

Effective from serial number 501001 onwards.

This manual includes operating and service information for all models of the SR Series currently in production. Where differences between models exist, such as four bus and two bus models, this is indicated in the text.

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## USER CONFIGURED OPTIONS

**Warning to users!** Although the options described in this section of the handbook are "user configured", unless you are thoroughly familiar with the procedures described here, do not attempt to perform them as errors may result in faulty mixer operation. Repairs to such faults are not covered by guarantee and are the responsibility of the user. If unsure, refer the work in this section to a qualified electronic technician!

### ACCESS TO MIXER CIRCUITS

Reconfiguration of user configured options and service work require that the mixer front panel with its connected circuit assemblies is removed from the base.

Proceed as follows:

1. Disconnect mixer power.
2. Set the mixer on workbench or any flat, sturdy surface.
3. Release the screws on the panel of the mixer (and 3 x screws from underside of SR432) and remove the mixer from its base. You will need a crosspoint screwdriver no 2 pozi. Carefully lift panel so that circuit assemblies clear base.
4. Put base aside and replace mixer on bench upside down, taking care not to damage the panel controls.
5. If work requires it, carefully remove the connector harness. Ensure as you do this that no connector pins are bent. Be gentle, and do not force it under any circumstance.
6. When the work is complete, refit the IDC connector harness to the back of the pcb assemblies. Ensure that the harness connectors align with the pcb connector pins. Re-check this before reassembling the mixer. Failure to correctly replace the connector harness will result in severe damage to the mixer.
7. Carry out option/service work required.
8. Carefully check your work. Look for solder bridges, dry joints, etc and ensure that links etc are correctly positioned according to the instructions and drawings. Remove any dirt and debris.
9. Ensure that the spire captive nuts on the base are correctly aligned over the holes and are tight. If loose, they should be removed, recrimped with pliers and refitted.
10. Re-assemble the mixer as reverse procedure of steps 1 to 4.

Note: Refer this work to qualified service personnel.

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## SERVICE NOTES

### Replacement of Individual Circuit Board Assemblies

- 1) Note that two types of INPUT assembly are used, one for models SR8, 16 and 24, the other for models SR416 and SR424.
- 2) Note that SR GROUP assemblies are distinguished by function where each is connected to one and only one output mixing buss from input channels. The circuit function is achieved by a short bare wire link on each GROUP PCB assembly. For correct operation following service replacement, the links on the replacement assembly must match links on the item removed. Refer to group pcb parts placement drawings.
- 3) Note that SR L/R assemblies are distinguished by function where each is connected to one and only one stereo output mixing buss from input channels and group channels. Treat for service replacement as above for group channels. Refer to L/R pcb parts placement drawing.
- 4) Removal of any circuit board assembly should be considered for three reasons:
  - (i) time does not permit fault finding and repair
  - (ii) attempts at fault finding have failed
  - (iii) a pushbutton switch, rotary pot or pc mounted connector has become faulty.
- 5) Removal of a circuit board assembly requires only hand tools as follows:
  - Pot nut driver 10mm AF, one size all pots
  - Pliers or wrench 15mm AF, jack socket nuts
  - Cross point screwdriver No 1 Pozi, fader screws if required
  - Cross point screwdriver No 2 Pozi, case screws
  - Soldering iron - disconnect fader if required.

Note that the internal connections between circuit boards are by plug on insulation displacement harness system. This is capable of re-use many times with care in handling. Wrong connection may seriously damage sections of the circuitry.

- 6) AHB reserve the right to charge for repair work necessary as a result of incorrect service procedures. If in doubt, seek qualified assistance.

