



ENGINE BREAK-IN CHECKLIST

Before Each Flight:

☐ Approval & Briefing:

- ☐ Obtain **Chief Pilot** approval for the flight.
 - ☐ Complete a comprehensive **flight briefing with the Chief Pilot** to ensure all break-in procedures are understood.
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First 30-Minute Break-In Flight & Continuous Engine Break In Steps:

☐ Pre-Flight Oil Level:

- ☐ Send **preflight oil level** to Chief Pilot personnel before departure.

Engine Start:

- ☐ Set **RPM to 1500** immediately after engine start and taxi at this RPM setting
- ☐ Verify **oil pressure** is within normal range.
- ☐ Release brakes and **roll to the runway without stopping** (ensure immediate takeoff with no taxiway delays).

☐ Mag Check:

☐ Perform **magneto check** during taxiing at 1500 RPM.

☐ **Takeoff & Climb:**

☐ **Rotate at 75 knots** and initiate climb at **90-100 knots**.

☐ Maintain a **very shallow climb** and avoid exceeding max airspeed.

☐ **Engine Monitoring:**

☐ Continuously monitor engine parameters and **send photos of the EIS (Engine Information System)** full data page, showing **pressures** and **temperatures**, during flight.

☐ **Ensure Cylinder Head Temperature (CHT)** stays below **400°F** at all times.

☐ **Never use power idle**—this can damage piston rings and compromise the break-in process.

☐ **ONLY FOR 30 MIN BREAK IN-Circle over the airport** 1000ft above TPA for 30 min

☐ **Post-Flight:**

☐ **Send post-flight oil level** after shutdown.

Continuous Engine Break In Steps:

☐ **Cruise:**

☐ Operate with a full **rich mixture** during cruise.

☐ **Do not exceed 5000 feet MSL** during break-in.

☐ **Descent:**

☐ Use **drag (flaps)** during descent to keep RPM above 1500.

☐ **Power idle** is only acceptable during the final approach for touchdown.

☐ **Immediately restore RPM to 1500** after touchdown.

☐ **Post-Flight Oil Level Check:**

☐ After **1 hour of shutdown**, check and report the oil level.

☐ **Continuous Monitoring:**

☐ Continuously monitor engine parameters throughout the flight. **Send EIS full data page photos** at regular intervals, tracking pressures and temperatures.

Critical Notes:

☐ **Never** use **power idle** in-flight; it can harm the engine's break-in process.

☐ **Avoid CHT** exceeding **400°F** to prevent engine damage.

☐ Monitor engine data consistently to ensure optimal performance throughout the break-in period.

☐ **ONLY** use approved mineral oil for the AC