

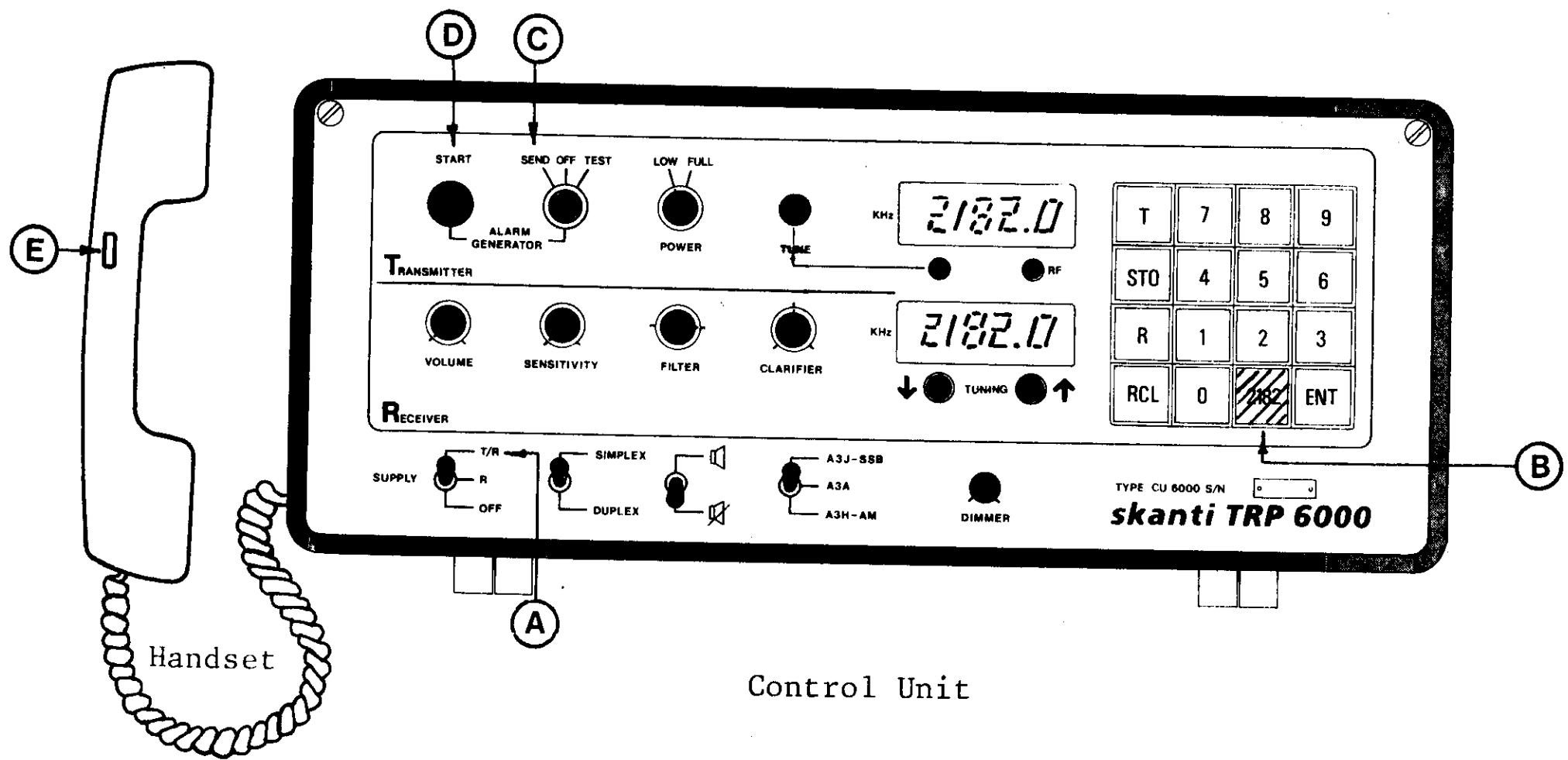
***skanti***

**INSTRUCTION MANUAL**

**SSB RADIOTELEPHONE**

**TRP 6000**

# DISTRESS OPERATION ON 2182 kHz



## Transmission of two-tone alarm signal

1. Switch SUPPLY (A) to "T/R"
2. Press the "2182" key (B)
3. Switch ALARM GENERATOR to "SEND" (C)
4. Press ALARM GENERATOR "START" pushbutton (D)

Transmission starts immediately after the automatically initiated tuning sequence and the alarm signal is now transmitted for about 45 seconds.

To repeat the alarm signal transmission just press the "START" pushbutton (D) again.

The alarm signal can be monitored in the handset earpiece.

An alarm signal transmission may be interrupted at any time by turning the ALARM GENERATOR switch to "OFF".

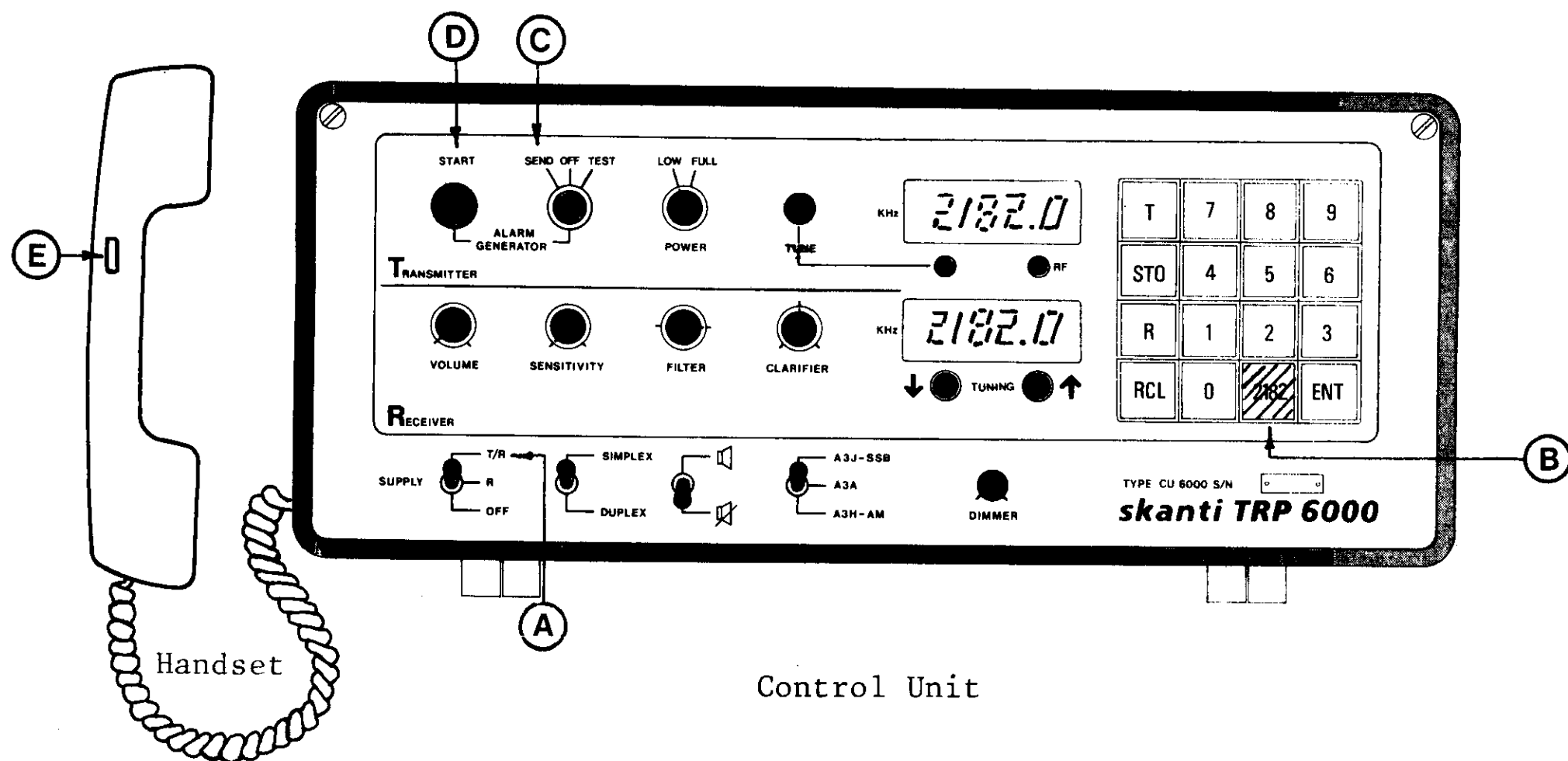
## Transmission of distress message

When the alarm signal ceases press handset key (E), and transmit your distress message by speaking into the handset microphone with a clear and calm voice.

Release handset key (E) and wait for a reply.

Repeat the distress message at intervals until a reply is received.

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***skanti***

**TRP 6000 INSTRUCTION MANUAL**

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### **NOTICE**

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Due to the constant processing of the experience gained during production and operation of our equipment, minor modifications may occur relative to the information given in this manual. Whenever practicable corrections will be listed on a correction sheet inside the front cover of this manual.

# TRP 6000 INSTRUCTION MANUAL

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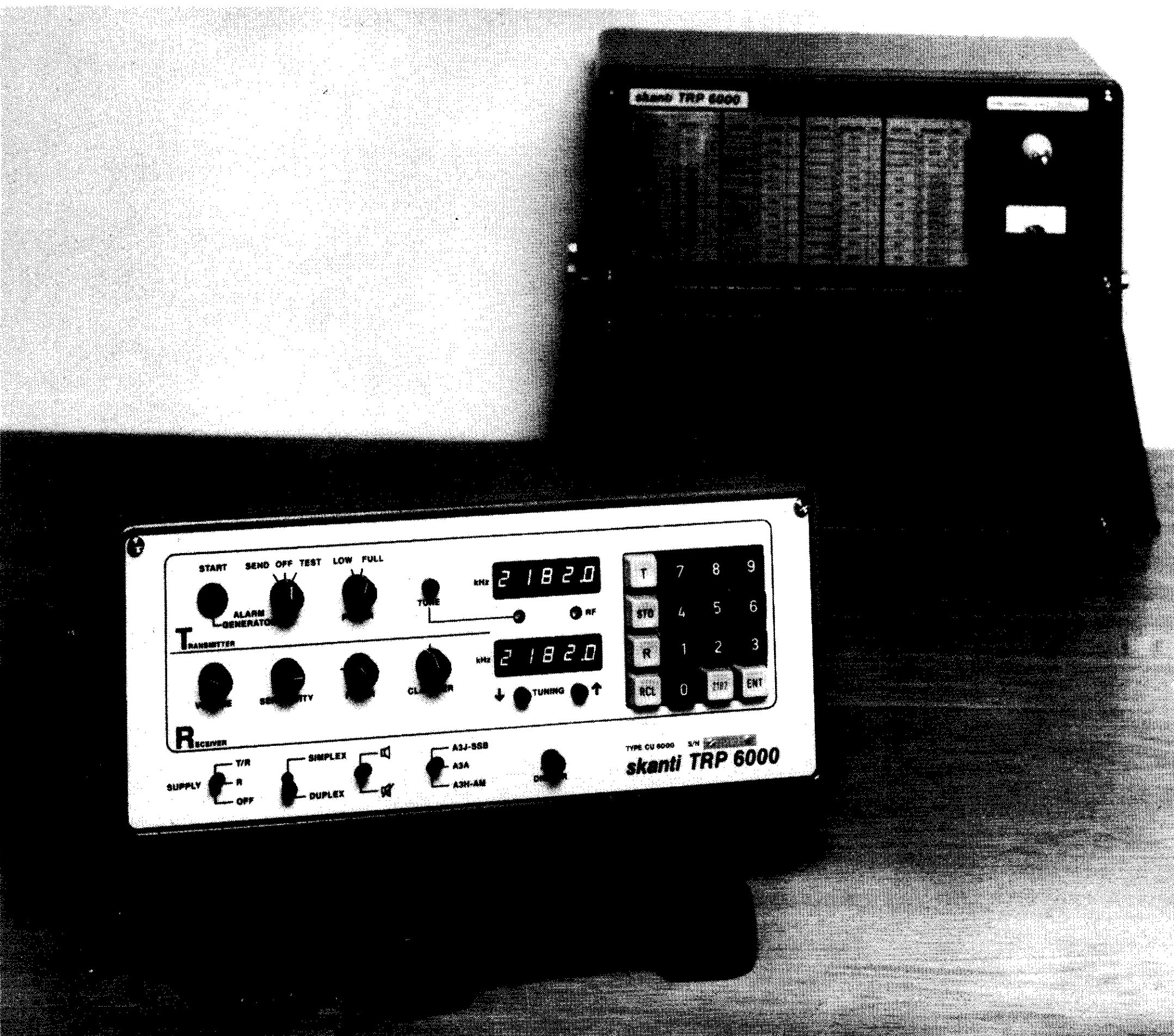


Fig. 1.1

# 1. INTRODUCTION TO TRP 6000

The TRP 6000 is an SSB Radiotelephone equipment for duplex, semiduplex and simplex communications in the maritime mobile bands from 1.6 to 4.5 MHz.

The novel design of the SKANTI TRP 6000 breaks with the traditional SSB radiotelephone concept. The TRP 6000 is divided into two units, a handy CONTROL UNIT and a fully remote controlled TRANSMITTER UNIT (fig. 1.1).

The Control Unit (CU 6000) contains all receiver and transmitter operating controls and is housed in a non-metallic, non-magnetic cabinet. This combined with the small dimensions of the cabinet ensures maximum installation flexibility.

The transmitter Unit (TU 6400, 400 W or TU 6200, 200 W) is fully remote controlled and may be installed up to 50 metres from the Control Unit where most convenient with respect to antenna lead-in, grounding and the battery connections, thus reducing the well-known problems of power-loss and radio frequency interference caused by long antenna- and ground-wires.

The Transmitter Unit is housed in a rugged nylon-coated steel cabinet and contains the fully solid state linear power amplifier, the power supply and the automatic tuning system. Cooling is performed by temperature controlled fans switched on only under heavy duty operation.

The microprocessor equipped Control Unit contains two separate frequency synthesizers and two frequency displays for the receiver and transmitter functions. Frequency selection is carried out via a common keyboard. A single key operation instantly selects 2182 kHz operation.

The keyboard permits the operator to program up to 20 channels with his busiest receiving and transmitting frequency pairs, and to recall each channel with a few key operations. The TRP 6000 will store the programmed channels for several years, even when switched off. Where required by the authorities, the TRP 6000 will contain a transmitter-frequency PROM with a capacity of up to 80 frequencies. Transmitter keying can only then take place exclusively on the authorized frequencies programmed into the PROM. The keyboard permits recall and display of all the frequencies contained in the PROM.

Due to the all solid state design the TRP 6000 is ready for operation within seconds after being switched on.

