Thunder Model 1:35 US Military motorcycle Indian 741B



Box art



My rendition; I added the kick stand

Kit number: 35003; for two motorcycles

The 741B was the most common Indian motorcycle produced for military use during WWII, a version of the Thirty-Fifty, powered by a 500cc (30.5 cubic inches) side valve engine delivering 15 hp. These motorcycles were primarily used by British and Commenwealth forces, and many served on airfields operated by the USAAF Eight Air Force in East Anglia. More than 30 000 units of the 741 were produced.

Parts count: 93, plus spoke wheels jig (parts A32 and A33), and decals

Are you thinking of building your first Thunder Model kit? Think twice. I had built the 1:35 Case VAI a while back; an extremely fiddly endeavor, and thus thought I knew what I was getting myself into with the 1:35 Indian 741B motorcycles. Alas, this kit forced me to think out of the box (no pun intended).

Random notes

The Indian 741B motorcycle is but a small fraction of the vehicles and accessories Included in a 4' x 4' diorama depicting a 1:32 HKM USAAF Eight Air Force B-17G as it is readied for a mission over Merseburg, southwest of Berlin, on August 24, 1944, at RAF Chelveston. It was brought down by 88mm flak. All 10 crew members survived and ended up in Stalag Luft III. The diorama was commissioned by the two sons of its bombardier, Lt. Lester Sorensen, and is destined for Washington, DC, from my workshop in Montreal, Canada; hence, a guiding principle of the build is its solidity. All this to say I will not be able to repair any item on the diorama. The 2 $\frac{1}{2}$ " long motorcycle will not be the center of attraction of this large diorama; nonetheless, I did the best I could. This diorama includes 7 Willys Jeeps, 3 tow tractors, a fire truck, 2 fuel trucks, bowsers, 10 bomb trolleys, a Quonset Hut, and so many more accessories.

This kit is not for the faint of heart, and requires creative modelling and patience. It is replete with a profusion of very small parts. Have double-sided tape handy, you will need it for all steps. De rigueur: Humbrol Precision Poly Cement, both thick-gel and capillary CA, different sized securing clamps, tweezers, quality snippers, flat and slightly rounded rat file, regular and hobby Q-tips, and lots of patience. I had foreseen this, as I recently built the same manufacturer's 1:35 Case VAI tractor, TDM35001, and that "Thunder Model learning curve" useful for these motorcycles. As I am putting together an extensive diorama, 4' x 4', for a Hong Kong Models 1:32 B-17G; these Thunder Model items will be right at home with the twenty or so vehicles of all sorts that I have mostly completed by now.

I separated most steps into two parts, labeled a and b. There is some light flashing, especially on the tire parts, even though this is a 2017 original release. I also omitted most PE parts, as the model, once ready, will be primed and painted, which means all these PE parts details will mostly be obliterated.

Securing the model whilst under construction

Working on the sides: find the flat portion of the engine block that still does not have cemented-on pedals, gear and brake levers, etcetera:



The sturdy saddle gas tanks offer an alternative for working on the sides of the model; you can thus attach those levers, pedal, air filter, and so on:



However, the following is the only way to work on the surfaces from the top of the model: drill a 3/32" hole well lined up with the middle of the bottom of the engine casing, insert a 1" number 4 wood screw, leaving 5/8" exposed, enough to fit in a sturdy and heavy "Dewalt" type; clamp this as photographed below:





Step 1: the wheels

Page 2 of the instructions, above step 1, is extremely useful regarding the method of creating a cone effect for all four spoked wheels (2 per wheel), from the PE fret. Separate F1 and F2 from the fret. Use a tea candle for the heating process, as its flame is considerably less strong as that of a butane lighter, and frees your two hands. The jig, parts A32 and A33, is a necessary provision on the part of Thunder Model. Remove all six round tire parts, the ejector pins and clean the insides of these parts with an X-ACTO knife and a slightly rounded rat file. There is some flashing on the inside of the tire parts and after test fitting all together, some unwanted locator pins; remove accordingly.

Place each PE parts (spoked wheel parts F1, F2, and R1, R2) one at a time in the jig and proceed as directed; if the PE part seems to catch on the inside of jig A33, you have too much residual metal at the fret attachment points. Clean soot produced by the tea candle. Works wonderfully.

