



PAINTING AND FINISHING SPECIAL



Build a classic 'Cuda



Revell's new 1970 kit offers many building possibilities • by TIM BOYD

IMAGINE you could transport yourself to spring 1970, and go to your local Chrysler-Plymouth dealer. You have an essentially unlimited checkbook, and you then proceed to factory-order the world's most-desirable (in your mind) Plymouth Hemi 'Cuda.

Well, we can't do that, but thanks to this new Revell kit, we are now able to replicate a 1/25 scale equivalent of that imaginary car.

Look at the engraving on parts like the pan that mounts the Air Grabber hood scoop, or the shape of the driver's-side 426 Hemi exhaust manifold. Or check out the sculpted asymmetrical handle of the iconic "Pistol Grip" shifter, and the deeply detailed surfaces of that Dana rear differential.

If you've ever had the pleasure to own or work on a 1:1 Mopar muscle car, the memories will come flooding back as you paint and assemble this kit.

And it has all the right equipment: that Dana rear axle, the 15x7 Rallye wheels molded with the correct open holes, the "fish gull" rocker moldings, and the correct factory graphics right down to the "Shaker" decal for the underside of the hood.

It also has the most desirable factory options: the Rallye Instrument Cluster, and a choice of both standard plated and Elastomeric body color bumpers (the latter of which has a different front design – replicated exactly correctly in this kit).

You'll also find black and white "Sport Tape Stripe" with "Hemi" callouts (and nonstock versions in red and silver as well).

As a lifelong aficionado of this particular car, I have yet to find anything

that is incorrect about the composition of this kit; it shows the attention to detail that we would all expect.

This is the third time that Revell has replicated the distinctive contours of the 1970 'Cuda body, and the first two times did not work out very well. Accordingly, it put extra effort into getting this body correct.

I did not conduct a dimensional comparison, but in overall visual character the body checks out relatively well against the 1:1 original.



Your first decision should be which of the 20 1970 Hemi 'Cuda factory colors you want to use (see chart). All colors are available in bottles for airbrushing from MCW Automotive Finishes. MCW also offers aerosols for nine of the colors.



Close reproductions of six 1970 'Cuda factory colors are also offered by Testor's in the Model Master Custom Lacquer Series. I used "Go Mango/K2" Orange, which is the Dodge name for the Vitamin C 'Cuda color, followed by Testor's One Coat Lacquer Wet Look Clear.



3 The kit includes front and rear bumpers in the factory-correct plated and optional "Elastomeric" forms. The paint color you've chosen will determine whether the color-keyed Elastomeric bumpers are a building option (see chart). The bumper guards on the Elastomeric rear bumper should be "plated." I used Bare-Metal foil to replicate this.



4 1970 'cudas included a blacked-out rear taillamp cover; you'll need to mask this area as shown. Tamiya Matte Black is an appropriate paint choice here, and should be used with all main exterior colors except black.



5 Here you can see the demarcation line of the black taillamp cove. Note that the part below the taillamp extends downward to the rear bumper.



6 There should be a wraparound molding for the taillamp blackout panel engraved on the body, but in lieu of that, you can cut a narrow strip of Bare-Metal foil and carefully outline the cove yourself.

The one area that I would change if I could would be to move the character line that runs front-to-back along the side of the car just slightly upward, and then slightly reduce the extent to which the wheel lips extend beyond the body.

Along with some other slight modifications, this would address a slight "visual thickness" of the body above the front wheel opening.

This new body is far more accurate in several other areas than the previous "gold standard" for models of this car, the original MPC 1970 cuda annual kit (see *Classic Kits*, p. 39, *Scale Auto*, June 2012).

The design of this kit expedites the detailing process, except for three areas:

The taillamps are separate chrome-plated castings that require fine paint-detailing for an accurate appearance (I prefer the taillamp design of the original MPC 'cuda kit).

The lack of an engraved molding around the 'cuda taillamp blackout panel makes the masking operation

more difficult, and requires one to "wing it" if they want to replicate the chrome border for this blackout panel.

Both issues here may be the result of engineering the kit to allow derivative versions in the future, and they can be overcome with a little extra effort – as explained in the text.

