



THE SOUND THAT CREATES LEGENDS

KEYBOARD  
EXTENDED  
RANGE **KXR**  
Sixty

Owner's Manual

P/N 049254

## INTRODUCTION

Your new Fender® KXR 60 Keyboard Amplifier is the result of Fender's ongoing dialog with many of today's top musicians. It uses state of the art technology to deliver clear, resonant and most importantly... musical sound.

The KXR 60 is actually much more than just a keyboard amp. With its heavy-duty, Fender® Special Design speaker and piezo-electric horn, it is a self-contained, portable P.A. system, suitable for almost any musical instrument requiring full-range sound reinforcement. This makes the KXR 60 ideal for amplifying electronic keyboards, acoustic/electric guitar, electric violin or voice. Compact packaging and medium level output power make the KXR 60 the perfect full-range instrument amplifier for rehearsal, studio or small club performances.

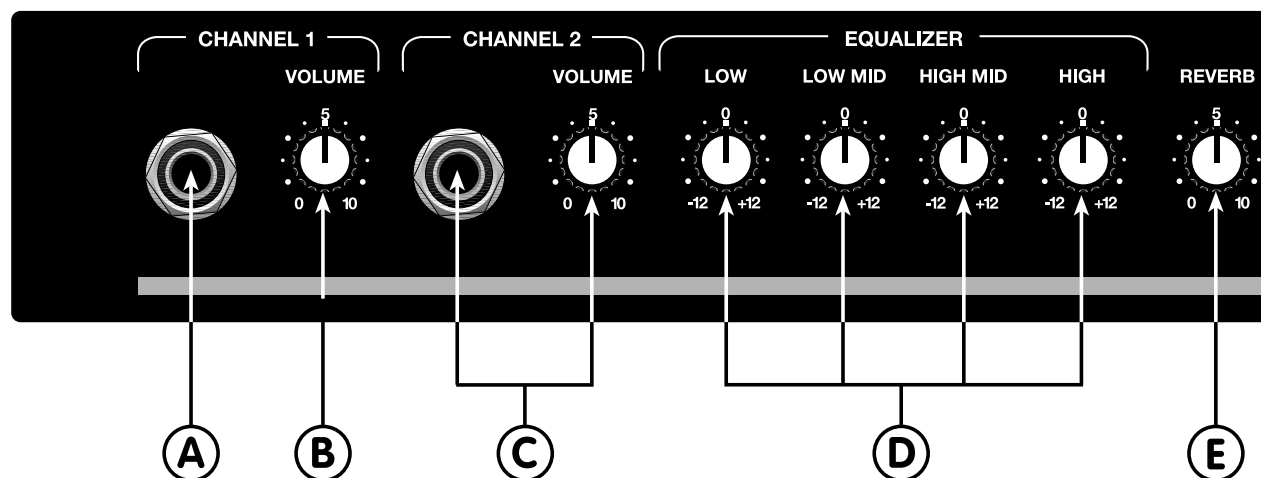
The preamp section of the KXR 60 features two independent channels, a four band master EQ, Reverb and Master Volume controls. Each channel features a single 1/4 inch Input jack and Volume control. The Effects Send and Effects Return jacks can be used with a wide variety of effects devices, or as patch points for slaving multiple amps together. The Effects Send can also be used to connect your KXR 60 directly to a recording console or sound rein-

forcement mixer. A tape player or drum machine can be mixed with the preamp signal (pre-effects loop) by using the Tape In jacks. The Headphones jack automatically mutes the internal speaker while driving stereo or mono headphones for private practice sessions.

The KXR 60's rugged 50 watt power amplifier was designed to give years of quality service under all conditions and is equipped with a unique implementation of our exclusive DELTACOMP™ adaptive compression system. With DELTACOMP™, it is practically impossible to cause the power amplifier to clip (distort). Also, apparent compressor release time is kept short keeping distortion to a minimum at low frequencies.

