

Workshop manual

JS50 - phase 3

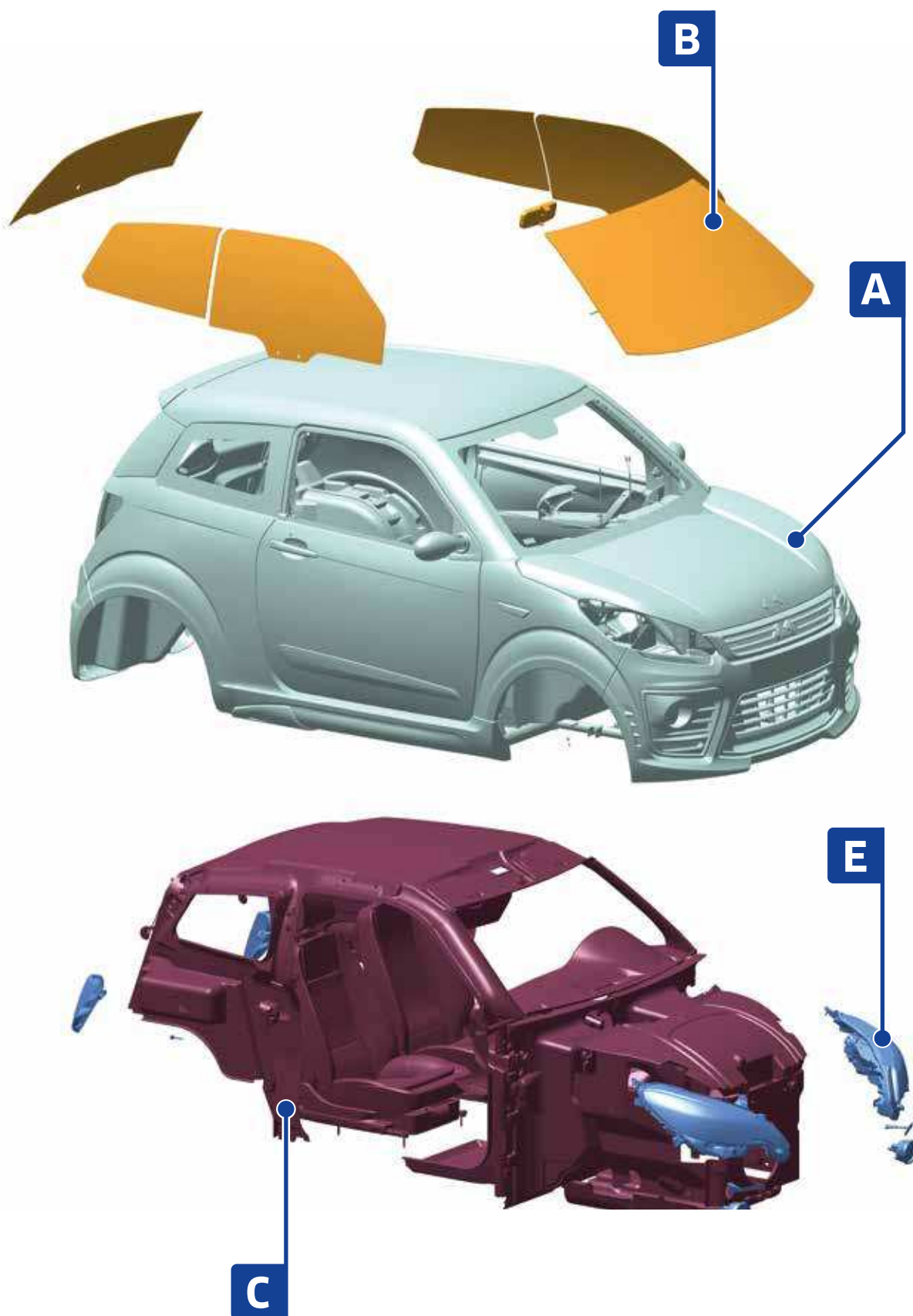
Since September 2018



LIGIER
GROUP



Réf - 1418187



Links to
chapters



Return to summary table of
times for each operation



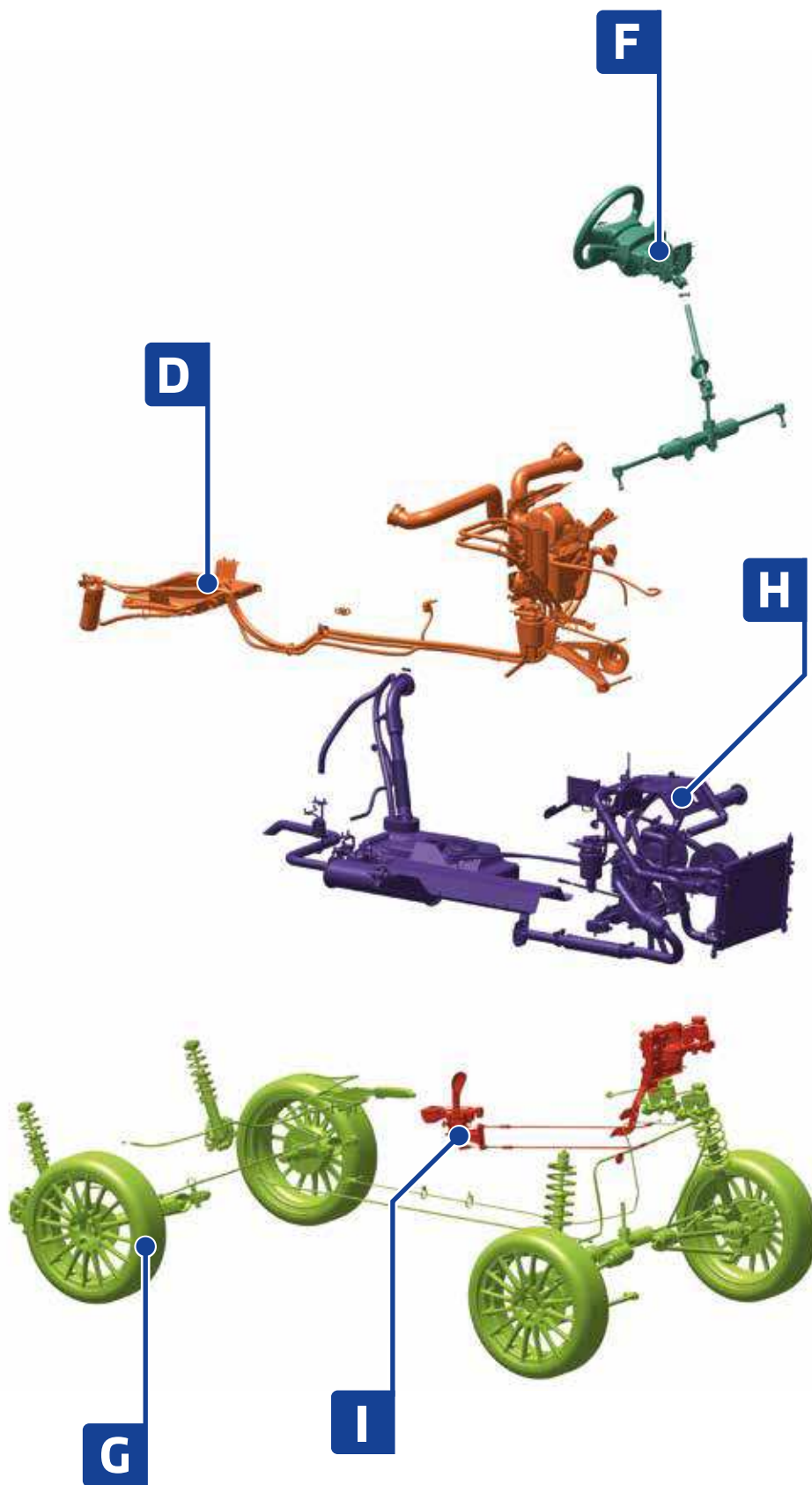
Links to wiring
diagrams



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Active page
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to "Annexes"



Introduction

Bodywork & Chassis

Windows

Passenger compartment

Heating & Air-conditioning

Electricity

Steering

Wheels & brakes

Engine & fuel supply

Transmission

Safety instructions

Introduction

This Workshop manual contains the technical data, descriptions and instructions required to repair the JS50 vehicle phase 3 with DCI engine indicated in the contents. Make sure you have the right manual for your vehicle.

Read the safety information, general information and repair instructions in this manual before you start to do any work.

Important!

The following warning symbols are shown in this manual and on the product:



CAUTION: DANGER

Failure to comply with the instructions may lead to a risk of injury, material damage or malfunction.



Used to draw your attention to important information which may make your work easier.

The risks, together with the safety measures to be respected or taken systematically during use or when performing any work, are listed below.

- Prevent the engine from starting by switching off the power supply with the main switch(es), then lock them in the Off position before starting any work. Place a warning sign on the driver's seat.
- As a general rule, all maintenance operations should be performed with the engine stopped. For some tasks, however, such as adjustments, the motor needs to be running. Moving close to a running motor or transmission system (variable speed drives and belts) always involves safety risks. Remember that loose clothing and long hair can catch on rotating components and cause serious accidents.
- When working near a running motor, a careless movement or a dropped tool can cause severe personal injury. Watch for hot surfaces (exhaust pipe, starting system component, etc.) and hot liquids in the pipes and hoses on a running engine or if the engine has just been stopped. Re-install all guards which were removed during work, before re-starting the engine.
- Make sure that the information and warning stickers affixed on the product are always clearly visible. Replace any damaged or illegible stickers.
- Never start the engine if the air filter is not fitted.
- Never use a starting fluid in an aerosol spray can or a similar product as an engine starting aid. Risk of explosion in the intake manifold and risk of damage to the engine.
- Avoid opening the coolant tank filler cap while the engine is hot. Risk of projections of vapour or hot fluids. Open the filler cap slowly and allow the pressure in the system to release. Be very careful when removing a valve, a cap or a coolant pipe on a hot engine. Risk of projections of vapour or hot fluids in unexpected directions.
- Hot oil causes severe burns. Avoid skin contact with hot oil. Make sure there is no pressure in the oil system before performing any work on the system. Never start and never let an engine run when the oil filler cap is not fitted, risk of splashes of oil.
- Stop the engine before performing any work on the cooling system.
- Start the engine only in a well-ventilated area. If the engine must run in an enclosed space, the exhaust gases and engine gases must be evacuated from the workshop or the engine compartment.
- Always use glasses or a protective mask when performing work involving risks of projections, sparks, splashes of acid or other chemicals. Eyes are extremely sensitive, you could become blind!
- Avoid skin contact with oil! Prolonged or repeated skin contact with oil may remove skin oils. This will cause irritation, dry skin, eczema and other skin disorders. Used engine oil is more hazardous to health than new oil. Use protective gloves and avoid oil-soaked clothes and rags. Wash regularly, especially before meals. Use special cream providing protection against dry skin and to make the skin easier to clean.
- Numerous chemicals used for the vehicle (for example transmission and motor oils, glycol, gasoline or fuel oil) and chemicals used in the workshop (for example degreasers, paints, solvents, primers and adhesives) are hazardous. Read the instructions on the packaging carefully! Always observe the safety instructions (for example use of a mask, goggles, gloves, etc.). Generally, make sure that employees are not exposed to hazardous substances, in the air they breathe, for example. Ensure good ventilation. Handle used products and surplus chemicals in compliance with applicable law.
- Be extremely careful for leak detection on the fuel supply system and when testing the injectors. Wear safety goggles. Very high pressure fuel spray from an injector system with a high penetration force, can deeply damage skin tissue. Risk of blood poisoning.

Safety instructions

- All fuels and many chemicals products are flammable. Make sure there are no open flames or sparks which could start a fire. Gasoline, some diluents and the hydrogen in the batteries, may be explosive and easily flammable in certain mix ratios with air. Do not smoke!
Provide good ventilation and take all necessary safety precautions, for example before you start welding or grinding in the vicinity. Always have a fire extinguisher readily available near the work station.
- Make sure that rags soaked with oil and fuel, and fuel and oil filters are stored in a safe place. Oil-soaked rags can self-ignite under certain circumstances. Fuel and spent oil filters are hazardous waste and must be stored with used oil, contaminated fuel, paint residues, diluents, degreasers and wash residues and transferred to an approved waste management facility.
- The battery must never be exposed to any source of heat, sunlight, flame, a spark and generally any other source which could cause a fire. Damaged batteries may produce flammable/explosive vapours and gases. Provide good ventilation and avoid breathing these vapours.
- Make sure that the positive and negative battery cables are connected correctly to the corresponding battery terminals. If the batteries are wrongly connected, this can cause severe damage to the electrical equipment. Check with the wiring diagram.
- Wear suitable personal protective equipment when charging and handling batteries (gloves, goggles, overalls, safety shoes). Battery electrolyte contains highly corrosive sulphuric acid. In case of contact with the skin, wash at once with soap and plenty of water. If electrolyte comes into contact with the eyes, rinse abundantly with water and seek medical assistance at once.
- Before working on an electrical component, make sure the power supply source is switched off: refer to the instructions specified in the maintenance procedures.
- The coupling must be adjusted when the engine is stopped.
- Use the lifting eyes on the engine/inverter to lift the assembly. Always check that the lifting equipment is in good condition and that it has the correct lifting capacity (weight of the engine with inverter and auxiliary equipment).
- Lift the engine with a lifting beam specially adapted to the engine or adjustable, to handle the components mounted on the upper surface of the engine in safe conditions and prevent damage. All the chains and cables must run parallel to each other and as perpendicular as possible with respect to the upper surface of the engine. If additional fittings are mounted on the engine and alter its centre of gravity, special lifting tools will be required to balance the assembly in complete safety. Never work on an engine which is only hanging from the lifting equipment.
- Never work alone when heavy components are to be removed, even when safe lifting equipment such as a lockable block and tackle is used. Even when lifting equipment is used, two people are needed in most cases: one operating the lifting equipment and the other to make sure that the components move freely and are not damaged during lifting. When working on board the vehicle, always make sure beforehand that there is enough space for disassembly where you are working, with no risk of personal injury or material damage.
- The components of the electrical system and the fuel system on the vehicles, have been designed and manufactured to minimise the risks of explosion and fire. The engine must not run in environments containing explosive materials.
- Under no circumstances shall the discharge pipes be bent or deformed. Damaged pipes must be replaced.
- Use of a high pressure cleaner is not recommended. It is recommended to wash the bodywork with a sponge and soapy water, with no detergent or alcohol which could cause irreversible damage to the bodywork.
- Always use the fuel specified in the user manual. The use of poor-quality fuel could damage the engine. On a diesel engine, poor fuel quality may cause seizing of the injection system and may cause overspeed and risk of major material damage and personal injury. Poor fuel quality may also increase maintenance costs.

Foreword

Introduction

This workshop manual contains the information required to remove, install, replace and service the various components, apart from the engine block of the JS50 - Phase 3 vehicle.

This manual, published by the Ligier Group, is mainly intended for dealers-resellers of Ligier vehicles and their qualified mechanics. Since this manual cannot include all the required training information, it is assumed that the people servicing and/or replacing parts on Ligier vehicles have basic knowledge of mechanical principles and repair techniques for this type of vehicle. Repair or servicing operations performed by unqualified personnel could make the vehicle unfit and/or dangerous for use.

Ligier strives to improve all its vehicles throughout their lifespan. Dealers selling Ligier vehicles will be notified of all important modifications made to the characteristics and/or technical methods, which will be included in the future editions of this manual.

Before performing any work on the vehicle, carefully read the foreword, the safety instructions, the list of tools required and the instructions for servicing/replacing the parts concerned.

How to use this manual

This manual is organised clearly so that mechanics can browse through it easily and find the information they require. It consists of 9 chapters containing all the various procedures required to service and/or replace parts on the JS50 - Phase 3 vehicle.

Each procedure is sub-divided into steps and contains all the instructions required to remove, install, repair and service the components concerned.

The first page of each procedure lists all the information required to perform the work under optimum conditions (number of technicians, labour time, tools and protective equipment, preliminary procedure(s)).

Each step is then described by a photo with explanatory text and references.

Recycling



Genuine Ligier Group spare parts are made using recycled or recyclable materials to address environmental issues.

By choosing a genuine Ligier Group spare part, you are ensuring maximum reliability for your vehicle and maximum safety for you and your passengers.

All scrapped parts must comply with the sorting criteria imposed by law.

Personal protective equipment (PPE)



Use of ear muffs is mandatory



Use of a safety helmet is mandatory



Use of safety shoes is mandatory



Use of gloves is mandatory

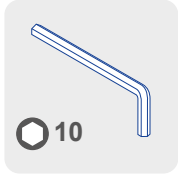


Use of protective eyewear is mandatory

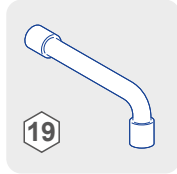
Foreword

Tools

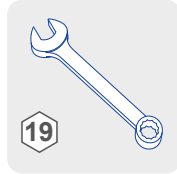
This section describes all the tools mentioned in this manual:



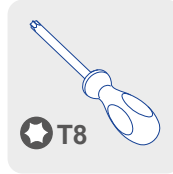
Allen key



Socket wrench



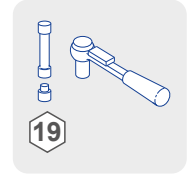
Open-end wrench



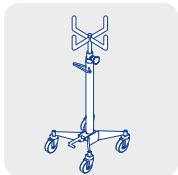
Screwdriver



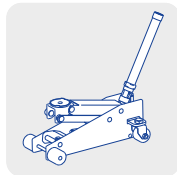
Ratchet screwdriver



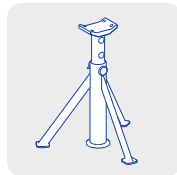
Torque wrench



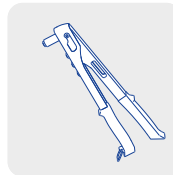
Pit cylinder



2-tonne jack



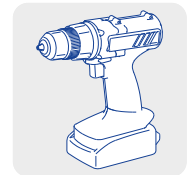
2-tonne axle stands



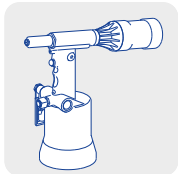
Rivet gun



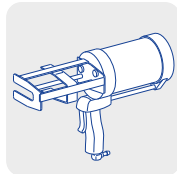
Tachometer



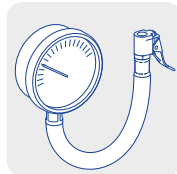
Screw gun



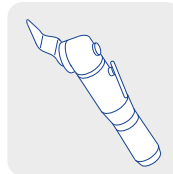
Staking machine



Double piston glue gun



Manometer



Pneumatic cutter



2-post lift

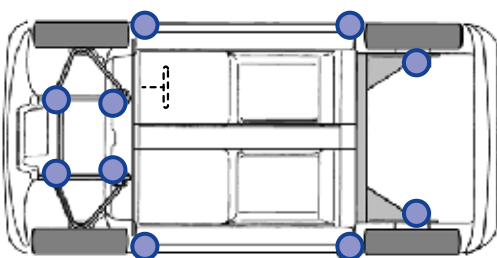


4-post lift



Workshop crane

Lifting points



● Lifting points under the body structure.

Foreword

Vehicle identification



A	•	LIGIER GROUP
B	•	L6e-B
C	•	e13*168/2013*XXXX
D	•	VJRXXXXXXXXXXXXXXXXX
E	•	XX dB (A) - XXXX min -1
F	•	6 kW 45 Km/h max XXX kg

- A:** Manufacturer's name
B: Category
C: Approval number
D: Vehicle identification number (VIN)
E: Noise level when stationary - Engine speed
F: Engine power / V max / MTPLM

Foreword

Tightening torques

Certain operations will require specific tightening torques using a torque wrench. In the event of non-compliance with these instructions, we assume no liability for the integrity of the parts concerned.

Table of standard screw tightening torques

		Coarse pitch (Nm)							
		Resistance class R (N/mm ²)							
		4.6	4.8	5.6	5.8	6.8	8.8	10.9	12.9
Diameter	M3	0.5	0.7	0.6	0.9	1	1.4	1.9	2.3
	M4	1.1	1.5	1.4	1.8	2.2	2.9	4.1	4.9
	M5	2.3	3	2.8	3.8	4.5	6	8.5	10
	M6	3.8	5	4.7	6.3	7.5	10	14	17
	M8	9.4	13	12	16	19	25	35	41
	M10	18	25	23	31	37	49	69	83
	M12	32	43	40	54	65	86	120	145
	M14	51	68	63	84	101	135	190	230
	M16	79	105	98	131	158	210	295	355
	M18	109	145	135	181	218	290	405	485
	M20	154	205	193	256	308	410	580	690
	M22	206	275	260	344	413	550	780	930
	M24	266	355	333	44	533	710	1000	1200
	M27	394	525	500	656	788	1050	1500	1800
	M30	544	725	680	906	1088	1450	2000	2400

		Fine pitch (Nm)							
		Resistance class R (N/mm ²)							
		4.6	4.8	5.6	5.8	6.8	8.8	10.9	12.9
Diameter	M8x1	10	14	13	17	20	27	38	45
	M10x1	21	28	26	35	42	56	79	95
	M10x1.25	20	26	24	33	39	52	73	88
	M12x1.25	36	48	45	59	71	95	135	160
	M12x1.5	38	45	42	56	68	90	125	150
	M14x1.5	56	75	70	94	113	150	210	250
	M16x1.5	84	113	105	141	169	225	315	380
	M18x1.5	122	163	153	203	244	325	460	550
	M18x2	117	157	147	196	235	313	440	530
	M20x1.5	173	230	213	288	345	460	640	770
	M20x2	164	218	204	273	327	436	615	740
	M22x1.5	229	305	287	381	458	610	860	1050
	M24x2	293	390	367	488	585	780	1100	1300
	M27x2	431	575	533	719	863	1150	1600	1950
	M30x2	600	800	750	1000	1200	1600	2250	2700

Summary table of times for each operation

Pictograms



This pictogram is shown at the top left on the first page of each procedure. It indicates the removal and installation times for the procedure concerned. These times include the preliminary procedures.

Operation	Procedure code	Operation type	Time
Bodywork & Chassis			
Front bumper removal - installation	CS5002	Removal - Installation	0.50 h
Replacement front bumper	CS5004	Replacement	1.25 h
Front wing	CS5007	Replacement	0.40 h
Bonnet	CM5000	Removal - Installation	0.30 h
Bonnet opening control	CM5003	Removal - Installation	0.15 h
Bonnet lock	CM5011	Removal - Installation	0.25 h
Engine support mount on the driver's side	CA5009	Removal - Installation	2 h
Engine support mount on the passenger side	CA5008	Removal - Installation	2 h
Engine mount	CA5005	Removal - Installation	1.25 h
Front windscreen wiper arm	ES5002	Removal - Installation	0.10 h
Roof panel	CS5014	Replacement	6.50 h
Passenger gripping handle	CS5027	Removal - Installation	0.05 h
Complete door	PO5000	Removal - Installation	0.15 h
Door seal	CS5005	Removal - Installation	0.10 h
Inside opening control	PO5010	Removal - Installation	0.10 h
Inner door panel	PO5015	Replacement	0.30 h
Door lock	PO5011	Removal - Installation	0.40 h
Door cylinder	PO5021	Removal - Installation	0.50 h
Rail seal	PO5006	Removal - Installation	0.60 h
Door opening cable	PO5013	Removal - Installation	0.40 h
Outside door handle	PO5017	Removal - Installation	0.50 h
Outer door panel	PO5014	Removal - Installation	0.75 h
Door frame	PO5022	Removal - Installation	2 h
Door bottom hinge	PO5020	Removal - Installation	0.30 h
Top hinge on the passenger side	PO5019	Removal - Installation	0.40 h
Top hinge on the driver's side	PO5018	Removal - Installation	0.90 h
Panneau latéral	CS5017	Replacement	9 h
Side panel	HA5000	Removal - Installation	1.50 h with 2 persons
Tailgate lock	HA5005	Removal - Installation	0.15 h
Rear bumper	CS5000	Removal - Installation	0.50 h
Replacement rear bumper	CS5801	Replacement	1.40 h

Summary table of times for each operation

Operation	Procedure code	Operation type	Time
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Windows

B

Windscreen	GL5000	Replacement	2.50 h
Tailgate window	GL5003	Replacement	1 h
Quarter window	GL5001 (1 side) GL5002 (2 sides)	Replacement	1.50 h (GL5001) 3.00 h (GL5002)
Door window	GL5004	Removal - Installation	0.40 h

Passenger compartment

C

Dashboard	PB5009	Removal - Installation	1.10 h
Heater vent	CR5003	Removal - Installation	0.67 h
Glove box	PB5012	Removal - Installation	0.25 h
Accessory support	PB5008	Removal - Installation	1.25 h
Fan buttons	PB5006	Removal - Installation	1.25 h
Front part carpet	CS5023	Removal - Installation	0.20 h
Safety belt	DV5000 DV5001	Removal - Installation	0.30 h 0.60 h
Windscreen pillar	CS5006	Removal - Installation	0.10 h
Roof panel fabric	CS5016	Removal - Installation	1.30 h
Boot fabric	CS5020	Removal - Installation	0.25 h
Passenger seat	SI5001	Removal - Installation	0.10 h
Driver's seat	SI5000	Removal - Installation	0.10 h

Heating & Air-conditioning

D

Engine radiator	CR5010	Removal - Installation	0.70 h
Passenger compartment heater box	CR5012 without air conditioning CR5812 with air conditioning	Removal - Installation	2.80 h without air conditioning 3.50 h with air conditioning
Passenger compartment heater motor	CR5002	Removal - Installation	2.75 h
R/I air conditioning compressor	CL5001	Removal - Installation	1.45 h
Air conditioning condenser	CL5002	Removal - Installation	0.50 h
Low pressure hose expansion valve - compressor	CL5003	Removal - Installation	2.50 h
High pressure hose expansion valve - dryer	CL5004	Removal - Installation	2.60 h
High pressure hose condenser - dryer	CL5005	Removal - Installation	2.45 h
High pressure hose compressor - condenser	CL5006	Removal - Installation	1.60 h



Summary table of times for each operation

Operation	Procedure code	Operation type	Time
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Electricity

E

Switch	PB5000 (windscreen wiper switch)	Removal - Installation	0.20 h
	PB5001 (low beam/ headlight switch)	Removal - Installation	0.20 h
Switch support	PB5007	Removal - Installation	0.35 h
Ignition	PB5002	Removal - Installation	0.50 h
Car radio	ER5000	Removal - Installation	0.10 h
Speedometer	PB5010	Removal - Installation	0.25 h
Air conditioning control	CL5000	Removal - Installation	1 h
Inside locking mechanism control	OC5004	Removal - Installation	1 h
Window lift mechanism	PO5005	Removal - Installation	0.50 h
Window lift mechanism switch	PO5007		0.40 h
Centralised locking unit	OC5000	Removal - Installation	0.25 h
Door actuator	OC5002 (1 side) OC5003 (2 sides)	Removal - Installation	0.30 h (OC5002) 0.60 h (OC5003)
Fuse box	EL5012	Removal - Installation	0.30 h
Windscreen washer reservoir	ES5004	Removal - Installation	0.15 h
Rear screen wiper motor	ES5005	Removal - Installation	0.20 h
Dual windscreen wiper motor	ES5800	Removal - Installation	0.70 h
Dual windscreen wiper arm plate	ES5003	Removal - Installation	0.70 h
12V battery	EL5001	Removal - Installation	0.25 h
Parking aid kit	EL5008	Removal - Installation	0.70 h
Reversing camera	EL5013	Removal - Installation	0.70 h
Headlight	EA5001 (1 side + adjustment)	Removal - Installation + Adjustment	0.40 h
Rear light	EA5003	Removal - Installation	0.15 h
Front foglight	EA5008	Removal - Installation	0.15 h
Daytime running lights	EA5010	Removal - Installation	0.15 h
Door harness	EL5002	 Wiring diagrams	0.50 h
LIGIER engine harness	EL5010	 Wiring diagrams	2 h
Body harness	EL5009	 Wiring diagrams	10 h
Air conditioning harness	EL5014	 Wiring diagrams	1.25 h

Steering

F

Steering wheel	DR5800 (with airbag)	Removal - Installation + Alignment	0.25 h (with airbag)
	DR5000 (without airbag)	Removal - Installation + Alignment	0.15 h (without airbag)
Electric Power Steering (EPS)	DR5010	Removal - Installation + Set to point zero	1.00 h
Lower steering column	DR5002	Removal - Installation	0.50 h
Steering rack boot	DR5007 (with air conditioning 2 sides)	Removal - Installation	1.80 h (DR5007)
	DR5004 (without removing rack 1 side)	Removal - Installation	0.50 h (DR5004)
	DR5005 (without removing rack 2 sides)	Removal - Installation	1 h (DR5005)
Steering rack	DR5003	Removal - Installation	1.60 h

Summary table of times for each operation

Operation	Procedure code	Operation type	Time
Wheels & brakes			
Front hub carrier	TA5009 (1 side) TA5010 (2 sides)	Removal - Installation	1 h 1 side 2 h 2 sides
Front hub	TA5013 (1 side) TA5014 (2 sides)	Removal - Installation	1 h 1 side 2 h 2 sides
Front brake disc	FR5011 (left side) FR5012 (right side)	Removal - Installation	1 h 1 side 2 h 2 sides
Bearing	TA5011 (1 side) TA5012 (2 sides)	Removal - Installation	1 h 1 side 2 h 2 sides
Steering ball joint	DR5008 (1 side) DR5009 (2 sides)	Removal - Installation	0.30 h 1 side 0.50 h 2 sides
Front brake calliper	FR5009	Removal - Installation	0.50 h
Front calliper piston seal	FR5026 (1 side) FR5027 (2 sides)	Removal - Installation	0.75 h 1 side 1.50 h 2 sides
Front left brake hose + bleeding	FR5001	Removal - Installation	0.50 h with bleeding
Front right brake hose air conditioning + bleeding	FR5002	Removal - Installation	0.75 h with bleeding
Front shock absorber	TA5007 (1 side) TA5008 (2 sides)	Removal - Installation	0.40 h 1 side 0.80 h 2 sides
Suspension wishbone	TA5003 (1 side) TA5004 (2 sides)	Removal - Installation	0.40 h (TA5003) 0.80 h (TA5004)
Suspension ball joint	TA5005 (1 side) TA5006 (2 sides)	Removal - Installation	0.40 h (TA5005) 0.80 h (TA5006)
Rear drive axle	TE5012 (1 side) TE5013 (2 sides)	Replacement	0.65 h 1 side 1.30 h 2 sides
Rear wheel hub	TE5006 (1 side) TE5007 (2 sides)	Removal - Installation	0.60 h 1 side 1.20 h 2 sides
Rear brake disc	FR5021 (1 side) FR5022 (2 sides)	Removal - Installation	0.60 h 1 side 1.20 h 2 sides
Rear bearing	TE5008 (1 side) TE5009 (2 sides)	Removal - Installation	1 h 1 side 2 h 2 sides
Rear brake calliper	FR5019	Removal - Installation	0.50 h
Rear brake hose + bleeding	FR5000	Removal - Installation	1 h with bleeding
Rear shock absorber	TE5002 (1 side) TE5003 (2 sides)	Removal - Installation	0.20 h (TE5002) 0.40 h (TE5003)
Rear suspension arm	TE5010 (1 side) TE5011 (2 sides)	Removal - Installation	0.75 h 1 side 1.50 h 2 sides
Hand brake lever	FR5006	Removal - Installation	0.75 h
Brake master cylinder + bleeding	FR5003	Removal - Installation	0.50 h
Pedal support	FR5017	Removal - Installation	1.70 h
Brake pedal	FR5016	Removal - Installation	0.40 h
Accelerator pedal	MO5034 DCI	Removal - Installation	0.40 h
Potentiometer	MO5016	Removal - Installation	0.25 h



Summary table of times for each operation

Operation	Procedure code	Operation type	Time
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Engine & fuel supply

H

DCI engine	M05001 powertrain* M05002 Dci engine	Removal - Installation Removal - Installation	2.75 h powertrain 3.50 h Dci
Dci exhaust outlet pipe	EC5000	Removal - Installation	0.60 h
Exhaust line	EC5002	Removal - Installation	0.20 h
Fuel tank	M05029	Removal - Installation	0.80 h
Fuel tank gauge	M05031	Removal - Installation	0.90 h
Fuel tank filling tube	M05030	Removal - Installation	0.70 h
Dci electric pump	M05033	Removal - Installation	0.30 h
Fuel hoses	M05032	Removal - Installation	0.50 h

Transmission

I

Inverter cable	B05014 (1 or 2 cables)	Removal - Installation	0.60 h
Inverter lever	B05017	Removal - Installation	0.75 h
Inverter unit	B05000	Removal - Installation	2.50 h
Transmission shaft	TR5000 (1 side) TR5001 (2 sides)	Removal - Installation Removal - Installation	0.40 h (TR5000) 0.80 h (TR5001)
Transmission belt	VA5004	Removal - Installation	0.15 h
Driven pulley	VA5005	Removal - Installation	1.00 h
Driving pulley	VA5000	Removal - Installation	0.30 h



Bodywork & Chassis

A





Equipment required

Special tools	Quantities	References
Allen key	1	-
Torx key	1	-
2-post lift	1	-
PPE		
Gloves	1	-

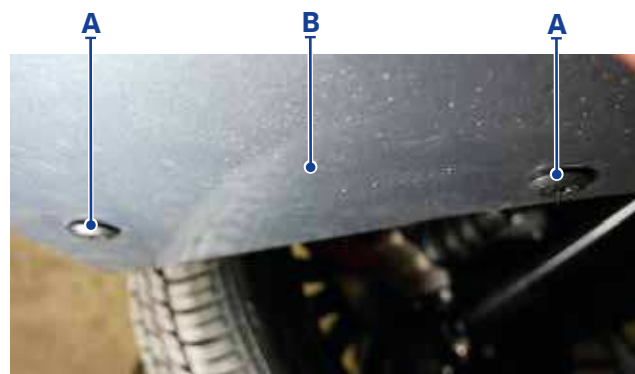
Preliminary procedures

Operations	Procedure types	Pages
Ignition off	-	-

Removal procedure

Passenger and driver's side of the vehicle:

1. Remove the 4 screws **A** underneath the bumper **B**.



2. Remove the 2 torx screws **C** on the bumper **B** mounted on the engine support mount **D**.



Access from underneath the vehicle.

Inside the vehicle:

3. Manually operate the opening lever of the bonnet **E**.



Front bumper removal - installation

CS5002

Outside the vehicle:

4. Manually operate the strike **F** under the bonnet **G**.

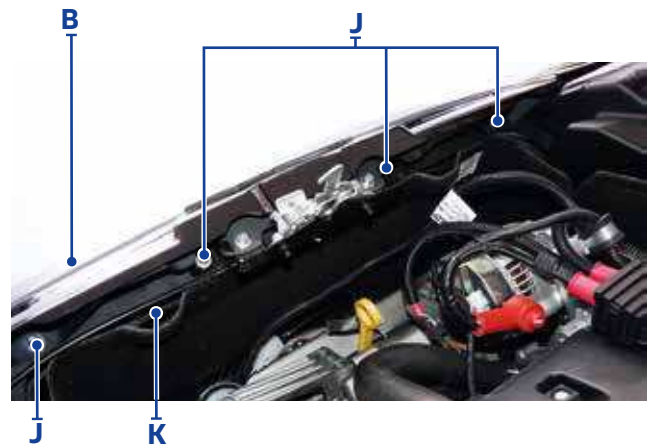


5. Once the bonnet is open, it is recommended to use the support rod **H**.

6. Remove the protective cover on the engine **I**.



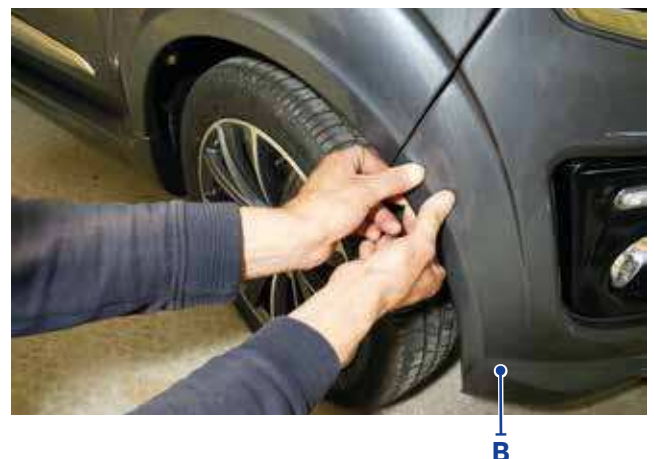
7. Remove the 4 screws **J** on the bumper **B** fitted on the upper cross-member **K**.



Outside the vehicle on the passenger and driver's side:

8. Place your hands on the bumper **B**.

9. Gently pull out and separate the bumper **B**.



RISK

It is not recommended to use tools to pull off the bumper.

A

Bodywork & Chassis

Front bumper removal - installation

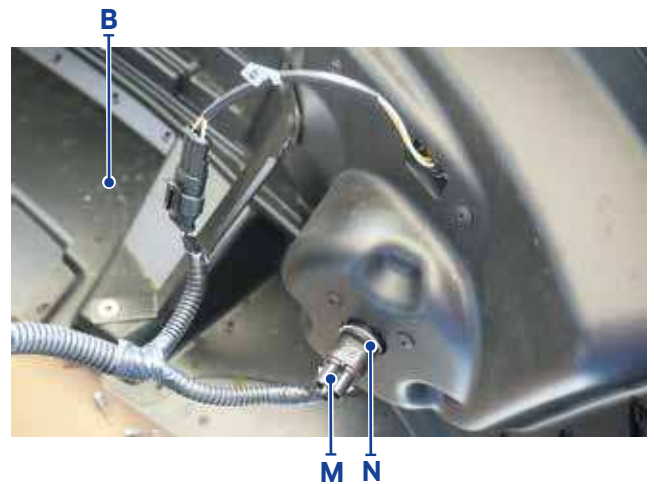
CS5002

A

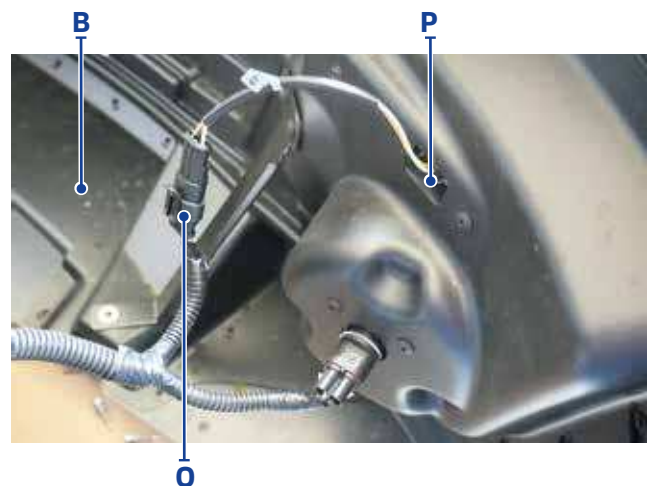
- 10. Remove the 2 plasti-rivets **K** fitted on the bumper **B**.
- 11. Partially separate the mudguard **L**.



- 12. On the bumper **B** disconnect the 2 connectors **M** on the 2 foglights **N**.



- 13. On the bumper **B** disconnect the 2 connectors **O** on the 2 daytime running lights **P**.
- 14. Remove the bumper **B**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

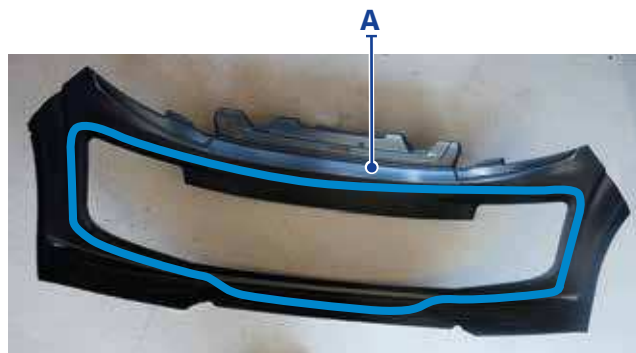
Special tools	Quantities	References
Compressor	1	-
Glue gun	1	-
Crimping pliers	1	-
PPE		
Gloves	1	-
Mask	1	-
Consumables / Ingredients		
Bodywork primer kit	1	-
Glue cartridges	1	-
Cloth	1	-
Heptane	1	-
Bumper sub-assembly	1	-
Driver's side foglight support sub-assembly	1	-
Passenger side foglight support sub-assembly	1	-

Preliminary procedures

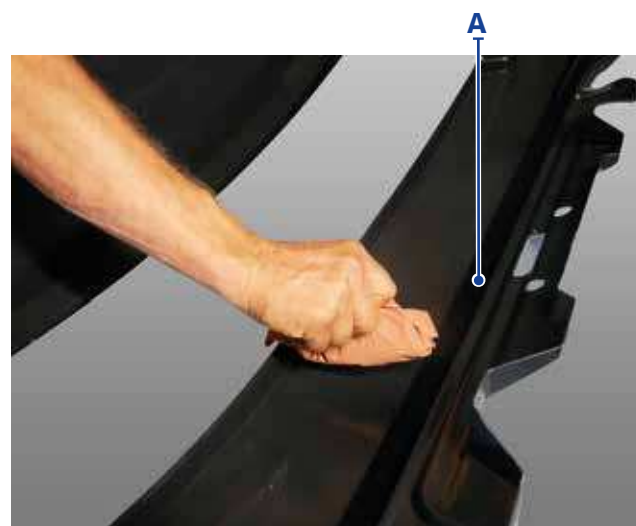
Operations	Procedure types	Pages
Front bumper	Removal	A-2

Assembly procedure

1. On the bumper **A**, area to be degreased for application of the bodywork primer.



2. On the bumper **A**, clean these areas with a clean cloth soaked with heptane and let it evaporate for 5 minutes (see point **1**).



Replacement front bumper

CS5004

A

3. Use the recommended bodywork primer kit B.



The use of a container is recommended to avoid losing the properties of the primer in the flask in contact with the sponge.



When applying the primer, take precautions to avoid runs on the visible parts of the bodywork.



RISK

It is mandatory to wear gloves.



B

4. Apply the bodywork primer B on the bumper A over the entire area (see step 1).



Drying time 20 minutes at 20 °C ambient temperature, to a maximum of 8 hours.



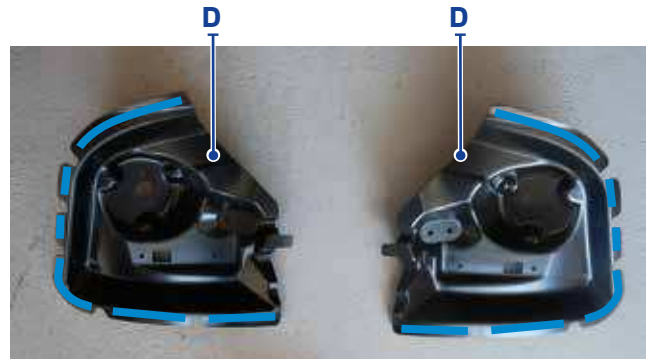
5. On the grille C, degrease the entire surface on both sides.



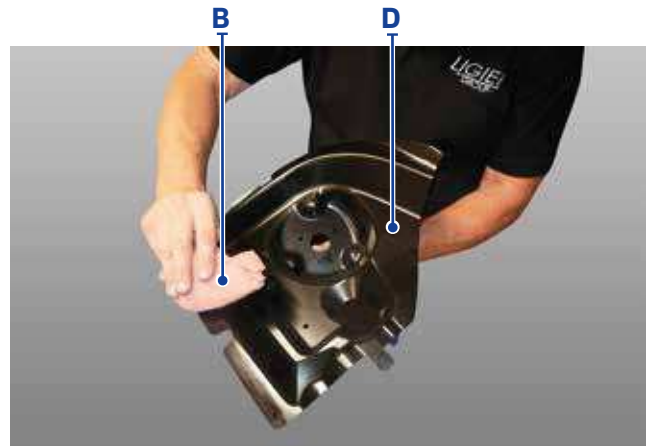
Replacement front bumper

CS5004

6. On the foglight supports **D**, area to be degreased for application of the bodywork primer.



7. On the foglight supports **D**, degrease over the entire areas (see step 6).



8. Apply the bodywork primer **B** on the foglight supports **D** over the entire areas (see step 6).



9. Preparation of the glue cartridges **E**.



When topping up the cartridges, check that the hardener and the glue proportions are identical.

Refer to the annex: Sikaaxson adhesives



A

Bodywork & Chassis

Replacement front bumper

CS5004

A

- 10.** Check that the glue and hardener mixture is uniform prior to application.
Use the recommended glue gun.



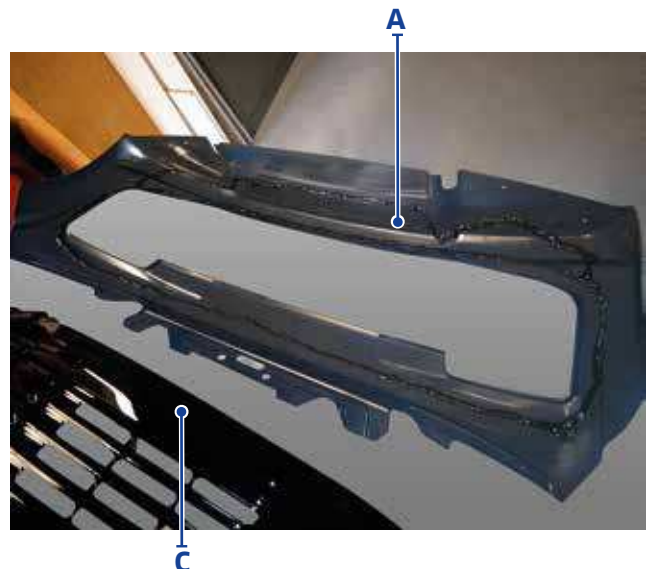
- 11.** Apply the glue **E** on the bumper **A** over the entire area (see step **1**).



The adhesive bead height must be ≥ 10 mm.



- 12.** Install the grille **C** on the bumper **A** and perform the required adjustments to make sure it is properly fitted.



Replacement front bumper

CS5004

On the passenger and driver side:

13. Apply the glue **E** on the foglight supports **D** over the entire area (see step **6**).

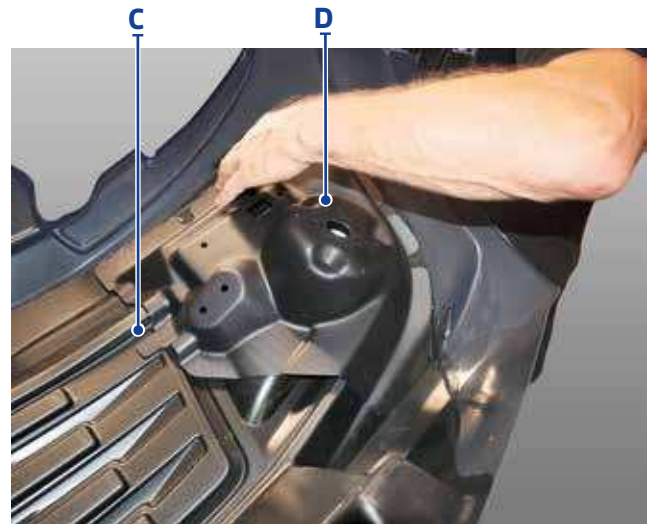


The adhesive bead height must be ≥ 10 mm.



On the passenger side:

14. Install the foglight support **D** on the grille **C** and perform the required adjustments to make sure it is properly positioned.



On the driver's side:

15. Install the foglight support **D** on the grille **C** and perform the required adjustments to make sure it is properly positioned.



Replacement front bumper

CS5004

A

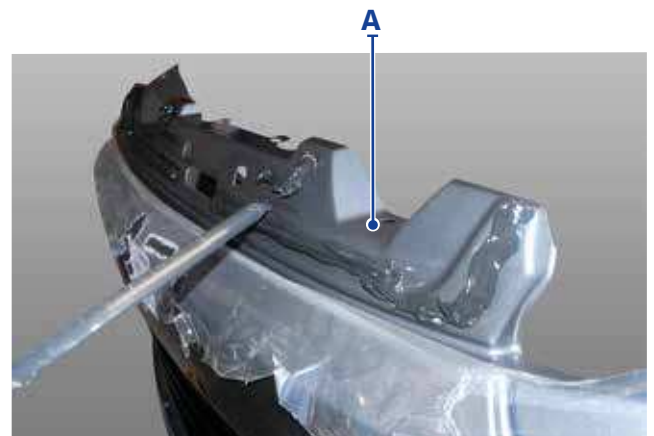
- 16.** On the upper part of the bumper **A**, areas for the application of the bodywork primer.



- 17.** Apply the glue **E** on the bumper **A** over the entire areas (see step **16**).



The adhesive bead height must be ≥ 10 mm.

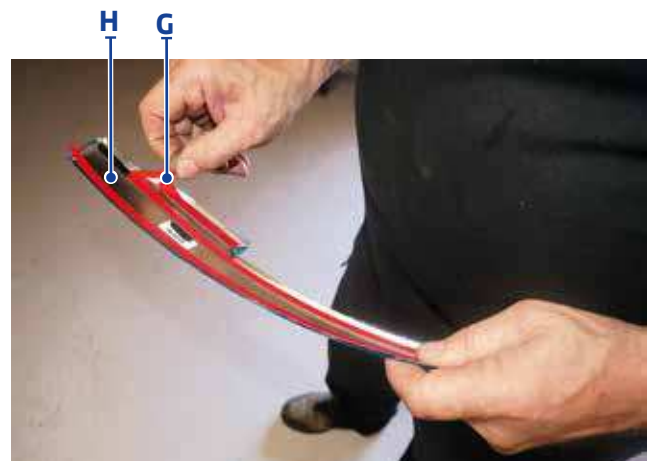


- 18.** Install the upper grille **F** on the bumper **A** and perform the required adjustments to make sure it is properly fitted.



On the driver and passenger side:

- 19.** Remove the adhesive protections **G** on the headlight trims **H**.

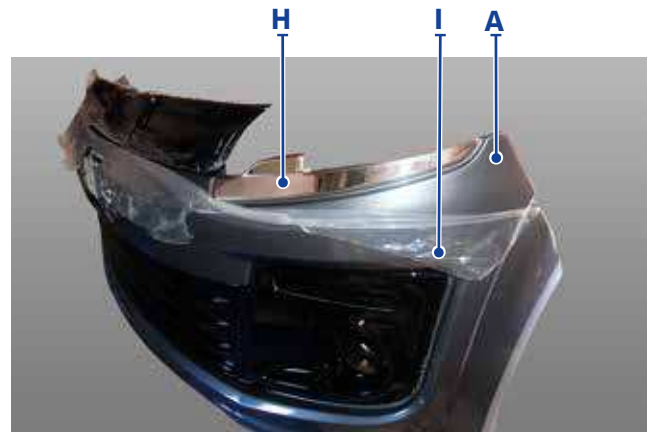


Replacement front bumper

CS5004

On the driver's side:

- 20.** Install the headlight trim **H** on the bumper **A** and perform the required adjustments to make sure it is properly fitted.
- 21.** Remove the plastic protection **I** on the bumper **A**.

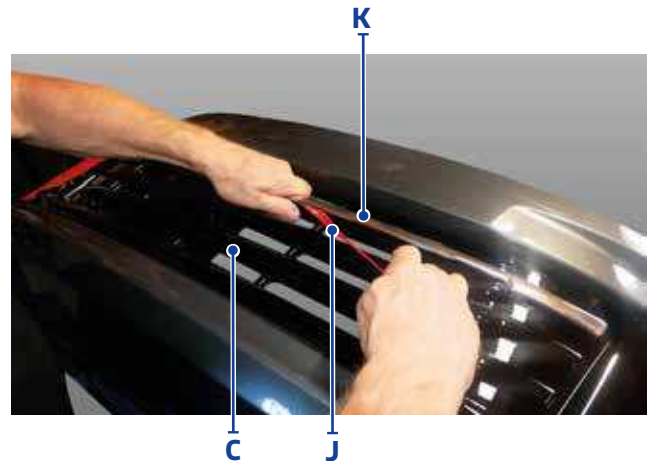


On the passenger side:

- 22.** Install the headlight trim **I** on the bumper **A** and perform the required adjustments to make sure it is properly fitted.



- 23.** Remove the adhesive protection **J** while installing the upper trim **K** on the grille **C**. Perform the required adjustments to make sure it is properly fitted.

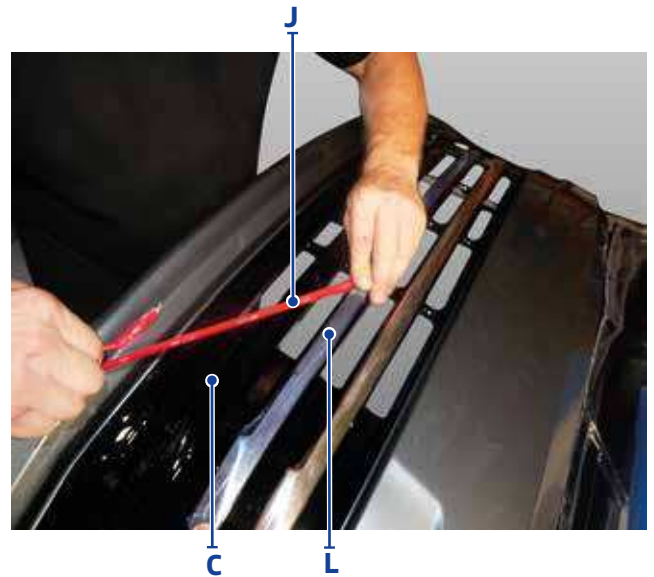


Replacement front bumper

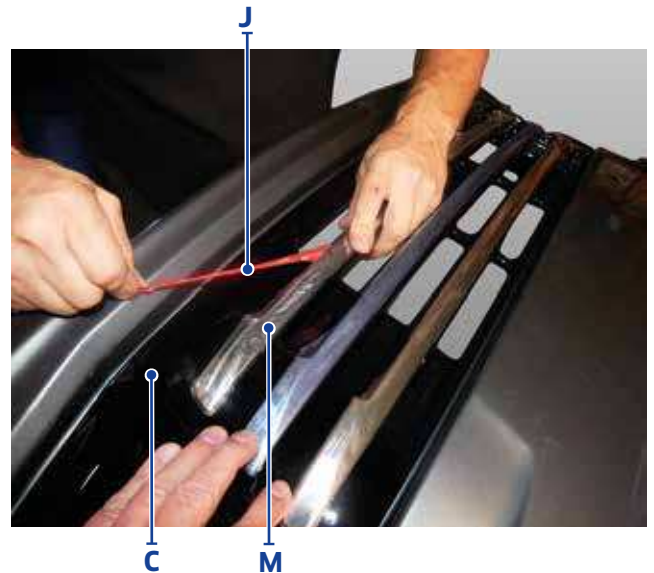
CS5004

A

- 24.** Remove the adhesive protection **J** while installing the intermediate trim **L** on the grille **C**.
Perform the required adjustments to make sure it is properly fitted.



- 25.** Remove the adhesive protection **J** while installing the lower trim **M** on the grille **C**.
Perform the required adjustments to make sure it is properly fitted.

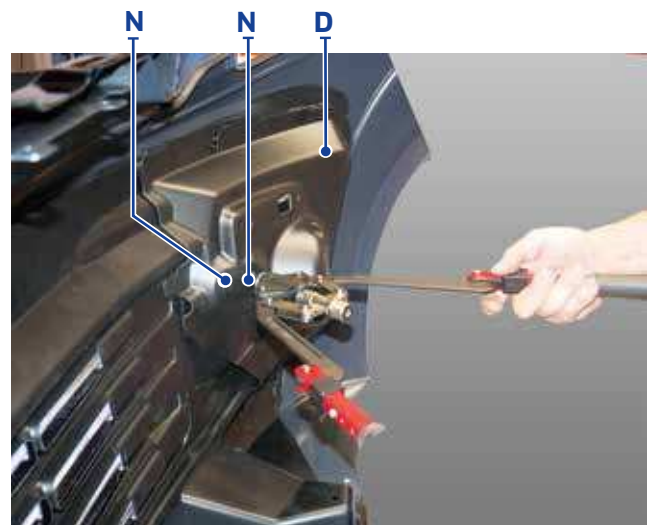


On the passenger side:

- 26.** Install the 2 inserts **N** on the foglight supports **D**.



Repeat this assembly on the driver's side.



Replacement front bumper

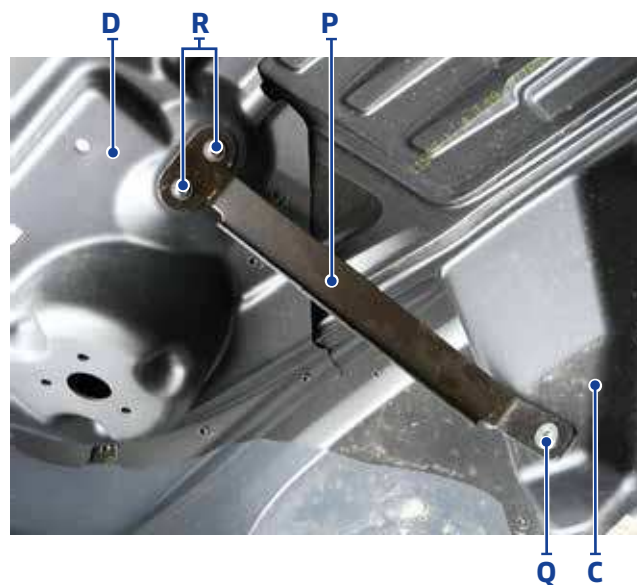
CS5004

On the passenger side:

- 27.** Install the lug **P** on the foglight support **D** and the grille **C**.
- 28.** Fit the lug **P** with an insert **Q** and 2 screws **R**.



Repeat this assembly on the driver's side.





Equipment required

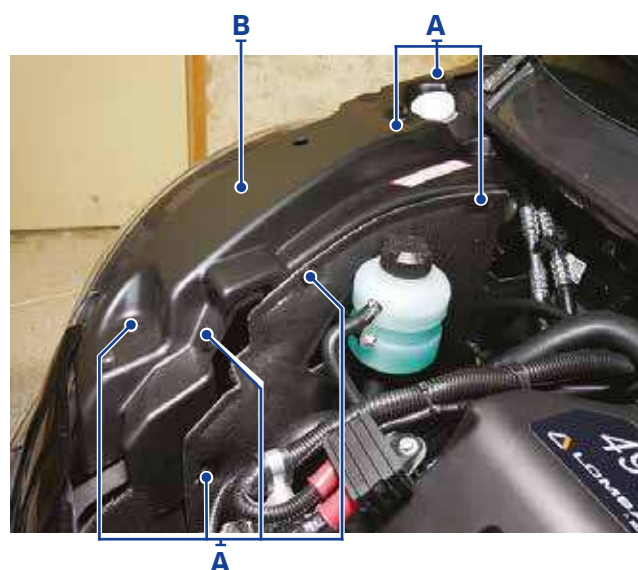
Special tools	Quantities	References
Compressor	1	-
Heat gun	1	-
Glue gun	1	-
PPE		
Gloves	1	-
Mask	1	-
Consumables / Ingredients		
Adhesive tape	1	-
Bodywork primer kit	1	-
Glue cartridges	2	-
Precision knife	1	-



This procedure is identical for the driver and passenger side

Removal procedure

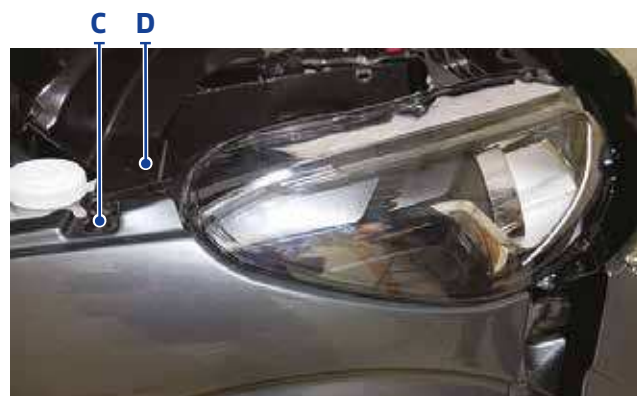
1. Remove the 7 plasti-rivets **A** from the wing inner panel **B** on the passenger side.
2. Remove the wing inner panel **B** on the passenger side.



Front wing

CS5007

- Remove the screw **C** fitted on the wing inner panel support **D**.



Identification of the areas on which the heat gun will be applied.

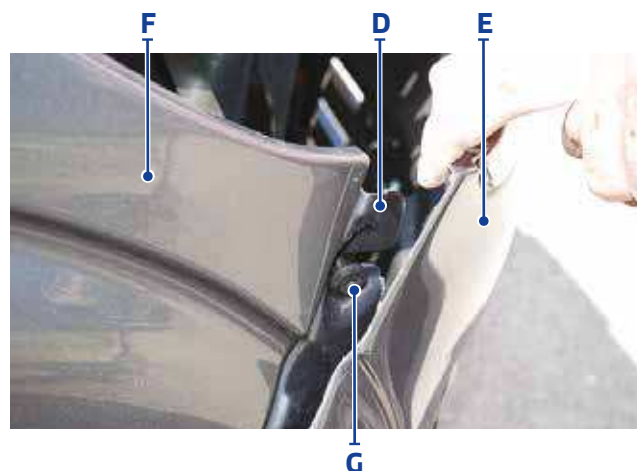


- Separate the bumper **E** from the front wing **F** and remove the screw **G** from the wing inner panel support **D**.



RISK

It is not recommended to use tools to partially separate the bumper.



- Separate the front wing **F** using a heat gun.



Do not damage the reflector **H** when separating the front wing **F**.



Front wing

CS5007

6. Remove the two "grifaxe" rings **I** securing the reflector on the front wing **F**.
7. Remove the reflector **H**.
8. Remove the front wing **F**.



Installation procedure

1. Remove the excess glue with a precision knife on the side panel **J**.



2. Use the recommended bodywork primer kit **K**.



The use of a container is recommended to avoid losing the properties of the primer in the flask in contact with the sponge.



When applying the primer, take precautions to avoid runs on the visible parts of the bodywork.



RISK
It is mandatory to wear gloves.



3. Remove the protective film on the front wing **F**.
4. Install the reflector **I** on the front wing **F**.



Front wing

CS5007

5. Apply the bodywork primer **K** on the inner part of the front wing **F** using the kit provided.



6. Apply the bodywork primer **K** on the side panel **J** using the kit provided.



7. Preparation of the glue cartridges **L**.



When topping up the cartridges, check that the hardener and the glue proportions are identical.

Refer to the annex: Sikaaxson adhesives



8. Check that the glue and hardener mixture is uniform prior to application. Use the recommended glue gun.



Front wing

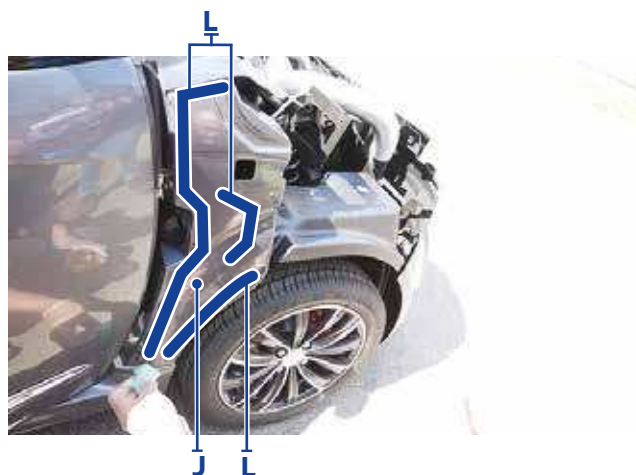
CS5007

9. Apply the glue **L** on the side panel **J**.



RISK

The adhesive bead height must be ≥ 10 mm.

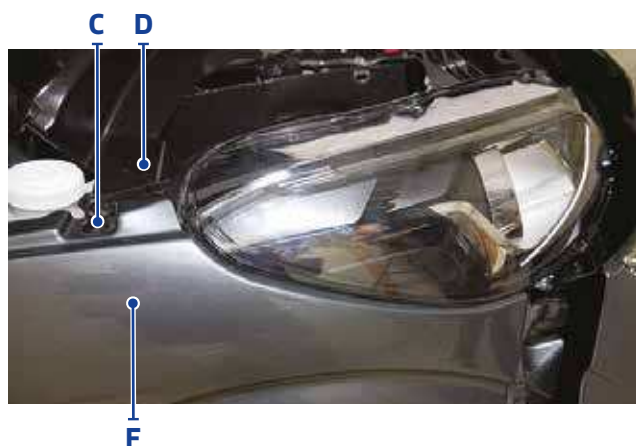


10. Install the new front wing **F** and perform the required adjustments to make sure it is properly positioned.



11. Hand tighten the screw **C** on the front wing **F** on the wing inner panel support **D**.

12. Apply adhesive tape during the drying time.



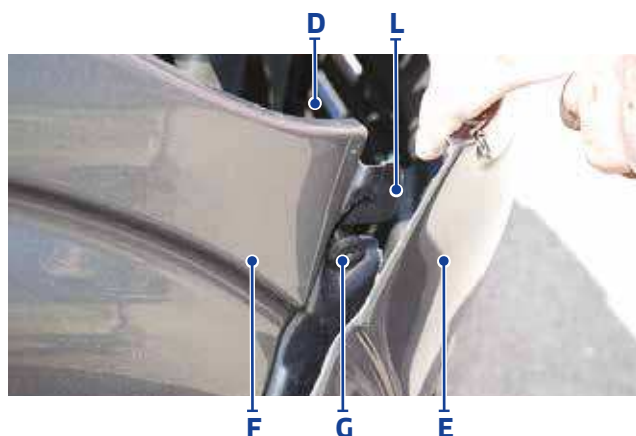
13. Tighten the screw **G** of the front wing **F** on the wing inner panel support **D**.

14. Apply the glue **L** on the front wing **F** to fit it to the bumper **E**.



RISK

The vehicle will remain immobilised for 48 hours before it can be used.





Equipment required

Special tools	Quantities	References
Allen key	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Possibility of a setting shim	1	-

Removal procedure

Inside the vehicle:

1. Manually operate the bonnet opening lever **A**.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**.



Bonnet

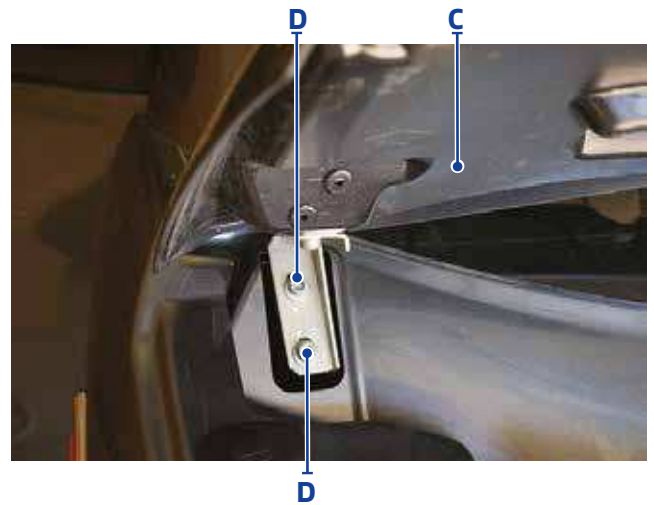
CM5000

A

3. Remove the 2 screws **D** from the bonnet **C** on the passenger side.



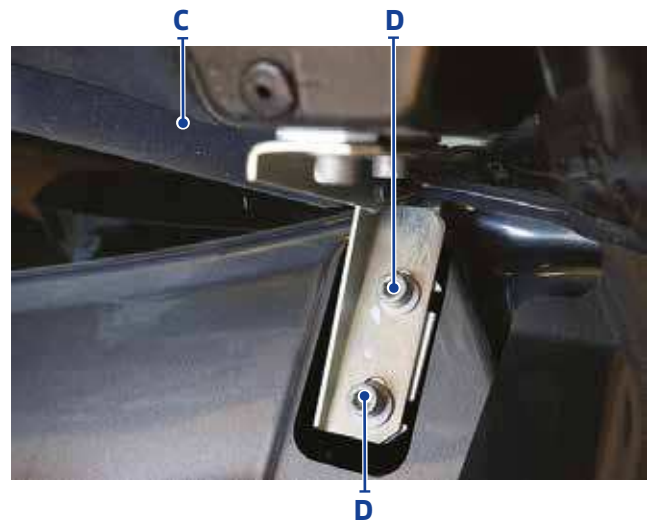
Check that there is a setting shim.
2 people are needed for this operation.



4. Remove the 2 screws **D** from the bonnet **C** on the driver's side.
5. Remove the bonnet **C**.



Check that there is a setting shim.
2 people are needed for this operation.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Philips screwdriver	1	-
PPE		
Gloves	1	-

Removal procedure

Inside the vehicle:

1. Manually operate the bonnet opening lever **A**.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**.



3. Bonnet open, it is recommended to use support rod **D**.
4. Remove the protective cover on the engine **E**.

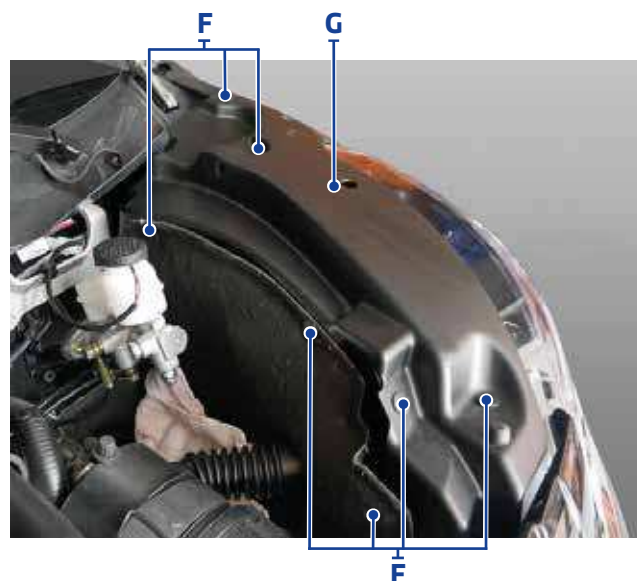


Bonnet opening control

CM5003

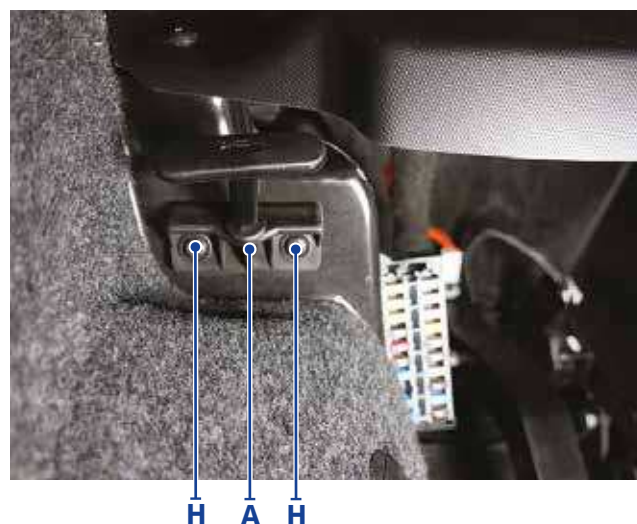
A

5. Remove the 7 plasti-rivets **F** from the wing inner panel **G** on the driver's side.



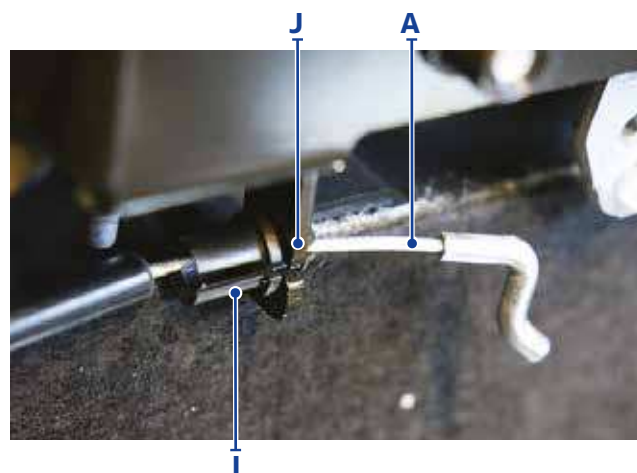
Inside the vehicle:

6. Remove the 2 screws **H** from the bonnet opening control **A**.



Outside the vehicle:

7. Locate the cable guide **I** under the bonnet lock **J**.
8. Turn the cable guide **I** to align the grooves with those of the bonnet lock **J**.
9. Pull out the bonnet opening control **A**.
10. Remove the bonnet opening control **A**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Allen key	1	-
PPE		
Gloves	1	-

Removal procedure

Inside the vehicle:

1. Manually operate the bonnet opening lever **A**.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**.



Bonnet lock

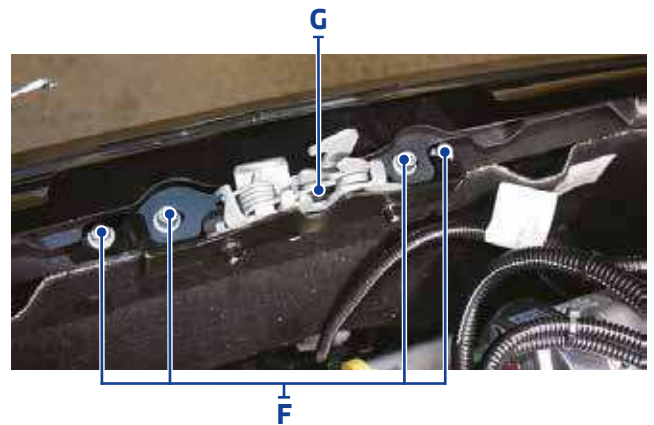
CM5011

A

3. Bonnet open, it is recommended to use support rod **D**.
4. Remove the protective cover on the engine **E**.



5. Remove the 4 screws **F** from the bonnet lock **G**.
6. Remove the bonnet lock **G**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Engine support mount on the driver's side

CA5009



Equipment required

Special tools	Quantities	References
Size 19 hex socket	1	-
Allen key	1	-
2-post lift	1	-
Workshop crane	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Thread-locking fluid	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Bonnet	Removal / Installation	A-19
Front bumper	Removal / Installation	A-2
Headlight	Removal / Installation	E-42
Front shock absorber	Partial removal	G-24



Make a mark on the support mount and the engine cradle. This will make it easier to position the support mount during the installation if the support mount is not replaced.



Removal procedure

Outside the vehicle on the driver's side:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.

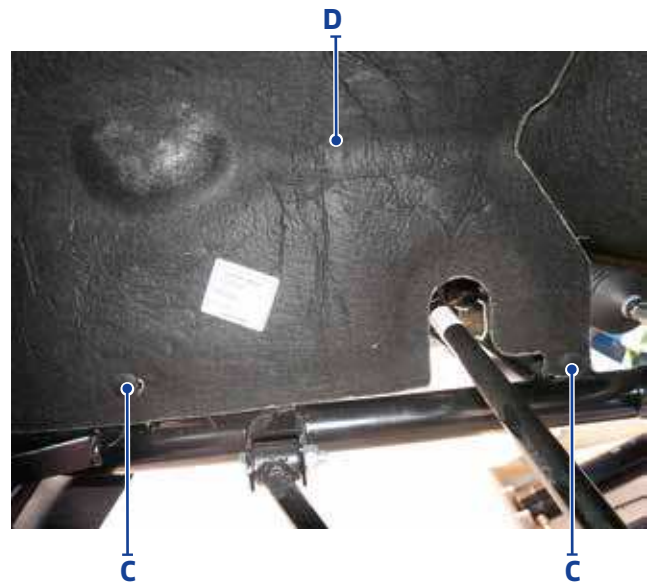


Engine support mount on the driver's side

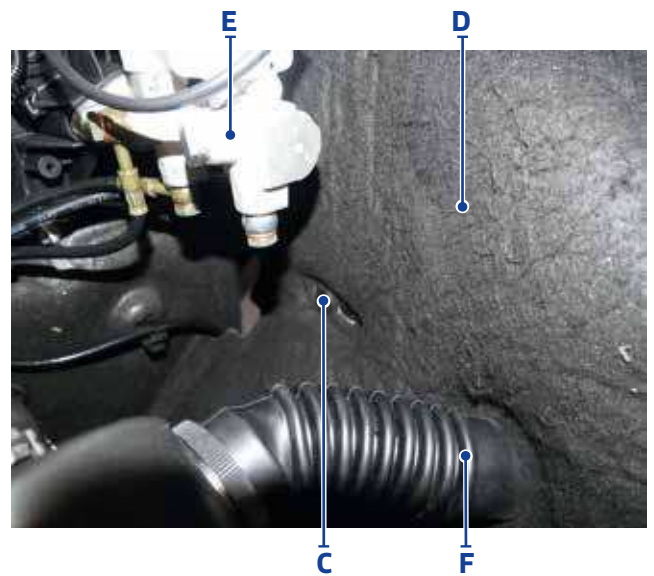
CA5009

A

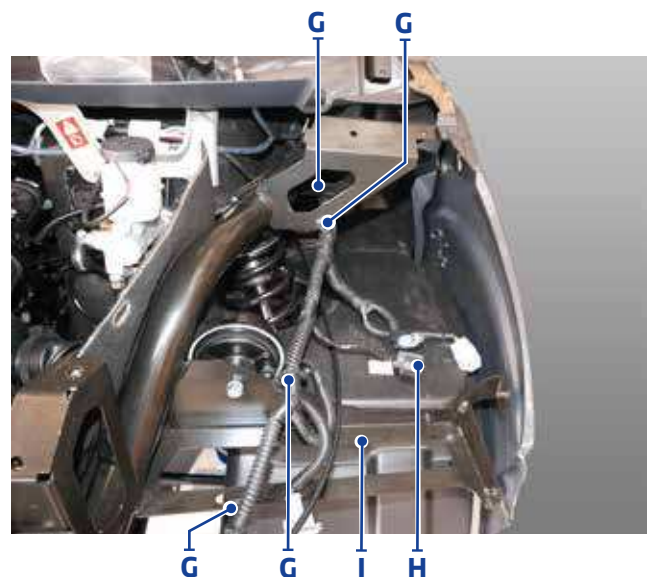
3. Remove the 2 plasti-rivets **C** from the edge guard **D**.



4. Remove the plasti-rivet **C** located beneath the master cylinder **E**.
5. Pull out the air inlet **F**.
6. Remove the edge guard **D**.



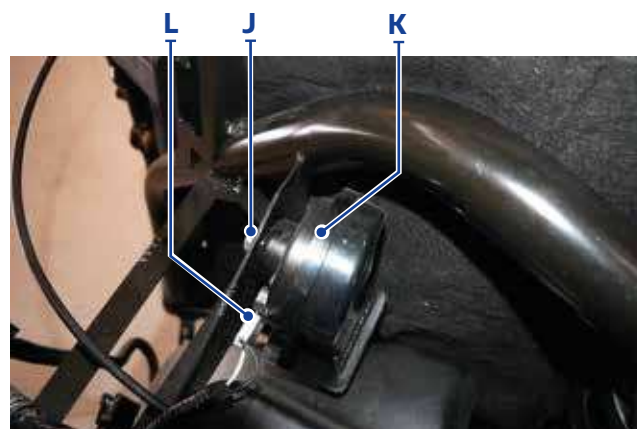
7. Remove the 4 clips **G** securing the body harness **H** on the engine support mount **I**.
8. Partially remove the body harness **H** on the windscreen.



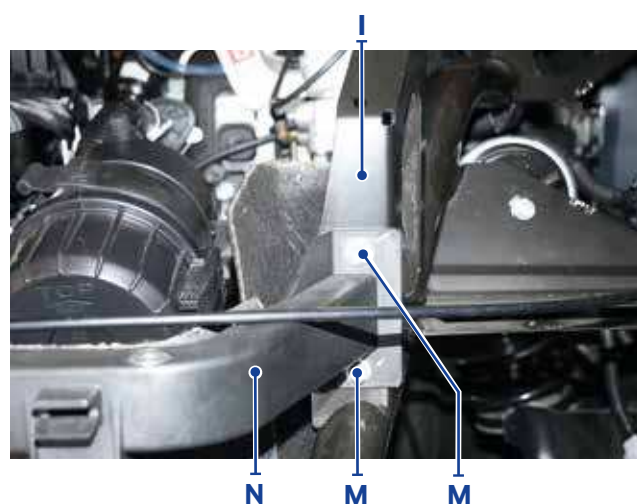
Engine support mount on the driver's side

CA5009

- 9. Remove the screw **J** from the warning buzzer **K**.
- 10. Disconnect the connector **L** from the warning buzzer **K**.
- 11. Remove the warning buzzer **K**.



- 12. Remove the 2 screws **M** on the upper cross-member **N** mounted on the engine support mount **I**.



- 13. Secure the final removal of the engine support mount.



RISK

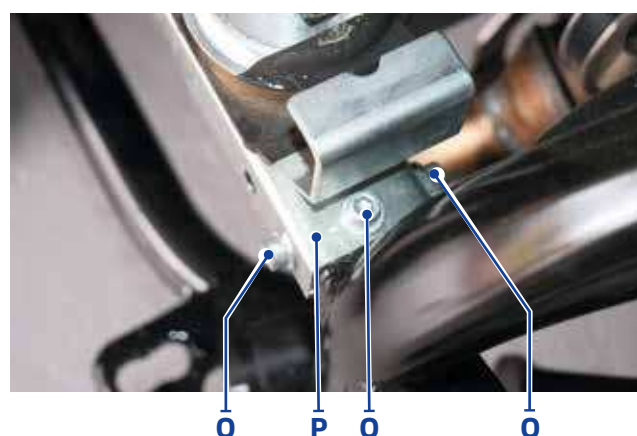
Lift the powertrain, using a workshop crane.



Refer to the DCI engine procedure to view the workshop crane anchoring points on the powertrain.



- 14. Remove the 3 screws **O** on the lower cross-member **P** on the passenger side.



Engine support mount on the driver's side

CA5009

Inside the vehicle:

15. With the door open, remove the screw **Q** on the door check **R**.



This step is recommended to make it easier to access the screw fastening the engine support mount to the chassis.



R **Q**

16. Remove the screw **S** securing the engine support mount on the chassis.



S

17. Remove the screw **T** securing the engine mount **X** on the engine support mount **I** on the driver's side.

18. Remove the engine support mount **I** on the driver's side.



I **T**
U

Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Screw **S**: tightening torque 100 Nm.



RISK

Screw **Q**: tightening torque 9.5 Nm.



RISK

Screw **T**: tightening torque 50 Nm.



Engine support mount on the passenger side

CA5008



Equipment required

Special tools	Quantities	References
Size 19 hex socket	1	-
Allen key	1	-
2-post lift	1	-
Workshop crane	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Thread-locking fluid	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Bonnet	Removal / Installation	A-19
Front bumper	Removal / Installation	A-2
Headlight	Removal / Installation	E-42
Windscreen washer reservoir	Partial removal	E-23
Front shock absorber	Partial removal	G-24



Make a mark on the support mount and the engine cradle. This will make it easier to position the support mount during the installation operation if the support mount is not replaced.



Removal procedure

Outside the vehicle on the passenger side:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



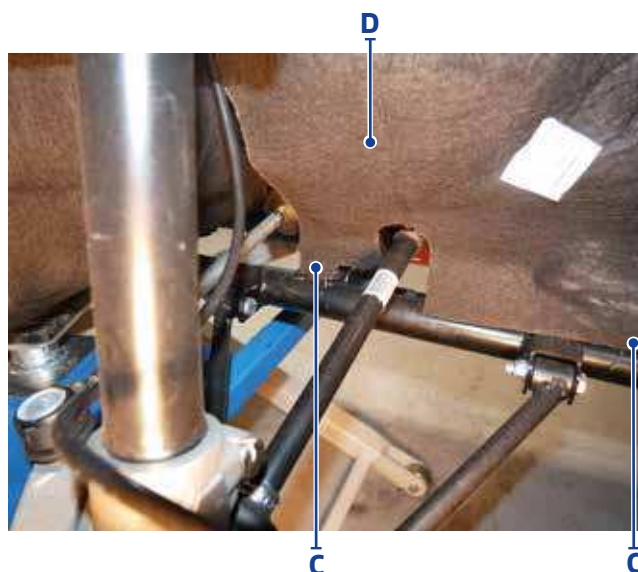
A

Bodywork & Chassis

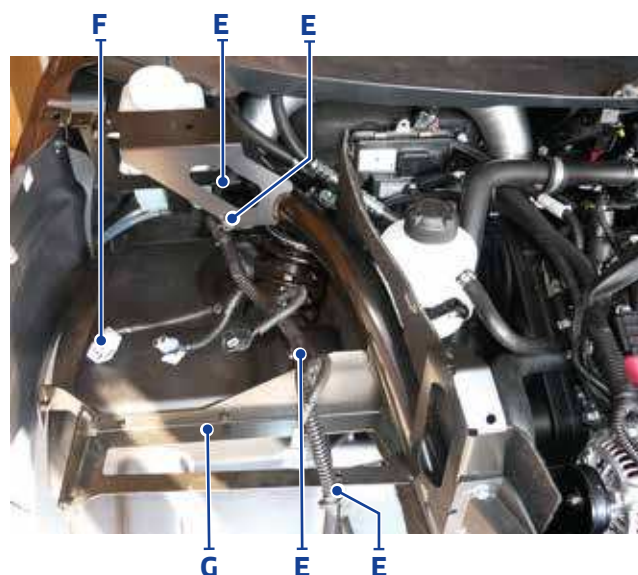
Engine support mount on the passenger side

CA5008

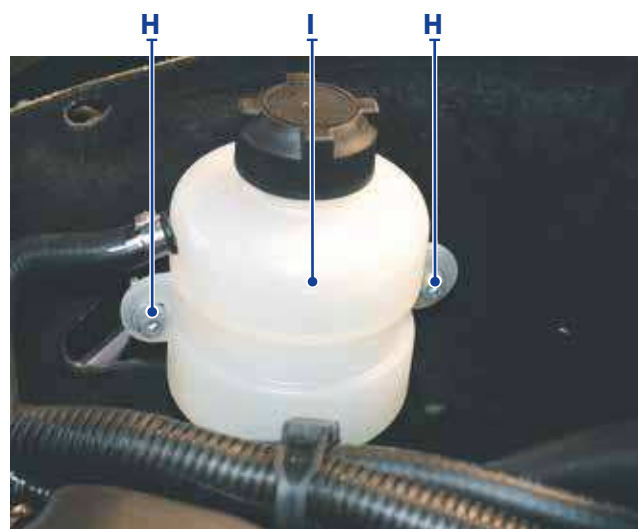
- 3.** Remove the 2 plasti-rivets **C** from the edge guard **D**.



- 4.** Remove the 4 clips **E** securing the body harness **F** on the engine support mount **G**.
5. Partially remove the body harness **F** on the windscreen.



- 6.** Remove the 2 screws **H** from the coolant tank **I**.
7. Partially remove the coolant tank **I**.



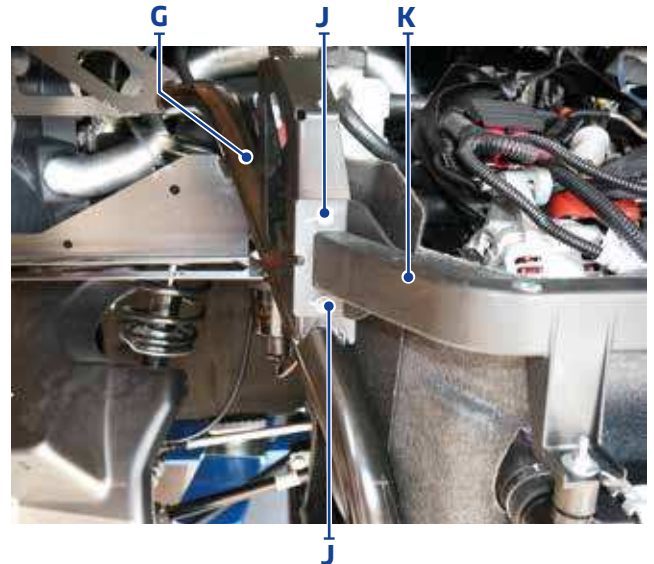
Engine support mount on the passenger side

CA5008

- 8. Remove the plasti-rivet **C** on the edge guard **D**.
- 9. Partially remove the edge guard **D**.



- 10. Remove the 2 screws **J** on the upper cross-member **K** mounted on the engine support mount **G**.



- 11. Secure the final removal of the engine support mount.



RISK

Lift the powertrain using a workshop crane.



Refer to the DCI engine procedure to view the workshop crane anchoring points on the powertrain.



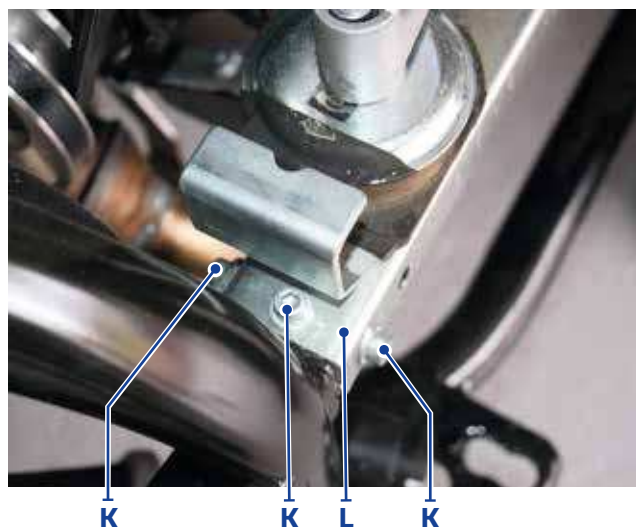
A

Bodywork & Chassis

Engine support mount on the passenger side

CA5008

- 12.** Remove the 3 screws **K** on the lower cross-member **L** on the passenger side.



Inside the vehicle:

- 13.** With the door open, remove the screw **M** on the door check **N**.



This step is recommended to make it easier to access the screw fastening the engine support mount to the chassis.



- 14.** Remove the screw **O** securing the engine support mount on the chassis.

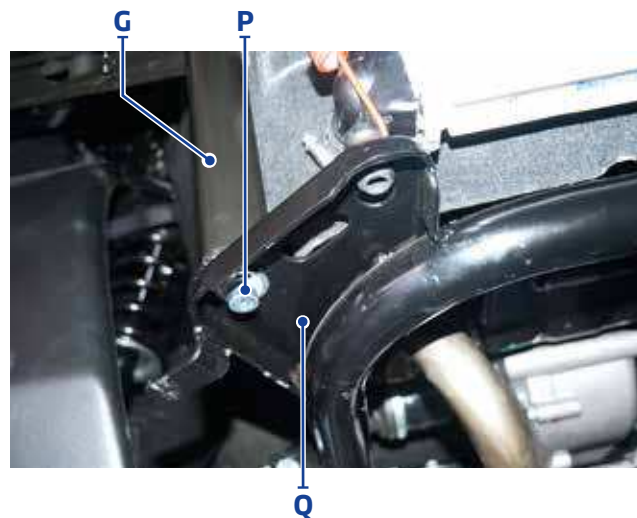


Engine support mount on the passenger side

CA5008

Outside the vehicle:

15. Remove the screw **P** securing the engine mount **Q** on the engine support mount **G** on the passenger side.
16. Remove the engine support mount **G** on the passenger side.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Screw **O**: tightening torque 100 Nm.



RISK

Screw **M**: tightening torque 9.5 Nm.



RISK

Screw **P**: tightening torque 50 Nm.



Equipment required

Special tools	Quantities	References
Size 19 hex socket	1	-
Size 17 wrench	1	-
Allen key	1	-
2-post lift	1	-
Workshop crane	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Thread-locking fluid	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Front bumper	Removal / Installation	A-2

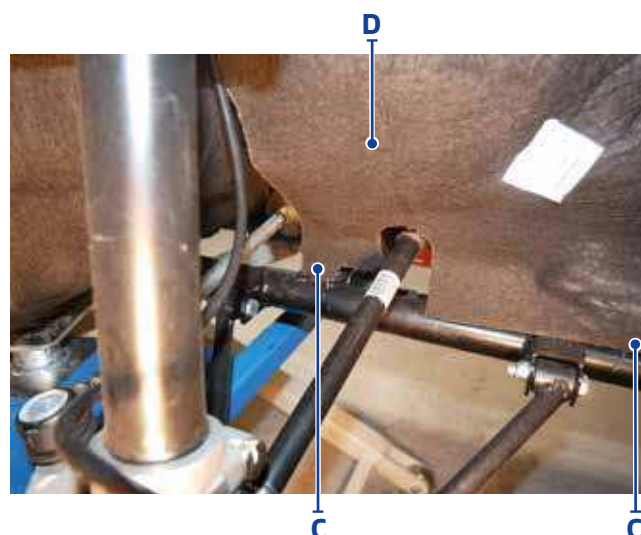
Removal procedure

Outside the vehicle on the driver's side and the passenger side:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



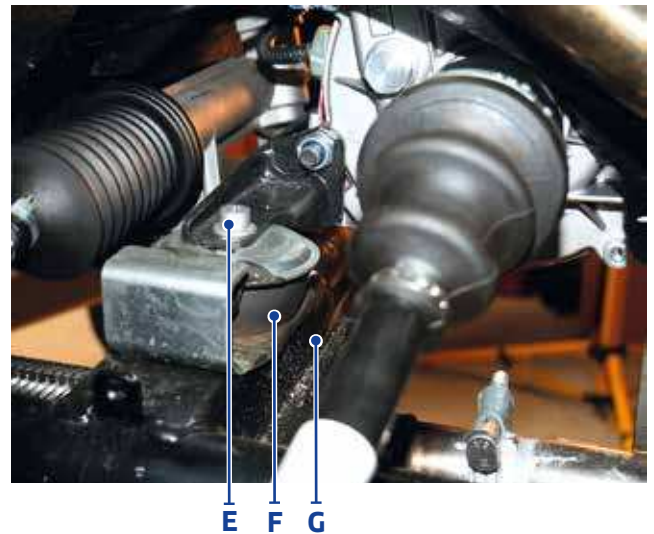
3. Remove the 2 plasti-rivets **C** from the edge guard **D**.
4. Remove the edge guard **D**.



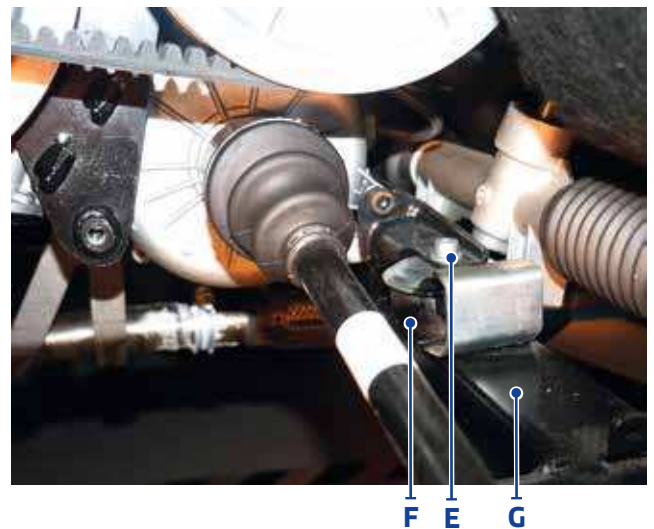
Engine mount

CA5005

5. On the passenger side, remove the screw **E** securing the rubber mounting **F** on the engine mount **G**.



6. On the driver's side, remove the screw **E** securing the rubber mounting **F** on the engine mount **G**.



Under the vehicle on the driver's side and the passenger side:

7. Remove the two screws **H** on the engine mount **G**.



A

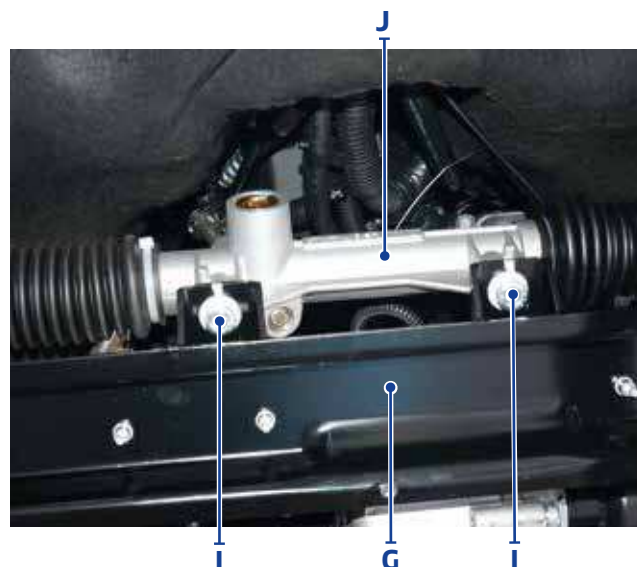
Bodywork & Chassis

Engine mount

CA5005

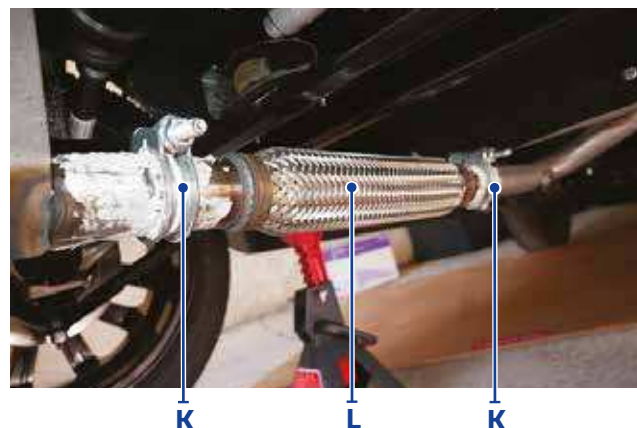
Under the vehicle:

- 8.** Remove the 2 screws **I** securing the rack **J** on the engine mount **G**.



- 9.** Remove the 2 clamps **K** from the exhaust hose **L**.

- 10.** Remove the exhaust hose **L**.



Outside the vehicle:

- 11.** Secure the final removal of the engine mount.



RISK

Lift the engine **M** using a workshop crane.



Refer to the DCI engine procedure to view the workshop crane anchoring points on the powertrain.

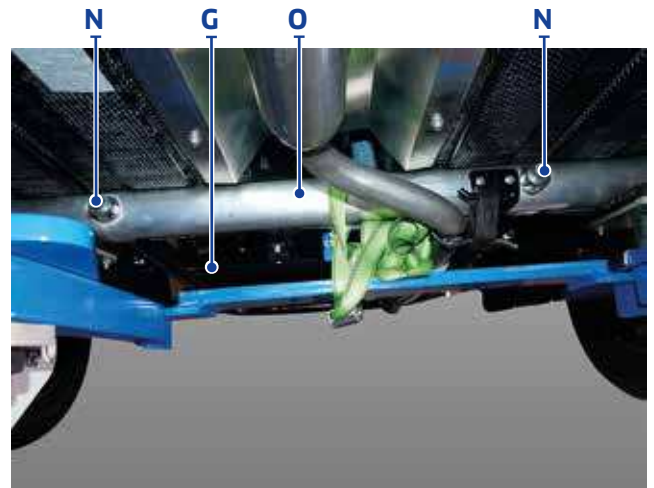


Engine mount

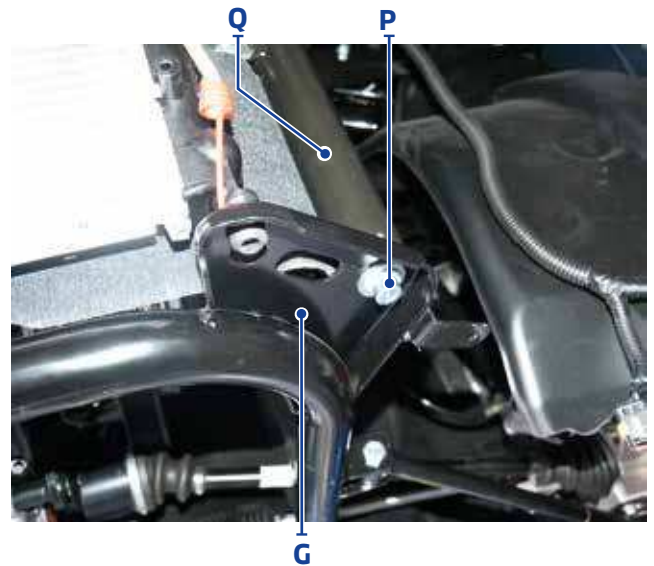
CA5005

Under the vehicle:

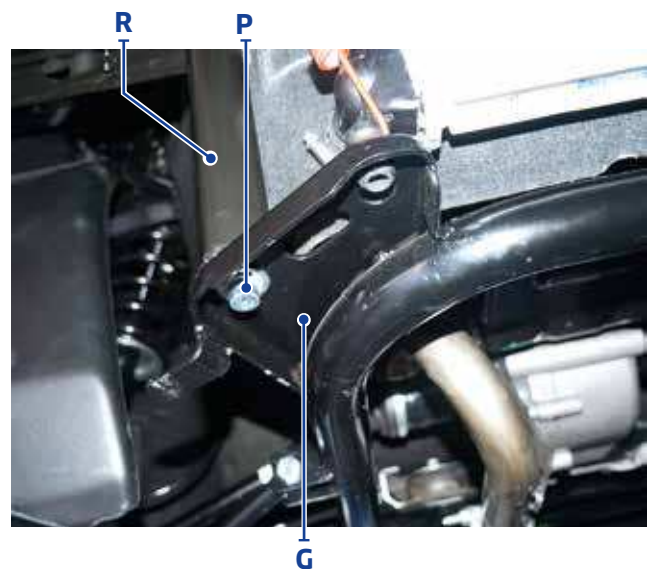
- 12.** Remove the 2 screws **N** securing the rear part of the engine support mount **G** on the side sill **O**.



- 13.** Remove the screw **P** securing the engine mount **G** on the engine support mount **Q** on the driver's side.



- 14.** Remove the screw **P** securing the engine mount **G** on the engine support mount **R** on the passenger side.
15. Remove the engine mount **G**.



Engine mount

CA5005

Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Screw **N**: tightening torque 116 Nm.



RISK

Screw **H**: tightening torque 46 Nm.



RISK

Screw **P**: tightening torque 116 Nm.



RISK

Screw **I**: tightening torque 45 Nm.



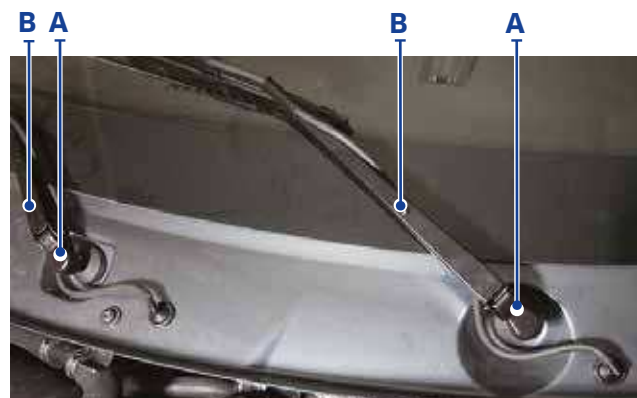
Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
Windscreen wiper arm extractor	1	-

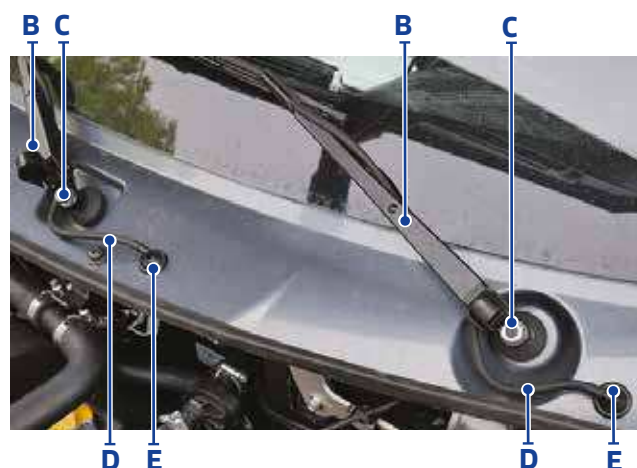
Removal procedure

Outside the vehicle:

1. Lift the two nut covers **A** on the windscreen wiper arms **B**.



2. Remove the nuts **C** from the windscreen wiper arms **B**.
3. Unclip the hoses **D** from the nozzles **E**.
4. Remove the windscreen wiper arm **B**.



Installation

To install, perform the removal operations in the reverse order.

1. Comply with the dimensions indicated on the photo measured from the windscreen washer nozzles to the edge of the windscreen.



During the installation, respect the tightening torques indicated on [page 9](#).





Equipment required

Special tools	Quantities	References
Compressor	1	-
Heat gun	1	-
Pneumatic cutter	1	-
Glue gun	1	-
Electric drill	1	-
PPE		
Gloves	1	-
Mask	1	-
Consumables / Ingredients		
Adhesive tape	1	-
Bodywork primer kit	1	-
Glue cartridges	2	-
Precision knife	1	-

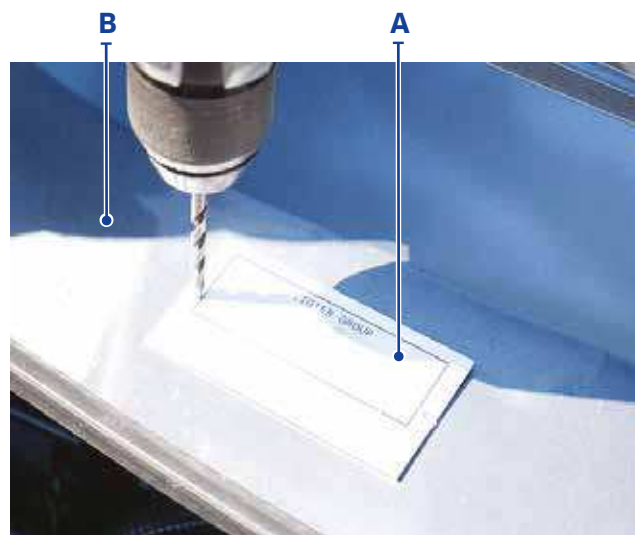
Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Windscreen	Removal / Installation	B-2
Roof panel fabric	Removal / Installation	C-19
Front wings	Removal / Installation	A-14
Door seal	Removal / Installation	A-52
Bonnet	Removal / Installation	A-19

Removal procedure

Outside the vehicle on the windscreen scuttle panel:

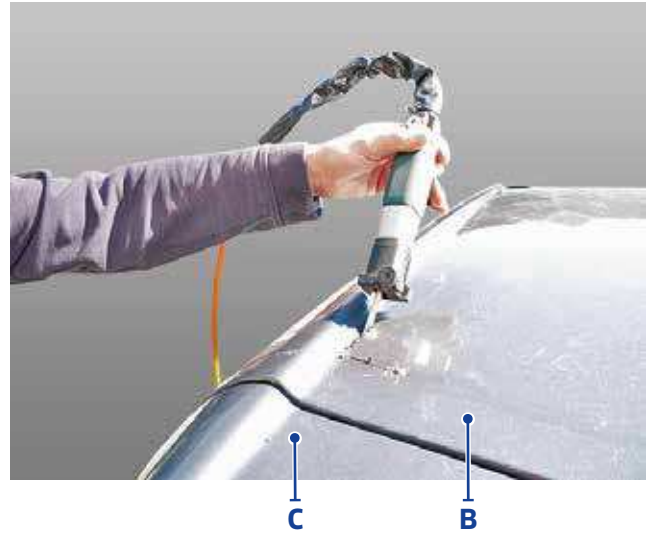
1. Remove the manufacturer's plate **A** fitted on the windscreen scuttle panel **B**, using a drill.



