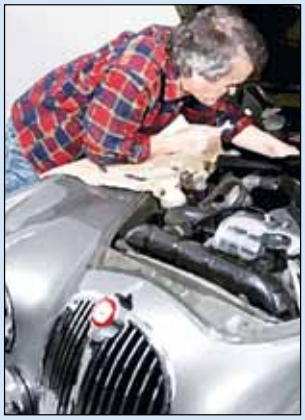


Finishing the Mk 2 heater and turning to the E-type

We removed and stripped down the Mk 2's heater last month ready for it's modern upgrade, now it's time to refit and finish the job

Words and pictures: **Jim Patten**

The revised XK 120 heater we fitted to an XK 120 last month has proved to be a tremendous improvement and well worth the upgrade. It remains out of sight and although the appearance is modern, its invisibility and efficiency outweighs that fact.

So then we moved on to the Mk 2 and last month the unit was removed from the car and dismantled ready for its makeover. There are one or two physical alterations to be made rendering it difficult to return to original (as if you would want to!). But the cuts are so minor that they are largely insignificant. It is also a job you can do at home although quite frankly for an extra £50 Clayton Heaters will do the whole thing and return your unit with a stove-enamelled casing. But then we know so many of you enjoy the therapy of doing these jobs yourself. Don't forget S-type and 420 owners: the heaters are similar to the Mk 2 and can also benefit from the upgrade.

There are always a number or extra 'while you're there' jobs to do and as we mentioned last month, it is critical that hoses and heater supply pipes be in perfect condition. If not renew as a matter of course. For the extra cost it is not worth the risk. Another factor is the bulkhead flap and its operation. On the Mk 2 the workings are manual and the pivots often seize up. If yours is creaky then get in there with some WD40. This may involve removing the mesh cover to get access. In severe cases - especially when a car has been left in the open with the flap open – water and debris gets inside, rests in the bottom of the void only to rot the bottom out. Telltale signs are water or flaky deposits on top of the transmission tunnel inside the car.

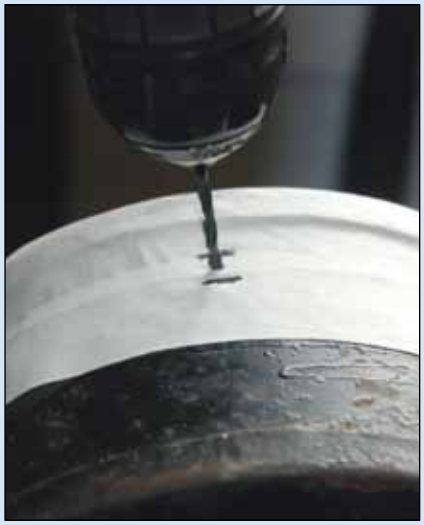
The benefits of this revised system is a more efficient heater matrix and with the internal flap now firmly closed and sealed in place, all the air coming in from the bulkhead flap will pass over the matrix. Backed up by a modern high-speed motor the generated heat will prove most beneficial to the occupants.

Clayton has also been developing air-conditioning systems for most models, something we will get back to sometime in the future. In the meantime stand by to be amazed by an efficient Jaguar heater.

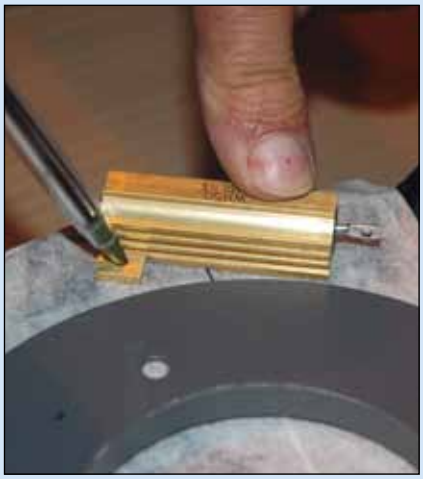
Heater upgrade

The air intake hole has to be enlarged to accept the bigger heater fan. Using a cutter (a jigsaw will work) trim away excess metal so that the hole meets the required 120mm. Try to keep parallel to the original hole edges

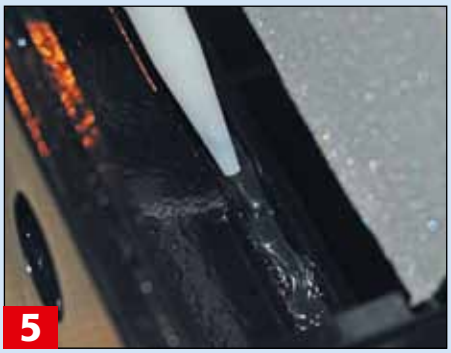
Measure down 20mm from the top of the heater box fan area and scribe a line. Then measure a further 10mm from that line and make another mark. Make a central mark (5mm down from the first) and then drill a pilot hole with a small drill bit. Follow this with a 10mm drill bit. The hole is to allow access for an Allen key later used to secure the new fan



