

1952 K-model engine uncrating

My worries about buying a K-model Harley Davidson motor that was in Montana were soon dispelled.

The seller and I started trading emails about how to get it down to Sunnyvale. I soon had their phone number and email address.

Jeannine and Steve turned out to be two of the nicest people I have met in a long time. They looked into several freight companies.

Turns out the shipping was a real hassle for them, requiring them to drive 50 miles to the UPS freight terminal. They did this in order to get me a better price. Like I said, they were really decent people.

Seeing how hard they were working despite already having my money lowered my blood pressure.



The first email I got was:

"Now, I need some info from you to complete the invoice:

1. Shipping address
 2. Is the address residential or a place of business?
- I'll keep checking back for your reply and start looking into freight shipping services to find the best available. Thank you and take care!"

I was amazed, the sellers were in instant and constant contact with me. I never had the slightest doubt I would get my stuff.

A day later I got another email, and i realized I was dealing with some good Americans from Montana, not some Wall Street looters or crooked politicians:

Hi Paul!

Steve built a wooden crate for it and the motor is bolted to the floor so it won't move. Then he took it to the local hardware store and had it banded for extra security. So, it should ship A-OK! I'm checking on freight costs now and will drop you another email when I have some figures for you. Take care! Jeannine t's a K-model

OK, these are some genuine cool people, and I realized I should have expected it from folks in Big Sky country. The very same day, I got a second email:

Hi Paul!

I checked on some estimates with UPS Freight and FedEx Freight and UPS seems to be the better cost, so far. UPS was approx. \$318.69 and FedEx was \$379.74. I didn't calculate liftgate services as part of the cost as I didn't know if you would need it or not. The crate weighs 200 pounds so don't know if you have a buddy that could help you unload it or not. UPS charges an extra \$125 for liftgate and I'm not sure what FedEx would charge. Why don't you give Steve a call at 406-xxx-xxxx as that might be easier than doing email. Thank you and take care!

Jeannine

I emailed Jeannine that I wanted the shipment insured for the \$2500 I won the auction for. I also offered to send 50 or 100 bucks extra to cover the crating. Jeannine wrote back the next day:

Hi Paul!

So glad you're excited about buying this motor! I've been on the phone with UPS and the shipping cost including liftgate service at delivery is \$395.56, plus UPS insurance covers for free the first \$200 value and charges \$69.00 for additional \$2300 value. So the total cost of shipping + liftgate + insurance is \$464.56. Steve is actually going to drive to Spokane, WA to the UPS freight terminal to ship the motor off. There is no cost for crating the motor. We just want to make sure it gets there safe and sound! I'll create the eBay invoice now and get it off to you. Take care! Jeannine

So I sent a PayPal right away. People this nice don't need any deadbeat bidders. I guess it all could have been some elaborate scam, to just seem genuinely nice and then rip me off, but I just couldn't see it. Montana is a long way from Washington DC or Wall Street.

PayPal didn't choke on the payment, but I have since learned there are limits to how large a payment you can make. I think my limit was about 4 grand, so I was still under the limit even with the shipping.

OK, so I did the buy-it-now early Monday morning, and on Wednesday I get an email:

Hi Paul!

You must have been reading my mind as I did need your phone number! Thanks for thinking of it. Yes, we received the PayPal notification and thank you so much for your promptness! I must apologize for being so slow in getting everything done. I'm actually in Oregon taking care of my Mom after surgery and so we've been having to communicate back and forth to get everything processed. I can only get on the computer down here at Mom's assisted living facility late in the morning and it's locked up around 5-6 at night, so it really hinders me.

Now Steve can do everything from rebuilding antique tractors to fabrication to operating heavy equipment to building Harleys, but when it comes to computers that's my area of expertise, and, unfortunately he's left at home to struggle to get all the paperwork done! So, we really appreciate your patience!

You should give Steve a call at 406-xxx-xxxx to talk motorcycle stuff and get the scoop on the K motor as all I do is pack behind him and watch the scenery! Take care and will keep you updated! Our goal is to get the motor to the Spokane terminal in the next day or 2! Keep your fingers crossed!

Jeannine

My patience? Heck I have had sellers not respond after a week. These folks are great. Notice they ride. That explains a lot. Bikers from Montana. OK, any tiny little worries I had about getting ripped off or having the engine show up junk are dispelled. So it turns out Steve has as much trouble dealing with UPS online as I, and even with phone help the goofy form wouldn't work. I'll give them this, they still gave us the online price even though they had to explain their goofy forms.

I have had even more trouble with Fed Ex, but that is another story. I called Steve up and we had a nice talk about bikes and life. Turns out the engine was a friend's, who left it to him. It is one of those projects that the friend never got around to. Steve is a Panhead guy, and I think he said he has a new bike too, a bagger no doubt.

So a few more days go by as UPS jacks things around and poor Jeannine, who is on Oregon taking care of her mother, is just apoplectic. I keep telling her to take it easy and just get her family stuff handled. She gets back and her and Steve go to UPS and get the motor shipped.

