

This Information Is Provided By
CBTricks.com

Redco RDS-1 Manual

Liability of damages to any equipment is the sole responsibility of the user! Downloading, viewing, or using any information provided on these pages automatically accepts the user to the terms of this agreement!

Modifications are provided for information purposes only!

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

The site is supported with donations from users, friends and selling of the Site Supporters DVD's to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

ALL the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). This work was not done for someone else to make money also, for example the ebay CD sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners.

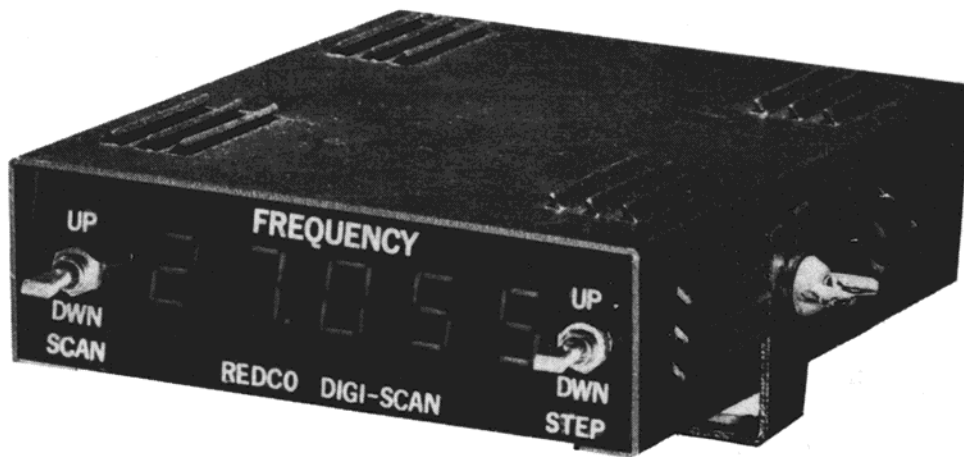
This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.

Thank you for any support you can give.

For information on how to Support CBTricks.com

<http://www.cbtricks.com/support/>

RDS-1 DIGI-SCAN



REDCO

Reliable Electronics Design Co.
11823 E. Slauson Ave., Santa Fe Springs, CA 90670

DIGI-SCAN

Model RDS-1

Operation and Installation Manual
Release Date 1-1-78

This manual applies directly to
REDCO Model RDS-1 basic Digi-Scan system

CERTIFICATION

REDCO certifies that this instrument was thoroughly tested and inspected and found to meet the published specifications. Each unit is exposed to a minimum of 24 hours of burn in.

TABLE OF CONTENTS

Section	Page
1. Introduction	4
1.1 Description	4
1.2 Identification	4
1.3 Specifications	4
2. Controls and Operation	9
3. Installation	9
4. Maintenance	11
5. Warranty	11
Illustrations and Drawings	
1. Drawing of Cable Assembly (Fig. 1)	7
2. 12 Volt DC Power Installation (Fig. 2)	6
3. Cutting Circuit Foil (Fig. 3)	5
4. Cutting Circuit Foil (Fig. 4)	5
5. Installation of Cable Assembly (Fig. 5)	8

1. INTRODUCTION: REDCO MODEL RDS-1 DIGI-SCAN SYSTEM

1.1 Description:

The REDCO DIGI-SCAN system is designed to expand the capabilities of the UNIDEN 858 PLL system currently in use on a number of transceivers. The system will expand only the receiver system and will automatically shut down if the radio is keyed for transmission. The Digi-Scan automatically displays the receive frequencies with a 5 digit frequency monitor system. This display is continuous in both the scan and step function, which allows for fast, accurate tuning of the receiver. The operating range of the receiver is increased to a maximum of 28.045 MHz and a minimum of 26.055 MHz. The system should be installed by a licensed technician only.

1.2 Identification:

REDCO uses a basic numerical serial number series. Refer to the title page for any change that may effect your unit. All changes will be noted by serial number effectivity for easy reference. The serial number for the Digi-Scan is located on the rear panel.

