



INSTALLATION INSTRUCTIONS
POLARIS RANGER 2015 - 2022 SP (MID-SIZE)
FULL WINDSHIELD – DUAL VENT
PART # 78-5500

IMPORTANT NOTICES

READ AND UNDERSTAND THESE INSTRUCTIONS COMPLETELY BEFORE INSTALLATION TO AVOID INJURY TO YOURSELF, DAMAGE TO THE VEHICLE OR ACCESSORY.

- For proper installation, **TWO** people are required.
- Torque specifications must be followed when tightening bolts. Over-tightening any and/or all screws will cause cracks around mounting holes which is not covered by any warranty.
 - As specified on carton label, once protective film on shields is removed, product cannot be returned.
- As specified on carton label, damage caused by packaging staples is not covered by warranty. All staples must be removed prior to removing product from carton.
 - ANY cutting, trimming, drilling or altering of this product as delivered is not covered under warranty.
- Failure to follow these installation instructions completely may void any warrantable components and result in product damage or personal injury.
- Do not use Loctite/Super Glue or any other similar fastener adhesive. These types of products react to plastics and cause cracking. Not covered by any warranty.
 - Our windshields are made from the highest quality material providing optimum transparency and clarity. Blurriness and/or extrusion marks may or may not appear when looking through windshield from a wide, side-angle. This is normal for all extruded clear plastic materials.
- The application of improper cleaners, abrasive and/or dirty cleaning towels can severely damage the product. Failure to follow cleaning recommendation (provided herewith) may void any warrantable components.

DEALER

These instructions contain important information for future reference and must be given to the customer at time of purchase or upon completion of installation.

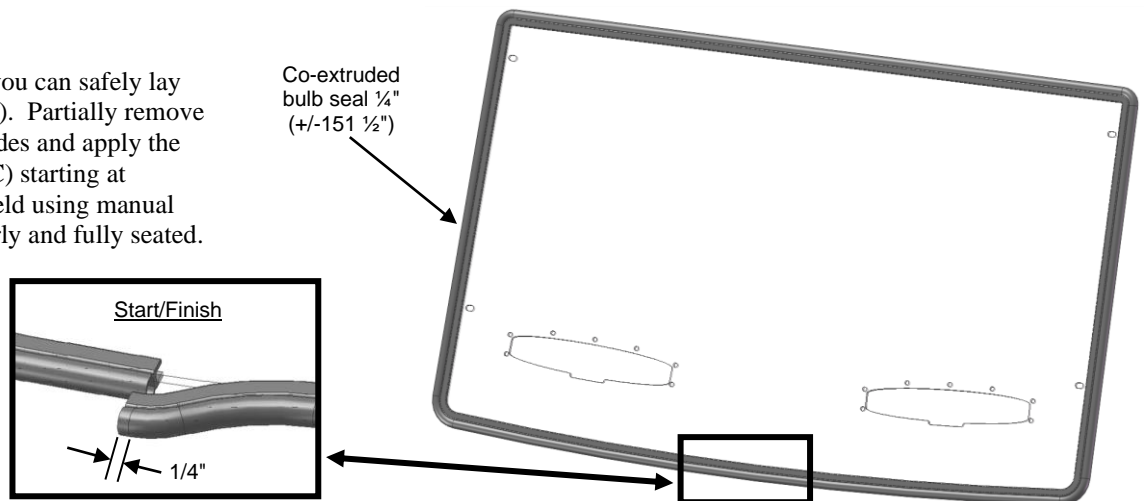
Parts List (parts available with kit only and not available separately)

ITEM	PART NAME	DESCRIPTION	QTY	
A	Windshield	CNC windshield cut-out made of 1/4" thick GE MR10 polycarbonate or equivalent	1	
B	Vent assembly	Includes: 1 vent cover, 1 vent flap assembly, 1 rubber vent seal and 7 vent mounting screws	2	
C	Co-extruded bulb seal (1/4")	Includes: 153" Co-extruded bulb seal (1/4") / #77-95BS [end user to cut to exact length]	1	
INSTRUCTION BAG	D	Windshield Hardware	Includes: 4 metal plate hooks, 4 washers M6 x 25 and 4 knobs M6 x 20	1

1. Installation

- a) Find a clean flat area where you can safely lay down the windshield (Item A). Partially remove the protective film on both sides and apply the co-extruded bulb seal (Item C) starting at bottom center of the windshield using manual pressure to ensure it is properly and fully seated.

At the start/finish of the bulb seal, cut an extra 1/4" more than required. This will ensure a tight fit between the start and finish of the bulb seal.



