

# PW617F1-E: *The Phenom 100 Upgrade Is Here*

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## **Executive Summary:**

The Embraer Phenom 100 PW617F1-E engine upgrade represents a significant hardware-driven performance enhancement rather than a simple software update, delivering meaningful gains across takeoff, climb, and cruise phases. With an increased max takeoff weight (MTOW) of 10,700 pounds and improved “hot and high” performance, operators can expect stronger capability in challenging conditions. Early real-world data confirms faster climbs to FL410 and notably improved cruise behavior, where the aircraft often approaches MMO limits. For buyers evaluating light jets for sale or navigating how to buy a private jet, this upgrade meaningfully enhances the Phenom 100’s position among business jets for sale.

## **Key Takeaways:**

- The Embraer Phenom 100 PW617F1-E upgrade is a true hardware-level improvement, increasing MTOW to 10,700 lbs and enhancing overall performance.
- Hot and high capability is significantly improved, making the Phenom 100 more competitive with other light jets for sale, such as a Citation Mustang for sale or entry-level Phenom 300 for sale options.
- Climb performance improves notably, with the Phenom 100 reaching FL410 in approximately 26 minutes while maintaining efficient fuel burn.
- Cruise performance is dramatically enhanced, with the aircraft often reaching MMO limits, requiring pilots to reduce thrust—an uncommon characteristic in legacy models.
- Upgrade cost varies significantly, so aligning the modification with engine overhaul is key—something a private jet broker or private jet expert can help evaluate when considering how to sell a private jet or upgrade within the private jets for sale market.

## **FAQ:**

### ***What is the Embraer Phenom 100 PW617F1-E engine upgrade?***

The Embraer Phenom 100 PW617F1-E upgrade is a hardware-based engine enhancement that improves takeoff, climb, and cruise performance, delivering a noticeable step up from earlier Phenom 100 configurations.

### ***How does the Embraer Phenom 100 with PW617F1-E engines perform in hot and high conditions?***

With the PW617F1-E upgrade, the Embraer Phenom 100 can depart at max takeoff weight from higher elevations and warmer temperatures, significantly improving operational flexibility compared to older models.

### ***What climb performance improvements does the Embraer Phenom 100 PW617F1-E deliver?***

The upgraded Embraer Phenom 100 can reach FL410 in about 26 minutes while maintaining strong climb speeds and efficient fuel burn, making it more competitive among light jets for sale.

### ***How does cruise performance change in the Embraer Phenom 100 with the PW617F1-E upgrade?***

In cruise, the upgraded Embraer Phenom 100 often approaches MMO limits, meaning pilots may need to reduce power to avoid overspeed—highlighting a substantial improvement over legacy performance.

### ***Is upgrading to the PW617F1-E engines on the Embraer Phenom 100 a good investment?***

The upgrade can significantly increase the aircraft's value and market appeal among business jets for sale, especially when completed during scheduled engine maintenance, making it a strategic consideration when working with a private jet expert or planning how to buy a private jet.

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