

F-150 Online Care & Detailing Sticky:

The Basic How-To A beginner's guide to a successful detail

Compiled by: F-150Sport03, RockPick, Gipraw, and many others

Introduction:

Congratulations. You have now taken the plunge into the realm of detailing an automobile. What you are getting into is a long, arduous, insane job that has rewards unimaginable until it's done. I wish you good luck in your endeavor for perfect paint.

I would like to credit RockPick, Gipraw, and Qadsan for the majority of this. They have taught me most of what I know about detailing. To the others who I have ripped ideas from, thank you for your advice.

In order to use this manual, you need to understand that it is based on a full detail, and it may very well take up to 36+ hours to complete, if everything is done to the absolute extremes. Most detailing jobs will take no more than 18-20 hours to complete. BUT, if you only want to hit certain sections that is always acceptable, but understand that you shouldn't expect results from the Concurs detailing competition from doing half the work.

What does *Detailing* really mean?

Detailing, in its essence, is merely paying attention to EVERY little detail. (Hence the name) You go through and find every bit of imperfection and remove it. Everything is just right, and better than how it came from the factory, and has that famous show-car shine. With detailing comes the basic understanding of time and Tender Loving Care.

Materials you will need:

This list could go on and on with particular products, but I'll leave it fairly general for you to take some liberties and experiment, for with no experimentation comes no discovery. It is imperative to understand that with many of the products, you get what you pay for. Be especially careful with anything that touches your paint. Here's the basic rundown and explanation:

• <u>Car Wash solution/concentrate</u>- You need to invest in some quality wash. The 2 that are very common and are VERY good are *PoorboysWorld Super Slick and Suds* wash and *Meguiars Gold Class* wash. Both are top notch washes, and are very good to work with. They offer high lubricity and high suds, not to mention that they both are safe for the wax you're about to apply. BUT, as with any wash out there, it must be diluted to the proper ratios to prevent stripping wax or not offering enough lubricity. The advantage to Gold Class is that it's relatively cheap and is very easy to come by. It is found at any auto parts store, Wal-Mart, and many

- others. Poorboys wash is an excellent wash, but to my knowledge, it must be ordered on the internet, and it is quite pricey. It's up to you, but these are the 2 that are recommended by virtually everyone.
- Wash Mitt- You can use a variety of washing implements, but I find that mitts offer reach into tight spaces, and are easy to use. The alternative is the boar's hair brushes, but those are VERY pricey. I prefer to use a genuine lambs wool mitt. The SW Arnold is an EXCELLENT mitt, as are many others. (See site 1 at bottom of page.) Alternately, a genuine Cotton Chenille mitt works well, too. Whatever you choose, it should have plenty of nap—that is, is should be able to trap and remove dirt/grit. It needs to be deeply piled and very soft.
- <u>Grit Guards/Buckets:</u> These are an excellent invention that prevents the grit that comes from the mitt to reenter the mitt. It allows you to scrub the grime out of the mitt and not worry about it. They are available at ADS (see site #2) as well as a plethora of other places. For a bucket, make sure it's a 5 gallon bucket (ie: The Homer Bucket from Home Depot) so that the grit guards fit into it. Other than that, it doesn't really matter.
- Microfiber towels: You will need to divide this into several categories:
 - 1. Waffle Weave Microfiber (abbr: MF): These are great for drying off the vehicle, as each of the ridges acts as a little squeegee and allows the fibers time to absorb the water. A great one is the Meguiars (abbr: Meg.s) one, as well as many others. See MF note at bottom of page. These have a fairly thick nap to them. (nap is a term that is used to define how plush the towel is; the more nap it has, the more plush, and therefore, the safer for the paint because the grime has places deep within the towel to go.)
 - 2. Wax removal towels: These, as the name implies, are primarily used for the removal of wax after application. A great one is the Meg.s Supreme Shine towel, if you are after going to an auto parts store and getting the best they have. But if you don't mind making an internet order, check out ADS, as Rick has some (Premium Quality 16"x16" polishing towel) or, a favorite if you don't mind the price, the Pakshak or the DF towel are among the best on the market. Make sure you snare quite a few of these, as I find myself using several on EACH detail. These are ALWAYS deeply piled, thick napped towels.
 - 3. Quick Detailing towels: These are to be used in conjunction with a good, high quality QD spray. DO NOT under ANY circumstance use dry. ALWAYS use plenty of lube. The same towels for Wax removal will work fine for this, but personal preference always applies. Experiment and use whatever works best for you. These must be deeply napped to allow the dust a place to go so that it prevents the grime from inducing swirls, micromarring, etc.
 - 4. General use/Grunge towels: This is where the Wal-Mart towels come in. Any of the cheapo towels you see apply for here. These are great for cleaning dashboards, etc. Basically, they are great for trapping dust, dirt, and grime without worry of scratching any non-painted surface. I particularly find them useful for conditioning plastics, leathers, and rubber seals. Other than that, use your imagination. Just keep them away from paint. (They could definitely be used for cleaning wheels, too.) Nap and pile are virtually unimportant here, so it will not be discussed. Use discretion.