Using a very fine pointed felt tip pen, mark, on all six plastic tire parts, the location of the locating tabs and notches so you can line the parts properly. Use double sided tape on your workbench, and position part B-10 on it; use precision cement and attach part B25. Insert PE F1, B5 and PE F2. Precision cement another part B10 on top. Trap the assembly inside the Dewalt-type clamp jaws, and squeeze the tire very firmly. Repeat for rear tire. Note the marks on the tire, circled in red.



Tires are ¾" wide

Step 2: engine assembly

Cylinders first. Rear cylinder: cement parts A5, A43 and A7 together; repeat for front cylinder: parts A6, A44 and A8; compress firmly the results with a Dewalt type clamp. Frame/lower engine casings: cement frame, part A13, to lower engine casing, part A14 (no arrows on instructions); cement right lower casing to left lower casing, part A15. Attach cylinders (you will have to do some sanding to

get both of them inside the tight confines of the frame) to the casing. Find room at the correct location for the carburetor, part A30, as shown; some surgery will be required to shorten the two fuel feed hoses.

Step 3a: left casing covers, protective bar

Cement engine casing covers, parts A21 and A22. Attach protective bar, part B19. Step 3b: saddle fuel tanks, handlebars, casing cover, battery, headlight bracket

Do not install the handlebars; wait to be at step 11. Extremely vulnerable. My right handlebar broke off, and the carpet ate it. Mercifully, the box contained two kits, so I just pinched the handlebars from that second kit as, after going through this frustratingly slow exercise, I had no hesitation: I would not build it.

I lightly cemented the dual fuel tanks, realized there was a full lengthwise gap that was meant to be, then asked myself: "Why?" Seems, from to vertical top view drawing on the "Painting and Marking Guide", these halves are not really halves, but rather two separate tanks; note the two fuel caps, one on each tank; refer to step 10b, parts B7 or PE9; this explains why the parts were molded as separate. Cement dual fuel tanks on frame as shown, parts B16 and B24. Join battery halves, parts A9 and A10, and attach sub-assembly as shown. Carefully trim sprue remnants on the frame of the roll bar, clamp the completed step 3a engine/frame sub-component, and attach. Let dry overnight.

Cement front forks link, part A18, and let this cement solidify the weld overnight; do not install handlebars yet (only at step 11); when you do, cement part A34 on top of part A18, as shown. Note: I installed mine on an angle towards the left, to display the 741B parked on a scratch-built side kick stand; I have the benefit of having owned, taken apart, and rebuilt two motorcycles during my college days, the latter a Honda 450. The Indian 741B is depicted in this fashion on the box art.



Step 4a: front fork/mudguard/wheel assembly

Cement spacer, part A31, on the lower tire pin of left fork, part A36, then drum brake, part A29, on lower tire pin of right fork, part A35. Secure front tire on double-sided tape, brake side up, and thick-gel CA drum brake to the tire. Once perfectly solid, repeat with left fork. Cement upper fork pins together. Cement front suspension spring, part A17, to front mudguard, as shown; *Note: I got rid of*

it later as it never fitted properly and would have been hidden behind the headlamp anyway; refer to step 11. Cement mudguard/spring to forks, using thick-gel CA at the contact points of the mudguard with the forks.

Step 4b: attaching step 4a sub-assembly to frame

Cement sub-assembly to frame, as shown, after step 10. Do not try to be perfect, or even close; just get the darn step 4a sub-assembly in place, using generous amounts of thick-gel CA. If you installed the handlebars on an angle, as I did, make sure the sub-assembly 4a is lined up properly. Set aside until the CA is solid.



Step 5a: the right side: rear wheel/chain/rear wheel framing

You will have to test fit, as the drive chain, parts A4 (I chose this one, for its solidity) or PE10, goes on its transmission block pin, and its relative horizontal positioning is entirely dependent on where the right rear axle on the right frame will end up. Test fit the rear axle pin on frame part A1 to the rear hole on the chain; you may wish to slightly enlarge this hole, heating the tip of a 3/64" drill

bit and melting the hole larger. Cement the chain first, as its forward part ends up, horizontally, underneath the rear right frame horizontally. Then cement rear right framing in place, aligning the rear axle pin with the hole at the back of the chain; make sure the space created between the upper portion of the chain and the framing is sufficient to, later, install the chain guard, part B4, step 8.