1.3 Specifications:

Frequency range	26.055 MHz to 28.045 MHz in 10 KHz steps
Readout	1/2 inch high, 5 digit, 7 segment LED
Resolution	least significant digit = 1 KHz
Power consumption	500 Ma. at 13.8 VDC
Size	4"L x 6"D x 1.25"H
Scan rate	12 steps/sec.
Operating temperature range	0° to 50°C
Storage temperature range	- 40° to 75°C

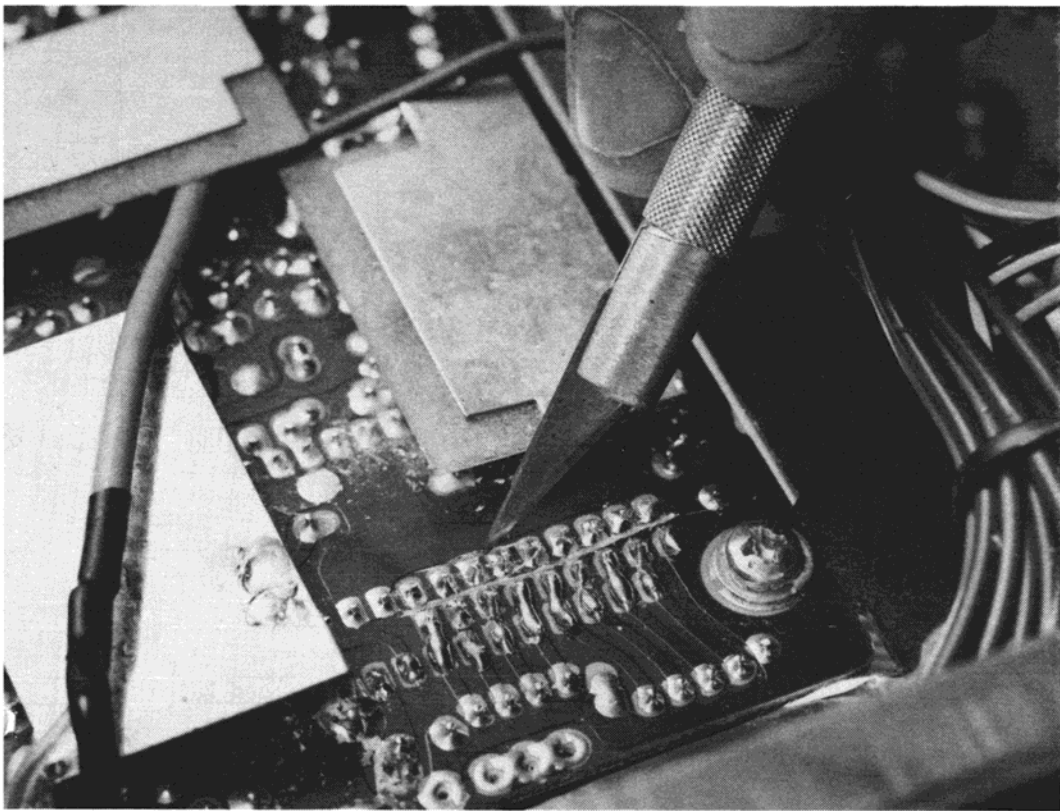
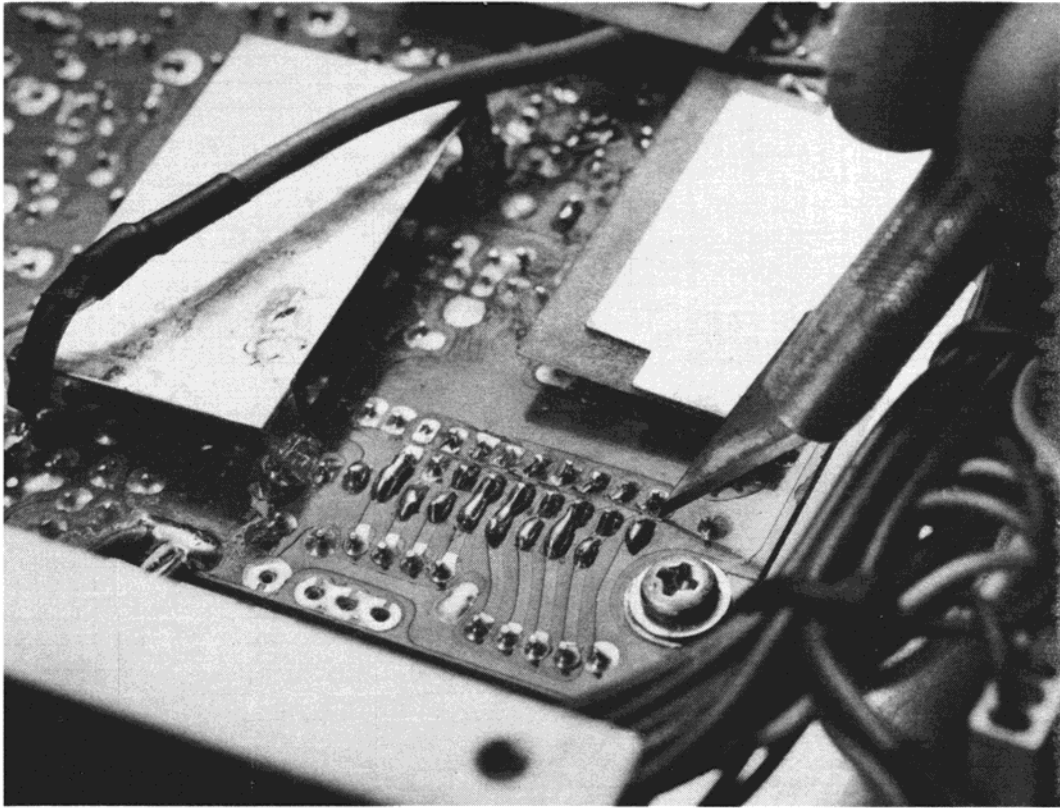
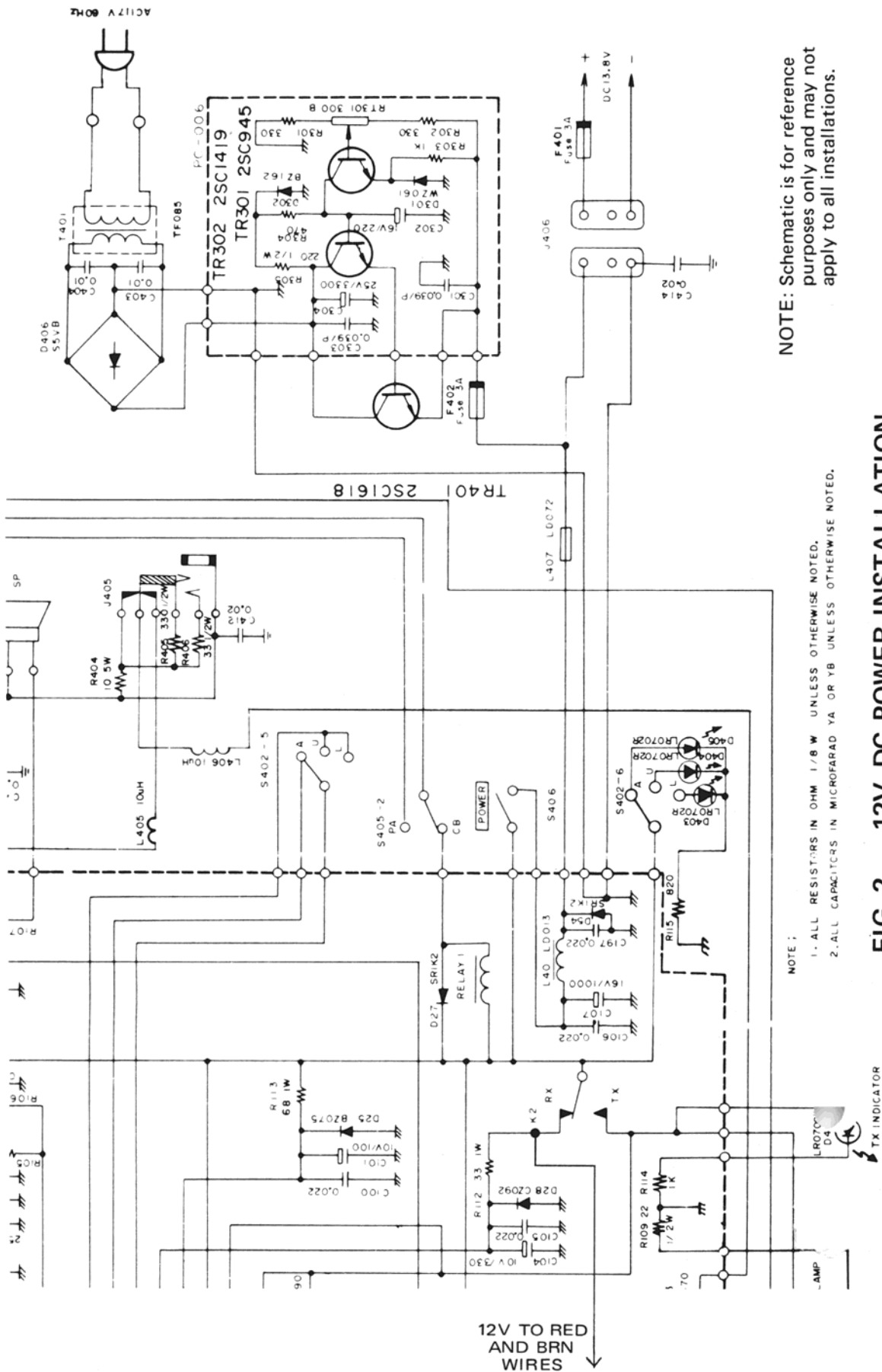


