



EUROPA

MODIFICATION NUMBER 79

ALTERNATIVE FUEL FILLER SYSTEM



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Note: The information in this manual refers to aircraft built to Europa manufacturing manuals. Any modifications may alter the applicability to your aircraft.

List of Revisions

Issue	Revision	Pages affected	Date
1	-	-	-
2	New document format applied.	All	August 2015
3	Correction to "Applicability"	5	August 2015
4			
5			
6			
7			



Classification

Optional

Applicability

All Europa Aircraft including the Long Wing variant, with the exception of any Europa Classic aircraft that are pre Mod 47. In this case Mod 80 should be fitted.

Compliance

As required

Effect on the Empty Weight and CG:

There is negligible effect on the Empty Weight and CG of the aircraft. Actual weight increase with respect to the original design is 157 grams.



Introduction

The original fuel filler system is no longer available. The tooling for the plastic moulding has been misplaced by the supplier and the cost of replacement tooling is prohibitive bearing in mind current demand. An alternative factory made-up hose assembly has been developed which joins the fuel filler cap housing to the fuel tank inlet.

Kit of Parts

Item Number	Part Number	Description	Quantity
1	FS13	90° Reducing Elbow	1
2	FS14	Aluminium Hose Joiner	2
3	FS15	Fuel Filler Neck Hose	1
4	FS16	60° Elbow	1
5	FS17	Hose Clip 40-60 mm	5
6	FS18	Hose Clip 50-70 mm	1
7	FS21	Ty-Rap	1
8	227-996	Ty-Rap Base	1





Action

Removal of existing fuel filler system (if applicable):

Note: Before commencing work, ensure the fuel level in the tank is well below the bottom of the tank inlet pipe.

Remove the pipe clips connecting the bottom end of the black elbow at the fuel tank inlet and at the top end where it connects to the plastic moulding.

Temporarily blank off the tank inlet with tape in order to prevent the ingress of debris.

Remove the fuel filler cap.

Carefully cut out the two grp straps attaching the polyurethane white moulding to the fuselage side – do not remove the part of the strap which is bonded to the fuselage skin.

Carefully apply heat (max. 60°C) to the adhesive joint, which bonds the plastic moulding to the filler cap housing, in order to soften the adhesive. The 2 components can now be separated with care.

Clean off excessive adhesive back to the outside diameter of the fuel filler cap housing grooves.

Installation of alternative fuel filler system:

Ensure the hose, hose connectors and elbows are thoroughly clean before installation – flush out if necessary.

Remove the blanking tape from the fuel tank inlet.

Select the reducer elbow and cut back the larger diameter end so that the internal straight portion is just sufficient to fully locate on the grooved exterior of the fuel cap filler housing. This locates the elbow as close to the fuselage side as possible.

Push one aluminium alloy hose connector halfway into the smaller end of this elbow. Push the elbow/connector assembly fully onto the fuel filler cap housing.

Loosely position the larger diameter hose clip over the top end of the filler housing elbow. Loosely position a smaller diameter hose clip to the other end.

Push the other aluminium hose connector into one end of the other elbow and push the assembly fully onto the fuel tank inlet - loosely attach one of the smaller hose clips at each end.

Orientate the 2 elbows for best position with the lower elbow as close to the fuselage side as possible and the upper elbow assembly roughly lined up with it. Maintaining this set-up, tighten



the hose clips at the upper end of the upper elbow assembly and the lower end of the lower elbow. Measure the length of straight hose required to connect between the 2 elbow assemblies – this dimension is nominally 450 mm.

Note: To ensure the assemblies connect up accurately this operation of measuring and cutting should be done very carefully.

When satisfied, cut the centre hose to length using a sharp knife and angle cutters.

Loosely position a hose clip at each end of this hose and push it onto the mating aluminium connectors. Check the orientation and when satisfied tighten all the hose clips.

Support the upper end of the centre hose using a **self-adhesive** ty-rap base and ty-rap. Determine the best position for the ty-rap base, clean and degrease the area and bond it to the fuselage side. Attach the ty-rap firmly but do not force the hose over to the extent that it puts the fuel tank inlet boss under stress.

Finally, carry out a fuel leak check by filling the fuel tank up to the top of the filler neck.

Inspect for leaks.

