

SERVICING INFORMATION



MODEL 2125

(1993 Version)

20-MHz DUAL-TRACE OSCILLOSCOPE

PARTS LIST

CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER
MAIN CHASSIS					
R101, 201	51 Ω, 5%, 1/2 W, Carbon Film Resistor	002-102-5-510		Cushion, Top Bracket, Front	388-114-9-007
VR303	500 Ω, Pot	008-866-9-001		CRT Cushion (Neck)	388-122-9-001
VR304	500 Ω, Pot W/Switch	008-888-9-002		Power Switch Link Cushion	388-122-9-002
	Trace Rotation Coil	047-101-9-001		Handle Cushion	388-122-9-003
	Power Transformer	065-236-9-002		AC Cord Assembly	420-042-9-001
	Pushbutton Switch, Power	088-173-9-001		Instruction Manual	480-537-9-001
LED801	LED	158-094-9-001		Label, Model No.	483-706-9-002
Q511	BD237 NPN Transistor	176-214-9-002		Label, Adjustments	483-706-9-003
Q503	BUX86 NPN Transistor	176-214-9-007		Label, Line Voltages	
	315 mA, 250 V, 5x20 mm Norm.			(for Fuse Holder Cap)	483-835-9-001
	Blow Fuse	194-048-9-001		Label, Calibration Adjustments	483-835-9-002
	630 mA, 250 V, 5X20 mm Norm.		Q503	3x6 mm PRHM Screw	634-228-9-001
	Blow Fuse	194-049-9-001		3X6 mm PRHM Screw	634-228-9-001
	150BTB31A CRT	230-038-9-001		3x6 mm PRHM Screw	634-228-9-001
	CRT Angle Bracket, Bottom	250-252-9-001	Q511	3x6 mm PRHM Screw	634-228-9-001
	CRT Angle Bracket, Top	250-253-9-002		3x12 mm PRHM Screw	634-228-9-004
	Angle Bracket (CH1-CH2 POS)	250-254-9-002		4x10 mm PRHM Screw	634-228-9-006
	Angle Bracket (Power Switch)	250-256-9-002		3x18 mm PFHM Screw	634-228-9-009
	Side Frame, Right	254-121-9-002		3x8 mm PPWHM Screw	634-228-9-011
	Side Frame, Left	254-122-9-002		3x8 mm PPWHM Screw, Black	634-228-9-012
	Rear Sub-Panel	254-124-9-002		3x6 mm PFHM Screw	634-228-9-013
	Center Frame	254-133-9-004		3x10 mm Screw	634-228-9-014
	Bracket, Timebase & Vert Attn			3x16 mm Screw	634-228-9-015
	Assy Mount	254-152-9-001		4x8 mm PTHM Screw, Type "S"	634-253-9-004
	Bracket	254-153-9-001		4x3.2 mm Hex Nut	653-127-9-001
	Front Sub-Panel	254-153-9-002		3x8 mm PPWHSM Screw, Type "B"	710-161-9-002
	CRT Shield	256-268-9-003		3x6 mm PFHSM Screw, Type "B"	710-161-9-003
	Inlay, Logo	260-496-9-003		3.2x8 mm Steel Washer	724-092-9-001
	Inlay, Controls	260-496-9-005		5.2x12 mm Steel Washer	724-092-9-003
	Transformer Mounting Plate	261-211-9-001		4x10 mm Steel Spring Washer	724-092-9-005
	Plastic Shaft, 6 mm x 135 mm Long	265-049-9-005		3.2x6 mm Steel Washer	724-092-9-007
	Plastic Shaft, 6 mm x 55 mm Long	265-049-9-006		M4x15 mm OD Toothed Washer	731-115-9-001
	Plastic Shaft, 6 mm x 80 mm Long	265-049-9-007		Rivet	733-047-9-001
	Metal Link, 2.5 mm x 270 mm Long	265-049-9-009		Metal Handle Frame	746-087-9-001
	Metal Link, 2.5 mm x 200 mm Long	265-049-9-010		Cover, Handle Mounting Piece	746-087-9-004
	Metal Link, 2.5 mm x 190 mm Long	265-052-9-001		Handle	746-100-9-001
	Plastic Shaft, 6 mm x 55 mm Long	265-052-9-002		Plastic Grip, Handle	746-100-9-002
	Cabinet (Housing)	272-199-9-003		Handle Spring	746-100-9-003
Q503, 511	Insulator	342-191-9-001		Handle Mounting Piece	746-100-9-004
	Cable Tie	380-311-9-001		CRT Socket	749-120-9-002
	Wire Tie	380-529-9-001		Large Knob, Grey	751-334-9-001
	Wire Tie	380-529-9-001		Small Knob, Grey	751-334-9-005
	Switch Coupler (Plastic Actuator)	380-567-9-001	Time/Div		
	Back Panel	380-582-9-002	A-Pos, B-Pos,		
	CRT Mask (Bezel)	380-582-9-003	Swp Mode		
	Front Panel	380-585-9-001	Time/Div (Var)	Small Knob, Grey	751-344-9-001
	Leg, Tilt Stand	380-585-9-002	Volts/Div (Var)	Knob, Small	751-362-9-001
	Switch Coupler (Plastic Actuator)	380-585-9-003	Volts/Div	Knob, Large	751-362-9-002
	Pot Coupler (Plastic)	380-585-9-005	Int, Foc, Trg,	Small Knob, Grey	751-362-9-003
	PC Board Hold Boss	380-603-9-001	Hldoff, X-Pos		
	Gro mmet	381-190-9-001		Graticule (CRT Screen)	753-049-9-001
	Lever Switch Cover, Grey	384-106-9-001		Standoff	759-229-9-002
	Push Button, Grey	384-106-9-003		Standoff	759-272-9-001
	Lever Switch Cover, Grey	384-119-9-001		Standoff	759-272-9-002
	Push Button, Red	384-136-9-001		AC Power Plug / Fuse Holder	770-030-9-001
	Cushion, CRT Top	388-114-9-002		BNC Connector	772-054-9-001
	Cushion, CRT Bottom	388-114-9-003		Banana Jack, Black	773-140-9-001
	Cushion, CRT Top & Bottom Bracket	388-114-9-004		Banana Jack, Red	773-147-9-001
	Cushion, Bottom Bracket	388-114-9-006	CAL	Test Pin	777-079-9-001

