



**“From this...”**

This toy truck or collectors item was made for Texaco as a promotional item by ERTL. It is available through participating Texaco dealers. It is too large to be an exact 1/4" scale model and too small for 3/8th scale, the conversion could be used by both.

Photo 1. Chinese conception of what a 1926 Mack tank truck looked like. Note white hard rubber tires to this.

Photo 2. After cutting, chopping and painting the author came up with this reasonable facsimile of a Robbins Bros. Bulldog Mack to tow the Clown and Horn Calliope. No special tools are required. Just care, patience and lacking that, a livid and salty vocabulary.

Tools Needed: Exacto knife, Exacto saw or small hack saw, small files. A Dremel Motor tools and accessories could be helpful.

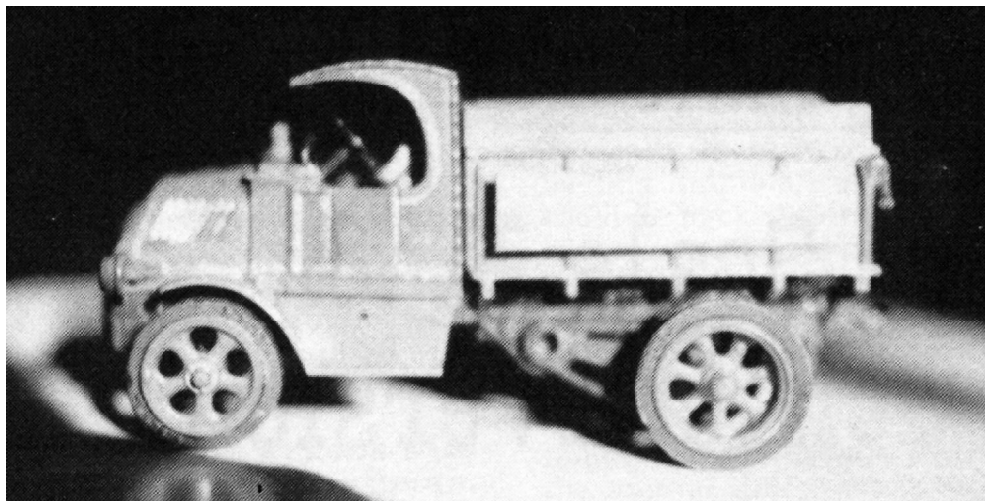
Description: The item is described as a Nostalgic Collector Series by Texaco. It is made in China, imported by ERTL and distributed by “participating Texaco dealers”. Each item is numbered. It is constructed of white metal and plastic and represents a 1926 Model AC (Bulldog) Mack. I cannot determine a scale. It is slightly too large for 1/4" scale and too small for 3/8th inch scale. However, if you can live with it, it might be useful in either scale. The truck is also out of proportion as it is too wide, scaling in 1/4", almost seven feet wide. The frame is too long for the usual stubby Mack used on the circuses and the tank is much too modern for the “Roarin’ Twenties”.

Dismantling the Truck: The body consists of cab/hood unit, tank and the actual frame consisting of the fenders, frame and tank cradle and bed. The plastic frame is merely cosmetic. It carries the detail, but has no strength. Photo 3 shows the lugs that hold the units together. The white dots hold the tank in place and bond the plastic to the frame, to the actual frame. The grey dots are the lugs that hold the front together. These parts should be separated. NOTE: It is not essential that you dismantle as far as I did, but the metal parts are painted with enamel which is very shiny and

the color may not match the cargo bed or tank that you will want to put on the rear end.

Dismantling: (1). On my first conversion, I used my Dremel Motor Tool with a #178 machining accessory which resembles a countersinking drill. Take your time. The metal is tough, you can easily overheat your drill and ruin the accessory. There is no way you can help chewing up some of the plastic frame, but it should not show after reassembly. Try removing the tank first. When it falls on your toe, you’ll know you have it loose. But try to save as much of the lugs for the cab as you can as they will help hold the front end together later on.

