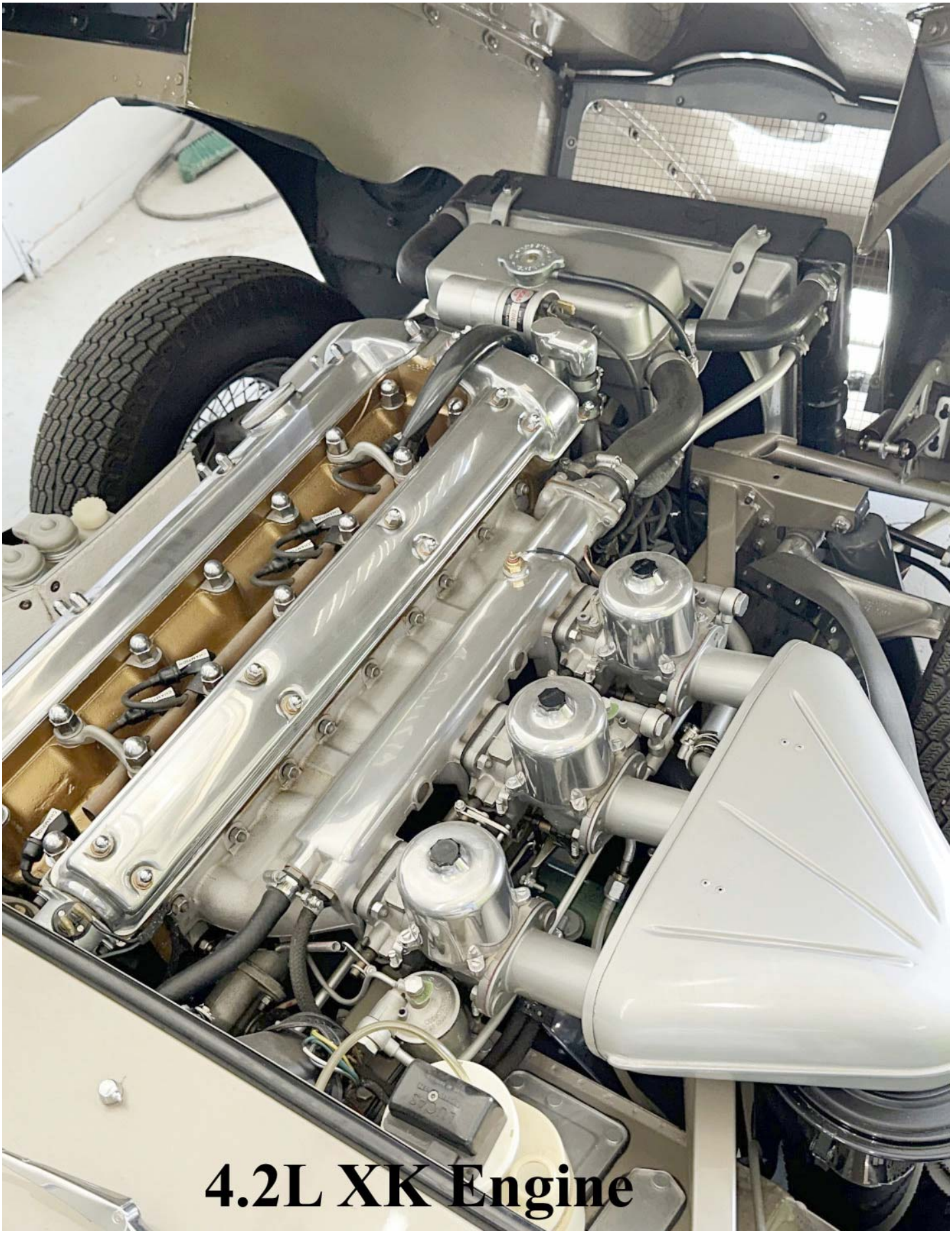
3.8L XK Engine



4.2L XK Engine

Engine Compartment Score Sheet

ENGINE COMPARTMENT (Champion and Special Divisions Only)

Bright Metal
(Cam Covers, Carb Domes, Etc.)

		Min Deduct	Max Deduct	
1	ratched	0.1	10	.
	d	0.1	10	.
3	ted	0.1	10	.
4	roded	0.5	10	.
5	anliness	0.1	40	.
				.

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Page 120
Page 121

Exhaust
(Manifolds & Downpipe Config.)

		Min Deduct	Max Deduct	
15	Cracked	0.1	6	.
	olored	0.1	6	.
17	sted	0.1	6	.
18	ratched/pitte ed	0.1	6	.
19	eanliness	0.1	6	.
				.

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Page 152

Sheet Metal
(Firewall, Radiator, Subframes, Bonnet, Underside, Etc.)

	Scratch hipped			
	usted			
	oor P			
	Cleanl			

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Elec., Hoses, A/C, Emission, P/S
(Gen., Alt., Relays/Reg., Wiring, Battery, Tubing, Clamps)

	d/cr d			
	hec d/de			
	ed d			
	ine			

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Page 153
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Engine Block, Head, Carbs or Fuel Injection

11	tched	0.1	10	.
12	oded/rus	0.1	9	.
13	d paint (/blo	0.3	6	.
14	nliness	0.1	25	.
				.

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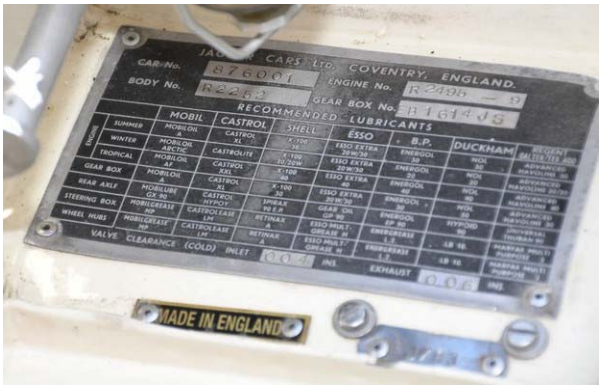
ENGINE COMPARTMENT

Champion Division Only

Internal tooth washers/split washers, except for copper split washers, used in many locations typically have a Black Oxide finish.

Commission Plate

Also referred to as:
Chassis Number Plate, Chassis, Engine, Body and Gearbox Number Plate, Car Number Plate, VIN Plate, Vehicle Data Plate, Recommended Lubricants & Specification Plate



The 3.8L Car or Chassis number is located on the commission plate, located on the right side of the engine bay under the fuel filter.

The 4.2L Car or Chassis number is located on the commission plate, located on the right side of the engine bay under the fuel filter.

As originally fitted, the Jaguar Cars Ltd. vehicle data plate is exclusive to each Entry and lists the original Chassis, Body, Engine, and Gear Box serial numbers. In acknowledgement of the uniqueness of data plates, Judges must not assess condition deductions for original data plates provided they retain their original shape and all of the stamped numbers are legible. All data plates and their fasteners must be judged for authenticity.

If there is a question regarding an E-Type's heritage, the Car Number on the Commission Plate is to be used only for verification against the Heritage Certificate.

Although not judged, the car number is located in two places, the commission plate and the forward, right hand side of the subframe above the shock support.

Although not judged, the Engine number is located in three places, the commission plate, the engine block above the oil filter flange and on the forward portion of the cylinder head.

Note: Some E-Types have an additional tag. This tag was inserted by Jaguar Cars indicating the car was originally destined for California, however, many cars wound up being sold in other markets.

- Two engines were available:
  - Straight 3.8L 6-cylinder DOHC engine (1961 - 1964).
  - Straight 4.2L 6-cylinder DOHC engine (1965 to 1967).
- Both engines in the Series 1 had polished aluminum camshaft covers (changed to a ribbed design from the Series 1.5 in late 1967).
- All 3.8L Series 1 cars came with a 4-speed (non-synchromesh on 1st gear) transmission. This was known as the Moss Gearbox, and fitted until late 1964. Some early 4.2L cars also utilized this gearbox.
- From late 1964 (including most 4.2L cars) the vehicles were fitted with a Jaguar 4-speed all synchromesh manual transmission, and the 2 + 2 coupes were also available with a 3-speed Borg-Warner automatic transmission.

Bright Metal, Cam Covers, Carb Domes, Etc.

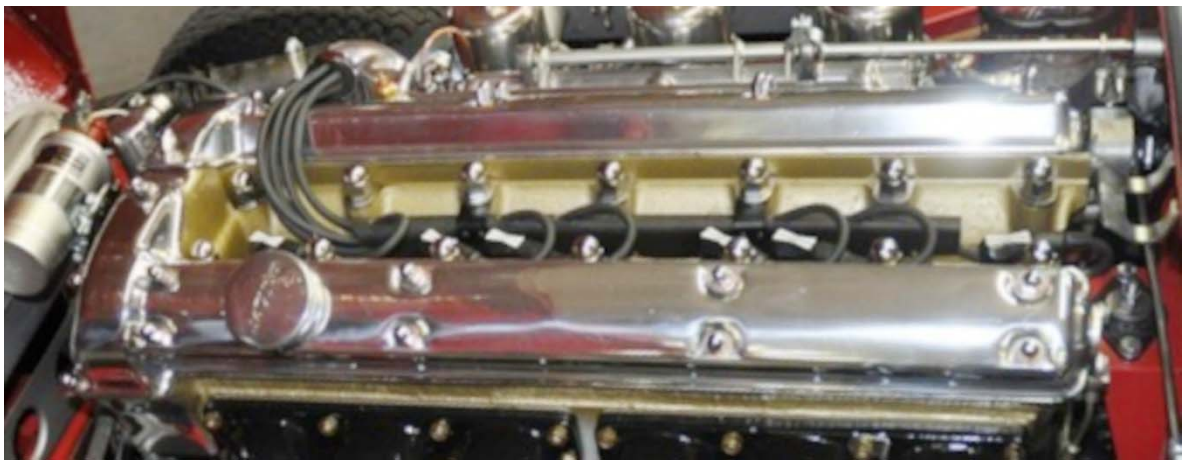
Bright Metal

Plated and Painted Fasteners, Caps, Covers, Piping, Handles, Etc.

Cadmium plated parts have a flat finish.

Cam Covers

For cylinder head color, see Page 147.



The camshaft covers are polished aluminum.

Note: As the Cam Covers are aluminum, small pits maybe visible, with no deduction.

Cam Cover Nuts and Oil Filler Cap

The camshaft covers have chrome, dome shaped, nuts, with copper washers below them.

The JAGUAR lettering on the Oil Filler Cap is black.

Note: Most of the oil filler caps screw on so the **JAGUAR** is not in a horizontal position but the cap may be rotated to a horizontal position without deduction.

Carburetor Domes and Damper Nuts

Polished aluminum vacuum chamber with cadmium plated damper nut.

The polished brass damper nuts are Non-Authentic and should be cadmium plated.

Polished aluminum vacuum chamber with scalloped black plastic damper nut.

HD8, SU Carburetors are fitted to both the 3.8L and 4.2L XK engines.

December 1962, the **Dash Pot Cap**s are changed from cadmium to black plastic.
Also, see Carburetors, Page 149.

Fuel Rail & Linkage

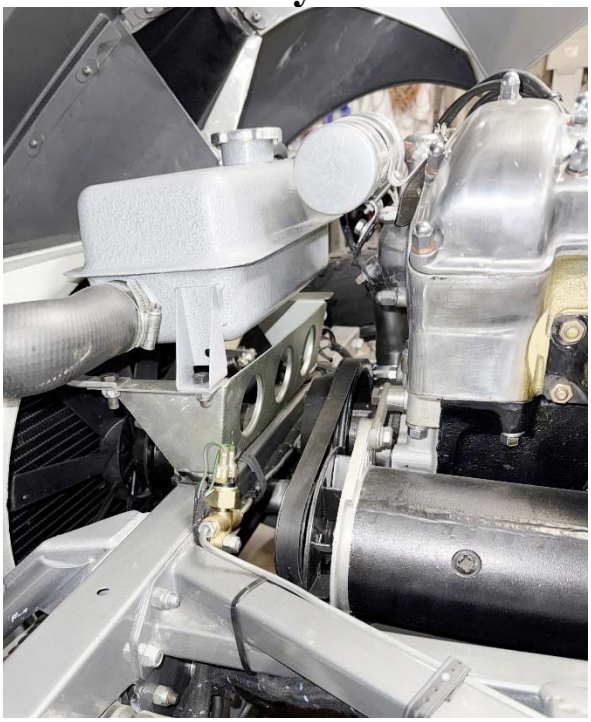
The cadmium plated fuel rail is fitted under the carburetors and has cadmium plated banjo bolts fitting it to the carburetors. The throttle linkage is cadmium plated.

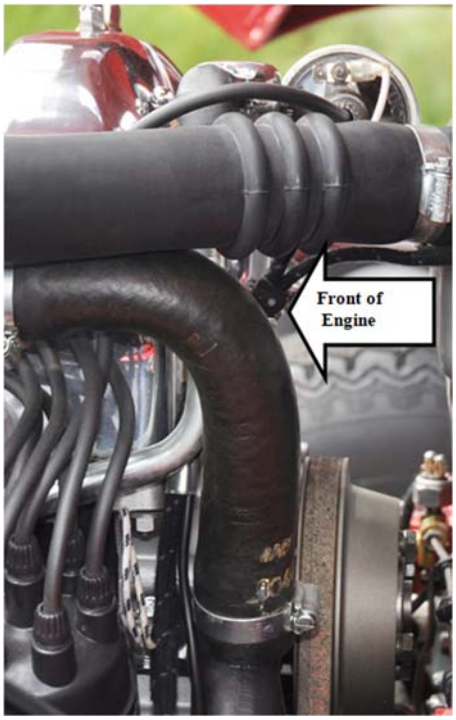
Etc.

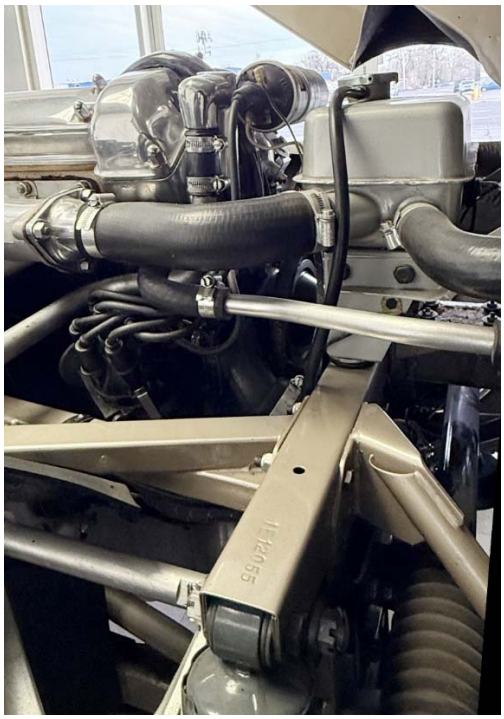
Specific items not otherwise covered on the score sheets.

