

Heathkit of the Month:
by Bob Eckweiler, AF6C



HOUSEHOLD PRODUCTS

Heathkit GU-1800 “MINIMIZER” TRASH COMPACTOR

Introduction:

It's April again and, as is the custom of this series, an unusual, obscure, preposterous or just plain made-up kit will be reviewed. For those awaiting part two of the HW-12/22/32 article, it is written and was supposed to appear in the March *RF*. Unfortunately, due to a project occurring at our March meeting, much of the space in the newsletter was filled with project related articles and the editor decided to hold the article for a future issue. It WILL appear in the May issue (as I am the designated editor for that month!)

My initial problem for the April article was finding a kit to review. At our recent board meeting one member showed dismay at the Heathkit articles, stating, “Who cares about forty year old Heathkit trash?” The word trash struck a chord in my head. I thought, “Didn't Heathkit once make a trash compactor?” Perusing some early 1970's Heathkit catalogs I found the GU-1800 listed. Searching the web, very little information on the kit was found. No manuals, no pictures - other than from the old ads, nada. Even the many places that sell Heathkit manuals drew a blank. I finally did find a review of trash compactors in the June 1972 issue of Popular Mechanics which included the Heathkit. Undaunted by this lack of information I continued on!

Heathkit GU-1800 Minimizer:

Heathkit introduced the GU-1800 in late 1971, see Figure 1. An ad appeared in the October issue of Popular Science of that year announcing



Figure 1: Heathkit GU-1800 Trash Compactor

“Ten exciting new Heathkit projects for wintertime kit building fun”. Included in those kits was the GU-1800. It sold for \$199.95 at introduction, saving you \$20 over the Sears Kenmore compactor and \$40 over the current General Electric model of the same period. The GU-1800 came with five plastic lined bags and a can of deodorant. It had a shipping weight of 203 lbs. and required motor-freight shipping.

In the 1972 catalog #800/40 the price of the GU-1800 was reduced \$20 to \$179.95; in that same catalog the plastic lined trash bags sold for \$4.99 for a box of 15. The GU-1800 continued to sell into 1974, but was no longer listed in the catalog in 1976.

GU-1800 Assembly and Features:

The GU-1800 was advertised as a “Two-Evening” kit (6 to 10 hours). The construction is mostly mechanical with minimal electrical wiring. The basic frame came as a welded structure to assure alignment and strength. The ram rides in the frame, driven by two jack-screws. The trash is compressed with a force of one ton. As shown in figure 2, a 1/3 horsepower motor drives a speed reduction pulley via a toothed rubber belt. That in turn drives a chain sprocket that drives the two jack screws, moving the ram. Pressure sensitive switches measure the force and detect when compression has stopped. the motor then reverses, returning the ram to its resting position and shutting the motor off. For safety, there are interlocks and a key operated lock to prevent kids and fools from playing with the compactor.

The compactor measures 15” in width and 25-1/2” in depth. It’s height is adjustable from 34-3/8” to 35-1/8” to fit under a counter, or be stand-alone, or built-in. The finish is white enamel with a marble-textured vinyl clad top. The controls are on the front at the top and include a rocker switch and the key-lock switch. The unit runs off 120 VAC power

and requires up to 10 amps. A full compacting cycle takes about 60 seconds, less as the bag gets fuller. Heathkit claims that a single plastic-lined bag can hold a week’s garbage for the average family of four. It compresses garbage to approximately 1/4 of its original volume. The article in Popular Mechanics comments that they found “...that one bagful of compressed waste equals the contents of two large conventional-type garbage cans...”.

The upper of two doors on the front of the unit is where the garbage is added. Each time the door is operated a shot of deodorizer from a replaceable aerosol can is released to keep any odors under control. No information was given on the deodorizer can other than it is of the 9 ounce size. Whether any store-bought can of the correct size would work was not mentioned. However, since nowhere did Heathkit offer replacement cans, it probably was readily available at your local store back then.

The lower of the two doors slides out for access to remove the full bag, which is designed to easily lock-fold to seal the contents along with any odors and prevent spilling of any liquids. Heathkit sold replacement bags for the GU-1800. Whether

