

TA-FA50ES/FA70ES

SERVICE MANUAL

AEP Model

TA-FA50ES and TA-FA70ES is the integrated stereo amplifier.

The mechanical and electrical specifications of TA-FA50ES/FA70ES is almost same as TA-FA5ES/FA7ES.

So, this manual contains only the points which differ from TA-FA5ES/FA7ES.

For the informations not contained in this manual, please refer to the TA-FA5ES/FA7ES service manual (9-959-828-00) previously issued.

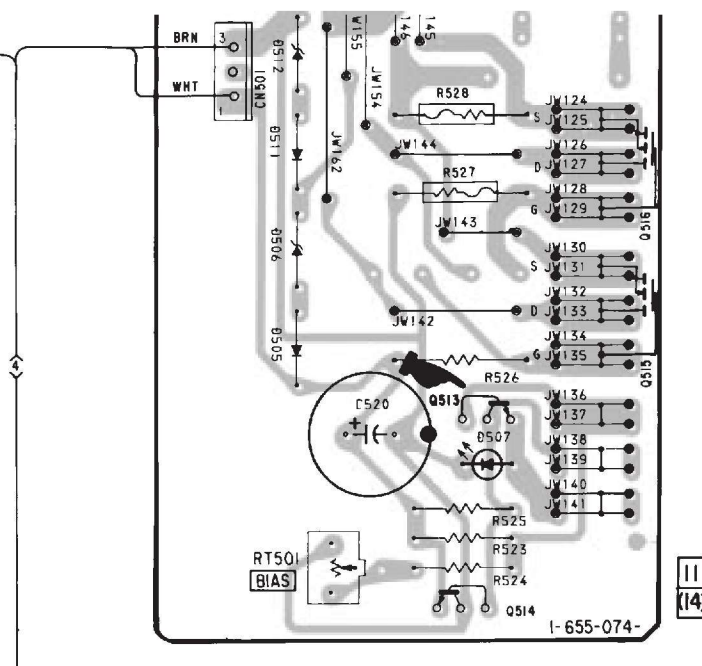
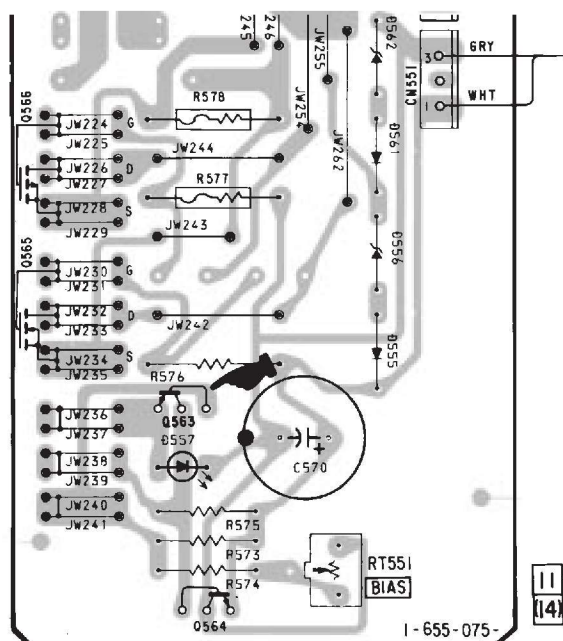
1. DIAGRAMS

∞ W : Difference portion

PRINTED WIRING BOARDS — MAIN Section —

(Refer to the TA-FA5ES/FA7ES service manual page 16)

∞ Location E-11 to H-17



INTEGRATED STEREO AMPLIFIER



SONY®

2. EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts

Example:

KNOB, BALANCE (WHITE) . . . (RED)

