VIAMED

SpO₂ Finger Probe Assembly

COMPANY OPERATING PROCEDURES

0018640	Datascope	P864RA

VM3/COP/32.11

Date:	13-Dec-01	**Revision date: 17-May-04**	Issue: 3

DIN Male 8 Pin — 3.65m — Finger Probe

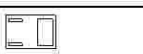Ø8 x 43 Clear heatshrink. For serial no.

Enlarged front view

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

Different types and methods:

MCI type: Pre-manufactured probe requiring testing and packaging only (pt no.0018640).
Service cable type: As detailed below. Sub assembly requiring only the probe to be fitted.

Parts list: Kit and parts required.

Din male 8-pin side			Finger Probe Side		
Qty	Description	Part No.	Qty	Description	Part No.
1	Pre made sub assembly	0018647	1	Top Shell (x25)	0010110
			2	Pad Support (Red) (x50)	0010167
			1	Top Pad (white)(x25)	0010130
			1	Bottom Pad (white)(x25)	0010131
			1	Bottom Shell (x25)	0010111
			1	Spring (x25)	0010140
			2	Button (Red) (x50)	0010187
			1	Detector	0030901

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
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			1	LED/ I.R.	0030951
			1	Strain Relief	0010150

ASSEMBLY OPERATIONS

1. Pre Heat soldering iron temperature to 240°c.
2. Collect all required parts and equipment listed above.

DIN male 8-pin side:

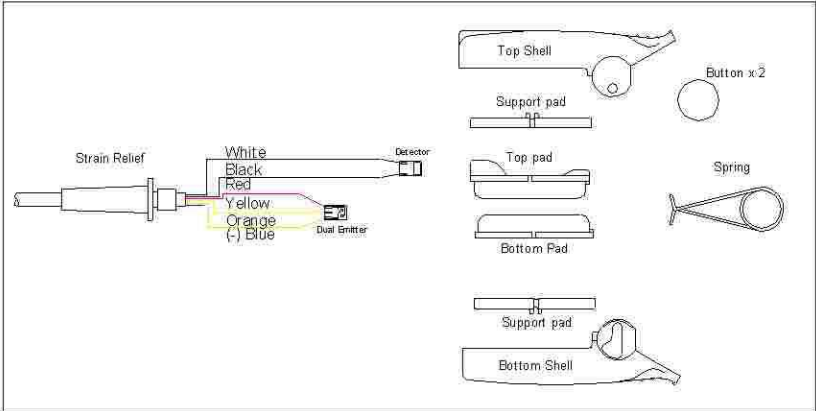1. Pre made sub assembly requires no work on the connector side.

Finger Probe side:

Fig 2.3

1. Apply loctite primer to the cable surface, and slide on the strain relief.
2. Apply a small amount of superglue on to the surface of the cable and push the strain relief over the glue to secure in place leaving approximately 80 mm of cable.
3. Strip outer jacket up to the strain relief and cut packing, outer shield and blue wire to the base.
4. Cut red, orange and yellow wires to 15 mm, strip jackets off 2mm and apply a small amount of solder to the ends.
5. Strip 10 mm off inner jacket and cut off inner shield.
6. Strip jackets 2mm and apply small amount of solder.
7. Solder wires to the detector, LED/I.R as shown in fig 2.3
8. Place the assembly on the drying rack, and apply a small amount of clear silicon to the front of the detector and LED/I.R and mount into the pads (Led/IR in the top pad and Detector in the bottom pad) allowing the sensors to be seen and central, and scrape excess silicon. Then place the drying rack in the drying cabinet and leave to dry overnight.
9. Superglue loose cable to the pads and fill the rears with white silicon.
10. Glue pads onto the pad supports (prime first).

