## Trainwreck Express Version AO




## Based on designs from Ken Fischer <br> Rev. 09-29-00

## Trainwreck Express Version A1


$\square 100$


100k
N




## Trainwreck Express Version A2



## Trainwreck Express Version A3


"How's it sound? Like the first Van Halen album..."

A DIY clone inspired by designs from Ken Fischer


## The Blues Express Version A5h

This is the final version of the Blues Express amp. The zener limiting circuit was removed and a modified cross-line MV was installed in its place. The bias/grid load resistors were returned to their original value of 220 k .
The 2nd stage supply was rewired to $\mathrm{B}+5$ instead of $\mathrm{B}+4$ and the $0.22 \mathrm{uF} / 630 \mathrm{v}$ poly cap from $B+5$ to ground was drawn in.

This amp was fine-tuned for blues tones, with a sparkling clean sound that gets more aggressive when you crank up the volume. It sounds like an old BF amp on Viagra..."

# Inspired by designs from Ken Fischer 




## Based on designs from Ken Fischer

## Blues Express Plus Version A8a

The Blues Express Plus adds a "Fat" switch to allow for more Marshall-ish sounds by using a switchable .0068uF coupling cap after the second stage. In the other modes this cap is run in series through a .0016uF cap which results in a net capacitance of 1295 pF . A center-off DPDT switch was used to toggle the grid load of the 3rd stage from 56 k to 82 k in the two "blues" modes, while dropping to 45 k to cut the gain a bit in the "Fat" mode.


The switchable conjunctive filter was used to smooth out the response of the amp, making the 250 pF caps across the 2nd and 3rd plate resistors unnecessary. With the .022uF and .033 uF caps in series the net capacitance is .0132 uF .
The Smooth switch is a local feedback loop between the plate and grid of the 2nd stage. The traditional value of 22 M allows for a compressed sound while the alternate value of 44 M has a more subtle effect.

Revisions from Versions 2 \& 5 shown in RED

## Inspired by designs from Ken Fischer

## Blues Express Plus Version A9h



The 3 position Bright Switch is an important control as it allows for chimey and clear sounds at lower settings of the volume control. Because of the series linkage the low capacitance setting works out to 129pF. I like to turn up all of the controls to 10 (going through a Marshall Power Brake when necessary) and then fiddle with the controls on the guitar to get clean, crunchy or downright distorted tones.

Revisions from Versions 2 \& 5 shown in RED

## Inspired by designs from Ken Fischer

## Blues Express Plus Version A9k



## Trainwrecked Expresso



## Design inspired by Ken Fischer

Notes on WRECKXPR.PDF
Version Number: Notes

A0: This is supposed to be pretty close to a real Express. Certain rumors were added in like the parallel coupling caps between the 2nd and 3rd stage

A1 and A1a: These came from someone who has seen the inside of a real Express... and lived to tell about it. I suspect that A1a is more accurate than A1

A1b: Similar to Ala, but I drew in a possible RC network bypassing the tone stack that was reportedly seen on at least one Express.

A2: This is probably based on Callaham clone and not a real Wreck. The 50pF treble cap, 1M treble cap and . O01uF/56k cap/resistor after the 2 nd stage all contribute to a brighter, less gainy sound than is produced by a real Express. (It was this schematic that was originally distributed as the Trainwrecked Expresso.)

A3: This schematic is based on a DIY clone.

A4: This schematic is based on a different DIY clone.
A5h: This is the final version of the original lower gain Blues Express amp (which was based on the Callaham schematic in version A2). Chimey like a Vox or BF Fender at lower gain settings, but when cranked up it was more like the Vox.

A6: This was reportedly based on one of Allesandro's amps.
A7: This was a clone built by Voodoo Amps.

A8a: This was an early rebuild of the Blues Express after I added a conjunctive filter to version A5h.

A9h: This is the final version of the Blues Express Plus. Note that the 47 k grid stopper on the 1 st stage and the $100 k$ grid stopper on the 2 nd stage have been eliminated, and except for the various mode switches is closer to version A2 than the earlier incarnations of the Blues Express/Plus.

