
	122R00_ PLANAR 4DM_xx		1/11

## **CHAUFFAGE DE L'HABITACLE**


### **REGLEMENT ECE 122R00**

TYPE DE CHAUFFAGE : TEPLOSTAR PLANAR 4DM\_xx

	122R00_ PLANAR 4DM_xx		2/11

## **SCHEMAS ET PHOTOS FOURNIS** ***DRAWINGS AND PHOTOGRAPHS SUPPLIED***


Schéma ou photographie du système de chauffage à combustion : <i>Photograph or drawing of the combustion heater</i>	Page 5
Schéma ou photographie l'étiquette du constructeur : <i>Photograph or drawing of the manufacturer's label</i>	Page 5
Notice de montage du chauffage à combustion et de ses composants : <i>Mounting description of the combustion heater and all its components</i>	Pages 6-11

	122R00_ PLANAR 4DM_xx		3/11

# 1. GENERALITES

## GENERAL

- 1.1.** Marque (raison sociale du constructeur) : TEPLOSTAR  
*Make (trade name of manufacturer)*
- 1.2.** Type : PLANAR 4DM\_xx  
*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*  
*of the ECE approval mark:*      heater
- 1.5** Adresse des ateliers de montage :  
*Address(es) of assembly plant(s)*      OOO Advers,  
443068, Samara,  
Novo Sadovaja st. 106  
RUSSIA

	122R00_ PLANAR 4DM_xx		4/11

## 2. CHAUFFAGE A COMBUSTION

### COMBUSTION HEATER

- 2.1.** Marque (raison sociale du constructeur) : TEPLOSTAR  
*Make (trade name of manufacturer)*
- 2.2.** Type : 4DM-24  
*Type* 4DM-12
- 2.2.1** Dénomination(s) commerciale(s) : Advers Planar  
*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*



### Drawing of the combustion heater



### Manufacturer's label



## MOUNTING DESCRIPTION

### *Heater Installation*

Installed the heater indoors while bearing in mind the permissible operating positions shown in Figure 1. The figure shows the two maximum assembly positions of the heater. Positioned the heater's inlet vent in such a way to prevent absorption of vehicle/heater exhaust gas in normal operating conditions. The gap between the walls/partitions and the edge of the inlet vent shall be at least 50 mm (see Figure 1). When assembling or operating the heater, ensure that no foreign objects enter the inlet/outlet vents. Prior to assembly, ensure availability of spare heating plug and bear in mind dismantlement requirements, as this will permit easier maintenance in future. See Figure 2 for how to position mounting holes to install the heater into the motor vehicle casing.

**ATTENTION !! To ensure reliable performance, follow the above recommendations carefully. Install the heater horizontally with the heating plug in the up position as shown in Figure 1.**