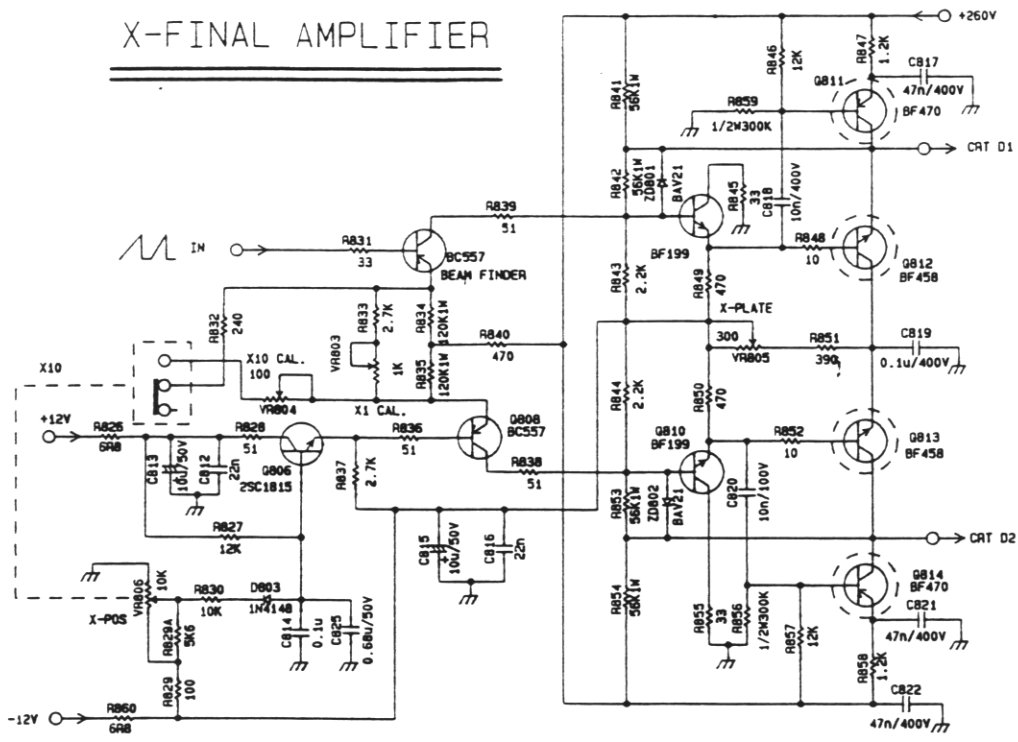
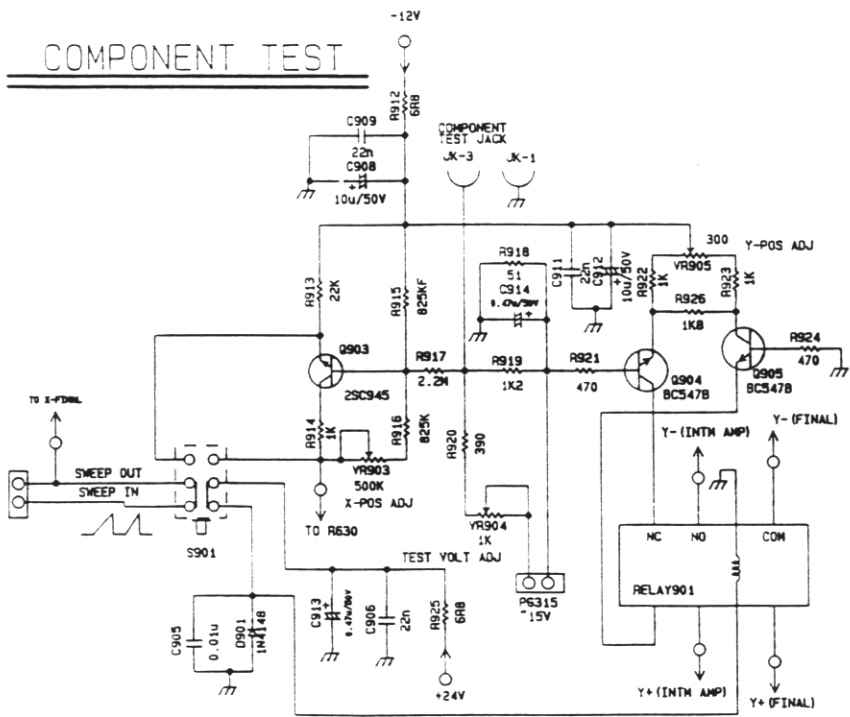
PARTS LIST

CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER
VERTICAL ATTENUATOR & PRE-AMP P.C.B. ASSEMBLY					
RESISTORS			C216	15 pF, 5%, 50 V, Ceramic	020-423-9-005
Unlisted resistors are 5%, 1/4 W, Metal Film (See schematic diagram for value.)			C220	0.0033 μ F, 5%, 50 V, Polyester	025-320-9-002
R112, 212	1 M Ω , 5%, 1/2 W, Carbon Film	002-102-5-105	VC122, 222	50 pF Trimmer Cap.	028-113-9-003
R113, 213	470 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-474	SWITCHES		
R133, 233	2.21 k Ω , 1%, 1/4 W, Metal Film	015-144-2-211	S101, 201	Lever Switch	080-030-9-001
VR101, 102, 201, 202	20 k Ω , Trimmer Pot.	010-100-9-001	S102, 202	Rotary Switch with 2k Ω Pot. & Switch	083-341-9-001
CAPACITORS			DIODES & TRANSISTORS		
C101, 201	.047 μ F, 10%, 400 V, Polyester	025-278-9-004	ZD101, 201	6.8 V, 500 m W, Zener Diode	152-180-9-004
C104, 204	2200 pF, 20%, 125 VAC, Ceramic	020-448-9-002	Q101, 105, 201, 205	2SC1907 NPN Transistor	176-174-9-001
C105, 205	22 pF, 5%, 50 V, Ceramic	020-423-9-010	Q102, 202	2SK168E FET	182-113-9-001
C107, 117, 124, 207, 217, 224	0.1 μ F, +80/-20% 50 V, Ceramic	020-480-9-001	Q103, 203	2SC1815Y NPN Transistor	176-089-9-003
C108, 113, 118, 208, 213, 218	0.022 μ F, +80/-20%, 50 V, Ceramic	020-423-9-034	Q104, 204	2SA844D PNP Transistor	177-021-9-001
C109, 110, 209, 210	0.01 μ F, +80/-20%, 50 V, Ceramic	020-448-9-007	INTEGRATED CIRCUITS		
C112, 119, 212, 219	10 μ F, 20%, 50 V, Electrolytic	022-441-9-002	U101, 201	LF411CN Op-Amp	307-338-9-004
C114, 214	100 pF, 5%, 50 V, Ceramic	020-423-9-003	U102, 202	733C Video Amp	307-189-9-001
C116, 121	47 pF, 5%, 50 V, Ceramic	020-423-9-015	MISCELLANEOUS		
VERTICAL AMPLIFIER P.C.B. ASSEMBLY					
RESISTORS			S301	Pushbutton Switch	088-175-9-001
Unlisted resistors are 5%, 1/4 W, Metal Film. (See schematic diagram for value.)			S302-304	Pushbutton Switch, 3-Station	088-175-9-002
R415	390 Ω , 5%, 1/2 W, Metal Film	011-102-5-391	DIODES & TRANSISTORS		
R423, 424	2.4 k Ω , 5%, 5 W, Metal Oxide	013-139-9-004	BD503-505	Bridge Rectifier	157-045-9-001
R519	1.0 Ω , 5%, 1/2 W, Metal Film	011-102-5-109	D301-322, 901	1N4148 Diode	151-038-9-001
R915, 916	825 k Ω , 1%, 1/4 W, Metal Film	015-144-8-250	ZD901	9.1V, 500m W, Zener Diode	152-115-9-002
SH401	Thermistor	005-024-9-001	Q301-304, 401-404	2SC1906 NPN Transistor	176-214-9-008
VR301, 302	3 k Ω , Trimmer Pot.	010-100-9-005	Q305, 306, 901	2SC1815Y NPN Transistor	176-089-9-003
VR305, 306, 905	300 Ω , Trimmer Pot.	010-073-9-008	Q307, 312, 313	2SA1015Y PNP Transistor	177-043-9-002
VR307, 308, 902	500 Ω , Trimmer Pot.	010-073-9-009	Q308-311	2SA1029C PNP Transistor	177-108-9-003
VR309-311, 904	1 k Ω , Trimmer Pot.	010-073-9-010	Q405, 406	BF458 NPN Transistor	176-214-9-001
