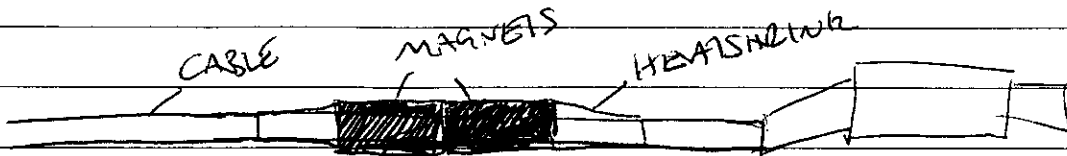


APP

NEUCOR TO
S+W ~~EXTENSION~~ EXT. CABLE

21.3.00

ORIGINAL PROBE ~~CA~~ RECEIVED BY AINTREE FOR
REPAIR WITH TWO MAGNETS COVERED BY HEATSHIELD
ON CABLE. I CHECKED WITH JOHN + STEVE IF
I COULD TRANSFER THE MAGNETS ON TO THE
REPLACEMENT CABLE DURING REPAIR THEY SAID OK.



NOTE 12-7-00 DIN 18933 - 8L21154
VSB/TY GWYNEDD RECEIVED ON 16DA NOT
UNDER WARRANTY - CONNECTOR HAS BEEN
REMOVED INCORRECTLY BY HOSPITAL



Viamed

New Information Data Sheet



Viamed

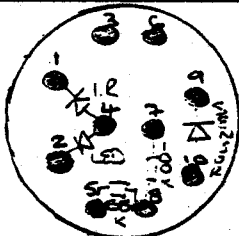
To be filled in for any new information gained in the workshop

Date	28/5/98
Technician	SV
Original part Number	
Description	S&W OHMEDA VIAMED CLIP & EPIC CABLE.
Work requested by	J. LAMB.
New part number if required	
Time taken	2 1/2 HRS.

Modifications need to be dated, signed and explained

Original Drawing

New Drawing if required



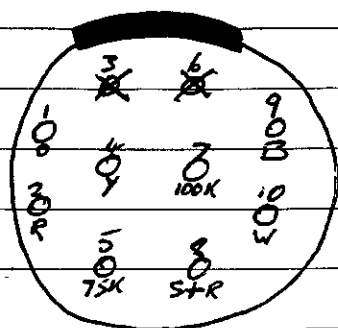
- 1) ORANGE
- 2) RED
- 3) N/A
- 4) YELLOW
- 5) RESISTOR 68K + 5% TOLERANCE
- 6) N/A
- 7) RESISTOR 100K
- 8) BOTH RESISTORS
- 9) BLACK
- 10) WHITE.

Reason for change or other details

TO BE COMPLETED

Confidential not for customer use

P867RA CONVERSION TO P888RA.



1 = ORANGE

2 = RED

3 = N/C

4 = YELLOW

5 = 75 K RESISTOR

6 = N/C

7 = 100 K RESISTOR.

8 = BOTH SIELDS + BOTH RESISTORS

9 = BLACK

10 = WHITE.

NOTES.

LEAVE PROBE ALONE TILL CHANGING BUTTONS
FROM GREEN TO CREAM.



SpO2 Assembly Instructions

29/01/99

P888RA

Issue 1

ver 1

18 June 2001

S & W

Page 1

Of 3

Equipment type: Finger probe Part Number: 0018880

Batch Size		
Nos	Viamed Part number	Description
1	0010101	Viamed Spo2 finger probe service kit (Black pads)
3.65m	0030513	Viamed cable SpO2 cable - version D (production)
1	0010708	S&W 10 socket plug connector kit
1	0032120	56K2 resistor
1	0032140	100K resistor
30mm	0032331	Heatshrink tubing - clear, 6.0mm, 7m reel
15mm	0032321	Heatshrink tubing - black, 6.0mm, 7m reel
		Cable tie


Assembly Clip

1. Prepare Clip end of cable as follows
 - a. Attach strain relief "0010150," to relevant replacement cable, and glue in position.
 - b. Strip back outer cable cover of exposed end 1mm from end of strain relief.
 - c. Remove outer shield and paper, and cut off Kevlar fibres and any unused wires.
 - d. Strip and tin relevant coloured wires (from red, yellow, blue, orange) to 13mm from end of cable cover. Strip and tin last 1mm of each wire.
 - e. Cut inner white cable to 78mm from end of outer cable cover, strip last 8mm of inner cable cover, strip and tin last 1mm of black and white wires, cut off inner shield and discard
 - f. Strip and tin ends of black and white wires.
2. Solder wires to components as per relevant diagram
3. Fit components into pads as follows
 - a. Position components in drying rack.
 - b. Place a small amount of flowable non-corrosive silicone sealant onto the face of the components.
 - c. Place pads onto components, ensuring that both emitter and detector are central in pad windows. Also note that the silicone on the outside of the pad must run to the contour of the pad to make a smooth window - there should be no doming or sinking of the window. Any excess can be removed with a small screwdriver, also any deficit can be topped up with small amounts of silicone from a screwdriver tip - however these steps should be taken within 2 minutes of the pad being placed on the component, before the silicone has had time to become tacky, so that it is still flowing enough to ensure that the window will return to a smooth flat surface
 - d. Leave pads to set for 24 hours.
4. Assemble the clip as follows
 - a. Glue white inner cable into channel in detector pad