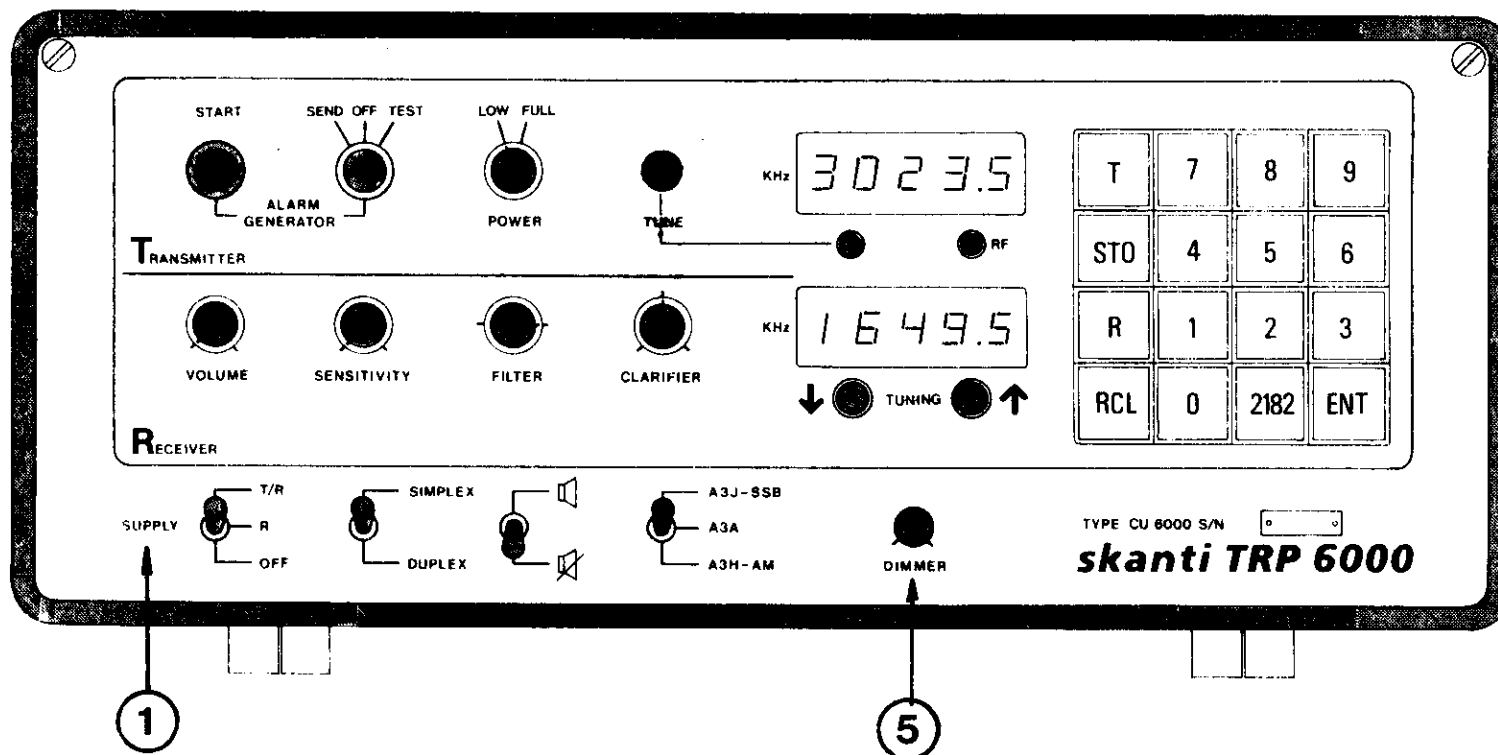
The automatic tuning system ensures optimum antenna matching under all conditions. This results in maximum RF output power for reliable short, medium and long range communications.



## 2. OPERATION

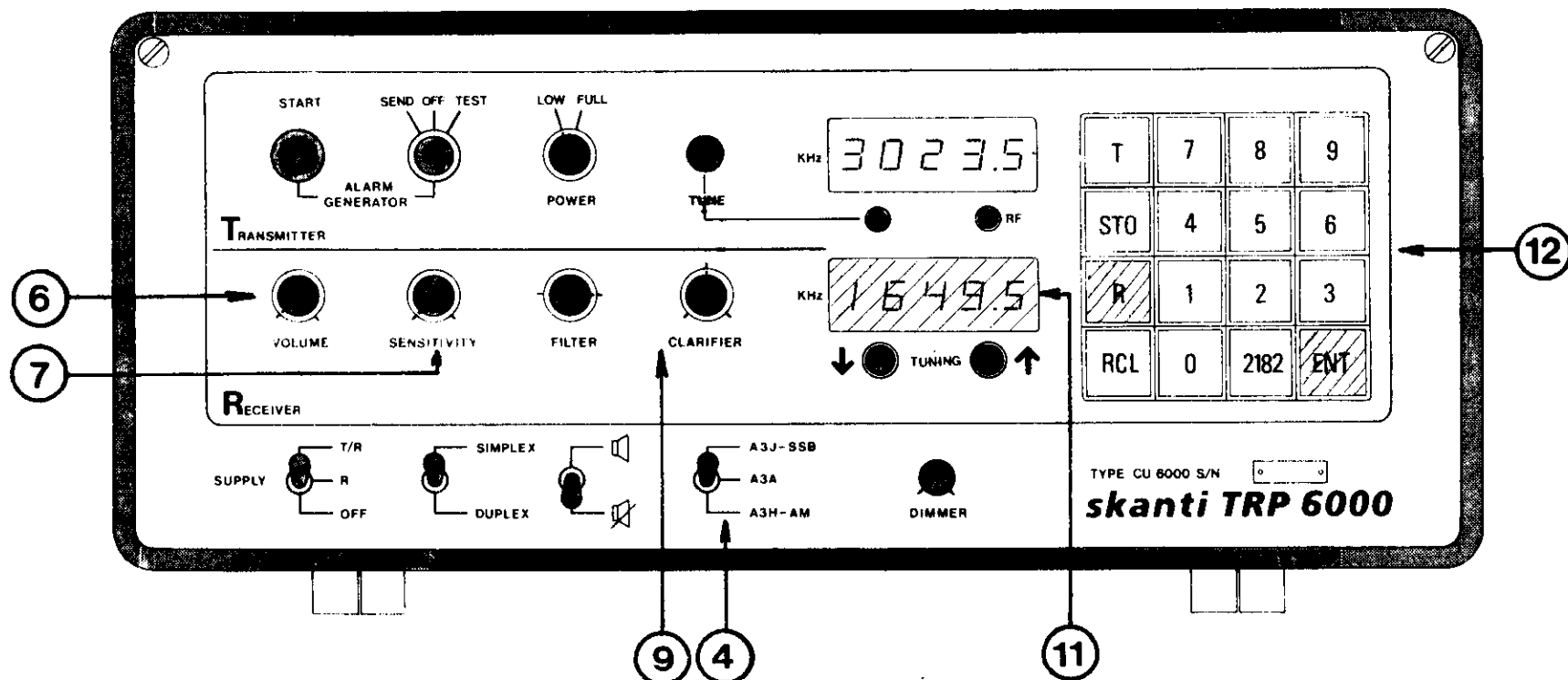
### 2.1. OPERATING INSTRUCTIONS - SHORT FORM

#### SWITCH ON



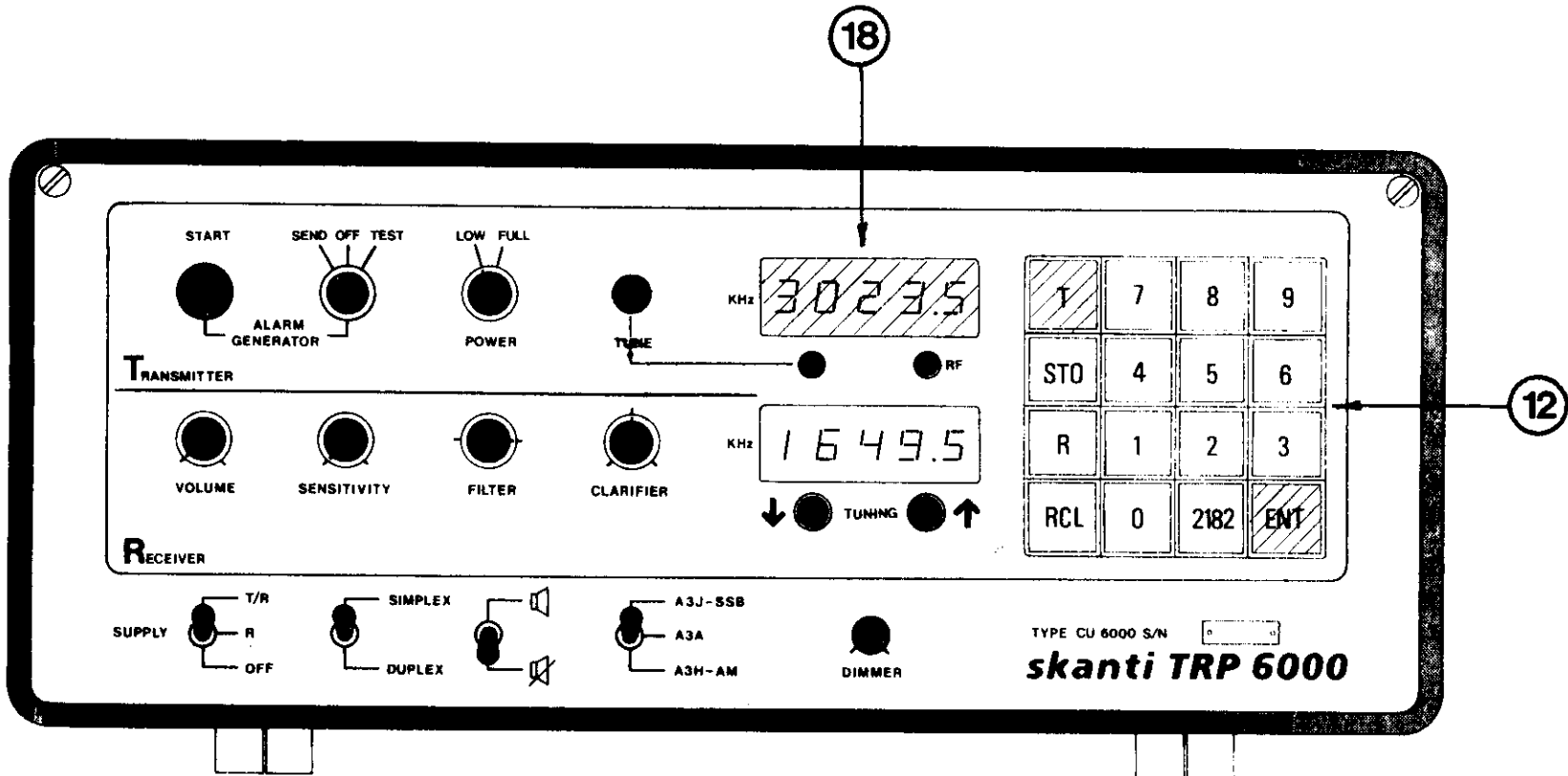
1. Switch SUPPLY (1) to "T/R".
2. Turn DIMMER (5) fully clockwise.

#### RECEIVE FREQUENCY SET-UP



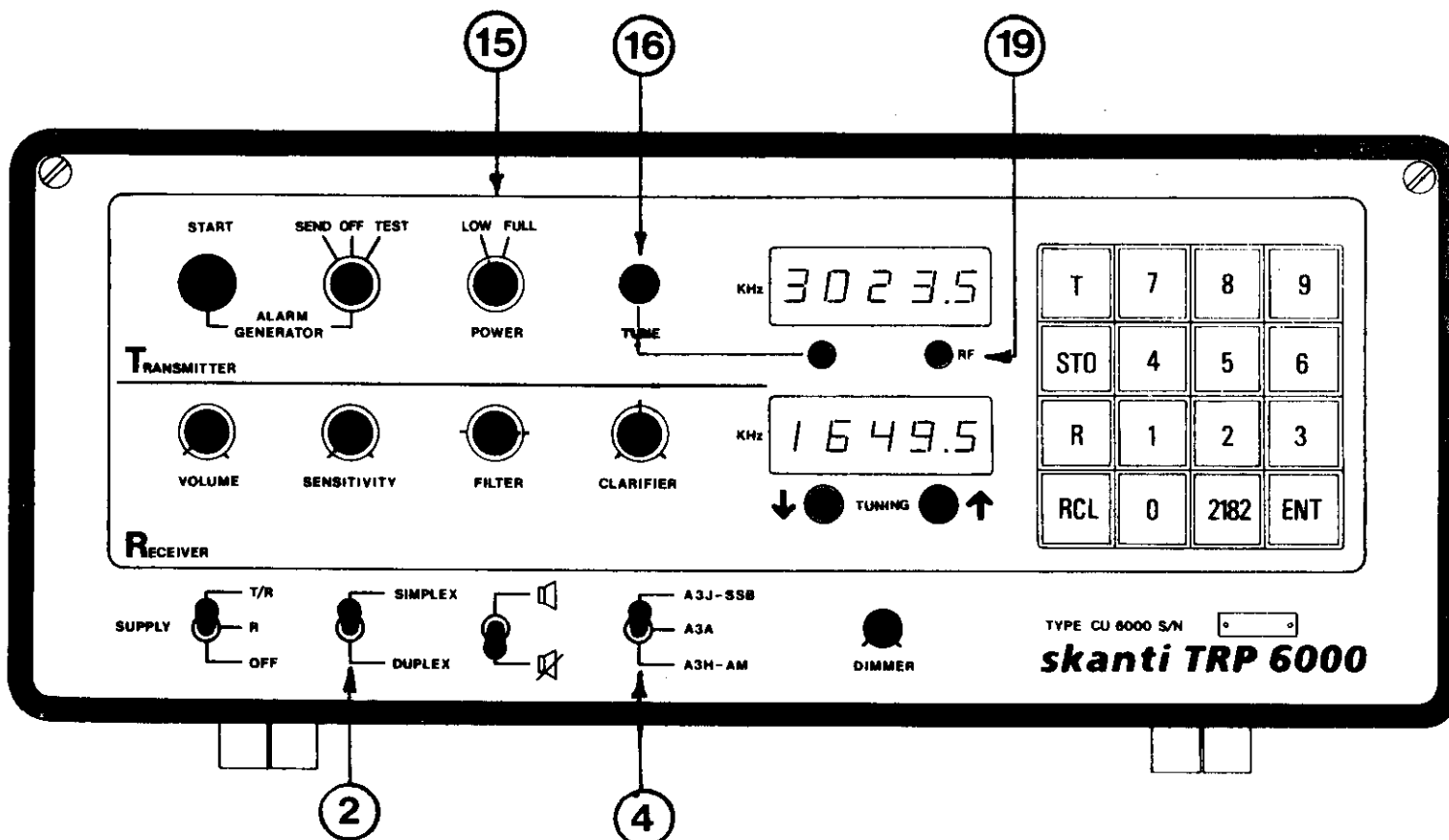
1. Press "R" key on keyboard (12).
2. Enter desired frequency in the receive frequency display (11) via keyboard (12) numeric keys.
3. Press "ENT" key on keyboard (12).
4. Turn SENSITIVITY (7) fully clockwise.
5. Adjust VOLUME (6) for a convenient sound level.
6. Set Mode-switch (4) to "SSB" or "AM" according to received signal.
7. Adjust CLARIFIER (9) for natural-sounding speech if mode is "SSB".

## TRANSMIT FREQUENCY SET-UP



1. Press "T" key on keyboard (12)
2. Enter desired frequency in the transmit frequency display (18) via keyboard (12) numeric keys.
3. Press "ENT" key on keyboard (12).

