Sprinter Side Window Removal and Installation

DaimlerChrysler has been very slow to offer side windows that open on Sprinters. In addition, the secondary market suppliers of windows have not jumped to fill the void as the number of Sprinters has not reached critical mass. But slowly, with lots of help from Sprinter owners working with some secondary market suppliers, replacement windows are reaching the market.

Below is my experience in installing a far rear passenger side window for the 140-inch wheel base Sprinter from Peninsula Windows. The job took us about 2 hours. Following my experience is Andy Bittenbinder's instructions for installing Creation Windows.

Why replace a perfectly good window? I live in Maryland. Often the weather is nice outside. However, the van became stuffy in sunny weather, especially in the back. Thus I had to turn on the AC even in 60 degree weather. In order to reduce the introduction of road noise, I chose to place the replacement window on the passenger side, assuming that side would receive less ambient noise than the driver's side. As I intend to drive with the window open, I needed a window that accommodated open while driving. That basically eliminated the louver window from consideration. Further, the louver window is not a good choice for the far rear passenger side. Louver windows would require modification of the sliding door's range of travel to reduce the risk of clipping an open window off when opening a door.

Before going any further, many thanks to Andy Bittenbinder, automotive engineer and Sprinter enthusiast extraordinaire, for ensuring the window was properly designed and constructed, and offering advice on the removal and installation of the window.

Needed Tools and supplies:

Screw drivers
Miscellaneous hand tools, cardboard, tape
Knife
Drill and 1/8-inch bit and #2 square driver bit
Rags and glue remover (glue actually comes off easily)
Gloves (for pulling on glass)
Bolt cutters and metal file
Something soft to lay the window on
Construction glue
This is a 2-person job. In my case, my son.

Removal of the existing window:

Start prying up the window gasket from a lower corner. Flat screw drivers work fine. The gasket was still quite flexible at 50-degrees without the need of heat.

Start pushing the lip of the gasket over the pinch weld.

Every now and then push the gasket down between the window and the skin of the van.

When the gasket has been relocated along the full bottom and some of the lower radius of the window, position someone on the outside to help pull the window out and catch it if it decides to fall out while the inside person works on the gasket.

Note the cardboard to protect the glass tint from scratches.

Gently pull the window out from the bottom.

And the glass comes out. The window is not heavy.

Remove the glue and dirt from the pinch weld flange.

Installing the new window:

Peninsula Glass Co. I purchased the window from Peninsula Glass Co. Peninsula has made patterns for at least the all the side windows of the 140" Sprinter. My window worked well, and I have read other customer's sliding-door and driver's side short rear window are happy with their models. Peninsula specializes in the "T" style. Peninsula splits the window vertically in half, which provides for a fair amount of height for the sliding window. (http://www.peninsulaglass.com/)

The "T" windows are not reversible, and must be ordered separately for the left or right side of the van. The sliding glass is designed to slide from back to front on the inside.

The window comes with two compression frames, double-backed foam, stainless steel sheet metal screws, (allegedly) two plastic shims and somewhat useful set of installation instructions.

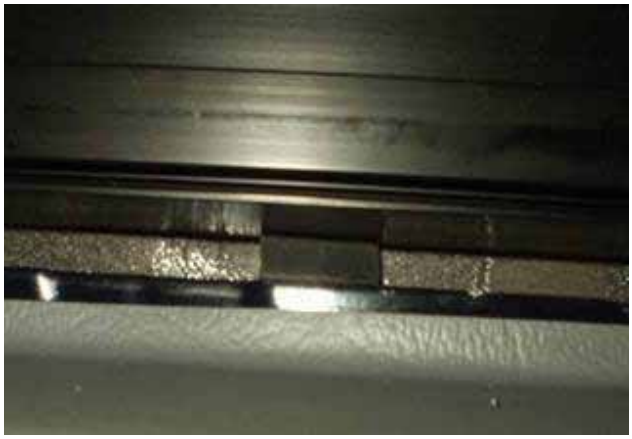
Before ordering your replacement windows, whether Peninsula or another supplier, be aware the aluminum framing cannot be bent in an exact duplicate of the radius of the glass. There is a compromise in the fit on the corners. The compromise is shown below.

