

REMEMBER WHEN CLASS A USED TO MEAN 30 WATTS AND 100 LBS.?

How about 30 lbs. and 100 watts!



TROUBLESHOOTING (continued)

be connected to your amplifier such as effects pedals or rack processors. Some of these devices are "amplifiers" in their own right with gain and boosted volume levels and they may cause hissing and unwanted feedback if set too high in front of the amp. Shut down the amp and check the tubes. Wait for the amp to cool down. Remove the back panel of the amplifier.

Avoid handling hot tubes as they can cause severe burns. Check the larger output power tubes first by carefully removing the tube shields or loosening the clamps, and then unseat the tubes from their sockets but note from which sockets you removed the tubes. Inspect the integrity of the filaments in the tubes. If one or more of these tubes are bad, you will need to replace the entire set of the power tubes. If all the tubes are OK, you can eliminate the adverse sounds by swapping the location of these tubes. If this fails to fix the problem, you may need to replace the entire set of power tubes with a new matched set. Use of inferior quality (unrated) tubes may cause damage to your amplifier.

You should also check the preamp tubes, especially the first input stage tube (far right if you're looking at the amp from the back). Microphonics (feedback noise that cannot be controlled by turning down the volume pot on your guitar) indicates a bad preamp tube(s). You may want to swap the position of preamp tubes to see if this will fix the microphonics problem. Preamp tubes can go bad without warning but can also last many years without any problem whatsoever.

As you can see when handling tubes, they are sensitive, fragile and somewhat prone to inconsistencies. Please handle your amp with care when transporting it. Although your Bad Cat amp is sturdily built and designed to take years of rugged use, the tubes are not. It's always a good idea to keep extra tubes (both preamp and output power tubes) handy, especially for performance situations. An overwhelming majority of minor problems on tube amps are tube-related and it's just a matter of swapping one or more out to have your amp performing like brand new again.

IMPORTANT!
FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:
WATER AND MOISTURE: Appliance should not be used near water (near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
POWER SOURCES: The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.
GROUNDING OR POLARIZATION: Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.
POWER CORD PROTECTION: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
SERVICING: The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
FUSING: If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

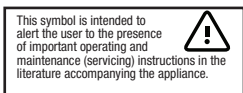
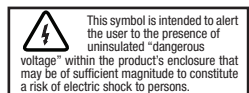
LIMITED LIFETIME WARRANTY

Bad Cat Amplifiers warrants our amps and cabs against workmanship or defect for life. The warranty does not cover tubes or cosmetic damage, or wear and tear or abuse. This warranty is transferable. Lifetime transferable warranty is only for North American sales. Please see your local dealer and distributor for warranty information. Modifying or altering the amp in any way voids the warranty. Shipping to and from the warranty repair center is the responsibility of the customer.

We have a new Lifetime Warranty on all new amps leaving the factory. We are extending the Lifetime Warranty to all of our pre acquisition amps for \$249. Simply send the unit back to us and we will have one of our technicians go through it from the ground up. And to top it all off, we will pay for the shipping back to you. For more information please contact us at sales@badcatamps.com or directly at 800-730-0966. When RETURNING merchandise to the factory, you must call for a return authorization number.

HELP SECTION

- 1) AMP WILL NOT TURN ON**
Check the power to the amp. Check for tripped circuit breakers, unplugged extension cords or power-strip switches that may be turned off. Check the fuse. If a dark brownish color or no wire can be seen within the glass tube, then replace. The amp may be perfectly fine but occasionally a fuse may blow because of high AC voltage surges. After the fuse has been replaced with the proper Slow Blow value and if the fuse fails again, the amp will require servicing.
- 2) NO OUTPUT with POWER light ON**
Tubes damaged in shipping will be the primary reason for your amp to not function properly. Please give us a call to help guide you through this simple repair.
- 3) KEEP YOUR AMP LOOKING NEW**
Use a damp cloth to wipe the controls on the front & rear chassis panels. Wipe the black vinyl covering with a damp cloth.



REFER SERVICING TO QUALIFIED SERVICE PERSONNEL!
THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!

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Operating Manual

BOBCAT 100

Congratulations and thank you for purchasing a professional tube amplifier from Bad Cat. As with all Bad Cat products, your amplifier is designed from the ground up to provide the very best tones possible in a rugged, reliable package. Each one of our pro quality models is constructed with Bad Cat's commitment to making the highest quality, hand-built, American-made amplifiers.