- 5. Glass towels: These are great for cleaning glass, but I find no use in them. I prefer to use newspaper, but this will be described later. Glass towels have very little nap, as they are predominantly used for the streak-free and scrubbing properties they have. Useless in paint, they offer great rewards on glass.
- Clay kit: These are relatively inexpensive (about \$20), and include virtually everything needed for claying your truck, one of the most important parts of the detail, like the box says, for a difference you cal FEEL. Get one. You probably will not need the Aggressive clay kit—the Smooth Surface Kit or almost any other one will work fine. The reason for claying is to abrasively remove embedded particulate matter from the paint that a paint cleaner and washing don't remove. These are EXTREMELY safe, and easy to use. They effectively trap particles, from bug guts to paint overspray, to grit, and remove it from the paint. You will be amazed how much crud you remove from your paint with one of these.
- <u>Scratch Removal:</u> I highly recommend Scratch-X for this. It's got an excellent breakdown, easy to use, etc.
 There are others out there, but it's readily accessible, fairly cheap, and VERY easy to use. For some more aggressive compounds, see the notes section.
- Paint Cleaner/Compound: Sometimes, these are one in the same. Sometimes they're not. Be sure that what you are using, it suits your needs. The cleaner does much more than washing, so don't be confused. It abrasively removes any contaminates that clay does not. It is particularly useful in removing stains, such as those from gasoline around your gas cap, bird bombs, and much more. Once you get more into the compounding side of things, you're more looking at a method to remove scratches and swirling. Some are more heavy duty, and thus must be followed by another product to eliminate the swirls it induces. Make sure you read carefully the information on the container so you know what you are buying, because they can be FAR from the same. My personal favorites are as follows: For the A-line consumer (that is, the person who goes to the auto parts store to get his/her supplies), The step 1 of the Deep Crystal (DC) system. For the Professional line (the person who orders online to get great products cheaper), #80 from Meg.s is absolutely fantastic. If you need a compound with a bit more cut to it, #83 is great, just be aware that you may need to follow it up with #80 afterwards. There are oodles of products like these out there, but I haven't the time, space, or experience to comment on them. Please ask in the forums if you have a question, and we will be more than happy to answer.
- Polish: These can sometimes be a pure polish, sometimes they contain mild cleaners, and sometimes they contain fillers. The overall purpose of a polish is to replace some of the oils lost to the environment from the paint. They increase shine, but offer ZERO protection. Pure polishes are great if you have a swirl free finish, and you are looking to increase depth, gloss, and overall shine and looks. These bring out the warmth of the paint. The difference in the pure polish and that of a filler is that when a filler polish is used, it fills in swirls left behind from the swirl removal step. It offers mostly the same benefits in terms of looks as the pure polishes, however, good results can be achieved by using a filler then a pure polish. The polishes with mild cleaners are generally meant to be used in less-step operations, and are generally to be avoided.
- <u>Wax:</u> This will be divided into 3 distinct categories:
 - 1. Cleaner Wax: These were meant for less-step operations, and in one step offer the benefits of cleaners, light swirl removers, and protection. Obviously, they aren't perfect,

- and don't offer the best results, but for some people, this is all they are willing to do, or for others, it's all they need, since they have mostly good looking paint.
- Synthetic Wax: Famous for their long-lasting protection, these are a hot product right now.
 They do, however, require a curing time of approximately 12 hours before application of
 another product to ensure their long lasting protection. Also, they are notorious for a
 glossy, "saran-wrapped" look.
- 3. Carnauba Wax: These are the oldest and most well-known waxes out there. They don't typically last as long as the synthetic waxes, but, when used as a last step product (abbr. LSP), they take away the saran-wrapped appearance, offer a bit more protection, and really increase the depth and warmth of the paint. They require no cure time, and are top notch additions to the detailing regimen.
- Quick Detailing Spray: There are tons of products out there for this specific purpose. You must use good judgment, though. This step in its own can potentially make you whole detail go to waste, so you need to get a nice Quick Detailing spray (abbr. QD Spray) for the job. A couple of great ones are Poorboys Spray and Wipe, Meguiars #34 Final Inspection, and the discontinued (and famous) Meguiars #51 Final Detail.
- <u>Dressing:</u> There are, again, oodles of products out there for dressing just about every part of the vehicle. I personally recommend Meguiars D-17 Hyper Dressing. It is able to be diluted from 1:1 to 4:1 (water:dressing). It can be used almost everywhere, including tires, engine bays, wheel wells, trim, interior, etc. Find a dressing that you like that works well for you. Keep in mind whether or not you are after something that is matte black or glossy. Also, keep in mind whether or not you want the ability to spray on, dilute, etc. 303 Aerospace protectant (abbr. 303 AP) is also great for things like trim and such, but it has the downside of the fact that it runs when it rains. But, it does offer a great amount of UV protection. The members here are presently trying to find ways to make 303 AP not run. Updates will be made as they are found.
- Applicators: For wax, your best bet is going to be a foam applicator. MF applicators work alright, but sometimes have problems. For tire shine, a great on is the Eagle One Tire swipe, available at any auto parts store.
- Glass Cleaner: I highly recommend Stoners Invisible Glass, from Wal-Mart or virtually any other auto store. The best stuff on the market In My Opinion. (abbr. IMO) 20/20 is also great, as is the Meg.s D-line glass cleaner concentrate. Combined with yesterday's newspaper, these all yield stellar results.
- All Purpose Cleaner: Simple Green is one of the best APC's on the market. It's safe, easy to use, and cheap. It is biodegradable, foams well, and will not ruin parts of your engine, paint, etc. Body solvent (Meg.s) and Safe D-Greaser (Meg.s) are also great. Each has it's own use. Basically, for the engine bay, undercarriage, etc., these can be your best friend.
- ACCESSORIES: You will want several things, described in this manual as they come up:
 - 1. *Meguiars Plast-X:* Polishes out scratches and oxidation from translucent/transparent plastic products such as head/tail lights, etc.

