

# PT Range Operators Handbook PT models

## **Covering Models:-**

PT5 / PT15 / PT24 / PT50

## **BAMBI AIR LTD**

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### **Operating Manual**

#### Your Bambi Air Compressor is a precision engineered product. By following these simple steps you will ensure years of trouble free use.

Parts & Service are available from your Bambi dealer.

It is important to quote Model, Type & Serial Number in all communications.

The substitution of parts not manufactured nor approved by Bambi can impair performance, service life and create potential mechanical or personnel hazards and will invalidate your warranty.

Bambi reserves the right to modify the contents of this operating booklet without notice and the information is in no way binding on the company.

## **Technical Specification**

| PT Pump Specification | 220v        | 110v        |
|-----------------------|-------------|-------------|
| Motor kW / Hp         | 0.75 / 1.00 | 0.75 / 1.00 |
| Voltage               | 220/240     | 110         |
| Frequency Hz          | 50          | 60          |
| RPM                   | 1450        | 1700        |
| Displacement I/min    | 128         | 145         |
|                       |             |             |

## **Preventative Maintenance**

| Operation                        | Daily | Weekly | Annually | 2 Years |
|----------------------------------|-------|--------|----------|---------|
| Drain Air Receiver               | •     |        |          |         |
| Replace Air Intake Filter        |       |        | •        |         |
| Check Pressure Relief Activation |       |        | •        |         |
| Clean Ventilation Grilles        |       |        | •        |         |
| Check Piston Ring                |       |        |          | •       |

Above are to be considered minimum frequency

## Warranty

Provided the operating instructions have been followed, and the compressor has been properly maintained, Bambi PT compressors are guaranteed against faulty workmanship for a period of 1 year. The air receiver is guaranteed for 5 years.

The guarantee does not cover damage by misuse, incorrect parts or service.

Contact Bambi Air Ltd or your retailer for further information.

#### 1) Safety Precautions

#### What you **must** do:

- Read these instructions before using your air compressor.
- Ensure the compressor has been installed, electrically connected and piped in by a properly qualified person.
- Ensure the compressor is kept upright at all times.

#### What you must not do:

- Do not attempt any maintenance on the compressor until it has been isolated from the power supply.
- Do not attempt any work on the compressor until the air receiver and pipe work systems are depressurised.
- During operation the motor will become quite hot to the touch. Avoid contact to prevent burns.
- Never tamper with the pressure relief valve.
- Never lubricate the oil free motor or pump assembly; this will cause severe damage.
- Never obstruct cooling fans or outlet vents.
- Compressed air is dangerous if misused and can prove fatal. Avoid any bodily contact with compressed air.

## 2) Siting The Compressor

#### What you **must** do:

- Provide adequate protection from the weather.
- Site the compressor level in both planes.
- Allow access for maintenance all around the compressor.
- Site in a dry area, avoiding damp or humid conditions. The site must be dust free, well ventilated and have a cool ambient temperature. 0 to 40°C should be regarded as the minimum and maximum allowable ambient.

#### What you **must not** do:

- Enclose the compressor or allow hot air generated by the motor to recirculate around the compressor.
   Ensure there is 30cm clearance around the compressor
- Restrict air flow around the end cover ventilation grilles.

#### Important!

These compressors generate heat. Never restrict any of the ventilation grilles otherwise serious damage may occur.

#### **Electrical Connections**

Where applicable, compressors are supplied with a moulded plug in accordance with national standards.

Never remove the moulded plug.

The use of extension cables is not recommended as this may cause voltage drops which can result in damage to the motor

220v/50Hz models wired in accordance with European Standard –

Blue = neutral

Brown = live,

Yellow & Green Stripe = earth

110v/60Hz models wired in accordance with US Standard –

White = neutral

Black = live,

Yellow = earth

## **Operation**

#### NOTE!

Please ensure that the pump motor filter is screwed in before operating the compressor. Fit with intake tube pointing down

#### Installing airline:

The airline should be fitted to the Filter regulator outlet "A"

#### Starting & Stopping

Plug the compressor into an outlet socket of nominal voltage.

#### All models:

Switch the compressor on by turning the red control on top of the pressure switch to the "Auto" position.

The compressor will run until the pressure in the receiver is at 8 bar. It will then cut out.

As air is used the pressure drops and the motor will restart at the preset pressure.

There is approximately a 2 Bar differential.

