

Battalion Bits BT9: Early Crusader Mk I

Battalion Bits

33 Norway Spruce Street, Stittsville, ON, Canada K2S 1P3
Phone: (613) 836-6575, e-mail: battalion@belcherbits.com

Background

American Walter Christie did a good job selling his ideas on tank suspension, and both Russia and the UK were keen on the concept of the fast tank. The A13 Cruiser Mk III used a Christie suspension, with long-travel springs, large diameter wheels and unsupported upper track run. The A13 wheels were aluminum with a plain disc cover, and these were also carried on early versions of the A15 Crusader and A16 Covenanter. However, aluminum shortages led to steel wheels and the removal of the disc covers.

The first British cruiser tanks (A9, A10 and A13) were all armed with 2 pdr main guns with a co-axial Vickers machine gun. Later versions of these tanks started to introduce the air cooled Besa machine gun as a replacement for water-cooled Vickers, and a new turret mantlet was required. This design was carried over to the earliest Crusaders and Covenanters as well. It was later replaced by an internal mantlet inside a more substantial armoured cover (as given in the Tamiya kit).

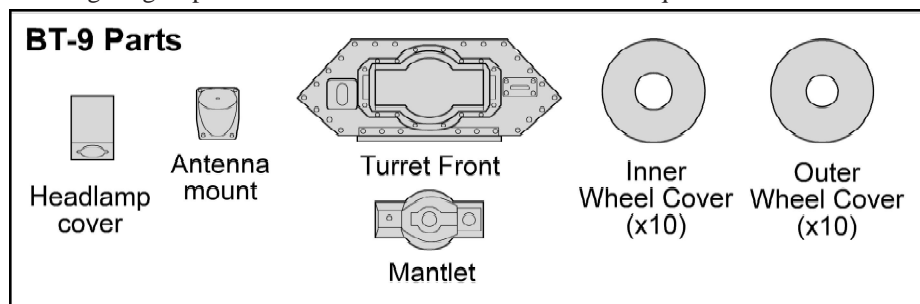
When the first Crusader Mk Is were sent to the desert in 1942, they included some examples with disc covers on the wheels, some with the old style mantlet and some with both features. This conversion provides disc covers, a new turret front with mantlet and early style radio antenna mounts and headlight cover. Consult your references to see which of these features you may need.

Wheel Disc Covers

If you want to fit these, you need to decide before starting on the suspension, because these covers are also fitted inside the inner wheels. The set provides 10 inner wheel covers and 10 outer; the inner ones have a slightly larger centre hole (see below). Sort them in to two piles and work on the inner wheels (Tamiya part A10) first. Clean the edges of these discs, put a couple small drops of cyano glue around the edge of the wheel and drop the disc in place. Do not fill the seam around the circumference. The outer wheel discs are assembled the same way.

Early Turret

The set provides a new turret front which is a direct substitute for the kit part (Tamiya part C14/15). The inner mantlet can then be glued in place with the Besa MG vent screen on top. If you want to show the main gun at any elevation other than at 90 degrees to the turret front, you can sand a bit of an angle on the back of the mantlet before gluing in place. Other turret modifications will be required:



- Camouflage net bin (part B30) not required, and mounting holes need to be filled.
- Small antenna (part C1) not required and rooftop mount needs to be removed and hole filled. Resin antenna mount is fitted to top of turret side, directly in line with the removed mounting (see side view drawing).
- Radio antenna mount (part C25) needs to be moved from rear of the right side to left side of rear plate. The early mount is actually more complex and somewhat bigger than this part, but it is a good simple substitution.

Early Headlamp Cover

The early Crusaders had a large central headlight under an armoured cover. Prior to installing this, some mods must be made to the front glacis. Before attaching the upper glacis plate (C28), remove the bosses where the headlights (B20 and B21) would go, and fill the holes where the headlight guards (4 x A26) would fit. The lower front plate (C3) has four notches at the top which also need to be filled in.

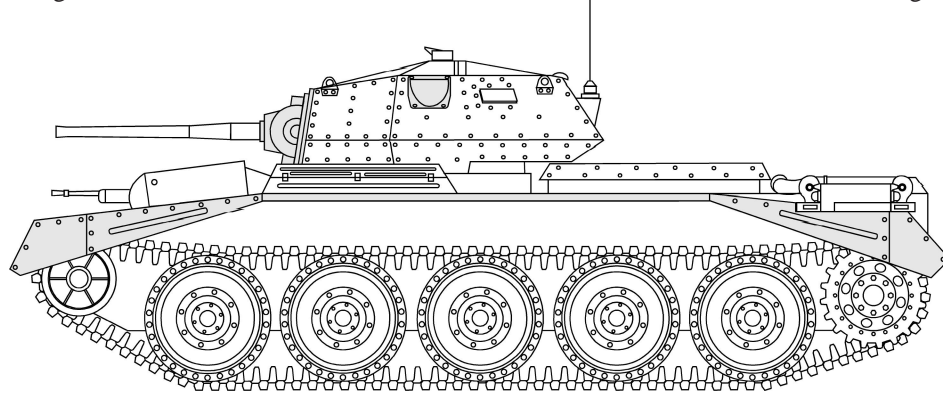
With the front glacis plates suitably modified, glue the headlight box in the centre of part C28. It is possible to install this part upside-down, so check that the front face is vertical; if not, turn the part over.

