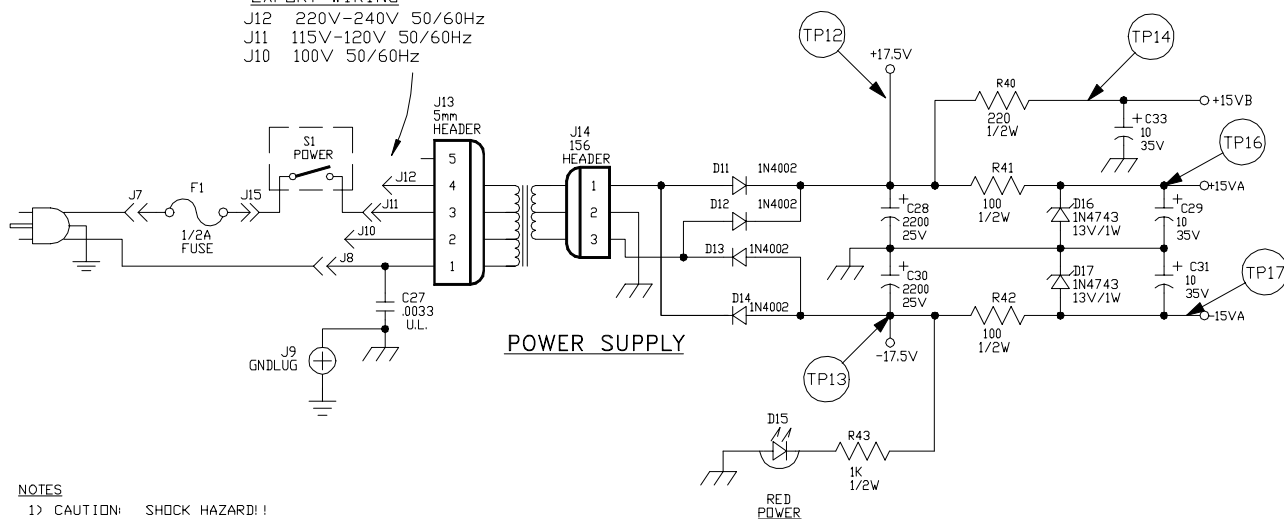


**EXPORT WIRING**

- J12 220V-240V 50/60Hz
- J11 115V-120V 50/60Hz
- J10 100V 50/60Hz



- NOTES**
- 1) CAUTION: SHOCK HAZARD!! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
  - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
  - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
  - 4) CIRCUIT GROUND  $\perp$  CHASSIS GROUND  $\perp$