Clayton had the heater box stove enamelled (rather than powder coating due to the heat developed) before the next stage. Masking tape is applied to the heater box surface and the new heater plinth base is offered up to the heater body with the flat end close to the box and the initial curve of the plinth following the contour of the heater box fan area. Make a mark through the holes for later drilling. Offer up the resistor anywhere alongside the plinth and mark the holes



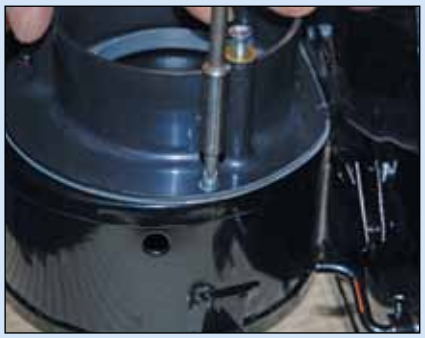
Three 2.7mm holes are now drilled for the motor plinth and a further two for the resistor. The one nearest the main body will have to be drilled at an angle unless you have a rather long drill bit

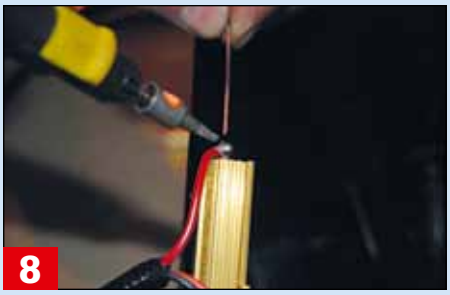


Silicon sealer is used around the inner flap aperture and the flap pushed close to make a permanent seal

Cut to size and then apply foam (included in the kit) to the outer flap by pulling back the protective cover as shown

Offer up the motor plinth base and plinth before screwing to the heater body with the self-tap screws provided. Then the motor can be fitted, again with the screws provided (below)





A loom is provided from the motor to the resistor and then on to the car's main harness and the switch. Solder the wires to the resistor as shown here (it doesn't matter which end) with the red on one side and the orange the other

The resistor can now be screwed in place on the heater body using the screws provided

Offer the new fan over the motor spindle noting that the shaft is a D-shape with a suitable D-shape hole in the fan centre

Arrange the fan so that it is close to the heater body but with enough clearance to miss while spinning and then secure with the grub screw using a long Allen key

Fit the grommet into the hole used to access the grub screw

Couple the wires up to the battery and make sure that the rotor fan spins the right way (note the arrow). Swap the wires around if not. As the motor is isolated from earth it is not polarity dependant

Apply foam to the outside of the heater matrix. This is to cushion the matrix against the heater body. Then lower the matrix into the heater body with the outlet pipes uppermost (see below)

15

Fit the cover and screw in place

16

Don't forget to fit the flap return spring

Refitting to the car

1

If the heater to bulkhead rubber seal is missing or damaged Clayton can supply a replacement. It is effectively thick foam supplied in a sheet and cut to size, with adhesive on one side

2

This seal from the fan to bulkhead was in good condition and could be reused

3

Fitting is the usual reversal of the removal process, making sure that any hoses are replaced and the supply pipes are carefully examined. This is being fitted with a rubber buffer under a bolt. Should the original bobbin type be required (see inset) they are available from SNG Barratt as part number C24792

4

A replacement water valve has been fitted, again available new. The old seal can usually be reused as long as it is thoroughly cleaned

5

Fitted to the car the heater motor was wired up to the car's harness with the red wire to max-speed (green with yellow trace) and the orange to low speed (green with purple trace). The black is to earth. Ensure that the bulkhead flap (inset) is in perfect working order otherwise there will be insufficient air flow over the heater matrix to provide heat

Parts prices (inc VAT)

Mounting bobbins part number C24792 at £2.07
Heater valve part number C16559 at £30.21
Heater pipe set £54.06

All the above available from SNG Barratt,
Tel: 01746 765432

Contacts

Clayton Heaters, Tel: 02476 691969,
Website: www.claytoncc.co.uk
Clayton supply the heater upgrade kit at £199 or your heater fully refurbished at £249

Next month:
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See technical disclaimer on page 129