

RENAULT

6 Air conditioning

61A HEATING

62A AIR CONDITIONING

Dacia Duster Explorers UK

X79

NOVEMBER 2009

EDITION ANGLAISE

"The repair procedures given by the manufacturer in this document are based on the technical specifications current when it was prepared.

The procedures may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which the vehicles are constructed".

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DUSTER - Chapitre 6

Contents

Pages

61A HEATING

Heating: List and location of components	61A-1
Cabin filter: Removal - Refitting	61A-8
Front air distribution duct: Removal - Refitting	61A-9
Rear air distribution duct: Removal - Refitting	61A-10
Recirculation control cable: Removal - Refitting	61A-11
Air distribution cable: Removal - Refitting	61A-13
Air mixing cable: Removal - Refitting	61A-15
Distribution unit: Removal - Refitting	61A-17
Heater matrix: Removal - Refitting	61A-21
Fan assembly: Removal - Refitting	61A-24
Heating resistor relays: Removal - Refitting	61A-25
Heating resistors: Removal - Refitting	61A-26
Passenger compartment fan assembly control unit: Removal - Refitting	61A-28
Control panel: Removal - Refitting	61A-29

62A AIR CONDITIONING

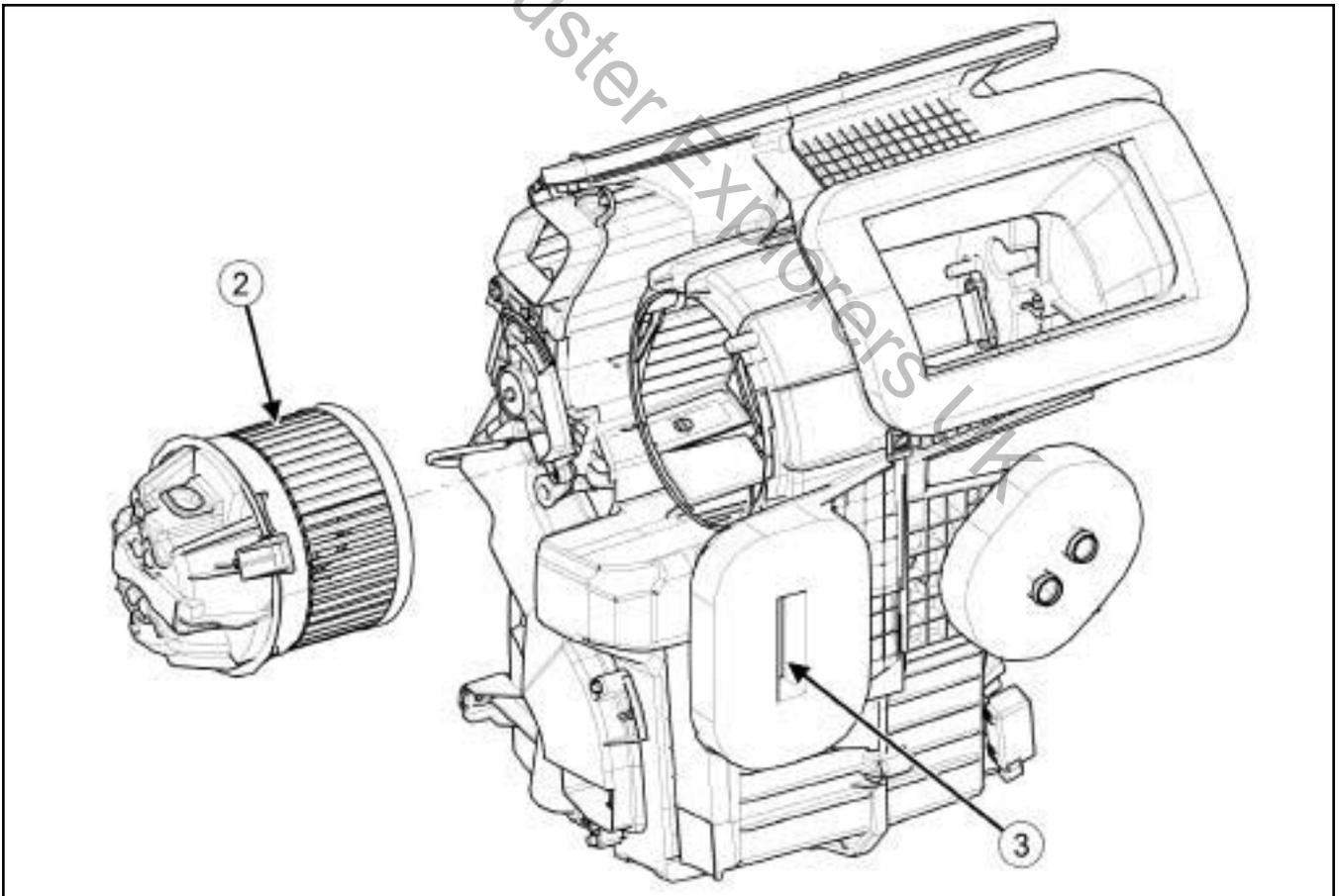
Air conditioning: List and location of components	62A-1
Air conditioning: Parts and consumables for the repair	62A-9
Condenser: Removal - Refitting	62A-10
Compressor: Removal - Refitting	62A-12
Expansion valve: Removal - Refitting	62A-16
Refrigerant pipe seal: Removal - Refitting	62A-18
Refrigerant circuit pipe: Removal - Refitting	62A-21
Pressure sensor: Removal - Refitting	62A-23

