OPERATING MANUAL

C–1800 (ACCELAIR 2)

FIBRE BLOWING MACHINE

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# REVISION HISTORY:

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<th>Date</th>
<th>Details</th>
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<td>30.05.14</td>
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<td>02</td>
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<td>03</td>
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<td>Reverse instructions added, photos updated</td>
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<td>Duplicate replacement air seal section removed</td>
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<td>01-11-16</td>
<td>Revised Program – V2.0 documented (multi-language support)</td>
<td>A.Sibun</td>
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<td>Program update – 100m/min in non-buckle mode.</td>
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1. SAFETY INSTRUCTIONS

THIS EQUIPMENT SHOULD BE USED ONLY BY PERSONNEL WHO HAVE BEEN GIVEN THE APPROPRIATE TRAINING AND WHO ARE COMPETENT TO USE IT.

THESE INSTRUCTIONS ARE TO BE MADE AVAILABLE TO OPERATORS OF THIS EQUIPMENT AT ALL TIMES, FAILURE TO OBSERVE THESE SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS PERSONAL INJURY AND/OR PROPERTY DAMAGE.

WORK AREA AND GENERAL SAFETY

- Read and understand the operation and maintenance manual supplied with this equipment. Keep it in a convenient place for future reference.
- Keep children and untrained personnel away from this equipment whilst in operation.
- Keep all guards and safety devices in place. Do not operate this equipment with guards removed or damaged.
- Keep hands, feet and loose clothing away from moving parts.
- Always stop the machine and isolate compressed air and electrical services to carry out servicing.
- Check machine before starting for worn or damaged parts. Check for signs of loose nuts and bolts etc.
- If machine is left unattended, ensure that unauthorised use is prevented.
• Never leave the machine unattended whilst in use.
• Consider the use of safety barriers, especially when used in public places, observe all statutory requirements for working environments.
• Beware of pinch points involved with rotating components,
• Beware of hot surfaces, machine uses compressed air.
• When operating machine always wear appropriate safety clothing, ear defenders, eye protection, hard hat, safety shoes and leather gloves, machine operates with compressed air at up to 15 Bar (220 PSI).
• Prior to installation ensure the tube route is connected properly.
• Beware of exposed electrical contacts. Do not touch, or allow metal objects to come into contact.
• Machine may cause additional fire hazard if involved in an existing fire due to compressed air.
• The machine must be operated on firm ground.
• Stay clear of pressurised airline and tube.
• Only use the machine for its intended purpose, to retrieve fibre blow air in the far end.
• The compressed air supply must not be allowed to enter the air chamber before the lid has been securely tightened.
• Ensure the fibre exits easily from the pan, place the pan a sufficient distance to allow the operator time to react should the fibre become tangled.
• The cable should enter the machine in a clean and dry condition.
FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY OR DAMAGE TO THE BLOWN FIBRE.

If a mains power supply is used and the connecting plug on the mains power lead to the generator / (or supply) is unsuitable and requires replacement, the new plug must be correctly connected observing the colour codes as below.

IT IS THE RESPONSIBILITY OF THE USER TO ENSURE THAT THE CONNECTIONS MEET THE ELECTRICAL REGULATIONS FOR THE RELEVANT COUNTRY.

The Accelair 2 machine itself runs off a 24V supply connected via a Binder Series 430 Socket. Should the connecting plug need replacement the Red wire is positive (+ve) (Pin 1) and the Black wire is negative (-ve) (Pin 3), pin 2 is unused.
GENERAL PNEUMATIC SAFETY INSTRUCTIONS

The CBS Blown Fibre Blowing Machine is a pneumatic device, using pressurised air to project fibre at high velocities. Please observe the following precautions when operating the Blowing Machine:-

Compressed air can cause flying debris. This could cause personal injury. Always wear personal protective equipment.

Ensure no personnel are in the manhole at the far end of the fibre run. Severe personal injury may result.

Never open the machine when pressurised.

Only authorised, fully trained personnel should operate the air compressor.

GENERAL ELECTRICAL SAFETY INSTRUCTIONS

The machine has electronic and electrical power and control circuits. Electric shock hazards exist that could result in severe personal injury. Observe the following precautions to avoid electrical hazards:

Do not operate in water. Do not expose the machine to rain.