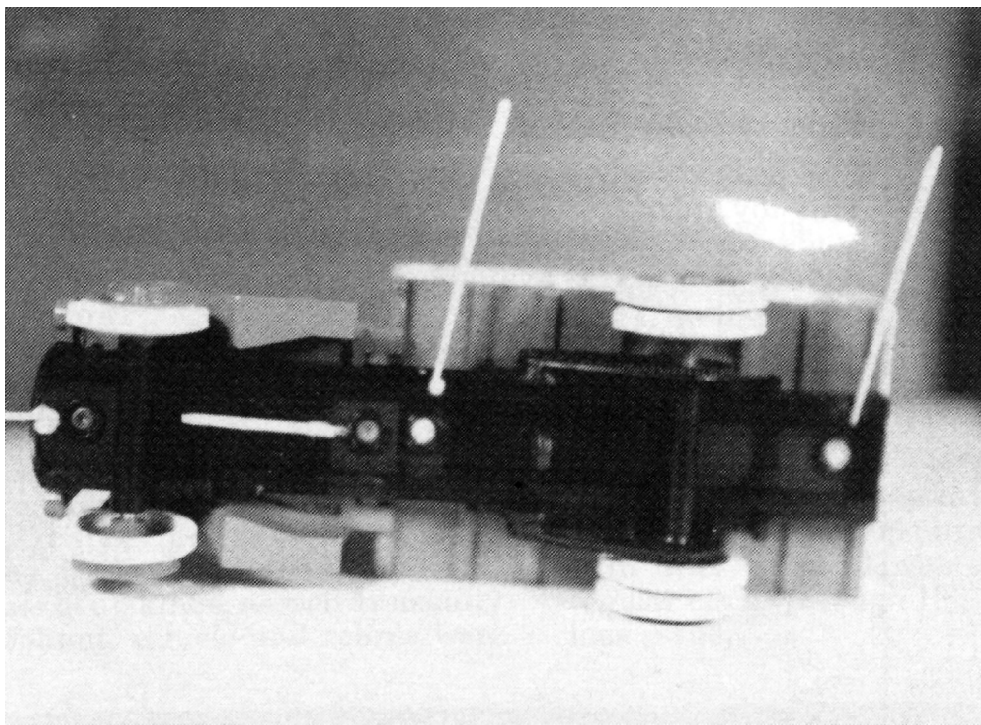
Dismantling: (2). In the event you do not have a motor tool, you should have an Exacto knife. With a sharp blade you can cut the plastic frame around each of the lugs. You can either cut in a square or a circle, but you have to cut completely through the plastic. Then you can lift the frame off, the wheels will come off. Clean the residual plastic from around the lugs and with a small Bastard file, file the lugs down until the parts can be separated. Retain as much of the front lugs as possible.



**“to this...”**

## Mack Truck Conversion from an Ertl Model

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<b>Circus Model Builders</b>			
Drawn By Haskell E. Harr			DRAWING NUMBER <b>#0323</b>



**Photo #3 - Arrows show peened studs.**

**Removing the Tires:** The outer rear duals and the front wheels should pose no problem. Simply pull them off the wheels. The inside duals, push inward. Press tire down against axle. With first two fingers and thumb of the other hand rotate tire outward and upward. It will easily slip over the wheel.

**Removing Cab Interior:** Unless you want the cab interior to be painted, remove it by inserting finger under hood against the firewall, press to rear of cab and lift toward you.

**Preparation for Painting:** At this point you should decide just what period of the life span of the Bulldog Mack you wish to model. The Mack was first produced in 1916 and was very primitive. There were not electric lights, tail lights, windshields, cab doors. They had two wheel brakes on the rear wheels, an engine, power train, hood and cab. They were equipped with hard rubber tires as the pneumatic tire was not strong enough to carry much of a load. You may want to remove the electric lights, the windshield and this is a good time to do it. If you leave the lights on, you may want to simulate acetylene lights. This can be done by a small dowel or piece of tubing on the slope of the fender on the driver's side. If you want the kerosene cowl lights often used, perhaps HO

model marker lights would be O.K., especially if they were of the kerosene variety. An amber light to the front with a red light on the rear of the truck frame for a tail light. If you wish no windshield, remove the frame from the cab detail.