VR401	100 Ω , Trimmer Pot.	010-073-9-006	Q902	2N3906 PNP Transistor	177-035-9-001
VR901	200 Ω , Trimmer Pot.	010-073-9-007	Q903	2SC945Q NPN Transistor	176-225-9-001
VR903	500 k Ω , Trimmer Pot.	010-073-9-011	Q904, 905	BC547B NPN Transistor	176-206-9-002
CAPACITORS			INTEGRATED CIRCUITS		
C301, 302	0.1 μ F, +80/-20%, 50 V, Ceramic	020-480-9-001	U301	I.C., 4013B (Dual "D" Flip-Flop)	308-377-9-001
C302A, 309, 404	10 pF, \pm 0.5 pF, 50 V, Ceramic	020-423-9-002	U302, 901	I.C., 4011B (Quad 2-Input NAND Gate)	308-114-9-001
C303	27 pF, 5%, 50 V, Ceramic	020-423-9-011	U502	I.C., 7812 (1 Amp, 12 Volt Regulator)	307-164-9-001
C304	39 pF, 5%, 50 V, Ceramic	020-423-9-014	U503	I.C., 7805 (1 Amp, 5 Volt Regulator)	307-080-9-001
C305, 308, 313, 314, 316, 401, 906, 909, 911	0.022 μ F, +80/-20%, 50 V, Ceramic	020-423-9-034	U504	I.C., 7824 (1 Amp, 24 Volt Regulator)	307-456-9-001
C306, 307, 312, 315, 317, 402, 908, 912, 913	10 μ F, 20%, 50 V, Electrolytic	022-441-9-002	MISCELLANEOUS		
C310	22 pF, 5%, 50 V, Ceramic	020-423-9-010	For Q405, 406	Insulator	342-191-9-001
C311	470 pF, 5%, 50 V, Ceramic	020-423-9-027	For U502	Insulator	342-191-9-001
C319, 320	18 pF, 5%, 50 V, Ceramic	020-423-9-007	For Q405, 406	Insulator, Ceramic Washer	347-137-9-003
C403	0.0047 μ F, 5%, 50 V, Polyester	025-278-9-011	For U504	3 x 6 mm Screw	634-228-9-001
C405	120 pF, 5%, 50 V, Ceramic	020-423-9-004	For Q405, 406	3 x 12 mm PRHM Screw	634-228-9-004
C407	.047 μ F, 10%, 250 V, Polyester	025-278-9-002	For U503	3 x 6 mm Screw	634-228-9-010
C506, 508	1000 μ F, 20%, 35 V, Electrolytic	022-441-9-004	For U502	3 x 12 mm PRH Machine Screw	634-259-9-001
C507	1000 μ F, 20%, 25 V, Electrolytic	022-441-9-005	For Q405, 406	3 x 2.4 mm Hex Nut	653-117-9-004
C900	33 pF, 5%, 50 V, Ceramic	020-423-9-013	For Q405, 406	3 x 7 mm Steel Washer	724-092-9-004
C902	0.001 μ F, 10%, 50 V, Ceramic	020-423-9-029	For U503	Heat Sink	747-160-9-001
C903-905	0.01 μ F, 5%, 50 V, Polyester	025-278-9-006	For U502, 504	Heat Sink	747-160-9-005
Parallel to R918	0.47 μ F, 20%, 50 V, Electrolytic	022-411-9-007	PG301	Heat Sink	747-160-9-006
VC401	50 pF Trimmer	028-113-9-003	PG316, 317, 319, Y+, Y-, 320	6-Pin Polarized Plug (Large)	757-140-9-005
INDUCTORS			PG303, 305, 306	2-Pin Polarized Plug (Small)	757-140-9-006
L401, 402	12 Ω H, Peaking Coil	047-067-9-002	PG315	3-Pin Polarized Plug (Small)	757-140-9-007
RELAYS & SWITCHES			PG302	4-Pin Polarized Plug (Small)	757-140-9-008
Relay 901	Relay	441-060-9-001	PG304	5-Pin Polarized Plug (Small)	757-140-9-009
			PG308, 309	7-Pin Polarized Plug (Small)	757-140-9-011
				6-Pin Polarized R.A. Plug (Small)	757-140-9-013