Roof panel

CS5014

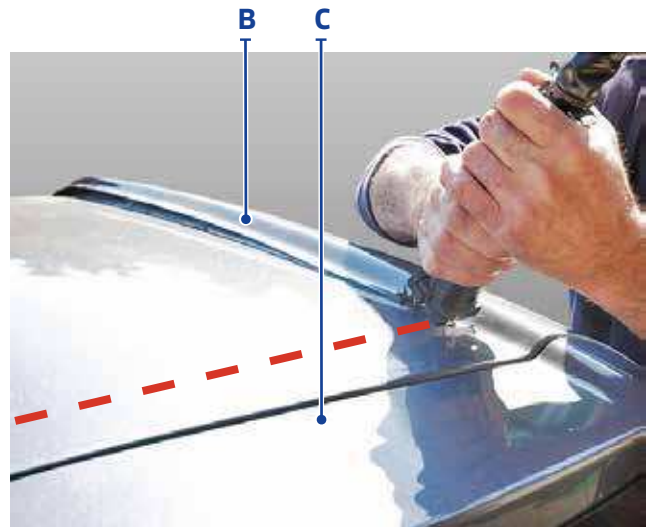
2. On the driver's side, use the pneumatic cutter, to cut out the roof panel **B** from the tailgate **C** towards the front part of the vehicle.



3. On the passenger side, start from the front part of the vehicle; cut out the roof panel **B** and stop cutting just before the tailgate **C**.



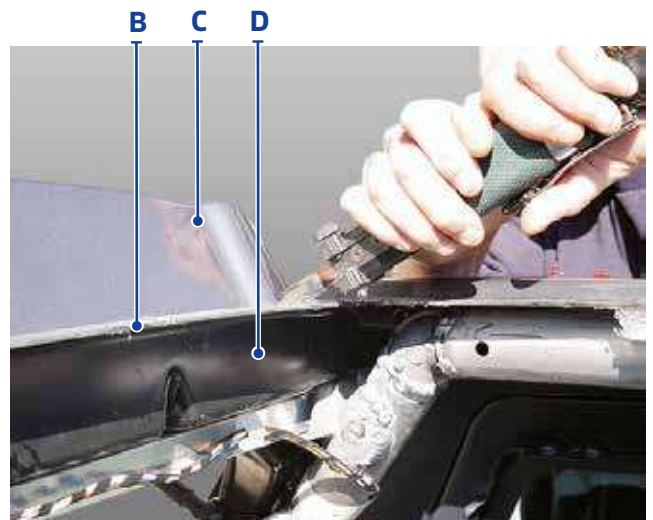
Continue along the red dotted line. At the other end, the central part of the roof panel is removed.



4. Cut out the roof panel **B** beside the tailgate **C** and make sure not to damage the body **D**.



Operation to be carried out on the driver and the passenger side.



Roof panel

CS5014

Outside the vehicle:



Identification of the areas on which the heat gun will be applied.



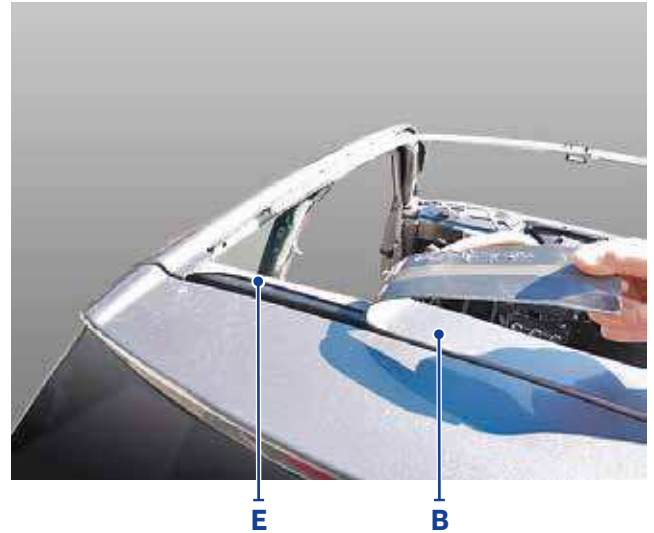
5. Use the heat gun on the part of the roof panel **B** near the tailgate **C**.



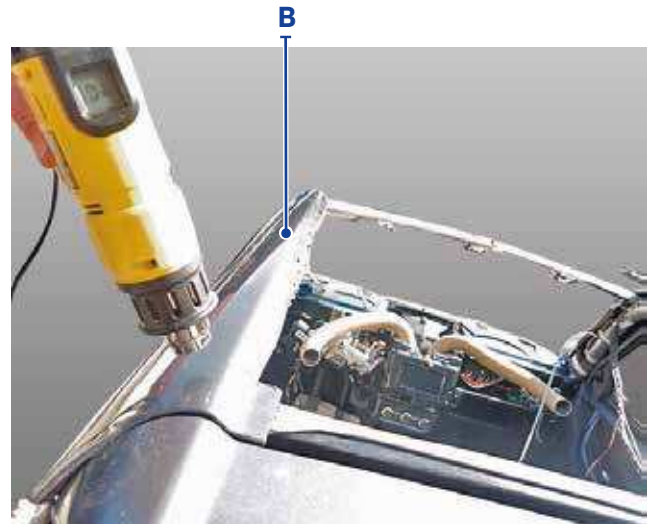
Roof panel

CS5014

6. Once the glue **E** becomes soft, manually pull out the small strip of the roof panel **B**.

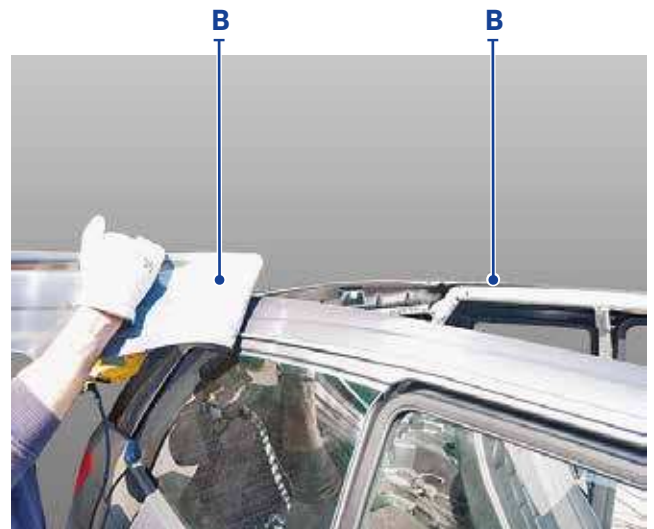


7. Use the heat gun on both side strips of the roof panel **B**.



8. Once the glue becomes soft, manually pull out the two strips of the roof panel **B** on the driver and passenger side.

9. Remove the roof panel **B**.



A

Bodywork & Chassis

Roof panel

CS5014

Installation procedure

1. Use the recommended bodywork primer kit **F**.



The use of a container is recommended to avoid losing the properties of the primer in the flask in contact with the sponge.



When applying the primer, take precautions to avoid runs on the visible parts of the bodywork.



F

2. Apply the bodywork primer kit **F** on the side panels **G**, on the driver and the passenger side.



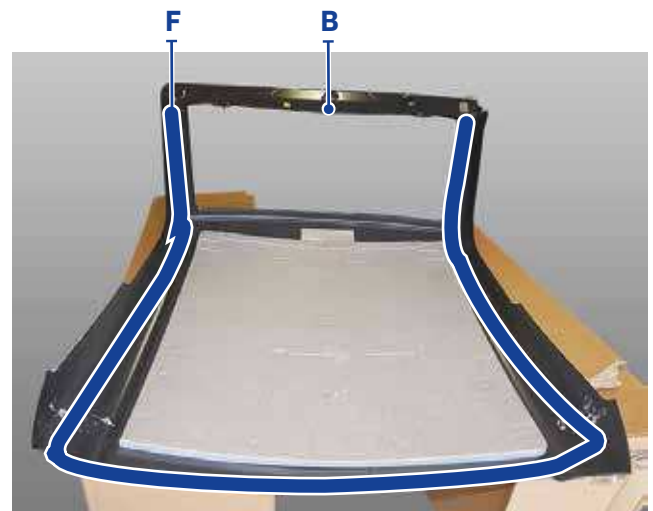
ABS primer drying time:
20 minutes at 20 °C ambient temperature,
to a maximum of 8 hours.



3. Apply the bodywork primer **K** on the new roof panel **B** using the kit provided.

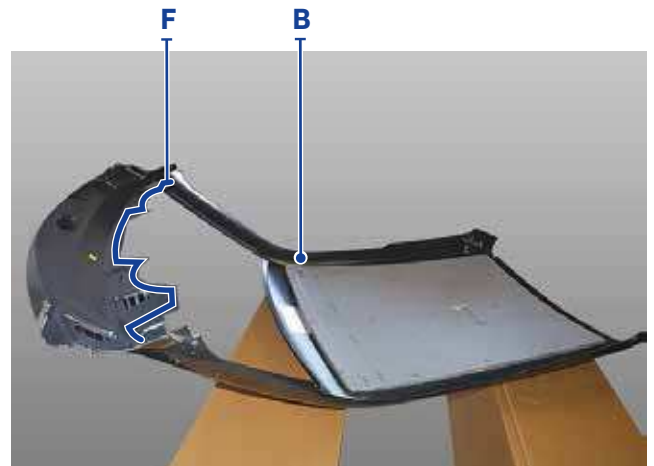


Identification of the areas on which the primer will be applied.



Roof panel

CS5014

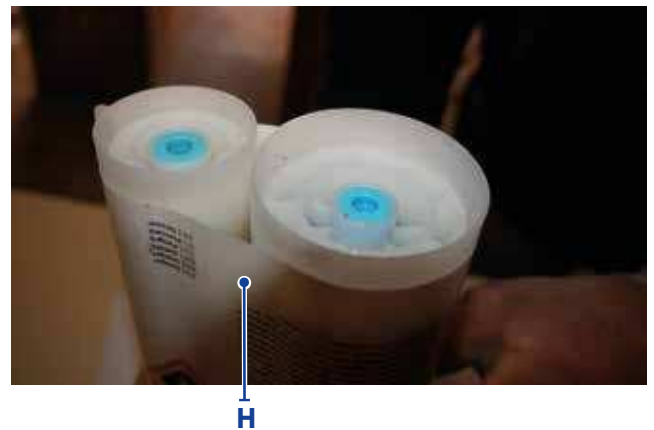


4. Preparation of the glue cartridges **H**.



When topping up the cartridges, check that the hardener and the glue proportions are identical.

Refer to the annex: Sikaaxson adhesives



5. Check that the glue **H** and hardener mixture is uniform. Use the recommended glue gun.



Roof panel

CS5014

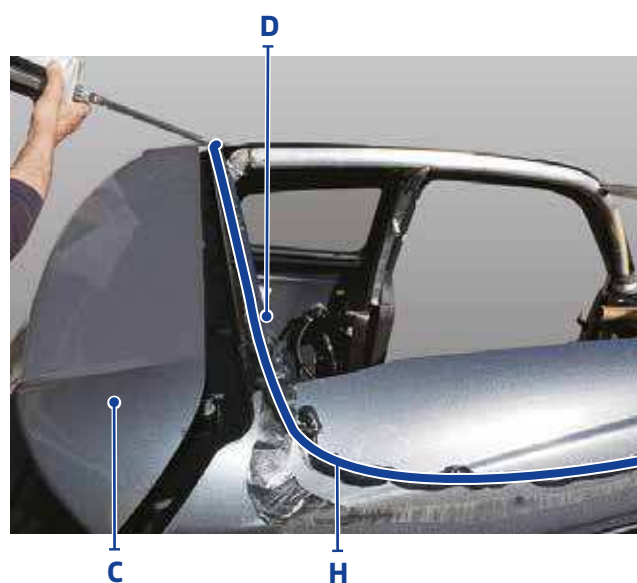
- 6.** Apply the glue **H** on the side panels **G** using the recommended glue gun.



The adhesive bead height must be ≥ 10 mm.



- 7.** Apply the glue **H** on the body part **D** near the tailgate **C** using the recommended glue gun.



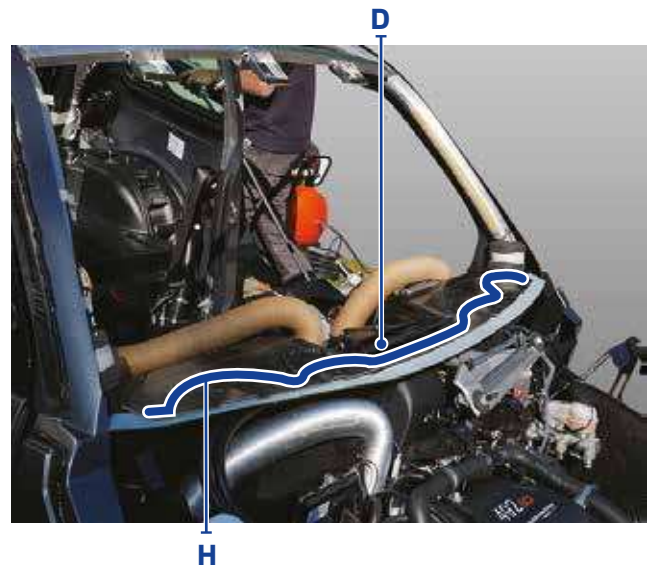
- 8.** Apply the glue **H** on the side panels **G** using the recommended glue gun.



Roof panel

CS5014

9. Apply the glue **H** on the body part **D** using the recommended glue gun.



10. Position the new roof panel **B** and perform the required adjustments to make sure it is properly fitted on the side panels **G**.



The windscreen wiper arm and bonnet hinge attachments can be used as references to correctly position the roof panel.



11. Position the new roof panel **B** and perform the required adjustments to make sure it is properly fitted with respect to the tailgate **C**.



Nominal clearance between the tailgate spoiler and the roof panel = 5 mm (-0.5 mm/+2.5 mm).



Check that the tailgate opens properly before the roof panel glue is completely dry.



A

Bodywork & Chassis

Roof panel

CS5014

A

- 12.** Installation of the screws **I** of the windscreen scuttle panel on the roof panel **B** to optimise the glue setting.

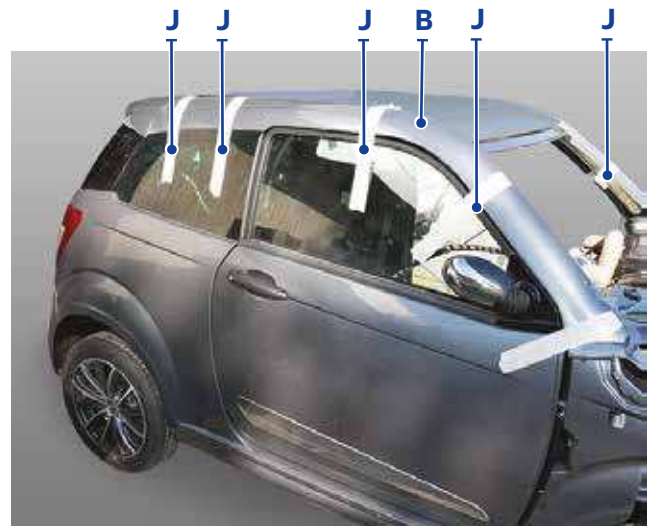


- 13.** Fit the adhesive tape strips **J**, on the passenger side and the driver side, to hold the roof panel **B** in position until the glue is completely dry.



RISK

The vehicle will remain immobilised for 48 hours before it can be used.





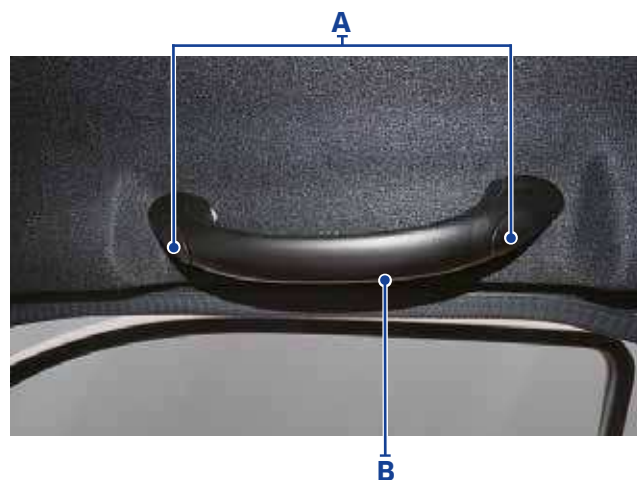
Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-

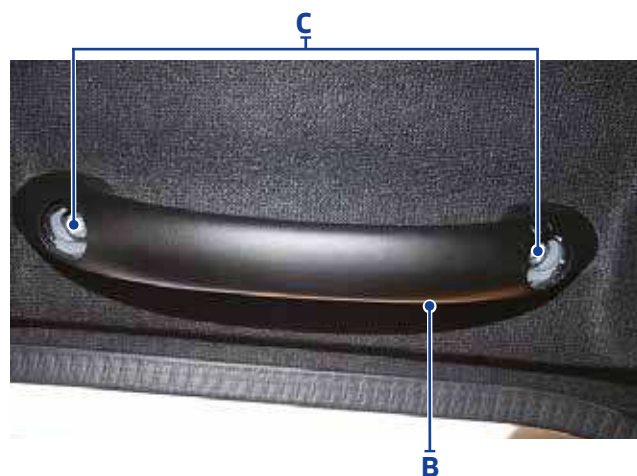
Removal procedure

Inside the vehicle:

1. Remove the 2 blanking caps **A** from the gripping handle **B** on the passenger side.



2. Remove the 2 screws **C** from the gripping handle **B**.
3. Remove the gripping handle **B**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Allen key	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-



This procedure is identical for the driver and passenger side

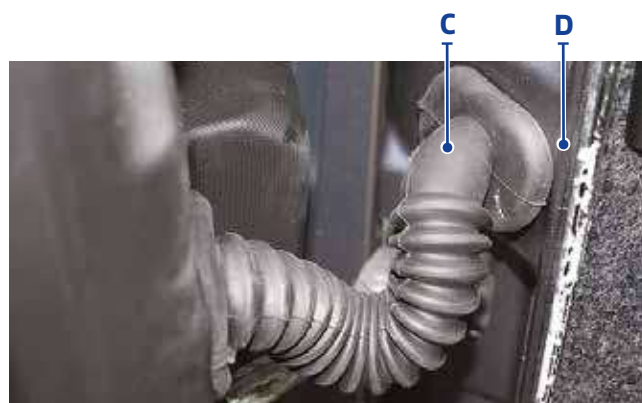
Removal procedure

Inside the vehicle:

1. With the door open, remove the screw **A** on the door retainer **B**.



2. Separate the grommet **C** from the body **D**.



Complete door

P05000

3. Disconnect the 2 connectors **E** from the body harness **F**.
4. Separate the door **G** from its 2 hinges and remove it.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK
Screw **A**: tightening torque 9.5 Nm.

A

Bodywork & Chassis



Equipment required

PPE

Gloves

1

-



This procedure is identical for the driver and passenger side.

Removal procedure

Inside the vehicle:

1. Open the door **A**, manually disengage the door seal **B** from its housing.



2. Remove the door seal **B**.



Installation

To install, perform the removal operations in the reverse order.



Respect the seal installation direction.

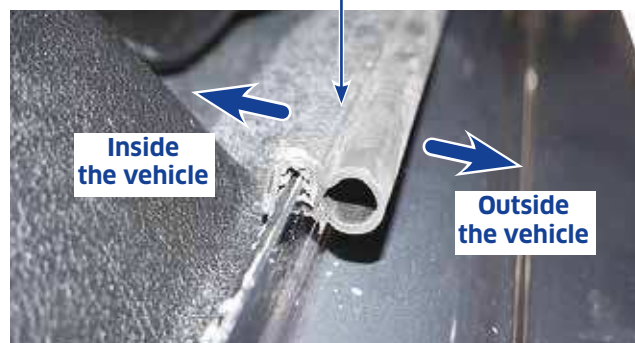


The two ends of the door seal must connect in the middle of the bottom part of the door frame (photo above).



RISK

Check that the door is properly sealed once the operation is completed.





Equipment required

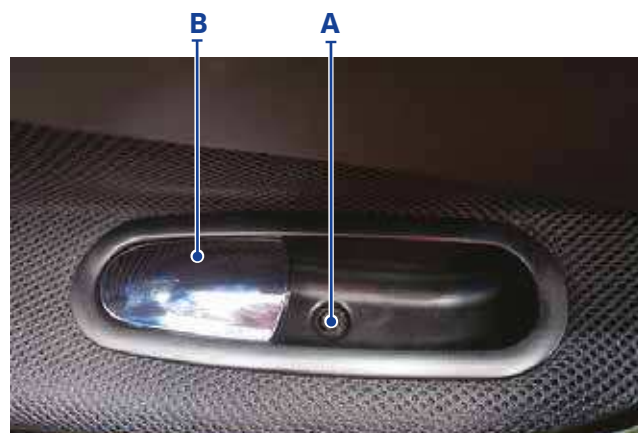
Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Cable grease	1	-



This procedure is identical for the driver and passenger side

Removal procedure

1. Remove the 2 screws **A** from the inside opening handle **B**.



2. Pull the sheath **C** out of its housing.



Inside opening control

P05010

A

3. Pull the cable **D** out of its housing.
4. Remove the inside opening control **B**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Cable grease	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Inside door control	Removal / Installation	A-53



This procedure is identical for the driver and passenger side

Removal procedure

Inside the vehicle:

1. Remove the trim **A** of the inner door panel **B**.



2. Remove the 2 plasti-rivets **C** from the inner door panel **B**.

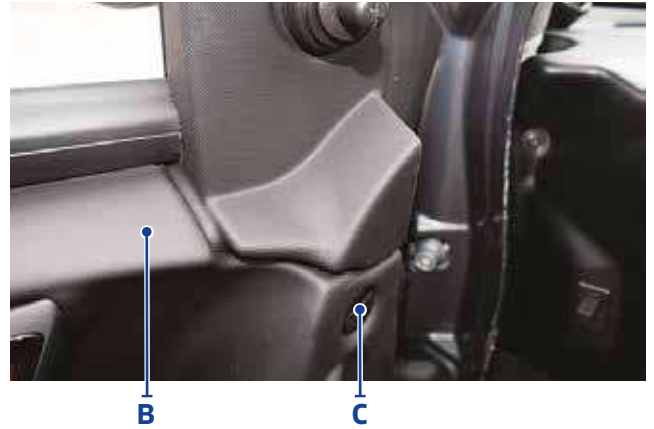


Inner door panel

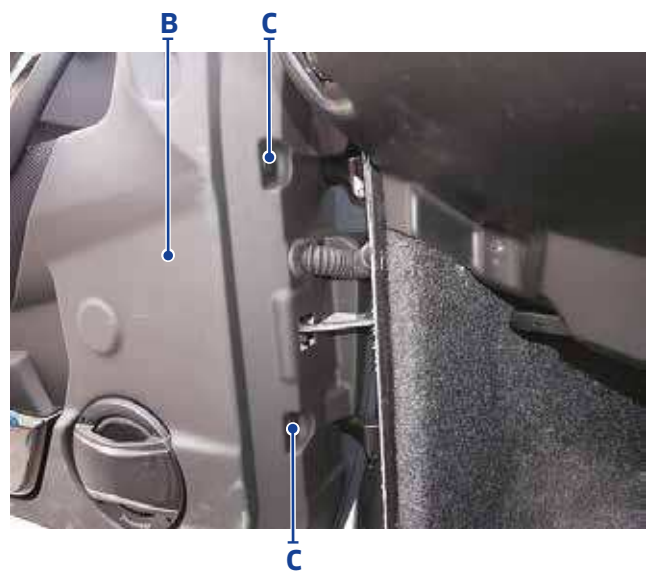
P05015

A

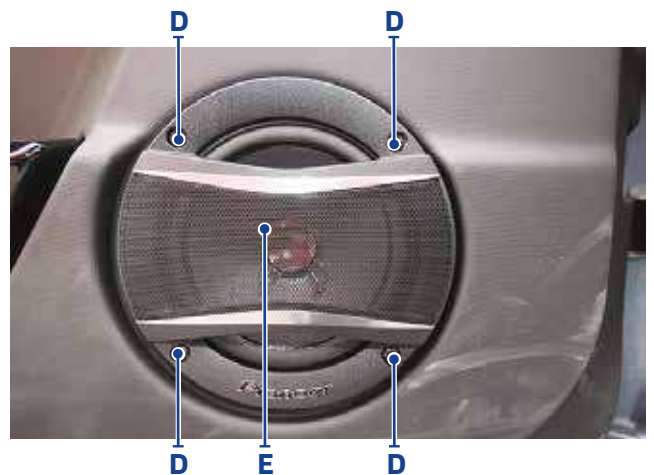
3. Remove the plasti-rivet **C** from the inner door panel **B**.



4. Remove the 2 plasti-rivets **C** from the inner door panel **B**.



5. Remove the 4 screws **D** from the loud speaker **E**.
6. Disconnect the 2 lugs at the back of the loud speaker **E**.
7. Remove the loud speaker **E**.



Inner door panel

P05015

8. Remove the 2 screws **F** from the door handle **G**.



9. Remove the 2 plasti-rivets **C** on the bottom of the inner door panel **B**.



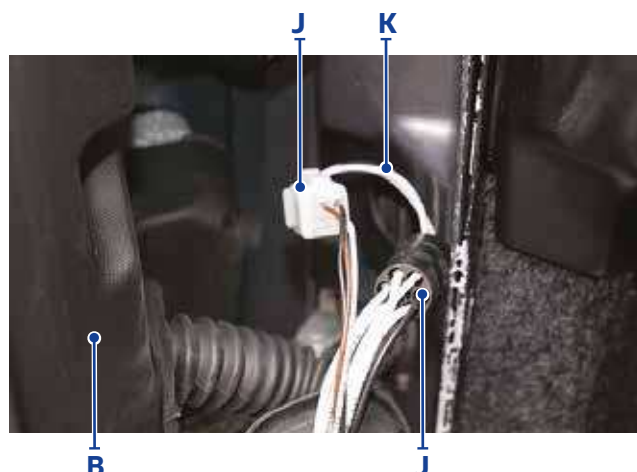
10. Separate the grommet **H** from the body **I**.



Inner door panel

P05015

- 11.** Disconnect the 2 connectors of the door harness **J** from the body harness **K**.
- 12.** Once it is disconnected, run the door harness with its protections through the inner door panel **B**.
- 13.** Remove the inner door panel **B**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Allen key	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Inner door panel	Removal / Installation	A-55

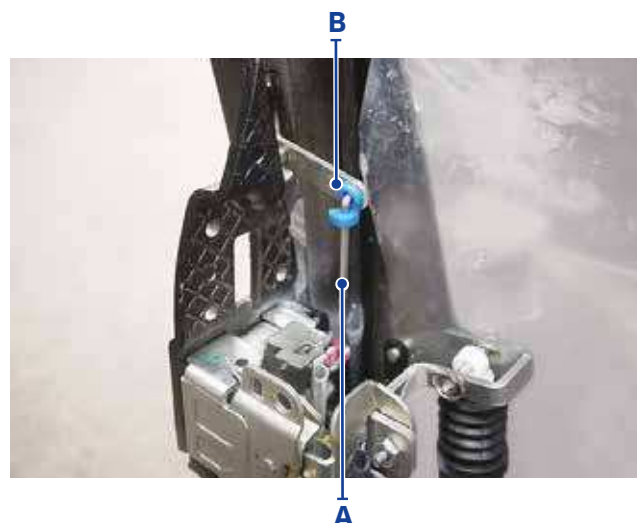


This procedure is identical for the driver and passenger side

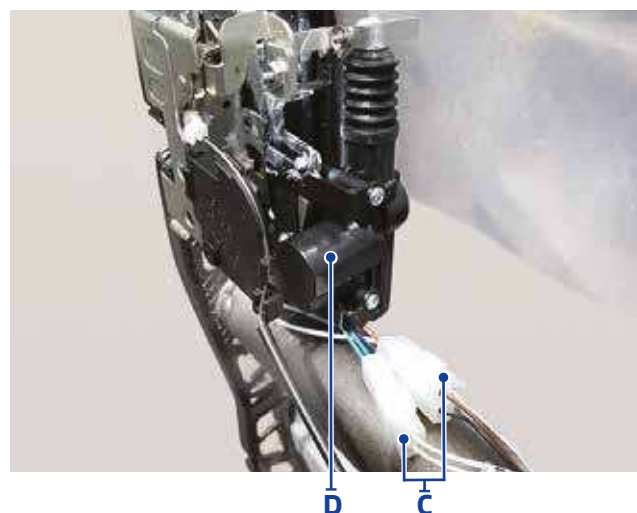
Removal procedure

Inside the vehicle:

1. Separate the rod **A** from the clip **B**.



2. Disconnect the 2 connectors on the door harness **C** from the centralised locking actuator **D**.

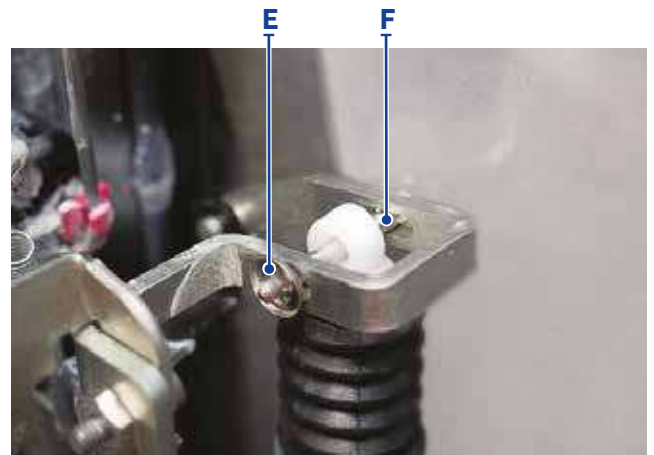


Door lock

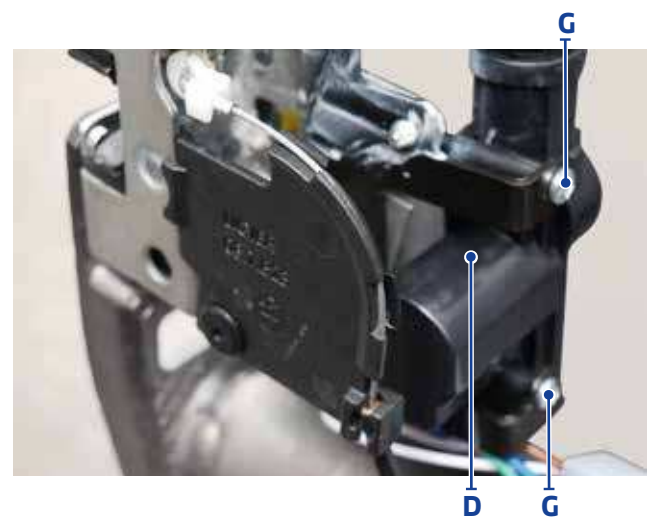
P05011

A

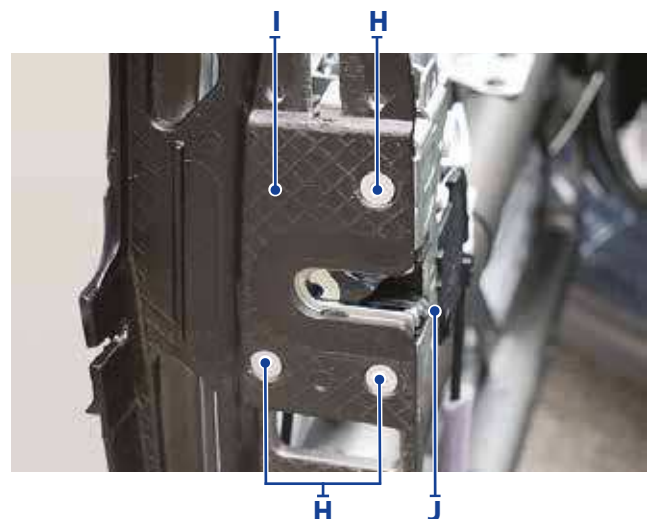
3. Remove the “grifaxe” ring **E** securing the actuator control shaft **F**.
4. Remove the actuator control shaft **F**.



5. Remove the 2 screws **G** from the centralised locking actuator **D**.
6. Remove the centralised locking actuator **D**.



7. Remove the 3 screws **H** from the door frame **I**.
8. Remove the door lock **J**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Inner door panel	Removal / Installation	A-55

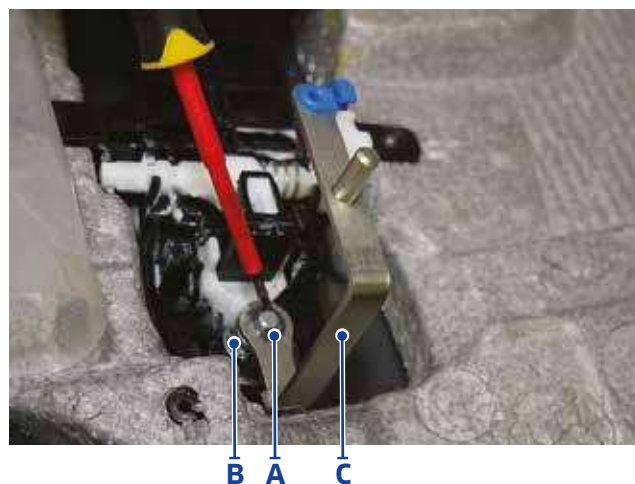


This procedure is identical for the driver and passenger side

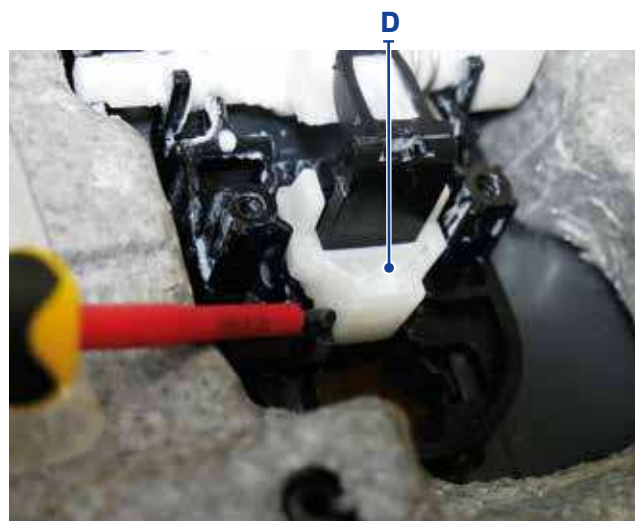
Removal procedure

Inside door panel

1. Remove the circlips **A** securing the cylinder **B** on the lock cylinder rod **C**.



2. Remove the antitheft security device **D** using a screwdriver.

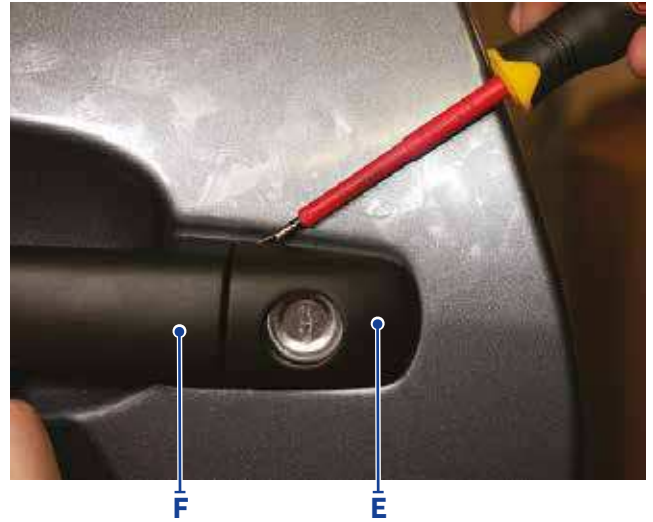


Door cylinder

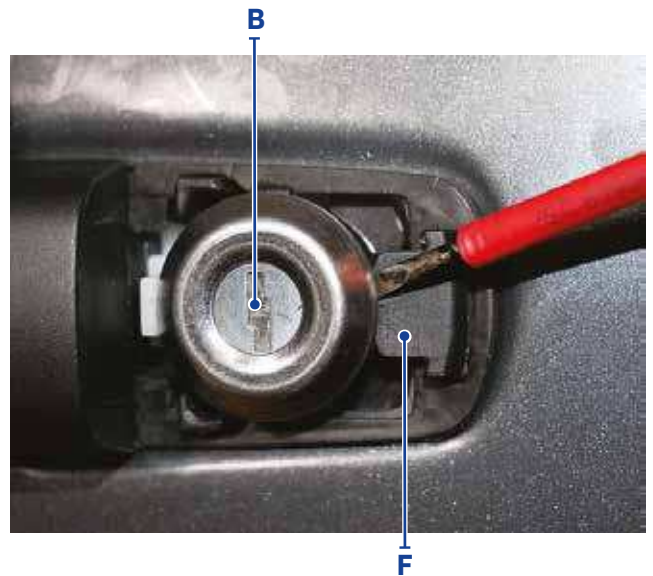
P05021

Outside door panel

- 3.** Remove the trim of the cylinder **E** from the outside handle **F**.



- 4.** Remove the cylinder **B** from the outside handle **F**.
5. Remove the cylinder **B**.



Installation

To install, perform the removal operations in the reverse order.



Equipment required

PPE	Quantities	References
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Door window	Removal / Installation	B-16

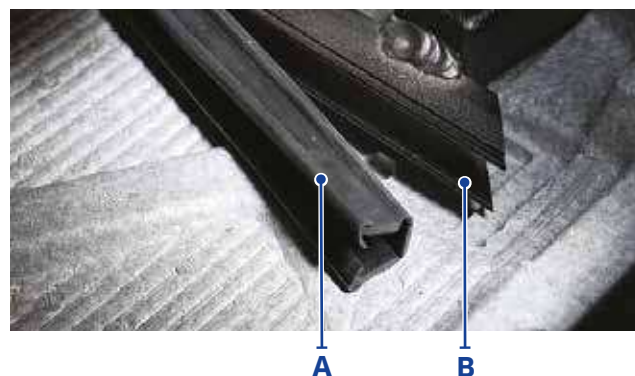


This procedure is identical for the driver and passenger side

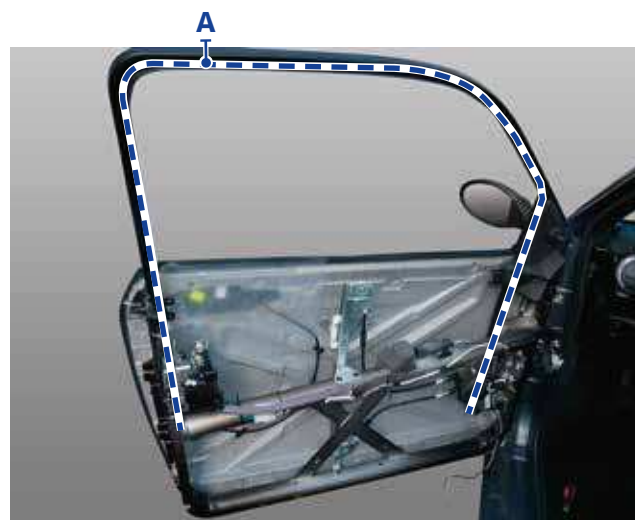
Removal procedure

Inside the vehicle:

1. Pull out the rail seal **A** from the welded door **B**.



2. Remove the rail seal **A**.



Installation

To install, perform the removal operations in the reverse order, make sure to position the seal in accordance with its deformation zones.



Equipment required

PPE	Quantities	References
Gloves	1	-
Consumables / Ingredients		
Cable grease	To be determined	0890100045

Preliminary procedures

Operations	Procedure types	Pages
Inner door panel	Removal / Installation	A-55



It is not necessary to strip the door inner panel.

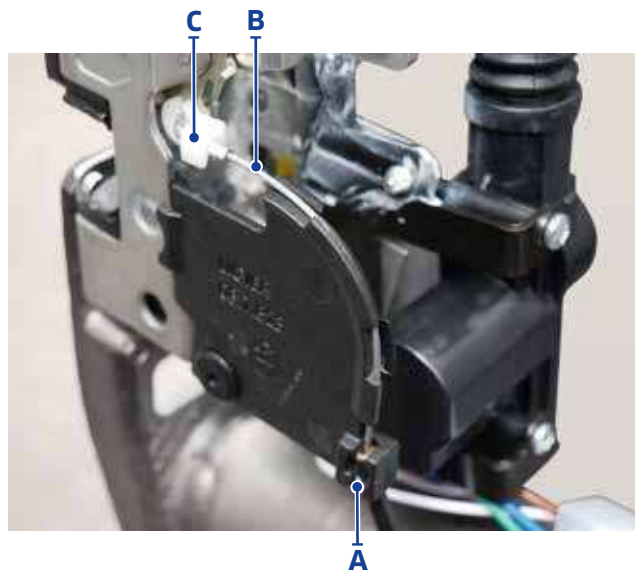


This procedure is identical for the driver and passenger side

Removal procedure

Lock on the inside of the vehicle:

1. Pull the cable sheath out manually from its housing **A**; pull the cable **B** out of its housing **C**.

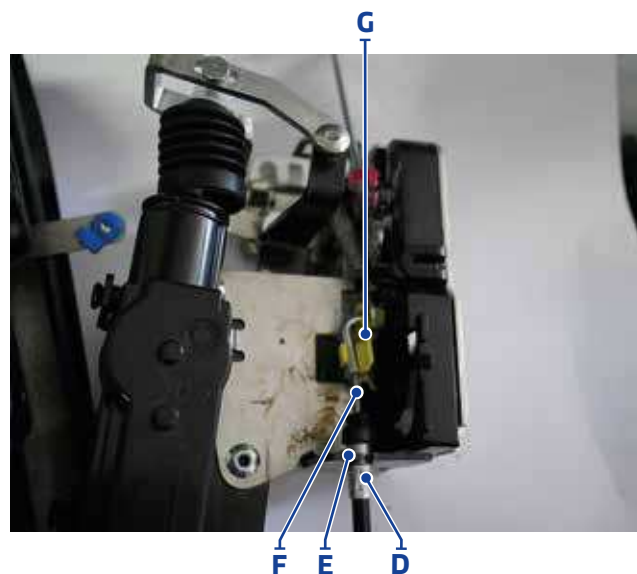


Door opening cable

P05013

Lock on the outside of the vehicle:

2. First, separate the cable **F** from the clip **G** and pull the sheath end **D** manually out of its housing **E**.



Installation

To install, perform the removal operations in the reverse order.



Apply cable grease if required.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Door cylinder	Removal / Installation	A-61



This procedure is identical for the driver and passenger side

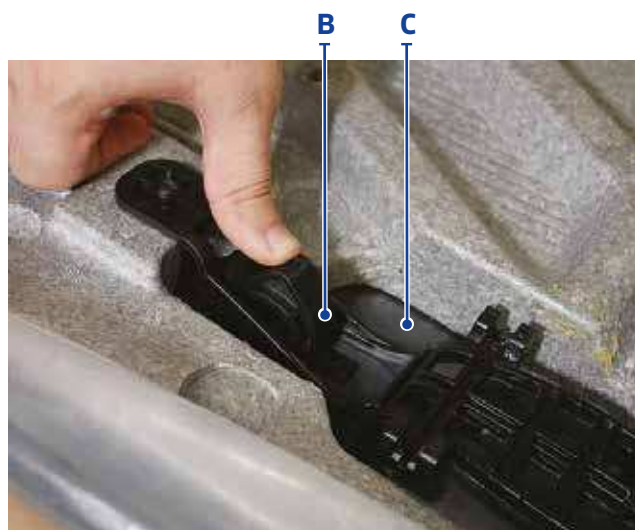
Removal procedure

Inside door panel:

1. Remove the antitheft security system stop **A** from the outside handle **B**.



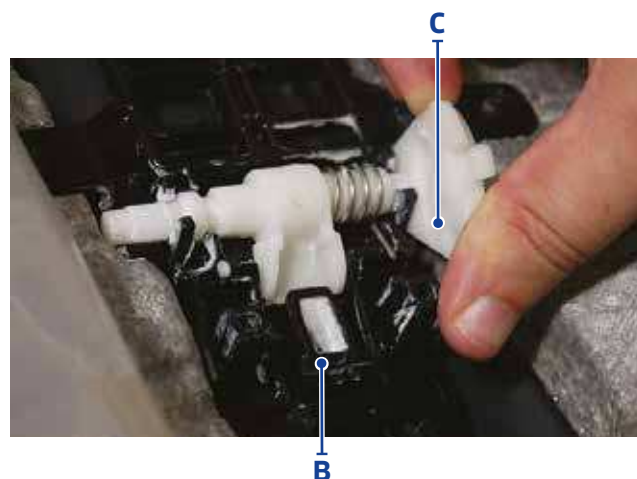
2. Separate the outside handle **B** manually from its base **C**.



Outside door handle

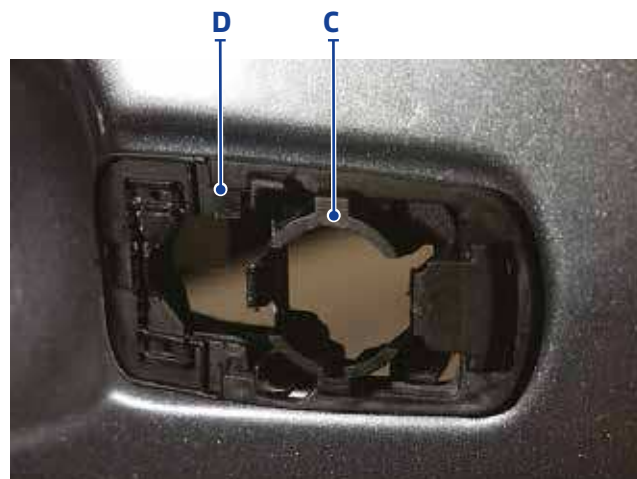
P05017

3. Manually operate the base mechanism **C** to release the outside handle **B**.
4. Remove the outside handle **B**.



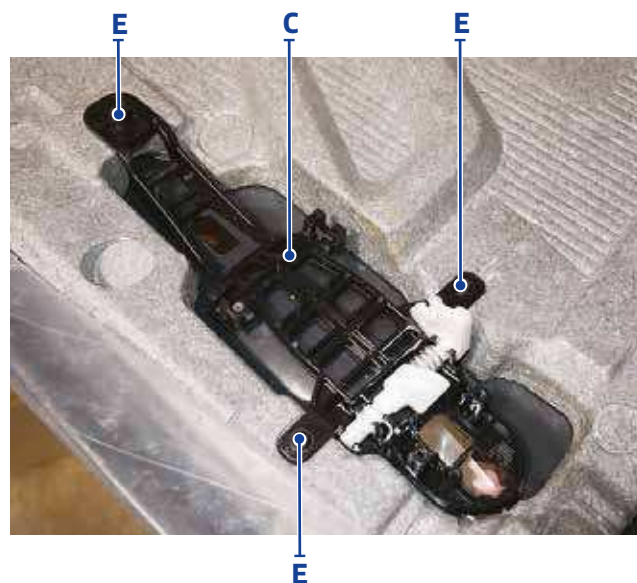
Outer door panel:

5. Separate the handle seal **D** from the base **C**.
6. Remove the handle seal **D**.



Inside door panel:

7. Remove the 3 screws **E** securing the base **C**.
8. Remove the base **C**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Door frame

P05022



Equipment required

PPE	Quantities	References
Gloves	1	-

Preliminary procedures

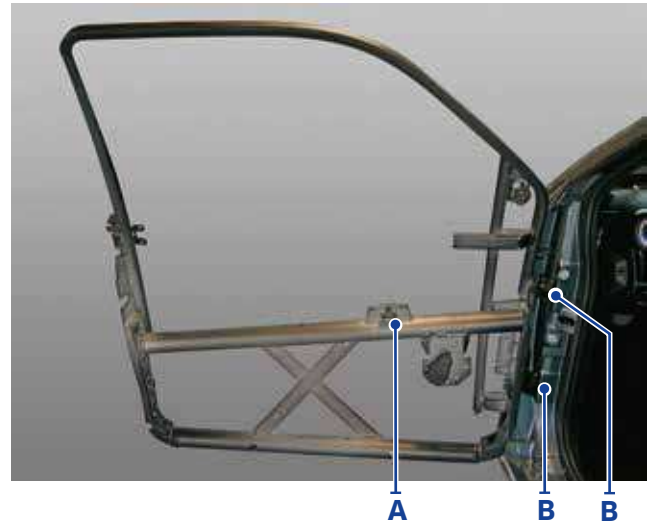
Operations	Procedure types	Pages
Outer door panel	Removal	A-77
Outside door opening cable	Removal	A-64
Door harness	Removal	E-53
Lock + actuator assembly	Removal	A-59
Window lift mechanism	Removal	E-14
Rail seal	Removal	A-63
Door retainer	Removal	A-50



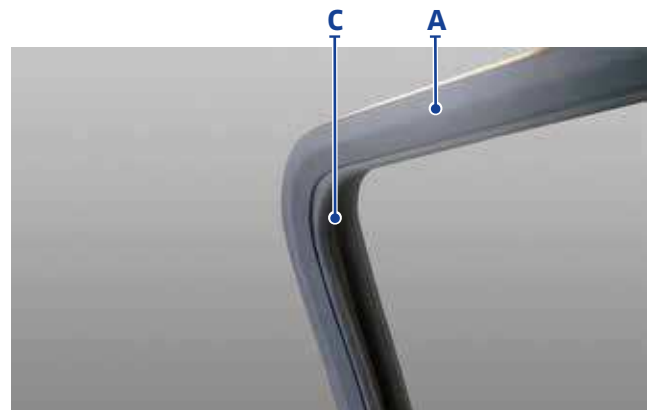
This procedure is identical for the driver and passenger side

Installation procedure

1. Install the door frame **A** on the 2 hinges **B**.



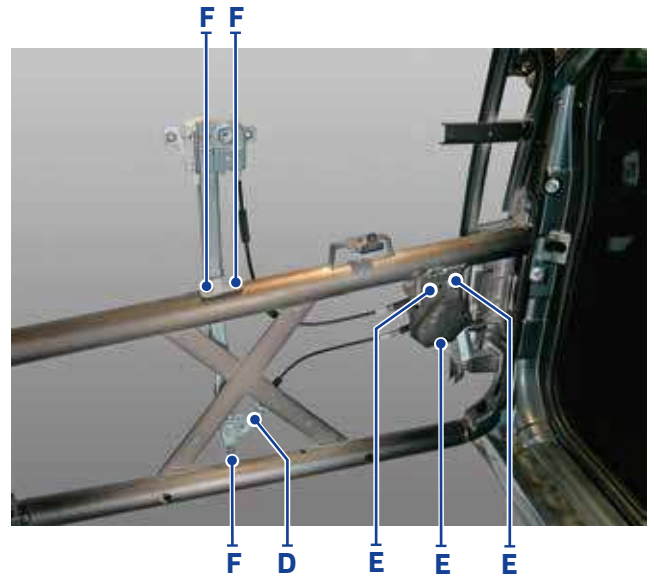
2. Install the rail seal **C** in its housing on the door frame **A**.



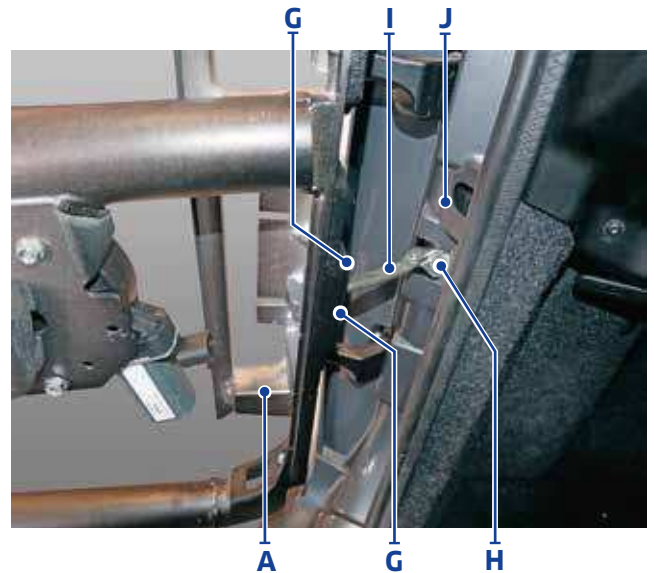
Door frame

P05022

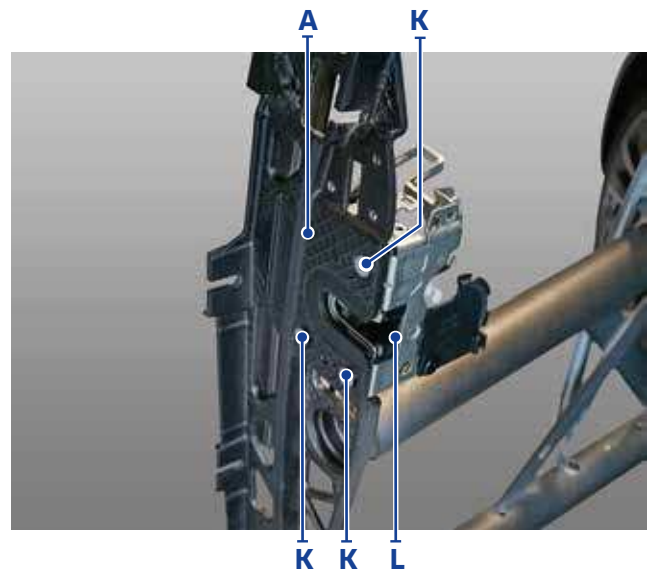
3. Install the 3 screws **E** on the window lift mechanism **D**.
4. Install the 3 screws **F** on the window lift mechanism **D**.



5. Install the 2 screws **G** of the door retainer **I** on the door frame **A**.
6. Install the screw **H** of the door retainer **I** on the body **J**.



7. Install the 3 screws **K** securing the door lock **L** on the door frame **A**.



A

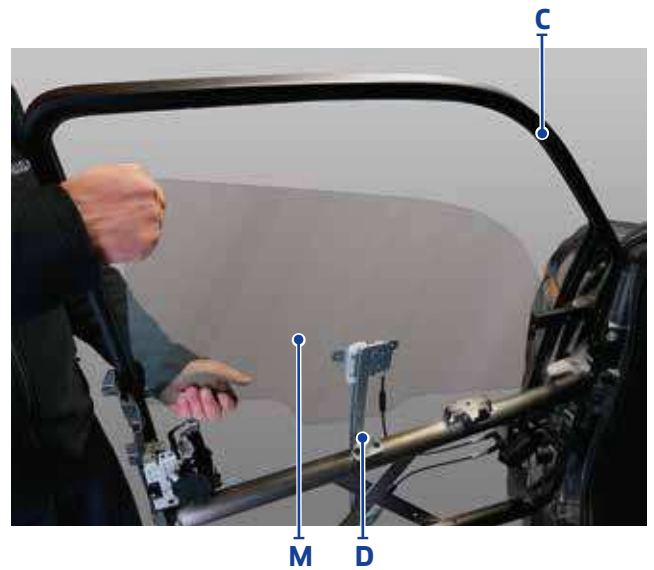
Bodywork & Chassis

Door frame

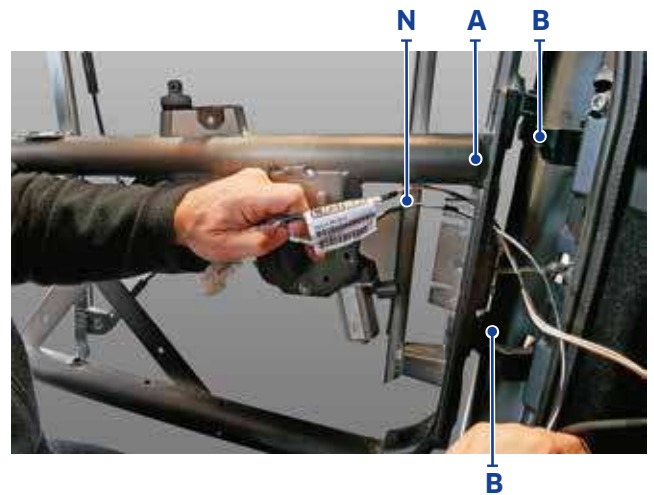
P05022

A

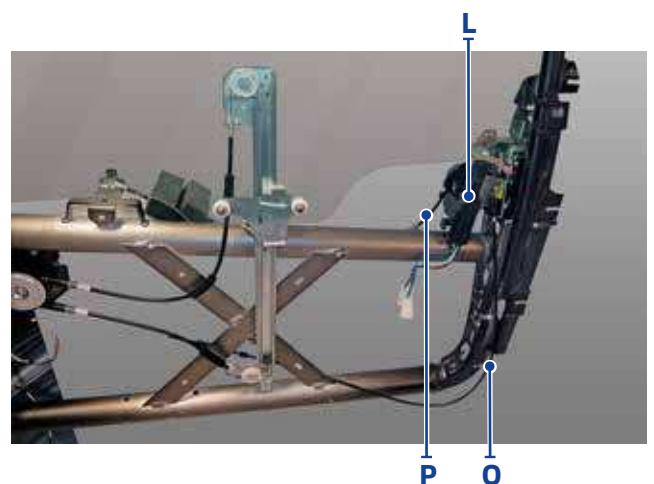
8. Tilt the window **M** on the door hinge side to slide it in the rail seal **C**.
9. Fit the window **M** on the window lift mechanism **D**.



10. Run the harness **N** through the door frame **A** in the opening located between the two hinges **B**.



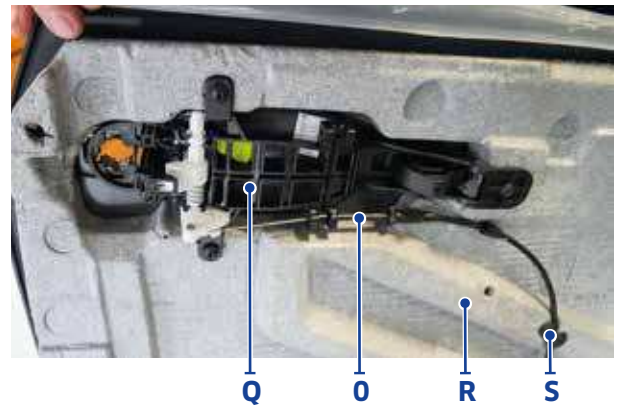
11. Install the cables of the door handle **O** and the inside opening control **P** on the lock **L**.



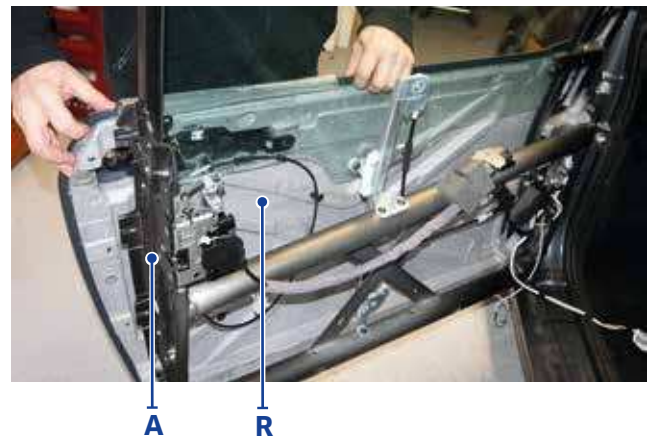
Door frame

P05022

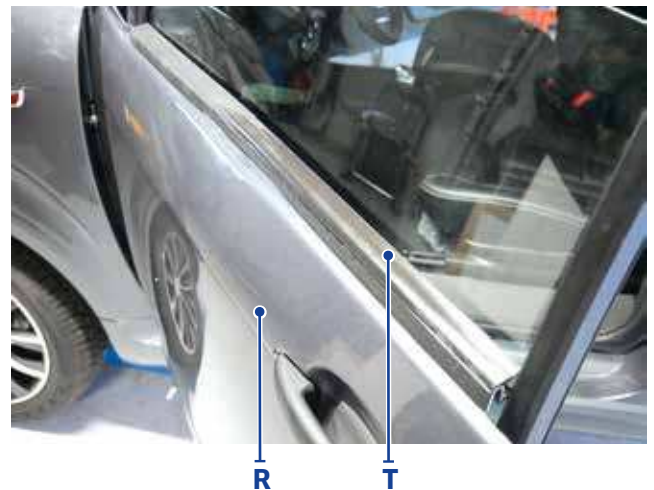
- 12.** Install the cable **O** on the handle **Q** while holding it in position with 2 panel clips **S** mounted on the outer door panel **R**.



- 13.** Install the outer door panel **R** on the door frame **A**.



- 14.** Install the outside weatherstrip **T** on the outer door panel **R**.



A

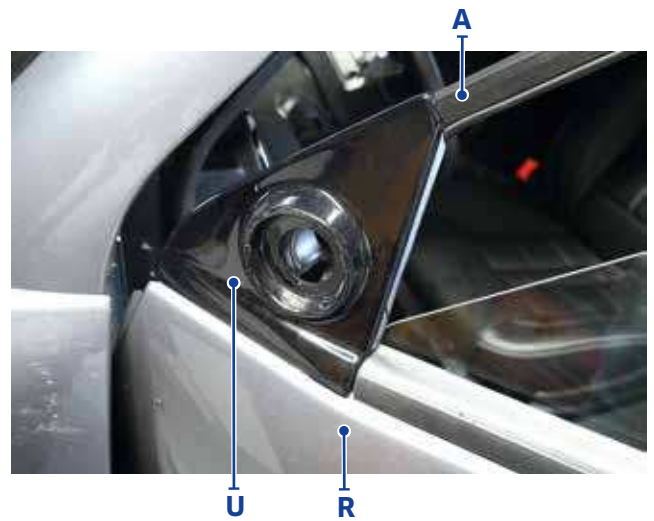
Bodywork & Chassis

Door frame

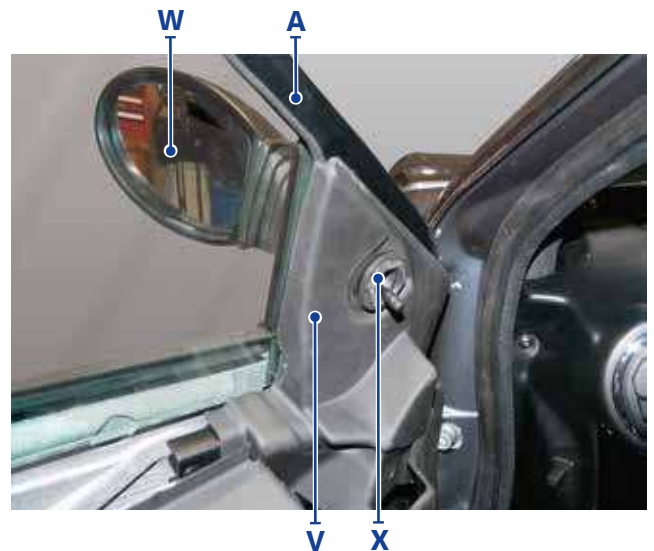
P05022

A

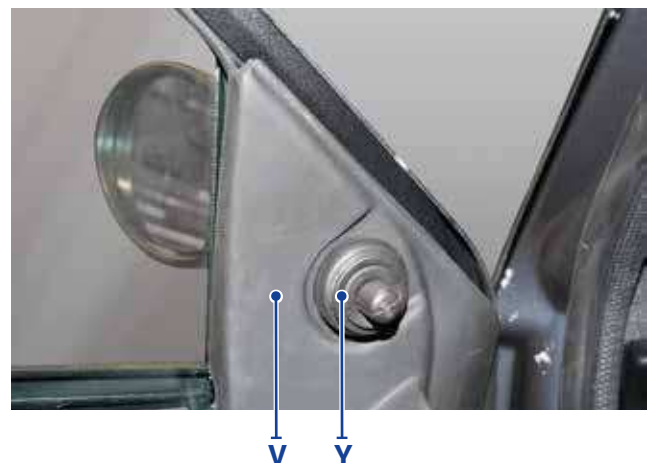
- 15.** Install the outside mirror cap **U** on the door frame **A** and the outer door panel **R**.



- 16.** Install the inside mirror cap **V** on the door frame **A**.
17. Install the mirror **W** on the outside mirror cap **U** (see step **15**).
18. Fit the mirror **W** with the nut **X**.



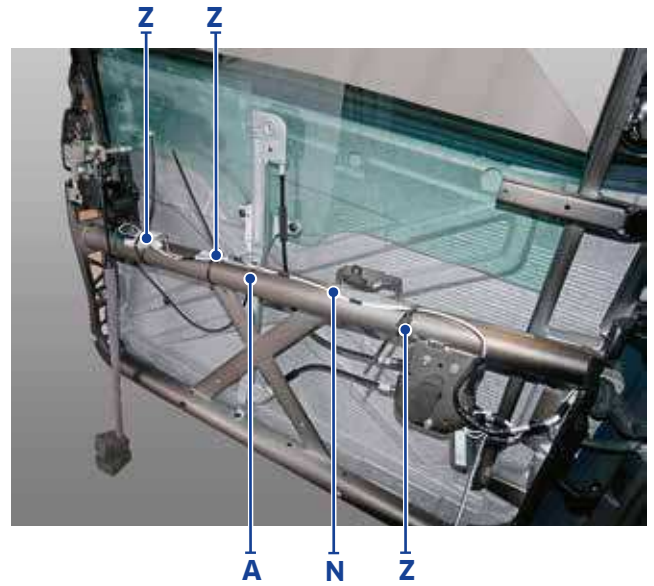
- 19.** Install the boot **Y** on the inside mirror cap **V**.



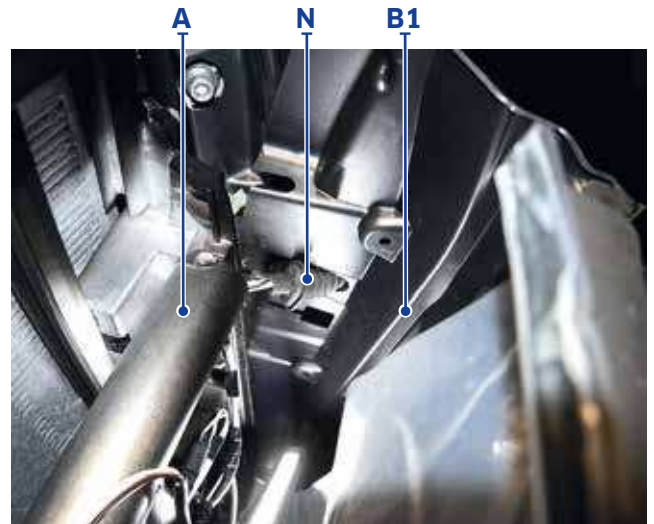
Door frame

P05022

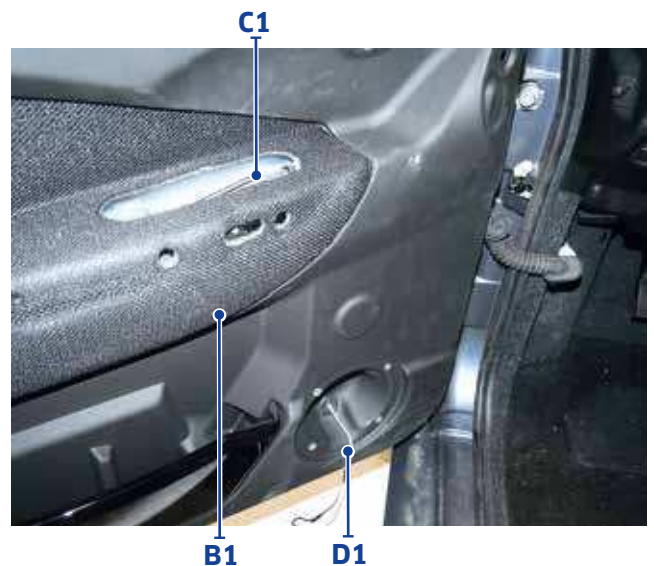
- 20.** Install the harness **N** on the door frame **A** secured with 3 ties **Z**.



- 21.** Install the outer door panel **B1** on the door frame **A** without tightening it.
22. On the hinge side, run the harness **N** through the inner door panel **B1**.



- 23.** Check that the inside opening cable **C1** is in place and accessible beneath the inner door panel **E1**.
24. Check that the connectors of the loud speaker **D1** run through the inner door panel **E1**.



A

Bodywork & Chassis

Door frame

P05022

A

25. Refit the inside opening control cable on the control unit.

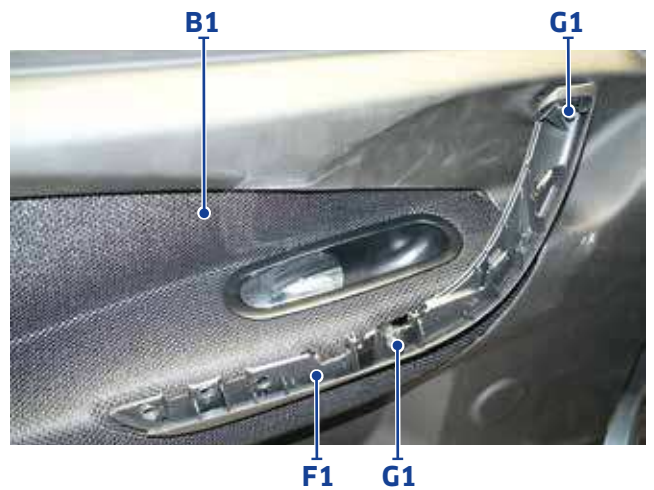
26. Install the inside opening control unit in its housing.



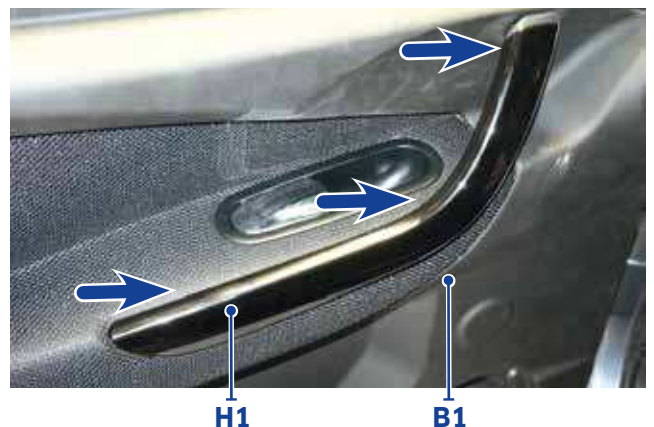
27. Finalise the installation of the door harness **N** on the body **H**.



28. Install the handle support **F1** on the inner door panel **B1** secured with the 2 screws **G1**.



29. Clip the handle trim **H1** on its support which is already fitted on the inner door panel **B1**.



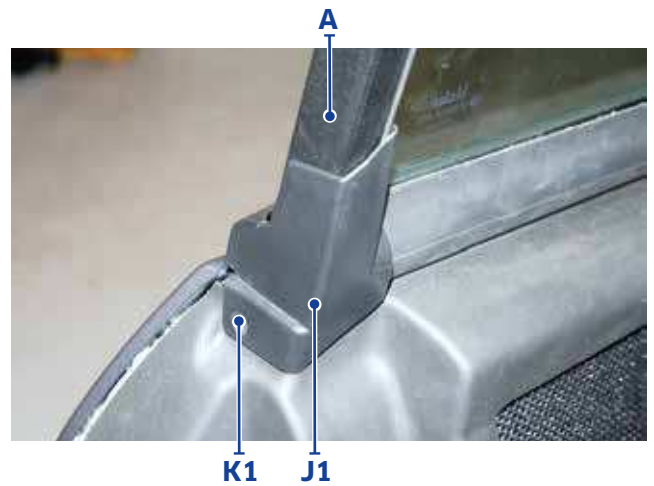
Door frame

P05022

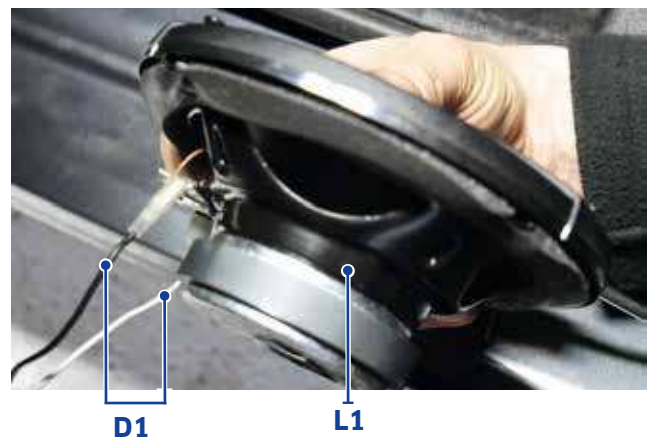
30. Install the inside weatherstrip **I1** on the inner door panel **B1**.



31. Install the rear left corner seal **J1** on the door frame **A** secured with a rivet **K1**.



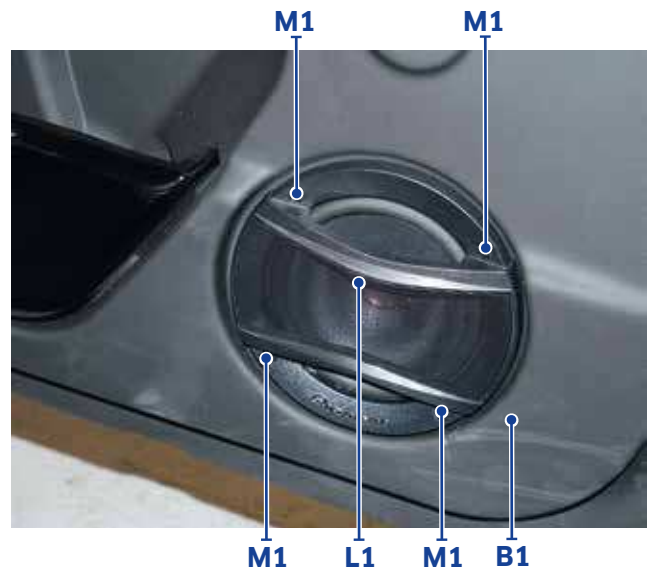
32. Connect the wires **D1** on the loud speaker **L1**.



Door frame

P05022

- 33.** Install the loud speaker **L1** on the inner door panel **B1** secured with the 4 screws **M1**.





Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
Flat screwdriver	1	-
Allen key	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Cable grease	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Outside door handle	Removal / Installation	A-66
Inner door panel	Removal / Installation	A-55

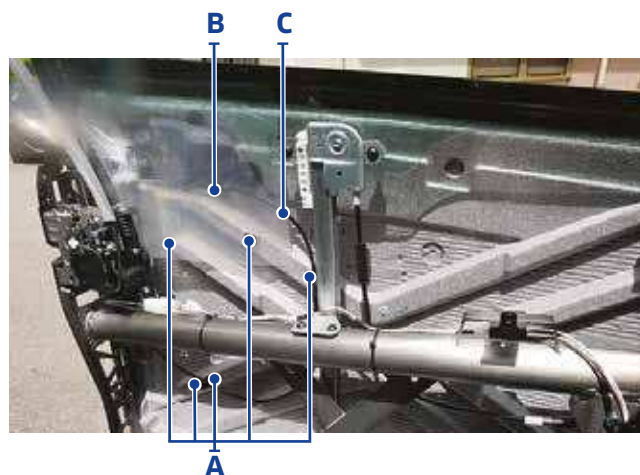


This procedure is identical for the driver and passenger side

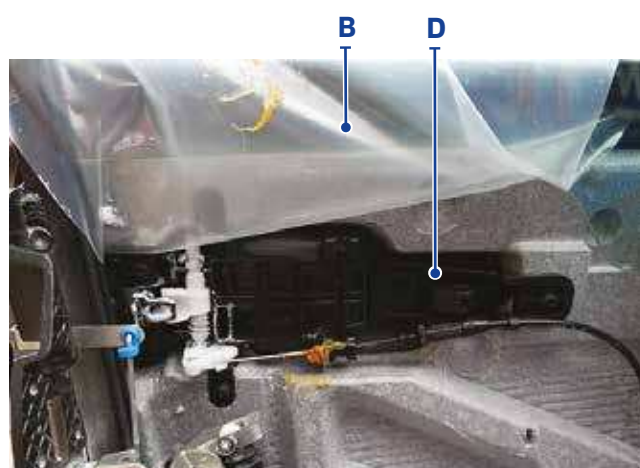
Removal procedure

Inside the vehicle:

1. Remove the panel clips **A** from the plastic protection **B** and the cable sheath **C**.



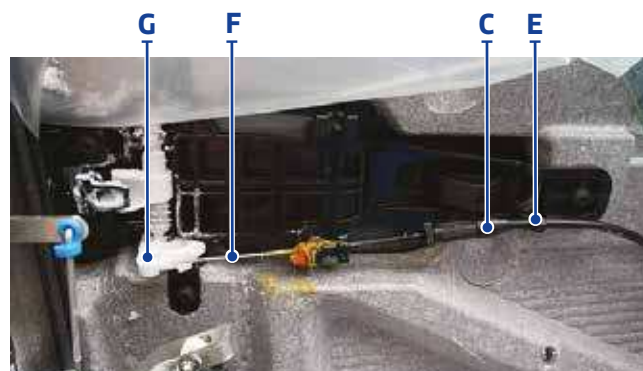
2. Lift the plastic protection **B** covering the handle **D**.



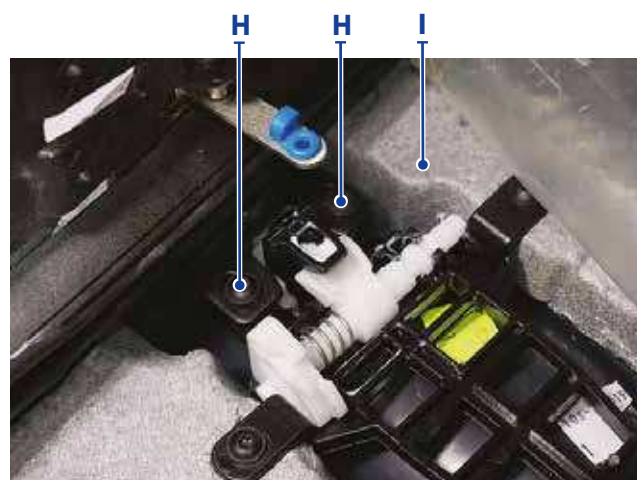
Outer door panel

P05014

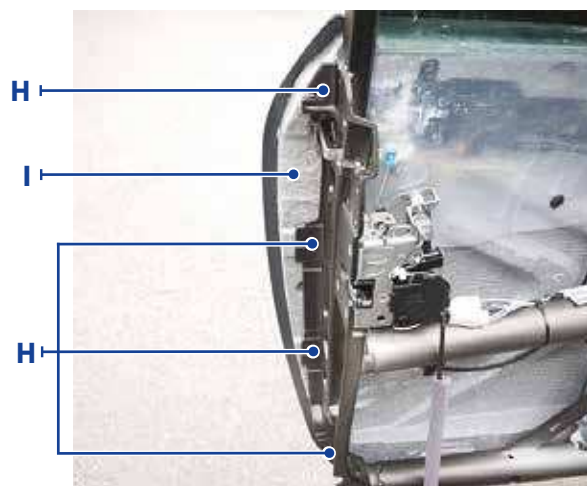
- 3.** Cut the cable tie **E** to release the cable sheath **C**.
4. Remove the cable **F** from its housing **G**.



- 5.** Remove the 2 screws **H** securing the outer panel **I**.



- 6.** Remove the 4 screws **H** securing the outer panel **I**.



- 7.** Remove the screw **H** securing the outer panel **I**.



Outer door panel

P05014

8. Remove the 2 screws **H** securing the outer panel **I**.



9. Remove the 2 screws **H** securing the outer panel **I**.

10. Remove the outer panel **I**.



Installation

To install, perform the removal operations in the reverse order.

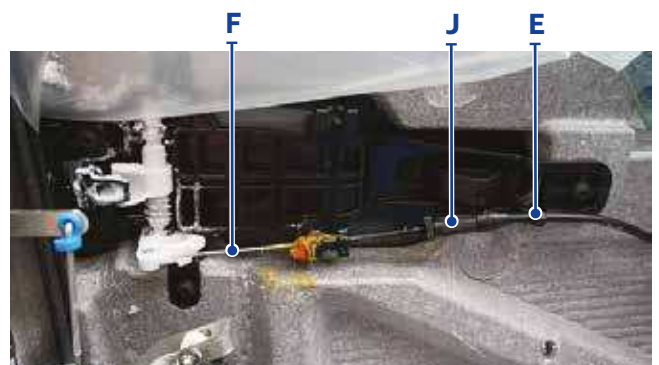
1. When installing the cable **F**, set the tension using the knob **J** of the cable sheath **E**.



Remember to apply grease on the cable during the installation operation.



During the installation, respect the tightening torques indicated on [page 9](#).





Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Size 10 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Hot melt type glue	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Complete door	Removal / Installation	A-50



This procedure is identical for the driver and passenger side

Removal procedure

Inside the vehicle:

1. Partially remove the door seal and the carpet.
2. Remove the blanking cap **A** from the body **B**.



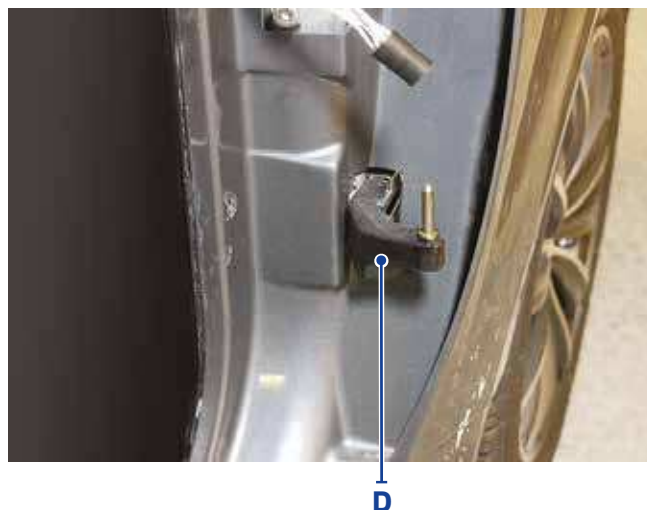
Door bottom hinge

P05020

3. Remove the screw **C** securing the door bottom hinge.



4. Remove the door bottom hinge **D**.



Installation

To install, perform the removal operations in the reverse order.

1. Install the new hinge: insert the door on the hinges, reposition the door seal on its support without attaching it, close the door and tighten the hinge.
2. Open the door and reattach the seal, reposition and glue the carpet.



Use a hot melt type glue to install the carpet in the front.



RISK

Screw **C**: tightening torque 80 Nm.



The hinge adjustment time is included for this procedure.



The forward-backward movement of the mounted or installed door still needs to be adjusted.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Size 10 wrench	1	-
PPE		
Gloves	1	-

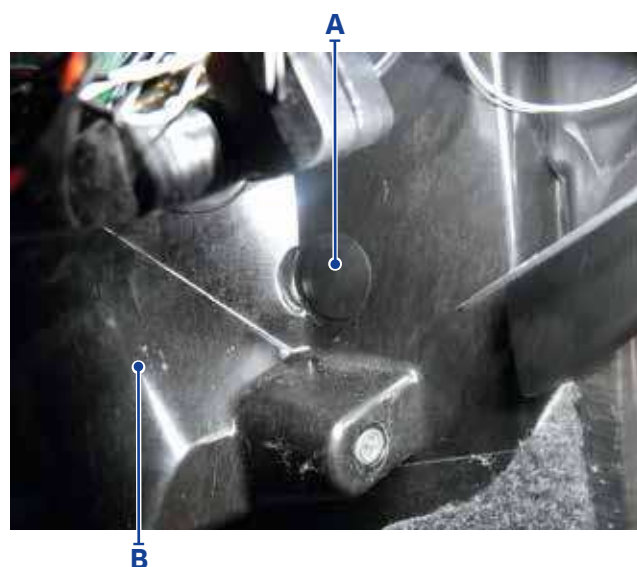
Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Complete door	Removal / Installation	A-50
Glove box	Removal / Installation	C-8

Removal procedure

Inside the vehicle:

1. Remove the blanking cap **A** from the body **B**.



Top hinge on the passenger side

P05019

2. Remove the screw **C** securing the top door hinge.



3. Remove the top door hinge **D**.



Installation

To install, perform the removal operations in the reverse order.

1. Install the new hinge: insert the door on the hinges, reposition the door seal on its support without attaching it, close the door and tighten the hinge.



The hinge adjustment time is included for this procedure.



The forward-backward movement of the mounted or installed door still needs to be adjusted.



RISK
Screw **C**: tightening torque 80 Nm.

A

Bodywork & Chassis



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Size 10 wrench	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Complete door	Removal / Installation	A-50
Dashboard	Removal / Installation	C-2

Removal procedure

Inside the vehicle:

1. Remove the blanking cap **A** from the body **B**.



2. Remove the screw **C** securing the top door hinge.



Top hinge on the driver's side

P05018

3. Remove the top door hinge **D**.



D

Installation

To install, perform the removal operations in the reverse order.

1. Install the new hinge: insert the door on the hinges, reposition the door seal on its support without attaching it, close the door and tighten the hinge.



The hinge adjustment time is included for this procedure.



The forward-backward movement of the mounted or installed door still needs to be adjusted.



RISK

Screw **C**: tightening torque 80 Nm.

A

Bodywork & Chassis



Side panel

CS5017



Equipment required

Special tools	Quantities	References
Compressor	1	-
Heat gun	1	-
Clamp	1	-
Locking pliers	1	-
Glue gun	1	-
Pneumatic cutter	1	-
PPE		
Gloves	1	-
Mask	1	-
Consumables / Ingredients		
Adhesive tape	1	-
Bodywork primer kit	1	-
Glue cartridges	2	-
Precision knife	1	-



This procedure is identical for the driver and passenger side

Preliminary procedures

Operations	Procedure types	Pages
Quarter window	Removal / Installation	B-10
Complete door	Removal / Installation	A-50
Roof panel	Removal / Installation	A-40
Tank filler tube (on the driver's side)	Partial removal	H-19

Removal procedure

1. Remove the 2 plasti-rivets **A** from the side panel **B**, on the rear wheel arc on the driver's side.



Side panel

CS5017



Identification of the areas on which the heat gun will be applied.



2. Prepare to take off the side panel **B** using a heat gun.



Cut out the side panel near the windscreen support mount to facilitate the removal thereof.



RISK

During the cutting operation, do not damage the body harness running through this area.



3. Separate the side panel **B** from the support mounts **C**.



4. Remove the side panel.



A

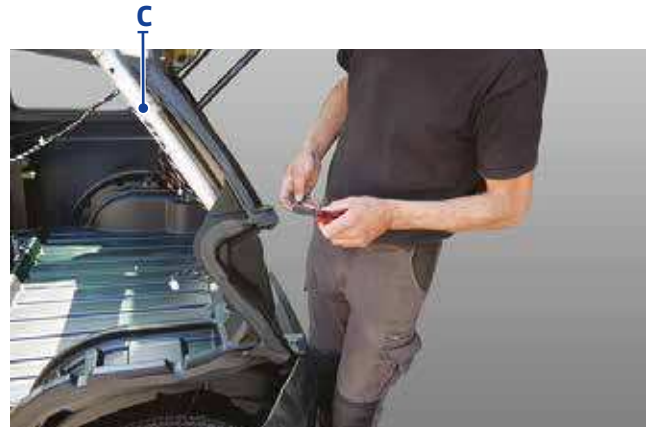
Bodywork & Chassis

Side panel

CS5017

Installation procedure

1. Remove the excess glue on the support mounts **C** and the body, with a precision knife.



2. Use the recommended bodywork primer kit **D**.



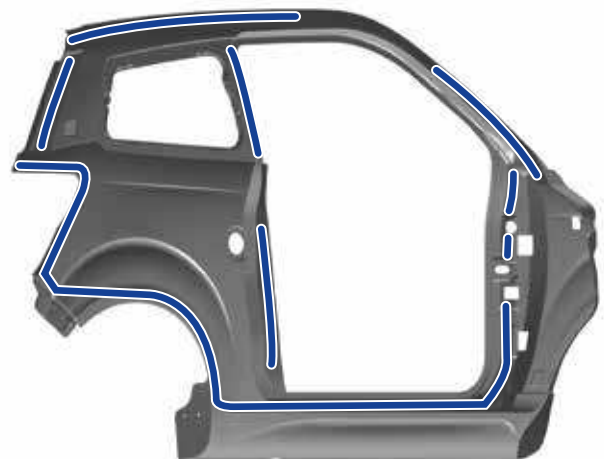
The use of a container is recommended to avoid losing the properties of the primer in the flask in contact with the sponge.



When applying the primer, take precautions to avoid runs on the visible parts of the bodywork.



Identification of the areas on which the bodywork primer will be applied.



Side panel

CS5017

3. Apply the bodywork primer **D** on the inside of the side panel **B** using the kit provided.



Identification of the areas on which the bodywork primer will be applied.



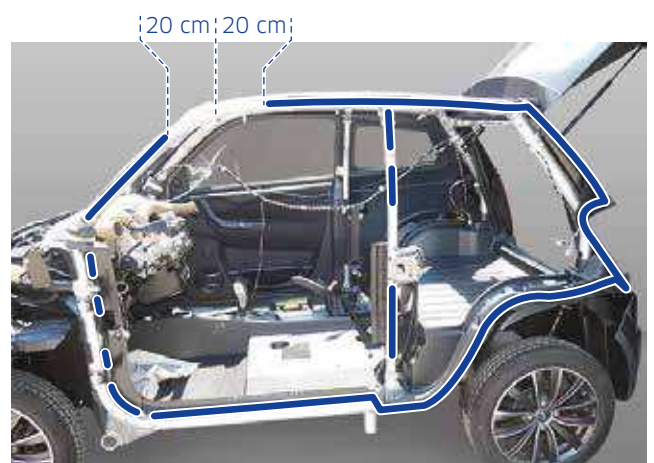
RISK

No primer in the 40 cm area.



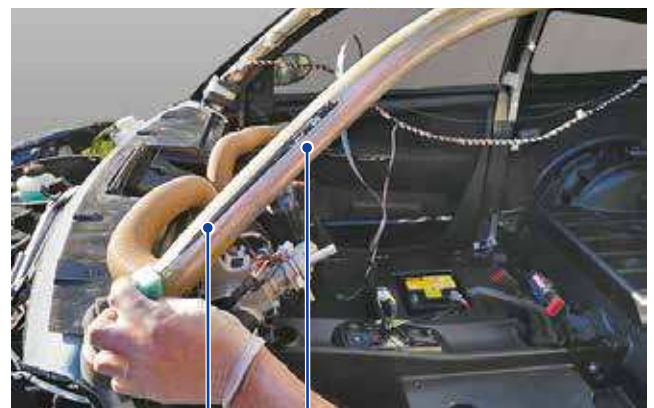
B

D



20 cm : 20 cm

4. Apply the bodywork primer **D** on the support mounts **C** using the kit provided.



D

C

5. Preparation of the glue cartridges **E**.



When topping up the cartridges, check that the hardener and the glue proportions are identical.

Refer to the annex: Sikaaxson adhesives



E

A

Bodywork & Chassis

Side panel

CS5017

6. Check that the glue and hardener mixture is uniform.
Use the recommended glue gun.

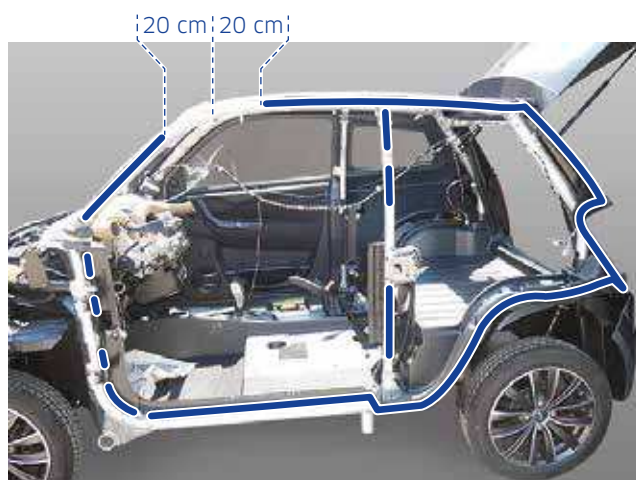


Identification of the areas on which the glue will be applied.



RISK

No glue in the 40 cm area.



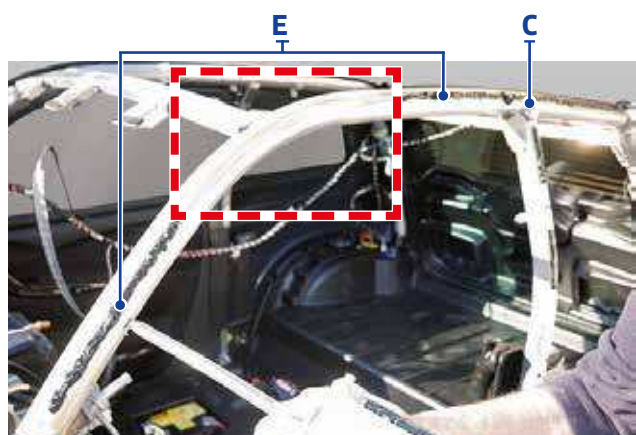
7. Recommendation: do not apply glue on the part shown in the frame.

8. Apply the glue **E** on the support mounts **C**.



RISK

The adhesive bead height must be ≥ 10 mm.



9. Apply the glue **E** on the body part.



Side panel

CS5017

- 10.** Several visual markers can be used to properly position the side panel.
The alignment of the side panel rib with that of the tailgate is shown opposite.



- 11.** The adjustment of the strike attachment holes is shown opposite.



- 12.** The adjustment of the cradle, door hinge and door stop attachment is shown opposite.



- 13.** Install the new side panel **B** and perform the required adjustments manually to make sure it is properly positioned.



A

Bodywork & Chassis

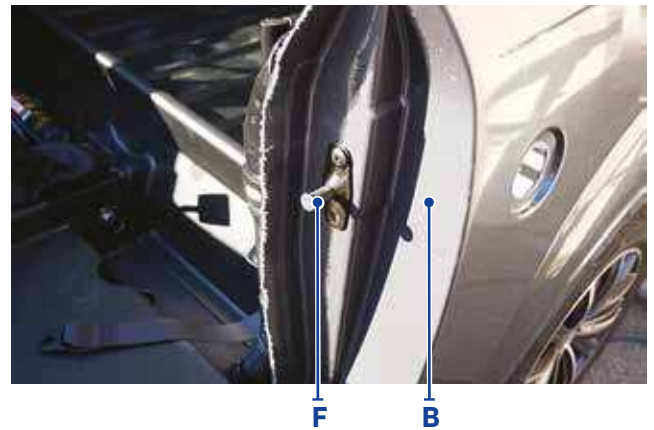
Side panel

CS5017

- 14.** Install the door strike **F** on the side panel **B**.



This step is completed only on the passenger side.



- 15.** Use clamps and locking pliers to ensure proper setting of the glue.



- 16.** Remove the plastic protective film on the side panel **B**.

- 17.** Apply the adhesive tape **G** on the entire side panel **B**.



The adhesive tape holds the side panel in position during the drying time.



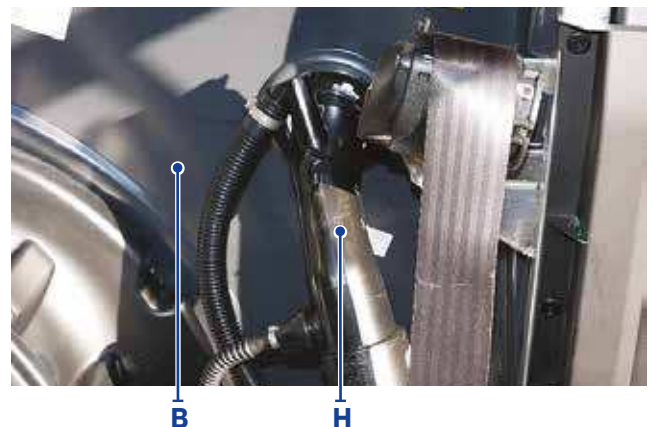
On the driver's side:

- 18.** Install the filler tube **H** on the side panel **B**.



RISK

The vehicle will remain immobilised for 48 hours before it can be used.





1.50 h with 2 persons

Tailgate

HA5000



Equipment required

Special tools	Quantities	References
Allen key	1	-
Flat screwdriver	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Tailgate window	Removal / Installation	B-6

Removal procedure

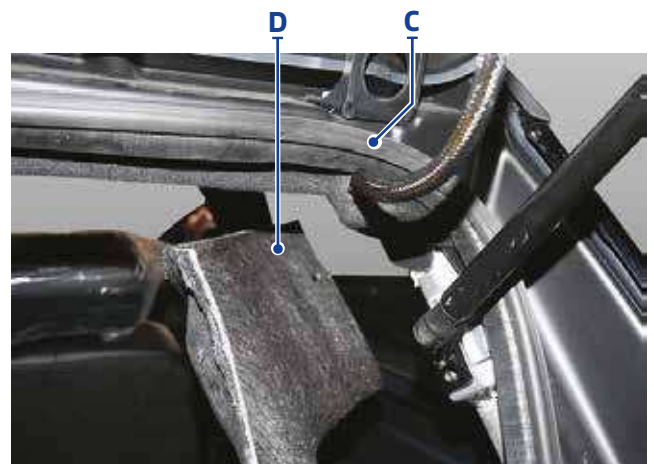
Outside the vehicle:

1. Manually operate the opening control **A** of the tailgate **B**.



Inside the vehicle:

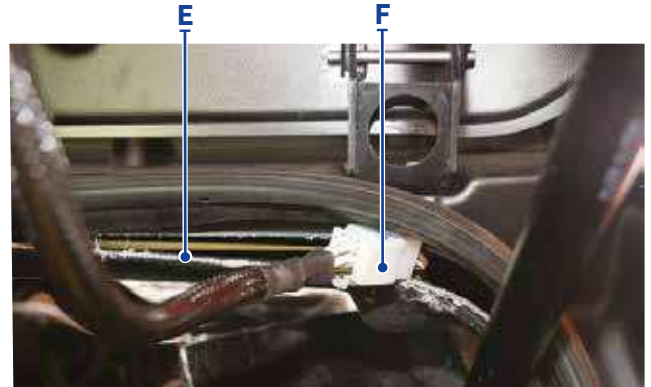
2. Partially remove the seal **C**.
3. Partially separate the upper part of the boot fabric **D**.



Tailgate

HA5000

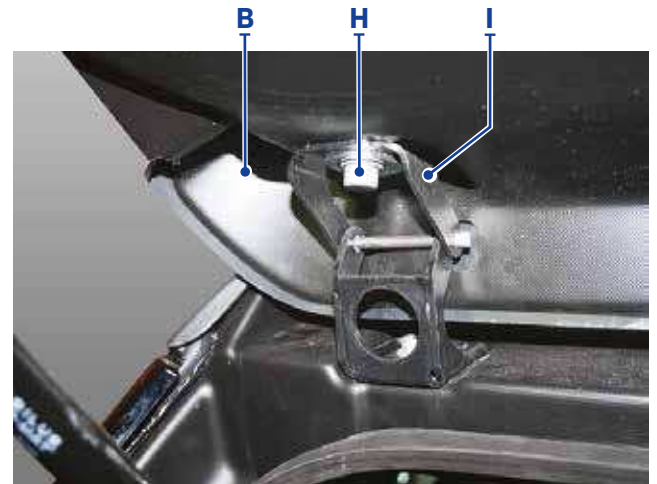
- 4.** Partially separate the upper part of the roof panel fabric **E**.
- 5.** Pull the connector **F** out of its housing and disconnect it.



- 6.** Unclip the piston head **G** on the driver and passenger side, and remove the piston from its ball joint.



- 7.** Remove the 2 screws **H** securing the 2 hinges **I** on the tailgate **B**.
- 8.** Remove the tailgate **B**.



2 persons are required to prepare the tailgate removal operation.

Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-

Removal procedure

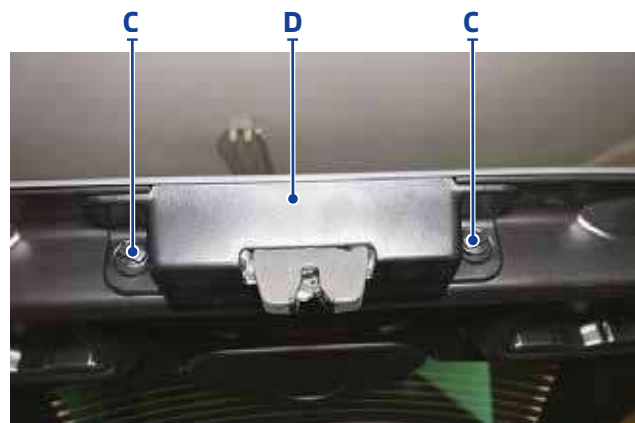
Outside the vehicle:

1. Manually operate the opening control **A** of the tailgate **B**.



Inside the vehicle:

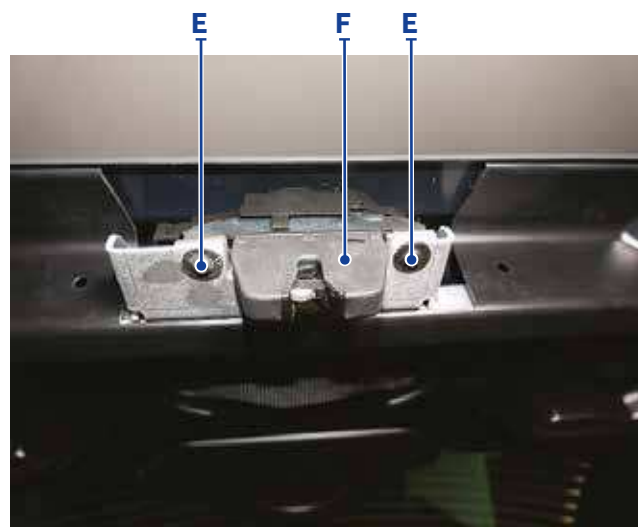
2. Remove the 2 plasti-rivets **C** from the tailgate lock cover **D**.
3. Remove the tailgate lock cover **D**.



Tailgate lock

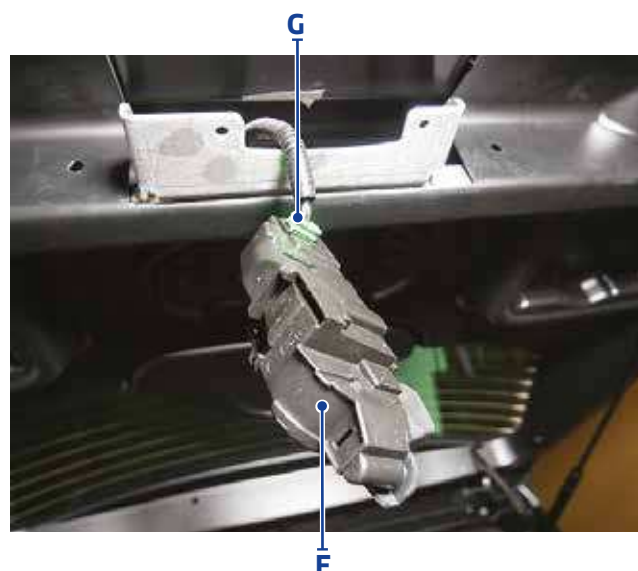
HA5005

4. Remove the 2 screws **E** from the lock **F**.



5. Disconnect the connector **G** from the lock **F**.

6. Remove the lock **F**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Preliminary procedures

Operations	Procedure types	Pages
Rear light	Removal / Installation	E-47
Boot fabric on the passenger side	Removal / Installation	C-22



For vehicles equipped with a reversing camera, remove the boot fabric on the passenger side to access the camera connector.

Removal procedure

1. Manually detach the rear bumper **A** from the side panel **B** on the passenger side and driver's side.

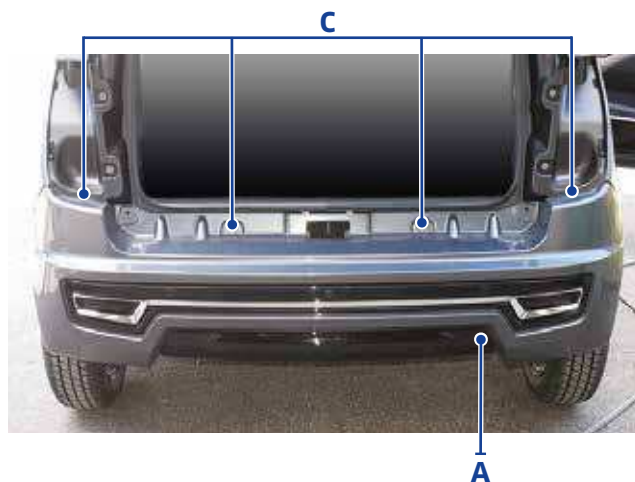


RISK

It is not recommended to use tools to partially separate the bumper.



2. Remove the 4 screws **C** from the rear bumper **A**.



Rear bumper

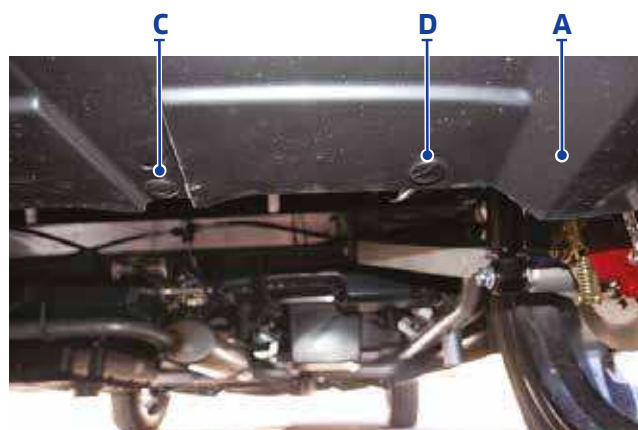
CS5000

Under the vehicle on the passenger side:

- 3.** Remove the plasti-rivets **D** and remove the screw **C** from the rear bumper **A**.

