

## **A GUIDELINE TO BUILDING AN AUTHENTIC LOOKING COBRA REPLICA**

### **Windscreen Frame**

All models had the same frame made by Elliot + Beclawat. A small Beclawat nameplate was attached on the inside top of the frame cross piece.

The side posts extended all the way to the top of the frame and actually wrapped over the top by about 40mm each side.

The frame was made from brass and was chrome plated.

There was a slot all the way across the top of the frame with a wider portion in the middle into which the soft-top half bows located.

A small hooked plate was attached to each post onto which the soft-top half bows clipped.

Sun visor and wind deflector hinge attachment tapped holes were provided.

The escutcheon plates used to trim the holes in the body where the side posts went in were held in place with a single screw.

### **Wiper Arms**

427R + S/C The wiper arm had a shortish base and a relatively long stem attached with two rivets. The finish was bright - probably st/steel.

AC 289 the wiper arms had a longer base and there were no rivets.**Bonnet Handle + latch**

All three models had the same style bonnet latch, viz an elongated T-handle standardised upon in the sq body era.

The latch was a plate, which rotated out of a rectangular shaped housing. This latch plate located under a plate attached in the engine bay.

### **Head lights**

Early square body cars used the "peace sign" Lucas light. This carried over to the first of the next generation, viz the 427S/C.

Some of the later S/C's and all the 427R and AC289's had Lucas sealed beams. "Sealed beam" and "Lucas" were printed on the face of the lens and the lens face was markedly convex.

### **Indicator - Front**

427S/C Lucas L539 - Amber lens with a pointed centre and with 3 fins cast into the lens.

427R Initially the same as the S/C but later changed to the Healey RB682S which was slightly bigger than the L539 and it had an amber lens and no fins.

AC289 Initially the same as the S/C except the lens was white. They later changed to the amber Healey RB682S.

### **Indicator + Brake lights**

Due to a carry over from the previous generation of sq bodies, all the cars were initially fitted with the rectangular Mynx light.

427S/C All had Mynx lights.

427R Initially Mynx but later changed to Healey. The indicator was the same as used in the front.

AC289 Initially Mynx but later changed to Healey. The indicator was the same as used in the front.

### **Side screen and soft top ferrels**

All had 3 per door for the side screens and one mounted on either side just inside the rear edge of the cock-pit for the soft top bow. ie a total of eight.

### **Number plate light**

All used the Lucas 467. It is identifiable by the raised rib running through the centre of the chromed lens cover. This cover was attached to the base using a slotted hex-headed screw. The lens is made of glass and has "Lucas 467" embossed on it.

### **Filler cap**

427S/C Le mans style with a roller catch. It was secured in the body recess on top of the right rear fender with six hexagon headed bolts. The finish was a brush polished aluminium - not chrome.

427 R Ceandess type. It was not fitted in a recess - same as AC289

AC289 Same as the Roadster.

### **Bumpers + o/riders or Quick jacks**

427SC Only the SC had quick lift jack points - note the direction of mounting. The S/C had no bumpers.

Finish: same explanation as for the heat extractors.

427R Overriders and bumpers were fitted front and rear - same as AC289

AC289 Same as for the 427R.

### **Oil cooler**

These were only found on the 427S/C. Mounted at a slight angle - top towards the motor. It was fitted with an aluminium cowling.

The oil pipes went off in opposite direction to the remote mounted oil filter.

### **Grille - air splitter**

427S/C The S/C never had a grille or air splitter

427R There was no mesh covering the "mouth" but it did have an air splitter - same as AC289.

AC289 Same as for the Roadster.

### **Wheels + tyres**

427S/C Halibrand and then Sunburst. Rims: rear 9.5", front 7.5". Tyres: rear 290 wide 15", front 207 wide 15".

Tyres were wide - much wider than either the 427 roadster or the 289 Sport.

427R Sunburst then back to Halibrand. Rims: 7.5" all round. Tyres: Goodyear blue dot 8.15x15" all round Tyres were much narrower on the roadster than on the SC.

AC289 Spoked wheels 6"x15" chromed. Tyres: 185x15" all round.

### **Badges front + rear**

427S/C All 427 S/C's and 427R had the round Cobra badge fitted front and rear.

427R Same as for the S/C

AC289 The "AC" logo front and rear.

### **Badges side**

427S/C 427 Ford Cobra.

427R 427 Ford Cobra - same as the 427S/C.

