

Build a bigger Jagdtiger



Converting Tamiya's big-scale Tiger with straightforward scratchbuilding techniques

By Doug Groom

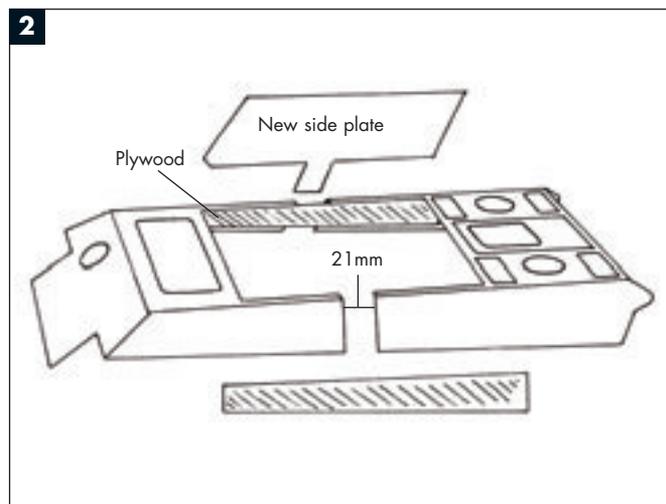
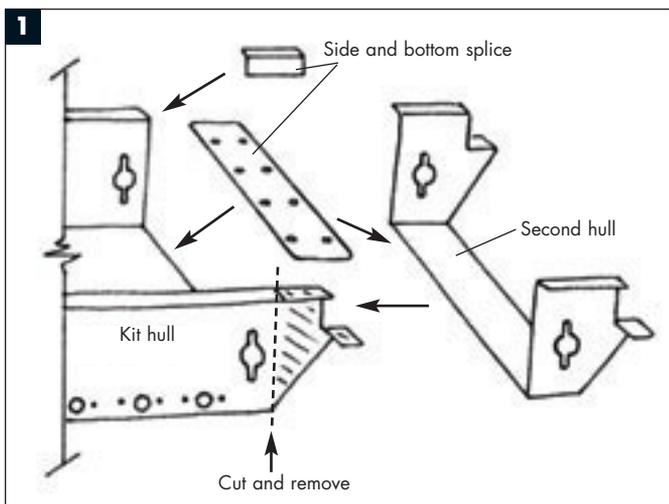
As a modeler, I'm primarily interested in scratchbuilding aircraft, so I was surprised to receive Tamiya's 1/16 scale radio-control King Tiger kit (No. 56007) as a birthday present.

Not long after receiving the kit, I bought a partially built 1/35 scale Dragon Jagdtiger kit (No. 6050) I found in the sale bin of my local hobby shop. After studying the model, I decided to use it as the pattern to convert the Tamiya kit into a big-scale Jagdtiger. It would be a unique model both in subject and in scale.

I decided to use basic materials for the conversion: balsa, plywood, sheet plastic, and a little brass tubing – nothing too expensive, exotic, or difficult to work with. The 1/35 scale Dragon kit would serve as a three-dimensional set of plans for the conversion. I could measure the 1/35 scale model and multiply my figures by 2.1875 to arrive at the correct dimensions for the larger 1/16 scale version.



Doug Groom used straightforward scratchbuilding techniques and basic materials to convert Tamiya's 1/16 scale King Tiger into a Jagdtiger tank destroyer.



Doug gave the superstructure working rear-access hatches. Brass pins are mounted inside the sheet-styrene hinges.



The Jagdtiger's massive gun was built up from several telescoping sections of brass tubing Doug soldered together.

Chassis. The Jagdtiger was slightly longer than its Tiger sibling, so I needed to extend the aluminum kit chassis 21mm between the rear running wheels and the track-tensioning wheels.

I purchased a second chassis pan from Tamiya America's customer service department (949-362-2240) for about \$12. Using a razor saw to make vertical cuts, I removed the rearmost sides of the original chassis pan, cutting in line with the pan's lower-rear horizontal edge, **1**.

Again using the razor saw, I cut off a section of the second chassis pan, cutting along a line 21mm forward of the lower-rear corner.

