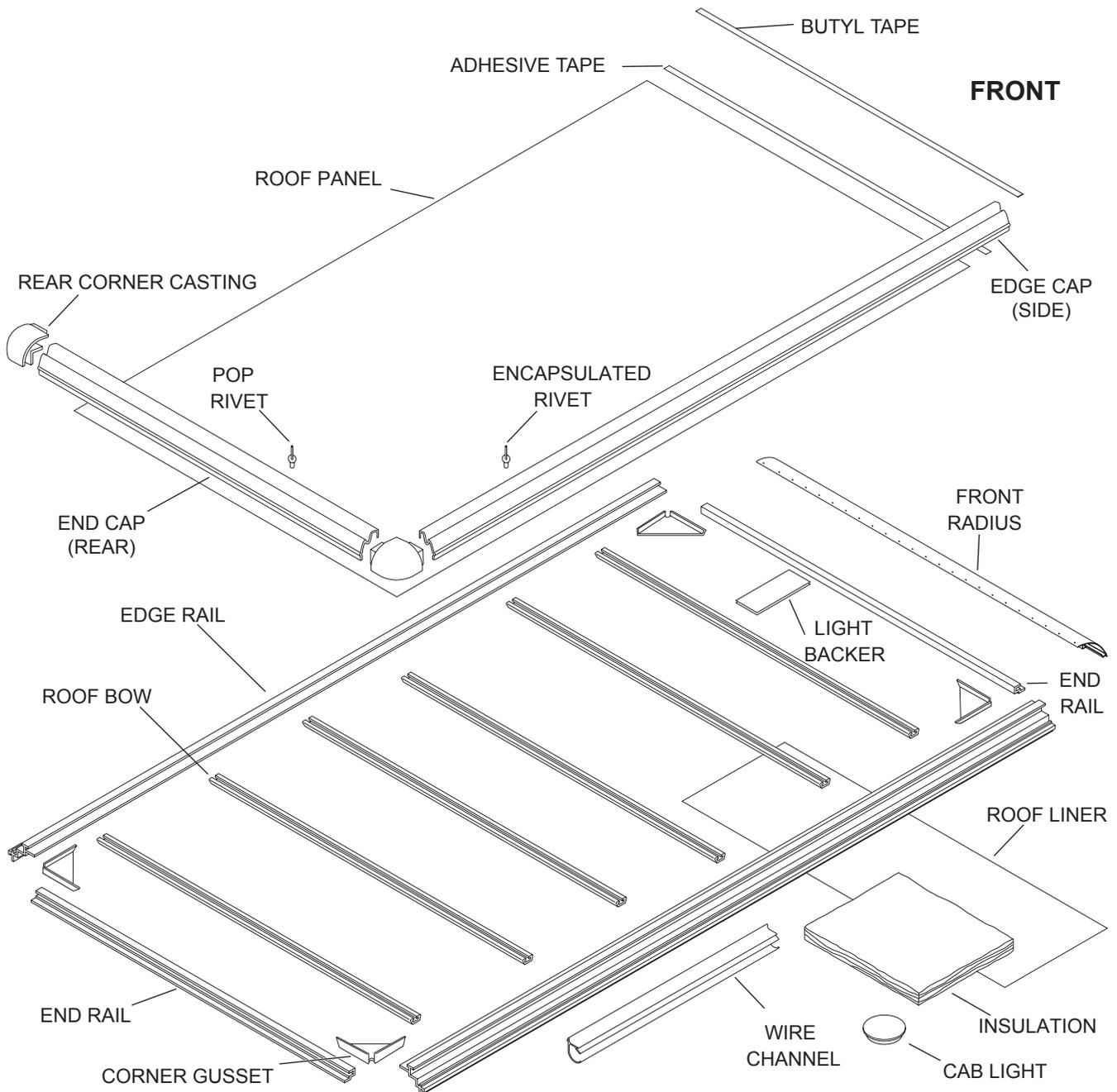




A SPARTAN MOTORS COMPANY

Service Guide

Roof Aeromaster



Roof assembly

Inspection

All roofs should be inspected for signs of damage or general condition.

NOTICE

Drivers should report immediately any impact to a unit's roof (e.g., contact with tree limbs, impact from rocks/stones, impact from cans/bottles, and any other audible impact to the roof). Drivers should immediately report if a unit has been driven in severe weather conditions where debris may have impacted the unit. Severe weather includes, without limitation, conditions where debris is evident in the air (e.g., tornadoes, hail storms, and high winds resulting in airborne debris). If a unit's roof has suffered any impact or has been driven in severe weather, the unit should be removed immediately from service until a complete inspection of the roof can be performed.

