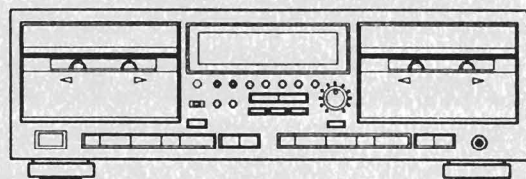
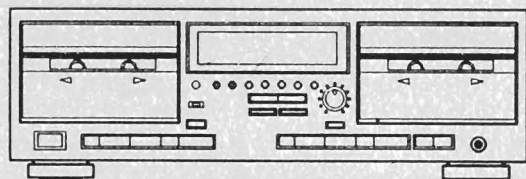


aiwa

AD-WX929 AD-WX828



AD-WX929



AD-WX828

STEREO CASSETTE DECK

• BASIC TAPE MECHANISM : α - 14MK II

• TYPE. HE,E,K

SPECIFICATIONS

Type	Stereo cassette tape deck	Output	PLAY/LINE OUT: 350 mV (0 VU)* Optimum load impedance 47 k Ω or more PHONES: 0.8 mW (load impedance 32 Ω , 0 VU)*
Track format	4 tracks, 2 channels	Outer dimensions	(W x H x D) AD-WX929: 430 x 140 x 317.5 mm AD-WX828: 430 x 140 x 317.5 mm
Power requirements	AD-WX929HE/AD-WX828HE AC 120/220/240V switchable, 50/60Hz AD-WX929E/AD-WX828E AC 230V, 50Hz AD-WX929K/AD-WX828K AC 240V, 50Hz	Weight	AD-WX929: 5.7 kg AD-WX828: 5.4 kg
Power consumption	23 W		
Frequency response	Metal tape: 20 - 18,000Hz -10^0 dB (-20dB Recording) CrO ₂ tape: 20 - 17,000Hz -10^0 dB (-20dB Recording) Normal tape: 20 - 16,000Hz -10^0 dB (-20dB Recording)		
Signal-to-noise ratio	78 dB (Dolby C NR ON above 5 kHz, metal tape, peak level)		
Wow and flutter	AD-WX929: 0.060 % (WRMS) AD-WX828: 0.065 % (WRMS)		
Recording system	AC bias		
Erasure system	AC erase		
Motor	DC motor x 2		
Playback/recording head	Permalloy head		
Erasure head	Double gap Ferrite head		
Input	REC/LINE IN: 50mV (input impedance 47 k Ω , 0 VU)*		

- Design and specifications are subject to change without notice.
- Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.
- "DOLBY", the double-D symbol $\square\square$ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

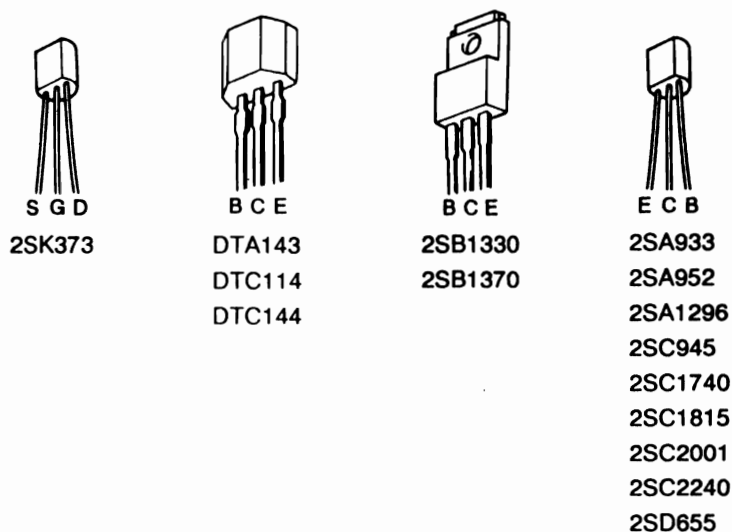
CAUTION WHEN SERVICING

If the tape transport mechanisms are in the following state, an abnormal sound may be heard when the power switch is turned on and the mechanisms may not operate. In this case, turn the power switch off and then on again. The mechanisms will operate normally. (The microprocessor will be reset.)

Case :The PLAY solenoids in both decks 1 and decks 2 have drifted down from the normal positions and also the FR solenoid in one deck has drifted down from the normal position.

Case :The FR solenoids in both decks 1 and decks 2 have drifted down from the normal positions and also the PLAY solenoid in one deck has drifted down from the normal position.

TRANSISTOR ILLUSTRATION



ACCESSORIES/PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
	1	★82-DW1-904-019	IB,EK (S)	※	1
	2	★82-DW1-030-019	RC - W101 (AD - WX929)	※	1
	3	★87-034-786-019	CORD PIN 189 - 0760		1
	4	★87-042-062-019	PLUG ADPTR S - I6115		1

3

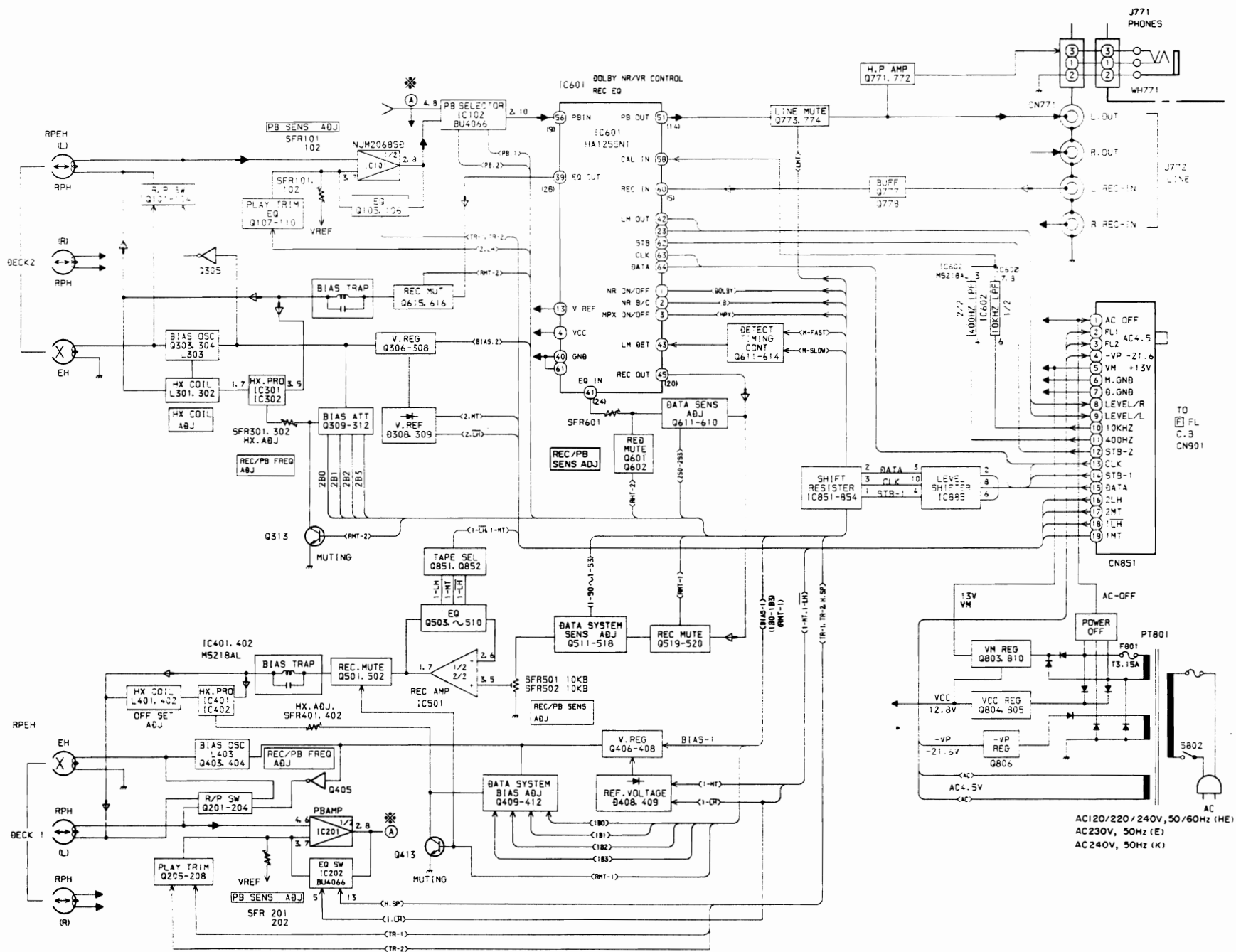
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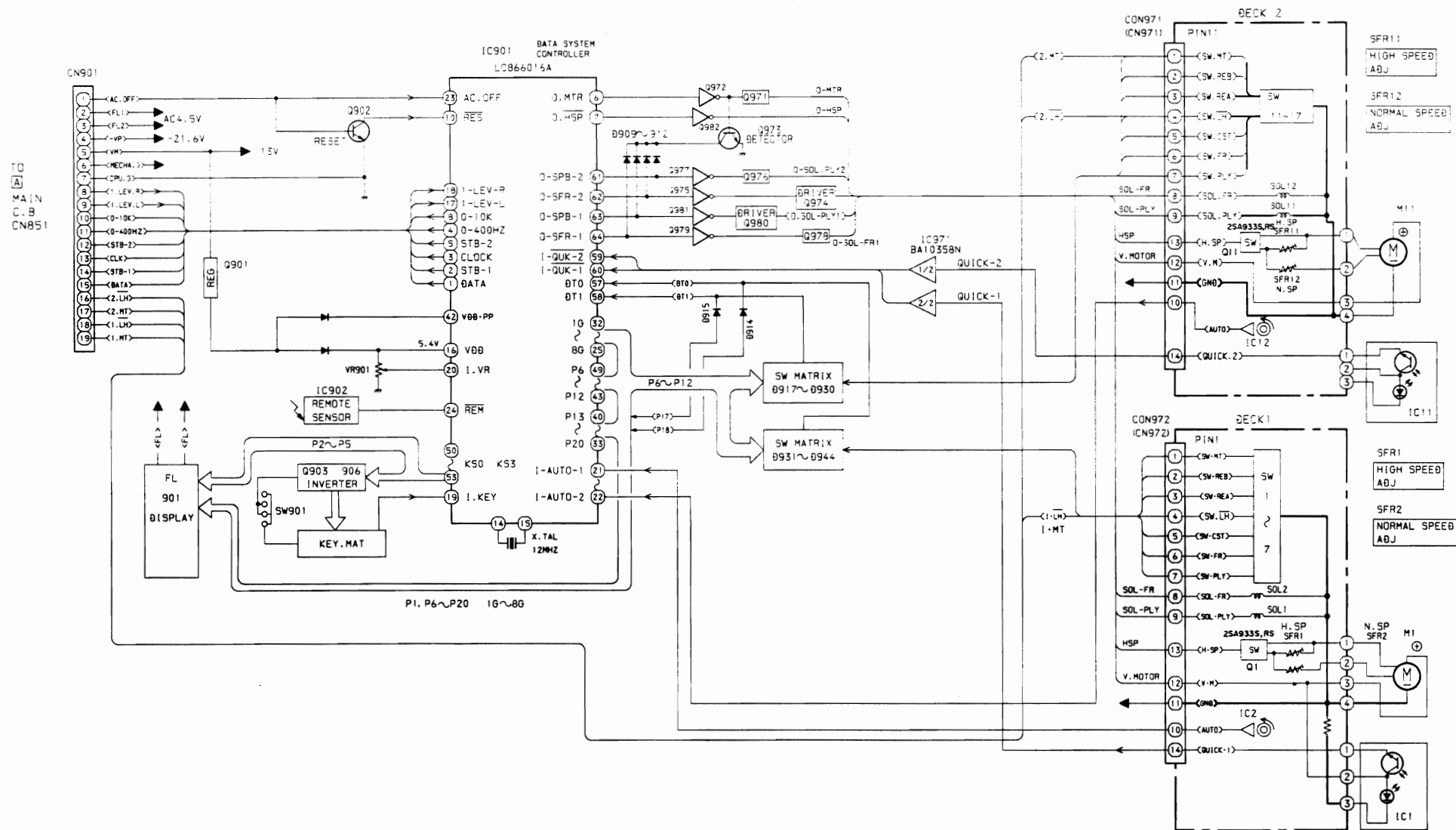
ELECTRICAL MAIN PARTS LIST - 2 (AD - WX828)

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
SFR1	★87-024-331-019	SFR, 5K	M1	87-045-348-019	MOT, SHW 2L 70(D1)
SFR2	★87-024-331-019	SFR, 5K	M11	87-045-348-019	MOT, SHW 2L 70(D2)
SOL1	★86-575-622-019	SOL ASSY (PLAY)	△PT801	82-DW1-621-019	PT, HE (HE)
SOL2	★86-575-622-019	SOL ASSY (FR)	△PT801	82-DW1-622-019	PT, E (E)
--- DECK-2 CIRCUIT BOARD SECTION ---					
S11	87-036-110-019	SW, PUSH (PLAY)	△PT801	82-DW1-623-019	PT, K (K)
S12	86-575-632-210	SW, FR (FR)	RPEH	87-046-392-019	HEAD, RPEH, HADKH5598A (D1)
S13	87-036-110-019	SW, PUSH (CST)	RPEH	87-046-392-019	HEAD, RPEH, HADKH5598A (D2)
S14	87-036-109-019	SW, PUSH (CRO2)			
S15	87-036-109-019	SW, PUSH (REA)			
S16	87-036-109-019	SW, PUSH (REB)			
S17	87-036-110-019	SW, PUSH (MT)			
SFR11	★87-024-331-019	SFR, 5K			
SFR12	★87-024-331-019	SFR, 5K			
SOL11	★86-575-622-019	SOL ASSY (PLAY)			
SOL12	★86-575-622-019	SOL ASSY (FR)			
--- FL CIRCUIT BOARD SECTION ---					
C901	★87-010-408-089	CAP, E 47-50 SME			
C902	★87-010-405-089	CAP, E 10-50 SME			
C903	★87-010-402-089	CAP, E 2.2-50 SME			
C904	★87-010-405-089	CAP, E 10-50 SME			
C905	★87-010-405-089	CAP, E 10-50 SME			
C908	★87-018-109-089	CAP, TC-U 22P-50 SL			
C909	★87-018-109-089	CAP, TC-U 22P-50 SL			
C910	★87-018-214-089	CAP, TC-U 0.1-50 F			
C911	★87-010-405-089	CAP, E 10-50 SME			
C912	★87-018-127-089	CAP, TC-U 470P-50 B			
C913	★87-010-252-089	CAP ELECT (TAPG) 1000-6.3V			
C971	★87-010-244-089	CAP, E 22-16 SL			
C972	★87-010-417-089	CAP, E 2.2-35 SL			
C973	★87-010-244-089	CAP, E 22-16 SL			
C974	★87-010-417-089	CAP, E 2.2-35 SL			
C975	★87-010-405-089	CAP, E 10-50 SME			
C978	★87-018-209-089	CAP, TC-U 0.1-50 F			
CF901	★87-030-264-089	CERA LOCK (MU) 12.0MHZ			
FL901	82-DW1-629-019	FL, BJ 108GK (DISPLAY)			
L901	87-003-098-089	C01L, 2.2UH			
S901	82-DW1-639-019	SW, SL SSSF013 (TIMER)			
VR901	★82-DW1-640-019	VR, 10KB RK11K1130 (REC LEVEL)			
--- RELAY-1 CIRCUIT BOARD SECTION ---					
--- RELAY-2 CIRCUIT BOARD SECTION ---					
--- SENSOR-1 CIRCUIT BOARD SECTION ---					
IC1	87-001-367-019	P-SNSR, SPI-315-05-CD			
--- SENSOR-2 CIRCUIT BOARD SECTION ---					
IC11	87-001-367-019	P-SNSR, SPI-315-05-CD			
--- POWER-1 CIRCUIT BOARD SECTION ---					
--- POWER-2 CIRCUIT BOARD SECTION ---					
--- MISCELLANEOUS ---					
△	★82-187-797-019	AC CORD (E) (HE, E)			
△	★82-187-796-019	AC CORD (BS) (K)			