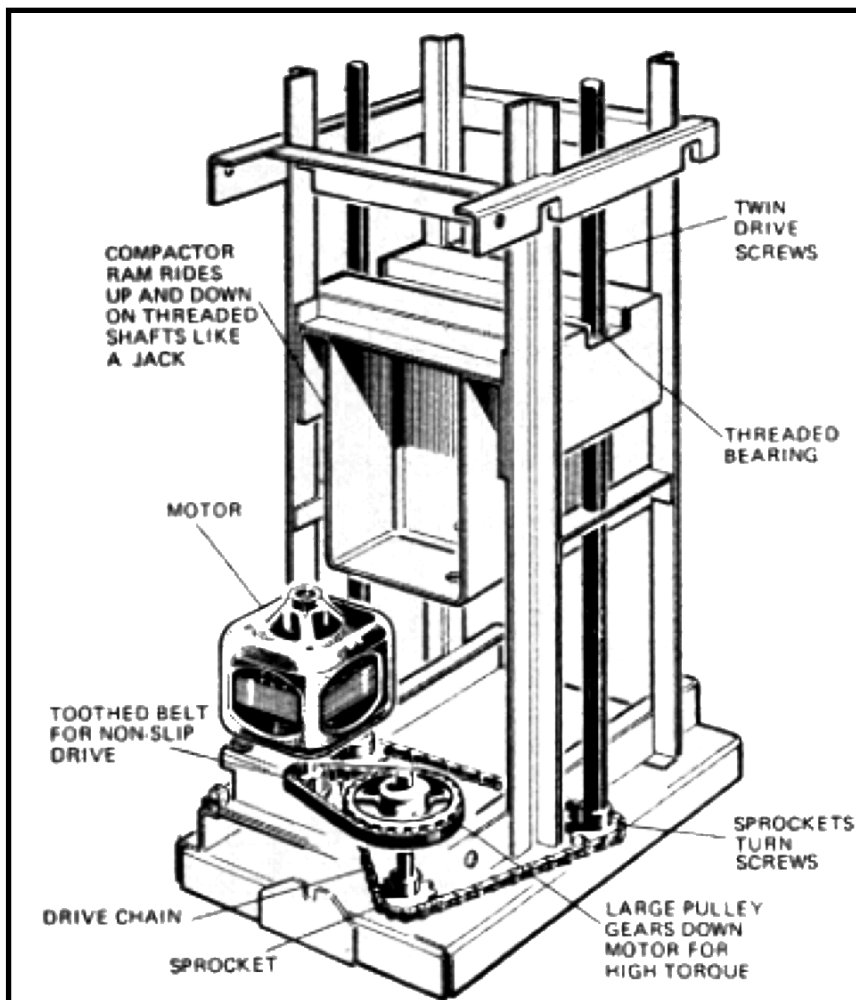


Figure 2: Internal drawing of GU-1800 compactor mechanism. View is from the rear, where the motor is located the motor.

they were of a standard size or not, could not be determined. A search of the web didn't reveal any bags that said they were compatible with the Heathkit GU-1800. No bag size specifications were given in the advertising.

Interlocks prevent the compactor from running when a door is open, the doors lock, preventing anyone from opening them, while the compactor is running, and the electrical key lock can prevent unauthorized use.

GU-1800 Operation:

The operation is quite simple. If you have small kids or elderly parents probably the most difficult part is finding where you left the key. If you have young kids it is probably on a nail above their reach. This doesn't necessarily work for elderly parents. Trash is added by opening the top door and tossing the trash in. When the door is closed a squirt of deodorant is added to the contents of the trash bag. If you only added a little you may not need to compact at this time, otherwise, with the key switch activated (you have found the key by now? - or perhaps, like many, you keep it in the lock all the times) you press the momentary rocker switch. The GU-1800 responds with a whining noise, followed by the sounds that clue you as to what you recently placed in the com-