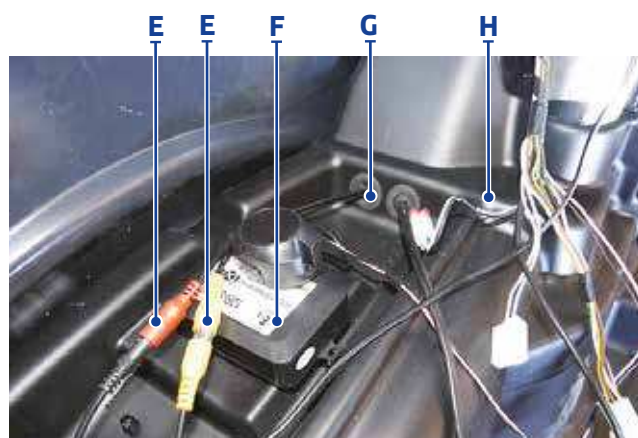
Under the vehicle on the driver's side:

- 4.** Remove the plasti-rivets **D** and remove the screw **C** from the rear bumper **A**.

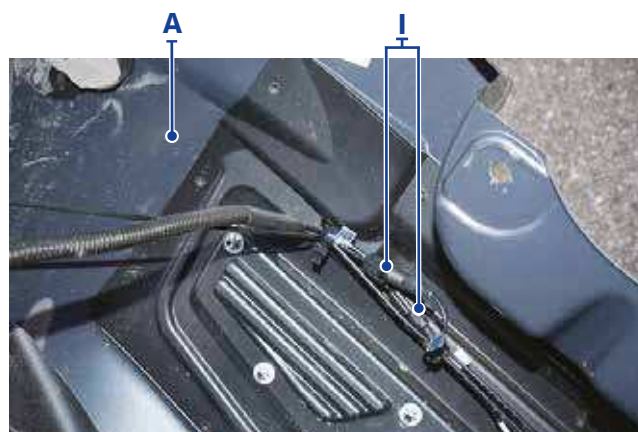


Inside the vehicle:

- 5.** Disconnect the 2 yellow and red jacks **E**, from the control box **F**.
6. Separate the grommet **G** from the back of the luggage compartment **H**.
7. Run the 2 jacks **E** through the grommet **G**.



- 8.** Disconnect the 2 connectors from the parking aids **I** on the rear bumper **A**.
9. Remove the rear bumper **A**.



Rear bumper

CS5000

On the driver and passenger side.

10. Apply the glue **D** on the side panel **R**.



11. Add the adhesive tape **S** to properly secure the rear bumper **A** on the side panel **R** until the glue is completely dry.



RISK

The vehicle will remain immobilised for 2 hours before it can be used.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Compressor	1	-
Glue gun	1	-
Consumables		
Adhesive tape	1	-
Bodywork primer kit	1	-
Glue cartridge	1	-

Preliminary procedures

Operations	Procedure types	Pages
Rear bumper	Removal	A-97



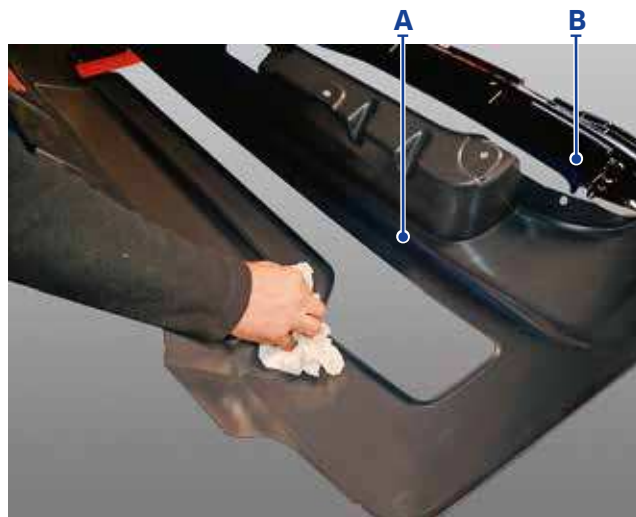
For vehicles equipped with a reversing camera, remove the boot fabric on the passenger side to access the camera connector.

Installation procedure

1. Degrease the contact parts, when gluing the bumper **A** and the spoiler **B**.



The areas to be degreased are identical to those on which the bodywork primer must be applied (see steps **2** and **3**).



2. On the rear bumper **A**, identification of the area on which the bodywork primer will be applied on the inner part.

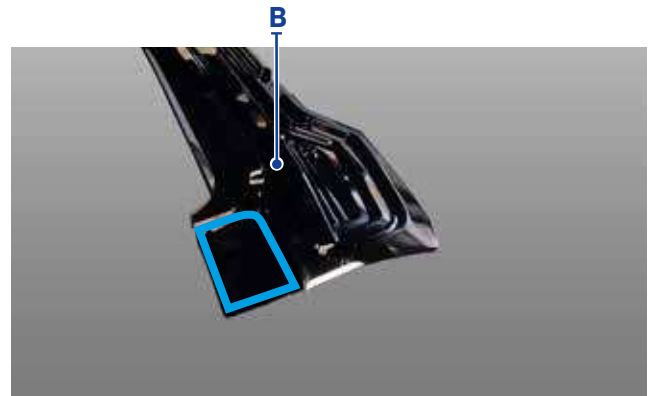


Replacement rear bumper

CS5801

On the passenger and driver side:

3. On the spoiler **B**, identification of the area on which the bodywork primer will be applied on the part.



4. Use the recommended bodywork primer kit **C**.



The use of a container is recommended to avoid losing the properties of the primer in the flask in contact with the sponge.



When applying the primer, take precautions to avoid runs on the visible parts of the bodywork.

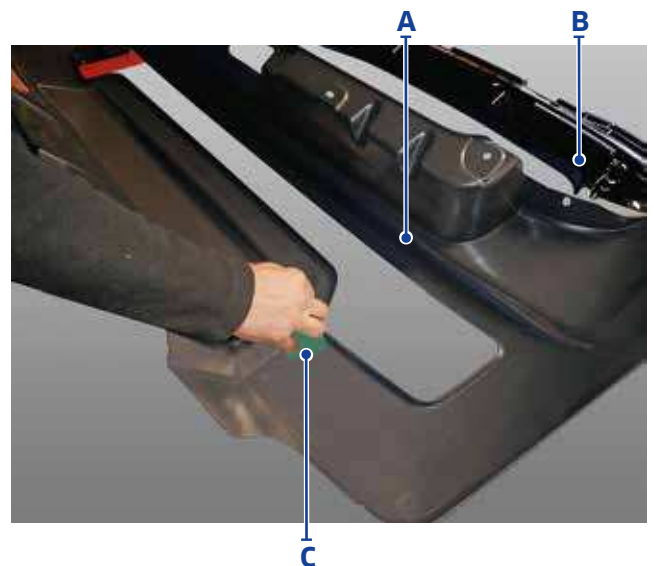


RISK

It is mandatory to wear gloves.



5. Apply the bodywork primer **C** on the bumper **A** and the spoiler **B** over the entire area (see steps 2 and 3).



A

Bodywork & Chassis

Replacement rear bumper

CS5801

6. Preparation of the glue cartridges **D**.



When topping up the cartridges, check that the hardener and the glue proportions are identical.

Refer to the annex: Sikaaxson adhesives



D

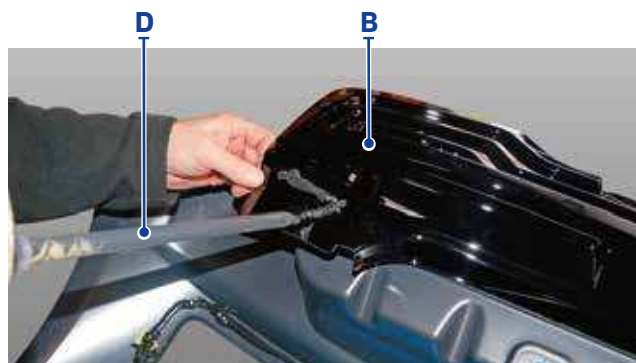
7. Check that the glue and hardener mixture is uniform prior to application. Use the recommended glue gun.



8. Apply the glue **D** on the bumper **A**.



9. Apply the glue **D** on the spoiler **B**.



Replacement rear bumper

CS5801

10. Install the spoiler **B** on the rear bumper **A** and perform the required adjustments to make sure it is properly fitted.
11. Apply the adhesive tape **E** to properly secure the spoiler **B** on the bumper **A** until the glue is completely dry.



12. Remove the protective film **F** on the rear bumper **A**.



13. Clean the rear bumper **A** over the rear bumper trim area.



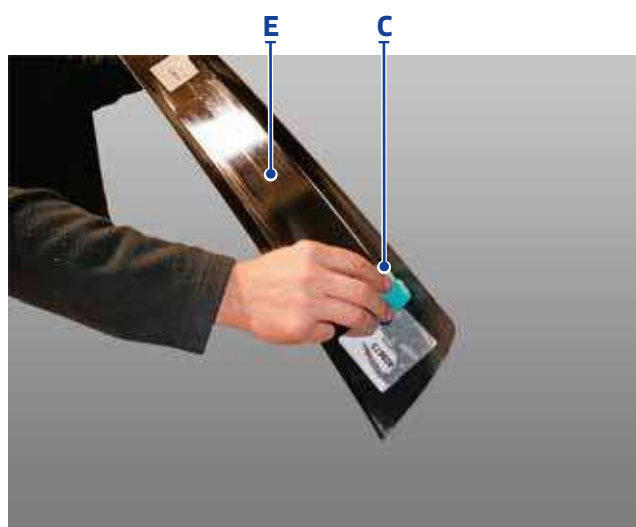
Replacement rear bumper

CS5801

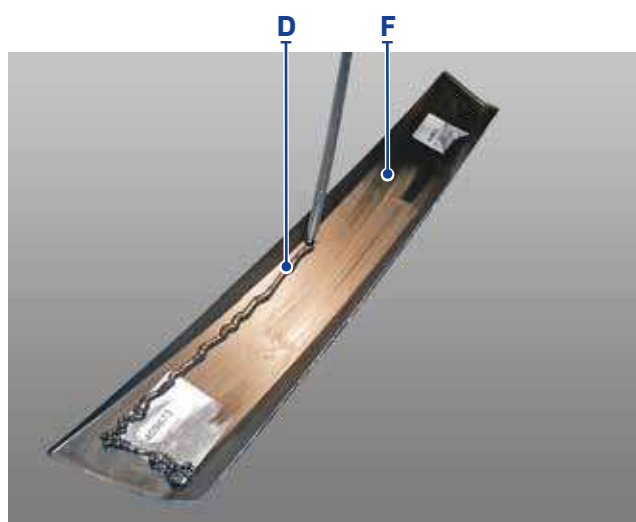
- 14.** Clean the rear bumper trim **G**.



- 15.** Apply the bodywork primer **C** on the inner surface of the rear bumper trim **G**.



- 16.** Apply the glue **D** on the trim **G**.



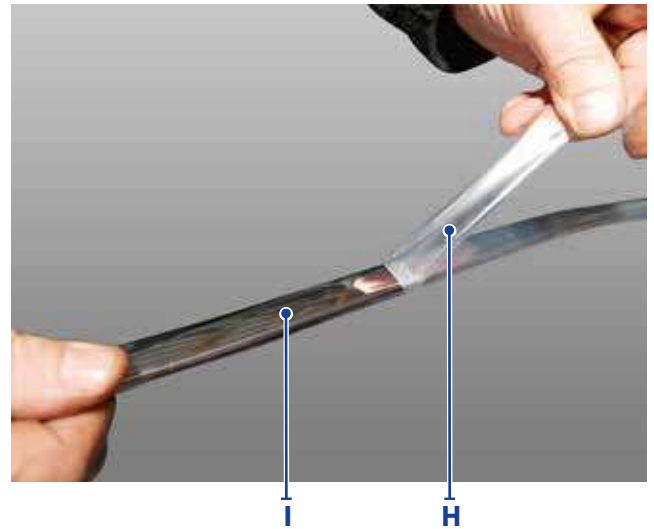
Replacement rear bumper

CS5801

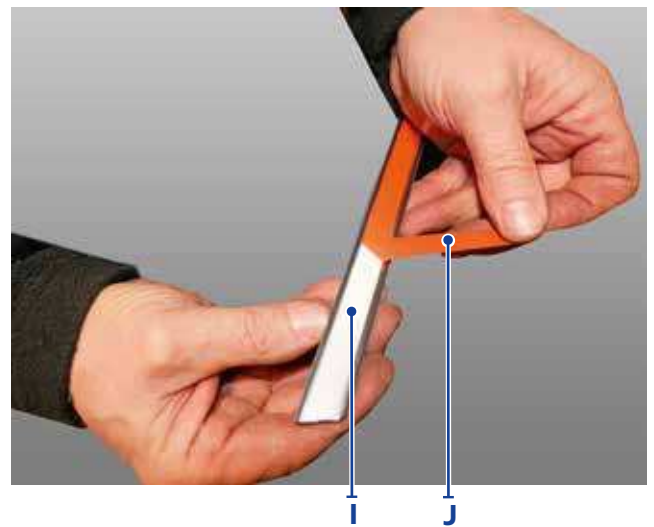
17. Install the trim **G** on the rear bumper **A** and perform the required adjustments to make sure it is properly fitted.
18. Apply the adhesive tape **E** to properly secure the trim **G** on the bumper **A** until the glue is completely dry.



19. Remove the protective film **H** from the trim strip **I**.



20. Partially remove the protection **J** on the adhesive of the trim strip **I**.



A

Bodywork & Chassis

Replacement rear bumper

CS5801

21. Install the trim **I** on the spoiler **B**.



Make sure the trim strip extrudes on either side of the trim housing when positioning it. See arrows on the photo.



On the driver side and the passenger side fit the following:

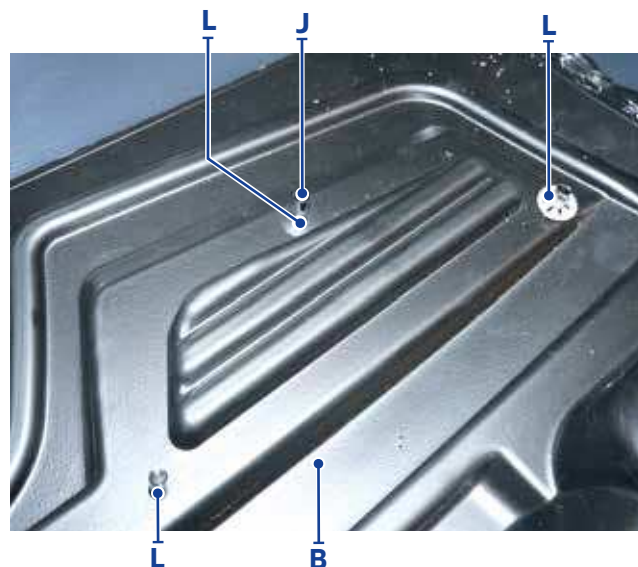
22. Install the trim **K** on the spoiler **B** covering the trim strip **I**.



See arrows on the photo.



23. Fit the trim **K** on the rear part of the spoiler **B** with the 3 “grifaxe” rings **L**.



RISK

Let it dry for 2 hours minimum at an ambient temperature of 20°C before handling the bumper and removing the tape.

Replacement rear bumper

CS5801

On the driver and passenger side.

24. Apply the glue **D** on the side panel **M**.

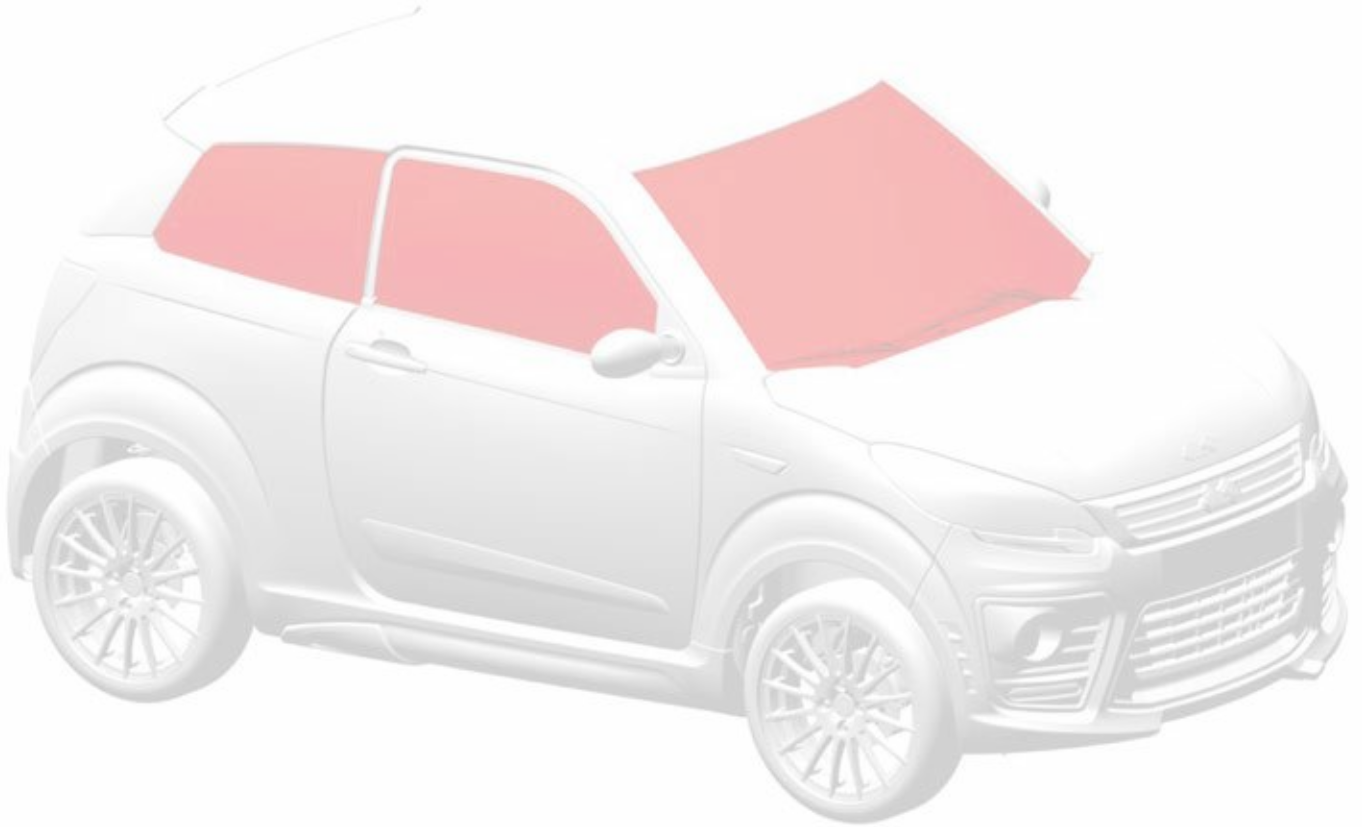


25. Apply the adhesive tape **E** to properly secure the rear bumper **A** on the side panel **M** until the glue is completely dry.



During the installation, respect the tightening torques indicated on **page 9**.

Windows



B



Equipment required

Special tools	Quantities	References
Pneumatic cutter to cut the two-component adhesive	1	-
Wood chisel or scraper	1	-
Pneumatic or electric glue gun	1	-
ASK Forch windscreen removal tool to cut the single-component adhesive	1	4915200
Suction cup	2	

PPE		
Gloves	1	-
Mask	1	-

Consumables / Ingredients

Windscreen adhesive kit	1	1419308
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Preliminary procedures

Operations	Procedure types	Pages
Inside mirrors	Removal / Installation	-
Dashboard	Removal / Installation	C-2
Bonnet	Removal / Installation	A-19
Windscreen wiper arm	Removal / Installation	A-39

Removal procedure

1. Cut the adhesive bead using the pneumatic cutter.
Use a BTB WK4ZS type short blade or use the ASK Forch windscreen removal tool.
2. Remove the windscreen.



It is strongly recommended to position a plate between the edge of the windscreen and the roof panel to act as a mechanical stop for the pneumatic cutter blade, to avoid damaging the roof panel when using the tool.



Windscreen

GL5000

Installation procedure

1. On the ABS side: if the original adhesive bead is in good condition, remove the excess glue using a scraper or a wood chisel and leave a thickness of approximately 1 mm. If the original adhesive bead is disbonded or when replacing the roof panel, remove all the disbonded parts, clean these areas with a cloth soaked in heptane and let it evaporate for 5 minutes.



2 persons are required to complete certain steps.

2. Clean the bonding area on the windscreen:
Prepare the windscreen by cleaning the surface with a cloth soaked in isopropyl alcohol and let it evaporate for 5 minutes.

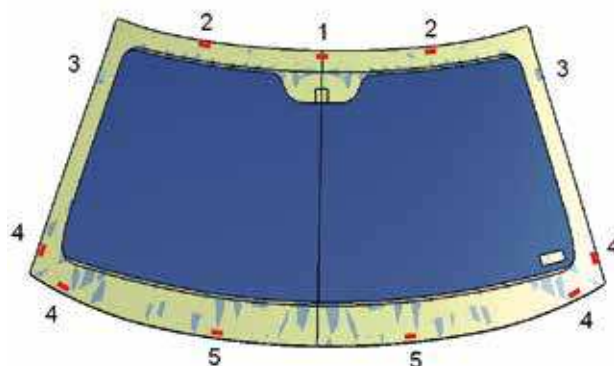
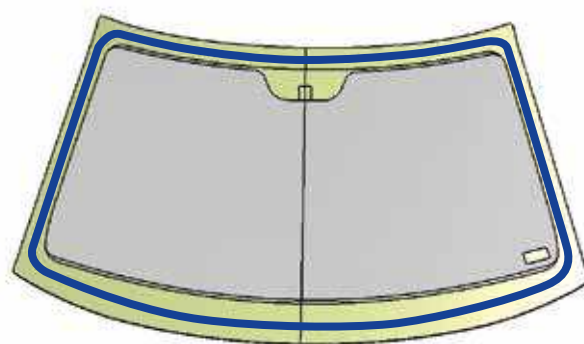
3. On the windscreen side:
Position the 9 shims - 4 mm and the 2 shims - 6 mm flush with the outer edge of the windscreen. The dimensions specified are measured between the outer edges of the shims and the closest corner of the windscreen:

- reference 1 = 4 mm shims centred
- reference 2 = 4 mm shims at 25 cm
- reference 3 = 6 mm shims at 15 cm
- reference 4 = 4 mm shims at 8 cm
- reference 5 = 4 mm shims at 45 cm



The adhesive bead height must be ≥ 10 mm.

4. Prepare the Kent glue cartridge with the **V**-cut nozzle.



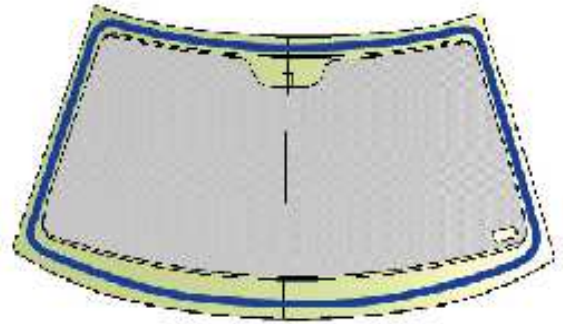
B

Windows

Windscreen

GL5000

- 5.** Apply the glue bead on the windscreen in a single pass, the bead must be flush with the inner edges of the shims. Start and end point of the glue bead in the bottom centre of the windscreen.



- 6.** Install the windscreen using the suction cups, stabilise it using adhesive tape and the stop part provided.

Immobilise the vehicle for 24 hours (information: the single-component glue drying time is 90 minutes).



- 7.** Using the stop part on a JS50 or MGO

Cardboard shim with the detachable part removed and the edge seal in place.



Using the stop part on a JS60

Entire cardboard shim and edge seal in place.



Windscreen

GL5000

8. Reassemble the rest of the elements by performing the removal steps in the reverse order and respecting the tightening torques.



B

Windows



Tailgate window

GL5003



Equipment required

Special tools	Quantities	References
Pneumatic cutter	1	-
Glue gun	1	-
Wood chisel	1	-
Compressor	1	-
PPE		
Gloves	1	-
Mask	1	-
Consumables / Ingredients		
Single-component glue cartridge	1	-
Cloth soaked in heptane	1	-
Cloth soaked in isopropyl alcohol	1	-
Adhesive tape	1	-
Precut nozzle	1	-
4 mm shims	7	-
		-
		-

Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Rear screen wiper motor	Removal / Installation	E-26

Removal procedure

1. Area on which the pneumatic cutter will be used inside the vehicle.



Inside the vehicle:

2. Cut the adhesive bead using the pneumatic cutter in the area shown above.
Use a BTB WK4ZS type short blade.



It is strongly recommended to position a plate between the edge of the window and the tailgate to act as a mechanical stop for the pneumatic cutter blade, to avoid damaging the roof panel when using the tool.



Tailgate window

GL5003

3. Area on which the pneumatic cutter will be used outside the vehicle.



Outside the vehicle with the tailgate open:

4. Cut the adhesive bead using the pneumatic cutter in the area shown above. Use a BTB WK4ZS type short blade.
5. Remove the tailgate window **A**.



Installation procedure

1. On the ABS side: if the original adhesive bead **B** is in good condition, remove the excess glue using the pneumatic cutter and leave a thickness of approximately 1 mm. If the original adhesive bead **B** is disbonded or when replacing the tailgate, remove all the disbonded parts, clean these areas with a cloth soaked in heptane and let it evaporate for 5 minutes. Do not sand or scratch the ABS.



- 2.1 Original window **A** reused: if the original adhesive bead is in good condition, remove the excess glue and leave a thickness of approximately 1 mm. If the original glue bead is disbonded, remove all the disbonded parts. Clean the surface with a cloth soaked in isopropyl alcohol and let it evaporate for 5 minutes.



Tailgate window

GL5003

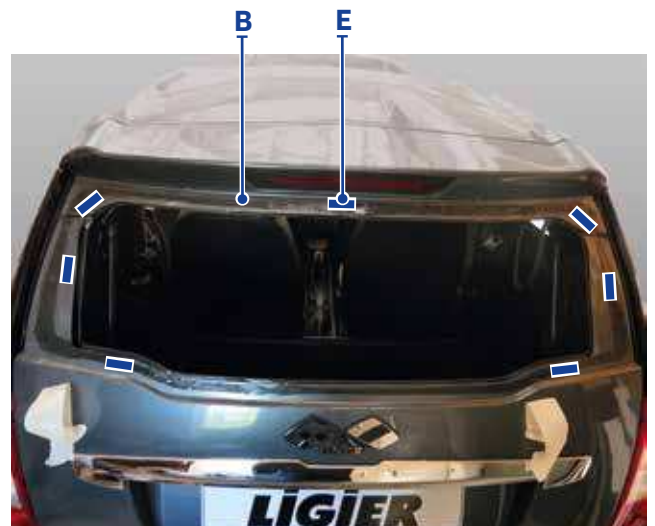
- 2.2** New window **A**: clean the printed area with a cloth soaked in isopropyl alcohol.
Let it evaporate for 5 minutes.



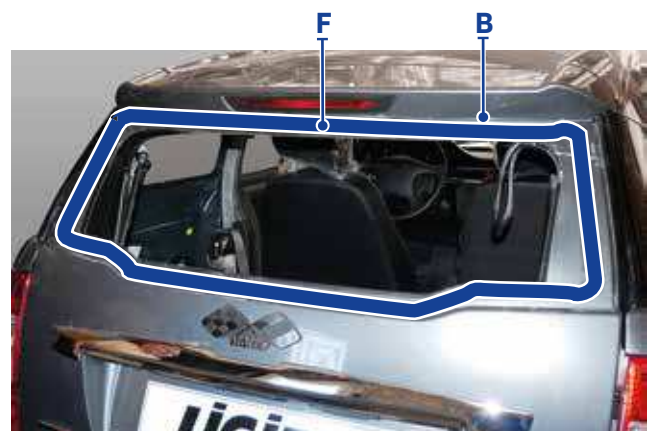
- 3.** Position and adjust the 7 shims **E** manually on the tailgate **B**.



The position of the 7 shims is shown in the photo opposite.



- 4.** Area on which the glue **F** will be applied on the tailgate **B** using the recommended glue gun.



Tailgate window

GL5003



The adhesive bead height must be ≥ 10 mm.



Use a V-cut nozzle to shape the glue bead (as for the windscreen).

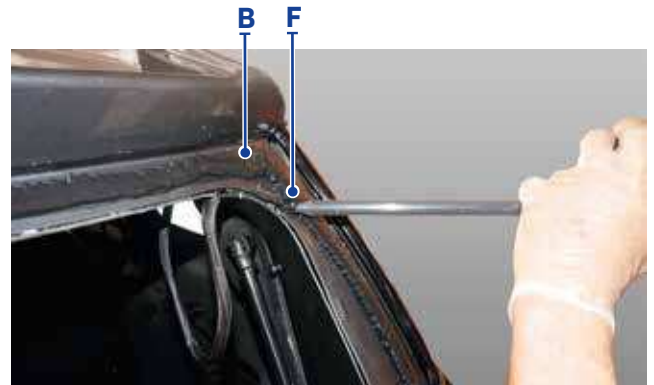
5. Position the tailgate window **A** and perform the required adjustments to make sure it is properly fitted on the tailgate **B**.

6. Apply adhesive tape **G** to secure the tailgate window in position until the glue is completely dry.



RISK

The vehicle will remain immobilised for 48 hours before it can be used.



B

Windows



1.50 h (GL5001)

3.00 h (GL5002)

Quarter window

GL5001 (1 side)

GL5002 (2 sides)



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Pneumatic cutter	1	-
Heat gun	1	-
Compressor	1	-
PPE		
Gloves	1	-
Mask	1	-
Consumables / Ingredients		
Single-component glue cartridge	1	-
Precut nozzle	1	-
4 mm stop	7	-
Cloth soaked in isopropyl alcohol	1	-
Cloth soaked in heptane	1	-
Adhesive tape	1	-
		-
		-

Preliminary procedures

Operations	Procedure types	Pages
Boot fabric	Removal / Installation	C-22



This procedure is identical for the driver and passenger side

Removal procedure

Outside the vehicle:



Identification of the areas on which the heat gun will be applied.



1. Use a heat gun to help remove the quarter window trim **A**.



Quarter window

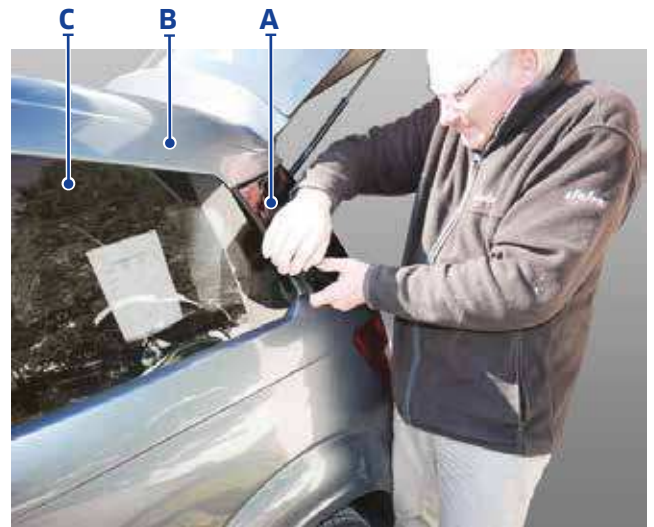
GL5001 (1 side)

GL5002 (2 sides)

2. Separate the quarter window trim **A** manually, avoid damaging the roof panel **B** and the quarter window **C**.
3. Remove the quarter window trim **A**.



The quarter window trim is always damaged during removal and can not be re-installed.



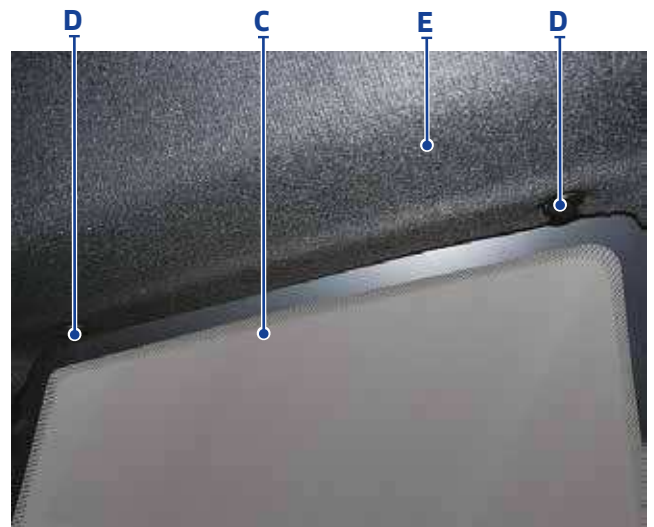
Inside the vehicle:

4. Remove the plasti-rivets **D** to separate the roof fabric **E** from the quarter window **C**.



CAUTION: RISK OF DAMAGING THE ROOF PANEL AND THE SIDE PANEL

Cut the adhesive bead using the pneumatic cutter for the top and bottom parts of the quarter window.
Use a BTB WK4ZS type short blade.



Outside the vehicle:

5. Cut the adhesive bead using the pneumatic cutter on the left and right parts of the quarter window **C**.
Use a BTB WK4ZS type short blade.
6. Remove the quarter window **C**.



Quarter window

GL5001 (1 side)

GL5002 (2 sides)

Installation procedure

See the procedure below:

1. Original window **C** reused: if the original adhesive bead is in good condition, remove the excess glue and leave a thickness of approximately 1 mm. If the original glue bead is disbonded, remove all the disbonded parts. Clean the surface with a cloth soaked in isopropyl alcohol and let it evaporate for 5 minutes.

New window **C**: clean the surface with a cloth soaked in isopropyl alcohol and let it evaporate for 5 minutes.



2. On the ABS side: if the original adhesive bead is in good condition, remove the excess glue using a pneumatic cutter and leave a thickness of approximately 1 mm. If the original adhesive bead is disbonded or when replacing the side panel, remove all the disbonded parts, clean these areas with a cloth soaked in heptane and let it evaporate for 5 minutes. Perform the same operations on the area receiving the trim.

Do not sand or scratch the ABS.



- 3.1. Position the 7 adjusting shims **I** on the side panel **H** for the JS50C model.



The position of the 7 shims is shown in the photo opposite.



Quarter window

GL5001 (1 side)

GL5002 (2 sides)

- 3.2.** Position the 7 adjusting shims **I** on the side panel **H** for the JS50L model.



The position of the 7 shims is shown in the photo opposite.



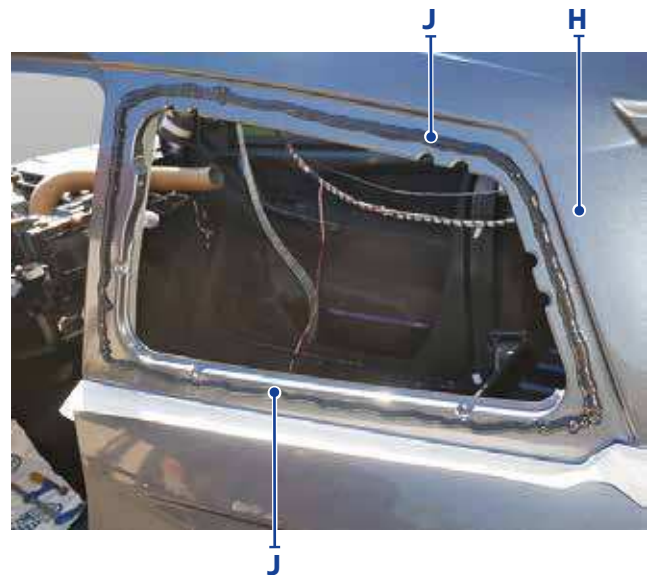
- 4.** Apply the glue **J** on the side panel **H** in a single pass using the recommended glue gun. Use a **V**-cut nozzle to shape the glue bead.



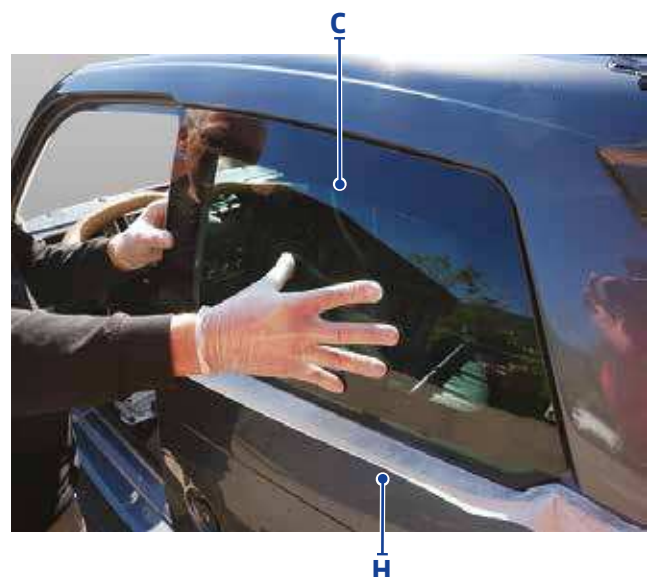
The adhesive bead height must be ≥ 10 mm.



Apply the glue in a single uninterrupted pass to avoid air or water ingress.



- 5.** Position the quarter window **C** and perform the required adjustments to make sure it is properly fitted on the side panel **H**.



B

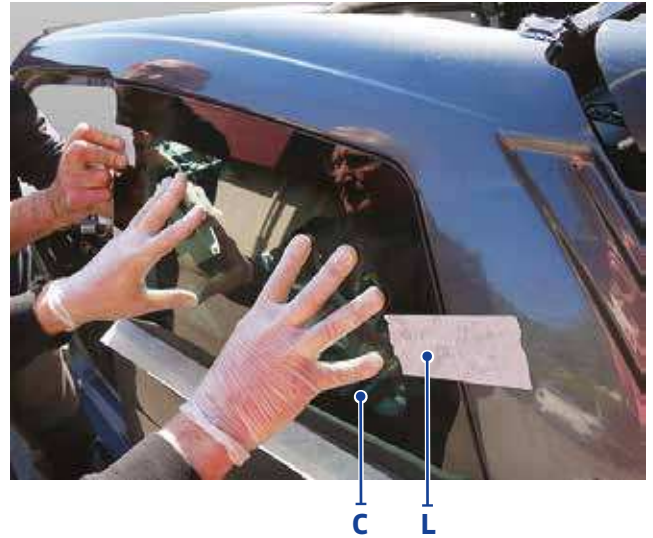
Windows

Quarter window

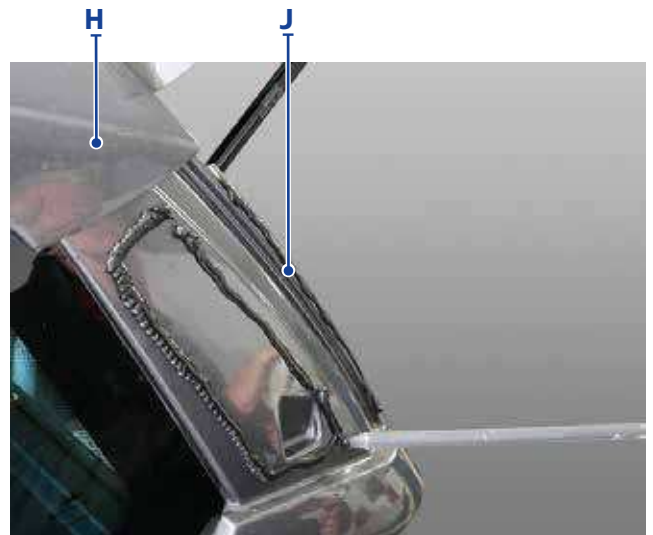
GL5001 (1 side)

GL5002 (2 sides)

6. Apply the adhesive tape **L** to properly secure the quarter window **C** until the glue is completely dry.



7. Apply the glue **J** on the side panel **H** using the recommended glue gun.



8. Position the quarter window trim **A** on the glue manually, in order to make it easier to position on the side panel **H**.



Quarter window

GL5001 (1 side)

GL5002 (2 sides)

9. Apply adhesive tape strips **L** to properly secure the quarter window trim **A** until the glue is completely dry.



RISK

The vehicle will remain immobilised for 48 hours before it can be used.



Equipment required

Special tools	Quantities	References
Size 10 open-end wrench	1	-
Allen key	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Cable tie	1	-

Preliminary procedures

Operations	Procedure types	Pages
Inner door panel	Removal / Installation	A-55

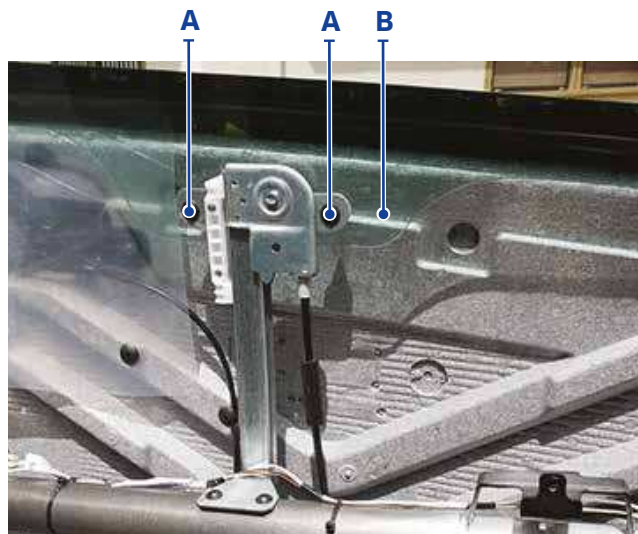


This procedure is identical for the driver and passenger side

Removal procedure

Inside the vehicle:

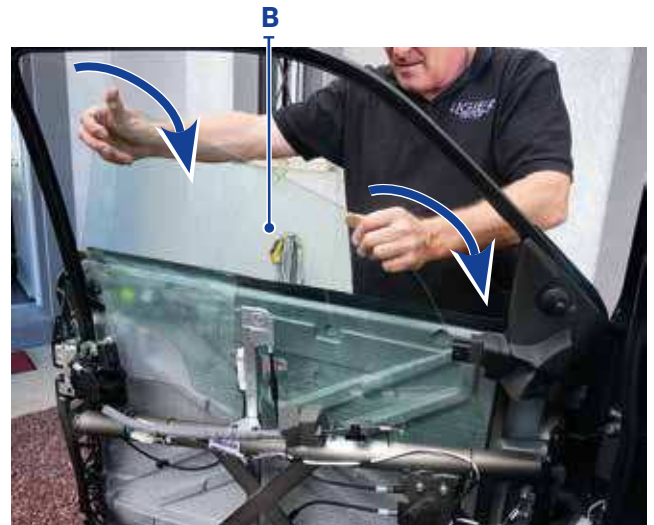
1. Remove the 2 screws **A** from the door window **B**.



Door window

GL5004

2. Tilt the window **B** to the door hinge side, to release the rail seal (see photo shown opposite).
3. Remove the door window **B**.



Installation

To install, perform the removal operations in the reverse order.



Comply with the assembly order of the two spacers **C** which sandwich the door window **B**.



Passenger compartment





Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Philips screwdriver	1	-

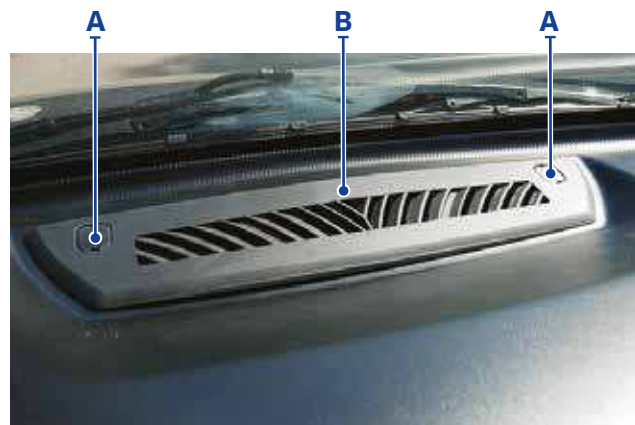
Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Speedometer	Removal / Installation	E-10
Switch support	Removal / Installation	<EX>
Car radio	Removal / Installation	E-8

Removal procedure

Inside the vehicle:

1. Remove the screw covers **A** from the demister grill **B**, using a flat screwdriver.



2. Remove the screws **C** from the demister grill **B**, using a Philips screwdriver.



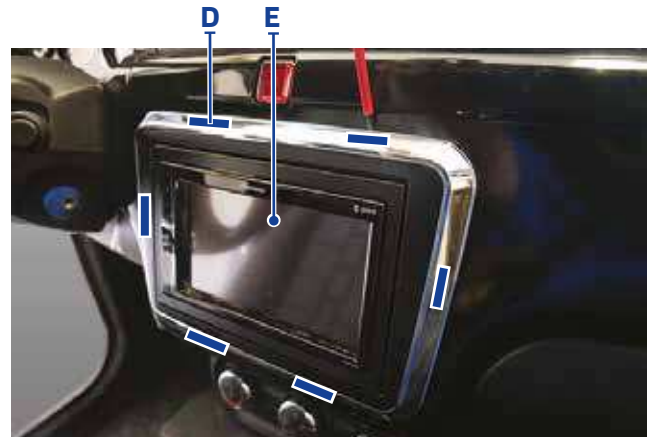
Dashboard

PB5009

3. Remove the trim **D** from the car radio **E**.



Position the screwdriver on the reference marks, and pry to unclip the trim **D** without damaging it.



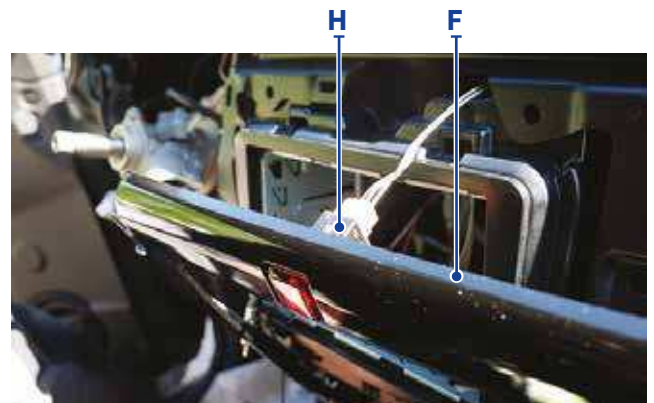
4. Unclip the trim **F** from the dashboard **G**.



Pull the side of the trim **F** manually to unclip it without damaging it.



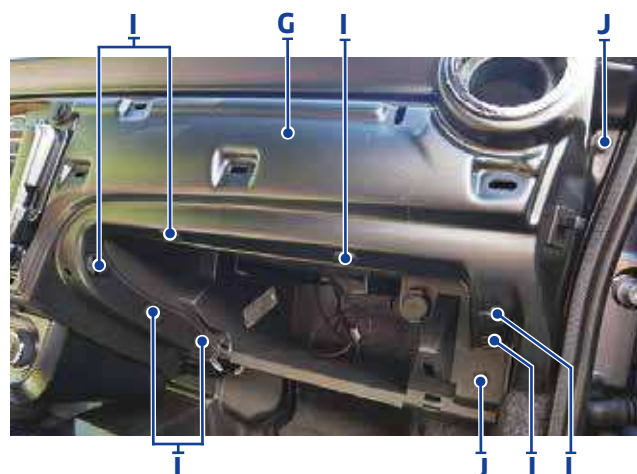
5. Disconnect the connector **H** from the hazard lights button.
6. Remove the trim **F**.



Dashboard

PB5009

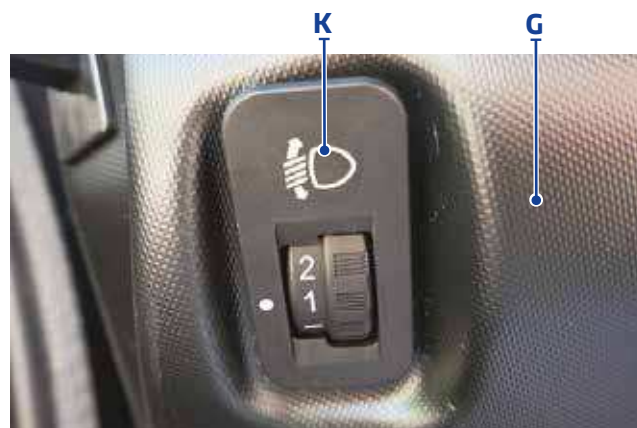
7. Remove the 7 plasti-rivets **I** and the 2 screws **J** from the dashboard **G**.



8. Remove the 2 screws **J** from the dashboard **G**.



9. Unclip the headlight setting button **K** (optional) on the driver's side from the dashboard **G**.



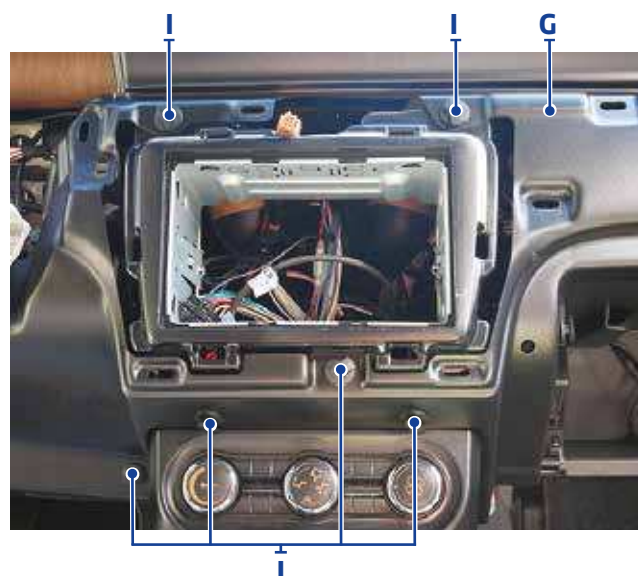
Dashboard

PB5009

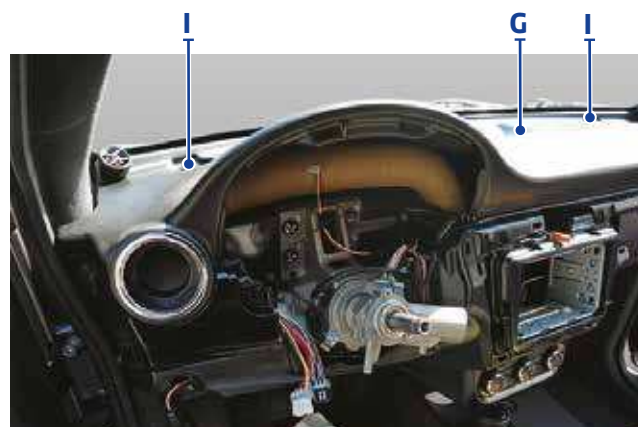
- 10. Disconnect the connector **L** from the headlight setting button **K**.
- 11. Remove the headlight setting button **K**.



- 12. Remove the 6 plasti-rivets **I** from the dashboard **G**.



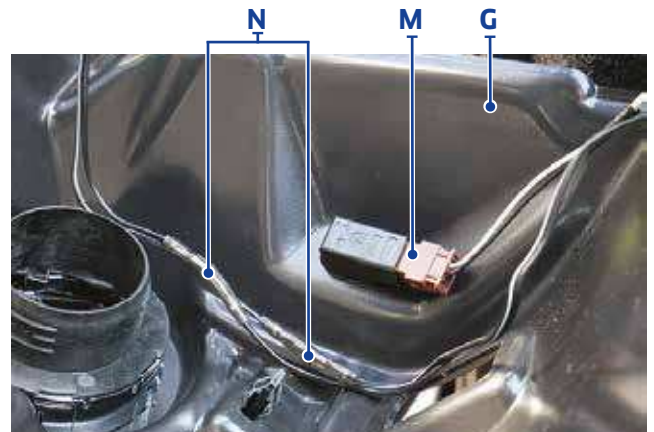
- 13. Remove the 2 plasti-rivets **I** from the dashboard **G**.



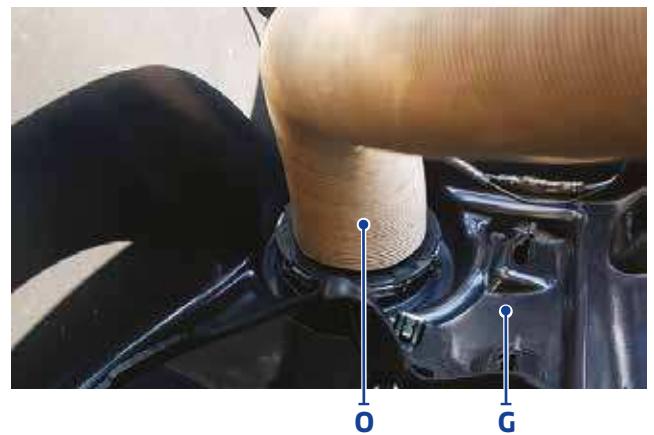
Dashboard

PB5009

14. Disconnect the 2 connectors **M** of the roof light contactors on the driver and passenger side from the dashboard **G**.
15. Disconnect the 4 connectors **N** if the vehicle is equipped with the Hi-fi pack, on the driver and passenger side from the dashboard **G**.



16. Disconnect the heater pipes **O** on the driver and passenger side from the dashboard **G**.
17. Remove the dashboard **G**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Allen key	1	-

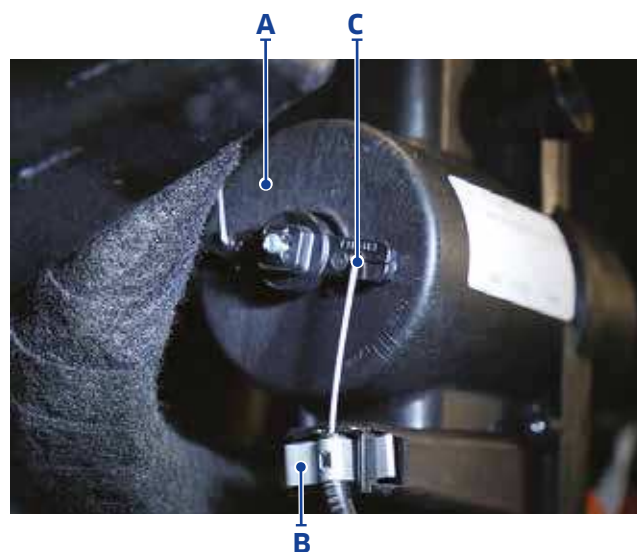
Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Dashboard	Removal / Installation	C-2
Accessory support - Fan button	Removal / Installation	C-10

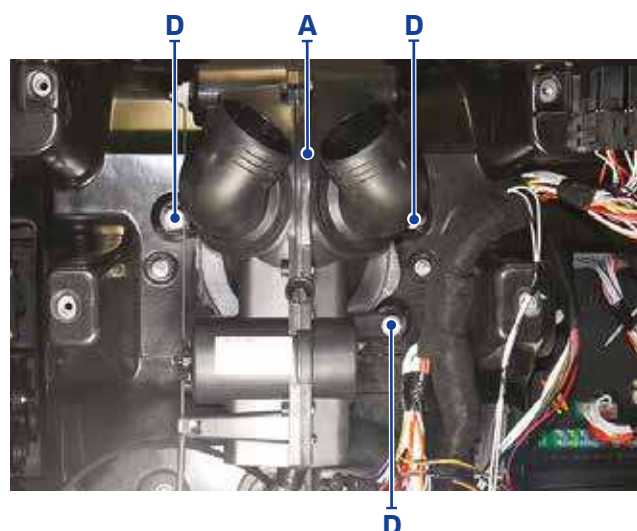
Removal procedure

Inside the vehicle:

1. Remove the clip **B** and the cable **C** from the heater vent **A**.



2. Remove the 3 screws **D** from the heater vent **A**.
3. Remove the heater vent **A**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



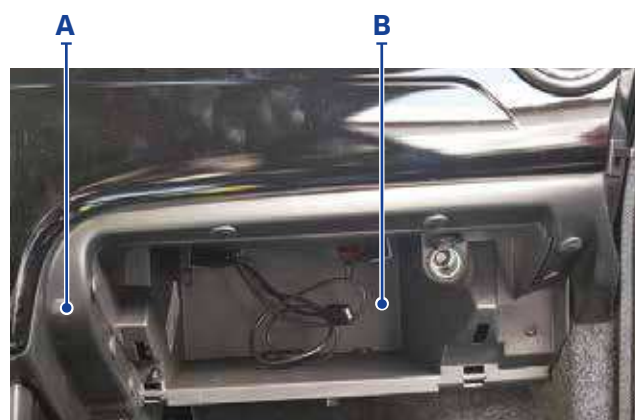
Equipment required

Special tools	Quantities	References
Magnetic Allen key with extension	1	-
Torx screwdriver	1	-
PPE		
Gloves	1	-

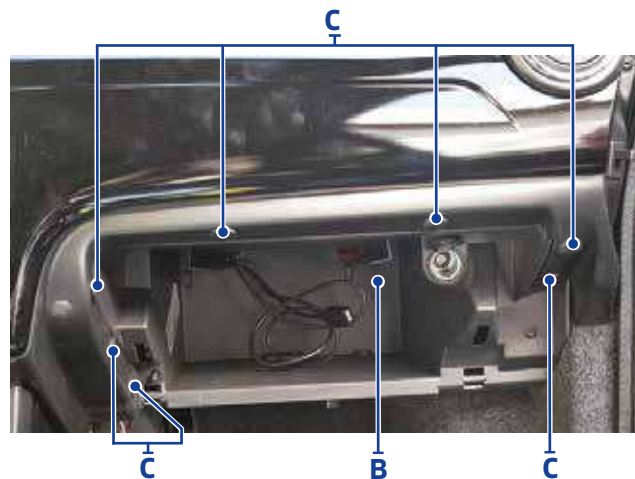
Removal procedure

Inside the vehicle:

1. Remove the blanking cap **A** from the glove box **B**.



2. Remove the 7 plasti-rivets **C** from the glove box **B**.



Glove box

PB5012

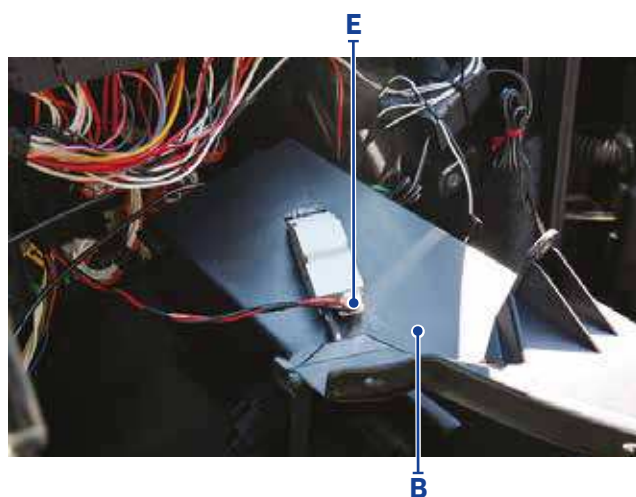
3. Remove the screw **C** from the glove box **B**.
4. Remove the screw **D** from the glove box **B**.



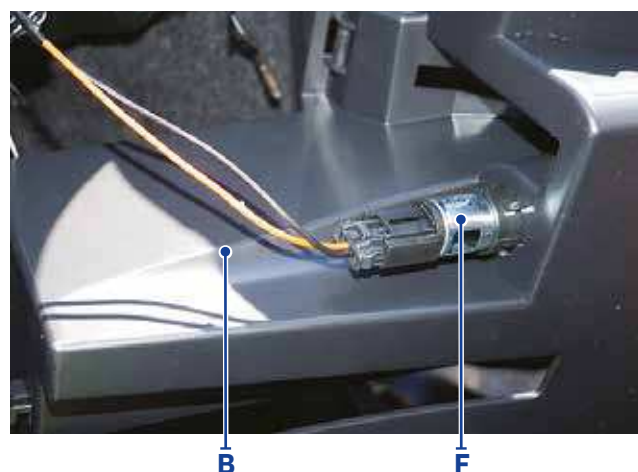
For the screw **C** use a magnetic Allen key with an extension.



5. Disconnect the connector of the light **E** from the glove box **B**.



6. Disconnect the connector of the 12V socket **F** from the glove box **B**.
7. Remove the glove box **B**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
1 Allen key	1	1
1 flat screwdriver	1	1

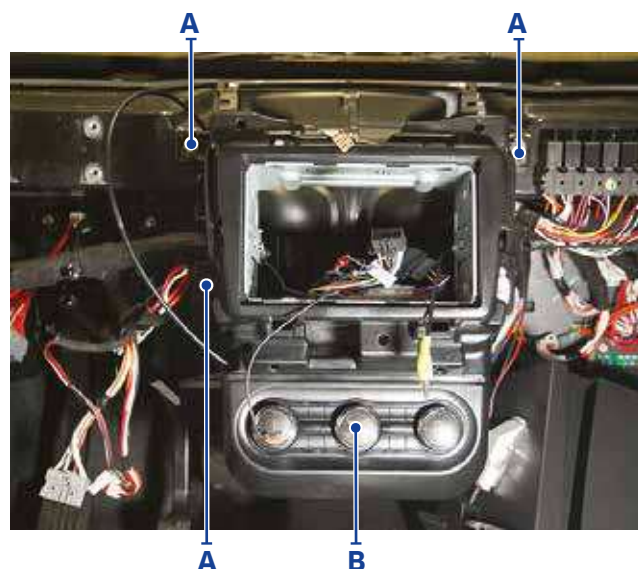
Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Car radio	Removal / Installation	E-8
Dashboard	Removal / Installation	C-2

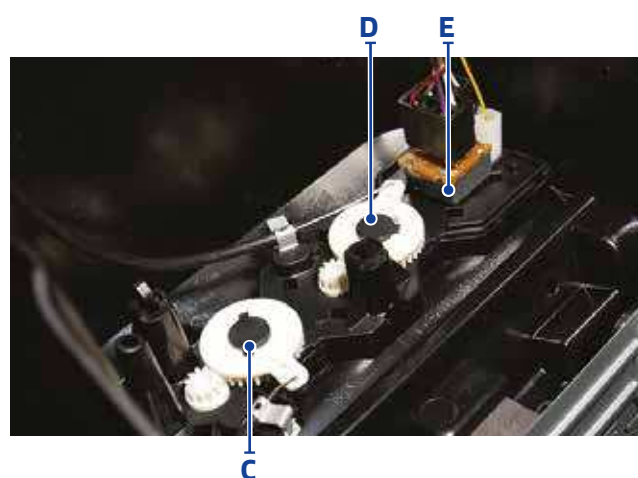
Removal procedure

Inside the vehicle:

1. Loosen the 3 screws **A**.
2. Tilt the accessory support **B** to the inverter lever side.



3. Identification of the heater control **C**.
4. Identification of the air distributor control **D**.
5. Identification of the fan control **E**.



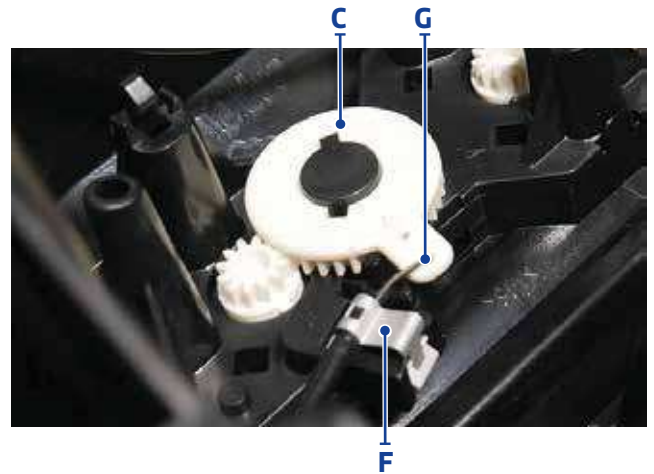
Accessory support

PB5008

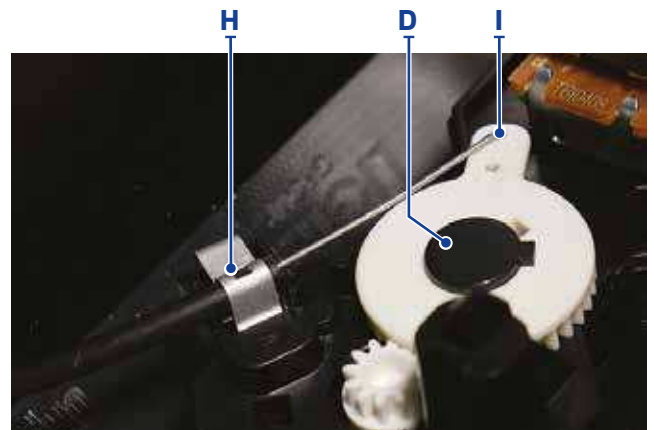
Fan buttons

PB5006

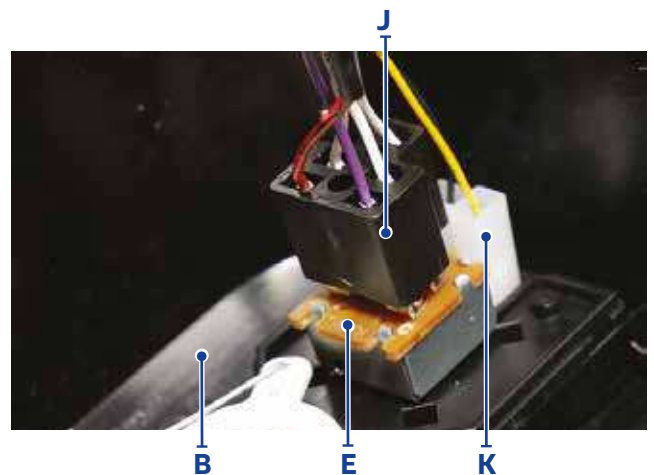
6. Remove the clip **F** from the heater control **C**.
7. Remove the cable **G** from the heater control **C**.



8. Remove the clip **H** from the air distributor control **D**.
9. Remove the cable **I** from the air distributor control **D**.



10. Disconnect the connector **J** from the fan control **E**.
11. Disconnect the connector **K** from the control panel **B**.
12. Remove the control panel **B**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Consumables / Ingredients		
Hot melt type glue	1	-



This procedure explains how to remove the carpet on the passenger side.
The procedure is identical to remove the carpet on the driver's side.

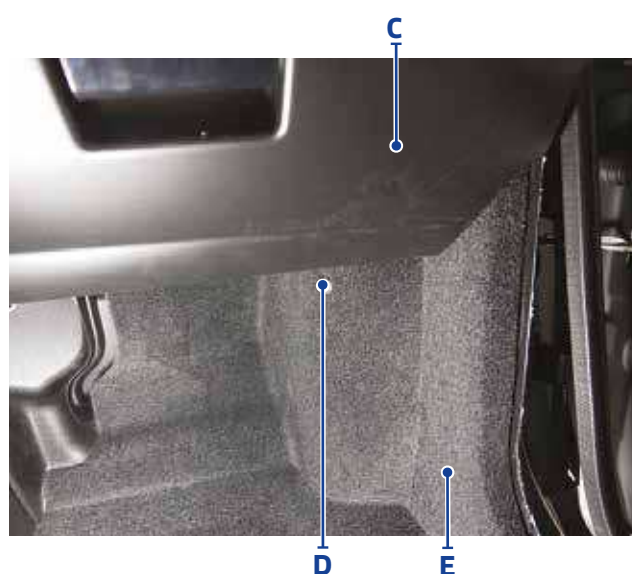
Removal procedure

Inside the vehicle:

1. Open the door **A**, partially remove the door seal **B**.



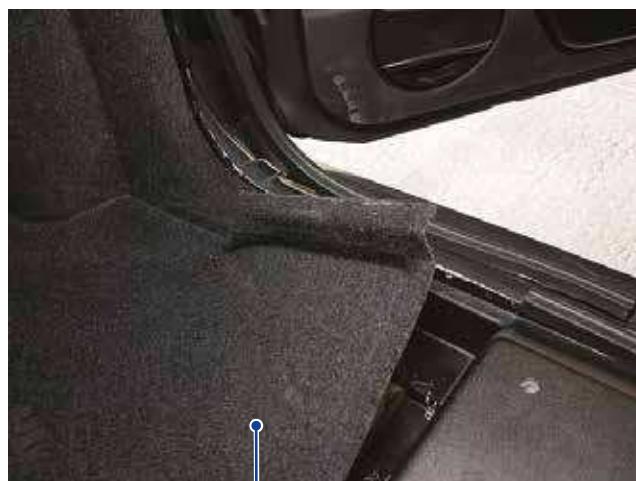
2. Remove the plasti-rivet **D** underneath the glove box, securing the carpet **E**.



Front part carpet

CS5023

3. Manually pull off the carpet **E**.



E

Installation procedure

To install, perform the removal operations in the reverse order.



Use a hot melt type glue to install the carpet.



Equipment required

Special tools	Quantities	References
Size 17 wrench	1	-
Flat screwdriver	1	-
Allen key	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Boot fabric	Removal / Installation	C-22

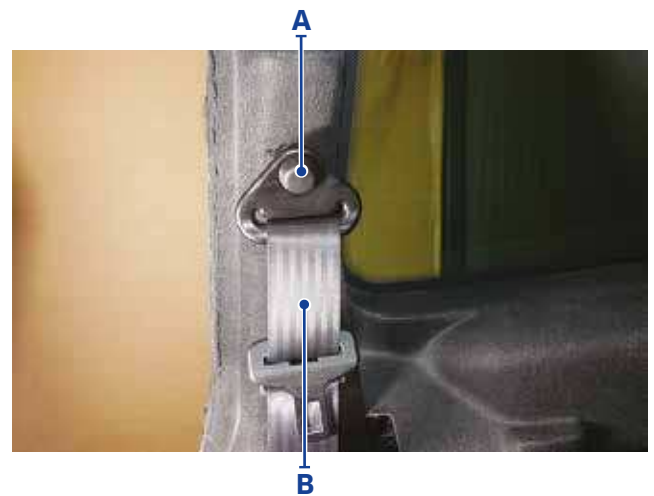


This procedure is identical for the driver and passenger side

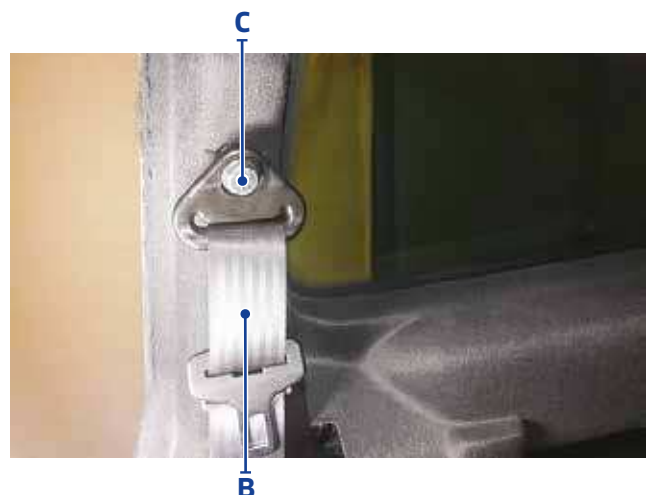
Removal procedure

Inside the vehicle:

1. Remove the screw cover **A** on the safety belt **B**.



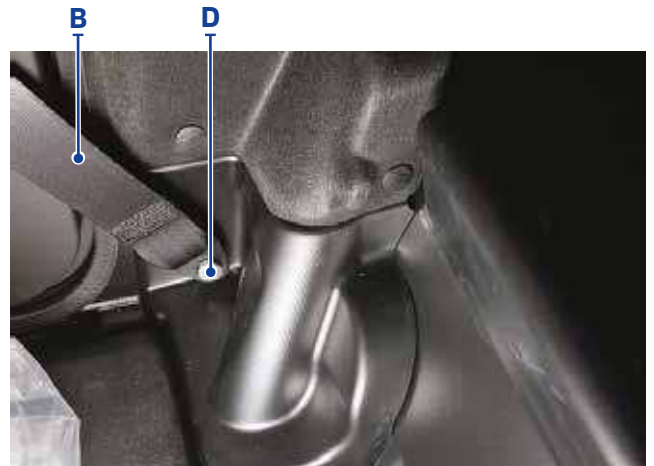
2. Remove the screw **C** from the safety belt **B**.



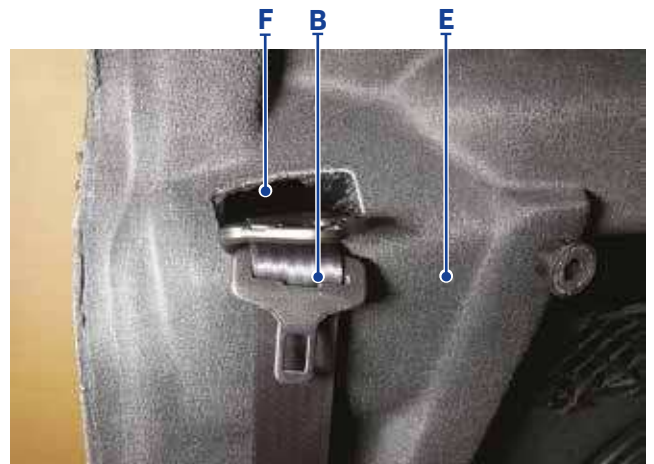
Safety belt

DV5000 - DV5001

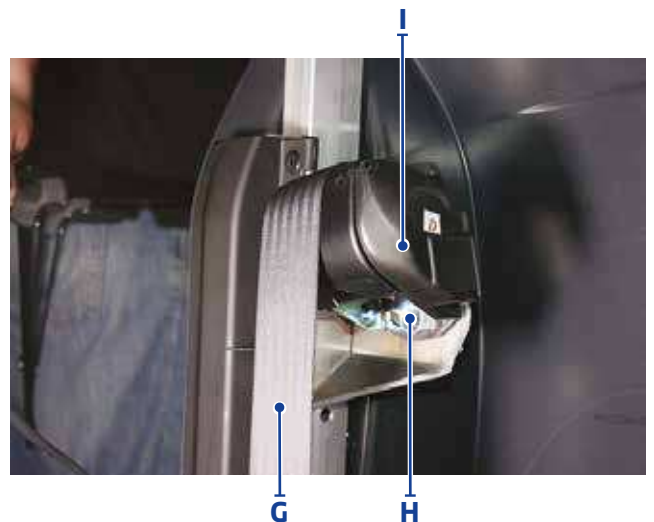
3. Remove the screw **D** of the safety belt **B** on the panel side.



4. Insert the entire safety belt **B** in the opening **F** in the boot fabric **E**.
5. Remove the boot fabric (see corresponding procedure).



6. Remove the screw **H** from the reel **I**.
7. Remove the safety belt **G** with the reel **I**.



Installation

To install, perform the removal operations in the reverse order.



Screw **C**: tightening torque 25 Nm.



Screw **H**: tightening torque 37 Nm.



Screw **D**: tightening torque 37 Nm.



Equipment required

Special tools	Quantities	References
Glue gun	1	-
Compressor	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Glue cartridges	1	-

Removal procedure

Inside the vehicle:

1. Partially remove the door seal **A**.
2. Manually separate the windscreen pillar **B**.



Windscreen pillar

CS5006

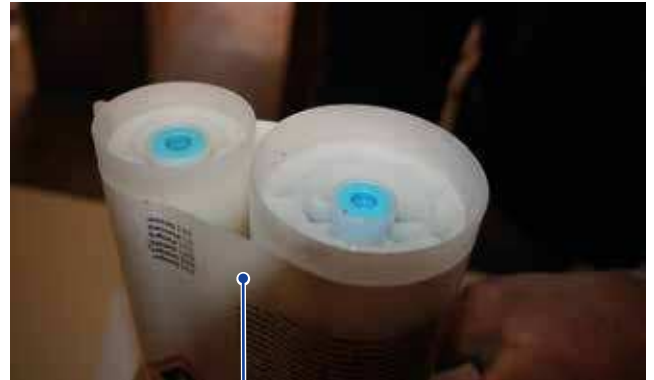
Installation

1. Preparation of the glue cartridges **C**.



When topping up the cartridges, check that the hardener and the glue proportions are identical.

Refer to the annex: Sikaaxson adhesives

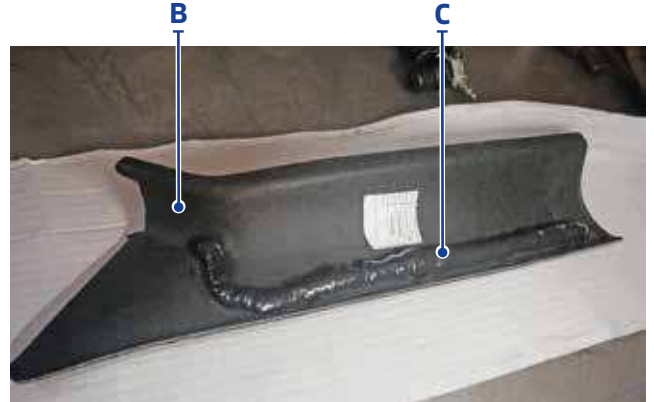


C

2. Check that the glue and hardener mixture is uniform.
Use the recommended glue gun.



3. Apply the glue **C** on the inside of the windscreen pillar **B**.



B

C

4. Position the new pillar **B** and perform the required adjustments to make sure it is properly fitted on the chassis pillar.



B

C

Passenger compartment

Windscreen pillar

CS5006

5. Install the door seal **A** on the windscreen pillar **B**.



CAUTION

Glue drying time 48 hours.



C



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
Electric drill	1	-
Riveting pliers	1	-
Vacuum cleaner	1	-
PPE		
Gloves	1	-
Protection cover	1	-
Consumables / Ingredients		
Rivets	4	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Boot fabric	Removal / Installation	C-22
Passenger gripping handles	Removal / Installation	A-49

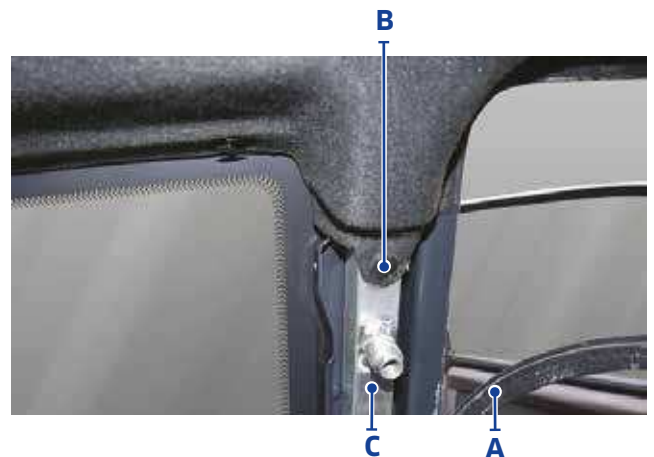


The procedure below is performed on the driver's side. The same operations must be repeated on the passenger side to completely remove the roof panel fabric.

Removal procedure

Inside the vehicle:

1. Partially remove the door seal **A**.
2. Remove the plastic rivet **B** fitted on the support mount **C**.



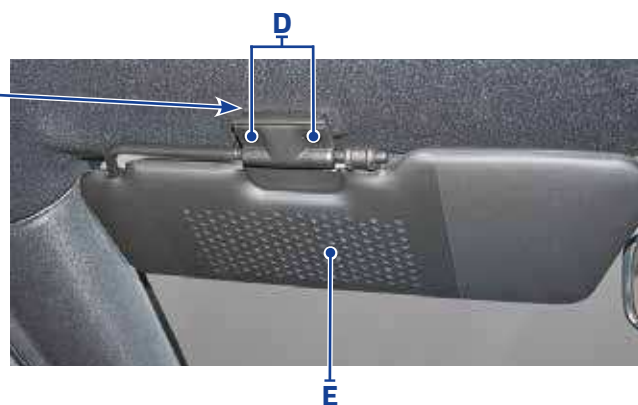
Roof panel fabric

CS5016

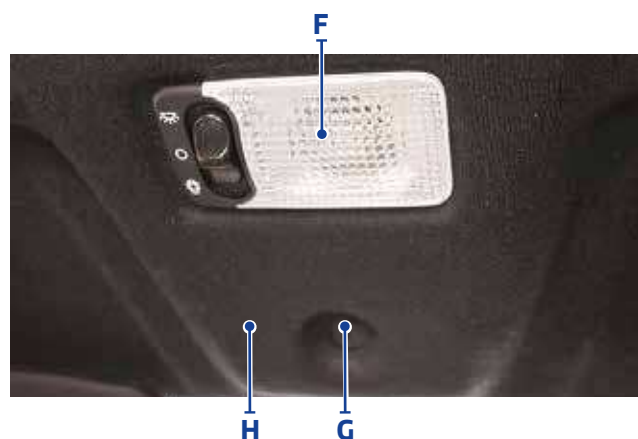
3. Drill the 2 metal rivets **D** of the sun visor support **E**.
4. Remove the sun visor support **E**.



Retrieve the shim which may be fitted between the sun visor and the fabric or between the fabric and the sun visor support.



5. Unclip the inside roof light **F** using a flat screwdriver.
6. Disconnect the connector on the back part of the inside roof light **F**.
7. Remove the inside roof light **F**.
8. Remove the plastic rivet **G** securing the roof panel fabric **H**.



9. Pull the windscreen pillar **I** to separate it.



10. Remove the two plasti-rivets **J** from the roof panel fabric **H**.



Roof panel fabric

CS5016

- 11.** Take the roof panel fabric **H** out through the boot.



- 12.** Check that there are no rivet parts under the body **K**.

- 13.** Use a drill to remove the remaining pieces.



During this step, pieces of rivets may fall on the seats.

Solution 1: before performing step 5, install a protective cover on the seats.

Solution 2: after completing step 5, vacuum the seats before using them.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Size 17 wrench	1	-
Flat screwdriver	1	-
Allen key	1	-



This procedure is identical for the driver and passenger side

Removal procedure

Inside the vehicle:

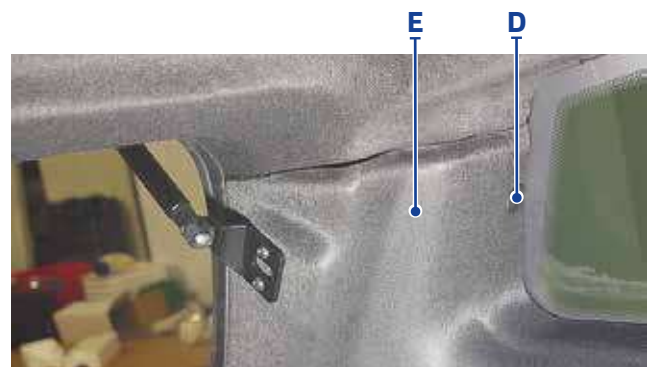
1. Take out the removable boot shelf **A**.
2. Remove the fixed boot shelf **B**.
3. Remove the boot divider **C**.



4. Remove the plasti-rivet **D** from the boot fabric **E**.



5. Remove the plasti-rivet **D** from the boot fabric **E**.



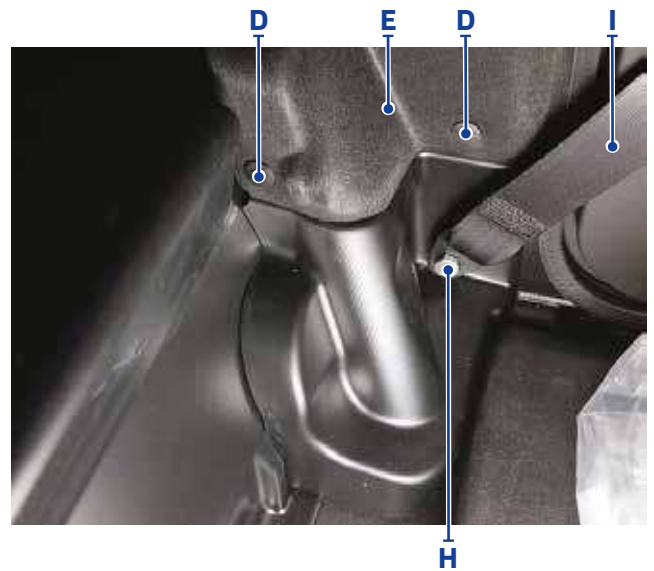
Boot fabric

CS5020

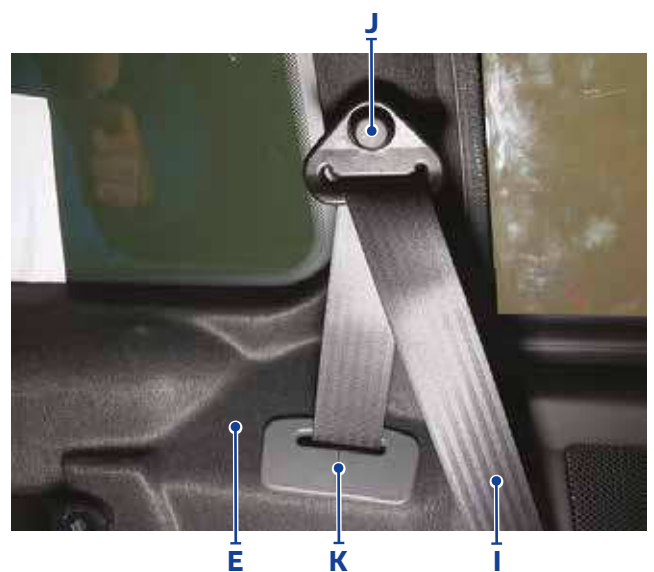
- 6. Partially remove the seal **F**.
- 7. Remove the 2 screws from the cylinder support **G** fitted on the boot fabric **E**.



- 8. Remove the two plasti-rivets **D** from the boot fabric **E**.
- 9. Remove the screw **H** from the safety belt **I**.



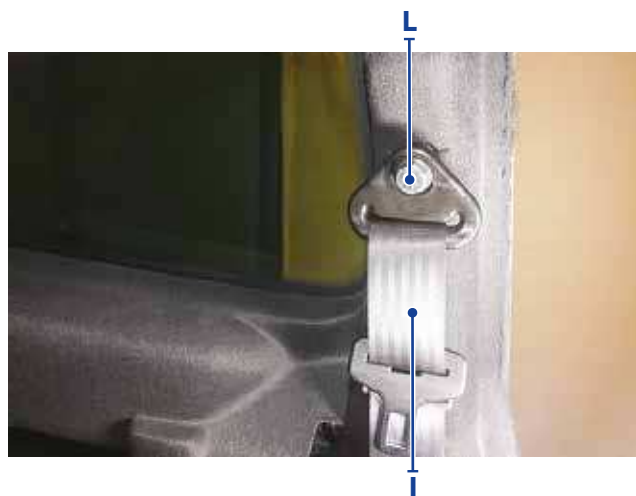
- 10. Remove the screw cover **J** from the safety belt **I**.
- 11. Separate the trim **K** from the boot fabric **E**.



Boot fabric

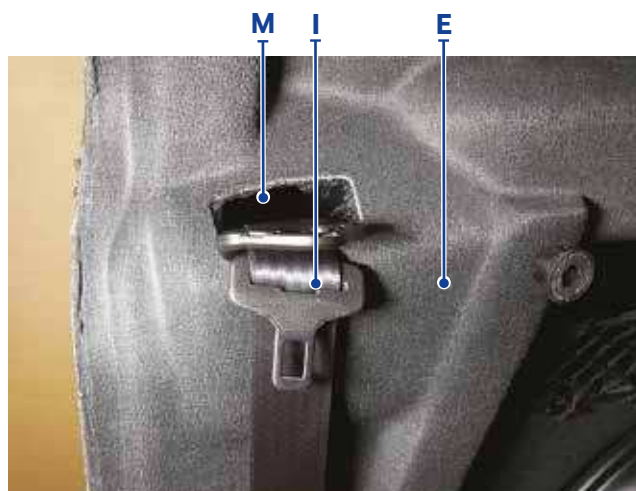
CS5020

12. Remove the screw **L** from the safety belt **I**.



13. Insert the entire safety belt **I** in the opening **M** in the boot fabric **E**.

14. Remove the boot fabric.



15. Partially pull out the seal **N** from the driver's side door.

16. Remove the boot fabric **E** on the driver's side.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Screw **H**: tightening torque 37 Nm.



Screw **L**: tightening torque 25 Nm.



Equipment required

Special tools	Quantities	References
Allen key (excluding Flex It range)	1	-

Removal procedure

1. Remove the 2 knobs or front hexagon socket retaining screws **A**.
2. Loosen the 2 knobs or rear hexagon socket retaining screws **B**.
3. Remove the passenger seat **C**.



C
Passenger compartment

Installation procedure

To install, perform the removal operations in the reverse order.



Equipment required

Special tools	Quantities	References
Allen key	1	-

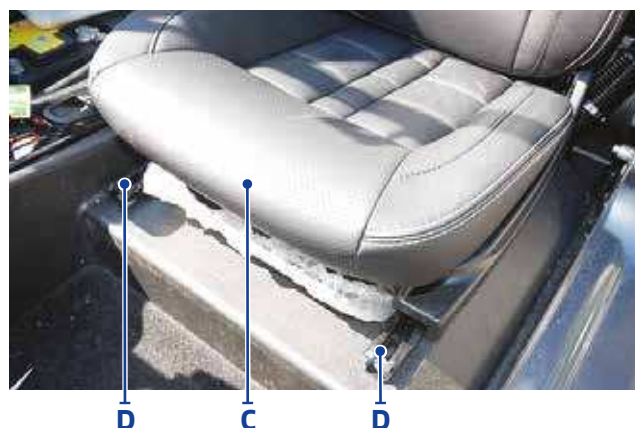
Removal procedure

Inside the vehicle:

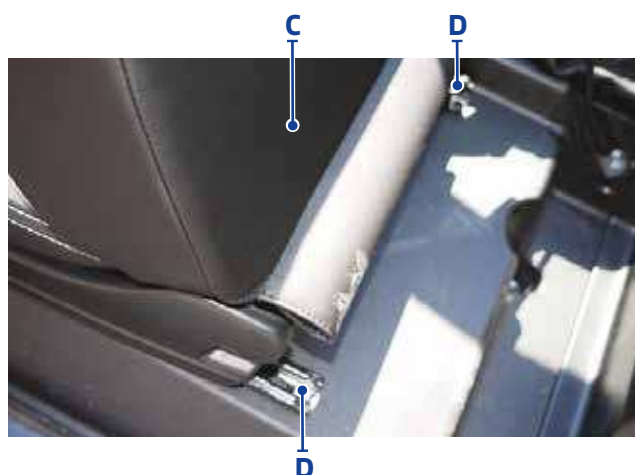
1. Remove the 2 plasti-rivets **A** from the seat fabric **B**.
2. Remove the seat fabric.



3. Pull the driver's seat **C** back and remove the 2 front hexagon socket screws **D** from the seat rails.



4. Push the driver's seat **C** forward and remove the 2 rear hexagon socket screws **D** from the seat rails.
5. Remove the driver's seat **C**.



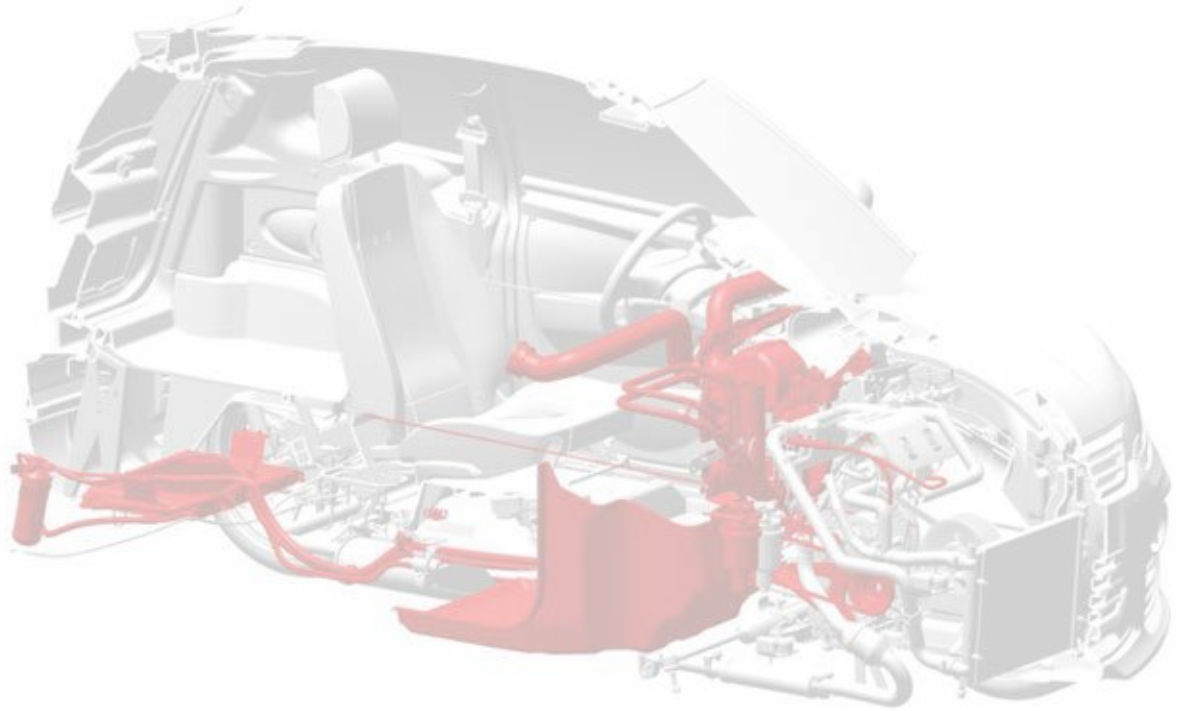
Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).

Heating & Air-conditioning





Equipment required

Special tools	Quantities	References
Philips screwdriver	1	-
Size 8 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Coolant	1	-
Collection container	1	-

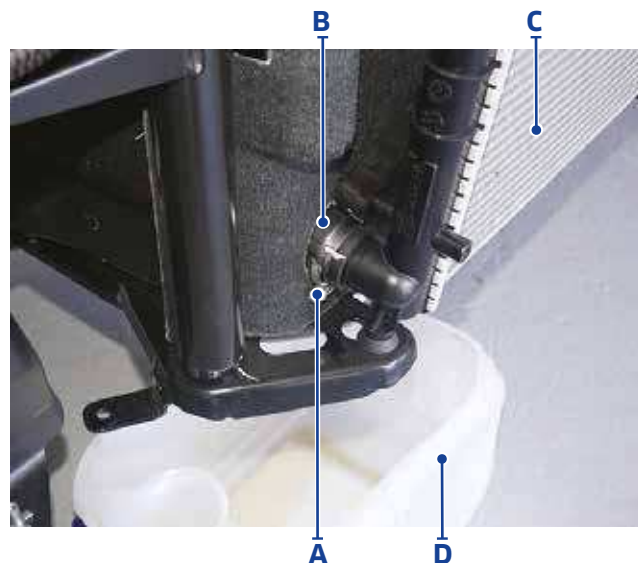
Preliminary procedures

Operations	Procedure types	Pages
Ignition off	-	-
Front bumper	Removal / Installation	A-2

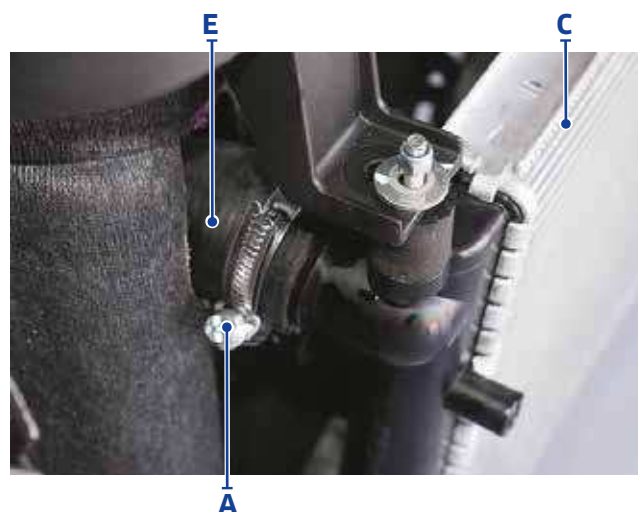
Removal procedure

Outside the vehicle:

1. Remove the hose clamp **A** securing the lower hose **B** on the engine radiator **C**.
2. Drain the engine radiator **C** and collect the coolant in a container **D**.



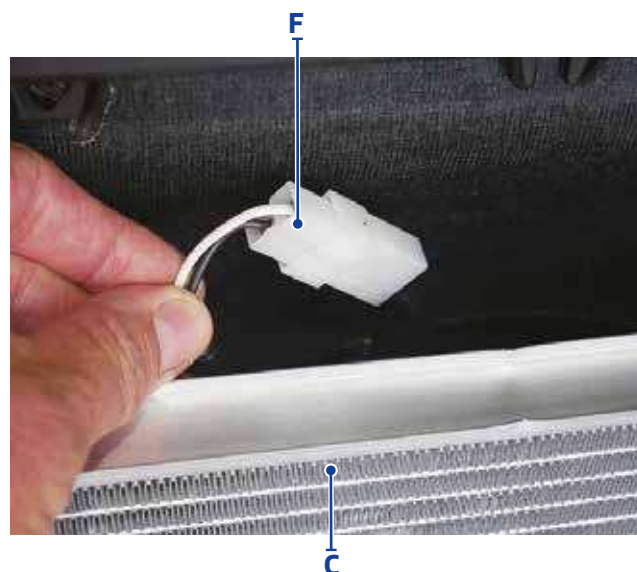
3. Remove the hose clamp **A** securing the upper hose **E** on the engine radiator **C**.



Engine radiator

CR5010

4. Behind the engine radiator **C** disconnect the connector of the fan **F**.



5. Loosen the 2 nuts **G** on the engine radiator **C**.
6. Separate the radiator from the lower rubber mountings **H** on the engine mount **I**.
7. Remove the engine radiator **C**.



Installation

To install, perform the removal operations in the reverse order.



Check the level of coolant in the expansion tank.



During the installation, respect the tightening torques indicated on **page 9**.



It is necessary to drain the cooling circuit after filling, check that the fan starts once the engine temperature increases, and check the level of fluid once the engine is cold.



2.80 h without air conditioning
3.50 h with air conditioning

Passenger compartment heater box

CR5012 without air conditioning
CR5812 with air conditioning



Equipment required

Special tools	Quantities	References
Philips screwdriver	1	-
Size 16 - 22 - 26 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Air conditioning hose gasket	2	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Engine	Partial removal / installation (powertrain)	H-2

D



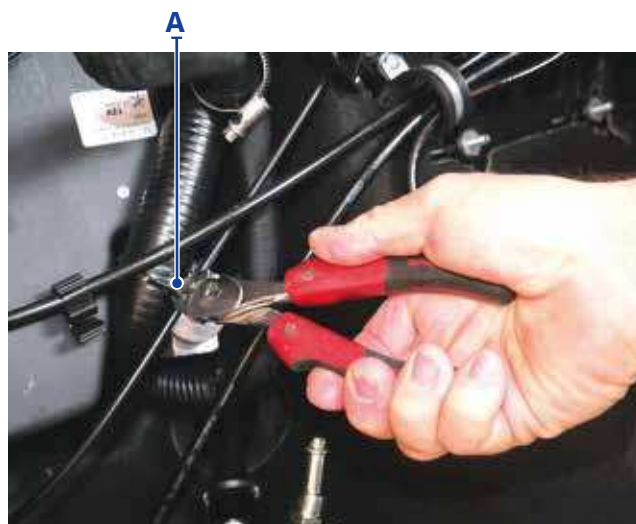
The powertrain must be removed using a workshop crane to access the passenger compartment heater box.



Removal procedure

In the engine compartment:

1. Cut the cable tie **A**.
2. Remove the cable tie **A**.



Passenger compartment heater box

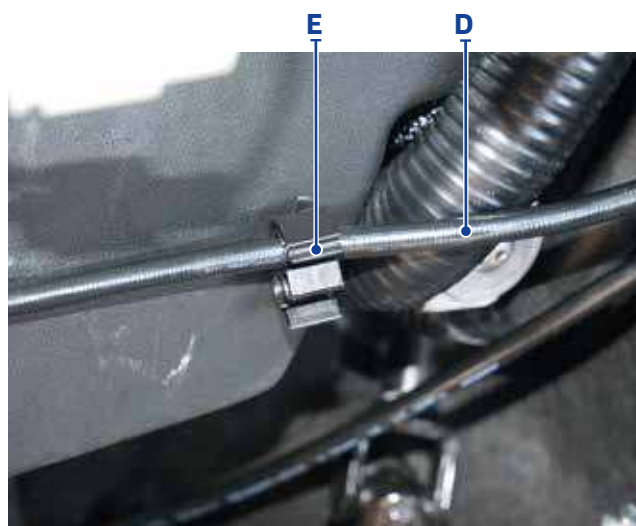
CR5012 without air conditioning

CR5812 with air conditioning

3. Remove the clip **B** from the heater cock **C**.



4. Release the front brake pipe **D** from the clip **E**.



5. Remove the 2 screws **F** from the windscreen scuttle panel **G**.

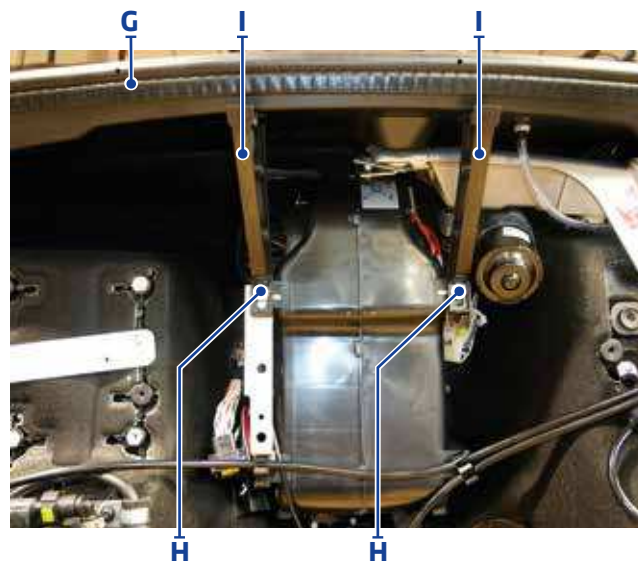


Passenger compartment heater box

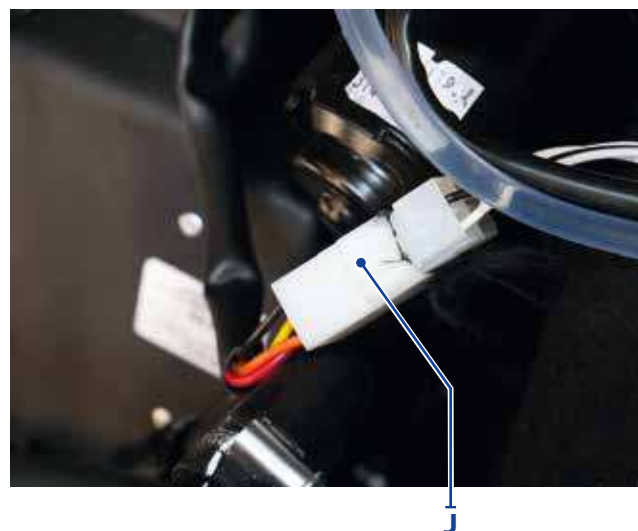
CR5012 without air conditioning

CR5812 with air conditioning

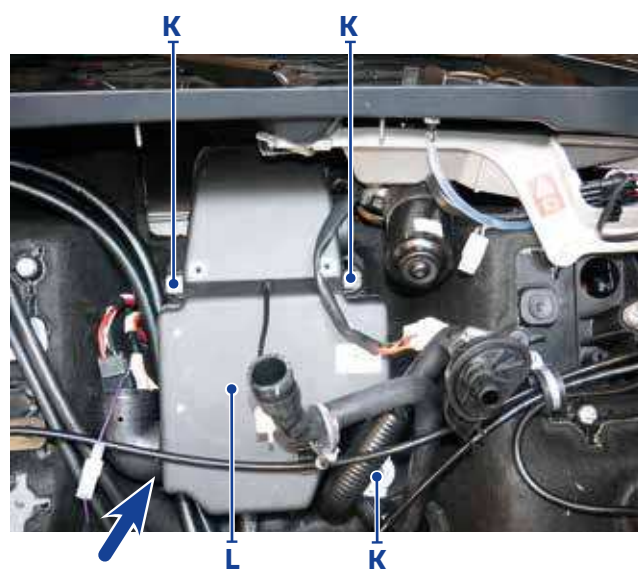
6. Remove the 2 screws **H** from the brackets **I** of the windscreen scuttle panel **G**.
7. Remove the 2 brackets **I**.



8. Disconnect the connector from the fan **J**.



9. Remove the 4 screws **K** from the heater box **L**.



See photo
below

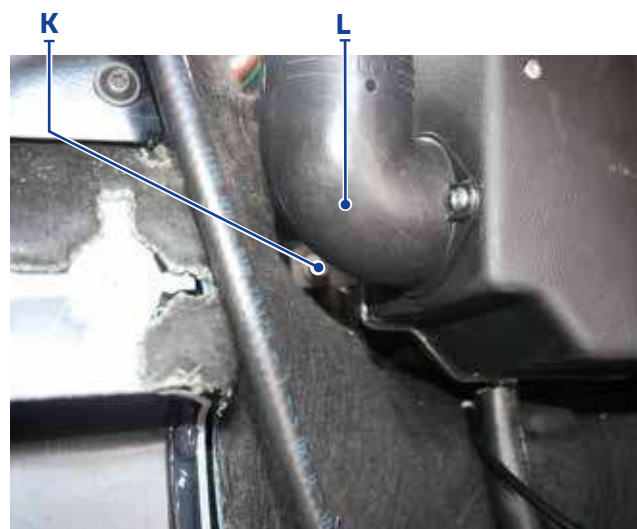
Passenger compartment heater box

CR5012 without air conditioning

CR5812 with air conditioning

10. Remove the 4th screw **K** from the heater box **L**.

11. Remove the heater box **L**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Air conditioning gas: 500 gr type R134.



RISK

Replace the air conditioning hose gaskets after each operation.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.

