



**c2R2nax**

Version 2 – 02 April 2009

**B12**

**RADIATOR**

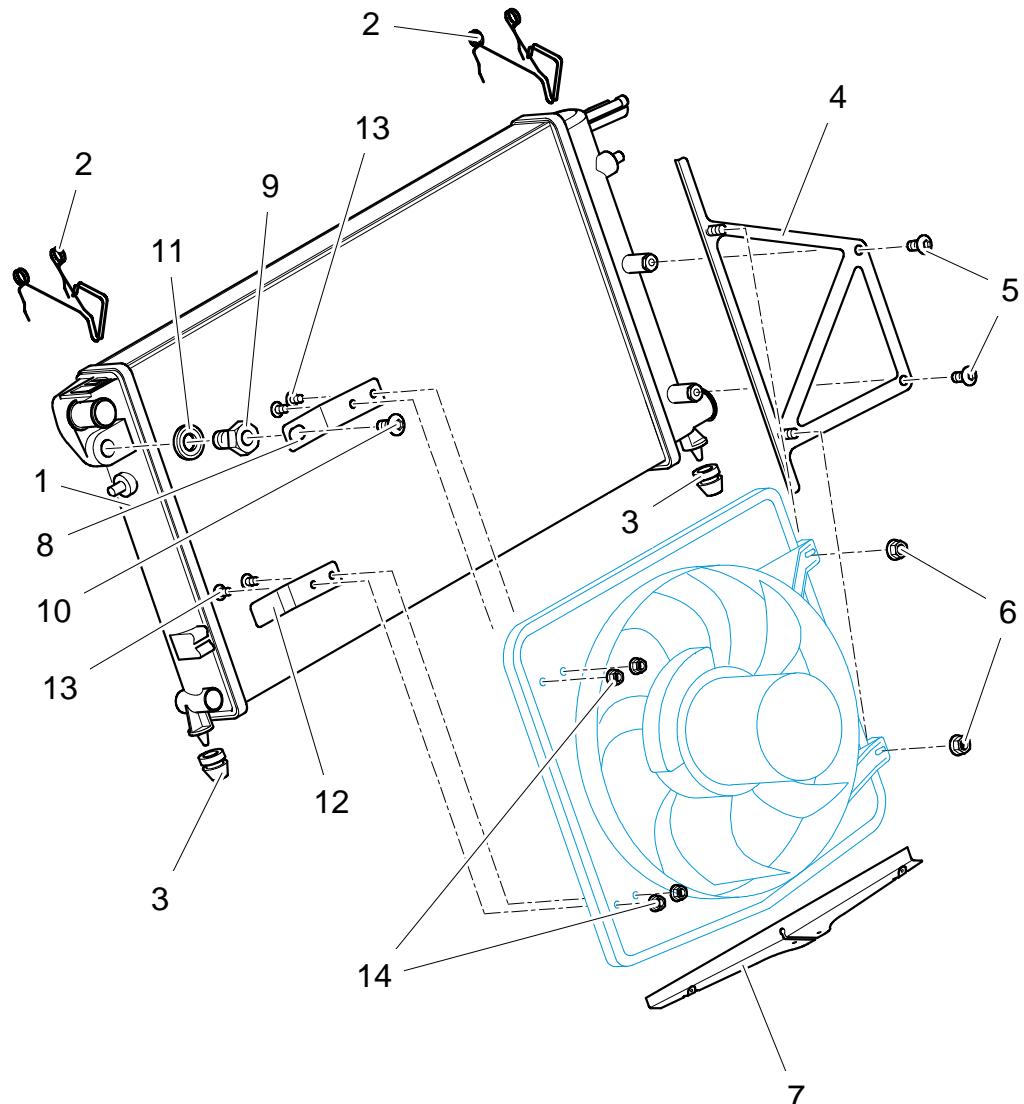


CITROËN  
RACING



**C2R2max**

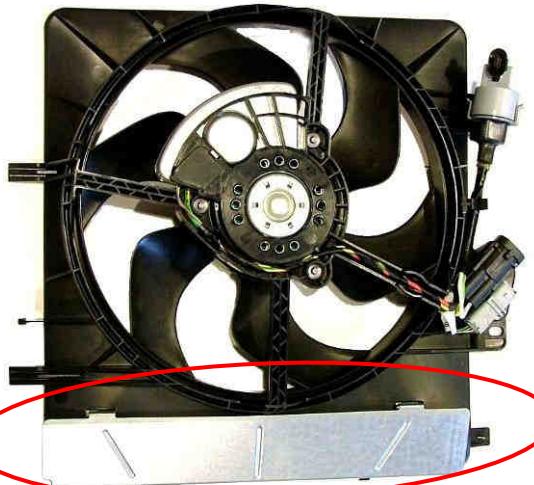
Version 2 – 02 April 2009



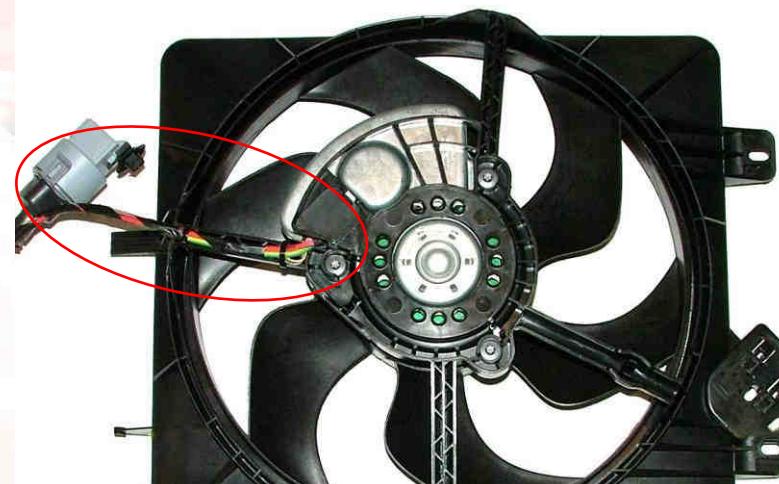
Ref	Part Number	Qty	Description
1	BCSP133092	1	Water radiator
2	BCSP132732	2	Fixing spring, radiator on upper crossmember.
3	BCSP131306	2	Silent-block on lower crossmember
4	0B1263097A	1	Motor fan unit right mount
5	BCSP6924C3	2	Motor fan unit right mount screw M6x100 lg12 Cl8.8 ZN
6	BCSP6936A9	2	Motor fan unit right mount collar nut M6x100 h9 D16 lock ZN
7	0B1263182A	1	Under radiator air-tightness sealing plate
8	0B1261387A	1	Motor fan unit upper left fixing bracket
9	0B1261389A	1	Radiator cap
10	BCSP6924C3	1	Cap screw M6x100 lg12 Cl8.8 ZN
11	BCSP016456	1	Radiator cap seal
12	0B1261388A	1	Motor fan unit lower left fixing bracket
13	BCSP6920A2	4	Lower left bracket screw M5x80 lg12 Cl4.8 ZN
14	BCSP693639	4	Lower left bracket collar nut M5x80 h4 D8 Cl8 ZN

**Preparing the motor fan unit (MFU) and assembly on the radiator:**

Remove the lower metal frame (see photo opposite).



Reverse the bundle passthru (see photo opposite). Attach the bundle using rilsans.

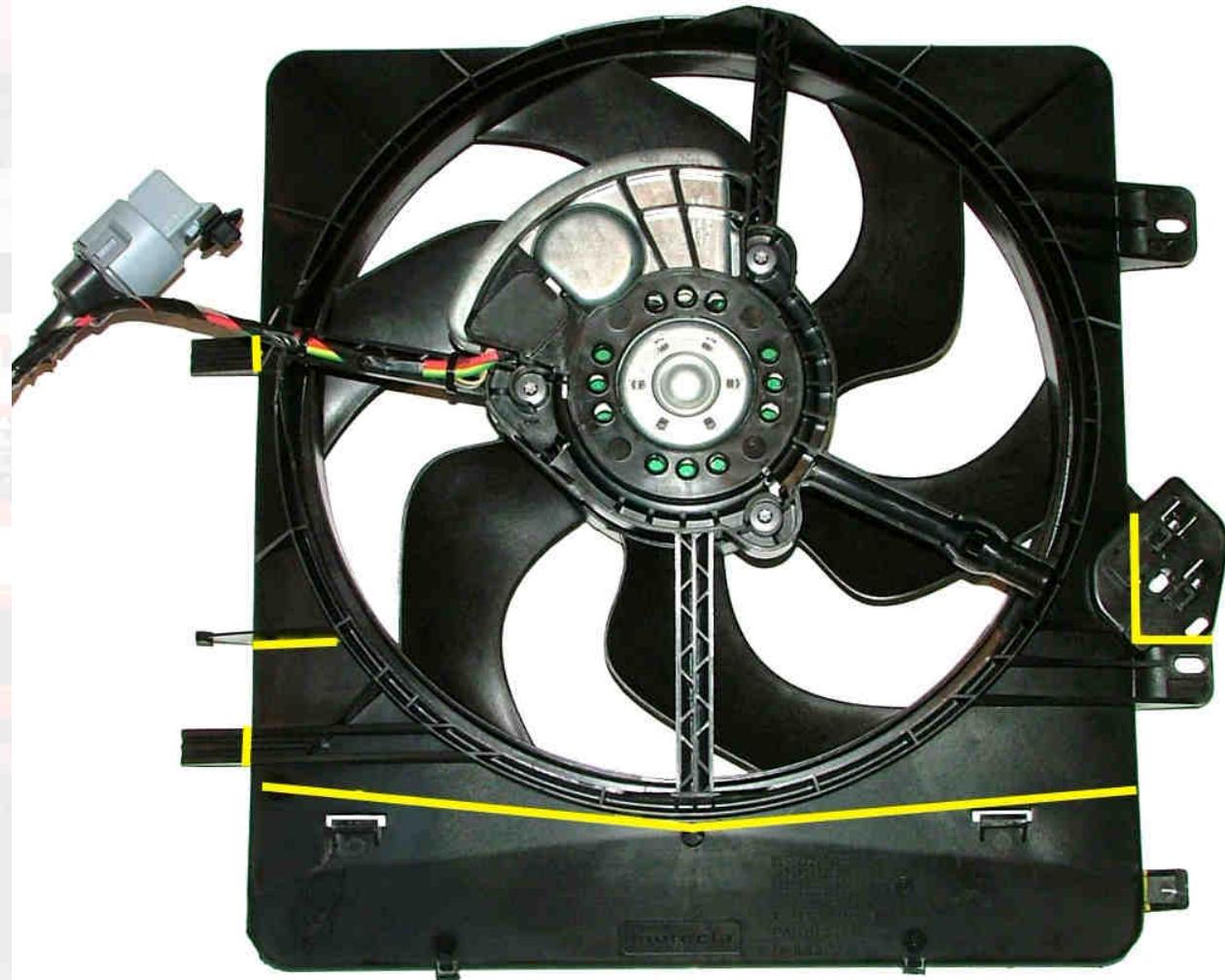


***B***  
***Radiator***



***B***  
***COOLING***

Cut out the areas identified in yellow in the photo below.



Fit the lower sealing plate (ref. 7) on the motor fan unit, using “pop” rivets Ø 4mm.

