

**ICOM**

**INSTRUCTION MANUAL**

VHF FM TRANSCEIVER

**IC-P2CT**

UHF FM TRANSCEIVER

**IC-P4CT**

**Icom Inc.**



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## FOREWORD

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Thank you for purchasing a "PT" series transceiver. This state-of-the-art handheld is compact and provides ease of use with multi-operational capabilities.

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## IMPORTANT

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**READ ALL INSTRUCTIONS** carefully and completely before using the transceiver.

**SAVE THIS INSTRUCTION MANUAL** – This instruction manual contains important safety and operating instructions for the **IC-P4CT/IC-P2CT**.

**NOTE:** The IC-P4CT-1's display is used in illustration examples. The only difference from the IC-P2CT and IC-P4CT-2 is the frequency.

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## CAUTIONS

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**NEVER** connect the transceiver to an AC outlet or to a power source of more than 16 V DC. This will damage the transceiver.

**NEVER** connect the transceiver to a power source using reverse polarity. This will damage the transceiver.

**NEVER** allow children to touch the transceiver.

**AVOID** using or placing the transceiver in areas with temperatures below  $-10^{\circ}\text{C}$  or above  $+60^{\circ}\text{C}$ .

**AVOID** placing the transceiver in direct sunlight.

**AVOID** the use of strong solvents such as benzine or alcohol when cleaning, as they may damage the transceiver surfaces.

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## OPERATING NOTES

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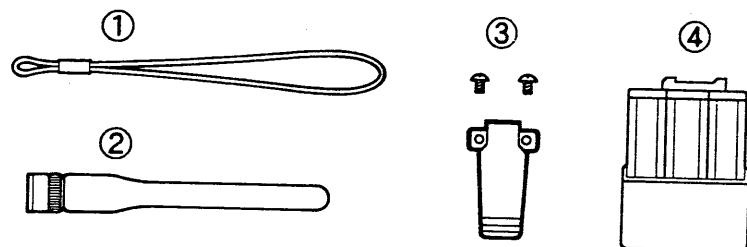
**BE CAREFUL!** The rear panel will become hot when transmitting for long periods at high power.

When possible, transmit at low output to conserve power.

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## UNPACKING



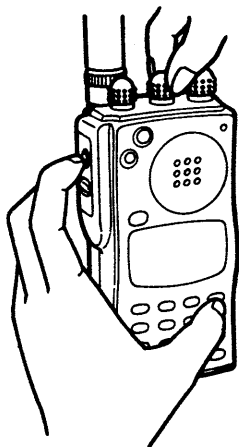
### Accessories included with the transceiver:

	Qty.
① Handstrap .....	1
② Antenna .....	1
③ Belt clip and screws .....	1 set
④ Battery case (BP-110) .....	1

### Resetting the CPU

Reset the transceiver before operating for the first time, or when the function display shows erroneous information.

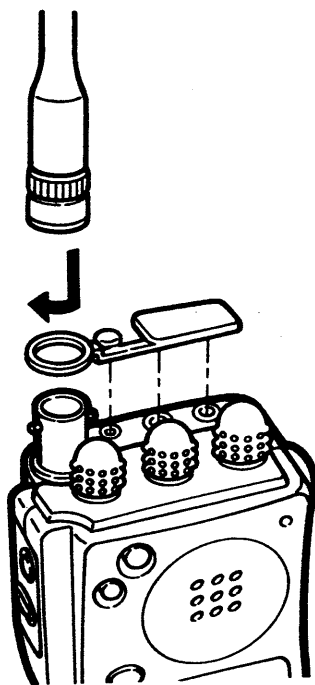
While pushing the [FUNC] and [A CLR] keys, rotate [PWR/VOL] to turn power ON.



**CAUTION:** Resetting the CPU will clear and initialize all memory channel contents, SET mode settings, DTMF memory contents and clock and timer settings.

### Antenna and rainproof cap

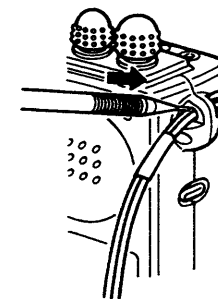
Insert the supplied antenna into the antenna connector and rotate the antenna as shown in the diagram below.



