



Highland
RIDGE RV

STARCRAFT

Slide Out Crack Instructions

Bulletin Type:	SRP	Publication Date:	April 2023
Bulletin #(s):	23-090	Make(s):	Highland Ridge
Job Code(s):	N/A	Model(s):	Various Models
Flat Rate(s):	All models not to exceed 36 hours total	Model Year(s):	Before Model Year 2024

Incident:	Crack forming at the front bottom corner of the off door side (ODS) or door side (DS) Front Slide Out
Affected Units:	Various Highland Ridge FW models before year 2024
Parts List:	1 – 1083456 Tube, AL 1.50X6.50X24X.090 Triple Hollow Square 1 – 0331876 set Corner Brackets 1 – 0403478 1 set = 25 screws 1 – 0160674 Galvanized Steel backer 1 – PB999 28 lbs Spray Adhesive (Order direct from vendor, industrialfinishes.com will need to order hose and spray nozzle also) (May use PB999 or 221 Sikaflex) 1 – 0330131 Expansion Joint 12 - #221 Sikaflex adhesive 1 - Fiberglass / Gelcoat panel (SMOOTH FINISH) OR - Filon panel (FIBERED HAIR FINISH) (This part is unit specific) 1 – Front Side wall Decals (These parts are unit specific)
Misc. Tools & Supplies:	- Standard Misc. hand tools - Caulk - Putty tape - Variety of screws - Scrap 3' x 6' 1/4" - 3/8" plywood and wood wedges, 2"x4"-8', - Misc electrical connectors (if applicable) - Shingle Scraper - Tig welder for Aluminum (or sublet to perform the welding) Fiberglass / paint repair (or sublet to perform the fiberglass / paint repair) - Pin box stand - Fiberglass / paint repair (or sublet to perform the fiberglass / paint repair),
Parts Return Information:	N/A

INSTRUCTIONS FOR REPAIRING A SLIDE OUT CRACK

Please read the following instructions thoroughly before starting the repair. If you have any questions, contact Highland Ridge customer service department.

Introduction:

This document will guide you through the repairs of a slide out crack that has appeared at the bottom front corner of the front slide out opening.

NOTICE

Indicates a potential situation that, if not avoided, may result in property damage or damage to your RV.

⚠ CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ DANGER

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This alert information is limited to the most extreme situations.

⚠ WARNING

Indicates a potentially hazardous situation that, if not avoided, may result in death or serious injury.

Note: a “note” is not necessarily safety related, but indicates a recommendation or special point of information that could assist in understanding the use or care of a feature item.

Safety and precaution:

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1.0 Measure Upper Deck Flex

- A. Reference LCI Upper Deck Flex
 - a. Measurement sheet (LIP SHEET 0236) for measuring front flex of unit. "Unit should not flex more than ¼", if flex is more than ¼" contact Highland Ridge customer service for further instructions: - Included in Highland Ridge Instructions
- B. Document the **condition of** the upper deck flex **before** the repair and **after** the repair is completed, keep for your records.

2.0 Removing Bedroom Slide Out Room

- A. Remove/Save all **Interior** slide out attachments for the slide out room to use on reassembly. Attachments will be different for each model.
- B. Remove/Save all **Exterior** slide out attachments for the slide out room to use on reassembly. Attachments will be different for each model.
- C. Unhook any plumbing connections attached to the slide out room (if applicable).
- D. Unhook any 12 VDC and 120VAC electrical connections attached to the slide out room (if applicable).
- E. Support the slide out room safely with proper lifts.
- F. Remove any bolts/screws that secure the slide-out room to the interior or exterior of the coach.
- G. Safely remove slide-out from the coach wall opening with proper lifts.
- H. Remove/save bottom slide out pan with seal (replace if damaged).
- I. Remove bottom slide out corner pan with seal (replace if damaged).



