INSTALLATION RECOMMENDATION
AIRTRONIC M2 B4L MSFM 29 2482 80 4003
FORD TRANSIT TOURNEO CUSTOM PHEV HYBRID

Version 2.0



THIS INSTALLATION RECOMMENDATION APPLIES TO VEHICLES FROM MODEL YEAR 2020 WITH THE FOLLOWING MOTORISATION

For cars produced 2019-12 ->

999 Cylindervolym, cm³, Petrol engine / Plug-in Hybrid CVT, 90kw/126hk

EQUIPMENT

- Fog lights
- Headlight cleaning system
- Automatic airconditioning
- Automatic transmission

Mounting time approx. 6 hours



Eberspächer

A WORLD OF COMFORT

20200602 V HS/SA

INTRODUCTION

CHAPTER	CHAPTER DESCRIPTION	PAGE
1	Introduction	3
2	Preparing of the vehicle	6
3	Installation	7
4	After installation	32
6	Guidance for customer	33

PLEASE NOTE!

This installation recommendation is valid for the above mentioned vehicle to the exclusion of all liability claims.

Deviating model years and/or deviating equipment may result in modifications to this installation recommendation.

It is therefore mandatory to check the feasibility of installing the heater in the vehicle before starting work.

All liability claims resulting from modifications to the vehicle are excluded.

1 INTRODUCTION

SPECIAL TEXT FORMATS, PRESENTATIONS AND PICTURE SYMBOLS

In this installation recommendation, special text formats and picture symbols are used to emphasize different contents. Please refer to the following examples for their meanings and appropriate action.

SPECIAL TEXT FORMATS AND PRESENTATION

- This dot (•) denotes a list, which ist started by a heading.
  - If an indented dash (-) follows a «dot» , this list is a sub- section of the black dot.

PICTURE SYMBOLS

DANGER!
This information points out a potential serious or fatal danger. Ignoring this information can result in severe injuries.

→ This arrow indicates the appropriate precaution to take the avert the danger.

CAUTION!
This information points out a dangerous situation for a person and / or the product. Ignoring this information can result in injuries to people and / or damage to machinery.
→ This arrow indicates the appropriate precaution to take avert the danger.

PLEASE NOTE!
These remarks contain recommendations for use and useful tips for the operation, installation and repair of the heater.

ACCIDENT PREVENTION

General accident prevention regulations / health and safety regulations and the corresponding workshop, company and operating safety instructions are to be observed.

SAFETY INTRODUCION FOR INSTALLATION AND REPAIR

DANGER!
Improper installation or repair of Eberspächer heaters can cause a fire or result in toxic exhaust entering the inside of the vehicle.
This can cause serious and even fatal risks.

→Only authorized and trained persons may install the heater according to the specifications in the technical documents or repair it using original spare parts.

→Installation and repairs by unauthorized and untrained persons, repairs using non-original spare parts and without the technical documents required for installation and repair are dangerous and therefore are not permitted.

→Installation according to this installation recommendation may only be carried out in conjunction with the respective unit-related technical description, installation instructions, operating instructions and maintenance instructions. This document must be carefully read through before / during installation and repair and followed throughout. Particular attention is to be paid to the official regulations, the safety instructions and the general information.

PLEASE NOTE!
- The relevant rules of sound engineering practice and any information provided by the vehicle manufacturer are to be observed during the installation and repair.
- When carrying out electric welding on the vehicle, the positive cable at the battery should be disconnected and earthed to protect the control box.

LIABILITY CLAIM / WARRANTY

Eberspächer does not accept any liability for defects and damage, which are due to installation or repair by unauthorized and untrained persons. Compliance with the official regulations and the safety instructions is prerequisite for liability claims. Failure to comply with the official regulations and safety instructions leads to exclusion of any liability of the heater manufacturer.

1 INTRODUCTION

ADDITIONAL INFORMATION ON THE ALIDITY OF THE INSTALLATION RECOMMENDATION

The installation recommondation is valid for the vehicle with the engine and gearbox options listed in the following.

ENGINE AND GEARBOX OPTIONS

Cubic capacity	kW / hk	Gearbox
1.0	90/126hk	Automatic

5 S = 5 gear manual box
6 S = 6 gear manual box

PLEAS NOTE!

- The installation recommendation is not valid for right-hand drive vehicles.
- Vehicle models, engine types and featurs options not listed in this recommendation, have not been tested.
  Installation acccording to this installation recommendation can still be possible

INITIAL STARTUP OF THE HEATER OR FUNCTIONAL TEST

- After installation or carrying out a repair on the heater, the coolant circuit must be carefully vented. Comply with the instructions issued by the vehicle manufacturer
- Open all heating circuits before the trial run (set the temperaturecontroller to "hot").
- During the heater trail run, all water connections must be checked for leaks and secure, tight fit.
- If faults occur while the heater is running, use a diagnostic unit to correct the cause of the fault.

PARTS REQUIRED FOR INSTALLATION

QUANTITY	DESIGNATION	ORDER NO.
1	Vehicle-specific installation Airtronic M2-B4L (201987)	29 2482 80 4003
	Easystart control unit as chosen:	
1	Easystart Pro Timer	22 1000 34 2200

SPECIAL TOOLS REQUIRED

- Torque wrench (5…50 Nm)
- Anti-corrosion agent
- Pliers for spring band clamps
- Crimping tool
- Step drill

