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## Peter Parry wrote (on the Subject of the Saniflo)

Warning: people of a sensitive disposition might care to venture no further.

*Angus asked:*

My recently installed Saniflo does not behave as described in the user manual. On flushing the WC it's supposed to run continuously for about 15 seconds, mine pulses on-off 3 or 4 times for about 2-3 seconds duration. Any ideas?

*Peter replied:*

Sell the house, failing that give it away, if that doesn't work pay someone to take it or burn it down. To give you a clue - these ghastly instruments of the Devil are French. Add the French and lavatorial engineering - now see why I say get out while you can. Moreover this particular Frenchman was a lunatic with strong Anglophobic tendencies and a bad case of coprophilia.

I am quite sure the designer was also an ex-submariner Frenchman who missed the strangled screams of seamen who had got the valve sequence wrong in the submarines toilet and just been rinsed down with a few gallons of seawater (and the recently donated contents of the bowl).

They break down at the slightest opportunity. The only thing you can actually guarantee about them is that they will break down - very frequently. Basically the only way of maintaining the slightest semblance of serviceability is to impose on pain of repair the same rules as for a small yachts sea toilet - if it hasn't passed through you it doesn't go in the bowl.

They have an interesting design. The motor has poor starting torque and the macerator lots of tiny teeth. Ergo anything that has strands in it catches on the teeth and stops the motor from starting. Things with strands include anything with cotton wool (including cotton wool buds) and anything with cloth. Females in particular must not be allowed anywhere near these devices. If you were unfortunate enough to have the added misery of a sink (oh dear - you were warned) then add hair, strands from woolly pullovers and almost anything else that's at all fibrous.

When they break (which they will - that's an absolute certainty) their endearing characteristic is that you are left with a bowl full of whatever which you have to empty back the way it came and more importantly many feet of 40mm pipe still full of minced whatever. When you disconnect the pipe I'll

give you one guess where its going to go. Repairing or unblocking them is the most thoroughly revolting job.

Now to get to specifics - the pulsing is a fault in either installation or the pressure switch. Does it pulse with just the cold water tap running from the sink? The way they work is a low pressure trip switch switches on the motor when the small holding tank is full. This tank remains partially full all the time. If its pulsing either the switch has too low a hysteresis or water isn't getting into it fast enough. The motor should remain on for a few seconds after everything has emptied so that pulsing you are seeing shouldn't be happening.

As the failure rate of these diabolical things is worse than that of a F104 Starfighter I'd suggest you get the installer back (preferably to remove it forever). If it was installed by yourself then self flagellation with a few lengths of barbed wire and a call to the Saniflo people might be in order.

*Angus asked:*

Also, my system is a Sanitop with the outflow from a washbasin going into the top of the unit. I find that running the tap for a few seconds activates the Saniflo. Is there any way of adjusting the sensitivity of it so that it will only run when a reasonable amount of water has gone into the unit?

*To which Peter replied:*

No, but if it's oversensitive this might be related to the pulsing you are seeing.

*Angus:*

I don't see why the washbasin water cant just bypass the cutter/pump internally.

*Peter:*

Because these horrors are designed to be installed pumping upwards - the raving idiot who designed them thought it would be pretty neat to have something you could stick in a downstairs cloakroom and run the pipe upwards to join the soil stack in the bathroom. If that's how your installation goes cut out the selling the house bit - just burn it now. When it fails there is 10ft of pressurised whatsit just waiting for that final turn on the drainpipe.

The other reason the sink must go through the pump is that the outlet of the thing is at some pressure. Connect the sink a bit downstream and every time you pull the chain the contents of the loo make a pretty little fountain out of the sink plughole (I've seen one plumbed like that - the owner kept a sandbag in the sink on top of the plug).

Some models have an interesting feature - on the top is a reset switch, under the top cover is a screwdriver slot on the top of the motor drive shaft to allow you to clear the (frequent) blockages. However to get the top cover open to get at the drive shaft to free it - you've guessed - you have to disconnect the drain pipe.

How they can be called Saniflow when they are anything but sanitary (as you will soon find out) and rarely flow is beyond me.

As I said - sell the house.

Peter Parry. <http://www.wppltd.demon.co.uk>

## Peter Parry wrote on the Subject of the Expanding Foam

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A friend of mine once built a canoe. He spent a long time on it and it was a work of art.

Almost the final phase was to fill both ends with polyurethane expanding foam.

He duly ordered the bits from Mr Glasplies (an excellent purveyor of all things fibreglass) and it arrived in two packs covered with appropriately dire warnings about expansion ratios and some very good notes on how to use it.

Unfortunately he had a degree, worse still two of them. One was in Chemistry, so the instructions got thrown away and the other in something mathematical because in a few minutes he was merrily calculating the volume of his craft to many decimal places and the guidelines got binned as well.

