



122R00_PLANAR-8DM_xx

1/13

CHAUFFAGE DE L'HABITACLE

REGLEMENT ECE 122R00

TYPE DE CHAUFFAGE : TEPLOSTAR PLANAR-8DM-##



SCHEMAS ET PHOTOS FOURNIS
DRAWINGS AND PHOTOGRAPHS SUPPLIED

- Schéma ou photographie du système de chauffage à combustion : Page 5
Photograph or drawing of the combustion heater
- Schéma ou photographie l'étiquette du constructeur : Page 5
Photograph or drawing of the manufacturer's label
- Notice de montage du chauffage à combustion et de ses composants : Pages 6-13
Mounting description of the combustion heater and all its components

**1.****GENERALITES****GENERAL**

- 1.1.** Marque (raison sociale du constructeur) : TEPLOSTAR
Make (trade name of manufacturer)
- 1.2.** Type : PLANAR-8DM-##
Type
- 1.2.1** Dénomination(s) commerciale(s) : TEPLOSTAR PLANAR
Commercial name(s)
- 1.3.** Nom et adresse du constructeur :
Name and address of manufacturer OOO Advers,
443068, Samara,
Novo Sadovaja st. 106
RUSSIA
- 1.4** Dans le cas d'éléments constitutifs, emplacement et
méthode de fixation de la marque d'homologation ECE: Label on the top of the
In the case of components, location and method of affixing heater
of the ECE approval mark:
- 1.5** Adresse des ateliers de montage : OOO Advers,
Address(es) of assembly plant(s) 443068, Samara,
Novo Sadovaja st. 106
RUSSIA



2. CHAUFFAGE A COMBUSTION

COMBUSTION HEATER

- 2.1.** Marque (raison sociale du constructeur) : TEPLOSTAR
Make (trade name of manufacturer)
- 2.2.** Type : PLANAR-8DM-12
Type PLANAR-8DM-24
- 2.2.1** Dénomination(s) commerciale(s) : PLANAR-8DM
Commercial name(s)
- 2.3** Moyens d'identification du type, s'il est indiqué sur le : Label on the heater
système de chauffage :
Means of identification of type, if marked on the heating system
- 2.4** Emplacement de cette marque : On the top of the heater
Location of that marking
- 2.5** Nom et adresse du constructeur : OOO Advers,
Name and address of manufacturer 443068, Samara,
Novo Sadovaja st. 106
RUSSIA
- 2.6** Adresse des ateliers de montage : 443068, Samara,
Address(es) of assembly plant(s) Novo Sadovaja st. 106
RUSSIA
- 2.7** Pression d'épreuve : Not applicable
Test pressure
- 9.10.5.3** Description détaillée, plan de masse et notice de montage du chauffage à combustion et de l'ensemble de ses éléments
Detailed description, layout drawings and mounting description of the combustion heater and all its components
- Carburant : Diesel
Fuel
- Fluide caloporteur : Air
Transfer medium



Photograph of the combustion heater



Manufacturer's label



MOUNTING DESCRIPTION

8 Installation requirements

8.1 Heater installation

Install the heater according to figure 8.1. Place of installation for the heater should be flat. Position the heater's inlet vent in such a way to prevent absorption of vehicle/heater exhaust gas in normal operating conditions. The distance between the walls/partitions and the edge of the inlet vent shall be at least 50 mm (see figure 8.1). When assembling or operating the heater, ensure that no foreign objects enter the inlet/outlet vents. Prior to assembly, ensure availability dismantlement requirements, as this will permit easier maintenance in future. See figure 8.2 how to position mounting holes to install the heater into the motor vehicle casing (the motor vehicle casing thickness is 3 mm max).

ATTENTION!! To ensure reliable performance, follow the above recommendations carefully. Install the heater horizontally as shown on the figure 8.1.

