POCKET RECORDER
POCKETRAK 2G

SERVICE MANUAL

This unit is not fielded repairable, EXCHANGE ONLY. Please refer to the documents under the Service Manual tab. Please give these forms to your customer. NOT PART OF THE YAMAHA warranty program.

■ **CONTENTS**

YAMAHA

CUSTOMER LOYALTY POCKETRAK EXCHANGE PROGRAM

(THIS FORM IS TO BE USED BY YAMAHA DEALERS ONLY.)

Should your customer encounter a problem that requires service for their OUT-OF-WARRANTY (beyond one year from original date of purchase) Yamaha POCKETRAK unit, Yamaha will exchange their POCKETRAK unit for a factory refurbished model for an accommodation charge based on the age of the unit. The replacement unit will have a six month Yamaha Manufacturer's Limited Warranty for refurbished product.

FEE SCHEDULE:

AGE OF UNIT FROM DATE OF PURCHASE	EXCHANGE CHARGE
0 months through 12 months	No charge-warranty exchange
13 months through 24 months	$200.00
25 months through 48 months	$250.00

INSTRUCTIONS:

1. Complete the exchange form on the following page.
2. Pack the POCKETRAK unit, its Owner's Manual, and all of its accessories in the original box or suitable alternative. Replacement accessories will be sent with the replacement POCKETRAK unit.
3. Put the completed form, a copy of the bill of sale, and remittance (cashier's check, or money order payable to "Yamaha") in an envelope. If you choose, Yamaha can bill your dealer account number for the fee (as listed above). Please fill out the required billing information in the form on the following page. Label the envelope "Return Documents". Place the envelope in the box with the product.
4. Seal the box securely, and ship the complete package via UPS or FedEx, insured and freight prepaid* to:

   YAMAHA Electronics Corp. USA
   Attn: POCKETRAK EXCHANGE
   6660 Orangethorpe Avenue
   Buena Park, CA 90620

   *(You will be required to pay all shipping and insurance costs for shipment to YAMAHA; and YAMAHA will pay the return freight and insurance costs to ship the replacement product back to you.)

5. Upon receipt of the completed form, POCKETRAK unit, accessories and remittance, Yamaha will ship out a replacement unit within 10 working days.
6. If you have not received the replacement unit within 15 business days, please dial (714) 522-9000 to obtain the status of your unit.

YAMAHA

Should you encounter any problem with your Pocketrak product, please follow the troubleshooting instructions in your Owner's Manual, and see the FAQs at WWW.POCKETRAK.COM. Then, if your Pocketrak unit requires service, please follow the instructions shown below.   (NOTE: The following instructions and form apply only to Pocketrak products, and only for warranty-covered repair or replacement service, as provided by the YAMAHA One (1) Year Limited Warranty.)

INSTRUCTIONS:

1. Complete the service/exchange form below.

2. Pack the Pocketrak unit, its Owner's Manual and all its accessories in the original box or a suitable alternative. If YAMAHA elects to exchange your Pocketrak unit, you will receive replacement accessories with your replacement product. If you require additional information, please call YAMAHA at (714) 522-9000.

3. Put the completed service/exchange form and a copy of your original sales receipt into an envelope. Label the envelope "Return Documents Enclosed." Place this envelope in the box with the product.

4. Seal the box with packing tape and ship the complete package via United Parcel Service or FedEx, insured and freight prepaid* to:

> YAMAHA CORPORATION of AMERICA
> Attn: Pocketrak SERVICE/EXCHANGE
> 6600 Orangethorpe Avenue
> Buena Park, CA 90620

Within the terms of your YAMAHA Limited Warranty, the Pocketrak will be serviced and returned to you or it will be replaced with a new or refurbished product as soon as reasonably possible.

*(You will pay all shipping and insurance costs for shipment to YAMAHA; and YAMAHA will pay all warranty-covered service or exchange costs plus shipping and insurance costs when returning a product to you.)