Do not remove cover of the mains power supply or the base from the Accelair 2 machine. There are no user serviceable parts inside. Refer servicing to qualified service personnel.
2. CRITICAL POINTS THAT DRAMATICALLY AFFECT THE OPERATION OF THE BLOWN FIBRE BLOWING MACHINE

- Cord seals in air chamber correctly fitted to provide good sealing.
- Correct blowing plates fitted.
- Tube fully connected and pressure-tested.
- Tube connecting fittings are suitable for operating at compressor supply pressure.
- Accelair 2 lid securely tightened.
- Compressor capacity is suitable for size of tube being used.
- Fibre pan must be close to the machine, the fibre should leave the pan freely and enter the machine horizontally.
- Air chamber, drive wheel and blown fibre must be clean and free from debris, glass beads, sludge, dirt, water and lubricant.
- The fibre must be hand guided into the machine.
- Ensure the compressed air supply is not applied to the fibre until approximately 30 metres of fibre has been installed or the machine begins to slow down.
- The compressed air moisture content needs to be carefully controlled, it should be dry enough to prevent moisture forming in the tubes yet not so dry to cause a static build up – CBS Products recommend the use of an air dryer with a bypass.
DISCLAIMER

CBS Products (KT) Ltd takes care in the design of its products to ensure that the cable is protected during installation. Due to the variety and different methods of fibre manufacture the responsibility of checking the fibre compatibility with the equipment lies with the operator. Therefore, CBS products cannot accept liability for any damage to the fibre.
3. GENERAL DESCRIPTION

The C-1800 Fibre Blowing Machine (Accelair 2) has been developed to provide a simple to use and reliable fibre blowing solution. The Accelair 2 is designed to fit a fibre up to 3mm diameter, thereby providing the complete range of blown fibre installation solutions from one machine.

The Accelair 2 is a compact integrated fibre blowing machine benefiting from full automation and fibre management; sophisticated fibre protection is implemented to ensure the fibre mechanical and optical integrity is maintained. The machine only requires a single 24V D.C. electrical supply and compressed air to operate.

CBS Products Ltd has designed a range of accessories aimed at providing the complete solution to blown fibre installation.
4. SPECIFICATION

**Fibre Compatibility:** Up to 1.6mm with buckle, up to 3mm without buckle

**Blowing Speed:** Manual control to 50 m/min with buckle or 100 m/min without buckle

**Compatible Tubes:** Any size from 3mm to 10mm

**Automation:** In buckle mode machine is self-regulating

**Air Supply:** 15 Bar max working pressure complete with suitable air conditioning (drying)

**Electrical Supply:** Universal mains power supply (supplied as standard): 85-265VAC (47-63Hz) or 120-370VDC input, 24VDC 2.2A output. Battery pack and vehicle adaptor available.

**Control:** Remote user interface with backlit screen provides all necessary information; including current distance, speed, torque setting and fibre status.

**Supported Languages:** English, French, German, Spanish, Portuguese & Italian.

**Machine size:** H: 166mm D: 184mm x 120mm. Weight: 3kg.

**Case size:** H: 220mm D: 480mm x 430mm. Weight (all in): 12kg

**Environment:** 0°C to +50°C (Usage)

-10°C to +70°C (Storage)
5. **MAJOR ELEMENTS**

- Drive Wheels
- Lid
- User Interface
- Tube Clamp
- Infeed guide
- Blowing Plates
- Lid Locking Screws
- Sight Glass
- Wheel Opening Handle
- Infeed guide
- Drive Wheels
- LCD Display
- Buckle Indicator LED
- User Interface

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CARRY CASE LAYOUT

- Air Control Valve
- Air Connection
- Lid Locking Screws
- 24V Connection
- Tools / Accessories
- Power Wires
- Universal Mains Power Supply
- Remote Unit
- Accelair 2 Machine
6. OPERATING PROCEDURE

IT IS IMPERATIVE THAT ALL PERSONS USING, OPERATING OR MAINTAINING THIS FIBRE BLOWING MACHINE:

- HAVE RECEIVED COMPREHENSIVE TRAINING IN THE USE OF THIS MACHINE
- ARE COMPETENT TO USE IT,
- AUTHORISED TO USE IT AND
- HAVE READ AND UNDERSTOOD THIS MANUAL

CBS PRODUCTS LTD. CANNOT BE HELD RESPONSIBLE FOR MISUSE OF THIS EQUIPMENT.