I cut a 1" section out of the floor of the second hull that would fit between the hull's side walls. I aligned the original hull and the new rear end, and placed the 1" patch across the joint in the hull floor. After clamping the three parts together, I drilled eight 1/8" holes through the patch and the hull floor for pop rivets. I installed the rivets, then strengthened the joint between the parts with slow-curing epoxy.

To strengthen the side joints, I cut two 1" L-shaped sections out of the second chassis pan. The 1/4"-wide channels overlap the splice between the parts along the top edge of the chassis sides, and are secured in place with epoxy.

When the epoxy holding the L-shaped sections had cured, I epoxied a 3/4" x 2" patch of thin aluminum sheet over the joint

lines on the sides of the hull. A little filler putty blended the patches into the sides after the epoxy cured. I covered a few of the small screw holes with the patches, so I opened them later with a drill.

One more modification was required. Since the rear hull plate was 21mm farther aft than it used to be, the mounting holes for the upper hull support (part BP-6) had to be relocated, too. At that point, all the lower-hull modifications were complete, and I could continue assembly, including adding the rear hull plate (part D2) and the upper hull support.

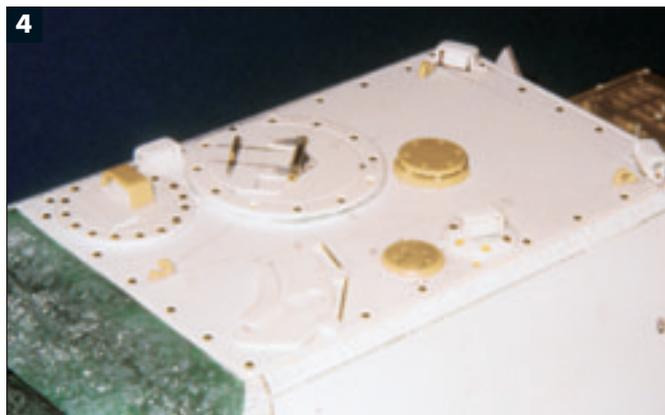
Upper hull. I cut the upper hull in half at the widest point of the turret ring. Using the Dragon kit as a guide, I cut the rectangular opening for the fighting compartment out of the upper surface.

After placing the two upper-hull halves on the stretched lower hull, I cut 1/16" plywood into two identical trapezoids, approximately 12" long and 1 1/4" wide at one end and 3/4" wide on the other. There's a lip molded into the inside surface of the upper hull sides that's parallel to the top. I placed these plywood reinforcements inside the hull against the lip, then glued them in place with epoxy.

The hardest part was done – I had an extended upper hull that fit perfectly on the extended lower hull. Next I needed to scratchbuild side plates that would form the sides of the superstructure and fill the 21mm-wide gap in the sides of the upper



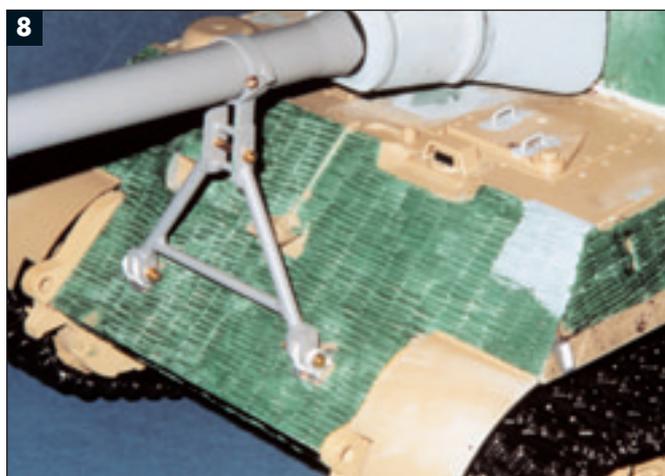
3 Gap-filling super glue and filler putty help blend the new scratchbuilt superstructure into the upper hull.



4 The roof of the fighting compartment is detailed with scratchbuilt components and parts from the original Tamiya kit. Tiny brass bolts hold the roof in place.



7 Filler putty smoothed the gun barrel to the proper taper and helped simulate a cast-metal texture on the mantlet.



8 A straight-bit screwdriver, a tube of filler putty, and plenty of patience produced the Jagdtiger's realistic Zimmerit coating.

hull. Using the Dragon kit and a little geometry, I made the mirror-image left and right plates from thick sheet styrene, **2**. After installing them with gap-filling super glue and blending them into the kit hull, I reinforced them from inside with more $\frac{1}{16}$ " plywood.