Although the kit has beautifully executed, newly-tooled tires, they omit the "Goodyear Polyglas GT F-60-15" raised white letters that were present on all factory-assembled 1970 Hemi 'cudas. Fortunately, the correctly lettered tires in the latest new AMT Parts Pack are a direct swap for those who want to add this extra detail.

As is so often the case with highly detailed model kits, the final assembly is the most crucial and challenging stage of the build.

As you insert the completed chassis assembly into the body/interior assembly, place the rear part of the chassis into the body, then stretch the sides (first) and then the front roll pan to

accommodate the chassis.

Make sure that the chassis is all the way forward in the body; you can eyeball the rear suspension location to make sure it is centered in the wheel wells to verify that you've positioned the chassis correctly within the body.

The relationship between the front radiator wall and the radiator itself will also be tight if the assembly has been done correctly.

Next comes the rear roll pan. Make sure to insert the exhausts into the roll pan from behind, before you add the roll pan to the body, and also make sure that the roll pan fits fully flush against the body (you may need to file some clearance for the rear leaf springs on the underside of the roll pan).

After the wheels and tires were added, I quickly determined that the stock ride height is a bit of a "tail sitter" as our model-airplane friends say. This may have been a function of my build of the kit, or it may be the 1:1 car that Revell measured and photographed (1:1

Mopars from the later years of the Muscle Car era that were set to exact factory specs did show this tendency).

If you encounter the same concern, and it bothers you, you can reduce the depth of the rear axle mounts on the underside of the leaf springs to address this, as I will do on my next build of this kit.

For those interested in competing in the “Box Stock” category at various model car contests, this kit would be a great starting point because of its accuracy and level of detail.

For those who enjoy kitbashing, it also offers a great starting point. Consider adding a vinyl top, the mid-year “Longitudinal Strobe Stripe” (not the same as the AAR ’cuda strobe

stripe), or choosing one of the more unusual paint-and-color combinations (all documented at the Hamtramck Registry Web site – see Sources).

You could swap in the 340, 383, 440, or 440+6 engines that were offered in the 1970 ’cuda.

A convertible conversion would be relatively easy, and constructing a Super Stock or Pro Stock drag racing model is an easy kitbashing exercise, given 1970 NHRA specs for these classes.

Mopar model builders now have a new source of exceptionally accurate pieces such the racing mirrors, shifter, and console, for all those other (depending on the parts application) 1970-1974 A, B, or E-body kitbashing projects.

Several years in the development, Revell’s new 1970 ’cuda kit is finally here, and in several areas it sets a new standard for 1/25 scale Mopar muscle car model kits.

This is every bit a “Skill Level 3” kit. Take your time and work slowly.

If you want add more detail, this kit encourages you to do just that, versus having to invest most of your time correcting errors, as is the case with so many other muscle car kits.

If you consider yourself a fan of the Muscle Car era, or you are a Chrysler Corporation enthusiast of any sort, I recommend this kit for both the building experience and a result that brings to life the magic of Plymouth’s most-desirable pony car entry.

TIM BOYD’S BUILDING HINTS

AIR GRABBER HOOD

The Air Grabber hood was standard on all 1970 Hemi ’cudas.

At the beginning of the model year, ’cudas painted Code FE5 Rallye Red had matching Red Air Grabber scoops; all other colors had Code 5X8 Black Organosol Air Grabber Scoops

Later in the model year, cars painted EB5 Blue Fire Metallic had matching Blue Air Grabber Scoops, and Code DA1 Astrotone Silver Air Grabber Scoops also became available.

ELASTOMERIC (BODY COLOR) BUMPERS

Code A21 Elastomeric Front Bumpers were only available with the following Exterior colors: FE5 Rallye Red, EB5 Blue Fire Metallic, FC7 In Violet Metallic, EF8 Ivy Green Metallic, FJ5 Limelight, FK5 Dark Burnt Orange Metallic, EW1 Alpine White, TX9 Black Velvet, and FY1 Lemon Twist.

Code A22 Elastomeric Front and Rear Bumper Group was initially restricted to cars painted FE5 Rallye Red. Effective 1/5/70, the package became available on all cars painted in all nine Code A21 colors listed.

