

Ukrainian Net of Gaschannels

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The transport gasification is one of the approaches of ecological-economic problems solution in Ukraine. These approaches are connected with the lack of own energy-bearing in the country, accepting motor fuels, as well as connected with environment improvement, because transport is one of the main disasters.

Along with the advantage of the working the inside burning engines on the gaseous fuel there are definite problems of its spreading in the transport.

1. The infrastructure problem.

Therefore, the problem is in the development of gaschannel net, rather than in the gas delivery to the place of its consuming. This net should allow to put in the cars fuel of required standards and good quality. At the same time the task of inputting the filling stations in the city should be solved. This task is complex enough in the organisational and technical senses.

2. The gas-fuel capacities problem.

One of the most important problems concerned with the spreading the use of gaseous motor fuel in transport is the improvement of gas-fuel capacities for gaseous fuel preservation.

The necessity of application of the high pressure bottles for natural gas is the substantial drawback of pressed gas. These bottles have big mass and sizes. Because of it the mass of gasbottle cars with carburetor engine grows up, and loading and movement reserve reduce comparing with the analogous indicators of cars with work on the benzine. Because of the big bottle mass, they are installed in preservation. This reserve supports the benzine. The gas-fuel equipment installation leads to the increasing of full speed time of the transport, as well as movement speed reducing at the lifting and worsening of its dynamic.

3. The problem of reliability of the gas bottle system of the engine feeding.

Also there is a problem of reliability of the engine feed system. The car exploitation practice (for cars which work on pressed natural gas) has shown a number of drawbacks of the gasbottle feed system, which lead to the disturbance of its hermetization.

4. The problem of the engine capacity decreasing.

Now the car re-equipping to using pressed natural gas as a motor fuel is done by gas-fuel equipment installation in the existing engine without its construction changing. But the advantages of gaseous fuel are not fully used. It means its work with increasing degree of pressure, to 12-14 units (at the existing cars - to 10 units). Because of it the engine loses the 10-20% of its capacity.