SERVICE/EXCHANGE FORM

Your Address (i.e., the street address to which YAMAHA should ship the serviced or exchanged product)

Name: _____

Street Address: _____ Apt. #: _____

City: _____ State: _____ Zip Code: _____

Your daytime phone number: _____ (8 AM to 5 PM Pacific time)

Detailed reason for return (use additional paper if necessary): _____

_____

_____

Pocketrak model you are shipping to YAMAHA

Model number: _____ Serial Number: _____

Remember, the box you ship to YAMAHA must include the following:

1. The Pocketrak unit.
2. Owners Manual and all the accessories originally supplied with the Pocketrak.
3. Sales receipt showing date and place of purchase.
4. Completed service/exchange form.

IF THE WARRANTY HAS EXPIRED, LEARN ABOUT YAMAHA'S POCKETRAK CUSTOMER-LOYALTY PROGRAM AT WWW.POCKETRAK.COM OR CALL (714) 522-9000, MONDAY THROUGH FRIDAY, 8:30 AM TO 5:00 PM PACIFIC TIME.

YAMAHA

POCKETRAK EXCHANGE FORM

THIS FORM IS TO BE USED BY YAMAHA DEALERS ONLY.
PLEASE ATTACH THIS FORM ON TOP OF ANY OTHER DOCUMENTS.

Ship-To address for return unit (Must be a street address that accepts UPS or FedEx delivery)

Dealer Name: _____

Street Address: _____

Suite #: _____

City: _____ State: _____ Zip: _____

Your daytime phone number (8 AM - 5 PM Pacific time): _____

Detailed reason for return (use the back of this form if additional space is required):

_____

_____

_____

_____

POCKETRAK you are shipping to YAMAHA:

Model Number_____ Serial Number: _____

Method of Payment, if applicable (check one):

☐ Money order enclosed

☐ Cashier's check enclosed

☐ Please bill my Yamaha Dealer Account #_____(Net 30 Day Terms)

Authorized Signature: _____

Print Your Name : _____

For office use only:

Replacement: Y / N Model #_____

Charge Y / N Amount $_____

Warehouse: NIPNCA-A   BP-B   BP-A   Reserved Stock   Other:_____

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: This presentation or sale of this manual to any individual or firm does not constitute authorization, certification, recognition of any applicable technical capabilities, or establish a principal-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground bus in the unit (heavy gauge black wires connect to this bus).

IMPORTANT: Turn the unit <u>OFF</u> during disassembly and parts replacement. Recheck <u>all</u> work before you apply power to the unit.

WARNING: This product contains chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHAT SO EVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

■ SPECIFICATIONS

|	
Internal Memory:	2GB
Recording Time (total time of A, B, C, D and S folder):	Approx. 3hr.10min. (PCM) Approx. 35hr.20min. (XHQ) Approx. 71hr. (HQ) Approx. 142hr. (SP) Approx. 284hr. (LP)
Frequency Response (overall):	40 Hz – 20 kHz (Built-in microphones, PCM) 40 Hz – 15 kHz (Built-in microphones, XHQ) 40 Hz – 7.5 kHz (Built-in microphones, HQ) 40 Hz – 3.5 kHz (Built-in microphones, SP) 40 Hz – 3.5 kHz (Built-in microphones, LP)
Recording Format:	MP3, PCM
Playback Format:	MP3 (MPEG-1 LAYER-3, MPEG-2 LAYER-3, MPEG-2.5 LAYER-3), WMA, PCM (only files recorded on this device)
Frequency Response (playback):	20 Hz – 20 kHz
Sampling Frequency:	44.1 kHz (PCM, XHQ) 22.05 kHz (HQ) 11.025 kHz (SP) 16 kHz (LP)
Bit Rate (recording):	1411 kbps, 16 bit (PCM) 128 kbps (XHQ) 64 kbps (HQ) 32 kbps (SP) 16 kbps (LP)
Bit Rate (playback):	MP3 (16 – 320 kbps) WMA (32 – 192 kbps) (Some files may not be playable on this device.)
Connectors:	USB, ⌒ (Headphones), 🎤 (Microphone)
Operating Temperature:	+5°C – +35 °C (+41°F – +95°F)
Output power (headphones):	10mW + 10mW (at 16Ω load)
Power Supply:	DC 1.5V ("eneloop" or "AAA/LR03/HP16" alkaline battery x 1)

