



OXFORD, ENGLAND

JETSTREAM™ & JETSTREAM™ GV-X

EN12941 : 1998

RESPIRATORY PROTECTIVE DEVICE -
POWERED FILTERING DEVICE, INCORPORATING A HELMET OR HOOD,
CLASS TH2 DEVICE

USER INSTRUCTION MANUAL



IMPORTANT - This manual must be read and fully understood before the Jetstream is used. This manual must be retained for future reference.

Important - Please read these instructions carefully before unpacking your Jetstream product.

Failure to comply with the instructions in this leaflet may void your warranty and adversely affect your health. If you have any questions regarding the suitability of this product to your task, please contact an occupational hygienist or call the manufacturers technical help line. Address and Telephone number information is printed at the back of this leaflet.

Unpacking - Your Jetstream Powered Respirator should include:

- a) Blower Unit
- b) Belt
- c) Head Cape with Hose
- d) Airflow Test Unit
- e) Battery Charger
- f) Instruction Leaflet
- g) Filter (Type depends on model)

If any of the above components are not included in your kit, please contact the supplier immediately.

Approvals - Jetstream - Jetstream has been designed and manufactured to comply with EN12941: 1998 as a TH2 device. BS4275 (Guide to implementing an effective respiratory protective device programme), which the user is advised to read, defines an EN12941 TH2 device as offering an Assigned Protection Factor of 20. Jetstream can only provide this level of protection when used with filters provided by the manufacturer marked "Jetstream" and "EN12941:1998 TH2". Jetstream is manufactured under a BS EN ISO 9001 Quality System.

Limitations To Use - This Respirator must be used strictly in accordance with this instruction leaflet and the instructions supplied with corresponding head-units.

When the blower unit is switched off little or no respiratory protection is to be expected. When the blower unit is switched off a rapid build up of carbon dioxide and depletion of oxygen within the head unit may occur.

DO NOT use Jetstream with the blower unit switched off.

DO NOT use Jetstream in an atmosphere that is immediately hazardous to user hygiene or health, has oxygen content of less than 19.5% or contains unknown substances

DO NOT expose to flames and/or sparks.

DO NOT use Jetstream in an explosive atmosphere.

DO NOT use Jetstream in confined spaces or areas of poor ventilation.

DO NOT use Jetstream in high winds.

DO NOT alter or modify in any way.

DO NOT touch any of the moving parts.

DO NOT remove the Battery cover, this is for use by the Manufacturer only.

DO NOT allow water or other liquids to enter the Impeller Chamber / Volute or Battery Compartment.

There is a possibility that the hose to the head unit may become caught up in use.

The blower unit should be positioned on the person in such a way as to reduce this possibility.

Filters cannot be fitted directly to the head units and should not be adapted to do so.

Correct respiratory protection will not be provided if any parts of the equipment are modified.

At very high work rates the pressure in the device may become negative at peak inhalation flow.

Jetstream are for use only by competent, trained personnel.

Jetstream and Jetstream GV-X filters are not interchangeable.

Filters should not be modified to fit different blower units.

The user is advised to leave the contaminated area immediately if:

The Manufacturer's Minimum Design Flow (MMDF) warning buzzer sounds.

Breathing becomes difficult. Dizziness or distress occurs. Any part of the system becomes damaged.

Airflow into the Head-Unit decreases or stops. Contaminant can be smelt or tasted inside the Head-Unit.

Materials that may come into contact with the users skin are not known to cause allergic reactions to the majority of individuals but in the unlikely event of a reaction, the user should immediately leave the contaminated area, remove the unit and seek medical advice.

System Overview - Jetstream

Jetstream is a belt mounted powered respirator with a replaceable, disposable high efficiency particle filter system.

Jetstream contains an 8hr rechargeable battery pack. Jetstream will warn the user when the MMDF of 140 L/min, is reached.

The pleated filter has been developed especially for this unit. It is used to filter the air the user will breathe.

The filter is intended to be disposed of once clogged to the point of triggering the warning signal.

