

Painting My GMC

Do it myself?

or

Have it done for me?

Background

- We needed a lot of body work
- We didn't like the old stripe colors
- The paint was beyond repair anyway
- We'd done almost everything else already
- It was at the top of my wife's list
- Choosing a design and colors

Needed a lot of body work



Didn't like the stripe colors



Almost everything else was done



Choosing a Design and Colors

- Considered using Byron Songer for design and color ideas
- Learned about choosing paint colors
 - Colors are developed by auto manufacturers
 - Colors are organized by auto manufacturer
 - Colors are chosen from small sample chips
 - Coordinated colors are not available
 - Automotive paint colors are a “crap shoot”

We had a design in mind



Hire someone or do it myself?

- I like to do some things like this myself
- I knew others who had done it themselves and they looked “great”
- Options for hiring someone:
 - Jim Bounds Coop in Orlando: top-of-the-line quality, two great examples (Steve F. and Jim D.), but two cross-country trips, and premium price
 - Local shops: Only one choice – unknown quality and premium price.

Skill Requirements for DIY

- Skills very similar to wood – shaping, finishing
- Lots of tutorials on youtube.com
 - DIY How To Paint A Car School
 - diyautoschool
 - Eastwood Company (Kevin's Corner with Kevin Tetz)
 - Official How To Pain A Car – DIY Learn Auto Body And Paint
 - Refinish Network
- Safety equipment is a must – respirator required

Tool Requirements



- Big compressor with spray gun and air tools or...
- Turbine-based HVLP system and electric tools

Turbine vs. Compressor

- Compressor: big, expensive, non-portable, with lots of overspray (relatively)
- Turbine:
 - 1) Complete Portability typically 20 lbs.
 - 2) Built in filter system
 - 3) All Self contained
 - 4) Fast operation with heated material (I needed something to slow it down)
 - 4) Excellent finish quality
 - 5) Very Low Overspray - Great for indoor applications
 - 6) No moisture to worry about

Where to work?

- I Had to work at the storage yard with vehicles on either side
- I Had 110V outlet available for electric tools and sprayer
- The workday would have to begin very early and be short (3-4 hours) due to the 100°-110°F heat



How to paint the roof?

- Greater probability of overspray so I moved it to do the roof
- How to reach it – I used 8-foot step ladder



My Decision:
Do it myself at the storage lot
and
“Do it right”

Preparation: “Bag and Shoot” or “Done Right”



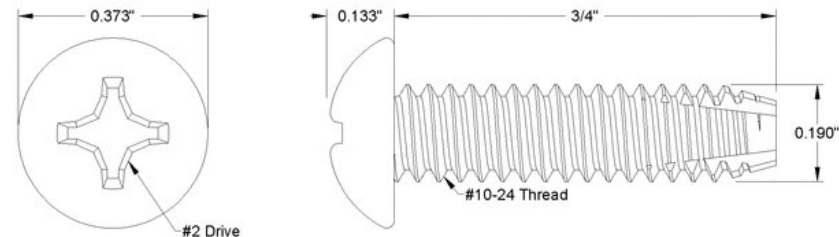
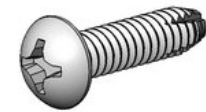
- “Bag and Shoot” cheaper, easier, but ...
- “Done right” means take “everything” off:
 - A/C units, Drip rails, Lights, Mirrors, Bumpers, Grill, Trim
 - Ideal is to remove all the windows too – I did not

Removing “Everything”

- Lifted A/C units onto 3 1/2” frames
- Removed luggage rack & ladder
- Removed caulking from around air vents
- Removed refrigerator & sewer vents
- Removed drip rails
- Removed lights, mirrors, bumpers, GMC badges, front hinges, latches, water and hookup doors

