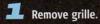
INTERCOOLER TEST

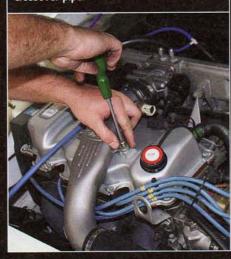
FITTING:

For the fitting you will need a selection of spanners, screwdrivers, sockets, pliers and a saw. We also found it pretty handy to have a Chris Todd lying around to assist us with the fitting. (This is actually a total lie, Chris did all of the fitting himself while we stood and watched!)

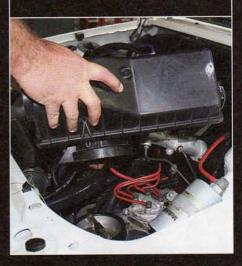




Undo hose clips and remove the crossover pipe.



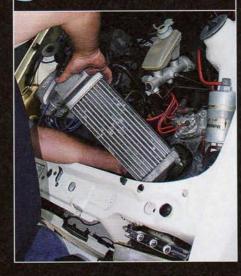
3 Undo screws and remove airbox.



Undo hose clip and remove lower boost pipe. Undo top intercooler securing screw.



5 Remove standard intercooler.



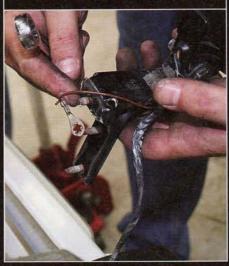
Undo hose clips and remove water hoses to radiator. Note: Catch coolant/antifreeze in a suitable container and dispose of correctly.



7 Remove radiator.



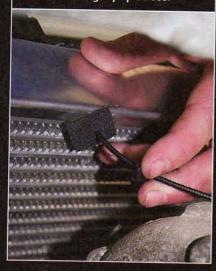
8 If fitted, remove spot light brackets.



Slide intercooler into place.



10 Secure both cooling fans to intercooler using clips provided.



1.1 Connect fan wiring and solder on to original fan wiring.



Refit spot lamp brackets using cap head bolts.



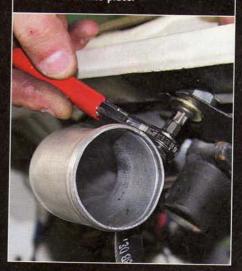
13 If necessary trim front panel to allow room for fans.



Space intercooler back 20mm using suitable spacer and tighten bolt.



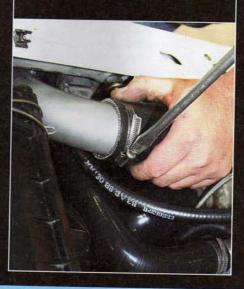
Using 20mm spacers, bolt radiator back into place.



16 Refit water hoses and top up cooling system.



17 Refit boost hoses.



Trim grille to allow clearance for fans and refit.



INTERCOOLER TEST

CONCLUSION:

The standard intercooler struggled massively to cope with the temperatures produced by the turbo, and although the figures are slightly higher than we would have experienced on the road on the day of our test, we would expect similar results on the road on a slightly warmer day. Part of the problem with the standard Series One 'cooler is the complete lack of airflow to the core. The unit is mounted behind a metal

panel and the headlight completely cutting it off from the air, so we were actually surprised that the cooler was working as well as it was! On a standard car running standard boost pressure the intercooler can only just cope, on a modified car it just didn't stand a chance, and the sort of intake temps we were seeing were not only sapping power, they were almost to the point of being dangerously high and risking engine damage!

Results – standard intercooler		
I provide the second	IN	OUT
Run 1:	118	89
Cool down:	66	49
Run 2:	121	97
Cool down:	76	58
Run 3:	120	100
Cool down:	79	60



IN OUT
Run 1: 112 47
Cool down: 72 36

Run 2: 120 52 Cool down: 80 39

Run 3: 121 51 Cool down: 83 39 As you can see from the figures, the Radtec cooler gave a massive improvement over the standard part. Despite seeing similar intake temps, the outlet temperature was actually half of what the original test figures were! One thing to bear in mind with our test though is that the figures were recorded on a rolling road. With the car out on the open road, we're pretty confident these would drop even further and be somewhere in the region of 30-40.

The Radtec not only impressed on its performance, but also on its build quality. The welds and core style are what we have come to

expect from a top manufacturer like Radtec, and when you get the part in your hands, you can really see where your money has gone, on the time and effort to produce it.

The only issue we did have was with the fitting, which although looked straightforward, was actually a bit fiddly, although admittedly it would be simpler without a photographer leaning over your shoulder flashing a camera in your eyes every few minutes! Overall though, the cooler comes highly recommended – you need this!





THANKS TO

Radtec Tel: 01543 502525 Chris Todd and all at Brooklands Horse Power Tel: 01932 400567