



MD Range Operators Handbook

Covering Models:-

MD35/20
MD75/150
MD75/150V
MD75/250
MD75/250V
MD150/500
MD225/1000

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Operating Manual

**Your Bambi Air Ltd 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 or 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.

Warranty

Provided the operating instructions have been followed and the compressor has been properly maintained Bambi 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.

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.
- Compressed air is dangerous if misused and can prove fatal. Avoid any bodily contact with compressed air.
- During operation the motor will become quite hot to the touch. Avoid contact to prevent burns. At no time must the oil temperature be allowed to exceed 100°C.
- Never tamper with the pressure relief valve.
- Never change the oil when the compressor is still warm. Take necessary precautions to avoid contact with the skin.

Bambi 1110S compressor oil does not contain hazardous components and is not required to be labelled dangerous, according to the Classification, Packaging and Labelling of Dangerous Substances regulation: [CPL]Regulation 1984

Siting The Compressor

What you **must** do

- Provide adequate protection from the weather.
- Site the compressor level in both planes.
- As larger models are heavy, ensure the surface has sufficient load bearing capacity.
- 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. 35°C should be regarded as the maximum allowable ambient.

What you **must not** do

- Enclose the compressor or allow hot air generated by the motor to re-circulate around the compressor.

Electrical Connections

All 220/240 volt compressors, except Model 225/1000 are supplied with a moulded plug in accordance with national standards. Never remove the moulded plug.

Wired in accordance with European Standard –

Blue = neutral Brown = live Yellow & Green Stripe = earth

Model 225/1000 requires a dedicated 20 amp power supply.

Operation

Refer to exploded parts diagrams and illustrations when reading this section.

Oil level

Your Bambi compressor is shipped without oil for transit. Before use you must fill the motor to the correct level.

Models 75/80 to 225/1000

- Remove air intake filter housing by pulling gently out of intake tube - see *fig 9*
- Pour oil into motor through the tube until the correct level is reached indicated on the oil sight glass, approx 900cc - see *fig 2*
- Refit air intake filter to intake tube

Note!

Always use Bambi 1110S compressor oil. Failure to do so will invalidate your warranty.

Starting & Stopping

Plug the compressor into an outlet socket of nominal voltage and fitted with a 13amp fuse.

Note!

Model 225/1000 requires a dedicated 20 amp power supply.

Switch the compressor on using the on/off control on top of the pressure switch.
– see *fig 3*.

The compressor will start running and automatically switch off at the preset pressure.

As air is used the pressure drops and the motor will restart at the preset pressure.
Approx 2 Bar differential.

Note!

Never tamper with the pressure switch settings, these are factory set.

Adjusting Outlet Pressure

The airline should be fitted to the filter regulator outlet.
Use the filter regulator to adjust the outlet pressure. The 40mm pressure gauge indicates the selected pressure. To increase line pressure rotate the black knob on top of the filter regulator in a clockwise manner, to decrease turn anti clockwise. It is possible to lock the setting by pushing the knob down until it “clicks” home – see *fig 4*.

Routine Maintenance

Draining the Air Receiver

Drain 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 – see *figs 7 & 8*.
 Close drain tap when all water has drained off.
 Do not overtighten, this will damage the tap seal.
 Automatic drains where fitted do not require draining, however the drain bottle will require emptying.

Draining the Filter/Regulator Unit

Slowly open the drain screw provided to allow water to flow out – see *fig 5*.
 Close the drain screw when all water has drained off.

Note !

The waste 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 – see *fig 6*.

Technical

The compressor has a maximum 50% duty cycle. The motor must never be allowed to run continuously otherwise it will overheat and may become damaged.

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.

Note !

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

Preventative Maintenance

Operation	Daily	Weekly	Monthly	Annually
Drain air receiver < 15 Litres	•			
Drain air receiver > 15 Litres		•		
Drain filter regulator			•	
Check oil level		•		
Change oil				•
Replace air intake filter				•
Replace filter regulator element				•
Check pressure relief activation				•