Heating: List and location of components



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VALEO distribution unit

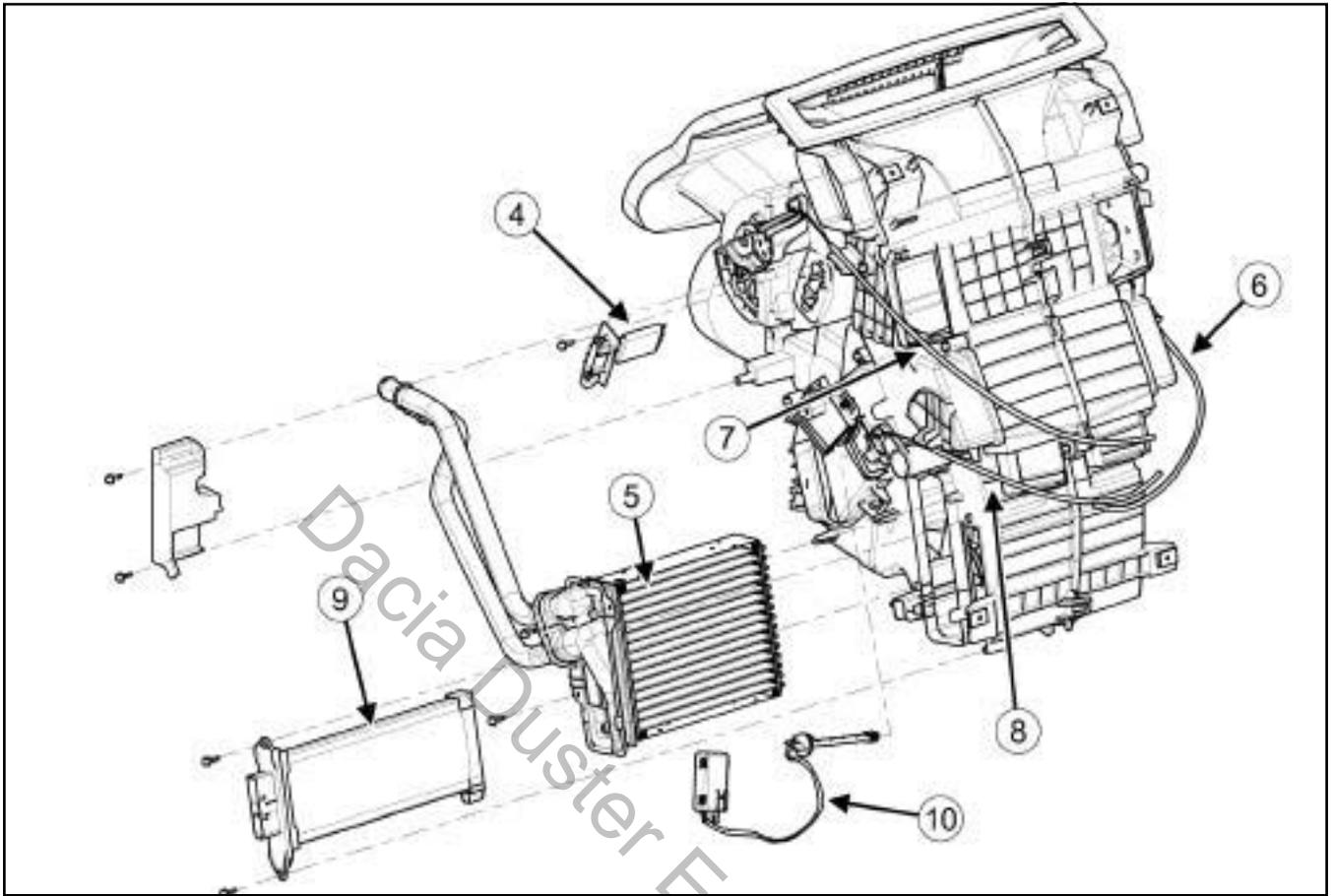


143994

HEATING

Heating: List and location of components

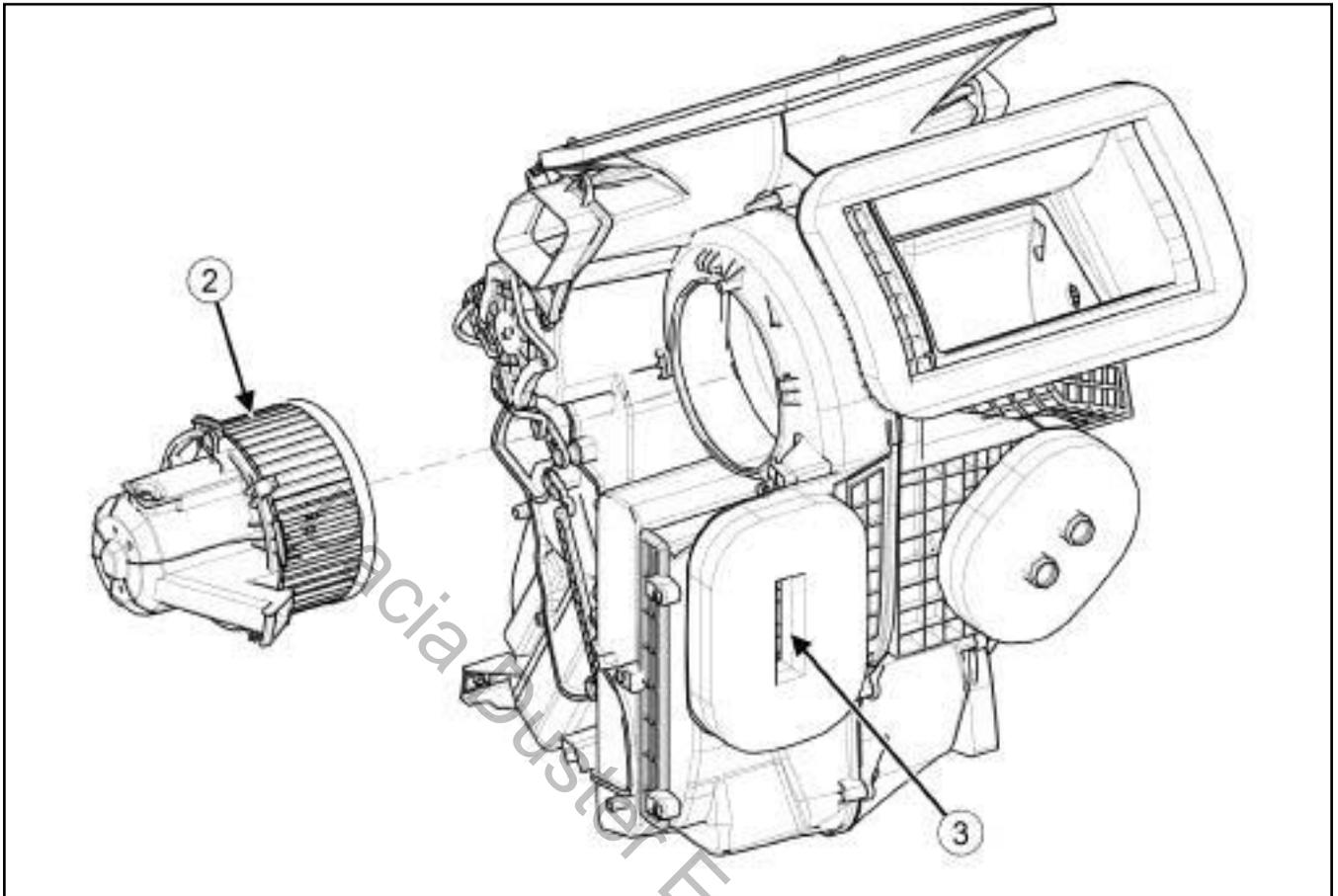
61A



143997

Heating: List and location of components

BEHR distribution unit

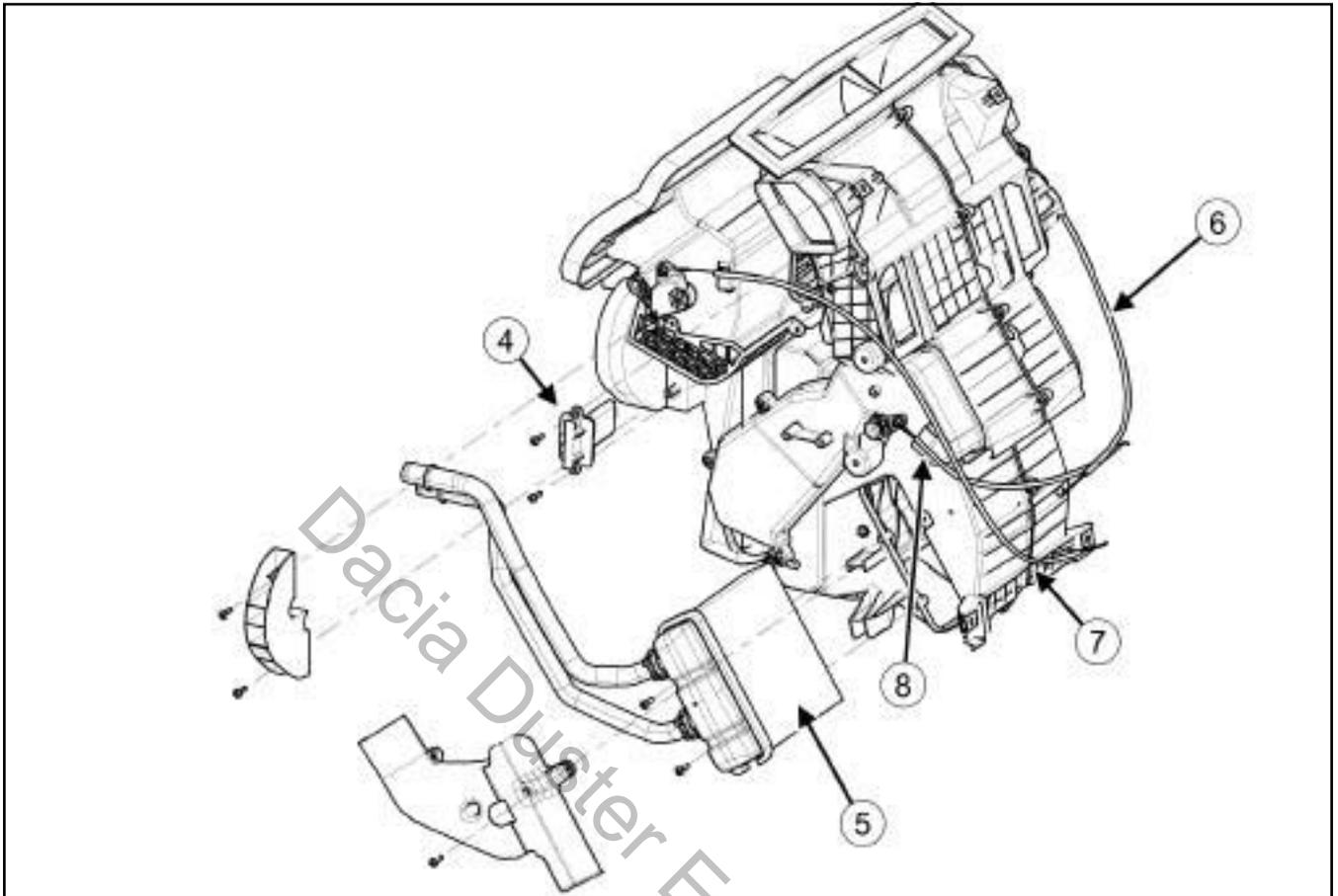


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HEATING

Heating: List and location of components

61A

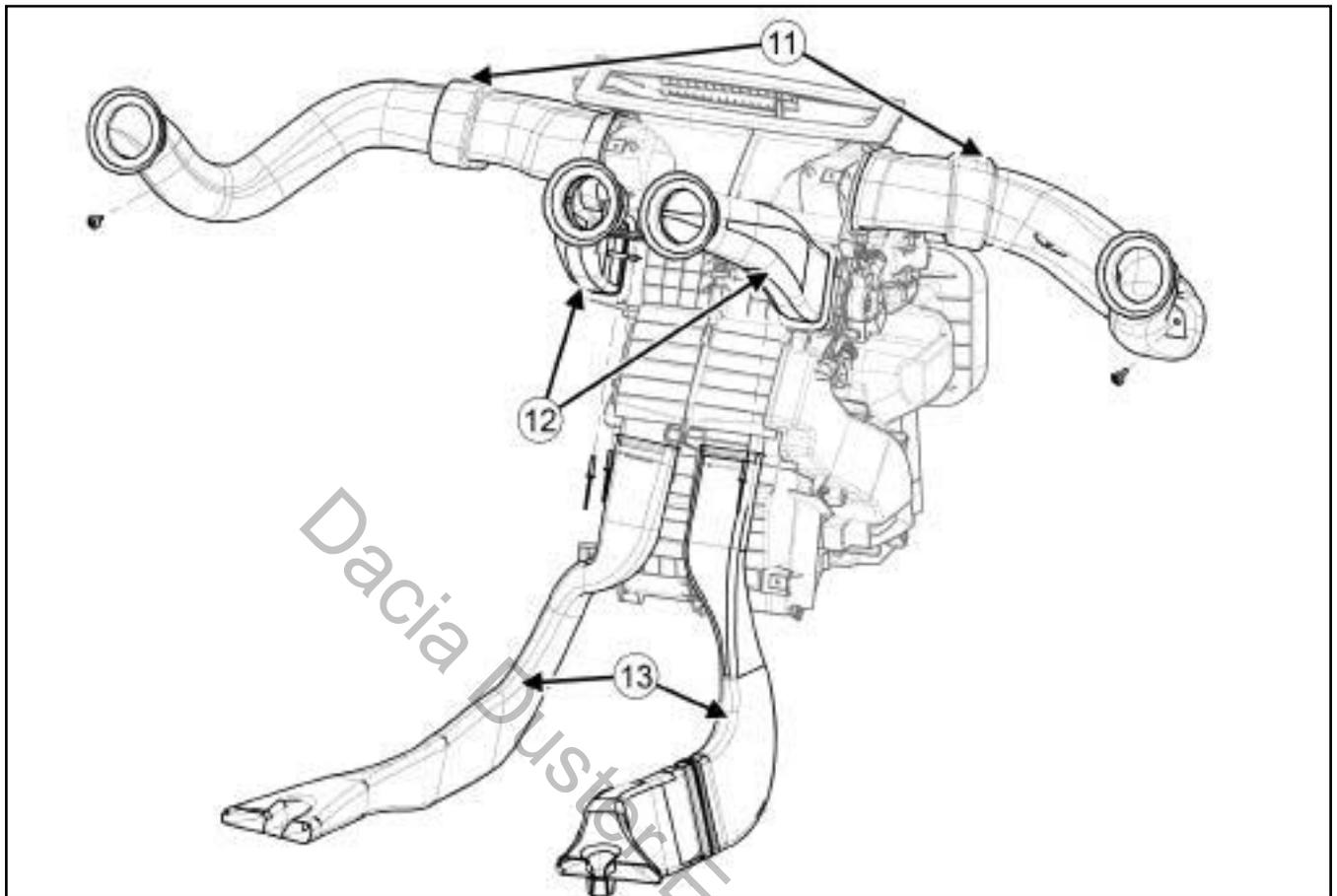


143998

HEATING

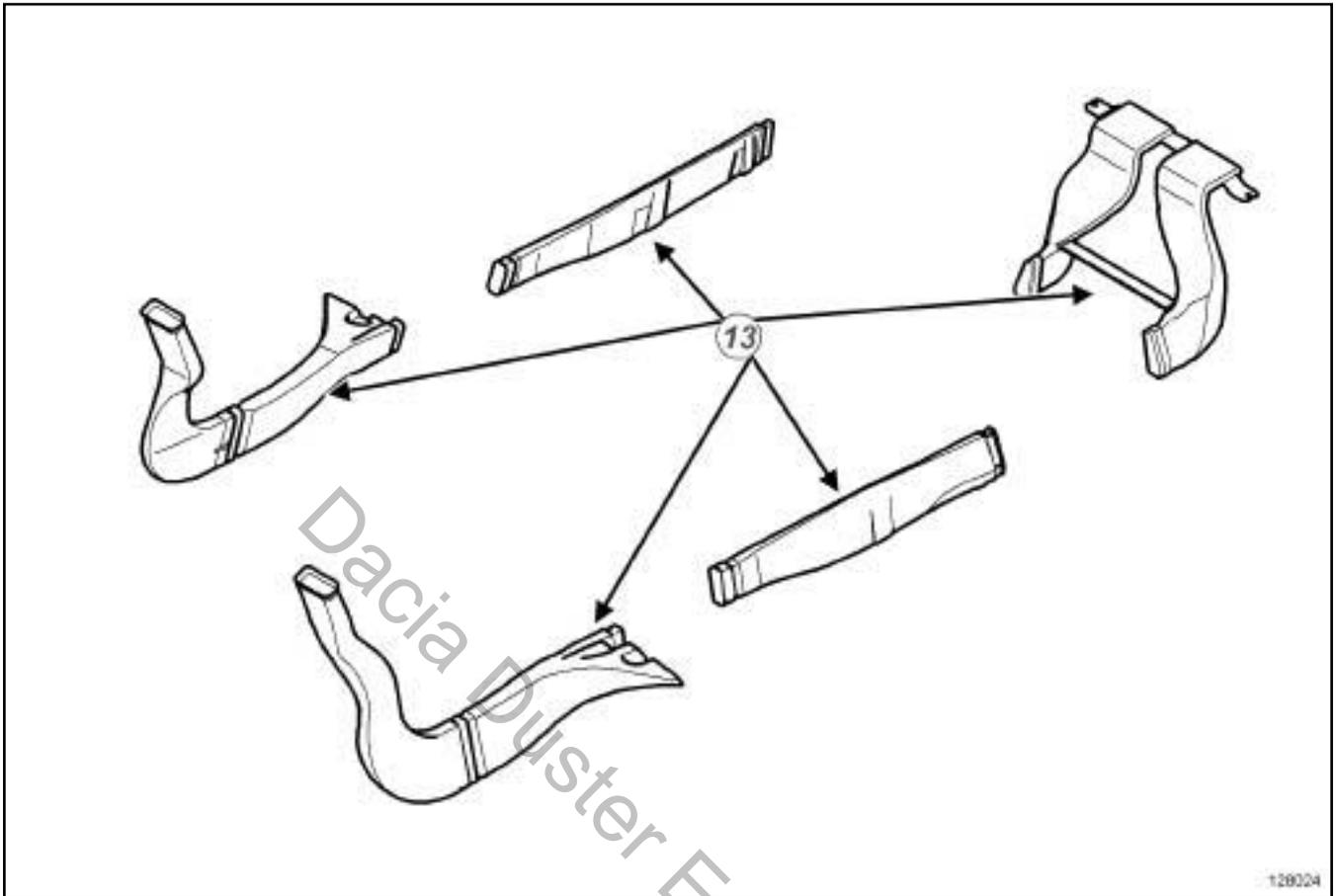
Heating: List and location of components

61A



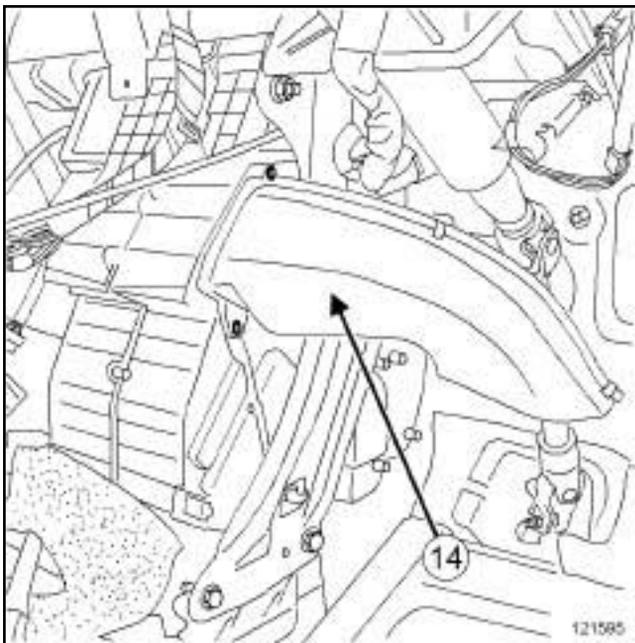
143996

Heating: List and location of components



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128024



121595

1	Control panel	(see 61A, Heating, Control panel: Removal - Refitting, page 61A-29)
2	Passenger compartment fan assembly	(see 61A, Heating, Fan assembly: Removal - Refitting, page 61A-24)

Heating: List and location of components

3	Expansion valve	(see 62A, Air conditioning, Expansion valve: Removal - Refitting, page 62A-16)
4	Passenger compartment fan assembly control unit	(see 61A, Heating, Passenger compartment fan assembly control unit: Removal - Refitting, page 61A-28)
5	Heater matrix	(see 61A, Heating, Heater matrix: Removal - Refitting, page 61A-21)
6	Air distribution cable	(see 61A, Heating, Air distribution cable: Removal - Refitting, page 61A-13)
7	Recirculation control cable	(see 61A, Heating, Recirculation control cable: Removal - Refitting, page 61A-11)
8	Air mixing cable	(see 61A, Heating, Air mixing cable: Removal - Refitting, page 61A-15)
9	Heating resistors (VALEO type)	(see 61A, Heating, Heating resistors: Removal - Refitting, page 61A-26)
10	Evaporator sensor (VALEO type)	(see Evaporator sensor: Removal - Refitting)
11	Front side air distribution duct	(see 61A, Heating, Front air distribution duct: Removal - Refitting, page 61A-9)
12	Front central air distribution duct	
13	C-pillar air distribution duct	(see 61A, Heating, Rear air distribution duct: Removal - Refitting, page 61A-10)
14	A-pillar air distribution duct	(see Front footwell air distribution duct: Removal - Refitting)

Cabin filter: Removal - Refitting

AIR CONDITIONING

REMOVAL

OPERATION FOR REMOVAL OF PART CONCERNED



- Unclip the passenger compartment filter (1) .

Note:

Foreign bodies (leaves, insects etc.) are likely to accumulate in the passenger compartment filter.

Remove the cabin filter with care so as to prevent foreign bodies getting into the evaporator.

- Remove the cabin filter.

REFITTING

I - REFITTING PREPARATIONS OPERATION

- Check for foreign bodies in the cabin filter housing, and clean thoroughly if necessary.

II - REFITTING OPERATION FOR PART CONCERNED

- Refit the cabin filter.
- Clip on the cabin filter.

Front air distribution duct: Removal - Refitting

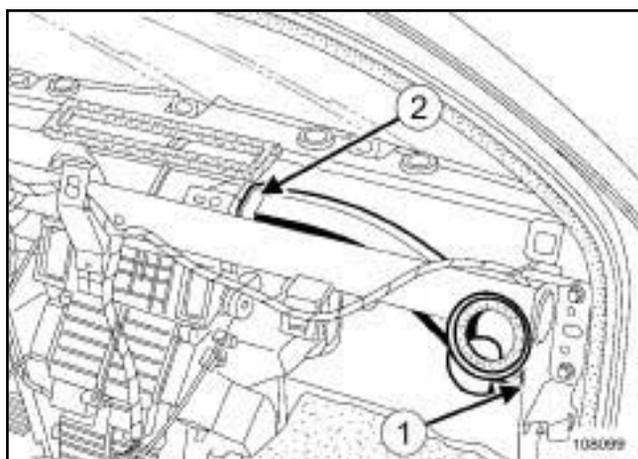
REMOVAL

I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Remove:
 - the driver's frontal airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
 - the storage compartment,
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).

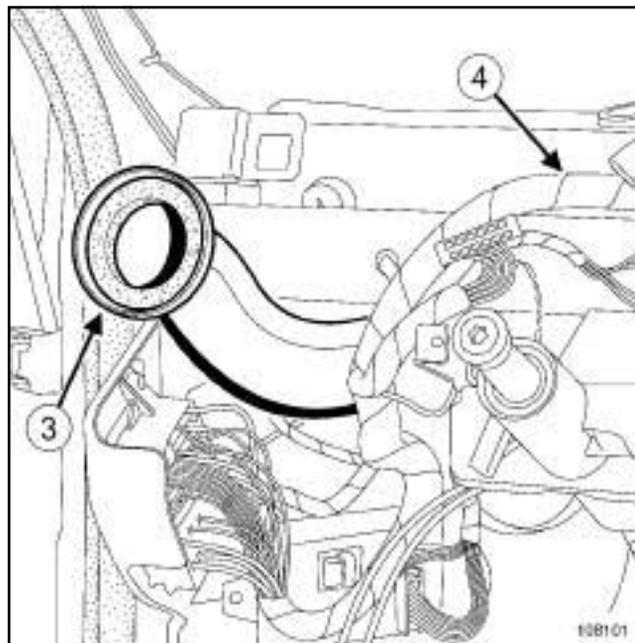
II - REMOVAL OPERATION

1 - Front right-hand air distribution duct



- Remove:
 - the aerial cable clip on the front right-hand air distribution duct,
 - the front right-hand air distribution duct bolt (1) .
- Pull out the front right-hand air distribution duct at (2)

2 - Front left-hand air distribution duct



- Remove the front left-hand air distribution duct bolt (3) .
- Pull out the front left-hand air distribution duct at (4) .

REFITTING

- Proceed in the reverse order to removal.
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

Rear air distribution duct: Removal - Refitting

REAR SEATS AIR DUCT

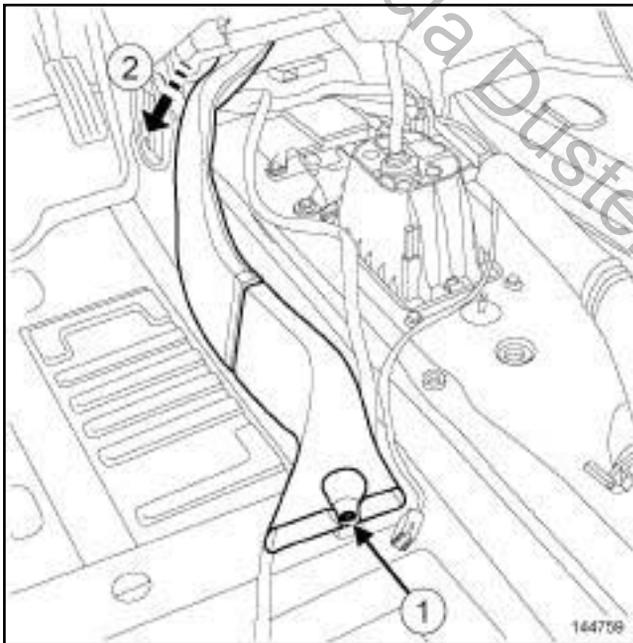
REMOVAL

I - REMOVAL PREPARATION OPERATION

- Remove:
 - the central console (see **Centre console: Removal - Refitting**) (57A, Interior equipment),
 - the front seats (see **Front seat assembly: Exploded view**) (75A, Front seat frames and mechanisms),
 - the floor carpet partially (see **Floor trim assembly: Exploded view**) (71A, Body internal trim).

II - REMOVAL OPERATION

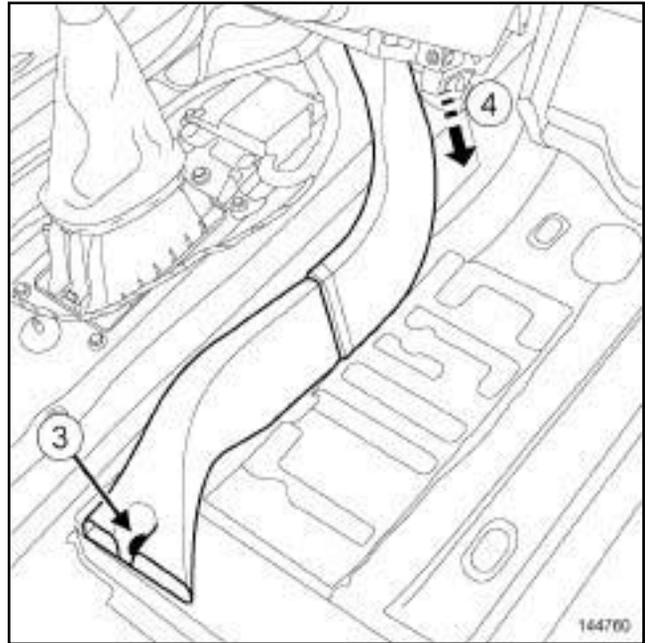
1 - Rear left-hand air distribution duct



144759

- Remove the clip (1) using an unclipping tool.
- Remove the rear left-hand air distribution duct at (2)

2 - Rear right-hand air distribution duct



144760

- Remove the clip (3) using an unclipping tool.
- Remove the rear right-hand air distribution duct at (4) .

REFITTING

REFITTING OPERATION

- Proceed in the reverse order to removal.

Recirculation control cable: Removal - Refitting

AIR CONDITIONING or STANDARD HEATING RECIRCULATION

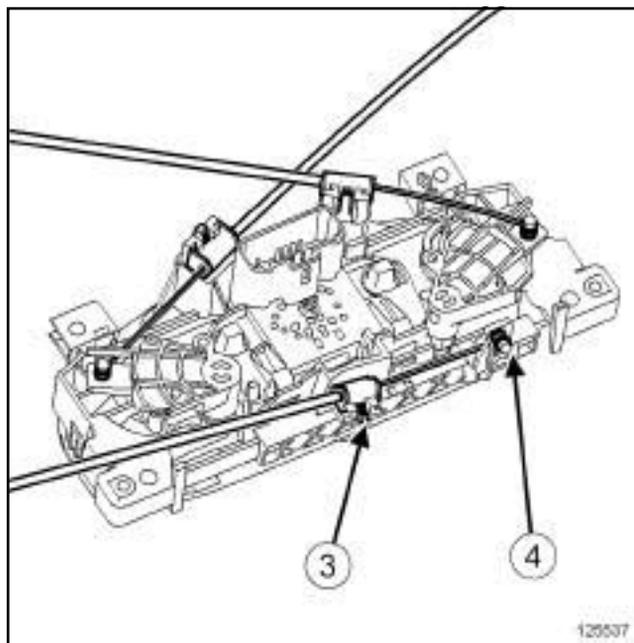
REMOVAL

I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Remove:
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel)
 - the storage compartment,
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).
- Turn the air recirculation switch to the air recirculation position.
- Disconnect the air conditioning control panel connector.

