

Heli-Sport CH-7 Kompress Model Guide

The Heli-Sport CH-7 Kompress is a two-seat, dual-control ultralight (VDS) helicopter. It has a steel-tube frame, a fibre cabin, landing skids and a two-blade semi-rigid main rotor. The March 2010 flight manual describes a turbocharged Rotax 914 of 115 HP. Later service bulletins also cover EPA 917 Ti engines. Empty weight is 280 kg and maximum takeoff weight is 450 kg.

KEY TAKEAWAYS

- Two seats, 280 kg empty, 450 kg max takeoff (500 kg on the amphibious model), which leaves a 170 kg useful load.
- The tank holds 40 L and the engine burns 20 L/h at 75% power. Plan fuel and payload together.
- Confirm which engine is fitted. The manual lists a Rotax 914 turbo. Bulletins also cover EPA 917 Ti, which had a flight suspension in December 2021.
- Ask for proof that bulletins SB-061, SB-063, SB-066, SB-68 and SB ALLERT-71 were applied and recorded in the maintenance log.

POWERPLANT, DRIVE AND FUEL

The Rotax 914 turbo is a four-stroke, four-cylinder engine of 1211 cc with carburettors and an electronically controlled turbo. It makes 115 HP for a maximum of 5 minutes and 100 HP continuous at 5500 rpm. A single V-belt drives a freewheel clutch and bevel-gear boxes. Fuel can be unleaded or super auto petrol (MON83 or RON90 minimum, unleaded preferred) or Avgas 100LL. Do not use plain aircraft engine oil without gear additive.

MAINTENANCE SCHEDULE (FEB 2010 BOOK)

After the first 25 h: replace the main gearbox, MRG filter and tail box oil, clean the air and fuel filters and fuel pump, and check pulley and belt alignment. Clean filters and pump every 50 h. The 100 h service adds clutch parts, an optic-fibre check of the main gearbox, main and tail rotor balance, and a flight check by an experienced pilot. At 300 h the main gearbox bearings are replaced. At 400 h the tail rotor bearings and the belt are replaced. Prices are in EUR excluding tax and may rise.

SERVICE BULLETINS TO VERIFY

SB-061: safety-wire the throttle support bolts on both carburettors. SB-063: governor card update. SB-066: protect throttle cable sheaths and fuel lines from the engine pulley cooling fan. SB-68: Atal 8000 voltage regulator and 7004 fan card on EPA 917 engines. SB ALLERT-71: flight suspension on EPA 917 Ti until EPA instructions were applied. The bulletins also require the POH revised 28.01.22 to be on board.

SPECIFICATIONS

Seats	2
Max Continuous Power Hp	100
Takeoff Power 5min Hp	115
Main Rotor Diameter Ft	20.3
Tail Rotor Diameter Ft	3.34
Fuel Capacity L	40
Engine Oil Capacity L	3.5

PERFORMANCE

Fuel Burn 75pct Power Lph	20
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WEIGHT & BALANCE

Empty Weight Kg	280
Max Takeoff Weight Kg	450
Max Takeoff Weight Amphibious Kg	500
Useful Load Kg	170
Fuel Capacity Kg	30

SAFETY NOTES

- The governor is a pilot aid, not a vital system. Check that the pilot can control rotor rpm manually, and that the voice warning card works (SB-063).
- A failed voltage regulator gives no warning. Failures were linked to outside air at 25 degrees or above. Falling battery voltage is the only clue (SB-68).
- The EPA 917 Ti engine was grounded in 2021. Confirm that the mandatory EPA inspections and the revised POH limits were applied (SB ALLERT-71).