When FM3 Moulin Rouge and FJ6 Sassy Grass Green were added as mid-year colors, the Elastomeric Bumpers were not available with these colors.

RACING MIRRORS

Chrome left and right Racing Mirrors were optional, but most ’cudas included them.

Body color left and right Racing Mirrors were also optional, but restricted to certain exterior colors, most likely the Elastomeric Bumper Colors listed above. They also became available in FM3 Moulin Rouge and FJ6 Sassy Grass Green at mid-model-year.

The A22 Front and Rear Elastomeric Bumper Group included body color Racing Mirrors, including the colors added at midyear.

WHEELS AND TIRES

The Hemi ’cuda came with standard with F60-15 Goodyear PolyGlas GT Raised White Letter Tires and 15”x7” Rallye Wheels with Trim Rings. Round 2 includes two of these exact tires in a Tampo-printed form in some recent kits (1966 Mustang GT, 1969 Hurst Olds), as well four of them in its new AMTPP006 “Goodyear Polyglas GT Tires” parts pack.

INTERIOR COLORS

’cuda standard interior colors were E4 Red, B5 Blue, F8 Green, T5 Tan, X9 Black, and XW White with Black Components (black instrument panel/console, steering wheel, package shelf, and carpet). White also became available later with Red, Green, or Blue Components.

Optional seating choices included a front bench seat (in Green, Blue, Black, or White with Black components, and a leather seat (with a different sew pattern) in Tan, Black, and White with Black Components

VINYL TOPS

Vinyl tops were optional and available in Black, White, and Dark Green.

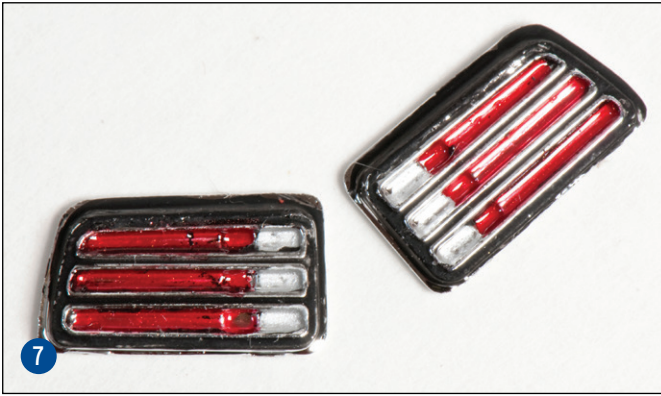
Also available were a “Gator Grain” Black roof (a larger, more exaggerated vinyl grain), and “Mod Blue” or “Mod Yellow” floral pattern roofs. (At least one factory-produced “Mod Yellow” Hemi ’cuda has been documented and restored; it is painted in F8 Ivy Green Metallic.)

OTHER EQUIPMENT NOTES

Midyear options added included a pedestal rear spoiler, backlight louvers, and a “Strobe Stripe” similar to, but different from the Strobe Stripe that was standard on the 1970½ AAR 340+6.

The Rallye Instrument Cluster was optional on ’cudas, but most were equipped with it.

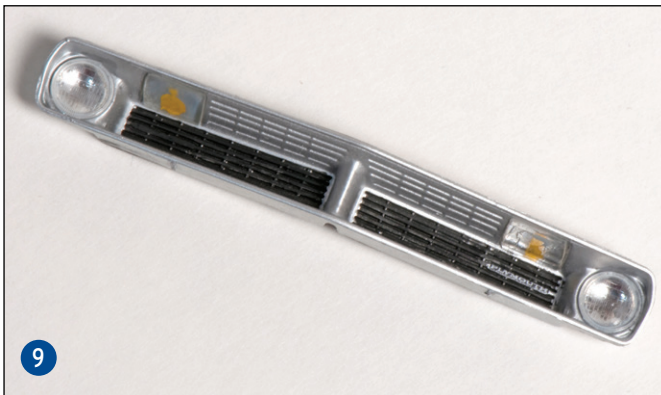
A factory-installed trunk lid luggage rack was available. Reportedly it was identical to and provided by the same vendor as the Corvette luggage rack. AMT/Ertl’s 1972 Corvette, kit tooled in the early 1990s, includes this luggage rack.



