

RangerWare

By  POLARIS®



Installation Instructions

Dual Wiper System

Part # 2878138

For Tip Out Windshield go to page 4

**YOU WILL NEED THE WINDSHIELD OFF OF VEHICLE FOR THE
INSTALLATION PROCESS.**

ORDER OF INSTALLATION FOR RANGERWARE PRODUCTS

- **HEATER**
- **WIPER**
- **WINDSHIELD**
- **TOP & BACK**
- **DOORS**

- 1.** If installed on vehicle remove the entire windshield assembly also remove the plastic plugs.
- 2.** Assemble the mount brackets on each end of the motor bracket assembly using (4) ¼" x ½" bolts with washers. NOTE: Brackets are side specific see Photo 5 for proper assembly.
- 3.** Position the motor bracket assembly in to the windshield frame with the pivot shafts extending thru the frame.
- 4.** Mount the pantograph arm adaptors (item 3) to the outside of the fiberglass frame. ((Illustrations 1 & 2))
- 5.** Install the washer, nuts and boots on the pivot shaft as shown in illustration 2.
- 6.** Install the wiper blades to the arm. (15" blades on the Fixed) Illustration 1
- 7.** Install the wiper arms on the pivot shafts in the position shown in Photo 1, install washers and acorn nuts (snug but do not tighten). Wiper arms will lock at 90 degrees as shown in Photo 2 for easier installation and removal and then tighten acorn nuts.

- 8.** Plug in the wire harness and connect to an appropriate 12 volt source and test the wiper operation and park position. Adjust the arms on splined shaft as needed.
- 9.** Install the windshield assembly on the vehicle. Omit the (2) center roll cage clamps. Position the roll cage brackets over the angle braces on the upper roll cage and align with the mount brackets on each side of the motor bracket assembly. Secure the windshield assembly using 5/16" x 5/8" bolts and washers. See Photo 5
- 10.** Drill a 3/4" hole as shown in Photo 3 and install the grommet. (Driver Side). Route the wire harness following the roll cage and thru the grommet down under the dash.
- 11.** Drill a 7/16" hole and mount the switch in the dash. Check for proper clearance on the backside before drilling. Connect the harness to an appropriate power source and connect the switch. (see wiring diagram) Wire harness 1134 that comes with the RangerWare WPS-09-500 series top has both positive and negative accessory wires. You can also use the terminal block located under the dash shown in Photo 4.