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
--- IC ---					
	87-002-282-019	IC, BU4066B	C216	★87-010-405-089	CAP, E 10-50 SME
	87-002-444-019	IC, BU4094B	C217	★87-010-384-089	CAP, E 100-25 SME
	87-002-669-010	IC, GP 1U 571X (REMOTE SENSOR)	C218	★87-018-134-089	CAP, TC-U 0.01-16 Y
	87-002-932-010	IC, HA12155MT-01	C220	★87-018-134-089	CAP, TC-U 0.01-16 Y
	87-001-334-019	IC, LB 9051A	C221	★87-018-126-089	CAP, TC-U 390P-50 B
	82-DW1-630-010	IC, LC866016A-5300	C222	★87-018-123-089	CAP, TC-U 220P-50 B
	87-002-328-010	IC, ME218AL	C301	★87-018-123-089	CAP, TC-U 220P-50 B
	87-020-758-019	IC, NJM 2068 SD	C302	★87-018-123-089	CAP, TC-U 220P-50 B
	87-027-565-019	IC, TC4081BP	C303	★87-018-131-089	CAP, TC-U 1000P-50 B
--- TRANSISTOR ---					
	89-503-735-089	TR, FET 2SK373-GR (TPE2)	C304	★87-018-131-089	CAP, TC-U 1000P-50 B
	87-026-463-089	TR, 2SA933S (RS)	C309	★87-018-126-089	CAP, TC-U 390P-50 B
	89-109-521-089	TR, 2SA952K	C310	★87-018-126-089	CAP, TC-U 390P-50 B
	89-112-965-089	TR, 2SA1296GR	C313	★87-018-131-089	CAP, TC-U 1000P-50 B
	89-213-302-089	TR, 2SB1330Q	C314	★87-018-131-089	CAP, TC-U 1000P-50 B
	89-213-702-019	TR, 2SB1370E	C317	★87-010-260-089	CAP, E 47-25 SME
	87-026-462-089	TR, 2SC1740S (RS)	C318	★87-010-260-089	CAP, E 47-25 SME
	89-309-456-089	TR, 2SC945L P	C319	★87-018-131-089	CAP, TC-U 1000P-50 B
	89-318-155-089	TR, 2SC1815GR	C320	★87-014-081-089	PPCAP, 0.01J
	89-320-011-089	TR, 2SC2001K	C323	★87-018-201-089	CAP, TC-U 5600P-16 X
	89-322-406-089	TR, 2SC2240BL	C325	★87-010-248-089	CAP, E 220-10 SME
	89-406-555-089	TR, 2SD655E	C326	★87-010-401-089	CAP, E 1-50 SME
	87-026-288-089	TR, DTA143XS	C327	★87-010-401-089	CAP, E 1-50 SME
	87-026-464-089	TR, DTC114TS	C329	★87-010-405-089	CAP, E 10-50 SME
	87-026-215-089	TR, DTC114YS	C601	★87-018-121-089	CAP, TC-U 150P-50 B
	87-026-218-089	TR, DTC144ES	C602	★87-018-121-089	CAP, TC-U 150P-50 B
--- DIODE ---					
	87-001-783-089	DIODE, 1N4002-T	C603	★87-010-404-089	CAP, E 4.7-50 SME
	87-001-559-089	DIODE, 1SS131 (T-72)	C604	★87-010-404-089	CAP, E 4.7-50 SME
	87-020-465-089	DIODE, 1SS133 T-72	C605	★87-010-546-089	CAP, E 0.33-50 SME
	87-020-123-089	DIODE, DS446-AT (TA)	C606	★87-010-546-089	CAP, E 0.33-50 SME
	87-017-183-089	ZENER, HZS12A3L	C607	★87-010-402-089	CAP, E 2.2-50 SME
	87-017-143-089	ZENER, HZS22-2	C608	★87-010-402-089	CAP, E 2.2-50 SME
	87-001-636-089	ZENER, HZS3C1	C609	★87-010-401-089	CAP, E 1-50 SME
	87-001-936-089	ZENER, HZS7A3L	C610	★87-010-401-089	CAP, E 1-50 SME
	87-001-911-089	ZENER, UTZJ4.7A (TAPG)	C611	★87-018-132-089	CAP, TC-U 2200P-16 X
--- MAIN CIRCUIT BOARD SECTION ---					
C101	★87-018-121-089	CAP, TC-U 150P-50 B	C612	★87-018-132-089	CAP, TC-U 2200P-16 X
C102	★87-018-121-089	CAP, TC-U 150P-50 B	C613	★87-018-121-089	CAP, TC-U 150P-50 B
C103	★87-018-123-089	CAP, TC-U 220P-50 B			
C104	★87-018-123-089	CAP, TC-U 220P-50 B			
C109	★87-010-405-089	CAP, E 10-50 SME			
C110	★87-010-405-089	CAP, E 10-50 SME			
C111	★87-010-405-089	CAP, E 10-50 SME			
C112	★87-010-405-089	CAP, E 10-50 SME			
C117	★87-018-129-089	CAP, TC-U 680P-50 B			
C118	★87-018-129-089	CAP, TC-U 680P-50 B			
C119	★87-010-404-089	CAP, E 4.7-50 SME			
C120	★87-010-404-089	CAP, E 4.7-50 SME			
C121	★87-010-384-089	CAP, E 100-25 SME			
C122	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C124	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C125	★87-018-126-089	CAP, TC-U 390P-50 B			
C126	★87-018-123-089	CAP, TC-U 220P-50 B			
C203	★87-018-124-089	CAP, TC-U 270P-50 B			
C204	★87-018-124-089	CAP, TC-U 270P-50 B			
C213	★87-010-405-089	CAP, E 10-50 SME			
C214	★87-010-405-089	CAP, E 10-50 SME			
C215	★87-010-405-089	CAP, E 10-50 SME			
C216	★87-010-405-089	CAP, E 10-50 SME			
C217	★87-010-384-089	CAP, E 100-25 SME			
C218	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C220	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C221	★87-018-126-089	CAP, TC-U 390P-50 B			
C222	★87-018-123-089	CAP, TC-U 220P-50 B			
C301	★87-018-123-089	CAP, TC-U 220P-50 B			
C302	★87-018-123-089	CAP, TC-U 220P-50 B			
C303	★87-018-131-089	CAP, TC-U 1000P-50 B			
C304	★87-018-131-089	CAP, TC-U 1000P-50 B			
C309	★87-018-126-089	CAP, TC-U 390P-50 B			
C310	★87-018-126-089	CAP, TC-U 390P-50 B			
C313	★87-018-131-089	CAP, TC-U 1000P-50 B			
C314	★87-018-131-089	CAP, TC-U 1000P-50 B			
C317	★87-010-260-089	CAP, E 47-25 SME			
C318	★87-010-260-089	CAP, E 47-25 SME			
C319	★87-018-131-089	CAP, TC-U 1000P-50 B			
C320	★87-014-081-089	PPCAP, 0.01J			
C323	★87-018-201-089	CAP, TC-U 5600P-16 X			
C325	★87-010-248-089	CAP, E 220-10 SME			
C326	★87-010-401-089	CAP, E 1-50 SME			
C327	★87-010-401-089	CAP, E 1-50 SME			
C329	★87-010-405-089	CAP, E 10-50 SME			
C601	★87-018-121-089	CAP, TC-U 150P-50 B			
C602	★87-018-121-089	CAP, TC-U 150P-50 B			
C603	★87-010-404-089	CAP, E 4.7-50 SME			
C604	★87-010-404-089	CAP, E 4.7-50 SME			
C605	★87-010-546-089	CAP, E 0.33-50 SME			
C606	★87-010-546-089	CAP, E 0.33-50 SME			
C607	★87-010-402-089	CAP, E 2.2-50 SME			
C608	★87-010-402-089	CAP, E 2.2-50 SME			
C609	★87-010-401-089	CAP, E 1-50 SME			
C610	★87-010-401-089	CAP, E 1-50 SME			
C611	★87-018-132-089	CAP, TC-U 2200P-16 X			
C612	★87-018-132-089	CAP, TC-U 2200P-16 X			
C613	★87-018-121-089	CAP, TC-U 150P-50 B			
C614	★87-018-121-089	CAP, TC-U 150P-50 B			
C615	★87-010-404-089	CAP, E 4.7-50 SME			
C616	★87-010-404-089	CAP, E 4.7-50 SME			
C627	★87-010-404-089	CAP, E 4.7-50 SME			
C628	★87-010-404-089	CAP, E 4.7-50 SME			
C631	★87-010-401-089	CAP, E 1-50 SME			
C632	★87-010-401-089	CAP, E 1-50 SME			
C633	★87-010-405-089	CAP, E 10-50 SME			
C634	★87-010-401-089	CAP, E 1-50 SME			
C636	★87-018-119-089	CAP, TC-U 100P-50 B			
C638	★87-018-195-089	CAP, TC-U 1200P-16 X			
C643	★87-010-405-089	CAP, E 10-50 SME			
C644	★87-010-370-089	CAP, E 330-6.3 SME			
C645	★87-010-401-089	CAP, E 1-50 SME			
C646	★87-010-401-089	CAP, E 1-50 SME			
C647	★87-010-401-089	CAP, E 1-50 SME			
C648	★87-018-121-089	CAP, TC-U 150P-50 B			
C649	★87-018-121-089	CAP, TC-U 150P-50 B			
C650	★87-018-121-089	CAP, TC-U 150P-50 B			
C651	★87-010-401-089	CAP, E 1-50 SME			
C652	★87-010-405-089	CAP, E 10-50 SME			
C653	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C654	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C671	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C672	★87-018-134-089	CAP, TC-U 0.01-16 Y			
C771	★87-010-401-089	CAP, E 1-50 SME			
C772	★87-010-401-089	CAP, E 1-50 SME			
C773	★87-010-263-089	CAP, E 100-10			

BLOCK DIAGRAM (AD - WX929)





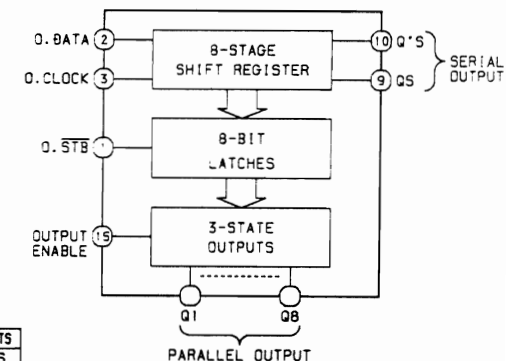
REF. NO.	PART NO.	DESCRIPTION
C774	★87-010-263-089	CAP. E 100-10
C775	★87-010-401-089	CAP. E 1-50 SME
C776	★87-010-401-089	CAP. E 1-50 SME
C778	★87-018-134-089	CAP. TC-U 0.01-16 Y
C779	★87-010-401-089	CAP. E 1-50 SME
C780	★87-010-401-089	CAP. E 1-50 SME
△C801	★87-010-453-099	CAP ELECT 4700-25V SME
△C802	★87-010-389-099	CAP ELECT 2200-25V SME
C803	★87-010-247-089	CAP. E 100-50 SME
C804	★87-010-405-089	CAP. E 10-50 SME
C805	★87-010-382-089	CAP. E 22-25 SME
C806	★87-010-235-089	CAP. E 470-16 SME
C807	★87-010-401-089	CAP. E 1-50 SME
C808	★87-010-235-089	CAP. E 470-16 SME
C809	★87-010-370-089	CAP. E 330-6.3 SME
C810	★87-019-112-019	CAP. SG 0.01 E
C851	★87-010-405-089	CAP. E 10-50 SME
C852	★87-010-248-089	CAP. E 220-10 SME
C857	★87-018-134-089	CAP. TC-U 0.01-16 Y
△F801	87-035-366-019	FUSE 2.5A 250V T E/K
J772	★87-009-394-019	JACK PIN 4P EARTH(LINE IN/OUT)
L301	★80-DS4-618-010	COIL HX85K-4
L302	★80-DS4-618-010	COIL HX85K-4
L303	80-DS4-617-010	COIL OSC 85K-4
L601	★80-DS2-611-019	FLTR. MPX 85K-CAN
L602	★80-DS2-611-019	FLTR. MPX 85K-CAN
L603	★82-231-622-080	COIL. 22MH-J
L604	★82-231-622-080	COIL. 22MH-J
△S801	★87-036-015-019	AC SW SDDLI (POWER)
△S802	87-036-136-019	SW ROTARY 1-1-3 H B1 (AC VOLTAGE)
SFR101	★87-024-168-089	SFR. 1K DIA6 V
SFR102	★87-024-168-089	SFR. 1K DIA6 V
SFR201	★87-024-168-089	SFR. 1K DIA6 V
SFR202	★87-024-168-089	SFR. 1K DIA6 V
SFR301	★87-024-176-089	SFR. 100K DIA6 V
SFR302	★87-024-176-089	SFR. 100K DIA6 V
SFR601	★87-024-175-089	SFR. 47K DIA6 V
SFR602	★87-024-175-089	SFR. 47K DIA6 V
--- FRONT CIRCUIT BOARD SECTION ---		
S902	87-036-170-089	SW. TACT (STOP) (D1)
S903	87-036-170-089	SW. TACT (STOP) (D2)
S904	87-036-170-089	SW. TACT (SYNC DUBB HIGH)
S906	87-036-170-089	SW. TACT (PLAY) (D1)
S907	87-036-170-089	SW. TACT (PLAY) (D2)
S908	87-036-170-089	SW. TACT (SYNC DUBB NORMAL)
S910	87-036-170-089	SW. TACT (PLAY) (D1)
S911	87-036-170-089	SW. TACT (PLAY) (D2)
S912	87-036-170-089	SW. TACT (DATA SYSTEM) (D2)
S913	87-036-170-089	SW. TACT (REC FADER)
S914	87-036-170-089	SW. TACT (MS) (D1)
S915	87-036-170-089	SW. TACT (MS) (D2)
S916	87-036-170-089	SW. TACT (LAP TIME)
S917	87-036-170-089	SW. TACT (REPEAT/BLANK SKIP)
S918	87-036-170-089	SW. TACT (MS) (D1)
S919	87-036-170-089	SW. TACT (MS) (D2)
S920	87-036-170-089	SW. TACT (DOLBY NR)
S921	87-036-170-089	SW. TACT (REV. MODE)
S922	87-036-170-089	SW. TACT (REC/REC MUTE) (D2)
S923	87-036-170-089	SW. TACT (PAUSE) (D2)
S924	87-036-170-089	SW. TACT (COUNTER RESET) (D1)
S925	87-036-170-089	SW. TACT (COUNTER RESET) (D2)
--- JACK CIRCUIT BOARD SECTION ---		

REF. NO.	PART NO.	DESCRIPTION
C777	★87-018-134-089	CAP. TC-U 0.01-16 Y
J771	★87-009-355-019	JACK. 6.3 GLD HLJ1520 (PHONES)
--- DECK-1 CIRCUIT BOARD SECTION ---		
S1	87-036-110-019	SW. PUSH (PLAY)
S2	86-575-632-210	SW. FR (FR)
S3	87-036-110-019	SW. PUSH (CST)
S4	87-036-110-019	SW. PUSH (CRO2)
SFR1	★87-024-331-019	SFR. 5K
SFR2	★87-024-331-019	SFR. 5K
SOL1	★86-575-622-019	SOL ASSY (PLAY)
SOL2	★86-575-622-019	SOL ASSY (FR)
--- DECK-2 CIRCUIT BOARD SECTION ---		
S11	87-036-110-019	SW. PUSH (PLAY)
S12	86-575-632-210	SW. FR (FR)
S13	87-036-110-019	SW. PUSH (CST)
S14	87-036-110-019	SW. PUSH (CRO2)
S15	87-036-109-019	SW. PUSH (REA)
S16	87-036-110-019	SW. PUSH (REB)
S17	87-036-110-019	SW. PUSH (MT)
SFR11	★87-024-331-019	SFR. 5K
SFR12	★87-024-331-019	SFR. 5K
SOL11	★86-575-622-019	SOL ASSY (PLAY)
SOL12	★86-575-622-019	SOL ASSY (FR)
--- FL CIRCUIT BOARD SECTION ---		
C901	★87-010-408-089	CAP. E 47-50 SME
C902	★87-010-405-089	CAP. E 10-50 SME
C903	★87-010-402-089	CAP. E 2.2-50 SME
C904	★87-010-405-089	CAP. E 10-50 SME
C905	★87-010-405-089	CAP. E 10-50 SME
C908	★87-018-109-089	CAP. TC-U 22P-50 SL
C909	★87-018-109-089	CAP. TC-U 22P-50 SL
C910	★87-018-209-089	CAP. TC-U 0.1-50 B
C911	★87-010-405-089	CAP. E 10-50 SME
C912	★87-018-127-089	CAP. TC-U 470P-50 B
C913	★87-010-252-089	CAP ELECT (TAPG) 1000-6.3V
C975	★87-010-405-089	CAP. E 10-50 SME
C976	★87-018-209-080	CAP. TC-U 0.1-50F
C977	★87-018-209-08	CAP. TC-U 0.1-50F
C978	★87-018-209-08	CAP. TC-U 0.1-50F
CF901	★87-030-264-089	CERA LOCK (MU) 12.0MHZ
FL901	82-DW1-629-019	FL. BJ 108GK (DISPLAY)
L901	87-003-098-089	COIL. 2.2UH
S901	82-DW1-639-019	SW. SL SSSF013 (TIMER)
VRS01	★82-DW1-640-019	VR. 10KB RK11K1130 (REC LEVEL)
--- RELAY-1 CIRCUIT BOARD SECTION ---		
--- RELAY-2 CIRCUIT BOARD SECTION ---		
--- POWER-1 CIRCUIT BOARD SECTION ---		
--- POWER-2 CIRCUIT BOARD SECTION ---		
--- MISCELLANEOUS ---		
△	★82-187-797-019	AC CORD (E) (HE, E)

REF. NO.	PART NO.	DESCRIPTION
△	★82-187-796-019	AC CORD (BS) (K)
M1	87-045-348-019	MOT. SHW 2L 70 (D1)
M11	87-045-348-019	MOT. SHW 2L 70 (D2)
PH	87-046-391-019	HEAD. PH HADKH2542A (D1)
△PT801	82-DW2-621-019	PT. HE (S) (HE)
△PT801	82-DW2-618-019	PT. E (S) (E)
△PT801	82-DW2-619-010	PT. K (S) (K)
RPEH	87-046-390-019	HEAD. RPEH. HADKH5597A (D2)

IC BLOCK DIAGRAM - 1

IC, BU4094B



IC, BU4094B

TRUTH TABLE

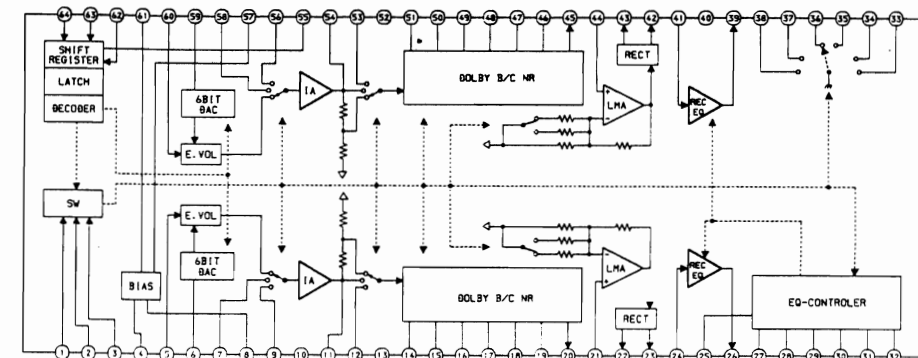
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Q5	Q'S
L	L	x	x	Z	Z	Q7	NO CHG.
L	L	x	x	Z	Z	Q7	Q5
L	H	L	x	NO CHG.	NO CHG.	Q7	NO CHG.
L	H	H	L	L	Qn-1	Q7	NO CHG.
L	H	H	H	H	Qn-1	Q7	NO CHG.
L	H	x	x	NO CHG.	NO CHG.	NO CHG.	Q5

