When Wayne wanted to build a Ferrari 599 GTB Fiorano, he turned to a resin-and-metal kit and, following a simple sequence, created this 1/43 scale gem.

8 steps to building better AULTIVEDIA MODELS

Breaking down construction into stages makes it easy

By Wayne E. Moyer

S ometimes, injection-molded plastic is not an option. I build 1/43 scale autos, so when I wanted to model Ferrari's hot new sports car, the 599 GTB Fiorano, the only available kit was

a resin-and-metal item from Italian manufacturer BBR.

Multimedia models are just like any other – they're pretty easy to put together if you take care and plan ahead.

Step 1: EXAMINE THE KIT

OPEN THE BOX and look at the parts and the breakdown of materials. This will help you find areas that need extra attention or special tools.

BBR's Ferrari consisted of 106 parts, A: Four resin parts including the coupe's body, 19 white-metal castings, four rubber tires, six machined-alloy pieces, four jeweled light lenses, and 69 photoetchedmetal parts. Many of the latter had engraved detail for three-dimensional effect.

One of the unusual aspects of BBR's kit was the window glass: pieces of clear plastic cut to shape with preprinted black surrounds.



Resin kits vary a lot. BBR's Ferrari has excellent resin and white-metal castings, lots of photoetched-metal detail parts, and precut windows.



Step 2: READ THE INSTRUCTIONS

THIS IS IMPORTANT with any model, but it really pays off with multimedia kits. Early identification of problems allows you to better plan solutions.

The Ferrari's CAD-produced instructions show the parts well, and the loca-

Step 3: CLEANUP AND PREP -

RESIN AND WHITE METAL need a little more cleanup than plastic, especially in terms of pour plugs, flash, and mold seams.

The high quality of the BBR Ferrari made cleanup a breeze. There was very little flash on the hard, gray resin castings, so I concentrated on removing ragged edges inside windows and wheel arches. I used a pointed emery board to smooth the window openings, **A**. The diameter of my motor tool's sanding wheel proved to be a



Wayne removes ragged edges left by the casting process from the windows with an emery board he trimmed to a point.

tions are easy to understand, but I discovered a couple of problems. Most serious, there is no part map for the photoetched-metal sprue. Although these parts were numbered in the instructions, there were no numbers on the fret. I was able to place most of the parts using the drawings as well as references, but I left a few off because I couldn't identify them. Also, the photoetched-metal brake disks should go inside the wheels, not outside as the instructions show them.

perfect fit for the Ferrari's wheel arches. Spin it by hand, **B**, not with the motor tool: Otherwise, you'll need monster truck tires to fill the wells.

During dry-fitting, the resin interior and white-metal underbody refused to sit correctly in the body. The problem was several large pour plugs inside the body. I ground them away with a motor tool, **C**. Warning: Always wear a respirator and goggles when cutting or sanding resin – the dust can be unhealthy!



Hand-spun modeling: A motor tool sanding wheel wrapped with wet/dry sandpaper is the perfect fit for the Ferrari's wheel arches.



Wayne fills pinholes on the underside of the Ferrari's body shell. He used Vallejo Model Color putty, but any putty or super glue would work. Pinholes are a fact of life with resin parts, and there were a few on the flat, lower surfaces of the model's body. I filled them with Vallejo Model Color putty, **D**, an acrylic filler easily applied with a spatula or flat toothpick. The excess can be wiped away with a wet cloth before curing. The putty dries quickly and is easy to sand.

The high-quality, white-metal castings have almost-invisible mold seams that I easily removed with small files, **E**.



Using a motor tool, Wayne removes pour plugs from the body of the car so the interior and chassis will join cleanly.



Although the white-metal parts are nearly perfect, Wayne uses files to remove mold lines from items such as the exhaust pipes.

Step 4: PRIMING

THE KEYTO a great finish is priming – and the secret of great priming is surface preparation. To ensure paint adhesion, I soaked the Ferrari's parts in soapy water for about an hour, then scrubbed them with an old toothbrush to remove any mold-release agent and prevent "fish eyes" (where the surface repels paint).

Primers for models have finely ground pigment and need less sanding, but they don't fill small blemishes as well as full-size automotive primer. I applied Duplicolor 632, an automotive primer, in light coats.