D

Heating & Air-conditioning



Equipment required

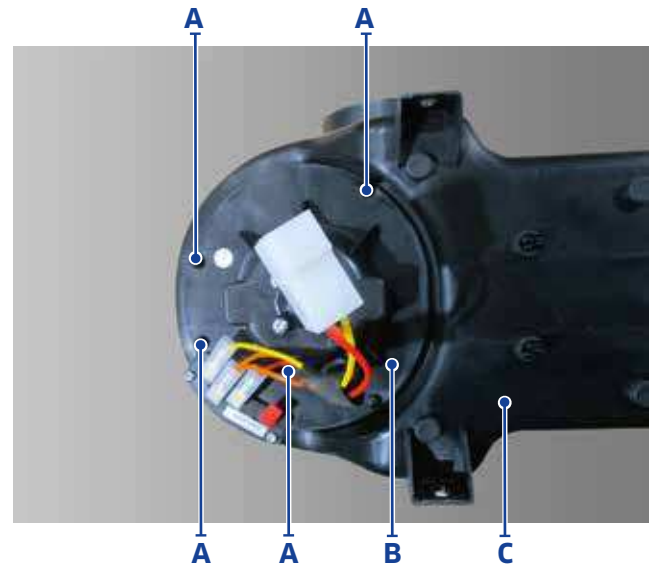
Special tools	Quantities	References
Philips screwdriver	1	-
PPE		
Gloves	1	-

Preliminary procedures

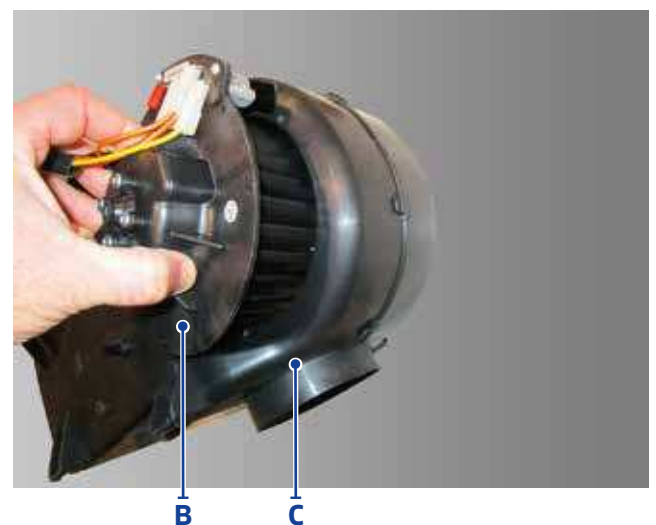
Operations	Procedure types	Pages
Passenger compartment heater box	Removal	D-4

Removal procedure

1. Remove the 4 screws **A** from the passenger compartment heating motor **B** fitted on the passenger compartment heater box **C**.



2. Take the passenger compartment heater motor **B** out of the passenger compartment heater box **C**.



Passenger compartment heater motor

CR5002

Installation

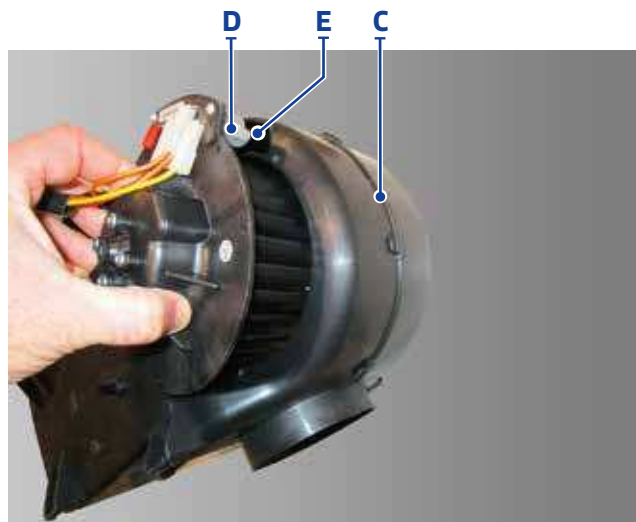
To install, perform the removal operations in the reverse order.



The resistance **D** is used as a positioner on the notch **E** of the passenger compartment heater box **C**.



During the installation, respect the tightening torques indicated on **page 9**.



D

Heating & Air-conditioning



1.45 h

without bleeding or filling

R/I air conditioning compressor

CL5001



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
Size 13 wrench	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Air conditioning hose gasket	2	-
Air conditioning gas (500 g of R134 type gas)	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-



Use a dedicated and certified tool to collect all the gas in the circuit.

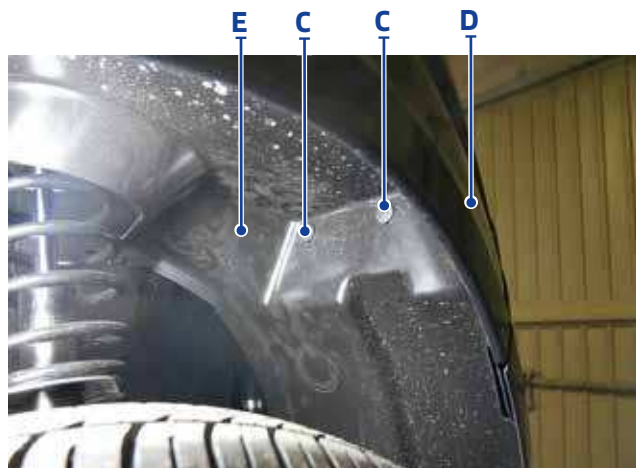
Removal procedure

Outside the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



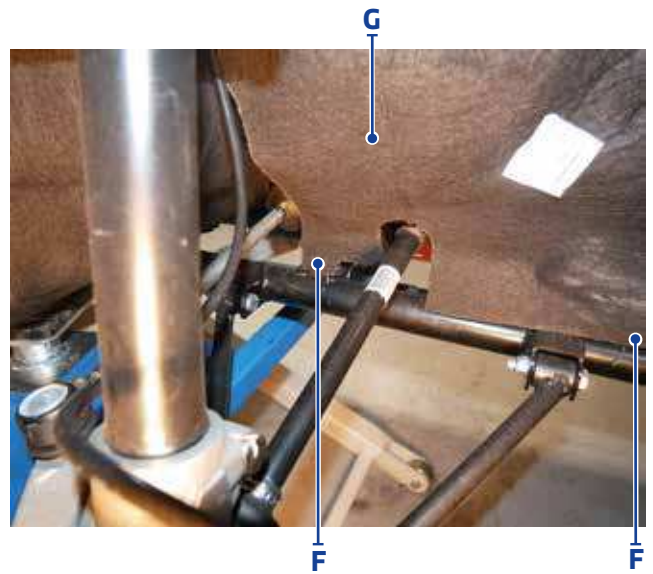
3. Remove the 2 plasti-rivets **C** fitted on the bumper **D** and partially separate the mudguard **E**.



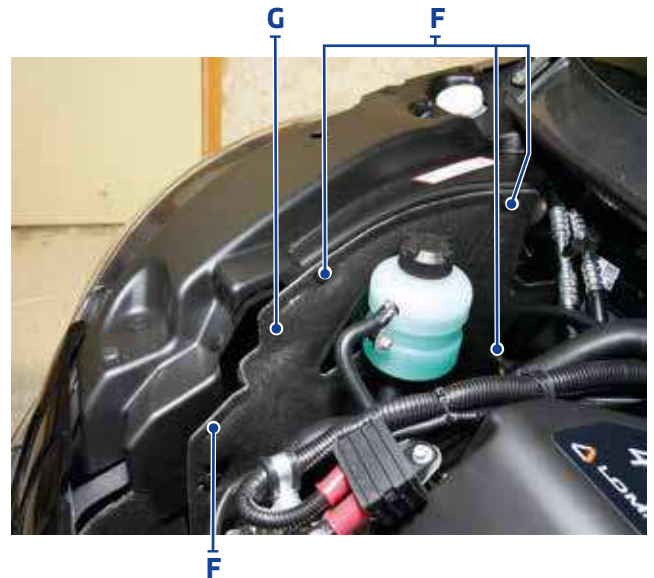
R/I air conditioning compressor

CL5001

4. Remove the 2 plasti-rivets **F** from the edge guard **G** on the passenger side.



5. Remove the 4 plasti-rivets **F** from the edge guard **G** on the passenger side.
6. Partially remove the edge guard **G**.



7. Remove the 2 screws **H** from the fuel filter **I**.
8. Partially remove fuel filter **I**.



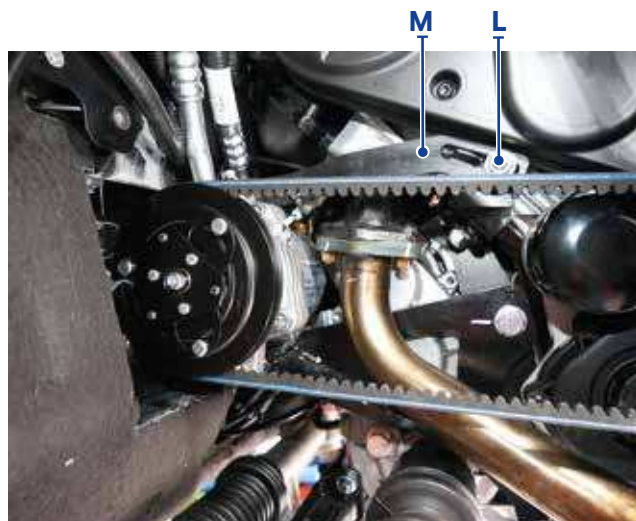
R/I air conditioning compressor

CL5001

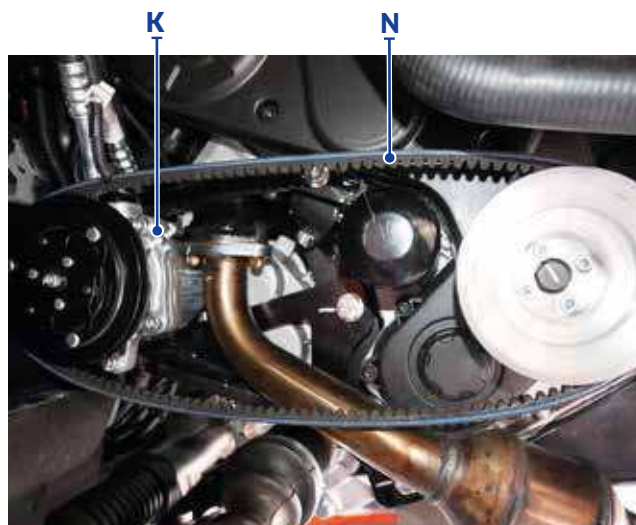
9. Disconnect connector **J** from the compressor **K**.



10. Remove the screw **L** from the belt tensioner **M**.



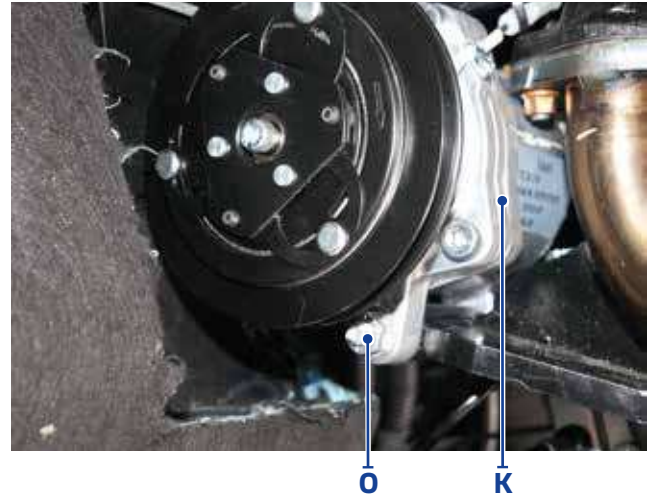
11. Remove the belt **N** from the compressor **K**.



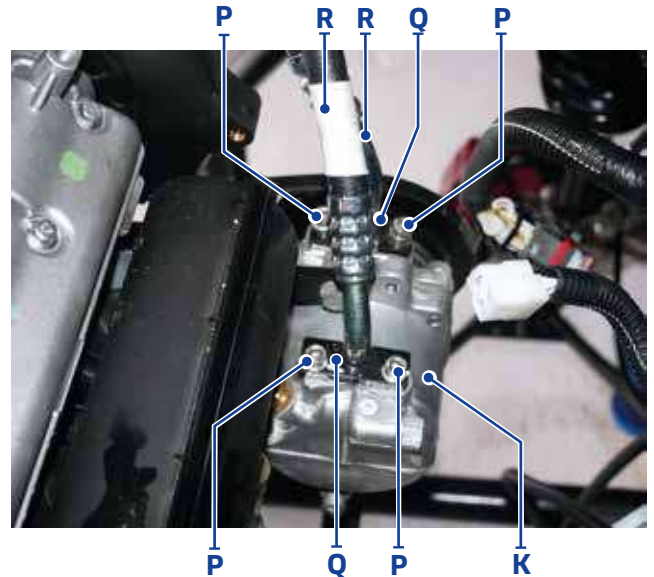
R/I air conditioning compressor

CL5001

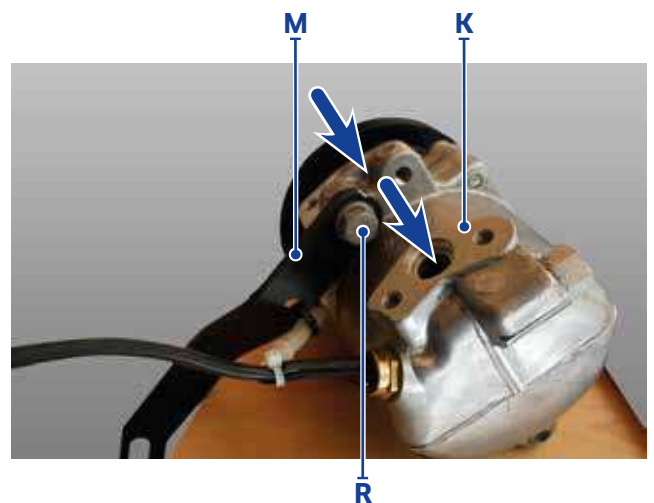
- 12. Remove the screw **O** from the compressor **K**.
- 13. Partially pull out the compressor **K**.



- 14. Remove the 4 screws **P** from the 2 brackets **Q** securing the 2 air conditioning hoses **R** on the compressor **K**.
- 15. Partially remove the 2 air conditioning hoses **Q**.
- 16. Pull out the compressor **K** from its housing fitted with the belt tensioner **M**.



- 17. Remove the screw **R** from the belt tensioner **M**.
- 18. Remove the compressor **K**.
- 19. Seal the 2 ports of the air conditioning compressor **K**.



RISK

To prevent fluid ingress and for protection against dust.



RISK

Keep the compressor upright, it contains oil.

D

Heating & Air-conditioning

R/I air conditioning compressor

CL5001

Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Replace the air conditioning hose gaskets after each operation.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Screw **H**: tightening torque 5 Nm.

D



0.50 h

without bleeding or filling

Air conditioning condenser

CL5002



Equipment required

Special tools	Quantities	References
Allen key	1	-
Size 19 - 20 - 22 wrench	1	-
Cutting pliers	1	-
Electric drill	1	-
Rivet gun	1	-
Consumables / Ingredients		
Air conditioning hose gasket	2	-
Rivets	8	-
Air conditioning gas (500 g of R134 type gas)	1	-
PPE		
Gloves	1	-

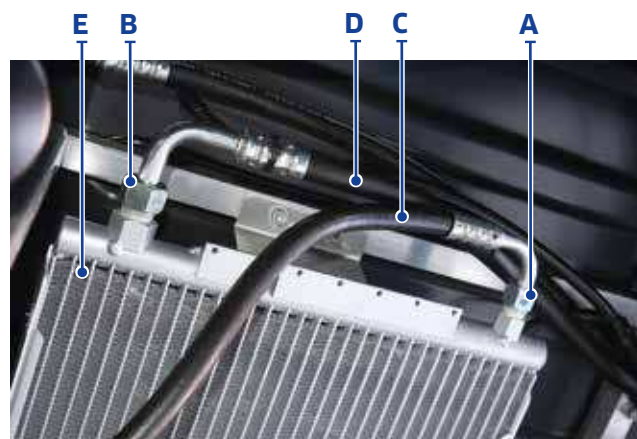


Use a dedicated and certified tool to collect all the gas in the circuit.

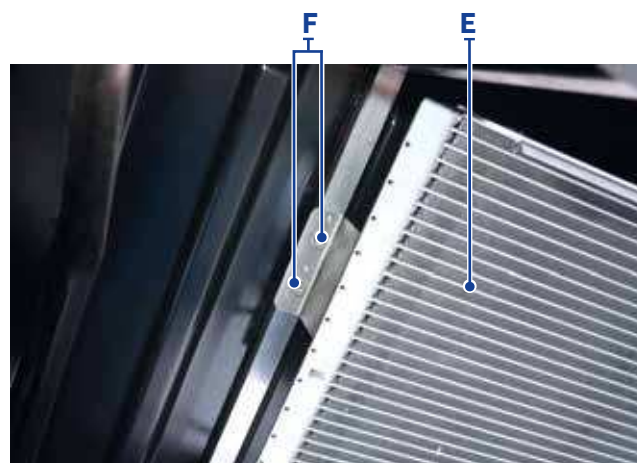
Removal procedure

Under the vehicle:

1. Disconnect the 2 fittings **A** and **B** from the 2 air conditioning hoses **C** and **D**, fitted on the condenser **E**.
2. Partially remove the 2 air conditioning hoses **C** and **D**.



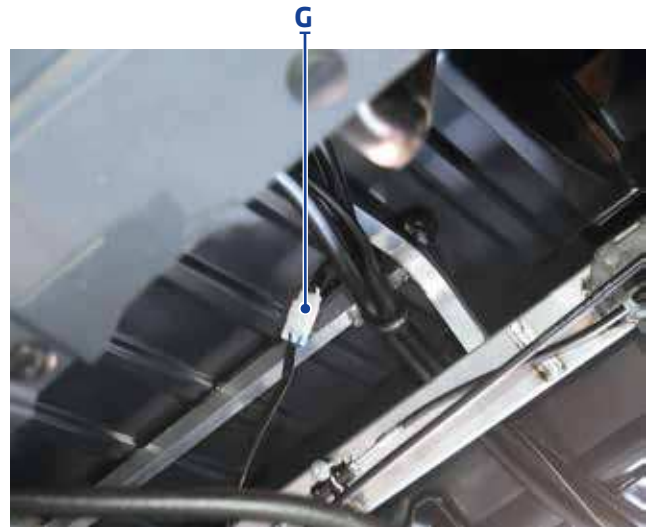
3. Remove the 4 screws **F** from the air conditioning condenser **E** (2 screws on either side).



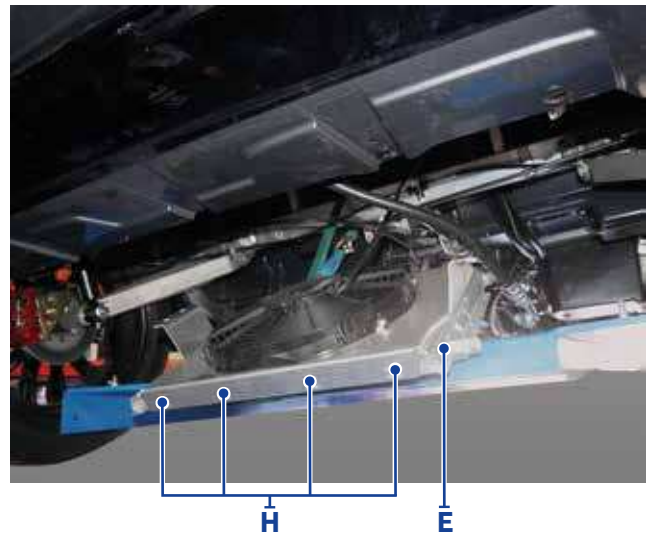
Air conditioning condenser

CL5002

4. Disconnect the connector **G** from the air conditioning fan.



5. Remove the 8 rivets **H** from the support of the condenser **E** (4 rivets on either side).
6. Remove the condenser **E**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Replace the air conditioning hose gaskets after each operation.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.

**2.50 h**

without bleeding or filling

Low pressure hose expansion valve - compressor

CL5003



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
Size 22 - 26 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Air conditioning hose gasket	1	-
Cable ties	2	-
Air conditioning gas (500 g of R134 type gas)	1	-

Preliminary procedures

Operations	Procedure types	Pages
Engine	Removal / Installation	H-2



Use a dedicated and certified tool to collect all the gas in the circuit.

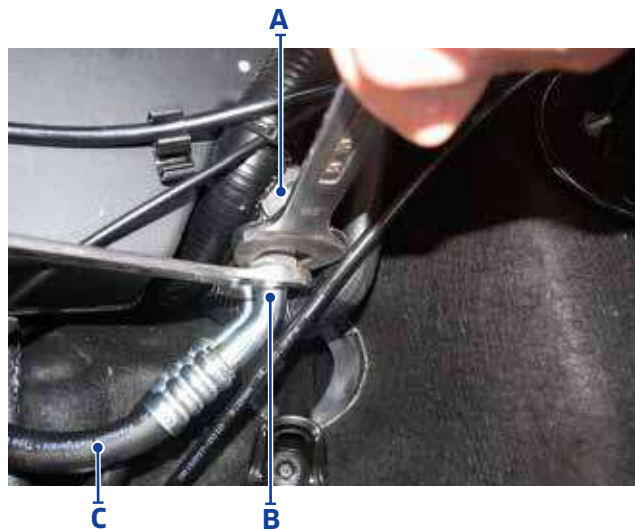


Removal-installation of the powertrain (not the engine alone)

Removal procedure

Outside the vehicle:

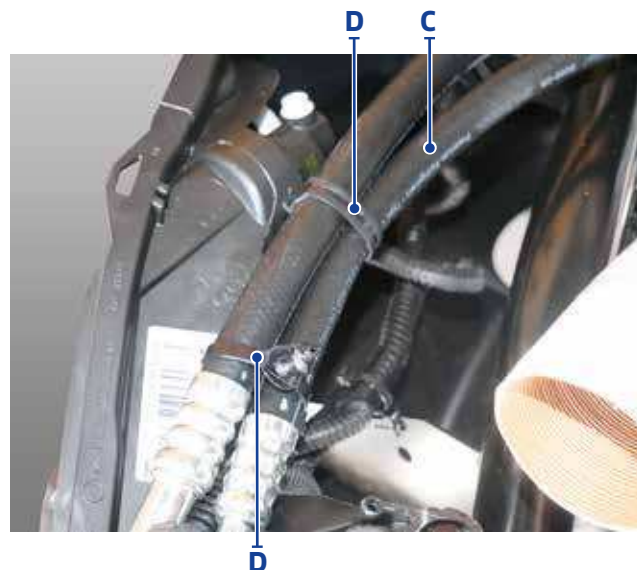
1. Secure the air conditioning expansion valve **A** with a size 26 wrench.
2. Remove the fitting **B** from the (low pressure) air conditioning hose **C**.



Low pressure hose expansion valve - compressor

CL5003

3. Cut the 2 cable ties **D**.
4. Remove the (low pressure) hose from the air conditioning unit **C**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Replace the air conditioning hose gaskets after each operation.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.

**2.60 h**

without bleeding or filling

High pressure hose expansion valve - dryer

CL5004



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
Allen key	1	-
Size 16 - 22 - 26 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Air conditioning hose gasket	3	-
Hose clamps and cable ties	2	-
Air conditioning gas (500 g of R134 type gas)	1	-

Preliminary procedures

Operations	Procedure types	Pages
Engine	Removal / Installation	H-2
Exhaust line	Removal / Installation	H-14



Use a dedicated and certified tool to collect all the gas in the circuit.

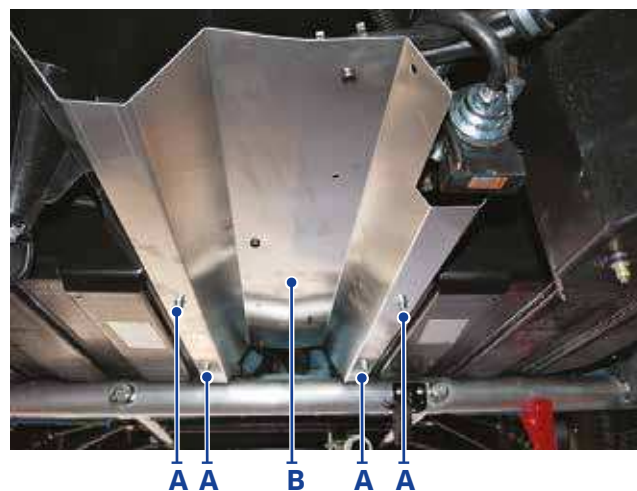


Removal-installation of the powertrain (not the engine alone)

Removal procedure

Under the vehicle:

1. Remove the 4 screws **A** from the exhaust heat shield **B**.
2. Remove the exhaust heat shield **B**.

**D**

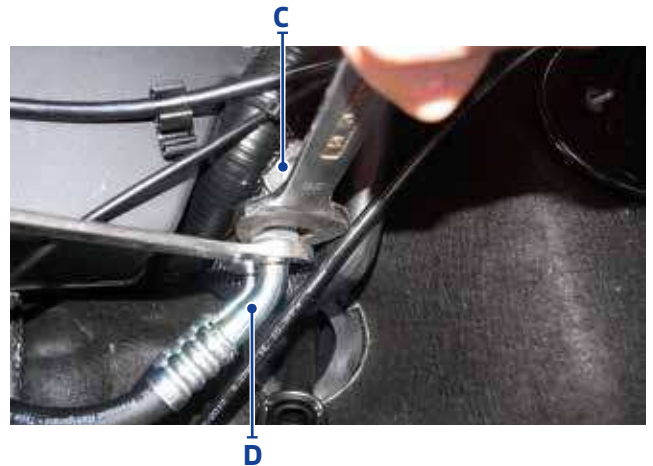
Heating & Air-conditioning

High pressure hose expansion valve - dryer

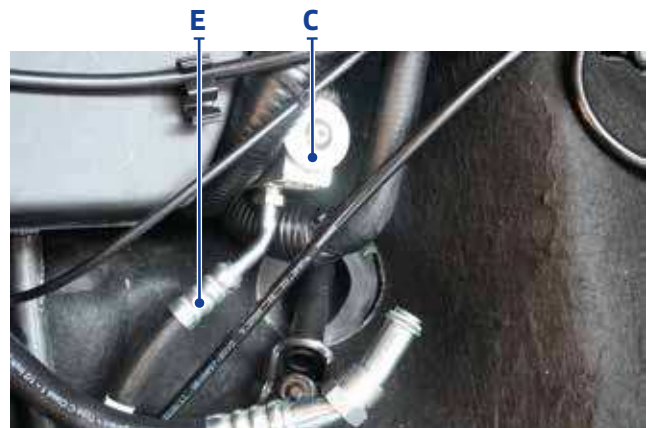
CL5004

Outside the vehicle:

3. Secure the air conditioning expansion valve **A** with a size 26 wrench.
4. Remove the low pressure air conditioning unit hose **D**.

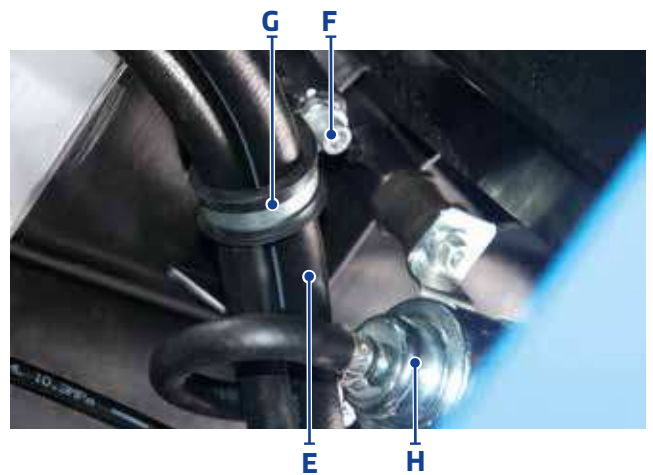


5. Secure the air conditioning expansion valve **C** with a size 26 wrench and partially remove the high pressure air conditioning hose **E**.



Under the vehicle:

6. Remove the screw **F** from the clamp **G** securing the air conditioning hose **E** near the electric pump **H**.



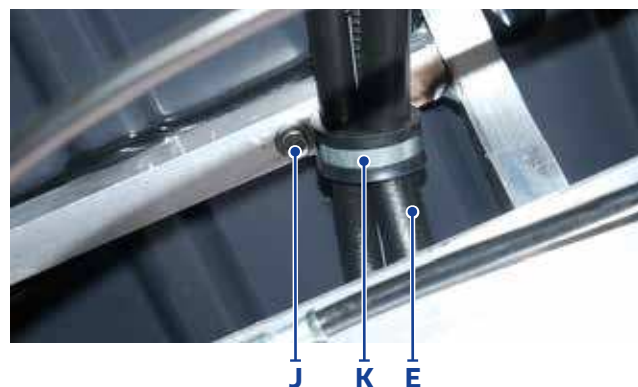
7. Cut the cable tie **I** securing the air conditioning hose **E**.



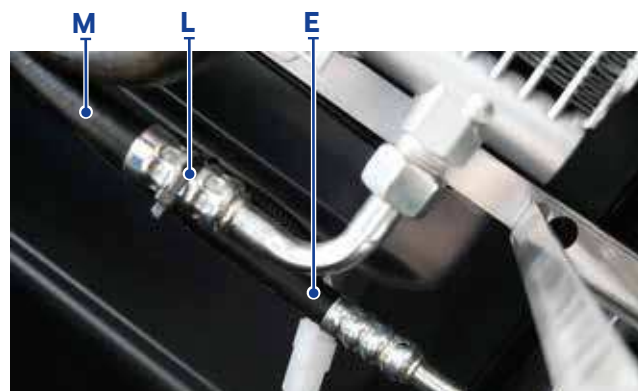
High pressure hose expansion valve - dryer

CL5004

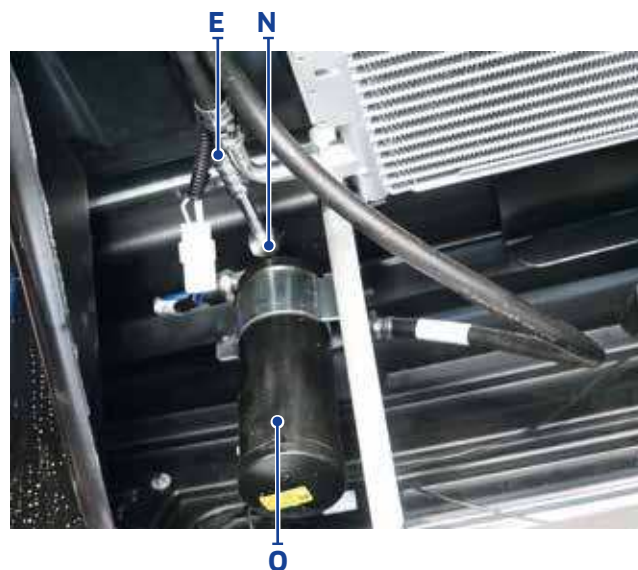
8. Remove the screw **J** from the clamp **K** securing the air conditioning hose **E**.



9. Cut the cable tie **L** securing the air conditioning hoses **E** and **M**.



10. Remove the fitting **N** mounted on the dryer **O**.
11. Remove the high pressure air conditioning hose **E**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Replace the air conditioning hose gaskets after each operation.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.



2.45 h

without bleeding or filling

High pressure hose condenser - dryer

CL5005



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
Size 22 - 26 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Air conditioning hose gasket	2	-
Cable ties	2	-
Air conditioning gas (500 g of R134 type gas)	1	-

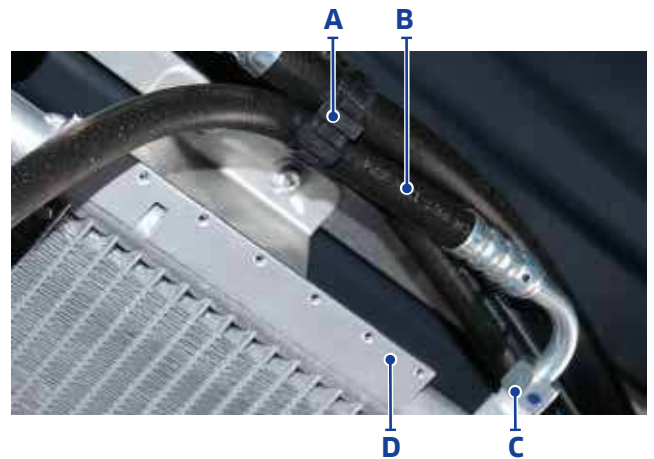


Use a dedicated and certified tool to collect all the gas in the circuit.

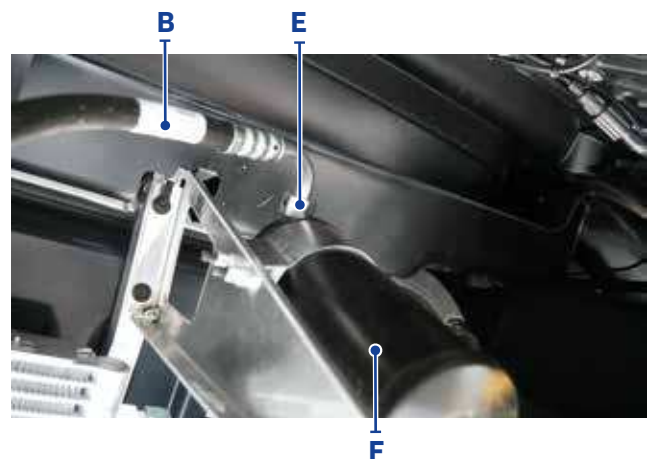
Removal procedure

Under the vehicle:

1. Cut the cable tie **A** securing the air conditioning hose **E**.
2. Remove the fitting **C** mounted on the condenser **D**.



3. Remove the fitting **E** mounted on the dryer **F**.
4. Remove the (low pressure) air conditioning hose **B**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Replace the air conditioning hose gaskets after each operation.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.

**1.60 h**

without bleeding or filling

High pressure hose compressor - condenser

CL5006



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
Allen key	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Air conditioning hose gasket	3	-
Hose clamps and cable ties	2	-
Air conditioning gas (500 g of R134 type gas)	1	-

Preliminary procedures

Operations	Procedure types	Pages
Exhaust line	Removal / Installation	H-14



Use a dedicated and certified tool to collect all the gas in the circuit.

Removal procedure

On the front side of the vehicle:

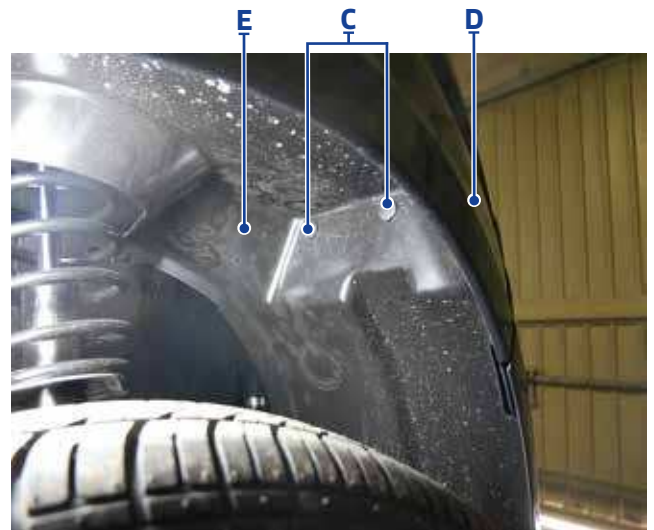
1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



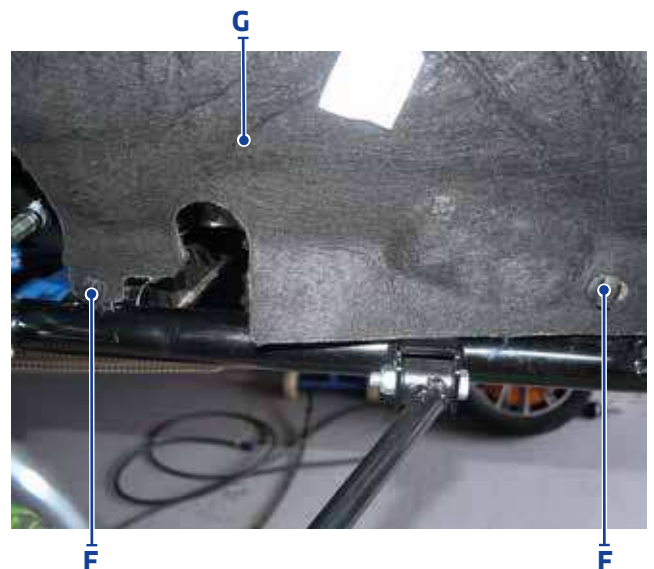
High pressure hose compressor - condenser

CL5006

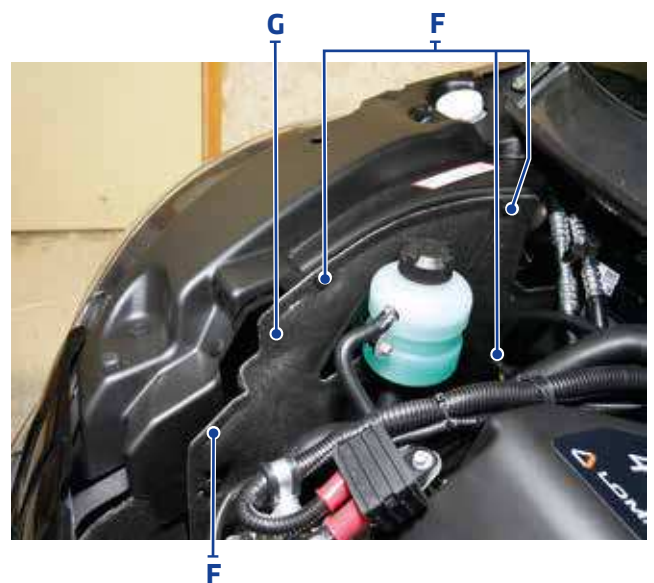
3. Remove the 2 plasti-rivets **C** fitted on the bumper **D** and partially separate the mudguard **E**.



4. Remove the 2 plasti-rivets **F** from the edge guard **G** on the passenger side.



5. Remove the 4 plasti-rivets **F** from the edge guard **G** on the passenger side.

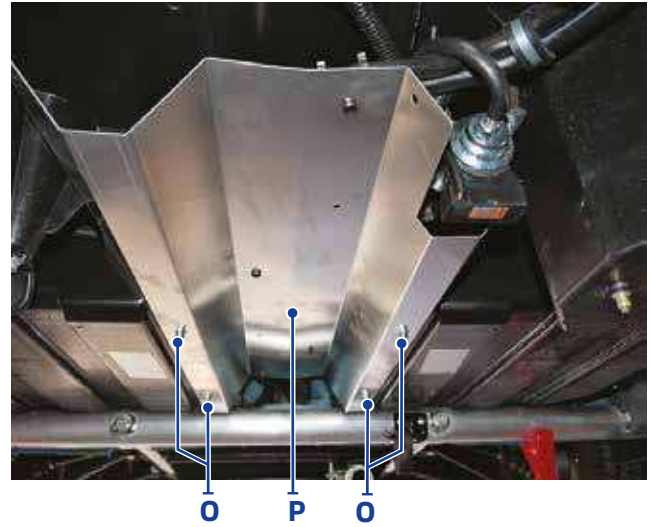


High pressure hose compressor - condenser

CL5006

Under the vehicle:

- 6. Remove the 4 screws **O** from the exhaust heat shield **P**.
- 7. Remove the exhaust heat shield **P**.

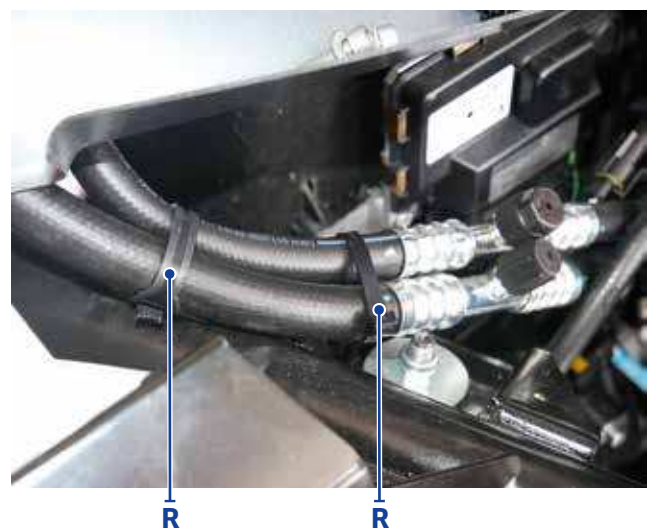


In the engine compartment:

- 8. Remove the outside air hose **Q**.



- 9. Cut the 2 cable ties **R**.



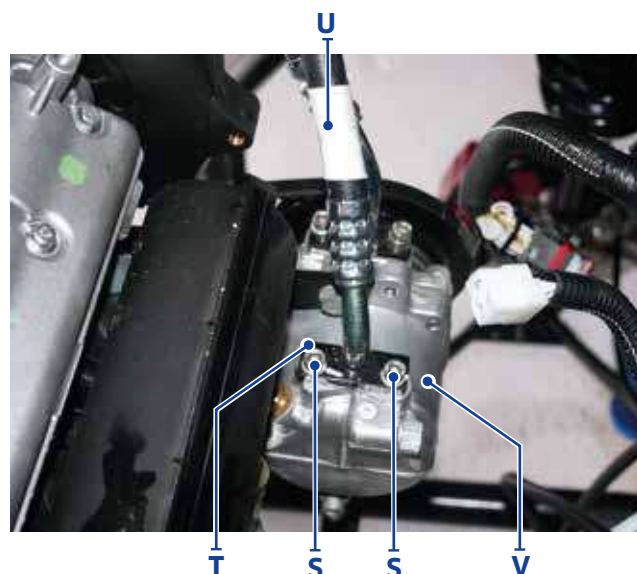
D

Heating & Air-conditioning

High pressure hose compressor - condenser

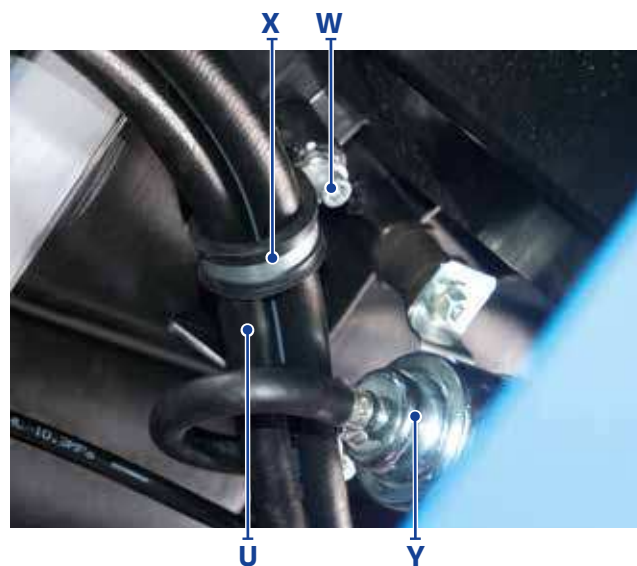
CL5006

- 10.** Remove the 2 screws **S** from the bracket **T** securing the (high pressure) air conditioning hose **U** on the compressor **V**.

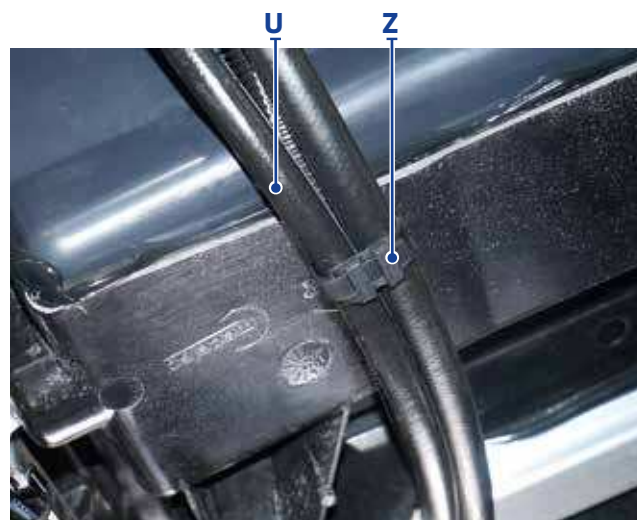


Under the vehicle:

- 11.** Remove the screw **W** from the hose clamp **X** securing the air conditioning hose **U** near the electric pump **Y**.



- 12.** Cut the cable tie **Z** securing the air conditioning hose **U**.



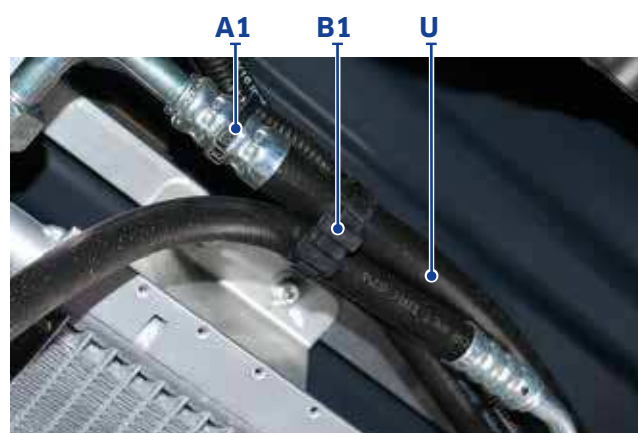
High pressure hose compressor - condenser

CL5006

- 13.** Remove the screw **W** from the hose clamp **X** securing the air conditioning hose **U**.

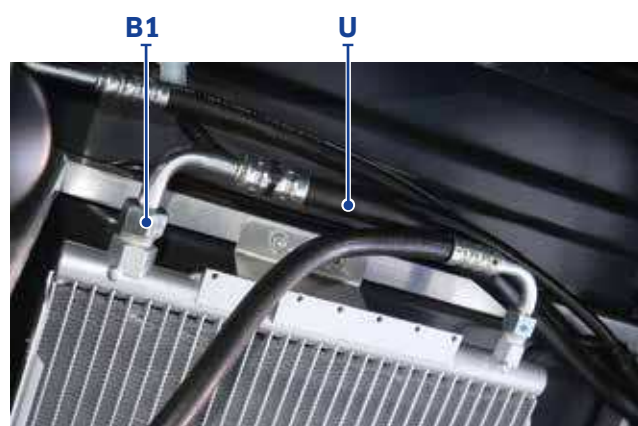


- 14.** Cut the 2 cable ties **A1** and **B1** securing the air conditioning hose **U**.



- 15.** Remove the fitting **B1** securing the air conditioning hose **U**.

- 16.** Remove the air conditioning hose **U**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Replace the air conditioning hose gaskets after each operation.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.



RISK

Nut **A**: tightening torque 45 Nm.

Electricity



E



Wiring diagrams

Switch

PB5000 (windscreen wiper switch)
PB5001 (low beam/headlight switch)



Equipment required

Special tools	Quantities	References
Torx screwdriver	1	-
Allen key	1	-

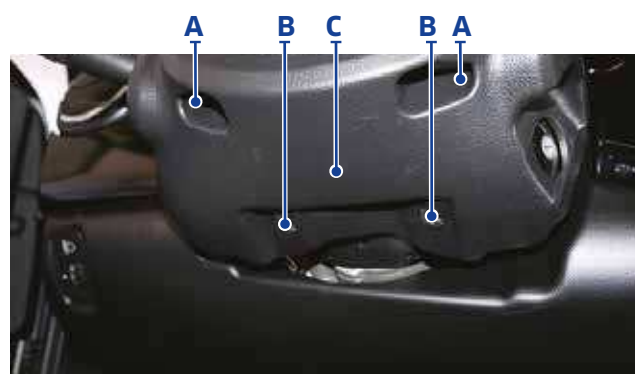
Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35

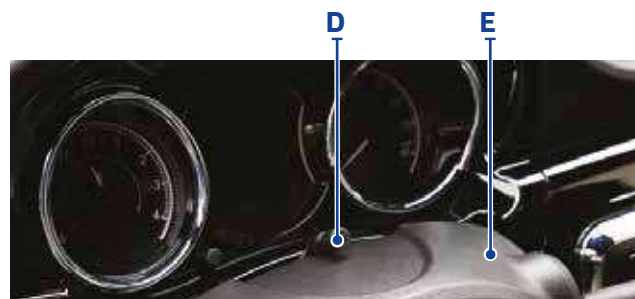
Removal procedure

Inside the vehicle:

- Under the steering wheel, remove the 2 torx screws **A** and the 2 Philips head screws **B** under the lower half-shell **C**.
- Remove the lower half-shell **C**.

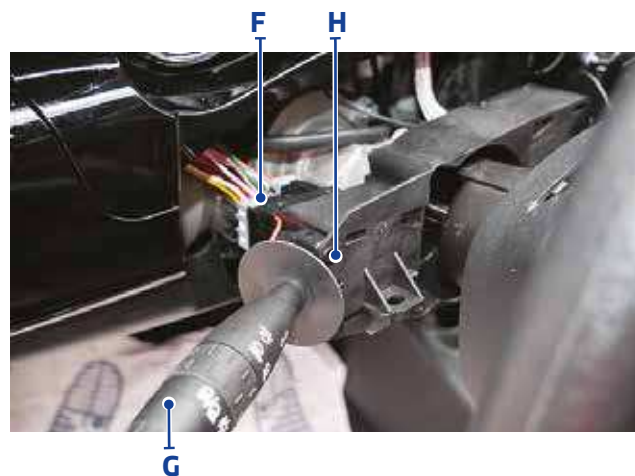


- Remove the microphone **D** fitted on the upper half-shell **E**.
- Remove the upper half-shell **E**.



Lighting switch

- Disconnect the 2 connectors **F** from the lighting switch **G**.
- Remove the screw **H** from the lighting switch **G**.
- Remove the lighting switch **G**.

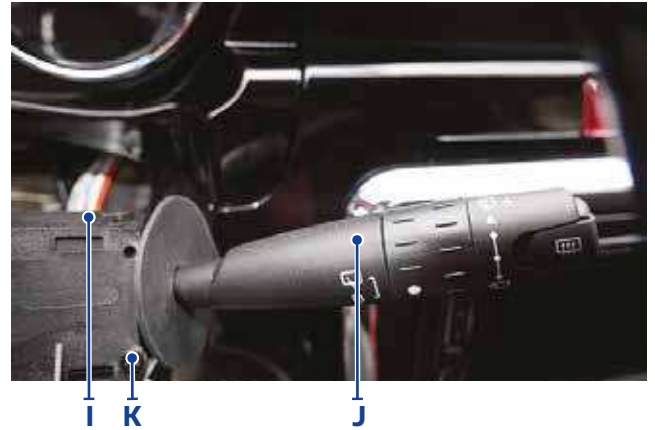


Switch

PB5000 (windscreen wiper switch)
PB5001 (low beam/headlight switch)

Windscreen wiper switch

8. Disconnect the connector **I** from the windscreen wiper switch **J**.
9. Remove the screw **K** from the windscreen wiper switch **J**.
10. Remove the windscreen wiper switch **J**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Size 4 Allen key	1	-
Torx screwdriver	1	-

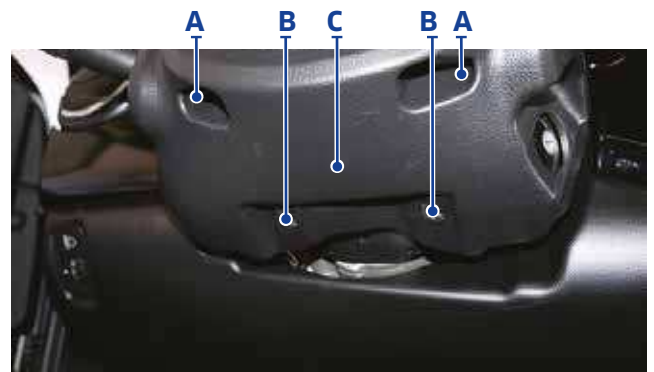
Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Switches	Removal / Installation	E-2
Steering wheel	Removal / Installation	F-2

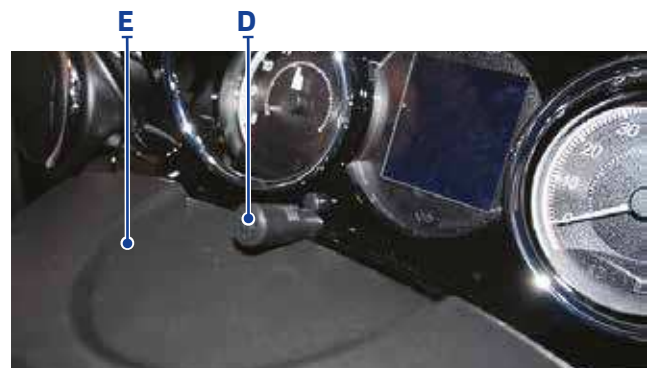
Removal procedure

Inside the vehicle:

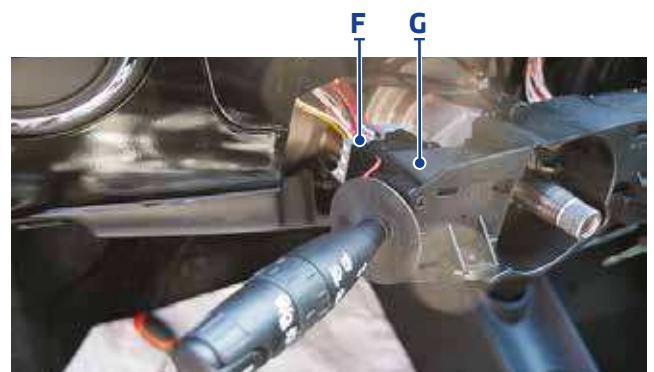
1. Under the steering wheel, remove the 2 torx screws **A** and the 2 Philips head screws **B** under the lower half-shell **C**.
2. Remove the lower half-shell **C**.



3. Remove the microphone **D** fitted on the upper half-shell **E**.
4. Remove the upper half-shell **E**.



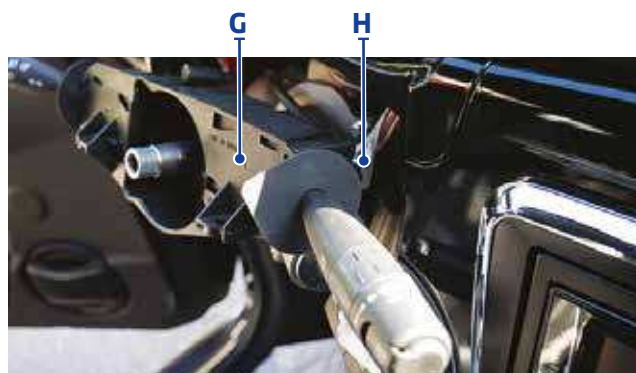
5. Disconnect the left side connector **F** from the switch **G**.



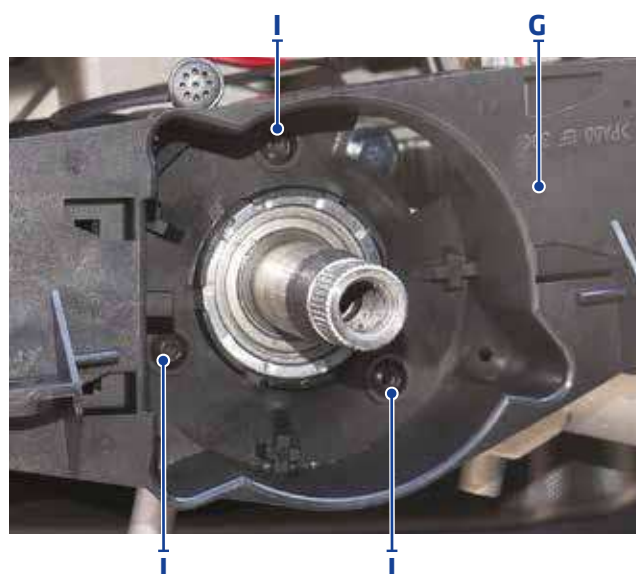
Switch support

PB5007

6. Disconnect the right side connector **H** from the switch support **G**.



7. Remove the 3 hexagon screws **I** from the switch support **G**.
8. Remove the switch support **G**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
Philips screwdriver	1	-
Consumables / Ingredients		
Plastic tie	1	-

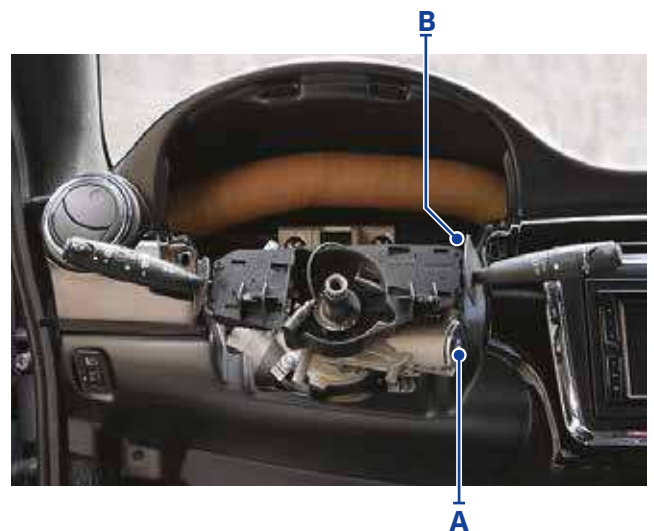
Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Steering wheel	Removal / Installation	F-2
Speedometer	Removal / Installation	E-10

Removal procedure

Inside the vehicle:

1. Identification of the connectors **B** of the key switch **A**.



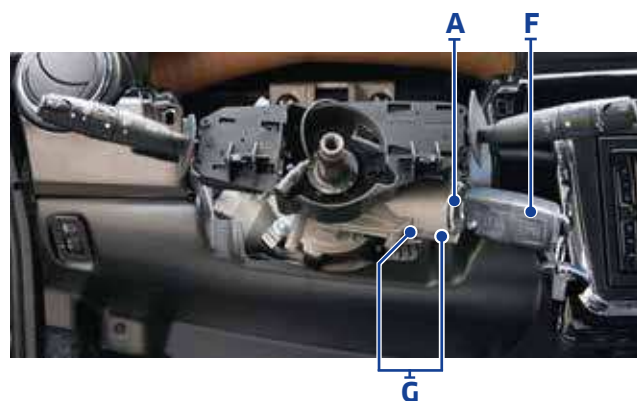
2. Cut the plastic tie **C**.
3. Disconnect the 2 connectors **D**.



4. Remove the screw **E** from the key switch **A**



5. Insert the switch key **F** in ACC position (first notch).
6. Insert the screwdriver in the slots **G**.
7. Remove the key switch **A**.



Installation procedure

To install, perform the removal operations in the reverse order.



Remember to install the cable tie (see removal operation step **2**).



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Fork to remove the car radio	1	-
Small flat screwdriver	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-

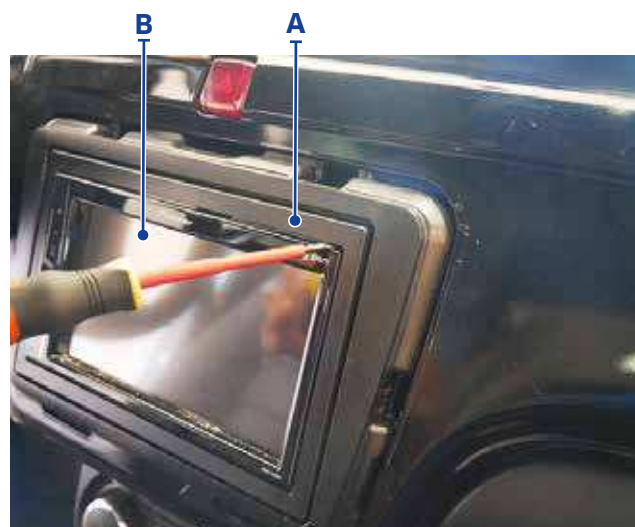
Removal procedure

Inside the vehicle:

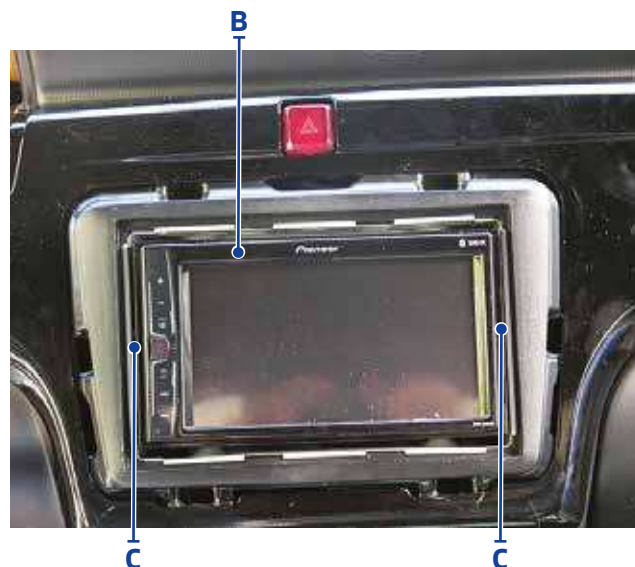
1. Remove the trim **A** from the car radio **B**.



Position the screwdriver as shown opposite, and pry to unclip the trim without damaging it.



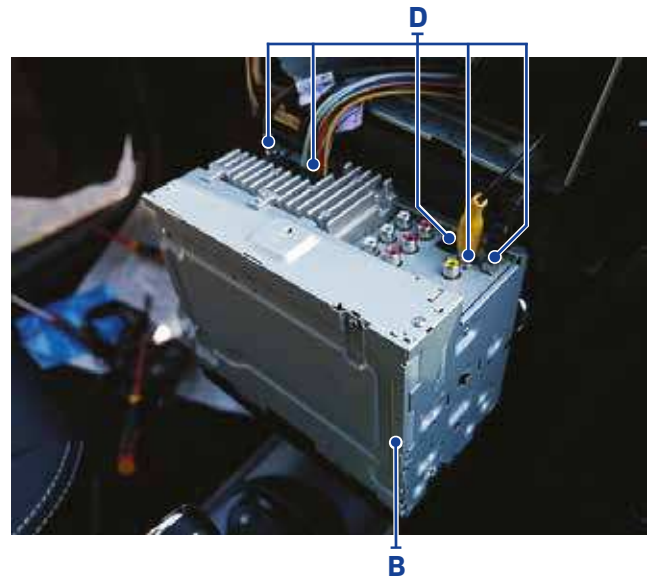
2. Insert the forks on the sides **C** of the car radio **B** according to the instructions in the manual provided with the vehicle.



Car radio

ER5000

3. Disconnect the 5 connectors **D** from the car radio **B**.
4. Remove the car radio **B**.



Installation procedure

To install, perform the removal operations in the reverse order.



The yellow jack connector on the reversing camera harness connects to the brown female connector on the car radio (not the yellow one).



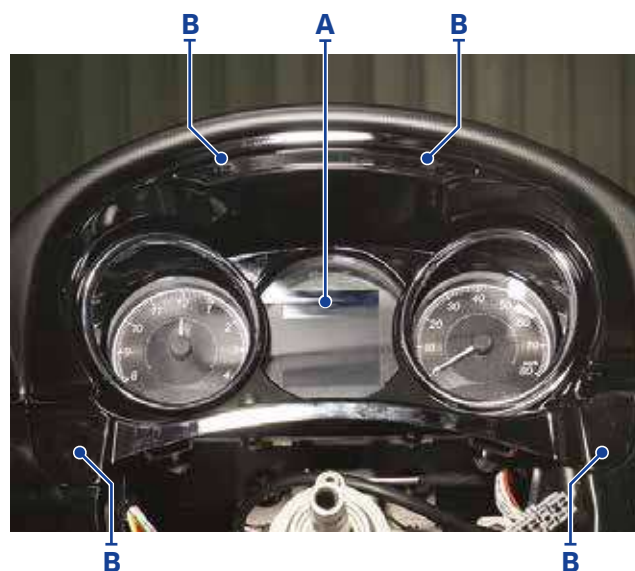
Preliminary procedures

Operations	Procedure types	References
Ignition off + Parking brake shunt fuse removed	-	-
1/2 shells (switch support)	Removal / Installation	<?>

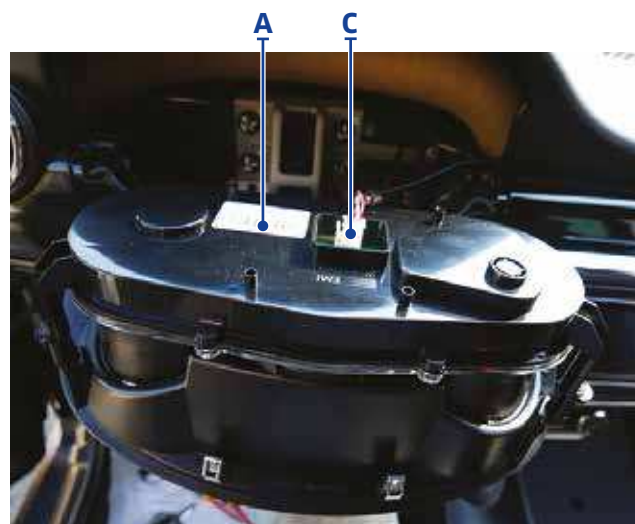
Removal procedure

Inside the vehicle:

1. Pull the anchoring points **B** manually to tip the speedometer **A**.



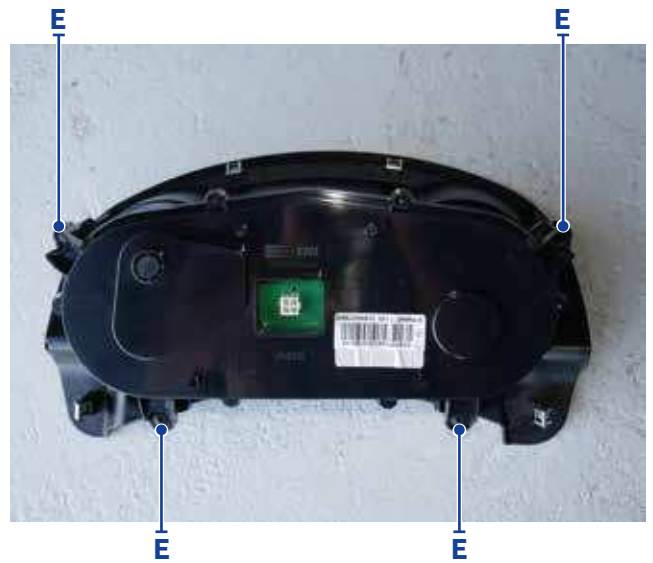
2. Disconnect the connector **C**.
3. Remove the speedometer **A**.



Speedometer

PB5010

4. Remove the 4 screws **E**.



5. Remove the speedometer **A** and the trim **D**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Air conditioning control

CL5000

Inside locking mechanism control

OC5004



Equipment required

Special tools	Quantities	References
Allen key	1	-
Torx screwdriver	1	-
Size 10 wrench	1	-
2-post lift	1	-

PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Exhaust line	Removal / Installation	H-14

Removal procedure

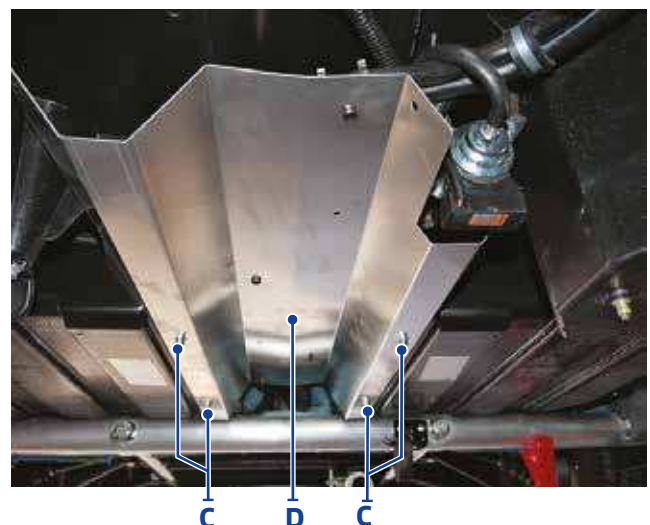
Inside the vehicle:

1. Remove the screw **A** from the gear knob **B**.
2. Remove the gear knob **B**.



Under the vehicle:

3. Remove the 4 screws **C** from the exhaust heat shield **D**.
4. Remove the exhaust heat shield **D**.



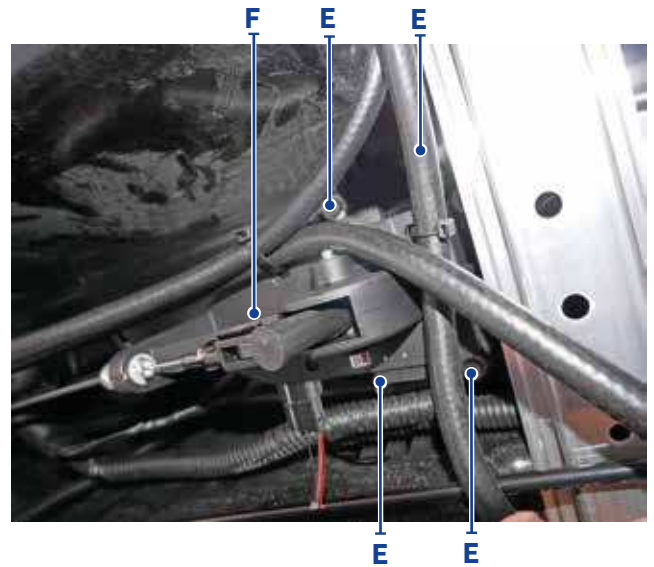
Air conditioning control

CL5000

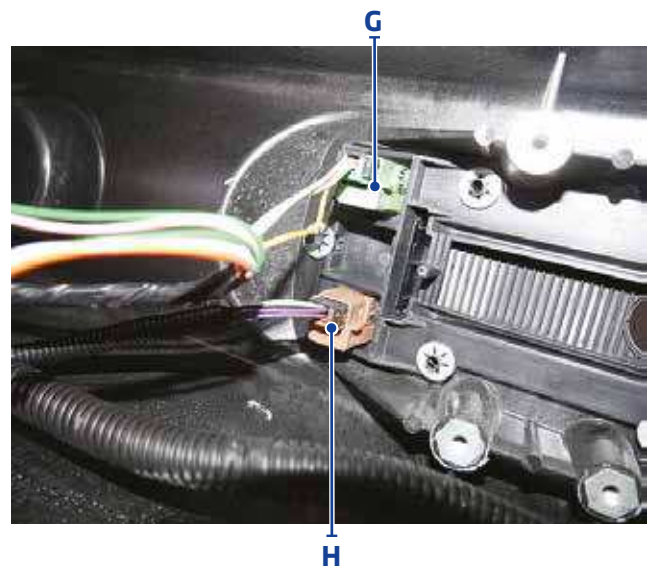
Inside locking mechanism control

OC5004

5. Remove the 4 screws **E** from the inverter lever **F**.
6. Partially remove the inverter lever **F**.



- 7.1 Inside locking mechanism control: disconnect the green connector **G**. Push the control upwards to take it out of its housing.
- 7.2 Air conditioning control: disconnect the brown connector **H**. Push the control upwards to take it out of its housing.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
Size 10 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Cable tie	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Door window	Removal / Installation	B-16

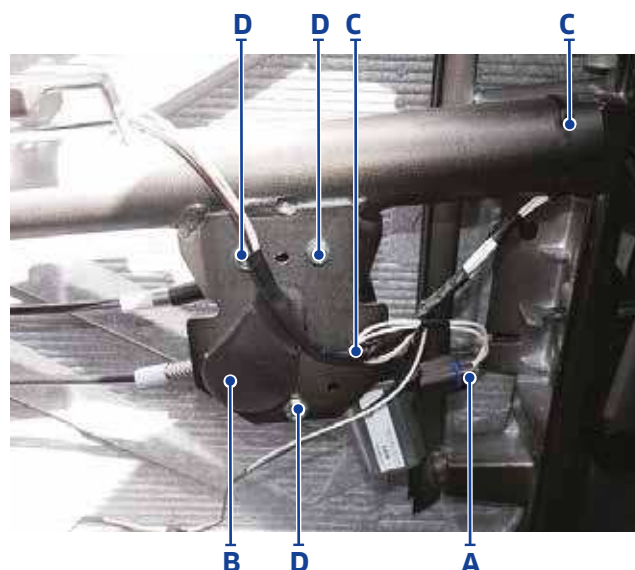


This procedure is identical for the driver and passenger side

Removal procedure

Inside the vehicle:

1. Disconnect the connector **A** from the window lift mechanism **B**.
2. Cut the cable ties **C** securing the door harness **A**.
3. Remove the 3 nuts from the window lift mechanism **B**.



Window lift mechanism

P05005

4. Remove the 3 screws **E** from the window lift mechanism **F**.
5. Remove the window lift mechanism **B**.



Be careful not to damage the door harness when removing the window lift mechanism.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.

Electricity

E



Equipment required

Special tools	Quantities	References
Allen key	1	-
2-post lift	1	-
Flat screwdriver	1	-
PPE		
Gloves	1	-

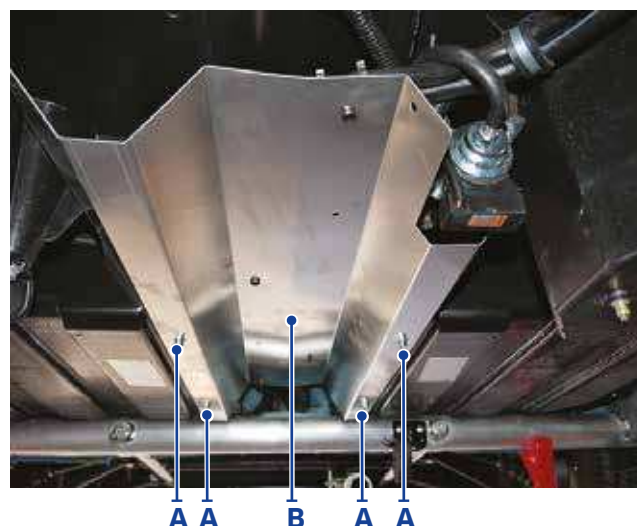
Preliminary procedures

Operations	Procedure types	References
Exhaust line	Removal - Installation	H-14

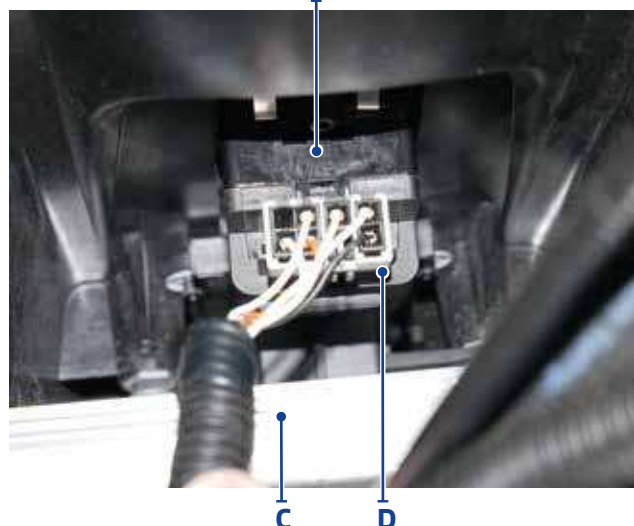
Removal procedure

Under the vehicle:

1. Remove the 4 screws **A** from the exhaust heat shield **B**.
2. Remove the exhaust heat shield **B**.



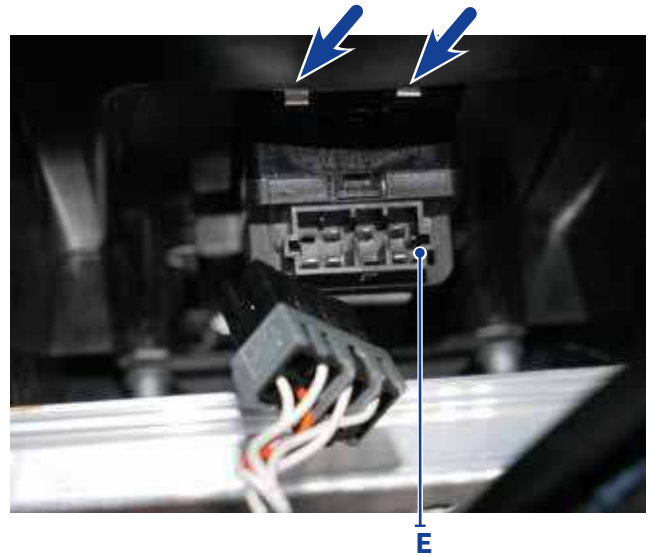
3. Above the central cross-member **C** disconnect the connector **D** from the window lift switch **E**.



Window lift mechanism switch

P05007

4. Use a flat screwdriver to push (follow the arrows) on the 2 metal clips of the window lift switch **E**.



Inside the vehicle:

5. Remove the window lift switch **E**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

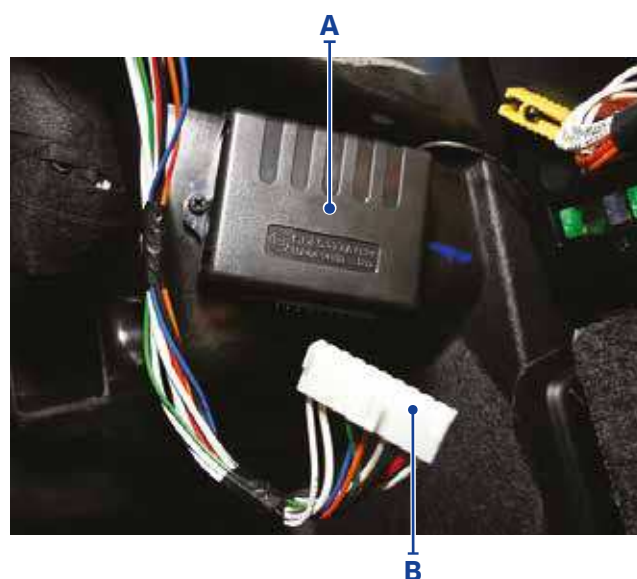
Special tools	Quantities	References
Philips screwdriver	1	-

Preliminary procedures

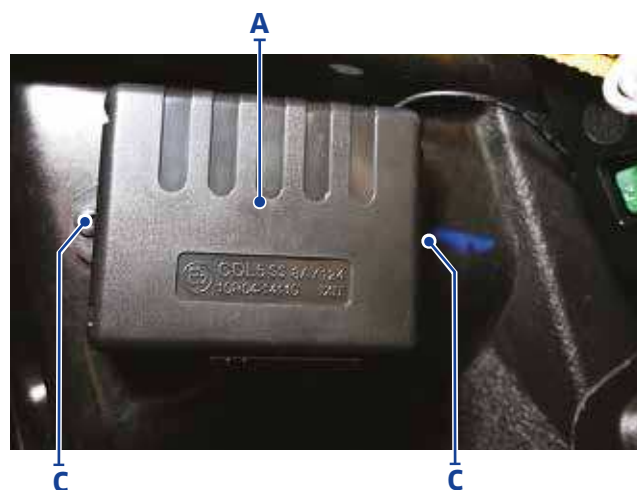
Operation	Procedure type	Pages
Ignition off + Parking brake shunt fuse removed	-	-

Removal procedure

1. Disconnect the connector **B** from the centralised locking unit **A**.



2. Unscrew the 2 screws **C** on the centralised locking unit **A**.
3. Remove the centralised locking unit.



To program the centralised locking unit:
Refer to the annex: 219-2 IRDC

Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



0.30 h (OC5002)

0.60 h (OC5003)

Door actuator

OC5002 (1 side)

OC5003 (2 sides)



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Philips screwdriver	1	-
Allen key	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-



This procedure is identical for the driver and passenger side

Removal procedure

Inside the vehicle:

1. Remove the trim **A** of the inner door panel **B**.



2. Remove the 2 plasti-rivets **C** from the inner door panel **B**.



Door actuator

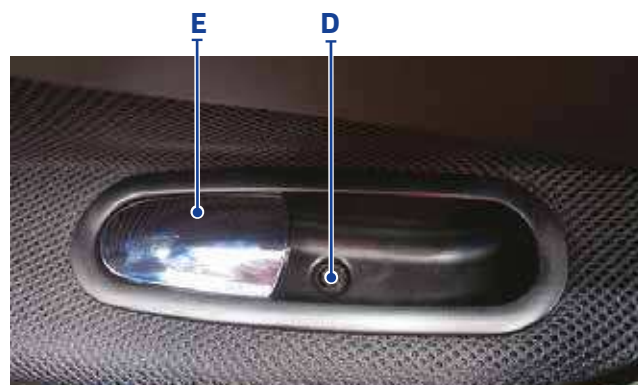
OC5002 (1 side)

OC5003 (2 sides)

3. Remove the plasti-rivet **C** from the inner door panel **B**.



4. Remove the screw **D** from the inside opening handle **E**.



5. Remove the 2 screws **F** from the door handle **G**.



6. Remove the 2 plasti-rivets **C** on the bottom of the inner door panel **B**.



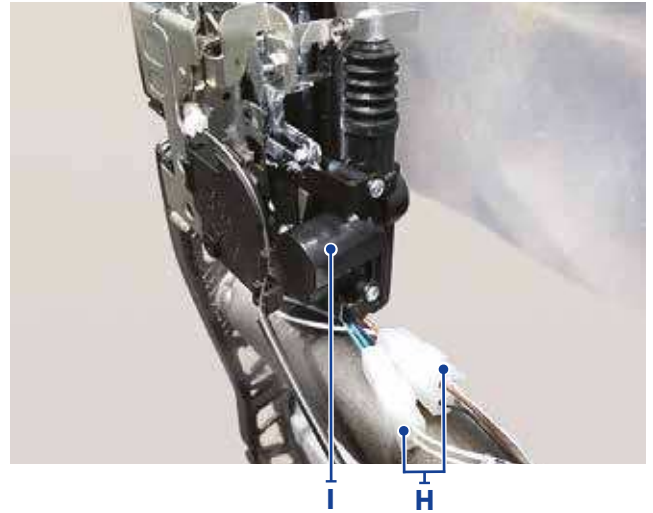
E

Door actuator

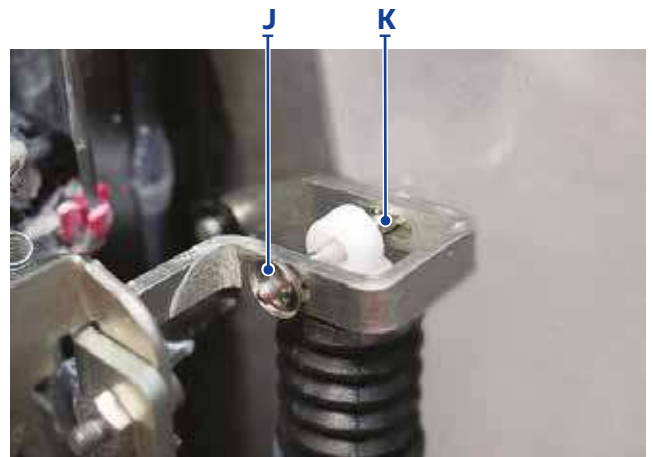
OC5002 (1 side)

OC5003 (2 sides)

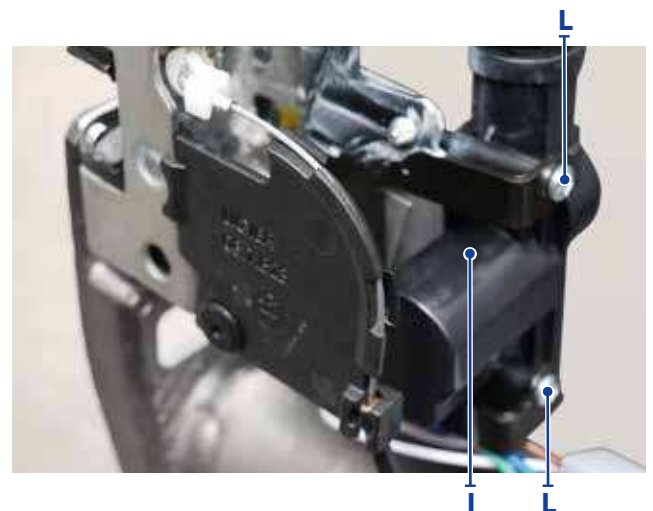
- 7. Separate the inner door panel without removing it, to work on the door actuator **I**.
- 8. Disconnect the 2 connectors on the door harness **H** of the door actuator **I**.



- 9. Remove the “grifaxe” ring **J** securing the actuator control shaft **K**.
- 10. Remove the actuator control shaft **K**.



- 11. Remove the 2 screws **L** from the centralised locking actuator **I**.
- 12. Remove the centralised locking actuator **I**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Allen key	1	-

Preliminary procedures

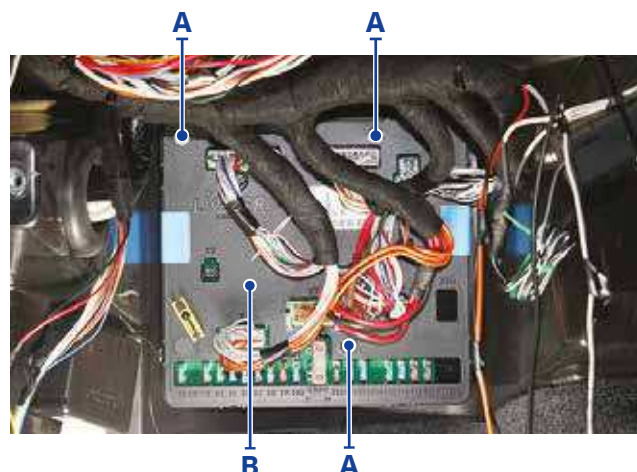
Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Glove box	Removal / Installation	C-8



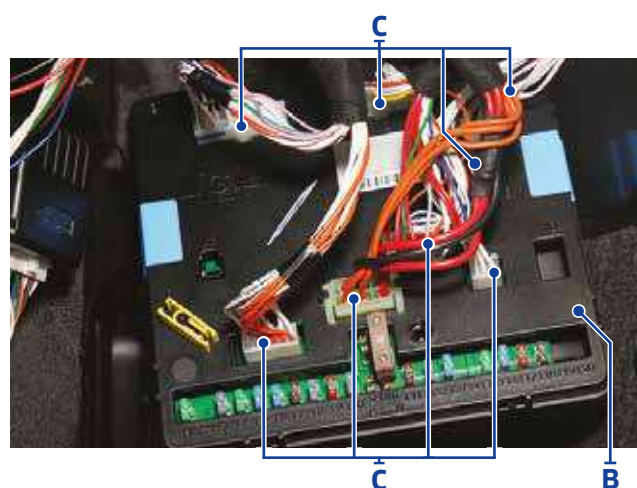
The fuse box is unique for each vehicle. Before replacing this part, the replacement part must be reprogrammed by the manufacturer according to the serial number and mileage of the vehicle concerned. The serial number and the mileage must imperatively be specified in the comment area on the part order sheet.

Removal procedure

1. Remove the 3 screws **A** from the fuse box **B**.



2. Disconnect the 8 connectors **C** from the fuse box **B**.
3. Remove the fuse box **B**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Philips screwdriver	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off	-	-



The windscreen washer to be used must imperatively be diluted in water, otherwise it may cause irreversible damage to the bodywork: 1 dose of windscreen washer for 10 doses of water.

Removal procedure

Inside the vehicle:

1. Manually operate the opening lever of the bonnet **A** under the steering wheel, on the driver's side.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C** to open the bonnet.



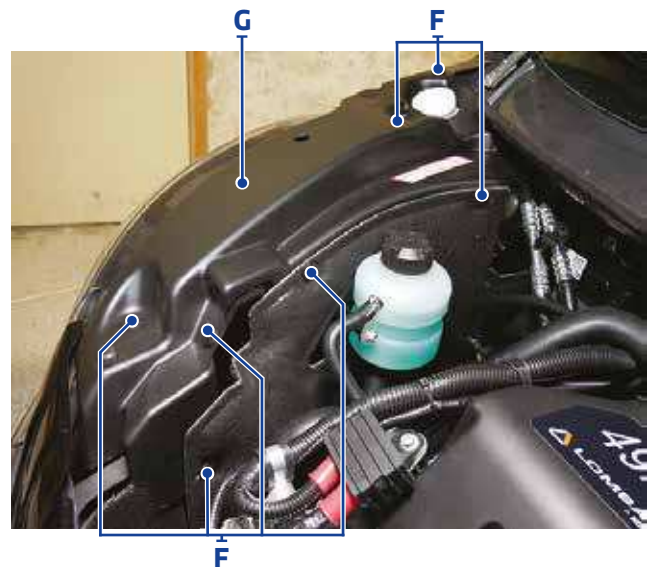
Windscreen washer reservoir

ES5004

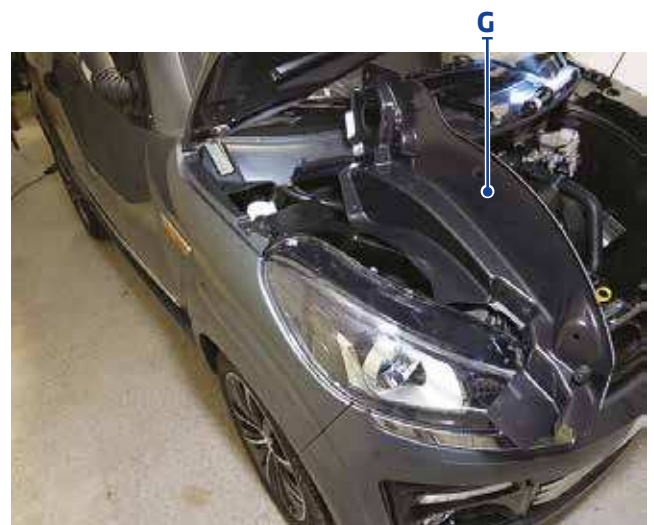
3. Bonnet open, it is recommended to use the support rod **D**.
4. Remove the sound-deadening protection **E**.



5. Remove the 7 plasti-rivets **F** from the wing inner panel **G** on the passenger side.



6. Partially remove on the side the wing inner panel **G**.

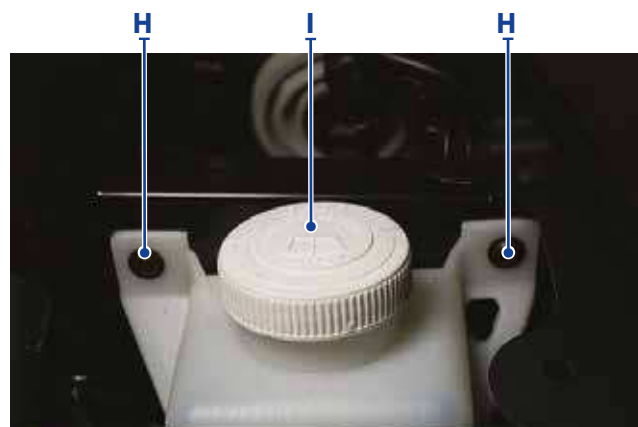


E

Windscreen washer reservoir

ES5004

7. Remove the 2 hexagon screws **H** from the windscreen washer reservoir **I**.



8. Disconnect the connector **J** on the windscreen washer reservoir **I**.



9. Separate the hose **K** from the windscreen washer reservoir **I**.

10. Remove the windscreen washer reservoir **I**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, check the level of fluid in the reservoir.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
Size 17 wrench	1	-
PPE		
Gloves	1	-

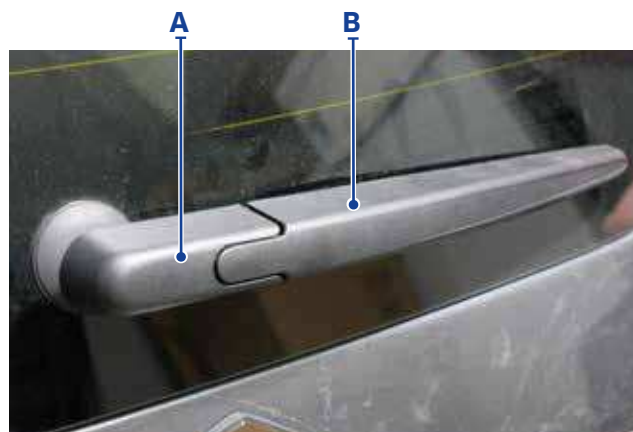
Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-

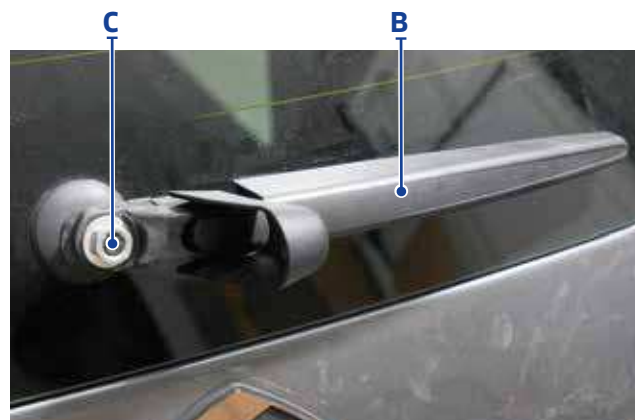
Removal procedure

Outside the vehicle:

1. Lift the nut cover **A** from the windscreen wiper blade **B**.



2. Remove the nut **C** from the windscreen wiper blade **B**.
3. Remove the windscreen wiper blade **B**.



Rear screen wiper motor

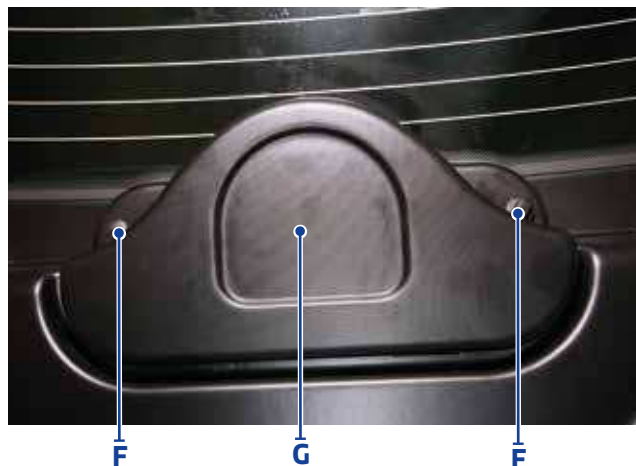
ES5005

4. Manually operate the opening control **D** of the tailgate **E**.



Inside the vehicle:

5. Remove the 2 plasti-rivets **F** from the windscreen wiper motor cover **G**.
6. Remove the windscreen wiper motor cover **G**.



7. Remove the 3 screws **H** from the windscreen wiper motor **I**.



Outside the vehicle:

8. Push the threaded rod **J** through the tailgate window **K**.



Electricity

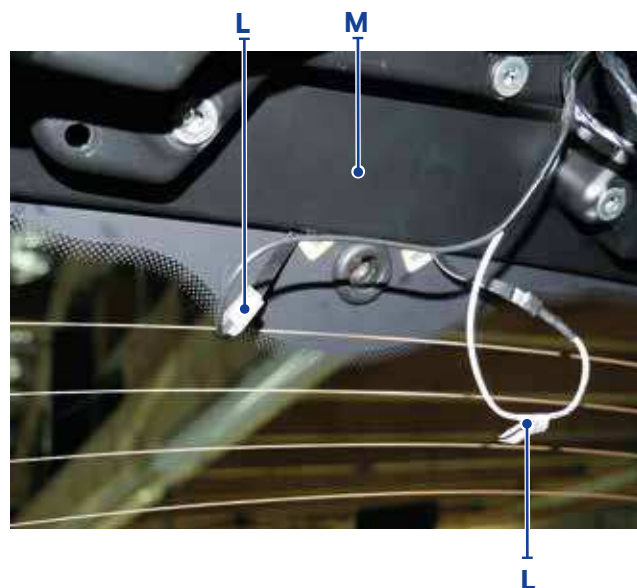
E

Rear screen wiper motor

ES5005

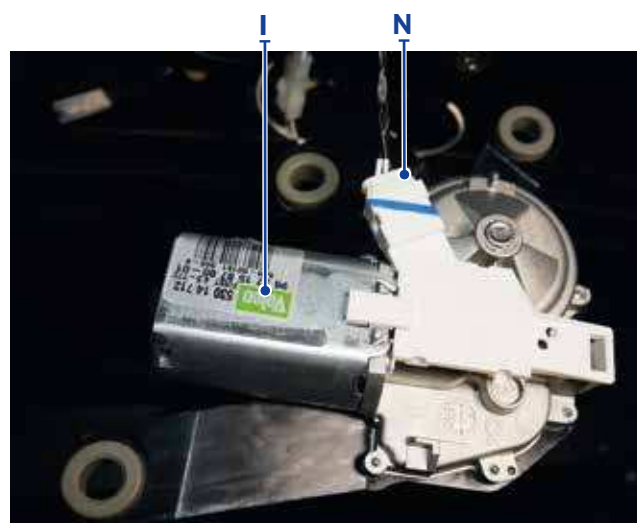
Inside the vehicle:

9. Disconnect the 2 lugs **L** from the tailgate **M**.



10. Disconnect the connector **N** from the windscreen wiper motor **I**.

11. Remove the windscreen wiper motor **I**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

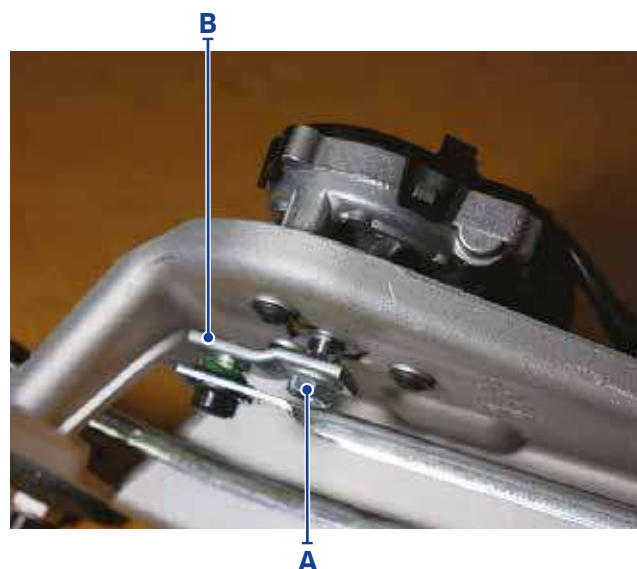
Special tools	Quantities	References
Flat screwdriver	1	1
Allen key	1	1
Size 13 wrench	1	1
PPE		
Gloves	1	1

Preliminary procedures

Operations	Procedure types	Pages
Dual windscreen wiper arm plate	Removal / Installation	E-31

Removal procedure

1. Loosen the nut **A** to release the mechanism on the windscreen wiper motor shaft **B**.

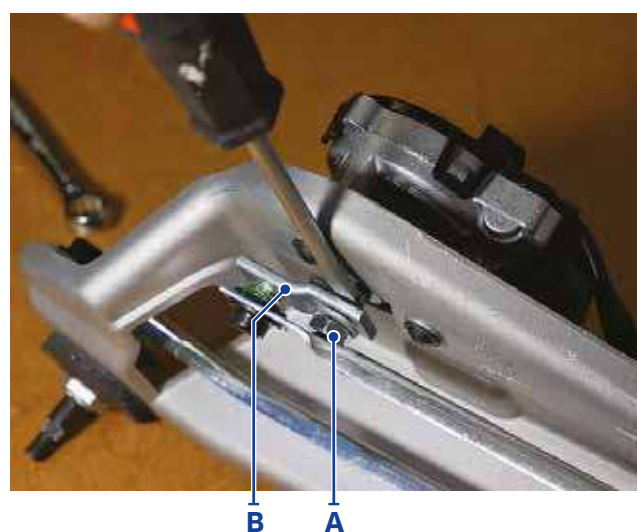


2. Apply leverage on the windscreen wiper motor shaft mechanism **B**, using a flat screwdriver.
3. Remove the nut **A**.



RISK OF WIPERS OPERATING IN THE REVERSE DIRECTION

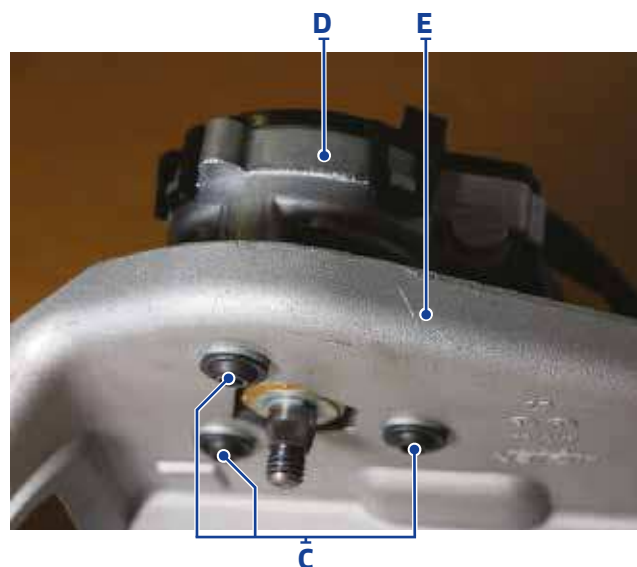
Caution: before disengaging the lever of mechanism **B** on the engine shaft, mark its position.



Dual windscreen wiper motor

ES5000

4. Remove the 3 screws **C** from the windscreen wiper motor **D**.
5. Remove the windscreen wiper motor **D** from the dual wiper plate **E**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK OF WIPERS OPERATING IN THE REVERSE DIRECTION

Mark the lever position on the shaft (see removal procedure step **2**).

E



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Philips screwdriver	1	-
Allen key	1	-
Size 10 and 13 wrench	1	-

PPE		
Gloves	-	-

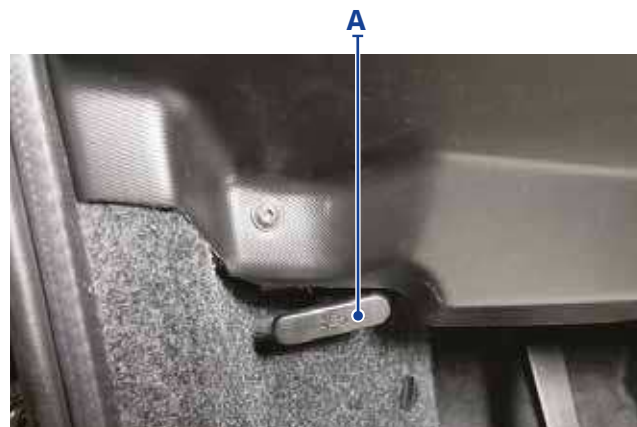
Preliminary procedures

Operations	Procedure types	Pages
Front windscreen wiper arm	Removal / Installation	A-39
Ignition off + Fuse No.7, 15A on fuse carrier on the driver's side removed	-	-

Removal procedure

Inside the vehicle:

1. Manually operate the opening lever of the bonnet **A** under the steering wheel, on the left side.



Outside the vehicle:

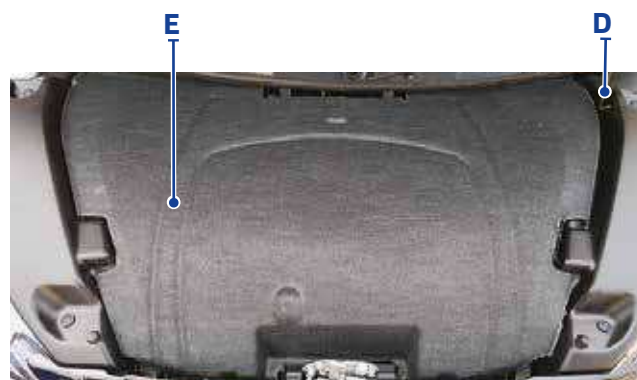
2. Manually operate the strike **B** under the bonnet **C** and open the bonnet.



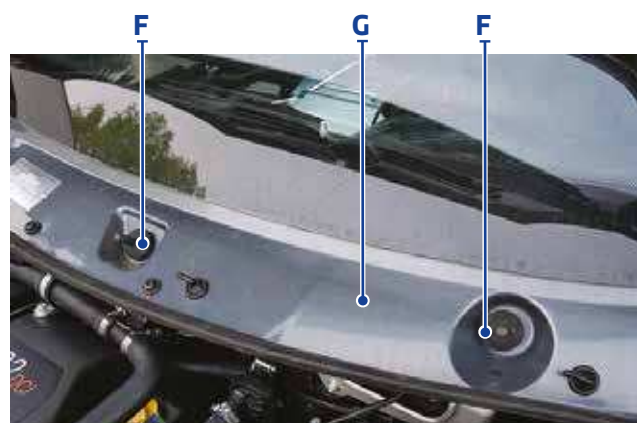
Dual windscreen wiper arm plate

ES5003

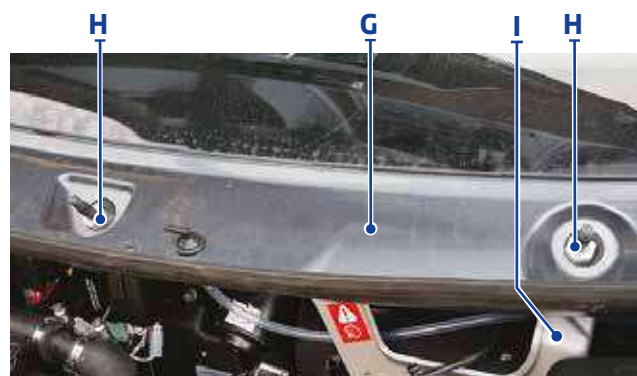
3. Once the bonnet is open, it is recommended to use the support rod **D**.
4. Remove the sound-deadening protection **E**.



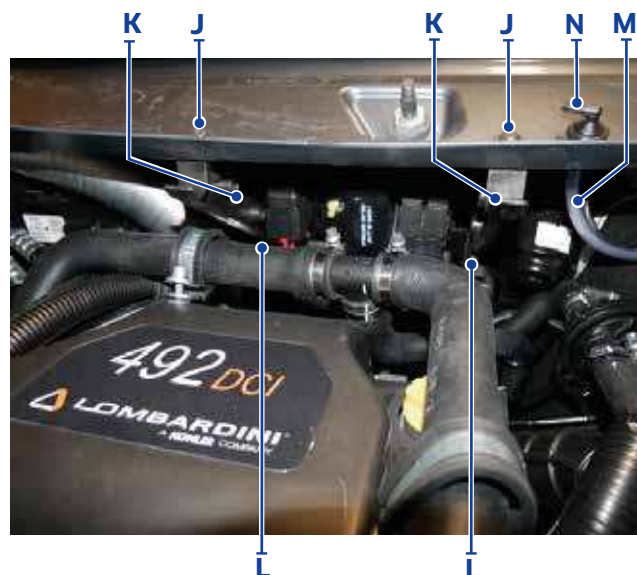
5. Remove the 2 caps **F** fitted on the windscreen scuttle panel **G**.



6. Remove the 2 nuts **H** securing the dual windscreen wiper arm plate **I** on the windscreen scuttle panel **G**.



7. Remove the 2 screws **J** from the 2 brackets **K**.
8. Remove the 2 screws **L** from the 2 brackets **K**.
9. Separate the pipe **M** from the nozzle **N**.



