

Fender[®] custom amplification



P/N 049504

**Rumble Bass[™]
Owner's Manual**

SPECIFICATIONS

PART NUMBER:	100V version: 081-2170-000 120V version: 081-2100-000 230V version: 081-2160-000 240V version: 081-2130-000
TYPE:	CSR 10
DIMENSIONS:	Height: 10 in. (25.4cm) Width: 24.5 in. (62.2cm) Depth: 13.5 in. (34.3cm) Weight: 70 lbs. (31.75kg)
POWER REQUIREMENTS:	100V version: 100 volts AC, 50/60 Hz, 900W 120V version: 120 volts AC, 60 Hz, 900W 230V version: 230 volts AC, 50 Hz, 900W 240V version: 240 volts AC, 50 Hz, 900W
FUSE TYPE:	100V and 120V version: F10A, 125V min. 230V and 240V version: F5A, 250V
INPUT IMPEDANCE:	Input A: 2.5 M ohm Input A/B: 2.0 M ohm Input B: 2.5 M ohm
EFFECTS LOOP:	Output Impedance: 42.5 k ohm Input Impedance: 1 M ohm
EFFECTS MIX CONTROL:	Continuously variable between the signal at the EFFECTS SEND and the EFFECTS RETURN jacks.
PRE-AMP OUT:	-9.5 dBV nominal output.
POWER AMP IN:	-9.5 dBV nominal input sensitivity.
BALANCED LINE OUTPUT:	Derived from the output transformer, fully balanced. +1 dBv nominal output. Pin 1 floating, pin 2 (+), pin 3 (-).
AMPLIFIER LOAD IMPEDANCE:	4 ohm with MAIN SPEAKER only. 2 ohm with EXT. SPEAKER included.
AMPLIFIER DAMPING FACTOR:	3.1 at 4 ohms
POWER OUTPUT:	300 Watts, 5% THD into 4 ohms.
SUGGESTED SPEAKER ENCLOSURES:	081-3100-000 Rumble bass 410 081-3101-000 Rumble bass SUB 081-3102-000 Rumble bass 115

WARNING: NO USER SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

WARNING: TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE AMPLIFIER TO RAIN OR MOISTURE.

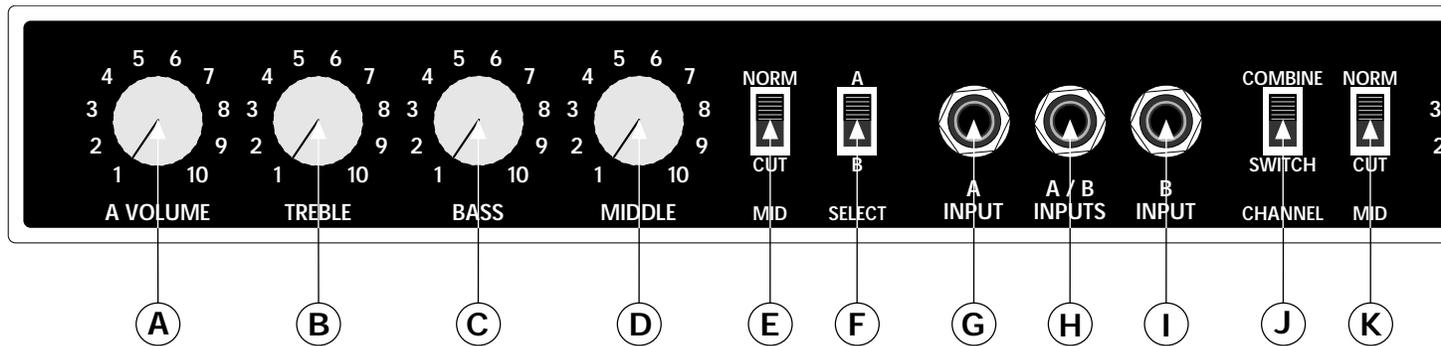
RUMBLE BASS[®] OWNERS' MANUAL

INTRODUCTION

The Fender Amp Custom Shop is dedicated to creating high quality amplification to serve top artists and discriminating players. The Rumble Bass is a unique amplifier with many possibilities. It is a 300 watt, two channel bass "Head" with special features which set it apart from anything offered before.

