

ZENAIR CH-601 Zodiac XL Model Guide

The ZENAIR CH-601 Zodiac XL is a piston-engine, kit-built light aircraft. The registry family (601, 601 HDS, 601XL, 601XL-B and others) carries up to 2 people, with up to 500 kg MTOW, 105 kt cruise, 820 nm range and a 12000 ft ceiling. The library lacks years, seats and specs for this model, so verify your own aircraft's figures.

KEY TAKEAWAYS

- Family-level maxima only: up to 105 kt cruise, 820 nm range, 12000 ft ceiling, 500 kg MTOW. These are not figures for any one aircraft.
- Sample CH 601 UL manual (Rotax 912, 80 hp): 1058 lbs gross, 550 lbs empty, 508 lbs useful load, 16 US gal standard fuel.
- Service Bulletin ZE-2008-01 is mandatory: check control cable tension before the next flight and every 50 hours. Flutter was reported.
- Each kit aircraft is one-of-a-kind. The manual says its values must be verified through a flight test program.

SPEEDS TO KNOW

The XL flight manual (LTF-UL, at 472.5 kg) gives VNE 224 km/h, VC 201, VA 146, VFE 130, and stall 73 clean and 63 with flaps. Indicated speeds must be checked on each aircraft. The sample CH 601 manual lists Vne 150 mph, stall 44 mph, +4/-2 g, and 120 mph cruise at 75% power with the Rotax 912. Aerobatics are prohibited.

WHAT TO INSPECT ON A PURCHASE

Per ZE-2008-01, set cable tension: rudder 22 lbs ±5, aileron 30 lbs ±5, elevator 40 lbs ±5. Check the ailerons for skin deformation at the piano hinge and root rib. Check the wing-root rear spar area for deformation or loose rivets. The Feb 2010 checklist is meant for use after a purchase or hard landing. It covers the propeller, firewall, fuel lines, nose gear bungee and muffler clearance.

GROUND HANDLING

The sample manual describes tricycle gear with a steerable nose wheel. Avoid steering with the brakes. It has no parking brake, so tie the aircraft down at each wing and the rear fuselage ring when unattended. In winds over 20 mph, taxi very slowly with neutral or down elevator. Check fuel level physically before every takeoff.

SPECIFICATIONS

Engine Power Hp	80
Wing Span Ft	27
Length Ft	19
Cabin Width Inches	44
Fuel Capacity Standard Gal	16
Optional Wing Tank Gal	7.5

WEIGHT & BALANCE

Empty Weight Lbs	550
Useful Load Lbs	508
Max Gross Weight Lbs	1058

SAFETY NOTES

- Control cable flutter has been reported on the Zodiac CH 601 XL by two pilots. ZE-2008-01 compliance is mandatory before the next flight and every 50 hours.
- Engine failure: set best-glide speed, shut off fuel and engine, tighten harness, and land straight ahead. Avoid tight turns.
- Fire in the air: cabin heat, fuel, ignition and electrics off. Do not try to restart the engine. Make an emergency landing.