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## What is The Good One™ and who the hell is G. Smith?

Hello, my name is Matthew Holl, and I own Wren and Cuff. It's very nice to meet you.

To tell the tale of this pedal, I figured we'd forget the "we" and "ours" and I'd break down the story of the G. Smith pedal as though we were hanging out and having a chat. You can probably tell by the multiple paragraphs below that I can be a bit long winded at times, and perhaps you'll find the details to be way more than you ever wanted or needed. I get it, we're all busy... That said, I also know there are many, many, pedals out there, and I truly want you to know what makes your new pedal so special. If you've got the time, give this all a read; if ya don't, throw this dumb manual aside, plug in yer pedal, and let it rip. You can even throw this thing in the trash (although having the original manual does make the pedal worth a little more, so maybe keep it just in case).

To start with, you'll notice some text descriptors on the front of your new pedal that might seem a little odd. To help make sense out of it all, I thought I'd give an explanation of what they mean.

### "G. Smith", "Triangle", and "Ver. 1 2nd ED"

It all started with a restoration. In late 2020, I received an email from a customer named G. Smith inquiring about our restoration service.

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**Mr. Smith** had a very rare triangle knob muffler that wasn't working. He wished to bring it back to its former glory and hoped I could get the job done. I told Mr Smith to send it in. (BTW: "triangle knob" is pedal-slang for the first generation of Muffs produced from roughly 1969 through 1972/73. This particular pedal was considered to be the first version of the Big Muff® but the 2nd edition of this pedal). The first edition was made of perf board, wired point-to-point, and made in truly limited quantities. All V1 pedals are easily distinguished by their smaller enclosure size, front facing on/off slide switch, and super simple one color black graphics over clear-coated steel enclosures. Oddly, and in my humble opinion, none of the knobs from this era look remotely triangle-like, but for some reason among Muff enthusiasts, the name stuck.

A while later I received the package, and, because I'm the only one that does repairs here at the shop, I put it on the shelf where it sat for a few weeks.

Finally, I was able to get to the repair.

I gave the old pedal a test and as G. had said, it sounded very... unwell. There were some broken parts, and the remnants of some less than pro fixes that had been hacked together over the years, which is not that uncommon for a pedal of this age.

After repairing a few torn traces, replacing one of the pots, and replacing a cracked cap or two, I was able to get it fired up.

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### Woah... I was taken aback by the tones that greeted my ears.

The sounds were noisy, yet still rich and refined. Hi-fi and Low-fi at the same time. The lows growled and grunted without getting flabby, the mids would heave and ebb as I tweaked the tone knob, yet the overall sound would never lose its slightly darkened smokey sounds. The gain poured out of it like a debris filled river after a fresh flood. However, it was still grumpy. Slight touches to the tone and gain knobs would drastically change its character, sometimes in a good way, sometimes not. It was the kind of pedal I like. One that makes you dig to find the sweet spots. One that makes you have to put up with some noise and hiss in order to hear its greatness. One of the good ones.

The first thing that stood out to me was something quite rare. The circuit was reverse polarity compared to most vintage Muffs (as well as 99% of other pedals in the world). This is something commonly seen in very early effects from the 60's: Fuzz Faces™, Rangemasters™, Tone Benders™, and others, but not often seen in Muffers. If you're unfamiliar with what this means, it's pretty simple: the positive and negative polarities are inverted so that the positive voltage is the ground, and the negative is the "hot" side of the voltage. This does not affect the tone, but eventually fell out of favor for various reasons, the main reason being that positive ground circuits in audio gear are prone to picking up radio stations and such, especially in a fuzz circuit which is noisy by nature (don't

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worry, the Good One uses a negative ground circuit so it can be powered with a battery, or any common pedal power-supply).

Looking over the circuit, the combo of component values was nothing extremely out of the ordinary, but for a "triangle knob" era pedal, it was definitely a combo I had never seen before. These inconsistencies are what makes Muff circuits both fun and frustrating (as many people know, the components in early Muff circuits were about as consistent as jailhouse pruno). Fun, because it gives people like me a huge palette of circuits to play with, submerge myself in, recreate, learn about, and honestly, fall in love with. Frustrating, because to the regular Joe or Joanne, they can be told that a certain version of vintage Muff will be the "best one".

