

MusicParts.Com

Technical Document Distribution

Brand:	Ibanez
Model	WH10
Product:	Wah Pedal
Description:	Service Manual

Musicparts Document Number: 50393 TechTips: No Pages: 6 Dated: None

Hello,

Welcome to MusicParts.Com, Inc. your online resource for technical documents and service information. This PDF package may contain information, schematics, parts lists, images, engineering changes, previous versions, circuit descriptions, and many other unique features about the product you have chosen. This document was assembled from a variety of sources and is the result of our many years in the music repair business.

NOTE: Large original over-sized drawings will need to be taped together. We feel this is better than reducing them and losing the fine details.

VIEWING: This document is utilizing PAGE-ON-DEMAND downloading. This will let you navigate to any page without waiting for the entire file to download. Just click ON the thumbnails.

PRINTING: Very Important!

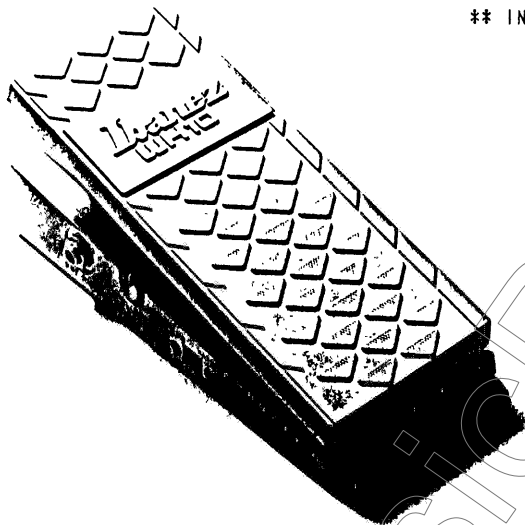
When the print dialog appears, please make sure "**REDUCE TO PAPER SIZE**" OR "**SHRINK OVERSIZED PAGES**" is checked, otherwise you may cut off the edge of the page. This will compensate for your printer's margins and produce a great looking printout. Also please stay online while printing this document to make sure you get all the pages.

Visit us on the web at: <http://www.musicparts.com/>
Email us at: customerservice@musicparts.com

Ibanez

SERVICE MANUAL

 *
 * WAH PEDAL *
 * WH10 *
 *



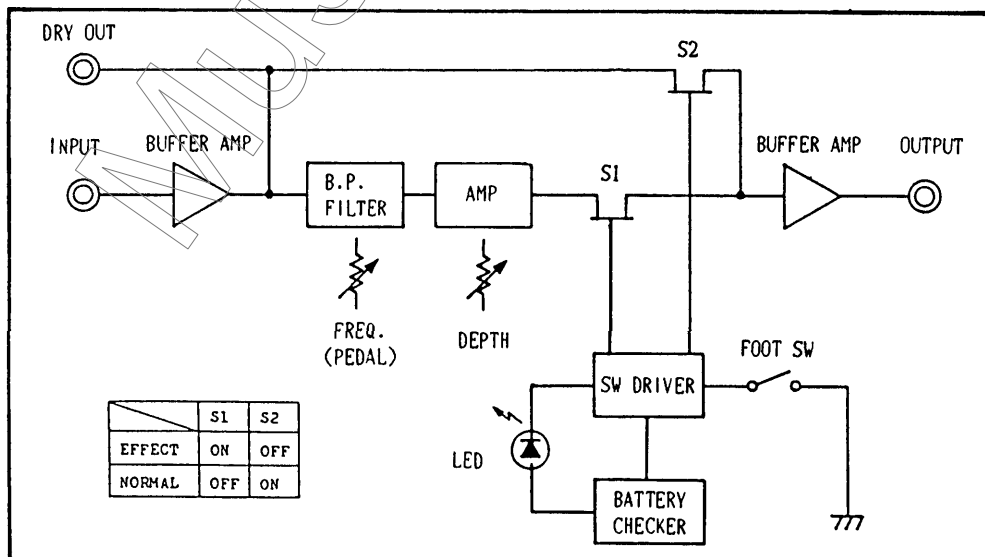
** INDEX **

SPECIFICATIONS	-----	1
BLOCK DIAGRAM	-----	1
TECHNICAL DATA INFORMATION	-----	2
PARTS LIST	-----	2
ADJUSTMENT	-----	3
TROUBLE SHOOTING	-----	4
P.C.B.	-----	5
SCHEMATIC DIAGRAM	-----	6

