

Guide to Adding K-Seal (Generic Installation)

- Ensure the coolant level in the overflow tank on or below the minimum level before adding K-Seal, and DO NOT top up to the MAX level. By doing this coolant is drawn from the reservoir sooner.
Make sure you shake the bottle thoroughly (at least 30 seconds) as K-Seal does have particles that will settle to the bottom of the container.
It is critical to ensure you have all the mixture added to the system; add a little water to the empty bottle if you like and shake again if you are unsure everything is out.
If you add K-Seal directly into the radiator, just ensure there is enough coolant to cover the core which is the metal at the very top of the radiator otherwise the K-Seal particles will only sit on it like a shelf.
- Add to an already warm engine TAKING CARE when removing any caps that you do not get hot coolant on yourself. In this way, the thermostat is already open and will allow coolant to flow freely immediately.
- Keep the internal heater controls on HOT, and the fan ON which ensures coolant is flowing through the Heater Control Valve and will keep any air in the system moving. The heater matrix is often the highest point of the cooling system, and any air in the system or combustion gases will gravitate there potentially impeding the flow of coolant. Also, if this section is closed but contains any traces of air or combustion gases these will still be there after a repair but now within an enclosed system with nowhere to escape.
- Just let the vehicle idle for about 20 - 30 minutes and DON'T take for a drive as this will only increase the over-pressurizing preventing a repair. This backpressure is more associated with Head Gasket issues, but in general, an engine at idle is perfectly adequate for a K-Seal repair. If necessary, allow the system to cool and repeat the idling process for an additional cold-heat cycle.
- Leave the cap OFF the expansion tank and or radiator when letting the engine idle to let any combustion gases escape as any pressure build-up will again hinder K-Seal from flowing.
- It is entirely possible that this procedure might need repeating several times and providing you have not lost the majority of the K-Seal infused coolant from the system, please feel free to use the vehicle as you would over the next few days.

Please remember K-Seal will only fix a hole up to 0.635mm and a crack 0.025mm wide by 11mm long. Although these dimensions are large enough to cause a sizeable coolant leak if you have to add litres of water over short distances or time, then this may be beyond the limits of what K-Seal can fix.

K-Seal Installation Guide for Severe Over-Pressurising Systems (Backpressure)

In many instances of Head Gasket Failure K-Seal is prevented from making a repair due to combustion gases entering the cooling system. This is known as over-pressurizing or backpressure and some tell-tale signs to look out for are:

- Bubbles that are visible in the expansion tank or top of the radiator that look like air bubbles rising to the surface.
- Coolant that is being expelled out of the expansion or overflow tank and into the engine. Sometimes this is to such a degree that the cap of the expansion tank can be blown off.
- Low coolant visible in the expansion tank but the level rises when you remove the cap, and previously there has been no over-heating.

In these instances, it may well be that the damage to the gasket is so severe that K-Seal may not be able to make a repair; but it is important to tackle the over-pressurizing to allow K-Seal to try and seal the leak.

The most efficient way of adding K-Seal to a cooling system with backpressure is to disable the problem cylinder temporarily, and then add K-Seal and allow to run to operating temperature.

The simplest way to achieve this is to remove the spark plug in a petrol engine and the glow plug for diesel. It is worth optionally disabling the fuel injector to prevent the loss of un-burnt fuel during the process. This method will remove any combustion gases from getting into the system and allow K-Seal to flow through into the leaking cylinder and meet with air to enable a chemical reaction and form a seal.