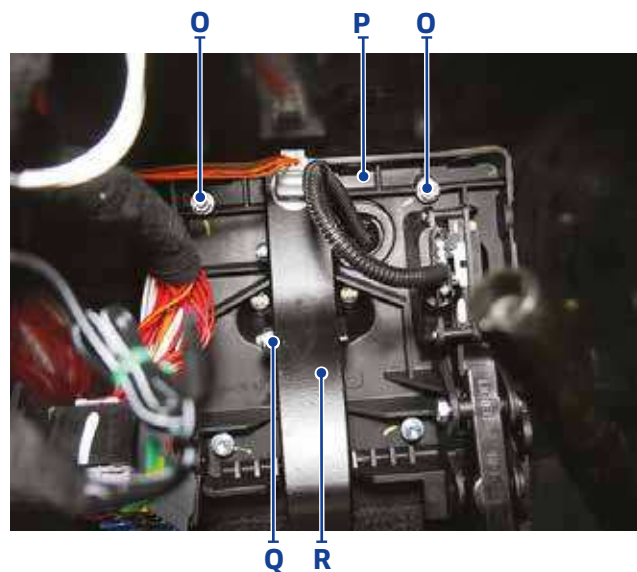
E

Dual windscreen wiper arm plate

ES5003

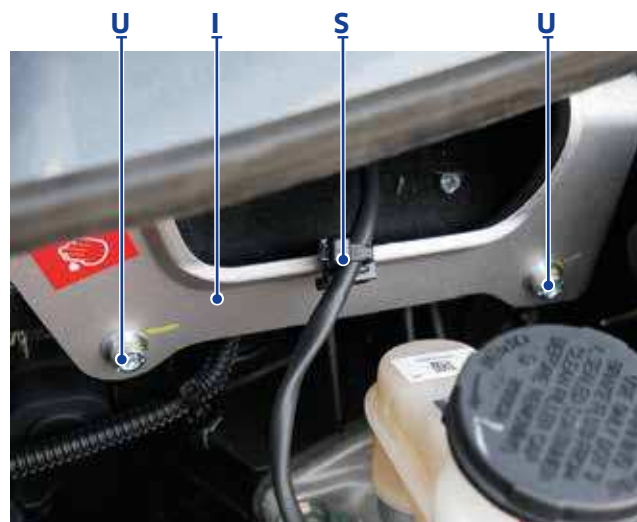
Inside the vehicle, under the dashboard:

- 10.** Remove the 2 nuts **O** at the top of the pedal plate **P**.
- 11.** Remove the nut and the screw **Q** from the brake pedal **R**.

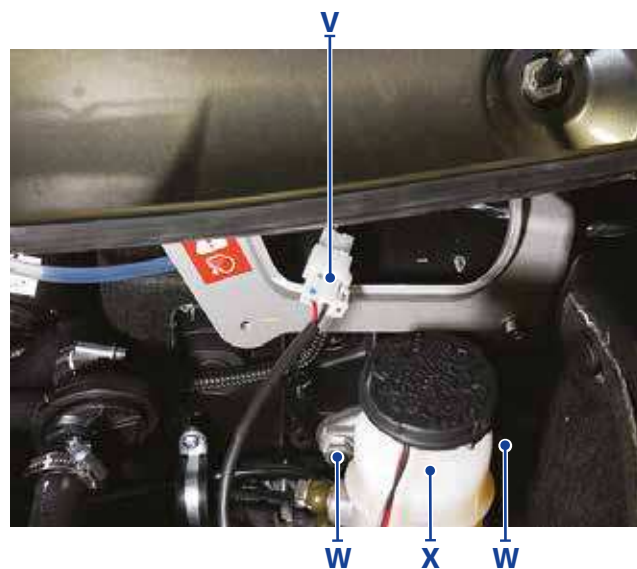


Outside the vehicle:

- 12.** Unfasten the clip on the edge of plate **S**.
- 13.** Remove the 2 screws **U** from the dual windscreen wiper plate **I**.



- 14.** Disconnect the connector **V** from the master cylinder **X**.
- 15.** Remove the 2 retaining nuts **W** from the master cylinder **X**.
- 16.** Partially remove the master cylinder **X** on the side.



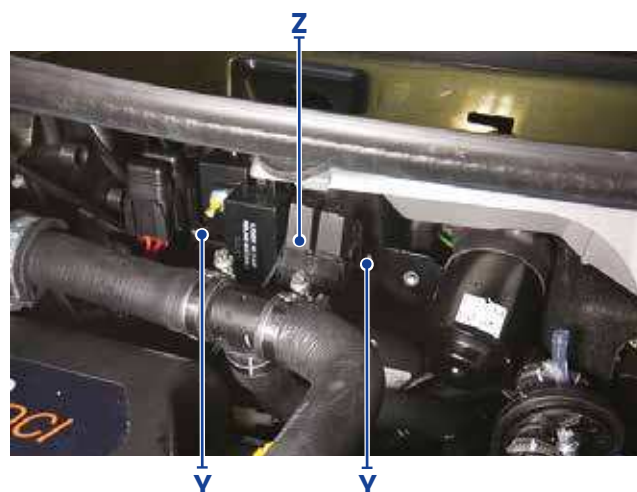
Electricity

E

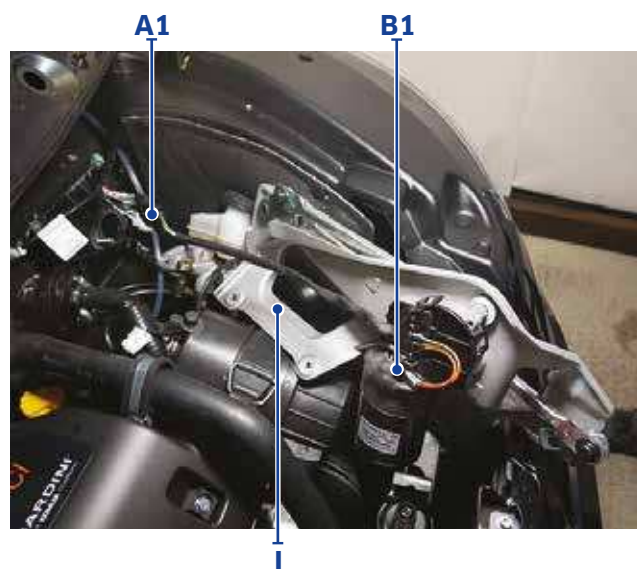
Dual windscreen wiper arm plate

ES5003

17. If the vehicle is equipped with air conditioning, remove the 2 hexagon screws **Y** from the relay carrier **Z**.



18. Partially remove the dual windscreen wiper plate **I**.
19. Disconnect the connector **A1** from the windscreen wiper motor **B1**.
20. Remove the dual windscreen wiper plate **T**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).

1. Comply with the dimensions indicated on the photo, measured near the nozzles on the windscreen wiper arms, between the centre of the windscreen wiper arm and the edge of the windscreen.





Equipment required

Special tools	Quantities	References
Size 10 wrench	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Standard passenger seat (without Flex-it option)	Removal / Installation	C-25

Removal procedure

Inside the vehicle:

1. Pull the strap **A** upwards, to tip the seat **B** forward.



2. Remove the protection plate on the battery **C**, using the opening **D**.



12V battery

EL5001

3. Loosen the lug on the negative terminal (-) **E** of the battery **F** using a size 10 wrench.

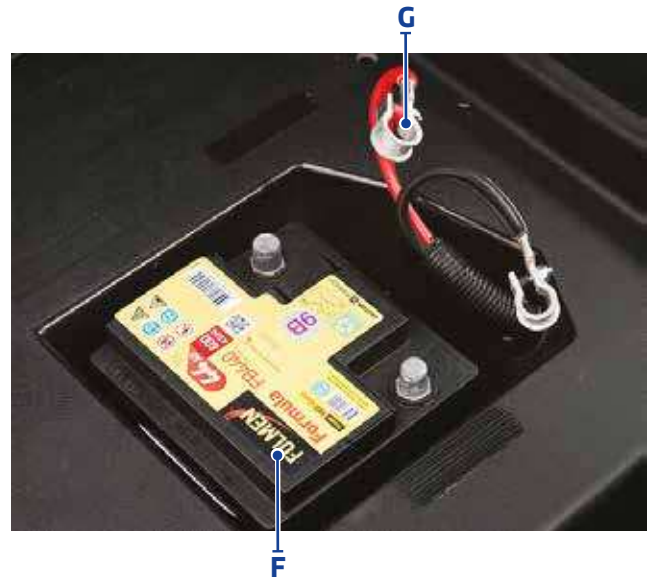


CAUTION: RISK OF SHORT-CIRCUIT

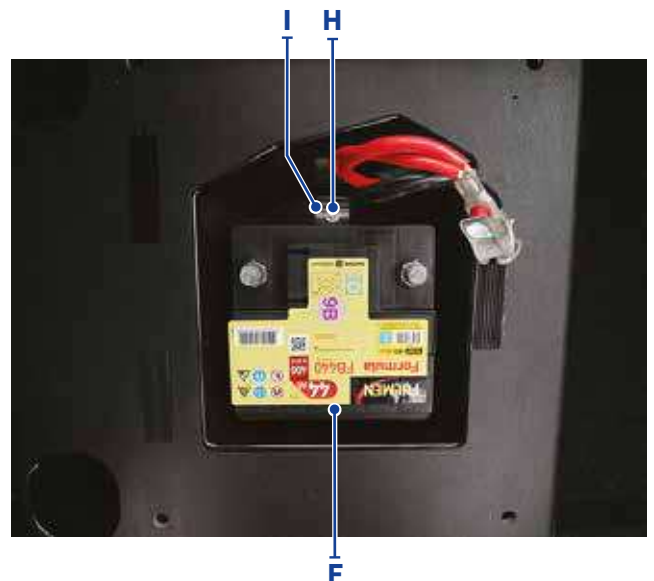
If you start with the positive terminal (+), you may cause a short-circuit with the disassembly tool.



4. Loosen the lug on the positive terminal (+) **G** of the battery **F** using a size 10 wrench.



5. Remove the support plate **I** by loosening the screw **H** using a size 10 socket + extension.
6. Remove the battery **F**.



12V battery

EL5001

Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



CAUTION: RISK OF SHORT-CIRCUIT

When installing the battery, properly tighten the positive terminal (+) first; if you start with the negative terminal (-) you may cause a short-circuit.



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
PPE		
Gloves	1	-

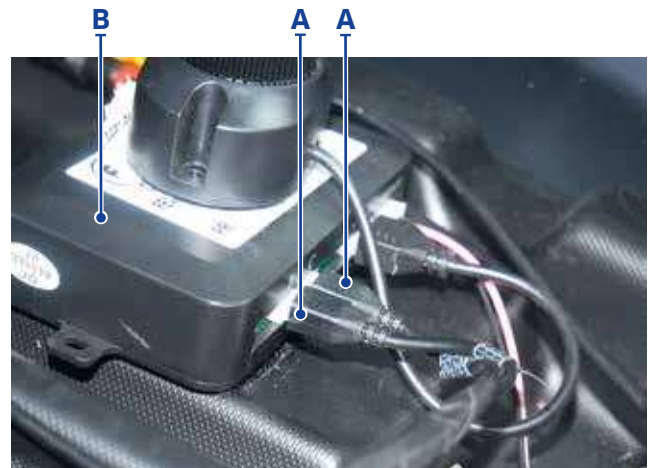
Preliminary procedures

Operations	Procedure types	Pages
Ignition off	-	-
Boot fabric on the passenger side	Removal / Installation	<EX>
Rear bumper	Removal / Installation	A-97

Removal procedure

Inside the vehicle:

1. Disconnect the 2 connectors **A** from the control box **B**.



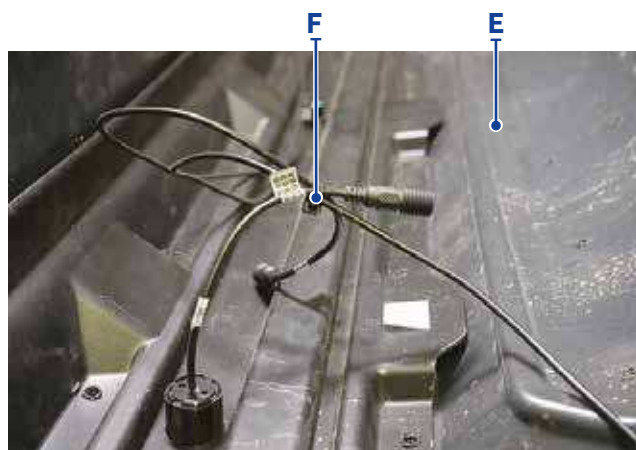
2. Separate the grommet **C** from the back of the luggage compartment **D**.
3. Run the 2 connectors **A** through the grommet **C**.



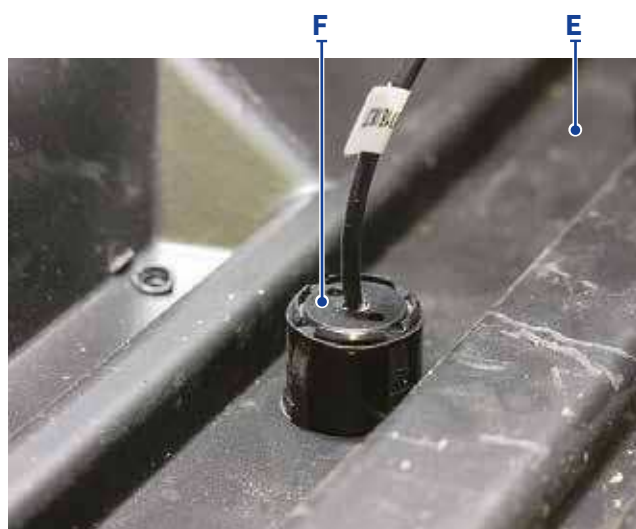
Parking aid kit

EL5008

4. On the inner side of the bumper **E** cut the cable tie **F**.



5. Manually push the parking aid **F** out from the bumper **E**.
6. Remove the parking aid **F**.



Installation

To install, perform the removal operations in the reverse order.



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
PPE		
Gloves	1	-

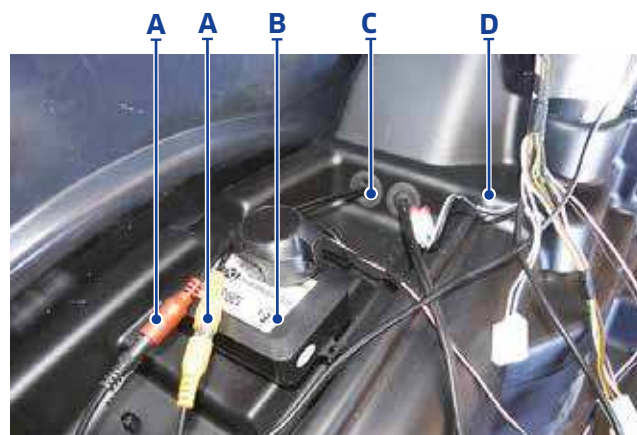
Preliminary procedures

Operations	Procedure types	Pages
Ignition off	-	-
Boot fabric on the passenger side	Removal / Installation	<EX>
Rear bumper	Removal / Installation	A-97

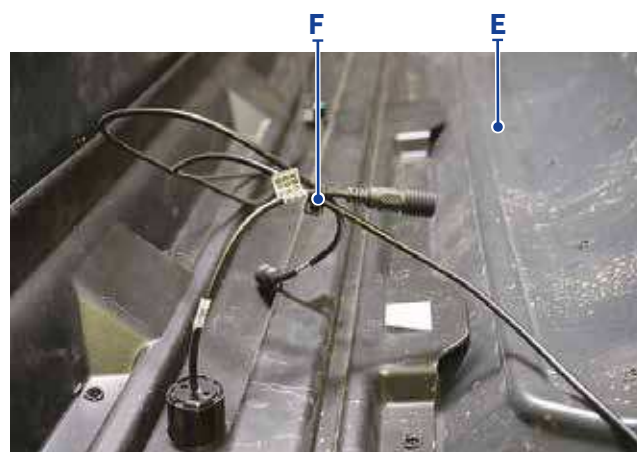
Removal procedure

Inside the vehicle:

1. Disconnect the 2 yellow and red jacks **A**, from the control box **B**.
2. Separate the grommet **C** from the back of the luggage compartment **D**.
3. Run the 2 jacks **A** through the grommet **C**.



4. On the inner side of the bumper **E** cut the cable tie **F**.



Reversing camera

EL5013

5. Manually push the reversing camera **F** out from the bumper **E**.
6. Remove the reversing camera **F**.



Installation

To install, perform the removal operations in the reverse order.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
Glue gun	1	-
Torx key	1	-
Compressor	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Glue cartridge	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-

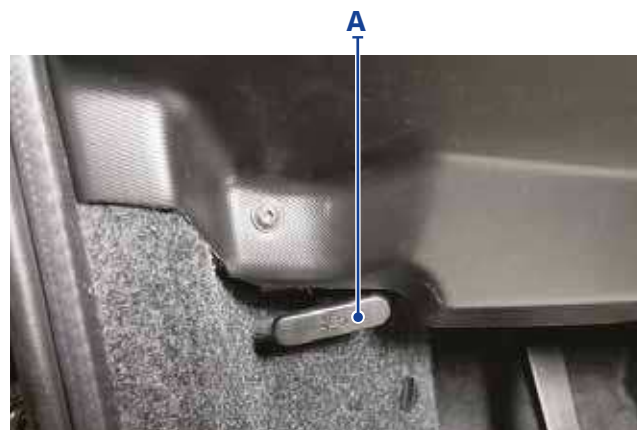
Removal procedure



This procedure is identical for the driver and passenger side

Inside the vehicle:

1. Manually operate the opening lever of the bonnet **A** under the steering wheel, on the left side.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**, open the bonnet.



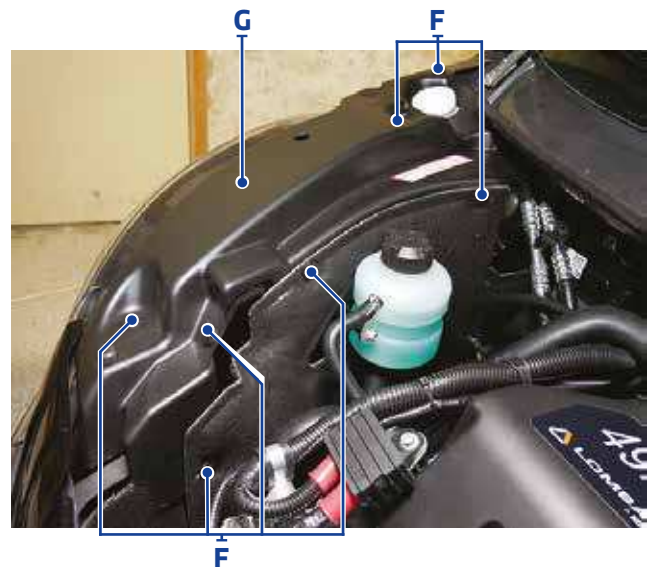
Headlight

EA5001 (1 side + adjustment)

3. Bonnet open, it is recommended to use the support rod **D**.
4. Remove the sound-deadening protection **E**.



5. Remove the 7 plasti-rivets **F** from the wing inner panel **G** on the passenger side.



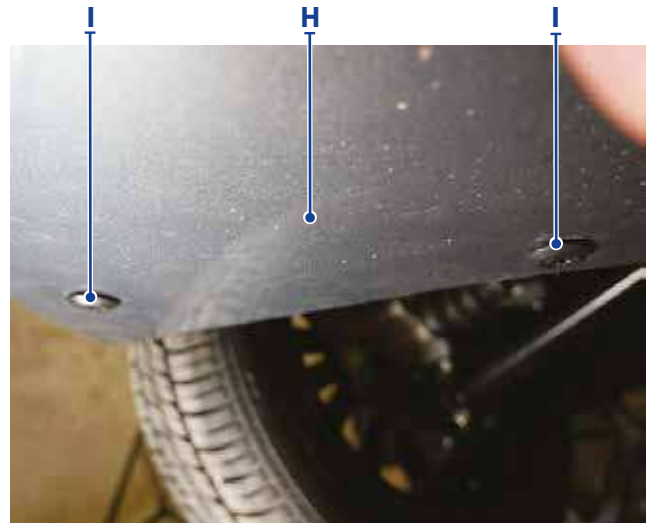
6. Partially remove the wing inner panel **G** on the side.



Headlight

EA5001 (1 side + adjustment)

7. Remove the 2 screws **I** underneath the passenger side bumper **H**.

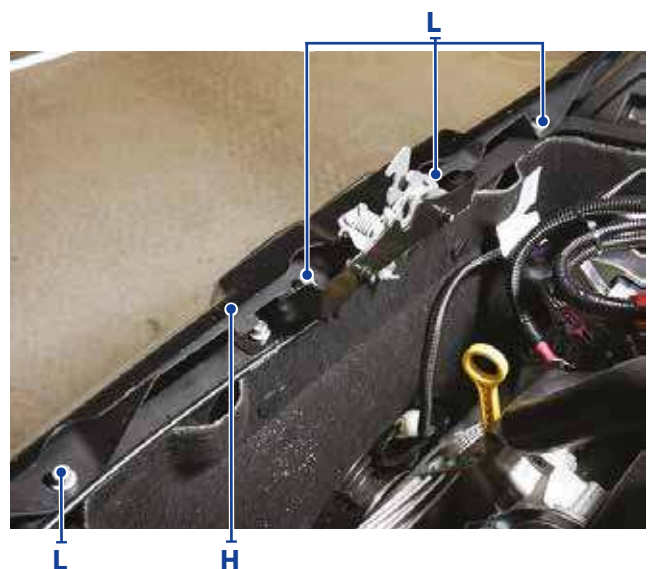


8. Place yourself above the point **J** to identify the screw **K**.

9. Remove the screw **K**.



10. Remove the 4 screws **L** from the bumper **H**.



Headlight

EA5001 (1 side + adjustment)

- 11.** Gently pull the bumper **H** to separate it from the front wing.



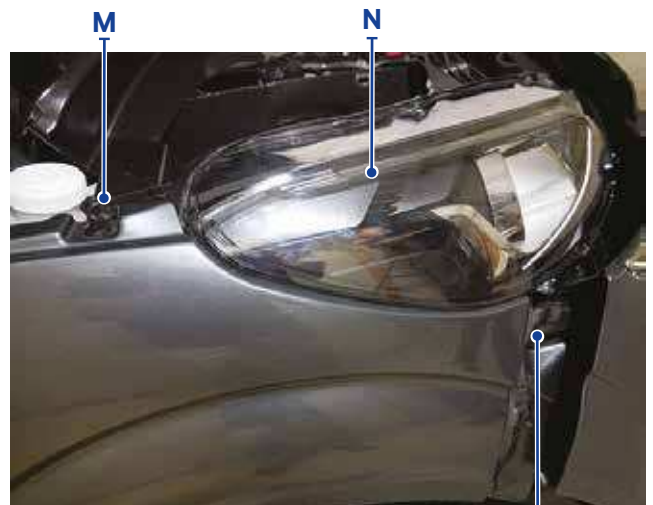
RISK

It is not recommended to use tools to separate the bumper.



H

- 12.** Remove the 2 screws **M** from the right headlight **N**.



M

- 13.** Remove the 3 screws **M** from the right headlight **N**.



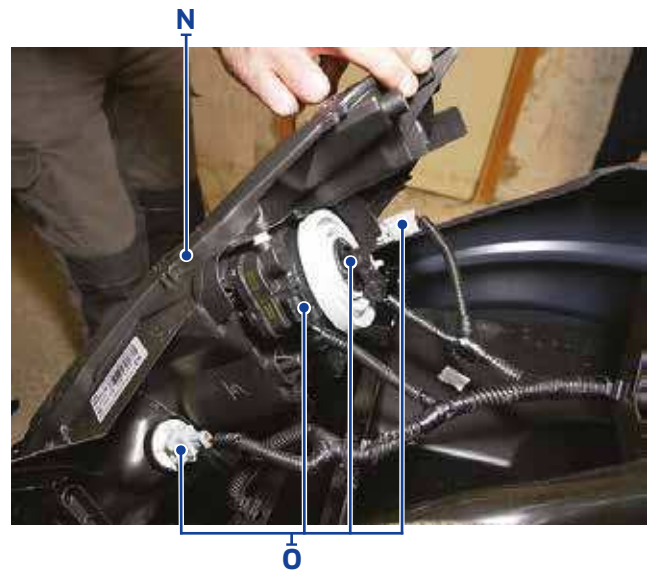
M

N

Headlight

EA5001 (1 side + adjustment)

14. Disconnect the 4 connectors **O** on the right headlight **N**.
15. Remove the right headlight **N**.



Installation procedure

To install, perform the removal operations in the reverse order.



To install the bumper, use a special bodywork glue with a glue gun (refer to Sikaaxson annex).



During the installation, respect the tightening torques indicated on **page 9**.



When installing the headlight, adjust the beam of light.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Size 5 Allen key	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-



This procedure is identical for the driver and passenger side

Removal procedure

1. Manually operate the opening control **A** of the tailgate **B**.



2. Remove the 2 screw covers **C** on the rear light **D**, using a flat screwdriver.



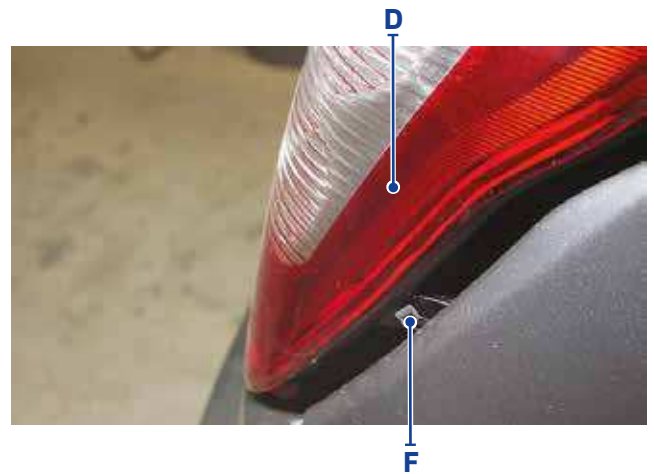
Rear light

EA5003

3. Remove the 2 screws **E** from the rear light **D**.

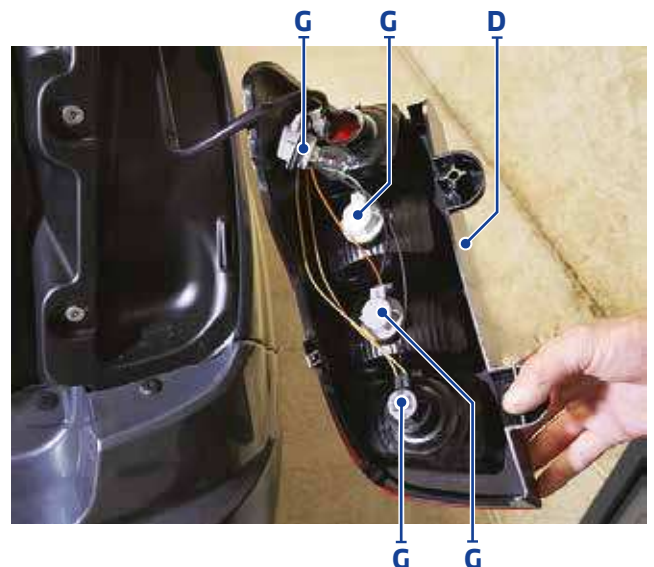


4. Unfasten the clip **F** on the rear light **D** using a flat screwdriver.



5. Disconnect the 4 connectors **G** on the rear light **D**.

6. Remove the rear light **D**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Allen key	1	-
Flat screwdriver	1	-
PPE		
Gloves	1	-

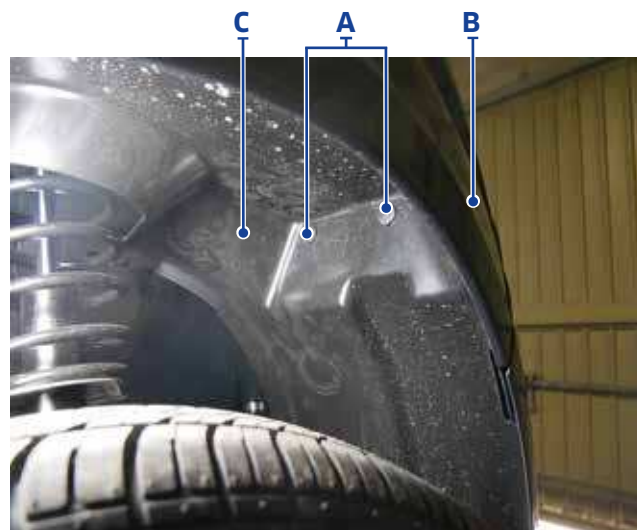
Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-

Removal procedure

Underneath the vehicle:

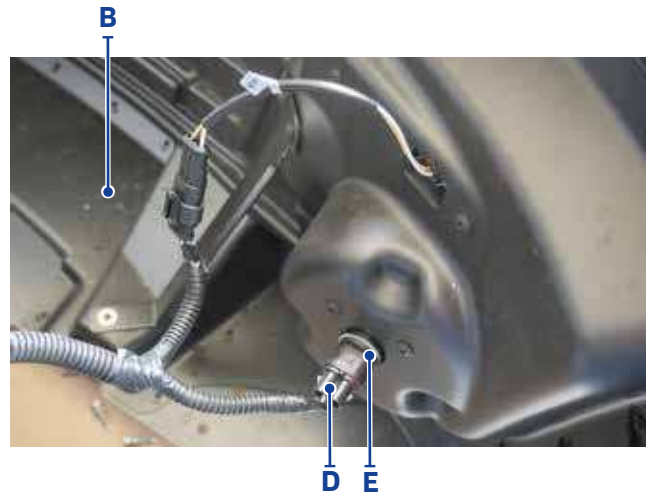
1. Remove the 2 plasti-rivets **A** fitted on the bumper **B** and separate the mudguard **C**.



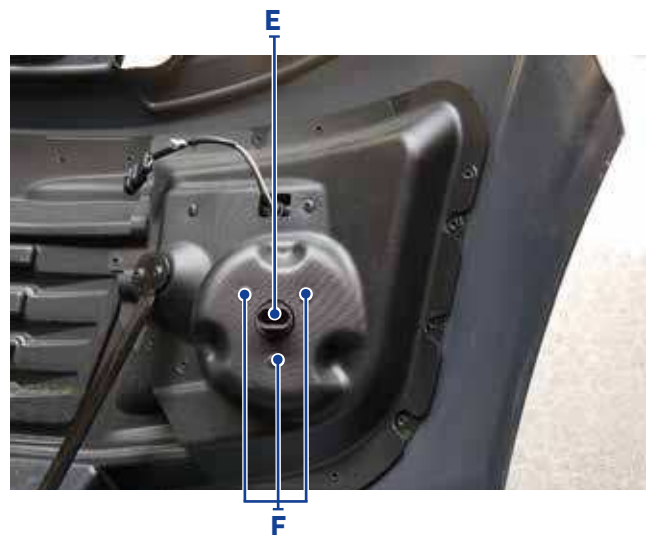
Front foglight

EA5008

2. On the bumper **B** disconnect the connector **D** on the foglights **E**.



3. Remove the 3 screws **F** on the foglight **E**.



4. If the vehicle is fitted with a trim **G**, it must be removed to pull the foglight **E** out forward, and replace the damaged trim **G** during the installation operation.

5. Remove the foglight **E**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Allen key	1	-
PPE		
Gloves	1	-

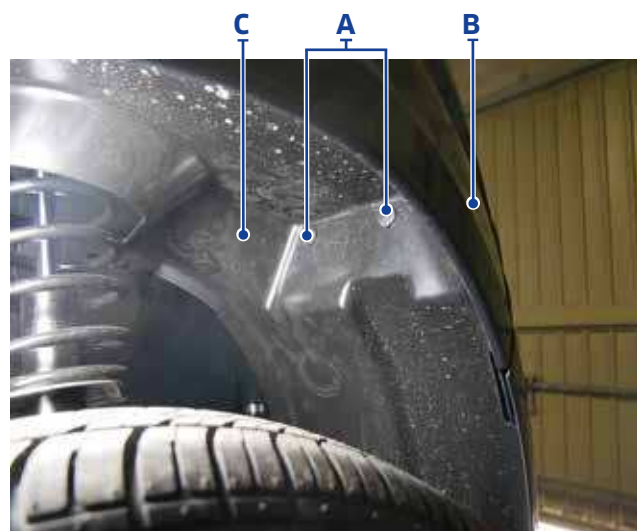
Preliminary procedures

Operations	Procedure types	Pages
Ignition off	-	-

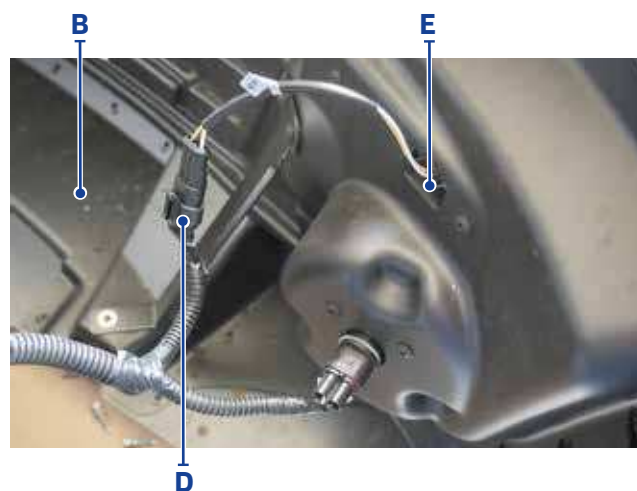
Removal procedure

Underneath the vehicle:

1. Remove the 2 plasti-rivets **A** fitted on the bumper **B** and separate the mudguard **C**.



2. On the bumper **B** disconnect the connector **D** on the daytime running light **E**.



Daytime running lights

EA5010

3. Remove the 2 screws **F** from the daytime running light **E**.



4. Remove the daytime running light **E**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Cutting pliers	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Cable tie	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + Parking brake shunt fuse removed	-	-
Inner door panel	Partial removal	A-55

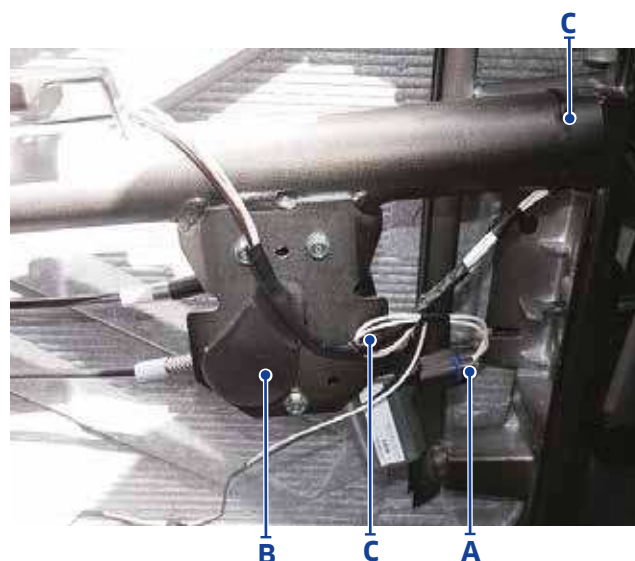


This procedure is identical for the driver and passenger side

Removal procedure

Inside the vehicle:

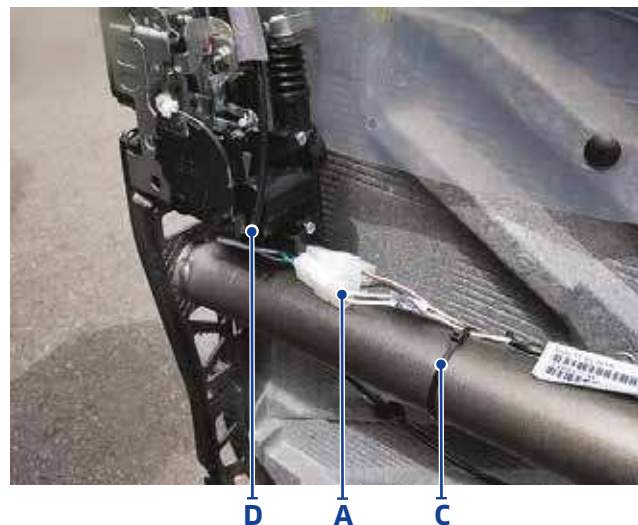
1. Disconnect the connector **A** from the window lift mechanism **B**.
2. Cut the cable ties **C** securing the harness **A**.



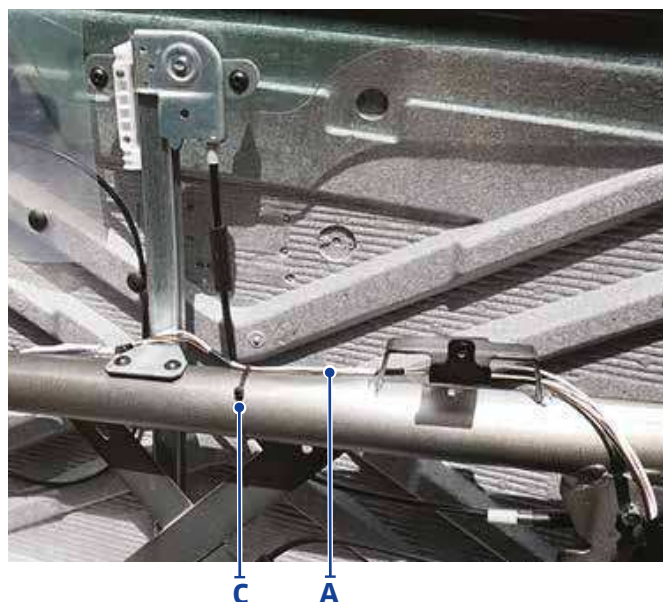
Door harness

EL5002

3. Disconnect the 2 connectors **A** from the centralised locking actuator **D**.
4. Cut the cable tie **C** securing the harness **A**.



5. Cut the cable tie **C** securing the harness **A**.
6. Remove the harness **A**.



Installation

To install, perform the removal operations in the reverse order.

E



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Philips screwdriver	1	-
Allen key	1	-
Size 10 and 13 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Cable tie	1	-

Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	-	-
Exhaust line	Removal / Installation	H-14
Passenger seat or battery access if Flex It seat	Removal / Installation	C-25 - E-35

Removal procedure

Inside the vehicle:

1. Manually operate the bonnet opening lever **A**.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**.



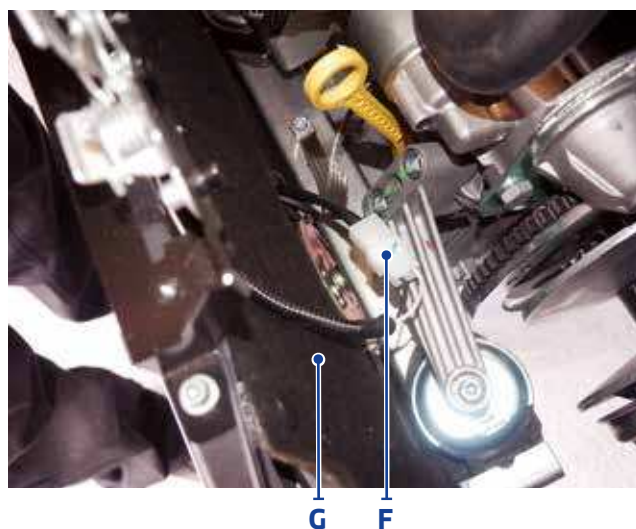
LIGIER engine harness

EL5010

3. Bonnet open, it is recommended to use support rod **D**.
4. Remove the protective cover on the engine **E**.



5. Disconnect the connector **F** from the engine radiator **G**.



6. Open the central unit **H**.



LIGIER engine harness

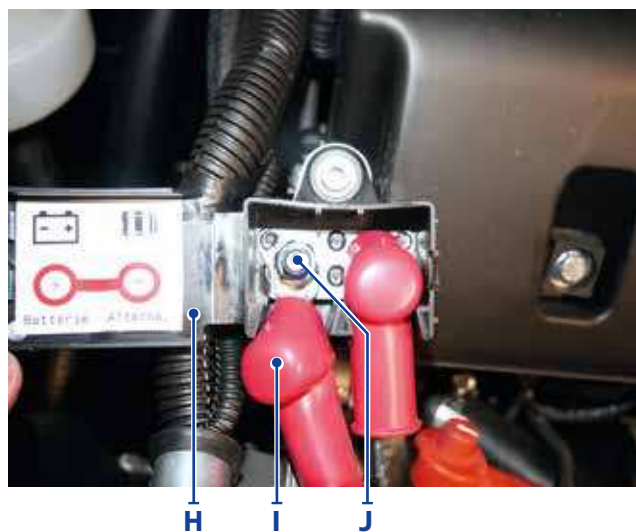
EL5010

7. Release the red protection cover **I** on the LEFT to remove the positive lug **J** of the unit **H**.



RISK

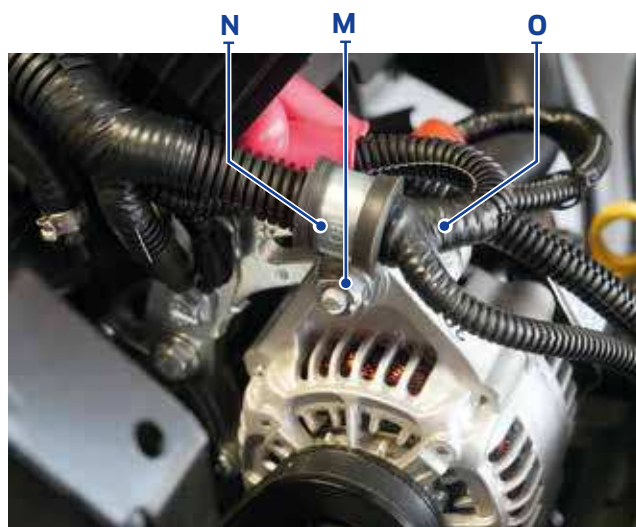
Caution, risk of short-circuit if the tool used is conductive and in contact with a metal part.



8. Remove the upper ground screw **K** on the side of the alternator **L**.



9. Remove the nut **M** from the clamp **N** securing the harness **O**.



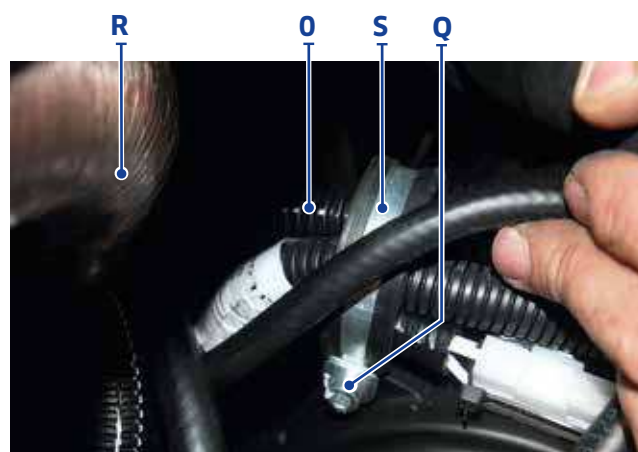
LIGIER engine harness

EL5010

10. Remove the cable tie **P** to pull out the harness **O**.



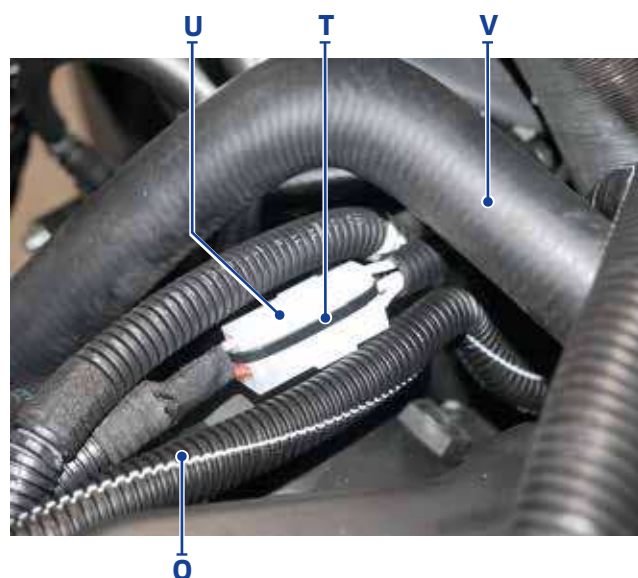
11. Remove the screw **Q** from the clamp **S** securing the harness **O** near the heater hose **R**.



12. Cut the cable tie **T**.

13. Disconnect the connector of the sparking plugs **U**.

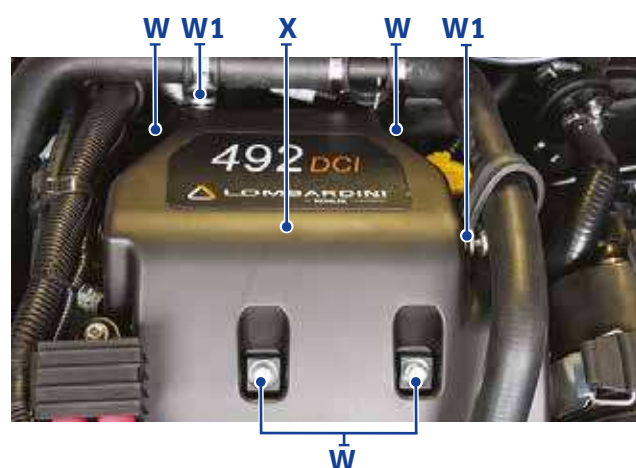
14. Run the harness **O** under the main hose **V**.



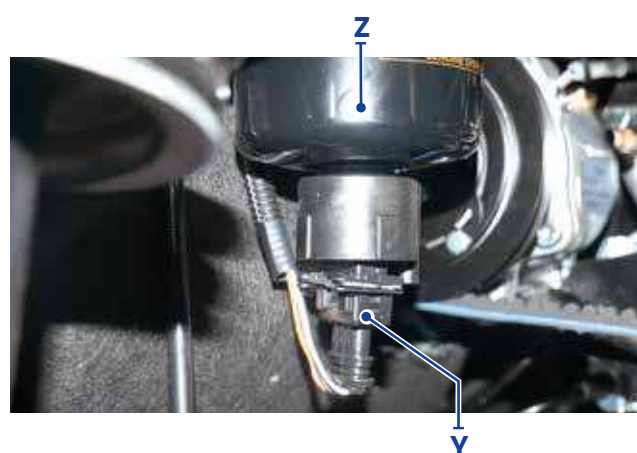
LIGIER engine harness

EL5010

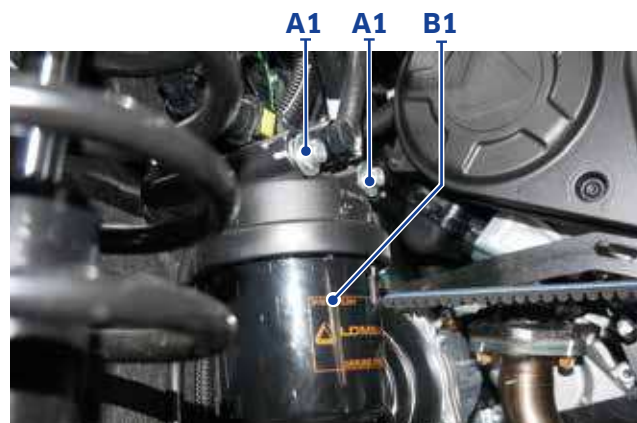
- 15.** Remove the 4 screws **W** + 2 screws **W1** securing the clamps on the upper hose, to release the engine sound-deadening cover **X**.



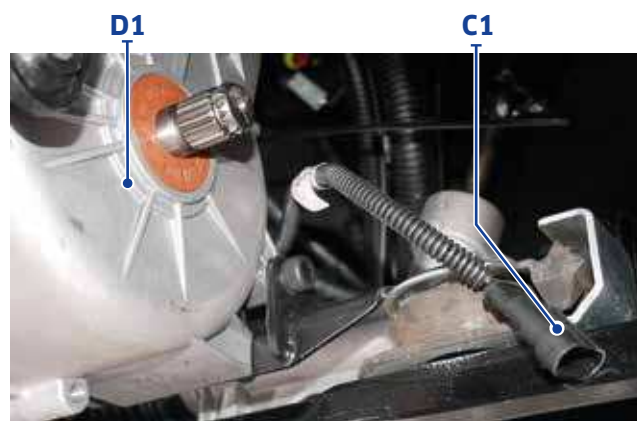
- 16.** Disconnect the connector **Y** from the fuel filter **Z**.



- 17.** Remove the screws **A1** from the fuel filter **B1**.
18. Partially remove the fuel filter **B1**.



- 19.** Disconnect the sensor **C1** from the inverter unit **D1**.



LIGIER engine harness

EL5010

- 20.** Cut the cable ties **E1** on the engine harness **O** at the back of the inverter unit **D1**.



- 21.** Unlock the 2 connectors **S** of the computer, by pressing on the centre part (see photos).



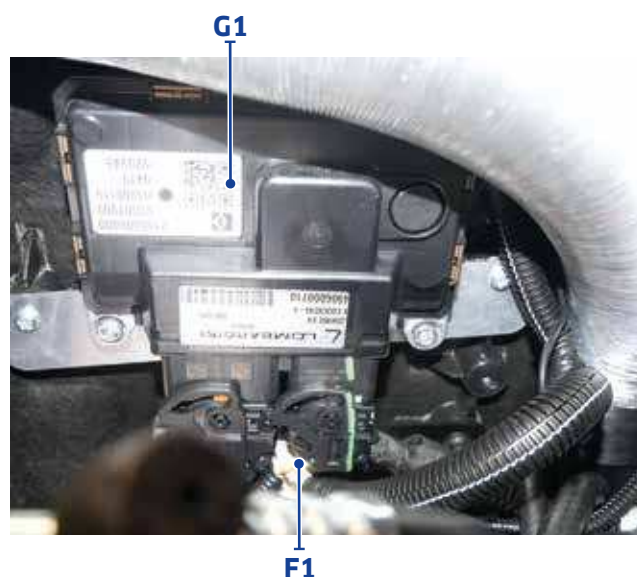
- 22.** Connectors in “unlock” position.



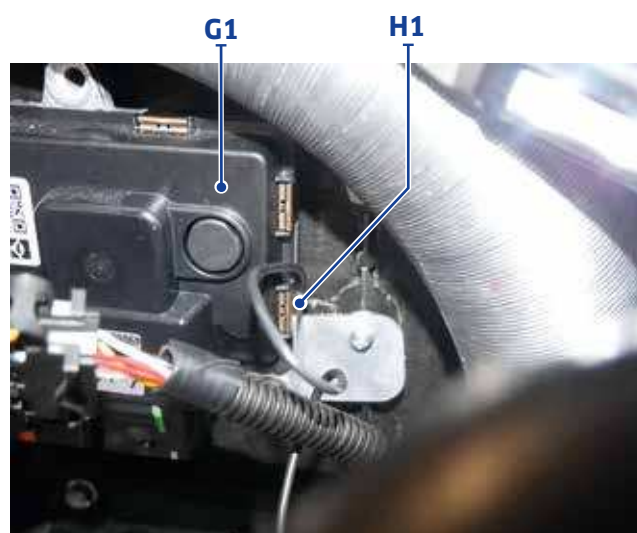
LIGIER engine harness

EL5010

23. Disconnect the connectors **F1** from the computer **G1**.

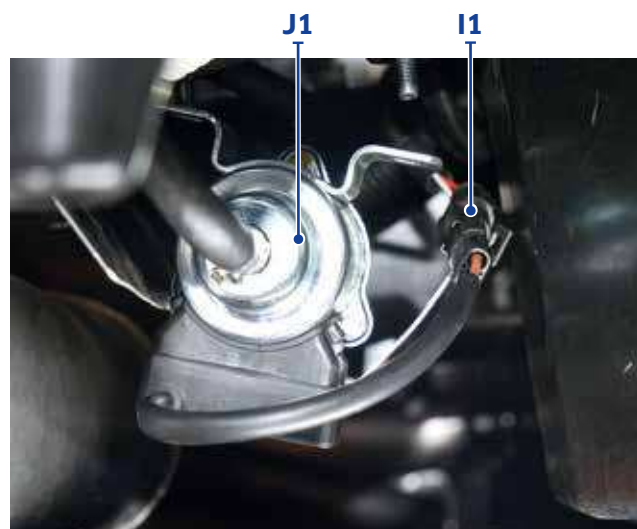


24. Remove the screw from the ground conductor **H1** of the computer **G1**.



Under the vehicle:

25. Disconnect the connector **I1** from the electric pump **J1**.



View with

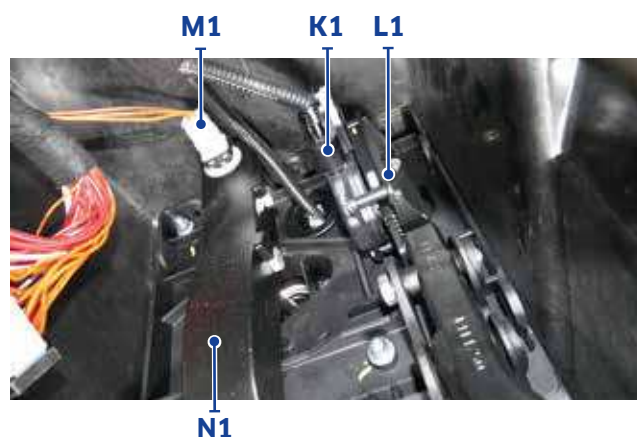
LIGIER engine harness

EL5010

Inside the vehicle:

26. Disconnect the connector **K1** from the accelerator pedal potentiometer **L1**.

27. Disconnect the connector **M1** from the brake pedal **N1**.

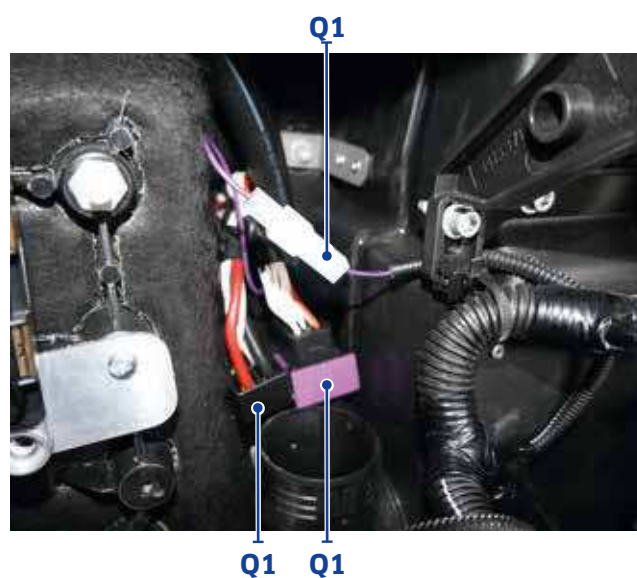


28. Remove the clip **O1** and pull the grommet **P1** out from its housing.

29. Pull the harness **O** through the grommet hole **P1**.



30. Disconnect the 3 connectors **Q1** from the body harness interconnection.



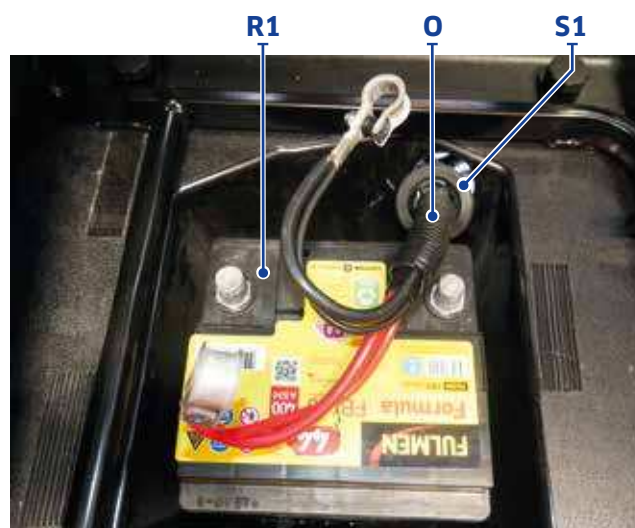
E

LIGIER engine harness

EL5010

Inside the vehicle:

31. In the battery compartment **R1** release the grommet **S1** and pull the engine harness **O** out of the vehicle.
32. Remove the engine harness **O**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Screw **A1**: tightening torque 5 Nm.



Equipment required

Special tools	Quantities	References
Philips screwdriver	1	-
Lift	1	-
Electric drill	1	-
Cutting pliers	1	-
Flat screwdriver	1	-
Allen key	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery.	Partial removal	E-35
Dashboard	Removal / Installation	C-2
Fuse box	Removal / Installation	E-22
Roof panel fabric	Removal / Installation	C-19
Boot fabric	Removal / Installation	<EX>
Headlight	Removal / Installation	E-42
Glove box	Removal / Installation	C-8
Windscreen washer reservoir	Removal / Installation	E-23
Rear light	Removal / Installation	E-47

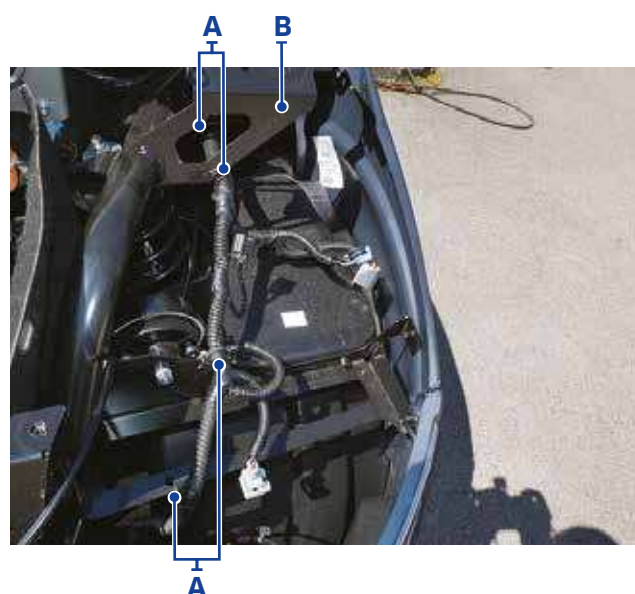
Removal procedure



2 persons are required to complete certain steps.

In the engine compartment:

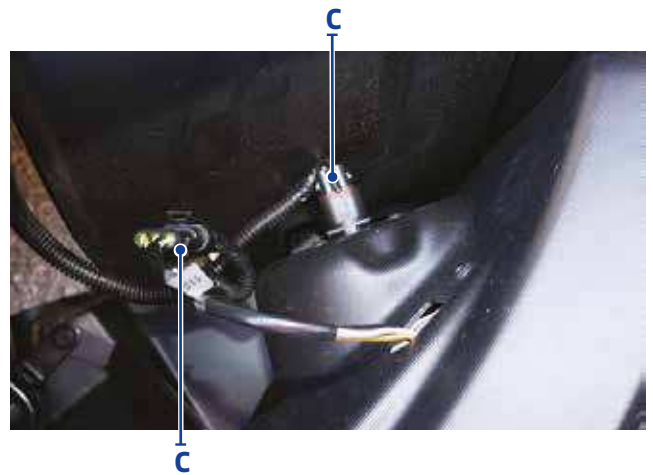
1. Remove the 4 clips **A** fitted on the wing inner panel support **B** on the driver side.



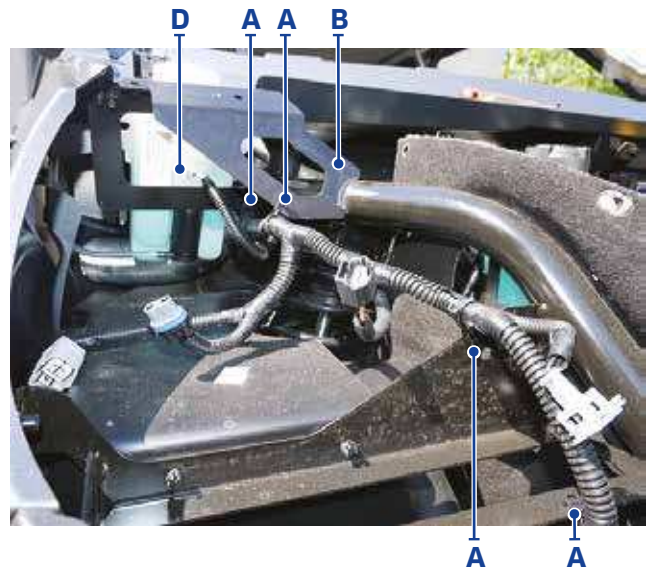
Body harness

EL5009

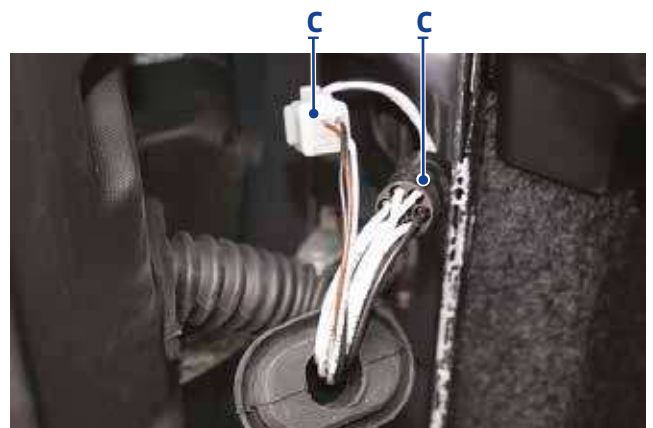
2. Remove the 2 connectors **C** from the foglight and front daytime running light on the driver side and the passenger side.



3. Remove the 4 clips **A** fitted on the wing inner panel **B** on the passenger side.
4. Remove the windscreen washer reservoir **D**.



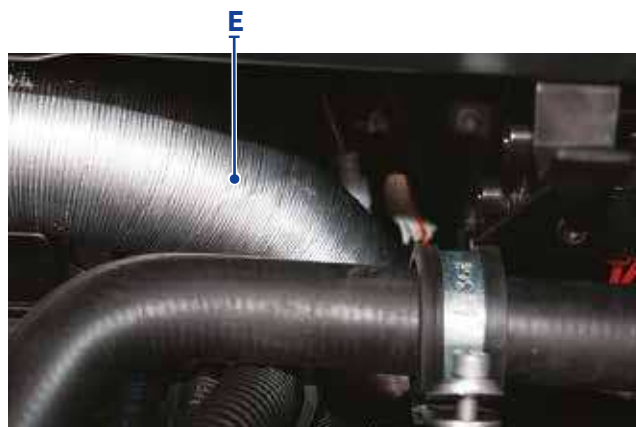
5. Disconnect the connectors **C** from the door harnesses on the passenger side and the driver side.



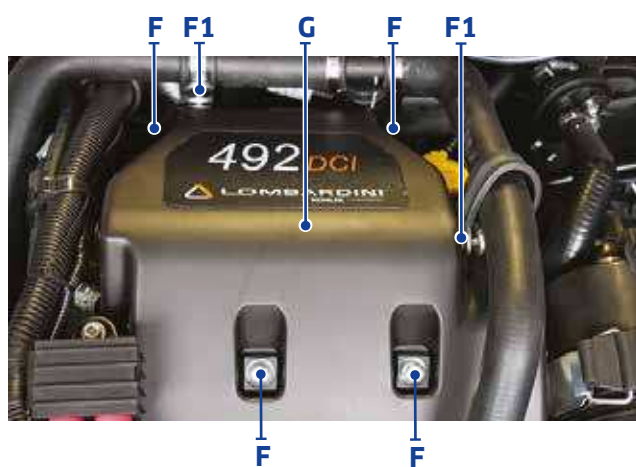
Body harness

EL5009

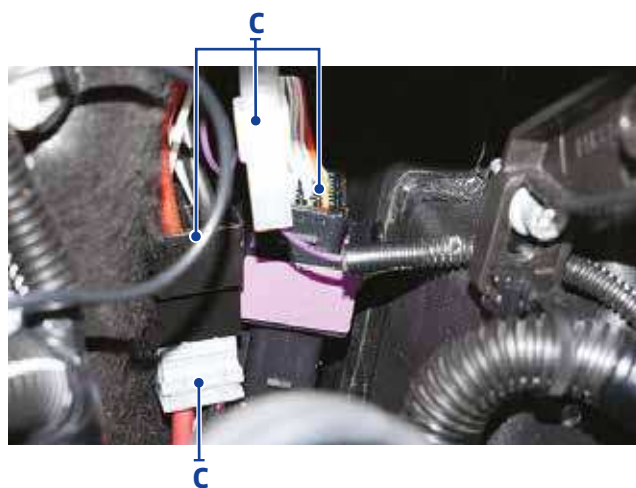
6. Disconnect the air inlet pipe from the heater box **E**.



7. Remove the 4 screws **F** + 2 screws **F1** securing the clamps on the upper hose, to release the engine sound-deadening cover **G**.



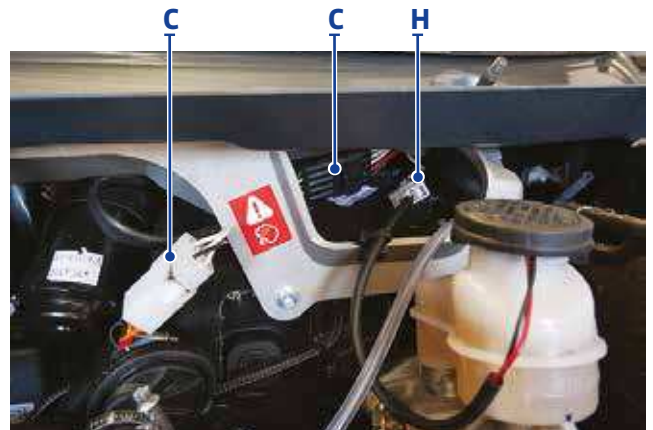
8. Disconnect the 4 connectors **C** between the body harness and the engine harness.



Body harness

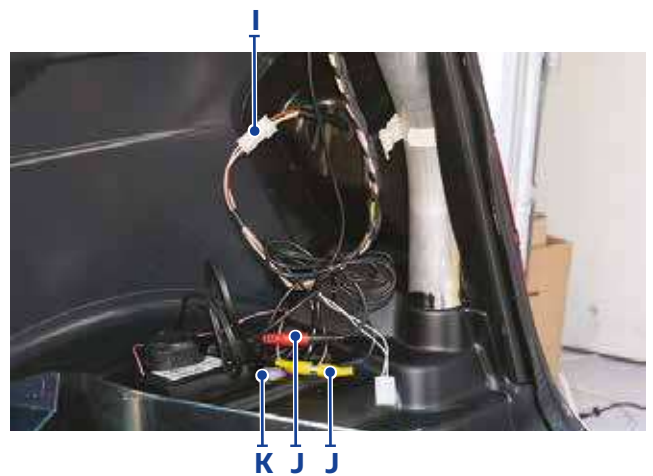
EL5009

9. Disconnect the connectors **C** of the air blower, on the front windscreen wiper motor and the brake fluid level sensor **H**.



At the back of the boot part:

10. Remove the connector **I** from the rear light on the passenger side and the driver side.
11. Disconnect the jack connectors **J** on the reversing camera and the connectors of the parking aid unit **K**.



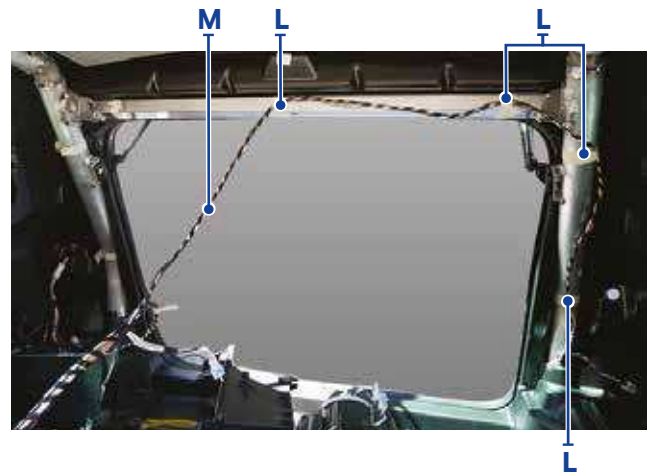
12. Disconnect the connector **C** from the tailgate harness.



Body harness

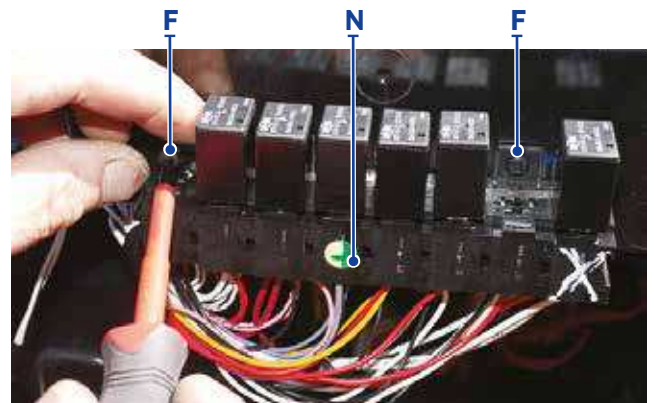
EL5009

- 13.** Remove all the adhesive tape **L** to release the harness **M**.

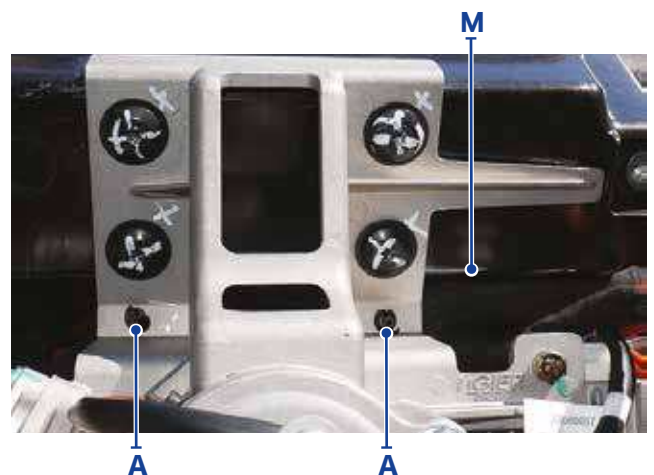


At the front of the driver's cab:

- 14.** Remove the 2 screws **F** from the relay carrier **N**.



- 15.** Release the harness **M** by pushing the 2 clips **A**.



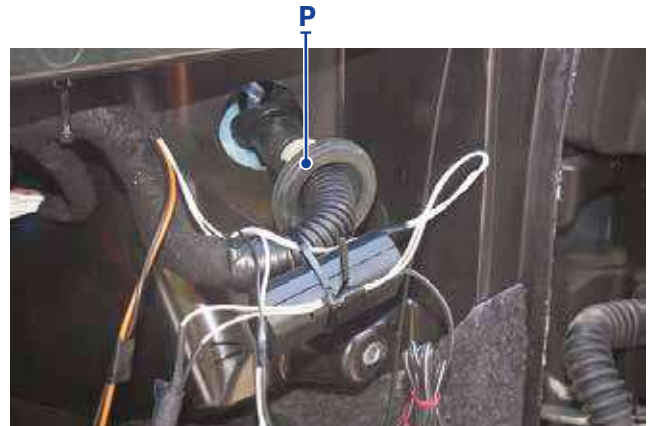
- 16.** Remove the protection **O** and the adhesive tape **L** to release the harness **M**.



Body harness

EL5009

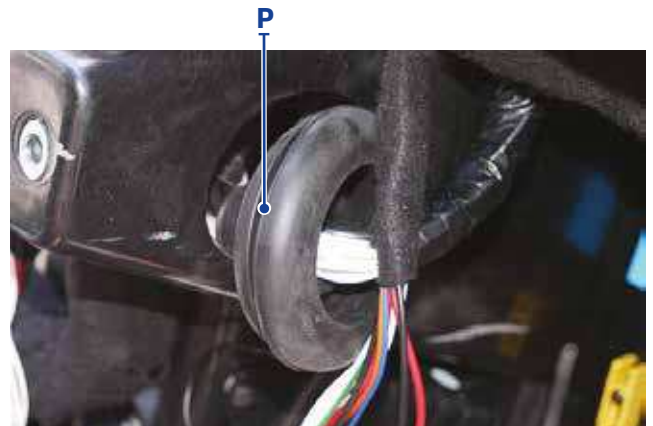
17. Release the grommet **P** from the body.



18. Drill the rivet **Q** of the antenna earth using a drill.



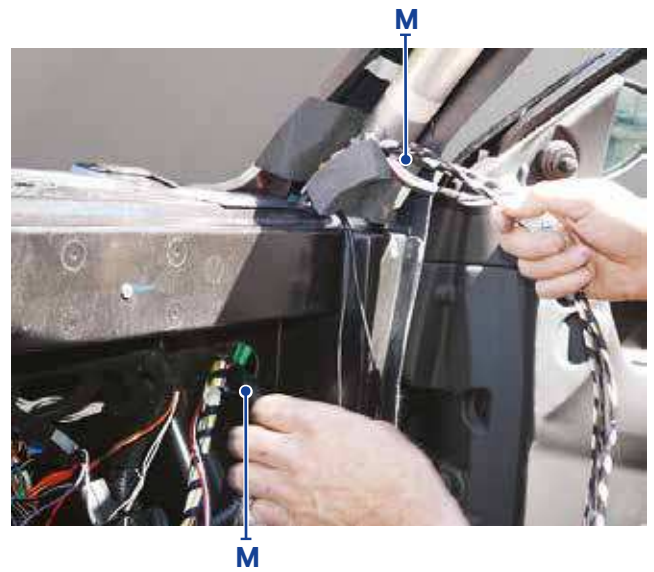
19. Release the grommet **P** from the body on the passenger side.



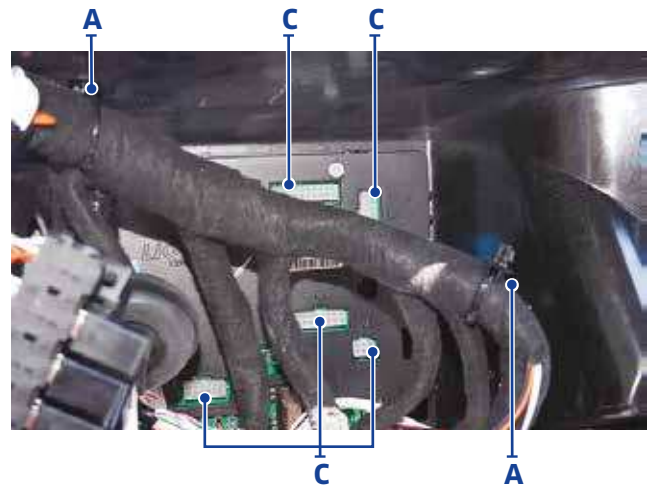
Body harness

EL5009

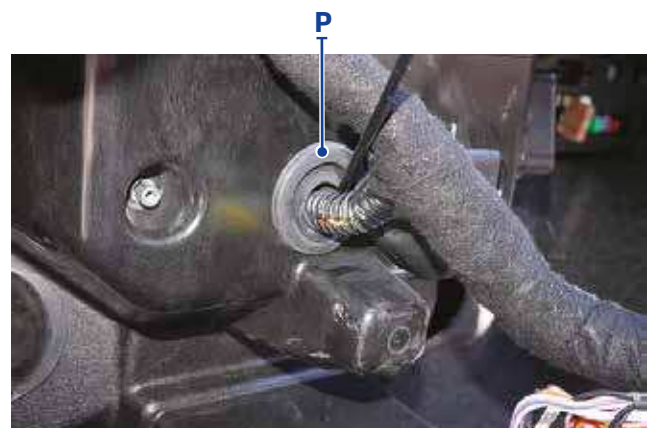
- 20.** Simultaneously pull on both parts of the harness **M**, towards the inside of the vehicle.



- 21.** Release the clips **A** securing the harness onto the body.
22. Disconnect all the connectors **C** from the smart fuse box.



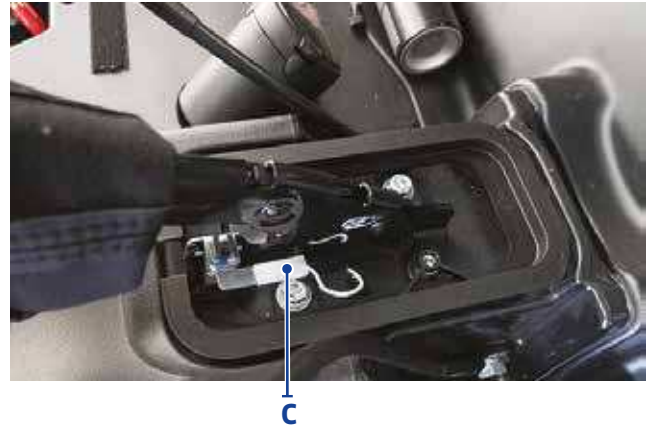
- 23.** Release the grommet **P** from the body.



Body harness

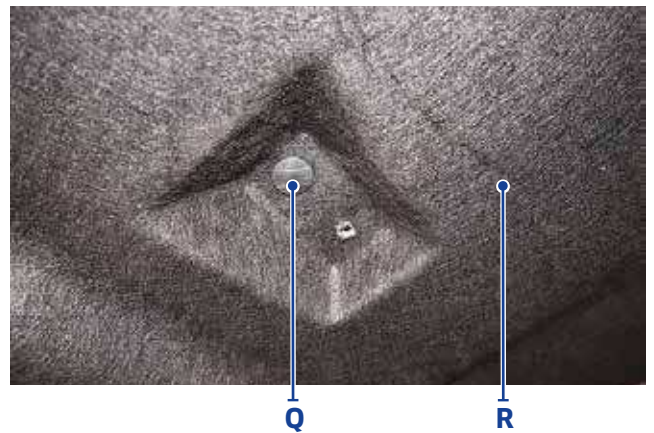
EL5009

- 24.** Disconnect the connector **C** from the handbrake.

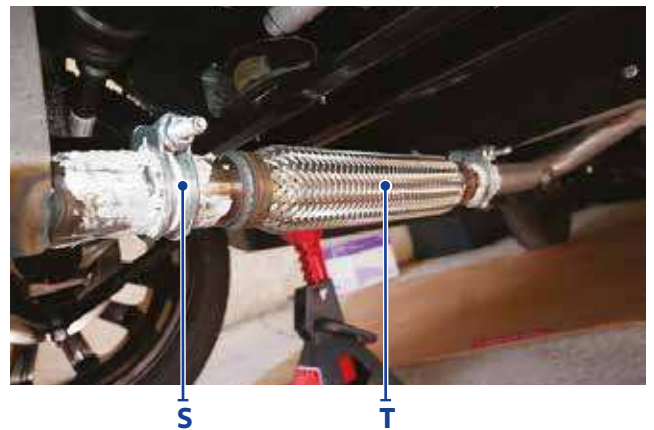


Under the vehicle:

- 25.** Remove the plasti-rivet **Q** to remove the engine sound-deadening pad **R**.



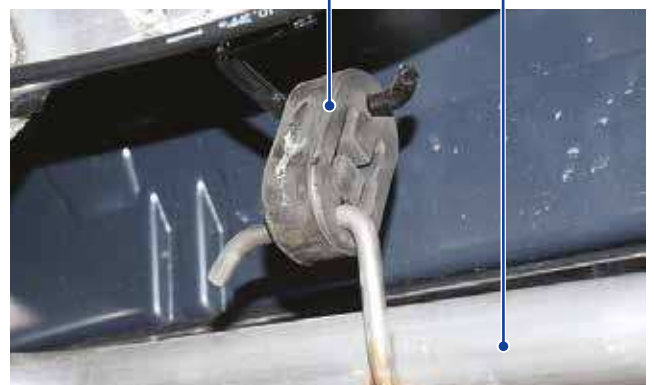
- 26.** Loosen the clamp **S** on the exhaust hose **T**.



Body harness

EL5009

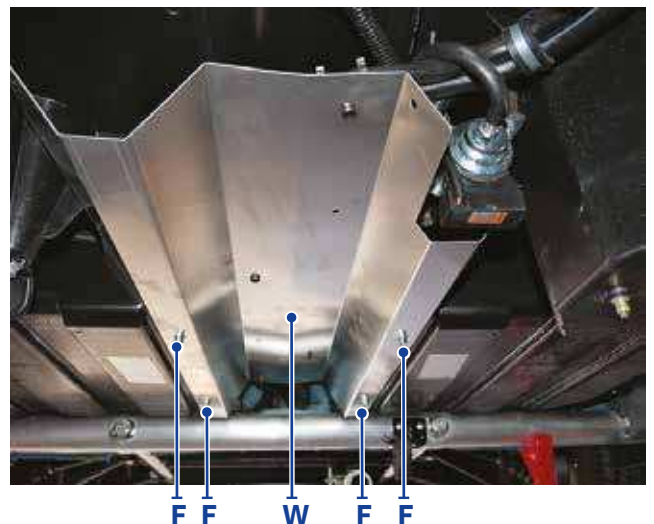
- 27.** Release the rubber mountings **U** to remove the exhaust line **V**.



- 28.** Pull on the exhaust line **V** to separate it from the rubber mounting **U**.
- 29.** Remove the exhaust line **V**.



- 30.** Remove the 4 screws **F** from the exhaust heat shield **W**.
- 31.** Remove the exhaust heat shield **W**.



Body harness

EL5009

32. Disconnect the connector **C** from the window lift control.



33. Disconnect the connector **C** from the inverter lever.



Identify the layout of the connectors on the inverter lever.



34. Disconnect the connector **C** from the central locking switch and the connector from the air conditioning button, if any.



35. Disconnect the connector **C** from the fuel gauge.

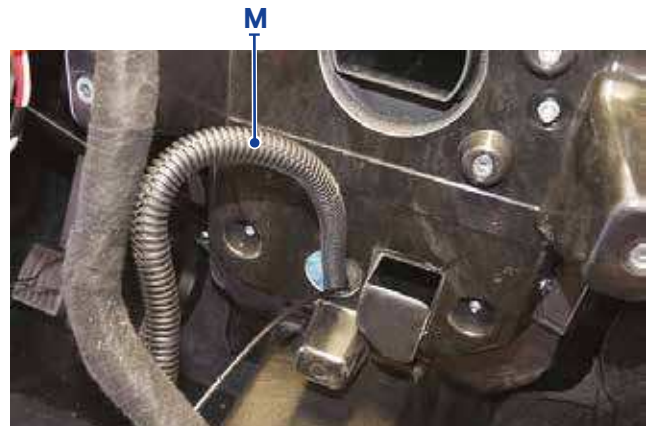


Body harness

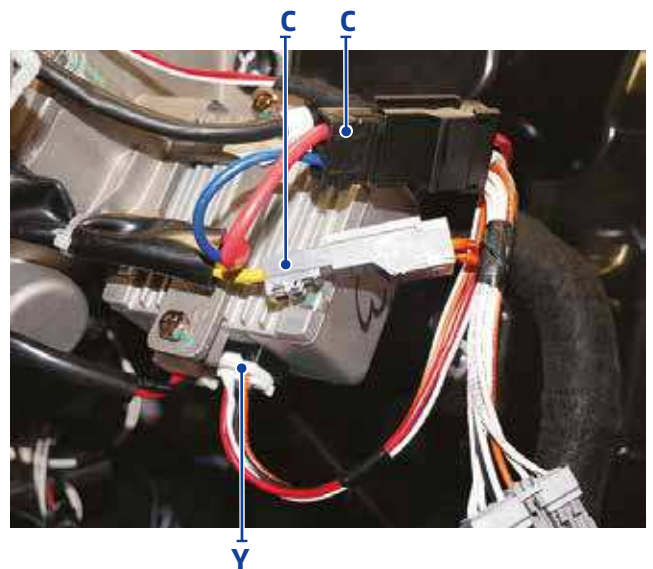
EL5009

At the front of the driver's cab:

- 36.** Pull on the harness **M** inside of the vehicle.
The assistance of a second person is required underneath the vehicle to release the harness.



- 37.** Disconnect the 2 connectors **C** from the key switch and the connector **Y** from the power steering unit, if any.



- 38.** Disconnect the connector **C** from the brake light switch.

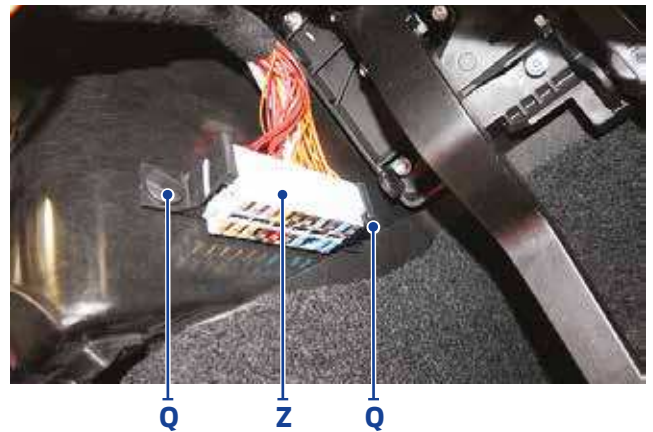


E

Body harness

EL5009

39. Remove the plasti-rivets **Q** from the fuse carrier **Z**.



40. Pull the harness **M** on the driver's side towards the inside of the vehicle.

41. Remove the harness **M**.



Installation procedure

To install, perform the removal operations in the reverse order.

2 persons are required to complete certain steps.



Remember to refit the cable ties and the adhesive tape which were removed.



Equipment required

Special tools	Quantities	References
Allen key	1	-
2-post lift	1	-
Electric drill	1	-
Rivet gun	1	-
Cutting pliers	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Rivets	1	-

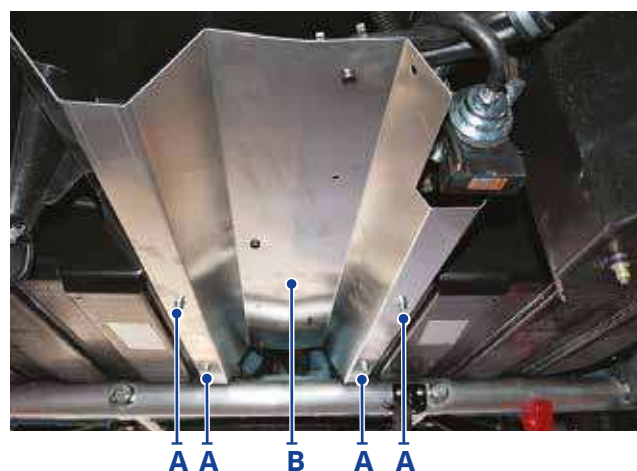
Preliminary procedures

Operations	Procedure types	References
Exhaust line	Removal - Installation	H-14

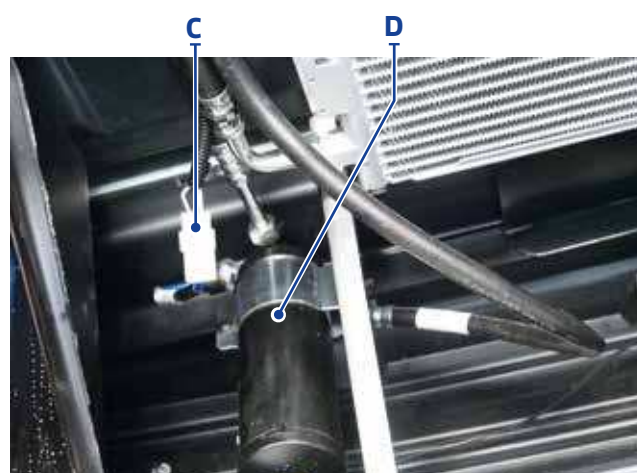
Removal procedure

Under the vehicle:

1. Remove the 4 screws **A** from the exhaust heat shield **B**.
2. Remove the exhaust heat shield **B**.



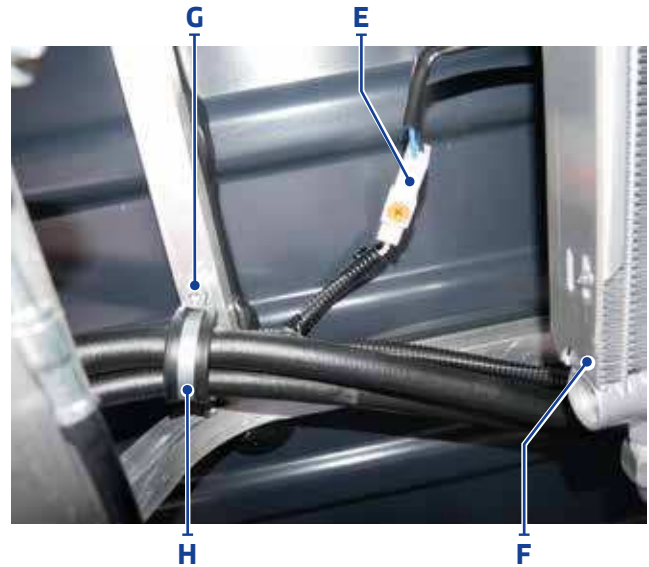
3. Disconnect the connector **C** from the pressure switch **D**.



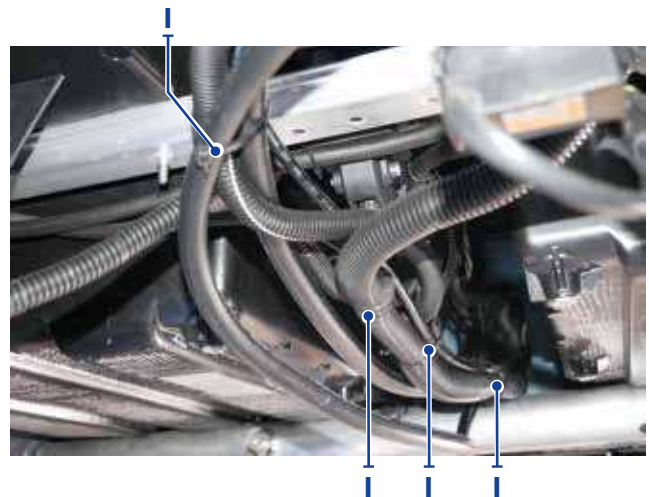
Air conditioning harness

EL5014

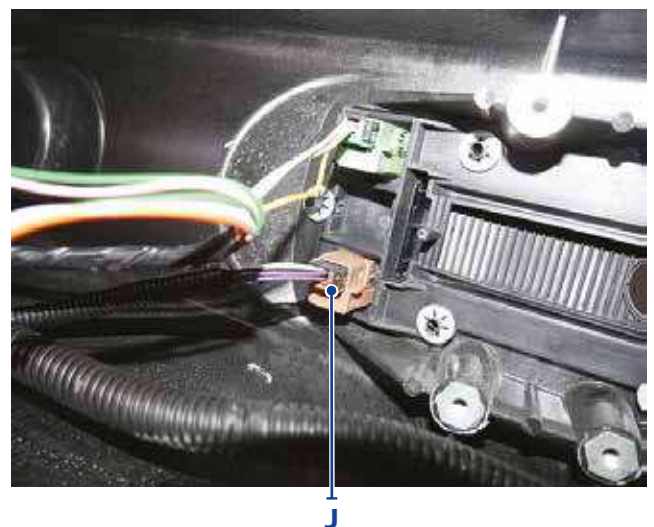
4. Disconnect the connector of the fan **E** mounted on the condenser **F**.
5. Remove the screw **G** from the clamp **H**.



6. Cut the cable ties **I** working towards the engine.



7. Disconnect the brown connector **J** from the air conditioning control.

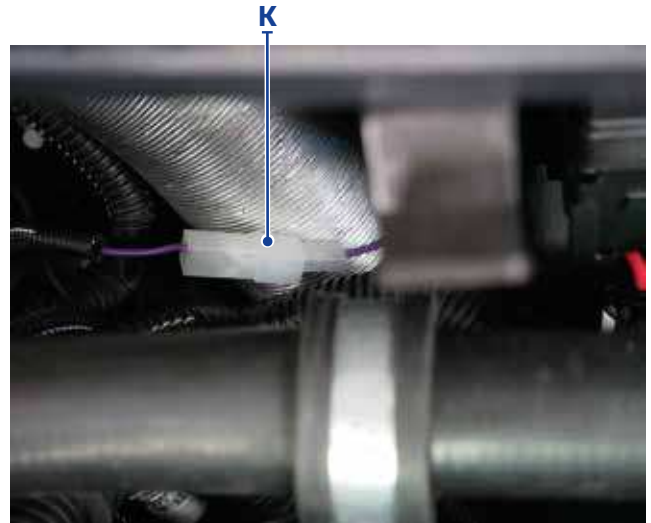


Air conditioning harness

EL5014

On the engine compartment side:

8. Disconnect the heater sensor **K** under the windscreen scuttle panel.



9. Remove the screw **L** from the clamp **M** mounted on the engine cover.



10. Remove the protective cap **N**.
11. Remove the nut **O** of the main supply source of the air conditioning unit on the alternator.

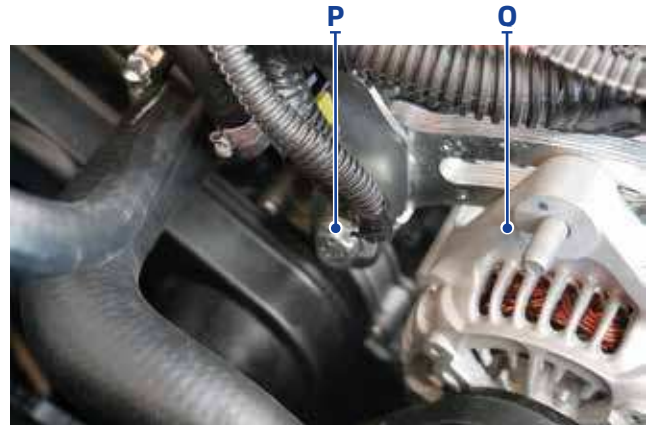


E

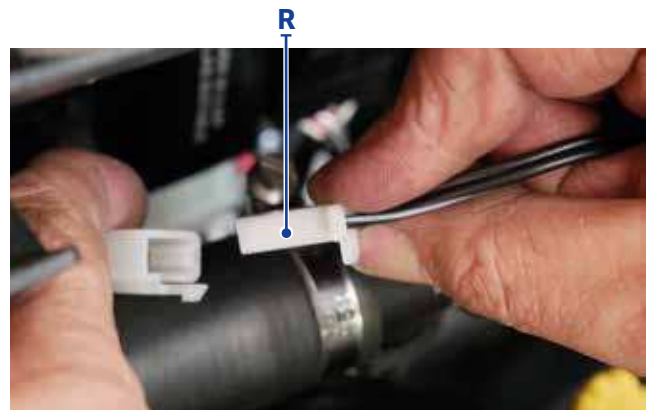
Air conditioning harness

EL5014

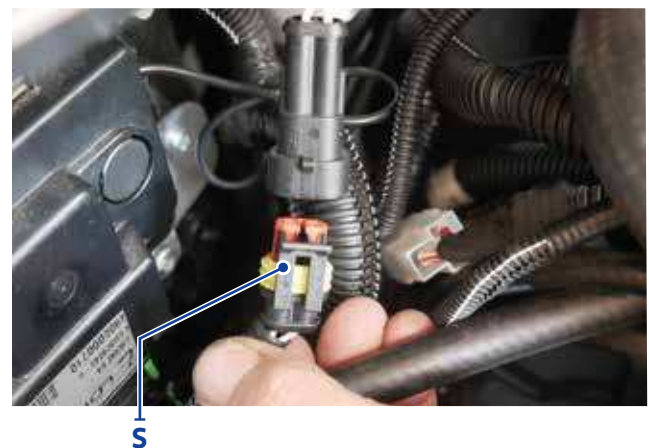
- 12.** Remove the ground by removing the screw **P** on the alternator tensioner **Q**.



- 13.** Disconnect the connector **R** from the pressure switch.



- 14.** Disconnect the connector **S** from the engine harness.



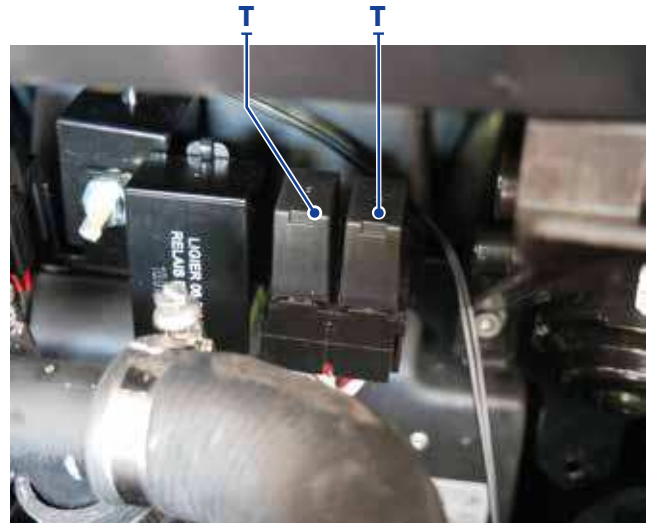
- 15.** Disconnect the connector **T** from the compressor **U**.



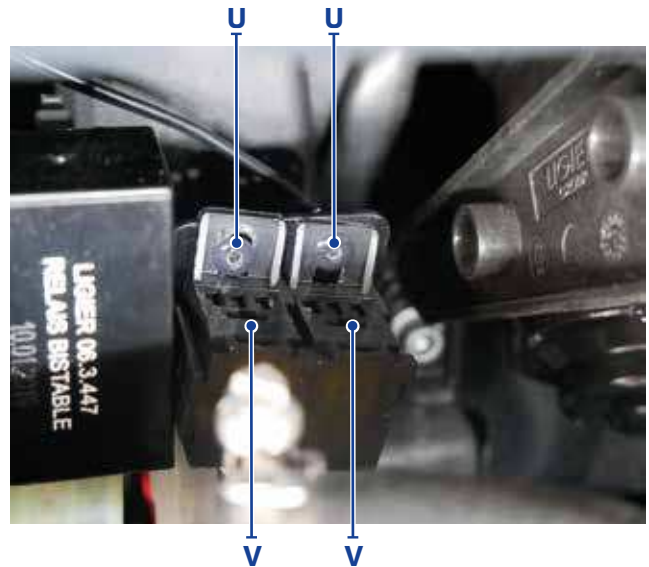
Air conditioning harness

EL5014

16. Remove the two relays **T**.



17. Drill the two rivets **U** to remove the 2 relay carriers **V**.



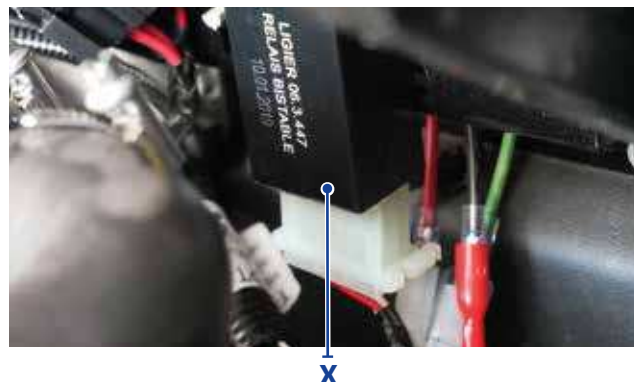
18. Remove the fuse holder **W**.



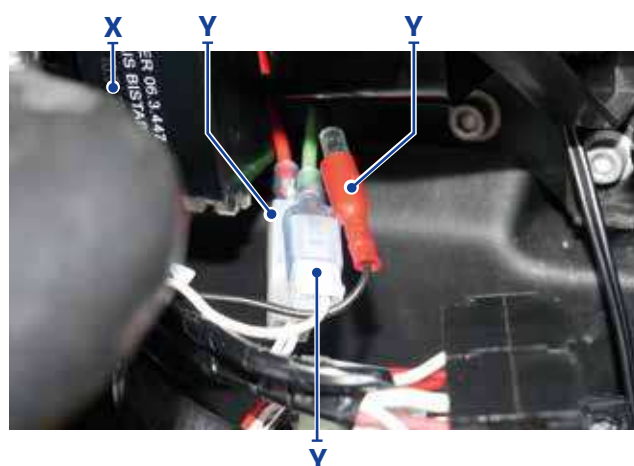
Air conditioning harness

EL5014

19. Disconnect the bistable relay **X**.



20. Disconnect the 3 connectors of the thermostat **Y** near the bistable relay **X**.



21. Remove the air conditioning harness **Z**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).

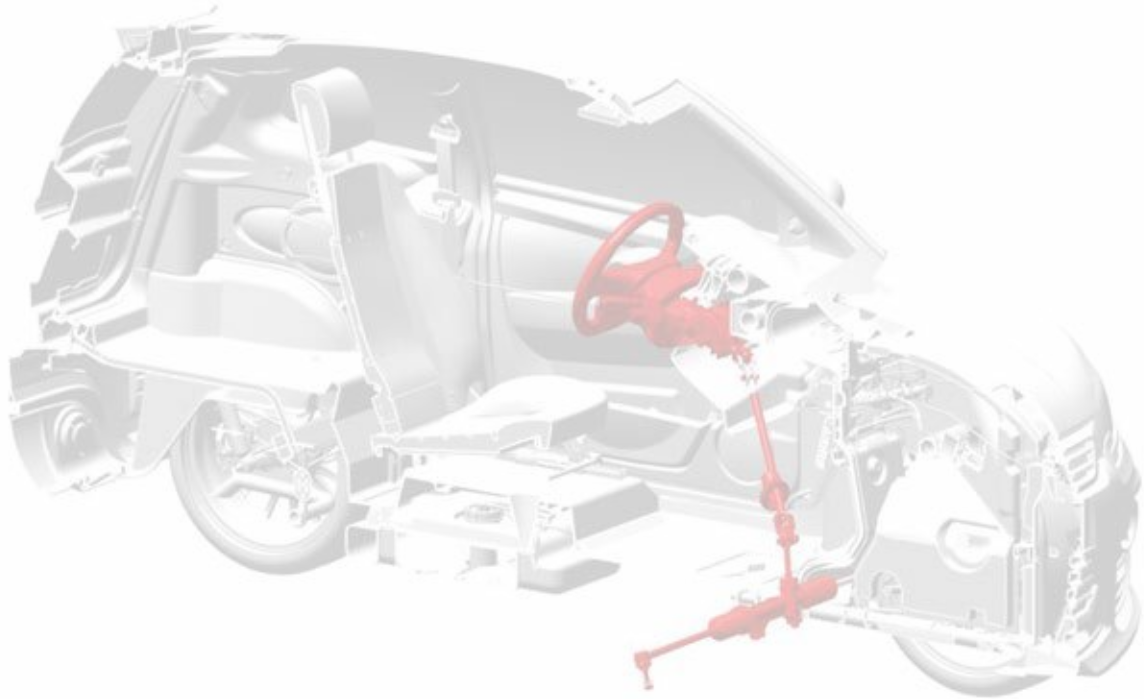


RISK

The connection of the bistable relay (point 19) must be mounted in a specific direction and has no positioner. The only black wire of the air conditioning harness connector must be positioned facing the mark 1 present on the bistable relay body, on the connector side (see photo). If the connector is mounted the wrong way, rupture of the 7.5 A fuse of the air conditioning harness.



Steering





0.25 h (with airbag)
0.15 h (without airbag)

Steering wheel

DR5800 (with airbag)
DR5000 (without airbag)



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	2	-
Philips screwdriver	1	-

Procedures included

Operations	Procedure types	Time
Airbag	Removal / Installation	0.10
Airbag release mechanism	Removal / Installation	0.04

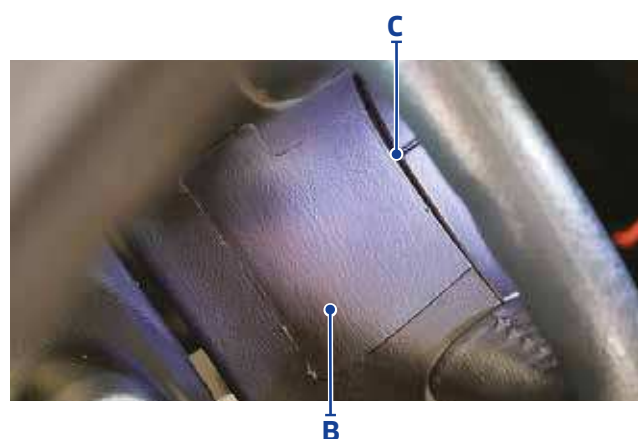
Removal procedure

Inside the vehicle:

1. Identification of the airbag trim **A**.
2. Locate the blanking cap covers **B** on either side of the steering wheel.



3. Using a flat screwdriver **C**, pry off the covers **B** on either side of the steering wheel.
4. Remove the cap covers **B**.



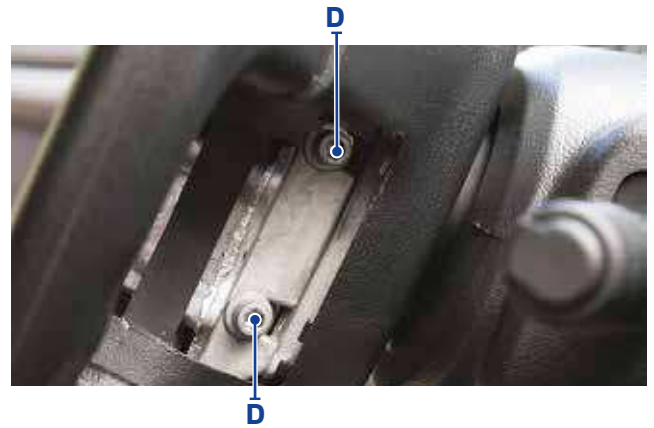
F

Steering wheel

DR5000 (without airbag)

DR5800 (with airbag)

5. Remove the four screws **D**, 2 screws on either side of the steering wheel.
6. Remove the airbag trim **A** (see step 1).

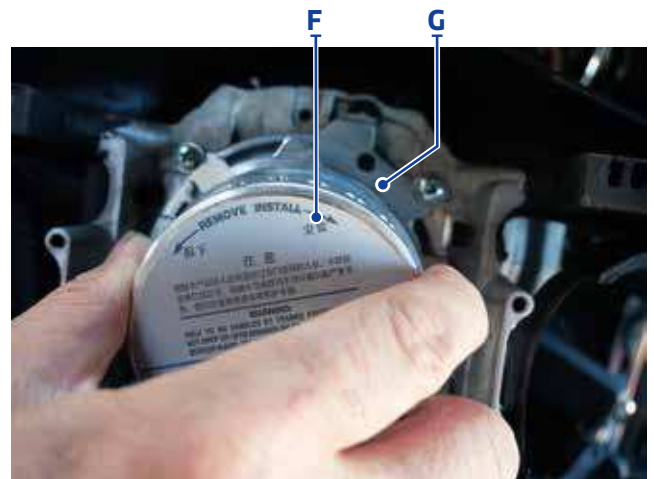


Removal of the airbag:

7. Pull the black mechanism **E** upwards, using a screwdriver.
8. Rotate the cartridge **F**, 1/4 of a turn, anti-clockwise.



