## PRO HD 6000 WINCH KIT

## P/N 2882237

## **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**

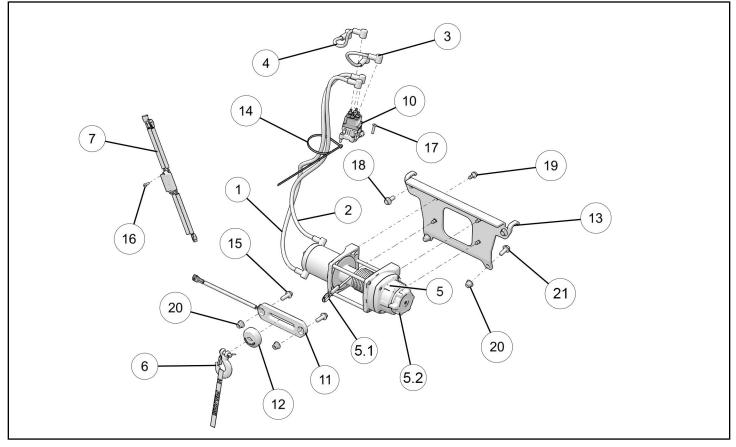
This kit contains parts for installation of the winch only. Prior installation of a Battery Connection Kit (PN 2879388, 2879685, or equivalent) is also required (sold separately).

NOTE Winch Kit 2882237 also contains Wireless Winch Remote Kit 2879316 (i.e., a kit within a kit).

**P#LARIS** 

ENGINEERED PARTS ACCESSORIES & APPAREL

#### Winch Kit 2882237 includes:

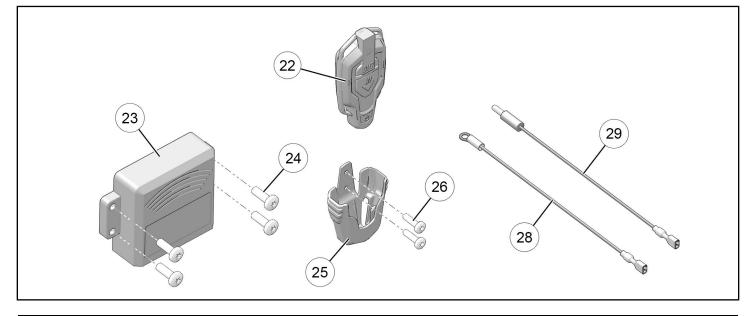


REF	QTY	PART DESCRIPTION	PART NUMBER	INCLUDED IN SERVICE KIT
1	1	Winch Cable, Yellow - 800 mm	4013468-800	-
2	1	Winch Cable, Blue - 800 mm	4013469-800	-
3	1	Power Cable, Black - 250 mm         4013470-250         -		-
4	1         Power Cable, Red - 250 mm         4013471-250         -		-	

REF	QTY	PART DESCRIPTION	PART NUMBER	INCLUDED IN SERVICE KIT
5	1	Winch Assembly (includes items 5.1–5.2)	2206385	-
5.1	1	- Rope, UHMW	2879188	-
5.2	1	- Knob, Gear Selector, Rapid Rope Recovery	-	2207842
6	1	Hook	2412964	-
7	1	Controller, Autostop (includes items 8–9)	2413444	2881692
8	1	- Wire, Adapter, Spade to Ring (not shown)	-	-
9*	1	- Wire, Adapter, Spade to Bullet (not shown)	-	-
10	1	Contactor	4015095	-
11	1	Fairlead, Autostop	-	2881692
12	1	Stop, Magnetic	-	2881692
13	1	Plate, Mounting	5439929	-
14	10	Cable Tie	7080492	2879172
15	2	Screw, Hex Flange - M10 X 1.5 X 30	7517425	2879172
16*	2	Screw, Torx <sup>®</sup> Pan Head, High/Low - #10 X 5/8	7518238	2879172 / 2881692
17	4	Screw, Torx <sup>®</sup> Pan Head, #10–32 X 1	7518246	2879172
18	2	Screw, Hex Flange - M10 X 1.5 X 20	7519905	2879172
19	4	Screw, Torx <sup>®</sup> Truss Head - M8 X 1.25 X 20	7519260	2879172
20	4	Nut, Hex Flange, Locking - M10 X 1.5	7547423	2879172 / 2881692
21	2	Screw, Hex Flange - M10 X 1.5 X 25	7519071	2879172
	1	Winching Guide	9923644	-
	1	Instructions	9927470	-

\* Not used for installation of Winch Kit 2882237.