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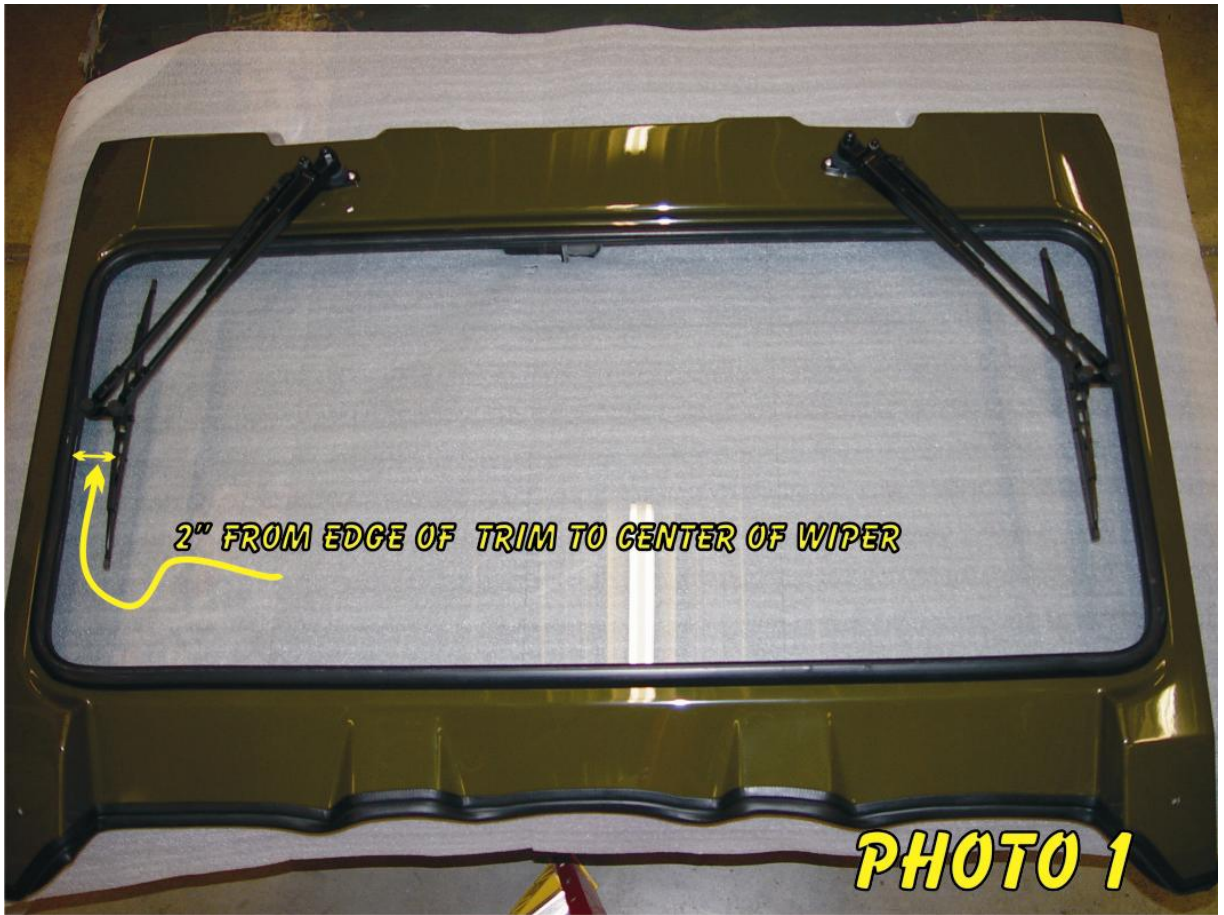
**YOU WILL NEED THE WINDSHIELD OFF OF VEHICLE FOR THE
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ORDER OF INSTALLATION FOR RANGERWARE PRODUCTS

- **HEATER**
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- **WINDSHIELD**
- **TOP & BACK**
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- 1.** If installed on vehicle remove the entire windshield assembly.
- 2.** Open the windshield and remove the gas shocks
- 3.** Remove the Tip Out windshield from the main frame by unbolting the hinges from the main frame (8 Bolts)
- 4.** Remove the bare (top) windshield wiper bracket from the inside of the main frame by removing the 2 bolts on each side which connects it to the side supports.
- 5.** Remove the mount brackets from each side of the motor brackets (4 bolts each side). Note: Brackets are side specific – keep separate for correct re-assembly.
- 6.** Assemble the mount on each side of the new wiper motor bracket assembly (complete with motor) and tighten securely.
- 7.** Remove the plugs from the wiper holes in the fiberglass frame.

- 8.** Position the motor bracket assembly into the main frame with the pivot shafts extending thru the frame and loosely fasten to the side supports.
- 9.** Fasten the Tip Out windshield to the main frame bolting the hinges in place.
- 10.** Tighten the bolts securing the motor bracket assembly to the side supports.
- 11.** Mount the pantograph arm adaptors (item 3) to the outside of the fiberglass frame. ((Illustrations 1 & 2))
- 12.** Install the washer, nuts and boots on the pivot shaft as shown in illustration 2.
- 13.** Install the wiper blades to the arm. (Use 13" Blades on Tip out) Illustration 1
- 14.** Install the wiper arms on the pivot shafts in the position shown in Photo 1, install washers and acorn nuts (snug but do not tighten). Wiper arms will lock at 90 degrees as shown in Photo 2 for easier installation and removal and then tighten acorn nuts.
- 15.** Plug in the wire harness and connect to an appropriate 12 volt source and test the wiper operation and park position. Adjust the arms on splined shaft as needed.
- 16.** Install the windshield assembly on the vehicle
- 17.** Drill a 3/4" hole as shown in Photo 3 and install the grommet. (Driver Side). Route the wire harness following the roll cage and thru the grommet down under the dash.
- 18.** Drill a 7/16" hole and mount the switch in the dash. Check for proper clearance on the backside before drilling. Connect the harness to an appropriate power and connect the switch. (see wiring diagram) Wire harness 1134 which comes with the RangerWare WPS-09-500 series top has both positive and negative accessory wires, or you can use the terminal block located under the dash as shown in Photo 4.



