

3.2 LEAN ASSIST MODE (OPTIONAL)



NOTE: *The pilot should follow the engine manufacturer's recommended leaning procedures as described in the Pilot's Operating Handbook (POH).*

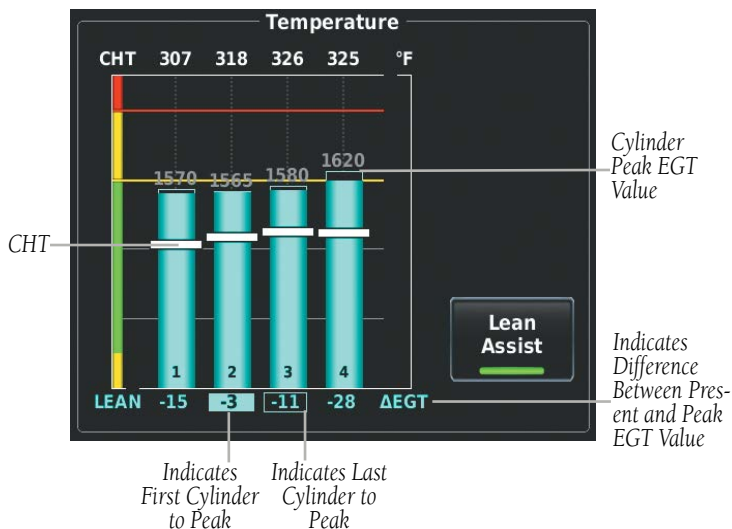
A **Lean Assist** Button is displayed on the Eng Page when Lean Assist Mode is enabled and at least one Exhaust Gas Temperature (EGT) or Turbine Inlet Temperature (TIT) input is configured (refer to the G3X Touch Installation Manual for more information).

Using Lean Assist Mode:

From the **Main** Tab of the Eng Page, touch **Lean Assist**. As the mixture is leaned, one of the cylinders' exhaust temperature will peak. Continuing to lean the mixture will cause each additional cylinder to peak (if applicable) until the last of the cylinders peaks. To cancel Lean Assist Mode, touch **Lean Assist** again.

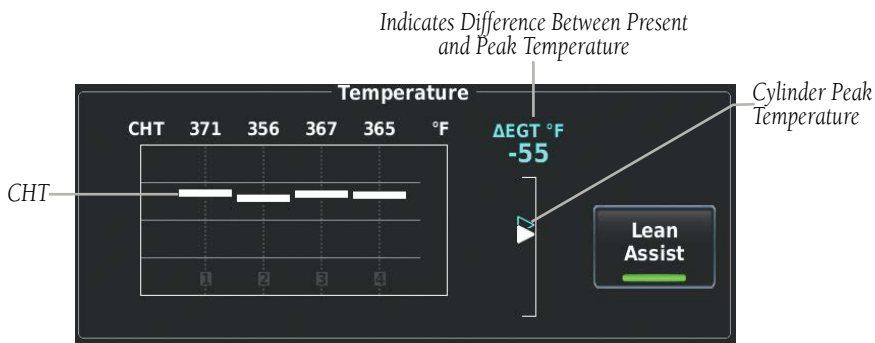
When the **Lean Assist** is selected, the Lean Assist Mode waits for a cylinder's EGT to reach a peak temperature and decrease by at least 7°F. To prevent detection of false peaks, the system waits for a cylinder's EGT to increase by at least 15°F before detecting a peak. In addition, if the cylinder temperature rises above a previously detected peak by more than 100°F, the previous peak is considered false.

The following bar graph is displayed when four or more EGT cylinders are configured and the same number of EGT and CHT probes are configured. When each cylinder peaks, its bar changes from green to blue, and the white EGT number changes to a blue delta number. The blue delta number is the difference between current EGT and peak EGT for each cylinder. The first cylinder to peak is identified with a solid blue box around the delta number, and the last cylinder to peak is identified with a hollow blue box. The outline and grey number above each bar displays the actual peak EGT value.



