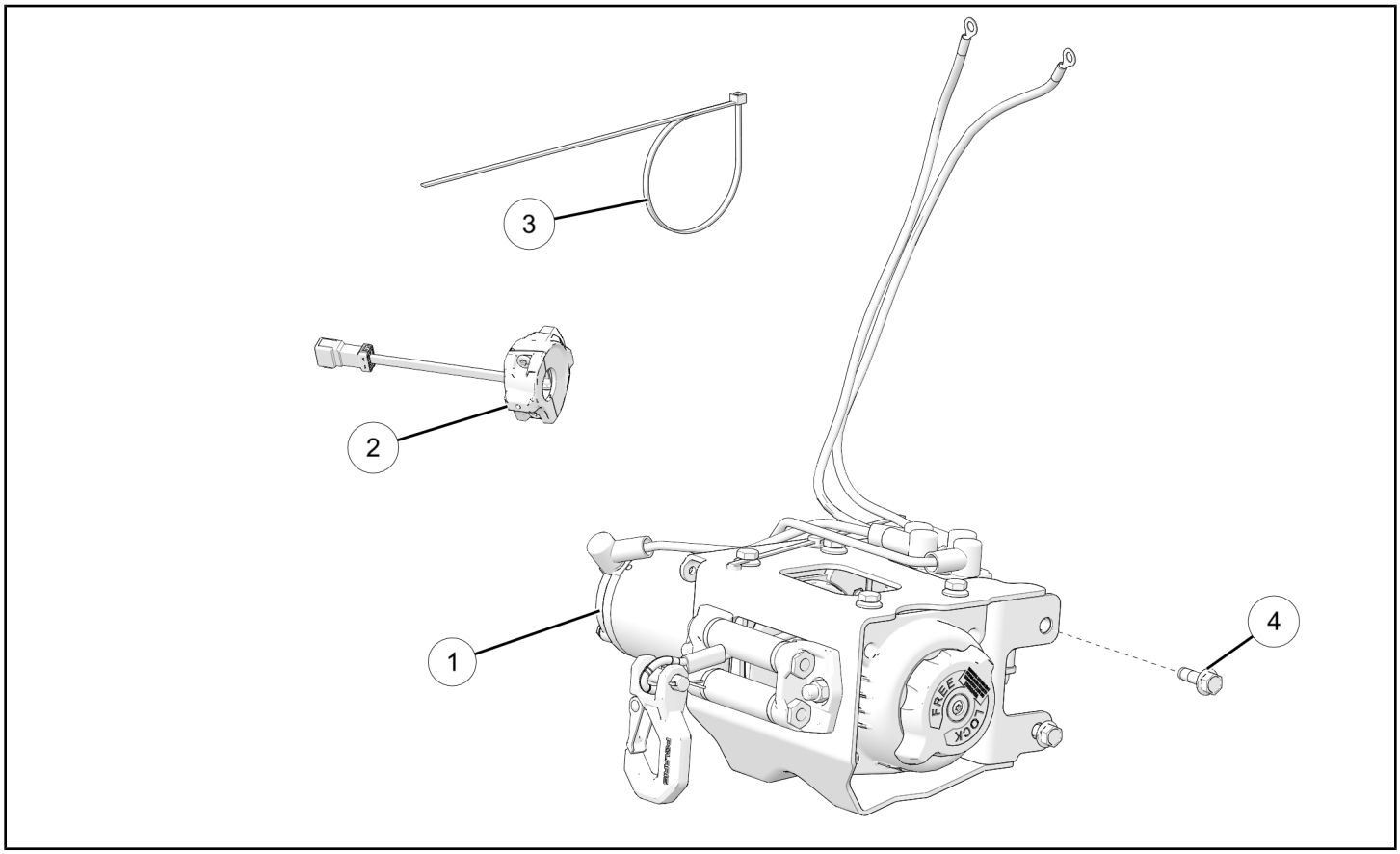
Read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

APPLICATION

Verify accessory fitment at www.polaris.com.

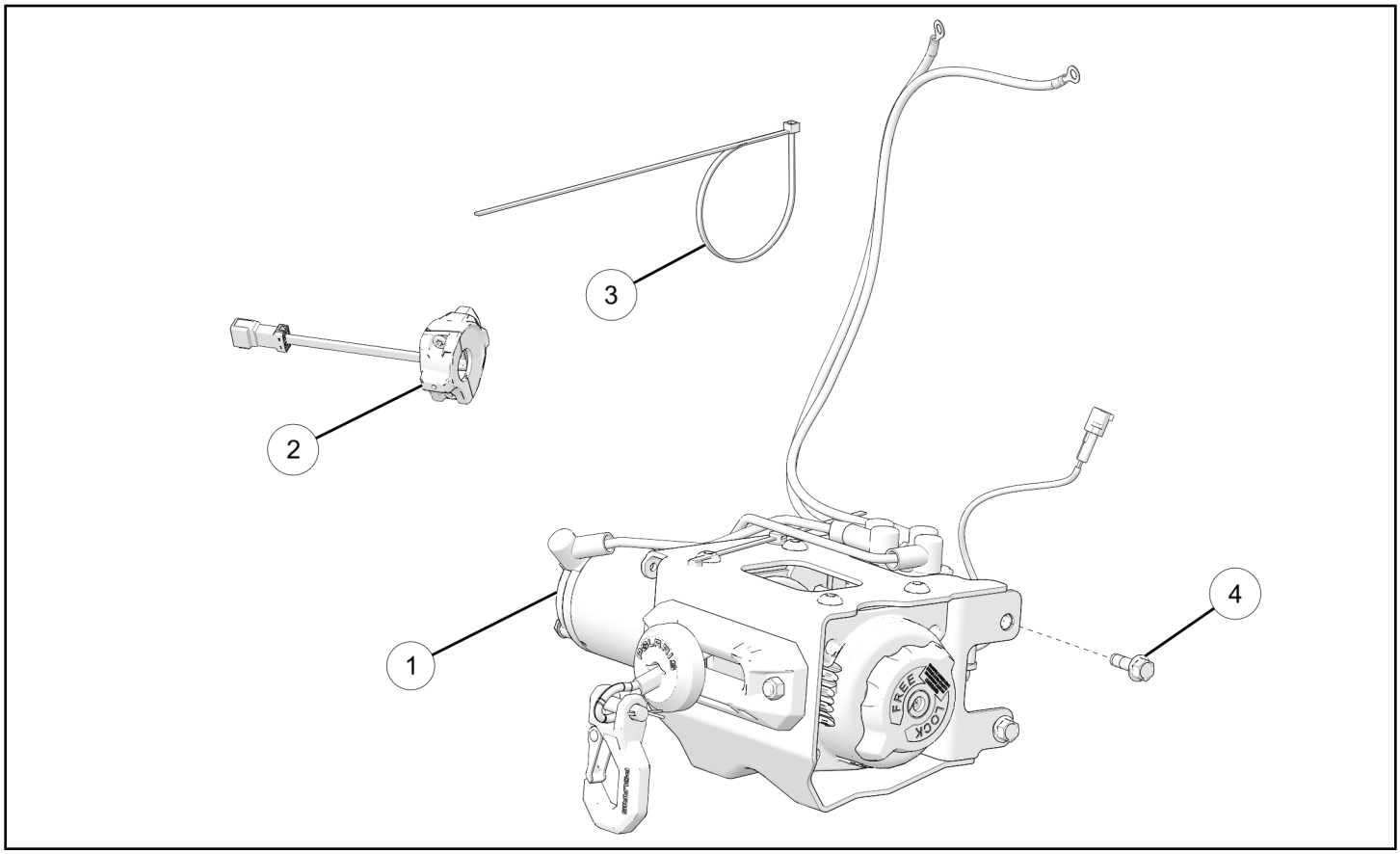
KIT CONTENTS

2500 KIT, P/N 2889469



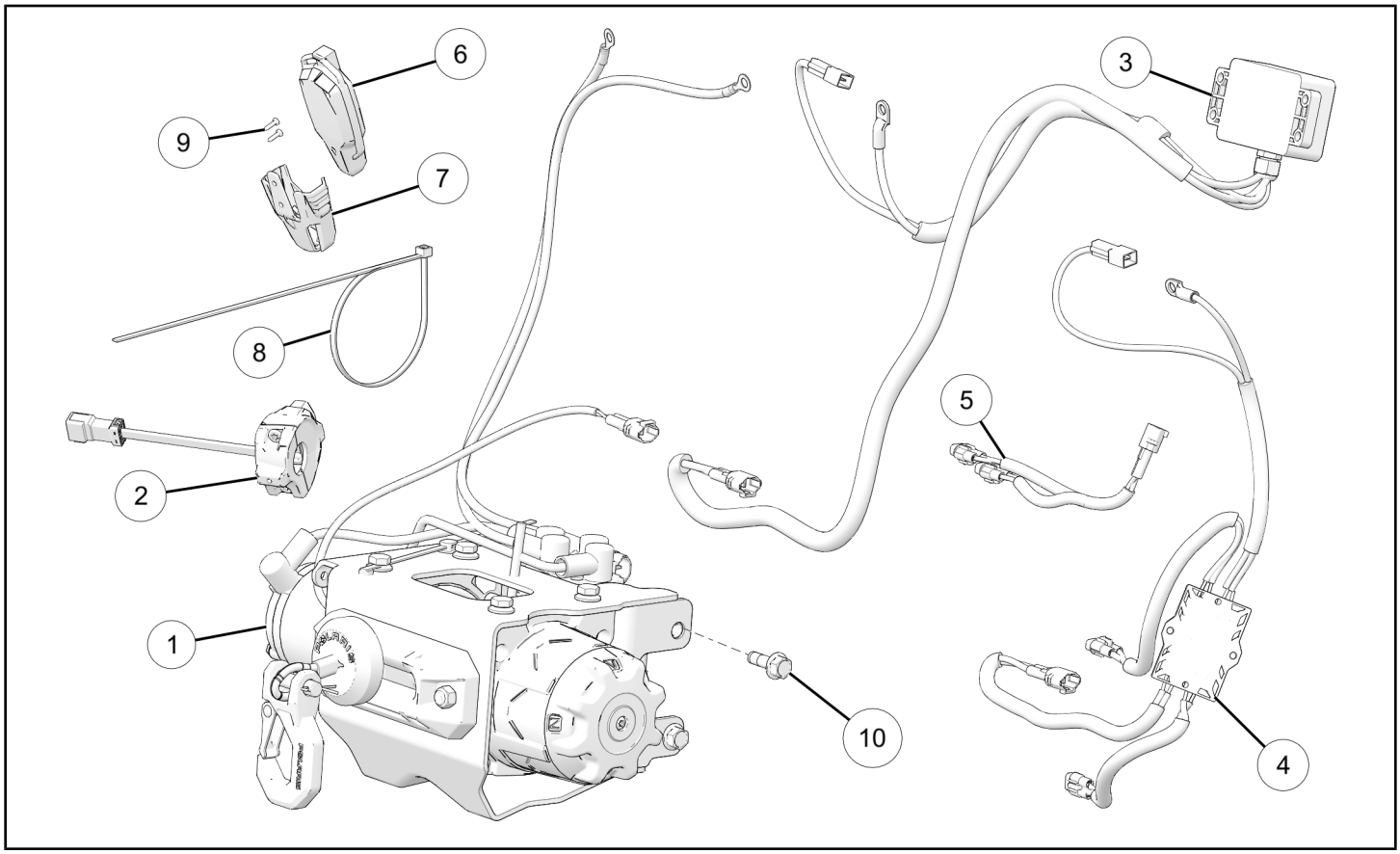
REF	QTY	PART DESCRIPTION	P/N AVAILABLE SEPARATELY
1	1	Winch Assembly, 2.5HD	2638706
2	1	Winch Switch, ATV	2207175
3	5	Cable Tie 76 mm	7080492
4	4	Screw, Hex Flange Head, M8 x 1.25 x 25 mm	7519739
5	1	Manual, Winch Guide (not shown)	9923644

