

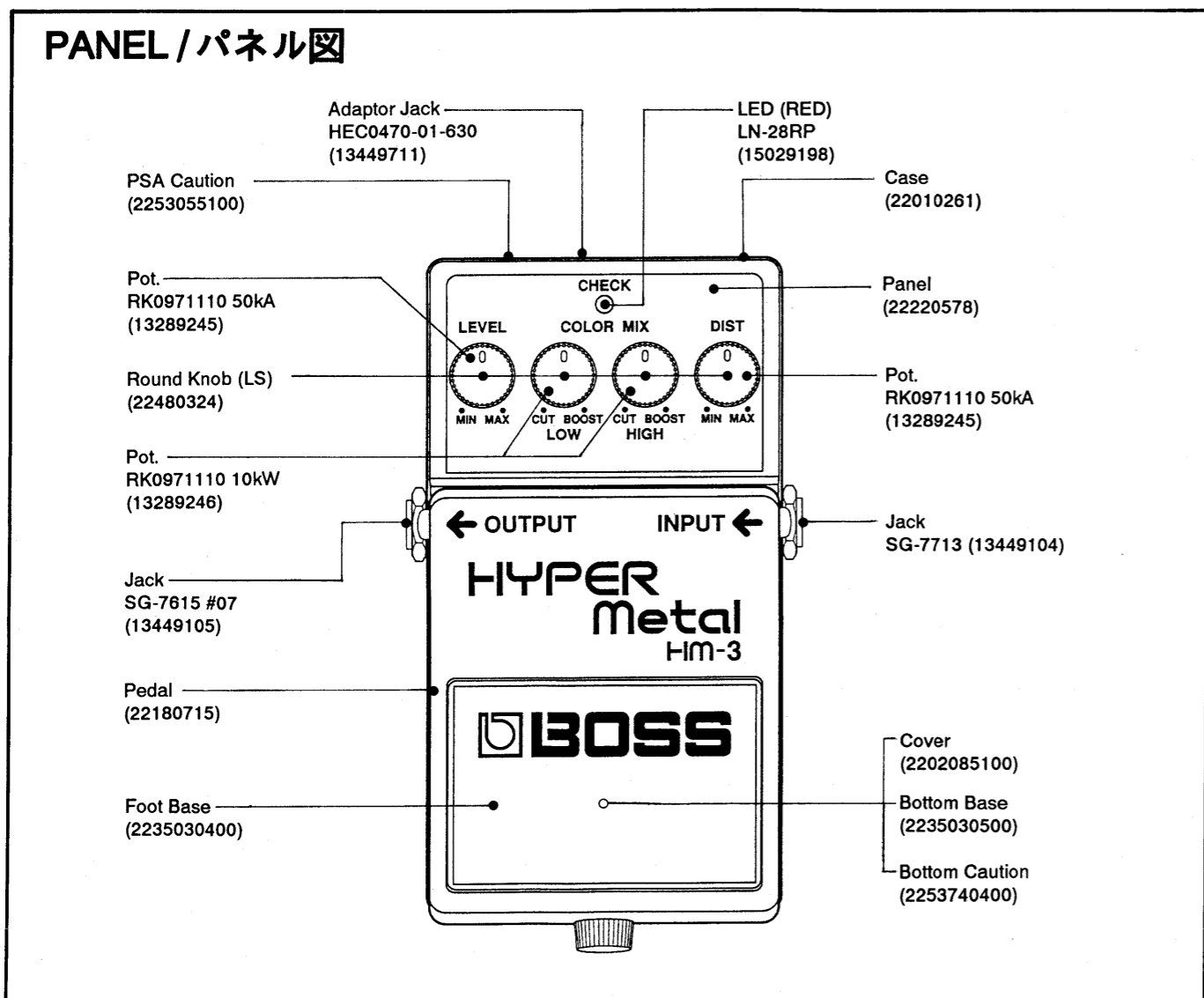