7. Extract the cartridge **F** from its support **G**.
8. Remove the cartridge **F**.



Steering wheel

DR5000 (without airbag)

DR5800 (with airbag)

Removal of the steering wheel:

7. Remove the screw **G** in the centre of the steering wheel **H**.
8. Remove the steering wheel **H**.



Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Screw **G**: tightening torque 70 Nm.

F



Equipment required

Special tools	Quantities	Reference
Size 13 Allen key	1	-
Philips screwdriver	1	-

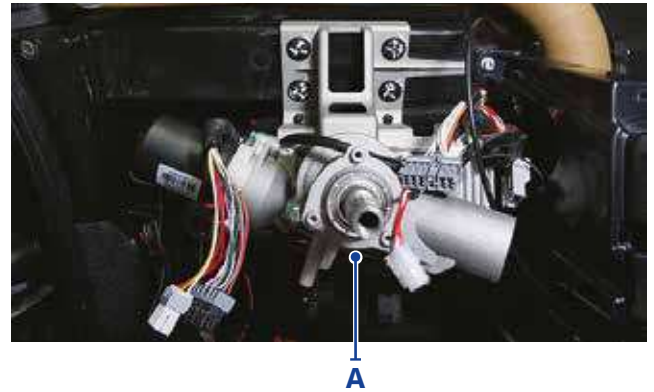
Preliminary procedures

Operations	Procedure types	Pages
Disconnect the battery	Partial removal	E-35
Key switch	Removal / Installation	E-6
Switch support	Removal / Installation	<?>
Speedometer	Removal / Installation	E-10

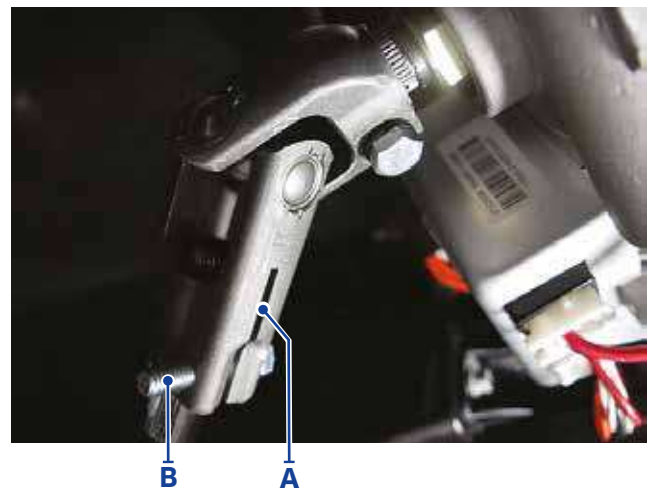
Removal procedure

Inside the vehicle:

1. Identification of the steering cross piece **A** on the lower part.



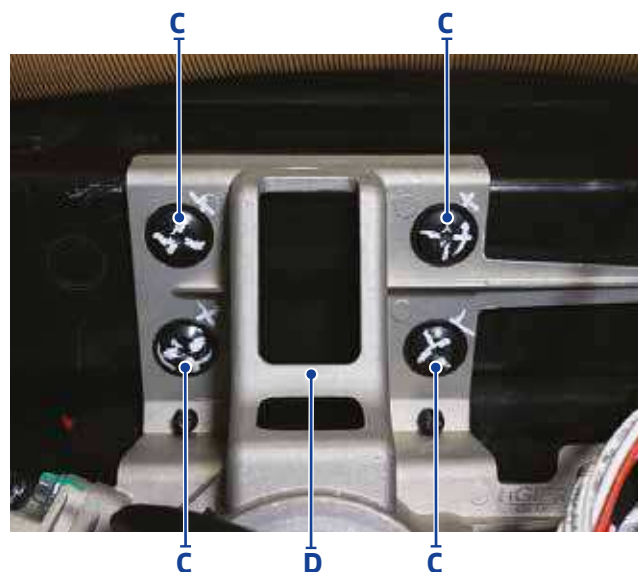
2. Unscrew the hexagon screw **B** to remove the steering cross piece **A**.



Electric Power Steering (EPS)

DR5010

3. Unscrew the 4 screws **C** on the power steering gear **D**.



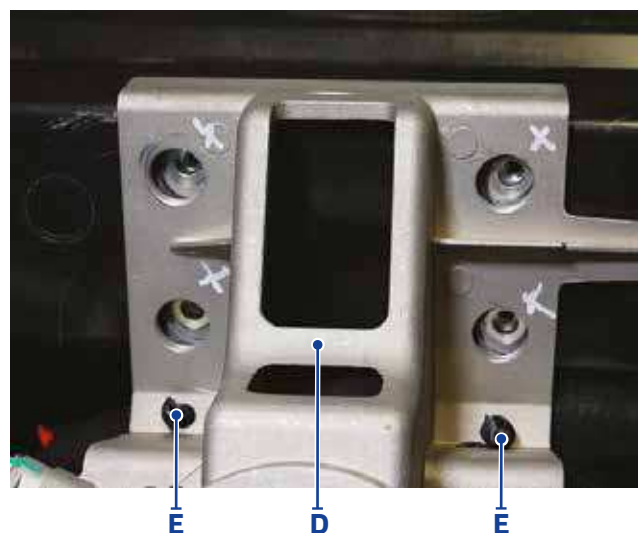
4. Unclip the 2 plasti-rivets **E** from the steering unit **D**.

5. Disconnect the EPS harness.

6. Remove the steering gear **D**.



When removing the steering gear, it is preferable to unclip the electric harness plasti-rivets from the back.



F

Installation procedure

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Screw **B**: tightening torque 31 Nm.



RISK

After working on the EPS system, the zero point must imperatively be set.



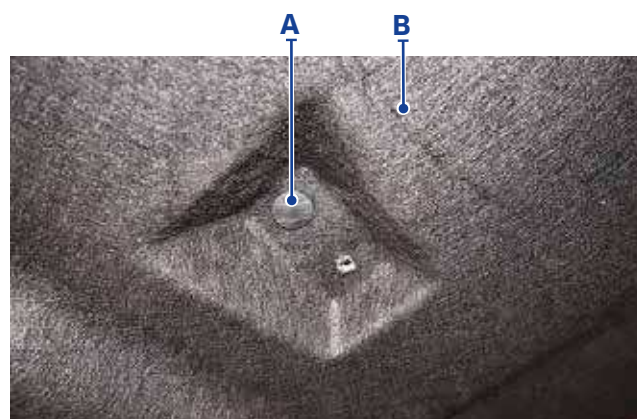
Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
2-post lift	1	-
PPE		
Gloves	1	-

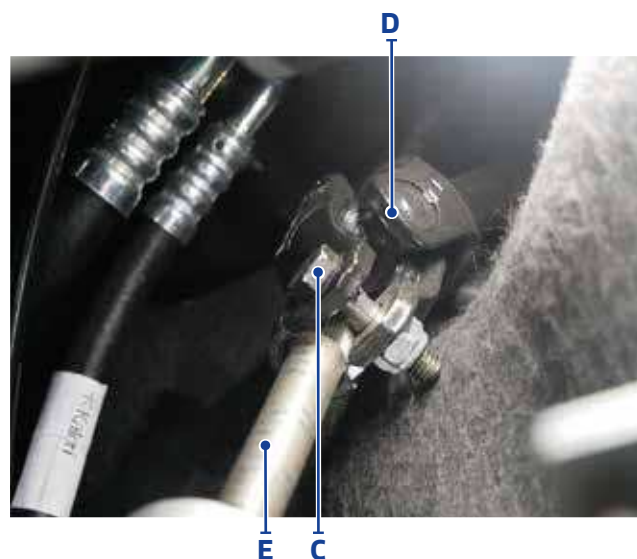
Removal procedure

Under the vehicle:

1. Remove the plasti-rivet **A** on the engine sound deadening pad **B**.
2. Remove the engine sound deadening pad **B**.



3. Remove the screw **C** assembling the lower steering column **D** to the rack shaft **E**.



Lower steering column

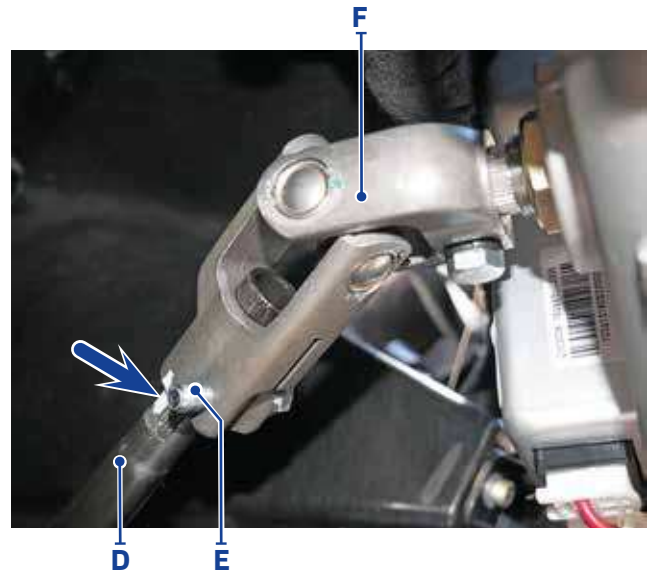
DR5002

Inside the vehicle:

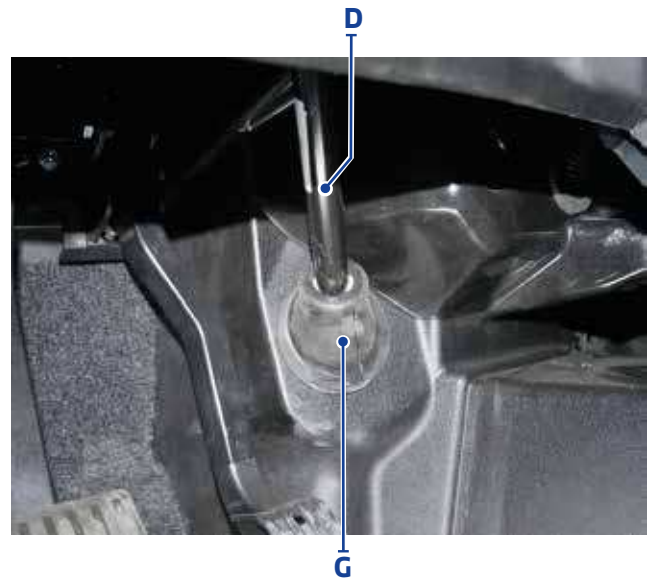
4. Remove the screw **E** to release the lower steering column **D** from the upper steering column **F**.



Before disassembling the lower steering column, make a mark to facilitate the adjustment of the steering wheel during the installation operation (as shown on the opposite photo).



5. Pull the seal **G** out of its housing.
6. Remove the lower steering column **D** by pulling inside the vehicle.



F

Installation

To install, perform the removal operations in the reverse order.



RISK

Screws **C** and **E**: tightening torque 23 Nm.



RISK

If the vehicle is equipped with EPS, the 0 point of the EPS must imperatively be set.



1.80 h (DR5007)
0.50 h (DR5004)
1 h (DR5005)

Steering rack boot

DR5007 (with air conditioning 2 sides)
DR5004 (without removing rack 1 side)
DR5005 (without removing rack 2 sides)



Equipment required

Special tools	Quantities	References
Vise	1	-
Cutting pliers	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Steering rack boot	1	-

Preliminary procedures

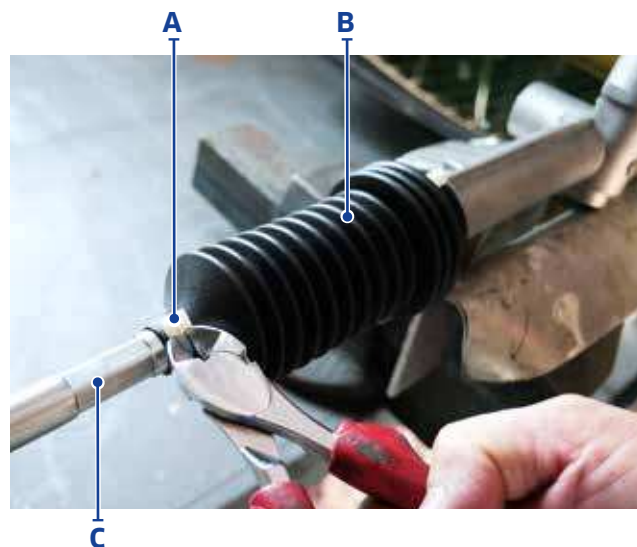
Operations	Procedure types	Pages
Steering ball joint ⁽¹⁾	Removal / Installation	G-10
Steering rack ⁽²⁾	Removal / Installation	F-11

⁽¹⁾ For vehicle without air conditioning only.
⁽²⁾ For vehicle with air conditioning only.

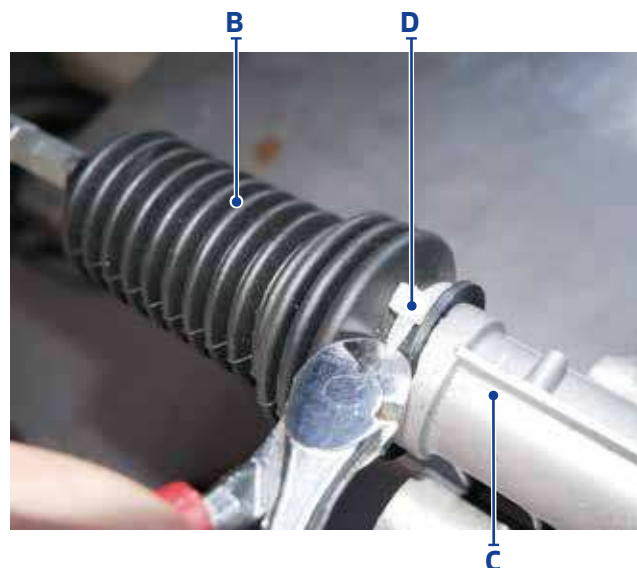
Removal procedure

Under the vehicle:

1. Cut the outer tie **A** securing the boot **B** on the rod of the steering rack **C**.



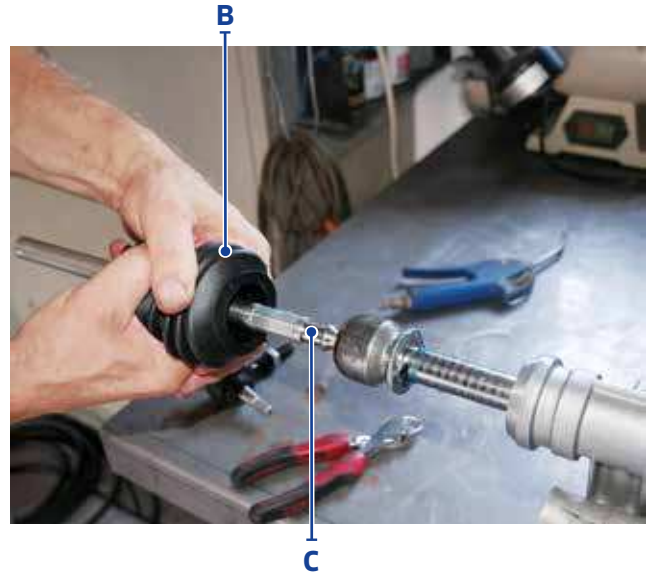
2. Cut the inner tie **D** securing the boot **B** on the body of the steering rack **C**.



Steering rack boot

DR5007 (with air conditioning 2 sides)
DR5004 (without removing rack 1 side)
DR5005 (without removing rack 2 sides)

3. Shift the boot **B** towards the end of the rack **C**.
4. Remove the boot **B**.



Installation

To install, perform the removal operations in the reverse order.



Apply lubricant on the internal parts of the boot, to make it easier to install.



Pay attention to the boot installation direction.



Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
2-post lift	1	-
PPE		
Gloves	-	-

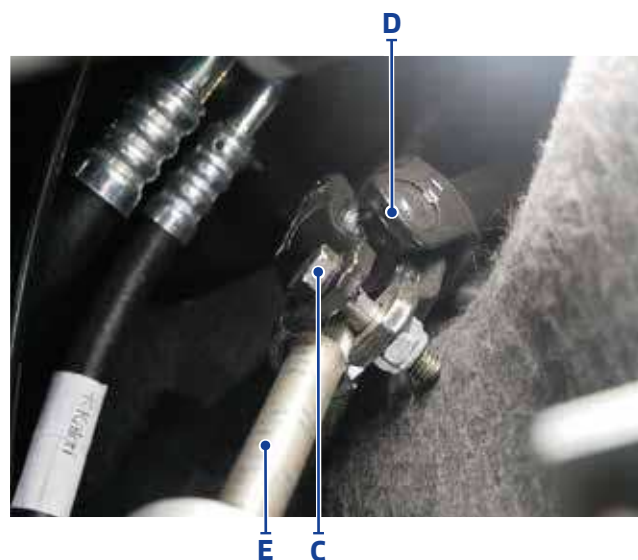
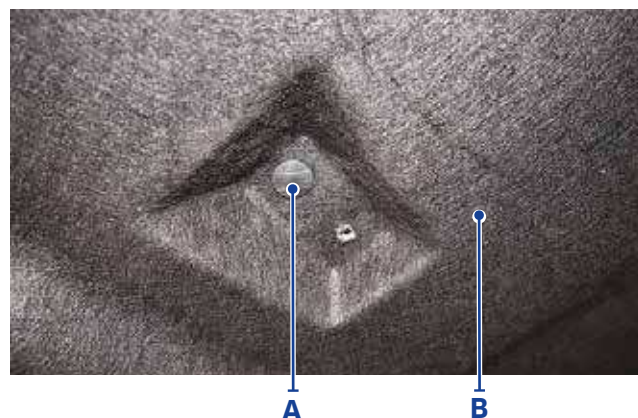
Preliminary procedures

Operations	Procedure types	Pages
Removal of the 2 steering ball joints	Removal / Installation	G-10

Removal procedure

Under the vehicle:

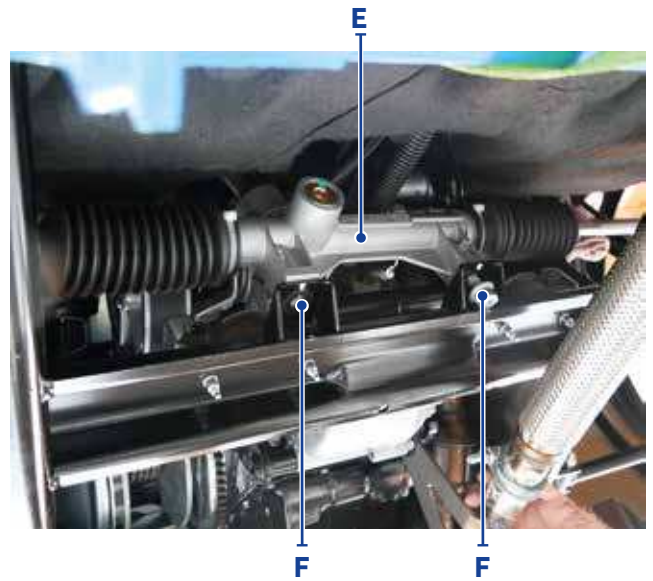
1. Remove the plasti-rivet **A**.
2. Remove the engine sound deadening pad **B**.
3. Remove the screw **C** securing the lower steering column **D** to the rack shaft **E**.



Steering rack

DR5003

4. Remove the 2 screws **F** securing the rack **E**.
5. Remove the rack **E**.



Installation

To install, perform the removal operations in the reverse order.



Check the geometry.



CAUTION

If the vehicle is equipped with Electric Power Steering (EPS), the 0 point of the EPS must imperatively be set.



RISK

Screw **C**: tightening torque 23 Nm.

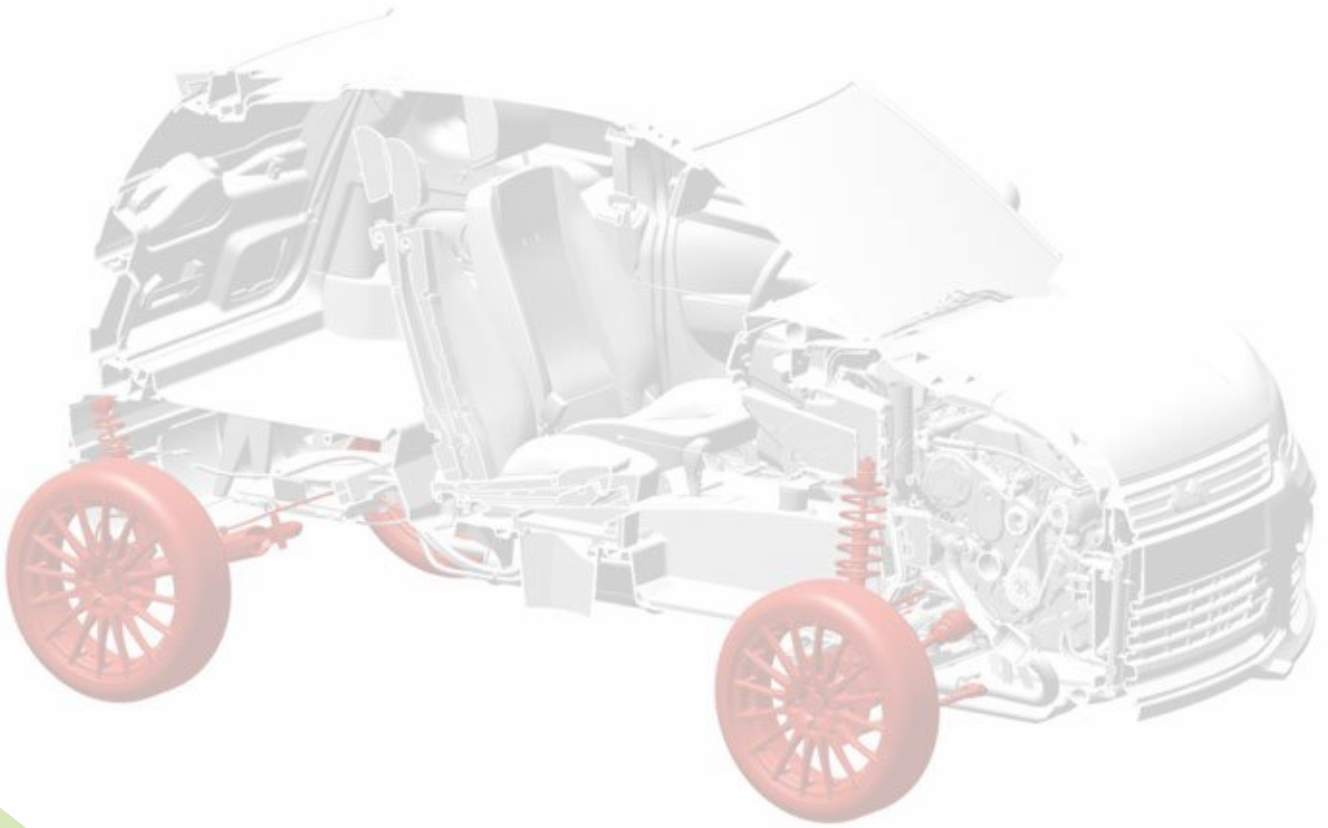


RISK

Screw **F**: tightening torque 45 Nm.

F

Wheels & brakes





1 h 1 side
2 h 2 sides

Front hub carrier

TA5009 (1 side)
TA5010 (2 sides)

Front hub

TA5013 (1 side)
TA5014 (2 sides)

Front brake disc

FR5011 (left side)
FR5012 (right side)

Bearing

TA5011 (1 side)
TA5012 (2 sides)



Equipment required

Special tools	Quantities	References
Size 16 - 17 - 24 wrench	1	-
Flat screwdriver	1	-
Allen key	1	-
Size 19 hex socket	1	-
Ball joint extractor	1	-
Torx key	1	-
Guillotine type puller	1	-
Press	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Goggles	1	-
Consumables / Ingredients		
Thread-locking fluid	1	-



This procedure is identical for the driver and passenger side

Removal procedure

Outside the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



Front hub carrier

TA5009 (1 side)

TA5010 (2 sides)

Front hub

TA5013 (1 side)

TA5014 (2 sides)

Front brake disc

FR5011 (left side)

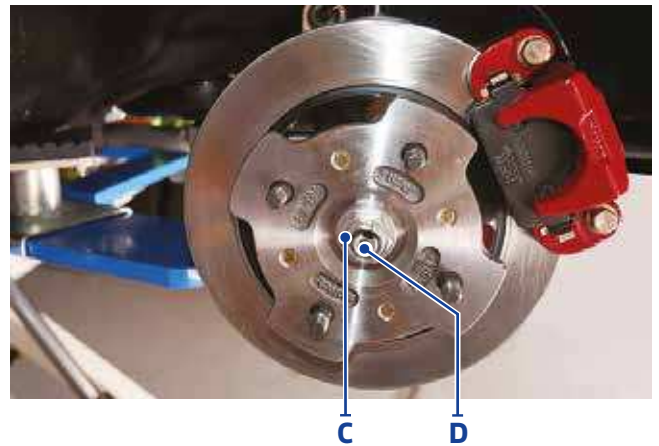
FR5012 (right side)

Bearing

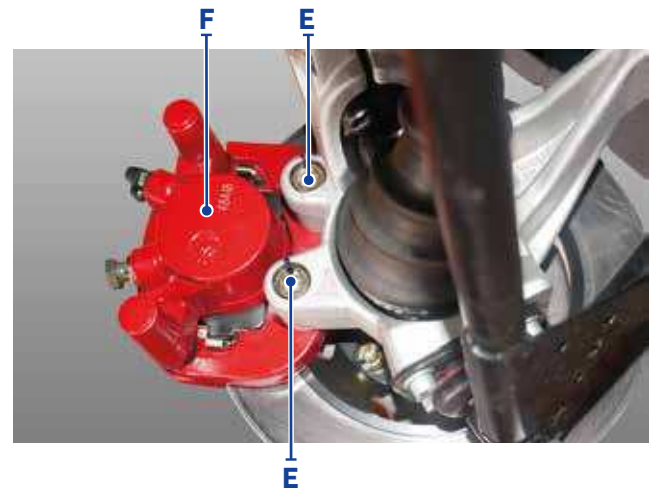
TA5011 (1 side)

TA5012 (2 sides)

3. Remove the centre nut **C** from the transmission **D**.



4. Remove the 2 screws **E** from the front calliper **F**.
5. Partially remove the front calliper **F**.



6. Remove the nut **G** on the steering ball joint **H**.



Front hub carrier

TA5009 (1 side)

TA5010 (2 sides)

Front hub

TA5013 (1 side)

TA5014 (2 sides)

Front brake disc

FR5011 (left side)

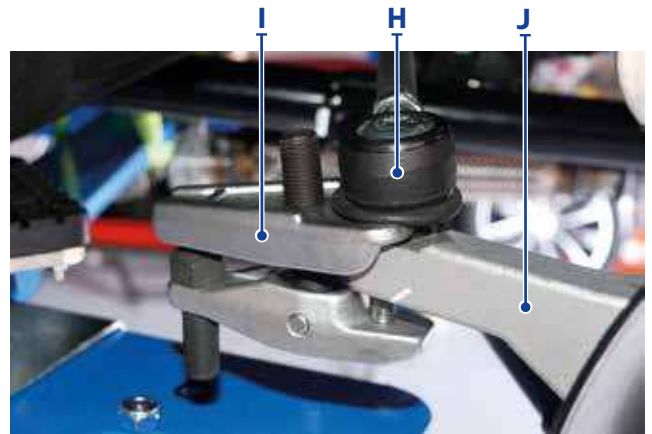
FR5012 (right side)

Bearing

TA5011 (1 side)

TA5012 (2 sides)

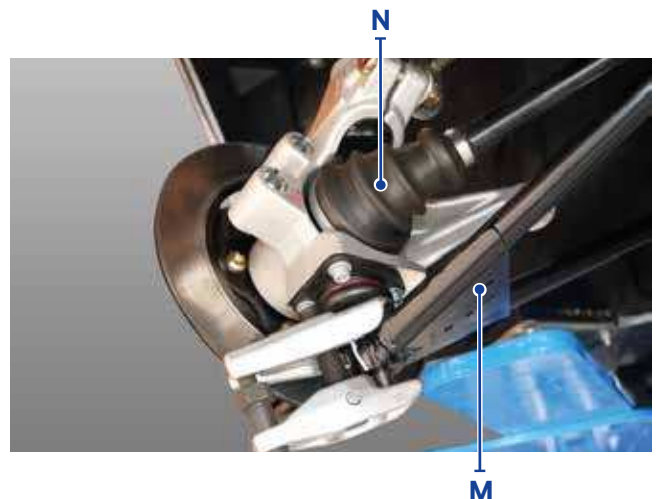
- 7.** Use the extractor **I** to pull out the steering ball joint **H** from the stub axle **J**.



- 8.** Loosen the nut **K** from the suspension ball joint **L**.



- 9.** Use the ball joint extractor to remove the suspension wishbone **M**.
10. Partially remove the transmission shaft **N**.



Front hub carrier

TA5009 (1 side)

TA5010 (2 sides)

Front hub

TA5013 (1 side)

TA5014 (2 sides)

Front brake disc

FR5011 (left side)

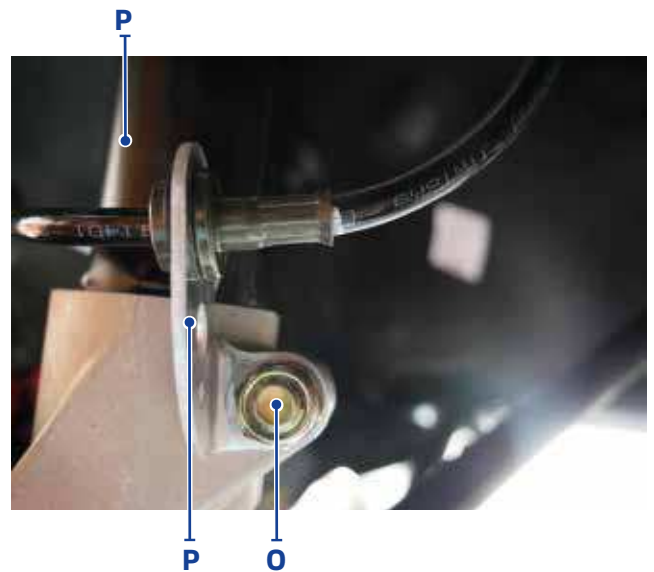
FR5012 (right side)

Bearing

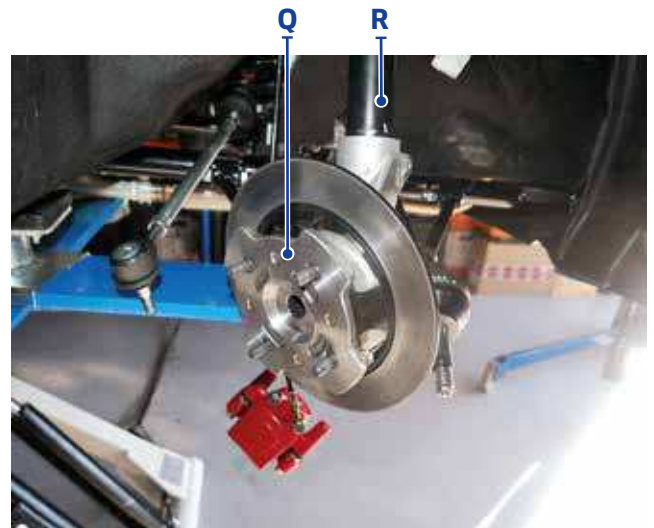
TA5011 (1 side)

TA5012 (2 sides)

- 11. Remove the screw **O** securing the brake hose support **P** and used to tighten the shock absorber base.
- 12. Partially remove the brake hose support **P**.



- 13. Separate the hub **Q** from the shock absorber **R**.
- 14. Partially remove the shock absorber **R**.
- 15. Remove the hub assembly **Q**.



Front hub carrier

TA5009 (1 side)

TA5010 (2 sides)

Front hub

TA5013 (1 side)

TA5014 (2 sides)

Front brake disc

FR5011 (left side)

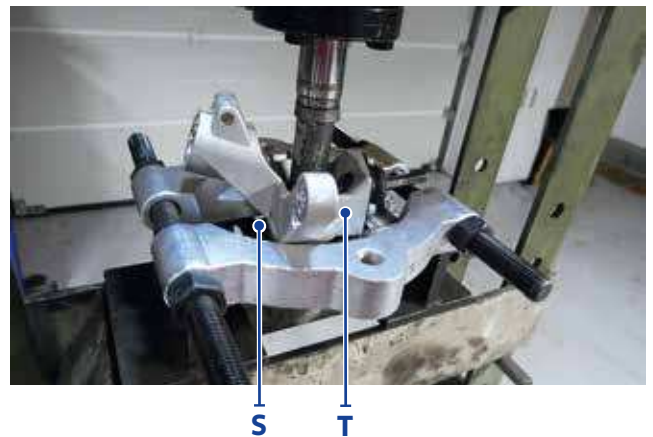
FR5012 (right side)

Bearing

TA5011 (1 side)

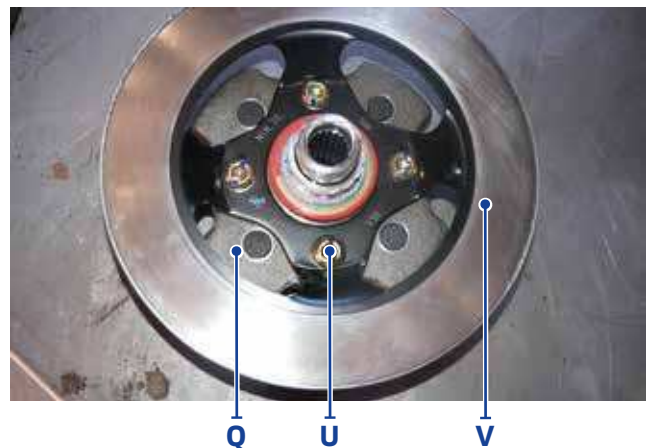
TA5012 (2 sides)

- 16.** Separate the disc + bearing **S** from the hub carrier **T** using a press + guillotine type puller.



- 17.** Remove the 4 screws **U** securing the disc **V** on the hub **Q**.

- 18.** Remove the disc **V**.



- 19.** Assemble the guillotine type puller on the inner cage of the bearing **S**.



Front hub carrier

TA5009 (1 side)

TA5010 (2 sides)

Front hub

TA5013 (1 side)

TA5014 (2 sides)

Front brake disc

FR5011 (left side)

FR5012 (right side)

Bearing

TA5011 (1 side)

TA5012 (2 sides)

- 20.** Position the guillotine type puller on the press and remove the inner cage of the bearing **S**.



- 21.** Remove the cage **S** mounted on the hub **Q**.



Front hub carrier

TA5009 (1 side)

TA5010 (2 sides)

Front hub

TA5013 (1 side)

TA5014 (2 sides)

Front brake disc

FR5011 (left side)

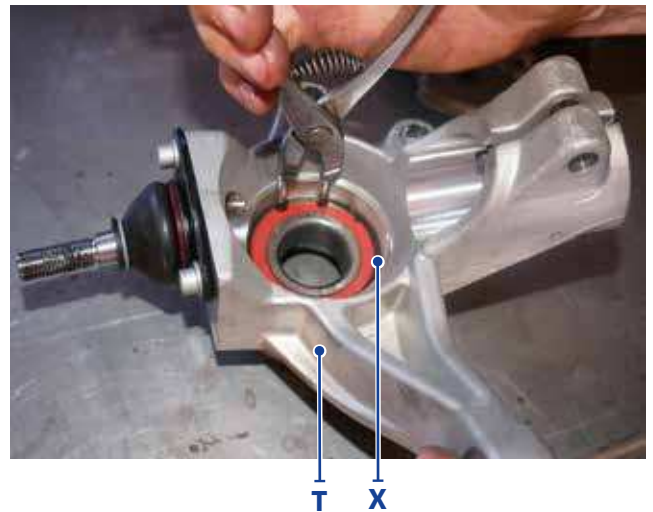
FR5012 (right side)

Bearing

TA5011 (1 side)

TA5012 (2 sides)

22. Remove the circlips **X** mounted on the hub carrier **T**.



23. Position the hub carrier **T** on the press.

24. Use the press to extract the outer cage of the bearing from the hub carrier **T**.

25. When replacing the hub carrier **T**, remove the lower ball joint.



G

Front hub carrier

TA5009 (1 side)

TA5010 (2 sides)

Front hub

TA5013 (1 side)

TA5014 (2 sides)

Front brake disc

FR5011 (left side)

FR5012 (right side)

Bearing

TA5011 (1 side)

TA5012 (2 sides)

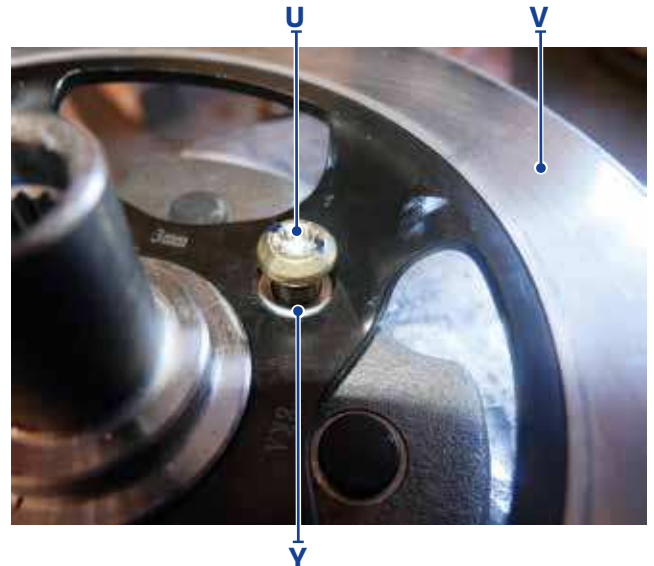
Installation

To install, perform the removal operations in the reverse order.

1. Pay attention to the fitting orientation of the disc **V**.
2. Pay attention to the fitting orientation of the screw **U**.
3. Pay attention to the fitting orientation of the washer **Y**.
4. Correctly position the bearing **S** on the hub carrier **T** before using the press.



Apply thread-locking fluid on the 4 screws **C**.



Apply thread-locking fluid on the 2 screws **E** and **U**.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nut **G**: tightening torque 46 Nm.



RISK

Nut **C**: tightening torque 125 Nm.



RISK

Nut **L**: tightening torque 46 Nm.



RISK

Screw **E**: tightening torque 25 Nm.



RISK

Screw **O**: tightening torque 32 Nm.



0.30 h 1 side
0.50 h 2 sides

Steering ball joint

DR5008 (1 side)
DR5009 (2 sides)



Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
Size 19 hex socket	1	-
2-post lift	1	-
Ball joint extractor	1	-

PPE		
Gloves	1	-

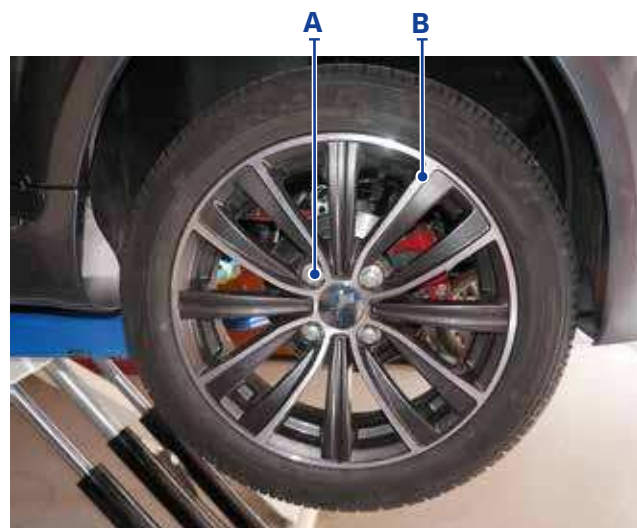


This procedure is identical for the driver and passenger side

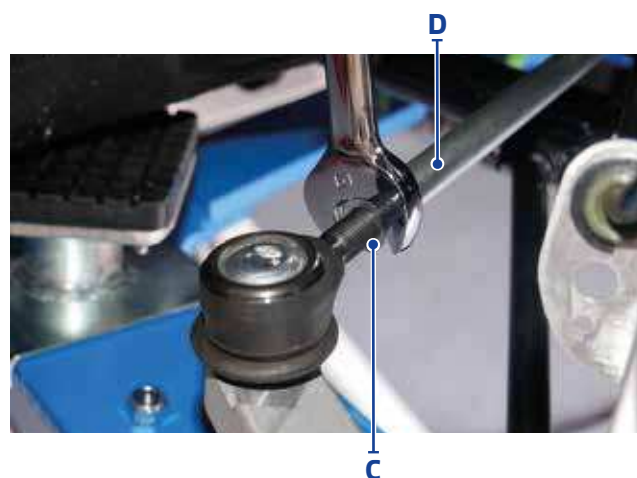
Removal procedure

On the front side of the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Loosen the counter-nut **C** on the steering rod **D**.

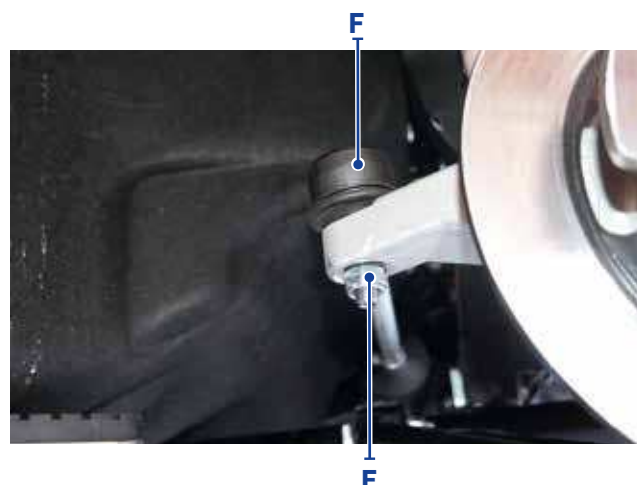


Steering ball joint

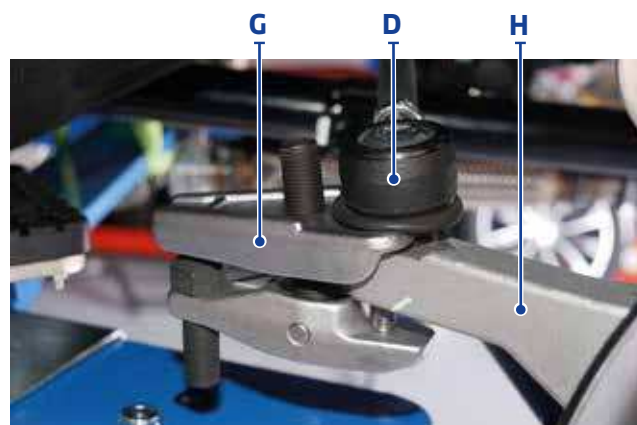
DR5008 (1 side)

DR5009 (2 sides)

4. Remove the nut **E** on the steering ball joint **F**.



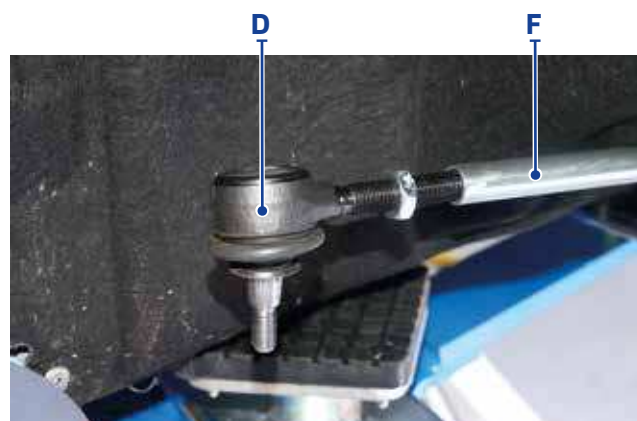
5. Install the extractor **G** to remove the ball joint **D** from the hub carrier.



6. Unscrew the ball joint **D** from the steering rod **F**.
7. Remove the steering ball joint **D**.



Count the number of turns completed when removing the steering ball joint. In order to make it easier to adjust during the installation operation.



Installation

To install, perform the removal operations in the reverse order.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nut **C**: tightening torque 38 Nm.



Equipment required

Special tools	Quantities	References
Size 14 wrench	1	-
Size 19 hex socket	1	-
Allen key	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Brake fluid	1	-
Thread-locking fluid	1	-
Copper seal	2	-

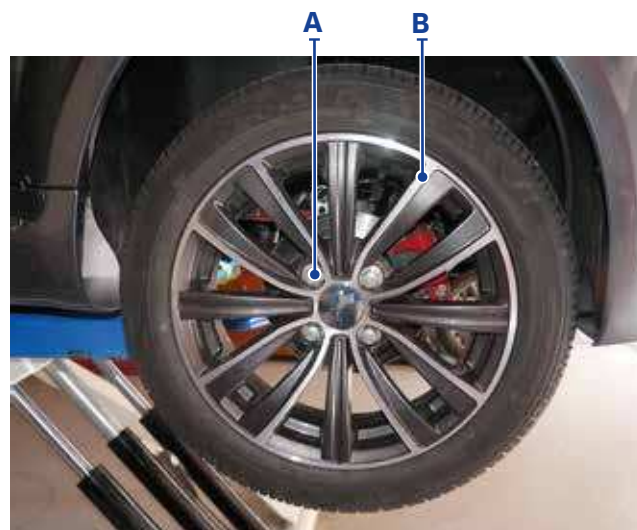


This procedure is identical for the driver and passenger side

Removal procedure

On the front side of the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Remove the banjo fitting **C** on the sides.

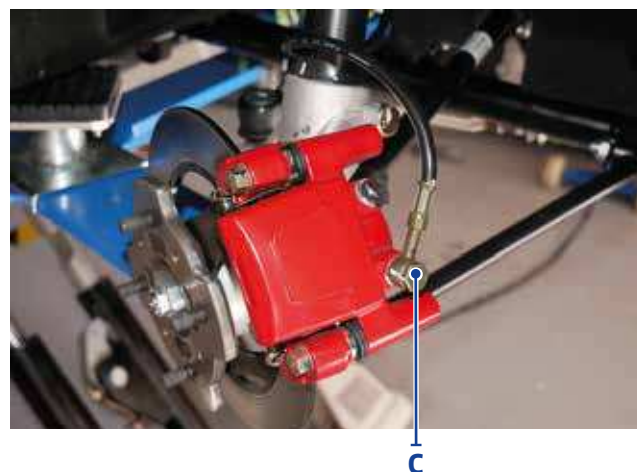


RISK

Caution: watch for brake fluid projections.



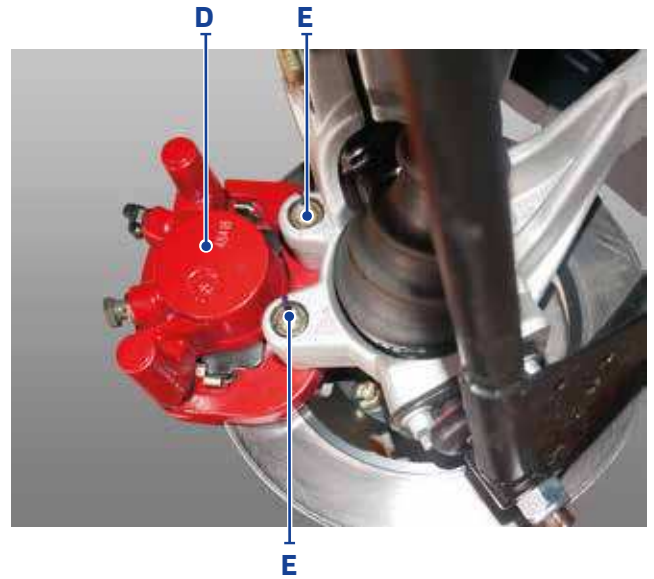
Mark the position of the banjo fitting before removal in order to re-install it in the same position.



Front brake calliper

FR5009

4. Remove the 2 screws **E** from the calliper **D**.
5. Remove the calliper **D**.



Installation

To install, perform the removal operations in the reverse order.



Apply thread-locking fluid on the 2 screws **E**.



Check the level of brake fluid in the master cylinder.



Bleed the circuit.



Change the copper seals on the banjo fittings.



Hold the banjo fitting while tightening it to make sure it returns to its initial position.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Banjo fitting **C**: tightening torque 25 Nm.



RISK

Screw **E**: tightening torque 25 Nm.



0.75 h 1 side
1.50 h 2 sides

Front calliper piston seal

FR5026 (1 side)
FR5027 (2 sides)



Equipment required

Special tools	Quantities	References
Size 14 wrench	1	-
Micro-screwdriver	1	-
Vise	1	-
Compressed air gun	1	-
Compressor	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Brake fluid	1	-
Cloth	1	-
Brake cleaner	1	-
Seal	2	-

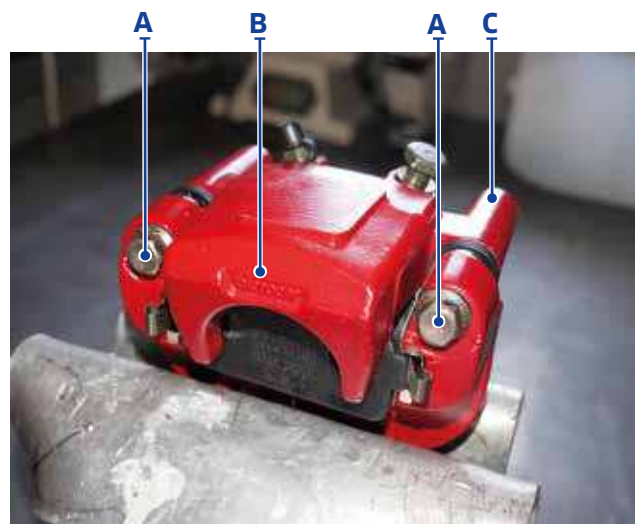
Preliminary procedures

Operations	Procedure types	Pages
Front brake calliper or removal of the rear calliper	Removal / Installation	G-12 - G-39

Removal procedure

On a vise:

1. Remove the 2 screws **A**.
2. Separate the parts **B** and **C** composing the calliper.



Front calliper piston seal

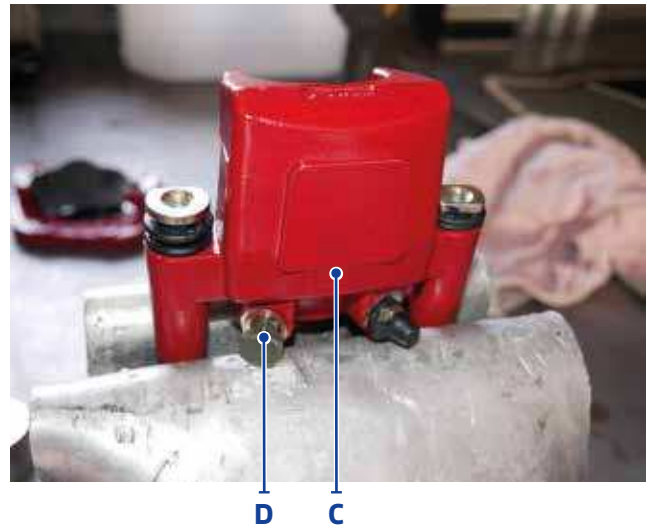
FR5026 (1 side)

FR5027 (2 sides)

3. Clean the traces of dust from the pads on the entire part **C** of the calliper.



4. Remove the screw **D** from the calliper **C**.



5. Using a compressed air gun, lift the piston **E** out of its housing.

6. Remove the piston **E**.



Front calliper piston seal

FR5026 (1 side)

FR5027 (2 sides)



E

7. Using a micro screwdriver, remove the 2 seals **F** from the calliper **C**.



C

F

F

Installation

1. Install the 2 seals **F** on the calliper **C** without damaging them and in the proper position.
2. Apply brake fluid on the seals with your finger.



F

F

C

G

Front calliper piston seal

FR5026 (1 side)
FR5027 (2 sides)

3. Apply brake fluid on the piston **E** with your finger.



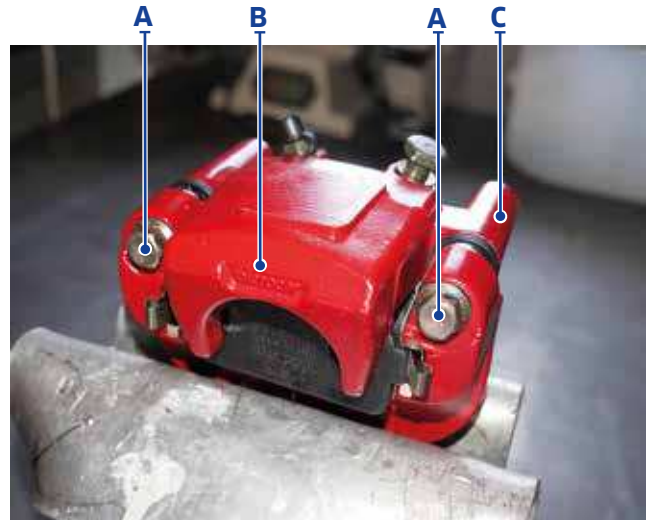
4. It is important to properly insert the piston **E**; it must be inserted without forcing or without any blocking points.

5. Install the piston **E** on the calliper **C**.



6. Assemble the parts **B** and **C** composing the calliper.

7. Fit the 2 screws **A**.



During the installation, respect the tightening torques indicated on **page 9**.



0.50 h with bleeding

Front left brake hose + bleeding

FR5001



Equipment required

Special tools	Quantities	References
Size 13 - 14 wrench	1	-
Size 19 hex socket	1	-
Flat screwdriver	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Goggles	1	-
Consumables / Ingredients		
Brake fluid	1	-
Copper seal	6	-

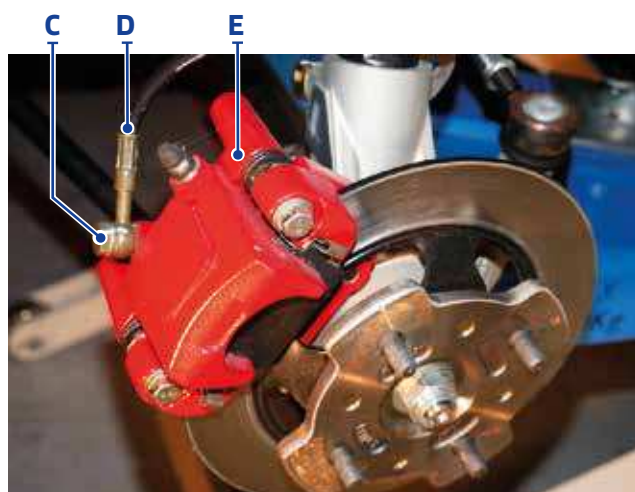
Removal procedure

Outside the vehicle on the driver's side:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Remove the screw **C** securing the brake hose **D** on the calliper **E**.



RISK

Caution: watch for brake fluid projections.

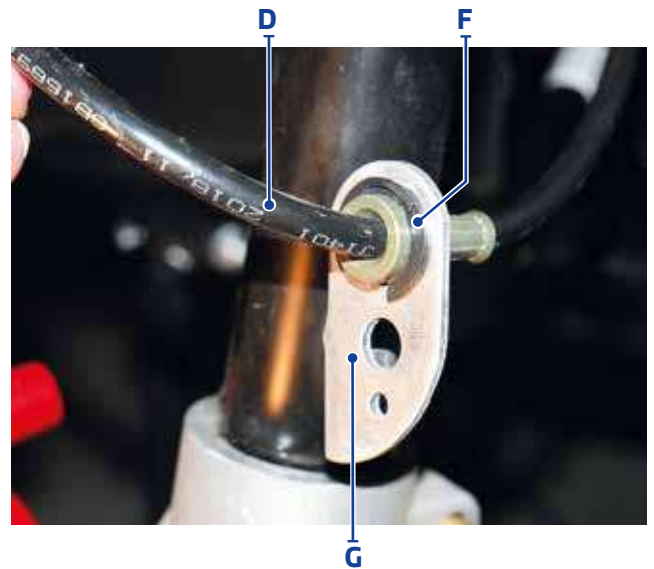


Mark the position of the banjo fittings on each calliper before removal in order to re-install them in the same position.

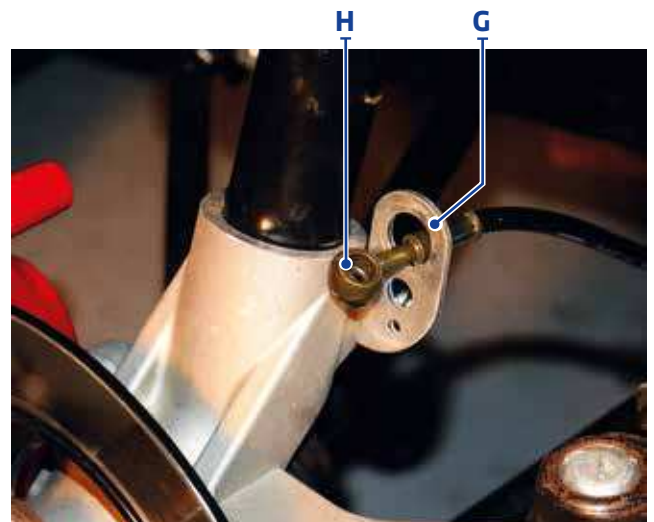
Front left brake hose + bleeding

FR5001

4. Remove the circlips **F** securing the brake hose **D** on the support **G**.



5. Run the banjo fitting **H** through the support **G**.



In the engine compartment:

6. Remove the screw **I** securing the brake hose **D** on the master cylinder **J**.

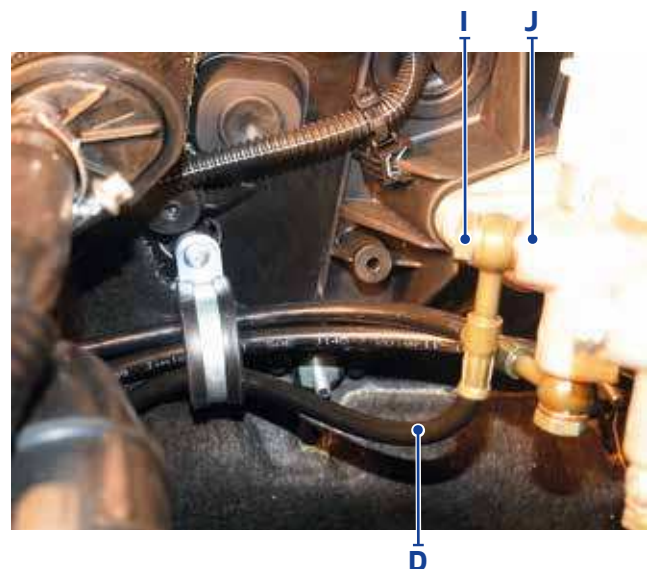


RISK

Caution: watch for brake fluid projections.



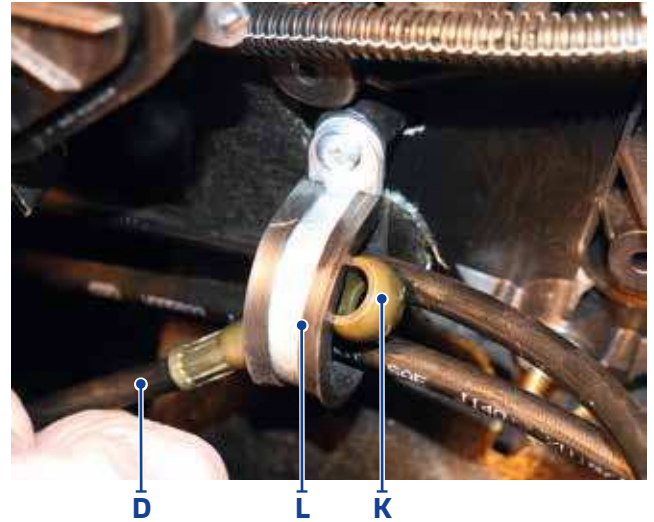
Mark the position of the banjo fittings on each calliper before removal in order to re-install them in the same position.



Front left brake hose + bleeding

FR5001

7. Run the banjo fitting **K** through the clamp **L**.
8. Remove the brake hose **D** on the drivers' side.



Installation

To install, perform the removal operations in the reverse order.



Check the level of brake fluid in the master cylinder.



Bleed the circuit.



Change the copper seals on the banjo fittings.



Hold the banjo fitting while tightening it to make sure it returns to its initial position.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Retaining screws **C** and **I**: tightening torque 25 Nm.



Equipment required

Special tools	Quantities	References
Size 13 - 14 wrench	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Goggles	1	-
Consumables / Ingredients		
Brake fluid	1	-
Copper seal	6	-

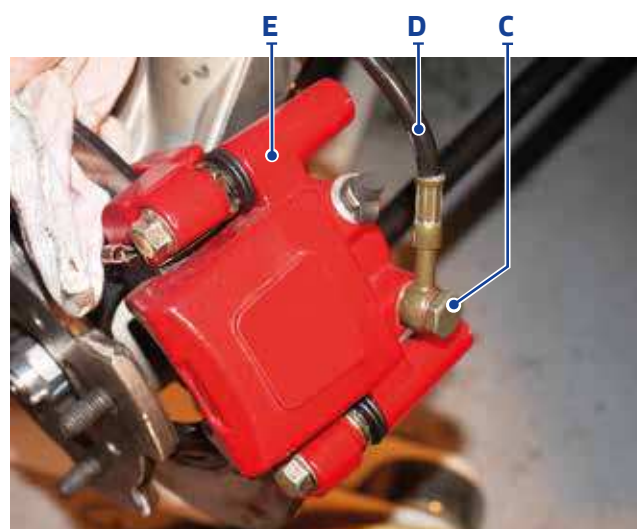
Removal procedure

Outside the vehicle on the driver's side:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Remove the screw **C** securing the brake hose **D** on the calliper **E**.



RISK

Caution: watch for brake fluid projections.

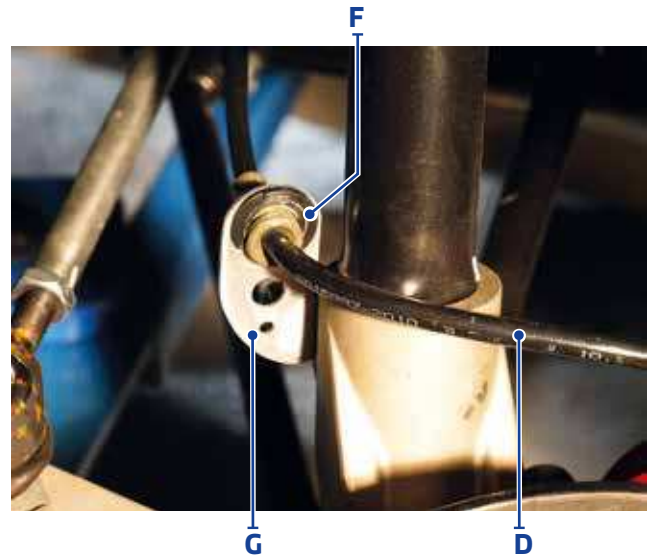


Mark the position of the banjo fittings on each calliper before removal in order to re-install them in the same position.

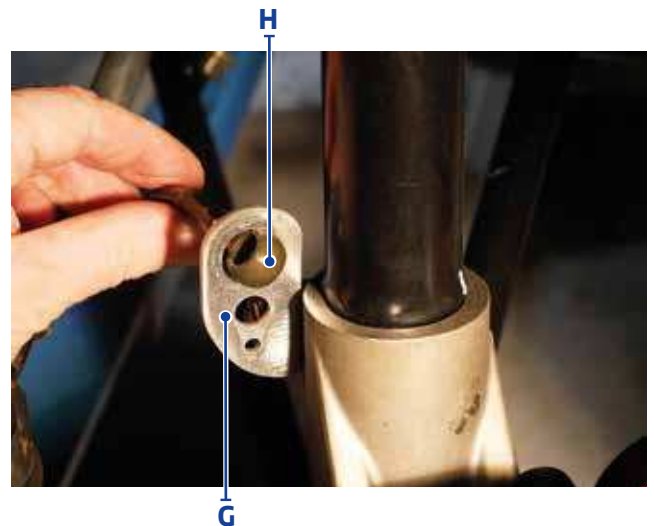
Front right brake hose air conditioning + bleeding

FR5002

4. Remove the circlips **F** securing the brake hose **D** on the support **G**.

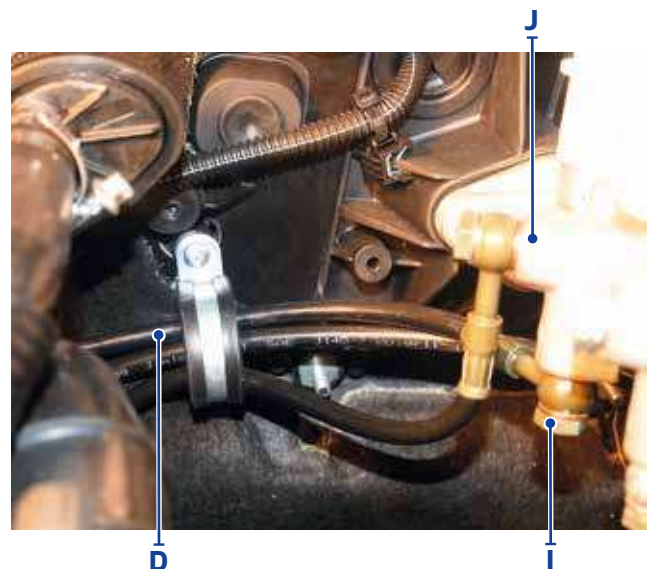


5. Run the banjo fitting **H** through the support **G**.



In the engine compartment:

6. Remove the screw **I** securing the brake hose **D** on the master cylinder **J**.



RISK

Caution: watch for brake fluid projections.

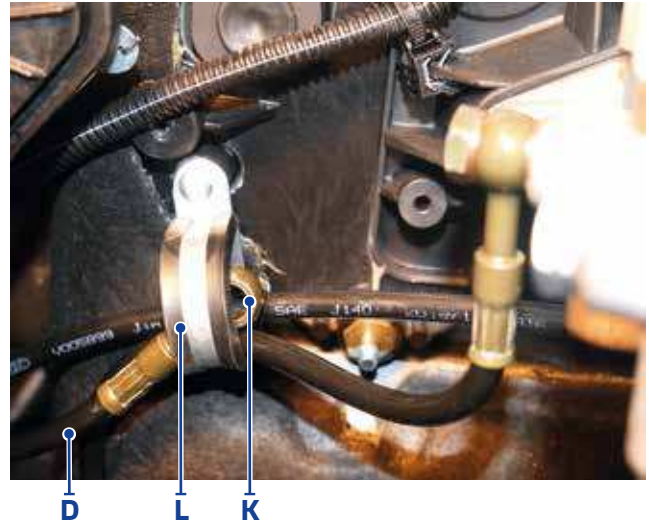


Mark the position of the banjo fittings on each calliper before removal in order to re-install them in the same position.

Front right brake hose air conditioning + bleeding

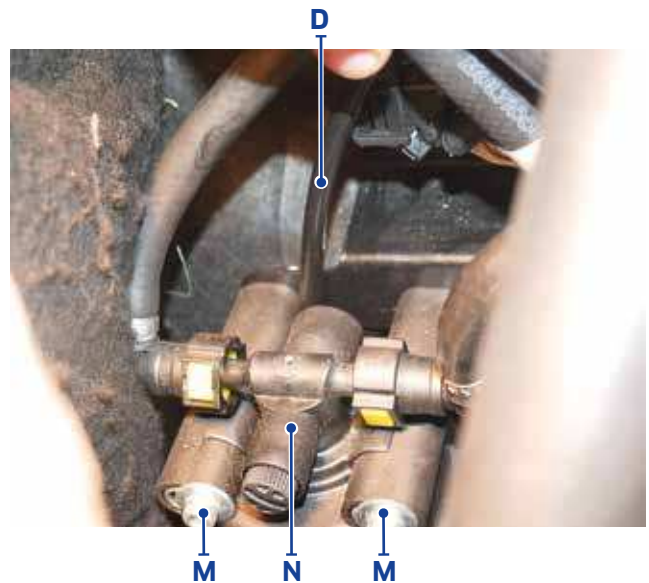
FR5002

7. Run the banjo fitting **K** through the clamp **L**.



8. Remove the screws **M** from the fuel filter **N** to release the brake hose **D**.

9. Remove the brake hose on the passenger side **D**.



Installation

To install, perform the removal operations in the reverse order.



Check the level of brake fluid in the master cylinder.



Bleed the circuit.



Change the copper seals on the banjo fittings.



Hold the banjo fitting while tightening it to make sure it returns to its initial position.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Retaining screws **C** and **I**: tightening torque 25 Nm.



0.40 h 1 side
0.80 h 2 sides

Front shock absorber

TA5007 (1 side)
TA5008 (2 sides)



Equipment required

Special tools	Quantities	References
Size 16 - 17 wrench	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-

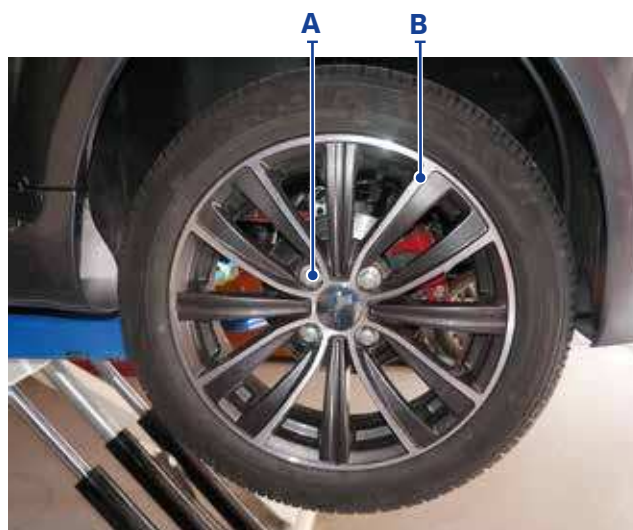


This procedure is identical for the driver and passenger side

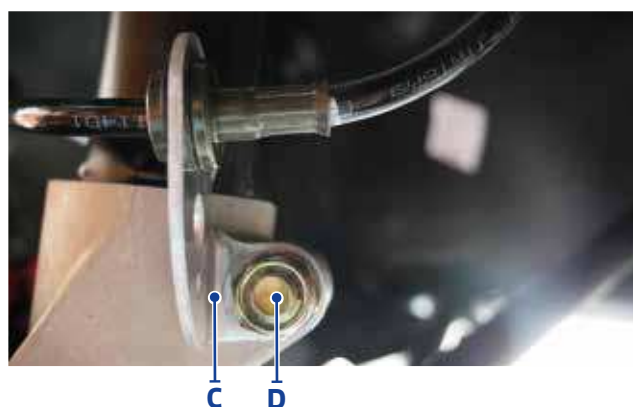
Removal procedure

On the front side of the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Remove the screw **D** from the brake hose support.
4. Partially remove the brake hose support **C**.



G

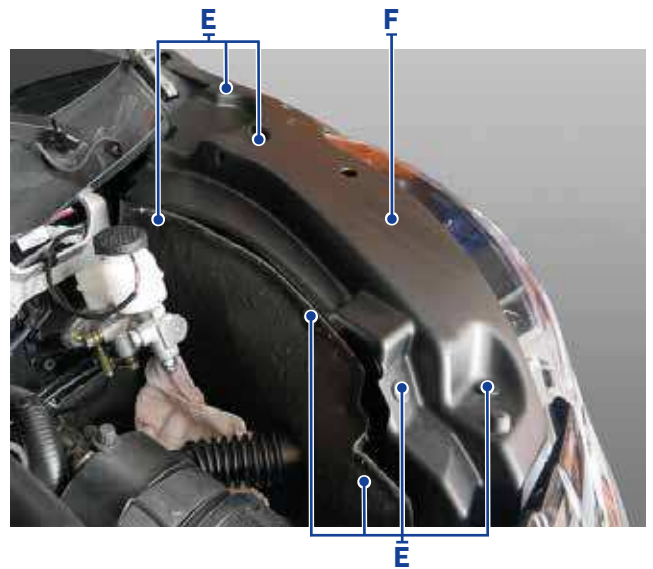
Front shock absorber

TA5007 (1 side)

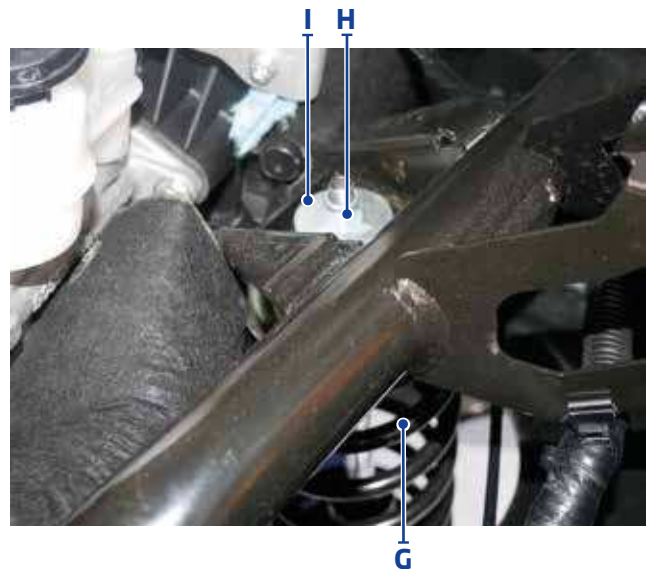
TA5008 (2 sides)

5. Remove the plasti-rivets **E** from the wing inner panel **F**.

6. Remove the wing inner panel **F**.

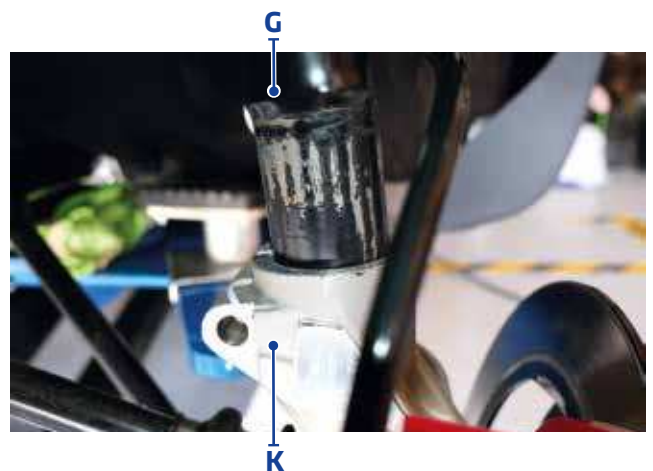


7. Remove the nut **H** and the large washer **I** securing the shock absorber **G**.



8. Separate the shock absorber **G** manually from the hub carrier **K**.

9. Remove the shock absorber **G**.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nut **H**: tightening torque 20 Nm.

Front shock absorber

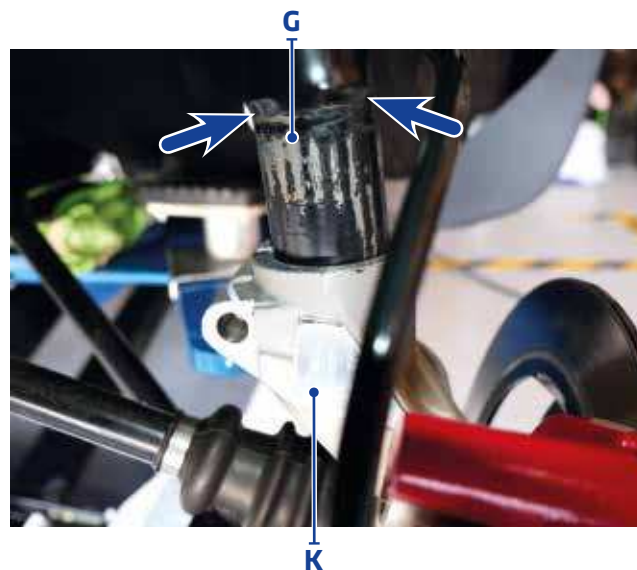
TA5007 (1 side)

TA5008 (2 sides)

Installation

To install, perform the removal operations in the reverse order.

1. Fit the shock absorber **G** against the hub carrier **K** along the markings indicated on the photo shown opposite.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nut **H**: tightening torque 20 Nm.

G



0.40 h (TA5003)

0.80 h (TA5004)

Suspension wishbone

TA5003 (1 side)

TA5004 (2 sides)



Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
Size 19 hex socket	1	-
Ball joint extractor	1	-
2-post lift	1	-

PPE		
Gloves	1	-



This procedure is identical for the driver and passenger side

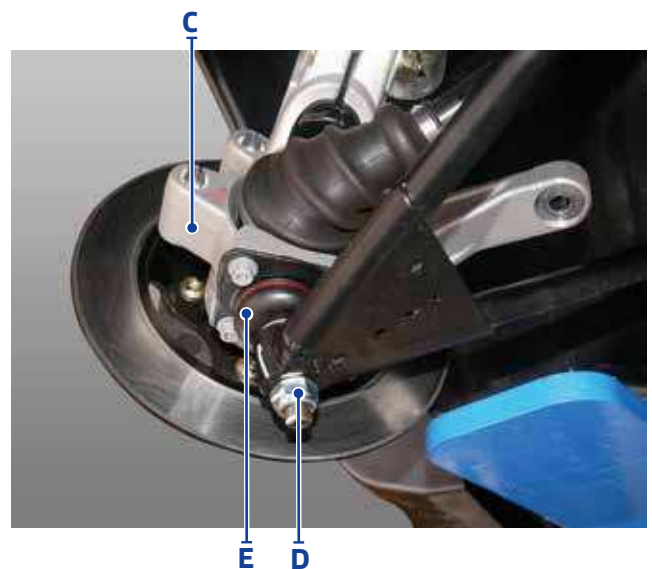
Removal procedure

Outside the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Rotate the hub carrier **C** on the outer side for easy access to the nut **D** of the suspension ball joint **E**.
4. Remove the nut **D** from the suspension ball joint **E**.



Suspension wishbone

TA5003 (1 side)

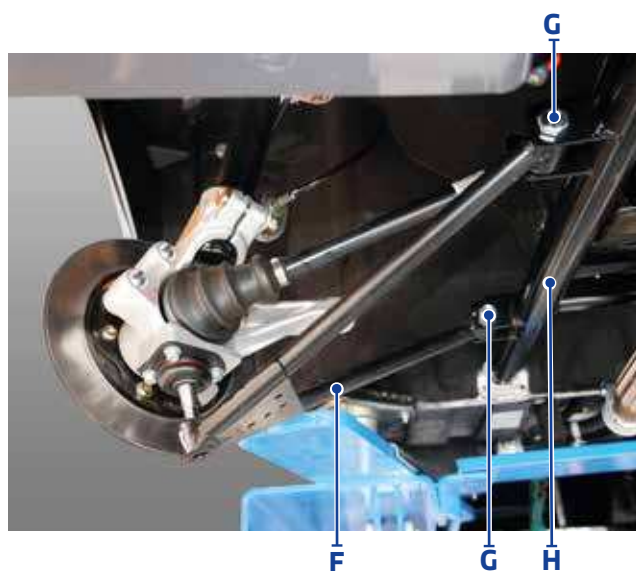
TA5004 (2 sides)

5. Use the ball joint extractor to remove the suspension wishbone **F**.



6. Remove the 2 retaining screws **G** of the suspension wishbone **F** on the engine mount **H**.

7. Remove the suspension wishbone **F**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nuts **D** and **C**: tightening torque 46 Nm.



0.40 h (TA5005)

0.80 h (TA5006)

Suspension ball joint

TA5005 (1 side)

TA5006 (2 sides)



Equipment required

Special tools	Quantities	References
Allen key	1	-
Size 13 wrench	1	-
Size 19 hex socket	1	-
Ball joint extractor	1	-
2-post lift	1	-
PPE		
Gloves	1	-



This procedure is identical for the driver and passenger side

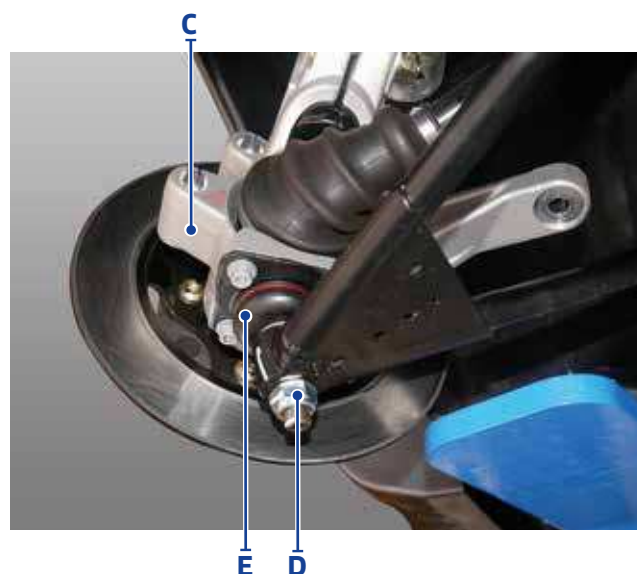
Removal procedure

Outside the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



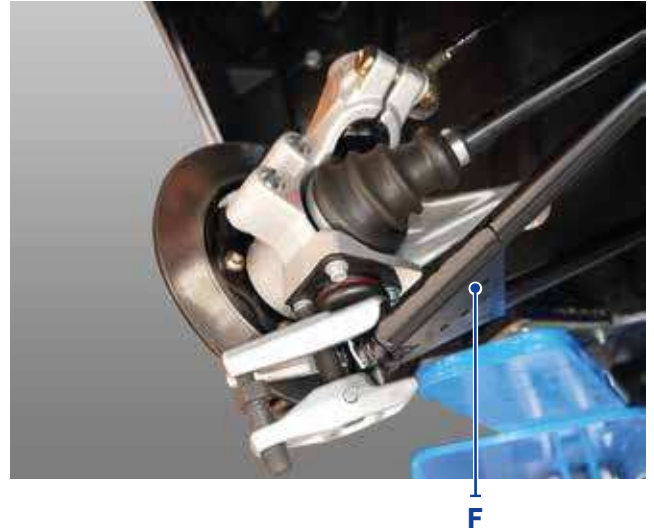
3. Rotate the hub carrier **C** on the outer side for easy access to the nut **D** of the suspension ball joint **E**.
4. Loosen the nut **D** from the suspension ball joint **E**.



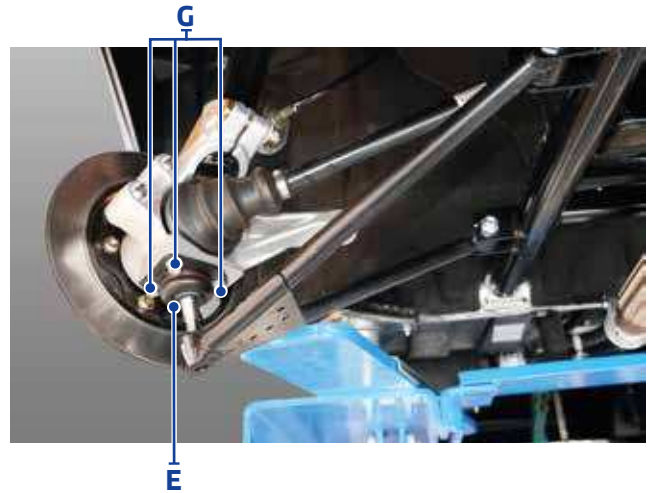
Suspension ball joint

TA5005 (1 side)
TA5006 (2 sides)

5. Use a ball joint extractor to remove the suspension wishbone **F**.



6. Pull the suspension wishbone **F** off the suspension ball joint **E**.
7. Remove the 3 screws **G** from the suspension ball joint **E**.
8. Remove the suspension ball joint **E**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nut **D**: tightening torque 46 Nm.



RISK

Screw **G**: tightening torque 12 Nm.

G



0.65 h 1 side
1.30 h 2 sides

Rear drive axle

TE5012 (1 side)
TE5013 (2 sides)



Equipment required

Special tools	Quantities	References
Size 12 -24 wrench	1	-
Size 19 hex socket	1	-
2-claw hub puller	1	-
2-post lift	1	-

PPE		
Gloves	1	-

Preliminary procedures

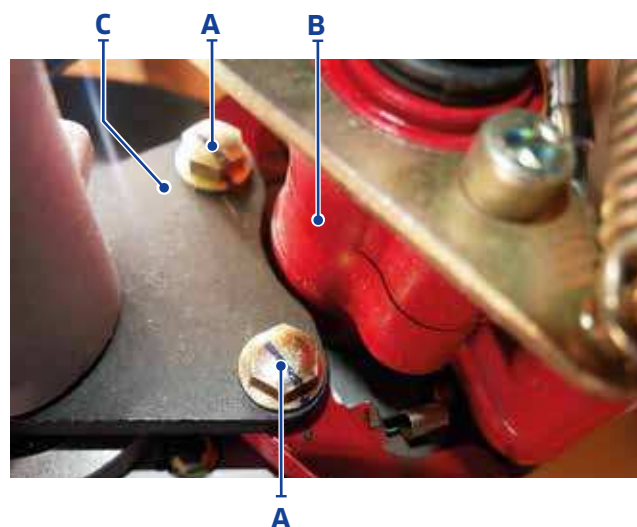
Operations	Procedure types	Pages
Rear shock absorber	Removal / Installation	G-45



This procedure is identical for the driver and passenger side

Removal procedure

1. Remove the 2 screws **A** securing the calliper **B** on the stub axle **C**.
2. Partially remove the calliper **B**.



3. Remove the nut **D** from the stub axle **E**.
4. Remove the hub **F**.

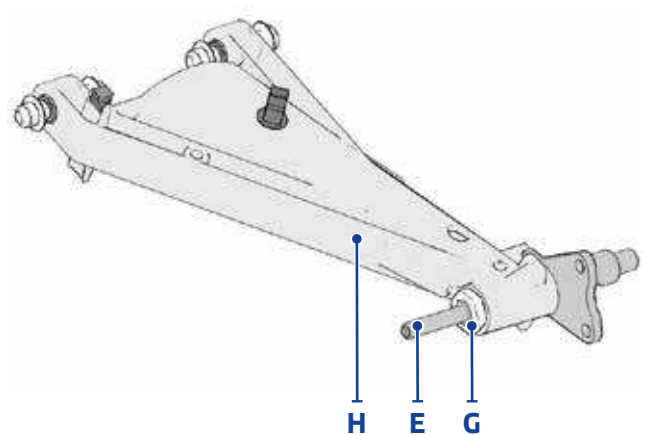


Rear drive axle

TE5012 (1 side)

TE5013 (2 sides)

5. Remove the nut **G** securing the stub axle **E** on the suspension arm **H**.



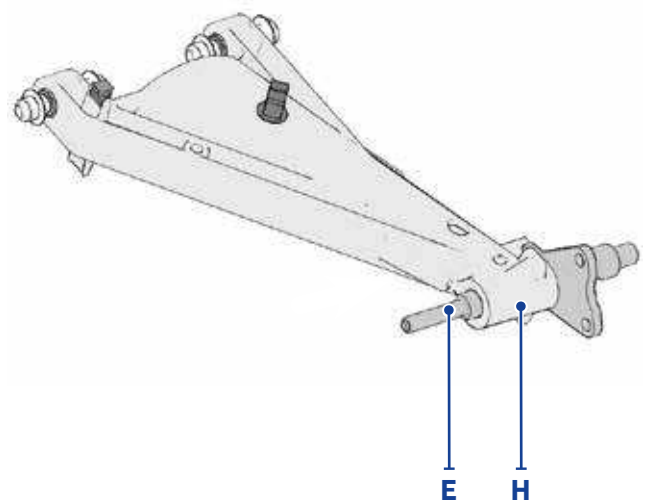
6. Before removing the elements, identify the position of the positioner used between the original stub axle and the suspension arm to install the new stub axle in the same position (see arrow in the photo shown opposite).



7. Use a 2-claw hub puller to remove the stub axle **E** from the suspension arm **H**.



If the extraction operation is difficult, use a heat gun to heat and expand the suspension arm.



G

Rear drive axle

TE5012 (1 side)

TE5013 (2 sides)

Installation

To install, perform the removal operations in the reverse order.



Apply thread-locking fluid on the 2 screws **I**.



RISK

Nuts **A**: tightening torque 25 Nm.



RISK

Nut **G**: tightening torque 125 Nm.



RISK

Screw **D**: tightening torque 125 Nm.



RISK

Pay attention to the fitting orientation (positioner).



0.60 h 1 side
1.20 h 2 sides

Rear wheel hub

TE5006 (1 side)
TE5007 (2 sides)

Rear brake disc

FR5021 (1 side)
FR5022 (2 sides)



Equipment required

Special tools	Quantities	References
Size 12 -19 wrench	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Release the hand brake lever	Action required	-



This procedure is identical for the driver and passenger side

Removal procedure

Outside the vehicle:

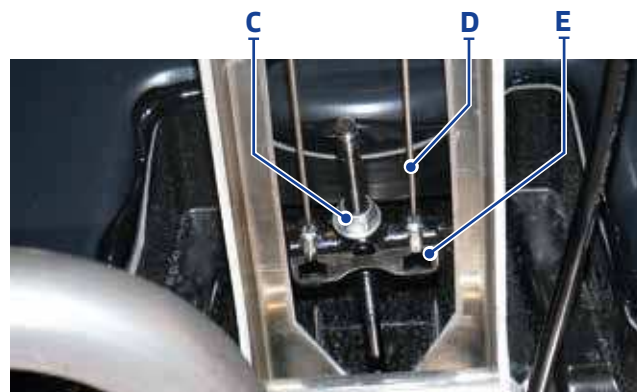
1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



B **A**

Under the vehicle:

3. Loosen the tension nut **C** securing the brake cable **D** in tension on the bracket **E**.



C **D** **E**

Rear wheel hub

TE5006 (1 side)

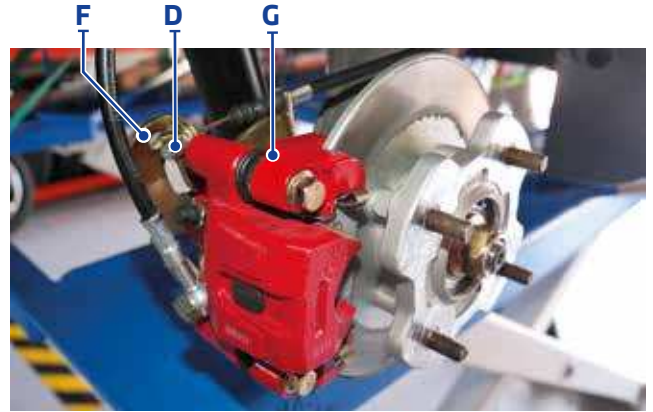
TE5007 (2 sides)

Rear brake disc

FR5021 (left side)

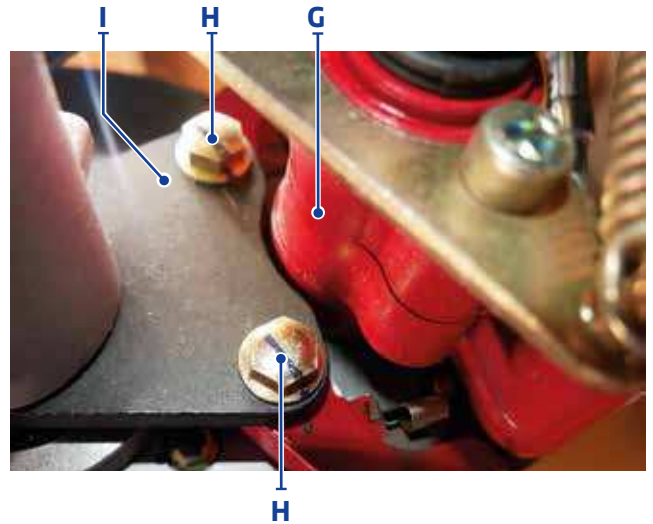
FR5022 (right side)

4. Release the brake cable **D** from the support **F** mounted on the calliper **G**.



5. Remove the 2 screws **H** securing the calliper **G** on the stub axle **I**.

6. Partially remove the calliper **G**.



7. Remove the nut **J** from the stub axle **I**.

8. Remove the hub **K**.



Rear wheel hub

TE5006 (1 side)

TE5007 (2 sides)

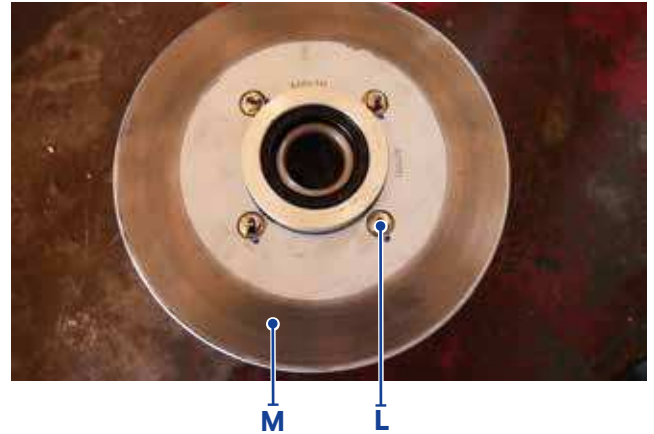
Rear brake disc

FR5021 (left side)

FR5022 (right side)

9. Remove the 4 screws **L** from the disc **M**.

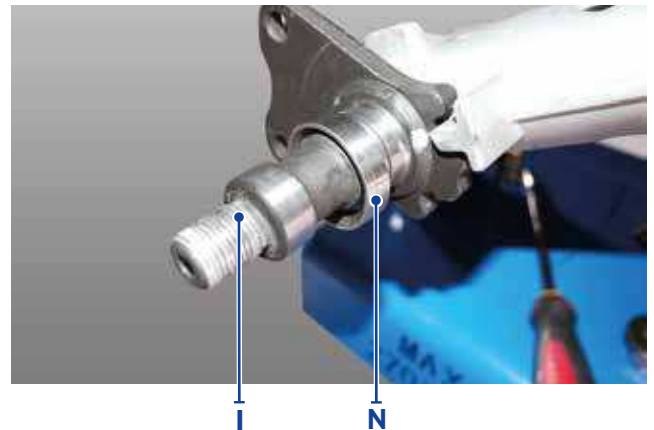
10. Remove the disc **M**.



Installation

To install, perform the removal operations in the reverse order.

1. Check the presence of the ring **N** on the stub axle **I**.



1. The counterbores **O** must be visible during reassembly.



Apply thread-locking fluid on the 4 screws **L**.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nut **H**: tightening torque 25 Nm.



RISK

Nut **C**: tightening torque 9 Nm.



RISK

Nut **J**: tightening torque 125 Nm.



1 h 1 side
2 h 2 sides

Rear bearing

TE5008 (1 side)
TE5009 (2 sides)



Equipment required

Special tools	Quantities	References
Circlip pliers	1	-
Flat screwdriver	1	-
Press	1	-
PPE		
Gloves	1	-

Preliminary procedures

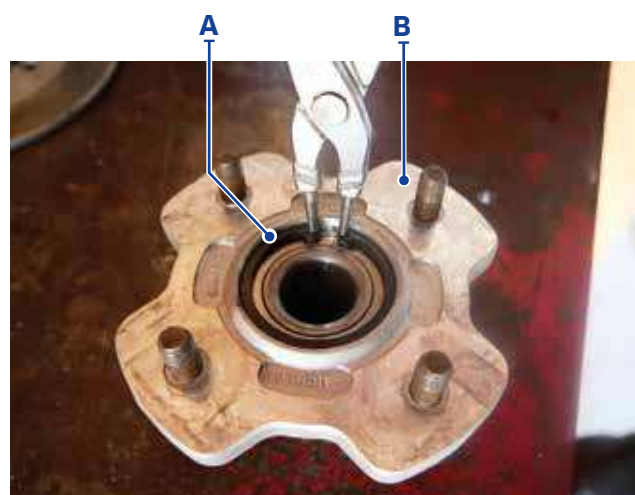
Operations	Procedure types	Pages
Rear wheel hub - Rear brake disc	Removal / Installation	G-34



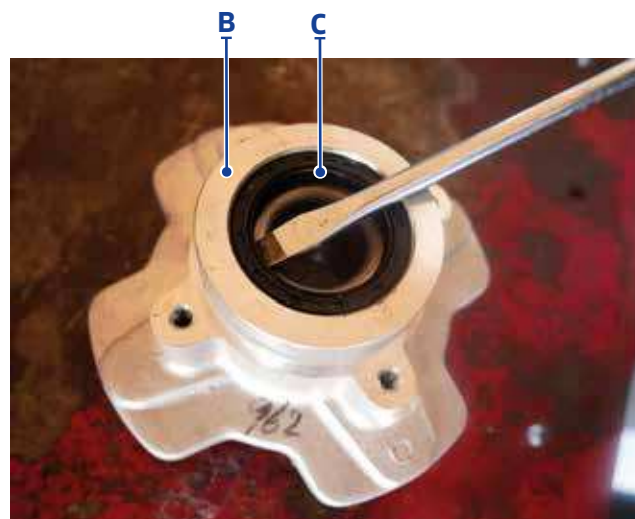
This procedure is identical for the driver and passenger side

Removal procedure

1. Remove the circlips **A** mounted on the hub **B** with circlip pliers.
2. Remove the circlips **A**.



3. Remove the lip seal **C** mounted on the hub **B**.



Wheels & brakes

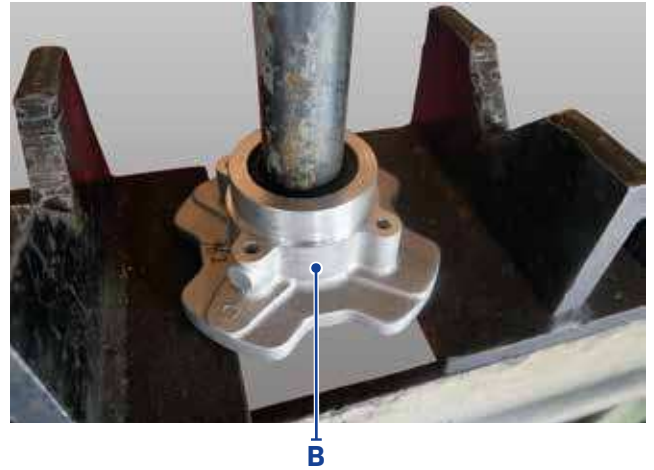
G

Rear wheel bearing

TE5008 (1 side)

TE5009 (2 sides)

4. Install the hub **B** on a press.
5. Use the press to extract the bearing from its housing.



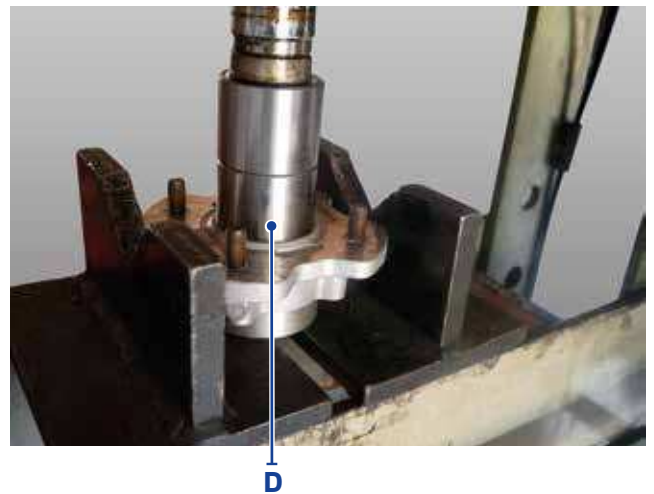
6. Remove the bearing **D**.



Installation

To install, perform the removal operations in the reverse order.

1. Correctly position the bearing **D** before using the press.



G



Equipment required

Special tools	Quantities	References
Size 13 - 14 wrench	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Brake fluid	1	-
Thread-locking fluid	1	-
Copper seal	2	-



This procedure is identical for the driver and passenger side

Removal procedure

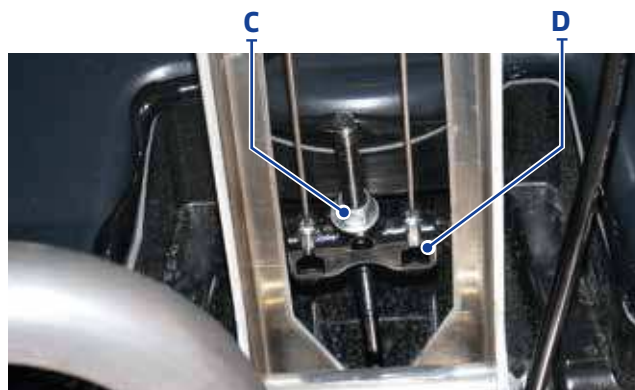
On the rear side of the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



Under the vehicle:

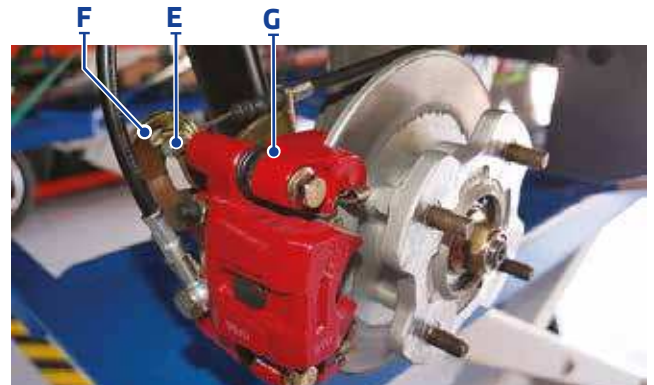
3. Loosen the nut **C** for the adjustment of the hand brake lever balance bar **D**.



Rear brake calliper

FR5019

4. Release the brake cable **E** from the support **F** mounted on the calliper **G**.



5. Remove the banjo fitting **H** mounted on the calliper **G**.

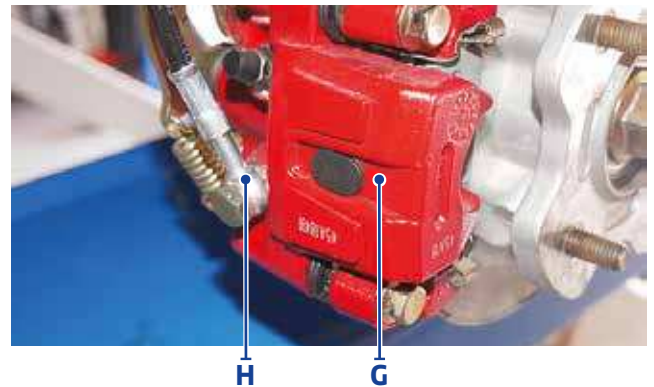


RISK

Caution: watch for brake fluid projections.

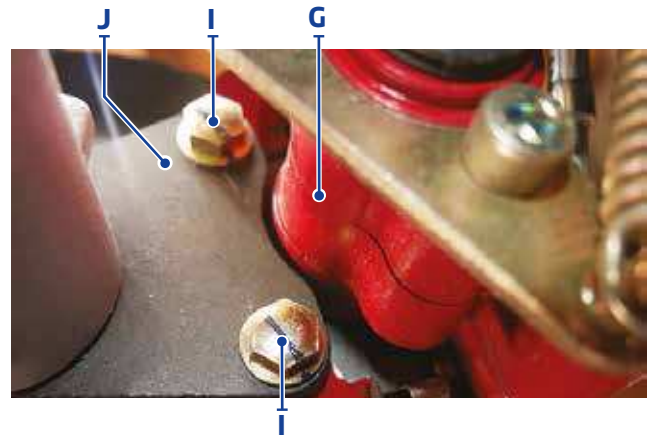


Mark the position of the banjo fitting before removal in order to re-install it in the same position.



6. Remove the 2 screws **I** securing the calliper **G** on the stub axle **J**.

7. Remove the calliper **G**.



Installation

To install, perform the removal operations in the reverse order.



Apply thread-locking fluid on the 2 screws **I**.



Check the level of brake fluid in the master cylinder.



Bleed the circuit.



Change the copper seals on the banjo fittings.



Hold the banjo fitting while tightening it to make sure it returns to its initial position.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nuts **C**: tightening torque 9 Nm.



RISK

Banjo fitting **H**: tightening torque 25 Nm.



RISK

Screw **I**: tightening torque 25 Nm.



Equipment required

Special tools	Quantities	References
Size 13 - 14 wrench	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Brake fluid	1	-
Copper seal	6	-

Preliminary procedures

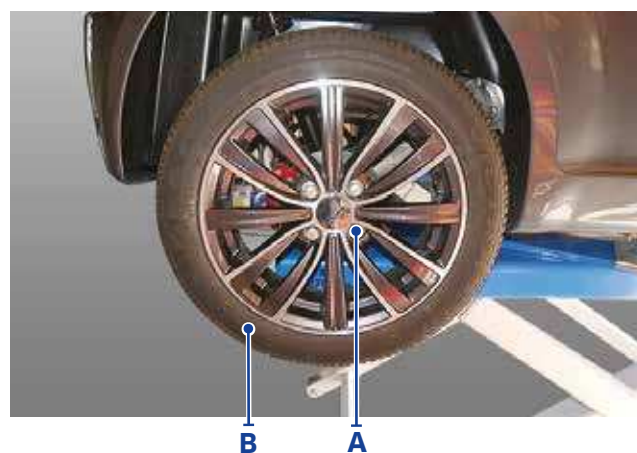
Operations	Procedure types	Pages
Exhaust line	Removal / Installation	H-14



This procedure must be completed on both sides.

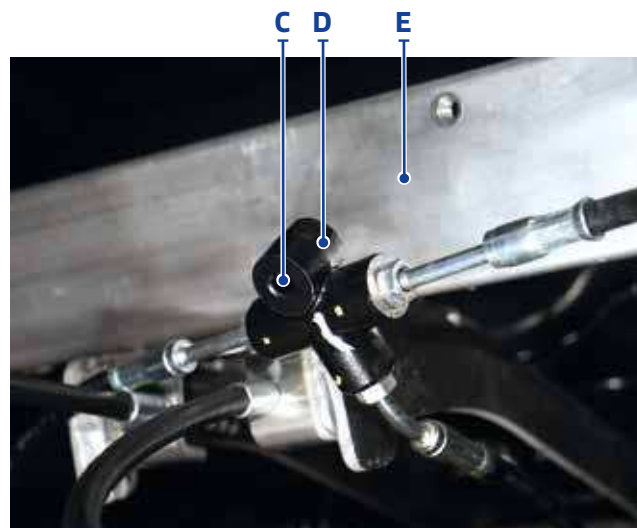
Removal procedure

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



Under the vehicle:

3. Remove the screw **C** securing the fitting **D** on the rear cross-member **E**.



Rear brake hose + bleeding

FR5000

4. Remove the banjo fittings **F** securing the brake hose **G** on the 2 rear callipers **H**.

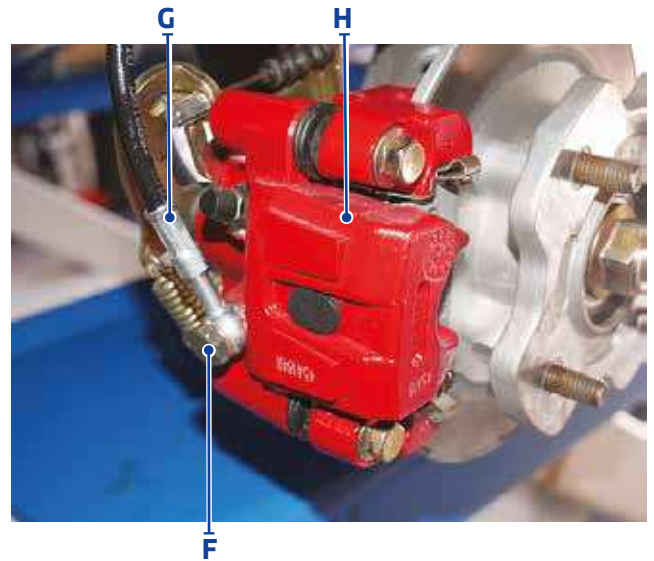


RISK

Caution: watch for brake fluid projections.