- 2. Newspaper: Great for use with glass cleaners, as described above.
- 3. Bug/Tar remover (or Body Solvent): Self-explanatory. Body solvent (Meg.s) works great here.
- 4. WD-40: An all around great product. Squeaky hinges, belts, etc, can all be remedied with this stuff.
- 5. Cheap rags (ie: shop rags): Great for cleaning the dirtiest of dirty or simply wiping your hands dry/clean.
- 6. Westley's Bleache White (only If you dare risk potential problems): A very powerful solution of Hydroflouric acid, so be VERY careful. Before using, I encourage you to do a search on it in the forums or to post a question. There are varying points of view on it, and I cannot take the time or space to discuss all of it.
- 7. Various soft brushes: You will find that having several types and sizes of brushes will come in handy quite often. From removing wax buildup on doorjambs to reaching the dirt between the cab and bed, these are a necessity for every detailer. You will want to have several strengths of brushes, from the very soft that can be used on paint scratch-free to fairly stiff for trim and convertible cleaning. Just remember, if you are using a paintbrush, put several layers of duct tape on the metal part to prevent scratches.
- 8. D/A Buffer and pads: A Dual-Action (aka: D/A, aka: PC, aka: buffer, aka: G-100) is a very handy tool to have around. It speeds up the processes of scratch removal, wax application, and is VERY safe to use. Like many, I was skeptical at first about using a D/A on my paint, but very quickly learned how fool-proof it is. They also are great for preventing the soreness the day after a detail. They are relatively cheap, VERY easy to use, and offer a whole new world of detailing products. The pad maintenance will be discussed later, but as for pad selection, get some cutting pads, some pads for applying wax, etc. There are various systems to choose from that have already selected the pads you should get, and they tend to work well. The G-100 is a Porter Cable buffer, under Meguiar's logos, and it comes with a lifetime instead of a several year warrantee.
- 9. Leather cleaner and conditioner (as applicable): There are oodles of leather conditioners out there, but here are my recommendations. Keep in mind, for leather, I only know about what I use on client vehicles since I have a cloth interior. Lexol and Meg.'s 2 step cleaner/conditioner. I have enjoyed good results with both.
- 10. Scotch-Guard Fabric Protector: This stuff is an absolute must. It really helps for stain prevention, decreases fluid AND solid absorbancy, and tends to make the object last longer. Granted, when you first apply it, it smells horrible, but crack you windows and return a few hours later, and the smell will have dissipated.
- 11. Carpet/Upholstery cleaner: I have heard various reviews, but my #1 recommendation is Meg.'s Quik Out carpet and upholstery cleaner, with additions from Bissel. It powers through stains, does not leave marks, and if used properly, can virtually eliminate the

- scrubbing. It is relatively cheap, comes with a GREAT sprayer tip, and is extremely user friendly. Alternately, though, Hot Shot, Oxy Clean, and many others work fine. Even though Simple Green is a great cleaner, DO NOT USE ON CARPET/UPHOLSTRY!!! It is notorious for degrading the stitching, and the label will confirm that.
- 12. Metal Polish (as applicable): Adams Heavy metal polish is definitely a great polish. But the price paid for it, shipping, and such make it not worth the difference in price as compared to NXT all metal Polysh, IMO. But use whatever you like best.
- 13. Air freshener: I tend to not like scents in the vehicle, with the exception of scents that either are non-congruent with my truck (ie: I like leather scents, but I have cloth, so I can't use leather scents) or others find annoying (ie: coffee and doughnuts) So, febreeze works really well at eliminating odors and giving off a clean fresh scent. Also, you can obtain an ozone generator that will encapsulate and dissipate odors quite well.
- 14. Plastic Razor Blades: These are great for removing hardened road tar, bugs, etc. They can be particularly effective and safe if used properly. Just keep the edges from digging into the paint and scratching.
- 15. Plastic Trim Cleaner: a great example of this is Vinylex, Meg.'s #39 or 40, etc. Just about any will do, as will Simple Green (just don't let it get onto the paint --for any of them)These are great for removing dried wax, cleaning off grime, and increasing shine and color quality and evenness of the trim. I also recommend finishing with #303 Aerospace protectant. Though it runs in the rain, it is a fantastic product—even though it is a bit pricey.
- 16. Wetsanding supplies (as needed): There may come a time when you have scuffs or scratches that do not easily come out with a compound, and you are on a time crunch. Wetsanding can be very effective for this. Simply get a body shop grade wet sanding paper, and follow the instructions to the letter.
- 17. Blue Painters Tape (DEFINITELY GET THIS!!!): Taping off your trim is a particularly good trick to use—it saves cleanup time in the long run, and allows you to have a lot more room for error. After you have done it a few times, it doesn't take long at all to do.
- 18. Ziploc bags: These are predominantly used to seal up your pads, towels, etc. Also, when you have clayed and know the bar can be reused, squirt a bit of QD spray in to prevent sticking and seal it up to prevent contamination.
- 19. Storage compartments for all detailing supplies: Though not necessary, most detailers are clean freaks, and having all your supplies organized and protected not only prevents losses due to the environment, it also keeps everything close at hand, easily accessible, and readily usable. Not to mention, it keeps the garage looking nice.
- 20. Nozzle for hose: Being a firefighter, I prefer a fire department-style nozzle similar to what is sold at Wal Mart. Whatever you get, keep in mind that you want to be able to control flow, spray, etc. Also, think about the metal that is on them. Try to find one that is rubber

coated so that if you accidentally bring the nozzle and paint into contact with one another, there will be less of a problem, if any at all. If you opt to not use a nozzle, cut the connector fitting off so that the end of the hose is soft and will not scratch the paint. Remember, the unadulterated flow from the hose is one of the best ways to dry a vehicle, as it causes a waxed paintjob to sheet of the water and be virtually dry. (This is as opposed to a spray pattern that causes thousands of little droplets to form, which don't combine into sheets.)

Vehicle Size Up:

Okay, so you have decided to go ahead and proceed with doing this thing. The first thing that you'll want to do before you go buy everything under the sun is to evaluate what the vehicle needs. Look at several things when you do this: Oxidation, swirls, scratches, clearcoat integrity (has it failed), any paint chips, etching, staining, etc. Decide your plan of action BEFORE you touch the paint. Decide whether you need to do a prewash in the Self-Serve carwash with the high pressure wand. Inspect the interior and decide its action plan. Also, think about the results you want to achieve. Make your plan, but remember to remain flexible if need be. If you are working on someone else's vehicle, decide how much time you will be spending, and judge the price off of that, remembering that the longer you have their car, the longer they can't drive. Use a lot of common sense here, and determine how you are going to be most effective.

