SUMMARY : VEHICLE C6 - EVOLUTIONS IN YEAR 2009 (COMMERCIAL LAUNCH - DT20C 3.0 HDI ENGINE WITH PARTICLE FILTER)

1. DT20C engine introduction

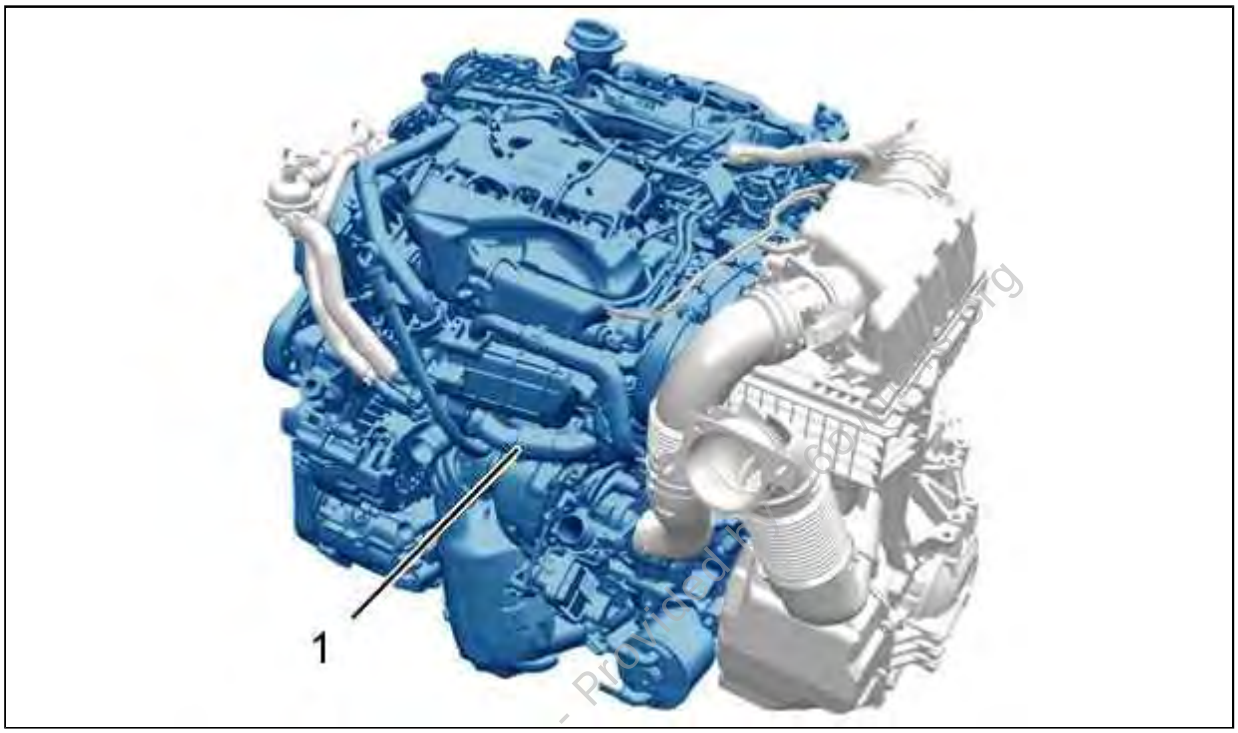

Figure : B1CB027D

(1) Engine (Front view).

2. Special features : DT20C engine

Special features :

- 6 cylinders, 24 valves with twin overhead camshaft, driven by toothed belt
- Direct injection boosted by 2 variable geometry turbochargers
- Two actuators for piloting the variable geometry turbochargers
- Two oxidation pre-catalysers fixed directly on the turbocharger outlets
- Catalytic converter/monobloc particle emission filter assembly (Inseparable assembly)
- air/air heat exchanger (cooling of the turbocharged air)
- An exhaust gas recycling (EGR) system with exchanger for reducing the temperature of the recycled gases. The cooling capacity and the volume of the exchanger are optimised
- A by-pass device for the exhaust gas recycling (EGR) exchanger, with a flap controlled by a pneumatic actuator
- 2 electric exhaust gas recycling solenoid valves
- A proportional lambda sensor
- A low pressure circuit with a boost pump in the fuel tank and a transfer pump in the high pressure pump
- 2 piloted torque reaction rod electrovalves
- Capacity of 3 litres, combustion chamber with compression ratio of 16

3. Modifications (In relation to the DT17 engine)

Increase in power whilst preserving driving pleasure and reducing both engine noise and fuel consumption (By around 15 to 18%).

3.1. New exhaust gas recycling system (EGR)

Suppliers : PIERBURG + ENSA.
Features of the air loop and of the exhaust gas recycling (EGR) system :

- Optimised management of the actuators of the EGR system valves (Complying with emission control standard Euro 5)
- Management of the by-pass actuators for the heat exchangers of the EGR system to control the temperature of the recycled exhaust gas