AC289 No side badges were fitted to the AC289

### **Boot hinges**

All the cars were fitted with internal tubular boot hinges. The hoop shaped hinge pivoted about a point on the roof of the boot.

### **Boot handle + catch**

All had the T-style handle.

### **Wing Mirrors**

427S/C Bullet type. One mounted on the drivers side fender.

427R Bullet type. One mounted on the drivers side fender.

AC289 The AC289 had no wing mirrors.

### **Rear reflectors**

Rectangular and red and only found on the 289 Sport.

### **Fender heat extractors**

All three models were fitted with heat extractors. The previous generation sq bodies never had them.

427S/C Because all 31 cars were delivered to Shelby from the UK as unpainted, there is a possibility that the heat extractors were not colour matched to the body and could've been finished to the owner's preference

427R These cars were delivered fully painted from AC cars and the heat extractors were colour matched to the body colour.

AC289 These cars were delivered fully painted from AC cars and the heat extractors were colour matched to the body colour.

## **INTERIOR**

### **Dashboard shape**

All the dashboards were straight; ie the face of the dash did not curve towards you at the ends. At the extreme ends of the dash, the face curves sharply away from you.

427S/C Straight lower edge, without a cubby hole

427R Straight lower edge, with a cubby hole

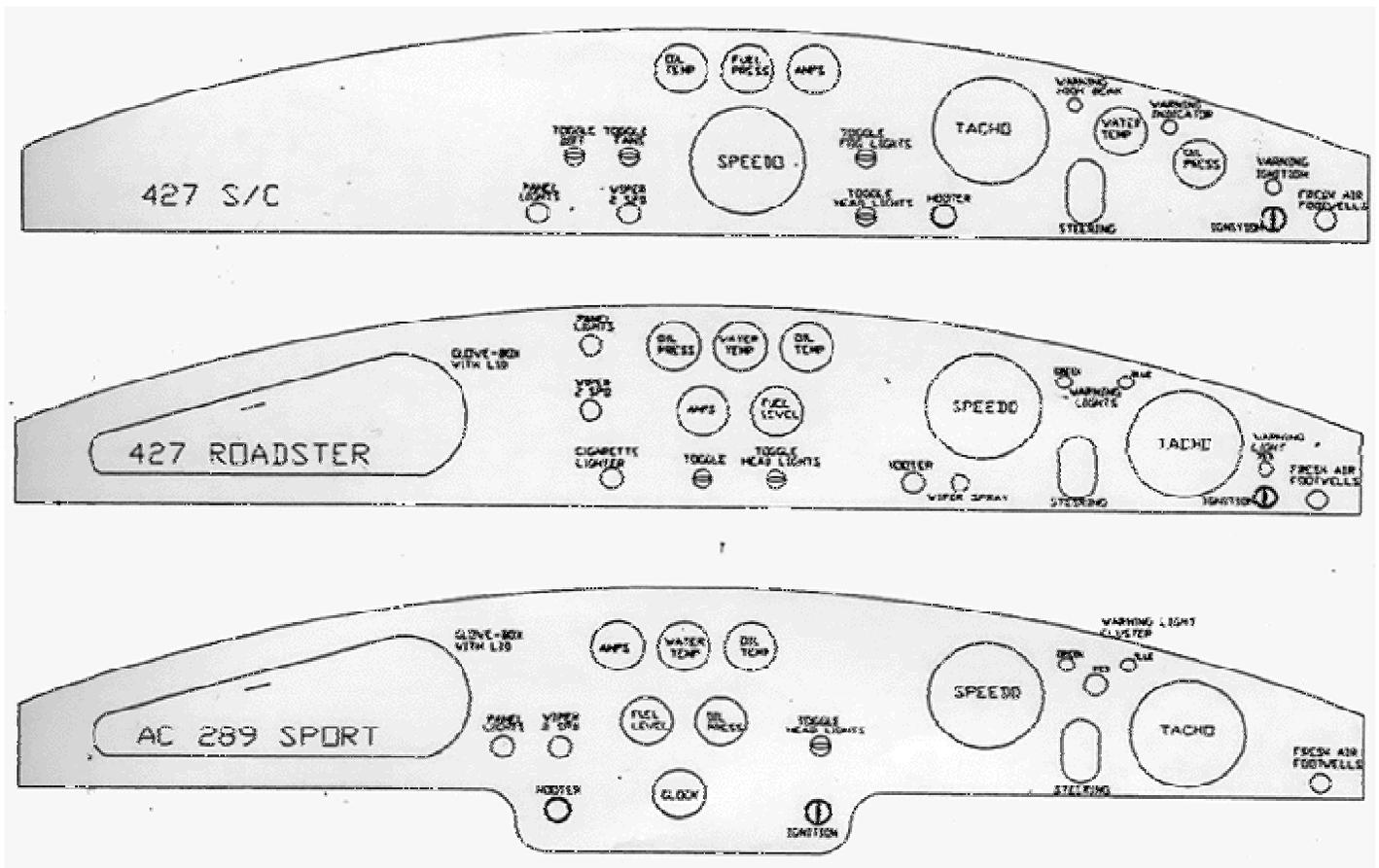
AC289 The lower edge had a slightly larger portion in the centre to accommodate the clock. A cubby hole was a standard feature