## TRANSMITTER TUNING

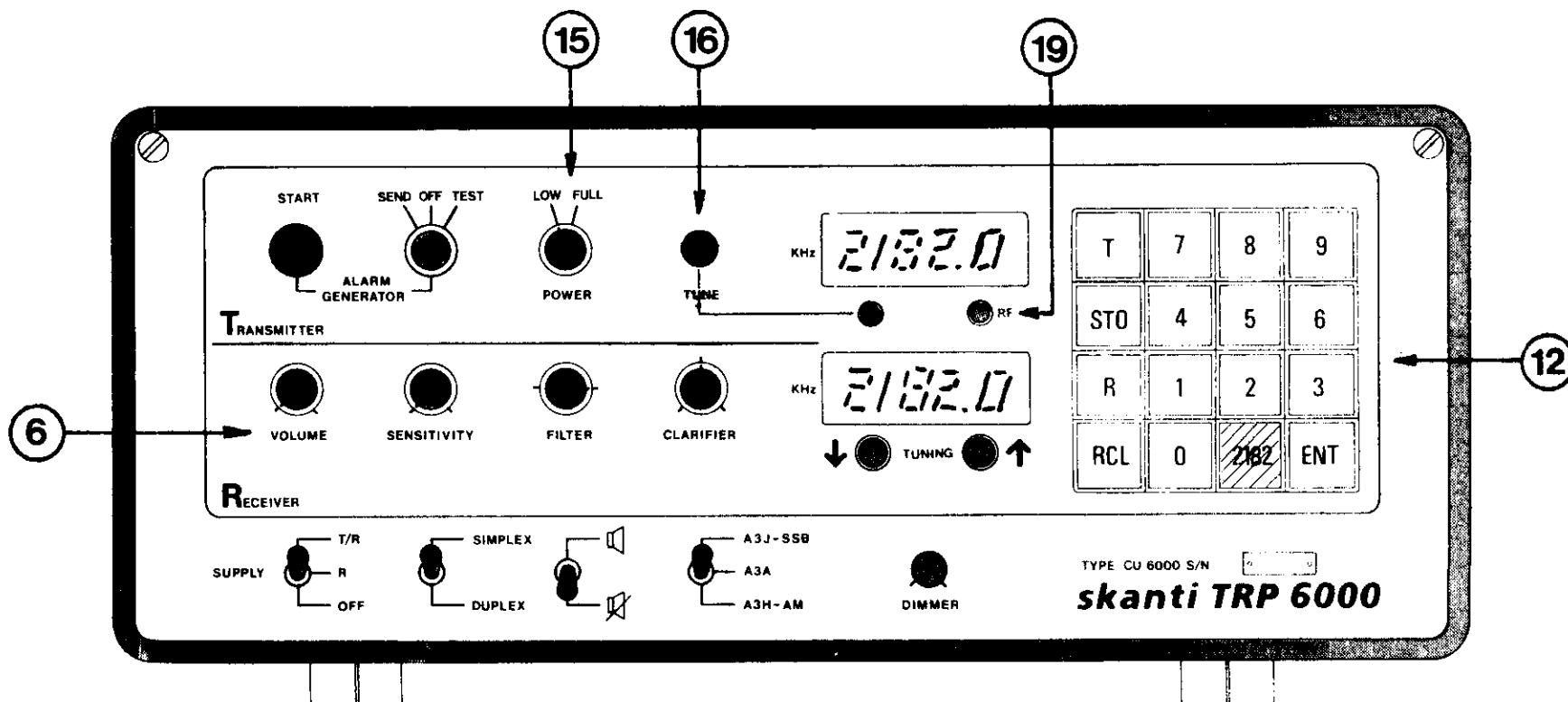


1. Press TUNE pushbutton (16).  
The RF output indicator (19) lights during the automatic tuning procedure. When this light goes off, tuning is completed.

### TO TRANSMIT

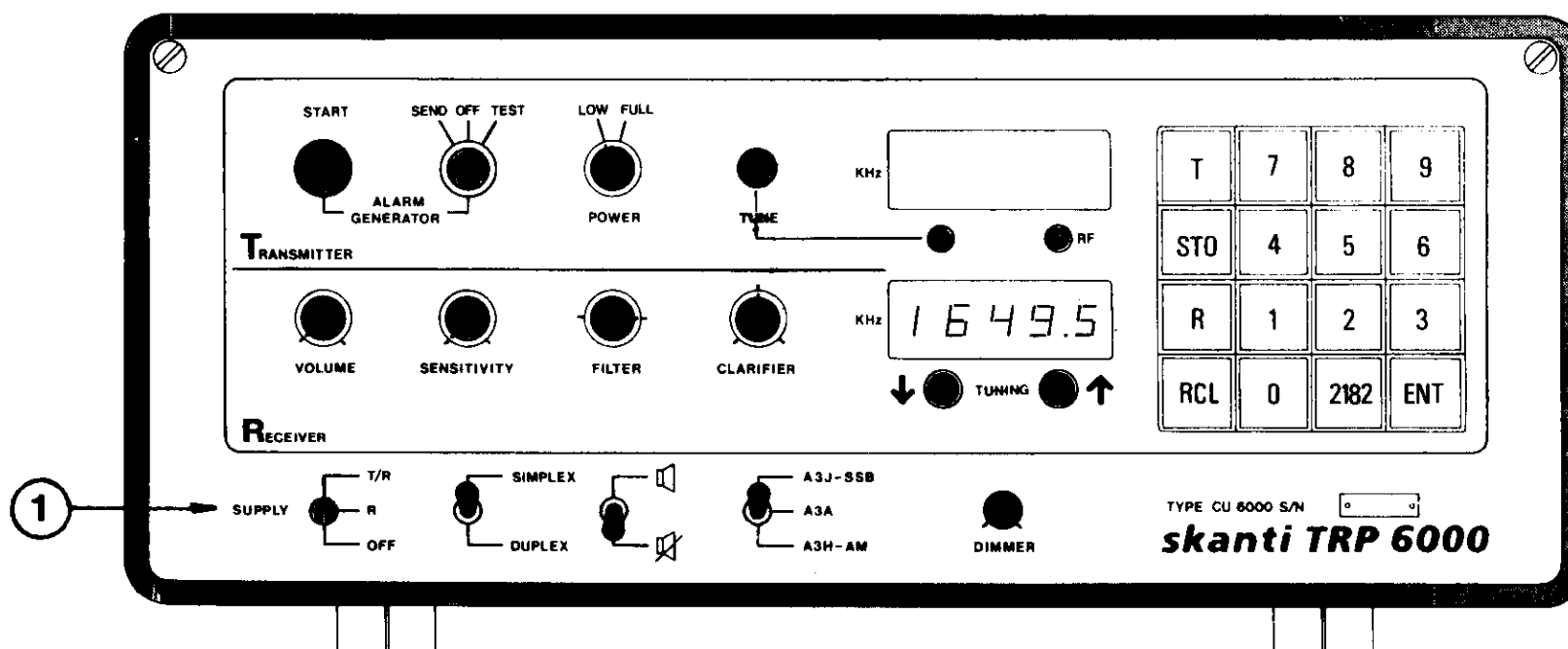
1. Set POWER-switch (15) to "LOW" or "FULL".
2. Choose SIMPLEX or DUPLEX (2) and SSB or AM (4).
3. Press the handset key - you are now on-the-air.

QUICK SET-UP FOR 2182 kHz



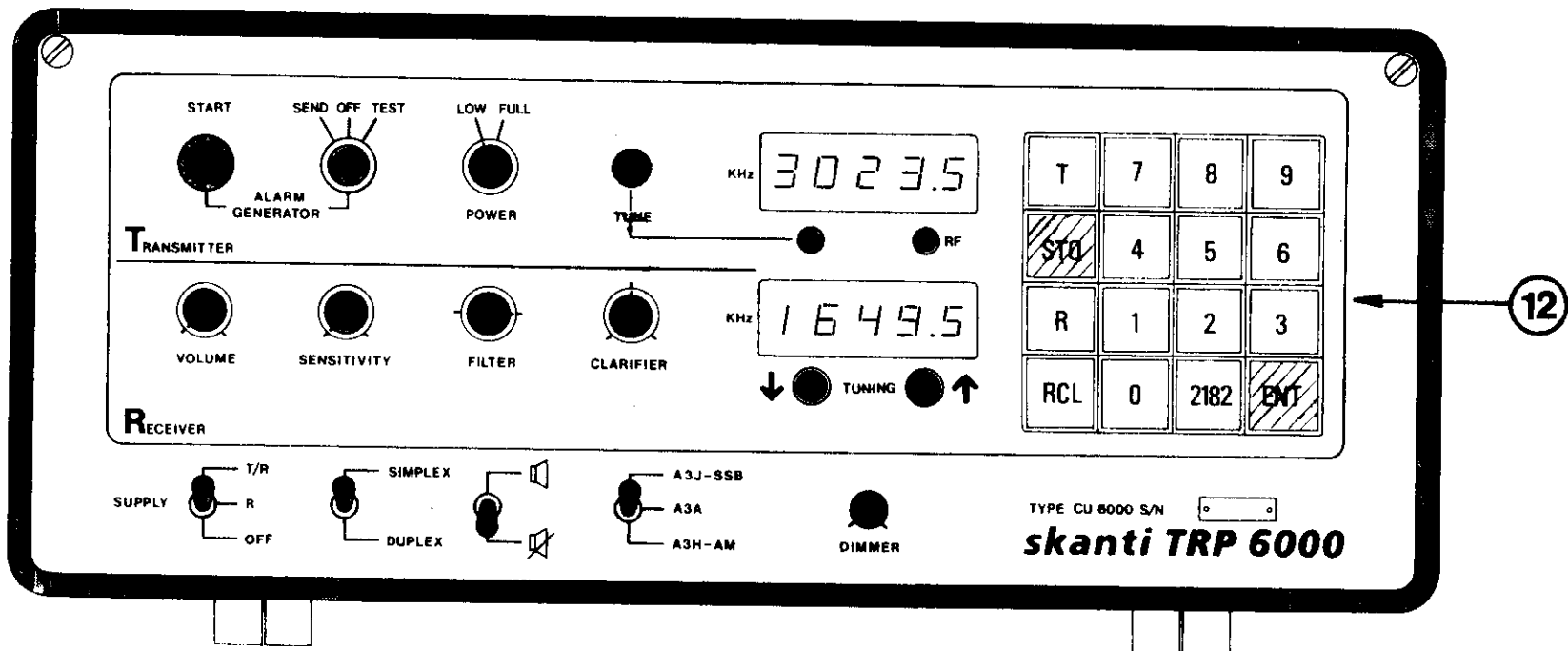
1. Press "2182" key on keyboard (12).  
This instantly changes receive and transmit frequency to 2182 kHz.  
Mode A3H-AM is automatically selected (mode switch is de-activated).  
Receiver sensitivity is automatically switched to maximum. (The SENSITIVITY control is de-activated).
2. Adjust VOLUME (6) for a convenient sound level.
3. Press the TUNE (16) pushbutton and wait until the light in the RF (19) output indicator goes out.
4. Set POWER-switch (15) to "LOW" or "FULL".
5. Press the handset key - you are now on-the-air.

RECEIVE ONLY



1. Switch SUPPLY (1) to "R".  
This will switch off all transmitter functions.

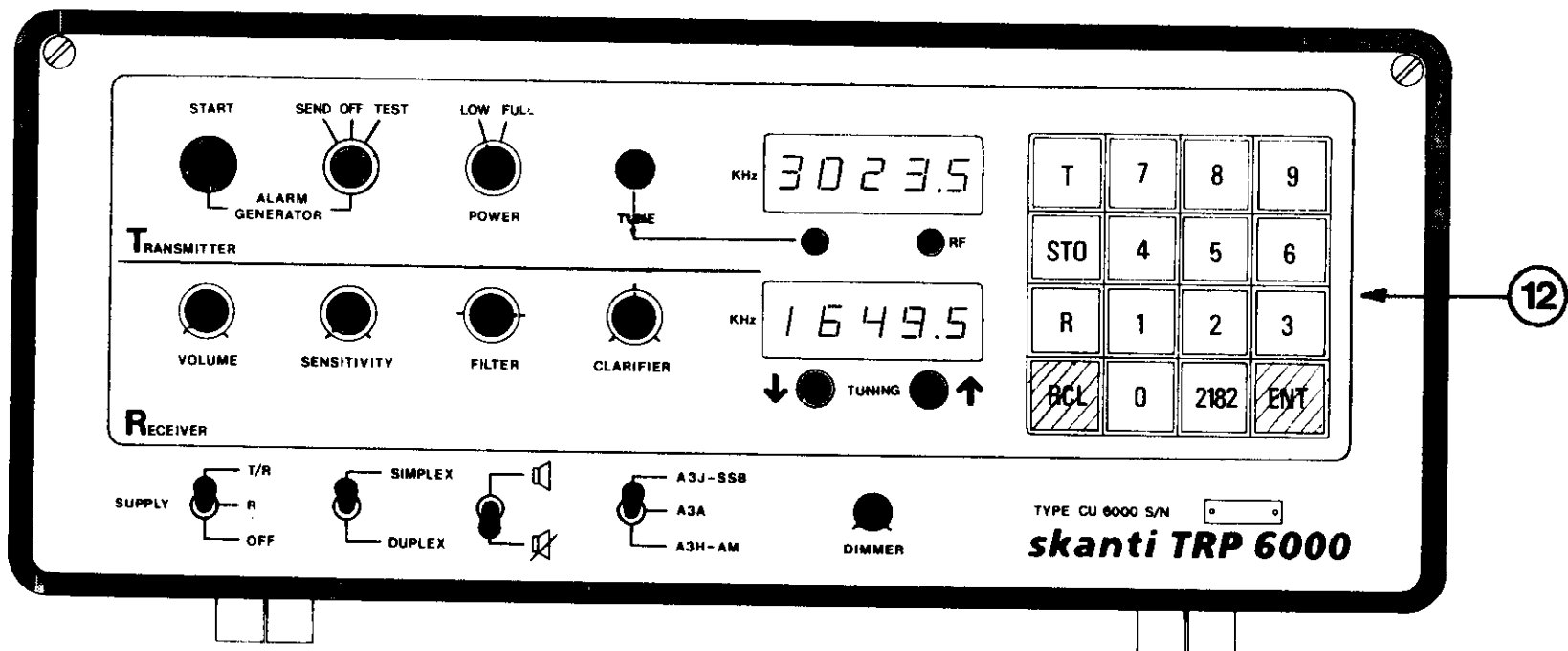
HOW TO STORE (STO) RECEIVE AND TRANSMIT FREQUENCY PAIRS



To programme a "channel" into the built-in frequency memory proceed as follows:

1. Set up the actual frequencies on the two displays.
2. Press the "STO" key on keyboard (12) and keep it pressed.
3. Enter your channel-number via the keyboard (12) numeric keys. You have 20 channels from 0-19.
4. Press and release "ENT" key, release "STO".