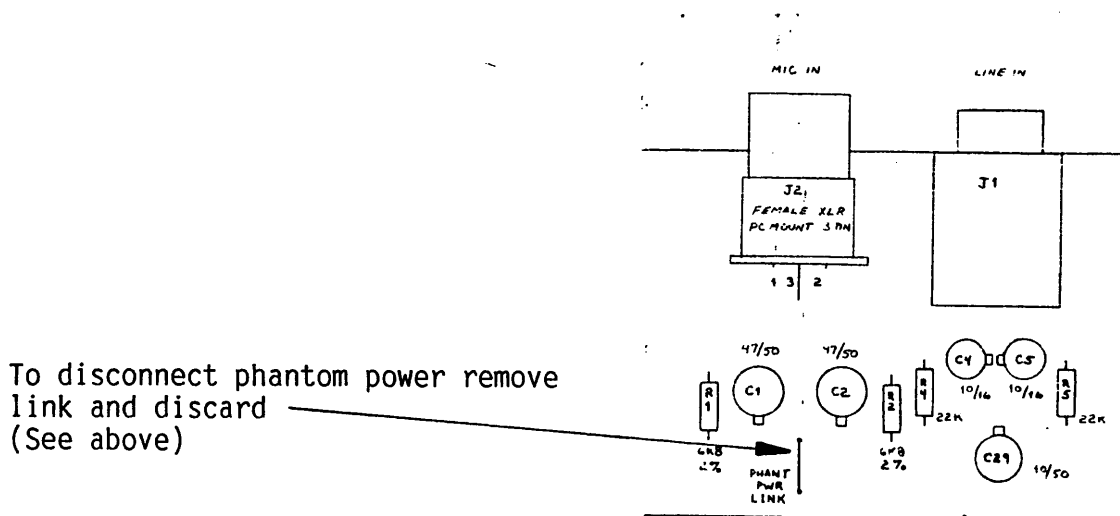
**PHANTOM POWER**

SR mixers are supplied with 48 volt phantom power as standard. The range is fitted in manufacture with the "PP" link in place so that when switched on, the phantom power reaches all microphone input terminals.

Individual microphone inputs can be isolated from the phantom supply by removal of this link. To remove the link, follow the following procedure. You will need a soldering iron, desoldering bulb or braid, and a Pozi 2 screwdriver. Refer to figure.

1. Disconnect mixer power.
2. Set mixer on workbench or other flat, steady surface. Release all panel screws from edge of mixer and remove mixer from base. Refer to page 32.
3. PP link is located directly behind and between input capacitors C1 and C2 (shown) on each input pcb assembly. Desolder each of the links you wish to remove and discard them.
4. Check for solder bridges around each link area worked on and clear if necessary.
5. Make a note of the links removed for future reference.
6. Replace mixer in base and refit panel screws.

To be safe, we recommend that you double check your work by measuring for voltage at the mic input pins of the channels worked on. Measure DC volts between pin 1 or metal case, and pins 2 and 3 and look for no voltage present.



**AUXILIARY SEND - Input Channel**

The input channel auxiliary send controls are wired at the time of manufacture in the following configuration:

Aux A, Aux B - wired to receive their signal post-fader.

Aux C, Aux D - wired to receive their signal pre-EQ.

Certain mixer applications may require that several auxiliary sends all be configured to take their signals from different points in the input circuits. Any aux send channel can be set up to take its signal from three places in the input circuit. These three points are:

Pre-equalizer, pre-fader - post equalizer, and post fader.

On each input pcb assembly four wire links are provided which allow you to configure all four auxiliary send controls to suit your particular requirements. The procedure for this is as follows. You will need: soldering iron, desoldering bulb or braid, and a Pozi 2 screwdriver. Refer to figure.

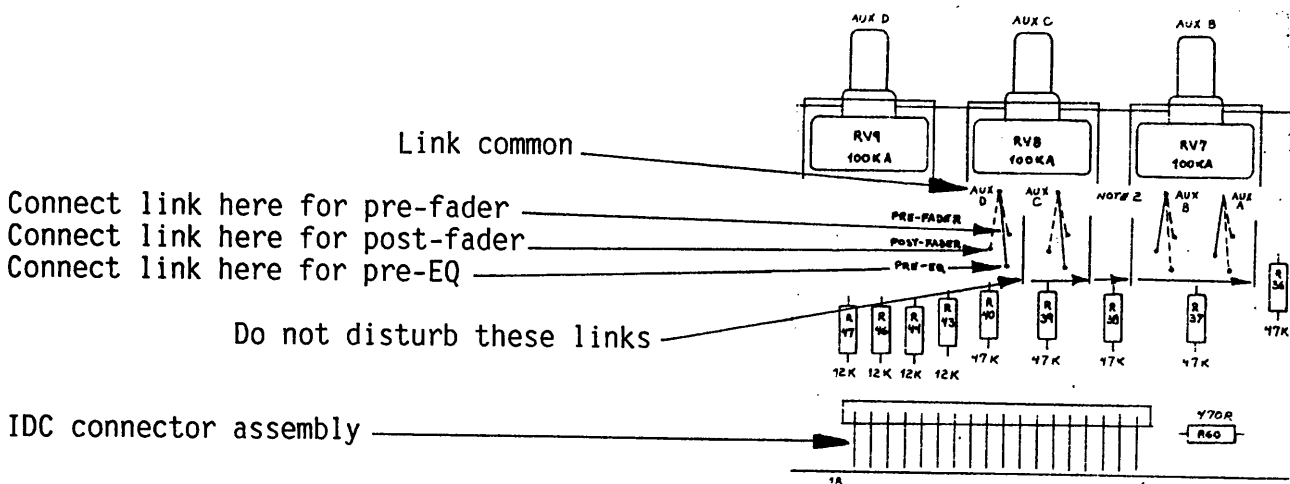
Remove mixer base. Refer to page 32.