I think shipping did cost more than I paid, but Steve just covered the extra. It only took a couple days and it was down in California. The bad thing is UPS told me "Between 2:00 and 6:00" and it was almost 7:00PM when the driver showed up in his big rig. He was a heck of a nice guy, so no hard feelings, but I really did not need to take 4 hours off work to sit and wonder where my motor was.

The only bad thing is that Steve used those infernal square-head wood screws for the crate, so I had to drive to Lowes to buy some bits. I was about going crazy, but I got the over 200-pound crate muscled out of the garage and into the rec-room I use as a shop. I got this square bits chucked into the drill and behold:



Boy Steve sure is a mechanical genius. I was a bit worried about the carburetor or some other delicate part getting banged up in shipping. I didn't realize that when Steve said he built a crate, he meant a **crate**. I have a \$220 Harbor Freight hoists in the ceiling where a skylight is, so I used that to get the crate up on the old desks I use as work benches.



Oh man, check out the steel mounts Steve welded up for the crate. The motor, well actually its an engine. Motors are electric, engines are internal combustion. So anyway, the engine is in the exact shape I expected from the great pictures Steve took for the auction. This is when I realized the heads were polished, not chromed. I was pleasantly surprised., The biggest deal was I was able to feel under the cases and it feels like there are no "zippers" as we bikers call the welded-up sections that have been repaired. The delicate area around the speedometer sending unit was fine, and that is a big deal. A really big deal since I just broke a chain in my 1962 Sportster and broke a cherry set of cases as the sprocket cover bolt got ripped out. At least I have the pieces. I think I bought this project to make amends to the Harley gods for damaging my 1962.



Here is the primary side of the engine. To me the serial numbers look good, but I am sure the nit-pickers on the forums will be crying how its a re-stamp or something. Sorry, not from Steve and Jeannine. Right about now you have to suppress the urge

to start taking things apart. There are 20,000 Sportsters in garages all over America that are in pieces since it is so easy to take things apart and so hard to put them back together.



The front of the cases don't have any "zippers," and the fins all look good. Steve did such a nice job crating this up. You can bet your bippie I am saving this crate. It will fit any K-model or Sportster engine from 1952 to 1984, and probably later. You never can tell when you or one of your friends might need to ship a motor.



Everything looks just dandy back here. No "zippers". It looks like someone painted the cases black, this is not stock, I am pretty sure they were just natural aluminum. There is the correct steel rear motor mount. There are two types of rear motor mounts Harley used. Steel and cracked. Steel from 1952 to 1962, part number 16201-52. Cracked from 1963 onwards. That is part number 16201-58A, and its made from aluminum.

The bad thing about the steel mount is that early version captivate the kick-starter shaft, the hole in the mount is too small to let that shoulder you can see on the kickstarter shaft pass through. Worse yet, the cases captivate the rear motor mount. So you can't get the kickstarter shaft out without taking off the cylinders and splitting the cases. I have no idea why the otherwise brilliant Harley engineers did

something so retarded. If you drill out the motor mount it weakens it. If you turn down the shoulder on the kickstarter shaft, you reduce the thrust bearing area. Just hope you don't bend the shaft. Maybe one reason to have the hole so tight, is so if you break a sprocket cover, the shaft has enough support so you can still kick the bike over.



The oil fittings all look correct. In the old days, before the AMF finance people almost destroyed Harley, they routed all three oil lines inside the case. That took a lot of drilling. Sales people want things cheap to make that sale. Finance weenies want things cheap so there is more left for the 1%. Engineers want to make things good. But it is two against one, and if you don't have any marketing people that care about the brand, well the finance types force the engineers to cheapen the product until its junk. By 1977 when the AMF-financed case redesign happened, the feed and return lines were rubber hoses that ran directly to the oil pump, near all these places where the line could get cut. The vent line came off the back of the gearcase. Die beloved Harley. Once

Harley management bought the company back from the AMF finance weenies in 1981, they put the brand back in. It was a close call. The place where the aluminum motor mount breaks is right behind the right hole at the far right of the picture. It might not break sitting on a conference room table, but if the front or top motor mount gets loose, or if you drop the bike on the kickstarter, it will crack that thin section of aluminum, guaranteed. I buy all the steel motor mounts I can find and retro-fit them on all my iron Sportsters. I call this "engineer's revenge".



The top end seems in good, but rusty, shape. The K-model is a mash-up of a 45 cubic inch flathead with a modern unit-design case. The engine and transmission are in one case. They stuffed that into a modern chassis with hydraulic forks on the front and shock absorbers on the back. This is 1952. The Duo-Glide big bike panhead came out in 1958. The carburetor looks fine, all original and all there. There is a fellow on eBay that rebuilds these old Linkerts, and I am sure I can call him in to rescue me if I can't fix anything in the carb. The regulator is brown, I wonder if it came off a car or truck. I thought this was too big to be a stock regulator but the one in the

parts book look just like this. The parts book does show a "mounting kit" and that does not look like this regulator.



