

Belcher Bits BB-46: RAF Type C Bomb Trolley 1/48

Background

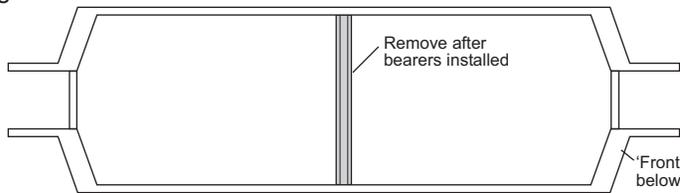
Starting in the late 30s, the RAF developed a series of bomb trolleys to carry ordnance from the bomb dumps out to the dispersal areas where armourers would load them on aircraft. The first two types were lightweight, used sprung suspension and had a capacity of 1000 lb. However, as bombers got larger, so did bomb loads and the Type C trolley with a capacity of 3000 lb was introduced. This used a more substantial frame, with movable cross-members (bearers) which also had adjustable chocks so that a wide variety of loads could be safely transported. This kit represents the Type C Mk III and was often seen at Lancaster dispersals loaded with 500 lb MC bombs or SBCs carrying incendiaries.

Frame assembly

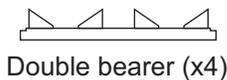
The frame is provided on a thin flash of resin which should be trimmed away and cleaned up. Note the frame is molded upside-down, and a small printed 'Front' cast into the frame indicates the bottom and points to the front end. It can be sanded off once assembly is complete. At this point, you should decide which bearers to use and where they are to be installed, because they strengthen the whole assembly when glued in place. The bearers fit between the side frames and the notch on their top fits against the top flange of the frame. Once all four bearers are glued in place, the central support can be cut out and the inside of the side frames cleaned up where removed. Use a 0.047" drill and drill through the side frame where the central support was located. Cut a length of the 0.047" plastic rod to 1.1" long, feed this through the holes and glue in place. The excess can be trimmed off; leave a little protruding because the real thing was welded on the outside. Drill a small hole in the ends to represent the hole in the center of the pipe.

Cut a length of 0.047" rod to 0.8" long, and glue it in place in the notches under the rear arms. This will be the rear axle.

BB46 Parts



Frame



Double bearer (x4)



Single bearer (x4)

See diagram next page for
Front axle, Tiebar and Towbar

Also included: 0.047" plastic rod



Wheel (x4)

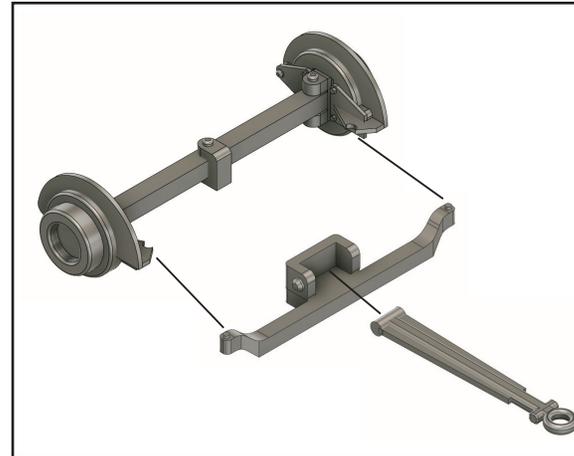
Belcher Bits

33 Norway Spruce St,
Stittsville, ON, Canada
K2S 1P3

Phone: 613-836-6575, Email: info@belcherbits.com Web: www.belcherbits.com

Front axle assembly

This will be a bit fiddly but will look great when completed. The front axle has a small riser moulded under the main cross bar; carefully remove this. Glue the front axle in place, centred under the front arms of the frame. The larger lobe of the brake assembly faces forward. Next, the tie bar needs to be carefully removed from its backing, and it is glued to the front axle. Small (very small!) protrusions, pointing up, on the tie bar ends fit into the horizontal tabs on the brake assembly. The tie bar glues in from below, not above. See the diagram below. Do not install the tow bar at this stage. The tow bar not only steered the trolley, but also applied the brakes depending on the position of the towbar. A cam on the bottom of the towbar pushed down on the tie bar when the towbar was raised. When the towbar was hooked to the towing tractor, the brakes were released, but once in position, the towbar was raised and the brakes on the trolley were set to hold it in position.



Time to get the trolley up on its wheels. Saw them off their sprues and clean up the bottom leaving a small flat. These were low pressure tires so they should show a bit of bulge on the bottom. It helps to shim up the frame (about 0.13" or so) so the flats on the tires all end up aligned. That is one problem with cyano glues; you generally do not get the time to line everything up after the glue is applied.

The towbar is cleaned up and the cross bar just below the ring can have a couple small extensions added (see the illustration next page). The tow bar can then be glued in position in the steering yoke on the tie bar. The tow ring should rest on the ground (which is why the wheels go on first).

Final steps

Up until 1940 (and after the war) trolleys were painted RAF Blue but during the war, they were generally overall Dark Earth. Some photos indicate that some trolleys had markings on the outside of the frame to show where to position the bearers for particular loads, but just as many show no markings at all.

Towing the trolley

There are a couple tractors available. Accurate Armour makes both a Fordson and a David Brown tractor in 1/48. Both are very nice.