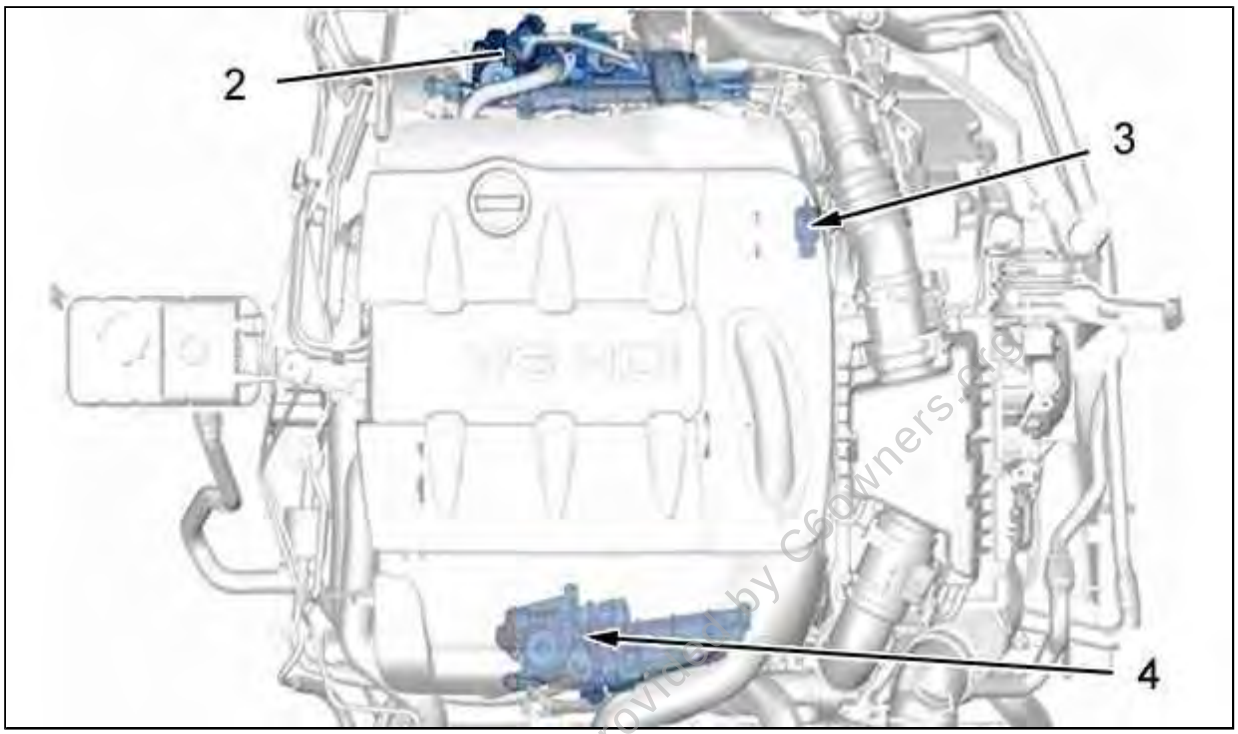

Figure : B1CB028D

(2) Front EGR module.
(3) Control electrovalve for the EGR heat exchanger by-pass.
(4) Rear EGR module.

3.2. New diesel injection system BOSCH EDC17CP11 (Instead of SIEMENS)

Special features of the injection system :

- Fuel injection managed as a function of engine torque
- The high pressure pump supplies a maximum injection pressure of 2000 bars in the fuel high pressure common injection rail
- Multiple injection engine management strategies (Complying with emission control standard Euro 5)
- CP4.2 type high pressure fuel pump

N.B. : Discontinuation of the diesel fuel cooler.

3.3. New engine ECU of increased volume

The engine ECU manages the entire injection system.
The engine ECU software incorporates the following functions :

- Control of fuel injection and emission control
- Driveability strategies
- Immobiliser
- Back-up strategies
- Control of the cooling fans and warning lamps
- Diagnostic with fault memorising
- Cruise control and speed limiter

N.B. : The atmospheric pressure sensor cannot be separated from the engine ECU .

The engine management ECU has 2 power stages which are able to supply the very high control current necessary for the operation of the diesel injectors.

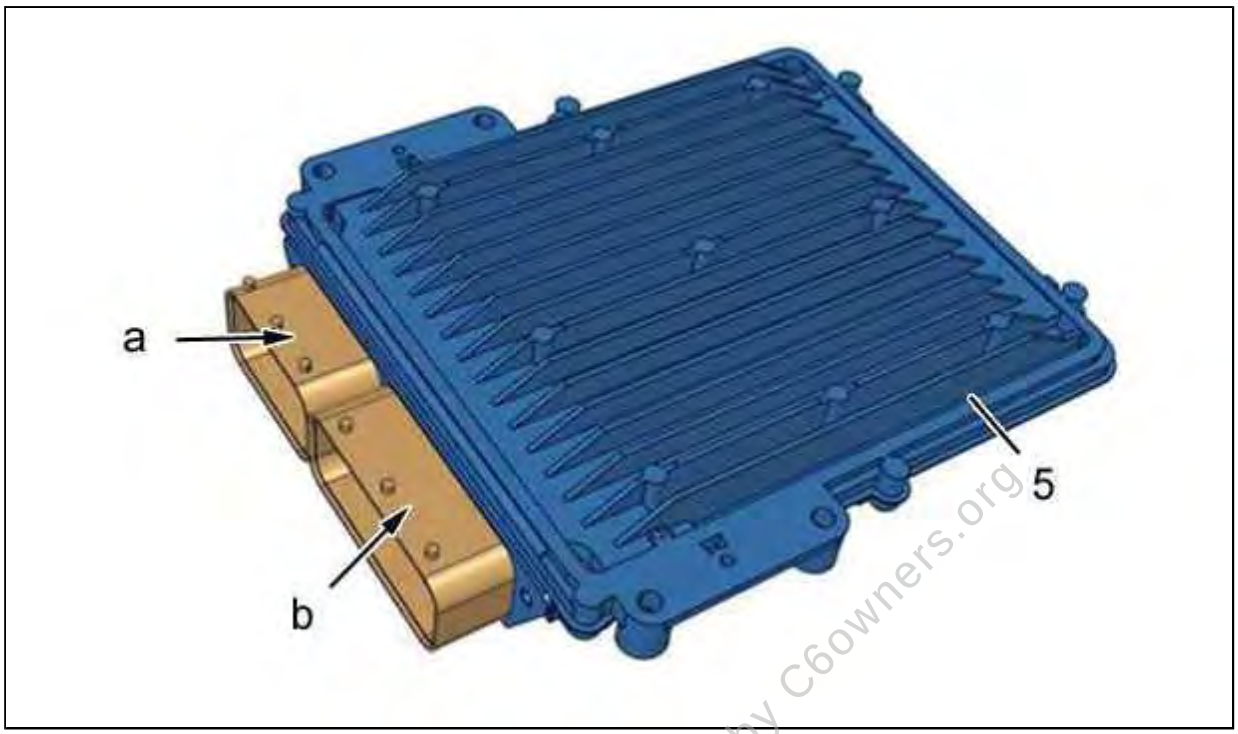

Figure : D4EB007D

(5) Engine ECU.
"a" 58-way black connector (CH).
"b" 96-way brown connector (CM).
make : BOSCH.
Type : EDC17CP11.

4. Identification marking - Technical data

engine	DT20
Marking on engine	X 801
Legislation type	X8Z
Power rating	177 kW at 3800 rpm
Actual maximum torque	450 Nm at 1600 rpm

5. New exhaust line with transverse rear silencer

The exhaust line has evolved with an increase in the volume of the rear silencer which is installed transversely (Complying with emission control standard Euro 5).