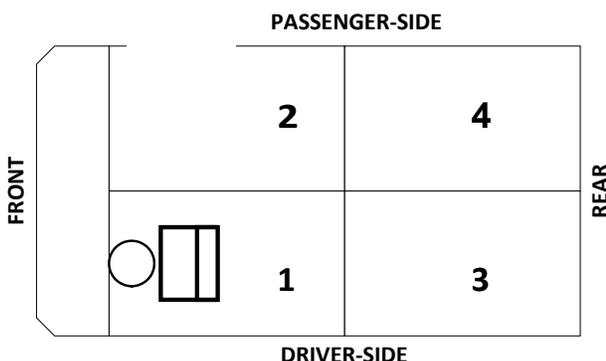
Interior Inspection

1. Use a light to visual inspect the roof for any visible signs of damage, imperfections, or impact (e.g., cracks, breaks, holes, tears, or bulges).
2. Inspect the driver-side front corner (1) and the entire quadrant. Proceed to the passenger-side front corner.
3. Complete inspection of the driver-side rear quadrant (3) and passenger-side rear (4).

NOTICE

The maximum acceptable gap between a roof bow and the exterior panel is 1/2" or 12" in length.

4. Using only your hand, gently apply pressure to the roof panel approximately centered between the roof bows. Visually inspect for separation between the bows and panel.



Exterior Inspection

CAUTION

Use appropriate safety equipment and precautions. Do not climb or attempt to climb on the roof.

1. Use a ladder, scissor lift, etc. to view above the unit's roof line.
2. Inspect roof for visible signs of damage, imperfections, or impact (e.g., cracks, breaks, holes, tears, or bulges).

NOTICE

If any damage is found, the unit should be removed immediately from service until all necessary repairs are performed. Units left in service without proper repairs may result in roof failure. Contact Utilimaster with questions concerning the condition of a roof or repairs.

Warranty Information

Utilimaster does not warrant any inspection or repair. The inspection and repair are entirely the responsibility of the user. All repairs should be made in accordance with established manufacturing guidelines and procedures. This instruction does not alter or modify the Utilimaster Limited Warranty ("Warranty"). Damage to a unit's roof caused by outside sources or severe weather is not covered by the Warranty. Please refer to the Warranty for all of your rights and obligations.

⚠ CAUTION

Always follow the sealant and cleaner manufacturer's cautions and recommendations for protective equipment, application, and cleanup.

NOTICE

Removal and replacement of roof sections could result in roof leaks. If a vehicle requires major roof or structural repair, check with Utilimaster for a recommendation on returning the vehicle to Utilimaster or repairing damage at a professional body shop.

Repair

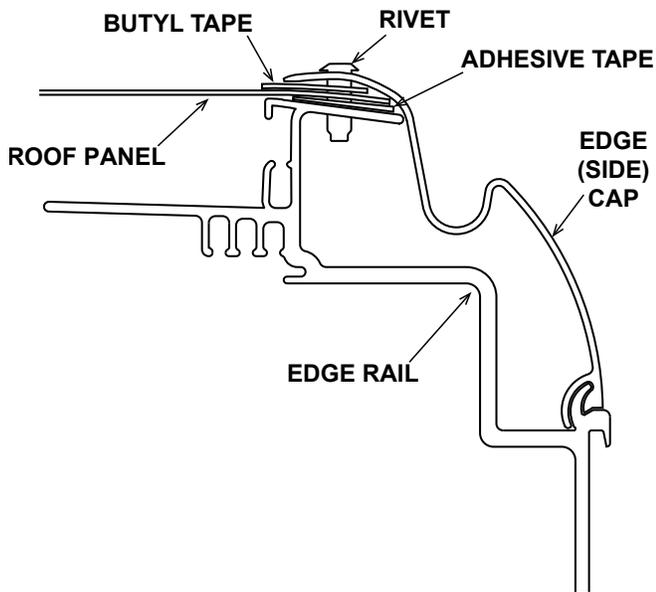
Quick and easy translucent fiberglass repair kits are available for permanently repairing small tears and punctures.

Roof Panel Replacement

NOTICE

If the roof panel is translucent Kemlite®, use a patch kit such as SunPatch™ (P/N 01900680) where possible.