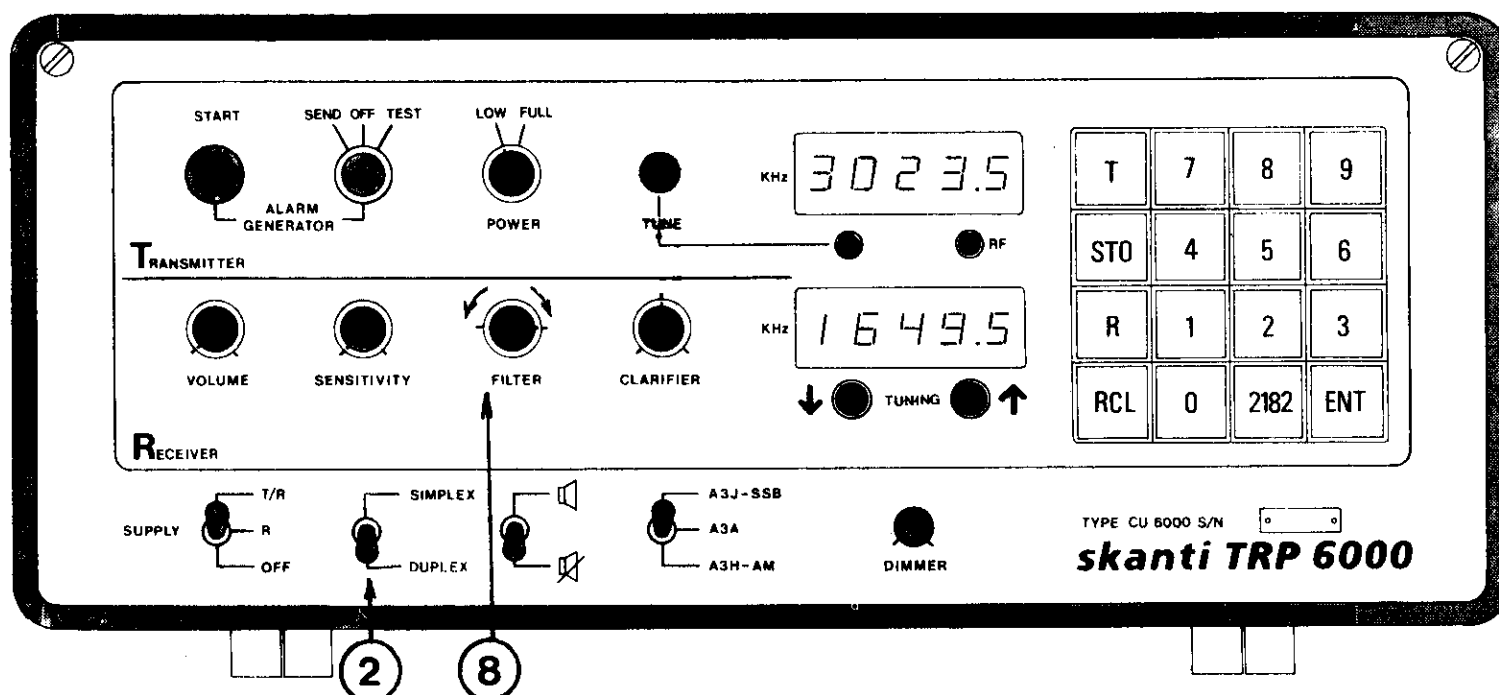
HOW TO RECALL (RCL) STORED RECEIVE AND TRANSMIT FREQUENCIES



To recall a "channel" in the frequency memory proceed as follows:

1. On keyboard (12) press  
     "RCL"  
     Channel no.  
     "ENT"

## DUPLEX OPERATION



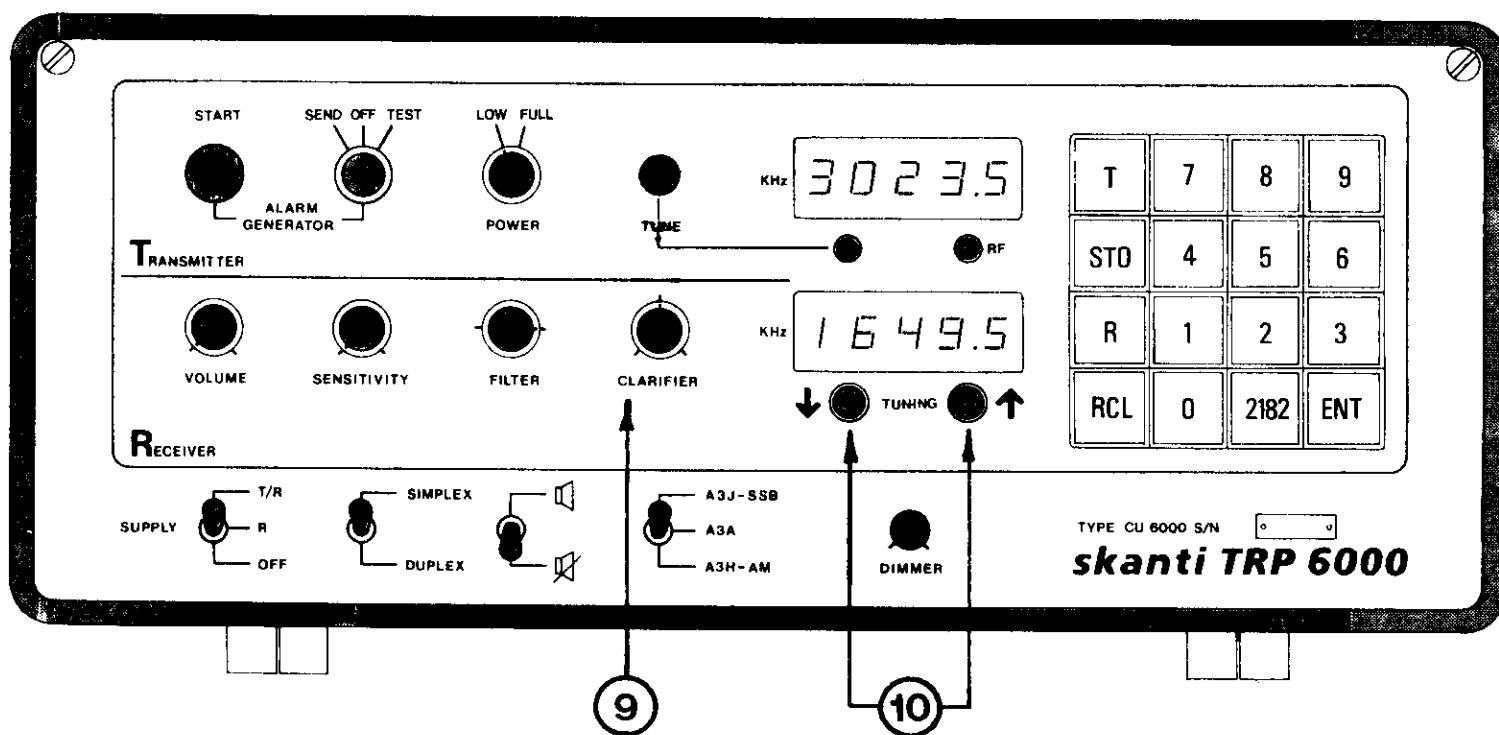
1. Set SIMPLEX/DUPLEX switch (2) to DUPLEX.

To minimize noise and interference at the receiving frequency, activate the FILTER (8) as follows:

2. Turn the FILTER (8) knob to its extreme left or right position (right or left demarcation line); this will activate the filter.
3. Adjust FILTER (8) knob for max. receiver sensitivity or minimum transmitter noise/interference.

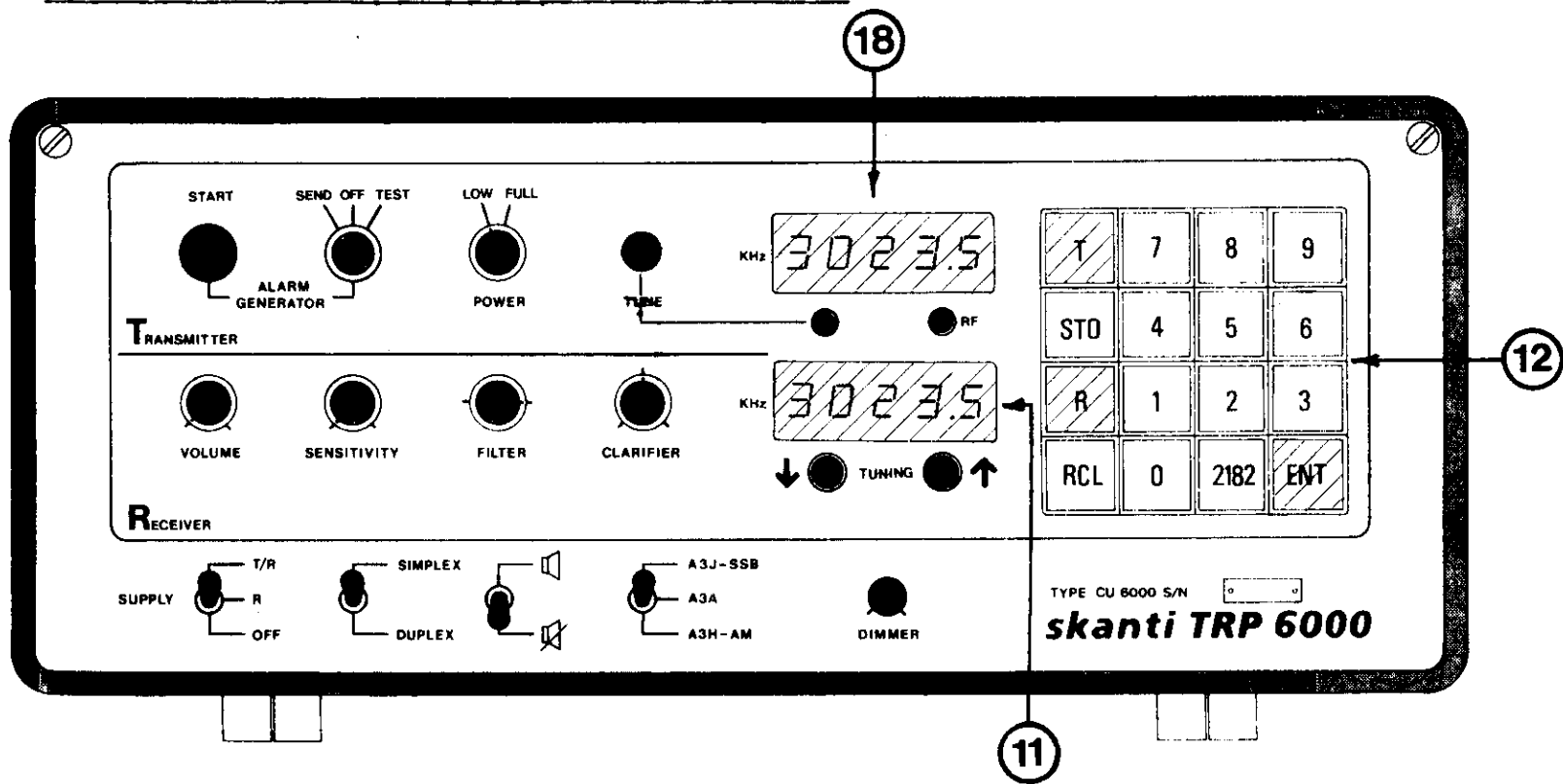
**NOTE:** The filter switches off automatically if the receiver frequency is changed either by TUNING or by a new key-board entry of receiver frequency.

## RECEIVER TUNING



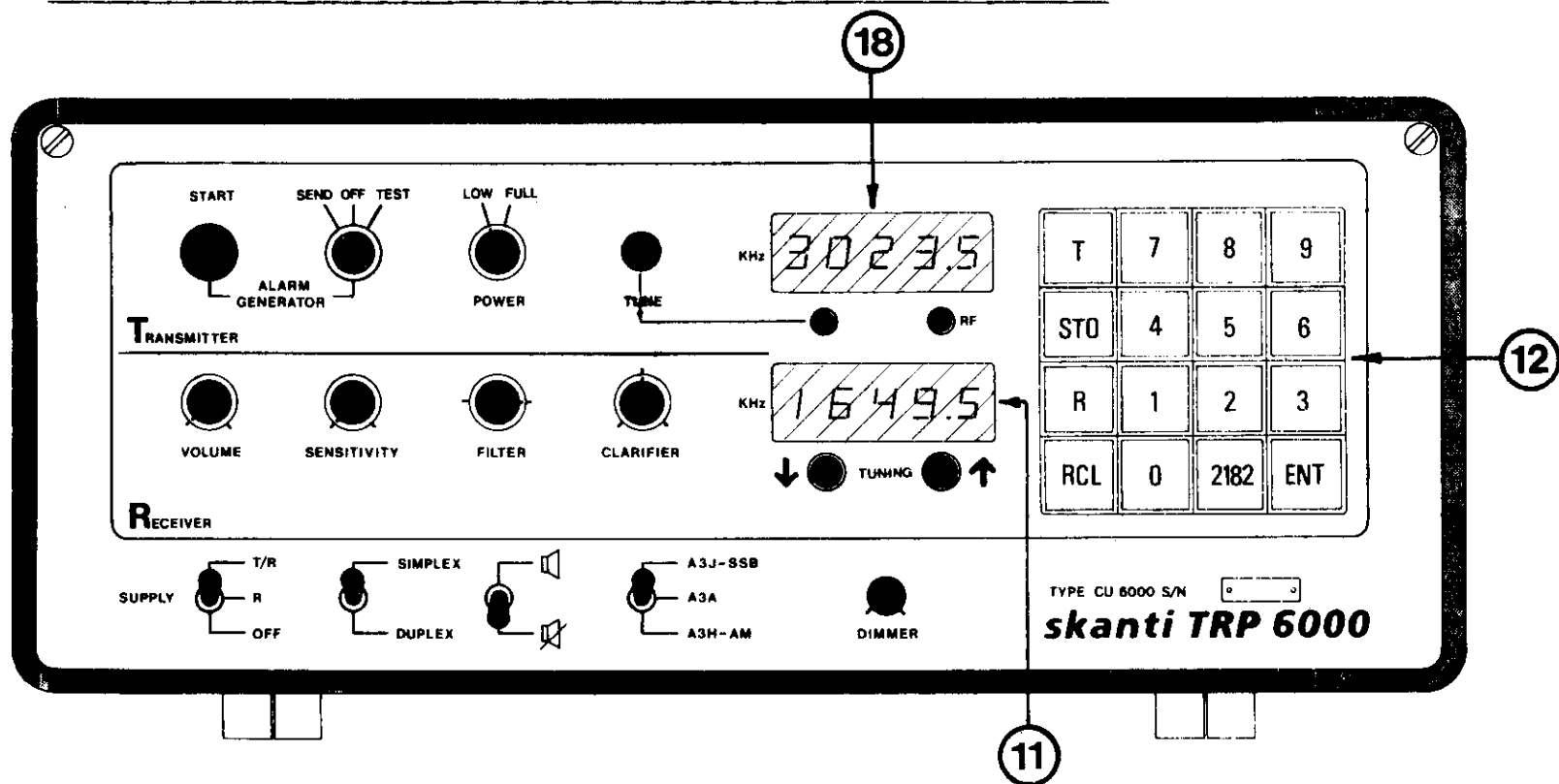
1. TUNING pushbuttons (10) are used to change the receive frequency up/down. A short operation will change the frequency 1 kHz or 100 Hz in A3/A3H and A3J/A3A mode respectively. If a TUNING pushbutton is pressed and held pressed for more than 0.5 sec. the receiving frequency will change continuously with 10 kHz/sec. or 5 kHz/sec. in A3/A3H and A3J/A3A mode respectively. After 1 second the rate of change will be doubled. See also page 2-7.
2. For fine tuning to an SSB station use the CLARIFIER control (9) and adjust for natural-sounding speech.

## QUICK SET-UP FOR SIMPLEX OPERATION



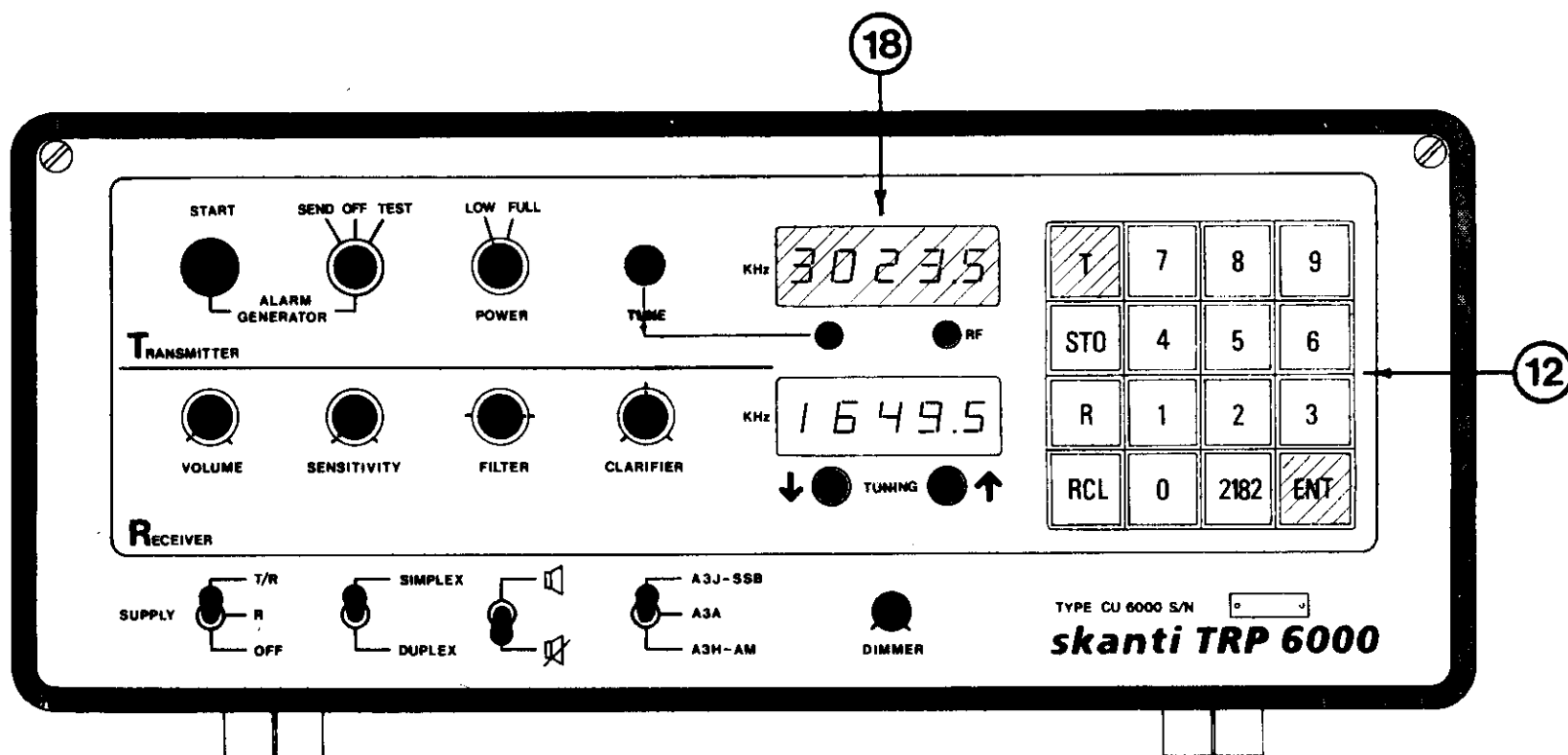
1. Press "T" key on keyboard (12)
2. Press "R" key on keyboard (12)
3. Enter desired frequency in the transmit and receive frequency displays (18) and (11) simultaneously via keyboard (12) numeric keys.
4. Press "ENT" key on keyboard (12)

## QUICK WAY OF RECALLING STORED FREQUENCY PAIRS



1. Press "R" key on keyboard (12)
2. Press "ENT" key on keyboard (12)
3. The transmit and receive frequency displays (18) and (11) will now show the first stored frequency pair.
4. Repeat step 2 to see the next frequency pair.