3500 KIT, P/N 2889470



REF	QTY	PART DESCRIPTION	P/N AVAILABLE SEPARATELY
1	1	Winch Assembly, 3.5HD	2638706
2	1	Winch Switch, ATV	2207175
3	5	Cable Tie 76 mm	7080492
4	4	Screw, Hex Flange Head, M8 x 1.25 x 25 mm	7519739
5	1	Manual, Winch Guide (not shown)	9923644

3500 PRO KIT, P/N 2889471

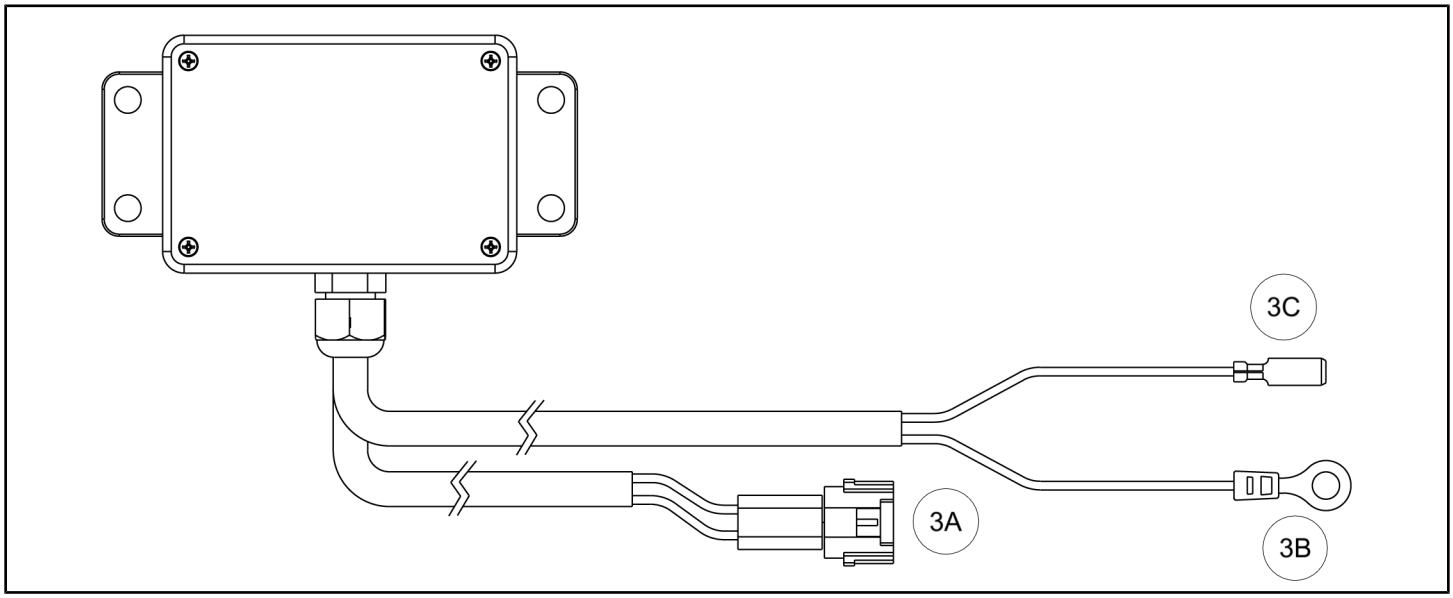


REF	QTY	PART DESCRIPTION	P/N AVAILABLE SEPARATELY
1	1	Winch Assembly, 3.5 Pro	2638078
2	1	Winch Switch, ATV	2207175
3	1	Receiver, Wireless, Winch, ATV (wiring may be pre-connected)	N/A
4	1	Control Box, Fairlead	2415867
5	1	Harness, Wireless Remote, Winch (wiring may be pre-connected)	4017126
6	1	Remote, Winch, Wireless	4080061
7	1	Holder, Remote, Wireless Winch	5454269
8	5	Cable Tie 76 mm	7080492
9	2	Screw, Torx®, Self-Threading, #10 x 3/4 in	7512026
10	4	Screw, Hex Flange Head, M8 x 1.25 x 25 mm	7519739
11	1	Manual, Winch Guide (not shown)	9923644

HARNESS DETAIL

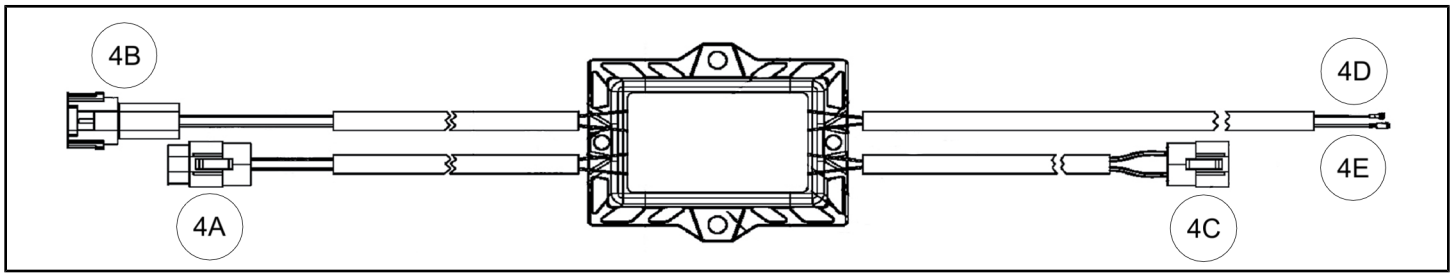
3500 PRO KIT, P/N 2889471

WIRELESS RECEIVER ③



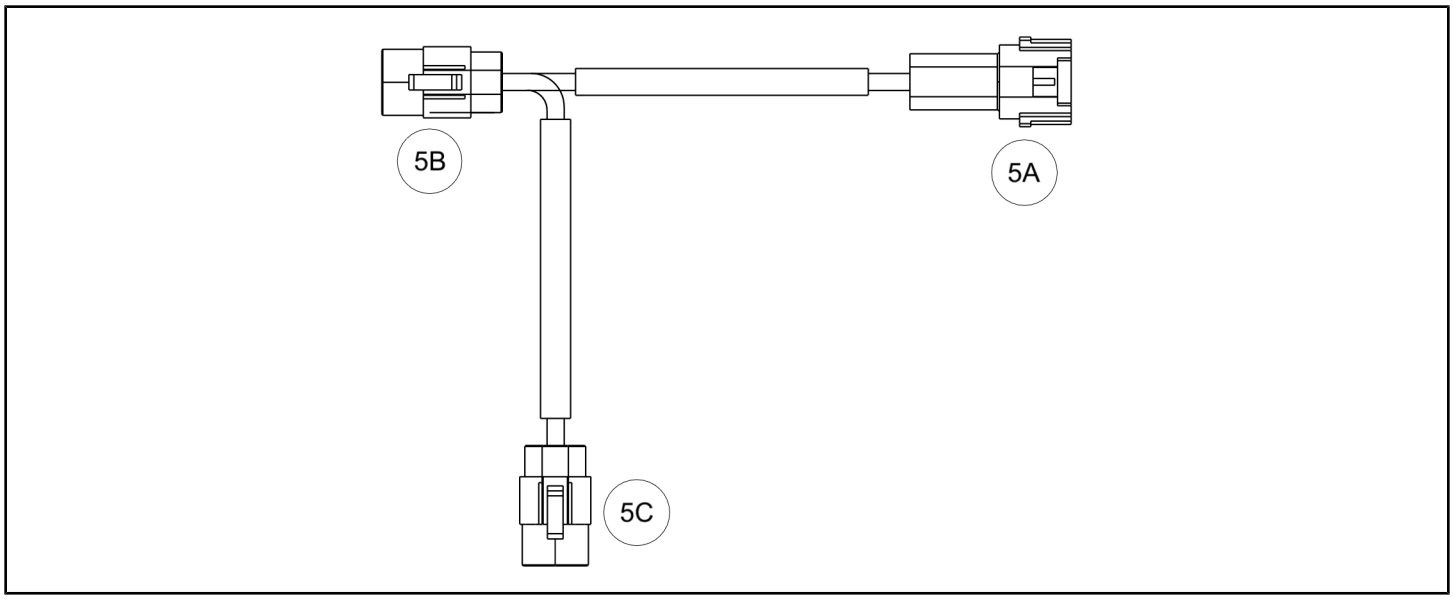
REF	PART DESCRIPTION	CONNECTS TO
3A	Wireless Receiver, Connector	Y-Splitter Harness
3B	Wireless Receiver, Terminal, Ring	Battery Terminal, Negative
3C	Wireless Receiver , Terminal, Spade	Main Harness Keyed Power, Positive

FAIRLEAD CONTROL BOX ④



REF	PART DESCRIPTION	CONNECTS TO
4A	Fairlead Control Box, Connector	Winch Contactor, Connector
4B	Fairlead Control Box, Connector	Y-Splitter Harness
4C	Fairlead Control Box, Connector	Fairlead, Connector
4D	Fairlead Control Box, Terminal, Ring	Battery Terminal, Negative
4E	Fairlead Control Box, Terminal, Spade	Main Harness Keyed Power, Positive

Y-SPLITTER HARNESS ⑤



REF	PART DESCRIPTION	CONNECTS TO
5A	Y-Splitter Harness, Connector	Main Harness Connector
5B	Y-Splitter Harness, Connector	Fairlead Control Box, Connector
5C	Y-Splitter Harness, Connector	Wireless Receiver, Connector

TOOLS REQUIRED

- Safety Glasses
- Hex Key Set, Metric
- Screwdriver, Phillips
- Socket Set, Metric
- Socket Set, Torx® Bit
- Torque Wrench
- Wire Cutters

IMPORTANT

Your Sportsman Winch Kit is exclusively designed for your vehicle. Please read the installation instructions thoroughly before beginning. Installation is easier if the vehicle is clean and free of debris. For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence shown.