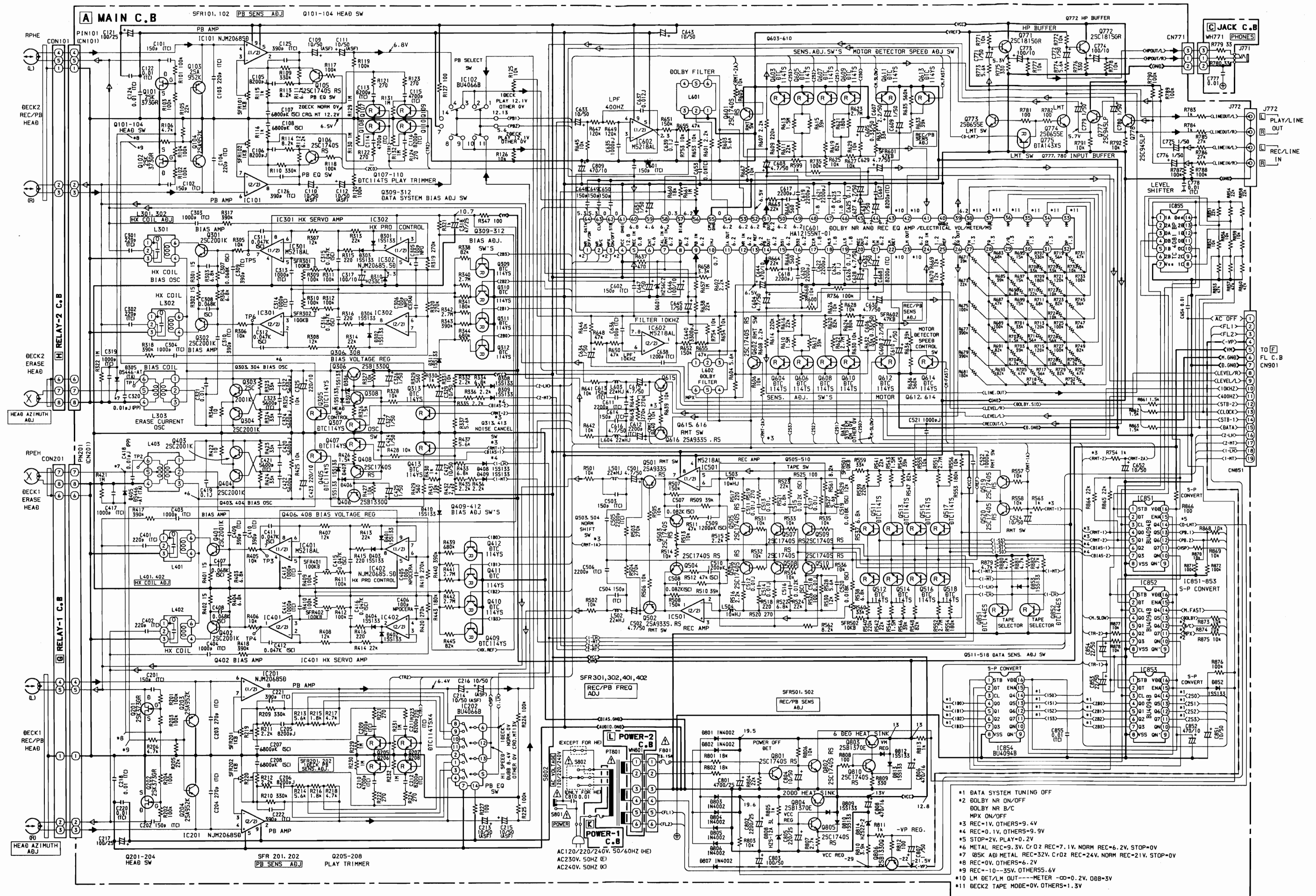
Z = HIGH IMPEADANCE

x = DON'T CARE

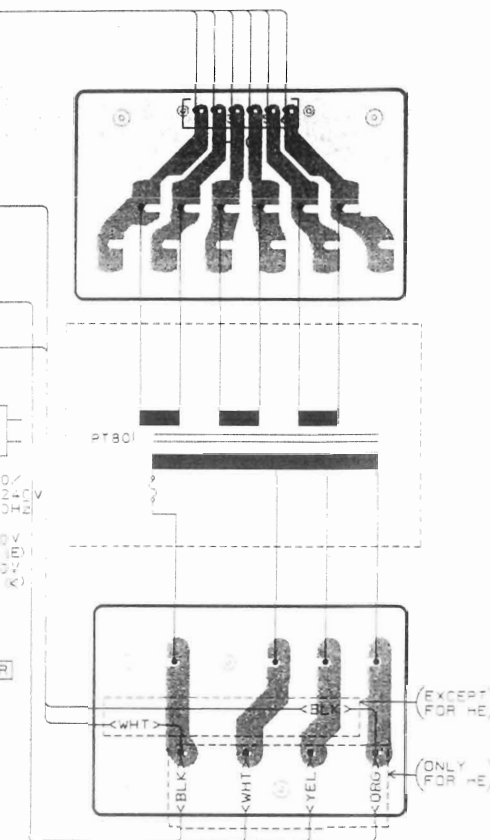
Q1: 0.00LBY ON
Q2: 0.00LBY C
Q3: 0.EXT. REC
Q4: 0.INT. REC
Q5: 0.PLAY
Q6: 0.PB2
Q7: 0.LEB
Q8: 0.RMT

IC, HA12155NT - 01



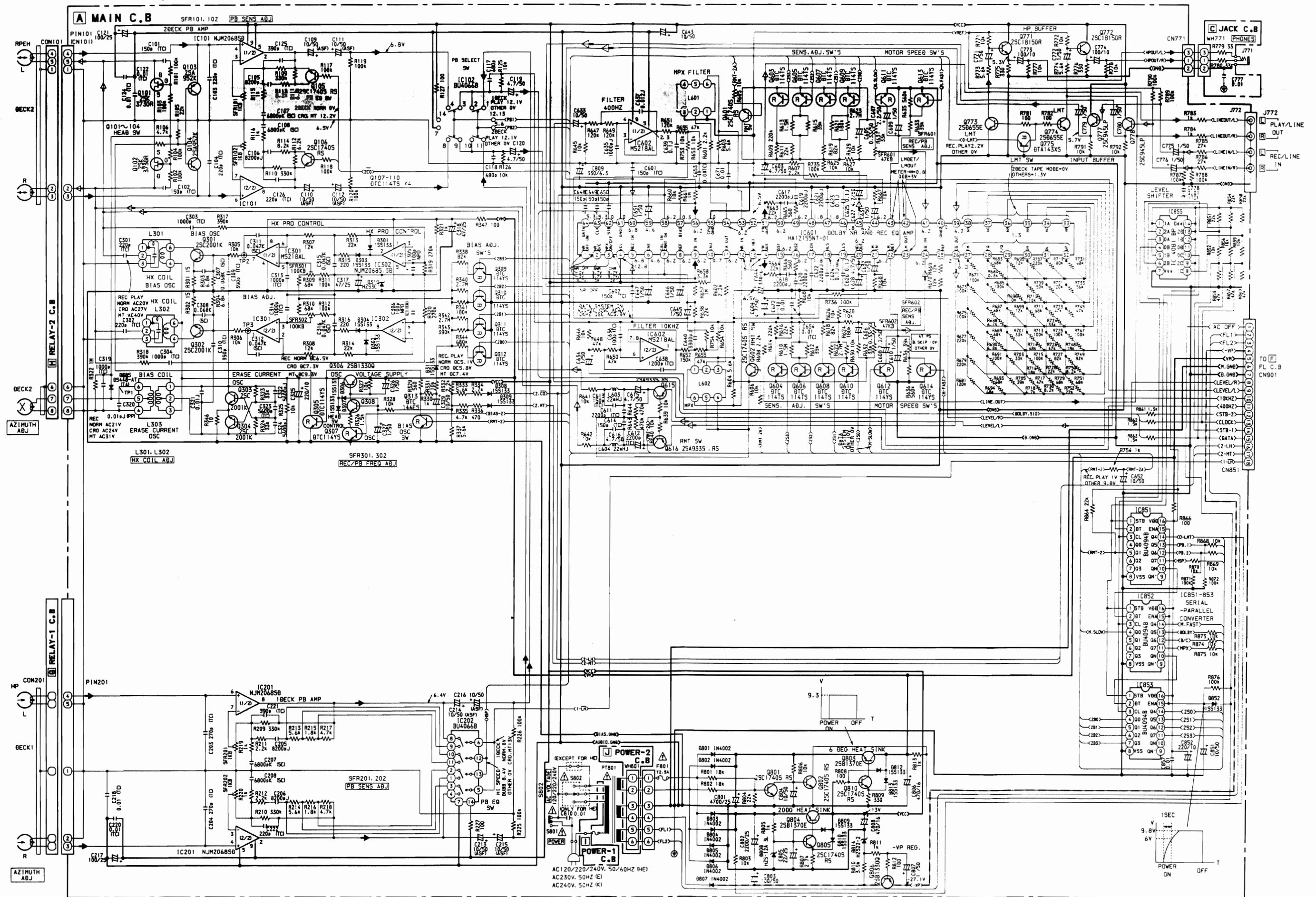


PIN 20
↑
8
FROM RELAY C.
CON 2

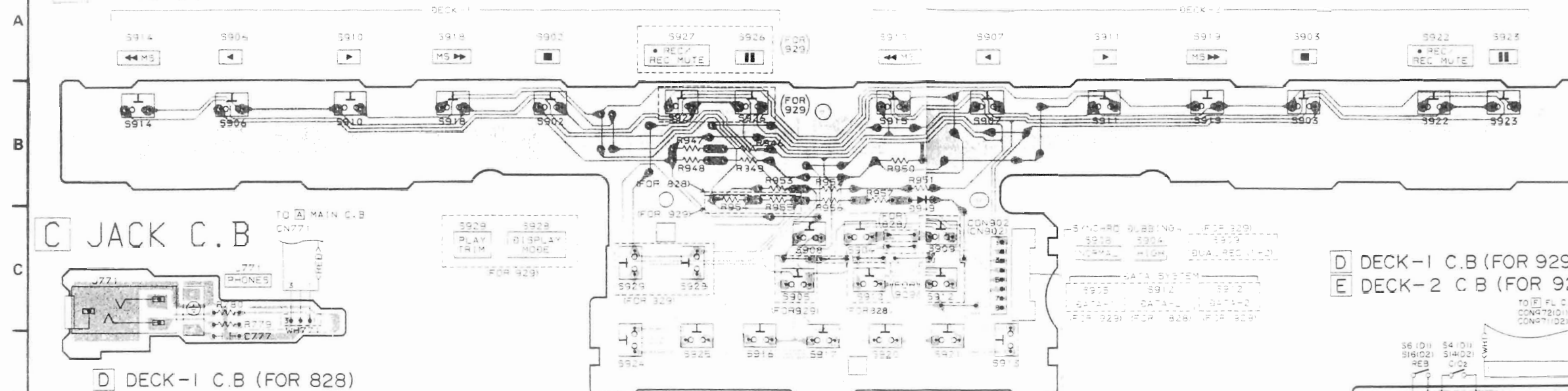


15

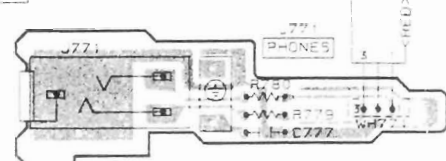




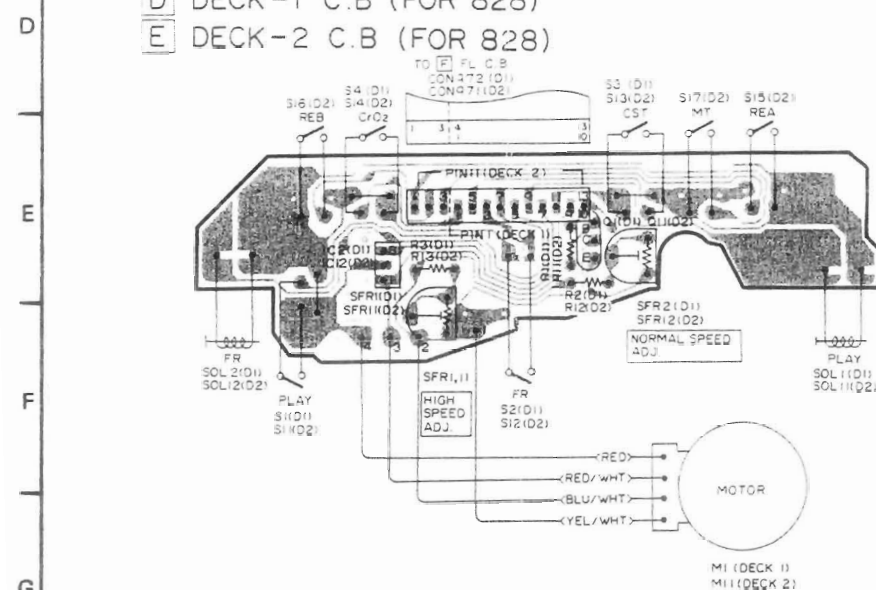
B FRONT C.B



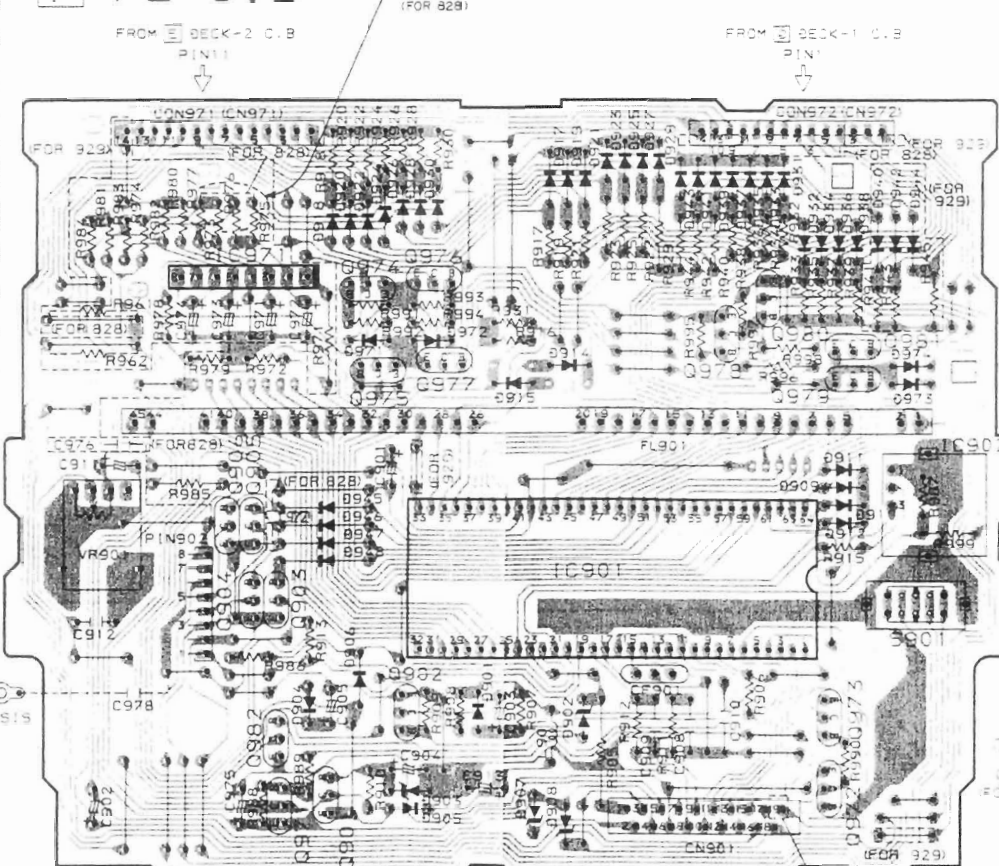
☐ JACK C.B



☐ D DECK-1 C.B (FOR 828)



F FL C.B

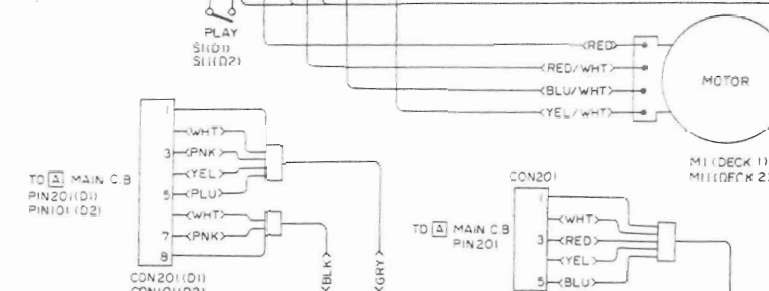
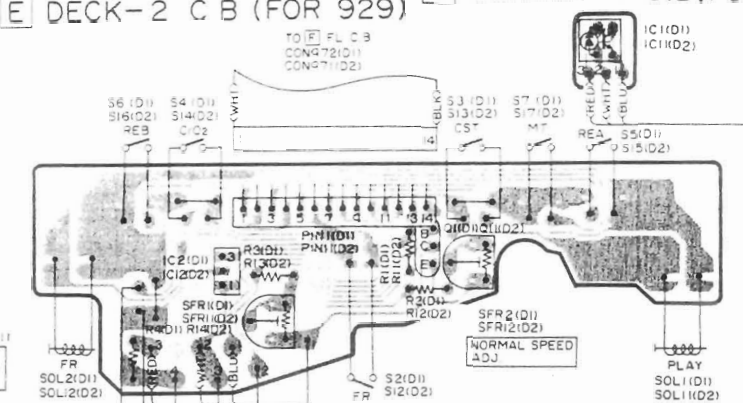


FROM [A] MAIN C
CHBSI

21

22

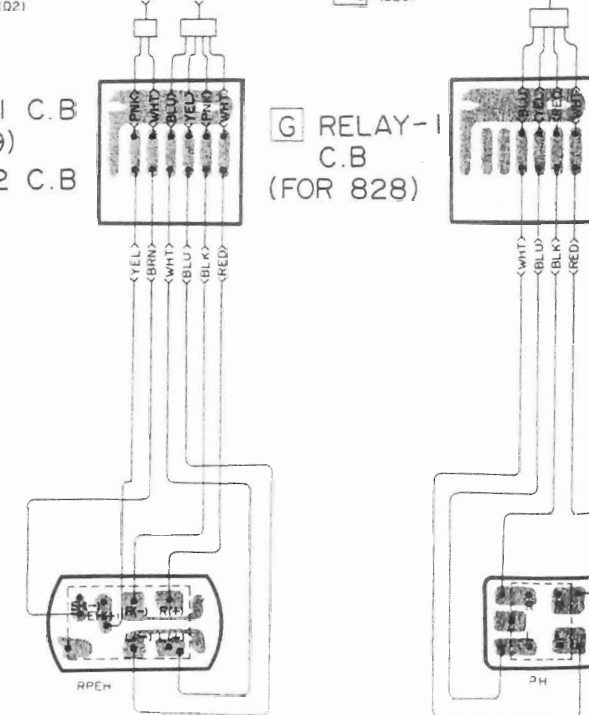
D DECK-1 C.B (FOR 929) I SENSOR-1 C.B (FOR 929)
E DECK-2 C.B (FOR 929) J SENSOR-1 C.B (FOR 929)

