

**SC407**  
**WHIP ANTENNA TUNING COIL**  
**ASSEMBLY**

**OPERATOR MAINTENANCE**  
**MANUAL**

Publication No. 003-0417-001  
Rev. D00

**LORAL**  
**TerraCom**

Technical Publications Group

9020 Balboa Avenue San Diego, California 92123-1595  
TEL: (619) 278-4100 ■ TLX: TERRACOM A SDG 18-2774 ■ FAX: (619) 292-1140. (619) 541-7188

Cover Sheet #003-0418-001

**SC407 WHIP ANTENNA TUNING COIL ASSEMBLY**

**457-0008-001**

<b>CONTENTS</b>		<b>PAGE</b>
<b>1.0</b>	<b>GENERAL DESCRIPTION</b> .....	<b>1</b>
<b>2.0</b>	<b>PERFORMANCE SPECIFICATIONS</b> .....	<b>1</b>
2.1	ELECTRICAL .....	1
2.2	MECHANICAL .....	2
2.3	ENVIRONMENTAL .....	2
<b>3.0</b>	<b>OPERATING PROCEDURES</b> .....	<b>3</b>
3.1	TUNING COIL ASSEMBLY ATTACHMENT TO AN/PRC-132 .....	3
3.2	ANTENNA ATTACHMENT AND TUNING GUIDELINES .....	4
3.3	TUNER OPERATIONS .....	7
3.3.1	TUNING ON RECEIVER NOISE .....	7
3.3.2	TUNING UNDER LOW TRANSMIT POWER .....	8
3.4	REMOVAL AND TRANSPORT .....	9
<b>4.0</b>	<b>FUNCTIONAL DESCRIPTION</b> .....	<b>10</b>
<b>5.0</b>	<b>MAINTENANCE INSTRUCTIONS</b> .....	<b>15</b>
<b>6.0</b>	<b>PART LIST</b> .....	<b>16</b>
	<b>WARRANTY INFORMATION</b> .....	<b>19</b>

LIST OF FIGURES

FIGURE #	TITLE	PAGE
1	Tuning Assembly Control Locations, Front View (With Angle Bracket in Up Position) . . . . .	11
2	Tuning Assembly, Attached (With Angle Bracket in Up Position) . . . . .	12
3	Tuning Assembly Control Locations, Front View (With Angle Bracket in Down Position) . . . . .	13
4	Tuning Assembly Attached (With Angle Bracket in Down Position) . . . . .	14

## 1.0 GENERAL DESCRIPTION

The SC407 Whip Antenna Tuning Coil Assembly is an adjustable inductor assembly that mounts to the AN/PRC-132 Transceiver. The assembly is used to tune the SC140AW whip or similar antennas in the 2 MHz to 33 MHz frequency range\*. The SC407 is comprised of the tuning coil, a mounting bracket suitable for attachment to the AN/PRC-132 Transceiver, the SC140AW Whip Antenna and an operators instruction plate with operating instructions and tuning information. The SC407 is designed to withstand the extremes of jungle, desert, coastal and mountainous terrain.

\* The SC407 may be used in a fixed-tune mode above 33 MHz, but at some loss in efficiency.

## 2.0 PERFORMANCE SPECIFICATIONS

### 2.1 ELECTRICAL

TUNING APPLICATION	Applicable to SC140AW whip, or any other whip antenna of 9 feet in length across specified frequency range.
--------------------	---

FREQUENCY RANGE	2 MHz to 33 MHz*
-----------------	------------------

#### FREQUENCY BANDS

Band 1A	2 - 7.1 MHz	Antenna: Full length
Band 2A	7.0 - 14 MHz	Antenna: Full length
Band 3A	13 - 19 MHz	Antenna: Full length
Band 2B	15 - 22 MHz	Antenna: Top section
Band 3B	21 - 33 MHz*	Antenna: Top section

NOTE: Frequency band suffix letter indicates antenna length to be used. Suffix A indicates full length. Suffix B indicates top section only.

\* The SC407 may be used in a fixed-tune mode above 33 MHz, but at some loss in efficiency.

EFFICIENCY	35% at 2 MHz 50% at 6 MHz 70% at 10 MHz and above
OPERATING POWER	Up to 75 Watts generated from a 50 ohm source.
DUTY CYCLE	Continuous 50 Watt CW input from 50 ohm source.

**2.2 MECHANICAL**

WEIGHT	4.25 pounds
--------	-------------

**2.3 ENVIRONMENTAL**

OPERATING TEMPERATURE	-30°C to +65°C
STORAGE TEMPERATURE	-40°C to +85°C
HUMIDITY	95%
SHOCK	4 foot drop in transport configuration
OPERATING ALTITUDE	15,000 ft
STORAGE ALTITUDE	40,000 ft

Resistant to effects of rain, dust, fungus, salt fog and sun loading.

### 3.0 OPERATING PROCEDURES

Refer to Figures 1 and 2 for the following descriptions.

\*\*\*\*\*  
\* WARNING \*  
\*\*\*\*\*

**High RF voltages are present at the interconnection between the antenna tuning coil and the antenna while transmitting. Avoid contact with these points to prevent RF burns.**

#### 3.1 TUNING COIL ASSEMBLY ATTACHMENT TO AN/PRC-132

1. Attach the tuner mounting bracket to the side of the AN/PRC-132 and use the hand operated latches to secure the bracket in place (Refer to Figures 1 and 2).
2. Loosen the clamp knob at the base of the antenna tuning coil assembly and slide the assembly into the mounting bracket, making sure the anti-rotation pin is seated in the base of the switch housing.
3. Hand tighten the clamp knob.

