



## POLARIS RANGER RCS WINDSHIELD WIPER

(p/n: 1POLRWPR)

### 1. INSTALL WIPER MOTOR

- 1.1 From outside the vehicle, measure and mark the center of the windshield (from left to right) on the upper edge of the windshield. Using tape, affix the paper Wiper Template (page 4) to the **outside** surface of the windshield, aligning the marked top edge and center line. Mark and drill 5/16" and 11/16" holes through the polycarbonate. Remove and discard paper template.
- 1.2 Remove the large hex nut, plastic washer, and rubber washer from the motor shaft making sure to leave the black plastic standoff on the motor shaft as in Figure 1.2.
- 1.3 From the inside, insert the motor shaft out through the larger hole in the polycarbonate until the black plastic standoff is against the plastic. (*Note: If the motor hits the window rubber, the optional nylon bushings can be added. Note: underlined and shown in italics in Figure 1.2*) Replace the rubber washer, plastic washer, and hex nut on the outside end of the shaft. Do not tighten completely at this point.
- 1.4 Use caution to avoid scratches. From the inside, pivot the wiper motor so that the small hole in the polycarbonate aligns with the hole in the motor bracket. Insert the 1/4-20 x 1" long bolt through the 1/4" flat steel washer, the hole in the wiper motor bracket, the polycarbonate, a second flat steel washer, and finally attach the locknut.
- 1.5 Tighten the bolts at this time. Tighten the large hex nut on the motor shaft to 30 in-lbs and the 1/4-20 hex head bolt to 75 in-lbs. **WARNING: Over tightening wiper mounting hardware can damage components. Tighten only to specified values.**