VERIFICATION OF TRANSMITTER -FREQUENCY PROM



1. Press "T" key on keyboard (12)
2. Press "ENT" key on keyboard (12)
3. The transmit frequency display (18) will now show the first authorized frequency programmed into the PROM.
4. Repeat step 2 up to 80 times to see the next frequency.

9 kHz (10 kHz) SCANNING FACILITY IN THE BROADCAST BANDS

This facility eliminates the need for fine-tuning to broadcast stations when using the TUNING pushbuttons. The broadcast bands 155 kHz to 281 kHz and 531 kHz to 1602 kHz are scanned in steps of 9 kHz, corresponding to the channel spacing of broadcast stations in Regions 1 and 3. Alternatively the band 540 to 1600 may be scanned in steps of 10 kHz, corresponding to the channel spacing in Region 2.

To obtain 9 kHz (10 kHz) scanning proceed as follows:

Press in sequence

"R"  
 "9" ("10")  
 "ENT"

"9.0" ("10.0") is flashing in the R-display. Store the information in channel No. 19:

Press "STO" and keep it pressed

Press in sequence

"1"  
 "9"  
 "ENT"

Release

"STO"

Any other content in channel 19 than 9.0 or 10.0 causes 1 kHz scanning.

Note that when the 9 kHz (10 kHz) scanning facility is desired channel 19 cannot be used for storing a receiver frequency.

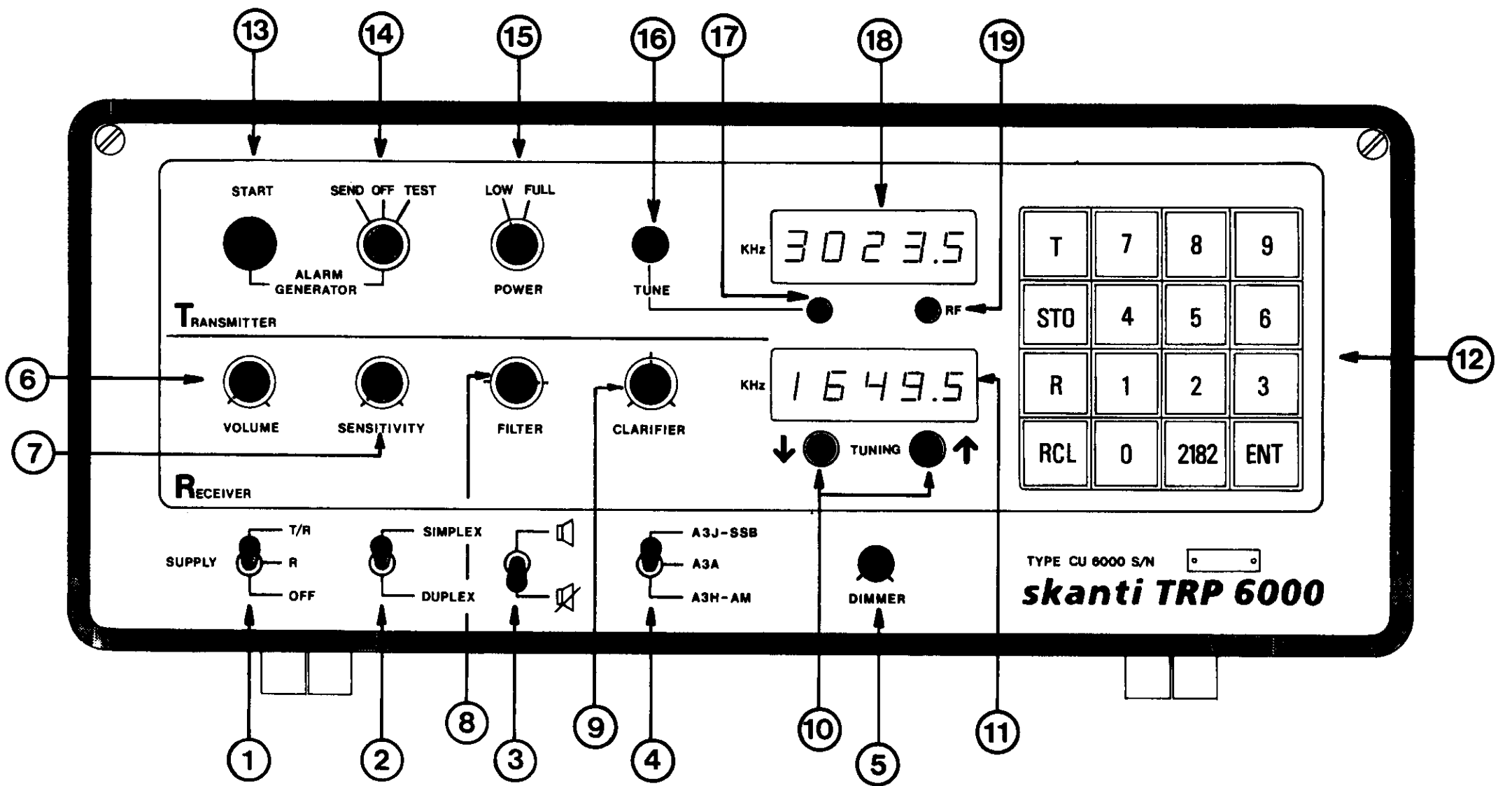




Fig. 2.2.1



## 2.2. DETAILED DESCRIPTION OF OPERATING CONTROLS

Refer to fig. 2.2.1.

- ① SUPPLY
  - T/R : Complete switch-on of TRP 6000
  - R : Receiver only is switched on
  - OFF : Complete switch-off of TRP 6000
  
- ② SIMPLEX / DUPLEX
  - DUPLEX : Transmitter is keyed from handset key.  
Receiver is on, but speaker(s) is disconnected.
  
  - SIMPLEX : Transmitter is keyed from handset key.
  
- ③ Speaker on/off
  -  : Speaker(s) on
  -  : Speaker(s) off
  
- ④ Mode switch
  - A3J-SSB : Transmission of A3J  
Reception of A3J and A3A
  
  - A3A : Transmission of A3A  
Reception of A3A and A3J
  
  - A3H-AM : Transmission of A3H  
Reception of A3H and A3  
A3H-AM is automatically selected in the receiver  
for frequencies below 1606.5 kHz.
  
- ⑤ DIMMER : For adjustment of the light intensity in the frequency displays.  
Turn fully clockwise, for full maximum intensity.
  
- ⑥ VOLUME : For adjustment of receiver AF gain.

- ⑦ SENSITIVITY: Adjusts receiver IF amplifier gain. Turning the control anticlockwise gradually reduces the gain. This can be advantageous during SSB reception as it prevents noise from coming up in speech pauses.

NOTE: The AGC (Automatic Gain Control) is impeded when the gain is manually reduced by means of the SENSITIVITY control. Always turn the control fully clockwise when selecting a new frequency.

The SENSITIVITY control is disabled at frequencies below 1606.5 kHz (broadcast bands) and 2182 kHz (if selected by 2182 key) where A3H-AM, AGC ON is automatically selected.

- ⑧ FILTER : For activation and adjustment of the narrow, tunable receiver input filter. To activate the filter, turn the knob to its extreme left or right position (right or left horizontal markers).

Next, adjust the knob for maximum receiver sensitivity or minimum transmitter noise/interference.

NOTE: The filter is taken out of circuit automatically if the receiver frequency is changed, with either the TUNING pushbuttons (10) or with a new keyboard entry of receiver frequency.

- ⑨ CLARIFIER : Receiver frequency fine tuning in modes A3A and A3J.

- ⑩ TUNING



: Receiver frequency-decrease pushbutton



: Receiver frequency-increase pushbutton

NOTE: Rate of change is 10 kHz/second in A3/A3H mode and 5 kHz/second in A3A/A3J mode.

However, the rate of frequency change will double if a TUNING pushbutton is kept pressed for more than one second. See also page 2-7.

In A3J/A3A mode the frequency will step 100 Hz each time one of the pushbuttons is pressed.

- ⑪ R-display : Receive frequency display.

A flashing decimal point indicates that an enter or recall of a new receive frequency is not finalized.

Flashing digits indicate that the frequency is outside the specified receiver frequency range.

⑫ Keyboard

The keyboard consists of six control keys and ten numeric keys.

T			
STO			
R			
RCL			ENT

FUNCTION CONTROL KEYS

	7	8	9
	4	5	6
	1	2	3
	0		

NUMERIC KEYS

		2182	

2182 CONTROL KEY

All keyboard operations (except use of the "2182" key) must begin with one of the four extreme left column keys T - STO - R - RCL to define the type of function and must end with ENT to indicate that the keyboard operation is finalized.

For this reason keyboard operations generally have the following 3-step structure:

- Step 1 Press one of the four function control keys:
  - T for updating the T-display
  - STO for storing the frequencies in T- and R-display
  - R for updating the R-display
  - RCL for recalling stored frequencies (channels).
- Step 2 Use the numeric keys, either for entering new frequencies or a channel number.
- Step 3 Press ENT.

Details related to the six control keys are as follows:

- T Transmitter frequency key.  
Pressing this key will clear the T-display.  
The decimal point flashes to indicate that a new transmit frequency must be entered with the numeric keys.

- STO      Store key.  
To be used for storing the current contents of the T- and R-displays in the user-programmable memory.  
Pressing STO will not change the contents of the T- and R-displays.  
STO must be pressed during the complete store sequence, see section 2.1.
- R        Receiver frequency key.  
Pressing this key will clear the R-display.  
The decimal point flashes to indicate that a new receive frequency must be entered with the numeric keys.
- RCL      Recall key.  
To be used for recalling a channel (a frequency pair) from the user-programmable memory.  
Pressing this key will clear both T- and R-displays.  
The decimal point will flash, in both displays, to indicate the channel number must be entered with the numeric keys.  
The entered channel number will now show in the R-display. Refer to section 2.2 for complete recall procedure.
- ENT      Enter key.  
Must be operated to terminate all keyboard operations initiated by the T-STO-R or RCL keys.
- 2182    Quick set-up key for 2182 kHz.  
Pressing this key will instantly select 2182 kHz as both transmit and receive frequency.  
A3H simplex operation and full receiver sensitivity is automatically selected independent of the actual positions of the mode-switch, simplex/duplex switch or sensitivity control knob.

⑬ START : Alarm generator start push-button.

Pressing this red pushbutton will initiate the 45 seconds two-tone alarm signal generation period if the ALARM GENERATOR SWITCH (14) is in position SEND or TEST. If in position SEND, the transmitter is automatically tuned when the START pushbutton is pressed.

⑭ ALARM GENERATOR SWITCH

SEND : In this position the alarm generator is ready to be started by the START pushbutton (13).

When START is pressed the transmitter is automatically tuned, then keyed and the two-tone alarm signal is transmitted for approx. 45 seconds at full output power.

The alarm signal can be monitored in the telephone handset and can be interrupted at any time, by switching (14) to OFF.

OFF : The alarm generator is switched off and cannot be activated by pressing START (13).

TEST : Transmitter cannot be keyed.

The alarm generator can be started by pressing the START pushbutton (13).

The alarm signal is generated for 45 seconds.

The alarm signal can be monitored in the telephone handset and can be interrupted at any time, by switching (14) to OFF.

⑮ POWER

LOW : Transmitter is driven to approx. 1/8 of full rated output power.

NOTE: Full power is automatically selected when the ALARM GENERATOR switch (14) is in the SEND position.

FULL : Transmitter is driven to full rated output power.

①⑥ TUNE : Pushbutton for initiating the automatic tuning procedure in the Transmitter Unit. A typical tuning takes about 7 seconds. During tuning the RF output indicator (19) will light to indicate that the transmitter is keyed and that power is delivered to the antenna during tuning. When the light in (19) is switched off, tuning is completed.  
During tuning the receiver is muted.

①⑦ Tune indicator:

Light indicates that tuning is needed.  
Press TUNE (16).

If the tune indicator lights even when tuning has been performed, an overload condition is present in the Transmitter Unit. Refer to page 4-5 for specific instructions.

①⑧ T-display: Transmitting frequency display.

A flashing decimal point indicates that an enter or recall of a new transmitting frequency is not finalized.

Flashing digits indicates that the frequency is unauthorized, i.e. the frequency is outside the specified transmitter frequency range and/or not contained in the transmit frequency PROM.

The transmitter cannot be keyed if the T-display is flashing.

①⑨ RF

: RF output indicator.

A low light intensity indicates the transmitter is being keyed.

