



Breathing Air Trailer

S/N 2019526

Operating Instructions

General Information.

Trade Safety Ltds Air Trailers comprises of a two axle two tonne capacity , auto braked trailer. Sn 2019526 NSAI approved

The air storage system consists of a number of 300 bar 50 litre or 80 litre steel storage cylinders.

The Pneumatics consists of a single point charging valve to fill all cylinders. Isolating valves for the top and bottom air banks.

High pressure safety valves, low pressure safety valve. Two pressure regulators, two low pressure system gauges and one high pressure cylinder contents gauge are all housed in a waterproof steel box.

There is a low pressure ex rated Diktron DS4 MK11 visual and audible alarm housed in its own steel box.

At the rear of the trailer there is a lockable aluminium box that contains two stainless steel hose reels that can contain up to 90 metres of breathing air hose each. Also contained in the box are two breathing air filter units and two Scott Flights B/A sets



Operating Instructions.

The Air Trailer should be operated by a person trained and instructed in its use.

A trained person should be in attendance at the control panel and within range of the Diktron audio visual alarm at all times when trailer is in use.

- ❖ To fill the Air Trailer connect up charging hose from the compressor to the charging valve.
- ❖ Open charging valve and ensure that all of the cylinder valves are open.
- ❖ Open both isolation valves in control box
- ❖ Start Air Compressor.
- ❖ Fill all cylinders to 300 bar.
- ❖ Shut off compressor.
- ❖ Close charging valve.
- ❖ Close isolation valves in control panel.
- ❖ Vent charging line by lifting the handle on the charging valve and hold up until all of the air is vented from the charging line.
- ❖ Remove charging hose.

Please note:

For safety reasons all cylinder valve should be closed during transportation.



To operate Breathing Air Trailer.

- ❖ Open up cylinders as required.
- ❖ Open valve marked top or bottom air bank or both if required.
- ❖ Check low pressure gauge on panel is in green sector 6 Bar To 9.5 bar.
- ❖ Open box at rear of trailer.
- ❖ Check air pressure at hose reels. (This should also be between 6 and 9.5 bar pressure).
- ❖ Connect hose reel to the Breathing Air flight or other B/A and test same.
- ❖ The control panel has a air (outlet) low pressure warning whistle which is positioned in the y piece on the operators This whistle will sound if the line pressure falls below 5 bar.
- ❖ Check the operation of the whistles by turning off the air in the control panel and bleeding the air from the system using the breathing apparatus bypass valve.
- ❖ If the whistles do not sound at the correct pressures 5 Bar +/- 5% inform the supplier immediately.
- ❖ Turn the air back on fully.
- ❖ Connect the airline breathing apparatus and complete the checks described in the Breathing Air instruction.
- ❖ The unit is now ready for use.

During use:

If the cylinder contents High Pressure whistle sounds or the gauge leaves the green section- turn on at least 1 more cylinder if not already open.

Report any fault to the suppliers immediately.



In brief:

Maximum cylinder pressure 300 bar working pressure 450 Bar test pressure.

Outlet (line) pressure 6 to 9.5 bar.

Cylinder warning whistle set at 55 bar when there is 1 hours supply for 1 man on 1 cylinder.

Line pressure warning whistle set at 5 bar +/- 5%.

Flow rate 300 Lts/Min one man 120 Lts /Min for every operative after that.

Six Full cylinders hold 90,000 litres which is enough for 1 man for 37.5 hours approx.

Always:

- ❖ Turn on at least 1 cylinder from each row of cylinders.
- ❖ The control panel is type approved to BS EN 139, Clause (6.11.0-6.11.4)

Breathing Air Supply Hose Details.

Anti Static Hose.

Anti Static Hose type approved to BS EN 139 (Tests on Compressed Airline Supply Tube to the Requirements of Clause 6.10,12 & 22)

Anti static Hoses available in lengths approximately 30 metres.

Please Note:

The maximum total length of hose (Anti static & P.V.C.) allowable in any combination is 90 metres.



TECHNICAL SPECIFICATIONS

Air Trailer two axel auto braked, two tonne carrying capacity, EEC approved

Complete air trailer weight with six full cylinders one Tonne

Air Storage Cylinder working pressure 300 bar TP450 Bar. Manufactured from C M alloy to ISO 9809/3

Valves to BS 341/3

Safety Valves to BS EN ISO4126-1 2004 set at 330 bar.

Air Lines Safety valve set at 13.5 Bar located on regulators in control panel.

Anti static Breathing air hose to BS EN 139 6.10.12 and 22.

Breathing Air to BS EN 12021 and all European Standards.

Diktron DS4 MK11 Alarm set at 5 Bar EX rated to EN 60079-0 &EN 60079-11-2012

Warning Whistles high pressure set at 50 Bar

Warning whistles low pressure set at 5 Bar

Complete Breathing Air Trailer manufactured to BS EN 139 conforms to BS EN 4275

See separate instructions for Breathing Apparatus