Above are to be considered minimum frequency

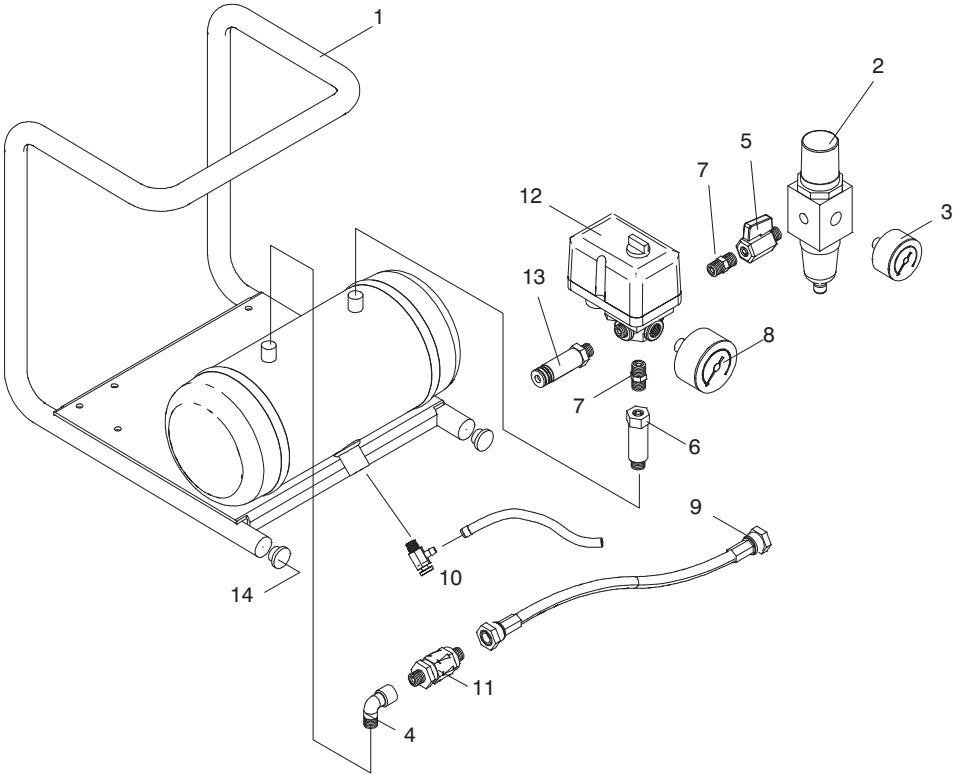
Technical Specification

Type 35 Pump Specification	
Voltage	220/240
Motor Kw / Hp	0.37 / 0.5
Frequency Hz	50
Amps	2.4
Watts	340
Displacement l/min	50
FAD@ 6 Bar	33
Type 75 Pump Specification	
Voltage	220/240
Motor Kw / Hp	0.5 / 0.5
Frequency Hz	50
Amps	3.6
Watts	500
Displacement l/min	78
FAD@ 6 Bar	54

MD35/20

Ref No.	Description	Part no.
1	4 litre vessel	BPB1094
2	Filter regulator	BPB1080
3	Regulator gauge	BPB1077
4	1/4" Male/Female elbow	BPB1139
5	On/off valve	BPB1079
6	1/4" Extension	BPB0150
7	1/4" Male / 1/4" Male adaptor	BPB1078
8	Vessel pressure gauge	BPB1081
9	200mm delivery pipe	BPB1102
10	1/4" Drain tap	BPB1138

Ref No.	Description	Part no.
11	Non-return valve	BPB1086
12	Pressure switch	BPB1074
13	1/4" 10 Bar relief valve	BPB1084
14	Handle insert	BPB0078