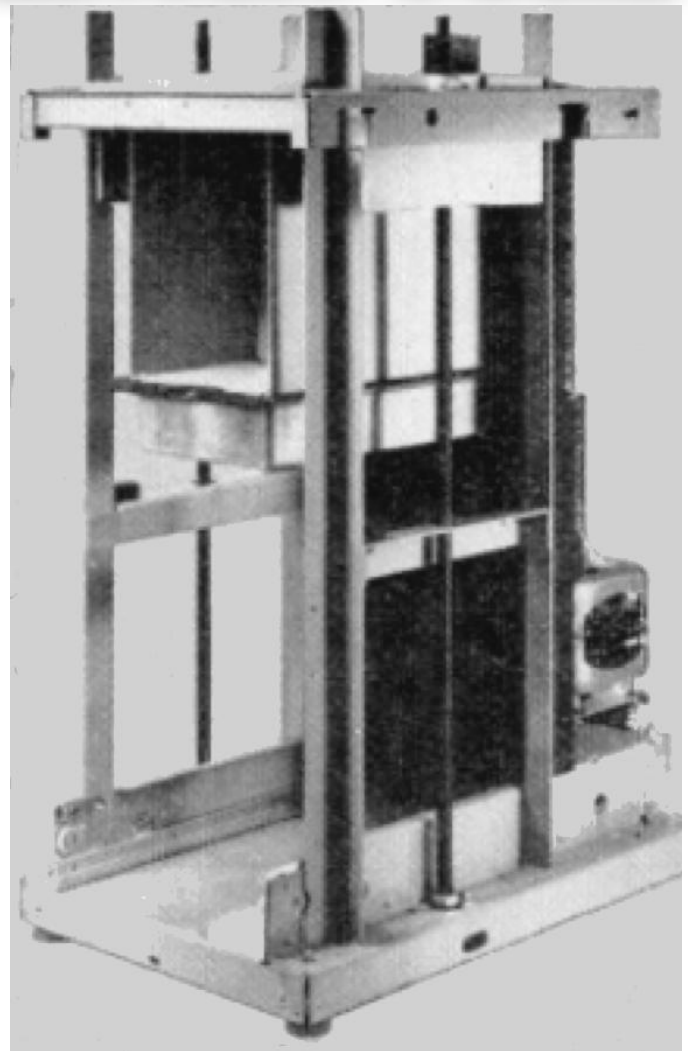


Figure 3: Photo of the compacting mechanism of the Heathkit GU-1800

SAVE \$20 NOW ONLY 179⁹⁵

Build the Heathkit "Minimizer" and put the squeeze on trash

In as little as two evenings you can build the "Minimizer". Uncomplicated drawings and simple instructions speed assembly time . . . so you'll be carrying out the trash only once a week. The "Minimizer" compresses cans, bottles and kitchen trash into one lock-folded, moisture-proof bag . . . holds up to a week's trash for an average family of four. A packing ram descends with 2,000-lb. force to reduce refuse to almost 1/4 its original size. When the bag's full, you simply fold over the top and remove a neat, dry package for normal rubbish pickup. And the "Minimizer" deodorizes the contents each time the drawer is used. For safety, a key lock switch is provided, and an interlock automatically turns unit off if drawer is not fully closed. Unit fits under counter or can be used free-standing. Measures 35 1/2" H x 15" W x 25 1/2" D. Bright white enamel finish and marble-tone vinyl-clad top complement any decor. Kit includes troubleshooting instructions so you can do any periodic adjustments or servicing yourself. Five plastic-lined bags and 9-oz. can of deodorant included. Operates from any conventional 120 VAC 3-wire grounded household outlet. Let the "Minimizer" take over your chores. Order yours, today.

Kit GU-1800, 210 lbs., Exp./Frt. 179.95
 GUA-1800-1, 15 plastic lined bags, 10 lbs., mailable 4.99

No money down on any kit - up to 2 years to pay - see order blank for details.

Figure 4: Heathkit GU-1800 blurb from their 1972 catalog #800/40

pactor. These sounds can be benign as cardboard crushing and paper and plastic crinkling; to more aggressive - but still acceptable - sounds of glass bottles breaking, tin cans crushing and chicken bones crunching; to the unacceptable sounds of a pet uttering its last screech (either you're negligent, or one of your kids has found the key).

When the sensor detects that the trash is compacted to the correct extent, the motor reverses, the ram returns to its resting position, and the compactor is ready for more garbage. Should the sensors detect that the bag is full, the motor will not operate, and it is time to slide out the bottom drawer and remove and seal the full bag and put in a new bag. In 1972 about 33 cents for a bag was quite reasonable, especially if you could purchase them locally at your local Heathkit store instead of using mail order.

So what can you NOT put in your Heathkit GU-1800? I'm sure the elusive Heathkit manual includes a list. The Popular Mechanics article recommends not compressing *“food wastes that spoil quickly and produce strong odors, such as fish, and citrus rinds”*. Also, aerosol cans are not recommended as they might still have pressure and explode with damaging force. Other than that, most things you would toss in your garbage can (in 1972) are acceptable. This is where common sense plays an important part in owning a GU-1800. Since the paper bags are lined in plastic, wet items are acceptable. But water is not compressible so wet items are okay but a jar or milk container full of water (or milk) isn't.

Conclusion:

I've never owned a trash compactor. I do know of two people who do have them - both are hams. Come to think of it, I never asked them if they were a Heathkit model. I imagine it is a handy device, but with today's recycling I have trashcans full of recyclable CRV cans, glass bottles and plastic bottles. I won't get into the awful California CRV system. But, in Massachusetts and other states with a real deposit system

it is simple to return bottles and cans at the grocery store without long lines and such.

When I was researching trash compactors on the web, there was a link to a book - "The Indio Trash Compactor Murders" by Michael Shepler. It was written in 1979 and the note on Amazon was "Be the first to review this item". No thanks!

What was almost as amazing were all the references to trash compactors that involved the Star Wars movies. Of course there was the Star Wars clip of four of the heroes caught in the Death Star trash compactor - an interesting scene, but then there were white papers, theses and other writings, one entitled *“On the Implausibility of the Death Star's Trash Compactor”*. Amazing, can you now get a PhD in "Star Wars studies"?

If anyone is the proud current or previous owner of a Heathkit GU-1800 Minimizer Trash Compactor, please drop me an email and let me know your experiences. Are bags still available? I just have to assume Heathkit used a standard bag, but I know they came imprinted with the Heathkit logo and Minimizer name on them.

Next Month:

Next month will be part two of the HW-22 series article. I do hope to a future short article on the later A-series of those kits. Meanwhile, checkout the Heathkit.Com site. They have added an antenna and a soldered version of their Explorer Jr®. radio, to their new line.

73, from AF6C



This article originally appeared in the April 2016 issue of RF, the newsletter of the Orange County Amateur Radio Club - W6ZE.

Remember, if you are getting rid of any old Heathkit Manuals or Catalogs, please pass them along to me for my research.

Thanks - AF6C