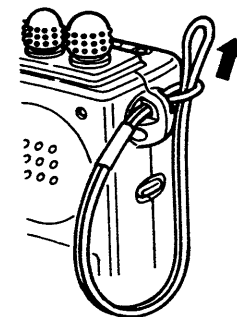
### Handstrap

The handstrap is convenient for carrying the transceiver. Attach the handstrap as shown in the diagrams below:

1. Push the short end of the handstrap through the loop on the transceiver using a pointed instrument.



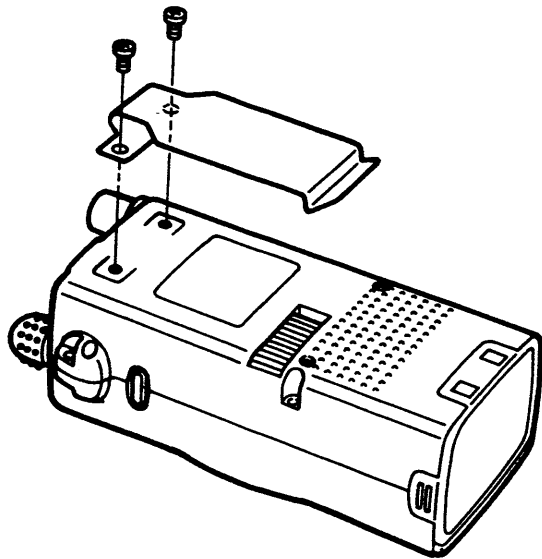
2. Put the long end of the handstrap through the short end's loop, then, pull it all the way through and tighten.



### Belt clip

The belt clip allows you to attach the transceiver to your belt.

Remove the plastic screws to attach the belt clip.

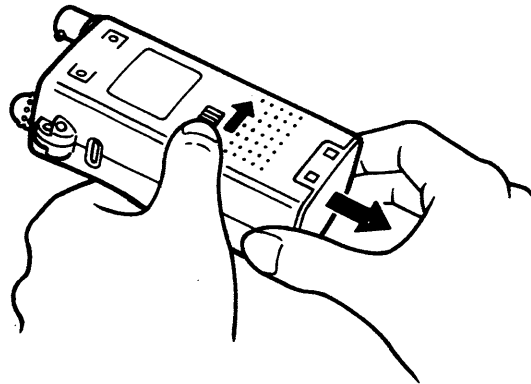


To use an optional MB-22 ALLIGATOR CLIP with the transceiver, use the screws supplied with the transceiver. **NEVER** use the screws supplied with the alligator clip.

### Battery case/pack

Slide the battery pack release button on the rear panel inward, then pull the battery case downwards.

To insert the battery case, slide the case into the bottom of the transceiver until it clicks into place.



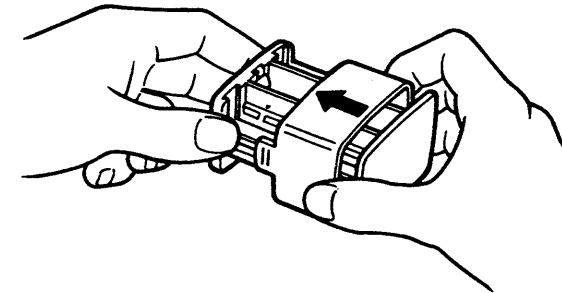
- **Be careful!** The transceiver has a battery stopper, therefore exact insertion is necessary.
- **Minimal current drain** to the lithium backup battery and CPU will result in exhaustion of an attached battery pack or case during long periods of storage.

### Battery installation

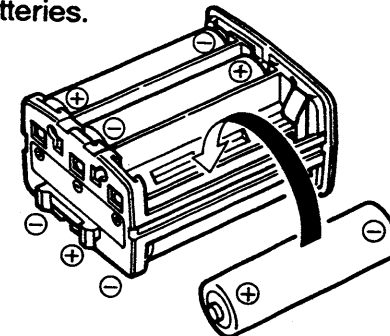
Non-rechargeable dry cell batteries can be installed in the transceiver.

To install the batteries, remove the battery case cover as shown in the diagram below:

1. Slide the battery case cover lengthwise to remove it.



2. Install six AA (R6) type batteries. Be sure to observe the polarity of the batteries.



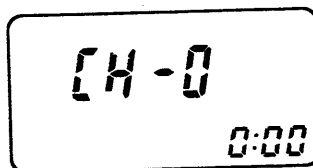
## 2-1 Mode types

The transceiver has 6 different modes and 1 call channel for versatile, multi-function operations.

