

NORTH AMERICAN AT-6 Model Guide

The NORTH AMERICAN AT-6 is a single-engine, low-wing, two-place advanced trainer. It has a Pratt and Whitney nine-cylinder air-cooled radial engine, a Hamilton Standard controllable-pitch two-blade propeller and retractable main gear. The family covers AT-6, AT-6A, AT-6B, AT-6C, AT-6D, AT-6F, SNJ-7 and T-6G models.

KEY TAKEAWAYS

- Two-place, low-wing trainer with a nine-cylinder radial engine and constant-speed propeller.
- Mixed construction: steel-tube front fuselage and engine mount, mostly 24ST alclad aluminum elsewhere.
- The rear fuselage can be aluminum or wood, and the control surfaces are fabric-covered, so check each carefully.
- The maker's repair manual covers the AT-6A, AT-6B, AT-6C, SNJ-3 and SNJ-4 only.

WHAT YOU ARE BUYING

The NORTH AMERICAN AT-6 has fully retractable main gear and a non-retractable, full-pivoting tail wheel. The front fuselage truss and engine mount are chrome molybdenum steel tube. The rest is mainly 24ST alclad sheet and extruded aluminum alloy. The front and rear fuselage, outer wings and tail can each be removed and replaced after damage.

STRUCTURE AND REPAIR POINTS TO INSPECT

The manual describes both aluminum and wooden rear fuselages, with plywood skin and glued joints on the wooden type. It also covers welded steel-tube repairs, wing spar and stringer splices, wing skin patches, and fabric on the rudder, elevators and ailerons. Look for the quality of past riveting, welding, wood glue work and fabric repairs. Fuel tanks, the oil tank, the oil cooler and the plastic canopy panels each have their own repair sections.

IDENTIFICATION AND PARTS

The manual says to quote the airplane's serial number and model when ordering parts. It is stenciled in the upper left corner of the left front fuselage side panel. It is also stamped on a name plate on the right side of the front cockpit. Part numbers change between models, for example a different prefix on the AT-6C. Check that the parts and manuals match the exact variant.

PERFORMANCE

Family Max Range Nm	590
Family Max Cruise Speed Kt	140
Family Max Service Ceiling Ft	22500

SAFETY NOTES

- The repair manual warns against using any method of repair not described in it on important structural components.
- Poor rivets, such as cracked heads, over-driven rivets or sheets not clamped together, must be replaced. Check past structural repairs for these faults.
- Welds, wood glue joints and fabric condition on any airframe should be inspected against the repair manual standards.