

Question: *After activating a vacuum priming system, how do I know when the fire pump has achieved a "prime," so I can turn off the vacuum primer?*

Assuming a good suction hose connection from the static water supply source to the pump inlet and a "tight" pump (no air leaks) after primer activation, you should see a small amount of primer lubricant being discharged onto the ground from the vacuum primer outlet. This changes to a steady lubricant/water mixture after the pump achieves a prime. As an audible verification of pump prime, you may be able to hear a noticeable difference in the sound of the primer as soon as it starts discharging the lubricant/water mixture. Always verify a fire pump prime by checking the pressure readings on the master-discharge gauge. If the pressure readings vary with corresponding increases in pump rpm speed, the pump is indeed primed.

If you have to operate a vacuum primer for an extended period to get a pump primed, you have problems either with the primer itself, or with air leaks into the pump.

Do not continuously run the primer for more than 45 seconds because the electric primer motor amperage draw may cause it to become too hot if run for an extended time without a cool-down period, causing damage. (Check with the primer manufacturer for their recommended maximum activation time and cool-down period.)