The Type 26, 36 & 45 Lotus Elan – An Introduction

As Colin Chapman and Lotus became more successful on the race track, he realised he needed a complimentary business in series production cars. The Lotus IX was the first car to be bought by enthusiast drivers in meaningful numbers. The Type 14 Elite was then introduced in 1958 as Chapman's first foray into a closed car designed for the road, though it too found its way rapidly onto the track following first deliveries. Unfortunately the car failed to make money for Lotus and in the early 1960s Chapman sought to introduce a car that would help establish him as a serious manufacturer. The M2 design project under Ron Hickman became the Type 26 Elan and was introduced to an appreciative public at the 1962 Earls Court Motor Show.

The Elan at its inception was primarily about the chassis design and the engine. Both were to influence other Lotus cars on and off the track for over ten years.

Elan 1600: The first Elan series was the 1600, though it is now more commonly referred to as the S1. Some reckon this to be the purist form of the Elan, lacking as it does the side window frames and slightly chunkier body of the later Series 3 and 4 versions. Units A, B & C were the M2 prototype cars. Unit 0001 was registered 997 NUR and given to Jim Clark; it is the red car he is sitting on the bonnet of in the iconic Lotus advert of the time. Unit 0002, registered NPN 169, was the first Elan sold to a member of the public, Mr Richard Foster. He may have been the brother of the managing director of

a well-known Lotus dealer. Unit 0003 was given the registration 766 BOO and sold to Ian Scott-Watson after it had done duty as the Motor Show car on the Lotus stand. It was also used by Jim Clark. Eight of the first ten cars were fitted with 1498cc engines; these were all swapped out for the production 105 bhp 1558cc twin cam soon after they were sold, unit 0006 being the first Elan fitted with the 1600 on the production line. Lotus moulded their own bodies for these very first Elans, before they contracted Bourne of Nottingham to make Elan bodies, from unit 0008. That contract was terminated by the time unit 3400 was built.

From unit 0039 a production hard top became available from the factory. After unit 0048 a curious thing happened. 3000 numbers were added to the production numbers without that number of cars ever having been built. Thus what should have been unit 0049 became 3049. There is some speculation surrounding why this was done by Lotus! Furthermore, there is no record of when the first digit 3 was used by the production line when they scribed the VIN onto the identification plate in the engine compartment. The office appeared to be using the first digit 3 straight away. By unit 3200 in autumn 1963 Elans were being exported to Europe and North America. There is no way of identifying which of these early cars went where other than by reference to the dealer, importer or first owner name recorded in the sales order book. As most enthusiasts will appreciate, in the early days of Lotus record keeping was not a key priority!

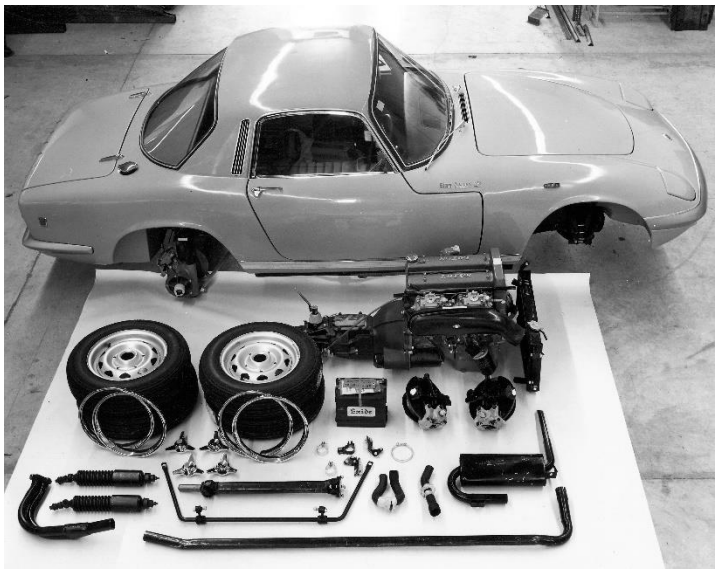
A number of minor changes were made to various items as production progressed until the summer of 1964, when it was decided that a Series 2 should be introduced. According to Lotus 899 Elan 1600s were made. At the time of manufacture any regard to historical information which may be required in years to come was just not considered. Therefore it is almost impossible to be precise about change overs and introduction of changes for all Elans.