INSTALLATION INSTRUCTIONS

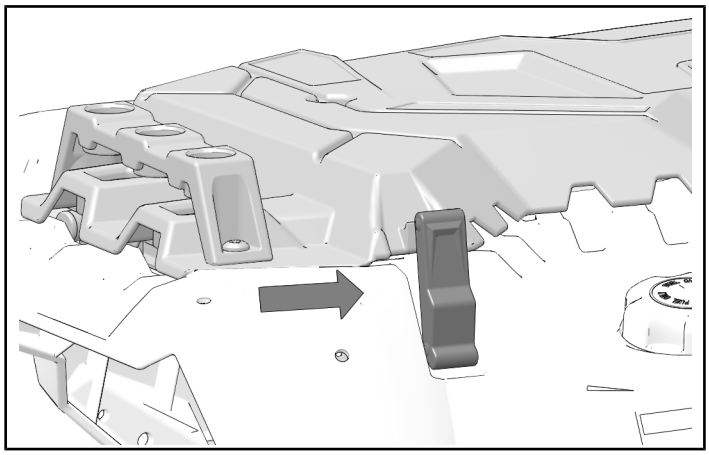
VEHICLE PREPARATION

GENERAL

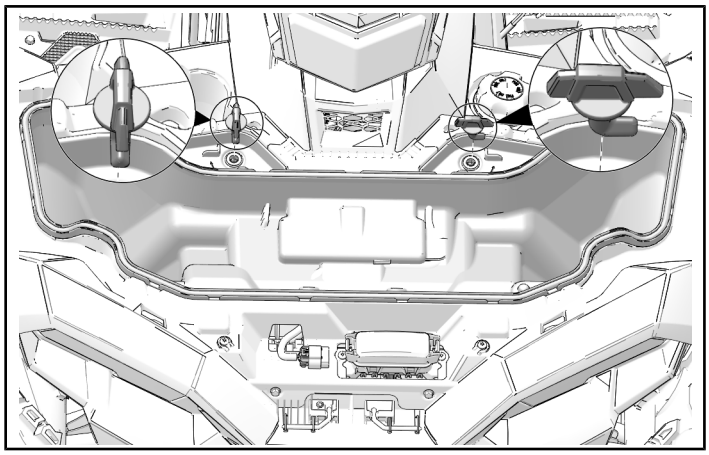
1. Park vehicle on a flat surface.
2. Push engine stop switch to OFF position.
3. Turn key to OFF position and remove key.

BATTERY DISCONNECT

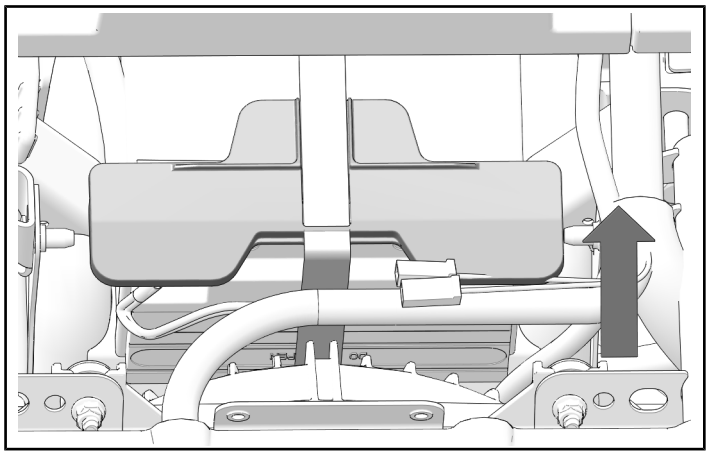
1. Release rubber latch on both sides and open front rack.



2. Remove two fasteners from front storage bin. Remove front storage bin.



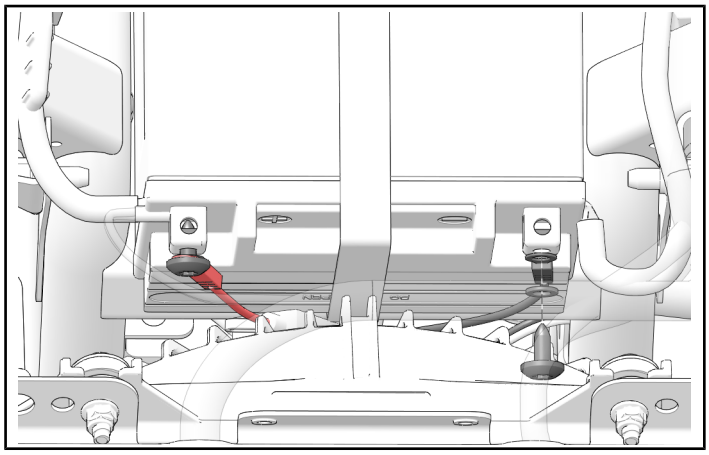
3. Fold up ends of battery cover to access battery bolts.



4. Remove bolt from black negative battery cable and disconnect negative battery cable. Remove bolt from red positive battery cable and disconnect positive battery cable.

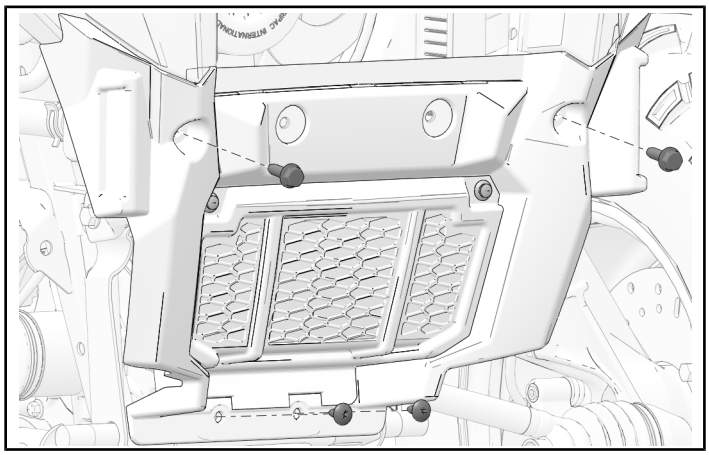
⚠ WARNING

Always disconnect black negative cable from battery FIRST. Failure to do so will result in high current electrical arc and may result in battery explosion if tool touches grounded frame. Death or serious personal injury may occur.

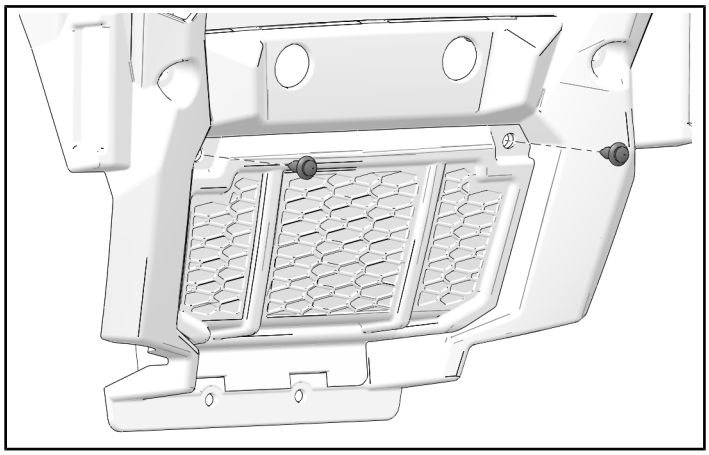


FRONT BUMPER COVER REMOVAL

1. Remove and keep four bolts from lower front bumper cover. Remove lower front bumper cover.



2. Remove two push pin rivets from panel on front bumper cover. Remove panel.



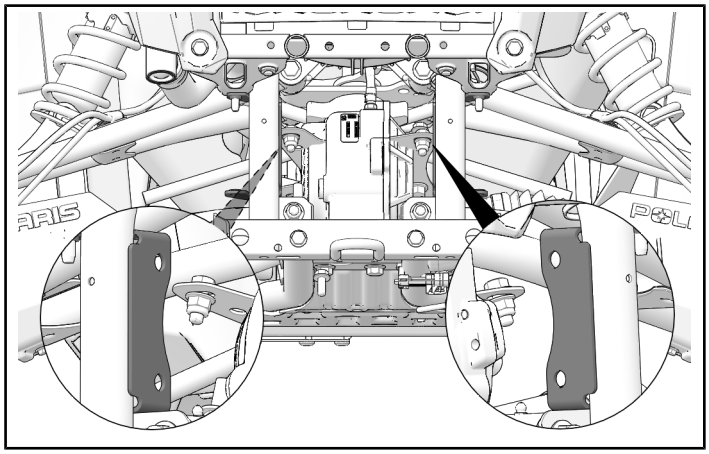
ACCESSORY INSTALLATION

WINCH AND CONTROL INSTALLATION – ALL MODELS

IMPORTANT

The winch assembly is heavy and there are many parts that need to be lined up correctly during assembly. Enlist at least one helper during winch installation.

1. Identify four winch mounting holes at front of vehicle.



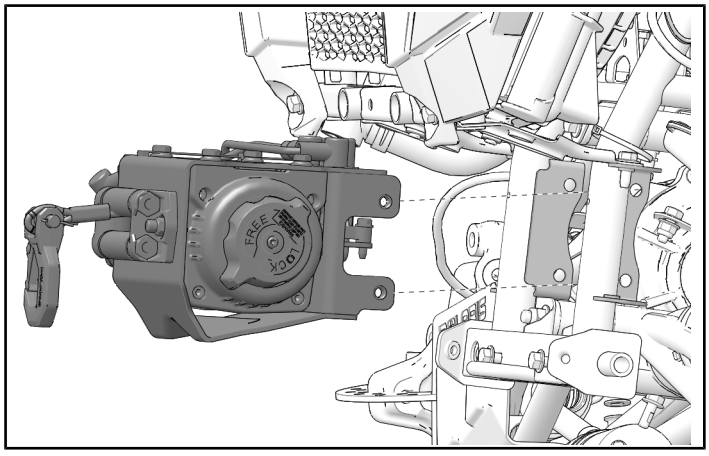
2. Install the red and black winch power cables through winch opening first, then put winch in position on vehicle, lining up four mounting points. Make sure not to pinch any wires.

