

## Tech Tips Information to help our customers reduce time Out of Service



## Pressure Governor

By BARRY COKER

It seems that with every new advancement in technology that is supposed to make something quicker, simpler or "better", a new problem is created.

With the introduction of Electronic Pressure Governors, some new twists on old issues have surfaced.

The Pressure Governor operates by using a o-5 vdc signal to translate water pressure into voltage. This allows it to monitor and control pressure by controlling the trucks engine speed. The governor also protects the pump by preventing cavitation.

This is an issue commonly seen with Electronic Pressure Governors:

The truck is set up with the Tank To Pump valve FULLY OPEN and the Tank Fill/Recirculate valve FULL Y OPEN. Then when the Pump Operator hits the preset button on the governor, the RPM's will rise quickly and the truck will then go to an idle. What is happening???

As the preset increases engine RPM's, the pressure governor is looking for an increase in pressure in proportion to the increase in RPM's. With the Tank Fill valve FULLY OPEN, the pressure cannot rise fast enough. This causes the pressure governor to sense a pump cavitation and automatically reduces the engine speed to idle to protect the pump.

The Tank Fill valve is only opened to help cool the pump when water is not flowing. Having the valve  $\frac{1}{4}$  to  $\frac{1}{3}$ open is fine and this will prevent this issue.

Also, all pumps at idle will produce around 40-50 psi of pressure. Be sure to look at your discharge gauge before hitting the preset button. If that 40-50 psi of pressure is not there, PRIME THE PUMP!



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Barry Coker has more than 30 years of experience working on emergency vehicles. He is an EVT and a Pierce Master Technician, along with holding numerous other certifications.