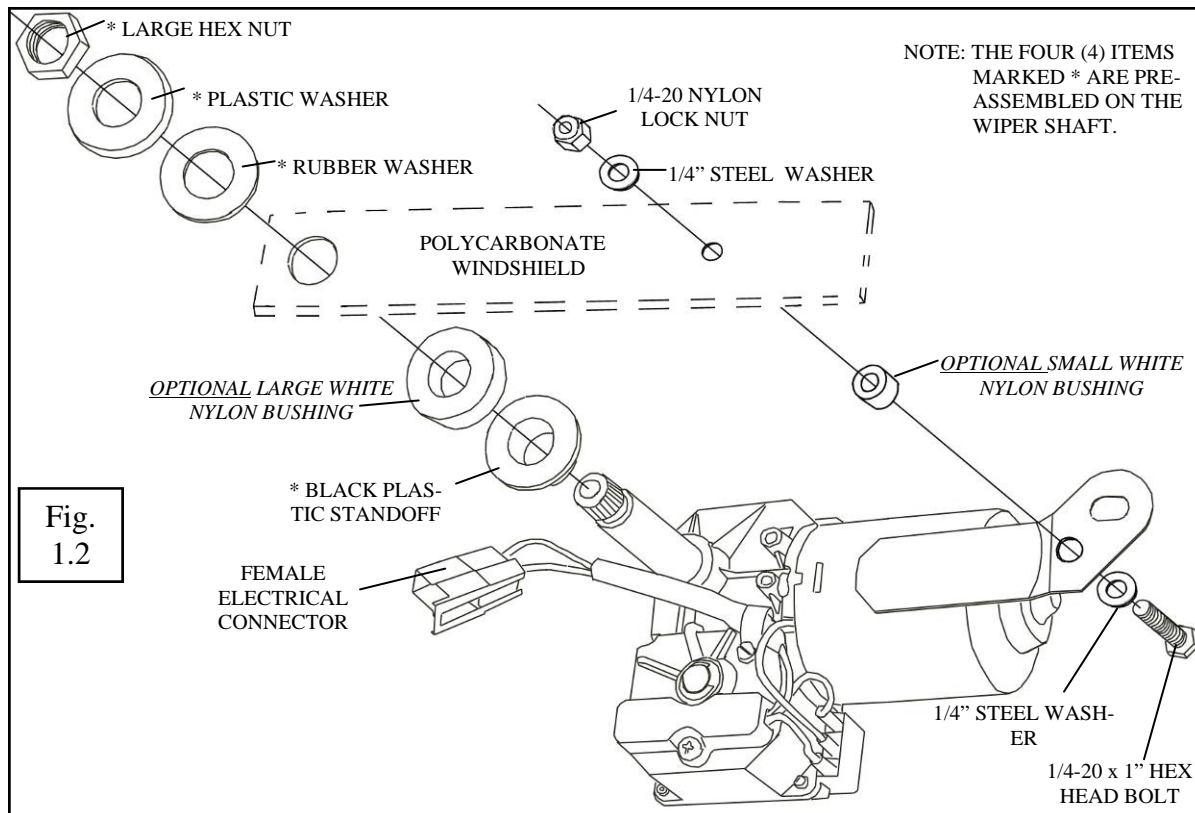


Fig.  
1.2

## 2. WIRING

*Note: Wear safety glasses when working with batteries.*

- 2.1 Disconnect negative battery cable.
- 2.2 Insert the male electrical connector on the wiper harness (see fig. 2.2) into the female electrical connector on the wiper motor.
- 2.3 Cover the wires with split loom and route the wires along the top and down the right side of the windshield frame using the supplied square adhesive mounts and wire ties to secure the wires. Note: mounting surfaces for pressure sensitive adhesive should be clean, dry, and at room temperature for best adhesion. Make sure that there is enough slack to allow the windshield to open completely.
- 2.4 Install the in-line fuse onto the positive, red wire on the chassis wire harness (see fig. 2.4). To install, cut the red fuse wire in half and install a butt connector on one of the cut ends and a ring terminal on the other end. Connect the red wire on the wiring harness to the butt connector. Connect the ring terminal to a positive power feed located on the driver side of the battery box. The top post is only powered when the key is in the “on” position.
- 2.5 Install a ring terminal on to the black wire of the chassis harness. Connect this ring terminal to a ground source.
- 2.6 Connect power pole quick connectors together on the wiper and chassis harnesses (see figures 2.2 and 2.4).
- 2.7 Re-connect the negative battery cable and test wiper operation.

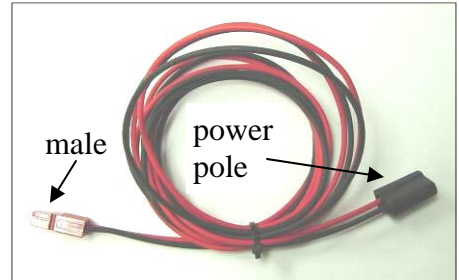


Fig. 2.2 Wiper Harness

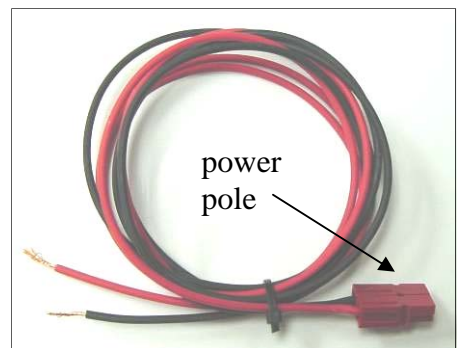
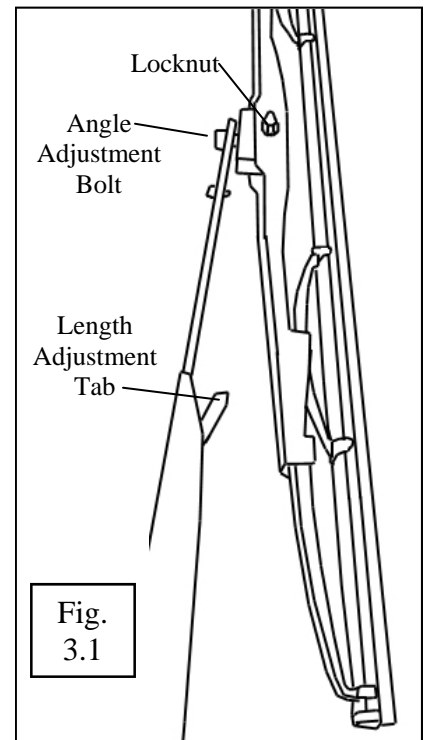