#### NOTE

The mounting bracket may be reversed as shown in Figures 3 and 4. The antenna tuning coil assembly is fitted into the mounting bracket such that the anti-rotation step in the angle bracket will prevent the housing from rotating after the clamp knob has been tightened. This configuration may be used to lower the center of gravity of the assembly, and provide better stability to the radio.

4. Position the antenna to the desired position by loosening the wing nut on the mounting bracket, rotating the mounting plate and antenna tuning coil assembly to the desired position and tightening the wing nut.

5. Attach the antenna tuner coaxial cable to the AN/PRC-132 ANT connector.

### 3.2 ANTENNA ATTACHMENT AND TUNING GUIDELINES

\*\*\*\*\*  
\* WARNING \*  
\*\*\*\*\*

When the transceiver antenna is tuned without a ground to the radio front panel or housing, the front panel or housing can assume a high RF potential to ground. This RF voltage increases as the capacitance between the case and ground decreases. The AN/PRC-132 Transceiver has power output up to 50 watts, and the voltages developed can cause RF burns when the exposed metal parts of the front panel or housing are touched momentarily while transmitting. RF burns can occur when intermittent contact is made with the exposed metal parts. The occurrence can cause involuntary reflex action by the operator with undesired results. To minimize the occurrence of RF burns, it is best to either avoid intermittent contact with the exposed metal parts or to remain constantly in contact while transmitting.

#### NOTE

As with any HF manpack antenna, performance is affected by several factors:

- o Type of terrain
- o Conductivity of terrain
- o Presence of large structures
- o Location of radio and antenna with respect to ground.

These and similar factors can affect overall performance. For best results, it is recommended that both radio and antenna tuning coil be located as close to ground as possible. If possible, the ground stud on the radio front panel should be tied to a ground rod.

Information for coarse tuning the antenna tuning coil is shown in the chart below. This information is also included on the operators instruction plate and on the base of the antenna tuning coil assembly. The length of the antenna chosen is based on the operating frequency and conditions. The full length SC140AW whip antenna can be tuned at frequencies below approximately 19 MHz and should be used for maximum radiated power. The short length top tape section of the SC140AW whip antenna may be tuned at frequencies above approximately 15 MHz and may be more convenient to use in many instances. If the operation with the short antenna is not satisfactory the full length antenna may be used above 19 MHz by selecting Band 3 and adjusting the antenna tuning coil so that the pointer is at the top of the range. In many cases this will provide better results than tuning the short whip antenna above 19 MHz.

The full length SC140AW whip antenna is tuned in the following bands:

Band 1A	2 - 7.1 MHz
Band 2A	7.0 - 14 MHz
Band 3A	13 - 19 MHz

The short length top tape section of the SC140AW whip antenna is tuned in the following bands:

Band 2B	15 - 22 MHz
Band 3B	21 - 33 MHz*

Note that the band switch has 3 positions. The A and B designators refer to the antenna length. For example, Band 2A means the band switch is in position 2 and the full length antenna is used.

- \* The SC407 may be used in a fixed-tune mode above 33 MHz by setting the tuning indicator to the top of the range (= 30) with the top tape section attached.



**SC407 WHIP ANTENNA TUNING UNIT  
TUNING CHART**

<b>BAND 1</b>		<b>BAND 2A</b>		<b>BAND 3A</b>	
<u>FREQ. MHz</u>	<u>SETTING</u>	<u>FREQ. MHz</u>	<u>SETTING</u>	<u>FREQ. MHz</u>	<u>SETTING</u>
2.0	3	7.0	14	13.0	19
2.5	6	8.0	16	14.0	20
3.0	9	9.0	17	15.0	21
4.0	12	10.0	18	16.0	22
5.0	14	11.0	19	17.0	23
6.0	17	12.0	20	18.0	24
7.0	23	13.0	21	19.0	26
7.1	27	14.0	22	20.0 & up	30*

<b>BAND 2B</b>		<b>BAND 3B</b>	
<u>FREQ. MHz</u>	<u>SETTING</u>	<u>FREQ. MHz</u>	<u>SETTING</u>
15.0	18	21.0	18
17.0	19	24.0	20
19.0	20	27.0	22
21.0	21	30.0	23
22.0	23	33.0 & up	30*

NOTE: Bands 1, 2A and 3A use full 9 ft. whip.

Bands 2B and 3B use top whip section only.

**\* NOTE**

For frequencies above 20 MHz, the 9 ft. whip may be used by setting the band select switch to position 3 and tuning scale pointer to 30. For frequencies above 33 MHz, the flexible tape section antenna may be used by setting the band select to position 3 and the tuning scale pointer to 30.

Attach the selected antenna by threading the antenna onto the stud at the top of the tuning coil assembly and tightening.

### 3.3 TUNER OPERATIONS

**CAUTION**

Tuning should only be attempted with the transceiver power switch in the 5 Watt position.

\*\*\*\*\*  
\* **WARNING** \*  
\*\*\*\*\*

The position of the band switch should never be changed while transmitting. Permanent damage may occur.

#### 3.3.1 TUNING ON RECEIVER NOISE

The preferred method of antenna tuning is to tune without transmit power (tuning on receiver audio output noise).

1. Refer to the tuning chart above or the chart provided with the antenna tuning coil. The chart provides information regarding: 1) position of frequency band switch, 2) antenna length, and 3) position of travel pointer on coil tuning scale.

Proper operation of the antenna tuning coil assembly requires the coordination of frequency band selection, antenna length and travel pointer position.

2. Set the band switch to the proper band for the desired operating frequency and antenna length.
3. Use the tuning knob to set the travel pointer to the position indicated on the tuning chart for the frequency and antenna selected.

The tuning coil assembly is now coarse tuned.

4. Slowly adjust the tuning knob around the coarse tuning point and listen for a peak in the receiver audio output noise.

