30+ Ways to Build Better Models

Best of Tips & Tech

A supplement to Scale Auto Magazine

- Cutting
- Painting
- Gluing
- Weathering
- Masking
- Scratchbuilding
- Chopping
- Much more!
Welcome to Best of Tips & Tech! This supplement contains a lump sum of hints, questions, and answers from the last few years of Ken Hamilton’s “Tips & Tech” column in *Scale Auto*.

We’ve put together 13 pages of helpful auto-modeling goodness so you can build better models and get more out of the hobby you love. From paint stripping to scratchbuilding leaf springs – these pages have something for everyone.

If you’ve got a modeling how-to question or a tip or technique that you’d like to share with *Scale Auto*, send it to us:

Scale Auto, Tips & Tech
21027 Crossroads Circle
Waukesha WI 53187

So whether you’re looking to learn or just reading to refresh your skills, we hope you’ll enjoy this unique compilation of tips and techniques.

Andy Lilienthal
Project Coordinator

---

**Tip:** Here’s a product I’ve discovered for masking a two-tone paint job or custom graphics:

Glad “Press ‘n Seal,” advertised for covering dishes of leftovers, makes a great masking material. The edges create a tight seal when pressed onto any surface (hence the name). When sealed properly, there’s no bleed under the edges. It also comes off easily and doesn’t leave any residue.

— Bud Lefevre
Toledo, Ohio

Ken: Leave it to a modeler to find a new and improved use for a household product; plus, it’s guaranteed to lock in freshness! Thanks for the great tip, Bud.

**2 Welding plastic**

**Q:** Does anyone have any information on welding plastic? I’ve heard of it being done with a soldering iron, and even plastic rods. Can that be done? Thanks.

— Robert Lillibridge
Cedar Rapids, Iowa

**A:** That’s a good, basic modeling question, Robert. Glad you asked!

For our purposes, there are two ways to join materials: Fusion and adhesion.

Adhesion means connecting two pieces by introducing a substance that creates a bond between the two materials. Super glue, epoxy, and contact cement are examples of this method. The glue attaches itself to the surface of each piece and creates a bond without altering the composition of the pieces being joined.

Fusion (welding) melts the pieces together to create a seamless joint. When done properly, the two pieces literally become one, and technically there is no longer a “joint.” This happens when welding steel, and it also happens when two pieces of plastic are joined using liquid plastic cement. Liquid cement softens both edges, and the pieces are squished together to create a strong, seamless bond.

This can only happen when welding similar materials that can be softened (like kit styrene pieces). Dissimilar material, or pieces that won’t “melt” together (like resin) must be joined by adhesion.

So in a nutshell, you’re already “welding plastic” every time you use liquid cement. Using a soldering iron to melt and join two pieces of plastic would be overkill and almost impossible to control; stick with liquid cement.

One point to consider: Too much liquid cement can be as ineffective as too little cement. Never use the applicator brush that’s attached to the screw cap of a liquid cement bottle. Dedicate a small, round paint brush to the task of applying liquid cement so the liquid goes exactly where you want it.

Thanks for the question, Robert. We hope this helps.

**3 “Used” tires**

**Tip:** As a builder of stock cars, I have a trick that will add a “used” look to tires. I sand some dried Elmer’s Wood Putty with 320-grit sandpaper, then sand the tires with that same piece of sandpaper. The wood putty dust that comes from the sandpaper makes the tires look more “used.”

— Nick Calabrese
Menasha, Wisconsin

Ken: I love stuff like this! What a simple and effective way to weather tires. Thanks for submitting a very useful tip, Nick.
4 Restoring warped promos

Q: Is it possible to restore old, warped promo bodies? I’d be grateful for any information you may have on this.

A: Good question, Dan. Many older promos made of different types of plastic did not age gracefully, and the results are badly warped bodies. Some new promos (and standard kit bodies, for that matter) also suffer from the same malady.

Depending on the extent of the problem, some warped bodies can be straightened by heating the plastic and using your fingers to gently coax it into its original position. When the body cools, it will generally retain its new shape.

The two most popular heating methods involve water and/or air. Warm the body in hot water, but don’t start with water that is too hot; gradually increase the temperature so you can see how your repair job is progressing. As a rule of thumb, if the water is too hot for your hand, it’s too hot for the plastic. If possible, practice on a similar piece of plastic (which may be difficult with an old promo).

Hot air can also produce enough energy to straighten a body. Using a hair dryer or commercial heat gun, carefully warm the affected piece and shape it as you would if using water.

Do not heat the body by placing it in a microwave or conventional oven.

Thanks for the question, Dan, and we would love to hear how some of our readers have solved warped-body problems. We’ll publish other useful hints as they come in.

5 Pro street chassis

Q: My question is about stuffing pro street chassis under different vehicles. I’ve read in your magazine about modelers doing it, but I haven’t seen it explained. Can you help?

A: To get fat tires to fit behind an existing rear wheel opening (so the tires don’t stick out beyond the body), something has to give. In this case, it’s the width of the rear end.

Pop the wheels into the wide tires you’re using and measure where the mounting point of the wheel is in relation to the tire. Position the wheels under the body (without the frame, which will have to be modified) and measure between the two marks on the tires.

That measurement represents the total width of the rear axle, including the brake drums or whatever mounting surface you’re using at the ends of the axles. Now you can narrow the rear axle assembly to match that measurement.

The rear suspension will have to be modified, as will the frame. Temporarily attach the wheels/tires to the rear end and position this assembly onto the frame. This will tell you how much the frame should be notched to accommodate the narrowed rear end.

You’ll have to rebuild the frame, including the springs and shock perches, to fit the narrowed rear and notched frame. Check the ad sections of some 1:1 car mags to see what a narrowed rear assembly looks like.

Several aftermarket companies sell complete tubing kits for bolt-on installation on 1:1 project cars, and the illustrations of these products in their ads make for invaluable modeling tools. Pay special attention to the suspension systems used with these kits.

You’ll need to reconstruct the inner rear fender well to accommodate the new tires. If the frame has a complete floor pan the and the trunk doesn’t open, this may be tricky.

Use card stock material (an old filing card or report folder) to mock in a new inner fender well around the big tires; tack it to the frame with tape. Cut and fit a semicircular back panel and tack that into place, too. Remove the rear end and tires so you’re able to see what you’re doing next.

Carefully lower the body onto the frame and see where it starts to hit the fender well mockup. Trim the fender well until the body sits on the frame properly, and when viewed from underneath, the inner fender well fits snugly against the inside of the body.

Remove the card stock and use it as a pattern to transfer the shapes to .010” or .015” styrene, cut out the new pieces, bend and shape the styrene to duplicate the cardstock fender wells, and glue the new pieces into place. This may sound complicated, but by carefully following these procedures, your tubs should look great.

You could also cut the back end off a pro street chassis from another kit, graft it to your project car, then pick up the “cutting and fitting” portion of this text.

Good luck with your project, Nick, and thanks for the great question.