SETTING UP THE TUBE AND FIBRE

To begin an installation first we must connect the tube and fit the fibre through the machine. A selection of changeable parts are available to suit any combination of tube and fibre. Please consult sections 8, 9 and 10 for the procedures to fit these changeable parts and section 17 for a list of available parts.

Firstly it is beneficial and recommended to install a fibre blowing bead onto the end of the fibre. Place the bead over the end of the fibre and use a small set of pliers to gently crimp it in place. Try to deform the bead as little as possible whilst holding it in place.
Place the tube seal over the end of the tube and insert into the machine as shown with the tube flush up to the air inlet and the seal in the groove. Do not allow the tube to protrude into the air inlet as this will restrict air flow and performance.

Close the tube clamp by pressing downwards; a plunger will hold it in place. Insert the end of the fibre into the tube and position it through the slot in the buckle shuttle, if applicable.

Open the drive wheels as shown and place the fibre in the grooves on the buckle plate and infeed guide.
The wheels are sprung and will automatically close and grip the cable once the handle is released. Ensure the fibre runs smoothly through the machine and is placed in all grooves as shown.

Carefully close the lid, ensuring the fibre is not caught or crushed. Tighten the thumb screws to seal the lid.

*NEVER OPEN THE LID OF THE MACHINE WHEN IT IS UNDER PRESSURE, SERIOUS INJURY MAY OCCUR DUE TO ITEMS EXPELLED AT HIGH VELOCITY.*

CBS Products recommend the use of a stop end at the end of the tube route to arrest the fibre at the end of the installation.
FIBRE INSTALLATION

To begin an installation first power up the machine. With the remote unit already plugged in, insert the power cable into the rear of the machine. The LCD display on the remote unit should now power up with the following display:

Select the option by pressing the relevant blue button under either YES or NO depending on the type of installation you wish to carry out and the plates fitted to the machine. The buckle sensor utilises plates with the buckle shuttle - this can be seen in the photo at the top of the previous page. Should the wrong selection be made this can be altered in the menu system, this is detailed later in this section.

Once the selection is made, a confirmation screen is briefly displayed followed by one of the screens below:

If a job has not been finished then it will remain active in memory and the screen on the right will be visible. It is then possible to either resume that job or start a new job. The blue buttons allow navigation through the menus and the functions of these buttons are displayed on the screen. Starting a new job will present you with the following display.
The two dials control the torque setting and speed. The maximum speed of the machine is 100m/min in non-buckle mode or 50m/min when using the buckle sensor. Adjustment of the torque setting is only relevant when installing fibre with the buckle functionality disabled, however torque should be set to maximum when using the buckle sensor to enable the Accelair 2 to automatically control the installation, low settings may reduce the pushing force available.

This message will be displayed if the buckle mode is selected and the shuttle cannot be detected. This is either because the fibre is buckled in the machine or because you are attempting to install with a straight plate but have not disabled the buckle functionality.
Should the incorrect buckle mode be selected at power up select ‘MENU’ if not already there and then select ‘SETTINGS’. When on the buckle sensor option press ‘Change’ to alter this function. You can then return to the menu and resume active job; the error will now have disappeared.

To check the buckle function and to allow a viewing point for the fibre CBS Products suggest a small length of tube with a clear connector be used in the machine first. Moving the fibre in and out should be possible; the screen should display that the buckle shuttle is moving.
As the fibre is moved into the machine the screen will first display ‘warning’ and then when more fibre is fed through it will display ‘active’. Eventually it will display ‘error’; do not worry, this simply means the buckle shuttle has moved beyond the sensing range. In ‘error’ mode the machine reacts as though it were in ‘active’ mode.

For installing fibre with the buckle function disabled it will be necessary to perform a test to determine the maximum torque setting that can be used to ensure the fibre is not damaged. See section 13 for details on how to perform this test.

Once satisfied that all settings are correct the installation can begin.

