



Oil-Free Range Operators Handbook VT & VTS models

Covering Models:-

VT75	VT150	VT200	VT250	VT300	VT400
VT75D	VT150D	VT200D	VT250D	VT300D	VT400D
VTS75	VTS150	VTS200	VTS250		
VTS75D	VTS150D	VTS200D	VTS250D		

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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.

Warranty

Provided the operating instructions have been followed, and the compressor has been properly maintained, Bambi VT and VTS compressors are guaranteed against faulty workmanship for a period of 2 years.

The air receiver is guaranteed for 5 years.

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

Contact Bambi Air Compressors 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.
- 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.
- 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.

2) Siting The Compressor

What you **must** do:

- Provide adequate protection from the weather.
- Site the compressor level in both planes.
- 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. 40°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. Ensure there is 30cm clearance around the compressor
- Restrict air flow around the after cooler, after cooler fan unit or end cover ventilation [S models].

Important ! For Silenced VTS Models:

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.

Note !

Duplex models VT300/300D, VT400/400D must be connected to a dedicated fused 20 amp supply.

Wired in accordance with European Standard –

Single phase: Blue = neutral, Brown = live, Yellow & Green Stripe = earth

Three phase: Brown/Black/Grey = Phase conductors

Blue = Neutral

Yellow and Green Stripe = earth

Three phase compressors should be connected by a competent person

All three phase units require neutral supply

3) Unpacking Instructions for: **VTS75 / VTS150 / VTS200/ VTS250**

3.1) Fitting Mounting Castors

Before using the compressor you must remove the external packaging and fit the castors supplied as they also provide essential clearance for the lower cooling fan exhaust.

Note !

Failure to do so will cause damage and invalidate your warranty

Remove the four bolts securing the compressor to its wooden packing, carefully lift the compressor to enable you to screw in the four castors using the same mounting holes.

Take care lifting the compressor, some models are heavy.

3.2) Removing Internal Transit Packing

Before using the compressor you must remove the internal packing, failure to do so will cause damage to the compressor. The procedure is as follows -

VTS75/150/200



Fig 1.

Using the hex key provided, remove the 3 bolts fixing the left hand end cover in place (when viewed from the front) – see fig 1.

There are three packing pieces, two either side of the pump unit, one on top of the cooling fan assembly.

Ensure that these are removed.

VTS250D

Using the hex key provided, remove the 4 bolts fixing the top cover in place and remove the top cover - see fig 1a.

There is one packing piece on the top of the pump unit.

Ensure that this is removed.

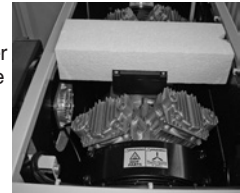


Fig 1a.

Reassembly is a reverse of the above but do not over-tighten the cover fixing bolts.

3.3) Fitting Condensate Bottle – VTS Dryer models only



Fig.2 - VTS Condensate bottle position

Compressors fitted with an air dryer are supplied with a condensate bottle which you will need to fit before use.

Attach the condensate bottle mounting bracket to the front panel of the compressor using the 2 plastic clips provided. These are a simple push fit.

Slide the condensate bottle into the mounting bracket.

Push the black plastic condensate tube which emerges from the front panel into the hole in the lid of the bottle. As on Fig. 2

Fit the exhaust silencer to the condensate tube by pushing firmly on to the end of the tube.

Fit the bottle lid ensuring that it “clicks” home.

4) Operation

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

Note ! For VTS Models

Ensure the transit packing has been removed as described in the previous section. Failure to do so will cause damage and invalidate your warranty

4.1) Starting & Stopping

Plug the compressor into an outlet socket of nominal voltage and fitted with the correct fuse as shown in section Electrical Connections.

Switch the compressor on (I) using the on/off switch located on the front panel or pressure switch - see fig 3 pictures:



Fig. 3 On off switch versions

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

Note!

Duplex Models VT300/300D, VT400/400D are fitted with a sequential start system to reduce electrical loading. You will notice one motor starting a few seconds after the other [single phase only]. This is normal.

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

Note !

Each time the compressor switches off or the power supply is interrupted, you will hear a short hiss of air. You are hearing the unloader valve discharging the residual delivery pipe pressure. This is normal.

4.2) Adjusting Outlet Pressure



Use the pressure regulator to adjust the outlet pressure.

To increase line pressure, rotate the black knob next to the pressure gauge 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.



Fig 4: Gauge layouts

On cabinet [VTS] models, gauges are labelled.



On others:

The smaller gauge is **SELECTED** pressure
The larger is **RECEIVER** pressure

5) Routine Maintenance

Refer to preventative maintenance section for frequency.

5.1) Draining the Air Receiver

Drain condensate from air receiver at a pressure of no more than 2 Bar. Slowly open the red coloured drain tap provided to allow water to flow out – see fig 5.

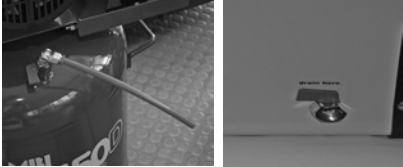


Fig. 5 Drain tap types

Close drain tap when all water has drained off. Draining is not required on dryer equipped models.

Automatic drains where fitted do not require draining, however the condensate bottle will require emptying – see following section “Operation Dryer Models”.

Note !

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

5.2) Check Pressure Relief Valve

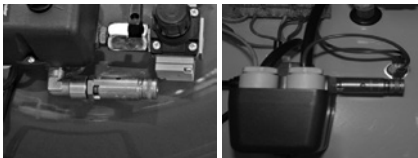


Fig. 6 Pressure relief valve positions

Ensure the air receiver is not pressurised. On “S” models, refer to section 8: Removing Housing Cover

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

6) Operation – Dryer Models

When equipped with an air dryer unit, the compressor will automatically dry the compressed air before it is stored in the air receiver. This happens automatically and requires no additional maintenance. This eliminates the need to manually drain the air receiver.



Fig. 7 Condensate bottle locations

Operation is similar to standard versions with the following change :-

Each time the compressor switches off or the power supply is interrupted, the dryer purge valve opens and automatically activates the drain valve on the after cooler filter allowing the dryer tower to regenerate. All accumulated moisture will discharge into the condensate bottle.

This should be emptied when it reaches $\frac{3}{4}$ full.

Do not exceed the recommended 50% duty cycle, otherwise the dryer will not activate and the humidity of the air will increase. Ensure the after cooler fins are kept clear of accumulated dust.

Note!

It is normal for the VTS 250D units to constantly bleed air from the condensate bottle.

7) Technical

We recommend the compressor has a maximum 50% duty cycle to prolong pump life.

Note !

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 2 thermal overloads. In the event of excessive temperature the compressor will switch off and the external thermal protector will activate. To re-set follow the procedure below-

Models: VT75/75D, VT150/150D, VT200/200D, VT250/250D

Switch off at the pressure switch [see Fig. 2]. Allow 50 minutes for the motor to cool down then switch back on at the pressure switch. The compressor will now restart.

Models: VTS75/75D, VTS150/150D, VTS200/200D, VTS250/250D

Do not switch the compressor off after overheating as this will prevent the internal cooling fans which reduce the temperature inside the housing from running.

Allow 50 minutes for the motor to cool down.



Press the thermal re-set button, you will hear an audible click – see fig 8.

The compressor will now restart.

Fig. 8 Thermal re- set button

Models: VT300/300D, VT400/400D

The re-set is integral with the pressure switch.

The pressure switch will automatically turn off (0) in the event of motor overload.

Turn the pressure switch to the on position [see Fig. 3].

The compressor will now restart.

If the compressor still does not run, switch off immediately and disconnect from the mains supply.

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 outlets restricted

Contact your service engineer to investigate the cause.

8) Removing Housing Cover (VTS Models Only)

For routine maintenance it may be necessary to remove the top cover. Adhere to the following procedure:

Models: VTS 75/75D, 150/150D, 200/200D

Disconnect from the mains power supply and release all the air from the compressor and the air system.

Using the hex key provided, remove the 3 bolts fixing each end cover in place and remove the end covers.

Remove the bolts holding the top cover in place.
Gently lift up the top housing.

Note !

Do not use excessive force as this will strain the electrical and air connections.

Carefully pull apart the electrical multi connector by squeezing the side clips and gently pulling the connector apart. Do not use excessive force.

To release the air connections, push the connector collar in and simultaneously pull the air tube out.

Reassembly is a reverse of the above but check that -

- The air tubes are pushed fully home into the connector and seal
- The electrical connector is secure
- No wires or air tubes are trapped in the housing join

Models: VTS250/250D

Disconnect from the mains power supply and release all the air from the compressor and the air system

Using the hex key provided, remove the 4 bolts fixing the top cover in place and remove the top cover.

Preventative Maintenance

Operation	Daily	Weekly	Annually	2 Years	5 Years
Drain Air Receiver	•				
Replace Air Intake Filter			•		
Check Pressure Relief Activation			•		
Clean After Cooler Fins			•		
Clean Ventilation Grilles			•		
Check Piston Ring				•	
Replace Air Dryer Filter				•	
Desiccant Change				•	
Coalescing Filter Element					•

Above are to be considered minimum frequency

Technical Specification

VT 0.75Hp Pump Specification

Motor Kw / Hp	0.55 / 0.75
Voltage	220/240
Frequency Hz	50
Amps	3.9
Displacement l/min	120

VT 1.5Hp Pump Specification

Motor Kw / Hp	1.1 / 1.5
Voltage [Single phase - 3 phase]	220/240 - 380/415
Frequency Hz	50
Amps [Single phase - 3 phase]	6.8 - 2.9
Displacement l/min	175

VT 2.0Hp Pump Specification

Motor Kw / Hp	1.5 / 2.0
Voltage [Single phase - 3 phase]	220/240 - 380/415
Frequency Hz	50
Amps [Single phase - 3 phase]	9.9 - 3.6
Displacement l/min	220

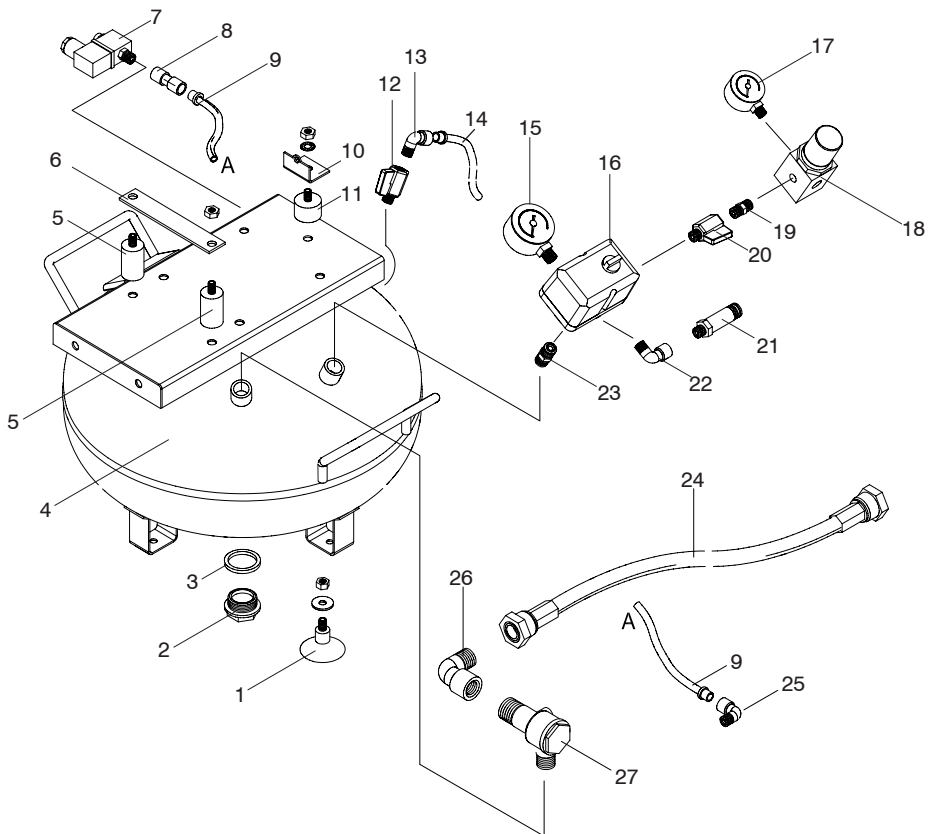
VT 2.5Hp Pump Specification

Motor Kw / Hp	1.84 / 2.5
Voltage [Single phase - 3 phase]	220/240 - 380/415
Frequency Hz	50
Amps [Single phase - 3 phase]	12.9 - 4.6
Displacement l/min	300