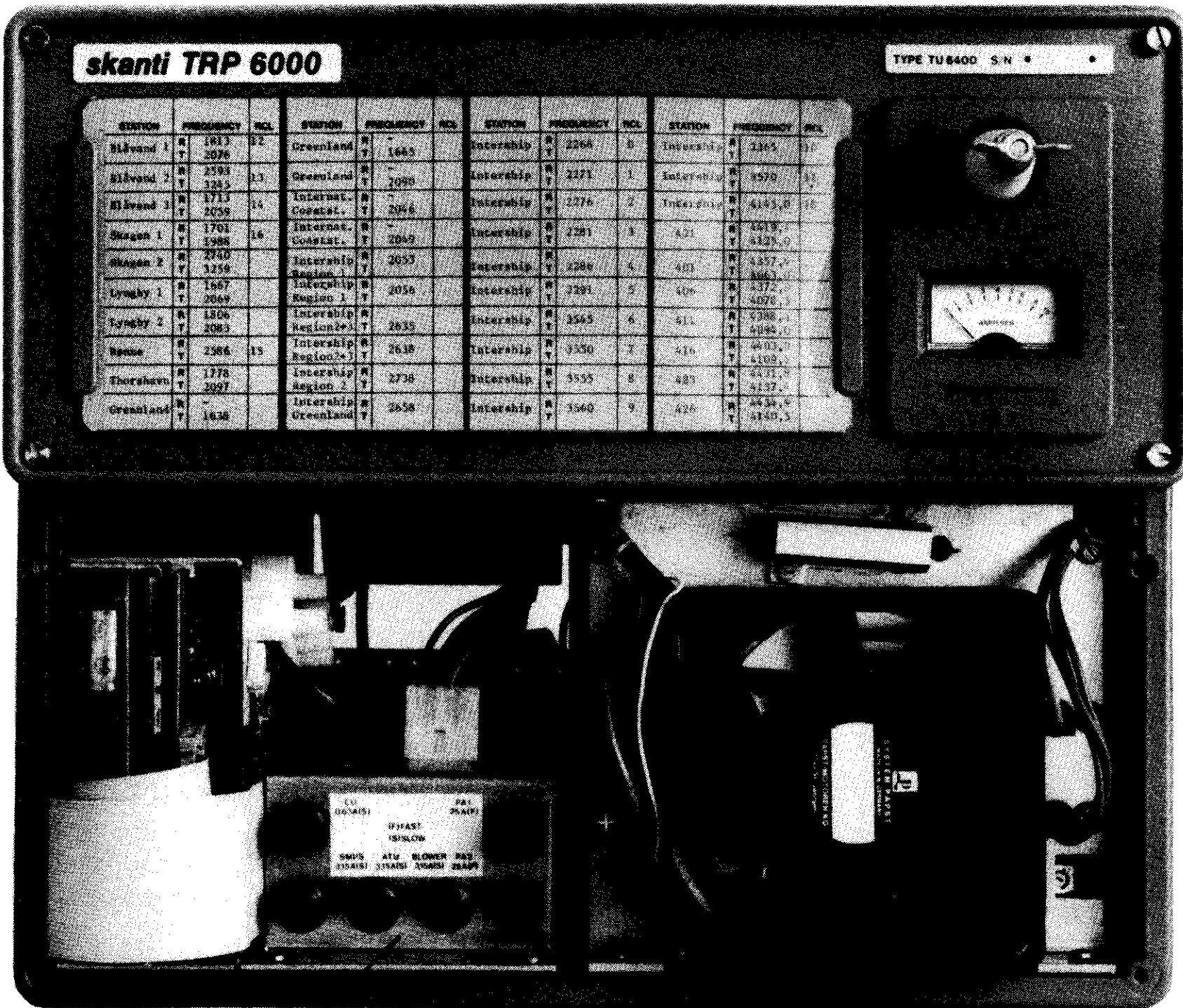
Light intensity increases in direct relation to increase in the actual antenna current.

### 3. PREVENTIVE MAINTENANCE

To ensure maximum performance and minimum repair trouble, we strongly recommend you to follow below stated headlines for preventive maintenance.

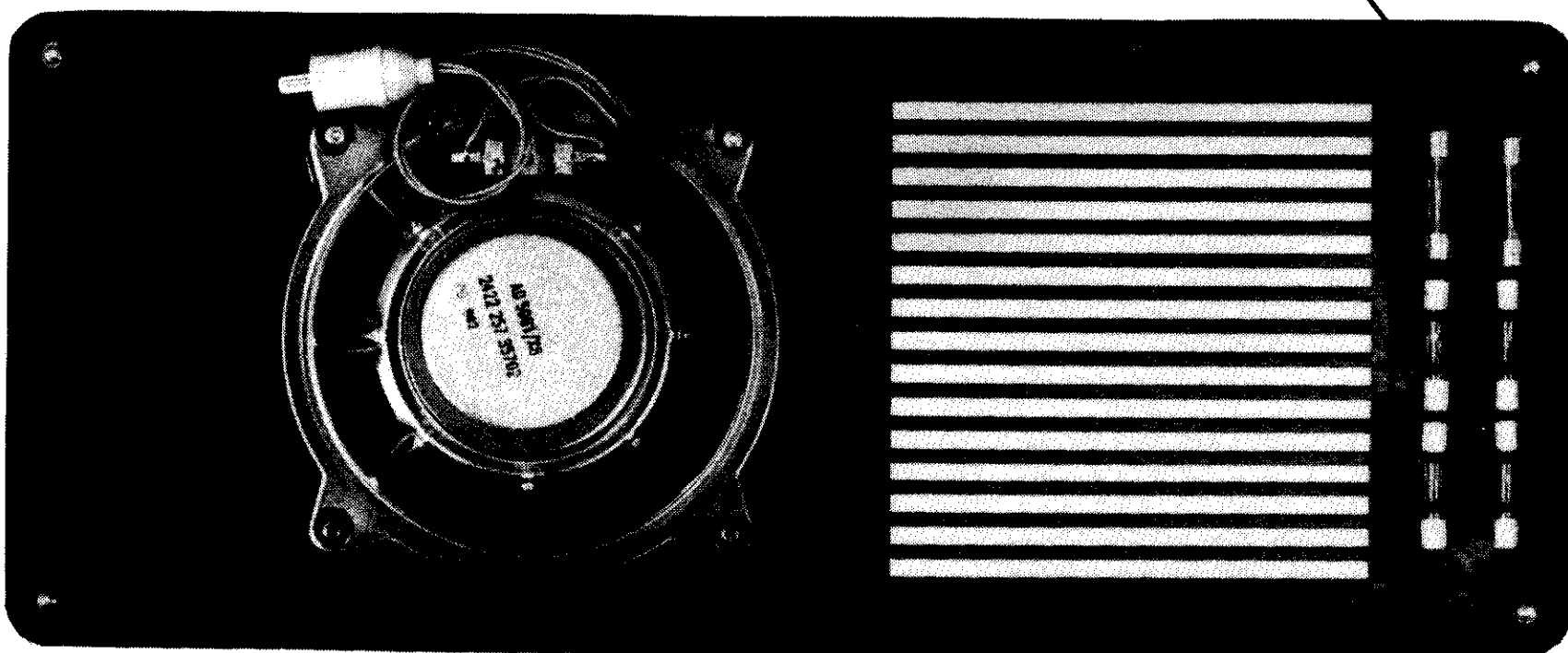
1. Always keep the battery fully charged.
2. Check antenna installation and the ground connection at regular intervals.
3. Keep antenna feed-through insulators clean and dry.
4. Keep your TRP 6000 clean and dry externally: this will ensure continued function of the front panel controls and will prevent flash-over from the antenna-horn.
5. If TRP 6000 has not been used for a long period of time combined with exposure to extreme environmental conditions, open both units and make a visual inspection. Remove salt, water or ice with a moist cloth before switching on the equipment. Check that the cooling fans and the two tuning coils are running freely.
6. For general maintenance and top performance, call an authorized service technician to give the equipment and the complete antenna / earth connection installation a general check every 12-18 months.

NOTE: Check at regular intervals that the Power Amplifier air intake located at the lower right front of the Transmitter Unit is free of dust. If dust is visible detach the front panel and remove the dust by means of a soft brush. Check intervals should be from one to six months dependent upon the environment.



FUSES

SPARE FUSES



Transmitter Unit - Lower front panel removed

Fig. 4.1



# 4. TROUBLE SHOOTING AND SERVICE

## 4.1. Malfunction

If the equipment is not functioning correctly, a check should be made that it is being operated properly; see chapter 2.

## 4.2. Battery

The condition of the battery should be checked at frequent intervals. The battery must always be fully charged and should be topped up frequently with distilled water (liquid should be 5 to 10 mm above the plates).

## 4.3. Replacement of Fuses

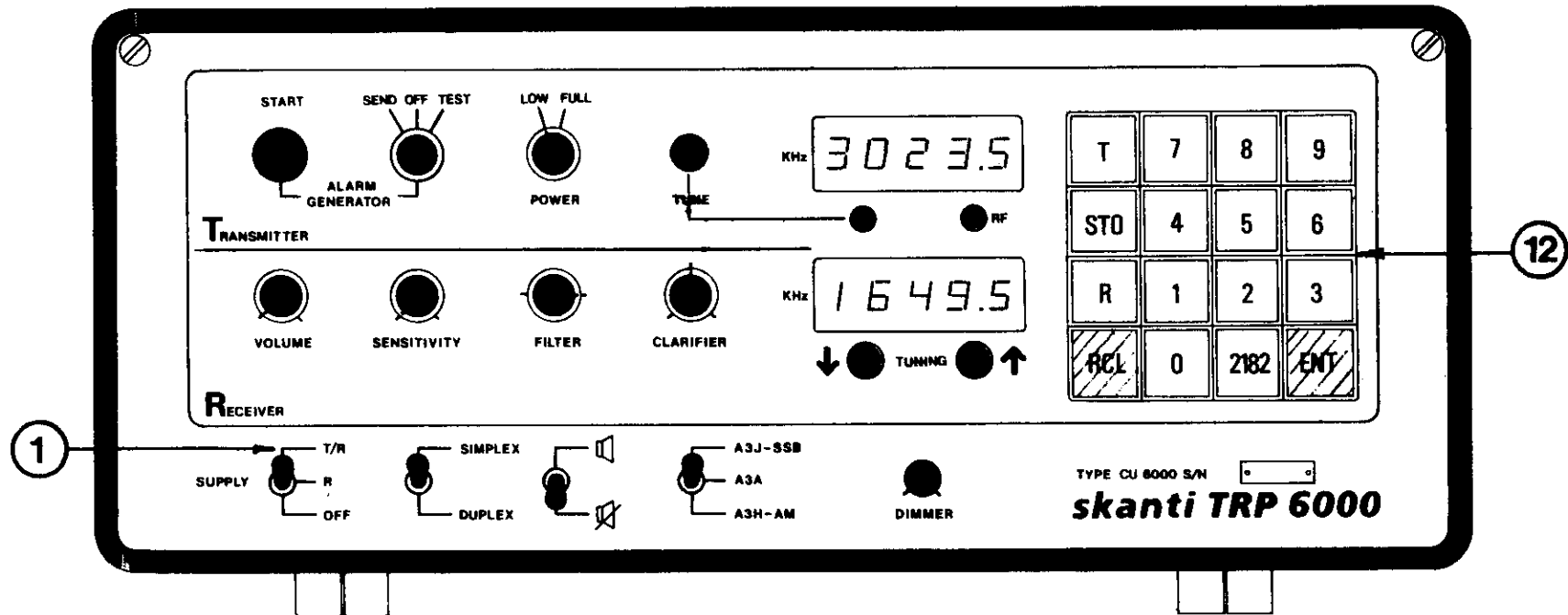
All fuses can be found behind the lower front panel of the Transmitter Unit. The fuses become accessible when the front panel is removed (4 screws). Spare fuses are placed on the inside of the lower front panel (see fig. 4.1.).

NOTE: Set SUPPLY switch to OFF and open external supply voltage switch before opening the equipment and replacing fuses.

Fuse ratings are given in the table below. Fuses with marked ratings within 5 per cent of the ratings given must be used. Note that slow or fast blowing fuses must be used as specified.

Fuse Rating	Fuse Marking	Function	Symptom if fuse is blown
0.63 A slow	CU	+24V to SUPPLY switch	Equipment totally dead. Main relay in Transmitter Unit does not operate when SUPPLY switch is activated.
3.15 A slow	SMPS	Generation of 7.5V and 15V	Control Unit off. Main relay in Transmitter Unit operates when SUPPLY switch is switched from OFF to R. Cooling fans in Transmitter Unit are off.
3.15 A slow	AAC	+24V for automatic antenna coupler	TUNE pushbutton no function.
3.15 A slow	Blower	+24V for blower con- verter	PA cooling fan does not rotate when SUPPLY switch is in posi- tion T/R.
25 A slow	PA 1	+24V to left- hand power amp.	Reduced antenna current and RF output indicator light.
25 A slow	PA 2 (TU6400 only)	+24V to right- hand power amp.	No antenna current and minimum RF output indicator light in- tensity if PA 1 and PA 2 are both blown.

#### 4.4. HOW TO USE THE BUILT-IN SELF-CHECK FUNCTION



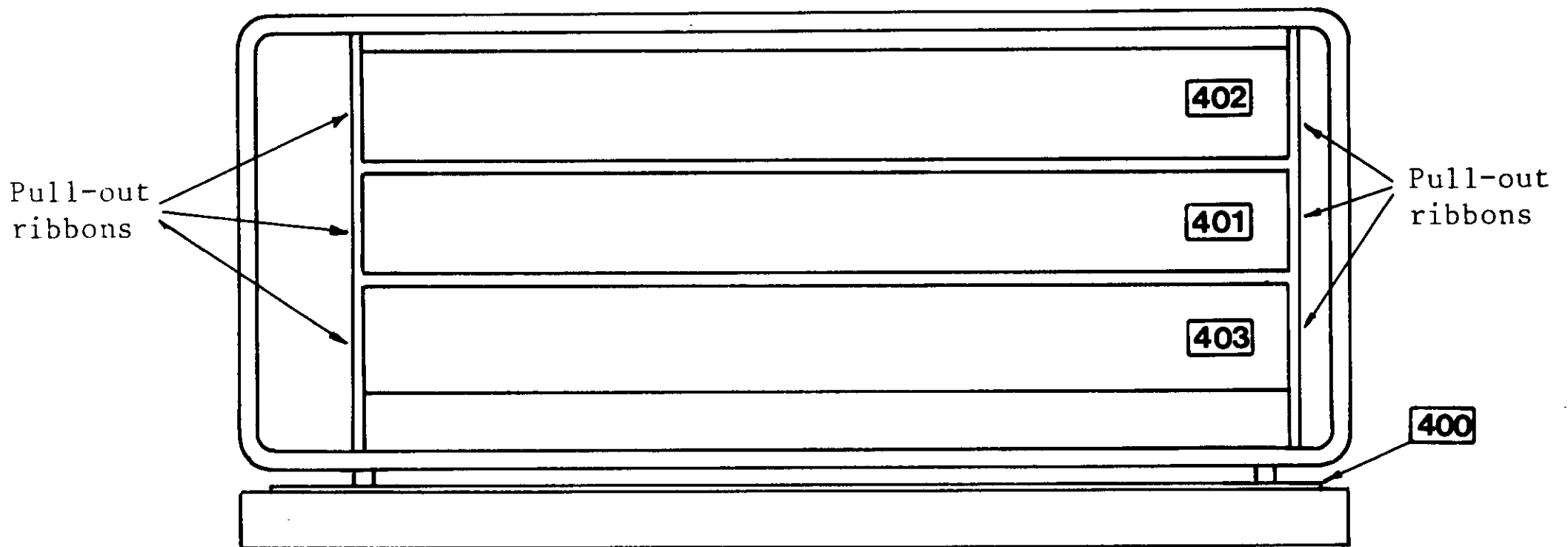
The built-in selfcheck function checks all major functions in the Control Unit.

Check procedure:

1. Set SUPPLY-switch (1) to "T/R" and switch off speaker.
2. Press "RCL" and keep it pressed, then press "ENT"
3. Release "RCL" and "ENT".

A check takes approx. 4 seconds. The result of the check is shown in the T-display.

Table 4.4.1 shows the possible error codes and the corresponding most probable faults.



Control Unit p.c.b. positions

To replace a faulty p.c.b. set SUPPLY switch to OFF, disconnect the coax- and flat-ribbon-cables and pull out the faulty p.c.b. box taking advantage of the pull-out ribbons placed on each side of the box.

