

SERVICE MANUAL

PARTS LIST

PRIDE IN QUALITY

AKAI STEREO TAPE DECK

MODEL **GX-4400D**

THIS MANUAL MUST BE USED AS A SET TOGETHER WITH
SEPARATELY PUBLISHED 4400 SERVICE MANUAL AND PARTS
LIST.

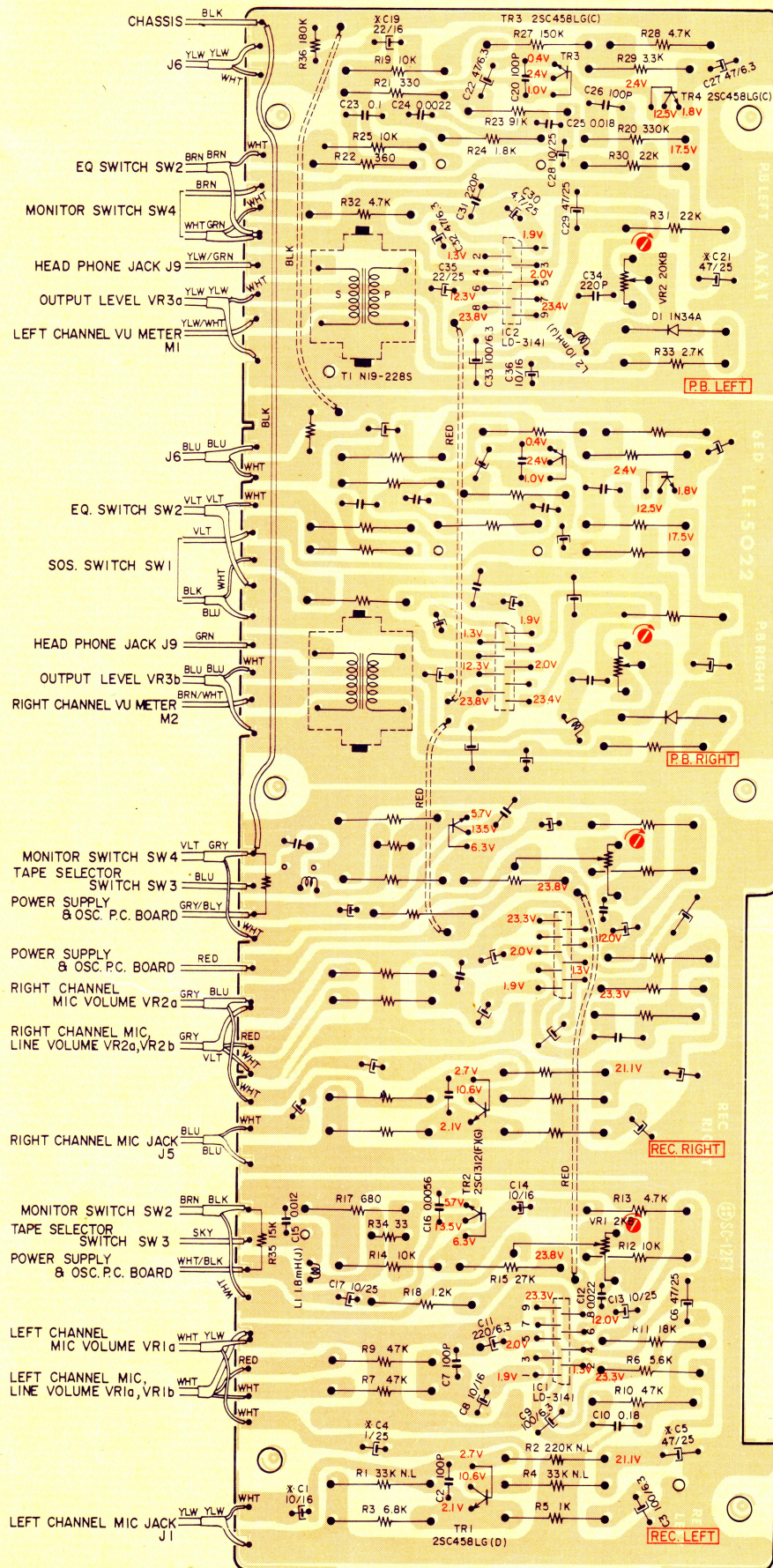
SECTION 1 Except for the parts which have been changed as per List 1 below, the composite parts of Model GX-4400D are identical to those of Model 4400D. Therefore, for general repairs and adjustments, etc., please refer to 4400 Service Manual.