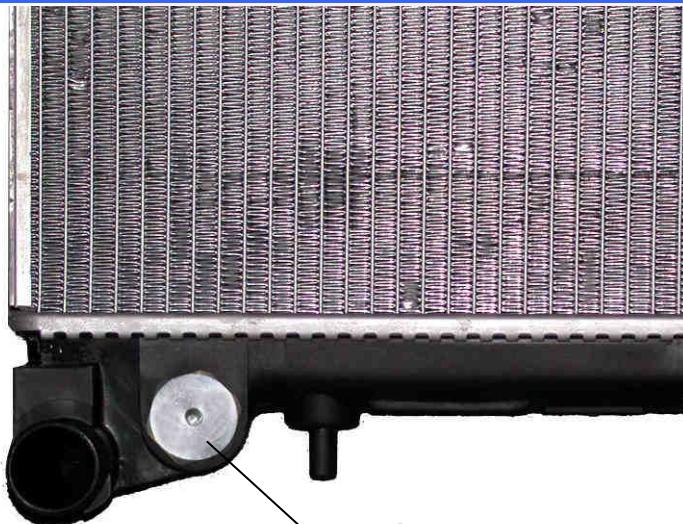
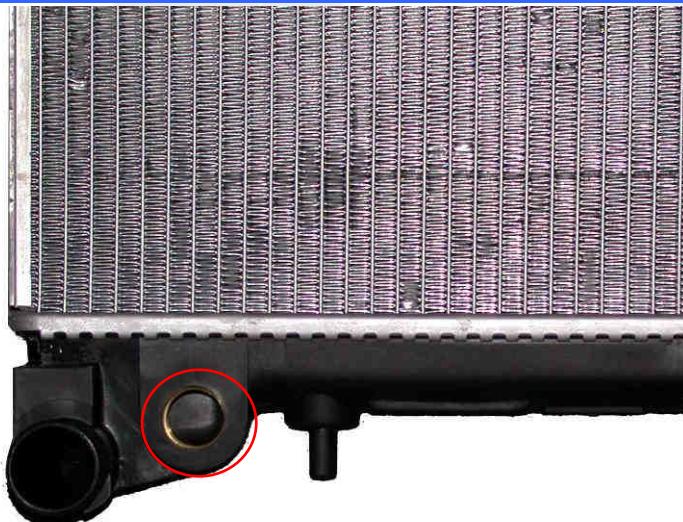


**B**  
*Radiator*



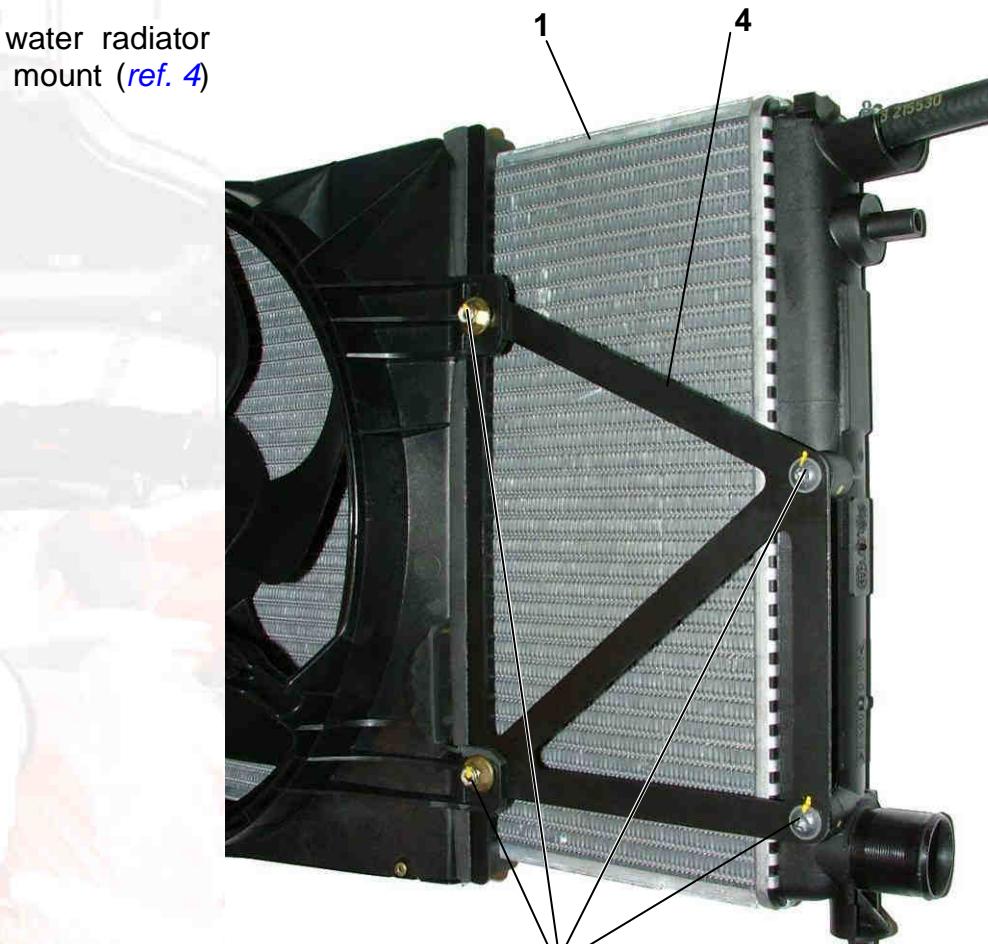
**B**  
*COOLING*

Close the original temperature sensor hole with the radiator cap (ref. 9) and its seal (ref. 11).



577  
“Thread  
Sealing”

Fit the motor fan assembly on the water radiator (ref. 1), using the motor fan unit right mount (ref. 4) and the screws (ref. 6 and ref. 5).



**B**  
**COOLING**

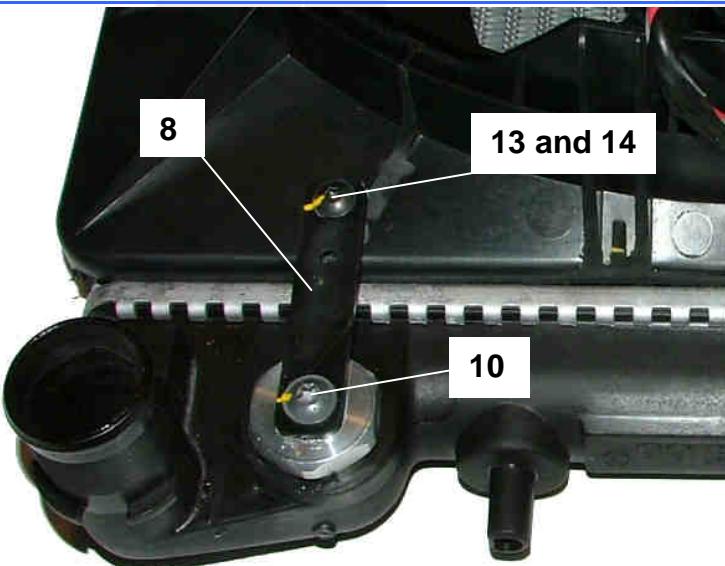
**B**  
**Radiator**





Screw the motor fan unit upper left fixing bracket (ref. 8) onto the radiator cap with its cap screw (ref. 10).

Counterdrill the motor fan unit through the left bracket, and fix it to the motor fan unit using the screws (ref. 13) and nuts (ref. 14).

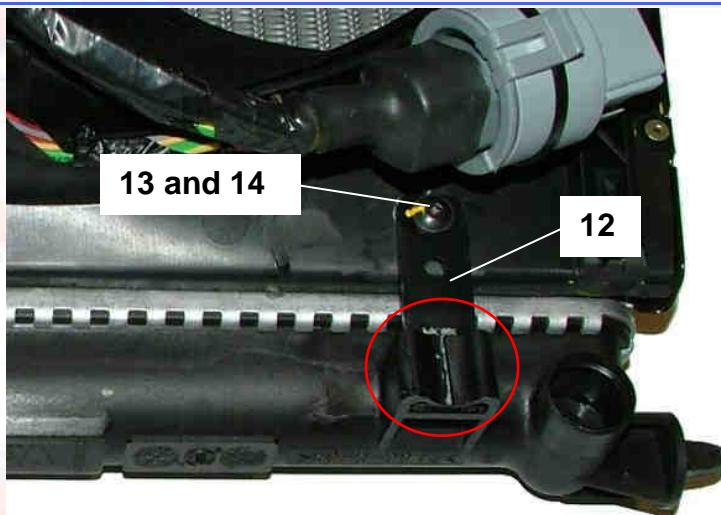


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Slide the motor fan unit lower fixing bracket (ref. 12) into the slot of the radiator.

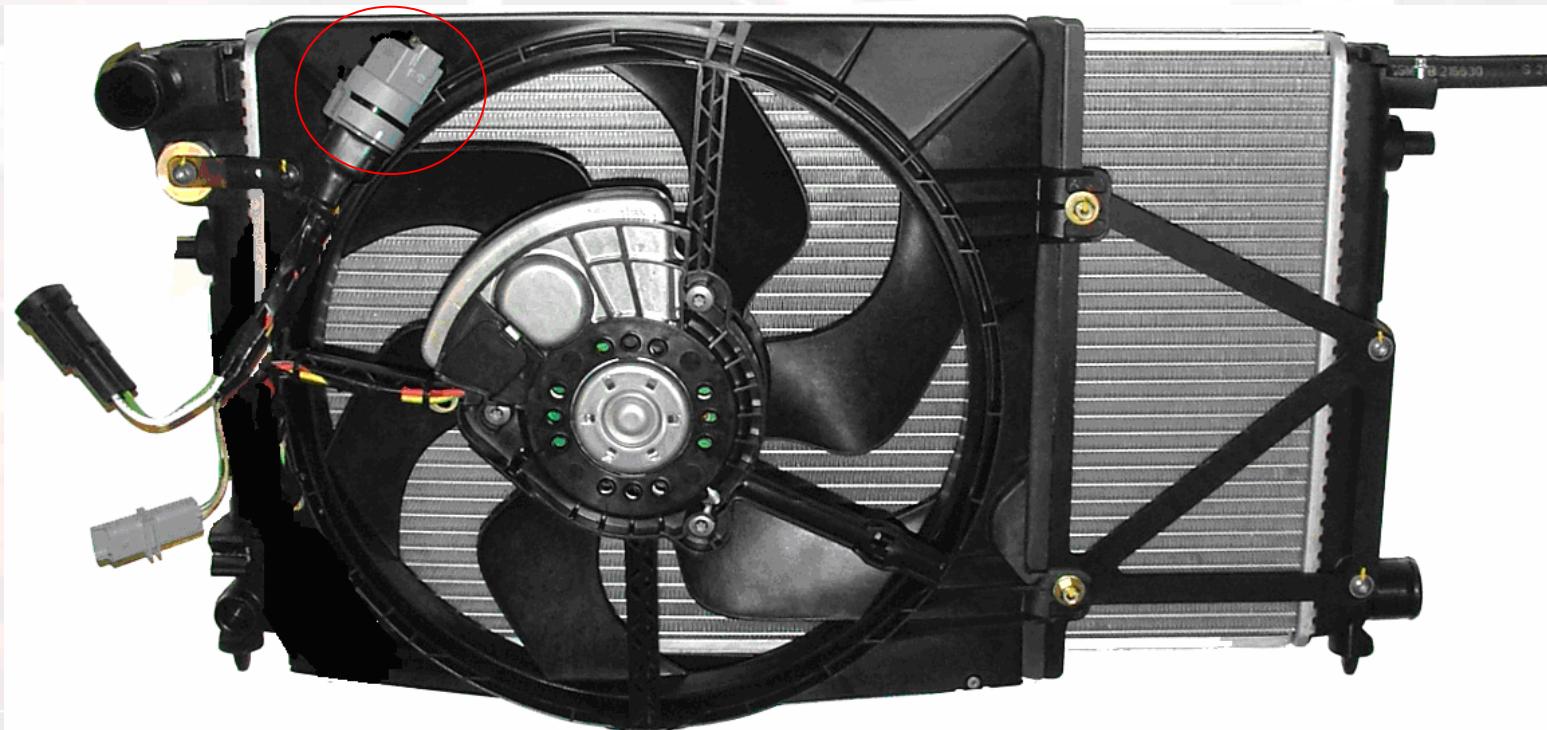
Counterdrill the motor fan unit through the lower bracket, and fix it to the motor fan unit using the screws (ref. 13) and nuts (ref. 14).