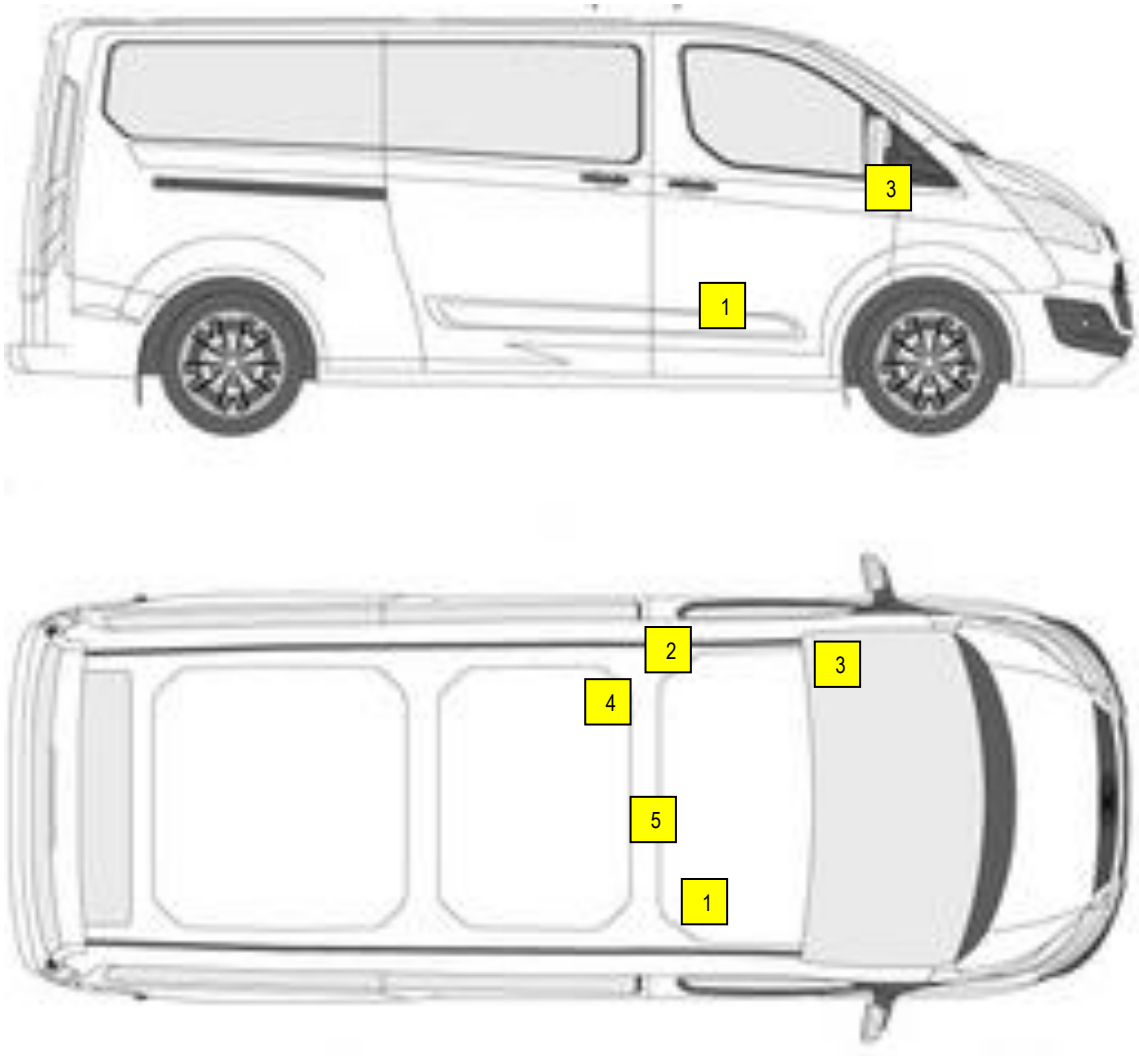
TIGHTENING TORQUES

If no tightening torques are specified, tighten the screw connections according the following table:

Skruforbindelse	Tiltrekningsmomenter
M4	$3^{+0,5}$ Nm
M5	$5^{+0,5}$ Nm
M6	10^{+1} Nm
M8	20^{+2} Nm
M10	45^{+2} Nm
TRX M6	$6^{+0,5}$ Nm
Hose clip for water hose	$3^{+0,5}$ Nm
Hose clip for water hose	$3^{+0,5}$ Nm

1 INTRODUCTION

Installation overview



1 Heater
2 Fuse holder
3 Stationary part of control unit
4 Metering pump
5 Fuel tank extractor

2 PREPARING OF THE VEHICLE

Remove cupholder (1) and remove screws (2) that hold panel (3)

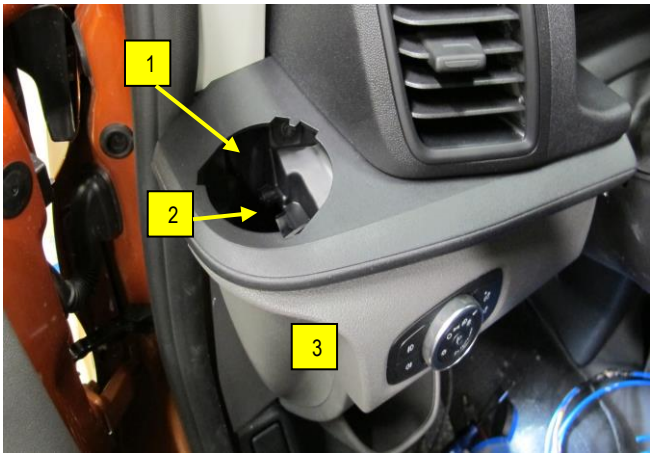


Fig. 1

Remove panel (1) and remove screws that hold panel (2)

Remove panel (2)

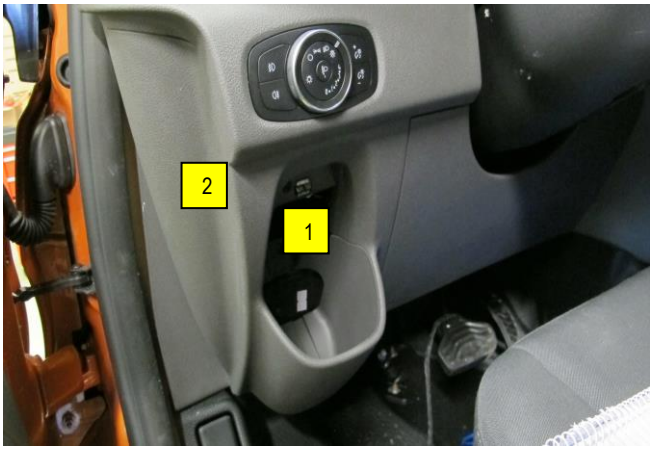


Fig. 2

Remove panel on B-column (1) and power terminal cover on seat base (2)

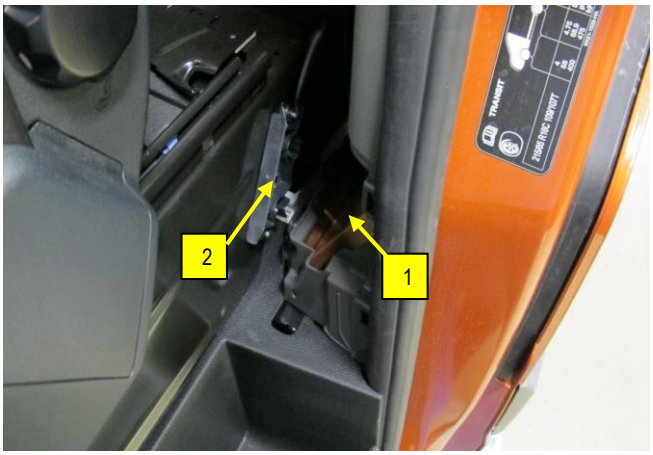


Fig. 2

3 INSTALLATION

Remove towbar and holder (1) under passenger seat

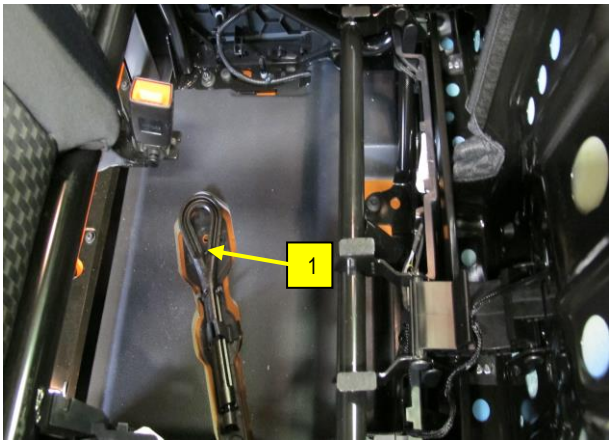


Fig. 3

Use floor bracket and place it as shown and cut mat around bracket

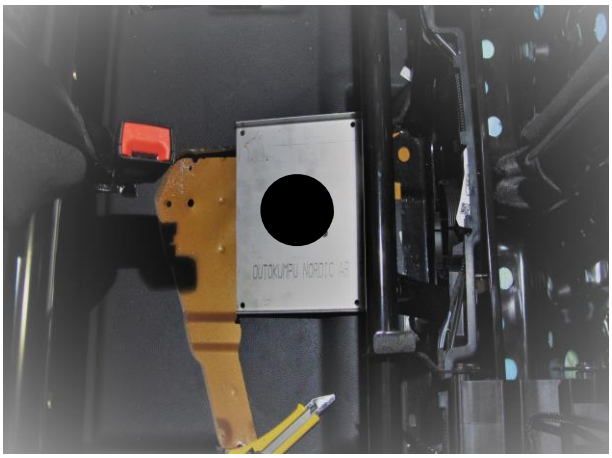


Fig. 4

Measure 145 mm (1) from seat base (2)

