## POWER SUPPLY PWID <br> SERVICE MANUAL


SPECIFICATIONS ..... 3
PANEL LAYOUT ..... 3
CONNECTOR CIRCUIT DIAGRAM ..... 4
DISASSEMBLY PROCEDURE ..... 5
CIRCUIT BOARD ..... 6PARTS LISTCIRCUIT DIAGRAM

## IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.
WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.
IMPORTANT: This presentation or sale of this manual to any individual or firm does not constitute authorization, certification, recognition of any applicable technical capabilities, or establish a principal-agent relationship of any form.

The data provided is belived to be accurate and applicable to the unit(s) indicated on the cover. The research engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.
WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground bus in the unit (heavy gauge black wires connect to this bus).
IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

## WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and/or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.
DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHAT SO EVER
Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!
If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

## IMPORTANT NOTICE FOR THE UNITED KINGDOM

 Connecting the Plug and CordIMPORTANT. The wires in this main lead are coloured in accordance with the following code:
BLUE: NEUTRAL
BROWN: LIVE
As the colours of the wires in the main lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The BLUE wire must be connected to the terminal that is marked with the letter N (or coloured BLACK).
The BROWN wire must be connected to the terminal that is marked with the letter L (or coloured RED).

Be certain that neither core is connected to the earth terminal of the three pin plug.

## WARNING

Components having special characteristics are marked $\widehat{\$}$ and must be replaced with parts having specification equal to those originally installed.

■ SPECIFICATIONS
■ PANEL LAYOUT

Note: See operation manual for details.

## ■ CONNECTOR CIRCUIT DIAGRAM



## ■ DISASSEMBLY PROCEDURE

## 1. Power Supply Unit

1-1 Remove the fourteen (14) screws marked [300]. The top cover can then be removed. (Fig. 1)
1-2 Remove the six (6) screws marked [130]. The power supply unit can then be removed. (Fig. 1)

[130]: Bind Head Tapping Screw-B A4.0x8 MFZN2BL (VC688800) [300]: Bind Head Tapping Screw-B A4.0x8 MFZN2BL (VC688800)

Fig. 1

## 2. PW-SW Circuit Board

2-1 Remove the three (3) screws marked [260] and the three (3) screws marked [280]. Each rack mount angle can then be removed. (Fig.2)
2-2 Remove the six (6) screws marked [170]. The front panel can then be removed. (Fig. 2)
2-3 Remove the two (2) screws marked [260]. The PW-SW circuit board can then be removed. (Fig. 2)

- Left side



## - Right side


[150]: Bind Head Screw 3.0x8 MFZN2BL (VB659000) [170]: Oval Head Screw-B 4.0x8 MFZN2BL (VS153600)
<Front View>


PW-SW

[260]: Oval Head Screw-B 4.0x8 MFZN2BL (VS153600)
[280]: Oval Head Screw-B 4.0x8 MFZN2BL (VS153600)

Fig. 2

## PW1D

■ CIRCUIT BOARD

- PW-SW Circuit Board


Note: See parts list for details of circuit board component parts.

## POWER SUPPLY

## PW1D PARTS LIST

## CONTENTS

OVERALL ASSEMBLY ..... 2
ELECTRICAL PARTS ..... 4

## Notes: DESTINATION ABBREVIATIONS

| A: Australian model | $\mathrm{M}:$ South African model |  |
| :--- | :--- | :--- |
| B: British model | $\mathrm{O}:$ Chinese model |  |
| C: | Canadian model | $\mathrm{Q}:$ South-east Asia model |
| D: German model | $\mathrm{T}:$ Taiwan model |  |
| E: | European model | $\mathrm{U}:$ U.S.A. model |
| F: French model | $\mathrm{V}:$ General export model $(110 \mathrm{~V})$ |  |
| $\mathrm{H}:$ | North European model | $\mathrm{W}:$ General export model $(220 \mathrm{~V})$ |
| I: Indonesian model | $\mathrm{N}, \mathrm{X}:$ General export model |  |
| $\mathrm{J}:$ | Japanese model | $\mathrm{Y}:$ Export model |

## WARNING

Components having special characteristics are marked $\lfloor$ and must be replaced with parts having specification equal to those originally installed.

- The numbers in "QTY" show quantities for each unit.
- The parts with " - -" in "PART NO." are not available as spare parts.
- The mark " \}" in the remarks column indicates that these parts are interchangeable.
- The second letter of the shaded ( ) part number is O, not zero.
- The second letter of the shaded ( $\quad$ ) part number is I, not one.