↑ ↑
Parts Color Cabinet's Color

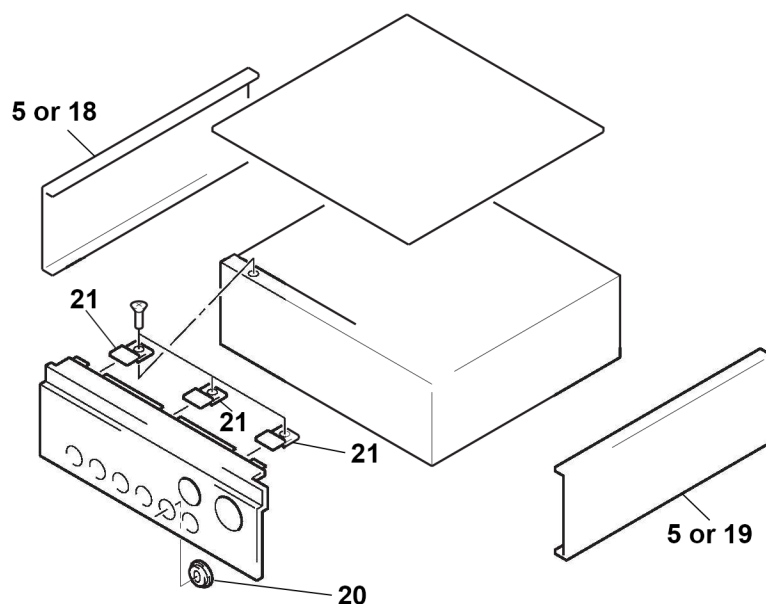
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

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

(1) CABINET SECTION

(Refer to the TA-FA5ES/FA7ES service manual page 23)

∞ This illustration is simplified that of the page 23 and added some parts.



TA-FA5ES/FA7ES				TA-FA50ES/FA70ES			
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-970-139-41	PANEL, FRONT (FA5ES: BLACK)		1	4-992-012-21	PANEL, FRONT (FA50ES: BLACK)	
1	4-970-139-51	PANEL, FRONT (FA5ES: GOLD)		1	4-992-012-31	PANEL, FRONT (FA50ES: GOLD)	
1	4-970-139-61	PANEL, FRONT (FA7ES: BLACK)		1	4-992-012-01	PANEL, FRONT (FA70ES: BLACK)	
1	4-970-139-71	PANEL, FRONT (FA7ES: GOLD)		1	4-992-012-11	PANEL, FRONT (FA70ES: GOLD)	
4	4-970-142-01	PLATE (R), ORNAMENTAL (BLACK)		4	4-998-328-11	PLATE, ORNAMENTAL (BLACK)	
4	4-970-142-11	PLATE (R), ORNAMENTAL (GOLD)		4	4-998-328-01	PLATE, ORNAMENTAL (GOLD)	
5	4-970-140-01	PANEL SIDE (BLACK)		5			
5	4-970-140-11	PANEL SIDE (GOLD)		5			
7	4-971-842-01	FELT (FA7ES)		7			
10	4-970-141-01	PLATE (L), ORNAMENTAL (BLACK)		10	4-998-328-11	PLATE, ORNAMENTAL (BLACK)	
10	4-970-141-11	PLATE (L), ORNAMENTAL (GOLD)		10	4-998-328-01	PLATE, ORNAMENTAL (GOLD)	
14	4-969-325-11	LENS, LED		14	4-991-946-01	LENS, LED	
15	4-970-144-01	PLATE (V), ORNAMENTAL (BLACK)		15	4-992-014-11	ESCUTCHEON (A) (BLACK)	
15	4-970-144-11	PLATE (V), ORNAMENTAL (GOLD)		15	4-992-014-01	ESCUTCHEON (A) (GOLD)	
16	4-970-486-01	LENS, LED		16	4-931-646-01	LENS, LED	
17	4-969-347-01	CUSHION		17			
* 18				* 18	4-998-322-11	PANEL (L), SIDE (BLACK)	
* 18				* 18	4-998-322-01	PANEL (L), SIDE (GOLD)	
* 19				* 19	4-988-323-11	PANEL (R), SIDE (BLACK)	
* 19				* 19	4-988-323-01	PANEL (R), SIDE (GOLD)	
20				20	4-988-321-01	PLATE (L, S), ORNAMENTAL (GOLD)	
20				20	4-988-321-12	PLATE (L, S), ORNAMENTAL (BLACK)	
21				21	4-988-309-01	BLACKET (F, P)	

(2) FRONT PANEL SECTION

(Refer to the TA-FA5ES/FA7ES service manual page 24)

