

## Note 2

### Heat Pump And Back-up Heat Example To Call For Gas Furnace

<u>Setpoint</u>	<u>Indoor Temperature</u>	<u>Operation</u>
70	70+	No functions occur.
	69	Heat Pump turns on (Primary heat source)
	71	Heat Pump turns off (Thermostat satisfied)
	69	Heat Pump turns on
	65	Gas Furnace turns on (Heat Pump not able to satisfy Thermostat) (First strike for backup heat counter)
	71	Gas Furnace turns off, heat pump turns off (Thermostat satisfied)
	69	Heat Pump turns on
	65	Gas Furnace turns on (Heat Pump is again unable to satisfy Thermostat), (backup heat counter reaches 3 <sup>rd</sup> strike and Heat Pump is locked out for 1 hour + 45 minutes). <b>Backup heat counter is reset if Heat Pump is running for more than 20 minutes and does not call for backup heat.</b>
	71	Gas Furnace turns off (Thermostat satisfied).
	69	Gas Furnace turns on (Becomes Primary heat source).
	71	Gas Furnace turns off (Thermostat Satisfied) <b>After 1 hour + 45 minutes lockout</b>
	69	Heat Pump turns on (Resumes as Primary heat source).
	65	Gas Furnace turns on, heat pump turns off (Becomes Primary heat source) (Heat Pump is locked out for another 1 hour + 45 minutes).
	71	Gas Furnace turns off (Thermostat satisfied). <b>After 1 hour + 45 minutes lockout</b>
	69	Heat Pump turns on (Resumes as Primary heat source).
	71	Heat Pump turns off (Thermostat satisfied). <b>(backup heat counter is reset any time Heat Pump satisfies thermostat setpoint and does not need Gas Furnace).</b>

**The word “DIFF” will display on LCD when backup heat is operating.**