YAKOVLEV YAK 52 Model Guide

YAKOVLEV YAK 52 is a single-engine piston aircraft with front and rear cabins, a retractable undercarriage with a front wheel, a sliding canopy and a propeller pitch lever. The registry gives no weight, range or seat data, so confirm payload and performance against the aircraft's own documents. Service bulletins reference serial numbers starting at 780102.

KEY TAKEAWAYS

- Ask for the full service bulletin status: factory overhaul checks the aircraft against the complete Yakovlev list.
- Bulletins cover wing spar and attachment strengthening, fin base, undercarriage life and engine cooling.
- Cold starts need priming and a warm-up: oil above 40°C and cylinder heads above 120°C before takeoff.
- Check the undercarriage, pneumatic air pressure, and the warning and fuel lights during the pre-start instrument checks.

SERVICE BULLETIN HISTORY

Bulletins were mandatory fleet-wide from the start. Today, certified factory overhaul (only the Shakhty Overhaul Plant) checks the aircraft against the FULL list. Items include the heavy main spar (60R), stronger wing attachment fittings (59R), fin base strengthening (18DA), first overhaul extended to 600 hours (96BE), and undercarriage life of 7000 landings (115BE). Ask which are done.

START-UP AND WARM-UP

Cold engines are primed with the priming handle, and propeller cranking by ground crew is needed when cold but forbidden when hot. Overpriming can cause hydraulic shock. Oil pressure should settle at 4–6 kgF/cm2. If it fails to reach 1 kgF/cm2 within 15–20 seconds, shut down. Warm up after every cold start until oil exceeds 40°C and cylinder heads exceed 120°C.

TAXI, TAKEOFF AND HANDLING

The aircraft tends to turn slightly right when taxiing, corrected with left pedal and brake. On the takeoff run, use left rudder to counter yaw. Rotate at 90 km/h, lift off at 120 km/h and climb at 160 km/h. Retract the undercarriage at no less than 20 m. On long, slow taxi runs, watch the electrical consumers (ADF, compass, HSI).

V-SPEEDS

Rotation Speed Kmh	90
Liftoff Speed Kmh	120
Climb Speed Kmh	160
Initial Climb Speed Kmh	170
Downwind Base Speed Kmh	180

SAFETY NOTES

- Takeoff is strictly prohibited if engine instrument readings exceed the specified limits.
- Do not inject more fuel than specified when priming; this can cause hydraulic shock.
- If oil pressure fails to reach 1 kgF/cm2 within 15–20 seconds after start, shut the engine down at once and find the cause.

AI-aggregated guide for the YAKOVLEV YAK 52 · sources: FRONT SEAT INTERIOR INSPECTION/RESET CHECKLIST (#102342) · YAK-52 SERVICE BULLETINS (#101066) · generated 2026-10-21 ·
Reference only, not for flight. Check the original documents before relying on this guide.