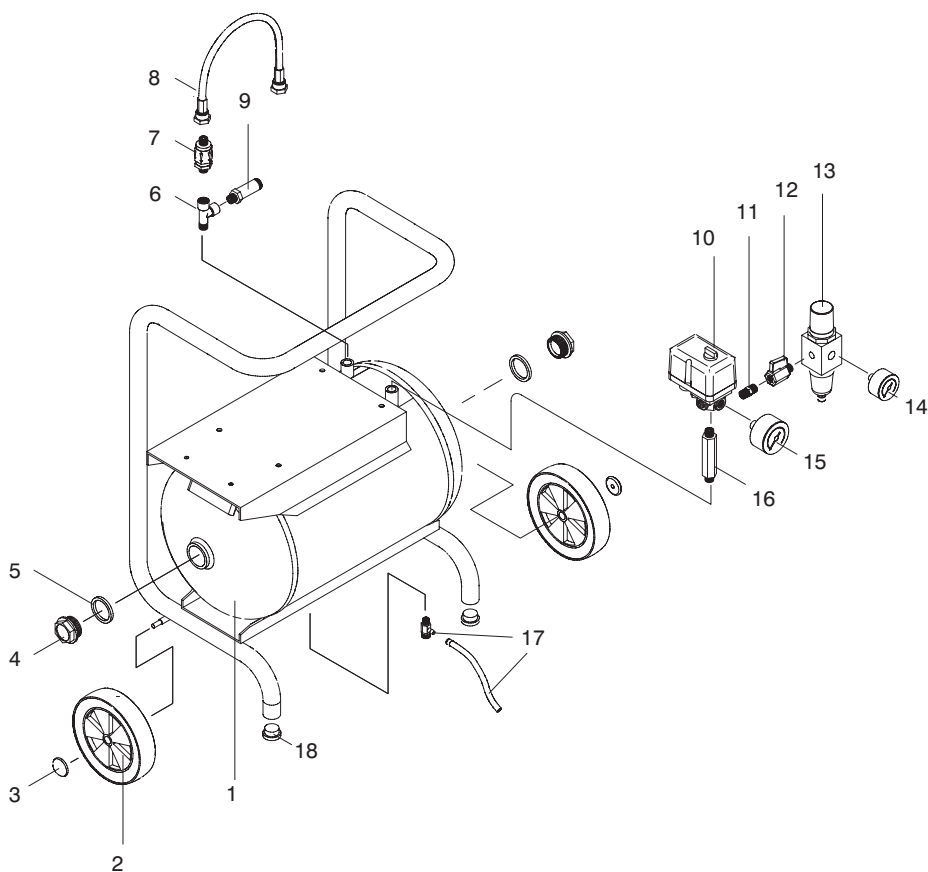


On auto drain machines the pressure switch part number is BPB0550

MD75/150

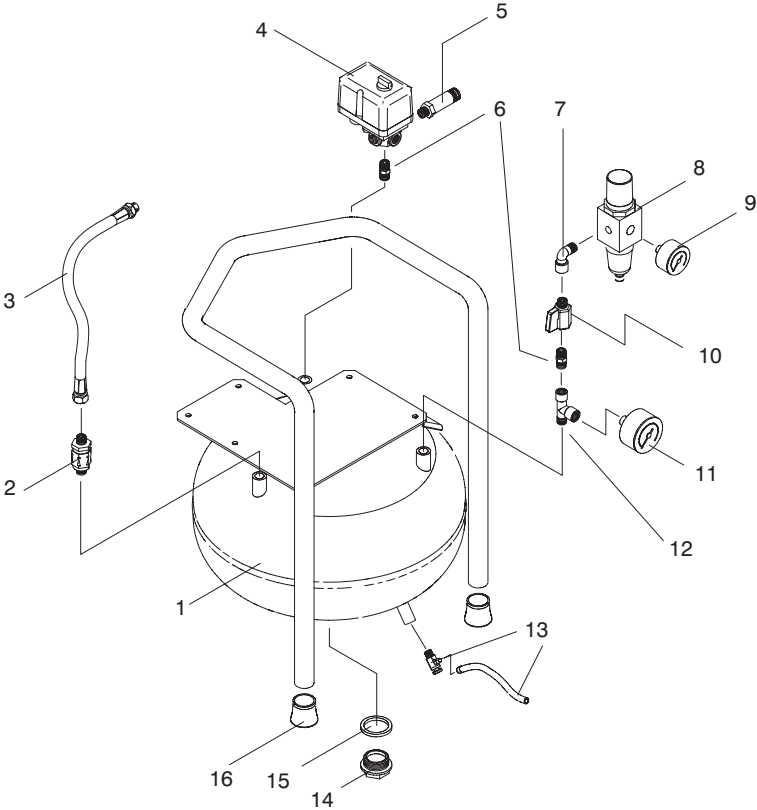
Ref No.	Description	Part no.
1	15 litre vessel	BPB1099b
2	140mm wheel	BPB1144
3	Starlock washer	BPB1091
4	Inspection plug	BPB0243
5	Inspection plug seal	BPB0502
6	1/4" Male/Female/Female tee	BPB1109
7	Non-return valve	BPB1086
8	200mm Delivery pipe	BPB1102
9	1/4" 10 Bar relief valve	BPB1084
10	Pressure switch	BPB1074
11	1/4" Male / 1/4" Male adaptor	BPB1078
12	On/off valve	BPB1079

Ref No.	Description	Part no.
13	Filter regulator	BPB1080
14	Regulator gauge	BPB1077
15	Vessel pressure gauge	BPB1081
16	1/4" Extension	BPB0152
17	Drain tap	BPB1138
18	Black round tube insert	BPB0076