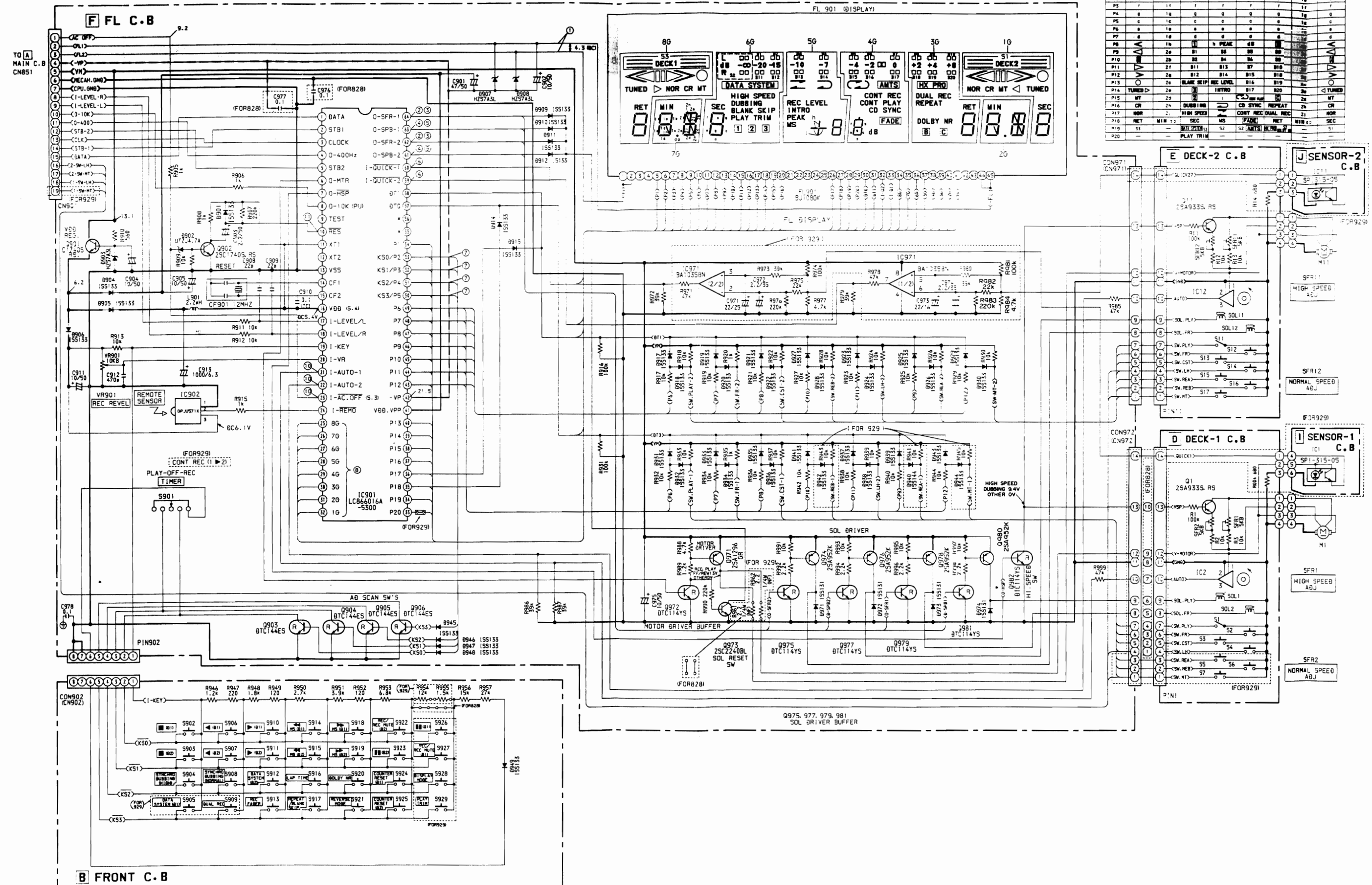


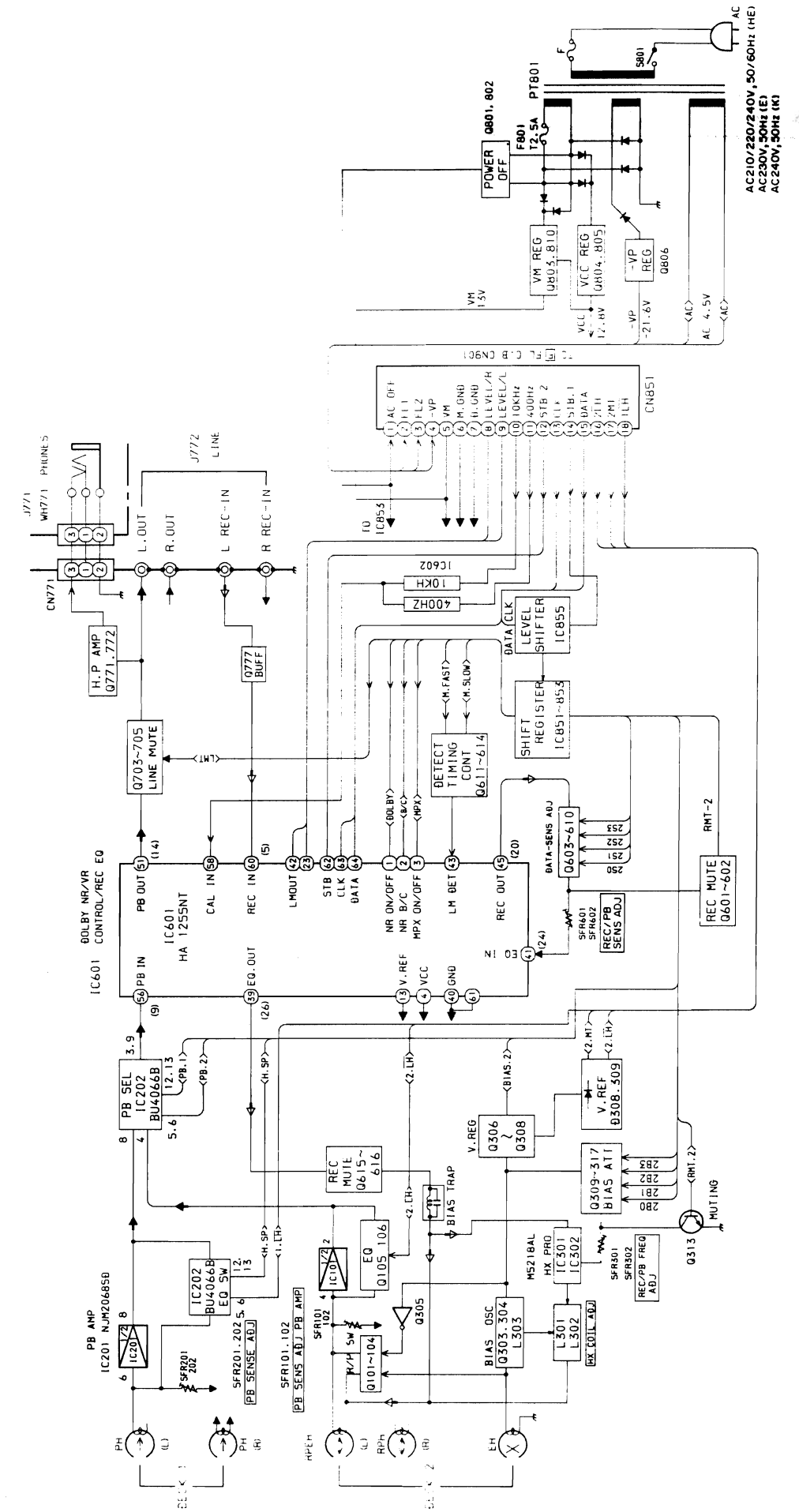
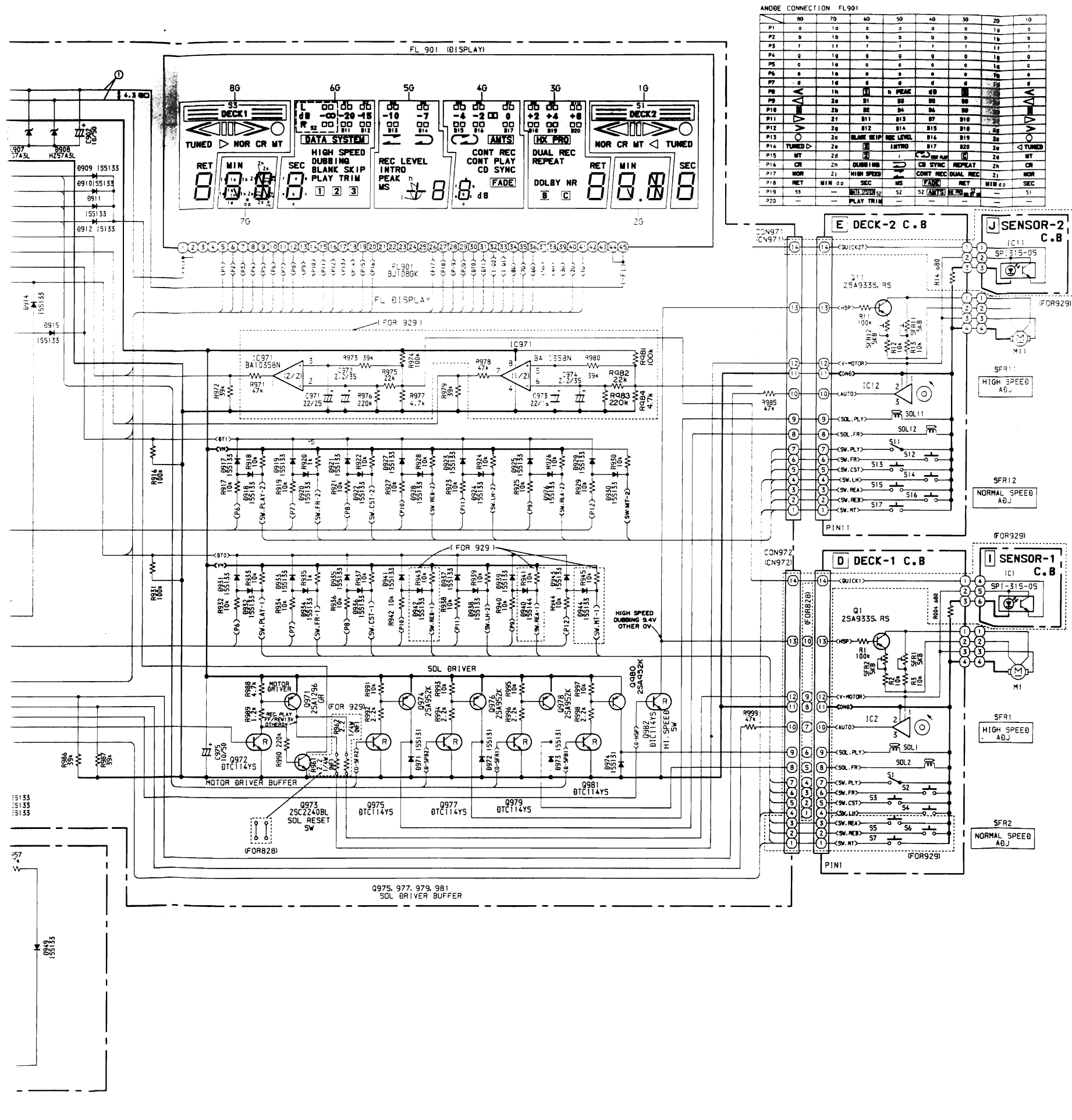
☐ G RELAY-1 C.B.
(FOR 929)

☐ H RELAY-2 C.B.

G RELAY-1
C.B
(FOR 828)







IC DESCRIPTION

IC, LC866016A – 5300

Pin No.	Pin Name	I/O	Description
1	DATA	O	Serial data output.
2	STB1	O	Strobe output (for shift register).
3	CLOCK	O	Data clock output.
4	0 – 400Hz	O	400Hz oscillation output for data system.
5	STB2	O	Strobe output (for Dolby IC).
6	O – MTR	O	Mechanism motor control output.
7	$\overline{O} - \text{HSP}$	O	Motor speed switching output.
8	O – 10kHz	O	10kHz oscillation output for data system.
9	TEST1	–	System test pin, not connected.
10	$\overline{\text{RES}}$	I	System reset pin.
11	XT1	O	Sub-clock pin, connected to VDD.
12	XT2	I	Sub-clock pin, not connected.
13	VSS	–	System power supply pin, connected to GND.
14	CF1	O	System clock pins. A 12MHz ceramic clock oscillator is connected.
15	CF2	I	
16	VDD	–	System power supply pin, connected to +5V.
17	I – LEVEL • L	I	Lch meter input. AD converted to 8 bits internally.
18	I – LEVEL • R	I	Rch meter input. AD converted to 8 bits internally.
19	I – KEY	I	AD key scan input.
20	I – VR	I	Volume level detection.
21	I – AUTO1	I	Reel disk rotation pulse inputs for counter.
22	I – AUTO2	I	
23	$\overline{\text{I}} - \text{AC} \cdot \overline{\text{OFF}}$	I	Power off detection input.
24	$\overline{\text{I}} - \text{REMO}$	I	Serial data input for remote control.
25	G8	O	Grid outputs to drive the FL display. Lights at "H".
26	G7	O	
27	G6	O	
28	G5	O	
29	G4	O	
30	G3	O	
31	G2	O	
32	G1	O	

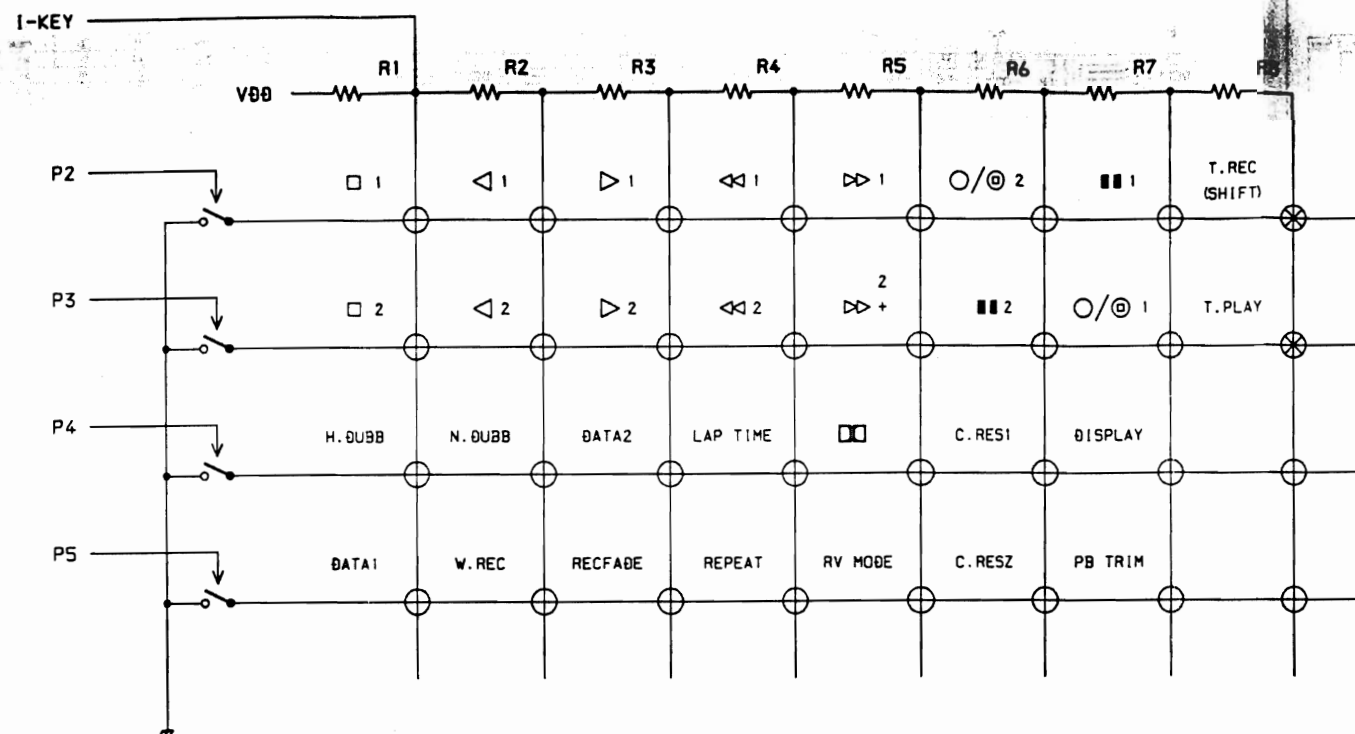
Pin No.	Pin Name	I/O	Description
33	P20	O	Segment outputs to drive the FL display. Lights at "H". P17 – P20 are also used to scan the operation mode during initialization.
34	P19	O	
35	P18	O	
36	P17	O	
37	P16	O	
38	P15	O	
39	P14	O	
40	P13	O	
41	VDDVPP	–	Power supply of FL display drive outputs. Connected to 5V.
42	VP	–	Negative power supply for pull-down resistors. – 27V is connected.
43	P12	O	Segment outputs to drive the FL display. Lights at "H". P2 – P12 are also used as the SW scan and AD scan outputs.
44	P11	O	
45	P10	O	
46	P9	O	
47	P8	O	
48	P7	O	
49	P6	O	
50	P5	O	
51	P4	O	
52	P3	O	
53	P2	O	
54	P1	O	
55	NC	–	Not used.
56	NC	–	
57	DT0	I	SW scan inputs.
58	DT1	I	
59	I – QUICK1	I	Quick sensor inputs.
60	I – QUICK2	I	
61	O – SOL • PL2	O	Outputs to control the plunger driver in the mechanism. The plunger is attracted at "H".
62	O – SOL • FR2	O	
63	O – SOL • PL1	O	
64	O – SOL • FR1	O	

Note : The initial output of P6 and P61 – P64 are set to "L" and others to "H" when reset.