Fig 1

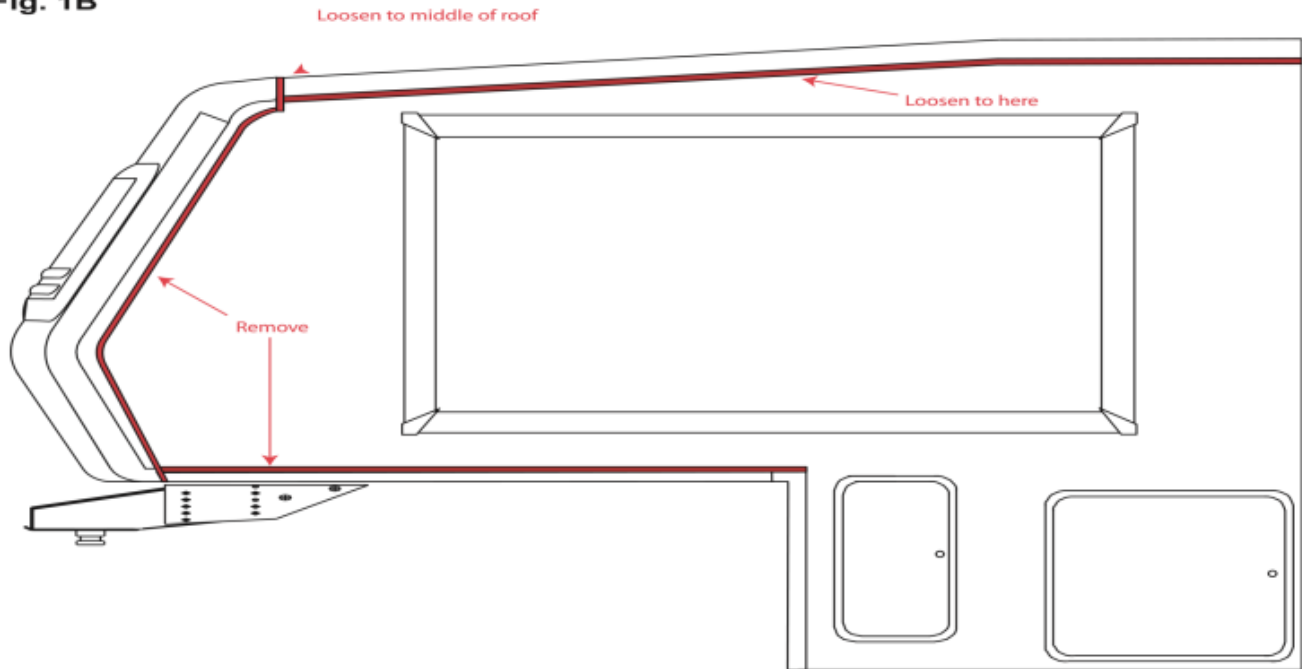
3.0 Loosening Exterior Wall, Cap and Roof Trims

- A. Remove/Save the front vertical cap trim to access cap trim screws. (Figure 1B)
- B. Remove all front vertical cap trim screws. (Figure 1B)
- C. Loosen the screws from the roof line trim from the front cap to about the rear of the slide. **(Figure 1B) Do not remove this trim.**
- D. Remove/Save lower goose neck molding.
- E. Remove/Save the slide-out drip rail.
- F. Loosen front cap to access full side of wall.

NOTE:

The front cap **DOES NOT** need removed from the coach to perform this repair. (see Figure 1B)