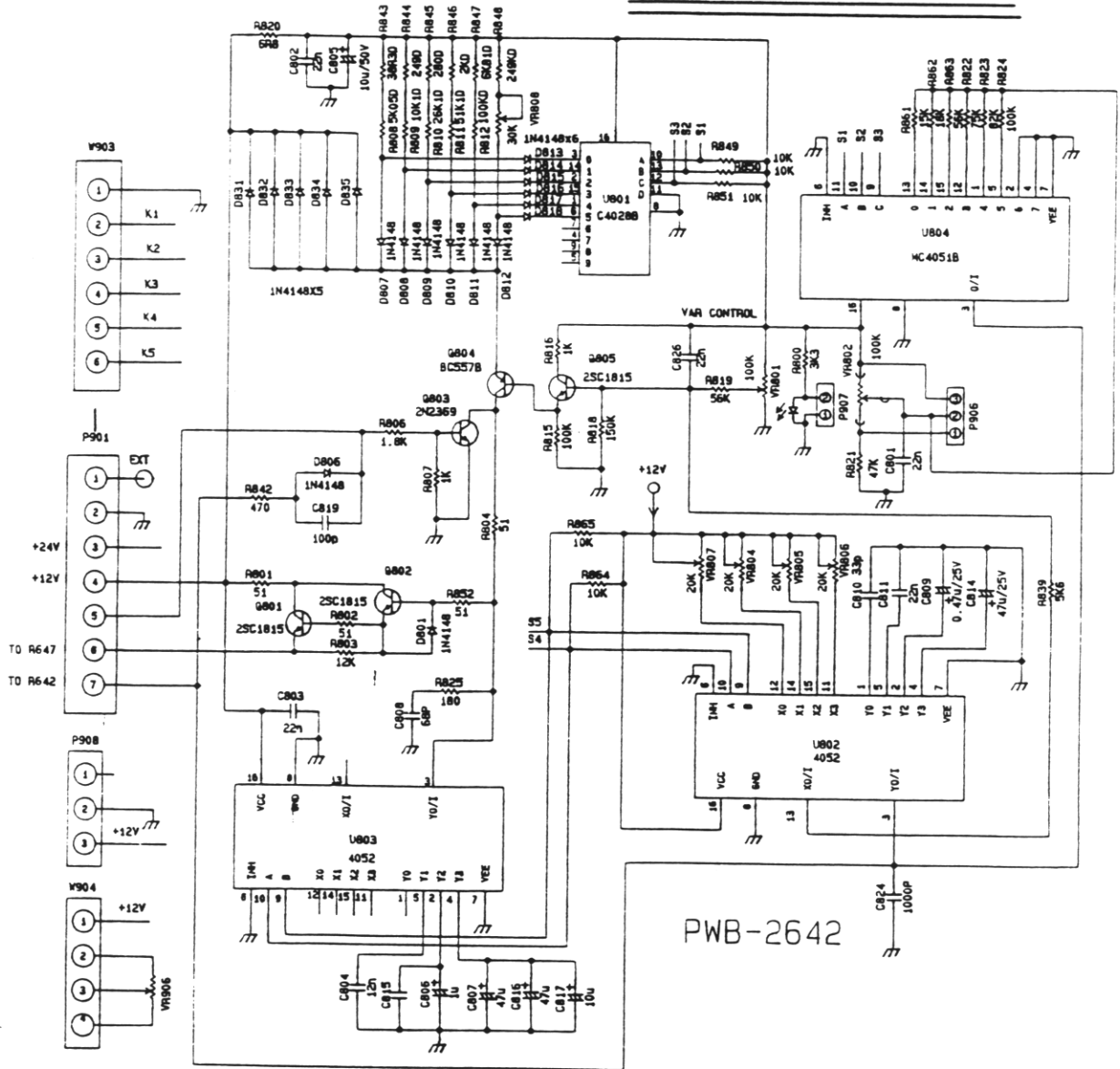
CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER
TIMEBASE P.C.B. ASSEMBLY					
Unlisted resistors are 5%, 1/4 W, Metal Film. (See schematic diagram for value.)			C814	47 μ F, 20% Electrolytic	022-411-9-008
R808	5.05 k Ω , 1/2%, 1/4 W, Metal Film	017-144-5-501	C819	100 pF, 5%, 50 V, Ceramic	020-423-9-003
R809	10.1 k Ω , 1/2%, 1/4 W, Metal Film	017-144-1-012	C824	0.001 μ F, 10%, 50 V, Ceramic	020-423-9-029
R810	26.1 k Ω , 1/2%, 1/4 W, Metal Film	017-144-2-612	SWITCHES		
R811	51.1 k Ω , 1/2%, 1/4 W, Metal Film	017-144-5-112	S801	19-Pos. Rotary Switch	083-339-9-001
R812	100 k Ω , 1/2%, 1/4 W, Metal Film	017-144-1-003	S802	Rotary Switch (Main Time Base)	083-342-9-001
R843	38.3 Ω , 1/2%, 1/4 W, Metal Film	017-144-3-888	DIODES & TRANSISTORS		
R844	249 Ω , 1/2%, 1/4 W, Metal Film	017-144-2-490	D801, 806-818, 831-835	1N4148 Diode	151-038-9-001
R845	280 Ω , 1/2%, 1/4 W, Metal Film	017-144-2-800	Q801, 802, 805	2SC1815Y NPN Transistor	176-089-9-003
R846	2.00 k Ω , 1/2%, 1/4 W, Metal Film	017-144-2-001	Q803	2N2369 NPN Transistor	176-049-9-001
R847	6.81 k Ω , 1/2%, 1/4 W, Metal Film	017-144-6-811	Q804	BC557B PNP Transistor	177-105-9-003
R848	249 k Ω , 1/2%, 1/4 W, Metal Film	017-144-2-493	INTEGRATED CIRCUITS		
VR804-807	20 k Ω Trimmer Pot.	010-100-9-001	U801	I.C., 4028B (Decoder)	308-320-9-001
VR808	30 k Ω Trimmer Pot.	010-100-9-007	U802, 803	I.C., 4052B (Dual 4-CH Analog Mult/Demult)	308-434-9-001
CAPACITORS			U804	I.C., 4051B (8-CH Analog Mult / Demult)	308-314-9-001
C801, 802, 803, 826, 811	0.022 μ F, +80/-20%, 50 V, Ceramic	020-423-9-034	P907	2-Pin Polarized Plug (Small)	757-140-9-006
C804	0.012 μ F, 5%, 50 V, Polyester	025-294-9-005	P906, 908	3-Pin Polarized Plug (Small)	757-140-9-007
C805	10 μ F, 20%, 50 V, Electrolytic	022-441-9-002	P901	7-Pin Polarized Plug (Small)	757-140-9-011
C806	1.0 μ F, 10%, 25 V, Tantalum	027-103-9-001	J1-3, 5-15, D804, 805	Jumper Wire	---
C807, 816	47 μ F, 10%, 20 V, Tantalum	027-120-9-002	MISCELLANEOUS		
C808	68 pF, 5%, 50 V, Ceramic	020-423-9-018	DELAY P.C.B. ASSEMBLY		
C809	0.47 μ F, 20%, 50 V, Electrolytic	022-411-9-007	C906, 908, 920	10 μ F, 20%, 50 V, Electrolytic	022-441-9-002
C810	33 pF, 5%, 50 V, Ceramic	020-423-9-013	C912	0.012 μ F, 5%, 50 V, Polyester	025-294-9-005
RESISTORS			C913	1.0 μ F, 10%, 25 V, Tantalum	027-103-9-001
Unlisted resistors are 5%, 1/4 W, Metal Film. (See schematic diagram for value.)			VC902	50 pF Trimmer	028-113-9-003
R934	5.05 k Ω , 1/2%, 1/4 W, Metal Film	017-144-5-051	DIODES & TRANSISTORS		
R935	10.1 k Ω , 1/2%, 1/4 W, Metal Film	017-144-1-012	D902-922, 925, 931-935	1N4148 Diode	151-038-9-001
R936	26.1 k Ω , 1/2%, 1/4 W, Metal Film	017-144-2-612	ZD902	5.6V, 500 m W, Zener Diode	152-180-9-003
R937	51.1 k Ω , 1/2%, 1/4 W, Metal Film	017-144-5-112	Q903, 904, 907	2SC1815Y NPN Transistor	176-089-9-003
R938	100 k Ω , 1/2%, 1/4 W, Metal Film	017-144-1-003	Q905	2N2369 NPN Transistor	176-049-9-001