Fig. 3 & 4 — Cutting Circuit Foil



NOTE: Schematic is for reference purposes only and may not apply to all installations.

NOTE: 1.- ALL RESISTORS IN OHM 1/8 W UNLESS OTHERWISE NOTED.
2.- ALL CAPACITORS IN MICROFARAD YA OR YB UNLESS OTHERWISE NOTED.

FIG. 2 — 12V DC POWER INSTALLATION

BRN	PIN 15	02A
RED	PIN 14	02A
ORG	PIN 13	02A
YEL	PIN 12	02A
GRN	PIN 11	02A
BLU	PIN 10	02A
VIO	PIN 9	02A
GRY	PIN 8	02A
WHI	PIN 7	02A
BLK	--	NC
BRN	--	+12V
RED	--	
ORG	--	GND
YEL	--	

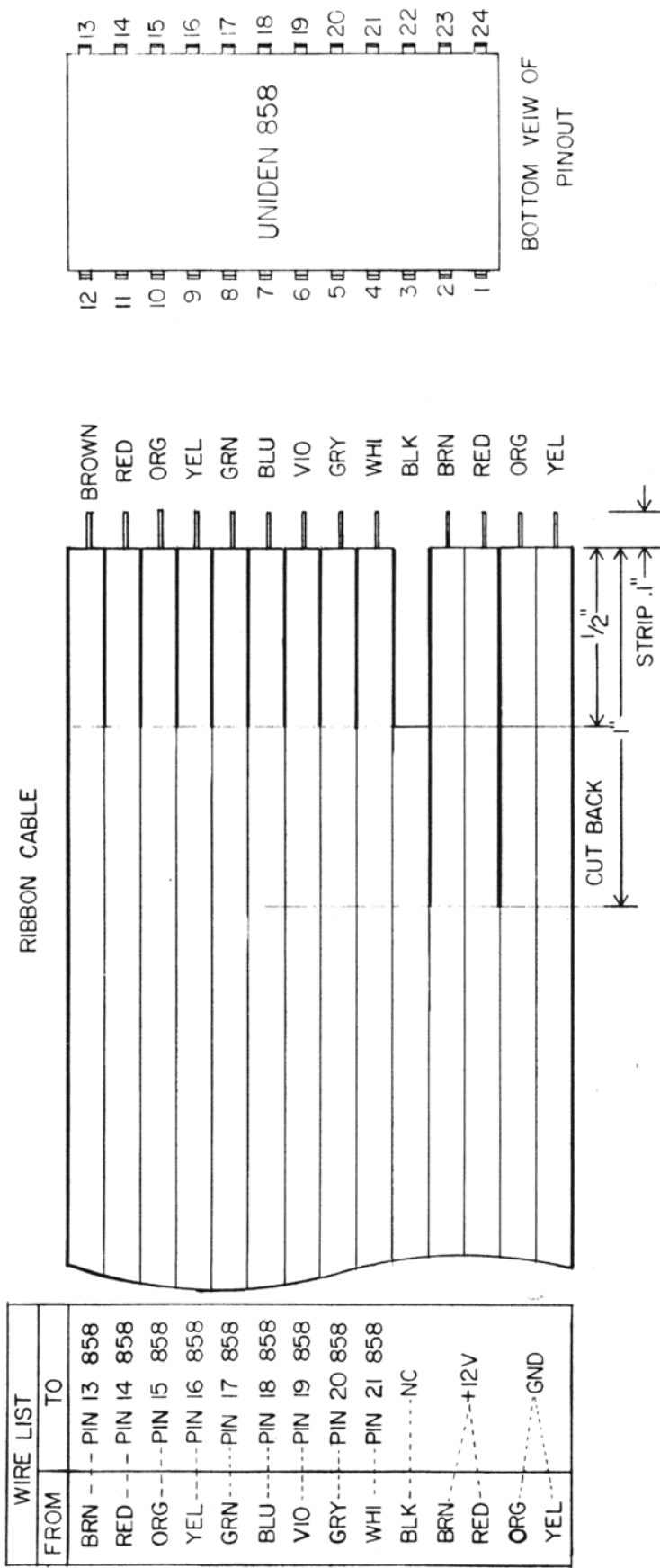


FIG. 1 - RIBBON CABLE INSTALLATION

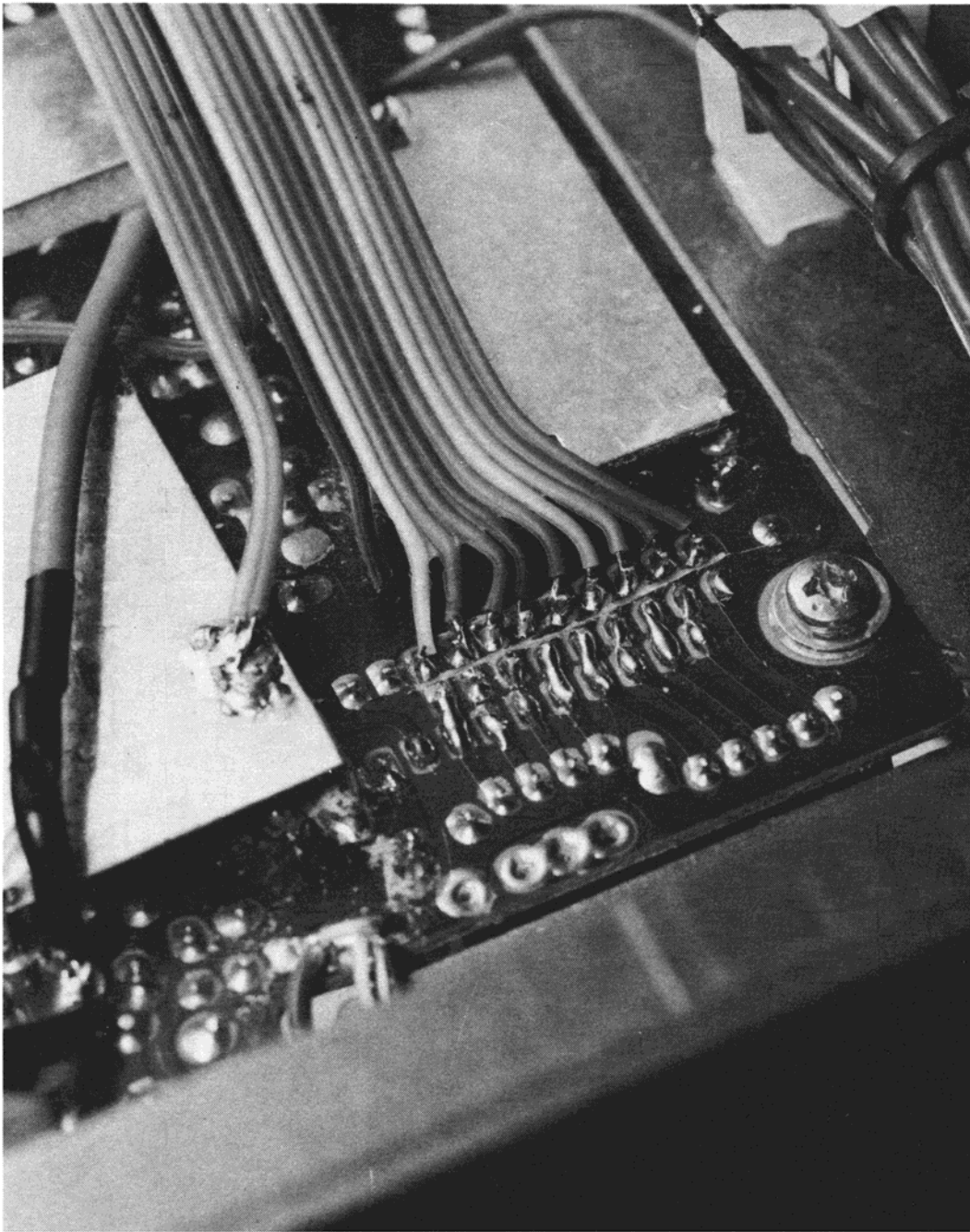


Fig. 5 — Installation of Cable Assembly

2. CONTROLS AND OPERATION

This section covers the various controls and basic description of their operation.