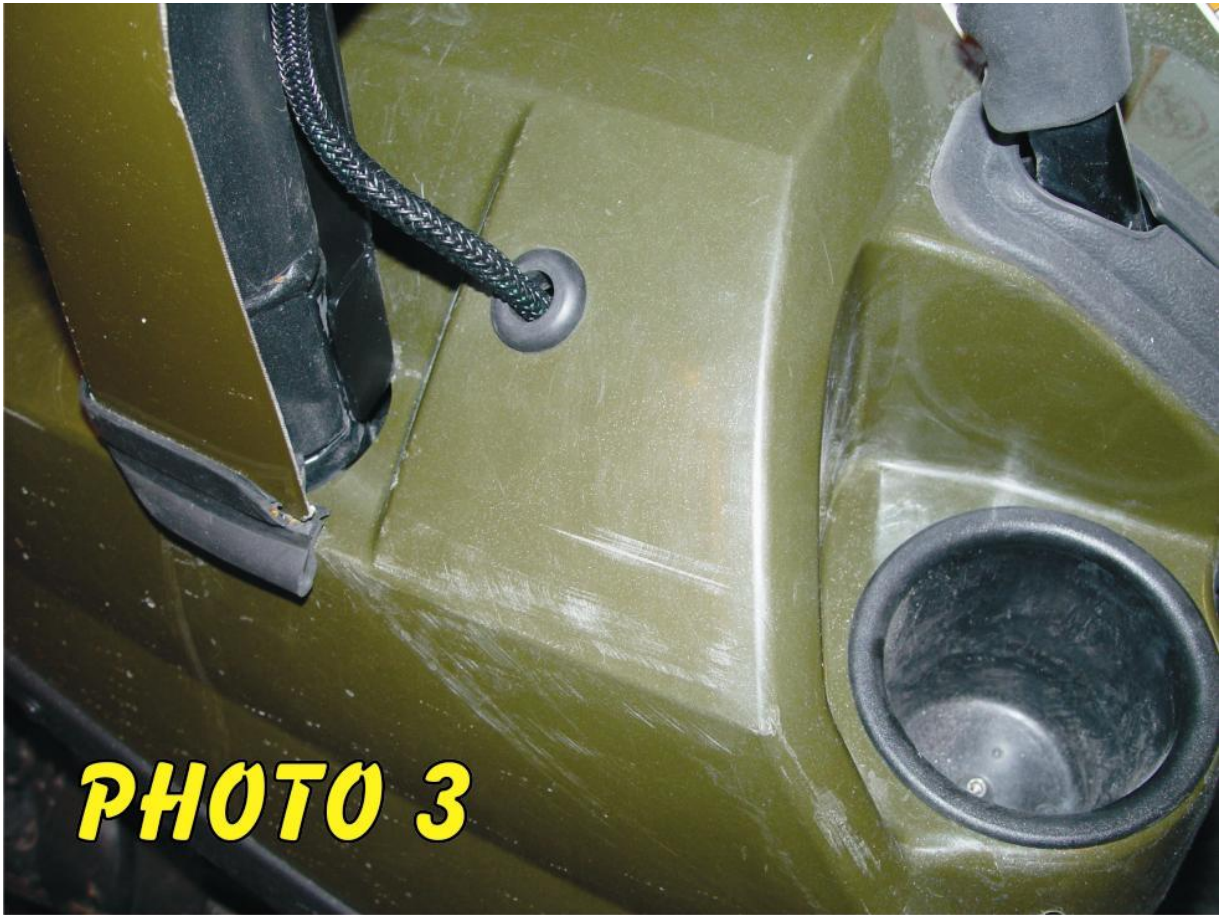


PHOTO 3