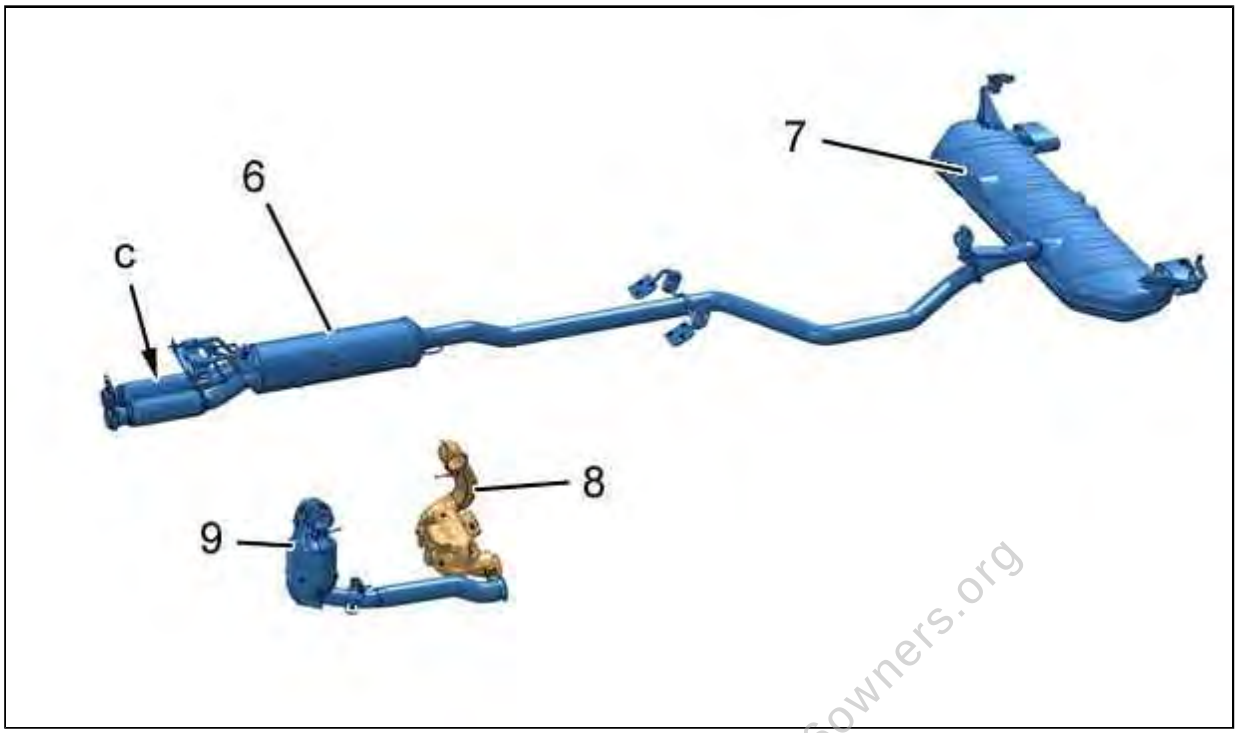

Figure : B1JB0A3D

(6) Catalytic converter-particle emission filter .
(7) Transverse rear silencer.
(8) Rear pre-catalyst.
(9) Front pre-catalyst.
"c" Front flexible pipe.

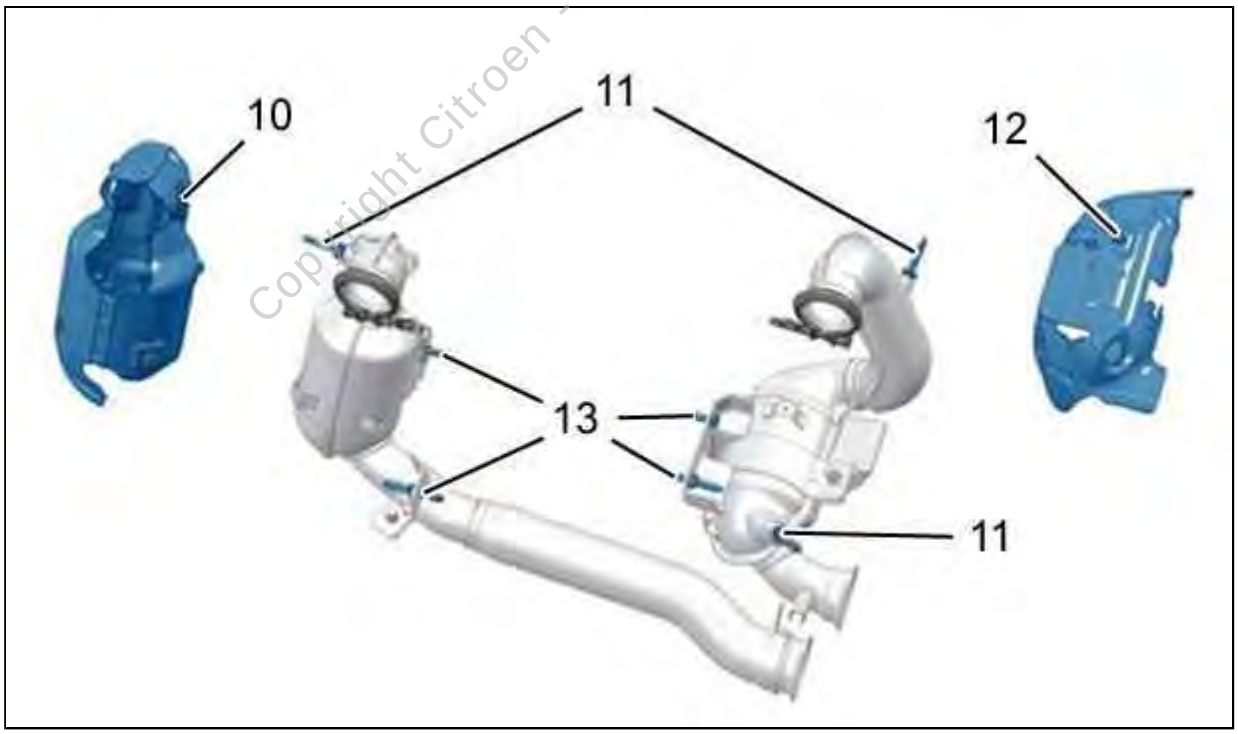

Figure : B1JB0A4D

(10) Heat shield (Front pre-catalyst).
(11) Temperature sensor.
(12) Heat shield (Rear pre-catalyst).