### CHANNEL INDICATION MODE

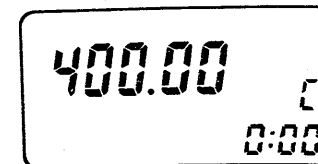
(p. 28)

Used for operating a pre-programmed memory channel or call channel.



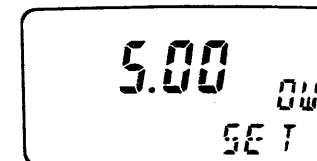
### CALL CHANNEL (p. 20)

Used for operating the transceiver on a programmed call channel.



### SET MODE (various pages)

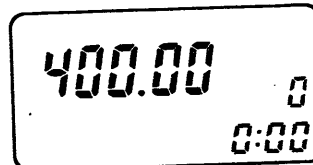
Used for programming infrequently changed settings.



### VFO MODE

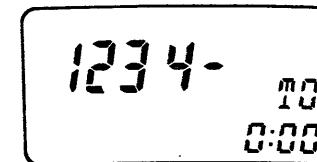
(frequency setting) (p. 11)

Used for frequency setting and normal operations over the entire band.



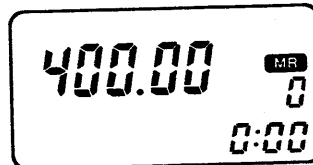
### DTMF MEMORY MODE (p. 27)

Used for programming DTMF codes. 16 DTMF memory channels with up to 15 digits each are available.



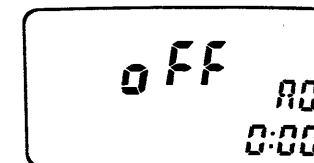
### MEMORY MODE (p. 17)

Used for operating the transceiver using memory channel contents. 100 memory channels are available for programming.