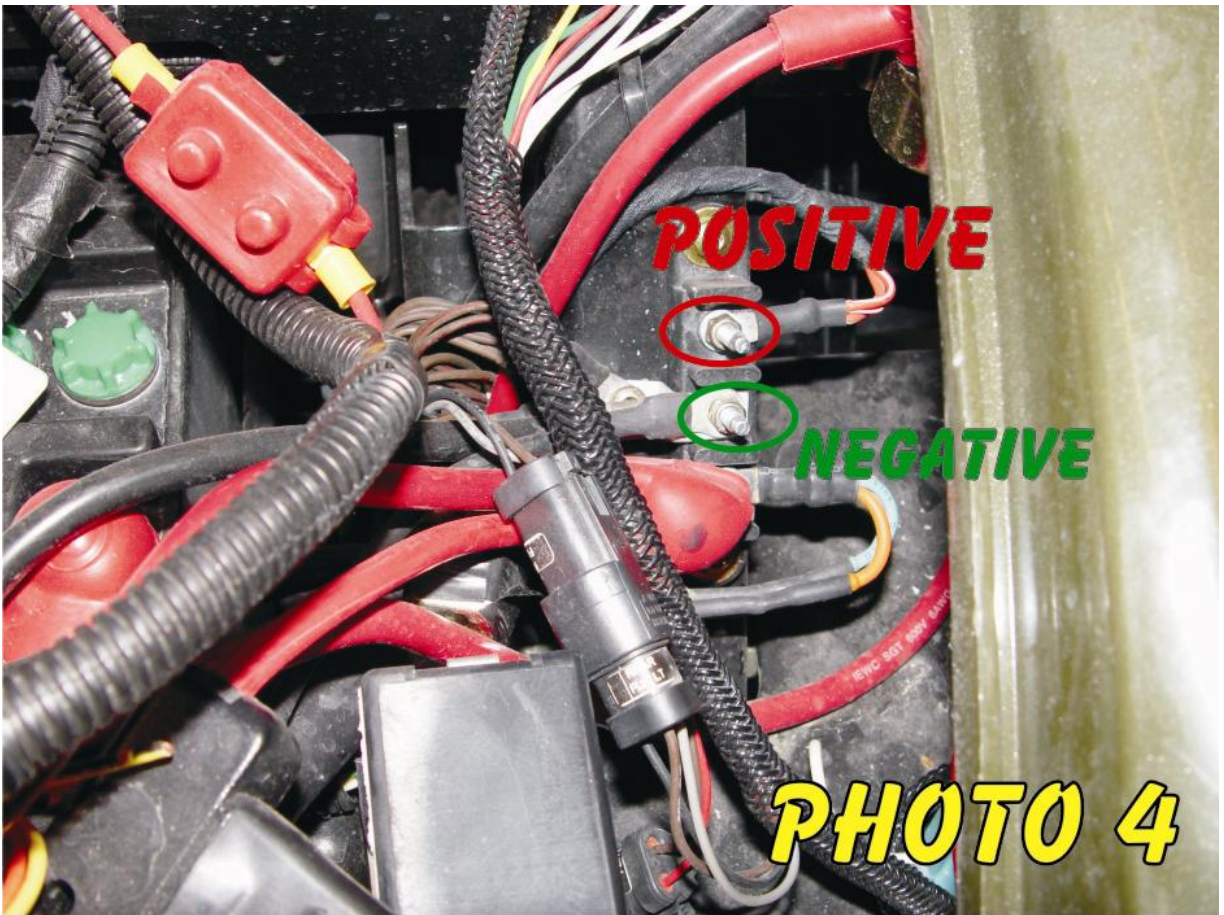
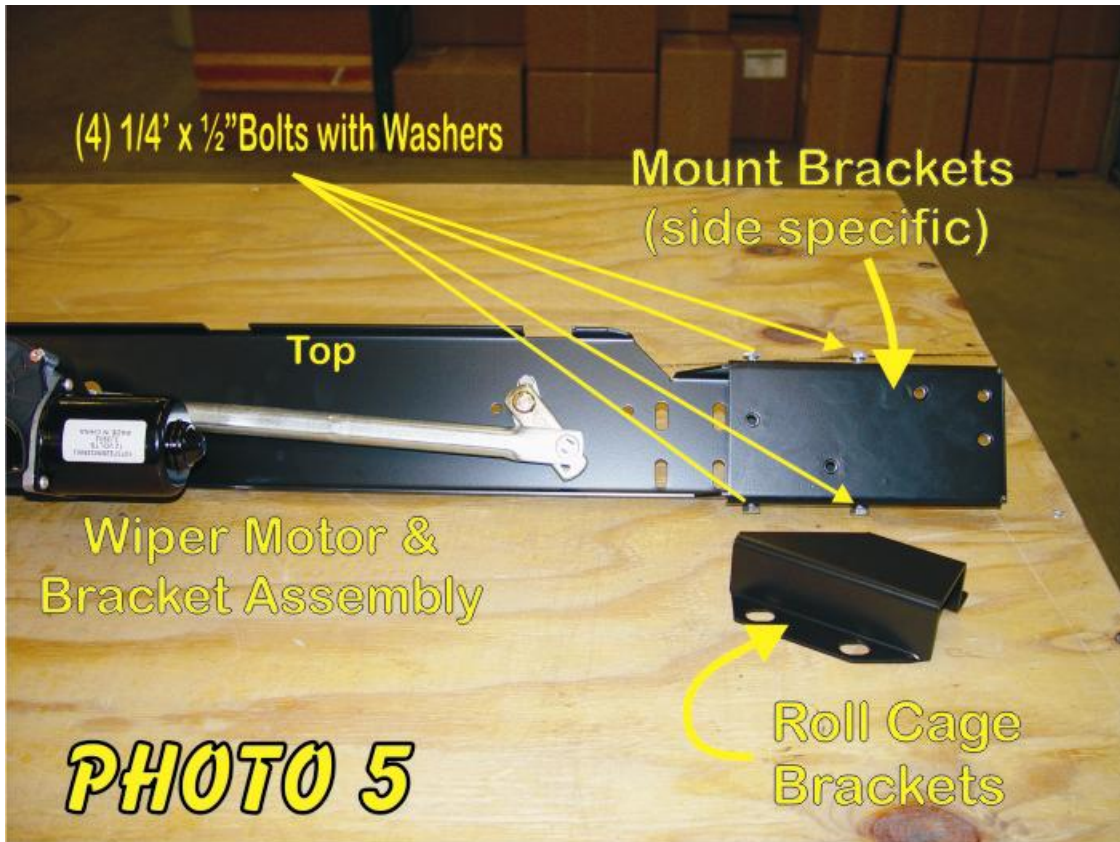
