

RANGER MIDSIZE 3500 WINCH KIT



P/N 2881669

APPLICATION

Verify accessory fitment at Polaris.com.

NOTE

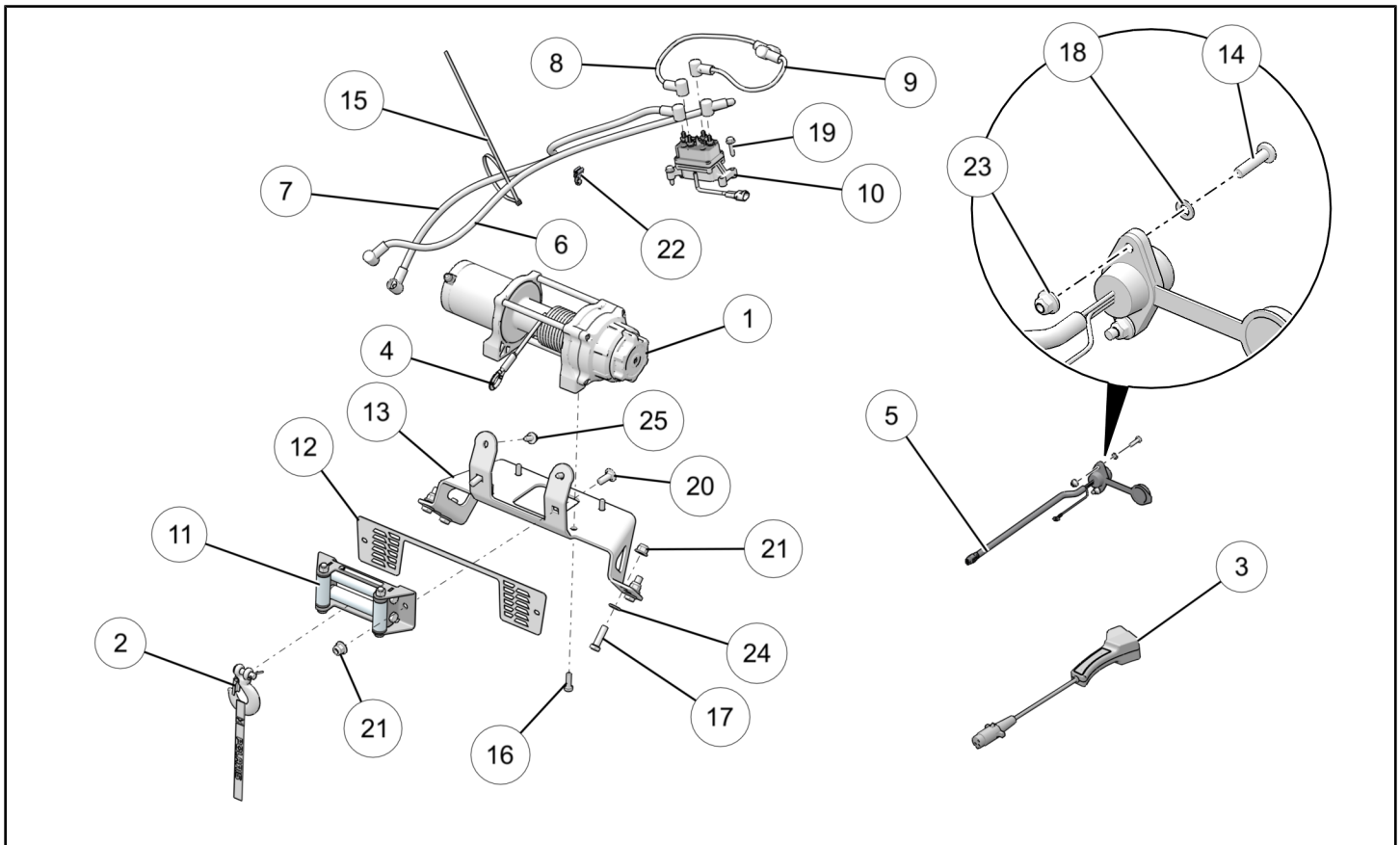
You must order below mentioned power cables kit separately to connect battery to the vehicle bus bar.

- For 3 Passenger Models : PN 2881684
- For Crew Models : PN 2881685

BEFORE YOU BEGIN

Read these instructions thoroughly and make sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

