

by **Thinkenstein** on March 11, 2011

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I'm a refugee from Los Angeles, living in backwoods Puerto Rico for about 35 years now and loving it. I built my own home from discarded nylon fishnet and cement.

Intro: Air Filter from a Cat Food Can

I recently bought a new-old vehicle and it had no air filter for the carburetor. My first attempt to find one at the auto parts store failed, so I made my own out of an aluminum cat food can and stainless steel parts from an old coffee maker I found.

The stainless steel screen from the coffee maker is very fine, although maybe not as fine as a paper filter. At least it will keep the cockroaches out. Also, if it ever clogs I can clean it and keep reusing it.



Step 1: Design Evolution

The design started out with a bunch of round holes drilled in the bottom of the can. One hole centered the can on the threaded vertical rod of the carburetor. The next layer was the fine screen. The top layer was a stainless steel circle from the coffee maker, with round holes in it. The end result: the engine choked climbing hills for lack of sufficient air.

The next improvement was to cut larger holes in the can, using a drill and a nibbler tool (see the next step). For some reason, I chose to use three holes with three arms. Before even trying it, though, I noticed the other round part from the coffee maker with four holes.

I replaced the many-hole round part with the 4-hole round part and cut the can with 4 corresponding holes. That way the holes line up for more direct air flow.

Thus far, the car is running fine. If the air filter ever clogs, I can always just clean it off with detergent and water and keep using it. There will be no need to ever buy replacement paper filters.

A nut and spacer washer hold the parts together on the carburetor. Pressure is around the edge of the can, not in the center.





Step 2: The Nibbler Tool

<http://en.wikipedia.org/wiki/Nibble> This link takes you to a Wikipedia article about the nibbler tool.

As its name implies, it takes tiny bites out of sheet metal. When you squeeze the handle, the nibbler jaw closes, nipping of some metal. You can drill a hole, insert the head of the nibbler, and nibble out a larger hole.

Nibblers can be found online.

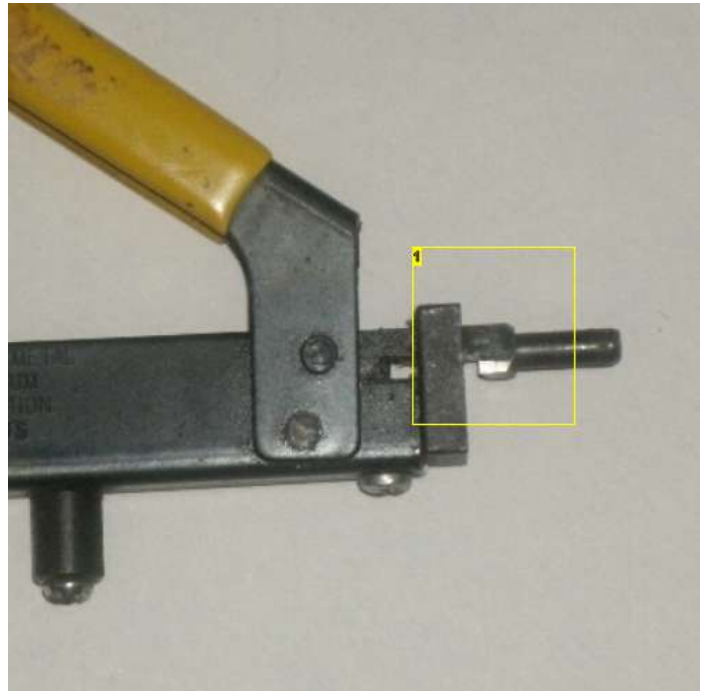


Image Notes

1. This is the cutting jaw.



Image Notes

- 1. Cuts 18 GA. (.048) soft sheet metal.

Related Instructables



Replace air filter on BMW 135i, 335i, 535i with Helene Performance Streamline SE filter panel by baduncadonk



Homemade Air Purifier & Cat Litter Box Air Filter by bclamore



Cheap Air filter by steveo625c6



Add Horsepower and Save Gas With a Performance Filter System by Scout trooper48



How To Change Your Engine Oil by benj.iastate



How to change your oil by monkeys