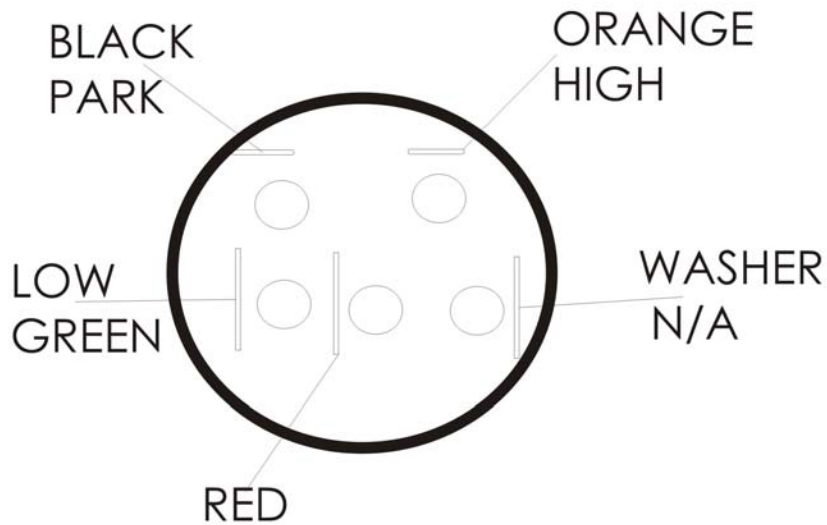


