



**PART 1; PRODUCT INTRODUCTION**  
**General Function and Component Details**

**1 ABOUT THE PHP 597**

The PHP 597 offers a comfortable support, whose cells gently inflate and deflate (in accordance with established alternating principles). It is cost effective for both the prevention and treatment of pressure ulcers. The Phase power unit operates a 10-minute alternating cycle, and is both energy efficient and quiet in operation. In the event of cardiac arrest the CPR can be released allowing the system to be deflated in 15 seconds or less.

**2 TECHNICAL DESCRIPTIONS**

The PHP 597 is comprised of a pressure regulated pump and an air flotation mattress system  
The pump is made from a fire retardant ABS material and meets the UL, CSA. BS 5724 (IEC 60 1/1) safety standards.

**IT FEATURES**

1. Low Pressure Indicator Light
2. Normal Pressure Indicator Light
3. Low Pressure Audible Alarm
4. ON/OFF Switch Indicator Light
5. Adjustable Comfort Control
6. Alarm Mute Button

**3. COMFORT CONTROL**

Different ranges adjustable to patient's comfort while maintaining low tissue interface pressure.  
Internal pressure of the mattress is ranged from 30-80 mm/Hg +/-10%

Document Reference: QAP/AS1/78a    Amendment No: 00    Date: 16/01/02

**TECHNICAL DATA**

MODEL:	PHP 597
COMPRESSOR:	X2
PRESSURE SETTINGS:	30-80mm/Hg +/- 10%
AIR FLOW:	7 LITRES / MINUTE
CYCLE TIME:	10 MINUTES (50HZ)
LOW PRESURE ALARM:	LED WITH BUZZER (WITH RESET SWITCH)
CPC CONNECTORS:	PLC 100-04 & PLC 240-04
POWER SUPPLY:	220/240 vac 50HZ
POWER INPUT:	12 WATTS
NOISE LEVEL:	NC30
SAFETY APPROVAL:	BS 5724 (IEC 601/1)
MAINS LEAD SUPPLY:	6A
MAINS SUPPLY FUSE:	3A
UNITS INLINE FUSES:	1A (TIMED)

Document Reference: QAP/AS1/78j    Amendment No: 00    Date: 16/01/02

## PHP 597 SPARE PARTS

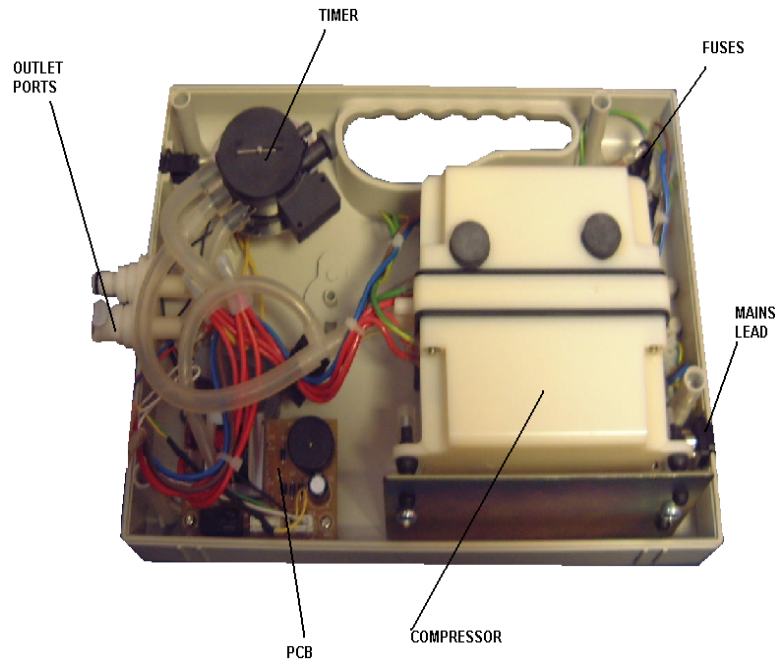
<b>PHSP101</b>	Compressor unit (full)
<b>PHSP102</b>	Compressor attenuator inc seals
<b>PHSP102A</b>	Top hat seals
<b>PHSP102B</b>	Attenuator nuts & bolts
<b>PHSP103</b>	Compressor inners (bellows & internal housing) x 2
<b>PHSP104</b>	Compressor windings
<b>PHSP105</b>	Compressor housing
<b>PHSP106</b>	Timer unit inc rotating valve
<b>PHSP106A</b>	Timer
<b>PHSP106B</b>	Bottom valve section
<b>PHSP106C</b>	Top valve section
<b>PHSP106D</b>	Spring
<b>PHSP106E</b>	Pin
<b>PHSP107A</b>	Front case
<b>PHSP108C</b>	Back case inc bed hooks
<b>PHSP108A</b>	Fuse holder
<b>PHSP108B</b>	Filter
<b>PHSP109</b>	Plug & 5 metre lead
<b>PHSP110</b>	Mains on/off switch
<b>PHSP111B</b>	Alarm mute button & lead
<b>PHSP111C</b>	PCB screws
<b>PHSP111D</b>	PCB (PHP 597)
<b>PHSP112</b>	Pressure control Knob
<b>PHSP113</b>	Side panel inc connectors & tubes
<b>PHSP113A</b>	Threaded male connector
<b>PHSP113B</b>	Threaded female connector
<b>PHSP114</b>	Bedhook (each)
<b>PHSP114B</b>	Bedhook screws