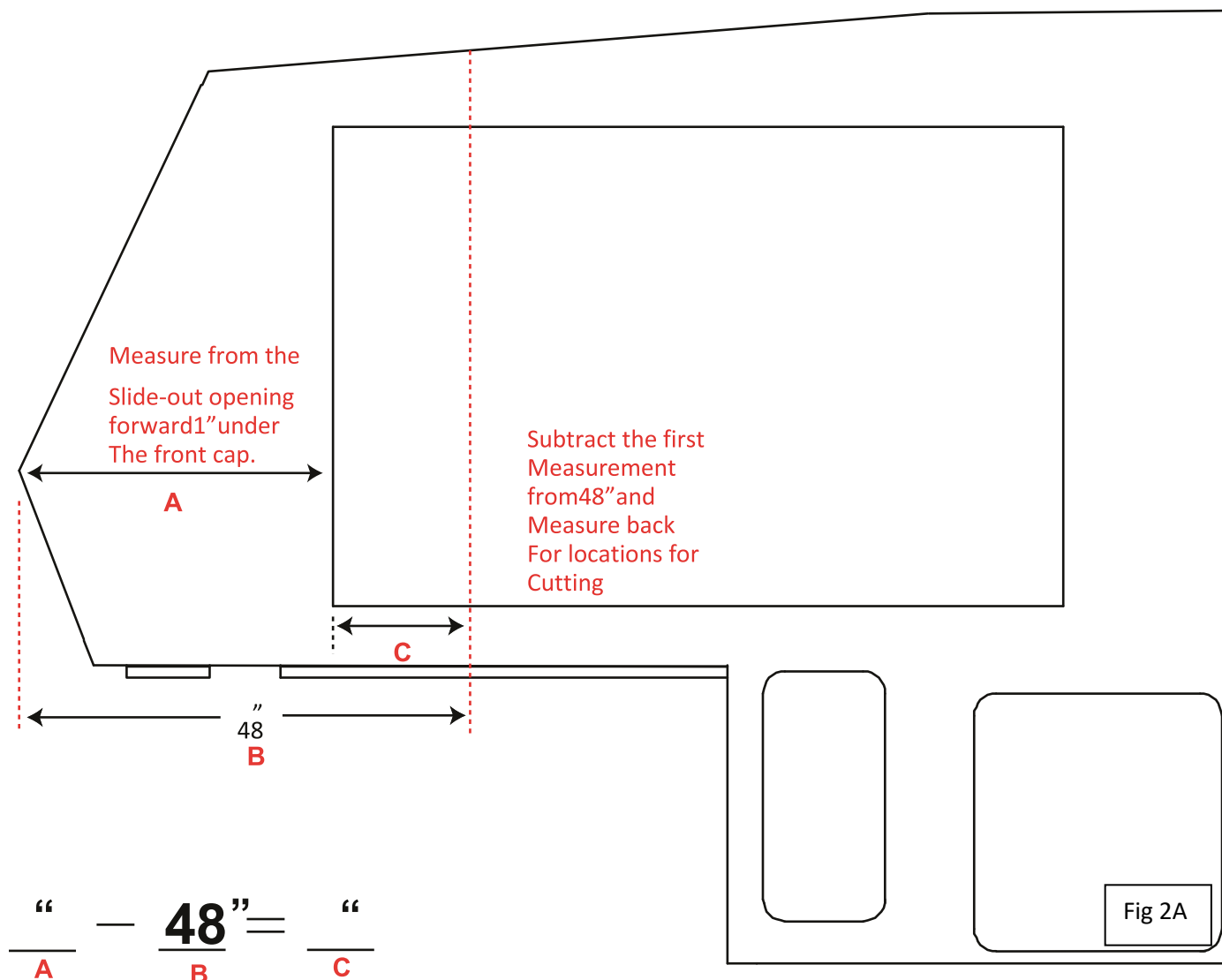
Fig. 1B



4.0 Removing Fiberglass/Filon Panel from coach wall

- A. Measure from the front point of the sidewall to the slide-out opening. (Figure 2A)
- B. Subtract this measurement from 48" and measure from slide-out opening back for cutting location. (See the table on Figure 2A for help)
- C. Make a cut through the fiberglass/filon siding at the markings both top and bottom of the slide-out. Multiple shallow cuts will be needed to ensure you do not cut the aluminum tube below the glass.
- D. Remove the fiberglass and luan from the aluminum framework by using a scrapper or a chisel.

Note: DO NOT damage the aluminum frame.



NOTE: Save removed fiberglass/filon panel to use as a template in later steps if possible.

- For re-installation on new fiberglass/filon panel. If backers are damaged upon removing from fiberglass/filon panel, you will need to make your own from 3"X 96" galvanized 28 gauge steel.
- Remove all glue and wood pieces from aluminum frame work with a scrapper and a hammer.
- Clean all surfaces of the aluminum frame work with a wire wheel. Remove all glue and wood pieces.

5.0 Installing Aluminum Tube in Coach Wall

- A. Block all coach wheels.
- B. Place a support under the pin box.
- C. Using the landing gear, lower the coach so that all the weight is on the pin box.

Note: All weight must be on the pin box.

- D. Do not lift the front landing jacks more than ½" off the ground when the full weight is on the pin box.
- E. Remove the styrofoam from bottom of the triangle portion of the coach wall structure for the triple hollow tube placement
- F. Remove the angled aluminum brace to make room for the triple hollow tube
- G. Cut the triple hollow tube to length to install between the vertical aluminum wall structure

Note: Figure 2 shows Aluminum brace to be removed



Fig 2

- H. Install small aluminum shims to lift the triple hollow tube off the horizontal bottom wall tube. (see picture 3)
- I. Weld triple hollow tube in place. Inspect all existing exposed wall frame welds for cracking. Re-weld as needed (see figure 2).
- J. With a ball peen hammer indent all areas where welding is to be done on frame. Indent enough for welds to hold and to be ground flat. (Shown in Fig 4).