Referring to the accompanying diagram, locate the aux send links for the sends you wish to reconfigure. There are four links which arc over the pcb. These are the links which must be removed. Note: There are four other links in this general area which lay flat on the pcb. Do not disturb these links.

Once you have located the link you wish to change, desolder the link at the end closest to you using a desoldering bulb or braid. Do not desolder the other end of the link.

Using a pair of long nosed pliers, lift the end of the link out of the pcb and replace in the desired position (pre-EQ, pre-fade, post-fade) using the diagram as a guide. Resolder the link into its new position.

SR Range Options: Aux Buss Configuration, Input Channel PC Assembly



**Auxiliary Send - Fx Return**

The auxiliary send controls from the FX returns are wired in manufacture to allow the effects signal to be sent to aux busses C and D independent of the amount of signal being sent to the left and right outputs. In some situations it may be desirable for the aux busses to receive their signal in the same proportion as that which is sent to the master outputs. Internal wire links are provided for this purpose.

On each L/R pcb assembly two wire links are provided which allow you to configure the two auxiliary send controls to suit your particular requirements. The procedure for this is as follows. You will need: soldering iron, desoldering bulb or braid, and a Pozi 2 screwdriver.

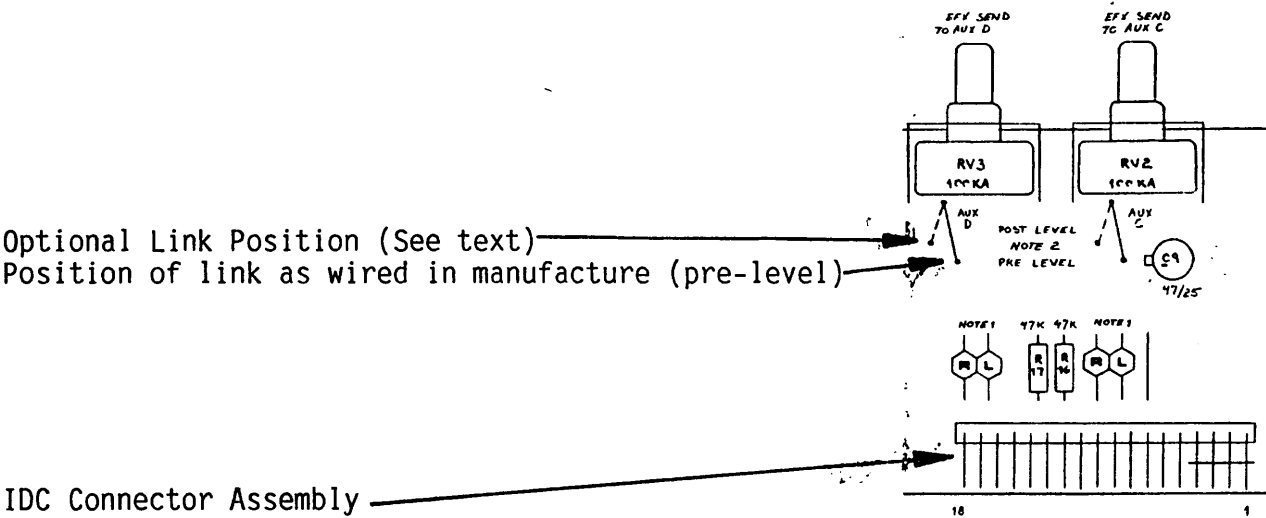
Remove mixer base. Refer to page 32.

