

TECH SERVICE BULLETIN: 1984-01 Jeep Cherokee (Sport) & 1992-98 Grand Cherokee Ribbed Roof Install

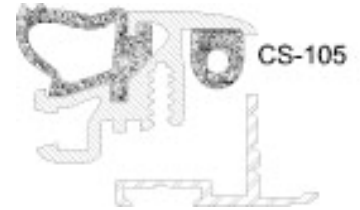
Many sunroof techs are concerned about installing sunroofs in Jeep Cherokees because they have ribbed roofs. Cherokee ribs are only 3/16" high x 1-1/2" wide. While most sunroofs are designed to clamp to flat sheet metal, this bulletin explains various techniques for making sunroof installation possible and relatively easy.

Similar height ribs may interfere with a sunroof install in the Jeep Liberty, Chevy Astro, GMC Safari, and in the rear sections of many full sized SUV's.

I. Metal Frame Sunroofs

In order to accommodate the added thickness of the ribs, longer clamp frame screws or peeling one score off a clamp frame may be required. Install as normal, with any of the following options:

- A.** Use **CS-105** (3/8" x 7/16" D-shaped foam seal) as main frame sealant
1. Measure and cut sunroof hole as usual
 2. Apply self-adhesive CS-105 to sunroof frame (approx. 9 ft. per sunroof).
 3. Join CS-105 ends at a 45° angle (not a butt joint). Apply sealant to the joint.
 4. Clamp sunroof into hole as usual. No cleanup is required.



- B.** Use non-corrosive silicone sealant to fill between the ribs.
1. Measure and cut sunroof hole as usual
 2. Apply a bead of silicone in between the ribs to fill the gap
 3. Apply a bead of silicone to sunroof frame (in place of butyl or foam tape)
 4. Clamp sunroof into hole as usual. Longer screws may be required on some sunroofs.
 5. Cleanup is required. Neatly smooth and feather the silicone around the sunroof frame.
- NOTE:** shims can be helpful, but are not required - metal frames will not twist out of shape

II. Composite Frame Sunroofs [see illustrations]

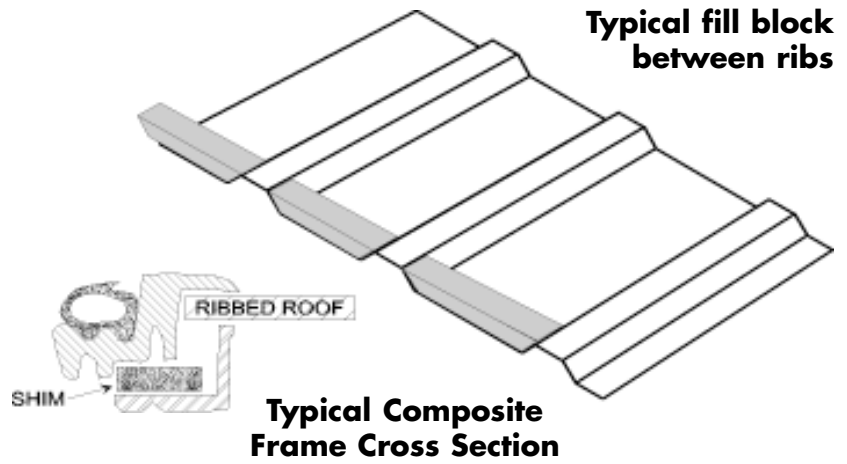
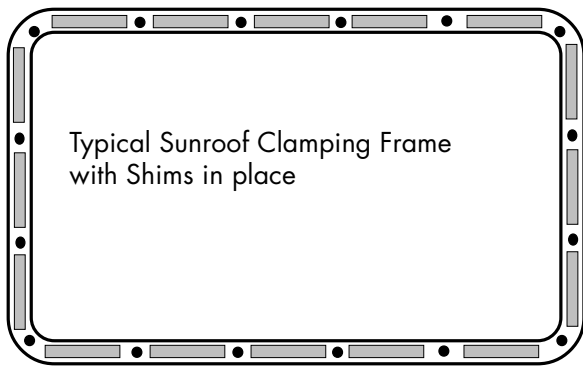
Composite frames are not as rigid as metal, and tend to twist inward when installed in ribbed or thick roof skins. Use silicone sealant to seal the frame against the roof, and shims prevent the frame from bending out of shape.

A. Required materials:

1. 3/16" thick x 1/4" - 3/8" wide [width of outer frame lip] hard black rubber or vinyl material. Body side molding works well.
2. 1/8" thick x 1/4" wide plastic or vinyl
3. Paint sticks (for use as shim blocks)
4. Non-corrosive silicone sealant
5. Longer clamp ring screws are recommended to accommodate the extra roof thickness

B. Procedure:

1. Measure and cut sunroof hole as usual
2. Cut strips of 3/16" thick material to fit between each rib at the sunroof hole. Run a bead of non-corrosive silicone in troughs between ribs and set strips into it. Fill any gaps with silicone. Objective is to create a flat area for sunroof to seal against. Clean overrun. Allow silicone to set to minimize shifting while installing.
3. Cut strips of 1/8" thick x 1/4" wide material to fit between clamp ring and main frame. Glue to inside edge of clamp frame, between screw holes. Without this inside shim, the sunroof main frame will twist, causing gaps between the glass and seal which will result in water leaks.
4. Insert paint sticks in channel gap between edge of sunroof glass and frame. This will minimize inward distortion of the frame.
5. Install sunroof as usual, using non-corrosive silicone sealant (not butyl or foam). Allow silicone to set for at least 1 hour before removing shims.



III. Inbuilts (Moonroofs) - choose from the following options

- A. Crimp the trim ring to accommodate the ribs
- B. Flatten the ribs
- C. Use a sunroof which has a flexible exterior trim ring

IV. Overhead Consoles - choose from the following options

- A. Use DONMAR's **JC-KIT** to cut and cap the console (can be wrapped with cloth) OR
- B. Eliminate the console, and completely recover the headliner OR
- C. Cut, patch and recover the console

NOTE: if installing a power sunroof with a front mounted drive, motor should be magnetically shielded or the compass will read the motor as magnetic North. Nickel alloy magnetic shielding tape is available from McMaster Carr (www.mcmaster.com 708/833-0300, PN 8912K24, ~ \$40 per sq. ft.)

DONMAR offers a variety of console modification kits for Trucks & SUV's -- see current product catalog.



NOTES
