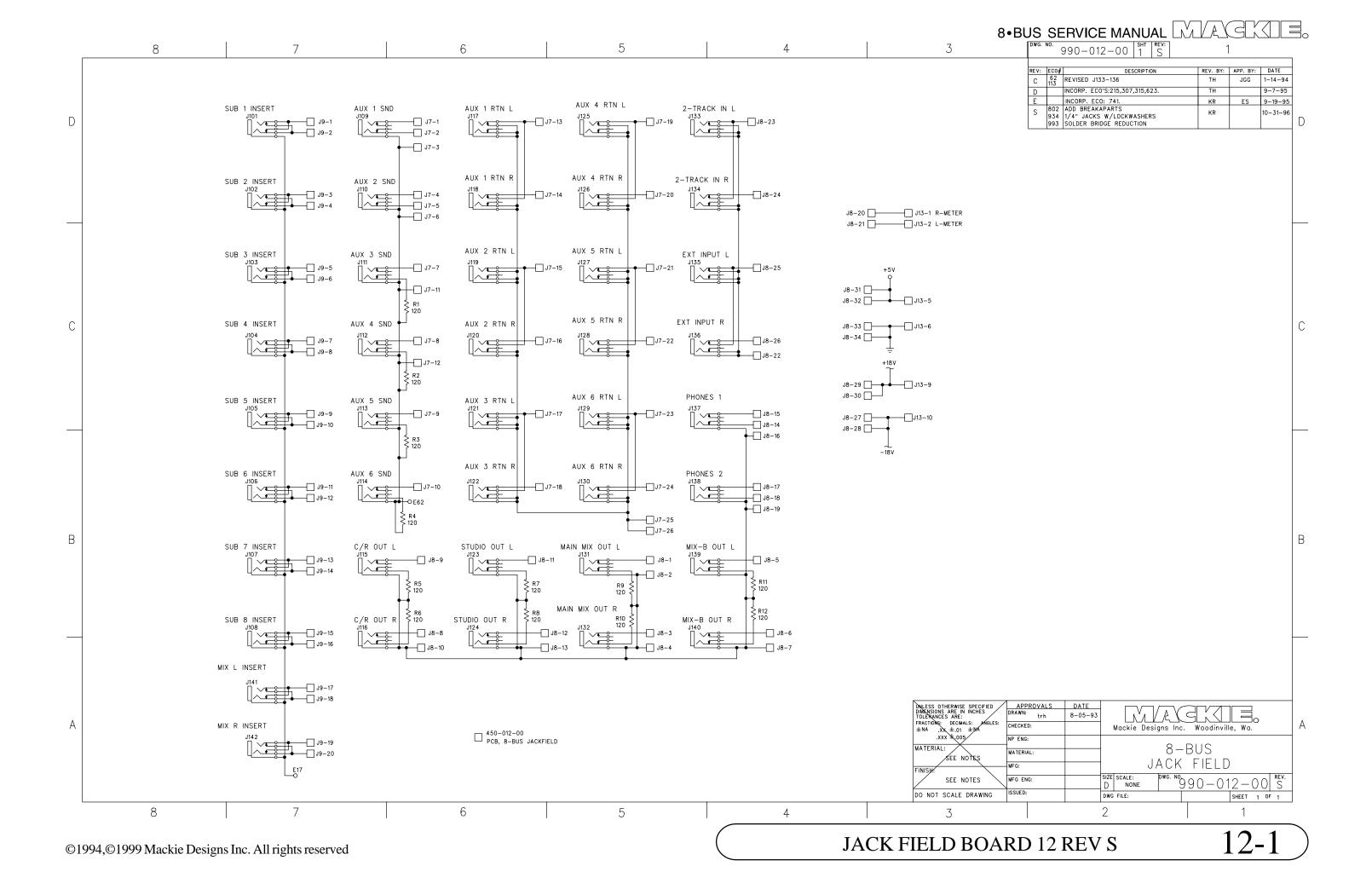
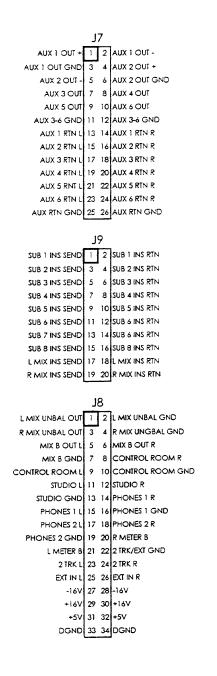
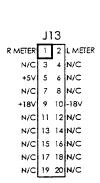
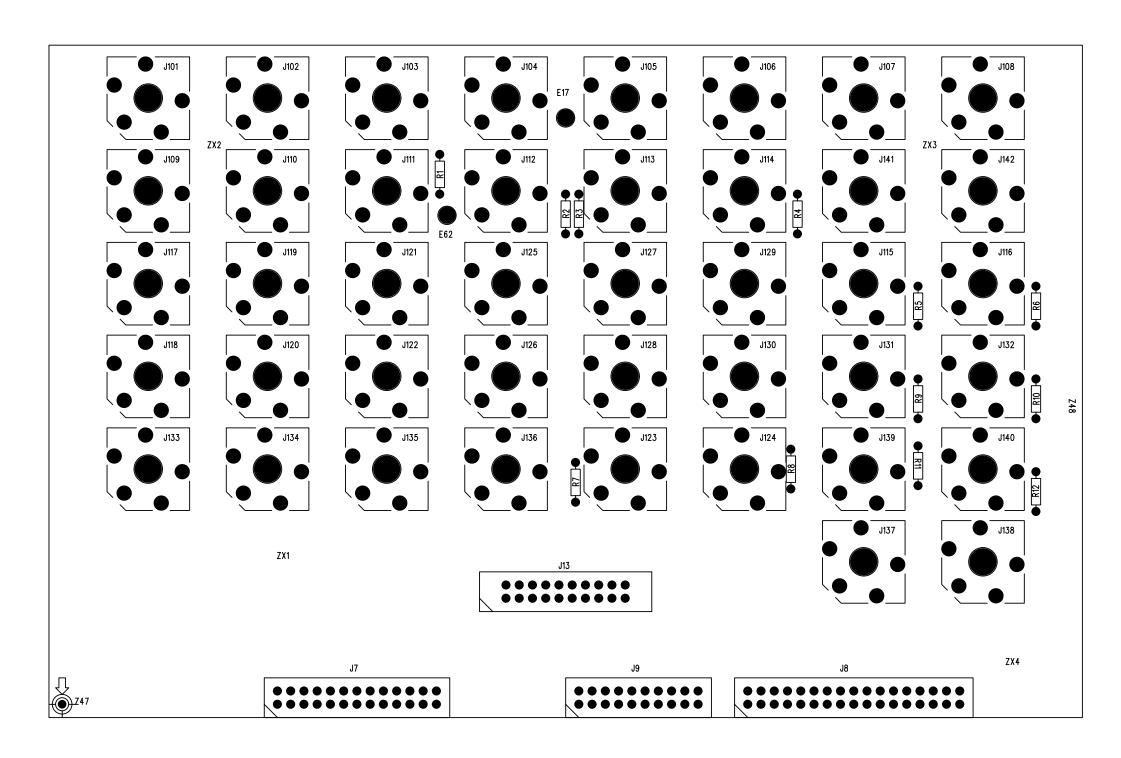


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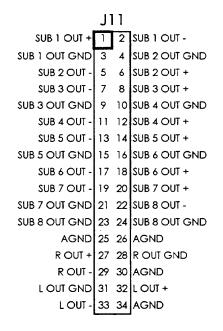


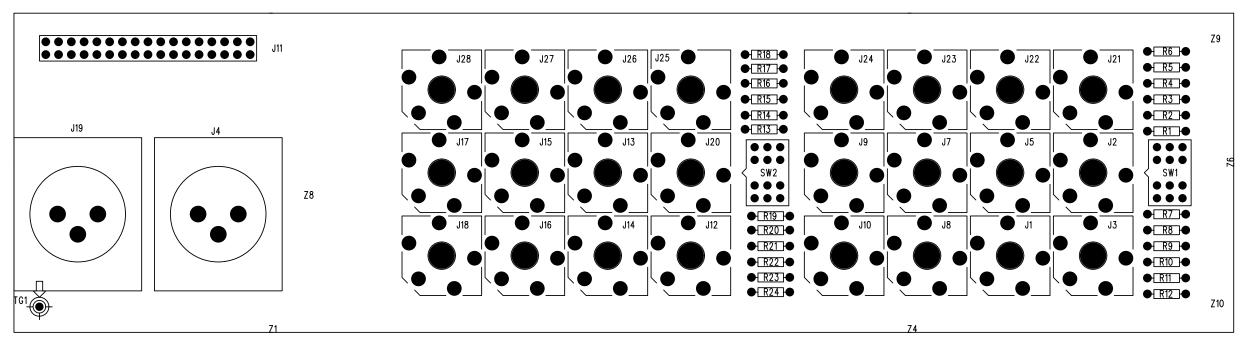


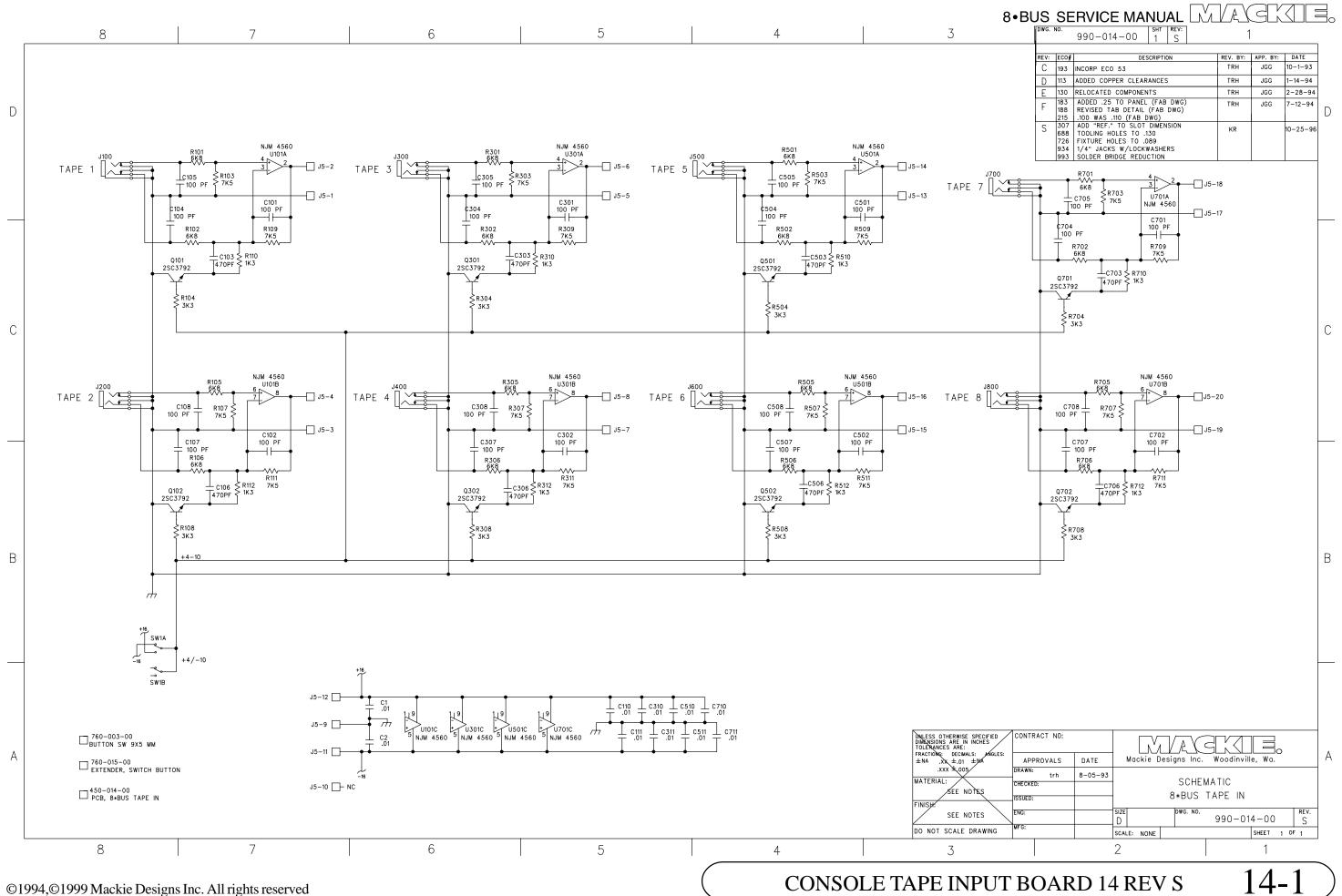


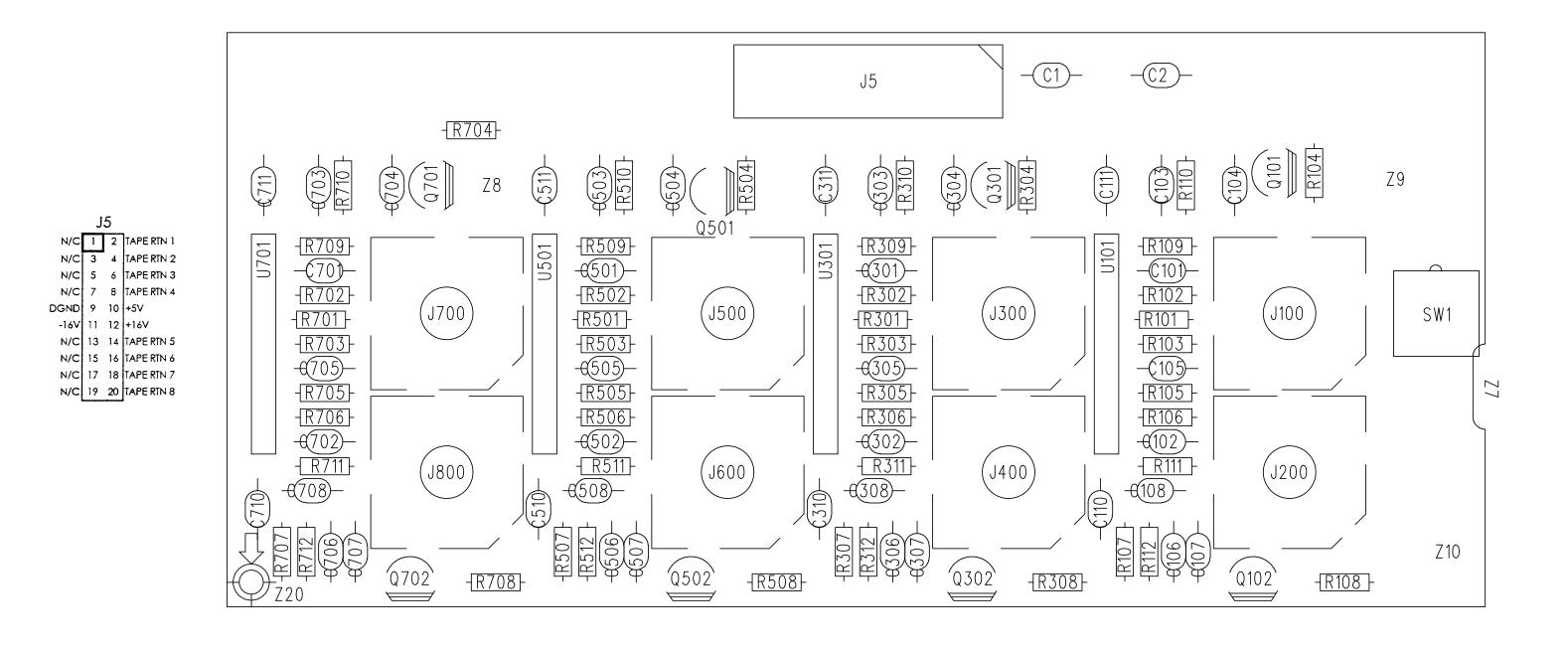


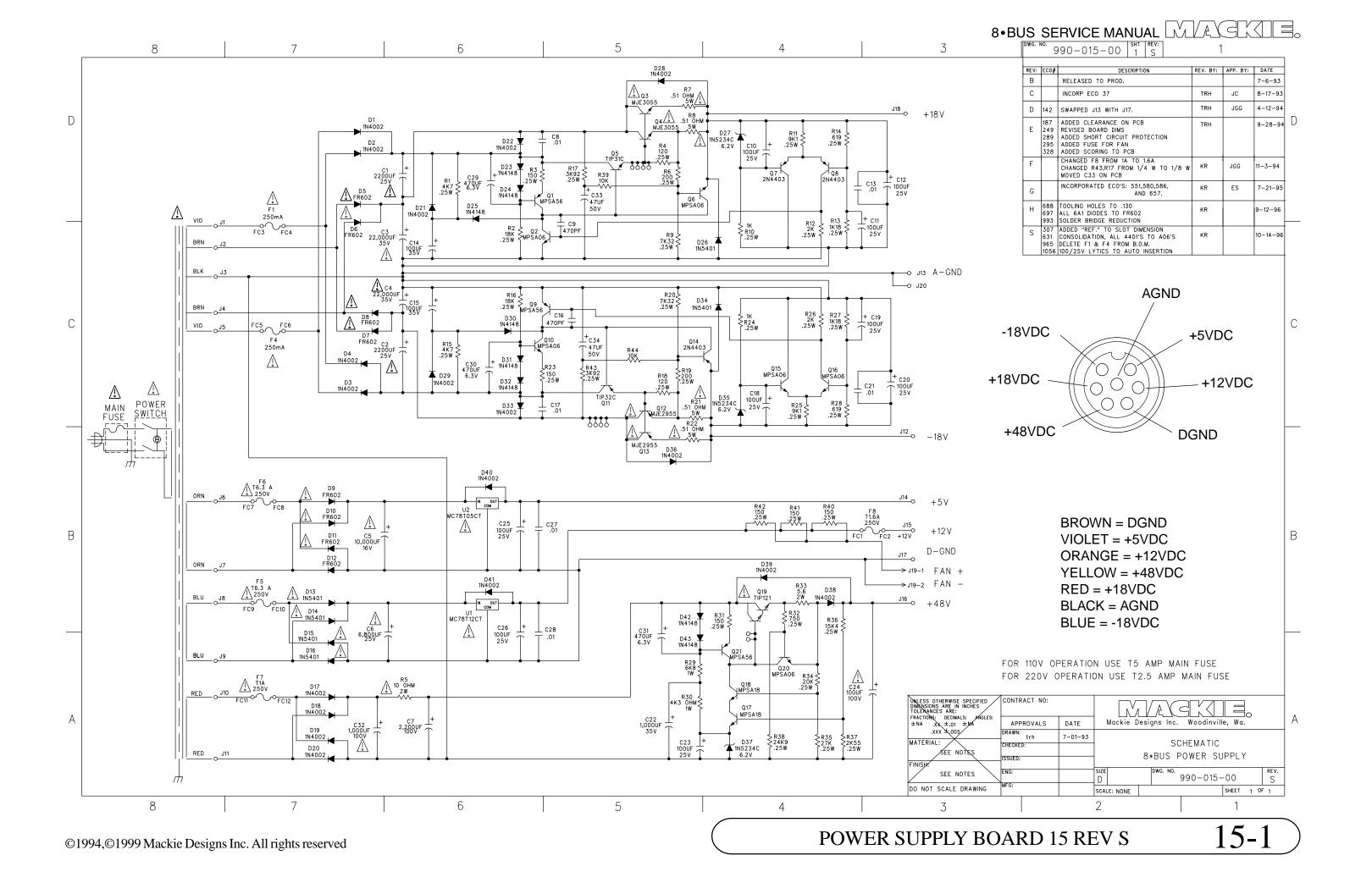
8-BUS SERVICE MANUAL MARKET AND A SERVICE MANUAL 990-013-00 REV. BY: APP. BY: DATE REV: ECO# DESCRIPTION KR ES 9-6-95 INCORP ECO'S: 215,307,545. S 934 1/4" JACKS W/LOCKWASHER 993 SOLDER BRIDGE REDUCTION KR 10-30-96 SUB 17 OUT SUB 21 SW2A SUB 1 SUB 9 OUT SUB 13 SUB 22 OUT SUB 18 OUT SW1B 5 4 6 SW2B F SUB 2 OUT SUB 6 OUT SUB 10 OUT SUB 14 SUB 19 J23
OUT OUT SUB 23 OUT —0 J11−32 —0 J11−33 —0 J11−31 SUB 7 OUT RIGHT OUT SUB 15 —0 J11−29 —0 J11−28 SUB 20 J24 OUT J24 SUB 24 J28 —0 J11−34 —0 J11−30 SW1D 11 10 —○ J11–26 —○ J11–25 SUB 4 OUT SUB 8 OUT O J11−23 ^{-O} J11−22 SUB 12 SUB 16 -O J11-24 ☐ 450-013-00 PCB, 8-BUS TAPE OUT ☐ 760-003-00 BUTTON SW 9X5 MM UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS: DECIMALS: ANGLES: ☐ 760-003-00 BUTTON SW 9X5 MM APPROVALS DATE 760-015-00 EXTENDER, SWITCH BUTTON trh 6-23-93 SCHEMATIC 760-015-00 EXTENDER, SWITCH BUTTON CHECKED: 8-BUS TAPE OUT 0WG. NO 990-013-00 S DO NOT SCALE DRAWING SHEET 1 OF 1 SCALE:

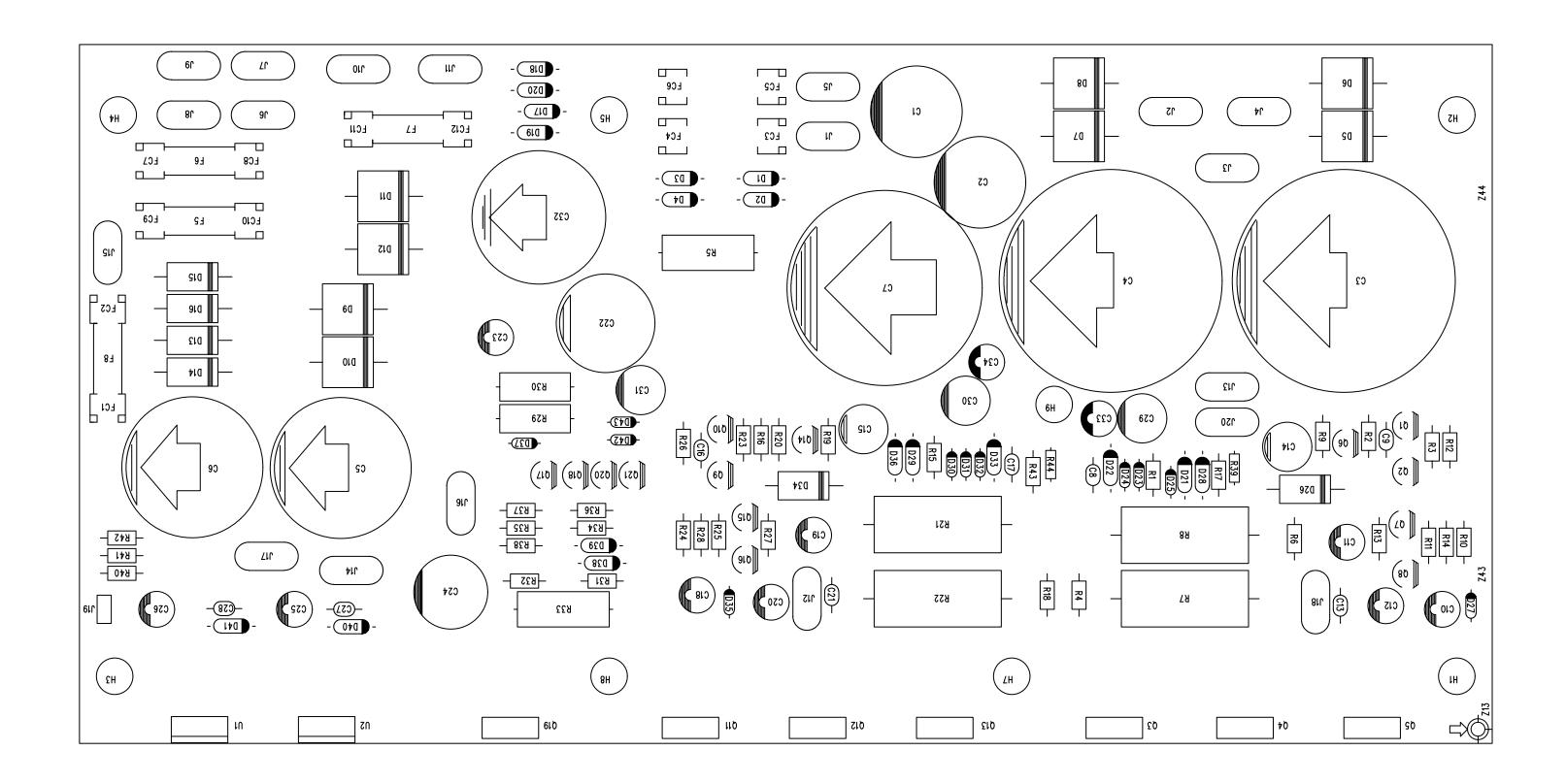












8-BUS SERVICE MANUAL MARKET DWG. NO. 990-019-00 SHT REV: REV: ECO# REVISIONS REV. BY: APP. BY: DATE C 67 CORRECTED CONNECTOR PINOUTS JC 11-12-93 D 189 CHANGED TO LOCKING CONNECTORS TH JGG 5-20-94 S 307 ADD "REF." TO SLOT DIMENSION 688 TOOLING HOLES TO .130 10-31-96 993 SOLDER BRIDGE REDUCTION -___J2-10 AUX-6-BUS J2-9 AUX-4-BUS ____ J2-8 AUX-4/6-GND J2-7 AUX-5-BUS ____ J2-6 AUX-3/5-GND J20-19 🔲 R4 30K ____ J2-5 AUX-3-BUS J20-37 J2-4 AUX-2-GND R5 30K J20-18 -J2-3 AUX-2-BUS J20-36 J2-2 AUX-1-GND J20-17 🗀 J2-1 AUX-1-BUS J20-35 ___ ___ J1−14 +5V J20-34 ___ J20-15 __-—___ J1−13 +5V —___ J1−12 D GND J20-33 ____ J1–11 D GND -□ J1-10 FLASH BUS J20-32 J20-13 🗀--□ J1-9 SOLO CTL BUS J20-31 J1-8 R-SOLO-BUS R11 5K1 — J1−7 MIX−B−GND−BUS J20-12 ___ J1-6 L-SOLO-BUS J20-30 ___ R12 5K1 5K1 J1-5 MIX-B-GND-BUS J20-11 🔲 J20-29 — J1−4 R−MIX−B−BUS J1-3 MIX-B-GND-BUS J20-10 ___ J1-2 L-MIX-B-BUS J20-28__-J1-1 MIX-B-GND-BUS J20-9 🗀 J20-8 🔲-J20-26 J3-19 BUS-R R14_2K7 J3-18_BUS-L-GND J20-7 J3-17 BUS-L J20-6 ___ J20-24 J20-5 ___ J3-14 BUS-7-GND