IMPORTANT

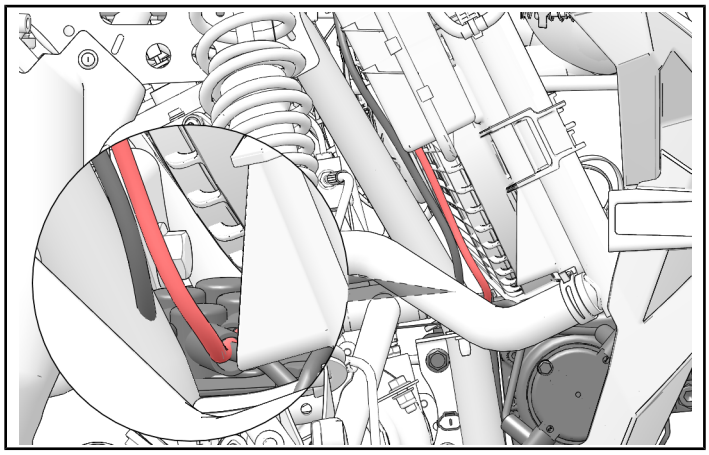
Enlist a helper to hold winch in position.

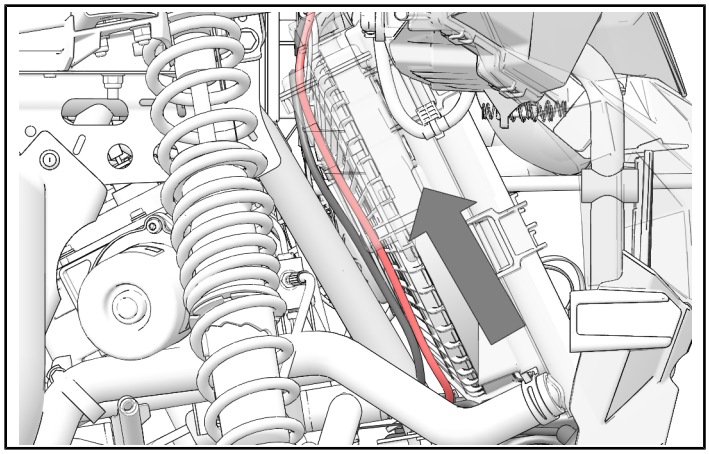
TIP

The red and black winch power cables can be placed over the coolant line on the right side of the vehicle to prevent the wires being pinched as the winch slides in.



3. Route winch power cables along frame tube up to the battery as shown. Place the ring terminals next to the respective battery terminal post. Do not connect the wires to the battery at this time.

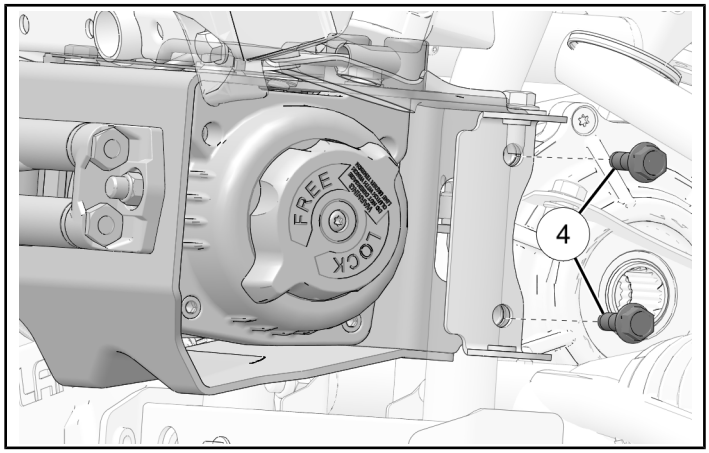




4. Install four screws ④ and torque to specification.

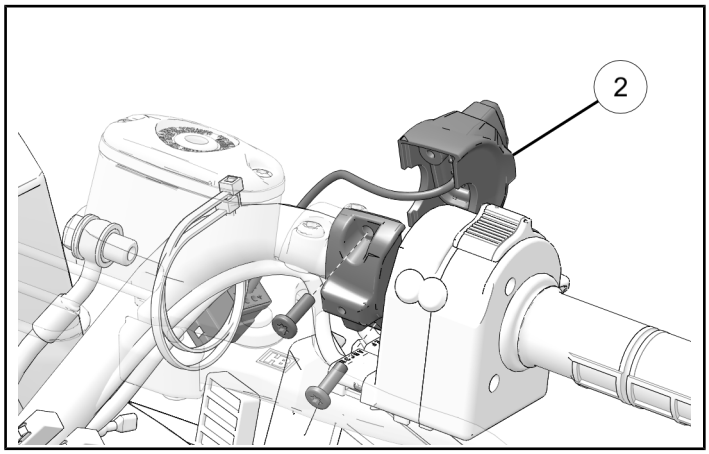
NOTICE
Left side shown, right side similar.

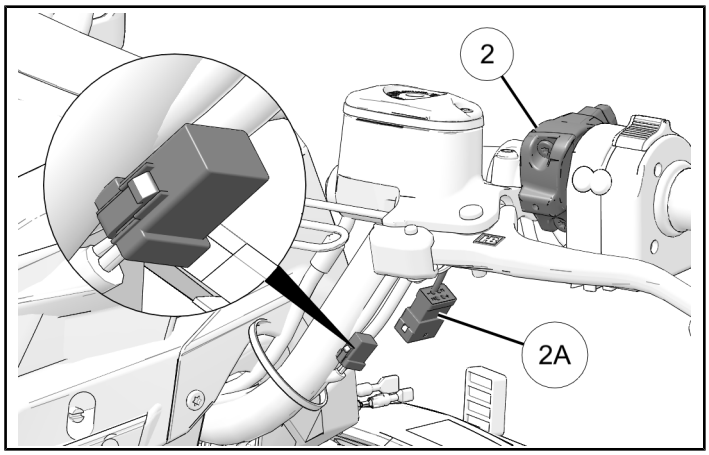
TORQUE
Winch Mounting Screws ④: **20 ft-lbs (27 N·m)**



5. Install the handlebar switch ② on the left side handlebar. Connect wiring plug **2A** to vehicle wiring harness.

TORQUE
Handlebar Switch Screws: **24 in-lbs (2.7 N·m)**

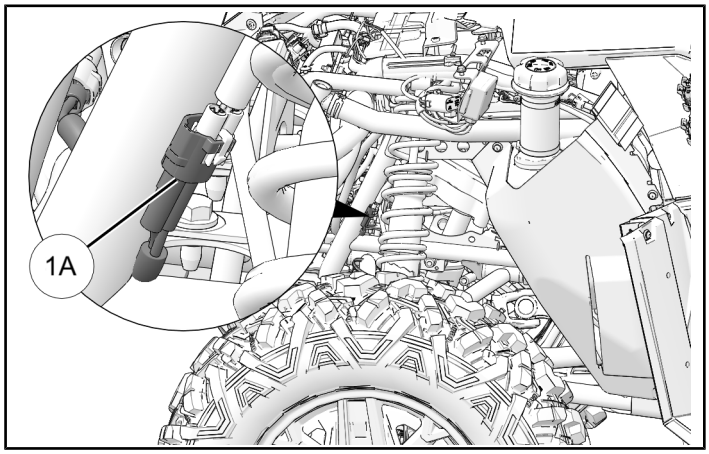




WINCH WIRING CONNECTION

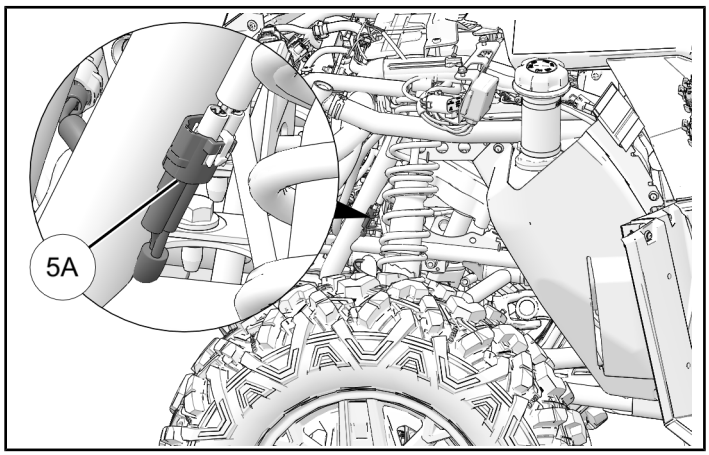
WIRING CONNECTION - 2500 AND 3500

1. Connect the winch contactor connector **1A** to the main chassis harness connector in the area shown and continue to "Vehicle Reassembly" section.



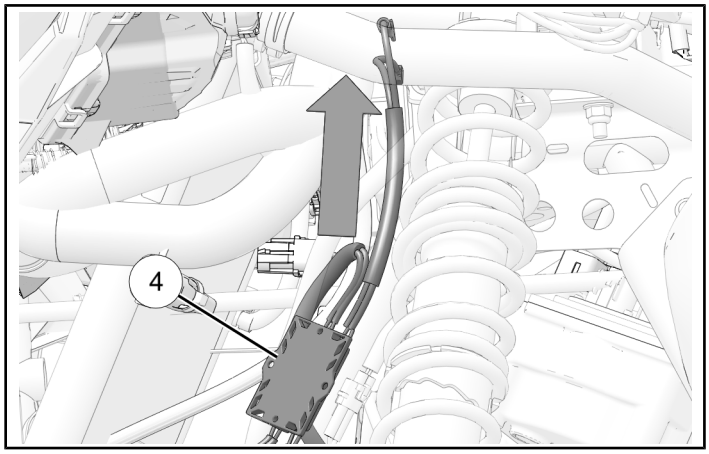
WIRING CONNECTION - 3500 PRO

1. Connect the y-splitter harness ⑤ connector **5A** to the main chassis harness connector in the area shown.

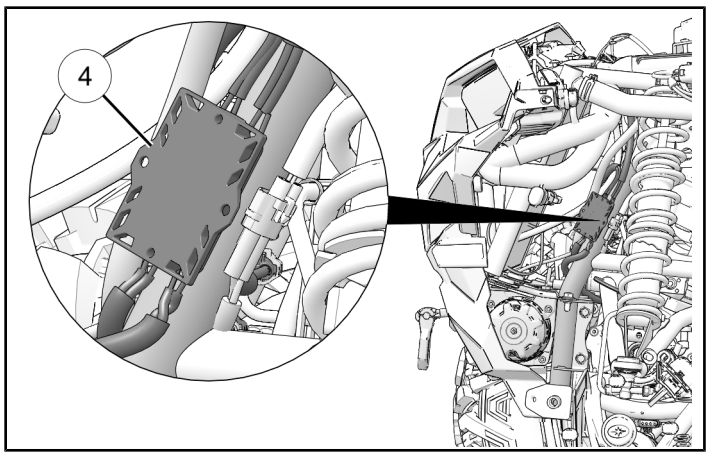


REMOTE CONTROL AND FAIRLEAD CONTROL SYSTEM INSTALLATION - 3500 PRO

1. Place fairlead control box ④ near installed position on left side frame tube and route the power wires up to the battery.