**CAUTION:** THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

**GFX-20 TEST POINTS**

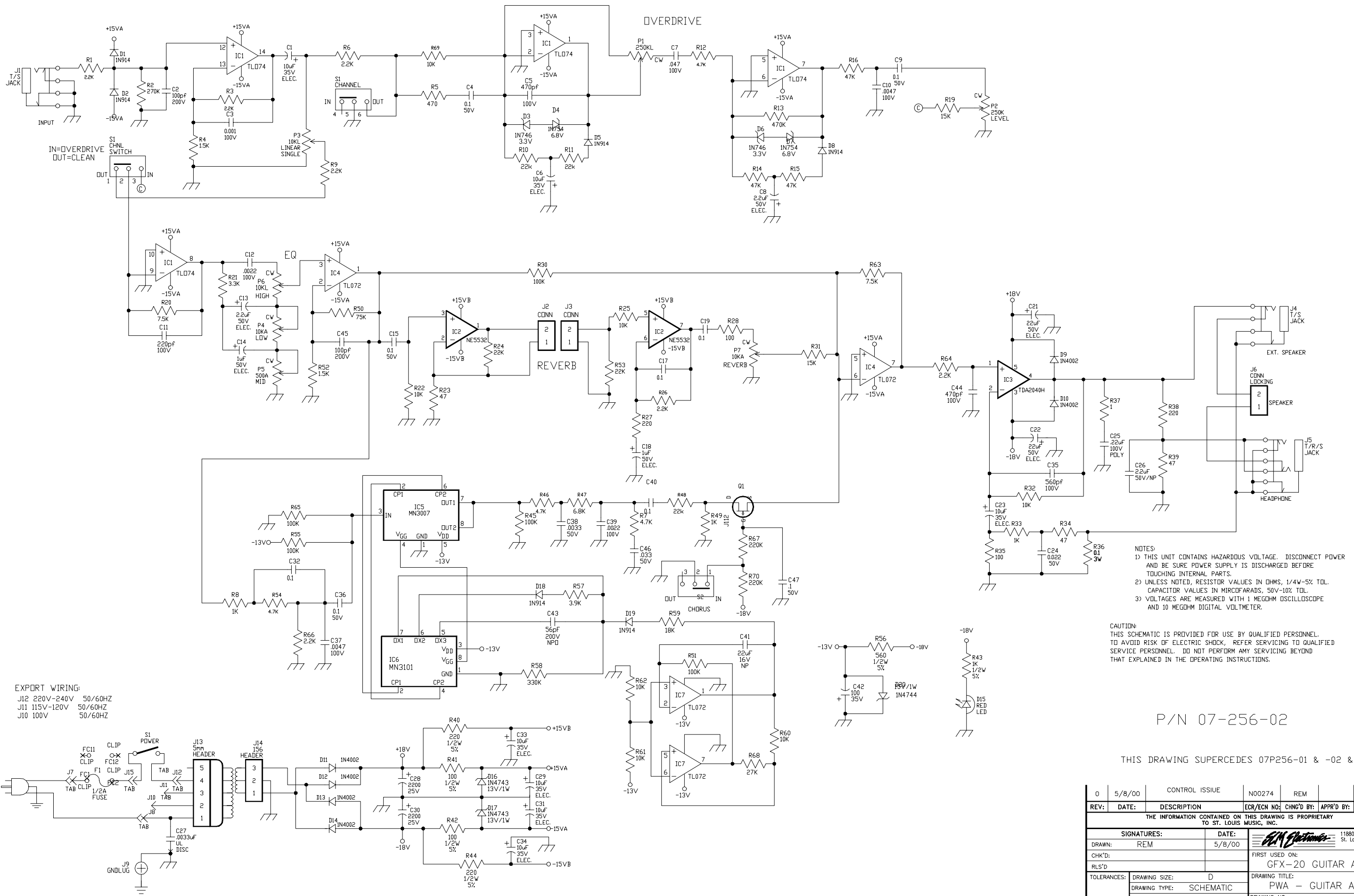
| S1 IN (OVERDRIVE CHANNEL)       |                 |            |          | S1 OUT (CLEAN CHANNEL)       |                 |            |          |
|---------------------------------|-----------------|------------|----------|------------------------------|-----------------|------------|----------|
| INPUT SIGNAL 50mV P-P @ 1kHz    |                 |            |          | INPUT SIGNAL 50mV P-P @ 1kHz |                 |            |          |
| GAIN & LEVEL @ "10"; EQ s @ "5" |                 |            |          | VOLUME @ "10"; EQ s @ "5"    |                 |            |          |
| T.P.                            | AC VOLTAGE      | DC VOLTAGE | WAVEFORM | T.P.                         | AC VOLTAGE      | DC VOLTAGE | WAVEFORM |
| 1                               | 50mV p-p        | —          | ~        | 1                            | 50mV p-p        | —          | ~        |
| 2                               | 120mV p-p       | —          | ~        | 2                            | 120mV p-p       | —          | ~        |
| 3                               | 5.6V p-p        | —          | ~        | 3                            | 0V p-p          | —          | —        |
| 4                               | 2.1V p-p        | —          | ~        | 4                            | 0V p-p          | —          | —        |
| 5                               | 1.1V p-p        | —          | ~        | 5                            | 420mV p-p       | —          | ~        |
| 6                               | 9V p-p          | —          | ~        | 6                            | 1.2V p-p        | —          | ~        |
| 7                               | .7V p-p         | —          | ~        | 7                            | 86mV p-p        | —          | ~        |
| 8                               | 27V p-p         | —          | ~        | 8                            | 4.4V p-p        | —          | ~        |
| 9                               | NOT USED        | —          | —        | 9                            | NOT USED        | —          | —        |
| 10                              | NOT USED        | —          | —        | 10                           | NOT USED        | —          | —        |
| 11                              | NOT USED        | —          | —        | 11                           | NOT USED        | —          | —        |
| 12                              | 2V p-p ripple   | +15VDC     | ~        | 12                           | .75V p-p ripple | +16.7VDC   | ~        |
| 13                              | 2V p-p ripple   | -15VDC     | ~        | 13                           | .75V p-p ripple | -16.7VDC   | ~        |
| 14                              | 1V p-p ripple   | +13VDC     | ~        | 14                           | 5V p-p ripple   | +14.1VDC   | ~        |
| 15                              | NOT USED        | —          | —        | 15                           | NOT USED        | —          | —        |
| 16                              | 1.5V p-p ripple | +13VDC     | ~        | 16                           | 40mV p-p ripple | +13VDC     | ~        |
| 17                              | 1.5V p-p ripple | -13VDC     | ~        | 17                           | 40mV p-p ripple | -13VDC     | ~        |