The taillamps are replicated by a carefully engraved piece of plated plastic. Apply flat black between the taillamp lenses, leaving the raised, plated surface clean. You can then flow Testor's Stoplight Red Metallic in the lens areas, followed by Matte Silver to simulate the backup lenses.



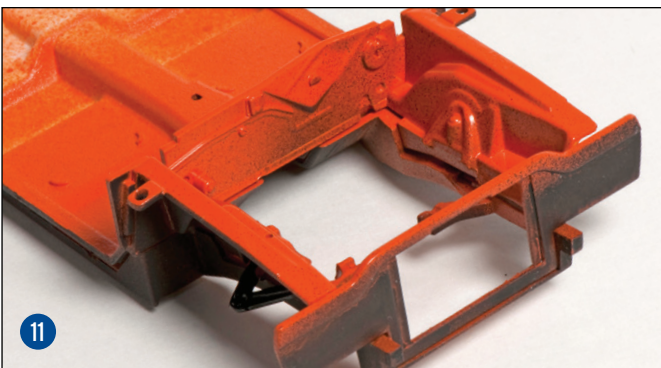
Here is the completed taillamp panel with the taillamps installed and the cove blackout molding completed. Note again that the factory correct appearance is for the blackout area to extend below the plated trim to the bumper area.



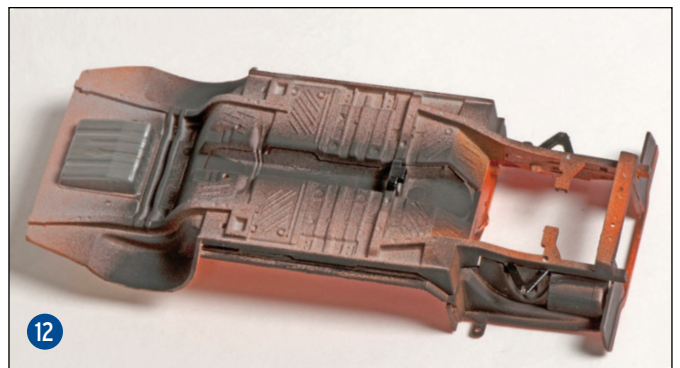
The front grille panel should be finished in Testor's Model Master Aluminum Plate, with the grille area brush-painted Tamiya Flat Black. A dollop of yellow paint is applied to the turn signal housing before the lenses are applied. You may want to file down the width of these lenses for a better fit in the grille recess. Note the decaled "Plymouth" badge. 1:1 'cuda grilles also had a superthin horizontal red pinstripe extending across the grille; let us know if you figure out a scale-correct way to replicate this feature!



1970 'cudas also had a separate lower front roll pan insert. I replicated this with Testor's Metalizer Stainless Steel, carefully brushed on the horizontal and vertical surfaces as shown.



The 'cuda engine compartment was finished in the same color as the body. Here I mocked up the firewall and radiator wall for the painting operation. Note the flat black airbrushed across the front of the radiator wall; this was done at the factory (very sloppily, as shown), to make sure the body color did not show through the grille openings.



Mockup the interior floorboard to the chassis pan, then follow this painting sequence: a) light or dark gray primer, b) factory paint color overspray (lightly please!) - it should only show on the edges chassis pan and in the fenderwells, c) optional factory undercoating airbrushed into the wheel wells, rear axle area, and transmission/driveshaft tunnel, d) flat black applied to the rocker panel areas (all cars), e) a polished metal color applied to the gas tank area and finally, f) semigloss black paint applied to the molded-in front suspension A-arms and transmission mount (at the rear of the transmission tunnel).



13
 Back to the engine compartment, shown are all the Revell components, painted in factory-correct colors. I painted the clear windshield washer container with flat white paint on the outside; this is the way I remember my own 1:1 Mopar muscle cars, and it matches my 1970 'cuda reference photography. Note the correct variable-speed windshield wiper (lower right), next to the hood latch panel. Decaled factory graphics for the heater hoses fit great as shown, if treated with several coats of Micro Sol decal softener.



