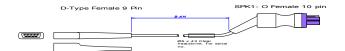


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Equipment required: Soldering iron (0060120), solder (0050012), Wire stripper (0060030), Flush Cutter (0060010), Snipe nose pliers (0060021), 'helping hand' (0060145), Heat gun (0060100).

<u>Parts list:</u> Kit and parts required. (Continued over page)

D-Type female 9-pin Side				SPK-1 female 10-pin Side			
Qty	Description	Part No.	Qty	Description	Part No.		
1	D-type female 9-pin kit	0010760	1	SPK1-O female 10-pin kit	0010708		
(1)	Outer Casing	kit	(1)	Rubber housing	kit		
(1)	Cable grip	kit	(1)	Cable grip	kit		
(1)	□ Pin Housing	kit	(1)	Collar	kit		
(9)	- Pins	kit	(10)	- Pins	kit		
1	1.6m 6-core cable	0030513 (roll)	(1)	Upper casing	kit		
1	Ø1.6 x 17mm heat shrink	0032310 (roll)	(1)	- Cable clamp	kit		
1	Ø6 x 10mm heat shrink	0032321 (roll)	(1)	• (purple) Pin housing	kit		
			(2)	Screws	kit		



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	(1)	(A_1)	Lower casing	kit
	(1)			kit
		'	Purple Coller	
	1		100 kΩ Resistor	0032140
	1	Ø6 x 43r	nm Clear heat shrink	0032331 (roll)
	1	Ø1.6 x	20mm heat shrink	0032310 (roll)
	1	Ø6 x	25mm heat shrink	0032321 (roll)

ASSEMBLY OPERATIONS

- 1. Pre Heat soldering iron temperature to 240°c.
- 2. Collect all required parts and equipment listed above.
- 3. Cut a 1.6 metre length of standard 6-core cable. Shown below.

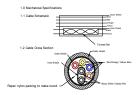
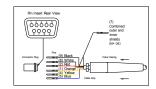


Fig 1.

D-Type female 9-pin side:





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- 1. Feed outer casing, cable grip and Ø6 x 10mm heat shrink (black) over end of wire.
- 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.
- 4. Strip 20mm off inner jacket to reveal black and white wires and the inner shield.
- 5. Twist outer and inner shields together.
- 6. Trim ends of wires and shields to the same length.
- 7. Strip jacket of every wire 2mm to reveal copper core.
- 8. Heat \emptyset 1.6 x 17mm heat shrink over twisted inner and outer shields to cover naked wire, and solder end to the rear of one pin.
- 9. Clamp cable grip approximately 2mm from end of outer jacket.
- 10. Place Ø6 x 10mm heat shrink over cable grip and beginning of wires and heat to shrink firmly over.
- 11. Insert pins into correct locations (as shown in fig 2.1) and push firmly into place.
- 12. Push outer casing over cable grip and wires to fit around the pin housing.

SPK1-O female 10-pin side:

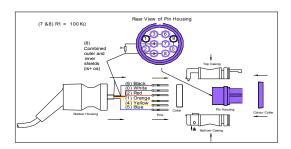


Fig 2.2

- 1. Feed \emptyset 6 x 43mm (clear) heat shrink, rubber housing, collar, cable grip and \emptyset 6 x 25mm (black) heat shrink over the end of the cable.
- 2. Strip 25mm off outer jacket of cable to reveal coloured wires, outer shield, and nylon/paper wire packing.
- 3. Cut all packing to the base.
- 4. Strip 25mm off inner jacket to reveal black and white wires and the inner shield.
- 5. Strip jacket of the blue wire 5 mm and twist together with both inner and outer shields (apply small amount of solder to hold together). Heat \emptyset 1.6 x 20mm heat shrink over combined shields and blue wire.
- 6. Trim ends of wires to the same length.



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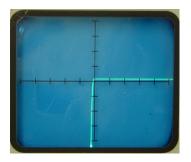
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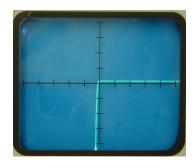
- 7. Strip jacket of every wire 2mm to reveal copper core, and solder all except white wire to the rear of individual pins.
- 8. Cut each leg of the resistor to 15mm each.
- 9. Cut the legs of the capacitor so the overall length is the same as the resistor.
- 10. Bend legs of both resistor and capacitor to fit into the rear of two separate pins (one leg of each in one pin) then solder to pins.
- 11. Insert all pins into correct locations except in pin 8 to which the white wire needs to be soldered to the same pin as that of the capacitor and resistor before inserting.
- 12. Insert pin housing into the bottom casing, and screw cable clamp over cable.
- 13. Push top casing onto bottom casing, and push the collar over mating cases.
- 14. Push rubber housing over cases, and then the grey collar over the casing.

TESTING

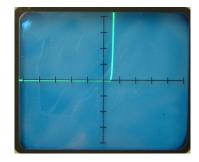
- 1. Attach DPK-1 female 10-pin side to the S&W test box and then to the test box connector marked 'B'.
- 2. Attach D-type female 9-pin side to an Aristo finger probe.
- 3. Check display is showing correct characteristics as shown below. (At correct switch positions)



Position 2. IR



Position 3. LED



Position 4. Detector

- 4. 'Play' with wire at connections to see if any change in the display (i.e. flickering etc).
- 5. 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.
- 6. Check the cable is of correct quality standard. (See VM/COP/30.11 for details).
- 7. Connect female 10 pin side to the Ohmeda monitor and attach probe on finger to check SpO₂ 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

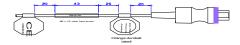


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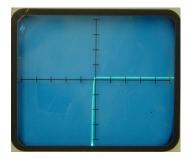
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- 1 x Serial no. Label
- 1x Orange 'Do Not Throw Away' Label (correct one of two is dependant of country unit is being sold to).

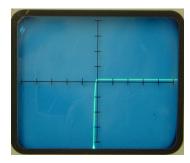


Quality Assurance (QA)

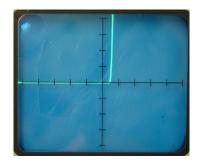
- 1. Attach DPK-1 female 10-pin side to the S&W test box and then to the test box connector marked 'B'.
- 2. Attach D-type female 9-pin side to an Aristo finger probe.
- 3. Check display is showing correct characteristics as shown below. (At correct switch positions)



Position 2. IR



Position 3. LED



Position 4. Detector

- 4. 'Play' with wire at connections to see if any change in the display (i.e. flickering etc).
- 5. 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.
- 6. Check the cable is of correct quality standard. (See VM/COP/30.11 for details).
- 7. Connect female 10 pin side to the Ohmeda monitor and attach probe on finger to check SpO₂ level. (Ideal reading 95-100.)
- 8. Fill and sign attached paperwork.

Packaging

1. Visually check all labels are attached properly



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- 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.