

Alpine/Tiger Doors – The Inside Story by Chris Barker

From the UK through the Sunbeam Alpine Owners Club.

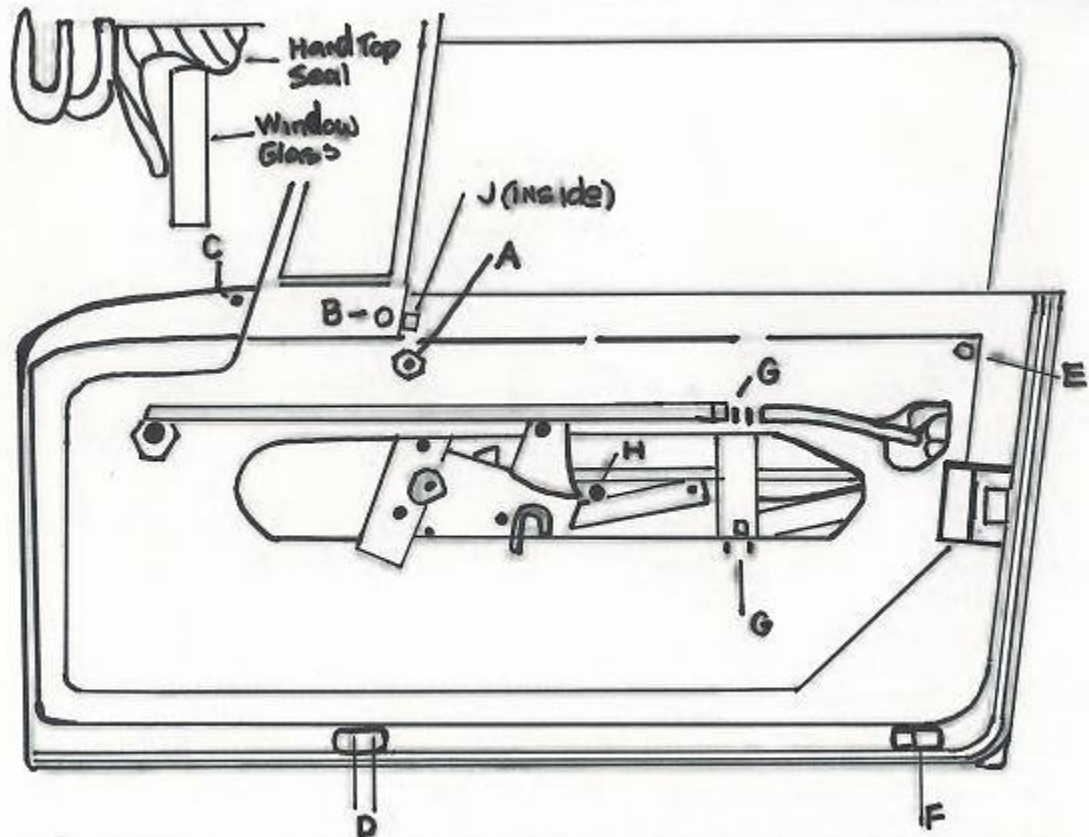
Originally printed in SAOC's Alpine Horn No35 in 1984. Later, it appeared in the Rootes Review 1/86 and then it is included in 'The Alpine Guide', first issued in 1989.

This version (February 2019) has been updated in the notes which mention suppliers.

The stylists' and customers' desires for frameless door windows on convertible cars present the automotive engineer with a number of problems and life is made more difficult when the winding window has to fit both a hardtop and a well-engineered soft-top frame. Fortunately, as with many aspects of its design, Rootes did a thorough job in designing the Alpine/Tiger doors so that they can be set up to work well and to minimize draughts and wind noise. This article attempts to explain how to do this.

Window winders are one of the Alpine's/Tiger's known weak points but I think that most failures result from overloading caused by maladjustment or lack of lubrication; are yours stiff to turn?

It's worth mentioning that suppliers can supply reconditioned winders or kits of bits. Incidentally, the Rootes Alpine workshop manuals never mention these adjustments and the SV manual still has SI/II pictures and words for removing and replacing the winding window! Included here is a sketch that will, I hope, help you understand the words. I have drawn a SV (of course!) but SIII and IV are very similar and some of the adjustments also apply to SI and II.



Alpine SV R.H. Door with Window 2/3 raised

Before touching the door's insides you should adjust the lock striker (on the rear wing front edge) and the hinge positions as necessary so that the door fits the body and closes easily. Unfortunately, there is no adjustment to compensate for worn hinges. The striker will lift the back of the door a little and shimming out the lower hinge might help but that will push the door back as well as up. Drifting out and re-pinning the hinges is the only long-term answer. Removal of the hinges usually requires an impact driver but sometimes a LARGE Pozidriv screwdriver and Mole grips (Vise Grips) are enough.

If you have a hardtop, fit it. If not, raise the hood (top). To get at the door innards you will, of course, have to remove the trim panel. Now, where do we start?

The first job is to set the top of the glass parallel to the hardtop edge rubber seal. Slackening the four screws "G" allows the rear of the winder to be raised or lowered, thus tilting the glass.