### Instrument layout, gauges and switches

	S/C	Roadster	289 Sport
Oil Pressure	Smiths full sweep 0-100psi	Smiths full sweep 0-100psi	Smiths full sweep 0-100psi
Water Temp	Smiths full sweep 0-110deg C	Smiths full sweep 0-110deg C	Smiths full sweep 0-110deg C
Oil Temp	Smiths full sweep 0-140deg C	Smiths full sweep 0-140deg C	Smiths full sweep 0-140deg C
Amps	Lucas -50 +50 Needle pointed up	Lucas -50 +50 Needle pointed up	Lucas -50 +50 Needle pointed up
Fuel Gauge	None	Smiths half sweep Needle pointed down	Smiths half sweep Needle pointed down
Fuel pressure	Smiths full sweep 0-10 psi	None	None
Clock	None	None	Smiths Electrical Had two "screws" at 10 and 2
Speedo	Smiths reverse wound 0-180 mph	Smiths reverse wound on early cars Later cars used normally wound 0-180mph	Smiths normally wound 0-180mph
Rev (Tacho)	Smiths - same size as speedo 0-8000rpm	Smiths - same size as speedo 0-8000rpm	Smiths - same size as speedo 0-8000rpm
Warning lights	Big red for ignition smaller blue and green for bright's and indicators resp	Big red for ignition smaller blue and green for bright's and indicators resp	Big red for ignition smaller blue and green for bright's and indicators resp
Toggle Diff	2 position (up down) for the diff oil cooler pump	None	None
Toggle Fans	2 position (up down) To override the thermo switch	2 position (up down) To override the thermo switch	None
Wiper knob	Fluted knob 3 position (turn) off-slow-fast	Fluted knob 3 position (turn) off-slow-fast	Fluted knob 3 position (turn) off-slow-fast
W/screen washer	None	Fluted push pull knob which was actually a pump	?
Toggle fog	2 position (up down)	?	None
Toggle lights	3 position (up down) off-parks-lights	3 position (up down) off-parks-lights	3 position (up down) off-parks-lights
Panel rheostat	Fluted turn knob Could switch panel lights off or	Fluted turn knob Could switch panel lights off or	Fluted turn knob Could switch panel lights off or

	just dim them	just dim them	just dim them
Hooter	Round black button	Round black button	Round black button
Ignition switch	Ignition and starter	Ignition and starter	Ignition and starter
Fresh air knob	Fluted push pull knob opened air to footwells	Fluted push pull knob opened air to footwells	Fluted push pull knob opened air to footwells
Cigarette lighter	None	Round push-in knob	None

## Dash Layouts



## Steering wheel

They all were fitted with 16" 3 spoked wood rim. Tear drop slots. The centre spoke pointed vertically down.

427 S/C Badge was the "AC" logo being a carry on from the square bodied predecessors.

427R Badge was the Pete Brock "Cobra" logo.

AC289 Badge was the "AC" logo.

## Seat Belts

427 S/C Used U.S. Ray Brown or Impact belts- a carry over from sq body cars.

427R As for the SC

AC289 Anchor points were provided but the belts were not fitted as a standard

### **Direction indicator**

They all used the 1960's VW beetle unit. The lever pointed towards the centre of the car.

### **Rearview mirror - Dash mounted**

427S/C Had a small rectangular mirror mounted just off centre on top of the dash - the stalk was relatively short.

427R Had a small rectangular mirror mounted just off centre on top of the dash - the stalk was much longer.