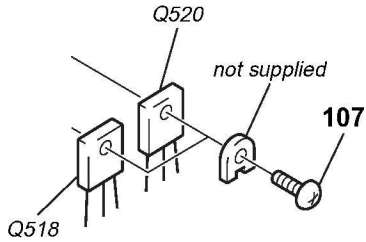
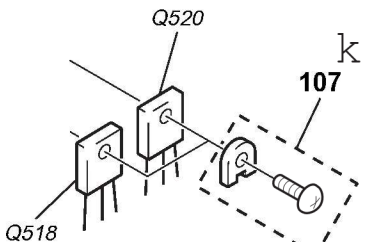
TA-FA5ES/FA7ES				TA-FA50ES/FA70ES			
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-4945-357-1	KNOB (YB) ASSY (BLACK)		51	4-991-943-01	KNOB (V) (BLACK)	
51	X-4945-359-1	KNOB (VG) ASSY (GOLD)		51	4-991-943-11	KNOB (V) (GOLD)	
* 59	4-971-834-01	TUBE (B), LIGHT INTERCEPTION		* 59	4-971-834-11	TUBE (B), LIGHT INTERCEPTION	
61	4-942-032-01	KNOB (POWER) (BLACK)		61	X-4948-658-1	BUTTON ASSY, POWER (BLACK)	
61	4-942-032-11	KNOB (POWER) (GOLD)		61	X-4948-011-1	BUTTON ASSY, POWER (GOLD)	
63	4-970-152-01	KNOB (R), (BLACK)		63	4-988-316-11	KNOB (DIA. 29) (BLACK)	
63	4-970-152-11	KNOB (R) (GOLD)		63	4-988-316-01	KNOB (DIA. 29) (GOLD)	
65	4-970-148-01	KNOB (I) (BLACK)		65	4-991-944-01	KNOB (F) (BLACK)	
65	4-970-148-11	KNOB (I) (GOLD)		65	4-991-944-11	KNOB (F) (GOLD)	

(3) CHASSIS SECTION

(Refer to the TA-FA5ES/FA7ES service manual page 25)

∞ Ref. No. #7 of TA-FA50ES/FA70ES corresponds to the illustration Ref. No. 104 on the page 25.

∞ W : Difference portion

TA-FA5ES/FA7ES				TA-FA50ES/FA70ES			
							
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
104	4-967-960-01	SCREW (4 × 8)		#7	7-685-883-09	SCREW +BVTT 4 × 12 (S)	
* 106	1-655-075-11	MAIN B-R BOARD (FA5ES)		* 106	1-655-075-21	MAIN B-R BOARD	
* 106	1-655-075-21	MAIN B-R BOARD (FA7ES)		* 106			
107	4-956-589-01	SCREW (3 × 14), +B (COPPER PLATING)		107	X-4943-354-1	SCREW (+B) ASSY, BARREL WASHER	
* 109	1-655-076-11	PS JUMPER BOARD (FA5ES)		* 109	1-655-076-21	PS JUMPER BOARD	
* 109	1-655-076-21	PS JUMPER BOARD (FA7ES)		* 109			
* 120	1-655-078-11	PS BOARD (FA5ES)		* 120	1-655-078-21	PS BOARD	
* 120	1-655-078-21	PS BOARD (FA7ES)		* 120			
* 122	1-655-074-11	MAIN B-L BOARD (FA5ES)		* 122	1-655-074-21	MAIN B-L BOARD	
* 122	1-655-074-21	MAIN B-L BOARD (FA7ES)		* 122			
* 123	3-333-771-01	WASHER		123	3-376-862-01	WASHER	
C701	1-104-902-11	CAP, ELECT 15000uF (FA7ES)		C701	1-117-581-11	CAP, ELECT 15000uF (FA70ES)	
C701	1-107-845-12	CAP, ELECT 12000uF (FA5ES)		C701	1-117-903-11	CAP, ELECT 12000uF (FA50ES)	
C702	1-104-902-11	CAP, ELECT 15000uF (FA7ES)		C702	1-117-581-11	CAP, ELECT 15000uF (FA70ES)	
C702	1-107-845-12	CAP, ELECT 12000uF (FA5ES)		C702	1-117-903-11	CAP, ELECT 12000uF (FA50ES)	
Q513	8-729-203-45	TRANSISTOR 2SC3423-0		Q513			
Q563	8-729-203-45	TRANSISTOR 2SC3423-0		Q563			
△ T1	1-429-111-11	TRANSFORMER, POWER (FA5ES)		△ T1	1-431-377-11	TRANSFORMER, POWER (FA50ES)	
△ T1	1-429-112-11	TRANSFORMER, POWER (FA7ES)		△ T1	1-431-376-11	TRANSFORMER, POWER (FA70ES)	

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

(4) BACK PANEL SECTION

(Refer to service manual page 26)