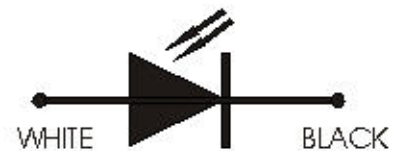
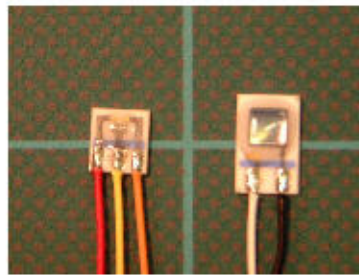
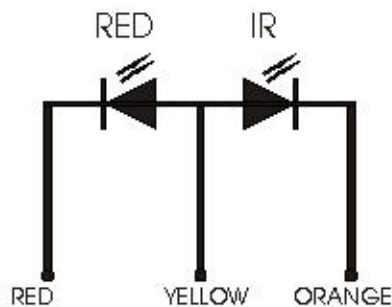
Drawn BY	MFG&DB
Date	26/04/01
Checked By	
Date	
Revised By	

Page1 18/06/01

SpO2 Assembly Instructions/ P888RA S&W

	SpO2 Assembly Instructions			
	29/01/99	P888RA	Issue 1	ver 1
	18 June 2001	S & W	Page 2	Of 3

- b. Fill around component with silicone
- c. Glue pad support onto back of detector pad.
- d. Glue pad support onto back of emitter pad.
- e. Glue white inner cable into channel in emitter pad.
- f. Fill around component with silicone
- g. Refit replacement springs "0010140," around pads.
- h. Push pads into position within clip, making sure that the pad support rim is securely underneath the pad retaining lugs - there are four retaining lugs for each pad. If any lugs are not holding the pad support securely, then add a drop of superglue to the relevant lug.
- i. Glue strain relief into position in clip body.
- j. Add labels as required.



Assembly Connector

1. a/ Check that all the relevant parts are in the connector kit - the kit should contain:
1 x purple front ring, 1 x shroud, 8 x ARBO pins (DPK1) w/ retaining ring, 1 x internal ring, 1 x strain relief, 1 x shell (with tongue), 1 x shell (without tongue), 2 x screw M2.5x10, 1 x purple socket housing.
- b/ Add a 30mm length of heatshrink (0032331) to the cable.
- c/ Add the shroud to the cable.
- d/ Add the internal ring to the cable.
- e/ Add a 15mm length of heatshrink (0032321) to the cable.
- f/ Strip the outer cable cover back by 30mm, using the cable stripper (0060031).
- g/ Unwind, but do not remove, the outer shield. Remove the paper layer, and the Kevlar strands, using flush cutter (0060020), cutting them flush to the end of the cable cover. Also remove any unused wires, cutting them flush to the end of the cable cover.
- h/ Strip the inner cable cover back, using the cable stripper, as close to the end of the outer cable cover as possible. Unwind, but do not remove, the inner shield.
- i/ Twist together the outer and inner shield, and tin this between 9-15mm from the cable cover.
- j/ Cut the twisted shields at 12mm from the outer cable cover using the flush cutter. Trim off any loose strands of shield flush to the cable cover.

Drawn BY	MFG&DB
Date	26/04/01
Checked By	
Date	
Revised By	



SpO2 Assembly Instructions

29/01/99

P888RA

Issue 1

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Page 3

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k/ Cut the wires to 15mm from the outer cable cover. Strip and tin the last 2mm of each wire.

l/ Cut one of the legs of the 68K1 resistor (0032134) to 4mm from the resistor body. Cut the other leg to 15mm from the resistor body. Bend the longer leg of the resistor to form a hairpin, ensuring that the ends of both legs are now level.

m/ Cut one of the legs of the 100K resistor (0032140) to 4mm from the resistor body. Cut the other leg to 15mm from the resistor body. Bend the longer leg of the resistor to form a hairpin, ensuring that the ends of both legs are now level.

n/ Solder the short leg of the 68K1 resistor into one of the ARBO pins. Solder the short leg of the 100K resistor into another of the ARBO pins.

o/ Solder the long leg of the 68K1 resistor into an ARBO pin. Also solder the long leg of the 100K into the same pin. Solder the twisted shield to the long legs of these resistors, between the body of the resistor and the pin.

p/ Solder the remaining wires into the remaining pins.

q/ Referring to the wiring diagram, and ensuring that the pin retaining rings do not become detached, insert the pins into the socket housing as follows:

i/ Push the pin with both resistors and the shield attached into pin hole 8.

ii/ Push the pin with the 68K1 resistor only attached into pin hole 5.

iii/ Push the pin with the 100K resistor only attached into pin hole 7.

iv/ Push the remaining pins into the relevant pin holes.

r/ Push the 15mm piece of heatshrink (0032321) up over the cable cover, so that 10mm of the heatshrink covers the white cable cover, and the remaining 5mm projects beyond the cable cover and over onto the wires. Shrink this into position using a heatgun.

