



**PRODUCT OPERATING MANUAL**

**Manual No. ZVP-PC-0111-00**

**OPERATING MANUAL  
ABRAFLO II NPT**

**SECTION**

- 1. GENERAL INFORMATION**
- 2. INTRODUCTION**
- 3. INSTALLATION**
- 4. OPERATING INSTRUCTIONS**
- 5. MAINTENANCE**
- 6. TROUBLE SHOOTING GUIDE**
- 7. ASSEMBLIES, PARTS LISTING & EXPLODED VIEW**

Panblast Pte Ltd  
2 Woodlands Sector 1  
#05-20 Woodlands Spectrum I  
Singapore 738068  
Tel: 65-6586-1583  
Fax: 65-6586-1563  
Email: [inquiries@panblast.com](mailto:inquiries@panblast.com)

Website: [www.panblast.com](http://www.panblast.com)

*An ISO 9001:2008 Quality Management  
System Certified Company*



## PRODUCT OPERATING MANUAL

### 1.0 GENERAL INFORMATION

#### 1.1 Pan Abrasives Group Notice to Purchasers and Users

1.1.1 All products and equipment designed and manufactured by Pan Abrasives are intended for use by experienced users of abrasive blasting equipment and its associated operations and abrasive blasting media.

1.1.2 It is the responsibility of the user to:

- Determine if the equipment and abrasive media is suitable for the users' intended use and application.
- Familiarize themselves with any appropriate laws, regulations and safe working practices which may apply within the users working environment.
- Provide appropriate operator training and a safe working environment including operator protective equipment such as, but not limited to, safety footwear, protective eyewear and hearing protection.

1.1.3 Pan Abrasives Standard Terms and Conditions of Sale apply. Contact your local Pan Abrasives office should you require any further information or assistance.

#### 1.2 ! WARNING! - READ THIS SECTION CAREFULLY BEFORE USING THIS EQUIPMENT

1.2.1 Heavy metal paint, asbestos and other toxic material dusts will cause serious lung disease or death without the use of properly designed and approved supplied air respiratory (SAR) equipment by blast operators and all personnel within the work site area.

1.2.2 The compressor must have adequate output and the plumbing between the compressor and the point of attaching the air supply hose must have sufficient capacity to supply the volume of air at the pressure required.

#### 1.3 Standard Safety Precautions

1.3.1 Approved safety eyewear, hearing and footwear protection should be worn at all times by the operator and any personnel in the immediate area that may be exposed to hazards generated by the abrasive blasting process.

1.3.2 Suitably approved respiratory protection (PPE) should also be worn when handling abrasive media, abrasive refuse dust and when carrying out any service and maintenance work where dust may be present.

1.3.3 Any work performed on any electrical wiring or components must only be carried out by suitably qualified and registered electrical personnel.

1.3.4 Under no circumstances should any safety interlocks / lockouts or features be altered or disabled in any way.

1.3.5 All equipment must be isolated from the compressed air supply and electrical power

prior to any service or maintenance work being carried out.

1.3.6 All care must be taken by the operator(s) when lifting or moving equipment or components in order to prevent injury. Blast Pots must always be emptied of abrasive media before any attempt is made to move them.

1.3.7 Any modification of the equipment or use of non genuine PanBlast™ replacement parts will void warranty.

1.3.8 Always check the Material Safety Data Sheet (MSDS) on the abrasive media being used to ensure that it is free of harmful substances, in particular, free silica, cyanide, arsenic or lead.

1.3.9 Test the surface to be blasted for harmful substances, taking the appropriate measures to ensure the safety of all personnel.

1.3.10 The operator should carry out a daily inspection of all related components prior to startup of all wearing and safety items to ensure they are in correct operating order.

In particular check all Hose Couplings and Nozzle Holders, ensuring that all Hose Couplings are fitted correctly, the Safety Locking Pins are engaged and in good order. Always install Safety Whip Check Cables at every hose connection. Ensure that the Blast Nozzle has been securely screwed into the Nozzle Holder and the Nozzle Holder has been secured to the Blast Hose correctly and all screws are engaged.

**NOTE: UNDER OSHA 1915:34(c)(1)(iv) DEAD MAN CONTROL. A DEADMAN CONTROL DEVICE SHALL BE PROVIDED AT THE NOZZLE END OF THE BLAST HOSE EITHER TO PROVIDE DIRECT CUTOFF OR TO SIGNAL THE POT TENDER BY MEANS OF A VISUAL AND AUDIBLE SIGNAL TO CUT OFF THE FLOW, IN THE EVENT THE BLASTER LOSES CONTROL OF THE HOSE. THE POT TENDER SHALL BE AVAILABLE AT ALL TIMES TO RESPOND IMMEDIATELY TO THE SIGNAL.**

### 2.0 INTRODUCTION

2.1 **Scope.** These instructions cover the installation, operation and maintenance of the PanBlast™ AbraFlo NPT Abrasive Trap II Assembly.

2.2 **Application.** The PanBlast™ AbraFlo NPT Abrasive Trap II Assembly features a durable cast iron body with internal screen assembly. The AbraFlo II is ideally suited to trap abrasive media particles which are exhausted from the Blast Pot during the depressurization stage.

2.3 The PanBlast™ AbraFlo NPT Abrasive Trap II Assembly can be used with the PanBlast™ range of Remote Control Exhaust Valves which includes the HiFlo, Helix 50, 1" Diaphragm Valve and Sola 5 Exhaust Valve.



