# **Water Heater**



# **Thermo Top Evo Parking Heater**



# **Installation Documentation Nissan Note**

# **Validity**

Manufacturer	Model	Туре	EG-BE No. / ABE
Nissan	Note	E12	e11 * 2007 / 46 * 0753 *

Motorisation	Fuel	Transmission type	Output in kW	Displacement in cm <sup>3</sup>	Engine code
1.5 D	Diesel	5-speed SG	66	1461	K9K

SG = Manual transmission

From Model Year 2014 Left-hand drive vehicle

Verified equipment variants: Automatic air-conditioning

Front fog light Start / Stop

Intelligent key with start button

Euro 5

Daytime running lights

Not verified: Passenger compartment monitoring

Manual air-conditioning

**Total installation time:** approx. 7 hours

Ident. No.: 1322168B\_EN Status: 17.02.2015 © Webasto Thermo & Comfort SE

## **Table of Contents**

Validity	1	Radiator Grille Removal Instructions	13
Necessary Components	2	Preparing Bracket	13
Installation Overview	2	Preparing Installation Location	14
Notes on Total Installation Time	2	Preparing Heater	16
Information on Operating and Installation Instructions	3	Installing Heater	17
Notes on Validity	4	Fuel	18
Technical Instructions	4	Coolant Circuit	22
Explanatory Notes on Document	4	Combustion Air	26
Preliminary Work	5	Exhaust Gas	27
Heater Installation Location	5	Final Work	29
Preparing Electrical System	6	Template for Fuel Standpipe	30
Electrical System	8	Operating Instructions for End Customer	31
Fan Controller	9		
MultiControl CAR Option	11		
Remote Option (Telestart)	11		
Remote Option Thermo Call	12		

# **Necessary Components**

- Basic delivery scope Thermo Top Evo based on price list
- Installation kit for Nissan Note 2014 Diesel: 1322166B
- · Heater control in accordance with price list and upon consultation with end customer
- In case of Telestart, indicator lamp in accordance with price list and upon consultation with end customer

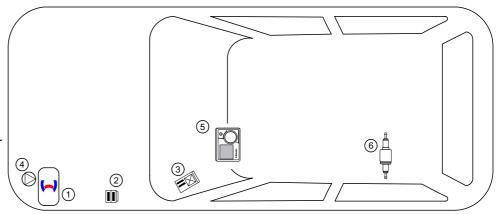
#### Installation instructions:

- Arrange for the vehicle to be delivered with the tank only about ¼ full!
- The installation location of the push button in the case of Telestart or Thermo Call should be confirmed with the end customer.
- Depending on the space required and the manufacturer's instructions on the vehicle, we recommend the use of a vehicle battery with a higher electrical capacity!

## **Installation Overview**

#### Legend:

- 1. Heater
- 2. Fuse holder of engine compartment
- 3. Relay and fuse holder of passenger compartment
- 4. Circulating pump
- 5. MultiControl CAR
- 6. Metering pump



#### **Notes on Total Installation Time**

The total installation time includes the time needed for mounting and demounting of the vehicle-specific components, the heater specific installation time and all other times required for the system integration and initial start-up of the heater.

The total installation time may vary for vehicle equipment other than provided.

## Information on Operating and Installation Instructions

#### 1 Important Information (not complete)

#### 1.1 Installation and Repair



The improper installation or repair of Webasto heating and cooling systems can cause fire or the leakage of deadly carbon monoxide, leading to serious injury or death.



To install and repair Webasto heating and cooling systems you need to have completed a special company training course and have the appropriate technical documentation, special tools and special equipment.



Installation and repair may ONLY be carried out by persons trained and certified in a Webasto training course. NEVER try to install or repair Webasto heating or cooling systems if you have not completed a Webasto training course, you do not have the necessary technical skills and you do not have the technical documentation, tools and equipment available to ensure that you can complete the installation and repair work properly.

Only use genuine Webasto parts. See the Webasto air and water heaters accessories catalogue for this purpose.

#### 1.2 Operation

To ensure safe operation, we recommend having the heater checked every two years by an authorised Webasto dealer, especially when used over a long period and/or under extreme environmental conditions.

Do not operate the heater in closed rooms due to the danger of poisoning and sufficient

Always switch off the heater before refuelling.

The heater may only be used with the prescribed fuel Diesel (DIN EN 590) or petrol (DIN EN 228).

The heater may not be cleaned with a high-pressure cleaner.

#### 1.3 Please note

ALWAYS follow all Webasto installation and operating instructions and observe all warnings.

To become familiar with and understand all functions and properties of the heater, the operating instructions must be read carefully and observed at all times.

For proper, safe installation and repair work, the installation instructions with all warnings and safety information must be carefully read and observed at all times. Please always contact a workshop authorised by Webasto for all installation and repair work.

#### Important

Webasto shall assume no liability for defects, damage and injuries resulting from a failure to observe the installation, repair and operating instructions of the information contained in them.

This liability exclusion particularly applies to improper installations and repairs, installations and repairs by untrained persons or in the case of a failure to use genuine spare parts.

The liability due to culpable disregard to life, limb or health and due to damage or injuries caused by a wilful or reckless breach of duty remain unaffected, as does the obligatory product liability.

Installation should be carried out according to the general, standard rules of technology. Unless specified otherwise, fasten hoses, lines and wiring harnesses to original vehicle lines and wiring harnesses using cable ties. Insulate loose wire ends and tie back. Connectors on electronic components must audibly snap into place during assembly.

Sharp edges should be fitted with rub protection. Spray unfinished body areas, e.g. drilled holes, with anti-corrosion wax (Tectyl 100K, Order No. 111329).

Observe the instructions and guidelines of the respective vehicle manufacturer for demounting and mounting vehicle specific components!

The initial startup is to be executed with the Webasto Thermo Test Diagnosis.

When installing a programmable control module (e.g. a PWM Gateway), the corresponding settings must be checked or adjusted.

#### 2 Statutory regulations governing installation

Ident. No.: 1322168B\_EN

Guidelines	Thermo Top Evo	
Heating Directive ECE R122	E1 00 0258	
EMC Directive ECE R10	E1 04 5627	

#### Note

The regulations of these guidelines are binding in the scope of the Directive 70/156/EEC and/or 2007/46/EC (for new vehicle models from 29/04/2009) and should also be observed in countries in which there are no special regulations.

#### Important

Failure to follow the installation instructions will result in the invalidation of the type approval for the heater and therefore invalidation of the general **homologation of the vehicle**.