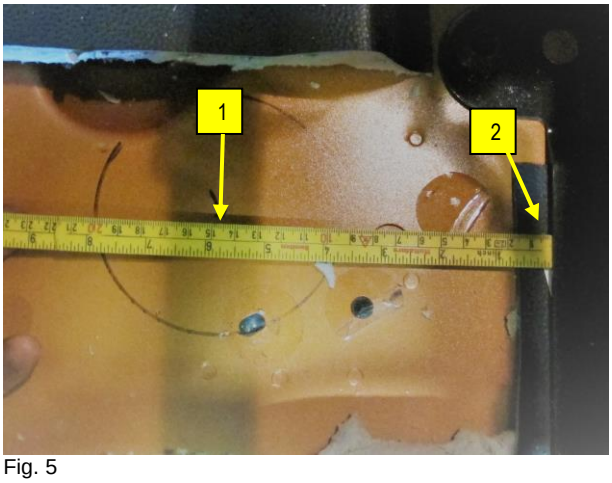


Fig. 5

3 INSTALLATION

Measure 55 mm (1) from edge of existing hole

Use 116 mm hole saw for drilling

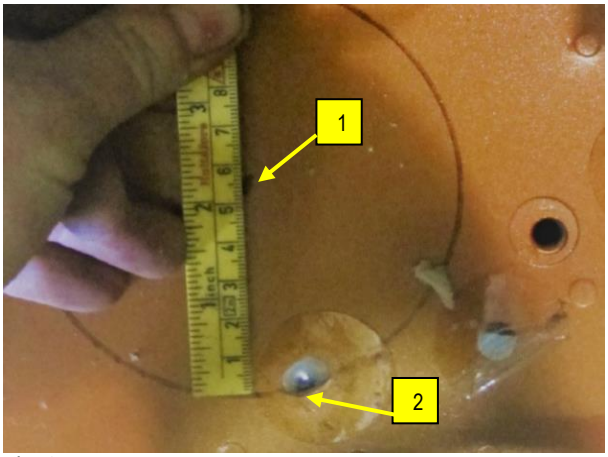


Fig. 6

⚠ Always use rust protection after drilling


Fig. 7

Add cable to heater under passenger seat (1) and place bundled part behind driver seat (2)

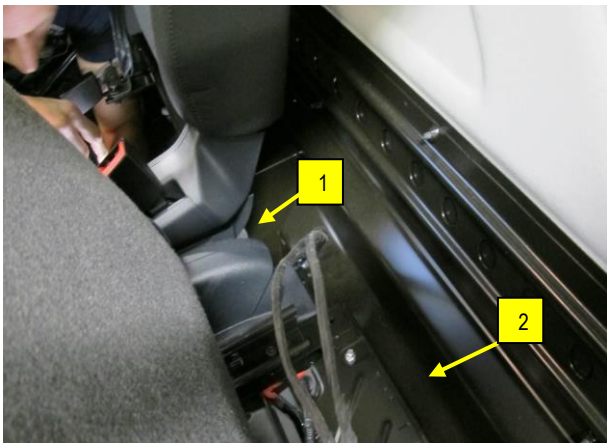


Fig. 8

3 INSTALLATION

Loosen the floor panel (1) and insert a pull cord from (2) to (3).

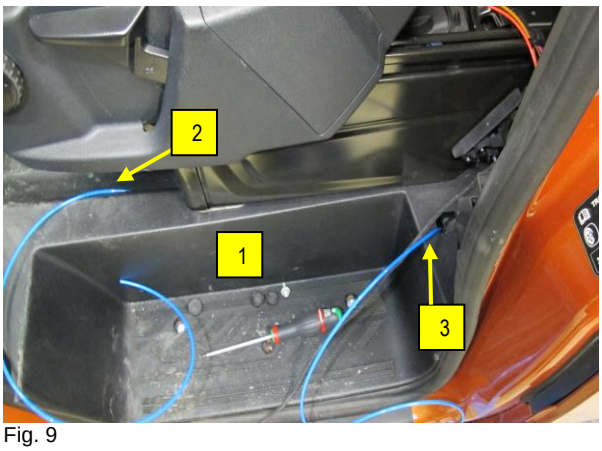


Fig. 9

Attach heater control unit cable to pull cord and pull it forward behind floor panel



Put cable behind floor mat and up in dashboard


.Fig 10

3 INSTALLATION

Pull cable forward (1) and attach excess cable as shown (2)

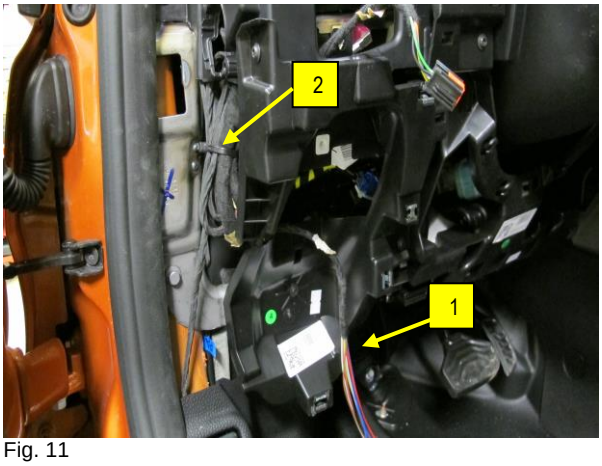


Fig. 11

When mounted on a Pro Timer only 4-pin connector (1) from heater will be used.

Isolate rest of the cables (2)

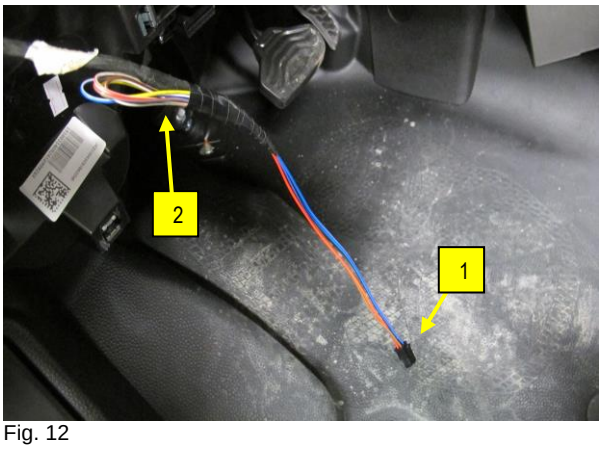


Fig. 12

Use template (1) on console when installing Pro Timer.

