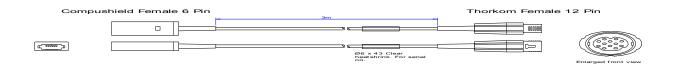


## 0019650 CRITIKON & SENSORMEDICS P965E10

VM3/COP/33.11

Date: 18-Dec-01 Revision date: 7-Apr-11 Issue: 3







Equipment required: Soldering iron (0060120), solder (0050012), Wire stripper (0060030), Flush Cutter (0060010), Snipe nose pliers (0060021), 'helping hand' (0060145), Heat gun (0060100).

<u>Parts list:</u> Kit and parts required.

Compushield female 6-pin side				Thorkom female 12-pin side			
Qty			Qty	Description	Part No.		
1	Compushield femal 6-pin kit	e 0010712	1	Thorkon female 12-pin kit	0010781		
(1)	— Housin	kit g		Rear nut	Kit		
(1)	Connect	kit		Strain relief	Kit		
(1)	Cable gr	kit ip		Collett	Kit		
(1)	- Rear inse	rt kit		- Pins	Kit		
1	Strain rel	ief 0010618 (50 off)		Pin housing	kit		
			1	Ø6 x 43mm Clear heat shrink	0032331 (roll)		
			1	Ø6 x 10mm heat shrink	0032321 (roll)		
			2	Ø1.6 x 17mm heat shrink	0032310		



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#### ASSEMBLY OPERATIONS

- 1. Pre Heat soldering iron temperature to 240°c.
- 2. Collect all required parts and equipment listed above.
- 3. Cut a 3.1 metre length of special 6-core cable. Shown below.

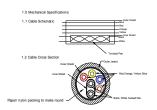


Fig 1.

#### Compushield female 6-pin side:

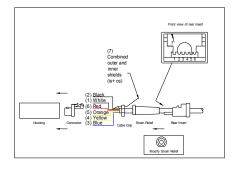


Fig 2.1

- 1. Cut a flat side on the strain relief as shown in fig 2.1.
- 2. Feed rear insert, strain relief and Ø6 x 10mm heat shrink (black) over end of cable.
- 3. Strip 20mm off outer jacket of cable to reveal coloured wires, outer shield, and nylon/paper wire packing.
- 4. Cut all packing to the base.
- 5. Strip 20mm off inner jacket to reveal black and white wires and the inner shield.



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- 6. Twist inner and outer shields together, and form wire backwards along cable outer jacket surface.
- 7. Clamp cable grip over shields and 2mm from the end of the cable outer jacket (see fig 2.1).
- 8. Push strain relief up to cable grip, and push rear insert around strain relief as far as possible.
- 9. Push wires firmly into correct locations. (Apply small amount of glue if necessary).
- 10. Trim any excess wire 'overhanging' from the front end of the rear insert.
- 11. Solder shields to the metal plate in the rear insert and trim remaining wire.
- 12. Push connector onto rear insert, and use pliers to push pins down through wires.
- 13. Push housing over connector and rear insert to cover the unit.

#### Thorkom female 12-pin side:

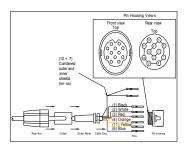


Fig 2.2

- 1. Feed Ø6 x 43mm Clear heat shrink, rear nut, collett, strain relief, cable grip, and Ø6 x 10mm heat shrink over the end of the cable.
- 2. Strip 20mm off outer jacket of cable to reveal coloured wires, outer shield, and nylon/paper wire packing.
- 3. Cut all packing to the base and strip 20mm off inner jacket of wire to reveal black and white wires and the inner shield.
- 4. Combine outer and inner shields together then split to form 2 wires, each containing inner and outer shield wire.
- 6. Trim ends of wires and shields to the same length.
- 7. Strip jacket of every wire 2mm to reveal copper core.
- 8. Place Ø1.6 x 17mm heat shrink over each twisted inner and outer shields to cover naked wire, and solder the ends to the rear of 2 separate pins.
- 9. Solder all remaining wires to the rear of separate pins and insert firmly into correct locations shown in fig 2.2.
- 10. Clamp cable grip approximately 2mm from the end of the outer jacket.
- 11. Place Ø6 x 10mm heat shrink over cable grip and beginning of wires and heat to shrink firmly over.



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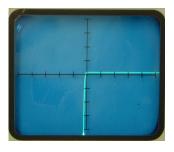
#### VM3/COP/33.11

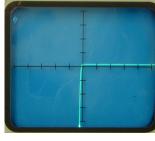
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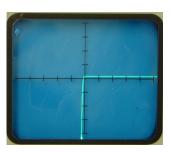
12. Push Strain relief up to the cable grip, collett over the strain relief, and screw the rear nut to the pin housing.

## TESTING

- 1. Attach Thorkom female 9-pin side to a Thorkom adapter cable and then to the test box connector marked 'J'.
- 2. Attach Compushield female 6-pin to a Sensormedics finger probe.
- 3. Check display is showing correct characteristics as shown below. (At correct switch positions)







Pos 2. LED

Pos 3. IR

Pos 4. Detector

- 5. 'Play' with wire at connections to see if any change in the display (i.e. flickering etc).
- 6. If there is any movement of signal, the extension wire must be taken apart and all connections checked and re-soldered. Then tested again until results are satisfactory.
- 7. Check the cable is of correct quality standard. (See VM/COP/30.11 for details).
- 8. Connect Thorkom female 9-pin side to a Sensormedics oxyshuttle monitor and attach probe on finger to check SpO<sub>2</sub> level. (Ideal reading 95-100.)

#### Labelling

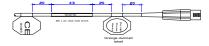
- 1. Labels: to be attached facing upwards as looking at the top of the probe.
  - 1 x CE Label
  - 1 x serial no. Label
  - 1x Orange 'Do Not Throw Away' Label (correct one of two is dependant of country unit is being sold to).



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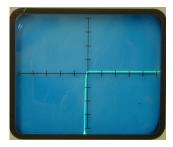
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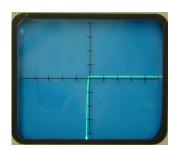


#### **Quality Assurance (QA)**

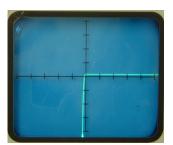
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- 8. Connect Thorkom female 9-pin side to a Sensormedics oxyshuttle monitor and attach probe on finger to check SpO<sub>2</sub> level. (Ideal reading 95-100.)
- 9. Fill and sign attached paperwork.
- 10. Test 10 % of batch on DL3000 simulator.
- 11. Log all results on compatibility sheet.

#### **Packaging**

- 1. Visually check all labels are attached properly
- 2. Using a twist tie (bunny clip) wrap the cable and place in a small blue Viamed plastic box, ensuring the cable is inserted in a neat and tidy presentable manor.



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- 3. Place a serial number sticker (supplied with the batch) on the front face of the box.
- 4. Place a packed and tested sticker (also containing initials of the individual who is packing) on the right hand side top left corner of the box. Do not close box.

#### Final QA

- 1. Final inspection. Visually ensure cable sit neatly within the box and is in a presentable state.
- 2. Boxes are ready to stock in stores.