TA-FA5ES/FA7ES				TA-FA50ES/FA70ES			
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 152	4-969-344-01	HOLDER (P) (FA7ES)		* 152	4-969-344-01	HOLDER (P) (FA70ES)	
				* 152	4-969-344-12	HOLDER (P) (FA50ES)	
* 153	1-655-077-11	PRE PS BOARD (FA5ES)		* 153	1-655-077-21	PRE PS BOARD	
* 153	1-655-077-21	PRE PS BOARD (FA7ES)		* 153			
* 154	1-655-361-11	JUMPER BOARD (FA5ES)		* 154	1-655-361-21	JUMPER BOARD	
				* 154			
* 154	1-655-361-21	JUMPER BOARD (FA7ES)		* 156	A-4378-499-A	MAIN. A BOARD, COMPLETE (FA50ES)	
* 156	A-4378-507-A	MAIN. A BOARD, COMPLETE (FA5ES)		* 156	A-4378-512-A	MAIN. A BOARD, COMPLETE (FA70ES)	
* 156	A-4378-519-A	MAIN. A BOARD, COMPLETE (FA7ES)		* 156	A-4378-512-A	MAIN. A BOARD, COMPLETE (FA70ES)	
* 159	A-4378-506-A	INPUT BOARD, COMPLETE (FA5ES)		* 159	A-4398-752-A	INPUT BOARD, COMPLETE (FA50ES)	
* 159	A-4378-518-A	INPUT BOARD, COMPLETE (FA7ES)		* 159	A-4378-518-A	INPUT BOARD, COMPLETE (FA70ES)	
* 162	4-975-263-01	PANEL, BACK (FA5ES)		* 162	4-975-263-31	PANEL, BACK (FA50ES)	
* 162	4-975-263-11	PANEL, BACK (FA7ES)		* 162	4-975-263-21	PANEL, BACK (FA70ES)	
* 167	1-655-071-11	OUT LET BOARD		* 167	1-655-090-11	OUT LET BOARD	

3. ELECTRICAL PARTS LIST

NOTE:

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Page	TA-FA5ES/FA7ES				TA-FA50ES/FA70ES			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
28	*	A-4378-506-A	INPUT BOARD, COMPLETE (FA5ES)		*	A-4398-752-A	INPUT BOARD, COMPLETE (FA50ES)	
	*	A-4378-518-A	INPUT BOARD, COMPLETE (FA7ES)		*	A-4378-518-A	INPUT BOARD, COMPLETE (FA70ES)	
			<JACK>				<JACK>	
	J103	1-766-895-11	JACK, PIN 4P (TAPE-3) (FA5ES)					
	J103	1-766-895-21	JACK, PIN 4P (TAPE-3) (FA7ES)		J103	1-766-895-21	JACK, PIN 4P (TAPE-3)	
	J104	1-766-895-11	JACK, PIN 4P (MD/TAPE-2) (FA5ES)					
	J104	1-766-895-21	JACK, PIN 4P (MD/TAPE-2) (FA7ES)		J104	1-766-895-21	JACK, PIN 4P (MD/TAPE-2)	
	J105	1-766-895-11	JACK, PIN 4P (DAT/TAPE-1) (FA5ES)					
	J105	1-766-895-21	JACK, PIN 4P (DAT/TAPE-1) (FA7ES)		J105	1-766-895-21	JACK, PIN 4P (DAT/TAPE-1)	
	J106	1-766-894-31	JACK 2P (PRE OUT) (FA5ES)					
	J106	1-766-894-41	JACK 2P (PRE OUT) (FA7ES)		J106	1-766-894-41	JACK 2P (PRE OUT)	
29	*	1-655-361-11	JUMPER BOARD (FA5ES)					
	*	1-655-361-21	JUMPER BOARD (FA7ES)		*	1-655-361-21	JUMPER BOARD	
	*	A-4378-507-A	MAIN. A BOARD, COMPLETE (FA5ES)		*	A-4378-499-A	MAIN. A BOARD, COMPLETE (FA50ES)	
	*	A-4378-519-A	MAIN. A BOARD, COMPLETE (FA7ES)		*	A-4378-512-A	MAIN. A BOARD, COMPLETE (FA70ES)	
31	*	1-655-074-11	MAIN B-L BOARD (FA5ES)					
	*	1-655-074-21	MAIN B-L BOARD (FA7ES)		*	1-655-074-21	MAIN B-L BOARD	
32			<TRANSISTOR>				<TRANSISTOR>	
	Q513				Q513	8-729-821-54	TRANSISTOR 2SC1815-BL	
	*	1-655-075-11	MAIN B-R BOARD (FA5ES)					
	*	1-655-075-21	MAIN B-R BOARD (FA7ES)		*	1-655-075-21	MAIN B-R BOARD	
			<TRANSISTOR>				<TRANSISTOR>	
	Q563				Q563	8-729-821-54	TRANSISTOR 2SC1815-BL	
33	*	1-655-077-11	PRE PS BOARD (FA5ES)					
	*	1-655-077-21	PRE PS BOARD (FA7ES)		*	1-655-077-21	PRE PS BOARD	
34	*	1-655-078-11	PS BOARD (FA5ES)					
	*	1-655-078-21	PS BOARD (FA7ES)		*	1-655-078-21	PS BOARD	
35	*	1-655-076-11	PS JUMPER BOARD (FA5ES)					
	*	1-655-076-21	PS JUMPER BOARD (FA7ES)		*	1-655-076-21	PS JUMPER BOARD	
			<TERMINAL>				<TERMINAL>	
	TM801	1-537-930-11	TERMINAL BOARD (SP) 4P (FA5ES)		TM801	1-694-225-21	TERMINAL BOARD (SP) 4P (FA50ES)	
	TM801	1-537-931-11	TERMINAL BOARD (SP) 4P (FA7ES)		TM801	1-694-308-11	TERMINAL BOARD (SP) 4P (FA70ES)	
	TM802	1-537-930-11	TERMINAL BOARD (SP) 4P (FA5ES)		TM802	1-694-225-21	TERMINAL BOARD (SP) 4P (FA50ES)	
	TM802	1-537-931-11	TERMINAL BOARD (SP) 4P (FA7ES)		TM802	1-694-308-11	TERMINAL BOARD (SP) 4P (FA70ES)	