He propped the canoe up on one end, got a huge tin, carefully measured the calculated amounts of glop, mixed them and quickly poured the mixture in the end of the canoe (The two pack expands very rapidly).

I arrived as he was completing this and I looked in to see the end chamber over half full of something Cawdors Witches would have been proud of. Two things occurred to me, one was the label which said in big letters: "Caution - expansion ratio 50:1" (or something similar) and the other that the now empty tins said "approximately enough for 20 small craft"

Any comment was drowned out by a sea of yellow brown foam suddenly pouring out of the middle of the canoe and the end of the canoe bursting open. My friend screamed and leapt at his pride and joy which was knocked to the ground as he started trying to bale handfuls of this stuff out with his hands.

Knocking the craft over allowed the still liquid and not yet fully expanded foam to flow to the other end of the canoe where it expanded and shattered that end as well.

A few seconds later and we had a canoe with two exploded ends, a mountain of solid foam about 4ft high growing out of the middle, and a chemist firmly embedded up to his armpits in it.

At this stage he discovered the reaction was exothermic and his hands and arms were getting very hot indeed. Running about in small circles in a confined space while glued to the remains of a fairly large canoe proved ineffective so he resorted to screaming a bit instead.

Fortunately a Kukri was to hand so I attacked the foam around his hands with some enthusiasm. The process was hindered by the noise he was making and the fact he was trying to escape while still attached to the

canoe.

Eventually I managed to hack out a lump of foam still including most of his arms and hands. Unfortunately my tears of laughter were not helping as they accelerated the foam setting.

Seeking medical help was obviously out of the question, the embarrassment of having to explain his occupation (Chief Research Chemist at a major petrochemical organisation) would simply never have been lived down. Several hours and much acrimony later we had removed sufficient foam (and much hair) to allow him to move again. However he still looked something like a failed audition for Quasimodo with red burns on his arms and expanded blobs of foam sticking everywhere. My comment that the scalding simple made the hairs the foam was sticking to come out easier was not met with the enthusiasm I felt it deserved.

I forgot to add that in retrospect rather unwisely he had set out to do this deed in the hallway of his house (the only place he later explained with sufficient headroom for the canoe - achieved by poking it up the stairwell.

Having extricated him we now were faced with the problem of a canoe construction kit embedded in a still gurgling block of foam which was now irrevocably bonded to the hall and stairs carpet as well as several banister rails and quite a lot of wallpaper.

At this point his wife and her mother came back from shopping.....

Oh yes - and he had been wearing the pullover Mum in law had knitted him for his birthday the week before.

*Peter Parry.* <http://www.wppltd.demon.co.uk>

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## The Self-Uninstalling Gas Water Heater

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By Andrew Gabriel

On Wednesday, my trusty Main Medina multipoint gas water heater decided it was time to depart from this world. Age unknown, but I guess at some 20-25 years old, it's filled a fair few baths and handled many showers in its time. Anyway, my Wednesday morning's bath was to be its last. As usual, it did a great job of providing a nice hot bath of water. However, it seems that it had a momentary lapse of concentration, that is, it failed to notice I turned off the bath tap and that the flow of water through it had stopped. Merrily, it continued to pump 33kW of heat into the pint or so of stationary water in its heat exchanger. Well, it didn't stay either stationary or water for longer than a few seconds. What with senility having set in far enough that it had forgotten what its role in life was, and with having found that it could make steam at a rate and at a temperature that Stephenson and Watt would have been truly proud of, it duly embarked on its final mission, to uninstall itself.

Steam production only within the confines of its own pipework was never going to be very satisfying exercise by itself - it would be much more exciting to involve all the household plumbing. There's the little matter of the flow restrictor valve on the water inlet which could limit the rate steam can be pumped out, but since that's only got a plastic centre, suitably hot steam

can just melt it out of the way, so that problem is easily overcome. So now let's see how far back up the water main we can blow steam - quite some way it seems, certainly far enough that a very respectable jet can be ejected from any cold tap which someone might happen to turn on. This gets boring after a while - have to find something else to do. Ah yes, get the steam hot enough and under enough pressure, and the solder in all the pipe joins/elbows can be melted and the joints blown apart - now there's a good laugh.

Well, by this stage I'd realised the house plumbing was having a fight with something, and the water heater was starting to let off a bit of a hot smell, so I quickly turned it off, just before any joints had completely separated. This was followed by cold water coming back into the hot pipes, which reset all the solder joints (not how they were before). It then picked up the molten guts of the flow restrictor valve and transferred it back into the water heater, leaving it to solidify in the flow detector pipe constriction, thereby completely blocking the water path through the heater.

Anyway, after a minute or two of surveying the situation and realising I had no further hot water (in fact, not any water out of the hot taps because the heater water path blocked), I decided to go and make the most of the last hot bath I might be getting for a while, which I'd just finished running.

Upon emerging from the bath, a post mortem of the heater and pipework ensued. It was decided against any resuscitation attempts, and death was pronounced.

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