VT75

Ref No.	Description	Part no.
1	Rubber foot	BPB0601
2	Inspection plug	BPB0243
3	Inspection plug seal	BPB0502
4	24 litre tank	BPB0260
5	40mm rubber mounting	BPB0272
6	Motor mounting bracket	BPB0321
7	Solenoid c/w cable	BPB0545
8	1/8 x 6mm push fitting	BPB0154
9	6mm black nylon tube	BPB0203
10	Crankcase mounting bracket	BPB0347
11	20mm rubber mounting	BPB0273
12	Drain valve tap	BPB0281
13	3/8 x 10mm tube elbow	BPB0277

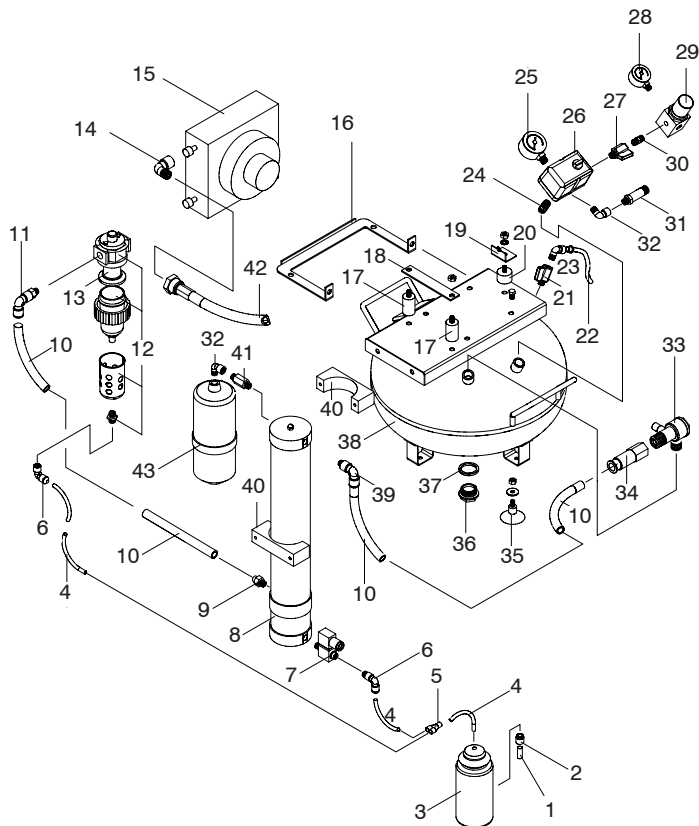
14	Red nylon drain tube	BPB0284
15	50mm tank pressure gauge	BPB0658
16	Pressure switch	BPB0550
17	40mm line pressure gauge	BPB0657
18	Pressure regulator	BPB0510
19	1/4 x 1/4 M adaptor	BPB1078
20	1/4 on-off tap	BPB1079
21	Safety valve	BPB1084
22	1/4 M/F elbow	BPB1139
23	3/8 M adaptor	BPB0283
24	Delivery pipe	BPB0508
25	1/8 x 6mm elbow bush fitting	BPB0044
26	3/8 M/F elbow	BPB0282
27	Non-return valve	BPB0656



VT75D

Ref No.	Description	Part no.
1	Condensate diffuser	BPB0588
2	1/8 x 6mm push tube fitting	BPB0154
3	Condensate bottle - complete	BPB0088
4	1.3m 6mm nylon tube	BPB0203
5	6mm tube divider	BPB0279
6	1/8 x 6mm elbow tube fitting	BPB0044
7	Solenoid valve c/w cable	BPB0545
8	Dryer assembly	BPB0548
9	1/4 x 10mm push tube fitting	BPB0591
10	0.65m 10mm black nylon tube	BPB0551
11	3/8 x 10mm tube swivel elbow	BPB0277
12	Coalescing filter	BPB0258
13	Coalescing filter element	BPB0655
14	3/8 M/F elbow	BPB0282
15	Aftercooler - complete	BPB0560
16	Aftercooler mounting bracket	BPB0557
17	40mm mounting rubber	BPB0272
18	Motor mounting bracket	BPB0321
19	Crankcase mounting bracket	BPB0347
20	20mm mounting rubber	BPB0273
21	Drain valve tap	BPB0281

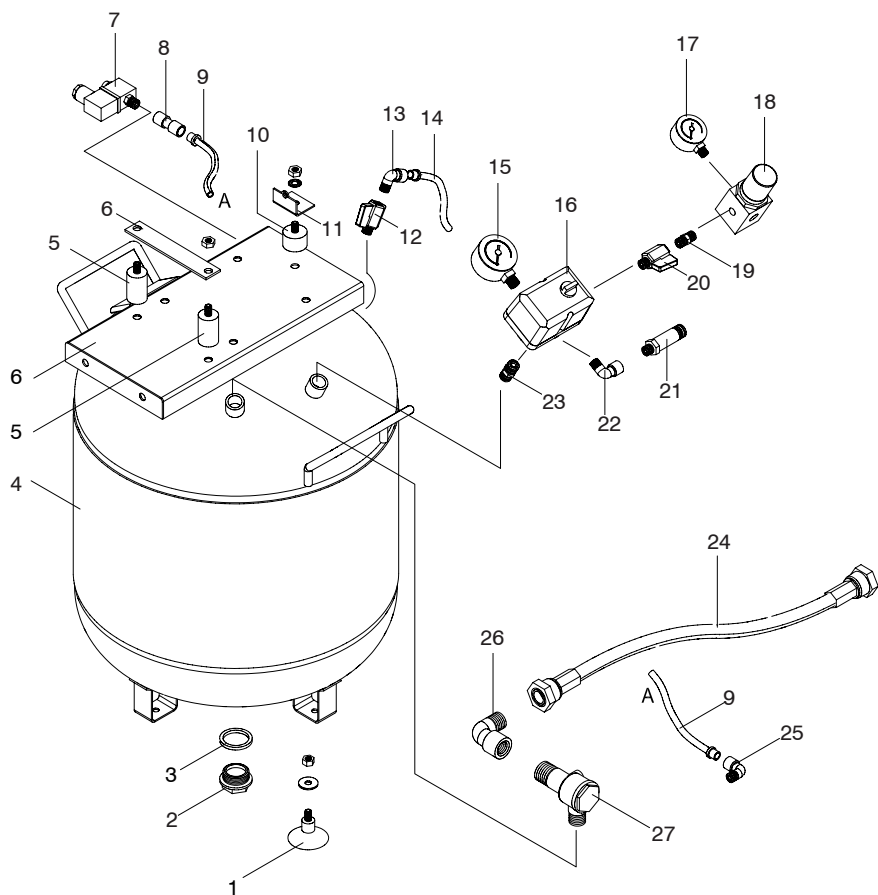
22	Red nylon drain tube	BPB0284
23	3/8 x 10mm tube swivel elbow	BPB0277
24	3/8 M adaptor	BPB0283
25	50mm tank pressure gauge	BPB0658
26	Pressure switch	BPB0550
27	1/4 On-off tap Closing ring	BPB1079
28	40mm line pressure gauge	BPB0657
29	Pressure regulator	BPB0510
30	1/4 M adaptor	BPB1078
31	Safety valve	BPB1084
32	1/4 M/F elbow	BPB1139
33	Non-return valve	BPB0656
34	3/8 x 10mm straight tube conn.	BPB0275
35	Rubber foot	BPB0601
36	Inspection plug	BPB0243
37	Inspection plug seal	BPB0502
38	24 litre tank	BPB0260
39	1/4 x 10mm Tube swivel elbow	BPB0276
40	Dryer mounting clamp	BPB0503
41	Purge tank bleed pipe	BPB0775
42	Delivery pipe	BPB0508
43	Purge tank	BPB0484



VT150 / VT200

Ref No.	Description	Part no.
1	Rubber foot	BPB0601
2	Inspection plug	BPB0243
3	Inspection plug seal	BPB0502
4	50 litre tank	BPB0261
5	40mm mounting rubber	BPB0272
6	Motor mounting bracket [VT150]	BPB0321
7	Solenoid valve c/w cable	BPB0545
8	1/8 x 6mm push fitting	BPB0154
9	0.4m 6mm nylon tubing	BPB0203
10	20mm mounting rubber	BPB0273
11	Crankcase mounting bracket	BPB0347
12	3/8 drain tap	BPB0281
13a	3/8 x 10mm tube elbow [VT200]	BPB0280
13b	3/8 x 10mm tube elbow [VT150]	BPB0277

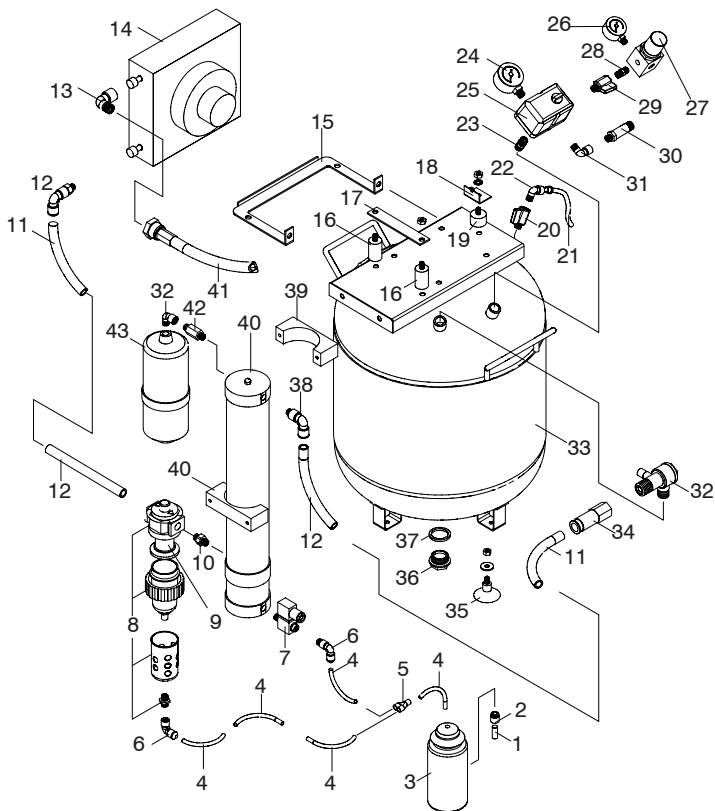
14	0.6m drain tube	BPB0284
15	50mm tank pressure gauge	BPB0658
16	Pressure switch	BPB0550
17	40mm line pressure gauge	BPB0657
18	Pressure regulator	BPB0510
19	1/4 M adaptor	BPB1078
20	On-off tap	BPB1079
21	Safety valve	BPB1084
22	1/4 M/F elbow	BPB1139
23	3/8 M adaptor	BPB0283
24	400mm Delivery pipe	BPB0508
25	1/8 x 6mm elbow tube fitting	BPB0044
26	3/8 M/F elbow	BPB0282
27	Non-return valve	BPB0656