R939	249 k Ω , 1/2%, 1/4 W, Metal Film	017-144-2-493	Q906, 908	BC557B PNP Transistor	177-105-9-003
R969	38.3 Ω , 1/2%, 1/4 W, Metal Film	017-144-3-838	INTEGRATED CIRCUITS		
R970	249 Ω , 1/2%, 1/4 W, Metal Film	017-144-2-490	U902	I.C., 74LS74 (Dual "D" Flip-Flop)	307-119-9-001
R971	280 Ω , 1/2%, 1/4 W, Metal Film	017-144-2-800	U903	I.C., 308N	307-423-9-002
R972	2.00 k Ω , 1/2%, 1/4 W, Metal Film	017-144-2-001	U904	I.C., 710PC (Differential Comp., 14-Pin)	307-466-9-001
R973	6.81 k Ω , 1/2%, 1/4 W, Metal Film	017-144-6-811	U905	I.C., 4011B (Quad 2-Input NAND Gate)	308-114-9-001
VR905	5 k Ω Trimmer Pot (Swp Length Adj)	010-100-9-008	U906	I.C., 4028B (Decoder)	308-320-9-001
VR907	50 k Ω Trimmer Pot.	010-100-9-002	U907	I.C., 4052B (Dual 4-CH Analog Mult/Demult)	308-434-9-001
VR908-911	20 k Ω Trimmer Pot.	010-100-9-001	MISCELLANEOUS		
VR912	30 k Ω Trimmer Pot.	010-100-9-007	P905	2-Pin Polarized Plug (Small)	757-140-9-006
CAPACITORS			P904	4-Pin Polarized Plug (Small)	757-140-9-008
C916	100 pF, 5%, 50 V, Ceramic	020-423-9-003	P903	6-Pin Polarized Plug (Small)	757-140-9-010
C921	180 pF, 5%, 50 V, Ceramic	020-423-9-008	P902	11-Pin Polarized Plug (Small)	757-153-9-001
C915	68 pF, 5%, 50 V, Ceramic	020-423-9-018	D923, 925	Jumper Wire	---
C911	390 pF, 5%, 50 V, Ceramic	020-423-9-026	HORIZONTAL SWEEP P.C.B. ASSEMBLY		
C907, 909, 910	0.022 μ F, +80/-20%, 50 V, Ceramic	020-423-9-034	RESISTORS		
C918	0.01 μ F, +80/-20%, 50 V, Ceramic	020-448-9-007	Unlisted resistors are 5%, 1/4 W, Metal Film (See schematic diagram for value.)		
C917, 919	0.1 μ F, +80/-20%, 50 V, Ceramic	020-480-9-001	R646	82 Ω , 5%, 1 W, Metal Oxide	013-183-9-002
C922	100 μ F, 20% Electrolytic	022-411-9-009	R834, 835	120 k Ω , 5%, 1 W, Metal Oxide	013-183-9-003
RESISTORS			R841, 842, 853, 854	56 k Ω , 5%, 1 W, Metal Oxide	013-183-9-004
Unlisted resistors are 5%, 1/4 W, Metal Film (See schematic diagram for value.)			R856, 859	300 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-304
R526-528	1.8 M Ω , 5%, 1/2 W, Carbon Film	002-102-5-185	VR502	5 k Ω Trimmer Pot.	010-046-9-008
R529	1 M Ω , 5%, 1/2 W, Carbon Film	002-102-5-105	VR503, 506	500 k Ω Potentiometer	008-877-9-003
R540	560 Ω , 5%, 1/2 W, Carbon Film	002-102-5-561	VR504, 505	500 k Ω Trimmer Pot.	010-046-9-010
R544	10.0 k Ω , 1%, 1/4 W, Metal Film	015-144-1-002	VR507, 606	50 k Ω Trimmer Pot.	010-046-9-009
R545	6.8 M Ω , 5%, 1/2 W, Metal Glaze	013-139-9-001	VR508, 601	30 k Ω Trimmer Pot.	010-046-9-007
R546	820 k, 5%, 1/2 W, Carbon Film	002-102-5-824	VR602	1 M Ω Trimmer Pot.	010-046-9-005
R546A	680 k, 5%, 1/2 W, Carbon Film	002-102-5-684	VR603, 806	10 k Ω Potentiometer with Switch	008-877-9-001
R547	71.5 k Ω , 1%, 1/4 W, Metal Film	015-144-7-152	VR604, 805	300 Ω Trimmer Pot.	010-046-9-006
R548	18.2 k Ω , 1%, 1/4 W, Metal Film	015-144-1-822	VR605	5 k Ω Trimmer Pot.	010-046-9-001
R549	33 Ω 1 W, Fusible	013-181-9-001			
R601	1.2 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-122			