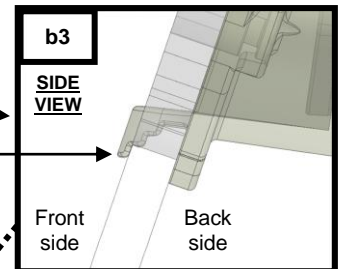
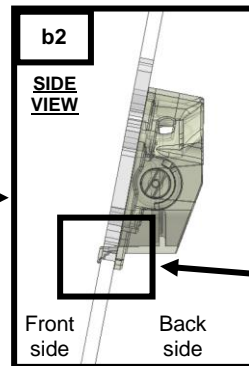
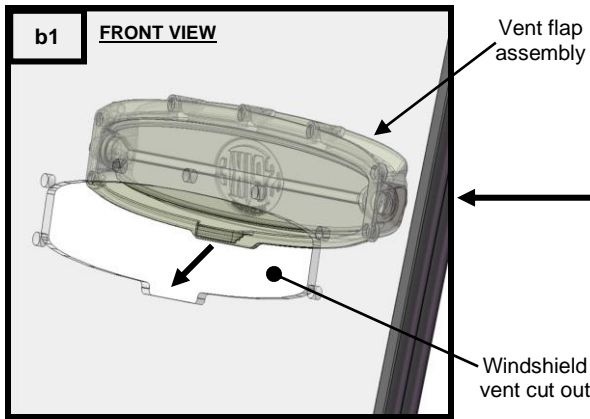
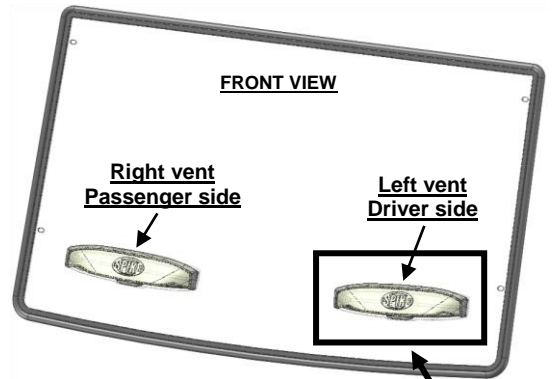
IMPORTANT NOTICES

Torque specifications must be followed when tightening bolts.

Over-tightening any and/or all screws will cause cracks around mounting holes which is not covered by any warranty.

b) **Vent assembly (Item B) installation:** Partially remove the protective film on both sides of the windshield around the vent cutouts and follow instructions below. (Left vent / Driver side installation is shown below)

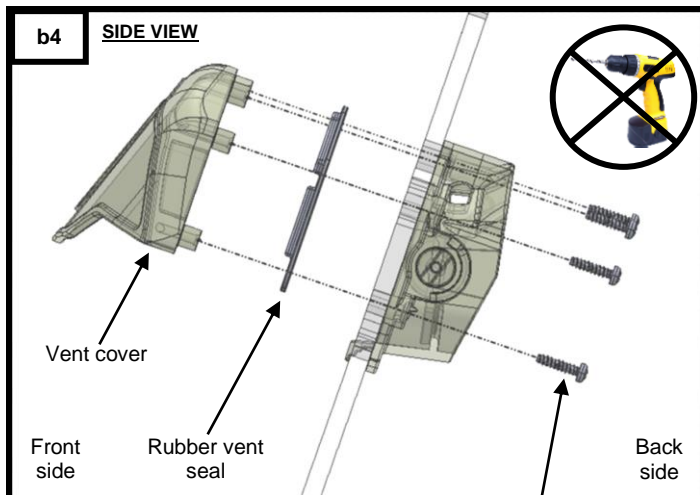
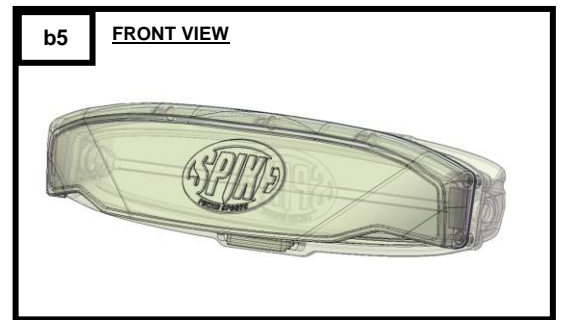
a. From the back side of the windshield, slide the vent flap assembly in the vent cut out as shown in image b1. Ensure the lower tab nests into the front of the windshield as shown in image b2 & b3.



Bulb seal is not shown on these 2 images to properly show the vent's mount details

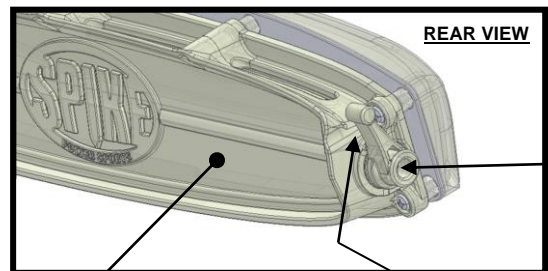
b. Install the remaining vent components (Item B) using supplied hardware as shown below in image b4 & b5.

