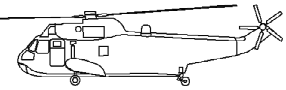


Battalion Bits BT12: Japanese Road Roller 1/48

Belcher Bits



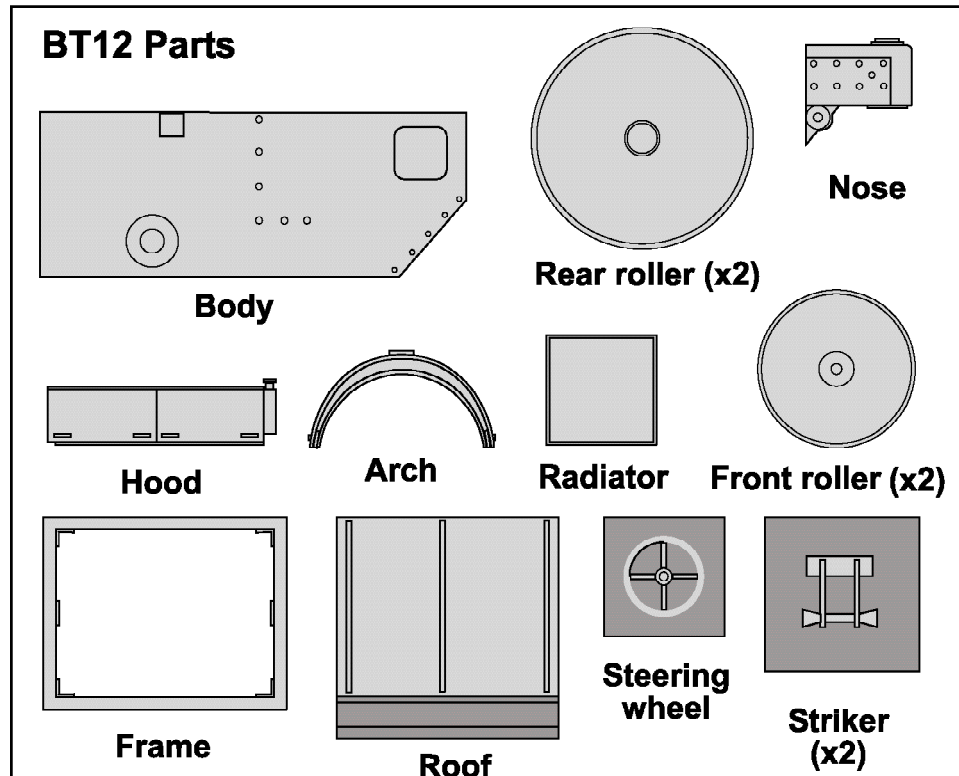
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Background

In July 1942, the IJN began constructing a large airfield at Lunga Point on the island of Guadalcanal, using a construction force of nearly 2800 personnel. This base and others in the area would help protect Rabaul and act as a staging point for further southward expansion. On August 7, US Marines staged an amphibious landing on Guadalcanal to capture the island and airfield. The Japanese defenders abandoned the airfield and retreated some distance away; furious fighting over the next months eventually resulted in a victory by December 1942. The airfield was crucial to early Marines defense of their position, and captured IJN equipment was pressed into service to maintain the runways despite naval bombardment and aerial attacks.

Japanese Road Roller

This kit is based on a single photograph from the period (see right). The official War Department caption is "A U.S. Marine stands guard over a Jap steam roller which smoothed the ground on Guadalcanal Island for a Jap air field until the leathernecks took over the island in their offensive in the Solomons" and is dated August 1942.



The Main Body

Drill a 1/16" (1.5mm) hole through the body centred on the discs at the rear bottom. It is really hard to drill through straight, but by drilling in partly through from each side, it is relatively easy. Glue on the nose, lining up the square panel on the side with the top of the body. Use the side view below as a guide.

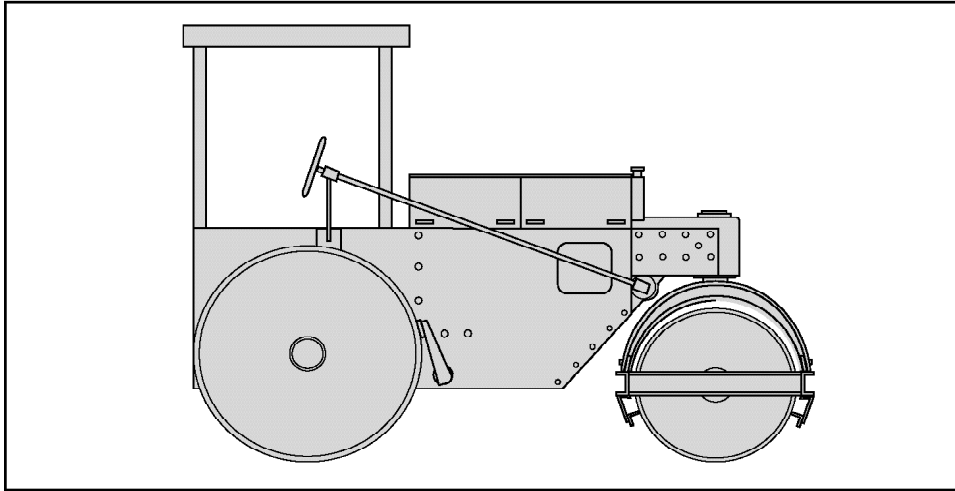
Drill a similar sized hole in the centre of each rear wheel. Cut a length of 1/16" (1.5mm) brass rod to 1" (25mm) long and insert through. The wheels can then be glued on the protruding axle.