See specific information included in the Pro Timer



Fig. 13

3 INSTALLATION

Connect Pro Timer with 4-pin cable from heater and reinstall panel

See specific control panel wiring diagram for more information



Fig. 14

Pull out cover (1) and pull cables to fuse holder behind cover

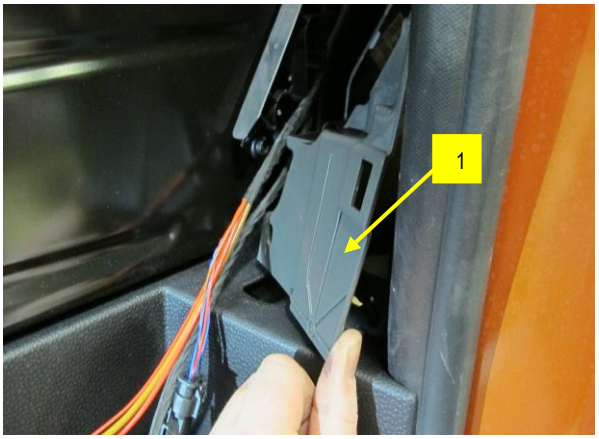


Fig. 16

Remove fuses from fuse holder and connect cables

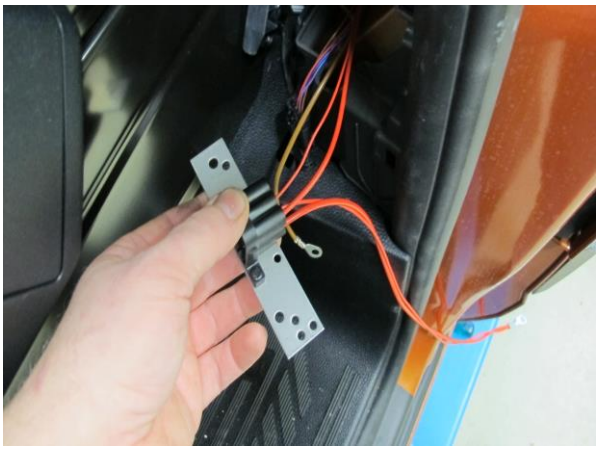


Fig. 17

3 INSTALLATION

Mount bracket and ground cable to existing screw (1) with M6 nut

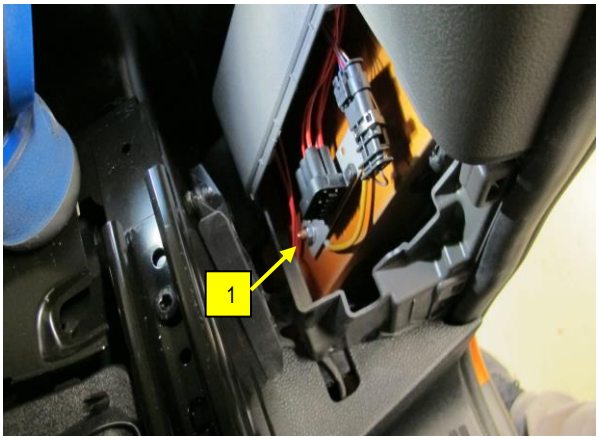


Fig.18

Connect red supply cable from fuse holder to B+ terminal on seat base (1)

⚠ Take care to not to allow wires to conflict with sharp and moving parts

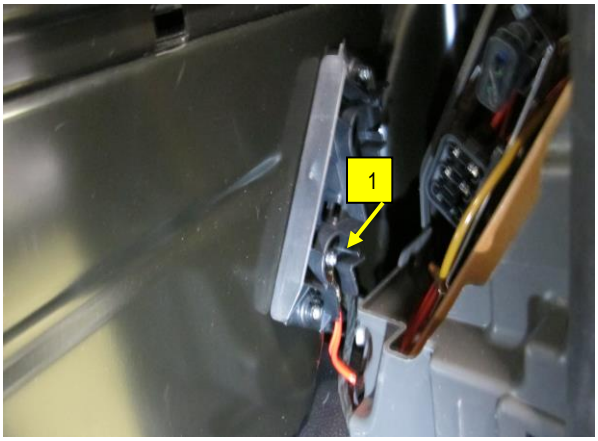


Fig. 19

Put cable harness to heater and fuel pump under floor mat to front of seat base (1)

Drill hole in plastic plug in floor (2) and pull cable for fuel pump out under car

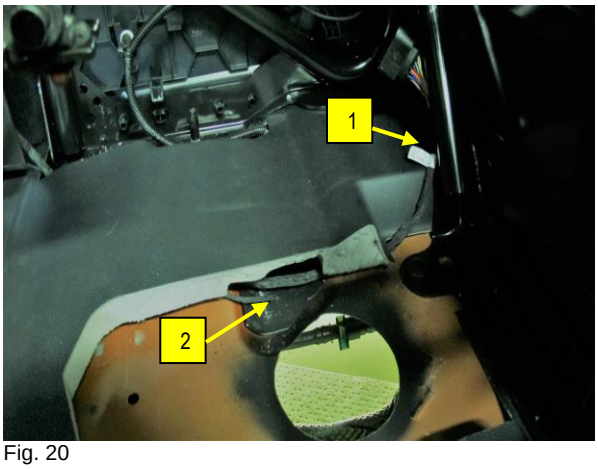


Fig. 20

3 INSTALLATION

Place a cardboard plate over holes



Fig. 20

Remove fuel tank (1)



Fig. 21

Use rust protection around the drilled hole from the underside of the car

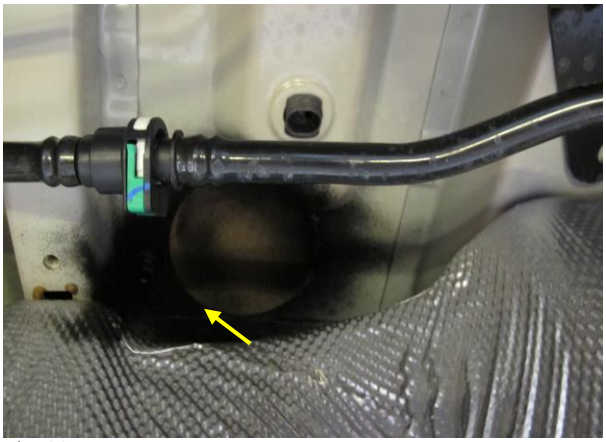


Fig. 22

3 INSTALLATION

Locate space on heat shield for exhaust pipe

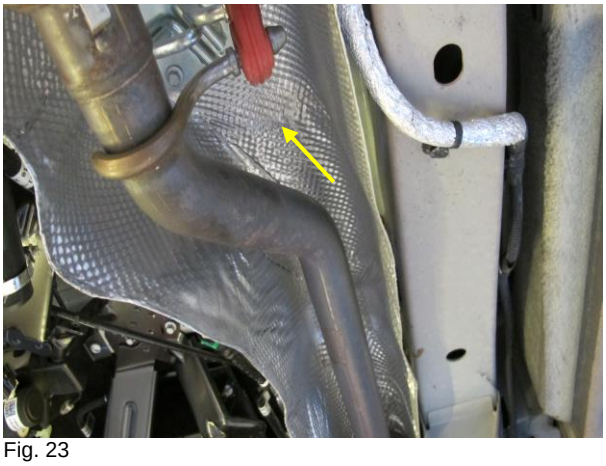


Fig. 23

Measure approx. 8 cm (1) from edge of the heat shield as shown (2)

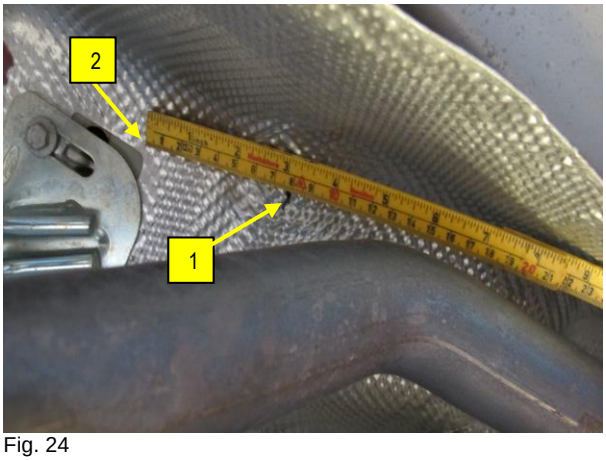


Fig. 24

Drill a 40 mm hole in heat shield (1)

