Gas Appliances

Many Montana homes have furnaces, water heaters, clothes dryers and cook ranges/ovens that use propane or natural gas as the fuel. While these appliances are safe, these precautionary steps must be taken by the consumer to assure they remain that way throughout their life:

- Operate appliance(s) as they were designed and intended for (DON'T ALTER EQUIPMENT).
- Keep appliance(s) clean.
- Do not use as a source of home heating.
- Never use unvented gas and kerosene heaters.
- Routinely inspect and provide preventive maintenance.

Sounds easy doesn't it?

It is; however, these simple items are generally overlooked by the consumer and can create potentially dangerous situations:

- Incomplete gas combustion, which also wastes energy.
- Spillage of combustion gas by-products into the home: carbon monoxide, nitrogen dioxide, sulfur dioxide and respirable particles.
- Backdrafting harmful exhaust gases down the chimney and into the home.
- A trained technician can check these items for safety.

When using combustion appliances follow these guidelines:

- Properly operate appliance(s).
- Never alter a combustion appliance, its exhaust flue or gas piping from original installation.
- If a combustion appliance and connections must be relocated or replaced, seek the services of the gas fuel provider or a professional technician.
- Never block off fresh air intake vents.
- Never enclose a combustion appliance without assuring adequate combustion air is available to the appliance.
- Never use a gas range or oven as a heater.
- When a naturally vented gas appliance (e.g., water heater or range) is operating do not run a powered exhaust (e.g., counter top down-draft exhaust fan) fan in the same room – this may result in exhaust gas backdrafting.

Routinely inspect and provide preventive maintenance

Inspect gas appliances for:

- Blocked or clogged chimney opening.
- Blocked off crawl space or mobile home opening where fresh air is supplied for the gas appliance.
- Leaks and obstructions in furnace supply and return duct work.
- Cracked or separating exhaust flues.
- Corroded or disconnected vent pipe.
- Dirty filters.
- Pilot light failures.

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- Exhaust gas odors or burning odors.
- Malfunctioning kitchen range or cooktop vent.
- Irregular or abnormally short or long cycling of the furnace.

Preventive maintenance by a service technician should include:

- Testing all combustion appliances for carbon monoxide.
- Checking for gas leaks.
- Fresh-air supply for all combustion appliances.
- Proper exhaust draft to prevent backdrafting.
- Heat exchanger examination.
- Cleaning blower
- Flue and vent system examination.
- Proper operation of fan and limit switches

Keep appliance(s) clean

A dirty furnace filter, clogged oven and range gas orifices, restricted duct work and intake air–flow vents and lint–clogged dryer vents can all alter the performance of gas appliances. Every effort should be made to keep combustion appliances clean from lint, dust, oil and grease.

Never use unvented gas and kerosene heaters

Unvented combustion heating systems should never be used indoors without proper outside fresh air and exhaust. Infiltration reduction measures (caulking, weatherstripping, etc.) should not be installed if any unvented combustion heater is present in the home. Although unvented heaters are approved for use in some situations, they must be equipped with an oxygen depletion sensor and they must never be used as the primary source of heat nor may they be used in a bedroom.

Beware of carbon monoxide

Among the most serious results of incombustion is the production of carbon monoxide, a odorless and colorless deadly gas. To detect carbon monoxide install at least two carbon monoxide detectors; one located in the furnace room, the other near sleeping areas. These devices may be available at your local building supply or hardware store.

Air-tightening precaution

Air-tightening measures – caulking, weatherstripping, etc. – should never be done without first correcting problems associated with combustion appliances.

Notes

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