4500 HD WINCH KIT

P/N 2881667

APPLICATION

Verify accessory fitment at **Polaris.com**.

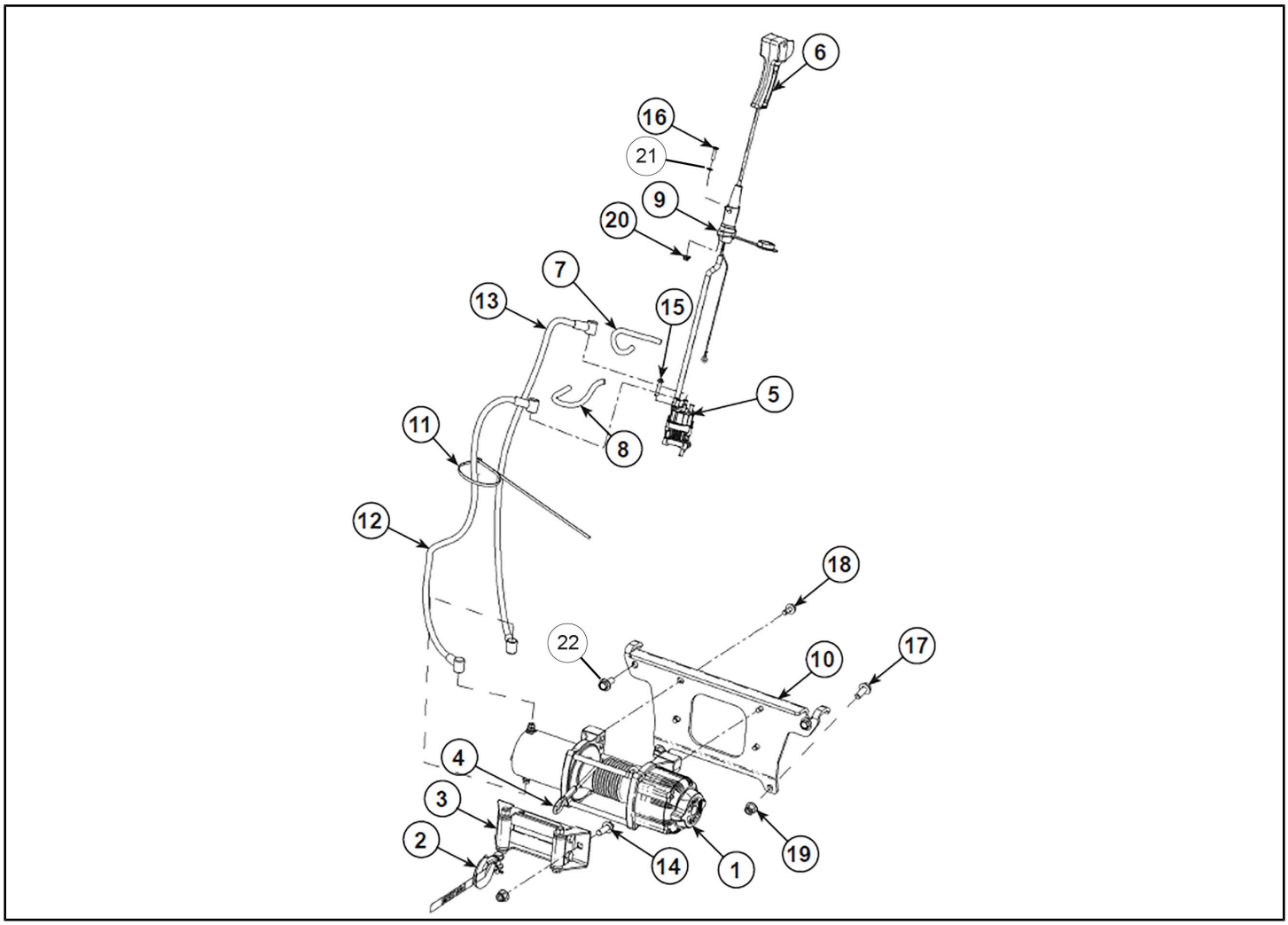
BEFORE YOU BEGIN

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.