R16 2K7

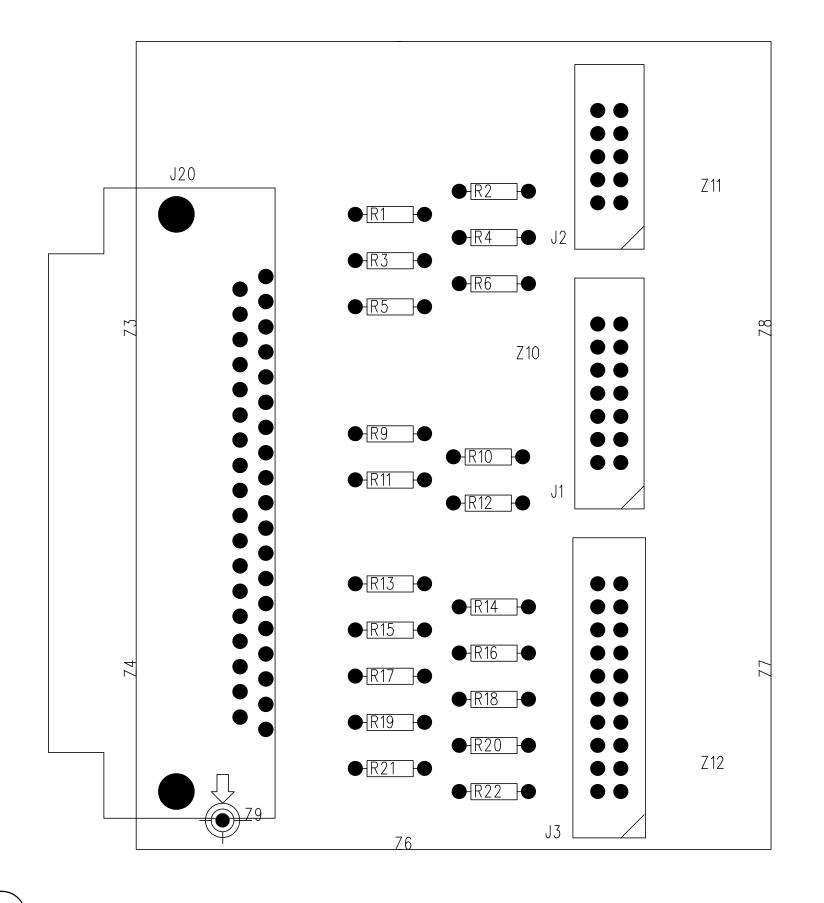
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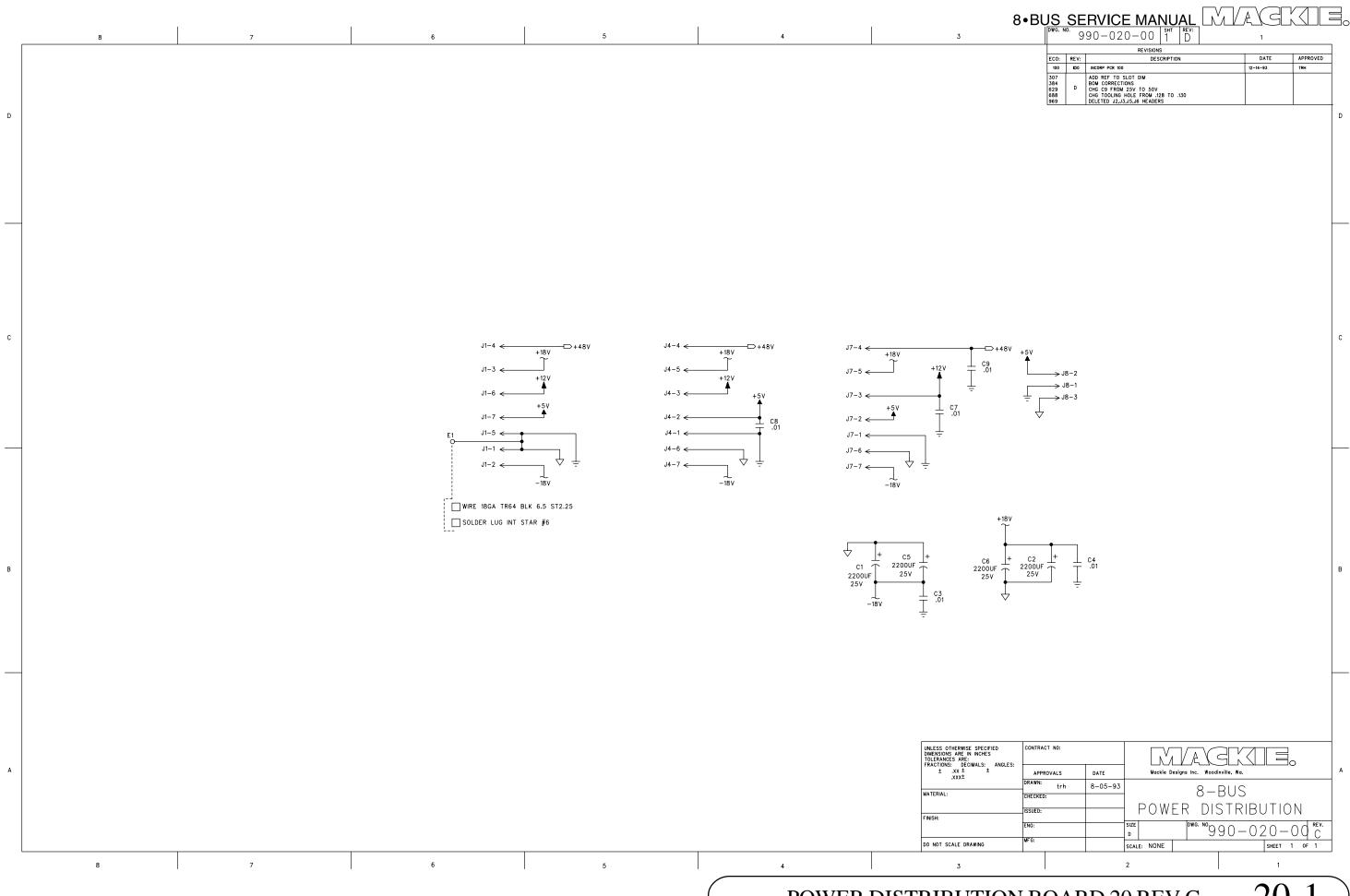
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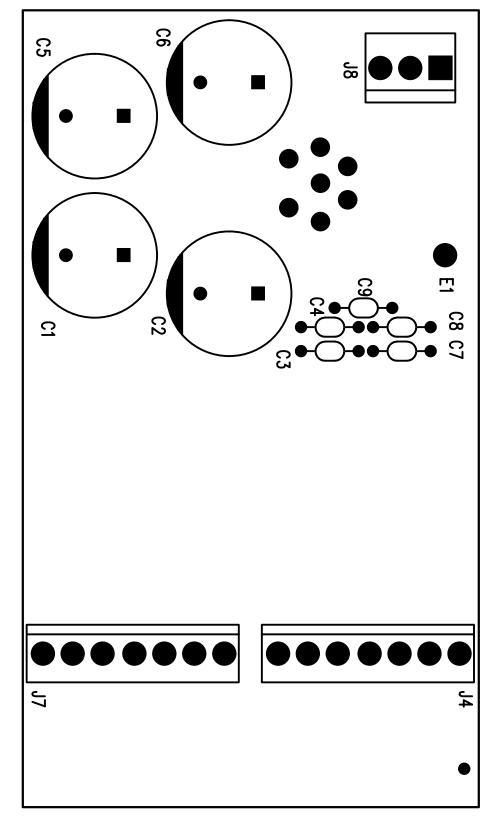
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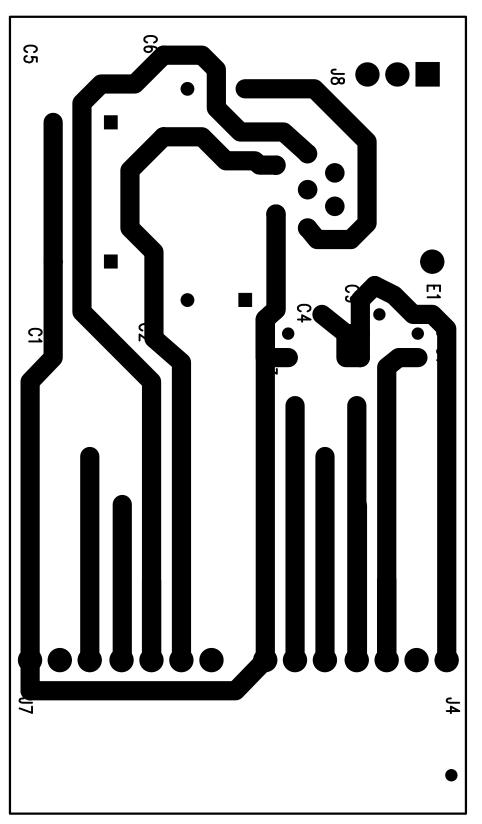
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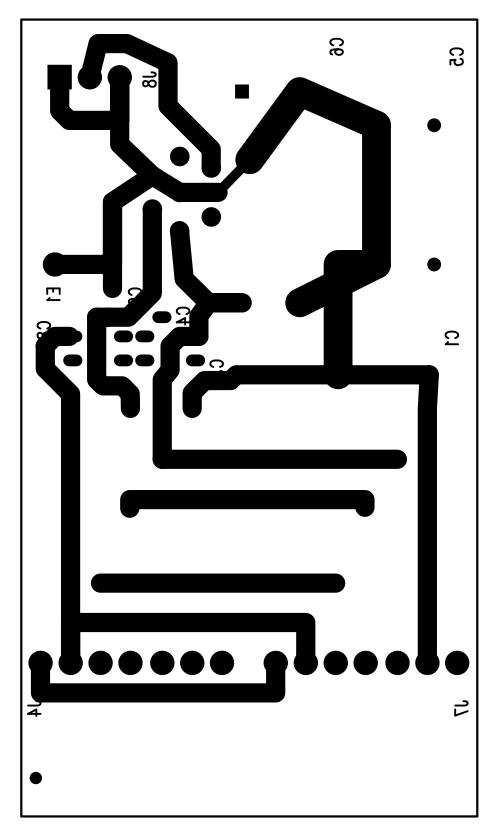
J3-5 BUS-3 CONTRACT NO: UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS: DECIMALS: ANGLES: ± .xx ± .xxx± APPROVALS DATE 6-23-93 SCHEMATIC MATERIAL: CHECKED: CHUCK 7-7-93 8-BUS EXPANDER CR 7-7-93 DWG. NO 990-019-00 S. JG 7-7-93 DO NOT SCALE DRAWING 7-7-93 SCALE: SHEET 1 OF 1





