



CLUB LOTUS ELAN SECTION



The Elan Super Safety

In North America during the mid-1960s an explosion in safety issues surrounding automobiles, led by Ralph Nader, introduced a raft of regulations for all car manufactures. Imported cars therefore had to abide by these new rules if they were to continue to trade in the US. This led to the introduction of the Elan Super Safety, a stop gap car between the Series 3 and the soon to be introduced Series 4. It was sold mostly in the Federal markets of North America, but some were also sold into the Domestic UK market (and perhaps into other territories), whilst others were a mixture of all three!

It is very tricky to be definitive about the Super Safety. We know some cars were produced that had just one or two of its features, some had all, others a handful. Clearly this makes it almost impossible to be absolute about the car, particularly with regards to dates and numbers made. As we have to with all Lotus history, it is therefore necessary to allow some leeway in the following article. We know there are all kinds of anomalies when it comes to our cars. The Super Safety is very much a case in point.

Let us start with what Lotus themselves indicate, by way of the Elan Parts List. They say that the Elan Super Safety was introduced at Unit No. 7400 (invoice date November 1967) and ran for 495 cars until Unit No. 7895 (invoice date June 1968). However, our records have the first as Unit No. 7279 (invoice

date July 1967) and the last at Unit No. 8221 (invoice date October 1968). We know that not all cars between these dates or Unit numbers were Super Safety; some were regular S3 or S4 Elans. We begin to see the waters getting muddier!

Let us look at what else was happening at Lotus at this time, as far as the Elan was concerned. Notably, bonnets with bulges for Stromberg carburettors appeared and the S4 was introduced. It is perhaps helpful to do this by following a timeline:

Jun 67 – First Super Safety invoiced by date, Unit No. 7319, per our records

Jul 67 – First Super Safety invoiced by Unit No. 7279, per our records

Oct 67 – First bonnet bulge fitted by date, Unit No. 7380, per our records

Nov 67 – First Super Safety produced, Unit 7400, per Lotus Parts List

1 Jan 68 - Federal safety and pollution standards came into effect in the US market

Mar 68 – Series 4 Elan Introduced. Bonnet with power bulge introduced from unit 7895. Source Lotus Parts List

Jun 68 – Elan Super Safety production ends at Unit No. 7894. We know some Super Safety cars have later unit numbers. Source Lotus Parts List

Jun 68 – First G type Federal Stromberg equipped engine invoiced, per our records

Oct 68 – Final Super Safety invoiced, Unit No. 8221, per our records

Oct 68 (see below, likely Oct 67) – Denis Austin, Lotus buyer, becomes aware Zenith-Stromberg carbs are cheaper than Webers; he tells Chapman who orders Steve Sanville to start using Strombergs as soon as he can re-develop the head. Source Wilkins

Nov 68 – Mar 69 (see below, likely Nov 67 – Mar 68) - Graham Atkins redesigned the head to accept Strombergs and Solex, the manufacturers, carried out the development of specialised needles, temperature compensators and settings that make the Lotus supplied 175CDS carburettor unique to the Twin Cam. At the same time the revised bonnet was redesigned to clear the dashpot tops of the Strombergs and moulds made up. Source Wilkins

Dec 68 – First K type Domestic Standard Stromberg equipped engine invoiced, per our records

Jan 69 - First L type Domestic SE Stromberg equipped engine invoiced, per our records and Lotus Parts List

It is our belief that Miles Wilkins' dates above are, for whatever reason, out by one year. It would make more sense if Graham Atkins had been designing the Stromberg head from Nov 67 to Mar 68, as that would fit the known introduction dates from the Lotus Parts List and our own records of invoice dates. Thus it would follow that the decision to fit Strombergs would have been made around mid-1967, which would allow time for the making of a new mould to incorporate a power bulge and their subsequent appearance on the Elan Super Safety. We would be happy to hear from anyone who can verify or repudiate this, in the interests of historical accuracy.

The Super Safety had several distinguishing features. As we have stated, not all these features were applied and some were introduced as the cars and equipment became available. Turning first to the exterior, these are the features that predominate:

Two Super Safety badges were placed on the flank of each front wing

Reflectors were located at all four corners of the car, resting on matching rubber plinths. The rear reflectors were red and placed just above the end of the rear bumper/fender, the same position as the later S4 side reflector lights were placed. The front reflectors were amber and they too were placed just above the end of the front bumper/fender, whereas the later S4 side reflector lights were positioned in a recess in the end of the front bumper/fender. (These were only fitted to Federal Elans).