VT150D / VT200D

Ref No.	Description	Part no.
1	Condensate diffuser	BPB0588
2	1/8 x 6mm Push fitting	BPB0154
3	Condensate bottle complete	BPB0088
4	1.1m 6mm Nylon tube	BPB0203
5	6mm Divider	BPB0279
6	1/8 x 6mm Elbow tube fitting	BPB0044
7	Solenoid valve c/w cable	BPB0545
8	Coalescing filter	BPB0258
9	Coalescing filter element	BPB0655
10	1/4 x 3/8 adaptor	BPB0591
11	0.65m 10mm Nylon tube	BPB0551
12	3/8 x 10mm Swivel elbow	BPB0283
13	3/8 M/F elbow	BPB0282
14	Aftercooler	BPB0561
15	Aftercooler bracket	BPB0557
16	40mm Rubber mounting	BPB0272
17a	Motor mounting bracket [VT150D]	BPB0321
17b	Motor mounting bracket [VT200D]	BPB0516
18	Crankcase mounting bracket [VT150D]	BPB0347
19	20mm Rubber mounting	BPB0273
20	3/8 Drain tap	BPB0281
21	0.6m 10mm Drain tube	BPB0284

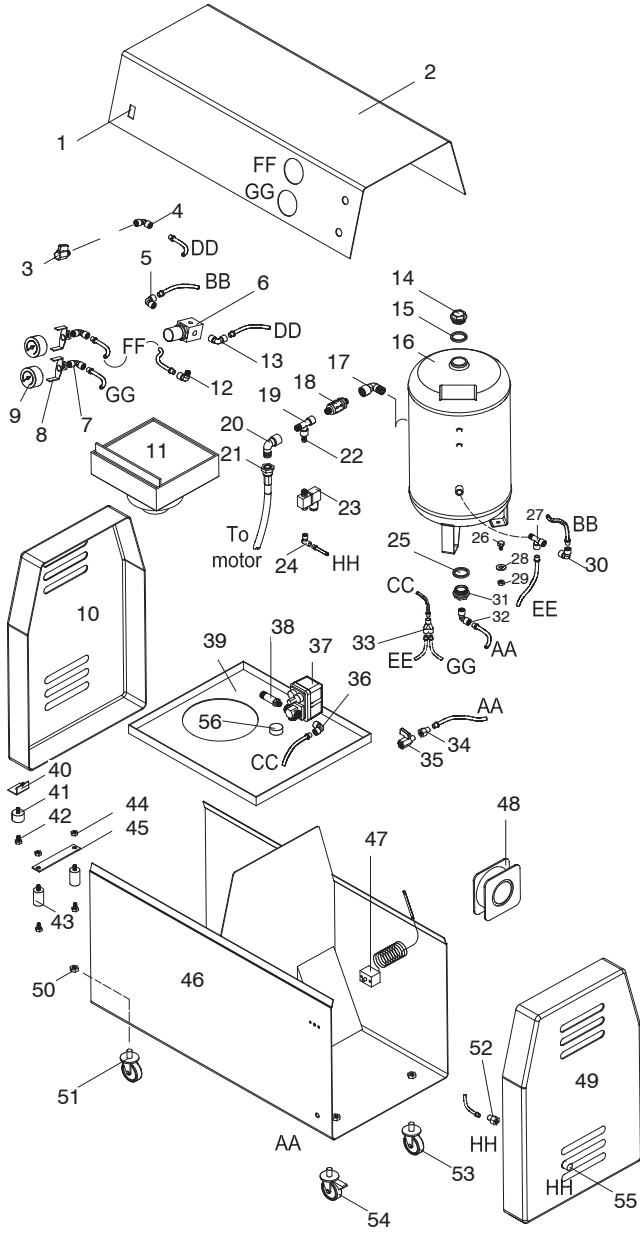
22a	3/8 x 10mm Elbow [VT200D]	BPB0280
22b	3/8 x 10mm Elbow [VT150D]	BPB0277
23	3/8 M adaptor	BPB0283
24	50mm Tank pressure gauge	BPB0658
25	Pressure switch	BPB0550
26	40mm Line pressure gauge	BPB0657
27	Pressure regulator	BPB0510
28	1/4 M adaptor	BPB1078
29	On/off tap	BPB1079
30	Safety valve	BPB1084
31	1/4 M/F elbow	BPB1139
32	Non-return valve	BPB0656
33	50 Litre tank	BPB0261
34	3/8 x 10mm Connector	BPB0275
35	Rubber foot	BPB0601
36	Inspection plug	BPB0243
37	Inspection plug seal	BPB0502
38	1/4 x 10mm Swivel elbow	BPB0276
39	Dryer mounting bracket	BPB0503
40	Dryer assembly	BPB0548
41	400mm Delivery pipe	BPB0508
42	Purge tank bleed valve	BPB0775
43	Purge tank	BPB0484



VTS75 / 150 / 200

Ref No.	Description	Part no.
1	On/Off switch	APT626
2	Cabinet lid	BPB0763
3	On/Off valve	BPB1079
4	1/4BSPF x 10mm stud elbow	BPB0820
5	1/4BSPM x 10mm tube elbow	BPB0276
6	Pressure regulator	BPB0510
7	1/4BSPF x 6mm tube elbow	BPB0758
8	1/4BSP panel mounted gauge	BPB0748
9	1/4BSP panel mounted gauge	BPB0748
10	End panel	BPB0538
11	Cooling fan housing	BPB0767
12	1/4BSPM x 6mm elbow	BPB0044
13	1/4BSPM x 10mm tube elbow	BPB0276
14	1BSP flanged inspection plug	BPB0243
15	Inspection plug seal	BPB0502
16	23ltr vessel	BPB0795
17	3/8BSP M/F plated elbow	BPB0282
18	3/8BSPM non-return valve	BPB0822
19	3/8BSP M/F/F tee	BPB0802
20	3/8BSP M/F plated elbow	BPB0282
21	600mm delivery pipe	BPB0798
22	3/8BSPM x 1/8BSPF bush	BPB0803
23	Solenoid valve / cable assembly	BPB0545
24	1/8BSPF x 6mm elbow	BPB0278
25	Inspection plug seal	BPB0502
26	M8 x 20 Hex screw	BPB0265
27	1/4BSP M/F/F tee	BPB1109
28	M6 x 25 washer	BPB0121

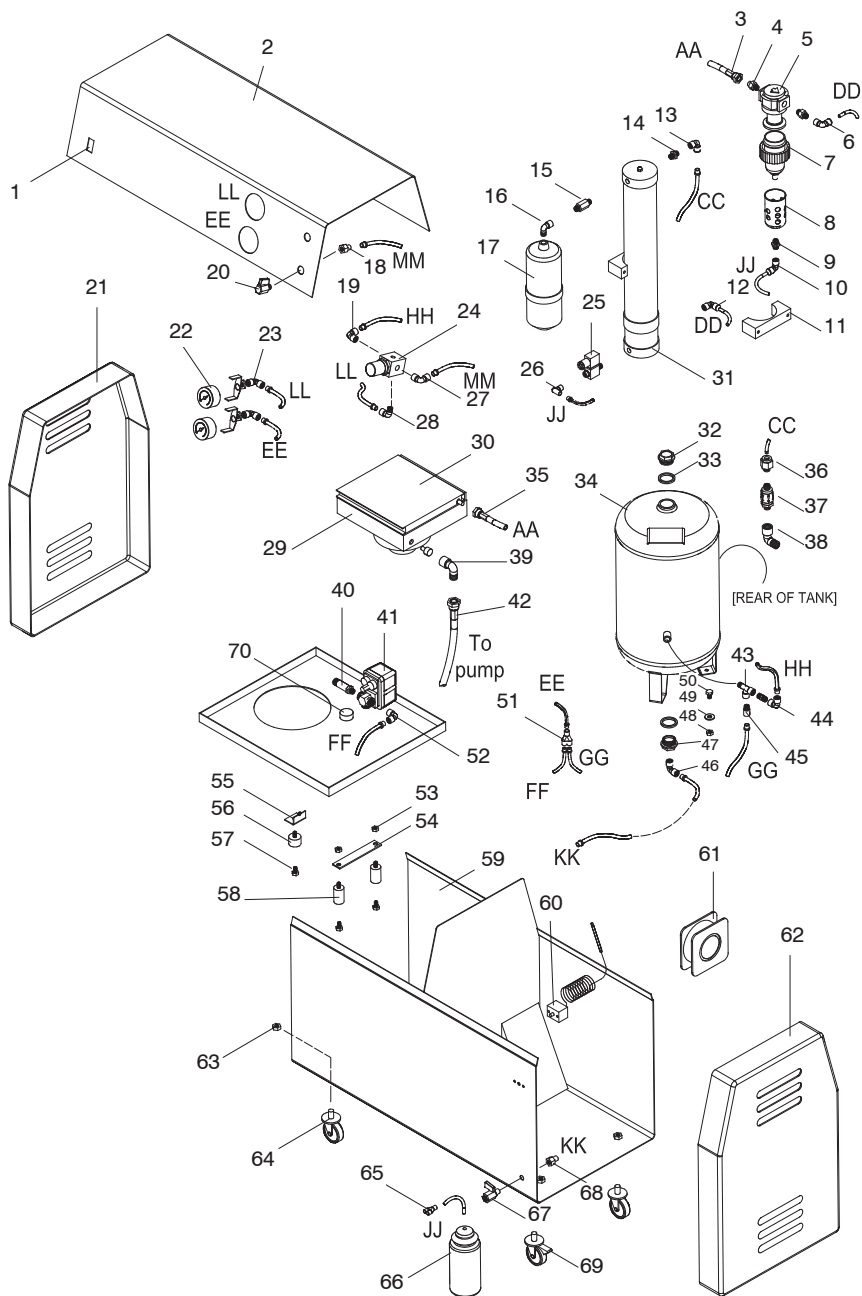
29	M8 nut	BPB0161
30	1/4BSP x 10mm elbow	BPB0276
31	1BSP x 1/4BSP reducing bush	BPB0255
32	1/4BSPM x 6mm Tube swivel elbow	BPB0042
33	6mm tube Y connector	BPB0279
34	3/8BSPF x 6mm tube fitting	BPB0756
35	Drain tap	BPB0281
36	1/4BSPM x 6mm elbow	BPB0042
37	Pressure switch	BPB0550
38	Safety valve	BPB1084
39	Cabinet tray	BPB0764
40	0.75 & 1.5HP crankcase bracket	BPB0347
40	2.0HP crankcase bracket	BPB0517
41	20mm rubber mount	BPB0273
42	M8 nut	BPB0161
43	40mm rubber mount	BPB0272
44	M8 nyloc nut	BPB0266
45	Motor mounting bracket	BPB0321
46	Cabinet base	BPB0762
47	Cutout / reset switch	BPB0722
48	Cooling fan	BPB0727
49	End panel	BPB0538
50	M8 nut	BPB0161
51	Swivel castor	BPB0811
52	1/8BSPF x 6mm tube fitting	BPB0154
53	Swivel castor	BPB0811
54	Swivel castor with brake	BPB0812
55	1/8BSPP silencer	BPB0588
56	Thermal switch	BPB0732