II - REMOVAL OPERATION

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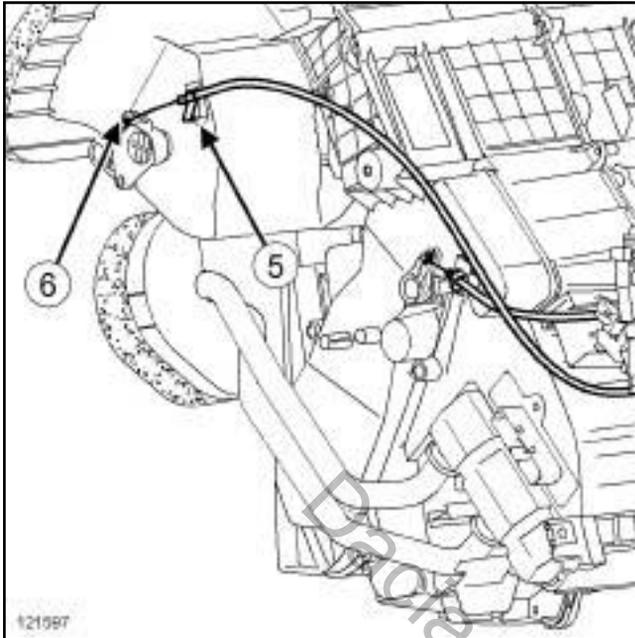


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- Remove the sheath stop by moving the tab (3) to one side.
- Extract the recirculation control cable (4) from the control panel.

Recirculation control cable: Removal - Refitting

AIR CONDITIONING or STANDARD HEATING RECIRCULATION



121597

- Unclip the cable sleeve stop (5) from the distribution unit.
- Extract the end of the air recirculation control cable (6) .
- Remove the air recirculation control cable.

REFITTING

- Proceed in the reverse order to removal.
- Check that the air recirculation flap is in the recirculation position.
- Check that the recirculation control can move along its whole stroke.
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

Air distribution cable: Removal - Refitting

AIR CONDITIONING or STANDARD HEATING RECIRCULATION

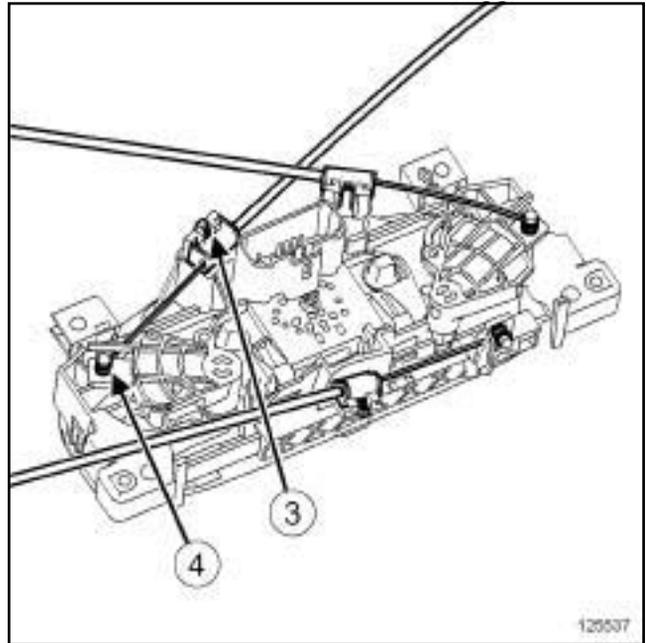
REMOVAL

I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Turn the air distribution control to the air vent position on the dashboard,
- Remove:
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
 - the storage compartment,
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).
- Disconnect the climate control panel connector .

II - REMOVAL OPERATION

H79



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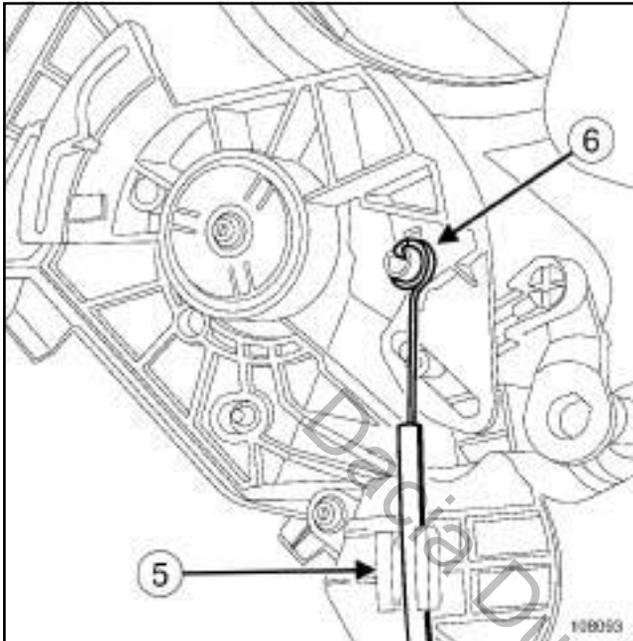
125537

- Remove the sheath stop by moving the tab (3) to one side.
- Extract the air distribution cable (4) from the air conditioning control panel.

Air distribution cable: Removal - Refitting

AIR CONDITIONING or STANDARD HEATING RECIRCULATION

LEFT-HAND DRIVE



- Unclip the cable sleeve stop (5) from the distribution unit.
 - Extract the end of the air distribution cable (6) .
-
- Remove the air distribution cable.

REFITTING

- Proceed in the reverse order to removal.
- Check that the air distribution control can move along its whole stroke.
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

Air mixing cable: Removal - Refitting

AIR CONDITIONING or STANDARD HEATING RECIRCULATION

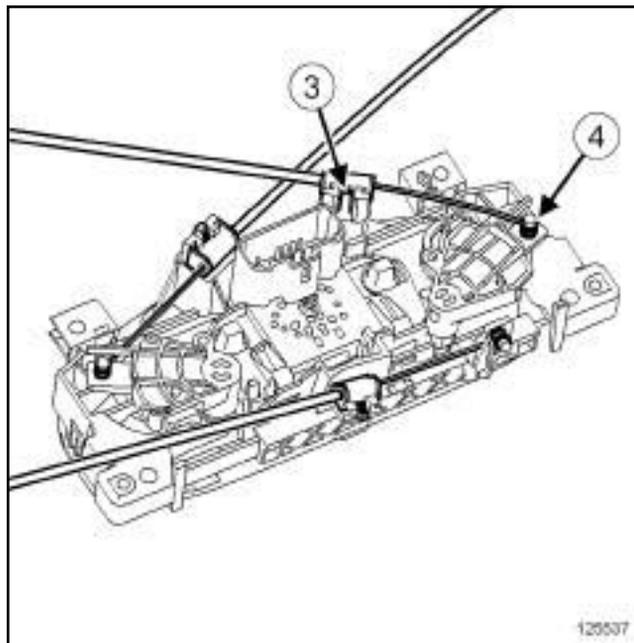
REMOVAL

I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Turn the heating and air conditioning mixing control to the hottest position.
- Remove:
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
 - the storage compartment,
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).
- Disconnect the climate control panel connector .

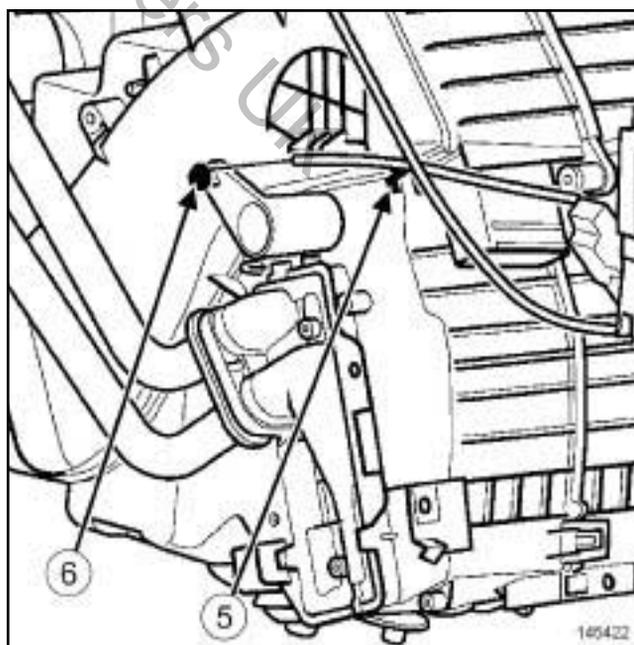
II - REMOVAL OPERATION

H79



125537

- Remove:
 - the sheath stop by moving the tab (3) to one side,
 - the air mixing cable (4) from the control panel.



145422

- Unclip the distribution unit cable sleeve stop (5) .
- Extract the end of the air mixing cable (6) .

Air mixing cable: Removal - Refitting

AIR CONDITIONING or STANDARD HEATING RECIRCULATION

- Remove the air mixing cable.

REFITTING

- Proceed in the reverse order to removal.
- Check that the air mixing control can move along its whole stroke.
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

Dacia Duster Explorers UK

Special tooling required

Ms. 583 Pipe clamps.

Equipment required

refrigerant charging station

REMOVAL

I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

AIR CONDITIONING

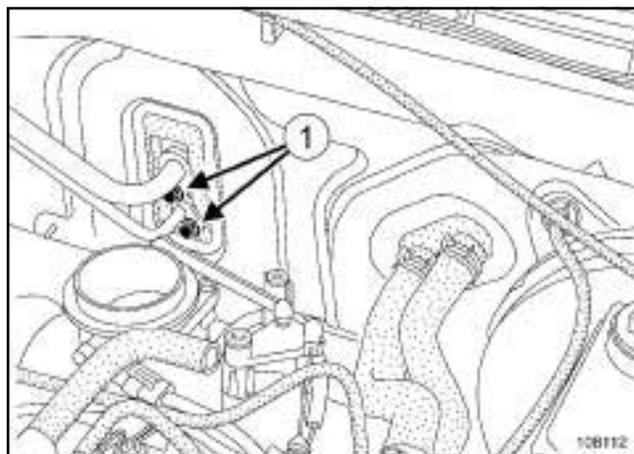
IMPORTANT

Consult the safety and cleanliness advice and operation recommendations before carrying out any repair (see **Air conditioning: Precautions for the repair**).

Note:

Use blanking plugs for the fuel circuits with part numbers **77 01 208 229** or **77 01 476 857** to plug any openings exposed to the open air. They must be clean. Do not use any which have already been used to plug a fuel circuit.

- Drain the coolant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**).
- Move aside the engine compartment bulkhead soundproofing.



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- Remove the bolts (1) from the pipe unions on the expansion valve.

WARNING

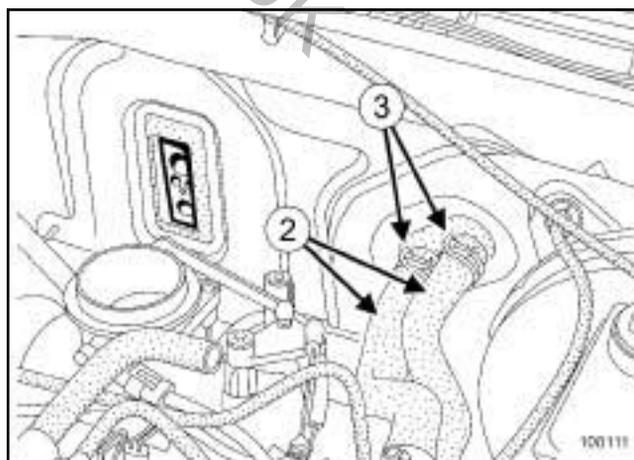
In order to avoid any refrigerant leaks, do not damage (deform, twist, etc.) the pipe.

- Disconnect the expansion valve pipes.

WARNING

To prevent moisture from entering the system, place plugs on the cold loop components which are open to the air.

- Fit plugs into the openings.



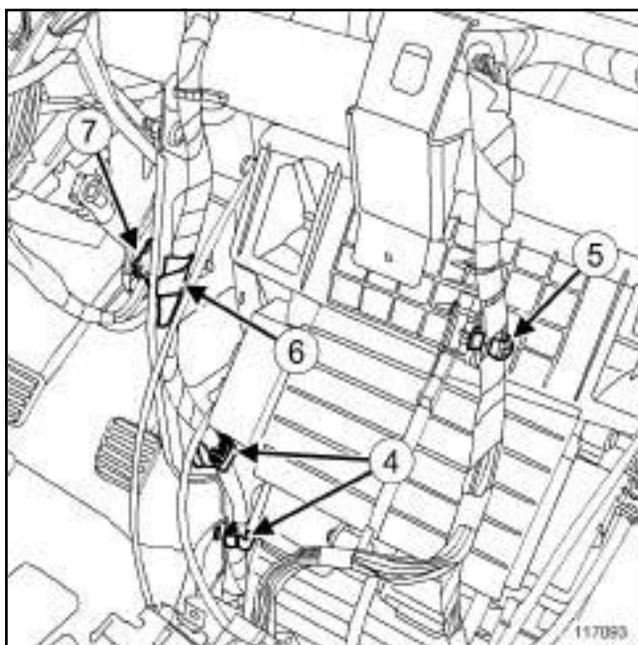
108111

- Fit hose clamps (**Ms. 583**) at (2).
- Remove the clips (3) from the heater hoses.
- Disconnect the heater hoses.

Distribution unit: Removal - Refitting

□ Remove:

- the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
- the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
- the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
- the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
- the storage compartment,
- the radio (see **Radio: Removal - Refitting**) (86A, Radio),
- the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment),
- the front air distribution ducts (see **61A, Heating, Front air distribution duct: Removal - Refitting**, page 61A-9) ,
- the steering column (see **Steering column: Removal - Refitting**) (36A, Steering assembly).



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□ Unclip:

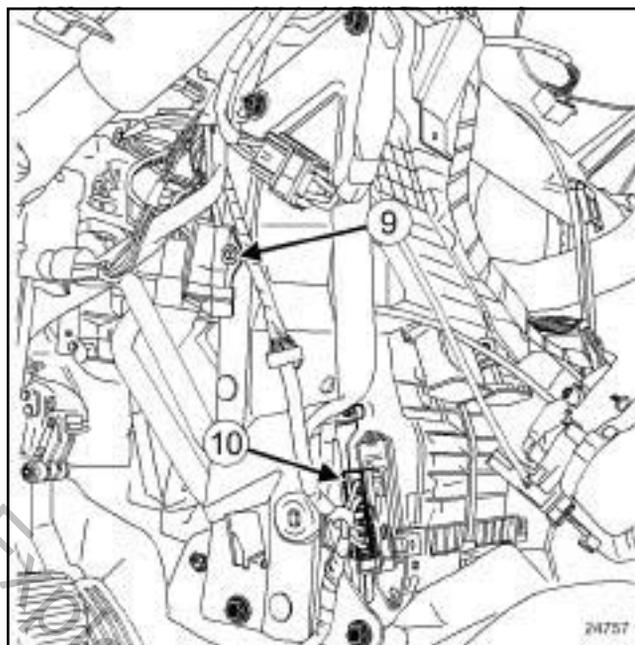
- the wiring at (4) ,
- the wiring on the distribution unit at (5) .

□ Unclip the wiring at (6) .

LEFT-HAND DRIVE

- Unclip the ignition switch connector (7) from its mounting.

DIESEL VEHICLE



24757

□ Remove:

- the heating resistor relay mounting bolt (9) ,
- the heating resistor relay mounting.

- Disconnect the connector (10) from the heating resistor unit.

- Remove the dashboard cross member (see **Dashboard cross member: Removal - Refitting**) (42A, Upper front structure).

II - REMOVAL OPERATION

□ Disconnect:

- the air conditioning control panel connector,
- the passenger compartment fan assembly connector,
- the passenger compartment fan assembly resistor unit connector.

Distribution unit: Removal - Refitting

REAR SEATS AIR DUCT

- Separate the C-pillar air distribution ducts from the distribution unit.
- Put a container in place to recover the coolant.
- Remove:
 - the distribution unit,
 - the distribution unit control panel.
- Remove from the distribution unit:
 - the air recirculation control cable,
 - the air distribution cable,
 - the air mixing cable,
 - the passenger compartment blower unit,
 - the passenger compartment blower unit control unit,
 - the heater matrix pipes,
 - the heater matrix,
 - the evacuation ring.

AIR CONDITIONING

- Remove the expansion valve.

DIESEL VEHICLE

- Remove the heating resistors.

REFITTING

I - REFITTING PREPARATION OPERATION

- Check that the parts are in good condition and replace any defective parts, if necessary.

WARNING

To avoid any leaks, check that the pipe surface is sound before positioning the new seal. The surface must be clean and scratch free.

- Always replace the seals between the heater matrix pipes and the heater matrix.

- Refit on the distribution unit:

- the heater matrix,
- the heater matrix pipes,
- the passenger compartment fan assembly control unit,
- the passenger compartment blower unit,
- the air mixing cable,
- the air distribution cable,
- the air recirculation control cable,
- the trim kit,
- the evacuation ring,
- the control panel.

DIESEL VEHICLE

- Refit the heating resistors.

AIR CONDITIONING

- Refit the expansion valve.

II - REFITTING OPERATION

- Refit the distribution unit.

REAR SEATS AIR DUCT

- Connect the C-pillar air distribution ducts onto the distribution unit.

- Refit:

- the dashboard cross member (see **Dashboard cross member: Removal - Refitting**) (42A, Upper front structure),
- the distribution unit bolts.

- Connect:

- the connector of the passenger compartment fan assembly resistor unit,
- the passenger compartment fan assembly connector,
- the air conditioning control panel connector.

Distribution unit: Removal - Refitting

III - FINAL OPERATION

- Refit the floor carpet.

Note:

Check that the floor carpet reaches under the accelerator pedal end-stop.

DIESEL VEHICLE

- Connect the heating resistor connector.
- Refit:
 - the heating resistor relay mounting,
 - the heating resistor relay mounting bolt.
- Clip on:
 - the starter switch connector on its mounting.
 - the wiring at (6) .
- Clip:
 - the wiring on the distribution unit at (5) ,
 - the wiring at (4) .
- Refit:
 - the steering column (see **Steering column: Removal - Refitting**) (36A, Steering assembly),
 - the front air distribution ducts (see **61A, Heating, Front air distribution duct: Removal - Refitting**, page 61A-9) ,
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the storage compartment,
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and seat belt pretensioners).
- Connect the heater hoses.
- Refit the clips on the heater hoses.

- Remove the hose clamps (**Ms. 583**).