MD 75/150V

Ref No.	Description	Part no.	Ref No.	Description	Part no.
1	15 litre vessel	BPB1099	11	Vessel pressure gauge	BPB1081
2	Non-return valve	BPB1086	12	1/4" Male/Female/Female tee	BPB1109
3	500mm delivery pipe	BPB1087a	13	Drain tap	BPB1138
4	Pressure switch	BPB1074	14	Inspection plug	BPB0243
5	1/4" 10 Bar relief valve	BPB1084	15	Inspection plug seal	BPB0502
6	1/4"Male / 1/4"Male adaptor	BPB1078	16	Rubber foot	BPB0247
7	1/4" Male/Female elbow	BPB1139			
8	Filter regulator	BPB1080			
9	Regulator gauge	BPB1077			
10	On/off valve	BPB1079			

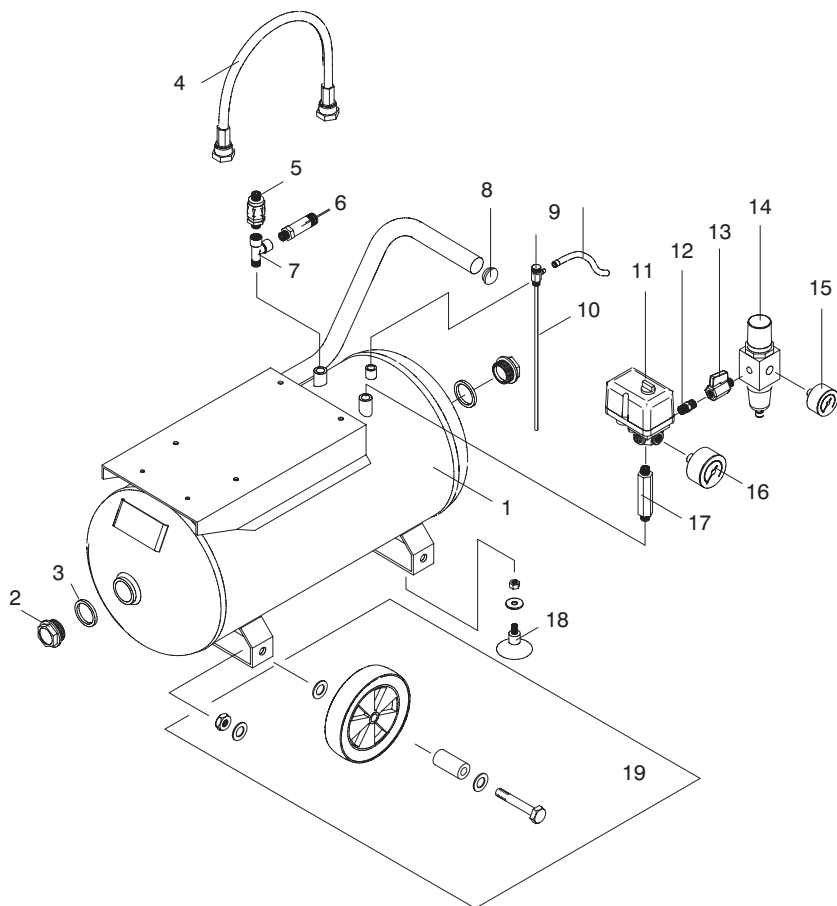


On auto drain machines the pressure switch part number is BPB0550

MD75/250

Ref No.	Description	Part no.
1	24 litre vessel	BPB1088b
2	Inspection plug seal	BPB0502
3	Inspection plug	BPB0243
4	200mm Delivery pipe	BPB1102
5	Non-return valve	BPB1086
6	1/4" 10 Bar relief valve	BPB1084
7	1/4" Male/Female/Female tee	BPB1109
8	Handle insert	BPB0076
9	Drain tap	BPB1138
10	Siphon tube	BPB0029
11	Pressure switch	BPB1074
12	1/4" Male / 1/4" Male adaptor	BPB1078

Ref No.	Description	Part no.
13	On/off valve	BPB1079
14	Filter regulator	BPB1080
15	Regulator gauge	BPB1077
16	Vessel pressure gauge	BPB1081
17	1/4" Extension	BPB0152
18	Wheel kit	BPB0157
19	Wheel kit	BPB0157