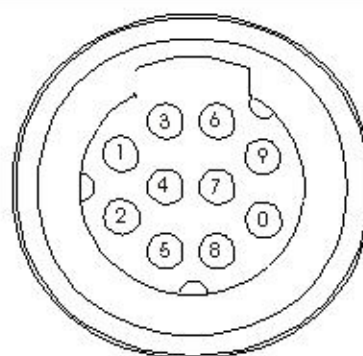
s/ Screw the strain relief over the cable and into the shell (without tongue), at a point just above where the cable cover ends, so that the cord grip does not bite down upon the cable at a point where there is no cable cover beneath the heatshrink to protect the wires. There should also be a small degree of 'play' with the cable, so that when the connector is fitted together, there is no strain directly on the wires.

t/ Attach the cable tie to the cable, just below the strain relief, and tighten. Cut off the excess part of the cable tie using the flush cutter.


u/ Orientate the socket housing in the shell (without tongue), and add the shell (with tongue). Push up the internal ring into position around the shells. Push up the shroud around the connector. Finally add the front ring to the connector.

Connector rear view:

- | | |
|-----------|----------------------|
| 1. Orange | 6. No pin |
| 2. Red | 7. R2 |
| 3. No pin | 8. R1 + R2 + Shields |
| 4. Yellow | 9. Black |
| 5. R1 | 0. White |

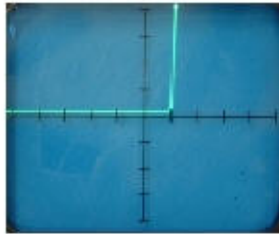


Drawn By	MFG&DB
Date	26/04/01
Checked By	
Date	
Revised By	

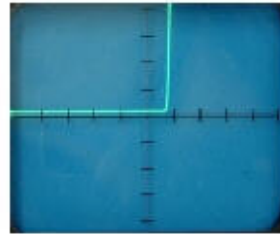
	SpO2 Assembly Instructions			
	29/01/99	P888RA	Issue 1	ver 1
	18 June 2001	S & W	Page 4	Of 3

Test using component tester and test box:

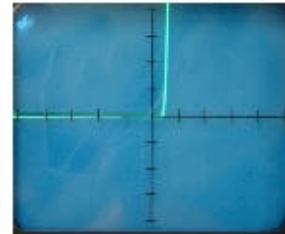
Position 1:Red emitter



Position 2:IR emitter



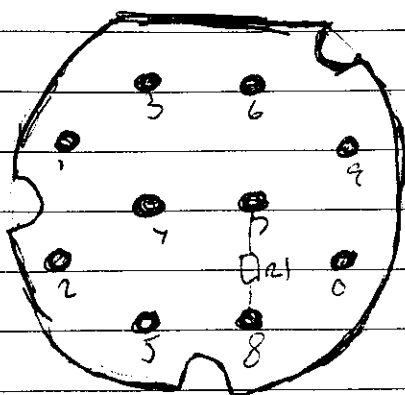
Position 3:Photo-diode



Drawn BY	MEG&DB
Date	26/04/01
Checked By	
Date	
Revised By	

OHMEDA S+W OR TIP EXT. CABLE

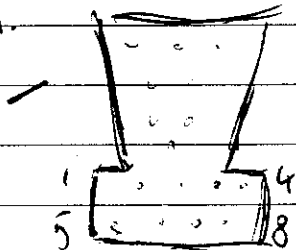
RN



- 1, Orange
- 2, Green
- 3, -
- 4, Red
- 5, Blue
- 6, -
- 7, R1
- 8, R1 + Yellow
- 9, Shield (only shields black)
- 10, Black

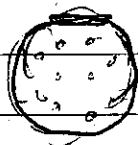
R1 = 100K Ω 1%

Makes down.

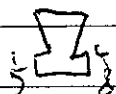


- 1, Red
- 2, -
- 3, Yellow
- 4, Black
- 5, Green
- 6, Orange
- 7, Blue
- 8, Shield

MCI CABLE



- 1, Orange
- 2, Yellow
- 3, -
- 4, Red
- 5, Blue
- 6, -
- 7, R1
- 8, R1 + MS
- 9, ~~MS~~ IS
- 10, Black



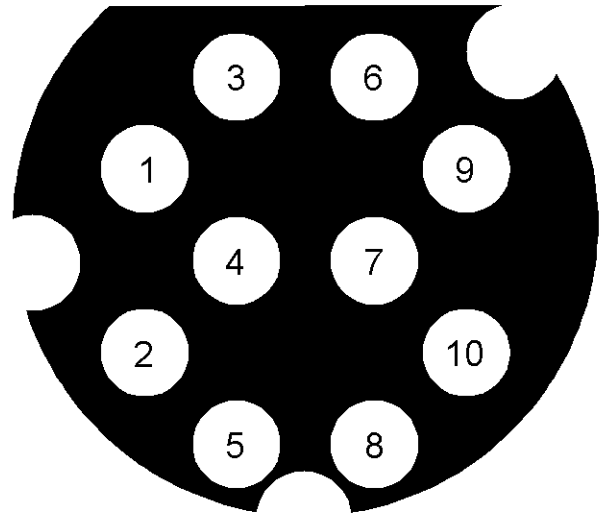
- 1, Red
- 2, -
- 3, MS
- 4, Black
- 5, ~~Green~~ Yellow
- 6, Orange
- 7, Blue
- 8, IS