VTS75D / 150D / 200D

Ref No.	Description	Part no.
1	On/off switch	APT626
2	Cabinet lid	BPB0763
3	165mm delivery pipe	BPB0728
4	3/8BSP Bulkhead connector	BPB0749
5	Coalescing filter	BPB0258
6	3/8BSPM x 10mm tube elbow	BPB0277
7	Coalescing filter	BPB0258
8	Coalescing filter	BPB0258
9	Coalescing filter	BPB0258
10	1/8BSPM x 6mm elbow	BPB0044
11	Dryer mounting clamp [two halves]	BPB0503
12	1/4BSPM x 10mm tube elbow	BPB0276
13	1/4BSPM x 10mm tube elbow	BPB0276
14	1/4BSPM x 10mm tube elbow	BPB0276
15	Purge tank bleed pipe	BPB0775
16	1/4BSPT M/F elbow	BPB1139
17	Dryer purge tank	BPB0484
18	1/4BSPF x 10mm elbow	BPB0820
19	1/4BSPM x 10mm tube elbow	BPB0276
20	On/off valve	BPB1079
21	End panel	BPB0538
22	1/4BSP x 63mm 0-160 gauge	BPB0748
23	6mm tube elbow	BPB0758
24	Pressure regulator	BPB0510
25	Solenoid valve / cable assembly	BPB0545
26	1/8BSPF x 6mm tube fitting	BPB0154
27	1/4BSPM x 10mm tube elbow	BPB0276
28	1/6BSPM x 6mm elbow	BPB0044
29	Aftercooler / fan assembly	BPB0862
30	Aftercooler / fan assembly	BPB0862
31	Dryer assembly	BPB0584
32	1BSP flanged inspection plug	BPB0243
33	Inspection plug seal	BPB0502
34	23ltr vessel	BPB0795
35	165mm delivery pipe	BPB0728

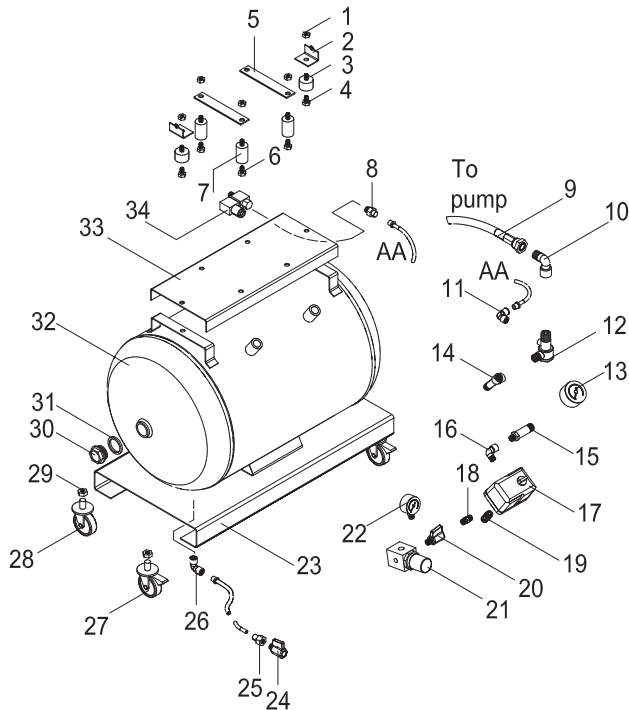
36	3/8BSPF x 10mm tube connector	BPB0275
37	3/8BSPM non-return valve	BPB0822
38	3/8BSP M/F plated elbow	BPB0282
39	3/8BSP M/F plated elbow	BPB0282
40	Safety valve	BPB1084
41	Pressure switch 3/8BSPF	BPB0550
42	400mm delivery pipe	BPB0508
43	1/4BSP M/F/F T piece	BPB1109
44	1/4BSPM x 10mm tube elbow	BPB0276
45	1/4BSPM x 6mm tube fitting	BPB0043
46	1/8BSPM x 6mm tube elbow	BPB0044
47	1BSP x 1/4BSP Flanged bush	BPB0255
48	M8 Hex full nut	BPB0161
49	M8 x 25 washer	BPB0121
50	M8 x 16mm set screw	CP2737
51	6mm Y connector	BPB0279
52	1/4BSPM x 6mm tube elbow	BPB0042
53	M8 Hex full nut	BPB0161
54	0.75/1.5HP Motor mounting bracket	BPB0321
55	0.75/1.5HP Crankcase mtg bracket	BPB0347
55	2HP Crankcase mounting bracket	BPB0517
56	20mm Rubber mount	BPB0273
57	M8 Hex full nut	BPB0161
58	40mm Rubber mount	BPB0272
59	Cabinet base	BPB0762
60	Cutout / Reset switch	BPB0722
61	Cooling fan	BPB0727
62	End panel	BPB0538
63	M8 Hex full nut	BPB0161
64	Swivel castor	BPB0811
65	6mm tube Y connector	BPB0279
66	Water bottle c/w cap and cage	BPB0088
67	Drain valve	BPB0281
68	3/8BSPF x 6mm tube fitting	BPB0756
69	Swivel castor with brake	BPB0812
70	Thermal switch	BPB0732



VT250

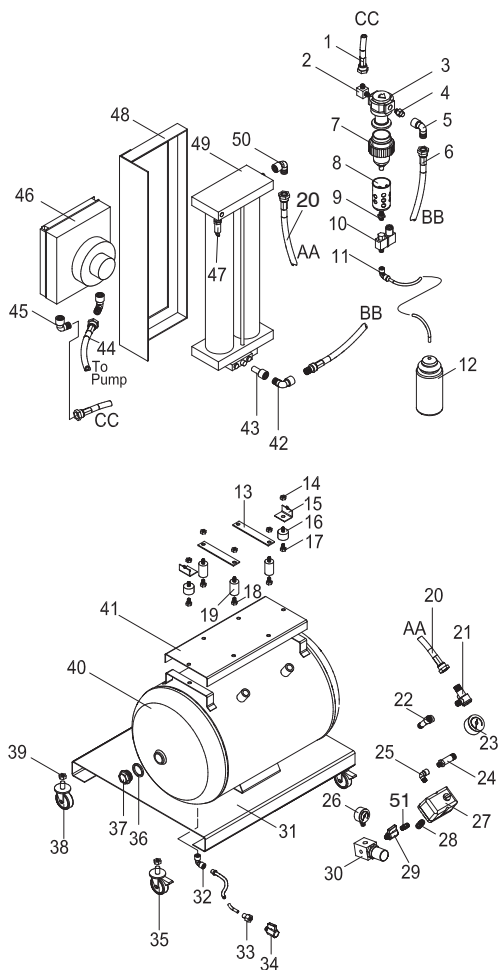
Ref No.	Description	Part no.
1	M8 Hex full nut	BPB0161
2	Crankcase mounting bracket	BPB0517
3	20mm Rubber mount	BPB0273
4	M8 Flanged nut	BPB0130
5	2.0hp Motor mounting bracket	BPB0516
6	M8 Hex full nut	BPB0161
7	40mm rubber mount	BPB0272
8	1/8BSPF x 6mm push tube fitting	BPB0154
9	600mm delivery pipe	BPB0798
10	3/8BSP M/F elbow	BPB0282
11	1/8BSPM x 6mm elbow tube fitting	BPB0044
12	3/8 X 3/8 N/R valve	BPB0656
13	Pressure gauge	BPB1081
14	3/8BSP M/F/F tee	BPB0802
15	Safety valve	BPB1084
16	1/4BSPT M/F elbow	BPB1139
17	Pressure switch	BPB0550

18	1/4BSPT x 1/4BSPMT adaptor	BPB1078
19	3/8BSP x 3/8BSP adaptor	BPB0283
20	On/Off valve	BPB1079
21	Pressure regulator	BPB0510
22	Pressure gauge	BPB0657
23	Base plate	BPB0319
24	Drain valve	BPB0895
25	1/4BSPMT x 1/4 i/d hose tail	BPB1076
26	1/4BSPT M/F elbow	BPB1139
27	Swivel castor with brake	BPB0812
28	Swivel castor	BPB0811
29	M8 hex full nut	BPB0161
30	1BSP Flanged Inspection plug	BPB0243
31	Inspection plug seal	BPB0502
32	59 litre vessel	BPB0230
33	Motor Mtg bracket	BPB0343
34	Solenoid valve / cable assembly	BPB0545



VT250D

Ref No.	Description	Part no.
1	270mm delivery pipe	BPB0858
2	3/8BSP M/F elbow	BPB0614
3	Coalescing filter	BPB0983
4	3/8BSP x 3/8BSP adaptor	CP0713
5	3/8BSP M/F elbow	BPB0282
6	185mm Delivery pipe	BPB0357
7	Coalescing filter	BPB0983
8	Coalescing filter	BPB0983
9	Coalescing filter	BPB0983
10	Solenoid valve / cable assembly	BPB0545
11	1/8BSPF x 6mm tube elbow fitting	BPB0278
12	Water bottle / black cap & cage	BPB0088
13	Motor mounting bracket	BPB0516
14	M8 Hex full nut	BPB0161
15	Crankcase mounting bracket	BPB0517
16	20mm rubber mount	BPB0273
17	M8 Flanged nut	BPB0130
18	M8 Hex full nut	BPB0161
19	40mm rubber mount	BPB0272
20	600mm delivery pipe	BPB0798
21	3/8 x 3/8 Non-return valve	BPB0656
22	3/8BSP M/F/F tee	BPB0802
23	Pressure gauge	BPB1081
24	Safety valve	BPB1084
25	1/4BSP T M/F elbow	BPB1139
26	Pressure gauge	BPB0657