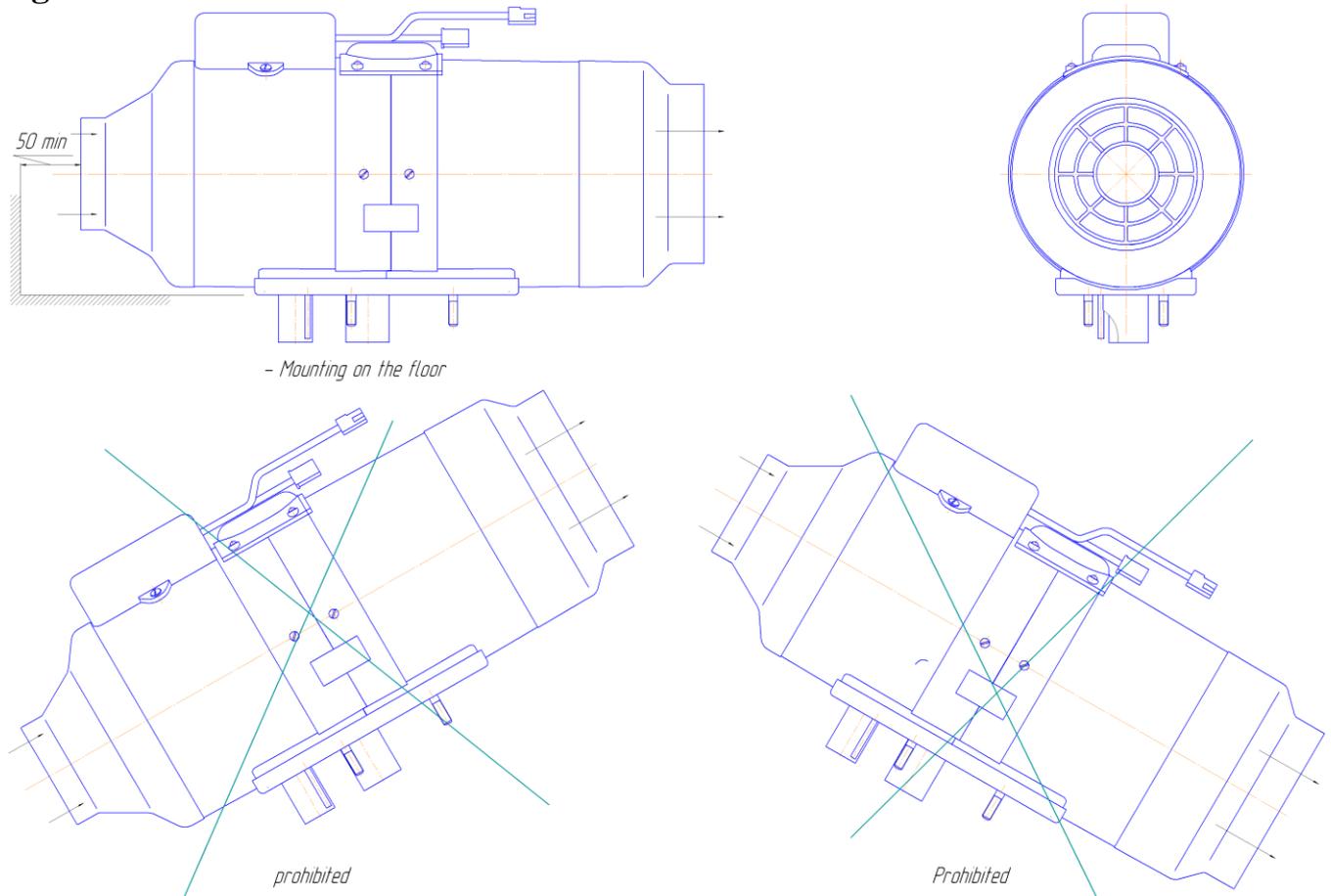


Figure 8.1 – Variants of installation of a heater.