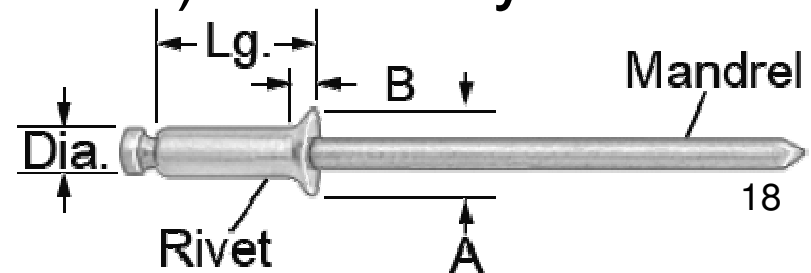
Notes on drip rails

- Screws break off – must be ground down
- Attached rails to 16-foot 2"x 6" for handling
- Moved forward 1/4" for new holes
- Drilled new holes with 1 1/64" drill bit (0.172 vs. spec. of 0.1495)
- Sealed with "Bond + Seal" (JimB) in groove and above it
- Used McMaster-Carr stainless steel screws #90410A245



Body Work

- SMC – the “fiberglass” body parts
 - Buy the recommended materials for SMC
 - Use acetone to clean before applying repair
 - Fay and Bert Curtis sell fender repair panels
- Aluminum roof and upper sides
 - Large holes “require” welding – I used rivets with aluminum sheet metal covered with body filler (who will see it?)
 - Small holes require counter-sunk rivets (McMaster-Carr 97447A210) and body filler



Cleaning

- Clean before sanding
- Removing silicone
 - I used a silicone remover
 - With a small wire brush
 - Finished with “Prep-All”
- Clean after sanding with “Prep-All”



Masking

- You do have to do some “bagging” – windows, including window frames, wheels, etc.
- Quick and dirty: cheap tape with paper is OK but it will not stay on
- Multi-day or outdoors: use “good” tape from an auto body supply (3M 233+) and if outdoors use 3.5 mil plastic sheeting (no paper)
- Even 3M 233+ leaves lots of residue but comes off with lacquer thinner (be careful)

Selecting the Type of Paint

- Enamel (softer and less expensive) or urethane (more durable, but more difficult)
- One-part vs. two-part (1K or 2K) – uses a hardener for durability and dries quickly
- Single stage (1 coat) vs. basecoat/clearcoat - forgiving because clearcoat can be sanded and polished very easily to remove drips, sags, and orange peel.
- Note: Multi-component systems have time requirements that complicate the project
- I used Nason brand basecoat/clearcoat for its forgiveness and durability – made by DuPont
- Safety is a consideration – you must use a respirator and more if indoors

Selecting Our Colors

- Chose a main color similar to original
- Chose black for around the windows
- A multi-color scheme would have been very difficult to get right – 4 different but coordinated stripe colors would be almost impossible I think

Phase I – Bottom Half of Sides

- First objective was to cover body work on SMC-half of sides before April rally
- Painted side trim strip but stopped there
- Primed with 2K primer/surfacer for uniformity and sealing – 2K primer can be left uncovered indefinitely
- Color changed with temp/humidity
- Overall: a success – got compliments at the last rally

Phase I Complete



Phase II - Painting the Roof

- Bare aluminum needed to be primed with Etch primer
- Etch primer had to be covered with a primer-surfacer or sealer within 8 hours
- Primers require sanding so chose sealer
- Sealer needs to be covered with the basecoat the same day or recovered the next day
- Basecoat needs to be covered with the clearcoat the same day
- It took 5 hours and approximately 120–160 times up the ladder – Results not great but who will see it besides me and the next owner?

Phase III – Painting the rest of it

- Two colors require masking and unmasking between color changes
- Unmasking can cause paint damage on first color taking time to repair
- Too much to do for one morning because of the heat so I needed three mornings:
 - Day 1 a.m. - paint black around windows
 - Day 1 p.m. - mask black around windows
 - Day 2 a.m. - paint beige sections and repair black
 - Day 3 a.m. - apply clear coat
- Solution: “222S Mid-Coat Adhesion Promoter”

Phase III – Ready for Black



Phase III – Day 1 Morning



Phase III – Day 1 Evening



Phase III – Day 2 Morning



- Applied beige paint
- Removed masking from black
- Several iterations of paint/repair of both colors until right



Phase III – Day 3 a.m.