Fig. 2.4 Chassis Harness

## 3. INSTALL WIPER ARM AND BLADE

- 3.1 Remove the screw and locknut from the wiper arm (see Fig. 3.1).
- 3.2 Insert the screw through the upper mounting hole in the wiper blade, then the wiper arm, and back through the wiper blade securing with the locknut.
- 3.3 Lift the locking tab on the underside of the wiper arm and extend the wiper arm to the desired length. The angle of the blade can be adjusted by loosening the small bolt on the top of the wiper arm.
- 3.4 **IMPORTANT:** Turn the wiper motor to the “off” position using the switch on the wiper motor so that it will cycle to the park position and stop.
- 3.5 Press the wiper arm onto the shaft so that it is positioned at seven (7) o’clock. Turn the wiper motor on and test its operation. Adjust the arm sweep by turning the blade, adjusting the arm length, or removing the wiper arm off of the motor shaft and reinstalling it at a different position.



### 3. INSTALL WIPER ARM (cont'd.)

3.6 Make sure wiper arm is fully seated on wiper motor shaft. See figures 3.6 and 3.6.1 for improper and proper wiper arm installation onto the splined shaft of the wiper motor. Note: fig. 3.6 may give the impression that the wiper arm is fully engaged and will not come off, but that is not the case until the conditions in fig. 3.6.1 are met (**spring clip fully behind the splines**). Note: a mirror was used in both photos in order to clearly see and confirm the spring clip engagement. It is strongly suggested to double check the spring clip engagement using a mirror as illustrated. It may be necessary to lightly tap the arm with a rubber mallet to fully seat the arm. **CAUTION: to avoid breaking the polycarbonate windshield, support the wiper motor with your hand when tapping the arm.**

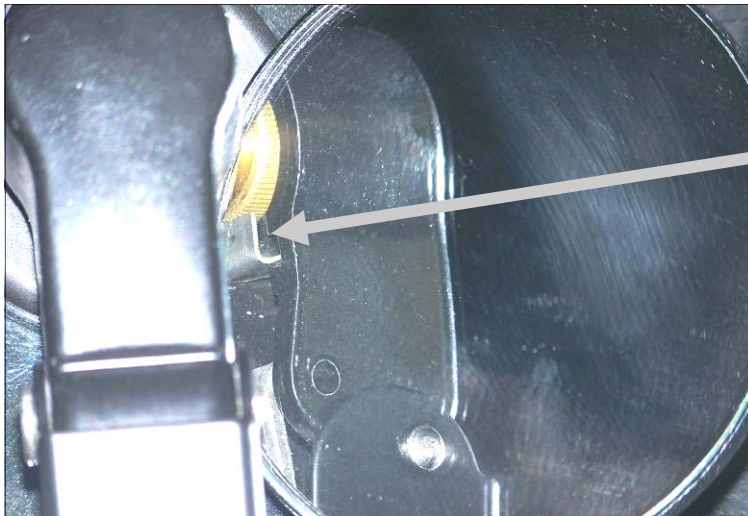


Fig. 3.6 shows the wiper arm **not properly installed** (spring clip has not sprung down behind/below the raised splines)



Fig. 3.6.1 shows the wiper arm properly installed (spring clip has sprung down behind/below the raised splines)

This paper template is to be taped onto the outside surface of the poly-carbonate windshield as a location guide for the drilling of two mounting holes.

This horizontal line represents the top edge of the windshield

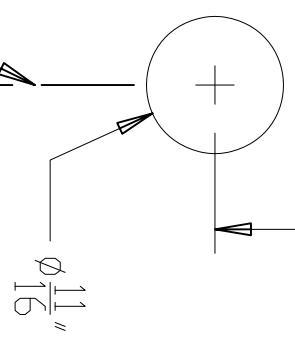
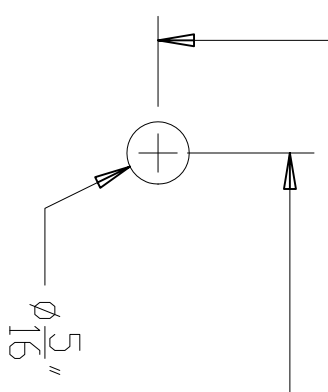
Ref: 3/4" Square Windshield Stiffener Tube

2 5/8"

Outside View

5 3/4"

3 3/16"



NOTE: please measure and verify the dimensions on this paper template just in case of possible slight variations during copying.

This vertical line represents the center of the windshield