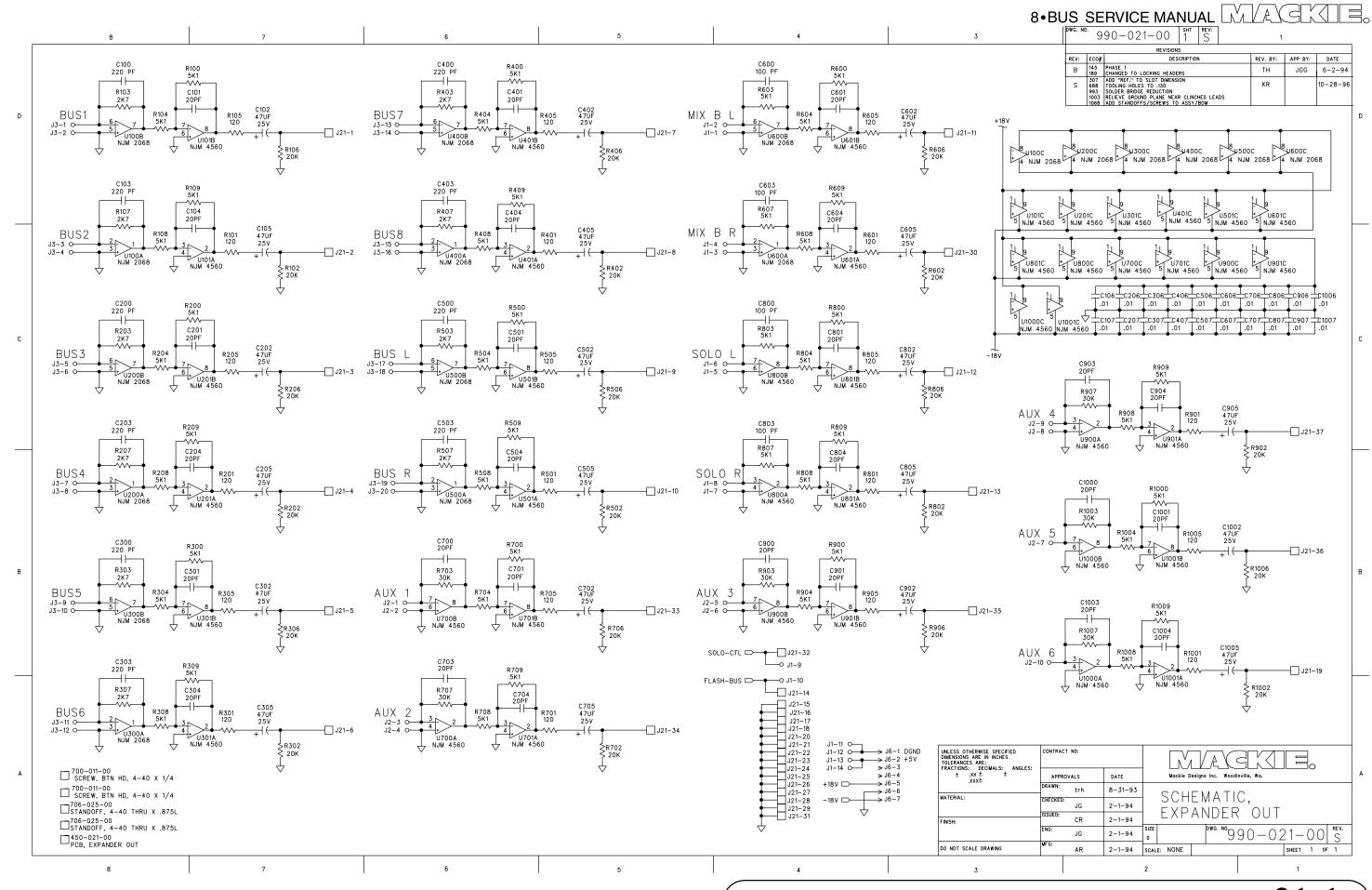


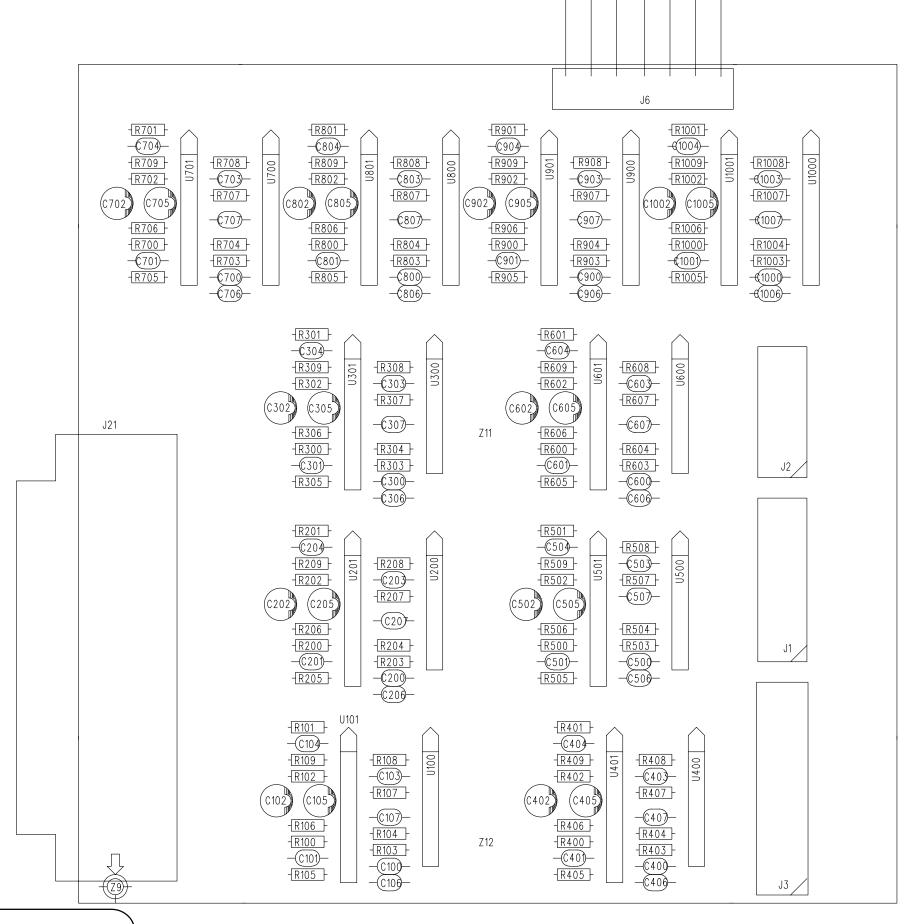




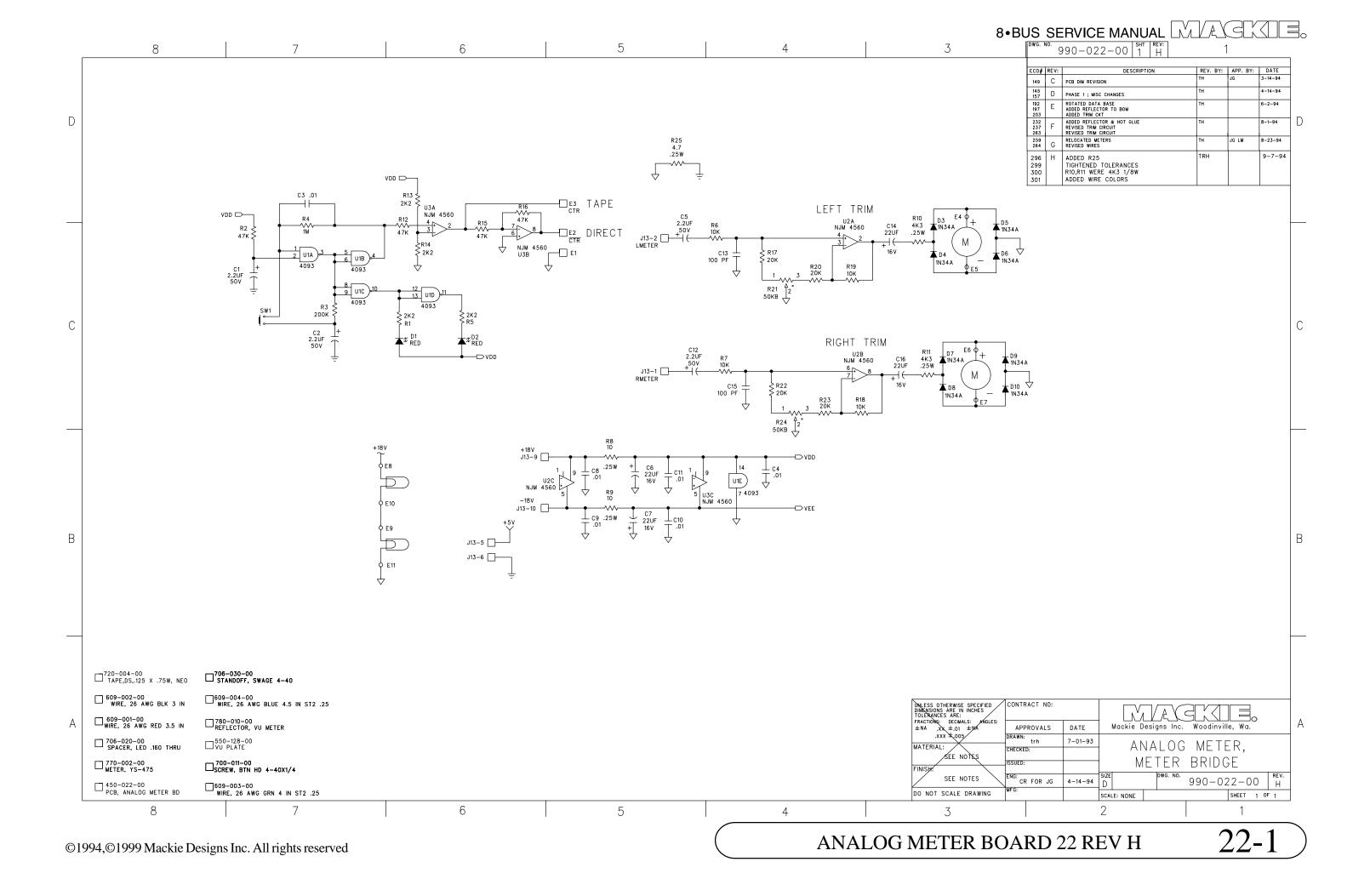
TOP TRACES BOTTOM TRACES

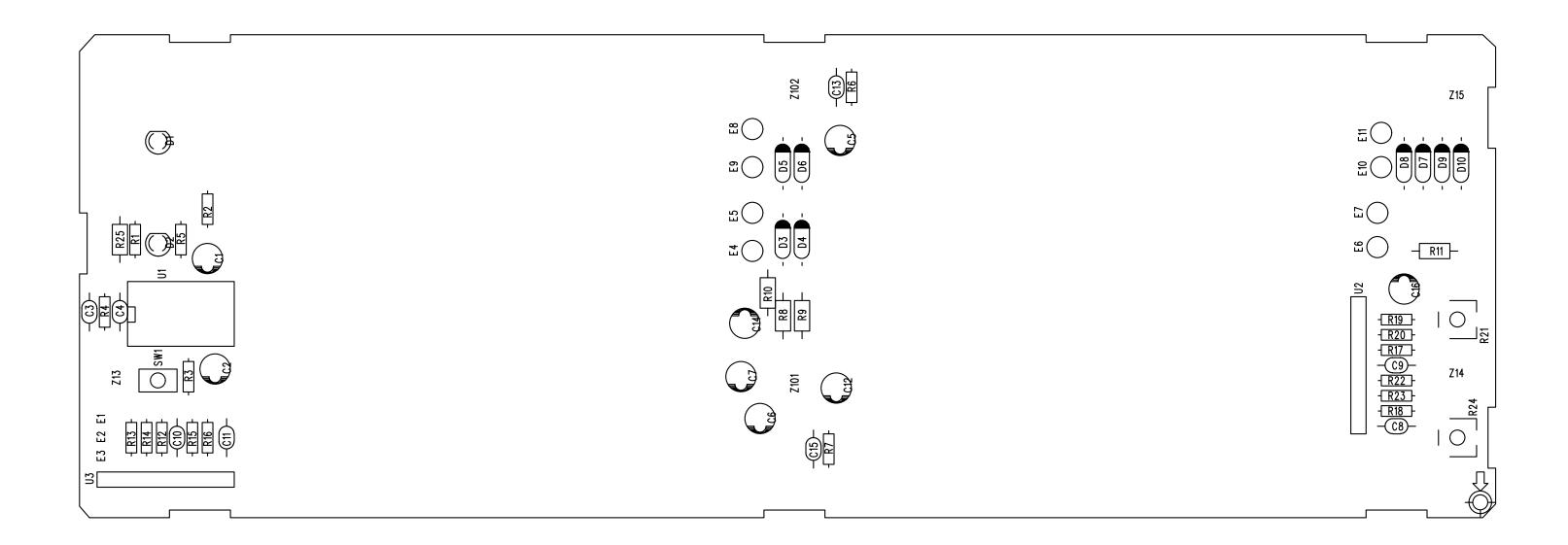
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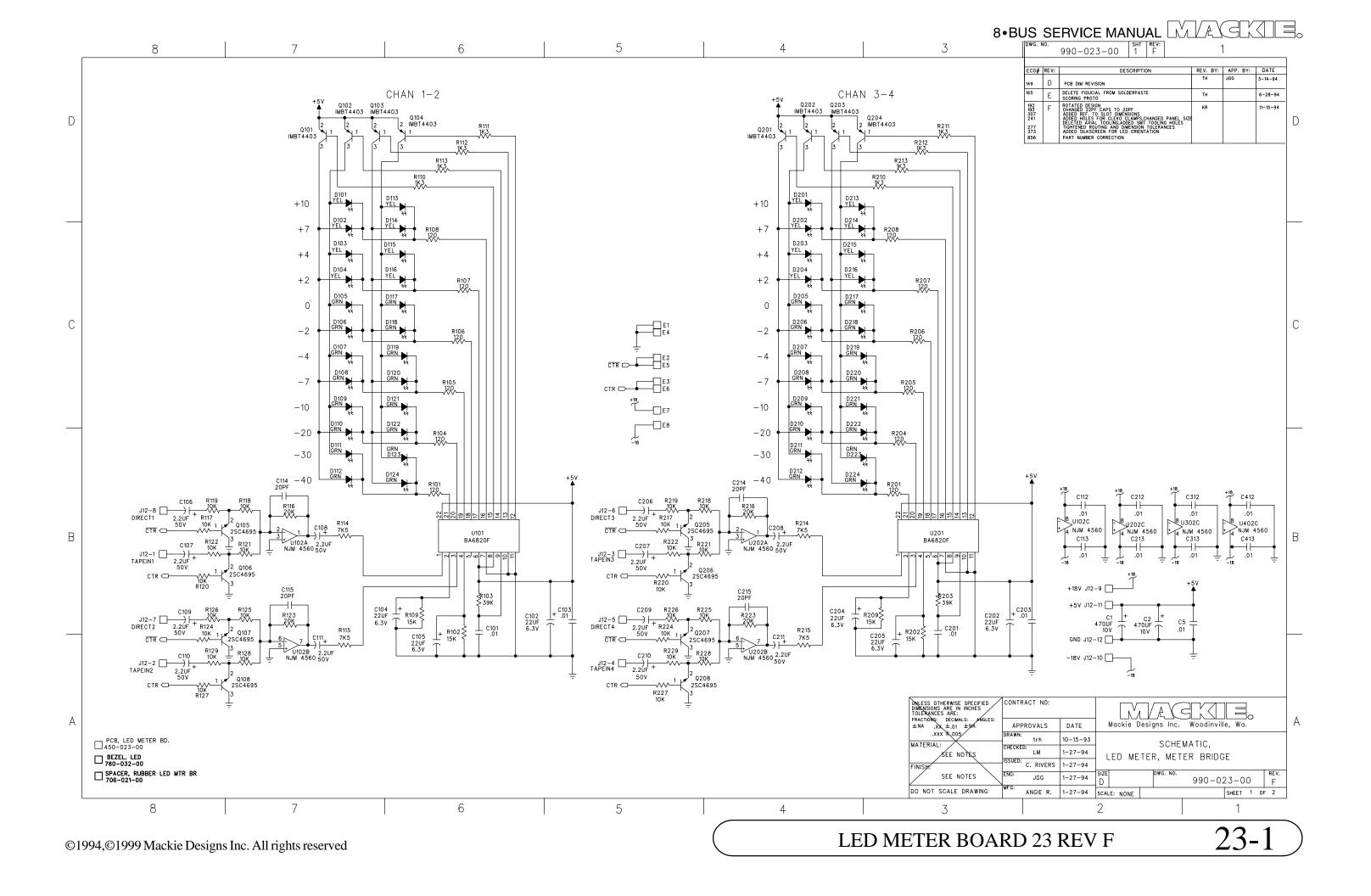


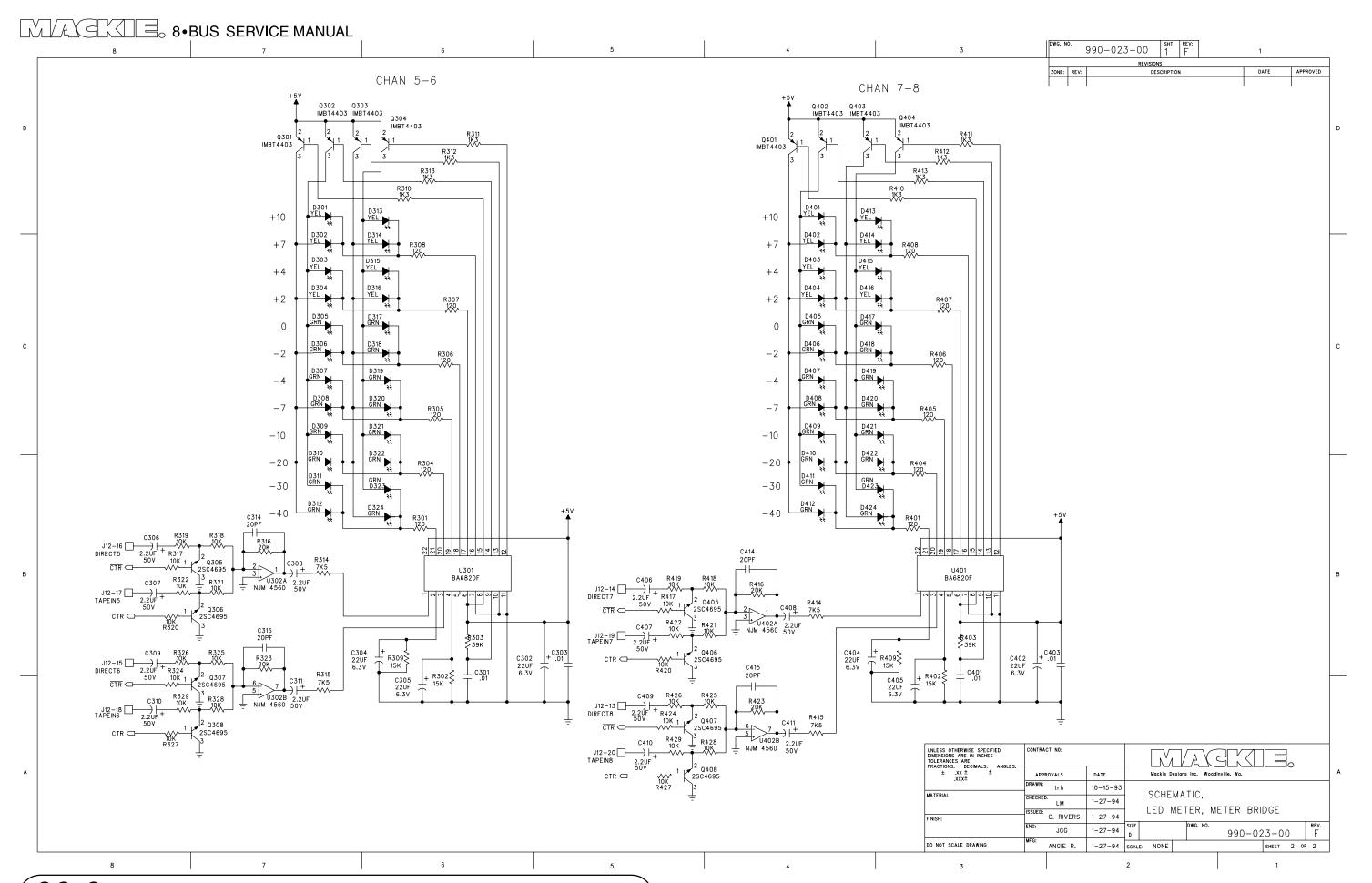


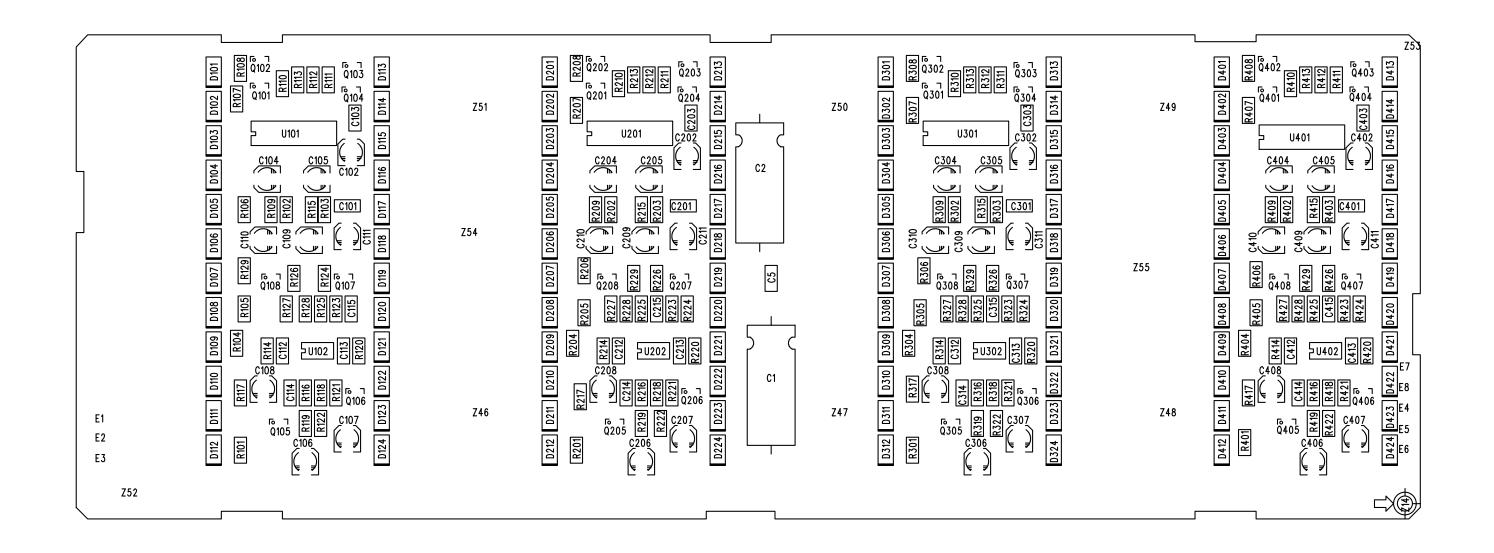
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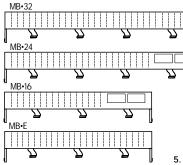








MB•32/MB•24/MB•16/MB•E **8•BUS METER BRIDGES**



Congratulations on adding a Meter Bridge to your Mackie Designs 8 • Bus Console. Installation is very straightforward and should take just a few minutes. The only reason we've included so many step-by-step drawings is because our art department wanted something to do on a rainy day1

INSTALLATION INSTRUCTIONS

- 1. Locate the warranty card and fill it out. If you bought your Meter Bridge at the same time you purchased an 8. Bus series console, you don't need to answer all the guestions on the card that came with the Meter Bridge. Just fill in the model number of the Meter Bridge, serial number, purchase date and dealer. and your name and address.
- 2. Make sure that your 8. Bus Console power supply is turned off.
- 3. Remove the Meter Bridge from its plastic bag. Save the bag. It's handy for wrapping boa constrictors or moray eels before popping them in your freezer. Also, save the box.

¹And, since every day except four or five in August are rainy up here in the Northwest Rainforest, they had time to do quite a nice job.

4. Locate and ware that came with your Meter Bridge: □ a. Two (2) slotted screws; □ b. Two (2) collar pieces (Note

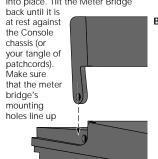
that there is a small pin protruding from the bottom of each collar piece);

□ c. Two (2) Allen head screws; □ d. Two (2) lockwashers; □ e. One (1) allen wrench.

Remove the plastic caps that cover the Meter Bridge mounting holes on each side of the Console (Drawing A). Feed them to your boa.



Alian the Meter Bridge with the Console (B) and lower it into place. Tilt the Meter Bridge



: WW 8888-8888- 8888-8888 .e: 🚃 🖦 👯 👯 8888- 8888- 8888- 8888- 8888- 8888-MB•F Meter Bridge MB•32 Meter Bridge 8888"8888"8888"

with the console's mounting holes 7. Hand-insert one collar piece into each side, with the "teeth" pointing out (C). Occasionally, the end caps of the Console will try **-0**-(3≡)

pin down

MB•16 Meter Bridge

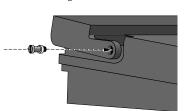
to interfere with this step. Don't get upset. Simply loosen the CONSOLE end cap screws, install the collar and then retighten the screws

- 8. Turn the collars by hand until you feel the pin seat itself (it will stop turning)
- 9. Slide one lockwasher onto each allen-head
- 10. Secure the collars by inserting an Allenhead screw on each side (C). Take care not to cross-thread the screws or strip the screwheads. Tighten the Allen screws securely
- 11. Using a hefty screw driver, install a flush screw almost all the way into each side (Drawing D at right).
- 12. Raise the Meter Bridge as far forward as it will ao.
- 13. On the Console, locate the rubber plugs that cover the Meter Bridge ribbon cable

sockets. The 32.8 has five; the 24.8 has four; the 16.8 and MB.E each have three (see epic MondoDrawing E at the top).

MB•24 Meter Bridge

- 14. Remove the rubber plugs and feed them to the afore-mentioned boa constrictor.
- 13. Making sure that the plug and socket are aligned, firmly insert each ribbon cable into its corresponding socket in the Console (F). Take care to make sure that the cable is not twisted 180° (sounds insulting to caution you against something like this, but we've seen it done.) Unless your fingers are microminiature, you'll probably need to use the eraser end of a pencil to press down on the plug and make sure that it is fully
- 16. Slide the new improved, slotted rubber plugs (that are pre-attached to the ribbon cables) down until they fit snugly into the rectangular Console holes (Drawing H).
- 17. Adjust the Meter Bridge to the desired angle and tighten the screws
- 18. Make yourself a sandwich. Wash hands before returning to work.



A SHORT TEST-DRIVE

The point of this exercise is to make sure that all the Meter Bridge channels (and all the LED's 5. Repeat steps 3 and 4 for each channel of on each channel) work properly. Better now

- 1. Power up your 8 Bus Console. Confirm that the following are alight:
 - A. The console's power LED;
 - B. The meter bridge's VU meters (unless you're installing an MB•E); and
 - C. Either the TAPE or CHANNEL LED on the Meter Bridge

If nothing lights up, turn the power off immediately and recheck your connections. If all is aglow. proceed to the next step.

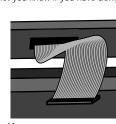
2. If the Meter Bridge TAPE LED is on, press the SOURCE button below it once to switch to CHANNEL. If the CHANNEL LED is



3. Send a signal into the main path of

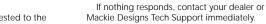
Console Channel 1. The -20 LED above the fader will let you know if you have done

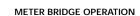
4. After making sure that the channel is not muted turn up the channel fader. Confirm Meter



Bridge activity on Channel 1. Whoop with unbridled joy

- the Console. You'll probably want to stop whooping after about the sixth or seventh
- 6. Assign the last channel you tested to the L/R MIX. Turn up the L/R MIX fader. Engage the L/R switch in the MONITOR section of the Console.
- 7. Confirm meter activity on both the Meter Bridge VII meters and the console's L/R MAIN LED meters. Pan the channel left and right to confirm that all meters understand this sort of thing.





sure that it is firmly plugged in.

TROUBLESHOOTING

Your meter bridge's ballistics and general behavior is the same as the submaster LED ladders on the Master section of the Console. For the excruciating details, read the section on METERING on page 11 of your 8 • Bus manual.

If a group of LED ladders doesn't respond

there's a good chance that the corresponding

ribbon cable isn't pushed in all the way. Make

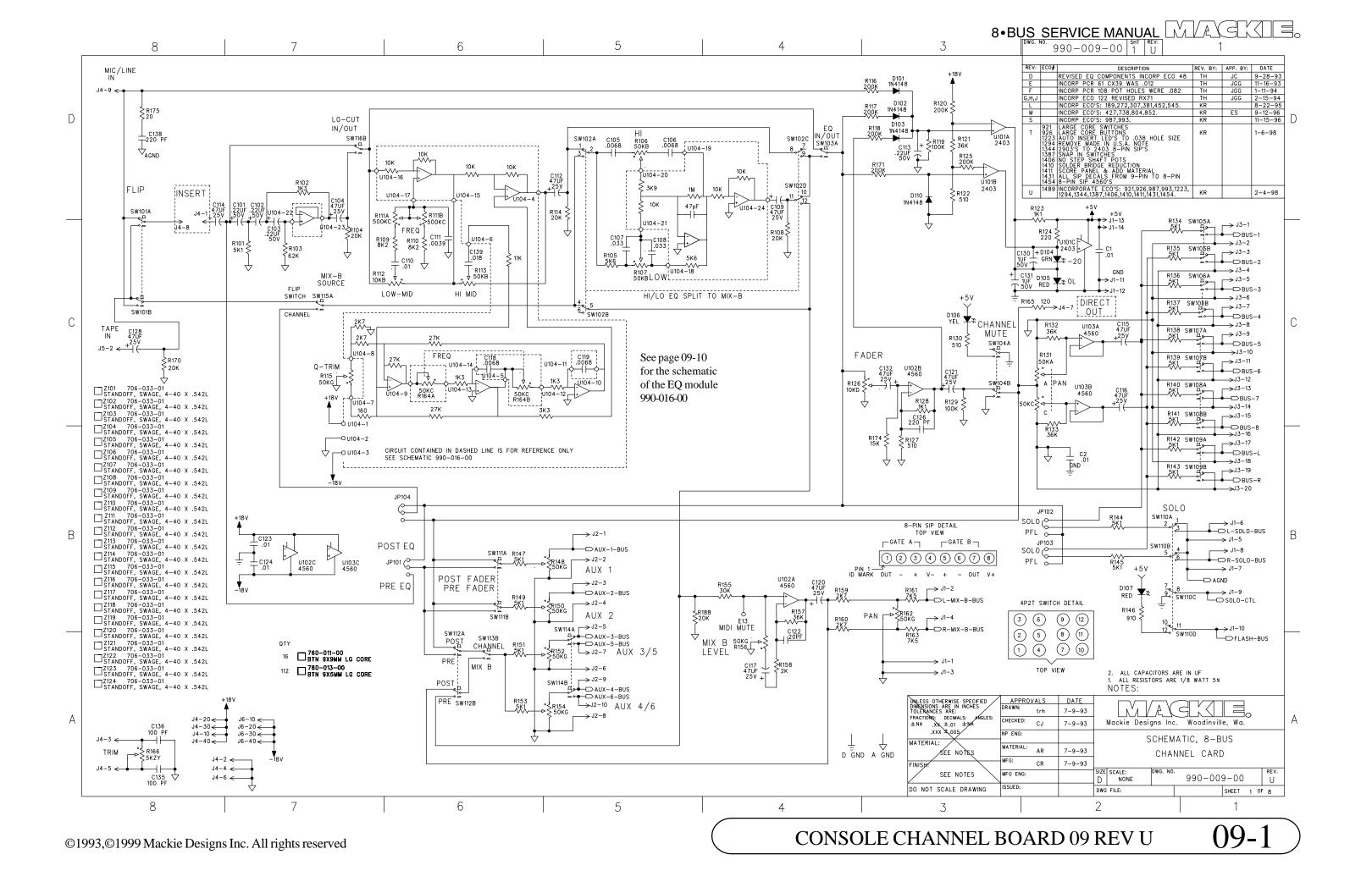
When TAPE is selected on the Meter Bridge, the channel meters will show you what is coming out of your multitrack into your tape returns - before any signal manipulation in the channel (but after the +4/-10 switching circuit). The channel meters should behave just like your multitrack's meters.

