# WINDSHIELD WIPER KIT



## P/N 2879968

## APPLICATION

RANGER 570, RANGER ETX AND RANGER EV

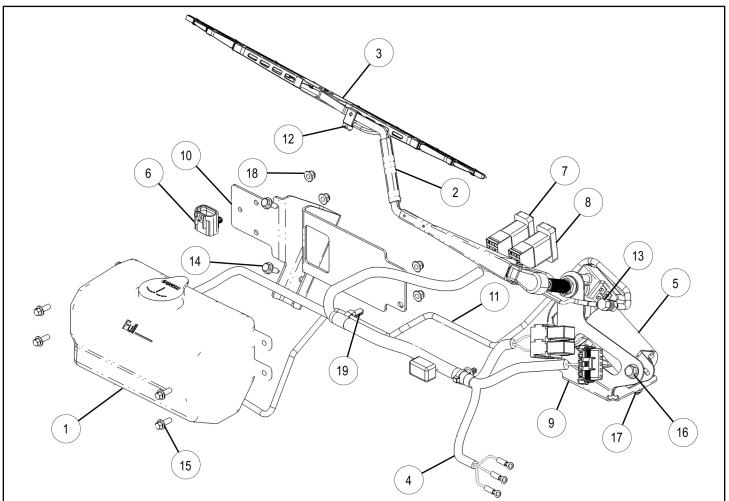
**NOTE** Polaris does not recommend use of this kit with Tip-Out Windshield PN 2880442.

#### **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 includes:



REF	QTY	PART DESCRIPTION	PART NUMBER
1	1	Bottle Assembly, Washer, Windshield	2205139
2	1	Wiper Arm, Wet	2205557
3	1	Wiper Blade, Wet	2205558

REF	QTY	PART DESCRIPTION	PART NUMBER
4	1	Wiper Harness, Windshield	2412943
5	1	Wiper Motor Assembly	2635422
6	1	Cover-Diagnostic, W/ Clip	4012170
7	1	Wiper Switch, Wash	4014071
8	1	Wiper Switch, Low/High	4014072
9	1	Wiper Motor Bracket	5259474
10	1	Wiper Bottle Bracket	5259475
11	1	Wiper Hose, Wet, Long	5415165
12	1	Wiper Nozzle, Wet	7052606
13	1	Wiper Fitting, Wet	7052607
14*	2	Flange Screw - M6 X 1.0 X 20	7518529
15*	4	Flange Screw - M6 X 1.0 X 16	7518637
16*	3	Flange Screw - M8 X 1.25 X 20	7518702
17*	3	Flange Hex Nut - M8 X 1.25	7547317
18*	4	Flange Hex Nut - M6 X 1.0	7547453
20	1	Clip, Silencer	7670102
	1	Instructions	9925254

Items marked (\*) are included in Hardware Kit PN 2205559.

## **TOOLS REQUIRED**

- Metric Socket Set
- Metric Wrench Set

- Cutting Tool
- Safety Glasses

- 5/16" Drill Bit
- 1-11/16" Hole Saw

## **IMPORTANT**

Your WINDSHIELD WIPER 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 30 minutes

#### **INSTALLATION INSTRUCTIONS**

#### **IMPORTANT**

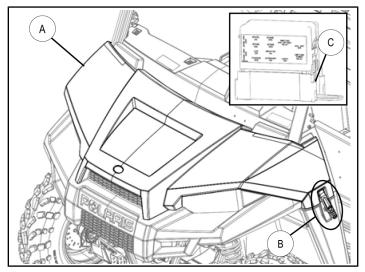
*Ranger* 570/ETX models require <u>prior installation</u> of PN 2879990 Bus Bar Power Wiring Kit (sold separately).

Ranger EV models with >8A total load at accessory terminal block (3A wiper motor load plus >5A other accessory load) require <u>prior installation</u> of the following two kits (sold separately):

- PN 2879990 Bus Bar Power Wiring Kit, AND
- PN 2880555 EV Battery Kit.

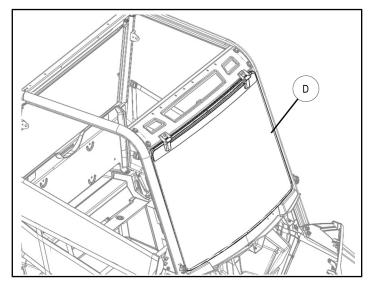
*Ranger* EV models with ≤8A total load at accessory terminal block (3A wiper motor load plus ≤5A other accessory load) require no additional kit installation.

- 1. Place vehicle in "PARK". Turn key to "OFF" position and remove from vehicle.
- 2. Release retainer straps (B) and open hood (A) as shown.



