6.4 Sleep Number Bed by Select Comfort

We bought two Select Comfort 5000 Queen beds in Dec., 2005 for $4,000 ($2,000 each, probably equivalent to today's P5 Queen, listing in 2012 at $2,100). It is a respectable bed, but has several disadvantages that conventional beds do not have. It is basically an expensive air mattress that I think can be marketed at a much lower price if they get rid of their high overheads. Therefore the price includes an unnecessary premium; you should be able to get the same quality air mattress for much less elsewhere, although I have not investigated other manufacturers of air beds.

The "sleep number" is misleading because although you can select the air pressure, it does not stay constant, not because it leaks, but because the mattress pressure for a given amount of air in the mattress depends on atmospheric pressure. If you set the pressure at 65 (the meter range is between 20 and 100) when the barometric pressure is normal, and then the barometric pressure decreases because the weather changed, the sleep number can creep up as high as 90; this can happen in a matter of hours. Conversely, if the barometric pressure increases, it can creep down to 40. The maximum difference in the bed pressure between highest and lowest barometric pressures is typically about 50.

The mistake many people make is to re-adjust the pressure to 65 when they see their meter reading 90. Now if the barometric pressure increases after re-adjustment, you can end up with a pressure of 15 (65-50)! Or, if you see your select number go down to 40 and you raise it back up to 65, and the barometric pressure changes, the bed can feel like it is at 115 (65 + 50), although the meter cannot read above 100. Thus, if you don't know anything about the weather effect, and you set the bed to 65, you could end up sleeping on a bed anywhere between 15 and 115! If you choose a number higher or lower than 65, one of your extremes will be even farther off. According to company statistics, most users set it near 65; therefore, the concept of sleep number loses most of its meaning.

The company provides no information on the change in bed pressure when the barometric pressure changes. If you are comfortable at 65 at normal barometric pressure, and the meter reading changes to 90 because of the weather, what is the most comfortable pressure for you? It may still be 65, but I suspect that it changes slightly because the buoyancy of the body changes the effective body weight when barometric pressures (density of air) change. For example, in a more dense medium, such as water, you are almost weightless.

What I do is to set the pressure at 65 when the barometric pressure is normal (30in-mercury or, equivalently, 760 torr, or 14.7 psi) and not re-adjust it when the weather changes. Your local barometric pressure is usually available on the weather report online. I wish the company would publish a pressure vs settings curve; I will try to do this. Thus I am sleeping on a bed anywhere between 40 and 90 depending on the weather. The extremes of weather do not occur frequently, so I am sleeping on somewhere between 50 and 80 about 90% of the time. The system tends to lose air whenever there is a electricity blackout, so I usually need to reflate after power outages.

I found out that one air chamber was leaking in 2006; it was probably leaking from the beginning, but I did not discover the leak earlier because this bed was in a guest room that was not frequently used. So in Dec., 2006, I requested a new air chamber to be replaced on their 20 yr warranty, and they replaced it free of charge.

In Dec. 2008, one of the two wired remotes broke down, so I asked for an exchange remote. I was told

that the wired remote cannot be exchanged and that I would have to exchange the entire pump and remotes assembly. This warranty exchange for a refurbished unit cost me $169 ($450-$306 warranty discount) + $10 tax + $15 shipping), because their "20 yr warranty" is prorated after 2 yrs. They did not request a return unit, so I wound up with 3 good pumps and one bad remote. In Mar, 2011, five yrs after purchase, another remote and a pump broke down (possibly from a lightning strike). Contrary to company reply that remotes cannot be swapped, I found out that changing remotes was very easy. Simply pop the remote open and disconnect a connector to the incoming wire. So I took the remaining good remote from the bad pump and swapped it with the bad remote on a good pump. Now I had two working systems and a bad pump with 2 bad remotes. Around Oct., 2011, another remote broke down (the LED indicators did not work so that you could not read the pressure, but the remote could still be used to control the pressure), so I bought a refurbished wireless system for $77 on warranty discount. A new unit would have cost $275-$154 warranty discount = $121 plus tax and shipping. With a wireless system, if a remote breaks down, you can just exchange a remote on warranty, instead of having to exchange an entire pump/remote system for the wired units which they do not manufacture any more. The list price for the new wireless pump/remote system is cheaper, $275 and it needs just one remote to control both air chambers of the double bed; the new pump is also quieter than for the old wired system. My total cost of maintenance for the 2 queen beds is $246 after 6 yrs.

The above applies to older systems that are not sold anymore (but there are still many in the field). The new systems have wireless remotes. Unfortunately, they have re-programmed the new remotes so that YOU CANNOT EASILY MEASURE YOUR ACTUAL BED PRESSURE! Previously, if you pressed the remote button, it displayed the actual pressure of the bed, so that if it had changed due to barometric pressure, temperature, leakage, power outage, etc., you can see the change. WITH THE NEW REMOTE CONTROLS, YOU CANNOT SEE THIS PRESSURE ANY MORE! Because the new remotes display only the previous pressure setting regardless of what the actual bed pressure is. Thus if you set the pressure to 65 and the actual pressure changes to 90 or anything else because of barometric pressure changes, leaks, etc., and you press the remote button, it will read 65. And the new instructions that come with the remotes do not tell you this. This is crazy because the entire motivation for this bed is that you can set the pressure accurately because that is (supposedly) so critical, but they have made it so that you can't measure it, so that YOU HAVE NO IDEA WHAT PRESSURE YOU ARE SLEEPING ON (unless you have the older system).

The only way to read the actual pressure with the new remotes is to change the pressure setting. If you change to a pressure different from your original setting, the meter will briefly (about one second) read the actual pressure and then change gradually to your new setting. This method of reading the actual pressure is not explained in any of their manuals that I have received. I don't know how accurate that brief reading is, because it is so short. What happened to their claim that the bed pressure is critical to your health and comfort?????

What will be the possible legal, medical, commercial, etc., consequences of their action? New owners of these beds may feel very happy that their pressure settings stay constant no matter what happens, but this is no way to sell a product. Some customers seem to think that the company has found a way to compensate for barometric pressure changes, but that is not the case.