**If eventually they do find one of the holy grail Muffers, they are sometimes very disappointed by how the pedal sounds.** Why? In those early days of Electro-Harmonix, the company would often use whatever components they could buy cheaply in bulk. As long as the outside of the pedals looked the same, they weren't too concerned with the circuits being a little different. Keep in mind, in those days, people weren't A/B'ing pedals side by side, comparing small nuances, tones, etc. To be a distortion or fuzz pedal, all it needed to do was... distort or fuzz! As long as the pedal's sound was in the general ballpark of the others, it could be sent out and no one would be the wiser.

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### “The Good One”

All this to say, after studying and analyzing so many Muffs over the years, one thing I know for sure is that vintage does not always mean great tone. This is particularly true of triangle knob era Muffs which have been reported to have up to 18 different circuits all housed in the same enclosure! As of this writing, I’ve personally come across two that I considered subpar. So, even though this pedal was a super cool specimen, I knew there was no guarantee it was going to sound good. For a real treasure, you have to come across a truly GOOD ONE. Once I got it all together, I was very pleased to find out that in this case,

**I was listening to what I consider to be one of the good ones.**

### “1972”

This one is pretty straight forward as I’m sure you’ve figured out. From everything I could piece together, the pedal was most likely produced in 1972. The unusual polarity of the circuit, as well as transistors, make this unit easier to date than some.

### “Dirty Guts”

Along with the unusual component values, another thing stuck out to me: nearly every capacitor in the circuit was the cheap ceramic disc type. Ceramic disc caps were very plentiful in those days and

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used in many situations when all that was required was a simple capacitor to get the job done; it didn’t need to be anything special. However, in audio circuits (high gain circuits in particular), they are often avoided because they can be microphonic, noisy, and have some nonlinear characteristics that are less than desirable in several different applications. Over the years, even Electro-Harmonix® favored only using ceramic caps mixed with the more desirable metal film caps, rarely using all ceramic disc types for the reasons previously mentioned. There have been other versions of vintage Muffs that were all ceramic caps, but not many. However, as many of us know, pedals are weird; sometimes using the “wrong” components creates a certain magic that can’t quite be explained, and the G. Smith pedal was proof of that.

So here’s where the “Dirty Guts” come in. I decided to seek out surplus bags of old crusty ceramic disk caps. The older and dirtier, the better. There was some trial and error; I wanted caps that were old, but also consistent. There were batches that were too inconsistent or too crumbly and delicate from improper storage to be used. Some were just too cheaply made. But after some hunting around, I was able to find old, dirty, somewhat crusty, but reliable and consistent caps that would help to recreate the magic inside of Mr. Smith’s pedal.

When you look inside the Good One, it’s a grungy mix of old and new that has its own unique beauty.

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That covers the text on the front. Now we're on to some other details in the guts of your new pedal. We've already covered capacitors, so let's go over the rest of the core components we have yet to discuss.

### Resistors

For the Good One, I elected to use NOS carbon composition resistors wherever possible. However, after doing some measurements, there was a particularly odd-ball value that was quite a ways off from its stated value. Because the value of these resistors is not a standard one for carbon-composition resistors, the only way to compensate for this was to use two mil-spec metal film resistors. So, if you take a peek inside the pedal, you'll see two shiny new light blue resistors nestled in with all those old-school brown carbon comps.

### Transistors

For the transistors, I settled on two that I had never used, nor come across before. I went through a few different vintage transistors, tried a mix of old and new, tried all NOS, then all new, and several combinations thereof. This pedal had me searching outside of any go-tos I have used in the past. After poring over way too many data sheets, I finally settled on a couple of transistors that were not NOS, not crusty, not that hard to find, not commonly used for pedals, but that absolutely nailed the sound of the original half-spherical FS3700 black-top transistors. I really wanted it to be some quirky

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old part that was as rare as hens teeth, but alas, it was not to be. I had to follow the sound!

The rest of your new pedal follows our usual practice of top-quality components, hand-wiring, and genuine mechanical true-bypass switching. The heavy-duty folded steel enclosure is made, painted, and silkscreened here in Los Angeles by two multigenerational small businesses.

**So there it is**, the story of The Good One, affectionately known as the "G Smith" here at the shop. I truly hope you treasure this unique pedal for many years to come. -m

### Specs:

- May be powered with a 9V battery or a 9V center-negative 2.1mm barrel regulated power supply (typical guitar pedal power unit). *Please use a power supply intended for effects pedals.*
- This pedal will draw around 5.5mA

Made in the USA

Lifetime Warranty

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