References

1. Various photos on the internet
2. RAF publication A.P.1664D, Vol 1, Sect 1, Chapter 3

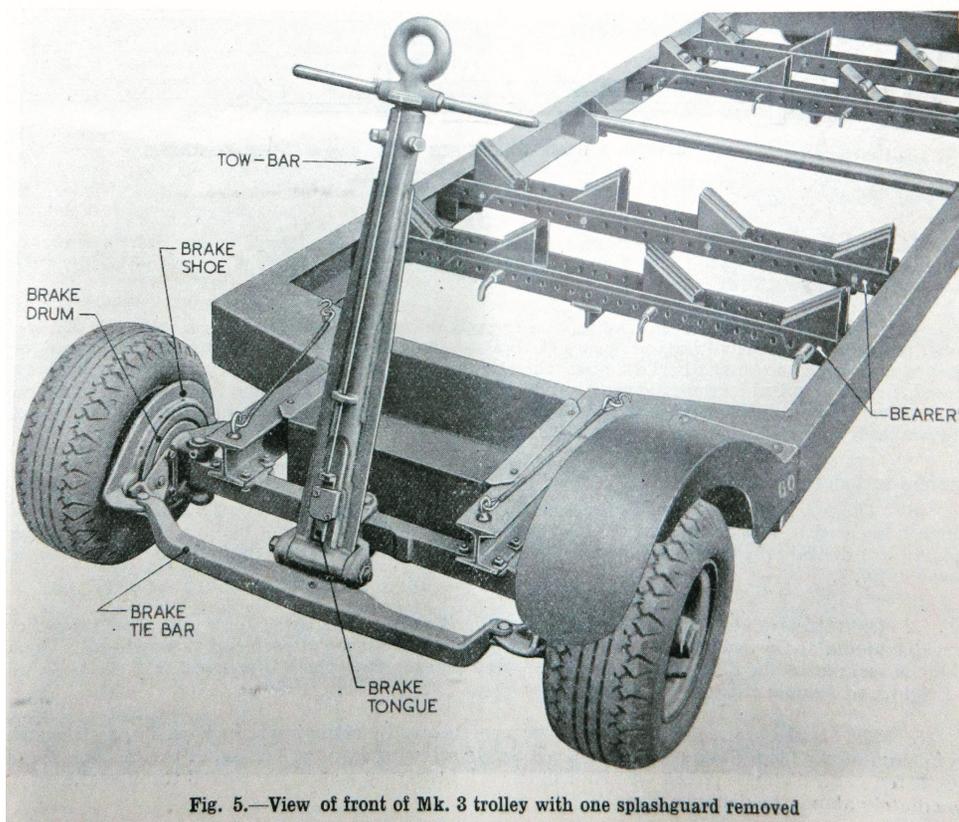
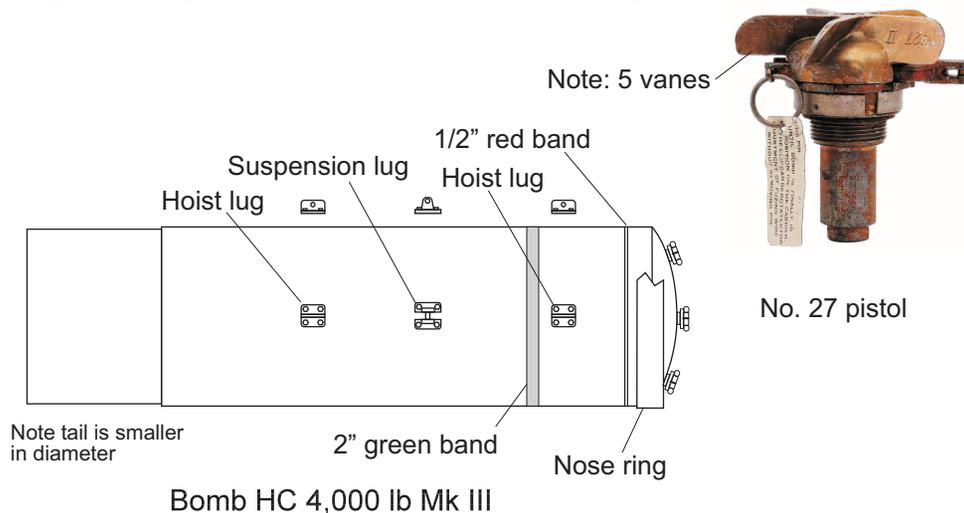


Fig. 5.—View of front of Mk. 3 trolley with one splashguard removed

Improving the bombs

The bombs provided in the HK Lancaster kit are nominally 500 lb MC types, and a 4000 lb HC cookie. The dimensions are not too bad, but detail is lacking in the extreme. They are designed to look OK in the bomb bay of the kit, but out in the open on a bomb trolley, they need help.

The large cookie has no suspension lug, so something will need to be added there. While being loaded, the bomb also had two hoist lugs bolted on which were used to lift it into position, then disconnected. The three bomb pistols at the front are in the right position, but need arming vanes (see below). The drum tail was slightly smaller in diameter than the bomb (29.3" vs. 30") but this could be overlooked. Usually, these later cookies also had a thin metal ring fitted around the nose to improve aerodynamics during the drop. The diagram below is scaled to 1/32 (multiply by 0.66 for 1/48).



The 500 lb MC bombs also need detailing of the suspension lug (RAF used single suspension points, so removes the double ones on the other side) and the nose of the bomb seems to be fitted with a large circular push-button rather than a normal pistol and arming vanes. Many of these bombs also used tail pistols so arming vanes could be added using thin brass strip.

Bombs were stored in the open in bomb dumps and rolled in the dirt to load them. Typically, they were dark green in colour but need weathering, especially the body of the bomb. The tails were often added later and they are generally much cleaner looking. Both MC and HC bombs had a narrow red band around the nose to indicate they were filled and a wider light green band further back to indicate high explosive fill.

Belcher Bits makes a set of 1/48 HC bombs (BB9) and two different SBC incendiary sets: BB17 for the common 4lb incendiary, and BB41 for the 30lb incendiaries.