Installing a Bugeye windscreen

by Mark Allen, Pleasanton CA

Early Sprite windscreens came in two varieties, this article applies to the later, and more common type, built from car number HAN5-5477 through Sprite Mk II. Replacement of the glass is much easier if the entire windscreen frame is removed from the car. When replacing the glass, plan on replacing all of the rubber glazing, seals and pads, as well as the hardware at the same time. These parts are inexpensive and it is virtually impossible to remove the glass with out ruining the rubber.

Remove the windscreen wipers. Remove the rear pillar to body attach screws. These may have nuts behind them. Note the orientation of the rubber seal between the bottom of the windscreen frame and the body.

Carefully remove the forward pillar-to-body attach screws. These are attached to captive nuts which are welded to the underside of the sheet metal. The entire windscreen assembly can now be lifted from the car.

Detach the pillar posts from the windscreen frame by removing three self-taping screws on each side. Working on a padded surface, pry one end of the rubber filler strip from the glazing rubber using a small flat screwdriver. The filler strip is on "inside side" of the windscreen, and is most likely in two pieces, one running along the bottom and the other along the other three sides.

Using a narrow putty knife or screwdriver, lift the "inside side" of the glazing rubber up enough to slide in a very sharp utility knife blade. Carefully cut the glazing rubber in half along the edge of the glass. Once half of the glazing rubber is removed, separate the rubber on the "outside side" from the glass using the putty knife. You should now be able to lift the glass from the frame.

Remove the rest of the glazing rubber and thoroughly clean the entire frame. Take this opportunity to replace the top attach studs. Treat your new glass, inside and out, with Rain-X before installation. This seems to help keep the rubber from binding.

Using a silicone lubricant (such as Tri-Flow) thoroughly wet the new glazing rubber. This is a real mess but makes the job much easier. Be sure to use a silicone lubricant and not a petroleum based product (like WD-40) which might attack the rubber.

Press the new glazing rubber into the frame. Don't worry if it's a little too long or short. Remember that the channel for the filler strip goes on the "inside side".

Now comes the fun part! Starting at one lower corner place the glass into the channel. While keeping constant pressure from the other side to hold things in place, slowly peel back the glazing rubber until it pops over the edge of the glass. This is much easier if you have an extra pair of hands to hold the glass under a little pressure. Work outward from the corner in both directions. The last place to be worked will be the opposite lower corner. Use lots of silicone lubricant, it really helps. I used only my fingers to pull back the rubber, but others have used small screwdrivers and putty knives, just be careful not to scratch the glass!

When you get to the far end, be very careful not to split the rubber where it is welded together in the corner. I am not sure that this is possible, I have never seen a Sprite without at least one corner of the rubber split! It does not appear that a split in the rubber causes a leak. Once the glazing rubber is completely in place, you can install the filler strip. Once again, lots of silicone lubricant really helps. The filler strip goes in two pieces. Carefully cut one end to the appropriate angle to match the corner. Press the pointed edge of the filler strip into the grove of the glazing rubber. Using the flat face of a straight screwdriver work the filler strip completely into the glazing rubber. If you can't get the strip to seat properly, stretch the rubber a little by pulling on the loose end and pressing down with the screwdriver. Work your way all the way around the windscreen making the appropriate mitre cuts at the two corners.

When the glazing rubber and filler piece are in place you can clean up all of the silicone lubricant with glass cleaner. Install and cut to fit a new windscreen frame to body seal. Reattach the pillar posts to the windscreen frame. Be very careful not to strip the threads in the windscreen frame.

It's time to reattach the windscreen to the car. This is much easier if you have help. Loosely attach the rear pillar post screws. Don't forget the pillar post pads. The windscreen will be leaning back because the new rubber body seal is stiff and needs to be peeled forward. Pull the rubber flap out from under the rest of the seal and pull the windscreen frame forward and down. Install the forward pillar post screws. Tighten all four screws. Reinstall the windscreen wipers.

The entire job took less than four hours and cost about \$170, including all new hardware.