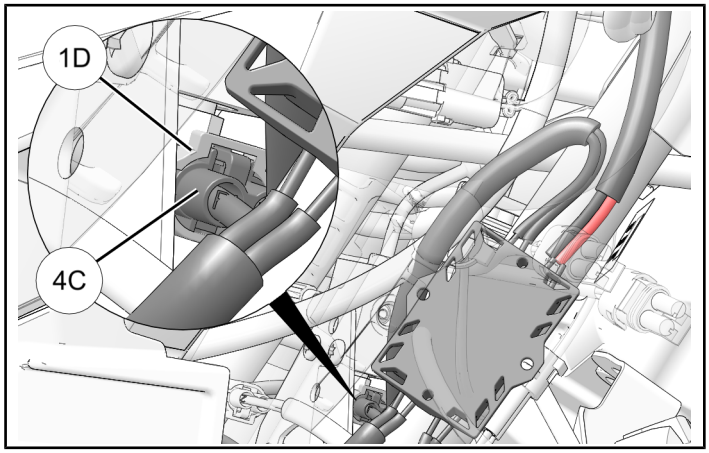


2. Install fairlead control box ④ onto left side frame tube and attach with cable ties in approximate location shown.

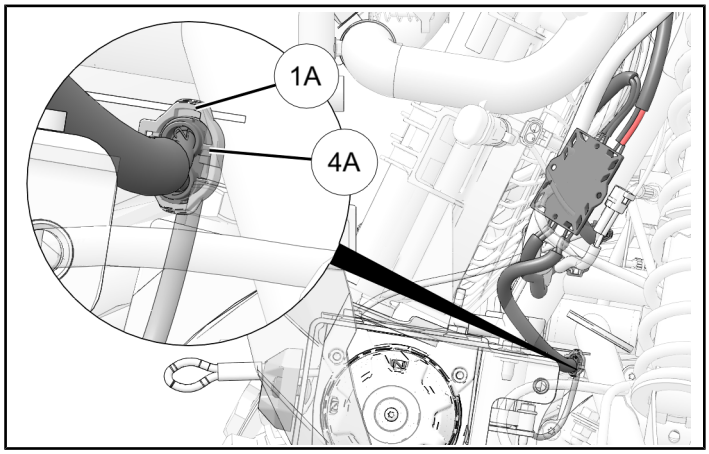


3. Connect **4C** from top of fairlead control box to fairlead connector **1D**. Secure the wires with cable ties to make sure that they are located safely away from the winch rope and other moving components on the winch and vehicle.

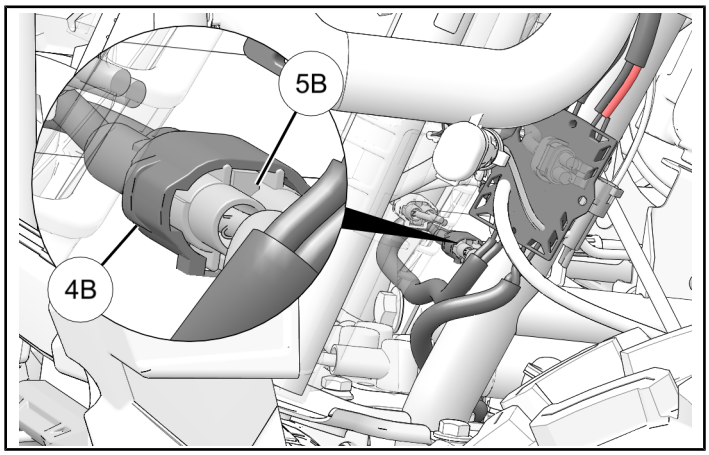
NOTICE
Connector **4C** is on the longest wire of the fairlead control box, and located on the same side as connections **4E** & **4D**.



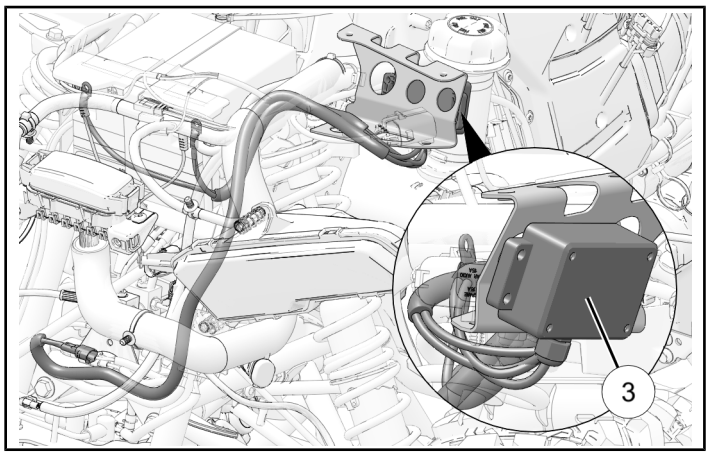
4. Connect **4A** from bottom of fairlead control box to the winch contactor connector **1A** on the back of the winch assembly. Secure the wires with cable ties to make sure that they are located safely away from the winch rope and other moving components on the winch and vehicle.

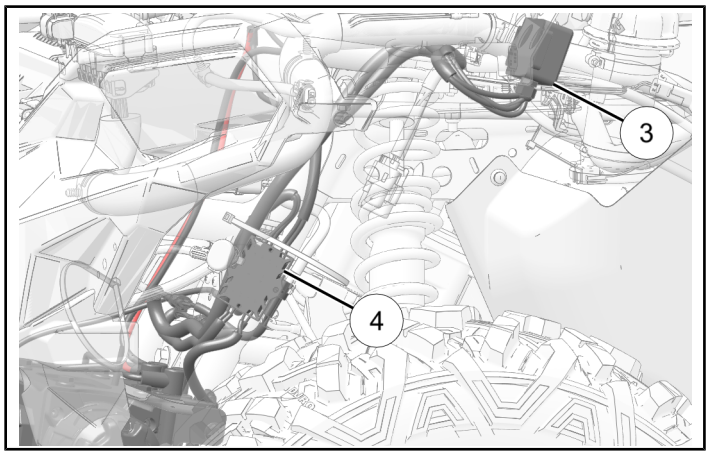


5. Connect **4B** from bottom of fairlead control box to y-splitter harness connector **5B**.

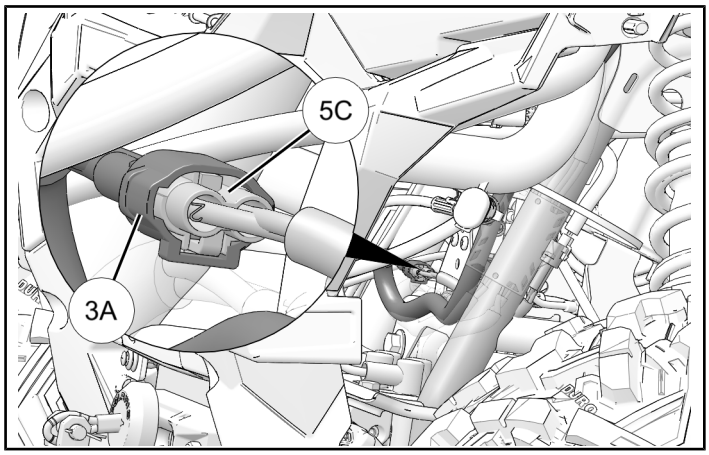


6. Install wireless receiver ③ on upper body bracket. Install cables along frame tube as shown. Attach wireless receiver with cable ties.

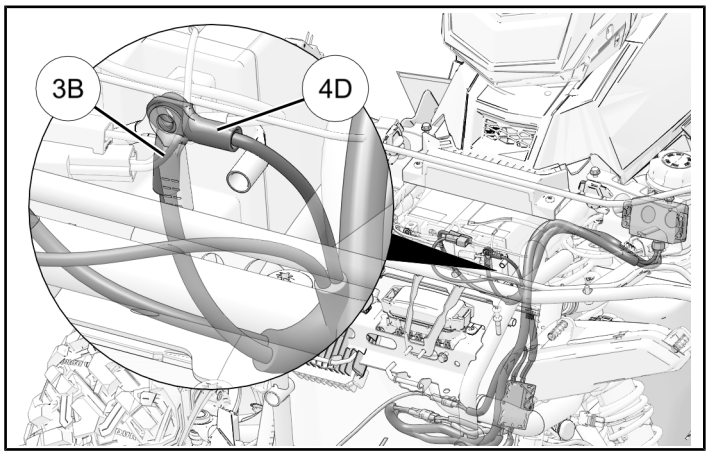




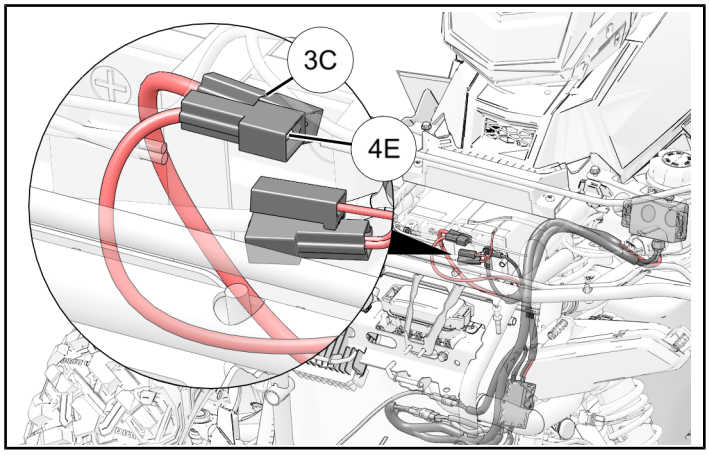
7. Connect **3A** from bottom of wireless receiver to y-splitter harness connector **5C**.



