

Overheating problems on a Austin-Healey 100

By Tadeusz Malkiewicz

The 4 cylinder engine cooling system in its stock form is absolutely sufficient to cool the engine. If the engine is overheating something has to be wrong.

1. Check the temperature gauge – is it functioning properly and reading correct temperature?
2. Check the thermostat – is it operating properly, opening at the designated temperature?
3. Try using a 180 or 160 deg thermostat, these cars originally did not use 190+ thermostats.
4. Is the coolant level proper?
5. Is the coolant a proper mix of antifreeze concentrate & water? Too much antifreeze reduces the cooling efficiency of the coolant.
6. Is the Radiator cap a 4-7PSI cap?
7. Is the engine block/head clean? If not, redistrip/ chemistrip the block.
8. Is the radiator clean? Even if new, it could be blocked by debris from a dirty block. A full stock radiator should empty in about 12 seconds.
9. If you changed to an aluminum radiator, check its capacity – is it less than the stock one?
10. If you have placed a fan in front of the radiator it may be blocking air – try removing it
11. Are all air deflectors fitted?
12. Are the heat shields in place?
13. Check the exhaust manifold for cracks
14. Check if the manifold is not loose
15. It's a good idea to have your manifold ceramic coated – it prevents high temperature radiating from the manifold
16. Is the fan belt properly tight?
17. Is the water pump defective?
18. Is the head gasket cracked?
19. Is the head cracked (the 100 heads are prone to cracking between cylinder 2 & 3)
You can check it by checking the compression on cylinders.
20. Has the head been over shaved? If so, the water channels coming from the block will not match the channels in the head – they run at an angle.
21. The distributor should be set to ~6-10 deg @600 RPM; 35-38 deg max @ ~3000 rpm; Gap 0.015"
22. Are the carbs tuned properly?
23. Are the carbs set too lean?
24. Brake system checked? No brakes binding?
25. Is the oil pressure correct?