#### Note!

Each time the compressor switches off, you will hear a short hiss of air. You are hearing the unloader valve discharging the residual delivery pipe pressure.

This is normal

#### THIS IS HUITHAL.

#### **Adjusting Outlet Pressure**

Use the pressure regulator to adjust the outlet pressure.

To increase line pressure, rotate the knob in a clockwise direction; to decrease turn anti clockwise. It is possible to lock the setting by pushing the knob down until it "clicks" home.

There are two pressure gauges on each model.

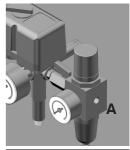
The larger gauge indicates the air receiver pressure, the smaller gauge indicates the air outlet pressure.

#### NOTE!

NEVER unplug the compressor when running. Always switch off using the red control on the pressure switch to ensure the compressor discharges.

Failure to do so will cause damage and will invalidate your warranty.







## **Routine Maintenance**

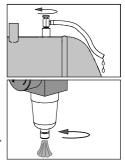
#### **Draining the Air Receiver**

Drain water condensate from air receiver at a pressure of no more than 2 Bar.

Slowly open the drain tap provided to allow water to flow out. Close drain tap when all water has drained off.

#### **Draining the Filter/Regulator Unit**

Slowly open the drain screw provided to allow water to flow out. Close drain screw when all water has drained off.

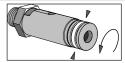


#### Note!

Waste water condensate must be handled in accordance with national environmental rules.

#### **Check Pressure Relief Valve**

Ensure the air receiver is not pressurised.



Unscrew the knurled end of the pressure relief valve until an audible "click" is heard. Retighten without using excessive force.

#### **Technical**

We recommend the compressor has a maximum 65% duty cycle to prolong pump life.

#### Note!

The motor must never be allowed to run continuously otherwise it will overheat and may become damaged. The duty cycle is calculated over 10 minutes, meaning that if the motor runs continuously for 6.5 minutes it must then rest for 3.5 minutes.

Do not ignore air leaks. All air connections must be leak free to prevent the compressor from over heating.

The compressor is fitted with a thermal overload. In the event of excessive temperature, the motor will switch off. After about 50 minutes when the motor has cooled it will automatically reset.

You **must** find the cause of the overload and rectify this before continuing to use the compressor.

#### Check for -

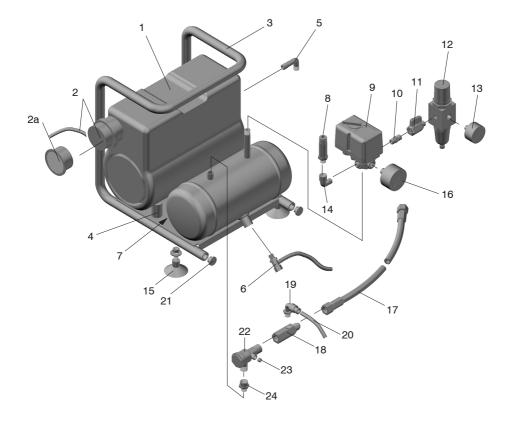
- Drain tap not closed properly
- Air leaks on the pneumatic fittings
- Compressor not the correct size for the work load
- Cooling fan cover vent restricted

If problems persist contact your dealer.

## PT5

| Ref No. | Description                 | Part no. |
|---------|-----------------------------|----------|
| 1       | Pump motor                  | BPB1238  |
| 2       | Pump motor filter           | BPB1259  |
| 2a      | Pump motor filter element   | BPB1263  |
| 3       | Frame                       | BPB1262  |
| 4       | Motor support               | BPB1261  |
| 5       | Elbow                       | BPB1257  |
| 6       | Drain tap and pipe assembly | BPB1294  |
| 7       | Capacitor                   | BPB1260  |
| 8       | Pressure relief valve       | BPB1084  |
| 9       | Pressure switch             | BPB1074  |
| 10      | Adapter                     | BPB1078  |
| 11      | On/off tap                  | BPB1079  |