(13) bolts .

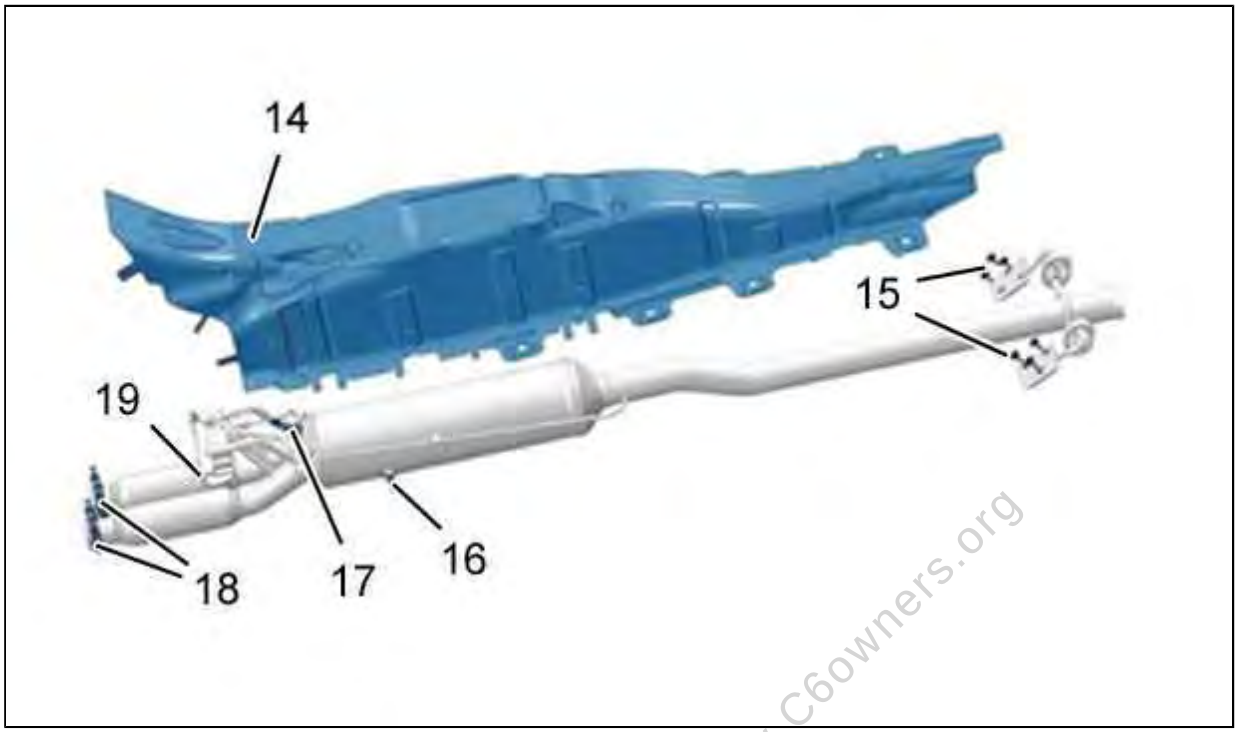

Figure : B1JB0A5D

(14) Catalytic converter heat shield (Central catalytic converter).
(15) Exhaust rear hangers.
(16) Temperature sensor.
(17) Oxygen sensor.
(18) Fixing clip .
(19) Exhaust front hangers.

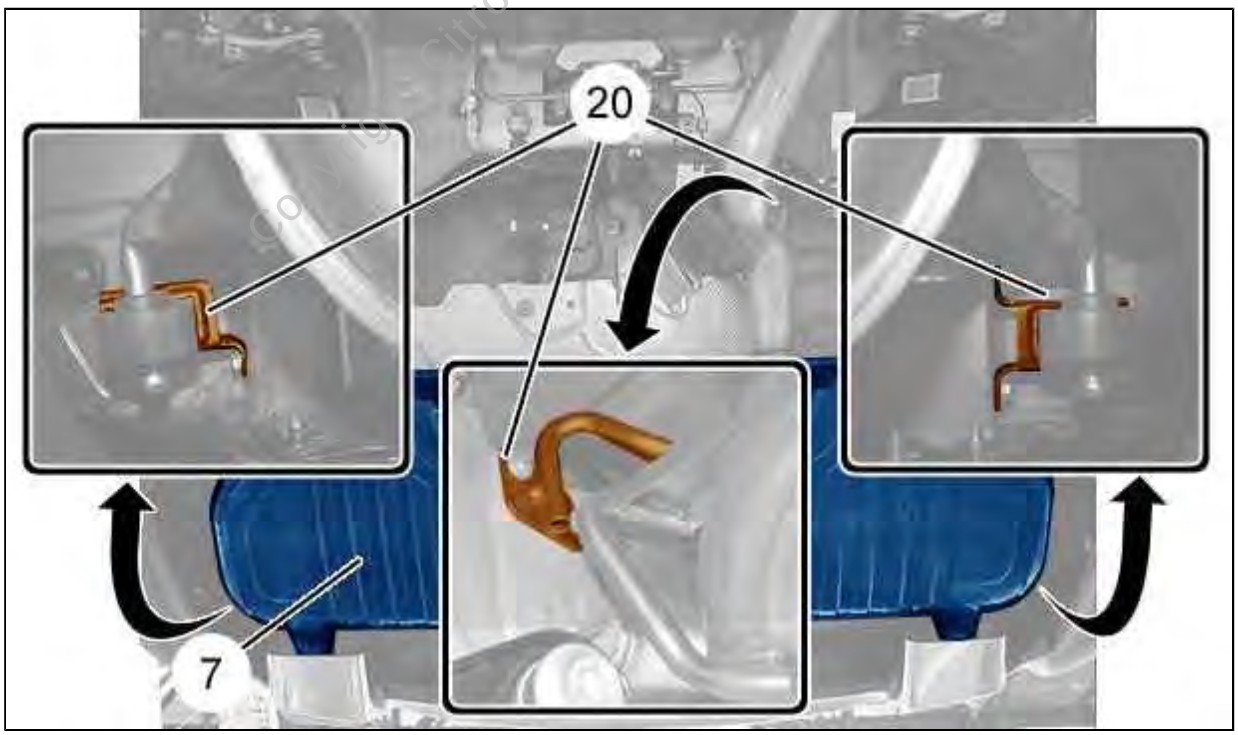

Figure : E1AT00DD

(7) Transverse rear silencer.
(20) Transverse rear silencer hangers.