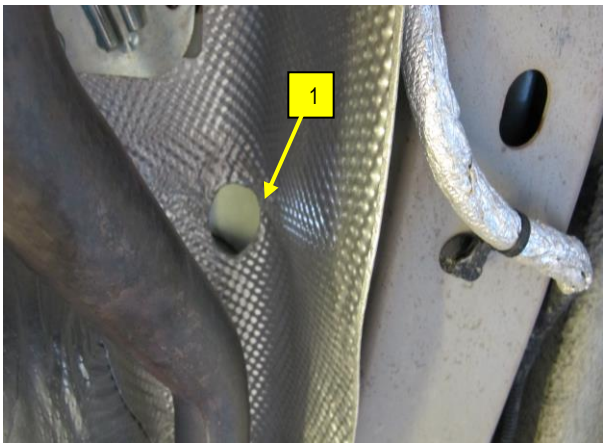


Fig. 25

3 INSTALLATION

Lay gasket silicone around edge of bracket as shown (1)

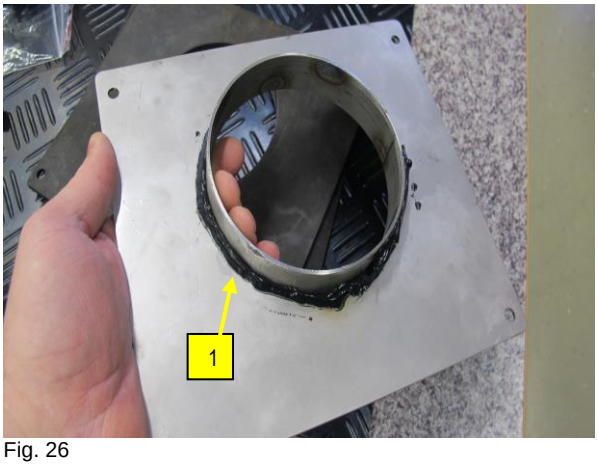


Fig. 26

Place bracket in holes on the floor and put silicone gasket on place

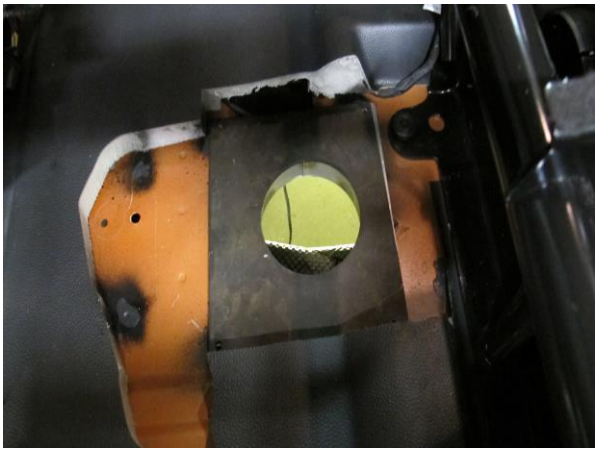


Fig. 27

Slide exhaust pipe backwards through holes in heat shield (1)

Push fuel pipe and combustion air hose through holes (2)

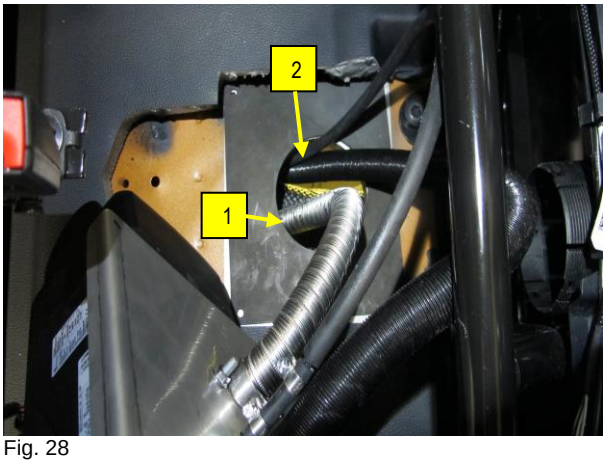


Fig. 28

3 INSTALLATION

The heater and bracket are fastened with self-drilling screws

Connect cable from heater to cable harness



Fig. 29

install strips with knobs in existing hole (1)

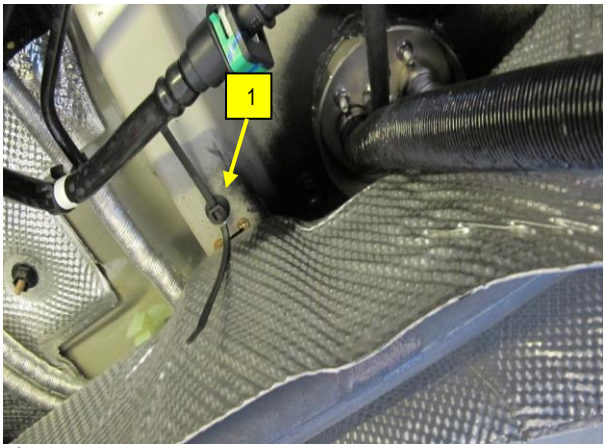


Fig. 30

Attach combustion air hose in strips (1)

Place fuel hose over bracket (2) and attach with strips (3)

Take care not to allow hoses and wires to conflict with sharp and moving parts

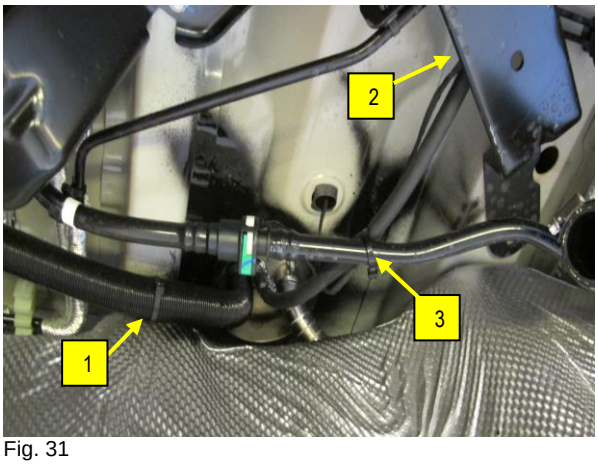


Fig. 31

3 INSTALLATION

Add combustion air hose as shown and attach with strips (1 and 2)

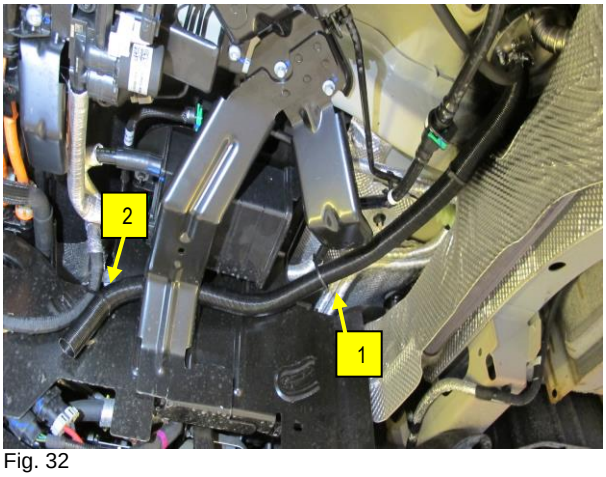


Fig. 32

Safety instructions for the combustion air system
- Lay the combustion air inlet so that exhaust gases cannot be drawn in as combustion air.
- The combustion air opening must remain free at all times.
- Do not direct the combustion air intake against the vehicle's airstream.
- The combustion air inlet must not become clogged with dirt and snow.