Press start and the machine will begin the installation. It will accelerate slowly as there is a soft-start function; this is to protect the fibre from damage. Notice the distance readout increase and also that the speed readout may not always match the input setting; this could be due to the buckle being active or a high resistance on the fibre.
The speed and torque settings can be adjusted at any time by moving the dials either clockwise or anti-clockwise. The machine will slow instantly but will accelerate slowly as previously described.

After 30-50m of fibre has been installed it will be necessary, as resistance increases, to introduce airflow down the tube. Turn the knob on the needle valve as indicated to allow air into the system. This valve should provide a degree of control over the air pressure used.

A lower pressure is beneficial at first; with increasing distance the pressure should be increased to maintain installation speed. Consult the pressure gauge for your current system installation pressure.

**DO NOT EXCEED THE MAXIMUM SYSTEM PRESSURE OF 15 BAR OR OPEN THE MACHINE WHEN UNDER PRESSURE, SERIOUS INJURY MAY RESULT.**
The installation of fibre should now be semi-automatic. If the buckle function is not in use then the machine will come to a stop when there is a blockage; the fibre will be undamaged as there will not be enough torque to break it. Once the machine has come to a stop, press ‘stop’ on the remote to prevent the machine continuing when the blockage is rectified.

If the buckle function is in use then the machine will automatically slow or stop if it comes up against a resistance. If it comes to a stop then it will reverse to straighten the fibre before continuing; it will reverse a maximum of three times before considering there to be a blockage at which point the installation will be halted.

The following display will be visible along with the red LED. It will now be necessary to investigate the cause of the blockage and remove it before attempting to continue.

Once safe to do so, open the machine and reset the buckle shuttle. The ‘OK’ option will then appear; pressing this takes you back to the installation screen and will allow viewing of the current installation distance. This may be needed to help remove the blockage.

Once all blockages have been removed the installation can resume to completion. When the route has been completed press ‘stop’, turn off the air supply and allow any pressure in the system to dissipate. You may then open the machine and retrieve the fibre.
It is advisable to finish the current job to ensure the next installation begins with the distance reset to zero. To do this select ‘OPTIONS’ from the installation screen followed by ‘Finish Job’. You will be asked to confirm this selection.

Reverse Mode

It is possible to reverse the Accelair 2 machine to remove any fibre previously installed. On the main installation screen press ‘OPTIONS’.

Then press ‘DOWN’ to scroll to the reverse option, press ‘SELECT’ to activate the function and then ‘BACK’ to return to the installation screen. Repeat this process to turn the reverse function off.
Imperial Units

The Accelair 2 machine can display metric or imperial measurement formats as well as European and American date formats. To set your machine to the desired units navigate to the settings screen.

Scroll down to ‘Units of Measure’ and press ‘SELECT’.

You can now scroll down and individually change the displayed units and date format by pressing ‘CHANGE’. Once the desired units and format have been set press ‘BACK’ to return to the settings screen. These settings will now be saved even when the machine is powered down.
7. MAINTENANCE

The CBS Blown Fibre Blowing Machine has been designed to give reliable, trouble free service over long periods. The machine requires no sophisticated maintenance procedures; simple common sense checks and precautions are all that are needed.

The main source of breakdown and/or malfunction of a machine being used outdoors is contamination by the elements, this contamination may be introduced into the machine in a number of different ways.

The most likely may be mud, dust or other contaminants carried into the machine on the fibre. However glass beads from EPFU fibre may also contaminate the machine.

The machine may be set down on a muddy surface, or be splashed by road going vehicles when it is being used by the roadside.

The machine should be returned to the manufacturers (or an approved service agent) after every 250 kilometres use (or at intervals of 12 months) for a major service. The service will include the following.

- Strip down the machine.
- Clean and inspect all parts for damage, replace as necessary.
- Check all screws and fixings for damage, replace as necessary.
- Check all bearings for smooth running, replace as necessary.
- Check all electrical connections for continuity and damage, remake connections and/or replace connectors as necessary.
- Rebuild the machine, to current build standard.
- Test.
8. PROCEDURE FOR CHANGING THE BLOWING PLATES

The C-1800 Accelair 2 uses two types of blowing plates. One type is for use in conjunction with the buckle functionality and one without. The buckle plates use 4 off M3 cap screws each to retain them into the machine; the non-buckle plates use 3 off each. The supplied 2.5mm allen key will be required for removal.