The carburetor was included which made me feel \$2500 was a fair price. It is probably the real carb that came with the bike in 1952. That, the generator, and the fact that the motor was not in pieces inside a peach basket. The Linkert looks corroded, but bead-blasting will amaze you. [I have since decided to not bead-blast the carb. I think I will ultrasound clean it.] That cylinder base nut looks just like the ones on my 1979 Sportster. Its the longest-running motorcycle model in history.



The carb still has the delicate choke lever and it still works. Thanks for the crate, Steve.



Here I try out the choke for the first time. It is pretty scratchy, but it works. Sixty years old, and it works. Too cool.



The manifold is rusty but the nuts don't look too bad. There is an NOS (new old stock) one on eBay for \$400. I am tempted, but one of my goals is to show how Harley engineers built for eternity, so I would much rather just clean this one up and use it. I don't want to risk any air leaks. I burned up a piston in my 1977 Sportster due to an air leak in the manifold. I guess those little flat spots in the heads are where you rivet in the threaded nipples that these big nuts screw to.



The circuit breaker, sometimes mis-called a distributor, is rusted badly. Harley interchangeability means I can slap in an auto-advance circuit breaker. This one you advance and retard by hand, with a twist grip on the left side of the handlebars.



The valve lifter covers are peeling, another reason to hate chrome. The original covers are cadmium plated. There are aftermarket covers available. It is doubtful that these would ever seal oil again.





The heads look to be in great shape. I thought they were chromed with I bought the motor, so I was delighted to see they were polished aluminum.

The generator and regulator looked great in the auction listing and they look great up close. I have a an electric motor that I can drive a Harley generator with, so I can check out the generator and regulator before I run it on the bike.

I also just got a "Growler" with a bunch of parts from a buddy. A growler is a transformer setup you can test out armatures with. I am now a member of the Growler club for men. .



Here is the rusty kicker spring. I don't think these were chromed in 1952. Either they were Parkerized, or they were painted black. It took a lot of Tri-Flow to get this off. I have since got a couple cans of Kroil for the rusty bolts and such.



Here is the shifter shaft. It does not look bent. Note that it is splined. I had a smooth bore lever that fit over it, but then got a splined one, I think aftermarket. Note the ultra-cool angled Zerk grease fitting at the bottom of where the shaft comes out..



Here is the oil pump. It looks just dandy. Even the switch is in one piece. This is one reason I think it was right to buy this baby. Working oil pump, generator, carburetor, and a rusty but working circuit breaker. Add those up and it is worth more than the individual parts, since these came on the engine from day one..



The sprocket looks to be in pretty go shape. I have taken to putting a new sprocket on with every new chain. The sprocket on the brake drum can last for a while, but the small tranny sprocket gets worn pretty bad, pretty quick. A worn sprocket will ruin your brand new chain in a few miles. Thing, is this 1952 sprocket may be different than the aftermarket and factory sprockets for Sportsters.



While we were back at the sprocket, here are shots of the kickstarter from behind.



Here is the primary cover in the same area. That big boss is for mounting a brake switch.

This is one of the few bad design philosophies of the K-model. The brake and pegs are part of the frame, the brake switch should be part of the chassis as well. Harley adopted this design philosophy in later model Sportsters. Then they moved the pegs to mount on the engine. Go figure.



And finally, here is the VIN (vehicle identification number). This brings up an important point. As Kirk over at Sporty Specialties will tell you, don't spend a bunch of money on the engine before you check to make sure it is not on the hot sheet.

And don't just ask the cops or the DMV. You have to go to the Highway Patrol auto theft unit in your town. Their computers search all the way back, and for all the states. This way you don't get your bike impounded or some other grief.

A buddy of Kirks got a bike impounded by the Customs people because they have the same computer as the Highway Patrol. Make sure your stuff is legal. If this does come up hot, the nice Highway Patrol people give you a simple choice. Turn in the engine, or take a felony auto theft charge.

What scares me is reading on the forums, "Oh every old Harley has been stolen once or twice.". Lets see what happens.



Here is a restored 1952 K-model from the Smorg section of this website. I am pretty sure the rubber bellows on the front fork tubes are incorrect. The earliest models had "cowbells" the same way old Panheads did. The K-models ones are smaller, but have a similar style. I might be able to cut up an aftermarket set of big-bike cowbells and make them look right. That would test my welding skills, but I did manage to find a tiny ox-acetylene torch like jewelers use. Other than that, I might try to tig weld them. There is some

guy I see on eBay who claims to have stainless steel cowbells for big bikes. If I can weld that with a stainless rod, maybe I can polish up the mess after I cut and weld them and have a set that looks half decent. Like I have said, my first goal is to just get the parts in one place. Then to rebuild the engine, then to ride the bike a bit. Only after I have some miles on will I pretty up. Building things takes engineers, architects and interior decorations. They are important, but you don't send in the interior decorators to the jobsite first.

Date	Descript	Cost	Shipping	Total
03/21/12	Engine, uncrating	\$2,500.00	\$464.56	\$2,964.56
03/23/12	Rolling chassis, uncrating	\$3,500.00	\$669.00	\$4,169.00
		\$6,000.00	\$1,133.56	\$7,133.56

Here is the table as I buy parts for this project.