Install fuel pump in existing screw as shown (1)

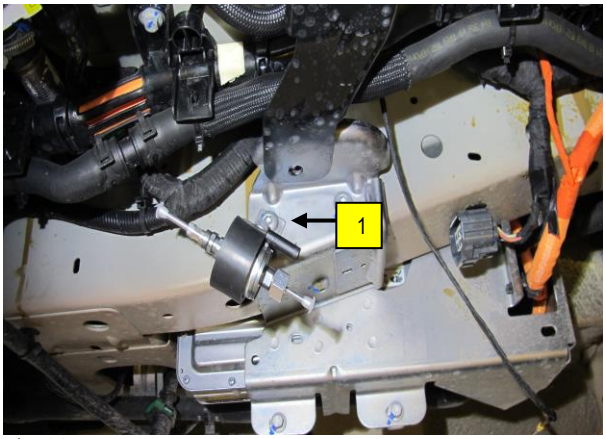


Fig. 33

Always install the metering pump with the delivery side rising upwards.
Any mounting position over 15° is allowed, although a mounting position between 15° and 35° is preferable.

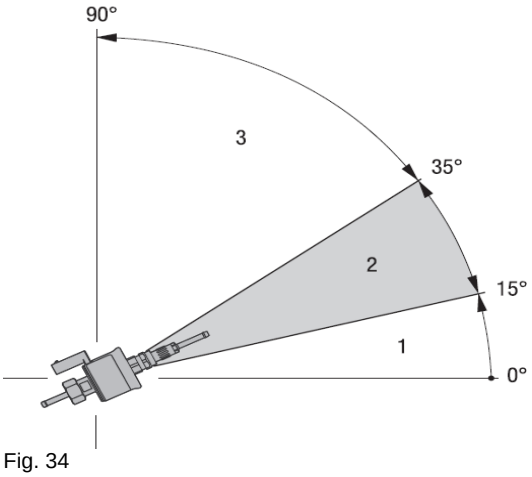


Fig. 34

3 INSTALLATION

Connect the fuel hose from the heater (1).

Mount the connector housing on the cable and connect to the fuel pump (2).

Attach fuel hose and cable with strips (3).

⚠ Take care not to allow hoses and wires to conflict with sharp and moving parts

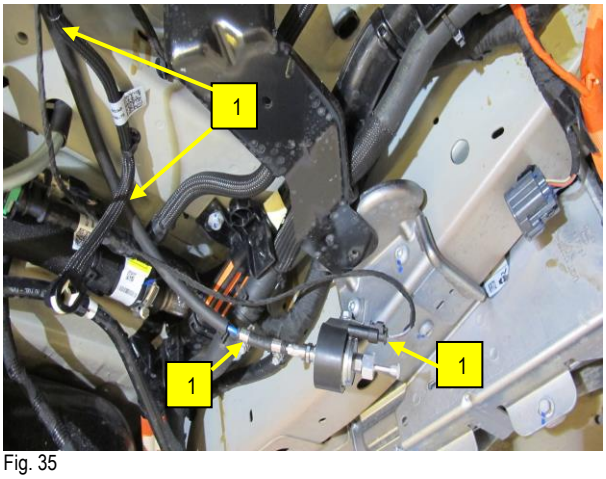


Fig. 35

Disassemble tank fitting (1)

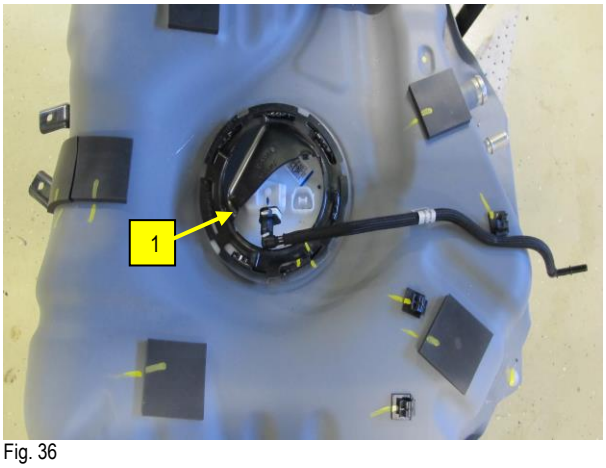


Fig. 36

Use a light to light underneath and mark the center of the square as shown (1)

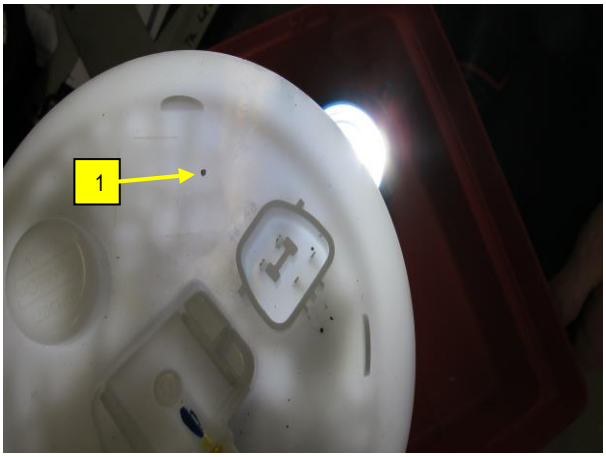


Fig. 37

3 INSTALLATION

Drill an 8mm hole and mount the fuel pipe as shown (1)

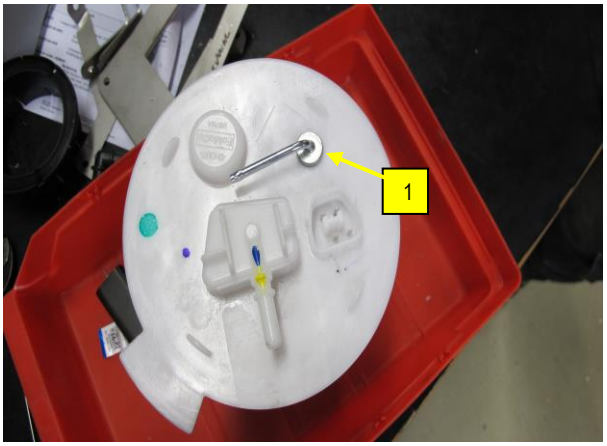


Fig. 38

The fuel pipe must go along the edge of the fitting (1)

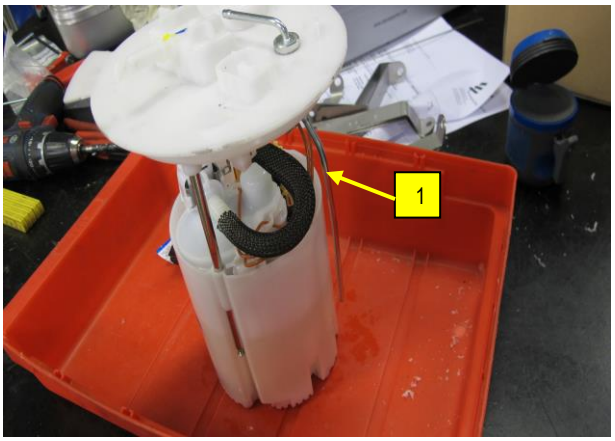


Fig. 39

Reinstall the tank fitting (1)

Connect the fuel hose to the fuel pipe (2)