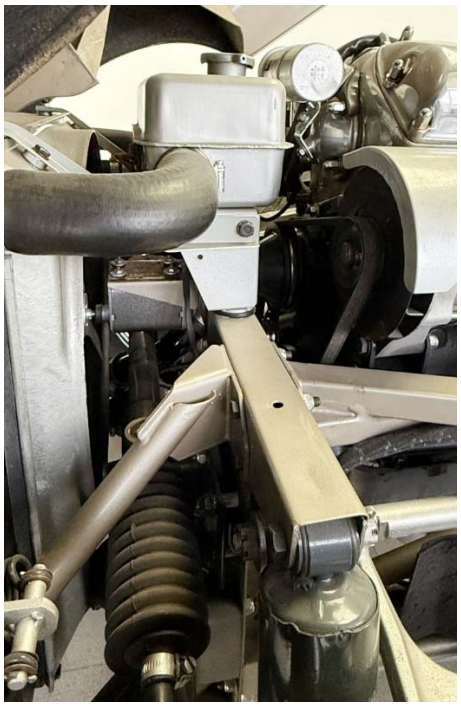
Front of Engine

Fan Belts and Pulleys & Front Timing Cover









The front of both the 3.8L and 4.2L engines are hard to see. The timing cover is held in place with horizontal bolts and eight vertical studs; four top, four bottom. Two of the studs have flat copper washers. Ordinary steel nuts used on studs.

Breather Pipe

On early 3.8L E-Types, a flexible pipe is fitted on the left side of the engine, extending down to the splash shield.

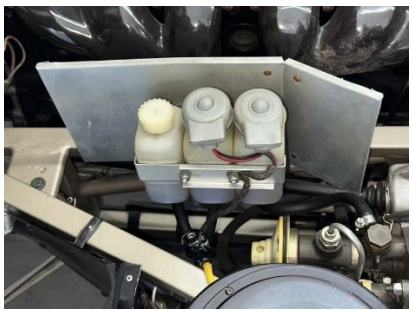
The later 3.8L and 4.2L breather is polished aluminum with chrome dome nuts and split washers that run down the right side of the engine.

The breather pipe is changed from the flexible pipe exiting on the left side of the engine to exiting via a polished aluminum fitting, to the right side of the engine, attaching to the air filter, making it a closed system.

J.30/p20 3.8L OTS chassis nos. 850092 RHD, 875386 LHD
J.30/p20 3.8L FHC chassis nos. 860005 RHD, 885021 LHD

Brake And Clutch Reservoir Shapes, Caps and Heat Shields

Brake and Clutch Bottle Reservoir Mount

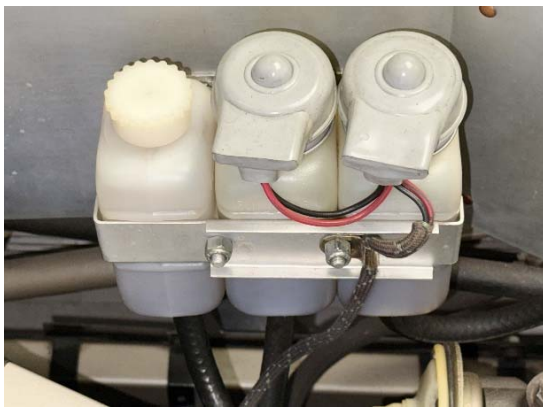


Left-Hand Drive E-Types have the fluid bottles mounted on the exhaust side of the subframe.

The empty bracket with the two holes, above the fuel filter on Left-Hand Drive E-Types, is where the fluid bottles are mounted on RHD E-Types.

Brake And Clutch Bottle Reservoir Shape and Connectors

Photo by M. Lemke



Upon introduction, the brake reservoirs caps were black plastic on round plastic reservoirs with horizontal spades. The clutch reservoir had a black metal cap.

3.8L OTS chassis nos. 850001 to 850555 RHD
3.8L OTS chassis nos. 875001 to 877556 LHD
3.8L FHC chassis nos. 860001 to 860677 RHD
3.8L FHC chassis nos. 885001 to 886282 LHD

July 1962, SB K.48: The shape of the reservoirs is changed from round to rectangular at the following chassis numbers:

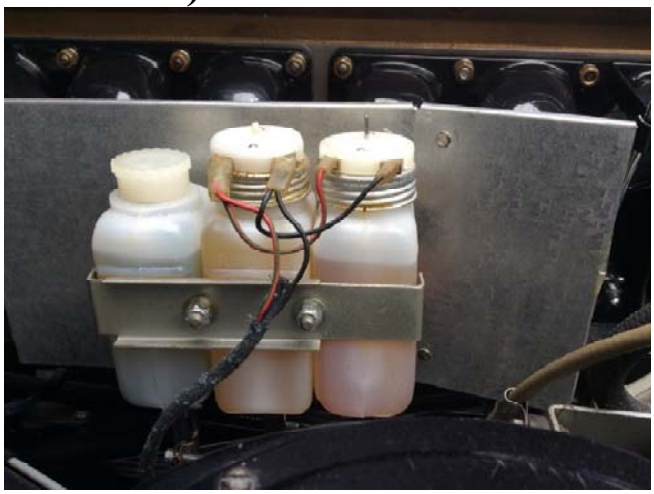
3.8L OTS chassis nos. 850556 RHD,
3.8L OTS chassis nos. 877557 LHD
3.8L FHC chassis nos. 860678 RHD,
3.8L FHC chassis nos. 886283 LHD

Brake And Clutch Bottle Reservoirs and Fluid Level Caps

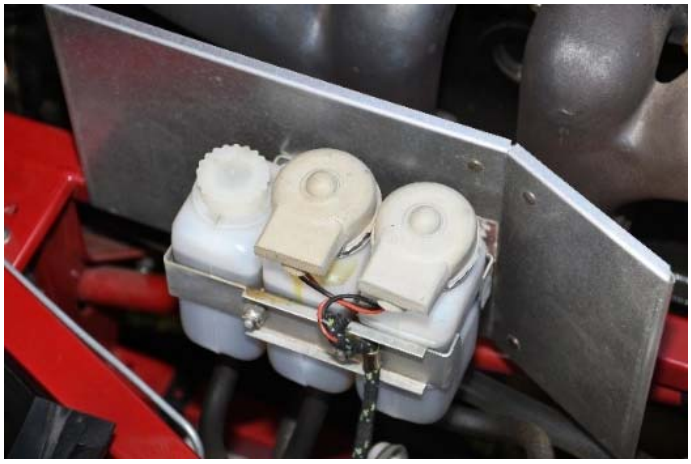
Upon introduction, the brake reservoirs caps were black plastic on round plastic reservoirs with vertical spades. The clutch reservoir had a metal cap; some were painted black.
3.8L OTS chassis nos. 850001 to 850555 LHD
3.8L FHC chassis nos. 860001 to 860677 LHD

Early 3.8L (note CC breather hose) with 2nd design have horizontal spades on round bottle caps.

Brake And Clutch Bottle Reservoirs and Fluid Level Caps (continued)



Shown here is 1964 3.8L OTS 880090 with square bottles and no covers.
Note: Correct red with green stripe wire.



January 1964, SB L.30 & April 1964, SB K.70:
The 4th style of [gray] Protective Caps of improved design for the [square] brake and clutch fluid Reservoirs are fitted.

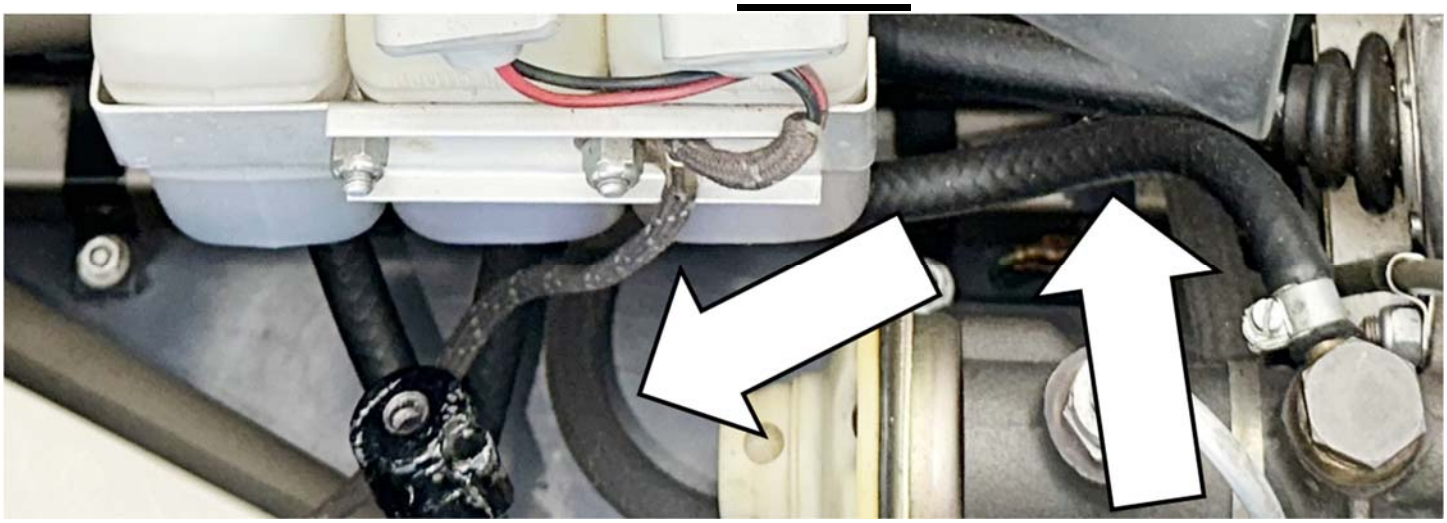
3.8L OTS chassis nos. 850807 RHD, 880760 LHD
3.8L FHC chassis nos. 861427 RHD, 889697 LHD

Note: The rectangular design, along with the caps, continues throughout the remains of the 3.8L and 4.2L production.

Clutch Bottle Reservoir Caps

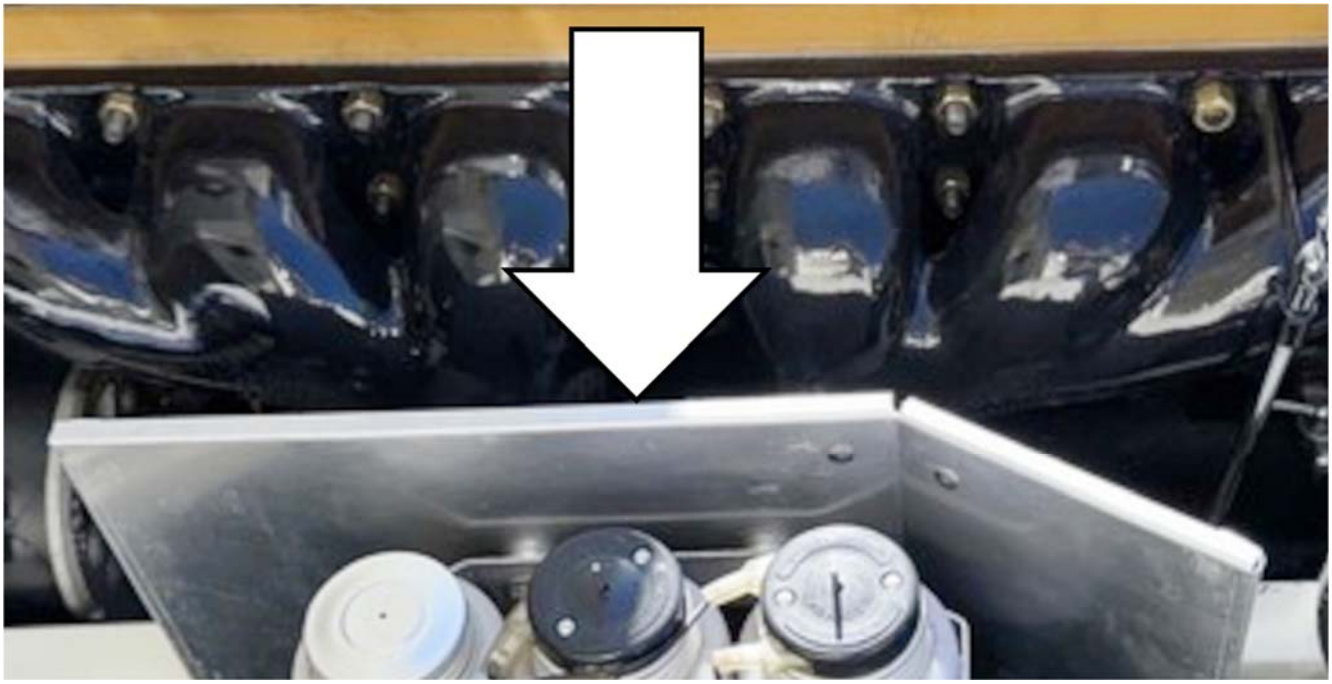
The clutch reservoir bottle cap on the far left, is changed from metal to plastic with knurled edges.
Note: Correct red with green stripe wire.

Brake And Clutch Bottle Reservoir **Hoses**



The hoses from the bottles are black (or maybe brown) with a yellow stripe, not always visible. The hoses are fastened using a low pressure, without any perforations, cadmium plated clamps.

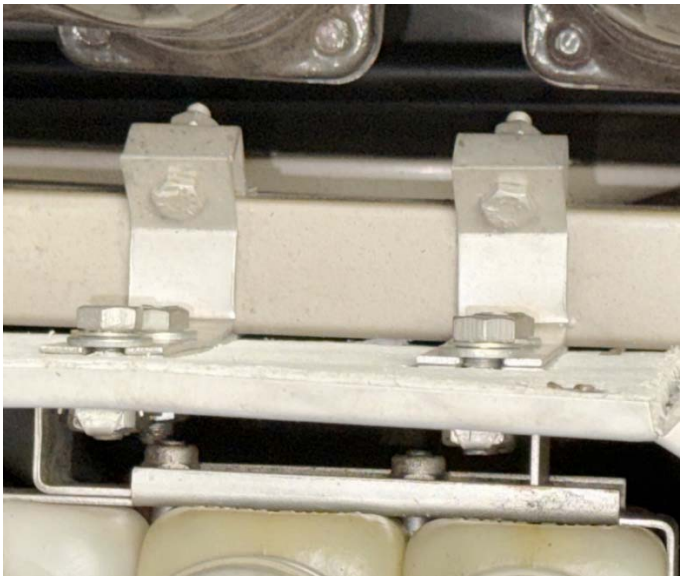
Brake And Clutch Bottle Reservoir **Heat Shield**



The cadmium plated steel reservoir heatshields, with cadmium plated fasteners, are the same for both the 3.8L and 4.2L E-Types.