## PW1D

## ■ OVERALL ASSEMBLY



| REFNo. | PART NO. | DESCRIPTION |  | REMARKS |  | aty | RANK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 信 $\begin{gathered}-- \\ -- \\ \text { V4586900 }\end{gathered}$ | OVERALL ASSEMBLY <br> Overall Assembly Overall Assembly Overall Assembly Bottom Chassis |  | PW1D J U,C,V H,B,W | (V470350) (V539350) (V539360) |  |  |
| 20 | CB806590 | Leg <br> Bind Head Tapping Screw-B PET Sheet | BL |  |  | 4 | 03 |
| 30 | EG340190 |  | 4.0X8 MFZN2BL |  |  | 4 | 01 |
| 35 | V5297200 |  |  |  |  | 6 |  |
| 40 | V4605100 | Side Panel | LEFT |  |  |  |  |
| 50 | VC688800 | Bind Head Tapping Screw-B | A4.0X8 MFZN2BL |  |  | 3 | 01 |
| 60 | V4068400 | Side Panel | RIGHT |  |  |  |  |
| 70 | VC688800 | Bind Head Tapping Screw-B | A4.0X8 MFZN2BL |  |  | 3 | 01 |
| 80 | V4587400 | Rear Panel |  |  |  |  |  |
| 90 | VC688800 | Bind Head Tapping Screw-B | A4.0X8 MFZN2BL |  |  | 5 | 01 |
| 91 | VP156800 | Bind Head Screw | A4.0X8 MFZN2BL |  |  |  | 01 |
| 95 | V3125300 | Fan | MMS-06E12DL |  |  |  | 08 |
| 96 | VN003900 | Finger Guard |  |  |  |  |  |
| 97 | VM964700 | Fan Support Metal |  |  |  |  | 09 |
| 98 | VR116500 | Pan Head Screw | SP 4.0X25 MFZN2BL |  |  | 4 | 01 |
| 100 | V4587900 | Sub Chassis |  |  |  |  |  |
| 110 | VC688800 | Bind Head Tapping Screw-B | A4.0X8 MFZN2BL | $J$ |  | 6 | 01 |
| 120 | V4704700 | Power Supply Unit |  |  |  |  |  |
| 120 | V5390500 | Power Supply Unit |  | U,C, V |  |  |  |
| 120 | V5390700 | Power Supply Unit |  | H,B,W |  |  |  |
| 130 | VC688800 | Bind Head Tapping Screw-B | A4.0X8 MFZN2BL |  |  | 6 | 01 |
| 140 | V4564700 | Circuit Board | PW-SW (PSWCOM) |  |  |  |  |
| 150 | VB659000 | Bind Head Screw | 3.0X8 MFZN2BL |  |  | 2 | 01 |
| 160 | V4587100 | Front Panel |  |  |  |  |  |
| 170 | VS153600 | Oval Head Screw | 4.0X8 MFZN2BL |  |  | 6 | 01 |
| 180 | VL813000 | Escutcheon, Power Switch |  |  |  |  | 03 |
| 190 | VL812900 | Power Switch Knob |  | POWER ON/OFF |  |  | 03 |
| 200 | - - | AC Inlet Assembly | AC INLET\&FASTON M1908-C 3P |  | (V539260) |  |  |
| * 200a | V5065200 | AC Inlet |  |  |  |  | 03 |
| 210 | V5600300 | Support |  |  |  |  |  |
| 220 | VP156800 | Bind Head Screw | A4.0X8 MFZN2BL |  |  | 2 | 01 |
| 230 | V5054900 | Connector Assembly | VH\&PH\&NK 120L \#20 | DC OUTPUT |  |  |  |
| 240 | VP157000 | Bind Head Tapping Screw-B | A3.0X8 MFZN2BL |  |  | 4 | 01 |
| 250 | V4705100 | Rack Mount Angle |  |  |  |  |  |
| 260 | VS153600 | Oval Head Screw | 4.0X8 MFZN2BL |  |  | 3 | 01 |
| 270 | V4705100 | Rack Mount Angle |  |  |  |  |  |
| 280 | VS153600 | Oval Head Screw | 4.0X8 MFZN2BL |  |  | 3 | 01 |
| 290 | V4588000 | Top Cover |  |  |  |  |  |
| 300 | VC688800 | Bind Head Tapping Screw-B |  |  |  | 14 | 01 |
| 310 | -- | Connector Assembly | A4.0X8 MFZN2BL <br> VH\&VH 3P 350L \#20 |  | (V505500) |  |  |
| 320 | - - | Connector Assembly | PH\&PH 2P 650L \#28 |  | (V477420) |  |  |
| 330 | -- | Label, Caution | S-14B |  | (V533510) |  |  |
| 340 | CB817510 | Cord Binder |  |  |  | 3 | 03 |
| 350 | -- | Label | UL |  | (V533540) |  |  |
| 350 | -- | Label |  | H,B,W | (V539490) |  |  |
| 360 | -- | Label |  | U,C, V | (V570430) |  |  |
| $\begin{aligned} & 370 \\ & 380 \end{aligned}$ | -- |  |  | U,C,V (VA03930) |  |  |  |
|  | CB095100 | Cord Holder |  |  |  | 6 |  |
|  |  | ACCESSORIES | 2P 15A | J |  |  |  |
|  | V5800000 | AC Cord |  |  |  |  |  |
|  | V5068000 | AC Cord | 3P 13A3P 10A | U,C,V |  |  |  |
|  | V5067700 | AC Cord |  | H,W |  |  |  |
|  | VP204400 | AC Cord | $\begin{aligned} & \text { 3P } \\ & \text { UL2501 \#20X27 } \end{aligned}$ | B |  |  | 10 |
|  | V5525000 | DC Power Supply Cable |  | J, U, C, V |  |  |  |
|  | V5600500 | Cable Lock |  |  |  |  |
|  | V5600800 | Cable Lock |  | H,W,B |  |  |  |

## ELECTRICAL PARTS



## POWER SUPPLY

 PW $\boldsymbol{D}$CIRCUIT DIAGRAM

## CONTENTS

PSWCOM ........................................................................................ 4

A


## ■CONSOLE-DC CIRCUIT DIAGRAM 1/3 (PW1D)




■CONSOLE-DC CIRCUIT DIAGRAM 3/3 (PWW1D)