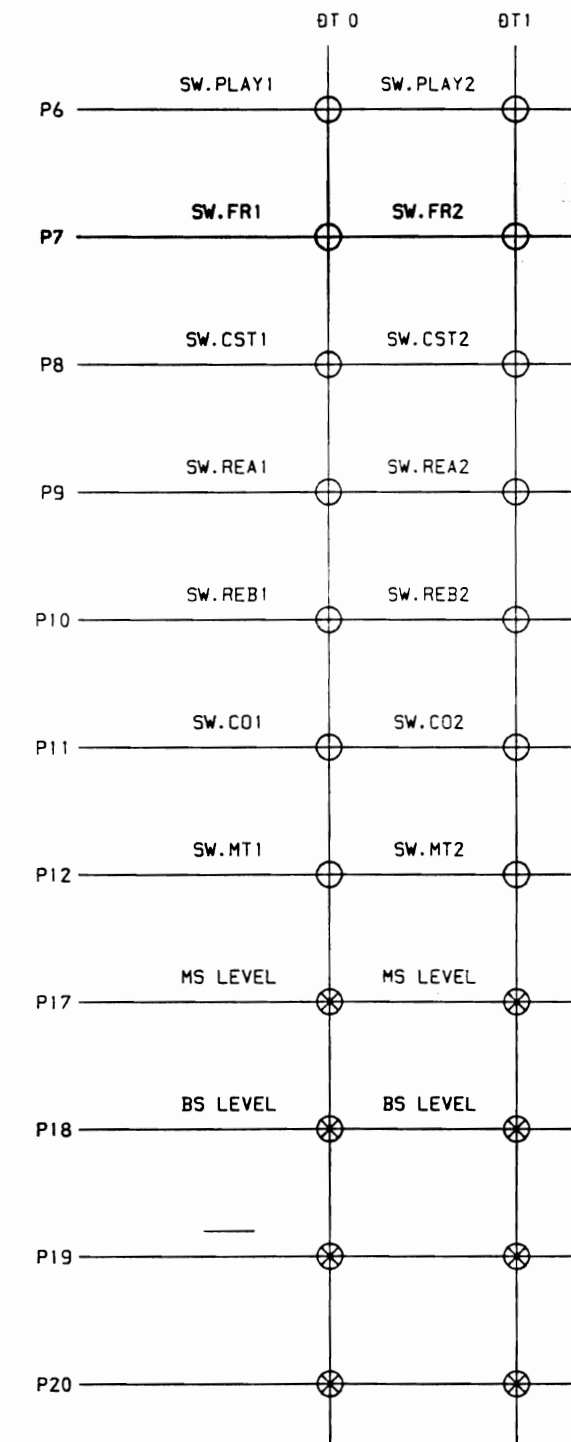
KEY MATRIX

IC, LC866016A - 5300

KSCAN-AD MATRIX

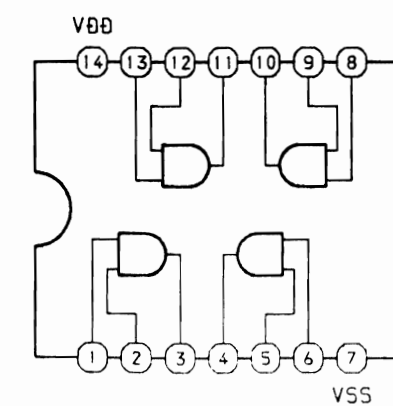


SEGMENT SCAN MATRIX

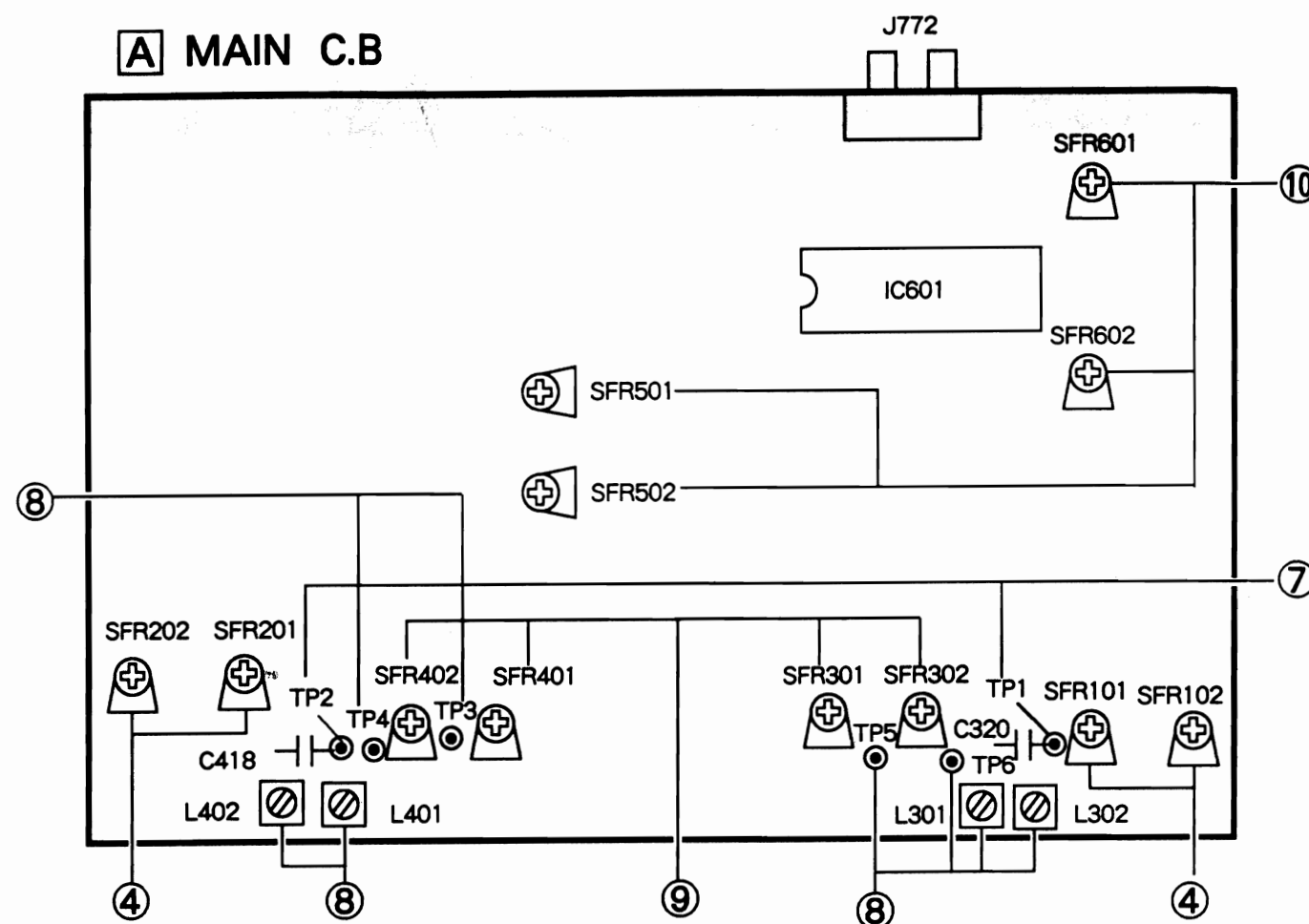


IC BLOCK DIAGRAM - 2

IC, TC4081BP

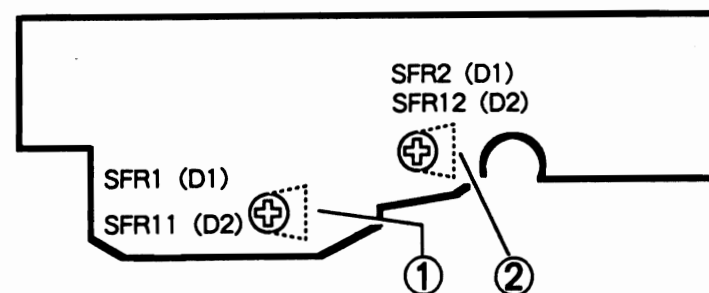


ADJUSTMENT - 1 (AD - WX929)
< DECK SECTION >



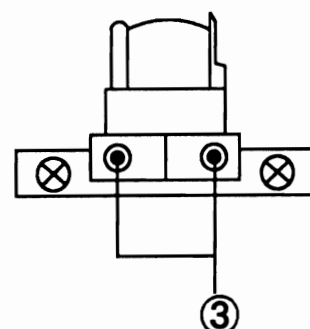
D DECK - 1 C.B

E DECK - 2 C.B



(TOP VIEW)

(DECK1, 2) R/P/E HEAD



1. High Speed Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA - 100 (TTA - 111S)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR1 (DECK1)
SFR11 (DECK2)

Method : Play back the test tape, and adjust for $5980 \pm 20\text{Hz}$.

2. Normal Speed Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA - 100 (TTA - 111S)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR2 (DECK1)
SFR12 (DECK2)

Method : Play back the test tape, adjust for 3000Hz.

3. Head Azimuth Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA - 300 (TTA - 317E)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : Head azimuth
adjustment screw

Method : Play back the 10kHz signal of test tape and adjust so that the output is maximum and the waveforms in the lissajours are in phase.

4. PB Sensitivity Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA - 200 (TTA - 161)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR201 (DECK1, Lch)
SFR202 (DECK1, Rch)
SFR101 (DECK2, Lch)
SFR102 (DECK2, Rch)

Method : Play back the test tape, and adjust SFR so that the output level of the test point is 480mV.

5. PB Frequency Response Check (DECK1, DECK2)

Settings : • Test tape : TTA - 300 (TTA - 317E)
• Test point : LINE OUT (PIN JACK)

• Method : Play back the 315Hz and 10kHz signals of the test tape and check the output of the 10kHz signal is $0\text{dB} \pm 2\text{dB}$ with respect to that of the 315Hz signal.

6. Level Meter Check (DECK1, DECK2)

Settings : • Test tape : TTA - 200 (TTA - 161)
Method : Play back the test tape, and check that the reading of the level meter is light on -4dB. After check the FL goer out the level by +2dB.

7. Bias Frequency Check (DECK1, DECK2)

Settings : • Test tape : TTA - 630
• Test point : TP1, TP2
Method : Set to the record mode, and check so that the frequency counter of the test point reads $85\text{kHz} \pm 3\text{kHz}$.

8. HX Coil Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA - 630
• Test point : TP3, TP4, TP5, TP6
• Adjustment Location : (DECK1)
L401 (Lch), L402 (Rch)
(DECK2)
L301 (Lch), L302 (Rch)

Method : Adjust L401, L402 and L301, L302 so that the DC voltage at the test points is minimum in the record mode.

9. REC/PB Frequency Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA - 601 (TTA - 630)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : (DECK1)
SFR401 (Lch)
SFR402 (Rch)
(DECK2)
SFR301 (Lch)
SFR302 (Rch)

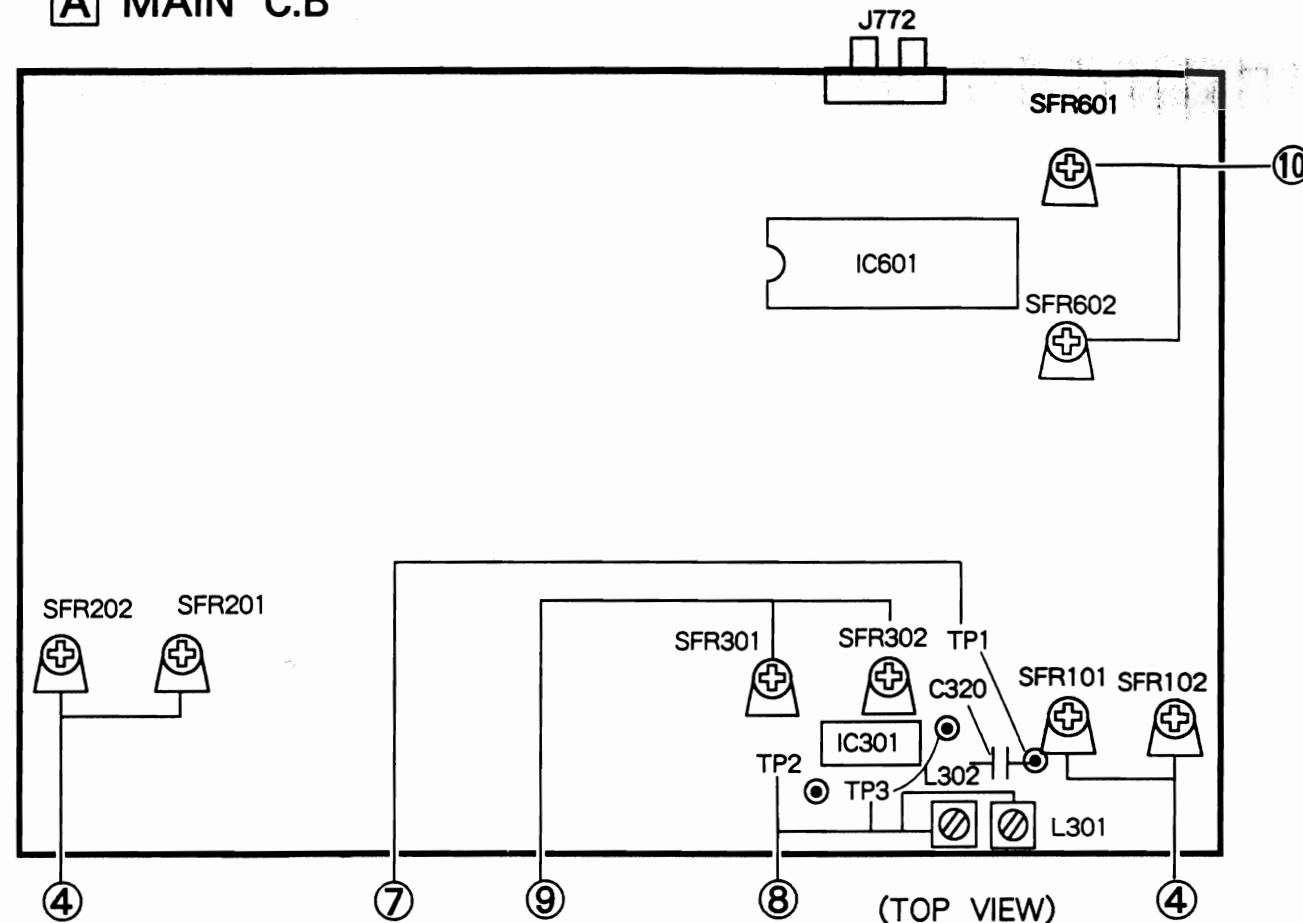
Method : Apply a 1kHz signal and adjust REC LEVEL VR attenuator so that the output level at the LINE OUT jack is 48mV. Record and playback the 1kHz and 10kHz signals and adjust so that the output of the 10kHz signal is $0\text{dB} \pm 0.5\text{dB}$ with respect to that of the 1kHz signal.

10. REC/PB Sensitivity Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA - 601 (TTA - 630)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : (DECK1)
SFR501 (Lch)
SFR502 (Rch)
(DECK2)
SFR601 (Lch)
SFR602 (Rch)

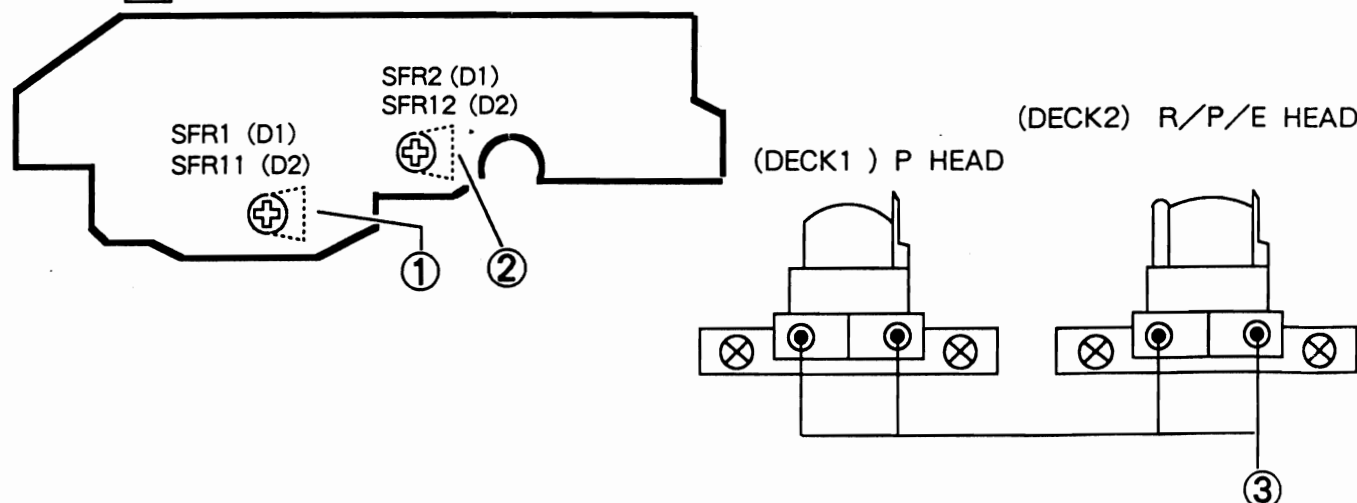
Method : Apply a 1kHz signal and adjust REC LEVEL VR so that the output level at the LINE OUT is 48mV. Record and playback the 1kHz signal and adjust so that the output is $48\text{mV} \pm 0.5\text{dB}$.