I. SPECIFICATIONS

TAPE SPEED		7-1/2 ips. 3-3/4 ips $\pm$ 3% (7-1/2 ips. 1,000 Hz speed standard tape playback)
WOW AND FLUTTER		Less than 0.22% at 7-1/2 ips. Less than 0.3% at 3-3/4 ips. (3,000 Hz wow standard tape playback)
TOTAL WOW AND FLUTTER		Less than 0.28%
FREQUENCY RESPONSE	LOW NOISE TAPE	40 to 20,000 Hz $\pm$ 3 dB at 7-1/2 ips. 40 to 14,000 Hz $\pm$ 3 dB at 3-3/4 ips.
	WIDE RANGE TAPE	40 to 22,000 Hz $\pm$ 3 dB at 7-1/2 ips. 40 to 14,000 Hz $\pm$ 3 dB at 3-3/4 ips. (Adjust at 7-1/2 ips. 2 kHz 0 dB/20 kHz 1 $\pm$ 0.5 dB, using a Scotch #211 tape, -20 VU recording)
TOTAL DISTORTION FACTOR		Less than 1.5% (Scotch #211, 1,000 Hz 0 VU recording)
LINE OUTPUT		1,228V, 4 $\pm$ 1.5 dB (7-1/2 ips. 250 Hz 0 VU recorded standard tape playback)
RECORDING/PLAYBACK LEVEL		1,228V, 4 $\pm$ 1 dB (Scotch #211, 1,000 Hz recording/playback)
S/N RATIO		Better than 50 dB at 7-1/2 ips. Better than 48 dB at 3-3/4 ips.
TOTAL S/N RATIO		Better than 44 dB (Recording Volume rotated 180° from minimum)
CROSS TALK		Better than 40 dB (Stereo) Better than 55 dB (Monaural) (1,000 Hz 3 VU recording, Mic input 4 mV)
ERASE RATIO		Better than 70 dB (1,000 Hz, 3 VU recording)
BIAS FREQUENCY		105 kHz $\pm$ 5%
INPUT SENSITIVITY	MIC	More than 0.8 mV
	LINE	More than 70 mV
	DIN	More than 3 mV
BIAS LEAK		Less than -20 VU
HIGH RANGE DEVIATION		Within 2 dB (Playback of 3-3/4 ips. 8,000 Hz Angle adjustment tape at 7-1/2 ips.)
RECORDING CAPACITY		90 minute stereo recording using an 1,800 ft. tape at 7-1/2 ips.
F.FWD AND RWD TIME		4 min. and 40 sec.
MOTOR		4-pole eddy current motor Type: SSM-1 Revolutions: 1,500/1,800 r.p.m. 50/60 Hz
HEADS	ERASE HEAD	Type: E4-260 Gap: 0.6 mm W gap Impedance: 210 Ω $\pm$ 10% at 100 kHz D.C. Resistance: 4 Ω
	RECORDING HEAD	Type: R4-200 Gap: 4 μ $\pm$ 15% Impedance: 1,870 Ω at 100 kHz D.C. Resistance: 8 Ω
	PLAYBACK HEAD	Type: P4-202 Gap: 1.7 μ $\pm$ 0.5 μ Impedance: 1,400 Ω at 1 kHz D.C. Resistance: 268 Ω
TRANSISTORS		2SC458LG(C) (D) . . . 6 2SC1098(L) (M) . . . 1 2SC971 (2) (3) Red . . . 2 2SC1312 (F) (G) . . . 2
I.C.		LD-3141 . . . 4
DIODES		1N34A . . . 4 10DC1 (Blk) . . . 1
ZENER DIODE		WZ240 . . . 1
POWER SOURCE		100V A.C. 50/60 Hz
POWER CONSUMPTION		26W/50 Hz, 31W/60 Hz
DIMENSIONS		412(W) x 355(H) x 194(D) mm (16.3" x 14" x 7.6")
WEIGHT		12.5 kg (27.5 lbs.)