KIT CONTENTS

This kit contains parts for installation of the winch only. Prior installation of a Battery Connection Kit (PN 2879388, 2879685, or equivalent) is also required (sold separately).

This Kit includes:



REF	QTY	PART DESCRIPTION	PART NUMBER
1	1	Winch, 4500 HD	2207537
1.1	1	- Cam, Rotary, Winch Freespool (not shown)	5633169
2	1	Hook	2411836

REF	QTY	PART DESCRIPTION	PART NUMBER
3	1	Roller-Fairlead	2411847
4	1	Cable, Steel - 7/32 inch	2878889
5	1	Contactor	4015095
6	1	Remote Switch	4013466
7	1	Power Cable, Winch, Black 6 GA, 250 mm	4013470-250
8	1	Power Cable, Winch, Red 6 GA, 250 mm	4013471-250
9	1	Remote Socket	4014228
10	1	Plate, Mounting	5439929
11*	10	Cable Tie	7080492
12	1	Cable, Winch, Yellow 6 GA, 800 mm	4013468-800
13	1	Cable, Winch, Blue 6 GA, 800 mm	4013469-800
14*	2	Screw, Hex Flange - M10 X 1.5 X 30	7517425
15*	4	Screw, Torx® Pan Head - #10–32 X 1	7518246
16*	2	Screw, Torx® Pan Head - M5 X 0.8 X 20	7518980
17*	2	Screw, Hex Flange - M10 X 1.5 X 25	7519071
18*	4	Screw, Torx® Truss Head - M8 X 1.25 X 20	7519260
19*	4	Nut, Hex Flange, Locking - M10 X 1.5	7547423
20*	2	Nut, Hex Flange, Locking - M5 X 0.8	7547427
21*	2	Washer, Flat - M5	7556724
22*	2	Screw, Hex Flange - M10 X 1.5 X 20	7519905
	1	Winching Guide	9923644
	1	Instructions	9926739

Items marked (*) are included in Hardware Kit PN 2879172. Hardware kit is universal and contains additional parts not used for this installation.

TOOLS REQUIRED

- Safety Glasses
- Cutting Tool
- Drill
- Drill Bit: 1/4 inch (6 mm)
- Hole Saw: 1–1/16 inch (27 mm)
- Pliers, Push Pin Rivet
- Screwdriver, Phillips
- Socket Set, Metric
- Socket Set, SAE
- Socket Set, Torx® Bit
- Torque Wrench
- Wrench Set, Metric

IMPORTANT

Your 4500 HD 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

1. Shift vehicle transmission into “PARK”. Turn ignition switch to “OFF” position and remove key.
2. Remove all seats.

⚠ WARNING

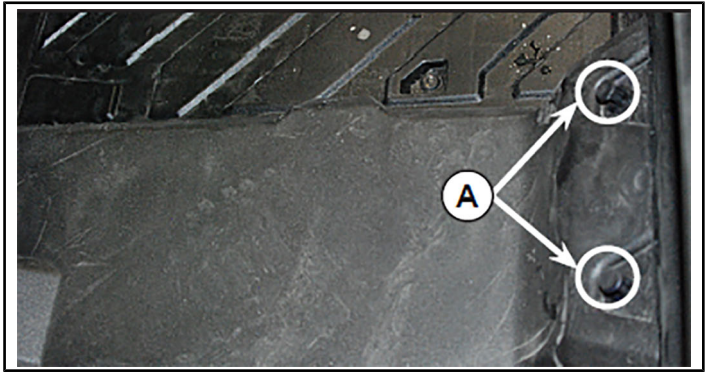
Ensure red positive (+) battery terminal is COMPLETELY COVERED by protective boot. Accidental tool contact across both battery terminals will result in high current electrical arc, and may result in battery explosion. Death or serious personal injury may occur.