KIT CONTENTS

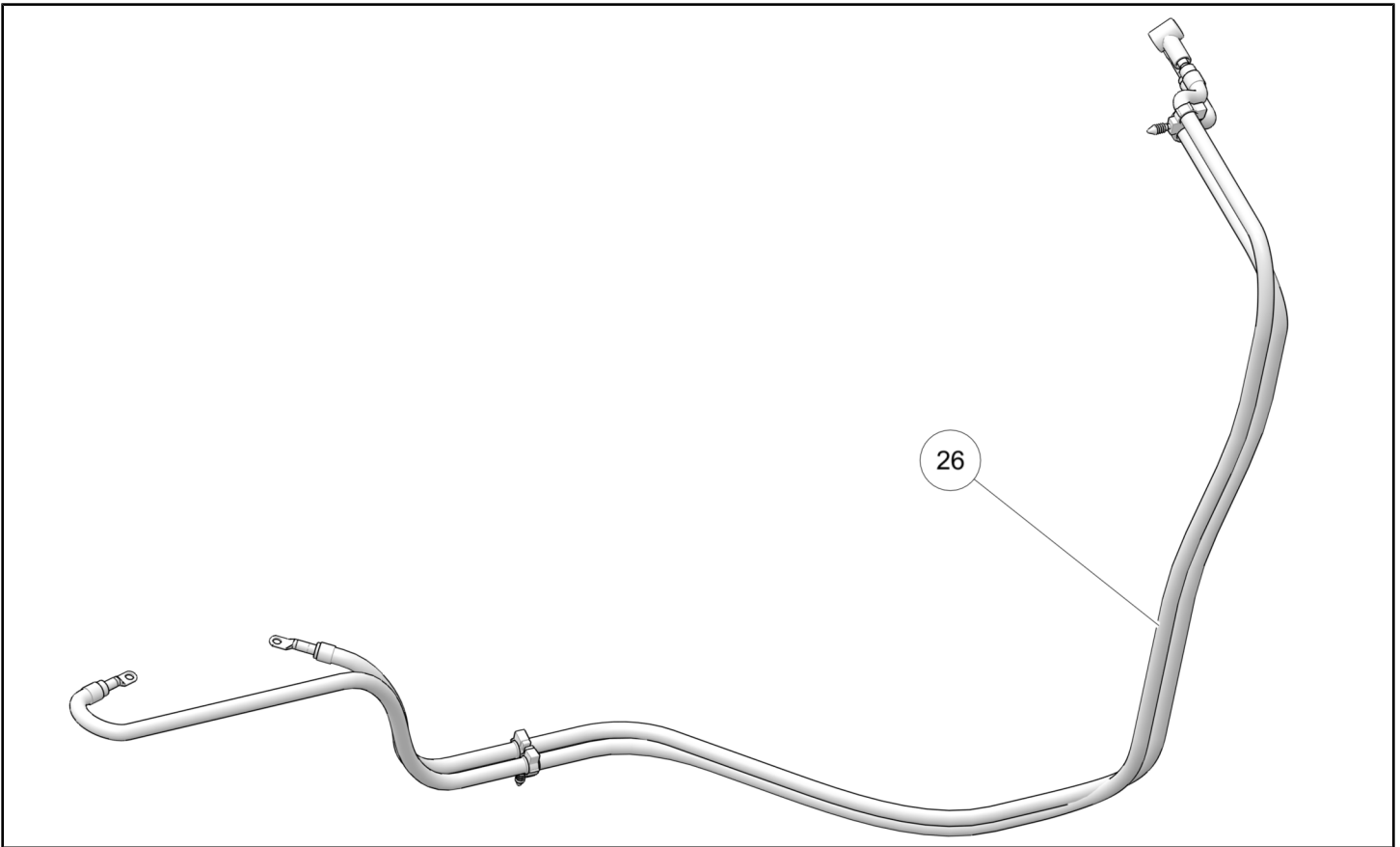


REF	QTY	PART DESCRIPTION	PART NUMBER
1	1	Winch Assembly - 3500	2204630
2	1	Hook-Latch, Winch	2411836
3	1	Remote-Switch, Winch	4013466
4	1	Cable Winch Steel	2878890

REF	QTY	PART DESCRIPTION	PART NUMBER
5	1	Socket-Winch Ring Terminal	4013569
6	1	Cable-Winch, Yellow, 6 GA, 740 MM	4013468-740
7	1	Cable-Winch, Blue, 6 GA, 740 MM	4013469-740
8	1	Power Cable, Winch, Red	4013471-480
9	1	Power Cable, Winch, Black	4013470-480
10	1	Contacto Winch	4015095
11	1	Roller-Fairlead, Winch	2411848
12	1	Grill-Fairlead Cover	5255409
13*	1	Mount Bracket-Winch	-
14*	2	Screw-M5 X 0.8	-
15	10	Cable Tie	7080492
16*	4	Screw Hex Head - M8 X 1.25 X 20	-
17*	4	Screw Hex Head - M10 X 1.5 X 35	-
18*	2	Flat Washer - M5	-
19*	2	Screw Hex Head - M6 X 1.0 X 30	-
20*	2	Screw - M10 X 1.5 X 25	-
21*	6	Nut - M10 X 1.5	-
22*	1	Edge Clip/Cable Tie	-
23*	2	Nut, Locking HXFL - M5 X 0.8	-
24*	4	Washer - 10.5 X 20 X 2.0	-
25*	2	Screw - 5/16" - 18 X 1.25	-
	1	Winching Guide	9923644
	1	Instructions	9926741
		Service Handle (includes freespool handle and screw)	5454752

Items marked (*) are included in Hardware Kit (PN 2878894).

Power Cable Kit: PN 2881684 (3 Passenger Models) / PN 2881685 (Crew Models) Include:



REF	QTY	PART DESCRIPTION	PART NUMBER
26	1	Power Cables, Vehicle Bus Bar to Battery (3 Passenger Models) Power Cables, Vehicle Bus Bar to Battery (Crew Models)	2881684 2881685
	1	Instructions	9926841

TOOLS REQUIRED

- Drill
- Drill Bit: 1" hole saw and 1/4"
- Safety Glasses
- Socket Set, SAE
- Socket Set, Metric
- Wrench Set, SAE
- Wrench Set, Metric
- Phillips Screwdriver
- Socket Set, Torx® Bit
- Pliers, Side Cutting

IMPORTANT

Your *RANGER MIDSIZE 3500 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.