** SPECIFICATIONS **

		(0dBv=775mVrms)
1	Input Impedance	500kohms
2	Output Impedance	< 1kohms
3	Equivalent Input Noise (Input Shorted)	< -95dBv (IHF-A)
4	Maximum Output Level	+4dBv
5	Wah Range (GUITAR) (BASS)	350Hz - 2.2KHz 175Hz - 1.1KHz
6	Wah Depth	+6dB - +20dB
7	Power Requirement	6mA/DC9V
8	Size (DxWxH) mm	89 x 55-84 x 200
9	Weight grms	490

** BLOCK DIAGRAM **



PRINTED IN JAPAN

** TECHNICAL DATA INFORMATION **

[A] POWER SUPPLY

1	Connection	AC109	to EXT.DC.		
2	Check	DC VOLTAGE	DC9.0V DC4.5V	at C17 at C18	
3	Check	SUPPLIED CURRENT	approx.10mA		
4	Check	WORKING VOLTAGE	5.0V minimum		

** PARTS LIST **

PARTS NAME	Mkr.	pcs	PARTS NO.	REF.NO.	REMARKS
PEDAL CASE(TOP)		1	GA003201-03		
CASE(BOTTOM)		1	GA003201-01		
WASHER		2	GA003201-05	FOR PEDAL	
BOTTOM PLATE		1	GA003212-01		
VOLUME SHILD CASE		2	GA003210-03	FOR MAIN & DEPTH VOLUME	
PIN		1	GA003211-02	FOR CRANK (A)	
CRANK (A)		1	GA003211-01A	FOR MAIN VOLUME	
CRANK (B)		1	GA003211-01B	FOR PEDAL	
BOLT		1	GA003220-01	FOR PEDAL	
U-NUT		1	GA003220-02	FOR PEDAL	
SCREW		1	GA003220-03	FOR CRANK (A)	
SCREW		1	GA003220-04	FOR CRANK (B)	
SPRING WASHER		1	GA003220-05	FOR CRANK (B)	
SCREW		1	GA003220-06	FOR LUG	
NUT		1	GA003220-07	FOR LUG	
SCREW		2	GA003220-08	FOR P.C.B.	
WASHER		1	GA003220-09	FOR LUG	
E-RING		2	GA003220-10	FOR PIN	
LUG		1	GA003220-11		
WASHER (A)		3	GA003220-12	FOR JACK	
WASHER (B)		2	GA003220-13	FOR PEDAL	
SCREW		2	GA003220-14	FOR SWITCH	
SCREW		4	GA003220-15	FOR BOTTOM PLATE	
E-RING		1	GA003220-16	FOR SWITCH	
RUBBER NAME PLATE		1	GA003200-01	FOR PEDAL	LIGHT GREEN
RUBBER FOOT		4	GA003200-02	FOR BOTTOM PLATE	
RUBBER		1	GA003231-01	FOR PEDAL	
KNOB		1	GA003202-01	FOR DEPTH VOLUME	LIGHT GREEN
BATTERY		1	S-006P		
SWITCH	FUJI	1	GA003140-02	SW1 Normal/Effect	
SWITCH	TEI	1	GA003140-01	SW2 GTR/BASS RANGE	