∞ Ref. No. #7 of TA-FA50ES/FA70ES corresponds to Ref. No. 104 on page 25 of TA-FA5ES/FA7ES service manual .

Page	TA-FA5ES/FA7ES				TA-FA50ES/FA70ES			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
37			MISCELLANEOUS *****				MISCELLANEOUS *****	
	C701	1-104-902-11	CAP, ELECT 1500uF (FA7ES)		C701	1-117-581-11	CAP, ELECT 1500uF (FA70ES)	
	C701	1-107-845-12	CAP, ELECT 1500uF (FA5ES)		C701	1-117-903-11	CAP, ELECT 1200uF (FA50ES)	
	C702	1-104-902-11	CAP, ELECT 1500uF (FA7ES)		C702	1-117-581-11	CAP, ELECT 1500uF (FA70ES)	
	C702	1-107-845-12	CAP, ELECT 1200uF (FA5ES)		C702	1-117-903-11	CAP, ELECT 1200uF (FA50ES)	
	Q513	8-729-203-45	TRANSISTOR 2SC3423-O		Q513			
	Q563	8-729-203-45	TRANSISTOR 2SC3423-O		Q563			
	△T1	1-429-111-11	TRANSFORMER, POWER (FA5ES)		△T1	1-431-377-11	TRANSFORMER, POWER (FA50ES)	
	△T1	1-429-112-11	TRANSFORMER, POWER (FA7ES)		△T1	1-431-376-11	TRANSFORMER, POWER (FA70ES)	
37			ACCESSORIES & PACKING MATERIALS *****				ACCESSORIES & PACKING MATERIALS *****	
		1-465-801-11	REMOTE COMMANDER (RM-S703)			1-475-250-11	COMMANDER, STANDARD (RM-S318)	
		3-707-584-21	LID, BATTERY (for RM-S703)			4-981-643-01	LID, BATTERY (for RM-S318)	
		3-800-210-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)			3-860-786-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)	
		3-800-210-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN)			3-860-786-21	MANUAL, INSTRUCTION (GERMAN, SWEDISH, ITALIAN, DUTCH)	
	*	4-970-079-01	CUSHION					
	*	4-977-437-01	INDIVIDUAL CARTON (FA5ES)					
	*	4-977-438-01	INDIVIDUAL CARTON (FA7ES)					
37			***** HARDWARE LIST *****				***** HARDWARE LIST *****	
	#7				#7	7-685-883-09	SCREW +BVTT 4 × 12 (S)	

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