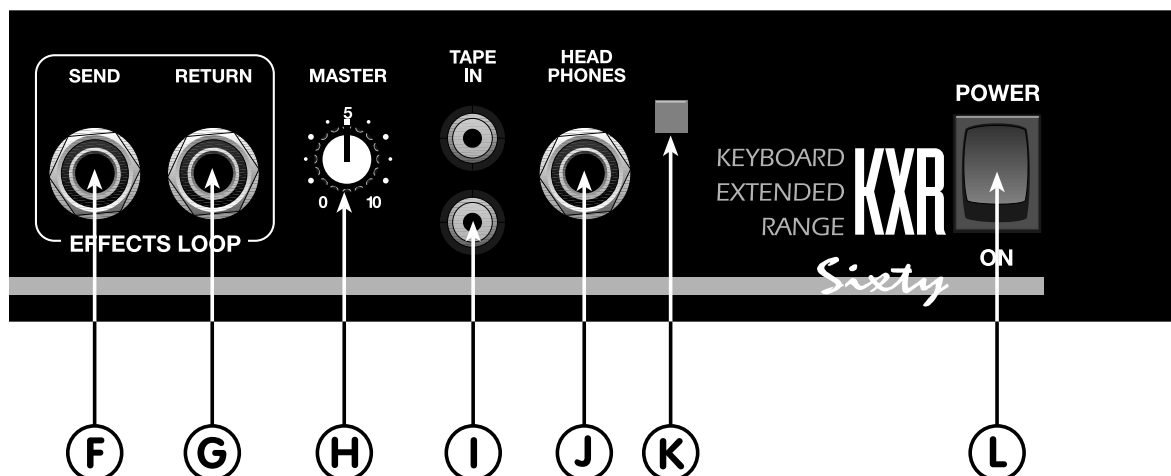
Your selection of a Fender® amplifier will be rewarded with years of quality performance and a wide range of musical sounds. The built in quality of your Fender® amplifier is the result of over four decades of dedication in the combined skills of research and development by our engineers and musicians.

That is why we proudly say... Fender®, The Sound That Creates Legends.



## KXR 60 FRONT PANEL FUNCTIONS

- A. **CHANNEL 1 INPUT (1/4" Phone)**- Plug-in connection for instruments. This balanced input can handle as much as 8V R.M.S.
- B. **CHANNEL 1 VOLUME**- This control adjusts the preamplifier gain of channel 1. It works in conjunction with the Master Volume control (item H) to set the overall loudness of the amplifier for Channel 1 only. Being a true "gain" control, it allows for the use of a variety of microphones, keyboards or other instruments with differing output signal levels. Low-level instruments generally require a higher Channel Volume setting, while "hotter" keyboards require a lower Channel Volume setting.
- C. **CHANNEL 2** - This channel is provided for an additional instrument. Its input and volume control operate in the same manner as items A and B in channel 1. This channel is muted when nothing is plugged into its input, and thus will contribute no additional noise to the amplifier output when left unused. Both channels may be used simultaneously, however Channel 1 should be used first if only one input is needed.
- D. **EQUALIZER**- The equalizer allows precise adjustments of the tonal characteristics of the amplifier. Each control provides a 12 dB boost or cut to bands of frequencies centered about 100, 338, 1188, and 4000 Hz.
- E. **REVERB CONTROL**- This control adjusts the amount of reverb to be mixed with the dry signal. The input to the reverb assembly is the sum of Channels 1 and 2.
- F. **EFFECTS SEND JACK**- This jack provides an unbalanced output signal from the preamp. This output can be used with the Effects Return jack (item G) as a patch point for mono effects devices. The Effects Send is connected to the input of the effect (digital delay or other effects device) and the output of the effect is connected to the Effects Return jack (Item G). The Effects Send can also be used to provide a signal to a recording or sound reinforcement mixer. In addition, this output can be used to drive another KXR 60 used as a slave amp. This is done by connecting a standard guitar cord from the Effects Send jack of the master amp to the Effects Return jack of the slave amp.



**G. EFFECTS RETURN JACK-** This balanced jack inputs signal to the Master Volume control which drives the power amp section. It automatically disconnects the preamp when used. This jack is useful with the effects loop feature, or when using the KXR 60 as a slave amp.

