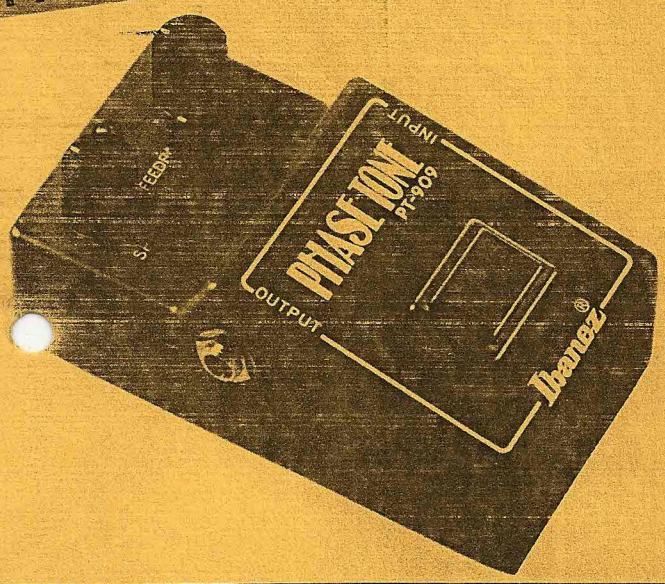
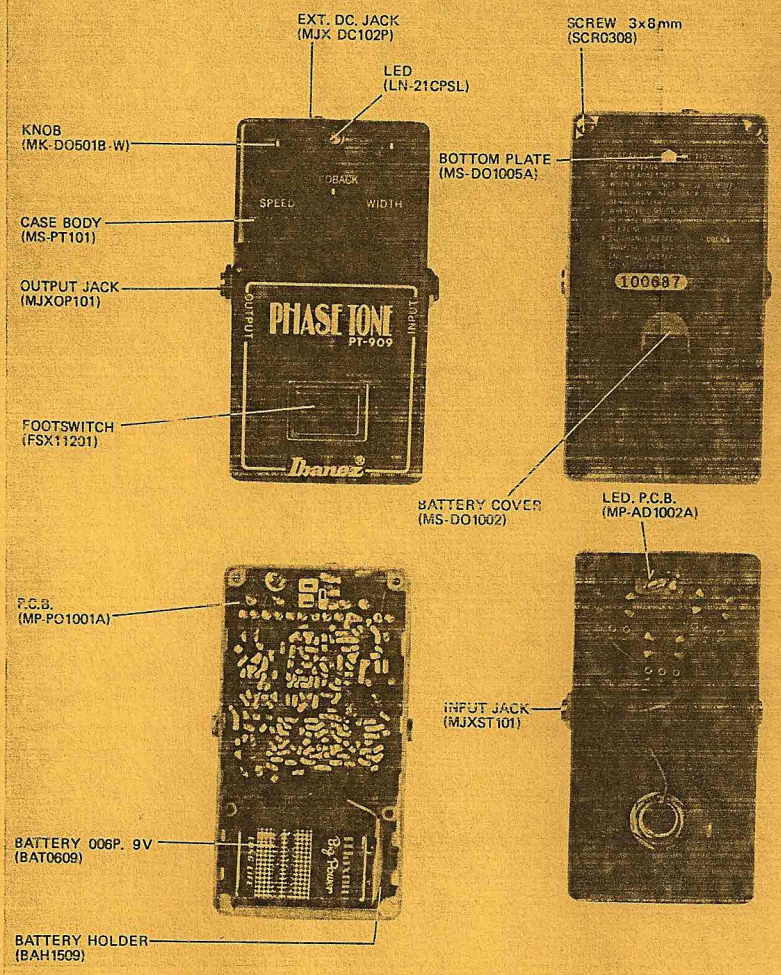
Ibanez SERVICE MANUAL