The tuning coil assembly is fine tuned at the point where the receiver audio noise peaks. A proper tune can be verified by observing the meter in the base of the antenna tuning coil during transmit. This meter monitors reflected power and the optimum tune occurs when the meter is at a null while transmitting. In practice the reflected power indication should be below mid scale in most instances.

### 3.3.2 TUNING UNDER LOW TRANSMIT POWER

If tuning on receiver noise does not result in an acceptable tune, tuning can be accomplished under low transmit power using the meter in the base of the antenna tuning coil assembly to null the reflected power by following the steps below.

1. Refer to the tuning chart above or the chart provided with the antenna tuning coil. The chart provides information regarding: 1) position of frequency band switch, 2) antenna length, and 3) position of travel pointer on coil tuning scale.

Proper operation of the tuning coil assembly requires the coordination of frequency band selection, antenna length and travel pointer position.

2. Set the band switch to the proper band for the desired operating frequency and antenna length.
3. Use the tuning knob to set the travel pointer to the position indicated on the tuning chart for the frequency and antenna selected.

The tuning coil assembly is now coarse tuned.

**CAUTION**

The tuning time in transmit must be minimized to conserve battery energy and to avoid exceeding the specified duty cycle of the AN/PRC-132 transceiver. It is very important to coarse tune the antenna tuning coil assembly before keying the transceiver for fine tuning. Fine tuning should take no more than a few seconds once coarse tuning is completed.

4. Before transmitting make sure the power switch on the transceiver is in the 5 Watt position.

\*\*\*\*\*  
\* **WARNING** \*  
\*\*\*\*\*

**Tuning should only be attempted with the transceiver power switch in the 5 Watt position. Tuning while transmitting greater than 5 Watts may result in permanent damage.**

5. Set the mode of the radio to AME. Key the radio and, while observing the meter on the antenna tuning coil assembly, adjust the fine tuning knob for a null on the meter. Note that it is not necessary to achieve a sharp null to have acceptable tuning. In many cases the null will occur over a broad tuning range.

The tuning coil assembly is now fine tuned.

6. Set the mode and the power switch of the transceiver to the desired positions.

The radio system is now ready for normal operation.

### **3.4 REMOVAL AND TRANSPORT**

The SC407 should be removed from the AN/PRC-132 for storage or transport. The tuning coil assembly is removed by loosening the clamp knob at the base of the housing enough to allow the anti-rotation pin to be removed from the hole in the plate of the mounting bracket.

**CAUTION**

In order to protect the SC407 tuning knob during transport, the clamp knob should be turned fully counter-clockwise (as viewed from the bottom of the housing assembly) so that it extends fully over tuning knob and protects the tuning knob handle.

The mounting bracket is removed from the side of the AN/PRC-132 by unlatching the four hand operated latches.

**4.0 FUNCTIONAL DESCRIPTION**

The SC407 Whip Antenna tuner consists of a Whip Antenna Tuning Coil Assembly, a Mounting Assembly, and a Whip Antenna.

The Tuning Assembly may be attached to the mounting assembly with the angle bracket oriented up or down (refer to Figures 1, 2, 3 and 4).

The Tuning Assembly is secured to the angle bracket of the mounting assembly by tightening the clamp knob at the bottom of the Tuning Assembly housing. With the angle bracket oriented up (as shown in Figure 1 and 2), an anti-rotation pin on the angle bracket fits into a hole in the bottom of the housing to provide positive anti-rotation mounting for the Tuning Assembly.

When the angle bracket is oriented down (as shown in Figures 3 and 4), a step in the angle bracket prevents the housing from rotating after the clamp knob is tightened.

The tuning assembly provides a threaded stud for attachment of the whip antenna. Either the full antenna or the flexible top section can be attached to the threaded stud at the top of the coil assembly. The stud is recessed to protect the threads when not connected to the whip antenna.