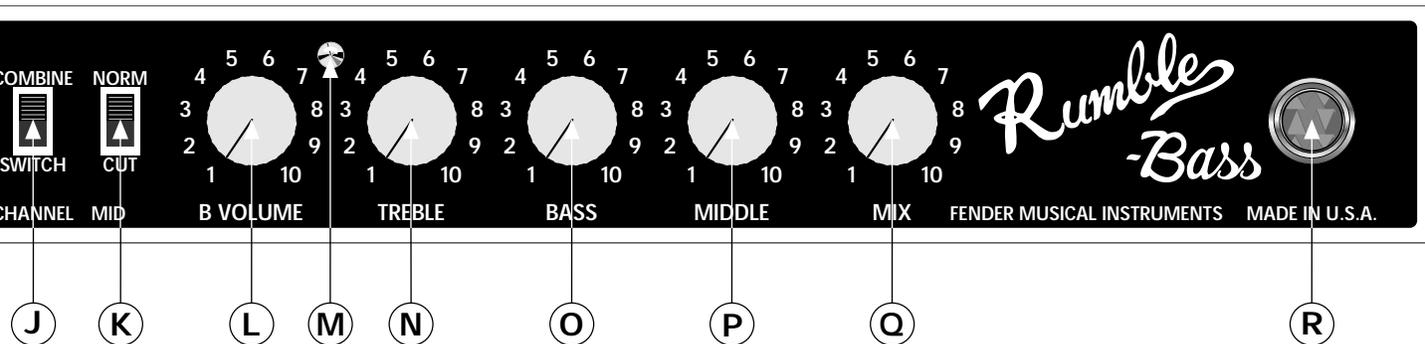
The Rumble Bass is an all tube instrument amplifier. There are no solid-state (transistor) devices in the signal path of any kind. Its' two channels may be operated in combine mode or switch mode. In switch mode, the footswitch (provided) may be used to switch channels or to "A-B" switch between two different instruments. In combine mode, one instrument may be linked to both channels for infinite tonal shaping, or two instruments can be played simultaneously, each with independent control of volume and tone. A "Cut" control on each channel allows a cut in midrange frequencies to suit playing with a pick or for playing slap style. A straight forward Treble-Bass-Mid Tone control section allows for adjustments in tonal balance at frequencies musically relevant to the bass guitar. An effects loop with a mix control to infinitely adjust the amount of external effects is standard, and is switchable, on or off, in both channels. Like the other Fender custom amps, the Rumble Bass is painstakingly built, one at a time, by a select group of craftsmen at the Fender electronics factory in Lake Oswego, Oregon.

It is suggested that you read this manual thoroughly to understand all the features and functions of this amplifier. This amplifier will provide years of trouble-free service and playing enjoyment.

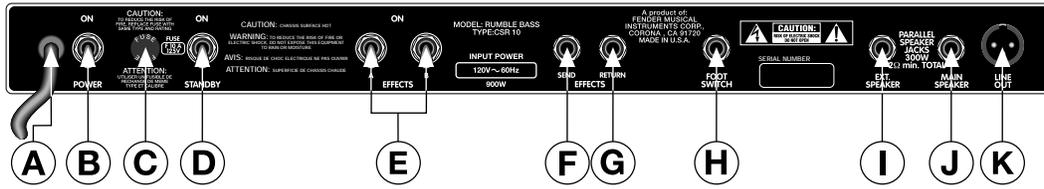


RUMBLE FRONT PANEL FUNCTIONS

- A. A VOLUME - Adjusts the volume of Channel A.
- B. TREBLE - Adjusts the level of high frequencies in Channel A.
- C. BASS - Adjusts the level of low frequencies in Channel A.
- D. MIDDLE - Adjusts the level of mid frequencies in Channel A.
- E. MID - Selects whether pre-set mid frequencies are to be attenuated in Channel A.
- F. SELECT - Selects Channel A or Channel B to be sent to the speaker jack. SELECT only operates when CHANNEL (see item J) is in "switch" mode.
- G. A INPUT - A high impedance, high sensitivity plug-in connection for Channel A.
- H. A/B INPUT - A high impedance, high sensitivity plug-in connection for Channel A and/or Channel B. If CHANNEL is in "switch" then Channel A or Channel B (depending on SELECT setting) is sent to the speaker jacks. If CHANNEL is in "combine" then Channel A and Channel B are mixed and sent to the speaker jacks. The two channels are mixed after all tone shaping sections of the pre-amplifier.
- I. B INPUT - A high impedance, high sensitivity plug-in connection for Channel B.



- J. CHANNEL - Selects whether Channel A and Channel B are to be separate (SWITCH) or mixed (COMBINE) together before being sent to the speaker jacks.
- K. MID - Selects whether pre-set mid frequencies are to be attenuated in Channel B.
- L. B VOLUME - Adjusts the volume of Channel B.
- M. CHANNEL INDICATOR - When this red LED is illuminated, Channel B is selected.
- N. TREBLE - Adjusts the level of high frequencies in Channel B.
- O. BASS - Adjusts the level of low frequencies in Channel B.
- P. MIDDLE - Adjusts the level of mid frequencies in Channel B.
- Q. MIX - The MIX control becomes active only when the Effects Loop is enabled. This control determines the amount of "wet" signal (post effects device) to be mixed with "dry" signal. When the control is rotated fully counter-clockwise the signal sent to the speaker jacks is completely "dry". When the control is fully clockwise the signal sent to the speaker jacks is completely "wet".
- R. PILOT LIGHT - When this lamp is illuminated the amplifier is receiving power. Should the lamp burn out, turn off the amplifier and unplug it from its power source, unscrew the red jewel, and replace the lamp with type T47 light bulb.