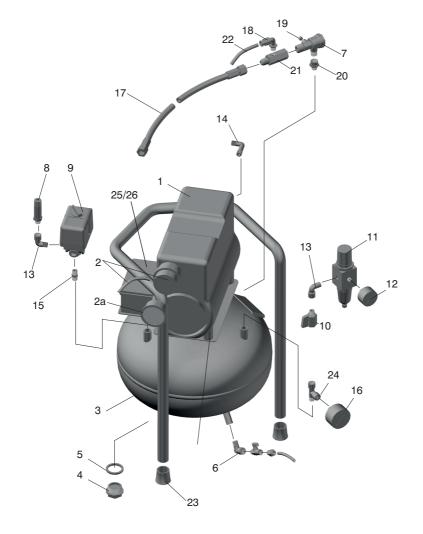
| 12 | Regulator                 | BPB1080 |
|----|---------------------------|---------|
| 13 | 40mm line pressure gauge  | BPB1077 |
| 14 | Elbow M/F                 | BPB1139 |
| 15 | Foot                      | BPB1295 |
| 16 | 50mm tank pressure gauge  | BPB1081 |
| 17 | Delivery pipe             | BPB1258 |
| 18 | 3/8 x M14 x 1/8 Connector | BPB1300 |
| 19 | Elbow for air pipe        | BPB0044 |
| 20 | Air pipe                  | BPB0203 |
| 21 | Inserts                   | BPB0078 |
| 22 | Non Return valve          | BPB0656 |
| 23 | 1/8BSP Plug               | BPB0823 |
| 24 | 1/4 x 3/8 Adapter         | BPB0918 |



## PT 15 / 24

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|---------|---------------------------|----------|
| Ref No. | Description               | Part no. |
| 1       | Pump motor                | BPB1238  |
| 2       | Pump motor filter         | BPB1259  |
| 2a      | Pump motor filter element | BPB1263  |
| 3       | Tank [PT15]               | BPB0470  |
| 3a      | Tank [PT24]               | BPB0472  |
| 4       | Inspection plug           | BPB0243  |
| 5       | Inspection plug seal      | BPB0502  |
| 6       | Drain tap assembly        | BPB1138  |
| 7       | Non-return valve          | BPB0656  |
| 8       | Pressure relief valve     | BPB1084  |
| 9       | Pressure switch           | BPB1074  |
| 10      | On/off tap                | BPB1079  |
| 11      | Regulator                 | BPB1080  |
| 12      | 40mm line pressure gauge  | BPB1077  |

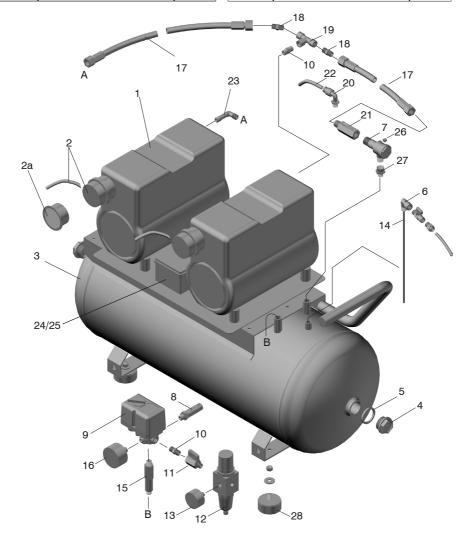
| 13 | Elbow M/F                         | BPB1139 |
|----|-----------------------------------|---------|
| 14 | Elbow                             | BPB1257 |
| 15 | Connector                         | BPB0810 |
| 16 | 50mm tank pressure gauge          | BPB1081 |
| 17 | Delivery pipe                     | BPB1258 |
| 18 | 1/8BSPM x 6mm Push fit elbow      | BPB0044 |
| 19 | 1/8BSP Plug                       | BPB0823 |
| 20 | 1/4 x 3/8 Adapter                 | BPB0918 |
| 21 | 3/8 x M14 x 1/8 Adapter           | BPB1300 |
| 22 | Air pipe                          | BPB0203 |
| 23 | Foot                              | BPB0247 |
| 24 | 1/4bsp Male,Male,Female,Tee Piece | BPB1095 |
| 25 | Capacitor box                     | BPB1236 |
| 26 | Capacitor                         | BPB1260 |