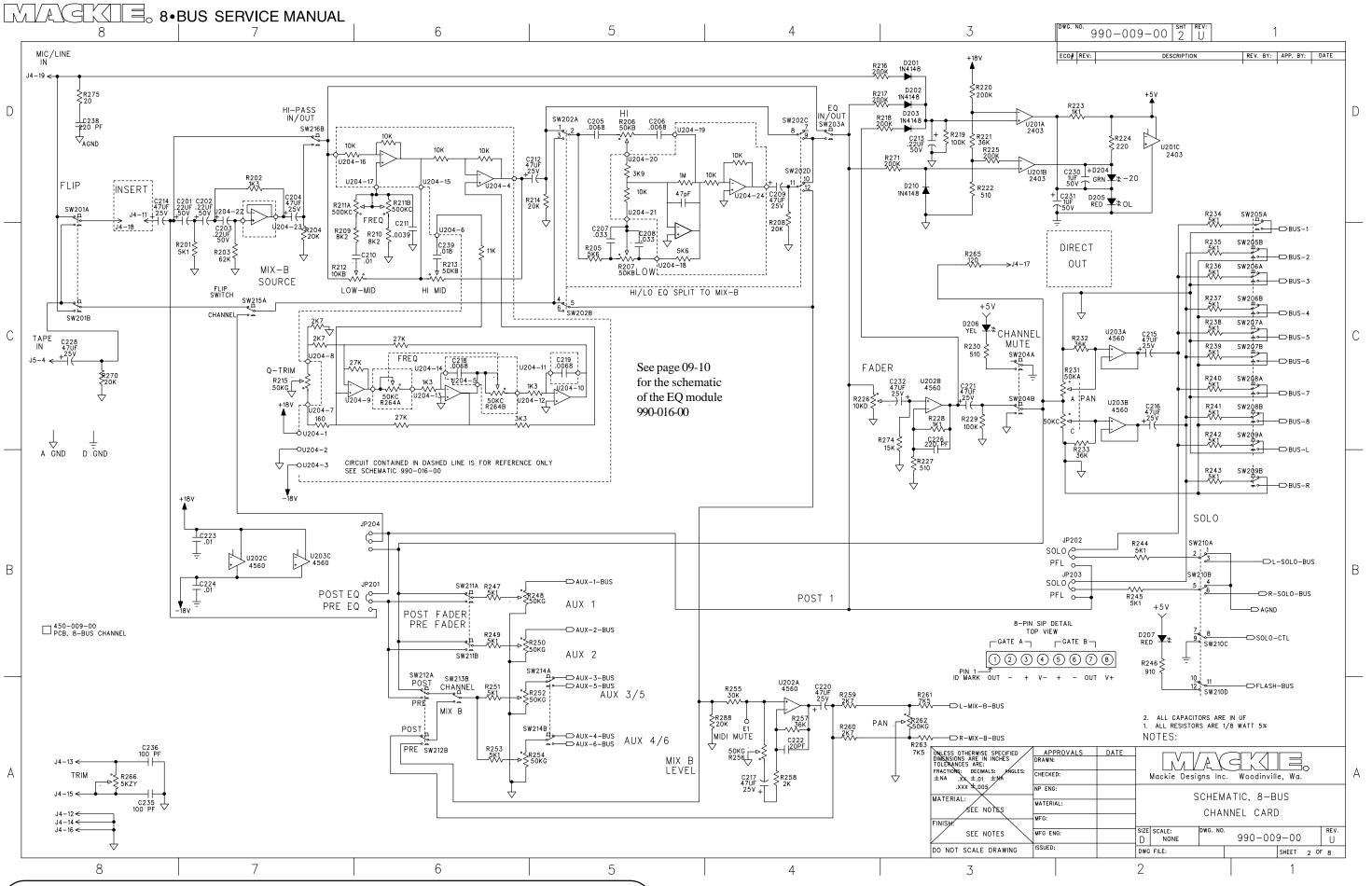
When CHANNEL is selected, the meters "see" the channel's direct output post-EQ, post-fader and post-mute. This is particularly

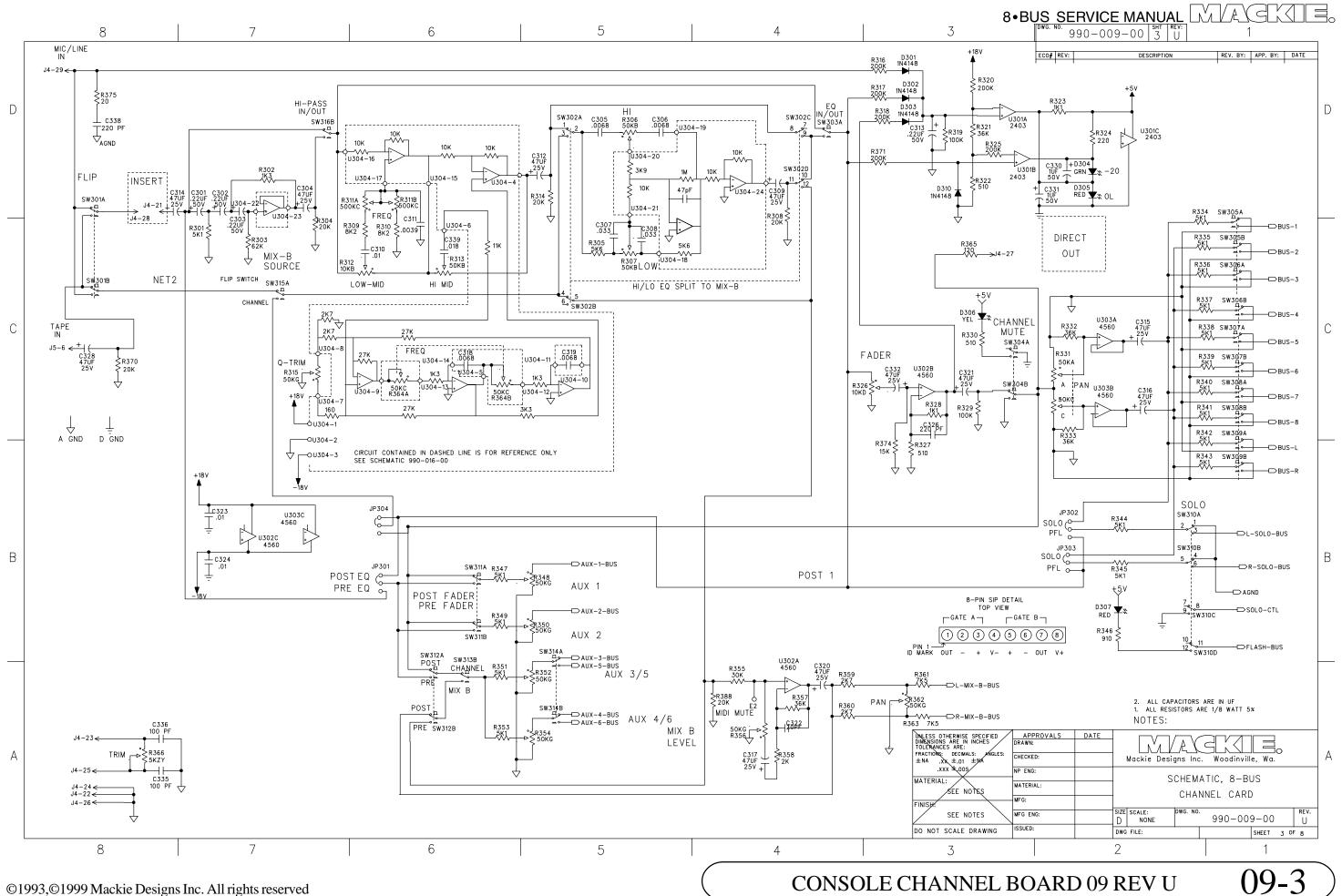
The VU meters on the MB•32, MB•24 and MB•16 "look" at the same signals as the console's L/R LED meters. You will notice that the VIJ meters and LED meters will not always agree with each other THIS IS NORMAL. The LED meters read peak activity and will show every dynamic nuance. The VU meters, designed in the Farly Bronze Age, are slower to respond and therefore show an RMS or average signal level. This will usually be several dB less than the peaks shown on the LED meter.

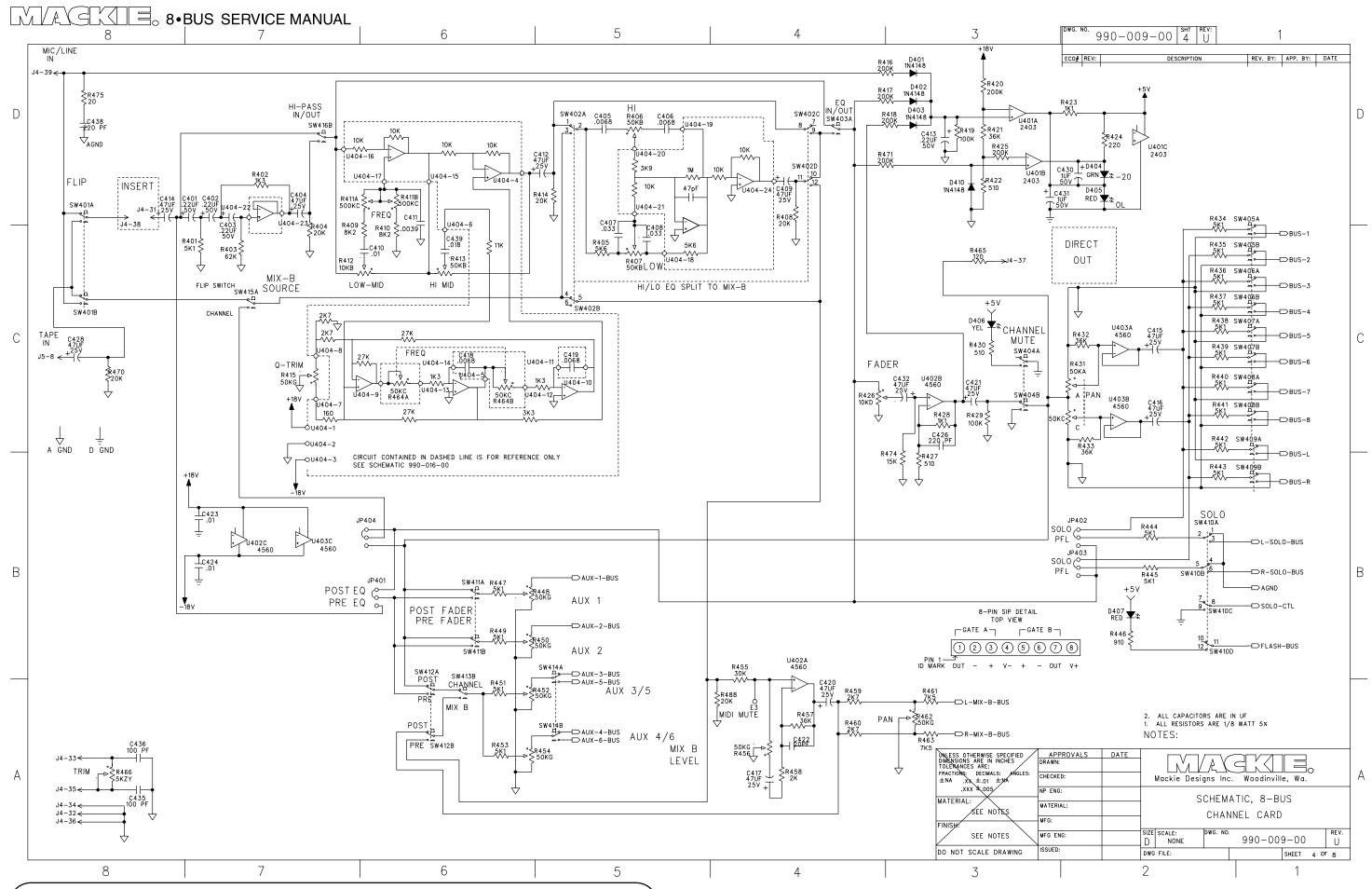
Final suggestion: Turn your overhead lights way down so that your Mackie system will look like the Death Star from Revenge of the Jedi.