#### Note

The heater is licensed in accordance with paragraph 19, section 3, No. 2b of the StVZO (German Road Traffic Licensing Authority).

2.1 Excerpt from ECE regulation 122 (heating system) paragraph 5 for the installation of the heater

Beginning of excerpt.

#### **ANNEX VII**

# REQUIREMENTS FOR COMBUSTION HEATERS AND THEIR INSTALLATION

#### 1. GENERAL REQUIREMENTS

1.7.1. A clearly visible tell-tale in the operator's field of view shall inform when the combustion heater is switched on or off.

#### 2. VEHICLE INSTALLATION REQUIREMENTS

#### 2.1. Scope

- 2.1.1. Subject to paragraph 2.1.2. combustion heaters shall be installed according to the requirements of this Annex.
- 2.1.2. Vehicles of category O having liquid fuel heaters are deemed to comply with the requirements of this Annex.

#### 2.2. Positioning of heater

- 2.2.1. Body sections and any other components in the vicinity of the heater must be protected from excessive heat and the possibility of fuel or oil contamination.
- 2.2.2. The combustion heater shall not constitute a risk of fire, even in the case of overheating. This requirement shall be deemed to be fulfilled if the installation ensures an adequate distance to all parts and suitable ventilation, by the use of fire resistant materials or by the use of heat shields.
- 2.2.3. In the case of M2 and M3 vehicles, the heater must not be positioned in the passenger compartment. However, an installation in an effectively sealed envelope which also complies with the conditions in paragraph 2.2.2 may be used.
- 2.2.4. The label referred to in paragraph 1.4 or a duplicate, must be positioned so that it can be easily read when the heater is installed in the vehicle.
- 2.2.5. Every reasonable precaution should be taken in positioning the heater to minimise the risk of injury and damage to personal property.

#### 2.3. Fuel supply

- 2.3.1. The fuel filler must not be situated in the passenger compartment and must be provided with an effective cap to prevent fuel spillage.
- 2.3.2. In the case of liquid fuel heaters, where a supply separate to that of the vehicle is provided, the type of fuel and its filler point must be clearly labelled.
- 2.3.3. A notice, indicating that the heater must be shut down before refuelling, must be affixed to the fuelling point. In addition a suitable instruction must be included in the manufacturer's operating manual.

#### 2.4. Exhaust system

2.4.1. The exhaust outlet must be located so as to prevent emissions from entering the vehicle through ventilators, heated air inlets or opening windows.

#### 2.5. Combustion air inlet

- 2.5.1. The air for the combustion chamber of the heater must not be drawn from the passenger compartment of the vehicle.
- 2.5.2. The air inlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

#### 2.6. Heating air inlet

- 2.6.1. The heating air supply may be fresh or recirculated air and must be drawn from a clean area not likely to be contaminated by exhaust fumes emitted either by the propulsion engine, the combustion heater or any other vehicle source.
- 2.6.2. The inlet duct must be protected by mesh or other suitable means.

#### 2.7. Heating air outlet

- 2.7.1. Any ducting used to route the hot air through the vehicle must be so positioned or protected that no injury or damage could be caused if it were to be touched.
- 2.7.2. The air outlet must be so positioned or guarded that blocking by rubbish or luggage is unlikely.

End of excerpt

Status: 17.02.2015

In multilingual versions the German language is binding.

## **Notes on Validity**

This installation documentation applies to Nissan Note Diesel vehicles - for validity, see page 1 - from model year 2014 and later, assuming technical modifications to the vehicle do not affect installation, any liability claims excluded. Depending on the vehicle version and equipment, modifications may be necessary during installation with respect to this installation documentation.

Vehicle and engine types, equipment variants and other specifications not listed in this installation documentation have not been tested. However, installation according to this installation documentation may be possible.

#### **Technical Instructions**

#### **Special Tools**

- Hose clamp pliers for self-clamping hose clamps
- · Hose clamp pliers for Clic hose clamps of type W
- Automatic wire stripper 0.2 6mm²
- Crimping pliers for cable lug / tab connector 0.5 6mm²
- Torque wrench for 2.0 10 Nm
- · Hose clamping pliers
- · Metric thread-setter kit
- · Webasto Thermo Test diagnosis with current software

#### **Dimensions**

· All dimensions are in mm

#### **Tightening torque values**

- Tightening torque values for 5x13 heater bolts and 5x11 heater stud bolts = 8Nm.
- Tightening torque of 5x15 retaining plate of water connection piece bolt = 7Nm.
- Tighten other bolt connections in accordance with manufacturer's instructions or in accordance with state-of-theart-technology.

## **Explanatory Notes on Document**

You will find an identification mark on the outside top right corner of the page in question to provide you with a quick overview of the individual working steps.

Special features are highlighted using the following symbols:

Mechanical system	<b>3</b>	Specific risk of injury or fatal accidents	Â
Electrical system	7	Specific risk due to electrical voltage	F
Coolant circuit		Specific risk of damage to components	!
Combustion air		Specific risk of fire or explosion	
Fuel		Reference to general installation instructions of the Webasto components or to the manufacturer's vehicle-specific documents	
		Reference to a special technical feature	
Exhaust gas	~	The arrow in the vehicle icon indicates the position on the vehicle	
Software		and the viewing angle	Nm -

Tightening torque according to the

manufacturer's vehicle-specific documents

## **Preliminary Work**

#### **Vehicle**

- · Open the fuel tank cap.
- Ventilate the fuel tank.
- Close the fuel tank cap again.
- Depressurise the cooling system.
- · Disconnect and remove the battery.
- Remove the air filter together with the intake hose.
- Remove the engine control unit.
- Detach the central electrical box and put it aside.
- Detach the wheel well trim on the front left.
- Remove the radiator grille (see removal instructions).
- Remove the bumper.
- · Remove the rear bench seat.
- Remove the instrument panel trim on the driver's side.
- Detach the passenger compartment fuse and relay box and put it aside.
- · Remove the air outlet trim of the centre console.
- Remove the A/C control panel.

The following work should only be performed during the corresponding installation sequence:

Remove the fuel-tank sending unit in accordance with the manufacturer's instructions.

#### Heater

- Remove years that do not apply from the type and duplicate label.
- Attach the duplicate label (type label) in the appropriate place inside the engine compartment.