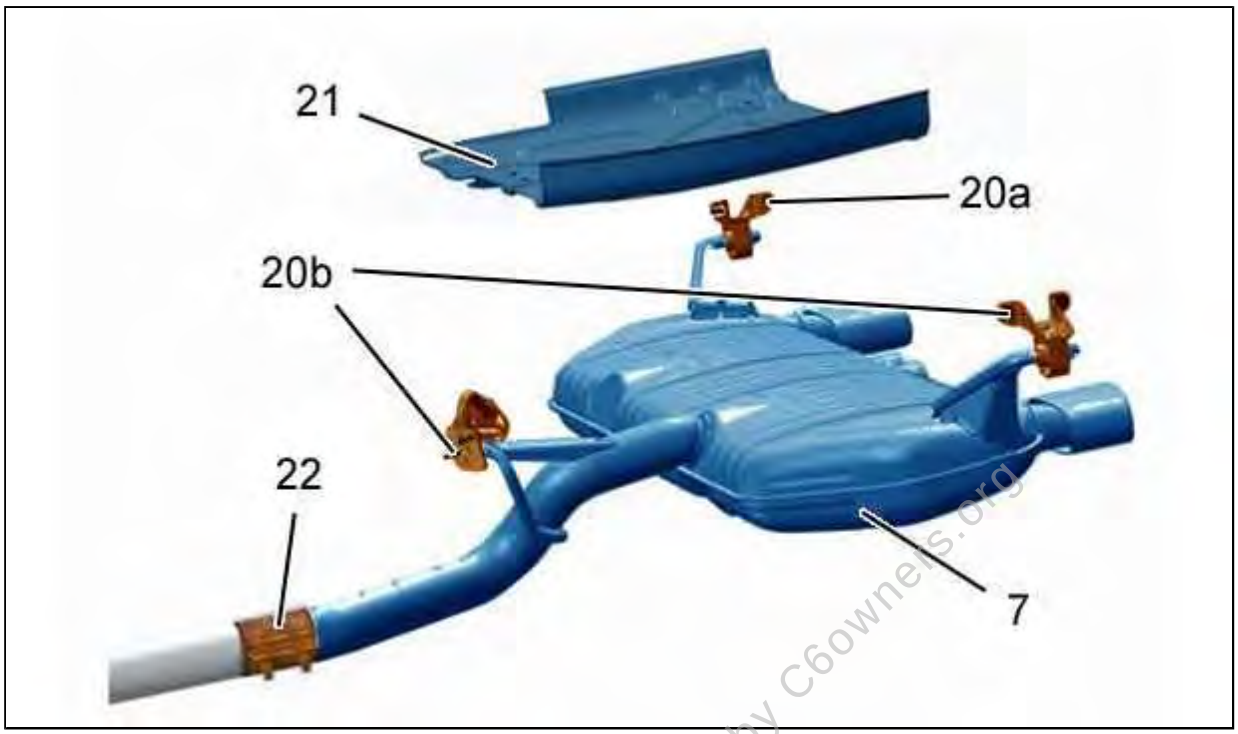

Figure : E1AT00OD

(7) Transverse rear silencer.
(20a) Exhaust hanger (Rear right hand side).
(20b) Exhaust hangers (Left hand rear).
(21) Heat shield.
(22) Connecting sleeve .

CAUTION : Remove the bolts from the 3 exhaust hangers to remove the rear silencer.

6. Modification : Exhaust tailpipe trim

Modification : Exhaust tailpipe and trim (Complying with emission control standard Euro 5 ; Service).

Figure : C4BT006D

(23) Exhaust tailpipe trim.

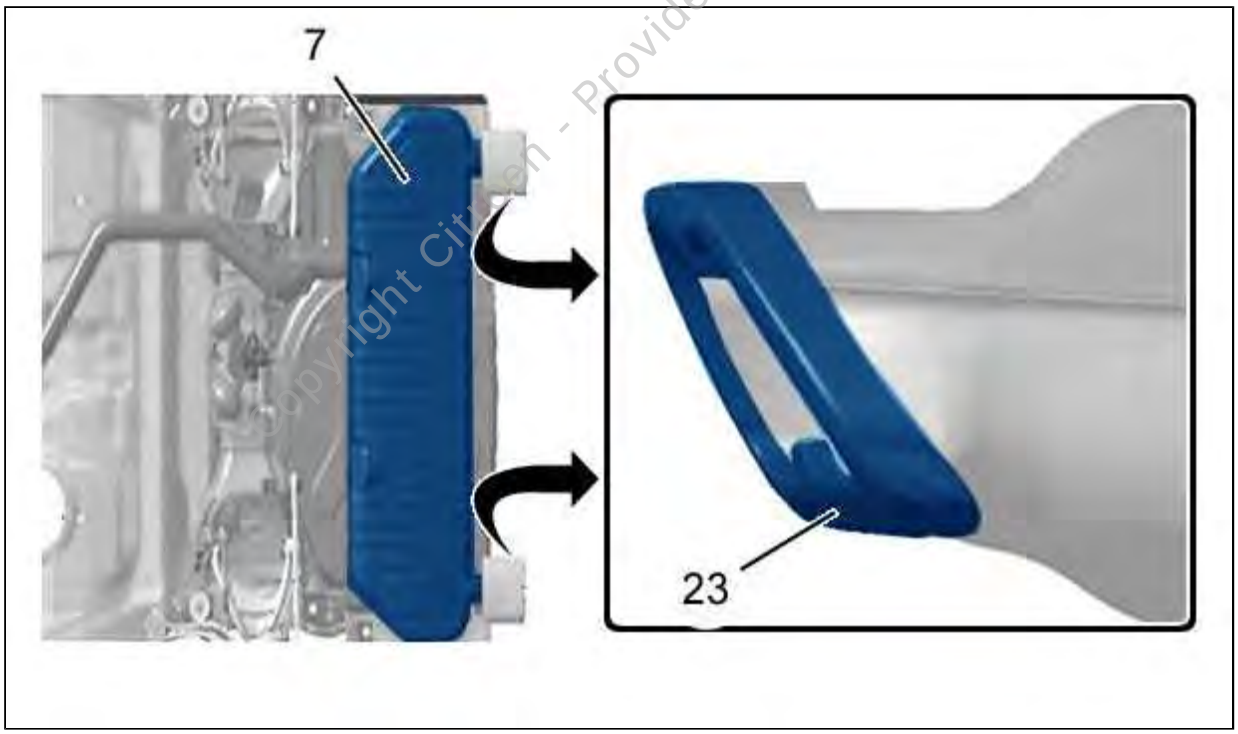

Figure : E1AT00LD

(7) Rear silencer.
(23) Exhaust tailpipe trim.