PHOTO 4



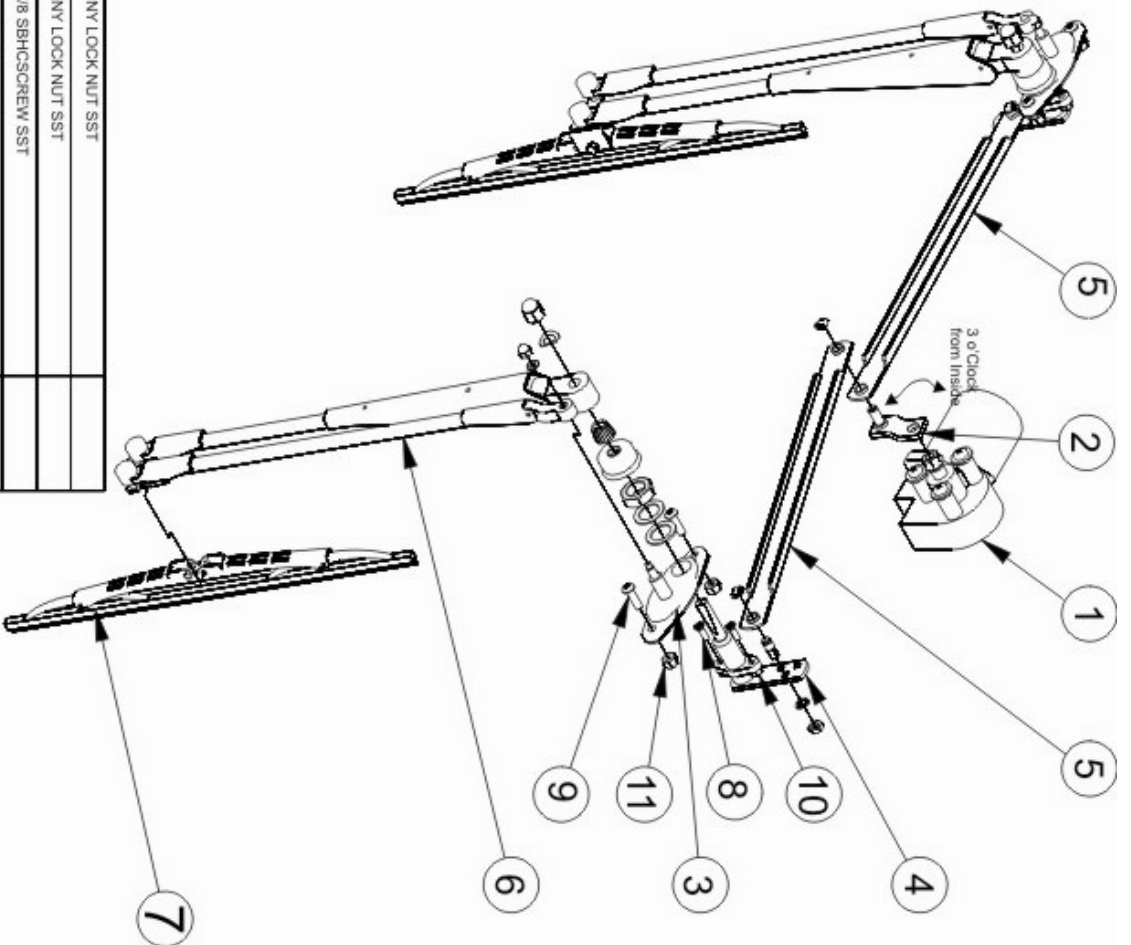
WPS-09-116



BACK OF SWITCH

LONG RED WIRE -POSITIVE
LONG BROWN WIRE--NEGATIVE

ILLUSTRATION 1



11	4	90630A115	1/4-20 UNC 2B NY LOCK NUT SST
10	4	90630A115	10-24 UNC 2B NY LOCK NUT SST
9	4	73761	1/4-20 UNC 2A X 7/8 SBHSCREW SST
8	4	90273A244	10-24 UNC 2A X 5/8 PFHMS ZINC
7	2	11315	15" WIPER ASSEMBLY
6	2	200461	16" PANTOGRAPH ARM ASSY
5	2	301870	12.8" CONNECTING LINK NYLON BUSHING
4	2	300774	PIVOT SHAFT KIT
3	2	200241	PANTOGRAPH ARM ADAP KIT
2	1	82113	LONG PIN DRIVE ARM
1	1	1073722MO25WJ	12 VOLT 3A3412 MOTOR KIT
			DESCRIPTION

