

PRC1077 Tactical VHF Manpack Transceiver section 7

July 2014

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Features

30.000-87.975 MHz

25 kHz Channel Spacing

Simplex/Semi-Duplex

10 Programmable Memory Channels

500 mW, 2W, 5W Selectable Output Power

Low Battery Drain (<60 mA in Rx)

Encryption Option

Vehicular Systems up to 50W



Introduction

The PRC1077 is a tactical VHF/FM manpack transceiver used by commercial and military organizations around the world. Originally designed as a drop-in replacement for the AN/PRC-77, the PRC1077 is a high performance, rugged 30 to 87.975 MHz manpack transceiver used for reliable portable and mobile communications in harsh environments. It has been thoroughly tested and evaluated and found to be fully interoperable with the AN/PRC-77 when it is in non-hopping and non-secure modes. The transceiver has been put into service and used extensively by several nations and has consistently delivered superior performance in the broad range of environmental conditions encountered throughout the world.

The PRC1077 is easy to use, provides extremely long mission life due to its low-power consumption, and accommodates optional internal encryption modules to provide secure communications. It has a high performance receiver, a wide-temperature range LCD, 10 preset memory channels, 25 kHz spacing, and is packaged in 7 easily-removable and repairable modules providing quick and easy maintenance.

A full range of operating configurations are available using the PRC1077. They include: mobile systems at the 5W and 50W levels, a variety of portable and mobile mounting arrangements, and an extended control system. The PRC1077 is completely interoperable with the PRC1070-5 handheld transceiver, the PRC1080-5, and PRC2100V in all clear voice fixed frequency modes. Although the transceiver retains the same form, fit and function of the AN/PRC-77, the advanced design provides the user the capability to modernize their tactical VHF system without rendering obsolete their extensive inventories of accessories and ancillary equipment. The PRC1077 with KRC1077 encryption option is interoperable in encrypted voice mode with the HH7700 with HH-SCR1 encryption option.

PRC1077 Manpack Transceiver

PRC1077

VHF FM synthesized manpack transceiver providing three different output RF power levels (0.5/2/5W), 30-87.975 MHz, simplex/semi-duplex operation, and 10 preset memory channels. It is designed to the requirements of MIL-STD-810 for operation under severe vibration and shock environments. Waterproof unit fully operational over -40°C to +60°C. The PRC1077 is dimensionally identical to the AN/PRC-77 and AN/PRC-25-series VHF manpacks and weighs 4.7 kg without battery. It is fully interoperable with all U.S. standard audio accessories, antennas, and specialized accessories such as crypto equipment, audio remoting equipment, retransmission, and direction-finding equipment. NSN 5820-01-293-2131. The basic PRC1077 includes the radio, battery box, and an operator manual. A diagram of a typical manpack system is shown later in this section.

PRC1077 Extended Control Options

An extended control is available for the PRC1077 radio. This control unit works with the radio in either a manpack or mobile configuration.

1. PRC1077-ECU

PRC1077-ECU

Extended control unit for use with the PRC1077. Functions include: remote power on/off, speaker on/off, external speaker drive capability, squelch override, and PTT inhibit.

PRC1077 Encryption Options

The PRC1077 can accept an embedded encryption module, KRC1077-x, which offers protection against most unwanted eavesdropping. It is a rolling code scrambler with true frequency hopping rather than just frequency sweeping which provides much greater security than competitive rolling code scramblers. Means are also provided to program the encryption modules.

1. KRC1077

2. KF1077

3. CMS1077

KRC1077-x

Note: The -x suffix will be replaced by a customer specific code as each customer can have his own private top-level key.

The KRC1077-x is a member of Datron's TACSEC-II family of tactical high-security voice scramblers that offers protection against most unwanted undesired eavesdropping. It is a plug-in module that can be embedded in PRC1077 radio (factory installation). The TACSEC-II products are rolling code scramblers that provide true frequency hopping rather than just frequency sweeping. As a result, radios using the TACSEC-II units offer much greater security than competitive rolling code scramblers.

Important Note: The KRC1077-x can not be used in the radios that make up a retransmission system.

KF1077

A handheld keyfill device and adapter cable that is designed to transfer the programming data from a computer to a PRC1077 that contains an embedded KRC1077-x module.

CMS1077

Programming kit for the KRC1077-x. Contains the following items:

- **CMS1077-PRG:** Programming software for the KRC1077. Runs on a PC. Allows users to change the code key and to load it into the KF1077.
- **KF1077:** Keyfill device
- **C992359:** Programming cable, computer to KF1077
- **KF1077-MS:** KF1077 manual
- **CMS1077-MS:** CMS1077 manual

PRC1077 Manpack Accessories

Datron offers a wide variety of accessory equipment to use with the PRC1077 in a manpack configuration. Manpack accessory equipment is listed below and encompasses the following categories.

Note: mobile PRC1077 accessories are described in the PRC1077 Tactical Vehicular Accessories section.

1. Power Accessories
2. Carrying Accessories
3. Audio Accessories
4. Manpack Antennas
5. Retransmission Equipment



1. Power Accessories

The following accessories are available for powering the manpack radio and charging batteries.

a. Batteries

1. BB-LA6
2. BB-NC4
3. PRC-BCD-20

BB-LA6

A sealed lead-calcium rechargeable battery pack that fits into the transceiver battery case and attaches to the rear of the transceiver. Rated at 6.0AH, maximum. When used with the PRC1077 it provides approximately 30 hours of mission life at a 9:1 (Rx:Tx) duty cycle at 5W transmit power. When used properly the battery pack can be successfully recharged between 500 and 700 times.

BB-NC4

“D” size battery cassette for 10 dry-cell batteries or “D” NiCd cells. Cassette does not include batteries. Fits inside standard PRC1077 battery case.

PRC-BCD-20

“D” size battery cassette and extended battery box for 20 dry-cell batteries or “D” NiCad cells. Cassette does not include batteries.

b. Battery Chargers & Power Supplies

1. PRC-BC4-110
2. PRC-BC4-220
3. PRC-PS

PRC-BC4-110

Multiple battery charger. Charges up to four BB-LA6 lead-calcium batteries simultaneously. Automatic rapid/taper charge characteristic. Individual charge status indicators. Includes three C991610 charging cables and C991609 dc power cable. Includes 110 VAC power cord. 110 VAC, 24 Vdc input.

PRC-BC4-220

Identical to PRC-BC4-110 except includes 220 VAC power cord.

PRC-PS

Power supply/battery charger for one BB-LA6 sealed lead-calcium battery pack. Will charge attached battery and power the radio simultaneously. Automatic rapid/taper charge characteristic. Includes C991608 control cable and C991609 dc power cable. Includes 110 VAC or 220 VAC power cord. 110/220 VAC, 24 Vdc input. Specify ac voltage when ordering.

c. Solar Power Unit

1. PRC-SPU-10

PRC-SPU-10

Lightweight, fold-up, 10W solar panel. For recharging 12 Vdc battery packs such as BB-LA6. Complete with C991617 adapter cable to charge stand-alone battery. Order C991613 adapter cable for charging battery installed in radio.

d. Hand Crank Generator

1. PRC-HC-30
2. PRC-HC-MP
3. PRC-HC-TM

PRC-HC-30

Hand-crank generator, 30W. For recharging 12 Vdc battery packs such as BB-LA6. Double handle. Use monopod or tree mount. Complete with C991611 adapter cable for charging battery installed in radio. Order C991618 cable to charge stand-alone battery.

PRC-HC-MP

Monopod mount. For hand-crank generators. Unfolds to convenient operating height.

PRC-HC-TM

Tree mount with tree strap. For hand-crank generators.

e. Charging Cables

1. C991608

2. C991609

3. C991610

4. C991611

5. C991613

6. C991617

7. C991618

C991608

PRC-PS to PRC1077 power/charging cable. Comes with the PRC-PS.

C991609

PRC-PS input dc power cable. Comes with the PRC-PS.

C991610

PRC-BC4-110(-220) to BB-LA6 charging cable. Comes with the PRC-BC4-110(-220).

C991611

Hand-crank generator to radio charging cable. Comes with the PRC-HC-30.

C991613

PRC-SPU-10 to radio charging cable. Comes with the PRC-SPU-10.

C991617

PRC-SPU-10 to stand-alone BB-LA6 battery charging cable.

C991618

Hand-crank generator to stand-alone BB-LA6 battery charging cable.

2. Carrying Accessories

a. ST-138

b. CW-503

ST-138

Carrying harness with canvas bag for the PRC1077 transceiver.

CW-503

Canvas bag for use in carrying accessory items like antennas, etc. Use with the ST-138.

