The Elan Factory - Information Sheet

Elan +2 internal sill replacement procedure

These instructions should to be read in conjunction with the official Lotus workshop manual.

- Position car on level work area and apply handbrake.
- Remove both front seats.
- Remove rear seat trim around door opening.
- Remove lower front seat belt fixing points.
- Release the carpet along the entire length of the sill area.
- Lift the car carefully by jacking on suitable points on the chassis.
- Support the car just ahead of the rear wheel and just behind the front wheel.
- The car should be supported by axel stands with a large timber on top to distribute the weight across the floor area and back to the chassis.
- Remove the front and rear road wheels.
- From the forward face of the rear wheel-arch and the rear face of the front wheel-arch, remove the dust shield concealing the end of the reinforcing member.
- Unbolt front suspension top ball joint and lower trunnion from the wishbones.
- From inside the car, remove the four setscrews securing each of the three backing plates.
- From outside the car, remove all the 11 setscrews, washers and nyloc nuts that run along the lower edge of the body sill.

NOTE:
These setscrews are normally rusted solid so it is usually quicker to drill through the heads to release them. ***Please centre punch the heads before drilling to avoid damaging the paintwork.***
The approximate length of the sill area is 1770mm. The spacing for the setscrews is as follows. First hole from either end is approximately 60mm in from the wheel arch aperture. The rest of the holes are spaced equally at every 165mm. The hole to floor alignment should be 15mm down the vertical face. This will ensure the screws emerge inside the car just above the floor level. Also note the floor pan is not completely flat and once the setscrews are installed, appear to follow a slight arc. This is normal.

- Protect the front hub assembly and the leading edge of the front wheel-arch from damage when the sill member is pulled forward.
- Now slide each reinforcing member forward and out of the body opening.
- Thoroughly clean any remaining metal and rust debris out of the sill area. A vacuum cleaner is recommended for this as the hose can be pushed up inside the bodywork.
- Insert new reinforcing member back into front wheel-arch opening.
- Position new reinforcing member so setscrew holes are in alignment.
- From inside the car, insert setscrews so as to locate the three backing plates but *do not tighten.*
- From outside the car, position the lower edge of the reinforcing member so it is flush with the floor pan.

NOTE. Care must be taken to realign the body with the new reinforcing member. Because the body has not been supported along the entire length of the sill, the floor pan/sill may have sagged slightly in the middle. This must be corrected by gently applying an upward force with a jack and large timber placed under the lowest point. Check and make gradual adjustments until the floor pan/sill is in alignment with the bottom edge of the reinforcing member.

- At this point it is recommended that a waterproof sealant be introduced between the reinforcing member and the fibreglass body sections.
- The setscrews locating the three backing plates may now be tightened.
- Now check how each door opens and closes as further adjustment to the sill position maybe necessary.
- From outside the car, re-drill the 11 holes along the lower sill section and install new setscrews.
- Re-install dust shields inside front and rear wheel-arches.
- Apply a liberal coating of waterproof sealant around the dust shields and along the sill/floor pan joint.
- Re-commissioning the car is now the reversal of the removal procedure.