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View of the radiator assembly fitted with its motor fan:

**N.B.:** The motor fan's relay must be directed upwards, so that it does not fill with water in case of bad weather or when cleaned.



**For info :** The reference of the motor fan to be used for this assembly is **1253H3 (C2 VTS)**.

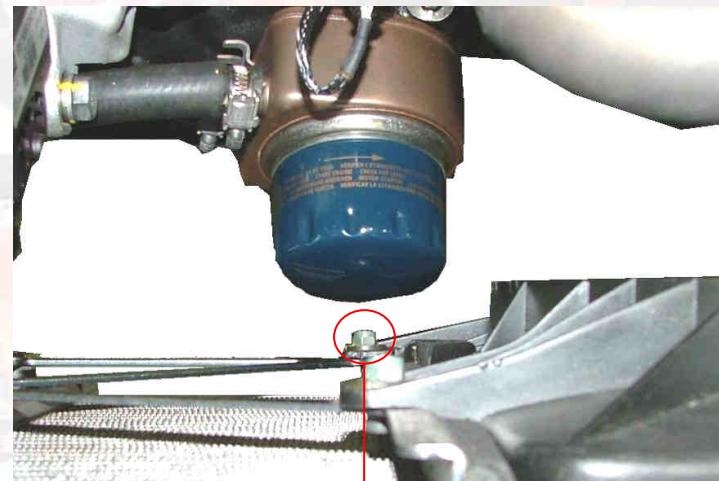
**B**  
*Radiator*



**B**  
*COOLING*



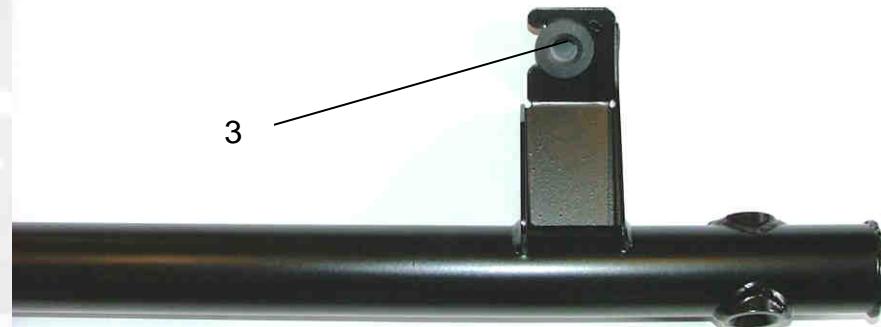
Dangerous proximity  
between the oil filter and the  
fan bracket screw.



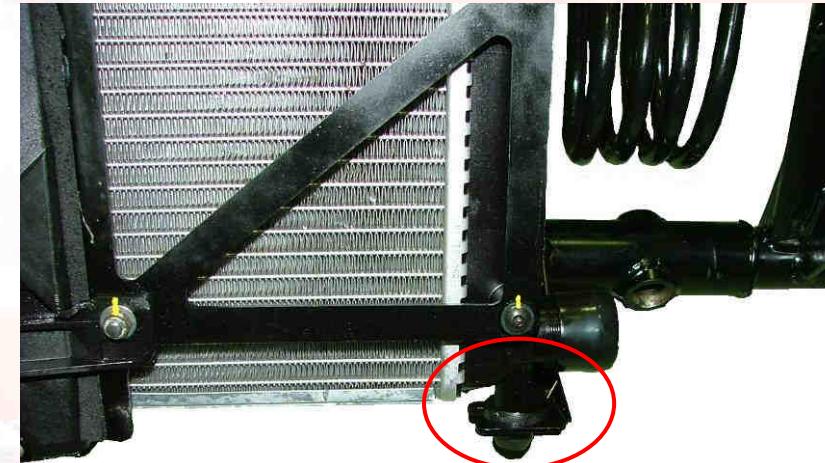
Cut out, to bring the same  
level than the nut.

**Fitting the radiator assembly on the body:**

Insert a silent-block (ref. 3) on each fixing bracket of the lower crossmember, as shown in the photo below:



Place the radiator on the crossmember, inserting the two centring devices in the silent-blocks.



**B**  
**Radiator**



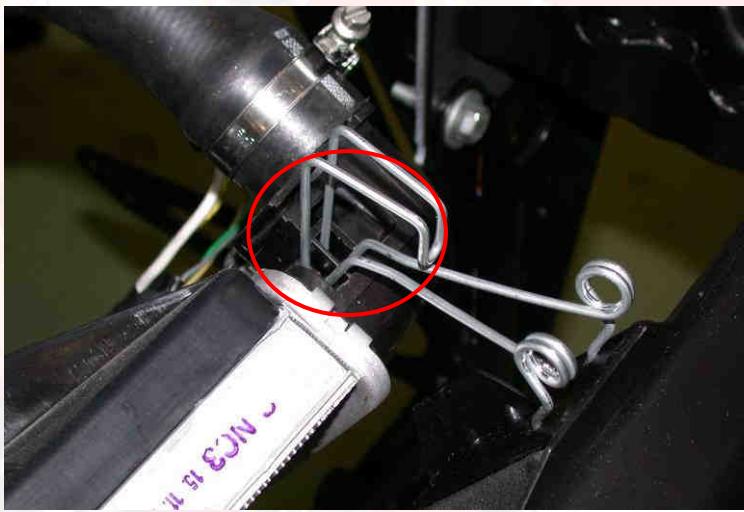
**B**  
**COOLING**



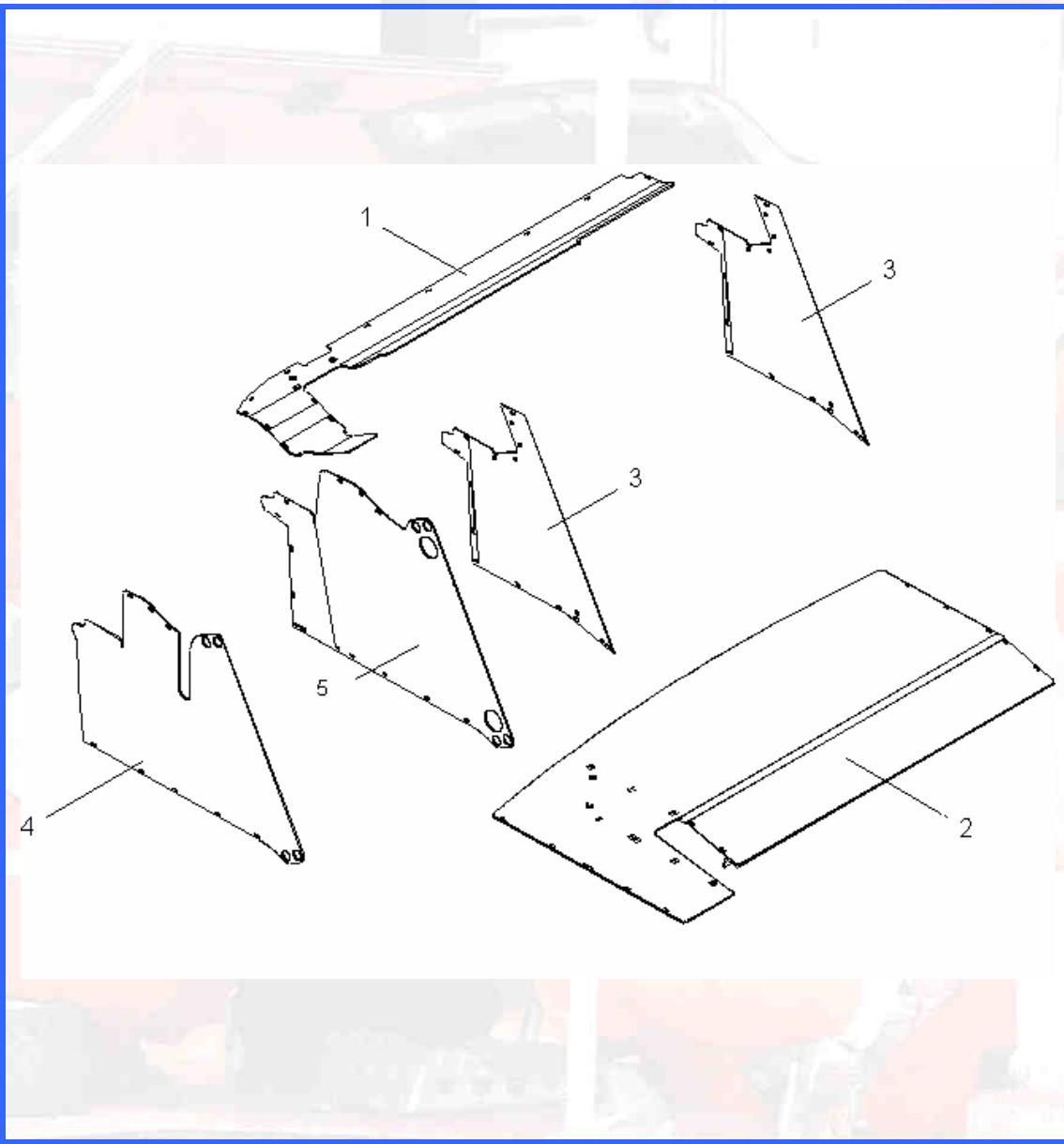
Slide the two radiator fixing brackets (ref. 2) onto the upper crossmember, as shown in the photo below:



Clip the radiator using two pins, in the housings provided for this purpose (see photo below):





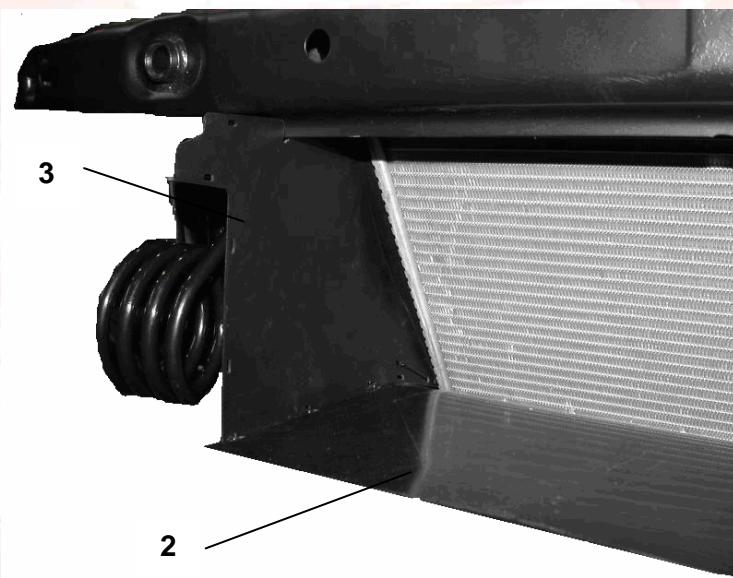


**Assembling the radiator bulkheads:**

Position the lower bulkhead (ref. 2) on the crossmember supporting the radiator.



Connect the right bulkhead (ref. 3) to the lower bulkhead (ref. 2) using rilsans. Some adjustments may be necessary.