PT909

PHASE TONE



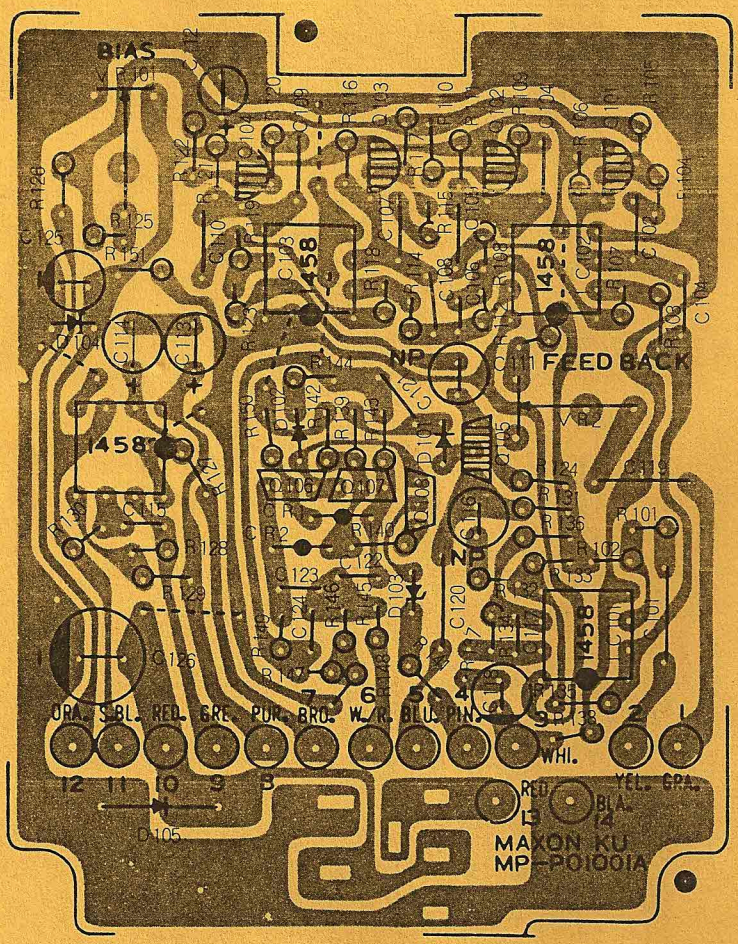
DISPOSITION OF PARTS



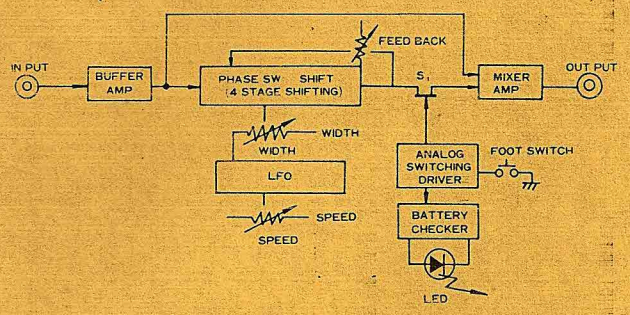
PARTS LIST

PARTS NAME	TYPE	PARTS NO.	REF. NO.
CASE BODY		MS-PT101	
BOTTOM PLATE		MS-DO1005A	
BOTTOM-RUBBER		BR-DO1003A	
BATTERY-COVER		MS-DO1002	
BATTERY-RUBBER		BR-DO1004A	
P.C.B.		MP-PO1001A	
FOOT SWITCH	ELECTRIC	FSX11201	
INPUT JACK	MOLD STEREO	MJXST101	
OUTPUT JACK	MOLD OPEN	MJXOP101	
KNOB		MK-DO501B-W	
BATTERY	006P 9V	BAT0609	
BATTERY HOLDER	200 mm	BAH1509	
SCREW	3x8 mm	SCR0308	
LED	LN21CPSL	LN21CPSL	
LED P.C.B.		MP-AD1002A	
EXT. DC. JACK		MJX DC 102P	
IC	MC1458	MC1458	IC101 – 104
Tr.	2SC536SPE	2SC536SPE	Q106 – 108
FET	2SK44SP-C$_2$	2SK44SP-C$_2$	Q105
FET	2SK30A-Y	2SK30A-Y	Q101 – 104
DIODE	IN5231B	IN5231B	D104
DIODE	RD5.6EB	RD5.6EB	D103
DIODE	WO3C	WO3C	D105
DIODE	MA150	MA150	D101, 102
VARIABLE RESISTOR	16ϕ-10KB	PMXB155R103BSC	
VARIABLE RESISTOR	16ϕ-100KB	PMXB155R104BSC	
VARIABLE RESISTOR	16ϕ-500KC	PMXB155R504BSC	
SEMI FIXED RESISTOR	10K3P	RSFST103P3	VR102
SEMI FIXED RESISTOR	100K3P	REFST104P3	VR101

P.C.B.

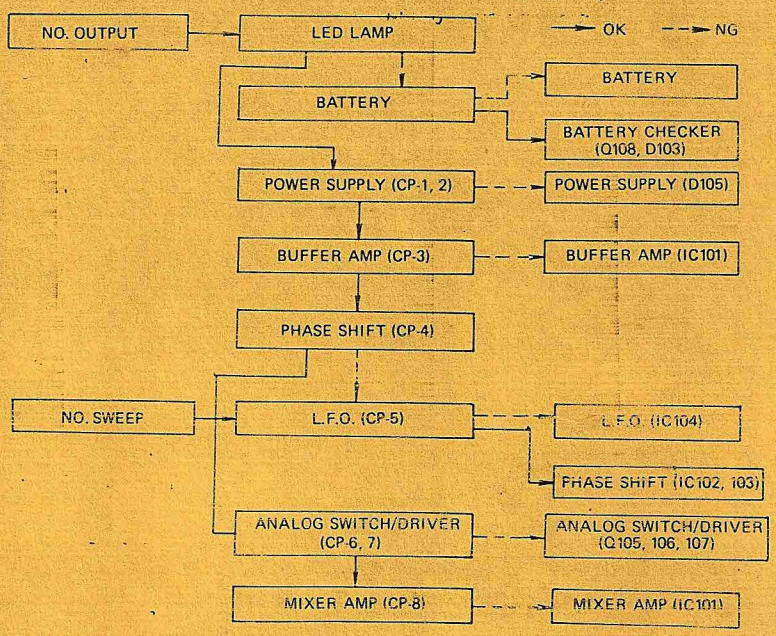


BLOCK DIAGRAMS



	S1
EFFECT	ON
NORMAL	OFF

TROUBLE SHOOTING



REMARK: SIGNAL OF CP IS THE WAVE INPUTTING A SINE WAVE SIGNAL TO INPUT.