AIR CONDITIONING

- Replace the seals.
- Lubricate the seals using recommended air conditioning oil to make fitting easier.
- Fit the pipe unions on the expansion valve.
- Refit the pipe union bolts on the expansion valve.
- Position the engine compartment bulkhead sound-proofing.
- Consult the refrigerant and oil quantity values before filling the circuit (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair**, page 62A-9) .
- Fill the refrigerant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .
- Check for leaks (see **Refrigerant circuit: Check**) .
- Check that the air conditioning is operating correctly (see **Air conditioning: Check**) .
- Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Fill the cooling circuit (see **Cooling system: Draining - Refilling**) (19A, Cooling).
- Bleed the cooling circuit (see **Cooling system: Draining - Refilling**) (19A, Cooling).
- Check the cooling circuit (see **Engine cooling system: Check**) (19A, Cooling).

Heater matrix: Removal - Refitting

LEFT-HAND DRIVE

Special tooling required

Ms. 583	Pipe clamps.
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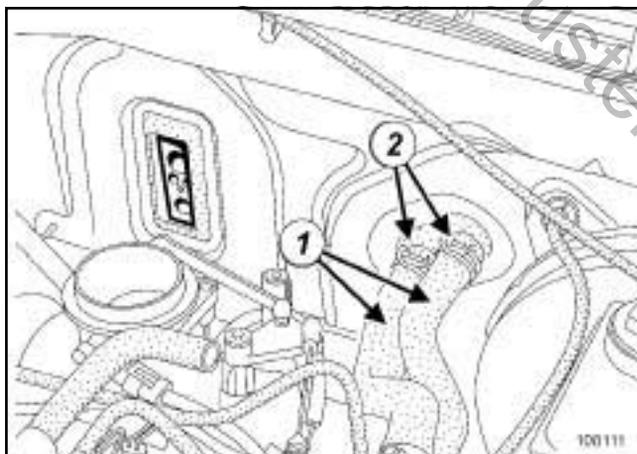
Tightening torques 

upper nuts of the strut	21 N.m
lower bolts of the strut	21 N.m

REMOVAL

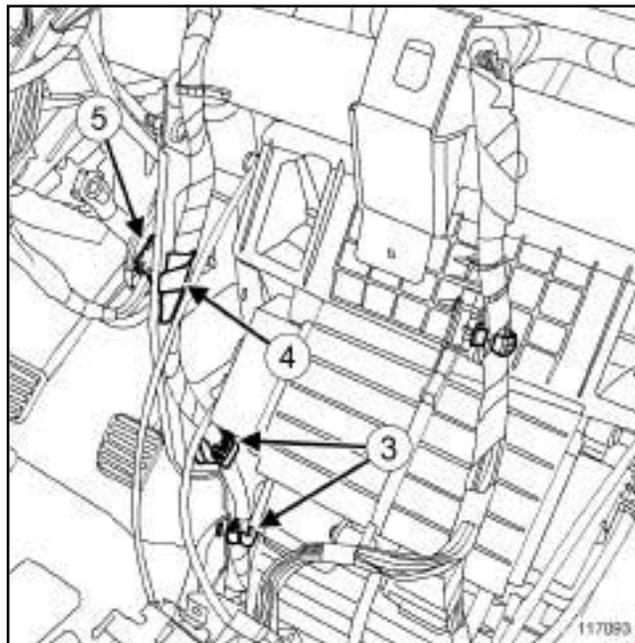
I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).



- Fit hose clamps (**Ms. 583**) at (1) .
- Remove the clips (2) from the heater hoses.
- Disconnect the heater hoses.
- Remove:
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
 - the storage compartment,

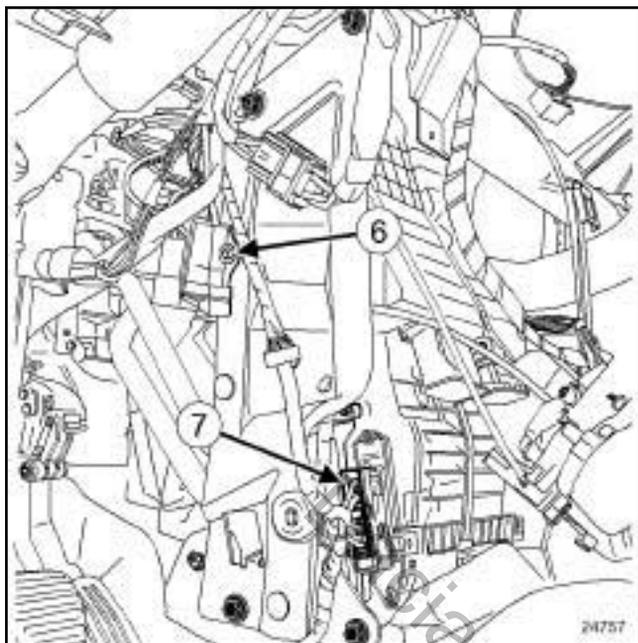
- the radio (see **Radio: Removal - Refitting**) (86A, Radio),
- the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).



- Unclip the wiring at (3) .
- Unclip:
 - the wiring at (4) ,
 - the ignition switch connector (5) from its mounting.

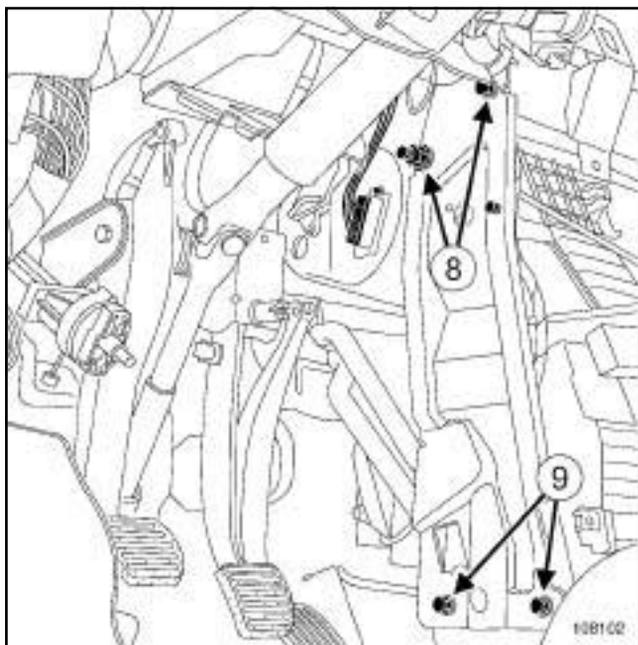
Heater matrix: Removal - Refitting

LEFT-HAND DRIVE



24757

- Remove:
 - the heating resistor relay mounting bolt (6) ,
 - the heating resistor relay mounting.
- Disconnect the connector (7) from the heating resistor.
- Partially lift the floor carpet to access the strut bolt.
- Mark the position of the strut on the body before removing it.



108102

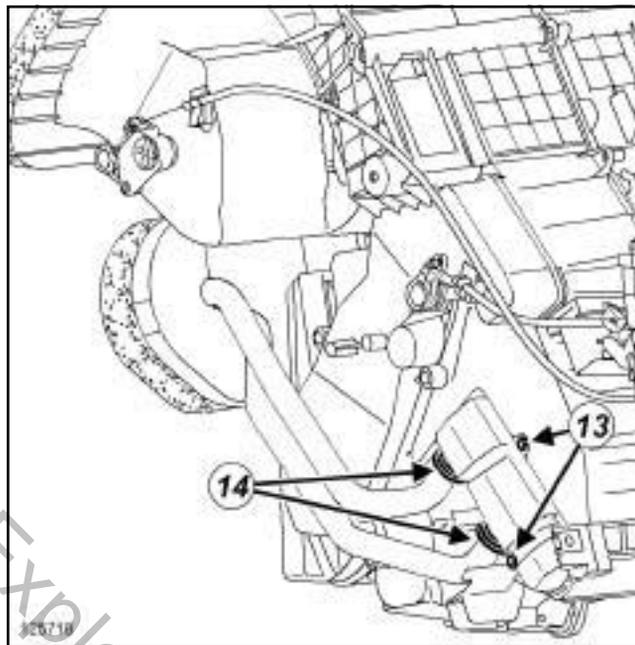
- Remove:
 - the two upper nuts (8) from the strut,

- the two lower bolts (9) from the strut,
- the stay.

- Put a container in place to recover the coolant.

II - REMOVAL OPERATION

H79



125718

- Remove:
 - both heater matrix bolts (13) ,
 - the heater matrix pipe clips (14) using a screwdriver.

- Remove the heater matrix.

REFITTING

I - REFITTING PREPARATION OPERATION

- Always replace the seals between the pipes and the heater matrix.

WARNING

To avoid any leaks, check that the pipe surface is sound before positioning the new seal. The surface must be clean and scratch free.

Heater matrix: Removal - Refitting

LEFT-HAND DRIVE

II - REFITTING OPERATION

- Refit the heater matrix.

H79

- Refit:
 - the heater matrix,
 - the heater matrix bolts.
- Position the heater matrix pipes on the heater matrix.
- Refit the heater matrix pipe clips.

III - FINAL OPERATION

- Refit:
 - the strut,
 - the two lower bolts on the strut, respecting the marking made during the removal operation,
 - the two upper nuts to the strut,
- Torque tighten:
 - the **upper nuts of the strut (21 N.m)**,
 - the **lower bolts of the strut (21 N.m)**.
- Position the floor carpet.

Note:

Check that the floor carpet reaches under the accelerator pedal end-stop.

- Connect the heating resistor connector.
- Refit:
 - the heating resistor relay mounting,
 - the heating resistor relay mounting bolt.
- Clip on:
 - the starter switch connector on its mounting.
 - the wiring onto the strut.
- Clip the wiring onto the strut.
- Refit:
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment),
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the storage compartment,

- the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
- the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
- the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly).
- the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and seat belt pretensioners).

- Fit the heater hoses.
- Refit the clips on the heater hoses.
- Remove the hose clamps (**Ms. 583**).
- Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Fill the cooling circuit (see **Cooling system: Draining - Refilling**) (19A, Cooling).
- Bleed the cooling circuit (see **Cooling system: Draining - Refilling**) (19A, Cooling).
- Check the cooling circuit (see **Engine cooling system: Check**) (19A, Cooling).
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

Fan assembly: Removal - Refitting

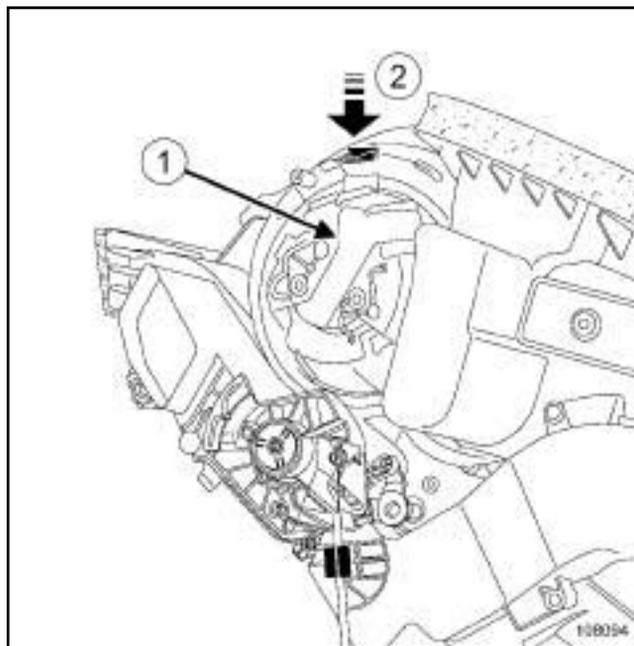
REMOVAL

I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Remove:
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).

II - REMOVAL OPERATION

LEFT-HAND DRIVE



- Disconnect the fan assembly connector (1) .
- Press the tab (2) , and turn the fan assembly a quarter of a turn clockwise.
- Remove the fan assembly.

REFITTING

-

Note:

A sharp snap will be heard when the fan assembly is refitted.

- Proceed in the reverse order to removal.
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

Heating resistor relays: Removal - Refitting

Note:

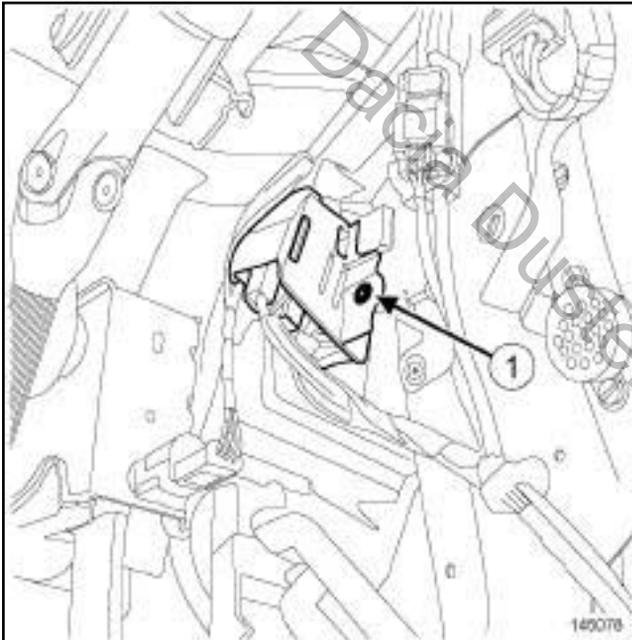
Do not remove the dashboard.

REMOVAL

I - REMOVAL PREPARATION OPERATION

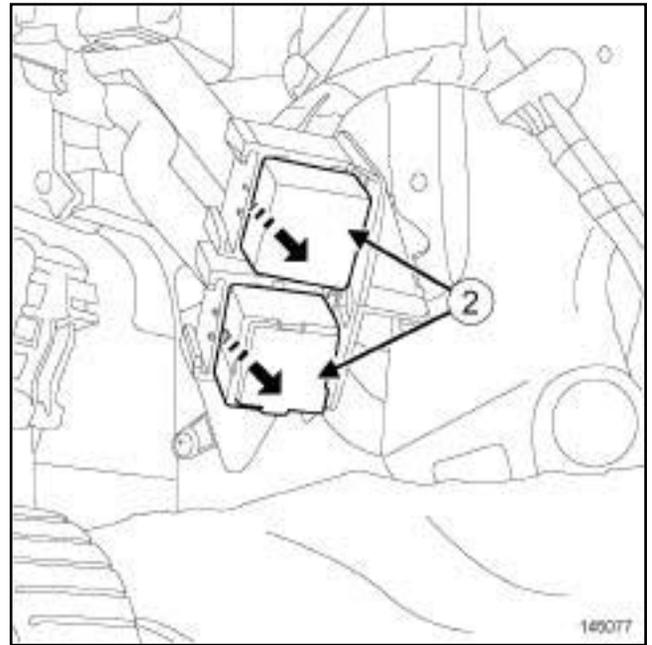
- Unclip the soundproofing under the dashboard using unclipping pliers.

II - REMOVAL OPERATION



145078

- Remove the bolt from the heating resistor relay unit (1).
- Remove the heating resistor relay unit support from its support.



145077

- Remove the heating resistor relays (2) in the direction of the arrows.

REFITTING

REFITTING OPERATION

- Proceed in the reverse order to removal.

Heating resistors: Removal - Refitting

Tightening torques 

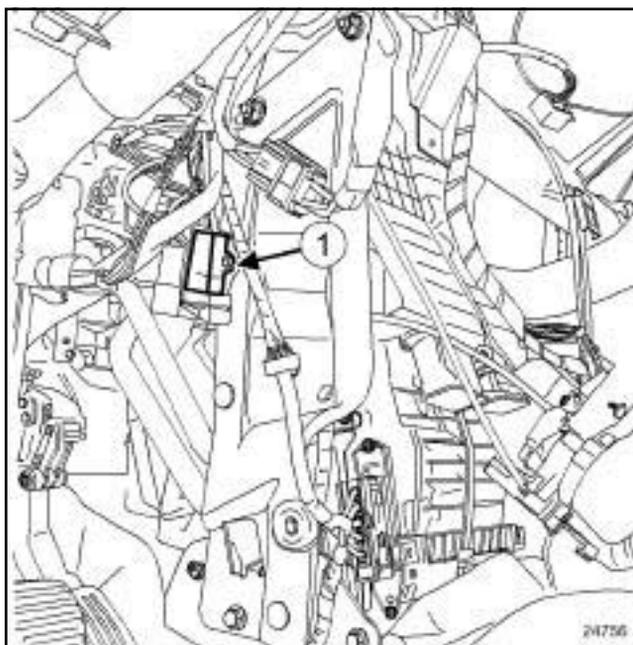
lower bolts of the strut	21 N.m
upper nuts of the strut	21 N.m

REMOVAL

I - REMOVAL PREPARATION OPERATION

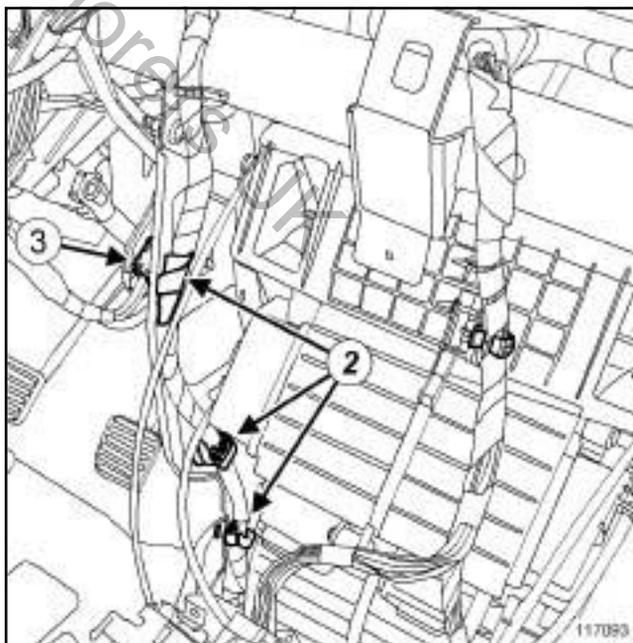
- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Remove:
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel)
 - the storage compartment,
 - the radio (see **Radio: Removal - Refitting**) (86A, Radio),
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).