Battery Duration Time:	Continuous Recording Time
	  SP: Approx. 25 hr. (alkaline)
	        Approx. 19 hr. (eneloop)
	  PCM: Approx. 9 hr. (alkaline)
	        Approx. 8 hr. 30 min. (eneloop)
	(when recording LED/backlight are OFF and without headphones monitoring)
	
	Continuous Playback Time (headphones)
	  MP3: Approx. 22 hr. (alkaline)
	        Approx. 17 hr (eneloop)
	  PCM: Approx. 9 hr. 30 min. (alkaline, eneloop)
	  (when backlight is OFF)
	
	Continuous Playback Time (speaker)
	  MP3: Approx. 14 hr. (alkaline)
	        Approx. 11 hr. (eneloop)
	  PCM: Approx. 6 hr. (alkaline, eneloop)
	  (when backlight is OFF)

Dimensions (W x H x D):	Approx. 34.2 x 119.5 x 13 mm
Weight:	Approx. 49 g (including "eneloop," excluding soft case)
Included Accessories:	Owner's Manual, Earphones, USB connection cable, "eneloop" (Rechargeable Ni-MH battery), DVD-ROM, Soft case, Microphone stand adapter

■ **PANEL LAYOUT**
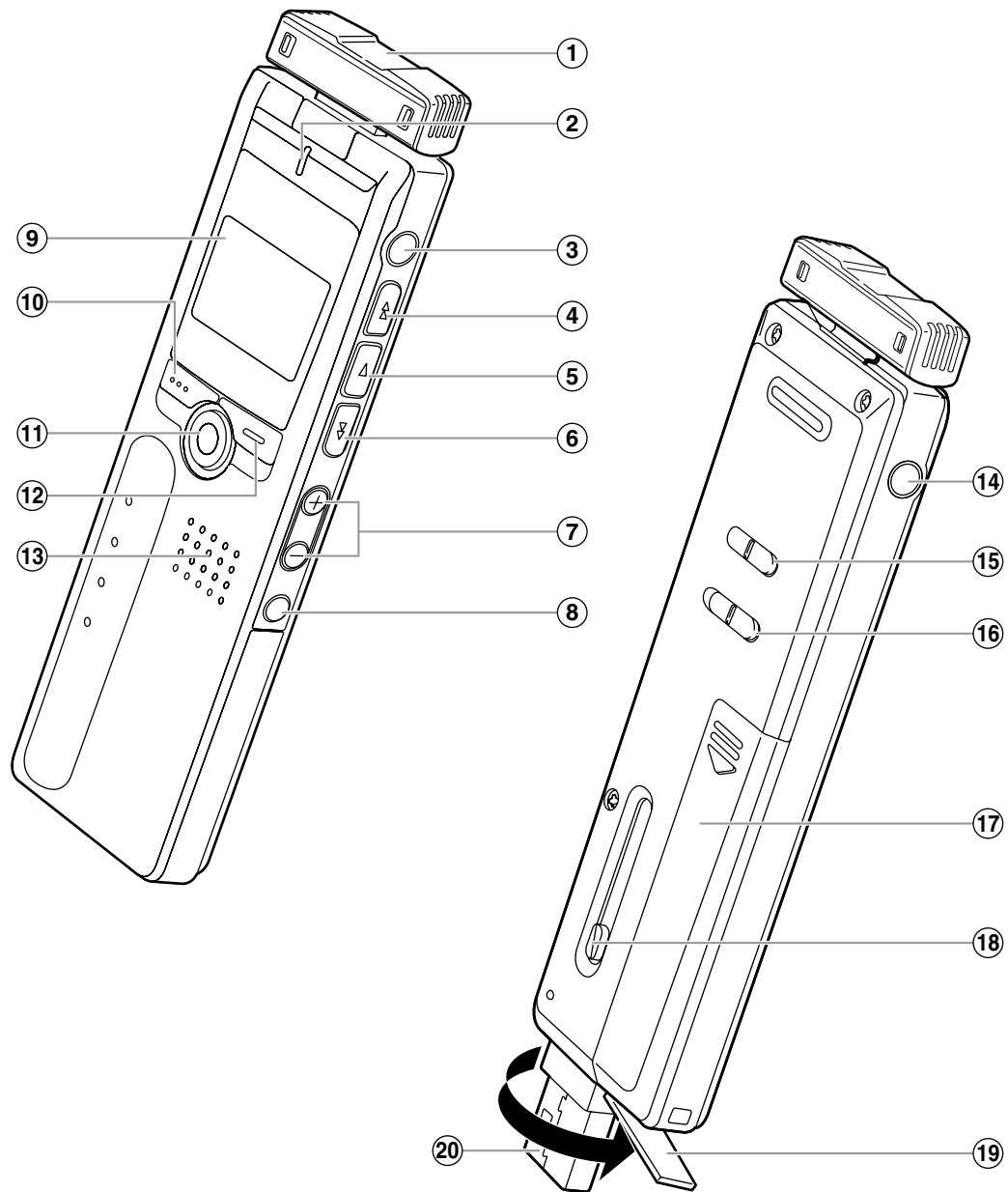
① Built-in microphones (L, R)
② Recording LED
③ External stereo microphone/Line socket (✎)
④ Skip/Search button (►►I)
⑤ Play/Select button (►)
⑥ Skip/Search button (I◄◄)
⑦ Volume buttons (VOL +, −)
⑧ Folder/Index button (FOLDER/INDEX)
⑨ LCD screen
⑩ Delete button (DEL)

