

CERTIFICATE OF CONFORMITY
BUNDED FUEL BOWSERS & STATIC SKID BASE TANK

ALL 950 LITRE & 2140 LITRE BOWSERS FROM SERIAL NO 18380 UPWARDS ARE U.N CERTIFIED & COMPLY WITH CURRENT & PENDING EEC REGULATIONS FOR THE CONTAINMENT OF FUEL OIL. THEY ALSO COMPLY WITH CURRENT STATUTORY INSTRUMENT 2001 No 2954 THE CONTROL OF POLLUTION(OIL STORAGE) ENGLAND REGULATIONS. ALL HIGHWAY FUEL BOWSERS FROM 10TH MAY 2004 ARE ADR OR U.N. CERTIFIED.

As from 30th October 2012 all highway bowsters & trailers have
EU Whole Vehicle Type Approval.

R.D. SWIFT
DIRECTOR

CERTIFICATE OF CONFORMITY
FOR WATER BOWSERS.

500, 1125 & 2000 LITRE POLYETHYLENE TANK SITE & HIGHWAY WATER BOWSERS COMPLY WITH CURRENT & PENDING EEC REGULATIONS FOR THE CONTAINMENT OF WATER. THE TANK IS CONSTRUCTED FROM FOOD QUALITY POLYETHYLENE. THEY ALSO COMPLY WITH CURRENT D.E.T.R, ENVIRONMENT AGENCY & HEALTH AND SAFETY REGULATIONS THE BLUE POLYETHYLENE TANKS ARE MOULDED FROM WATER COUNCIL APPROVED PLASTIC & APPROVED TO BS6920:2000 FOR WATER BOWSERS & HAVE SECRETARY OF STATE APPROVAL.

R.D. SWIFT
DIRECTOR

WE RESERVE THE RIGHT TO CHANGE OR MODIFY OUR PRODUCTS WITHOUT PRIOR NOTICE.

ALL DIMENSIONS & WEIGHTS ARE APPROXIMATE & CAN VARY WITH COMPONENT CHANGES.

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TRAILER ENGINEERING
MANUFACTURERS OF INDUSTRIAL TRAILERS & TANKERS



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**BOWSER OPERATING
INSTRUCTIONS
2014**



500/1125/2000 Litre SITE & HIGHWAY BOWSER & STAKA TANK
1125/2000 Litre PRESSURE WASHER -Diesel or Petrol Engine -
SITE OR HIGHWAY BOWSER

950 Litre U.N. SITE/SKIDBASE & HIGHWAY BUNDED FUEL BOWSER

950 Litre U.N. POLYCUBE

2140 Litre U.N. SITE/SKIDBASE & HIGHWAY BUNDED FUEL

INITIAL SET UP FOR BUNDED FUEL BOWSERS

1. PARK THE BOWSER ON AS NEAR AS POSSIBLE A LEVEL SURFACE. IF DISCONNECTING FROM TOWING VEHICLE, LOWER THE FRONT & REAR SUPPORT STANDS & SECURE CLAMPS, APPLY BRAKES OR CHOCK THE WHEELS. OPEN THE REAR HINGE DOWN ACCESS DOOR.

2. TO FILL THE BOWSER. A VENT VALVE IS FITTED DIRECTLY ON THE TOP OF THE REAR OF THE INNER TANK, **ENSURE** THIS VALVE IS FULLY OPEN BY TURNING ANTI-CLOCKWISE UNTIL RESISTANCE IS FELT. UNSCREW THE ALLUMINIMUM CAP SECURED BY A CHAIN WHICH IS COVERING THE 2" BSP FILLER. EITHER INSERT THE FILLING HOSE INTO THE TANK THROUGH THE FILLER PIPE OR SCREW A CONNECTION TO THE FILLER & START FILLING, OBSERVING THE LEVEL OF FUEL THROUGH THE SIGHT GLASS IF FITTED OR THROUGH THE TRANSLUCENT SKIN OF THE INNER TANK. **STOP** FILLING WHEN THE FUEL NEARS THE UNDERSIDE OF THE FILL PIPE

3. TO OPERATE THE BOWSER. AT THE BASE OF THE INNER TANK IS THE MAIN SUPPLY VALVE WITH A SECOND VALVE IN LINE TO THE PUMP, FULLY OPEN THESE VALVES. ENSURE THAT THE VENT VALVE ON THE TOP OF THE TANK IS FULLY OPEN. REMOVE THE TRIGGER NOZZLE FROM ITS BRACKET & INSERT INTO FUEL TANK OR CONTAINER TO BE FILLED FROM THE BOWSER. SQUEEZE THE LEVER ON THE TRIGGER NOZZLE & OPERATE THE SEMI ROTARY HAND PUMP BY MOVING THE HANDLE FROM SIDE TO SIDE. WHEN SUFFICIENT FUEL HAS BEEN DISPENSED, STOP PUMPING & RELEASE THE TRIGGER NOZZLE. REPLACE THE TRIGGER NOZZLE BACK ONTO THE STORAGE BRACKET INSIDE THE BUND. CLOSE THE MAIN SUPPLY VALVE AT THE BASE OF THE TANK & SECONDARY VALVE TO PUMP.