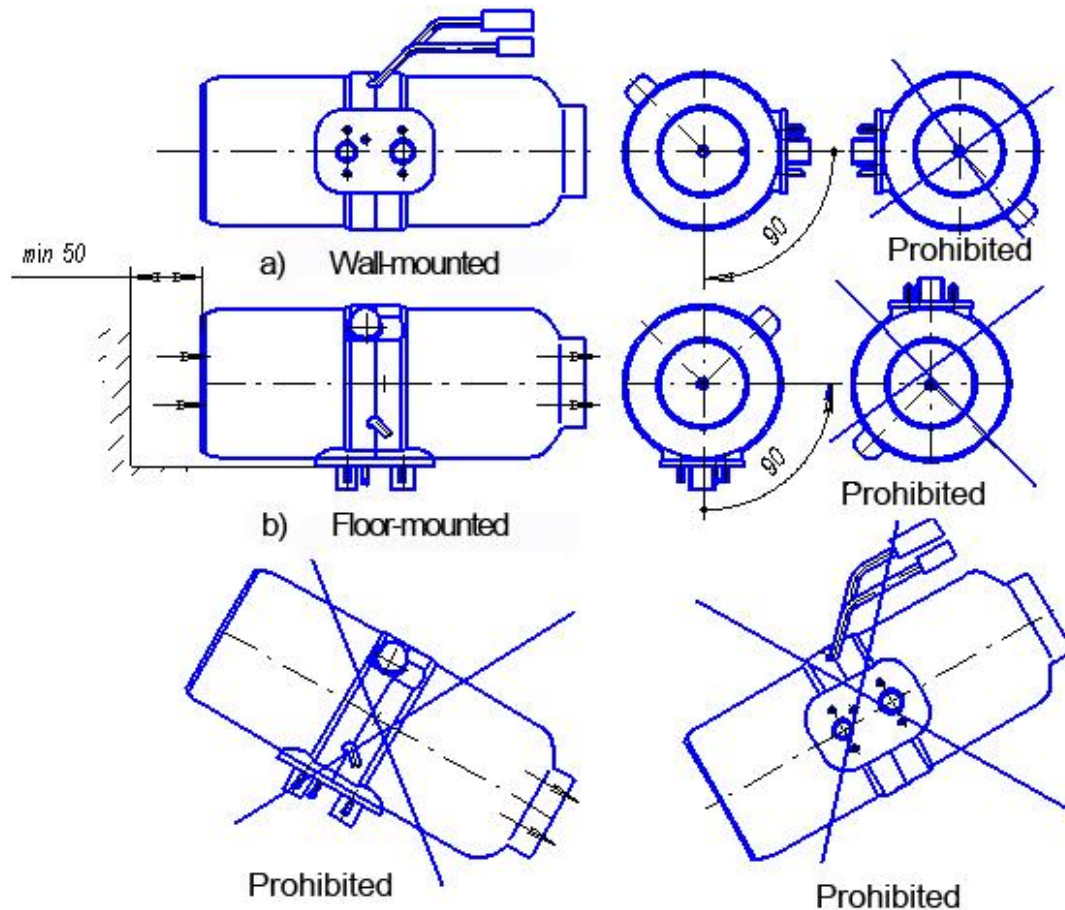


Figure 1 – Mounting Options

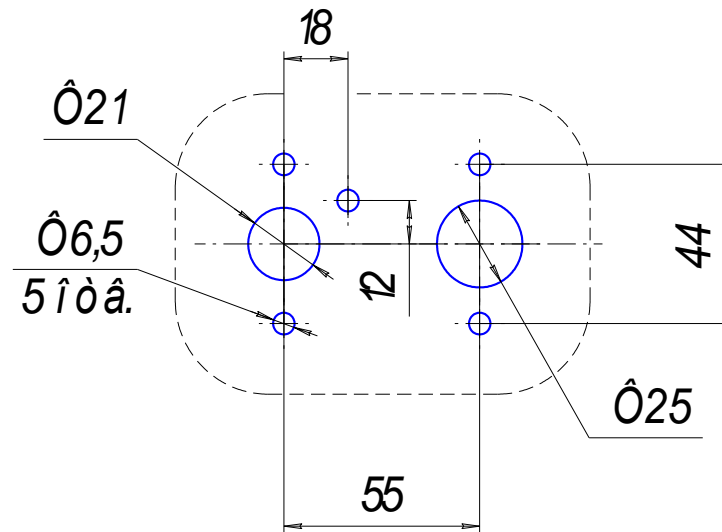


Figure 2 – Mounting Holes Used for Heater Installation

### 1.2 Air Inlet Installation

Do not allow combustion air to be sucked in from the passenger compartment or vehicle cabin or boot. Position the pipe's air inlet vent to prevent snow entering or choking the pipe and to allow incoming water to run off. Ensure the vent is not facing oncoming air.

### 1.3 Exhaust Pipe Installation

When installing the exhaust pipe, be mindful of its high operating temperature. Cut the exhaust pipe (a flexible corrugated metal hose) to size. Fix the exhaust pipe in place using clamps and position it at a slight angle following the trajectory of gas flow.

To achieve a tight fit, prior to connecting the exhaust pipe to the heater pipe, make a saw-cut of about 15mm along the length of the exhaust pipe without going beyond the gripped part of the pipe. Ensure that the end of the exhaust pipe does not come into contact with the rubber seal of the heater. 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. Ensure the vent is not facing oncoming air.

