

TC-WA9ES

SONY SERVICE MANUAL

US Model
Canadian Model
E Model
Australian Model

SUPPLEMENT-1

File this supplement with the service manual.

Subject : 1. CORRECTION
2. RM SENSOR BOARD AND PANEL BOARD
CHANGED
3. OTHER CHANGES

(RPC-96006/ECN-TC500422)

1. CORRECTION

- Correct your service manual as shown below.

GENERAL

 : Indicates corrected portion

Page	INCORRECT	CORRECT
3	 1/PITCH CONTROL (Tape speed)	 PITCH CONTROL (Tape speed)
	 4/TIMER switch	 TIMER switch
	 7/PITCH CONTROL ON/OFF (Tape speed) button	 1/PITCH CONTROL ON/OFF (Tape speed) button
	 2/MPX (multiplex) FILTER ON/OFF button	 4/MPX (multiplex) FILTER ON/OFF button
	 5/DIR (direction) MODE switch	 7/DIR (direction) MODE switch
	 BLANK SKIP button	 2/BLANK SKIP button
	 9 DOLBY NR (Dolby noise reduction) buttons (deck A) ON/OFF button B/C/S button	 5/DOLBY NR (Dolby noise reduction) buttons (deck A) OFF/B/C/S button
	 12 6/DOLBY NR (Dolby noise reduction) buttons (deck B) ON/OFF button B/C/S button	 12 6/DOLBY NR (Dolby noise reduction) buttons (deck B) OFF/B/C/S button
	 13 AUTO PAUSE button	 3/AUTO PAUSE button
	 14 A+B REC (simultaneous recording) button	 14 10/A+B REC (simultaneous recording) button
	 15 SYNCHRO DUBBING buttons HIGH Speed button NORMAL Speed button	 15 >10/SYNCHRO DUBBING buttons HIGH Speed button NORMAL Speed button

2. RM SENSOR BOARD and PANEL BOARD CHANGED

The RM SENSOR board has been changed due to improvements made in the remote control light-receiving circuit, and consequently, the panel board has also been changed.

The former type and new type RM SENSOR boards are not interchangeable.

The PANEL board connected to this board is also not interchangeable between the old and new types.

For details of the interchangeabilities of the PANEL board and RM SENSOR board, refer to the following table.

		PANEL board		
		FORMER TYPE (board suffix number: 11)	NEW TYPE (board suffix number: 12)	
			For former IC	For new IC
RM SENSOR Board	FORMER TYPE (IC902: GPU90XB)	○	○ * Note 1	×
	NEW TYPE (IC902: SBX1780-51)	×	×	○ * Note 1

*** Note 1:**

The RM SENSOR board has two kinds of type such as old type (board suffix number: 11) and new type (board suffix number: 12) according to using parts to IC902.

The new type PANEL board (board suffix number: 12) can be made to correspond to the former type and new type RM SENSOR boards by changing the mounted parts to the board.

Check if the RM SENSOR board used is the old or new type and use the corresponding PANEL board.

