

To: All Technicians

Re: Engineered Air Flame Failure Service Calls

On any service call related to flame failure, heat fail or low limit lockout, the following should be checked before replacing a pilot assembly or ignition module

- Remove and check air hose for dust buildup/spider webs
- Remove and inspect the entire burner tray
- Remove the 3/8" compression tee from the pilot burner to gain access to the pilot orifice, which is pressed into the tee. This tee and the tube have a tendency to plug up with dust-dirt-spider webs. A piece of 18 Ga T-stat wire is a good way to clean out the orifice. Also check to make sure that the entire pilot burner and brazed tube are all free and clear
- Re-assemble the burner making sure pilot assembly gasket is intact and spade terminals are tight

With the new fenwall ignition board, the minimum flame current is 0.8 microamps. Eng Air service techs say that anything above 2.2 microamps is a good signal. My experience has found that anything below 2.5 microamps can be a problem. Normal flame current should be between 3 and 5, it can be as high as 9.

Pilot gas pressure should be set between 3-5" wc as per manufacturer but I've found 4"wc to give the best avg. pilot flame signal

O2 readings can be checked on low fire and high fire and compared with factory test sticker where it also shows the PL-PA and PL-PG actuator feedback readings from the factory.

O2 for low fire should be in the range of 16 to 18. Low fire lockouts can occur if the O2 is too high, 16.5% O2 is usually a good setting for low fire. High fire should be in the range of 3.5 – 4.2% O2.

Hope this helps!





