



Rockwell
International

instructions

AC-8013 External Standard Kit (622-3461-001)

Collins Telecommunications Products Division

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AC-8013 External Standard Kit
(622-3461-001)

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1. DESCRIPTION

The AC-8013 External Standard Kit 622-3461-001 contains an external phase-lock card, a cable assembly, and the hardware necessary to install them in the units listed in table 1. When installed, the external standard kit allows for an external high-stability frequency source to be connected to the synthesizer reference.

The external phase-lock card (P/O AC-8013 kit), when installed, allows an external reference frequency of 5 MHz, 1 MHz, or 100 kHz to be supplied to the units listed. The external reference signal must be 0.5 to 1.5 volts rms sine wave into 50 ohms with accuracy depending on the accuracy of the signal source.

2. INSTALLATION (Refer to figure 1.)

Installation of AC-8013 External Standard Kit (622-3461-001), consists of installation of external phase-lock on the synthesizer reference (REF STD) and installation of cable assembly W1 (637-9136-001).

Note

Refer to maintenance section of this instruction book for planar card component replacement procedures.

2.1 External Phase-Lock (635-0655-001) Installation

- Remove top cover from unit.
- Remove top cover from synthesizer assembly.
- Remove REF STD from synthesizer assembly.

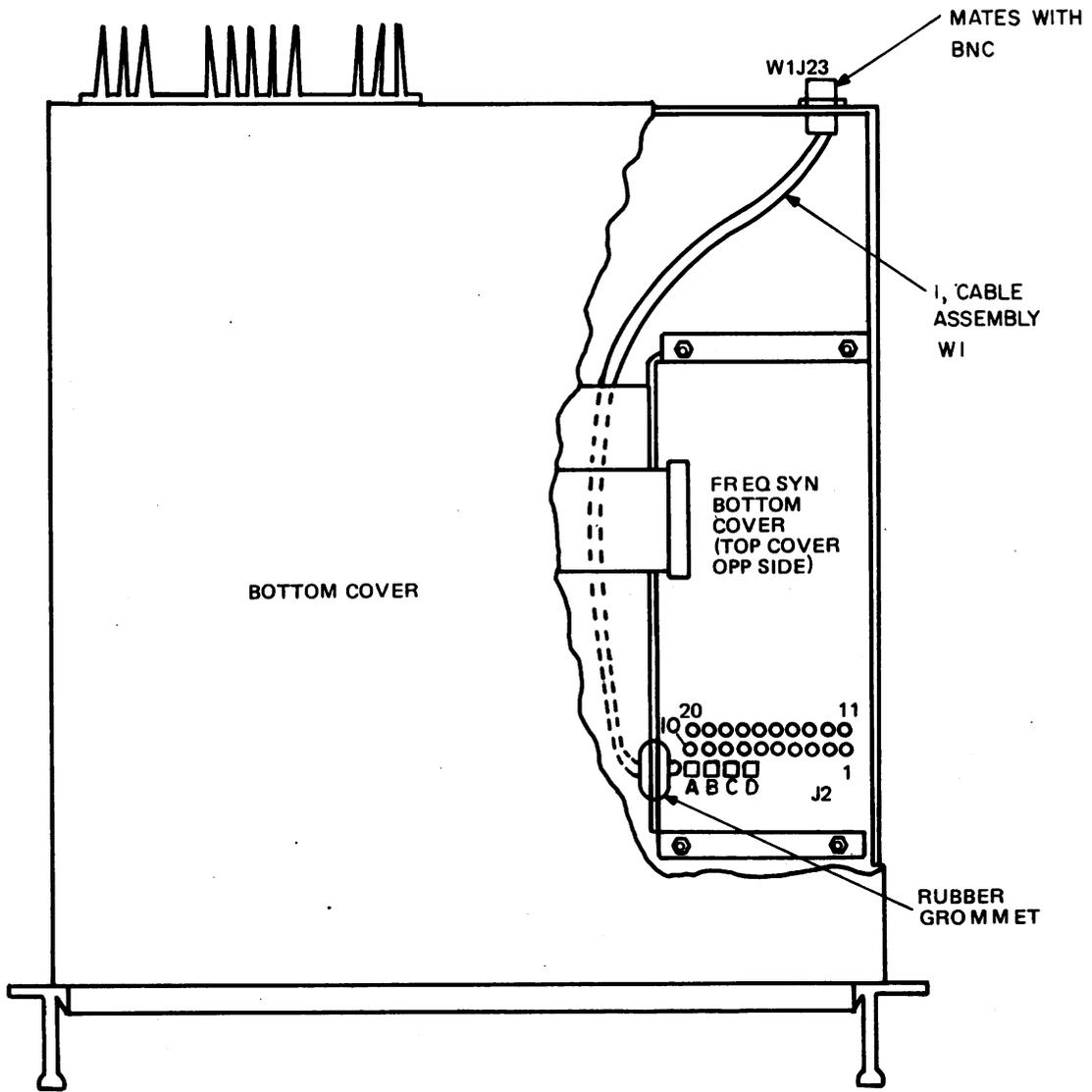
Table 1. AC-8013 External Standard Kit, Equipment Used On.