8. Route black wires from the wireless receiver and fairlead control box to the battery and place the ring terminals **3B** & **4D** next to the negative post on the battery. Do not connect the black wires to the negative battery post at this time.

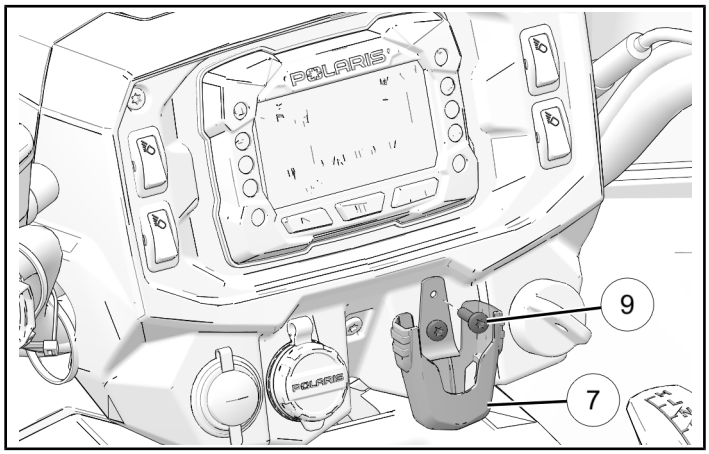


9. Route the red or orange wires from the wireless receiver and fairlead control box to the mating connections on the main wire harness just in front of the battery. Connect the red or orange wires **3C** & **4E** to the two open terminals on the main wire harness.



10. Secure all wires to the main harness using cable ties.
11. Install wireless remote control holder ⑦ using screws ⑨.

TIP
Location shown is a suggestion. Wireless remote holder may be installed in other locations. Make sure no fuel or electrical connections are at risk of being contacted by mounting screws.



VEHICLE REASSEMBLY

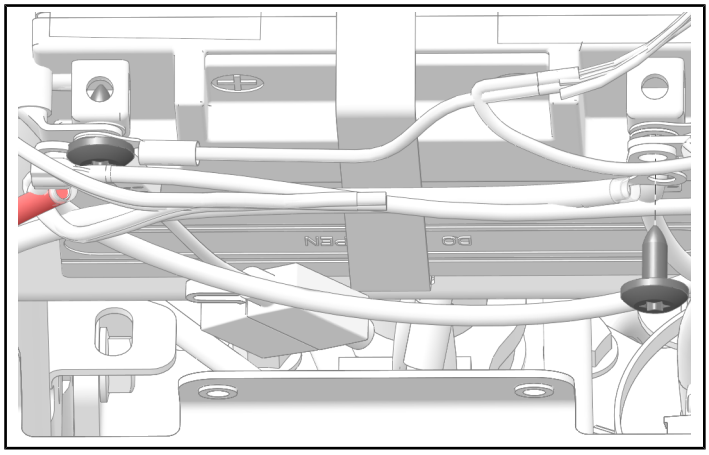
GENERAL

1. Make sure there are no exposed wires or terminals, or pinched wiring. Tightly bind all loose wires and attach away from moving parts and heat sources.

BATTERY CONNECTION

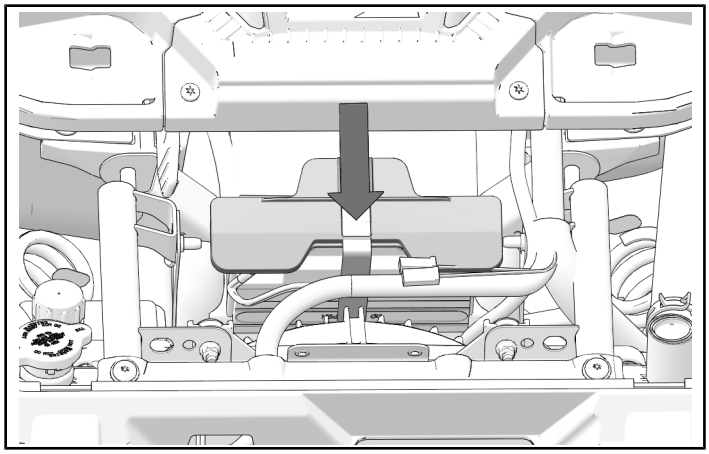
1. Connect power/negative cables to battery:
   - **2500 AND 3500** - Connect power cable to battery using retained battery connection screw. Reconnect ground cable to the negative battery post using retained battery screw.
   - **3500 PRO** - Connect power cable to battery using retained battery connection screw. Reconnect ground cable and make sure to add both the ground wires for the wireless receiver and fairlead control box to the negative battery post using retained battery screw.

⚠ WARNING
Always connect red positive cable onto battery FIRST, black negative cable LAST. Failure to do so will result in high current electrical arc and may result in battery explosion if tool touches grounded frame. Death or serious personal injury may occur.

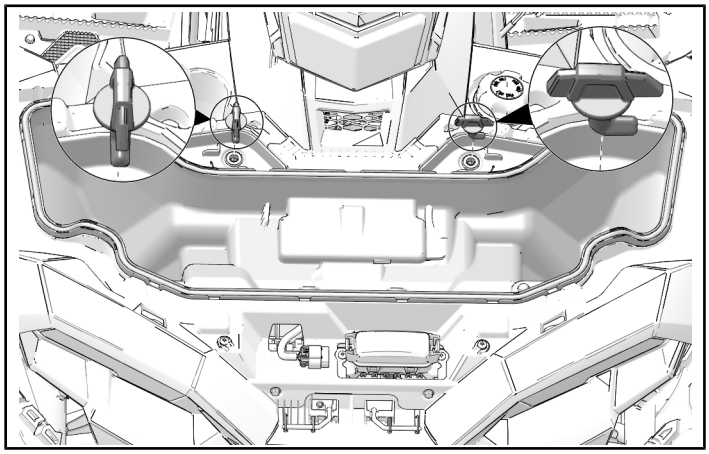


2. Secure wires to the main harness, bundling any extra wire length to retain it in place.

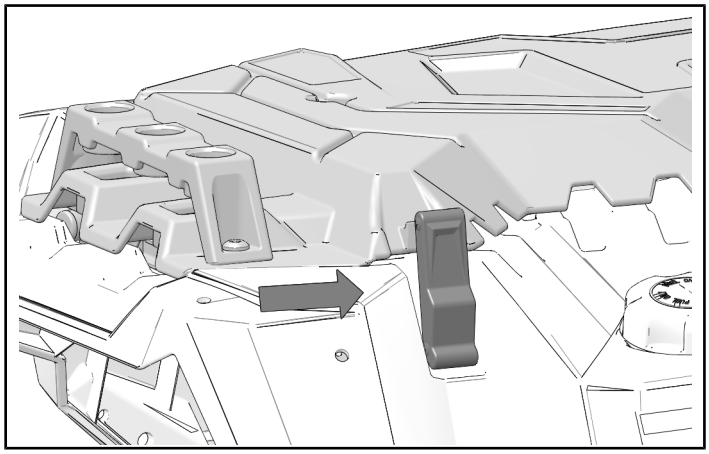
3. Put battery cover in place.



4. Install storage bin and lock in place with two fasteners.

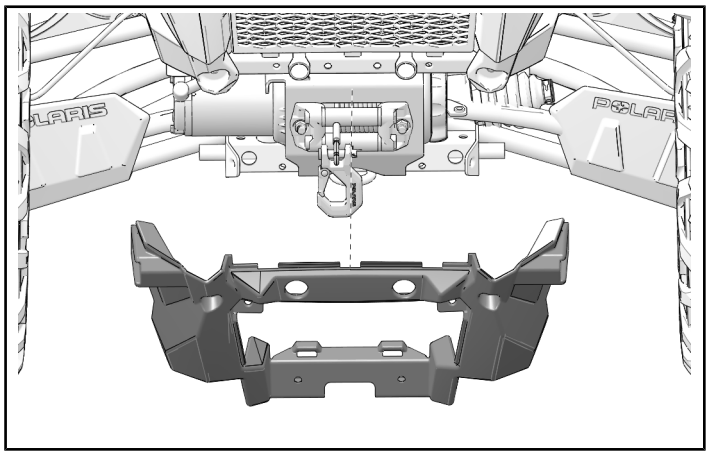


5. Install storage bin cover and secure with straps.



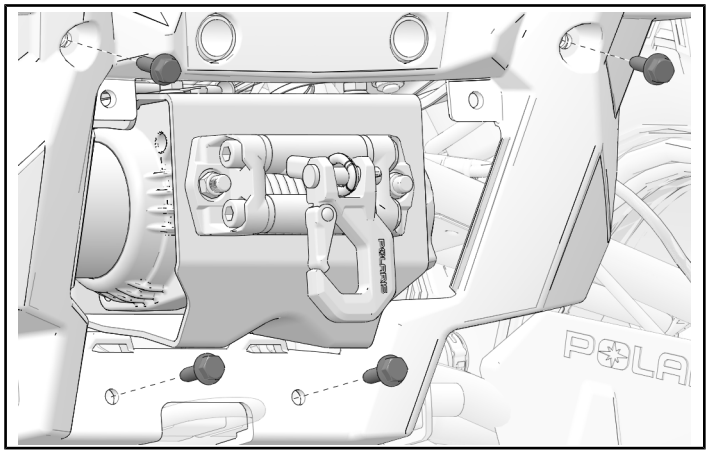
FRONT BUMPER COVER INSTALLATION

1. Put bumper cover in position on vehicle.



2. Install four retained bolts and torque to specification.

TORQUE
Bumper Cover Bolts: **79 in-lbs (9 N·m)**



OPERATION

HANDLEBAR SWITCH OPERATION CHECK

Handlebar switch allows winch operation while seated on the vehicle. If winch does not operate as described, refer to *Troubleshooting* section.