The new window's compression strip goes over the plastic. There is no gasket on the inside to fill in any gaps. Therefore, reduce the bumps by trimming the four places around the window that the plastic overlaps.

Install the supplied foam gasket to the inside of the frame on the window. Do not remove the film protecting the glue until first testing the location of the window.

Test install the window. The window, while not that heavy, requires 2 people to carefully place the window into the opening. **Note** the problem with the different radii. This picture was taken without shims at the bottom of the window. Note the ½-inch gap between the pinch weld and the top-interior part of the aluminum frame. The gap on the sides is less. The guiding design factor may have been the lack of compression flange space on the inside of the van. The compression flange uses the full amount of the space between the replacement window and the start of the thickening of the interior wall on the inside of the van.

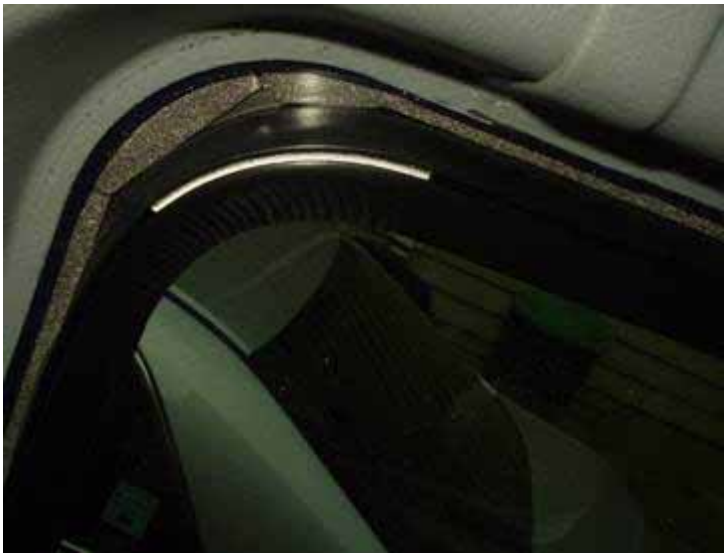
Shims are needed to vertically center the window and ensure room all-around for the compression flange. The tape's glue will hold the window for horizontal centering.



I do not know what type of shims Peninsula provides to center the window in the frame. I made shims out of hard rubber, and, by trial and error, settled on a shim height of about 3/8-inch. Note the shim is narrow so it will not impinge on the compression action of the compression frame. Once everything looks good, remove the protection film from the foam and glue the shim to the tape.

Carefully set the window into the opening. The tape will stick. But it is not strong enough (only about ½ of its width is actually against the skin of the van) to hold the window in place. Therefore to keep the window braced. I found I had to relocate the window a couple of times to get it just right.

Note how the window sets on the shim.



This is how the corners look with the window properly shimmed. The exterior aluminum frame covers the skin of the van. There are no gaps between the window and the skin of the van.

A step back: The instructions provided by Peninsula show a diagram on how to apply the compression frame. However, the diagram is incorrect, as it shows a "S"- frame with the outer flange extending away from the window to accommodate a thick wall. The "S" flange for the pinch-weld window must go under the window to reach the wall of the van.

Note that the compression frames are not the same. The one without the pre-drilled holes on one side goes on the bottom.

Using the compression frame's pre-drilled holes as a guide, start drilling pilot holes in the middle of the window with an 1/8-inch bit. Mount some screws lightly, and continue around the perimeter of the window until all the holes are drilled and screws mounted. **Be careful to drill the holes on the bottom of the window near the bottom of the frame.** The screws must go beneath the window screen's track.

Peninsula does not drill holes in on the side of the compression frame that the sliding window and screen are located. If left at this point, the frame would flop around and serve no purpose other than to snag peoples' clothes and skin. Peninsula provides no guidance. The problem is that the screws can interfere with the screen's movement into the side channel that serves double duty as the flange the compression screws mount into. <u>If the screen does not go all the way into the channel, the window cannot lock</u>. [1] Slide the screen out of the way. Drill 2 pilot holes through both flanges, aiming to keep the screw as far to the rear as possible.