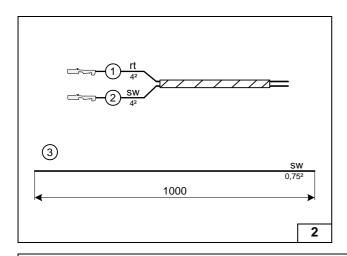
## **Heater Installation Location**

1 Heater

Installation location

Ident. No.: 1322168B\_EN Status: 17.02.2015 © Webasto Thermo & Comfort SE





# **Preparing Electrical System**

Wire sections retain their numbering in the entire document.

Produce all following electrical connections as shown in the wiring diagram.

Pull wire 3 into 4mm dia. protective sleeving!

- 1 Red (rt) wire of fan wiring harness
- 2 Black (sw) wire of fan wiring harness

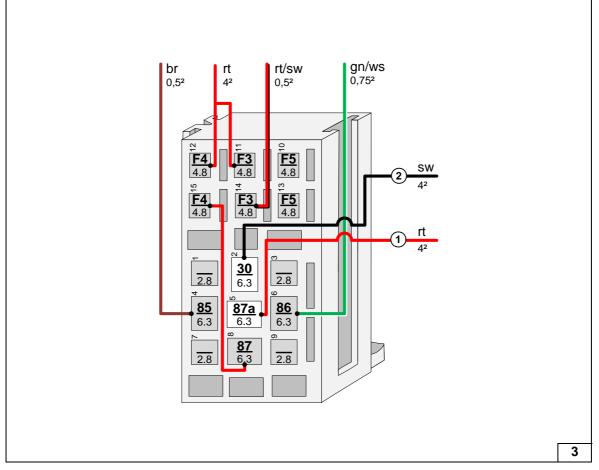




**Assigning** wires



Connecting wires to passenger compartment relay and fuse holder

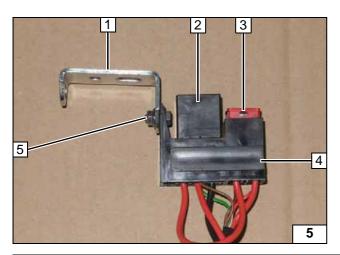


- 1 30 4
- 1 Perforated bracket
- 2 Drill out hole to 8 mm dia.



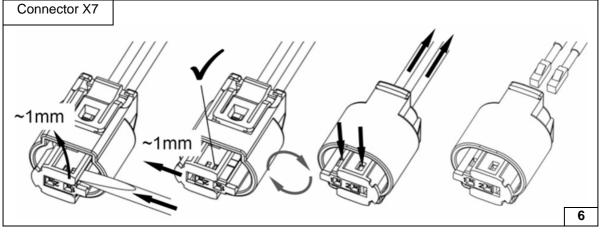
**Preparing** perforated





- 1 Perforated bracket
- 2 K1 relay
- 3 Fuse F4 10A
- 4 Relay and fuse holder of passenger compartment
- 5 M5x16 bolt, large diameter washer [2x], nut

Preparing relay and fuse holder of passenger compartment



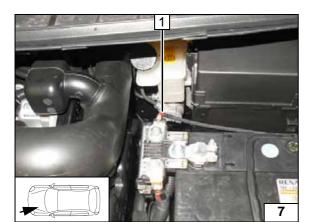
Removing metering pump connector



# **Electrical System**

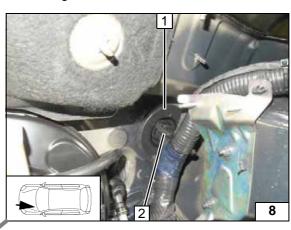
#### Positive wire

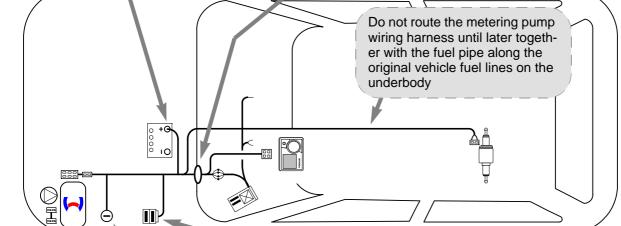
1 Positive wire on positive battery terminal



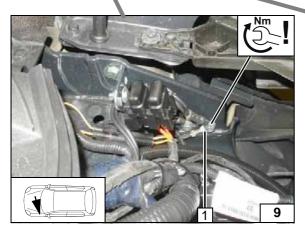
## Wiring harness pass through

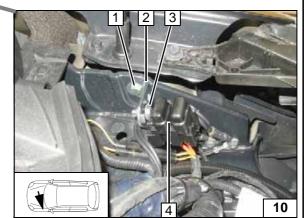
- 1 Protective rubber plug
- 2 Wiring harnesses of heater, heater control





Wiring harness routing diagram





## Earth wire

1 Earth wire on original vehicle earth support point

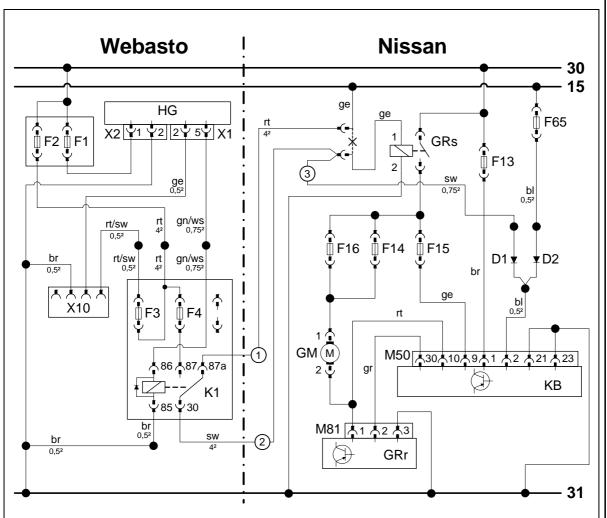
## Fuse holder of engine compartment

- 1 M6x20 bolt, flanged nut, existing hole
- 2 Angle bracket
- **3** M5x16 bolt, large diameter washer [2x], retaining plate of fuse holder, nut
- **4** F1-2 fuses



## **Fan Controller**





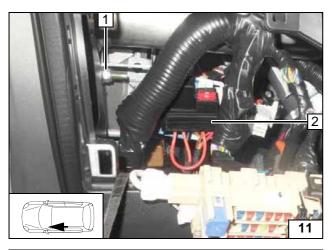
	$\sim$
ĺ	1

Wiring diagram

Webasto components		Vehicle components		Colours and symbols	
HG	TT-Evo heater	F65	10 A fuse	rt	red
X1	6-pin heater connector	GRs	Fan relay	sw	black
X2	2-pin heater connector	F13	10 A fuse	ge	yellow
F1	20A fuse	F16	15A fuse	gn	green
F2	30A fuse	F14	15A fuse	br	brown
X10	4-pin connector of heat-	F15	10 A fuse	ws	white
	er control	GM	Fan motor	bl	blue
F3	1A fuse	KB	A/C control unit	gr	grey
F4	10 A fuse	M50	40-pin KB connector		
K1	Fan relay	GRr	Fan controller		
D1	3A diode	M81	Connector GRr		
D2	3A diode			Х	Cutting point
				Wiring colours may vary.	