ASSEMBLY TIME

Approximately 60 minutes

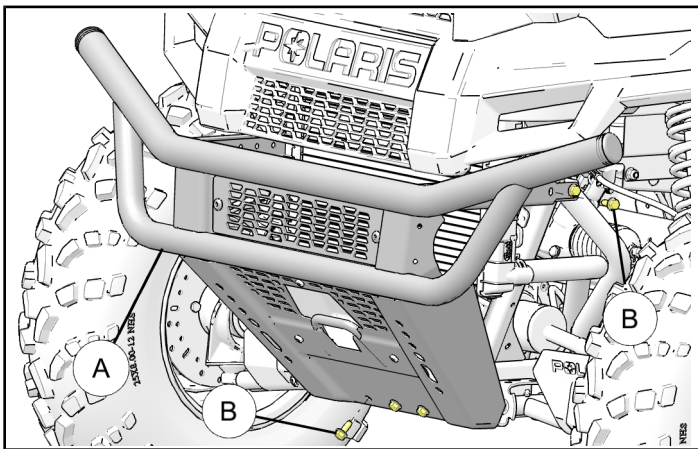
INSTALLATION INSTRUCTIONS

CAUTION

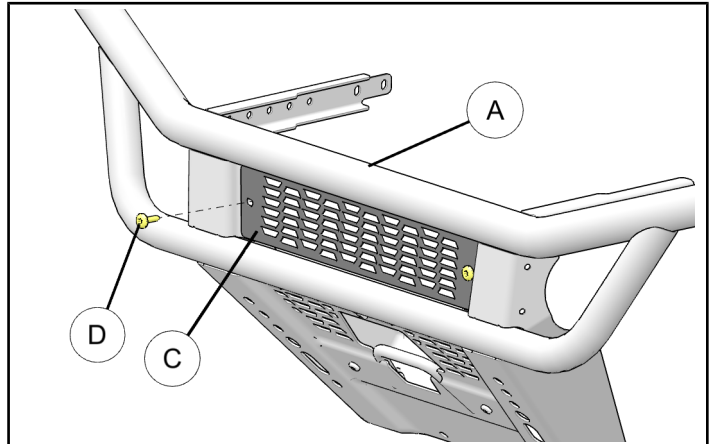
BEFORE STARTING INSTALLATION, always ensure vehicle is properly secured on a flat stable surface to avoid accidental tipping, unwanted movement and to prevent personal injury and/or damage to equipment. Shift vehicle transmission into "PARK". Turn key to "OFF" position and remove from vehicle.

PREPARATION

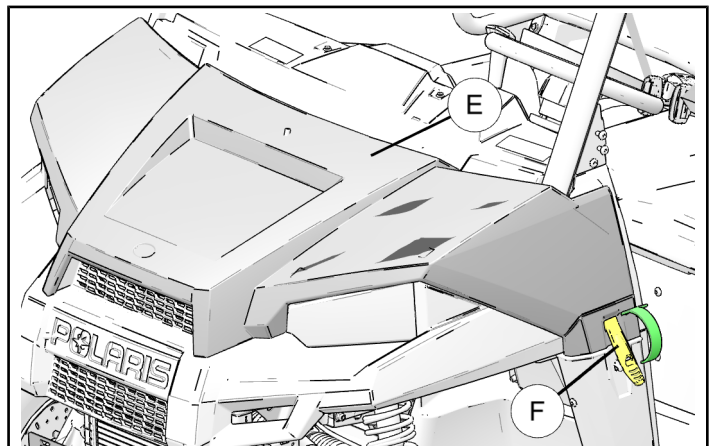
1. Remove the driver seat and disconnect black negative cable first and then red positive cable from the battery.
2. Remove the front bumper (A) by removing seven bolts (B).



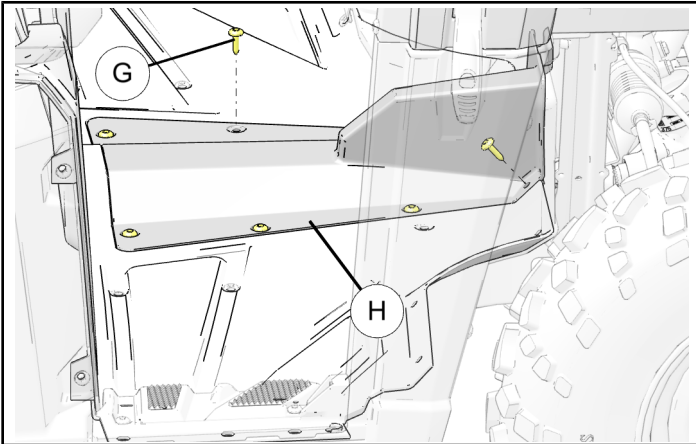
3. Remove grill screen (C) from bumper by removing two screws (D). Retain screws for reuse.



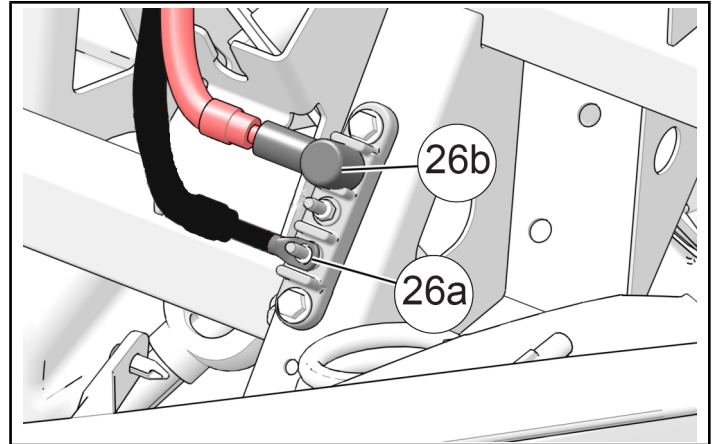
4. Detach rubber latch (F) on both sides of vehicle and open the hood (E).