#### Wireless Winch Remote Kit 2879316 includes:



REF	QTY	PART DESCRIPTION	PART NUMBER
22	1	Remote, Wireless 4017125	
23	1	Receiver, Wireless (wire harnesses not shown) -	
24	4	Screw, Torx <sup>®</sup> Pan Head, High/Low - #14 X 0.75 7519731	
25	1	Holder, Wireless Remote 5454269	
26	2	Screw, Torx <sup>®</sup> Pan Head, High/Low - #10 X 0.75 7512026	
27	1	Harness, Y-Splitter (not shown)4017126	
28	1	Wire, Adapter, Spade to Ring   -	
29*	1	Wire, Adapter, Spade to Bullet	

\* Not used for installation of Winch Kit 2882237.

## **TOOLS REQUIRED**

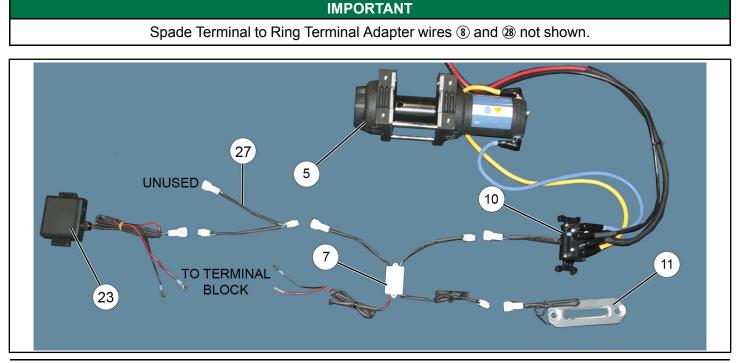
- Safety Glasses
- Drill\*
- Drill Bit: 1/8 inch (3 mm)\*
- Screwdriver Set, Torx®
- Pliers, Push Pin Rivet

- Pliers, Slip Joint
- Socket Set, Metric
- Socket Set, Torx<sup>®</sup> Bit
- Torque Wrench
- Wrench Set, Metric
- \* Tool requirement dependent on specific installation.

#### **IMPORTANT**

Your PRO HD 6000 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.

## **ELECTRICAL CONNECTIONS**



## **INSTALLATION INSTRUCTIONS**

#### IMPORTANT

Carefully read **GEAR SELECTION** section at end of manual to familiarize yourself with proper operation of Rapid Rope Recovery function.

### PREPARATION

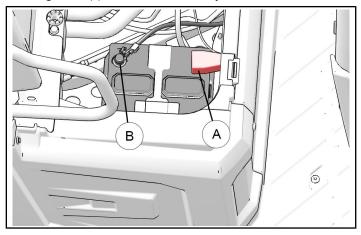
1. Shift vehicle transmission into "PARK". Turn ignition switch to "OFF" position and remove key.

#### **WARNING**

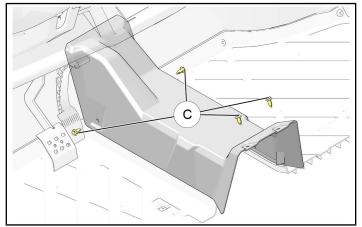
Ensure red positive (+) battery terminal (A) is COMPLETELY COVERED by protective boot. Accidental tool contact across both battery terminals will result in high current electrical arc, and may result in battery explosion. Death or serious personal injury may occur.

Black negative (-) cable MUST be disconnected from battery terminal <sup>®</sup>. 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.

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



3. Remove center floor console by removing four push pin rivets ①. Retain rivets.

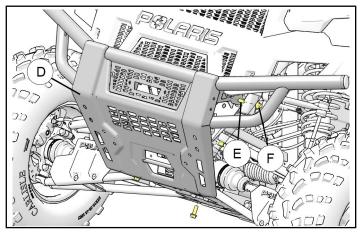


4. Remove hood.

#### 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.

5. Support front bumper (D) while removing four each screws (E) and nuts (F) (two upper and two lower attach points). Retain hardware.