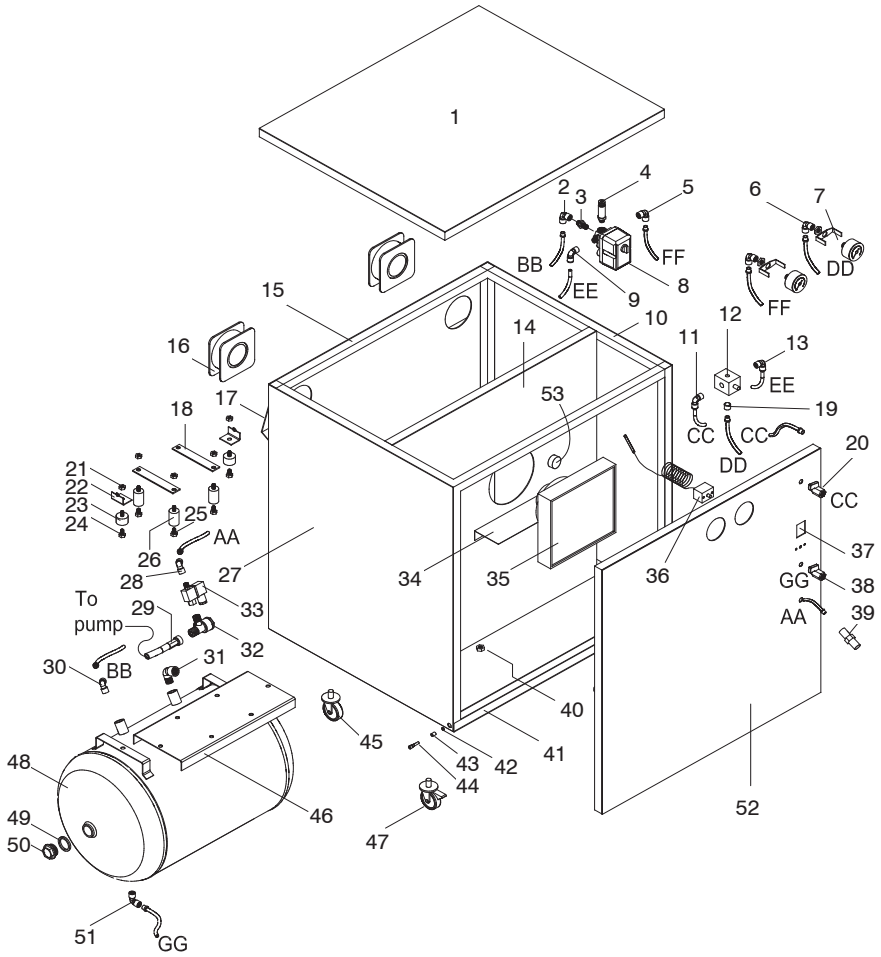
27	Pressure switch	BPB0550
28	3/8BSP x 3/8BSP adaptor	BPB0283
29	On/Off valve	BPB1079
30	Pressure regulator	BPB0510
31	Base plate	BPB0315
32	1/4BSP T M/F elbow	BPB1139
33	1/4BSPMT x 1/4 i/d hose tail	BPB1076
34	Drain valve	BPB0895
35	Swivel castor with brake	BPB0812
36	Inspection plug seal	BPB0502
37	1BSP Flanged inspection plug	BPB0243
38	Swivel castor	BPB0811
39	M8 Hex full nut	BPB0161

40	59ltr vessel	BPB0230
41	Motor mounting bracket	BPB0343
42	1/4BSP T M/F elbow	BPB1139
43	1/4BSP M/F extension piece	BPB0150
44	400mm Delivery pipe	BPB0508
45	3/8BSP M/F plated elbow	BPB0282
46	After-cooler c/w fittings and guard	BPB0860
47	Safety valve	BPB1084
48	After-cooler / dryer mounting brkt.	BPB0330/0331
49	Twin tower dryer	BPB0836
50	3/8BSP Outlet elbow	BPB0629
51	1/4BSPMT x 1/4BSPMT adaptor	BPB1078

VTS250

Ref No.	Description	Part no.
1	Top panel	BPB0354
2	3/8BSPF x 10mm tube elbow	BPB0593
3	3/8BSP Bulkhead connector	BPB0749
4	Safety valve	BPB1084
5	1/4BSPM x 6mm tube elbow	BPB0042
6	1/4BSPF x 6mm tube elbow	BPB0758
7	1/4BSP x 63mm 0-160 gauge	BPB0748
8	Pressure switch	BPB0550
9	1/4BSPM x 6mm tube elbow	BPB0042
10	Cabinet: RH panel	BPB0352
11	1/4BSPM x 10mm tube elbow	BPB0276
12	Pressure regulator	BPB0510
13	1/4BSPM x 10mm tube elbow	BPB0276
14	Cabinet centre panel	BPB0353
15	Cabinet back panel	BPB0350
16	Cooling fan	BPB0727
17	Fan guard	BPB0355
18	2.0HP Motor mounting bracket	BPB0516
19	1/8BSPF x 6mm push fitting	BPB0154
20	On/Off valve	BPB1079
21	M8 Hex full nut	BPB0161
22	2.0HP Crankcase mounting brkt.	BPB0517
23	20mm Rubber mount	BPB0273
24	M8 Flanged nut	BPB0130
25	M8 Hex full nut	BPB0161
26	40mm Rubber mount	BPB0272

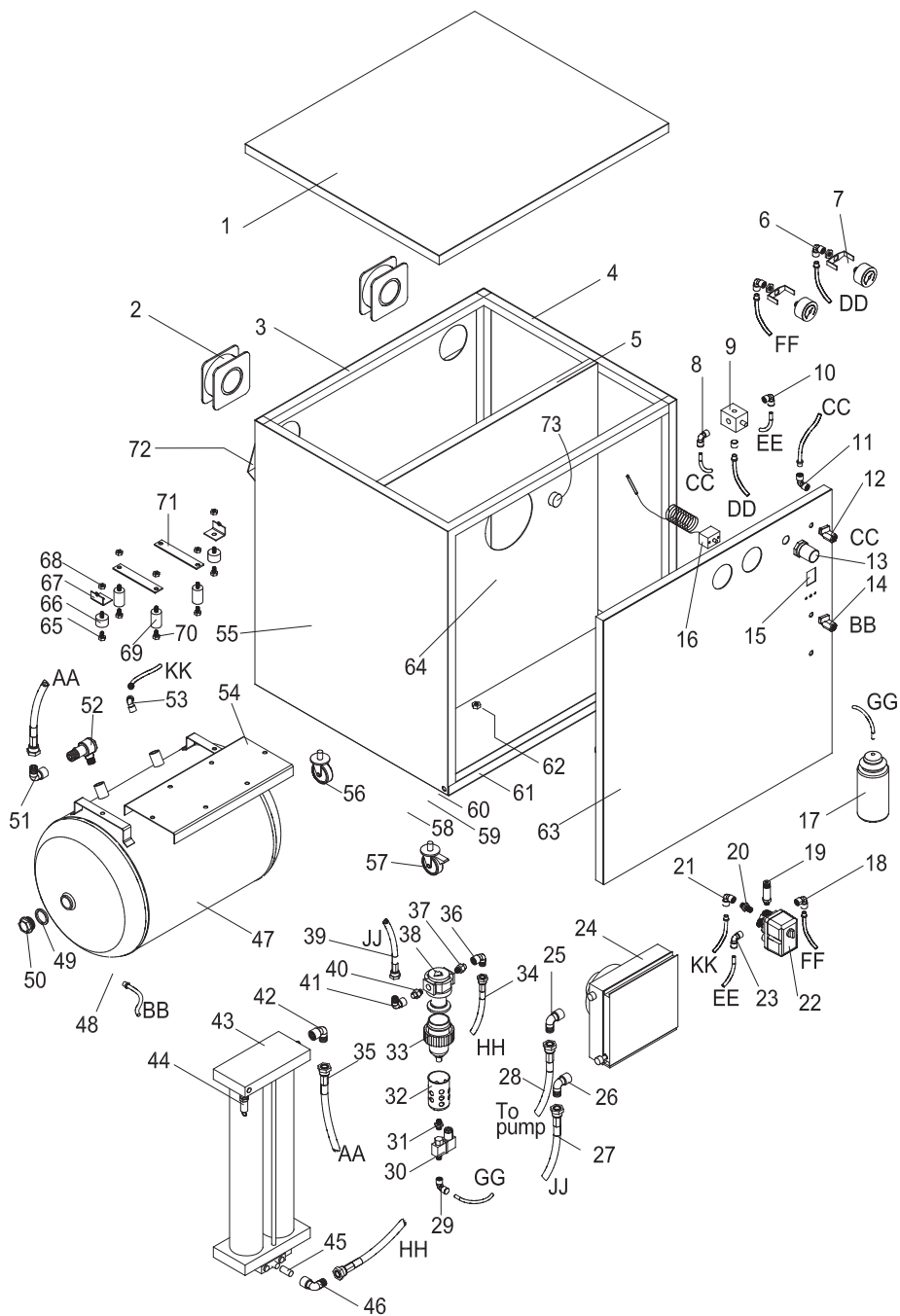
27	Cabinet LH panel	BPB0351
28	1/8BSPF x 6mm elbow	BPB0278
29	400mm Delivery pipe	BPB0508
30	3/8BSPM x 10mm tube elbow	BPB0277
31	3/8BSP M/F elbow	BPB0282
32	Non-return valve	BPB0656
33	Solenoid valve / cable assembly	BPB0545
34	After-cooler mounting bracket	BPB0336
35	Cooling fan / housing: Large	BPB0767
36	Cutout / Reset switch	BPB0722
37	On/Off switch	APT626
38	Drain valve	BPB0895
39	1/8BSP Silencer	BPB0588
40	M8 Hex full nut	BPB0161
41	Cabinet base	BPB0348
42	Retaining washer	BPB0559
43	Spacer	BPB0082
44	M6 x 35mm caphead screw	BPB0131
45	Swivel castor	BPB0973
46	Motor mounting plate	BPB0343
47	Swivel castor c/w brake	BPB0974
48	59ltr vessel	BPB0230
49	Inspection plug seal	BPB0502
50	1BSP Flanged inspection plug	BPB0243
51	1/4BSPM x 6mm tube elbow	BPB0042
52	Cabinet front panel	BPB0349
53	Thermal switch	BPB0732



VTS250D

Ref No.	Description	Part no.
1	Top panel	BPB0354
2	Cooling fan	BPB0727
3	Back panel	BPB0350
4	Cabinet RH panel	BPB0352
5	Cabinet centre panel	BPB0353
6	1/4BSPF x 6mm tube elbow	BPB0758
7	1/4BSP x 63mm 0-160 gauge	BPB0748
8	1/4BSPM x 10mm tube elbow	BPB0276
9	Pressure regulator	BPB0510
10	1/4BSPM x 10mm tube elbow	BPB0276
11	1/4BSPM x 10mm elbow	BPB0820
12	On/Off valve	BPB1079
13	1/4BSP Regulator	BPB0510
14	Drain valve	BPB0895
15	On/Off switch	APT626
16	Cutout/Reset switch	BPB0722
17	Water bottle c/w cap and cage	BPB0088
18	1/4BSPM x 10mm tube elbow	BPB0276
19	Safety valve	BPB1084
20	3/8BSP Bulkhead connector	BPB0749
21	3/8BSPF x 10mm tube elbow	BPB0593
22	Pressure switch	BPB0550
23	1/4BSPM x 10mm tube elbow	BPB0276
24	Aftercooler c/w fittings / guard	BPB0869
25	3/8BSP M/F plated elbow	BPB0282
26	3/8BSP M/F plated elbow	BPB0282
27	165mm Delivery pipe	BPB0728
28	600mm Delivery pipe	BPB0798
29	1/8BSPF x 6mm elbow	BPB0278
30	Solenoid valve / cable assembly	BPB0545
31	Coalescing filter: manual drain	BPB0983
32	Coalescing filter: manual drain	BPB0983
33	Coalescing filter: manual drain	BPB0983
34	400mm Delivery pipe	BPB0508
35	600mm Delivery pipe	BPB0798
36	3/8BSP M/F elbow	BPB0282