EQUIPMENT	COLLINS PART NUMBER
HF-8010 Exciter	622-3389-()
HF-8010A Exciter	622-3395-()
HF-8050 Receiver	622-3385-()
HF-8050A Receiver	622-3393-()
HF-8070 Receiver-Exciter	622-3387-()
HF-8070A Receiver-Exciter	622-3394-()
851S-1 Receiver	622-4272-()
Note	
If an oven standard kit is installed, the oven standard must first be removed before the external standard kit is installed.	

- Remove cover from left side rf compartment on REF STD, and move jumper clip from INT to EXT position (strap for external operation).
- Reinstall left side rf compartment cover on REF STD.
- Mount external phase-lock (table 2, item 2) to REF STD with two lockscrews (table 2, item 3).
- Set jumper clip on external phase-lock to 1-MHz position.
- Insert REF STD in its original position in synthesizer assembly.
- Reinstall synthesizer assembly top cover.
- Reinstall unit top cover.

2.2 Cable Assembly W1 (637-9136-001) Installation

- Remove bottom cover from unit.
- Remove bottom cover from synthesizer assembly.



TP5-4258-013

AC-8013 External Standard Kit Installation
Figure 1

- c. Secure cable assembly W1 (table 2, item 1) to J23 position of rear panel and thread cable through rubber grommet to synthesizer assembly as shown in figure 1.

Note

Some configurations of the synthesizer assembly do not contain a rubber grommet. In configurations not having a rubber grommet, place W1 in one of the cutouts for wiring using care not to pinch wires when reinstalling synthesizer assembly bottom cover.

Some configurations of the synthesizer sideboard contain posts in the J2 pads and some only contain solder holes. In the configurations containing solder holes, do not insert leads more than 0.508 cm (0.20 in) into sideboard when soldering.

- d. Solder center conductor of W1 (insulated) to J2-A post or pad of synthesizer sideboard.

- e. Solder shield top of W1 (uninsulated) to J2-B post or pad of synthesizer sideboard.
- f. Reinstall synthesizer assembly bottom cover.
- g. Reinstall unit bottom cover.

3. REPAIR

Repair of the AC-8013 External Standard Kit is accomplished using standard maintenance and planar card repair procedures. Refer to the maintenance section of this instruction book for planar card repair procedures.

4. PARTS LIST/DIAGRAMS

This paragraph assists in identification, requisition, and issuance of parts, and installation/maintenance of the equipment. The Collins part number and description for each nonstandard replacement part are listed in table 2.

External Phase-Lock 635-0655-001 is covered in Synthesizer Reference (623-3085-001) instructions (Collins part number 523-0767970) included in this instruction book.

Table 2. AC-8013 External Standard Kit, Parts List.

ITEM	DESCRIPTION	COLLINS PART NUMBER	QUANTITY
1	Cable assembly W1	637-9136-001	1
2	External phase-lock	635-0655-001	1
3	Lockscrew - 0.112 x 40 x 0.187	330-1716-130	2
4	Drawing envelope	520-8360-133	1
	Installation kit-external reference standard, AC-8013	622-3461-001	1