CAUTION

With a little care and caution, your Bad Cat amplifier should provide you with years of trouble-free operation and enjoyment. Please avoid damp areas and moisture during operation of the amp and in storage. This includes placement of beverages near or on the amp that could spill into the amp's chassis. Liquids can easily damage tubes, switches and other parts. Immediately disconnect the amp from power source should a spill occur and dry the amp thoroughly prior to switching on the amp again. Drying may require the complete removal of the chassis from the cabinet and the removal of the tubes for cleaning. Avoid tipping the amp, using it in unbalanced positions, or lifting it unassisted to awkward heights. A little common sense will go a long way in making sure the amp does what it's supposed to do: provide you with dependable operation and great tone on a consistent basis.

GROUNDING

Please check thoroughly that the ground tip on the power cord plug is connected to true ground prior to operation of your Bad Cat amp. Using unfamiliar junction boxes can cause potentially dangerous floating grounds. Please do not cut or defeat the ground tip.



SINGLE CHANNEL, 5/100 WATT, 6V6 CLASS A/D

Introducing the first of its kind.

If you have ever experienced the pleasure of playing a really fine vintage single-ended all tube amplifier then you'll know the feeling. Touch sensitivity, sweet breakup and natural sounding compression. It changes the way you play – inspiring and pushing you as a player. The problem that arises with single-ended amplifiers is that they are limited to low wattage situations. Imagine having that touch sensitivity and tone at gig-able volumes. Until now this was impossible.

We'd like to introduce our newest cat the Bobcat. Hand-wired, single-ended, touch sensitive, ferocious and ultra light weight amplifier. Utilizing the patent pending Bad Cat Unleash technology, this little hand-wired beast is capable producing about 100 watts RMS from a single-ended amplifier.

High and low gain settings allow for spanky clean and snarling tones accessible by the included foot switch. Two foot-switchable Unleash volume levels allow for lead and rhythm volume settings.

The Unleash Technology

With the Unleash disengaged the Bobcat is essentially an elegant sweet sounding single ended 5-watt amplifier. Flip the switch to engage the Unleash, turn the knob and go from whisper quiet attenuation suitable for bedroom play to 100 roaring watts of stage filling tone. The sound and feel of a juicy single ended circuit with 100 watts of headroom.

Did we mention that the 1x12 combo weighs 32 pounds? This amp is a remarkable feat of engineering and truly the first of its kind.

Available with or without reverb.

ELECTRONICS

Power: 5/100-Watt Class A/D
Channels: 1
Controls: Gain, Tone, Unleash 1, Unleash 2

HARDWARE

Available Configuration: Head or 1x12 Combo
Cabinet Material: Head - Italian Poplar, Combos - 13 Ply Baltic Birch
Speaker Description: 12" Proprietary Bad Cat Celestion Speaker
Impedance: 8 ohms
Power Tubes: 1 - 6V6
Pre-Amp Tube: 1 - 6SL7
Rectifier Tube: Solid State

Shown as 1x12 Combo in Black Tolex and Dark Gold Grill Cloth



FOR YOUR RECORDS, YOU MAY WISH TO RECORD THE FOLLOWING INFORMATION.

SERIAL NO. _____ INVOICE DATE _____

Last updated: July 30, 2013

Front & Rear Panel Controls

BOBCAT 100

OPERATION

If this is your first all-tube amplifier, please become familiar with a few issues that differentiate your amp from solid-state or hybrid amp products. Only a few precautions are required but they will insure that you will get the most of your new all-tube amplifier. Vacuum tubes are “old world” thermal devices that require more attention than transistors, but that’s the reason they sound so much sweeter and more musical than integrated circuits and other solid-state components. A little heads-up on the following points will ensure maximum performance from your Bad Cat amp.

1. Place the amp at least 6 inches away from any wall or obstacle to provide adequate ventilation around the amp. Good airflow around the amp will go a long way in preventing the amp from overheating, especially the tubes. Do not place covers, clothing, or any other materials on or in the amp that can obstruct the free venting of the chassis to the outside air. Trapped heat in the chassis may cause a condition known as thermal runaway. To put it simply, to warm or cook the tubes is good, to heat-cycle or fry the tubes is extremely dangerous and will also shorten the life of the tubes considerably.

2. Vacuum tubes will last longer and sound more musical when they are allowed to warm up prior to introducing an input signal from your guitar. A full flow of electrons from the cathode can only be achieved when the tube is heated. This requires some time. Please allow at least one minute of warm-up time before playing through the amp.

