

Finishing up - Weight and balance

Step # 10

The following few pages contain information on the weight and balance of the Challenger aircraft. Some FAA inspectors want to see an actual weight and balance calculation on your plane before they will give you an airworthiness certificate. We have included a sample form on one of our planes and a blank one for you to use on your plane.

Remember - **If the nose wheel does not stay down** with the pilot sitting in the front seat with the engine NOT running, you are too tail heavy and must add ballast to the nose.

If you **weigh more than 250 lbs.**, you will probably be nose heavy unless you have the Rotax 503 with electric start system.

Generally speaking, the Challenger II will come out **Tail Heavy** if the following things are true.

1. Pilot weighs less than 150lbs.
2. Too much paint is put on the tail surfaces
3. '503' engine, ten gallon tank and / or electric starter is installed.

If 1,2 & 3 are all true, you may need as much as 25lbs of ballast attached to the steel nose gear carrier assembly to balance the aircraft.

If you are slightly nose heavy, you will have to fly with the ailerons or flaperons in a more up (reflex) position. If you are slightly tail heavy, you will have to fly with the ailerons or flaperons in a more down (flap) position. Adjust your aileron pushrods accordingly. Elevator trim tabs may also be used (tab down for nose up trim).

IMPORTANT NOTE:

Before attempting to start the engine, taxi or fly your Challenger, refer to and read carefully the owners manual for set-up, pre-flight inspection, warnings and specific information vital to safe, proper operation are contained in that manual.