5. Remove seven screws (G) securing drive shaft cover (H) to the floor. Save fasteners for use during reinstallation. Remove drive shaft cover (H) from vehicle.

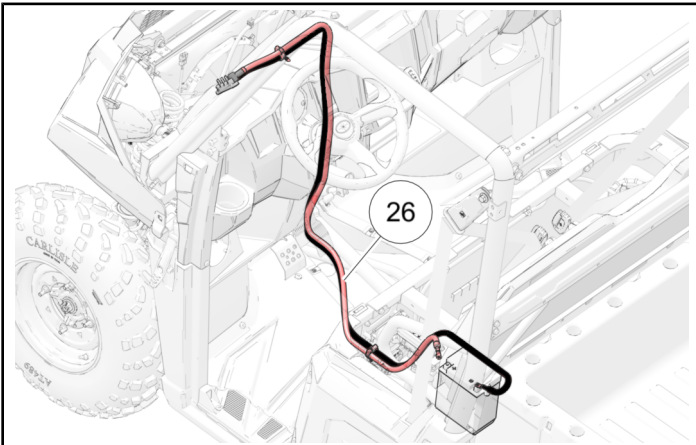


2. Install red and black power cables kit (26) to vehicle bus bar by connecting the black cable (26a) to the bottom terminal and the red cable (26b) to the top terminal as shown.



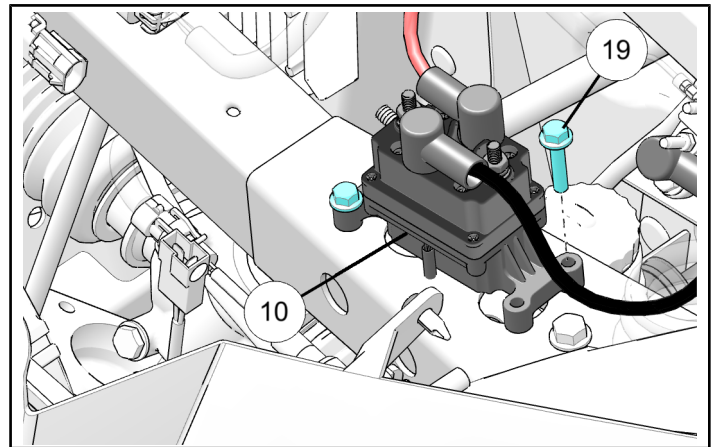
POWER CABLE KIT (PN 2881684) INSTALLATION

1. Route power kit cables (red and black) (26) from battery to bus bar terminals following the vehicle main wire harness as shown. Do not connect cables to battery and bus bar terminals at this time.



CONTACTOR INSTALLATION

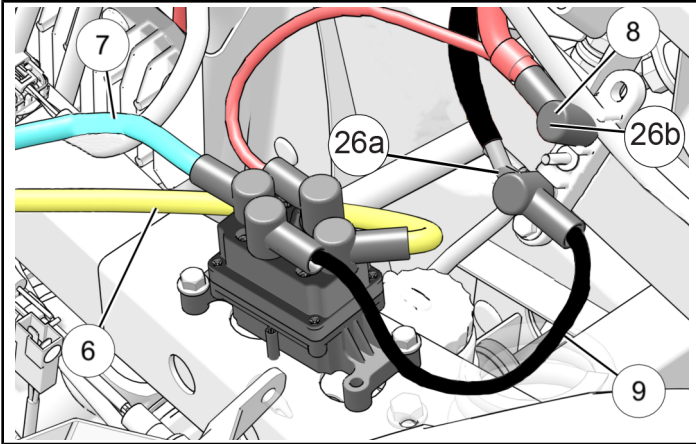
1. Install contactor (10) to center frame member under hood using two screws (19) as shown. Tighten just until snug. Do not overtighten.



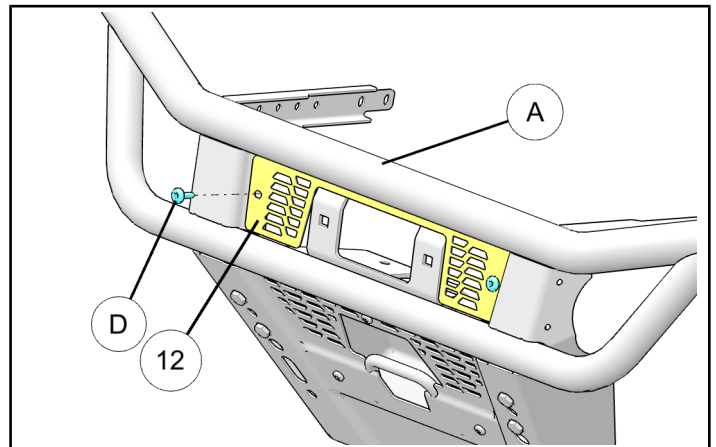
2. Connect short (250mm) red ⑧ and black ⑨ cables to the vehicle bus bar as shown. Connect the other ends of cables to their respective colored posts on contactor and torque to specification. Slide the cable covers on as shown.