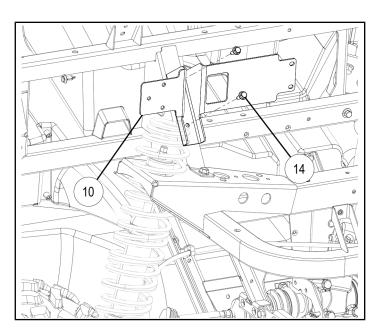
- 3. Remove accessory fuse from fuse box (C) as shown.
- 4. Remove driver seat and disconnect black negative cable from 12V battery.

5. Remove windshield (D) as shown.

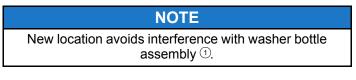


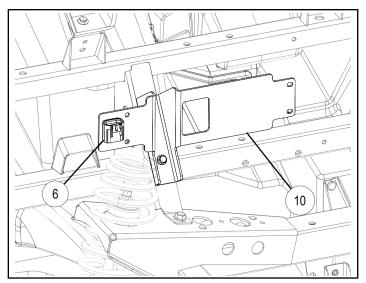
6. Install wiper bottle bracket <sup>(i)</sup> to cab frame mount bracket using two M6 screws <sup>(i)</sup> as shown. Torque screws to specification.

TORQUE 6 ft. lbs. (8 Nm)

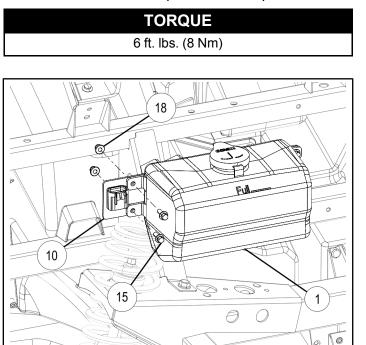


7. Remove diagnostic plug from lower cross member. Connect plug to diagnostic cover <sup>(6)</sup>, then install cover to wiper bottle bracket <sup>(10)</sup> as shown.

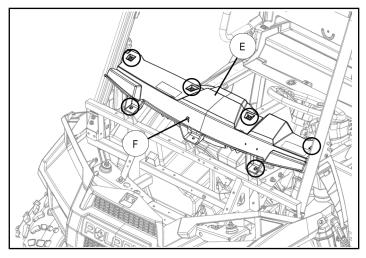




8. Mount washer bottle assembly ① to wiper bottle bracket ⑩ using four M6 screws ⑮ and four M6 nuts ⑲ as shown. Torque screws to specification.



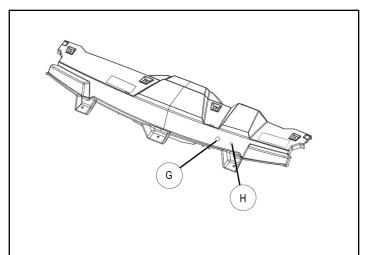
9. Remove upper dash panel (E) by removing seven rivets (F). Retain rivets for reinstallation.



10. Drill two holes through upper dash panel as shown: 18 mm hole at location (G), and 5/16" hole at location (H).

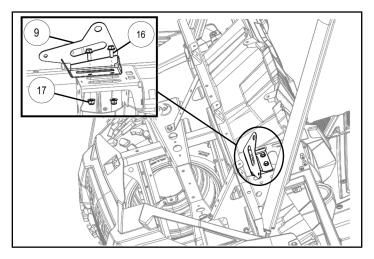
#### NOTE

Locations (G) and (H) are identified by diamond-shaped indentations in panel.



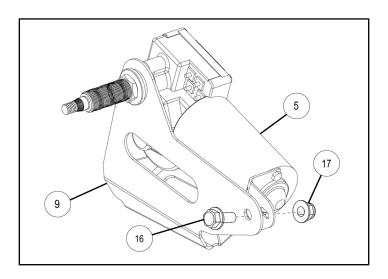
11. Install wiper motor bracket (1) to chassis frame using two M8 screws (6) and two M8 nuts (7) as shown. Torque screws to specification.

TORQUE 16 ft. lbs. (22 Nm)



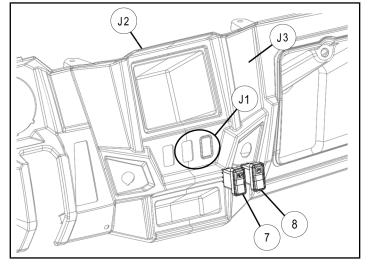
12. Install wiper motor (5) to bracket (9) using screw (6) and nut (7) as shown. Torque screw to specification.

> TORQUE 16 ft. lbs. (22 Nm)



- 13. Cut two rectangular switch openings at locations shown:
  - a. Ranger 570/ETX: at location (J1)
  - b. Ranger EV: at location (J2) or (J3)

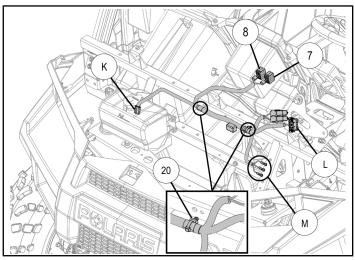
Do not install switches 0 and 0 at this time.