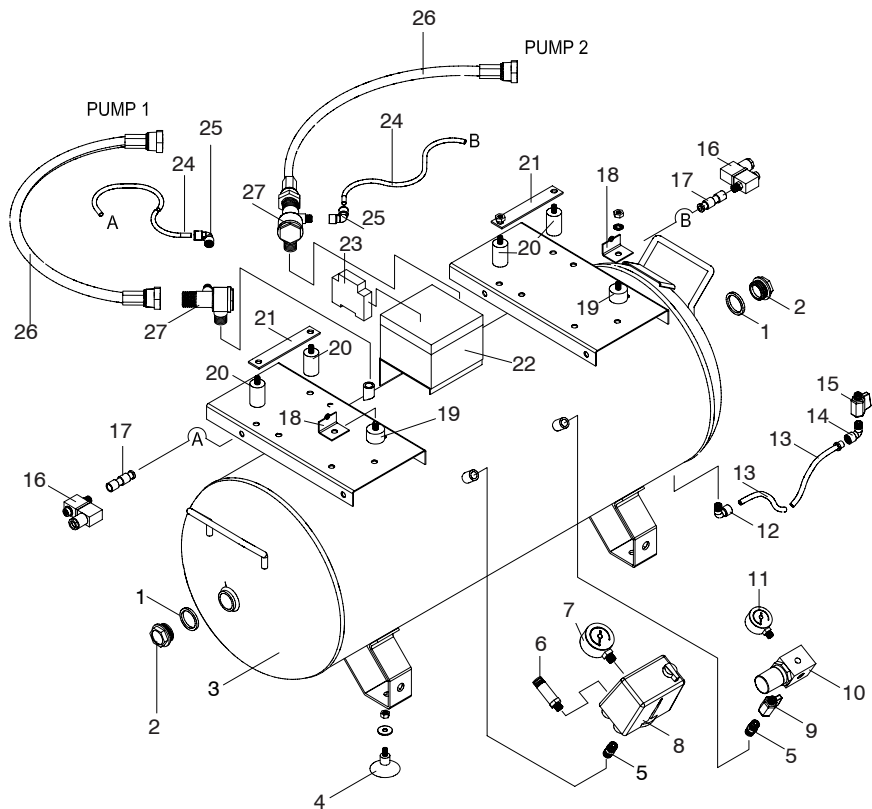
37	3/8BSP Bulkhead connector	BPB0749
38	Coalescing filter: manual drain	BPB0983
39	165mm Delivery pipe	BPB0728
40	3/8BSP Bulkhead connector	BPB0749
41	3/8BSP M/F elbow	BPB0282
42	3/8BSP Elbow	BPB0629
43	Twin tower dryer	BPB0758
44	1/4BSP Relief valve: 10bar	BPB1084
45	1/4BSP M/F Extension piece	BPB0150
46	3/8BSP M/F elbow	BPB0282
47	59ltr vessel	BPB0230
48	1/4BSPM x 6mm tube elbow	BPB0042
49	Inspection plug seal	BPB0502
50	1BSP Flanged inspection plug	BPB0243
51	3/8BSP M/F elbow	BPB0282
52	Non-return valve	BPB0656
53	3/8BSPF x 10mm tube elbow	BPB0593
54	Motor mounting plate	BPB0343
55	Cabinet LH panel	BPB0351
56	Swivel castor	BPB0974
57	Swivel castor c/w brake	BPB0973
58	M6 x 35mm cap head bolt	BPB0131
59	Spacer	BPB0082
60	Retaining washer	BPB0559
61	Cabinet base	BPB0348
62	M8 Hex nut	BPB0161
63	Cabinet front panel	BPB0349
64	After-cooler mounting bracket	BPB0336
65	M8 Flanged nut	BPB0130
66	20mm Rubber mount	BPB0273
67	2.0HP Crankcase mounting bracket	BPB0517
68	M8 Hex nut	BPB0161
69	40mm Rubber mount	BPB0272
70	M8 Hex nut	BPB0161
71	2.0HP motor mounting bracket	BPB0516
72	Fan guard	BPB0355
73	Thermal switch	BPB0732



VT300 / VT400

Ref No.	Description	Part no.
1	Inspection plug seal	BPB0502
2	Inspection plug	BPB0243
3	100 Litre tank	BPB0262
4	Rubber foot	BPB0601
5	3/8 M adaptor	BPB0283
6	Safety valve	BPB1084
7	Tank pressure gauge	BPB0658
8	Pressure switch	BPB0549
9	3/8 On/off tap	BPB0535
10	Pressure regulator	BPB0511
11	Line pressure gauge	BPB0657
12	3/8 M/F elbow	BPB0282
13	Drain tube	BPB0199

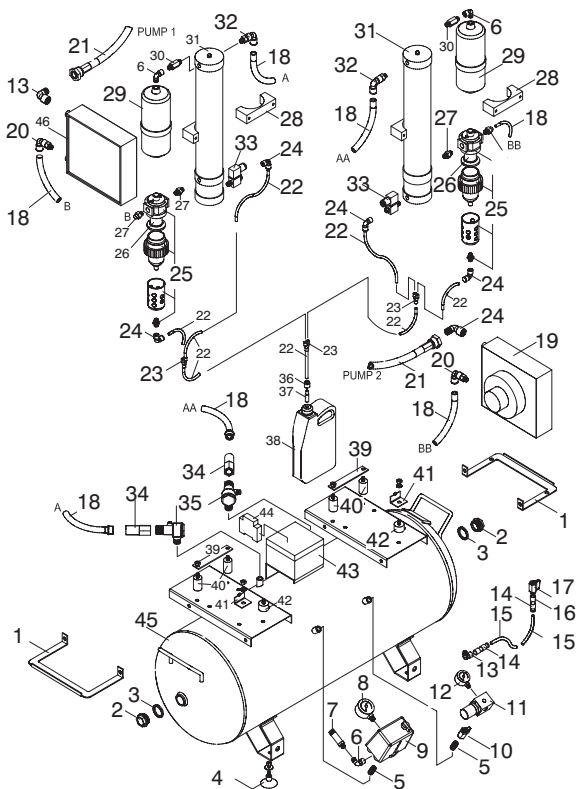
14	3/8 x 1/4 Hose tail	BPB0652
15	Drain valve	BPB0281
16	Solenoid c/w cable	BPB0545
17	1/8 x 6mm Push fitting	BPB0154
18	Crankcase mounting bracket [VT300]	BPB0347
19	20mm Rubber mounting	BPB0273
20	40mm Rubber mounting	BPB0272
21	Motor mounting bracket [VT300]	BPB0321
22	Electrics enclosure	BPB0513
23	Sequential timer	BPB0512
24	6mm Nylon tube	BPB0203
25	1/8 x 6mm Elbow push fitting	BPB0044
26	Delivery hose	BPB0508
27	Non return valve	BPB0656



VT300D / VT400D

Ref No.	Description	Part no.
1	Aftercooler mounting bracket LH	BPB0863
2	Inspection plug	BPB0243
3	Inspection plug seal	BPB0502
4	Rubber foot	BPB0601
5	3/8 M adaptor	BPB0283
6	1/4 M elbow	BPB1139
7	Safety valve	BPB1084
8	50mm Tank pressure gauge	BPB0658
9	Pressure switch	BPB0549
10	3/8 on/off tap	BPB0535
11	Pressure regulator	BPB0511
12	40mm Line pressure gauge	BPB0657
13	3/8 M/F elbow	BPB0282
14	3/8 x 1/4 Hose tail	BPB0652
15	Drain tube	BPB0199
16	Drain tube clamp	BPB0200
17	Drain valve	BPB0281
18	1.25m x 10mm Tube	BPB0551
19	Aftercooler R/H	BPB0561
20	3/8 x 10mm Swivel elbow	BPB0593
21	Delivery tube	BPB0508
22	1m 6mm Nylon tube	BPB0203
23	6mm Tube divider	BPB0279

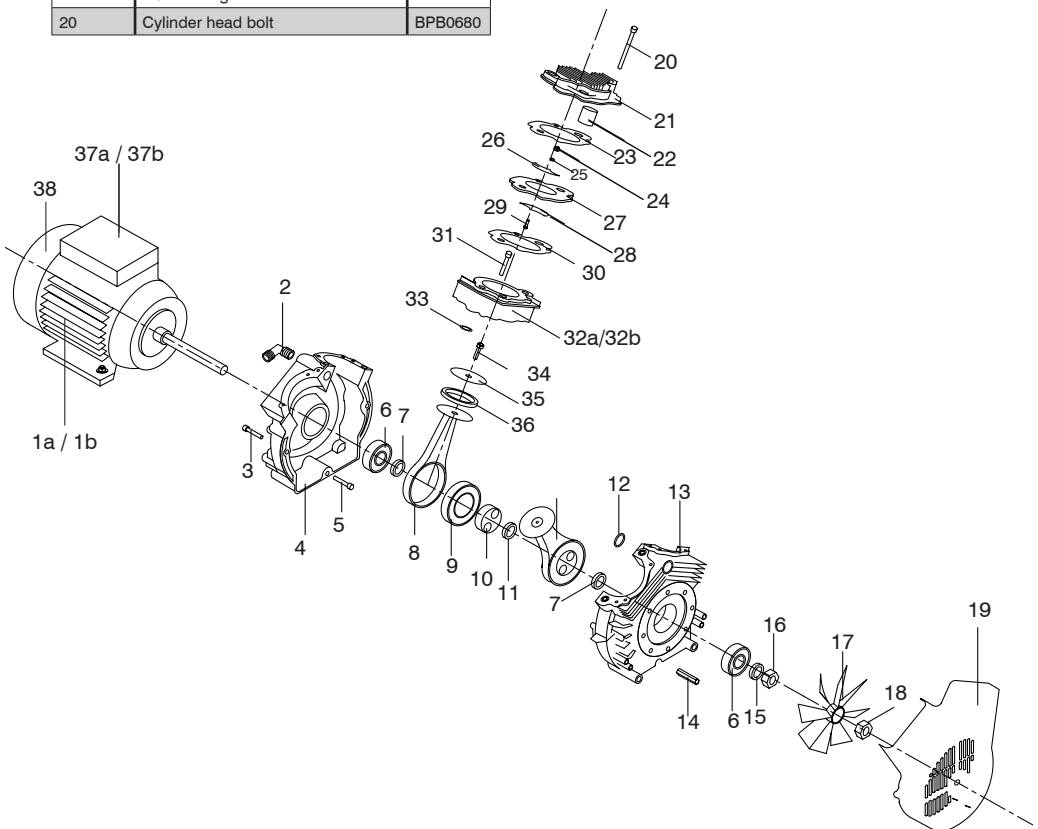
24	1/8 x 6mm Elbow	BPB0044
25	Coalescing filter	BPB0258
26	Coalescing filter element	BPB0655
27	1/4 x 3/8 Adaptor	BPB0591
28	Dryer mounting clamp	BPB0503
29	Purge tank	BPB0484
30	Purge tank bleed pipe	BPB0775
31	Dryer assembly	BPB0548
32	1/4 x 10mm Swivel elbow	BPB0276
33	Solenoid valve c/w cable	BPB0545
34	3/8 x 10mm Connector	BPB0275
35	Non return valve	BPB0656
36	1/8 x 6mm Push fitting	BPB0154
37	Condensate diffuser	BPB0588
38	Condensate bottle	BPB0587
39	Motor mounting bracket [VT300D]	BPB0321
39	Motor mounting bracket [VT400D]	BPB0516
40	40mm Rubber mounting	BPB0272
41	Crankcase mounting bracket [VT300D]	BPB0347
41	Crankcase mounting bracket [VT400D]	BPB0517
42	20mm Rubber mounting	BPB0273
43	Electrics enclosure	BPB0513
44	Sequential timer	BPB0512
45	100 Litre tank	BPB0262
46	Aftercooler L/H	BPB0865