Schematic's

Wiring Positions

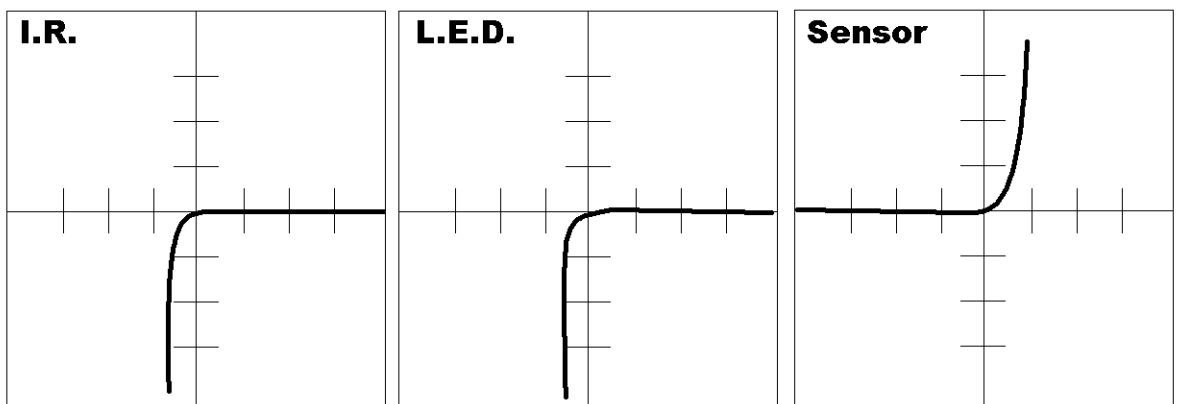
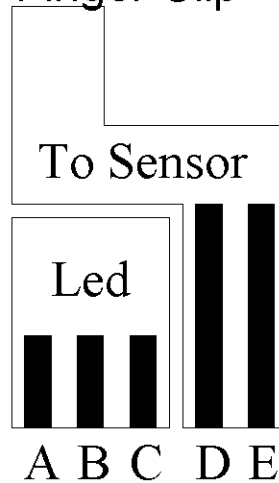
- 1 - Orange
- 2 - Green
- 3 - Not Connected
- 4 - Red
- 5 - Resistor (68K)
- 6 - Not Connected
- 7 - Resistor (100K)
- 8 - Both Resistors + Shield
- 9 - White
- 10 - Black

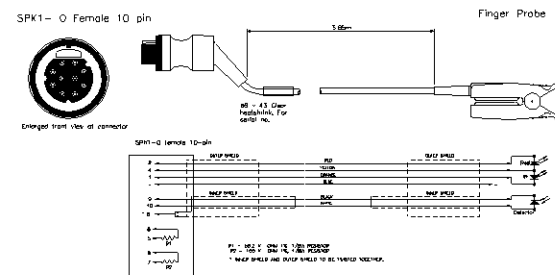
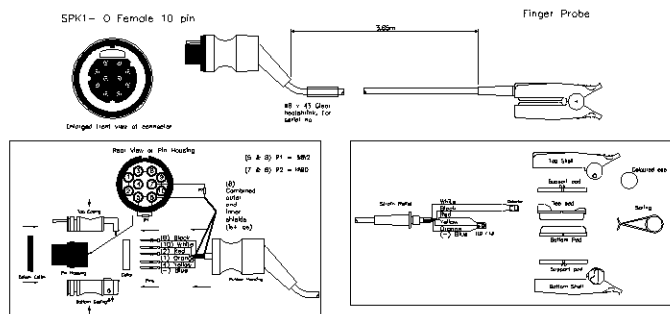
(Rear View)

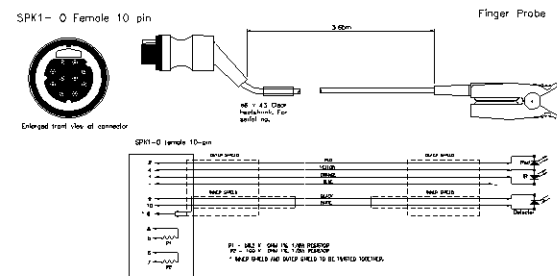
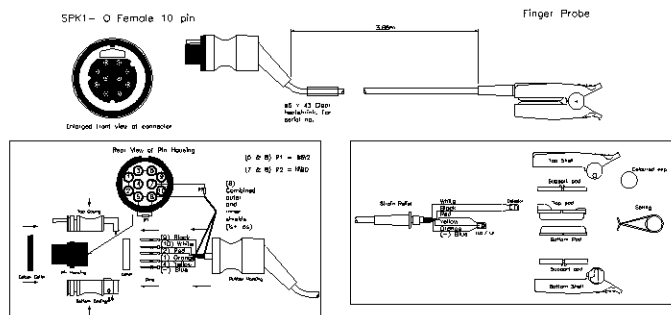