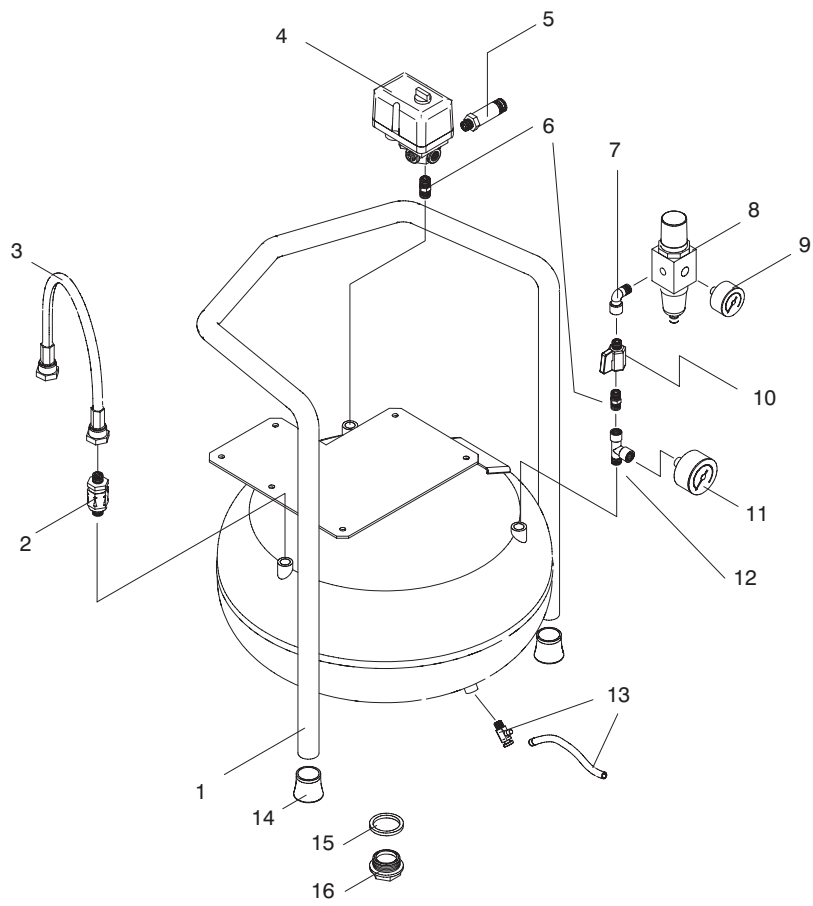


On auto drain machines the pressure switch part number is BPB0550

MD 75/250V

Ref No.	Description	Part no.
1	24 litre vessel	BPB1088
2	Non-return valve	BPB1086
3	500mm Delivery pipe	BPB1087a
4	Pressure switch	BPB1074
5	1/4" 10 Bar relief valve	BPB1084
6	1/4" Male / 1/4" Male adaptor	BPB1078
7	1/4" Male/Female elbow	BPB1139
8	Filter regulator	BPB1080
9	Regulator gauge	BPB1077
10	On/off valve	BPB1079
11	Vessel pressure gauge	BPB1081
12	1/4" Male/Female/Female tee	BPB1109

Ref No.	Description	Part no.
13	Drain tap	BPB1138
14	Rubber foot	BPB0247
15	Inspection plug seal	BPB0502
16	Inspection plug	BPB0243