6 Underhood, overhead, photoetch

Q: What’s the best way to make accurate-looking hood insulation and interior headliners? Also, are there any materials available on how to use photoetched-metal detail parts?

A: As a rule of thumb, Richard, try to use a material that resembles whatever it is you’re duplicating in scale. If you’re building a wooden bed for a truck, start with real wood. The same holds true for engine compartment insulation and interior upholstery.

Several headliner options are available, depending on the particular car, the era you’re modeling, and the look you’re after. A trip to a fabric store will reveal a wide range of cloth that can be cut and fit to form headliners. Look for tightly woven, thin, dense fabric. Glove leather, which can be dyed almost any color and is fairly thin, can be used to replicate Naugahyde and, of course, leather.

After you’ve selected a fabric, you’ll need to make a pattern. Cut a paper pattern that matches the underside of the roof to be upholstered. Transfer the pattern to fabric and cut it out with scissors. Seal the edges with anti-fray seam sealer, also available at the fabric store, then carefully glue the piece of material into place. The choice of adhesive is important; avoid water-based glues that will soak through and stain the fabric.

Any type of spray glue should work but, as we usually suggest, try it on a small separate piece of material first.

Other choices include flocking, which is available in many different colors, and Scale Motorsport’s Faux Fabric spray, which can be applied to create realistic-looking cloth textures. For a tuck-and-roll effect, Evergreen round styrene strips can be glued into place individually then sanded to knock off the crown.

Thin-scribed Evergreen stock, used as exterior siding in smaller scales, can also be cut, bent, and applied to simulate a vintage tuck-and-roll headliner.

Hood insulation is thicker than upholstery and will require thicker material. If possible, check out some cars with this type of insulation, examine its texture, and match it at the fabric store. Foil-backed insulation and sound-deadening material can be duplicated with Bare-Metal foil, and painted with your favorite flat finish to eliminate the shine. Just remember – try to duplicate the texture and the color of the real thing to create a successful illusion.

Photoetched-metal parts are another matter,
and volumes could be written on their usage. Simply put, photoetching is a process whereby detail parts are acid-cut from thin sheet metal. The finished pieces either end up connected to a metal tree (similar to the way kit parts are molded on a plastic sprue) or independently mounted on a more costly (but very convenient) rubber backing. Military modelers have used photoetched-metal parts for years. The scale automotive photoetched-metal parts aftermarket has made tremendous strides, and hundreds of detail items are now available.

Preparation and application are key when it comes to using photoetched-metal parts. Begin by removing the part from the tree with a pair of sharp cutters. Clip as close to the piece as you can and finish the rough edge with a file. Next, do any required pre-shaping or assembly, depending on the piece and the instructions that are typically included with each detail set. Use quality tools to make clean, crisp bends. To attach photoetched parts, use super glue, clear epoxy or, if the piece is very small, a dab of “clear” applied with a small brush or the end of a toothpick. One more consideration – if the part isn’t going to be painted, you may wish to polish it before cutting it from the tree. Use a metal polish, such as “Simichrome,” and a buffing wheel chucked in a motor tool.

Q: How do I remove paint from a model without harming the plastic? Also, what do I need to paint a car with fingernail polish, and how do I do it?
– Willie Selman
via E-mail

A: Knowing how to remove paint is sometimes as important as knowing how to put it on. Scribing new door lines onto one side of a model car body can be tricky. Scribing an identical door on the other side of the car can be downright frustrating – unless you use this handy tip submitted by Duane Hester. Our goal in the “Tip of the Month” section of this article is to present simple solutions to common modeling problems, and I think Duane’s idea is just the ticket for saving valuable hobby time when duplicating panel lines. We’ll let Duane take it from here:

“Duplicating door lines can be made easy by employing a styrene template that can be traced on either side of the model.

**Step 1:** Using .015- or .020-inch styrene sheet, cut a template in the shape of the door you wish to create. You may want to make a test pattern out of card stock and when you get it right, transfer the shape onto the styrene.

**Step 2:** Tack the template to the side of the car using super glue. A small drop at each corner of the template will hold it. I also use small office binder clips to hold the template in place while the glue cures.

**Step 3:** Using the template as a guide, scribe the new door lines around the template with the back of a no.11 hobby blade. A small triangle file would also work.

**Step 4:** Carefully pry the template off of the body using the hobby blade or a small, flat screwdriver. It’s important to pop the template off as soon as possible. Once the super glue cures, it’ll be difficult to remove.

**Step 5:** Reverse the template and follow steps 2 through 4 to make matching lines on the other side of the model.

**Step 6:** Clean the glue residue off the body using a sanding stick. Again, the quicker you remove the residue the better. This tip also works for hoods and trunks. Just make your template in the shape of half the hood-trunk line you wish to create and draw a centerline down the body to align the template. Flip the template from one side to the other to create perfect panel lines.”

Sometimes the simplest ideas are the biggest time savers. Thanks for sharing your great tip, Duane. Your original “Tip of the Month” drawing is on the way.
The first step is to carefully disassemble the model. Various stripping agents, ranging from brake fluid to Easy-Off brand oven cleaner to newer hobby-shop-available paint removers such as Polly-S Easy Lift Off have found favor with model builders. However, one of the most popular and effective paint strippers is Castrol Super Clean degreasing agent, available at most auto parts stores. It’s relatively mild, eats paint like a hungry lumberjack gobbles up pancakes, and doesn’t harm the underlying plastic. When working with any chemical substance, wear the appropriate rubber gloves and eye protection, and always dispose of used cleaner properly.

As with any new technique, practice on an expendable scrap part. Use a piece that’s finished with the same kind of paint or dab some Super Clean on an inconspicuous area of your project model just in case there’s a compatibility problem. Once you’ve determined that your painted model is up to a swim in Lake Castrol, pour enough Super Clean into a plastic or glass container to cover the piece you intend to strip.

Working time will vary with the type and thickness of paint; keep an eye on the progress to see when the paint softens and begins to lift. The loose paint will rinse off in water, and stubborn areas can be cleaned with a toothbrush. When all the paint has been removed, clean the model thoroughly with warm water and dishwashing detergent. Be sure to remove all of the paint remover – any leftover residue will ruin your forthcoming paint job and you’ll be back where you started. A thorough cleaning is especially important if you intend to chrome plate the parts. The slightest residue will destroy the chrome job, and you’ll be out the cost of plating and the time and effort it takes to remove the botched chrome job.

Now it’s time to add some color to those freshly stripped parts, and for that task, many modelers have discovered the joy of nail polish (here we go down the cosmetic aisle again). Nail polish offers a wide array of color choices, is available in small quantities, and most importantly, is no more difficult to work with than any other airbrushed paint. You’ll prepare and prime the body just as you would during any modeling project. Since nail polish is lacquer-based, the model’s plastic surface will have to be treated with a good coat of automotive primer. Because of its translucence, nail polish is typically used as a “Candy” top coat, so a base coat of lacquer or lacquer-compatible paint must be used. Changing the base coat will ultimately change the color of the nail polish top coat.

