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## Manufactured Housing Furnace Inspection Program Safety Notice

### Safety Bulletin

 <small>Article Picture</small>	<p><b>Models : Coleman, Coleman Evcon, &amp; Red T Model numbers, DGAT070xxx (70,000btuh input) &amp; DGAT075xxx (75,000btuh input) natural and propane, Manufactured Housing gas furnaces, manufactured during 1997, 1998, &amp; 1999.</b></p> <p>Based on several reported premature heat exchanger failures on the above listed furnaces in Alberta, Canada, the Alberta Canada Municipal Affairs, Safety Services Agency issued a January 30, 2002 Consumer Advisory, advising that furnaces installed in the Alberta province, be inspected and serviced by a qualified person. Furnaces involved were found to have heat exchanger cracking, burn through, and in extreme cases, furnace wrapper burn through.</p> <p>These situations, if left unresolved, can lead to significant property damage, personal injury and/or death.</p> <p>Since the publication of the Consumer Advisory, YORK has initiated extensive field and factory testing. <b>In all cases</b>, testing revealed that pre-mature heat exchanger cracking, burn-through and furnace wrapper burn through are not a result of furnace manufacturing quality, or design, but instead, a direct result of the following installation and/ or application related issues:</p> <ol style="list-style-type: none"> <li>1. Furnace heat exchanger temperature rises that are significantly above the 45-75°F temperature rise data published on the DGAT furnace rating plate.</li> <li>2. Restricted indoor blower airflow as a result of high external duct system and filter static pressures. Many installations with cracked heat exchangers were observed to have high static HEPA, or Electro-Static, after-market air filters installed. In addition, many furnaces with cracked heat exchangers were installed on very small, restricted ductwork. The small ductwork itself can be restrictive enough to cause the furnace to operate above its listed maximum static rating.</li> </ol>
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U.S. Manufactured Housing Manufacturer's are required in new construction to have duct systems pass HUD duct design requirements, which state that the total duct external static pressure can not exceed 90% of the furnace nameplate external static pressure requirement. Canadian Manufactured Housing Manufacturers presently are not presently required to comply with this HUD-type requirement.

Older Manufactured Housing retrofits frequently have overly restrictive ductwork as well, and this installation condition must be addressed by the installation contractor.

3. Furnace input over-firing, based on manifold pressure settings and installation. Furnace inputs must always be de-rated by orifice change, for elevations above 2,000 ft. above sea level.

To assist technicians in the furnace inspection process, YORK has developed and distributed a detailed DGAT070 & DGAT075 service inspection sheet. This inspection sheet specifically guides the technician on heat exchanger inspection, as well as guides the technician on a step-by-step inspection of the three potential furnace installation problem areas listed above.

If a heat exchanger is found to be cracked, it is very important that an inspection of the installation be performed, BEFORE a heat exchanger or the furnace is replaced. Failure to do so, can lead to rapidly re-occurring heat exchanger failures, significant damage to property, personal injury, and/or death.

Mandatory furnace de-rating may be necessary to compensate for high altitude, or overly restrictive manufactured housing ductwork to allow furnaces to comply with published 45-75°F heat exchanger temperature rise data.

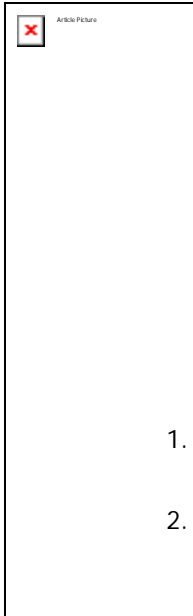
**For more information Canadian consumers can contact our YORK Toronto Office at 1-800-668-2389. Consumers in the U.S. can contact the Coleman/Stylecrest Technical Service Group at 1-800-228-7896.**



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