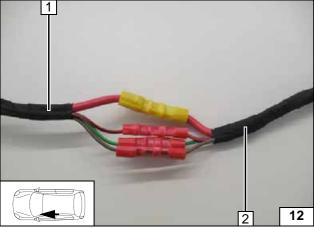
Legend





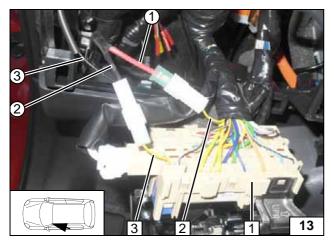
- M8 flanged nut on original vehicle stud bolt
- 2 Relay and fuse holder of passenger compartment

Installing relay and fuse holder of passenger compartment



- 1 Wiring harness of passenger compartment relay and fuse holder
- 2 Wiring harness of heater

Connecting wiring harnesses using same colour wires

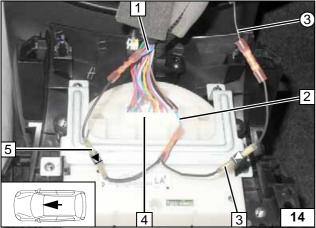


Connection at original vehicle fan relay. Route additional black (sw) wire ③ in protective sleeving to the A/C control unit.



- 1 Central electrical box
- 2 Yellow (ge) wire of Terminal 15
- 3 Yellow (ge) wire of fan relay GRs/Pin 1
- Red (rt) wire of K1/87a, fan wiring harness
- ② Black (sw) wire of K1/30, fan wiring harness

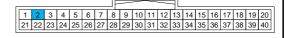
Connecting the fan relay



Connection to 40-pin connector M50 **4** from A/C control panel. Pay attention to the diode direction of flow.

- 1 Blue (bl) wire from fuse F65
- 2 Blue (bl) wire of 40-pin M50 connector, Pin 2
- 3 Diode D1
- 5 Diode D2
- 3 Additional black (sw) wire

View of connector M50 4 on wire side





Connection to A/C control unit

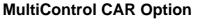








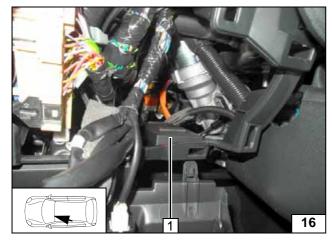




1 MultiControl CAR

15

Installing MultiControl CAR

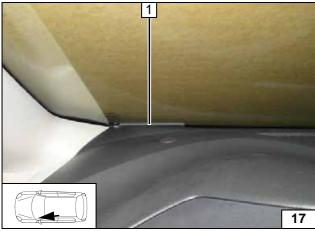


# **Remote Option (Telestart)**

Fasten receiver 1 with adhesive tape.



Installing receiver



1 Antenna

Mounting antenna



## **Temperature sensor T100 HTM**

Secure temperature sensor 1 from behind using adhesive tape.



**Mounting** temperature sensor

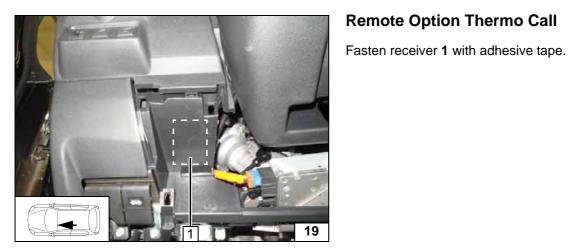




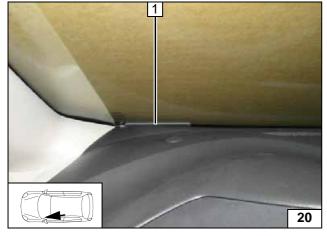




Installing receiver

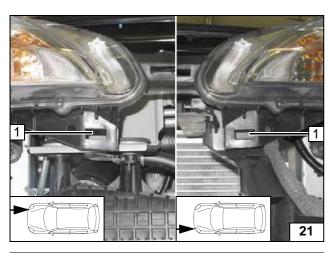


1 Antenna



Mounting antenna

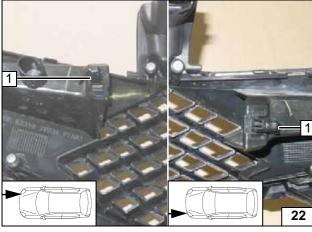




## **Radiator Grille Removal Instruc**tions

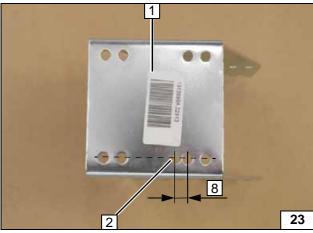
1 Fastening points for retaining clip of radiator grille in left and right headlights.

Removing radiator grille



1 Retaining clip on the left and the right in radiator grille, inside view

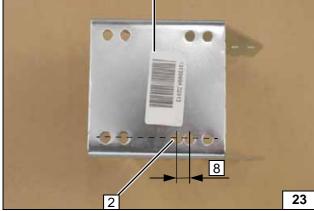
> Removing radiator grille



# **Preparing Bracket**

- 1 Bracket
- 2 7 mm dia. hole

Hole in bracket

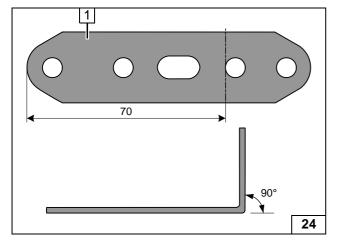


1 Perforated bracket

Status: 17.02.2015

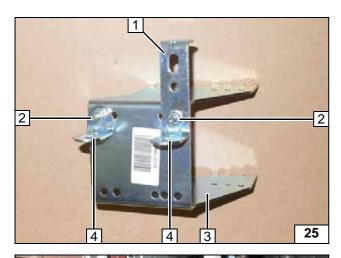


Preparing perforated . bracket



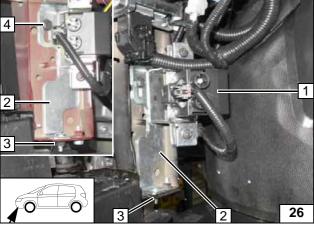
Ident. No.: 1322168B\_EN





- 1 Perforated bracket
- 2 M6x20 bolt, flanged nut [2x each]
- 3 Bracket
- 4 Angle bracket [2x]