7. Modification : Cooling front panel

Application of the Euro 5 emission control standard involves an increase in the temperature under the bonnet, necessitating the fitting of 2 "sucking" type cooling fans instead of one "blowing" type cooling fan (Standard Euro 4).

To increase the flow of cooling air, the "sucking" type cooling fans are positioned to the rear of the following front panel components :

- Cooling radiator
- Air conditioning condenser
- Turbocharger air cooler (RAS)
- New anti-recycling bulkheads

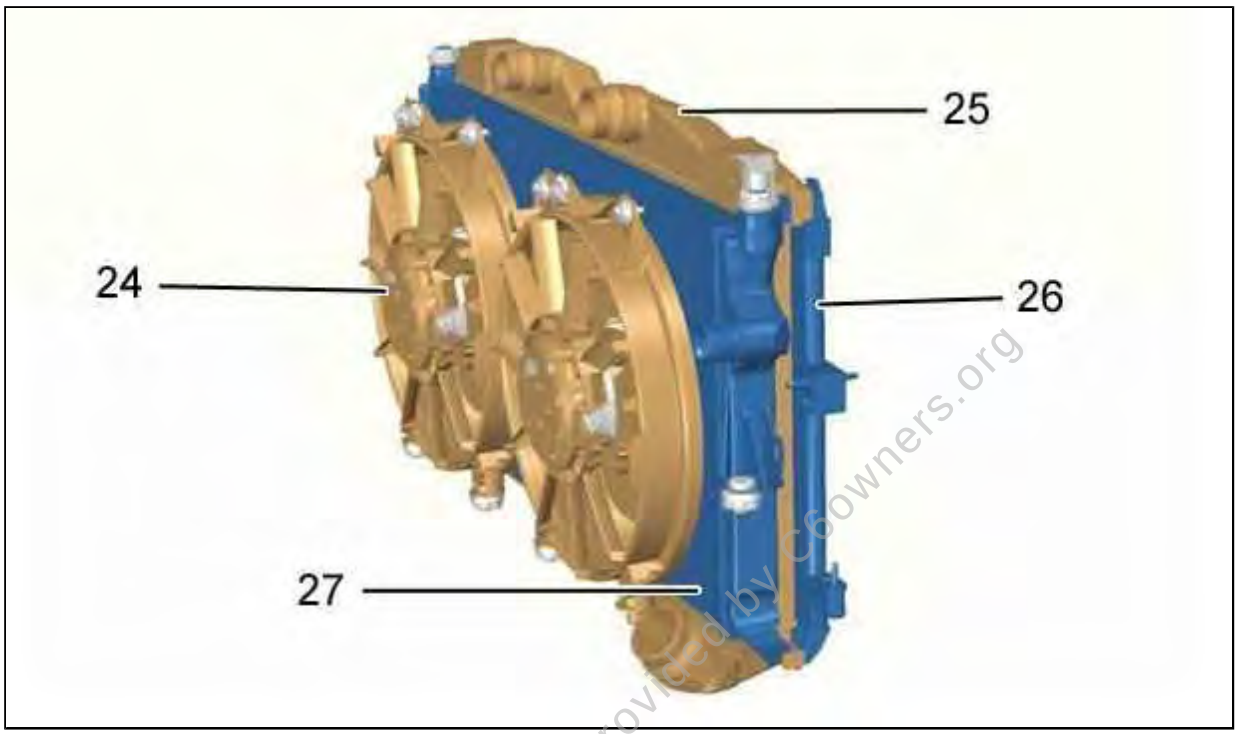

Figure : E1AT00ID

(24) "sucking" type cooling fan.
(25) Turbocharger air cooler (RAS).
(26) Air conditioning condenser.
(27) Cooling radiator.

8. Modification : Rear structure

8.1. Modification : Rear central strengthener

Figure : C4BT002D

"d" Rear central strengthener for anchoring point.

CAUTION : Do not use the rear central strengthener to lift a vehicle that has hydraulic suspension.

Special feature of vehicles with hydraulic suspension : Because of the increased volume of the rear silencer, the new rear central strengthener does not allow for lifting of the vehicle.

N.B. : Anchoring of the vehicle on a truck or boat is still permitted.