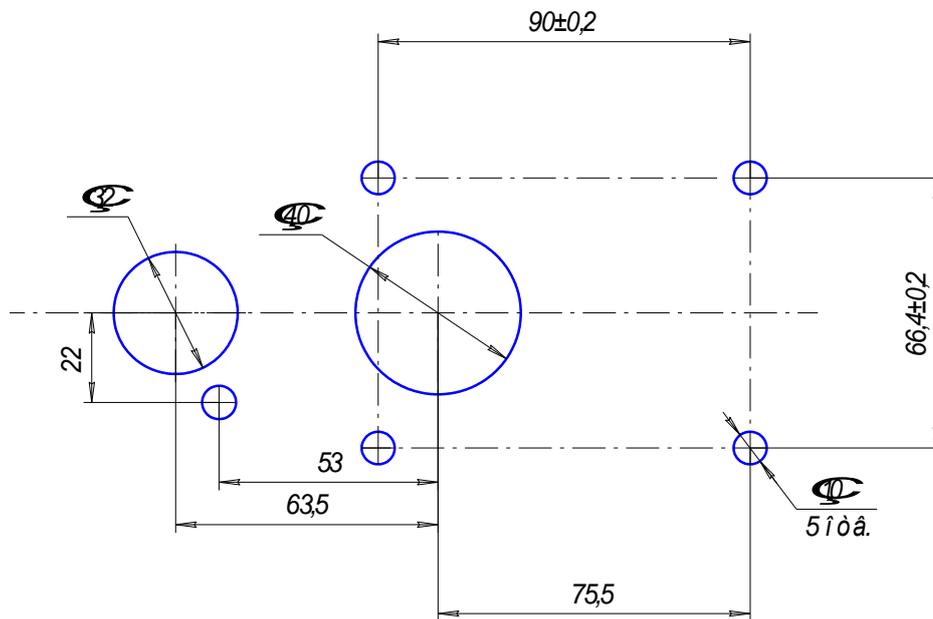


Figure 8.2– Mounting holes used for heater installation

If the motor vehicle casing thickness is more than 3mm it is necessary:

1. to make hole in figure-of-rectangle shape with sides dimensions 180x95 mm;
2. to attach sealing plate to the heater see figure 7.1 (this plate is possible to be made of steel sheet with min thickness 2.5 mm see figure 8.3)
3. to connect exhausting pipe, air intake, fuel supply harness to the heater and fix the heater with screws to the vehicle casing.

When fixing the heater to the vehicle casing provide the leaktightness.

To isolate the driver's compartment from exhausting gases one may install rubber plate under the sealing plate or to fix the sealing plate with sealant.

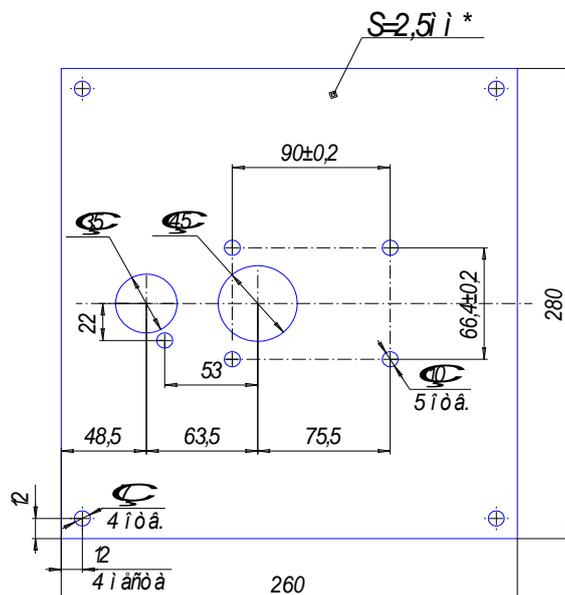


Figure 8.3 Mounting plate



8.2 Air inlet installation

Air necessary for burning, should not be soaked up from salon or a cabin and a car luggage space. Position the pipe's air inlet vent to prevent snow entering or choking the pipe and to allow incoming water to run off. The entrance aperture of an air inlet is forbidden to have against a running air stream at car movement.

8.3 Exhaust pipe installation

When installing the exhaust pipe, be mindful of its high operating temperature. Exhaust pipe is fixed with clamps.

