TECHNICAL SERVICE INFORMATION No. 01/2021

Heavy Commercial Vehicles

Information bulletin to be circulated	Service Manager	Warranty Manager	Parts Manager	Master Technician	Service Consultant	BMIS
to:	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Subject	Installation of Float Filter Kit on Eu6 Vehicles with Short Urea Tank
Variant	On Eu6 Vehicles with Short Urea Tank
Abstract	On vehicles with float with a VIN number between LA93126 – LL97063 where urea quality is low error is received, the installation of the filter kit shall be performed as specified in the service application.

Parts to be Used

Part Number	Part Name	Number of Parts to be Used
KTLC46 5J246 AA	Urea Tank Float	1

Labour

Labour Code	Labour Name	Duration (hour)
25C120 A	Installation of Urea Float Filter	0.75

• KTLC46 5J249 AA kit includes 1 filter, 1 bolt and spring washer and a plastic clamp.



• Installation Condition of the New Filter Kit in the Urea Tank Float



Service Procedure;

1- When 'Urea Quality Low Error' is received on vehicles with a VIN between LA93126 – LL97063, the urea quality shall be measured first with a refractometer. Urea quality shall be 32.5 (+/- 2). If the urea quality is not within this interval, the quality of the urea used by the customer is low, and the urea shall be replaced. If the urea quality is within this interval, install the filter kit issued on the float and move to the next steps for this procedure.

Failure Code	Error Code Description
P207F-27	Low Urea Quality

- 2- The urea tank surface shall be cleaned with water before removing the urea float. It shall not remain dirty. Otherwise dust may enter the tank and may cause other errors on the vehicle.
- **3-** Some models have a protective cover on the urea tank. This cover shall be removed together with 4 screws shown on the figure.



4- Tighten the urea line inlet and outlet connectors on the float from the tabs on two sides as marked on the figure and pull them to the reverse direction of the float. It is normal that some urea drips.



5- Loosen the clamps of the water line inlet and outlet hoses on the float and remove the water hoses. After performing this operation, bend the cooling line quickly to prevent draining of coolant completely; it shall be blanked by tightening with straps from the bending points.





6- Pull the yellow clip on the urea float upwards in the direction of the arrow from its tabs and detach the electric connector from the float in the direction of the arrow.



7- Remove the float from the tank. On some vehicles, the tank shall be removed completely as the air filter bracket is located on the float. The retaining cover bolts in front of the tank shall be removed with an M12 socket for this purpose. Bolts shall not be re-used. Then the tank shall be pulled out from the frame and the float shall be removed as described above.



8- After removing the float, wash the areas shown with an ARROW with clean water. Ensure that there is no urea residue left.



9- Turn the float upside down. First, try to remove the screw with a phillips screwdriver. If you have a trouble in removing, heat the screw shown with an arrow using a soldering iron to prevent damage to the teeth. While heating with a soldering iron, the tip of the soldering iron shall only contact the screw. It shall not contact any other area.

Note: The temperature of the soldering iron shall be 300 – 400 degrees and it shall be applied on the screw for about 2 minutes.



10-After heating the phillips head screw with the soldering iron, remove the screw with phillips screwdriver.

Note: While removing with a screwdriver, hold the pipe shown with an arrow tight by hand, and do not allow rotating of this pipe with the load caused by the removal torque of the screw.



11-The screw and the spring washer under it shall be scrapped after removing them.



12-Try to remove the filter component on the float by pressing on the areas shown on the image with a flat tip screwdriver. Remove the filter component by inserting the flat tip screwdriver to the areas shown with an arrow.



13-Remove the filter component as shown in the figure. The tabs specified with an arrow may break while removing the filter component. The removed filter component shall be scrapped and shall not be used again. There are 2 tabs on the filter component.

Note: The broken tabs shall be removed if they fall down inside the installation area, they shall not be left in the relevant area.



14-After removing the filter component, new filter kit shall be installed on the relevant area. Installation procedure shall be performed as shown in the figure.



15-After installing the new filter kit, ensure that the surfaces shown with arrows are completely covered.



16-After installing the service component, the filter component shown with an arrow shall be inside the float pipes as shown in the figure.



17-The spring washer and the screw provided with the kit shall be installed on the relevant area. The installation torque for the relevant screw is 2-2.5Nm. It shall be installed with an adjustable torque wrench, if applicable.



18-There is a groove on the filter for connection with the plastic clamp. The plastic clamp shall be installed from this groove to the float pipes as shown in the figure.

Note: The connection area of the plastic clamp shall remain inside the heater pipes as shown in the figure. If it is installed so that it will be outside of the pipes, it shall be hard to install the float to the adblue tank.



19-After completing the installation of the service component, it shall be in the upright position as shown in the figure. It shall be installed on the V seat that is created between the filter return pipe and the heater pipe.



Examples of incorrect installation;

• The connection area of the plastic clamp shall not remain outside of the heater pipes.





• Service component shall not be positioned at an angle as shown in the figure.



• Installation images below are examples of correct application.



20-After completing all inspections and applications specified above, the float shall be installed to the tank. The float shall be installed without damaging metal pipes of the float and the filter while installing the new float to the tank. Ensure that the rubber O-rings on the float are not forgotten. After the installation, spigot ends of the float shall be upright and shall face the frame.



21-If the tank is removed, it shall be placed inside the metal casing as per its original position. The retaining cover shall be installed and new GC46-5J286-AB bolts (2 pcs.) shall be tightened with a torque of **80Nm**.



22-First, plug the electrical connector to the float. Then, visually inspect the insides of the urea hose connectors and ensure that the O-rings do not rotate inside. Urea inlet and outlet hoses shall be installed correctly in their original position and it shall be ensured that the quick-fit device is seated properly. Water inlet and outlet hoses shall be installed correctly to the float as in their original position and then tightened to 3.2 Nm. Ensure that the ventilation hose is not caught in between and that it passes right through the center as its original position. After completing the procedures, straps shall be applied correctly as in their original position.

Note: To prevent corrosion due to ingress of water to the electrical connector of the float, remove the water, then urea and then the electrical connection respectively. And during re-installation, perform the electrical connection first, and then the urea, and finally the water hose connection.



Note: Finally wash the exterior of the tank and perform final inspections.

23-If the urea tank's protective cover is removed, it shall be installed together with 4 screws and tightened to 25 Nm.



Regards,

Ford Trucks Service Engineering