Before painting, I wash all the parts to be painted in a solution of hot water and dish washing detergent. With a small brush, scrub the sides of the cab real well to remove the gum from the Texaco logo. During the manufacture the parts may have been handled by many persons, each leaving some body oil on the components. Paint will not adhere well to body oils. After they have been scrubbed, rinse them in running water, holding them with tongs or wire hooks and then laying them on a board to air dry. For the most part, the parts are heavy enough so they will not move when spray painted. The tires are a different matter. For all my wheels I use a simple rack. It is merely an upright piece of board with some brads or small finishing nails upon which the wheels and in this case, the tires, can be suspended. For the wheels and axles, put them on a board with a piece of tape over the axle to held them in place.

**Paint:** My preference in paint is Pactra Insignia Red or Testors Italian Red. As the tires and plastic frame are to be painted, I will use almost any flat black spray enamel.



**Photo #4 - Tank removed.**

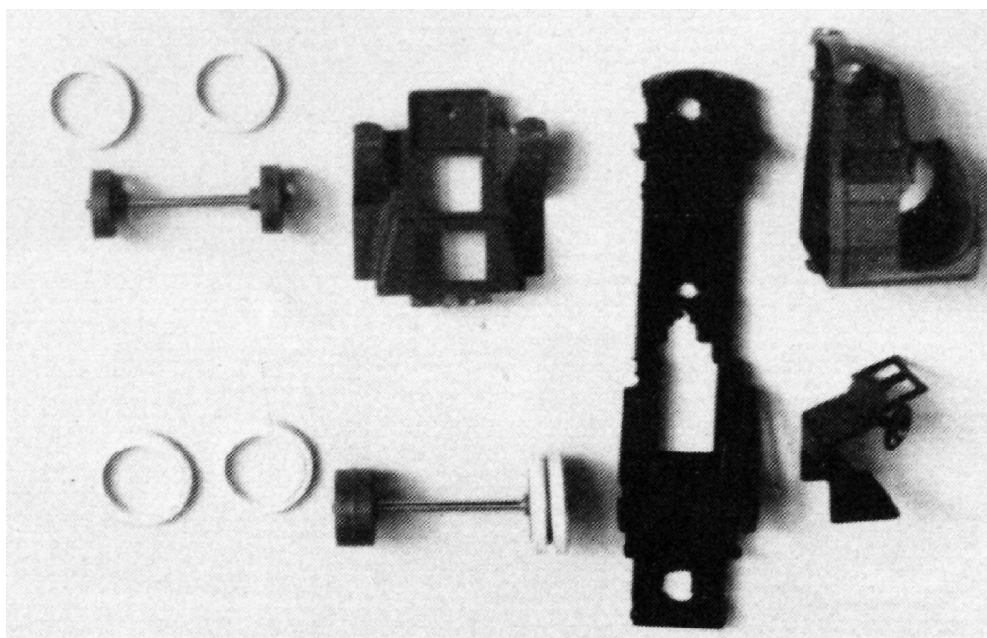
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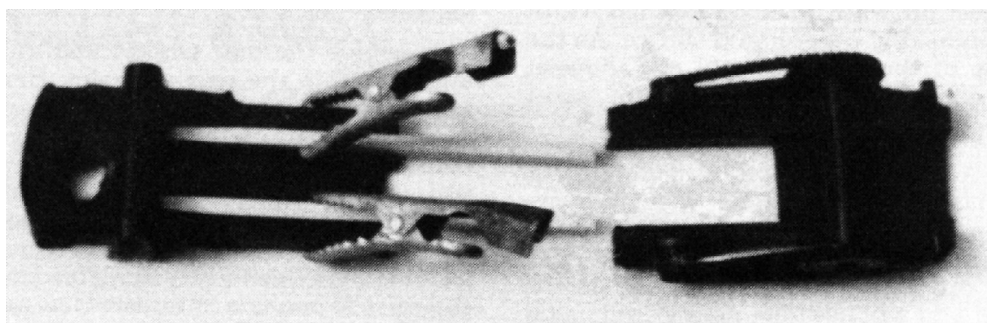
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**Photo #5 - Completely disassembled truck.**

Sometimes it is packaged as Wrought Iron, but it is flat.

**Painting:** The directions for using the spray cans is printed on the container. It is most important to make certain the paint can is pointing in the right direction. You should have a well ventilated area and I generally make a spray booth by using a suitably large cardboard box. This keeps the spray from running wild. Remember two or three light coats are better than one heavy one. There is also less chance of having "runs". There will be plenty of time for the paint to dry, and I'd give it at least a day or two. Oh, and remember, when you have finished spraying, turn the can upside down, pointed away from you and expend the propellant. It will tell you how to do it in the directions.