Heat Shield Mounting Brackets

The heat shield is held to the subframe with **black oxide bolts and clamps** on early E-Types



The heat shield is held to the subframe with **cadmium plated bolts and clamps** on later cars.

Sheet Metal, (Firewall, Radiator, Subframes, Bonnet, Underside, Etc.)

Firewall

The firewall is body color.

Firewall Area
Brake/Clutch Housing and Cylinders

3.8L brake and clutch master cylinders are natural cast aluminum. Brake bellows is black.

4.2L brake and clutch master cylinders are natural cast aluminum. The brake booster, located on the lower portion of the engine side of the bulkhead below master/clutch assembly, is black.

Windshield Washer

Windscreen Washer Bottle

3.8L & early 4.2L Lucas 2SJ Windshield Washer Bottle

- Rectangular Glass bottle
- Black round lid with motor on top
- 2-black rubber sleeves on black bracket to protect bottle
- Red/Black "Lucas Screen Jet" sticker at bottom of bracket

4.2L Lucas 5SJ Windshield Washer Bottle

- Oval plastic bottle
- Gray oval lid with black motor on top
- White elastic mounting strap

April 1965, SB O.7: The Lucas 2SJ glass washer bottle is supplied to all 3.8L cars and early 4.2L cars. It is replaced by the Lucas 5SJ windscreen washer plastic bottle, held in place by a white strap after the following chassis numbers.

4.2L OTS chassis nos. 1E.1165 RHD, 1E.10754 LHD
4.2L FHC chassis nos. 1E.20371 RHD, 1E.30825 LHD

Windscreen Wiper Motor, see Page 155

Bonnet Safety Catch

Bonnet Safety/Receiver Catch
Bonnet catch and latch are cadmium plated.

The Early Bonnet Catch was more pointed than the later Catch

Bonnet Safety Latch & Blanking Plates
Inside Bonnet Safety Catch Lock Assembly

Cadmium plated Bonnet Stop & Lock Assembly

Cadmium plated Bracket Assembly on Bonnet Side Panel

Outside Bonnet Lock Assembly

Outside Bonnet Lock CATCH **Outside Bonnet Twist Lock**

For the Outside Bonnet Lock E-Types, the latch plate has been seen in both black and cadmium plated, the latch portion fitted to the bonnet is cadmium plated.

Outside Bonnet Lock Escutcheon

Elongated Escutcheon

Round Escutcheon

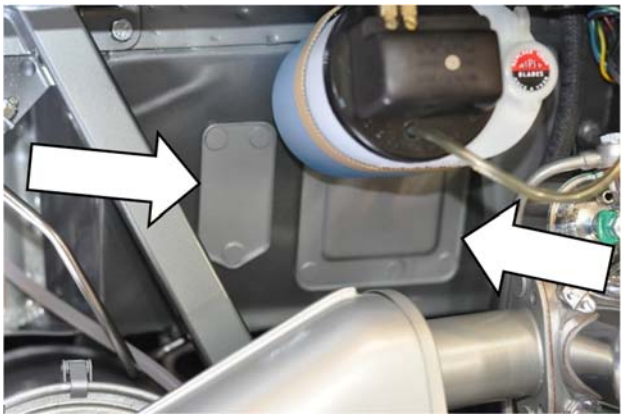
Note: Round bonnet lock covers have been seen on the following: chassis nos. 875023, 875136, 875172, 875173, 875304, 875317

Outside Bonnet Lock Escutcheon may be of either design shown above.

Outside Bonnet Lock E-Types do NOT have the internal J latch

Outside Bonnet Lock E-Types have the "T" handle stowed on the side of the transmission tunnel.

Blanking Plates



The cadmium plated blanking plates are used to cover the holes in the firewall where the pedal assemblies would be fitted, if the car was built for driving on the opposite side of the road.

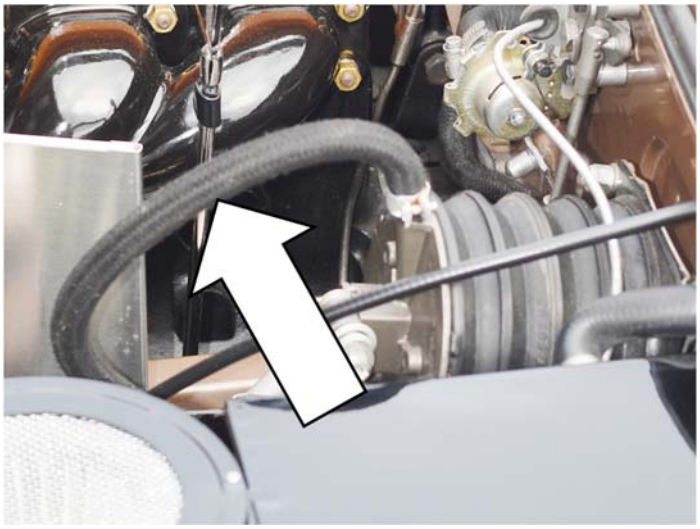
Note: Painted blanking plates are non-authentic.

Cadmium Plated Parts on Firewall

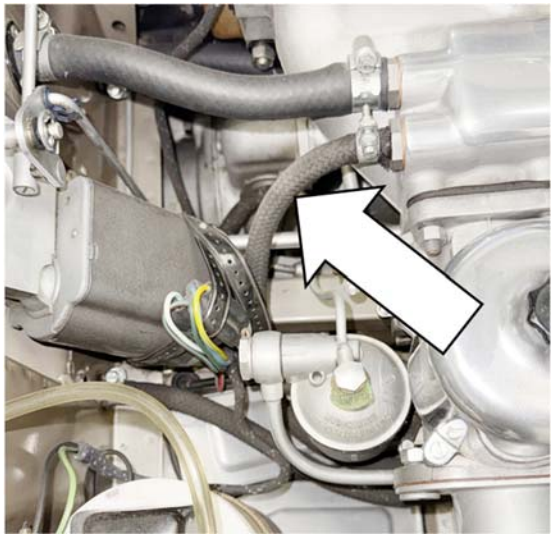
All throttle linkage, bonnet locks & guides, rectangular blanking plates and heater valve mount are cadmium plated.

Note: Early 4.2L engines have a steel tube attached on the firewall with two yellow cadmium clips that runs around the back of the engine to supply vacuum. Later models had the tube run through the firewall.

Vacuum Hoses



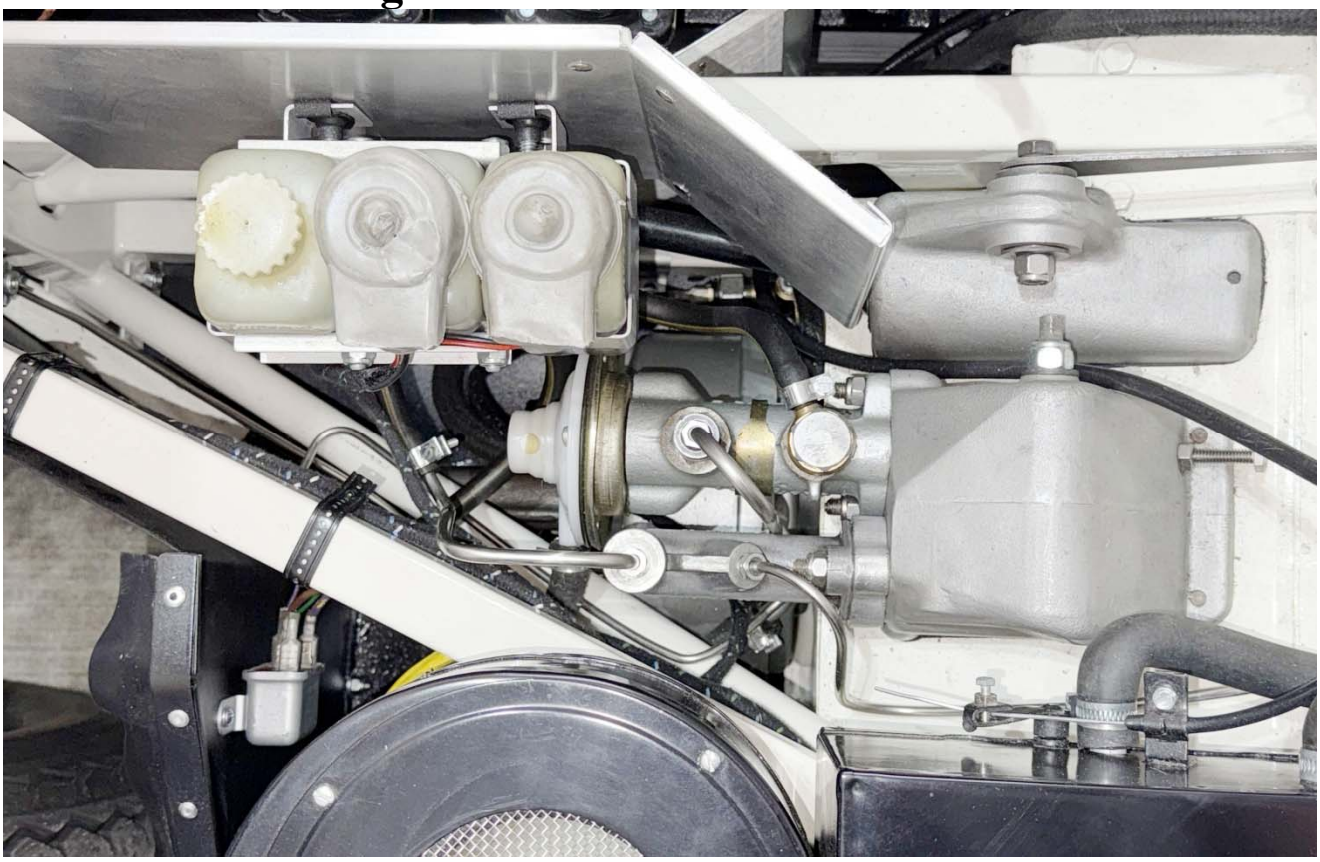
3.8L Vacuum Hose to Brake Booster



4.2L Vacuum hose from intake manifold

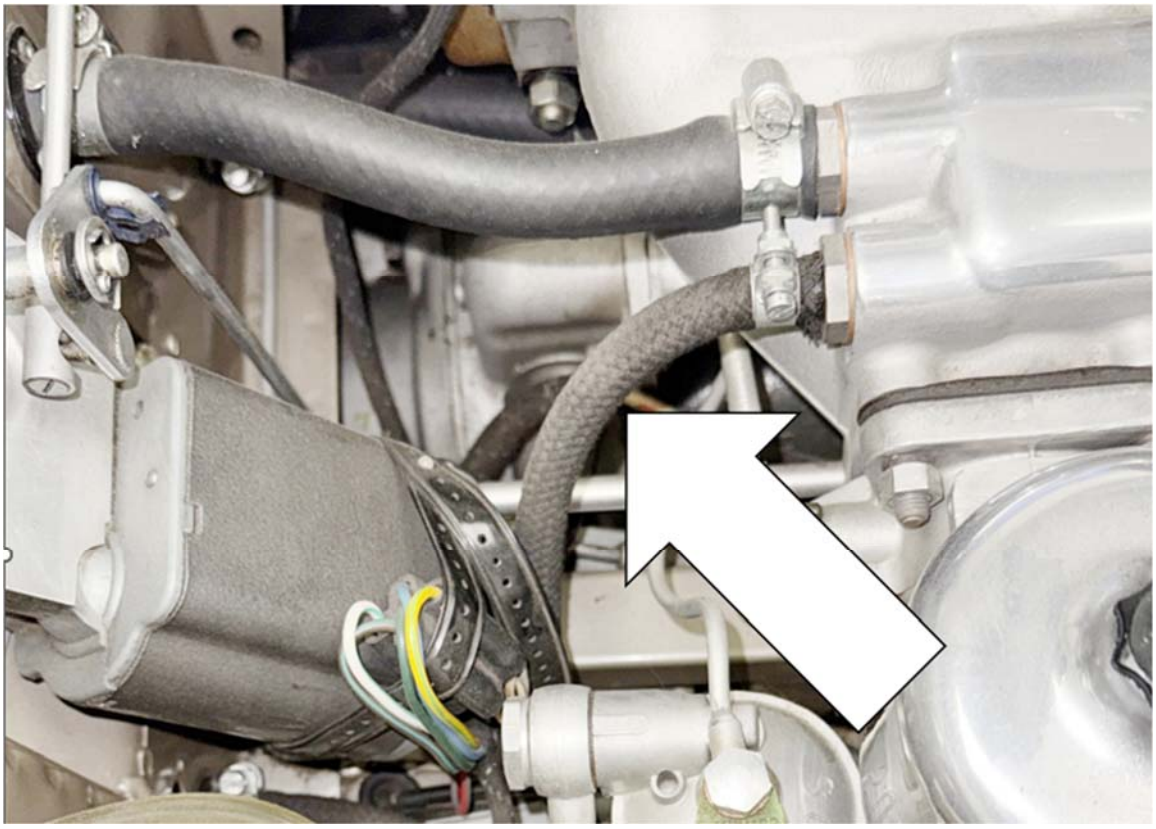
Vacuum hoses are black with a cloth braided, Herringbone pattern.

Vacuum Hose Routing



Vacuum lines to the non-polished, sand cast, brake master cylinder.
There is a yellow plated finish on the clip securing the speedometer cable to inner stud of master cylinder.

Vacuum Hose from Intake Manifold to Vacuum Tank



Vacuum line, held to the intake manifold with low pressure hose clamps, goes to the vacuum tank and is cloth braided with a Herringbone pattern.