Referring to the accompanying diagram, locate the aux send links for the send you wish to reconfigure. There are two links which arc over the pcb.

Once you have located the link you wish to change, desolder the link at the end closest to you using a desoldering bulb or braid. Do not desolder the other end of the link.

Using a pair of long nosed pliers, lift the end of the link out of the pcb and replace in the desired position using the diagram as a guide. Resolder the link into its new position.

**Reconfiguration of Auxiliary Sends From FX Returns: L/R PC Assemblies**



Optional Link Position (See text)

Position of link as wired in manufacture (pre-level)

IDC Connector Assembly

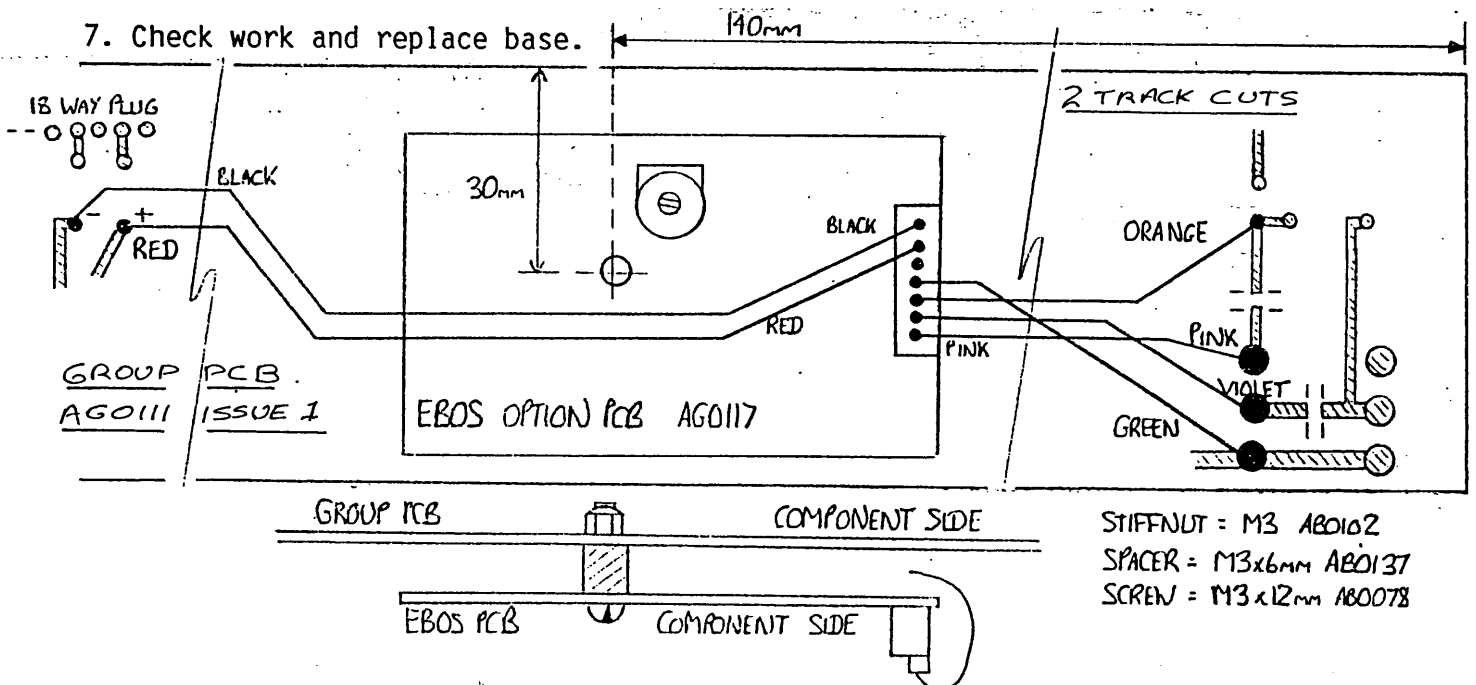
**Fitting Balanced Group Outputs:**

The following applies to issue 1 GROUP pcb assemblies, ie.