**Photo #6 - Showing alligator clips holding plastic strips in place on frame while being glued.**

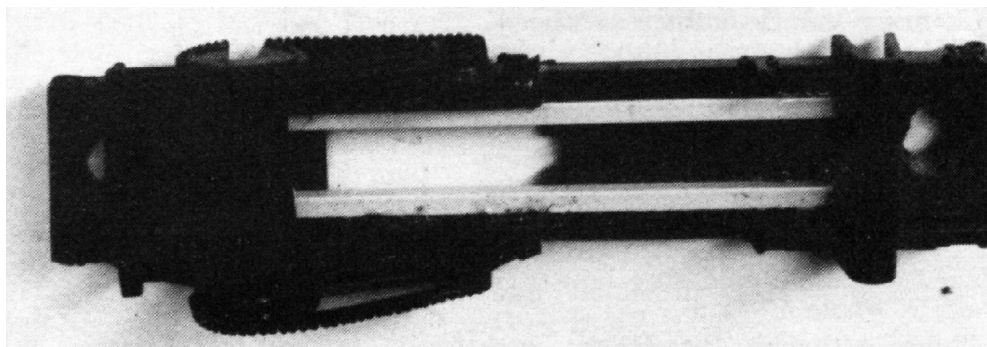
**Shortening the Frame:** In order to get that stubby appearance, we have to shorten the frame. In Sketch 1 you'll notice I have shortened the frame in two areas. One (A) is between the cab and the chain drive and the other is behind the rear axle. Due to the detail on the side of the frame, it will not fit against the fence

of the miter box, so I made a buffer of a short length (about 11/2" long) of wood, 1/4" x 1/4" square. I placed this between the smooth side of the frame (which is laying upside down on the bottom of the miter box) and lined it up so as to make my first cut just ahead of the dummy chain tightener cast

into side of the frame. I cut through both sides of the frame. I measured 3/4 of an inch to the left of that cut and made my second cut. I obtained two plastic stirring sticks, the type used to stir drinks. You can buy them at the supermarket or party stores. They are about 1/8" x 1/8" square. I cut off the ball at the end, then cut them to a length of 11/2 scale feet for 2 7/8ths inches. These are to reinforce our splice in the frame. I butted one end up against

the front axle housing and glued it to the side of the frame, holding it in place with a small alligator clip. I did the same with the other side. While that was drying, I cut the last quarter inch of the frame off and set it aside. I then cut off the last half inch of the remaining rear end of the frame and discard that. I then made a butt joint and butted the rear cross member to the rear end of the frame. Later, at your convenience, you can drill a small hole and screw in a spall screw eye to serve as a towing hitch.

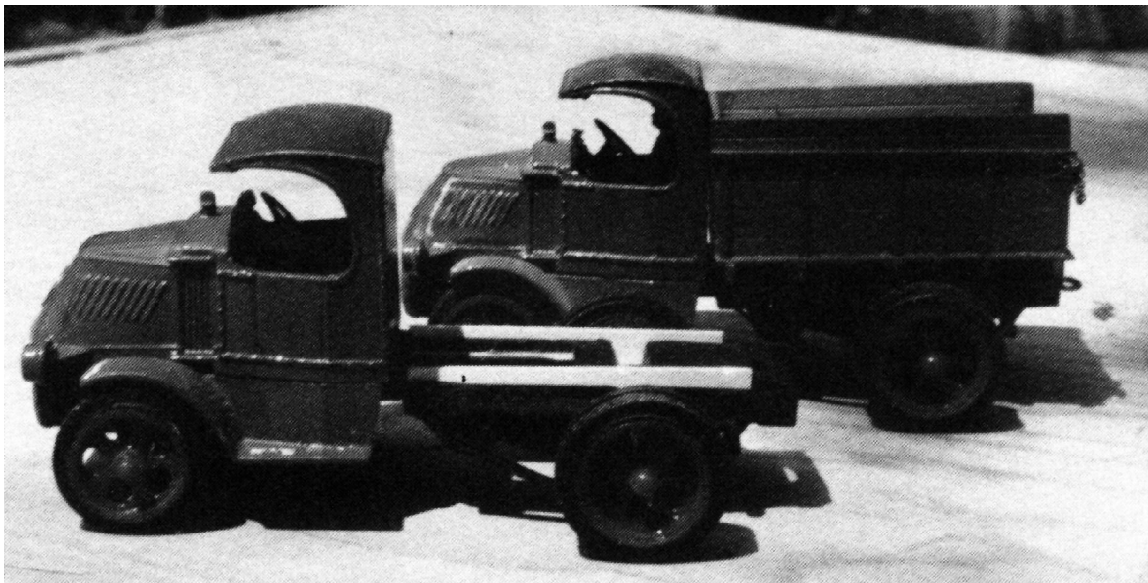
When the main splice in the front of the frame is dry, complete the splice and clamp it with alligator clips. When completed, the spliced frame should be in the neighborhood of 5 3/16th inches. The frame is now ready for washing and painting.