A MAIN C.B



D DECK - 1 C.B

E DECK - 2 C.B



1. High Speed Adjustment (DECK1, DECK2)
Settings : • Test tape : TTA - 100 (TTA - 111S)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR1 (DECK1)
SFR11 (DECK2)
Method : Play back the test tape, and adjust for $5980 \pm 20\text{Hz}$.
2. Normal Speed Adjustment (DECK1, DECK2)
Settings : • Test tape : TTA - 100 (TTA - 111S)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR2 (DECK1)
SFR12 (DECK2)
Method : Play back the test tape, adjust for 3000Hz .
3. Head Azimuth Adjustment (DECK1, DECK2)
Settings : • Test tape : TTA - 300 (TTA - 317E)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : Head azimuth adjustment screw
Method : Play back the 10kHz signal of test tape and adjust so that the output is maximum and the waveforms in the lissajours are in phase.
4. PB Sensitivity Adjustment (DECK1, DECK2)
Settings : • Test tape : TTA - 200 (TTA - 161)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR201 (DECK1, Lch)
SFR202 (DECK1, Rch)
SFR101 (DECK2, Lch)
SFR102 (DECK2, Rch)
Method : Play back the test tape, and adjust SFR so that the output level of the test point is 480mV .
5. PB Frequency Response Check (DECK1, DECK2)
Settings : • Test tape : TTA - 300 (TTA - 317E)
• Test point : LINE OUT (PIN JACK)
Method : Play back the 315Hz and 10kHz signals of the test tape and check the output of the 10kHz signal is $0\text{dB} \pm 2\text{dB}$ with respect to that of the 315Hz signal.
6. Level Meter Check (DECK1, DECK2)
Settings : • Test tape : TTA - 200 (TTA - 161)
Method : Play back the test tape, and check that the reading of the level meter is light on -2dB .
7. Bias Frequency Check (DECK2)
Settings : • Test tape : TTA - 630
• Test point : TP1
Method : Set to the record mode, and check so that the frequency counter of the test point reads $85\text{kHz} \pm 3\text{kHz}$.
8. HX Coil Adjustment (DECK1, DECK2)
Settings : • Test tape : TTA - 630
• Test point : TP2, TP3
• Adjustment Location : L301 (Lch)
L302 (Rch)

- Method : Adjust L301, L302 so that the DC voltage at the test points is minimum in the record mode.
9. REC/PB Frequency Adjustment (DECK2)
Settings : • Test tape : TTA - 601 (TTA - 630)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : (DECK2)
SFR301 (Lch)
SFR302 (Rch)
Method : Apply a 1kHz signal and adjust REC LEVEL VR attenuator so that the output level at the LINE OUT jack is 48mV .
Record and playback the 1kHz and 10kHz signals and adjust so that the output of the 10kHz signal is $0\text{dB} \pm 0.5\text{dB}$ with respect to that of the 1kHz signal.
 10. REC/PB Sensitivity Adjustment (DECK2)
Settings : • Test tape : TTA - 601 (TTA - 630)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : (DECK2)
SFR601 (Lch)
SFR602 (Rch)
Method : Apply a 1kHz signal and adjust REC LEVEL VR so that the output level at the LINE OUT is 48mV .
Record and playback the 1kHz signal and adjust so that the output is $48\text{mV} \pm 0.5\text{dB}$.

PRACTICAL SERVICE FIGURE (AD - WX929)

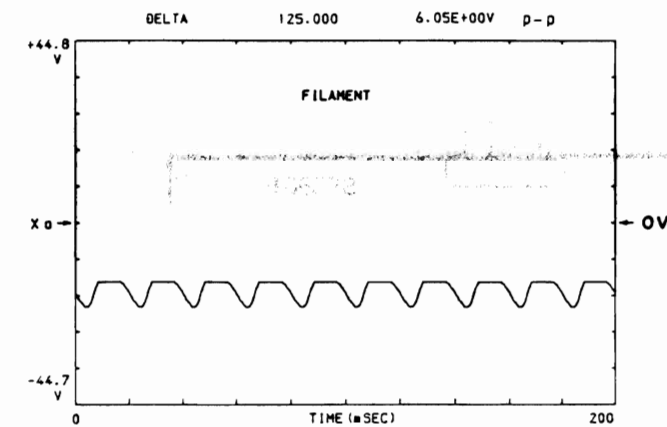
Playback output Level : 480mV $\pm$ 0.5dB
(TTA-200) (TTA-161, TCC-130) (LINE OUT)
REC/PB output : 0VU $\pm$ 1dB
(TTA-601) (LINE OUT)
REC/PB distortion : Less than 2%
(NORM., CrO₂, MT)
Playback noise : Less than 4.0/3.5mV
(120 μ s / 70 μ s, DOLBY NR OFF)
Less than 1.8/1.5mV
(120 μ s / 70 μ s, DOLBY NR B, C)
Erase ratio (125Hz) : More than 58dB
Crosstalk : More than 60dB
Channel separation : More than 30dB
Level drift : Within 1.5dB
(10kHz, TTA-300)
DOLBY EFFECT : More than 8.5dB
(TTA-610) (DOLBY NR B)
More than 17dB
(DOLBY NR C)
REC/PB S/N ratio : Less than 4.0/3.5mV
(LINEAR) (DOLBY NR OFF NORM./ MT, CrO₂)
Less than 1.8/1.5mV
(DOLBY NR B, C NORM./ MT, CrO₂)
Recording bias frequency: 85kHz
Tape speed : 3kHz $\pm$ 1.5%
Wow & flutter : Less than 0.08%
(W.R.M.S) (FWD)
Take-up torque : 30~55g-cm
Fast forward torque : 75~150g-cm
Rewind torque : 75~150g-cm
Back-tension : 2~6g-cm
Test tape : METAL TTA-630
CrO₂ TTA-610
(TTA-119H)
NORMAL TTA-601

PRACTICAL SERVICE FIGURE (AD - WX828)

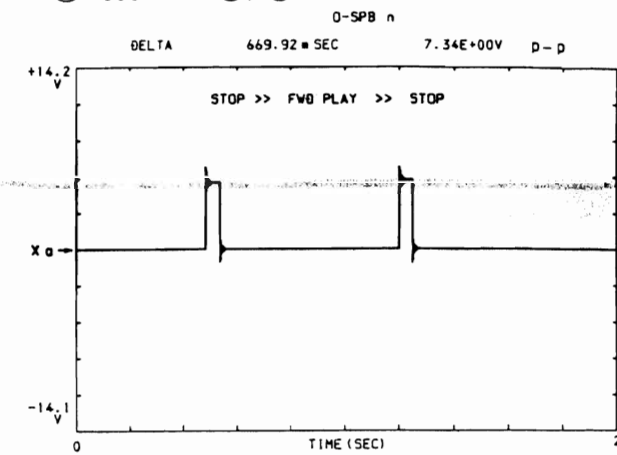
Playback output Level : 480mV $\pm$ 0.5dB
(TTA-200) (TTA-161, TCC-130) (LINE OUT)
REC/PB output : 0VU $\pm$ 1dB
(TTA-601) (LINE OUT)
REC/PB distortion : Less than 2.5% (NORM., CrO₂)
Less than 3.0% (MT)
Playback noise : Less than 4.0/3.5mV
(120 μ s / 70 μ s, DOLBY NR OFF)
Less than 1.8/1.5mV
(120 μ s / 70 μ s, DOLBY NR B, C)
Erase ratio (125Hz) : (DECK - 2)
More than 58dB
Crosstalk : More than 60dB
Channel separation : More than 30dB
Level drift : Within 1dB
(10kHz, TTA-300)
DOLBY effect : More than 8.5dB
(TTA-610) (DOLBY NR B)
More than 17dB
(DOLBY NR C)
REC/PB S/N ratio : Less than 4.0/3.5mV
(LINEAR) (DOLBY NR OFF NORM./ MT, CrO₂)
Less than 1.8/1.5mV
(DOLBY NR B, C NORM./ MT, CrO₂)
Recording bias frequency: (DECK - 2)
85kHz
Tape speed : 3kHz $\pm$ 1.5%
Wow & flutter : Less than 0.08%
(W.R.M.S) (FWD)
Take-up torque : 30~55g-cm
Fast forward torque : 70~150g-cm
Rewind torque : 70~150g-cm
Back-tension : 2~6g-cm
Test tape : METAL TTA-630
CrO₂ TTA-610
(TTA-119H)
NORMAL TTA-601

WAVE FROM

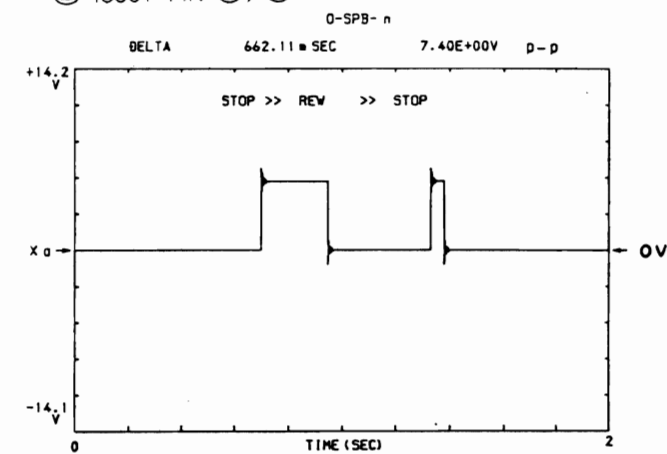
① FL901 PIN ①, ②, ④, ⑤



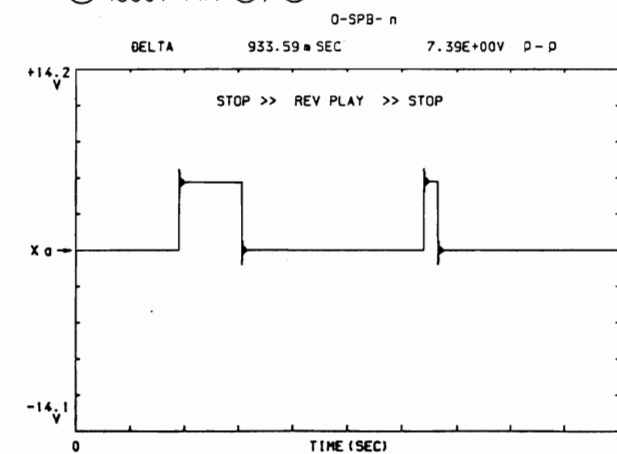
④ IC901 PIN ⑥1, ⑥3



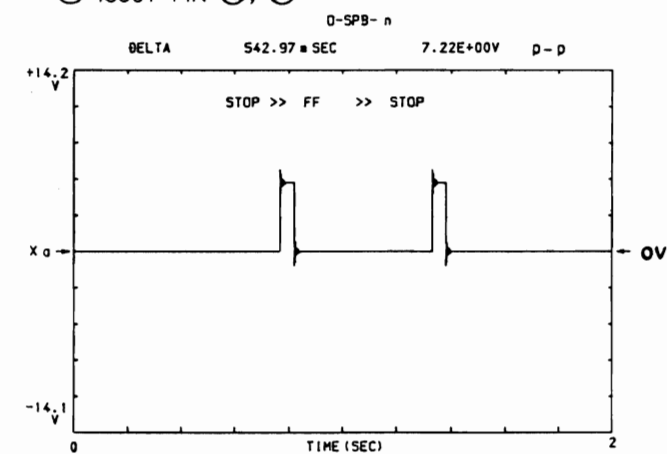
② IC901 PIN ⑥2, ⑥4



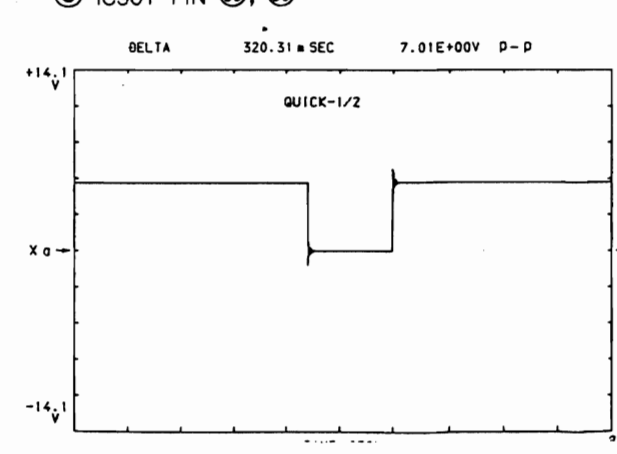
⑤ IC901 PIN ⑥1, ⑥3



③ IC901 PIN ⑥2, ⑥4

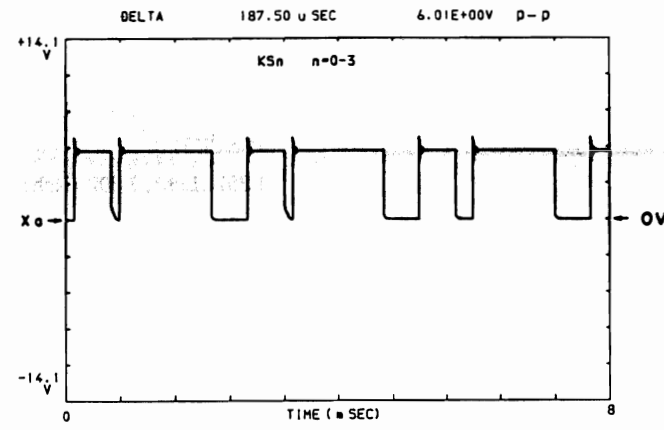


⑥ IC901 PIN ⑤9, ⑥0

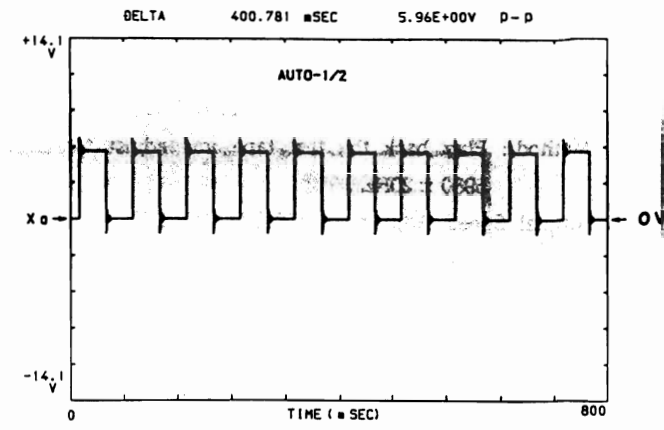


EXPLODED VIEW - 1 (AD - WX929,AD - WX828)

