SCHMIDT CONSULTING

Cat Proof Automatic Cat Feeder

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My daughter purchased an automatic cat feeder to dispense dry cat food. Unfortunately the cats figured out they could put their paws into the auger to get additional food. This modification mounts the feeder on a small wooden box to prevent cats from getting more food then the human programmed amount.

Pet Mate C3000



My daughter purchased an automatic cat food dispenser, a <u>Pet Mate</u> <u>C3000</u>. The feeder itself works as advertised. Unfortunately her cats figured out they could put their paws into the pellet auger to obtain more food. Apparently this is not an uncommon problem as it has also occurred with one of her friends.

She asked me if there was a way to harden the feeder without having to modifying it or make it difficult to clean.

Figure 1 Pet Mate C3000 Automatic Feeder

Hardened Automatic Cat Food Dispenser

After thinking about it for a while decided the best solution was to build a box and locate the feeder mechanism on top. I detached the food tray and located it on the bottom and used PVC pipe to connect the two. The box is 16" wide, 12" deep and 12" high (12.5" with mounting feet). I wanted it to be as small as practical but stable so it could not be easily be tipped over. The top and bottom are made out of an old counter top so it is easy to clean. The rest are pine boards I had laying around.

I used 2" PVC pipe to channel the food to the dispenser food tray. A 3" to 2" reducer is located on top under the auger discharge. The pipe carries the food and a 2" street 45 directs it into the food tray. The reducer has to be removable so it is not glued to the vertical pipe. The dispenser has three keyhole mounting slots. I used them to affix the feeder to the box. Unfortunately there is not enough room to both center the spout over the 3" PVC pipe and slide it out of the way to remove the feeder when it is time to change batteries. The easiest way to address this was just to use a friction fit on the 3" Reducer so it can be easily lifted off. To fit the reducer under the spout I had to notch the portion facing the feeder. Since the feeder needs to be removed for battery changes I did not fully tighten the three mounting screws. Even a little loose they hold the feeder pretty securely. To secure the feed tube used a component hold down clamp I had laying around.

The food tray originally attached to the feeder with a couple of molded spring clips. I used two large head screws screwed into the base and covered to exposed threads with heat shrink to minimize chafing of the food bowel clips. The food tray clips to the screws to keep it in place.

Not shown in the pictures, I added a strap over the food hoper for extra protection. It was made it from a trade show swag bag shoulder strap I had laying around. Added a snap fastener at one end and screwed a mating snap to the front of the box. The other end of the strap is attached to the rear wall with a hook eye. The adjustable length works well to keep it snug over the food hopper. To refill the feeder just unsnap the strap.

Four rubber bumpers screwed into the bottom finished it off.



Figure 2 Cat Proof Automatic Feeder



Figure 3 Feeder Mounting Details



Figure 4 PVC Pipe and Food Tray Details

Cat Feeder in Action



Figure 5 Waiting For Dinner

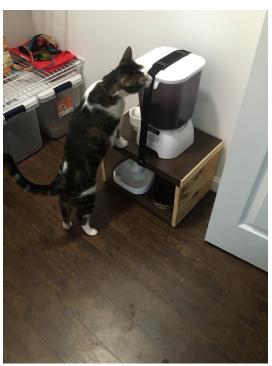
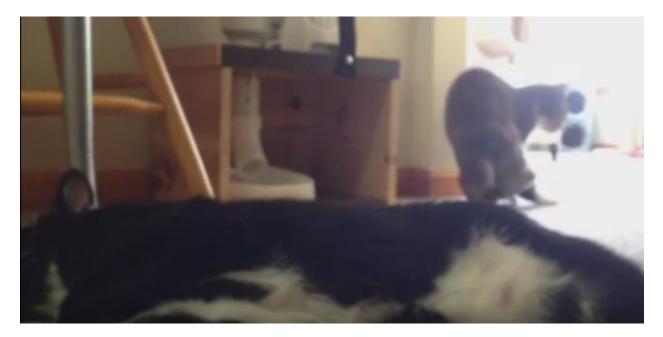


Figure 6 Attacking the Strap



YouTube Clip

All in all a fun project. Time will tell if this does the job on I need to come up with version 2.