3. Audio Accessories

All PRC1077 audio accessories are terminated with 5-pin, twist-lock, and military-style connectors that are interchangeable among Datron military products.

- a. MHS
- b. H-250/U
- c. H-140/U
- d. H3M
- e. H2200

MHS

H-189/U military handset. Repairable.

H-250/U

Noise canceling, non-repairable version of MHS.

H-140/U

Ruggedized headphones.

H3M

Headset-boom microphone. Single earphone low profile. With clip-on push-to-talk switch.

H2200

Ruggedized headphone, lightweight, waterproof, single-earpiece, waterproof PTT switch, and clothing clip. Fits under helmet.

4. Manpack Antennas

- a. Whip Antennas

- 1. AT-271A/U

- 2. AT-892/U

AT-271A/U

Folding, multi-sectional, whip antenna with AB-591/U flexible antenna base, 10 ft (3 m). Connects directly to the whip antenna port on the transceiver. Uses internal radio matching network.

AT-892/U

Collapsible tape whip antenna with flexible gooseneck antenna base, 3.3 ft (1 m). Connects directly to the whip antenna port on the transceiver. Uses internal radio matching network.

b. Long range Antennas

1. OE-254/GRC
2. 701555

OE-254/GRC

Broadband (30-87.975 MHz) portable omni-directional antenna kit including antenna, mast, mallet, support cable, stakes, transit bag, 80 ft RF cable with 90 degree N-socket to BNC-plug adaptor. Overall height approximately 42 ft (13 m).

701555

Complete mast kit for DWC4242-2 or 4242-MK2 antenna. Includes antenna mount, 42 ft (13 m) mast, base plate, hammer, and support cable. Order DWC4242-2 or 4242-MK2 antenna and C991577-100 RF cable separately.

5. Retransmission Equipment

a. 1077RETRAN

1077RETRAN

Cable kit used to interconnect two PRC1077s for use as a retransmission station in applications over long-range paths in rough terrain that cannot be spanned with a single line-of-sight link. Includes 50 ft cable.

PRC1077 Vehicular Accessories

1. Mounts and Adapters
2. RF Power Amplifiers
3. Mobile Antennas
4. Control and Audio Accessories
5. Mobile Power Accessories
6. Vehicle Installation Kit

1. Mounts and Adapters

- a. MT-1077-12
- b. MT-1077-24
- c. AM1077ADPT
- d. PS1077

MT-1077-12

Vehicle adapter with integral shock mount for installation of the PRC1077 transceiver into 12 Vdc vehicles. Unit provides power conditioning and audio amplification for external loudspeaker. Provides 12 Vdc to the AM1077CONV which converts it to 24 Vdc for the AM-1077 power amplifier. For configuration details, see the PRC1077 System Configurations section below.

MT-1077-24

Vehicle adapter with integral shock mount for installation of the PRC1077 transceiver into 24 Vdc vehicles. Unit provides power conditioning and audio amplification for external loudspeaker. Provides 24 Vdc directly to the AM-1077 power amplifier. For configuration details, see the PRC1077 System Configurations section below.

AM1077ADPT

Amplifier adapter. Required for the AM-1077 amplifier when used with the 24 Vdc MT-1077-24 vehicle adapter. Includes adapter box and handle clamps. NSN 5340-01-296-4780.

PS1077

20-32 Vdc power adapter/base. Provides convenient mounting base for PRC1077 and AM-1077. Ideal for portable applications. Complete with 1m (3 ft.) power cable (unterminated).

2. RF Power Amplifiers

a. AM-1077

AM-1077

30-87.975 MHz, 50W power amplifier for PRC1077. 24 Vdc operation only. Switched harmonic and low-pass filters. Full compatibility with MT1077 mount which is required for installation. PRC1077/MT1077/AM-1077 combination is interchangeable with AN/VRC-12 and AN/VRC-46 radio families. Order C991575 RF cable and C991579 power cable separately. NSN 5820-01-300-7600.

3. Mobile Antennas

a. DWC4242-2

b. 4242-MK2

c. 4257

DWC4242-2 **THIS ITEM IS USML*

Broadband, center-fed, 2-section, vehicular whip antenna, 30-88 MHz, 9.1 ft (2.8 m). The antenna is ground independent and does not require a good ground plane. Order C991577 RF cable separately.

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4242-MK2 **THIS ITEM IS USML*

Broadband, center-fed, 2-section, vehicular whip antenna, 30-88 MHz, 10.5 ft (3.2 m). Shakespeare model 4242-MK2. The antenna is ground independent and does not require a good ground plane. Order C991577 RF cable separately.

4257

Antenna vehicular mounting bracket for DWC4242-2 or 4242-MK2 antenna. Ruggedized, open design allows easy access to antenna connections.

4. Control and Audio Accessories

a. PRC1077-ECU

b. LS-R

PRC1077-ECU

Extended control unit for use with the PRC1077. Functions include: remote power on/off, speaker on/off, external speaker drive capability, squelch override, and PTT inhibit. Maximum operating distance is 30m (100 ft.). Order control cable C991714.

LS-R

External loudspeaker for PRC1077.

5. Mobile Power Accessories

a. AM1077CONV

b. C991659

c. PRC-CA12V

AM1077CONV

12 Vdc to 28 Vdc converter at 6 A continuous output. Allows use of AM-1077 amplifier in 12 Vdc vehicles. Mounts inside AM-1077 rear accessory box when used with MT-1077-12 mount. Order dc power cable C991658.

C991659

Cable allows charging of two BB-LA6 batteries from a 12 Vdc vehicle battery or other 12Vdc source.

PRC-CA12V

Cable allows operation of radio from 12 Vdc vehicle battery or other 12 Vdc source. Allows charging of BB-LA6 battery installed in radio from 12 Vdc vehicle battery or other 12 Vdc source.

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6. Vehicle Installation Kit

a. 701579

701579

Installation kit for single vehicle.

PRC1077 Fixed Station Power Accessories

1. UPF7000A-12
2. UPF7000A-12-220
3. UPF7000A-28
4. UPF7000A-28-220
5. C991614

UPF7000A-12

Continuous duty (FSK) 12 Vdc power supply designed to power PRC1077 in 5W and 50W configurations with AM-1077. Automatic input voltage selection. Accepts 85-240 VAC, 47-63 Hz input. Packaged in rugged waterproof case. Order C991614 dc power cable separately.

UPF7000A-12-220

Same as UPF7000A-12 with standard 220 VAC plug on power cable.

UPF7000A-28

Continuous duty (FSK) 28 Vdc power supply designed to power PRC1077 in 5W and 50W configurations with AM-1077. Automatic input voltage selection. Accepts 85-240 VAC, 47-63 Hz input. Packaged in rugged waterproof case. Order C991614 dc power cable separately.

UPF7000A-28-220

Same as UPF7000A-28 with standard 230 VAC plug on power cable.

C991614

DC power cable between UPF7000A and MT-1077-12 and 24.

PRC1077 Tactical Systems

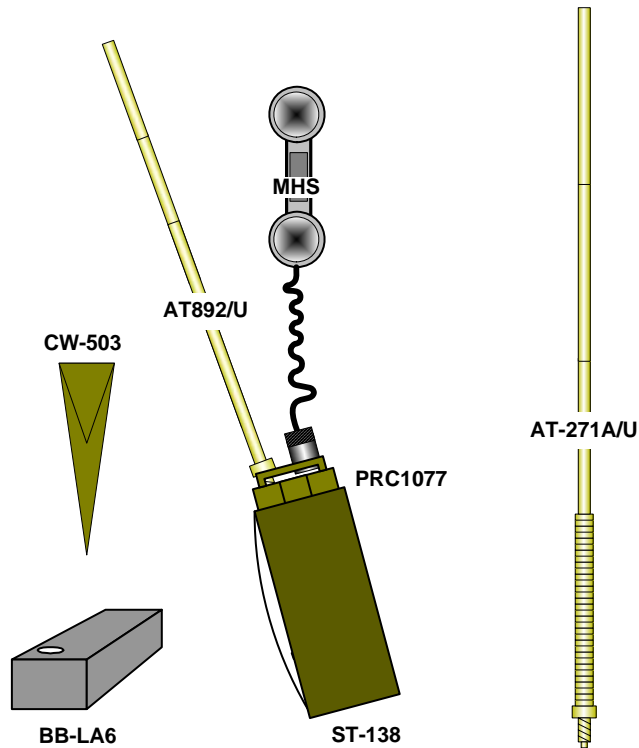
Various tactical manpack and mobile configurations are available using the PRC1077 as the core. Both +12 Vdc and +24 Vdc vehicles can be accommodated. A simple “building block” approach allows the user to configure a system for 5W or 50W RF power output. Some of the more common systems are shown in the following pages with all components and interconnecting cables.