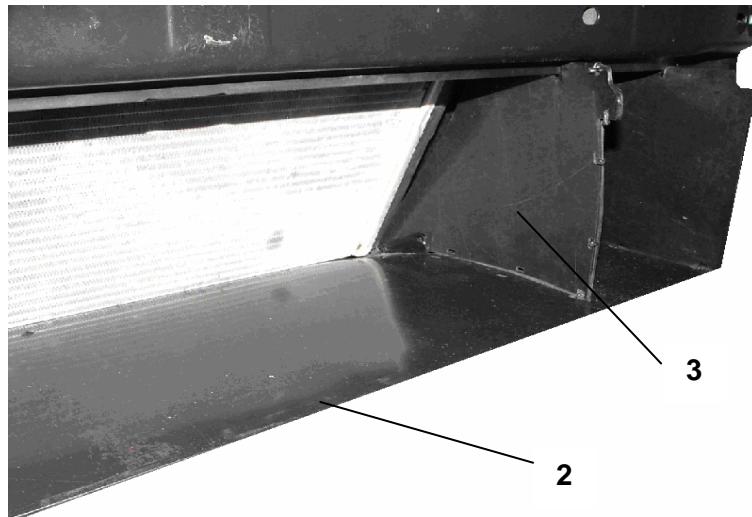


**B**  
*Radiator*



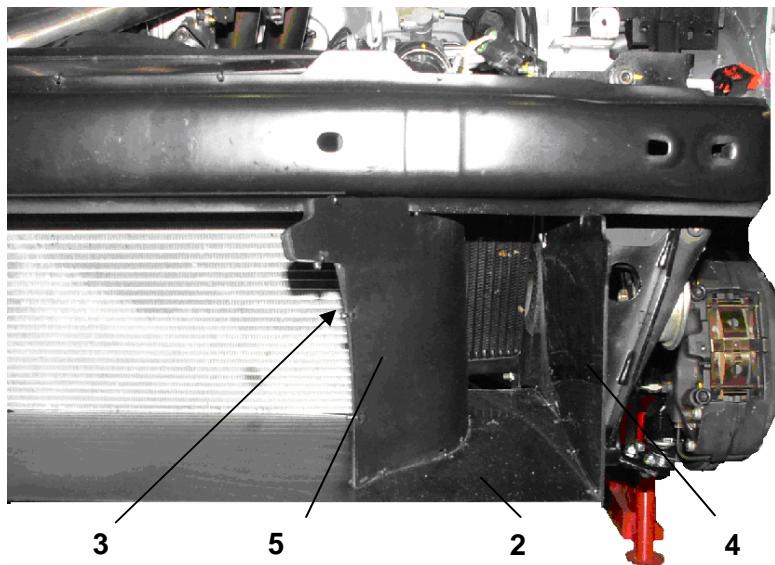
**B**  
*COOLING*

Connect the left bulkhead (ref. 3) of the radiator to the lower bulkhead using rilsans. Some adjustments may be necessary.

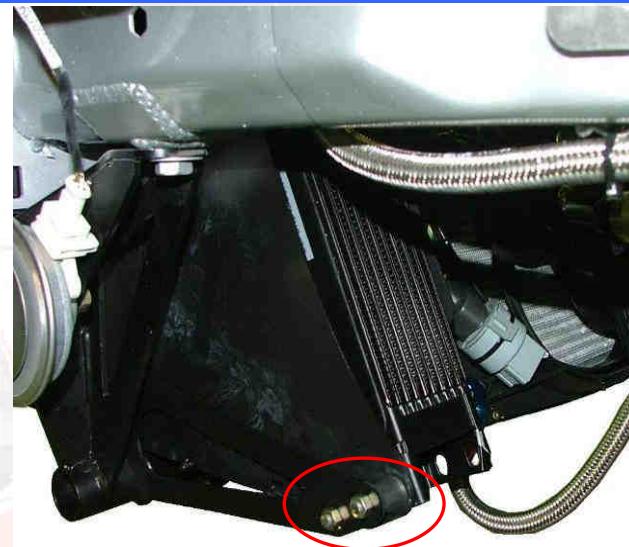


Connect the oil cooler right bulkhead (ref. 5) to the lower part (ref. 2). Then connect it to the left bulkhead of the radiator (ref. 3) at the top.

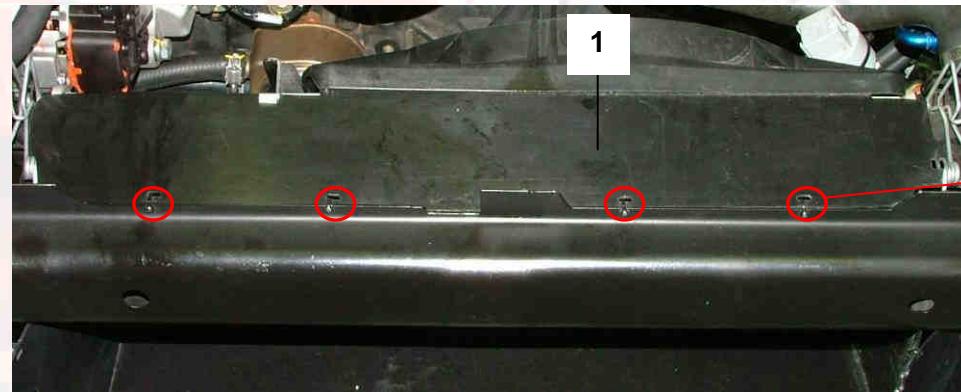
Connect the oil cooler left bulkhead (ref. 4) to the lower part (ref. 2). Some adjustments may be necessary.



Pass the silent-blocks of the oil cooler mount in the apertures of the left bulkhead provided for this. Some adjustments may be necessary.



Position the upper bulkhead (*ref. 1*) as shown in the photo below and counterdrill the crossmember ( $\varnothing$  4mm). Connect the bulkhead to the crossmember using rilsans.



*B*  
Radiator



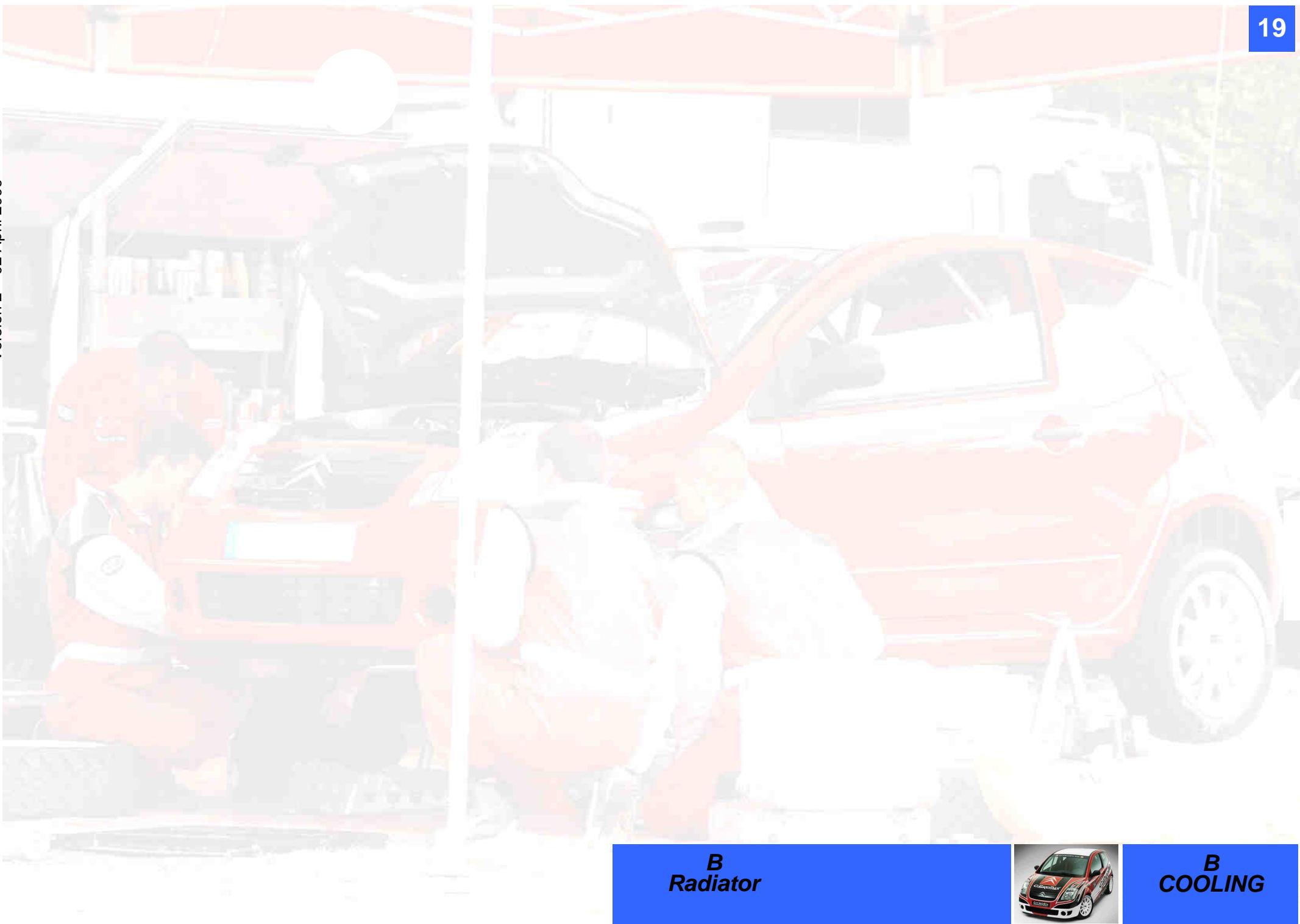
*B*  
COOLING

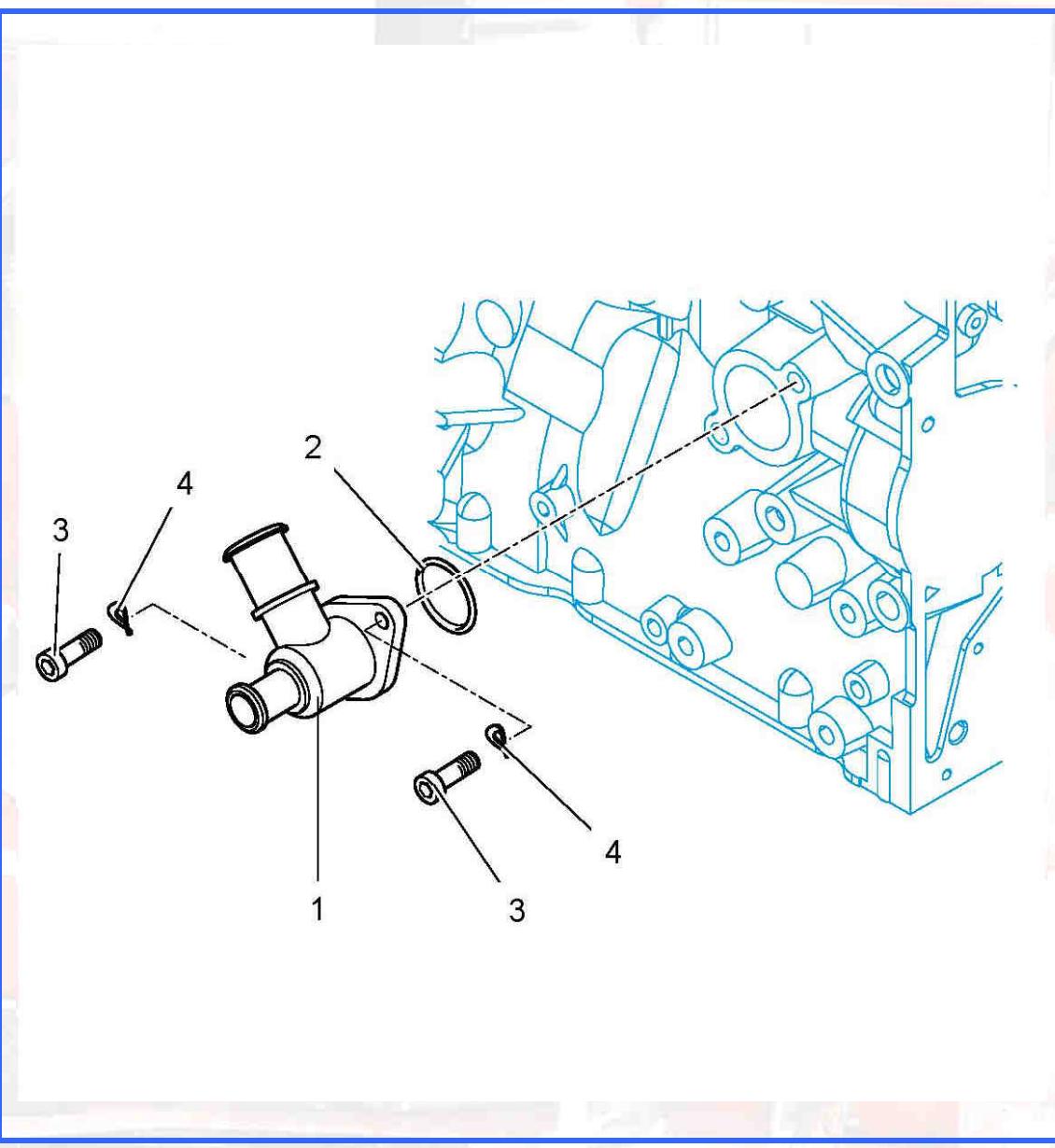
Connect the oil cooler right and left bulkheads to the upper bulkhead (ref. 1), using rilsans. Some adjustments may be necessary.