Most nail polishes can be thinned with regular paint store lacquer thinner. Different brands vary in thickness, so you’ll need to carefully experiment with various amounts of thinner to achieve the consistency required to send it through an airbrush. Both enamel and lacquer “clear” finishes can be applied over nail polish. (You can actually use clear nail polish for this step, too.) Cleanup is conducted with lacquer thinner as well. Basically, what we’re dealing with here is lacquer paint that’s a little trickier to mix. Experiment on a scrap body to get your feet wet before shooting nail polish onto a model, Willie, and we think you’ll be happy with the results.

Scratchbuilt leaf springs

One of the best ways to enhance a model car’s suspension system is to do away with those thick, clunky, poorly detailed leaf springs and replace them with a set of properly scaled scratchbuilt springs.

Florida modeler Keith Schafer’s great tip that can serve as a simple introduction to scratchbuilding and give any model with leaf springs a great new personality:

“Materials needed for the springs are aluminum or brass tubing, brass rod, strip styrene, and glue.

“You’ll need to make a fixture so all the springs will be uniform. Drill “blind” holes (don’t go all the way through) in three-scale-inch increments along a piece of 1 x 2 scrap wood. The holes should be the same size as the brass rod pegs that you’ll be using for shackles (Fig. 1).

“Select a tubing size that is appropriate for the spring. The tubing will be the ‘eye’ of the spring and should fit perfectly over the pin in the wood. The width and length of the styrene leaf will vary from project to project, but 1:1 spring leaves are typically about two inches wide and 1/4 inch thick.

“Carefully wrap one end of your first styrene ‘leaf’ around one tubing ‘eye.’ Bend it slowly so it won’t break. Position the eye over one of the pins. Measure the length of the spring you need for your model; this will determine where you place pin no. 2. Allow enough material for the spring’s arch, which will also vary from model to model (use the kit spring as a guide).

“After you have placed the second pin, slip a second ‘eye’ over the pin, carefully wrap the leaf around the eye, and secure it with epoxy or ACC adhesive (Fig. 2). Ken’s note: The first leaf could also be made of strip aluminum or brass, which may wrap around the pin a little more easily.

“Without removing the spring, add as many ‘leaves’ as needed. Glue them in sequence to the main leaf (Fig. 3). When the glue has set up, remove the spring. The additional leaves will help the spring hold its shape. Use thin strips of plastic, brass, or aluminum for the anchor straps (Fig. 4).

“To mount the spring to the frame of your model, line up the spring against the frame and use the eyes as guides to drill small holes into the frame. Glue pins (the same size as the pins on the fixture) into the frame and slide the spring over the pins (Fig. 5). Glue the axle to the springs, and you’re ready to go.”

Approaching any scratchbuilding project as a series of simple steps will make the whole process less intimidating, and the end result is a model you’ll be proud of. Thanks for the great tip, Keith.
**Glue-on fingernails**

**Tip:** While looking through the makeup aisle for some new sanding pads, I found packs of assorted acrylic glue-on fingernails. I bought a package and used two of them for peaked fender extensions over the headlamps of my latest custom model. The nails come in different widths, lengths, and shapes. Pick the ones that match the curve of your fender, apply them with super glue, and blend them into the fender with body putty. The tips can be sanded to any shape you want. They come in handy for molding small scoops, too.

— Mark Richardson via E-mail

Ken: There’s nothing fake about that tip, Mark. With a cosmetic touch like that, your custom should be a real cover girl.

**Peeling paint**

Q: I have a problem painting some scale model cars — the paint peels off with the masking tape. It also peels off when I use Bare-Metal foil as a mask. I prepare the surface properly by washing the model with soap and water and three grades (1200-, 1500-, and 2000-grits) of water emery. Do you know a way to prevent this?

— Bob Stevens via E-mail

A: It sounds like you may actually be preparing the surface a little too well, Bob. Since you’re cleaning the parts beforehand, you’re on the right track; but be careful how you handle the model after it’s washed. You don’t want to contaminate the surface with oil from your fingers. Also, be sure to use a quality primer. Plasti-Kote Sandable Primer, available in spray cans, goes on well and serves as a great base for both enamel and lacquer finishes.

Speaking of sanding, your choice of papers may actually be creating the problem. Paint needs something to grab on to and by sanding the primer, particularly with the 1500- and 2000-grits, you may be smoothing the surface too well before applying the color coats. Leave the shine for last. A 600-grit wet/dry sandpaper will provide a better bite. Always apply several thin coats of color instead of one or two heavy coats, and avoid excessive paint buildup around the edges of the tape.

When you’ve finished applying the color coats, remove the masking material as soon as the paint can be handled without damaging the surface. Dry paint is remarkably strong. If the masking material is left on too long, the paint can tear away from the surface (especially if the primer is too smooth). Remove the tape by pulling it away from the painted edge, and be sure to keep the tape at a low angle. After the paint is dry, break out the four-digit grits and polish your new paint job to a brilliant luster. Good luck, Bob.

**Putty-mixing surface**

**Tip:** When I mix small batches of two-part body putty, I use the lid from a can of Pringles potato chips. When the lid is inverted it makes a great dish, and the rim is perfect for scraping excess putty from your mixing stick. When the putty hardens, it will pop right off in one large piece when you flex the lid, and you’re ready to mix another batch on a fresh, clean surface.

— Dee Goin Manchester, Kentucky

Ken: An excuse to come home with a can of Pringles! Thanks for the appetizing tip, Dee.

**Scratchbuilding**

Scratchbuilding is a word that can strike fear into even the most seasoned modelers, but building something from pieces of something else need not be intimidating. A case in point is the method Chris Roldan uses to produce custom pedals.

Using everyday workbench items and a little imagination, Chris has come up with a clever and economical way to create a handsome detail. That accomplishment has earned Chris bragging rights for submitting this issue’s Tip of the Month. Here’s what Chris has to say:

“Flatten a piece of \( \frac{1}{16} \)-inch (or similar) solder by rolling a tube back and forth over a length of solder that’s approximately four inches long. Be sure to tape at least one end of the solder to the work table so it stays in place. When the piece is flat, roll the knurled chuck of a pin vise across the flattened solder in one smooth, firm pass. Don’t roll the chuck back and forth, or you’ll mess up the pattern. If you make a mistake, cut another piece of solder and start over.

“Cut the pedals into the proper shape using a new, sharp hobby knife. The edges can be smoothed with a small file if necessary. When you’re finished with the rough work, gently clean the back side of the solder with a clean rag and a little acetone to eliminate dirt and oil from your fingers.

“To hang the completed pedals, I use \( \frac{1}{8} \)-inch aluminum rod for the gas pedal and \( \frac{1}{16} \)-inch rod for the brake/clutch pedals. The aluminum is easy to bend, and holds its shape. Bend the rod to the desired configuration and attach it to the backs of the pedals with super glue. Trim as required, and after final polishing, mount the pedals under the dash to add a touch of class to your prize-winning model.”