System Overview - Jetstream GV-X

Jetstream GV-X is a belt mounted powered respirator with a range of filters for protection against Particles and/or Organic gases and vapours with boiling points above 65°C. Jetstream GV-X contains an 8hr rechargeable battery pack. Jetstream GV-X will warn the user when the MMDF of 140 L/min, is reached.

The Jetstream GV-X range of Filters have been developed especially for this unit. They are used to filter the air the user will breath. The Jetstream GV-X Filters are intended to be disposed of once clogged to the point of triggering the warning signal.

A number of alternative head pieces are available, an impact protective browguard unit, a range of different material hoods, a helmet assembly with a sealed visor (for heavier duty industrial applications) and a welding visor using the Chameleon solar powered automatic welding shield.

The rechargeable battery used is a Nickel Metal Hydride cell. When supplied the battery may hold a small charge, the unit should be run flat and then charged for sixteen hours before the first use.

Application Guide

Note: JetStream will only protect against particulate hazards in the industries shown below. For gases and gas/particulate combinations use the Jetstream GV-X with appropriate filter



Hood



Browguard



Helmet



Welding Visor



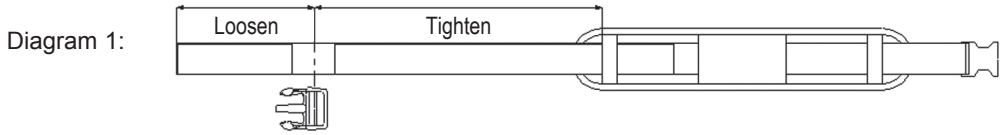
Cobra Welding/
Grinding Shield

	Hood	Browguard	Helmet	Welding Visor	Cobra Welding/ Grinding Shield
Agriculture	✓	✓		✓	
Aluminium			✓		
Animal Allergies	✓				
Asbestos	MUST HAVE QUANTITATIVE FACE FIT TEST CARRIED OUT				
Building & Construction			✓		
Chemical Plants		✓	✓		✓
Demolition & Maintenance		✓	✓		✓
DIY	✓	✓	✓	✓	✓
Electronic/PCB Manufacture	✓	✓			✓
Flour Mills & Silos	✓	✓	✓		✓
Food Processing	✓	✓			✓
Foundries		✓	✓		✓
GRP Manufacture	✓	✓			✓
Isocyanates	USE COMPRESSED AIR FED EQUIPMENT				
Laboratories	✓	✓			✓
Lead Processing			✓		
Mining			✓		
Nuclear			✓		
Paint Spraying (water based)	✓	✓			✓
Pest Control		✓	✓		✓
Petrochemical		✓	✓		✓
Pharmaceutical	✓	✓	✓		✓
Purification & Sewage	✓	✓	✓		✓
Shipyards			✓	✓	✓
Steel Industry				✓	
Textiles	✓	✓			✓
Tunnelling/Quarrying			✓		
Waste disposal		✓	✓		✓
Welding				✓	✓
Wineries/Market Gardens	✓	✓	✓		✓

Waist-Belt Adjustment

Put the belt around your waist and fasten the two ends together; If the belt is too loose, slide the male adjuster down the belt, towards the female half. If the belt is too tight, slide the male adjuster away from the female half. Repeat the above processes until a comfortable and secure fit is achieved. (See Diagram 1)

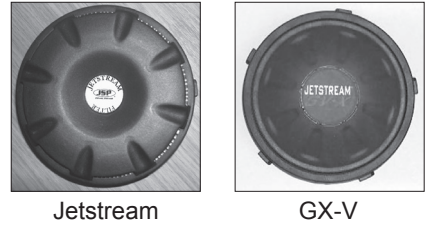
Once the belt fits correctly, secure any excess belt material using the Velcro sections.



Filter Selection

Use only "Jetstream and Jetstream GV-X" Filters manufactured by JSP Ltd. (See Diagram 2). It should first be ascertained by consulting an occupational hygienist or by calling the manufacturers technical help line as to whether or not the Jetstream Filter will offer suitable protection from the hazard.