P.C.B.		1	GA003230-01		
IC Op.Amp.	NSC	1	LM358	IC1	
TRANSISTOR	TO	2	2SC1815[Y]	Q5,Q6	
FET	TO	4	2SK30A[Y]	Q1,Q2,Q3,Q4	
DIODE	TO	2	1S1588	D1,D2	
DIODE	HI	1	W03C	D4	
ZENER DIODE	NEC	1	RD4.7EB	D3	
VARIABLE R.	TEI	1	GA003110-01	VR1	500k+50k
VARIABLE R.	TEI	1	GA003111-01	VR2	50k(B)
LED	TO	1	GA003160-01	D5	RED
JACK	SMK	2	GA003150-01	JK1,JK2	
JACK	SMK	1	GA003150-02	JK3	
EXT.DC JACK	HO	1	GA003151-01	EXT.DC JK4	
BATTERY SNAP		1	GA003170-01		

**** ADJUSTMENT ****

Adjustment and Calibration of Main Volume (Wah Range)

- Step 1 Hook-up (Refer to Fig.1)
- Set the "FREQUENCY RANGE SWITCH" to the "GTR" position.
 - Put 300~400Hz, 0dBv sinewave into "INPUT" and connect the oscilloscope or voltmeter to "OUTPUT".
 - Turn the "DEPTH" controls fully CW.
 - Set the position of pedal all the way up.
- Step 2 Check the output level for maximum at 350Hz. (approx.+20dB)
- Step 3 Press the pedal all the way down and set-up the range of oscillator to 2.0K~2.4KHz.
- Step 4 Check the output level for maximum at 2.2KHz.
- Step 5 Set the "FREQ. RANGE SW" to the "BASS" position and repeat steps from 1 to 4. (as SPECIFICATION : 175Hz~1.1KHz)
- Step 6 If proper results are not obtained, Adjust the main volume. Just then, Adjust the gained frequency that is the same as SPECIFICATION. (Refer to Fig.2)
This is done by loosening the set screw that secures the shaft of the main volume pot to the crank.
Remove the shaft of the main volume and repeat steps 1 and 2.
- Step 7 When proper results are obtained, retighten the set screw.