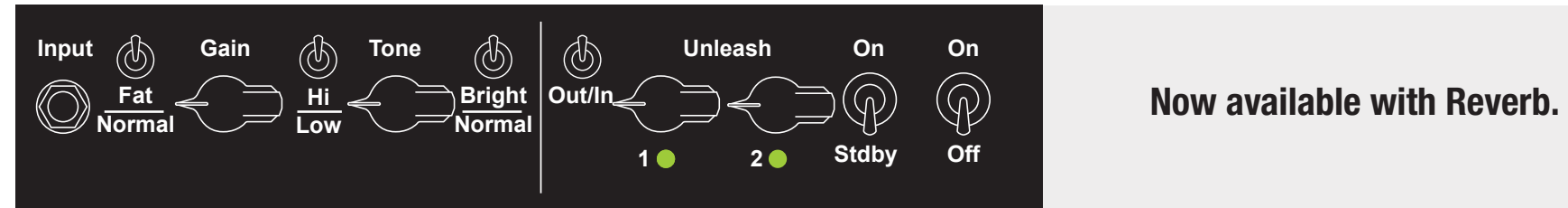
3. Avoid long idle periods with no input signal. The vacuum tubes prefer to see a signal present. When taking a break between practice sessions or in between sets of a performance, use the standby switch or turn off the amp.

4. Avoid unverified impedance loads. In other words, do not clip on or otherwise attach additional speakers unless you know the system impedance. Tube amplifiers are very sensitive to speaker impedance matching. This is due to the relationship between the internal resistances of the output transformer, the output power tubes and the load that is required to drive them. Unbalanced loads can cause destructive arcing; the transformer and the tubes may actually burn themselves out. This is not covered by our warranty.

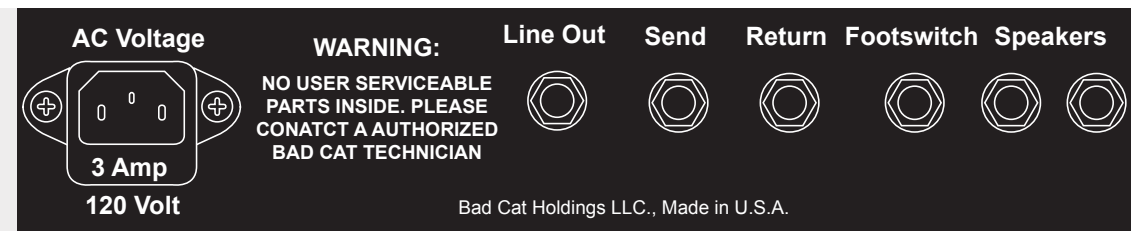
With proper impedance matching, multiple speaker configurations will work fine. If you are not familiar with “Ohm’s Law”, please consult with a dealer or a qualified amplifier technician. Do not attempt to operate the amp if you cannot verify system impedance after connecting the speakers. Never operate your Bad Cat amp at 2 ohms or less.

5. Avoid unapproved “Power Soak” devices or attenuators that are not recommended by Bad Cat as they can shorten the life of your power tubes considerably. Attenuators burn out tubes prematurely because they require the power tubes to overwork continuously. Also, please note that power tubes are best replaced as a matched full set whenever any of them fail.

BOBCAT 100 FRONT PANEL



Bobcat 100 also available in 5-watt with or without Unleash Technology



BOBCAT 100 REAR PANEL

Maintenance

Your Bad Cat amp is a professional instrument that does not require much in maintenance. Use a clean dry cloth to wipe cabinet as required but avoid solvents of any type as they may tarnish or discolor the vinyl. If you’re going to store the amp with a cover, please allow the tubes to cool before covering the amp. A cover cloth or vinyl amp cover will prevent dust buildup in the amp.

Weak or dull tones from your amp may indicate that the tubes are old or tired and need replacement. The tubes in your amp are like tires on your car. They do wear out. If you notice change in tone and tactile response from the amp, it’s most likely that the power tubes need to be replaced. As advised earlier in this manual, replacement should only be done in complete matched sets. Preamp tubes will last much longer than power tubes, but these should also be checked occasionally. Preamp tubes tend to go micro-phonic and also produce undesired results when old or not working properly.

FRONT PANEL

Input

Your guitar plugs in here...

Fat/Normal

Add thickness and warmth to single coil bridge pickup. Add fullness at low volume levels (bedroom volume).

Gain

The Gain knob controls the amount of gain applied. Set the knob low (approximately 9 o’clock to noon) and you will get bluesy breakup to classic rock crunch. Turn the knob clockwise past noon and you get punchy hard rock distortion to over-the-top tweed tones. You will also notice that the gain is very sensitive to your guitar volume knob adjustments and your picking attack. The touch sensitivity of the amp’s gain control allows you to access a wide range of overdrive and distorted sounds without having to readjust the Gain knob in between noon and 2 o’clock and use your guitar volume knob to go from bluesy with slight breakup to crunch to searing leads.