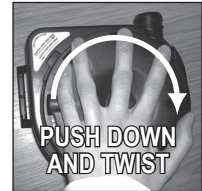
Diagram 2:



Removing the Filter

Push the Filter-Housing down towards the body of the Blower Unit and apply a twisting force in a Clock-Wise Direction. (See Diagram 3) It will now be possible to pull the filter away from the Unit.

Diagram 3:



Fitting the Filters

After first having checked the filter for its sealing gasket and that its filter element is undamaged (See Diagram 4), place the filter over the corresponding circular recess in the blower unit. Twist lightly until the 5 location lugs, fall into the corresponding recesses. (See diagrams 5 & 6.) Force the filter down towards the blower unit and apply a twisting force in an anti-clockwise direction (See Diagram 7) until the 5-way bayonet system is heard locking into place. (See Diagram 8).

Diagram 4: Jetstream

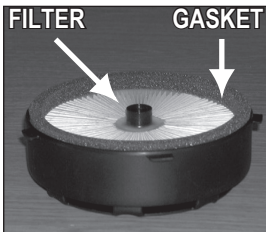


Diagram 4: GX-V



Diagram 5:

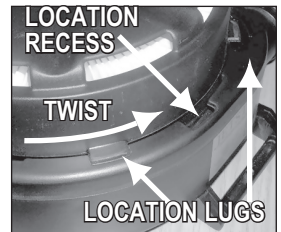


Diagram 6:

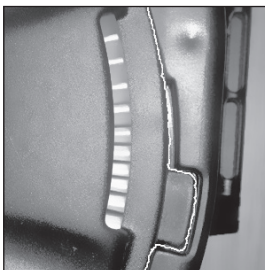


Diagram 7:



Diagram 8:



Spark Guard

The Spark Guard is included with the Jetstream TH2P filter (not suitable for fitting to the Jetstream TH2A2 or TH2A2P filters or other types of JSP filters).

The Spark Guard is a simple push fit. Line up the finger recess on the Spark Guard with the finger recess on the filter housing (see diagram 9, 10 and 11) and push into place. Ensure a positive click fit is heard.

Diagram 9:

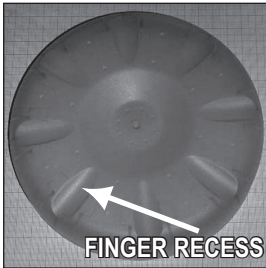


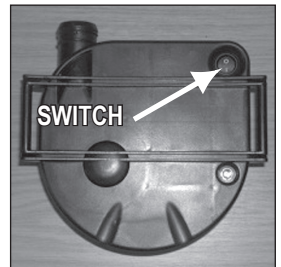
Diagram 10:



Diagram 11:



Diagram 12:



When the Jetstream TH2P filter is exhausted simply pull off the Spark Guard. Under normal circumstances the Spark Guard can be used up to 5 times. The Spark Guard should be cleaned between each use. Use a cloth moistened in a warm diluted mild detergent solution, the Spark Guard should be allowed to air dry. Under no circumstances should you use any solvents or abrasive cleaners be used. The unit must not be dried using hot air or radiant heat.

Starting the Blower-Unit

Activate the Power-Switch at the rear of the unit (See Diagram 12.) and wait to see that the buzzer turns off after about 10 seconds. If this does not occur, the unit may require recharging or a new filter fitting.

Checking the Airflow

With the Blower-Unit running, place the Flow-Test-Unit onto the Blower-Unit so that the sealing gasket is securely gripping the 'chimney'. (See Diagrams 13 & 14.) Check that the indicator lever rises above the red fail and into green pass sector. (See Diagram 15.)