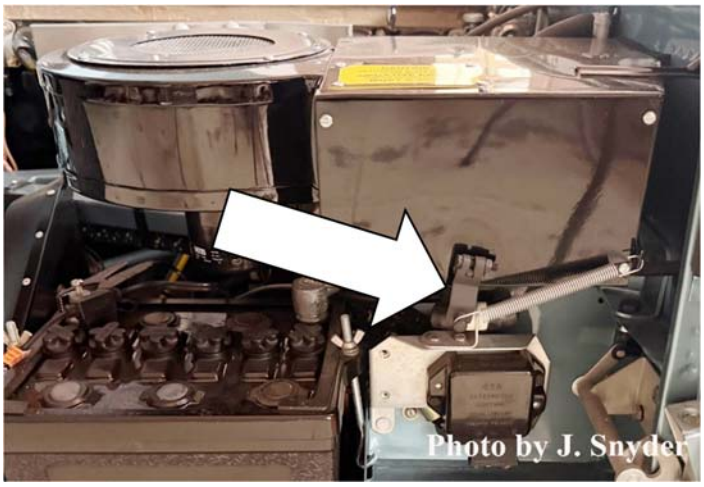
Vacuum Tank

The vacuum tank and hose are both Black. The hose clamp is the same as the Brake and Clutch Reservoir clamps and are cadmium plated and is not slotted. Some tanks have been observed that were marked "Trico Reservac" (Sports Car Graphic 9-62).

Heater
Heater Box

3.8L Heater Box

- Semi-gloss, Black, round fan motor housing with cadmium plated screen
- Semi-gloss, rectangular Heater box housing
- Cadmium plated spring and lever on side
- Fan - White nylon
- Fan motor - Semi-gloss, Black



4.2L Heater Box

- Semi-gloss, Black, round fan motor housing with cadmium plated screen
- Semi-gloss, rectangular Heater box housing with yellow "Negative Earth" label.
  Note: With the 4.2L**,** the ground was changed from Positive Ground to Negative Ground.
- Black lever on side with cadmium plated spring
- Fan - White nylon
- Fan motor - Semi-gloss, Black

Heater Hoses - Black with molded white stripe (note replacement hoses may not be so equipped)

Negative Earth Notification Plate

Note: With the implementation of the Alternator, the Series 1 E-Type is changed from Positive Ground to Negative Ground and a **CAUTION** plate is mounted on the top of the heater box with this notification.

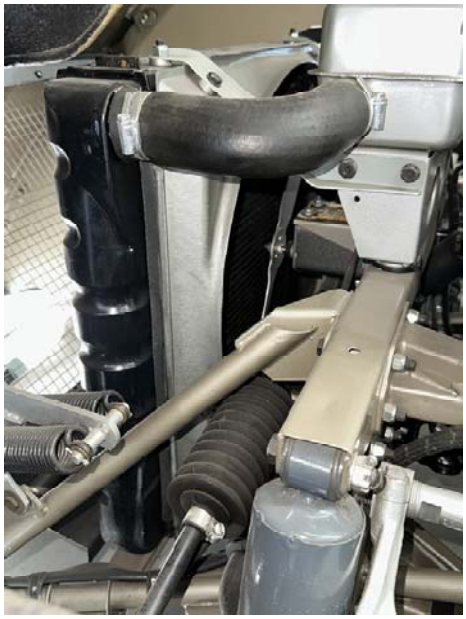
Radiator Area
Radiator, Fan and Fan Shroud
3.8L Radiator

The 3.8L radiator, with its corrugated sides, is painted satin black. The Fan Shroud is dull silver fiberglass in color.

The shock absorbers are not judged as they are part of the suspension system.

The subframe assembly is held together using black oxide bolts and cadmium plated Nyloc nuts.

Late 3.8L & 4.2L Radiator



The late 3.8L and 4.2L radiators are satin black and have scalloped sides.
The Fan Shroud is unpainted, dull silver colored fiberglass in color.

See Hose Clamps on Page 164.

Upper Radiator Hose and Header Tank

1961-1963 3.8L Header Tank:

- Header Tank with inlet above the tank seam at corner of tank up to early 1963.
- Hammertone silver header tank
- Hammertone silver mount
- Header tank support **brackets are painted a green tinted gray**
- Three-flex-rings on the hose going from the corner of the header tank to the thermostat housing

1963-1964 3.8L Header Tank:

- Header Tank, with inlet above the tank seam, off-set from corner of tank.
- Hammertone silver header tank
- Hammertone silver mount
- Header tank support **brackets are painted a green tinted gray**
- Formed hose with a slight bend going from the side of the header tank to the thermostat housing

1964-1968 4.2L Header Tank:

- Header Tank with the Inlet and outlet hose connections below the tank seam.
- Hammertone silver tank on Hammertone silver mount
- Header tank support **brackets are painted a green tinted gray**
- Formed hose with a slight bend going from the side of the header tank to the thermostat housing

March 1963, SB D.8: The 9-pound radiator pressure cap replaces the 4-pound cap. The radiator hose is changed from three flex joints in the middle of the hose to a solild hose with a formed bend and a modified header tank at the following chassis numbers:

3.8L OTS chassis nos. 850657 RHD, 879044 LHD
3.8L FHC chassis nos. 861091 RHD, 888241 LHD

The header tank and supports Header tank support **brackets are painted a green tinted gray**. The water inlet for the header tank is changed from the top portion of the header tank to the lower portion of the header tank and an additional smaller hose runs from the radiator to the lower portion of the header tank.

Radiator Pressure Cap

Photo by D. Jones

The 4-pound radiator cap was initially fitted from March 1961-February 1963.

March 1963, the 9-pound, is fitted.

The 7-pound, was fitted to 4.2L E-Types.

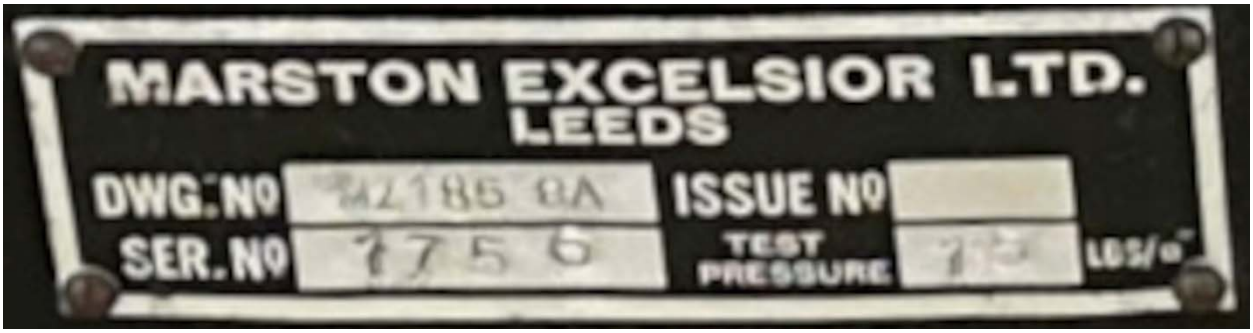
Up until cars chassis numbers OTS 850656 RHD/879043 LHD, FHC 861090 RHD, 888240 LHD, (around February 1963) a 4 lb/sq in radiator cap was fitted as part number C18460. The 4-pound cap was used in conjunction with the three-flex-ring radiator hose and bellows thermostat. Because of overheating reports, the header tank was revised, the top hose was changed to a molded version and the alcohol filled bellows type thermostat #C12867/2 (which had an alcohol moving sleeve) was changed to a Waxstat type and the 9-pound, 3.8L radiator cap replaced the 4-pound cap. Above, left, is an original radiator cap as fitted to car #875343 and note the simple '4' stamp to designate the pressure rating: ***David Jones***

Radiator Support and Header Tank Braces

Early 3.8L Radiator Support and Header Tank Braces support brackets are painted a green tinted gray

Marston Radiator Tag

The Marston Excelsior Ltd. tag is fitted to the center portion of the 3.8L radiator.



The Marston Tag indicates the Test Pressure that the radiator is pressurized for.

Subframe (Bonnet Support)

The subframe is body color. Black perforated straps with white plastic pins hold items in place.
For early E-Types, the brake line may be routed on top of the subframe.

For later E-Types, the brake line may be routed on the side of the subframe.

Subframe to Firewall

Black Oxide Bolts holding the subframe to the firewall, **unrestored** chassis no. 875950, 30 October 1961.

Black Oxide Bolts holding the subframe to the firewall, restored chassis no. 876001, 2 November 1961.

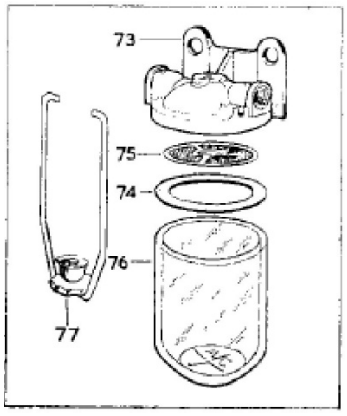
Subframe Bolts

Both Black Oxide and body colored subfame bolts are authentic, the exact point in time when the change occurred is not know.

Firewall of 1E.31628

Note: The exact change point of when the subframe was changed from being painted separately to being painted while attached to the firewall is not known; but the photo shows the firewall of 1E.31628, August 25, 1965 with paint under the location where the subframe is attached.

Fuel Filter and Mounting Bracket



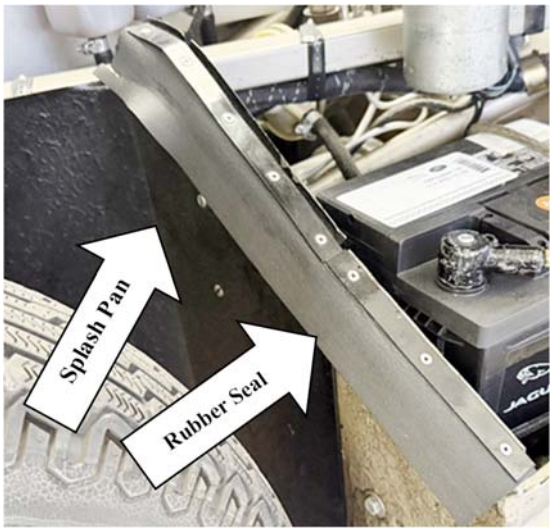
Note: As per the 3.8L and 4.2L parts book, the Fuel Bowls does not have a fuel filter cartridge.
Drawing Courtesy of JLRNA

3.8L fuel filter is mounted on a cadmium bracket that is parallel to the firewall and fitted below the body seam.

The 4.2L cadmium fuel filter <u>mount</u> is moved onto a gray angular bracket with black oxide bolts. The metal fuel line routes to the carburetors.
Note: Black oxide bolt holding the fuel filter mount in place.

3.8L fuel lines are frosted plastic lines and the routing may vary. Older lines turn yellow due to fuel and with age. 4.2L fuel lines, one is plastic, the other is metal.

Subframe Splash Pan, Inner Fender and Rubber Seals



Black rubber splash seals, fastened by pop rivets, to the left and right wheel wells and on left underside of the bonnet.

Note: The Splash Pans in the Wheel Wells Steering Rack and the Suspension are Not Judged Per JCNA Rulebook.

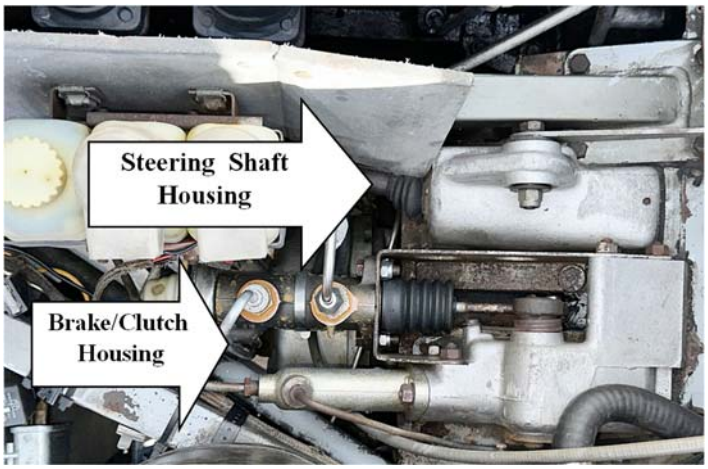
Suspension and Fender Wells

Suspension components and Fender Wells, the underside of the bonnet above the tires, are not judged, just as the same areas on other Jaguars are not judged.

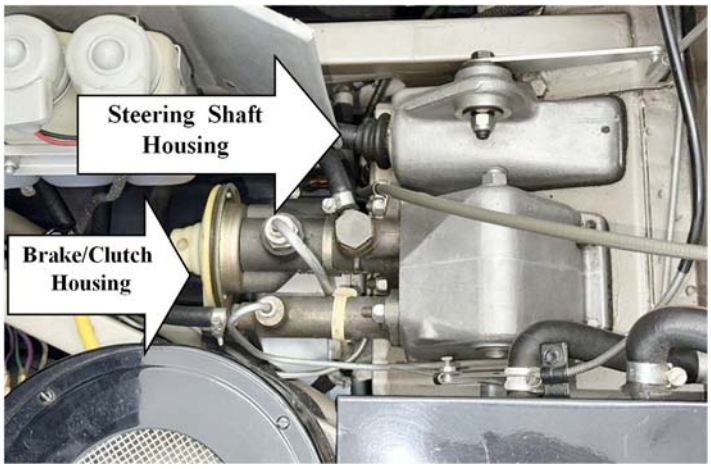
Steering Rack, Housing & Bellows

Note: The steering rack housing and bellows as well as other steering and suspension components are not judged items just as they are not judged items on other cars where they are not visible.

Steering Shaft Housing and Brake/Clutch Housing



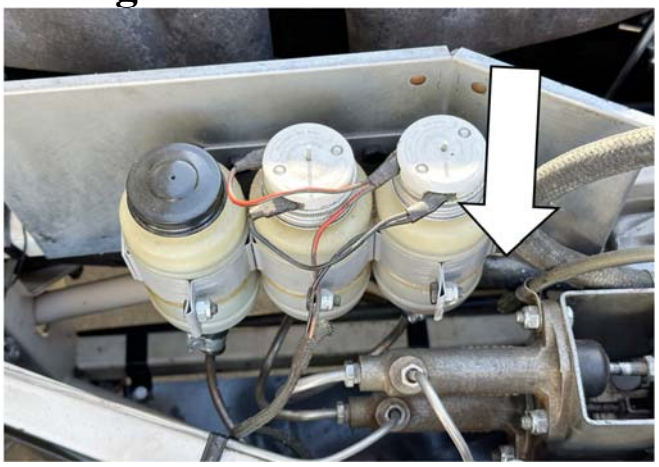
3.8L Housings are cast aluminum

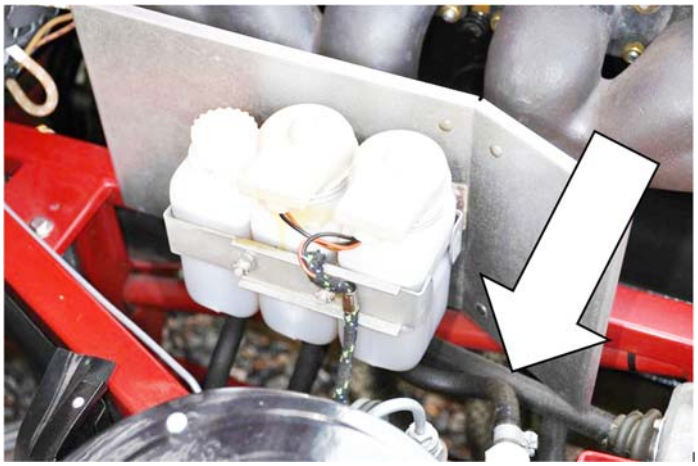


4.2L Housings are cast aluminum

The Steering, brake and clutch housings are unpolished cast aluminum.