- A - Green
- B - Red
- C - Orange
- D - Black
- E - White

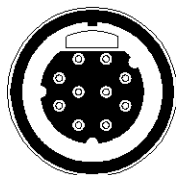
Finger Clip



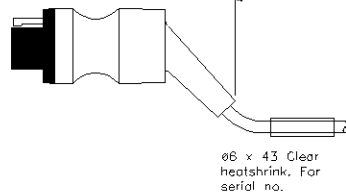




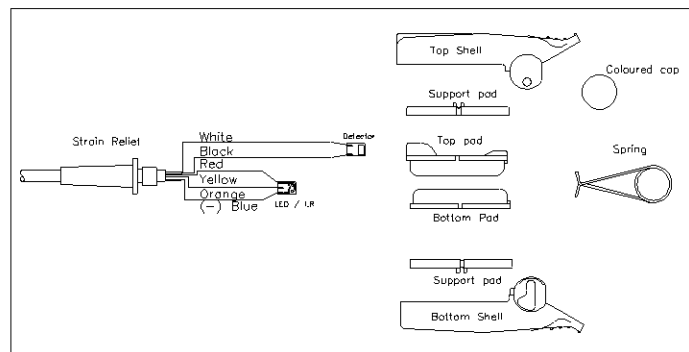
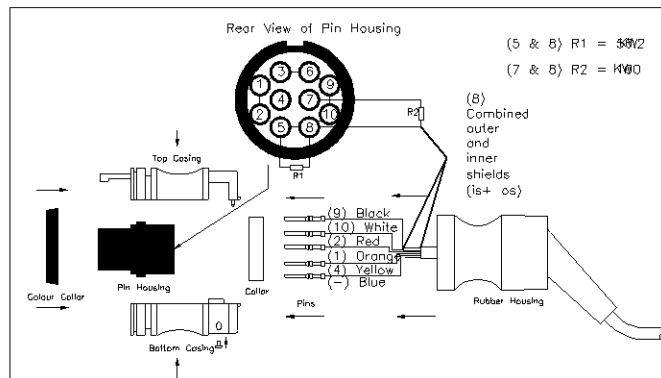
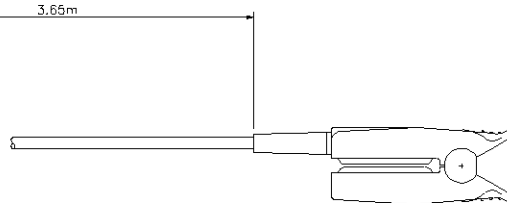
SPK1- 0 Female 10 pin




Enlarged front view of connector



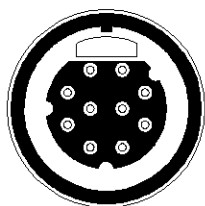
Finger Probe



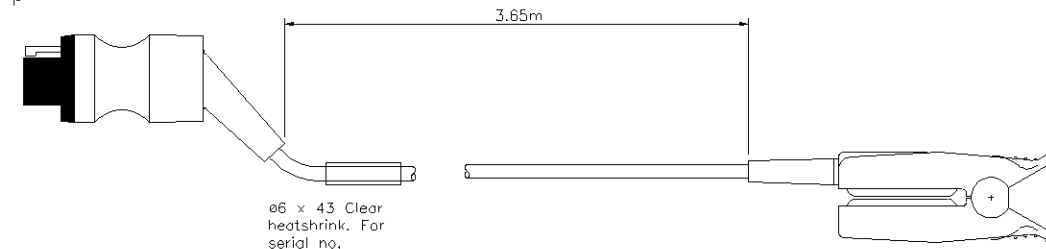
Title P888RA S&W				VIAMED Ltd. 15 Station Rd Cross Hills, Keighley West Yorkshire BD20 7DT	
		Dim in	mm		
		Tol	± 0.2		
		Drawn	J.Nirwan		
Scale	Not To Scale	Date	30/01/02	Dwg No.	SPF-888