\* F=25Hz  
\* \* MODULATED BETWEEN 50kHz AND 200kHz

P/N 07-256-01

THIS DRAWING SUPERCEDES 07P256-01 & -02 & -03.

|   |        |                         |                                    |                         |  |       |
|---|--------|-------------------------|------------------------------------|-------------------------|--|-------|
| 0   | 5/8/00 | CONTROL ISSUE           | N00274                             | REM                     |  |       |
| REV:  | DATE:  | DESCRIPTION             | ECR/ECN NO:                        | CHNG'D BY:              | APPR'D BY:                                       | DATE: |
| THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC. |        |                         |                                    |                         |  |       |
| SIGNATURES:   |        |                         | DATE:                              |                         | 11880 Borman Dr.<br>St. Louis, Missouri<br>63146 |       |
| DRAWN: REM  |        |                         | 5/8/00                             |                         | FIRST USED ON:<br>GFX-20 GUITAR AMP              |       |
| CHK'D:  |        |                         | DRAWING TITLE:<br>PWA - GUITAR AMP |                         |  |       |
| RLS'D:  |        |                         | DRAWING NO:<br>07S-256-XX          |                         |  |       |
| TOLERANCES:   |        | DRAWING SIZE: D         |                                    | DRAWING TYPE: SCHEMATIC |  |       |
|   |        | DRAWING TYPE: SCHEMATIC |                                    | CLASS CODE:             |  |       |
|   |        | SCALE: NONE             |                                    | SHEET: 1 OF 4           |  |       |



EXPORT WIRING:  
 J12 220V-240V 50/60HZ  
 J11 115V-120V 50/60HZ  
 J10 100V 50/60HZ

- NOTES:  
 1) THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.  
 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.  
 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.