Elan S1 ½: Before the Series 2 Elan was officially unveiled to the public in November 1964, a small number of what have become known as S1 ½ Elans appeared. These cars incorporated some, but not all, of the later S2 changes. Just to further confuse matters, some of the official S2 cars were occasionally fitted with some of the old S1 specification parts. This reflects another occurring theme throughout Elan production, that habit of the factory to fit superseded parts to production cars in order that the parts bin was all used up.

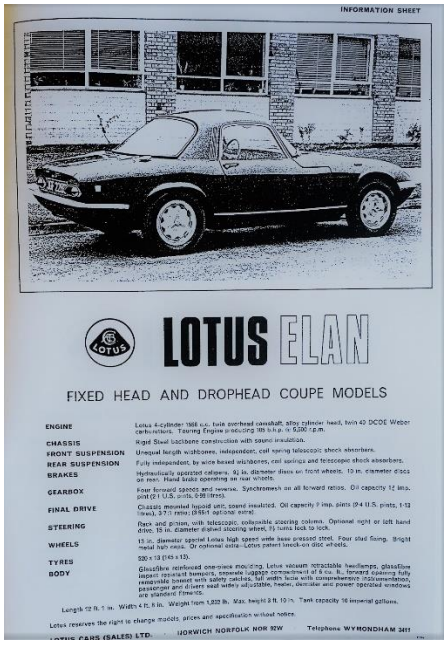
Elan 26R: Colin Chapman apparently indicated that the Elan was never intended to go near a race track. But new owners thought otherwise and many private racing teams saw the potential of the Elan as a race tool during 1963, notably Ian Walker. Chapman bowed to the inevitable and sanctioned the 26R. These cars had many significant differences to the road cars and were in fact produced by Lotus

Components on a separate line. Team Lotus only raced the 26R twice during 1965, in the hands of Ray Parsons, at Goodwood in April and Brands Hatch in August. Instead they heavily supported Ian Walker's 'Gold Bug' Elan team, which had greatly contributed to the development of the 26R in the first place. The production of 26Rs spanned S1 and S2 cars, being produced between 1964 and 1966. The total number built has been hotly debated over the years and we are aware there was some duplication by the factory. Current research indicates that 101 26Rs were made by Lotus Components. Unit numbers were recorded as 26-R-# and 26-S2-# for the two Series.

Elan S2: For those of us of a certain age, our first introduction to the Elan was watching Emma Peel of the Avengers TV series. She actually used two cars, a white S2 and a metallic blue S3. The S2 added some refinements, such as a lid for the glovebox and established the car as a commercial success. It cemented the favourable reviews the Elan received in the motoring press worldwide and helped Lotus profits rise, as Chapman had hoped. The Type number 36 was announced at the London Motor Show in October 1965. Unit 4915 was the first production Elan to be given this prefix with the introduction of the Coupe version. These early cars of what became known as Fixed Head Coupes (FHC) are distinguished by the lack of air grills on the pillar behind each window; they are referred to as Pre-Airflow cars and for some enthusiasts are the purest form of the Elan. In late 1965 the factory developed a 115 bhp engine for the Elan, giving it an increase in power, servo assisted brakes and a close ratio gearbox, calling this version the SE (Special Equipment), and available at extra cost. At the same time all Elans now came fully carpeted, thus adding appeal to a new target audience of professionals, as well as enthusiast owners. 1,911 S2 cars of all varieties were produced at Cheshunt.



Elan S3: In June 1966 Lotus Sales Director Graham Arnold got what he wanted with the introduction of the S3. The car gained further refinements, including such luxuries as electric windows, which required window frames to be fitted to the doors, revised bodywork, full width teak finished dashboards and other changes. At the same time the Type 45 Elan made its debut. It was the Drop Head Coupe (DHC) version of the S3. Elans always had black interiors, though a small number, probably no more than 30 S3s, were fitted with red interiors; now very rare, of course. Speak to the men at the factory building and testing Elans at this time and they tend to agree that the S3 was the best of all versions of the Elan. It certainly sold very well for Lotus and, by the time production ended in May 1968, 2,084 cars had been built.