Premounting bracket

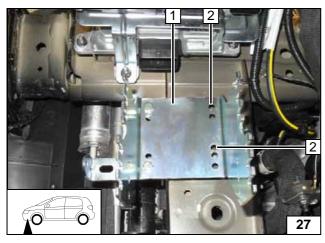


# **Preparing Installation Location**



Remove relay for electrical auxiliary heater 1 with bracket 2 . Discard bracket 2 . Original vehicle bolt 4 and original vehicle nut 3 will be reused, see "Exhaust" section.

Removing pull solenoid

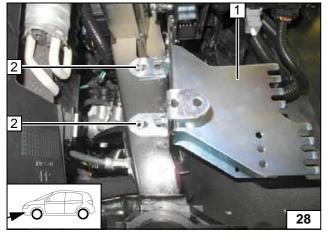


Align bracket 1 upwards and place angle bracket on the carrier (see next image).



2 Copy hole pattern [2x]

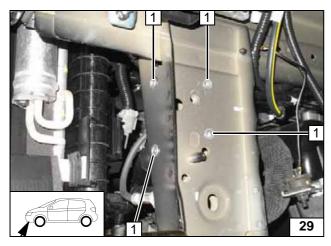
Copying hole pattern



- 1 Bracket
- 2 Copy hole pattern [2x]

Copying hole pattern



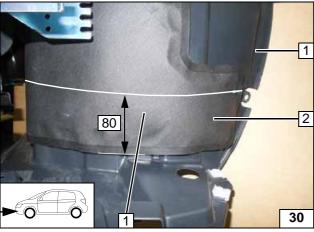


Remove bracket.

1 9.1 mm dia. hole; rivet nut [4x each]



Inserting and tightening rivet nuts

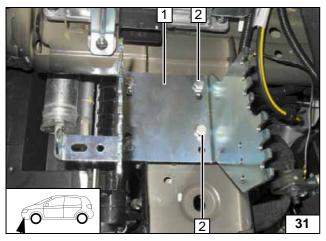


Loosen insulation mat **2**, move it 80 mm higher and reattach.



1 Wheel well trim



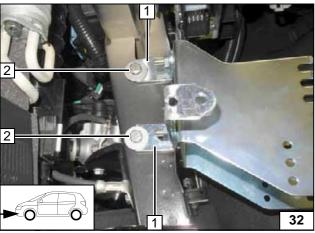


Insert one 20 mm shim each between bracket 1 and frame side member at position 2.



**2** M6x40 bolt, spring lockwasher, 20 mm shim [2x each]

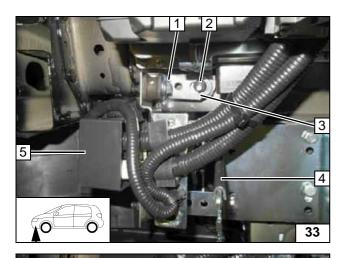
Installing bracket



- 1 Angle bracket [2x]
- **2** M6x20 bolt, spring lockwasher, large diameter washer [2x each]

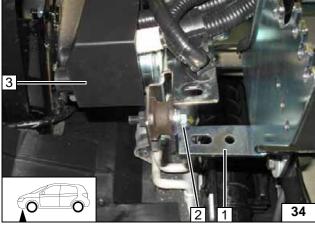
Installing bracket





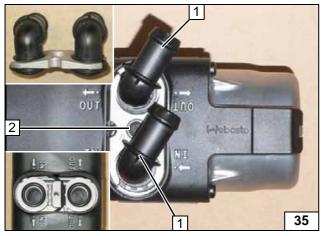
- Original vehicle bolt
- 2 Flanged nut
- 3 Angle bracket
- 4 Apply 100 mm edge protection
- 5 Relay for electrical auxiliary heater

Installing pull sole-noid



- 1 Perforated bracket
- 2 Flanged nut
- 3 Relay for electrical auxiliary heater

Installing pull solenoid



# **Preparing Heater**



- 1 Water connection piece, sealing ring [2x
- 2 5x15 self-tapping bolt, retaining plate of water connection piece

Installing water connection piece



36

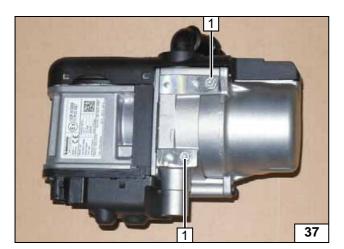
Insert self-tapping bolt 5x13 1 and stud bolt 2 in the available holes, turning in by max. 3



Premounting bolts

Ident. No.: 1322168B\_EN Status: 17.02.2015

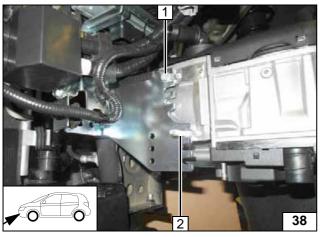




Screw 5x13 self-tapping bolts **1** [2x] into existing holes by a maximum of 3 thread turns.



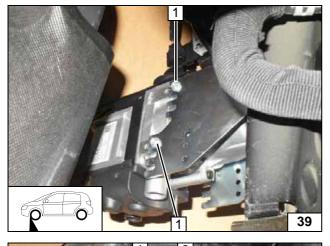
Loosely premounting bolts



# **Installing Heater**

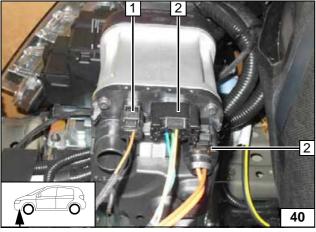
- 1 Tighten 5x13 self-tapping bolt2 Tighten stud bolt

Installing heater



1 Tighten 5x13 self-tapping bolt [2x]

Installing heater



- Wiring harness of circulating pumpWiring harness of heater [2x]

Installing wiring harnesses



#### **Fuel**

#### **CAUTION!**

Open the vehicle's fuel tank cap, ventilate the tank and then re-close the tank lock.