PARTS LIST

CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER	CIRCUIT SYMBOL	DESCRIPTION	B+K PRECISION PART NUMBER
HORIZONTAL SWEEP P.C.B. ASSEMBLY (Continued)					
VR802	100 k Ω . Potentiometer with Switch	008-888-9-001	D505-507, 514, 601-609, 803	1N4148 Diode	151-038-9-001
VR803	1 k Ω . Trimmer Pot.	010-065-9-001	D511, 512	R5000 Diode	151-176-9-001
VR804	100 Ω . Trimmer Pot.	010-046-9-004	Q505	2SA1015Y PNP Transistor	177-043-9-002
CAPACITORS					
C501, 524, 526, 611, 616, 621	10 μ F, 20%, 50 V, Electrolytic	022-441-9-002	Q507, 601-604, 611, 806	2SC1815Y NPN Transistor	176-089-9-003
C502, 522, 523, 517	0.1 μ F, 5%, 100 V, Polyester	025-278-9-016	Q508	2SA1029C PNP Transistor	177-108-9-003
C510, 633	120 pF, 5%, 50 V, Ceramic	020-423-9-004	Q509	2SC535C NPN Transistor	176-055-9-001
C511, 512	0.22 μ F, 10%, 1k V, Polyester	025-278-9-005	Q510	BF422 NPN Transistor	176-214-9-004
C513	0.33 μ F, 10%, 250 V, Polyester	025-300-9-001	Q605, 807, 808	BC557B PNP Transistor	177-105-9-003
C514-516	68 pF, 10%, 2k V, Ceramic	020-423-9-028	Q606, 607	BF450 PNP Transistor	177-108-9-002
C518, 817, 821, 822	.047 μ F, 10%, 400 V, Polyester	025-320-9-003	Q608-610, 809, 810	BF199 NPN Transistor	176-214-9-003
C519, 520, 528	.0047 μ F, +80/-20%, 2k V, Ceramic	020-423-9-032	Q811, 814	BF470 PNP Transistor	177-115-9-001
C521	100 μ F, 20%, 50 V, Electrolytic	022-441-9-006	Q812, 813	BF458 NPN Transistor	176-214-9-001
C525, 527, 612, 617, 623, 625-627, 812	0.022 μ F, +80/-20%, 50 V, Ceramic	020-423-9-034	U505	4N25 Photo Diode	158-094-9-002
C526A	22 μ F, 20%, 50 V, Electrolytic	022-441-9-003	ZD501	33V, 500 m W, Zener Diode	152-180-9-002
C529	100 pF, 10%, 2k V, Ceramic	020-423-9-031	ZD502	100V, 5%, 1W, Zener Diode	152-180-9-005
C530, 531	0.01 μ F, +80/-20%, 1.5k V, Ceramic	020-423-9-033	ZD503	12V, 500 m W, Zener Diode	152-197-9-001
C601	270 pF, 5%, 50 V, Ceramic	020-423-9-024	ZD506, 601	5.6V, 500 m W, Zener Diode	152-180-9-003
C603, 605, 608, 619	1 μ F, 20%, 50 V, Electrolytic	022-441-9-007	ZD801, 802	200mA, 250 V, Diode (BAV21)	151-158-9-001
C604, 606, 629	0.01 μ F, 10%, 50 V, Ceramic	020-453-9-003	INTEGRATED CIRCUITS		
C607	0.047 μ F, 5%, 50 V, Polyester	025-278-9-012	U506	I.C., 308N	307-423-9-002
C609, 610	6.8 pF, +/-0.5 pF, 50 V, Ceramic	020-423-9-017	U601	I.C., 710PC (Differential Comp., 14 Pin)	307-466-9-001
C613, 625A	0.001 μ F, 10%, 50 V, Ceramic	020-423-9-029	U602	I.C., 74LS74 (Dual "D" Flip-Flop)	307-119-9-001
C614	0.1 μ F, 5%, 50 V, Polyester	025-278-9-007	U603	I.C., 7812 (1 Amp, 12 Volt Regulator)	307-164-9-001
C615	100 pF, 5%, 50 V, Ceramic	020-423-9-003	MISCELLANEOUS		
C618	1.0 μ F, 20%, 50 V, Non-Pol. Electrolytic	022-381-9-006	Shield, High Voltage (Top)		256-318-9-004
C620	330 pF, 5%, 50 V, Ceramic	020-423-9-025	Shield Plate		256-318-9-005
C622, 624, 628, 813	10 μ F, 20%, 50 V, Electrolytic	022-441-9-002	Shield (Copper Strap)		256-318-9-006
C814	0.1 μ F, 5%, 50 V, Polyester	025-278-9-007	Insulator		342-191-9-001
C817	10 μ F, 10%, 25 V, Tantalum	027-120-9-003	Cable Tie		380-311-9-001
C818, 820	0.01 μ F, 10%, 400 V, Polyester	025-278-9-003	3 x 8 mm PRHM Screw		634-228-9-002
C819	0.1 μ F, 10%, 400 V, Polyester	025-286-9-001	Heat Sink		747-160-9-002
C825	0.68 μ F, 10%, 100 V, Polyester	025-286-9-002	Test Pin, PC Board		757-140-9-001
TRANSFORMERS					
T502	CVT Transformer	063-021-9-001	Test Pin, PC Board		757-140-9-001
S601, 602	Lever Switch	080-030-9-002	5-Pin Polarized Plug (Large)		757-140-9-004
S903	4 Position Rotary Switch	083-327-9-001	2-Pin Polarized Plug (Small)		757-140-9-006
DIODES & TRANSISTORS					
D501	1 Amp, 1K V, Diode (1N4007)	151-053-9-001	3-Pin Polarized Plug (Small)		757-140-9-007
POWER SUPPLY P.C. B. ASSEMBLY					
RESISTORS					
R503, 510	4.7 k Ω , 5%, 1/4 W, Metal Film	011-104-5-472	4-Pin Polarized Plug (Small)		757-140-9-008
R504	100 Ω , 5%, 1/2 W, Carbon Film	002-102-5-101	2-Pin Polarized R.A. Plug (Small)		757-140-9-012
R506	47 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-473	4-Pin Polarized Plug (Large)		757-140-9-015
R507	100 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-104	3-Pin Polarized Plug		757-140-9-016
R508	120 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-124	DIODES & TRANSISTORS		
R509	100 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-104	BD501, 502	Bridge Rectifier	157-045-9-001
R511	33 Ω , 5%, 1/2 W, Carbon Film	002-102-5-330	D502, 504	1 Amp, 1 k V Diode (1N4007)	151-053-9-001
R512, 516	22 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-223	D503	1N4148 Diode	151-038-9-001
R513	820 k Ω , 5%, 1/2 W, Carbon Film	002-102-5-824	Q501	BF459 NPN Transistor	176-214-9-005
R514	12.1 k Ω , 1%, 1/4 W, Metal Film	015-144-1-212	Q502, 504	BF423 PNP Transistor	177-108-9-001
R517	390 k Ω , 5%, 1/2 W, Carbon	002-102-5-394	INTEGRATED CIRCUITS		
R518	39 k Ω , 5%, 1/4 W, Metal Film	011-104-5-393	U501	I.C., 431CLP (Programmable Reference)	307-409-9-001
VR501	5 k Ω . Trimmer Pot.	010-065-9-002	MISCELLANEOUS		
CAPACITORS					
C505	0.001 μ F, 10% 50 V, Ceramic	020-423-9-029	For Q501	Insulator	342-191-9-001
C503, 504	47 μ F, +50/-20%, 250 V, Electrolytic	022-381-9-005	For Q501	3 x 8 mm Screw	634-228-9-002
			For Q501	Heat Sink	747-160-9-002
			PG114	4-Pin Polarized Plug (Large)	757-140-9-003
			PG116	3-Pin Polarized Plug (Small)	757-140-9-007