⑪ Pause/Record button (PAUSE/REC)
⑫ Menu/Stop button (MENU/STOP)
⑬ Speaker
⑭ Headphones socket (⌒)
⑮ Power/Hold switch (POWER/HOLD)
⑯ Playback speed control switch (PLAY SPEED)
⑰ Battery compartment lid
⑱ USB terminal slide switch
⑲ USB terminal cover (may be rotated)
⑳ USB terminal

■ WIRING

MIC

L-MIC ⊕ YL BK ⊖ R-MIC
⊖ BK YL ⊕

BK WH
RE GY

LCD

CN461
PHONES

CN551
MIC

CN552
(4P)

MAIN

CN471
(13P)

KEY

CN493
(6P)

BATTERY
DC1.5V

BK RE

CN602
(6P)

⊖ ⊕
SPEAKER

USB
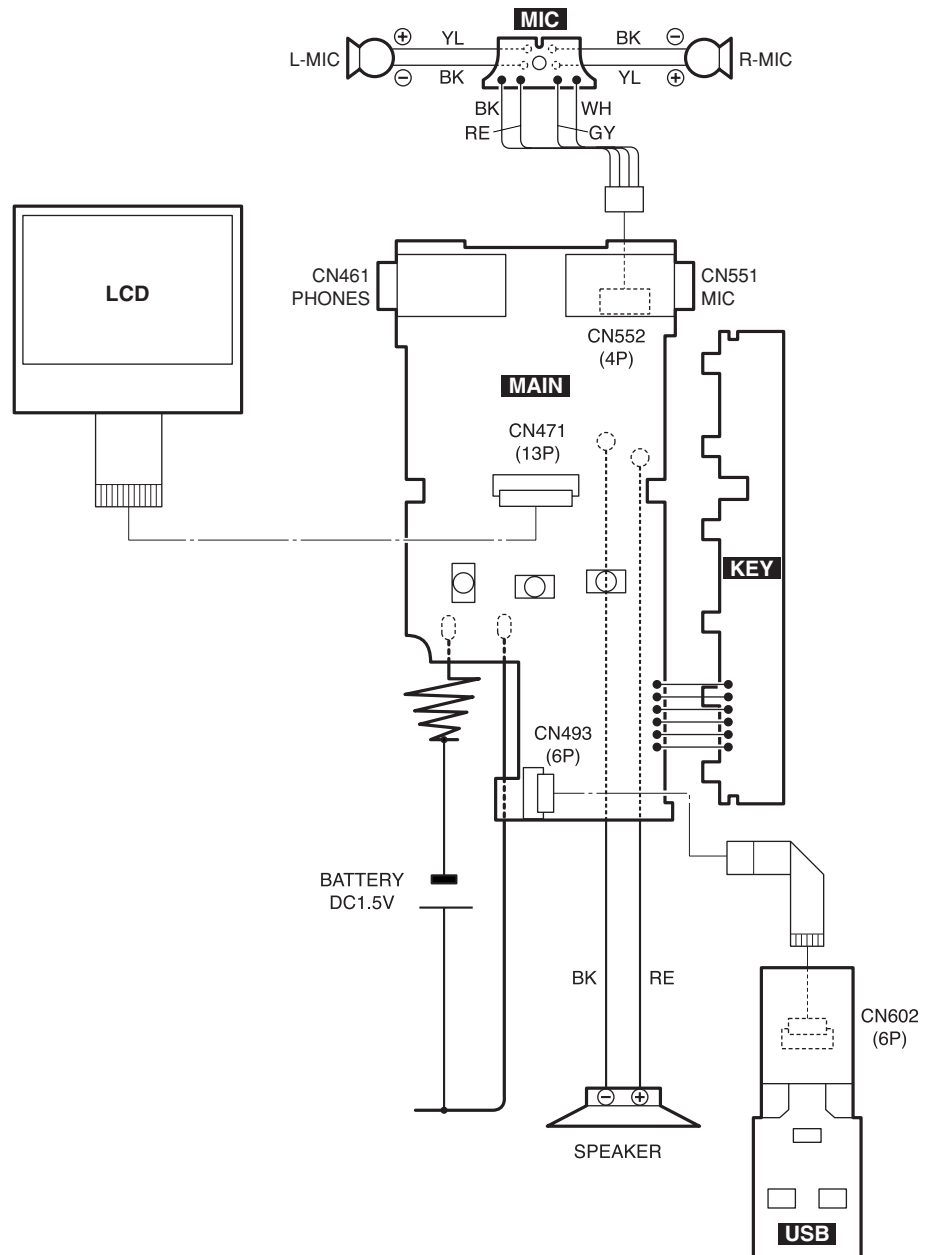
■TROUBLESHOOTING

The unit does not operate.

Possible cause	Battery is not inserted properly or is dead.
Corrective action	Reinsert the battery correctly. Recharge the eneloop or replace with a new alkaline battery.

Possible cause	Internal memory error.
Corrective action	Format (initialize) the internal memory and then try recording again.

Buttons do not work.

Possible cause	The Hold function is set.
Corrective action	Turn off the function.

Possible cause	The USB terminal is still connected to the computer.
Corrective action	Disconnect the unit from the computer.

No sound.

Possible cause	The volume is turned down too low.
Corrective action	Adjust the volume.

Files in the VOICE (A, B, C, D, S) or L (line) folder cannot be played.

Possible cause	The file name is wrong.
Corrective action	If you modify the file name using your computer, the file may become unplayable. Correct the file name to "IC_X (folder name)_XXX (file number).MP3" or "IC_X_XXX.WAV".

Files in the M (music) folder cannot be played (correctly or at all).

Possible cause	The file is not in a playable format.
Corrective action	Use MP3/WMA-format files.

Possible cause	Files on the PC were not transferred to the MUSIC folder.
Corrective action	Transfer the files to the MUSIC folder on the Removable Disk.

Possible cause	You attempted to play a data file, which cannot be played on the unit.
Corrective action	Create a file using different encoder (MP3/WMA conversion) software.

Cannot play back files in the Playlist folder, and the unit displays "- M - - S".

Possible cause	Music files you have erased remain in Playlist.m3u.
Corrective action	Delete music files you have erased from Playlist.m3u.

The Removable Disk is not displayed when the unit is connected to the PC.

Possible cause	The unit is not connected to the PC correctly.
Corrective action	Make sure the connection is correct. Disconnect the unit from the PC and reconnect it again.

Possible cause	Sufficient power is not being supplied from the PC to the unit.
Corrective action	If a USB hub is being used, reconnect the unit directly to the USB terminal on the PC. If the PC is equipped with several USB terminals, try another terminal.

Possible cause	A network drive has been assigned.
Corrective action	If a network drive has been assigned, the drive letter (the letters used as drive names) is already taken, so the Removable Disk cannot be created. Change the network drive assignments and reconnect the unit. Talk to your network administrator about reassigning network drives.