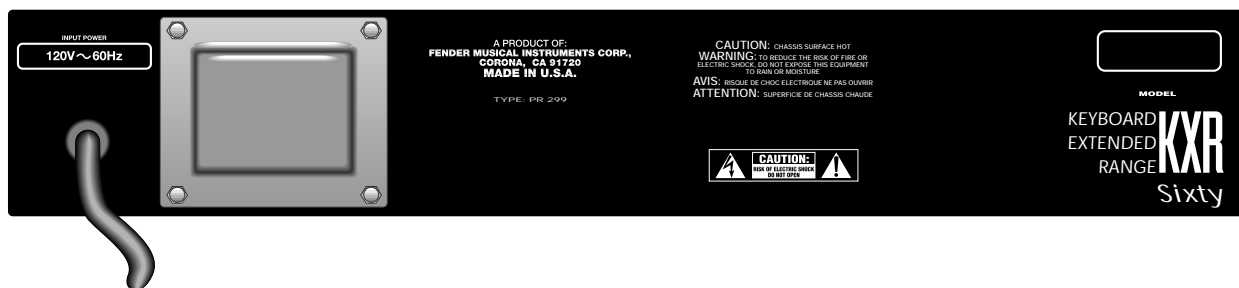
**H. MASTER VOLUME CONTROL-** This control adjusts the level of the signal coming out of the preamplifier section. This control is used in conjunction with the Channel Volume control to set the overall sound level of the amplifier. In order to maximize headroom and minimize noise, instruments with low-level output will require a high Channel Volume setting and a low Master Volume setting, while other instruments will require a lower Channel Volume and higher Master Volume setting. It is recommended that the Master Volume control be set as high as possible for maximum DELTACOMP™ compressor range.

**I. TAPE IN JACK-** Two RCA style jacks provide an input for an unbalanced, mono signal from a tape player or CD player. This signal is summed with the signal from the preamp inputs and provides the user the ability to play along with pre-recorded music.

**J. HEADPHONE JACK-** This jack allows the use of stereo headphones for private listening. When this jack is used, the internal speaker is disconnected. **WARNING: BE CAREFUL WHEN USING HEADPHONES, AS EXCESSIVE VOLUME WILL DAMAGE YOUR HEARING.**

**K. POWER INDICATOR-** When this LED is illuminated, the KXR 60 is receiving power.

**L. POWER SWITCH-** This switch turns the KXR 60 On or Off.



## KXR 60 REAR PANEL

**POWER CORD** - This amplifier is equipped with a grounding type supply cord to reduce the possibility of shock hazard. Be sure to connect it to a grounded AC receptacle. The line cord should be connected to a suitable power source, in accordance with the voltage and frequency as shown by the power rating on the rear panel. **DO NOT ALTER THE AC (MAINS) PLUG.**

**NOTE: DO NOT BLOCK THE AIR FLOW TO THE REAR PANEL; FOR EXAMPLE, BY BACKING THE AMPLIFIER UP AGAINST A WALL.** The rear panel contains a heatsink that needs air flow to cool off the amplifier. Blocking the air flow may result in equipment failure due to excessive heat building up inside the chassis.

**WARNING : THIS EQUIPMENT MUST BE EARTH GROUNDED.**

**COVERING CARE** - The exclusive vinyl covering on your cabinet has been especially designed for years of lasting beauty. A very light, soapy solution on a sponge may be used to remove dirt and residue that may accumulate in the texture. Be careful as not to let any liquid get inside the chassis or contact the operating surfaces. **UNPLUG THE POWER CORD BEFORE CLEANING.**