The hood has a shallow plate on the bottom which is meant to locate the hood in place on the body. It may be sanded off if you prefer; the hood will sit over the nose piece at the radiator.

The Front Roller

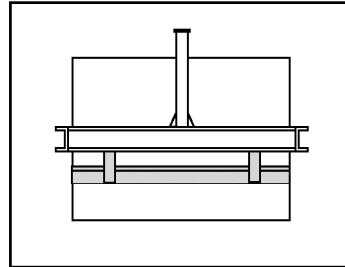
Sand the rear of the front rollers (just enough to ensure they are flat), and glue together. The best way to do this by using a V block or a length of angle to line the two parts up. Fill the seam all around. Clean up the flash around the frame. The front roller should simply snap into place in the roller, but glue it in.

Remove the flash from inside the arch, clean up and glue it to the frame, centred over the roller. I like to reinforce key joints with a bit of steel or brass wire; the arch isn't very thick, so drill into the top, no more than 0.02" (0.5mm) diameter and the same into the disc on the bottom of the nose. You can glue the roller in place now, or wait until you decide if you want to turn the front roller.



The Front Scapers / Strikers

I'm not sure of the correct term, but these are the things which prevent road material from being drawn into the space between the roller and frame. Cut two lengths of 1/16" plastic angle to the length of the roller. Cut four lengths of brass bar to 1/4" (6.3mm) long and bend a small bit over, matching the drawings. Glue two of these brass strips to each angle, and glue to the roller frame.

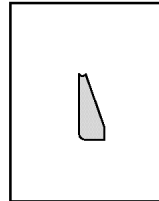


Steering Gear

This roller had the steering wheel offset to the right, driving through a right angle gearbox to some sort of worm gear to turn the front roller frame. Details are sketchy, so some artistic license is involved. Cut a steering wheel support bracket from 0.02" (0.5mm) plastic strip per the sketch and glue it to the pad on the right side of the body.

Cut a length of 0.03" (0.75mm) rod to 1.8" (46mm) lg. Slip one of two tiny copper tubes supplied on one end and glue in place. Slide the other tube over the other end, down 0.04" (1mm) and glue it in place. Glue this assembly to the body, the offset end sitting on the bracket and the other end over the round protrusion at the base of the nose leg.

Sand the backing away from the steering wheel, drill a 0.03" (0.75mm) hole in the centre disc and glue it on the end of the steering rod assembly.



'Cockpit'

Boy, if you thought the steering gear was sketchy, you'll love this. There are of course no photos of the operating cabin of this machine, or any others similar that I could find. Discussions with a friend who worked on a paving crew said the machine likely had a lockable throttle on the inside wall, and some form of gearshift lever (basically, forward and backwards). I provide a pin with a round head which you can use to represent the gearshift lever. Cut the pin to 0.6" (16mm) long, drill a matching hole in the small pad on the cabin floor and insert. Any more information on controls for this sort of machine would be welcome.

Rear Striker / Scrapers

Two are provided. You need to trim off the conical section on the outboard side of each per the sketch, then glue in place on the body as shown in the side view.

Roof

Cut four lengths of 1/16" angle to 1.5" (38mm) long and glue them to the bars inside the cabin, flat sides facing in and towards the centre. Remove the roof part from its pour sprue. This should sit over the four upright angle, and glue it in place.

Painting

Another guess! Nothing like trying to infer colours from a black and white photo. My guess would be something similar to Japanese Navy Grey, a darkish grey with a hint of blue. The paint would no doubt be quite faded on top, and heavy weathering is indicated. Note that the runway would have been crushed coral rather than gravel, so white dust would be prevalent and heavier on the rollers.

From the photo, a canvas tarp and palm fronds were on the roof. Maybe the thin sheet metal had rusted out, maybe more shade was needed, who knows. I have seen somewhere that good looking palm fronds can be cut from coloured paper.

References

Limited. I'd like to thank Pietro Maviglia for his help on operating these rollers.