TORQUE

4ft. lbs. (5.4 Nm)



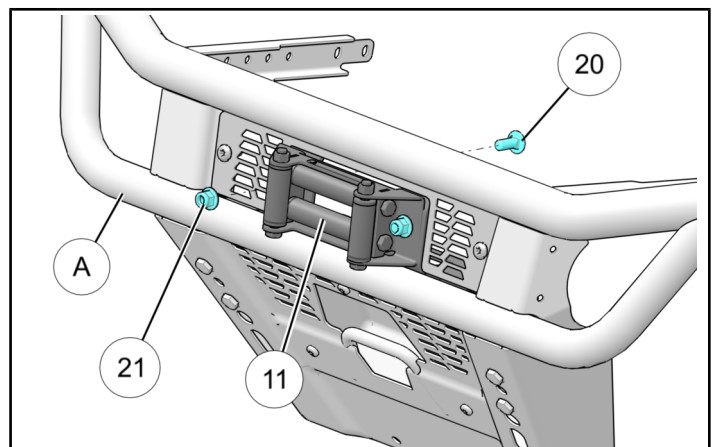
2. Install new grill screen ⑫ on front bumper ① using retained two screws ⑬.



3. Install roller fairlead ⑪ to winch mounting bracket ⑬ using two screws ⑭ and nuts ⑮ and torque to specification.

TORQUE

16ft. lbs. (21.7 Nm)

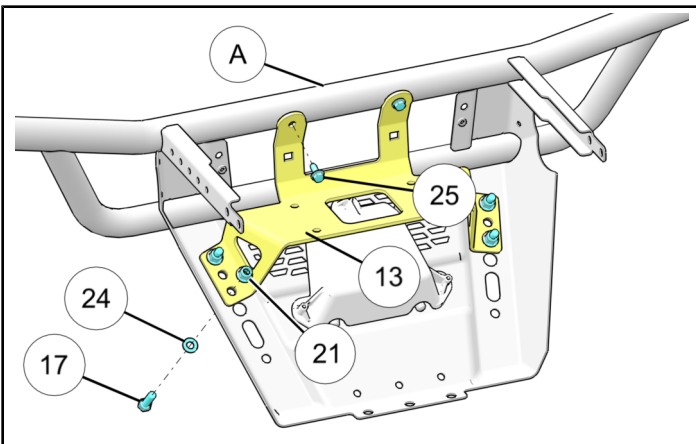


WINCH INSTALLATION

1. Install winch mounting bracket ⑬ onto the front bumper ① using four screws ⑰, nuts ⑱, and washers ⑲ on lower side and two self-tapping screws ⑳ at the top as shown. Tighten bolts and nuts to specification, but tighten self-tapping screws just until snug.

TORQUE

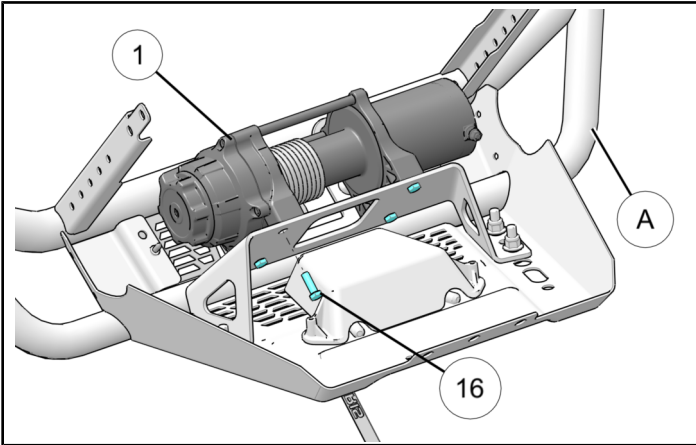
20ft. lbs. (27.1 Nm)



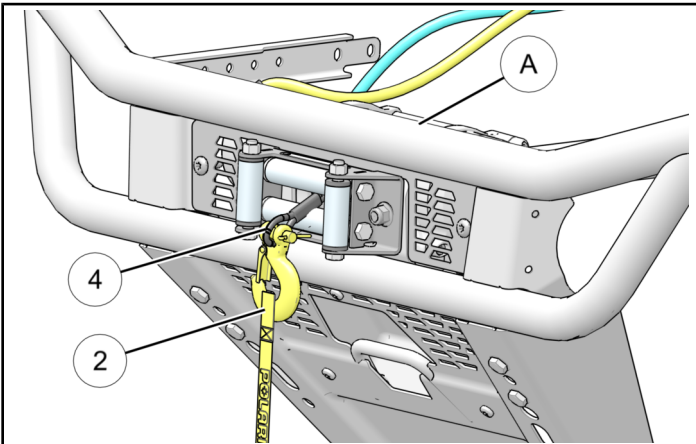
4. Install winch ① onto the winch mounting bracket using four screws ⑯ as shown and torque to specification.