Cut down two of the provided screws to about 3/8-inch. Use these trimmed screws to mount the last of the compression frame. Test the screen and the window locking mechanism. File down the screw as necessary.

With all the screws set, proceed to tighten the screws incrementally several times around the window. Do not over tighten any one screw. This would risk stripping the aluminum hole and bending either the compression or window frame. **Note** that the long stretches of straight compression frame will cinch up close to the window frame, but the corners will not.

The plastic track for the window-screen to slide over both rattles <u>and</u> squeaks when driving. Remove the plastic track, drop some construction glue into the gap, replace the track and run the screen over the track to properly set the glue.

[1] There are reports from a Sprinter RV conversion company that Peninsula Windows' latches are prone to breaking. This may be related to the inability of the glass window to slide far enough back because of the screen, and people forcing the latch to close the combined window and screen.

On the outside, trim off any foam that is visible.

Note the differences in the Sprinter's radius and Peninsula's radius. The further away from the van, the less noticeable the difference.

Interior view. Note also my E-track and extra cup holders.

Exterior view.

Creation Windows. Another supplier of replacement windows for Sprinters is Creation Windows. They specialize in the louver style (I think they refer to the style as "flipper"). (http://www.creationwindows.com/specialty/specialty.html) I have seen their windows in a Sprinter for at least the far rear 140" and the driver's side short rear. Creation Windows apparently designed their windows for the cut-out window market (cutting the panels of the cargo van). They designed the cut-out to be close to the Sprinter's stamping. But the corners have a gap when put into an OEM cut-out. That gap requires filling, as discussed below. This expected application also means the flange has a bead that must be removed if the window is to be used in an OEM cut-out. Apparently they do not intend to re-engineer their windows for the OEM replacement market. Creation Window's louver style for the Sprinter uses an unsupported upper glass panel, even for the 5+ foot side rear window of the 140". Thus, at least for the longer window, it constantly rattles when driving. The Peninsula window rides quiet. Further, Creation Window tinted windows uses excess black screening, resulting in a significant loss of viewing area – by my estimate at least ½ of the window is blacked out. However, the louver window has advantages for applications like campers. The window can be open at a campsite when raining, thus permitting air in or out without getting wet. (See last picture.)

The following picture of the red Sprinter and instructions for installing a Creation Window in an OEM cut-out come from Andy Bittenbinder. The last picture shows another van with Creation Windows in the open position.

http://autos.groups.yahoo.com/group/sprintervan/message/10267 From Andy Bittenbinder:

Basically you need to grind away a 1/8" tall, narrow lip/bead running the entire inside circumference of the mounting flange (mask off the entire inner working of window to keep out debris). The window is placed outer face down on your padded workbench. You will see how the outer glass protrudes past the flange (especially at corners and bottom edge!). Next proceed to your hardware store or building supply and purchase 1" wide 1/16" thick anodized aluminum flat bar stock. Get enough to span the entire circumference. At the auto parts store buy a spray can of self-etching primer. Paint the flange you have ground the lip from. Cut the aluminum to length to span all the straight sections of flange. Then cut corner sections to

fill between the straights. You are creating a gapless new flange that will extend out past original flange to the edge of the glass. Roughen up the anodizing and paint. When the paint has fully cured, adhere the aluminum pieces in place using lots of clamps and a strong urethane adhesive (3M 560 is one). You can finish file the outer edge flush with glass. When cured flip over window and open awning window panels. Paint the visible flange with trim black. This portion of flange is the only visible component and only when panels are swung open and you bend down and look up. Prefit the clamp ring and drill screw holes (1/8") using the clamp ring holes as a guide. Then enlarge holes in clamp ring to allow screw to fall into holes. Apply 3M double sided adhesive acrylic tape along the entire circumference, install into the Sprinter, and center the window in the opening. Secure the inside clamp ring with #10, 3/4 long black trim screws (buy locally). Stand back and admire, then open and enjoy FRESH AIR without bugs! Easy to accomplish if you have a small power grinder. That is the only tedious part. The aluminum strip can be cut with your band saw or by hand.

Open Creation Windows: from Ebay 1