PRC1077 System Descriptions	System Part Number
5W, 12 Vdc, VHF Manpack Voice System	PRC1077-SYS-M5
5W, 12 Vdc, VHF Mobile Voice System	PRC1077-SYS-V5-12
5W, 24 Vdc, VHF Mobile Voice System	PRC1077-SYS-V5-24
50W, 12 Vdc, VHF Mobile Voice System	PRC1077-SYS-V50-12
50W, 24 Vdc, VHF Mobile Voice System	PRC1077-SYS-V50-24

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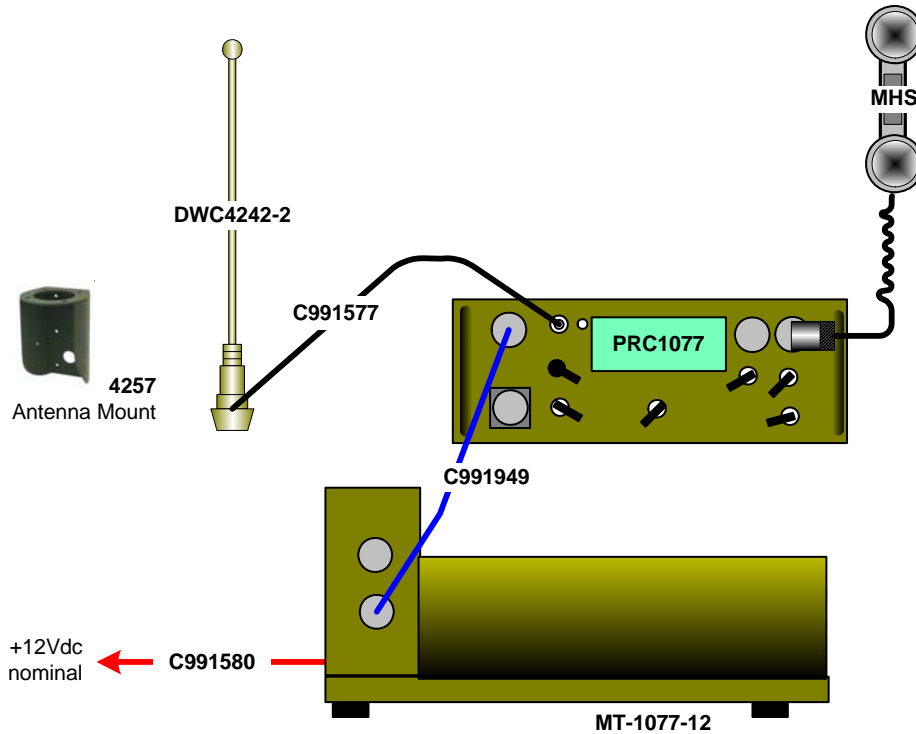
PRC1077-SYS-M5. 5W, 24 Vdc, VHF Manpack Voice System



PRC1077-SYS-M5. 5W, 12 Vdc, VHF Manpack Voice System			
Item	Quantity Supplied	DWC P/N	Item Description
1	1	PRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz.
2	1	MHS	Handset, military style H-189/U-type.
3	1	BB-LA6	Battery, rechargeable, 6 AH.
4	1	AT-892/U	Antenna, whip, flexible, 1.2m (3.9 ft.).
5	1	AT-271A/U	Antenna, whip 3m (10 ft.) with AB-591/U flexible base.
6	1	ST-138	Carrying Harness with canvas bag for radio.
7	1	CW-503	Carrying bag for accessories.

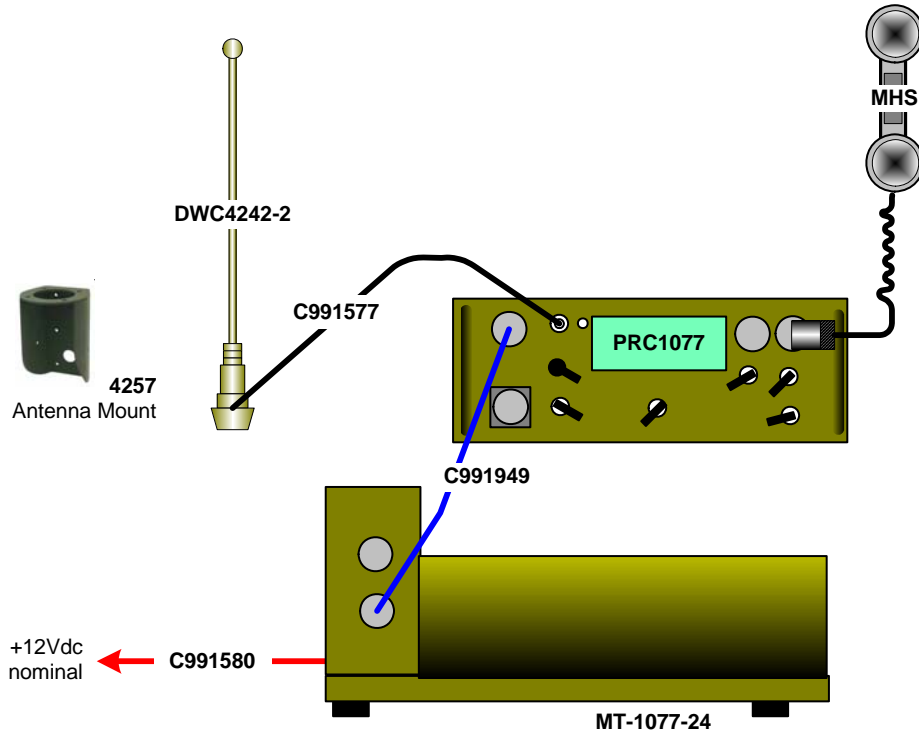
Note:
Order battery charger separately.

PRC1077-SYS-V5-12. 5W, 12 Vdc, VHF Mobile Voice System



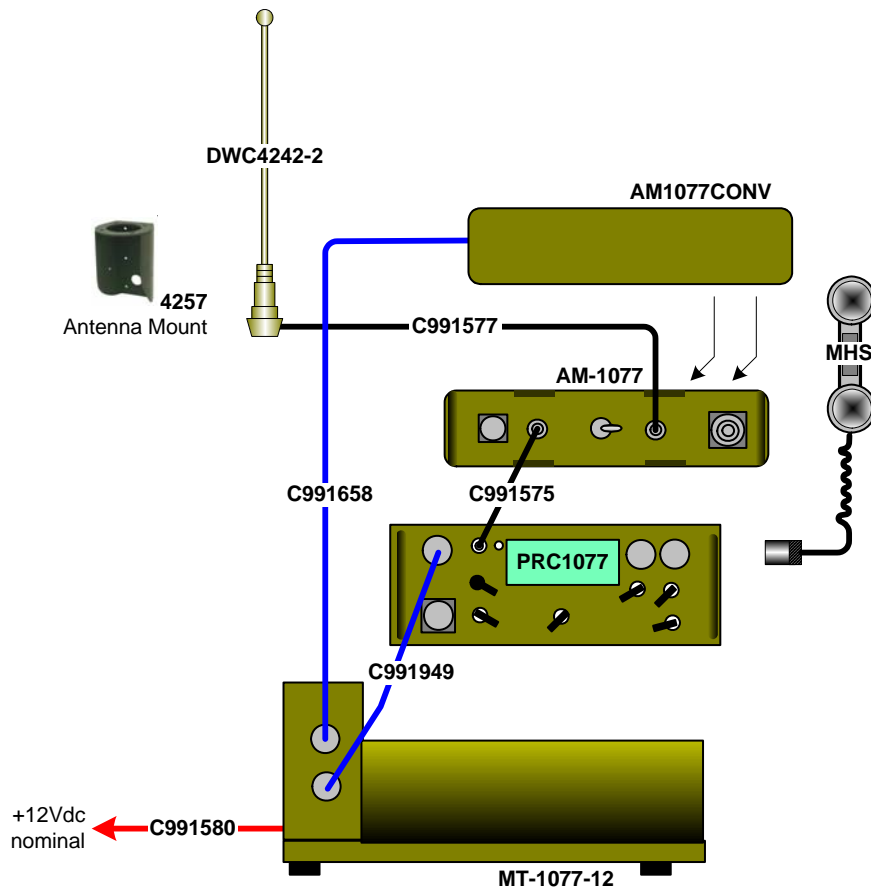
PRC1077-SYS-V5-12. 5W, 12 Vdc, VHF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-12	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	DWC4242-2	Antenna, broadband, vehicular, center fed, ground independent.
5	1	4257	Antenna mount for DWC4242-2.
6	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
7	1	C991580	Cable, DC power, MT-1077-12 to power source.
8	1	C991949	Cable, control + power, PRC1077 to MT-1077-12.
9	1	701579	Installation kit, single vehicle.