Thanks for the great Tip, Chris. Now that your ride has pedals, you can step on the gas and pick up your original “Tip of the Month” illustration at the post office.

Remember, if you want to be a part of the elite “Tip of the Month Contributors Club,” jot down your favorite technique and send it to the Tips & Tech Workshop here at Scale Auto. You’ll be glad you did!
I built the model with super glue, but let it dry and air out before putting the model in the case. This stuff won’t polish out or clean off, and if I sand any more I’ll be down to bare plastic. What did I do wrong?

—“Moose” Trapasso
Las Vegas, Nevada

A: Fumes from super glue can be pretty potent. Moose, and even though you aired out the model before confining it to an unventilated case, apparently there were enough residual fumes released from the model to fog the windows and react to your fingerprints. Even a small amount of moving air may have been enough to prevent the fogging you describe.

Next time you want to protect a model from dust, create a “tent” (instead of a hermetically sealed environment) by elevating the case slightly to allow some air to circulate around the model.

As far as eliminating the residue, the fumes appear to have reacted with the paint to the point where you may have to strip the car and repaint it.

If it’s any consolation, you’ve taught us all a valuable lesson, and no doubt saved other models from a similar fate.

15 8-ball shifters

Tip: Have you ever admired the 8-ball shifters on full-size early rods? And have you ever thought that making one in scale would be impossible? Think again!

If you look at the patterns on an 8-ball, you’ll realize that it’s not much more than a number of dots positioned over each other. Instead of trying to figure out how you can draw a tiny black number 8, dab a series of dots onto a small bead or ball of solder to create a great-looking shifter. Attach the finished piece on your floor shifter with a touch of super glue and you’re ready to go!

—Dennis Campbell
via E-mail

Ken: Working on a super-small detail doesn’t have to be intimidating if we break down the shapes and look at the piece objectively. Thanks, Dennis.

16 Recreating a “wreck”

Sometimes a comprehensive answer requires some extra space and a “visual aid.” Sometimes it’s also a great candidate for the “Tip of the Month” — as with the question sent in by John Mertens.

Q: I’d like to know the best method to make a “wreck.” I want to make a model look like it ran into a tree. Could you please tell me the best method to heat the model to create this effect?

— John Mertens
Mustang, Oklahoma

A: Carefully heating and bending body panels is one of many ways to create a model that exhibits the effects of accidental damage. A section of the car, such as a door panel, is heated over a flame or immersed in hot water until it’s pliable enough to be reshaped with your fingers. The panel is then carefully pushed, pulled, and prodded until it has the desired shape. This technique works quite well for creating what I would call “soft” dents, like parking-lot damage or “too-much-weight-on-that-Model-T-fender,” but it typically doesn’t lend itself well to sharp edges and creases. In addition, too much heat will melt and shrink plastic, which doesn’t realistically happen in a wreck.

Before we get into the “how,” we should examine the dynamics of a wreck so our end result looks convincing and realistic. In the split second of any impact at speed, a vehicle is dramatically reshaped, to put it mildly. The bends, folds, and creases are sharp and drastic, and to some extent, the vehicle will mold itself to the stationary object it has come in contact with.

One of the best ways to get first-hand information ahead of time is to go to the local salvage yard and see what happens to a wrecked car. Note the weak points and all the ways a car can crumple, and take lots of reference photos.

Another great source of information is Old Car Wrecks by Ron Kowalke (Krause Publications, 700 E. State St., Iola, WI 54990-0001). It chronicles accident scenes from the 1920s through the ’60s and is loaded with pictures of old car, truck, and racetrack wrecks. I picked up a copy to show how different vehicles reacted in accidents, and far from being morbid, the book has some great detail shots.

How do you replicate a major wreck? The easiest way is to use thin sheet metal to recreate the portion of the car to be wrecked and crimp it into the proper post-accident shape. Pick up some .010” or .015” sheet brass or aluminum from the hobby store. Thin aluminum flashing from a hardware store will work, too, as will Verlinden sheet lead (although this last option is much more pricey). If none of those options are available, aluminum TV dinner trays will work.

Bend the metal to the kit piece to be crunched and shape
When thin coats are applied in rapid succession, the layers’ surfaces can set up enough to keep the colors from running together, but still gas out as a single coat. On heavier coats, when the surface skin gets too hard, a second coat will only seal the first coat and not allow any of the vapors to escape through the skin. You run the risk that over time, those solvents will turn around and try to get out through the plastic car body if the primer isn’t strong enough to hold them back. That’s why labels on some rattle cans say “apply a second coat within 20 minutes or after 24 hours.”

Personal preference, the type of paint, and the number of coats come into play when it comes to polishing out your model, which is why Pat and George may recommend different drying times. Relative humidity in your area is also an important factor in drying time.

When in doubt, polish a small, inconspicuous section of the model. If the surface won’t polish to a brilliant sheen, wait a few more days and try it again.

18 Old cyanoacrylate

Q: Is there any way to use cyanoacrylate glue after it has thickened because of age or temperature changes? Can it be thinned so I don’t have to throw it out?

A: No. When the drying/hardening process starts it’s impossible to reverse. Super glue can be chilled to extend its shelf life, so it should be kept in the refrigerator between uses. Make sure the bottle is clearly marked (and preferably sealed inside another container) so you don’t accidentally use it for something else.

19 Removing glue from plastic

Q: I was wondering if you might be able to answer this question: How do you get plastic model glue off of a windshield, or for that matter, any part of a model?

A: A misplaced glue blob, especially on a clear plastic window, can ruin your day. If the errant blemish is on a body part, you can easily slice, file, or sand the blob from the body, touch up any resulting scratches with putty and sandpaper, then finish the area with primer and paint. However, on a clear window panel, the type of offending glue will dictate the method of repair. A solvent adhesive, such as liquid cement, will actually eat into the clear surface. If that’s the case, the area will need to be sanded smooth and revitalized with a polishing kit.

Start with the finest grit possible to bring the area down to the clean plastic. Be careful not to remove too much material or the surface (and the view you get when looking through the windshield) will become distorted. Finish the area with the progressively finer grades of sanding material included in the polishing kit.

A top coat of either Novus or Bare-Metal Plastic Polish will create a final luster. Afterward, the part should be washed with mild, non-abrasive detergent and treated to a final coat of wax. If epoxy or super glue caused the problem, the surface will not have been etched as deeply, so not as much material will have to be removed.

If the damaged glass is already in place, it will have to be removed before it can be repaired. With solvent glues, you’ll have to carefully run a blade around the windshield to loosen the joint, then pop the glass out of the channel with (hopefully) a minimal amount of damage. This method sounds easy, but be forewarned, it’s time-consuming work requiring a great deal of patience. If the piece is held in place with super glue, dab on some super glue debonder, which may soften the glue joint enough to get the glass out.

I hope these suggestions clear up your windshield questions, Chris.

20 Removing chrome from resin

Q: How can I remove chrome plating from cast-resin parts without harming the surface underneath? I’ve heard that some strippers will damage resin.