Use of a drill stop is critical; otherwise a hole can be drilled through the cab roof liner or other interior parts.



Removal

1. Using a #11 or 3/16" drill bit with a drill stop set at 3/8", carefully remove the rivets on the edge (side) and rear (end) caps (not the rails) as well as the front radius.

NOTICE

Be sure to remove all of the rivets during these steps.

2. Remove the (rear) end cap, the corner castings, and the (side) edge caps.

NOTICE

After removing rivets, the caps will lift up and out. Cut the sealant and butyl tape with a razor knife.

A heat gun may help break the adhesive bond holding the translucent panel to the roof bows and rails.

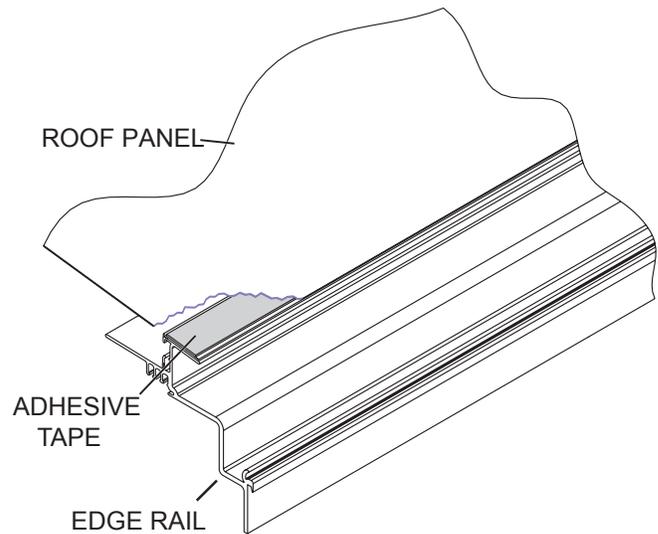
2. Remove any remnants of rivets securing the roof panel to the edge and end rails.
3. Loosen the bolts that help secure the roof panel under the front radius.
4. With a razor knife, cut the double-sided tape between the roof panel and the roof bows and rails.
5. Remove the exterior panel (some prying and additional cutting may be required to break the panel loose from the roof bows and rails).
6. Scrape the rails, caps, roof bows, caps, and corner castings to remove the old tape and sealant.
7. Clean the tape and sealant areas with isopropyl alcohol and allow to dry.

NOTICE

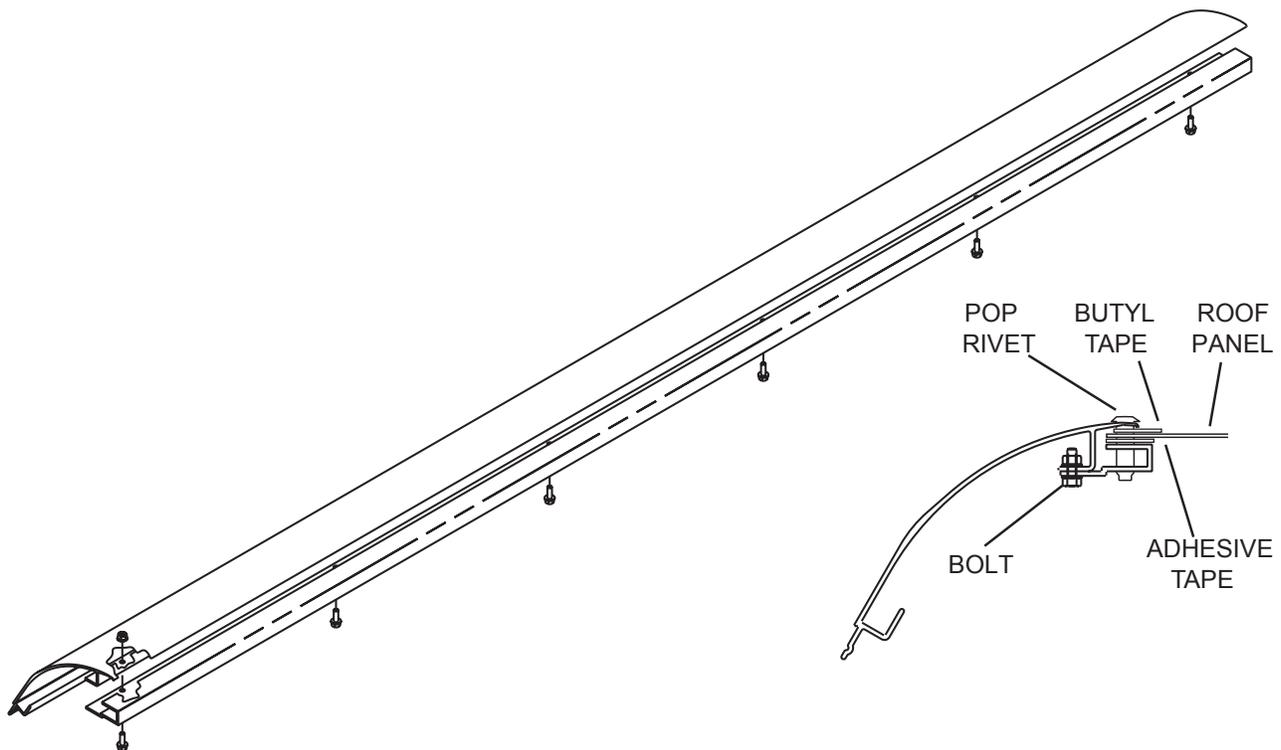
For Steps 3 through 5, do not remove the tape paper until the panel is in the proper position (Step 8). Once the adhesive tape sticks to a surface, you will not be able to reposition it without starting over and possibly damaging the new panel.