Possible cause	Playback is locked with the security setting turned on.
Corrective action	Cancel the playback lock and connect the unit to the PC with the unit's power turned on.

Cannot recharge the eneloop.

Possible cause	The BATTERY SETTING is set to "ALKALINE."
Corrective action	Set the BATTERY SETTING to "eneloop".

Possible cause	Connecting the unit to the PC does not cause the battery to be recharged.
Corrective action	Press the ►► button for at least two (2) seconds.

A file can't be erased.

Possible cause	The attribute of the file is set to "read only".
Corrective action	Connect the unit to the PC and change the file attribute or erase the file from the PC. Alterna-tively, format (initialize) the built-in memory.

[ERROR FILE SYSTEM] is displayed and nothing else happens.

Possible cause	FAT administration system error.
Corrective action	Format (initialize) the built-in memory.

Cannot select the S folder.

Corrective action	Press and hold down the FOLDER/INDEX button while the unit is stopped.

Icon " ⊠ " appeared when you attempted to recharge the battery.

Possible cause	You attempted to recharge a battery other than the eneloop. You attempted to recharge the battery, but the battery had not been inserted.
Corrective action	Insert the eneloop battery into the unit.

Possible cause	The unit is overheated.
Corrective action	Disconnect the unit from the PC, let the unit cool down for a while, then try to recharge again.

Cannot divide a file.

Possible cause	There may be insufficient free memory.
Corrective action	Erase unnecessary files.

Possible cause	The file is too short to divide.
Corrective action	You can divide only files that exceed a specific minimum recording time. 　PCM .... about one sec or longer 　HQ ...... about four sec or longer 　HQ ...... about eight sec or longer 　SP .... about 16 sec or longer 　LP .... about 32 sec or longer

The file transfer speed (from PC to unit) is slow.

Possible cause	The unit is connected to the USB1.1 terminal.
Corrective action	Connect the unit to a USB2.0 High Speed terminal.

Recordings include unwanted noise.

Possible cause	Recording mode or microphone sensitivity may not be appropriately set.
Corrective action	Change the recording mode or microphone sensitivity and try to record again. Determine the optimum setting for your recording environment. Format (initialize) the internal memory.

"Connection" icon does not appear when the unit is connected to the PC.

Corrective action	Some computers may not cause the icon to be displayed on the unit, or may not recognize the unit. Disconnect the unit from the PC, then reconnect it.

The calendar does not show the correct date and time.

Corrective action	Set the date and time again.

The playback is missing a small portion at the beginning of the file.

Possible cause	In order to minimize noise, 0.1 seconds from the beginning of the file is faded-in for playback (the volume will gradually increase).
Corrective action	If you're using this device to play back a file that was created using DAW software such as Cubase AI, insert a blank space of at least 0.1 seconds at the beginning of the file when creating it.

POCKET RECORDER

POCKETRAK 2G

PARTS LIST

■ CONTENTS

- The numbers "QTY" show quantities for each unit.
- The parts with "--" in "PART NO." are not available as spare parts.
- This mark " } " in the REMARKS column means these parts are interchangeable.
- The second letter of the shaded (�) part number is O, not zero.
- The second letter of the shaded (▒▒) part number is I, not one.

