

TRAILER ENGINEERING LTD

BOWSER MANUFACTURERS

Established 1972

March 2019 VOL 4

ADDITIONAL OPERATING INSTRUCTIONS

FOR:

AVIATION REFUELLING BOWSERS



MODEL

AVGAS 1000 litre site / highway & skid base.

JET A1 950 litre site / highway & skid base

JET A1 2140 litre site / highway & skid base

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IMPORTANT: Also see current brochure operating instructions in conjunction with this booklet.

FUEL MUST BE RUN THROUGH THE SYSTEM PRIOR TO FILLING AND OPERATING THE BOWSER.

ENSURE THERE ARE NO NAKED FLAMES OR OTHER SOURCES OF IGNITION WITHIN THE IMMEDIATE VICINITY OF THE UNIT.

All bowzers as standard are fitted with a 2" bsp fill pipe fitted with an alloy cap & chain, some models with extended fill pipes have a 2" gate valve on the end of the fill tube. Filling through this aperture is usually by screwing a standard 2" ADR tanker nozzle directly onto the fitting or via a trigger nozzle inserted through the aperture and splash filling; models fitted with specified fittings other than the above, such as ground control units will have individual operating instructions issued appropriate to the fittings.

FILLING THE TANK

1. If the tank has an extended fill pipe or gate valve fitted. Position the bowser so that the drawbar of the trailer is slightly lower than horizontal, this ensures any fuel left in the fill pipe runs into the tank & not into the bund.
2. **Ensure that the top mounted vent valve is fully open**, if a valve is fitted on the filler pipe, ensure that this valve is open fully, unscrew the alloy filler cap. Connect any earth bonding leads from the filling tanker as appropriate.

Connect the ADR nozzle securely to the screwed connection or insert the filler nozzle into the fill pipe & commence filling, observe the rate of fill through the sight glass tube (fitted to stainless tank) or view through translucent skin of tank if polyethylene tank fitted.

Stop filling when the fill point is reached.

NOTES

APPROXIMATE DIMENSIONS & WEIGHTS**950 Litre JET A1 EU Highway**

Length: 3555mm
Width: 1550mm
Height: 1524mm
Weight: 476kg Unladen
1500kg Laden

UNLADEN TOWING HEIGHT WITH BOWSER ON LEVEL - 560mm

2140 Litre JET A1 EU Highway

Length: 3684mm
Width: 1981mm
Height: 1981mm
Weight: 850kg Unladen
2800kg Laden

UNLADEN TOWING HEIGHT WITH BOWSER ON LEVEL - 590mm

1000 Litre AVGAS EU Highway

Length: 3555mm
Width: 1550mm
Height: 1524mm
Weight: 476kg Unladen
1500kg Laden

UNLADEN TOWING HEIGHT WITH BOWSER ON LEVEL - 580mm

4. Remove the ADR nozzle or filler nozzle, securely screw the 2" alloy cap onto the fill pipe & close any valve on the fill line if fitted. **Close the vent valve if you do not intend to use the bowser immediately to refuel your aircraft or you intent to tow the bowser.**

TO REFUEL AIRCRAFT USING A HAND PUMP

- 5.
- A. Park the bowser within the distance of your hose length from the aircraft.
 - B. Unroll sufficient earth bonding lead from the hand rewind reel located within the back of the tank and connect to the bonding point on the aircraft.
 - C. Open the main fuel supply valve fitted to the base of the tank.
 - D. Open the secondary valve to the pump, situated just above the main valve in the base of the tank.
 - E. Fully open the vent valve on the top of the tank.
 - F. Unroll the fuel delivery hose and insert the nozzle into the fuel tank of the aircraft using either the jack plug or crocodile clip.
 - G. 2 people are normally required to operate this system. One holds the trigger nozzle open whilst the other operates the single diaphragm hand pump.
 - H. On completion of the filling operation, close all of the valves and rewind the cable.

FLOWMETER OPERATION**NON-RESALE MODEL**

To use flowmeter for recording fuel quantity delivered, rotate black knob on the side of the flowmeter until the digits re-set at zero prior to using the pump. The totaliser numbers will not re-set.

Resale flowmeters have individual operating instructions

OPERATING INSTRUCTIONS

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12/24 VOLT PUMP OPERATION TO FILL AIRCRAFT

To operate the electric pump, switch the battery on using the side mounted master switch located on the front mounted battery box.

Follow the procedure for hand pump operation from 5A - 5F.

It is possible to operate the bowser single handed.

The pump on-off switch is a lever located directly on the pump body. Switch the pump on & proceed to dispense fuel into the aircraft, when filled, switch the pump off as soon as possible, then turn the battery off with the master switch.

READ THE PUMP MANUAL SUPPLIED

Battery boxes fitted with built in chargers: if the bowser has a built in charger, the charger is fitted within the lockable battery box & has a 13amp plug fitted. To charge the battery, ensure the bowser is in a well ventilated area, ensure the master switch is turned off. Connect the plug to an extension lead, switch the extension lead on after connecting the plug & socket.

Leave the charger on until the battery is fully charged then disconnect the charger. Switch the charger off at the extensions lead mains switch first.

DIESEL ENGINE PUMP OPERATION

To operate follow instructions from 5A - 5F then pump operation as supplied in the engine manual.

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FUEL SAMPLING

6. The bowser is fitted with a hand operated sample pump which draws fuel from the base of the tank. Before taking a sample ensure that the bowser has the drawbar slightly higher than horizontal.

A) Open the main fuel valve in the base of the tank & open the supply valve to the hand pump.

B) Attached to the hand pump is a length of clear flexible hose with a cam lock cap fitted to the end to keep the hose clean, this is normally stowed on a spring clip when not in use.

C) Wipe the hose with a clean cloth to prevent contaminated the sample, remove the cam lock cap and insert the hose into your sample vessel.

D) Operate the sample pump by raising & lowering the plunger mounted on top of the pump until you have drawn off your sample.

E) Replace cam lock cap, turn off the supply valve & turn off the main fuel valve.

FILTER SAMPLING

F) On the bottom of the filter casing is a sampling valve fitted with a cam lock cover, remove the cover.

G) Place a sample vessel under the valve, open the valve to take the filter sample, close the valve when sample is taken and re-fit the cam lock cap.