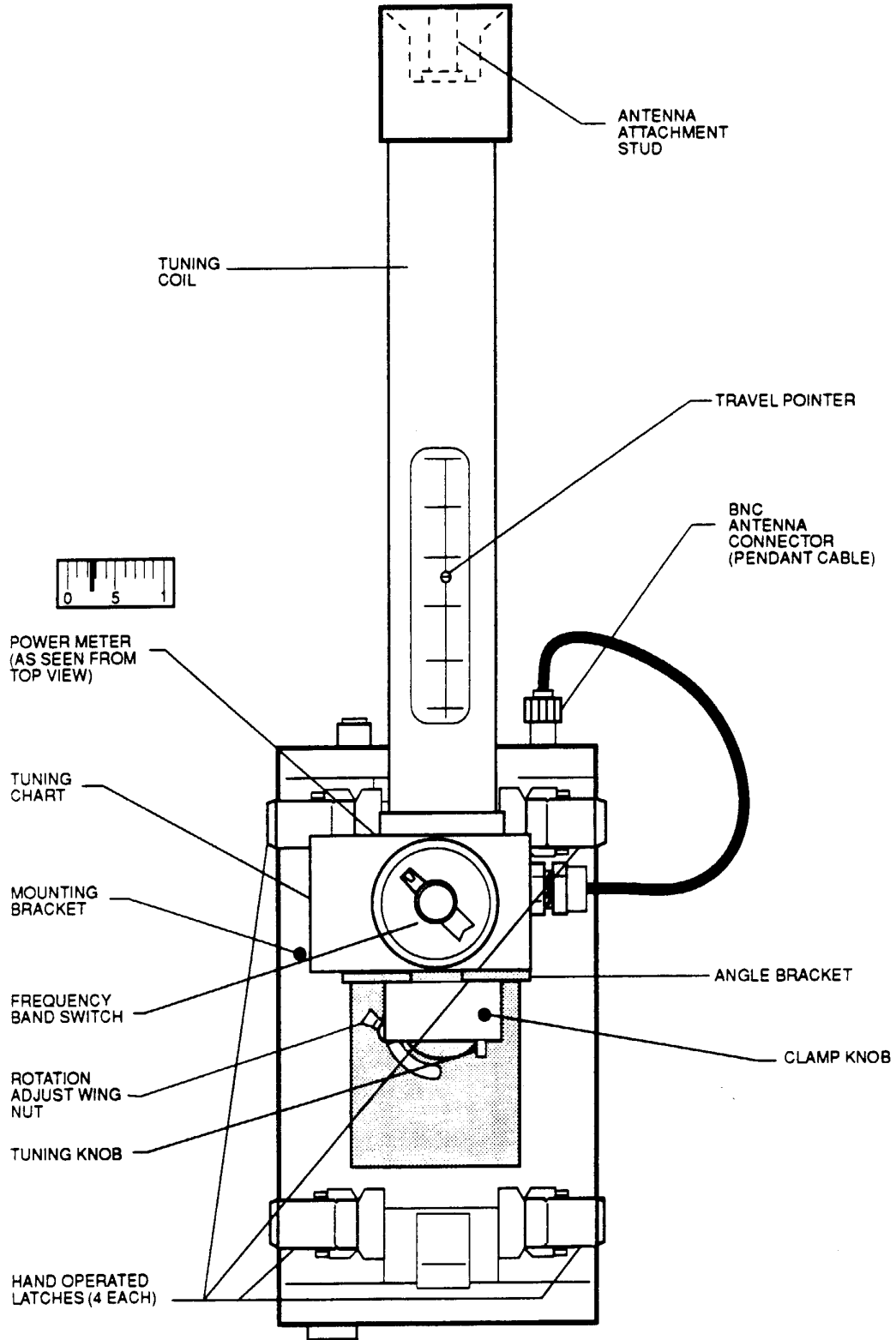
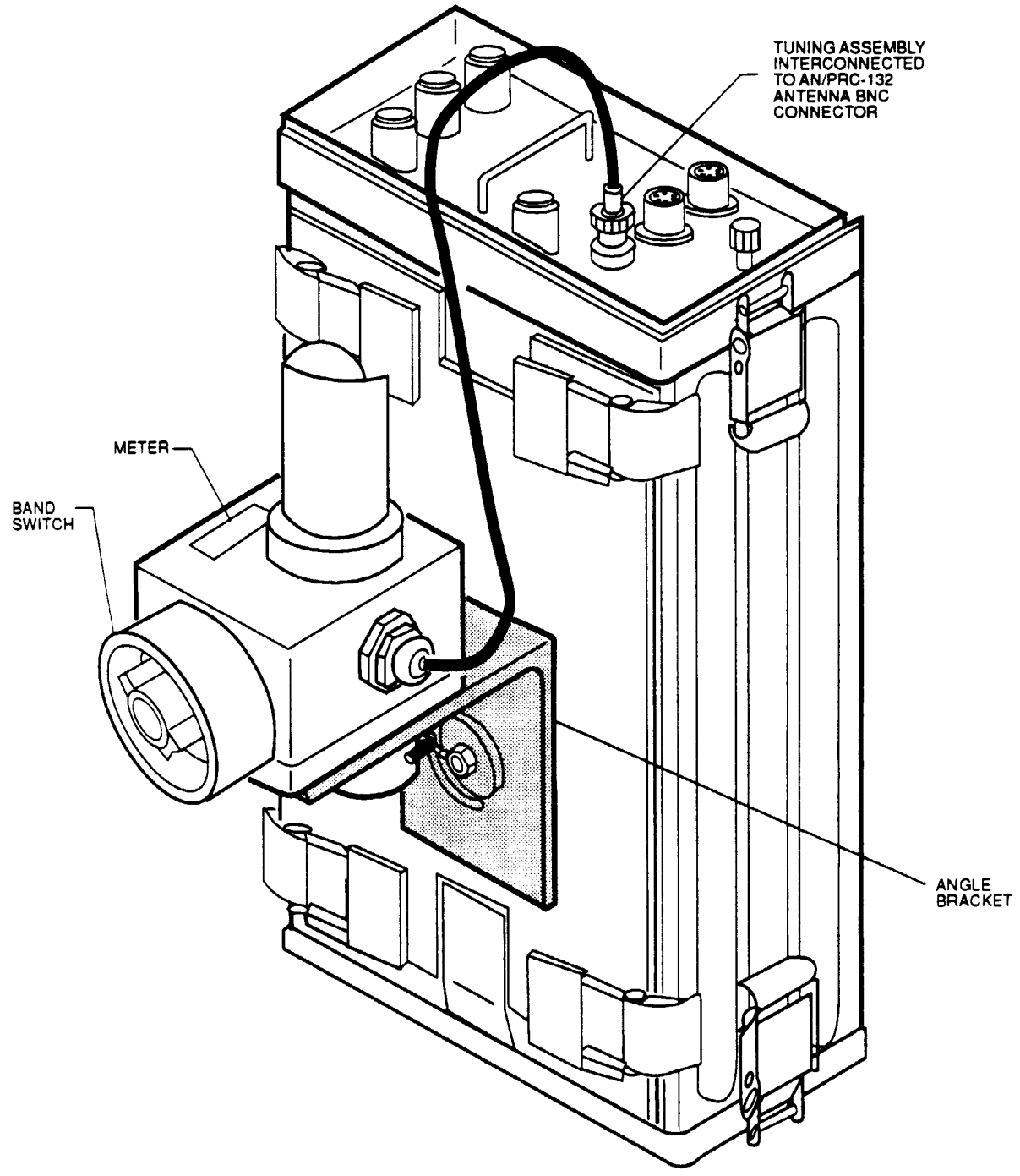