Direct exhaust gas outside. Position the gas outlet vent and the air inlet vent in such a way as to prevent exhaust gas from entering the combustion chamber.

Ensure that exhaust gas does not enter the passenger compartment of the vehicle and that it does not get sucked in through the vehicle fan. Do not allow exhaust gas to affect the performance of vehicle components. Position the exhaust pipe outlet vent so as to prevent snow entering or choking the pipe and to allow incoming water to run off. The exhaust outlet of an exhaust pipe is forbidden to have against a running air stream at car movement.

At the vent of the exhaust pipe the screen is installed, this is necessary for stable operation of the heater while working low idle.

8.4 Installation of heater fuel supply system

To prevent emergency situations, follow these instructions carefully

8.4.1 Installation of heater fuel pump and fuel tank

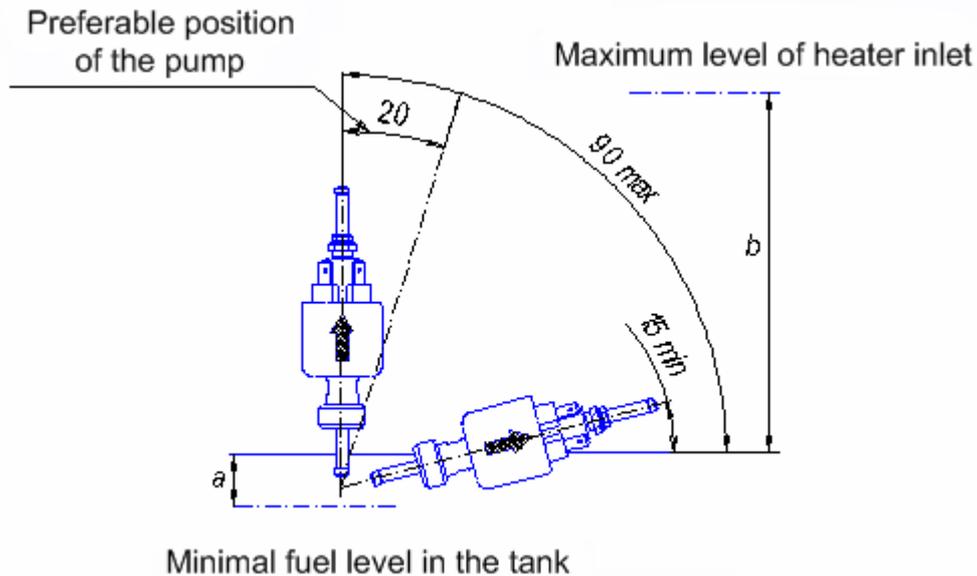
A fuel tank it is necessary to fix so that the exit of fuel which can flow out from its bulk mouth, on the earth was provided.

The bulk mouth of a fuel tank should not be in salon, a luggage carrier, in a motor compartment. If the bulk mouth is located on a vehicle lateral face the filler cap in the closed position should not support car's body dimensions. Fuel which can spill at filling of a fuel tank, should not get on exhaust systems and electro wires. It should be taken away on a ground.

The fuel supply pump should be mounted as close to the fuel tank as possible and positioned below the tank's lower fuel level.

For the purpose of an exception of leak of fuel from a fuel tank by gravity at infringement of tightness of the fuel pump, a fuel tank it is preferable to have so that the fuel maximum level was below a cut of a fuel tube of a heater.

The spatial position of the fuel supply pump must comply with figure 8.4 (preferably in a vertical position).