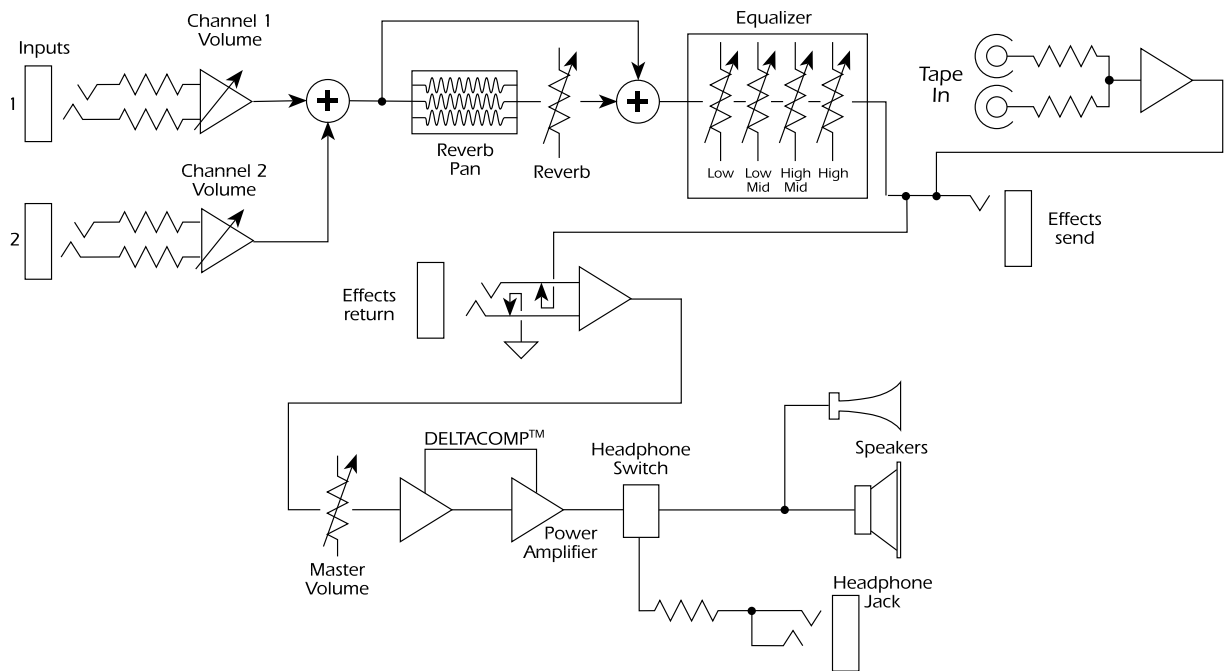
## TROUBLESHOOTER'S CHECKLIST

If the amplifier is set up but does not function, check the following items:

- Is the amplifier power cord plugged into an electrical outlet ?
- Is there power at the outlet ?
- Are all the control knobs properly set ?
- Are the controls knobs on the instrument properly set ?
- Is the instrument properly plugged into the KXR 60 ?
- If you are using an electronic keyboard, does it have power?  
(Eliminate any effect pedals and try another instrument cord.)

If after checking all of the above, and the system is still not performing correctly, consult your FENDER® Service Dealer.

## KXR 60 BLOCK DIAGRAM



## KXR 60 SPECIFICATIONS

Part Number:	120V Version:	022-8500-000
	Aust. Version:	022-8530-000
	UK Version:	022-8540-000
	230V Version:	022-8560-000
	100V Version:	022-8570-000



Type Specification: PR 299

Power Requirements:	100V Version:	100VAC, 50/60Hz, 180W
	120V Version:	120VAC, 60Hz, 180W
	230V Version:	230VAC, 50Hz, 180W
	240V Version:	240VAC, 50Hz, 180W

### POWER AMPLIFIER SECTION:

Power output:	50 W R.M.S.
Rated load impedance:	8 $\Omega$
Distortion at 50 watts:	Less than .1% @ 1 kHz, before compression. Less than 1% @ 1 kHz, maximum compression.
Sensitivity:	370 mV R.M.S.
Input impedance:	33 k $\Omega$
DELTA COMP™ range:	20 dB