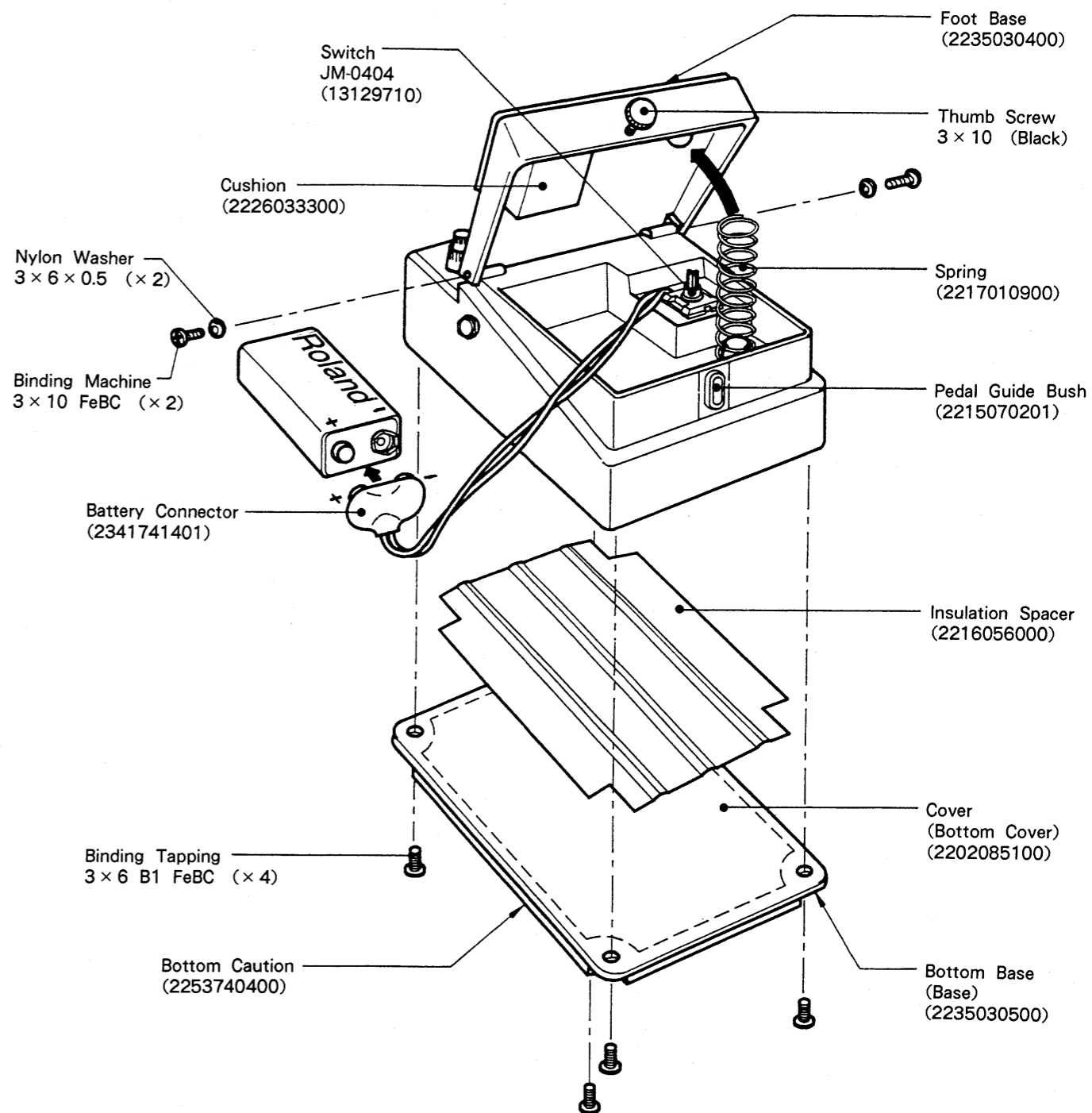
BOSS HM-3 SERVICE NOTES