■ OVERALL ASSEMBLY
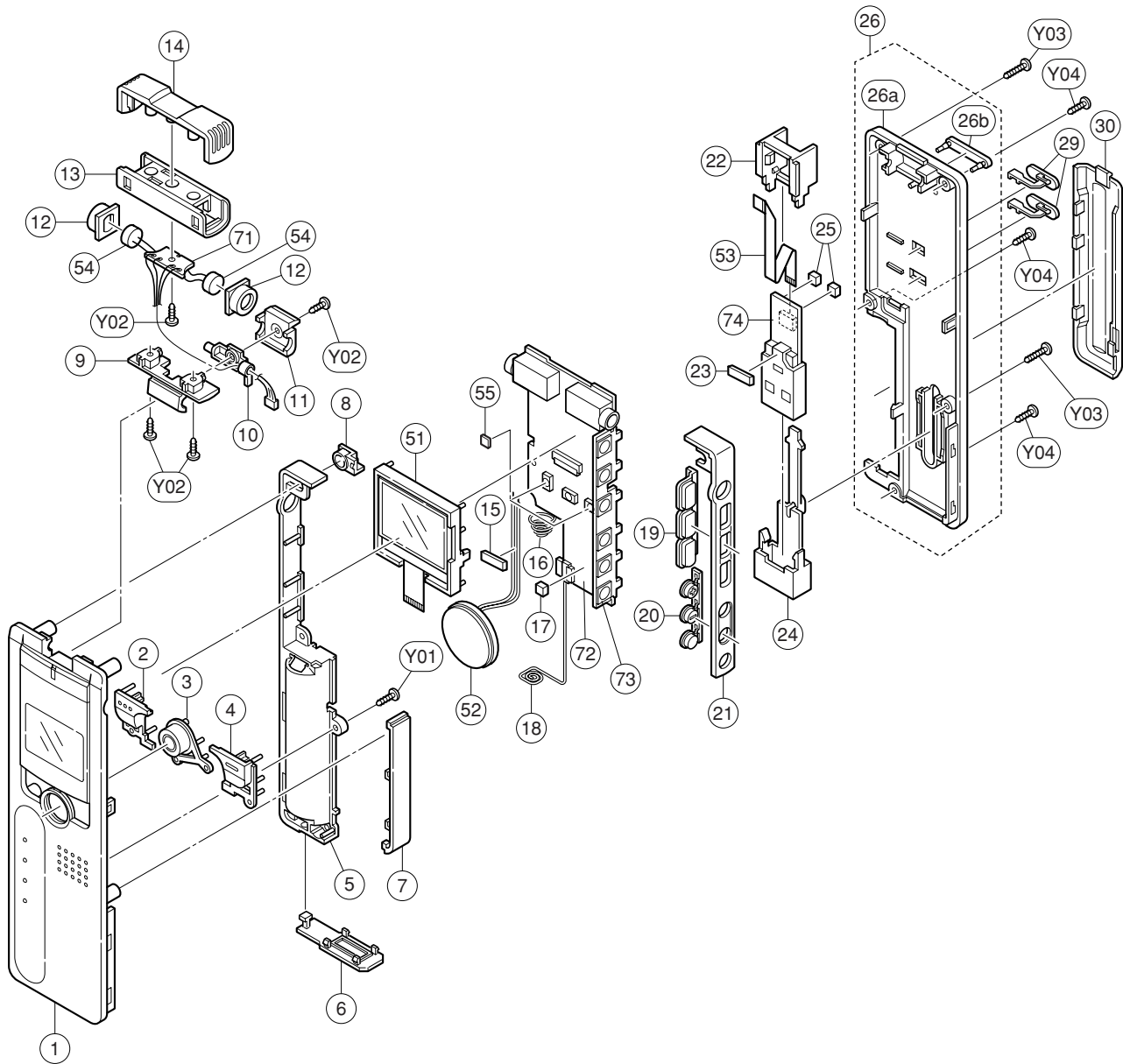
REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
	--	OVERALL ASSEMBLY			POCKETRAK 2G		
	--	OVERALL ASSEMBLY			(WP13550)		
* 1	WP135700	TOP CABINET ASSEMBLY					
* 2	WP136000	BUTTON			DEL		
* 3	WP136100	BUTTON			REC		
* 4	WP136200	BUTTON			STOP		
* 5	WP136300	SIDE PANEL	LEFT				
* 6	WP136400	USB COVER					
* 7	WP136500	SIDE PANEL	RIGHT FIX				
* 8	WP138900	MOUNTING SHAFT	MIC				
* 9	WP136600	COVER	MIC TOP				
* 10	WP139000	MIC SHAFT					
* 11	WP136700	MIC BOTTOM COVER					
* 12	WP138400	MIC SPACER				2	
* 13	WP136800	MIC COVER					
* 14	WP136900	MIC DECORATION COVER					
* 15	WP138500	SPACER CUSHION	WIRE FIX USB				
* 16	WP138000	BATTERY TERMINAL	SUM-4(-)				
* 17	WP138600	SPACER CUSHION					
* 18	WP138100	BATTERY TERMINAL	SUM-4(+)				
* 19	WP137000	BUTTON			PLAY		
* 20	WP137100	BUTTON			VOL		
* 21	WP137200	SIDE PANEL	RIGHT				
* 22	WP139100	USB HOLDER					
* 23	WP138700	SPACER CUSHION	USB PWB				