AG0111 issue 1	SR MK 1	from S/No 9501	to S/No 8999
	SR RANGE	from S/No 501001	to S/No 9999

Use SR BALANCED GROUP OUTPUT OPTION KIT      AHB part number ZS800-813

1. Remove mixer base.
2. Check that GROUP pcb trackside identification is AG0111 issue 1. Check that mounting hole for EBOS assembly is available. If not remove group pcb assembly and drill holes to dimensions shown. Avoid damage to tracks and components.
3. Locate group output socket and cut 2x tracks as shown.
4. Solder EBOS harness wires to pads as shown.
5. Mount EBOS assembly on group pcb using screws, spacer and nut provided. Check that screws are tight.
6. Plug harness into EBOS pcb socket observing correct polarity.
7. Check work and replace base.



**Note:** We must stress the need for qualified service personnel to perform this work and regret that service work involving this particular section of the mixer is NOT covered by AHB product warranty.

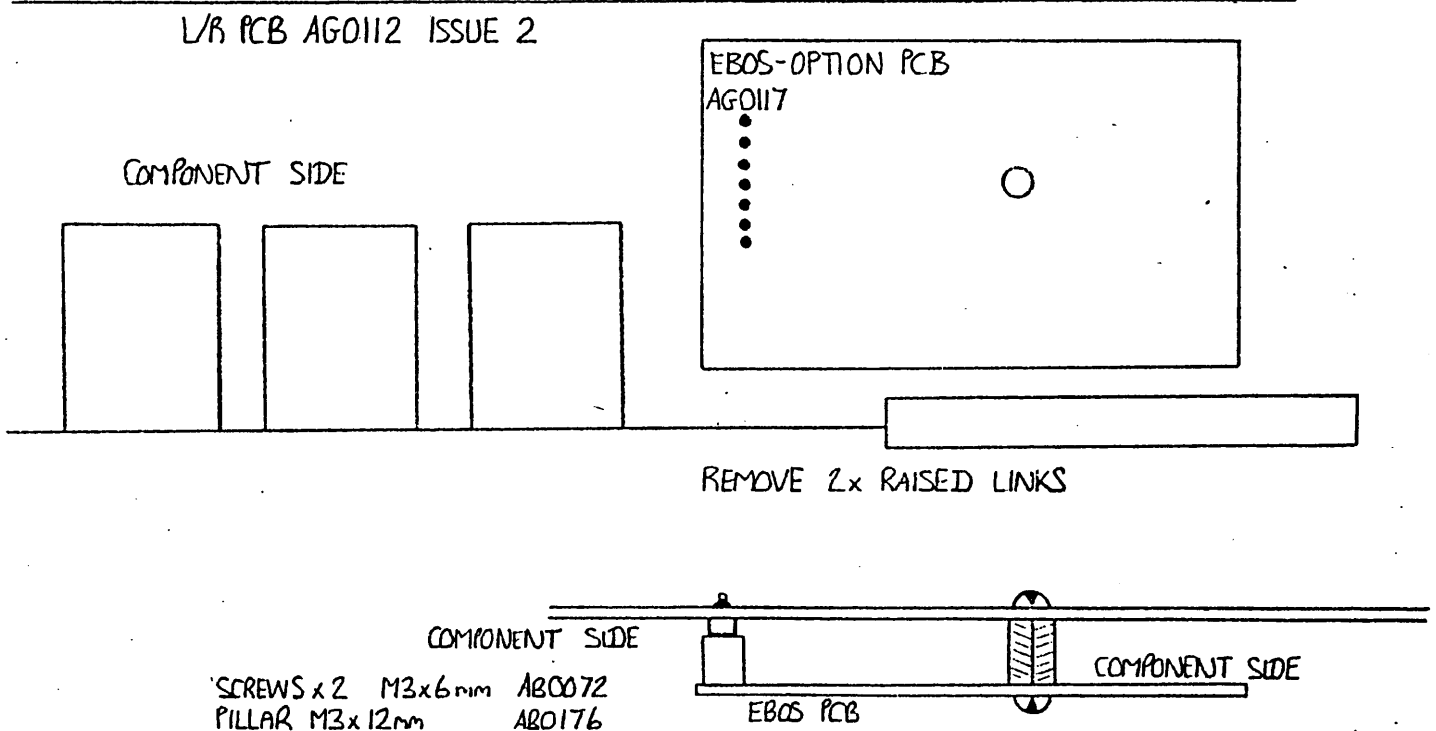
**Fitting Balanced Stereo Outputs:**

The following applies to mixers fitted with issue 2 L/R pcb assemblies, ie.