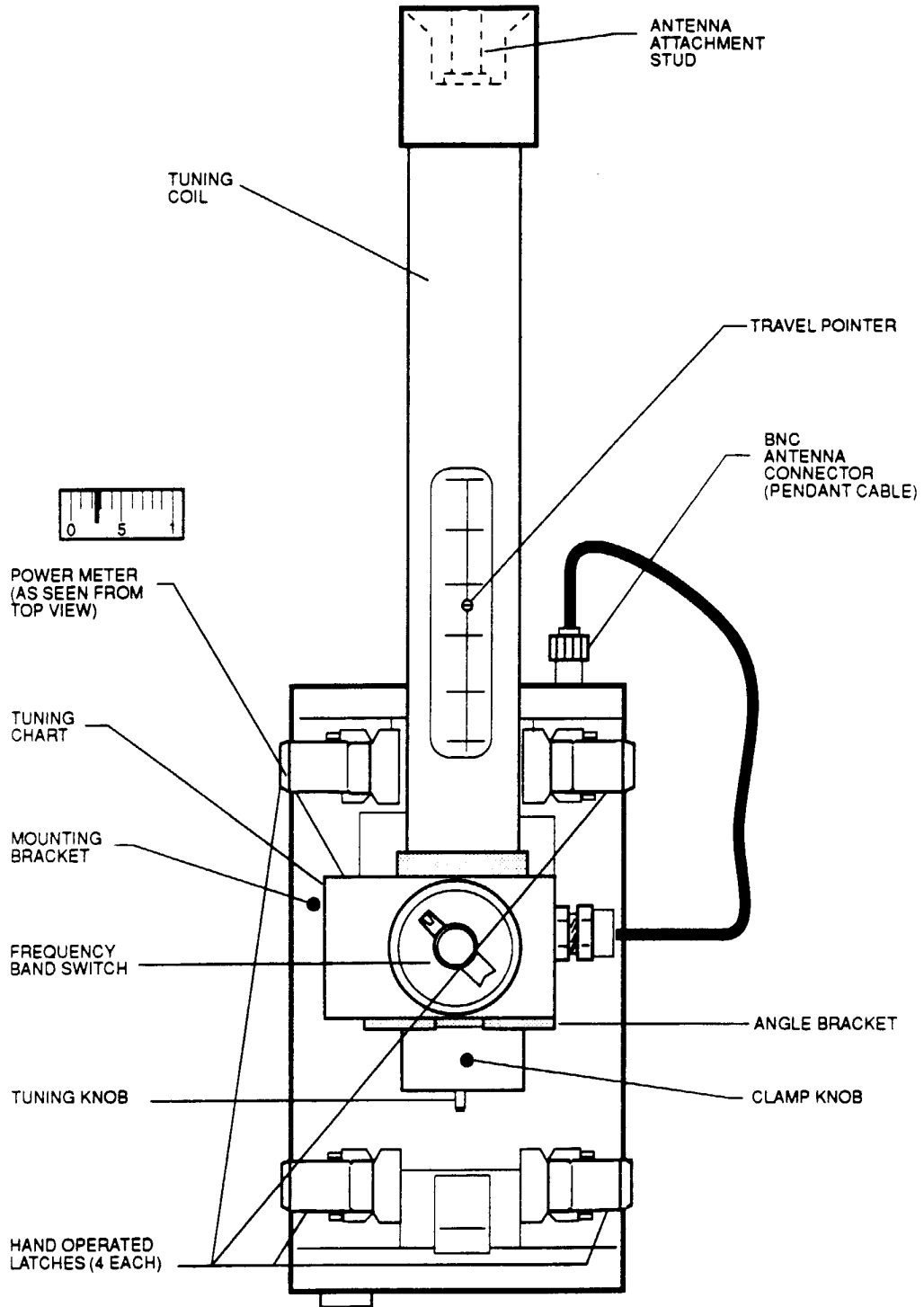