HYPER Metal *First Edition*

EXPLODED VIEW / 分解図

SPECIFICATIONS / 仕様

- Controls Pedal Switch, Distortion, Color Mix High, Color Mix Low, Level
- Indicator Check Indicator (Serves also as battery check indicator)
- Jacks Input, Output, AC Adaptor
- Input Impedance 1M Ω
- Output Impedance 1k Ω
- Recommended Load Impedance 10k Ω or greater
- Equivalent Input Noise -120dBm (IHF-A, Typ.)
- Power Supply DC9V; Dry Battery (9V), AC Adaptor (PSA Series : Option)
- Current Draw 12mA (DC9V)
- Dimensions 70 (W) × 125 (D) × 55 (H) mm / 2-3/4 inch × 4-15/16 inch × 2-3/16 inch
- Weight 420g/15 oz (including battery)
- Accessories Owner's Manual (English) : PNo.26050982
 Owner's Manual (Japanese) : PNo.26050981
 Dry Battery S-006P (9V) : PNo.12569103RT
- Options AC Adaptor PSA-120, PSA-220, PSA-240, Battery S-006P/9V, 6AM6/9V (Alkaline)



PARTS LIST / パーツリスト

SAFETY PRECAUTIONS:
 The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.
 安全上の注意:
 Δが付いている部品は、安全上特別な規格でつくられたものです。交換の際は、指定された部品番号以外の部品は使わないようして下さい。

CONSIDERATIONS ON PARTS ORDERING
 When ordering any parts listed in the parts list, please specify the following items in the order sheet.

Ex.	QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
10	22575241	Sharp key	C-20/50	
15	2247017300	Knob (orange)	DAC-15D	

 Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.
パーツ発注に関するお願い
 オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)

例)	必要数	パーツナンバー	品名	使用機種
10	22575241	Sharp key	C-20/50	
15	2247017300	Knob (orange)	DAC-15D	

 もし記入漏れ、誤記等がある場合、必要部品が発送できなかったり、大幅な遅れの原因になります。御協力をお願いします。

CASING/ケース

22010261	Case
22220578	Panel
2202085100	Cover
2235030500	Bottom Base
22180715	Pedal
2235030400	Foot Base

KNOB, BUTTON/ツマミ、ボタン

22480324	Round Knob (LS)	DIST, COLOR (High, Low), LEVEL
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SWITCH/スイッチ

13129710	JM-0404	Push Switch
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JACK, SOCKET/ジャック、ソケット

13449711	HEC0470-01-630	Adaptor In Jack
13449104	SG-7713	INPUT
13449105	SG-7615 # 07	OUTPUT

PCB ASSY/基板完成品

7318252000	MT Board Assy (pcb 22930508 1/2)
NOTE : Replacement MT Board Assy includes VR Board Assy.	
注 : 補修用MT Board AssyはVR Board Assyを含みます。	
VR Board Assy (pcb 22930508 2/2)	
7318254000	LED Board Assy (pcb 2291049600)

IC

15189250	M5218AL	OP Amp	IC1, 2
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TRANSISTOR/トランジスター

15129186	2SC3378GR	
or 15129120	2SC2240GR	
15129185	2SC2458GR	
15139131	2SK184GR	FET
or 15139106	2SK117GR	
151391160Y	2SK118Y	FET

DIODE/ダイオード

15039118	S5688G	
15019125	1SS-133	
15019526	RD5.6EB3	zener
15029198	LN-28RP	LED (red)

POTENTIOMETER/ボリューム

13289245	RK0971110	50kA	LEVEL, GAIN
13289246	RK0971110	10kW	COLOR (High, Low)

WIRING, CABLE/ワイヤリング、ケーブル

23470462	Flat Cable 9p	L = 45mm
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SCREW/ネジ類

*****	3 × 10mm Thumb Screw (Black)
*****	3 × 6mm Pan Tapping B1 FeBC
*****	3 × 10mm Binding Machine FeBC
*****	Nylon Washer 3 × 3 × 0.5
*****	3 × 6mm Binding Tapping B1 FeCm

MISCELLANEOUS/その他

2215070201	Pedal Guide Bush	
2226033300	Cushion	
2217010900	Spring	
2341741401	Battery Connector	
2216056000	Insulation Spacer	clear large type
2253740400	Bottom Caution	
2253055100	PSA Caution	

ACCESORIES/標準付属品

26050982	Owner's Manual (English)	
26050981	Owner's Manual (Japanese)	
12569103RT	S-006P	Dry Battery (9V)

MT BOARD

Assy 7318252000
(pcb 22930508 1/2)