BOWSERS FITTED WITH ELECTRIC PUMPS. FULLY OPEN THE MAIN SUPPLY VALVE AT THE BASE OF THE INNER TANK & THE SECONDARY VALVE IN LINE TO THE PUMP. FULLY OPEN THE VENT VALVE ON TOP OF THE TANK. CONNECT THE CABLE FROM THE PUMP TO THE APPROPRIATE POWER SUPPLY. REMOVE TRIGGER NOZZLE FROM ITS BRACKET. SWITCH THE PUMP ON AT THE SWITCH MOUNTED ON THE PUMP BODY. INSERT THE TRIGGER NOZZLE INTO THE FUEL TANK OR CONTAINER TO BE FILLED FROM THE BOWSER & SQUEEZE THE TRIGGER. RELEASE TRIGGER WHEN SUFFICIENT FUEL HAS BEEN DISPENSED. SWITCH PUMP OFF & REPLACE TRIGGER NOZZLE ON STORAGE BRACKET INSIDE BUND. **CLOSE BOTH VALVES IN LINE TO THE PUMP. 110V & 230 VOLT PUMPS MUST NOT BE LEFT RUNNING AGAINST A CLOSED TRIGGER NOZZLE FOR MORE THAN 2 MINUTES (THE OIL SEAL WILL BLOW OUT).**

IMPORTANT 12 VOLTS PUMPS MUST NOT BE RUN CONTINUOUSLY FOR MORE THAN 25 MINUTES EVERY HOUR. 24 VOLT PUMPS MUST NOT BE RUN MORE THAN 20 MINUTES EVERY HOUR.

SERVICE / MAINTENANCE RECORD

[illegible]

Note:- Regular maintenance with particular attention to the Brake condition/adjustment and Bearings is vital to the safety of the trailer.

TRAILER 'RUNNING GEAR' MAINTENANCE SCHEDULE

	1ST. 2000 KILOMETRES 1200 MILES	EVERY 4000 KILOMETRES 2500 MILES	EVERY 16000 OR 1 YEAR 10,000 MILES	WEEKLY
CHECK AND ADJUST BRAKES	*	*	*	
CHECK AND ADJUST SYSTEM			*	
GREASE LINKAGES AND CABLES		*	*	
GREASE AND CHECK OVER-RUN COUPLING		*	*	
CHECK TYRE PRESSURES				*
CHECK AND GREASE HUBS			*	
CHECK WHEEL NUT TIGHTNESS	*		*	
CHECK TYRE TREAD DEPTH			*	*
CHECK HUB ADJUSTMENT	*		*	
REMOVE HUBS – CHECK BRAKES, BEARINGS			*	

CLEAN 'Y' STRAINER ON FUEL BOWSER MONTHLY
FAILURE TO CLEAN 'Y' STRAINER WILL CAUSE PUMP TO MALFUNCTION

INITIAL SET UP FOR WATER BOWSERS

1. PARK THE BOWSER AS FOR THE BUNDED FUEL BOWSER INSTRUCTIONS (SEE PAGE 2).

IMPORTANT INFORMATION ON FILLING A WATER BOWSER WITH A **HYDRANT CONNECTION.**

BEFORE CONNECTING THE HYDRANT HOSE TO THE TANK ENSURE THAT THE BLACK INNER MANLID IS FULLY OPEN, THE PRESSURE FROM THE HYDRANT COULD BURST THE LID OR THE TANK WHEN IT IS FULL.

REFER TO DRINKING WATER BOWSER OPERATING MANUAL WHEN BOWSER IS USED FOR THE CARRIAGE OF POTABLE WATER.

LIFTING INSTRUCTIONS FOR WATER STAKA-TANKS & BUNDED SKIDBASE & U.N. FUEL BOWSERS.

ALL SKIDBASE & STAKA TANKS HAVE 4 BUILT IN LIFTING EYES FITTED. LIFT ONLY USING 4 LEGGED CHAINS, 2 METRES MINIMUM LEG LENGTH OF SUFFICIENT CAPACITY FOR THE LOAD, USING 'D' SHACKLES OR HOOKS WITH RELEVANT SAFETY CATCHES ON THE HOOK. SECURE TO THE 4 LIFTING EYES ON THE TANK OR USE AN APPROVED LIFTING BEAM.