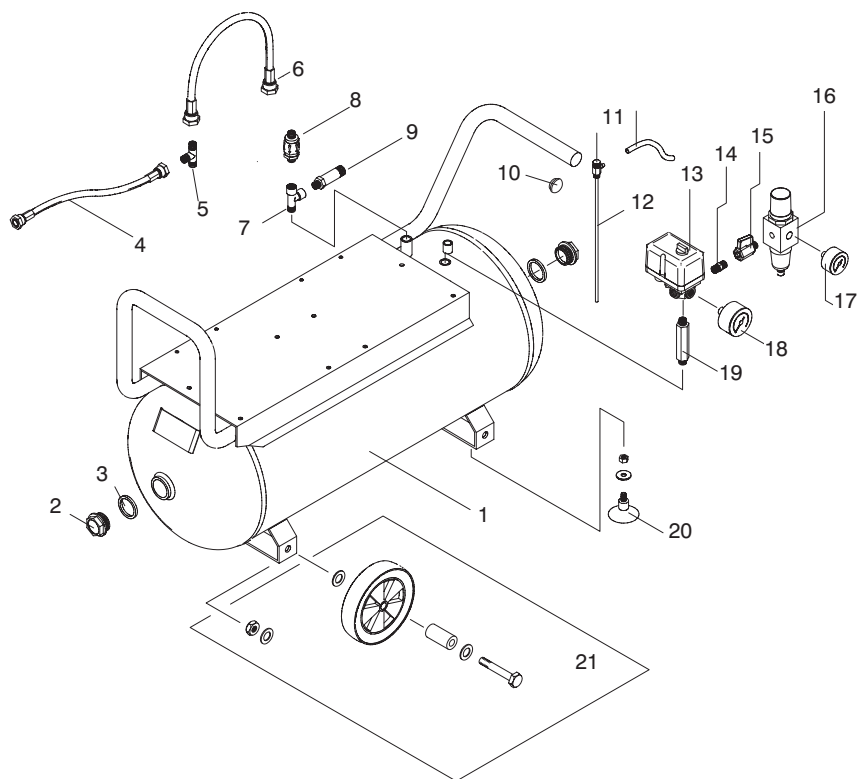


On auto drain machines the pressure switch part number is BPB0550

MD150/500

Ref No.	Description	Part no.
1	50 litre vessel	BPB1097
2	Inspection plug	BPB0243
3	Inspection plug seal	BPB0502
4	300mm Delivery pipe	BPB1087
5	1/4" Male/Female/Male tee	BPB0158
6	200mm Delivery pipe	BPB1102
7	1/4" Male/Female/Female tee	BPB1109
8	Non-return valve	BPB1086
9	1/4" 10 Bar relief valve	BPB1084
10	Handle insert	BPB0076
11	Drain tap	BPB1138
12	Siphon tube	BPB0034

Ref No.	Description	Part no.
13	Pressure switch	BPB1074
14	1/4" Male / 1/4" Male adaptor	BPB1078
15	On/off valve	BPB1079
16	Filter regulator	BPB1080
17	Regulator gauge	BPB1077
18	Vessel pressure gauge	BPB1081
19	1/4" Extension	BPB0152
20	Wheel kit	BPB0157
21	Wheel kit	BPB0157