FIGURE 1. TUNING ASSEMBLY CONTROL LOCATIONS, FRONT VIEW (WITH ANGLE BRACKET IN UP POSITION)

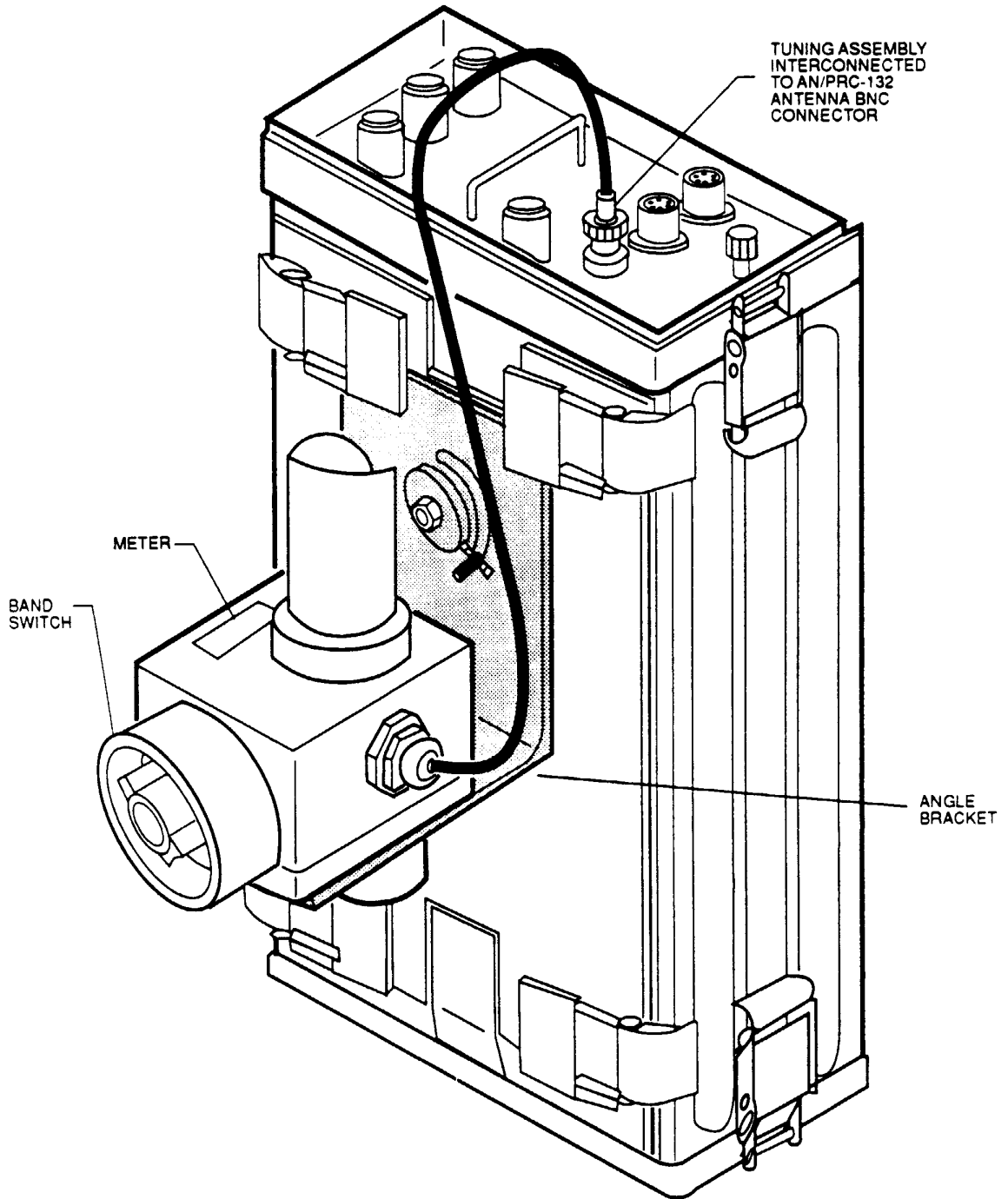


**FIGURE 2. TUNING ASSEMBLY ATTACHED  
(WITH ANGLE BRACKET IN UP POSITION)**



**FIGURE 3. TUNING ASSEMBLY CONTROL LOCATIONS, FRONT VIEW (WITH ANGLE BRACKET IN DOWN POSITION)**





**FIGURE 4. TUNING ASSEMBLY ATTACHED  
(WITH ANGLE BRACKET IN DOWN POSITION)**

The tuning assembly utilizes three main bands. Accordingly, the frequency band switch has three operating positions. Two additional frequency bands are accessible when the flexible top section of the antenna is used rather than the full antenna.

A pendant coaxial cable is provided for attachment to the ANT connector on the AN/PRC-132 transceiver.

The tuner mounting bracket makes use of quick release hardware. Tools are not required for bracket attachment or release.

The tuning coil can be rotated through a 90 degree arc so that the antenna position can be adjusted for use when the radio is sitting vertically on the bottom of the battery pack or horizontally on the case. A wing nut is used to tighten and release the tuning coil assembly.

A plastic laminated SC407 Quick Reference Card containing operator instructions is provided for reference.

## **5.0 MAINTENANCE INSTRUCTIONS**

The tuner is a non-repairable assembly.

If you suspect your tuning assembly is bad, substitute with a known good unit and verify operations.

**6.0 PARTS LIST**

**NOTE**

The SC407 Whip Antenna Tuning Coil Assembly is a non-repairable unit. The following lists major components only.

**DESCRIPTION** This column lists the part name with additional descriptive nomenclature.

**QTY** Quantities shown in this column are the total number of each item required per assembly.

**TERRACOM PART-NO.** This column lists Loral TerraCom part numbers, and specification or source control drawings.

PARTS LIST

FORM NO: K006/81/PPL  
 DATE : 14 NOV 1991  
 PAGE 1 OF 1 PAGE(S)

EQUIPMENT : SC407 WHIP ANTENNA TUNING COIL ASSY, END ITEM  
 PART NO. : 457-0008-001 REV NO.: D  
 MANUFACTURER : LORAL TERRACOM, INC.

EQUIPMENT CODE:

NSN	DESCRIPTION	SCHEMATIC REF.	QTY	TERRACOM PART-NO.
	SC407 WHIP ANTENNA TUNING COIL ASSY, END ITEM			457-0008-001
	**** CONSISTS OF: ****			
	ANTENNA TUNING COIL ASSY, SC407	(1)	1	466-0007-001
	MANUAL, SC407 WHIP ANTENNA TUNING COIL ASSY	(2)	1	003-0417-001
	ANTENNA, WHIP SECTION SC140	(3)	1	823937-00
	FOLDING ANTENNA	(5)	1	993944-00
	CARD, QUICK REFERENCE SC407 TUNING, AN/PRC-132	(6)	1	003-0470-001

**(THIS PAGE INTENTIONALLY LEFT BLANK)**

**LORAL TERRACOM**

San Diego, California

**PROPRIETARY RIGHTS**

Proprietary rights are involved in the subject matter of this material; and all manufacturing, reproduction, use and sales rights pertaining to such matter are expressly reserved. It is submitted in confidence for a specific purpose; and the recipient, by accepting this material, agrees that this material will not be used, copied or reproduced in whole or in part, nor its contents revealed in any manner, or to any person, except for the purpose delivered.