PRC1077-SYS-V5-24. 5W, 24 Vdc, VHF Mobile Voice System



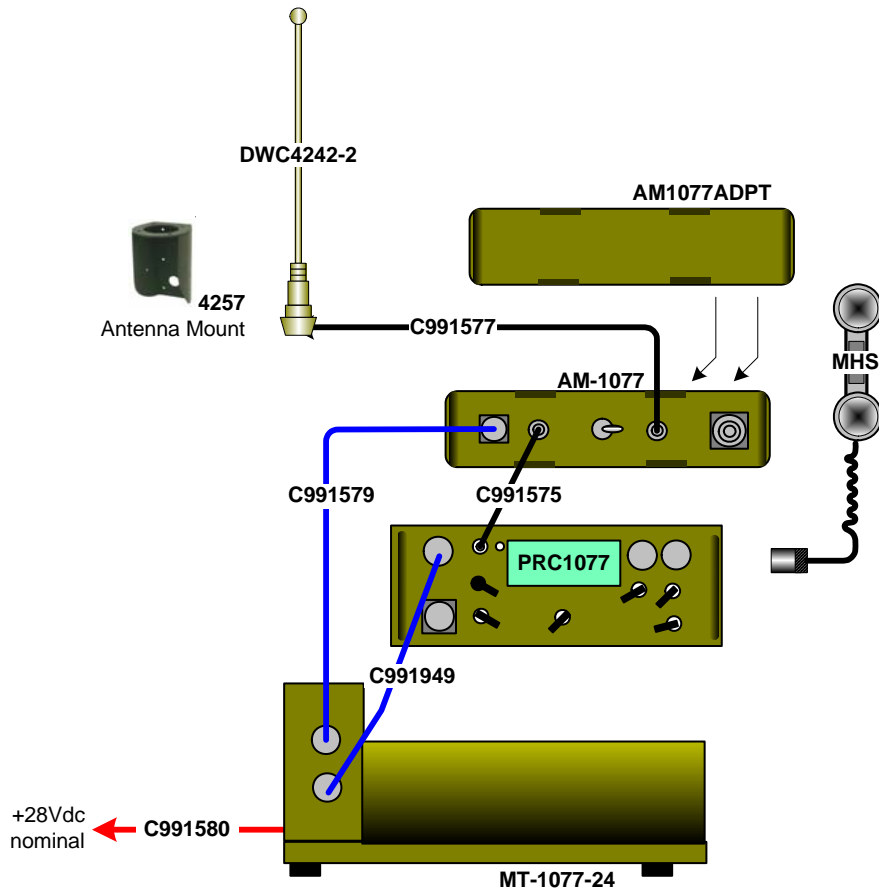
PRC1077-SYS-V5-24. 5W, 24 Vdc, VHF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-24	Adapter, vehicle, 24 Vdc, with loudspeaker.
4	1	DWC4242-2	Antenna, broadband, vehicular, center fed, ground independent.
5	1	4257	Antenna mount for DWC4242-2.
6	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
7	1	C991580	Cable, DC power, MT-1077-24 to power source.
8	1	C991949	Cable, control + power, PRC1077 to MT-1077-24.
9	1	701579	Installation kit, single vehicle.

PRC1077-SYS-V50-12. 50W, 12 Vdc, VHF Mobile Voice System



PRC1077-SYS-V50-12. 50W, 12 Vdc, VHF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-12	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077CONV	12 Vdc to 28 Vdc Converter.
6	1	DWC4242-2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4257	Antenna Mount for DWC4242-2.
8	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
9	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
10	1	C991580	Cable, DC power, MT-1077-24 to power source.
11	1	C991658	Cable, DC PWR, MT-1077-12 to AM1077CONV.
12	1	C991949	Cable, control + power, PRC1077 to MT-1077-12.
13	1	701579	Installation kit, single vehicle.

PRC1077-SYS-V50-24. 50W, 24 Vdc, VHF Mobile Voice System



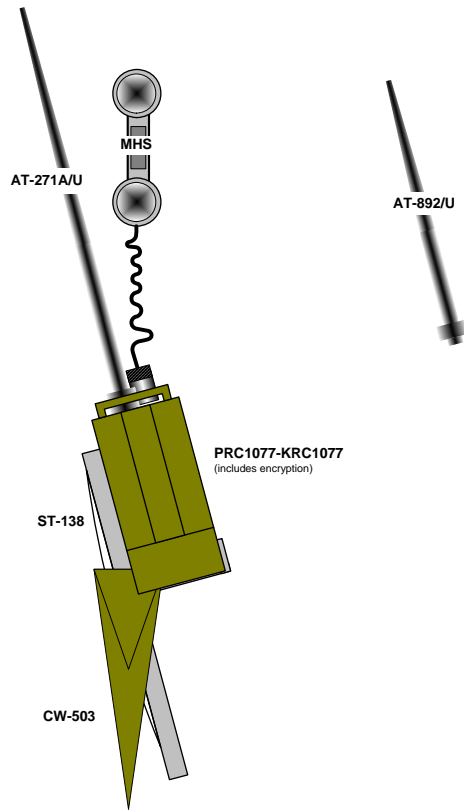
PRC1077-SYS-V50-24. 50W, 24 Vdc, VHF Mobile Voice System			
Item	Quantity	DWC P/N	Description
1	1	PRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-24	Adapter, vehicle, 24 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077ADPT	AM-1077 adapter kit, AM-1077 to MT-1077-24.
6	1	DWC4242-2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4257	Antenna Mount for DWC4242-2.
8	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
9	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
10	1	C991579	Cable, control + power, AM1077ADPT to MT-1077-24.
11	1	C991580	Cable, DC power, MT-1077-24 to power source.
12	1	C991949	Cable, control + power, PRC1077 to MT-1077-24.
13	1	701579	Installation kit, single vehicle.

PRC1077 Legacy Systems

Legacy Systems are shown in the table below.

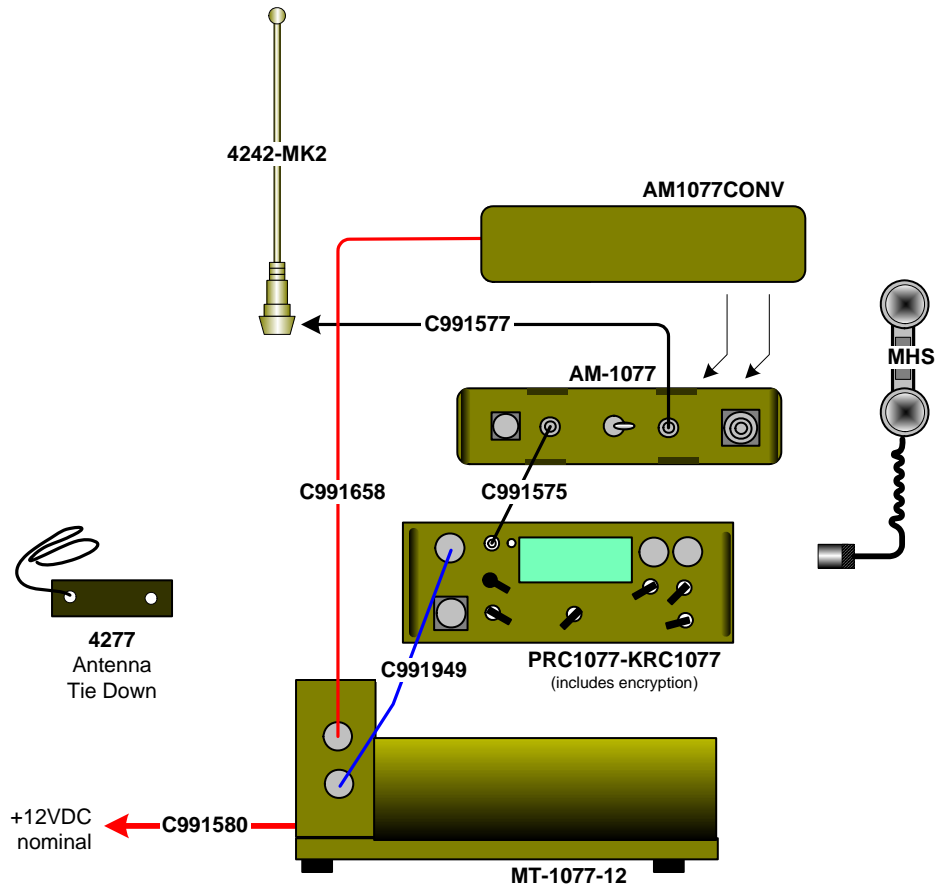
PRC1077 System Descriptions	System Part Number
5W, 12 Vdc, VHF Manpack Voice System with Encryption and MHS Handset	PRC1077-SYS100M
50W, 12 Vdc, VHF Mobile Voice System with Encryption and 4242-MK2 Antenna	PRC1077-SYS100V
5W, 12 Vdc, VHF Manpack Voice System with Encryption and H-250 Handset	PRC1077-SYS101M
50W, 24 Vdc, VHF Mobile Voice System with Encryption, 4242-MK2 Antenna and Ground Strap and without DC Power and RF Cables	PRC1077-SYS101V
50W, 24 Vdc, VHF Mobile Voice System with Encryption, 4242-MK2 Antenna and without DC Power Cable	PRC1077-SYS102V
50W, 12 Vdc, VHF Mobile Voice System with Encryption and DWC4242-2 Antenna	PRC1077-SYS103V
50W, 24 Vdc, VHF Mobile Voice System with Encryption, DWC4242-2 Antenna and with 30 ft RF Cable	PRC1077-SYS104V
50W, 12 Vdc, VHF Mobile Voice System with Encryption, 4242-MK2 Antenna and 4257 Antenna Mount	PRC1077-SYS110V
50W, 12 Vdc, VHF Fixed Station System with Encryption and OE-254/GRC Antenna	PRC1077-SYS120B
50W, 12 Vdc, VHF Retransmission System with 4242-MK2 Antenna	PRC1077-SYS125V