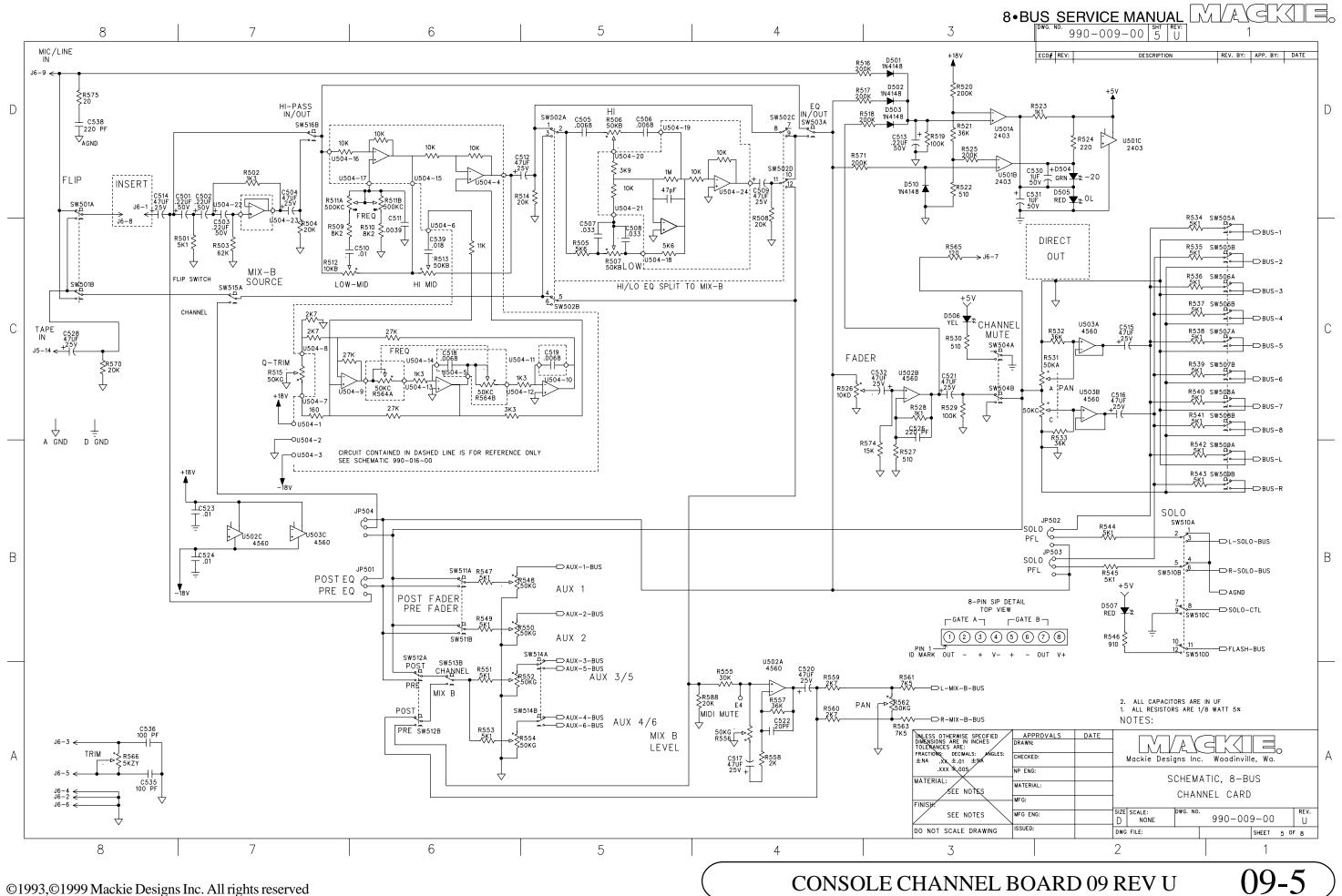


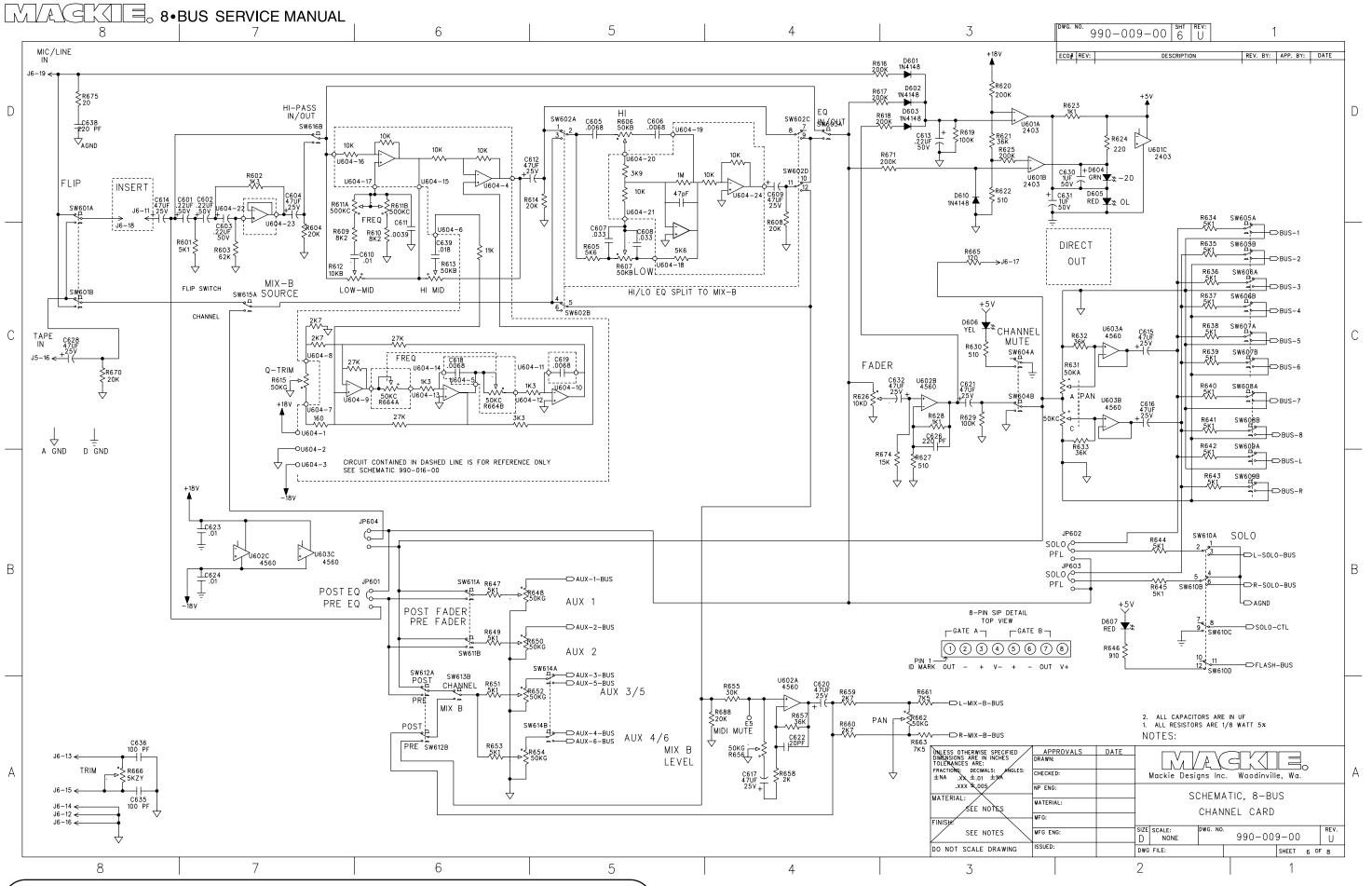


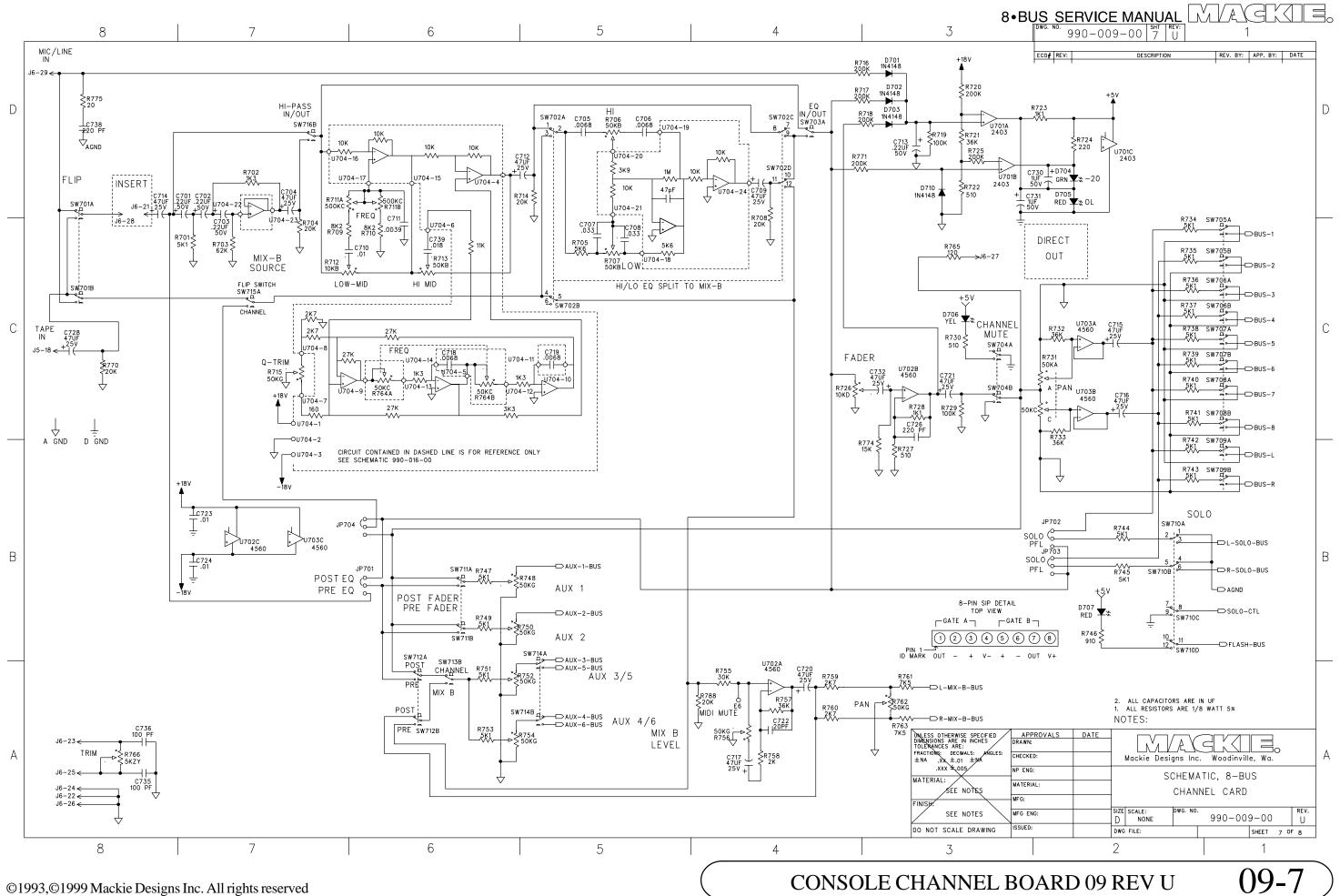


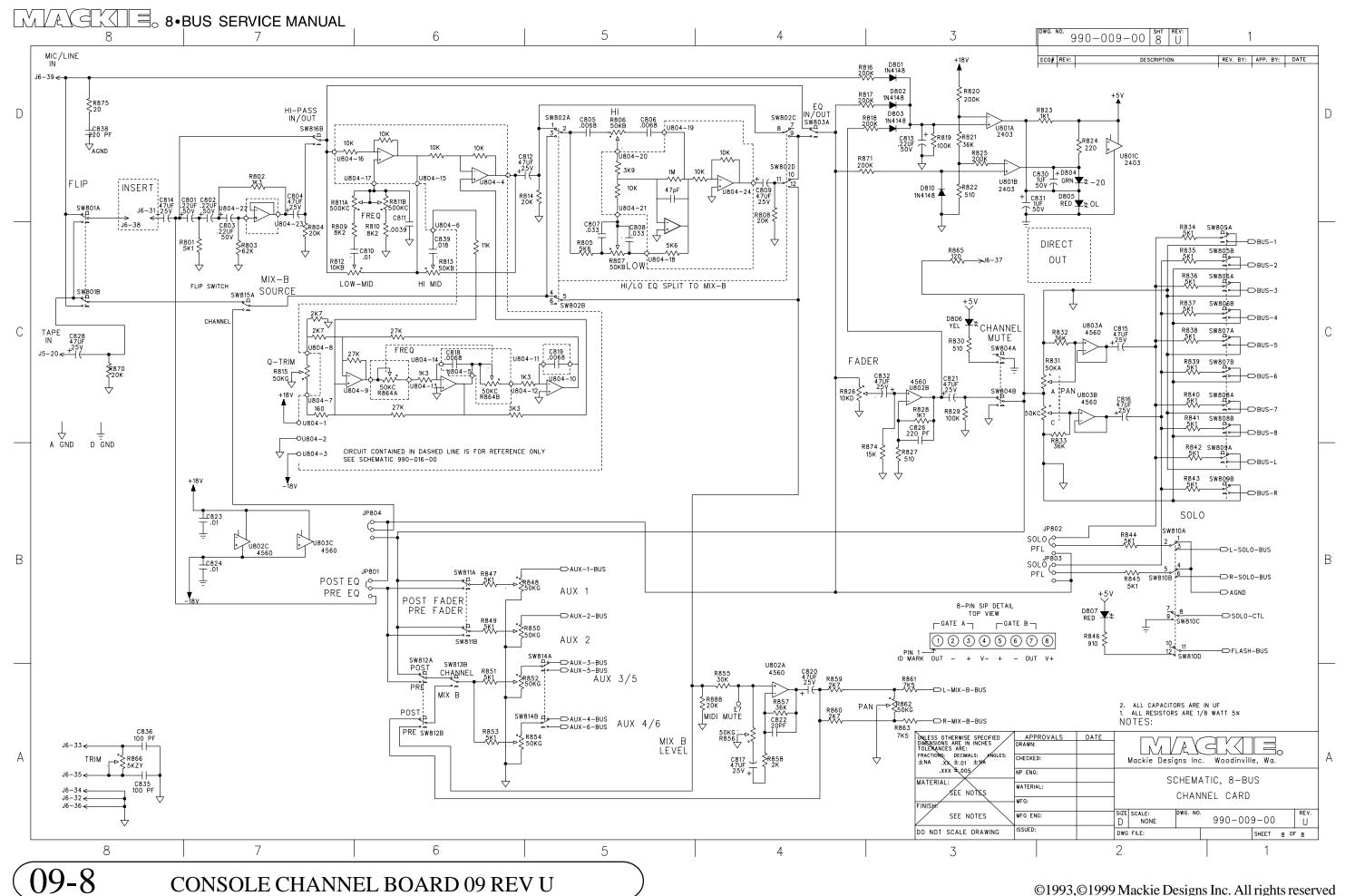


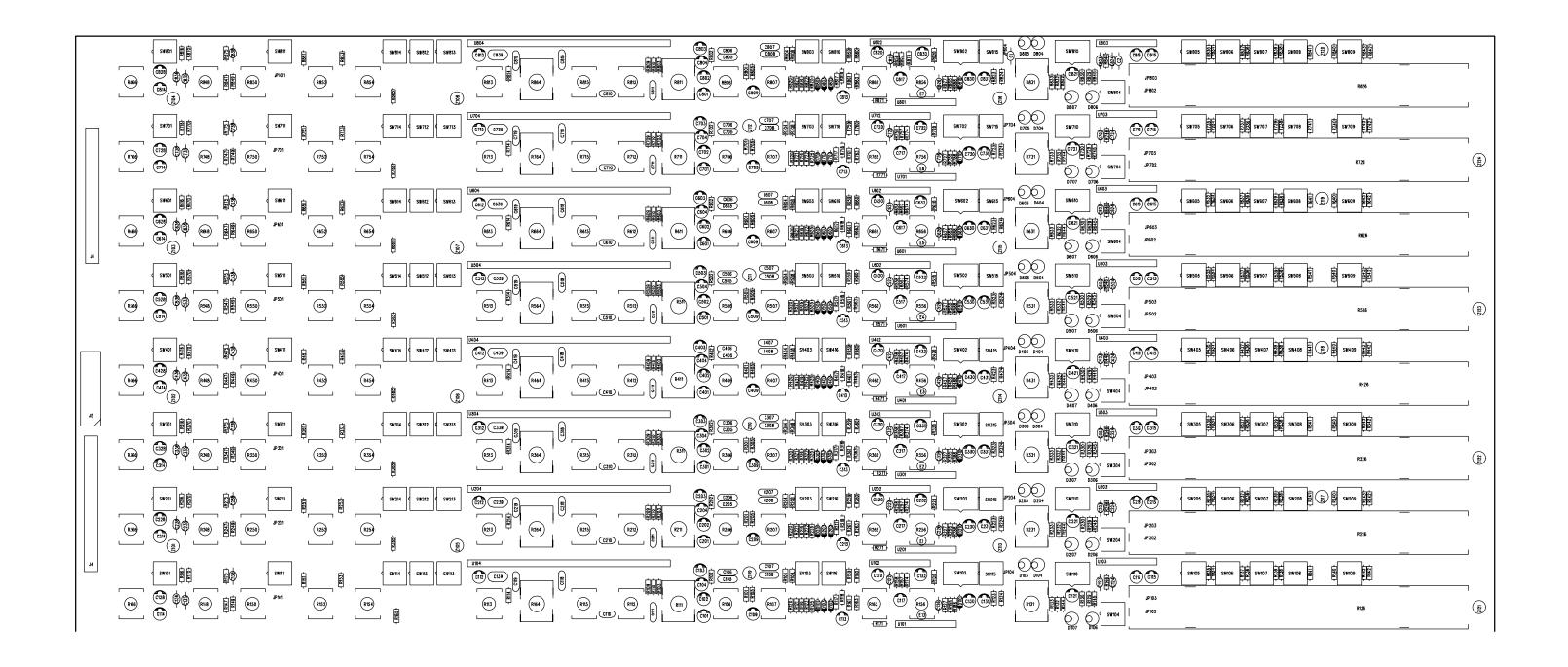


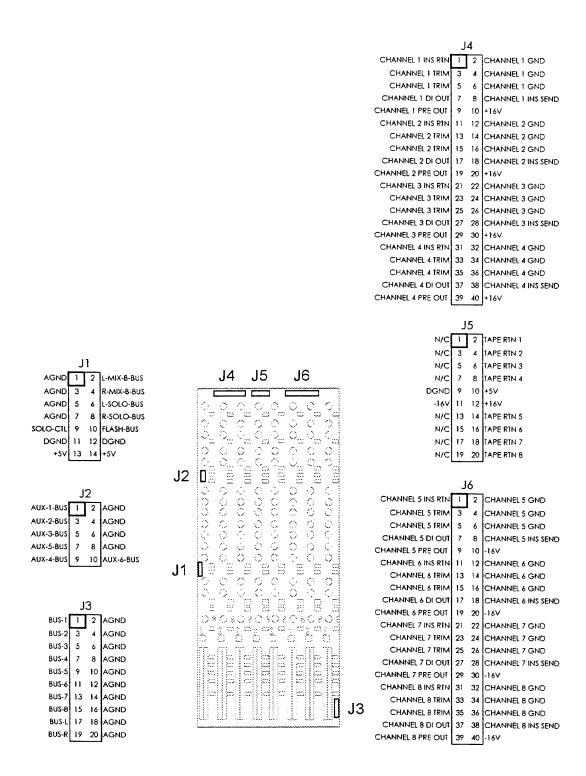


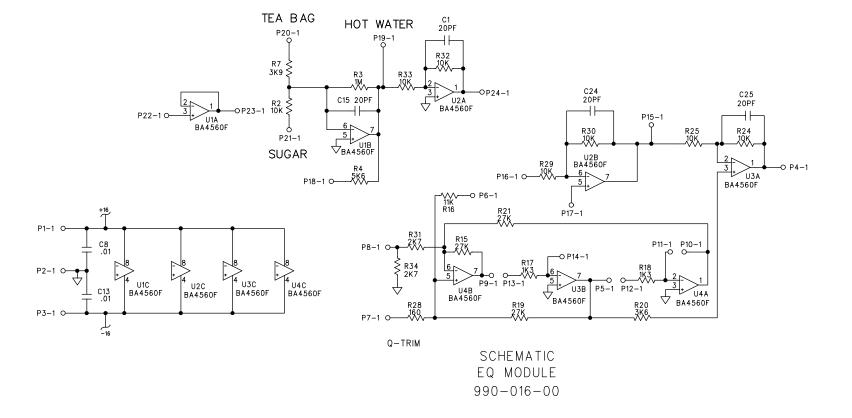


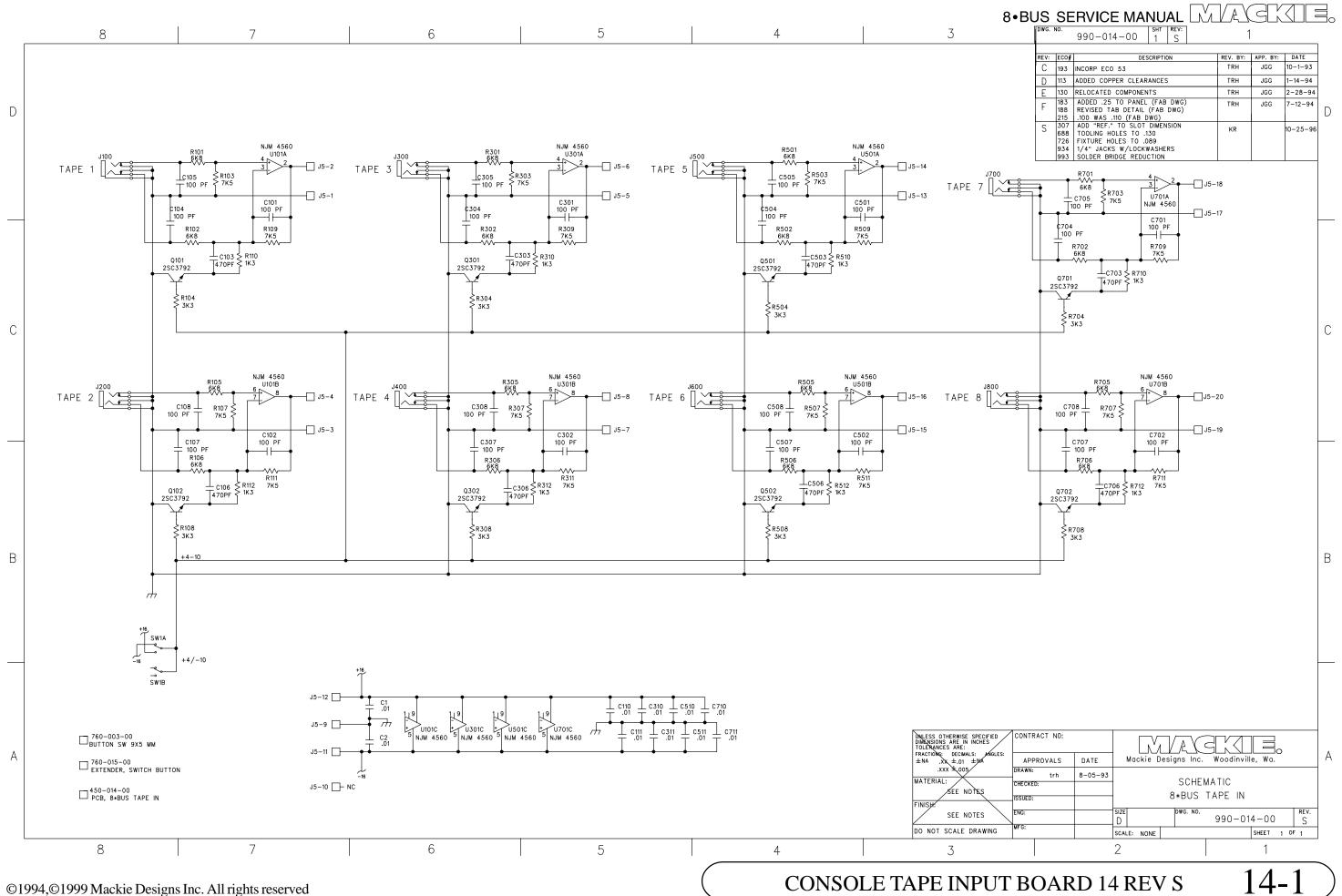


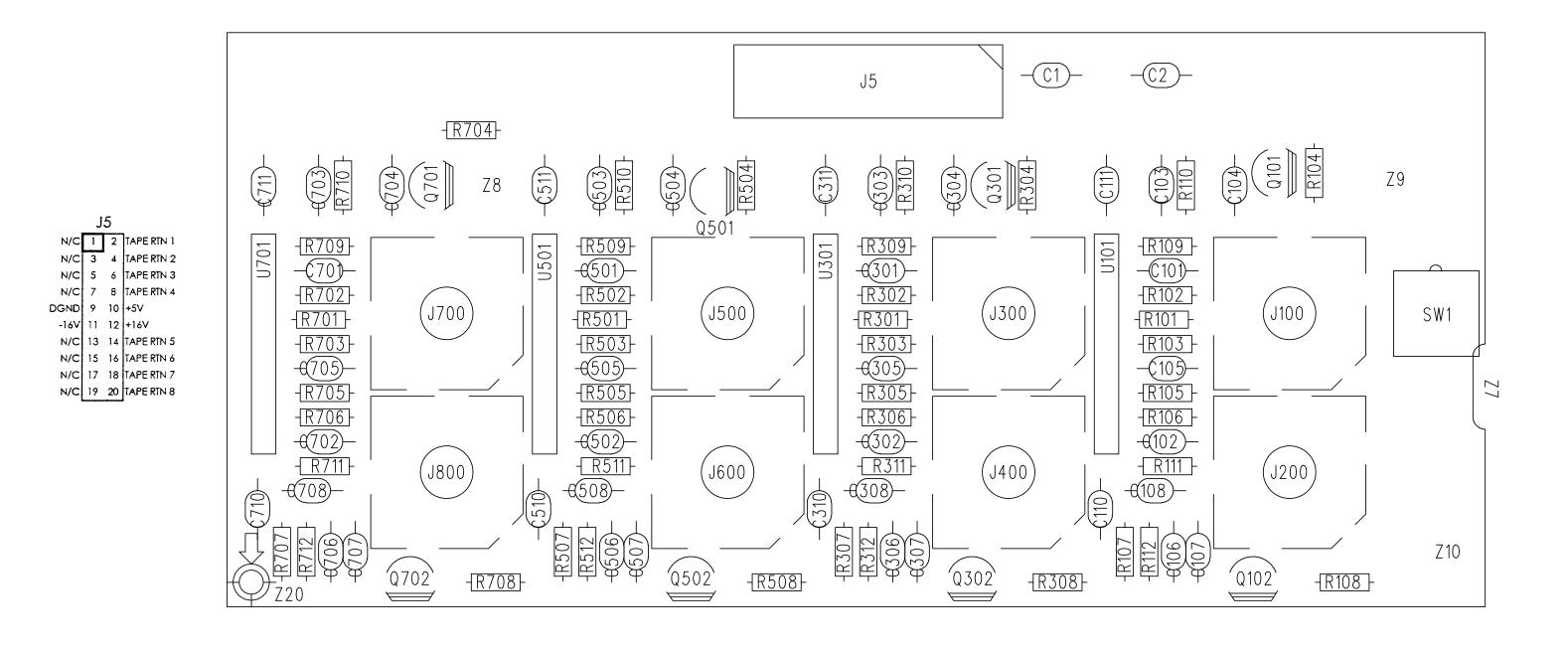




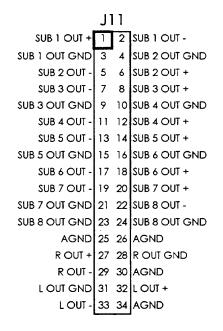


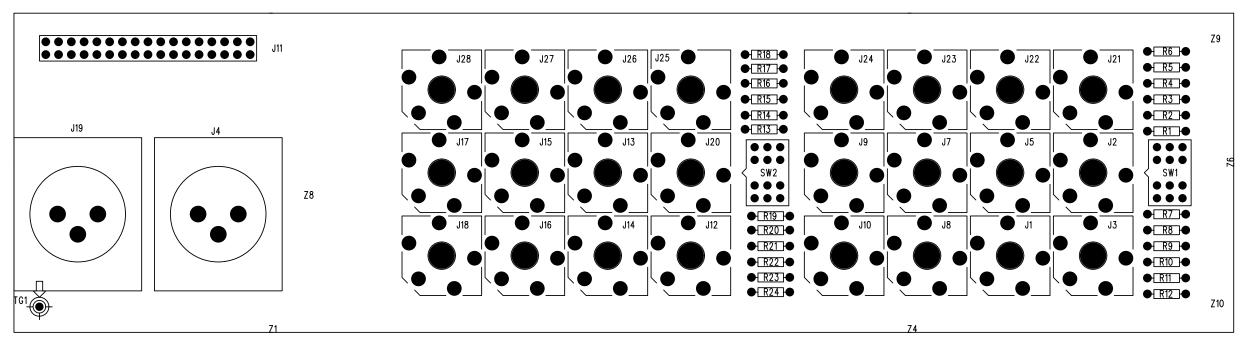


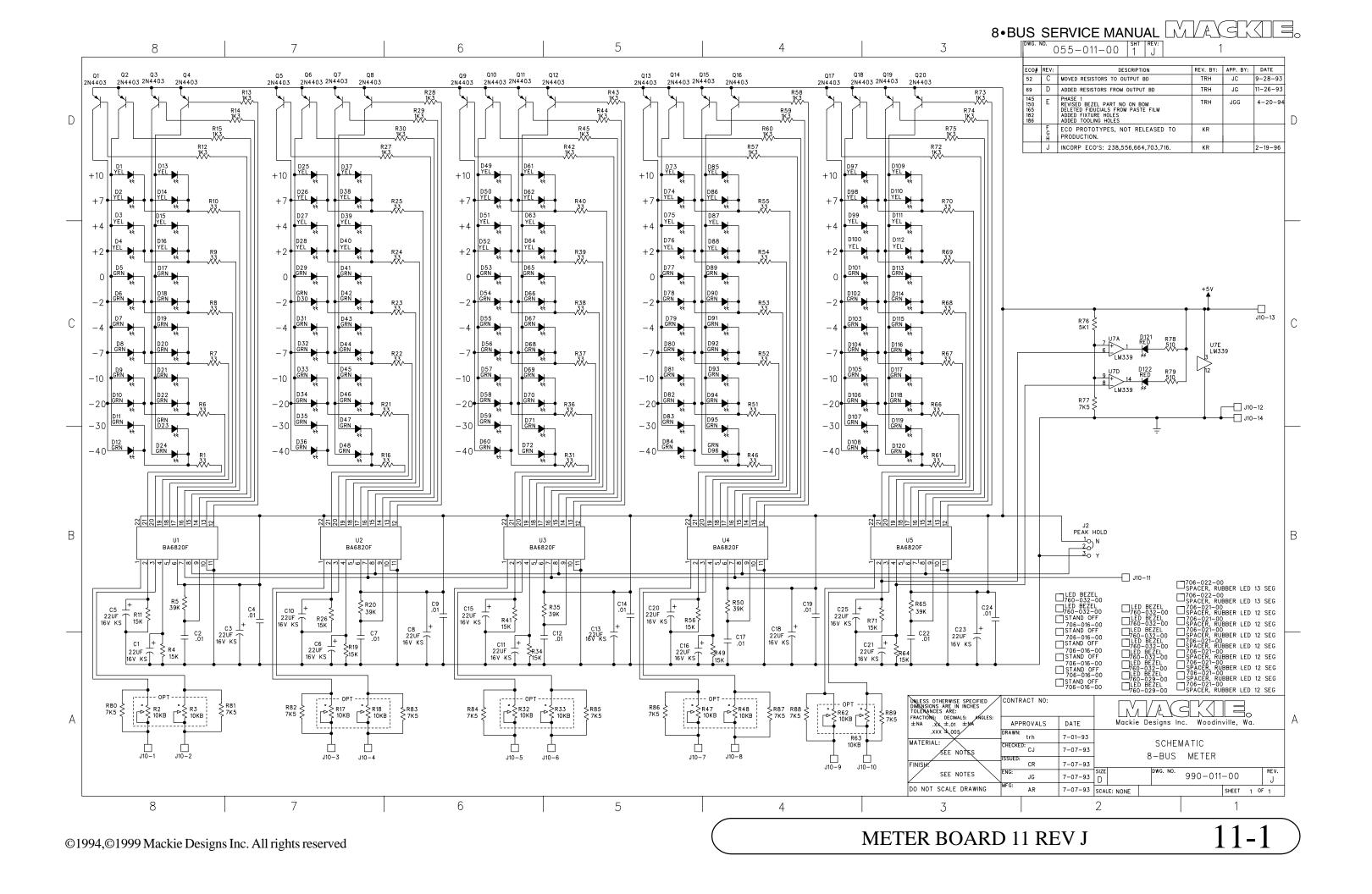


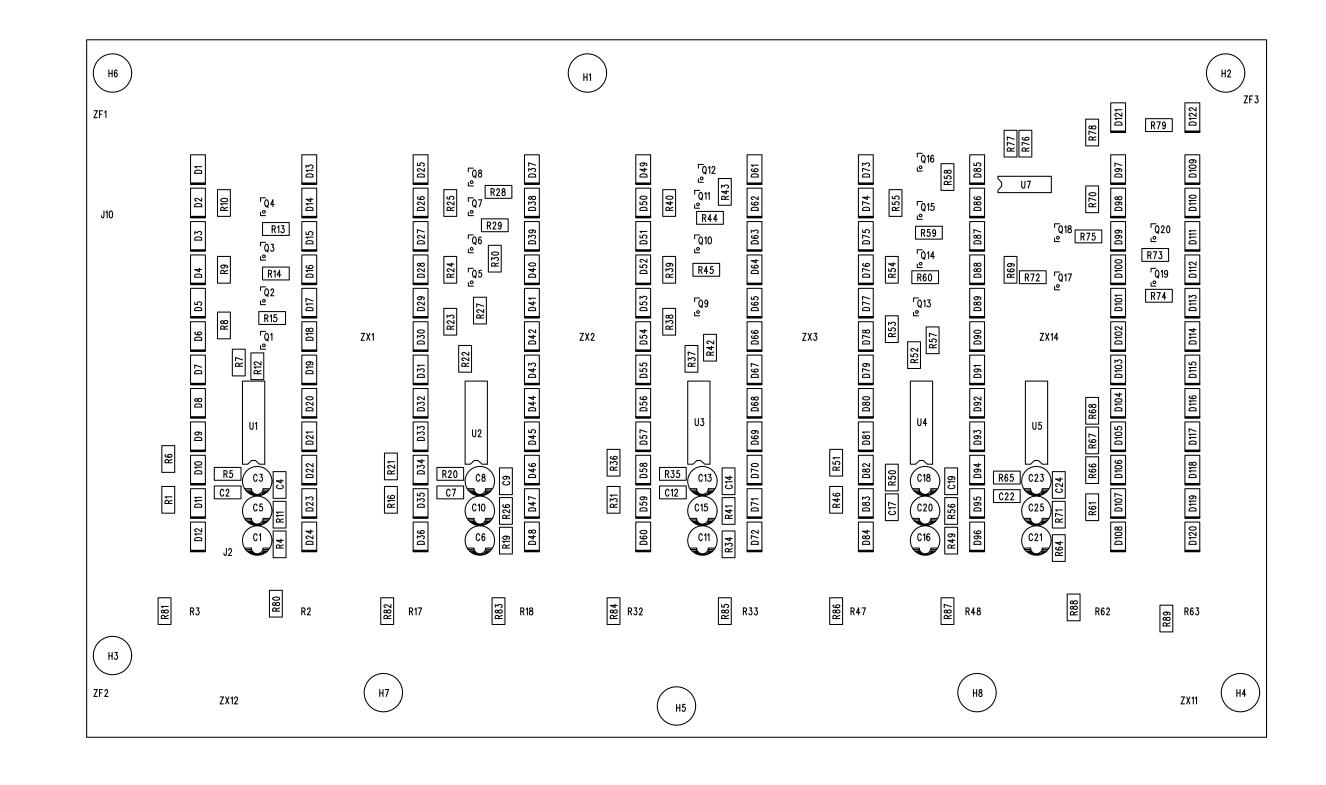


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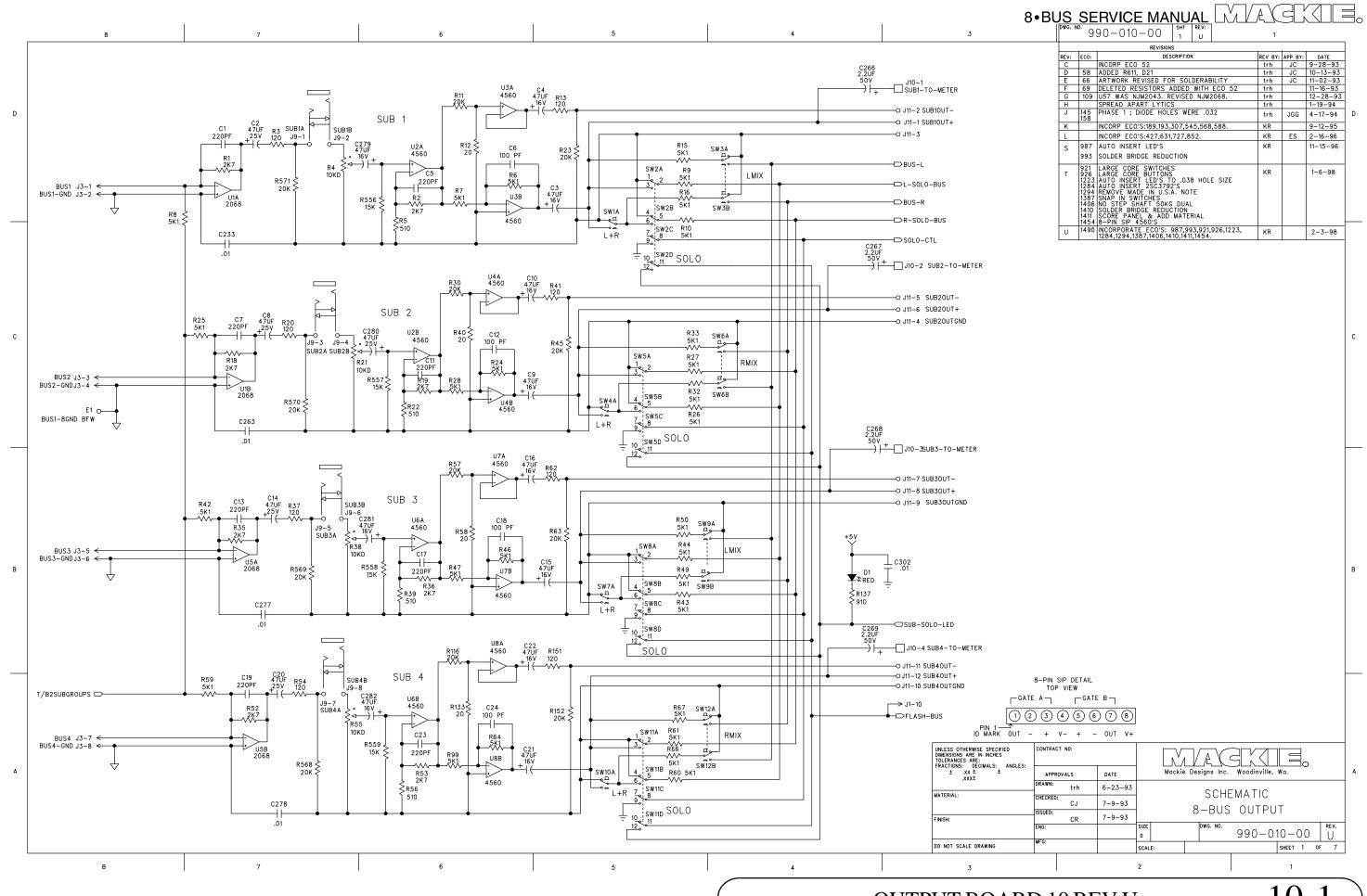