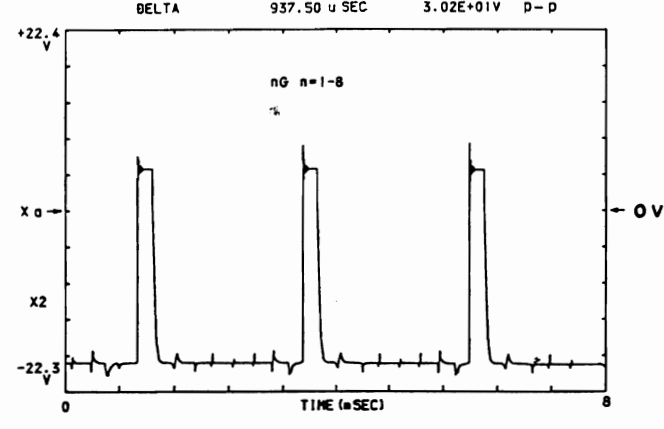
⑦ IC901 PIN ⑤①, ⑤②, ⑤③



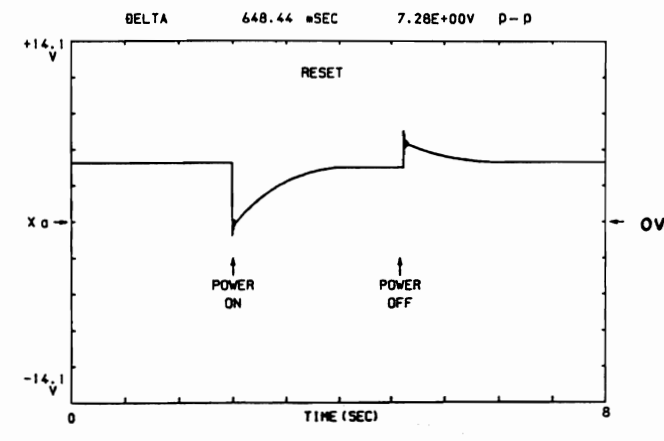
⑩ IC901 PIN ②①, ②②



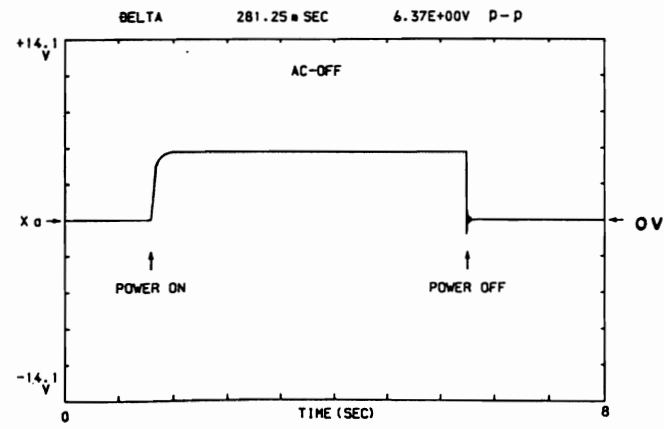
⑧ IC901 PIN ②⑤ ~ ③②



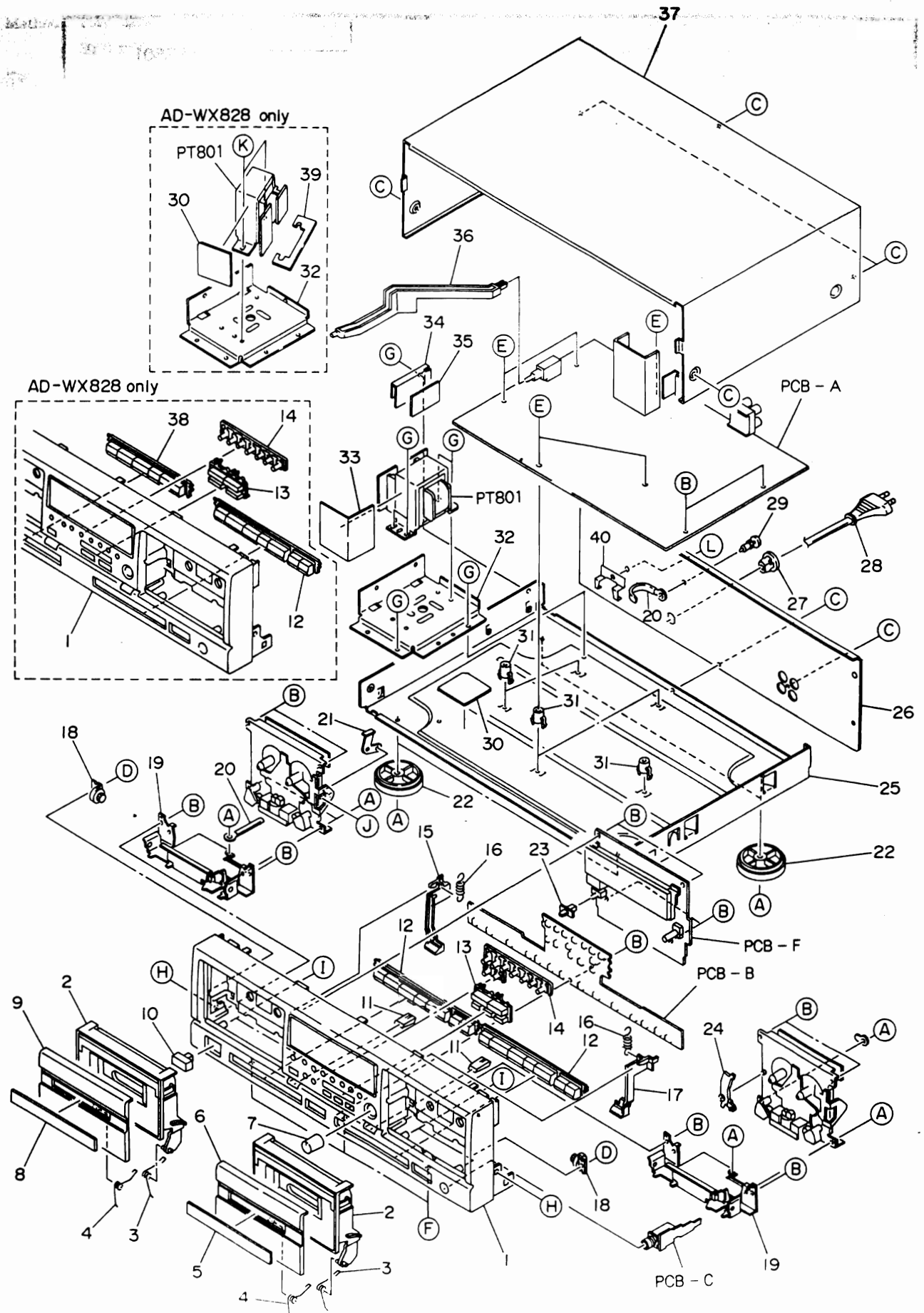
⑪ IC901 PIN ⑩



⑨ IC901 PIN ②③



REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	87-067-584-010	BVT ₁ +3-6	E	87-067-698-010	BVT ₁ +3-18 W/O SLOT	I	87-067-978-010	VFT ₁ +3-8 DIA10 BLK
B	87-067-579-010	BVT ₁ +3-8 W/O SLOT	F	87-067-777-010	BVTT+3-6 W. CONVEX BLK	J	87-067-977-010	S-SCREW+2.6-2.5
C	87-067-660-010	BVT ₁ +3-8 W/O SLOT BLK	G	87-067-585-010	BVTT+4-6	K	87-067-586-010	BVTT+4-8
D	87-067-703-010	BVT ₁ +3-10 W/O SLOT	H	87-591-094-410	QIT+3-6	L	87-253-094-419	U+3-6 BLK

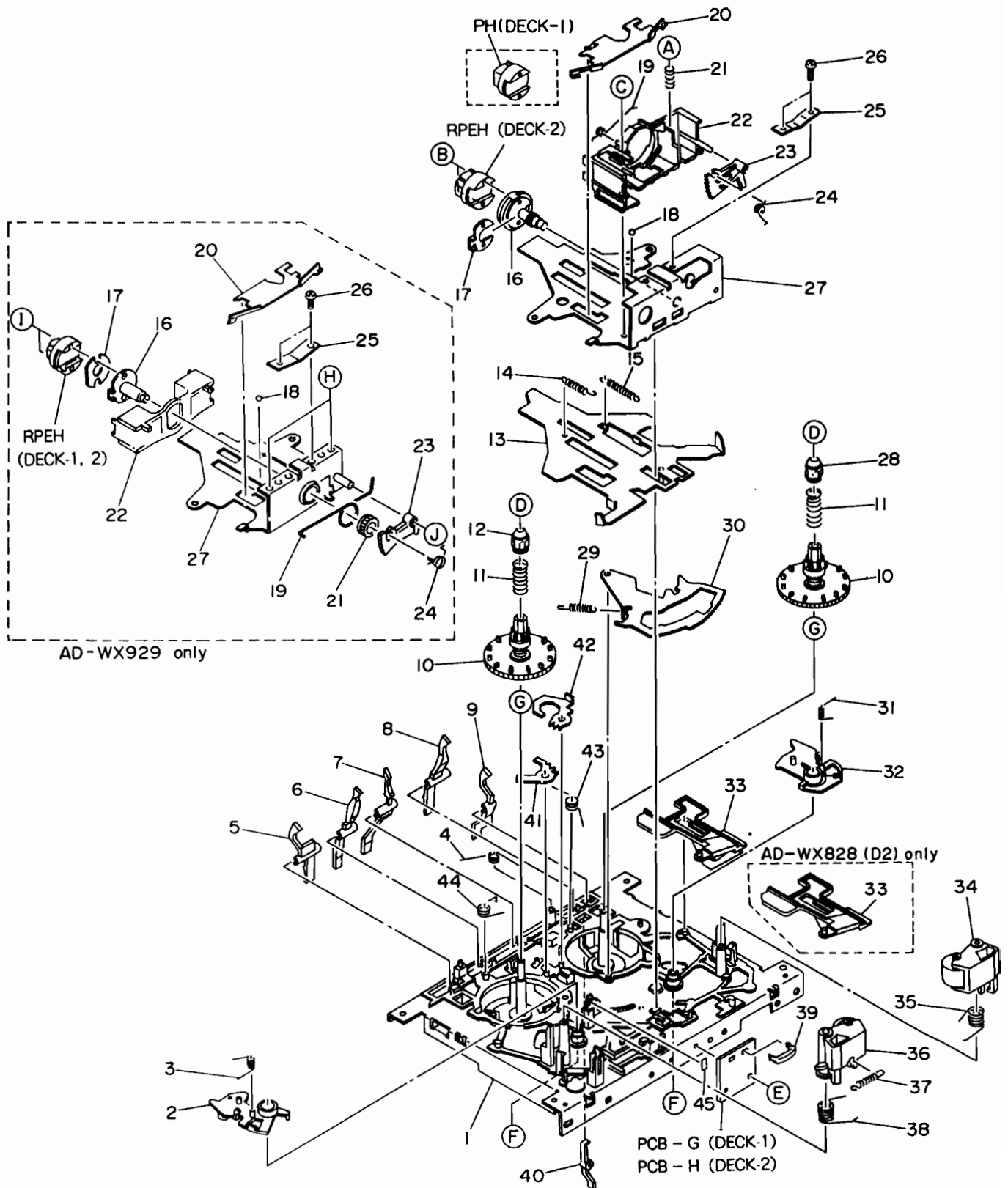


MECHANICAL PARTS LIST (AD - WX929,AD - WX828)

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	1-1	★ 09-047-738-010	CAB FR ASSY(WX828)	*	1
	1-1	★ 09-047-739-010	CAB FRONT ASSY(WX929)	*	1
	1-2	★ 09-047-508-010	CASS BOX ASSY	*	2
	1-3	★ 82-DW1-213-010	SPR-T, EJECT 2(E, K)	*	2
	1-3	★ 82-DW1-218-019	SPR-T, EJECT 2(HE, EN, KN)	*	2
	1-4	★ 82-DW1-212-010	SPR-T, EJECT 1(E, K)	*	2
	1-4	★ 82-DW1-217-019	SPR-T, EJECT 1(HE, EN, KN)	*	2
	1-5	★ 82-DW1-016-019	WINDOW, C-BOX R	*	1
	1-6	★ 82-DW2-007-019	PANEL, C-BOX 2R(WX828)	*	1
	1-6	★ 82-DW1-011-019	PANEL, C-BOX 1R(WX929)	*	1
	1-7	★ 82-DW1-007-019	KNOB, VOL	*	1
	1-8	★ 82-DW1-013-019	WINDOW, C-BOX L	*	1
	1-9	★ 82-DW2-006-019	PANEL, C-BOX 2L(WX828)	*	1
	1-9	★ 82-DW1-010-019	PANEL, C-BOX 1L(WX929)	*	1
	1-10	★ 82-AA1-016-019	BTN, POWER	*	1
	1-11	★ 82-DW1-008-019	BTN, EJECT	*	2
	1-12	★ 82-DW1-004-019	KEY, PLAY 1(WX828)	*	1
	1-12	★ 82-DW1-004-019	KEY, PLAY 1(WX929)	*	2
	1-13	★ 82-DW2-003-019	KEY, DUBB 2(WX828)	*	1
	1-13	★ 82-DW1-005-019	KEY, DUBB 1(WX929)	*	1
	1-14	★ 82-DW2-004-019	KEY, DOLBY 2(WX828)	*	1
	1-14	★ 82-DW1-006-019	KEY, DOLBY 1(WX929)	*	1
	1-15	★ 82-DW1-202-010	LVR, EJECT L	*	1
	1-16	★ 82-DW1-214-010	SPR-E, LVR(E, K)	*	2
	1-16	★ 82-DW1-219-019	SPR-E, LVR(HE, EN, KN)	*	2
	1-17	★ 82-DW1-203-010	LVR, EJECT R	*	1
	1-18	★ 87-063-143-010	OIL-DMPR 75	*	2
	1-19	★ 82-DW1-204-010	HLDR, MECHA	*	2
	1-20	---	WIRE BINDER(WX929)	*	2
	1-21	★ 82-DW1-215-010	LVR, PROTECT R-2	*	1
	1-22	★ 82-AA1-029-010	FOOT	*	4
	1-23	★ 82-DW1-017-019	KNOB, SLIDE	*	1
	1-24	★ 80-DW1-206-019	LVR, EJECT ST	*	1
	1-25	---	CHAS, MAIN	*	1
	1-26	★ 82-DW2-014-019	PANEL, REAR 2-E(WX828 E)	*	1
	1-26	★ 82-DW2-015-019	PANEL, REAR 2-K(WX828 K)	*	1
	1-26	★ 82-DW2-016-019	PANEL, REAR 2-HEJN(WX828 HE)	*	1
	1-26	★ 82-DW2-001-019	PANEL, REAR 2-EN(WX828 EN)	*	1
	1-26	★ 82-DW2-011-019	PANEL, REAR 2-KN(WX828 KN)	*	1
	1-26	★ 82-DW1-024-019	PANEL, REAR 1-E(WX929 E)	*	1
	1-26	★ 82-DW1-025-019	PANEL, REAR 1-K(WX929 K)	*	1
	1-26	★ 82-DW1-027-019	PANEL, REAR 1-HEJN(WX929 HE)	*	1
	1-26	★ 82-DW1-003-019	PANEL, REAR 1-EN(WX929 EN)	*	1
	1-26	★ 82-DW1-021-019	PANEL, REAR 1-KN(WX929 KN)	*	1
	1-27	★ 87-085-185-010	BUSHING, AC CORD	*	1
	1-28	★ 82-187-796-019	AC CORD(K)	*	1
	1-28	★ 82-187-797-019	AC CORD(HE, E)	*	1
	1-29	★ 87-084-077-010	NYLON RIVET DIA 3.5 - 4.5(WX929)	*	1
	1-30	★ 82-231-615-010	SILICON BOARD 43-43	*	1
	1-31	★ 81-670-214-010	HOLDER, PCB	*	5
	1-32	---	HLDR, PT	*	1
	1-33	★ 84-117-637-010	PLATE, SHIELD PT(WX929)	*	1
	1-34	★ 82-DW1-222-110	COVER, PT(WX929)	*	1
	1-35	★ 82-DW1-223-010	SH, PT(WX929)	*	1
	1-36	★ 82-DW1-207-010	ROD, POWER	*	1
	1-37	★ 82-DW1-002-019	CAB, STEEL	*	1
	1-38	★ 82-DW2-002-019	KEY, PLAY 2(WX828)	*	1
	1-39	---	PLATE, PT(WX828)	*	1
	1-40	★ 80-DS3-208-019	HLDR, VS2(HE)	*	1

EXPLODED VIEW - 2 (AD - WX929,AD - WX828)

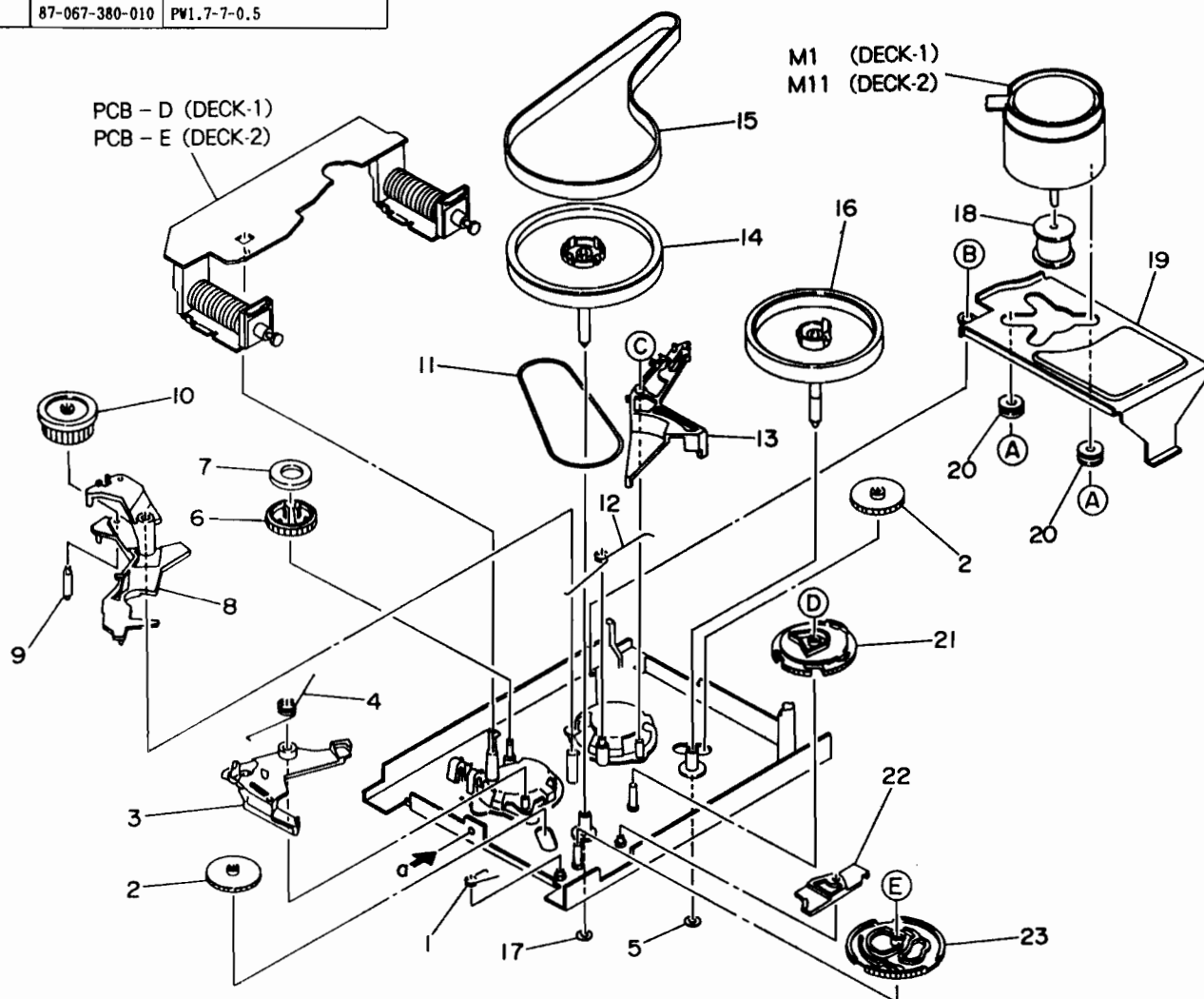
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	86-575-363-210	S-SCREW V+2-8	E	87-067-174-010	VTT+2-4	I	87-067-177-010	V+1.6-5.5
B	80-ZM6-207-010	V+1.6-7	F	80-ZM6-250-010	PW4.8-8.5-0.13	J	87-081-489-010	PW1.7-3.5-0.25
C	87-263-033-110	V+2-4	G	87-067-825-010	PW4.1-6.9-0.25			
D	86-524-418-010	VFT+1.4-5	H	86-575-236-010	S-SCREW TAPE ADJ			