8.2. Vehicle with very low ground clearance (In the event of malfunctioning of the hydraulic suspension)

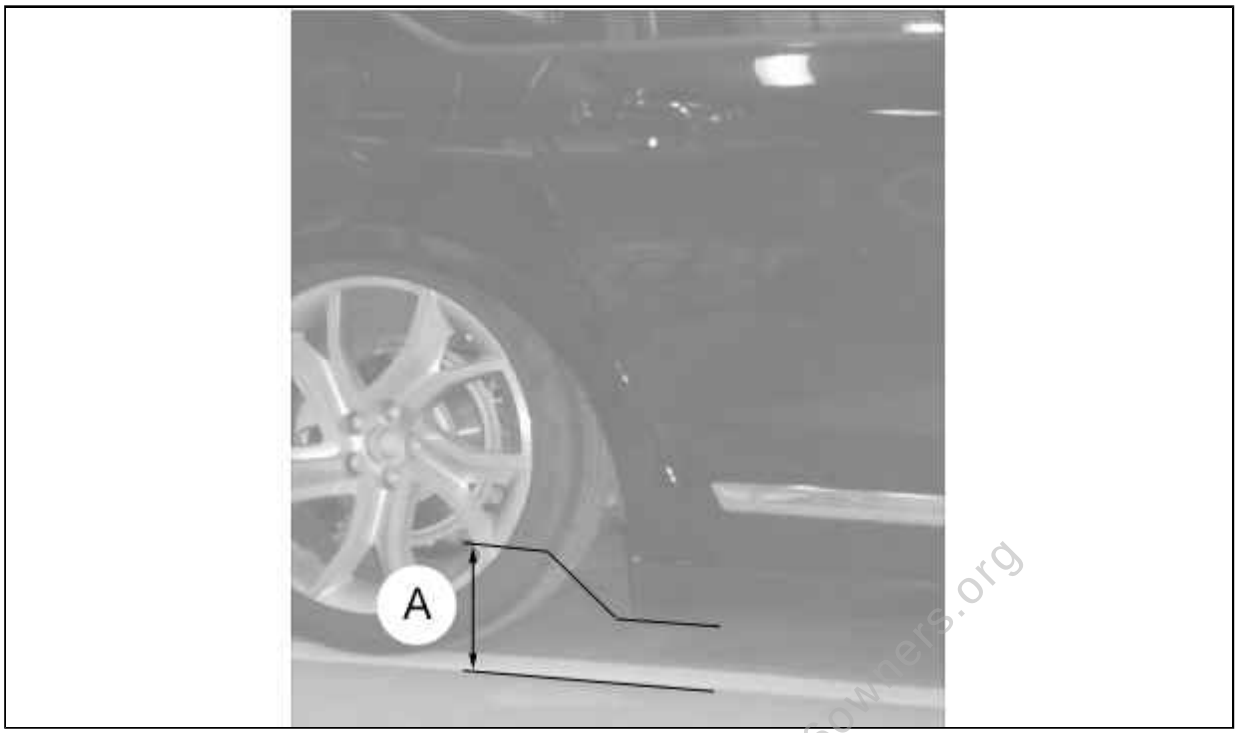

Figure : C4BKGFRD

"A" Vehicle with very low ground clearance preventing lifting.

Figure : C4BKGFSD

Equipment : Trolley for moving the vehicle by lifting it by the wheels (Type "GOJAK").
If the vehicle height does not permit access to the side jacking points (Engagement of a trolley jack or of the arms of a 2-post lift) :

- Raise the vehicle by the wheel until a trolley jack or the arms of a 2-post lift can be engaged ; Using a trolley for moving the vehicle by lifting its wheels
- Use either the special (low height) "CITROEN" trolley jack or the standard trolley jack at the side lifting points

- Lift the vehicle and place it on axle stands (Consult the lifting-chocking method)

8.3. Spare wheel half-well

Installing of a spare wheel half-well on the boot floor to accommodate a "space saver" type spare wheel.
The increased volume of the rear silencer results in a reduction in the height of the spare wheel well (Complying with emission control standard Euro 5).

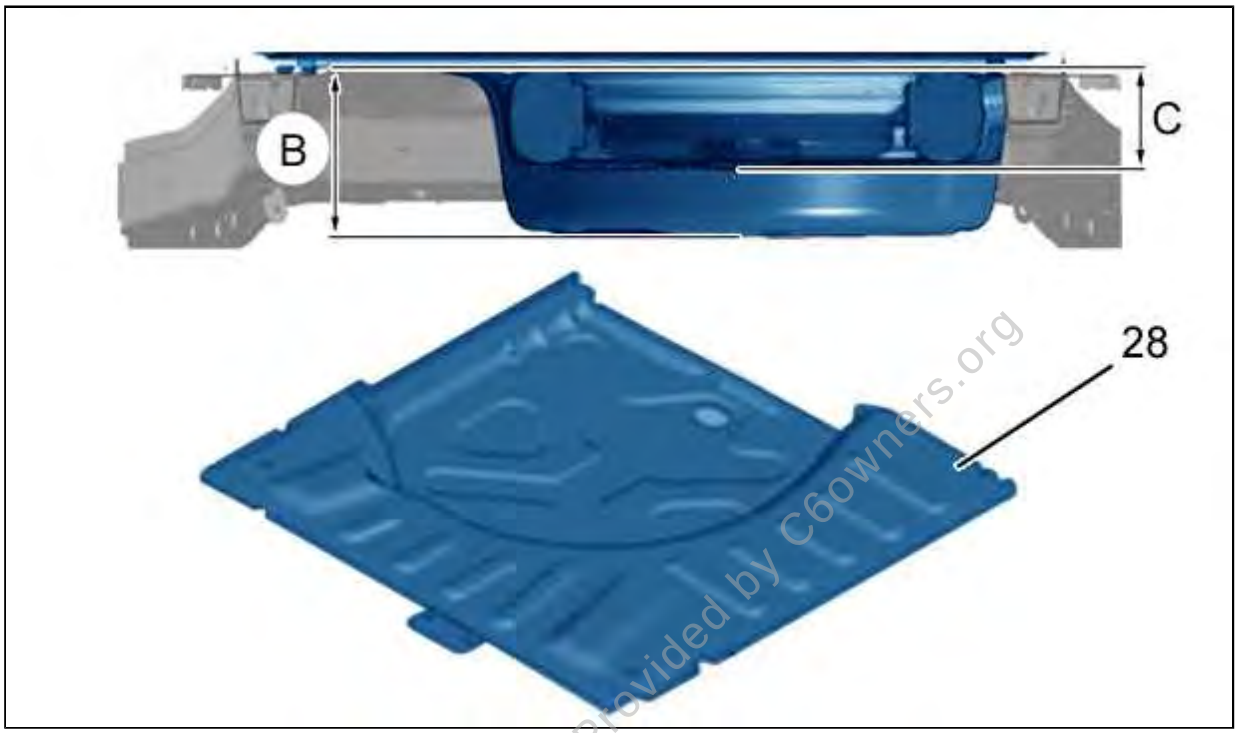

Figure : C4BT007D

"B" Height of the spare wheel well EURO 4.
"C" Height of the spare wheel half-well DT20C EURO 5.
(28) Spare wheel half-well DT20C EURO 5.