--For those of you thinking about customers: Create a form that allows you to point out scratches, provide a written comment section, and otherwise make it a cover your tail type of form. There are those out there that will accuse you of doing damage, ruining paintjobs, tearing/staining upholstery, etc. So create or download a good form with a pre-inspection, estimated cost, comments section, and a section with materials used/methods used. This will help you out when a customer begins to get angry.

Beginning the pre-cleaning:

As referred to above, this often means either pulling out the pressure washer or going to the self serve carwash to clean off the frame, large accumulations of dirt, etc. It is best not to do this where the detailing will be taking place because of the amount of grease, mud, and other grime that will come off the vehicle. Also take into consideration the bed of trucks, the convertible tops of some cars, and the trunks of any cars. Get the trash out, and eliminate as much of the big stuff as possible.

<u>Washing:</u> When you begin to prepare to wash, you should have gathered up your 2 buckets, grit guards, good wash mitt, high quality soap (and measuring device), nozzle for hose, drying towel(s), etc. Once you feel prepared, you need to fill your buckets, add premeasured amount of soap to one, and aerate/mix. Ensure that your grit guards are properly installed, and that your wash mitt has a minute or so to soften up in the sudsy water.

To start washing: Rinse entire vehicle with a stream from the nozzle. Try to remove any dirt you can, because this will eliminate much of the swirl-causing grime. Then, dip your mitt into the sudsy solution. Wash from top to bottom, front to back. This leaves the dirtiest and grimiest areas for last, which will reduce the area of swirling if at all. Remember to wash a small area, rinse mitt in the clean water, then re-soap the mitt. You should never do more than ½ to 1 body panel at a time between rinses. It is a good idea to have a dedicated mitt specifically for the rocker panels—as these areas are particularly grungy, and will thrash any mitt and paint in relatively short order.

As you wash, you MUST keep the entire vehicle wet, as this will eliminate water spotting. And, as you finish washing a panel or a portion of a panel, you need to rinse off the soap. Leaving soap on the paint for an excess amount of time WILL eat through wax, and eventually the clear. This is not to say that it will happen overnight, but over a period of years, with improper wash techniques, expect to see some paint deficiencies.

<u>Wheel/tire cleaning:</u> As you are washing the paint, keep your wheel and tire cleaning supplies handy. Some prefer to use Westleys Bleache white on the tires, but remember, it is a .017 concentration of Hydroflouric acid (HF). It is an extremely powerful chemical, usually used to etch concrete, and it WILL pit rims, eat paint, and it is extremely caustic to the skin, bones, eyes, and respiratory system. HOWEVER, it cleans tires extremely well, so you must ask yourself, "Do I feel lucky???"

The alternate to that is using Simple Green at a 1:1 ration with water. It is very safe, and causes much less problems. The only caution I have about SG is that it will degrade wax—immediately, and it causes aluminum to oxidize quicker. So, do your best to keep it off of your aluminum and paint, and you are good to go. I prefer to use a medium stiffness nylon tire brush to scrub my tires. It helps to get them extra clean.

To clean your rims, there are oodles of products out there, and you are faced with the decision. I have used the Dupont Teflon Wheel cleaner with good luck, as well as Simple Green. I prefer SG because it is cheaper, I can buy it in bulk, and I know that it is safe and has no harsh effects on the metal. For the scrubbing, you should either get a dedicated wash mitt, or get a decent sponge to clean the rims. Remember, if you have chrome—you absolutely MUST maintain a good wash procedure, as the chrome shows swirls and scratches VERY easily, so use caution.

<u>Claying:</u> For beginners, claying seems daunting, but if you have done it, it is probably the easiest thing you can do to greatly improve your paint. The process is quite simple. There are kits you can buy, or you can get individualized parts for money saving and time saving opportunities. Snag a kit, and follow the directions. You simply spray a good amount of the supplied (or your own) QD spray on the paint, knead the bar, then gently push the bar in a side to side, then up and down fashion across the paint. As you finish a section, you should dry off the panel with a good quality MF towel, to prevent water spotting.

Just a few precautions for you: Cut the bar into halves or thirdsbefore you start, and save the other pieces in a Ziploc bag with a squirt of QD spray to keep it moist. If the piece you are working with is dropped, it MUST be trashed, no questions asked. It is much easier to trash a bar knowing that you have 1 or 2 more pieces in reserve than it is to trash an entire bar knowing that you now have to get another one. Also, DO NOT use clay on a hot surface. If you attempt this, the clay will fail, and leave nasty streaks all over your paint, which you have to work to remove. Trust me—I have tried this and it was not a fun fix. It is well worth your time to wait for the paint to cool off.

Key areas: the hood and all upward facing portions of the car will likely have a lot of fallout from while they are parked. The front of the car will likely have a lot of bugs and driven in grime (also to include tar), and the back will have a lot of dust. Based on the way dust travels when a car travels over it, this should not be a surprise, so expect the rear of the vehicle to take a bit of time. Fortunately, though, in my experience, there is not a lot usually on the sides of the vehicle.

Wetsanding: I have never wetsanded, so you may need to write this, or remove it altogether.

<u>Scratch Removal:</u> Here is the description of S-X, just because it is probably the best scratch removal product out there. It is simple to use: Work it into the affected area, using an appropriate amount of force, but not too hard, until the product is about to dry (begins gumming up). Remove with a quality MF towel immediately. Work a small section

at a time, and do not be afraid to use several applications for it. It should be tested in an inconspicuous area first, just in case. There are other options out there, but this one is #1 on my list, and is equally priced, so why risk it for the same amount of \$\$\$???