The next step is trickier. First a bit of explanation, the quarter light locates on the lower front window channel but it is fixed by a screw "B" (don't lose the spacer behind the chrome if it's a GT) and by the upper and outer screws at "C". Remove these and you can pull the whole thing up and out but for adjustment, just slacken them.

The lower front channel is fixed by a screw "A" second screw "J" above and outboard of "A" inside the door on the other side of the channel and by two screws "D" at the bottom.

To undo "J" you need a 5/16 AF open ended or flat ring spanner. Screws "D" and "F" need a 5/16 AF socket, box spanner or cranked ring spanner. If all else fails drill out "D" or "P" with a 5/32" drill and replace with Pozidriv-headed self tappers. If "J" is stuck you won't be able to remove the channel but adjustment should be possible.

Slacking "A" and "J" allows the top of the lower channel to move fore/aft to locate with the quarter light. The main adjustment is at the bottom of the channel; loosening screws "D" allows it to be moved fore/aft and in and out, and the quarter light and channel tilt accordingly.

The fore/aft is easy. Just set the channel so that the quarter light fits snugly against the screen pillar seal. Here's a word of caution if you have hard and soft tops. My hood pulls the screen back a little so don't make it too tight with the steel roof.

The in/out setting should be such that when winding up the window, with the door closed, the glass just, BUT only just goes outside the "flip" of the seal-see scrap view (detail view) on the picture and Note 1 below.

When all is well, tighten screws A, B, C, D and J. O.K. so far? Good.

Now slacken screws "E" and "F". This will allow the rear channel to move fore/aft at the top and both fore/aft and in-and-out at the bottom. Set it so that the window winds easily and has about 1/8" fore/aft freedom. I have

found that a silicone rubber lubricant spray helps the glass slide easily. The winder channel on the bottom of the glass should be greased.

The upper limit for winding the window is set by adjusting the stop in the winder channel (screw "H", accessible with the window about 2/3 up). The idea is that the glass should be as high as possible while just brushing over the outer ridge of the hardtop seal when the door is shut with the window up-see scrap view. That's just about it. If you have hard and soft tops, raise the hood and see how things fit. There is inevitably more noise with the hood, that's why I suggested setting up with the hardtop, but you might wish to make some compromises.

To finish, a few miscellaneous points which may be helpful and which I hope will make this the definitive article on Alpine/Tiger doors:

- 1.The rear edge of the winding window can be moved out if necessary by putting a washer between the top of the channel and the door inner skin at screw "E". Don't overdo it or the winder will be overloaded by friction with the outer waist seal and your glass will get (more) scratched.
- 2.The outer waist seal is almost 800mm (31.5") long. Several suppliers sell this type of seal, but you need one with a slim visible section. The seal has to be cut (shaped) to fit around the S3-V quarterlight rear pillar. It fits into special clips with 2 barbed legs which are inserted down into slots in the door. A third barbed leg comes up to grip the seal. These clips (2212159) are now once again available. .
- 3.The trim/seal section which runs down the seam of the S3-V screen frame and then down the body is readily available. The same section covers the seam at the inner edge of the hardtop.
- 4.Alpines (and Tigers) DO NOT have seals under the edge of aluminium trims at the top of the sills. There should just be a black finished clip-on trim. A seal here will distort the door, pushing out the lower edge.
- 5.There is a seal which clips into C channels along the inside of the bottom and rear edge of each door. It's a standard section.
- 6.There is a further seal up the rear of the body aperture. This has plastic clip-on trim with a flat rubber seal.
- 7.The seals which screw to the screen trim and seal to the quarterlight and the forward top edge of the door have metal strip cores. Specialists sell them. The seals along the top outer edges of the hardtop are similar. These seals are no good for SI-II A pillars but Paul Beck Vintage Supplies www.vintagecarparts.co.uk can sell you SR25 which is good if carefully glued in place. I think it's a standard section available elsewhere too.
- 8.If you have to weld new metal onto the bottom of your doors make sure that the oval access holes for screws "D" and "F" are not filled up! If in the process you lose the channel which holds the door seal it can be replaced with a piece of suitable bright trim. I have also seen mild steel channel in at least one UK supplier's catalogue.
- 9.The winding glass rear channel filler can be replaced by felt strip 1 3/8" by 1/8". The length is 16". Fillers can be found for the other channels which are 1/2" wide.
- 10.The channels which grip the lower edge of each door glass can corrode and weaken. There are 3 types across the Series (I-II, 3-IV,V) and the winder rollers are different too. Also, they have to be fitted to the glass at the correct F/A position or the 'up' stop will not adjust correctly. If you have to fit a channel to a glass, use clamps and wood. DON'T hit anything.
- 11.You should also have a 'down' stop. If missing, you may wind the pinion off the quadrant
- 12.Making new Tourer door trims is very easy; use 1/4" foam between the vinyl and the hardboard. GT door cards are a very different proposition as they have pressed steel pieces which extend the hardboard around the edges, and the vinyl has a welded pattern below the winding glass. The pattern can be reproduced with a double needle in a sewing machine with a layer of thin foam and a backing behind.

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