Check that all the rilsans are in place on all the fixings.



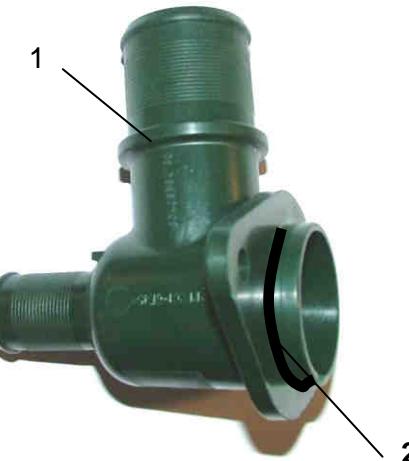






### Preparing and assembling the engine water inlet manifold:

Fit the o-ring (ref. 2) on the water inlet manifold (ref. 1), having taken care to lubricate it beforehand.



Fit the assembled engine water inlet manifold on the rear of the block (as shown in the photo opposite), using the screws (ref. 3) and washers (ref. 4).

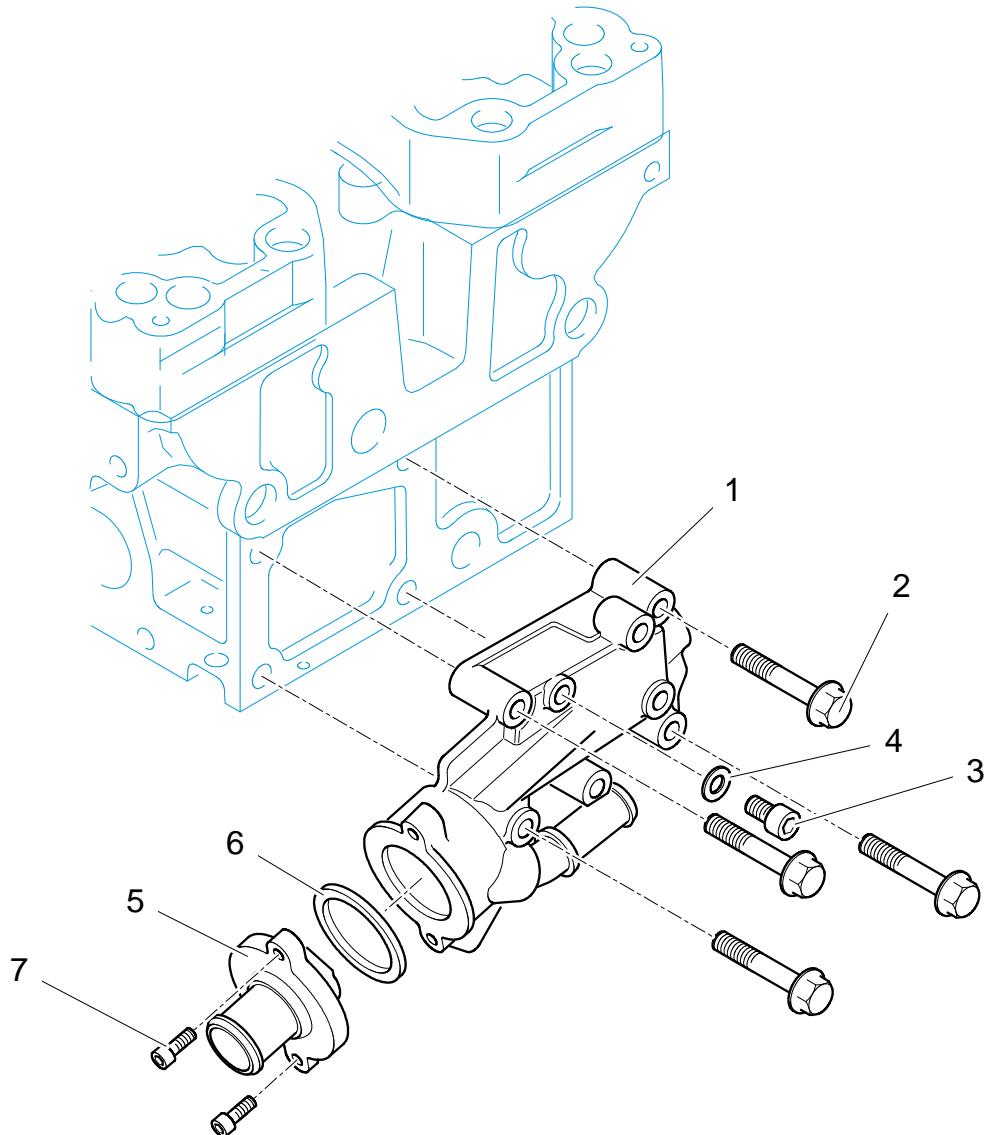


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**B**  
*Radiator*



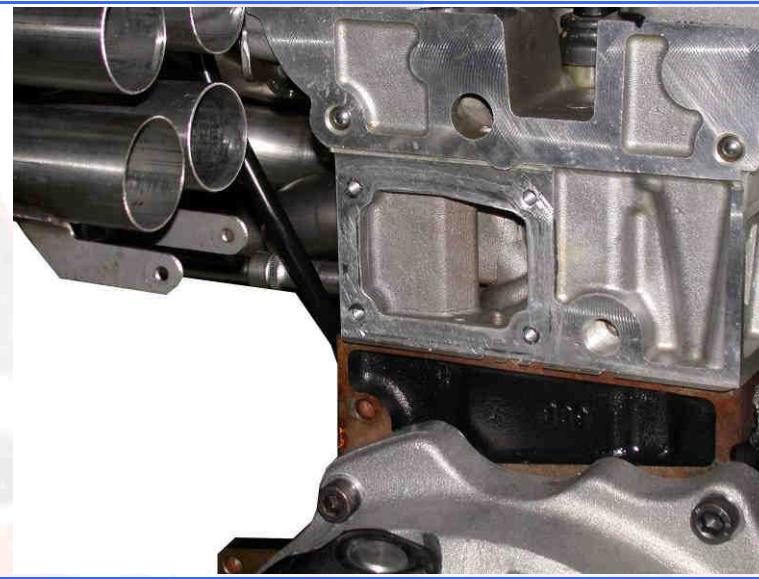
**B**  
*COOLING*



**Assembling the water outlet manifold on the cylinder head:**

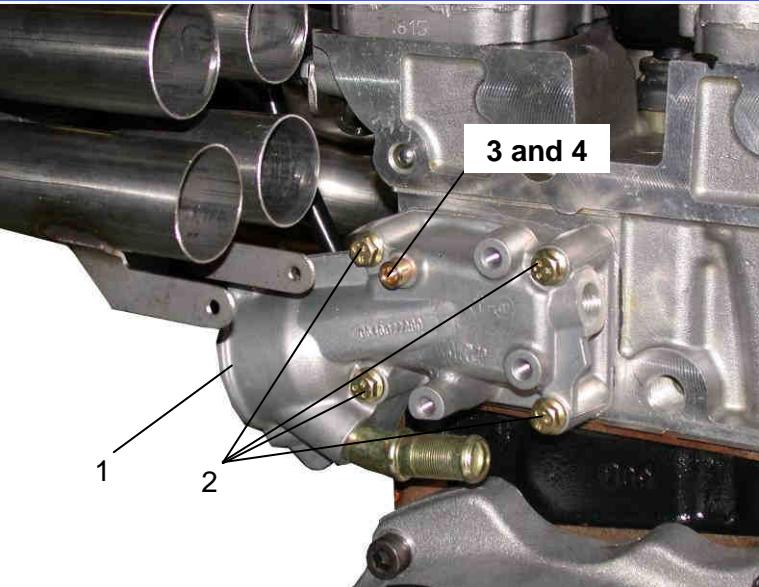
Clean the water outlet manifold sealing surface. Use glass paper if necessary.

Place a sealing ring all round the water outlet manifold at the black auto-seal.



Fit the water manifold ([ref. 1](#)) on the cylinder head using the screws ([ref. 2](#)).

Fit the bleeder screw ([ref. 3](#)) fitted with its seal ([ref. 4](#)) on the water manifold.



1.5  
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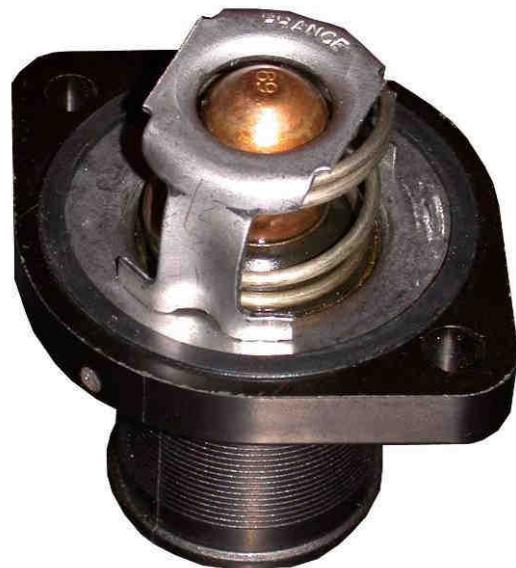
***B***  
***Radiator***



***B***  
***COOLING***

**Preparing the thermostat:**

Remove the thermostat from the water pipe.



Remove the glued seal, and clean the glue residues.

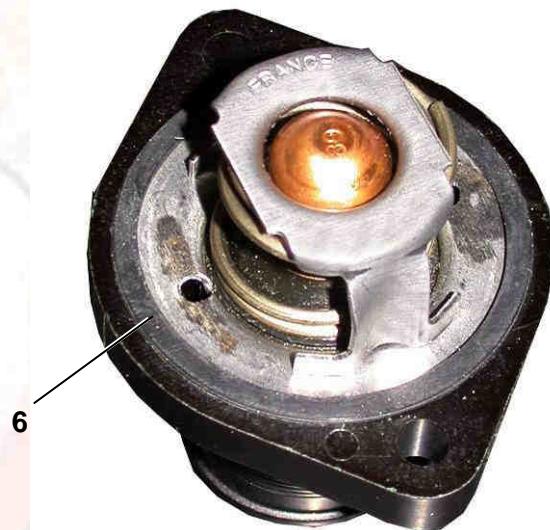




Drill two **4 mm** holes in the thermostat, as shown in the photo opposite.