- Remove all retaining screws and lift the plates out of the machine.
- Inspect the condition of the air seal beneath the lower plate and replace if necessary (photo overleaf).
- Replace plates of suitable size into the machine and tighten the retaining screws firmly but take care not to damage the aluminium threads.
• Store the removed plates in the bag provided and in the designated area of the carry case to avoid loss or damage.

The above figure shows the air seal beneath the lower blowing plate. This seal should sit proud of the surface; if it has become flattened or damaged replace to maintain a good air seal and blowing performance. Use a thin layer of superglue or other suitable adhesive (see section 9) to retain the seal in place.
9. PROCEDURE FOR REPLACING THE BLOWING PLATE AIR SEAL

To minimise air loss and maintain good blowing performance it is important to periodically replace the seal cord in the blowing plates once it becomes flattened and worn. (Note: Plates shown below are black plastic, machines may also be fitted with stainless steel)

- Remove the old seal from the groove in the plate and remove any residual adhesive.
- Offer up a length of Ø2mm seal cord (2m provided) and cut off to the correct length; this should be long enough to cover the flat section in the bottom of the groove.
- Apply a small amount of adhesive at critical points around the groove (near bends etc). CBS Products Ltd recommends the use of 3M Scotch Weld 847 for this purpose. IT IS IMPERATIVE THAT YOU DO NOT USE SUPERGLUE ON BLACK PLASTIC PLATES AS THIS WILL CAUSE DAMAGE TO THE MATERIAL.
- Place the seal into the groove ensuring it is properly located into the groove the whole way around.
- Wipe off any excess adhesive.
• Using a sharp knife and taking care not to damage the plates, slice a section of the seal away at the fibre entry point sufficient to allow the fibre free movement through the plate.
10. PROCEDURE FOR REPLACING TUBE CLAMP INSERTS AND INFEED GUIDES

Various tube clamp inserts and infeed guides are available for the C-1800 Accelair 2 to allow the use of different tube and fibre sizes. Both the tube clamp inserts and infeed guides are retained using 2 off M3 cap screws each and require the use of the 2.5mm allen key.

- Remove all retaining screws and remove the inserts/guides.
- Replace inserts/guides of suitable size into the machine and tighten the retaining screws firmly but take care not to damage any aluminium threads.
- Store the removed inserts/guides in the bag provided and in the designated area of the carry case to avoid loss or damage.
11. PROCEDURE FOR REPLACING TYRES

The C-1800 Accelair 2 uses a replaceable silicone tyre to provide grip to install the blown fibre. Two sizes are available; one for smaller fibres and one for larger fibres. When installing a different fibre or through wear it will be necessary to replace these tyres.

- To replace the tyres remove all 6 M3 countersunk screws. The top half of the wheel and thus the tyre can now be removed.
- Slightly stretch a new tyre over the lower half of the wheel.
- Replace the top half of the wheel; the tyre may require slight manipulation to stretch it on to the top wheel half.
- Replace the countersunk screws; note that whilst tightening the screws the operator should feel the tyre being slightly compressed.

ALWAYS ENSURE TYRES ARE REPLACED AS PAIRS OF THE SAME SIZE.
12. CHECKING THE ODOMETER

The C-1800 Accelair 2 has an odometer to indicate the total distance the machine has installed during its service life. This can be accessed via the ‘System Information’ page from the main menu.

Also displayed will be the ID numbers for the Accelair 2 machine and the remote unit. It may be useful to log these numbers as the main and remote units are interchangeable.
13. DETERMINING MAXIMUM TORQUE SETTING

When preforming an installation of a larger or stiffer fibre it may be necessary to use a non-buckle or ‘straight’ set of blowing plates. To ensure the integrity of the fibre at all times during the installation it is crucial a test is performed. This test will provide the installer with the maximum torque setting for the machine such that if the fibre hits a blockage at speed, the fibre will not be damaged.