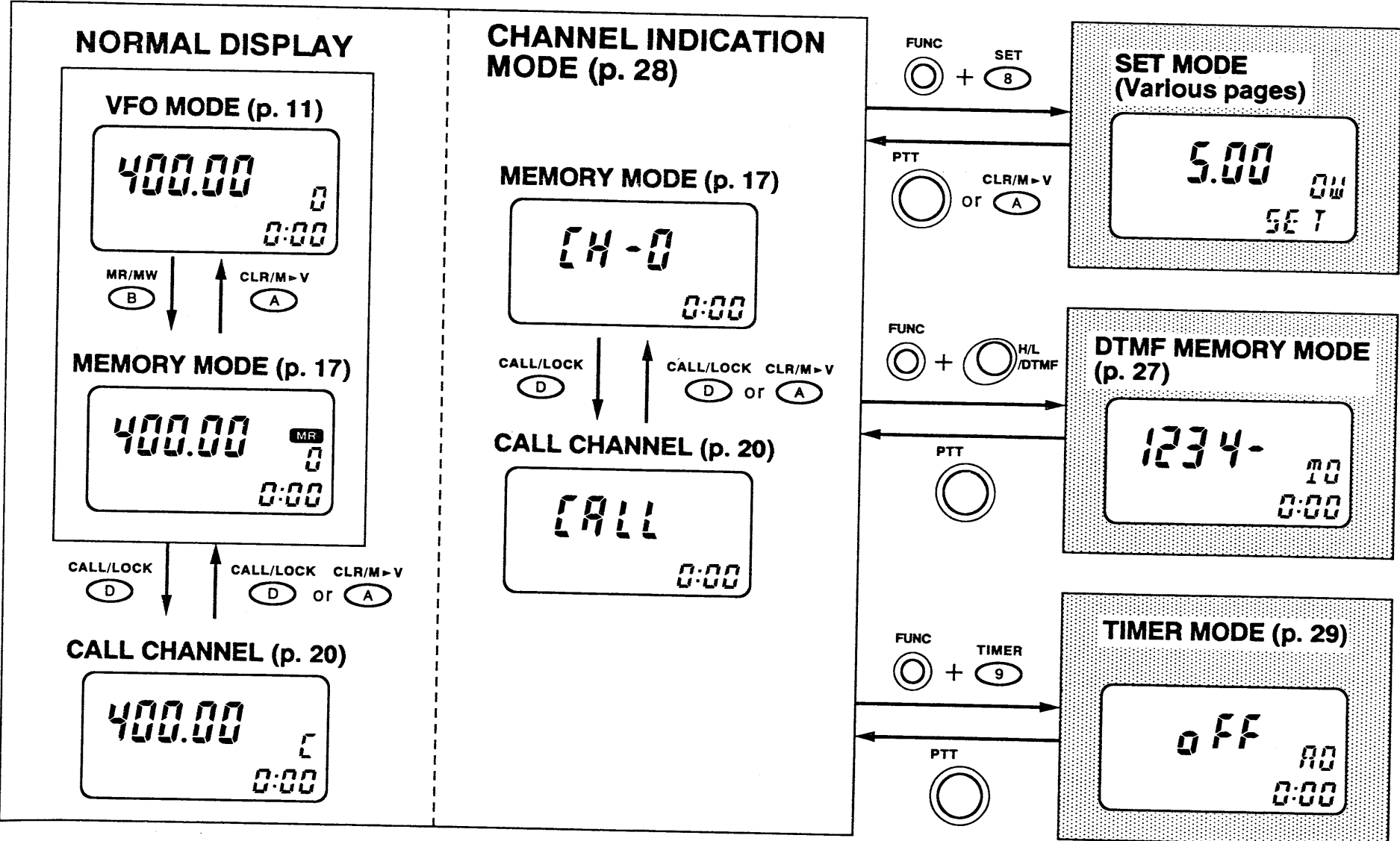


### TIMER MODE (p. 29)

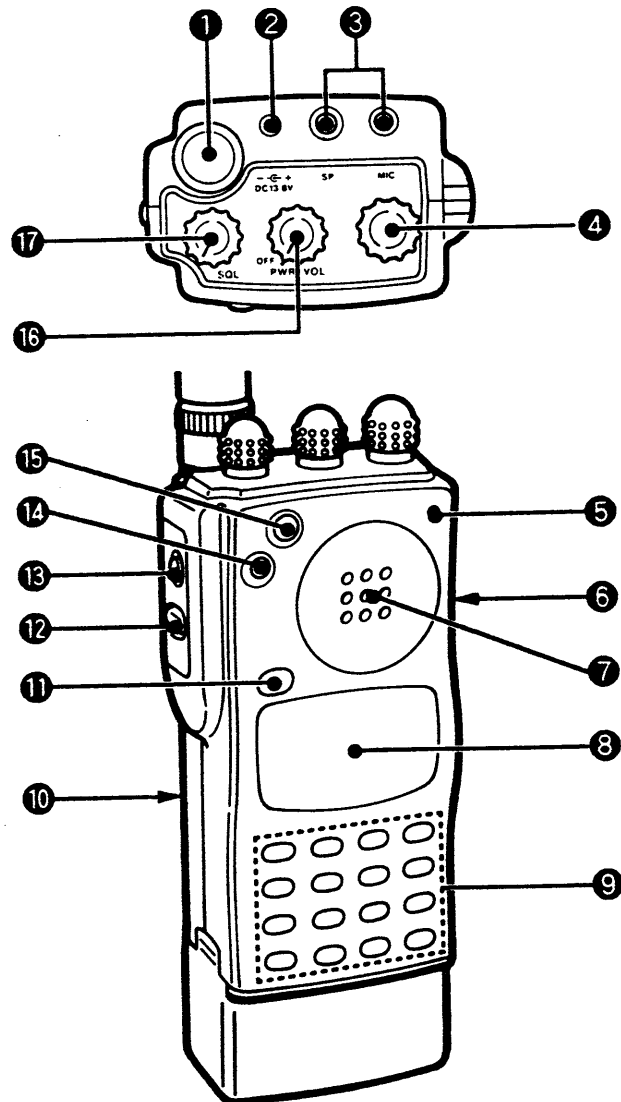
Used for setting the power-on timer, power-off timer and auto power-off function.



# 2-2 Mode arrangement chart



## 3-1 Switches and controls



- ① **ANTENNA CONNECTOR** (p. 1)  
Connects the supplied flexible antenna.

- ② **EXTERNAL DC POWER JACK [DC13.8V]**  
Connects an optional wall charger for charging an optional battery pack.

**CAUTION when using dry cell batteries!**  
Operation with an external DC power source simultaneously charges batteries inside the battery case. This may cause battery leakage and damage the transceiver.

- ③ **EXTERNAL SPEAKER AND MICROPHONE JACKS [SP/MIC]**  
Connects an optional speaker-microphone or headset, if desired. The internal speaker and microphone will not function when either is connected.