## INSTALL CONTACTOR

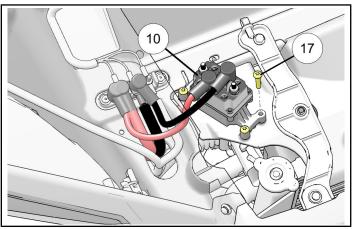
#### 

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 (1) to underhood liner using four screws (7). Tighten screws.

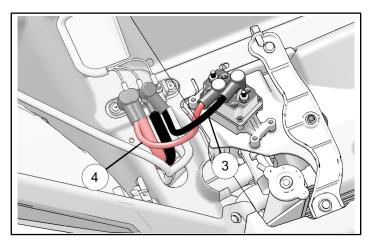


- 3. Connect short (250 mm) red power cable ④ and black power cable ③ to terminal block.
  - a. **RED** cable ④ to post with existing **RED** battery connection cable (unswitched 12V POS)
  - b. **BLACK** cable ③ to post with existing **BLACK** battery connection cable (12V NEG)

Install terminal block post nuts finger tight only. Additional connections will be made later.

#### NOTE

If two cable boots exist for same terminal, then slide inner boot (closest to terminal block) down cable. Unused boot can remain on cable.



- 4. Connect opposite ends of cables ④ and ③ to posts on contactor ⑩. Ensure cable routing will prevent contact with hot components, sharp edges, or moving parts.
  - a. RED cable ④ to RED contactor post
  - b. **BLACK** cable ③ to **BLACK** contactor post. Do not remove existing wire and ring terminal (not shown) pre-connected to **BLACK** post.

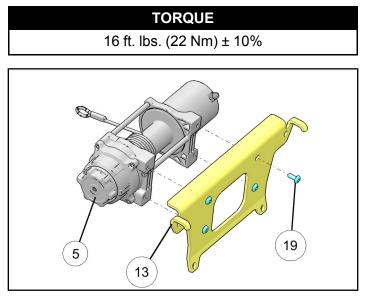
Torque nuts to specification, then install cable boots.

#### TORQUE

49-53 in. lbs. (5.5-6.0 Nm)

## **INSTALL WINCH AND CABLES**

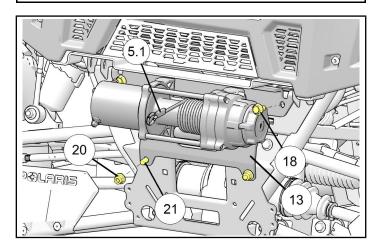
1. Loosely install mounting plate (3) to winch (5) using four screws (9). Torque screws to specification.



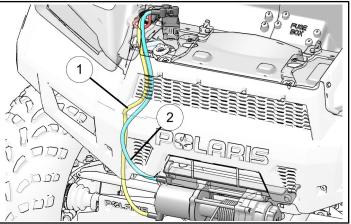
- 2. Install mounting plate (1) (with winch) to vehicle as follows:
  - a. Upper holes: two screws (8) installed from FRONT to REAR. No nuts are needed.
  - b. Lower holes: two screws (2) installed from REAR to FRONT, secured with nuts (2).

Torque screws to specification.

## **TORQUE** 25 ft. lbs. (34 Nm) ± 10%



- 3. Install winch cables.
  - a. Loosely install 800 mm yellow cable ① and blue cable ② to corresponding color posts on winch.



b. Route opposite end of cables up through under-hood liner to contactor.

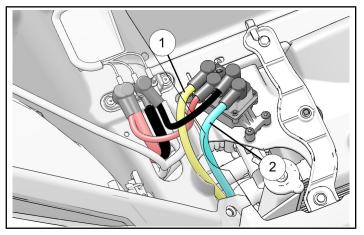
Ensure routing prevents contact with hot components, sharp edges, or moving parts (including suspension and steering components throughout their full range of travel).

c. Loosely install yellow winch cable ① and blue winch cable ② to corresponding color posts on contactor.

Torque nuts to specification, then install cable boots.