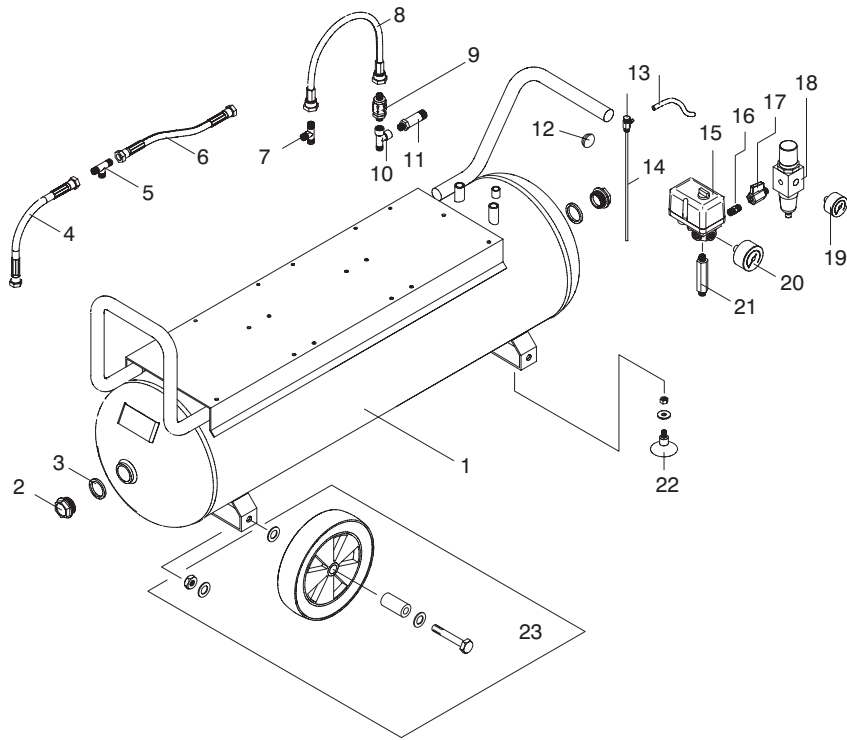


On auto drain machines the pressure switch part number is BPB0550

MD225/1000

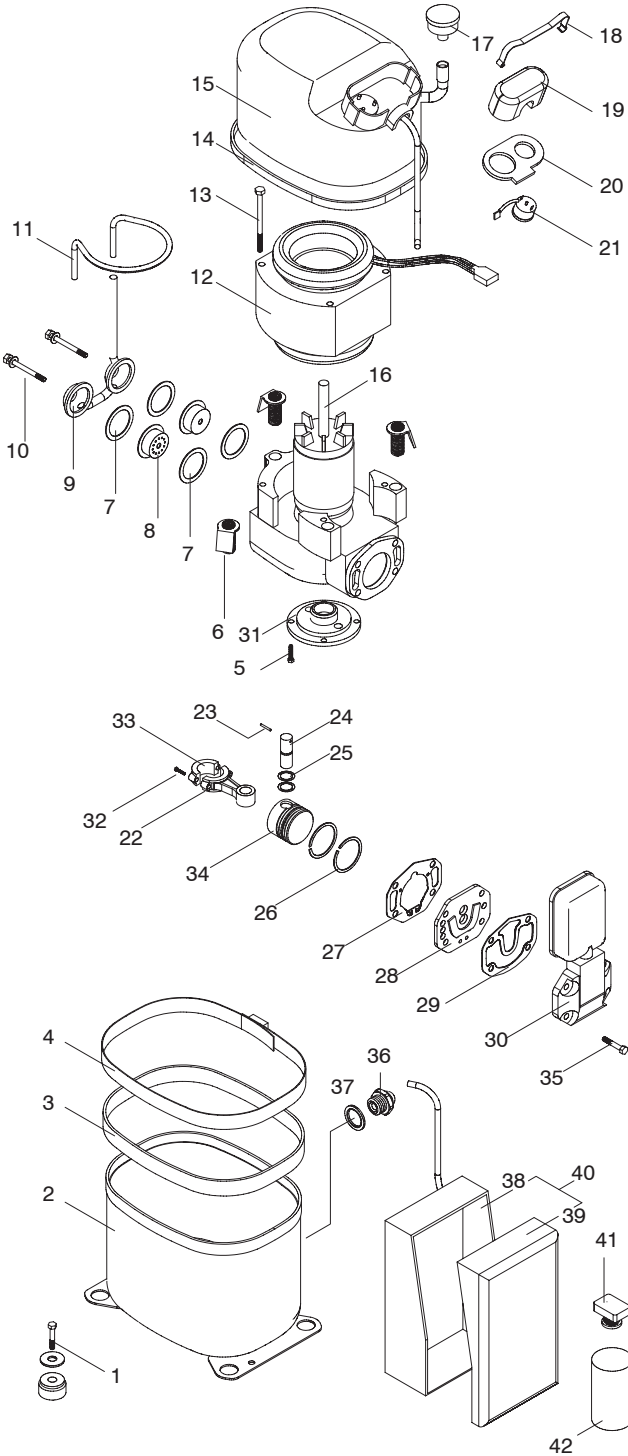
Ref No.	Description	Part no.
1	100 litre vessel	BPB1105
2	Inspection plug	BPB0243
3	Inspection plug seal	BPB0502
4	300mm Delivery pipe	BPB1087
5	1/4" Male/Male/Female tee	BPB1095
6	300mm Delivery pipe	BPB1087
7	1/4" Male/Male/Female tee	BPB1095
8	300mm Delivery pipe	BPB1087
9	Non-return valve	BPB1086
10	1/4" Male/Female/Female tee	BPB1109
11	1/4" 10 Bar relief valve	BPB1084
12	Handle insert	BPB0076

Ref No.	Description	Part no.
13	Drain tap	BPB1138
14	Siphon tube	BPB0035
15	Pressure switch	BPB1074
16	1/4" Male / 1/4" Male adaptor	BPB1078
17	On/off valve	BPB1079
18	Filter regulator	BPB1080
19	Regulator gauge	BPB1077
20	Vessel pressure gauge	BPB1081
21	1/4" Extension	BPB0152
22	Wheel kit	BPB0604
23	Wheel kit	BPB0604



On auto drain machines the pressure switch part number is BPB0550

**Motor / Pump Parts:
75 model**



Ref No.	Description	Part no.
1	Mounting set	BPB1008
2	Bottom casing	BPB1011
3	Large rubber gasket	BPB1007
4	Closing ring	BPB1005
5	Bearing bolt	BPB1025
6	Mounting spring	BPB1038a
7	Delivery gasket	BPB1026
8	Delivery mufflers	BPB1128
9	Pressure pipe	BPB0132
10	Pressure pipe bolt	BPB1027
11	Pressure pipe horse shoe	BPB0108
12	Stator 110v	BPB0799
12	Stator 240v	BPB1023
13	Stator bolt [4 off]	BPB1022
14	Small rubber gasket	BPB1006
15	Top casing	BPB1004
16	Cylinder block	BPB1012
17	Air filter	BPB1003
18	Overload clip	BPB1001b
19	Overload cover	BPB1001b
20	Overload gasket	BPB1001b
21	Overload	BPB1001a
22	Con rod & washers	BPB1013a
23	Split pin	BPB1015
24	Gudgeon pin	BPB0100
25	Con rod washers	BPB0102
26	Piston rings (2)	BPB1013c
27	Valve plate gasket	BPB1014
28	Valve plate	BPB1015
29	Cylinder head gasket	BPB1016
30	Cylinder head	BPB1017
31	Bottom bearing	BPB1024
32	Con rod bolt	BPB0103
33	Con rod & washers	BPB1013a
34	Piston & rings	BPB1013b
35	Cylinder head bolt [4]	BPB1018
36	Sight glass	BPB1009
37	Sight glass seal	BPB1010
38	Electrical cabinet back	BPB1002f
39	Electrical cabinet cover	BPB1002e
40	Electrical cabinet	BPB1002
41	Start relay 240v	BPB1002a
41	Start relay 110v	BPB1002d
42	Capacitor 240v	BPB1002b
42	Capacitor 110v	BPB1002g