TORQUE

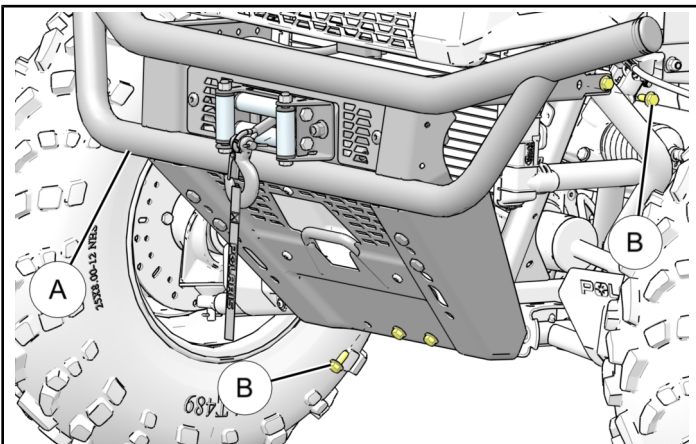
20ft. lbs. (27.1 Nm)



5. Insert winch rope/cable ④ through roller fairlead ⑪ as shown. Install hook ② onto the rope/cable using clevis and cotter pins.



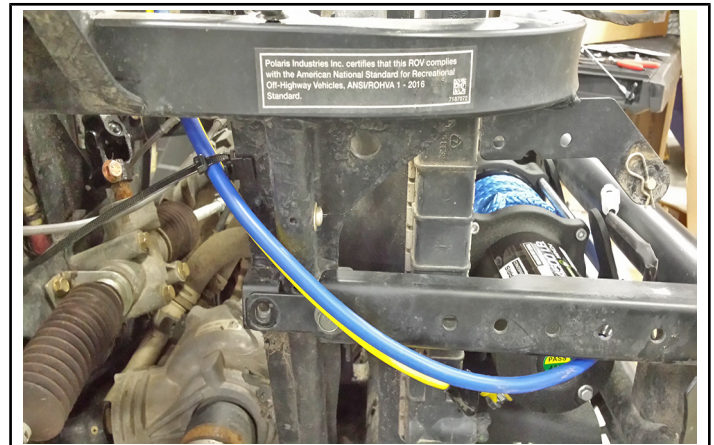
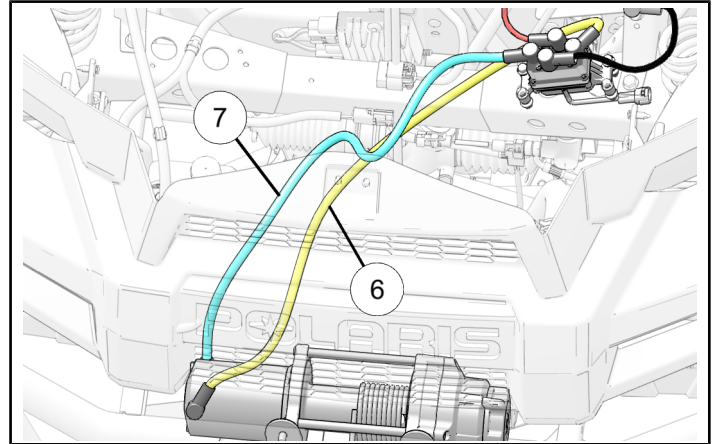
6. Reinstall bumper assembly ① onto the vehicle using seven retained screws ②.

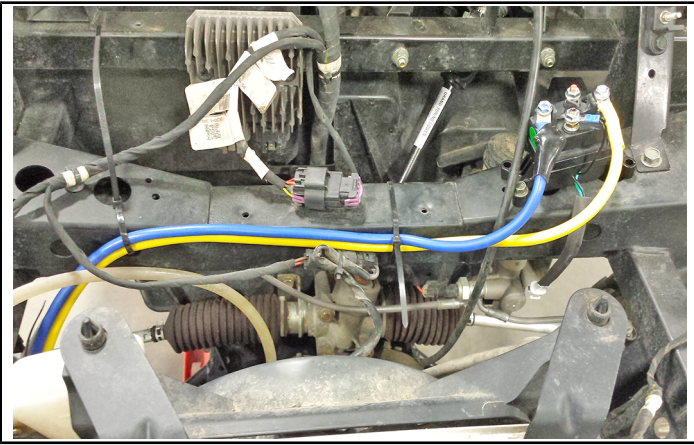


7. Connect yellow ⑥ and blue ⑦ cables to the corresponding posts on winch assembly. Route cables from winch assembly to the contactor posts as shown and torque nuts to specification.

TORQUE

4ft. lbs. (5.4 Nm)