Steering Shaft





3.8L & 4.2L Steering Shaft and bellows are semi-gloss black.

The steering shaft, extending from the firewall to the forward portion of the subframe, is semi-gloss black.

Bonnet (Underside)

Underside of Bonnet

The underside of the bonnet is finished in body color.
On Flat Floor cars, the fiberglass heater duct may be dull black, body color or gray.

Heater Air Inlet

Black Heater Air Inlet, oval cadmium washers and cadmium Phillips screws and hex bolts, as shown on unrestored 875240.

Body colored Heater Air Inlet, oval washers and bolt heads, as shown on unrestored 875950.

Black "snail" Heater Air Inlet as shown on 4.2L E-Type. Bolts and oval washers should be black.

September 1966, SDB P.173: The heater air intake was modified from a larger intake to a smaller, "snail" style, with a black crinkle finish.

4.2L OTS chassis nos. 1E.1479 RHD, 1E.12580 LHD
4.2L FHC chassis nos. 1E.21228 RHD, 1E.32632 LHD

Note 1: When the heater inlet is installed after the bonnet is painted, the oval washers are cadmium plated. If the heater inlet is body colored, the washers are body color.

Note 2: The left and lower-left fasters are Philips head, the lower-right and right-side fasteners are hex head bolts.

Welded changed to Pressed Louvers

Welded Bonnet

Pressed Bonnet Louvers

As no exact chassis number is published in any of the parts books or Service Bulletins as to when the bonnet louvres were changed from welded to pressed, the following observations have been made on XKData.com and other internet locations as follows:

LHD OTS, Last welded 876615, 23 January 1962	First pressed 876464, 29 December 1961
RHD OTS, Last welded 850336 around 23 January 1962	First pressed 850294, around 13 December 1961
LHD FHC, Last welded 885515 around 18 January 1962	First pressed 885314, 14 December 1961;
RHD FHC, Last welded 860113, 15 December 1961	First pressed 860120, 18 December 1961

Radiator Debris Screen

The debris screen is cadmium plated and has a black felt strip at the top.

Etc.
Bonnet Hinges

Bonnet Compensator, cadmium plated, Bonnet Springs, gloss black

Cast aluminum bonnet hinges

Air Plenum and Air Filter Canister

The 3.8L has a smooth Air Plenum. Some have black filter canisters.

Most 3.8L filter canisters are the same gray as the air plenum.

The 3.8L and some early 4.2L filter canisters are black.

Some late 3.8L and most 4.2L filter canisters have the three recesses or groves and are the same Hammertone gray as the air plenum.

Starting in the summer of 1965, the air cleaner canister paint color was changed from black to silver Hammerite. This was considered a "soft" change-over, in that the air cleaner canister (as were many parts) was supplied from an outside vendor, AC, and Jaguar did not have total control over what was delivered. The range of production dates commonly accepted for the color transition was between 5 May 1965 -1 April 1966. It can be stated that all cars produced before 5 May 1965 did have black air canisters, and all cars produced after 1 April 1966 had silver canisters. The cars in between may have had either.

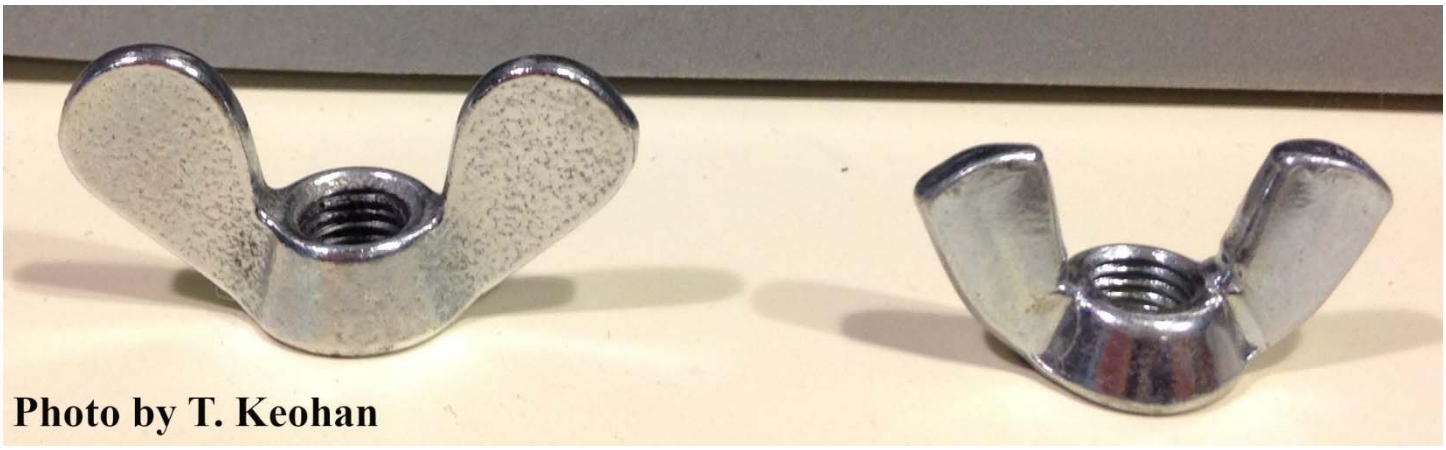
Here are some chassis ranges by body style. Before the first chassis numbers, all E-Types had black canisters. After the second chassis number, all E-Types had the silver canisters. Between the two numbers, it could be either. ***A. Karpovitch***

LHD OTS chassis nos. 1E11020~~1E12189 Approximately 1170 "transition" cars;
LHD FHC chassis nos. 1E31445~~1E32665 Approximately 1221 "transition" cars;
RHD OTS chassis nos. 1E1234 ~~1E1530 Approximately 297 "transition" cars;
RHD FHC chassis nos. 1E20876~~1E21051 Approximately 176 "transition" cars;
LHD 2+2 chassis nos. 1E75028~~1E75234 Approximately 207 "transition" cars;
RHD 2+2 chassis nos. 1E50007~~1E50021 Approximately 15 "transition" cars.

Air Intake/Trumpet Wing Nuts

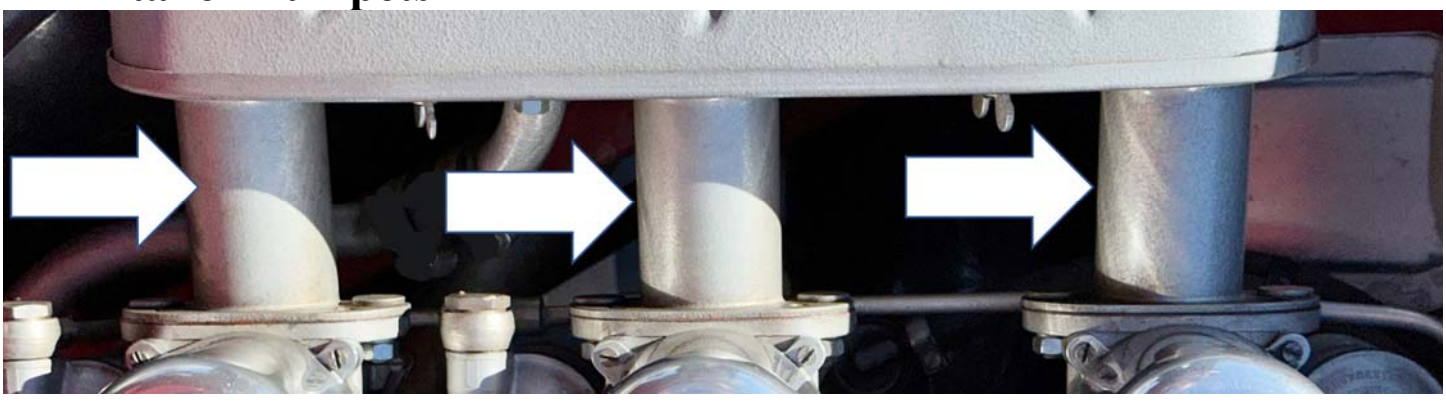
Large Eared wing nuts holding the Trumpets to air plenum

The Air Plenum is fastened to the trumpets via two large-eared C.12734 “Mickey Mouse” cadmium wing nuts with flat washers behind them.



Comparison of C.12734 “Mickey Mouse Ears” cast wing nut to standard, everyday wing nut.

Air Intake Trumpets

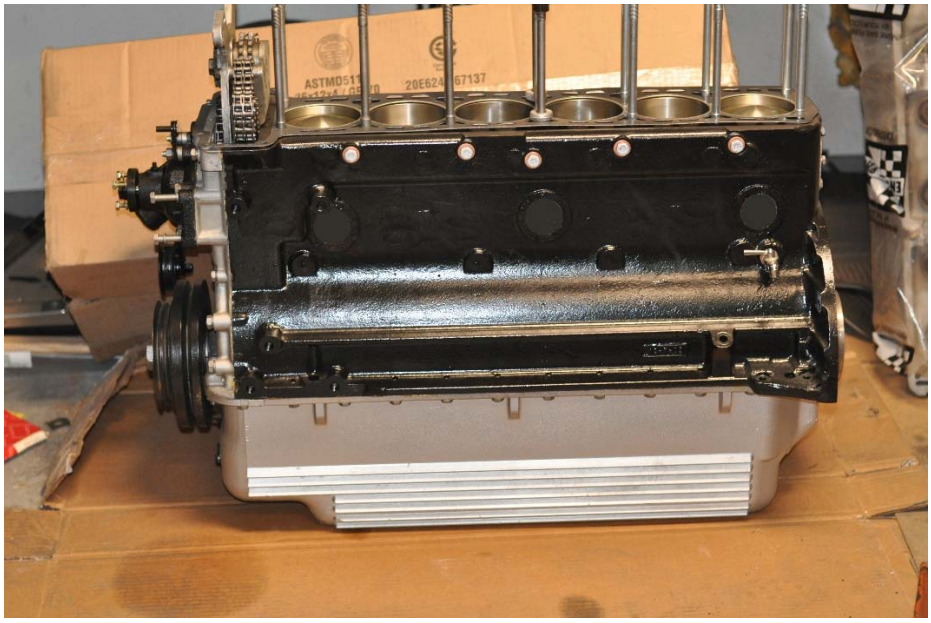


The Air Plenum Trumpets, connect the plenum to the carburetors, and are Hammertone silver on both the 3.8L and 4.2L E-Types.

Engine Block, Head, Carbs or Fuel Injection

Fasteners other than bonnet related hardware are typically black oxide.

Engine Block Color



Both the 3.8L and 4.2L blocks and freeze plugs are painted satin black. Oil sump is sand cast aluminum.

Engine Numbers

3.8L Engine Numbers R1001-R9999, R1001-on, 4.2L Engine Numbers 7E1001-on

Oil Filter Canister

3.8L Black Oil Filter Canister

4.2L Hammertone Green Oil Filter Canister

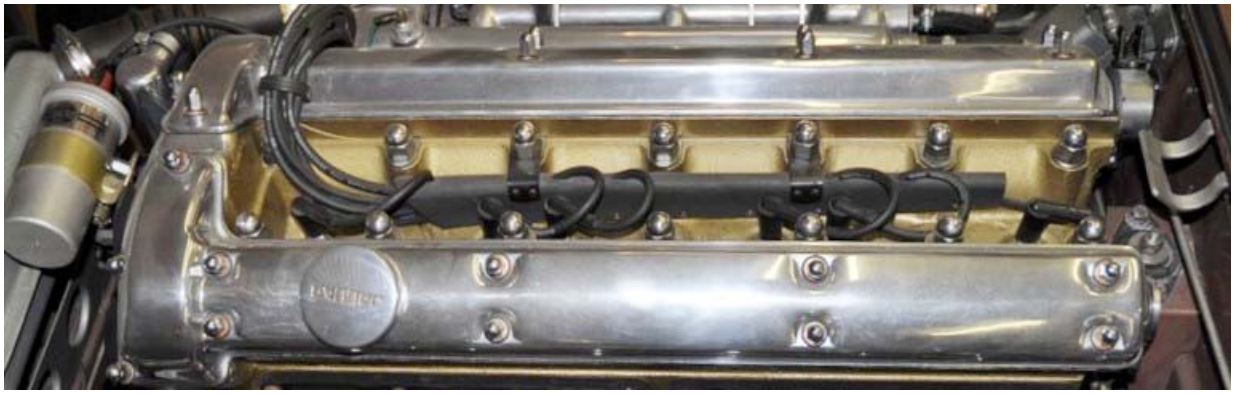
The 3.8L oil filter canister is black. Most 4.2L oil filter canisters are Hammertone green but no chassis number available as to when the change occurred.

(Cylinder) Head

The earliest E-Types had a Pumpkin Orange cylinder head (paint code not known), which has been traced as high as engine number R-2518-9 according to the Jaguar Club of North America. Later cylinder heads were painted Bradite Gold Jaguar Harvest Gold (which unfortunately is believed to no longer be produced). Several people have mentioned in forums that POR15 Olds Gold Engine Enamel is a close match. For 1967 models, the cylinder head was left unpainted.

Cylinder Head Color

Early 3.8L cylinder heads are Pumpkin colored at least up to engine number R-2512 as stated in the JCNA Rule Book.



Later 3.8L cylinder heads and all 4.2L cylinder heads are gold colored.