<u>Paint touch ups:</u> This is a very touchy situation (no pun intended). For the scratches that are through the color coat, you need to get some paint on there to prevent rusting, not to mention look good. While I could go into detail about how to use a touch up pen to achieve stellar results, it would take forever, so do a search (perhaps a future sticky). But in addition to touching up the paint, there are body shops. Choose your body shop with care, as you don't want to pay somebody to do a bad job. Ask to see some of their previous work.

Cleaners and compounds (for application by hand): Cleaning/Compounding a method to abrasively remove swirls, oxidation, light scratches, stains, etc. These can range all the way from ultra heavy duty (to the point where there is almost no use for them) such as Turtle Wax Rubbing Compound to the ultra light duty (ie: cleaner polishes or step 1, or similar) In order to do this, you must first diagnose the problem. Once you know what you are tackling, you need to sift through the oodles of products out there and find the one(s) that you need to get to solve the problem. At this point, you will begin 'solving' the problem. Keep in mind that in order to remove scratches and swirls, you are removing a very thin layer of clearcoat, which is fine to do occasionally, but should not be done often, as you only have so much to work with. When you are using the compounding type products, you will need to NOT let the product dry before you remove it with a good MF towel. If you do, you WILL induce further swirling by removing what is essentially sand from your paint, via dry abrasion. Also, you should NOT push down very hard while you are doing this. The abrasives will do most of the work, so if you are getting excessively tired in this step, chances are you are pushing down too hard. Let the product break down naturally from high abrasion to low abrasion. It should be very simple for you to do.

<u>Polishing (for application by hand):</u> For most polishes, this is virtually identical to waxing (see below). But for some, the use and result is different than others, and the product instructions will guide you. Because of the vast amount of variance with polishing, I will say to follow manufacturer recommendations, or if nothing else, think of it as wax when applying (just keeping in mind that it offers NO protection. Looks only) This step should not be skipped, as the looks that it offers are what make heads turn. A lot of people wax, but this is an integral part to what makes your vehicle *stand out*, that everybody knows that you *detailed* because you *paid attention to detail*. As any Navy SEAL, Army Ranger, Marine Force Recon, or Air Force PJ will tell you, attention to detail is what gets the job done right the first time. Every time. So stick to the building blocks that make the bridge. You will soon see a great result that you can be proud of, and stand back and admire.

<u>Waxing (for application by hand)</u>: Hand waxing is one of the age old traditions to owning a car. Many people have a greater appreciation for hand waxing, as it should be. It shows the love and time you put into your baby. Fortunately, it is one of the simplest things you can do. Put very simply, shake the bottle of wax (if liquid) vigorously for about a minute to ensure that all of the product is well blended. Then, apply a quarter sized amount to the applicator pad, and smoothly massage it into the paint in a circular motion. You needn't press down for this—it is a top coat, not an abrasive. Remember, gently is the key here. This is where the love shows, as one who is too aggressive with the wax will induce swirling, an uneven color/appearance, and a bad looking wax job. Work your way around the car, doing a thin coat, letting it dry to a hazy film. It should be powdery, and very easily removed. In order to determine when the wax is ready for removal, perform the *finger swipe* test, a test that is quite simply gently wiping your clean finger across an inconspicuous area of the paint to see if the wax comes off or smears. If it smears, it needs more drying time. But if it is powdery and easily wipes off, then remove in a back and forth (straight, not

circular) motion, not pushing down too hard. If the wax residue begins to build up, flip the cloth to a clean side, or change to another cloth altogether.

Here I must note a few things:

- BE CAREFUL!!! Remember the prep work mentioned earlier? If you aren't prepping (you should be), you need to keep the wax off the trim, or you will have another step to perform in the end.
- YES!!! You <u>CAN</u> layer waxes. Use a synthetic (aka: sealant) wax as your base coat, let it cure for 12 hours, reapply, let cure another 12 hours, then do up to 2 coats of Carnauba wax. This system will get you optimal protection, and looks fantastic. The synthetic will give you the longevity, and the carnauba will remove the "suran-wrapped" appearance of the paint, giving it a deep, wet shine. Metal flake paint will really begin to pop here, too. You don't have to layer, nor is it necessary to do all that work, but if you do, that order MUST be followed. Also, remember the Law of Diminishing Returns: You can apply wax all day, but keep in mind that in the removal step, you are leaving only a few microns deep of wax—so there is a LOT of wasted product…so when you go out there and try to get an inch thick of wax---you are gaining nothing, and loosing money. Some systems are designed for layering deeper than others, but they obviously require a lot more work (ie: Zaino), but some are stand alone. Choose which best suits you.
- The quality of your applicator IS important, as is its cleanliness!!!
- The quality of your MF towels is 100% critical. DO NOT SKIMP!!! And Don't try to get away with a dirty towel.
- The wax you choose has a HUGE effect on the looks and performance. Choose wisely. (ask questions.)
- Wax is the sacrificial layer between the sun/elements and your paint. When something must fail, you decide: clearcoat or waxjob??? Now you see why I wax more often than is really necessary... Get a nice wax, or better yet, get several different kinds of waxes, and try them out on a head to head, or solo, but wither way, find something that works for YOU and stick with it.
- When doing wax removal (or any product removal for that matter), remember to get out a different towel for
 each product, and depending on the size of the towel, maybe even be ready to use 2-3 towels PER
 PRODUCT. Do not try to get away with shortcutting—it will not serve you well.