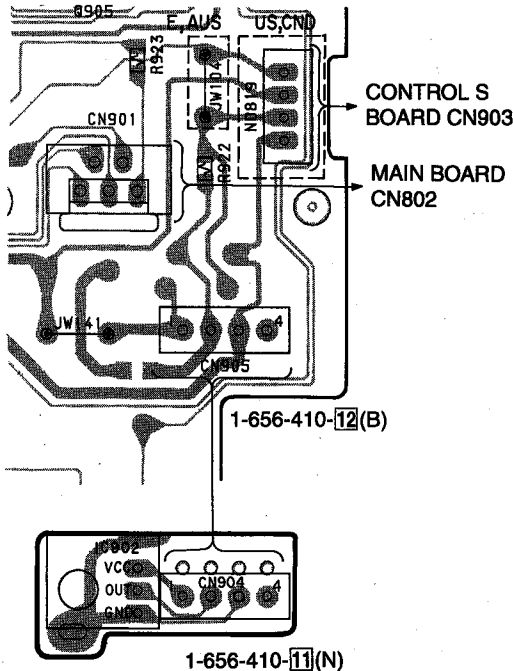
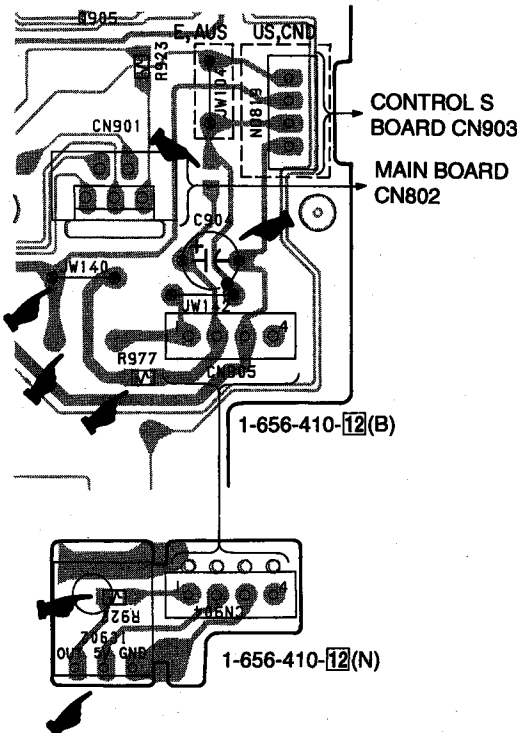
CORRESPONDENCE OF NEW AND OLD RM SENSOR BOARDS

- Use the former type RM SENSOR board only for the former type PANEL board (board suffix number: 11).
(The new type RM SENSOR board cannot be used because of modifications of the connection of the connector.)
- The new type PANEL board (board suffix number: 12) can correspond to the former and new type RM SENSOR boards by changing a part of circuit.
However, the connection of the connector is not interchangeable between the PANEL and RM SENSOR boards.
Refer to the following table and perform the necessary repairs.

Difference between Former and New PANEL and RM SENSOR Boards

: Indicates changed portion

Page	FORMER Type (RM SENSOR BOARD suffix No. -11)	NEW Type (RM SENSOR BOARD suffix No. -12)
31	[RM SENSOR BOARD] [PANEL BOARD] Location: D-E, 5-6	

Page	FORMER Type (RM SENSOR BOARD suffix No. -11)	NEW Type (RM SENSOR BOARD suffix No. -12)																																
36	[PANEL BOARD] Location: B-D, 7-9  1-656-410-12(B) 1-656-410-11(N) [RM SENSOR BOARD] Location: C-D, 9-10	 1-656-410-12(B) 1-656-410-12(N)																																
55	<table><tr><th>Ref.No</th><th>Part No</th><th>Description</th><th>Remark</th></tr><tr><td colspan="4">*** PANEL BOARD ***</td></tr><tr><td>C904</td><td></td><td>NO MOUNT</td><td></td></tr><tr><td>* CN905</td><td>1-691-007-11</td><td>CONNECTOR, PC BOARD (PLUG) 4P</td><td></td></tr></table>	Ref.No	Part No	Description	Remark	*** PANEL BOARD ***				C904		NO MOUNT		* CN905	1-691-007-11	CONNECTOR, PC BOARD (PLUG) 4P		<table><tr><th>Ref.No</th><th>Part No</th><th>Description</th><th>Remark</th></tr><tr><td colspan="4">*** PANEL BOARD ***</td></tr><tr><td>C904</td><td>1-124-589-11</td><td>ELECT 47uF 20% 16V</td><td></td></tr><tr><td>* CN905</td><td>1-573-107-11</td><td>CONNECTOR, PC BOARD (PLUG) 4P</td><td></td></tr></table>	Ref.No	Part No	Description	Remark	*** PANEL BOARD ***				C904	1-124-589-11	ELECT 47uF 20% 16V		* CN905	1-573-107-11	CONNECTOR, PC BOARD (PLUG) 4P	
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56	<table><tr><td>IC902</td><td>8-749-923-80</td><td>IC GPIU90XB</td><td></td></tr><tr><td>JW140</td><td></td><td>NO MOUNT</td><td></td></tr><tr><td>JW141</td><td></td><td>JUMPER WIRE</td><td></td></tr></table>	IC902	8-749-923-80	IC GPIU90XB		JW140		NO MOUNT		JW141		JUMPER WIRE		<table><tr><td>IC902</td><td>8-741-780-51</td><td>IC SBX1780-51</td><td></td></tr><tr><td>JW140</td><td></td><td>JUMPER WIRE</td><td></td></tr><tr><td>JW141</td><td></td><td>NO MOUNT</td><td></td></tr></table>	IC902	8-741-780-51	IC SBX1780-51		JW140		JUMPER WIRE		JW141		NO MOUNT									
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57	<table><tr><td>R922</td><td>1-216-025-91</td><td>METAL GLAZE 100 5% 1/10W</td><td>(Note 2)</td></tr><tr><td>R977</td><td></td><td>NO MOUNT</td><td></td></tr></table>	R922	1-216-025-91	METAL GLAZE 100 5% 1/10W	(Note 2)	R977		NO MOUNT		<table><tr><td>R922</td><td>1-216-025-91</td><td>METAL GLAZE 100 5% 1/10W</td><td>(Note 2)</td></tr><tr><td>R977</td><td>1-216-017-91</td><td>METAL GLAZE 47 5% 1/10W</td><td></td></tr></table>	R922	1-216-025-91	METAL GLAZE 100 5% 1/10W	(Note 2)	R977	1-216-017-91	METAL GLAZE 47 5% 1/10W																	
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Note 2:

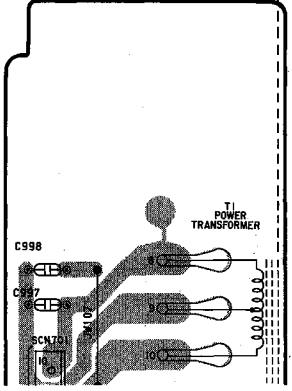
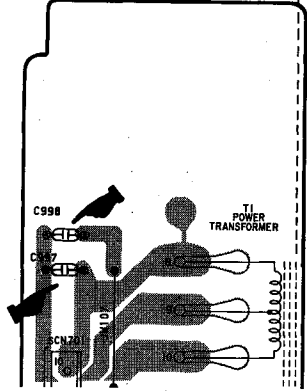
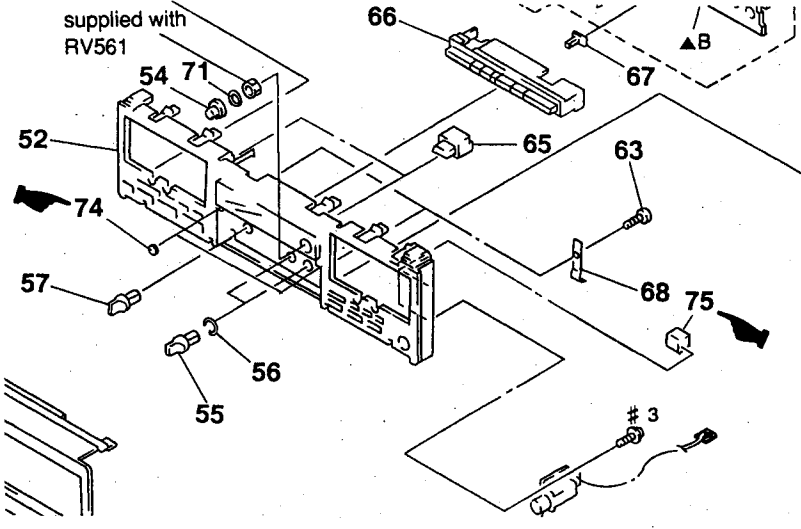
Mount the former type R922 to the PANEL board and new type to the RM SENSOR board.