Catch any fuel running off in an appropriate container.

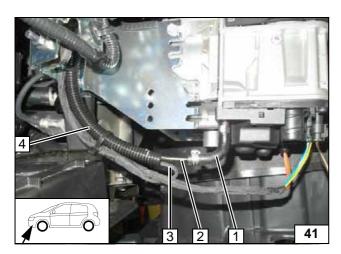
Route fuel line and metering pump wiring harness so that they are protected against stone impact. Unless specified otherwise, always fasten using cable ties.

Provide rub protection for fuel line and wiring harness in areas where there are sharp edges.

# !

#### WARNING!

The fuel line and wiring harness are routed to the metering pump as shown in the wiring harness routing diagram.

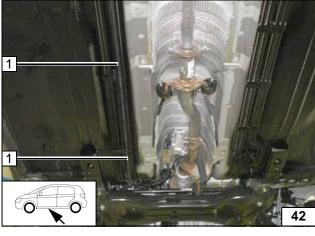


Pull fuel line 2 and wiring harness of metering pump 3 into 10 mm dia. corrugated tube 4 and route to the firewall in the engine compartment.

1 90° moulded hose, 10 mm dia. clamp [2x]







Route fuel line and wiring harness of metering pump in 10mm dia. corrugated tube 1 along original vehicle fuel lines to installation location of metering pump.

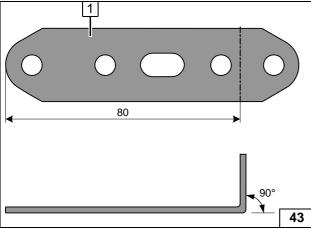


Routing lines



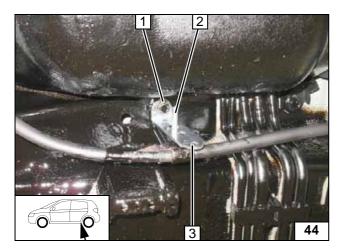


Preparing perforated bracket



Ident. No.: 1322168B\_EN Status: 17.02.2015 © Webasto Thermo & Comfort SE 18



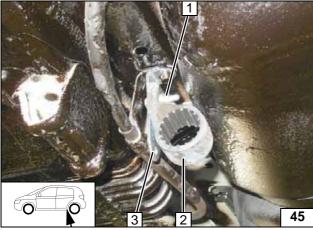


Prior to installation of perforated bracket 3, insert bolt M6x25 2 in oblong hole.



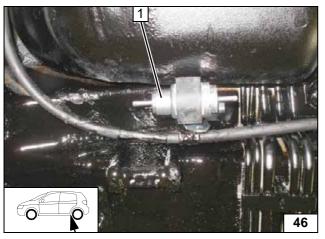
 Original vehicle bolt from handbrake cable bracket

Installing perforated bracket



- 1 Support angle bracket, M6 flanged nut
- 2 Metering pump mounting bracket
- 3 Perforated bracket

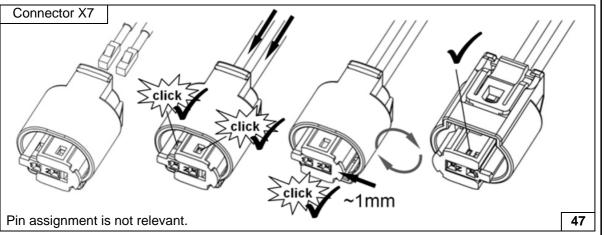
Installing metering pump mounting bracket



1 Metering pump in mounting bracket

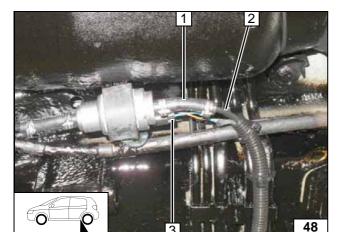


Installing metering pump



Completing metering pump connector

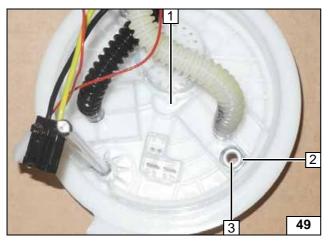




- 1 Hose section, 10 mm dia. clamp [2x]
- 2 Fuel line
- 3 Wiring harness of metering pump, connector X7 mounted



Connecting metering pump

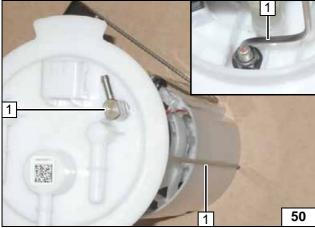


Remove and dismantle fuel-tank sending unit 1 according to manufacturer's instructions.



- 2 Mount M6 flanged nut
- 3 Copy hole pattern, 6 mm dia. hole

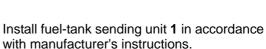
Fuel extraction

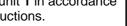


Shape fuel standpipe 1 according to template and cut to length.