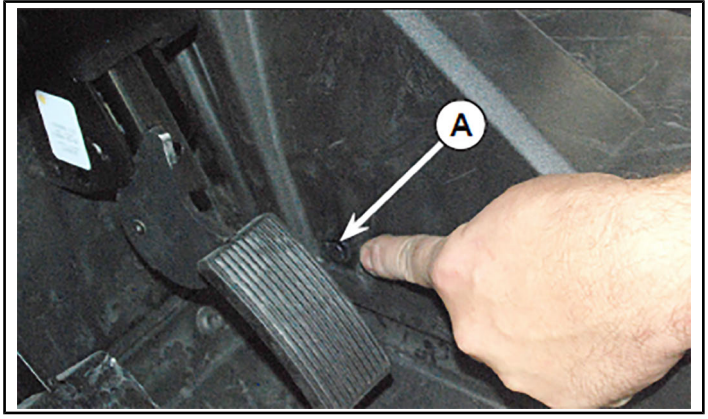
Black negative (-) cable MUST be disconnected from battery terminal. Failure to disconnect cable may result in electrical arc when installing connections at terminal block. Death or serious personal injury, or damage to vehicle or accessory, may occur.

3. Remove passenger (or right rear passenger) storage compartment, then disconnect black negative (-) cable from battery.

4. Remove hood.

5. Remove four push pin rivets Ⓐ from center floor console, and one on each side by foot pedal. Remove floor console. Retain fasteners.





CONTACTOR AND WIRING INSTALLATION

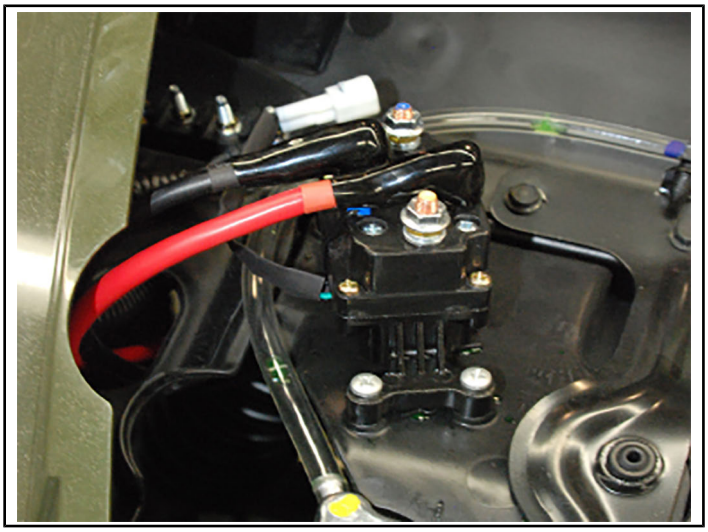
⚠ WARNING

Do NOT reconnect black negative (-) cable to battery terminal in the next step. Reconnecting cable may result in electrical arc when installing connections at terminal block. Death or serious personal injury, or damage to vehicle or accessory, may occur.

1. If not previously installed, install Battery Connection Kit (PN 2879388, 2879685, or equivalent; sold separately) at this time.

   Follow instructions included with Battery Connection Kit. However, do NOT tighten battery cable terminals at terminal block, and do NOT reconnect black negative (-) cable to battery terminal.

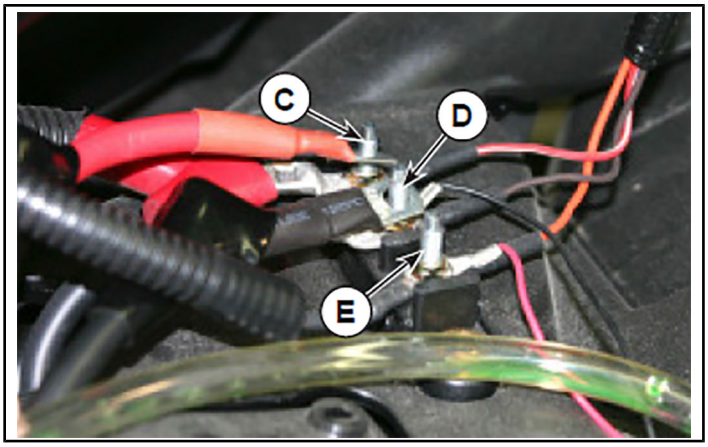
2. Install contactor ⑤ to underhood liner using four screws ⑮. Tighten screws.