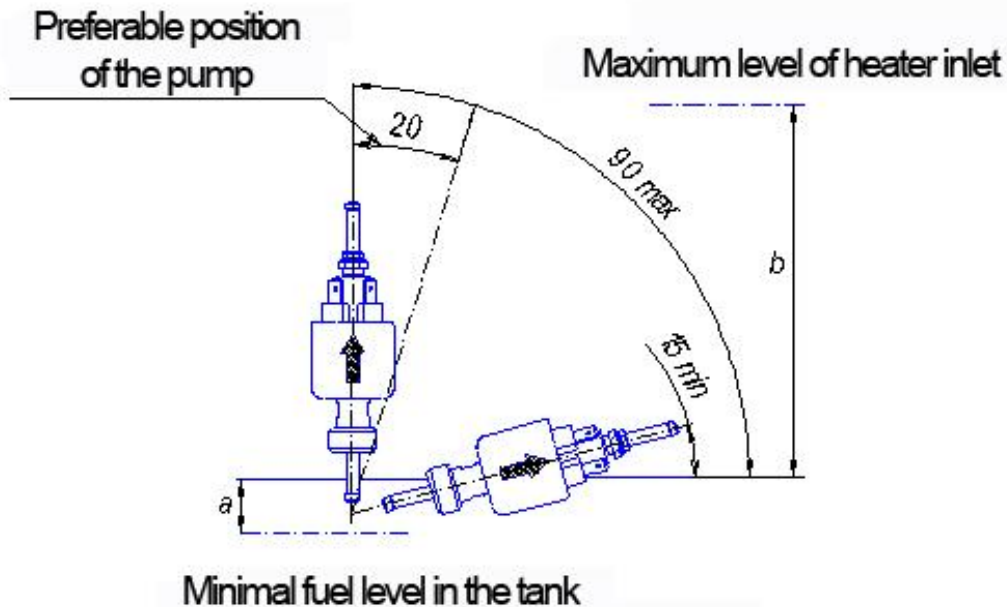
#### 1.4 Installation of Heater Fuel Supply System

To prevent emergency situations, follow these instructions carefully.

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

To prevent the possibility of fuel leaking out of the tank (due to gravity flow) as a result of faulty sealing of the fuel supply pump, the fuel tank should be positioned in such a way that the maximum fuel level is below the incision in the heater fuel tube.

The spatial position of the fuel supply pump must comply with Figure 3 (preferably in a vertical position).

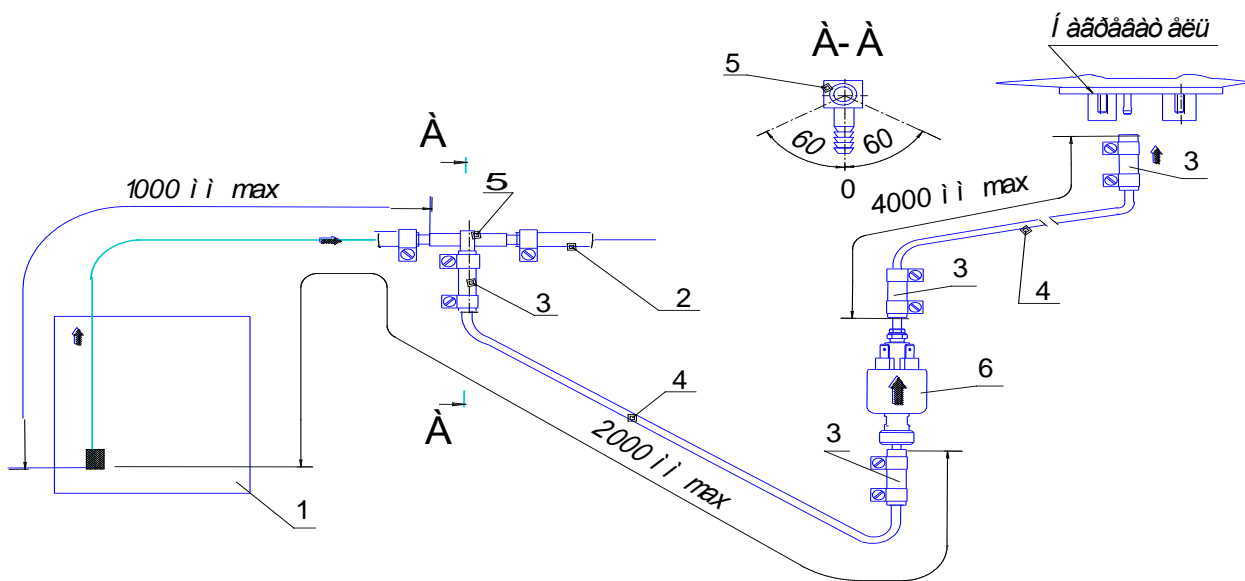


a – lift height up to 700 mm; b – delivery lift between fuel supply pump and heater up to 1500 mm.