PRC1077-SYS100M. 5W, 12 Vdc, VHF Manpack Voice System with Encryption and MHS Handset



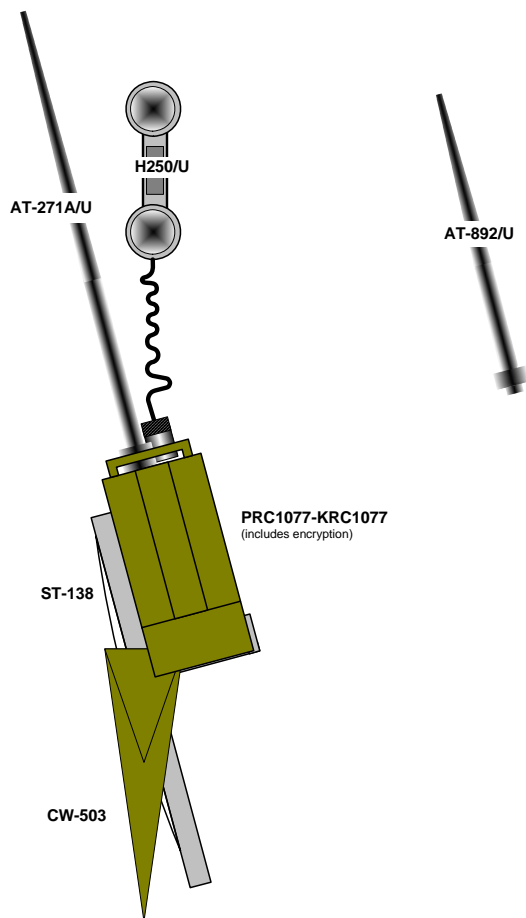
PRC1077-SYS100M. 5W, 12 Vdc, VHF Manpack Voice System with Encryption and MHS Handset			
Item	Quantity Supplied	DWC P/N	Item Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	AT-271A/U	Antenna, whip 3m (10 ft.) with AB-591/U flexible base.
4	1	AT-892/U	Antenna, whip, flexible, 1.2m (3.9 ft.).
5	1	ST-138	Carrying Harness with canvas bag for radio.
6	1	CW-503	Carrying bag for accessories.
7	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS100V. 50W, 12 Vdc, VHF Mobile Voice System with Encryption & 4242-MK2 Antenna



PRC1077-SYS100V. 50W, 12 Vdc, VHF Mobile Voice System with Encryption and 4242-MK2 Antenna			
Item	Quantity	DWC P/N	Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-12	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077CONV	12 Vdc to 28 Vdc Converter.
6	1	4242-MK2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4277	Antenna tie down kit.
8	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
9	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
10	1	C991580	Cable, DC power, MT-1077-24 to power source.
11	1	C991658	Cable, DC PWR, MT-1077-12 to AM1077CONV.
12	1	C991949	Cable, control + power, PRC1077 to MT-1077-12.
13	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

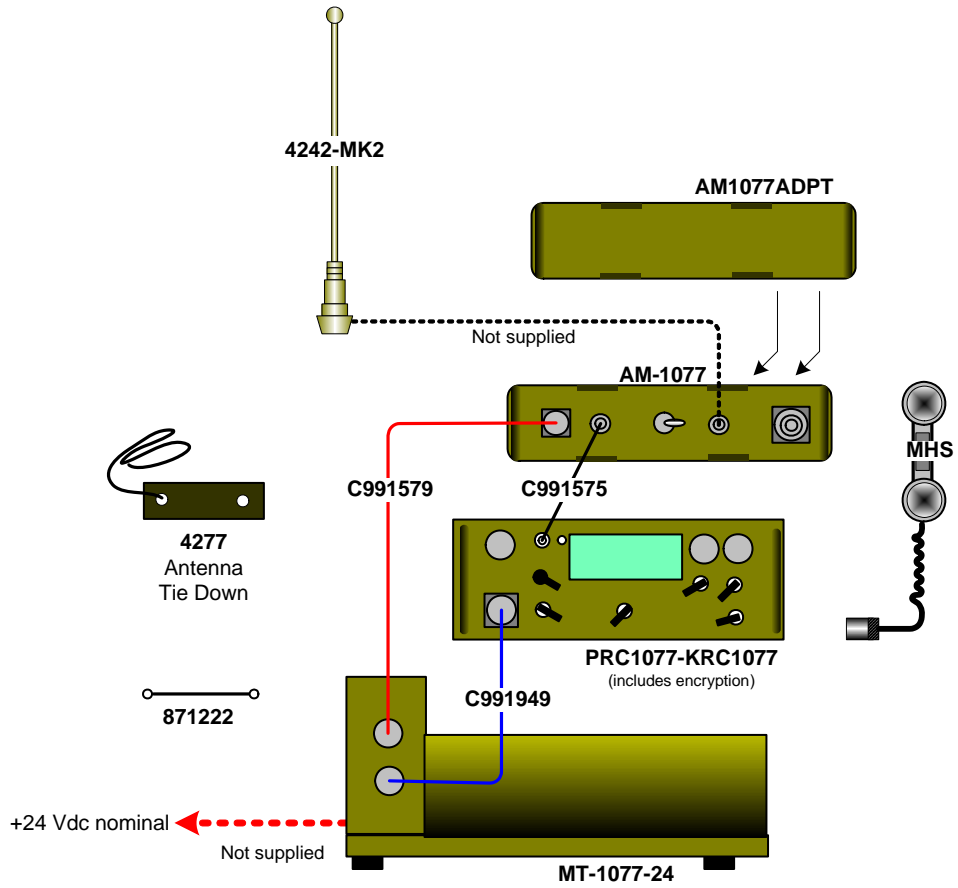
PRC1077-SYS101M. 5W, 12 Vdc, VHF Manpack Voice System with Encryption and H-250/U Handset



PRC1077-SYS101M. 5W, 12 Vdc, VHF Manpack Voice System with Encryption
and H-250/U Handset