3. Loosely install 250 mm long BLACK power cable ⑦ and RED power cable ⑧ to corresponding color posts on contactor.
4. Loosely install opposite ends of power cables ⑦ and ⑧ to vehicle terminal block. Ensure routing prevents contact with hot components, sharp edges, or moving parts.
   - **RED** power cable: To post Ⓒ with existing RED battery connection cable (unswitched 12V POS)
   - **BLACK** power cable: To post Ⓓ with existing BLACK battery connection cable (12V NEG)

NOTE

Terminal block post Ⓔ with existing ORANGE wire (accessory switched 12V POS) will be used later.



5. Tighten nuts on contactor (red and black wire posts), then install terminal boots.
6. Torque nuts on terminal block (red and black wire posts) to specification.

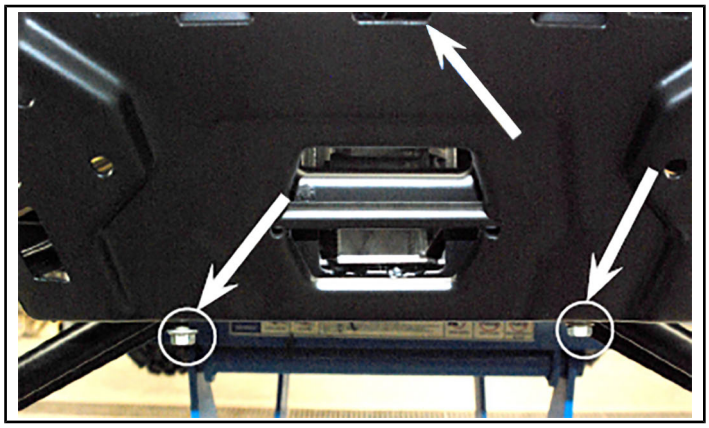
TORQUE
20–25 in. lbs. (2.3–2.8 Nm)

WINCH INSTALLATION

CAUTION

Bumper is heavy. Provide adequate support for bumper before removing final screws in next step. Failure to comply may result in personal injury or damage to bumper.

1. Support front bumper while removing four bolts (two upper, two lower) securing bumper to vehicle, then remove bumper. Retain hardware.