## PRODUCT OPERATING MANUAL

### 3.0 INSTALLATION

**⚠ ! WARNING! THE COMPRESSED AIR SOURCE MUST BE ISOLATED BEFORE PERFORMING ANY INSTALLATION WORK. FAILING TO DO SO MAY CAUSE SERIOUS INJURY OR DEATH.**

**NOTE: IF THE ABRAFLO NPT ABRASIVE TRAP II HAS BEEN SUPPLIED FACTORY FITTED TO THE BLAST POT SKIP THIS SECTION.**

- 3.1 Depressurize and disconnect the compressed air supply from the Blast Pot.
- 3.2 Disconnect the pilot air line connecting the inlet Remote Control Valve and the Exhaust Remote Control Valve.
- 3.3 Unscrew and remove the existing Exhaust Remote Control Valve from the exhaust air socket located on the Blast Pot.
- 3.4 Install the AbraFlo NPT Abrasive Trap II Assembly to the exhaust air socket on the Blast Pot, ensuring that the directional arrow located on the AbraFlo II body points away from the Blast Pot. Tighten the assembly with the top Cap facing upwards and the lower Hex Cap facing downwards.
- 3.5 Connect the exhaust Remote Control Valve to the outlet threaded nipple on the AbraFlo NPT Abrasive Trap II.
- 3.6 Reconnect the pilot air line connecting the inlet Remote Control Valve to the exhaust Remote Control Valve.

### 4.0 OPERATING INSTRUCTIONS

- 4.1 Before connecting the main compressed air supply, check the operation of the Deadman Remote Control Handle and ensure that the deadman handle safety lock is operational and that the Remote Control Handle is free in its action.
- 4.2 Ensure that all hose fittings are secured and coupling Safety Locking Pins are engaged.
- 4.3 Connect the Blast Pot to an air supply that is adequate for the application, check the Blast Nozzle air volume requirement and the minimum air pressure required to operate the Remote Control Valve.
- 4.4 Ensure that the Safety Mini Ball Valve or Safety Pet Cock on the Remote Control Valve is in the isolated / closed position.
- 4.5 After following all start up procedures as detailed in the Blast Pot operator's manual, press the safety lever in on the Remote Control Handle, and depress the lever handle. This will send a signal to the Remote Control Valve at the Blast Pot and initiate the abrasive blasting process. Blasting will begin within a few seconds.

4.6 To stop blasting, release the lever handle, the safety lever will spring out preventing the lever handle from being depressed, abrasive blasting will cease within 2-3 seconds.

4.7 It is recommended to clean the AbraFlo NPT Abrasive Trap II Assembly via the fitted blow down valve allowing reverse air flow purging of the internal Abrasive Trap Screen.

4.8 With the Blast Pot depressurized and the air supply isolated it is also recommended to open the quick release drain port located on the AbraFlo NPT Abrasive Trap II Assembly lower hopper for discharging of entrapped abrasive media particles.

### 5.0 MAINTENANCE

**⚠ ! WARNING! THE COMPRESSED AIR SOURCE MUST BE ISOLATED BEFORE PERFORMING ANY MAINTENANCE WORK. FAILING TO DO SO MAY CAUSE SERIOUS INJURY OR DEATH.**

- 5.1 Inspect the Abrasive Trap Screen for blockages or wear damage, clean or replace as necessary.
- 5.2 Ensure that the lower hopper is drained of abrasive media build up periodically via the lower Hex Cap.
- 5.3 Replace any broken or faulty components immediately.
- 5.4 Ensure that all O-Rings, Gaskets and Pads are in good condition, replace as required.

### 6.0 TROUBLE SHOOTING GUIDE

- 6.1 ***The Blast Pot is extremely slow to depressurize.***
  - 6.1.1 Ensure the internal Abrasive Trap Screen is not obstructed or blocked. Clean via air purge valve or replace as necessary.
  - 6.1.2 Check the lower hopper for excessive abrasive media build up, drain and remove the excessive abrasive media accumulation.
- 6.2 ***The internal components of the Remote Control Exhaust Valve are worn and damaged.***
  - 6.1.3 Remove the Abrasive Trap Screen and inspect for holes or damage, replace as required.
  - 6.1.4 Inspect all O-Rings, Gaskets and Pads for signs of wear and replace as required.
  - 6.1.5 Ensure the AbraFlo NPT Abrasive Trap II Assembly has been fitted to the Blast Pot with the directional arrow pointing towards the Remote Control Exhaust Valve.



## PRODUCT OPERATING MANUAL

### 7.0 ASSEMBLIES, PARTS LISTING & EXPLODED VIEW

#### 7.1 AbraFlo NPT Abrasive Trap II Assembly

Stock Code	Description	Weight
BAC-VA-0353-00	AbraFlo NPT Abrasive Trap II Assembly	1.7Kg (3.75lbs)

#### 7.1.1 AbraFlo NPT Abrasive Trap II Assembly Parts Listing

Item	Stock Code	Description
1	YAC-FN-0351-00	Screw
2	YAC-FN-PB-0118	Spring Washer
3	YAC-FN-0305-00	Flat Washer
4	YAC-VA-0373-00	Cap
5	YAC-BS-PB-0029	O-Ring
6	YAC-VA-PB-0185	Rubber Pad
7	BAC-VA-0345-00	Abrasives Trap Screen
8	YAC-VA-0374-00	Screen Gasket
9	YAC-VA-0354-00	Body
10	YAC-VA-PB-0183	Thread Sleeve
11	YAC-PF-0315-00	NPT Cap - Stainless Steel
12	YAC-PF-PB-0243	Nipple - NPT
13	YAC-PF-0316-00	NPT Elbow - Stainless Steel
14	YAC-PF-PB-0167	Mini Ball Valve
15	YAC-PF-PB-0242	Plug - NPT



## PRODUCT OPERATING MANUAL

### 7.1.2 AbraFlo NPT Abrasive Trap II Assembly Exploded View

