

The Nakajima Army Type 91 parasol monoplane was one of the first indigenously designed aeroplanes to see service with the JAAF, although the chief designers for the project were Japanese based Europeans. That they were strongly influenced by contemporary French aeronautical design shows clearly in the lines of the Nakajima aircraft.

Initially rejected in favour of an American Curtiss P-1 variant, the first prototype was perceived to be structurally weak. A second prototype with structural modifications was submitted for evaluation and this time met with a favourable response. An initial order for five pre-production aircraft was followed by squadron deliveries in December 1931.

Main powerplant for the Type 91-1 was the licence built Nakajima Jupiter VII engine; a second sub-type, the 91-2 was fitted with a Nakajima Kotobuki 2 engine. A navalized version with shorter span wings was submitted for evaluation by the Japanese navy, but was not selected for production.

Assembly procedure.

- 1) Carefully remove all flash and sprue gates with a sharp knife or file.
- 2) Degrease all parts with acetone and paint interiors.
- 3) Assemble fuselage and tail surfaces. Fabricate tailskid from aerofoil strutting.
- 4) Drill out axial hole in engine. The engine is mounted on the front of the fuselage (now there's a surprise!) with the cylinders lined up with the moulded cylinder fairings. One cylinder fairing has been moulded separately. This goes on top of the upper fuselage seam. The lower surface of this fairing may need some trimming.
- 4) Refer to the plans to locate the position of the wing struts. Drill out these with a 0.5 drill. The location points on the fuselage are marked by acorn fairings. It will be found easier if the cabane struts are located and fitted to the fuselage first, the main struts being added afterwards. Repeat procedure for the undercarriage. A quantity of aerofoil strutting has been provided to cater for these requirements
- 5) To provide for a rotating propeller, a small quantity of brass wire and aluminium tube has been included. Cut the tube into two parts, one long, one short. The long piece needs to be at least as long as the depth of the engine block it is passing through. Drill out the back of the propeller boss to accommodate the brass wire, then glue the brass wire in place, taking care to ensure that it sits square to the back of the propeller. Pass the brass wire through the long section of tube and glue the short piece of tube over the exposed end of the wire, then trim off any excess. Avoid getting any adhesive on the long section of tube which has to rotate. When drilling out the engine block select a drill as close as possible to the outside diameter of the aluminium tubing ideally you should aim for a light press fit as this will allow the propeller to be easily withdrawn for painting and the inevitable repairs.

Colour scheme

Overall white with red hinomaru in positions indicated on plans. Unit numerals on both wing surfaces inboard of hinomaru. Engine cylinders, steel. Cowling, black. At least one unit sported green elevators and rudder.

General tips

Undercoating the individual parts with Halfords plastic primer will assist paint adhesion and help to highlight any flaws in the surface. Tipp-Ex and similar typewriter correction fluids make excellent fillers for small gaps. When cutting the aluminium tube the best way to achieve a square cut is to roll it under a straight blade.