REV	Date	N°	Drawn	Approv	Material :
					Part No. 0018880

SPK1- 0 Female 10 pin

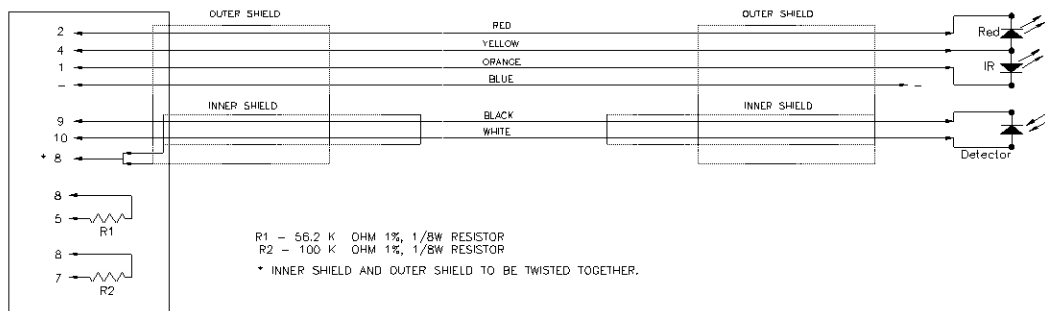


Enlarged front view of connector



Finger Probe

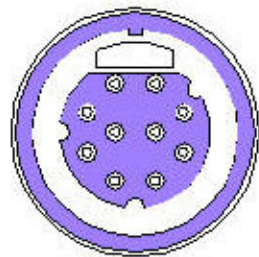
SPK1-0 female 10-pin



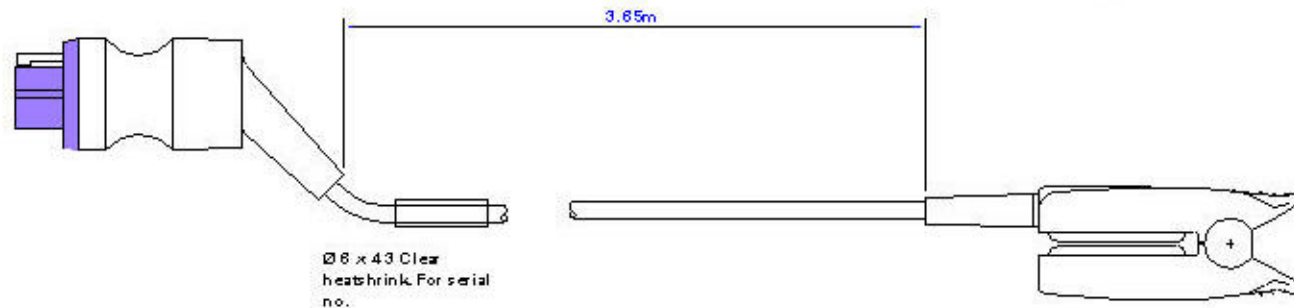
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		Dim in	mm
Scale		Tol	± 0.2
Not To Scale		Drawn	J.Nirwan
REV	Date	N°	Drawn
Approv	Part No. 0018880		
Date	18/02/03	Dwg No.	SPF-888.1

VIAMED Ltd.
15 Station Rd
Cross Hills, Keighley
West Yorkshire
BD20 7DT

SPK1- O Female 10 pin

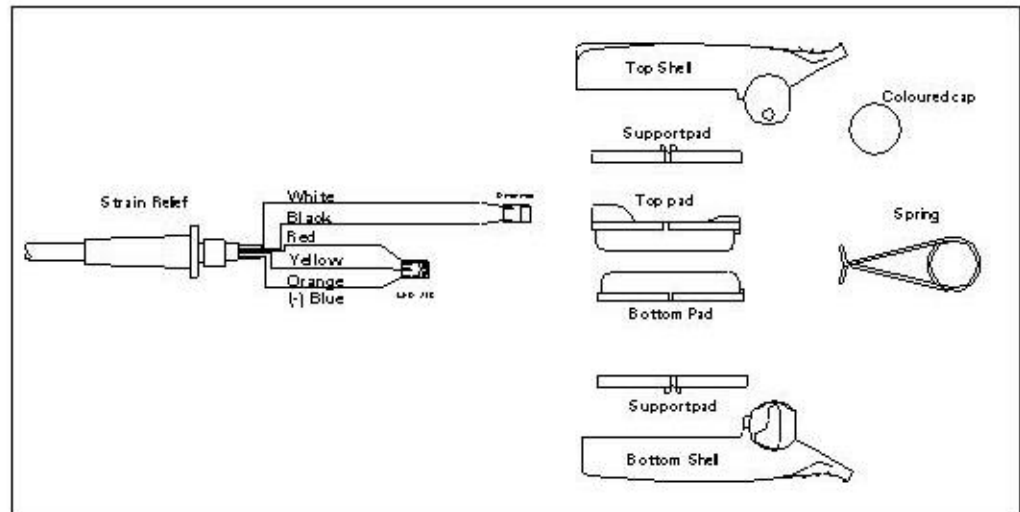
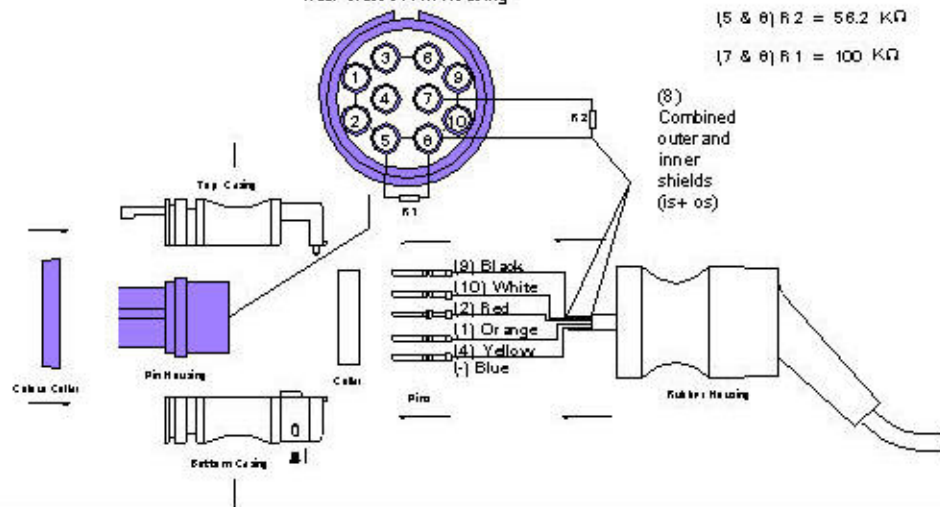


Enlarged front view of connector



Finger Probe

Rear View of Pin Housing



Title P888RA
S&W



Dim in mm
Tol ± 0.2
Drawn J.Nirwan

Scale Not To Scale

Date 30/01/02

Dwg No.