Cleaners and compounds (for application by Dual Action Orbital Buffer –abbr. D/A): Most of the time, a D/A is not used for compounding, as a rotary is more adept to this. But since it can be done...here goes. Size up the problem and decide what product and pad you will use. This is a critical step, as you don't tackle light swirls with rubbing compound and a wool bonnet...Since you are using a D/A, it is probably safe to assume that you have done at least one detail without it just to get a feel for it, which is good. But when you take the plunge into the D/A, pay attention to the fact that it WILL work MUCH faster than by hand, and thus requires you to pay attention when you are working. Being that there are oodles of products out there (both the chemicals and the pads), I cannot reasonably discuss all of them—ask on the forums, and we will gladly help. But note that #83 for heavy cut, #80 for general purpose, or Multi Purpose Cleaner Polish (MPCP) are all great, as is the discontinued MPPP. Again, work it into the paint, and remove before it dries. This is critical to your success.

Polishing (for application by D/A): Much like waxing either by hand or with a D/A, this is not a cutting step, and this is not a step to be cut. (le: You aren't removing clearcoat here, and you cant skip this step). Simply apply the polish of your choice (I prefer #7 if I removed all swirls, or #9 as it has great fillers in it) onto the pad, and work it evenly across the paint. Make sure you are doing thin coats (the D/A will help out a lot with this), and keep in mind that you will only leave a few microns depth behind when you towel off the residue, so applying it thick does nothing but waste money and increase the chances of inducing swirls by gunking up your towel more quickly. DO NOT PRESS HARD!!! The weight of the buffer is enough for what you are doing, there is no need to push down. Again, work all the way around the vehicle, and let it dry, using the finger swipe test to determine readiness. Once the entire vehicle is ready, remove with one of your quality microfibers. At this point, it should again be noted that a polish offers NO protection, and thus MUST be followed by a good wax of your choice. Choose wisely, as the work you have done to this point could be ruined by an inappropriate wax.

<u>Waxing (for application by D/A):</u> Much like hand applications of wax or polish, or machine applications of polish, the wax application step with a machine is quick and easy. Just remember to NOT PUSH DOWN, as that WILL remove your polish, and that you should ALWAYS use a quality Last Step Product (LSP) type wax, not a cleaner wax if you have done any previous steps. Quite simply, apply some wax to the orbital pad, place the buffer on the paint, turn it on (slow revs), and work it evenly across the paint. Thin coats are not only money and time saving (for removal), they also save extra work. As was described earlier, the amount left behind in the removal step is VERY minimal, so applying a thick coat actually INCREASES your chances of swirls and straight line scratches by gunking up your towel more quickly. As was true with hand waxing, perform the finger swipe test, and you will know when the vehicle is ready for the wax removal. Keep turning to a clean side of the cloth as it begins to offer the least bit of resistance across the paint—avoid the temptation to push down and 'scrub' off the residue.

Quick detailing sprays: First let me say this: Use good judgment and extreme caution. A guick detail spray is NOT meant to wash your truck—rather, it is meant to remove light dust from the vehicle. As such, this is where your BEST MF towel will come into play, because this is the guickest and easiest way to induce swirls. My product recommendations for this part are #34 Final Inspection, the A-Line QD, or the (unfortunately discontinued) Final Detail. Other than Megs, I definatlely recommend PoorBoys World Spray and Wipe, as it is a VERY nice product (probably better than the above mentioned), but it does have a bit of a pricetag. Alternately, FK1's #425 is also great, and super slick. For QD'ing a vehicle, you will need to spray on a misting on a small area—NOTE: The paint MUST be cool, NOT hot). I realize a misting is a broad term... You shouldn't have to soak the paint, but you need to ensure high lubricity and that there is NO dry abrasion going on. The Megs A-Line QD sprays have the BEST sprayer heads on the market for this application, so if nothing else, get a bottle of it just for the sprayer head (Even if you use the product for clay lube). Wipe off with your quality MF towel. Again, avoid any temptations to scrub at anything—this WILL cause swirls, micromarring, and straight line scratches. If it is anything that cannot be removed with a light pass of QD spray and a towel, it needs to be washed. DO NOT PRESS DOWN HARD!!! This step is one where the towel should glide over the paint, not press into the paint. Obviously there has to be some downforce, but imagine the amount you use when dusting in your house, or wiping your dash free of dust. THAT is the amount needed, because you are doing just that—dusting your car.

NOTES: There is a product out there called the California Car Duster. I have never used one for fear of the dry abrasion. There are those who swear by it, many detailing gurus used to, but the simple fact is that dry abrasion WILL at some point induce problems into the paint. If you opt to get one, remember to keep it clean, and to wash it or replace it periodically, since the dust will build up in the fibers, so there will come a point when the fibers act as a

normal cloth. So, again, use EXTREME CAUTION and lots of judgment when deciding on/using a California Car Duster.

<u>Quick Waxes (sprays)</u>: Personally, I have never seen or heard of a use for a quick wax. I realize the purpose, but in only a few minutes more, I can apply a REAL coat of wax that has more lasting protection and looks better. It is simply not cost effective to get one of these. (I realize that this section is VERY slanted, but many of the others would agree.)

Tire shine/Trim shine:

Trim: Personally, I like to use Natural shine as my cleaner and my protectant. But for the front end, there are times that I need something more powerful. For this, #39 or #40 (alternately, any trim cleaner will work fine) whatever you use, make sure you follow up with a good conditioner/protectant (Should advertise UV protection) so as to counter the effects of the sun, dust, etc. Follow the directions, but if nothing else, remember to apply to the cloth/applicator, then wipe on to the surface. You CAN use a product called 303 Aerospace Protectant on BOTH the interior and exterior. It is a fantastic product, but when it gets wet, it runs. So although it has fantastic properties, use caution and judgment with it. Also, Vinylex is a great product for trim. Get it at Pep Boys.