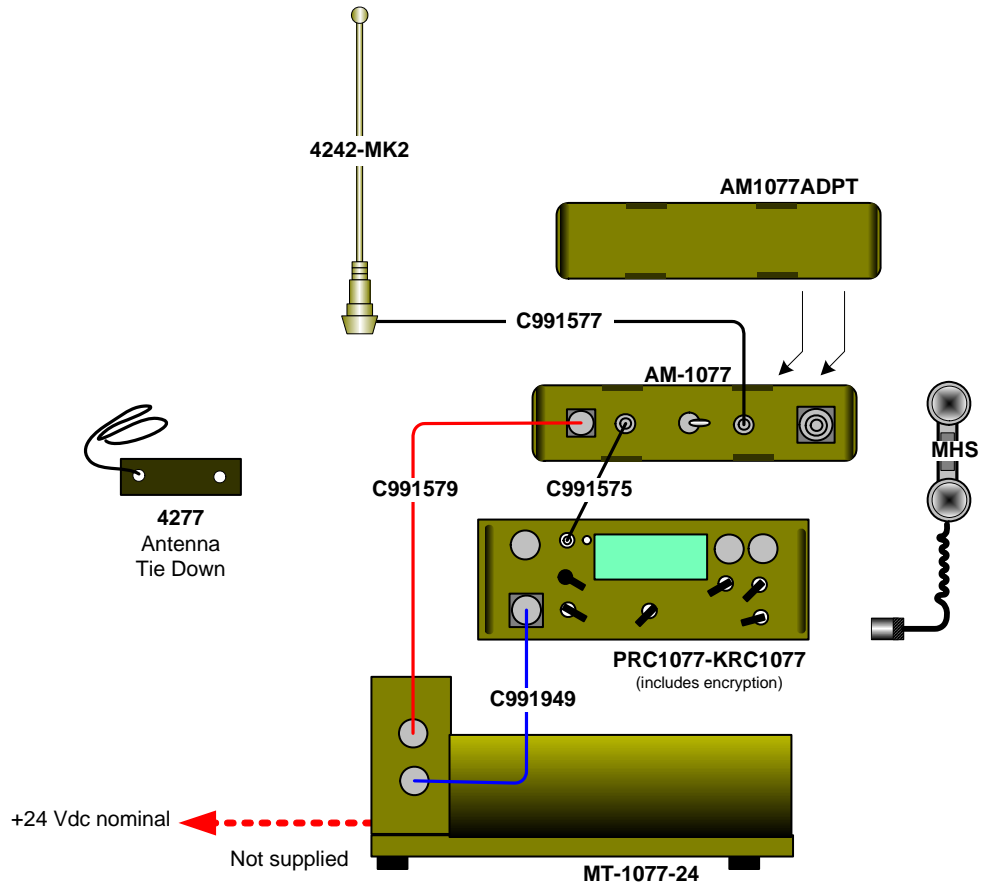
Item	Quantity Supplied	DWC P/N	Item Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	H-250/U	Handset, military style, non-repairable.
3	1	AT-271A/U	Antenna, whip 3m (10 ft.) with AB-591/U flexible base.
4	1	AT-892/U	Antenna, whip, flexible, 1.2m (3.9 ft.).
5	1	ST-138	Carrying Harness with canvas bag for radio.
6	1	CW-503	Carrying bag for accessories.
7	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS101V. 50W, 24 Vdc, VHF Mobile Voice System with Encryption, 4242-MK2 Antenna and Ground Strap and without DC Power and RF Cables



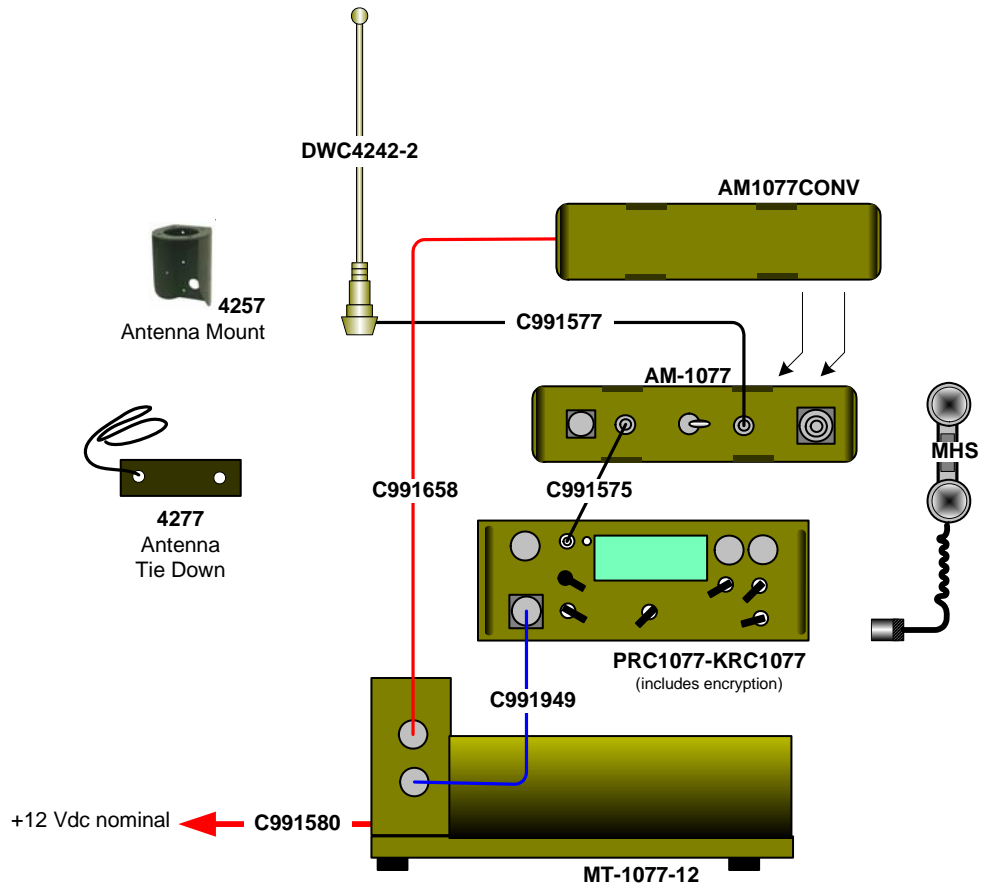
PRC1077-SYS101V. 50W, 24 Vdc, VHF Mobile Voice System with Encryption, 4242-MK2 Antenna and Ground Strap and without DC Power and RF Cables			
Item	Quantity	DWC P/N	Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-24	Adapter, vehicle, 24 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077ADPT	AM-1077 adapter kit, AM-1077 to MT-1077-24.
6	1	4242-MK2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4277	Antenna tie down kit.
8	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
9	1	C991579	Cable, control + power, AM1077ADPT to MT-1077-24.
10	1	C991949	Cable, control + power, PRC1077 to MT-1077-24.
11	1	871222	Installation kit, single vehicle.
12	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS102V. 50W, 24 Vdc, VHF Mobile Voice System with Encryption & 4242-MK2 Antenna and without DC Power Cable



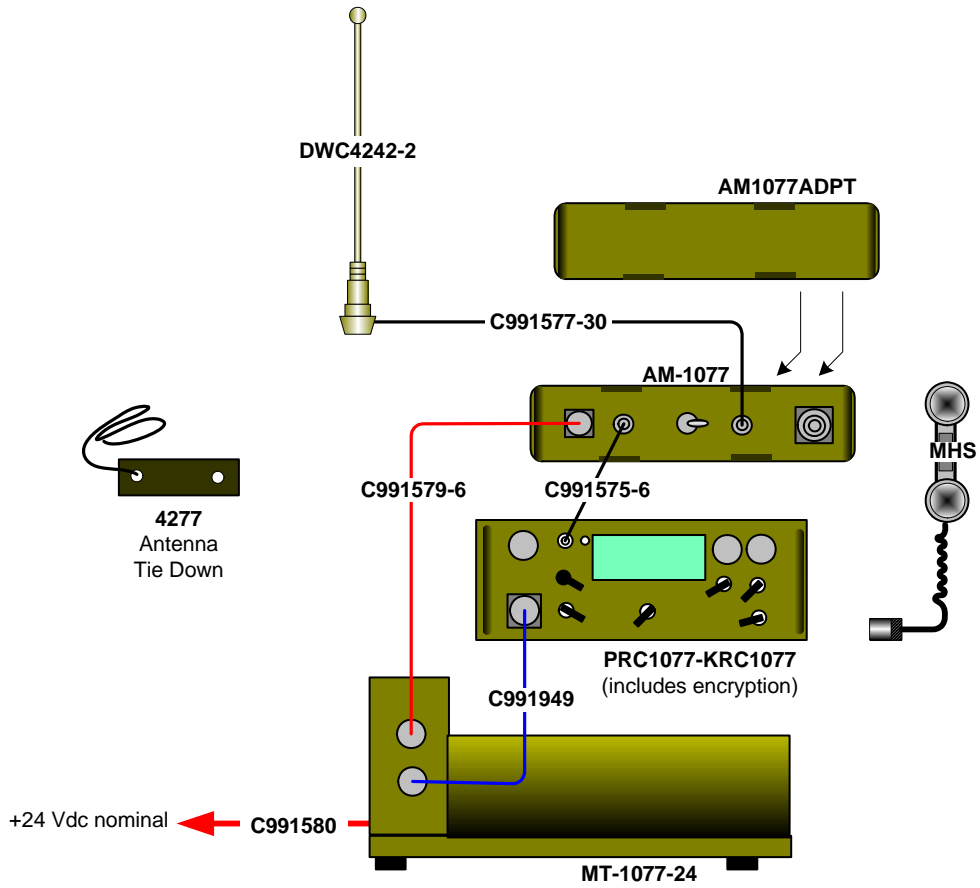
PRC1077-SYS102V. 50W, 24 Vdc, VHF Mobile Voice System with Encryption and 4242-MK2 Antenna and without DC Power Cable			
Item	Quantity	DWC P/N	Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-24	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077ADPT	AM-1077 adapter kit, AM-1077 to MT-1077-24.
6	1	4242-MK2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4277	Antenna tie down kit.
8	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
9	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
10	1	C991579	Cable, control + power, AM1077ADPT to MT-1077-24.
11	1	C991949	Cable, control + power, PRC1077 to MT-1077-24.
12	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS103V. 50W, 12 Vdc, VHF Mobile Voice System with Encryption and
DWC4242-2 Antenna