INFORMATION SHEET

LOTUS ELAN

FIXED HEAD AND DROPHEAD COUPE MODELS

ENGINE	Lotus 4-cylinder 1558 c.c. twin overhead camshaft, alloy cylinder head, twin 40 DCOE Weber carburetters. Tuning Engine producing 105 b.h.p. @ 6,250 r.p.m.
CHASSIS	Rigid Steel backbone construction with sound insulation.
FRONT SUSPENSION	Unequal length wishbones, independent, coil spring telescopic shock absorbers.
REAR SUSPENSION	Fully independent, by wide based wishbones, coil springs and telescopic shock absorbers.
BRAKES	Hydraulically operated calipers, 9¾ in. diameter discs on front wheels. 10 in. diameter discs on rear. Hand brake operating on rear wheels.
GEARBOX	Four forward speeds and reverse. Synchromesh on all forward ratios. Oil capacity 1¼ imp. pint (2.1 U.S. pints, 0.99 litres).
FINAL DRIVE	Chassis mounted hypoid unit, sound insulated. Oil capacity 2 imp. pints (2.4 U.S. pints, 1.13 litres). 3.77:1 ratio; (3.55:1 optional extra).
STEERING	Rack and pinion, with telescopic, collapsible steering column. Optional right or left hand drive. 15 in. diameter plaited steering wheel, 2½ turns lock to lock.
WHEELS	13 in. diameter special Lotus high speed wire base pressed steel. Four stud fixing. Bright metal hub caps. Or optional extra—Lotus patent knock-on disc wheels.
TYRES	520 × 13 (145 × 13).
BODY	Glassfibre reinforced one-piece moulding. Lotus vacuum retractable headlamps, glassfibre impact resistant bumpers, separate luggage compartment of 6 cu. ft., forward opening fully removable bonnet with safety catches, full width fascia with comprehensive instrumentation, passenger and drivers seat widely adjustable, heater, demister and power operated windows are standard fitments.

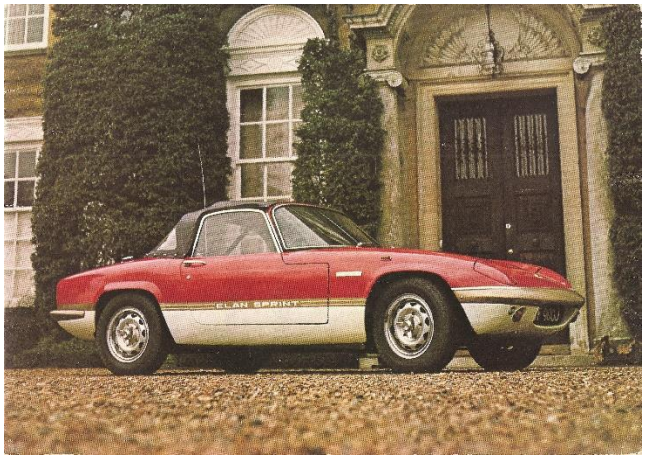
Length 12 ft. 1 in. Width 4 ft. 8 in. Weight from 1,832 lb. Max. height 3 ft. 10½ in. Tank capacity 10 imperial gallons.

Lotus reserves the right to change models, prices and specification without notice.

LOTUS CARS (SALES) LTD. HORSHAM NORFOLK NOR 92W Telephone WYMONDHAM 3411

Elan SS: By the middle of 1967 the motor industry, particularly in North America, was coming under attack from safety campaigners such as Ralph Nader. Safety features had to be built into new cars and this preceded an upgrade to Elans. However, as an interim measure Lotus produced the SS (Super Safety) version of the S3, principally for the North American market, though some SS Elans were sold in the UK. They had flush fitting instruments, were fitted with the later style rocker switches, with red as opposed to the later white lettering, and had collapsible steering columns and inward facing wheel spinners, as well as several other features. Some cars had all of these items, others just a few, in typical Lotus fashion! Unit 7400 was the first SS Elan and they were phased out after the introduction of the S4; some 350 to 450 having been produced.