Diagram 13:

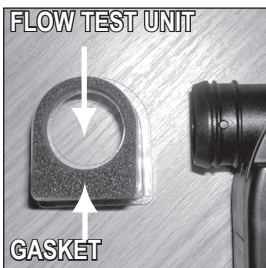


Diagram 14:

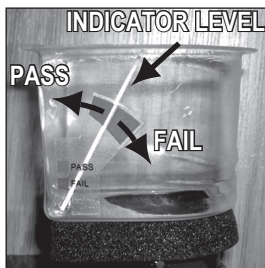
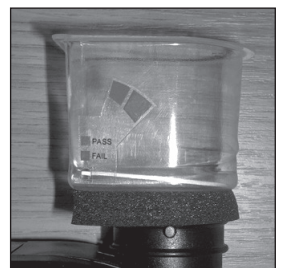


Diagram 15:



Donning the Blower Unit

Place belt around waist and fasten snap fit buckle. To adjust fit of belt pull free end away from the Velcro fastening and pull through buckle. The belt should be tightened/loosened so that the blower unit sits comfortably, usually at the small of the back. The free end of the belt should be flattened against the Velcro fastening.

Attaching the Hose to the Blower Unit

Switch on the blower unit and allow it to stabilise, the warning buzzer will stop when the unit is stabilised. If the buzzer fails to stop either the filter requires replacement or the battery needs recharging. Once the buzzer has stopped attach the hose. Place the Bayonet connector (See Diagram 16) over the 'Chimney' of the Jetstream, push down and twist in an anti-clockwise direction (See Diagram 17.) until the locating pin clips into place. (See Diagram 18.)

Diagram 16:

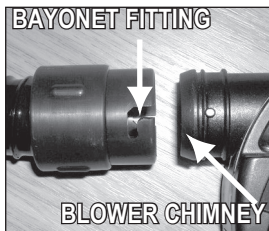


Diagram 17:

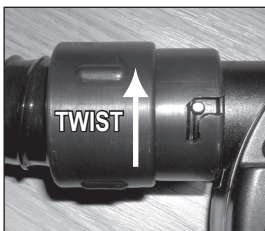


Diagram 18:



NOTE: The hose is permanently attached to the head units and no attempt should be made to remove it.

Diagram 19:

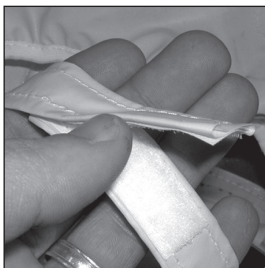


Diagram 20:



Donning the Cape

Place the Head-Unit on the head and adjust the headband until a comfortable fit is achieved. (See Diagram 19). Feed a finger underneath each side of the sealing skirt and pull it into place around the neck, ensuring that the rear edge of the cape sits behind the ears. (See Diagram 20)

Donning the Mk 6/7 helmet

Open the internal harness out to its maximum extension (see Diagram 21). Insert the chin into the skirt at the base of the Visor and rotate the helmet down over the back of the head (see Diagram 22). Lift the rear of the skirt up over the rear of the harness (see Diagram 23). Adjust the harness until a firm but comfortable fit is achieved (see Diagram 24). Pull the rear of the skirt back down over the harness, the skirt will now be sealed all the way around the wearer's neck (see Diagram 25).

Diagram 21:



Diagram 22:



Diagram 23:



Diagram 24:



Diagram 25:



Donning the Welding Visor

Lift the hose coupling over the top of the inner harness and unscrew the red ratchet wheel to it's maximum size (see Diagram 26). Place the inner harness over the head with the chin hooked inside the front part of the inner hood and re-tighten the red ratchet wheel until a secure but comfortable fit is achieved (see Diagram 27). Pull the hose coupling back down over the inner harness and allow the elastic at the rear to seal the inner hood on to the head (see Diagram 28).

Diagram 26:



Diagram 27:

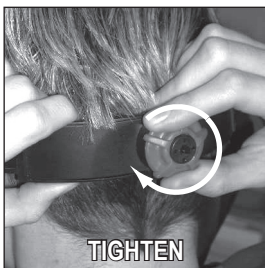


Diagram 28:



Donning the Browguard

Open the internal harness out to it's maximum extension (see Diagram 29). Insert chin into skirt at base of Visor and rotate the Harness down over the back of the head (see Diagram 30). Adjust the harness until a firm but comfortable fit is achieved (see Diagram 31). Pull the skirt into place all the way around the neck (see Diagram 32).

