

Repairing a Loose Headlight Reflector Volvo V70XC 2001 – 200? – Mark Pilant

If you find yourself in a position where the headlight adjusters do not change the aiming of your headlight, it is possible one of three clips inside the headlight assembly may have come off. This is especially true if the front end has received an impact. Although there is probably other damage to be repaired, the headlight assemble may look fine.

This is the situation I faced with our 2001 V70XC. The driver's side headlight was way out of alignment, and the adjusters did nothing to help. The other clue was when I took off the two caps covering the bulb assemblies, the reflector was floating loose inside the headlight assembly.

Figuring I had nothing to loose, and every thing to gain I decided to see if it was possible to open the assembly and repair any damage.

Before starting, I recommend reading Alan Yeo's "Replacing Headlight Assembly Volvo V70XC 2000 – 20???" to remove the headlight assembly. The only things I found to be different were:

- our car had only two push-dot fasteners on the lower edge of the nose cone,
- our car had a T-25 TORX screw inside the wheel arch, and
- only two electrical connectors needed to be released on the headlight assembly.

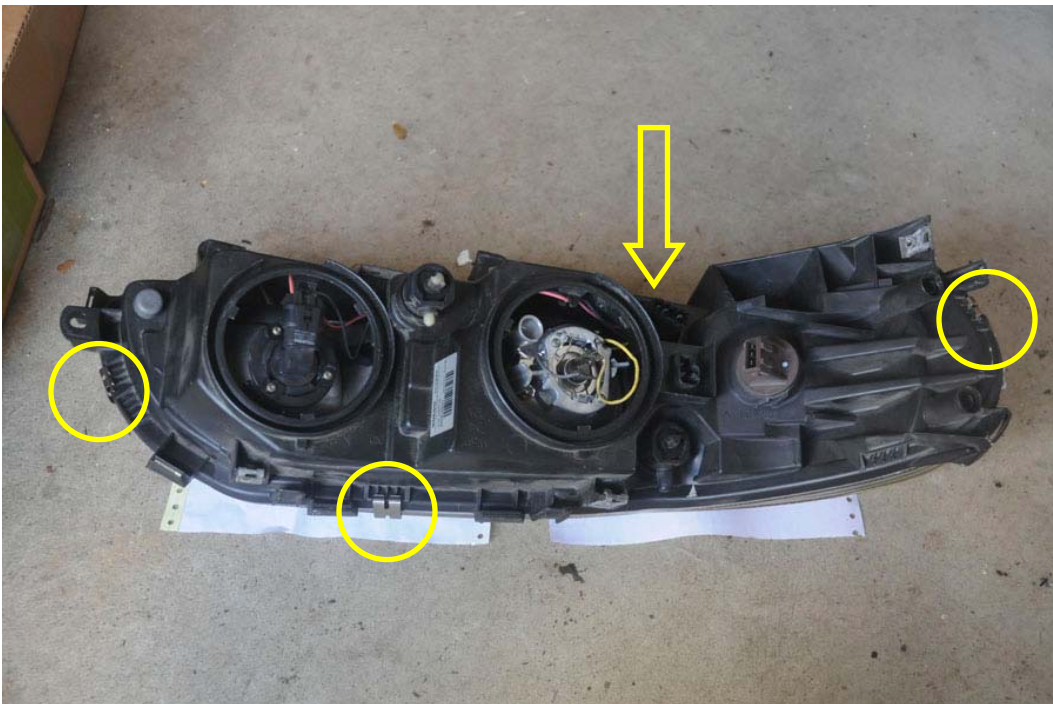
Once you have the headlight assembly out and in your hands, you will need to remove the weather seal along the upper edge. This is done by pressing down on the plastic "spring" tab in the center of each retainer to release the retainer. Below is a partial picture:



Here is what it looks like when it is removed. Oh yes, be a bit careful removing the retainers and flexing the weather seal. I broke one of the retainers. Oops...



The next step is to remove the lens from the headlight assembly. The first step is to remove the four retaining clips with a small screwdriver or needle-nose pliers. Refer to the picture below:



Once the clips have been removed, you will need to free the lens from the back of the assembly. On the assembly I had, the lens was attached with a non-hardening (waterproof) adhesive in addition to the clips. I ran a sharp knife all around the lens to start to break the seal. Then I took a gasket scraper with a 1" (25cm) blade to **CAREFULLY** and **SLOWLY** pry the lens from the back. You should use a wide bladed tool to pry so as to distribute the force and not crack the lens. In addition, you will need to work slowly to reduce any impact forces which might also crack the lens. In my case, it took me about 25 minutes to get the lens free.

You will now be able to remove the plastic insert to gain access to the reflector:



In the picture above, you can see (left to right) the lens, the plastic spacer, and the reflector and back of the assembly.

Adjustment of the reflector is done by two adjusters acting with a single pivot point. The horizontal adjuster is located between the high and low beam headlights and the parking/running light. The vertical adjuster is located at the bottom center of the high and low beam headlights. The common pivot is located at the top center of the high and low beam headlights.

Once I had everything apart, I was able to see two problems. First, the high and low beam reflector was not attached to the upper pivot. Second, the vertical adjuster was not attached to the bottom center of the reflector. I was fortunate in that there was no damage to any of the adjusters or the pivot. If you are not so fortunate, you will have to replace the headlight assembly with a new (or used) assembly.

Following are pictures of the horizontal adjuster, vertical adjuster, and the pivot:



The horizontal adjuster



The vertical adjuster



The common pivot

Once the adjusters and the pivot are back into position (see the picture above) reverse the procedure to disable the headlight assembly. Finally, reverse Alan Yeo's headlight replacement to fit the repaired headlight assembly.