- Set the machine up as per section 6 using non-buckle plates (therefore no buckle shuttle will be present).
- Instead of attaching to the installation route use a 5m length of the same tube. Use a stop end kit to block the end of the tube.
- Set the speed to the maximum installation speed to be used.
- Set the torque to c.10%.
- Press ‘start’. The machine will now accelerate to the speed setting.
- When the fibre hits the end stop the machine will either stop and leave the fibre undamaged or continue to install and break the fibre, in either case press ‘stop’ to prevent the machine from trying to continue the install. Reduce or increase the torque setting as appropriate for the outcome of the previous test and perform the test again. Through several iterations a torque setting just below the value which would break the fibre should become apparent.
14. CHANGING THE DISPLAY LANGUAGE

The Accelair 2 machine can display in several languages – English, French, German, Spanish, Portuguese and Italian. To set your machine to the desired language navigate to the settings screen.

![Settings Menu](image)

Scroll down to ‘Language’ and press ‘SELECT’ and scroll through to select the desired language. Languages selections are displayed in the current language setting (between arrows) and the native translation above.

![Select Language](image)

Powering up whilst holding all three blue buttons on the remote will revert the language setting to English (this will not alter any other settings or delete information).
15. TROUBLESHOOTING GUIDE

• Air loss from the Accelair 2 machine is greater than normal:
  o Ensure the correct changeable parts are fitted for the fibre and tube being used.
  o Check air seal beneath the lower blowing plate; replace if necessary.
  o Check blowing plate seal; replace if necessary.

• Little or no air-flow is exiting the tube:
  o Check compressor output (refer to manufacturers handbook)
  o Installation route may be too complex for installation.
  o Route length is too long.
  o There may be a partial blockage in the tube.
  o The tube may be crushed somewhere along the route.

• Fibre ‘rides’ out from between the drive wheels:
  o Larger tyres may be needed for improved guidance – follow section 10 for details on changing tyres.

• Fibre installation speed is very slow:
  o Static build up – switch the compressor from dry air to bypass mode (if available).
  o Moisture build up – ensure compressor is running in dry air mode or check dryer operation.

• Fibre buckles often:
  o Installation route may be too complex for installation.
  o The tube route may be damaged/blocked.
  o Increase air pressure if possible.
  o Manually slow the installation speed slightly.

• Machine won’t run – Error displayed:
  o Check plates fitted to machine. If non-buckle plates are being used ensure the machine is set to non-buckle operation, see page 20.
o Ensure a buckle leaf is fitted in buckle plates and that it moves freely in the groove.

- No drive/Drive wheels slipping:
  o Smaller tyres may be needed for improved grip – follow section 11 for details on changing tyres.
  o Tyres may be excessively worn – install new tyres.
16. MONTHLY SERVICE – CHECK LIST

This section is included in the manual for your convenience, there follows a list of suggested checks, it is recommended that these checks be carried out on a regular basis, depending on use. Monthly checks are convenient; a few minutes can be set aside on the same day of each month to complete these simple checks.

- Check the carry case, ensure all tools and interchangeable parts are present, clean and ready for use.

- Clean the outside of the machine and remote; take care not to damage the display screen, buttons, dials or connectors.

- Inspect air and electrical connections for damage.

- Inspect drive tyres for wear; replace if necessary.

- Inspect buckle shuttle for wear; replace if necessary.

- Check quantities of consumable items such as blowing beads, buckle shuttles and tube seals.
17. CHANGEABLE PARTS AND ACCESSORIES