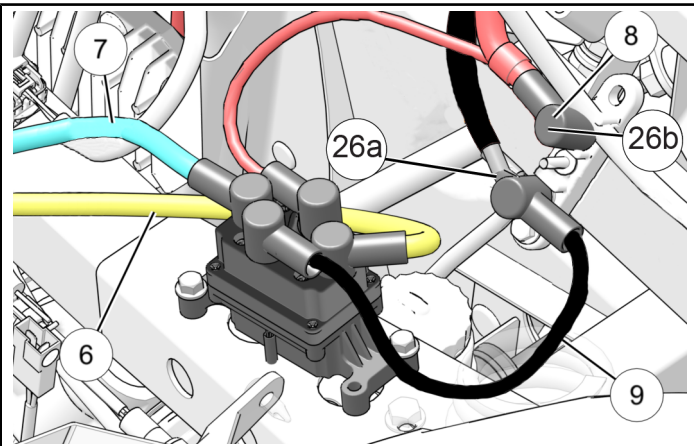




8. Connect blue ⑦ and yellow ⑥ cables to contactor posts as shown and torque to specification.

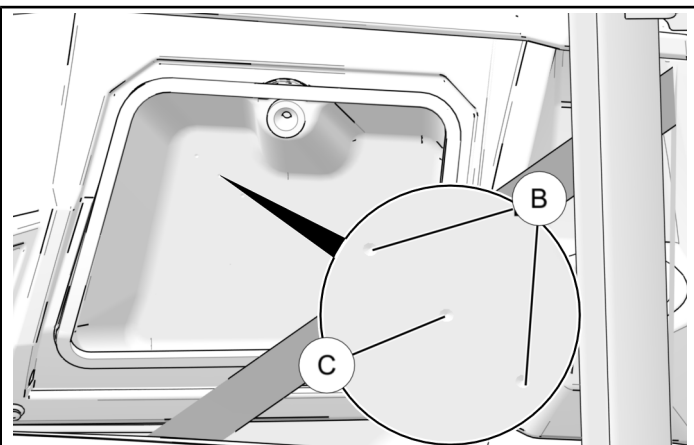
TORQUE

4ft. lbs. (5.4 Nm)

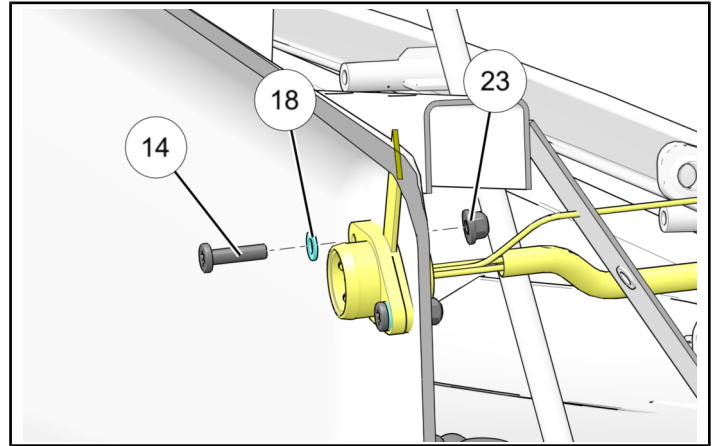


REMOTE SOCKET INSTALLATION

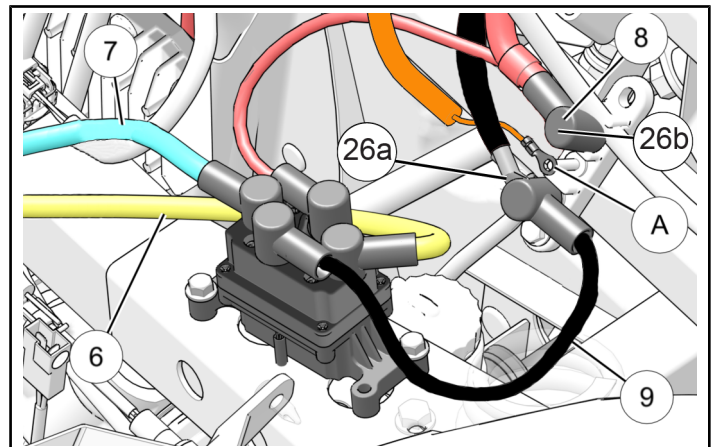
1. The recommended mounting location for the remote winch socket is inside the dash compartment located on the right hand side of the dash. The mounting hole locations ② and ③ have been marked as shown from the factory to aid in mounting.



2. Drill a 1" diameter hole in the center hole location ③.
3. Drill the two outer mounting holes ② with a 1/4" drill bit .
4. Fasten the socket to the vehicle using the provided two screws ⑭, two washers ⑱ and two nuts ㉓ as shown in the cutaway view below.



5. Connect the wires from the contactor and the electrical socket.
6. Connect the ring terminal from the electrical socket to the keyed power (center) terminal ① on the bus bar under the hood.



FINAL INSPECTION

1. Confirm that all wiring is correct.
2. Confirm that there are no exposed wires or terminals.
3. All loose wires need to be secured away from moving parts and heat sources.

VEHICLE COMPONENT REINSTALLATION

1. Re-connect the main vehicle battery cables and cables from power cable kit ②⑥ to battery terminals using original hardware.
2. Reinstall drive shaft cover ⑧ using retained screws ⑥.
3. Reinstall the hood ⑤ onto the vehicle.
4. Reinstall driver seat onto the vehicle.

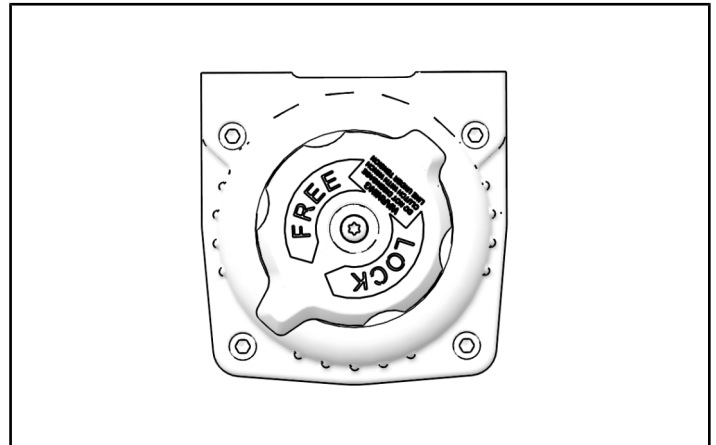
GEAR SELECTION

The Polaris 3500 winch is equipped with two different gear settings. "FREE" and "LOCK".