Put the new seal on the thermostat ([ref. 6](#)), and put the thermostat back on the water pipe.

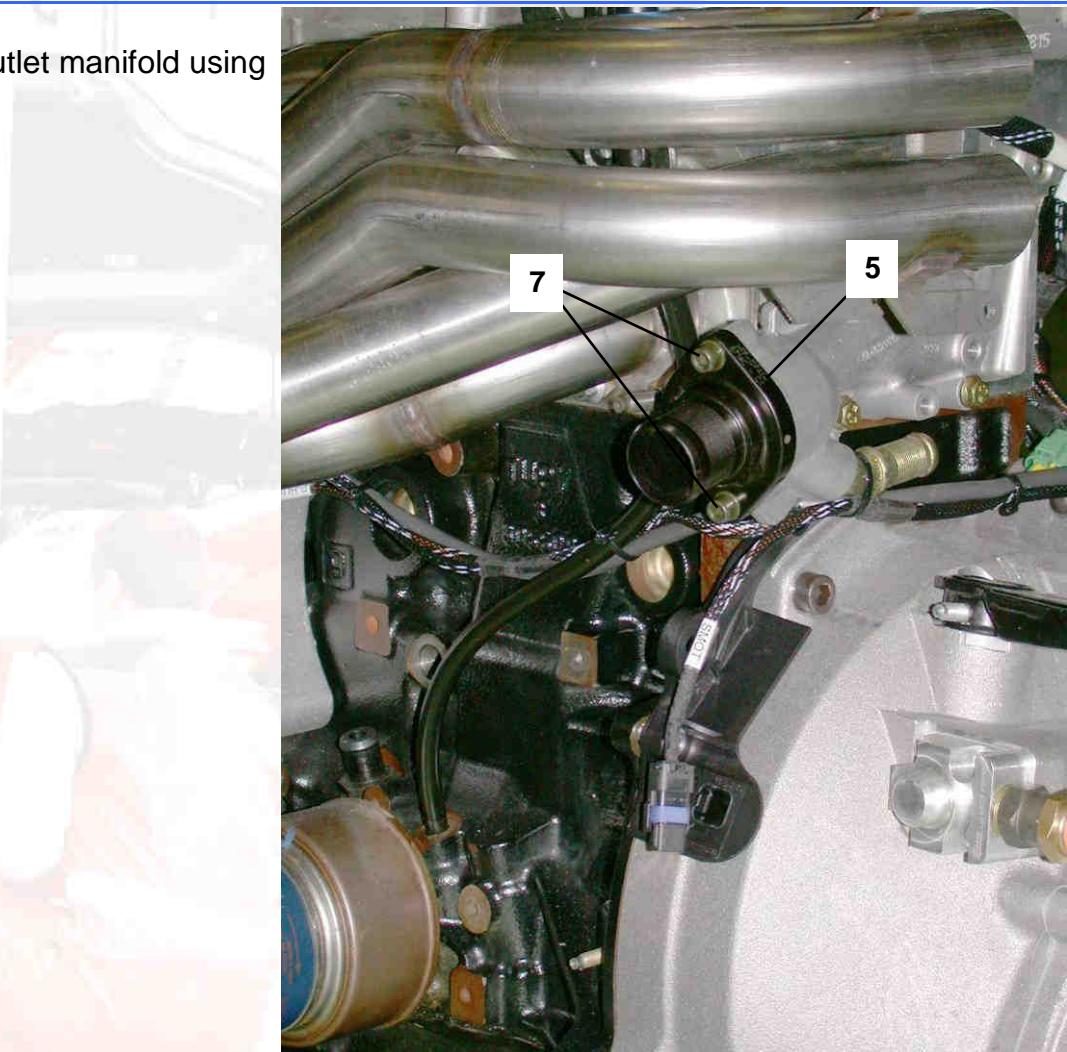


**B**  
*Radiator*

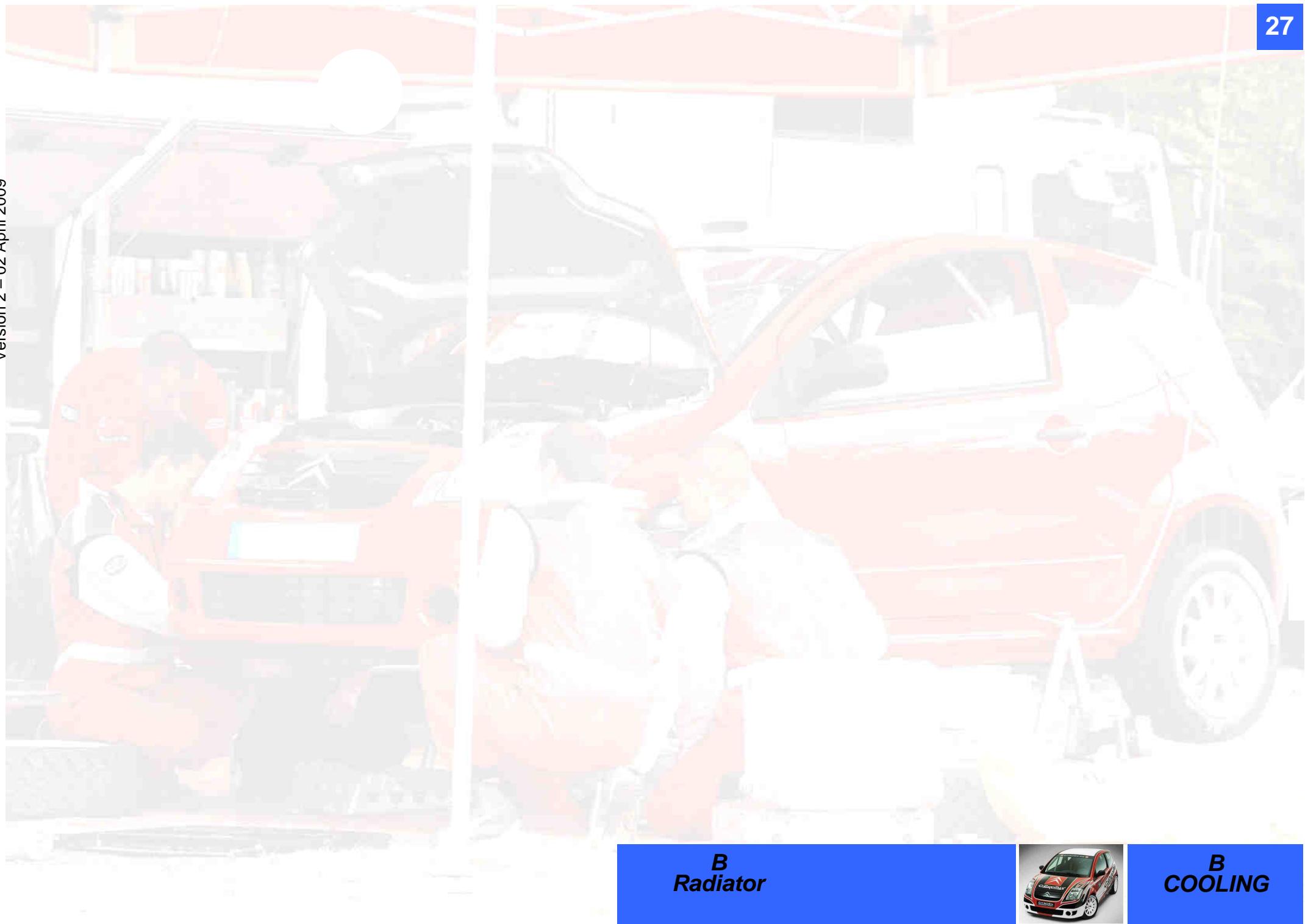


**B**  
*COOLING*

Fit the pipe (ref. 5) on the water outlet manifold using the screws (ref. 7).



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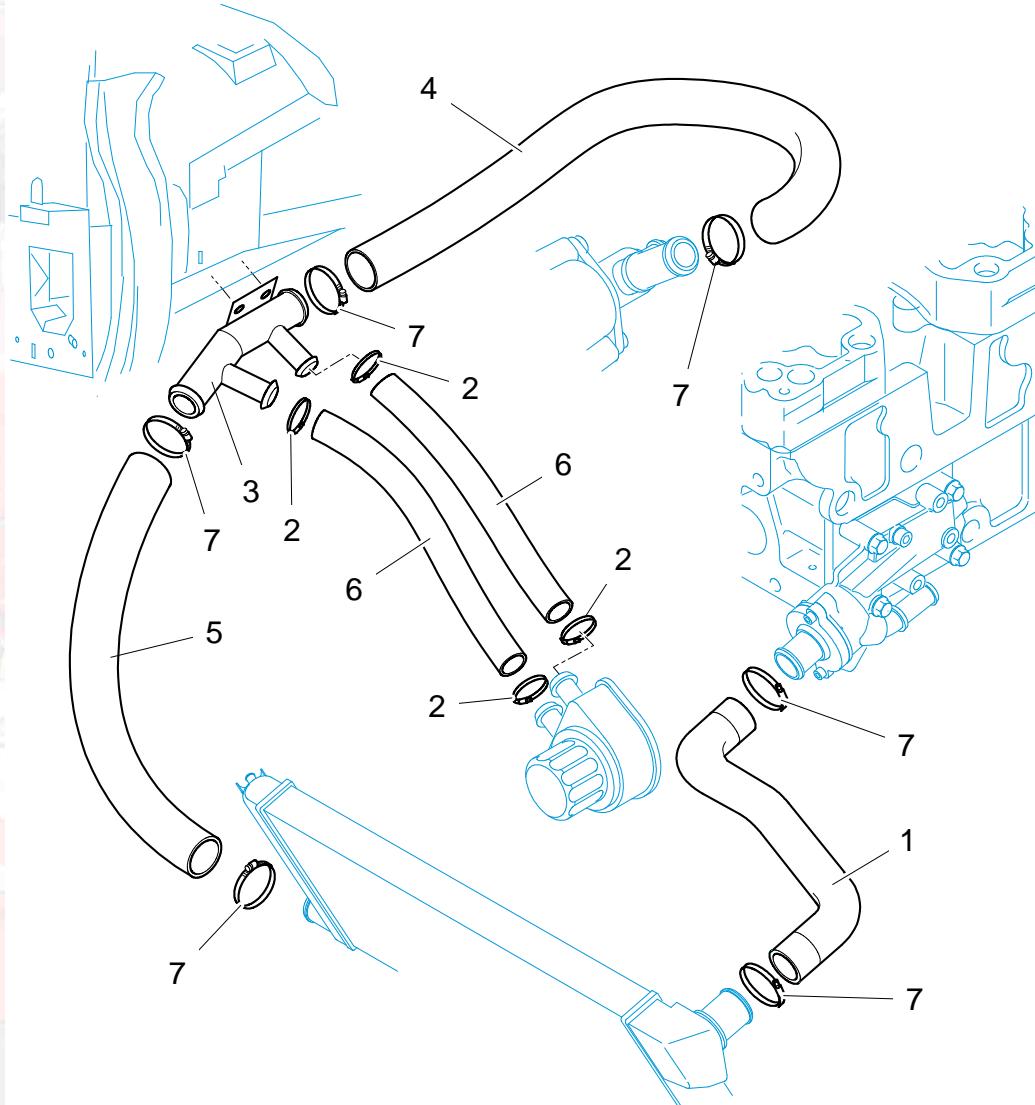


**C2R2max**

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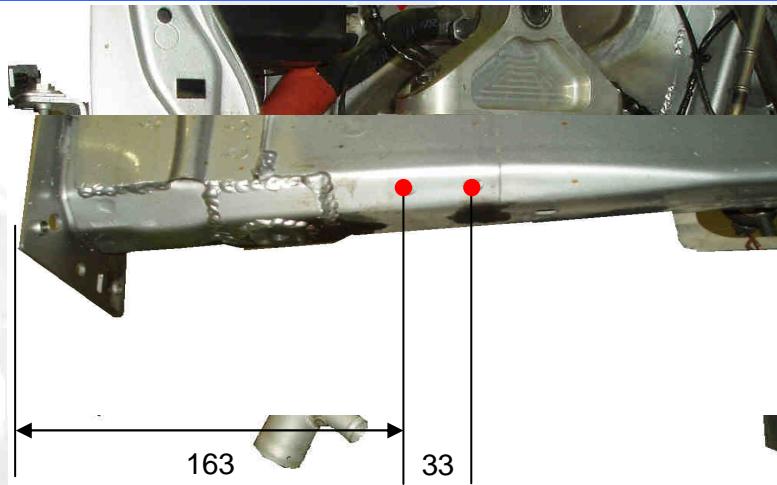
**CITROËN**  
RACING



Ref	Part Number	Qty	Description
1	BCSP1343HW	1	Radiator / block connecting hose
2	BCSP6981H7	4	Collar Ø16-27
3	0B1263305A	1	Oil cooler junction water tube
4	0B1263306A	1	Engine water inlet hose
5	0B1263307A	1	Water radiator water outlet hose
6	0B1263309A	2	Oil cooler water outlet hose
7	BCSP6981K3	6	Norma collar Ø30-45

**Fixing the water distribution block:**

Mark the inside of the front right side-member, as shown in the photo opposite.