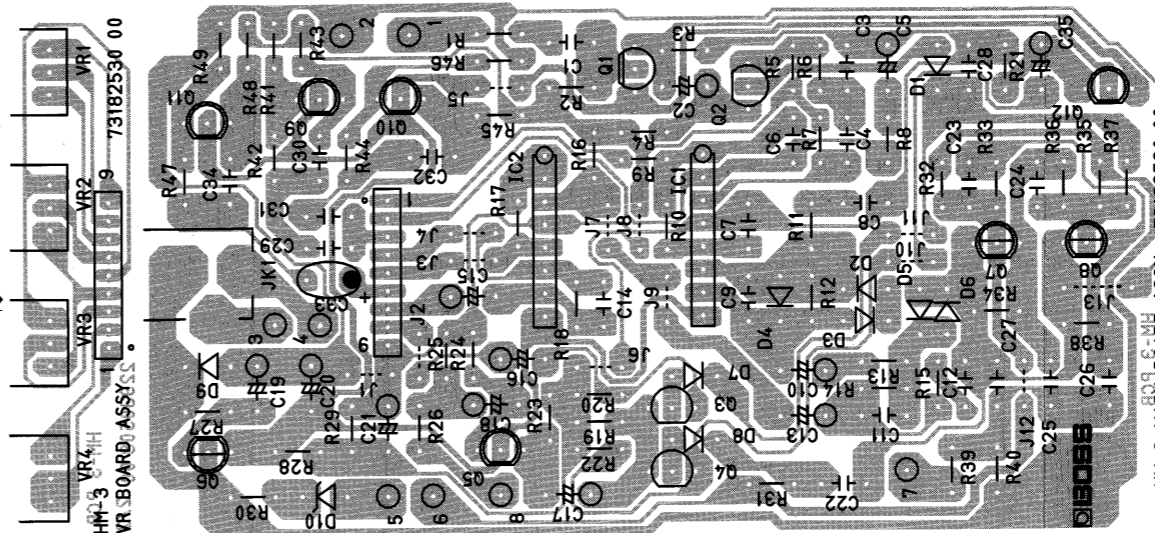
NOTE

Replacement MT Board Assy includes VR Board Assy.

補修用 MT Board Assy は VR Board Assy を含みます。

VR Board Assy (pcb 22930508 2/2)

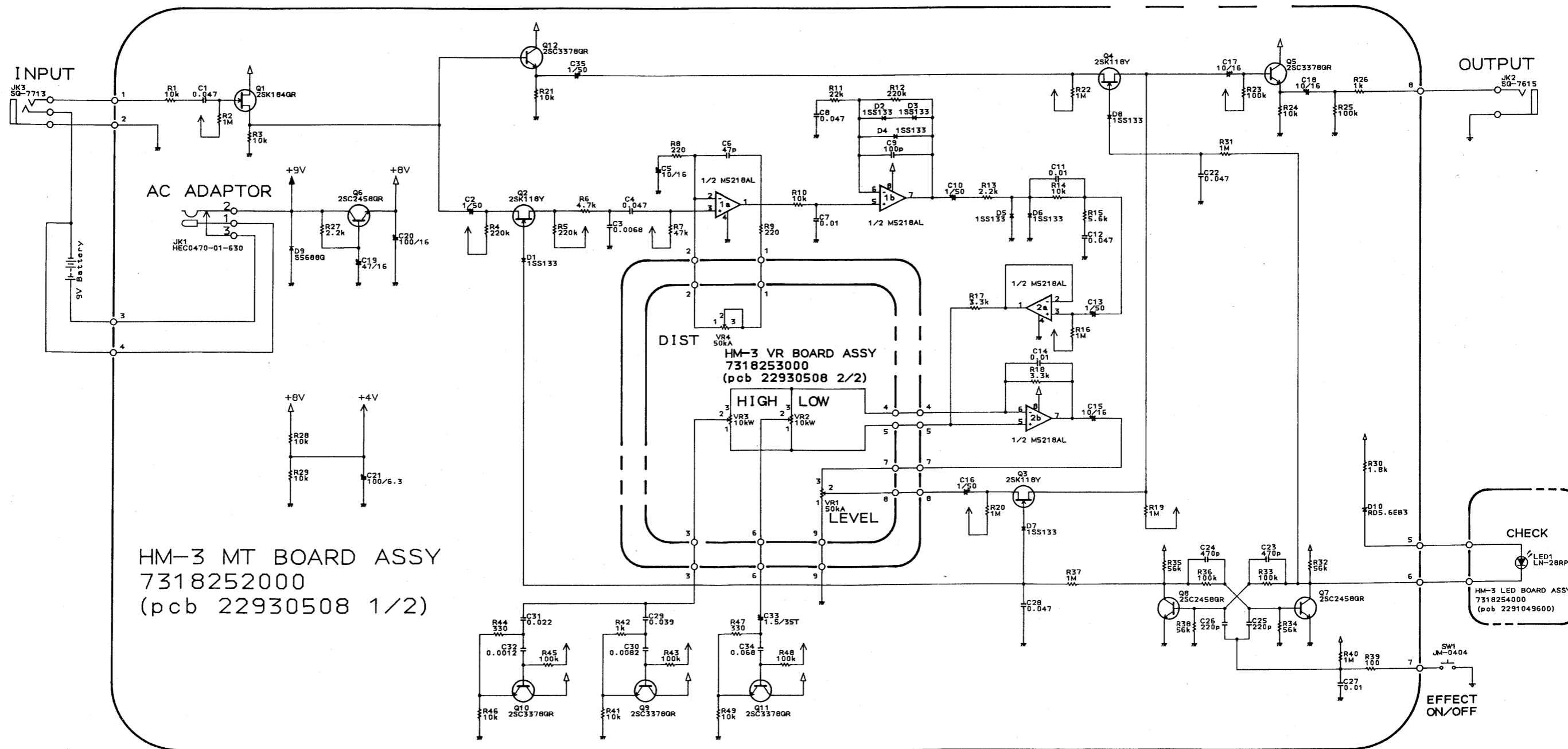
VR Board
(pcb 22930508 2/2)