\*

\*

\*

**(THIS PAGE INTENTIONALLY LEFT BLANK)**

LORAL TERRACOM

San Diego, California

WARRANTY and CERTIFICATION

**WARRANTY**

WARRANTY. Loral TerraCom warrants products manufactured by it to be free from defective material and factory workmanship and will repair such products under which normal use and service disclose the defect to be the fault of its manufacturing. The Loral TerraCom obligation under this warranty is for the original user only. Warranty is limited to repairing or replacing, at Loral TerraCom option, any such product that proves to be so defective upon its examination when returned to the factory, with shipping prepaid by purchaser. The warranty period is twelve (12) months, with period commencing with installation date or 90 days after date of original shipment, whichever is earlier. This warranty does not include fuses, meters, lamps or connectors.

Accessories supplied by, but not manufactured by, Loral TerraCom shall provide only such manufacturer's standard warranty, and are expressly and specifically excluded from this Loral TerraCom warranty.

Loral TerraCom products that have been repaired, worked upon or altered so as to compromise the stability or reliability of such product, or that have been subject to misuse, negligence or accident, are not covered by this warranty. Neither does this warranty apply to Loral TerraCom products that have been installed, used, connected or adjusted other than in accordance with the furnished manufacturer's instructions. Loral TerraCom does not assume any liability for consequential damage, and no liability shall exceed the original purchase price of the defective product.



The Loral TerraCom product will be accepted for replacement or return upon the written authorization and instructions of Loral TerraCom. The product will be shipped prepaid to the San Diego manufacturing plant. Shipment to the purchaser of replacement or repaired product will be prepaid by Loral TerraCom. For equipment located outside of the United States, transportation costs from U.S. port of exit to or from foreign destination will be borne by the Buyer. Import/export fees, customs and brokerage charges for equipment operated outside the United States will be paid by the Buyer.

This warranty is in lieu of, and excludes, all other implied or expressed warranty on Loral TerraCom products.

#### CERTIFICATION

Loral TerraCom certifies that this product was tested and inspected and found to meet its published specifications when shipped. All instruments used to test this product are systematically calibrated. The calibration measurements are traceable to the US National Bureau of Standards calibration facility.

\*

\*

\*

# LORAL

TerraCom

## CUSTOMER SERVICE

### Service Repair Tags

Please use these tags whenever necessary to Return Material for Repair.

1. Obtain Return Material Authorization (RMA) number from:

**LORAL TERRACOM**  
Customer Repair Service  
Phone: (619) 268-2240  
FAX: (619) 292-1140  
TLX: ASDG 18-2774

2. Attach one tag to each unit.
3. Enter the following information on each tag:

- A. Model number
- B. Serial number
- C. A brief description of the problem:  
"low power out"  
"intermittent operation" etc.

4. Customer name and address.

- A. Phone number

5. Purchase order number.

6. RMA number (Obtain from Step 1.)

7. Ship all equipment PREPAID to:

**LORAL TERRACOM**  
Customer Service Department  
9020 Balboa Avenue,  
San Diego, California 92123

Loral TerraCom maintains a well-staffed and equipped repair facility. Repaired units receive inspection and operational tests to the same specifications as new products. Your cooperation in providing complete information on the service tag will assist us in giving you prompt and effective repair service.

Additional quantities of these tags are available upon request.

Customer assistance may be obtained by calling (619) 268-2240, during normal working hours. After normal work hours (nights, weekends & holidays) call (619) 268-8622 for 24-hour emergency assistance.

Form No. 003-0163B

# LORAL

TerraCom

## REPAIR SERVICE TAG

MODEL NUMBER OR DESCRIPTION		SERIAL NUMBER
FAILURE SYMPTOMS		
PURCHASE ORDER NO.	RMA NUMBER	
CUSTOMER NAME _____		
LOCATION _____		
PHONE NUMBER _____		
AUTHORIZED RETURN	TITLE	DATE