9. Modifications : Bodywork

Modifications relating to the new European high speed impact standards :

- New attachment system for the cable on the bonnet release lock
- Modification of the cut-out for the front bumper panel and for the routing of the cable guide

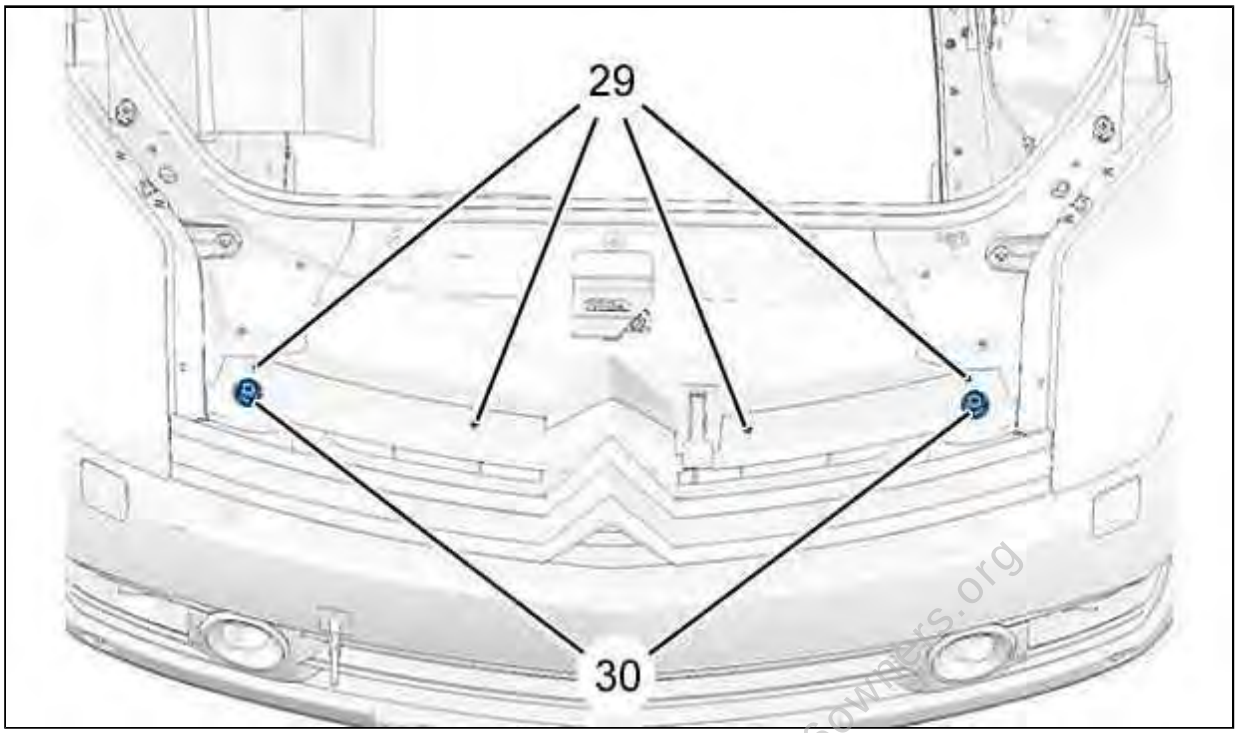

Figure : C4AT007D

(29) Plastic pins.
(30) Boot stop .

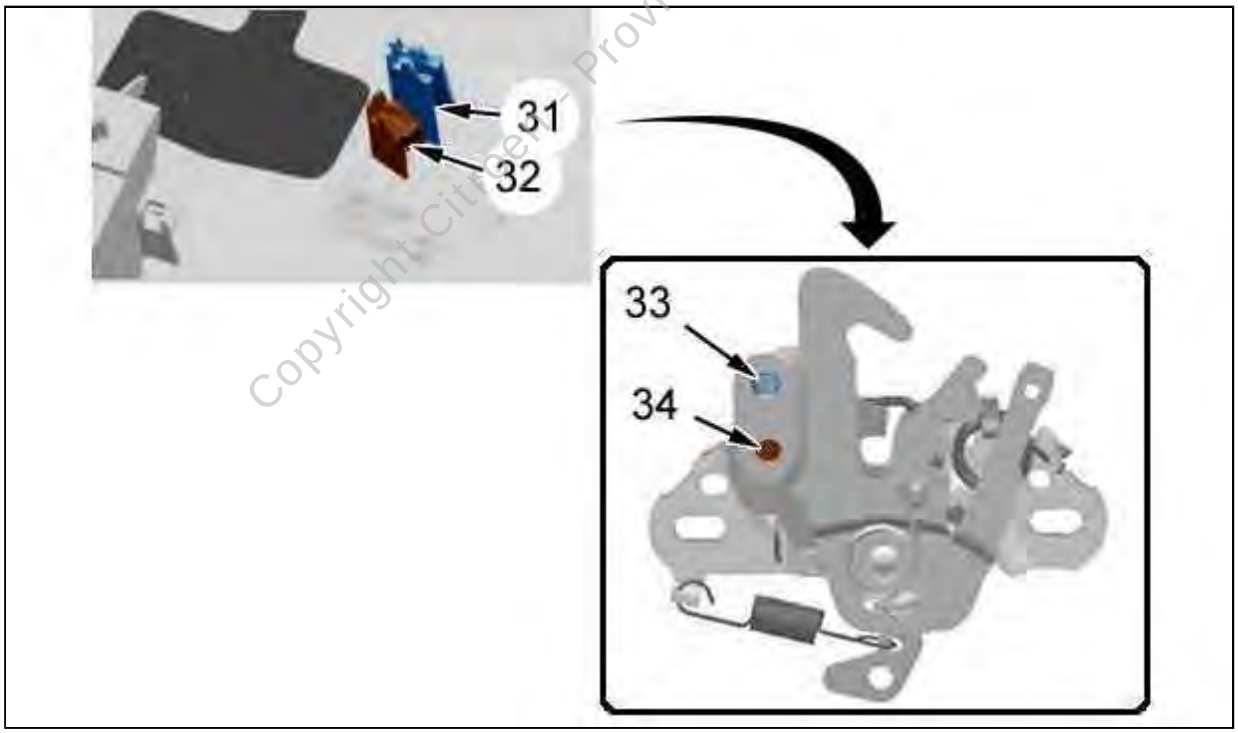

Figure : C4AT008D

(31) Cable guide position (EURO 5).
(32) Cable guide position (EURO 4).
(33) Cable attachment position (EURO 5).
(34) Cable attachment position (EURO 4).