NOTE: Specifications subject to change without notice.

1. PRE AMP. P.C. BOARD LE-5022



VR1 2K REC. LEVEL ADJ. 4±1dB 1,000Hz SCOTCH #211
 VR2 20K P.B. LEVEL ADJ. 4±1dB 250Hz 7 1/2ips "0" VU TEST TAPE

PRE AMP P.C. BOARD

FUSE P.C. BOARD

28.2VAC.

28.2VAC. 2200/50

23.8V

37.3V

24.5V

4.7K

47

38.2V

3W/18

25C1098(L)M

10DC1 (BLK)

POWER TRANSFORMER

CHASSIS

2200/50

220/25

5600P/500W.V.

SW9

BLK

BLK

25C971(2)(3) RED

-0.6V

19.6V

11.001

-0.6V

19.6V

25C971(2)(3) RED

-0.6V

19.6V

10.001

47/25

8.3

3.3

470

47K

100K

23.8V

SW9

RED

704VAC.

ERASE HEAD

REC. HEAD CH.1

GROUND

REC. HEAD CH.2

390P

5.6mH(J)

70P

704VAC.

70P

2KHz Od8

20KHz 1±0.5dB

PRE AMP P.C. BOARD

CHASSIS

SW9

WHT/BLK

Y-GRN/WHT

704VAC.

70P

2KHz Od8

20KHz 1±0.5dB

SECTION 2 The composite parts of Model GX-4400D, except for those which have been changed as per the list below, are identical to those of Model 4400D. Therefore, when ordering parts for this tape deck, please utilize Model 4400 Parts List.