High/Low

This is foot switchable and controls Gain level from Clean (sparkle) to Crunch (soft breakup) to Over-The-Top (Hi Gain). When combined with the two channels of the Unleash section, allows you to have 4 different tones from Clean to Mean!

Tone

This is a knob used for instant access to your favorite sounds. Turn it counterclockwise for increasingly darker, thicker tones. Turning the knob clockwise gives you more treble and bite.

Bright/Normal

Add top end sweetness to a single coil neck pickup or attack to a humbucker.

Out/In

This controls the Bad Cat Unleash technology to be in or out of the circuit. When switched out, the Bobcat becomes a pure, 5 watt, hand wired, class A amplifier. When switched in, the Bobcat becomes a 100 watt, snarling beast! Time to mic up the drummer!

Unleash 1

Channel 1 of a two channel, foot switchable, 100 watt amplifier section. Each channel can be set with independent levels to be used as rhythm/lead or clean/distortion or anything in between.

Unleash 2

Channel 2 of a two channel, foot switchable, 100 watt amplifier section. Each channel can be set with independent levels to be used as rhythm/lead or clean/distortion or anything in between.

Standby Switch

Leave this switch off when turning on the amp and let the amp warm up for a full minute before turning this switch on. It’s best to let tubes warm up before playing. Place amp in the Standby mode when you will not be playing for awhile (for example, breaks in between sets of your performances, etc.).

On/Off Switch

This switch turns the amp on or off.

BACK PANEL

A/C Plug

Plug your amp’s power cord in here first, then to the wall.

Lineout

This is a line-level output which can be used directly into a processor or effect unit, thereby making your amp the pre-amp or tone-shaper of a larger “rack” rig. This can also be used for direct recording, although typically clean sounds work best for this purpose as the distorted sounds tend to suffer from the lack of the positive coloration a speaker brings to a distorted guitar tone.

Send and Return

These jacks are your FX Loop. Typically, “time” based pedals are placed in the FX loop and “tone” based pedals are placed in the front of the preamp (the Input jack on the front panel). “Time” based pedals would be delays, reverbs, choruses, flangers, etc.. “Tone” based pedals would be Wah, EQ, overdrive, distortion, etc..

Footswitch

This is a jack for the included 2-button footswitch. The left button is used to toggle between the two Unleash channels. The right button is used to toggle between “HI” and “LOW” gain. In order for the Unleash to toggle using the footswitch, the Unleash front panel switch must be in the “IN” position. In order for gain to toggle using the footswitch, the gain front panel switch must be in the “HIGH” position.

Speakers

These jacks are for speaker connections and are wired in parallel. The internal single 12” speaker is rated at 8 ohms. With both speaker jacks connected, the speaker load should not be less than 4 ohms. The extension cabinet should be rated at 8 ohms or higher when used in conjunction with the internal speaker.

*****WARNING*** Do Not Connect To Grounded Plug!!!!**

TROUBLESHOOTING

Your new Bad Cat amplifier is designed for many years of professional trouble free operation. Common sense will tell you that if you notice any severe abnormalities in operation like burning smell, smoke, etc.; you need to shut down the amp immediately. Always consult your Bad Cat dealer if you are unsure of the problems that you are dealing with; i.e., take your amp to where you purchased it.

TECH NOTE***

The Bobcat is a lot more sophisticated than the average tube amp and extreme caution should be taken when servicing this amplifier. The chassis and floating grounds should be observed in order to prevent damage to the amp. Please contact Bad Cat for further information. The Bobcat incorporates a very high power class D amplifier, which re-amplifies a small 5 watt tube amp. In a small chassis and in some instances where this amp is pushed to its limits, full gain, etc. you may get microphonic tube feedback, especially in a small combo package. This is normal.

CONSUMER NOTE***

There are NO user serviceable parts inside this amplifier! Any attempt to modify this amp will void the lifetime warranty!

No Power

Check the power source from the wall first. Make sure the power cord is properly seated at both ends. If there is still no power, check the fuse and replace if necessary with the correct rating only.

Weak Output Level

Verify the signal output from your instrument first. Check guitar’s controls and that the cables are working properly. Also, check any effects pedals that may be connected in between the guitar and the amplifier.

Adverse Sounds-Hum, Whistle, Loss of Dynamics, Feedback, Howling

Check loudspeaker cones, frayed guitar cables, controls on your instrument, the guitar’s pickups and any other devices that may