Figure 3- Permissible Mounting Position of Fuel Supply Pump




Fuel can enter the heater through a yoke from the fuel line of 10 TS or 14TS-10 liquid phase heaters. See Figure 4 for how to install the yoke. The flow section of the pipe line connecting the fuel tank to the heater shall be 5 mm.



- 1 - liquid phase heater fuel tank
- 2 – fuel line of liquid phase heater  
10TS or 14TS
- 3 - sleeve

- 4- fuel line
- 5- yoke
- 6- fuel supply pump

Figure 4 – Installation Diagram for Heater Fuel Supply System Using a Yoke

	122R00_ PLANAR 4DM_xx		10/11

When installing the fuel supply line, do not allow connecting sleeves to bend. Use a sharp knife to cut the fuel tube as in Figure 5. The cutting location shall be free of indentations, hairs and must not restrict flow through the tube.

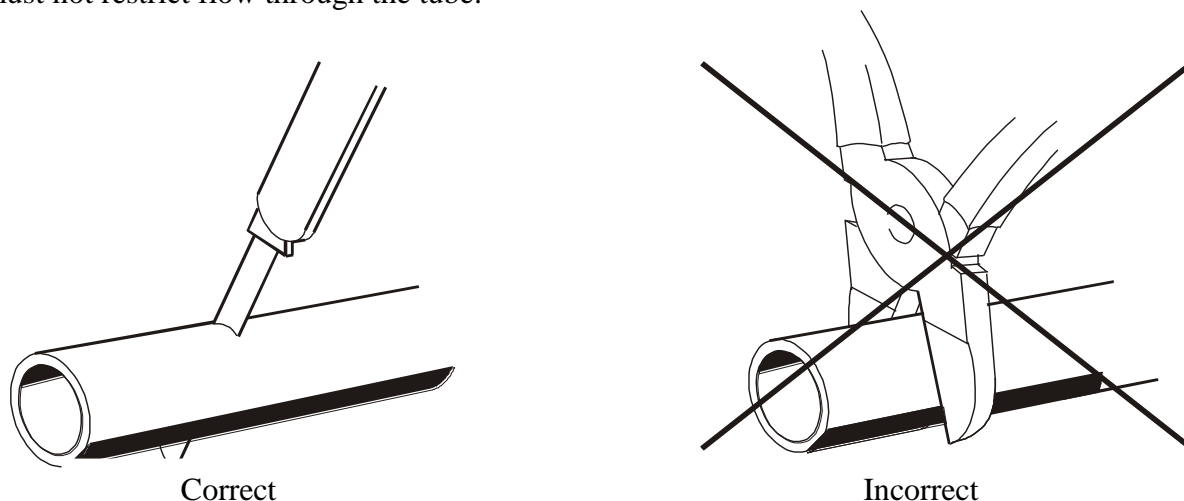


Figure 9 – Tube Cutting Prior to Installation\*

**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 top of 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.


#### *1.5 Installation of Heater Electric Circuit*

Heater wire harnesses shall be installed in compliance with the heater wiring system as shown in Figure 2. 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. It is possible to connect the harness of the 10TS or 14TS liquid phase heater to the heater harness's XP5 contact so as to provide the heater with electricity.

**Attention! Remove the fuse prior to installation.**

#### *1.6 Control Panel Installation*

Using two screws or self-tapping screws, install the control panel on to the dashboard in the cabin or passenger compartment of the vehicle. See the wiring diagram on how to connect the panel to the harness.

	122R00_ PLANAR 4DM_xx		11/11

## 9 Post-installation Testing

9.1 When installing, ensure that:

- the fuel supply lines of the fuel supply system are leak-proof and all clamps are securely tightened,
- the electric contacts of the harnesses and heater elements are securely installed,
- the shift knob located on the control panel is turned to the far left position by being turned anti-clockwise as far as it will go following the click.

9.2 Install fuse 25A .

9.3 Check that the heater is working:

- in ventilating mode,
- in heating mode.

When the ventilating mode is switched on, the green light-emitting diode on the panel should be activated (see Section 6). Turning the shift knob on the panel to the far right position will increase fan rotation speed and air flow intensity.

When heating mode is switched on, the red light-emitting diode on the panel should be activated (see Section 6). Heating mode comes on once the combustion chamber is purged. Once purged, the ignition process starts and the heater goes into maximum power mode.

9.4 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 booster pump until the fuel level reaches the inlet plug of the heater. If there is no booster pump, 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.**