Mark the position of the banjo fittings on each calliper before removal in order to re-install them in the same position.

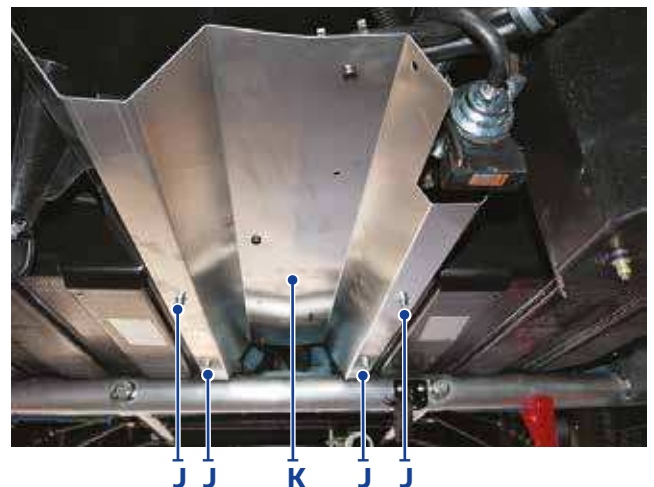


5. Unfasten the rear brake hose **H** from the 2 clips **I** on the rear suspension arms.



6. Remove the 4 screws **J** from the exhaust heat shield **K**.

7. Remove the exhaust heat shield **K**.



G

Rear brake hose + bleeding

FR5000

On the engine compartment side:

8. Remove the banjo fitting **L** securing the brake hose **H** on the master cylinder **M**.



RISK

Caution: watch for brake fluid projections.



Mark the position of the banjo fitting on the master cylinder before removal in order to re-install it in the same position.



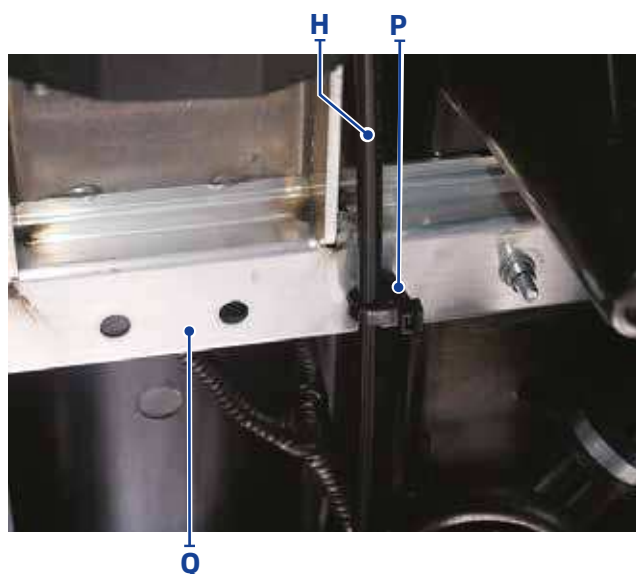
Under the vehicle:

9. Cut the cable tie **N** securing the rear brake hose **H** near the exhaust rubber mounting **O**.



10. Cut the cable tie **P** securing the rear brake hose **H** near the central cross-member **Q**.

11. Remove the rear brake hose **H**.



Rear brake hose + bleeding

FR5000

Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Check the level of brake fluid in the master cylinder.



RISK

Nuts **A**: tightening torque 45 Nm.



Bleed the circuit.



RISK

Retaining screw **C**: tightening torque 9 Nm.



Change the copper seals on the banjo fittings.



RISK

Banjo fittings **F** and **L**: tightening torque 25 Nm.



Hold the banjo fitting while tightening it to make sure it returns to its initial position.



0.20 h (TE5002)

0.40 h (TE5003)

Rear shock absorber

TE5002 (1 side)

TE5003 (2 sides)



Equipment required

Special tools	Quantities	References
Size 19 wrench	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-

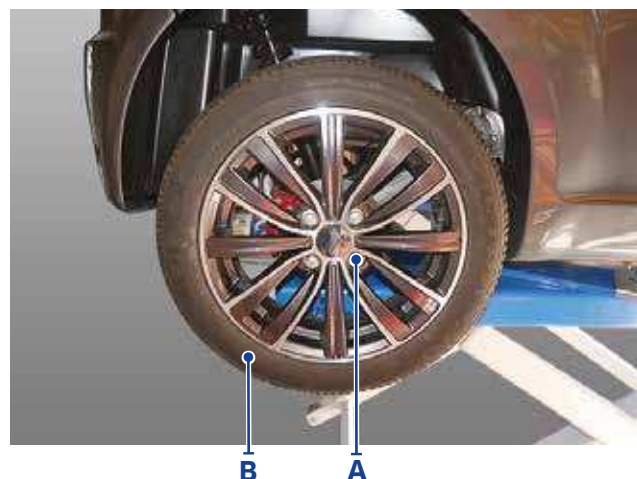


This procedure is identical for the driver and passenger side

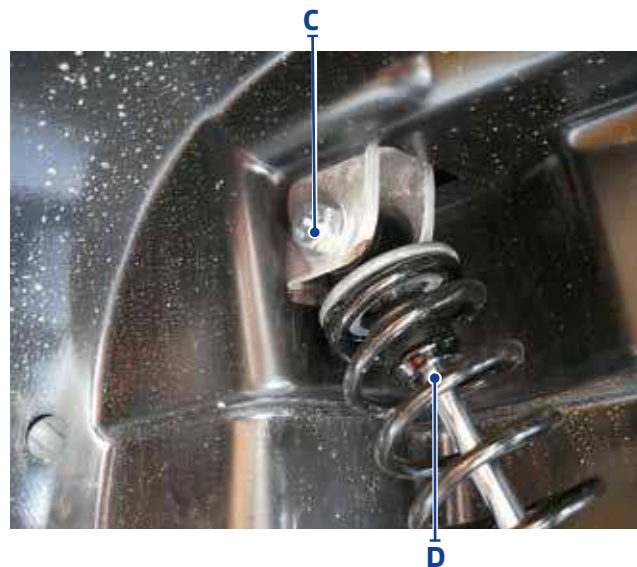
Removal procedure

On the rear side of the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Remove the upper bolt **C** securing the shock absorber **D**.

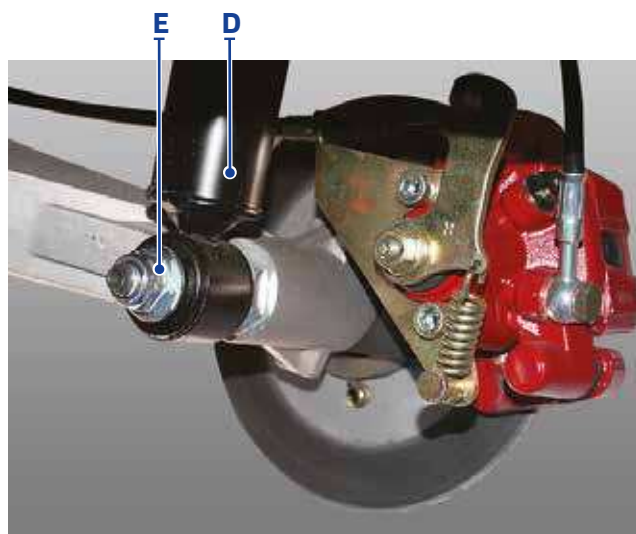


Rear shock absorber

TE5002 (1 side)

TE5003 (2 sides)

4. Remove the lower bolt **E** securing the shock absorber **D**.
5. Remove the shock absorber **D**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nut **C**: tightening torque 79 Nm.



RISK

Nut **E**: tightening torque 79 Nm.

G



0.75 h 1 side
1.50 h 2 sides

Rear suspension arm

TE5010 (1 side)
TE5011 (2 sides)



Equipment required

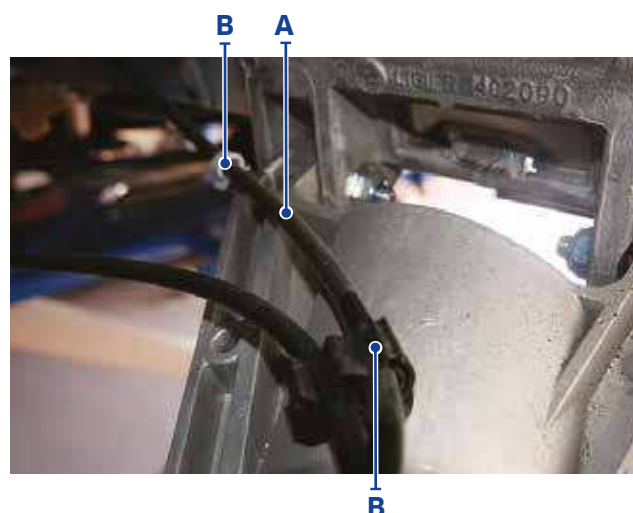
Special tools	Quantities	References
Size 12 - 19 - 24 wrench	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

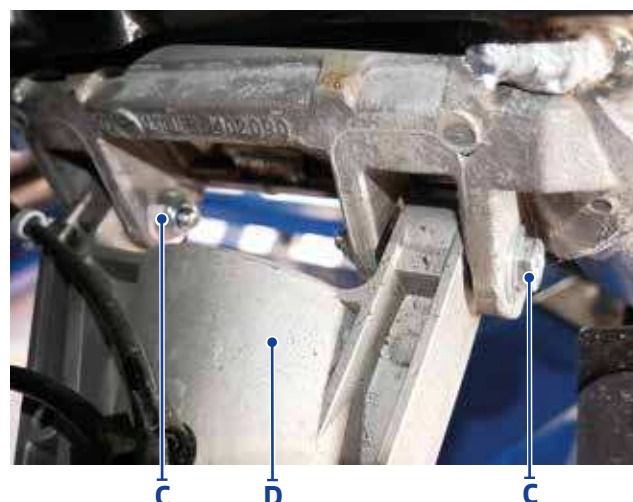
Operations	Procedure types	Pages
Replacement rear hub carrier	Removal / Installation	G-31

Removal procedure

1. Unclip the brake hoses **A** from the 2 clips **B** on the rear suspension arms.
2. Remove the rear brake hoses.



3. Remove the 2 bolts **C** from the suspension arm **D**.
4. Remove the suspension arm.



Installation

To install, perform the removal operations in the reverse order.



RISK

Nuts **C**: tightening torque 46 Nm.



Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
Allen key	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off	-	-

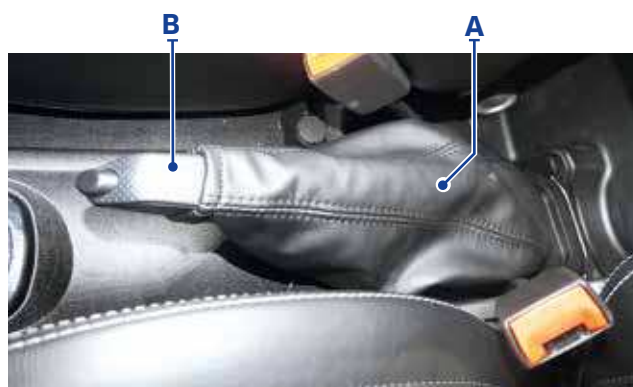
Removal procedure

Inside the vehicle:

1. Remove the rear part of the boot **A** fitted on the handbrake base **B**.



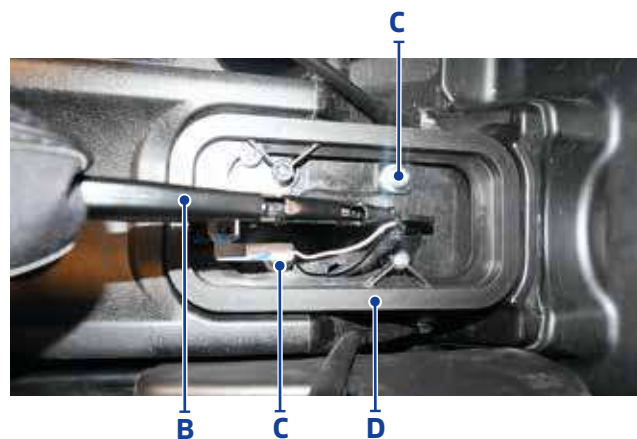
2. Slide the boot **A** over the hand brake lever **B** towards the front part of the vehicle.



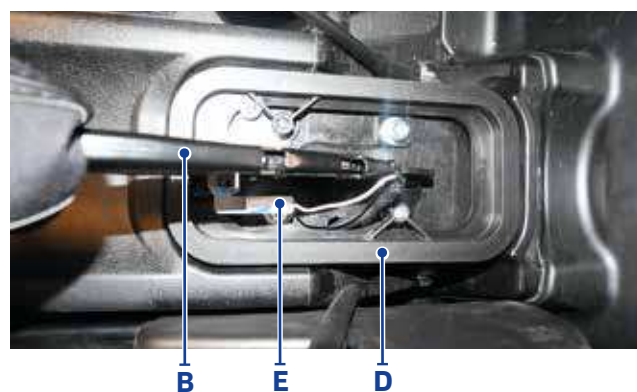
Hand brake lever

FR5006

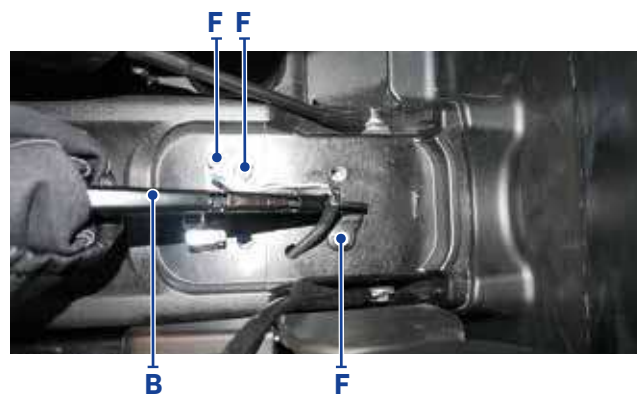
3. Remove the 2 screws **C** from the trim **D** of the hand brake **B**.



4. Disconnect the lug **E** from the contactor of the hand brake lever **B**.
5. Remove the trim **D**.

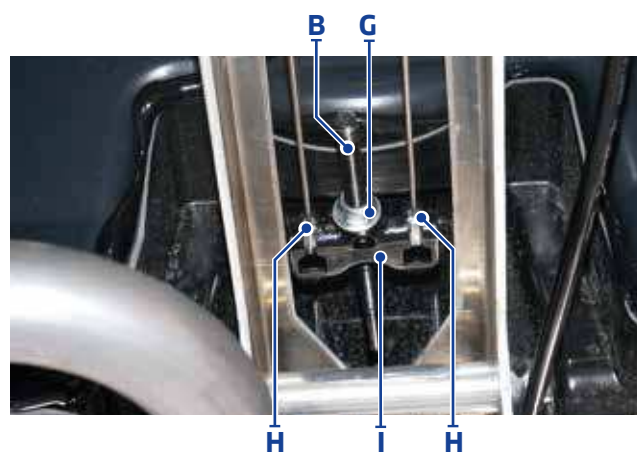


6. Remove the 3 screws **F** from the hand brake **B**.



Under the vehicle:

7. Remove the nut **G** for the adjustment of the balance bar of the hand brake lever **B**.
8. Partially remove the 2 cables **H** mounted on the balance bar **I**.
9. Remove the hand brake **B**.



Hand brake lever

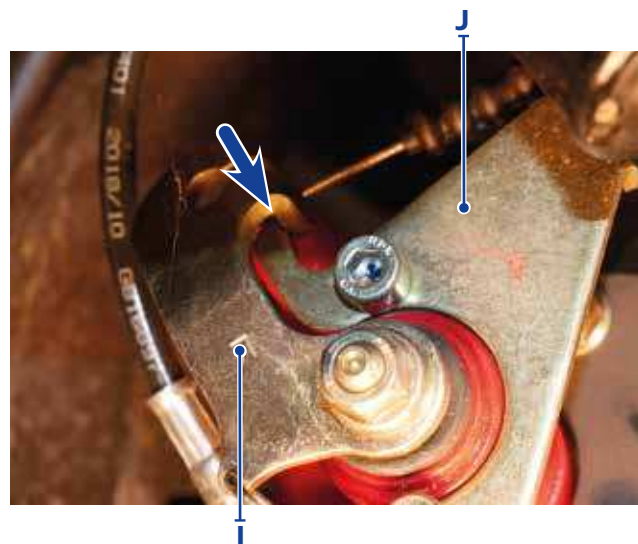
FR5006

Installation and adjustment

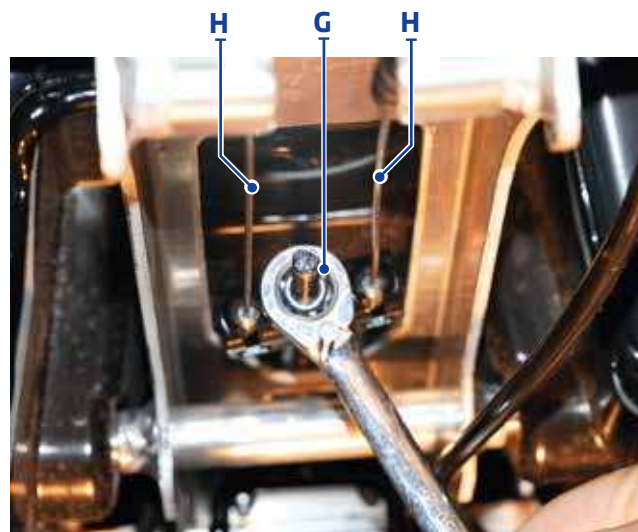
To install, perform the removal operations in the reverse order, respecting the adjustment procedure below:

Hand brake adjustment procedure:

1. Check that the lever **I** is against the bracket **J** in the location indicated by the arrow (photo shown opposite).



2. Set the tension of the cables **H** by tightening the nut **G**, avoid moving the lever **I**.
3. After step 2 the lever **I** must still be against the bracket **J** (see step 1).



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Nut **G**: tightening torque 9 Nm.



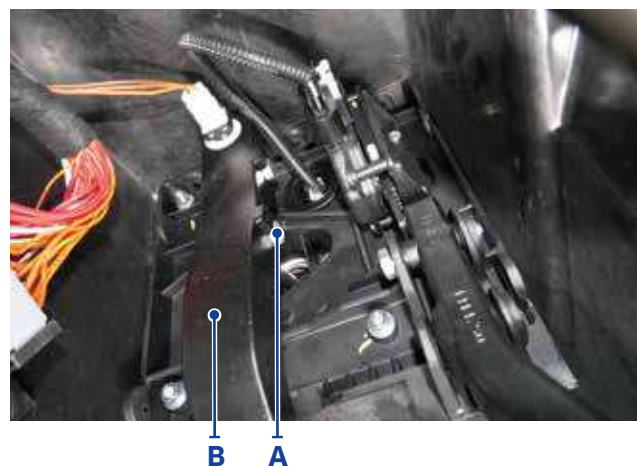
Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
Size 14 wrench	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Brake fluid	1	-
Copper seal	6	-

Removal procedure

In the passenger compartment:

1. Remove the screw **A** from the brake pedal **B**.



In the engine compartment:

2. Remove the 3 banjo fittings **C** from the master cylinder **D**.
Let the brake fluid empty out of the reservoir in an appropriate container.

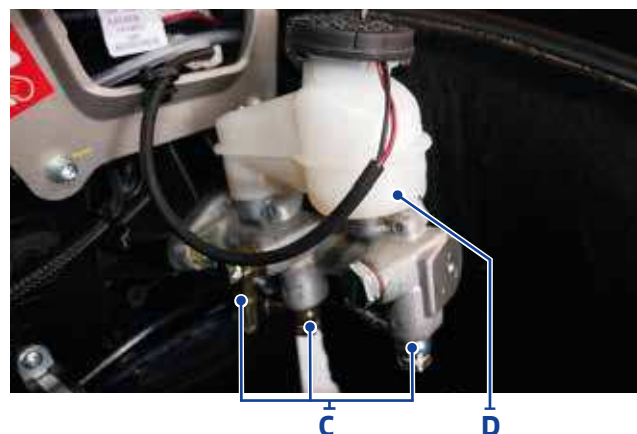


RISK

Caution: watch for brake fluid projections.



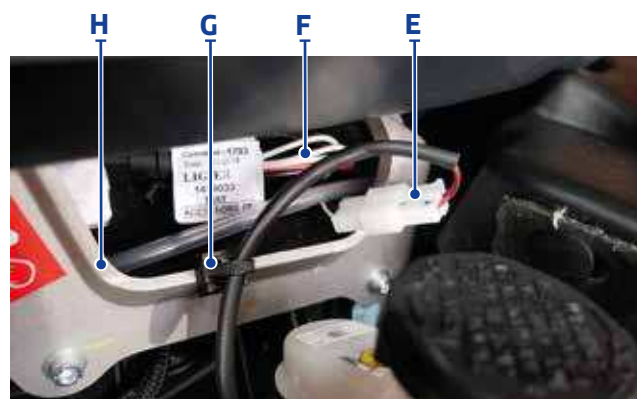
Mark the position of the banjo fittings on the master cylinder before removal in order to re-install them in the same position.



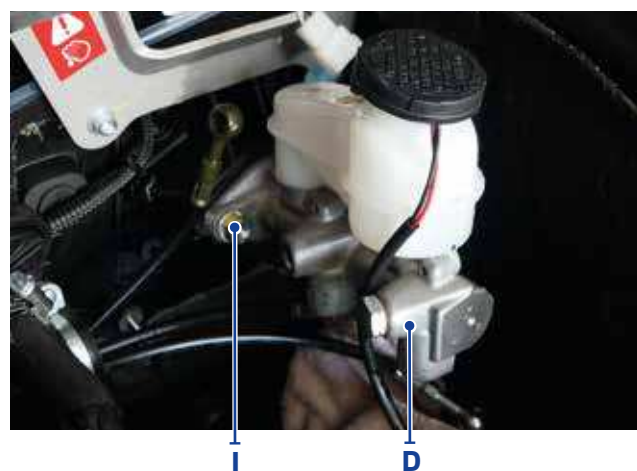
Brake master cylinder + bleeding

FR5003

3. Disconnect the sensor on the brake fluid reservoir **E** from the body harness **F**.
4. Unfasten the clip **G** from the windscreen wiper plate **H**.



5. Remove the 2 nuts **I** from the master cylinder **D**.
6. Remove the master cylinder **D**.



7. Check the condition of the seal **J**; replace in case of wear.



Brake master cylinder + bleeding

FR5003

Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Change the copper seals on the banjo fittings.



RISK

Banjo fitting **C**: tightening torque 25 Nm.



Check the level of brake fluid in the master cylinder reservoir.



RISK

Nut **I**: tightening torque 18 Nm.



Bleed the circuit.



Hold the banjo fitting while tightening it to make sure it returns to its initial position.



Equipment required

Special tools	Quantities	References
Size 10, 13 & 14 keys	1	-
Allen key	1	-
PPE		
Gloves	1	-

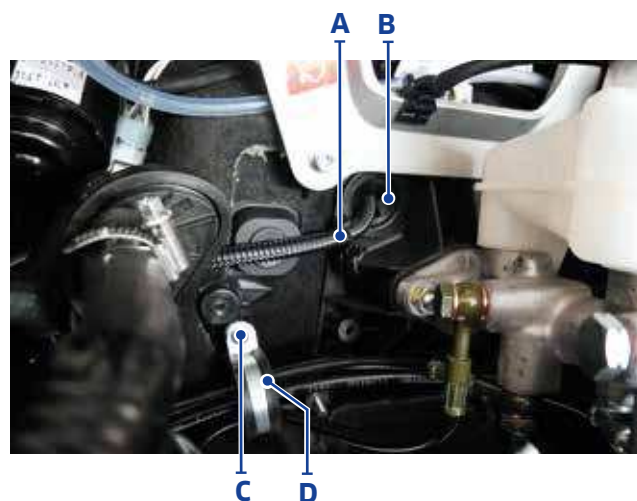
Preliminary procedures

Operations	Procedure types	Pages
Brake pedal	Removal / Installation	G-56
Accelerator pedal (Progress motors)	Removal / Installation	G-58
Accelerator potentiometer (DCI motors)	Removal / Installation	G-60

Removal procedure

In the motor compartment:

1. Remove the clip on the edge of the plate **A** and disengage the grommet **B** from its housing.
2. Remove the screw **C** from the clamp **D**.
3. Run the potentiometer connector through the grommet hole **B** and set it aside.



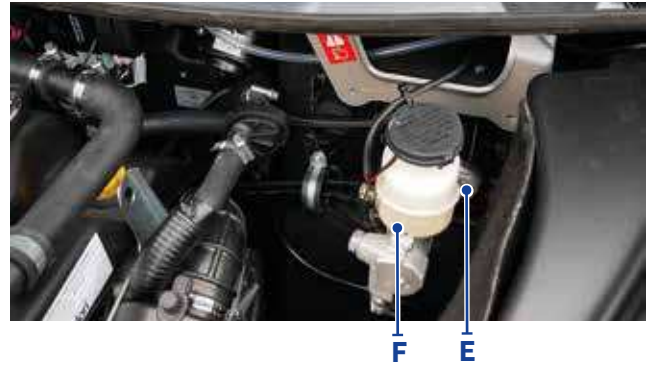
4. Remove the 2 nuts **E** from the master cylinder **F**.



Pedal support

FR5017

5. Separate the master cylinder **F** from its support.

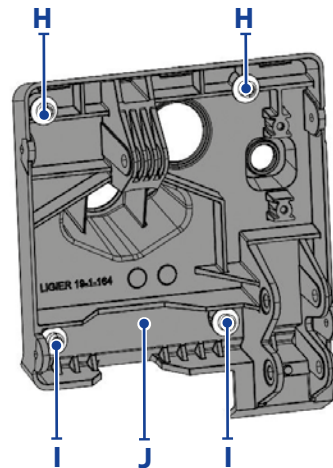


6. Check the condition of the seal **G**, replace in case of wear.



Inside the vehicle:

- 7. Remove the 2 nuts **H** from the pedal support **J**.
- 8. Remove the 2 screws **I** from the pedal support **J**.
- 9. Remove the pedal support **J**.



During the installation, respect the tightening torques indicated on **page 9**.

Installation

To install, perform the removal operations in the reverse order.



RISK

Nuts **E**: tightening torque 18 Nm.



Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
Size 14 wrench	1	-
PPE		
Gloves	1	-

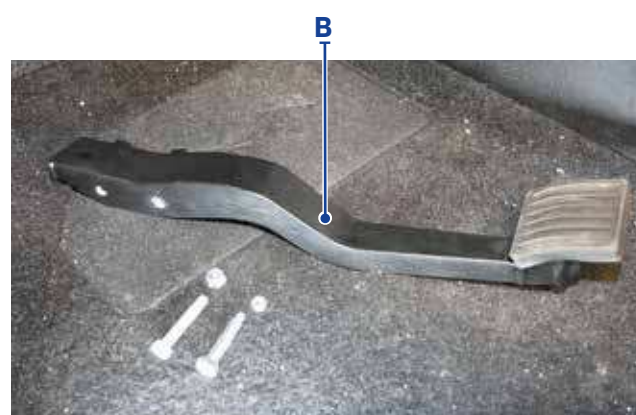
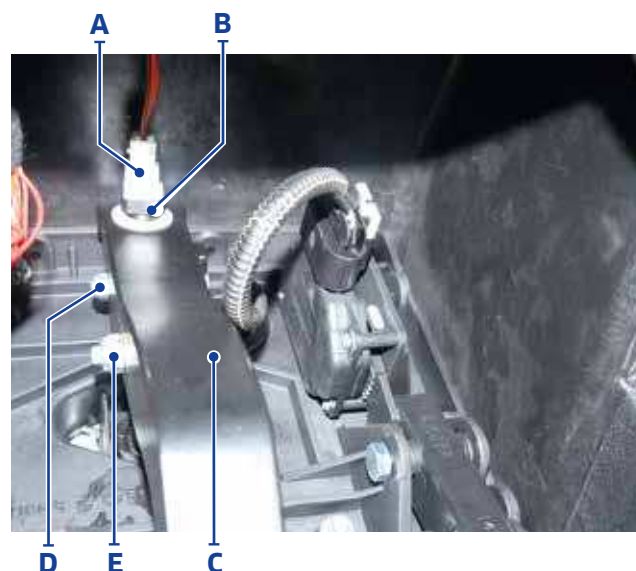
Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-

Removal procedure

Inside the vehicle:

1. Disconnect the connector **A** from the brake light switch **B** of the brake pedal **C**.
2. Remove the brake light switch **B** by pulling it towards you.
3. Remove the brake pedal shaft **D** and the bolt **E** coupling the brake master cylinder push rod and the brake pedal.
4. Remove the brake pedal **B**.
5. Remove the rubber pedal by pulling it towards you.



Brake pedal

FR5016

Installation:

Methodology to install and adjust the brake light switch.

1. Connect the brake light switch to the harness.
2. Key switch in **APC** position, the brake lights are switched on.
3. Keep the brake pedal lifted.
4. Engage the brake light switch in its housing on the brake pedal until the brake lights are switched off.
5. Release the brake pedal.



RISK

Bolts **D - E** : tightening torque 7 Nm.



Equipment required

Special tools	Quantities	References
Size 13 wrench	1	-
Size 14 wrench	1	-
PPE		
Gloves	1	-

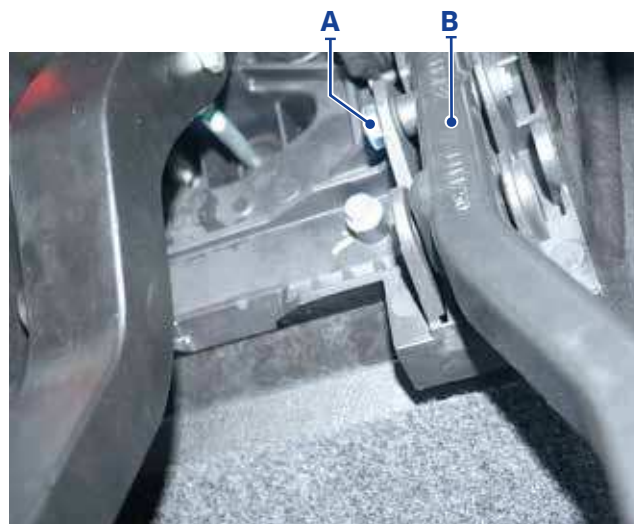
Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Potentiometer (for DCI only)	Removal / Installation	-

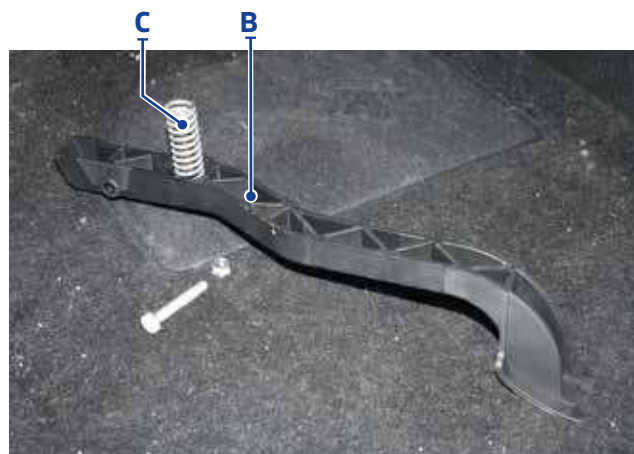
Removal procedure

Inside the vehicle:

1. Remove the bolt **A** from the accelerator pedal **B**.



2. Remove the accelerator pedal **B** with its spring **C**.



Accelerator pedal

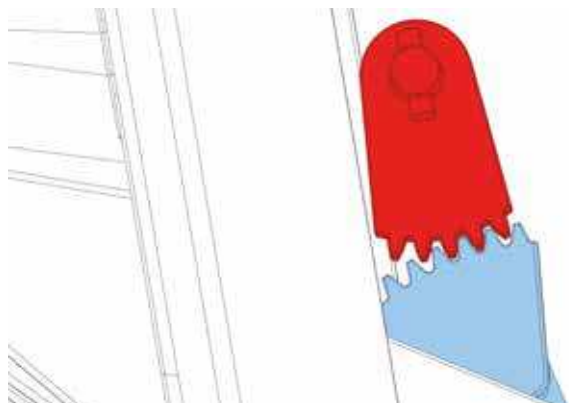
MO5034 DCI

Installation

To install, perform the removal operations in the reverse order.

1. With potentiometer for DCI.

Using the diagnostic tool, check that the “acc pedal position” is set to 0 % without pressing the pedal.



CAUTION: may require adjustment

Before disassembling the potentiometer, check the position of the accelerator pedal teeth with respect to the potentiometer teeth (recommendation: marking or positioner).

The first tooth of the pedal (blue) must be in front of the first tooth of the potentiometer (red).



RISK

Bolt **A**: tightening torque 7 Nm.



Equipment required

Special tools	Quantities	References
Philips screwdriver	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-

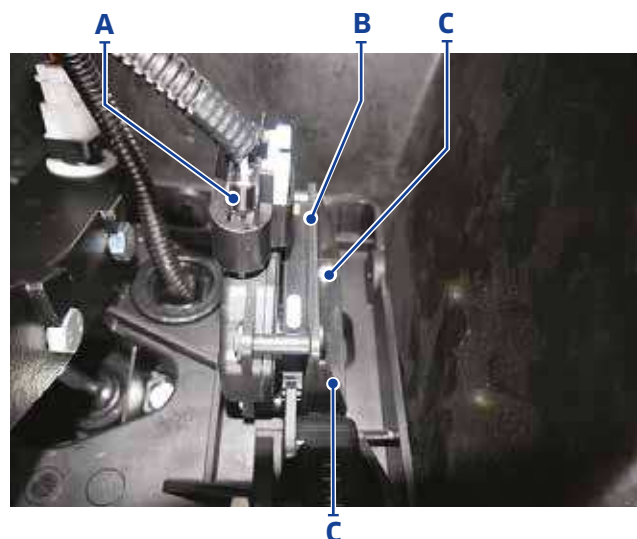


The first tooth of the pedal must be in front of the first tooth of the potentiometer.

Removal procedure

Inside the vehicle:

1. Disconnect the connector **A** from the potentiometer **B**.
2. Remove the 2 screws **C** from the potentiometer **B**.



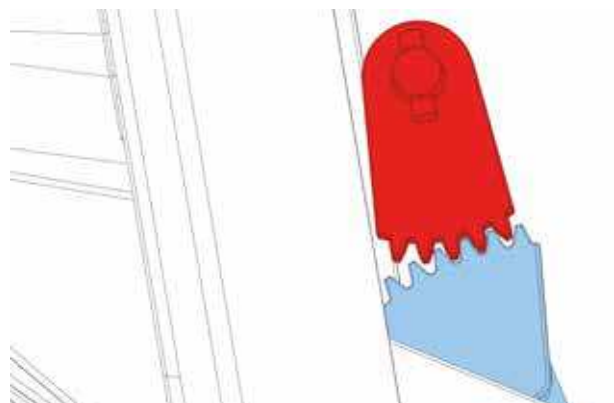
3. Remove the potentiometer **B**.



CAUTION: may require adjustment

Before disassembling the potentiometer, check the position of the accelerator pedal teeth with respect to the potentiometer teeth (recommendation: marking or positioner).

The first tooth of the pedal (blue) must be in front of the first tooth of the potentiometer (red).

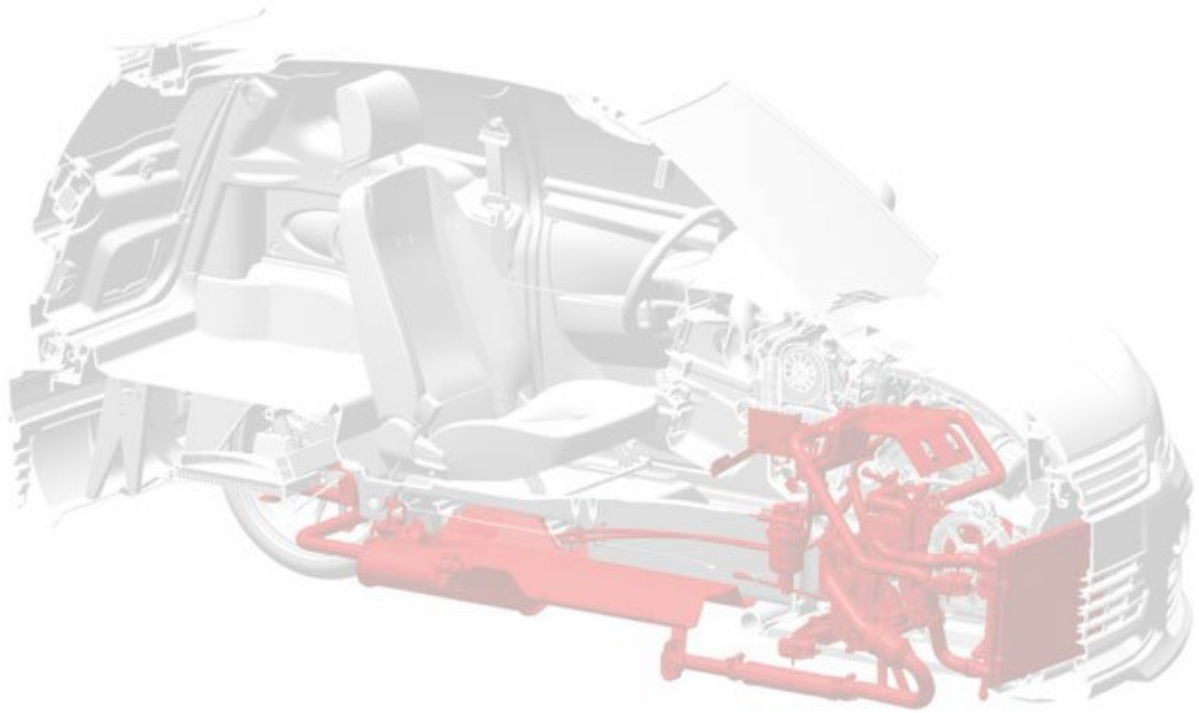


Installation

To install, perform the removal operations in the reverse order.

Using the diagnostic tool, check that the "acc pedal position" is set to 0 % without pressing the pedal.

Engine & fuel supply





* Powertrain: includes the complete engine + inverter unit + variable speed drives - belt + exhaust outlet tube assembly (+ compressor if air conditioning). From point No.1 to point No.17.

Equipment required

Special tools	Quantities	References
Size 13 - 17 - 19 - 30 open-end wrench	1	-
Allen key	1	-
Torx key	1	-
2-post lift	1	-
Strap	1	-
Workshop crane	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Air conditioning refill	1	-

Preliminary procedures

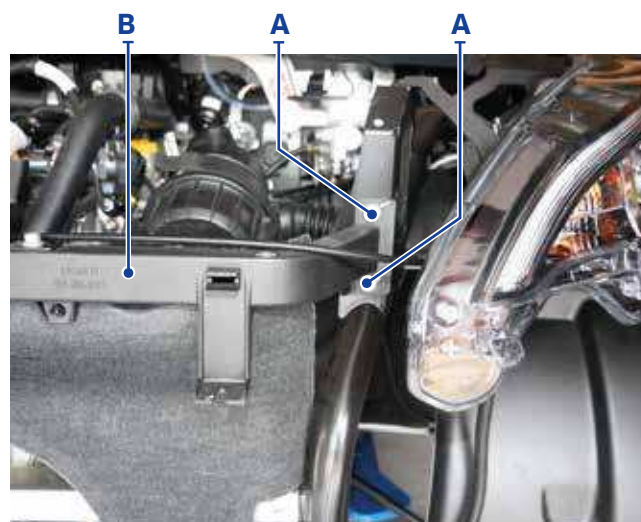
Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Radiator	Removal / Installation	D-3
Compressor belt	Removal / Installation	D-10
Wing inner panel (driver side and passenger side)	Removal / Installation	E-42
Bonnet	Removal / Installation	A-19
Engine harness	Partial removal	E-55
Exhaust hose	Removal / Installation	H-14
Transmission shaft (driver side and passenger side)	Removal / Installation	I-13

Removal procedure

1. Remove the 4 screws **A** from the upper cross-member **B**.
2. Remove the upper cross-member **B**.



2 screws on the passenger side and
2 screws on the driver's side.



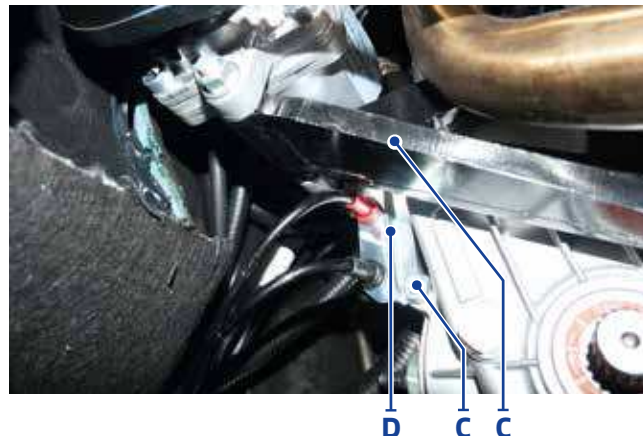
DCI engine

MO5001 powertrain*
MO5002 Dci engine

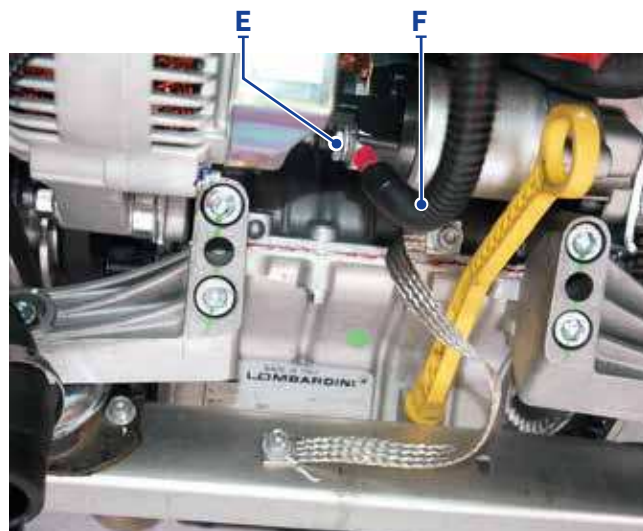
3. Remove the 2 screws **C** from the inverter cable support **D** on the inverter unit.
4. Partially remove the inverter cable support **D**.



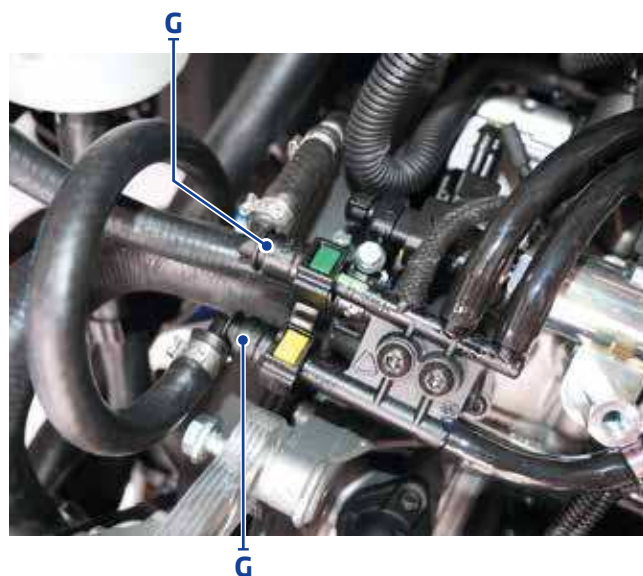
Release the inverter cables from the compensator (removal of the compensator cover for access).



5. Remove the nut **E** securing the starter cable **F**.



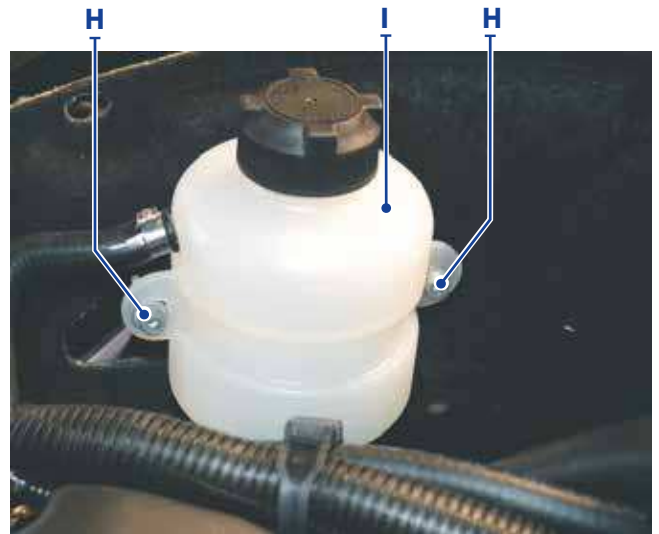
6. Remove the 2 fuel hoses **G**.



DCI engine

MO5001 powertrain*
MO5002 Dci engine

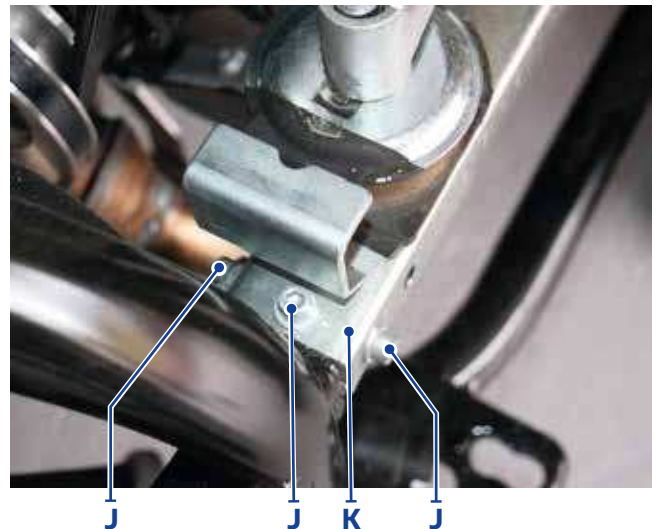
7. Remove the 2 screws **H** from the expansion tank **I**.



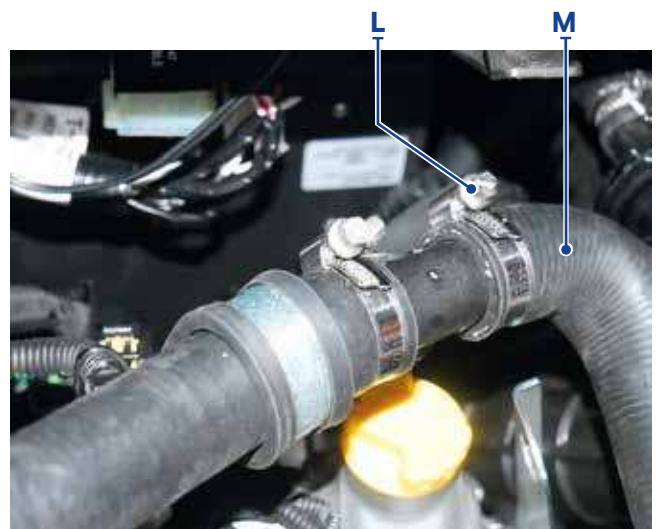
8. Remove the 6 screws **J** from the lower cross-member **K**.



3 screws on the passenger side and
3 screws on the driver's side.



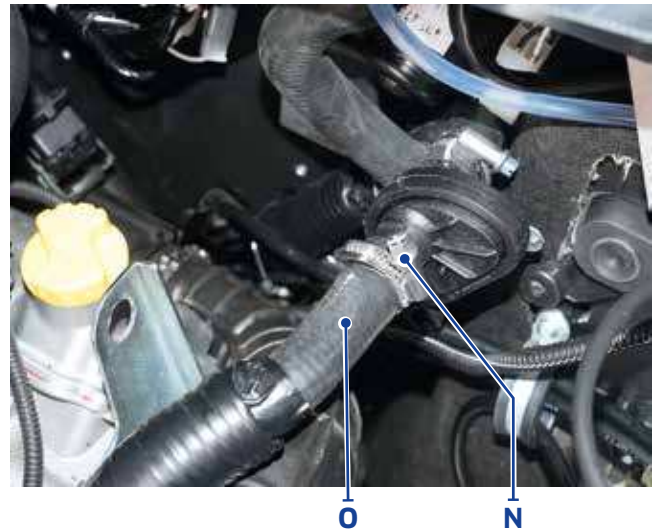
9. Remove the clamp **L** to release the first heater hose **M**.



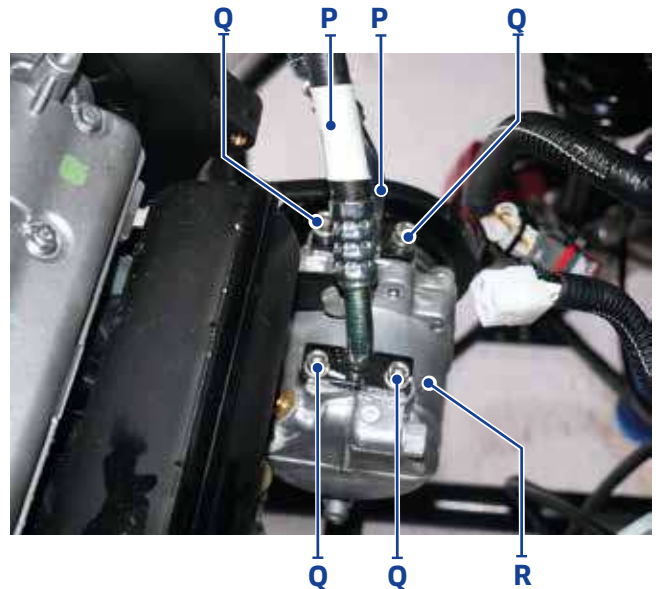
DCI engine

MO5001 powertrain*
MO5002 Dci engine

- 10.** Remove the clamp **N** to release the second heater hose **O**.



- 11.** Remove the 4 screws **Q** from the 2 air conditioning hoses **P** fitted on the compressor **R**.



- 12.** Partially remove the 2 air conditioning hoses **P**.
13. Check the presence of the gaskets **S**.



DCI engine

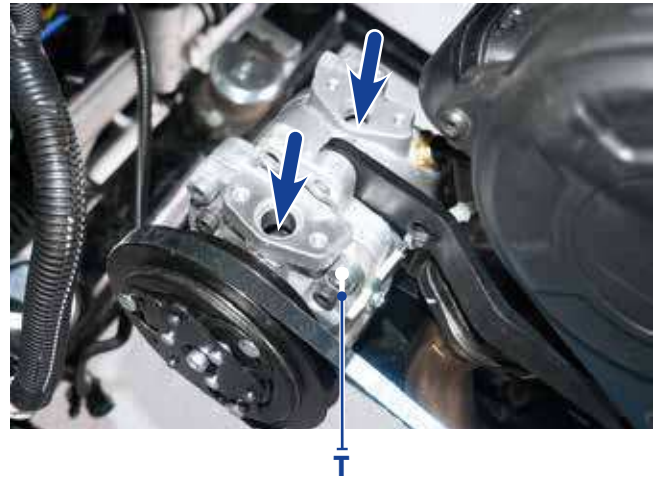
MO5001 powertrain*
MO5002 Dci engine

- 14.** Seal the 2 ports of the air conditioning compressor **T**.

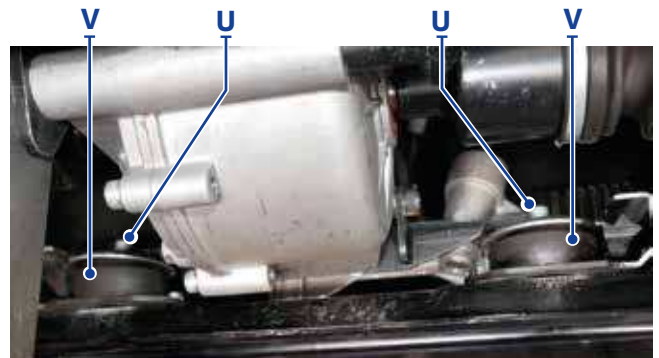


RISK

To prevent fluid ingress and for protection against dust.



- 15.** Remove the 2 screws **U** from the rear rubber mountings **V**.



- 16.** Use straps on the anchoring points of the engine and fit them on the workshop crane hook.



DCI engine

MO5001 powertrain*
MO5002 Dci engine

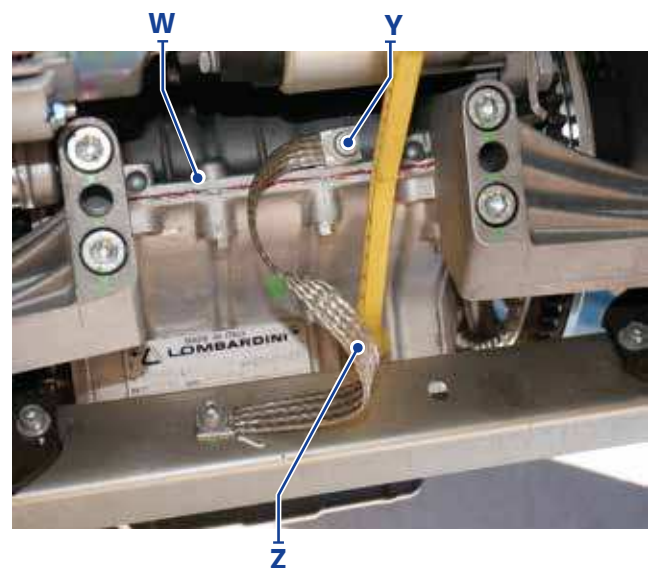
- 17.** Remove the powertrain **W** from the engine compartment, using the workshop crane.



- 18.** Remove the screw **X** from the compressor **T**.
19. Remove the compressor **T**.



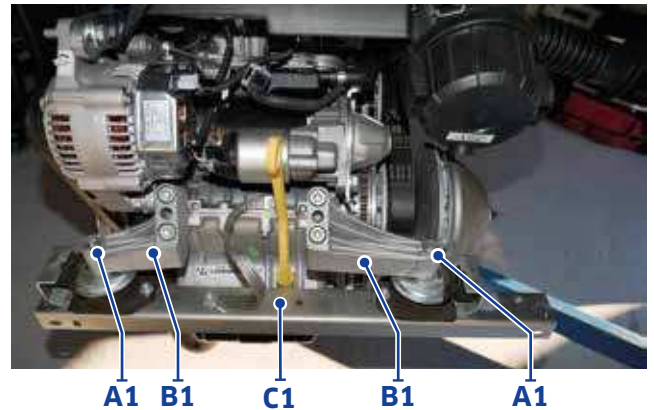
- 20.** Remove the screw **Y** from the earth braid **Z** fitted on the powertrain **W**.



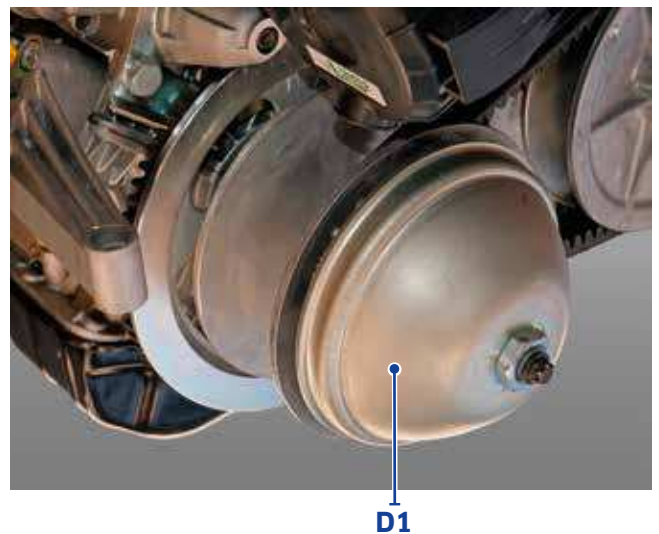
DCI engine

MO5001 powertrain*
MO5002 Dci engine

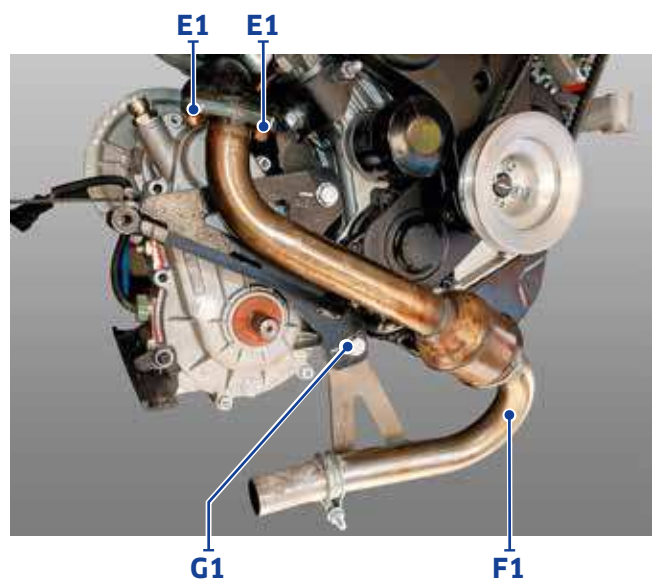
- 21. Remove the 2 screws **A1** fitted on the cross-member supports **B1**.
- 22. Remove the cross member **C1**.



- 23. Remove the driving pulley **D1** (see procedure VA5000).



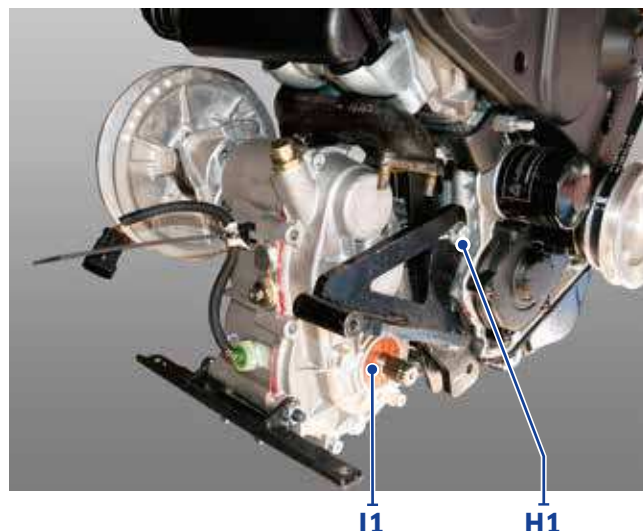
- 24. Remove the 2 screws **E1** from the catalytic converter **F1**.
- 25. Remove the screw **G1** from the catalytic converter **F1**.
- 26. Remove the catalytic converter **G1** with its seal.



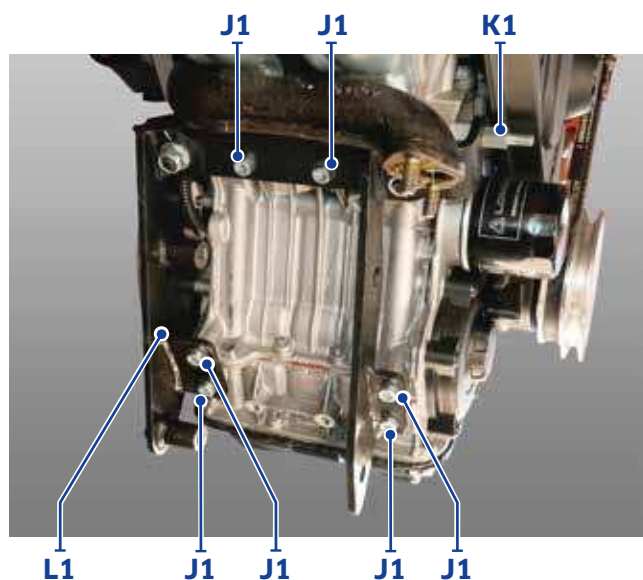
DCI engine

MO5001 powertrain*
MO5002 Dci engine

- 27. Remove the screw **H1** securing the inverter unit **I1**.
- 28. Remove the inverter unit **I1**.



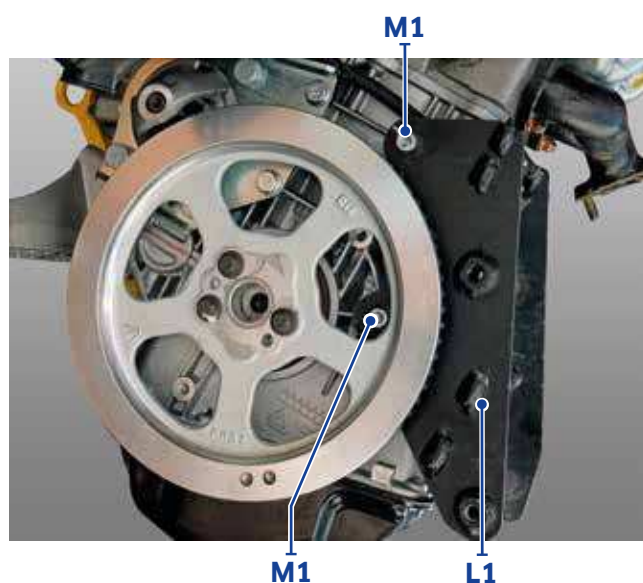
- 29. Remove the 6 screws **J1** from the inverter unit support **L1**.
- 30. Remove the spacer **K1** from the inverter unit support **L1**.



- 31. Remove the 2 screws **J1** from the inverter unit support **L1**.
- 32. Remove the inverter unit support **L1**.



The 2 screws **M1** are shorter than the 6 screws **J1** for step 29, make sure to use the right ones during the installation operation.



DCI engine

MO5001 powertrain*
MO5002 Dci engine

33. Remove the engine **N1**.



N1

Installation

To install, perform the removal operations in the reverse order.



Air conditioning gas: 500 gr type R134.



It is necessary to drain the cooling circuit after filling, check that the fan starts once the engine temperature increases, and check the level of fluid once the engine is cold.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Nut **F**: tightening torque 45 Nm.



RISK

Draining and filling of the air conditioning circuit.
To avoid any risk of contamination, contact an approved dealer.



RISK

Replace the air conditioning hose gaskets after each operation.



Equipment required

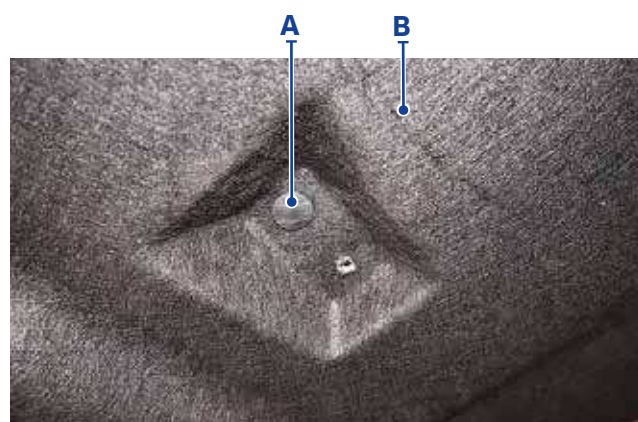
Special tools	Quantities	References
Size 10 wrench	1	-
Size 13 wrench	1	-
Size 17 wrench	1	-
2-post lift	1	-

PPE		
Gloves	1	-

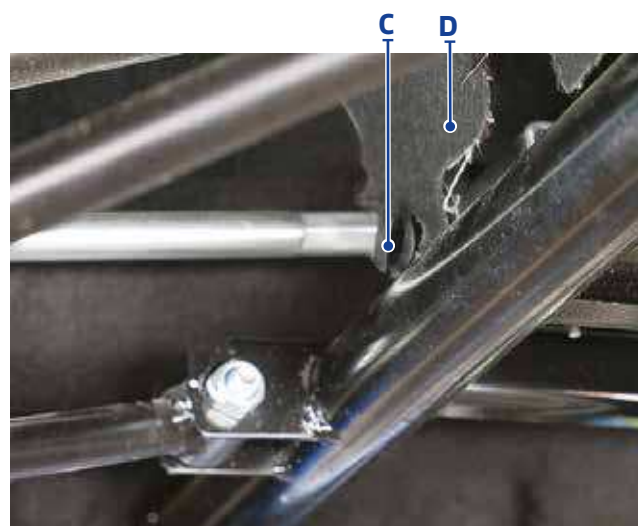
Removal procedure

Under the vehicle:

1. Remove the plasti-rivet **A** on the engine sound deadening pad **B**.
2. Remove the engine sound-deadening pad **B**.



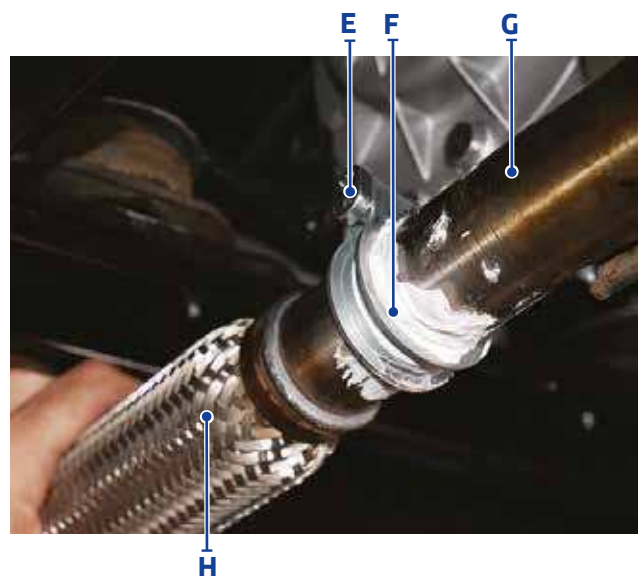
3. Remove the plasti-rivet **C** to partially remove the mudguard **D**.



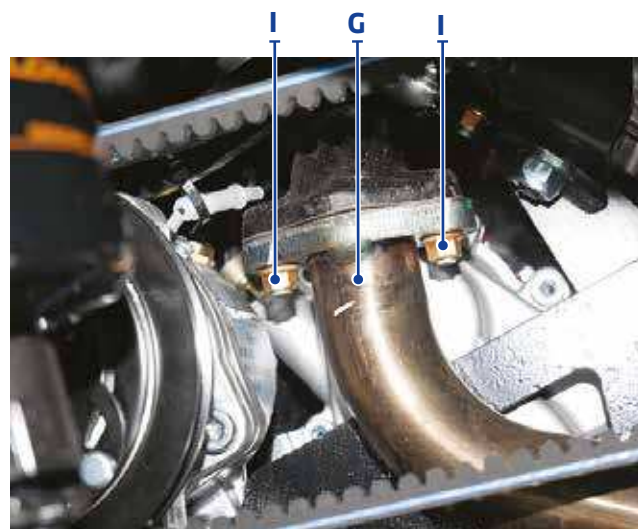
Dci exhaust outlet pipe

EC5000

4. Loosen the screw **E** of the clamp **F** securing the catalytic converter **G** to the hose **H**.



5. Remove the 2 nuts **I** of the catalytic converter **G** on the exhaust manifold.



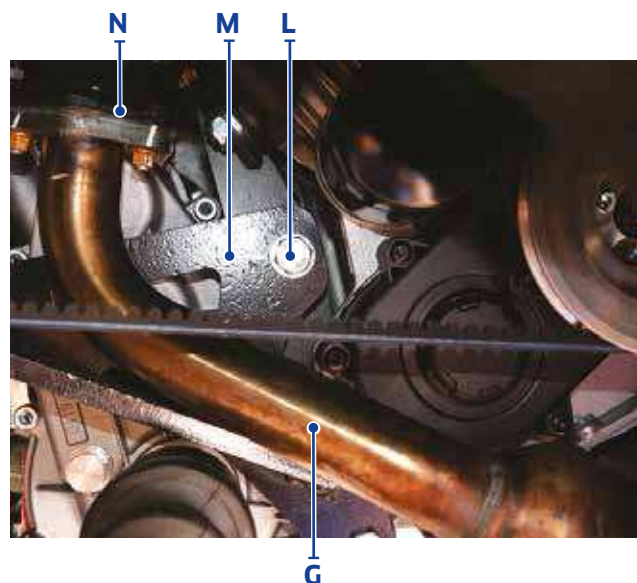
6. Remove the screw **J** on the front tube lug **K**.



Dci exhaust outlet pipe

EC5000

7. Remove the screw **L** from the unit support **M**.
8. Remove the catalytic converter **G** and collect the gasket **N**.



Installation

To install, perform the removal operations in the reverse order.

1. Systematic replacement of the gasket **N** before repositioning the catalytic converter **G**.



During the installation, respect the tightening torques indicated on **page 9**.



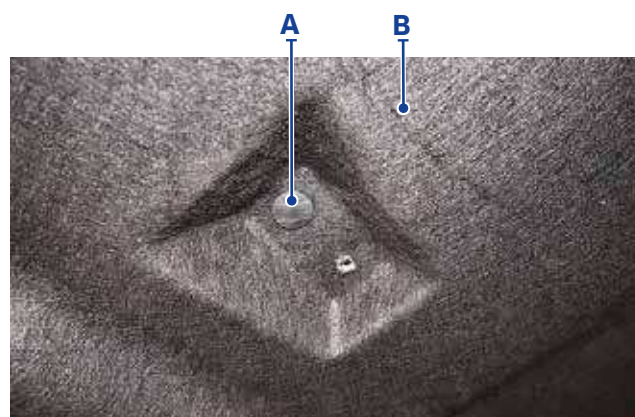
Equipment required

Special tools	Quantities	References
Size 10 wrench	1	-
2-post lift	1	-
Axle stand	1	-
PPE		
Gloves	1	-

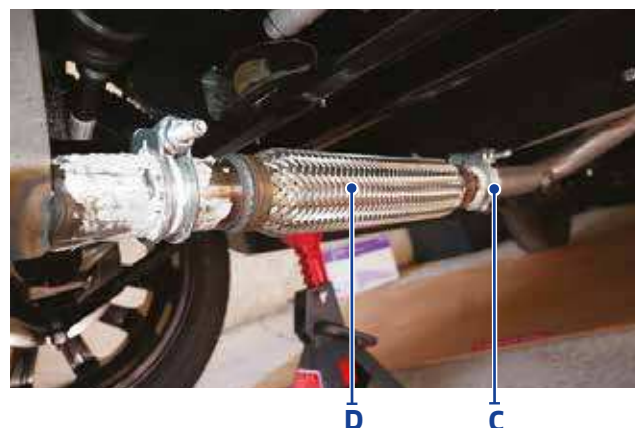
Removal procedure

Under the vehicle:

1. Remove the plasti-rivet **A** on the engine sound deadening pad **B**.
2. Remove the engine sound-deadening pad **B**.



3. Loosen the clamp **C** on the exhaust hose **D**.



Exhaust line

EC5002

4. Remove the 2 rubber mountings **E**.



5. Pull on the exhaust line **F** to separate it from the rubber mounting **G**.

6. Remove the exhaust line **G**.



Installation

To install, perform the removal operations in the reverse order.



It is recommended to grease the rubber mountings to insert the exhaust line supports.



RISK
Clamp **C**: tightening torque 27 Nm.



Equipment required

Special tools	Quantities	References
Allen key	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

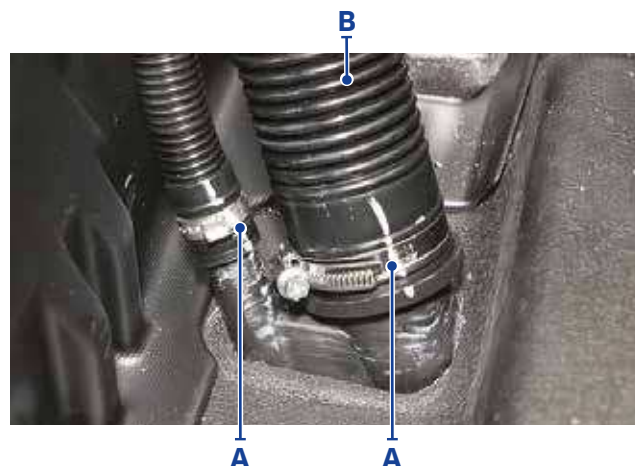
Operations	Procedure types	Pages
Ignition off	-	-
Left side boot fabric	Partial removal	<?>

Removal procedure

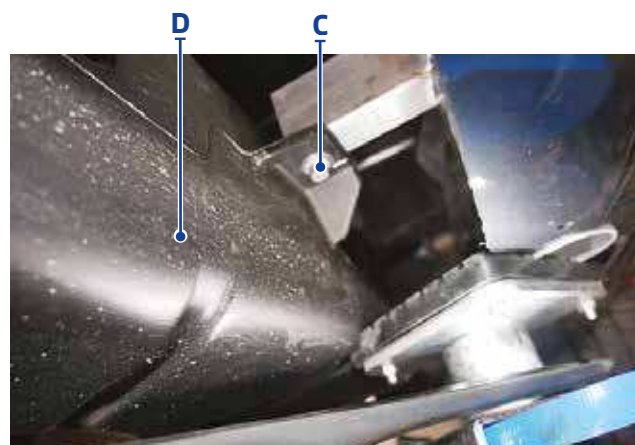
- Loosen the clamps **A**, disengage the hose from the tube **B**.



Before partially removing the tube make sure that the level of fuel is not too high. Drain if required.

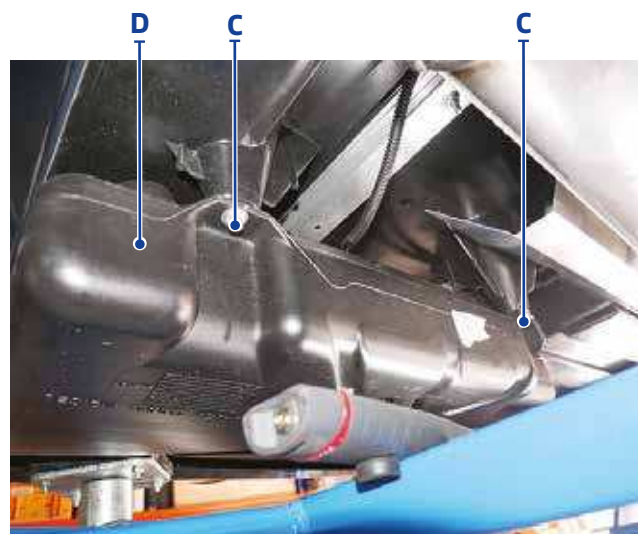


- Remove the 3 screws **C** from the fuel tank **D**.

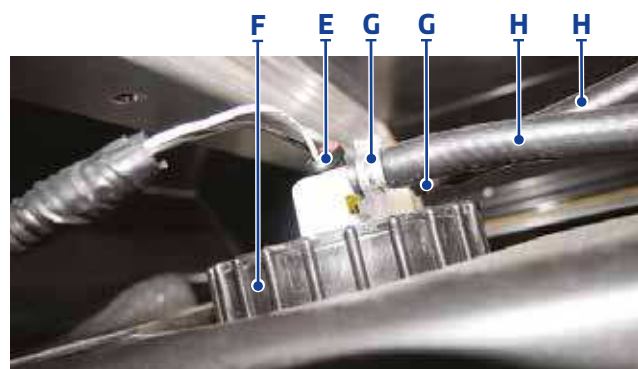


Fuel tank

MO5029



3. Disconnect the connector **E** of the fuel tank gauge **F**.
4. Remove the 2 clamps **G** from the 2 hoses **H**.
5. Disengage the 2 hoses **H**.
6. Remove the tank **D**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



RISK

Screw **A**: tightening torque 3 Nm.



Equipment required

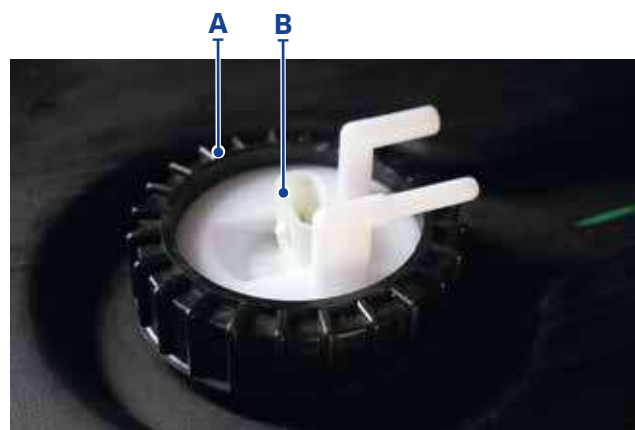
PPE	Quantities	References
Gloves	1	-
Consumables / Ingredients		
Fuel tank gauge	1	-

Preliminary procedures

Operations	Procedure types	Pages
Fuel tank	Removal / Installation	H-16

Removal procedure

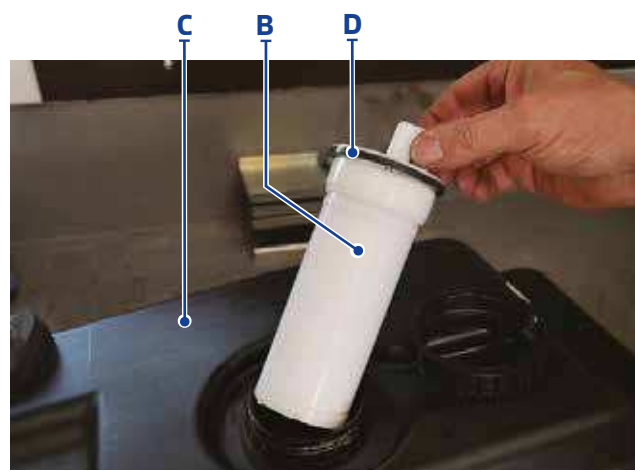
1. Manually loosen the nut **A** of the fuel tank gauge **B**.



2. Take the gauge **B** out of the fuel tank **C**.

3. Gasket **D**.

4. Remove the gauge **B**.



Installation

To install, perform the removal operations in the reverse order.



Check that the gasket **D** is in place during the gauge installation operation.
Make sure the tubes on which the hoses are mounted are properly orientated.



Equipment required

Special tools	Quantities	References
Collar screwdriver	1	-
Flat screwdriver	1	-
PPE		
Gloves	1	-
Consumables / Ingredients		
Clamps	2	-

Preliminary procedures

Operations	Procedure types	Pages
Boot fabric on the driver's side	Removal / Installation	<EX>

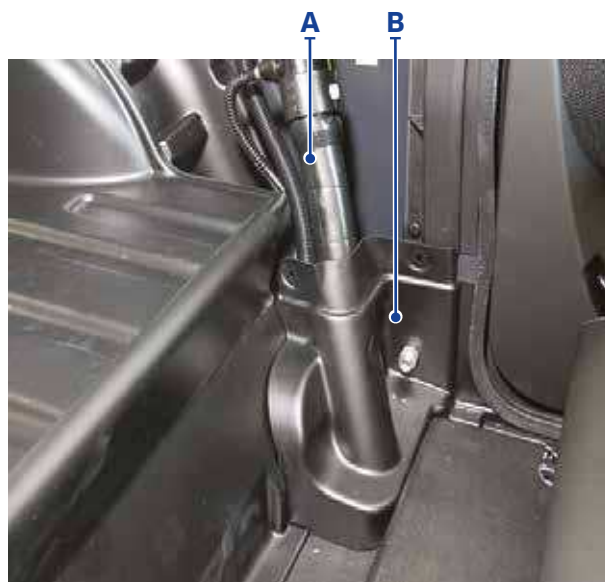
Removal procedure

Inside the vehicle:

1. Remove the protective cover **B** on the tube **A**.



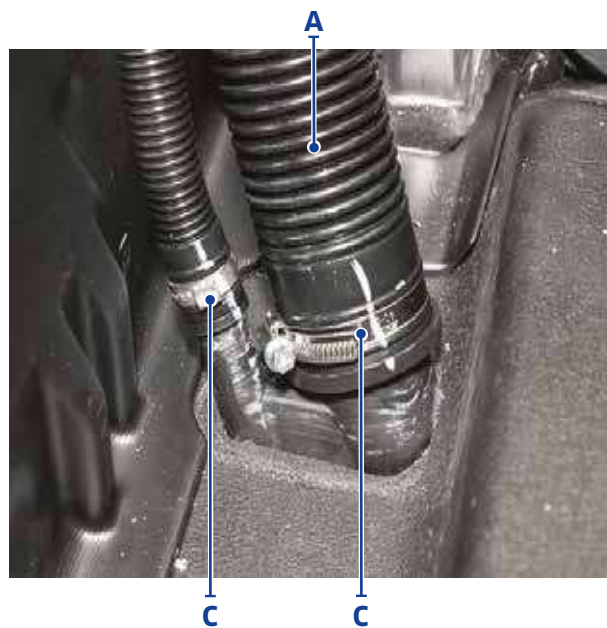
Check the level of fuel in the tank.
If required, partially drain the tank.



Fuel tank filling tube

MO5030

2. Loosen the clamps **C**, disengage the hoses from the tube **A**.



Outside the vehicle:

3. Remove the tank filling cap **D**.



4. To remove the tank cap trim **E**, enter the vehicle.

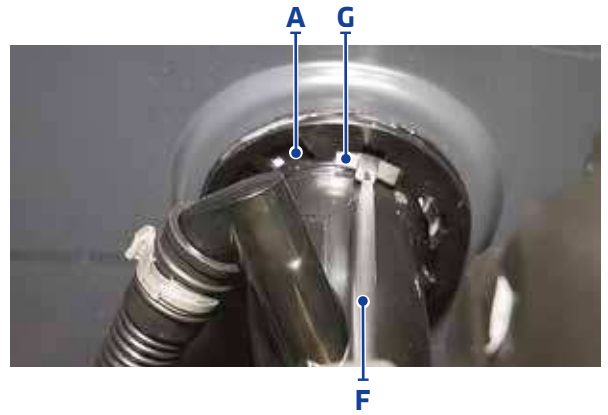


Fuel tank filling tube

MO5030

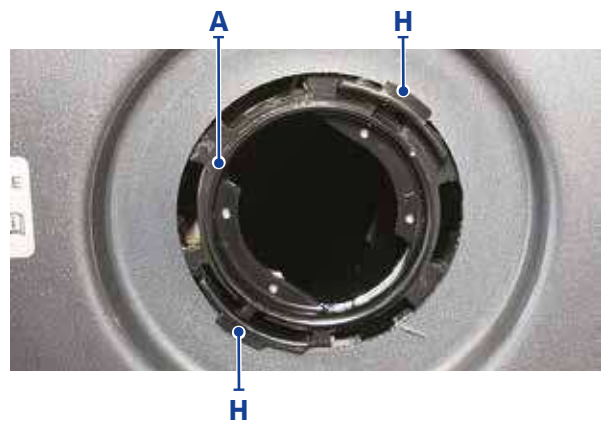
Inside the vehicle:

5. Using a screwdriver **F**, press on the 4 tabs of the trim **G** to unclip the tube **A**.



Outside the vehicle:

6. Using a flat screwdriver, unclip the 2 retaining tabs **H** of the tube **A**.
7. Remove the tube **A**.



Installation procedure

To install, perform the removal operations in the reverse order.



RISK

Screw **C**: tightening torque 3 Nm.



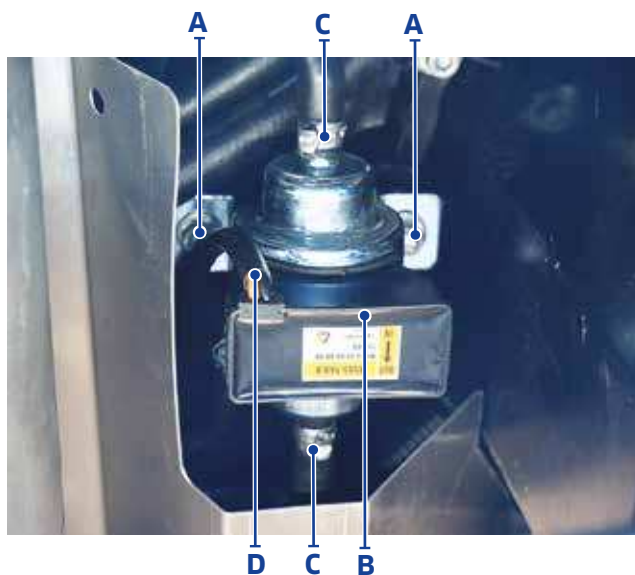
Equipment required

Special tools	Quantities	References
Size 10 wrench	1	-
PPE		
Gloves	1	-

Removal procedure

Under the vehicle:

1. Remove the 2 screws **A** from the electric pump **B**.
2. Cut or unscrew the clamps **C** according to the type of assembly.
3. Pull without forcing on the harness **D** of the electric pump to disconnect the connector.
4. Remove the electric pump **B**.



Installation

To install, perform the removal operations in the reverse order.



CAUTION

Check the pump assembly position: there are arrows on the electric pump inlet and outlet to indicate the fuel flow direction (inlet on the tank side and outlet on the engine side).



During the installation, respect the tightening torques indicated on [page 9](#).



Equipment required

Special tools	Quantities	References
Allen key	1	-
2-post lift	1	-
Cutting pliers	1	-
Container	1	-

PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	References
Exhaust line	Removal - Installation	H-14

Removal procedure

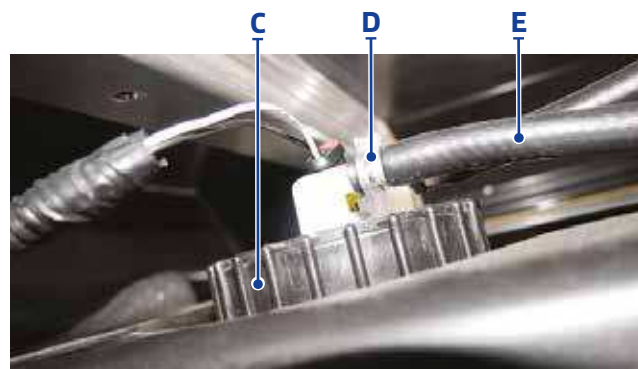
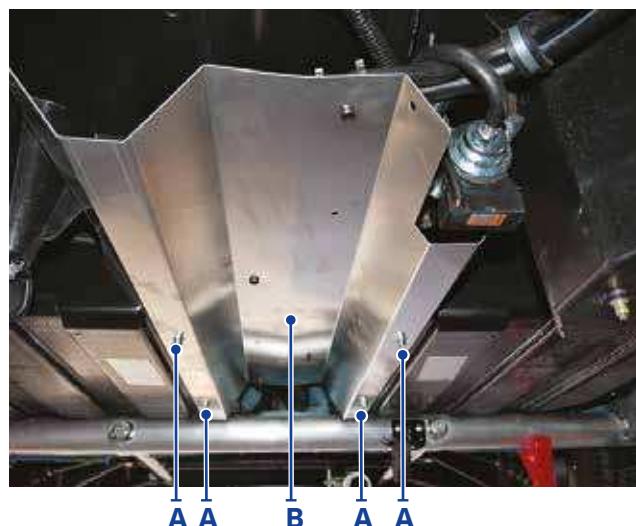
Fuel return hose

Under the vehicle:

1. Remove the 4 screws **A** from the exhaust heat shield **B**.
2. Remove the exhaust heat shield **B**.
3. At the base of the gauge **C**, remove the clamp **D** using an Allen key.
4. Disengage the fuel return hose **E** mounted on the gauge **C**.



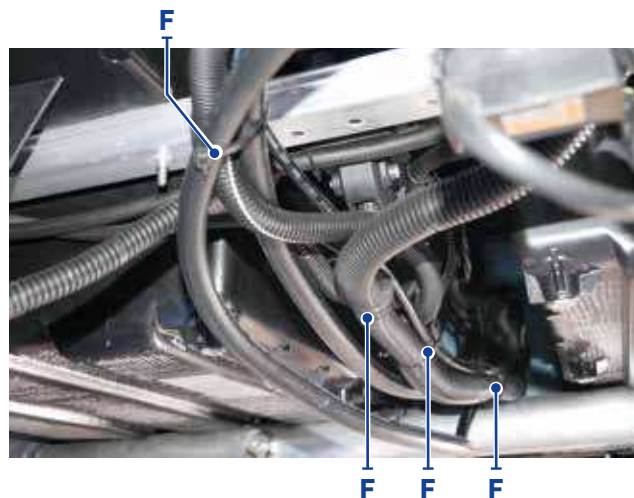
It is recommended to use a container to collect the fuel drips.



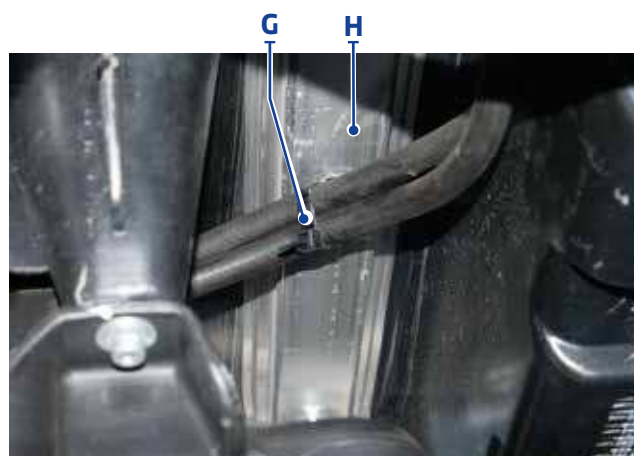
Fuel hoses

MO5032

5. Cut the cable ties **F** working towards the engine.



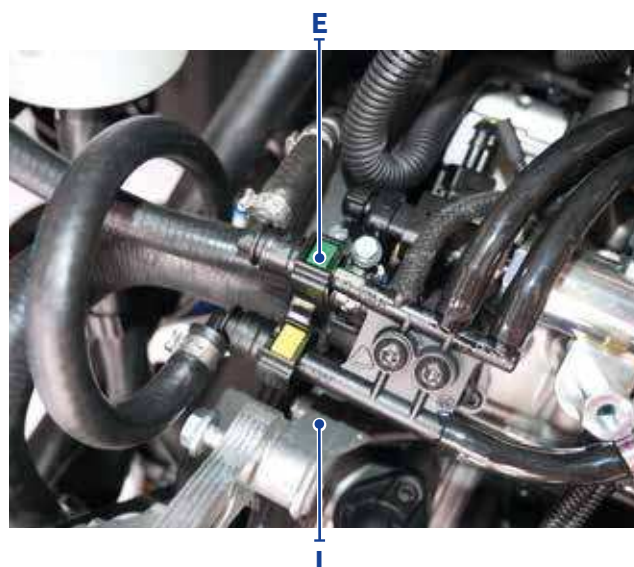
6. Cut the cable tie **G** under the cross-member **H**.



Engine compartment:

7. Unclip the fuel return hose **E** (green) fitted on the engine **I**.

8. Remove the fuel return hose **E**.



H

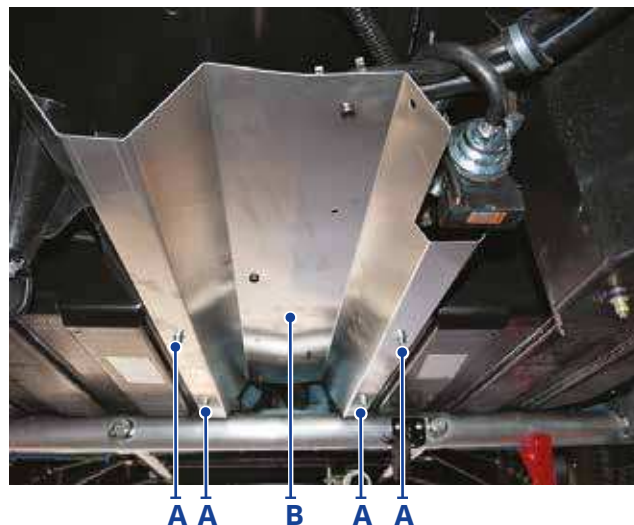
Fuel hoses

MO5032

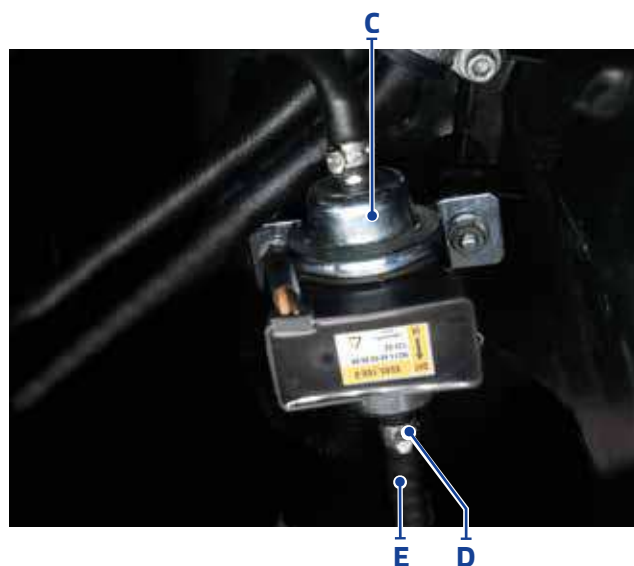
Engine supply hose

Under the vehicle:

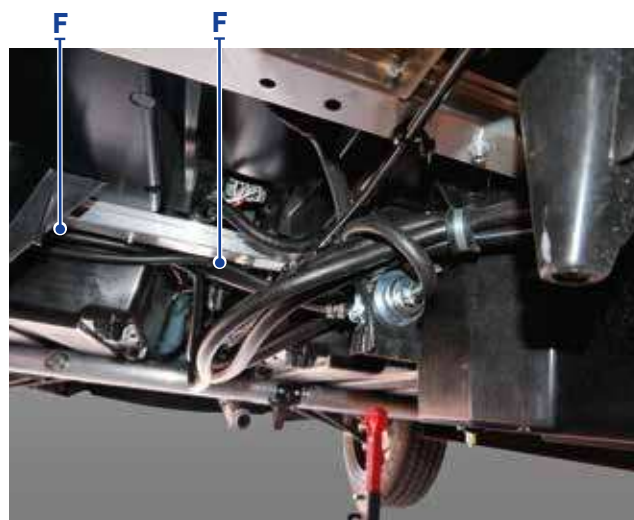
1. Remove the 4 screws **A** from the exhaust heat shield **B**.
2. Remove the exhaust heat shield **B**.



3. On the electric pump **C** remove the clamp **D** (on the side indicated by the arrow) using an Allen key.
4. Disengage the engine supply hose **E** mounted on the electric pump **C**.



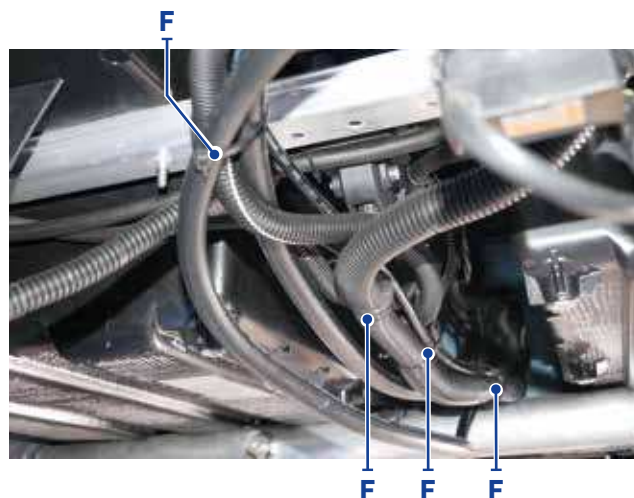
5. Cut the cable ties **F**.



Fuel hoses

MO5032

6. Cut the cable ties **F** working towards the engine.



Engine compartment:

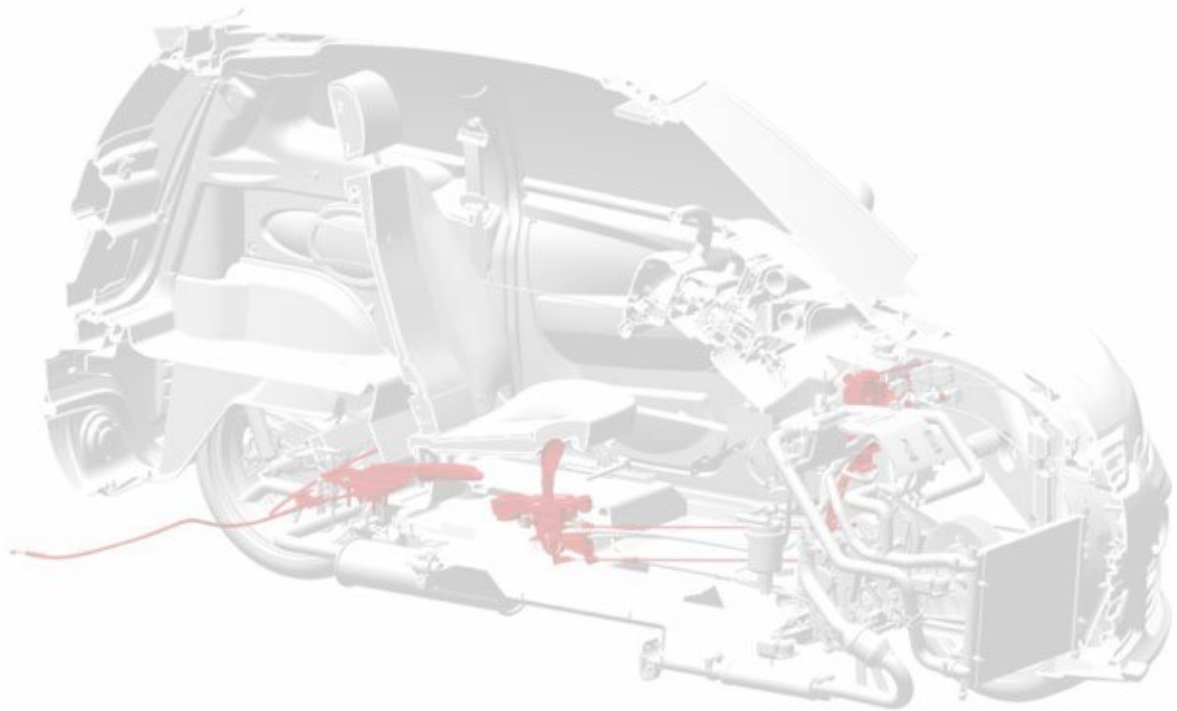
7. Unclip the engine supply hose **E** (yellow) mounted on the fuel filter **G**.
8. Remove the engine supply hose **E**.



Installation

To install, perform the removal operations in the reverse order.

Transmission





Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
Size 19 hex socket	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Exhaust line	Removal / Installation	H-14

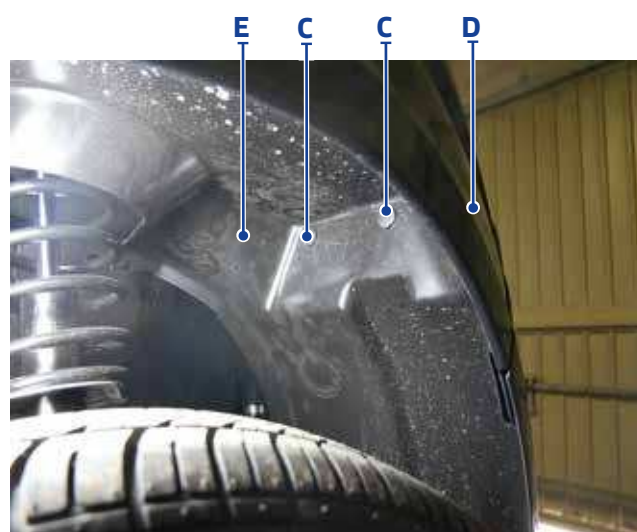
Removal procedure

Outside the vehicle:

1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



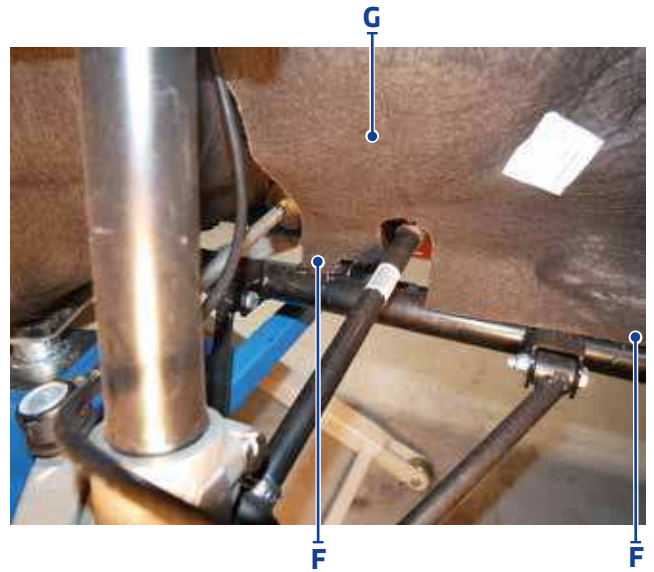
3. Remove the 2 plasti-rivets **C** fitted on the bumper **D** and partially separate the mudguard **E**.



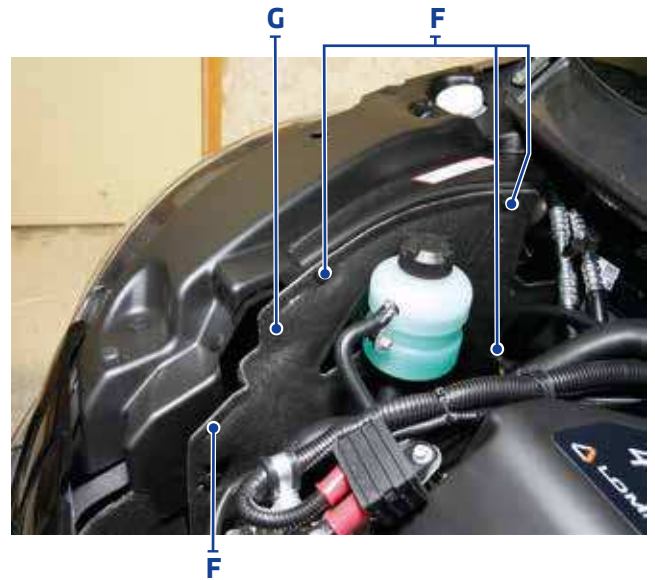
Inverter cable

B05014 (1 or 2 cables)

4. Remove the 2 plasti-rivets **F** from the edge guard **G** on the passenger side.



5. Remove the 4 plasti-rivets **F** from the edge guard **G** on the passenger side.



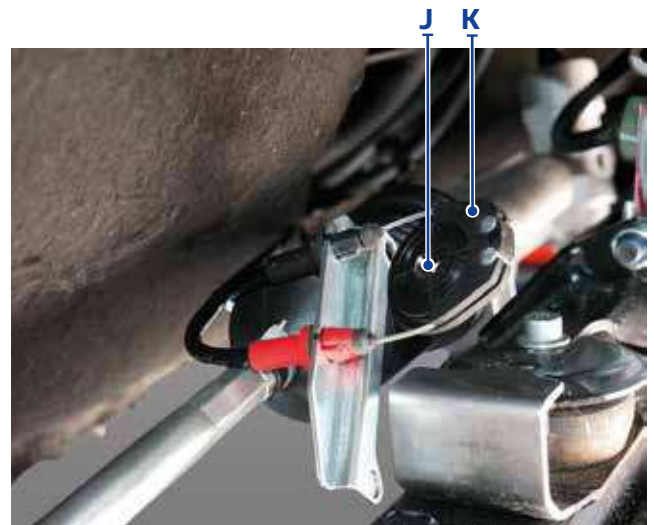
6. Remove the 2 screws **H** from the sheath end support **I**.



Inverter cable

B05014 (1 or 2 cables)

- 7. Remove the torx screw **J** securing the compensator **K**.
- 8. Remove the compensator **K**.



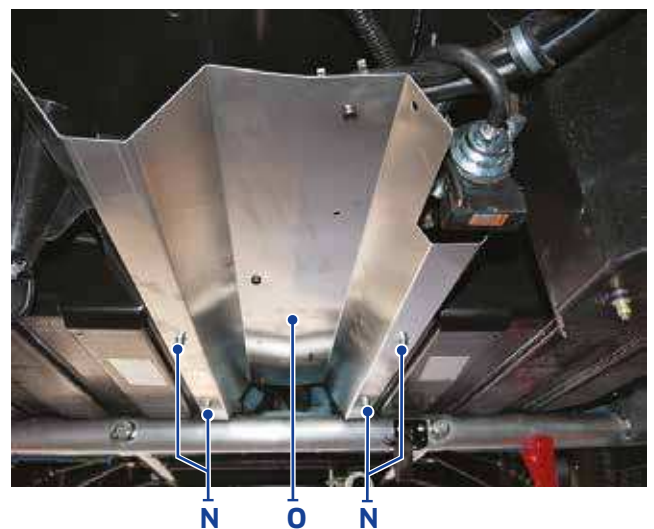
Inside the vehicle:

- 9. Remove the screw **L** from the gear knob **M**.
- 10. Remove the gear knob **M**.



Under the vehicle:

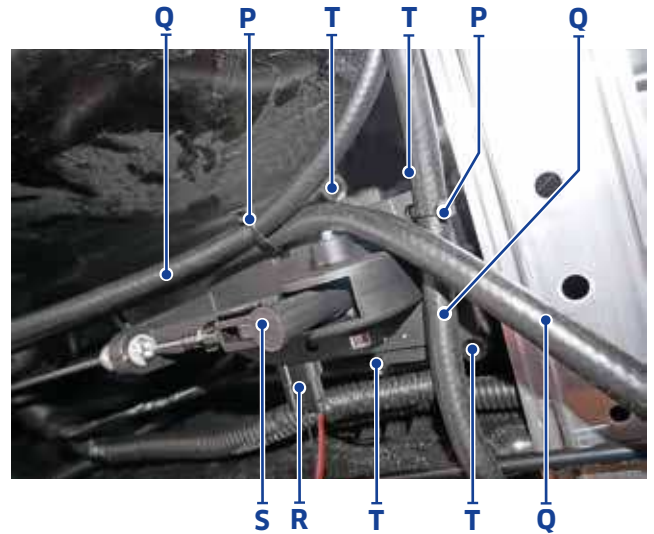
- 11. Remove the 4 screws **N** from the exhaust heat shield **O**.
- 12. Remove the exhaust heat shield **O**.