IMPORTANT

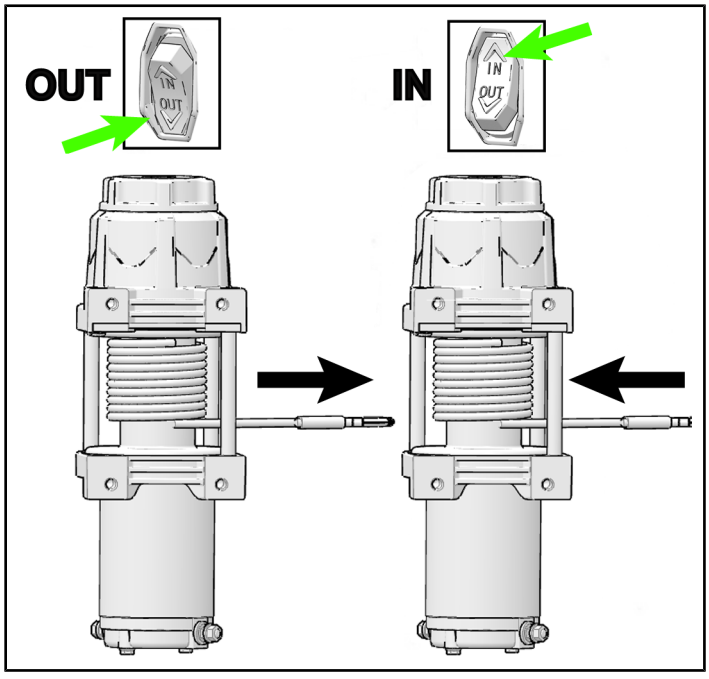
If equipped, the auto stop system is intended to prevent winch damage caused by over-tightening rope, but cannot prevent all possible winch damage. Winch system is very powerful and care should be exercised whenever it is in operation.

Winch operator is always responsible for using winch properly. Auto stop system should only be used as secondary preventive measure to help prevent damage to winch from over-tightening rope.

1. To extend rope, depress and hold OUT button. To recover rope, depress and hold IN button.

IMPORTANT

If applicable, during rope retraction winch should automatically stop when magnetic stop comes close to or contacts auto stop fairlead (within approximately 1 inch (25 mm)). Magnets in stop trigger sensors in fairlead, stopping winch.



WIRELESS REMOTE OPERATION CHECK

Wireless remote allows winch operation from off the vehicle. If winch does not operate as described, refer to *Troubleshooting* section.

IMPORTANT

If equipped, auto stop system is intended to prevent winch damage caused by over-tightening rope, but cannot prevent all possible winch damage. Winch system is very powerful and care should be exercised whenever it is in operation.

Winch operator is always responsible for using winch properly. Auto stop system should only be used as secondary preventive measure to help prevent damage to winch from over-tightening rope.

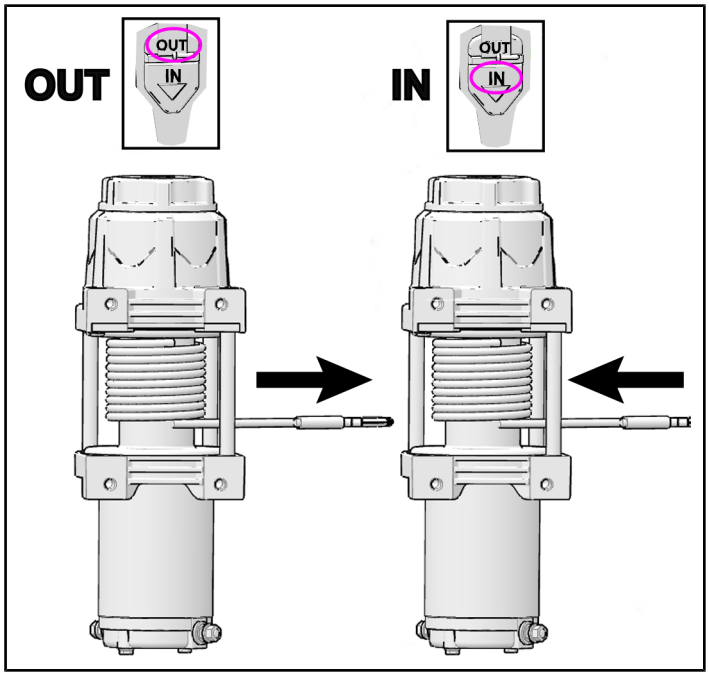
1. To turn wireless remote ON, depress and hold power button for three seconds or until LED light illuminates.

   Wireless remote will automatically turn OFF after 30 seconds of inactivity. To manually turn off, depress and hold power button for three seconds or until LED light extinguishes.

2. To extend rope, depress and hold OUT button. To recover rope, depress and hold IN button.

IMPORTANT

If applicable, during rope retraction winch should automatically stop when magnetic stop comes close to or contacts auto stop fairlead (within approximately 1 inch (25 mm)). Magnets in stop trigger sensors in fairlead, stopping winch.



WINCH GEAR SELECTION

STANDARD WINCH

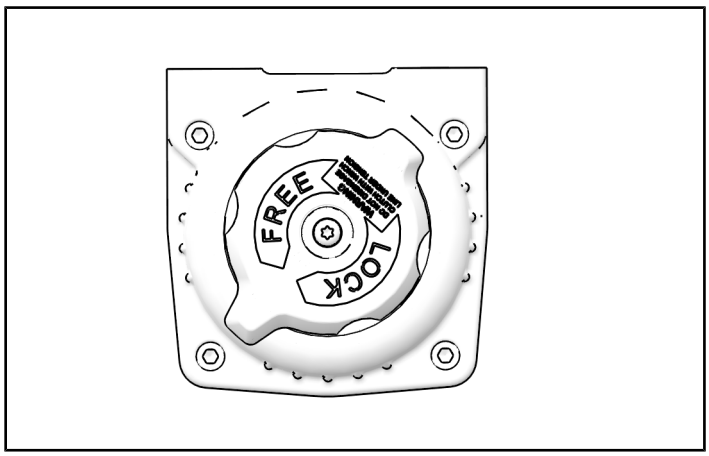
⚠ WARNING

Do NOT attempt to change gear setting while the cable is under tension. Failure to relieve cable tension prior to changing gears may result in winch failure, resulting in serious personal injury or death.

Your winch is equipped with two different gear settings: “FREE” and “LOCK”.

1. **FREE**: Used to rapidly extend cable (faster than when in the “LOCK” position)
2. **LOCK**: Used to recover cable

To shift between FREE and LOCK relieve all tension from cable, then rotate gear selector knob (located on end of winch) clockwise to engage LOCK setting, or counterclockwise to engage FREE setting.



WINCH WITH RAPID ROPE RECOVERY

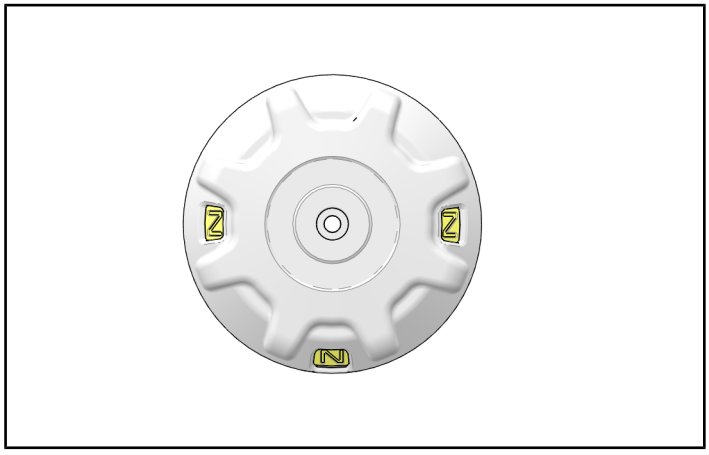
⚠ WARNING

Do NOT attempt to change gear setting while rope is under tension. Failure to relieve rope tension prior to changing gears may result in winch failure, resulting in serious personal injury or death.

Your winch is equipped with three different gear settings: N (NEUTRAL), L (LOW), and H (HIGH).

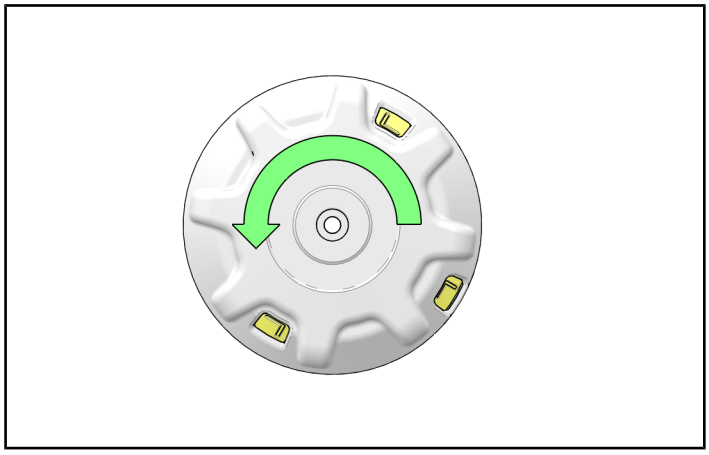
NEUTRAL: rapidly extend rope

When in neutral, N will be visible in cutout window on shift knob (LH side of winch).



LOW: recover LOADED rope

Relieve all tension from rope, then rotate gear select knob counter-clockwise until L is visible in shift knob cutout window.



HIGH: rapidly recover UNLOADED rope

Relieve all tension from rope, then rotate gear select knob clockwise until H is visible in shift knob cutout window.

If difficulty is encountered while shifting into HIGH, pull winch rope slightly by hand to help align gears.

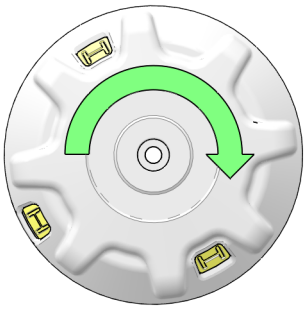
IMPORTANT

High gear is ONLY used for rapid recovery of UNLOADED winch rope. It is NOT intended for rope retraction while under load. Using high gear while under load will result in reduced winch life.

NOTICE

Recovery speed in HIGH gear is approximately 5X recovery speed in LOW gear. As result, using this feature will significantly reduce time needed to recover rope after use.

Polaris® recommends always returning gear selector to LOW after rapid recovery to prevent inadvertent future operation in HIGH gear.