A: Carefully cut the original panel from the car body and replace it with the carefully crumpled mess you just created. Clean the car body with a hose. Using your reference material as a guide, bend the panel into the shape it would assume in a wreck. Using your fingers or with light taps from a small hammer, depending on the panel, some relief cuts may be required to form the piece, but since you’ll be bending the panel into oblivion anyway, you don’t have to be an expert metal fabricator to achieve good results. For more complex panels, cut and bend a piece of cardstock to shape, flatten out the cardstock, and transfer the shape to the sheet metal.

Using your reference material as a guide, bend the panel into the shape it would assume in a wreck. Cut the original panel from the car body and replace it with the carefully crumpled mess you just created. Clean the car body with a hose. Using your reference material as a guide, bend the panel into the shape it would assume in a wreck. Cut the original panel from the car body and replace it with the carefully crumpled mess you just created. Repeat this process for each panel to be mangled. If you think of each panel as a subassembly and “build” the wreck a section at a time, the results will be very convincing.

The finished wreck can be finished piece-by-piece as you go along, or painted at the end of the assembly process. When this technique isn’t feasible (as in crumpling a chrome grille) strip the part first, then carefully heat and bend it as noted above. The bent piece can then be resprayed or finished in chrome foil.

The key to success is to pay close attention to each detail of the crash and duplicate it a piece at a time. Thanks for the great question, John. Since your question inspired our Tip of the Month, the original drawing is on the way. We hope it gets there in one piece!
A: You’re right, Scott. Some strippers, particularly Castrol Super Clean, will effectively remove paint but will also make mincemeat out of some cast-resin parts. A more resin-friendly approach is to use either Westley’s Bleche-Wite, a whitewall tire cleaner available at auto parts stores, or Easy Off oven cleaner.

Place the parts to be stripped in a suitable container (old plastic or glass food-storage dishes are good), immerse them in your chosen solution (not Super Clean), and wait for the plating to lift. Wearing rubber gloves and safety glasses for protection, wash the stripped parts with soap and warm water, and set them aside to dry. Once the parts are stripped and cleaned, wash them again— even the slightest residue will ruin any paint or plating job.

Since the cast-resin part to be stripped is likely from an aftermarket company that sends its parts out to be commercially plated, next time you may want to contact the company and request an unplated piece. Most aftermarket resin casters can accommodate such a request, and you may end up saving yourself some valuable hobby time.

Q: I’m about to start building Tamiya’s Ferrari F2000 kit and was wondering if I needed to spray a barrier before priming (I use Plasti-kote primer), because the kit is molded in red plastic. Since I will be painting it red anyway, is the barrier necessary? And, what is the best way to polish cast white-metal parts?

A: Parts molded in red plastic have long been the bane of model car builders. Even if you plan to paint the car red, without a good primer/sealer the color of the plastic can bleed through and affect your model’s paint job. This problem is amplified when the model is finished in a lighter color than the red plastic beneath the paint.

Yes, I’d recommend a good sealer to prevent this problem—even under red paint. Since you’re using an automotive-grade primer, an automotive-grade sealer would be just the ticket, but make sure you see the word “sealer” in any product you decide to use. Aerosol sealers are available at auto paint supply stores, and several model paint manufacturers offer “barrier” and “sealer” paints. Be sure to test the sealer on a scrap piece of plastic from the same kit to ensure compatibility.

Since you’re using an automotive-grade primer, an automotive-grade sealer would be just the ticket, but make sure you see the word “sealer” in any product you decide to use. Aerosol sealers are available at auto paint supply stores, and several model paint manufacturers offer “barrier” and “sealer” paints. Be sure to test the sealer on a scrap piece of plastic from the same kit to ensure compatibility.

Q: How can I remove paint but will also make mincemeat out of some cast-resin parts. A more resin-friendly approach is to use either Westley’s Bleche-Wite, a whitewall tire cleaner available at auto parts stores, or Easy Off oven cleaner.

Place the parts to be stripped in a suitable container (old plastic or glass food-storage dishes are good), immerse them in your chosen solution (not Super Clean), and wait for the plating to lift. Wearing rubber gloves and safety glasses for protection, wash the stripped parts with soap and warm water, and set them aside to dry. Once the parts are stripped and cleaned, wash them again—even the slightest residue will ruin any paint or plating job.

Since the cast-resin part to be stripped is likely from an aftermarket company that sends its parts out to be commercially plated, next time you may want to contact the company and request an unplated piece. Most aftermarket resin casters can accommodate such a request, and you may end up saving yourself some valuable hobby time.

Q: I’m about to start building Tamiya’s Ferrari F2000 kit and was wondering if I needed to spray a barrier before priming (I use Plasti-kote primer), because the kit is molded in red plastic. Since I will be painting it red anyway, is the barrier necessary? And, what is the best way to polish cast white-metal parts?

A: Parts molded in red plastic have long been the bane of model car builders. Even if you plan to paint the car red, without a good primer/sealer the color of the plastic can bleed through and affect your model’s paint job. This problem is amplified when the model is finished in a lighter color than the red plastic beneath the paint.

Yes, I’d recommend a good sealer to prevent this problem—even under red paint. Since you’re using an automotive-grade primer, an automotive-grade sealer would be just the ticket, but make sure you see the word “sealer” in any product you decide to use. Aerosol sealers are available at auto paint supply stores, and several model paint manufacturers offer “barrier” and “sealer” paints. Be sure to test the sealer on a scrap piece of plastic from the same kit to ensure compatibility.

Since you’re using an automotive-grade primer, an automotive-grade sealer would be just the ticket, but make sure you see the word “sealer” in any product you decide to use. Aerosol sealers are available at auto paint supply stores, and several model paint manufacturers offer “barrier” and “sealer” paints. Be sure to test the sealer on a scrap piece of plastic from the same kit to ensure compatibility.

Perished Tyres

Joshua Olm is a young Australian modeler who’s making a splash on this side of the ocean. We first noticed Joshua’s work in the Scale Auto “Readers’ Gallery,” after which he went on to win the Junior title in the 2003 Car Modeler Custom Clinic Photo Contest. If that wasn’t enough, Joshua can now add “Tip of the Month Contributor” to his growing résumé. His tip for creating “perished tyres” (translation: worn tires) was a shoo-in:

“I was agonizing over how to create perished tyres for a diorama when I happened upon a simple technique that yields maximum results. I used AMT’s Firestone tyres, but any solid vinyl tyre could be used.

“Start by cutting away the outer edges of the tyre to eliminate most of the tread and some of the sidewall using a sharp pocketknife of a new hobby blade. Clean up the sharp edges with various grades of sandpaper. Don’t forget to rough up the sidewalls while you’re at it.

“Now to ‘perish’ them: with needle-nose pliers, proceed to pinch, twist, claw, and chew your tyre into submission, but don’t stop there. Cut down your tyres further to create varying degrees of ‘perished life.’ Wrap the finished tyres around some rusted rims and throw them into a diorama or put them on an old wreck.”

Thanks for the great Tip, Joshua. The original illustration is on the way to Australia.

