

# SERVICE AND APPLICATION NOTES

100085

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## 80% Ultra Low NOx Models Updates

As part of our continuous effort to improve our product reliability and performance, Lennox has made several improvements to the 80% AFUE Ultra Low NOx model furnaces (Figure 1). These changes include the following;

- 1 - New cast iron combustion chamber.
- 2 - Formed Collector box.
- 3 - Coned Inlet Combustion Air Inducer
- 4 - SIT gas valve that operates at 0.05" WC manifold pressure. This is very low manifold pressure and requires a sensitive manometer to measure.
- 5 - A new air inlet that is required for quieter and proper operation. 4-1/2" clearance space is required.
- 6 - Removal of the Inner Flue Heat Shield.

The change to the gas valve required all new gas orifices and air orifices. These are different between single stage and two stage units unlike the older models.

Why is Lennox making these changes to their 80% AFUE ULN models? The driving reason is to improve performance and reliability. Extensive testing confirms that these modifications should reduce the start-up noise and no light conditions. These units are also approved for High Altitude installations up to 7500' with no modifications. The new units (-05) cannot be converted to LP gas at this time. New trouble shooting charts that will be available shortly.

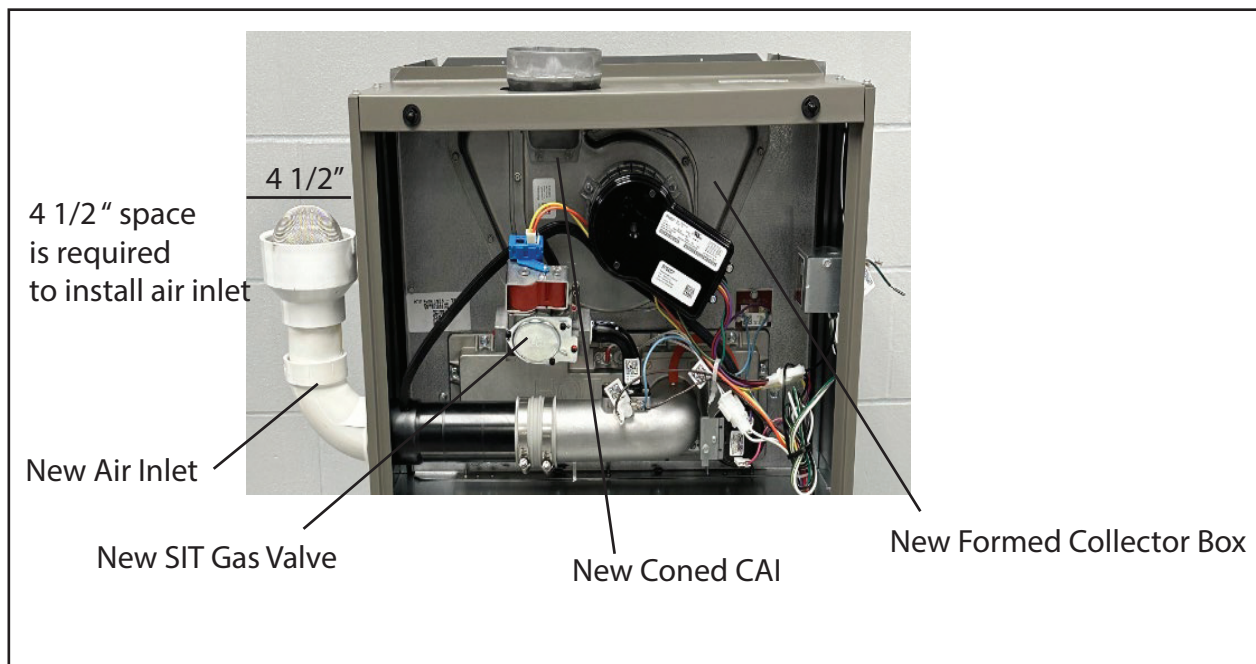


FIGURE 1