- Applied a coat of “Intercoat clear”
- Applied 2 coats of clear

Color Sanding

- Wash the area
- For drips and sags use a hard sanding block with 1200-grit wet/dry sandpaper
- For orange-peel use a firm sanding pad with 1200-grit
- Use a spray-bottle of clear water for lubrication – use a rubber squeegee to see progress
- Finish with a firm sanding pad and 2000-grit wet/dry sandpaper then buff with rubbing compound on slow speed – you can burn the paint off if your speed is too high (I did)

The Finished Product



Summary

- I'm glad I did it but not again without a shop
- Cost about \$2,500 for all materials (paint about \$1,000 and nuts, bolts, trim, etc. another \$1,500)
- Took 200-300 hours of labor
- Lots of help, advice, and stuff from JimB
- I met my objective of "10-foot" paint job
- I think the right price is \$10,000-\$12,000 - but the quality would be better

Body Repair Materials



SMC reconstruction



“Bondo” for SMC



Glazing finish



“Bondo” for aluminum



Seam filler

Primers and Cleaner



Etch



Primer/surfacer

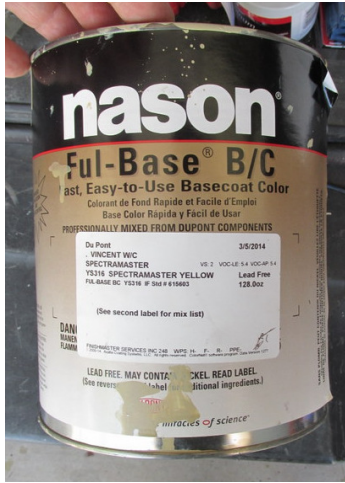


Sealer

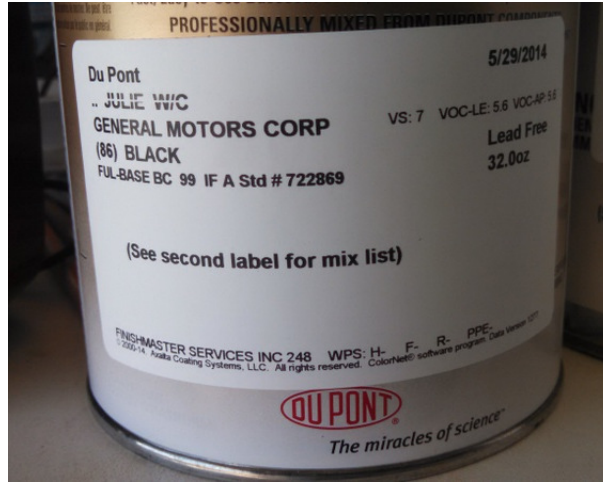


Cleaner

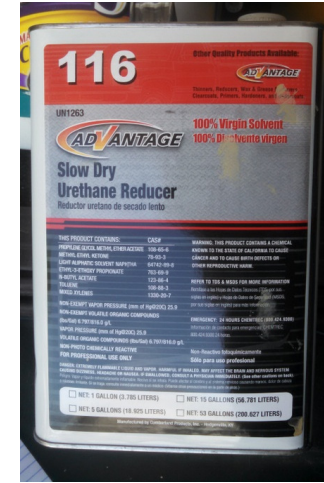
Base coat / Clear coat



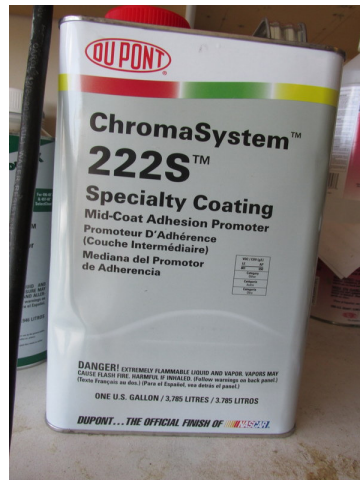
Beige base coat



Black base coat



Base coat reducer (slow)



“Intercoat clear”



Clear coat