### PREAMP SECTION:

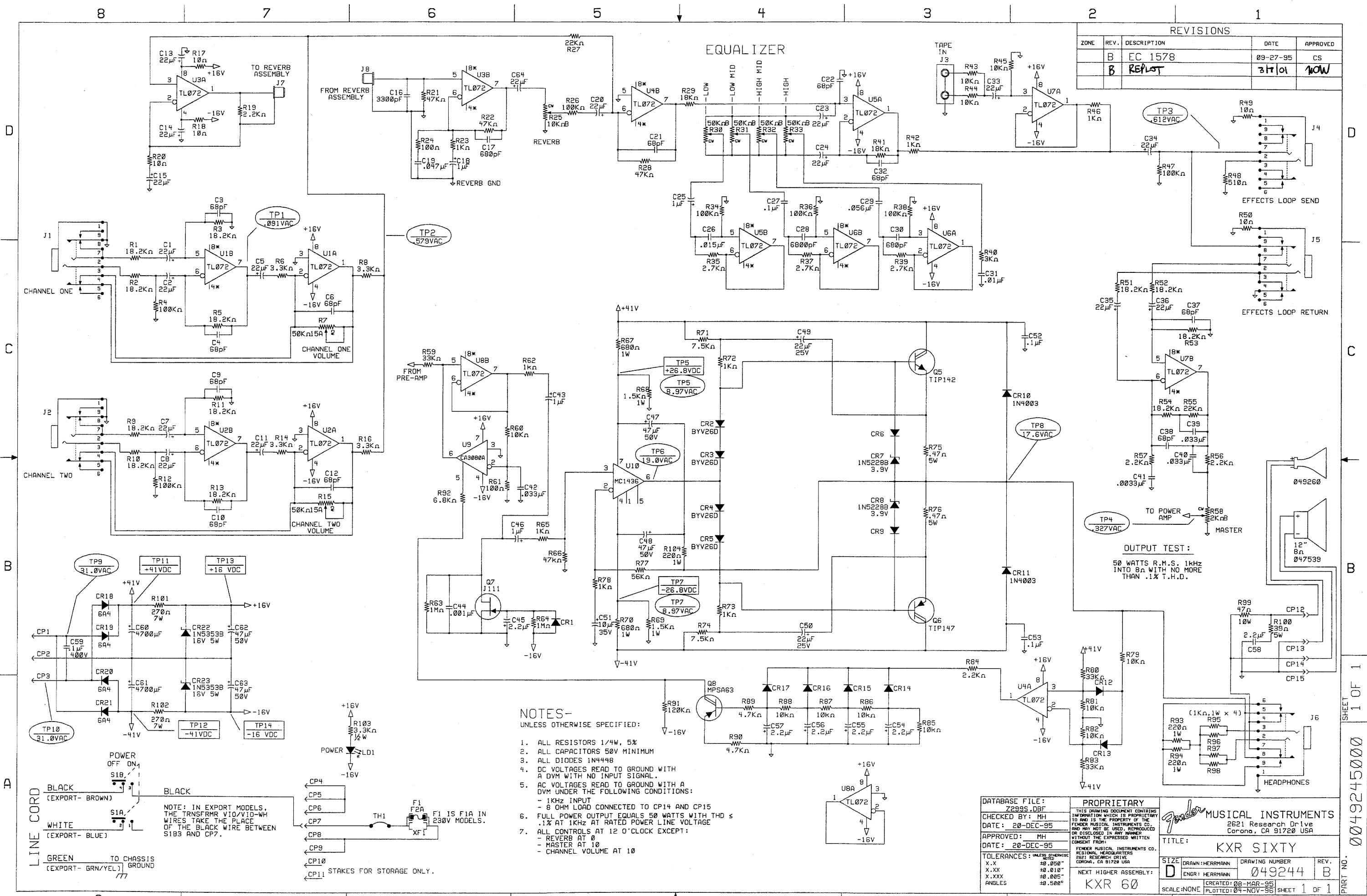
Input impedance:	Phone: 36 k $\Omega$
Sensitivity for 50 W: CHANNEL AND MASTER VOLUME at maximum, all tone controls at "0"	Phone: 28 mV
Equalizer:	Low +/- 12 dB @ 100 Hz (shelving) Low Mid +/- 12 dB @ 338 Hz High Mid +/- 12 dB @ 1188 Hz High +/- 12 dB @ 4kHz (shelving)

### PHYSICAL SPECIFICATIONS:

Height:	22"	(55.9 cm)
Width:	18"	(45.7 cm)
Depth:	12"	(30.5 cm)
Weight:	46 lbs	(21 kg)
Speaker Complement:	12" Fender Special Design (P/N 047539) Single piezo horn (P/N 049260)	

**WARNING: NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.  
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.**

A PRODUCT OF:  
**FENDER MUSICAL INSTRUMENTS CORP.,  
CORONA, CA 91720**



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	B	EC 1578	09-27-95	CS
	B	REPLT	3/7/01	KOW