Bolt-on wheels, reflectors, power bulge and SS badging reflected on this original Federal Elan

Federal Elans were usually Special Equipment versions. These would come equipped with knock-on wheels. However, the earliest Super Safety cars came fitted with bolt on wheels and hubs. Later versions fitted with knock-ons came equipped with a revised three eared spinner, where the usual out turned ears were reversed inwards. This made them harder to remove without whacking the steel wheel at the same time!



The Federal knock-on wheel spinner showing the inward turned ears

The Federal headlamp assembly was introduced along with sealed beam headlight units. The windscreen was altered slightly (at least, it has a different part number) and carried forward to the S4 and Sprint.

Inside the engine compartment a Super Safety exclusive was the squared-off electric windscreen washer bottle, alongside exclusive wiper motor, arms and blades.

The engines were equipped with Weber carburettors; however, as we have seen above, many Super Safety Elans came with the power bulge bonnet/hood. A different ignition coil was fitted and part of the wiring loom was also changed.

A key introduction was the change to a dual circuit braking system, including a revised Girling master cylinder with Sovy device. Since the body was still a S3 there was inadequate clearance for the dual master cylinder, so a small hole had to be cut into the inner wing. Later Elans used a differential pressure switch between the front and rear brake circuits to detect any failure. This was not fitted to the Super Safety. Instead a small micro switch was mounted to the floor in the engine bay, directly under the brake pedal. Thus should the brakes fail, the pedal went to the floor, hit the switch and lit the brake fail lamp on the dash. Some may think this too little, too late!

Meanwhile, on the inside of the car the seats were particular to the Super Safety in the Federal market, though they subsequently continued in other markets, retaining a low back, with the centres in the perforated material, as used in the S4 and Sprint. In addition, the seats were no longer able to tip forward. The high back Federal seats were introduced with the S4. Also introduced for the Super Safety was a fixed seat belt.

The door interior handles, though similar to the normal S3, were shortened and the handle hung down from the recessed centre of the door panel. As a result the door trim panel, window frame and assembly were particular to the SS. In addition, the chrome door pulls, which were part of the window frame on

the S3, were replaced with pivoting plastic pulls, from the BMC parts bin and found on the Mini and MGB.



The SS door panel with suspended handle and revised door pull

The dashboard surround had additional padding incorporated and, for some reason, the left hand sun visor was changed for the Super Safety. The dashboard itself was also changed to incorporate rocker switches instead of the previous toggle type, a glove box pull tag was fitted and the gauges were all counter-sunk, so that their rims became flush with the dash itself. On a few examples of the Super Safety the white lettering indicating switch use was red. These are rare and presumably illegible in the dark! The courtesy light was changed as were the heater and choke control cables to reflect the relocation of their control knobs to where the two bonnet releases had been; their control knobs were also of a slightly flatter and larger design. In turn, the bonnet release knob was located via a steel bracket that hung below the dashboard, under the revised warning lights cluster. They now included a parking brake light and a brake fail light, the small push button test switch for which was included on the steel bracket. It was at this time that FHC coupe versions of the Elan Super Safety were offered with a heated rear window, complete with a switch in the drivers under dash finishing panel and a light. We have heard that these early heated rear windows had vertical heating elements that were later changed to the usual horizontal ones. Whilst we are aware that this is a particularly nerd-like observation, we would be grateful for confirmation or otherwise! [*Afternote: At least one owner confirmed his car had these vertical elements fitted.*]

There was reference made in early press releases to there being a bladder in the fuel tank. There is nothing outwardly apparent on the fuel tank to make it appear to have a cell inside, however, neither have we heard of reports from owners finding them during restoration. We have therefore concluded that these were never fitted.

Whilst the majority of Elan Super Safety cars were delivered to the Federal market, we do know that a number were sold into the domestic UK market, clearly in RHD. Those we have seen are S3 Elans, have no Super Safety badging and usually have only some of the features outlined above. It is conceivable these were converted from unsold stock, but more likely that the factory used up items as cars progressed down the production line.

Finally, the owner's manual came with a Super Safety supplement. To wrap this up, the 'Super Safety' was a top selling brand of condom in the US at the time the Elan Super Safety was launched there!

Contact Us

Tim Wilkes and Mark Kempson can be contacted via email at elansection@clublotus.co.uk or via Club HQ by post or on 07720 288100