

## Electronic Fuel Pumps E1F, E2T and E3T Clogged Prefilters

Vehicle Type:	Product:	Electric Fuel Pump
Various	<b>Pierburg No.:</b>	E1F: 7.21440.05.0/.08.0/10.0/.51.0/.53.0/.63.0/.68.0/.78.0; 7.21388.51.0
		E2T: 7.21287.53.0; 7.21565.70.0/.71.0; 7.21538.50.0
		E3T: 7.21659.53.0/.70.0/.72.0

Fuel pumps of the series E1F, E2T and E3T have a built-in prefilter on the intake side.

This small prefilter provides protection against dirt.

Examination of electric fuel pumps that had been declared faulty were often found to have had this prefilter clogged by dirt in the inducted fuel.

### Sources of Complaint:

- The fuel pump produces too little pressure and does not generate enough pump delivery force.
- The fuel pump is too noisy.
- The fuel pump becomes very hot.
- Engine is interrupting.
- Pump cuts out too early at low operating levels.

*E1F Prefilters:*  
- new (left),  
- clogged (right)



### Consequences

Most modern fuel pumps are rinsed through by fuel and thereby lubricated and cooled. If this does not occur at adequate levels - for instance if a filter is clogged - there is a danger of "running dry".

In addition to the complaints described, the consequences can be:

- reduction in the pump's delivery performance or even total pump blockage
- dry-running will cause the pump to fail
- damage to the fuel system
- damage to the injection system



*Prefilter of E3T - blocked by rust*

Illustrations subject to changes and variation

For correct allocation and replacement, see the corresponding valid catalogues, TecDoc-CD or systems based on TecDoc data.

**Possible Causes**

After water, dirt is the most common cause for this damage. Possible reasons can be:

- rust forming in the fuel system as a result of water condensation
- introduction of dirt into the fuel tank from outside (for instance whilst fuelling)
- ageing of fuel by being left to stand for long periods (formation of sediment)
- inspection intervals (filter change) not observed
- poor fuel quality
- old, porous fuel pipes


**Solution**

We recommend the following measures:

- clean out the entire fuel system with good-quality fuel
- clean the intake side of the clogged screen filter

 Screen filters are not available as spare parts.

- If necessary, replace the fuel pump.

 Depending upon how much dirt is found, clean the entire fuel system (including removal and cleaning of the fuel tank)


**Notes:**

To avoid any damage occurring in the first place, please observe the following:


- use only good-quality fuel
- The water content of the air in the fuel tank can condense. For this reason it is advisable to fill up the tank completely of the vehicle is to be left standing in a garage over a long period.
- For fuel pumps of the E1F type, Pierburg offers a fuel screen-filter (stock number: 4.00030.80.0), which protects the fuel pump reliably from premature failure caused by dirt and other foreign particles. Further information about this can be found in our *Product Information PI 0023*. The screen filter should be replaced at the same intervals as the fuel filter

**Cleaning the Prefilter**


- Pull the prefilter carefully out of the suction intake using tweezers.

 Be careful not to damage the suction intake!

- Clean the filter with fuel
- Observe the safety precautions for working with fuels

 Fit the prefilter carefully back into the suction intake

- Do not damage the suction intake!

 Take care that no dirt or foreign particles are allowed to enter the fuel pump.



*Suction intake of the prefilter*

**Backfitting an E1F electronic fuel pump**

When backfitting older vehicles which have no screen filter in the tank with an electronic fuel pump of the type E1F:

**For petrol operation** the prefilter **can remain** in the pump.

**In Diesel operation the prefilter must be removed**, as it can lead to problems due to the higher viscosity of Diesel fuel.

Information on this subject can be found in our Service Information

- SI 0063 "Installation of E1F as a replacement for a mechanical KP" and
- SI 0063 "Installation of an E1F as an additional pump" and in our brochure
- Service Tips and Information "Fuel Systems - Components and Solutions for Universal Use" (Order Item: 8.40002.56.0).