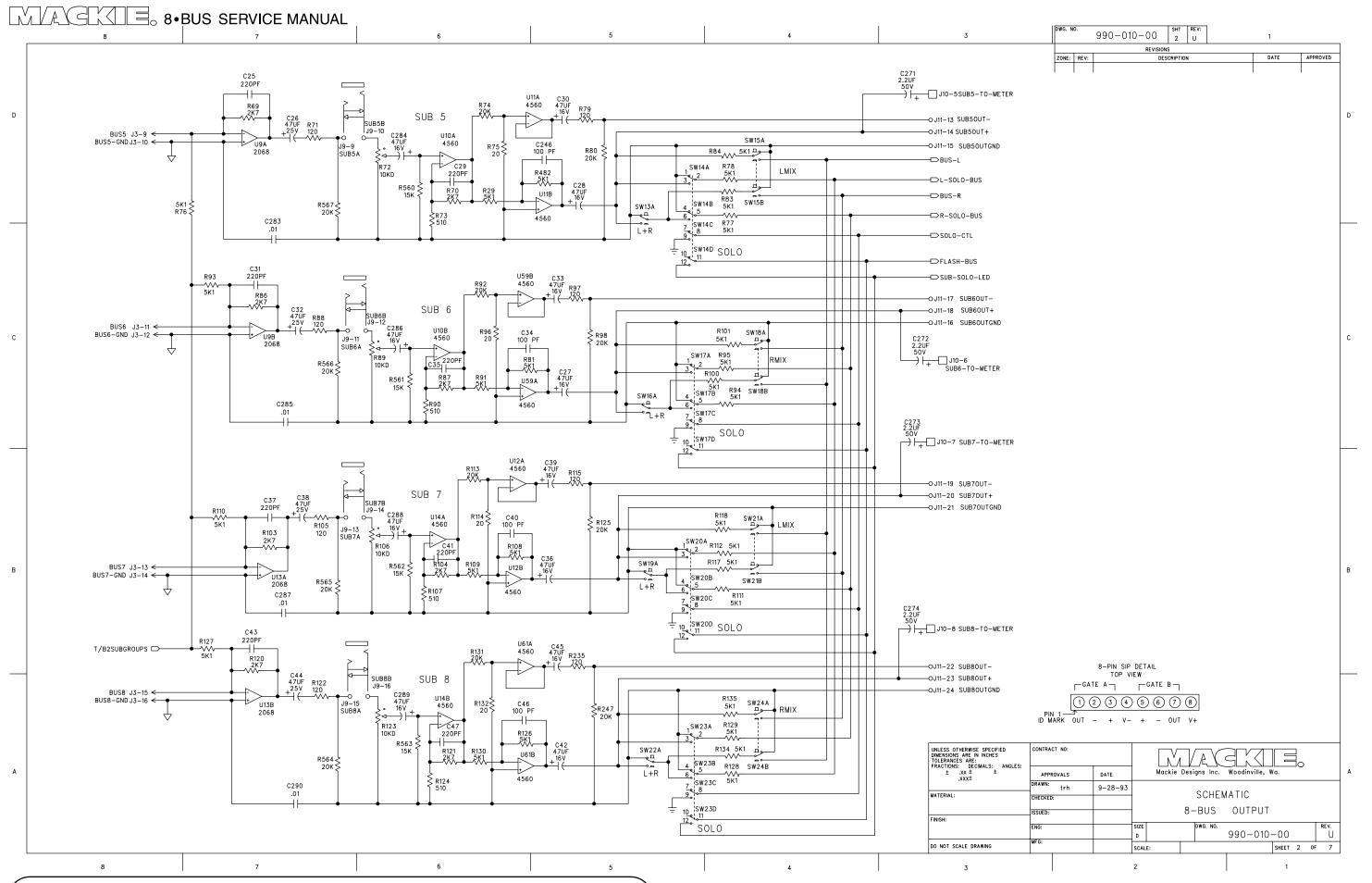


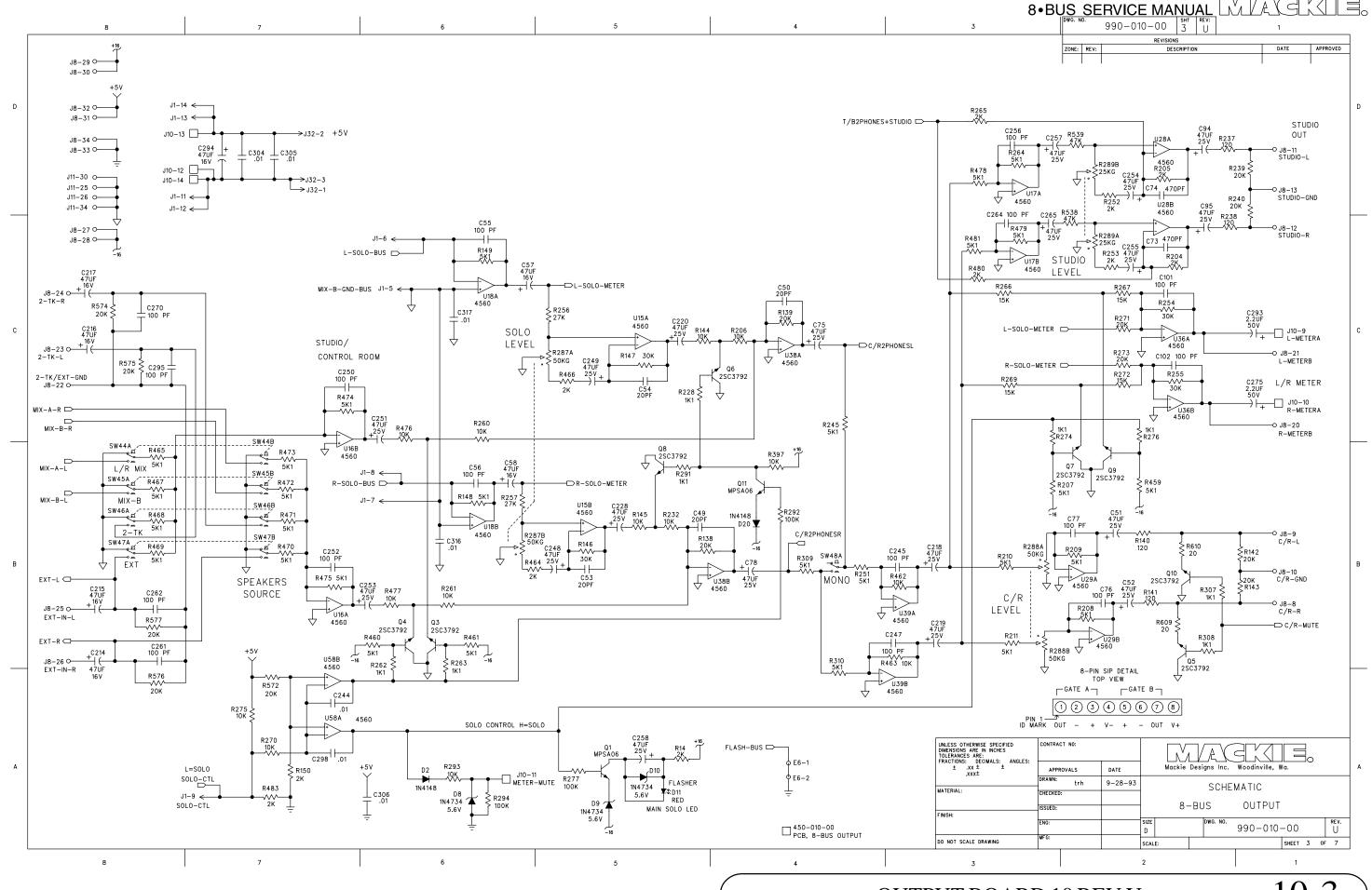


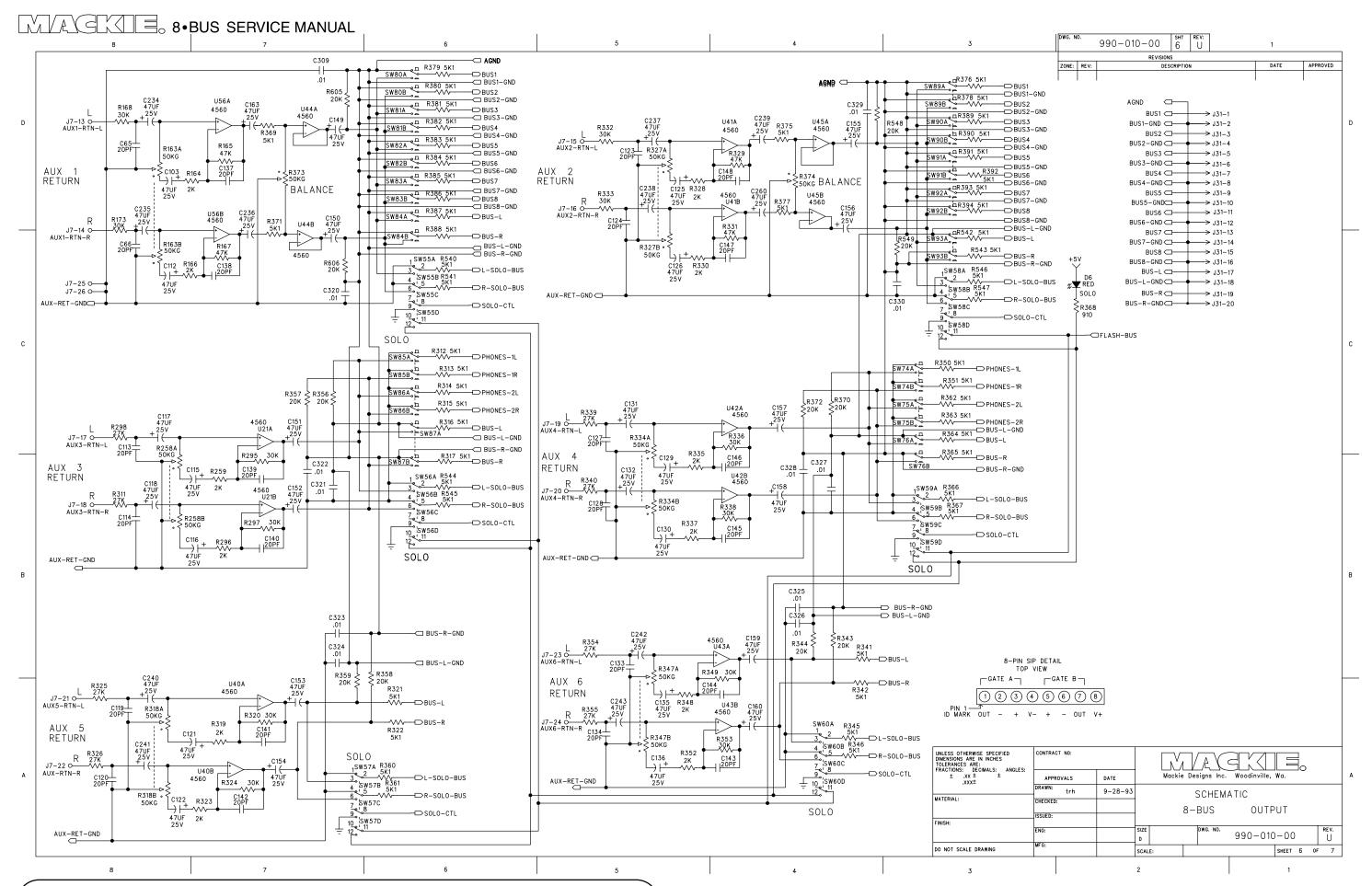


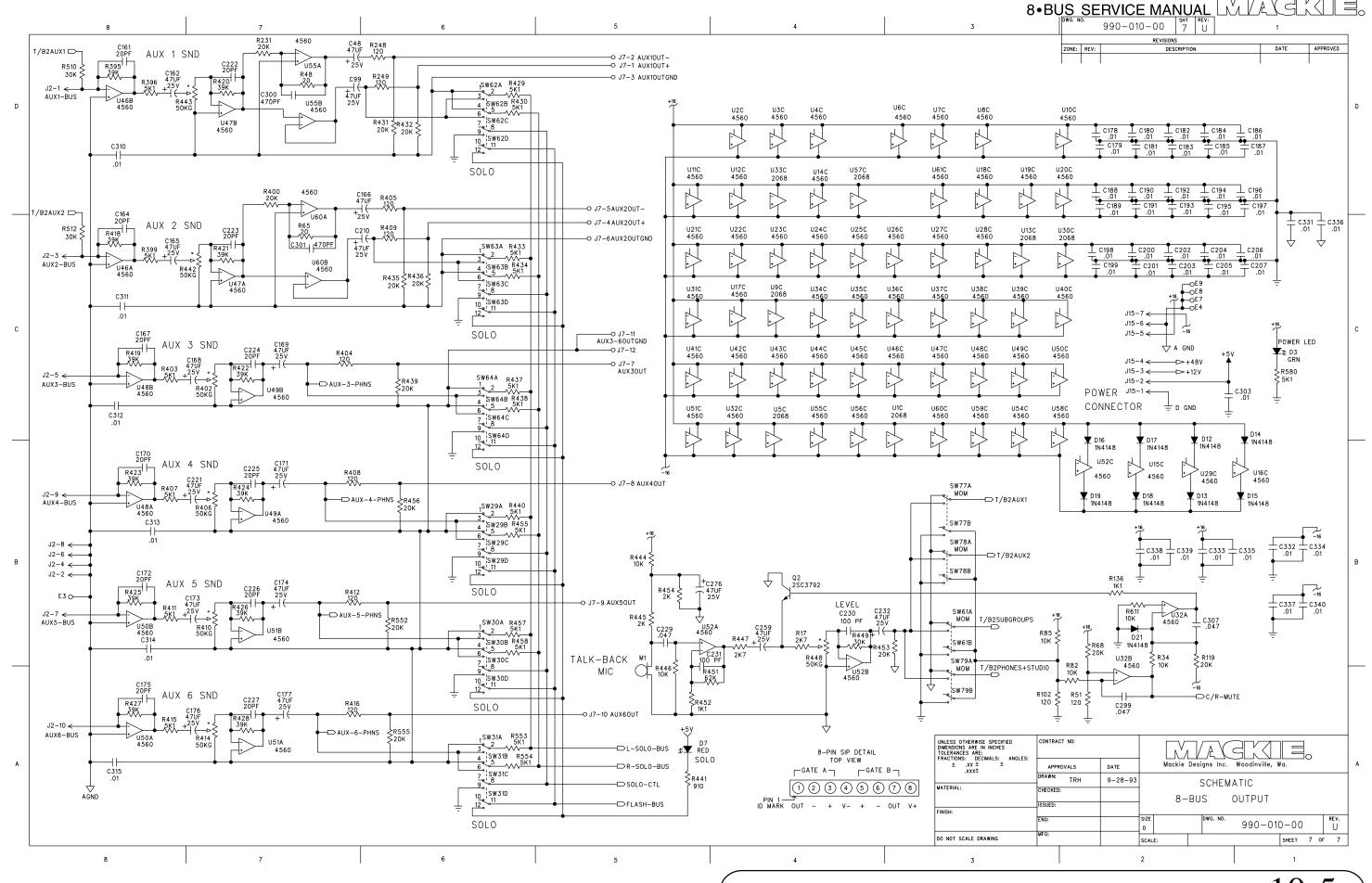
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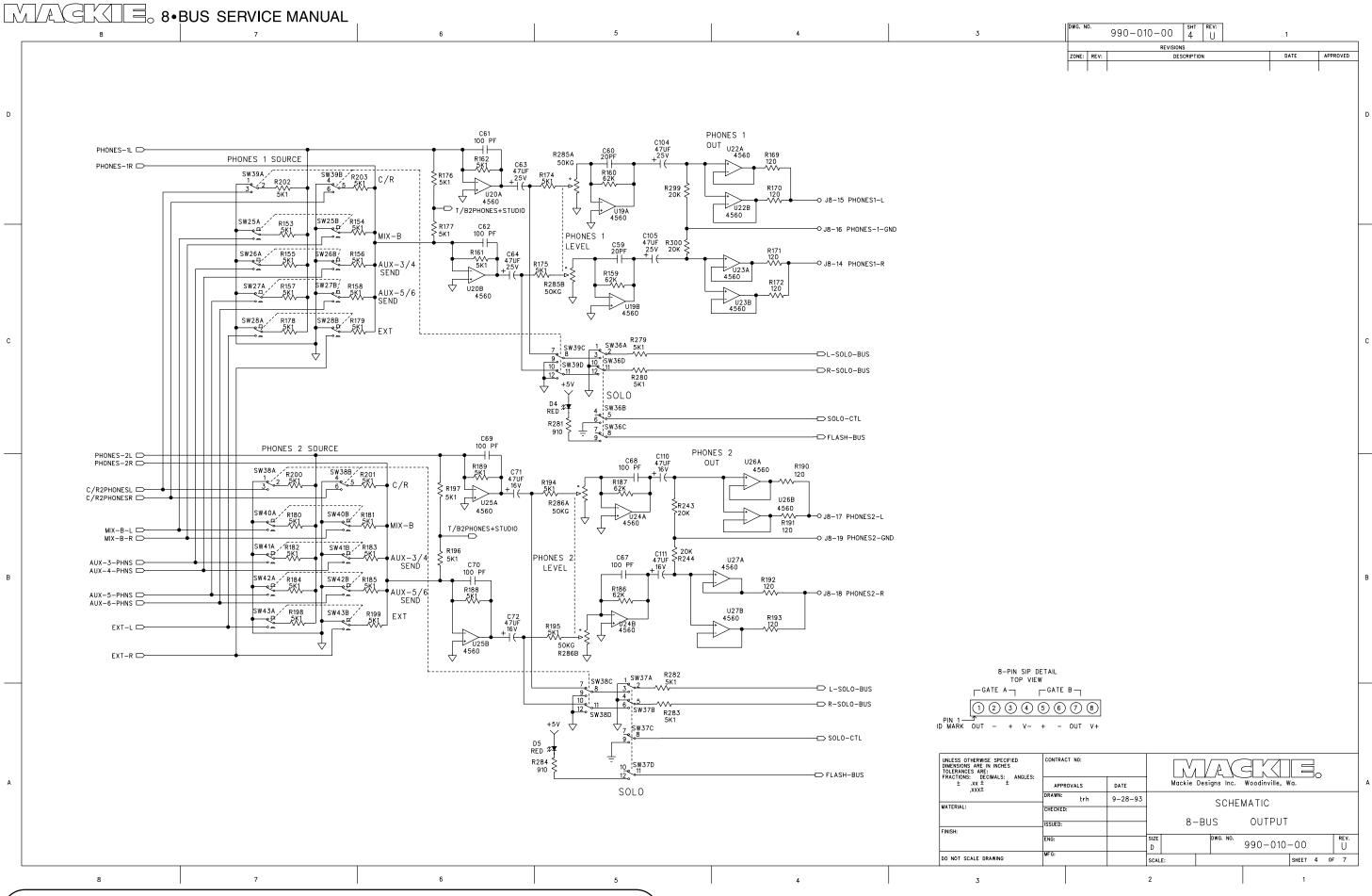