Installing fuel standpipe



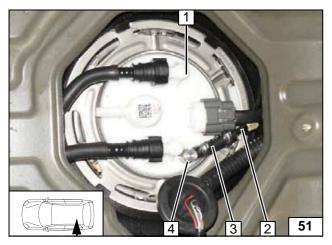




- 2 Fuel line
- 3 Hose section, 10mm dia. clamp [2x]
- 4 Fuel standpipe

Status: 17.02.2015

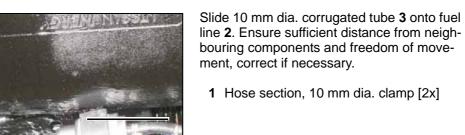
Connecting fuel line



Ident. No.: 1322168B\_EN







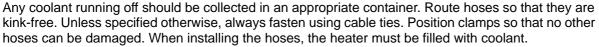
Connecting metering pump

Ident. No.: 1322168B\_EN Status: 17.02.2015 © Webasto Thermo & Comfort SE 21



# **Coolant Circuit**

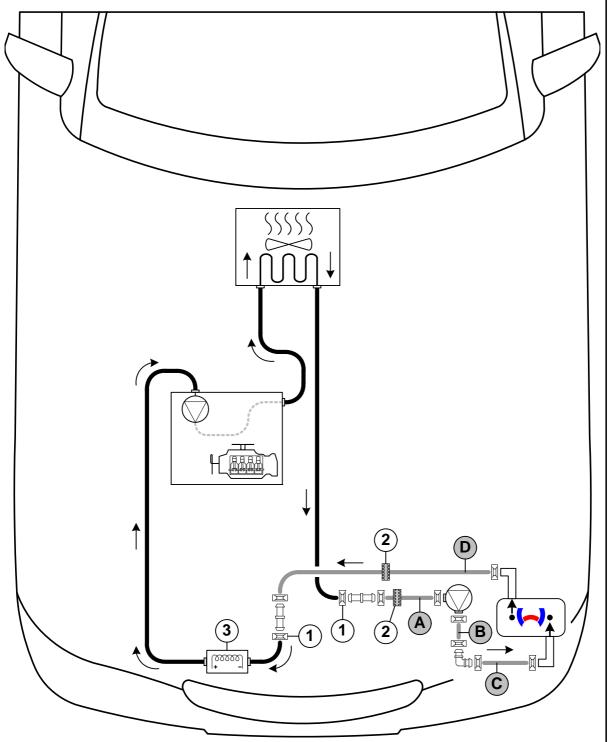
#### **WARNING!**



The connection should be performed "inline" in the return circuit from the heat exchanger via the electric auxiliary heater to the oil cooler in the engine as shown in the diagram below:



Hose routing diagram



All spring clips without a specific designation = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia. 1 = Original vehicle spring clip = 25mm dia.

Status: 17.02.2015

3 = Electric auxiliary heater

Ident. No.: 1322168B\_EN

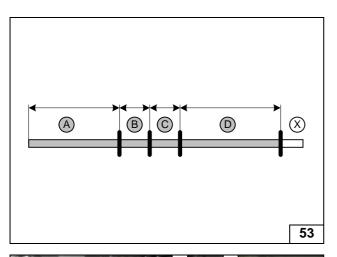






Cutting hoses to

length



- 2 54
- 1 M6 flanged nut on stud bolt
- 2 Wiring harness of circulating pump
- 3 Circulating pump mounting bracket
- 4 Circulating pump

Discard section X.

310

110

80

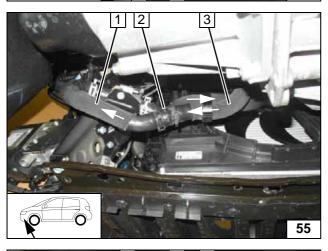
410

**B** =

C =

D =

Installing circulating pump



Remove and discard original vehicle connecting pipe 2. Spring clip will be reused!



- 1 Auxiliary heater inlet hose
- 3 Hose on heat exchanger outlet

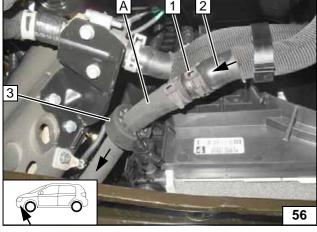
Cutting point



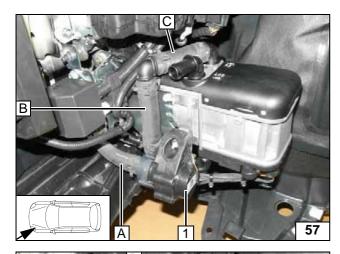
- 2 Hose on heat exchanger outlet
- 3 Slide on black (sw) rubber isolator



Connection on heat exchanger outlet

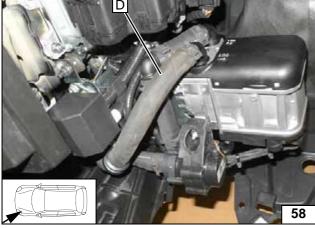




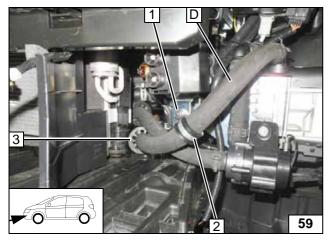


1 Circulating pump

Connecting heater inlet

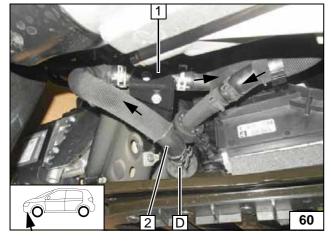


Connecting heater outlet



- Original vehicle bolt
  25 mm dia. rubber-coated p-clamp
  Slide on black (sw) rubber isolator

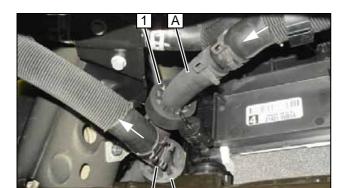
Routing in engine compartment



- 1 Electric auxiliary heater2 Auxiliary heater inlet hose

Electric auxiliary heater connection





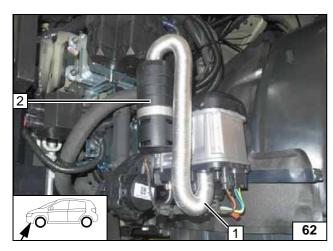
Align black (sw) rubber isolator 1 [2x] onto hoses A and D. Ensure sufficient distance from neighbouring components, correct if necessary.



Aligning hoses

Ident. No.: 1322168B\_EN Status: 17.02.2015 © Webasto Thermo & Comfort SE 25

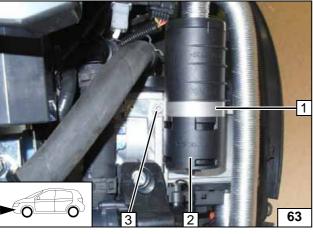




# **Combustion Air**

- 1 Combustion air pipe2 Silencer

Installing combus-tion air pipe

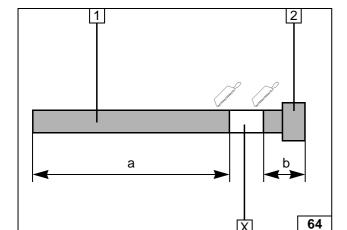


- 1 51 mm dia. clamp
- 2 Silencer
- 3 5x13 self-tapping bolt



Mounting silencer





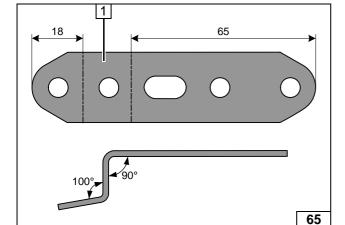
## **Exhaust Gas**

**1** 

Discard section X.