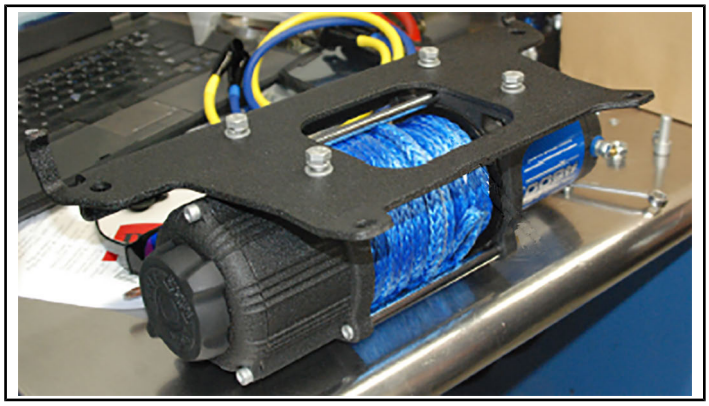


2. Loosely install mounting plate ⑩ to winch ① using four screws ⑱. Torque screws to specification.

TORQUE
14 ft. lbs. (10 Nm) ± 10%

NOTE

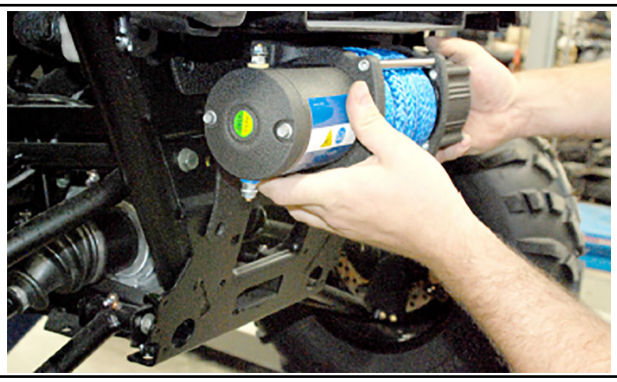
Winch shown is configured for autostop fairlead (not included); installation similar for roller fairlead (included).

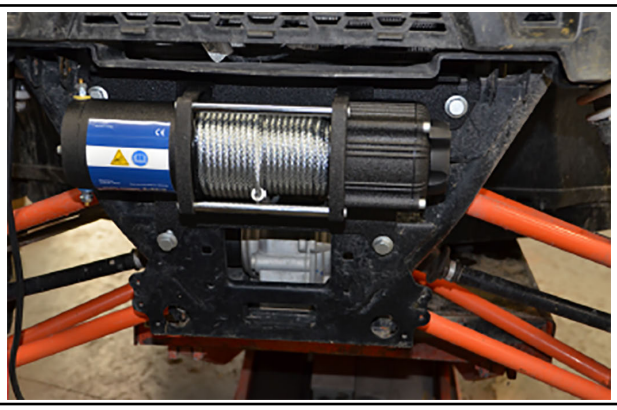


3. Install mounting plate ⑩ (with winch) to vehicle as follows:
   a. Upper holes: two screws ㉒ installed from FRONT to REAR. No nuts are needed.
   b. Lower holes: two screws ⑰ installed from REAR to FRONT, secured with nuts ⑲.

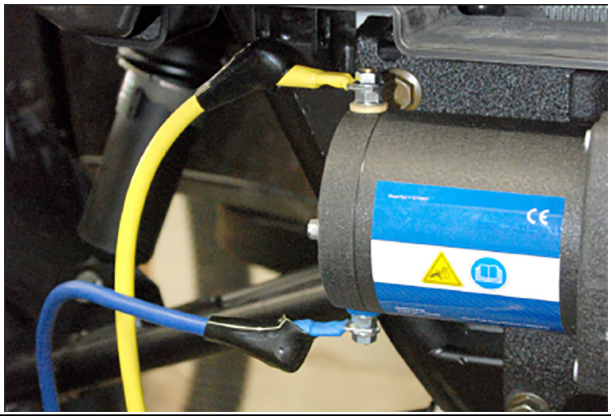
   Torque screws to specification.