Motor / Pump Parts: VT75 / VT75D / VT150 / VT150D / VT300/VT300D

Ref No.	Description	Part no.
1a	Motor VT75	BPB0663
1b	Motor VT150	BPB0664
2a	3/8 Elbow	BPB0614
2b	3/8 Elbow	BPB0654
3	Block fixing	BPB0665
4	Block motor side	BPB0666
5	Block screw	BPB0667
6	Block bearing	BPB0668
7	Short spacer	BPB0669
8	Con rod	BPB0670
9	Con rod bearing	BPB0671
10	Eccentric	BPB0672
11	Large spacer	BPB0673
12	Block "O" ring	BPB0674
13	Block fan side	BPB0675
14	Stud bolt	BPB0676
15	16mm washer	BPB0677
16	M16 Nut	BPB0678
17	Fan	BPB0625
18	M16 Fan nut	BPB0679
19	Fan cowl	BPB0626
20	Cylinder head bolt	BPB0680

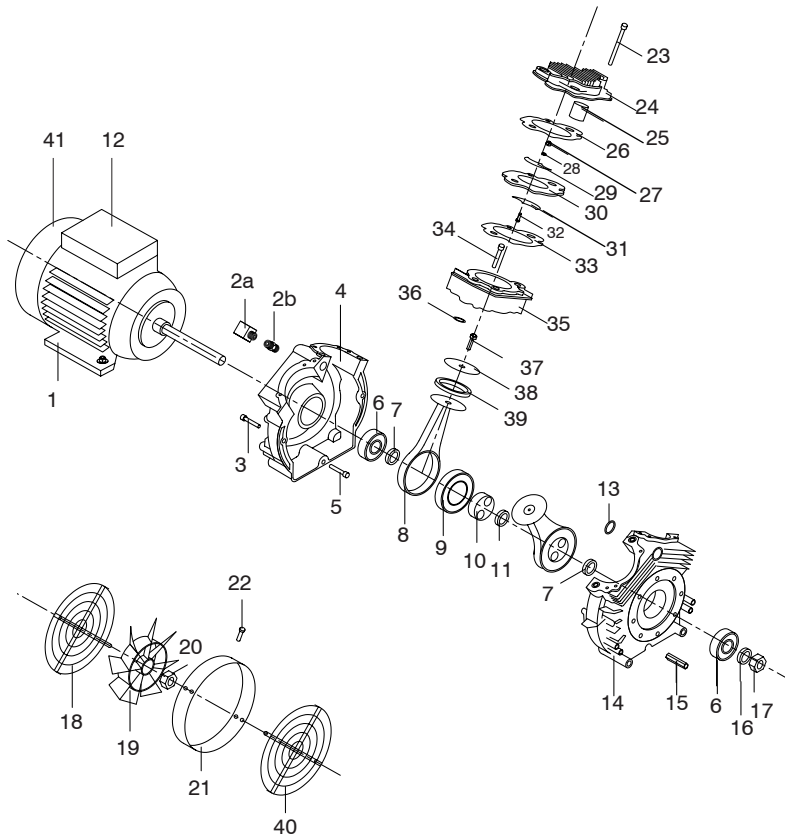
21	Cylinder head	BPB0681
22	Intake filter	BPB0682
23	Cylinder head gasket	BPB0620
24	Valve plate nut	BPB0683
25	Valve plate washer	BPB0684
26	Outlet valve strip	BPB0685
27	Valve plate	BPB0686
28	Inlet valve strip	BPB0685
29	Valve strip bolt	BPB0687
30	Valve plate gasket	BPB0621
31	Cylinder bolt	BPB0688
32a	Cylinder VT75	BPB0689
32b	Cylinder VT150	BPB0690
33	Cylinder "O" ring	BPB0691
34	Top washer bolt	BPB0692
35	Top washer	BPB0693
36	Piston seal	BPB0623
37a	Capacitor VT75	BPB0695
37b	Capacitor VT150	BPB0696
38	Motor fan cover	BPB0618



Motor / Pump Parts: VT200 / VT200D / VT400 / VT400D

Ref No.	Description	Part no.
1	Motor VT200	BPB0697
2a	Elbow	BPB0614
2b	3/8BSP M/M Equal adaptor	BPB0654
3	Block fixing	BPB0665
4	VT200 Block motor side	BPB0699
5	Block screw	BPB0667
6	Block bearing	BPB0668
7	Short spacer	BPB0669
8	VT200 Con rod	BPB0700
9	Con rod bearing	BPB0671
10	Eccentric	BPB0672
11	Large spacer	BPB0673
12	VT200 Capacitor	BPB0701
13	Block "O" ring	BPB0674
14	VT200 Block fan side	BPB0702
15	Stud bolt	BPB0676
16	16mm washer	BPB0677
17	M16 Nut	BPB0678
18	Inner fan cover	BPB0703
19	Fan	BPB0704
20	M16 Fan nut	BPB0679

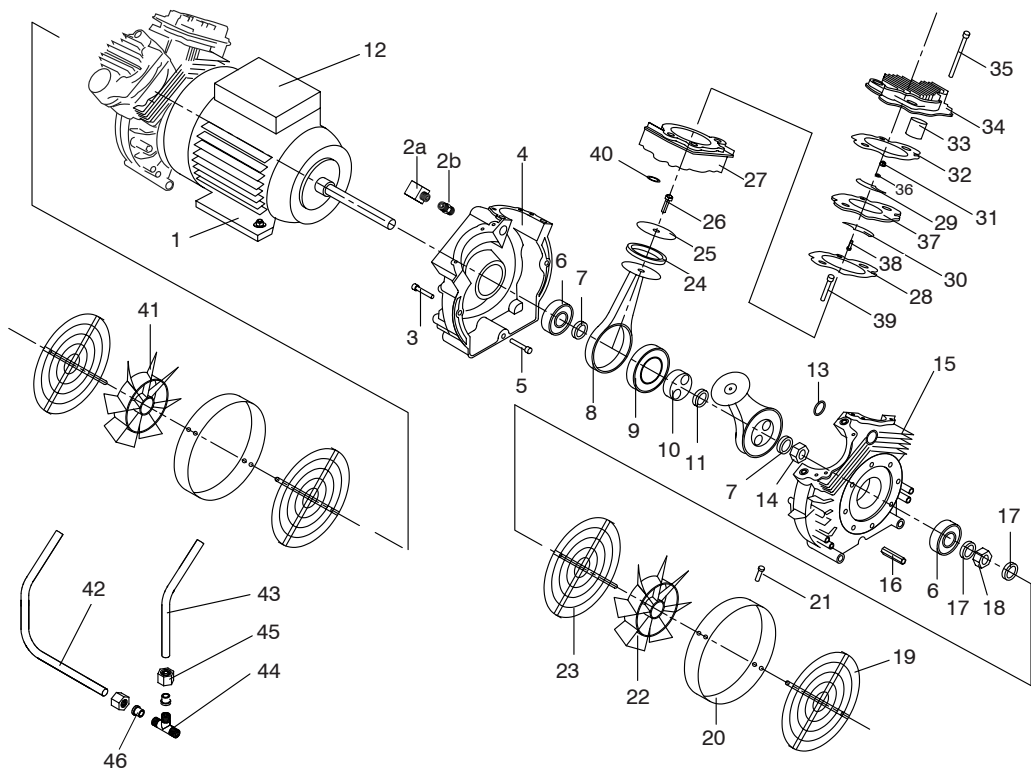
21	Fan ring	BPB0705
22	Fan cover fixing	BPB0706
23	Cylinder head bolt	BPB0680
24	Cylinder head	BPB0681
25	Intake filter	BPB0682
26	Cylinder head gasket	BPB0620
27	Valve plate nut	BPB0683
28	Valve plate washer	BPB0684
29	Outlet valve strip	BPB0685
30	Valve plate	BPB0686
31	Inlet valve strip	BPB0685
32	Valve strip bolt	BPB0687
33	Valve plate gasket	BPB0707
34	Cylinder bolt	BPB0688
35	Cylinder VT200	BPB0708
36	Cylinder "O" ring	BPB0691
37	Top washer bolt	BPB0692
38	Top washer	BPB0709
39	Piston seal	BPB0710
40	Outer fan cover	BPB0716
41	Motor fan cover	BPB0619



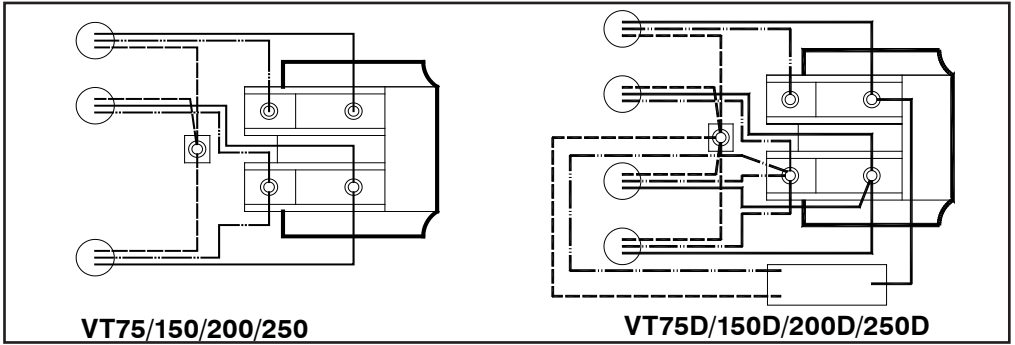
Motor / Pump Parts: VT250 / VT250D / VTS250 / VTS250D

Ref No.	Description	Part no.
1	Motor VT250	BPB0995
2a	Outlet connector	BPB0614
2b	Outlet connector	BPB0654
3	Block fixing	BPB0665
4	Block motor side	BPB0666
5	Block screw	BPB0667
6	Block bearing	BPB0668
7	Short spacer	BPB0669
8	Con rod	BPB0670
9	Con rod bearing	BPB0671
10	Eccentric	BPB0672
11	Large spacer	BPB0673
12	Capacitor	BPB0701
13	Block O ring	BPB0674
14	Eccentric nut	BPB0984
15	Block fan side	BPB0675
16	Stud bolt	BPB0676
17	Washer	BPB0677
18	M16 nut	BPB0678
19	VT250 Outer fan cover	BPB0991
20	VT250 fan ring	BPB0990
21	Fan cover fixing	BPB0706
22	VT250 Right hand fan	BPB0988

23	VT250 Inner fan cover	BPB0987
24	Piston seal	BPB0623
25	Top washer	BPB0693
26	Top washer screw	BPB0692
27	Cylinder	BPB0690
28	Valve plate gasket	BPB0621
29	Inlet valve strip	BPB0685
30	Outlet valve strip	BPB0685
31	Valve plate nut	BPB0683
32	Cylinder head gasket	BPB0620
33	Inlet filter	BPB0682
34	Cylinder head	BPB0681
35	Cylinder head bolt	BPB0680
36	Valve plate washer	BPB0684
37	Valve plate	BPB0686
38	Valve plate bolt	BPB0687
39	Cylinder bolt	BPB0688
40	Cylinder O ring	BPB0691
41	VT250 Left hand fan	BPB0989
42	90° connecting pipe	BPB0993
43	Straight pipe	BPB0994
44	Tee piece	BPB0992
45	Connecting pipe nut	BPB0986
46	Connecting pipe olive	BPB0985