V – VOLTAGE
S – SIGNAL

CP-1	2	3	4	5	6		7	8
V	V	S	S	S	V		S	S
					EF-ON	EF-OFF		
9	4.5				5.5	0.5		

ADJUSTMENT PROCEDURES

BIAS

1. Put 100mV 1KHz sinewave into INPUT.
2. Set WIDTH controls fully CW, SPEED controls fully CW and FEEDBACK controls fully CCW.
3. Adjust VR101 to achieve the Lissajous pattern shown in Fig. A.

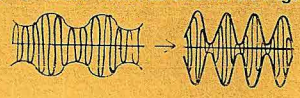
4. Set WIDTH controls fully CCW.
5. Make sure wave form as shown in Fig. B.
   If does not fit wave form, please readjust from 2.

Fig. B

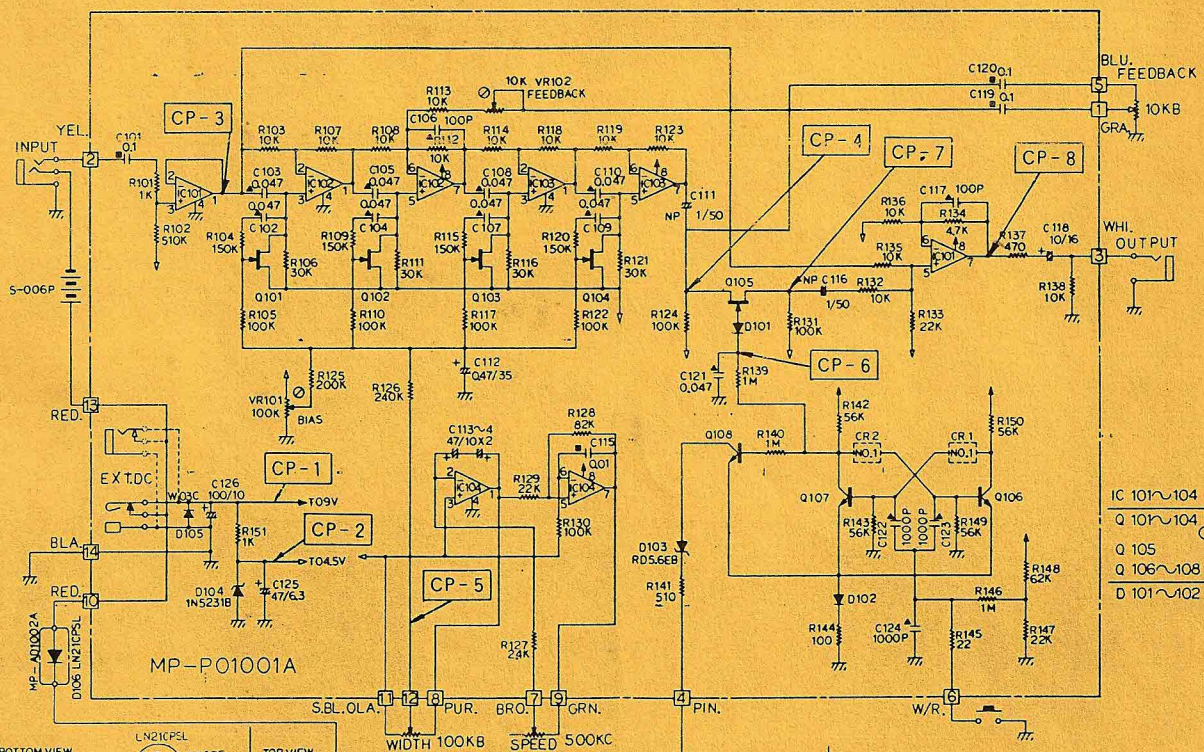
FEEDBACK

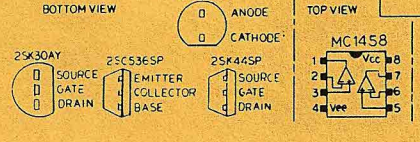
1. Put 100mV 1KHz sinewave into INPUT.
2. Set WIDTH, SPEED and FEEDBACK controls fully CW.
3. Adjust VR102 for wave form as shown in Fig. C. at output.

Fig. C



SCHEMATIC DIAGRAMS





NOTE

▲: CERAMIC capacitor. All ceramic capacitors are above 25V rating.
■: MYLAR capacitor. All mylor capacitors are above 50V rating.
NP: NON POLAR capacitor.
T: TANTALUM capacitor.

And all capacitors are ELECTOLYTIC capacitors, unless otherwise marked.
Unless otherwise indicated:
Resistance in Ω, K = K Ω, M = MΩ
Resistors, 1/8W, ±5% rating
Capacistance in pF μ = μF