Attaching rear wheel to rear right frame, using thick-gel CA

Step 5b: the rear left side, mudguard

Make sure the hole in the brake drum, part A20, is a tad more than large enough. Cement all three contact points of the rear left frame, part A2, as shown. Cement mudguard in place. Minor alignment adjustments can now be done; somehow, using my fingers while the cement was not completely set seem to help my cause.



Step 6: air filter, rear mudguard braces, horn

Cement air filter container back cover, part A26, to piped air filter casing, part A46. Look at the drawing of step 7 to identify the location. You will note the "piped" portion of part A46 is too long by 1/8"; trim accordingly. Cement rear left mudguard brace, part A47, in place. Cement horn, part B22, in place as well. Flip model and cement rear right mudguard brace, part A48.

Step 7a: gear shift pedal, front left mudguard brace

Cement front left mudguard brace, part B8, in place. Cement gear shift pedal, part A41, as shown. Once solid, add footrest, part B2.

Step 7b: rear brake pedal, front right mudguard brace

Cement front right mudguard brace, part B9, in place. Cement rear brake pedal components, parts A37 and A38, as shown. Once solid, add footrest, part B3.

Step 8: chain guard, parts A24, A25, A39, kick-starter (part B13)

Cement chain guard, part B4, in place. For a clearer idea of where parts A39, B13 and A24 go, look at the illustration in step 10b. Cement these parts in place. I cemented in place my scratch-built kickstand; I use it as a "wheels only on the ground" protective measure. The motorcycle will be securely parked somewhere.

Step 9: cargo holder, taillights, stand

First: cement taillight components B23, B20 and B21 on rear mudguard. I skipped all PE parts: too finicky, considering my general diorama scheme of things. Cement, as shown, cargo holder, part A40, and tilt-forward stand, part A16.

Step 10: seat, gas tanks filler covers and fuel gauges

Start with the gas tanks filler covers, parts B7 or PE 9, and the fuel gauges, part A11. Cement seat suspension, part A42, as shown. Attach the seat, part A12. Step 11: headlamp array, speedometer, handlebars

Install headlamp, part B14, first. Attach as shown the night headlamp hood, part A27; I ignored part B15, whatever it is; just too small and vulnerable. Cement the handlebars, part A34, and speedometer, part A23, in place, as shown. Decals: after priming/painting.



Finishing the model

Once model is primed, hand paint (no airbrush) Tamiya acrylics well-thinned with and only with Tamiya Lacquer Thinner. Tanks, frame and so on: XF-62 Olive Drab; saddle bags and seat: XF-64 Red Brown (close enough); saddle bags buckles, handlebar ends (more for the benefit of seeing where these are and avoid breakage): XF-16 Flat Aluminum; tail light: X-27 Clear Red; frame, engine, pedals ...: XF-16 in lieu of "polished metal"; wheel spokes: X-34 Metallic Brown (blow hard on any excess paint); tires: XF-85 Rubber Black; headlight "lens", speedometer and tank gauges: XF-16. Apply decals as you wish. Airbrush Future Wax to seal the paint. Testors Dullcote if you wish.



Primed, ready for painting; the primer lightly coated the metal clamps; however, these clamps are easy to clean with acetone. To handle, remove the lower clamp. At all times be aware of the fragility of the handlebars.



Protecting the 1:35 Indian 741B motorcycle, or any item of a similar size

We all have Woodland Scenics Blended Turf plastic 57.7 cubic inches bottles with only a residual amount of turf left in them. Sacrifice one such bottle for the protection objective. I will cut above the green painter's tape to create the cover:



Base



Number 4 1" woodscrew, centered in an old remnant of 3/8" wood

Cover dimensions: 3.5" L x 2.75" W x 3" H Base dimensions: 6" L x 3" W x 3/8" thickness

The heft of the plywood will provide a secure non-tip platform for the model; one could perceive this as a "display" case; at least, one can see its content.







Secure cover with transparent tape

Should you wish to know more about the diorama, you can email me. I have a WIP 72-page PDF document I could send you