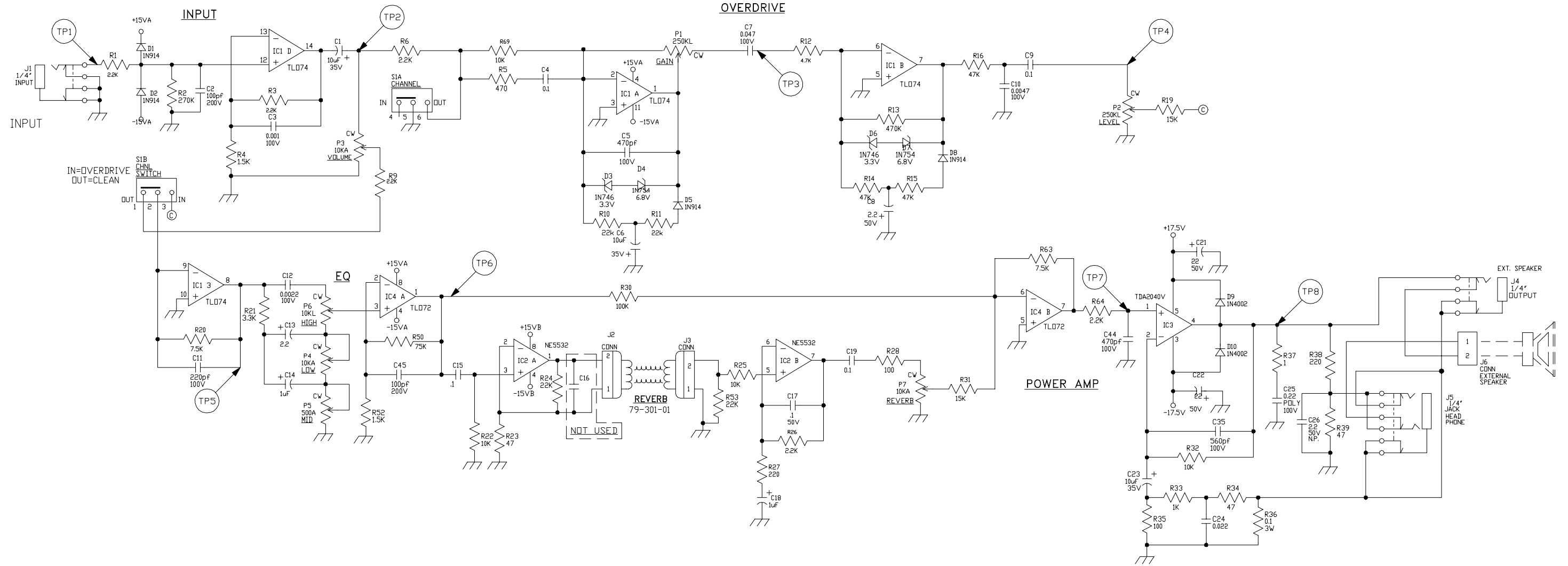
CAUTION  
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

P/N 07-256-02

THIS DRAWING SUPERCEDES 07P256-01 & -02 & -03.

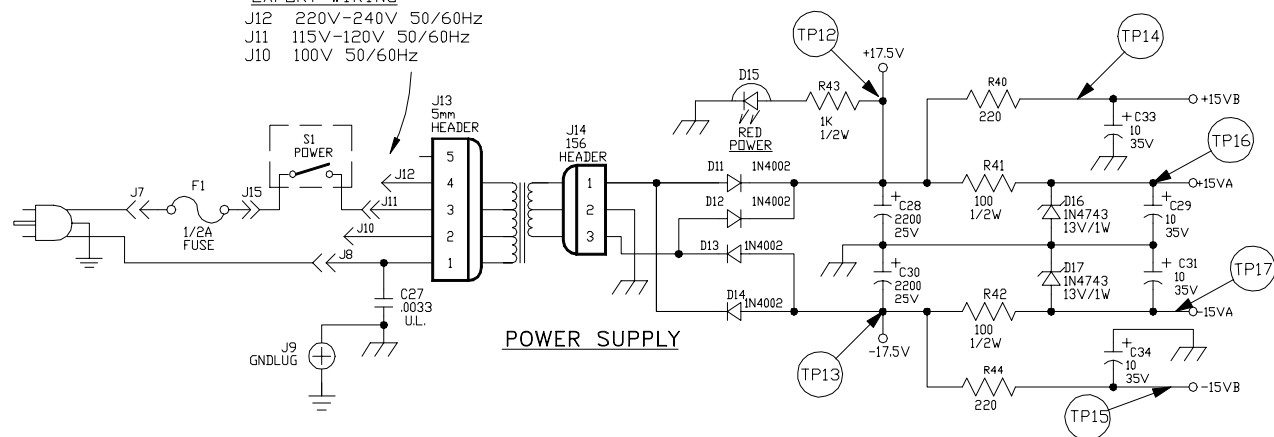
|   |        |                                     |             |            |            |
|---|--------|-------------------------------------|-------------|------------|------------|
| 0   | 5/8/00 | CONTROL ISSUE                       | NO0274      | REM        |            |
| REV:  | DATE:  | DESCRIPTION                         | ECR/ECN NO: | CHNG'D BY: | APPR'D BY: |
| THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC. |        |                                     |             |            |            |
| SIGNATURES:   |        | DATE:                               |             |            |            |
| DRAWN:  | REM    | 5/8/00                              |             |            |            |
| CHK'D:  | RLS'D  | FIRST USED ON:<br>GFX-20 GUITAR AMP |             |            |            |
| DRAWING TYPE:   |        | DRAWING TITLE:                      |             |            |            |
| SCHEMATIC   |        | PWA - GUITAR AMP                    |             |            |            |
| CLASS CODE:   |        | DRAWING NO:                         |             |            |            |
| SCALE: NONE   |        | 07S-256-XX                          |             |            |            |
| SHEET: 2  |        | OF 4                                |             |            |            |