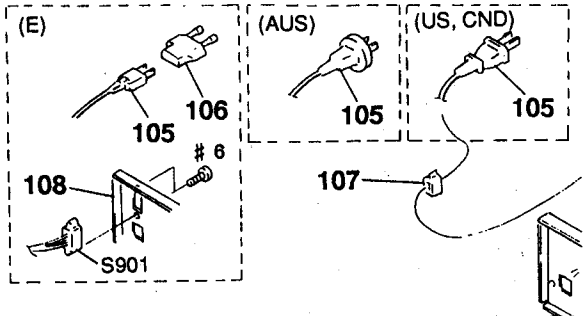
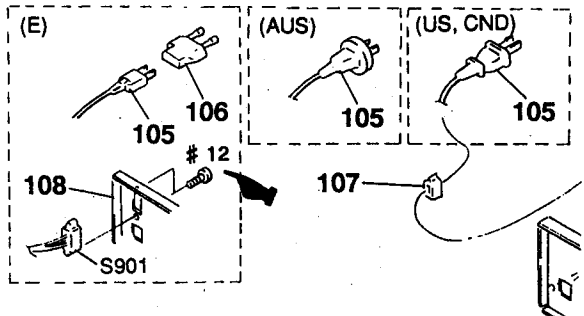
3. OTHER CHANGES

☛ : Indicates changed portion

NOTE:

- Abbreviation
- CND : Canadian model
- AUS : Australian model

Page	FORMER				NEW			
23	[POWER TRANSFORMER BOARD] Location: B-D, 21-22							
								
41	<u>Ref. No</u>	<u>Part No</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No</u>	<u>Part No</u>	<u>Description</u>	<u>Remark</u>
			*** EXPLODED VIEWS ***				*** EXPLODED VIEWS ***	
	3	3-923-143-01	PLATE, ORNAMENTAL		3	3-923-143-01	PLATE, ORNAMENTAL (E, AUS)	
					3	3-923-143-21	PLATE, ORNAMENTAL (US, CND)	
42	* 58	3-350-846-21	HOLDER, PCB (US, CND)		* 58	3-682-419-11	HOLDER, PCB (US, CND)	
	66	3-923-146-01	BUTTON (COUNTER)		66	3-923-146-01	BUTTON (COUNTER) (US, CND)	
					66	3-923-146-11	BUTTON (COUNTER) (E, AUS)	
	* 72	3-704-198-11	SUPPORT, PC (US, CND)		* 72	3-704-198-01	SUPPORT, PC (US, CND)	
					74	2-538-217-01	CUSHION	
					75	9-911-841-99	CUSHION	
								

Page	FORMER						NEW					
	Ref.No	Part No	Description	Remark			Ref.No	Part No	Description	Remark		
43	ECP1 △S901	1-765-469-11 1-570-307-11	LEAD (WITH CONNECTOR) SELECTOR, POWER VOLTAGE (E)				ECP1 △S901	1-775-756-11 1-692-155-11	LEAD (WITH CONNECTOR) SELECTOR, POWER VOLTAGE (E)			
												