**Photo #7 - Reinforced frame before painting.**

## **Mack Truck Conversion from an Ertl Model**





**Photo #8 - Plastic strips in the slotted plastic frame strengthen the frame and provide clearance for box and/or tank to clear wheels. Paint before adding body.**

Before painting, notice the two grooves in the top of the frame. We are going to need those and we don't want to get paint down in them. So, mask them off with tape. A one inch width of masking tape should suffice. As the top of the frame should not show, it doesn't have to be painted. But, paint the bottom and the two sides.

**Adhesives:** Before assembling the truck, let us consider what we are going to use to hold it together. Some people prefer the ACC type glues. I'm a bit leary of them. Plastic model cement will not hold plastic and metal together. I opted for Epoxy and the epoxy I prefer is Sig. It is used mainly for model airplanes, at least Sig makes model airplane supplies. I do not think it is better than any other epoxy, merely that it is packaged better. It comes in plastic squeeze bottles. Epoxy in tubes, at least for me, sooner or later begins to leak out around the cap threads and makes a heck of a mess. Being in bottles, the Sig epoxy remains more or less upright.

**Reassembly:** Having decided on our adhesives, we are now ready to begin the reassembly. First, put the tires on the front wheels and drop the axle into the front axle housing. Now put your adhesive into the groove (not too much) and fit the matching ridge on the front fender assembly into the groove. Alligator clips can hold it in place for the time being.

Insert the cab detail back into the cab. If you have elected to remove the windshield, you may have to glue the dash to the rear of the radiator. Put epoxy on the two lugs on the cab unit and after removing the alligator clamps on the fender assembly, position the cab. You will now have to use rubber bands to hold the three pieces together.

Assemble the rear wheels and axle and drop into the rear axle slot. Here we have a minor problem. We have discarded the retainers that held the rear axle in place. I wanted something you wouldn't have to go out and buy, so I decided on a strip of bond paper, seven inches long and 7/8ths inch wide. I rolled this tightly and glued the end of it to make a cylinder. Now cut two strips of wood or plastic 1/16th x 1/4" two and five eighths inches long (2 5/8"). Put the paper cylinder atop the axle, put adhesive into the slots, and take the long strips and place in the slots. Hold them in place with rubber bands. When dry, the strips will form a base upon which to construct your cargo box or tank and it will insure you clear the rear wheels. (Photo 8).

You are on your own when it comes to the use to which you put your Mack. Some circuses had cargo

boxes, others had square or wooden metal tanks for water. Others had combinations of the two. As reference check Jan-Feb. LCW Page 12, Photo 13 and May-June LCW Page 7, Photo 1.

**Trim:** Although the Macks were used as water trucks, cargo carriers, or mechanics mobile garages, they were also used as tractors. In fact, that was their prime function. The full water tanks only gave them better traction. Two are in use at the Circus World Museum and you'll see them towing two or three wagons up the hill. They were often used in parades to haul a calliope or a bandwagon. So, they were kept in good shape, cosmetically. As you will notice in Photo 2, I have striped my Mack. For striping I use a PILOT SuperColor GOLD extra fine rolling ball point pen. You'll have a little trouble in striping the cab and hood as there is a beading at the simulated junction of each panel. Just guide the pen point along the beading and you can do a magnificent job. A word of warning. Do keep a damp piece of cotton handy in case you make a miscue or a mistake, you can take a swipe at it and erase it before it dries. Then, merely correct your error.

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