Caution: over tightening any hardware could cause irreversible damage to the windshield.
DO NOT USE POWER TOOLS FOR THE INSTALLATION OF THE 7 MOUNTING SCREWS.



Vent mounting screws (7x)
 (2.0 ± 0.2 N•m / 18 ± 2 lbf•in)

Bulb seal is not shown on this image to properly show the vent's mount details



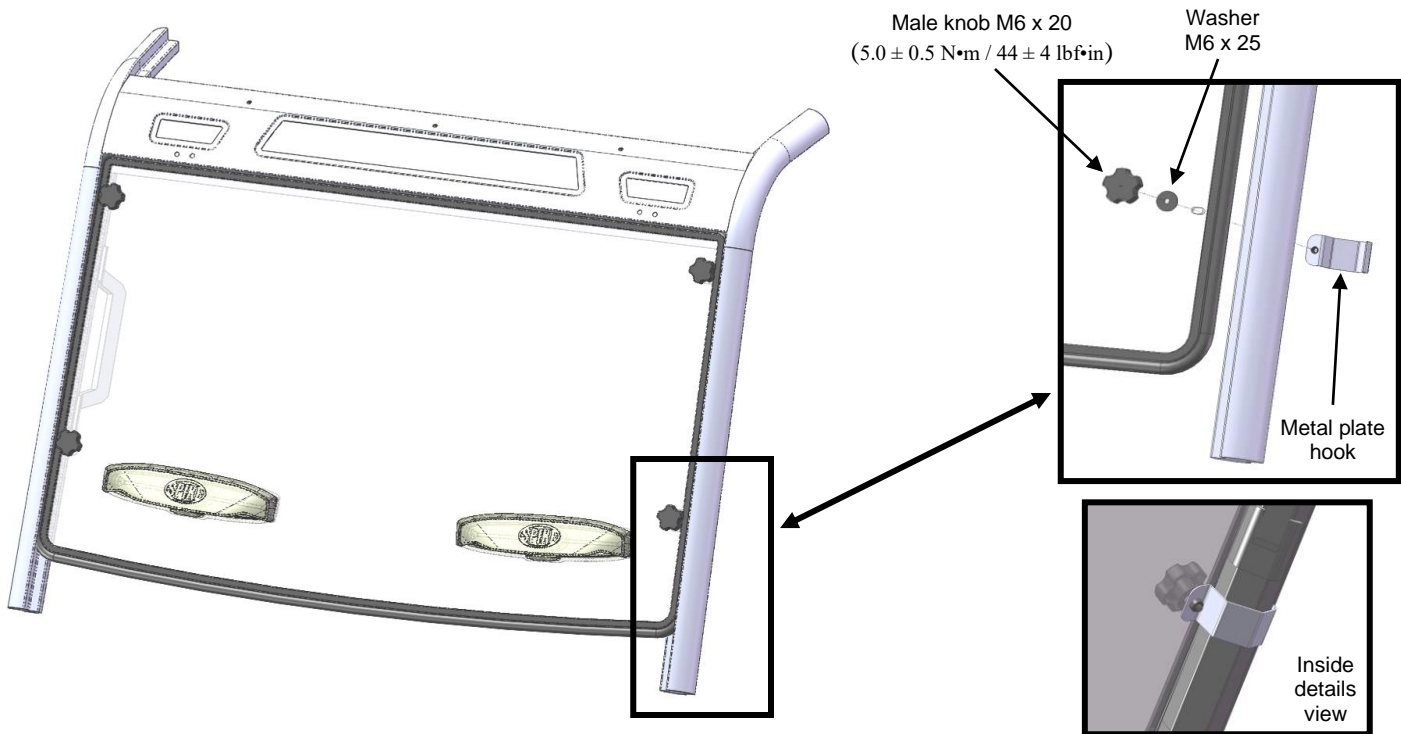
As shown on the rear-view image, the **lever** is installed by default on the right side of the vent. Lever can be installed/relocated on left or right side of the vent. End user can decide.

Tightening/Loosening of the **screw** in the lever determines the force required for the **affle** adjustment.

IMPORTANT NOTICES

Over-tightening any and/or all screws will cause cracks around mounting holes which is not covered by any warranty.

- a) Install the windshield to the vehicle using supplied hardware (Item D). Adjust the position of the windshield and tighten.
Caution: over tightening any hardware could cause irreversible damage to the windshield.