TORQUE
25 ft. lbs. (34 Nm) ± 10%

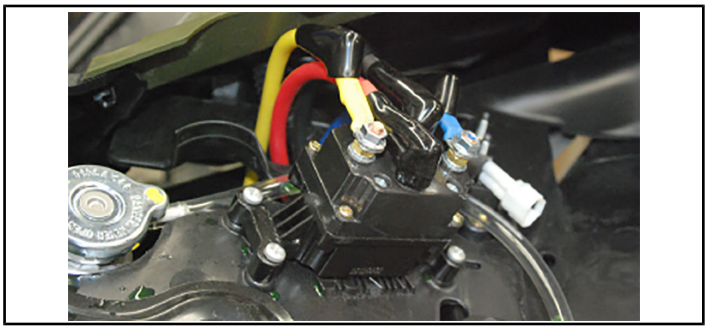




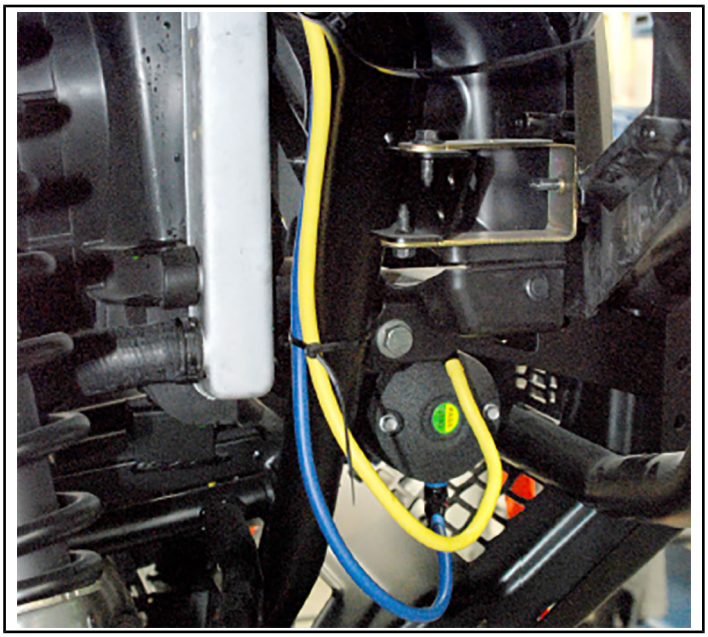
4. Install winch cables.
   a. Loosely install 800 mm yellow cable ⑫ and blue cable ⑬ to corresponding color posts on winch.



   b. Route opposite end of cables up through under-hood liner towards contactor. Ensure routing prevents contact with hot components, sharp edges, or moving parts (including suspension and steering components throughout their full range of travel).
   c. Loosely install yellow winch cable ⑫ and blue winch cable ⑬ to corresponding color posts on contactor.



   d. Tighten nuts on contactor AND winch (yellow and blue wire posts), then install terminal boots.
   e. Secure winch cables to main chassis harness and chassis structure using cable ties ⑪ to prevent contact with hot components, sharp edges, or moving parts.



5. Route winch cable through roller fairlead ③, then install fairlead to front bumper using two each screws ⑭ and nuts ⑲. Screws are installed from REAR to FRONT.

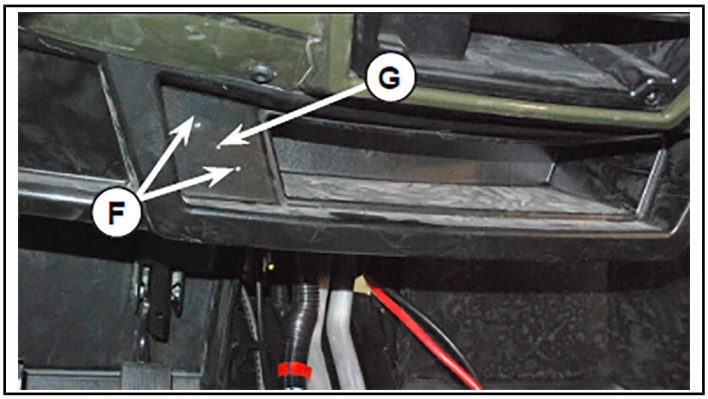
6. Reinstall front bumper with retained fasteners. See previous Step 1.
7. Attach hook ② to loop at end of cable ④, then secure using cotter pin.

REMOTE SOCKET INSTALLATION

IMPORTANT

Verify opposite side of wall is free from structure, components, wiring, lines, ducts, etc.