## OPERATING INSTRUCTIONS

1. Place the pump on a flat surface or suspend the pump unit by its hooks at the end of the bed.
2. Place the air mattress over the bed making sure it is extended completely without any kinks. Place with the printed feet at the bottom of the bed
3. Connect the air hoses from the mattress with the air outlet connectors on the pump unit. These are CPC quick release connectors. Make sure you hear them click when connecting.
4. Plug in the AC power cord to the household AC outlet (Be sure the switch is in the off position before plugging in)
5. Plug in and turn on power (make sure comfort control is on full).
6. While the mattress is inflating allow the mattress to inflate until the green normal pressure LED light is on.
7. When the system is up to pressure the comfort control can be adjusted to the desired comfort setting if required.

## Trouble Shooting.....Pump

**FIG 1 Main components**



SYMPTOM	CAUSE	ACTION
1. PUMP DEAD	A. FUSE IN PLUG B. LIVE/NEUTRAL FUSE ON PUMP C. LOOSE WIRE / CONNECTOR INSIDE PUMP	A. REPLACE FUSE B. REPLACE FUSES C. RECONNECT
2. PUMP MAINS SWITCH LIGHT ON BUT PUMP NOT WORKING	A. LOOSE WIRE / CONNECTOR INSIDE PUMP	A. RECONNECT
3. PUMP FUNCTIONING BUT MAINS SWITCH LIGHT NOT WORKING	A. NEON BLOWN IN ON/OFF SWITCH	A. REPLACE
4. PUMP FUNCTIONING BUT NO AIR OUTPUT OR VERY LOW	A. SPLIT OR LOOSE WIRE INSIDE PUMP B. FAULT INTERNAL HOUSINGS C. FILTER BLOCKED	A. RECONNECT OR REPLACE B. REPLACE C. REPLACE OR CLEAN
5. PUMP NOISY AND VIBRATES	A. CASING LOOSE B. LOOSE INTERNAL COMPONENTS C. FAULTY DIAPHRAGM	A. RETIGHTEN B. REFIX C. REPLACE INTERNAL HOUS
6. PUMP NOT ALTERNATING	A. PIPE OF INSIDE PUMP B. TIMER WIRES NOT CONNECTED C. TIMER STICKING	A. RECONNECT B. RECONNECT C. REPLACE

### A .REMOVING COVER

1. ISOLATE FROM MAINS
2. PLACE PUMP FACE DOWN WITH BED HOOKS FACING UP
3. UNSCREW THE FOUR FIXING SCREWS
4. TURN PUMP BACK OVER AND REMOVE COVER

NOTE : FIG 1 SHOWS ALL INTERNAL COMPONENTS

5. REFITTING IS AS ABOVE BUT IN REVERSE

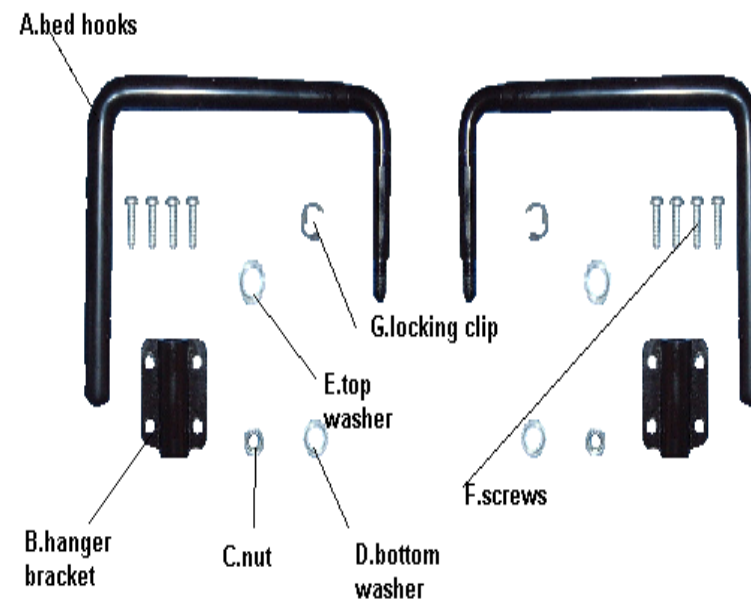
FIG 5 PCB



F. PCB REMOVAL & REFITTING

1. SEE FIG 5
2. REMOVE THE COVER AS IN SECTION A.
3. REMOVE THE CONNECTORS AND TUBES
4. DISCONNECT ALL CONNECTORS ON THE PCB
5. REMOVE THE FOUR FIXING SCREWS.
6. THE PCB CAN NOW BE GENTLY REMOVED FROM THE PUMP UNIT.
7. REFITTING THE NEW PCB IS AS ABOVE BUT IN REVERSE.