RUMBLE BIAS AND BALANCE ADJUSTMENT

WARNING:

Bias and balance are pre-set at the factory. Make adjustments only when necessary. If you are unsure about setting the bias and balance, take your Rumble Bass to the nearest authorized Fender service center.

1. Turn on the amplifier and let it warm up for at least three minutes with the STANDBY switch in the ON position.
2. Remove the front grill to gain access to the bias and balance controls.
3. With a digital voltmeter set to its most sensitive DC voltage scale, insert the Common Probe into the test point BALANCE. Insert the other probe into the test point BIAS2. Adjust the BIAS2 trim until 90 mVDC is obtained. Remove the Common Probe from the BALANCE test point and insert it into the BIAS1 test point. Adjust the BIAS1 trim until 0 mVDC is obtained. It is advised to recheck BIAS2 to confirm that 90 mVDC is still present. If not, repeat procedure.
4. With a speaker (or equivalent) load connected to the MAIN SPEAKER jack, run a 1 kHz sine wave through the amplifier. Connect an oscilloscope to the positive lead of a 1/4" phone plug so that you can view the output waveform. Adjust the output signal so that it is just into clipping. Adjust the BALANCE control so that the viewed waveform clips evenly on both the positive and negative peaks.

NOTE:

1. For optimum performance, set the bias to 90 mVDC, then set the balance.
2. If the output tubes cannot be balanced, check the bias setting and/or replace the 6550WA output tubes.

RUMBLE REAR PANEL FUNCTIONS

- A. LINE CORD - Your Amplifier is equipped with a grounding type supply cord to reduce the possibility of electrical shock. Be sure to connect it to a grounded AC receptacle. DO NOT ALTER THE AC PLUG.
- B. POWER - This switch turns the AC power on and off. When the switch is off (down) the amplifier is completely shut down.
- C. FUSE - The fuse is in the AC supply of the amplifier and will protect the amplifier and the operator in the event of an electrical fault.
- D. STANDBY - When in the STANDBY position the amplifier is off. However, the tube filaments are left on as to eliminate warm up time, provided that the POWER switch is on.

- E. EFFECTS - These switches select whether Channel A, or Channel B, or both are routed to the effects device. When either of the switches is on (up) the signal being sent to the speaker jacks is split. This secondary signal is diverted through the Effects Loop and is placed at the MIX control.
- F. EFFECTS SEND - Provides an unbalanced output signal from the pre-amp. This signal is after the tone shaping sections. It is used to patch into effects.
- G. EFFECTS RETURN - Provides a return from the effects gear.
- H. FOOT SWITCH - This jack provides a foot operated switch in which to select Channel A or Channel B. When a plug is placed into the jack, the front panel SELECT switch is disabled. Again, this feature is applicable only when the CHANNEL switch is in "SWITCH".
- I. EXT. SPEAKER - Plug in connection for extension speakers. This should be used in conjunction with the MAIN SPEAKER jack (item J). By using the EXT. SPEAKER jack, the extension speaker is placed in parallel with the main speaker. Therefore, the impedance as seen by the amplifier is half that of the main speaker alone (connecting two, four ohm speakers results in two ohms).
- J. MAIN SPEAKER - Plug in connection for speakers. For proper operation this jack should always be used first as a connection to the primary speaker(s).
- K. LINE OUT - This XLR jack provides a transformer coupled, balanced, floating ground output which can be used to drive slave power amps. The jack can also be used to send signal to a mixing console for recording or sound reinforcement.

TUBES

The Fender Amp Custom Shop Rumble Bass consists of six 6550WA's, four 12AX7's, three 12AT7's and two 12BH7's. For best results, replace with Fender original equipment tubes only. Tube location is printed in cabinet.

TOLEX COVERING CARE

The exclusive Fender Tolex covering on your cabinet is especially designed to provide 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 grain. Be careful not to let any liquid come in contact with the operating surfaces. DO NOT have the amplifier plugged into a power outlet when cleaning.

TROUBLESHOOTER'S CHECKLIST

- Is the power cord properly plugged into an electrical outlet?
 - Is there power at the outlet?
 - Is the fuse blown?
 - Is the speaker(s) properly connected to the amplifier?
 - Is the amp on standby?
 - Are all of the control knobs turned up above 4?
 - Is the volume control on the instrument turned up?
 - Is the instrument plugged into the amplifier?
- (Eliminate any effects devices and try another cord.)

If, after checking all of the above, the system is still not operating properly, consult your authorized Fender service dealer.

A PRODUCT OF:
FENDER AMP CUSTOM SHOP
SCOTTSDALE, AZ 85258-3241