Don’t forget, Tipsters: If your submittal is chosen as “Tip of the Month,” you too will receive the original drawing used to illustrate your tip, so keep those cards and letters coming!
Ken: There are no holes in that tip, Bill. Your suggestion takes some of the “pain” out of painting small parts. Thanks.

**24 Guitar strings**

*Tip:* I recently discovered how useful a wound guitar string could be for modeling projects. I broke an antenna on a model and decided to use some guitar string to replace it.

Some other great uses for wound guitar strings include braided gas lines and radiator hoses; unwind strings for antennas, leaving a little of the wound part as the spring; and some pull the wire out of the middle, leaving base return springs for throttle linkage; and some have little round ends that’d be great for pulleys.

You don’t necessarily have to buy new strings. Find a friend who plays guitar, or ask at guitar stores if they have any old strings. They’ll probably give them to you instead of just throwing them away. One complete set of old strings will keep your projects sounding good for a long time.

—Jason Little
Manchester, Ohio

Ken: Looks like your broken antenna leads to quite an array of great tips, Jason. Thanks for passing them along.

**25 Putty spatulas**

*Tip:* If you’re going to discard any type of antenna with a collar, check the collars to see if they have “stays” sewn into them. These are strips of hard plastic that measure about 2” in length with a tapered tip, and they make perfect putty spatulas.

—Evan Hermel

Ken: Our tipster is the same Evan Hermel who presides over the “Truck Stop” column in *Scale Auto.* It’s a pleasure to have you stop by, Evan. Thanks for the great tip.

**27 Painting window trim**

*Q:* Can you provide some tips on how to paint window trim? Especially when it involves those small side-vent windows. I have tried liquid masking film and masking tape without much success.

—Loris Schmidt
via E-mail

*A:* Many times we think that to paint a small object we have to use the tip of a small brush, but not so. In this case, the side of a flat brush will work better and produce a sharper line. Here’s how:

Dip a flat brush into your favorite trim paint – probably aluminum or chrome for shiny trim, or matte black to simulate rubber. If you’re using spray paint, spray some into the lid so you can dip the brush.

---

**Creating Space**

As you acquire more and more model kits, storage space can become a real issue, especially if your work and storage space is limited to a small basement. That’s what happened to Hampton, Iowa modeler Brad Huffman, whose available floor and shelf space in his basement “dungeon” (his words) had become painfully inadequate.

Like a seasoned urban planner, Brad chose to move things “up” instead of “out.” Here’s what he did:

“My shop and kit storage area is in my (small) basement, and a guy can only put up so many shelves. I had a lot of kits and parts stored in plastic freezer bags laying all over the place. After one fell to the floor and got stepped on, I decided it was time to do something besides move to a bigger house.

“I solved the problem by screwing two 2x4s between the overhead, first-floor joists at each end of the basement, and I stretched coated clothesline between them. I punched a hole in the freezer bags (under the seal) and hung the bags on the clothesline between the joists using big homemade S-hooks. The kits are now stored neatly above the work space. An alternative is to drill ⅛-inch holes through the joists about 18 to 20 inches apart, then thread the clothesline through the holes as you would lace a shoe.

“Uniform, homemade S-hooks can be fabricated on a simple fixture made from a piece of 1x2 about three inches long, with short dowels glued into two holes about an inch apart. Bend pieces of heavy wire around the dowels to create as many identical hooks as needed. Keep the fixture handy to make more S-hooks as you need them.

“Here are some trial-and-error tips: 1) Drill a hole in the center of the 2x4 used in Method 1 to keep the clothesline centered between the joists; 2) Use joist hangers from the lumber yard to attach the 2x4s to the joists; and 3) Be sure to allow yourself enough room above the clothesline to get your hand and hook over the line. I hang mine about four inches below the floor.”

Thanks for the Tip, Brad. A few dollars in material sure beats a new 30-year mortgage. We hope you have enough open space left to hang your original “Tips & Tech” illustration, which we’ll put in the mail to you with our compliments.

Remember, Tipsters: If your favorite problem-solving technique is chosen as “Tip of the Month,” we’ll send you the original drawing used to illustrate your tip. How’s that for a great deal? See you next time in the T&T Workshop!
Lay the flat side of the brush along the edge of the window opening. Tilt the brush until the paint-covered bristles hit the edge of the strip to be painted. Drag the brush across the window opening. The edge of the opening will steady the brush – much more so than trying to balance the point of a small brush while you pull a straight, uniform line.

Repeat this process until the paint line reaches the end of the trim line, using as few strokes as possible. Move the brush along at a steady pace. After you gain a little confidence, you’ll find the edge will be straighter and sharper with one quick stroke. Practice on a spare body until you get the hang of it.

Good luck, Loris, and thanks for submitting the question.

20 Replicating wood finishes

Q: I have several woody-type models in my collection and I was wondering how to replicate the wood finish. I don’t think I’m ready to start cutting bodies to replace the plastic with real wood, so I’m leaning toward ways to duplicate wood with painted plastic. What paint should I use, and how would I do it?

– Mark Ballington
Simpsonville, South Carolina

A: You’re in luck, Mark: Our good buddy and Maryland Automotive Modelers Association member Irv Arter has developed one of the most realistic techniques for duplicating a wood finish on plastic.

Wash and prime the car body as you would before starting any painting project. Paint the “wood” surface with Testor’s Model Master no. 33539 Insignia Yellow enamel. Paint using strokes that follow what would be the grain direction if the surface was real wood. Irregular coverage, with some lighter and darker spots along the board, is good. Allow this coat to dry thoroughly.

Gather jars of Model Master no. 4674 Leather, no. 4673 Wood, and no. 4674 Tan, which are the three colors that will make the wood come to life. Paint over the yellow with a coat of tan, applied in the same irregular fashion that will leave an uneven surface. The tan should be as spotty as the yellow so both colors blend visually.

Drybrush a thin coat of wood over the entire surface. This part is tricky, and will require some practice and a lot of patience. This step is particularly effective on models with molded-in wood grain, because the dry-brushed color will highlight the raised surfaces of the faux wood.

This will complete the look of lighter wood. If you’re looking to duplicate darker panels, continue by applying a dry-brushed coat of leather to the painted surfaces. Again, you don’t want to apply a coat of paint that’s too thick or too even.

Let these coats dry for at least a full day before you apply a light dry-brushed coat of black to pull out the details. A little goes a long way, so be careful not to darken the surface too much. This step is only meant to highlight the other colors.

20 Chopped pickups

Q: I’m looking for information about chopping the roof of a 1981 Chevy pickup.

– Aaron Jesso
via E-mail

I love those direct, to-the-point questions! Late model trucks, with their short rooflines, relatively vertical back panels, and sloped A-pillars present some unique considerations when planning a top chop; so much so that I decided to illustrate some of the possible alternatives for this issue’s “Tip of the Month.”