Installation

1. Test fit the new panel and trim as required.
2. Remove the panel.
3. Apply 1"-wide butyl tape along the bottom of the front radius where the roof panel will overlap. The tape should extend beyond the edge of the radius. On the side facing down, leave the paper strip on for now.
4. Apply 1"-wide adhesive tape around the roof perimeter on the side extrusion rails and the front and rear end rails. On the side facing up, leave the paper strip on for now.
5. Apply 1/2"-wide adhesive tape on all the roof bows. On the side facing up, leave the paper strip on for now.
6. Peel off about an inch of the tape paper at each tape end.



Adhesive tape and panel (cap removed)



Front Radius

- Carefully lay down the new roof panel, inserting the front edge under the tape of the front radius.

NOTICE

As you are lowering the panel, make sure you can reach (from the interior or the exterior) the peeled-off paper on every tape strip.

- Carefully remove the paper strip on the tape between the radius and the roof, and then carefully pull off all the other strips on the roof bows and roof perimeter.
- Tighten bolts to secure the panel under the front radius.
- Apply pressure around the perimeter with a roller to firmly adhere the tape to the roof.
- Apply 1-1/4"-wide butyl tape along the **sides** of the panel. Extend the tape beyond the area that will be covered by the edge caps.
- Apply the 1"-wide butyl tape along the **rear** of the panel. Extend beyond the area that will be covered by the end cap.
- Remove the paper strips and reinstall the edge caps, the rear corner castings, and then the end cap into position.

NOTICE

Install the rear castings after the edge caps and before the end cap.

- Using the drill stop and the existing rivet holes in the caps and radius as a template, drill holes in the panel.
- Attach the panel to the front radius and the (rear) end cap with aluminum rivets.
- Attach the panel to the (side) edge caps with plastisol-encapsulated rivets.
- Use polyurethane sealant to seal the front radius, caps, castings, and fasteners.
- After an eight-hour waiting period, water-

test the roof. With all doors and windows closed tightly, spray the roof and the top of the side structures with water. Check for leaks. Reseal and retest if any leaks appear.

Corner Casting Replacement

Removal

- Remove the fasteners holding the casting to the roof rails.
- Using a utility knife, cut the sealant around the casting.
- Pull off the casting.

Installation

- Scrape off the old sealant and clean the bonding surface with isopropyl alcohol.

NOTICE

For the new casting, drill new holes using the old casting as a model (if possible) or mark hole locations from test-mounting the casting.

- Apply polyurethane sealant along the bonding surface where the casting will mate with the roof rails.
- Fasten the casting into place.
- Apply polyurethane sealant around the exterior perimeter of the corner casting.
- After an eight-hour waiting period, water-test the roof. Spray the roof and the top of the side structures near the affected area with water. Check for leaks. Reseal and retest if any leaks appear.

Utilimaster Customer Service

574-848-2200

Email: Parts@Utilimaster.com

Roof Aeromaster Service Guide

03103436-A10027 October 2017

©Utilimaster, 603 Earthway Boulevard, Bristol, Indiana 46507 USA