LEFT-HAND DRIVE



24756

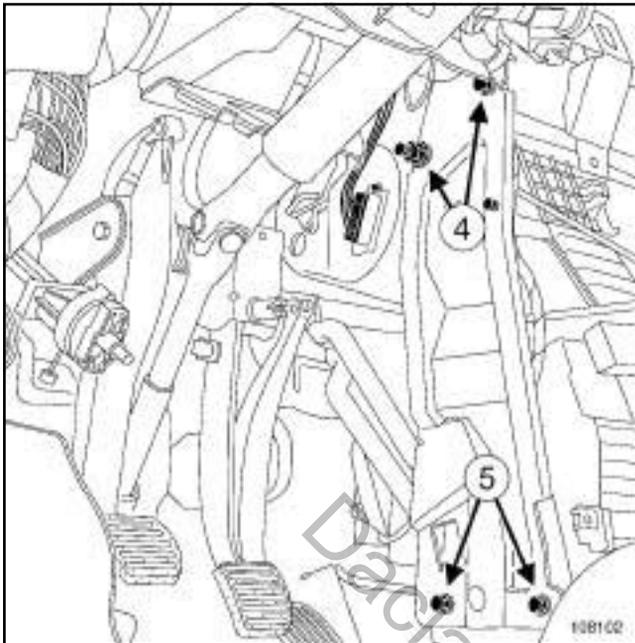
- Remove:
 - the heating resistor relay mounting bolt (1) ,
 - the heating resistor relay mounting.



117093

- Unclip:
 - the wiring at (2) ,
 - the ignition switch connector (3) from its mounting.

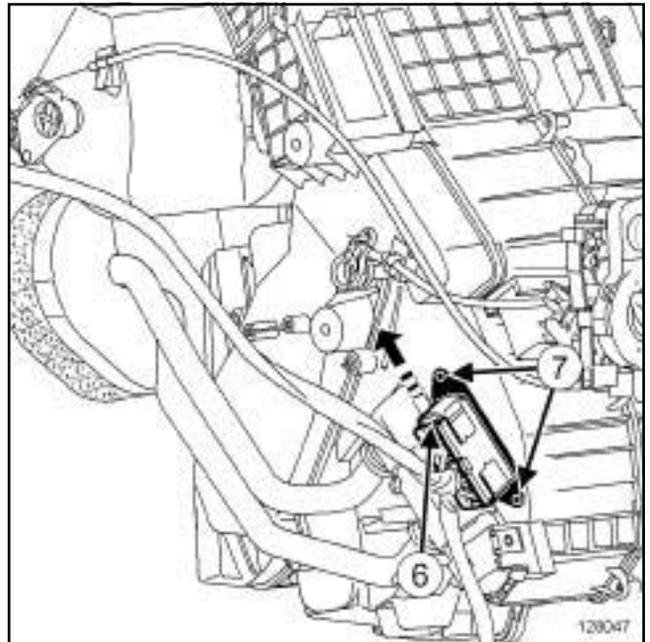
Heating resistors: Removal - Refitting



108102

- Partially lift the floor carpet to access the strut bolts.
- Make a mark between the strut and the panel welded on to the tunnel to ensure correct geometry when refitting.
- Remove:
 - the upper nuts (4) from the strut,
 - the lower bolts (5) from the strut,
 - the stay.

II - REMOVAL OPERATION



128047

- Disconnect the heating resistor connector (6) in the direction of the arrow.
- Remove:
 - the heating resistor bolts (7),
 - the heating resistor.

REFITTING

- Proceed in the reverse order to removal.
- Torque tighten:
 - the **lower bolts of the strut (21 N.m)**,
 - the **upper nuts of the strut (21 N.m)**.
- Check that the floor carpet reaches under the accelerator pedal end-stop.
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

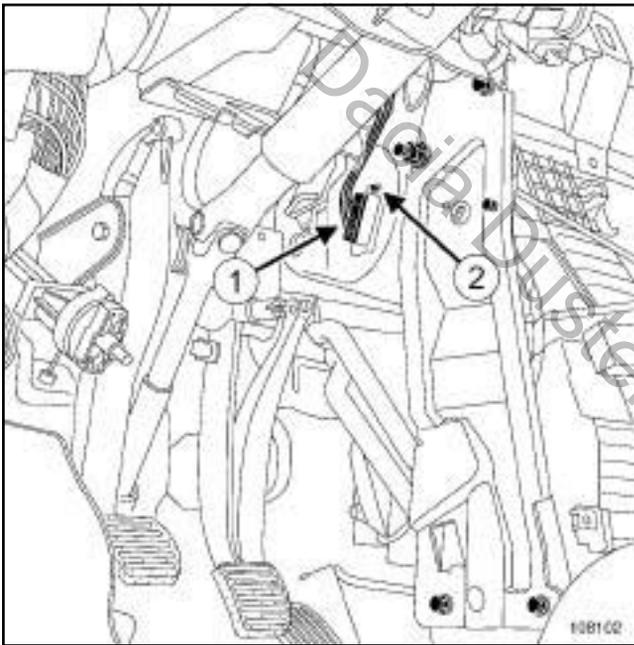
Note:

It is not necessary to remove the dashboard to remove the passenger compartment fan assembly control unit.

REMOVAL

REMOVAL OPERATION

- Remove the lower trim of the dashboard (depending on the equipment level).



- Disconnect the connector (1) from the passenger compartment fan assembly control unit.
- Remove:
 - the bolt (2) from the passenger compartment fan assembly control unit,
 - the passenger compartment fan assembly control unit.

REFITTING

- Proceed in the reverse order to removal.

Control panel: Removal - Refitting

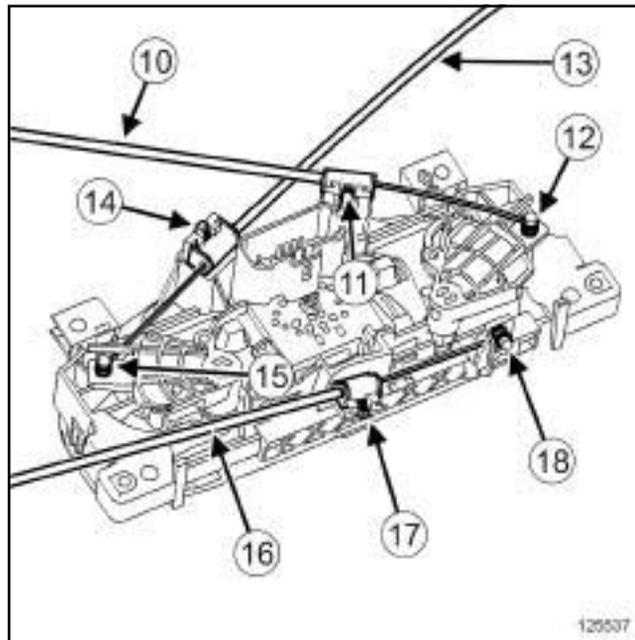
REMOVAL

I - REMOVAL PREPARATION OPERATION

- Lock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Remove:
 - the driver's front airbag (see **Driver's frontal airbag: Removal - Refitting**) (88C, Airbags and pretensioners),
 - the steering wheel (see **Steering wheel: Removal - Refitting**) (36A, Steering assembly),
 - the steering column switch assembly (see **Steering column switch assembly: Removal - Refitting**) (84A, Control - Signals),
 - the instrument panel (see **Instrument panel: Removal - Refitting**) (83A, Instrument panel),
 - the storage compartment,
 - the radio (see **Radio: Removal - Refitting**) (86A, Instrument panel),
 - the dashboard (see **Dashboard: Removal - Refitting**) (57A, Interior equipment).
- Place:
 - the air mixing control to the hottest position,
 - the air distribution control to the air vent position on the dashboard,
 - the air recirculation switch to the air recirculation position.
- Disconnect the climate control panel connector .

II - REMOVAL OPERATION

H79



125537

125537

- For the air mixing cable (10) , remove:
 - the sheath stop by moving the tab (11) to one side,
 - the control panel cable at (12) .
- For the air distribution control cable (13) , remove:
 - the sheath stop by moving the tab (14) to one side,
 - the control panel cable at (15) .
- For the air recirculation cable (16) , remove:
 - the sheath stop by moving the tab (17) to one side,
 - the control panel cable at (18) .

- Remove the climate control control panel.

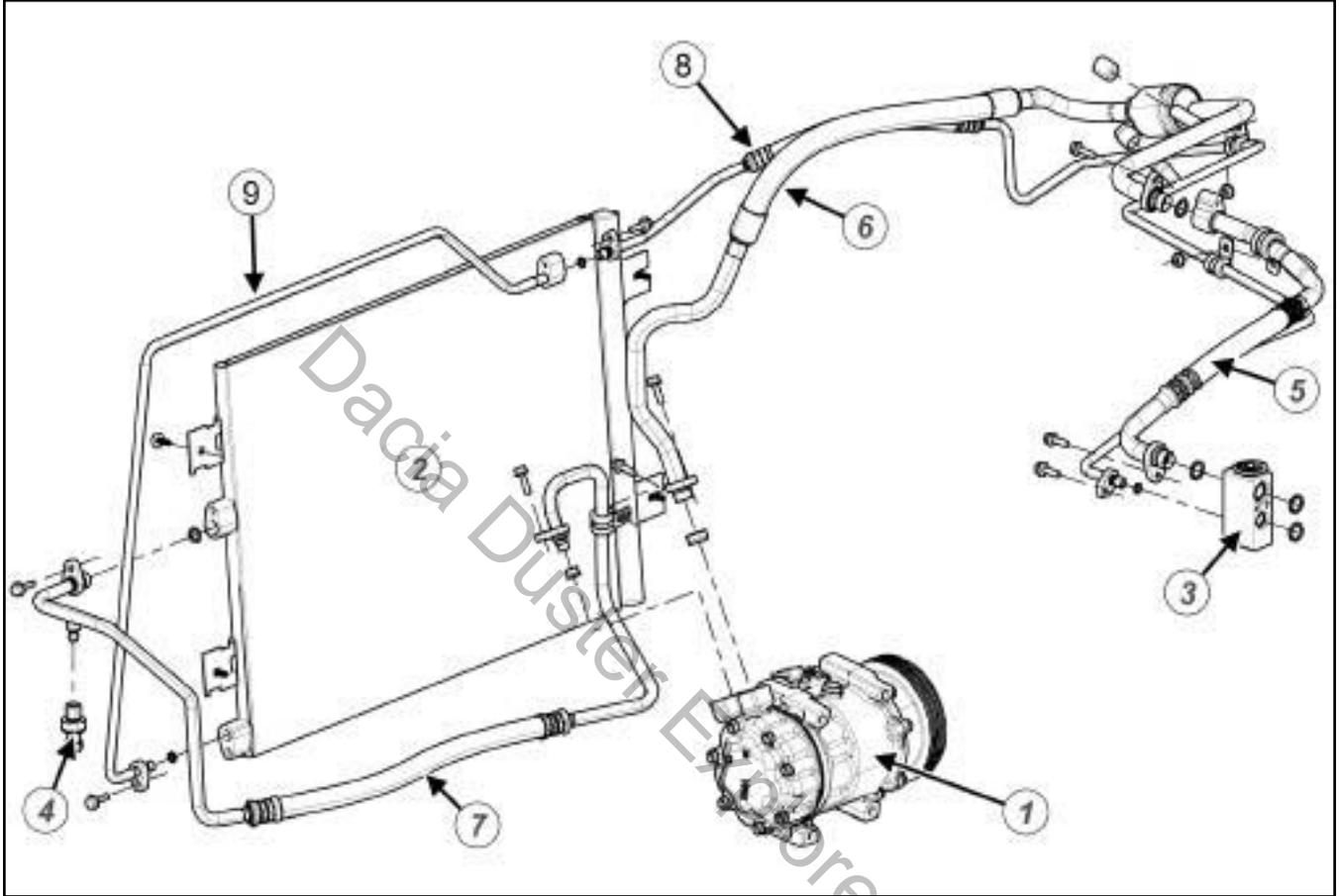
REFITTING

- Proceed in the reverse order to removal.
- Check that the controls can be moved to their fullest extent.
- Unlock the airbag computer (see **Fault finding - Replacement of components**) (88C, Airbags and pretensioners).

Note:

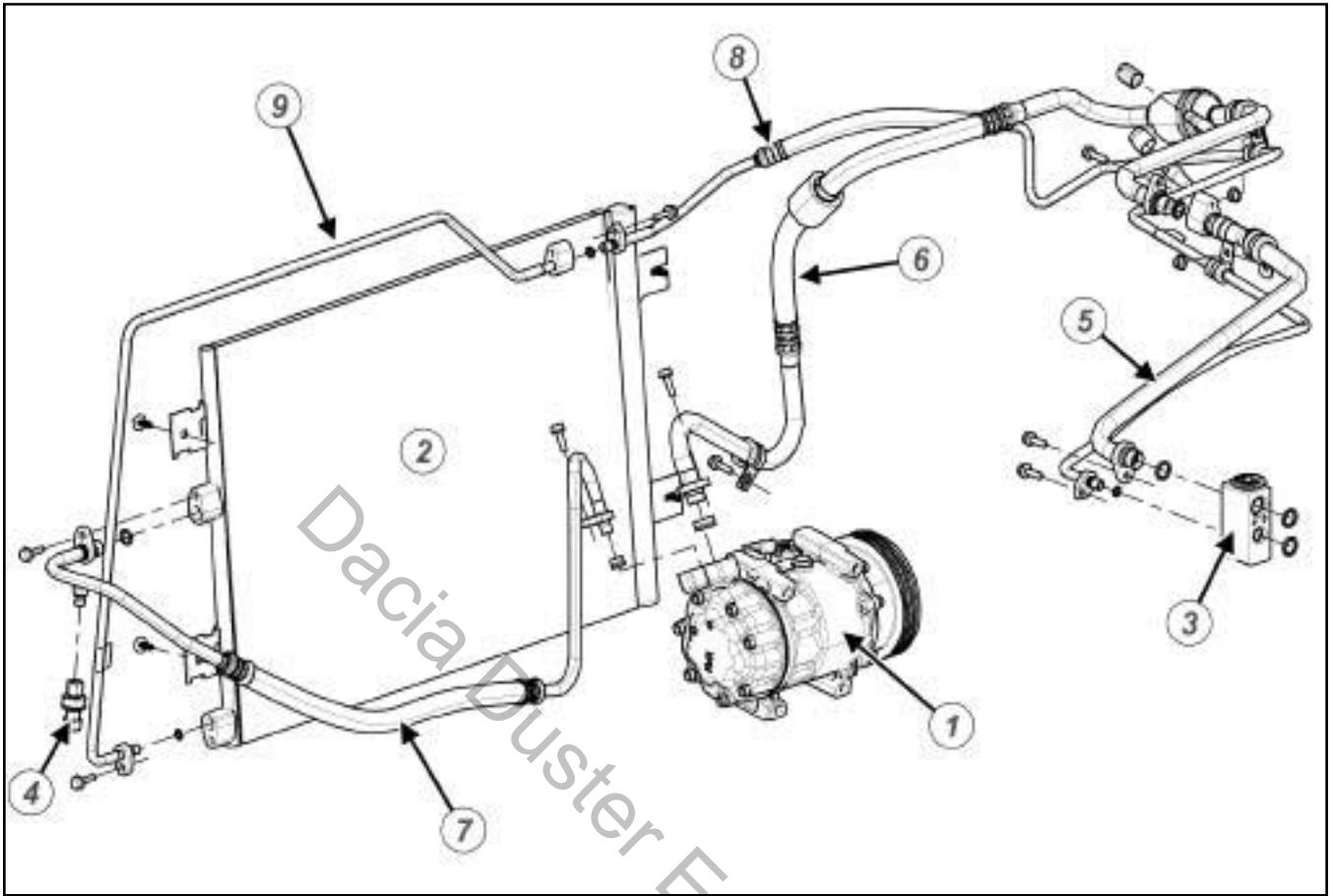
The pictures show the fittings present on Logan.