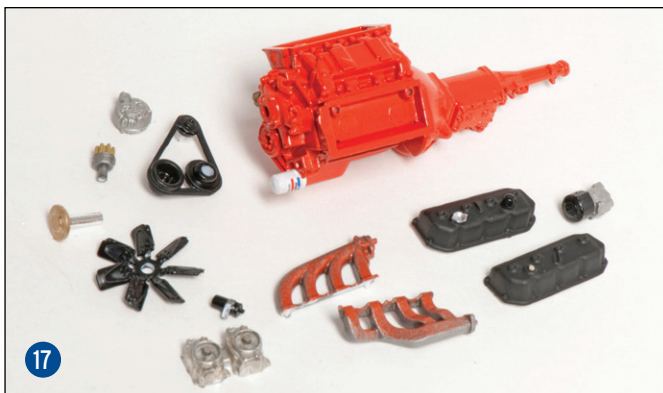
14
 See the reference charts for factory-correct interior color choices. I used Tamiya TS-29 Semigloss Black to replicate the shiny factory Black Vinyl. Revell provides convincing woodgrain decals for the instrument and console; they'll fit fine if softened with plenty of Micro Sol. Testor's Model Master 1736 Leather is a match for painting the woodgrained pistol-grip shifter, steering wheel rim, and the "winged" extensions of the IP instrument cluster that are not included in Revell's decal sheet.



15
 Here are all of the interior components, awaiting assembly. Note the accurate rear floor pan/back panel, which means the rear seat can be omitted for racing kitbash projects. The component design makes it easy to add flocking or texturing powder to simulate factory carpeting.



16
 The completed interior is a near-perfect replica of the real car. Decals are provided for all interior nameplates; I used the door panel decals but drybrushed the "Barracuda" instrument panel above the glove compartment. That pistol-grip shifter is correctly engraved with all of the correct surfaces, and the distinctive Mopar E-Body-only ribbed collapsible steering column is included.



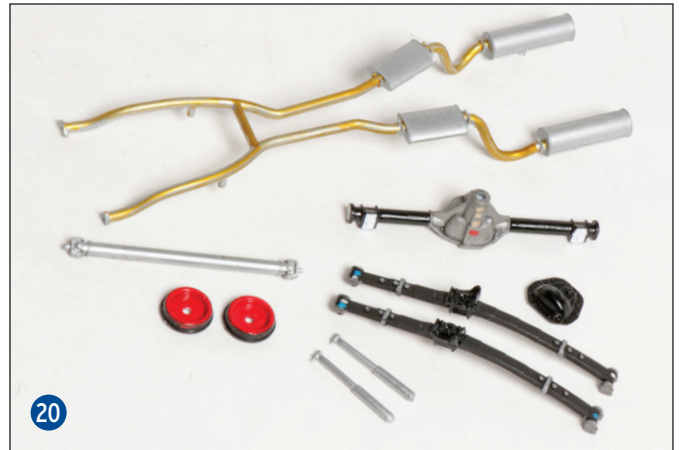
17
 I already like Revell's 426 Street Hemi (see "Mopar Muscle V-8s," *Scale Auto*, February 2014), but this one may be Revell's best replica yet. Note the correct shape of the driver's-side exhaust manifold, and the engraving on the starter motor. I painted the engine with 1:1 scale Mopar Street Hemi Orange, and applied overspray to the tops of the exhaust manifolds as shown, currently believed to be the correct original Mopar assembly plant finish.



18
 The valve covers are plated in the kit; they need to be stripped and painted textured flat black. Most of my references showed the valve cover with the oil fills to be on the passenger side, so that's how I assembled my engine. Revell provides decals to replicate the correct graphics for the upper radiator hose and oil filter.



The front suspension components are shown here, in various factory-correct finishes. Note the "cosmoline" finish on the lower suspension arm, replicated by gold paint overcoated with Tamiya Clear Yellow paint. One correction, the inner facing surfaces of the disc brake rotors discs should be semigloss (replicating the correctly molded dust covers), not metal as shown here.



The rear suspension components and one-piece exhaust system all check out with my references. Note that hunky Dana rear axle! Outward facing surfaces of the rear brake drums were painted with Gloss Red on late-era Mopar Muscle cars. A gold tone (Tamiya Clear Yellow) was applied unevenly on top of Testor's Model Master Stainless Steel, then overcoated with Testors DullCote, to match the appearance of some 'cuda restorations.