11880 Borman Dr.  
 St. Louis, Missouri  
 63146



**EXPORT WIRING**

- J12 220V-240V 50/60Hz
- J11 115V-120V 50/60Hz
- J10 100V 50/60Hz



**GX-20R TEST POINTS**

| S1 IN (OVERDRIVE CHANNEL)<br>INPUT SIGNAL: 50mV P-P @ 1kHz<br>GAIN & LEVEL @ '10'; EQ' @ '5' |            |            |          | S1 OUT (CLEAN CHANNEL)<br>INPUT SIGNAL: 50mV P-P @ 1kHz<br>VOLUME @ '10'; EQ' @ '5' |            |            |          |
|--|------------|------------|----------|---|------------|------------|----------|
| T.P.   | AC VOLTAGE | DC VOLTAGE | WAVEFORM | T.P.  | AC VOLTAGE | DC VOLTAGE | WAVEFORM |
| 1  | 50mV p-p   | —          | ~        | 12  | 75V p-p    | +16.7VDC   | ~        |
| 2  | 120mV p-p  | —          | ~        | 13  | 75V p-p    | -16.7VDC   | ~        |
| 3  | 5.6V p-p   | —          | ~        | 14  | 5V p-p     | +14.1VDC   | ~        |
| 4  | 2.1V p-p   | —          | ~        | 15  | 5V p-p     | -14.1VDC   | ~        |
| 5  | 1.1V p-p   | —          | ~        | 16  | 40mV p-p   | +13VDC     | ~        |
| 6  | 9V p-p     | —          | ~        | 17  | 40mV p-p   | -13VDC     | ~        |
| 7  | 7V p-p     | —          | ~        |   |            |            |          |
| 8  | 27V p-p    | —          | ~        |   |            |            |          |
| 9  | NOT USED   | —          |          |   |            |            |          |
| 10   | NOT USED   | —          |          |   |            |            |          |
| 11   | NOT USED   | —          |          |   |            |            |          |
| 12   | 2V p-p     | +15VDC     | ~        |   |            |            |          |
| 13   | 2V p-p     | -15VDC     | ~        |   |            |            |          |
| 14   | 1V p-p     | +13VDC     | ~        |   |            |            |          |
| 15   | 1V p-p     | -13VDC     | ~        |   |            |            |          |
| 16   | 1.5V p-p   | +13VDC     | ~        |   |            |            |          |
| 17   | 1.5V p-p   | -13VDC     | ~        |   |            |            |          |

\* F=25Hz  
\* MODULATED BETWEEN 50kHz AND 200kHz

**NOTES**

- 1) CAUTION: SHOCK HAZARD!! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
- 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
- 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
- 4) CIRCUIT GROUND  $\perp$  CHASSIS GROUND  $\perp$