Superstructure details. The superstructure's front and rear plates are all flat and fit between the already installed side plates, so fabricating and adding them is straightforward. I built the rest of the structure from sheet styrene using the Dragon kit as a guide, **3**. When I was satisfied with the assembly, I reinforced it from the inside, again using $\frac{1}{16}$ " plywood sheet.

To model the Jagdtiger's fixed mantlet, I sculpted a ring of epoxy putty around a length of $\frac{1}{2}$ "-diameter brass tubing. I opened the superstructure's rear plate so I could add opening access doors.

I made the fighting compartment roof from .040" styrene sheet reinforced on the inside with plywood sheet. I wanted to make the roof removable, so I attached it with tiny brass bolts I found in the model-railroad section of my hobby shop. My Jagdtiger's roof is detailed with scratchbuilt sheet-styrene details and parts I salvaged from the original Tamiya kit, **4**.

The large access doors on the rear of the fighting compartment are made from several laminations of sheet styrene. Brass-wire hinge pins keep the doors working smoothly, **5**.

With the hull essentially complete, I added weld seams and

cutting-torch marks with a heat engraver. To give the epoxy-putty gun mantlet a cast-steel look, I coated it with filler putty and stippled its surface lightly while it was still soft.

The gun. I made the Jagdtiger's massive 12.8cm gun from telescoping lengths of brass tubing I soldered together, **6**. The gun tapers slightly, so to fill in the "steps" between the tubing, I coated the barrel with filler putty and sanded it smooth. I scratchbuilt the gun mantlet from sheet styrene and balsa, then sealed the wood components with varnish. When it was dry, I coated all the mantlet components with filler putty and stippled them to produce a cast-metal texture, **7**.

Filler putty also provided the model's Zimmerit coating. After covering the model with the putty, I pressed in the distinctive pattern using a straight-bit screwdriver, **8**. When it was dry, I spray-painted the entire model with two coats of sandable gray automotive primer.

I airbrushed the model's camouflage pattern using a combination of Humbrol enamels and Tamiya acrylics. Washes of artist's oils deepened the recessed areas, and a lightly airbrushed overspray of a well-diluted dust color mixed from Tamiya acrylics completed the weathering.

The original Tiger kit provides more than enough extra track links to accommodate the lengthened chassis. I assembled the tracks, then applied a coat of Testor Dullcote. When it was dry, I applied a heavy wash of raw-umber and burnt-sienna artist's

oils, then sealed everything with a second, light coat of Dullcote. This finish is realistic and holds up well for radio-control operation.

A lot of what I've described falls into the category of traditional scratchbuilding, but none of the techniques I've used is particularly difficult. I promise you that once you try one of these techniques you'll realize how easy scratchbuilding can be. I wound up with a unique model that cost little more than the standard Tamiya kit, and I had the satisfaction of knowing I did all the work myself. **FSM**

Doug Groom is a pilot on contract to the California Department of Forestry. He's flown fire-fighting aircraft (including Cessna O-2s, Rockwell OV-10 Broncos, and Grumman S-2T Tracker air tankers) for more than 20 years.

Doug builds models in his spare time and particularly enjoys the challenges of scratchbuilding. He's made several display models of airplanes for his friends.



Jagdtiger

Manufactured by Nibelungenwerke from July 1944 to March 1945, the formidable SdKfz 186 Jagdtiger heavy tank destroyer mounted a 12.8cm PaK44 gun on a modified Tiger II chassis.

The Jagdtiger (also designated Jagdpanzer VI) is easily identified by its boxy, slab-sided appearance and large fixed superstructure. The Jagdtiger had a longer hull than the Tiger II but shared its suspension system. The 70-ton vehicle was manned by a crew of six and was powered by a Maybach HL230P30 engine. Seventy-seven Jagdtigers were produced.

The Jagdtiger was issued to two combat units, Panzerjägerabteilung 653 and Schwere Panzerabteilung 512. The 653rd fought in the Ardennes offensive before joining the 512th in the defense of Germany, including the battle at Remagen Bridge March 10, 1945.

— Matthew Usher



Doug's large-scale model is a standout at contests, and it still retains its radio-control running gear for when "static display" isn't enough!