Other mods

Some early Crusaders did not have a rear tow pintle, so carefully remove the mounting plate from part B25, add a couple rivets top and bottom and discard B14. Do not fit the long stowage bins (B28, BB39, B26 and B38). Do not use the rear fuel tank and fill the mounting holes.

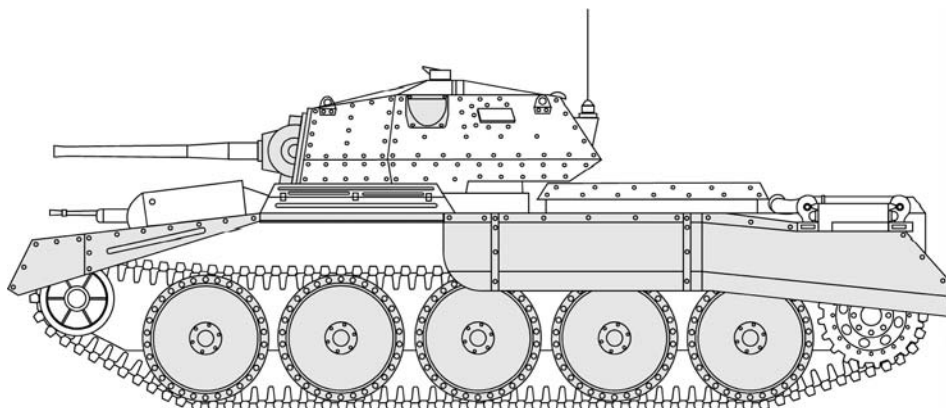
Sand shields

Early crusaders were delivered without sandshields, except for simple mudguards fore and aft. If you want to rob these parts from the Crusader AA kit, you can, but they are very easy to make from 0.015" plastic card. See the side view drawings below, cut using these drawings as a template, and use a bit of 0.010" strip to represent the long reinforcing ribs. The small bolts heads can be represented by using small discs cut from 0.020" rod. Another method which I learned from reading



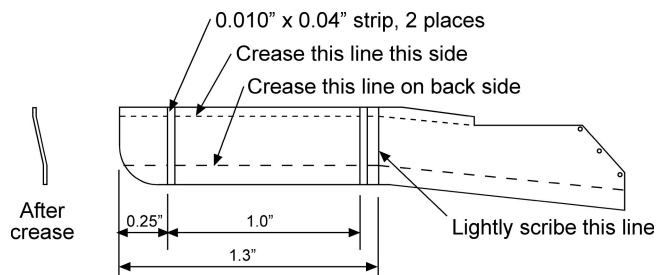
Steve Zaloga's articles in *Military Modelling* is the use of Slick dimensional fabric paint. This thick acrylic paint is designed for painting on T-shirts, and it retains a bit of thickness when it dries. Use a small piece of wire to dip in the paint, and apply a small drop. It requires practice to drop a line of rivet heads all of the same size, but it can be done and if you really put too much on, it is acrylic and the offending blob can be removed with water and a Q-tip.

The intermediate sandshields are, in my opinion, much more attractive, but are a bit more difficult to make. I recall reading somewhere that these sandshields were based on those fitted to Cruiser Mk IVs and were locally manufactured in Egypt. The rear mudguard was replaced by a much larger shield. You can use the drawing to aid in placement.



These sandshields have a couple bends in them which results in the middle section flaring out a bit, but the bottom edge being vertical. Use the process shown below to crease these. Draw along the lines with a ballpoint pen with the plastic sheet on a semi-soft base like several pieces of paper. Remember to remove the ink prior to painting!

Follow the instructions below, but remember to make a left and right unit, not two lefts (like I did the first time). Once bent, you can use a bit of 0.010" strip and make a couple reinforcing strips. Pre-bending these strips will make attaching them easier. Glue the shields in place. You will notice that you need to bend the after ends in to glue them to the kit fenders, which are vertical. The real tanks had the same problem, depending on the flexibility of the plates to fit to the fenders.



This photo (Imperial War Museum, E-7014) shows the rear turret antenna mount, detail of rear sandshields and on the sloping rear plate, a rack for British 'flimsy' gas cans. Photo via G. Bradford.

References

1. *British Armour in Action*, N. Harms, Squadron/Signal, 1974
2. *Crusader Cruiser tank 1939-1945*, D. Fletcher, Osprey, 1993
3. *Crusader Cruiser Tank Mk VI*, W. Gawrych, Progres, 2003
4. Photos from IWM, British Pathe and other online sources.