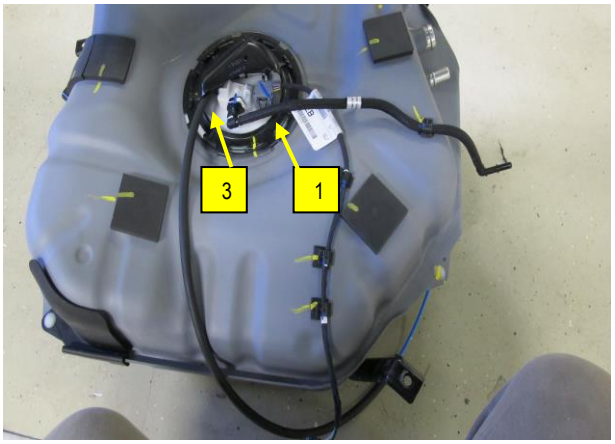


Fig. 40

3 INSTALLATION

Reinstall fuel tank in car

Connect fuel hose from fuel pipe to fuel pump (1)

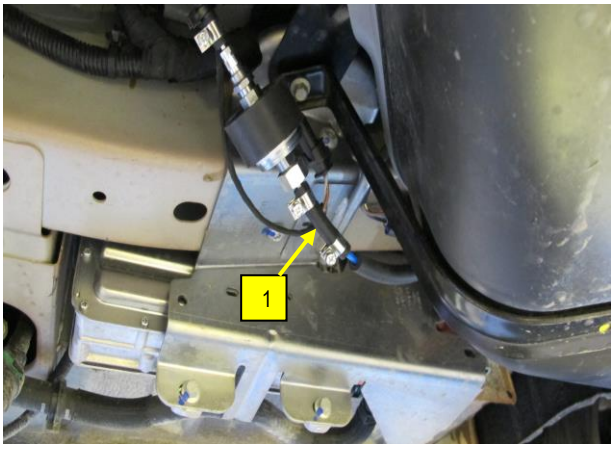


Fig. 41

Install exhaust muffler in existing hole (1) and connect exhaust pipe from heater (2)

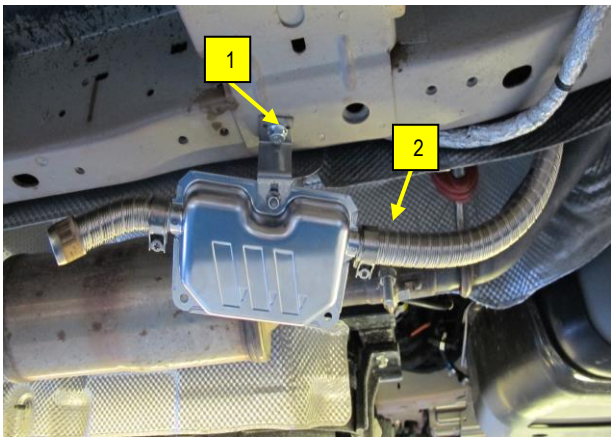


Fig. 42

Customize so that exhaust doesn`t comes into conflict with other components

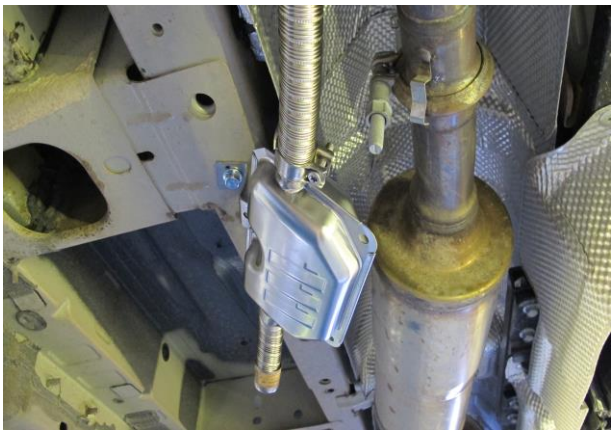


Fig. 43

3 INSTALLATION

Location under seat with heater



Fig. 44

Hold the hole saw as shown and mark the seat base with center drill



Fig. 45

Drill first a small hole fromm under seat.

Picture shows hole in front of seat base (1)

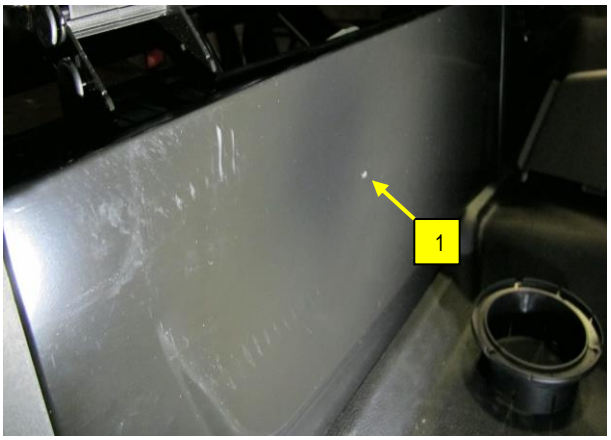


Fig. 46

3 INSTALLATION

Drill an 90mm hole as shown



Fig. 47

Install air outlet base

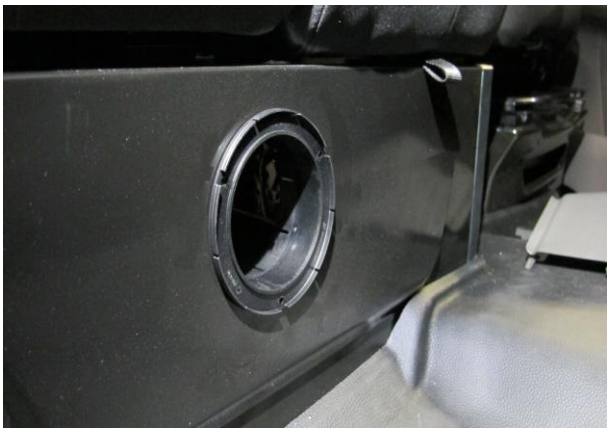


Fig. 48

Mount angled grids so air will flow against front window



Fig. 49

3 INSTALLATION

Mark on the partition behind the passenger seat from the storeroom (1)

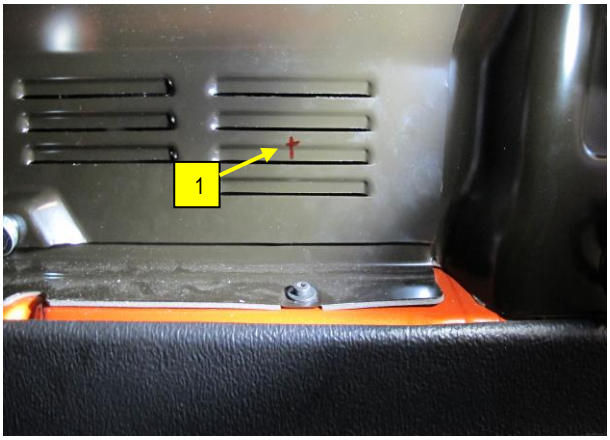


Fig. 50

Drill an 75 mm hole and install air outlet base



Fig. 51

Mount on adjustable lid (1)

Drill holes in the corners of the hatch and install screws that lock the hatch (2 og 3)