- NOTES-  
UNLESS OTHERWISE SPECIFIED:
1. ALL RESISTORS 1/4W, 5%
  2. ALL CAPACITORS 50V MINIMUM
  3. ALL DIODES 1N4448
  4. DC VOLTAGES READ TO GROUND WITH A DVM WITH NO INPUT SIGNAL.
  5. AC VOLTAGES READ TO GROUND WITH A DVM UNDER THE FOLLOWING CONDITIONS:
    - 1KHz INPUT
    - 8 OHM LOAD CONNECTED TO CP14 AND CP15
  6. FULL POWER OUTPUT EQUALS 50 WATTS WITH THD ≤ .1% AT 1KHz AT RATED POWER LINE VOLTAGE
  7. ALL CONTROLS AT 12 O'CLOCK EXCEPT:
    - REVERB AT 0
    - MASTER AT 10
    - CHANNEL VOLUME AT 10

DATABASE FILE:  
22995.DBF

CHECKED BY: MH

DATE: 20-DEC-95

APPROVED: MH

DATE: 20-DEC-95

TOLERANCES: UNLESS OTHERWISE NOTED

X.X  
X.XX  
X.XXX  
ANGLES

PROPRIETARY

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FENDER MUSICAL INSTRUMENTS CO.  
REGIONAL HEADQUARTERS  
8021 RESEARCH DRIVE  
CORONA, CA 91720 USA