ILLUSTRATION 2

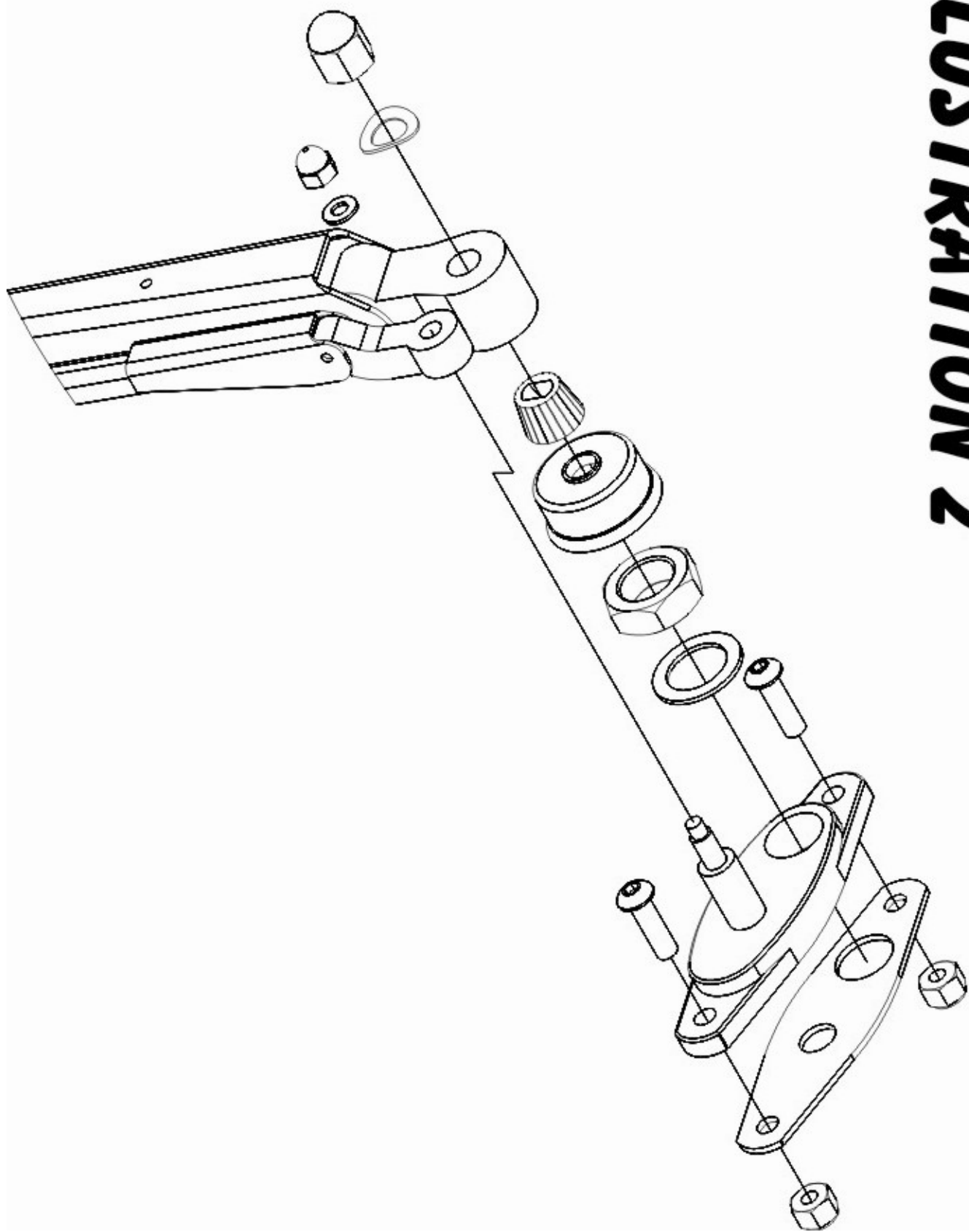
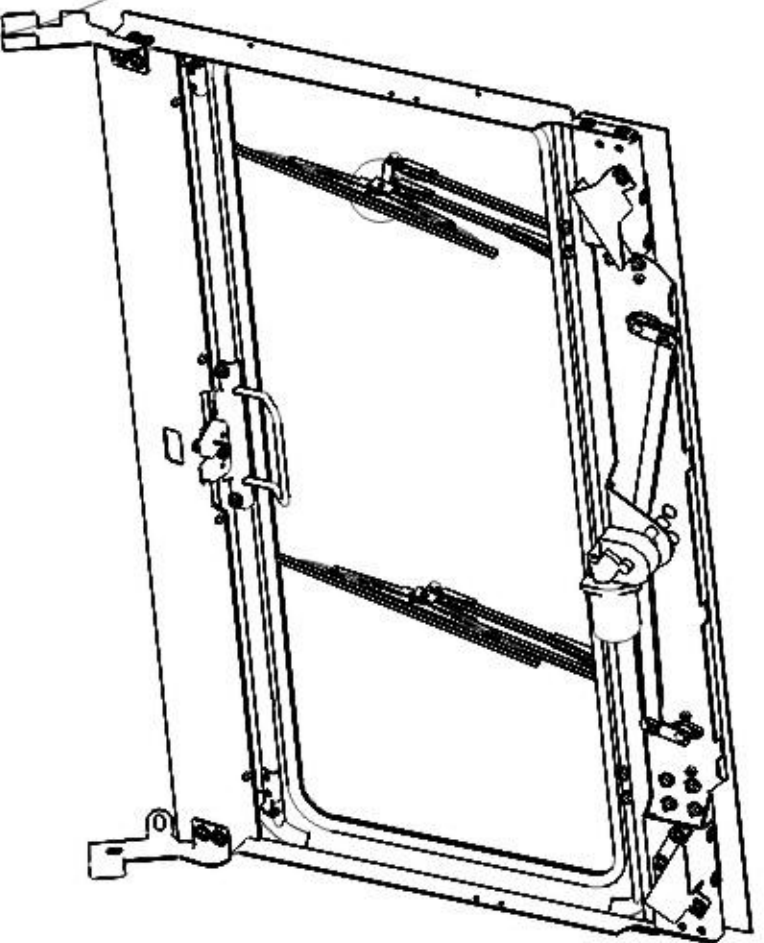
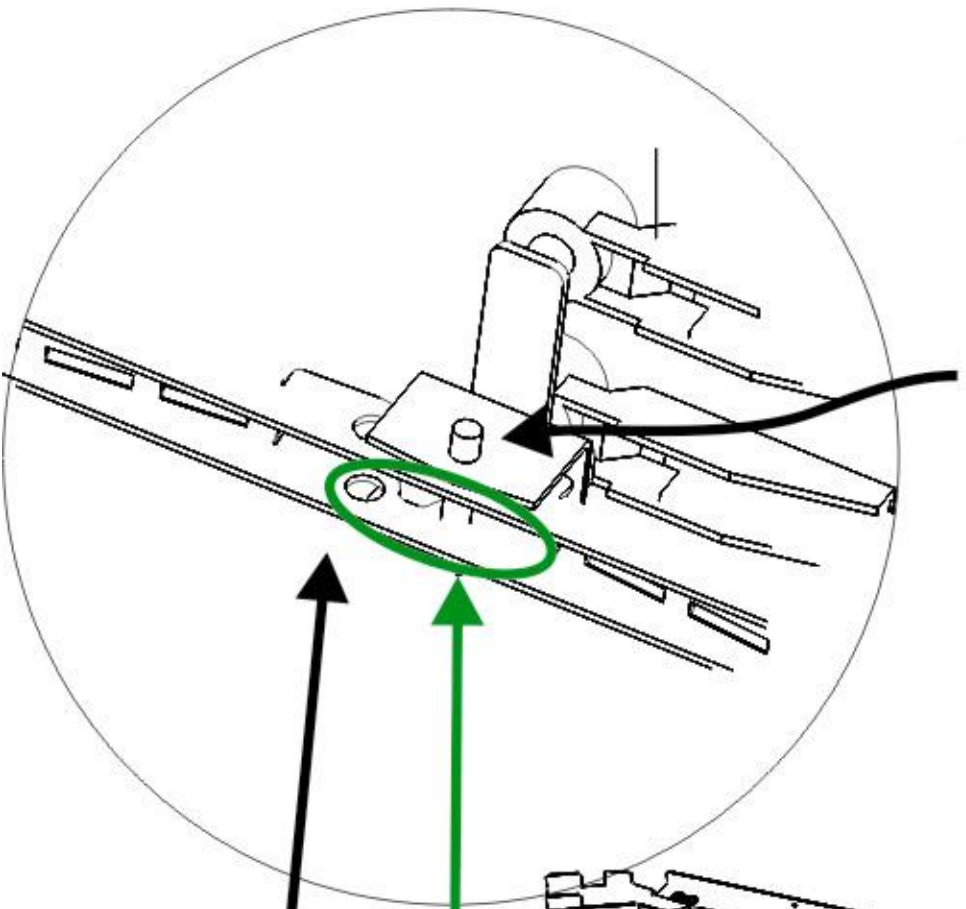


ILLUSTRATION 3

Use smaller hole
and position up
to push wiper down



If there is a Plastic adapter to be
removed will be located here.

Large Hole Down