

**Title:****Service Campaign SC 03/01
Exhaust Gas Temperature Sensors (EGTS)****Applicability:**

Bentley Arnage T

From VIN SCBLF34F02CX08734 to SCBLF34F13CX09263

Bentley Arnage R

From VIN SCBLC37F82CH08780 to SCBLC37F43CX09262

Bentley Arnage RL

From VIN SCBLE37GX3CH19154 to SCBLE37G03CX19175

Market Region:

All

Introduction:

It has been found that a specific batch of exhaust gas temperature sensors fitted to both A and B bank may malfunction and illuminate the Engine Check Light.

Description:

Investigations have revealed that the problem is caused by the failure of a soldered joint in the electronic control box, which is part of the Exhaust Gas Temperature Sensor Assembly. On the Control box there is a 4-digit number, which is the manufacturer's date code. Only EGTS with the date codes of either 2102 or 2502 are affected.

The details given below give the procedures for checking and replacing (if necessary) both A & B bank Sensor Assemblies.

Procedure:**Checking Date Code****A Bank Sensor**

The sensor date code A, is visible on the outside of the control box. See figure 1. If the date code is not 2102 or 2502 no further action is required and a white spot of paint should be applied to the upper fixing bolt head of the Control Box. See figure 1 item T. Should the date code be one of those affected carry out the replacement procedure.

B Bank Sensor

To gain access to the date code B, you will need to remove the 2 bolts, which retain the control box and then carefully rotate the unit. See figure 2. If the date code is not 2102 or 2502 no further action is required and a white spot of paint should be applied to the upper fixing bolt head of the Control Box. See figure 2 item T. Should the date code be one of those affected carry out the replacement procedure.

Note

To carry out the torque tightening of the sensor probe nuts you will require a 17mm 12-point crows foot adaptor (e.g Stahwille part no 0219 0017) and a 3/8 inch square drive pivot-head torque wrench (e.g. Snap-on part no. QD2FR75).

Removal

A Bank Sensor Assemble

1. Disconnect the battery negative leads Refer to ASSIST PIN 5903.
2. Remove the engine cover. Refer ASSIST PIN 0950.
3. Mark, then disconnect the high tension (HT) leads from A2 and A3 ignition coils C, and remove the two retaining screws D, from the coil mounting bracket. Move the assembly clear of the control box E. See figure 3.
4. Disconnect the electrical connector from the control box and remove the two retaining bolts
5. Remove the screw from the 'P' clip F, which secures the sensor cable to the chargecooler inlet pipe. See figure 4.
6. Loosen the retaining nut, and then carefully pull the sensor probe G, from the turbocharger flange. See figure 4.

Refit:

Apply a small amount of anti-seize grease onto the threads of the probe retaining nut. Take care not to bend the probe when fitting into the turbocharger flange and set the probe tube to the vertical position. Make sure that the sensor cable is not twisted and is free from kinks then **torque tighten** the retaining nut. The remainder of the refit process is the reversal of the removal. On completion of the work a white spot of paint should be applied to the upper fixing bolt head of the Control Box. See Figure 1 item T.

Removal

B Bank Sensor Assemble

1. Disconnect the battery negative leads. Refer to ASSIST PIN 5903
2. Remove the engine cover. Refer to ASSIST PIN 0950.
3. Remove the radiator shell. Refer to ASSIST PIN 6721.
4. Remove the dump valve and hoses from B bank. Refer to ASSIST PIN 3119.
5. Remove the air box. Refer to ASSIST PIN 3109.
6. Remove the front LH undersheet.
7. Drain and retain the engine coolant and remove the engine cooling fan. Refer to ASSIST PIN 3409.
8. Drain and retain the coolant from the chargecooler system. Refer to ASSIST PIN 3157.
9. Remove the 'B' bank torsion strut and move the secondary expansion tank forwards. Refer to ASSIST PIN 3402.
10. Remove the assembly bonnet cross member. Refer to ASSIST PIN 6027
11. Remove the tandem hydraulic pump. Refer to ASSIST PIN 4005
12. Remove the drive belt tensioner. Refer to ASSIST PIN 0930
13. Remove the chargecooler cast air feed pipe from B bank turbo.
14. Remove Primary Expansion Tank mounting screws H. Then manoeuvre to one side. See figure 5.
15. Remove fridge pipe clip retaining bolt J, from inner wing. See figure 6.
16. Disconnect bottom hose connection.
17. Remove HT lead retaining clip K, on chargecooler. See figure 7.
18. Disconnect the coolant inlet pipe L, from the front of the 'B' bank chargecooler. See figure 7
19. Release the hose clip M, at the bottom of the short hose, on the other end of the coolant inlet pipe. Remove the coolant inlet pipe and hose as an assembly. See figure 8.
20. Remove the bolt N, from the upper bracket on the pump to chargecooler pipe (the bolt also retains the dipstick tube bracket). See figure 8
21. Remove the screw P, from the 'P' clip, which secures the sensor cable. See figure 8
22. Remove the bolt Q, from the lower bracket on the pump to chargecooler pipe. This will allow side movement of the pipe, increasing access to the sensor probe. See figure 9
23. Remove the left-hand chargecooler mounting bolts R, two on

- the outer side, and one on the inner. See figure 10.
24. Disconnect the hose S, throttle to chargecooler, carefully lever the chargecooler upwards at the centre to allow the sensor removal. See figure 11.
 25. Disconnect the electrical connector from the Control Box.
 26. Remove the screws from the two 'P' clips, which secures the sensor cable to the rocker cover.
 27. Loosen the retaining nut, then carefully pull the sensor probe from the turbocharger flange.

