SOUTH AFRICAN DEFENCE FORCE
SUID - AFRIKAANSE WEERMAG

RS - B25 - SA

TECHNICAL MANUAL
TEGNIESE HANDBOEK
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SECTION SEVEN

CIRCUITS AND BLOCK DIAGRAMS
MAN-PACK TRANSCEIVER

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VIEW OF COMPLETE INSTALLATION

(A and B VERSION)
MAN-PACK TRANSCEIVER

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COMPOSITION OF TRANSCEIVER SYSTEM
(A and B VERSION)

KEY

1 Battery Unit
2 Basic Unit
3 20 W Amplifier
4 Antenna Tuning Unit
5 Device Connecting the Antenna to the Antenna Tuning Unit
6 Front Panels (Engraved)
7 Vehicle Vesion Adapter Connector
8 Valve Connector (Desiccant cell)

Plate 2
MAN-PACK TRANSCEIVER

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VIEW OF FRONT PANEL DESCRIPTION

(A and B VERSION)
MAN-PACK TRANSCEIVER

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BREAKDOWN OF THE TRANSCEIVER

BASIC UNIT
(A and B VERSION)

KEY

1. HF Head Unit
2. Peripheral Circuits Board
3. Filter and 2.5 MHz Filter Circuit Board
4. Exciter Board
5. Converter Unit
6. AF Board
7. Synthesizer Board No. 3
8. Synthesizer Board No. 2
9. Synthesizer Board No. 1
10. Setting Board
11. 102.5 MHz Crystal filter
MAN-PACK TRANSCEIVER

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VIEW OF FRONT PANEL [OPERATION]

(A and B VERSION)
MAN-PACK TRANSCEIVER

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STANDARD EXCHANGE OF BATTERY UNIT

(A and B VERSION)
MAN-PACK TRANSCEIVER
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GENERAL INTERCONNECTION DIAGRAM
(Amrad Version)
TRANSCEIVER

MAN-PACK

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Synthesizer No. 1 Board

Diagram of Main Loop

Mixer Module

Z05

(A and B VERSION)

Plate 12
TRANSCIEVER
MAN-PACK
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Synthesizer No. 1 Board

Diagram of Divider by Four Module

Z06
(A and B VERSION)
TRANSCIEVER
MAN-PACK
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Synthesizer No. 2 Board

Diagram of Divider by Two Module

Z02
(A and B VERSION)

Plate 15
TRANSCEIVER
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Synthesizer No. 2 Board

Diagram of Phase Comparator Module

Z03
(A and B VERSION)
TRANSCEIVER
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Synthesizer No. 2 Board

Diagram of Digital/Analog
Converter Module

Z 22
(A and B VERSION)
TRANSCEIVER
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Synthesizer No. 3 Board

Diagram of Filter Matching Module

(A and B VERSION)
TRANSCEIVER
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Synthesizer No . 3 Board

Diagram of 105 MHz Mixer

Z02
(A and B VERSION)