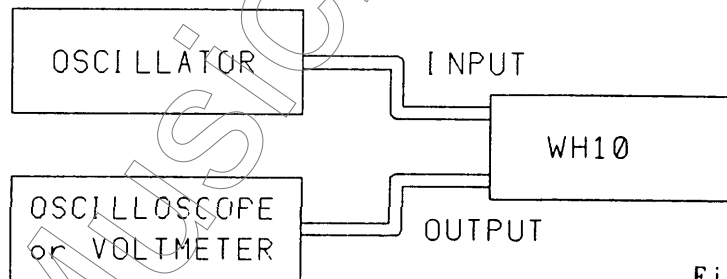


Fig.1

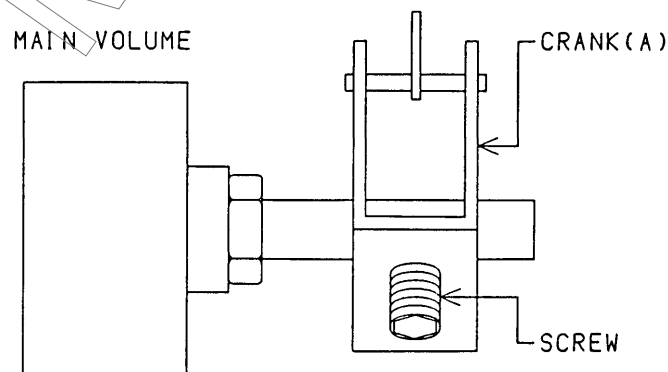
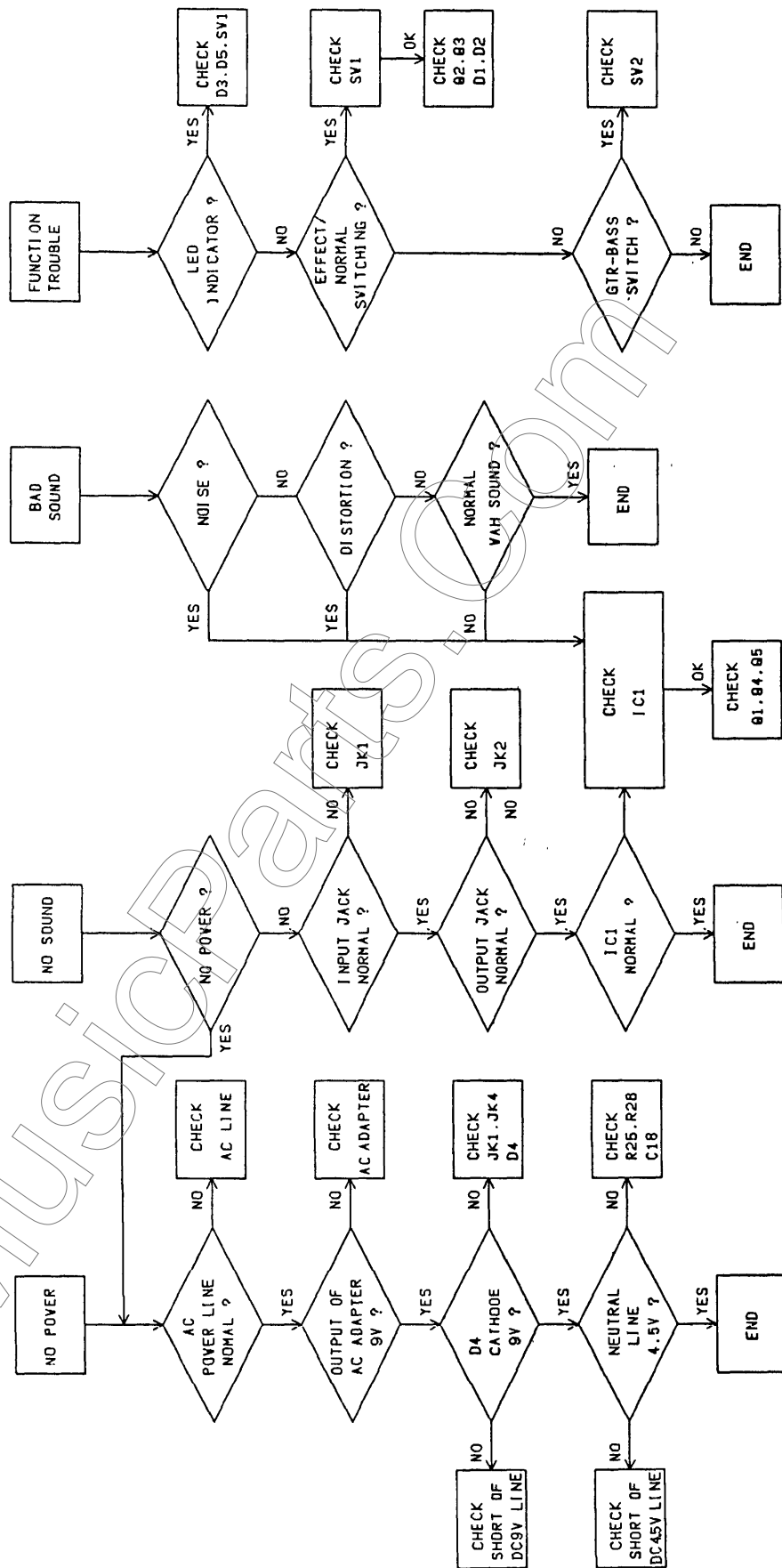