Revell has tooled up all-new tires for this kit (left), they appear accurate in size, tread, finish, and section/aspect ratio. However, the factory-correct "Goodyear Polyglas GT F-60-15 lettering is not provided. If this bothers you, Round 2's latest AMT Parts Pack has the correct tire and lettering (right), and they are a direct swap to the Revell wheels. The 15x7 Rallye Wheels are finished with Testor's Model Master Stainless Steel applied to the hub covers, and Aluminum Plate brushed on the exposed steel wheel surfaces. The holes are correctly molded open, which greatly expedites wheel detailing.



This mockup of the engine compartment to the chassis platform verifies that everything fits as intended. Note Revell's decal graphics for the radiator wall and the driver's-side fender well; these match my references. Some of the factory undercoating has drifted onto the firewall, this is correct to 1:1 references.

Check out Tim Boyd's downloadable article collections on engines, paint, and more at ScaleAutoMag.com.



The Air Grabber hood scoop is a four-piece assembly (scoop, a separate scoop grille insert, the underhood sealing pan, and the air cleaner itself). Check our references for correct color choices for the Air Grabber Scoop. I used Testor's Model Master Custom Lacquer System 1971 AMC Code 3D/Sterling Silver Metallic, followed by Testor's DullCote, to duplicate the heavily flaked "Astrotone" factory paint. The 1:1 air cleaner was painted a different shade of orange than the engine; I used Tamiya TS-12. Note that I should have painted the seal around the edge of the sealing pan flat black.

REFERENCES

Original 1970 Hemi 'cuda order guides, dealer memos, and color and trim information: www.hamtramck-historical.com/library.shtml

Mopar Collectors Guide, Mopar Action, Mopar Muscle, Muscle Car Review, Hemmings Muscle Machines, and Collectible Automobile (various issues)

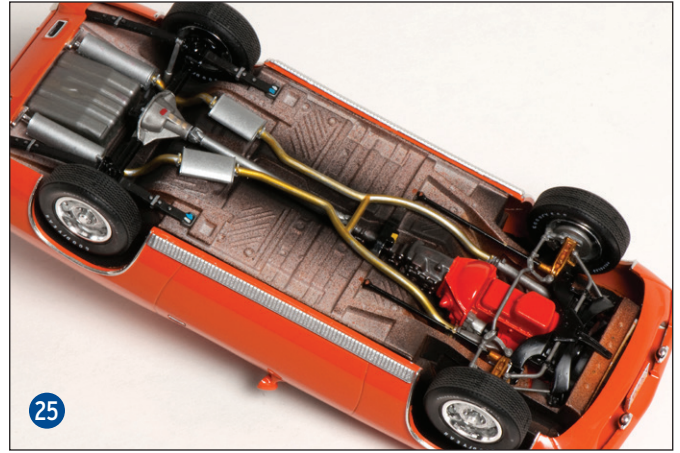
Dodge, Plymouth Muscle Car Red Book, 2nd Edition, Peter C. Sessler, 2001, MBI Publishing

Chrysler Corporation Production Option Code book, 1969-1971, Sixth Edition, Galen V. Govier, 2001 (self-published)

MCW Automotive Finishes www.mcwautomotivefinishes.com/



24 I left the Air Grabber hood scoop assembly loose so that it can be lifted off to show all the engine compartment detail. Everything here comes in the Revell kit - and shows the visual impact of the excellent kit engineering, along with factory-correct paint finishes.



25 Note the factory assembly paint markings: tan stripes on the Hemi-specific left and right torsion bars; orange paint dabs where the torsion bars meet the frame; gold and red slashes on the Dana rear axle; and blue/white stripes on the leading edge of the Hemi-specific rear leaf springs.



26 Revell includes the Elastomeric front bumper as a build option, and exactly like its 1:1 scale counterpart, this bumper is shaped differently than the plated front bumper. Those fog lamps are correct in appearance, but contain delicate mounts; you may want to reinforce them with pins.