WARNING

DO NOT attempt to shift the winch while the rope/cable is under tension. **ALWAYS** make sure the winch rope/cable is not in tension before shifting the winch between gears to avoid damage to the winch mechanism. Failure to comply may lead to death or serious personal injury

- The "FREE" setting is meant to be used to free-spool the winch rope/cable for faster deployment. To shift into "FREE", rotate the gear selection handle counter-clockwise.
- The "LOCK" position is meant to be used when winching is required or to retract the cable/rope back onto the winch spool. To shift into "LOCK", rotate the gear selection handle clockwise.



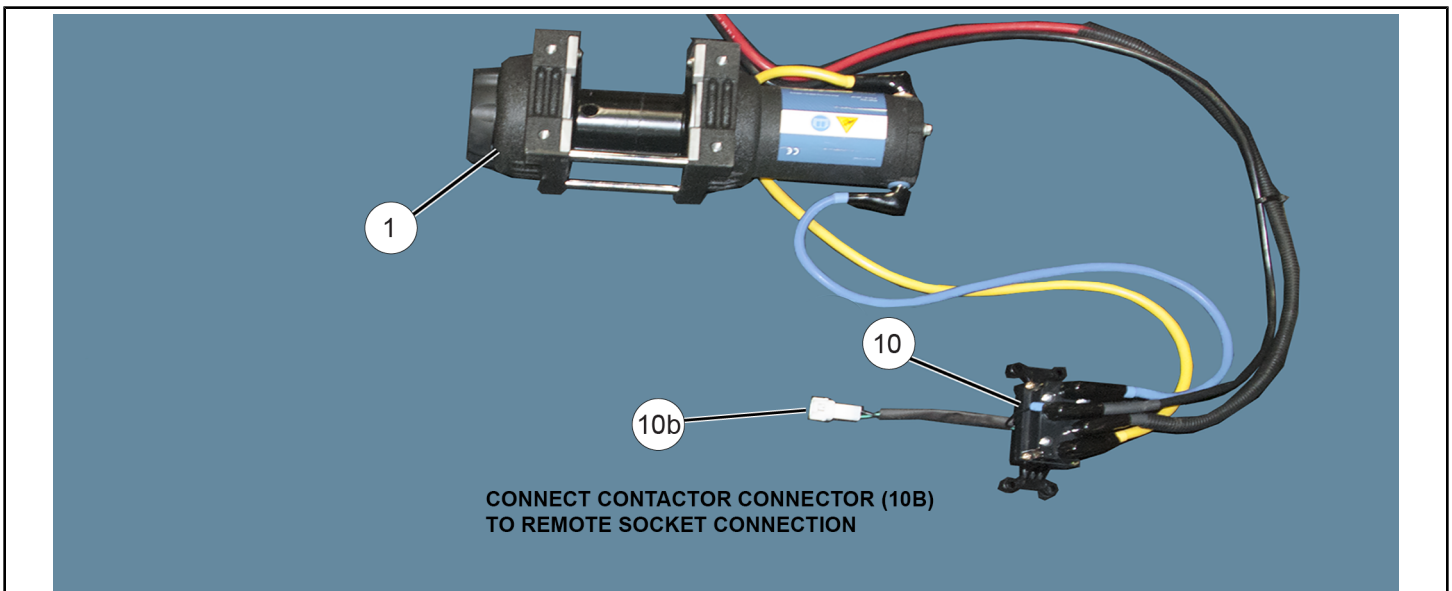
TROUBLESHOOTING

If your winch/Autostop is not functioning properly, below is a short guide that can help you diagnose and correct the problem.

SYMPTOM	POSSIBLE CAUSES	RECOMMENDED SOLUTION
Dead Vehicle Battery	Check that all power wires are connected to the correct terminals per your instruction manual and not drawing any current while the vehicle sits for longer periods of time.	Rewire to ensure wiring is connected properly per instructions.
Winch will not operate	Contactors not receiving power	Turn vehicle key on.
	Connections between components not in proper order	Check connections. Connect wired remote switch connection from vehicle main wire harness directly to contactor to make sure a direct connection will operate the winch. If connections are not in the order shown in the pictures on the last page, the whole system may not function or only certain parts of it will function.
	Keyed power circuit (orange wires) not properly powered	Check fusebox for 10A accessory circuit. Check voltage in certain places, especially orange wires coming out of the main harness by the steering post.
Winch makes noise but cable does not move	Contactors powered, but not winch.	If you can hear a clicking sound when you press the winch control but the winch does not make any sounds, check the connections between the winch and the contactor. If the winch makes noise but does not move, check that the winch is in gear. If the winch is in gear and the winch does not move, have a dealer inspect the winch.
Winch makes noise but rope does not move	Winch not in gear	Rotate gear knob fully into "LOCK", then recheck.

SYMPTOM	POSSIBLE CAUSES	RECOMMENDED SOLUTION
Winch operates too slowly	Winch improperly loaded	The winch, by design, operates slowly but can be slowed if there is a load on the rope or if the rope is bound up inside the spool area. Check that the winch is clear and the rope is not bound up and that there is no load pulling on the rope.
Winch will not change gears	Cable is still under load	The gears are purposely hard to shift when a load is on the rope to prevent accidental operation, which could lead to winch failure or personal injury. Make sure the rope has no load in tension, then check that the rope is not bunched up and bound inside the spool area. Operate the winch for a short period, then attempt to shift again.

ELECTRICAL CONNECTION REFERENCE GUIDE



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.