Elan S4: The S4 was introduced to refresh the Elan design and incorporated a slightly different body, with wider and squarer wheel arches to accommodate marginally larger wheels and by now universal radial tyres. The dashboard was changed to incorporate flush fitting rocker switches and several other improvements made. The Federal Elans got seats incorporating a vestigial head support. These changes were introduced as a result of safety legislation and by way of keeping the Elan at the front of sports car sales. The new series hit dealer forecourts in late 1968, unit 7895 being the first S4. Around this time Steve Sanville, Lotus engineer and his team worked up a SE twin cam engine to produce 124 bhp, by use of a D-type camshaft (based on that used in the Climax Stage III FWE engines), higher compression ratio and changed jetting and chokes to the Webers. This rare engine did find its way into some production Elans, for which the H prefix to the engine number was used. In early 1969 Stromberg carburettors replaced Webers, which necessitated a new cylinder head incorporating a different intake manifold and a bulge built into the bonnet to clear the dashpots. Why the change? Apparently purely for cost reasons. However it proved to be fortuitous as Federal cars had to comply with anti-smog control measures; Strombergs were thence fitted to all Federal Elans for the rest of production, though domestic cars returned to Webers in 1970. In all 2,778 S4 Elans were made.



Elan Sprint: By 1970 the Elan was becoming jaded compared to some of its rivals, at least in the eyes of contemporary road testers. Graham Arnold realised something had to be done to maintain sales. Tony Rudd, newly arrived at Hethel, breathed some of his BRM magic on the twin cam to produce the 125 bhp Big Valve version. This was to be fitted into what would be known as the Elan Sprint. Announced at the 1970 Motor Show, the Sprint did not go on sale until March 1971. To add to its zest, Arnold devised a colour scheme to reflect the Team Lotus sponsor John Player Gold Leaf brand. Red over white with gold side decals remains a popular Sprint colour combination. The road testers loved

the extra power available and the cars received excellent reports in the press. 79 S4 Elans, sitting at Hethel awaiting dealer orders, were refreshed at the factory to Sprint specification and are now referred to as S4/Sprints. During May 1972 Webers were replaced by the capable Dell'Orto carburettors and, towards the end of its production run, a small number, perhaps as many as ten, Sprints were fitted with the new 5 speed gearbox by the service garage at Hethel; these are known as Sprint/5. In all 1,409 Sprints were produced by the time the last one rolled off the production line on 6 March 1973.

Through my research a total of 9,081 Type 26, 36 & 45 Elans were built between 1963 and 1973. That is an average of 77 cars per month. Perhaps as much as 40% of this production is estimated to still exist, in various states of completion! This has been a swift look at the Elan over its production life. A large amount of detail has been excluded and no mention has been made of some of the intriguing specials built, such as the Shapecraft Elan, the unofficial works rally car and the Sprint Estate, commonly known as the Elanbulance. More particularly, we have not touched on the superb dynamic driving qualities of these cars, carried over in their make-up from the earlier wonderful cars of Chapman and Lotus.

The Type 50 Lotus Elan – An Introduction

Let us now turn our attention to the larger Elan built by Lotus, which reflected the growing Chapman family, the wish for Lotus to appeal to the family driver and to move the brand up-market: the +2 Elan.

The Type 50 +2 Elan was a reasonably logical extension of the Type 26 Elan concept. It built upon Ron Hickman's inspired design and his was again the creativity and genius that got the larger car into production, matching Colin Chapman's desire for a sporting family-friendly Lotus car. The design project M20 got underway in June 1963, even as the earliest Elans were being put together. However, due to various factors, not least of which was Chapman's frequent absences from Cheshunt as he bestrode the Formula One and Indianapolis stages, it was not until June 1967 that the +2 was introduced. Having moved to Hethel in late November 1966, all production +2s were made there.

Elan +2: The +2 was longer and wider than the Elan, though in most other respects it was a grown up version of that car. The same chassis design and body attachment techniques were used, the same engine and transmission also used and the same principles employed for the steering and suspension. Clearly the interior differed, providing as it did two vestigial rear seats, suitable for children or small adults for relatively short journeys. Two prototypes were produced. The first was a development mule known as 'The Tub', which was a stretched S3 FHC Elan, fitted with aluminium wheel arch flares and looked rather odd. One of the Team Lotus F1 mechanics was drafted in to put the Tub together and he completed this by September 1965.