46	*** ELECTRICAL PARTS LIST *** *** DOLBY (S) BOARD ***						*** ELECTRICAL PARTS LIST *** *** DOLBY (S) BOARD ***					
	R2	1-208-806-11	METAL GLAZE	10K	2%	1/10W	R2	1-208-462-41	METAL GLAZE	10K	2%	1/10W
	R8	1-216-667-11	METAL GLAZE	4.7K	0.5%	1/10W	R8	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W
	R14	1-216-667-11	METAL GLAZE	4.7K	0.5%	1/10W	R14	1-208-453-41	METAL GLAZE	4.7K	2%	1/10W
47	R25	1-208-806-11	METAL GLAZE	10K	2%	1/10W	R25	1-208-462-41	METAL GLAZE	10K	2%	1/10W
47	*** MAIN BOARD ***						*** MAIN BOARD ***					
	C191	1-124-925-11	ELECT	2.2uF	20%	100V	C191	1-126-961-11	ELECT	2.2uF	20%	50V
	C291	1-124-925-11	ELECT	2.2uF	20%	100V	C291	1-126-961-11	ELECT	2.2uF	20%	50V
	C521	1-124-925-11	ELECT	2.2uF	20%	100V	C521	1-126-961-11	ELECT	2.2uF	20%	50V
48	C541	1-124-925-11	ELECT	2.2uF	20%	100V	C541	1-126-961-11	ELECT	2.2uF	20%	50V
	C581	1-124-925-11	ELECT	2.2uF	20%	100V	C581	1-126-961-11	ELECT	2.2uF	20%	50V
	C586	1-124-925-11	ELECT	2.2uF	20%	100V	C586	1-126-961-11	ELECT	2.2uF	20%	50V
	C587	1-124-925-11	ELECT	2.2uF	20%	100V	C587	1-126-961-11	ELECT	2.2uF	20%	50V
	C803	1-124-925-11	ELECT	2.2uF	20%	100V	C803	1-126-961-11	ELECT	2.2uF	20%	50V
	CP521	1-232-946-11	COMPOSITION CIRCUIT BLOCK			CP521	1-233-562-11	COMPOSITION CIRCUIT BLOCK				
	CP541	1-232-946-11	COMPOSITION CIRCUIT BLOCK			CP541	1-233-562-11	COMPOSITION CIRCUIT BLOCK				
49	IC601	8-752-072-16	IC CXA1598M-T6			IC601	8-752-070-68	IC CXA1598M				
	IC602	8-752-072-16	IC CXA1598M-T6			IC602	8-752-070-68	IC CXA1598M				
	IC801	8-759-337-49	IC uPD78043AGF-023-3B9			IC801	8-759-356-94	IC uPD78043AGF-028-3B9				
	Q528	8-729-142-46	TRANSISTOR 2SC2001-LK			Q528	8-729-194-57	TRANSISTOR 2SC945-P				
	Q529	8-729-142-46	TRANSISTOR 2SC2001-LK			Q529	8-729-194-57	TRANSISTOR 2SC945-P				
50	Q548	8-729-142-46	TRANSISTOR 2SC2001-LK			Q548	8-729-194-57	TRANSISTOR 2SC945-P				
	Q549	8-729-142-46	TRANSISTOR 2SC2001-LK			Q549	8-729-194-57	TRANSISTOR 2SC945-P				
52	R762	1-249-423-11	CARBON	3.3K	5%	1/4W F	R762	1-247-843-11	CARBON	3.3K	5%	1/4W
	R786	1-249-423-11	CARBON	3.3K	5%	1/4W F	R786	1-247-843-11	CARBON	3.3K	5%	1/4W

Page	FORMER						NEW						
	Ref. No	Part No	Description	Remark			Ref. No	Part No	Description	Remark			
46	*** PANEL BOARD ***						*** PANEL BOARD ***						
	9-911-844-XX CUSHION						*	3-354-927-21 CUSHION					
47	C380	1-124-916-11	ELECT	22uF	20%	63V	C380	1-126-965-11	ELECT	22uF	20%	50V	
	C390	1-124-916-11	ELECT	22uF	20%	63V	C390	1-126-965-11	ELECT	22uF	20%	50V	
	C480	1-124-916-11	ELECT	22uF	20%	63V	C480	1-126-965-11	ELECT	22uF	20%	50V	
	C490	1-124-916-11	ELECT	22uF	20%	63V	C490	1-126-965-11	ELECT	22uF	20%	50V	
54	ECPI	1-765-469-11	LEAD (WITH CONNECTOR)				ECPI	1-775-756-11	LEAD (WITH CONNECTOR)				
	Q51	8-729-107-43	TRANSISTOR	2SC3624-L18			Q51	8-729-107-46	TRANSISTOR	2SC3624A-L15			
	Q52	8-729-107-43	TRANSISTOR	2SC3624-L18			Q52	8-729-107-46	TRANSISTOR	2SC3624A-L15			
	Q111	8-729-107-43	TRANSISTOR	2SC3624-L18			Q111	8-729-107-46	TRANSISTOR	2SC3624A-L15			
	Q211	8-729-107-43	TRANSISTOR	2SC3624-L18			Q211	8-729-107-46	TRANSISTOR	2SC3624A-L15			
55	*** MISCELLANEOUS ***						*** MISCELLANEOUS ***						
	ECPI	1-765-469-11	LEAD (WITH CONNECTOR)				ECPI	1-775-756-11	LEAD (WITH CONNECTOR)				
	△S901	1-570-307-11	SELECTOR, POWER VOLTAGE (E)				△S901	1-692-155-11	SELECTOR, POWER VOLTAGE (E)				

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.