SPF-888



VIAMED Ltd.
15 Station Rd
Cross Hills, Keighley
West Yorkshire
BD20 7DT

Material:

Part No. 0018880

REV Date N° Drawn Approv

DATE

28/5/98

TYPE

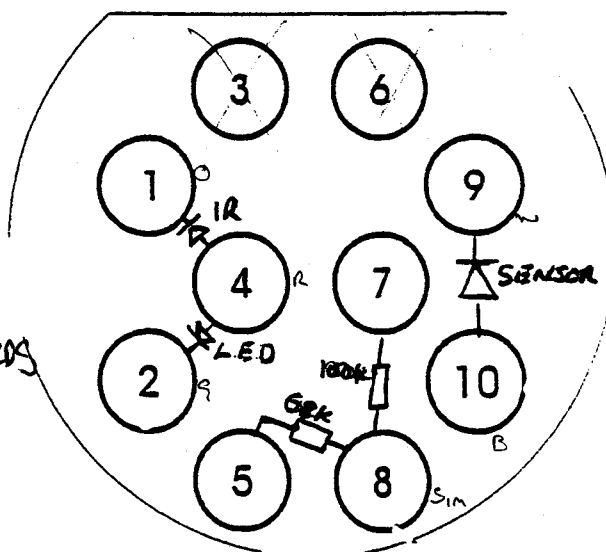
S&W OHMEDA

SCHEMATICS

WIRING POSITIONS

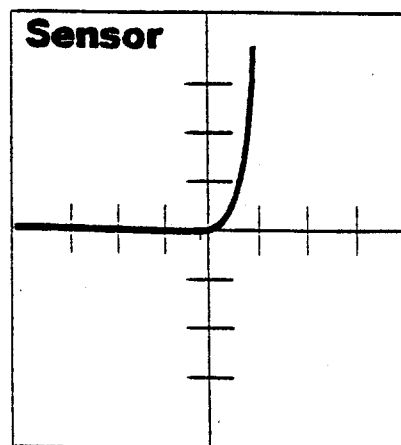
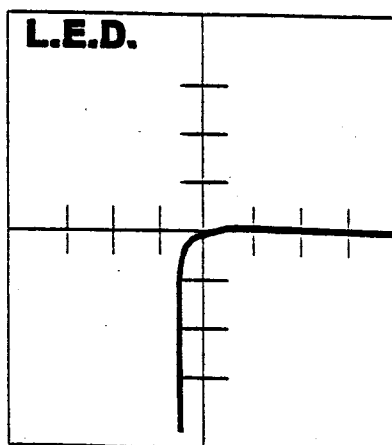
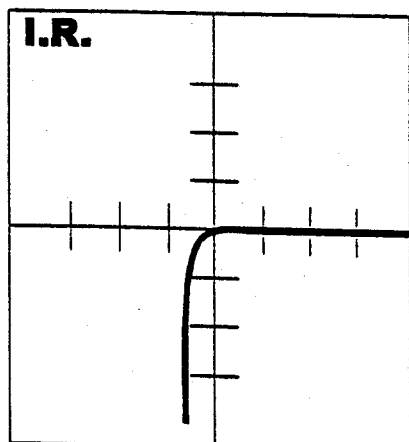
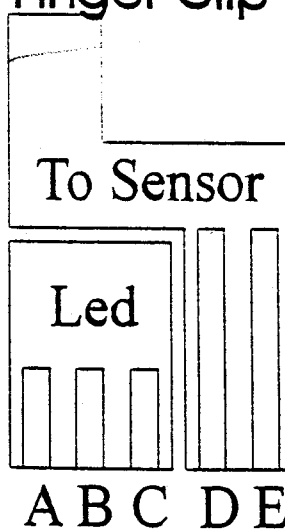
- 1 - ORANGE (I.R.)
- 2 - RED (RED)
- 3 - NOT CONNECTED
- 4 - YELLOW (COMMON)
- 5 - RESISTOR 68K +
- 6 - NOT CONNECTED
- 7 - RESISTOR 100K
- 8 - BOTH RESISTORS + BOTH SENSORS
- 9 - WHITE
- 10 - BLACK

(Rear View)



Finger Clip

- A - RED
- B - YELLOW
- C - ORANGE
- D - BLACK
- E - WHITE.