49–53 in. lbs. (5.5–6.0 Nm)

TORQUE



- d. Tighten nuts on winch (yellow and blue wire posts), then install cable boots.
- e. Secure winch cables to main chassis harness and chassis structure using cable ties (4) to prevent contact with hot components, sharp edges, or moving parts.

## INSTALL FAIRLEAD AND BUMPER

 Install autostop fairlead (1) to front bumper (D) using two screws (5) installed from REAR to FRONT. Ensure fairlead is oriented so electrical harness exits toward RH side of bumper as shown.

Secure with two nuts 20. Torque to specification.

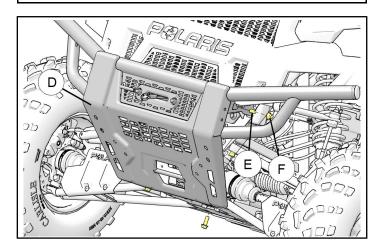
# TORQUE 16 ft. lbs. (22 Nm) ± 10%

2. Unwind BY HAND several turns of rope from winch spool. While lifting bumper (b) into position thread loop at end of rope through bumper and fairlead (f).

Reinstall bumper using retained screws (E) and nuts (F). See previous section, **PREPARATION**, Step 5.

Torque all four screws to specification.

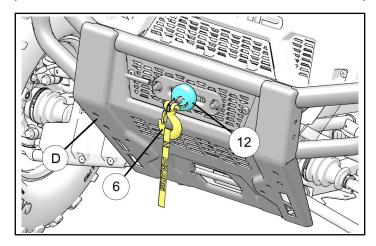
**TORQUE** 30 ft. lbs. (41 Nm) ± 10%



3. Thread loop at end of rope through magnetic stop
(1). Ensure stop is oriented with WIDE (magnet) end towards winch, and BEVELED ("POLARIS") end towards hook.

#### TIP

Loop a cable tie to end of rope, but do not tighten. Thread looped cable tie through magnetic stop, then pull cable tie and rope through magnetic stop.



4. Install hook (6) to loop at end of rope, then secure with cotter pin.

## **INSTALL AUTOSTOP CONTROLLER**

 Position autostop controller ⑦ on right side of vehicle, near contactor and terminal block, then secure using cable ties <sup>(4)</sup>.

#### NOTE

Two screws (6), identified in previous section **KIT CONTENTS**, are not used in this application.



2. Join connectors as follows:

#### NOTE

See previous section, **ELECTRICAL CONNECTIONS**, for visual aid.

a. Join connector on autostop fairlead (1) to mating connector on autostop controller (7).

#### IMPORTANT

TWO identical connectors exist on autostop controller. Use connector with **TWO BLACK WIRES** (SAME end of controller as ring and spade terminals).

b. Join connector on contactor (1) to mating connector on autostop controller (7).

#### IMPORTANT

Use connector with **BLACK AND GREEN WIRES**.

c. Join remaining connector on autostop controller ⑦ to Y-splitter harness ⑳.

#### NOTE

Y-splitter harness will have TWO mating connectors. Both connectors are electrically equivalent; either one can be used. Other Y-splitter connections will be made later.

- d. Make terminal block connections.
  - Join BLACK wire RING TERMINAL to post with existing BLACK battery connection cable (12V NEG)
  - Join ORANGE wire SPADE TERMINAL to adapter wire (18), then join adapter wire ring terminal to post with existing ORANGE wire (key power 12V POS)

Install terminal block post nuts finger tight only. Additional connections will be made later.

# INSTALL WIRELESS WINCH REMOTE KIT 2879316 (INCLUDED)

#### NOTE

See previous section, **ELECTRICAL CONNECTIONS**, for visual aid.

- 1. Install wireless receiver.
  - a. Install wireless receiver (2) to under-hood liner using four screws (2).



b. Join connector on wireless receiver (2) to mating connector on Y-splitter harness (2).

#### NOTE

Remaining connector on Y-splitter harness is not used in this application.

- c. Make terminal block connections.
  - Join BLACK wire RING TERMINAL to post with existing BLACK battery connection cable (12V NEG)
  - Join ORANGE wire SPADE TERMINAL to adapter wire <sup>(2)</sup>, then join adapter wire ring terminal to post with existing **ORANGE** wire (key power 12V POS)
- d. Torque all three terminal block post nuts to specification, then install cable boot(s).