Fig 1

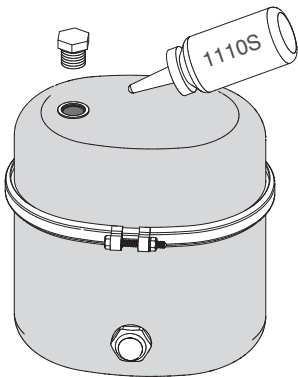


Fig 2

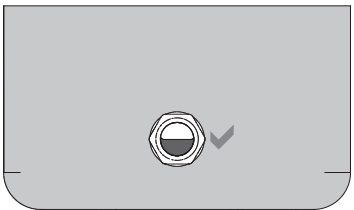


Fig 3

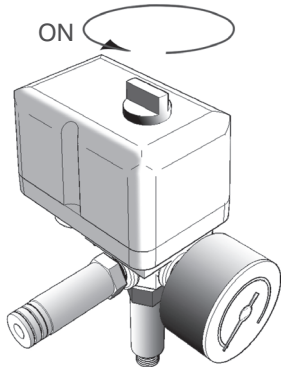


Fig 4

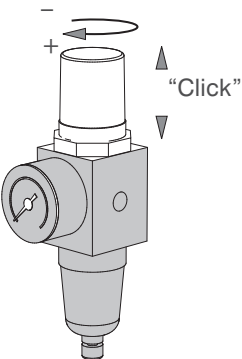


Fig 5

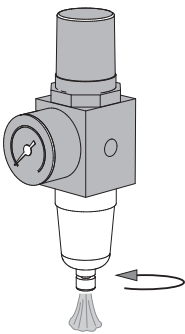


Fig 6

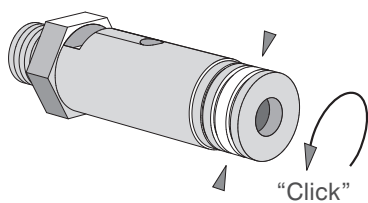


Fig 7

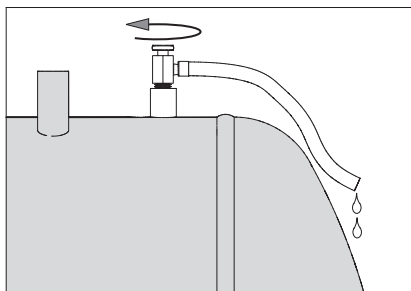


Fig 8

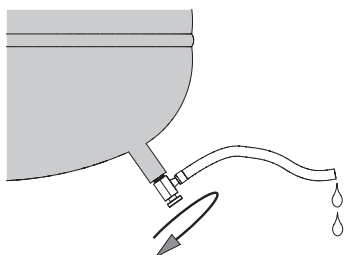
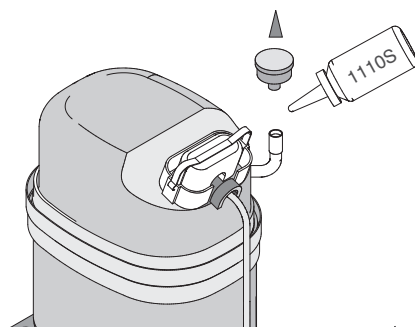


Fig 9



SERVICE RECORD

Date installed _____

Date	Maintenance work	Signature / Company

SERVICE KITS

BPB1122A Service Kit type 35 pump unit
BB24D (2 Kits) BB50D (2 Kits)

BPB1124A Service Kit type 75 pump unit
150/500 (2 Kits) 225/1000 (3 Kits)

NOTES

BAMBI AIR LTD

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EC Declaration of Conformity - Declaration de Conformite CE EG Konformitätserklärung 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 Directiva Europea listada abajo.

Bambi Ai 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/ EC, Machinery Directive 2014/68/EU,
Electromagnetic Compatibility 2014/30/ EU
Simple Pressure Vessels 2014/29/EU/105/EC
EN60034, EN60204-1:2007, EN ISO12100-1-2:2005, EN ISO13857:2010
CE Marking applied for the first time in 1997

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

A handwritten signature in black ink, appearing to read 'L Clutterbuck'.

L Clutterbuck
Director
10/06/16