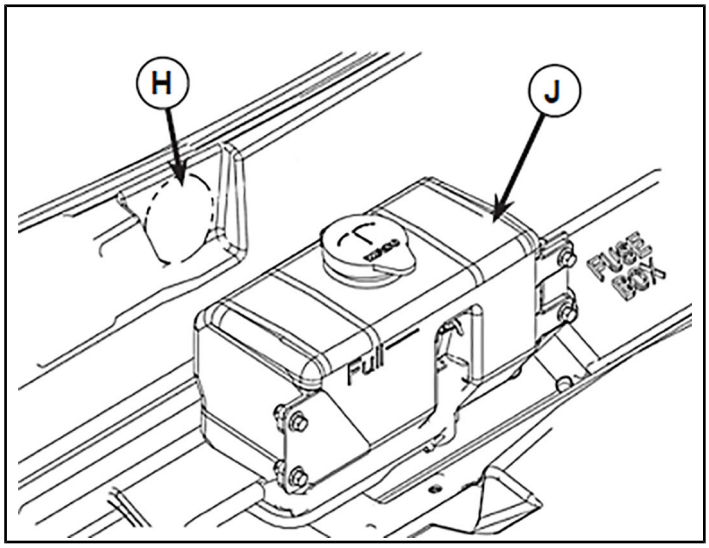
1. Drill holes in dash panel as follows:
   a. 1–1/16 inch (27 mm) hole Ⓖ centered between two fastener dimples Ⓕ
   b. Two 1/4 inch (6 mm) holes at dimples Ⓕ



2. Feed wiring on remote socket ⑨ through hole, then install socket to dash panel using two each screws ⑯, washers ㉑, and nuts ⑳. Install washers beneath nuts (not screw heads).

3. If firewall accessory grommet is already installed, then proceed to next step.

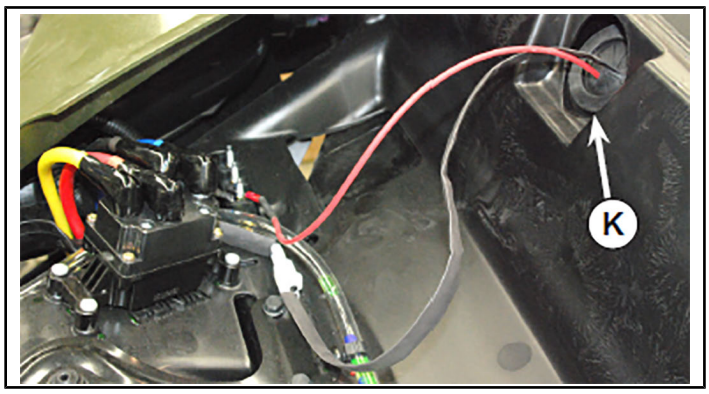
   Otherwise, cut 1–11/16 inch (43 mm) hole at location Ⓗ (behind washer bottle Ⓙ), then install accessory grommet (PN 5414440, sold separately).



4. Route remote socket wiring forward through firewall accessory grommet Ⓚ. Ensure routing prevents contact with hot components, sharp edges, or moving parts.

   Connect wires as follows:

   - **ORANGE** wire: To terminal block post with existing ORANGE wire (accessory switched 12V POS)
   - **BLACK** wire: To mating connector from contactor ⑤.



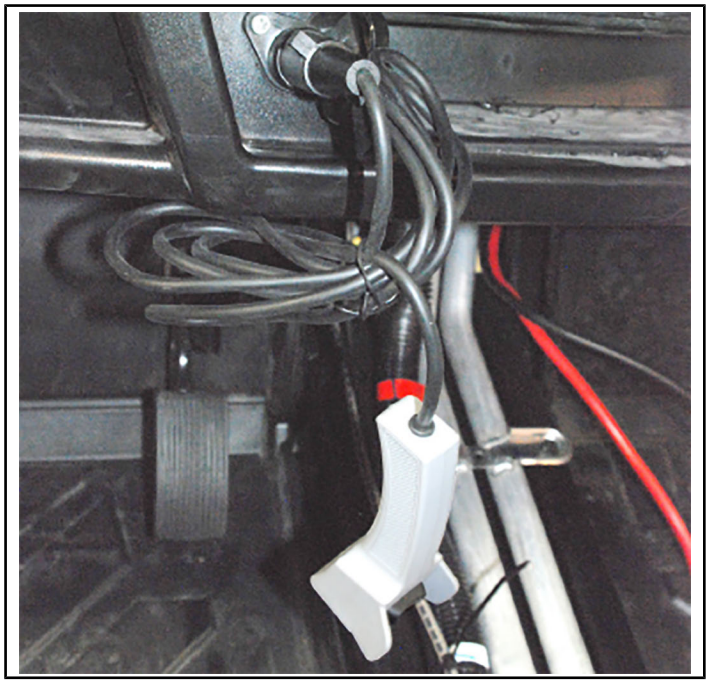
5. Torque nut on terminal block (orange wire post) to specification.