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	2-1	★ 86-575-407-010	MECHANISM CHASSIS ASSY	*	1
	2-2	★ 86-535-239-110	LEVER, PLAY R		1
	2-3	★ 86-535-283-010	T-SPRING, PLAY GEAR R		1
	2-4	★ 80-ZM6-206-010	T-SPRING CASSETTE		1
	2-5	★ 86-575-322-110	LEVER, REC A (D2)	*	1
	2-6	★ 86-575-325-210	LEVER, METAL (D2)	*	1
	2-7	★ 86-575-324-310	LEVER, CASSETTE	*	1
	2-8	★ 86-575-327-210	LEVER, CLOME	*	1
	2-9	★ 86-575-323-010	LEVER, REC B (D2)	*	1
	2-10	★ 80-ZM6-254-210	GEAR REEL ASSY L		2
	2-11	★ 86-535-293-010	C-SPRING, REEL TABLE		2
	2-12	★ 86-524-218-319	STOPPER, S REEL TABLE		1
	2-13	★ 86-535-215-410	SLIDE PLATE ASSY		1
	2-14	★ 86-535-285-110	E-SPRING, SLIDE		1
	2-15	★ 86-575-226-010	E-SPRING, HEAD CHASSIS	*	1
	2-16	86-575-411-110	HOLDER, HOUSING(WX828)	*	1
	2-16	★ 86-575-398-010	HEAD, HOUSING ASSY 2(WX929)	*	1
	2-17	★ 86-575-305-010	PLATE, HOUSING(WX828)	*	1
	2-17	★ 86-535-338-010	HEAD, MYLER(WX929)		1
	2-18	★ 87-073-018-010	BALL, STEEL 1.588		1
	2-19	★ 86-575-310-210	T-SPRING, HEAD(WX828)	*	1
	2-19	★ 86-575-240-010	T-SPRING, GUIDE(WX929)	*	1
	2-20	★ 86-575-347-110	P-SPRING, HEAD 2(WX828)	*	1
	2-20	★ 86-535-289-210	P-SPRING, ACTUATING(WX929)		1
	2-21	★ 86-541-318-110	T-SPRING, AZIMUTH(WX828)		1
	2-21	★ 86-575-206-010	HEAD, FR GEAR(WX929)	*	1
	2-22	★ 86-575-288-510	GUIDE, TAPE(WX828)	*	1
	2-22	★ 86-575-214-110	GUIDE, TAPE(WX929)		1
	2-23	★ 86-575-290-310	GEAR, SEGMENT(WX828)	*	1
	2-23	★ 86-535-246-210	GEAR, SEGMENT(WX929)		1
	2-24	★ 80-ZM6-229-110	T-SPRING, SEGMENT GEAR 2(WX828)		1
	2-24	★ 86-575-259-110	T-SPRING, SEGMENT GEAR(WX929)		1
	2-25	★ 86-575-343-110	P-SPRING, AZIMUTH 2(WX828)	*	1
	2-25	★ 86-524-300-110	P-SPRING, AZIMUTH(WX929)		1
	2-26	★ 80-ZM6-251-010	S-SCREW, AZIMUTH(WX828)		2
	2-26	★ 86-535-297-010	SCREW, AZIMUTH 3H(WX929)		2
	2-27	★ 86-575-311-410	CHASSIS, HEAD(WX828)	*	1
	2-27	★ 86-575-209-410	CHASSIS, HEAD ASSY(WX929)	*	1
	2-28	★ 86-524-233-219	STOPPER, T REEL PLATE		1
	2-29	★ 86-535-284-110	E-SPRING, DIRECTION LEVER		1
	2-30	★ 86-535-218-310	DIRECTION LEVER ASSY		1
	2-31	★ 86-535-282-010	T-SPRING, PLAY GEAR F		1
	2-32	★ 86-535-238-310	LEVER, PLAY F		1
	2-33	★ 82-DW1-216-010	LEVER, SLIDE(WX828 EXCEPT D2)		1
	2-33	★ 86-575-345-310	LEVER, SW2(WX828 D2)	*	1
	2-34	★ 86-575-408-010	PINCH LEVER ASSY F	*	1
	2-35	★ 86-575-222-110	T-SPRING, PINCH ROLLER F	*	1
	2-36	★ 86-575-409-010	PINCH LEVER ASSY R	*	1
	2-37	★ 86-575-339-010	E-SPRING, PINCH 22	*	1
	2-38	★ 86-575-341-110	T-SPRING, PINCH L(WX828)	*	1
	2-38	★ 86-575-223-110	T-SPRING, PINCH R(WX929)	*	1
	2-39	★ 86-575-342-010	HOLDER, WIRE 2	*	1
	2-40	★ 86-575-326-310	LEVER, RINK	*	1
	2-41	★ 86-535-252-210	LEVER, BRAKE R		1
	2-42	★ 86-535-251-110	LEVER, BRAKE F		1
	2-43	★ 86-575-416-010	T-SPRING, BRAKE F	*	1
	2-44	★ 86-575-417-010	T-SPRING, BRAKE RS	*	1
	2-45	★ 86-517-353-010	QUICK, SHEET(WX929)		1

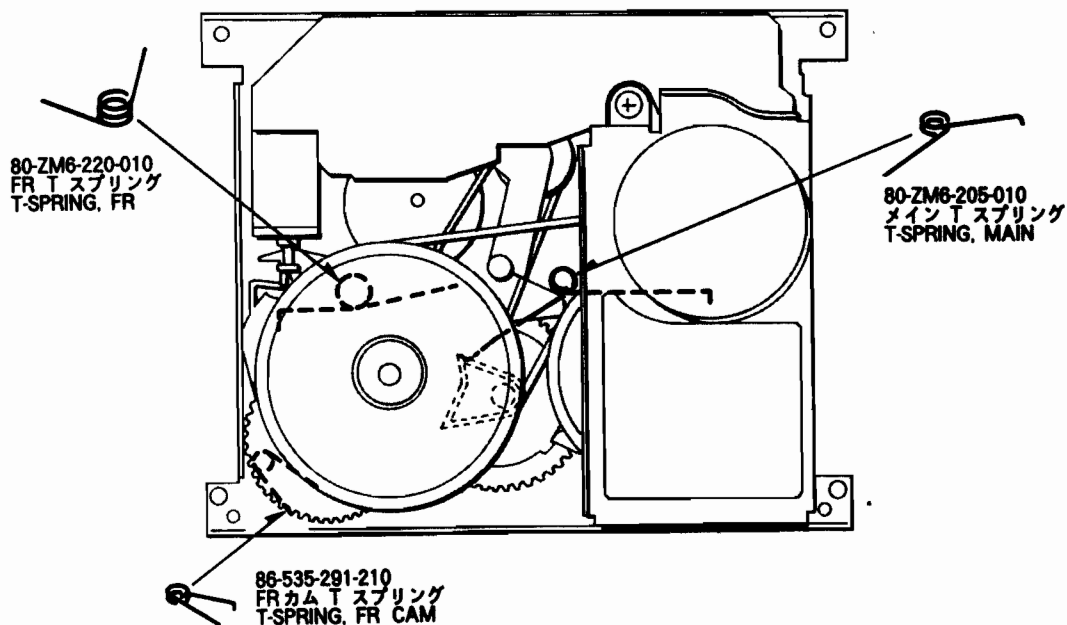
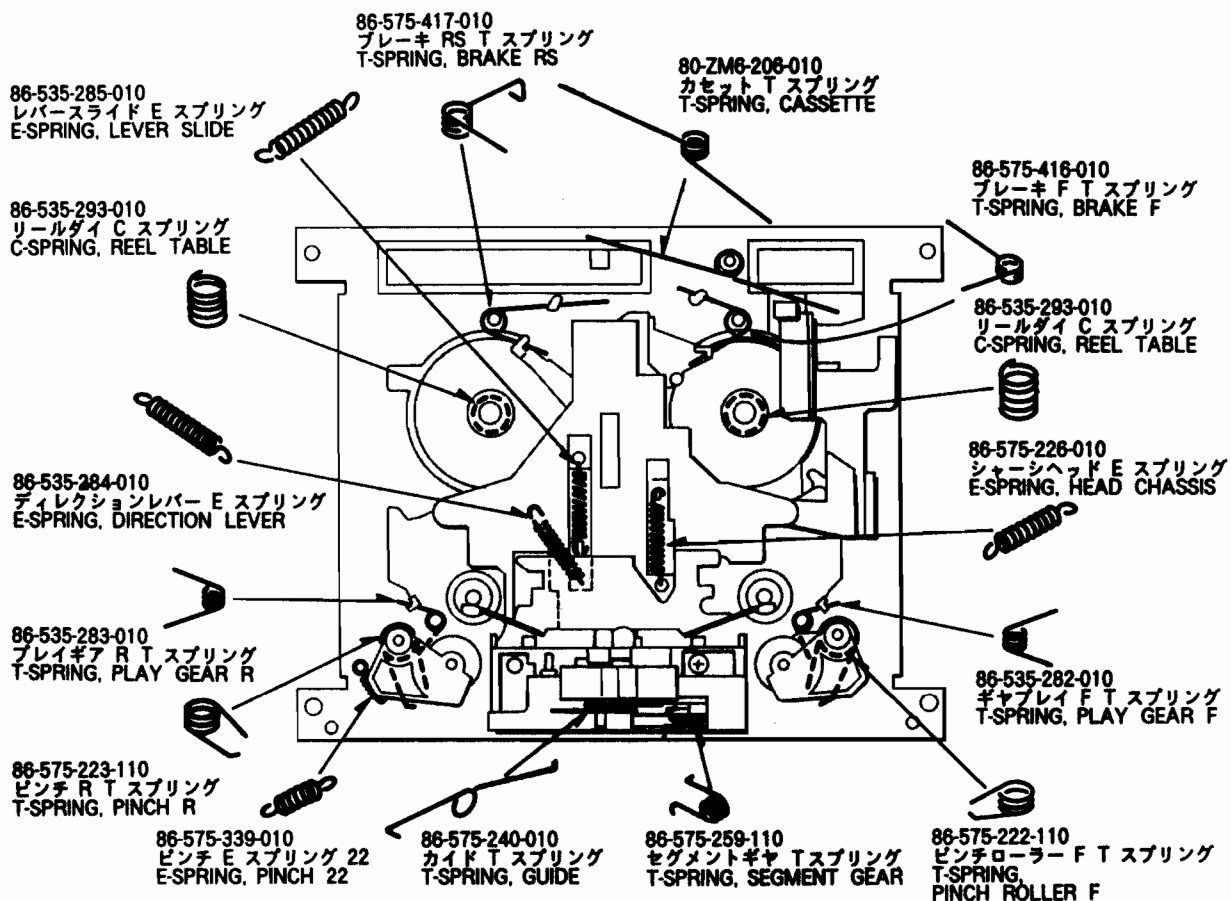
EXPLODED VIEW - 3 (AD - WX929,AD - WX828)

REF. NO.	PART NO.	DESCRIPTION
A	86-524-457-010	U+2.6-5.5
B	87-741-072-410	UT ₂ +2.6-5
C	80-ZM6-211-010	PW2.68-4.15-0.3 SLOT
D	87-081-489-010	PW1.7-3.5-0.25 SLOT
E	87-067-380-010	PW1.7-7-0.5

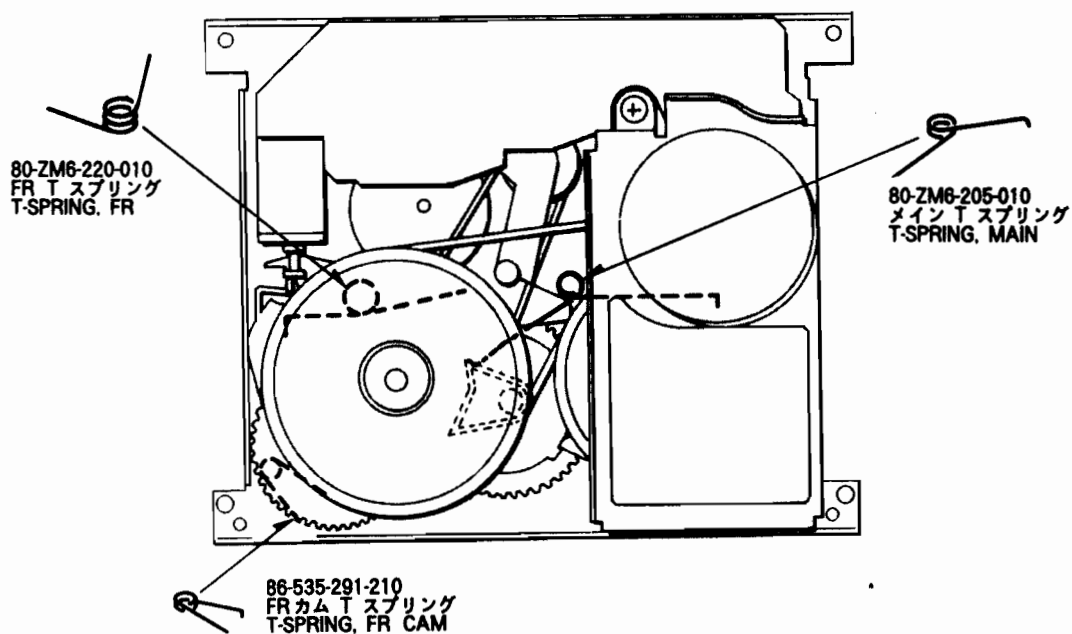
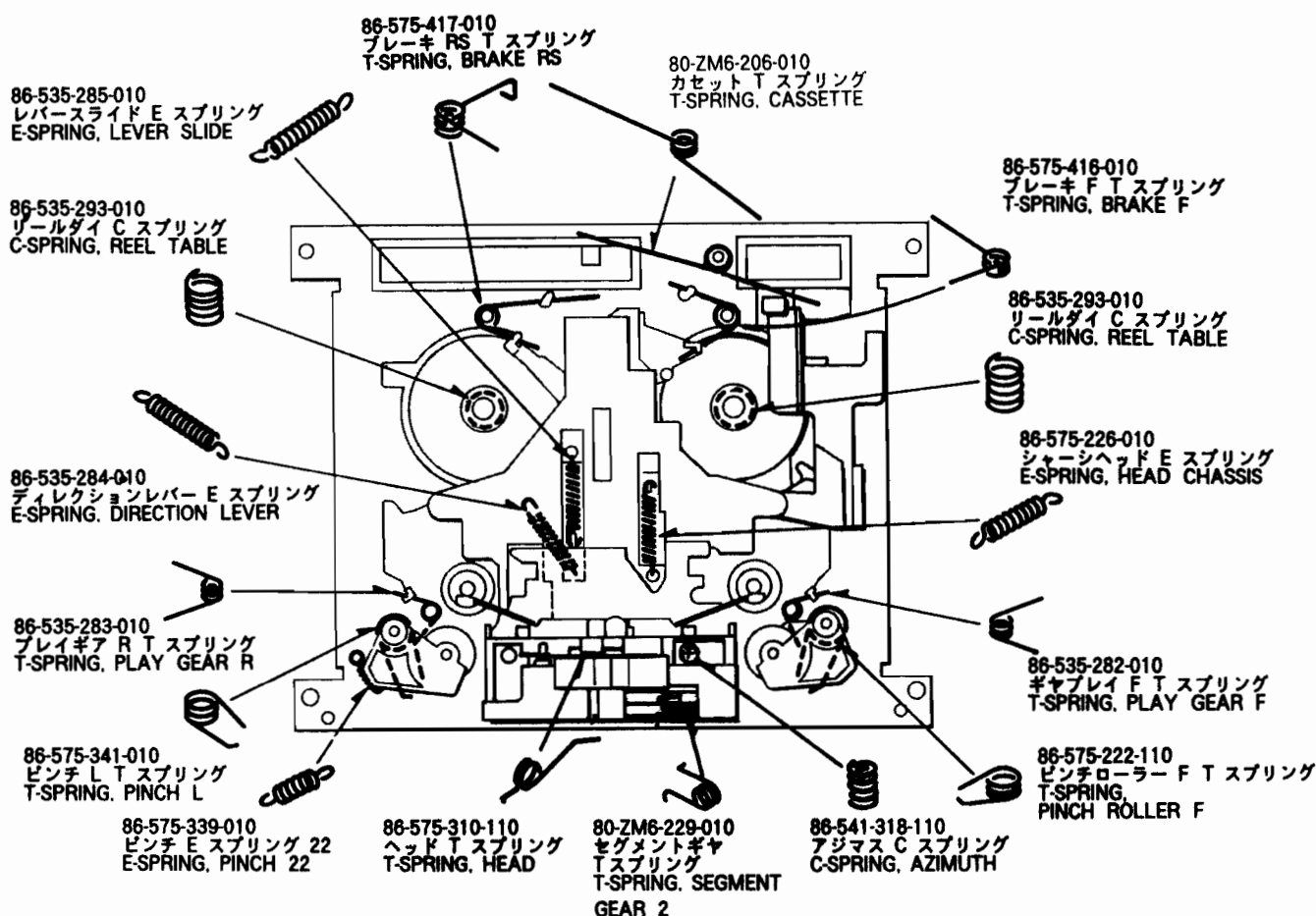


PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q T
	3-1	★ 86-535-291-210	T-SPRING, FR CAM		1
	3-2	★ 86-575-221-210	GEAR, PLAY	*	2
	3-3	★ 86-535-230-510	LEVER, FR TRIGGER		1
	3-4	★ 80-ZM6-220-010	T-SPRING, FR 2		1
	3-5	★ 80-ZM6-243-010	SHEET, 175-3.6-0.5		1
	3-6	★ 86-575-328-110	GEAR, IDLER	*	1
	3-7	★ 80-ZM6-217-010	RING, MAGNET 2		1
	3-8	★ 80-ZM6-218-110	LEVER, FR 2		1
	3-9	★ 80-ZM6-222-110	SHAFT, PULLEY FR		1
	3-10	★ 80-ZM6-282-010	GEAR, FR 2		1
	3-11	80-ZM6-227-110	BELT, SQ 1.2-140		1
	3-12	★ 80-ZM6-205-110	T-SPRING, MAIN		1
	3-13	★ 86-535-231-510	LEVER, PLAY TRIGGER		1
	3-14	★ 86-575-373-010	FLYWHEEL ASSY R3	*	1
	3-15	★ 86-575-415-010	BELT, FLAT 0.55-217	*	2
	3-16	★ 86-575-375-010	FLYWHEEL ASSY L3	*	1
	3-17	★ 80-ZM6-242-010	SHEET, 1.95-3.6-0.5		1
	3-18	★ 86-575-406-010	PULLEY MOTOR RQ		1
	3-19	★ 86-575-301-410	HOLDER, MOTOR	*	1
	3-20	★ 86-513-441-210	COLLAR		2
	3-21	★ 86-575-312-210	CAM, MAIN	*	1
	3-22	★ 83-575-229-210	LEVER, PAUSE B	*	1
	3-23	★ 80-ZM6-219-210	CAM, FR MK2 2M		1

SPRING APPLICATION POSITION - 1 (AD - WX929)



SPRING APPLICATION POSITION - 2 (AD - WX828)



REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
ECM	ECM
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッ サ	SERGESUPPRESSOR
セラコン	CAP, CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BAT, CONTACT ASSY	BATTERY CONTACT ASSY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CHAS, FR	CHASSIS, FRONT
CHAS, MECHA	CHASSIS, MECHANISM
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLD	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
KNOB, VOL REV	KNOB, VOLUME REV
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTORL
PANEL, FR	PANEL, FRONT
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP, SCREW BAT	SPECIAL SCREW BATTERY
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
SW	SWITCH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
シャフト	ARM, SHAFT
ガイド	GUIDE, SHAFT
ストラップ	STRAP