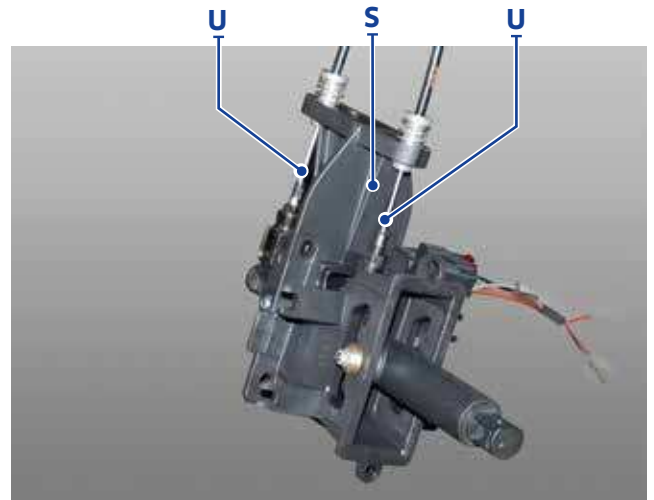
Inverter cable

BO5014 (1 or 2 cables)

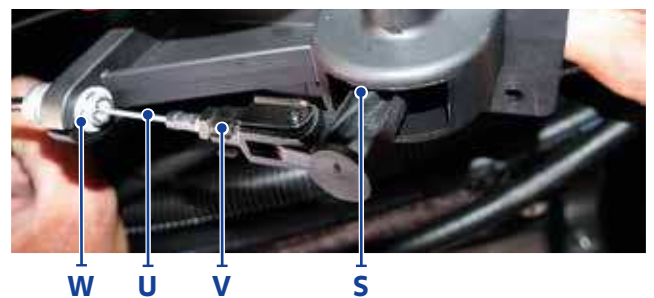
13. Cut the 2 cable ties **P**; pull out the 3 hoses **Q**.
14. Disconnect the connector **R** from the inverter lever **S**.
15. Remove the 4 screws **T** from the inverter lever **S**.



View of the two inverter cables **U** on the inverter lever **S**.



16. Unfasten the 2 clips **V** from the inverter lever **S**.
17. Unfasten the 2 circlips **W** securing the 2 inverter cables **U**.
18. Remove the 2 inverter cables **U**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on [page 9](#).



RISK
Nuts **A**: tightening torque 45 Nm.



The compensator retaining screw on the inverter unit must be fitted with Loctite 243 type thread lock and be tightened to torque value 4 Nm.



Equipment required

Special tools	Quantities	References
Flat screwdriver	1	-
Allen key	1	-
Size 19 wrench	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Ignition off + parking brake shunt fuse removed	-	-
Exhaust line	Removal / Installation	H-14

Removal procedure

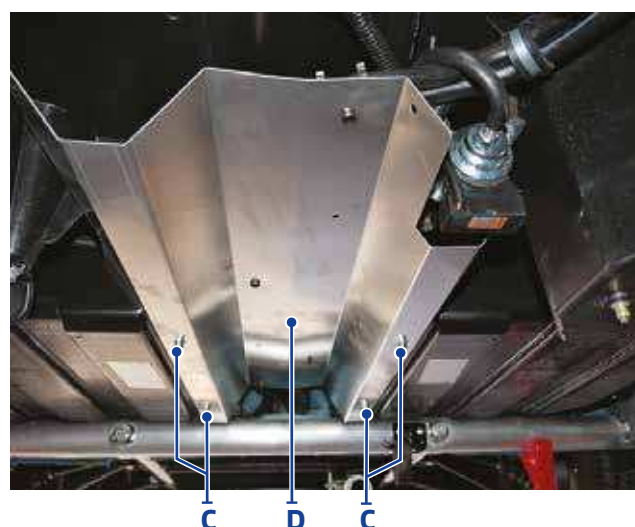
Inside the vehicle:

1. Remove the screw **A** from the inverter lever knob **B**.
2. Remove the inverter lever knob **B**.



Under the vehicle:

3. Remove the 4 screws **C** from the exhaust heat shield **D**.
4. Remove the exhaust heat shield **D**.



Inverter lever

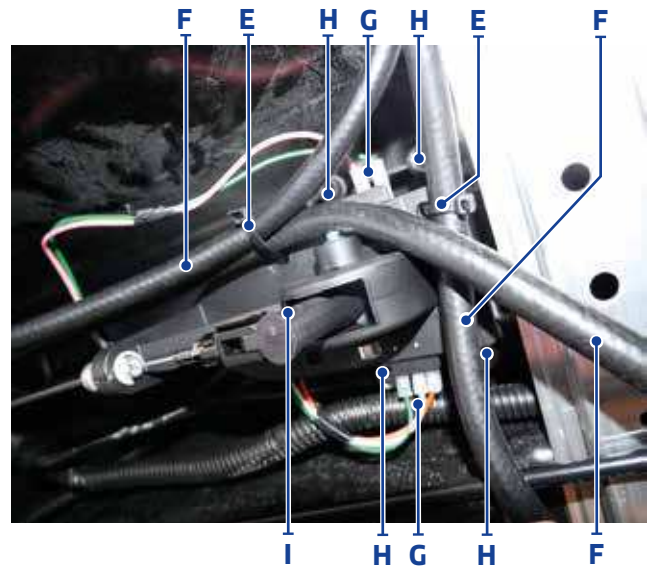
B05017

5. Cut the 2 cable ties **E**; pull out the 3 hoses **F**.
6. Disconnect the 2 connectors **G** from the inverter lever **I**.

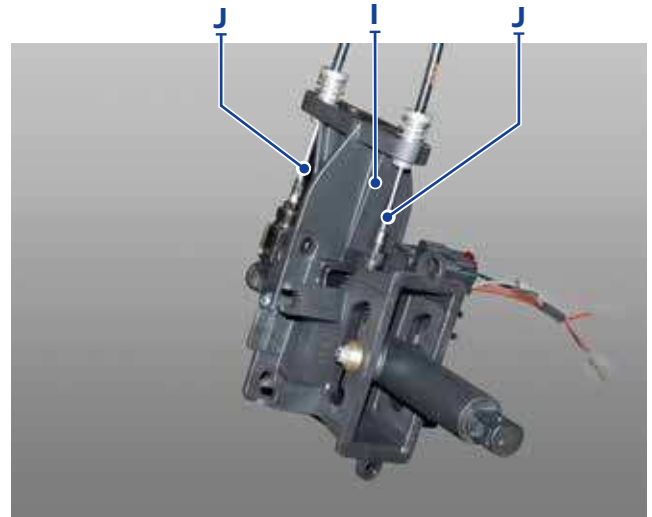


Correctly identify the position and the order of each wire for each connector **G** before removing them.

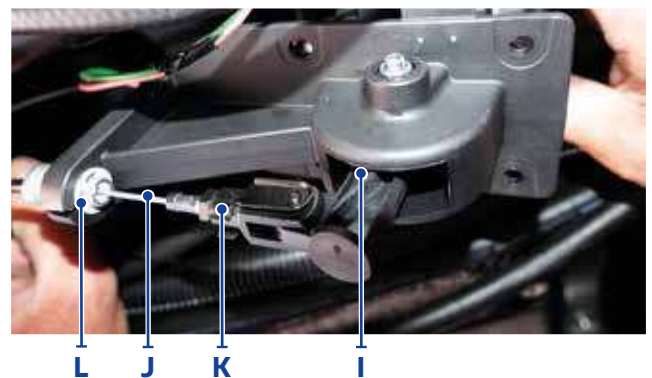
7. Remove the 4 screws **H** from the inverter lever **I**.



View of the two inverter cables **J** on the inverter lever **I**.



8. Unfasten the 2 clips **K** from the inverter lever **I**.
9. Unfasten the 2 circlips **L** securing the 2 inverter cables **J**.
10. Partially remove the 2 inverter cables **J**.
11. Remove the inverter lever **I**.



Installation

To install, perform the removal operations in the reverse order.



During the installation, respect the tightening torques indicated on **page 9**.



Equipment required

Special tools	Quantities	References
Size 17 - 19 - 24 wrench	1	-
Allen key	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Transmission	Removal / Installation	I-13

Removal procedure

Inside the vehicle:

1. Manually operate the bonnet opening lever **A**.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**.



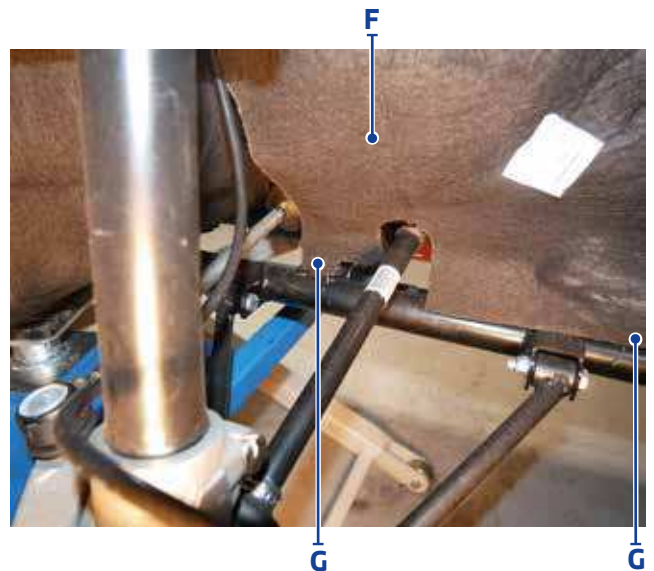
Inverter unit

B05000

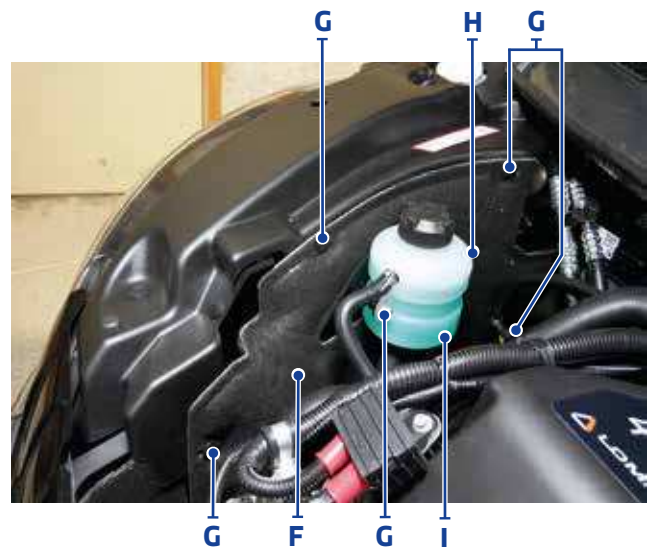
3. Once the bonnet is open, it is recommended to use the support rod **D**.
4. Remove the protective cover on the engine **E**.



5. Remove the 2 plasti-rivets **G** on the edge guard **F**.



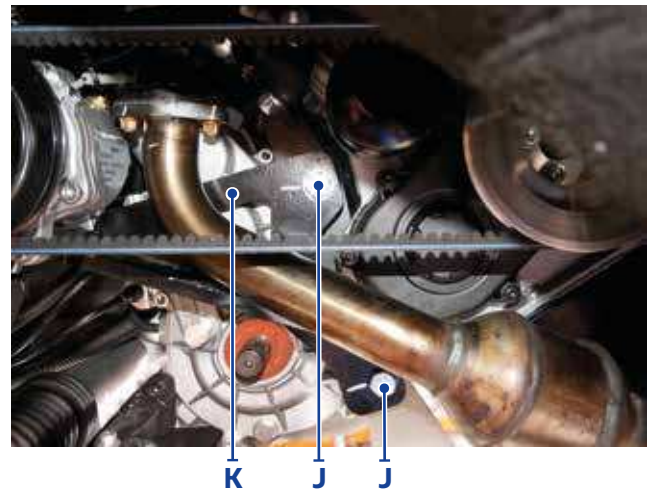
6. Remove the 2 screws **H** from the expansion tank **I**.
7. Partially remove the expansion tank **I**.
8. Remove the 4 plasti-rivets **G** on the edge guard **I**.
9. Remove the edge guard **I**.



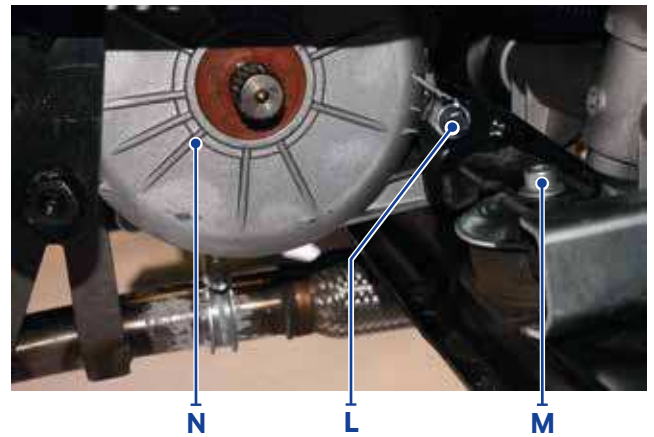
Inverter unit

B05000

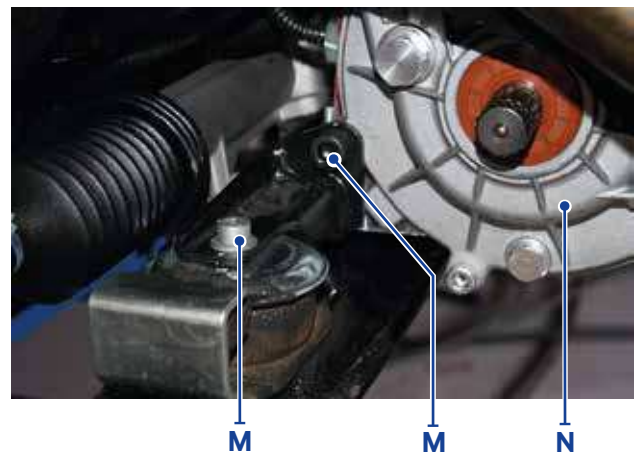
- 10.** Remove the 2 screws **J** from the inverter unit support **K**.



- 11.** Remove the nut **L** and the screw **M** from the inverter unit support **N** on the driver's side.



- 12.** Remove the 2 screws **M** from the inverter unit support **N** on the passenger side.

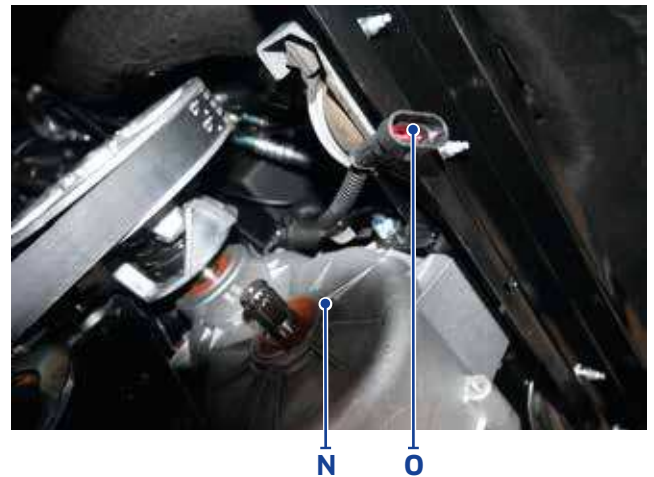


Inverter unit

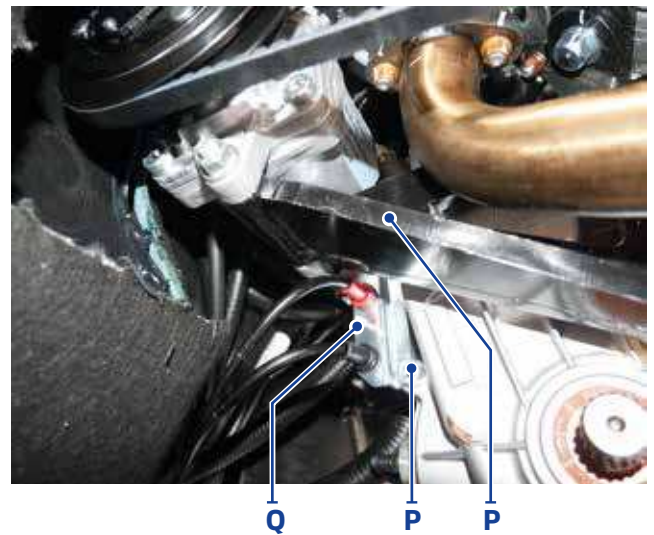
B05000

Under the vehicle:

- 13.** Disconnect the connector **O** from the speed sensor of the inverter unit **N**.



- 14.** Remove the 2 screws **P** from the inverter cable support **Q**.
- 15.** Partially remove the inverter cable support **Q**.



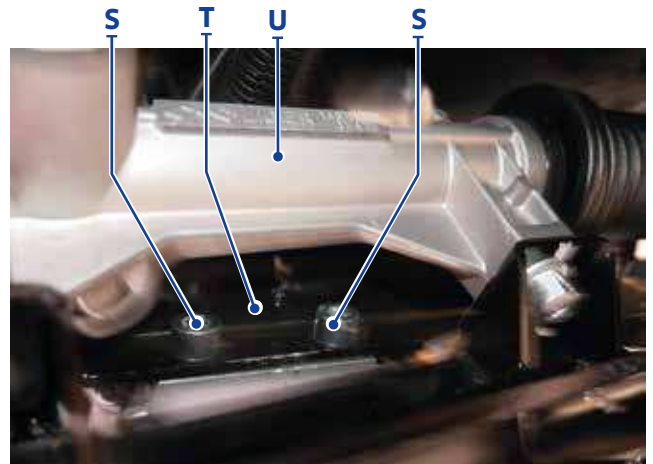
- 16.** Remove the selector shaft compensator **R** on the inverter unit **N**.



Inverter unit

B05000

17. Remove the 2 screws **S** from the rear unit support **T** located under the rack **U**.
18. Remove the rear unit support **T**.
19. Remove the inverter unit **N**.



Installation

To install, perform the removal operations in the reverse order.

1. Check that the key **V** and the spacer **W** are in place on the input shaft of the inverter unit **N**.



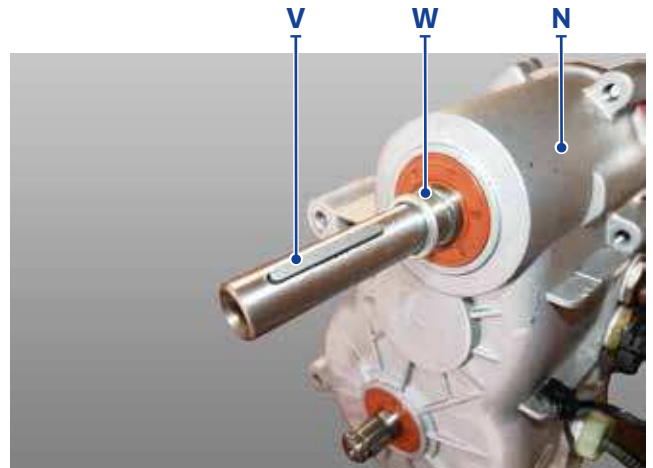
Quantity of oil in the inverter unit 0.8 L / type: SAE 80W90



During the installation, respect the tightening torques indicated on [page 9](#).



The compensator retaining screw **R** on the inverter unit must be fitted with Loctite 243 type thread lock and be tightened to torque value 4 Nm.



RISK

Screw **J**: tightening torque 67 Nm.



RISK

Screw-nut **L - M**: tightening torque 23 Nm.



0.40 h (TR5000)

0.80 h (TR5001)

Transmission shaft

TR5000 (1 side)

TR5001 (2 sides)



Equipment required

Special tools	Quantities	References
Size 24 wrench	1	-
Size 19 hex socket	1	-
Transmission release fork	1	-
2-post lift	1	-
PPE		
Gloves	1	-

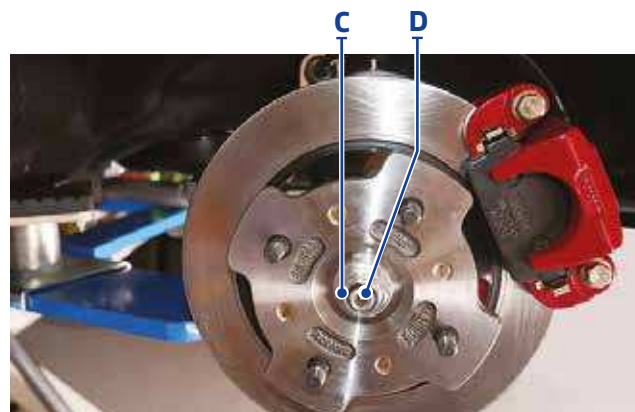
Removal procedure

Outside the vehicle:

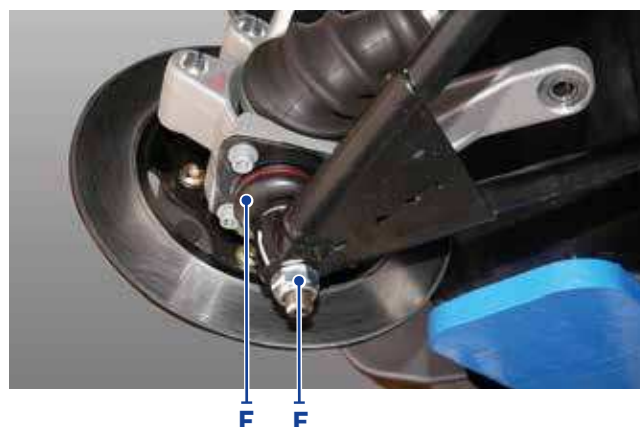
1. Remove the 4 screws **A** from the wheel **B**.
2. Remove the wheel **B**.



3. Remove the centre nut **C** from the transmission shaft **D**.



4. Loosen the nut **E** from the suspension ball joint **F**.



Transmission

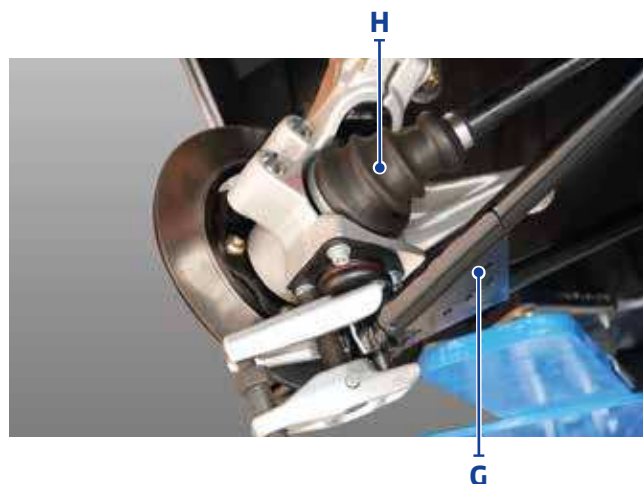
Transmission shaft

TR5000 (1 side)

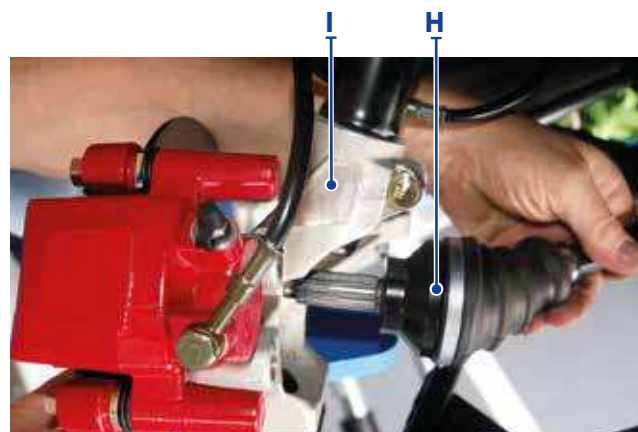
TR5001 (2 sides)

5. Use the ball joint extractor to remove the suspension wishbone **G**.

6. Partially remove the transmission shaft **H**.

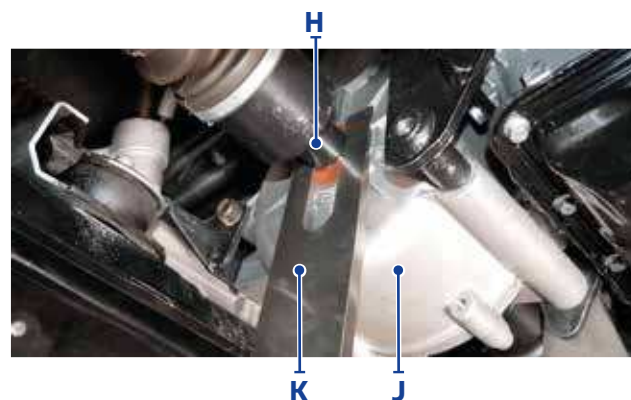


7. Separate the transmission shaft **H** from the hub assembly **I**.



8. Remove the transmission shaft **H** from the inverter unit **J** using the fork tool **K**.

9. Remove the transmission shaft **H**.

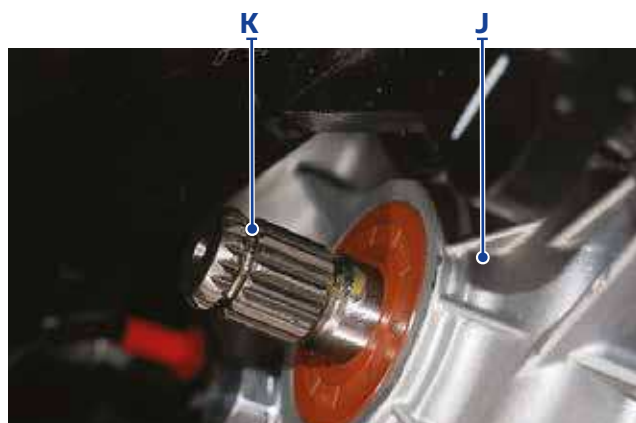


Transmission shaft

TR5000 (1 side)

TR5001 (2 sides)

10. Check the presence of the circlip **J** on the inverter unit shaft **I**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Nuts **A**: tightening torque 45 Nm.



RISK

Nuts **C**: tightening torque 125 Nm.



RISK

Nuts **E**: tightening torque 46 Nm.



Equipment required

Special tools	Quantities	References
Allen key	1	-
PPE		
Gloves	1	-

Removal procedure

Inside the vehicle:

1. Manually operate the bonnet opening lever **A**.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**.



3. Once the bonnet is open, it is recommended to use the support rod **D** provided for this purpose.
4. Remove the protective cover on the engine **E**.



Transmission belt

VA5004

5. Use a screw $\varnothing 6 \times 50$ mm min., screw it into one of the threaded holes **F** on the outer flange of the inverter unit variable speed drive **G**, until the belt is slackened to its maximum.



6. Turn the variable speed drive **G** manually to slacken the belt **H** on the inverter unit.



7. Separate the belt **H** from the variable speed drive **G** of the inverter unit.

8. Remove the belt **H**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Remember to remove the screw placed on the variable speed drive.



Equipment required

Special tools	Quantities	References
Size 17 - 19 - 24 wrench	1	-
Allen key	1	-
2-post lift	1	-
PPE		
Gloves	1	-

Preliminary procedures

Operations	Procedure types	Pages
Inverter unit	Partial removal	I-8

Removal procedure

Inside the vehicle:

1. Manually operate the bonnet opening control **A**.



Outside the vehicle:

2. Manually operate the strike **B** under the bonnet **C**.



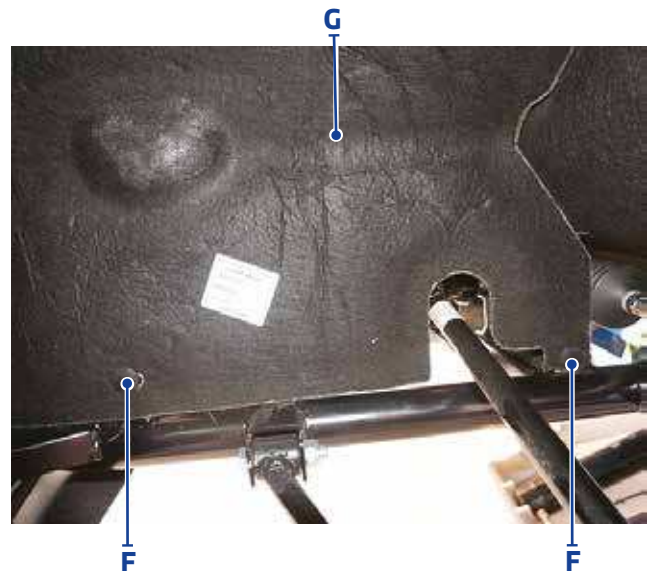
Driven pulley

VA5005

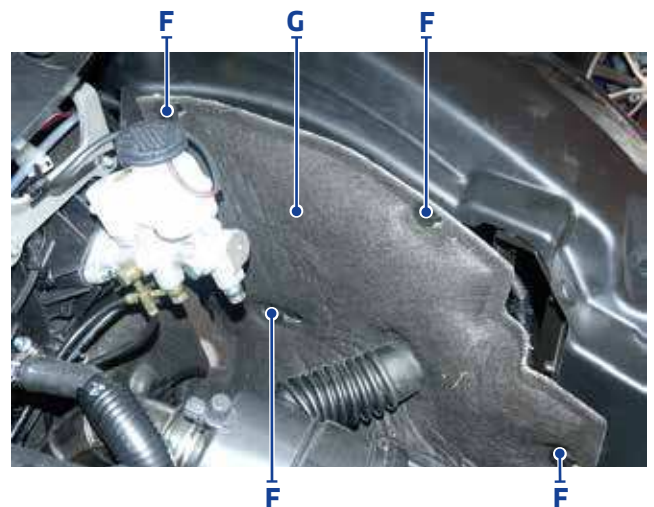
- 3. Bonnet open, it is recommended to use support rod **D**.
- 4. Remove the protective cover on the engine **E**.



- 5. Remove the 2 plasti-rivets **F** from the edge guard **G**.



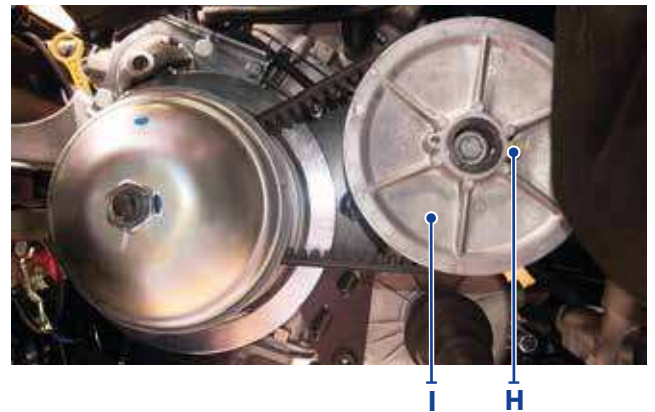
- 6. Remove the 4 plasti-rivets **F** from the edge guard **G**.
- 7. Remove the edge guard **G**.



Driven pulley

VA5005

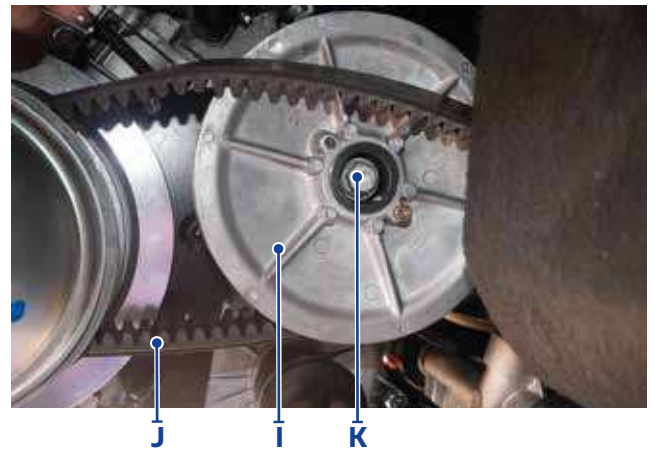
8. Tighten the screw **H** to shift the variable speed drive flange **I**.



9. Turn the variable speed drive **I** manually to slacken the belt **J** on the inverter unit.



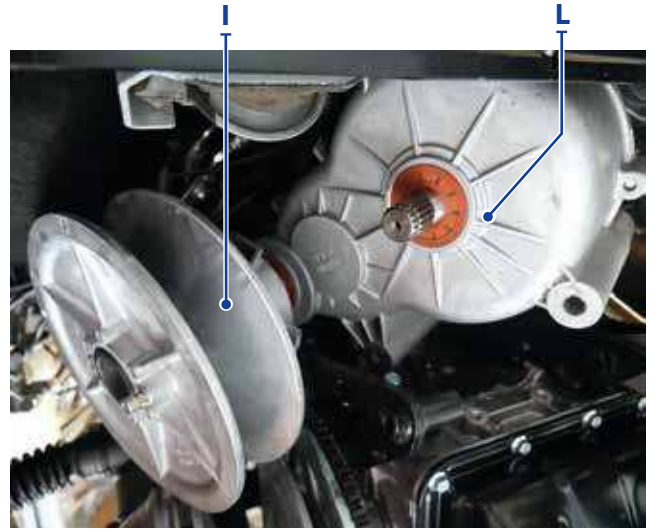
10. Separate the belt **J** from the variable speed drive **I** of the inverter unit.
11. Remove the belt **J**.
12. Remove the screw **K** from the variable speed drive **I**.



Driven pulley

VA5005

13. Slightly tilt and pivot the inverter unit **L** to clear a passage between the variable speed drive **I** and the body.
14. Remove the variable speed drive **I** from the inverter unit **L**.



Installation

To install, perform the removal operations in the reverse order.



RISK

Screw **K**: tightening torque 70 Nm.



Equipment required

Special tools	Quantities	References
Torx key	-	-
Open-end wrench	-	-
Flat screwdriver	-	-

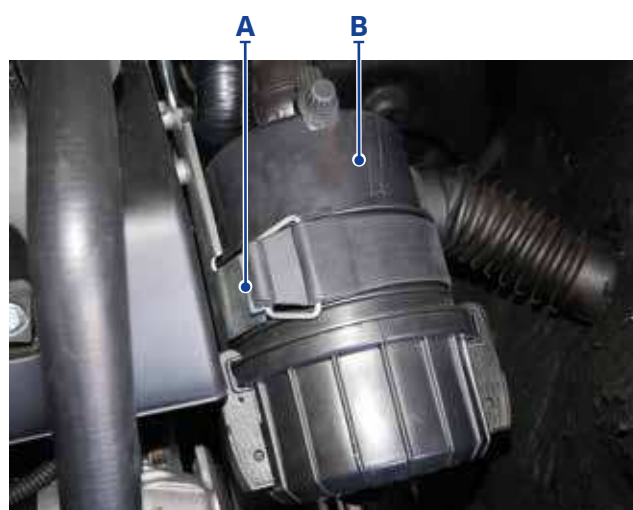
Removal procedure

On the engine compartment side:

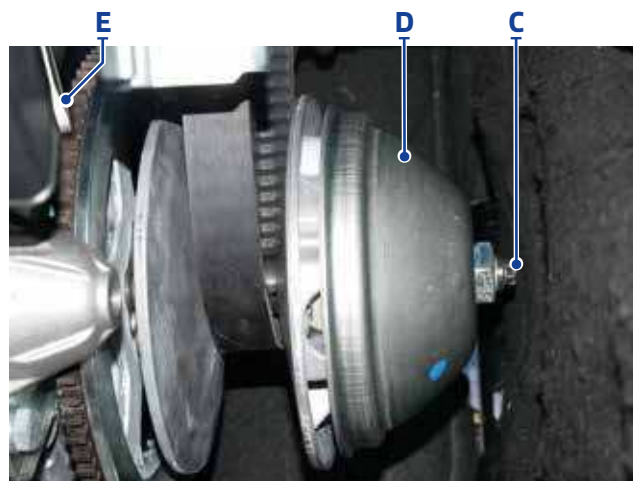
1. Open the elastic strap hook **A** on the air filter **B**.
2. Lift the air filter **B** towards the windscreen.



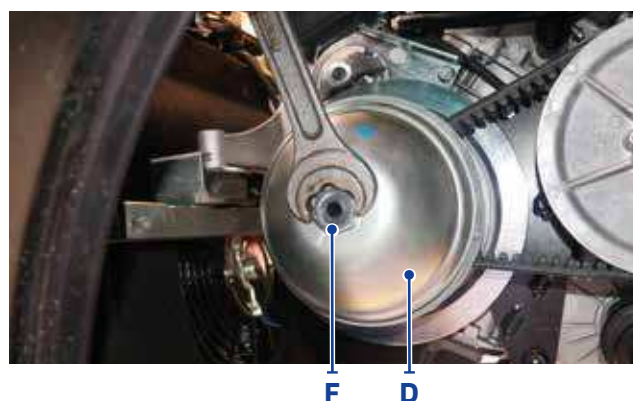
Secure the air filter position with a bungee cord or a strap.



3. Remove the screw **C** from the driving pulley **D**.
4. Block the rotation of the driving pulley, with a flat screwdriver **E** to make it easier to remove.



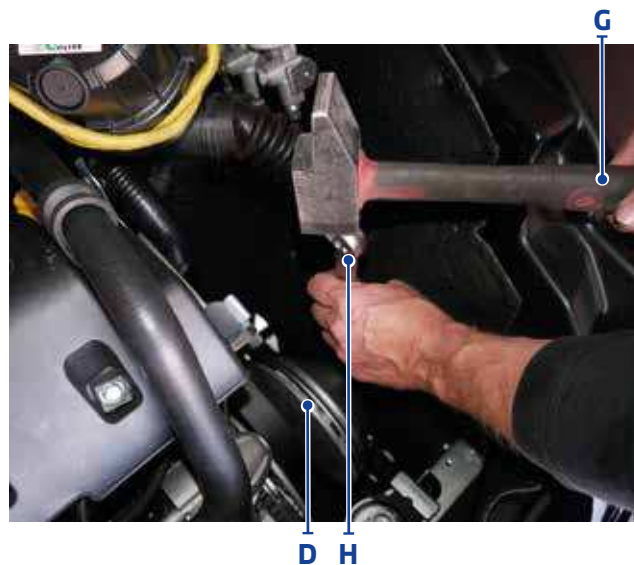
5. Position the open-end wrench on the hexagon **F** of the driving pulley **D**.



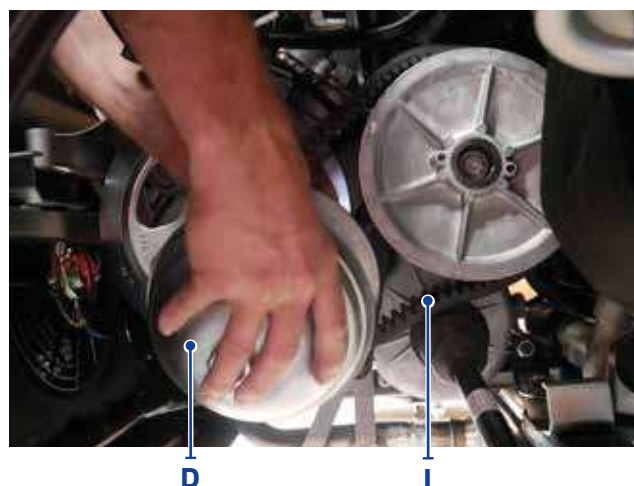
Driving pulley

VA5000

6. Strike the open-end wrench **H** with a hammer **G** to release the driving pulley **D** from the cone.



7. Separate the driving pulley **D** from the transmission belt **I**.
8. Remove the driving pulley **D**.



Installation

To install, perform the removal operations in the reverse order.

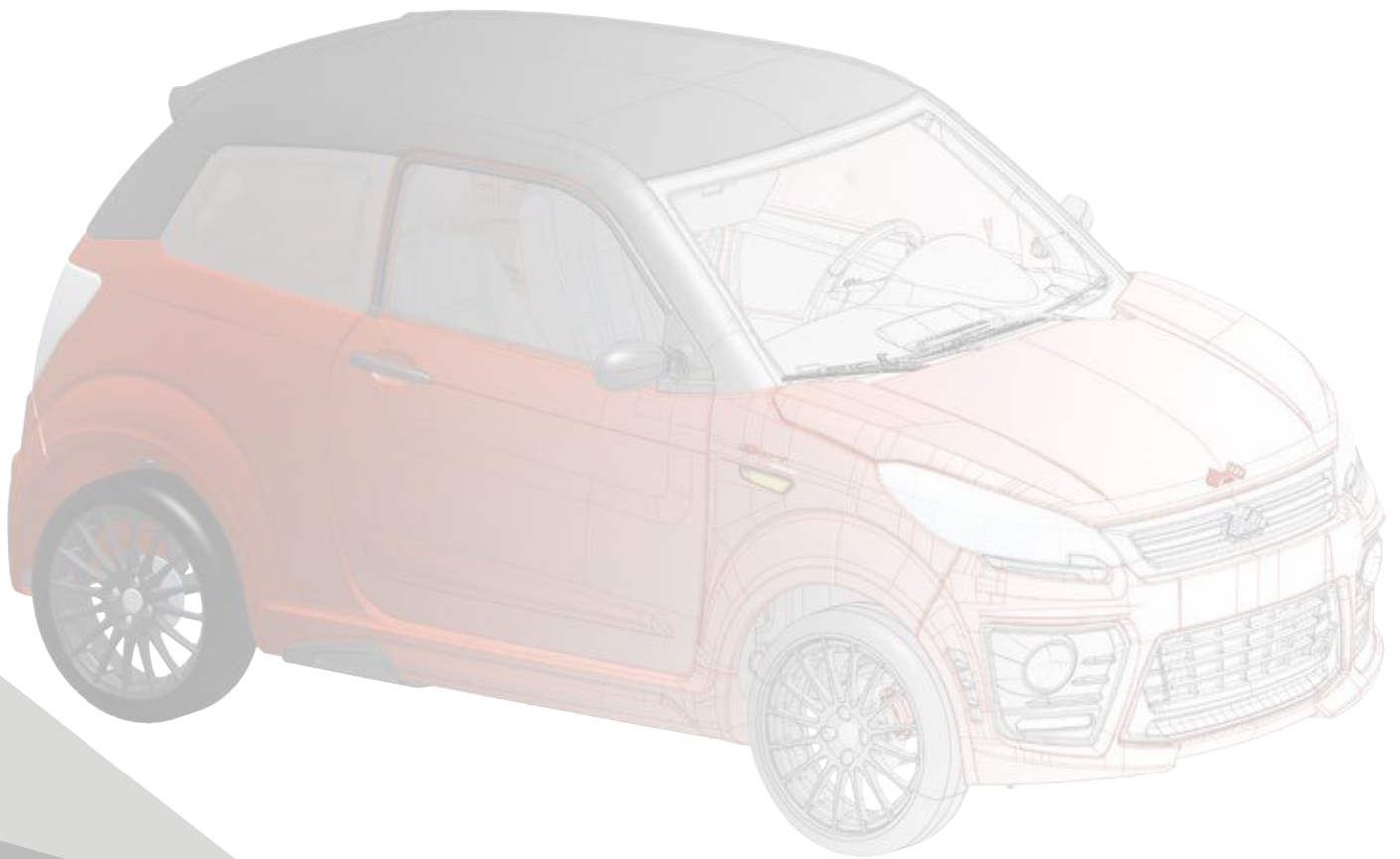


RISK

Screw **C**: tightening torque 70 Nm.



Annexes



B	MISE A JOUR SUITE DEMANDE DE MROCHE	01/07/2020	MLR		
A	CREATION	01/10/2019	MLR		
INDICE	MODIFICATION	DATE	DESSINE	VERIFE	APPROUVE



DESSINE:

VERIFE:

DATE DE CREATION: 01/10/2019

AFFAIRE N°:

Les schémas électriques s'appliquent aux véhicules des marques LIGIER et MICROCAR à partir des numéros de châssis suivants :

LIGIER

- Du VJRB2xxx256xx6046 au VJRB2xxx256xx6047 inclus – présérie
- Du VJRB2xxx256xx6088 au VJRB2xxx256xx6090 inclus – présérie
- Du VJRB2xxx256xx6298 au VJRB2xxx256xx6300 inclus – démonstration
- Du VJRB2xxx256xx6358 au VJRB2xxx256xx6360 inclus – démonstration

- A partir du VJRB2xxx256xx6448 – série »

MICROCAR

- A partir du VJR84xxxA98007254 – MGO 5
- A partir du VJR84xxxA88007275 – DUE 5 »

SCHEMAS ELECTRIQUES JS58

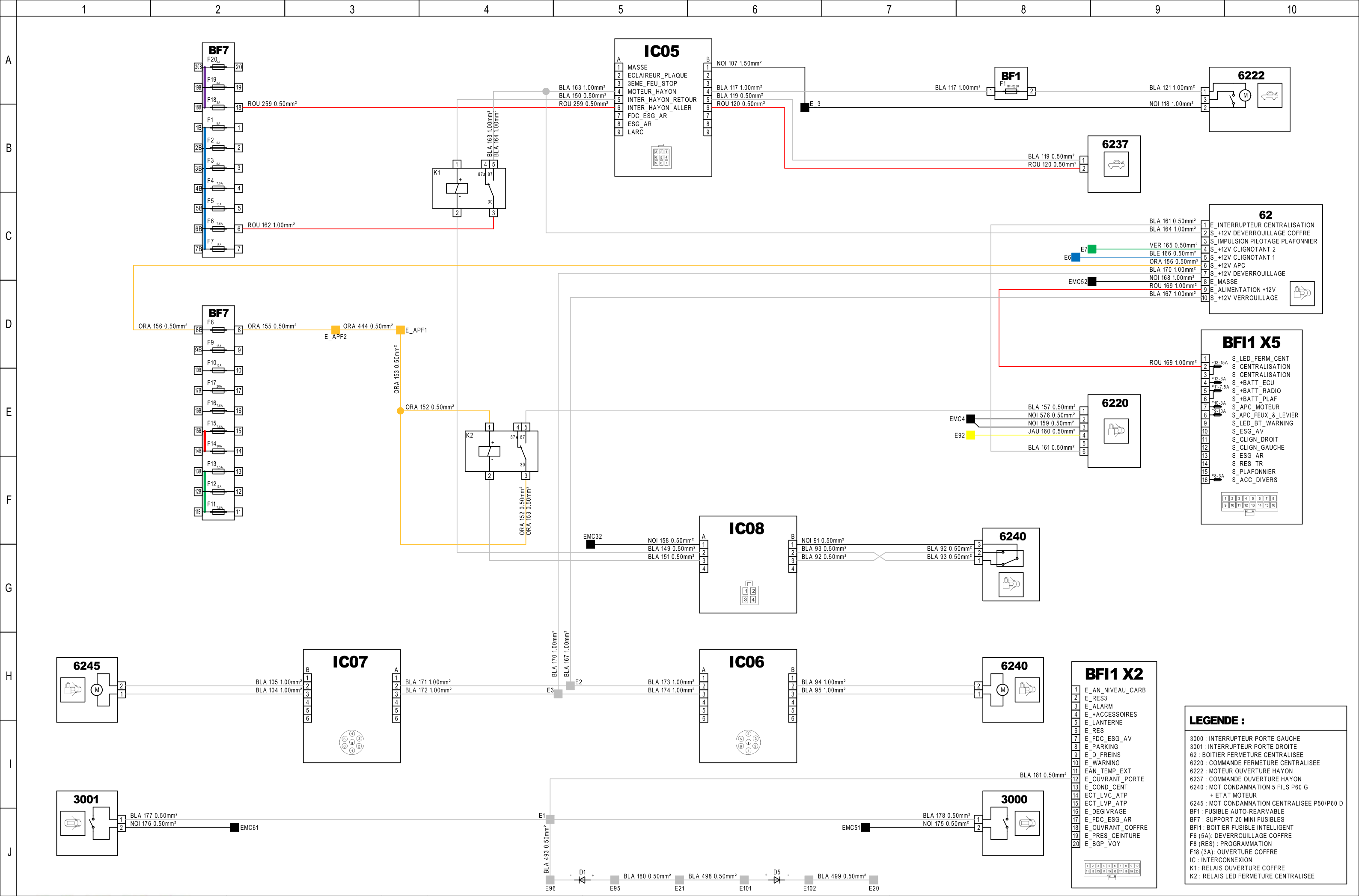
PAGE DE GARDE

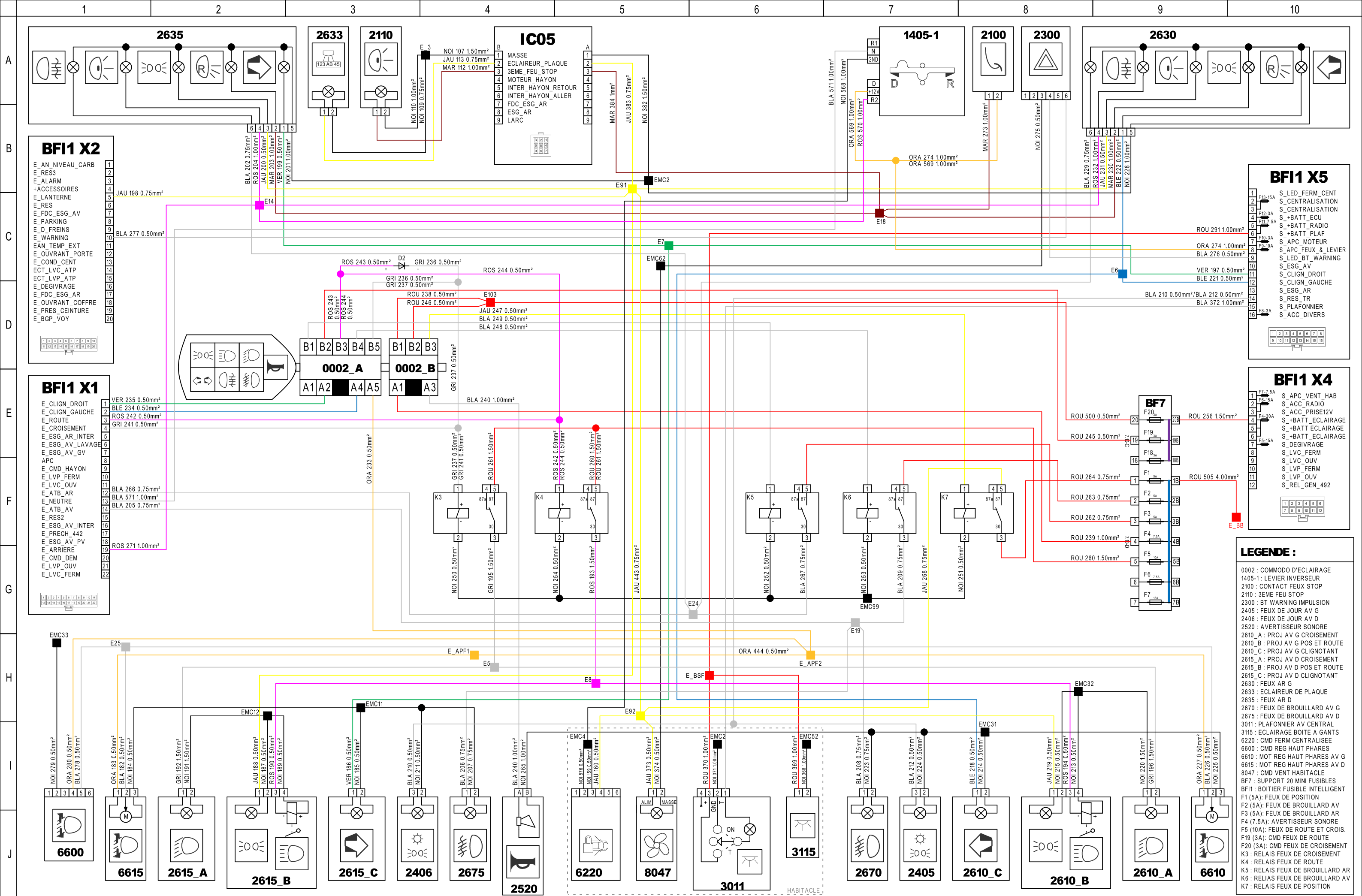
Liste des folios

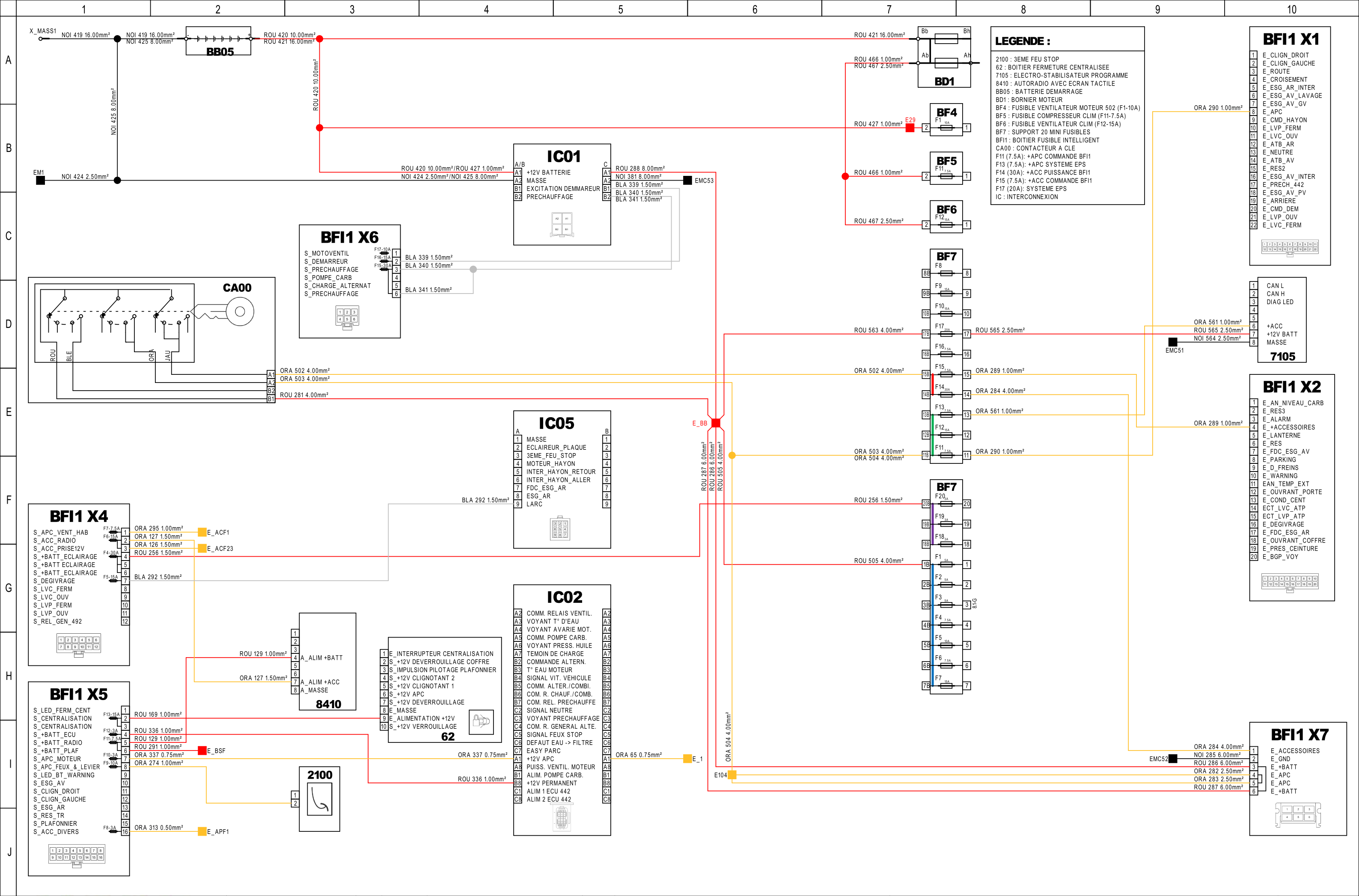
[illegible]

Liste des composants					
Repère	Désignation	Folio	Repère	Désignation	Folio
0002	COMMODO D'ECLAIRAGE	7	3000	INTERRUPTEUR PORTE GAUCHE	6
0004	COMBINE DE BORD	12	3001	INTERRUPTEUR PORTE DROITE	6
0005	COMMODO D'ESSUIE-GLACE ET DEGIVRAGE	9	3011	PLAFONNIER AVANT CENTRAL	7
1010	DEMARREUR AVV 1.1KW M3	10, 11	3115	ECLAIRAGE BOITE A GANTS	7
1020	ALTERNATEUR 50A	10, 11	4025	CAPTEUR TEMPERATURE - THERMOCONTACT EAU MOTEUR	11
1160	BOUGIE DE PRECHAUFFAGE	11	4051	DETECTEUR EAU DANS GASOIL	10
1210	POMPE A GASOIL	10, 11	4110	MONOCONTACT HUILE MOTEUR	11
1261	CAPTEUR D'ACCELERATION	10	4315	JAUGE CARBURANT	12
1320	CALCULATEUR CONTROLE MOTEUR (ECU)	10	4400/4401	FREIN DE PARKING	5, 12
1405-1	LEVIER INVERSEUR	7, 10, 11	4410	MAITRE CYLINDRE - NIVEAU LIQUIDE DE FREIN	12
1505	THERMOCONTACT D'ENCLenchement VENTILATEUR	11	5025	ESSUIE-GLACE AVANT	9
1510	MOTO-VENTILATEUR	10, 11	5100	POMPE LAVE GLACE	9
1620-01	CAPTEUR DE VITESSE (OLD)	10, 11	5215	MOTEUR ESSUIE-GLACE ARRIERE	9
2100	CONTACT FEUX STOP	7, 8	6061	COMMANDE LEVE VITRE	5
2110	3EME FEU STOP	7	6136	LEVE VITRE ELECTRIQUE GAUCHE	5
2300	BT WARNING IMPULSION	7	6137	LEVE VITRE ELECTRIQUE DROIT	5
2405	FEUX DE JOUR AVANT GAUCHE	7	62	BOITIER FERMETURE CENTRALISEE	6, 8
2406	FEUX DE JOUR AVANT DROIT	7	6220	COMMANDE FERMETURE CENTRALISEE	6, 7
2520	AVERTISSEUR SONORE	7	6222	MOTEUR OUVERTURE HAYON	6
2610_A	PROJECTEUR AVANT GAUCHE CROISEMENT	7	6237	COMMANDE OUVERTURE HAYON	6
2610_B	PROJECTEUR AVANT GAUCHE POSITION ET ROUTE	7	6240	MOTEUR CONDAMNATION 5 FILS P60 GAUCHE + ETAT MOTEUR	6
2610_C	PROJECTEUR AVANT GAUCHE CLIGNOTANT	7	6245	MOTEUR CONDAMNATION CENTRALISEE P50/P60 DROIT	6
2615_A	PROJECTEUR AVANT DROIT CROISEMENT	7	6600	COMMANDE REGLAGE HAUTEUR PHARES	7
2615_B	PROJECTEUR AVANT DROIT POSITION ET ROUTE	7	6610	MOTEUR REGLAGE HAUTEUR PHARE AVANT GAUCHE	7
2615_C	PROJECTEUR AVANT DROIT CLIGNOTANT	7	6615	MOTEUR REGLAGE HAUTEUR PHARE AVANT DROIT	7
2630	FEUX ARRIERE GAUCHE	7	7105	ELECTRO-STABILISATEUR PROGRAMME	8, 10, 11
2633	ECLAIREUR DE PLAQUE	7	7222	CAPTEUR DE TEMPERATURE EXTERIEURE	12
2635	FEUX ARRIERE DROIT	7	7500	RADAR DE REcul	5, 12
2670	FEUX DE BROUILLARD AVANT GAUCHE	7	7523	CAMERA DE REcul	5, 12
2675	FEUX DE BROUILLARD AVANT DROIT	7	8002	VENTILATEUR 3 VITESSES 4.9KW	9

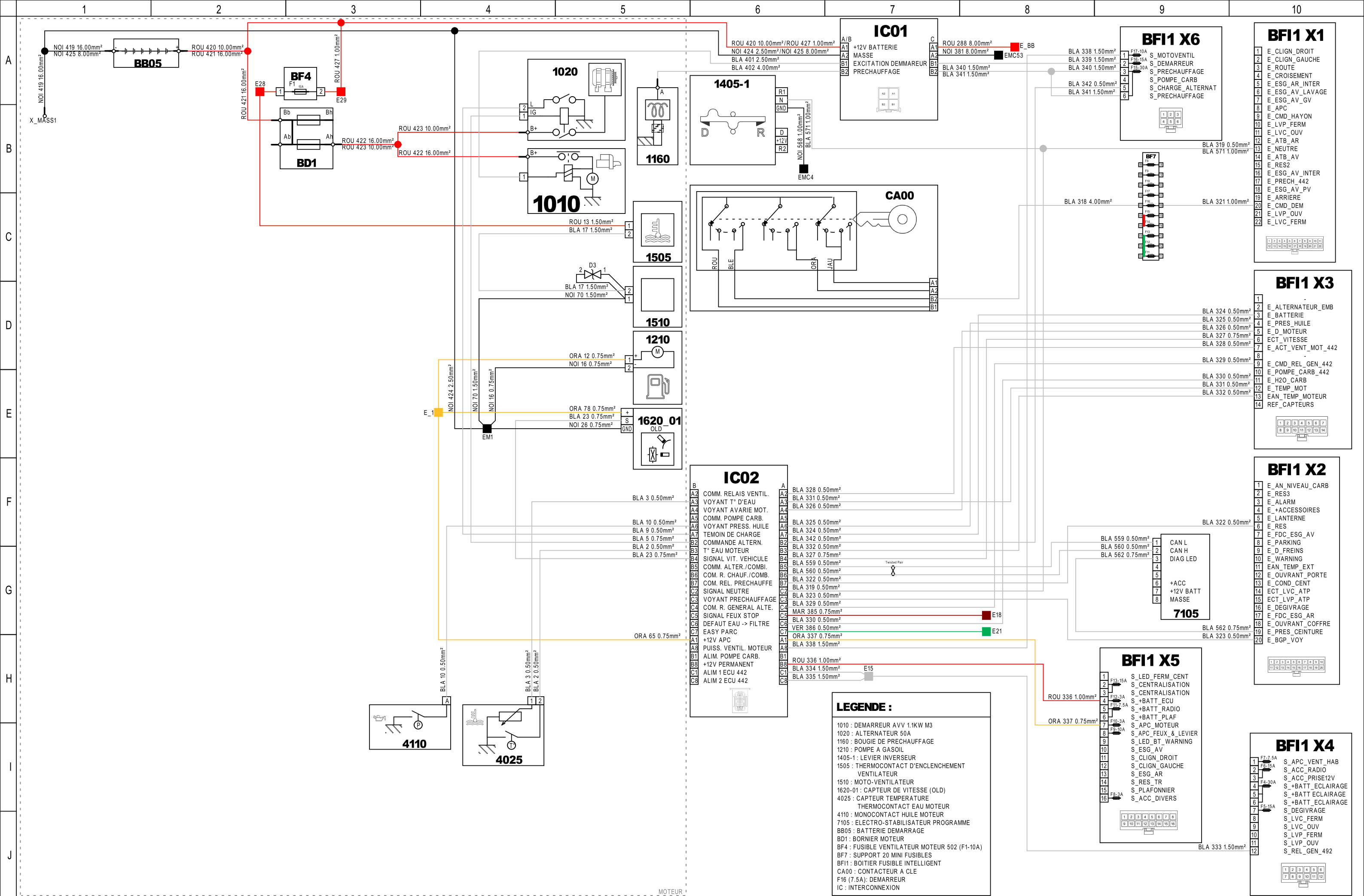
Liste des composants					
Repère	Désignation	Folio	Repère	Désignation	Folio
8007	PRESSOSTAT CLIMATISATION	13	F4	FUSIBLE - 7.5A - AVERTISSEUR SONORE	7
8020	COMPRESSEUR CLIMATISATION 63 CC12V	13	F5	FUSIBLE - 10A - FEUX DE ROUTE ET CROISEMENT	7
8027	INTERRUPTEUR CLIMATISATION - 32	13	F6	FUSIBLE - 5A - DEVERROUILLAGE COFFRE	6
8047	COMMANDE VENTILATION HABITACLE	7, 9, 13	F7	FUSIBLE - 15A - ESSUIE-GLACE	9
80D0	VENTILATEUR CONDENSEUR CLIMATISATION S12V	13	F8	RES - PROGRAMMATION	6
80F3	SONDE ANTI-GIVRE	13	F9	FUSIBLE - 15A - LEVE VITRE GAUCHE	5
8120-1	DEGIVRAGE LUNETTE ARRIERE	10, 11	F10	FUSIBLE - 15A - LEVE VITRE DROIT	5
8410	AUTORADIO AVEC ECRAN TACTILE	10	F11	FUSIBLE - 7.5A - +APC COMMANDE BFI1	8
8420	HAUT-PARLEUR PORTE AVANT CONDUCTEUR	5	F12	FUSIBLE - 15A - +APC COMMANDE ESSUIE-GLACE AVANT	9
8425	HAUT-PARLEUR PORTE AVANT PASSAGER	5	F13	FUSIBLE - 7.5A - +APC SYSTEME EPS	8
8430	HAUT-PARLEUR ARRIERE GAUCHE	5	F14	FUSIBLE - 30A - +ACC PUISSANCE BFI1	8
8435	HAUT-PARLEUR ARRIERE DROIT	5	F15	FUSIBLE - 7.5A - +ACC COMMANDE BFI1	8
8440	HAUT-PARLEUR TWEETER AVANT GAUCHE	5	F16	FUSIBLE - 7.5A - DEMARREUR	10, 11
8445	HAUT-PARLEUR TWEETER AVANT DROIT	5	F17	FUSIBLE - 20A - SYSTEME EPS	8
BB05	BATTERIE DE DEMARRAGE	8, 10, 11	F18	FUSIBLE - 3A - OUVERTURE COFFRE	6
BD1	BORNIER MOTEUR	8, 10, 11	F19	FUSIBLE - 3A - COMMANDE FEUX DE ROUTE	7
BF1	FUSIBLE AUTO-REARMABLE	6	F20	FUSIBLE - 3A - COMMANDE FEUX DE CROISEMENT	7
BF4	FUSIBLE VENTILATEUR MOTEUR 502 (F1-10A)	8, 11	IC	INTERCONNEXION	5, 6, 8 à 11, 13
BF5	FUSIBLE COMPRESSEUR CLIM (F11-7.5A)	8, 13	K1	RELAIS OUVERTURE COFFRE	6
BF6	FUSIBLE VENTILATEUR CLIM (F12-15A)	8, 13	K2	RELAIS LED FERMETURE CENTRALISEE	6
BF7	SUPPORT 20 MINI FUSIBLES	5 à 11	K3	RELAIS FEUX DE CROISEMENT	7
BFI1	BOITIER FUSIBLE INTELLIGENT	5 à 12, 14	K4	RELAIS FEUX DE ROUTE	7
C001	PRISE OBD	10	K5	RELAIS FEUX DE BROUILLARD ARRIERE	7
C1	ENSEMBLE MOTEUR LDW 492CR DIESEL	10	K6	RELAIS FEUX DE BROUILLARD AVANT	7
CA00	CONTACTEUR A CLE	8, 11	K7	RELAIS FEUX DE POSITION	7
CP01	PRISE +12V SUR CONSOLE CENTRALE	5	K9	RELAIS VENTILATEUR CONDENSEUR	13
CP07	PRISE +12V DANS BOITE A GANTS	5	K10	RELAIS ALIMENTATION COMPRESSEUR	13
F1	FUSIBLE - 5A - FEUX DE POSITION	7	K11	RELAIS DOUBLE LIGNE BISTABLE	13
F2	FUSIBLE - 5A - FEUX DE BROUILLARD AVANT	7	K12	RELAIS ESSUIE-GLACE AVANT	9
F3	FUSIBLE - 5A - FEUX DE BROUILLARD ARRIERE	7			



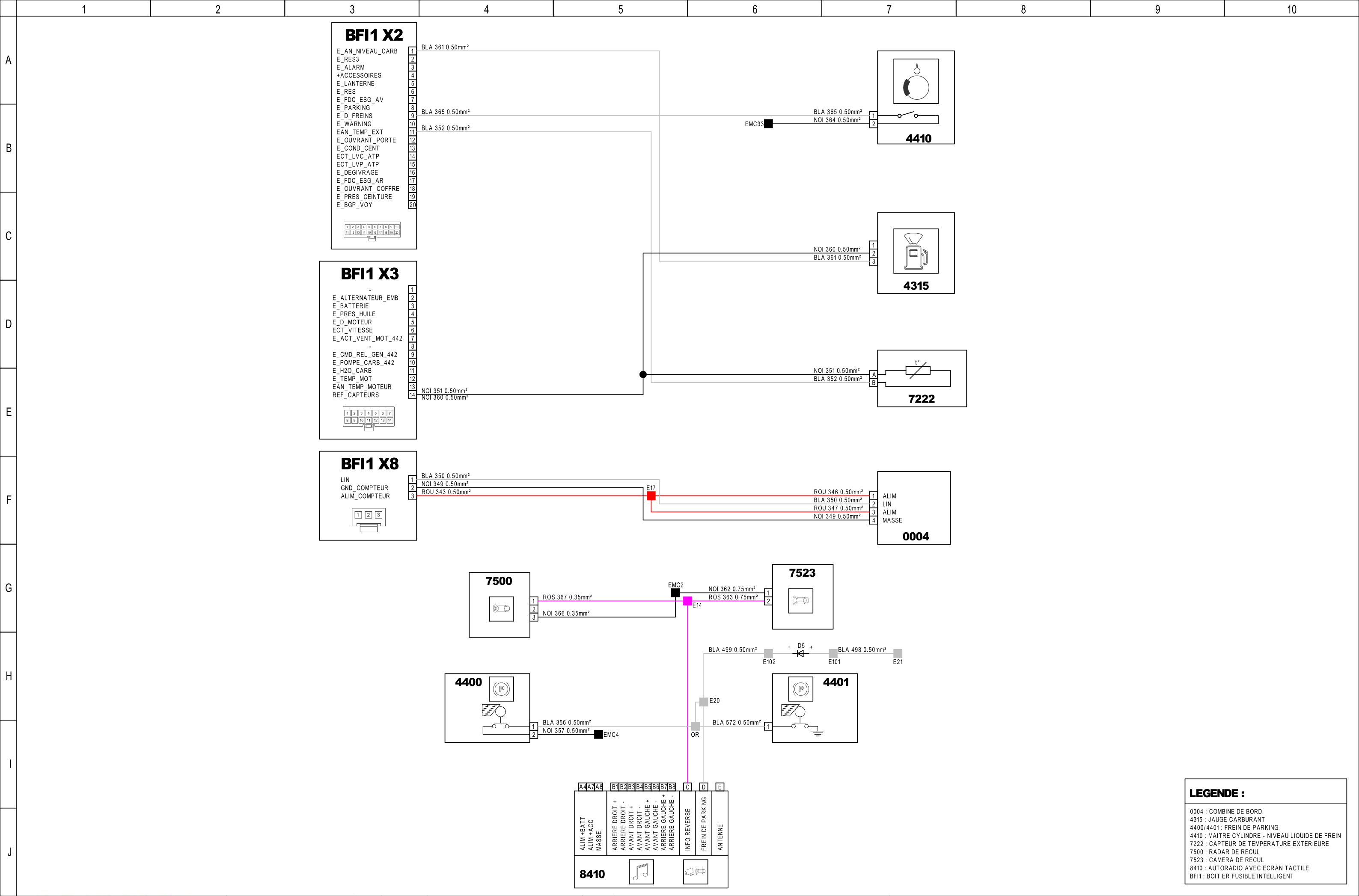


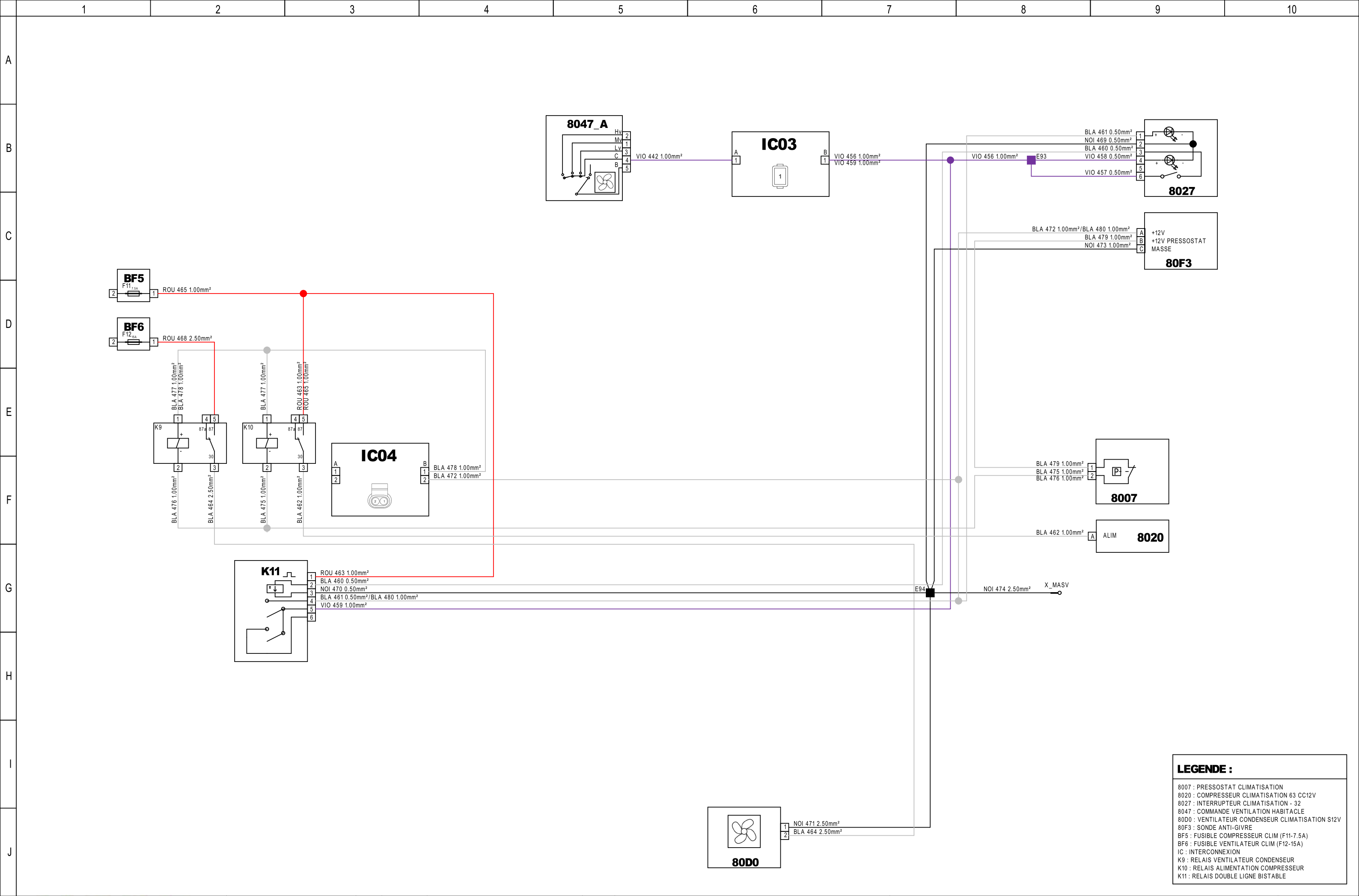






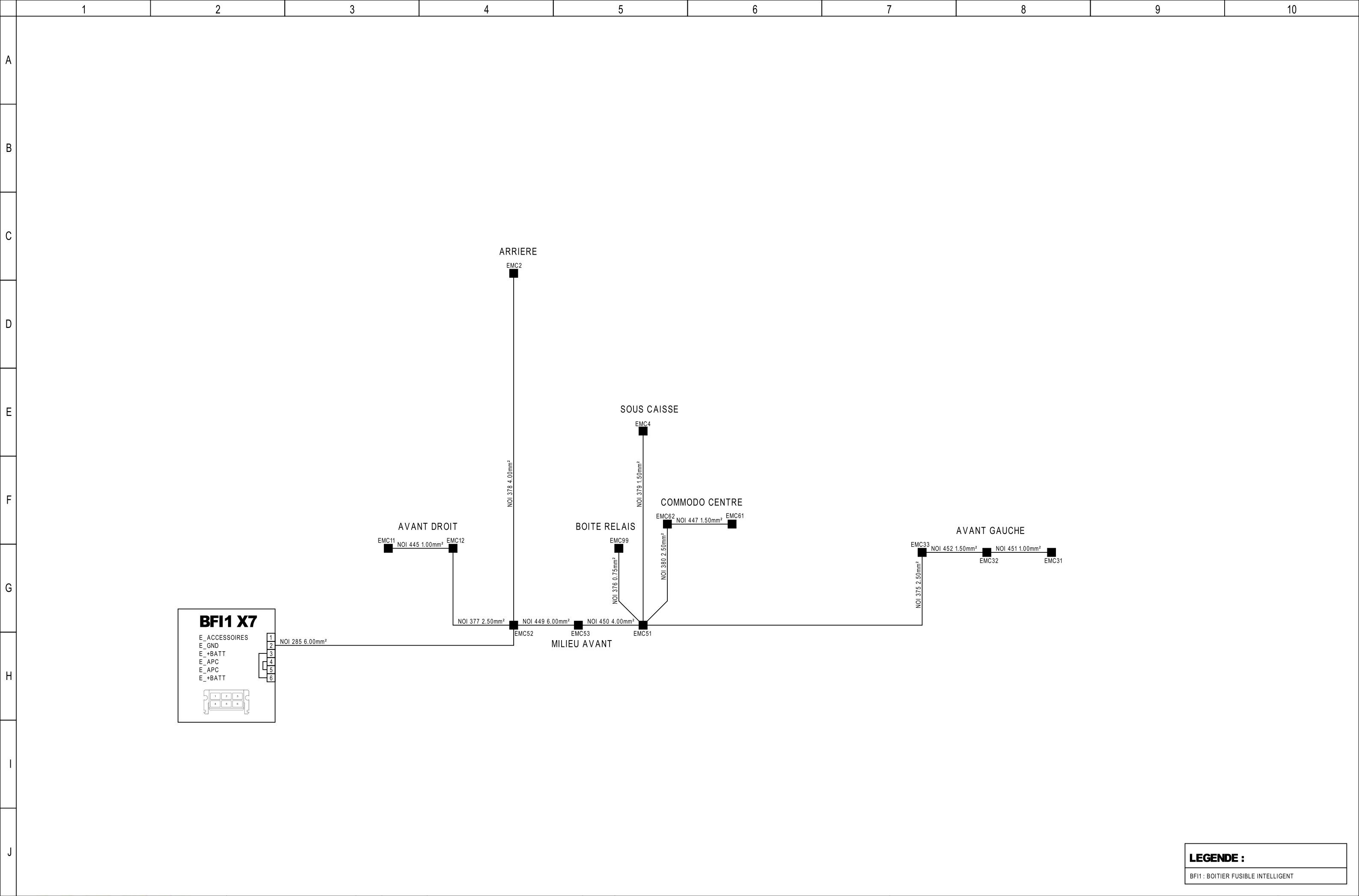
DESSINE:				
VERIFE:	B	01/07/2020	MISE A JOUR	MR
DATE DE CREATION:	A	01/10/2019	CREATION	MR
INDEXE	DATE		MODIFICATION	VISA





LEGENDE :	
8007	: PRESSOSTAT CLIMATISATION
8020	: COMPRESSEUR CLIMATISATION 63 CC12V
8027	: INTERRUPTEUR CLIMATISATION - 32
8047	: COMMANDE VENTILATION HABITACLE
80D0	: VENTILATEUR CONDENSEUR CLIMATISATION S12V
80F3	: SONDE ANTI-GIVRE
BF5	: FUSIBLE COMPRESSEUR CLIM (F11-7.5A)
BF6	: FUSIBLE VENTILATEUR CLIM (F12-15A)
IC	: INTERCONNEXION
K9	: RELAIS VENTILATEUR CONDENSEUR
K10	: RELAIS ALIMENTATION COMPRESSEUR
K11	: RELAIS DOUBLE LIGNE BISTABLE

DESSEINE:				
VERIFE:	B	01/07/2020	MISE A JOUR	MLR
DATE DE CREATION:	A	01/10/2019	CREATION	MLR
	INDICE	DATE	MODIFICATION	VISA



LEGENDE :
BF11 : BOITIER FUSIBLE INTELLIGENT

DESSINE:					
VERIFE:					
DATE DE CREATION:	A	01/10/2019	CREATION	MLR	
	INDICE	DATE	MODIFICATION	VISA	

LISTE DES FILS PROJET JS58

B	MISE A JOUR SUITE DEMANDE M.ROCHE	01/07/2020	MLR
A	CREATION	01/10/2019	MLR
INDICE	MODIFICATION	DATE	DESSINE

N° FIL	COULEUR	SECTION (mm²)	TENANT	ABOUTISSANT	FOLIO
2	BLANC	0.5	IC02/B3	4025/2	11
3	BLANC	0.5	IC02/A3	4025/1	11
5	BLANC	0.75	IC02/B2	1020/1	11
9	BLANC	0.5	IC02/A7	1020/2	11
10	BLANC	0.5	IC02/A6	4110/A	11
12	ORANGE	0.75	E1	1210/1	10,11
13	ROUGE	1.5	E28	1505/1	11
16	NOIR	0.75	1210/2	EM1	11
17	BLANC	1.5	1505/2	1510/2	11
23	BLANC	0.75	IC02/B4	1620_01/S	11
26	NOIR	0.75	1620_01/GND	EM1	10,11
33	NOIR	1.5	1320/M1	E_2	10
34	NOIR	1.5	1320/M2	E_2	10
35	BLANC	0.5	E111	C001/14	10
36	BLANC	1.5	IC02/C1	1320/L2	10
37	BLANC	1.5	IC02/C8	1320/L3	10
38	BLANC	0.5	IC02/A2	1320/H4	10
39	BLANC	0.5	1261/A	1320/E2	10
40	BLANC	0.75	IC02/C2	1320/B4	10
41	ORANGE	0.75	E1	1320/K4	10
42	BLANC	0.5	1261/B	1320/F1	10
43	BLANC	0.5	1261/E	1320/G1	10
44	BLANC	0.5	1261/C	1320/E4	10
45	BLANC	0.5	1261/F	1320/F3	10

46	BLANC	0.5	IC02/B7	1320/G4	10
47	BLANC	0.5	IC02/C3	1320/G3	10
48	BLANC	0.5	IC02/A4	1320/H3	10
49	BLANC	0.5	IC02/C4	1320/J3	10
50	BLANC	0.5	C001/7	1320/K2	10
51	BLANC	0.75	E26	1320/B1	10
52	MARRON	0.75	IC02/C5	1320/C2	10
53	ORANGE	0.75	E1	C001/1	10
54	ROUGE	0.5	C001/16	IC02/B8	10
58	BLANC	0.5	IC02/A7	1320/D3	10
59	BLANC	0.5	IC02/A6	1320/D1	10
60	BLANC	0.5	E27	4051/S	10
61	ORANGE	0.75	E1	4051/+	10
62	ROUGE	0.5	C001/16	1320/L1	10
64	BLANC	0.75	1210/2	1320/J1	10
65	ORANGE	0.75	IC02/A1	E1	8,10,11
66	NOIR	0.75	EM1	IC02/B1	10
67	NOIR	2.5	E_2	X_MECU	10
70	NOIR	1.5	EM1	1510/1	10,11
74	NOIR	0.5	4051/-	EM1	10
75	NOIR	0.75	E_2	C001/5	10
76	NOIR	0.75	E_2	C001/4	10
77	BLANC	0.5	IC02/A3	1320/H2	10
78	ORANGE	0.75	E1	1620_01/+	10,11
80	BLANC	0.75	E26	1620_01/S	10
81	BLANC	0.5	E27	1320/C4	10
82	BLANC	0.5	E110	C001/6	10
83	VERT	0.5	IC02/C7	1320/D2	10
84	BLANC	0.5	IC04/2	1320/B3	10
85	BLANC	0.5	IC04/1	1320/J4	10
86	NOIR	2.5	EM1	E_2	10
88	BLANC	0.5	IC02/C6	E27	10
89	BLANC	0.5	1261/D	1320/E1	10

90	BLANC	1.5	1510/2	IC02/A8	10
91	NOIR	0.5	IC08/1	6240/3	6
92	NOIR	0.5	IC08/2	6240/1	6
93	NOIR	0.5	IC08/3	6240/2	6
94	BLANC	1	IC06/2	6240/2	6
95	BLANC	1	IC06/3	6240/1	6
96	NOIR	0.5	IC06/6	8420/2	5
97	BLANC	0.5	IC06/5	8420/1	5
98	BLANC	1.5	IC06/4	6136/2	5
99	BLANC	1.5	IC06/1	6136/1	5
100	BLANC	1.5	IC07/1	6137/1	5
101	BLANC	1.5	IC07/4	6137/2	5
102	BLANC	0.5	IC07/5	8425/1	5
103	NOIR	0.5	IC07/6	8425/2	5
104	BLANC	1	IC07/3	6245/1	6
105	BLANC	1	IC07/2	6245/2	6
107	NOIR	1.5	E_3	IC05/1	6,7,9
108	NOIR	1.5	8120_1/B	E_3	9
109	NOIR	0.75	2633/2	E_3	7
110	NOIR	1	2110/2	E_3	7
111	NOIR	0.75	5215/3	E_3	9
112	MARRON	1	IC05/3	2100/1	7
113	JAUNE	0.75	IC05/2	2633/1	7
114	BLANC	1.5	IC05/9	8120_1/A	9
115	BLANC	0.75	5215/1	IC05/8	9
116	BLANC	0.5	5215/2	IC05/7	9
117	BLANC	1	IC05/4	BF1/1	6
118	NOIR	1	6222/2	E3	6
119	BLANC	0.5	IC05/5	6237/2	6
120	ROUGE	0.5	IC05/6	6237/2	6
121	BLANC	1	BF1/2	6222/1	6
122	NOIR	1.5	CP07/3	EMC61	5
123	NOIR	1.5	CP01/3	EMC62	5

124	ORANGE	1.5	E_ACF23	CP07/2	5
125	ORANGE	1.5	E_ACF23	CP01/2	5
126	ORANGE	1.5	X4/3	E_ACF23	5,8
127	ORANGE	1.5	X4/2	8410/7	5,8
128	NOIR	1.5	8410/A8	EMC62	5
129	ROUGE	1	X5/5	8410/A4	5,8
130	BLANC	1.5	X4/9	BF7/9B	5
131	BLANC	1.5	X4/8	IC06/1	5
132	BLANC	1.5	X4/11	BF7/10B	5
133	BLANC	1.5	X4/10	IC07/4	5,10,11
134	NOIR	0.5	6061/A1	EMC4	5
135	ORANGE	0.5	E_APF1	6061/A3	5
137	BLANC	0.5	X1/21	6061/B1	5
138	BLANC	0.5	X1/10	6061/B2	5
139	BLANC	0.5	X1/22	6061/A4	5
140	BLANC	0.5	X1/11	6061/B3	5
141	BLANC	0.5	8410/B3	8445/1	5
142	BLANC	0.5	8410/B4	8445/2	5
143	BLANC	0.5	8410/B5	8440/1	5
144	BLANC	0.5	8410/B6	8440/2	5
145	BLANC	0.5	8410/B3	IC07/5	5
146	BLANC	0.5	8410/B4	IC07/6	5
147	BLANC	0.5	8410/B6	IC06/6	5
148	BLANC	0.5	8410/B5	IC06/5	5
149	BLANC	0.5	BOBINE - K1	IC08/2	6
150	BLANC	0.5	BOBINE + K1	IC05/5	6
151	BLANC	0.5	BOBINE - K2	IC08/3	6
152	ORANGE	0.5	CONTACT 30 K2	BOBINE + K2	6
153	ORANGE	0.5	E_APF1	CONTACT 30 K2	6
155	ORANGE	0.5	BF7/8	E_APF2	6
156	ORANGE	0.5	BF7/8B	62/6	6
157	BLANC	0.5	CONTACT 87 K2	6220/1	6
158	NOIR	0.5	IC08/1	EMC32	6

159	NOIR	0.5	6220/3	EMC4	6,7
160	JAUNE	0.5	E92	6220/4	6,7
161	BLANC	0.5	6220/6	62/1	6
162	ROUGE	1	BF7/6	CONTACT 30 K1	6
163	BLANC	1	CONTACT 87 K1	IC05/4	6
164	BLANC	1	CONTACT 87 K1	62/2	6
165	VERT	0.5	E7	62/4	6
166	BLEU	0.5	E6	62/5	6
167	BLANC	1	62/10	E2	6
168	NOIR	1	62/8	EMC52	6
169	ROUGE	1	X5/2	62/9	6,8
170	BLANC	1	62/7	E3	6
171	BLANC	1	E2	IC07/2	6
172	BLANC	1	E3	IC07/3	6
173	BLANC	1	E2	IC06/2	6
174	BLANC	1	E3	IC06/3	6
175	NOIR	0.5	3000/2	EMC51	6
176	NOIR	0.5	3001/2	EMC61	6
177	BLANC	0.5	3001/1	E1	6
178	BLANC	0.5	3000/1	E1	6
180	BLANC	0.5	E95	E21	6
181	BLANC	0.5	E1	X2/12	6
182	BLANC	0.5	E25	6615/2	7
183	ORANGE	0.5	6615/1	E_APF1	7
184	NOIR	0.5	6615/3	EMC11	7
185	NOIR	0.5	2615-C/2	EMC11	7
186	VERT	0.5	E7	2615_C/1	7
187	NOIR	0.5	2615-B/2	EMC12	7
188	JAUNE	0.5	E91	2615-B/1	7
189	NOIR	0.5	2615-B/4	EMC12	7
190	ROSE	0.5	2615-B/3	E8	7
191	NOIR	1.5	2615-A/2	EMC12	7
192	GRIS	1.5	E5	2615-A/1	7

193	ROSE	1.5	CONTACT 30 K4	E8	7
194	ROSE	0.5	2610-B/3	E8	7
195	GRIS	1.5	CONTACT 30 K3	E5	7
196	GRIS	1.5	E5	2610-A/2	7
197	VERT	0.5	E7	X5/11	7
198	JAUNE	0.75	X2/5	E91	7
199	VERT	0.5	2635/6	E7	7
200	JAUNE	0.5	2635/3	E91	7
201	NOIR	1	2635/5	EMC2	7
202	BLANC	0.75	E24	2635/1	7
203	MARRON	1	2635/2	E18	7
204	ROSE	1	2635/4	E14	7
205	BLANC	0.75	E19	X1/14	7
206	BLANC	0.75	E19	2675/1	7
207	NOIR	0.75	2675/2	EMC11	7
208	BLANC	0.75	E19	2670/1	7
209	BLANC	0.75	CONTACT 30 K6	E19	7
210	BLANC	0.5	X5/14	2406/3	7
211	NOIR	0.5	2406/2	EMC11	7
212	BLANC	0.5	X5/14	2405/3	7
213	NOIR	0.5	2610-B/4	EMC32	7
214	NOIR	0.5	2610-C/2	EMC31	7
215	NOIR	0.5	2610-B/2	EMC32	7
218	BLEU	0.5	E6	2610-C/1	7
219	JAUNE	0.5	E92	2610-B/1	7
220	NOIR	1.5	2610-A/1	EMC32	7
221	BLEU	0.5	E6	X5/12	7
222	BLEU	0.5	2630/6	E6	6
223	NOIR	0.75	2670/2	EMC31	7
224	NOIR	0.5	2405/2	EMC31	7
225	NOIR	0.5	6610/3	EMC31	7
226	BLANC	0.5	E25	6610/2	7
227	ORANGE	0.5	6610/1	E_AP2	7

228	NOIR	1	2630/5	EMC2	6
229	BLANC	0.75	E24	2630/1	6
230	MARRON	1	2630/2	E18	6
231	JAUNE	0.5	2630/3	E91	6
232	ROSE	1	2630/4	E14	6
233	ORANGE	0.5	E_AP2	0002_A/A5	7
234	BLEU	0.5	0002_A/A4	X1/2	7
235	VERT	0.5	0002_A/A2	X1/1	7
236	GRIS	0.5	0002_A/B5	BORNE - D2	7
237	GRIS	0.5	BOBINE + K3	0002_A/B5	7
238	ROUGE	0.5	0002_B/B1	E103	7
239	ROUGE	1	0002_B/A1	BF7/4	7
240	BLANC	1	0002_B/A3	2520/A	7
241	GRIS	0.5	X1/4	BOBINE + K3	7
242	ROSE	0.5	X1/3	BOBINE + K4	7
243	ROSE	0.5	BORNE + D2	0002_A/B3	7
244	ROSE	0.5	0002_A/B3	BOBINE + K4	7
245	ROUGE	0.5	0002_A/B2	BF7/19	7
246	ROUGE	0.5	E103	0002_B/B2	7
247	JAUNE	0.5	0002_B/B3	BOBINE + K7	7
248	BLANC	0.5	0002_A/B4	BOBINE + K6	7
249	BLANC	0.5	0002_A/B1	BOBINE + K5	7
250	NOIR	0.5	BOBINE - K3	EMC99	7
251	NOIR	0.5	BOBINE - K7	EMC99	7
252	NOIR	0.5	BOBINE - K5	EMC99	7
253	NOIR	0.5	BOBINE - K6	EMC99	7
254	NOIR	0.5	BOBINE - K4	EMC99	7
256	ROUGE	1.5	X4/4	BF7/20B	7,8
259	ROUGE	0.5	BF7/18	IC05/6	6
260	ROUGE	1.5	BF7/5	CONTACT 87 K4	7
261	ROUGE	1.5	CONTACT 87 K4	CONTACT 87 K3	7
262	ROUGE	0.75	BF7/3	CONTACT 87 K5	7
263	ROUGE	0.75	BF7/2	CONTACT 87 K6	7

264	ROUGE	0.75	BF7/1	CONTACT 30 K7	7
265	NOIR	1	2520/B	EMC31	7
266	BLANC	0.75	X1/12	E24	7
267	BLANC	0.75	CONTACT 30 K5	E24	7
268	JAUNE	0.75	CONTACT 87 K7	E92	7
271	ROSE	1	E14	X1/19	7
273	MARRON	1	E18	2100/1	7
274	ORANGE	1	X5/8	2100/2	7,8
275	NOIR	0.5	2300/3	EMC62	7
276	BLANC	0.5	2300/4	X5/9	7
277	BLANC	0.5	2300/6	X2/10	7
278	BLANC	0.5	6600/5	E25	7
279	NOIR	0.5	6600/2	EMC33	7
280	ORANGE	0.5	6600/4	E_APF2	7
281	ROUGE	4	CA00/B1	E_BB	8
282	ORANGE	2.5	E104	X7/4	8
283	ORANGE	2.5	E104	X7/5	8
284	ORANGE	4	BF7/14	X7/1	8
285	NOIR	6	X7/2	EMC52	8,14
286	ROUGE	6	E_BB	X7/3	8
287	ROUGE	6	E_BB	X7/6	8
288	ROUGE	8	IC01/A1	E_BB	8,10,11
289	ORANGE	1	BF7/15	X2/4	8
290	ORANGE	1	BF7/11	X1/8	8
291	ROUGE	1	X5/6	E_BSF	7,8
292	BLANC	1.5	X4/7	IC05/9	8,9
294	ORANGE	1	E_ACF1	BORNE + D4	9
295	ORANGE	1	X4/1	E_ACF1	8,9
296	ORANGE	1	E_ACF2	8047_A/5	9
297	NOIR	1	8002/1	EMC33	9
304	NOIR	1.5	5025/5	EMC33	9
305	NOIR	1.5	5100/1	EMC12	9
306	BLANC	1.5	0005/B2	5100/2	9

308	BLANC	0.5	0005/A1	X1/5	9
309	ORANGE	1.5	E105	0005/B3	9
310	BLANC	1.5	0005/B1	X1/16	9
313	ORANGE	0.5	X5/16	E_APF1	5,8
314	BLANC	1	IC05/8	X5/13	9
315	BLANC	1	IC05/7	X2/17	9
316	BLANC	0.5	0005/A6	X2/16	9
317	NOIR	0.5	0005/B4	EMC33	9
318	BLANC	4	CA00/B2	BF7/16B	10,11
319	BLANC	0.5	IC02/C2	X1/13	10,11
321	BLANC	1	BF7/16	X1/20	10,11
322	BLANC	0.5	IC02/B7	X2/6	10,11
323	BLANC	0.5	IC02/C3	X2/20	10,11
324	BLANC	0.5	IC02/A7	X3/3	10,11
325	BLANC	0.5	IC02/A6	X3/4	10,11
326	BLANC	0.5	IC02/A4	X3/5	10,11
327	BLANC	0.75	IC02/B4	X3/6	10,11
328	BLANC	0.5	IC02/A2	X3/7	10,11
329	BLANC	0.5	IC02/C4	X3/9	10,11
330	BLANC	0.5	IC02/C6	X3/11	10,11
331	BLANC	0.5	IC02/A3	X3/12	10,11
332	BLANC	0.5	IC02/B3	X3/13	10,11
333	BLANC	1.5	X4/12	E15	10,11
334	BLANC	1.5	E15	IC02/C1	10,11
335	BLANC	1.5	E15	IC02/C8	10,11
336	ROUGE	1	X5/4	IC02/B8	8,10,11
337	ORANGE	0.75	X5/7	IC02/A1	8,10,11
338	BLANC	1.5	IC02/A8	X6/1	10,11
339	BLANC	1.5	IC01/B1	X6/2	8,10,11
340	BLANC	1.5	IC01/B2	X6/3	8,10,11
341	BLANC	1.5	IC01/B2	X6/6	8,10,11
342	BLANC	0.5	IC02/B2	X6/5	10,11
343	ROUGE	0.5	X8/3	E17	12

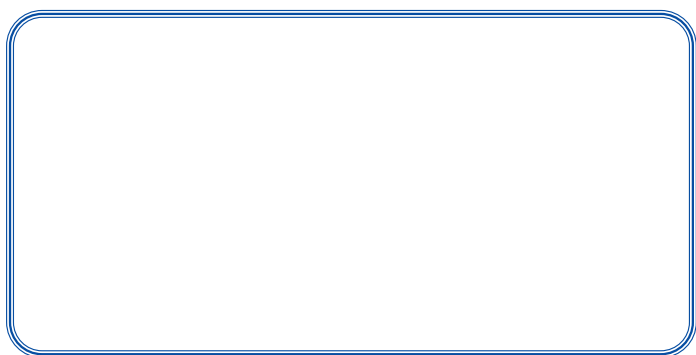
346	ROUGE	0.5	E17	0004/1	12
347	ROUGE	0.5	E17	0004/3	12
349	NOIR	0.5	X8/2	0004/4	12
350	BLANC	0.5	X8/1	0004/2	12
351	NOIR	0.5	X3/14	7222/A	12
352	BLANC	0.5	X2/11	7222/B	12
353	BLANC	0.5	X2/8	E20	5
354	BLANC	0.5	E20	8410/D	5
355	ROSE	0.5	E14	8410/C	5
356	BLANC	0.5	E20	4400/1	5,12
357	NOIR	0.5	4400/2	EMC4	5,12
360	NOIR	0.5	X3/14	4315/2	12
361	BLANC	0.5	X2/1	4315/3	12
362	NOIR	0.75	7523/1	EMC2	5,12
363	ROSE	0.75	E14	7523/2	5,12
364	NOIR	0.5	4410/2	EMC33	12
365	BLANC	0.5	X2/9	4410/1	12
366	NOIR	0.35	7500/3	EMC2	5,12
367	ROSE	0.35	E14	7500/1	5,12
368	NOIR	1	3115/2	EMC52	7
369	ROUGE	1	E_BSF	3115/1	7
370	ROUGE	1	E_BSF	3011/3	7
371	NOIR	1	3011/2	EMC2	7
372	BLANC	1	X5/15	3011/1	7
373	JAUNE	0.5	E92	8047_B/1	7,9
374	NOIR	0.5	8047_B/2	EMC62	7,9
375	NOIR	2.5	EMC51	EMC33	14
376	NOIR	0.75	EMC51	EMC99	14
377	NOIR	2.5	EMC52	EMC12	14
378	NOIR	4	EMC52	EMC2	14
379	NOIR	1.5	EMC51	EMC4	14
380	NOIR	2.5	EMC62	EMC51	14
381	NOIR	8	IC01/A2	EMC53	8,10,11

382	NOIR	1.5	IC05/1	EMC2	7,9
383	JAUNE	0.75	E91	IC05/2	7
384	MARRON	1	IC05/3	E18	7
385	MARRON	0.75	IC02/C5	E18	10,11
386	VERT	0.75	IC02/C7	E21	10,11
398	BLANC	2.5	IC01/B2	C1/S	10
399	BLANC	2.5	IC01/B2	C1/-	10
400	BLANC	2.5	IC01/B1	C1/+	10
401	BLANC	2.5	IC01/B1	1010/1	11
402	BLANC	4	IC01/B2	1160/A	11
419	NOIR	16	BB05/-	X_MASS1	8,10,11
420	ROUGE	10	BB05/+	IC01/A1	8,10,11
421	ROUGE	16	BB05/+	BD1/BB	8,10,11
422	ROUGE	16	BD1/AH	1010/B+	10,11
423	ROUGE	10	BD1/AH	1020/B+	10,11
424	NOIR	2.5	IC01/A2	EM1	8,10,11
425	NOIR	8	BB05/-	IC01/A2	8,10,11
427	ROUGE	1	IC01/A1	E29	8,11
439	BLANC	1	8002/2	8047_A/3	9
440	BLANC	1	8002/4	8047_A/1	9
441	BLANC	1	8002/3	8047_A/2	9
442	VIOLET	1	IC03/1	8047_A/4	9,13
443	JAUNE	0.75	E92	E91	7
444	ORANGE	0.5	E_APF1	E_APF2	6,7
445	NOIR	1	EMC12	EMC11	14
447	NOIR	1.5	EMC61	EMC62	14
449	NOIR	6	EMC53	EMC52	14
450	NOIR	4	EMC51	EMC53	14
451	NOIR	1	EMC32	EMC31	14
452	NOIR	1.5	EMC33	EMC32	14
453	ORANGE	1	E_ACF2	BORNE - D4	9
454	ORANGE	1	E_ACF1	BORNE + D6	9
455	ORANGE	1	E_ACF2	BORNE - D6	9

456	VIOLET	1	E93	IC03/1	13
457	VIOLET	0.5	8027/6	E93	13
458	VIOLET	0.5	8027/4	E93	13
459	VIOLET	1	IC03/1	K11/5	13
460	BLANC	0.5	8027/3	K11/2	13
461	BLANC	0.5	K11/4	8027/1	13
462	BLANC	1	CONTACT 30 K10	8020/A	13
463	ROUGE	1	CONTACT 87 K10	K11/1	13
464	BLANC	2.5	CONTACT 30 K9	80D0/2	13
465	ROUGE	1	BF5/1	CONTACT 87 K10	13
466	ROUGE	1	BD1/AB	BF5/2	8
467	ROUGE	2.5	BD1/AB	BF6/2	8
468	ROUGE	2.5	BF6/1	CONTACT 87 K9	13
469	NOIR	0.5	8027/2	E94	13
470	NOIR	0.5	K11/3	E94	13
471	NOIR	2.5	80D0/1	E94	13
472	BLANC	1	IC04/2	80F3/A	13
473	NOIR	1	80F3/C	E94	13
474	NOIR	2.5	E94	X_MASV	13
475	BLANC	1	8007/2	BOBINE - K10	13
476	BLANC	1	8007/2	BOBINE - K9	13
477	BLANC	1	BOBINE + K10	BOBINE + K9	13
478	BLANC	1	IC04/1	BOBINE + K9	13
479	BLANC	1	80F3/B	8007/1	13
480	BLANC	1	80F3/A	K11/4	13
493	BLANC	0.5	E1	E96	6
498	BLANC	0.5	E21	E101	5,6,12
499	BLANC	0.5	E101	E20	5,6,12
500	ROUGE	0.5	BF7/20	E103	7
501	ROUGE	1.5	BF7/7	5025/4	9
502	ORANGE	4	BF7/15B	CA00/A1	8
503	ORANGE	4	BF7/11B	CA00/A2	8
504	ORANGE	4	BF7/11B	E104	8

505	ROUGE	4	BF7/1B	E_BB	7,8
506	BLANC	1.5	5025/1	0005/B5	9
507	BLANC	1.5	5025/2	0005/B6	9
508	ORANGE	1.5	BF7/12	E105	9
509	BLANC	1.5	BOBINE + K12	X5/10	9
510	NOIR	1.5	BOBINE - K12	EMC61	9
511	BLANC	1.5	CONTACT 30 K12	0005/A4	9
512	BLANC	1.5	CONTACT 87A K12	5025/3	9
513	ORANGE	1.5	CONTACT 87 K12	E105	9
514	BLANC	1.5	BF7/10	IC07/1	5
515	BLANC	1.5	BF7/9	IC06/4	5
516	BLANC	0.5	E110	1320/A1	10
517	BLANC	0.5	E111	1320/A2	10
518	BLANC	0.5	IC02/B5	E111	10
519	BLANC	0.5	IC02/B6	E110	10
549	BLANC	1	E113	8404/A	5
550	NOIR	1	E114	MC_ANTENNE	5
551	BLANC	0.5	8410/B7	IC09/1	5
552	BLANC	0.5	8410/B8	IC09/2	5
553	BLANC	0.5	8410/B1	IC10/1	5
554	BLANC	0.5	8410/B2	IC10/2	5
555	BLANC	0.5	IC09/1	8430/1	5
556	BLANC	0.5	IC09/2	8430/2	5
557	BLANC	0.5	IC10/1	8435/1	5
558	BLANC	0.5	IC10/2	8435/2	5
559	BLANC	0.5	IC02/B5	7105/1	10,11
560	BLANC	0.5	IC02/B6	7105/2	10,11
561	ORANGE	1	BF7/13	7105/6	8
562	BLANC	0.75	X2/19	7105/3	10,11
563	ROUGE	4	E_BB	BF7/17B	8
564	NOIR	2.5	7105/8	EMC51	8
565	ROUGE	2.5	BF7/17	7105/7	8
566	BLANC	0.75	IC02/B4	E26	10,11

567	BLANC	1.5	5100/2	X1/6	9
568	NOIR	1	1405-1/GND	EMC4	7,10,11
569	ORANGE	1	1405-1/+12V	2100/2	7
570	ROSE	1	1405-1/R2	E14	7
571	BLANC	1	1405-1/N	X1/13	7,10,11
572	BLANC	0.5	E20	4401/1	5,12
576	NOIR	0.5	6220/2	EMC4	6,7
W1 AME	NOIR	1	8410/E	E113	5
W1 SH1	/	/	/	E114	5



Ligier Group

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