TORQUE
20–25 in. lbs. (2.3–2.8 Nm)

6. Secure winch socket harness using cable ties ⑪ to prevent contact with hot components, sharp edges, or moving parts.

FINAL INSTALLATION

1. Carefully examine all harness routing. Ensure harnesses are routed and secured to prevent contact with hot components, sharp edges, or moving parts. Use cable ties ⑪ as required.
2. Restore access. See beginning of procedure.
3. Reconnect black negative (-) cable to battery, then reinstall storage compartment and seats.
4. Connect remote switch ⑥ to remote socket ⑨.



5. Retighten all hardware after 30 minutes of riding.

OPERATION

OPERATIONAL CHECK

Wired remote allows winch operation from outside the vehicle. If winch does not operate as described, refer to the **TROUBLESHOOTING** section.

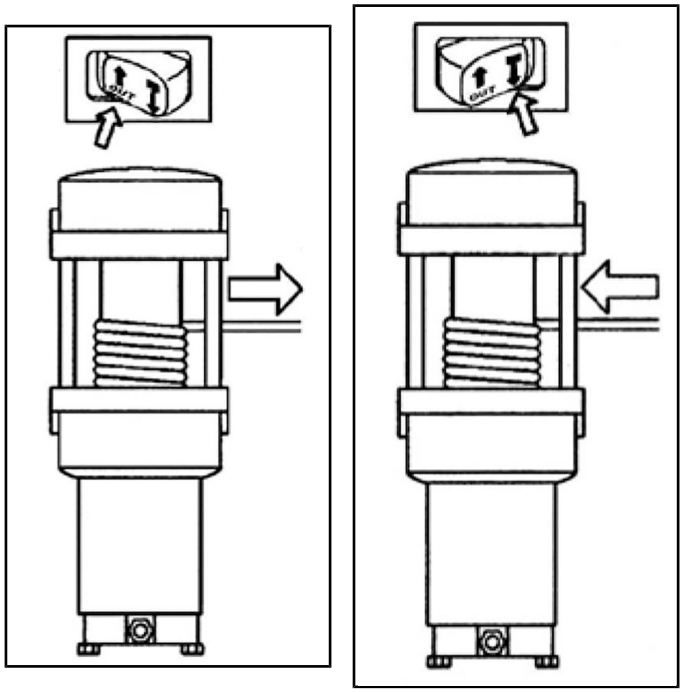
CAUTION

Use caution when operating winch. Winch does NOT have autostop mechanism to prevent hook from retracting through fairlead. Hook must be manually stopped PRIOR to contact with fairlead. Failure to stop hook from contacting fairlead may result in damage to fairlead, bumper, or other components.

With the vehicle key in the ON position, check winch for proper operation:

- To extend cable, depress and hold the “OUT” button.
- To recover cable, depress and hold the “IN” button.

OUT **IN**



GEAR SELECTION

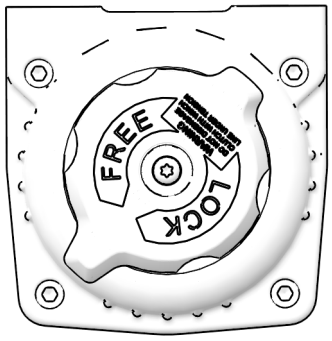
⚠ WARNING

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.



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.
	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 makes noise but rope/cable 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 operates too slowly	Winch is improperly loaded	Verify rope/cable is not binding on spool or fairlead.
Winch will not change gears	Rope/cable 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/cable is under no tension, and rope/cable is not binding on spool or fairlead. Briefly operate winch, then attempt to shift again.

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.

FEEDBACK FORM