- 2.1 Scan Switch: A momentary toggle switch which controls the scan function. Push the scan switch down or up and hold for fast changes in frequency. (12 steps/sec.)
- 2.2 Step Switch: A momentary toggle switch which controls the frequency selection by one step (10KHz) at a time. Push the step switch up or down and release for each frequency change desired.
- 2.3 Displays: Consists of 5 individual .50" 7 segment LEDs.
- 2.4 Power: Power is applied from the radio. The system will automatically center at 27.055 (CH. 8) when the receiver is turned on.
- 2.5 CAUTION: DO NOT ATTEMPT TO SCAN AND STEP SIMULTANEOUSLY AS THIS WILL CAUSE THE DIGI-SCAN TO LOOSE SYNCHRONIZATION BETWEEN READ-OUT AND OPERATING FREQUENCY. THIS CONDITION CAN BE RECOGNIZED BY TESTING THE UPPER OR LOWER LIMIT OF THE READ-OUT. TO CORRECT THIS CONDITION MOMENTARILY TURN POWER OFF.

3. INSTALLATION PROCEDURE

This section describes the installation of the Digi-Scan cable assembly to the synthesizer.

- 3.1 Equipment Required for Installation:
 1. Soldering iron (suggested 25 watts max.)
 2. Exacto knife
 3. Wire stripper/cutter (26 gauge)
 4. Phillips #1 or #2 screwdriver, and equivalent straight slot.
 5. Needle nose pliers (5" to 7")
- 3.2 Installation:
 1. Remove the transceiver and Digi-Scan cases.
 2. Locate the UNIDEN 858 chip — normally close to the selector switch.
 3. Cut existing circuit lines on printed circuit board connecting to pins 13 thru 21. (Refer to figures #3 & 4)
NOTE: Pin 13 thru 21 should be isolated from all printed circuit lines. Special attention should be given to pin 19 to insure isolation from ground.

3.2 Installation (continued):

4. Measure and cut ribbon cable to desired length for installation.
5. Separate wires as shown in Figure 1.
6. Solder wires to UNIDEN 858 chip as follows: Start with brown wire to pin 13, continue installation as shown on Figure 1. (Refer to Figure 5.)
7. The black wire is not used.
8. Solder the orange and yellow wires to the ground shield as shown in Figure 5.
9. Solder the red and brown wire to the 12V power line of the receiver. (See Figure 2). If additional wire length is required, install a 20-22 GA insulated wire for additional length.
10. Notch rear chassis to allow adequate clearance for cable.
11. Re-install cases of radio.
12. Plug in cable assembly to Digi-Scan system. NOTE: Install with arrow pointed toward front of unit. Add strain relief clip to connector.
13. Re-install cover of Digi-Scan system.

3.3 Performance Test:

1. Turn power of radio on. Digi-Scan will automatically center at 27.055 MHz (CH. 8).
2. Allow for 1 second delay before changing frequency.
3. Momentarily push step switch up or down and check for 10MHz frequency changes.
4. Push scan switch up. Unit should stop scan at 28.045 MHz.
5. Push scan switch down. Unit should stop scan at 26.055 MHz.

The Digi-Scan system is now controlling the PLL circuit of your receiver. The channel select switch has been disengaged and will not affect the operation of the system.

4. MAINTENANCE

4.1 Cleaning unit:

1. Use a non-ketone-base cleaner and a soft cloth to remove residue from front panel.
2. Do not allow moisture or liquids to run into vents as damage may occur.

LIMITED 6 MONTH WARRANTY PARTS & LABOR

REDCO warrants this product to be free from defects in material and workmanship for a period of six months from date of original sale to the ultimate user. **REDCO** will repair free of charge any **REDCO** product which in the judgment of **REDCO** has proven to be defective within the six month period when said product is returned at customer expense to **REDCO** or one of **REDCO's** Authorized Warranty Stations. This warranty does not cover any expenses incurred in the removal and re-installation of this product.

This warranty does not apply to any **REDCO** product damaged by accident, misuse, abuse, improper line voltage, fire, flood, lightning, or other acts of God, or by being altered or repaired by anyone other than **REDCO** or one of its Authorized Warranty Stations. This warranty does not cover marred cabinets, or any other accessory used in connection with the product or damage due to a defect in the product.

This warranty is in lieu of all other warranties expressed or implied including any implied warranty of merchantability, and no person is authorized to assume for **REDCO** any other liability in connection with the sale of the product.