**CAUTION:**

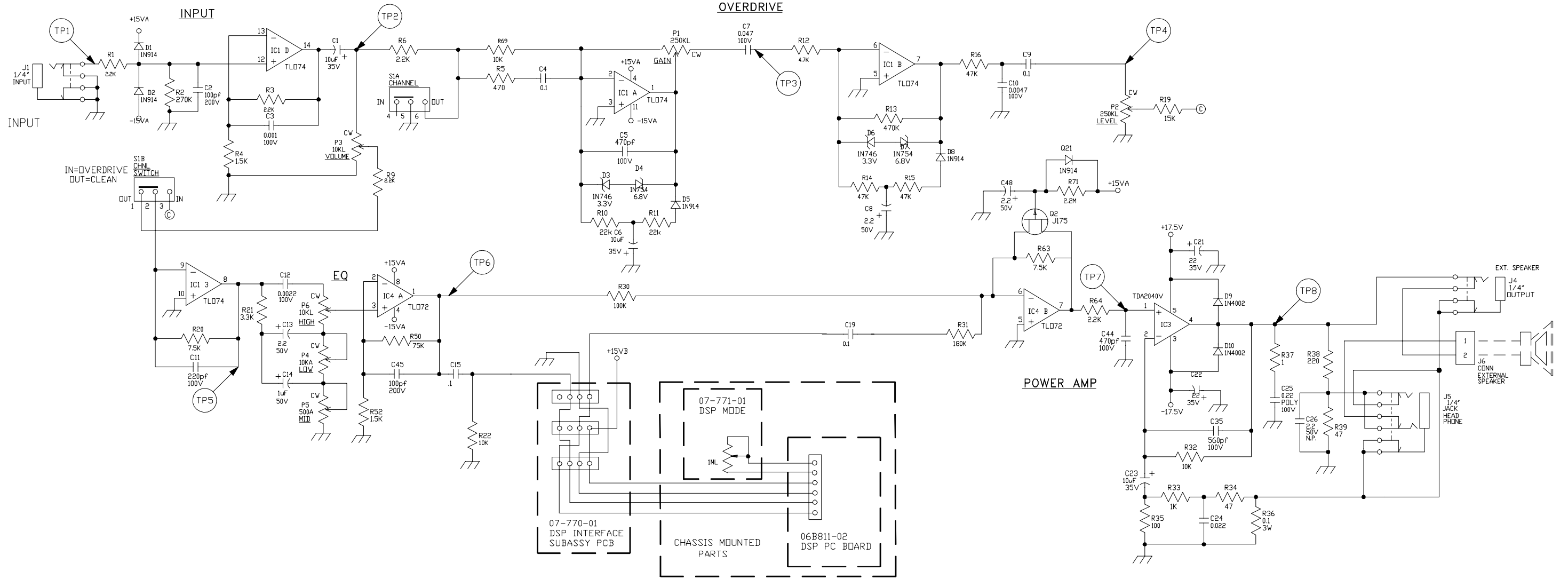
THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