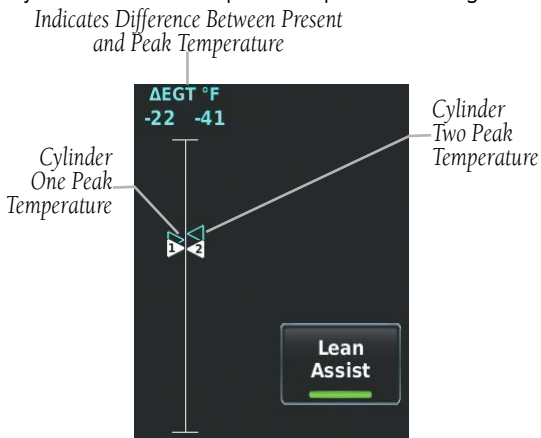
Lean Assist (Same Number Of EGT And CHT Probes Configured And Four Or More Cylinders Configured)

The following graph is displayed if EGT data is configured on less than four cylinders and a different number of EGT and CHT probes are configured. The temperature deviation between the current temperature and the peak temperature for the cylinder currently closest to its peak is displayed in cyan. A cyan hollow triangle appears on the EGT gauge at the temperature where the first cylinder peaked.



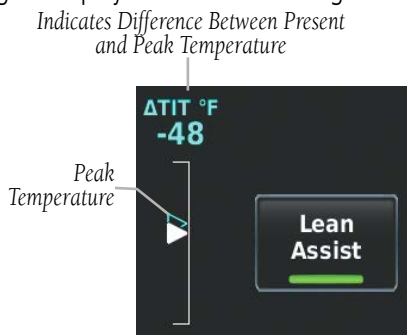
Lean Assist (Different Number Of EGT And CHT Probes Configured And Less Than Four Cylinders Configured)

The following dual-pointer gauge is displayed when exactly two cylinders of EGT are configured. Each cylinder has its own peak temperature triangle.



Lean Assist (Two EGT Cylinders Configured)

The following gauge is displayed when TIT is configured instead of EGT.

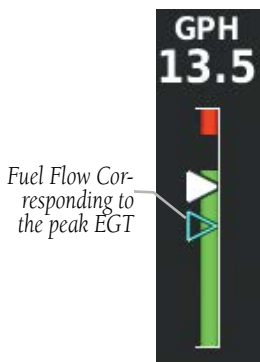


Lean Assist (TIT Configured)



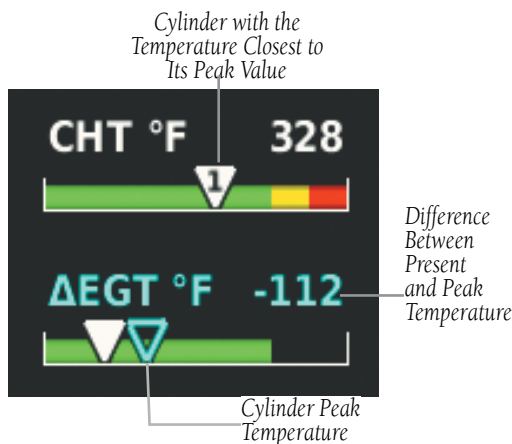
NOTE: A '+' (ΔEGT) value indicates the current temperature is greater than the previously detected peak.

If a fuel flow sensor is configured, the fuel flow value detected as the first cylinder peaks is saved. The fuel flow corresponding to peak EGT is drawn on the fuel flow gauge as a hollow blue pointer. This can be used to determine if you are on the rich side of peak (ROP) or the lean side of peak (LOP). Rich of Peak (ROP) if the fuel flow pointer is above the blue triangle, or Lean of Peak (LOP) if the fuel flow pointer is below the blue triangle.



**Fuel Flow Gauge - Lean Assist
(Fuel Flow Sensor Configured)**

The EIS displays the cylinder whose temperature is currently closest to its own peak value (when Lean Assist Mode is active) as a white pointer with the cylinder number. The peak temperature is depicted by a hollow blue pointer, and the temperature deviation from peak (Δ EGT or Δ TIT) is displayed in place of the normal temperature number in cyan text.



Lean Assist (EIS) (Example)