



# Technical Fact Sheet

## Multifamily Facility Management Services

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### TUNE-UP FOR PACKAGED BOILER WITH DUAL FUEL BURNER

#### Description:

“Dual fuel” refers to the fact that the burner can either use natural gas or another fuel (usually #2 oil). In general, tune-ups on such boilers are not warranted since the fuel/air ratio in a power burner can be more closely controlled and is more easily maintained. However, inefficiencies can result because of improper burner adjustments and worn nozzles or orifices for metering the fuel. This is especially true for dual fuel burners which have not been maintained regularly by qualified personnel.

#### How to Implement:

All modifications must be made by a qualified, licensed and bonded contractor and must be done within local code restrictions. Before a tune-up is begun, a basic inspection and maintenance service should be completed including inspection and repair as needed of the burner, combustion chamber, combustion blower, heat exchanger, all flues and vents, and all safety controls.

In general, the goal of the dual fuel tune-up is to reduce excess air to a minimum while maintaining the safety margins for both fuel types. The tune-up may include adjustments to the burner and fan, or possibly the replacement of some burner parts.

The contractor performing the tune-up should use an electronic flue gas analyzer and should provide pre- and post tune-up results for both fuels. Since adjustments to the burner must take into account the tolerances of both fuels, final steady state efficiencies are typically in the range of 78 to 80%, which is somewhat lower than expected from a single fuel power burner.