Drawn By:

Derek Lamb

Signed



New Information Data Sheet

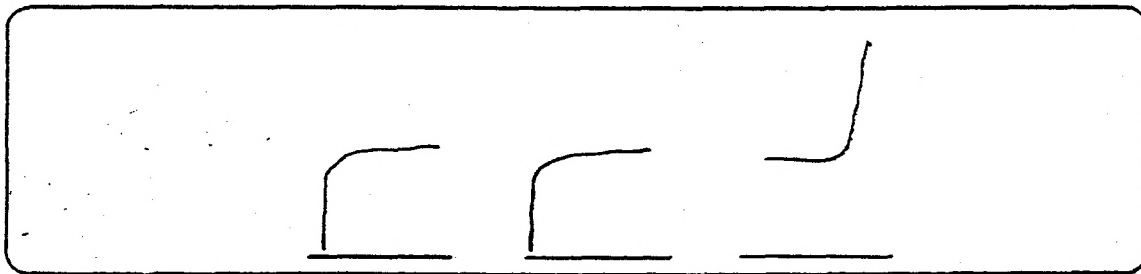


To be filled in for any new information gained in the workshop

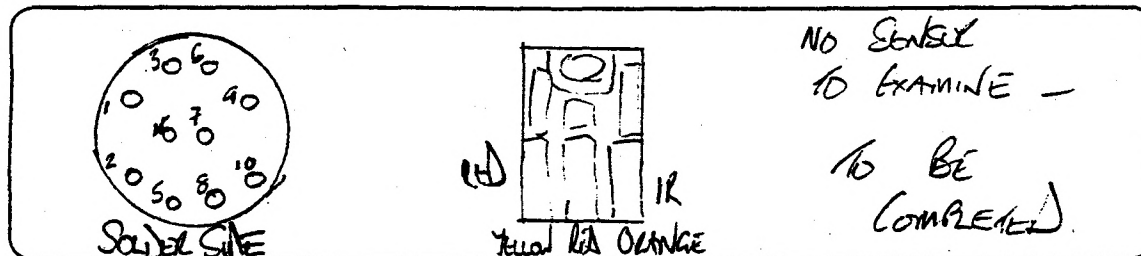
Date	OCTOBER 1st 1998
Technician	MARK WEST
Original part Number	
Description	HAL SAW PROBE / HAL CABLE
Work requested by	
New part number if required	
Time taken	

Modifications need to be dated, signed and explained

Original Drawing



New Drawing if required



Reason for change or other details

1. ORANGE (1R) 7 RESISTOR 100K
2. YELLOW (1R) 8 BOTH RESISTOR & SMDs
3. Nox (Use) 9 WHITE Solder
4. RED (COMMON) 10 BLACK Solder.
5. RESISTOR 68K
6. Nox (Use)

Confidential not for customer use



Viamed

New Information Data Sheet



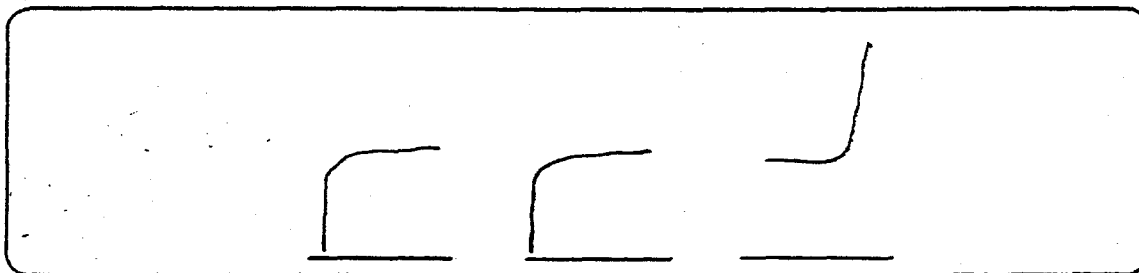
Viamed

To be filled in for any new information gained in the workshop

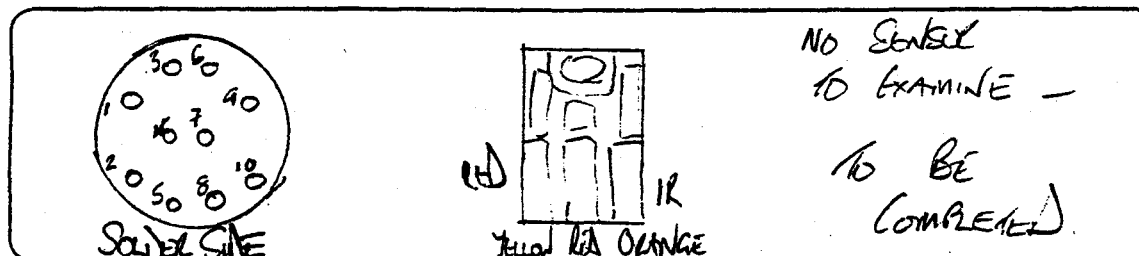
Date	OCTOBER 1ST 1998
Technician	MARK WEST
Original part Number	
Description	EAL SHN PROBE / EAL CABLE
Work requested by	
New part number if required	
Time taken	

Modifications need to be dated ,signed and explained

Original Drawing



New Drawing if required



Reason for change or other details

1. ORANGE (12) 7 RESISTOR 100K
2. YELLOW (RED) 8 BOTH RESISTOR SMD'S
3. NOT USED 9 WHITE SOLDER
11 RED (COMMON) 10 BLACK SOLDER
5. RESISTOR 68K
6. NOT USED

Confidential not for customer use