Cylinder Head Color and Number

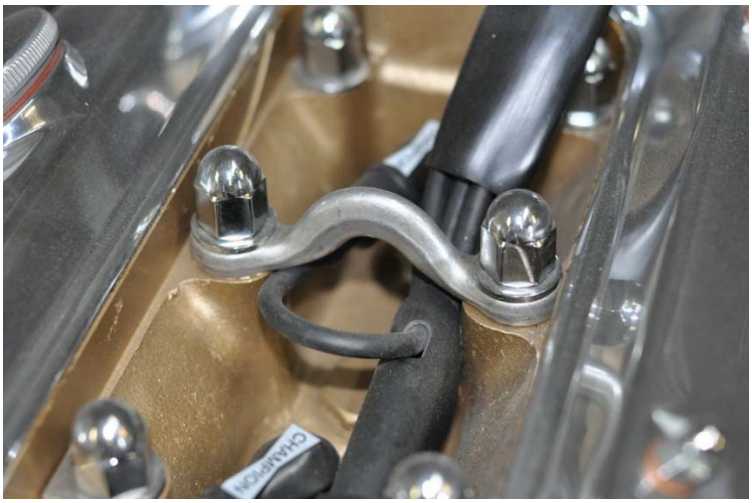
The cylinder head number is located both on the Data Plate, the front portion of the cylinder head and on the block above the oil filter, but "Numbers Matching" is not a judged area.

Series 1 E-Type - 3.8L to ~ R2512	Pumpkin[4]	Old Gold - Pumpkin
Series 1 E-Type-3.8L from ~R2512	Gold[4]	
Series 1 E-Type - 4.2L thru ~ 1966 and possibly early 1967 (See Note)	Gold[4]	
Series 1 E-Type, later 1967 and 68	Natural Aluminum	(No colors listed)

Note: The highest E-Type engine number observed to be gold to date is 7E10192-9 but there may be higher.

Cylinder Head Nuts, Washers and Lifting Brackets

The dome top cylinder head nuts and D washers are chrome



The engine Lifting Brackets are natural colored steel. As per **SDB A.146**, the lifting brackets may be fitted to earlier engines.

August 1964 SDB A.146: Commencing at engine number RA.7324-9, engines are fitted with Lifting Brackets... in sets and may be fitted to engines prior to the engine number indicated.

Carburetors or Fuel Injection

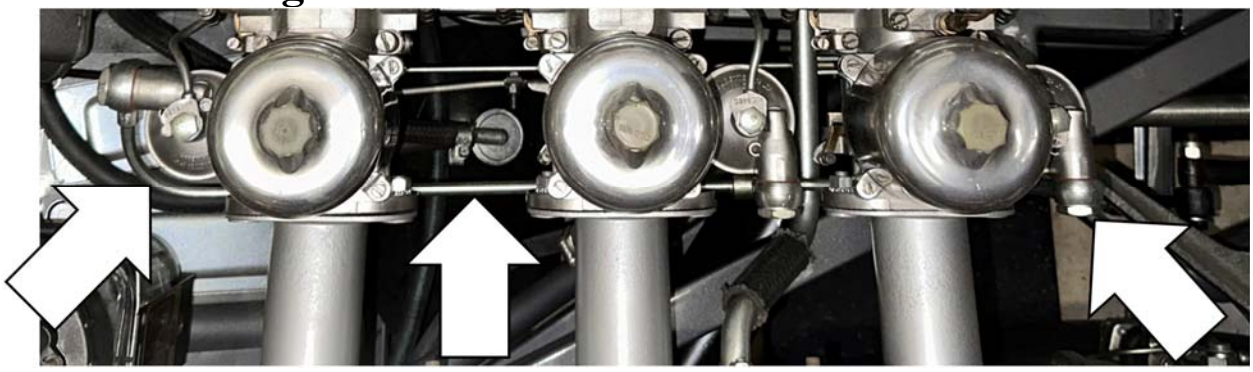
Carburetor Domes

The carburetor domes may be polished. Note: The Dashpot/Damper caps are cadmium plated.

All Series 1 E-Types were fitted with three HD8 carburetors.

As per the 2026 and earlier versions of the JCNA Rule Book, the carburetor tags under the bolt of each float bowl “must be considered optional”, thus not judged.

Fuel Rail & Linkage

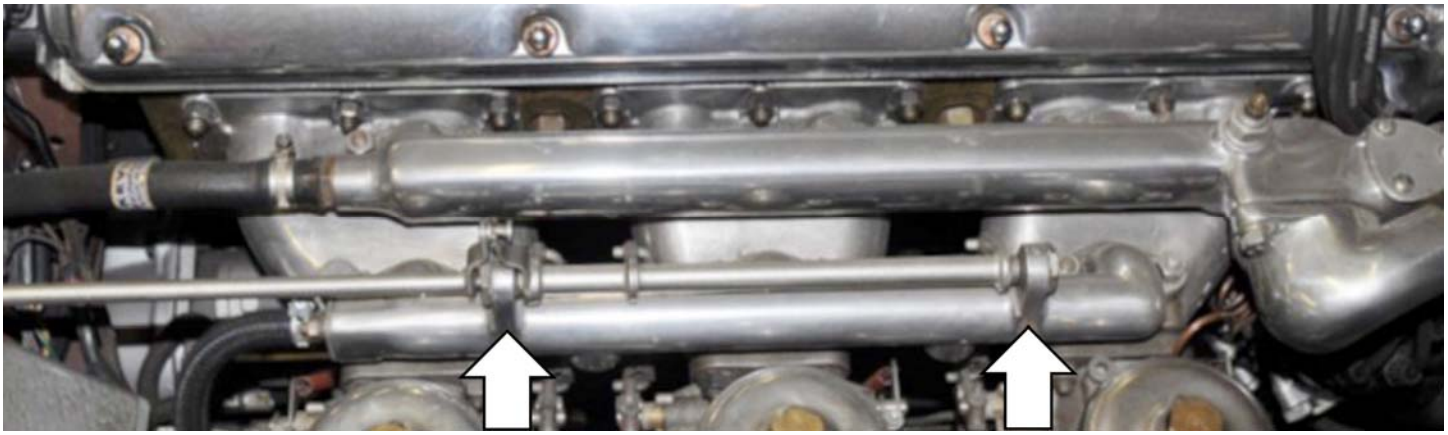


The cadmium-plated fuel rail is fitted under the carburetors and has cadmium -plated banjo bolts fitting it to the carburetors. The throttle linkage is cadmium plated.

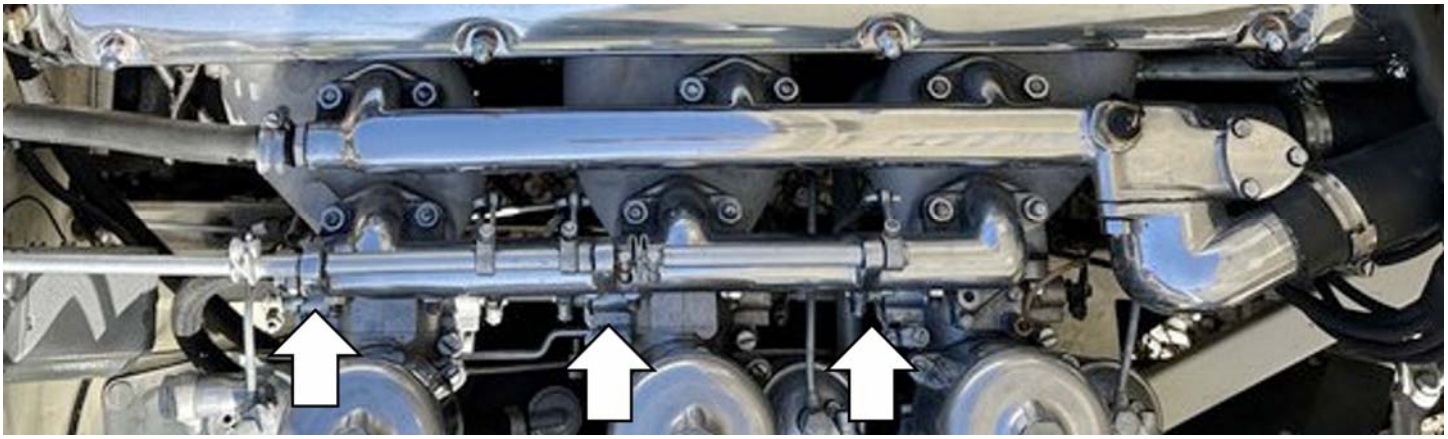
Fuel Injection

The Series 1 E-Type is not fuel injected, but as it is addressed on the score sheet, it is addressed here.

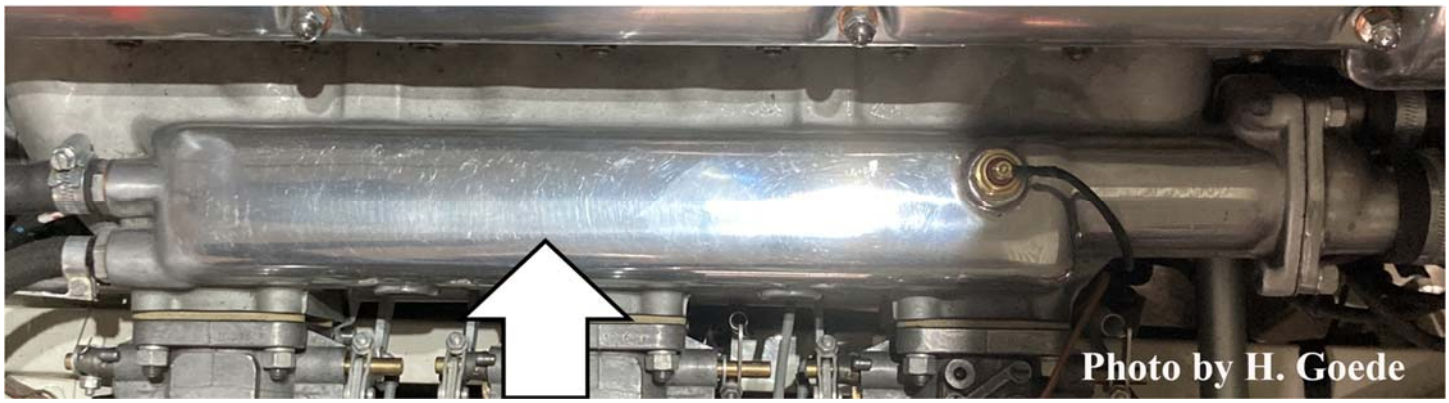
Intake Manifold



3.8L Three-separate pieces with polished 2-ear air balance pipe and water manifold.



3.8L Three-separate pieces with polished 3-ear air balance pipe and water manifold.



4.2L One-piece polished aluminum intake manifold.

Water Temperature Sending Unit

The 3.8L water temperature sending unit, mounted on the top forward portion of the water rail, is brass and has a spade connector for the black sending wire in place.

The 4.2L water temperature sending unit, mounted on the top forward portion of the water rail, is steel plated in bright Cadmium and has a brass knurl nut holding the black sending wire in place.

Down Pipe Head Shields

December 1966, SB M.39: 4.2L E-Type models beginning with the following chassis numbers are fitted with a Heatshield for the Exhaust Down Pipes:

4.2L OTS chassis nos. 1E.1545 RHD, 1E.12965 LHD
4.2L FHC chassis nos. 1E.21335 RHD, 1E.32888 LHD

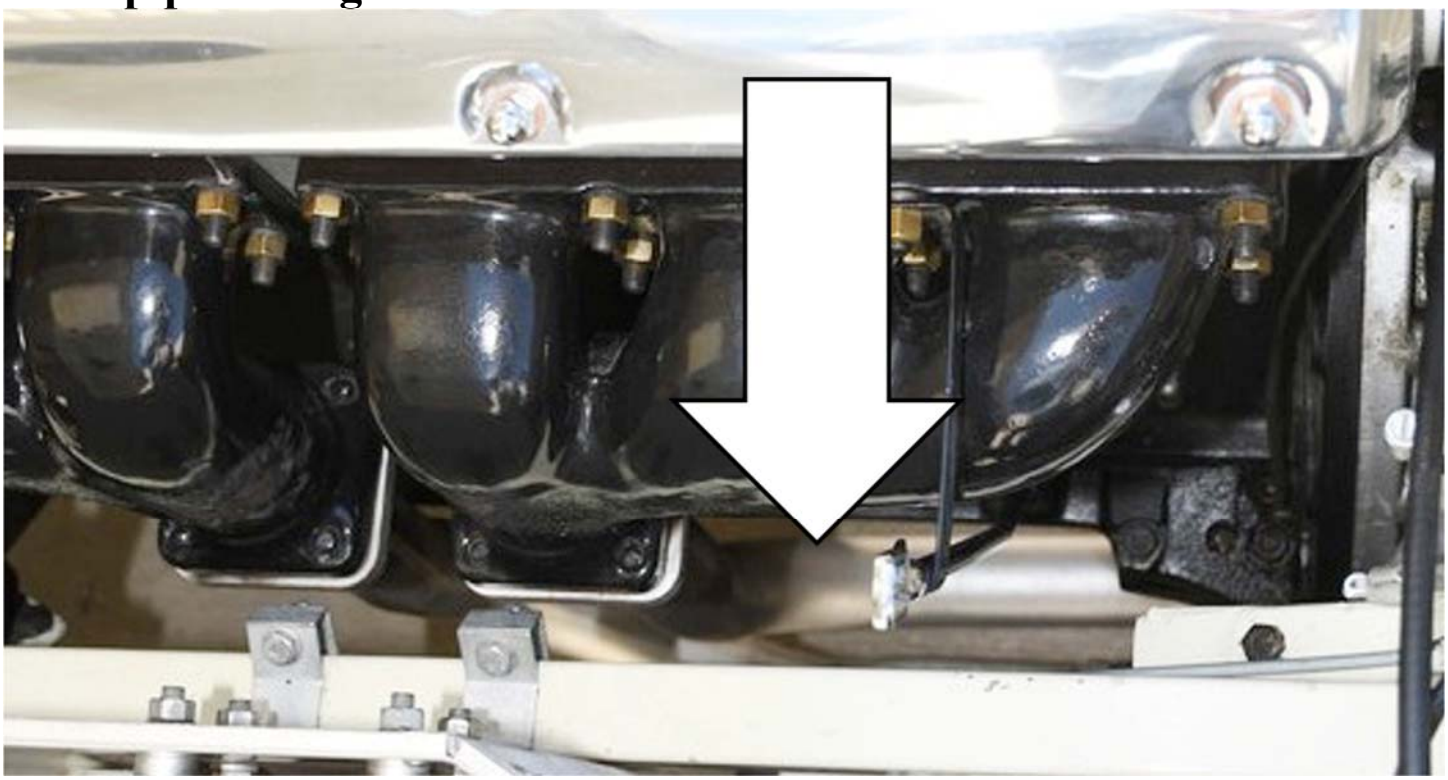
The Heat Shield may, if desired, be fitted to earlier 4.2L E-Types provided all the new items are employed.

Exhaust System (Manifolds & Down pipe Config.)

Exhaust Manifold

The porcelain coated (not painted) Exhaust Manifolds are fastened to the cylinder head using brass nuts with black oxide "high collar" spring washers.