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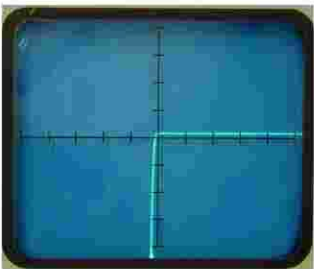| Date:	13-Dec-01	**Revision date: 17-May-04**	Issue: 3

11. Place spring around pads and into place.
12. Clip upper and lower shells (use a little super glue) into place and glue buttons onto the sides.
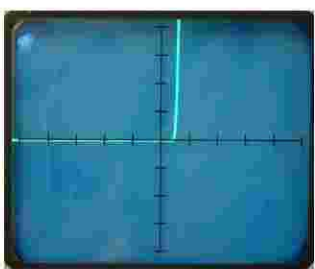
TESTING

1. Attach DIN male 8-pin side to the test box connector marked 'F'.
2. Check display is showing correct characteristics as shown below. (At correct switch positions)
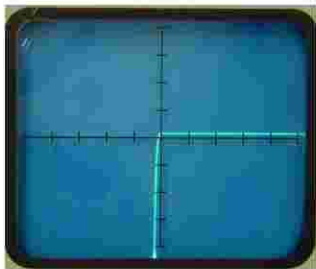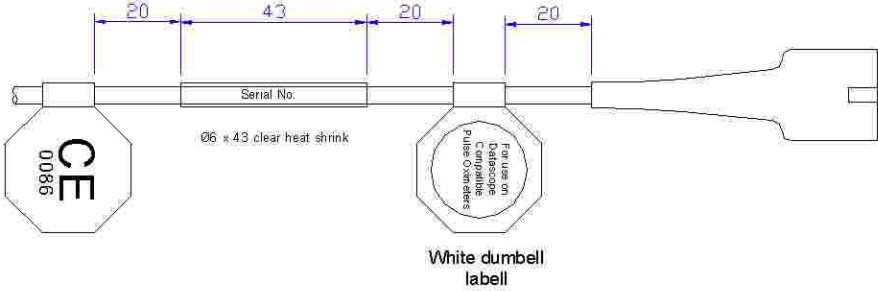
Pos 2. LED	Pos 3. IR	Pos 4. Detector

3. 'Play' with wire at connections to see if any change in the display (i.e. flickering etc).
4. If there is any movement of signal, the cable must be taken apart and all connections checked and re-soldered. Then tested again until results are satisfactory.
5. Check the cable is of correct quality standard. (See VM/COP/30.11 for details).
6. Connect DIN male 8-pin side to a Datascope monitor and attach probe on finger to check SpO$_2$ 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 Viamed shell label on probe lower shell.
   - 1 x Serial no. Label
   - 1 x White Datascope Label

Quality Assurance (QA)

1. Attach DIN male 8-pin side to the test box connector marked 'F'.
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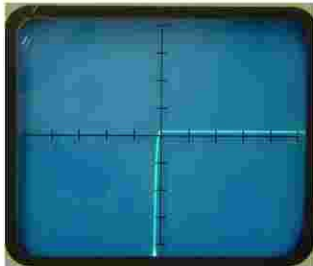| COMPANY OPERATING PROCEDURES |
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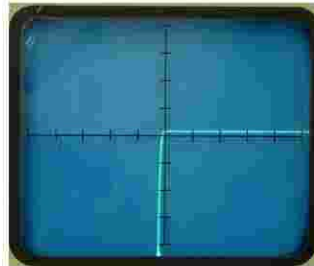
Position 2.	Position 3.	Position 4.
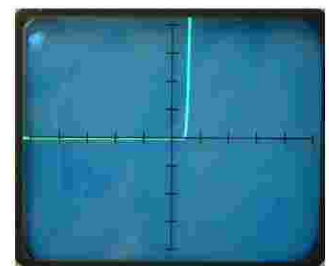
3. 'Play' with wire at connections to see if any change in the display (i.e. flickering etc).
4. If there is any movement of signal, the cable must be taken apart and all connections checked and re-soldered. Then tested again until results are satisfactory.
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6. Connect DIN male 8-pin side to a Datascope monitor and attach probe on finger to check SpO$_2$ level. (Ideal reading 95-100.)
7. Fill and sign attached paperwork.
8. Test 10 % of batch on DL3000 simulator.
9. 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.
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.