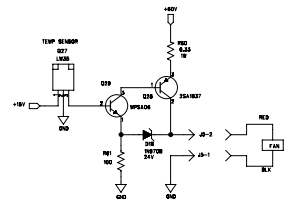
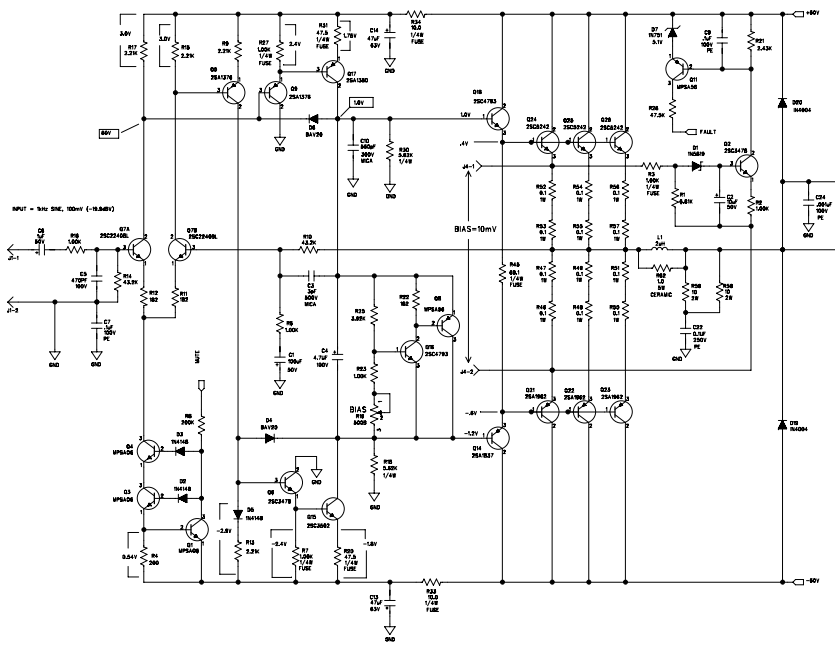
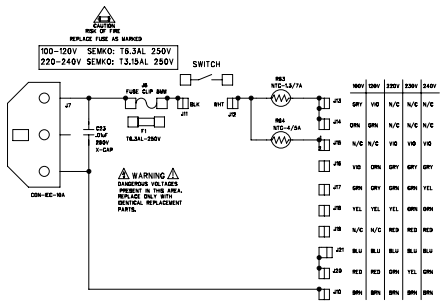
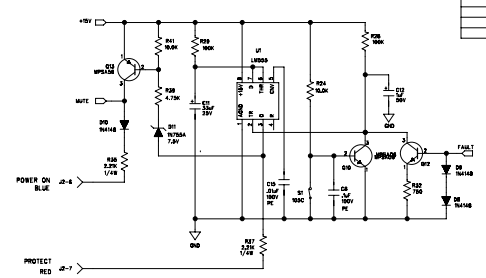


NOTE: Backline 600 uses the same power amp as the 400RB-IV.

