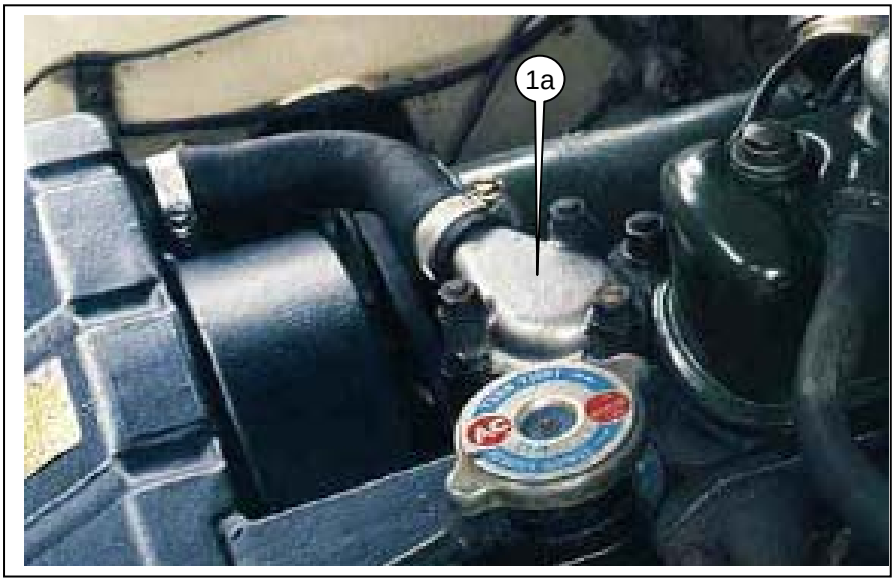
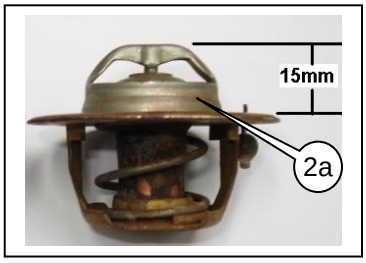
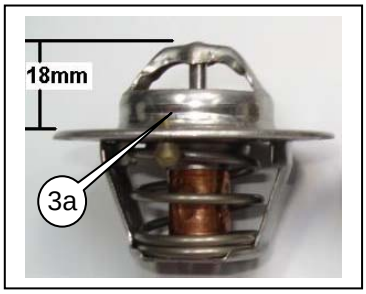
Supplemental Information
for
460-890 or AEA306 Thermostat Housing
948 Sprite





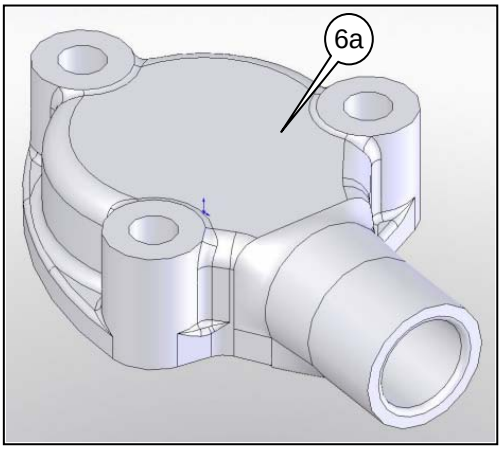


The original AEA306 (flat-top) thermostat housing (1a) is almost unique because of its very low profile. With limited space, the thermostats could not be more than 15mm high (2a) or they would hit the underside of the thermostat housing. In 2008, the range of thermostats that fit was discontinued, and efforts to have them remade proved impractical due to the cost. The thermostats available now have a height of about 18mm (3a). We decided to redesign the original flat top thermostat housing with a little bit more room to preserve the unique look of the original flat top design while allowing you to use a conventional thermostat.

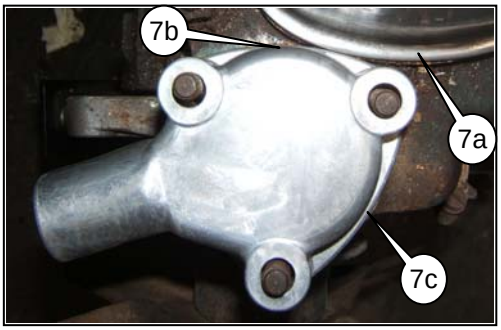
Compared to what was available (4a), the new thermostat housing (4b) is a huge improvement. The dimensions are correct and the quality of the casting is, in our opinion, better than the original factory housings.

Turning the housings over reveals more differences. The underside of the previous housing was left “as cast” (5a) while the new housing is actually machined (5b). The gasket seating surface (5c) of the new housing is also machined to a higher standard.

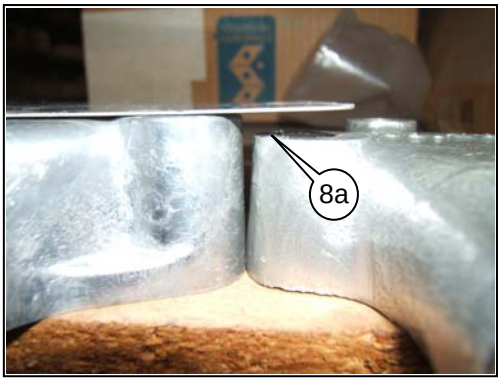
We started from scratch, and all of the development work was done in Solidworks (6a), an engineering software package that allowed us to easily fine tune the design as we made changes. It also made it possible to have prototypes made in plastic so that we could test fit samples on cylinder heads before we committed to a final design.



This project involved more that just making an existing part taller. We took into account issues that had come up long after the cars were out of production. One consideration was the fact that many aluminum valve covers for the Sprite have a flange that comes very close to the housing (7a). The housing we designed is asymmetrical and the section closest to the valve cover (7b) is thinner that the rest of the base (7c), without compromising the width of the sealing surface. Although we have given you as much room as possible, there may be an alloy valve cover out there that makes contact with the housing, requiring further modification to achieve a proper fit.



And of course while providing clearance for alloy valve covers and making it tall enough to fit over modern thermostats, it could not be so tall that new studs were required. It was also important to minimize the overall height because we are trying to preserve the appearance of the original “flat-top” thermostat housing. The new housing is very close to the original height (8a).



When we were satisfied with the design, the full set engineering drawings, specifications and solid models were sent to the manufacturer. They created the tooling and made several pre-production samples which we test fit with various valve covers, gaskets and thermostats before production was approved.

This entire project represents a commitment of time, money and resources to a very limited market. We believe that this type of project is exactly the kind of thing Moss should do, because there are not many others that would consider it worthwhile.

*Although every effort has been made to ensure the accuracy and clarity of this information, Any suggestions that you may have that will improve the information (especially detailed installation notes) are welcome. Please use the simple email form on the **“Contact Us”** page on the Moss website:*
http://www.mossmotors.com/AboutMoss/ContactUs.aspx
If you prefer, you may call our Technical Services Department at 805-681-3411. So many people call us for help that we are often not able to answer the calls as fast as we’d like, and you may be asked to leave a message. We apologize in advance for the inconvenience. We will get back to you within 2 business days.

Moss Motors, Ltd.
440 Rutherford Street, Goleta, California 93117
In the US & Canada Toll Free (800) 667-7872 FAX (805) 692-2510 (805) 681-3400
Moss Europe Ltd.
Hampton Farm Industrial Estate, Hampton Road West, Hanworth Middlesex, TW13 6DB
In the UK: 020-8867-2020 FAX:- 020-8867-2030