**ADDITIONAL OPERATING INSTRUCTIONS**

**FOR AVIATION REFUELLING BOWSERS**

 

 

**MODEL**

• AVGAS 1000 LITRE SITE/HIGHWAY & SKIDBASE

• JET A1 950 LITRE SITE/HIGHWAY & SKIDBASE

• JET A1 2140 LITRE SITE/HIGHWAY & SKIDBASE

**PAGE 2**

**PRIOR TO FILLING OR OPERATING THE BOWSER ENSURE THERE ARE NO NAKED FLAMES OR OTHER SOURCES OF IGNITION**

**WITHIN THE IMMEDIATE VICINITY**

**ALL BOWSERS 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” A.D.R TANKER NOZZLE DIRECTLY ON TO THE FITTING OR VIA A TRIGGER NOZZLE INSERTED THROUGH THE APERTURE & SPLASH FILLING. : MODELS FITTED WITH SPECIFIED FITTINGS OTHER THAN THE ABOVE, SUCH AS,GROUND CONTROL UNITS WILL HAVE INDIVIDUAL OPERATING INSTRUCTIONS ISSUED APROPRIATE TO THE FITTINGS .**

**FILLING 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 ALSO OPEN FULLY, UNSCREW THE ALLOY FILLER CAP. CONNECT ANY EARTH BONDING LEADS FROM THE FILLING TANKER AS APPROPRIATE.

**3.** CONNECT THE A.D.R. 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.

**4.** REMOVE THE A.D.R.NOZZLE OR FILLER NOZZLE, SECURELY SCREW THE 2” ALLOY CAP ON TO 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 INTEND TO TOW THE BOWSER.

**PAGE 3**

**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 & 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 & INSERT THE NOZZLE INTO THE FUEL TANK OF THE AIRCRAFT, CONNECT THE EARTH BONDING LEAD FROM THE NOZZLE TO THE AIRCRAFT USING EITHER THE JACK PLUG OR CROCDILE 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 & 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

**PAGE 4**

**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 5 a) TO 5 f).**

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 13 AMP 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, SWITCHTHE EXTENSION LEAD ON AFTER CONNECTING THE PLUG & SOCKET.

LEAVE THE CHARGER ON UNTILL THE BATTERY IS FULLY CHARGED THEN DISCONNECT THE CHARGER. SWITCH THE CHARGER OFF AT THE EXTENSION LEAD MAINS SWITCH FIRST.

**DIESEL ENGINE PUMP OPERATION.**

**TO OPERATE ,: FOLLOW INSTRUCTIONS FROM 5a) TO 5 f) THEN PUMP OPERATION AS SUPPLIED IN THE ENGINE MANUAL.**

**PAGE 4**

**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 CONTAMINATING THE SAMPLE, REMOVE THE CAM LOCK CAP& INSERT THE HOSE INTO TO 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 & RE-FIT CAM LOCK CAP.