The second prototype was the better known Metier II. This was built up as a fully working car and demonstrated to the Lotus board in December 1965. Painted silver blue it differed from production +2s in several aspects, most notably of course in styling. After the decision to make some changes and then go ahead with production, Ron Hickman used the car himself and when he left Lotus in 1967, he bought it for £125. Hickman carried on using the car until the early 1970s and then scrapped it, or so he believed. The car later emerged in London before ending up owned by well-known Lotus collector Malcolm Ricketts, who restored it and ran it for a number of years. He sold it in 2012.

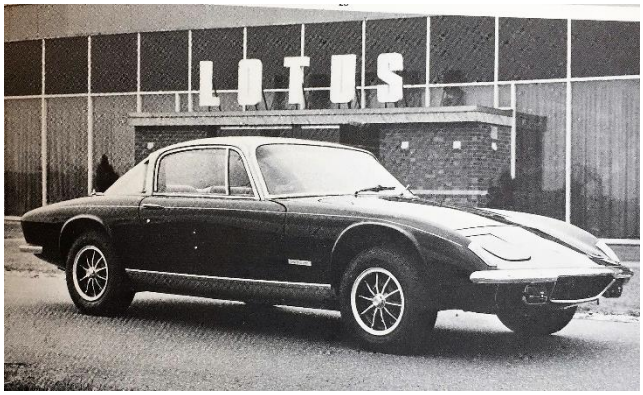
The first production +2 was 50/0001, registered LPW 120E in Norwich on 19 June 1967. It was used, heavily, as a press and test car, featuring in a number of publications. It was lost for many years but has recently been re-discovered and is due to undergo an extensive restoration. In late August 1967 the very first production cars became available to Lotus' favoured dealers. Unit 50/0003 was registered in Manchester as HVU 300F on 1 September 1967 and sold to George Best, the well-known playboy footballer. He later moved on to buy an Europa.

The factory must have thought that the +2 looked particularly good in Carnival Red, since many of these early cars were painted in the LO 05 hue, which had been introduced that same year. The cars were initially fitted with a number of distinguishing features lacking in subsequent +2s, including the fitment of a smart windscreen surround in silvered metal, Alfa Romeo Carello rear lights (these became Lucas units later) and Perspex quarter lights. For the first year of production the +2 was available in both factory built and component form, similar to the Elan. However this did not sit comfortably with Chapman's wish to take the marque further up market and in late 1968 the last component +2 was sold.

In 1969 a +2 was bought by Gerry Ashmore, a Lotus dealer running Ashmore Bros in West Bromwich, who had campaigned a Lotus 18 during 1961/2 and a Lotus 40 in the mid-sixties. For this foray into motorsport by the family oriented +2 the factory, somewhat perversely, supplied Ashmore with a very much lightened body shell, a dry sump twin-cam engine mated to a close ratio gearbox, Lotus 47 front brakes and wheels and special rear strengthening and wheels. It survived but one race before being written off by Ashmore's racing partner, the aptly named Max Payne. Ashmore then made a second racing +2 with another lightweight body supplied by Hethel, a BRM twin cam engine and 26R-like suspension modifications. He and Payne campaigned the car from 1969 until 1972, though it's weight and size compared unfavourably with its peers. This car, the only known racing +2 to have had any factory blessing, is still in existence. 1,592 +2 Elans were built.

Elan +2S: In early 1969 the +2 went through its first upgrade to become the +2S. This took the model further upmarket in image and included many features to distinguish it. Amongst these were a larger boot area, pull-down rear squabs, reclining front seats, collapsible steering column, a 118 bhp SE engine fitted as standard and a power bulge on the bonnet to accommodate Stromberg carburettors for the Federal market, though domestic cars retained the Webers. In addition, warning lights were fitted in the door edges, one fog and one spot light were located in nacelles in the front valance, a map light, improved upholstery, inertia reel seat belts, nine rocker switches and eight dials on the revised dash! Road tests lauded the handling and superior ride of the executive express and many remarked on the near absence of wind noise from the slippery shape of the car. Options on the S included Lotus brand alloy wheels, Sundym glass and rear seat belts, all adding to the increased level of sophistication expected by the discerning buyer Lotus hoped to appeal to.

During late 1969 some fifty +2Ss, which were due to have been shipped to North America, were sat at Hethel. Perhaps an order was cancelled or some other reason precluded their journey across the Atlantic. Lotus decided that they would de-Federalise them as much as they could and then offer them as component cars to UK and European drivers. These 'odd' cars tended to have Stromberg carburettors, a boot release toggle in a recess of the passenger door pillar, toggle switches, side reflectors and single circuit brakes. In all, 1,650 +2S Elans were produced.