# LORAL

TerraCom

## REPAIR SERVICE TAG

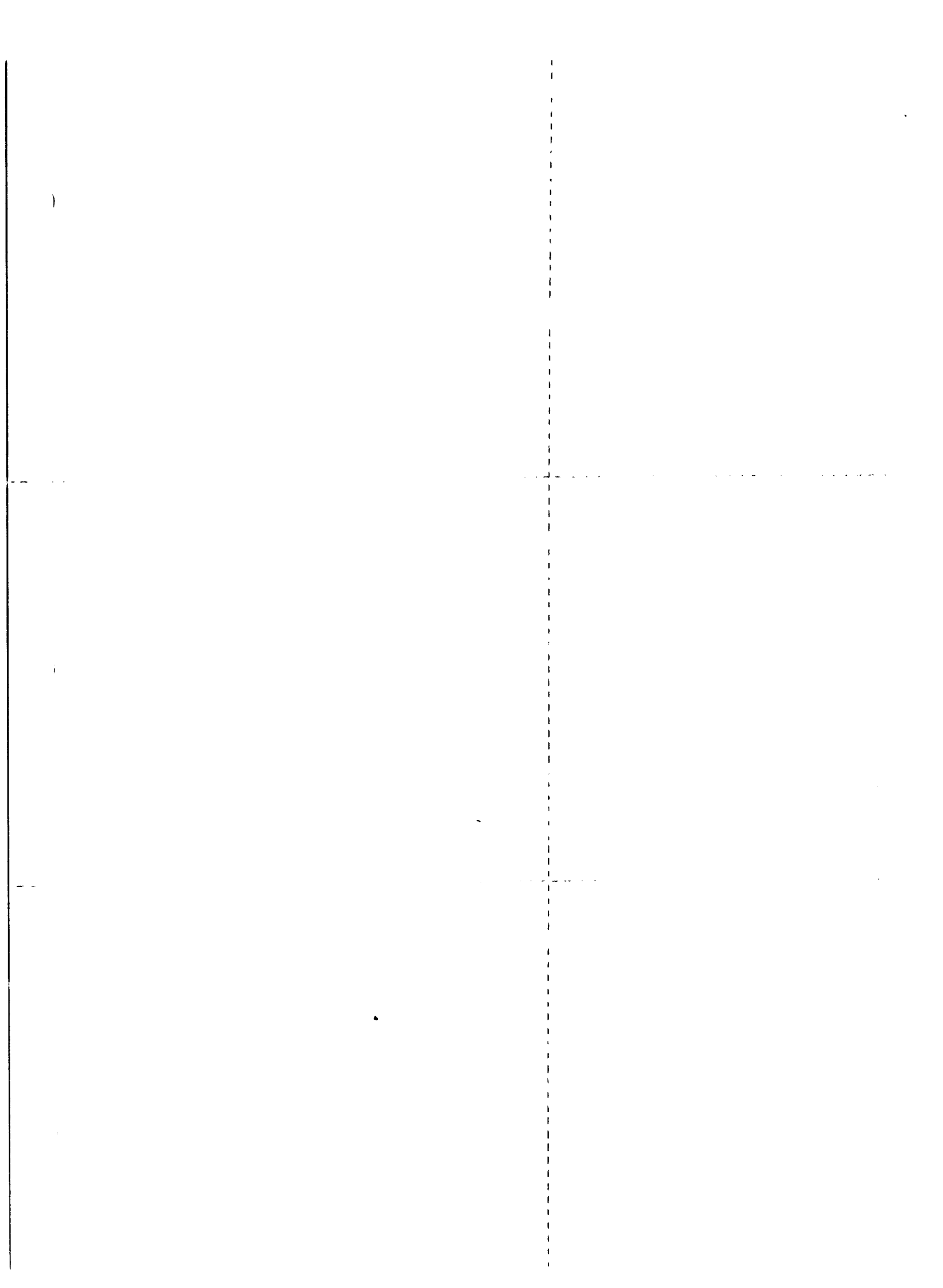
MODEL NUMBER OR DESCRIPTION		SERIAL NUMBER
FAILURE SYMPTOMS		
PURCHASE ORDER NO.	RMA NUMBER	
CUSTOMER NAME _____		
LOCATION _____		
PHONE NUMBER _____		
AUTHORIZED RETURN	TITLE	DATE

# LORAL

TerraCom

## REPAIR SERVICE TAG

MODEL NUMBER OR DESCRIPTION		SERIAL NUMBER
FAILURE SYMPTOMS		
PURCHASE ORDER NO.	RMA NUMBER	
CUSTOMER NAME _____		
LOCATION _____		
PHONE NUMBER _____		
AUTHORIZED RETURN	TITLE	DATE



**CUSTOMER FEEDBACK FORM**

Loral TerraCom technical manuals are dedicated to helping our customers properly operate and maintain their Loral TerraCom telecommunications equipment. We at Loral TerraCom endeavor to produce to best Operator Maintenance and Factory Service manuals. Should you discover any errors, omissions, or wish to contribute any recommendation; please write them below and mail us your suggestions. Any comments you have to help us improve our products or our service to our customers is greatly appreciated.

Customer: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Information/Comments:

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

FROM:

AFFIX  
POSTAGE  
HERE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

LORAL TERRACOM  
9020 BALBOA AVENUE  
SAN DIEGO, CALIFORNIA 92123  
U.S.A  
ATTN: TECHNICAL PUBLICATIONS

2  
Fold Down



1  
Fold Up



## **CUSTOMER SERVICE**

Loral TerraCom's 24-hour Customer Service Department provides either immediate assistance during normal working hours or an answering service that will contact the on-call field service engineer during non-working hours, weekends, or holidays. When the on-call field service engineer is notified by the answering service, he or she will contact the calling party for a detailed description of the maintenance problem. If desired, the maintenance request can be transmitted via TLX, which will be answered during normal working hours. The procedure for using either the telephone or TLX is provided in the following paragraphs.

### **TELEPHONE REQUESTS FOR MAINTENANCE ASSISTANCE**

Place maintenance requests as follows:

- a. Prior to calling Loral TerraCom, substitute a known good module or part, if available, and record the results observed.
- b. Prior to calling Loral TerraCom, perform a detailed visual inspection of the failed module, module PC assemblies, parts, wiring harness, rear panel connector plug and rear panel connector jack for burns, breaks, opens, cracks, or other malfunctions.
- c. Prior to calling Loral TerraCom, be prepared to furnish the following information:
  - o **CONTACT NAME:** The name and title of an employee who may be contacted for additional information.
  - o **CONTACT TELEPHONE NUMBER:** Telephone number of the employee specified above.
  - o **MODEL NUMBER or DESCRIPTION OF EQUIPMENT:** The model number is listed on an identification label. If the model number is not available, provide a description of the equipment with available information such as nomenclature of the system, front panel nomenclature and available circuit references.
  - o **SERIAL NUMBER:** A serial number is provided on identification labels. For the mounting location of the serial number, see the step above.

- o DESCRIPTION of FAILURE: A brief description of the failure, and whether or not a known good spare module or part was substituted and what results were observed.
- d. Telephone Loral TerraCom Customer Service at (619) 268-2240. After normal working hours (nights, weekends, & holidays) call (619) 268-8622 for 24-hour emergency assistance.

#### **TLX REQUESTS FOR MAINTENANCE ASSISTANCE**

Place maintenance requests by TLX.

- a. Send message to the Loral TerraCom TLX number:

**TERRACOM A SDG 18-2774**

- b. Include the information listed under Telephone Requests for Maintenance Assistance.
- c. A response to a TLX request for maintenance assistance will be returned as soon as possible.

#### **CHANGE NOTICES**

To assure the continued usefulness of this publication, change notices and revision pages will be issued whenever supplementary or modified data warrants a revision of the original material.