Fig 3

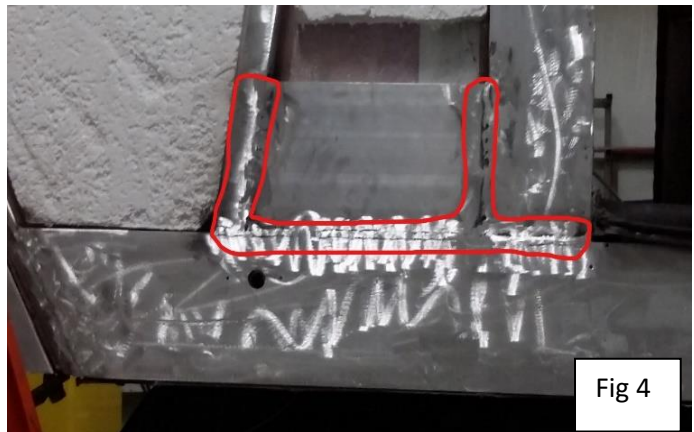


Fig 4

⚠ CAUTION

Use caution while drilling and screwing into the main frame rail steel tube. There is a wire harness that is routed through the frame rail. Do not damage the harness.

- K. Weld all tube seams together with 3" long beads spacing to making sure you have at least 3 welds. (Shown in Fig 5)
- L. Grind all the welds on side wall tubes and gussets for a flush surface.

6.0 Installing the New Fiberglass/Filon Panel on Coach Wall

- A. If the original fiberglass/filon came off the coach wall in one piece, use this as a template to trace on the new piece of fiberglass/filon.
- B. If original fiberglass/filon piece is not useable as a template, measure the coach wall carefully and cut new piece to fit on the wall.

Figure 5 shows New "C" shaped fiberglass

- C. Place the metal backers (part number 0160674) in the same location on the new fiberglass /filon panel, as they were located on the original fiberglass/filon panel. Use masking tape to hold the metal backers (part number 0160674) in place while installing new fiberglass/filon panel.
- D. Test fit fiberglass/filon panel in place. Check to ensure front cap covers new panel and seams are even. Make adjustments to the fiberglass/filon panel as needed. Retest fit as needed.
- E. Remove fiberglass/filon panel.
- F. Gather all the plywood (a piece of 3' x 6' 3/8" plywood), wood wedges (12 needed) and clamps needed to secure fiberglass/filon panel to the coach wall. You will secure the panel as shown below. (Figure 6)



Fig 5



Fig 6

G. Figure 7 shows bracing of new fiberglass to side wall.

- H. Cut the nozzle of your tube of adhesive to 3/8"– 1/2". Apply the adhesive to the side wall working from the top down.

Figure 7 shows that the glue pattern is sprayed with adhesive PB999, follow instructions on product label for usage.

NOTE: If fiberglass/filon is loose at the cut edge of the coach wall seam, apply some Sikiflex under the seam.

- I. Carefully align the new fiberglass/filon panel on the sidewall.
J. Clamp the sidewall fiberglass in place, install screws in any locations that trim will cover. (See Figure 6)
K. Make sure you place 3" – 4" masking tape over the seam.

NOTE: Not using masking tape will allow the adhesive to contact the plywood and you will not be able to remove after it has dried.

- L. Apply pressure to the upper and lower seams by using small pieces of 1/2" plywood. (See Figure 6)
M. Screw the plywood at the top and bottom edges making sure they are in areas that trim will cover. (See Figure 6)
N. Wedge the cap to the sidewall with the use of wood wedges. (See Figure 6)
O. Place a piece of 3' x 6' 3/8" plywood against the sidewall. Place a 2" x 4" board over the plywood and screw the 2" x 4" to the top and bottom of the sidewall to hold the fiberglass section in place. (See Figure 6)
P.

NOTE: This is to apply even pressure to the sidewall for equal adhesion.

- Q. Follow the recommended adhesive dry time normally 24 hours.

NOTE: Do not take weight off of the pin box till the 24 hours is up.

- R. After 24 hours, remove all wedges, boards, and plywood.



Fig 7

- S. Remove all screws that were used to hold the new fiberglass sidewall in place.