ALL SKIDBASES & STAKA-TANKS HAVE BUILT IN FORKLIFT TRUCK SOCKETS USE ONLY FORK TRUCKS WITH SUFFICIENT CAPACITY TO LIFT THE LOAD, ENSURING THAT THE FORKS ARE SECURELY INSERTED WITHIN THE SOCKET CHANNELS ON THE TANK & ARE SUFFICIENT LENGTH TO SUIT THE TANK, **U.N.** TANK FORK SOCKETS ARE FOR USE WHEN NOT FITTED IN A CHASSIS.

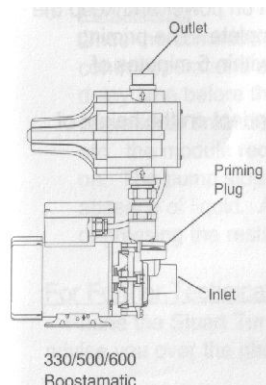
OPERATING INSTRUCTIONS FOR 110/240 VOLT ON DEMAND PUMP

ENSURE THERE IS WATER IN THE BOWSER TANK PRIOR TO OPERATION, CONNECT THE DELIVERY HOSE FROM THE PUMPTO THE FEED/SUPPLY INLET OF THE UNIT REQUIRING THE WATER SUPPLY, OPEN THE GATE VALVE FROM THE TANK TO THE PUMP, LOOSEN THE PRIMING PLUG ON TOP OF THE PUMP & BLEED THE AIR OUT & RETIGHTEN WHEN BLED.CONNECT THE ELECTRIC SUPPLY & THE PUMP WILL OPERATE.

ON DEMAND PUMP INFORMATION

ELECTRICAL CONNECTION

THE PRESSURE CONTROL MODULE FITTED TO THIS PRODUCT IS PROVIDED WITH A FACTORY FITTED SUPPLY CORD. THIS MUST BE CONNECTED TO THE POWER SUPPLY WITH A WEATHERPROOF PLUG OR ALTERNATIVELY IN PERMANENTLY WITH A DOUBLE POLE SWITCH PROTECTED WITH A FUSE. IF THE POWER IS SUPPLIED FROM A GENERATOR, THE GENERATOR MUST HAVE A NON FLUCTUATING CONSTANT 110/230 VOLT SUPPLY, GENERATORS THAT FLUCTUATE CAUSE THE CAPACITOR IN THE MOTOR OF THE PUMP TO FAIL AFTER A SHORT PERIOD OF TIME.



COLD WEATHER PROTECTION

WHEN THERE IS FROST OR FREEZING TEMPERATURES & THE PUMP IS NOT USED ie, NIGHT TIME/WEEKENDS OR HOLIDAYS, THE POWER & WATER SUPPLY SHOULD BE DISCONNECTED. CLOSE THE GATE VALVE FROM THE TANK TO THE PUMP & DRAIN THE PUMP BODY BY REMOVING THE SUPPLY HOSE TO THE PUMP & DRAINING THE WATER OUT OF THE PUMP BODY. ALTERNATIVELY ENSURE THAT THE BOWSER & PUMP ARE LOCATED IN A FROST FREE ENVIRONMENT OR HAVE INSULATION PLACED AROUND THE PUMP BODY.

TROUBLE SHOOTING GUIDE

IN NORMAL OPERATION THE GREEN L.E.D. 'POWER ON' IS ILLUMINATED & THE YELLOW L.E.D. 'PUMP RUNNING' IS ILLUMINATED. IF THE RED L.E.D. LIGHTS UP THIS INDICATES THE PUMP IS OUT OF LIQUID OR PRIMING IS INCOMPLETE. IN THE EVENT OF THIS HAPPENING, CHECK LIQUID SUPPLY TO PUMP, IF ALL IS IN ORDER KEEP THE **RESTART** BUTTON DEPRESSED WITH A TAP OPEN & WAIT UNTIL THE RED LIGHT GOES OUT. WHEN THE BUTTON IS RELEASED & THE TAP IS CLOSED, THE PRESSURE CONTROL MODULE WILL STOP THE PUMP AT ITS MAXIMUM PRESSURE. **DO NOT RUN AGAINST A CLOSED VALVE FOR PERIODS LONGER THAN 5 MINUTES.**