- 1 Exhaust pipe a = 440
- **2** Exhaust end section b = 70

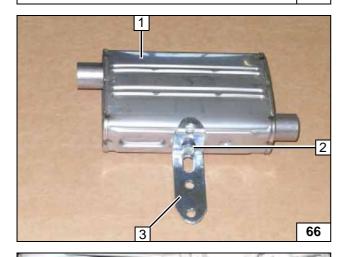
Preparing exhaust pipe



1 Perforated bracket



Preparing perforated bracket



- 1 Silencer
- 2 M6x16 bolt, spring lockwasher
- 3 Perforated bracket

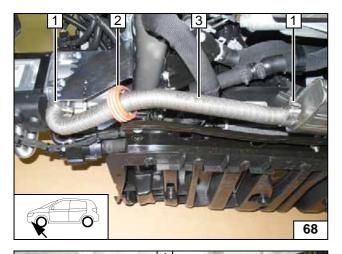
Premounting silencer



- 1 Perforated bracket
- 2 M6x20 bolt, flanged nut, existing hole

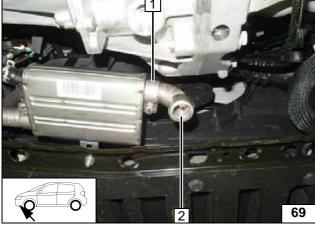
Mounting silencer





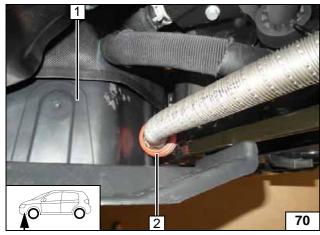
- Hose clamp [2x]
  Slide on spacer bracket
  Exhaust pipe

Mounting exhaust pipe



- 1 Hose clamp
- 2 Exhaust end section

Mounting exhaust end section



- 1 Wheel well trim installed
- 2 Spacer bracket

Aligning spacer bracket





#### **WARNING!**

Reassemble the disassembled components in reverse order. Check all hoses, clamps and all electrical connections for firm seating. Insulate all loose lines and tie back.

Only use manufacturer-approved coolant. Spray the heater components with anti-corrosion wax (Tectyl 100K, Order No. 111329).

- Connect the battery.
- · Fill and bleed the coolant circuit according to the vehicle manufacturer's specifications
- Program MultiControl CAR, teach Telestart transmitter
- Make settings on A/C control panel according to the "Operating Instructions for End Customer".
- Apply the caution label "Switch off parking heater before refilling" in the area of the filler neck
- See installation instructions for initial start-up and function check

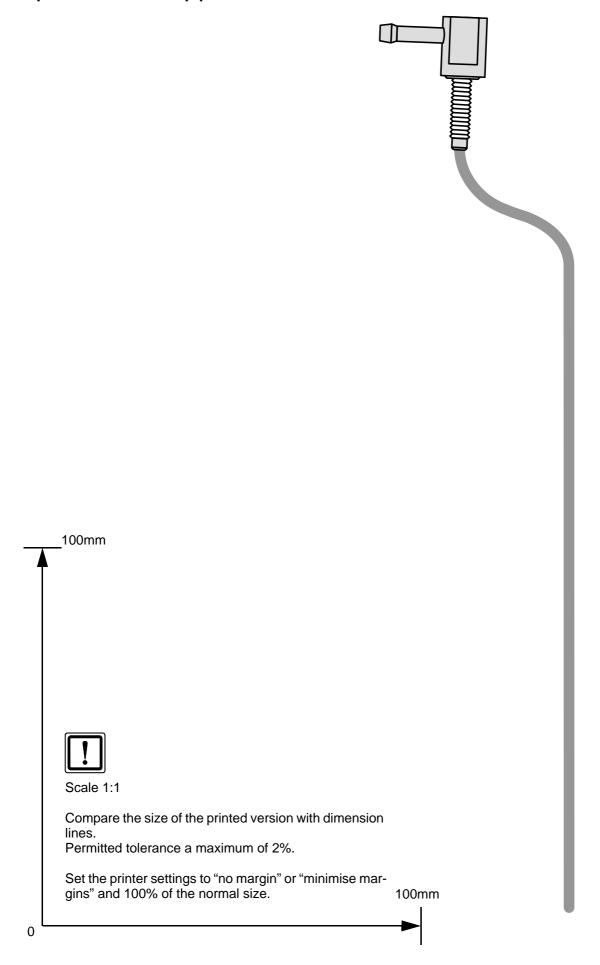




Webasto Thermo & Comfort SE Postfach 1410 82199 Gilching Germany Internet: www.webasto.com Technical Extranet: http://dealers.webasto.com



# **Template for Fuel Standpipe**



Ident. No.: 1322168B\_EN Status: 17.02.2015 © Webasto Thermo & Comfort SE 30



# **Operating Instructions for End Customer**

Please remove page and add to the vehicle operating instructions.

#### Note:

We recommend matching the heating time to the driving time.

Heating time = driving time

Example:

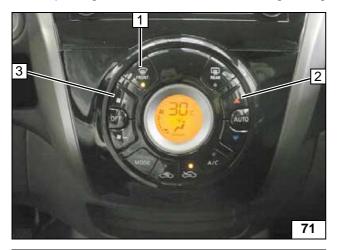
For a driving time of approx. 20 min. (in one direction), we recommend not exceeding a switch-on time of 20 min.



Passenger compartment monitoring, if installed, must be deactivated in addition to vehicle settings for the heating cycle.

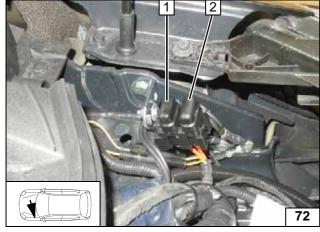
Deactivation instructions can be found in the operating instructions of the vehicle.

Before parking the vehicle, make the following settings:



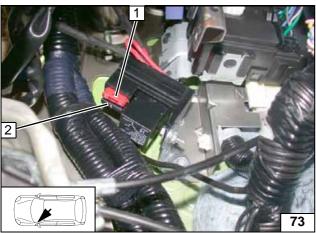
- 1 Air outlet to windscreen
- 2 Set temperature to "HI"
- 3 Set fan to level "2" or max. "3"

A/C control panel



- 1 30A main fuse F2 of passenger compartment
- 2 20A heater fuse F1

Engine compartment fuses



- 1 10A fan fuse F4
- 2 1A fuse F3 of heater control

Passenger compartment fuses