

## **Let's Hear It for Good Engineering!**

Good engineering is more than just functional, it's rewarding. What do I mean? I'll explain.

First, let me suggest that you have to be somewhat mechanically proficient, or at least interested in such things, to appreciate the rewarding aspects of good engineering.

Second, I'm not referring to, say, a Mercedes-Benz automobile. They're well engineered, yes, but it's the least you should expect when you plop down 50-80 k to own one. I'm referring to everyday engineering that makes things go more smoothly in our lives.

How about the lid that goes on the top of a takeout coffee cup made of Styrofoam? That's right, a coffee lid. "The man's finally lost what few marbles he's had," I hear you say. Perhaps, but let me make my pitch before you cast your vote.

At one time, coffee lids caused more than their share of trouble. They often popped off, lay flat across the cup and required you literally to tear the plastic to create an opening you could sip from. If you've ever had the dubious distinction of having to use one, you often burned your tongue and lips sipping. Further, once torn, the tab wouldn't close again, causing your coffee to lose heat and splash all over the car if you put it in the cup holder.

Enter the new, improved lid. There are a few variations on this theme, but it's raised, mostly in front, so that coffee doesn't splash out easily. It also provides an air space, so, when you sip, it helps cool the liquid. Second, the tab can be easily removed from the opening and snaps back just as easily and firmly. Third, and here's the icing on the cake, if you notice, around the edge is a recessed trough, where any coffee that may dribble there while you sip doesn't end up running down the side of the cup, ending up on your shirt, blouse, or jacket.

The end result is you enjoy your coffee while on the go with no muss or fuss. You then deposit the cup in the nearest waste receptacle, unaware of how easily everything went; not a bad overall experience for such a small cost. That's what I mean by rewarding.

Here's another example of the little things. I'll admit that I'm a bit more than a little OCD and the bathroom is my area of compulsiveness. Nothing turns me off more than a dirty sink, bathtub, shower, or toilet. Just so you don't think I make my better half's life miserable in this area, I perform the necessary elbow grease to prevent the above turning off.

In my view, one of the biggest eyesores in an otherwise clean and sanitary bathroom are the two bolts that hold the toilet to the floor. They stick up, corrode, catch all sorts of dirt and generally look disgusting. A solution to this is a cap that covers each bolt, but, aye, there's the rub ... they usually come off. I've seen plastic flanges under the nut onto which the cap is supposed to snap, but it's an iffy proposition and one of them usually doesn't work right. Another approach is to fill the cap with caulk, press it on and wait for the caulk to dry. It's better, but repeated cleaning often loosens it and you're back to square one.

Recently, I wanted to put caps on the grody bolts on the sparkling, white toilet in our usually spotless bathroom and expected to use the caulk approach. Lo and behold, I found a product that provided a very rewarding experience. Called Twister Bolts, and for the modest cost of less than \$4, I got two brass bolts with washers, inserts and caps. The manufacturer intended this kit for installing a new fixture, but I only needed the insert and cap. I simple screwed the nylon insert onto the existing bolt and screwed the cap onto the insert until tight. Voila! A cap that stays put and gives the toilet a neat, clean appearance. Success!

Admittedly, both instances are tiny things, really, but pay off in a large sense of satisfaction. If engineers and product designers can come up with such inexpensive items, don't you wish more products in everyday use employed the same standard? Sadly, that's often not the case with even some more expensive items. I don't know how many times I've purchased something, only to have to redesign one, or more, of its features. This, ladies and gentlemen, should not be!

I think there should be a place somewhere, where we can recognize engineers who provide such innovation and satisfaction for their service to mankind. So, the next time you and your friends are in a toasting mood, raise a glass to those souls who, more than most, make our everyday lives go a bit more smoothly.

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