WATER BOWSERS FITTED WITH PETROL ENGINE PUMPS
FOLLOW INSTRUCTIONS IN MANUAL SUPPLIED WITH PUMP

FAULT		REMEDY
A	Brake Shoes – Adjusted too Tight, wheels difficult to rotate.	Reset brakes according to reset procedure.
B	Brake Cable – Sticking, dirty, trapped or corroded.	Remove cables, clean, re-grease, fit to reset procedure.
C	Brake Spring – Broken or dislodged.	Remove hubs, clean brakes and drums, refit new springs and brake shoes.
D	Brake Shoes – Worn	Remove hubs, clean brakes and drums, replace brake shoes.
E	Hitch – Incorrectly adjusted.	Follow adjustment procedure, as laid down.
F	Cable linkage system incorrectly adjusted, sticking.	Remove linkages, cables, rods clean, refit, re-adjust linkage system.
G	Cable System insufficiently supported or supports broken.	Re-fit flexible supports under trailer to reduce friction in system.
H	Reversing Vehicle on slippery surface.	Use manual stop on over-run coupling if fitted.
I	Hand brake left "on" or "partially on".	Ensure hand brake fully off – if vehicle has been driven extensively with hand brake on, remove hubs, check brakes and hub bearing – replace if damaged.
J	Damper failure in coupling.	Return coupling to supplier for damper replacement.
K	Coupling shaft jammed or damaged/Rusty.	Return coupling to supplier for repair/ replacement.
L	Incorrect nose weight on trailer coupling.	Adjust load to give between 50 - 100 Kilos. "Nose-weight" on trailer coupling.
M	Rust formation or hub grease in brake drum.	Remove hubs/drums – clean away rust, oil, refit. <i>Take care to avoid breathing brake-lining dust.</i>
N	Brake shoe carrier rollers rusty, damaged/worn.	Remove hubs and brakes, clean carrier shoe with wire brush. Grease rollers with "copperslip" or similar material, refit and adjust.
O	Brakes not equally adjusted on all wheels.	Jack up trailer – adjust.
P	Wrong type pressures.	Check tyre pressures and correctly inflate to trailer manufacturer's recommendations.

TRAILER RUNNING GEAR FAULT DIAGNOSIS AND REMEDIES

IDENTIFY POSSIBLE CAUSE, THEN REFER TO FAULT/REMEDY TABLE

★ LIKELY CAUSE ● MOST LIKELY CAUSE

SYMPTOM	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Brakes over-heating	●	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Trailer failing to auto reverse	★	★	★	★	●	★	★	★	★	★	★	★	★	★	★	★
Hand brake not working efficiently		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Brakes not working efficiently		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Brakes snatching		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Trailer "snaking"		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Trailer swerving to one side		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Brakes remaining on after hand brake release	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Trailer failing to tow easily (resistance)	●	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Trailer brakes "jerkily"		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★

REGULATIONS FOR TOWING BUNDED FUEL BOWSERS AS AT MAY 2004.

BOWSERS MANUFACTURED PRIOR TO 10TH MAY 2004 ARE RECLASSIFIED AS UN / IBC'S IF THEY HAVE A BOLT ON TANK & OR ARE SKIDBASE VERSIONS, AS LONG AS THEY ARE WELL MAINTAINED, BUNDED & ARE LEAK FREE, THIS EXEMPTION RUNS UNTIL 2019. IF THEY HAVE A CAPACITY OF 1000 LITRES OR UNDER THE DRIVER CARRYING OR TOWING THEM WAS EXEMPT FROM NEEDING A FULL ADR LICENCE UNTIL JUNE 2019 (**THIS REGULATION IS CHANGING FROM JANUARY 2007 DEPENDING ON THE SIZE & GROSS WEIGHT OF THE TOWING OR CARRYING VEHICLE**) BUT NEEDS INSTRUCTING ON THE HAZARDS OF THE PRODUCT CARRIED & WHAT EMERGENCY ACTION IS NEEDED IN CASE OF AN ACCIDENT OR SPILLAGE. THEY SHOULD CARRY A 2Kg FIRE EXTINGUISHER IN VEHICLE, PERSONAL PROTECTION EQUIPMENT, SPILL KIT & REPORT DANGEROUS GOODS INCIDENTS & ACCIDENTS TO THE DEPARTMENT FOR TRANSPORT.

OVER 1000 LITRES CAPACITY IF THE TANK IS CARRYING MORE THAN 1000 LITRES THEN THE DRIVER NEEDS AN ADR LICENCE. THE PERSON OR COMPANY OPERATING THESE MUST APPOINT A DANGEROUS GOODS SAFETY ADVISOR, THE DRIVERS MUST UNDERGO AWARENESS TRAINING, THE DRIVERS MUST UNDERGO AWARENESS TRAINING, CARRY PPE & SPILL KIT AS PER 'TREM CARD', A 2Kg & 6Kg FIRE EXTINGUISHER, WHEEL CHOCKS & 2 WARNING TRIANGLES, HI VIS VESTS FOR CREW OF VEHICLE & TORCH. REPORT DANGEROUS GOODS INCIDENTS & ACCIDENTS TO THE DEPARTMENT FOR TRANSPORT.