Fitting A



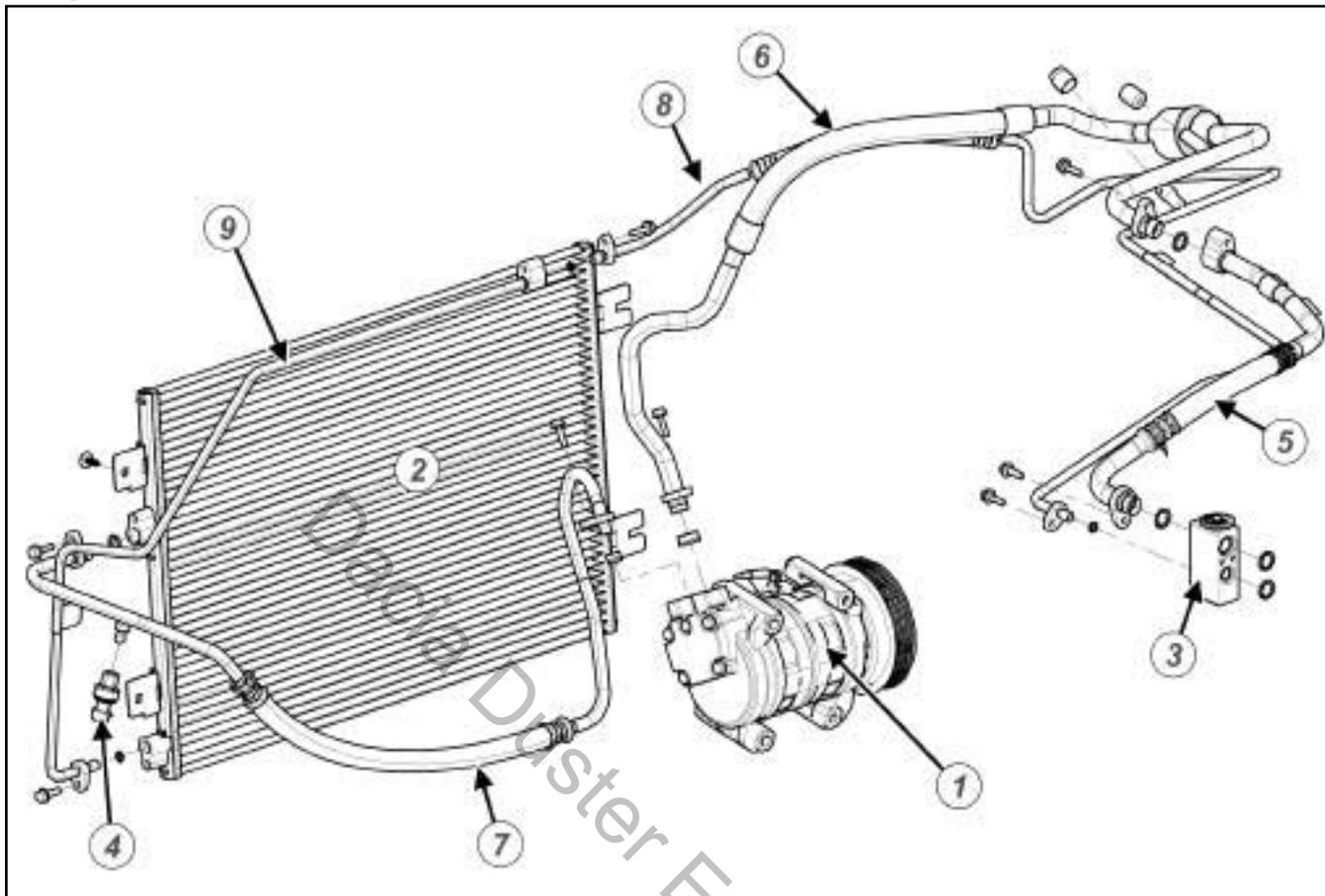
143987

Fitting B



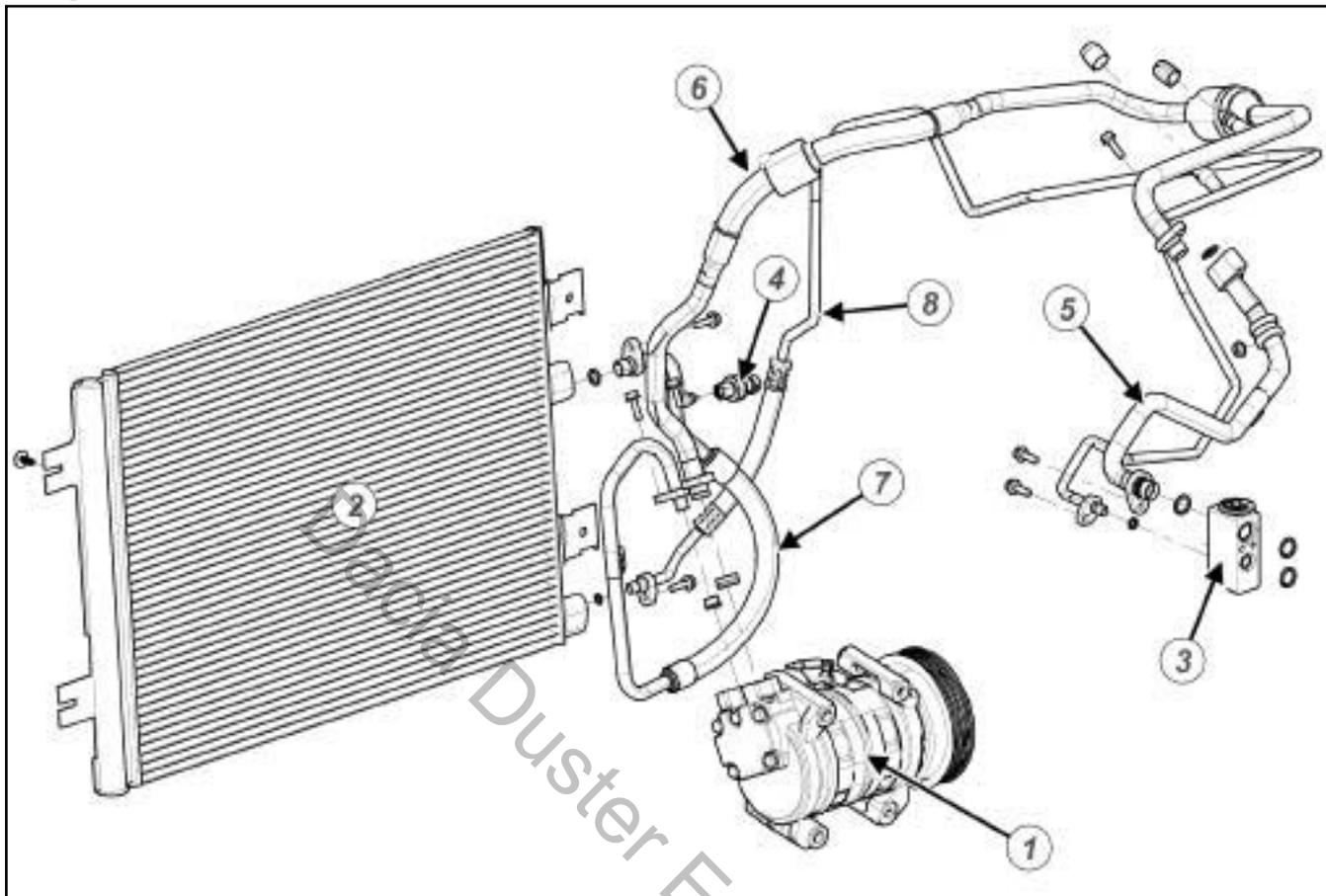
143988

Fitting C



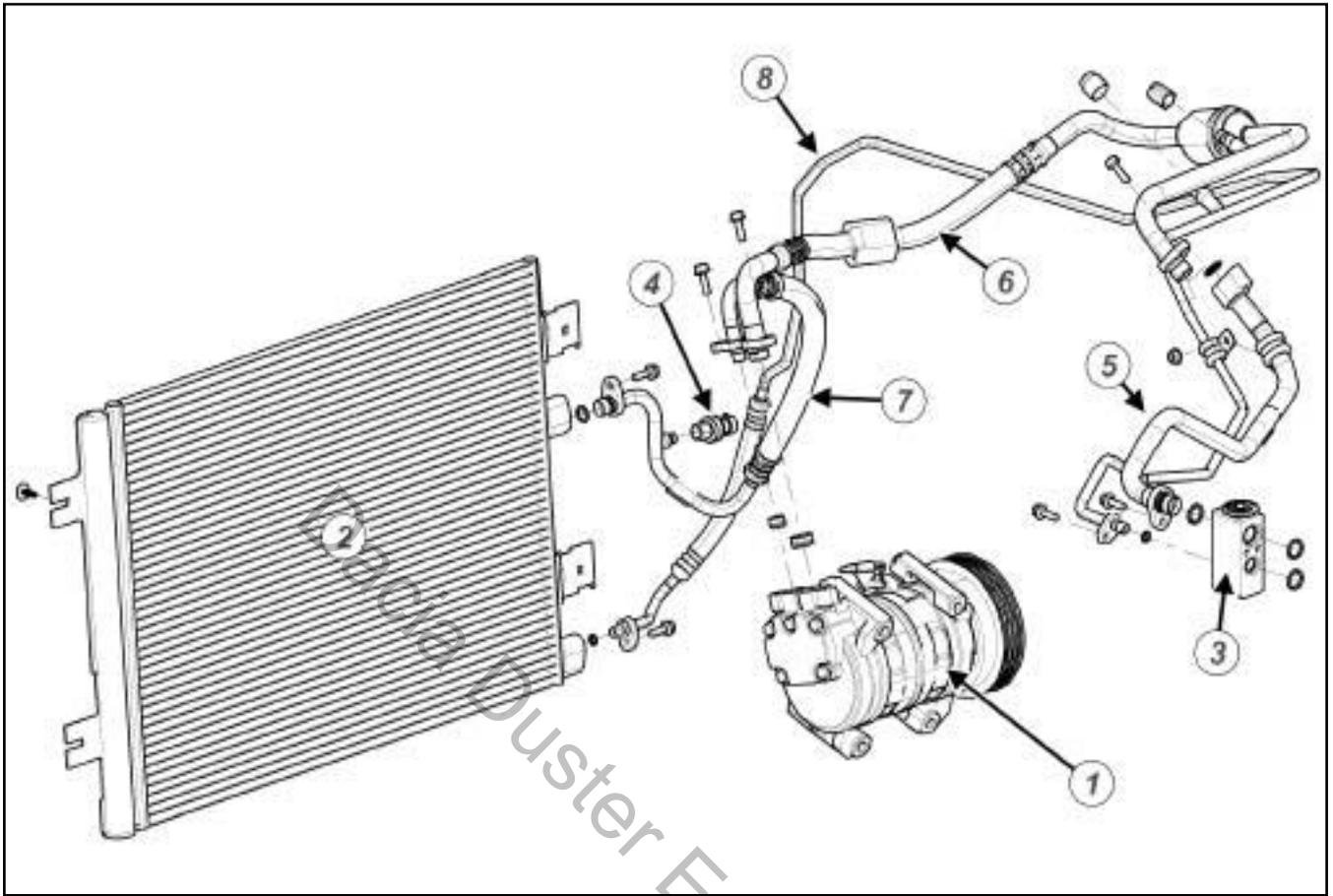
143991

Fitting D



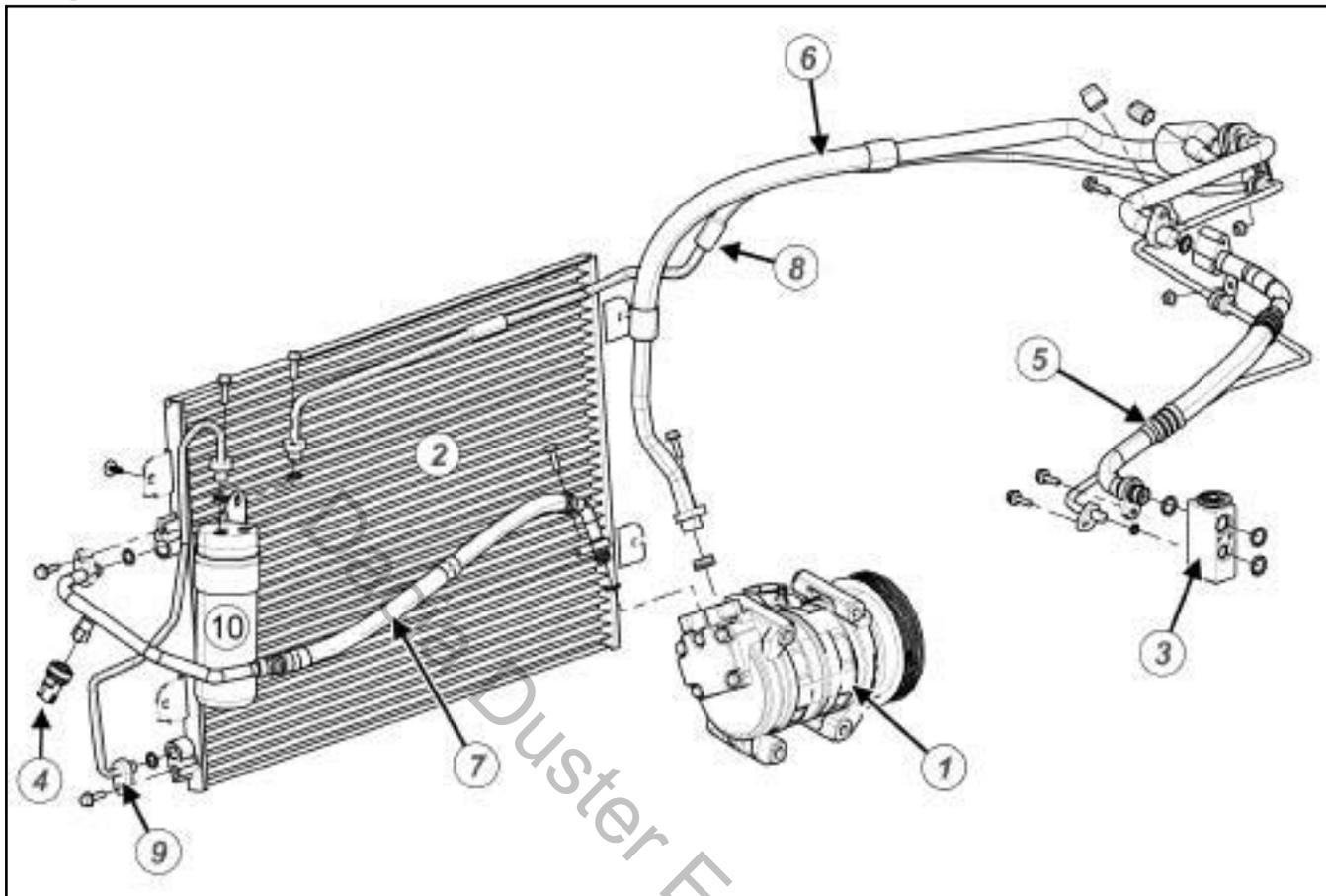
143990

Fitting E



143993

Fitting F



143989

Air conditioning: List and location of components

8	Intermediate pipe - expansion valve connecting pipe (fittings A, B, and C)	(see 62A, Air conditioning, Refrigerant circuit pipe: Removal - Refitting , page 62A-21)
	Condenser - expansion valve connecting pipe (fitting D)	(see 62A, Air conditioning, Refrigerant circuit pipe: Removal - Refitting , page 62A-21)
	Dehydrator reservoir - expansion valve connecting pipe (fittings F and G)	(see 62A, Air conditioning, Refrigerant circuit pipe: Removal - Refitting , page 62A-21)
9	Condenser - intermediate pipe connecting pipe (fittings A, B, and C)	(see 62A, Air conditioning, Refrigerant circuit pipe: Removal - Refitting , page 62A-21)
	Condenser - dehydrator reservoir connecting pipe (fitting F)	(see 62A, Air conditioning, Refrigerant circuit pipe: Removal - Refitting , page 62A-21)
10	Dehydrator reservoir (fittings F and G)	(see Dehydrator reservoir: Removal - Refitting)

Dacia Duster Explorers UK

AIR CONDITIONING

To find out the part number of the oil used (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).

Table of vehicle refrigerant capacities according to their engines and various specifications:

Engine	Refrigerant capacity (g)	Compressor	Type of oil	Total quantity of oil in the circuit (ml orcc)
D4D	475 ± 35	SANDEN SD7V16	SANDEN SP10	135 ± 10
K4M				
K7J				
K7M				
K9K				

Table of quantities of oil to add when replacing components:

Operation on the air-conditioning circuit	Quantity of oil (ml or cm ³)
Circuit oil change	Measure the volume recovered and add the same quantity of new oil
Split pipe or other rapid leak	100
Replacement of a condenser	Quantity recovered + 30
Replacement of an evaporator	Quantity recovered + 30
Replacement of the dehydrator reservoir	Quantity recovered + 15
Replacement of a pipe	Quantity recovered + 10
Removing / refitting a compressor	Quantity recovered
Replacement of a compressor	None added
Replacement of a compressor and one or more components of the heating and air conditioning system	None added
Standard replacement of a compressor	Top up as necessary
Standard replacement of a compressor and replacement of one or more heating and air conditioning circuit components	Top up as necessary

AIR CONDITIONING

Condenser: Removal - Refitting

62A

AIR CONDITIONING

Equipment required

refrigerant charging station

IMPORTANT

To avoid all risk of damage to the systems, apply the safety and cleanliness instructions and operation recommendations before carrying out any repair (see **Air conditioning: Precautions for the repair**).

WARNING

To prevent moisture from entering the system, place plugs on the cold loop components which are open to the air.

Note:

Use blanking plugs for the fuel circuits with part numbers **77 01 208 229** or **77 01 476 857** to plug any openings exposed to the open air. They must be clean. Do not use any which have already been used to plug a fuel circuit.

Location and specifications (tightening torques, parts always to be replaced, etc.) (see **62A, Air conditioning, Air conditioning: List and location of components**, page **62A-1**).

REMOVAL

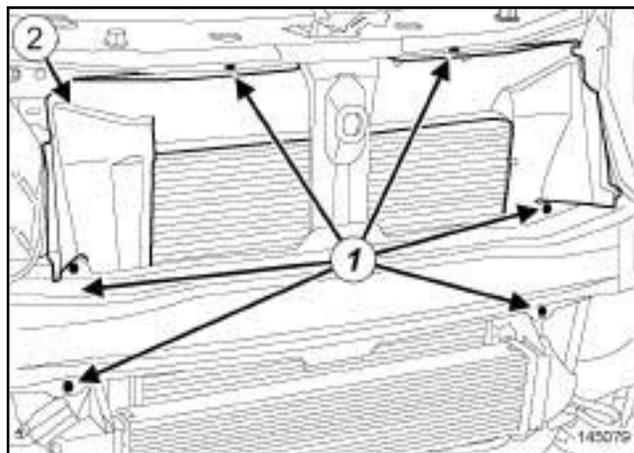
I - REMOVAL PREPARATION OPERATION

- Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).

WARNING

Consult the device's operating manual to avoid incorrect use.

- Drain the coolant circuit using the **refrigerant charging station**.
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Remove the front bumper (see **Front bumper assembly: Exploded view**) and (see **Exterior body front trim assembly: Exploded view**) (55A, Exterior protection).



145079

- Remove:
 - the air deflector mountings (1),
 - the air deflector (2).

K9K

- Remove the intercooler (see) (12B, Turbocharging).

II - REMOVAL OPERATION

- Remove the bolts from the pipes on the condenser (see **62A, Air conditioning, Air conditioning: List and location of components**, page **62A-1**).

WARNING

In order to avoid any refrigerant leaks, do not damage (deform, twist, etc.) the pipe.

- Disconnect the pipes from the condenser (see **62A, Air conditioning, Air conditioning: List and location of components**, page **62A-1**).
- Fit blanking plugs on the pipe openings.
- Remove (see **62A, Air conditioning, Air conditioning: List and location of components**, page **62A-1**):
 - the condenser bolts,
 - the condenser.

AIR CONDITIONING

Condenser: Removal - Refitting

62A

AIR CONDITIONING

REFITTING

I - REFITTING PREPARATION OPERATION

□

WARNING

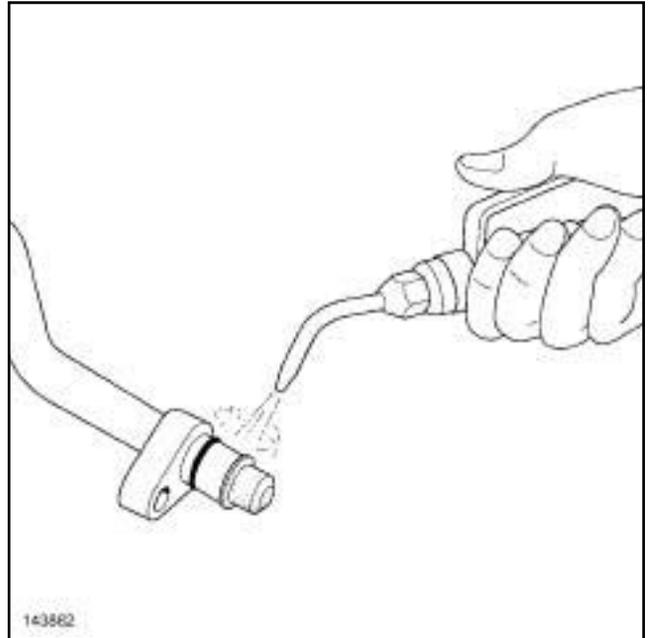
Do not remove the blanking plugs from each component until the last moment.