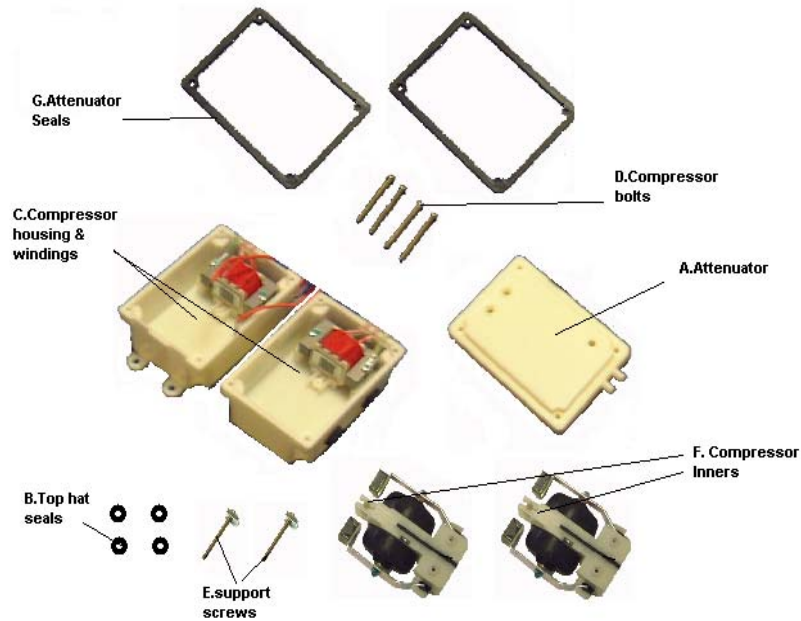
FIG 2 Bed Hook Assembly



B. BEDHOOK REMOVAL

1. PLACE THE PUMP FACE DOWN WITH BED HOOKS FACING UP
2. REMOVE THE LOCKING NUT AND WASHER.
3. SLIDE OUT THE BED HOOK.
4. REFITTING IS AS ABOVE BUT IN REVERSE.

FIG 3 Compressor breakdown

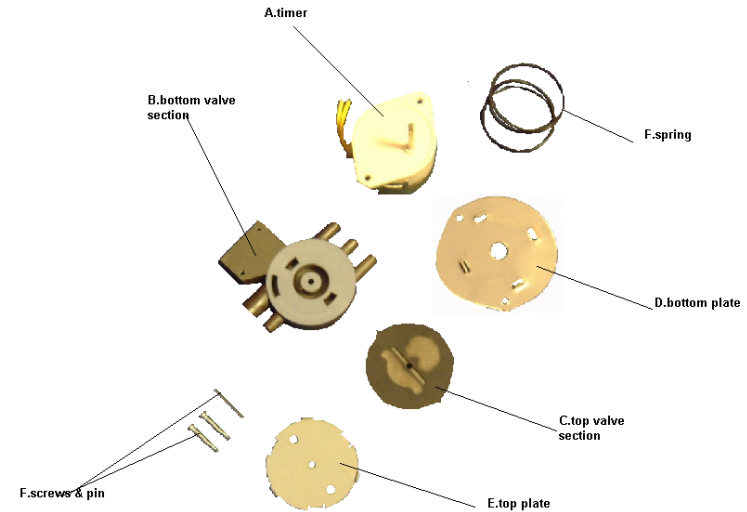


### C. COMPRESSOR BREAKDOWN

1. REMOVE THE COMPRESSOR AND TURN OVER SO THAT IT IS FACING DOWN.
2. REMOVE THE FOUR HOUSING NUT AND BOLTS, NUMBER AND GENTLY PULL APART.
3. THE UNIT HAS NOW BEEN BROKEN DOWN INTO THREE COMPONENTS. REMOVE THE ATTENUATOR SEALS, NUMBER AND THEN REMOVE THE TOP HAT SEALS.
4. REMOVE BOTH INTERNAL HOUSING MOUNTING SCREWS. COMPRESSOR BELLOW / INTERNAL HOUSING CAN NOW BE LIFTED OUT.

REFITTING IS AS ABOVE BUT IN REVERSE.

FIG 4 Air Valve Assembly



### D. AIR VALVE ASSEMBLY

1. SEE FIG 4.
2. GENTLY PULL OFF THE THREE AIR PIPES.
3. REMOVE FIXTURE PIN.
4. SLIDE OFF ROTARY VALVE (UPPER)
5. SLIDE OFF ROTARY VALVE (LOWER)
6. REMOVE THE SPRING AND, UNDERNEATH THE FIXING PLATE, THE TIMER CAN BE FOUND.
7. REFITTING IS AS ABOVE BUT IN REVERSE.

### E. TIMER

1. REMOVE AIR VALVE ASSEMBLY.
2. REMOVE THE TWO FIXING SCREWS.
3. DISCONNECT THE LIVE AND NEUTRAL
4. THE TIMER CAN NOW BE REMOVED FROM THE PUMP CASING

REMOVAL IS AS ABOVE BUT IN REVERSE.