NOTE: Make sure to state the exact part number (refer to the spare parts lists in section 4.7.) of the faulty p.c.b. when ordering a replacement

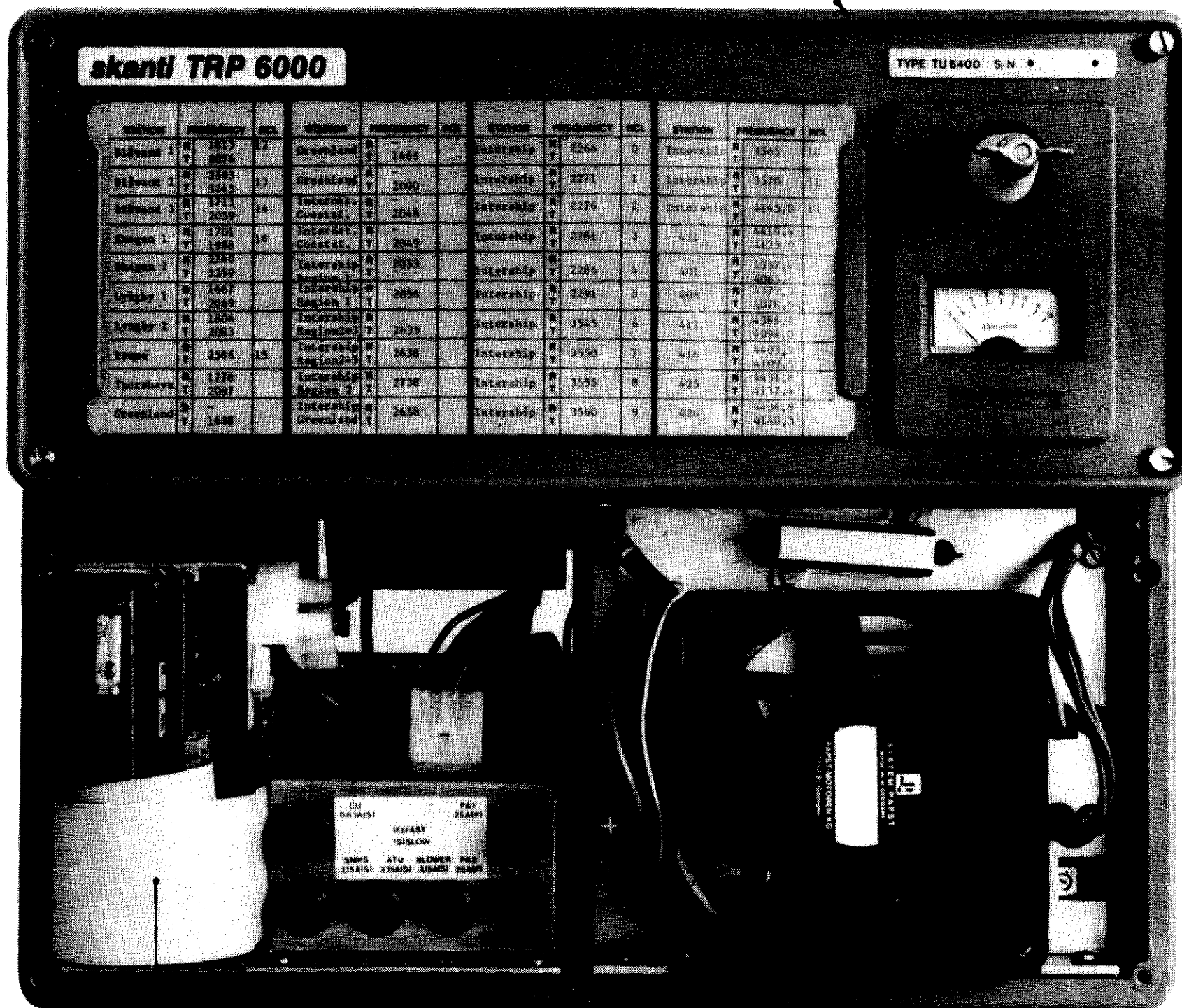
SELFCHECK ERROR MESSAGES			
ERROR CODE	PCB WITH FAILURE	TEST POINT FAILING	POSSIBLE FAILURE
C 000	no fault	-	-
101	401	6	a) AF-amplifier; BS- and LP-filters b) Mode switch circuit (SSB)
102		5	a) Signal detector; AGC detector b) 1.4 MHz BP-filter
103		4	a) RX signal path incl. 1.4 MHz x-tal LSB filter to signal detector.
104		6	a) Mode switch circuit (AM)
105		4	a) 1.4 MHz wide AM filter
201	402	3	a) 3.3 MHz VCXO; 9.3 MHz mixer b) 9.3 MHz BP-filter
202		1	a) VCO in RX-synthesizer
203		2	a) ÷ N divider; reference divider b) Phase comparator; LP-filter
301	403	9	a) 1.4 MHz level stabilizer
302		10	a) ÷ N divider; ÷ 14.000 divider b) Phase comparator; LP-filter
303		11	a) VCO in EX-synthesizer
304		12	a) EX signal path incl. 2.8 MHz LP-filter from 1.4 MHz mixer.
305		8	a) Compressor
306 399		12 -	a) 4.22 MHz LP-filter a) SUPPLY-switch not in position "T/R"
400		7	a) 15 V power from supply missing

a) Most probable failure

b) Second most probable failure

Table 4.4.1.

**AUTOMATIC ANTENNA COUPLER**



**POWER SUPPLY MODULE**

**POWER AMPLIFIER MODULE**

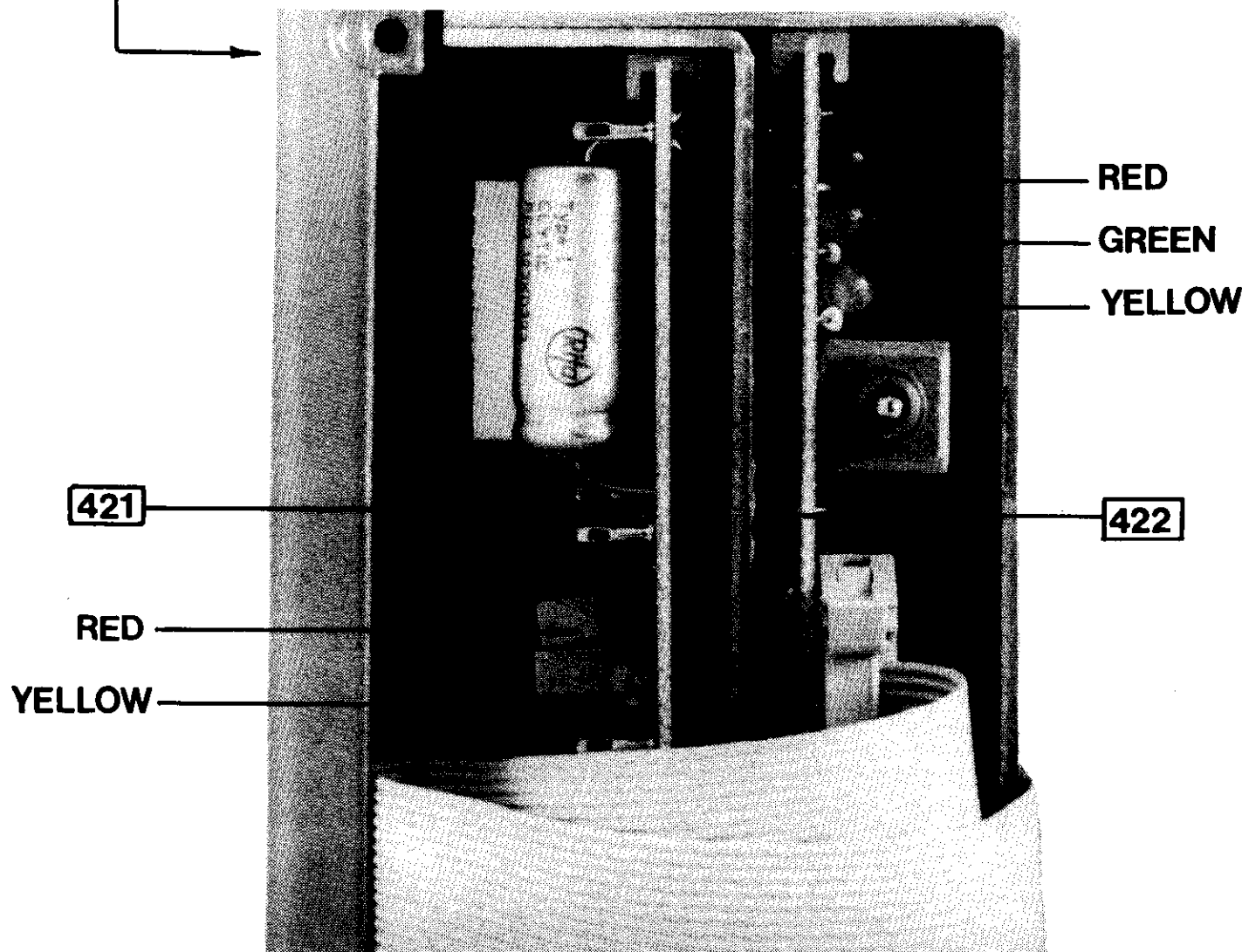


Fig. 4.5.1 Transmitter Unit

#### 4.5. TRANSMITTER UNIT FAULT FINDING

Remove the lower front panel as illustrated on fig. 4.5.1.  
Set SUPPLY switch (Control Unit front panel) to T/R.

As illustrated on fig. 4.5.1 you will find five LED status-indicators on the power supply module:

**421** Red light indicates 15V stabilized supply voltage OK.  
Yellow light indicates 7.5V stabilized supply voltage OK.

If either red or yellow is off replace **421**.

If both indicators are off check SMPS-fuse and CU-fuse. If both fuses OK replace **421**.

**422** Red light indicates that +24V for **422** is OK.  
Green light indicates that the transmitter is keyed.  
Yellow light indicates that the cooling fans are switched to full speed.

If red is off check the BLOWER-fuse.

If yellow is on, but cooling fans are stopped, replace **422**.

#### Control Unit TUNE INDICATOR lights continuously.

Press TUNE pushbutton and wait until light in the RF output indicator is switched off. If the tune indicator is still lit when the transmitter is keyed a transmitter overload condition exists due to one or more of the following abnormal conditions:

- A - Load mismatch. Check the complete antenna installation and the earth connection carefully.
- B - The Power Amplifier Module temperature is too high. Check cooling fans and ensure that transmitter unit ambient temperature and ventilation are within specified limits.
- C - The Automatic Antenna Coupler is faulty. Remove the frequency table, change frequency, press TUNE and observe the two tuning coils through the openings behind the frequency table. If the coils do not rotate, replace **433** and/or **434**. If you do not have the necessary spares, refer to section 4.6. of this manual.

#### Antenna current too low, tuning normal.

If the antenna current is less than normal, but tuning is OK (no light in the tune indicator (17) when the transmitter is keyed), the output power from the Power Amplifier Module might be too low due to one of the two **441** Power Amplifiers failing. This can be checked as follows:

Remove the PA1 fuse and observe the antenna current. If antenna current is unchanged and the PA1 fuse is OK, the lefthand **441** (PA1) is faulty. If the antenna current is reduced to about zero, PA1 is OK. Reinsert the PA1 fuse. Repeat the test by removing the PA2 fuse.

4.6. HOW TO MANUALLY TUNE THE TRANSMITTER TO 2182 kHz IN CASE OF A FAILURE IN THE AUTOMATIC TUNING SYSTEM.

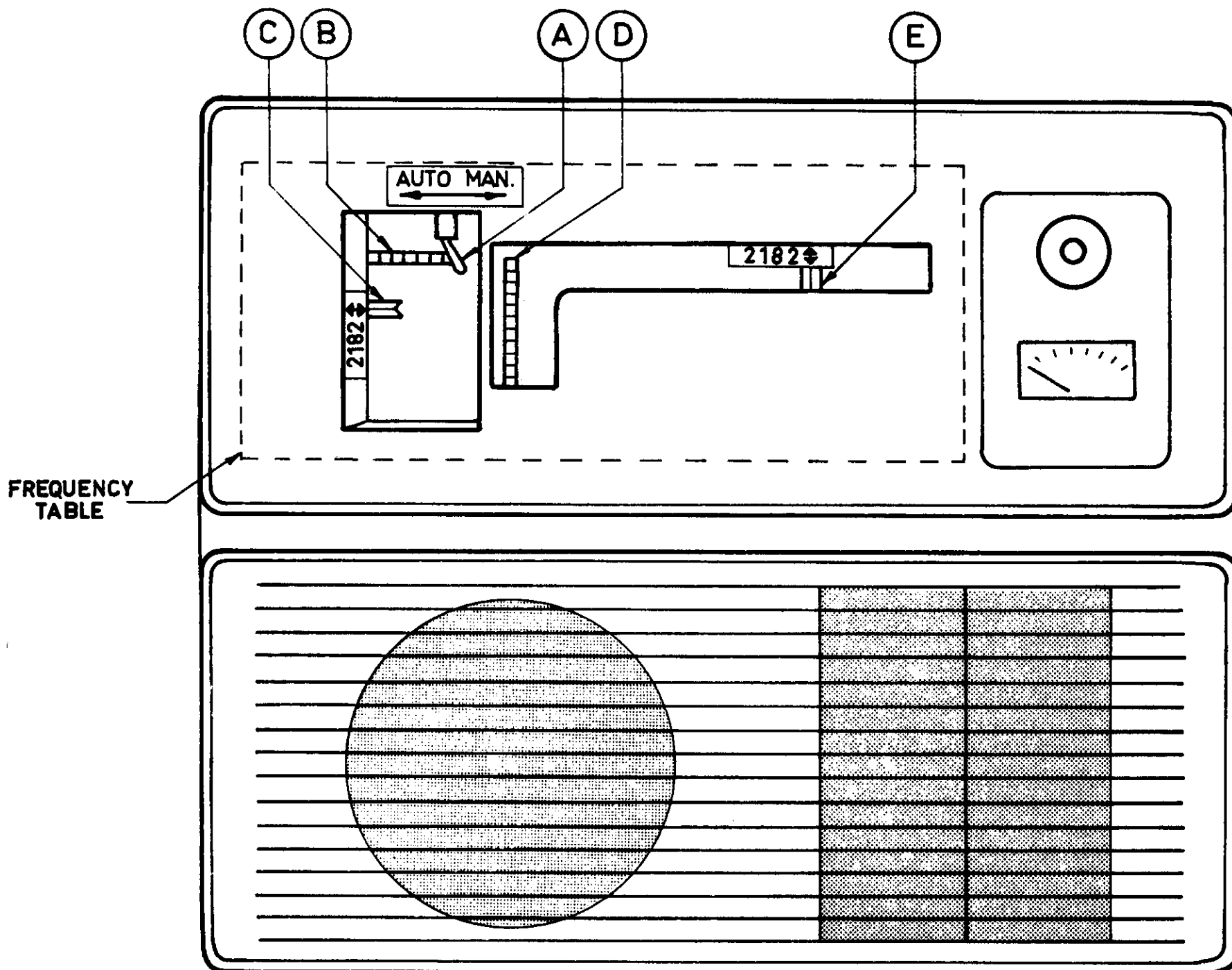


Fig. 4.6.1 Transmitter Unit

1. Switch SUPPLY to "OFF" on Control Unit
2. Remove Frequency Table from Transmitter Unit (Fig. 4.6.1)
3. Remove the self-adhesive plastic film behind the frequency table.
4. Switch AUTO/MAN switch (A) to position MAN.
5. Rotate with a finger, wheel (B) until the roller (C) is positioned exactly at the 2182-marker.
6. Rotate with a finger, wheel (D) until the roller (E) is positioned exactly at the 2182 marker.
7. Switch SUPPLY to "T/R" on Control Unit.
8. The radiotelephone is now ready for operation on 2182 kHz only.
9. Operate the radiotelephone as described in section 2.1.

NOTE: Call for immediate repair when you reach port.