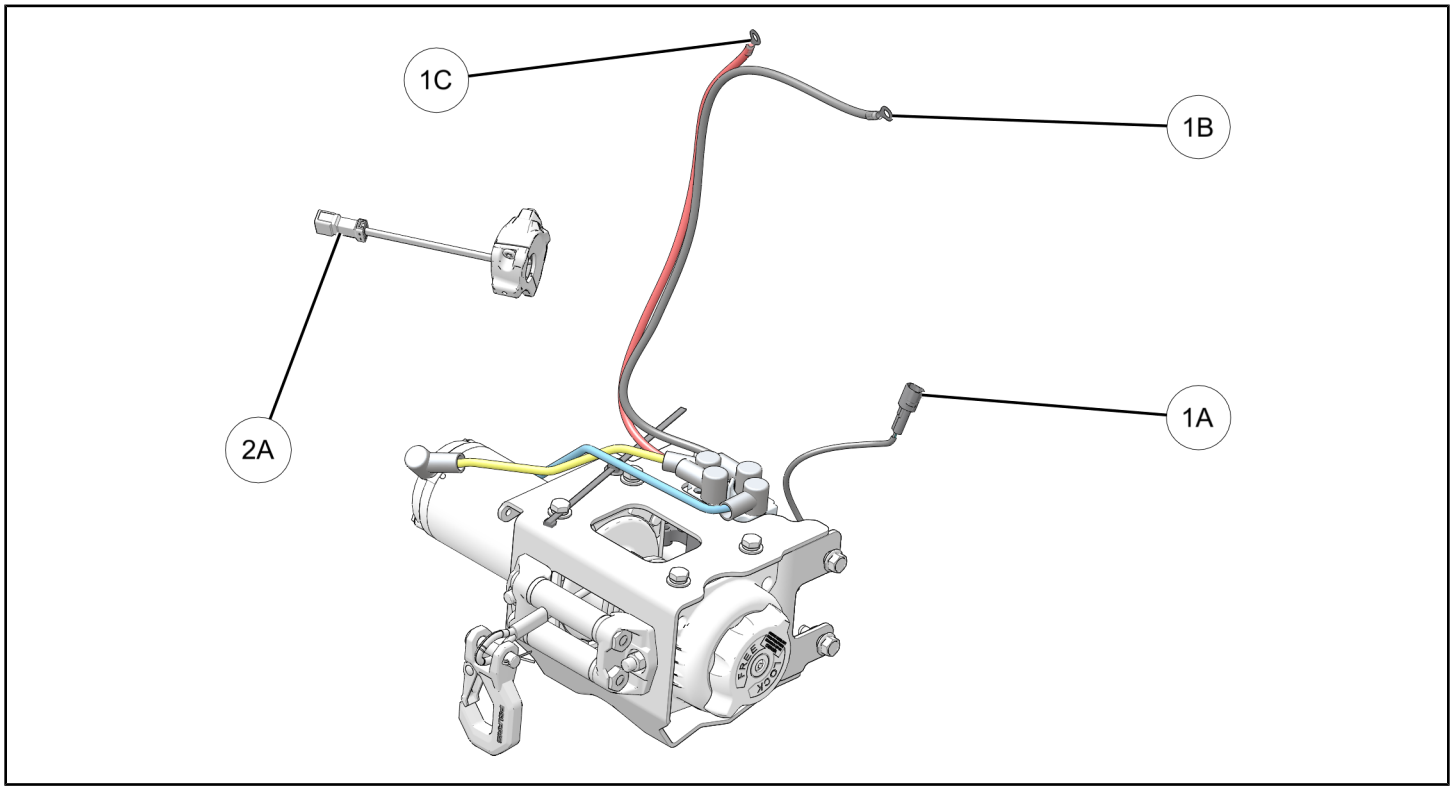
WINCH TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	RECOMMENDED SOLUTION
Dead vehicle battery	Incorrect, damaged, or corroded electrical connections	Verify all winch electrical connections are per instruction manual and free of damage and/or corrosion.
Winch will not operate	Contactor not receiving power	Turn vehicle key on.
	Wireless remote not powered on	Turn wireless remote on.
	Incorrect, damaged, or corroded electrical connections	Verify all winch electrical connections are per instruction manual and free of damage and/or corrosion.
	Keyed power circuit (orange wires) not properly powered	Check 10A accessory circuit fuse for continuity; replace as required.
Winch operates in one direction only	Autostop fairlead not properly connected	If winch operates only outward then ensure magnetic stop (black rubber puck) is not touching autostop fairlead. If winch operates inward even when magnetic stop is touching fairlead then verify all winch electrical connections are per instruction manual and free of damage and/or corrosion.
Winch makes noise but rope does not move	Contactor powered, but not winch	If clicking sound is heard when winch control button is depressed, but winch motor is silent, then verify electrical connections between winch and contactor are free of damage and/or corrosion. If winch makes noise but does not move, verify winch is in gear. If winch is in gear, but winch still does not move, have a dealer inspect the winch.
	Winch not in proper gear	Rotate gear knob fully into L or H, then recheck.
Winch operates too slowly	Winch is improperly loaded	Verify rope is not binding on spool or fairlead. **IMPORTANT** High gear is ONLY used for rapid recovery of the UNLOADED winch rope. It is NOT intended for rope retraction while under load. Using high gear while under load will result in reduced winch life.
	Winch not in proper gear	Rotate gear knob fully into L or H, then recheck. **NOTE** Winch is designed to operate slowly in low gear.
Winch will not change gears	Rope is under load	Changing gears while under load is intentionally difficult to prevent accidental operation, which could lead to personal injury or winch failure. Ensure rope is under no tension, and rope is not binding on spool or fairlead. Briefly operate winch, then attempt to shift again.

ELECTRICAL CONNECTION REFERENCE GUIDE

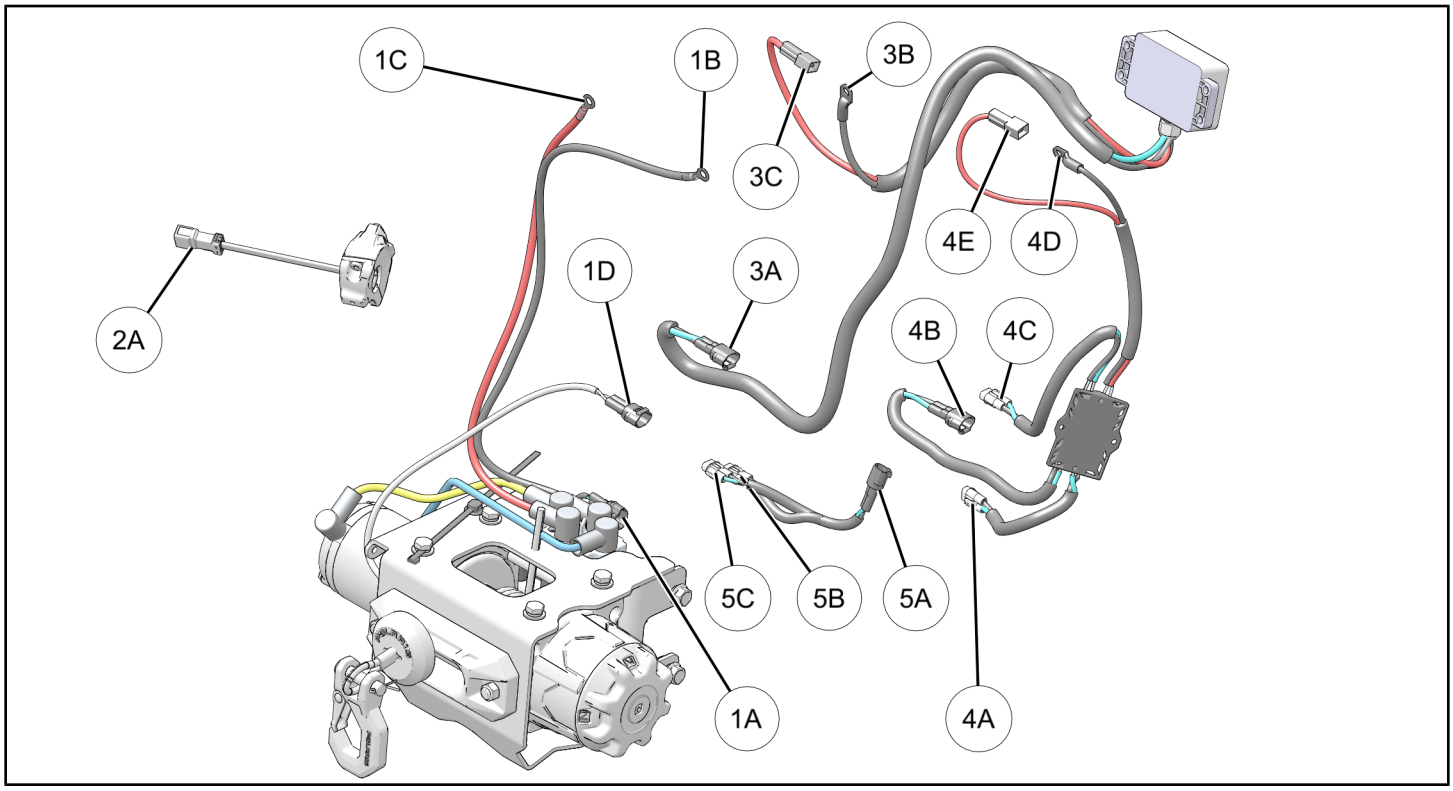
2500 KIT, P/N 2889469 / 3500 KIT, P/N 2889470

NOTICE
2500 Kit, P/N 2889469 shown, 3500 Kit, P/N 2889470 similar.



REF	PART DESCRIPTION	CONNECTS TO
1A	Winch Contactor, Connector	Main Harness Connector
1B	Connector-Battery, Negative	Battery Terminal, Negative
1C	Connector-Battery, Positive	Battery Terminal, Positive
2A	Winch Switch, Connector	Main Harness Connector

3500 PRO KIT, P/N 2889471



REF	PART DESCRIPTION	CONNECTS TO
1A	Winch Contactor, Connector	Fairlead Control Box, Connector
1B	Connector-Battery, Negative	Battery Terminal, Negative
1C	Connector-Battery, Positive	Battery Terminal, Positive
1D	Fairlead, Connector	Fairlead Control Box, Connector
2A	Winch Switch, Connector	Main Harness Connector
3A	Wireless Receiver, Connector	Y-Splitter Harness
3B	Wireless Receiver, Terminal, Ring	Battery Terminal, Negative
3C	Wireless Receiver , Terminal, Spade	Main Harness Keyed Power, Positive
4A	Fairlead Control Box, Connector	Winch Contactor, Connector
4B	Fairlead Control Box, Connector	Y-Splitter Harness
4C	Fairlead Control Box, Connector	Fairlead, Connector
4D	Fairlead Control Box, Terminal, Ring	Battery Terminal, Negative
4E	Fairlead Control Box, Terminal, Spade	Main Harness Keyed Power, Positive
5A	Y-Splitter Harness, Connector	Main Harness Connector
5B	Y-Splitter Harness, Connector	Fairlead Control Box, Connector
5C	Y-Splitter Harness, Connector	Wireless Receiver, Connector

INSTRUCTION FEEDBACK FORM

A feedback form has been created for the installer to provide any comments, questions or concerns about the installation instructions. The form is viewable on mobile devices by scanning the QR code or by clicking **HERE** if viewing on a PC.