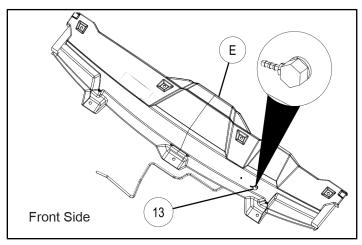
14. Route and install wiper harness as shown. Attach routing clip <sup>(a)</sup> to frame in either of two locations as shown. Make harness connections to washer bottle (K), wiper motor (L), and wiper/washer switches <sup>(7)</sup> <sup>(a)</sup>. Install switches.

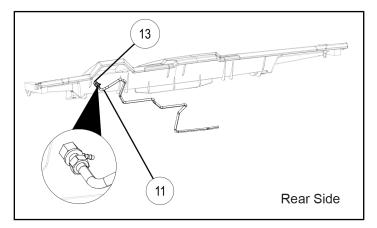
#### NOTE

Electrical harness will be connected to accessory power terminal block (M) in Step 22.



15. Ensure rubber washer is on fitting <sup>(3)</sup>, then insert fitting through front side of 5/16" hole previously drilled in dash panel (E) as shown. Install and tighten nut on fitting, then connect wiper hose <sup>(1)</sup> to fitting inlet.



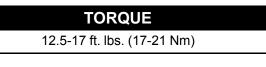


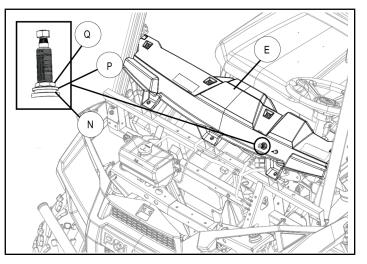
16. Ensure one of two rubber washers remains on motor shaft, then install dash panel (E) using seven rivets removed in Step 9.

#### NOTE

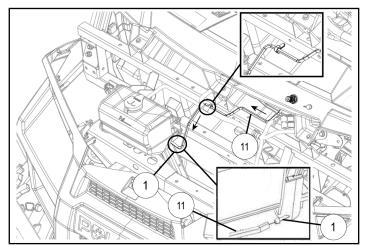
Motor shaft will pass through 18 mm hole previously drilled in panel.

17. Install remaining rubber washer (N), chrome cap (P), and jam nut (Q) as shown. Ensure chrome cap (P) is oriented so that cup side encloses rubber washer. Torque jam nut (Q) to specification.

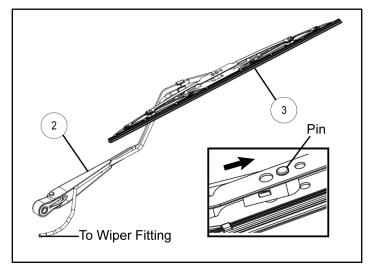




18. Route long wiper hose 11 to washer bottle 12 as shown, then connect to washer pump outlet fitting.

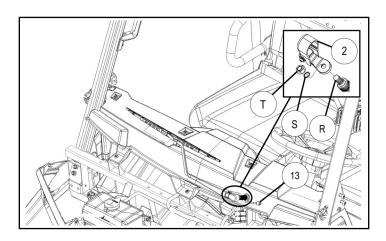


19. Insert wiper blade ③ into wiper arm ② as shown. Ensure hose is secured in wiper arm.



- 20. Reinstall windshield.
- 21. Install wiper arm ② to motor shaft (R) in home position (along base of windshield). Secure using wave washer (S) and nut (T) as shown. Torque nut to specification. Connect short wiper hose to outlet of fitting <sup>(3)</sup>.

#### **TORQUE** 10.3-13.2 ft. lbs. (14.0-17.9 Nm)



- 22. Connect wiper harness to accessory terminal block as follows:
  - a. All *Ranger*: Attach orange wiper harness wire to terminal post with existing orange/white stripe vehicle harness wire (accessory switched 12V POS).
  - b. Attach red wiper harness wire as follows:
    - i. *Ranger* 570/ETX: To terminal post with existing red wire (unswitched 12V POS).
    - ii. *Ranger* EV: To terminal post with existing pink/black stripe wire (and also red wire when PN 2879990 Bus Bar Power Wiring Kit is installed) (unswitched 12V POS).
  - c. Attach brown wiper harness wire as follows:
    - i. *Ranger* 570/ETX: To chassis ground (NOT to terminal block) (12V NEG).
    - Ranger EV: To terminal post with existing brown wire (and also black wire when PN 2879990 Bus Bar Power Wiring Kit is installed) (12V NEG).
- 23. Reinstall black negative cable to 12V battery removed in Step 4. Reinstall driver seat.
- 24. Reinstall accessory fuse removed in Step 3.
- 25. Close and secure hood.