CAUTION

Please understand that open trailer towing can result in windshield/roof damage due to high wind pressure and road debris. Towing at Highway Speeds (75+ mph) for EXTENDED periods (over 100 miles) causes constant and extreme pressure at the mount areas, and is not recommended. Spike suggests removal of roofs/windshields if towed in these conditions-removal will also create less drag on the tow vehicle. Lower speeds (60 mph) or two-lane roads are no problem.

2. Maintenance and Care

Tighten all hardware after first use and periodically thereafter.

See cleaning instructions on following page.

Cleaning Instructions for Polycarbonate Products

General Purpose Polycarbonate Products-GP will mar easily with wiping action. To minimize the risk of damage, use only compatible cleaners, a soft, clean cloth, (no paper towels!) and follow proper cleaning procedure as outlined below.

Hard coated Polycarbonate Products-HC offer a higher degree of both surface hardness and abrasion resistance, providing superior protection against unintentional chemical attack/damage. However, the use of abrasive, gritty cleaners or aggressive cleaning should be avoided to eliminate the possibility of scratching or damaging the coating. PLEASE NOTE: Trailing on an open trailer can cause windshield damage due to anti-freeze, brake fluid, oil, gasoline and even battery acid from other vehicles.

Cleaning / Preventing Scratches-ALL Shields:

- Pre-rinse the polycarbonate product with water to loosen and remove surface residue, grit and grime thoroughly. Pressure-washer spray is fine but at a safe distance with a fan spray nozzle – not jet spray mode.
- Using a clean sponge, microfiber sponge or soft cloth gently wash the polycarbonate product with lukewarm water. While cleaning - Keep the sponge clean of dirt, grit and debris. Rinse it frequently and keep it loaded with soap suds. MILD, diluted car wash soap is acceptable. **Do not apply cleaners under direct sunlight or during high temperatures!**
- Immediately rinse thoroughly with water, **DO NOT** allow cleaners to dry on the shield!
- Thoroughly dry using pressurized air, a chamois or moist cellulose sponge to prevent water spots.
- Protect using a quality product such as Plexus plastic cleaner, Rain X Plastic (**not standard RainX**), or liquid car wax and a soft cloth. Plexus is a registered trademark of B.T.I chemical.

Compatible Cleaners for General Purpose Polycarbonate and Hard coated Polycarbonate Products:

The following cleaning agents have been found compatible with polycarbonate products. Follow the manufacturer's recommendations and instructions.

Compatible Cleaners: Joy®, Palmolive liquid®, or mild car wash soap diluted appropriately. **Do NOT use in sunlight or let dry!** Joy is a registered trademark of Procter & Gamble; Palmolive is a registered trademark of Colgate Palmolive.

Compatible Organic Solvents: Butyl Cellosolve, Kerosene, Naphtha (VM&P) grade.
Use these solvents only in extreme cases-All residual organic solvents should be removed with a second rinse.

Compatible Alcohols: Isopropyl Alcohol.
All residual organic alcohols should be removed with a second rinse.

Repairing Hairline Scratches (General Purpose Polycarbonate” Products Only):

Deep scratches and gouges made by sharp objects such as keys, screwdrivers, and knives cannot be repaired. Hairline scratches and minor abrasions may be minimized by using a buffing/ polishing compound. We suggest testing a small area of the product first using a compatible polish following the manufacturer's instructions, prior to using the polish on the entire product. **ALWAYS** use a soft cloth and **NEVER** use paper towels.

Compatible buffing compound: Novus Plastic Polish #1 & #2, Mirror Glaze Clear Plastic Polish.

Cleaning and protecting, we recommend Plexus® plastic cleaner, Rain X Plastic (**not standard RainX**) or Liquid Car Wax.
Plexus is a registered trademark of B.T.I chemical.

For HARD COATED products, buffing the surface is not recommended. Buffing scratched areas may worsen the condition and further damage the coating. Once the coating is removed, it cannot be repaired and buffing may optically distort the polycarbonate product. Quick Spot cleaning on the trail can be done with water or window cleaner such as Sparkle etc., and a soft cloth. Rain-X can be used on HC Polycarbonate but **NOT** on GP Polycarbonate.

Some Important "Do NOT's":

- **DO NOT** use abrasive or high alkaline cleaners on polycarbonate products!
- **DO NOT** scrape polycarbonate products with squeegees, razor blades or other sharp instruments.
- **DO NOT** use gasoline, benzene, acetone, or carbon tetrachloride on polycarbonate products.
- **DO NOT** clean polycarbonate products in direct sunlight or at elevated temperatures.
- **DO NOT** leave cleaners on polycarbonate products for a long period of time. Rinse **IMMEDIATELY**.
- **DO NOT** clean polycarbonate products with gasoline.
- **DO NOT** use any cleaners other than those specified on the approved and compatible list included in this guide.
- **DO NOT** use **Super glue or thread lockers such as Loctite-immediate damage to the polycarbonate will result!**