| Customer Name: | | Gallien-Krueger | | Current Rev #: | | A3 | | New ECO Rev #: | | A4 | |
|--|----------------------------------|-------------------------------------|--------------------------|--------------------------------------|------------------|-------------------|--|----------------|--|----------|------|
| Model: | | 400RB-IV | | Distribute To: | | | | Page: | | 1 Of: 1 | |
| Assembly Description: | | Power Amp | | Originator: | | Enrique Hernandez | | | | | |
| Assembly Numbers: | | 206-0240-A | | Approved by: | | | | | | | |
| | | 145-0240-A | | Effective Date: | | 8/10/2005 | | | | | |
| Effective | | | | Document Update | | | | Date | | Initials | |
| <input checked="" type="checkbox"/> | All in Process | <input checked="" type="checkbox"/> | Next Buy | <input type="checkbox"/> | Artwork | | | | | | |
| <input type="checkbox"/> | All in Service | <input checked="" type="checkbox"/> | Next Production Run | <input type="checkbox"/> | Assembly Dwg. | | | | | | |
| <input type="checkbox"/> | All in Stock | <input type="checkbox"/> | | <input checked="" type="checkbox"/> | Board Artwork | | | | | | RAG |
| Beginning Serial Number: | | | | <input checked="" type="checkbox"/> | BOM | | | | | | Noli |
| Reason For Change | | | | <input type="checkbox"/> | Control Form | | | | | | |
| 1. Q7(2SC3381) on power amp is obsolete, replace with two 2SC2240BL. | | | | <input checked="" type="checkbox"/> | Costing | | | | | | TC |
| 2. Remove R5, change values of R14 to 43.2K and C6 to 1uF, 50V. This is to decrease offset DC voltage from 45mVdc to 10mVdc. | | | | <input checked="" type="checkbox"/> | Part Master File | | | | | | Noli |
| | | | | <input checked="" type="checkbox"/> | Schematic | | | | | | Noli |
| | | | | <input type="checkbox"/> | Service Manual | | | | | | |
| | | | | <input type="checkbox"/> | Test Procedure | | | | | | |
| | | | | <input type="checkbox"/> | | | | | | | |
| | | | | Other Affected Assemblies | | | | | | | |
| | | | | 290 Assemblies , 302 Assembly (Head) | | | | | | | |
| | | | | 303 Assemblies (Combo) | | | | | | | |
| <input type="checkbox"/> | Continued on ECO Supplement Page | | | | | | | | | | |
| Description Of Change | | | | Distribution | | | | Date | | Initials | |
| Update Schematic | | | | <input type="checkbox"/> | Accounting | | | | | | |
| | | | | <input type="checkbox"/> | Assembly | | | | | | |
| Update PCB board part number to 145-0240-A4 | | | | <input checked="" type="checkbox"/> | Engineering | | | | | | |
| | | | | <input checked="" type="checkbox"/> | Incoming Q.C. | | | | | | |
| Update Part Master File. | | | | <input checked="" type="checkbox"/> | Production Eng. | | | | | | |
| | | | | <input checked="" type="checkbox"/> | Purchasing | | | | | | |
| Update BOM | | | | <input type="checkbox"/> | Q.A. | | | | | | |
| | | | | <input type="checkbox"/> | Service | | | | | | |
| | | | | <input type="checkbox"/> | Test | | | | | | |
| <input type="checkbox"/> | Continued on Supplement Page | | <input type="checkbox"/> | Drawing(s) attached | | | | | | | |
| Part Number | Description | Parts Added | | Parts Deleted | | | | | | | |
| | | Qty | Ref. Designator | Qty | Ref. Designator | | | | | | |
| 010-0000-0 | 2SC3381BL | | | 1 | Q7 | | | | | | |
| 010-0010-0 | 2SC2240BL | 2 | Q7, Q7A | | | | | | | | |
| 060-1213-0 | 12.1k RES, 1/8W | | | 2 | R5, R14 | | | | | | |
| 060-4323-0 | 43.2k RES, 1/8W | 1 | R14 | | | | | | | | |
| 031-2106-0 | CAP 10uF, 50V | | | 1 | C6 | | | | | | |

| REVISION RECORD | | | |
|-----------------|---------|----------|------|
| LYN | ECO NO. | APPROVER | DATE |
| | | | |
| | | | |
| | | | |



NOTES: UNLESS OTHERWISE SPECIFIED,
 1. TEST CONDITIONS: 100mV 1kHz SINE, DIRECT INPUT (PRE-AMP BYPASSED) NO LOAD
 2. DENOTES RMS AC VOLTAGE

BIAS ADJUSTMENT PROCEDURE:
 WITH POWER OFF, ADJUST POT R19 TO FULL COUNTER-CLOCKWISE POSITION. TURN ON POWER AND WAIT 5 SECONDS FOR TURN ON DELAY. TURN R21 CLOCKWISE UNTIL VOLTAGE ACROSS J4 READS 0 mVDC.

| | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| W1001 | W1002 | W1003 | W1004 | W1005 | W1006 | W1007 | W1008 | W1009 | W1010 |
| 1001 | 1002 | 1003 | 1004 | 1005 | 1006 | 1007 | 1008 | 1009 | 1010 |

NOT VALID UNLESS STAMP IS RED

gallien technology

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 STOCKTON CA 95206
 VOICE: 209-254-7300
 FAX: 209-254-8029

| | | | |
|---|--------------------------|-------------|--------------------|
| NOTES REV A4 | APPROVALS | TITLE | 400RB-IV POWER AMP |
| 1. REPLACE Q1 THROUGH Q10 WITH THE SPECIFIED DATA AND Q10 | DESIGNED: R.A.C. 11/9/99 | DATE | 406-0240-A4 |
| 2. REWORK P1. | DRAWN: R.A.C. 8/10/03 | REV | B |
| 3. CHANGE VALUE OF R4 FROM 10K TO 4.5K. | DATE | PART NO. | 206-0240-A4 |
| 4. CHANGE VALUE OF C6 FROM 100N TO 100P. | COMPANY | DESIGNED BY | GALLIEN KRUEGER |
| | RELEASED | DATE | 6/24/03 |