* 24	WP138200	SLIDE KNOB			USB		
* 25	WP138800	SPACER CUSHION				2	
* 26	WP135800	BOTTOM CABINET ASSEMBLY					
* 26a	WP137300	BOTTOM CABINET					
* 26b	WP139200	DECORATION STAND					
* 29	WP138300	SLIDE KNOB			HOLD,SPEED	2	
* 30	WP137400	BATTERY COVER					
* 51	WP135900	LCD ASSEMBLY					
* 52	X9899A00	SPEAKER					
* 53	X9898A00	FLEXIBLE FLAT CABLE					
* 54	WP139700	MICROPHONE			L,R	2	
* 55	WP279300	SPACER				2	
* 71	WP137600	CIRCUIT BOARD	MIC				
* 72	WP137500	CIRCUIT BOARD	MAIN				
* 73	WP137700	CIRCUIT BOARD	KEY				
* 74	WP137800	CIRCUIT BOARD	USB				
* Y01	WP139300	SCREW	1.7x5				
* Y02	WP139600	SCREW	1.4x4			3	
* Y03	WP139400	SCREW	1.7x8			4	
* Y04	WP139500	SCREW	1.7x6			2	
*	WP137900	WIRE ASSEMBLY					
		ACCESSORIES			POCKETRAK 2G		
	--	SERVICE PARTS KIT	MIPA		(WP13540)		
*	WP139800	EARPHONES					
*	WP141200	USB CONNECTION CABLE					
*	WP378000	SOFT CASE					
*	WP378100	MICROPHONE STAND ADAPTOR					
*	X8515A00	DVD-ROM					