NEXT HIGHER ASSEMBLY:  
KXR 60

MUSICAL INSTRUMENTS

2621 Research Drive  
Corona, CA 91720 USA

TITLE:  
KXR SIXTY

SIZE: D

DRAWN: HERRMANN

ENG: HERRMANN

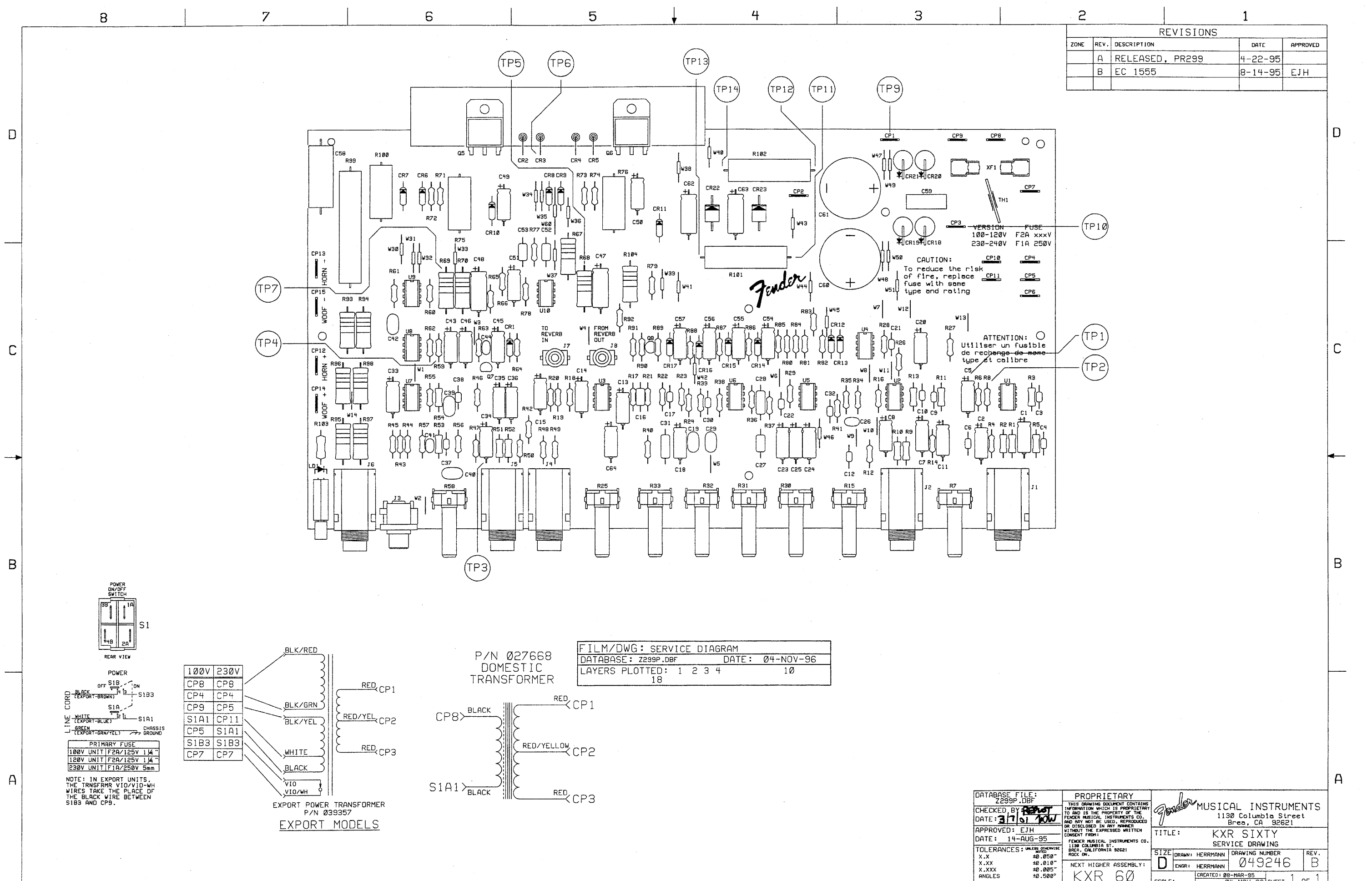
CREATED: 08-MAR-95

PLOTTED: 04-NOV-96

REVISION: B

SHEET 1 OF 1

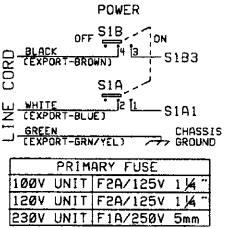
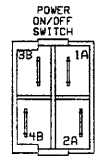




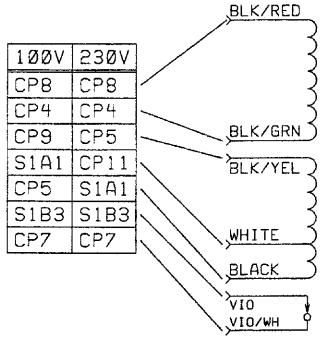
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A	RELEASED, PR299	4-22-95	
	B	EC 1555	8-14-95	EJH

CAUTION:  
To reduce the risk  
of fire, replace  
fuse with same  
type and rating

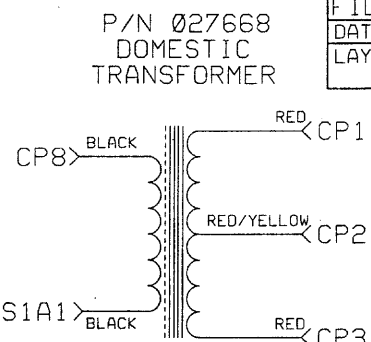
ATTENTION:  
Utiliser un fusible  
de rechange de meme  
type et calibre



NOTE: IN EXPORT UNITS,  
THE TRANSFORMER VIO/VIO-WH  
WIRES TAKE THE PLACE OF  
THE BLACK WIRE BETWEEN  
S1B3 AND CP9.



EXPORT POWER TRANSFORMER  
P/N 039357  
EXPORT MODELS



P/N 027668  
DOMESTIC  
TRANSFORMER

FILM/DWG: SERVICE DIAGRAM	
DATABASE: Z299P.DBF	DATE: 04-NOV-96
LAYERS PLOTTED: 1 2 3 4	10
18	

DATABASE FILE: Z299P.DBF		PROPRIETARY	
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DATE: 3/7/91		FENDER MUSICAL INSTRUMENTS CO. 1130 COLUMBIA ST. BREA, CALIFORNIA 92621 ROCK ON.	
APPROVED: EJH		NEXT HIGHER ASSEMBLY: KXR 60	
DATE: 14-AUG-95		TITLE: KXR SIXTY SERVICE DRAWING	
TOLERANCES: UNLESS OTHERWISE NOTED		SIZE: D	
X.X ±0.050"		DRAWN: HERRMANN	
X.XX ±0.010"		ENGR: HERRMANN	
X.XXX ±0.005"		DRAWING NUMBER: 049246	
ANGLES ±0.500°		REV. B	
		SCALE: 1 OF 1	