### CHANGEABLE PARTS

<table>
<thead>
<tr>
<th>Description</th>
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<tr>
<td>Fibre Buckle Plate size 1.1 (Inc 5 off Buckle shuttle)</td>
<td>C-1800-FBP-C1.1</td>
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<tr>
<td>Fibre Buckle Plate size 1.4 (Inc 5 off Buckle shuttle)</td>
<td>C-1800-FBP-C1.4</td>
</tr>
<tr>
<td>Fibre Blowing Plate size 1.6</td>
<td>C-1800-FBP-N1.6</td>
</tr>
<tr>
<td>Fibre Blowing Plate size 2.5</td>
<td>C-1800-FBP-N2.5</td>
</tr>
<tr>
<td>Fibre Blowing Plate size 3.0</td>
<td>C-1800-FBP-N3.0</td>
</tr>
<tr>
<td>3mm Tube Clamps Including 5 off Tube seals</td>
<td>C-1800-TBC-03</td>
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<tr>
<td>4mm Tube Clamps Including 5 off Tube seals</td>
<td>C-1800-TBC-04</td>
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<tr>
<td>5mm Tube Clamps Including 5 off Tube seals</td>
<td>C-1800-TBC-05</td>
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<tr>
<td>Infeed Guide up to 2mm</td>
<td>C-1800-CG-2</td>
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<tr>
<td>Infeed Guide up to 3mm</td>
<td>C-1800-CG-3</td>
</tr>
<tr>
<td>Pack of Silicone Tyres (Up to 2mm fibre, 5 pairs)</td>
<td>C-1800-T1</td>
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<tr>
<td>Pack of Silicone Tyres (2.1 – 3.0mm fibre, 5 pairs)</td>
<td>C-1800-T2</td>
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Only common blowing plate and tube clamp sizes shown, please contact CBS Products sales team for additional sizes.
<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Pack of 5 Buckle Shuttles</td>
<td>C-1800-BS</td>
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<tr>
<td>3mm Tube Seals (Pack of 5)</td>
<td>C-1800-TS-03</td>
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<td>4mm Tube Seals (Pack of 5)</td>
<td>C-1800-TS-04</td>
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<tr>
<td>5mm Tube Seals (Pack of 5)</td>
<td>C-1800-TS-05</td>
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<td>2mm Cord Seal (1m) plus Glue</td>
<td>C-1800-SC-1</td>
</tr>
<tr>
<td>Lower Plate Oring Seal (Pack of 5)</td>
<td>C-1800-OR</td>
</tr>
</tbody>
</table>

Only common tube seal sizes shown, please contact CBS Products sales team for additional sizes.
ACCESSORIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>5mm Clear Tube Connector (Pack of 10)</td>
<td>C-CON-NC621</td>
</tr>
<tr>
<td>Air Flow Meter</td>
<td>C-1400-FM</td>
</tr>
<tr>
<td>Blown Fibre Compressor</td>
<td>C-1206-141872</td>
</tr>
<tr>
<td>Air Stop End Kit</td>
<td>C-1400-ASEK</td>
</tr>
<tr>
<td>Lithium Polymer Battery Pack and Vehicle Adaptor Kit</td>
<td>C-1800-DC-KIT</td>
</tr>
<tr>
<td>Additional Lithium Polymer Battery</td>
<td>C-1800-BATT</td>
</tr>
<tr>
<td>Blown Fibre Beads Large (8/12 Fibre) (Pack of 25)</td>
<td>C-1400-BFB-12-F</td>
</tr>
<tr>
<td>Blown Fibre Beads Small (2/4 Fibre) (Pack of 25)</td>
<td>C-1400-BFB-4-F</td>
</tr>
</tbody>
</table>

Other sizes of clear tube connector are available. Air flow meter can be used to check route integrity. Please contact the CBS Products sales office to order or enquire about parts not listed; always quoting the machine type and serial number.
Lithium Polymer Battery Pack and Vehicle Adaptor Kit comprising:

- Lithium Polymer Battery (2 off)
- Mains Charger
- 12V to 24V DC Converter
- Vehicle Charger
- Vehicle Power Adaptor

CBS Products (KT) Ltd
Pillings Road
Oakham
Rutland
LE15 6QF

Tel: 01572 723 665
Fax: 01572 756 009

E-Mail: sales@cbsproducts.com
Website: www.cbsproducts.com
EC Declaration of Conformity
In accordance with EN ISO 17050-1:2004

We CBS Products (KT) Ltd
Of Pillings Road, Oakham, Rutland, LE15 6QF

In accordance with the following Directive(s):

2006/42/EC The Machinery Directive
97/23/EC Pressure Equipment Directive

Hereby declare that

Equipment: Accelair 2
Model Number: C-1800
Serial Number: 163

has been designed and manufactured to the relevant parts of the following standards

<table>
<thead>
<tr>
<th>Ref No.</th>
<th>Title</th>
<th>Edition/Date</th>
</tr>
</thead>
</table>

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications and is in accordance with the requirements of the Directive(s).

Signed by….........................................................

Name: Mr Andrew Sibun
Position: Technical Manager
Done at: Oakham, United Kingdom
On: 4th June 2014

The documentation for the machinery is available from:

Name: CBS Products (KT) Ltd
Address: Pillings Road, Oakham, Rutland, LE15 6QF

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