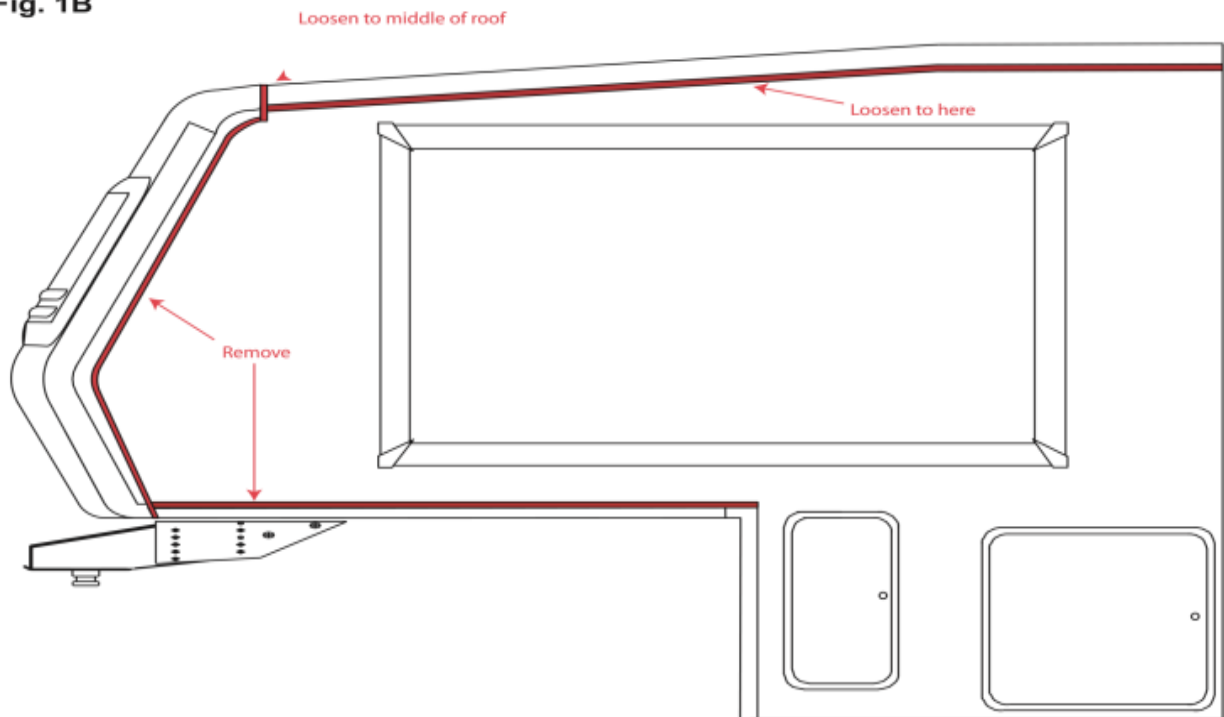
7.0 Perform Fiberglass/Filon Repair on Wall Seams

NOTE: Follow Jayco repair Instructions for smooth and gelcoat fiberglass to repair the seams on the new sidewall joints. Use a sublet to perform fiberglass and paint repairs.

8.0 Securing Exterior Wall, Cap and Roof Trims

- A. Secure the front vertical cap trim to access cap trim screws. (Figure 1B)
- B. Secure all front vertical cap trim screws. (Figure 1B)
- C. Secure all the screws from the roof line trim from the front cap to about the rear of the slide. (Figure 1B)
- D. Secure lower goose neck molding.
- E. Secure the slide-out drip rail.

Fig. 1B



9.0 Installing Bedroom Slide Out Room

- A. Install bottom slide out corner pan with seal.
- B. Install bottom slide out pan with seal.
- C. Install slide-out into the coach opening.
- D. Install any bolts / screws that secure the slide-out room to the coach.
- E. Hook any 12 VDC and 120VAC electrical connections attached to the slide out room.
- F. Install all **Interior** slide out trims and attachments that are attached to the slide out room.
- G. Install all **Exterior** Slide out trims and attachments that are attached to the slide out room.
- H. Install all front ODS decals.
- I. Seal all exterior trims and moldings as originally designed.

Jayco's sole obligation under our limited warranty is to repair or replace defective materials and/or workmanship deemed our responsibility as determined by Jayco in our sole discretion. Jayco reserves the right to use new and/or remanufactured parts or materials of similar quality to complete any work, and to make parts and/or design changes as appropriate without notice to anyone. Jayco designs and/or materials changes are done without obligation to incorporate such changes in previously manufactured product. Jayco makes every reasonable effort to ensure field remedies will not adversely affect performance and/or safety of the unit. This field remedy is not intended to extend to future performance of this RV, or any of its materials, components or parts beyond the standard warranty period. The RV owner's obligation to notify Jayco, or one of its independent, authorized dealers, of a claimed defect does not modify any obligation placed on the RV owner to contact Jayco directly when attempting to pursue remedies under state or federal law. Jan. 2019.

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