a - suction height: 700 mm.;

b - head between the fuel pump and heater: up to 1500 mm

Figure 8.4- Permissible mounting position of fuel pump

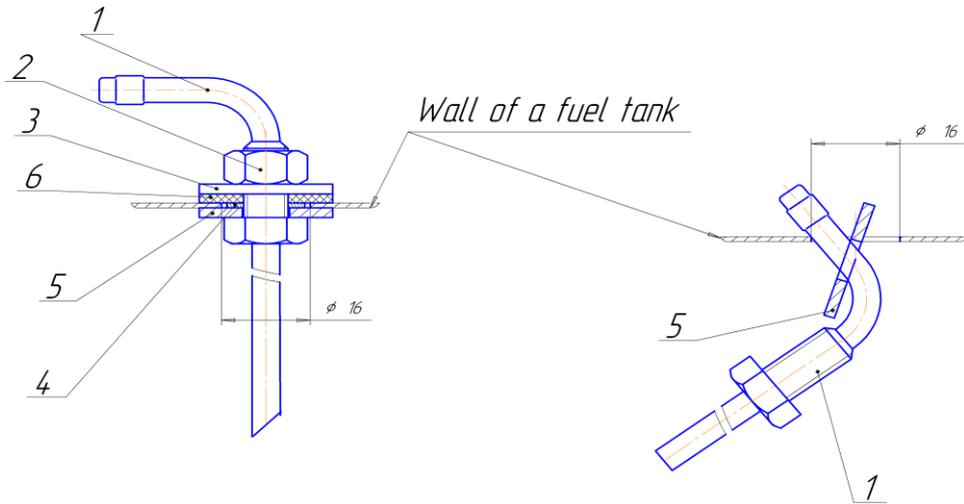
8.4.2 Installation a fuel supply intake in a regular tank of the car

Fuel supply intake must be installed into regular fuel tank of the car according to figure 8.5.

a) Perform installation of special washer with fuel supply intake to the tank inlet according to figure 8.5

b) Perform installation of the fuel supply line from fuel supply intake to the heater according to figure 8.6.

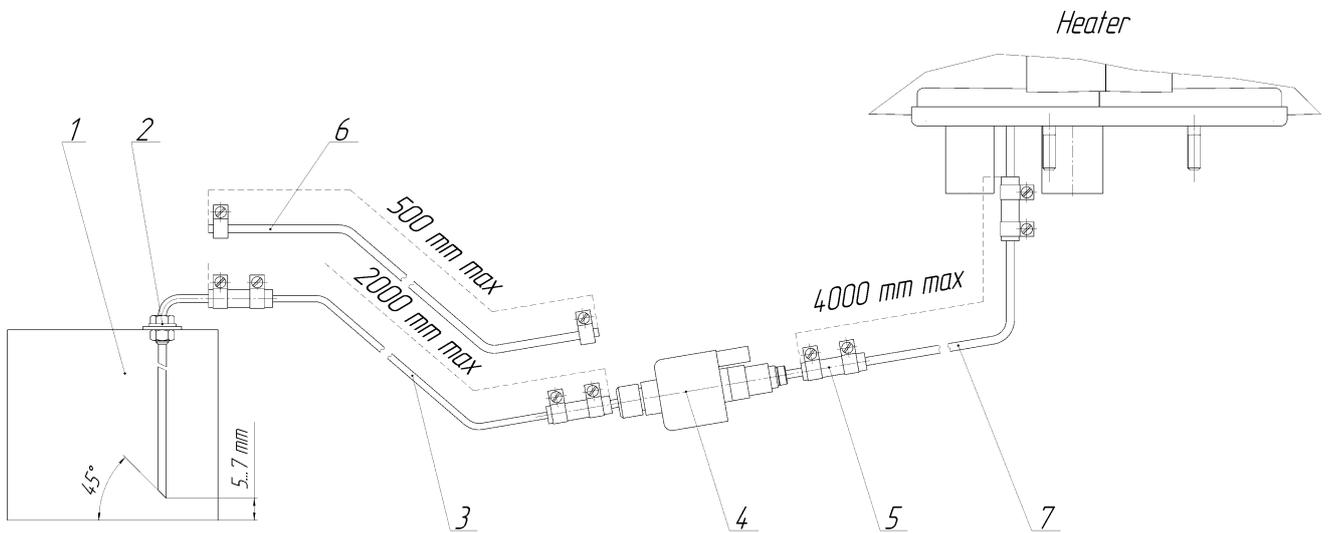
Attention!!! While manufacturing a hole in a regular fuel tank of the car it is necessary to fulfill safety requirements for works with tank which was filled with combustibile and explosive fuel.