#### TORQUE

30 in. lbs. (3.4 Nm) ± 10%

2. OPTIONAL: Install wireless remote.

#### NOTE

Wireless remote (2) can be stowed in any suitable location. Holder (2) is not required.

- Remove wireless remote <sup>(2)</sup> from holder <sup>(3)</sup>.
   Determine suitable mounting location for holder with special attention to the following:
  - Driver operation of vehicle (including travel of controls, such as shift lever)
  - Driver visibility
  - Adequate clearance between holder mounting fasteners and other vehicle components on underside of mounting surface

#### NOTE

Suggested location shown.



b. Using holder (2) as template, mark and drill two 1/8 inch (3 mm) holes into mounting surface.

#### IMPORTANT

Control drill depth to prevent damage to underlying structure or components.

- c. Install holder (25) using two screws (26). Do not over-tighten screws.
- d. Reinstall wireless remote into holder.

#### **CLOSE-UP**

- 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 (4) as required.
- 2. Restore access. See first section, **PREPARATION**, for detail.
- 3. Reconnect black negative (-) cable to battery, then reinstall storage compartment and seat(s).
- 4. Retighten all hardware after 30 minutes of riding.

## **OPERATION**

## **OPERATIONAL CHECK**

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

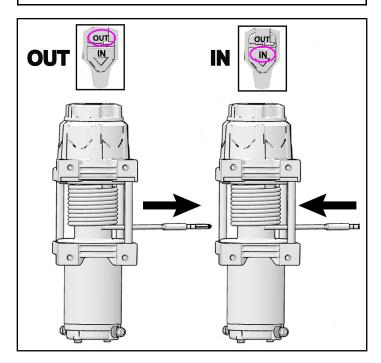
#### IMPORTANT

The Autostop system is intended to prevent winch damage caused by over-tightening a recovered rope, but cannot prevent all possible winch damage. The winch system is very powerful and care should be exercised whenever it is in operation. The winch operator is always responsible for using the winch properly, as described in the accompanying "Winch User Guide". The Autostop system should only be used as a SECONDARY preventive measure to help prevent winch damage during rope recovery.

- To turn wireless remote "ON", depress and hold power button for three seconds or until LED light illuminates.
- 2. To extend rope, depress and hold the "OUT" button. To recover rope, depress and hold the "IN" button.

#### IMPORTANT

During rope recovery the winch should automatically stop when the magnetic stop touches or comes close to the autostop fairlead (within approximately 1 inch / 25 mm). Magnets in the stop trigger sensors in the fairlead, stopping the winch.



 The 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.

## **GEAR SELECTION**

#### 

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

#### NOTE

See previous section, **KIT CONTENTS**, for replacement knob PN.

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

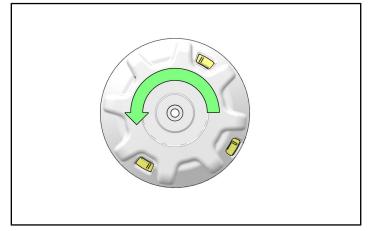
1. NEUTRAL: Used to rapidly extend the rope.

When in neutral "N" will be visible in the cutout windows on the shift knob (LH side of winch).



2. LOW: Used to recover the LOADED rope.

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



3. HIGH: Used to rapidly recover the UNLOADED rope.

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

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

#### 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.

#### NOTE

The recovery speed in HIGH gear is approximately 5X the recovery speed in LOW gear. As a result, using this feature will significantly reduce the time needed to recover the rope after use. **Polaris recommends always returning gear** 

selector to LOW after rapid recovery to prevent inadvertent future operation in HIGH gear.



## 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 motor makes noise but rope does not move, then verify winch is in gear. If winch is in gear, but winch still does not move, then contact your <b>Authorized Polaris Dealer</b> .
	Winch not in proper gear	Rotate gear knob fully into L or H, then recheck.
Winch operates too	Winch is improperly	Verify rope is not binding on spool or fairlead.
slowly	loaded	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	Rotate gear knob fully into L or H, then recheck.
	gear	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 not under tension, and rope 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.