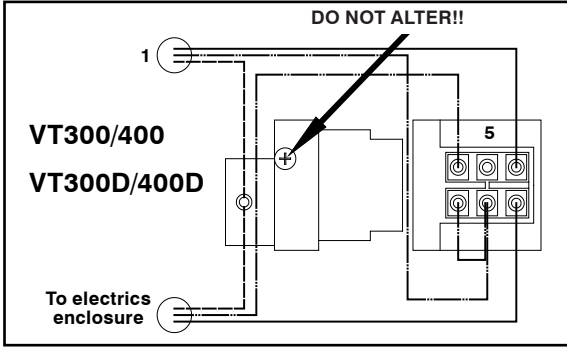


Wiring Diagrams - SINGLE PHASE- VT



VT75/150/200/250

VT75D/150D/200D/250D



VT300/400
VT300D/400D

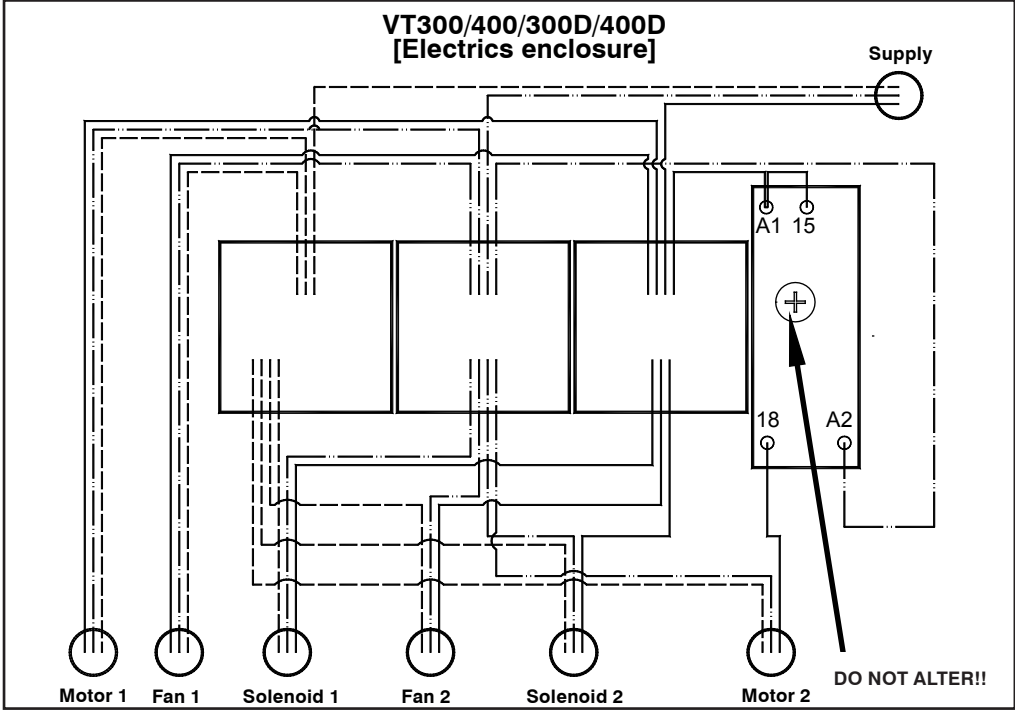
DO NOT ALTER!!

To electrics enclosure

KEY:

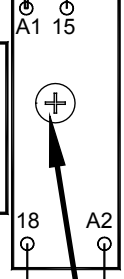
- Live
- - - Neutral
- Earth

- 1 - Supply
- 2 - Solenoid
- 3 - Earth
- 4 - Motor
- 5 - Pressure Switch
- 6 - Cooling fan
- 7 - Timer box [VT250D only]



VT300/400/300D/400D
[Electrics enclosure]

Supply

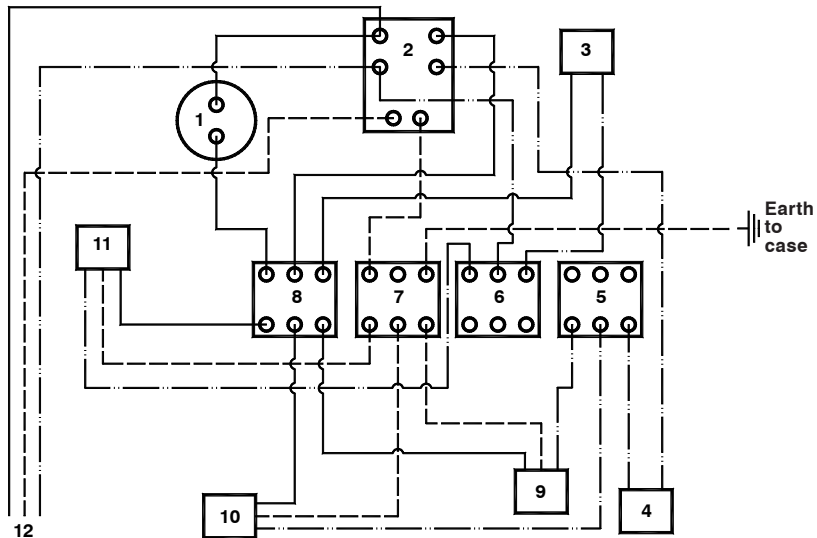


DO NOT ALTER!!

Motor 1 Fan 1 Solenoid 1 Fan 2 Solenoid 2 Motor 2

Wiring Diagrams - SINGLE PHASE - VTS

VTS75 150 200

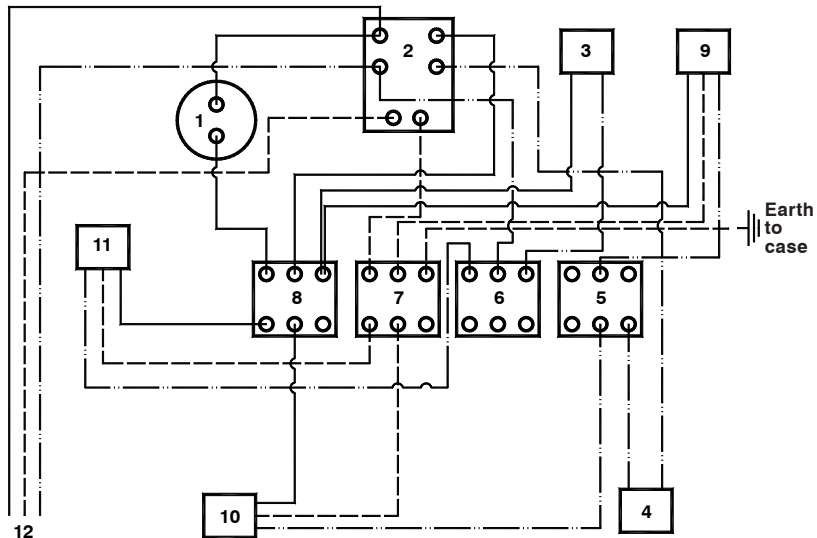


- | | | |
|------------------------|-----------------------------|------------------|
| 1 - Thermal fan switch | 4 - Thermal trip | 10 - Compressor |
| 2 - Pressure switch | 5,6,7 & 8 Connection blocks | 11 - Cooling fan |
| 3 - Exhaust fan | 9 - Solenoid | 12 - Power in |

KEY:

- Live
 - Neutral
 - Earth

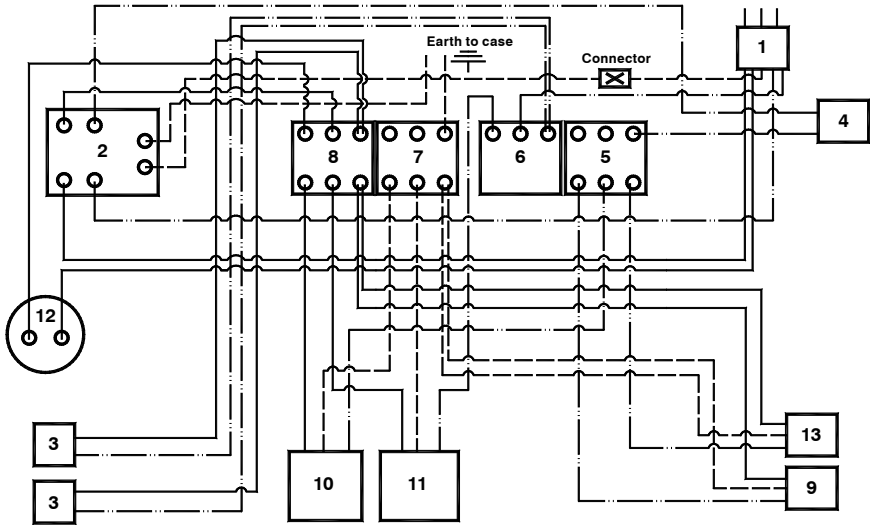
VTS75D 150D 200D



- | | | |
|------------------------|-----------------------------|------------------|
| 1 - Thermal fan switch | 4 - Thermal trip | 10 - Compressor |
| 2 - Pressure switch | 5,6,7 & 8 Connection blocks | 11 - Cooling fan |
| 3 - Exhaust fan | 9 - Solenoid | 12 - Power in |

Wiring Diagrams - SINGLE PHASE - VTS *cont'd*

VTS250 / 250D



- | | | |
|---------------------|-----------------------------|---------------------------|
| 1 - Power in | 5,6,7 & 8 Connection blocks | 12 - Thermal fan switch |
| 2 - Pressure switch | 9 - Solenoid | 13 - Timer box |
| 3 - Cooling fans | 10 - Motor | Note! Timer box only used |
| 4 - Thermal trip | 11 - Aftercooler fan | on Dryer models |

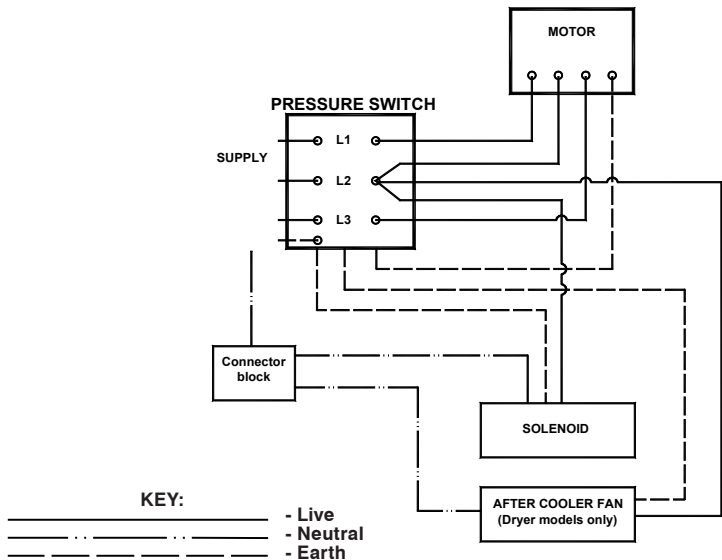
NOTE!
The cooling fans remain live even with the power switch in the "OFF" position

KEY:

- | | |
|-------|-----------|
| _____ | - Live |
| _____ | - Neutral |
| _____ | - Earth |

Wiring Diagrams - THREE PHASE

VT150/200/250 and 150/200/250D



VT300/400/300D/400D

