Power flushing agreement



I have read the information below, and accept there is a possibilty, the power flush procedure may not work effectivley or may need to be repeated. I also understand

there can be side effects after powerflushing that can cause furher issues. I also understand that I may have to replace sections, or all of the system, and that powerflushing is often a first step in an attampt to recify a problem. I understand that if the power flushig is carried out as a planned prventative measure, it can still have side effects afterwards.

I agree to pay Willett Technical Services Ltd in full what ever the result of the power flushing procedure.

Signed Customer Date

Print name

Power flush information

If you are considering power flushing as a planned maintenance procedure to ensure the heating system is kept clear as possible, to remove the build up of sludge and bacterial material, then it's straight forward and may well have a high success rate.

However, if this is being considered due to a system failure, poor flow to the radiators or hot water tank, over heating boiler, (noisy boilers ketling) slowly heating radiators, and assuming the pump is working correctly, then the object is to remove a partial blockage, if this is the issue, and the restriction is from sludge type material that is <u>soft</u> and has collected in the radiators or low level pipe work, the power flush with chemicals, is often highly effective.

If the restriction is of a hard deposit, encrusted, then this is a far more risky procedure.

If the flush is principally successful, the remainder of the thinner deposits will/may shred and produce tea leaves or flakes that travel around the system and can get caught in the pump impeller and or in the boiler heat exchanger (especially small multiple pipe bore heat exchangers), the fitting of a magnetic and sieve type filter can significantly help catch these, but still requiring action to empty the filters.

The thinning of the deposits may enable small lumps or even larger bergs to detach and then circulate and block the pipe work somewhere. These may never reach the pump or filter or heat exchanger.

The successful use of system cleaners is varied, in recent years with health and safety issue and regulations, the use of powerful cleaners has fallen from use, the effective dissolving of hard heating deposit materials can be achieved with hot Nitric acid but this is too strong to put into a heating system. These days weak acids are used, even in the stronger cleaners, the effectiveness is limited. The use of these cleaners can dislodge old rust and deposits, but then can enable leaks to occur, that were previously stopped by the deposits themselves.

The power flushing of a system can help clear a restriction, but then cause leaks, this is a reason weak cleaners are used. There is a balance to be taken. Ultimately it is quite possible that the deposits cannot be completely cleared, and the system stays partially restricted or blockage reoccurs, bits keep blocking the pump or heat exchanger, then requiring further maintenance.

Ultimately you may have to renew all the pipe work and radiators.

The fight against corrosion products and their deposits is not only limited to power flushing. The removal of sludge/loose deposits by using mains water pressure hosing of radiators, is often carried out, the cutting out and replacement of sections of pipe work is also effective.

Unfortunately a customer can believe the work carried out by a contractor, if unsuccessful, to be substandard work. Your heating system may have significant problems and may need replacing. There are no guarantees to power flushing, no matter what you have paid. Power flushing is not a miracle worker. It can be expensive and unsuccessful. However it can work well and is usually always worth a try. The operative word being try.

Labour being so costly these days it can become very expensive investigating blockages, leaks, power flushing.

At some point you just may have to replace the heating system. If you are cleaning the system yourself, then you are able to persevere longer and perhaps eventually succeed. But when paying for the labour, it can be more cost effective to stop and renew.