Tires: Personally, I am a HUGE fan of Hyper dressing at a 1:1 for high gloss, down to a 4:1 for a rich, black matte. (Water:solvent). But when I don't use HD, I really like Endurance gloss Gel (High shine or low shine is available) or Hot shine Gel. Both the last ones are best applied with an Eagle One Tire Swipe. (Other brands are out there, but E1 is very good). Simply apply a line of the gel to the swipe, and wipe it on, being careful to not get it on the rim, yet ensuring that it gets into all the lettering, etc. For sprays, simply spray on...duh. For both, after application, wipe off or blot off any excess (Wipe to reduce shine, blot to maintain it). Most any tire shine will work, but here are a few things to consider with ANY tire shine:

- a.) Slingoff: any tire shine has a small amount of slingoff. In order to prevent/minimize slinging, you need to apply, let sit for as long as possible, up to a couple of hours, then blot off the excess.
- b.) Shininess: Depending on the amount of gloss you want, you need to evaluate the product you use. Then, decide how many applications you need. For many dressings out there, you apply once for matte/semi gloss, then apply again for high gloss. There is also an alternative: apply it, then wipe off to the gloss level you like.
- c.) Water/oil base: With a water base, you can dilute (eg: Hyper Dressing), whereas with an oil base, you cannot easily dilute. (eg: Endurance gloss, Hot shine, etc.)
- d.) Type of application: Hyper dressing can be applies either via sprayer or by E1 swipes (Squeezed onto the swipe). The others I mentioned are gels applied to an applicator. But yet still are aerosols. Personally, I prefer gels and pumpsprays over aerosols for 2 reasons: Cost and overspray. Decide which suits you best.
- e.) Brand/age. If you are rooting around your dad's garage, stop it. The Armor All today is not damaging, but that of your fathers' day would wreak havoc on tires, trim, etc. Avoid anything with silicone in it.

NOTE*** If you are using a spray (aerosol or pump) to apply tire shine: There is a way to prevent the dressing from getting onto the rims. Simply cut out a piece of cardboard that matches the rim size, add a handle, and presto! You

have something to block the conditioner from the rim. But keeping it from getting on paint can be tricky. This would be a time to pull out the QD Spray and a MF towel.

<u>Wheel wells/Frame:</u> For one, clean these every time you wash to prevent staining. Simple green or Bleache White work great—no need to agitate unless excessively dirty. (BW only for rubber in the wheel wells—not for anything else). The first time, you may need to agitate the SG on the frame to get it really clean. Just remember that you don't want to scratch through/eat through the undercoating. Also—Don't forget to dress the undercarriage and especially the wheel wells—RP and many others will get after you for not doing that...These are 2 relatively easy maintenance items that really make a truck stand out.

Pressure washing the frame and underbody: this is especially helpful to do once to 4 times every year. Especially up North where road salt is used, you will want to pressure wash the underbody periodically, and make sure you rinse weekly. The advantage to pressure washing is obvious, and it should be explored by everyone who wants to get their truck in tip-top shape.

<u>Interior Cleaning:</u> As with many other parts to this, almost any good cleaner will work, but remember, you get what you pay for. For carpets, I really like Meguiars Quik Out (very good, new for 2007). Works great, has a great sprayer, and everything is optimal. (Obviously, OxyClean, Blue Magic, and Spot Shot work well, too.) For the glass, treat it just like exterior glass (ie: Stoners IG).

For leather: Try any of several products out there, but a personal favorite of mine is Lexol. Alternately, there are many 2 and 3 step processes out there that work fine. Also, remember that what you are working with is skin, so treat it with a warm, moist towel that may have some soap in it—but if you soap, remember to remove it, too. The moist warm towels will really help to moisturize the leather, as well as clean its pores out (yes, like your wife getting a facial). This is often as good as a chemical for light duty stuff. When it gets to ground in junk or stains, chemicals may be the only way to go, just try to use the least harsh method possible to solve the problem (a good rule of thumb for ALL detailing procedures.)

For the Dashboard and all vinyls, plastics, and rubbers inside: I prefer Natural Shine for this, as it smells good, offers UV protection, and is a low gloss application. There are oodles of products out there, and you should certainly feel free to ask on the forums about peoples' recommendations. But Vinylex, 303AP, and many more are also VERY good products. Apply to the APPLICATOR, then wipe onto the surface. This minimizes the blotchy look sometimes found on a dash. Also, use a cheap microfiber for this. I say cheap because you still want to have the softness and pile of a microfiber, but at the same time, you realize that the one used for this duty WILL get ruined in a short order from the dirt, grease, grime, and staining. It is fine to use the interior MFs far past what you would on the paint, but keep it a dedicated towel. Also—if you start to see it leaving lint behind, causing scratches or marring, etc, its time to trash it and get a new one.

Interior protection: Without a doubt, Scotch-Guard is the way to go if you have a cloth interior. Yes, after applying it, you will need to park in the sun with the windows cracked for a few hours, as it will smell horrible. Application is just like spray paint—just don't get it on anything other than cloth. TIP: Don't forget to treat the seatbelts, seatbacks, and the sides of the seat. I also like to apply an extra coat on the drivers' seat since it is used EVERY time the truck is. As for leather, I have limited experience. Any good conditioner *should* provide a little bit of protection, but for more in depth info, do a search or ask RP.

The dashboard and other plastics are often either loved or neglected; be on the former side. You need to condition the plastics and rubbers regularly (see product manufacturer's recommendations) to keep their color, keep them supple/flexible (as opposed to brittle), and to preserve moisture (preventing them from cracking). I prefer Natural Shine, but almost any good water based product will do fine. Just make sure that whatever you use offers UV protection.

Along with conditioning and protecting the interior, you need to consider several things: Tinted windows, sunshades, and where you park. These all have 2 major things in common:

- a.) They keep the interior temperature down, which in turn prevents the drastic temperature changes that cause unnecessary wear and tear on the vehicle.
- <u>b.)</u> They keep the UV rays off of the interior, which in turn prevents further degredation from the sun. Consider these things whenever you park.