ALL HIGHWAY FUEL BOWSERS MANUFACTURED AFTER 10TH MAY 2004 MUST EITHER BE ADR CERTIFIED OR UN / IBC'S. ALL OF OUR 950 LITRE & 2140 LITRE TANKS ARE U.N IBC'S.

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As from 1st November 2012, all highway trailers, bowsters manufactured from this date must be approved to EU standards Rolling chassis must be either EU Whole Vehicle Type Approval or UK Single Vehicle Type Approval.

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950 Litre U.N. Approved Polycube

Length: 1213mm
 Width: 1213mm
 Height: 1410mm overall
 Weight: 290kg Unladen
 1145kg Laden



1125 Litre Drinking Water Staka Tank

Length: 6' 0" (1828mm)
 Width: 5' 0" (1537mm)
 Height: 5' 0" (1524mm)
 Weight: 190Kg Unladen
 1326Kg Laden



950 Litre UN Bunded IBC Fuel Tank

Length: 6' 7" (2014mm)
 Width: 4' 3" (1295mm)
 Height: 4' 1" (1245mm)
 Weight: 390Kg Unladen
 1245Kg Laden



2140 Litre UN Bunded IBC Fuel Tank

Length: 6' 7" (2014mm)
 Width: 5' 7" (1701mm)
 Height: 5' 5" (1646mm)
 Weight: 623Kg Unladen
 2550Kg Laden

APPROXIMATE DIMENSIONS & WEIGHTS

500 LITRE SITE WATER

Length: 8' 0" (2438mm)
 Width: 4' 8" (1423mm)
 Height: 3' 4" (1016mm)
 Weight: 200Kg unl 722Kg Gross

500 LITRE EU HIGHWAY WATER

Length: 9' 2" (2795mm)
 Width: 5' 1" (1549mm)
 Height: 3' 6" (1021mm)
 Weight: 230Kg Unl 750Kg Gross

1125 LITRE SITE WATER

Length: 8' 10" (2693mm)
 Width: 4' 9" (1448mm)
 Height: 4' 1" (1245mm)
 Weight: 250Kg Unl 1390Kg Gross

1125 LITRE EU HIGHWAY WATER

Length: 9' 2" (2795mm)
 Width: 5' 1" (1549mm)
 Height: 4' 4" (1275mm)
 Weight: 264Kg Unl 1400Kg Gross

950 LITRE BUNDED SITE FUEL

Length: 10' 5" (3175mm)
 Width: 4' 9" (1448mm)
 Height: 5' 1" (1550mm)
 Weight: 430Kg Unl 1418Kg Gross

950L BUNDED EU HIGHWAY FUEL

Length: 11' 10" (3606mm)
 WIDTH: 4' 11" (1499mm)
 HEIGHT: 5' 1" (1550mm)
 WEIGHT: 456Kg Unl 1500Kg Gross

2000 LITRE SITE WATER

Length: 11' 2" (3390mm)
 Width: 6' 1" (1847mm)
 Height: 5' 3" (1595mm)
 Weight: 460Kg Unl 2732Kg Gross

2000 LITRE EU HIGHWAY WATER

Length: 11' 10" (3600mm)
 Width: 6' 2" (1879mm)
 Height: 5' 5" (1660mm)
 Weight: 600Kg Unl 2900Kg Gross

2140 LITRE BUNDED SITE FUEL

Length: 11' 1" (3378mm)
 Width: 5' 11" (1803mm)
 Height: 6' 7" (2006mm)
 Weight: 700Kg Unl 2780Kg Gross

2140L BUNDED EU HIGHWAY FUEL

Length: 11' 11" (3632mm)
 Width: 6' 4" (1930mm)
 Height: 6' 7" (2006mm)
 Weight: 850Kg Unl 2900Kg Gross

UNLADEN TOWING HEIGHT WITH BOWSER ON LEVEL

500 & 1125 Litre Site Water	17" (432mm)
500 & 1125 Highway Water	15" (381mm)
950 Litre Bunded Site Fuel	17" (432mm)
950 Litre Bunded Highway Fuel	24" (609mm)
2000 Litre Site & Highway Water	20" (508mm)
2140 Litre Bunded Site & Highway Fuel	26" (660mm)