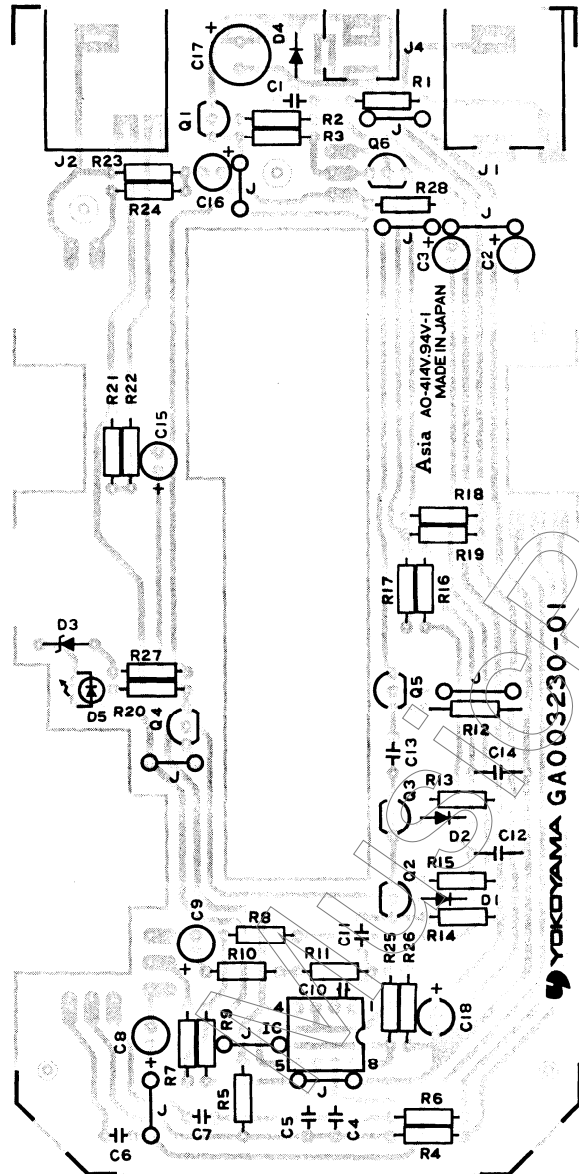
Fig.2

** TROUBLE SHOOTING **

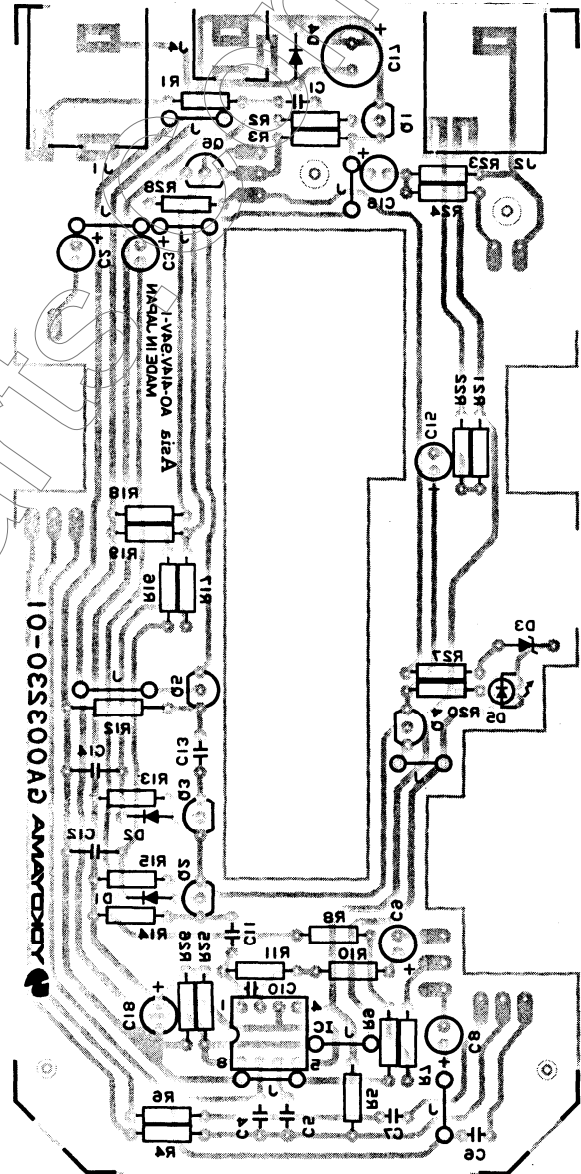


** P.C.B. **

(TOP VIEW)



(BOTTOM VIEW)