Removing the top from a model truck and shortening the pillars is easy. Putting the pieces back together in a visually appealing manner is the tricky part. Before you cut, picture what the finished chop will look like, particularly in the area of the A-pillars. First, decide what kind of slope you want at the front of the truck. That will determine how the roof will be reconstructed. Do you want to retain the stock windshield angle or would you rather have a more aggressive rake on the A-pillars? Remember your decision will also effect the front glass reconstruction.

While the windshield and side windows will obviously be narrowed, the back glass (since it’s located on a relatively flat plane) can be narrowed or totally reshaped, too. Dropping the lid will also affect the alignment of the corners. Relief cuts will have to be made in the pillars so the connection points will line up, or the top itself will have to be quartered and stretched so it lines up with the original locations.

Once the top is put back together, the kit glass will have to be addressed. Flat pieces on the sides and in the back can be trimmed and sanded to the proper shape or replaced with clear styrene or thin acetate sheet. Lay a piece of card stock (or a small filing card) inside the body against the window and trace the opening onto the card from the outside. Cut out the resulting shape and use the card as a template for cutting the new glass, keeping in mind that the rear window will probably need to be slightly larger than the opening depending on how the window will be mounted. The windshield is another matter.

If you’ve retained the stock A-pillar angle, you may be able to remove...
Set the body aside for a day or two until the surface is totally dry. Irv’s final step is to apply a coat of Testor’s Model Master Acryl no. 4637 Semigloss Clear to create just the right sheen.

We hope this helps, Mark. Thanks for the question, and a big Tips & Tech “thanks” to Irv for sharing such a great technique.

### 30 Tinting windows

**Q:** I’m building a PT Cruiser model and was wondering how I can tint the windows slightly. Not totally black, just a mild tint.

**A:** I like the word “mild” in your question, Todd. Sometimes a subtle change can be more visually appealing than a radical custom modification, and a slight tint should give your Cruiser some serious eye appeal. In the case of tinted windows, “mild” is synonymous with “transparent” and there are several ways to achieve the desired effect.

If you’ll be using an airbrush, mix a small amount of color with some clear enamel. This will soften the color. For this process, stay away from acrylic paints, which are softer and less durable than enamel. Thin the mixture with a compatible thinner, then airbrush it onto the inside of the Cruiser’s glass. Use low air pressure and several thin layers of color until you achieve the desired effect. With practice, you should even be able to fade from a darker shade at the top of the windshield to a lighter shade at the bottom. Clear sheet styrene can also be tinted using this technique.

You don’t necessarily need an airbrush to tint windows. Frequent contributor and renowned modeler Juha Airio, shared his techniques for brush-painting tinted windows in the October 2001 issue of *Scale Auto Enthusiast*. Juha uses Humbrol metallic enamel paint (which can be difficult to locate in this country, but other metallics should work as well). His technique calls for pouring off the tinted liquid at the top of the paint jar after the metallic particles have settled to the bottom. The tinted liquid is then mixed with clear enamel, thinned to a brushable consistency, and painted on the glass with a soft, wide artist’s brush.

Colored acetate photo filters could also be used to duplicate the car’s glass, particularly for the flat door glass panels. While Iago, I picked up a pack of square (approximately 3” x 3”) tinted acetate filters used by professional photographers in a darkroom. The pack contained dozens of different tints that I’ve been using for years. In spite of the popularity of digital imaging, acetate filters are still available at photo supply stores.

### 31 Painting small parts

**Q:** I’d like to add lighting to some of my models and dioramas. Do you know of a good source for information on this subject? What size bulbs are available?

**A:** The Next step on our cyber road trip: [www.miniatronics.com](http://www.miniatronics.com). Here you’ll find a comprehensive comparison of miniature light bulbs ranging from .75mm, 1.5-volt coaxial types to larger 2.4mm, 12-volt bulbs that are more suitable to lighting structures and road signs. Prices and ordering information are also listed.

Lighting can add a great deal of life to any model, and adding working lights isn’t as intimidating as it might seem. You’ll have to drill out the openings and use bulbs that are small enough to fit behind the lenses. Try to use the largest (and brightest) bulb available for each application. I’d lean toward 1.5-volt bulbs for car lighting, since small 1.5V AA or AAA batteries can be hidden under the model’s back seat or in the trunk. Secure the bulbs with five-minute epoxy.

Circuitry for the lighting is simple: One wire goes to the positive side of the battery, the other to the negative side, and a switch goes somewhere in the middle. To reduce the number of wires running through the model, I like to run a “hot” wire and a “ground” wire from the battery box through the car and then solder the individual bulb leads to them.

Switches can be as simple as a Radio Shack microswitch hidden in the car or as complex as a scale working pull switch mounted in the dash. As long as you have something to interrupt the circuit, you’re in business. You could also run the wires through the bottom of the car into a permanent base that houses both the batteries and the switch.

Entire articles could be written on lighting, but check out the attached schematic for at least a peripheral introduction to a basic wiring circuit.

### 32 Working lights

**Q:** What is the best way to detail small parts on 1/20 scale F1 Kits? Today’s F1 kits have many buttons and switches and picking them out adds detail. However, the lettering and details are so small that they are difficult to see let alone paint.

**A:** Good question, Mike. Some F1 kits do offer precise details that can be obliterated with one false move from a loaded paintbrush, and it’s almost impossible to paint these details with a conventional brush stroke. Fortunately, there are other ways to highlight these small features.

One of the most effective ways is to “dry brush” lighter colors over the raised surfaces instead of trying to paint each individual highlight. Dry brushing is painting a surface with a brush containing a minimal amount of pigment. Here’s how it works: get a soft, high-quality artist’s paintbrush with a wide, flat bristle that’ll maintain its shape (sable brushes work well). Paint the piece (we will use a dashboard gauge face for this example) with the background color. Avoid paint build-up so the small raised details will remain sharp.

Next, choose a contrasting color for the
raised surfaces and transfer a dab of that color onto a small palette such as a piece of cardstock or mat board. Dip the brush into the color and immediately remove most of the paint by dabbing the brush onto a piece of paper towel until it’s almost dry. When the right amount of color is on the brush, as you will determine through personal experience, lightly pull the brush across the gauge face, depositing a little bit of paint onto the raised surfaces.

If the brush is too wet, the excess paint will run into the low spots, ruining the effect. If it’s too dry, color won’t be deposited. If the color ends up being too light, dip the brush again and repeat the procedure until you’re satisfied.

This technique is particularly effective if Silver Leaf or White “Rub-n-Buff” (available at most craft stores) is used for the highlights. When used sparingly, Rub-n-Buff will bring out a startling amount of detail. Military modelers have been using this stuff for years and you’ll be amazed at how much detail jumps out with just a few brush strokes.

A variation on the dry brushing theme utilizes artist’s-quality colored pencils. Simply flatten the point of the pencil and drag the blunt edge over the raised areas.

One last thought when using brushes: with proper care, a good paintbrush should last for years. After each use, thoroughly clean your brushes with thinner to remove all the pigment, especially from the base where the bristles disappear into the sleeve. As a last step, wash your brushes with soap and water, reshape the tips between your fingers, and allow them to air-dry.