Downpipe Configuration



The down pipes are mild steel and may have a rusted surface. Stainless steel is acceptable as long as its original, non-highly-polished, surface **remains**.

Electrical, Hoses, A/C Emissions, P/S

(Generator, Alternator, Relays/Regulator, Wiring, Battery, Tubing, Clamps)

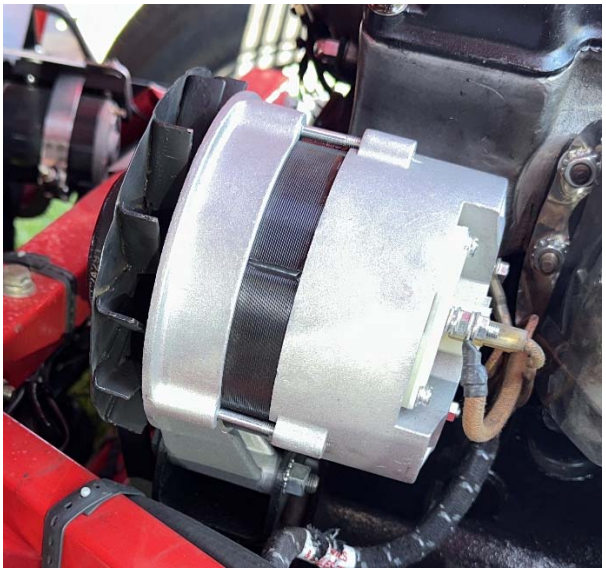
Electrical

Electrical clips, in various sizes, have been observed to be yellow plated finish cadmium or zinc plated.

Generator

The 3.8L generator housing is flat black with aluminum end plates.

Alternator



4.2L Alternator with**out** heat shield.

4.2L Alternator with a Hammertone **heat shield** fitted at engine number 7E6333.

The 4.2L Lucas alternator housing is aluminum with an exposed field winding.

Relays/Regular (Control Box)

Photo courtesy Maikel Lemke

3.8L Alloy Cover Lucas Voltage Regulator

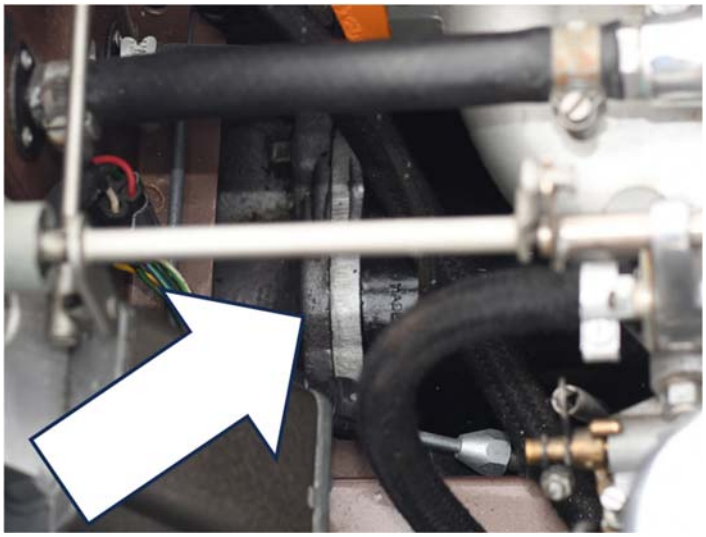
3.8L RHD OTS 850001 to 850091
3.8L LHD OTS 875001 to 875385
3.8L RHD FHC 860001 to 860004
3.8L LHD FHC 885001 to 885020

3.8L Black Cover Lucas Voltage Regulator

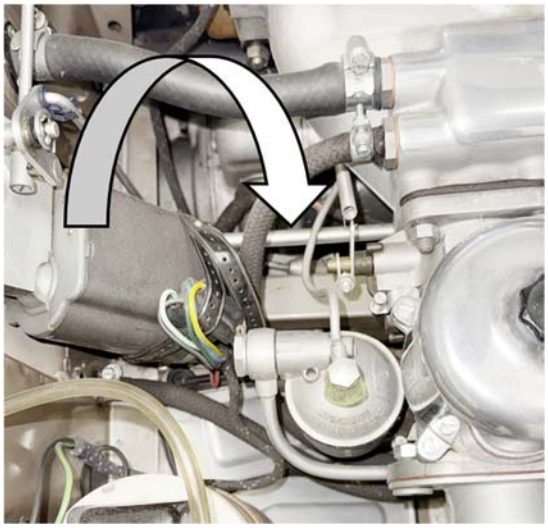
3.8L RHD OTS 850092 and subs.
3.8L LHD OTS 875386 and subs.
3.8L RHD FHC 860005 and subs.
3.8L LHD FHC 885021 and subs.

4.2L, 1965-1967, Lucas 4.T.R. Voltage Regulator (Control Box) coincides with the implementation of the alternator

Starter

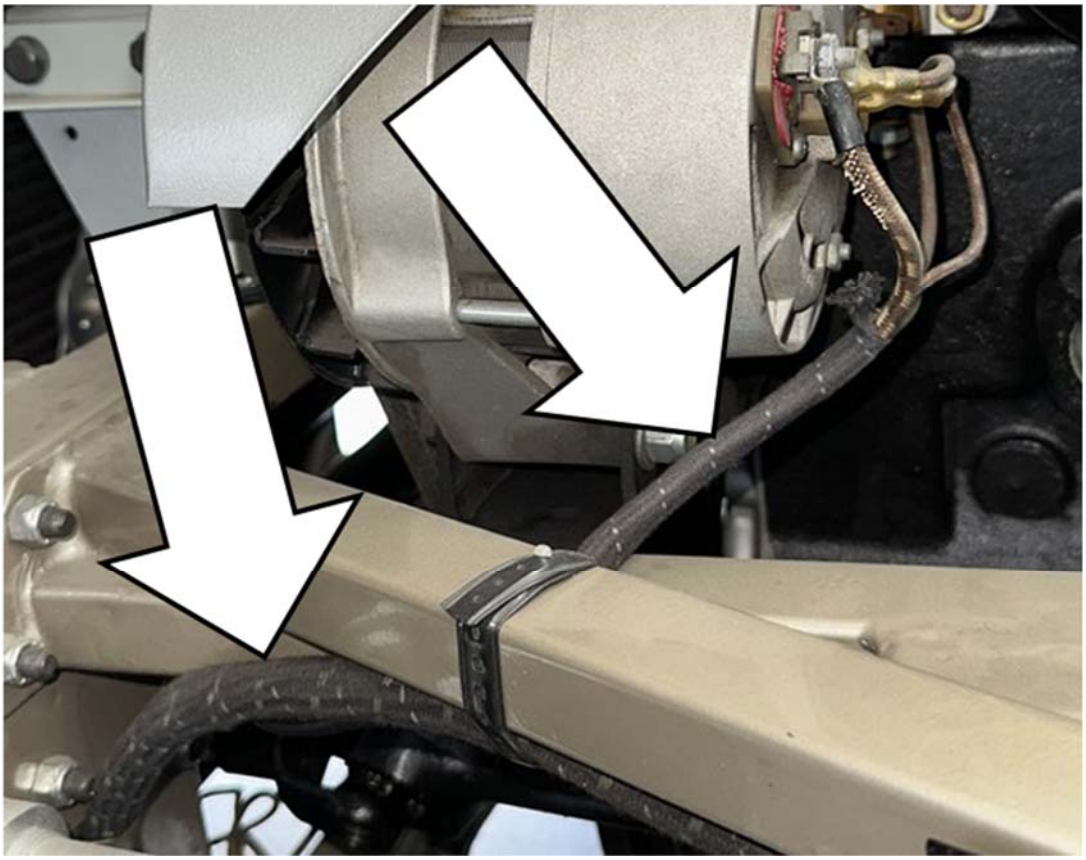


3.8L Lucas A-M 45G Bendix type Starter motor has a black housing with an aluminum mounting plate.



4.2L Lucas J-M 45G starter, (Not easily visible) with a black body, has the pre-engaged cadmium solenoid, mounted on top of the starter.

Wiring



All wiring harnesses have black, loomed cloth with light blue tracers.

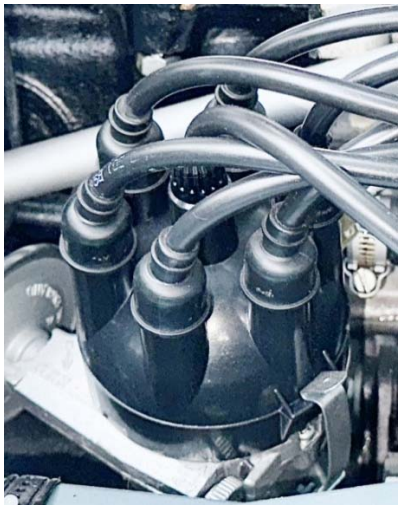
Wiper Motor

The 3.8L wiper motor has a Hammertone gray housing with aluminum end plates.

The 4.2L wiper motor has a dark gray motor housing with aluminum end plates.

Distributor

3.8L & 4.2L with Plastic Nuts, <u>but missing Rubber Boots</u>



3.8L & 4.2L with Rubber Boots Covering Plastic Nuts

The change from threaded spark plug wire nuts to push-in spark plug wire plugs was around March 1968.

3.8L and 4.2L distributor caps both use the threaded style nut to hold the spark plug wires in place. The parts book does show a rubber boot but it is unclear if all distributor caps were fitted with the rubber boots. The Push-in style spark plug wire and boot became effective around March 1968.

Coil and Coil Bracket

3.8L coil has an aluminum case with a Black top and a **threaded cap** for the high tension wire. It is held in place by a Cadinum plated bracket and a hex nut. The LUCAS decal has the round black logo on a silver background.

4.2L had a **rubber boot** on the coil for the high tension wire. The LUCAS decal has the round silver logo on the black background.

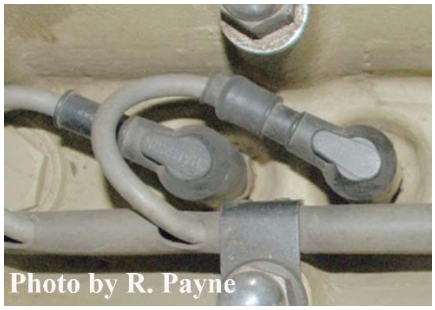
The change from **screw-in Coil to push-in Coil was around March 1968.** It is most probably that that justified a revised and obviously different Coil decal for easy identification/check on production line.

LUCAS Coil Decal Location

Both 3.8L and 4.2L coils have been seen with and without decals on factory photos. No deduction either way. The 3.8L coil has been seen on factory photos with the silver and black LUCAS Coil decal and fastened to the coil above the Cadmium bracket, and not on the bracket. The 4.2L coil has been seen on factory photos with the red on black decal, then in March 1968, the black on yellow on silver LUCAS Coil sticker, fastened on the coil above the Cadmium bracket, and not on the bracket, was used.

Spark Plug Caps

Black spark plug cap with a dot in the center and non-painted "Champion" lettering in a circular pattern on top, used on very early E-Types.

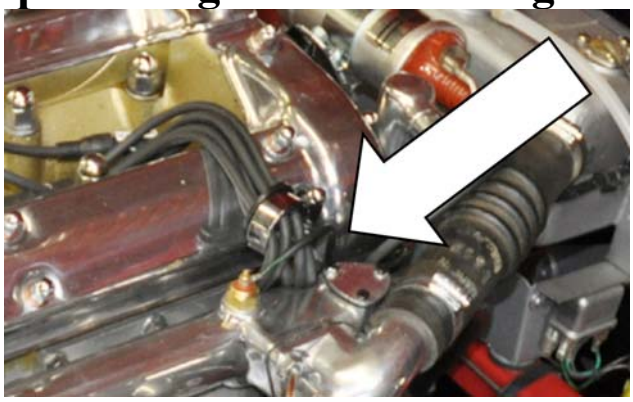


Black spark plug cap with non-painted "Champion" in an oval on top of the cap used on some mid 60's E-Types.

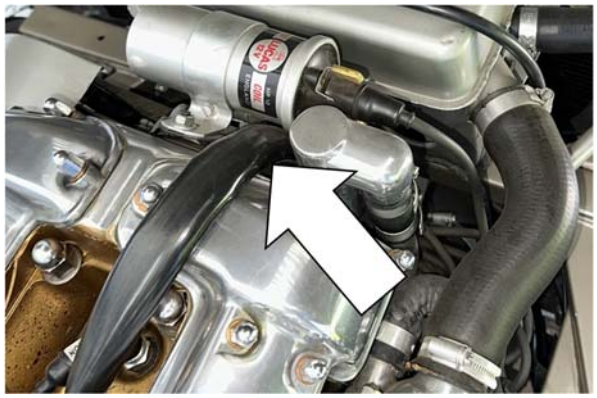
Black spark plug cap with the white painted "Champion" "Bow Tie" on top of the cap used on most 3.8L and 4.2L E-Types.

December 1962, SB B.24: Champion JUN.12.Y sparking plugs replace those already fitted. This Sparking plug supersedes the N.5 plug previously fitted and overcomes fouling of the electrodes under heavy traffic conditions. This change commences at Engine No. R.9528.

Spark Plug Cables and Organizers



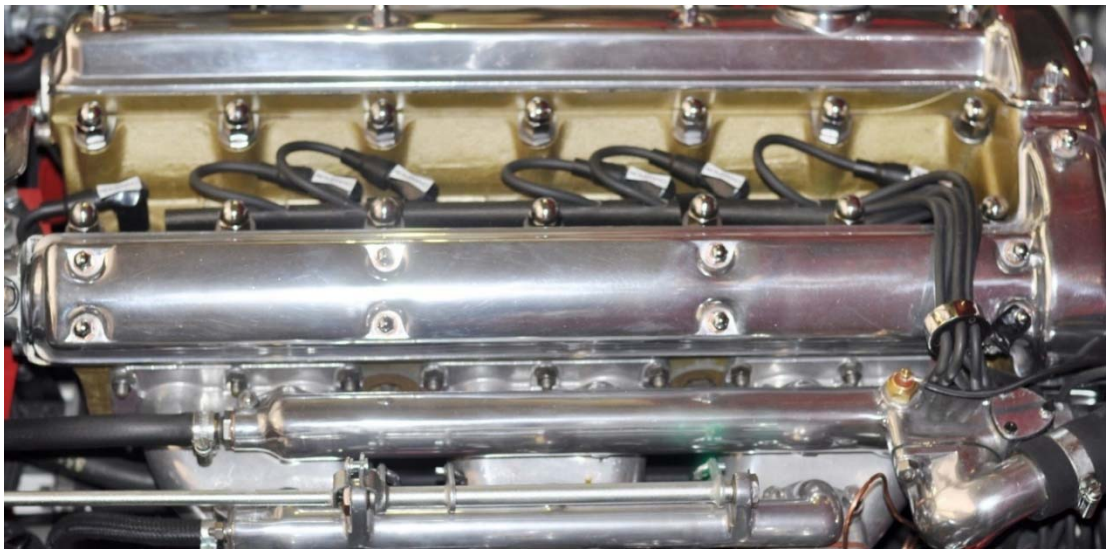
3.8L Spark Plug wire routing goes between the cam cover and the intake manifold.