- ④ **MAIN DIAL**  
Sets operating frequency, memory channel and SET mode contents.

- ⑤ **TRANSMIT/RECEIVE INDICATOR**  
Lights up in green when the squelch opens; lights up in red while transmitting.



- ⑥ LIGHT SWITCH [LIGHT]**  
Turns the display and keyboard lighting ON and OFF.  
[FUNC] + [LIGHT] turns the display and keyboard lighting ON continuously or OFF.
- ⑦ SPEAKER/MICROPHONE**
- ⑧ FUNCTION DISPLAY** (pgs. 9, 10)  
Indicates the operating condition.
- ⑨ KEYBOARD** (pgs. 7, 8)  
Numeral and other function keys for activating functions and tuning.
- ⑩ BATTERY PACK RELEASE BUTTON** (p. 2)  
Opens the latch for battery pack removal when pushed inward.
- ⑪ AI KEY [AI]**  
Push to activate the function indicated by the AI function indicator. (p. 44)  
Enters AI selection mode when pushed and held. (p. 44)  
This switch does not function when the channel indication mode is selected. (p. 28)
- ⑫ PTT SWITCH [PTT]** (p. 14)  
Push and hold to transmit; release to receive.
- ⑬ FUNCTION SWITCH [FUNC]**  
While pushing [FUNC], all switches are set for secondary function use. (p. 7, 8)  
• "Push [FUNC] + [LIGHT]" means "while pushing the [FUNC] switch, push the [LIGHT] switch."  
• In VFO mode, the dial select function is activated. (p. 13)
- ⑭ MONITOR SWITCH [MONI/DSEL]**  
Monitors an operating frequency. (p. 14)  
[FUNC] + [MONI/DSEL] changes the dial select step. (p. 13) The dial select does not function in the channel indication mode. (p. 28)
- ⑮ HIGH/LOW SWITCH [H/L/DTMF]**  
Selects high or low output power. (p. 14)  
[FUNC] + [H/L/DTMF] selects DTMF memory mode. (p. 27)
- ⑯ VOLUME CONTROL [PWR/VOL]** (p. 14)  
Turns power ON and OFF and adjusts the audio level.
- ⑰ SQUELCH CONTROL [SQL]** (p. 14)  
Varies the squelch threshold point for noise mute.

# 3 PANEL DESCRIPTION

## 3-2 Keyboard

KEY	FUNCTION	SECONDARY FUNCTION (While pushing [FUNC])
T/T SQL 1		Turns ON the following optional functions in this sequence: subaudible tone encoder → pocket beep → tone squelch → non-tone operation. (pgs. 16, 40, 41)
PGR/C-SQL 2		Turns ON the following optional functions in this sequence: pager → code squelch → non-selective calling operation. (pgs. 37~39)
SKIP 3	T/T SQL 1 PGR/C-SQL 2 SKIP 3 CLR/M→V A	Sets the selected memory channel as a skip memory channel in MEMORY mode. (p. 24)
DUP 4	DUP 4 CODE 5 MASK 6 MR/MW B	Selects the duplex direction in this sequence: - duplex → + duplex → simplex. (p. 16)
DUP 4	PRIO 7 SET 8 TIMER 9 C	Programs the code channel for optional pager and code squelch. (p. 36)
CODE 5	▽/SCAN * CLOCK 0 △/SCAN # CALL/LOCK D	Hides and displays the selected memory channel in MEMORY mode.* Memory channel 0 cannot be hidden. (p. 19)
MASK 6		Starts the priority watch.* (p. 26)
PRIO 7		• When selecting VFO/MEMORY mode or the call channel: Enters SET mode. (Various pages)
SET 8		• When selecting DTMF MEMORY mode: Programs DTMF code. (p. 27)
TIMER 9		Enters TIMER mode. (p. 29)
CLOCK 0		• When the AI function indicator shows a function: Calls up the clock display. (p. 30)
		• When the AI function indicator shows a time: Programs the time. (p. 30)

• When selecting VFO mode: Enters the digit for the operating frequency.\* (p. 12)

• When selecting MEMORY mode: Enters the first digit only into the memory channel.\* (p. 18)

• When transmitting: Transmits DTMF digits. (p. 16)

\* The function marked "\*" does not function when the channel indication mode is selected. (p. 28)

**Count on us!**



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