Drill two **Ø7** mm holes, as shown in the photo opposite, and fit two "Riveklés" **M5** inserts on the side-member.



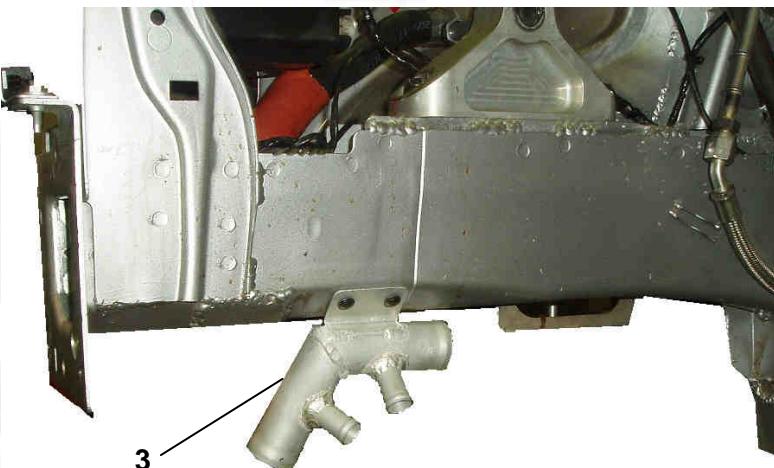
**B**  
**Radiator**



**B**  
**COOLING**



Fix the connector (ref. 3) on the side-member using two **M5 L12 BHC** screws.

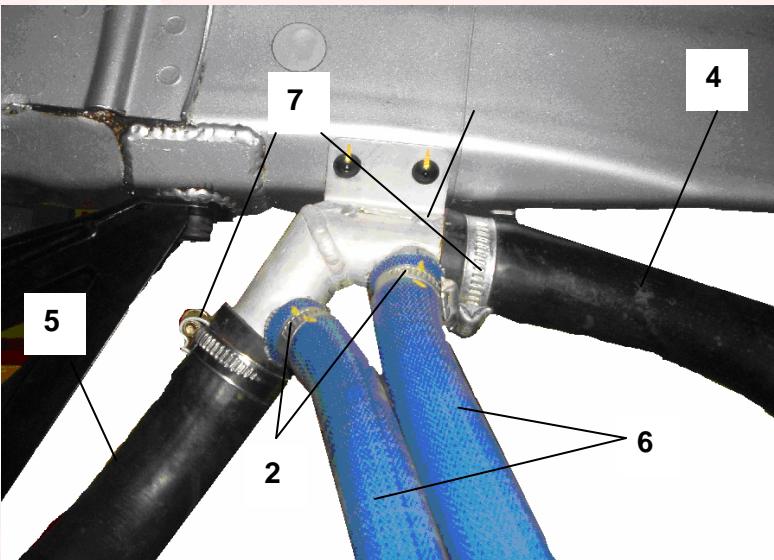


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### Assembling the connecting hoses.

Connect to the junction connector (ref. 3) the two oil cooler water outlet hoses (ref. 6), the radiator water outlet hose (ref. 5), and the engine inlet hose (ref. 4) using the collars (ref. 2 and ref. 7).



4

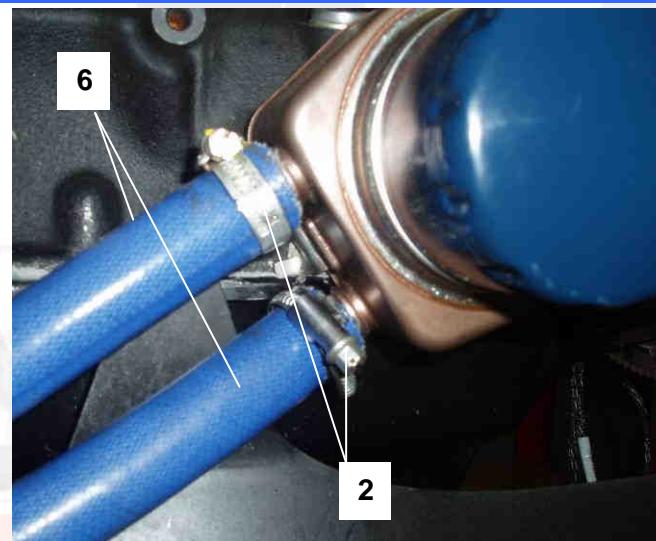
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2

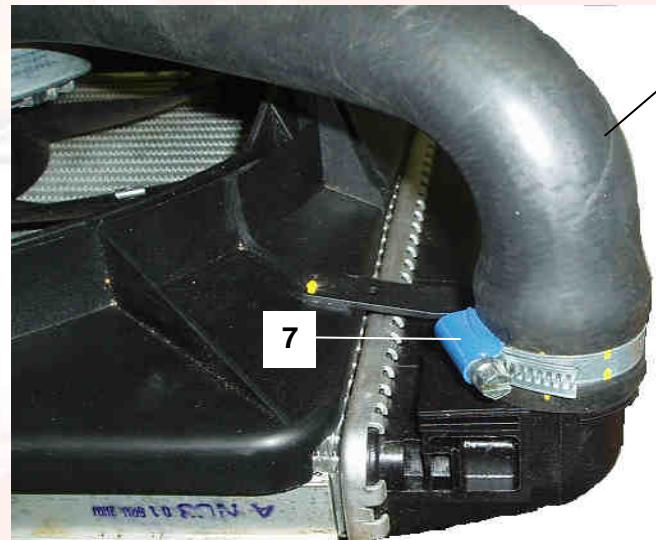
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7

Connect the two oil cooler water outlet hoses (ref. 6) to the oil cooler, using the collars (ref. 2).



Connect the radiator water outlet hose (ref. 5) to the radiator using the collar (ref. 7).

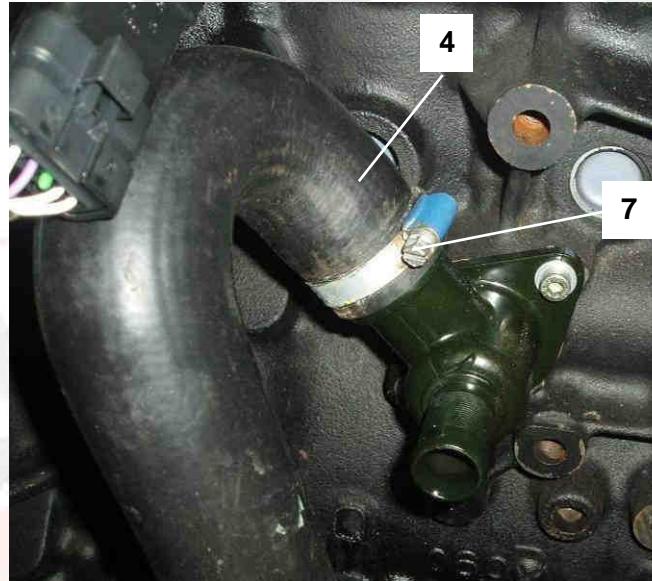


**B**  
*Radiator*

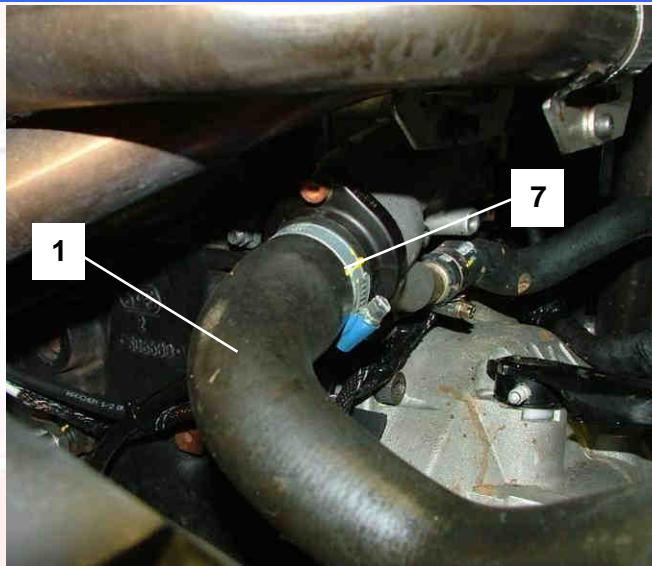


**B**  
*COOLING*

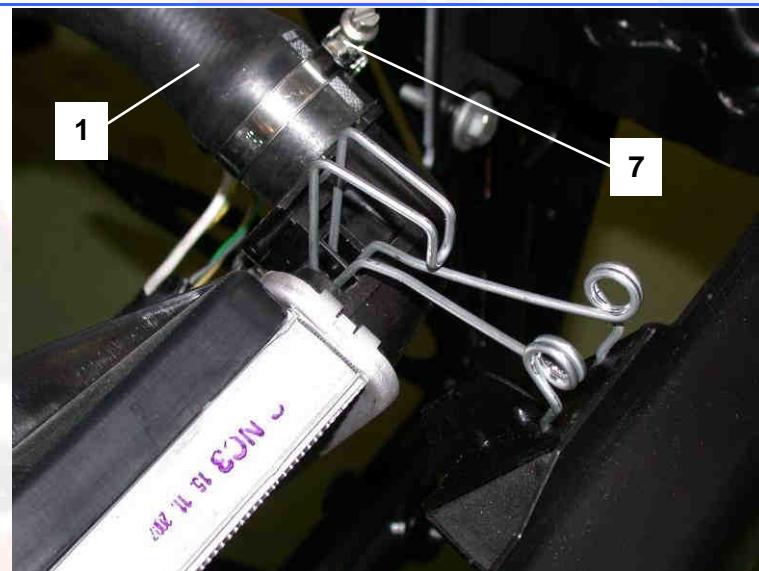
Connect the engine water inlet hose (ref. 4) on the engine water inlet pipe using the collar (ref. 7).



Fit the hose (ref. 1) on the pipe of the water outlet manifold then lock it in position with the collar (ref. 7).



Fit the hose (ref.1) on the radiator inlet using the collar (ref.7).



#### Assembling the heating system connecting hoses

Fit the heater outlet hose on the engine water inlet pipe using the collar.