Refit:

Apply a small amount of anti-seize grease onto the threads of the probe retaining nut. Take care not to bend the probe when fitting into the turbocharger flange and set the probe tube to the vertical position. Make sure that the sensor cable is not twisted and is free from kinks then **torque tighten** the retaining nut.

The remainder of the refit process is the reversal of the removal. On completion of the work a white spot of paint should be applied to the upper fixing bolt head of the Control Box. See Figure 2 item T.

Warranty:

Procedure	Defect Code	Repair Code	Time
Check B Bank	1000260300	10002603S	0.2
Replace A Bank	1000260200	10002602S	0.8
Replace B Bank	1000260400	10002604S	7.8

A Class A or P claim is to be generated upon completion of the work.

Individual codes must be entered as separate items and not

Parts Information:

New Part Number	Description	Displaced Part Number	Qty
PJ109884PB	Sensor Assemble A Bank	PJ101161PA	One
PJ101161PC	Sensor Assemble B Bank	PJ101161PA	One

Torque Specification:

Nut-Sensor Probe	32-38 Nm	24-28 lbf ft
------------------	----------	--------------

Policy: Service Campaign

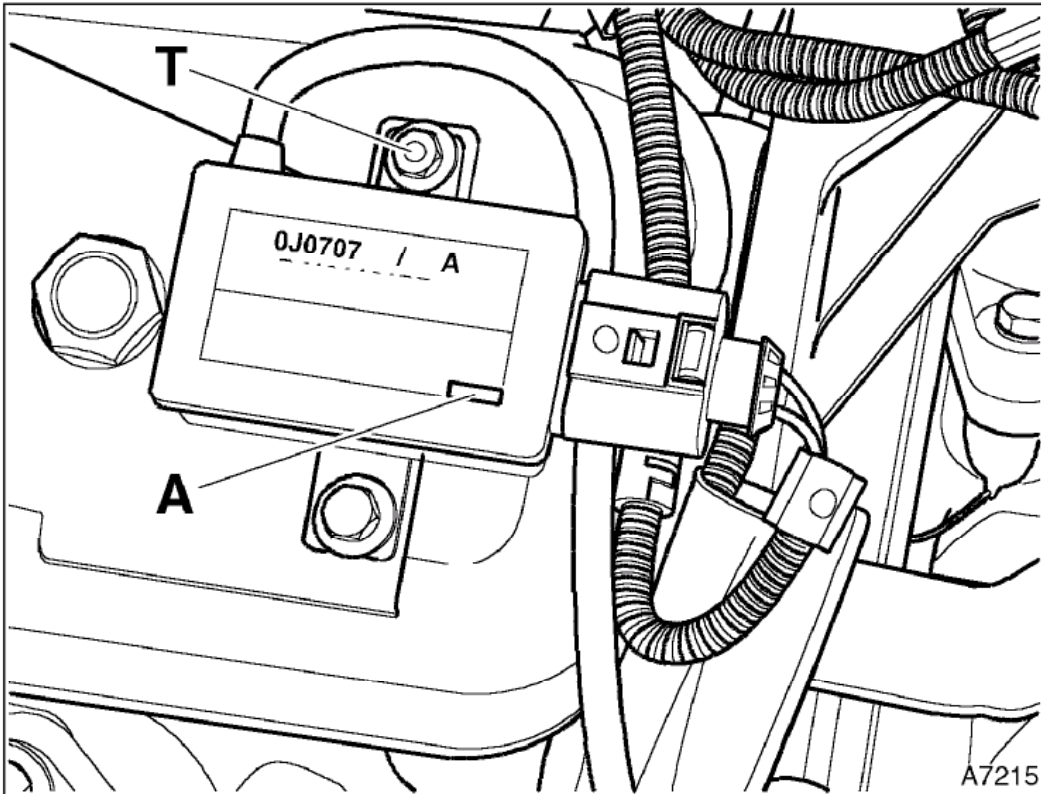


Figure. 1

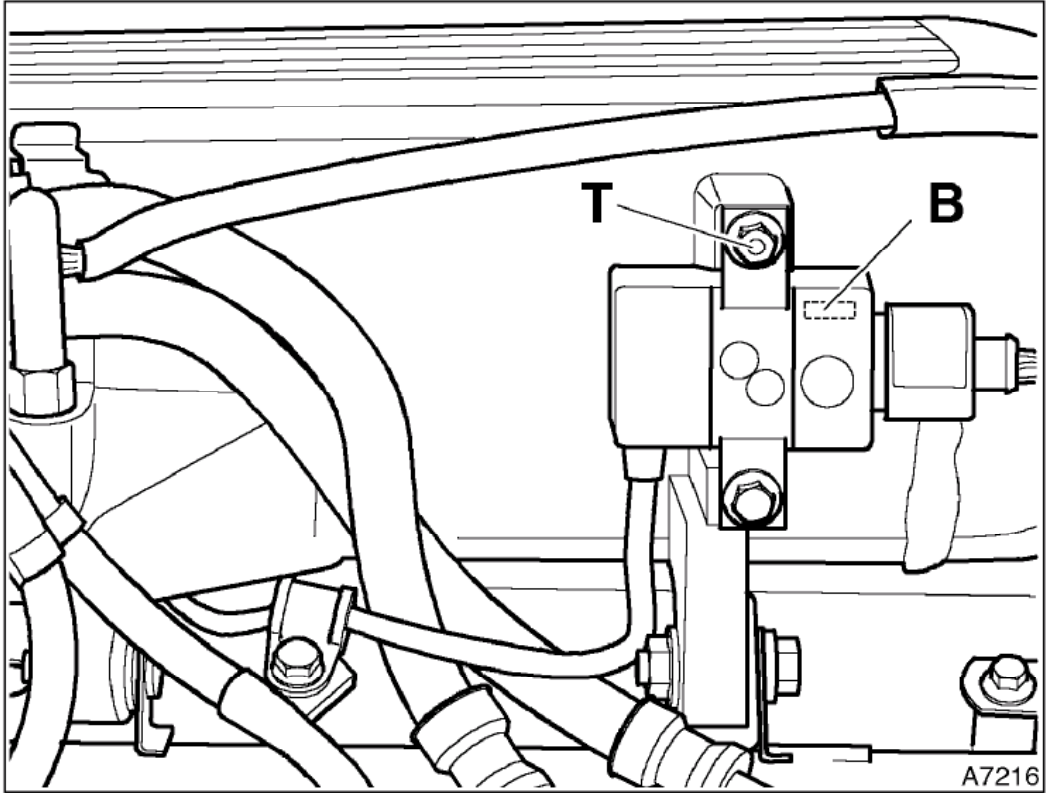


Figure. 2

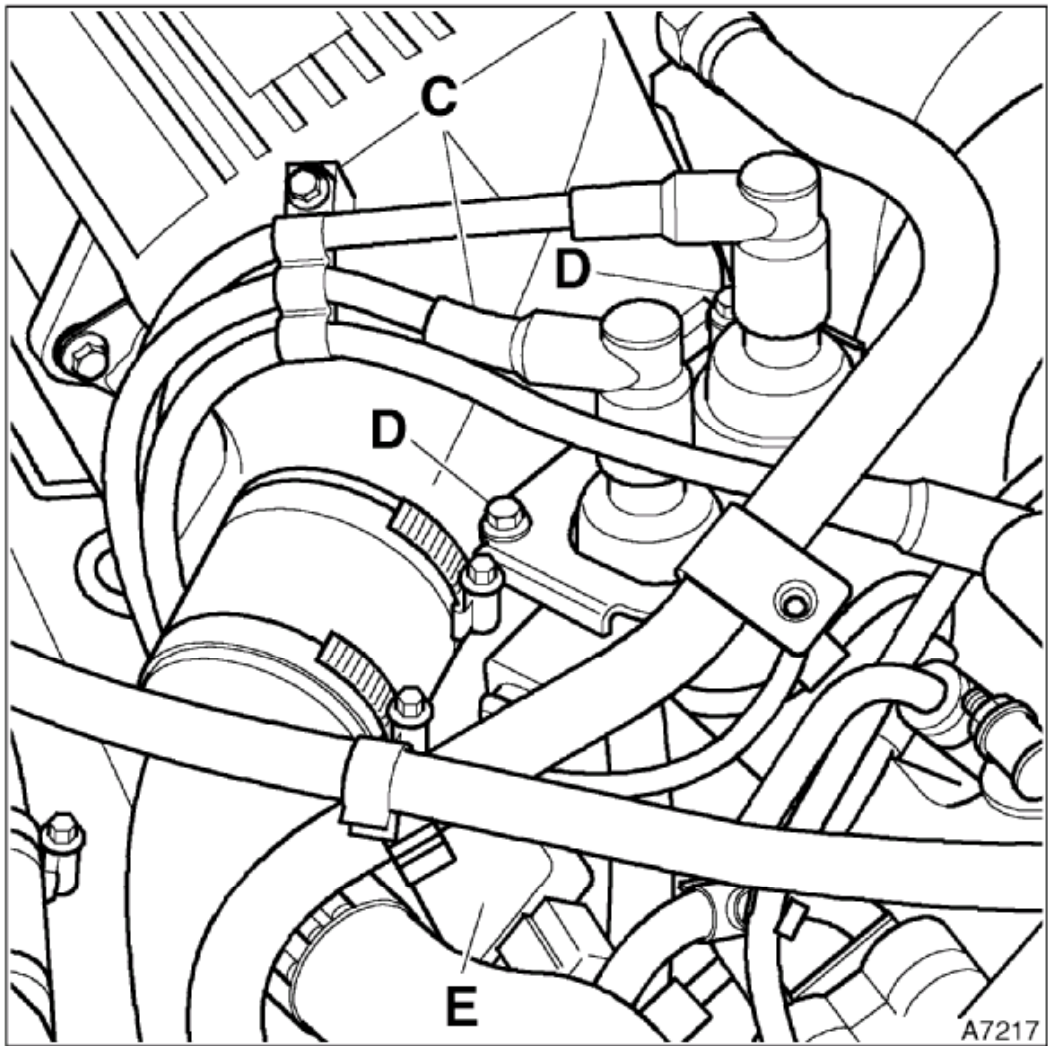


Figure. 3

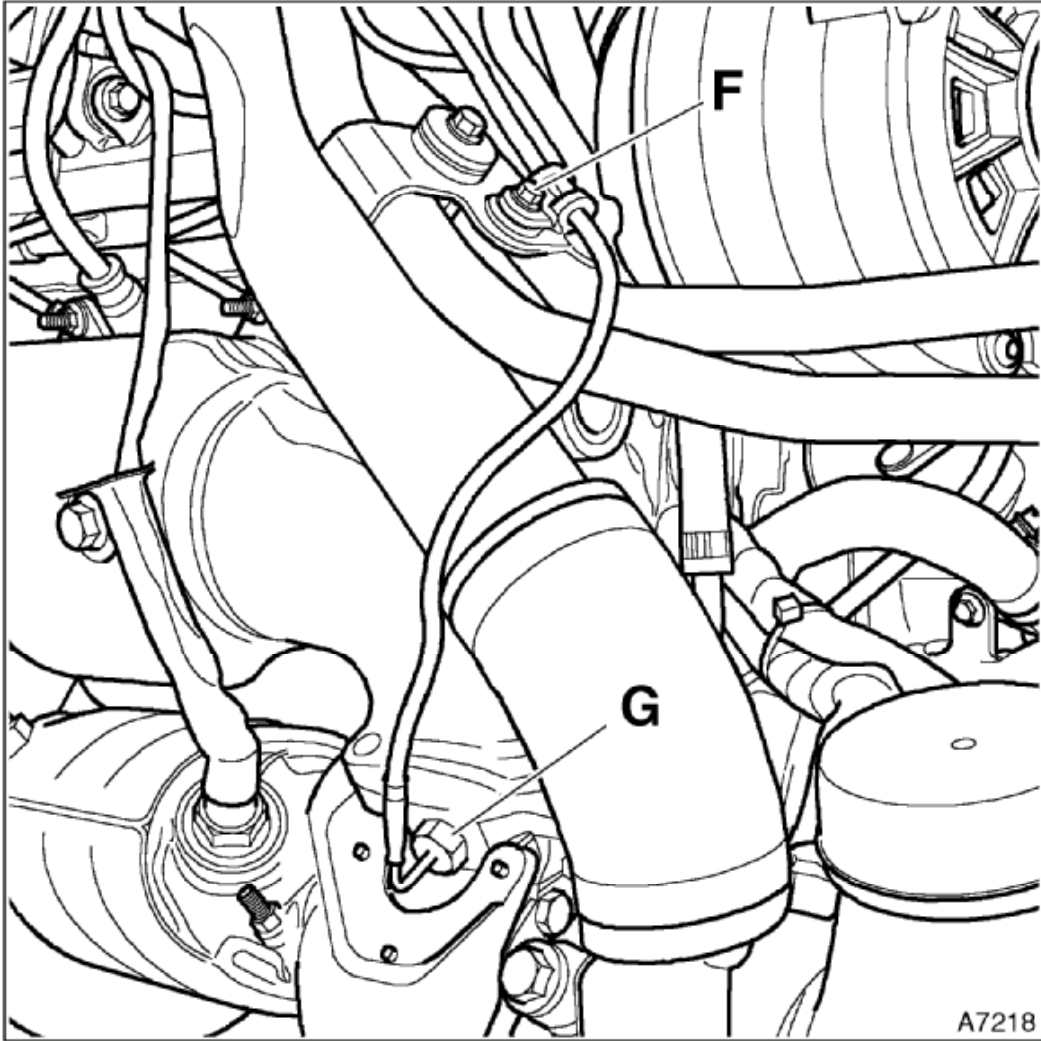


Figure. 4

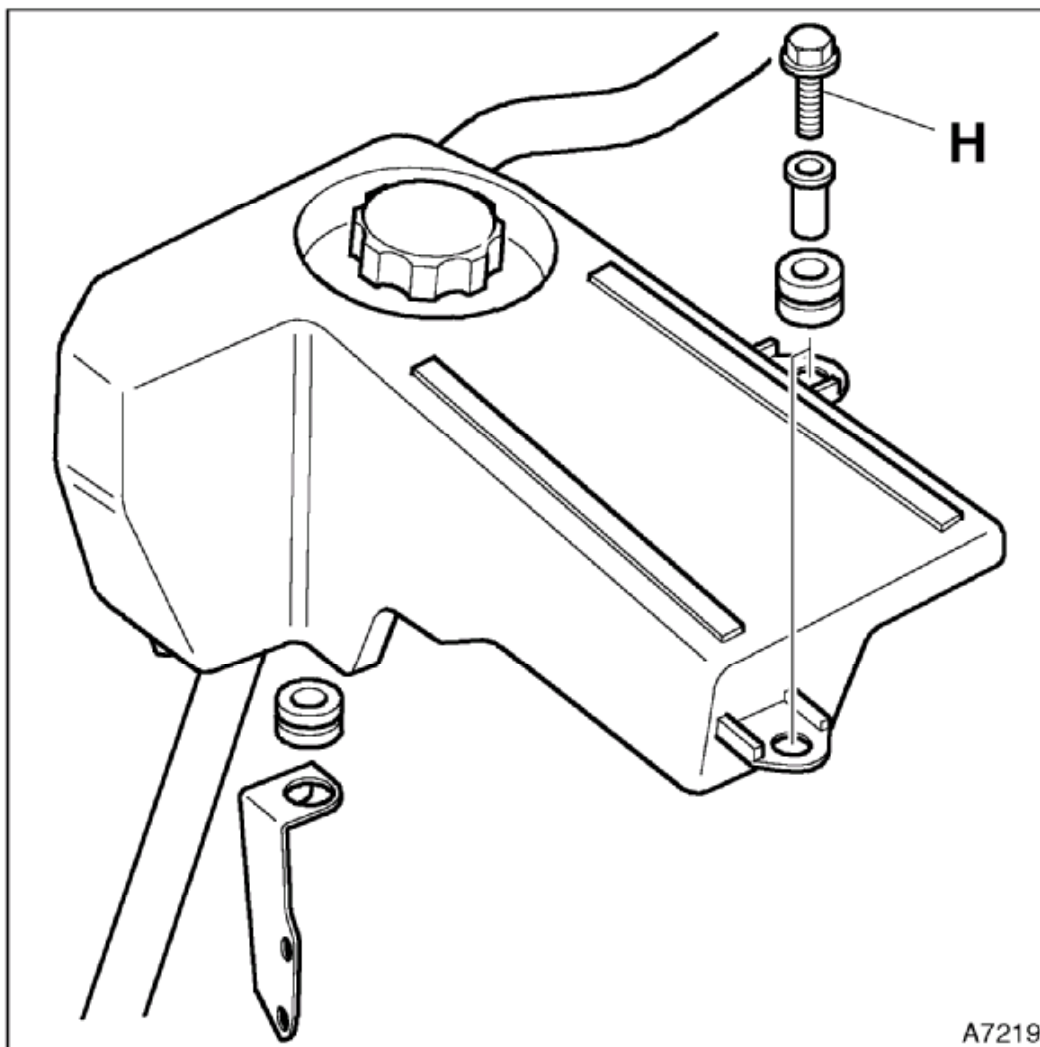