MT BOARD
(pcb 22930508 1/2)

CIRCUIT DIAGRAM / 回路図

View from component side.



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B
C
D
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APPENDIX


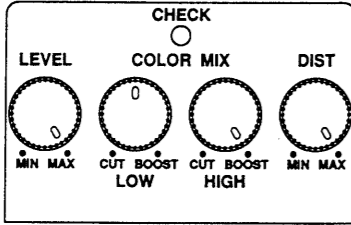
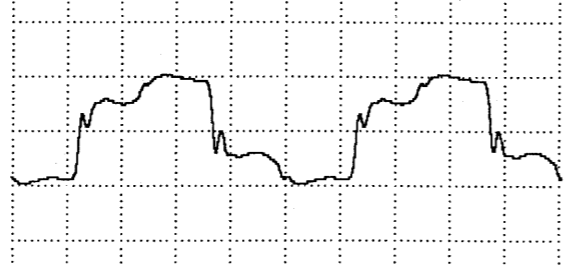
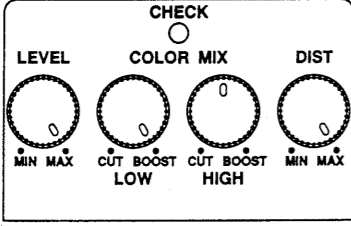
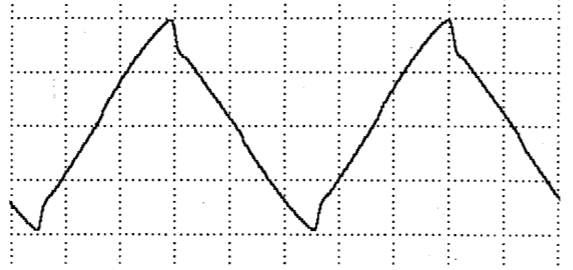
付録

Check OUTPUT Waveform

出力波形のチェック

1. Connect an audio generator to INPUT jack and apply the test signal.
2. Connect an osilloscope to OUTPUT jack.
3. If the LED is unit (EFFECT OFF), depress the pedal for EFFECT ON.
4. Verify the waveform to each controls setting as illustrated below.

1. INPUTにオーディオ発振器を接続し、テスト信号を加える。
2. OUTPUTにオシロスコープを接続する。
3. もし、LEDが点灯していない(EFFECT OFF)場合は、ペダルを押してEFFECT ONにする。
4. 下記のセッティングにおける波形を確認する。

INPUT	SET CONTROLS	WAVEFORM
 <p>200Hz 10mVp-p</p>	 <p>COLOR MIX HIGH MAX</p>	 <p>(RANGE : 1mS/DIV, 0.5V/DIV)</p>
	 <p>COLOR MIX LOW MAX</p>	 <p>(RANGE : 1mS/DIV, 0.5V/DIV)</p>