AC289 Same as the roadster except the glass was much bigger.

### **Pedals**

They all used the cast aluminium pedals with the "AC" logo cast into the pedal. The pedals each had two rubber grommets

427S/C Pivoted on the floor and swivelled on their mounting to the pedal lever.

427R Pivoted on the floor and swivelled on their mounting to the pedal lever.

AC289 Pivoted on top and also swivelled.

### **Seats**

427S/C Black leather '60 style bucket seat. The cushion was flat.

427R Black leather '60 style bucket seat. The cushion was flat.

AC289 A variety of colours were available.

### **Carpets**

427S/C Industrial pile black

427R As for the S/C

AC289 A variety of colours were available

### **Gearlever**

All the models had reverse selector levers just under the gear knob.

427S/C The lever exited slightly to the left of centre of the tunnel and then was angled forward and towards the driver

427R Same as the S/C.

AC289 Due to the smaller block, the lever came out of the tunnel in the correct place and was therefore straight and short.

### **Handbrake**

All the models had the same style of chromed handbrake lever. The lever was placed on the right hand side of the tunnel regardless of whether the car was LH or RH drive. In the engaged position, the lever stood almost perpendicular to the floor.

## **Door latches**

All the models had a "slam lock" system. The latch mechanism was housed in a chromed rectangular box and the activator stuck out of the top of this box. A leather thong was attached at one end to the end of the activator and at the other end to the under side of the centre side screen ferrel.

## **Doorpanels**

427S/C The S/C was not fitted with door pockets. The inside of the door was trimmed with black Vinyl or leather.

427R The inside of the door was trimmed like the S/C, but the Roadster also had door pockets. (Black)

AC289 As for the Roadster, but the colour of the material matched the rest of the upholstery.

## **Door trimming**

All the models had an aluminium strip along the sill of the door. This strip extended from the bottom of the hinge all the way around the bottom of the door sill to the door latch striker.

## **Roll bar**

Only found on the 427S/C. Also only on the driver's side. The front hoop was routed through holes in the body, was visible behind the seat and was anchored to the chassis through the floor of the body. The rear pipe started slightly left of centre of the hoop and angled down fairly sharply towards the right. It was removable and anchored in the luggage compartment on a steel bracket.

The question of the finish is the same story as for the heat extractors.

## **Ash tray**

Only found on the 427 Roadster. Mounted on top of the transmission tunnel in front of the gear lever.

## **Chicken Handle**

Only found on the 289 Sport. Mounted on the rim of the body above the dash on the passenger side.

## **ENGINE BAY**

### **Engine**

427S/C Ford 427 cu" side oiler

427R Ford 427 cu" side oiler then went to the Ford 428 Police interceptor and then the Ford 429 cu"

AC289 Ford 289 cu"

### **Tappet covers**

427S/C Chromed or painted pressed steel or a casting which said "Cobra - powered by Ford"

427R Chromed or painted pressed steel or a casting which said "Cobra - powered by Ford"

AC289 Painted pressed steel.

### **Air cleaner**

427S/C 8" dia - fairly flat (approx 2"). Enclosed in a plenum chamber. With a wing nut to retain the cover.

427R 14" pressed steel, chromed with wing nut.

AC289 14" pressed steel, chromed with wing nut and stickers.

### **Headers**

427S/C Black branches tuned length

427R Cast iron exhaust manifold. Black

AC289 Cast iron exhaust manifold. Black

### **Header tank**

427S/C Used a Galaxy brass header tank. Black. On both of the 427's it was mounted directly to the front of the engine

427R Used a Galaxy brass header tank. Black. On both of the 427's it was mounted directly to the front of the engine

AC289 Similar to Galaxy, flatter, mounted different also black

### **Bonnet stay**

All models used a straight pipe with a curl near the pivot end, which was pivoted against the firewall on the right hand side. This stay was held in place when not in use with a broad steel clip attached to the inside of the engine bay side wall. It had a rubber tip.

### **Pipes**

All radiator and fuel hoses were black rubber. Many of the original cars may have been modified with braided hoses by their owners, but this was not how they left the factory.

### **Radiator + fans**

427S/C Mounted at an angle - top towards the rear. Two 5 blade aluminium fans were mounted on the front face of the radiator

427R Also at an angle but were supplied with a single fan. Most times this was changed to a dual fan on the back face.

The Roadster also had a single small fan fitted in front of the radiator behind the air splitter

AC289 Same as the Roadster but without the small front fan.