PCB ART REV. 3

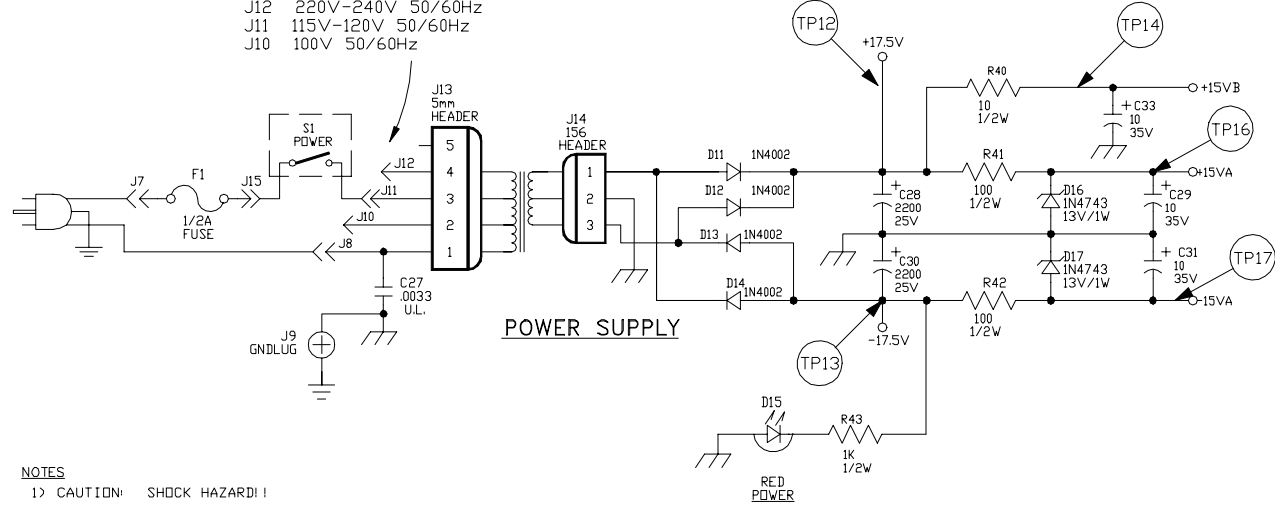
P/N 07-256-03

THIS DRAWING SUPERCEDES 07P256-01 & -02 & -03.

| 0   | 5/8/00 | CONTROL ISSUE           | N00274      | REM  |            |       |  |
|---|--------|-------------------------|-------------|--|------------|-------|--|
| REV:  | DATE:  | DESCRIPTION             | ECR/ECN NO: | CHNG'D BY:                                 | APPR'D BY: | DATE: |  |
| THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC. |        |                         |             |  |            |       |  |
| SIGNATURES:   |        | DATE:                   |             |  |            |       |  |
| DRAWN: REM  |        | 5/8/00                  |             | 11880 Borman Dr. St. Louis, Missouri 63146 |            |       |  |
| CHK'D:  |        |                         |             | FIRST USED ON:                             |            |       |  |
| RLS'D:  |        |                         |             | GFX-20 GUITAR AMP                          |            |       |  |
| TOLERANCES:   |        | DRAWING SIZE: D         |             | DRAWING TITLE:                             |            |       |  |
|   |        | DRAWING TYPE: SCHEMATIC |             | PWA - GUITAR AMP                           |            |       |  |
|   |        | CLASS CODE:             |             | DRAWING NO:                                |            |       |  |
|   |        | SCALE: NONE             |             | 07S-256-XX                                 |            |       |  |
|   |        | SHEET: 3 OF 4           |             |  |            |       |  |



**EXPORT WIRING**  
 J12 220V-240V 50/60Hz  
 J11 115V-120V 50/60Hz  
 J10 100V 50/60Hz



- NOTES**
- 1) CAUTION: SHOCK HAZARD!! THIS UNIT CONTAINS HAZARDOUS VOLTAGE. DISCONNECT POWER AND BE SURE POWER SUPPLY IS DISCHARGED BEFORE TOUCHING INTERNAL PARTS.
  - 2) UNLESS NOTED, RESISTOR VALUES IN OHMS, 1/4W-5% TOL. CAPACITOR VALUES IN MICROFARADS, 50V-10% TOL.
  - 3) VOLTAGES ARE MEASURED WITH 1 MEGOHM OSCILLOSCOPE AND 10 MEGOHM DIGITAL VOLTMETER.
  - 4) CIRCUIT GROUND  $\perp$  CHASSIS GROUND  $\perp$

**CAUTION:**  
 THIS SCHEMATIC IS PROVIDED FOR USE BY QUALIFIED PERSONNEL. TO AVOID RISK OF ELECTRIC SHOCK, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DO NOT PERFORM ANY SERVICING BEYOND THAT EXPLAINED IN THE OPERATING INSTRUCTIONS.