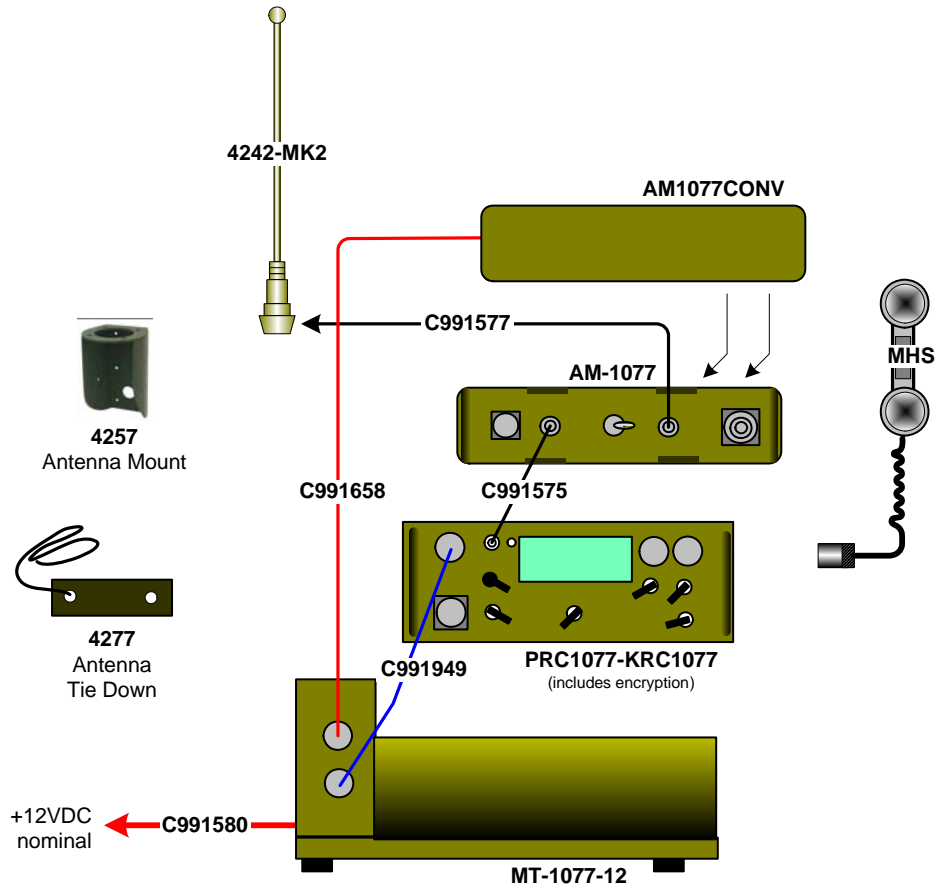
PRC1077-SYS103V. 50W, 12 Vdc, VHF Mobile Voice System with Encryption and DWC4242-2 Antenna			
Item	Quantity	DWC P/N	Description
1	1	PRC1077-KRC1077	Transceiver, VHF, tactical FM, 5W, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-12	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077CONV	12 Vdc to 28 Vdc Converter.
6	1	DWC4242-2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4257	Antenna mount for DWC4242-2.
8	1	4277	Antenna tie down kit.
9	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
10	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
11	1	C991580	Cable, DC power, MT-1077-24 to power source.
12	1	C991658	Cable, DC PWR, MT-1077-12 to AM1077CONV.
13	1	C991949	Cable, control + power, PRC1077 to MT-1077-12.
14	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS104V. 50W, 24 Vdc, VHF Mobile Voice System with Encryption and DWC4242-2 Antenna



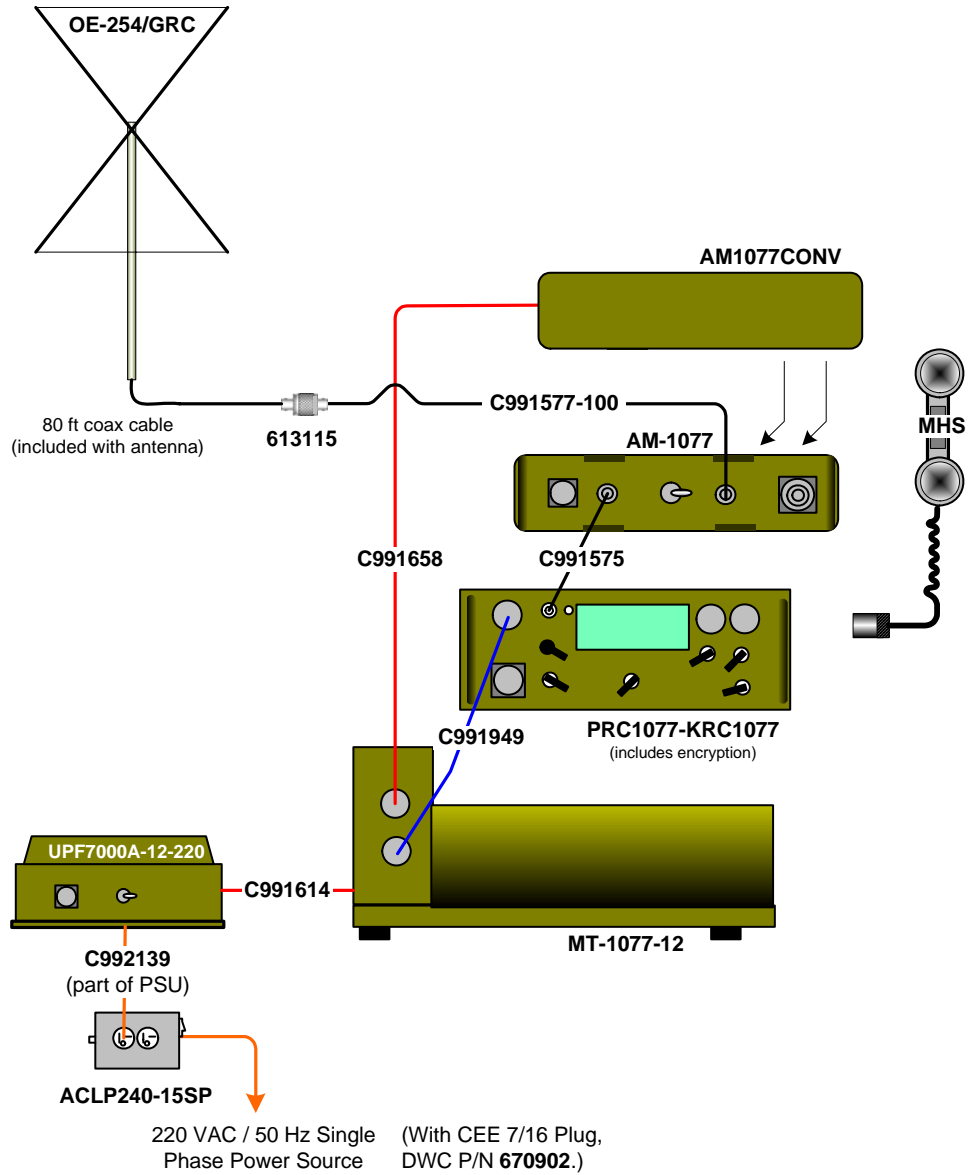
PRC1077-SYS104V. 50W, 24 Vdc, VHF Mobile Voice System with Encryption and DWC4242-2 Antenna			
Item	Quantity	DWC P/N	Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-24	Adapter, vehicle, 24 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077ADPT	AM-1077 adapter kit, AM-1077 to MT-1077-24.
6	1	DWC4242-2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4277	Antenna tie down kit.
8	1	C991575-6	Cable, RF, PRC1077 to AM1077ADPT, 6 ft.
9	1	C991577-30	Cable, RF, PRC1077 to DWC4242-2, 30 ft.
10	1	C991579-6	Cable, control + power, AM1077ADPT to MT-1077-24, 6 ft.
11	1	C991580	Cable, DC power, MT-1077-24 to power source.
12	1	C991949	Cable, control + power, PRC1077 to MT-1077-24.
13	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS110V. 50W, 12 Vdc, VHF Mobile Voice System with Encryption and 4242-MK2 Antenna