27 Body color elastomeric rear bumpers were a midyear addition in eight colors (other than Rallye Red), and thus are rarely seen on 1:1 1970 'cudas. The rear exhausts should extend a little farther beyond the roll pan than shown here; I'll correct that on my next build of this kit.

A WORD REGARDING FACTORY-CORRECT PAINT-DETAILING

In anticipation of introduction of a newly tooled model car kit of the 1970 Hemi 'cuda, I've been collecting magazine articles on restorations and unrestored original 1970 'cudas. In reviewing these articles (the earliest of which dates to 1984, the most recent from 2013), it is interesting to see how the definition of "factory correct" finishes for 1970 Hemi 'cudas has evolved.

As the subject has been researched more intensively in recent years, there is general agreement about the correct body, engine and engine compartment, and interior appearance. But even today, not all sources agree on the finish of the underbody areas.

Take, for instance, the rear leaf springs. They could be semigloss black, flat black, unfinished steel, or cosmoline-coated steel - all thought to be the single, factory-correct finish at one or another time. And I have yet to see any consensus on exactly where the factory undercoating was applied to the underbody.

All this has now led some Mopar experts to believe that with the different assembly plants, changes in assembly procedures during the model year, and just the hectic nature of an assembly plant at full-speed operation, there may not be a single "factory correct" appearance in these underbody (suspension, drivetrain, floorboards, gas tank, etc.) areas.

These experts have also found that many of the underbody and engine compartment finishes appear haphazard and sloppy - an appearance now highly valued on the most accurate 1:1 scale restorations (and that I have attempted to replicate in this expanded kit review).

The bottom line? Cut yourself some slack on how you finish your 'cuda kit underbody (and please cut me some slack if the definition of "factory correct" changes again by the time this review is published). You can choose how much - or how little - of the paint guidance I've given here to follow. Most important is that you have fun and enjoy your Hemi 'cuda build. - *Tim Boyd*

1970 HEMI 'CUDA FACTORY COLORS

CODE	NAME	DESCRIPTION	HOBBY SPRAY PAINT	MCW MATCH *
EB3	Ice Blue	Light Blue Metallic	Airbrush only	
EB5	Blue Fire	Bright Blue Metallic	Airbrush & spray can	
EB7	Jamaica Blue	Dark Blue Metallic	Airbrush only	
FC7	In Violet	Med. Purple Metallic	Testor's lacquer	Airbrush & spray can
FE5	Rallye Red	Bright Red Solid		Airbrush only
FF4	Lime Green	Light Green Metallic	Airbrush only	
EF8	Ivy Green	Dark Green Metallic	Airbrush only	
FJ5	Limelight	Bright Lime Solid	Testor's Lacquer	Airbrush & spray can
EK2	Vitamin C	Bright Orange Metallic	Testor's Lacquer	Airbrush & spray can
FK5	Deep Burnt Orange	Med. Terra Cotta Met.	Airbrush & spray can	
BL1	Sandpebble Biege	Lt Beige Solid	Airbrush & spray can	
FT6	Burnt Tan	Med. Brown Metallic	Airbrush only	
EV2	Tor-Red	Bright Orange Red Metallic	Testor's lacquer	Airbrush & spray can
EW1	Alpine White	Pure White Solid	Testor's lacquer (Close: Ford Wimbledon White)	Airbrush only
TX9	Black Velvet	Black Solid	Tamiya TS-14	Universal Black
FY1	Lemon Twist	Medium Yellow Solid	Airbrush only	
DY3	Yellow Gold	Ivory/Pale Tan Solid	Airbrush only	
FY4	Citron Mist	Pale Gold Metallic	Special order	
FJ6	Sassy Grass Green	Bright Medium Green Solid	Testor's lacquer	Airbrush & spray can
FM3	Moulin Rouge	Bright Magenta Solid	Testor's lacquer	Airbrush & spray can

Source: *Model Car World Automotive Finishes Automotive Paint Reference Guide for Model Cars, 2004*



The factory-correct "Fishgull" rocker moldings are separate plated parts, but were factory finished with the same "Astrotone" heavily flaked silver paint process used for the Air Grabber Scoop. I would prefer a slight forward rake to the body; I'll address that the next time around.