Diagram 29:

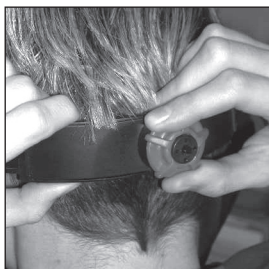


Diagram 30:

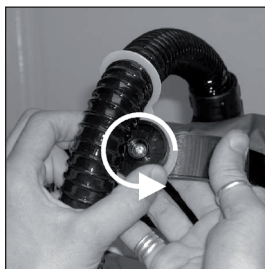
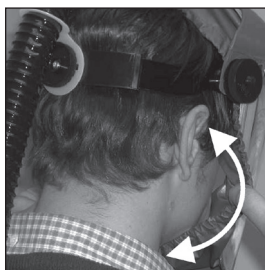


Diagram 31:



Diagram 32:



Maintenance of Unit and Head Pieces

The Blower unit, filter housing and head units can all be cleaned with a cloth moistened in a warm diluted mild detergent solution. Water must not be allowed to enter the workings of the blower unit or get on to the element of the filter. Parts should be allowed to air dry. Under no circumstances should any solvents or abrasive cleaning agents be used. The unit must not be dried using hot air or radiant heat.

The unit should continue to provide protection to the designed specification for 2 to 3 years, when maintained in accordance with these instructions. Prior to each use the user should check that the unit is free from defect, such as cracks, spilt filters and hoses, cracked visors and helmet components as appropriate.

Storage and Transportation

When not in use or during transportation the blower and head units should be stored in the container in which they were provided, or other similar container, such that it is out of direct sunlight, not in contact with solvents and cannot be damaged by physical contact with hard surfaces/items. Do not store outside the temperature range of +2°C to +55°C or with humidity above 75%RH.

Charging the Battery

Once the unit has reached it's MMDF, it is best to leave it to run down completely before recharging.

Plug the Charger into the mains Socket, fit the Plug on the end of the lead into the Socket at the back of the Blower Unit (See Diagram 33). The Socket is to be found underneath the Waist Belt, in line below the Power-Switch, (See Diagram 34).

On receipt of the unit run battery flat and then charge the unit for a period of 17-18hrs. Repeat charges after this should take about 16hrs for batteries to reach full capacity.

If the unit is run completely flat or not used for a long period it would be adviseable to repeat the 17-18hr charge cycle.

A reduced charging time of the battery will reduce the time that the unit operates at its intended flow rate.

Diagram 33:

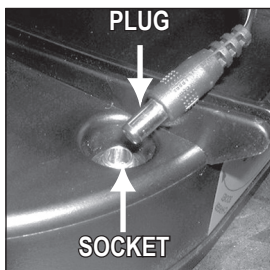
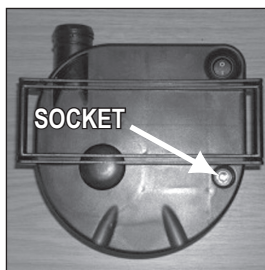


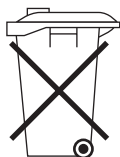
Diagram 34:



Battery Information

Battery Type: Nickel Metal Hydride

8hr Unit 6V 4.5 amphr



Battery packs should be disposed of under local disposal regulations.

Batteries should not be disposed of in general waste bins.

Guarantee

Jetstream or Jetstream GV-X is guaranteed for a period of 6 months from date of Purchase against mechanical or electrical defects. The Company undertakes to exchange or repair without charge, any part found to be defective within this period. Alternatively and at it's discretion, the Company may replace.

This guarantee is subject to:-

Jetstream or Jetstream GV-X has been used solely for the purpose for which it is intended.

Jetstream or Jetstream GV-X has not been subject to misuse, accident, modification or repair.

N.B. In the event of a claim, contact the retailer from which Jetstream was purchased.

This guarantee does not cover normal wear and tear.

This guarantee does not affect your legal rights.

This guarantee applies to the UK only.



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