#### 4.7. SPARE PARTS LIST

##### Standard Shipborne Spares

					Part No.
2	fuse	0.63 A	slow	6.3 x 32 mm	720 263 00
2	fuse	3.15 A	slow	6.3 x 32 mm	720 331 50
2	fuse	25 A	slow	6.3 x 32 mm	720 425 01

##### Depot Spares for TRP 6000

###### Control Unit CU 6000

<u>400</u>	Front Panel Board	107 440 01
<u>401</u>	Receiver	107 440 11
<u>402</u>	Control and Rx Synthesizer	107 440 21
<u>403</u>	Exciter	107 440 31
	60 Lead Flat Ribbon Cable	106 400 10
	26 Lead Flat Ribbon Cable	106 400 30
	10 Lead Flat Ribbon Cable	106 400 20

###### Handset

<u>450</u>	Microphone Amplifier	107 445 01
	Earpiece	862 000 05
	Microphone	862 000 06

###### Transmitter Unit TU 6400

###### Power Supply Module:

<u>421</u>	Switch Mode Power Supply	107 442 11
<u>422</u>	Blower Converter	107 442 21
<u>423</u>	Interconnection Board	107 442 31
RL1	Relay, 24V	780 000 05
C1-2	4700 uF 40V	652 947 02
D1	BZY93 Zener	832 933 90

###### Power Amplifier Module:

<u>441</u>	Power Amplifier	107 444 11
<u>442</u>	Stabilizer and Combiner	107 444 21
B1	Blower 24V AC	872 000 06
R1	70 ohm 50 W	548 150 00

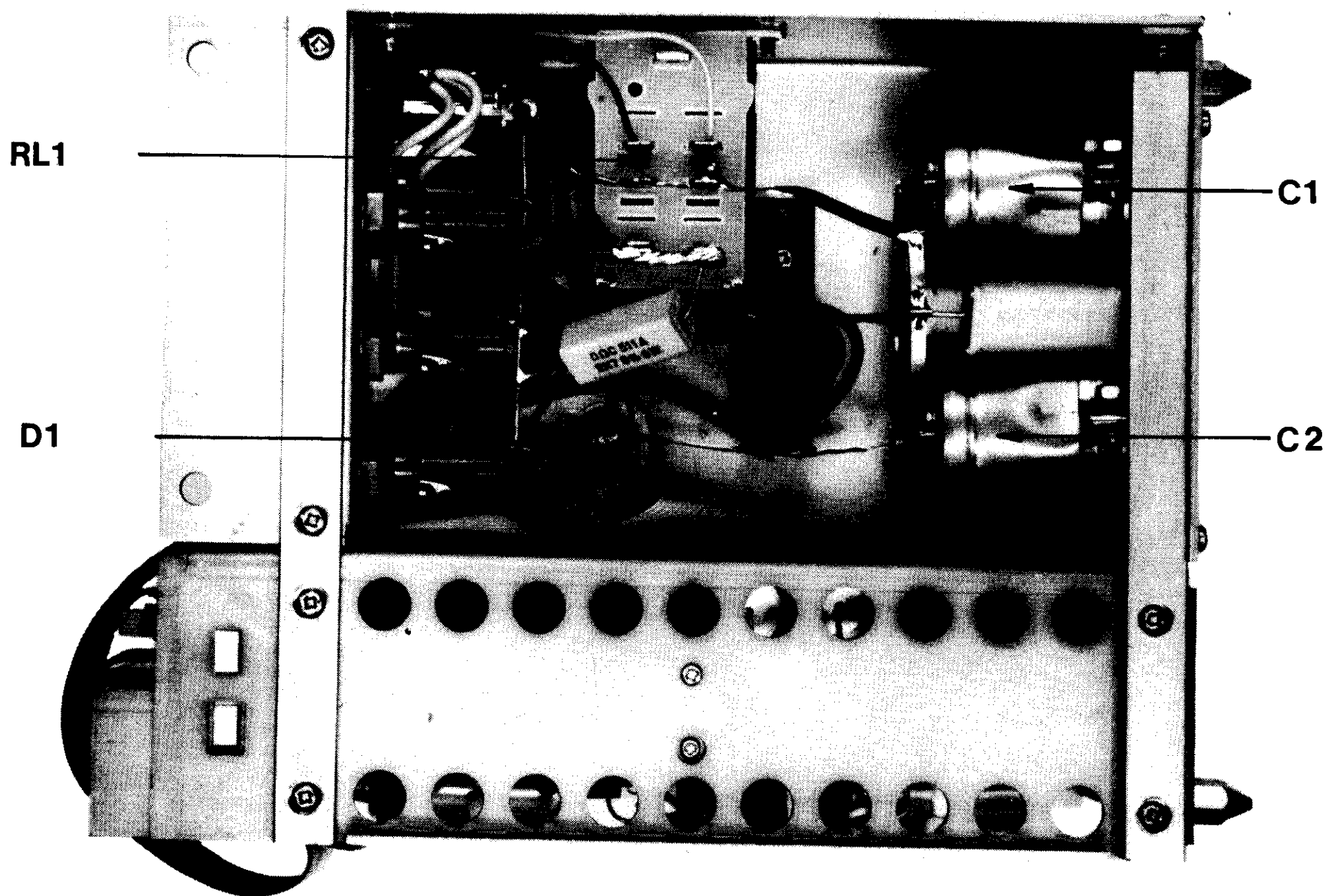
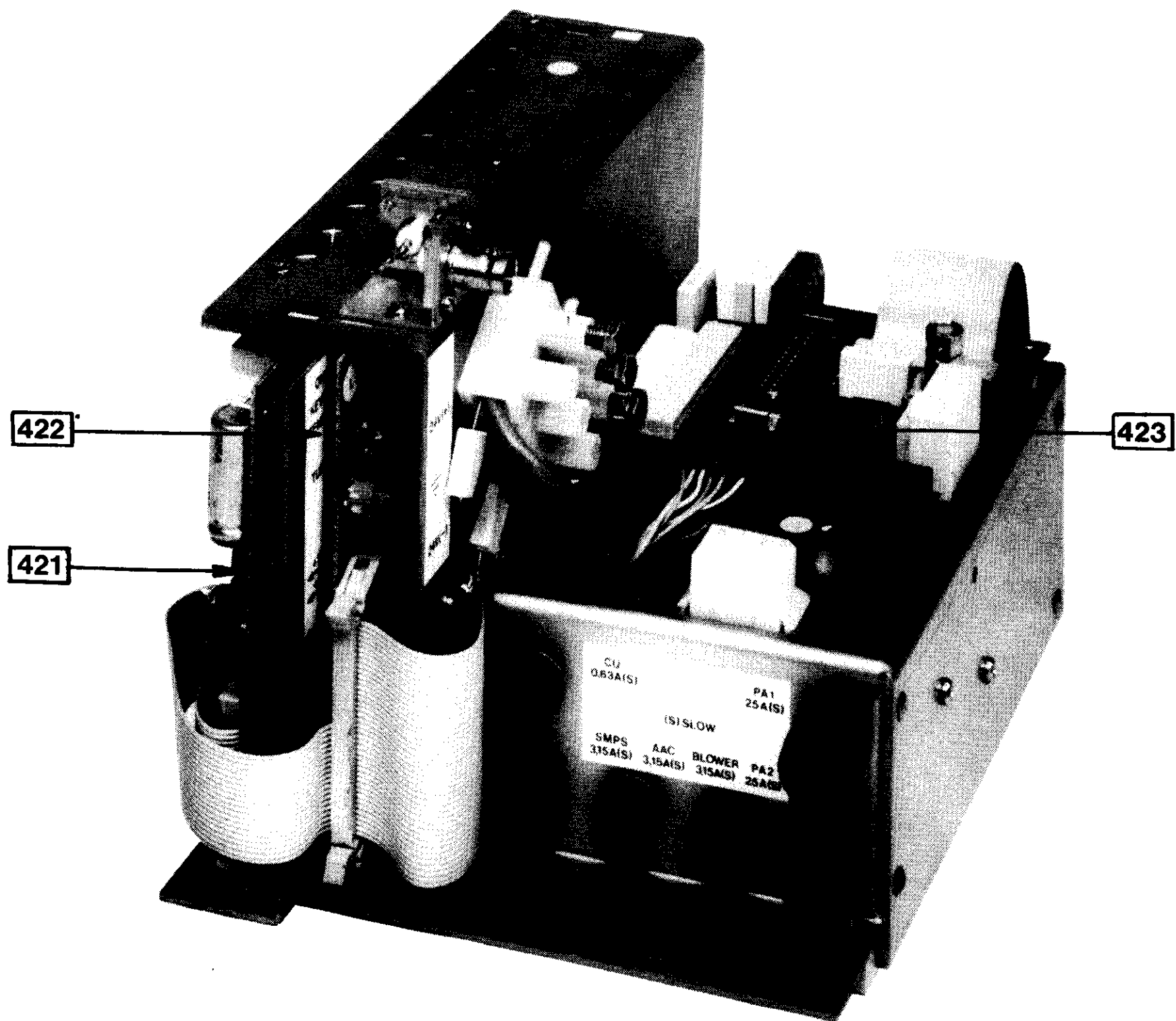


Fig. 4.7.1. Power Supply Module



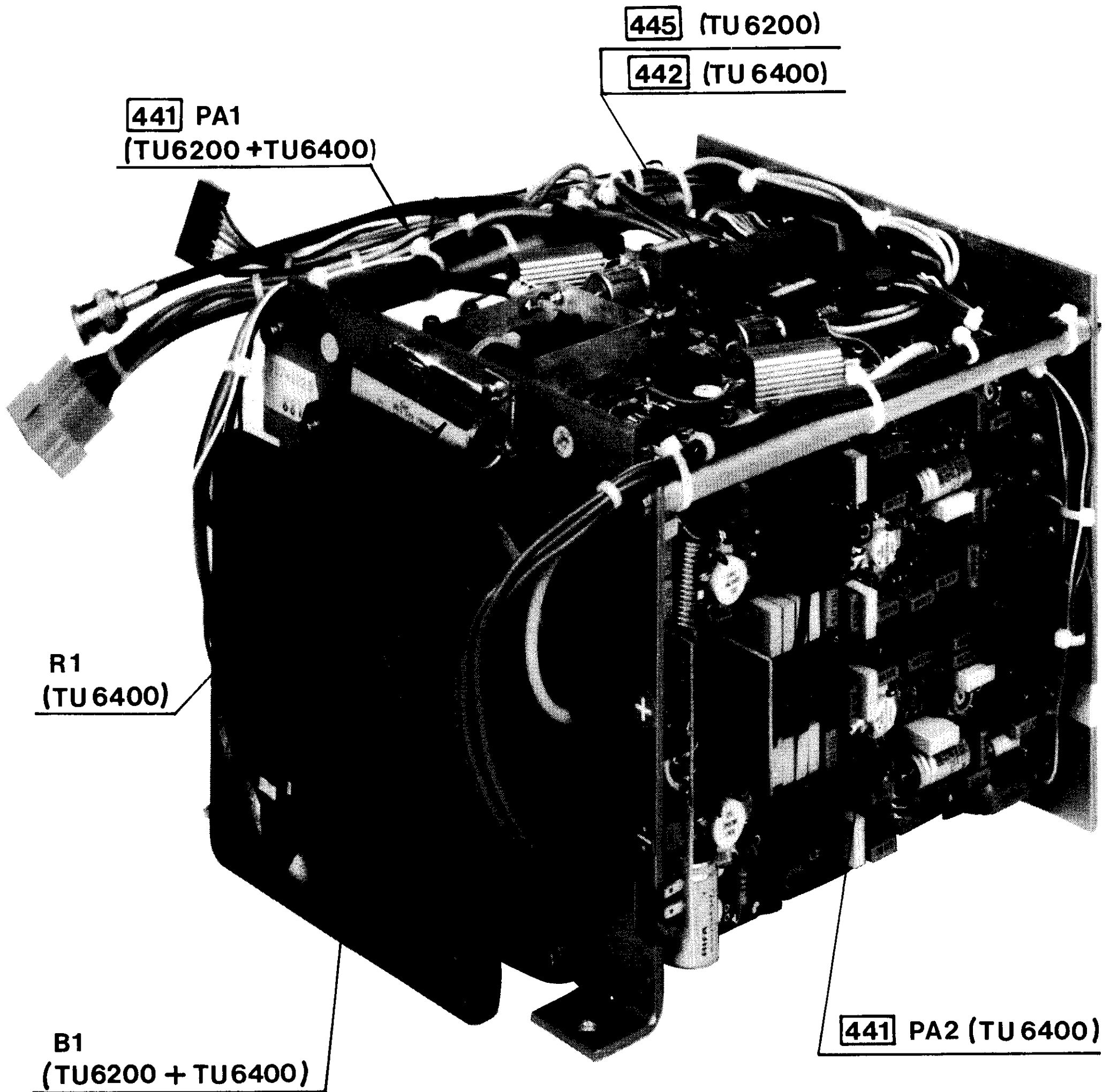


Fig. 4.7.2.

Power Amplifier Module

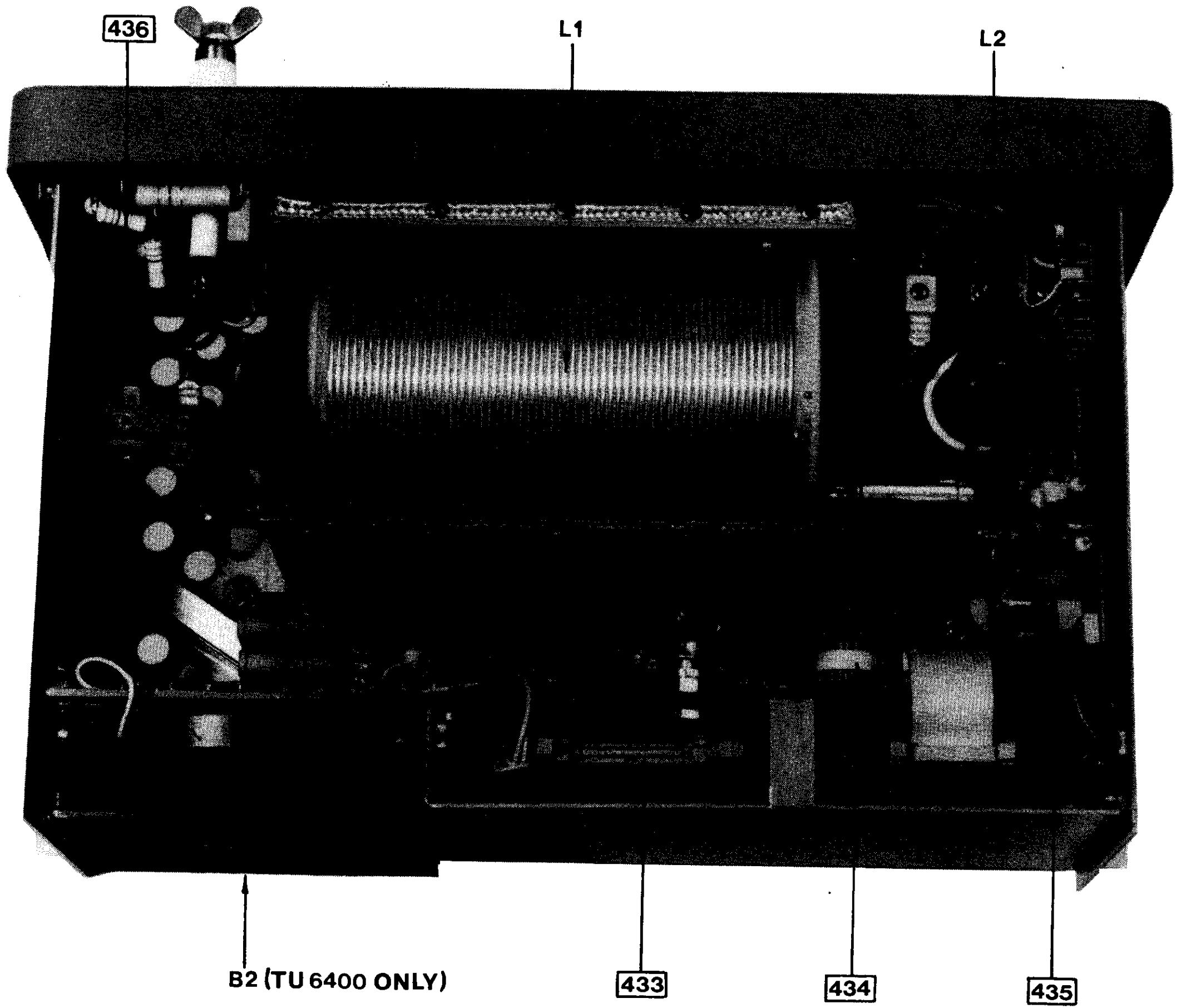


Fig. 4.7.3 Automatic Antenna Coupler