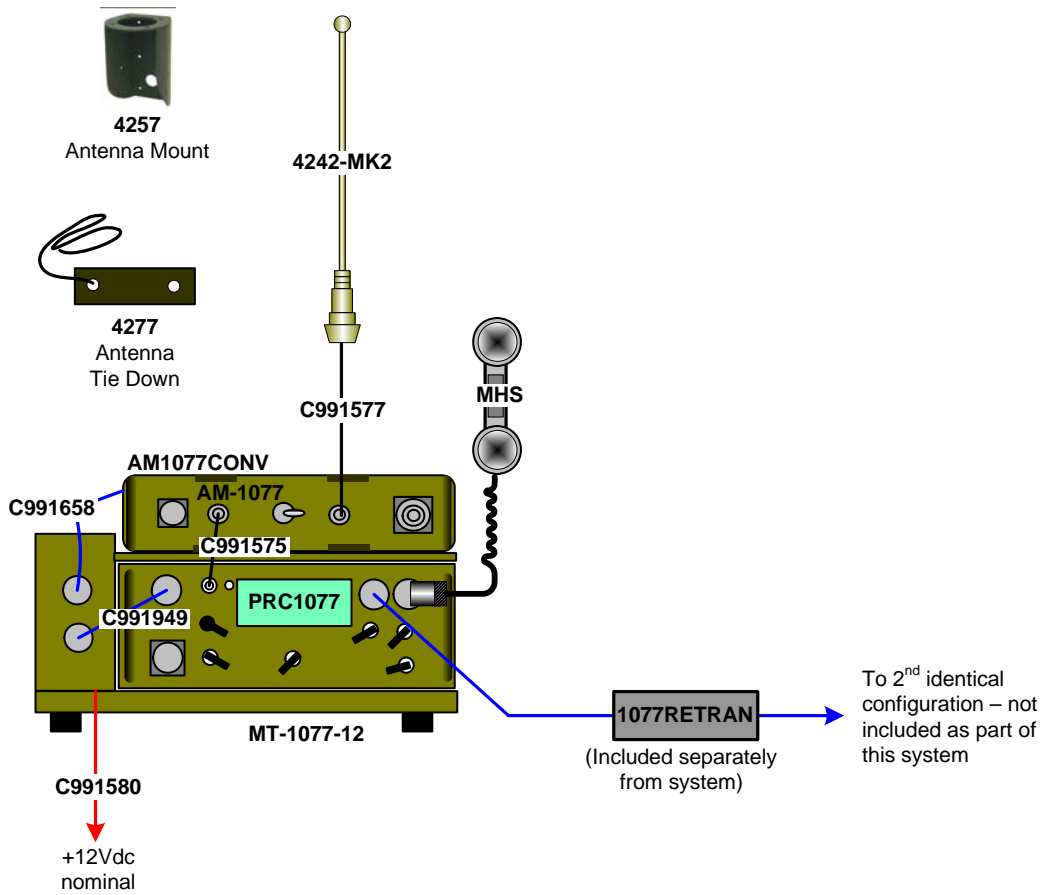
PRC1077-SYS110V. 50W, 12 Vdc, VHF Mobile Voice System with Encryption and 4242-MK2 Antenna			
Item	Quantity	DWC P/N	Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-12	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077CONV	12 Vdc to 28 Vdc Converter.
6	1	4242-MK2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4257	Antenna mount for DWC4242-2.
8	1	4277	Antenna tie down kit.
9	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
10	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
11	1	C991580	Cable, DC power, MT-1077-24 to power source.
12	1	C991658	Cable, DC PWR, MT-1077-12 to AM1077CONV.
13	1	C991949	Cable, control + power, PRC1077 to MT-1077-12.
14	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS120B. 50W, 12 Vdc, VHF Fixed Station Voice System with Encryption and OE-2545/GRC Antenna



PRC1077-SYS120B. 50W, 12 Vdc, VHF Fixed Station Voice System with Encryption and OE-254/GRC Antenna			
Item	Quantity	DWC P/N	Description
1	1	PRC1077-KRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz, with encryption.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-12	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077CONV	12 Vdc to 28 Vdc Converter.
6	1	UPF7000A-12-220	PSU, 12Vdc, 220Vac.
7	1	ACLP240-15SP	AC surge suppresser, 240 VAC, single phase.
8	1	OE-254/GRC	VHF Antenna, Broadband, 30-88 MHz.
9	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
10	1	C991577-100	Cable, RF, PRC1077 to DWC4242-2, 100 ft.
11	1	C991614	Cable, DC PWR, UPF7000A to MT-1077.
12	1	C991658	Cable, DC PWR, MT-1077-12 to AM1077CONV.
13	1	C991949	Cable, control + power, PRC1077 to MT-1077-12.
14	1	613115	Adapter, BNC-F to BNC-F.
15	1	670902	AC Plug, Euro, CEE 7/16.
16	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077-SYS125V. 50W, 12 Vdc, VHF Mobile Retransmission Voice System with 4242-MK2 Antenna



PRC1077-SYS125V. 50W, 12 Vdc, VHF Mobile Retransmission Voice System with 4242-MK2 Antenna			
Item	Quantity	DWC P/N	Description
1	1	PRC1077	Transceiver, 5W, VHF FM, 30-87.975 MHz.
2	1	MHS	Handset, military style H-189/U-type.
3	1	MT-1077-12	Adapter, vehicle, 12 Vdc, with loudspeaker.
4	1	AM-1077	50W RF Amplifier.
5	1	AM1077CONV	12 Vdc to 28 Vdc Converter.
6	1	4242-MK2	Antenna, broadband, vehicular, center fed, ground independent.
7	1	4257	Antenna mount for DWC4242-2.
8	1	4277	Antenna tie down kit.
9	1	C991575	Cable, RF, PRC1077 to AM1077ADPT.
10	1	C991577	Cable, RF, PRC1077 to DWC4242-2.
11	1	C991580	Cable, DC power, MT-1077-24 to power source.
12	1	C991658	Cable, DC PWR, MT-1077-12 to AM1077CONV.
13	1	C991949	Cable, control + power, PRC1077 to MT-1077-12.
14	1	PRC1077-MSOPDA	PRC1077 Operator Manual, in Dari.

PRC1077 Standard Spare Equipment

Datron offers spare kits for all of its 1077-series equipment. Standard spares are broken down into three complementary kits: MK, MRK, PSK. These kits are unique and do not include parts which are supplied as part of another kit.

Module Kit (MK)

A module kit contains one complete set of all replaceable printed circuit subassemblies in the product. These are the items which allow the equipment to be repaired by identifying and replacing modules in order to minimize down time.

In general, a technician should be able to replace one of these subassemblies using common tools.

The number of module kits required depends on the maintenance plan for the equipment. Typically, 2 module kits are held at each field service repair site – 1 for replacements and the other for backup while the defective module is returned to the factory or main service depot for repair.

Module Repair Kit (MRK)

A module repair kit contains all of the spare piece parts necessary to service the printed circuit assemblies in the product. It is designed to support up to 10 pieces of the product for 3 to 5 years. If the maintenance plan is to return all subassemblies to the factory for repair, then the MRKs are not required for equipment support.

Part Spares Kit (PSK)

A part spares kit contains the spare parts (except for basic hardware and wire) necessary to service the product with the exception of the printed circuit assemblies. It therefore contains those spares not contained in the MRK (e.g., chassis parts and front panel components). It is designed to support up to 10 pieces of the product for 3 to 5 years.

DWC Product P/N	Module Kit (-MK)	Module Repair Kit (-MRK)	Parts Spare Kit (-PSK)
PRC1077	>	>	>
AM-1077	>	>	>
MT-1077-12	>	>	>
MT-1077-24	>	>	>
PS1077	>	>	>
PRC-BC4	>	>	>
PRC-PS	>	>	>

Notes:

- To order an individual spares kit, add the appropriate suffix (i.e., -MK, -MRK, -PSK) to the product part number.*
- When MK (Module Kits) and MRK (Module Repair Kits) are not listed, they are not available and are not required.*

3. System spares do not include spare handsets, microphones, antennas or other accessories that may be required for long-term support of the system.

PRC1077 Manuals

DWC Product P/N	Operator (-MSOP) (supplied with unit)	Technical (-MS) (order separately)	Operator/Technical (-MS) (supplied with unit)
PRC1077	>	>	
AM-1077			>
MT-1077			>
PRC1077-ECU/ECSU			>
UPF7000A-28			>
CMS1077			>
KF1077			>

Note: For system documentation, contact your Datron Sales Representative.

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