4.2L Spark Plug wire routing is encased in a PVC sleave and routes behind the coil.

Spark Plug Wires/Conduits (Organizer)

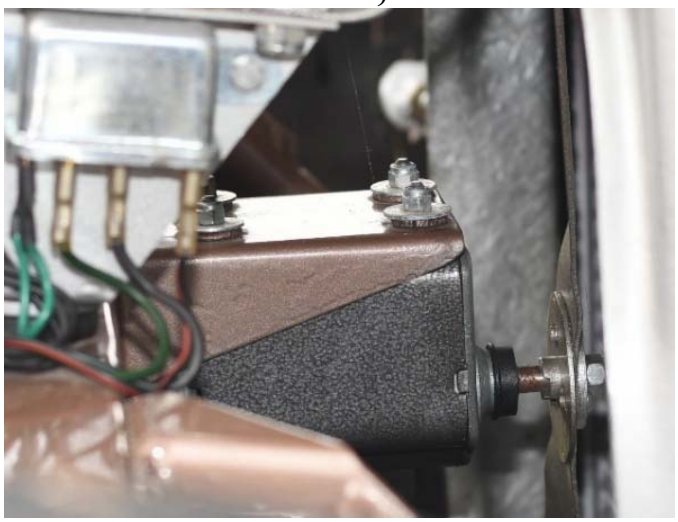
Early 3.8L E-Types have red fiberboard spark plug conduits.



886838, 3.8L E-Types have a black fiberboard spark plug conduit. The spark plug wires are routed up from the distributor, through a round ignition wire separator with the chrome bracket.

4.2L, Black spark plug conduit routed through PVC shield from front of cylinder head.

Electric Fan Motor, Fan Blade and Fan Shroud

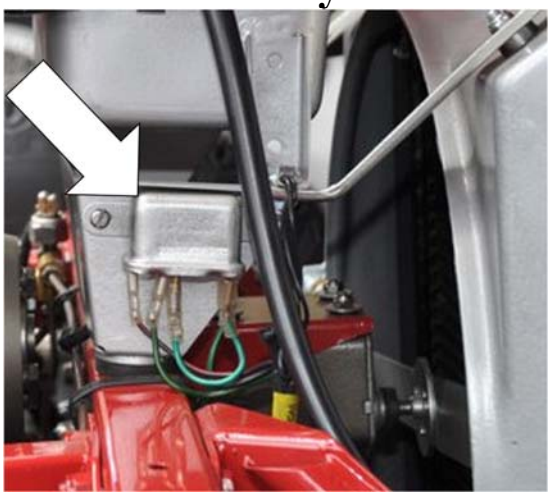


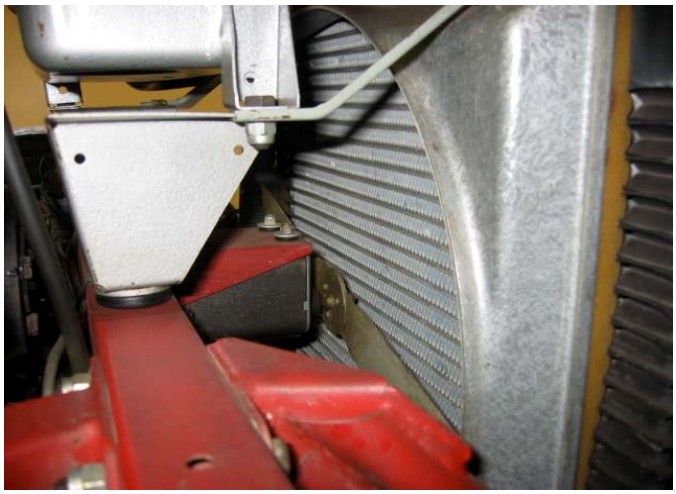
3.8L "D" shaped fan motor housing with a dark gray finish. Silver colored fan blades and shroud.

4.2L "D" shaped fan motor housing with a dark gray finish, Silver colored fan blades and dull silver fiberglass shroud.

The fan blade is a Single blade with a flat silver finish.

Fan Motor Relay





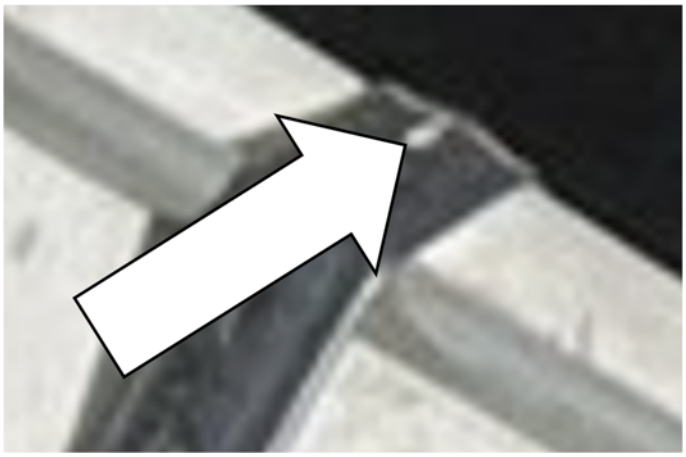
October 1962, SB D.6: The fan motor relay, mounted on the right side of the gray header tank support, is discontinued.

3.8L OTS chassis nos. 878021
3.8L FHC chassis nos. 886749

“Lucar” Connectors

Lucar connectors were black/maroon up to around 1962 when clear Lucar connectors became available.

Fasteners



Unrestored chassis no. 875950

Restored chassis no. 1E.12055

Black perforated ties, with white fasteners, fasten the brake line or other items to the subframe.

Battery Area

Battery

NOTE 1: As per the 2026 and earlier JCNA Rule Book, Lucas and other original equipment batteries, by any manufacturer, must be replaced only by those that are of **like voltage and appearance and have their terminals positioned as on the original battery**. Replacement batteries **do not have to be identical to the original in size**, but they **must fit in the location originally intended**, utilizing original factory hardware. Fluted or cylindrical sided (Gates-Optima style) batteries are non-authentic.

NOTE 2: "**Battery**" is covered in two places on the Score Sheet, under the Boot section and under the Engine Electrical Section. As the E-Type battery is located in the Engine Compartment, the Engine Judge is responsible for judging the battery, cables and related items.

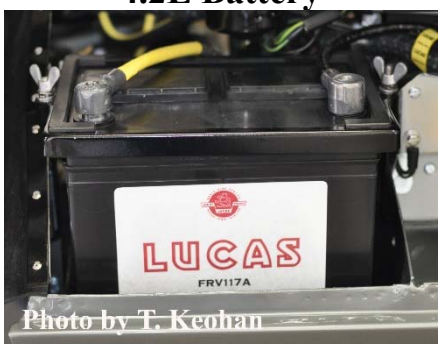
LUCAS 12 volt, FRV11/7A, tar top battery, L: 9 3/4" x W: 6 11/16" x H: 5 5/8", 57 AH (Amp Hours). Early batteries had six separate black filler caps with LUCAS branding on top of each cap as well as LUCAS molded on the front of the battery. The lettering was not highlighted or painted. The battery sat on a molded, ribbed battery tray made of black Bakelite with a spout for a rubber drain tube in the lower rear corner.

3.8L Battery

The 3.8L Series 1 E-Type is a positive ground car. It is fitted with a single 12-volt FRV 11/7A battery with the Positive Earth Post on the left **inboard** portion of the battery and the Negative post on the right **inboard** portion of the battery.

Note: Battery decals are not a judged component.

4.2L Battery



The 4.2L Series 1 E-Type is changed from a dynamo (generator), positive earth to the alternator, negative earth. At this time, for the FRV 117/A battery, if the battery is rotated 180 degrees, the battery terminals are moved to the **outboard** part of the battery, Negative Earth, with yellow cable, on the left, positive, black cable, on the right.

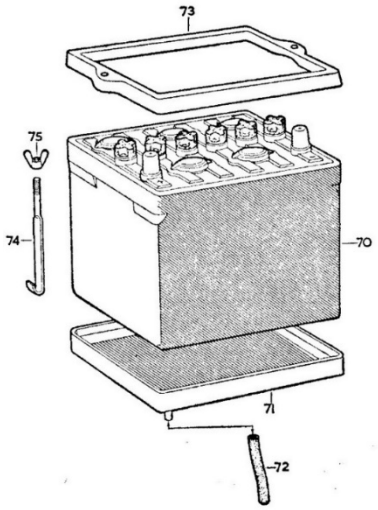
From 1965 the FRE 117/A battery was used with internal links and red plugs. It also seems Jaguar responded to complaints about the difficult access to the terminals by rotating the battery 180 degrees, thus moving the terminals from the inside to the outside.

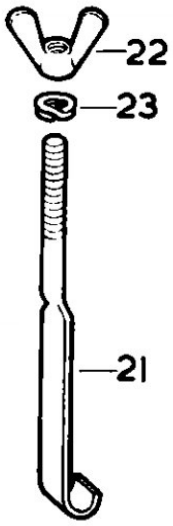
The FRV11/7A battery code translates as follows:
FR = Ferguson (tractors) special battery - the XK engine required a heavy-duty battery so this was chosen
V = type and size of plates
11 = number of plates per cell
7 = special assembly to Jaguar requirements
A = terminal layout and nominal voltage

Many thanks to Dave Allen for his research on the battery configuration and to Tom Keohan for providing the pictures of his original battery - a rare survivor!

Battery Hold Down Clamps

Large eared wing nuts with double spring washer on the “J” Bolts.





Battery Drawing and Related Images Courtesy of JLRNA

'Thackery' Washer with slight bent in the middle

Photo courtesy Kats British Cars.

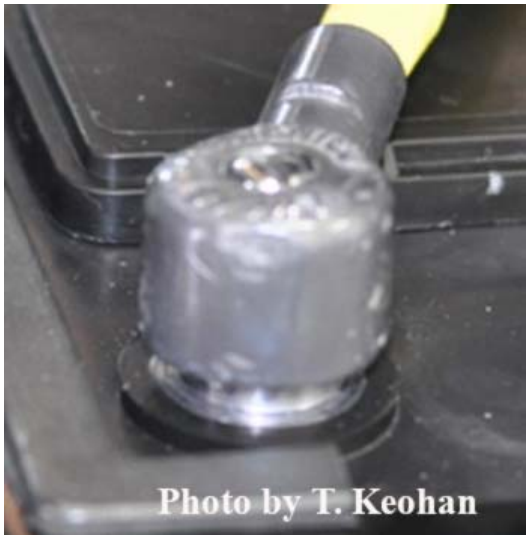
Battery Hold Down Frame and “J” Hold Down Clamp.

Note: Although the drawing on the left does NOT show double spring or the **'Thackery'** washer, as shown in the drawing in the center, drawing number item 23, shows that the black oxide 'Thackery' washer with a slight bend in the middle, as required.

Non-Authentic “Fluted Style” Battery

The manufacturer of the battery is not judged; however, the Gates/Optima or fluted style batteries are non-authentic.

Battery Cable Ends

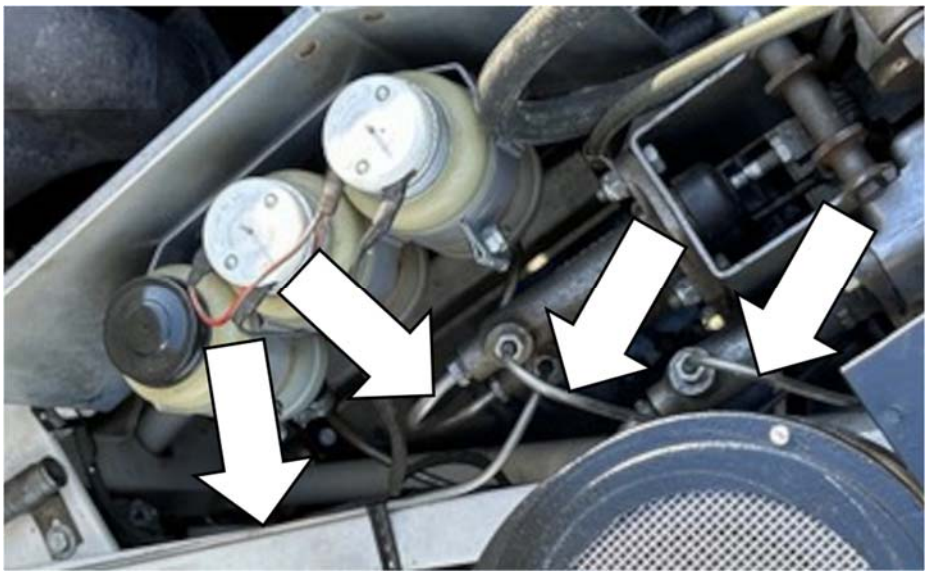


The Series 1 E-Types 3.8L Positive (Earth) Cable may or may not have an additional hole on the Helmet Style battery connector that was used on other Jaguar models for plugging in accessories.

Recessed Self-tapping, slotted screws are used to hold the helmet-style battery cable connectors to each battery terminal post.

Note: The hole on the side of the positive (Earth) terminal is correct. It is a left-over item as was used on earlier saloons for an auxiliary item, such as a light. It is correct on the E-Type, even though it is not needed.

Tubing



Metal tubing, such as the hydraulic clutch and brake lines are cadmium plated.

Clamps
Hose Clamps

The vacuum hose (top hose) has a low pressure, without any perforations, cadmium plated clamps.

Water lines have the Cheney “Cheese Head” or Regent Round-Screw style, cadmium plated clamp.

Note 1: Cheney clamps do not have perforated serrations, only indents for the tightening screw.
Note 2: Hex head hose clamp screws are non-authentic.

Miscellaneous

A/C Air Conditioning

Some 1966-67 FHC cars are fitted with air conditioning.

Emissions

The Series 1 E-Type does NOT have any visible factory fitted emissions equipment.

P/S Power Steering

The Series 1 E-Type is NOT factory fitted with power steering.