**GFX-20 TEST POINTS**

| S1 IN (OVERDRIVE CHANNEL)<br>INPUT SIGNAL 50mV P-P @ 1KHz<br>GAIN & LEVEL @ '10', EQ's @ '5' |                 |            |          | S1 OUT (CLEAN CHANNEL)<br>INPUT SIGNAL 50mV P-P @ 1KHz<br>VOLUME @ '10', EQ's @ '5' |                 |            |          |
|--|-----------------|------------|----------|---|-----------------|------------|----------|
| TP   | AC VOLTAGE      | DC VOLTAGE | WAVEFORM | TP  | AC VOLTAGE      | DC VOLTAGE | WAVEFORM |
| 1  | 50mV p-p        | —          | ~        | 1   | 50mV p-p        | —          | ~        |
| 2  | 120mV p-p       | —          | ~        | 2   | 120mV p-p       | —          | ~        |
| 3  | 5.6V p-p        | —          | ~        | 3   | 0V p-p          | —          | —        |
| 4  | 2.1V p-p        | —          | ~        | 4   | 0V p-p          | —          | —        |
| 5  | 1.1V p-p        | —          | ~        | 5   | 420mV p-p       | —          | ~        |
| 6  | 9V p-p          | —          | ~        | 6   | 1.2V p-p        | —          | ~        |
| 7  | .7V p-p         | —          | ~        | 7   | 86mV p-p        | —          | ~        |
| 8  | 27V p-p         | —          | ~        | 8   | 4.4V p-p        | —          | ~        |
| 9  | NOT USED        | —          | —        | 9   | NOT USED        | —          | —        |
| 10   | NOT USED        | —          | —        | 10  | NOT USED        | —          | —        |
| 11   | NOT USED        | —          | —        | 11  | NOT USED        | —          | —        |
| 12   | 2V p-p ripple   | +15VDC     | ~        | 12  | 75V p-p ripple  | +16.7VDC   | ~        |
| 13   | 2V p-p ripple   | -15VDC     | ~        | 13  | 75V p-p ripple  | -16.7VDC   | ~        |
| 14   | 1V p-p ripple   | +13VDC     | ~        | 14  | 5V p-p ripple   | +14.1VDC   | ~        |
| 15   | NOT USED        | —          | —        | 15  | NOT USED        | —          | —        |
| 16   | 1.5V p-p ripple | +13VDC     | ~        | 16  | 40mV p-p ripple | +13VDC     | ~        |
| 17   | 1.5V p-p ripple | -13VDC     | ~        | 17  | 40mV p-p ripple | -13VDC     | ~        |

\* F=25Hz  
 \*\* MODULATED BETWEEN 50kHz AND 200kHz

P/N 07-256-04

THIS DRAWING SUPERCEDES 07P256-01 & -02 & -03.

| 0   | 5/8/00 | CONTROL ISSUE                      | N00274      | REM                                 |  |       |
|---|--------|------------------------------------|-------------|-------------------------------------|--|-------|
| REV:  | DATE:  | DESCRIPTION                        | ECR/ECN NO: | CHNG'D BY:                          | APPR'D BY:                                       | DATE: |
| THE INFORMATION CONTAINED ON THIS DRAWING IS PROPRIETARY TO ST. LOUIS MUSIC, INC. |        |                                    |             |                                     |  |       |
| SIGNATURES:   |        |                                    | DATE:       |                                     | 11880 Borman Dr.<br>St. Louis, Missouri<br>63146 |       |
| DRAWN: REM  |        | 5/8/00                             |             | FIRST USED ON:<br>GFX-20 GUITAR AMP |  |       |
| CHK'D:  |        | DRAWING TITLE:<br>PWA - GUITAR AMP |             |                                     |  |       |
| RLS'D:  |        | DRAWING NO:<br>07S-256-XX          |             |                                     |  |       |
| TOLERANCES:   |        | DRAWING SIZE: D                    |             | DRAWING TITLE:                      |  |       |
|   |        | DRAWING TYPE: SCHEMATIC            |             | DRAWING NO:                         |  |       |
|   |        | CLASS CODE:                        |             | DRAWING NO:                         |  |       |
|   |        | SCALE: NONE                        |             | SHEET: 4 OF 4                       |  |       |