If dry brushing doesn’t suit your fancy, there are other ways to accent minuscule details. One option is to paint the entire piece with your “highlight” color, add a second background color over everything, and then wipe the background color from the raised areas. To further explain the technique, let’s use our dash gauge as an example and Bare-Metal foil as our “highlight.” First, apply the foil to the entire gauge. Next, spray or brush on the background color, which will also cover the foil on the highlights. When the paint is almost dry, dip a piece of clean rag into thinner that’s compatible with the background color and gently wipe the paint from the surface of the raised areas, which will now jump out as bright highlights. Paint can be used as a highlight color instead of foil. Just make sure the paint is totally dry before proceeding with the top coat.

Good luck with your detailing projects, Mike, and let us know how they turn out.

**33 Prepping for photoetched parts**

*Q:* I’ve been back into modeling for a little more than a year, and I’m delving into photoetched parts for the first time. I’ve read all the tips on cutting, polishing, and gluing, but I have a question on prepping the host.

*For interior parts such as appliqués, door panels, etc., should I smooth the surfaces before applying the photoetched parts? I’m using Model Car Garage parts on my latest project, a 1962 T-Bird.*

*A:* Welcome back to modeling, Jack. Correctly-applied photoetched-metal parts add greatly to the realism of any scale model. And preparation of the host is every bit as important as preparing the photoetched parts.

Ideally, the surface should be as smooth as possible; otherwise the parts may not follow the surface contour in a convincing manner. In the case of the ’62 T-Bird trim, quite a bit of molded-on detail will have to be removed first.

From removal of small items (interior door handles) to large areas (the front grille) you’ll have to do some judicious cutting, grinding, and sanding to ensure that the parts will fit right, but the results will be worth the effort.

In order for some photoetched parts to sit properly on curved surfaces, they must be carefully bent and shaped prior to installation. Be sure the fit is correct before you permanently attach any part; don’t try to bend the piece to fit as you go.

Thanks for the great question, Jack.

**34 Replicating rust**

*Q:* I’m building a model of a heavily weathered beater. I’ve got the rust colors down, but I’d like to add a real rust texture as well. What should I use?

*A:* Astute observation, Mike. Real rust not only changes the color of the metal it’s eating away, it also changes the texture.

The best way to achieve that texture in a heavily weathered model is to prep and prime the surface as you normally would, then lightly spray the body with a mist coat of Scale Motorsport’s Faux Fabric. I use the Velvet Gray no. 5510 because the color is similar to the Plasti-kote Sandable no. 235 Automotive Primer I always use.

When you spray on the texture, don’t hold the can in one position and just blast the body; you may get a few large, unrealistic spurts of “texture.” In stead, sweep the can across the model as you spray, much the same way as a color coat. If you don’t overdo it, you’ll get a subtly textured surface that’s a great base for your rusty color coats.

Another spray-can product I’ve used recently is Rust-Oleum American Accent Natural Rust. It’s a fine-textured paint (much finer than Faux Fabric) that not only provides a moderate rust texture but also gives a good base rust color.

Before you use Rust-Oleum, be sure the body is well primed with a good quality automotive primer that will protect the plastic, and as always, build up the texture/color with a series of light coats.

One additional thought: If you want a heavier layer of crud in selected areas (like buildup around transmissions, oil pan gaskets, rear ends, etc.), sprinkle some eraser powder or baking soda into the wet primer in those areas to achieve a heavy caked-on layer of gunk. When it’s dry, paint it an “old greasy black” color to heighten the effect.

Great question, Mike. Good luck with your “beater.”

**35 Cleaning models**

*Q:* What is a good way to clean dust off models without hurting the paint job? My models have decals without clear coat over them and I’m afraid to use water to clean the models for fear it will hurt the decals.

*A:* Just like their 1:1 counterparts, model cars require maintenance to preserve their shiny appearance. Fortunately, the biggest threats to our model collections are dust and an occasional spider web. The trick, Dylan, is to establish a cleaning schedule so the layers of dust don’t get too difficult to remove.

Begin by gently dusting the model with a soft sable brush you’ve set aside specifically for this task. A careful blast of air from a can of compressed air (sold in photography stores to clean negatives) or
A supplement to Scale Auto Magazine

from your airbrush will also loosen heavier deposits of crud, which can then be brushed away.

Don’t be afraid to add a little water to the surface, since cured decals typically aren’t harmed by gentle cleaning. Moisten a cloth and carefully rub off any grime. You’ll be more apt to knock off a side mirror or antenna than hurt the decals.

Cotton swabs (wet or dry) are good for cleaning hard-to-reach areas, too. Don’t be afraid to try a mild soap in spots that are really dirty, but be careful – only use a dab of soap that can be easily wiped off with your moist rag.

When using anything other than water, experiment on an inconspicuous area of the model first to make sure there are no adverse reactions.

Once your model has regained its original sheen, it doesn’t hurt to protect the surface with a coat of high-quality wax. A mild automotive cleaner wax can be used to further remove any residual grime from the surface and a good Carnauba wax to finish the whole thing, decals and all. Once the wax is applied, the dust will yield without much struggle during your next scheduled cleaning session.

Thanks for the question, Dylan. We hope our suggestions create stellar reflections on your model collection.

Talk about looking “outside the box” and using stuff that’s not specifically made for model building:

Joe Chernauskas of Georgetown, Illinois, sent in a whole bunch of ideas that only require us to dig that old, dried-up ball-point pen from the back of the desk drawer. Joe wasn’t the only reader to suggest using the chrome point of a pen to make a megaphone exhaust tip, but the sheer volume of his other ideas made him the top contender for this issue’s “Tip of the Month.” Let’s leave the rest to Joe:

“The generic retractable ball-point pen has several modeling uses. Everyone knows about using the springs for suspension detail, and the bottom chrome piece works great for exhaust megaphones; but there’s more!

“When you unscrew the sections of the pen, there’s usually a chrome ring that separates the pen halves. It can be used for steering wheel trim rings.

“One of the most useful parts is the cylindrical end cap that you ‘click’ to open and close the pen. These can be used as exhaust cans, but when carefully cut into sections, the pieces have many more uses.

“Depending on how far down you cut the end can be used for a radiator or power steering pump cap; if you leave it a little longer, it becomes a chrome valve-cover breather.

“And if it’s left even longer, this versatile piece can also be used as a chrome oil-filter cover or a radiator overflow container. And there’s more:

The Mighty Pen

“When they’re properly painted and weathered, the outer sections of the pen can be used on a diorama as pipe sections or small cans.

“By looking at the various pieces as abstract shapes, any number of possibilities will come to mind!”

Thanks, Joe. Your many uses for that tired old Bic have made you our #1 Pen Pal. Your original drawing is coming to you “Delivery Confirmation Requested” and we sure hope you saved a pen so you can sign the receipt!

Thanks again to all of you who took the time to send in your great tips. Without your support, the “Tips & Tech” workshop would be mighty empty!