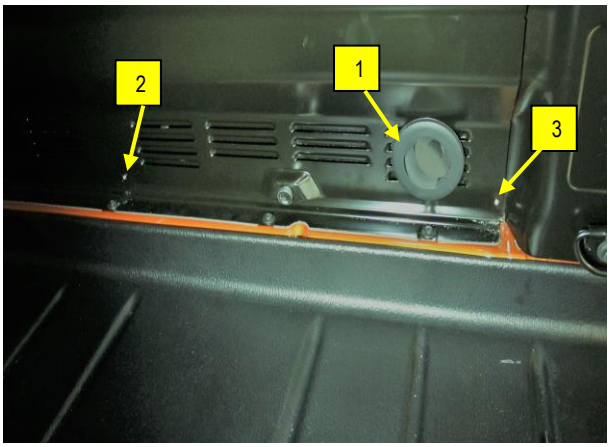


Fig. 52

3 INSTALLATION

Install air hoses on heater and air outlets as shown

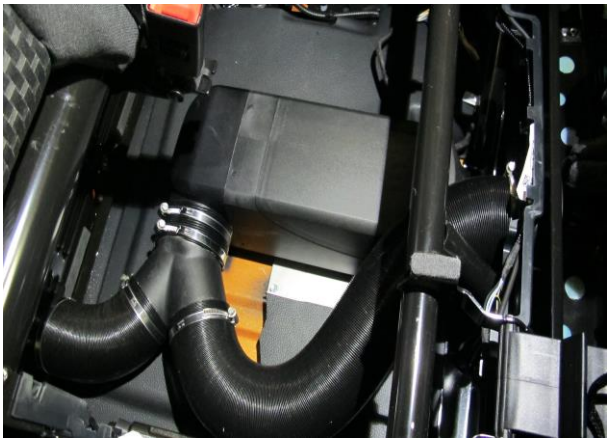


Fig. 53

3 INSTALLATION



6 Initial commissioning

The system must be configured according to its use. These installation instructions describe the standard configuration during initial commissioning. For details of enhanced configuration of EasyStart Pro and special functions, you can view and download the "Special Functions and Diagnosis" installation instructions from the Eberspächer partner portal https://partner.eberspaecher.com.

6.1 Standard settings

- Select the desired display language by turning the operating button and confirm by pressing.



Setting the time format

- Select between 12 h and 24 h format by turning the operating button and confirm by pressing.

Setting the time:

- Select the hours by turning the operating button and confirm by pressing.
- Select the minutes by turning the operating button and confirm by pressing.

Setting the weekday

- Select the weekday by turning the operating button and confirm by pressing.

Setting the temperature format

- Select between degrees Celsius and degrees Fahrenheit by turning the operating button and confirm by pressing.

6.2 Further settings

6.2.1 Determine display / control sensor

During initial commissioning, EasyStart Pro asks whether an external temperature display sensor or control sensor is to be determined.

Note

An external temperature display sensor is available as an option. For installation and connection to EasyStart Pro see page 17.

- For **water heaters**: Temperature display sensor

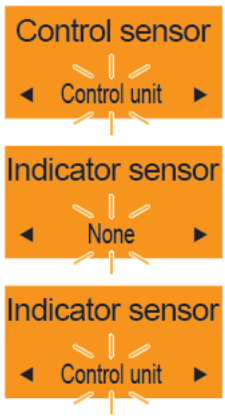




- For **air heaters**: Control sensor and temperature display sensor



3 INSTALLATION



- Select by turning the operating button and confirm by pressing.

Note

If several heaters are connected in heater groups, please see the note on heater identification in chapter “Switch heater group” on page 29.

6.2.2 Define the temperature offset

If the temperature display sensor of the control unit or heater (with air heaters) is defined as display sensor, the temperature offset of the display sensor can be defined in the next step.

- Select the temperature offset by turning the operating button and confirm by pressing.



The temperature offset can be set in the following ranges:

- –5°C to +5°C in 1°C increments
- –10°F to +10°F in 1°F increments

6.2.3 Define the starting or departure time

Users of EasyStart Pro can be choose between starting time and departure time during operation of the controlled heater.

Select between [Starting time] and [Departure time] by turning the operating button and confirm by pressing.

Note

- If [Departure time] was selected, the engine displacement must be selected and confirmed in the next step.
- If several heaters are connected in heater groups, please see the note on heater identification in chapter “Switch heater group” on page 29.

6.2.4 Determine the maintenance interval

In the next step, EasyStart Pro asks for the maintenance interval for the heater.

If desired, set the interval in hours by turning the operating button and confirm by pressing. Otherwise select [OFF] and confirm by pressing.

- 10 h to 1000 h: 10 h increments
- 1000 h to 5000 h: 500 h increments



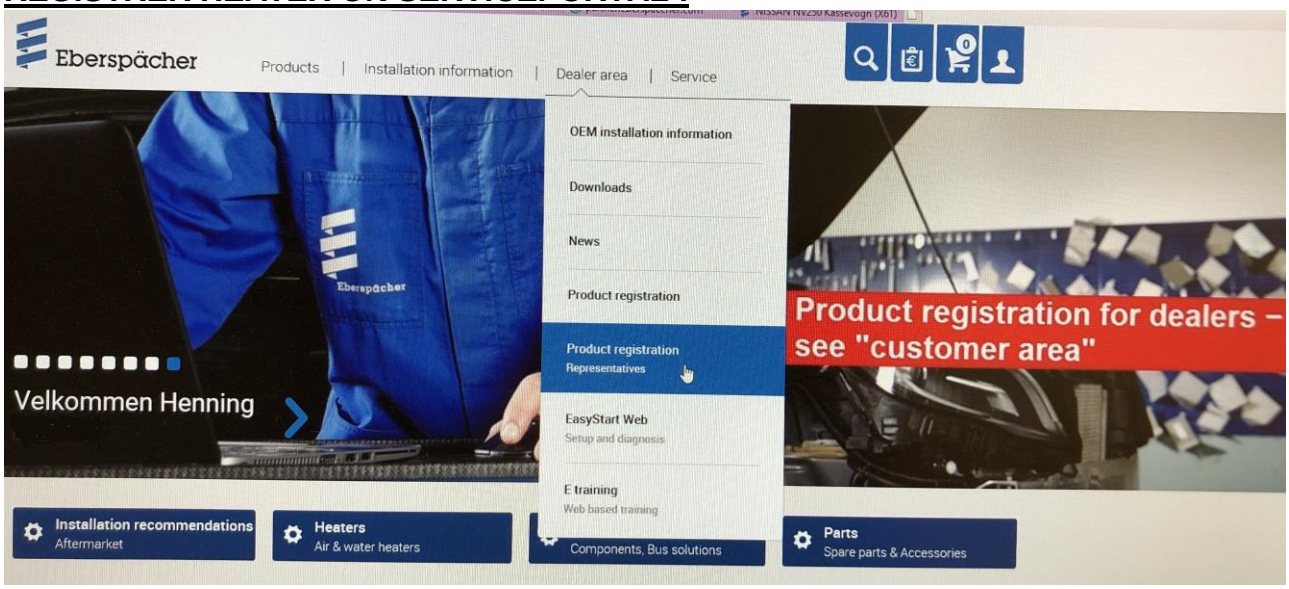
When the maintenance interval has been defined, initial commissioning has been completed. EasyStart Pro boots on the basis of the inputs previously made. The Start mask is then displayed.

Note

If errors in the configuration are discovered after initial commissioning, the fuse must be removed to reset the system to the delivery condition.

5 AFTER INSTALLATION

REGISTRER HEATER ON SERVICEPORTAL !



- ✓ Select "Product Registration" in the "Dealer Area" menu.
- ✓ Click on "Register new product" and fill in the required data .
- ✓ Print the "Preliminary Registration Card" as a valid customer card .

Hovedkvarter:

J. Eberspächer GmbH & Co. KG

Eberspächerstraße 24

73730 Esslingen

Hotline: 0800 1234300

Faks-hotline: 01805 262624

info@eberspaecher.com

www.eberspaecher.com

Opprettet av:

Eberspächer AB
Kardanvägen 34
461 38 Trollhättan
Phone: 08-683 11 00
support-se@eberspaecher.com
www.eberspaecher.se