Ref. No.	Parts No.	Description	Schematic No.	Q'ty	Ref. No.	Parts No.	Description	Schematic No.	Q'ty
HEAD BLOCK					AMP ASSEMBLY BLOCK				
1-1	BH589263	Head Block Comp.	LE-5	1	10-1x	BZ589050	Power Supply Frame Block Comp.	LE-5	1
1-2	HZ582693	Head Base	LE-0301	1	10-2x	BZ589061	Power Supply Frame Block Comp. (JPN)	LE-5	1
1-6	MH605856	Head Cover Prop B	LE-0007	2	10-3x	BZ589072	Power Supply Frame Block Comp. (3 core)	LE-5	1
1-9	HA582276	PH Angle	LE-0304	1	10-10x	BT588407	Power Trans. LET-14 (JPN)	38-4-281	1
1-10	ZG303300	Angle Adjust Spring B	RD-55	6	10-38x	ES479485	Slide SW. S-1	25-3-66	1
1-11	HP536501	PB. HEAD BLOCK P4-202		1	10-40x	EF575932	Fuse 0.8A 250V	39-1-50	1
1-12x	EA463206	Terminal P.C. Board A	RD-A36	2	10-41x	EF563681	Fuse 1A 250V	39-1-50	3
1-15	HR384513	REC. HEAD R4-200		1	10-42x	EA583841	Fuse P.C. Board	LE-5312	1
1-16	HZ410984	Erase Head Base	LF-0002	1	10-43x	EZ583852	Fuse Mt. Angle	LE-5313	1
1-18	HE589904	ERASE HEAD E4-261		1	10-53	EW540112	AC Cord (CUL) 2.5M	26-3-19	1
1-32	ML598386	Shift Lever, w/shaft B	LE-0306	1	10-54x	EW524845	AC Cord (J) 2.5M	26-3-31	1
1-35	HL582265	Shifter Lever B, w/pin	LE-0303	1	10-63x	BZ589116	Control Chassis Block Comp.	LE-5	1
1-36	ZS499331	Screw, pan head 2.3x5		1	10-78	EJ603145	Lamp Terminal Plate B	33-2-37	2
1-37	HZ411017	Head Shield Case	LF-0005	1	10-79	ER591186	Lamp 6.3V 150MA	28-2-35	2
1-38	HA582287	PH Angle B	LE-0305	1	10-83x	EC389485	Mylar/C. 0.018μF(J) 50WV (Vert. Type)	24-1-1	2
MOTOR BLOCK					10-84x	EC250683	Mylar/C. 0.0022μF(J) 50WV (Vert. Type)	24-1-1	2
3-1x	BM601020	Motor Block Comp.	LE-5	1	10-89x	BZ588914	Amp. Chassis Block Comp.	LE-5	1
FLYWHEEL/BELT CHANGE LEVER BLOCK					10-97	EJ448075	Mic. Jack 2PMJ1	31-2-23	1
4-14x	BL564107	Belt Change Lever Block Comp.	LE-5	1	10-105	BJ589307	Jack Plate Block Comp.	LE-5	1
4-15	ML217462	Belt Change Lever B (small)	AT-25	1	10-106x	EJ602177	Jack Plate B, w/jack	31-5-115	1
4-16	MZ248354	Belt Guide Stop	4TR-221	1	10-107	EZ582445	Capstan Case, w/prop	LE-5401	1
4-17	ZG465478	Brake Lever Spring	KD-1092	1	10-110	BA588960	Pre-Amp. P.C. Board Comp.	LE-5022	1
MECH. ASSEMBLY BLOCK					10-111x	MH314504	Shield Plate Prop	MR-525	2
6-29	MZ585887	Actuator B, w/pin lever	LS-1202	1	10-117	EM588115	VU Meter B-19A45R	46-1-84	2
6-31	ZS422965	Screw, pan head 3x15		2	FINAL ASSEMBLY BLOCK				
6-69	ML548280	Lever LF, w/lever E2	LF-1013	1	11-1x	BZ588778	Mech. Panel Block Comp.	LE-5	1
6-94	MS582906	Cam Roller Shaft A-1	7-3-6	1	11-12	BC588734	Case Block Comp.	LE-5	1
6-103	MZ610457	Pause Lever Cushion	LE-1005	1	11-14	SZ609952	Tran Leg D	2-6-11	4
6-108	SB258478	Rec. Button (Red)	900-167	1	11-15x	ZW476155	Screw, pan head 4x18		4
6-128	SB485741	Start Button C	MS-1002	1	11-19	SZ480712	Dust Cover Pin	LE-6024	2
6-129x	MZ606993	Stopper Angle	LE-1305	1	11-33x	ZW526577	Collar B, Jack	MC-5006	3
PRE-AMP. P.C. BOARD (LE-5022) BLOCK					11-36	SE578125	Pilot Lamp Escutcheon (Red)	TW-6017	1
7-TR2	ET539987	Transistor 2SC1312(F) (G)		2	11-40	SK576628	Knob A-BL	LE-6012	3
7-L1	EO380564	Ferri Inductor FL7H 1.8MH(J)		2	11-41	SK583266	Knob B-BL	LE-6015	3
7-VR1	EV561442	Semi-Fixed/Vol. V10K8-4-2(4US) 2kB		2	11-43	SM582658	Head Cover Name Plate	LE-6501	1
		Capacitor, Vertical Type			11-53	SK583132	Pinch Roller Cap B	MS-6020	1
7-C11	EC324516	Elect. 220μF 6.3WV		2	11-58x	EF563670	Fuse 0.5A 250V	39-1-50	1
7-C15	EC311793	Mylar 0.012μF(J) 50WV		2	11-59x	EF575932	Fuse 0.8A 250V	39-1-50	1
7-C16	EC329883	Mylar 0.0056μF(J) 50WV		2					
7-C17	EC220994	Elect. 10μF 25WV		2					
7-C20	EC513944	Styrol 100PF(J) 50WV		2					
7-C24	EC250683	Mylar 0.0022μF(J) 50WV		2					
7-C28	EC220994	Elect. 10μF 25WV		2					
OSC./POWER SUPPLY P.C. BOARD BLOCK									
8-TR2, 3	ET511920	Transistor 2SC1247A(B) (V)		2					

Record!

1gh2 68h2