- 1- fuel supply intake
- 2- nut M8
- 3- washer 8

- 4- washer 8
- 5- special washer
- 6- gasket

Figure 8.5 – Fuel supply intake installation in a regular tank of the car



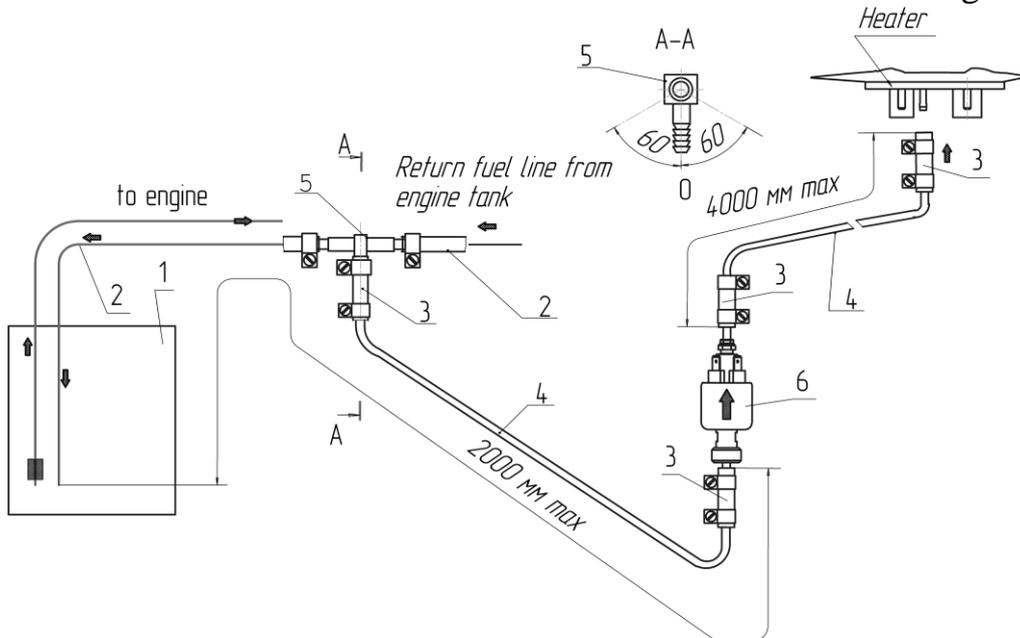
- 1 – regular fuel tank of the car
- 2 - fuel supply intake
- 3 – fuel supply line $d=4\text{ mm}$

- 4 - fuel pump
- 5 - joint box
- 6 – fuel supply line $d=5\text{ mm}$
- 7- fuel supply line $d= 2\text{ mm}$

Figure 8.6 – Installation diagram for heater fuel supply system using a fuel supply intake

8.4.3 Fuel intake from return fuel pipe with T-connector

Allowed fuel intake from the return fuel pipe (unloading fuel from the engine to the tank) with T-connector. Return fuel pipe should be free of pressure and goes at the bottom of the fuel tank. The installation of the T-connector according to Fig. 8.7;



- | | |
|--|---|
| 1 - regular fuel tank | 4 - fuel supply line $d_v = 2\text{mm}$ |
| 2 - return fuel line from engine to tank | 5 - T-connector |
| 3 - sleeve | 6 - fuel pump |

Рис. 8.7 – Installation diagram for heater fuel supply system using return fuel pipe. When installing the fuel supply line, do not allow connecting sleeves to bend. Use a harp knife to cut the fuel tube as in figure 8.8. The cutting location shall be free of indentations, hairs and must not restrict flow through the tube.