## PT50

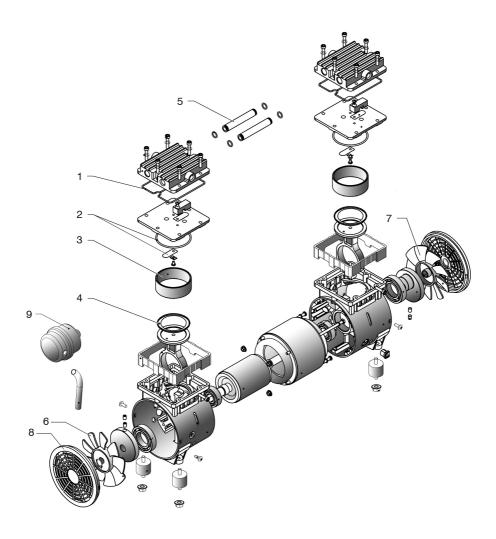
| Ref No. | Description               | Part no. |
|---------|---------------------------|----------|
| 1       | Pump motor                | BPB1238  |
| 2       | Pump motor filter         | BPB1259  |
| 2a      | Pump motor filter element | BPB1263  |
| 3       | Tank                      | BPB0474  |
| 4       | Inspection plug           | BPB0243  |
| 5       | Inspection plug seal      | BPB0502  |
| 6       | Drain tap assembly        | BPB1138  |
| 7       | Non-return valve          | BPB0656  |
| 8       | Pressure relief valve     | BPB1084  |
| 9       | Pressure switch           | BPB1074  |
| 10      | Adapter                   | BPB1078  |
| 11      | On/off tap                | BPB1079  |
| 12      | Regulator                 | BPB1080  |
| 13      | 40mm line pressure gauge  | BPB1077  |

| 14 | Siphon tube                  | BPB0028 |
|----|------------------------------|---------|
| 15 | Connector                    | BPB0152 |
| 16 | 50mm tank pressure gauge     | BPB1081 |
| 17 | Delivery pipe                | BPB1258 |
| 18 | Connector                    | BPB1242 |
| 19 | Tee piece MMM                | BPB1239 |
| 20 | 1/8BSPM x 6mm Push fit elbow | BPB0044 |
| 21 | 3/8 x M14 x 1/8 Adapter      | BPB1300 |
| 22 | Air pipe                     | BPB0203 |
| 23 | Elbow                        | BPB1257 |
| 24 | Capacitor box                | BPB1236 |
| 25 | Capacitor                    | BPB1260 |
| 26 | 1/8BSP Plug                  | BPB0823 |
| 27 | 1/4 x 3/8 Adapter            | BPB0918 |
| 28 | Foot assembly                | BPB0259 |



## PT Pump spares

| Ref No. | Description                   | Part no. |
|---------|-------------------------------|----------|
| 1       | Cylinder head seal            | BPB1250  |
| 2       | Valve plate assembly          | BPB1251  |
| 3       | Cylinder                      | BPB1253  |
| 4       | Piston ring                   | BPB1254  |
| 5       | Airway tube, inc. O ring seal | BPB1252  |
| 6       | Motor fan LH                  | BPB1255  |
| 7       | Motor fan RH                  | BPB1264  |
| 8       | Fan cover                     | BPB1256  |
| 9       | Air intake filter             | BPB1259  |



| Notes |  |  |
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#### **SERVICE RECORD**

| Date | installed |  |  |  |  |
|------|-----------|--|--|--|--|
|      |           |  |  |  |  |

| Date | Maintenance work | Signature / Company |
|------|------------------|---------------------|
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#### **SERVICE KITS**

BPPT 1 Service Kit covers all models.

PT50 requires two kits.

## BAMBI AIR LTD

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## EC Declaration of Conformity - Declaration de Conformite CE – EG Konformitatserklarung

#### Declaracion de Conformidad CE - EG Verklaring van Overeenstemming

Bambi Air Ltd declares that this product conforms to the European Directives listed below.

Bambi Air Ltd declare que ce produit est conforme aux directives europeennes enumerees ci-dessous.

Bambi Air Ltd declara que este producto cumple con la DirectivaEuropea listada abajo.

Bambi Air Ltd verklaart dat dit product voldoet aan de onderstaande Europese Richtlijnen

Bambi Air Ltd erklart hiermit, dass dieses Produkt mit den Bestimmungen der Nachstehenden EU-Richtlinien übereinstimmt.

Machinery Safety Standard 2006/42 EU, LOW Voltage Directive 2014/35/EU,

Machinery Directive 2006/42/EU, Electromagnetic Compatibility 2014/35/EU

Simple Pressure vessels Directive 2014/29/EU Pressure Equipment Directive 2014/68/EU

EN600034, EN 60204-1:2018, EN ISO 12100-1:2010, EN ISO 13857:2019

Date 10/2021

IF NO SERIAL NUMBER HERE THEN HANDBOOK ISSUED AS REPLACEMENT OR WITH SERVICE KIT

> L. Clutterbuck Director

> > Issue 5: 04/22