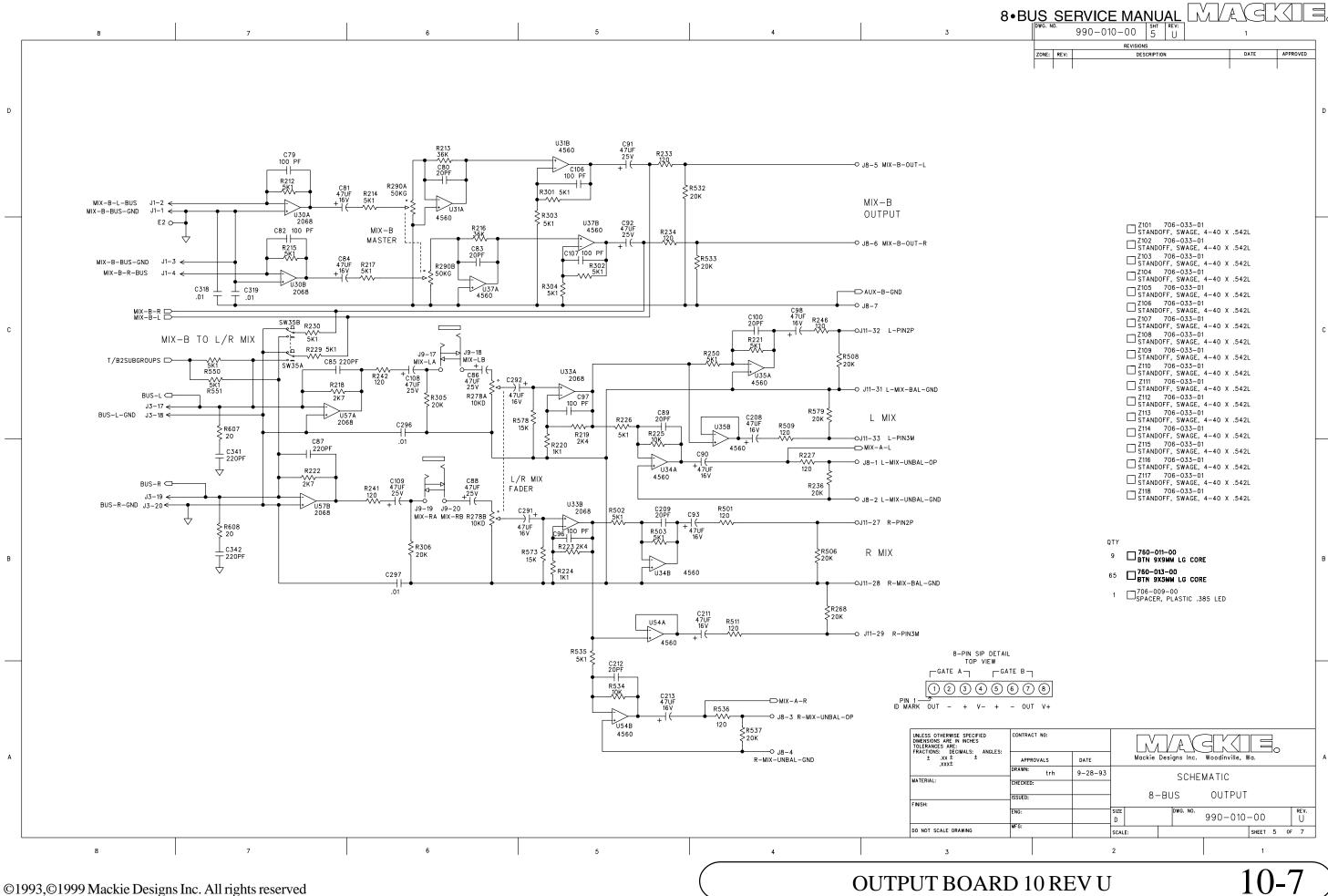


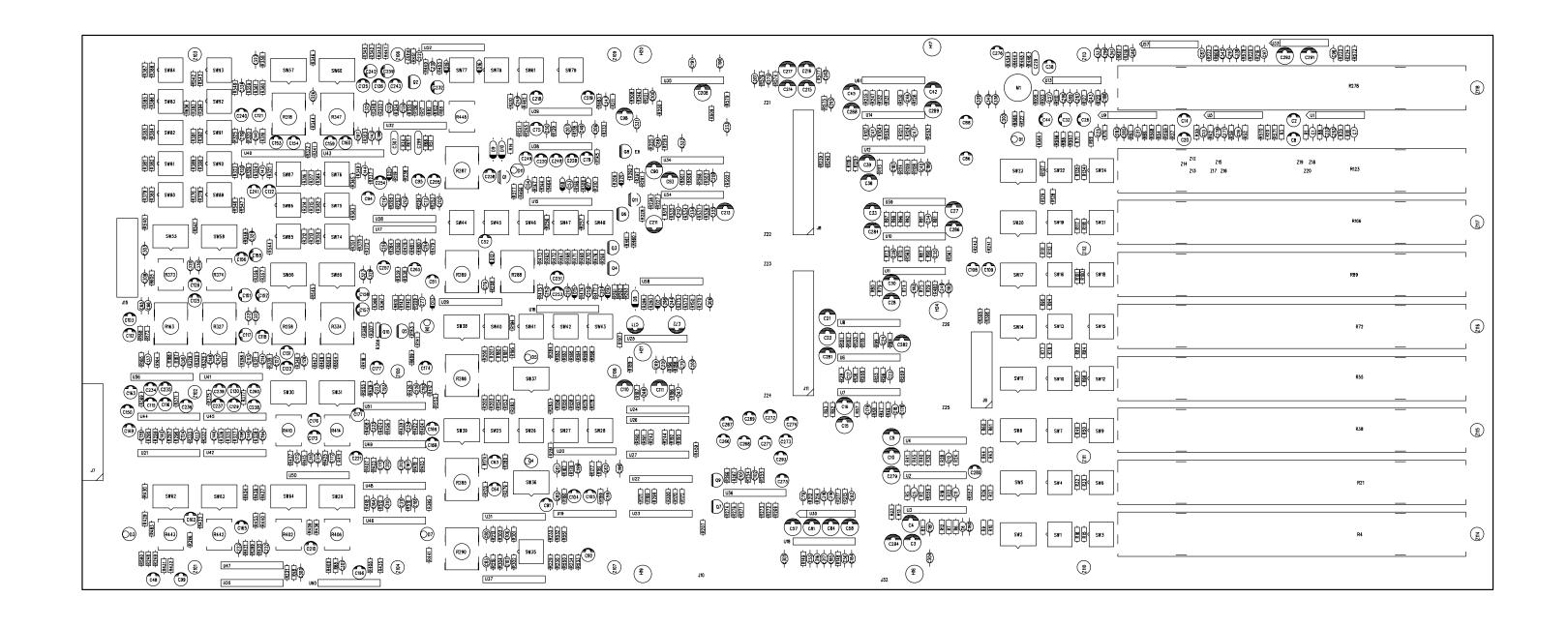


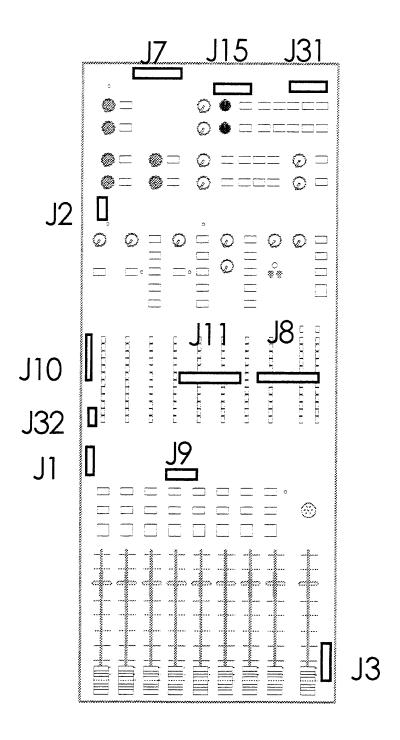


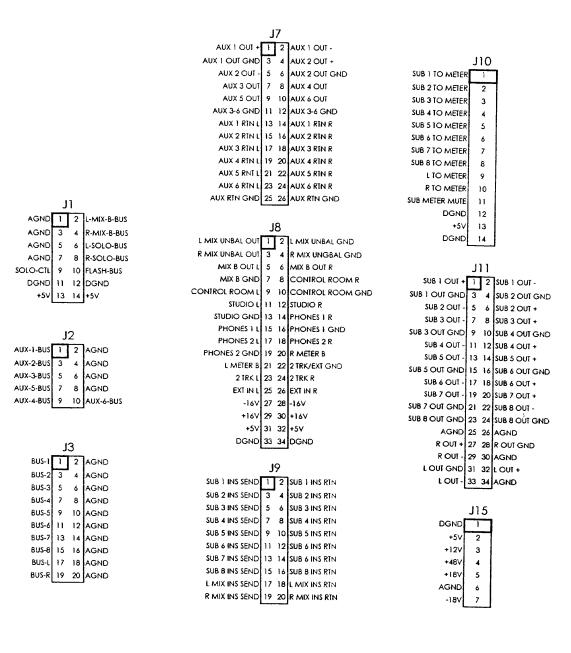


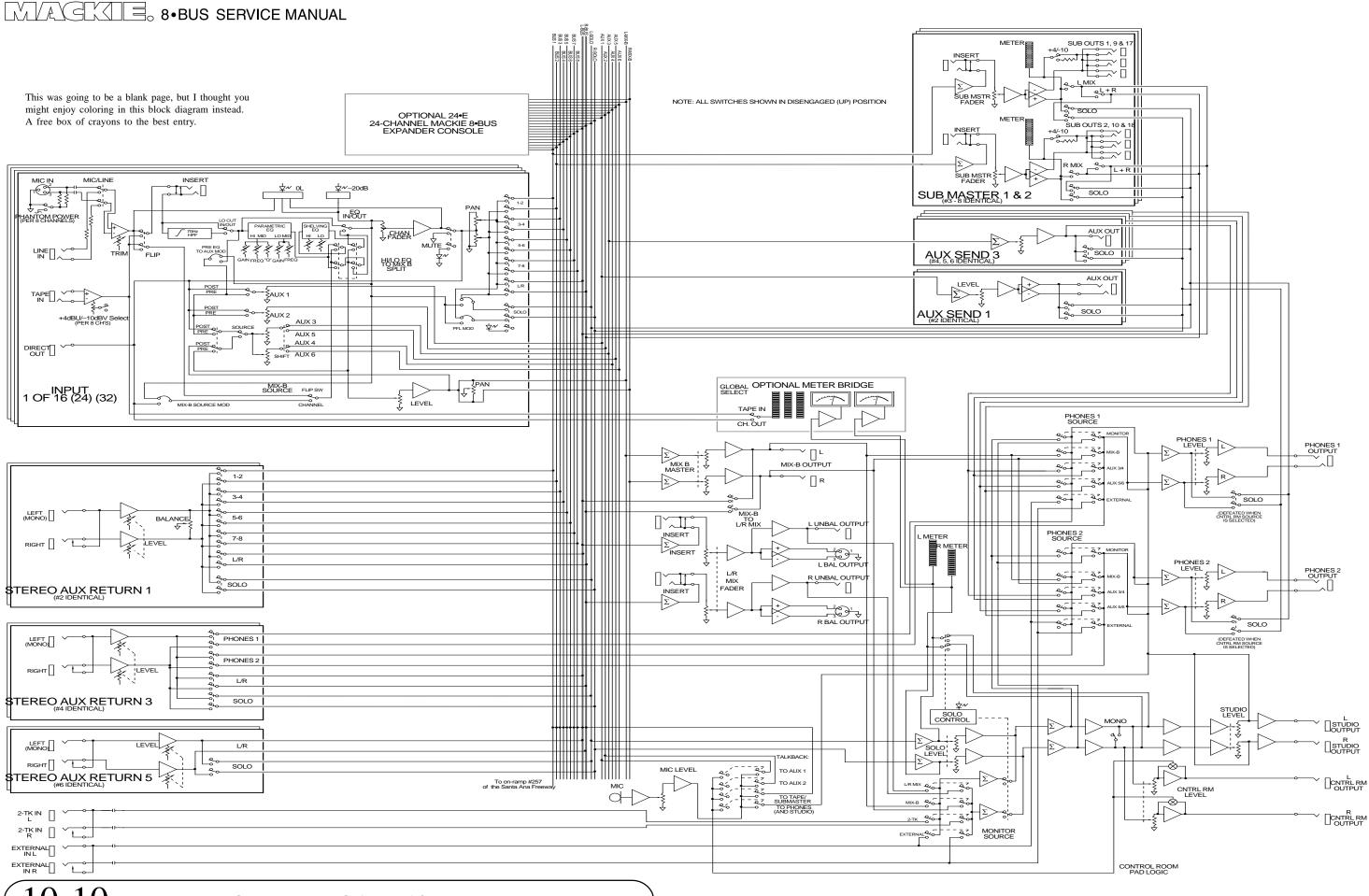


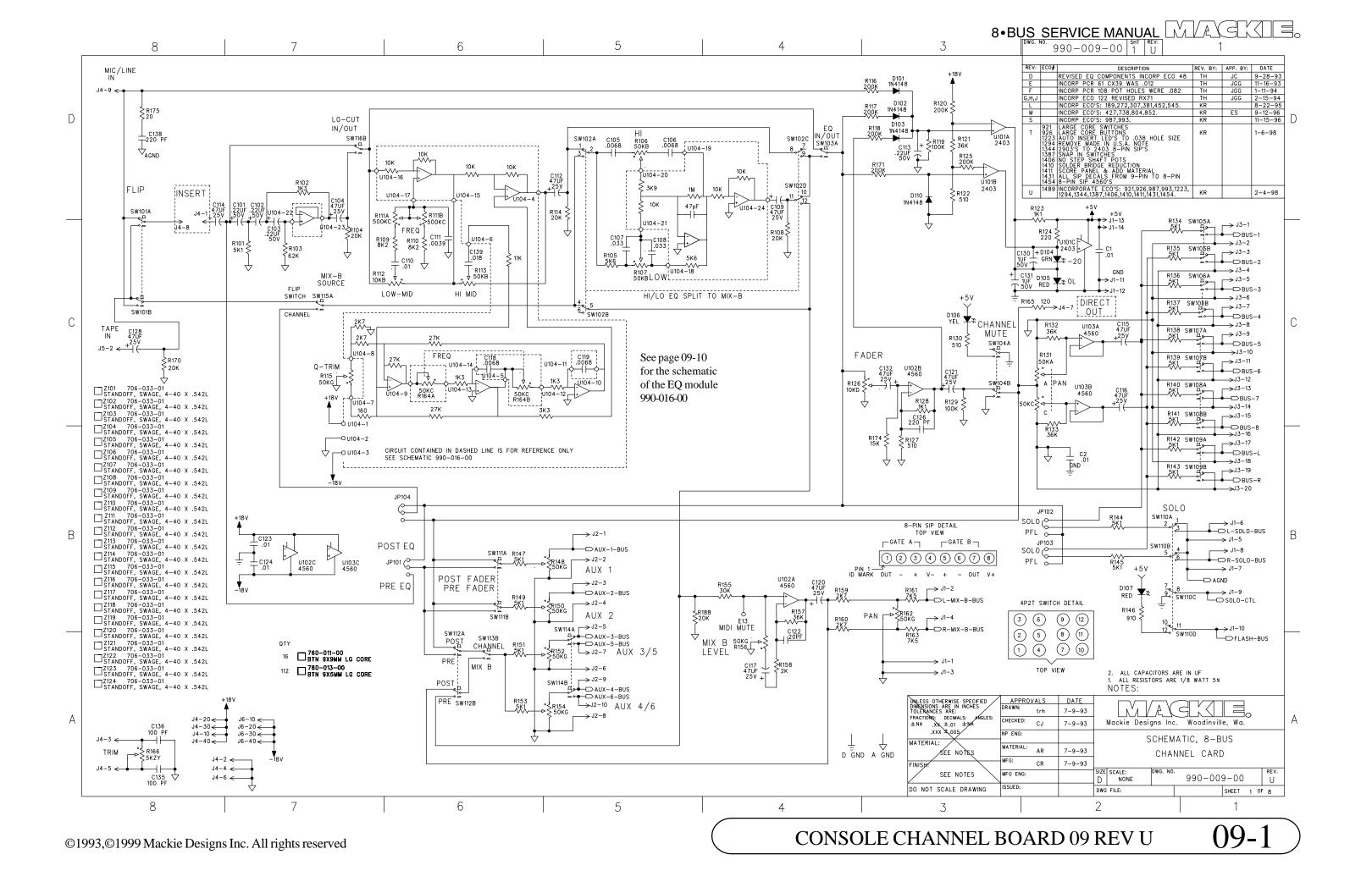


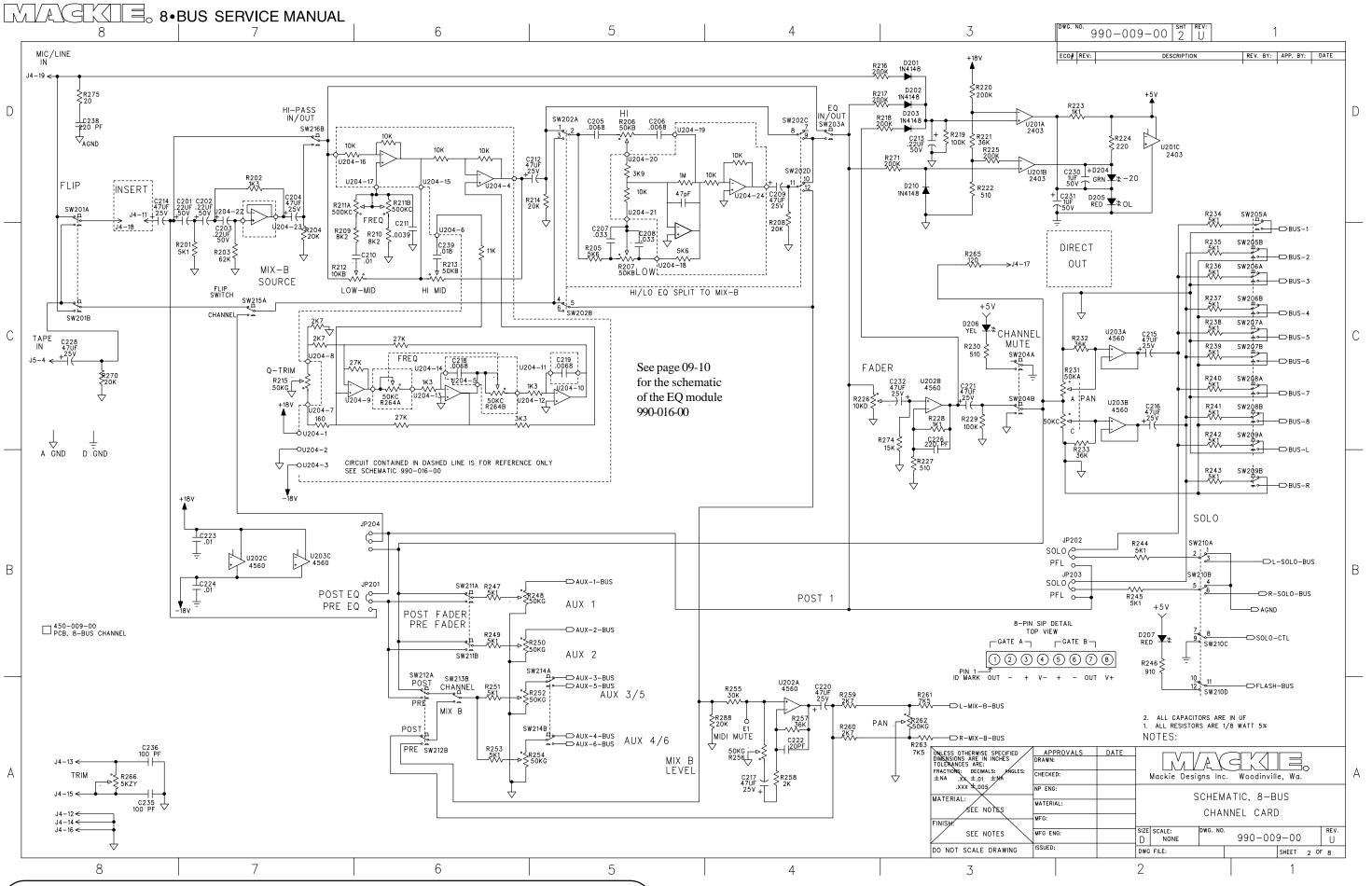


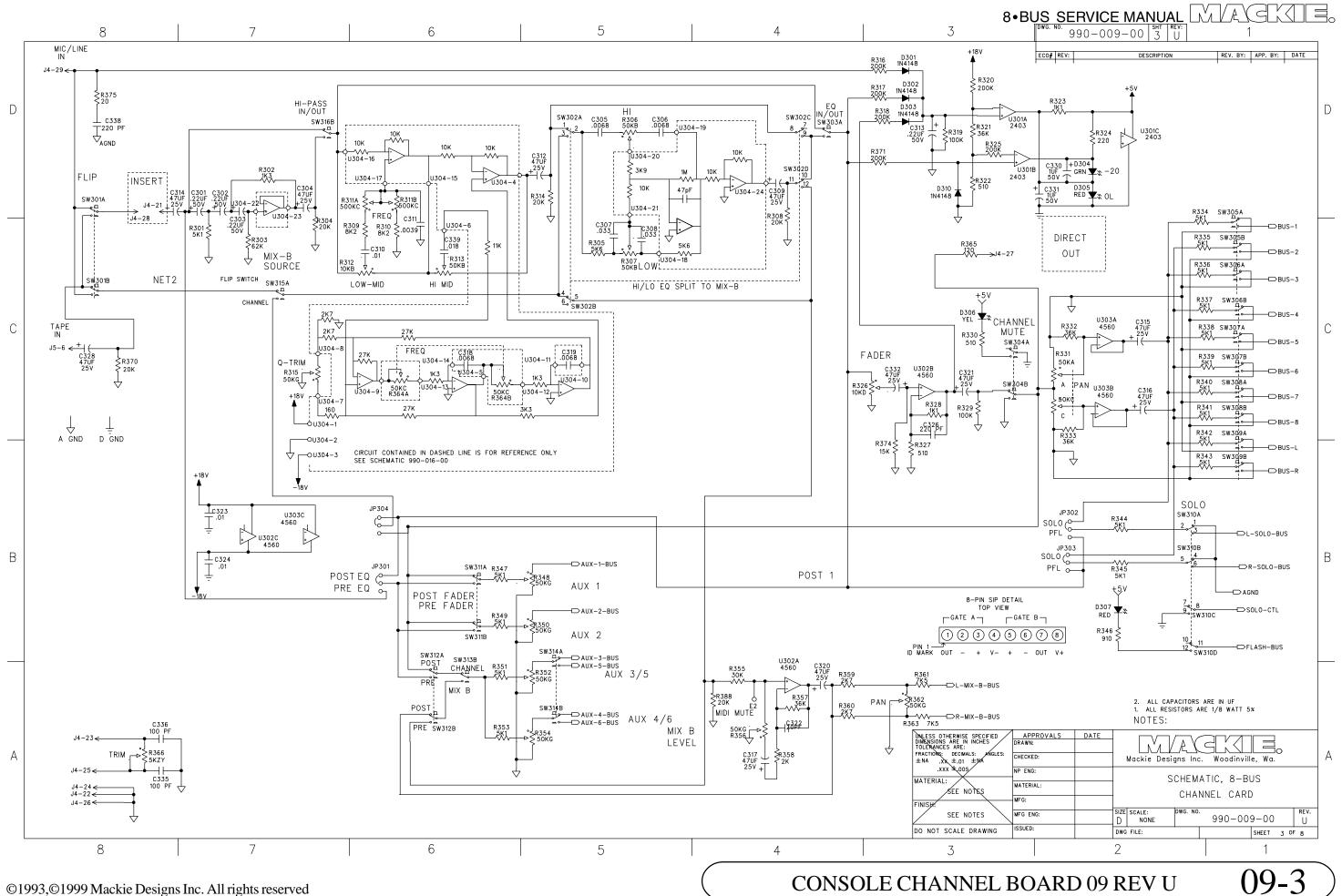


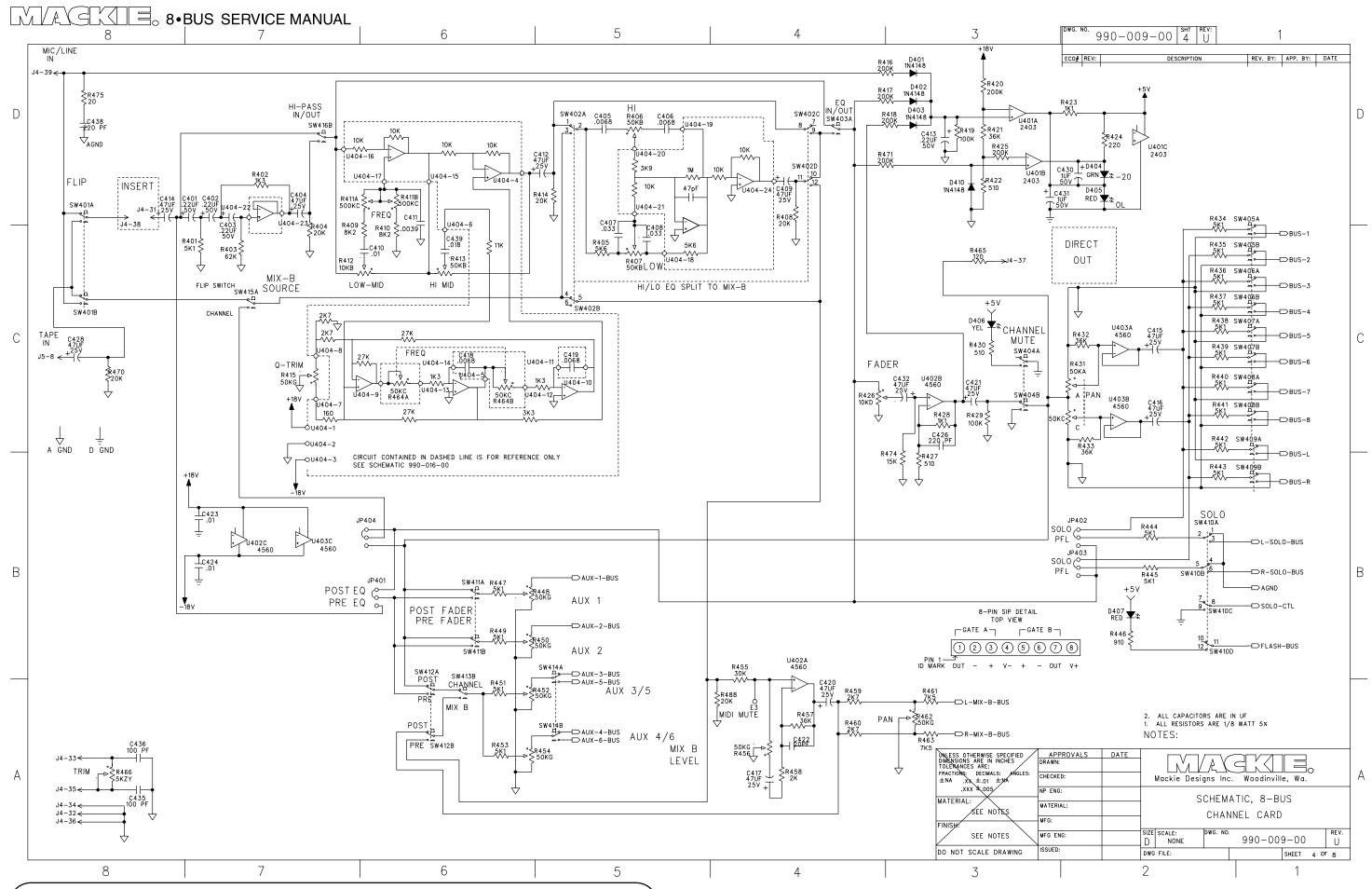


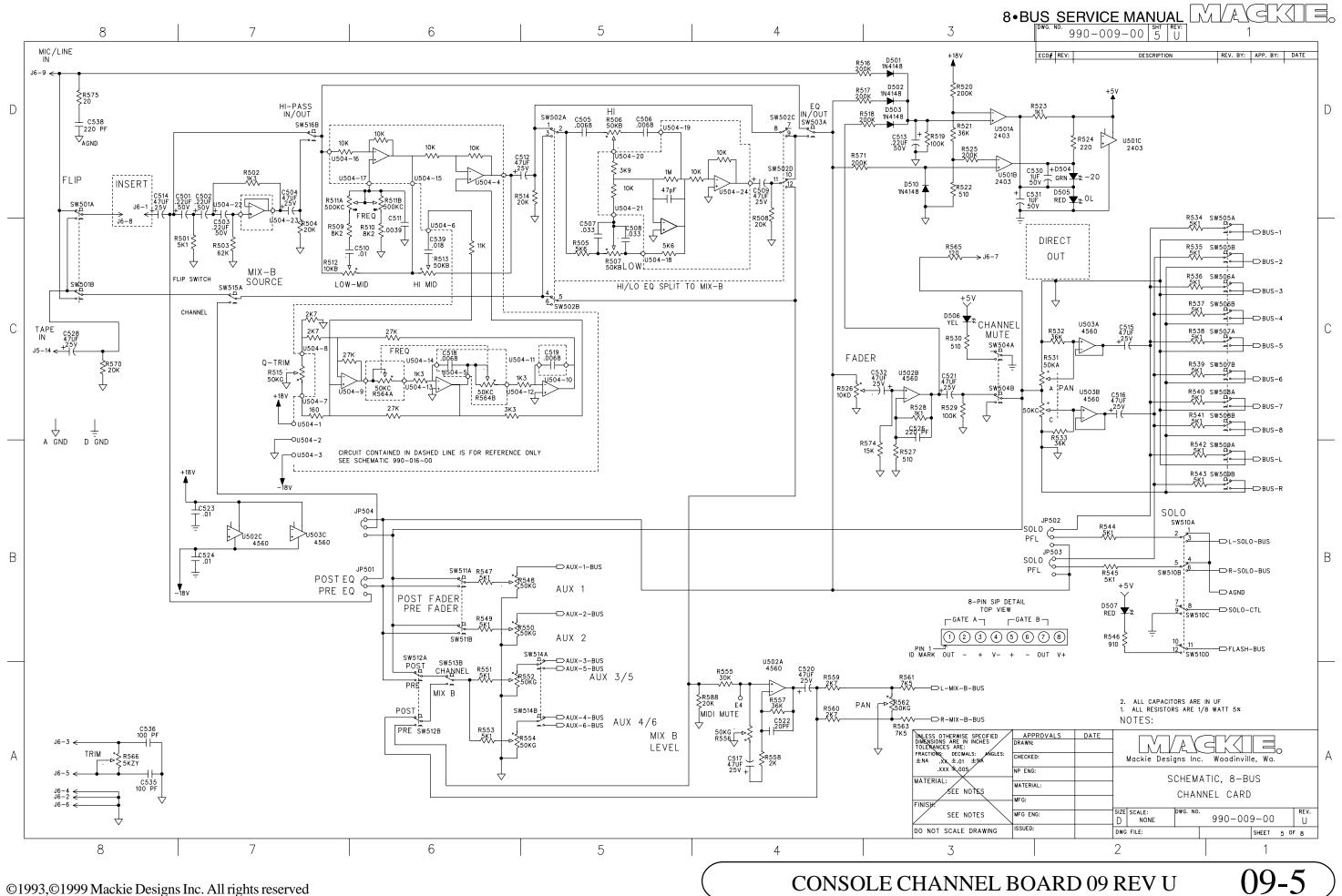


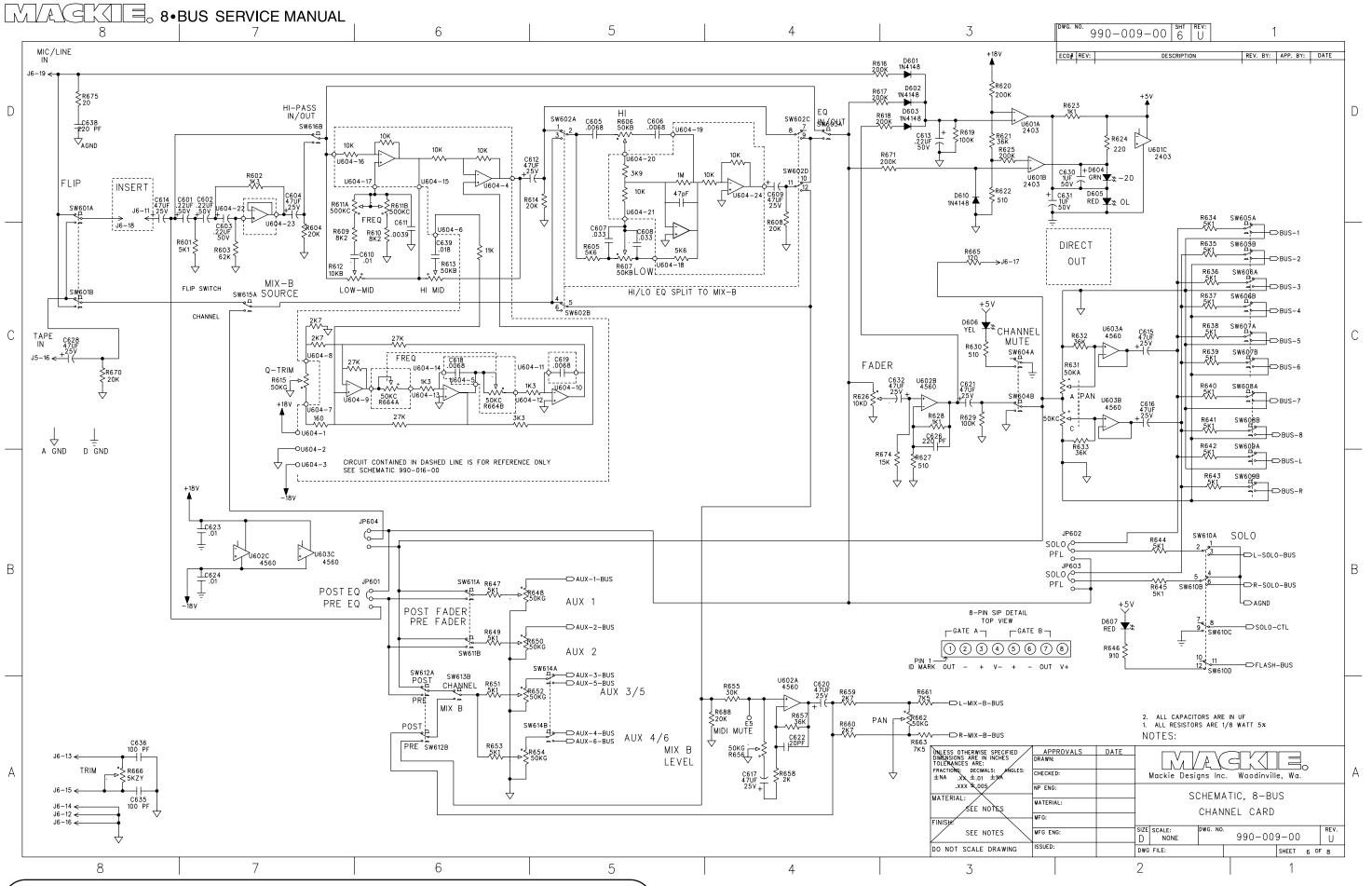


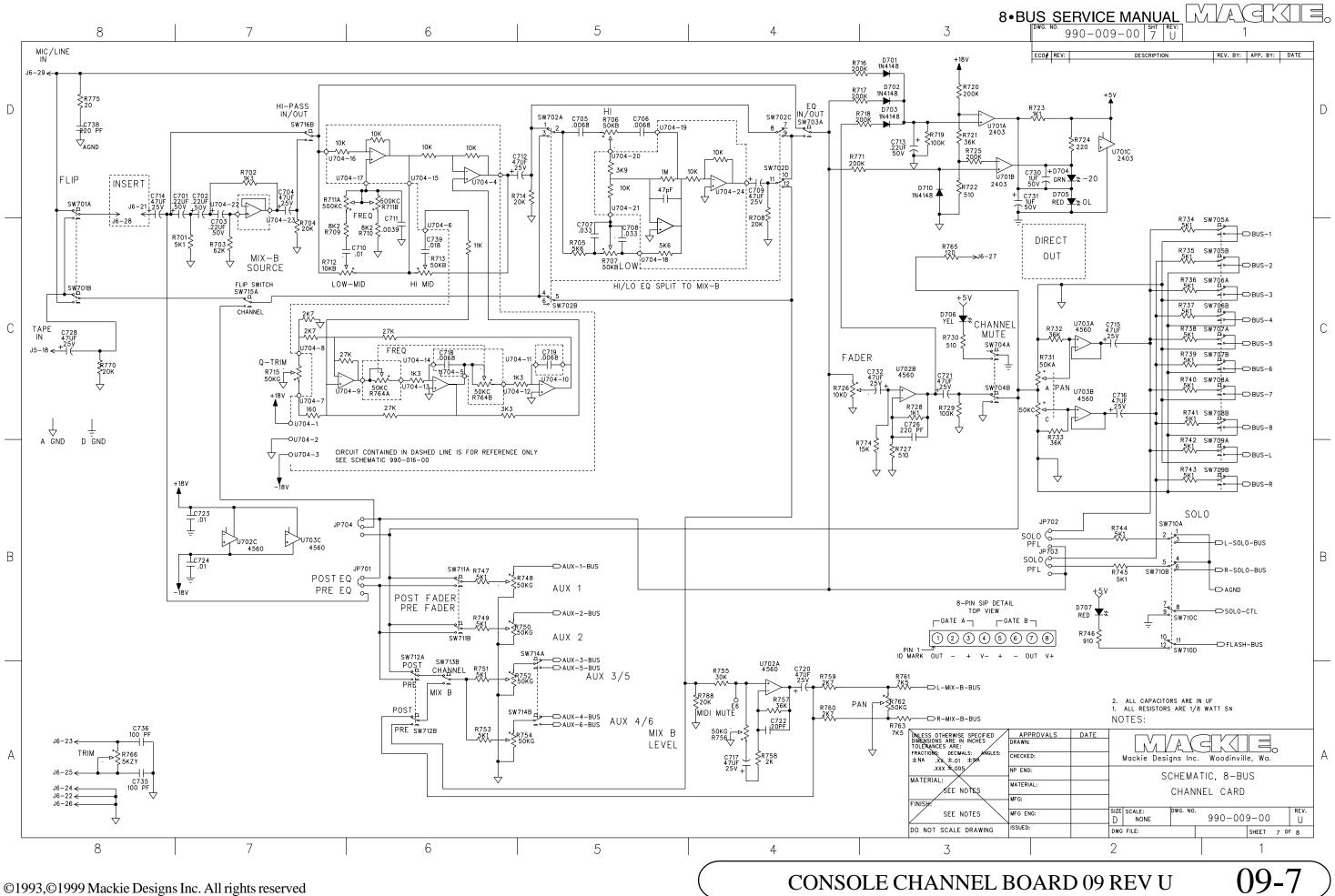


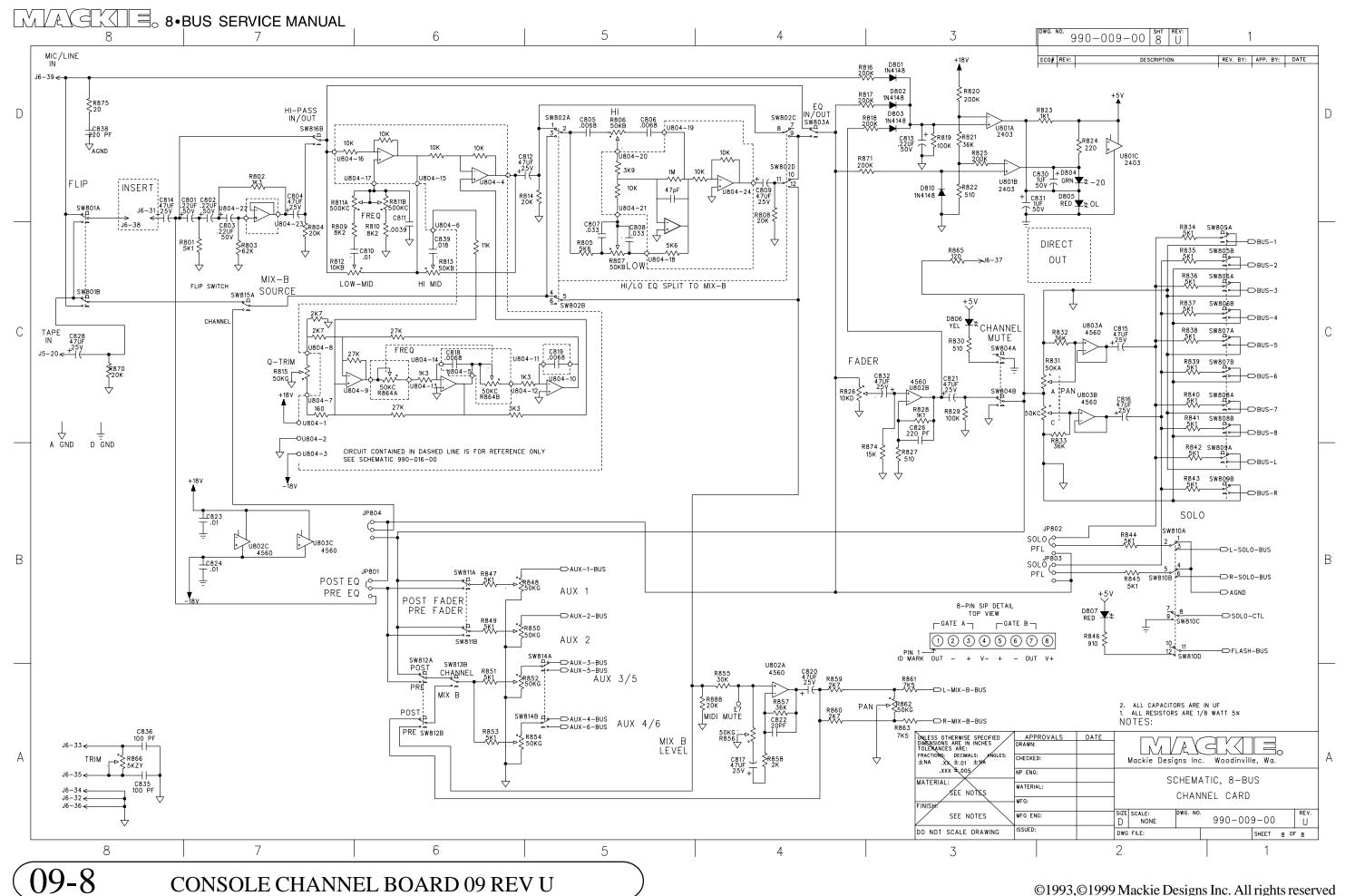


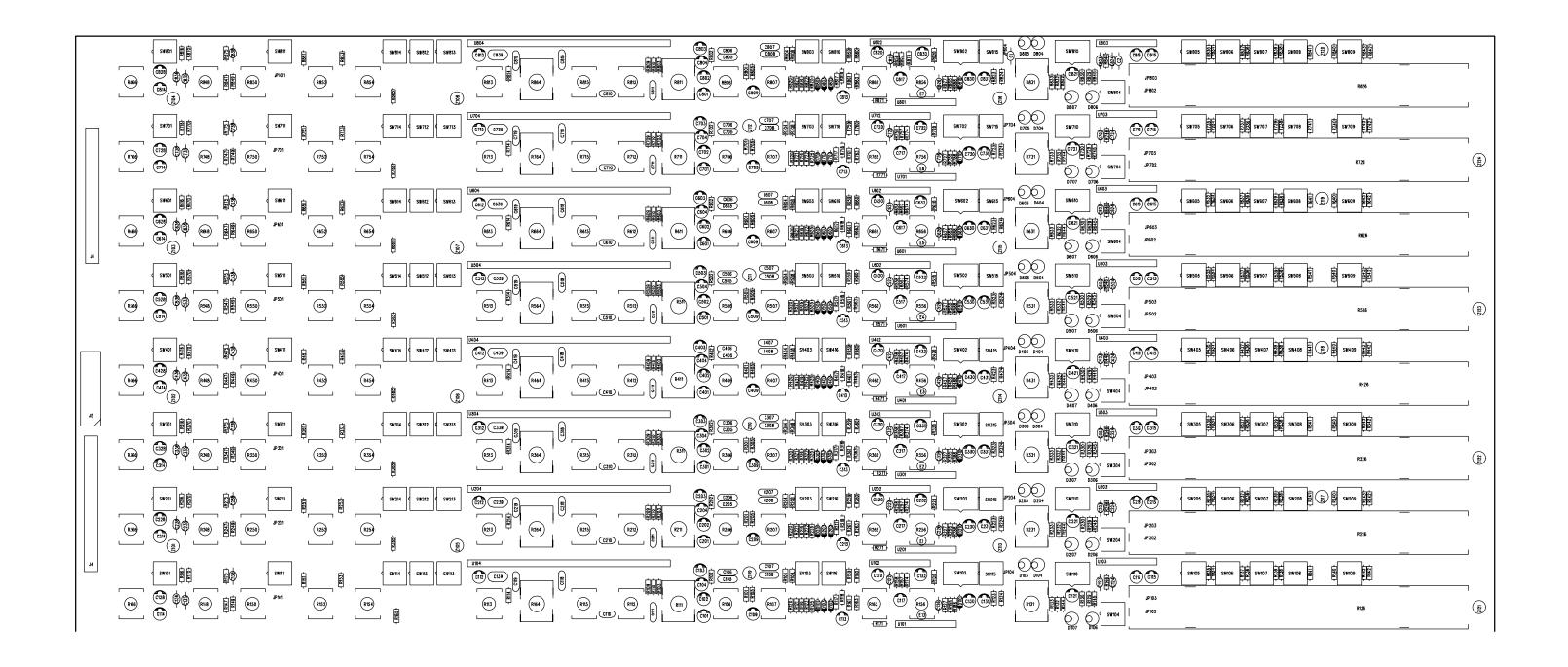


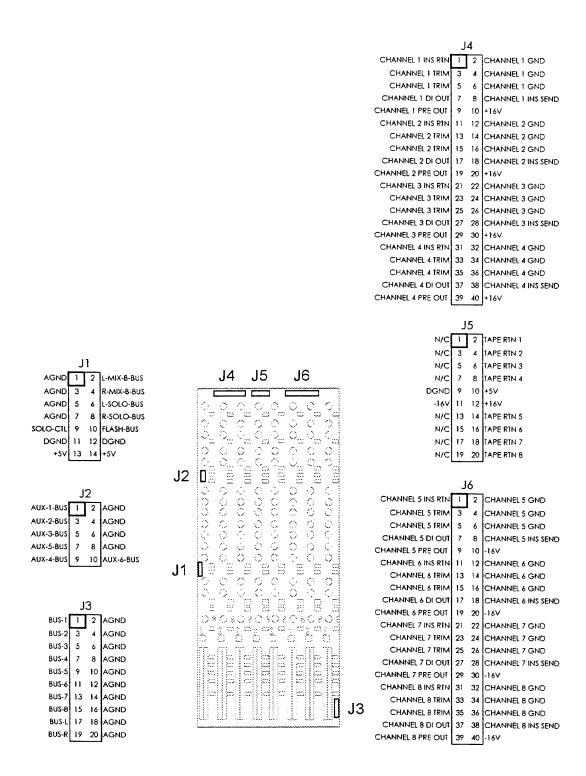


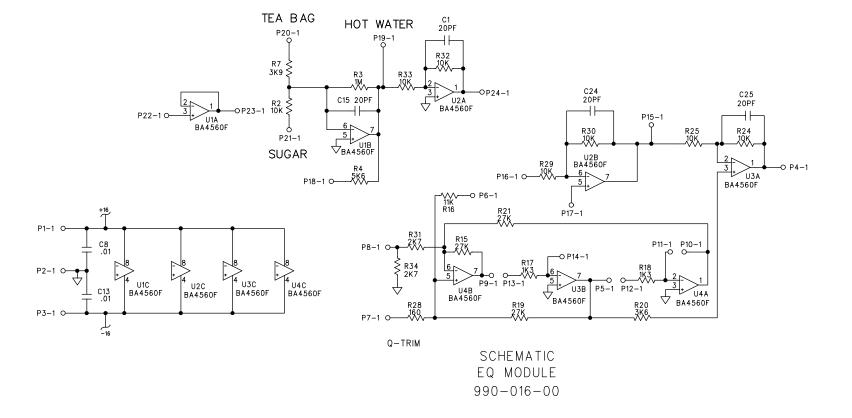












8-BUS SERVICE MANUAL MARKET DWG. NO. 990-019-00 SHT REV: REV: ECO# REVISIONS REV. BY: APP. BY: DATE C 67 CORRECTED CONNECTOR PINOUTS JC 11-12-93 D 189 CHANGED TO LOCKING CONNECTORS TH JGG 5-20-94 S 307 ADD "REF." TO SLOT DIMENSION 688 TOOLING HOLES TO .130 10-31-96 993 SOLDER BRIDGE REDUCTION -___J2-10 AUX-6-BUS J2-9 AUX-4-BUS ____ J2-8 AUX-4/6-GND J2-7 AUX-5-BUS ____ J2-6 AUX-3/5-GND J20-19 🔲 R4 30K ____ J2-5 AUX-3-BUS J20-37 J2-4 AUX-2-GND R5 30K J20-18 -J2-3 AUX-2-BUS J20-36 J2-2 AUX-1-GND J20-17 🗀 J2-1 AUX-1-BUS J20-35 ___ ___ J1−14 +5V J20-34 ___ J20-15 __-—___ J1−13 +5V ___ J1−12 D GND J20-33 ____ J1–11 D GND -□ J1-10 FLASH BUS J20-32 J20-13 🗀--□ J1-9 SOLO CTL BUS J20-31 J1-8 R-SOLO-BUS R11 5K1 — J1−7 MIX−B−GND−BUS J20-12 ___ J1-6 L-SOLO-BUS J20-30 ___ R12 5K1 5K1 J1-5 MIX-B-GND-BUS J20-11 🔲 J20-29 — J1−4 R−MIX−B−BUS J1-3 MIX-B-GND-BUS J20-10 ___ J1-2 L-MIX-B-BUS J20-28__-J1-1 MIX-B-GND-BUS J20-9 🗀 J20-8 🔲-J20-26 J3-19 BUS-R R14_2K7 J3-18_BUS-L-GND J20-7 J20-6 ___ J20-24 J20-5 ___ J3-14 BUS-7-GND

R16 2K7

J3-13 BUS-7 J20-23 J20-4 ___ J20-22 J3-10 BUS-5-GND

R18 2K7

J3-9 BUS-5 J20-21__ J20-2 ___ J20-20 J3-6 BUS-3-GND

R20 2K7

J3-5 BUS-3 CONTRACT NO: UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS: DECIMALS: ANGLES: ± .xx ± .xxx± APPROVALS DATE 6-23-93 SCHEMATIC MATERIAL: CHECKED: CHUCK 7-7-93 8-BUS EXPANDER CR 7-7-93 DWG. NO 990-019-00 S. JG 7-7-93 DO NOT SCALE DRAWING 7-7-93 SCALE: SHEET 1 OF 1