✼: New Parts

RANK: Japan only

■ ELECTRICAL PARTS

REF NO.	PART NO.	DESCRIPTION			REMARKS	QTY	RANK
		ELECTRICAL PARTS					
*	**WP137700**	CIRCUIT BOARD	KEY				
*	**WP137500**	CIRCUIT BOARD	MAIN				
*	**WP137800**	CIRCUIT BOARD	USB				
*	**WP137700**	CIRCUIT BOARD	KEY				
* S6201	**WP140200**	PUSH SWITCH					
* S6202	**WP140200**	PUSH SWITCH					
* S6203	**WP140200**	PUSH SWITCH					
* S6204	**WP140200**	PUSH SWITCH					
* S6205	**WP140200**	PUSH SWITCH					
* S6206	**WP140200**	PUSH SWITCH					
*	**WP137500**	CIRCUIT BOARD	MAIN				
* CN403	**WP140500**	BOARD-BOARD PLUG	10P JTAG				
* CN450	**WP140600**	EARTH TERMINAL					
* CN461	**WP140300**	PHONE JACK	D3.6		⎱ PHONES		
* CN461	**WP140400**	PHONE JACK	D3.6		⎰		
* CN471	**WP140700**	FPC SOCKET	13P				
* CN493	**WP140800**	FPC SOCKET	6P				
* CN551	**WP140300**	PHONE JACK	D3.6		⎱ MIC		
* CN551	**WP140400**	PHONE JACK	D3.6		⎰		
* CN552	**WP140900**	PWB-WIRE PLUG	4P				
* S4167	**WP140100**	PUSH SWITCH	1P-1T				
* S4168	**WP140100**	PUSH SWITCH	1P-1T				
* S4169	**WP140100**	PUSH SWITCH	1P-1T				
* S4171	**WP140000**	SLIDE SWITCH	1P-3T				
* S4801	**WP139900**	SLIDE SWITCH	1P-2T				
*	**WP137800**	CIRCUIT BOARD	USB				
* CN601	**WP141000**	USB SOCKET	4P USB PLUG				
* CN602	**WP140800**	FPC SOCKET	6P				

✽: New Parts

RANK: Japan only