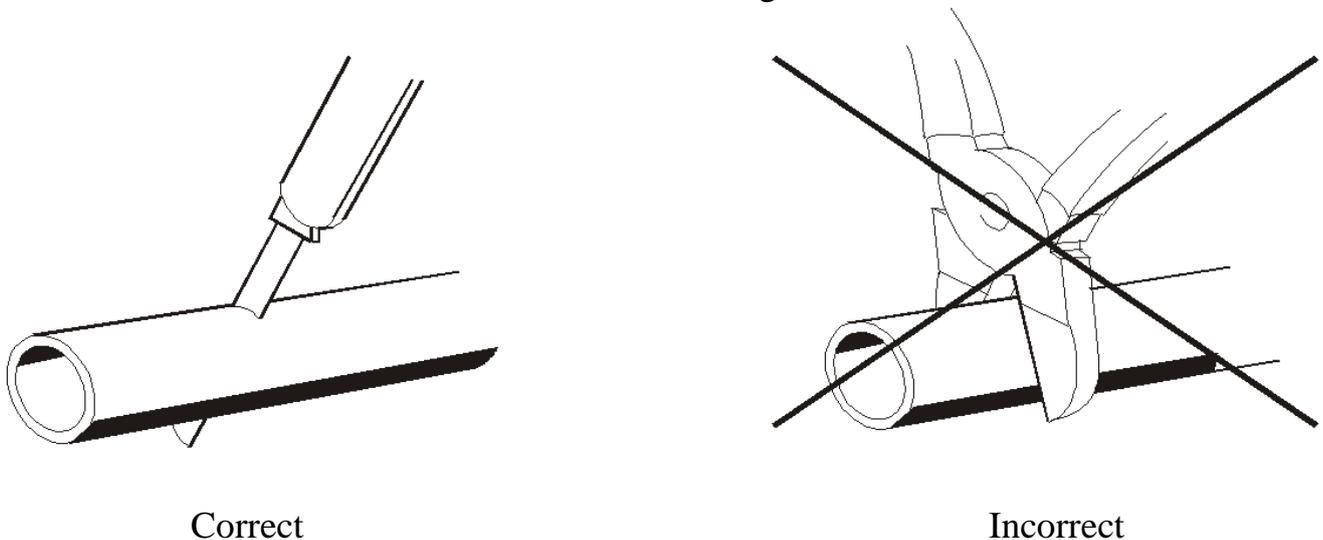


Figure 8.8 – Pipe cutting prior to installation

**ATTENTION.**

1. Do not allow the fuel supply line or fuel supply pump to overheat. Do not install the fuel supply line and fuel supply pump near the exhaust pipe or on the engine.

2 The fuel supply line connecting the fuel supply pump to the heating element of the heater should be installed at the same lifting angle.

8.5 Installation of heater electric circuit

Heater wire harnesses shall be installed in compliance with the heater wiring system as shown in figure 4.1. When installing, do not allow the wire harnesses to become overheated, deformed or dislodged during vehicle use. Attach the harnesses to the vehicle fittings using plastic clamps.

Attention! Installation should be performed with the fuse disconnected.

9 Post-installation testing

9.1 When installing, ensure that:

- the fuel supply system is leak-proof
- the electric contacts of the harnesses and heater elements are securely installed

9.2 Install fuse 25A .

9.3 Fill the fuel pipe system with fuel with the help of fuel pumping device (fuel pumping device can be ordered at manufacturer).

9.4 Check that the heater is working :

- in ventilating mode,
- in heating mode.

The process of activation begins with purging of the combustion chamber. After purging the process of combustion begins and the heater goes on working in operation mode.

9.5 Deactivate the heater. While switching off the heater the fuel stops entering and the process of ventilation of the combustion chamber and heat exchanger starts.

9.6 Activate the heater while the vehicle engine is running and ensure that the heater is operational.

**ATTENTION!**

1. When performing initial ignition following installation, the fuel supply line should be filled with fuel using a fuel pumping device until the fuel level reaches the inlet plug of the heater. If there is no pumping device, restart the heater as many times as necessary to fill the fuel supply line.

2. Remember that each time the heater fails to start at the first attempt, the heater will be restarted automatically by the control unit.

3. The cabin remote sensor must be disconnected, if you need to start the heater when the temperature of air more than 30°C