Elan Plus 2S 130: With the advent of production of the 126 bhp Big Valve engine at the beginning of 1971 Lotus could look at upgrading both the engine and refreshing the rest of the car. The same upgrades that came with the Sprint were applied to the Plus 2S 130, including the stiffer Rotoflexs and reinforced final drive housing. In addition the car came with a metallic silver roof to give a two tone effect, though one could still specify a mono paint scheme if desired. The extra power of the Big Valve engine helped to refine the performance of the larger car and keep it competitive with some of its competition. The Plus 2 had always had a complex electrical system due to the many extra components compared to the smaller Elan, so fitting an alternator as standard was a wise move. The first Plus 2S 130 was unit 7101020357L, in Lotus Yellow with a silver roof. For the Federal versions, which were introduced several months after the first domestic deliveries, Lotus retained the Stromberg carburettor set up with its 'anti-smog pipes' and added an extension to the top of the front seats; you'd hesitate to call it a head rest.

The car sold very well and Lotus must have been pleased with their attempt to elevate their brand into the same space occupied by Jaguar, Porsche and other performance express car makers. However, most testers noticed that on autostrada, autobahn and motorway the lack of a fifth gear made life somewhat more frantic than it should have been. In 1972 Lotus announced their five speed gearbox, based on a new Lotus casting, Lotus first and third motion shafts and Lotus selector rod mechanism and British Leyland Maxi internals. Bean Industries of Tipton, a Leyland firm,

manufactured and assembled the 5 speed gearbox for Lotus. The Elan Plus 2S 130/5 was revealed at the 1972 London Motor Show, with the five speed box available as an optional extra. At the same time an optional oatmeal coloured interior became available, proving a popular alternative to the usual black. It is impossible to say how many 130/5s left the factory, as even Lotus never recorded all the cars that left fitted with a 5 speed gearbox. We have not yet found any evidence that a single S130/5 was ever exported to North America from the factory.

In June 1973 Lotus decided to celebrate their 50th Grand Prix win by introducing a limited run of John Player Special Plus 2S 130/5s. They were all painted in the JPS colour scheme of Black with a Gold Metalflake roof, sills and thin gold coach line. They were all fully optioned with green tinted glass, oatmeal cloth seat inserts, Phillips Turnolock radio and 5 speed gearbox, although maybe two cars were fitted with the 4 speed box from new. The JPS cars all appear in the Lotus 'day book' records as ‘Black’, thus making it impossible to say with any degree of accuracy how many were made. The press announcement indicated that to begin with only 50 such cars would be produced. However, black was never an official Lotus colour so it is unusual to see it recorded. The first JPS produced was VIN 73061476L. There are a total of 115 cars recorded as black in the records up to December 1973, so that is probably as close as we shall get to know how many JPS Plus 2s were made by Lotus.

Production of the Plus 2S 130 ended in February 1974, though this fact was not reflected in the VINs of the later cars, which reveals another Lotus anomaly. Our belief is that there was a good legislative or tax related reason that the last 300 cars all had 73 (year) 12 (month) allocated to the first four digits of the VIN. We do know of a handful of cars with 7401 and 7402 figures. We would therefore guess that from December 1973 through to February 1974, as cars came off the production line, they were virtually all allocated the same December 1973 VIN date indicators. The final domestic car was VIN 73122013L, painted all white and first registered in Norwich on 22 January 1975 as GEX 161N. During 1974 many cars sat in dealer showrooms, their vogue clearly over, perhaps not helped by the anticipated launch of the all new four seat Lotus, the Type 75 Elite. In total 1,897 Plus 2S 130 & 130/5 Elans were made.

Through our research 5,139 Type 50 Elans were built between 1967 and 1974. That is an average of some 80 cars per month. Up until recently many +2 and Plus 2S Elans were often broken for spares at the ends of their lives. It is pleasing there is now a recognition that they are cars which deserve to be restored and appreciated in their own right, having played second fiddle to the Elan for too long. They have their own elegance, dynamic qualities and driving experience, as well as an important place in the making of Lotus as an appreciated manufacturer of luxurious expresses alongside their wonderful sports and race cars.