The first primer coat will reveal blemishes, pinholes, or mold seams you may have missed. Fill and sand them smooth, then spray another primer coat. Once you're satisfied with the finish, block-sand the primed body smooth in preparation for applying the body color. I used 2400- and 3200-grit cloths from an LMG polishing kit, **A**.



A smooth primer surface yields a good finish. Wayne block-sands the primed body with 2400- and 3200-grit polishing cloths.

Step 5: BODY PAINT -

MAKING THE BODY look right is essential for car models, inside and out. Make sure you know the color of items such as the headliner and pillars. Some kits, like my Ferrari, tell you; others are less specific.

My car had a leather interior, including the headliner and inside of the pillars, with black accents. I taped all interior components to a piece of cardboard, then airbrushed them and the inside of the body with Humbrol leather, **A**. After masking the headliner and area under the rear hatch, I airbrushed flat black inside the shell.

Now I was ready for the body color – red, of course! I masked the window openings and underside, then mounted the body on a homemade painting stand. With the model securely attached, I was able to move it around to ensure even paint coverage. I added the separate C-pillar "flying sails" to the base of the stand so they got the same paint as the body.

When everything was prepared, I sprayed the parts with BBR's Ferrari red, **B**. After the paint dried, I buffed it to a high gloss with a succession of 2400- to 12,000-grit sanding cloths, **C**.



Wayne taped the interior parts to cardboard, then airbrushed them leather. He painted the inside of the body shell flat black at the same stage.



Attaching the body to a homemade spray stand allows Wayne to turn the model around to get paint into every nook and cranny.



To give the paint the proper shine, Wayne polishes it with progressively finer sanding cloths from an LMG finishing kit.

Step 6: SUBASSEMBLIES

IN BETWEEN BODY-FINISHING sessions, finish the other assemblies such as the interior and chassis.

I really liked the interior BBR provided with the 599. There were decals for the carbon-fiber seat shells, glare shield, and upperdoor panels. The lower-door panels were prepainted, photoetched metal. Other photoetched-metal items, decal instruments, and precut self-adhesive, brown felt floor mats graced the interior. I covered the dome light with Bare-Metal Foil, then painted its "glass" with thin Tamiya gloss white, **A**.

Photos of the full-size car showed the rear lower-body panel is carbon fiber (something not mentioned in the instructions). I mixed Tamiya flat black, gloss white, and aluminum to get a shade that looked right to me, brushing it on to simulate unpainted carbon fiber.



Wayne detailed the interior with decals, photoetched-metal parts, and careful painting.

Step 7: INSTALLING THE WINDOWS

GLASS IS an important part of any car model. Poor installation can ruin an otherwise nice replica. Test-fitting and planning are important.

Dry-fitting showed the precut clear parts in the Ferrari kit fit well; I attached

them with Micro Kristal Klear, which doesn't get brittle as it ages, **A**. Strips of Tamiya tape held the parts for 24 hours, **B**.

The curvature of the headlights necessitated a different approach: I applied small amounts of thick super glue to one side of the lens, waited for it to dry, then bent the part to match the curve, attached it with more super glue, and held it in place until the glue set. Be very careful: Applying too much super glue will result in fogging the clear parts.



Wayne applies Micro Kristal Klear to attach the precut, clear sheet-styrene windows.



To ensure a solid fit, Wayne held the clear pieces in place with strips of Tamiya tape for 24 hours.

Step 8: FINAL ASSEMBLY -

HERE'S WHERE the sum of the parts makes the whole, all of your attention to detail pays off, and the model becomes the car. But don't rush: There can be pitfalls even this late in the game.

The interior of my Ferrari dropped into place perfectly. Next came the axles and wheels. BBR doesn't intend for you to roll the model around – the axles are square shafts that fit cutouts in the body. Remember that when fitting the wheels so the detailed brake calipers end up in the right place.

All that was left were the small details. The two-part photoetched-metal radiator face and chrome grille fit perfectly, as did the wing mirrors. After painting them black, I attached the photoetchedmetal faces for the body's air scoops.

The sail panels at the rear windows fit well, and there are panel lines on the full-size car exactly where the parts attach. The addition of pinhead-sized amber turn-signal lenses finished my Ferrari. **FSM**



REFERENCES

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SOURCES

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