Also, do not remove the components from their packaging until they are to be fitted to the vehicle.

- Check, and if necessary replace, the refrigerant circuit pipe seal.



- Clean the surface and the seal of the pipe using **ENGINE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).



143882

- Use a **compressed air gun** to blow the surface and the seal of the connecting pipe.
- Lubricate the surface of the connecting pipe and the seal with air conditioning oil (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair**, page **62A-9**) .
- Remove the blanking plugs.

II - REFITTING OPERATION

- Proceed in the reverse order to removal.
- Consult the refrigerant and oil quantity values before filling the circuit (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair**, page **62A-9**) .
- Fill the refrigerant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .
- Check that the air conditioning system is operating correctly (see **Air conditioning: Check**) .
- Check for leaks (see **Refrigerant circuit: Check**) .

AIR CONDITIONING

Compressor: Removal - Refitting

62A

AIR CONDITIONING

Equipment required

refrigerant charging station

Tightening torques

compressor bolts	21 N.m
pipe union bolts	8 N.m
pipe retaining bracket bolt on the compressor	21 N.m

IMPORTANT

Consult the safety instructions and cleanliness advice and the operation recommendations before carrying out any repairs (see **Air conditioning: Precautions for repair**).

WARNING

To prevent moisture from entering the system, place plugs on the cold loop components which are open to the air.

Note:

Use blanking plugs for the fuel circuits with part numbers **77 01 208 229** or **77 01 476 857** to plug any openings exposed to the open air. They must be clean. Do not use any which have already been used to plug a fuel circuit.

REMOVAL

I - REMOVAL PREPARATION OPERATION

- Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).

WARNING

Consult the device's operating manual to avoid incorrect use.

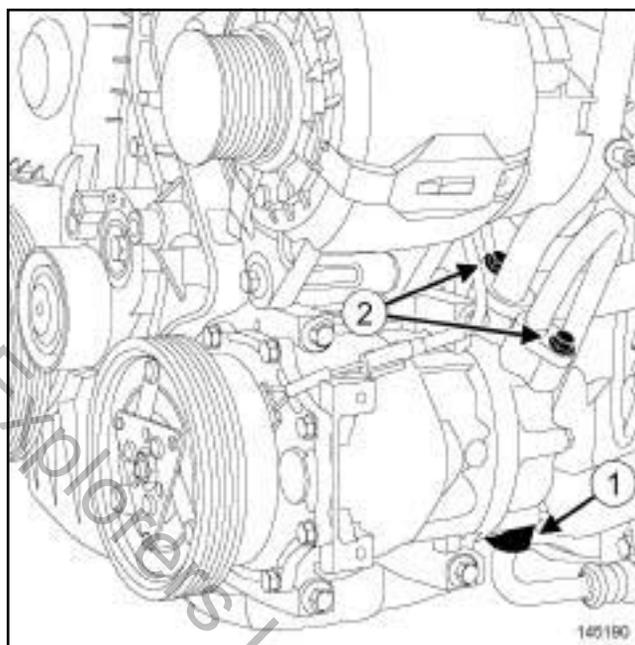
- Drain the coolant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**).
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

- Remove:

- the front bumper (see **Front bumper: Removal - Refitting**) and (see **Exterior body front trim assembly: Exploded view**) (55A, Exterior protection),
- the front right-hand wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres),
- the accessories belt (see **Accessories belt: Removal - Refitting**) (11A, Top and front of engine).

II - REMOVAL OPERATION

K4M



145190

- Remove:

- the pipe retaining bracket bolt (1) on the compressor,
- the pipe union bolts (2) on the compressor.

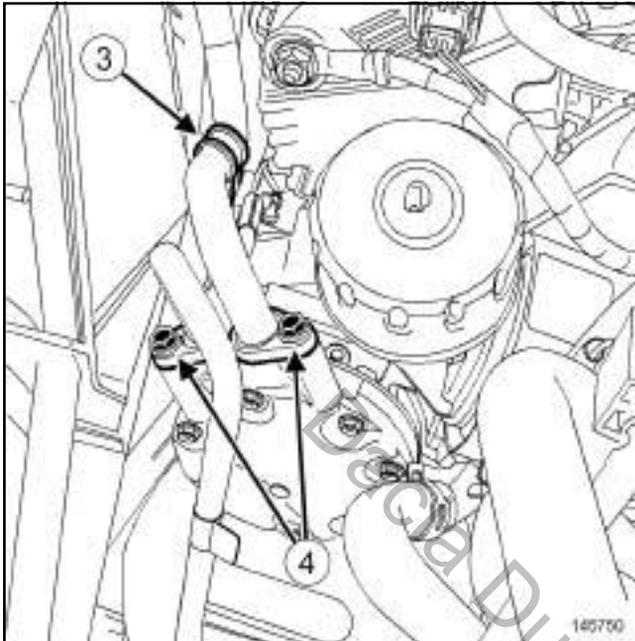
AIR CONDITIONING

Compressor: Removal - Refitting

62A

AIR CONDITIONING

K9K



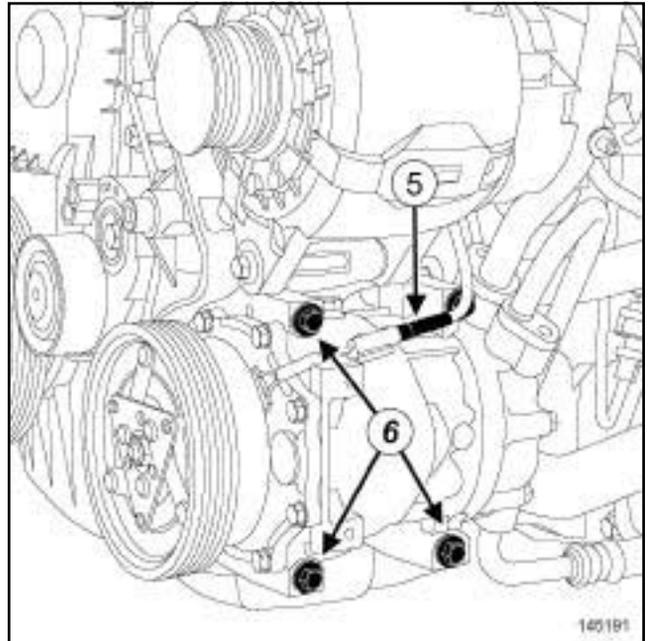
- Remove:
 - the bolt (3) from the pipe retaining clip on the compressor,
 - the pipe union bolts (4) on the compressor.

WARNING

In order to avoid any refrigerant leaks, do not damage (deform, twist, etc.) the pipe.

- Disconnect the compressor pipes.
- Fit blanking plugs in the pipe openings.

K4M



- Disconnect the compressor connector (5) .
- Remove:
 - the compressor bolts (6) ,
 - the compressor.

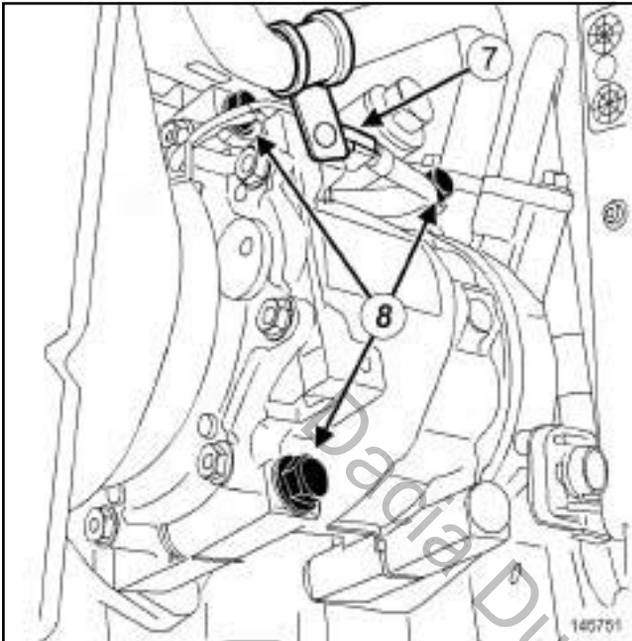
AIR CONDITIONING

Compressor: Removal - Refitting

62A

AIR CONDITIONING

K9K



- Disconnect the compressor connector (7) .
- Remove:
 - the compressor bolts (8) ,
 - the compressor.

REFITTING

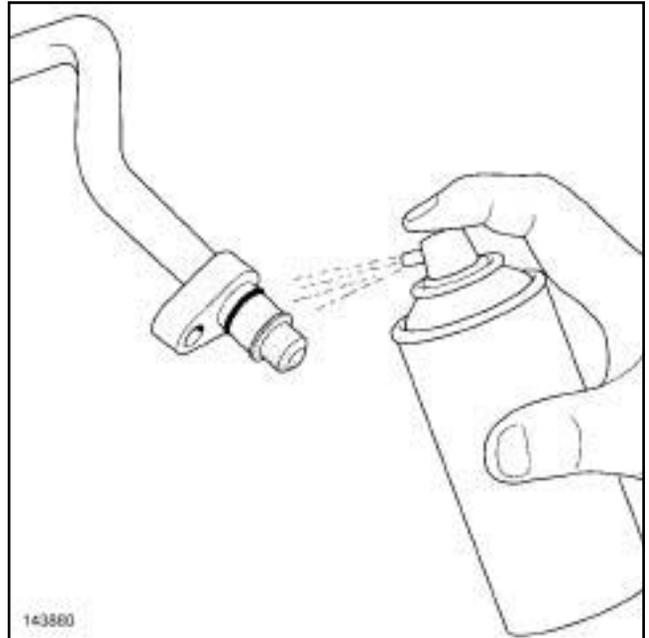
I - REFITTING PREPARATION OPERATION

WARNING

Do not remove the blanking plugs from each component until the last moment.

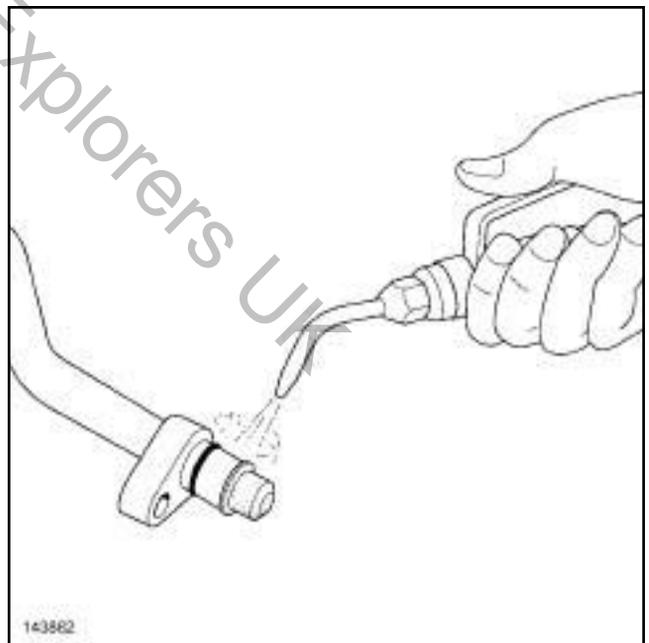
Also, do not remove the components from their packaging until they are to be fitted to the vehicle.

- Check, and if necessary replace, the refrigerant pipe seals.



143880

- Clean the surface and the seal of the pipe using **ENGINE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).



143882

- Use a **compressed air gun** to blow the surface and the seal of the connecting pipe.
- Lubricate the surface of the connecting pipe and the seal with air conditioning oil (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair, page 62A-9**) .
- Remove the blanking plugs.

AIR CONDITIONING

Compressor: Removal - Refitting

62A

AIR CONDITIONING

II - REFITTING OPERATION

- Proceed in the reverse order to removal.
- Torque tighten:
 - the **compressor bolts (21 N.m)**,
 - the **pipe union bolts (8 N.m)**.

K4M

- Torque tighten the **pipe retaining bracket bolt on the compressor (21 N.m)**.
- Consult the refrigerant and oil quantity values before filling the circuit (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair, page 62A-9**) .
- Fill the refrigerant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .
- Check that the air conditioning system is operating correctly (see **Air conditioning: Check**) .
- Check for leaks (see **Refrigerant circuit: Check**) .

AIR CONDITIONING

Expansion valve: Removal - Refitting

62A

AIR CONDITIONING

Equipment required

refrigerant charging station

IMPORTANT

Consult the safety instructions and cleanliness advice and the operation recommendations before carrying out any repairs (see **Air conditioning: Precautions for repair**).

WARNING

To prevent moisture from entering the system, place plugs on the cold loop components which are open to the air.

Note:

Use blanking plugs for the fuel circuits with part numbers **77 01 208 229** or **77 01 476 857** to plug any openings exposed to the open air. They must be clean. Do not use any which have already been used to plug a fuel circuit.

Location and specifications (tightening torques, parts always to be replaced, etc.) (see **62A, Air conditioning, Air conditioning: List and location of components**, page 62A-1) .

REMOVAL

I - REMOVAL PREPARATION OPERATION

WARNING

Consult the device's operating manual to avoid incorrect use.

- Drain the coolant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

K9K

- Remove the engine cover.

- Move aside the bulkhead soundproofing.

II - REMOVAL OPERATION

- Remove the bolts from the pipes on the expansion valve (see **62A, Air conditioning, Air conditioning: List and location of components**, page 62A-1) .

WARNING

In order to avoid any refrigerant leaks, do not damage (deform, twist, etc.) the pipe.

- Disconnect the pipes from the expansion valve (see **62A, Air conditioning, Air conditioning: List and location of components**, page 62A-1) .
- Fit blanking plugs on the pipe openings.
- Remove (see **62A, Air conditioning, Air conditioning: List and location of components**, page 62A-1) :
 - the expansion valve bolts,
 - the expansion valve.

REFITTING

I - REFITTING PREPARATION OPERATION

WARNING

Do not remove the blanking plugs from each component until the last moment.

Also, do not remove the components from their packaging until they are to be fitted to the vehicle.

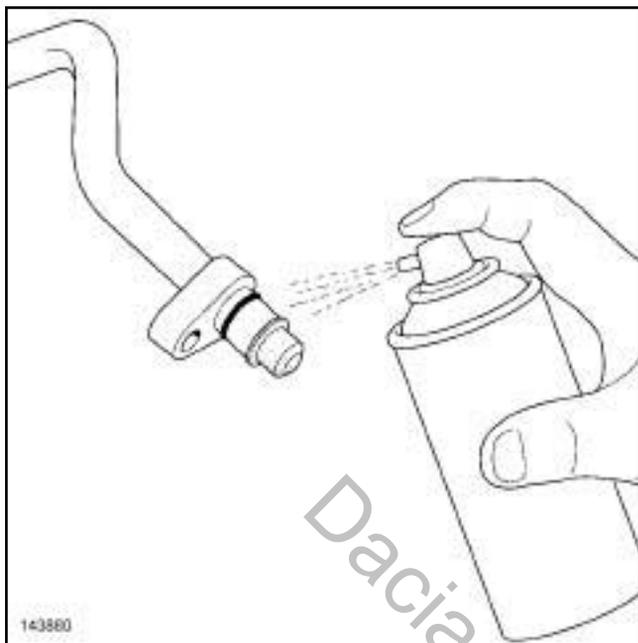
- Check, and if necessary replace, the refrigerant circuit pipe seal.

AIR CONDITIONING

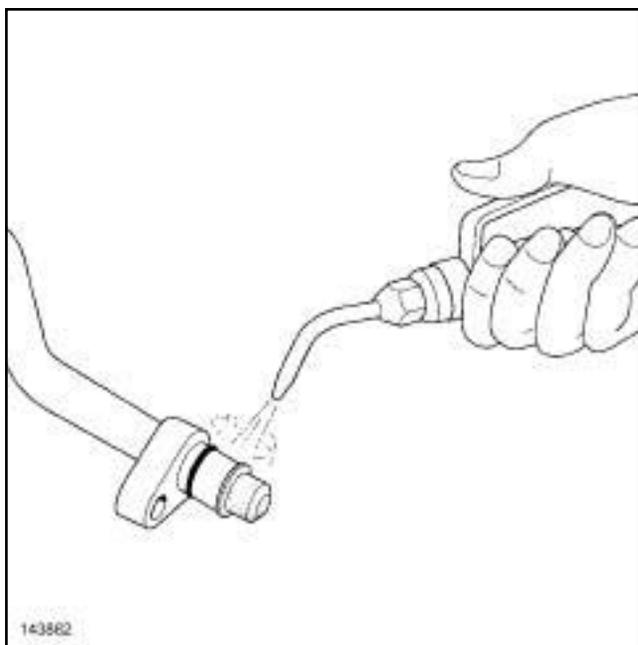
Expansion valve: Removal - Refitting

62A

AIR CONDITIONING



- ❑ Clean the surface and the seal of the pipe using **ENGINE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).



- ❑ Use a **compressed air gun** to blow the surface and the seal of the connecting pipe.
- ❑ Lubricate the surface of the connecting pipe and the seal with air conditioning oil (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair**, page 62A-9) .
- ❑ Remove the blanking plugs.

II - REFITTING OPERATION

- ❑ Proceed in the reverse order to removal.

Note:

Gradually tighten the expansion valve bolts so that the expansion valve is uniformly positioned on the pipes.

- ❑ Consult the refrigerant and oil quantity values before filling the circuit (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair**, page 62A-9) .
- ❑ Fill the refrigerant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .
- ❑ Check that the air conditioning system is operating correctly (see **Air conditioning: Check**) .
- ❑ Check for leaks (see **Refrigerant circuit: Check**) .