Figure. 5

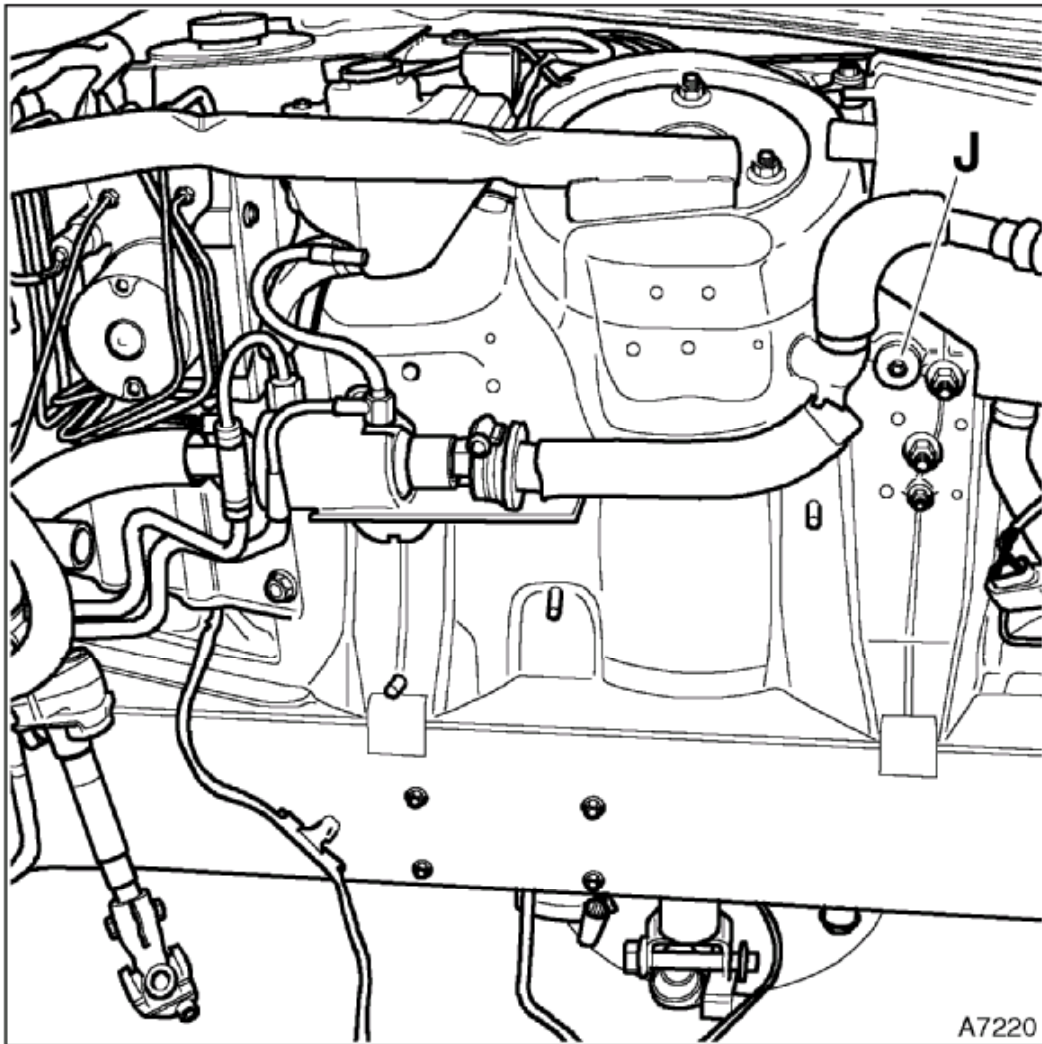


Figure. 6

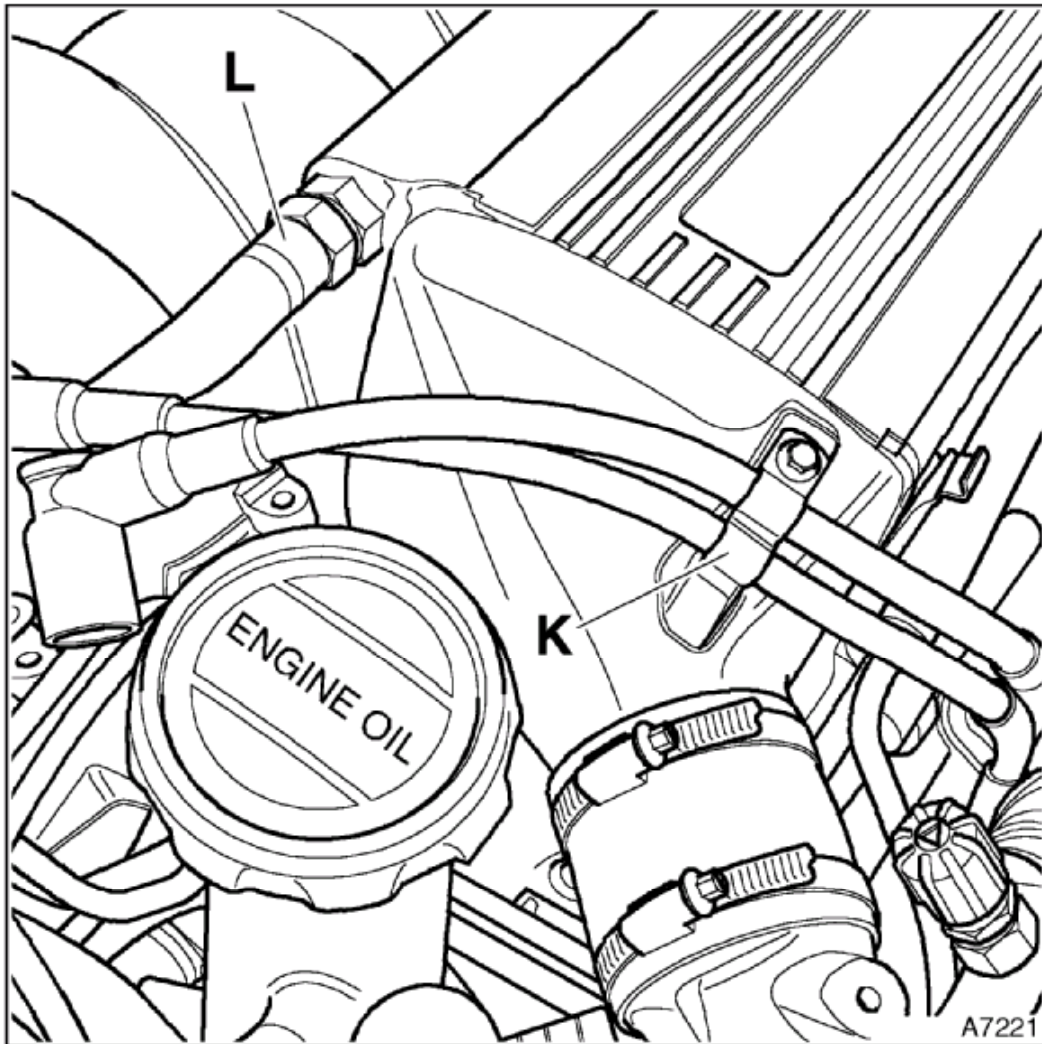


Figure. 7

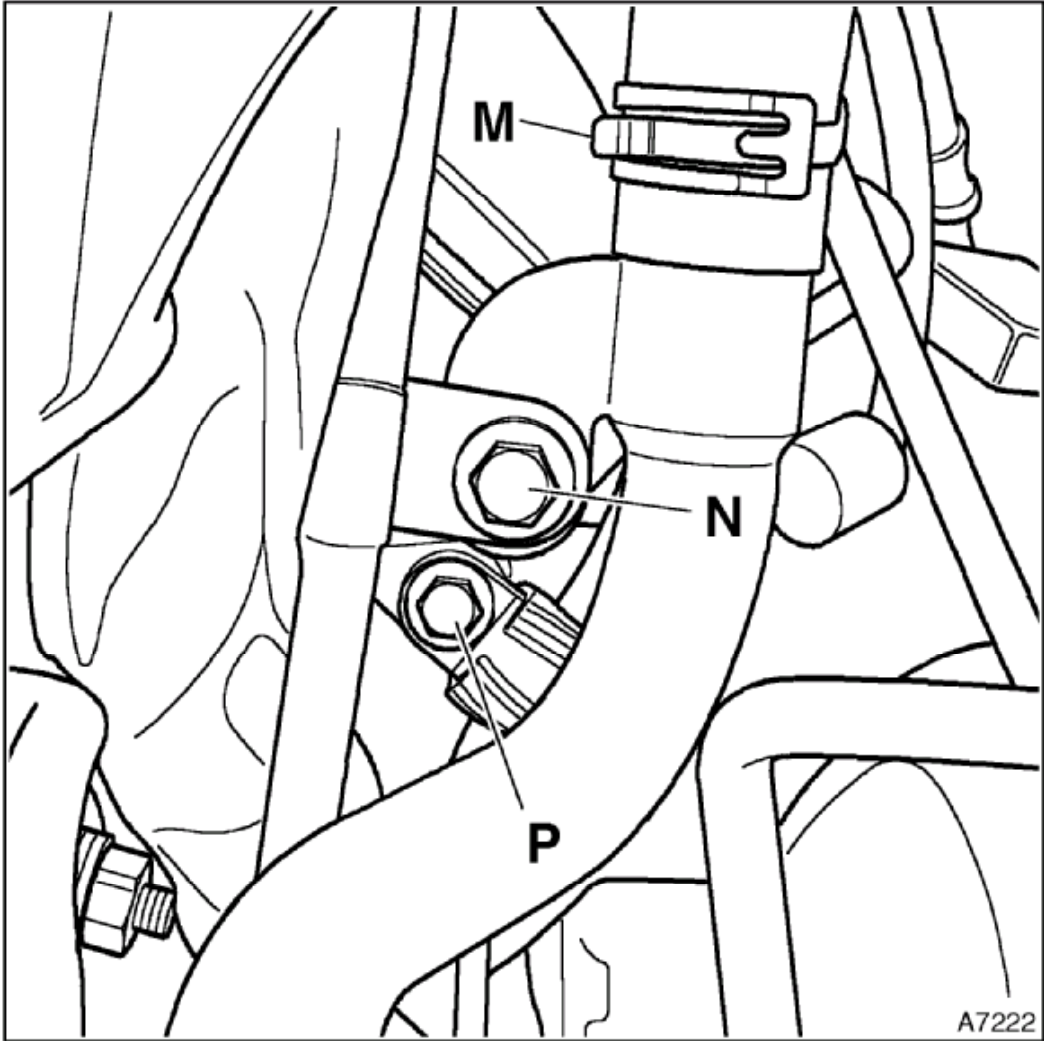


Figure. 8

A7222

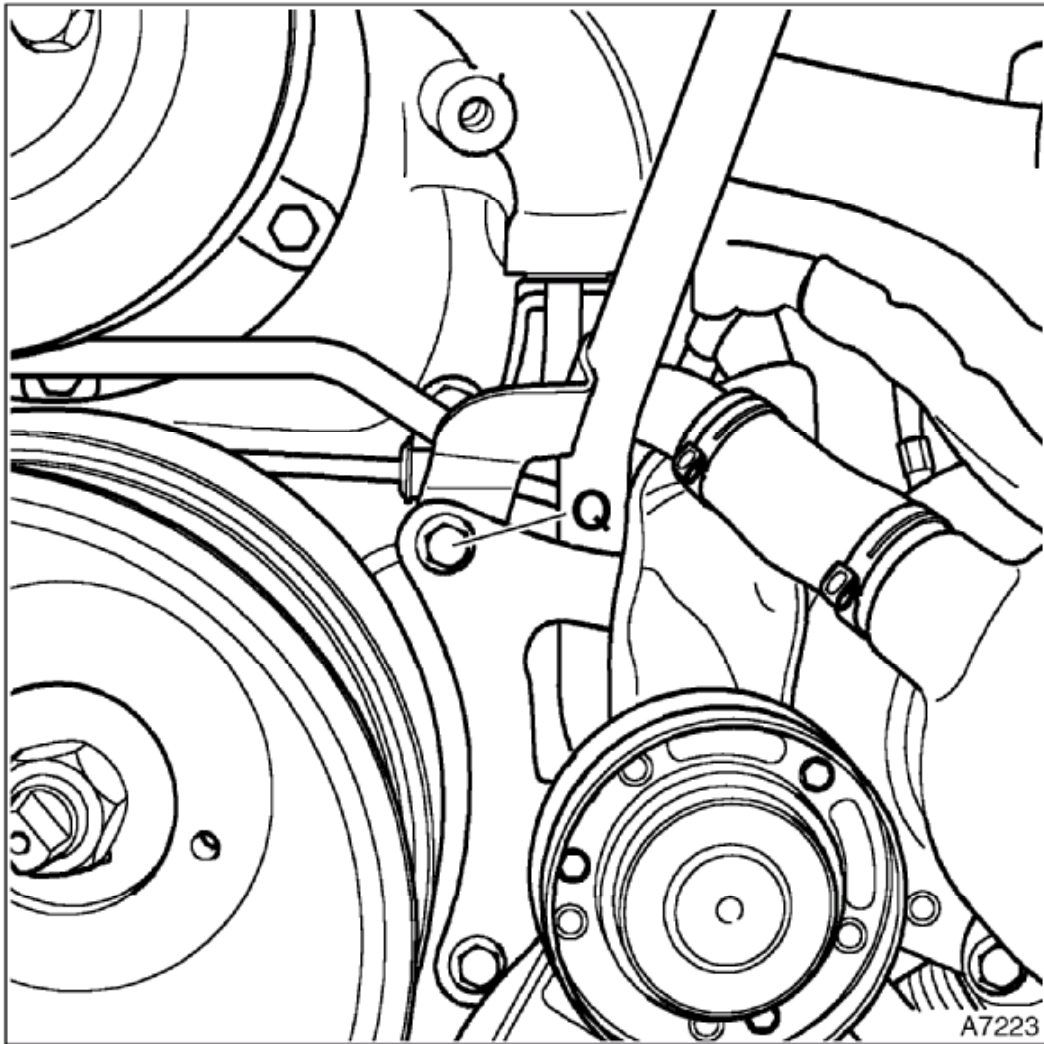


Figure. 9

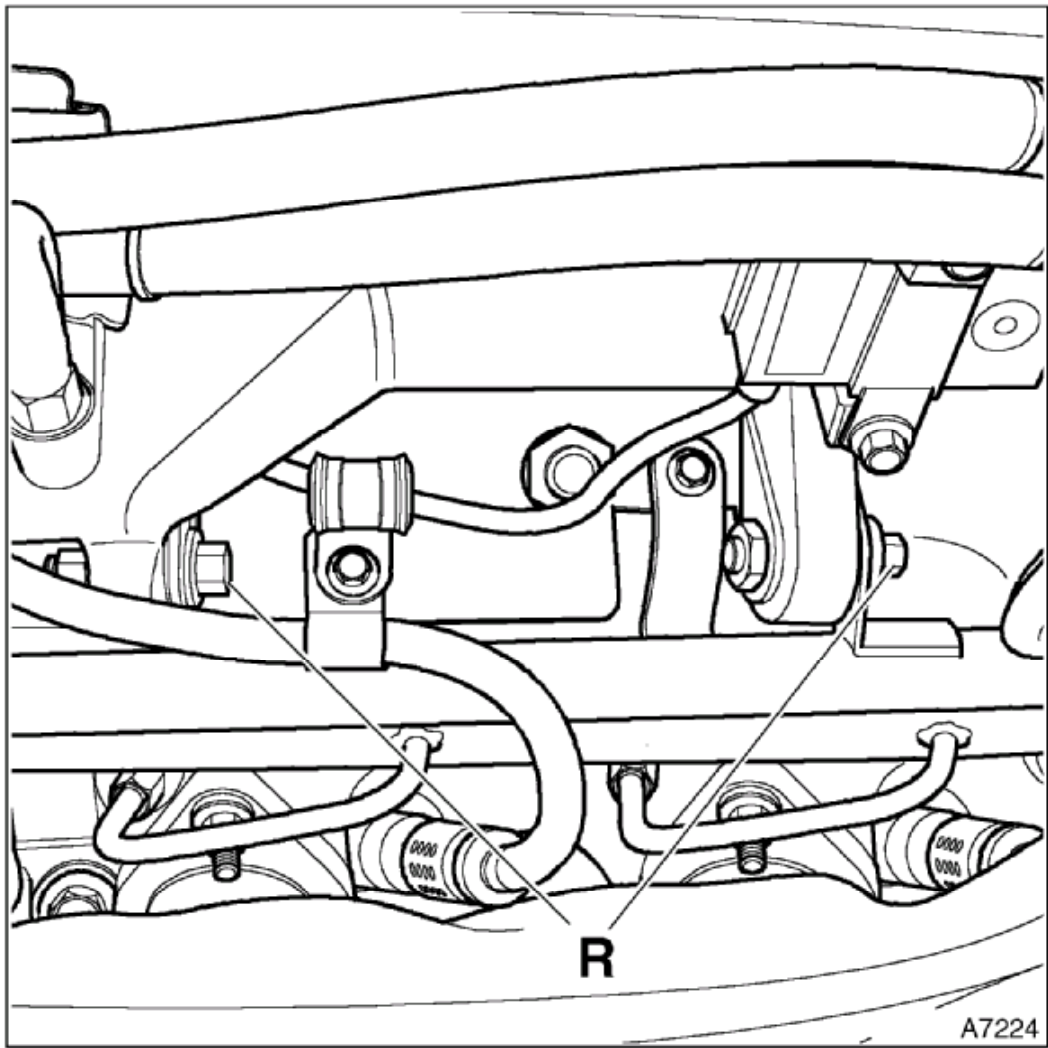


Figure. 10

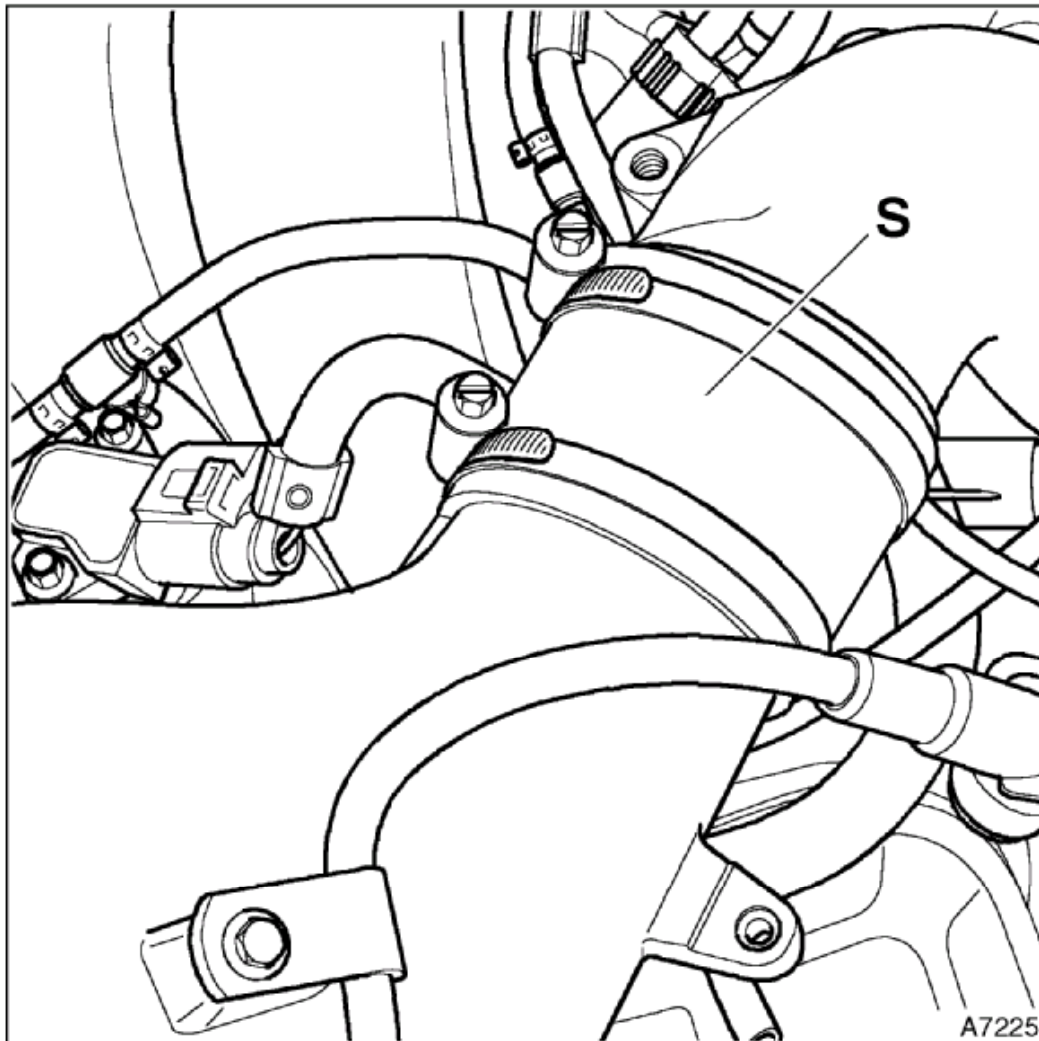


Figure. 11

Bentley Bulletins are intended for use by experienced and trained Technicians. If you lack the skills, tools, equipment and a suitable workshop for any procedure described in this document, we suggest you leave such repairs to an Authorised Bentley Dealer or other qualified workshop. See your Bentley Dealer for advice on whether your vehicle may benefit from the information contained within this document.

The information contained in the Bentley Bulletin is accurate at the date of publication. However, Bentley Motors regularly updates technical information. Please check with your Bentley Dealer that the Bulletin you intend to use contains the latest available information.