Constructing the SierraWest Ford TT Flat Bed 3D Printed Kit

by Brett Gallant

Please handle these parts very carefully! While I use a high strength tooling resin that is very flexible and strong, these parts contain incredibly fine detail that must be handled carefully to prevent damage. I always recommend test fitting all parts prior to assembly to familiarize yourself with the proper fit and orientation. Before you begin construction be sure to download: *"Working with SierraWest 3D Printed Castings".* These instructions cover all of the basics and provide essential information you will require before preceding. There is a wealth of information Online about the history of the Ford Model TT as well as many examples of the various paint schemes. That will not be covered here. Visit the "University" link on my website for more relevant instructions and videos.

General Notes

As with nearly all SierraWest 3D Printed parts, the supports are removed in house. On highly detailed castings like these, you may find very fine, thin supports that are easily removed with a pair of tweezers. Remnants of supports may be filed or gently scraped away with a sharp blade tip.

Test the fit of the four wheels and steering wheel. Use a very light touch and a hand drill bit to insure these parts fit correctly

Gently file the front and rear bottom edges of the cab and hood to insure a good fit once these parts are installed. A small ridge may occur during the 3D Printing process.

Prepare and prime all of the 3D Printed parts as outlined in the *"Working with SierraWest 3D Printed Castings"* download. Allow the primer to fully cure before proceeding. I primed all of the parts in this kit with a quality flat black spray paint. Except for the primer, all paint used is AK Interactive 3rd Generation water based paint. (Unless otherwise noted).

Paint both sides and the edges of the laser cut cardboard roof as well as the plain white piece of cardstock with the same black spray paint used to prime the 3D Printed parts.

Locate the laser cut window acetate. Handle with tweezers to avoid getting finger prints on the material. Remove the paper backing and apply chalk weathering to dirty the windows. Any cracks or holes may be added with the tip of a number 11 blade as desired.

Paint and Weather the Components

I chose to paint my TT frame and hood a simple plain weathered brown and rust combination. The cab was painted gray then weathered for a nice contrast.

Once the primer has fully cured weather the frame, hood, and wheels using a combination of brown and rust paints combined with chalk powder. Review the videos at the University link on my website "Weathering Resin Castings" parts one and two. Once the weathering is dry, apply a very light dry brushing of brass to the radiator gill. Use a very small amount of paint with a very light hand to just give a light brassy coat. Chalk may be applied to dull the brass once dried. Paint the headlights with the brass then chalk weather once dry.

Two hoods are included with the kit. If you choose to use the open hood, weather the exposed motor by dry brushing a little AK Oily Steel paint over the components. A product such as “mig, fresh engine oil” may be applied sparingly as well. This is a very effective product whenever you want to simulate the appearance of oil on a surface. It also makes great oil drips.

Paint the tires black then chalk weather gray and brown. The wheel spokes are a very dirty, muddy wood. Weather the four deck rail brackets and engine crank using rust and brown chalk powders.

Paint the cab gray then use the technique described in the “Chipped Paint Effects” video to achieve the desired peeled paint appearance. Apply chalk weathering once dry as desired. Weather the steering wheel and interior cab details with brown and black chalk powders. These details are very fragile. Paint the seat brown then chalk weather.

Grain and Stain the Stripwood

In both HO and O scales the longer pieces of stripwood are used to deck the flatbed, the single shorter piece in HO and two shorter pieces in O are used to create the deck rails.

Cut the stripwood to size as shown in the photographs for the decking and two deck rails. Add wood grain with a wire brush. Be sure to brush the exposed ends to remove the freshly cut appearance. Next review the videos at the University link on my website “Adding Details to Stripwood” and “Weathering Scale Stripwood with Artist Chalk”. Add desired details and then stain. Set the pieces aside to dry.

Complete the Cab

Start by installing the laser cut windows. Use tiny drops of Cyanoacrylate (super glue) applied with the tip of your blade to the inside frame of the windows. Do one at a time. Excess glue will ooze out and be visible from the outside. Use the smallest amount necessary to hold the acetate securely in place.

The completed TT with the Ingersoll Rand portable air compressor on sleds.
This 3D Printed kit is optional and was specifically designed to fit the bed.

Now use more Cyanoacrylate and glue the steering wheel to the column. Be sure it is not crooked as it will be very noticeable.

Use a small amount of five minute epoxy, applied to the top of the cab rafters to glue the laser cut roof in place. Be sure it is centered. Allow the epoxy to set. Cut to fit two strips of the cardstock then glue these to the top of the roof as shown using plain wood glue. Notice the top "tarpaper" piece overlaps the bottom and both are bent over the edge of the roof. Do not use too much glue or it will ooze out and spoil the weathering to be applied next. Use gray and a little white dry chalk powder to age the tarpaper. Add streaks as desired.

Assemble the Components

Epoxy the completed cab assembly to the frame. Notice it seats flush against the front deck support, centered left to right. Allow the epoxy to set then epoxy the hood in place allowing the epoxy to set once again before preceding. It seats flush against the front of the cab and is centered as well. If not centered the headlights will not fit correctly.

A quick sidebar; allowing the epoxy to "set" means giving it enough time to securely hold the bonded parts in place. This time varies depending mainly upon the ambient temperature and age of the epoxy. It is usually about ten to fifteen minutes. In contrast, allowing the epoxy to "cure" means giving it enough time that it reaches full bonding strength, usually about 24-48 hours.

Epoxy the deck boards in place then epoxy the deck rails to the brackets. Use the photographs to ensure the brackets are orientated correctly. Once the epoxy has set glue the deck rails to the deck as shown.

Check the fit of the engine crank and carefully enlarge the hole a bit if too snug. Use Cyanoacrylate to glue it in place then use more Cyanoacrylate and glue the headlights in place. Be sure they are correctly identified as left and right and are straight.

Finally use epoxy to glue the wheels in place. Do one at a time ensuring they are straight. Crooked wheels look horrible. Take your time with the wheels.