AIR CONDITIONING

Refrigerant pipe seal: Removal - Refitting

62A

Special tooling required

Car. 1363 Set of trim removal levers.

Equipment required

refrigerant charging station

compressed air nozzle

IMPORTANT

To avoid all risk of damage to the systems, apply the safety and cleanliness instructions and operation recommendations before carrying out any repair:

- (see **Air conditioning: Precautions for the repair**) ,
- (see **Vehicle: Precautions for the repair**) (01D, Mechanical introduction).

WARNING

To prevent moisture from entering the system, place plugs on the cold loop components which are open to the air.

WARNING

Do not remove the blanking plugs from each component until the last moment.

Also, do not remove the components from their packaging until they are to be fitted to the vehicle.

Note:

Use blanking plugs for the fuel circuits with part numbers **77 01 208 229** or **77 01 476 857** to plug any openings exposed to the open air. They must be clean. Do not use any which have already been used to plug a fuel circuit.

REMOVAL

I - REMOVAL PREPARATION OPERATION



WARNING

Consult the device's operating manual to avoid incorrect use.

- Drain the refrigerant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .
- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- Remove the connecting pipe concerned:
 - (see **Condenser - evaporator connecting pipe: Removal - Refitting**) ,
 - (see **Condenser - expansion valve connecting pipe: Removal - Refitting**) ,
 - (see **Rear condenser - front condenser connecting pipe: Removal - Refitting**) ,
 - (see **Evaporator - dehydrator reservoir connecting pipe: Removal - Refitting**) ,
 - (see **Compressor - rear condenser connecting pipe: Removal - Refitting**) ,
 - (see **Condenser - evaporator connecting pipe: Removal - Refitting**) ,
 - (see **Compressor - dehydrator reservoir connecting pipe: Removal - Refitting**) ,
 - (see **Dehydrator reservoir - rear expansion valve connecting pipe: Removal - Refitting**) ,
 - (see **Main expansion valve - additional expansion valve pipe: Removal - Refitting**) ,
 - (see **Expansion valve - intermediate pipe connecting pipe at the expansion valve outlet: Removal - Refitting**) ,
 - (see **Dehydrator reservoir - expansion valve connecting pipe: Removal - Refitting**) ,
 - (see **Condenser - dehydrator reservoir connecting pipe: Removal - Refitting**) ,
 - (see **Expansion valve - compressor connecting pipe: Removal - Refitting**) ,
 - (see **Expansion valve - rear expansion valve connecting pipe: Removal - Refitting**) ,
 - (see **Rear expansion valve - compressor connecting pipe: Removal - Refitting**) ,
 - (see **Compressor - condenser connecting pipe: Removal - Refitting**) ,

AIR CONDITIONING

Refrigerant pipe seal: Removal - Refitting

62A

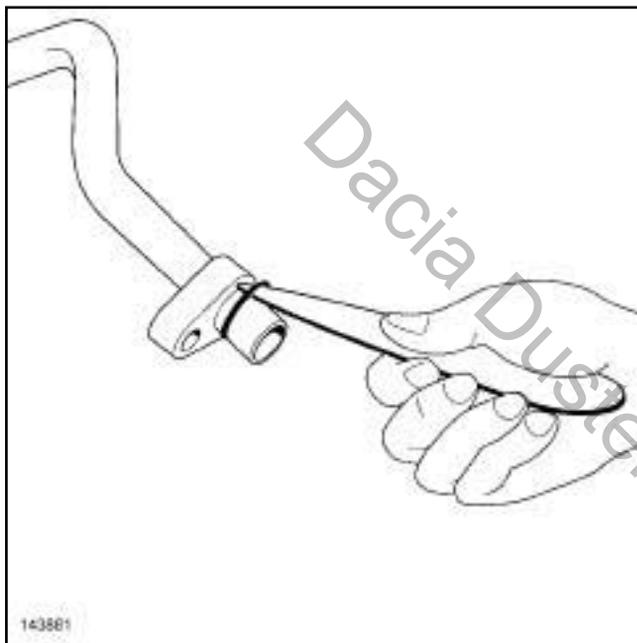
- (see **Compressor - intermediate pipe connecting pipe: Removal - Refitting**) .

II - OPERATION FOR REMOVAL OF PART CONCERNED

□

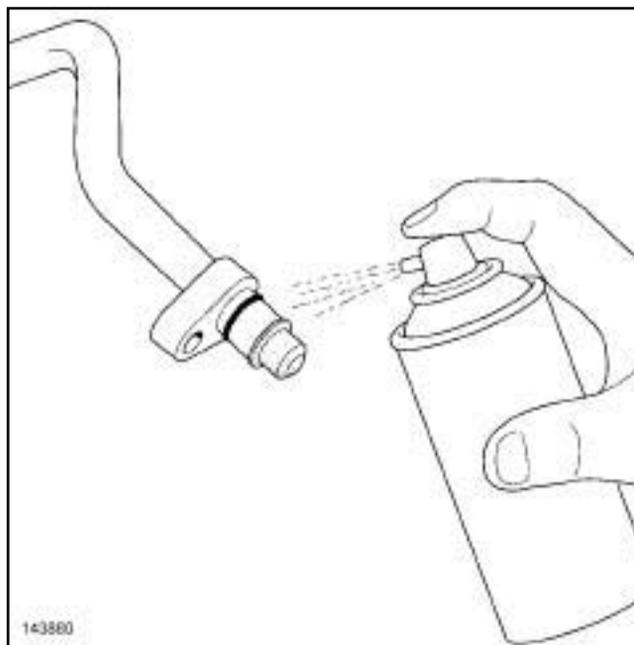
WARNING

To avoid damaging the surface of the air conditioning pipes when removing the seals, do not use a tool with a metallic end piece.



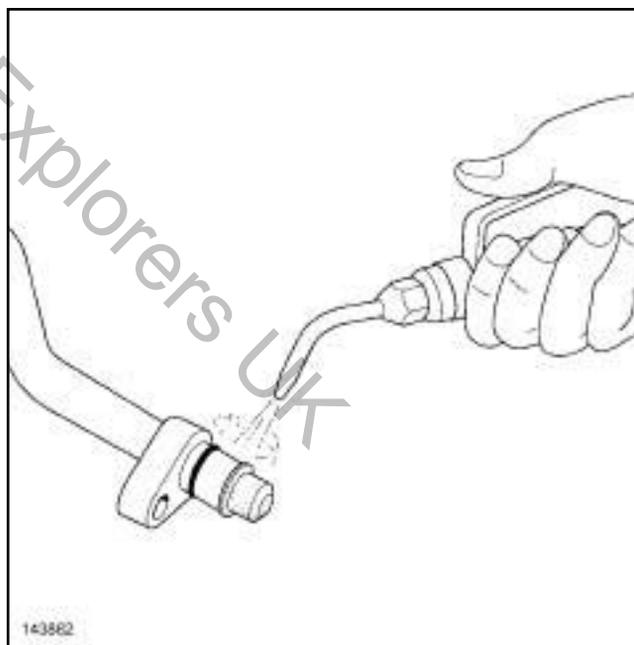
143881

- Remove the seal from the connecting pipe using the tool (**Car. 1363**).
- Fit blanking plugs.



143880

- Clean the surface of the pipe using **ENGINE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).



143882

- Use a **compressed air nozzle** to blow on the surface and the seal of the connecting pipe.

AIR CONDITIONING

Refrigerant pipe seal: Removal - Refitting

62A

REFITTING

I - REFITTING PREPARATION OPERATION

- Lubricate the surface of the connecting pipe and the seal with air conditioning oil to make fitting easier (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair, page 62A-9**).

II - REFITTING OPERATION FOR PART CONCERNED

- Remove the blanking plugs.

WARNING

To avoid any leaks, check that the seal and the pipe surface are in good condition. The seal and the surface must be clean and scratch free.

- Refit the seal on the connecting pipe.

III - FINAL OPERATION

- Refit the connecting pipe concerned:
 - (see **Condenser - evaporator connecting pipe: Removal - Refitting**),
 - (see **Condenser - expansion valve connecting pipe: Removal - Refitting**),
 - (see **Rear condenser - front condenser connecting pipe: Removal - Refitting**),
 - (see **Evaporator - dehydrator reservoir connecting pipe: Removal - Refitting**),
 - (see **Compressor - rear condenser connecting pipe: Removal - Refitting**),
 - (see **Condenser - evaporator connecting pipe: Removal - Refitting**),
 - (see **Compressor - dehydrator reservoir connecting pipe: Removal - Refitting**),
 - (see **Dehydrator reservoir - rear expansion valve connecting pipe: Removal - Refitting**),
 - (see **Main expansion valve - additional expansion valve pipe: Removal - Refitting**),
 - (see **Expansion valve - intermediate pipe connecting pipe at the expansion valve outlet: Removal - Refitting**),
 - (see **Dehydrator reservoir - expansion valve connecting pipe: Removal - Refitting**),
 - (see **Condenser - dehydrator reservoir connecting pipe: Removal - Refitting**),

- (see **Expansion valve - compressor connecting pipe: Removal - Refitting**),
 - (see **Expansion valve - rear expansion valve connecting pipe: Removal - Refitting**),
 - (see **Rear expansion valve - compressor connecting pipe: Removal - Refitting**),
 - (see **Compressor - condenser connecting pipe: Removal - Refitting**),
 - (see **Compressor - intermediate pipe connecting pipe: Removal - Refitting**).
- Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

Note:

A summary table gives the quantities of refrigerant in the system according to the engine types (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair, page 62A-9**).

- Perform the following operations:
 - refill the refrigerant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**),
 - check for leaks (see **Refrigerant circuit: Check**).
- Check that the air conditioning system is operating correctly (see **Air conditioning: Check**).

Refrigerant circuit pipe: Removal - Refitting

AIR CONDITIONING

Equipment required

refrigerant charging station

IMPORTANT

Consult the safety instructions and cleanliness advice and the operation recommendations before carrying out any repairs (see **Air conditioning: Precautions for repair**).

WARNING

To prevent moisture from entering the system, place plugs on the cold loop components which are open to the air.

Note:

Use blanking plugs for the fuel circuits with part numbers **77 01 208 229** or **77 01 476 857** to plug any openings exposed to the open air. They must be clean. Do not use any which have already been used to plug a fuel circuit.

Location and specifications (tightening torques, parts always to be replaced, etc.) (see **62A, Air conditioning, Air conditioning: List and location of components**, page **62A-1**) .

REMOVAL

I - REMOVAL PREPARATION OPERATION

WARNING

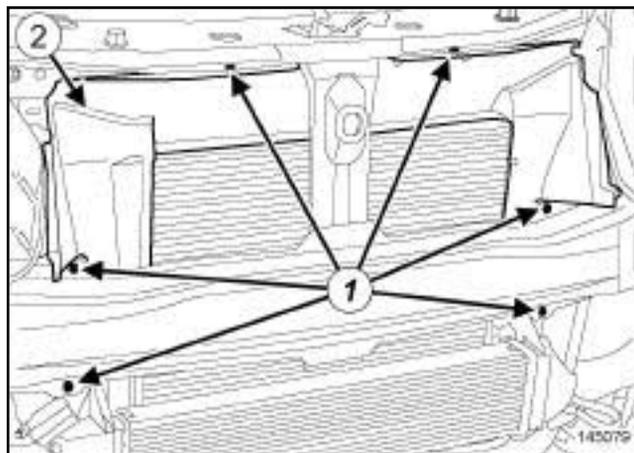
Consult the device's operating manual to avoid incorrect use.

Drain the coolant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .

- Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

For the pipe between the expansion valve and the condenser:

- Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).



- Remove:

- the front bumper (see **Exterior body front trim assembly: Exploded view**) and (see **Exterior body front trim assembly: Exploded view**) (55A, Exterior protection),
- the air deflector mountings (1) ,
- the air deflector (2) .

For the pipes connected to the expansion valve:

K9K

- Remove the front engine cover.
- Move aside the bulkhead soundproofing.

II - REMOVAL OPERATION

WARNING

In order to avoid any refrigerant leaks, do not damage (deform, twist, etc.) the pipe.

- Remove the refrigerant circuit pipe (see **62A, Air conditioning, Air conditioning: List and location of components**, page **62A-1**) .
- Fit blanking plugs on the pipe openings.

Refrigerant circuit pipe: Removal - Refitting

AIR CONDITIONING

REFITTING

I - REFITTING PREPARATION OPERATION

□

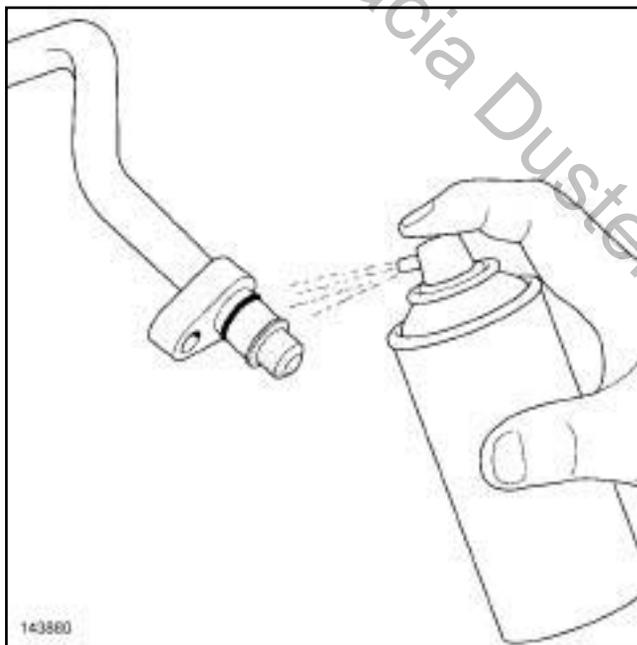
WARNING

Do not remove the blanking plugs from each component until the last moment.

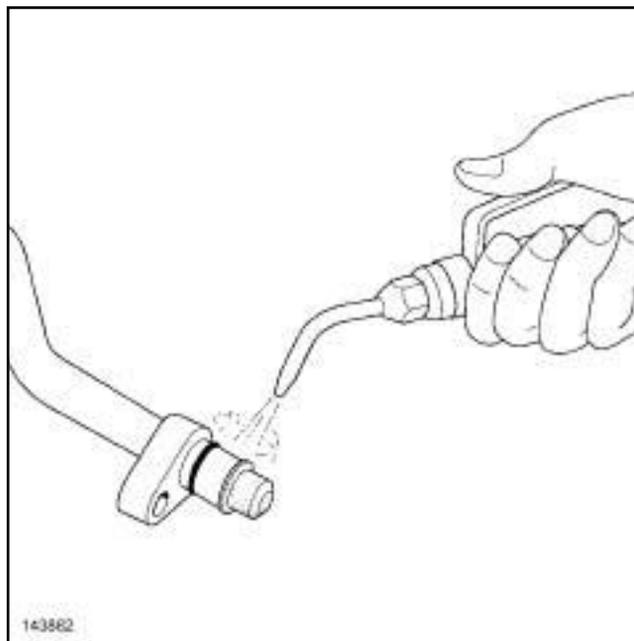
Also, do not remove the components from their packaging until they are to be fitted to the vehicle.

If removing and refitting the refrigerant circuit pipe:

- Check, and if necessary replace, the refrigerant circuit pipe seal.



- Clean the surface and the seal of the pipe using **ENGINE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).



143882

- Use a **compressed air gun** to blow the surface and the seal of the connecting pipe.
- Lubricate the surface of the connecting pipe and the seal with air conditioning oil (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair**, page **62A-9**) .
- Remove the blanking plugs.

II - REFITTING OPERATION

- Proceed in the reverse order to removal.
- Consult the refrigerant and oil quantity values before filling the circuit (see **62A, Air conditioning, Air conditioning: Parts and consumables for the repair**, page **62A-9**) .
- Fill the refrigerant circuit using the **refrigerant charging station** (see **Refrigerant circuit: Draining - Filling**) .
- Check that the air conditioning system is operating correctly (see **Air conditioning: Check**) .
- Check for leaks (see **Refrigerant circuit: Check**) .

AIR CONDITIONING

Pressure sensor: Removal - Refitting

62A

AIR CONDITIONING

Tightening torques

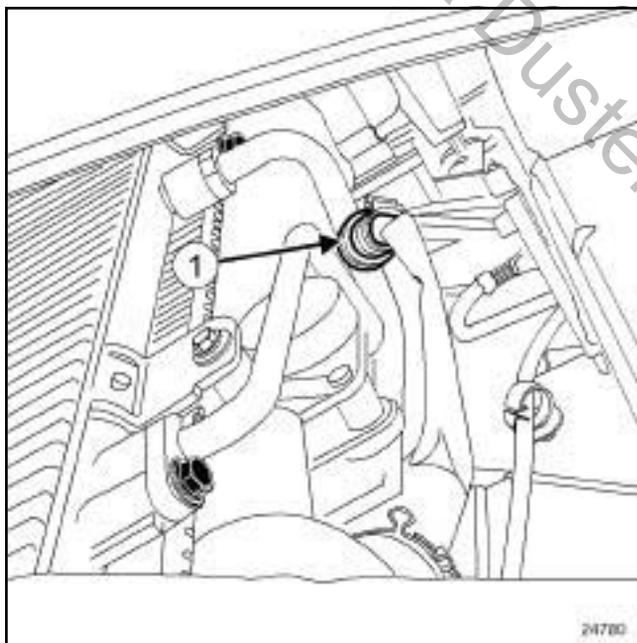
pressure sensor	9 N.m
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REMOVAL

I - REMOVAL PREPARATION OPERATION

- Disconnect the battery (see **Battery: Removal - Refitting**) (MR 388, 80A, Battery).
- Remove:
 - the engine cover,
 - the air intake sleeve.

II - OPERATION FOR REMOVAL OF PART CONCERNED



24780

- Disconnect the pressure sensor.

Note:

An automatic shut-off valve isolates the circuit from the outside during removal; do not drain the refrigerant from the circuit.

- Remove the pressure sensor (1) .

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- Refit the pressure sensor.
- Torque tighten the **pressure sensor (9 N.m)**.
- Connect the pressure sensor.

II - FINAL OPERATION.

- Refit:
 - the air inlet sleeve,
 - the engine cover.
- Connect the battery (see **Battery: Removal - Refitting**) (MR 388, 80A, Battery).