



ProBalancer Sport

DYNAMIC PROPELLER BALANCE CHECKLIST

You've noticed there are some vibrations in your aircraft, and it's time to balance your prop. We've put together a checklist for you to use.

- Insure all Airworthiness Directives have been accomplished for the aircraft you are balancing.
- You should inspect the Propeller assembly for nicks, dents, cracks, etcetera. FAA Advisory Circular 20-37E should be used as a reference for propeller inspections.
- Remove any old or previously installed dynamic balance weights.



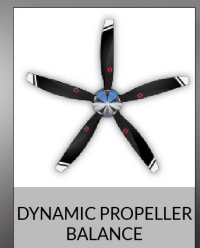
**DO NOT REMOVE STATIC BALANCE WEIGHTS
INSTALLED BY A CERTIFIED PROPELLER SHOP.**

- To select the balancing RPM you check for a manufacturers' recommended balancing RPM. If none exists, you may use the speed of the complaint or cruise, which ever is desirable. Cruise RPM is the power band where the aircraft will spend most of its time. Balancing at this RPM will give the greatest results.
- Place the balancer in the cabin. Install the vibration sensor and Phototach. Route the vibration and Phototach cables into the cabin and connect them to the balancer.
- Turn the balancer on.
- Start the engine and taxi to a location that will avoid prop and jet was from other aircraft and avoid any wind anomalies that may occur.
- Allow the engine to warm to a regular operating temperature.
- Enter the required information into the balancer (HP and RPM).
- When prompted increase the engine RPM to your designated balancing RPM.
- When prompted by the balancer, return the engine to idle and allow it to cool.



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- When the engine has sufficiently cooled, shut down the engine.
- Install the suggested trial weight.
- Enter the weight (in grams) and location (in degrees) of the weight you physically installed on the propeller into the balancer.
- When prompted by the balancer, start the engine.
- Allow the engine to warm to a regular operating temperature.
- When prompted increase the engine RPM to your designated balancing RPM.
- When prompted by the balancer, return the engine to idle and allow it to cool.
- When the engine has sufficiently cooled, shut down the engine.
- Remove the old weight suggestion.
- Install the new suggested dynamic balance weight.
- Enter the weight (in grams) and location (in degrees) of the weight you physically installed on the propeller, into the balancer.
- The process will repeat itself until the vibration has been driven below 0.07 IPS.
- Once the vibration level has been reduced below 0.07 IPS, install the permanent weight.



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