### **Chassis and undercarriage**

427S/C Black chassis black shocks with red coils. The chassis construction was tubular.

427R As for the SC

AC289 As for the SC

### **Engine compartment detail**

427S/C Autolite regulator on left footwell, scribed data plate, bonnet stay clip on RHS, solid throttle linkage, Alum. bulkhead with Lucas SPF4 fuse box

Black motor + blue w/pump, alternator, and sump.

427R Autolite regulator on left footwell, scribed data plate, bonnet stay clip on RHS, solid throttle linkage, Alum. bulkhead with Lucas SPF4 fuse box

Black motor + blue w/pump, alternator, and sump. Trico washer bottle mounted next to the regulator.

AC289 Autolite regulator on left footwell, scribed data plate, bonnet stay clip on RHS, solid throttle linkage, Alum. bulkhead with Lucas SPF4 fuse box

Black motor + blue w/pump, alternator, and sump. GLASS square washer bottle mounted midway above wheel on LHS.

### **Exhausts**

427S/C The S/C was fitted with side pipes without heat shields. The finish was probably up to the customer.

427R Twin underslung exiting directly under the taillights - same as AC289.

AC289 Same as for the Roadster.

### **Luggage compartment shape**

427S/C Sloped floor sloping down towards the inside and tapering towards the bottom.

427R Flat floor - the top of the spare wheel was almost flush with the boot sill.

AC289 As for the roadster.

### **Luggage compartment trim**

427S/C Brushed aluminium panels

427R Fibreglass. Earlier cars were white and later they were black.

AC289 Same as the Roadster except all were black.

### **Spare wheel**

427S/C The wheel was accommodated in the centre of the boot floor. The floor was shaped at an angle and narrow at the front.

427R Similar the S/C, but the wheel lay flat. On either side of the white fibreglass wheel well were two black tail light access hatches.

AC289 Same as the Roadster.

### **Battery**

427S/C 2 Rebat 35a 6V Aircraft batteries mounted behind the passenger seat.

427R A single Autolite 12V battery mounted in the boot.

AC289 A single Lucas FRLT9A 12V battery mounted in the boot.

### **Boot stay**

All the models used a "click-stay"

### **Tool Box and tools**

427S/C None - tools were designed to be kept in the pits

427R Recessed into the fibreglass boot trimming.

AC289 As for the roadster.

### **Fuel Pumps**

427S/C Twin Stewart Warner pumps mounted against the vertical wall of the aluminium boot trimming.

427R Mechanical.

AC289 Mechanical.

### **SECTION H**

**Plenum Chamber:** Rectangular in shape, pressed out of aluminium plate. Four equi-spaced holes at each end and others on the side to allow access to the carb adjustment points. The corners were rounded and the top lip curled out.

**Bonnet Rivets:** The leading edge of the bonnet was riveted to the frame. The centre rivet was on the centre line with 16 each side of it. They were all equi-spaced at intervals of ---mm and were ----mm from the edge of the bonnet.

**Bonnet scoop:** It can be argued that the shape often had to accommodate the height and size of the engine topworks. However all scoops were riveted on as opposed to being moulded. The rivet pattern is also distinct:

**Remote oil filter:** The filter on the SC was positioned in the left front of the engine bay in front of the alternator. It stood vertically and screwed into a specially cast aluminium "L" bracket.

**Wheel arches:** The SC had much wider tires than the other two models and as result the wheel arches at the rear were flared and at the front they were unflared but more bulbous than the other models.

**W/screen washer:** This applies to both the 289 Sport and the 427 roadster. They both used the Trico resevoir. There were two nozzles each with two holes. They were activated by a push/pull pump knob on the dash situated between the hooter button and the steering column.

**Demist slots:** This applies to both the 289 Sport and the 427 roadster. There was one fitted on each side between the w/screen and dash. The finish was chrome or polished st/steel.

**Meshed Ovals:** This applies to both the 289 Sport and the 427 roadster. The ovals in front of the car were finished off with an aluminium mesh that was attached on the inside of the body

**Heater / fan:** This applies to both the 289 Sport and the 427 roadster. The controls were situated in the middle of the dash below the lower edge

**Cigarette lighter:** The 427 roadster had a lighter that was mounted on the dash.

**Clock:** The 289 Sport had a Smiths Electric clock. It was mounted in the centre of the dash at the bottom bulge.