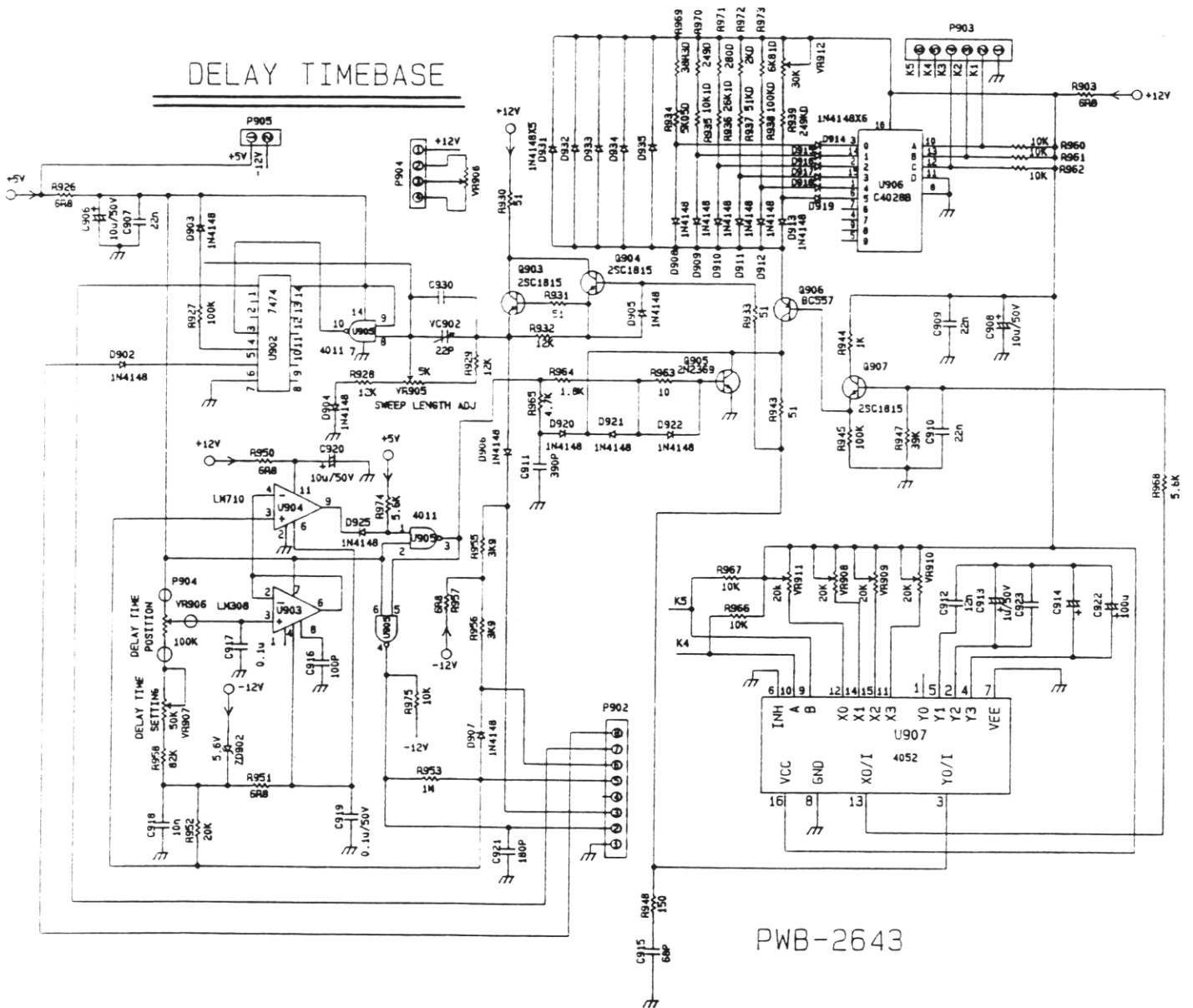


MAIN TIMEBASE

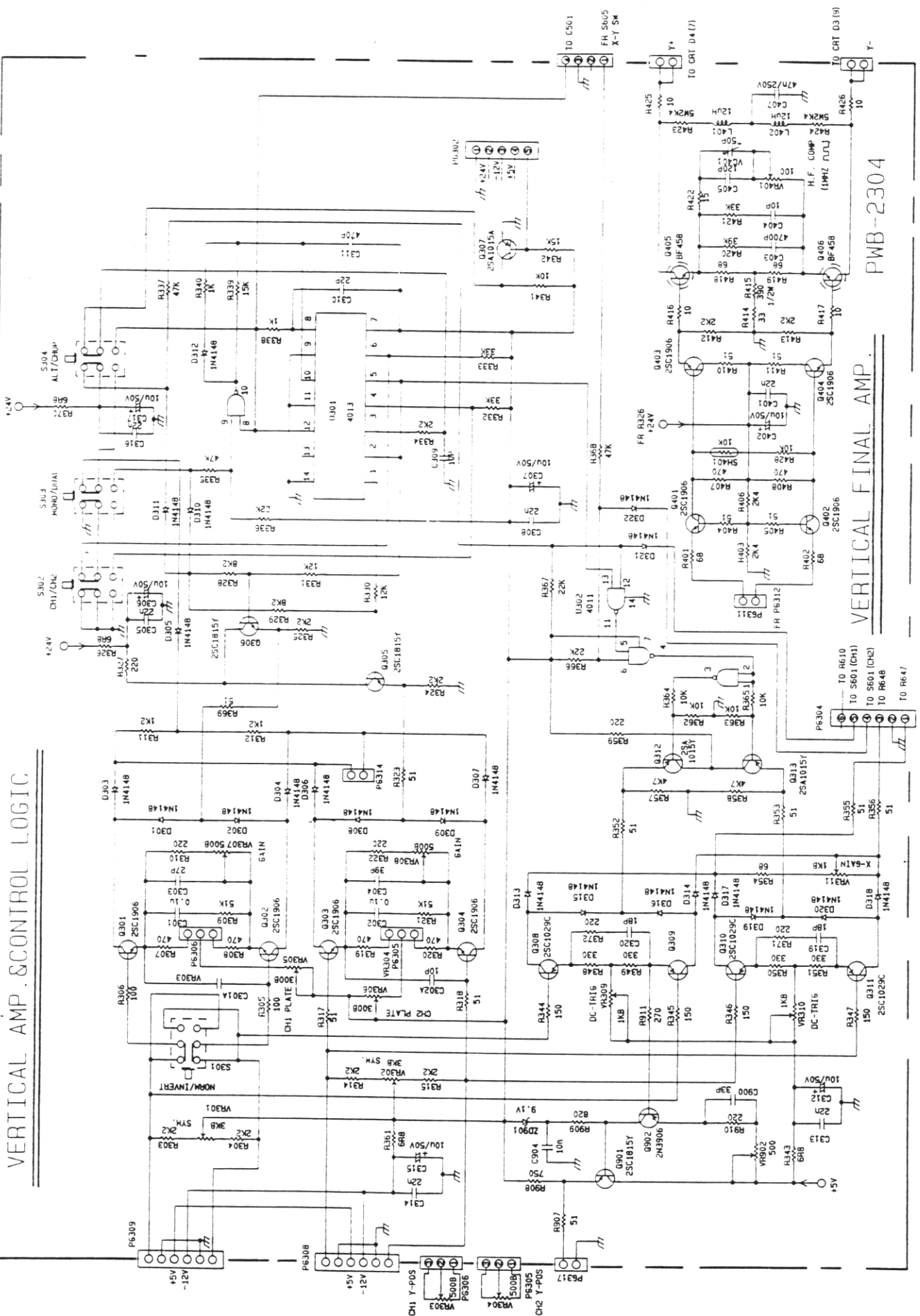


PWB-2642

DELAY TIMEBASE



VERTICAL AMP & CONTROL LOGIC



VERTICAL FINAL AMP

PWB-2304