AG0112 issue 2	SR Series	from	S/No 501001
	SRC Series	from	S/No M21001

Use **SR BALANCED STEREO OUTPUT OPTION KIT** AHB part number AG0112 issue 1.

1. Remove mixer base (SR) or master module (SRC).
2. Check that L/R pcb trackside identification is AG0112 issue 1.
3. On each L/R pcb assembly desolder and replace the raised links with the 7-way male moxex plugs provided.
4. Mount EBOS assemblies on L/R pcs using screws and pillars provided. Check that the 7-way plug and socket are correctly positioned.
5. Check work and replace base/module.



**Note:** We must stress the need for qualified service personnel to perform this work and regret that service work involving this particular section of the mixer is NOT covered by AHB product warranty.



**Fitting A Balanced Mono Output:**

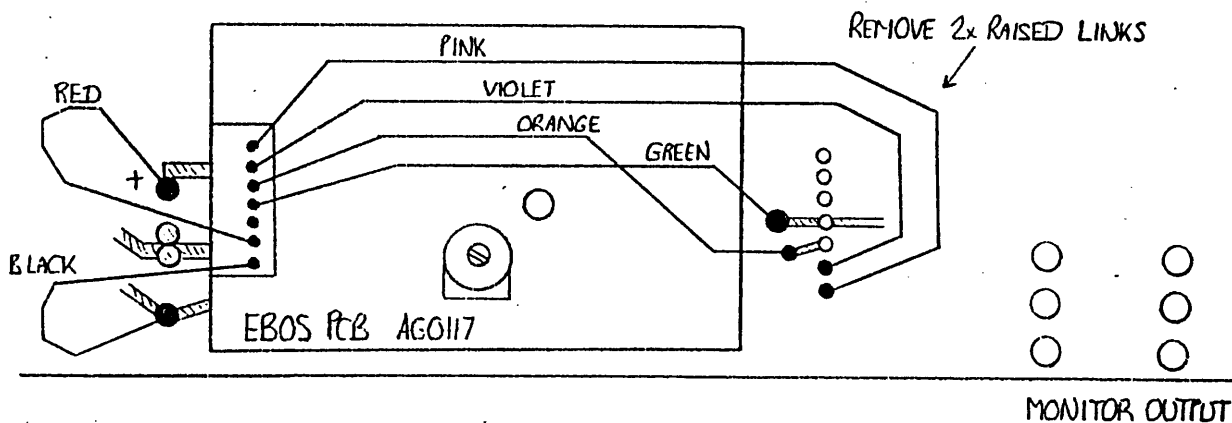
The following applies to mixers fitted with issue 2 MASTER pcb assembly, ie.

AG0113 issue 2                      SR Series                      from                      S/No 501001  
    SRC Series                      from                      S/No M21001

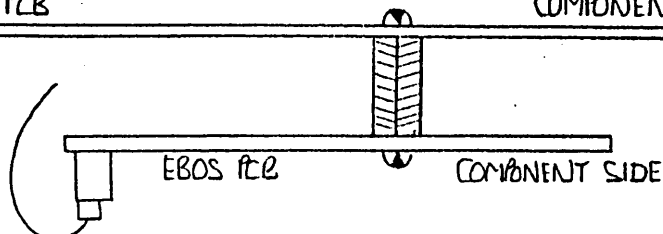
Use SR BALANCED MONO OUTPUT OPTION KIT                      AHB part number ZS800-812

1. Remove mixer base (SR) or master module (SRC).
2. Check that MASTER pcb trackside identification is AG0113 issue 2.
3. Desolder and remove 2x raised 7-way links as shown.
4. Solder EBOS harness wires to pads as shown.
5. Mount EBOS assembly on master pcb using pillar and screws provided. Ensure that these are tight.
6. Plug harness into EBOS pcb socket ensuring correct polarity.
7. Check work and replace base/module.

**MASTER PCB AG0113 ISSUE 2**



**MASTER PCB                      COMPONENT SIDE**



SCREWS x2 M3x6mm AB0072  
 PILLAR M3x12mm AB0176

**Note:** We must stress the need for qualified service personnel to perform this work and regret that service work involving this particular section of the mixer is NOT covered by AHB product warranty.