YOKOYAMA GA003230-01

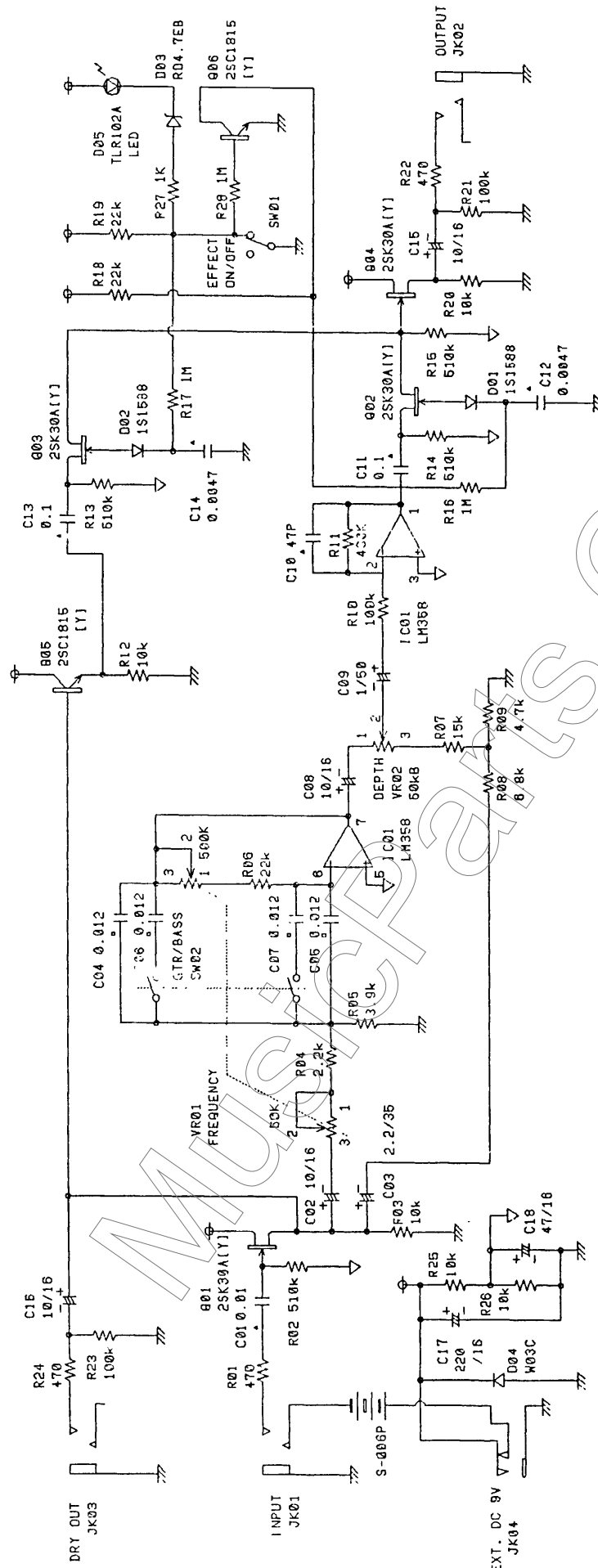
AMATEK GY003530-01

Asia AO-414V94V-1
MADE IN JAPAN

Asia AO-414V94V-1
MADE IN JAPAN

Parts

SCHEMATIC DIAGRAM



NOTES:
 Δ CERAMIC capacitor.
 □ FILM capacitor.
 ○ ALL FILM capacitors are above 50V rating.
 BP 51 POLAR capacitor.
 NP: NON POLAR capacitor.
 T TANTALUM capacitor.
 See all capacitors are ELECTROLYTIC capacitors unless otherwise noted.
 Unless otherwise indicated:
 Resistance in Ω, K=KΩ, M=MΩ.
 Resistors, 1/4W ±5% rating.
 Capacitance in p-DF, u-uF.

CAUTION
 This schematic diagram is a general standard one. The parts rating and/or schematic diagram will be subject to change without notice.

