

## Lotus Elise Series 2 & Vauxhall VX220 (E021, E022 & 0066) Fitting Instructions

### Important Note

To install this roll cage it is necessary to modify various parts of the composite components including changing the rear window for a Lexan version. This rear window is not supplied with the kit but 3.5 – 5mm Lexan is recommended.

Please read these instructions all the way through before starting, since the order of work is important.

1. Unwrap the bar and check the fitting kit.
2. Remove from the car:-
  - A. The rear window
  - B. The rear hoop fibreglass trim (cut as shown in red - Figure 1)
  - C. The interior trim panel covering existing roll bar.
  - D. The front seats.
  - E. The door striker plates and retain. Roll back rubber trim and cut the fibreglass panel as shown in figure 2
  - F. The existing roll bar and rear nut plates from sill. Retain nut plate for use with new roll bar.
  - G. The seat belts and 'B' post trim, if necessary to enable the rear cage to pass between the 'B' posts.

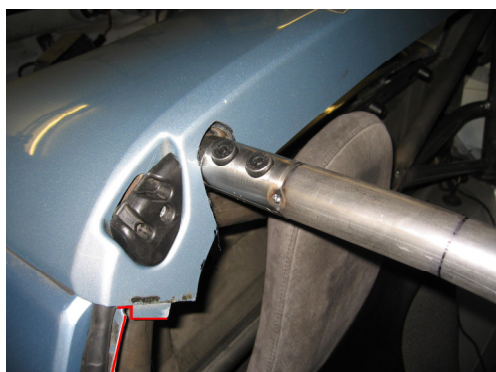


Figure 1



Figure 2

3. Cut the front sill fibreglass trim (as shown in Figure 3 and Drawing 4). Drop the sill plates into position but do not drill.

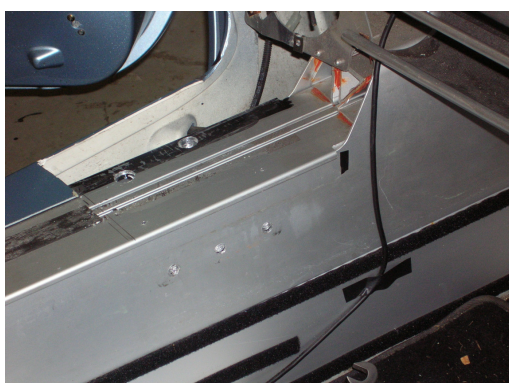


Figure 3



Figure 5

4. Stand the rear cage on its four feet beside the car, with its main hoop towards the front of the car and the backstays towards the rear.
5. With an assistant, if necessary, place the bar inside the car so that it sits inside in a similar manner, i.e. on its four feet. At this time check the fit of the Lexan rear window supplied with the fitting kit and fettle as necessary to give the backstays clearance. Do not glue into place.

6. If a front cage is also to be fitted, this must be done before proceeding further. Run an M10 tap through the Lap Joint to ensure the thread is clear of powder coat and lubricate with copper grease. Assemble the front cage to the main hoop **fully tightening the Lap Joint to 45Nm** (shown in figure 5). The rear cage may need tilting slightly to allow this.

Due to the production tolerances on body shells it is essential to ensure that the rear cage is correctly positioned. If all is well, align the cage and mark the position of the rear hoop footplate holes, shown in figure 6



Figure 6

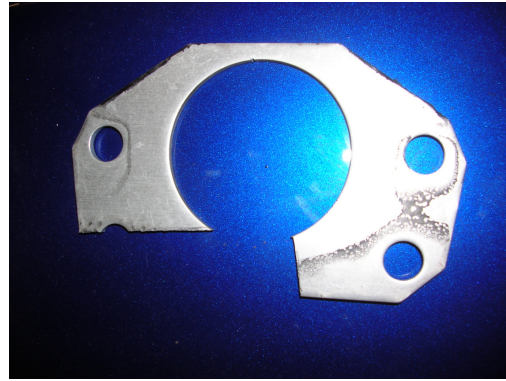


Figure 8

7. Disassemble the roll cage and remove from the vehicle.

8. Compare the marked position of the rear footplate holes with those stated in drawing 7. Using the standard shim as a guide, drill the new holes as suitable.

9. Modify the original equipment shim plates as shown in figure 8.

10. Position the standard nut plates at their new location and bolt until flush with underside of sill. Drill and rivet the nut plates to fix in their new position as shown in figure 6.

11. Position the front sill plates as required. Re position rear cage and bolt loosely in position. Drill clearance holes in the sill for the captive nuts on the underside of the sill plate. Bolt front cage to sill plate, ensuring sill plate is sitting flush. Assemble front cage, again **fully tightening Lap Joint to 45Nm**. Tighten all rear cage bolts. Compare the position of the front leg to drawing no 4.

12. Unbolt front cage and drill sill plate as suitable. Bolt sill plate into position using the spacer plates supplied.

13. Remove the cage from the car and fully fasten all the reinforcing plates to the vehicle. Any cleaning up and painting can now be done.

14. The cage may now be installed in the vehicle. Loosely assemble it in the car. Fully tighten the bifurcated joint then evenly bolt the feet to the car. Do not over tighten.

15. Finally, replace all the components that you removed at the start, modifying trim as required and using the replacement window. Replace the fibreglass sections using Sikaflex glue or similar product.

**DO NOT DRILL HOLES IN THE CAGE.**

#### **NOTICE TO PURCHASERS**

***Safety Devices 'Rollover Bar' assemblies are a homologated design structure, therefore any alteration to the assembly by: welding, repositioning, removal or addition of fittings, drilling or enlarging of holes etc., incorrect fitment to vehicle, or use of assembly other than its design purpose, releases the producer from any and all responsibility in the event of performance failure of these goods. Remember: A 'Rollover Bar' is no substitute for careful and considered driving.***