

	<b>Standard Modification</b> Issue 1	Mod No. SM 12781
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		Compiled : A Draper
		Approved : F Donaldson

## TITLE : Installation of Fuel Tank Drains

APPLICABILITY : **All Tecnam Sierra variants**

Mod Type : **At build or retro-fit**

### 1. Introduction

The fitting of a drain valve for each fuel tank is accomplished by riveting in place a Tecnam drain fitting on the wing lower skin, having first drilled a hole through into the tank. The advantages of having drain valves are that the tanks can be checked for the presence of water and, provided that other items are found to be satisfactory by an LAA inspector, unleaded Mogas can be used.

### 2. Parts List

Qty	Part No.	Description	Source
2	22-9-142-1	Quick drain support	Tecnam
8	AD48SB	3.2mm blind pop-rivet	LAS Aerospace
2	CCA-1550	Curtis drain valve	Various
	PRC 1422	Tank sealant	Various

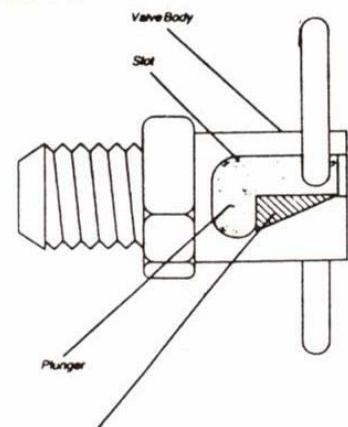
### List of related documents

Document No.	Title / Description	Issue
No. 108	P2002 Sierra quick drain installation procedure	1

### 3. Action

The installation of the drain valves must be carried out in accordance with Tecnam document No. 108 and with the additional actions below.

- 3.1 If fuel has been in the tanks, even after draining them via the normal fuel outlet, about half a litre or more will remain. To avoid the possibility of an explosion, don't use an electric drill, but use a hand drill instead. Expect the residual fuel to dribble out once the drill has first penetrated the tank so use rag to prevent it from dribbling down your arm.
- 3.2 Drill carefully to minimise the chance of swarf from entering the tank and, following drilling, ensure that all swarf is removed from the tank.
- 3.3 Before installing the Curtis drain valves, file away the portions of the valve body that act to latch the valve in the open position. See illustration.
- 3.4 If the rivet gun used is unable to be positioned properly due to a clash with the blade of the drain valve fitting and no smaller rivet gun is available, the use of a 10mm long x 6mm diameter adaptor with a rivet stem sized hole through it may be used. See photo.



File off shaded area (both sides)



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Note 10mm long adaptor to avoid clash between rivet gun and drain valve fitting.

**4. Weight and Balance**

	Weight (lb/kg)	CG (in/mm)	Moment
Existing A/C			
Weight Added			
Post Mod A/C			

The change in weight due to the quick drain valves and fittings is very small. If other changes to the aircraft are made a full weight and balance may be necessary.

Amend the aircraft weight and balance schedule accordingly.

**5. Flight Test and Special Instructions**

Before the modified aircraft may be flown: -

- 1) An LAA inspector must check the installation of the fuel tank drains and check for leaks in accordance with Tecnam document No. 108.
- 2) With the above found to be satisfactory, a logbook entry must be made, making reference to the modification number and the inspector must sign a Permit Maintenance Release (PMR).

Approved:	F Donaldson B.Tech C.Eng FRAeS Chief Engineer	Signed:	
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