

Trim Chart

These tests assume that the plane has been built perfectly aligned, wings square to fuse, stab in line with wings, vertical fin is exactly 90 Deg. to horizontal stab. The wings are not warped as checked with an incidence meter, and the elevator halves are moving together as checked by a "Throw Meter". These flying tests should be done in near calm conditions. Double check each of the following tests before making any changes.

Test for	Procedure	Results	Adjustments
Control Neutrals	test response to each control	Adjust trims for straight & level flight	adjust clevises to center xmter trims
Control Throws	Apply full deflection of each control	Check for response Aileron hi rate 3 rolls in 3 secs. Elevator, square loop corners Rudder, 35 to 40 Deg.	Change control horns, ATV, and Duel Rates
Decalage	Power off vertical dive from high altitude	A. Model continues straight down B. Model pulls to canopy C. Model pulls to belly	A. No change needed B. Reduce incidence C. Increase incidence
Center of Gravity	Roll into vertically banked turn	A. Nose Drops B. Tail Drops	A. Add tail weight B. Add Nose weight
Tip Weight - Test1	Fly straight & level, roll inverted, release aileron stick	A. Model does not drop a wing B. Left wing drops C. Right wing drops	A. No adjustment B. Add weight to right tip C. Add weight to left tip
Tip Weight - Test 2	Fly model towards you / away from you, pull tight inside loop, repeat with outside loop	A. Model comes out with wings level B. Model comes out with right wing low C. Model comes out with left wing low	A. No adjustment B. Add weight to left tip C. Add weight to right tip
Up/ Down Thrust, test 1	Fly model straight & Level, then cut throttle	A. Model continues level flight with a gradual drop B. Model abruptly dives C. Model abruptly climbs	A. No Change B. Remove down thrust C. Add down thrust
Up/Down Thrust, test 2	Fly model straight & level, then pull up	A. Model continues straight up B. Model pulls to canopy C. Model pulls to belly	A. No Adjustment B. Add down thrust C. Reduce down thrust
Side Thrust	Fly model away from you and pull up to vertical	A. Model continues straight up B. Model veers left C. Model veers right	A. No Adjustment B. Add right thrust C. Reduce Right thrust
Aileron Differential	Fly model toward you & pull into a vertical climb before it reaches you. Neutralize controls then half roll .	A. No Heading Changes B. Heading change opposite to roll command C. Heading change in direction of roll command	A. Differential settings OK B. Increase differential C. Decrease differential
Dihedral	Fly model on normal pass, roll to knife edge, left and right, use rudder to hold model level	A. Model does not roll B. Model rolls indirection of rudder C. Model rolls opposite to rudder	A. Dihedral OK B. Reduce dihedral C. Increase dihedral
Knife Edge Pitch	Fly model on normal pass, roll to knife edge, left and right, use rudder to hold model level	A. Model does not change pitch B. Model pitches to canopy C. Model pitches to belly	A. No adjustment needed B. Either move CG aft; or increase incidence; or mix down elevator with rudder C. Reverse of "B"