**B**  
*Radiator*



**B**  
*COOLING*

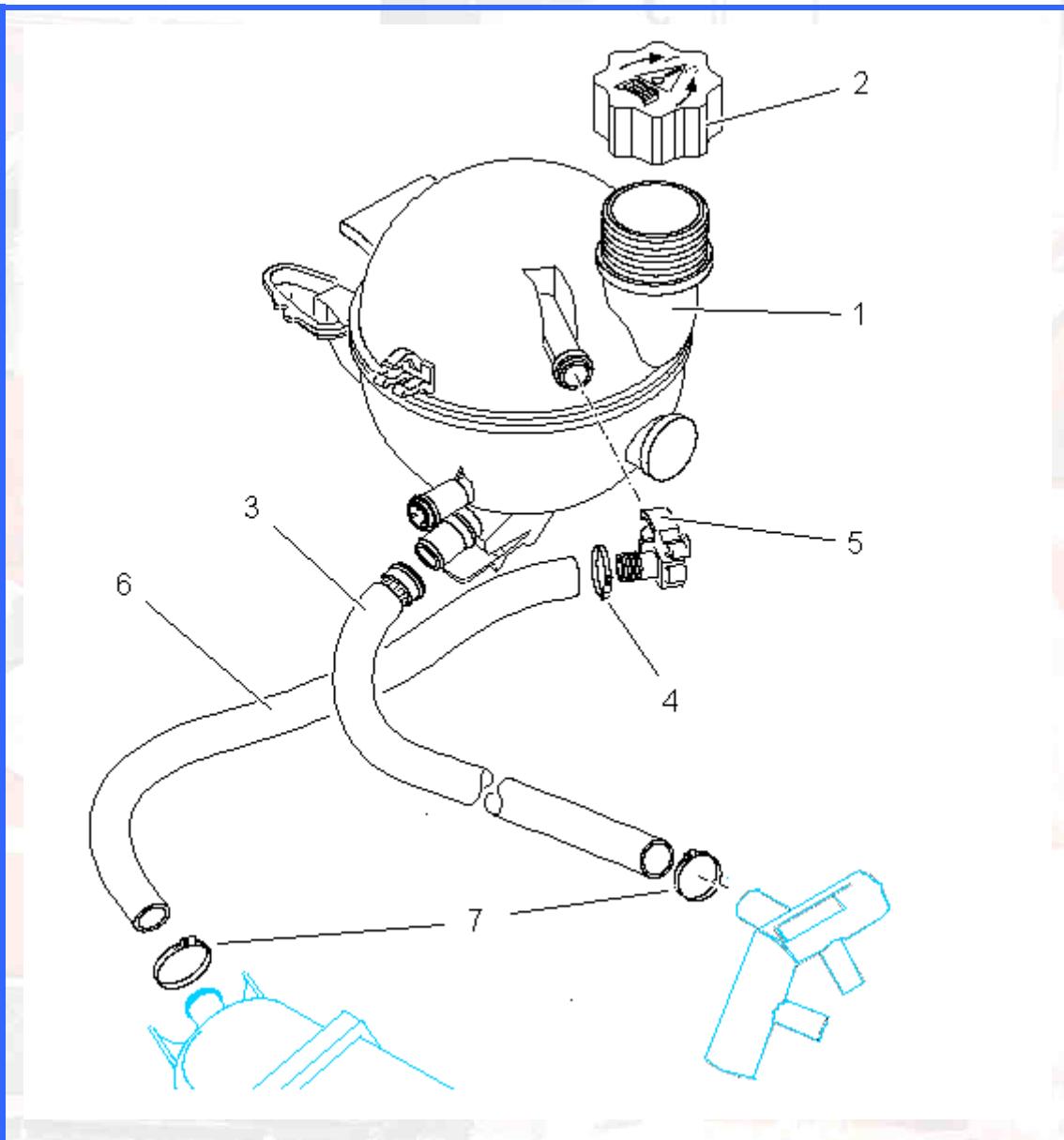
Fit the heater inlet hose on the engine water outlet manifold using the collar.



Connect the two heater hoses to the bulkhead grommet.

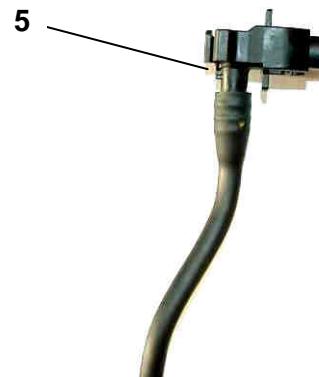




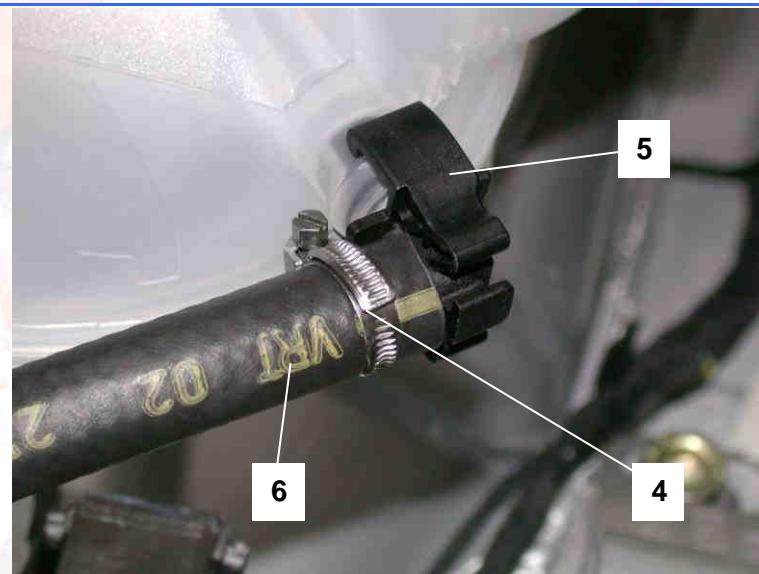




Cut the hose in order to retrieve the connector (ref. 5).



Connect the hose (ref. 6) onto the connector (ref. 5) using the collar (ref. 4).

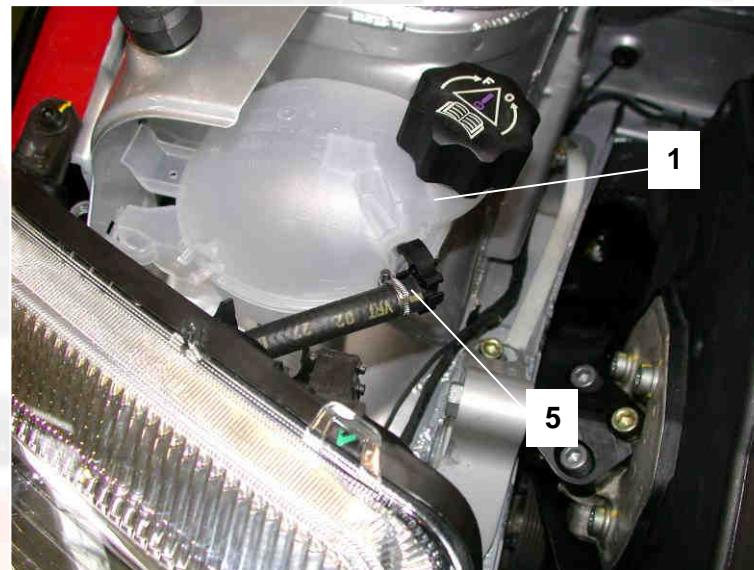


**B**  
*Radiator*

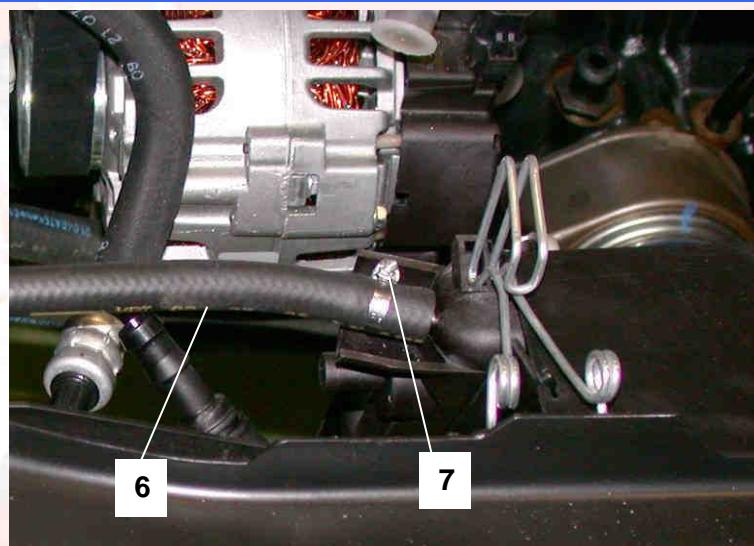


**B**  
*COOLING*

Connect the connector (ref. 5) to the expansion tank (ref. 1).

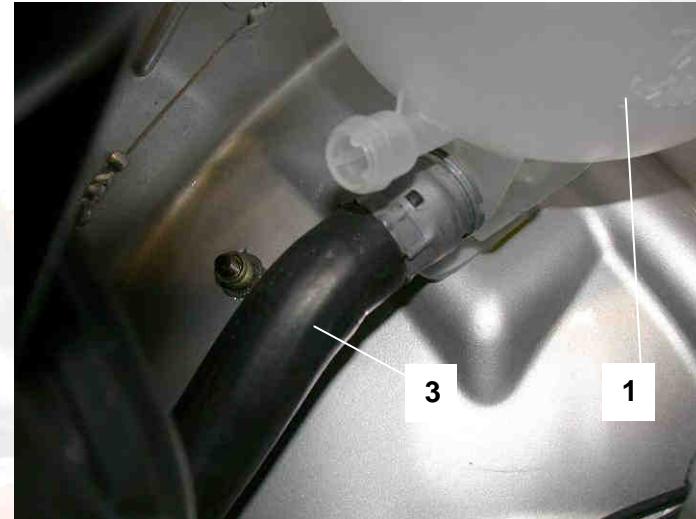


Connect the other end of the hose (ref. 6) to the water radiator, using the collar (ref. 7).

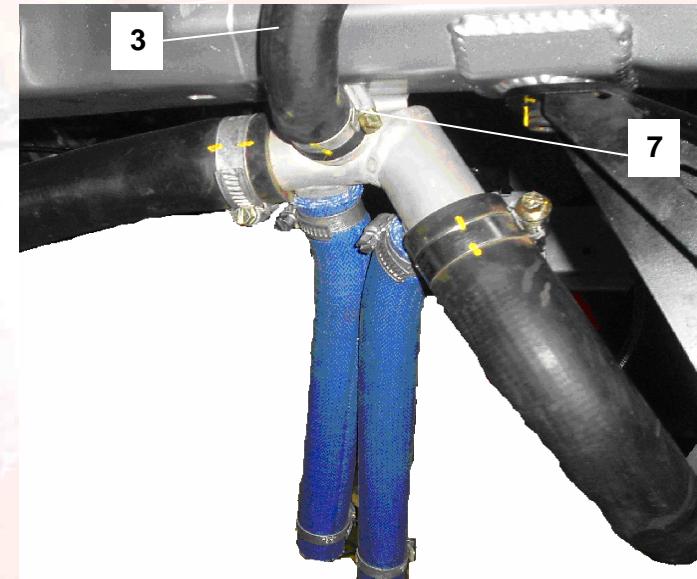




Connect the supply hose (ref. 3) to the expansion tank (ref. 1).



Connect the supply hose (ref. 3) onto the engine water connector using the collar (ref. 7).



***B***  
***Radiator***



***B***  
***COOLING***



Connect the supply hose (ref. 3) to the front side-member, using a lined collar (ref. A).

This collar can be fixed with the screw that is already present on the side-member (possibly the length will have been altered).