Now obviously, the first of the 2 is more oriented towards those who live in areas that get hot. But consider the opposite: If you live where it is extremely cold, and you have parked for several hours. Your glass and interior is probably around 0 to 20 degrees, if not less. If you turn the heater on, it will quickly heat up the plastics, likely causing a rapid expansion that will make the plastic become more brittle with every cycle. And the glass works in the similar manner. Just think of what happens when the glass that has been heated up gets freezing cold from some rain...=Cracks. Just beware of temperature extremes. We all know that there isn't always something you can do, but whenever you can, do something to keep temperatures moderated and keep the sun off the dash and seats.

Glass care: For my glass, I like to use Stoners Invisible glass. It is a great product, and powers through about anything when used in combination with newspaper. Other decent products include 20/20 glass cleaner, and the Meguiars D-Line Glass Cleaner Concentrate (DILUTE PROPERLY!!!) There may be a time, though, that you have some micro etching or water spotting to remove. This is a great time to pull out a product made for household cleaning: Bar Keep's friend. It is a white powder, and when mixed with water to make a paste, it can very well remove a lot of problems on the glass. Use caution, though, as it wreaks havoc on paint and plastics. You can do the same with baking soda, Lime-a-way, or Easy Off 'BAM' .(NOTE: If you use Lime a way or BAM, you need to apply directly to a towel, and DO NOT let it touch ANYTHING other than glass. EXTREME CAUTION IS TO BE USED!!!) Now, if you are after something in between Stoners and Bar Keeps friend, you can always use white vinegar, and it tends to remove a lot of spotting. Another method is to get a cheap rubbing compound or polishing compound (ie: Turtle Wax), and use on the glass. I have never tried it, and it seems a bit too harsh, but if you are out of ideas, you can always try this out.

As a sidenote, I suggest Rain-X to supplement your glass care. Not only does it help tremendously in seeing in the rain (improves safety), it also helps eliminate most of the water spotting problems, as it seals up the micro cracks in the glass that cause the water to 'stick' to the glass and dry to form a spot. Rain-X is an excellent product, and for what it's worth (FWIW), I use the washer fluid version so reapplication is easy, quick, and cheap.

<u>Complementary Projects:</u> Below I have outlined a few projects to compliment the work on the paint, for as we all know, it's the little things like dressing the wheel wells that make your truck evolve from a waxed truck into a detailed truck.

1. Use a water based dressing for your wheel wells, frame, and all parts of the undercarriage visible from the road. A good dressing is Meguiars Hyper dressing at a 4:1 ration (water:solvent)

- 2. Paint your frame and axle with a good satin black rust converter. Aside from the rust prevention, it also provides a clean look. Any metal part of the undercarriage is fair game.
- 3. Use high temp oven/grill paint to paint your exhaust black. If you don't want to do the outside of the exhaust pipe, you can still do the inside so that it has a clean--not rusty/burnt—look.
- 4. Paint your emblems. There is a great write up on this—see website #3.(Below)
- 5. Paint your plastics. Krylon Fusion in Black plus a clearcoat will work great for this. Alternately, Bondo Restore Black is a plastics dye (far different than Mothers Back to Black, mind you), available at Wal Mart, and it works great. All of these can be searched on the forums.
- 6. Paint any grillguards/nerf bars/bed bars/headache racks/etc. Use a good rust converter in a flat, satin, semigloss, or glossy finish, to suit your taste. This can really make a truck stand out, as a rusty nerf bar looks very poor.
- 7. Polish any visible chrome/brightwork—Often neglected are toolboxes, grillguards, bed bars, nerf bars, etc. Polish those up. Any chrome or brightwork should always be clean and spot free. These little things make a world of difference.
- 8. Paint brake calipers—though it seems menial, it makes a world of difference. It takes the dirty and rusty look of the calipers and replaces it with a clean look. A great kit from Duplicolor can be purchased at AutoZone for approximately \$15, and is available in Black, red, Blue, and I believe other colors can be ordered. Any high temperature enamel paint, caliper cleaner, and brush will work, though.
- 9. Clean/paint engine bay- Definitely spend a lot of time the first time; its always the hardest. But after the first time, it's a quick touchup. As for painting, be reasonable. Stay away from clearing the entire compartment, unless you are getting of the truck soon and the buyer will never find you...clearing everything will crack, yellow, and cause accelerated degredation. Again, when you are done, hit everything up with hyperdressing to make it really stand out. Search the forum for more in depth info on cleaning the engine bay.
- 10. Plast-X—This is pretty much liquid gold. Not only does it remove the haze and oxidation from translucent/transparent plastics, it also cuts through light scratches, and leaves a synthetic UV protection behind, to prevent as much oxidation. I strongly recommend giving this stuff a try; you will be thoroughly impressed. The clarity that it produces will likely amaze you—you will realize just how opaque all the plastics have gotten.
- 11. Paint wheel wells—From the factory, these are really a dark gray. And the mud and dirt hasn't helped either. I have had great luck with painting them with any of the following products, in order of preference: Undercoating spray, Bedliner spray, Rust Oleum, and Krylon Fusion. These will all leave those wheel wells a rich black, and they allow you to make them look great when you hit them with Hyper Dressing after each wash.
- 12. Door seam rust preventative: (also for tailgate seams) This has been discussed several times on the forums—the door seams have a problem with rusting. So, either sand or sandblast, then follow up with a rust converter rattle can, and a coat of clear for good measure. Alternately, instead of using traditional clear, I have heard of people using 3M Glass Sealer. It supposedly holds up well (I haven't tried it, though.)

- 13. Bedliner (DIY touchup): Touch up that fancy Rhino liner or your DIY liner with the DIY liner kit or the spay. Just be warned that the DIY stuff is glossy for a few months, so if you are after consistency, either do the whole thing, not at all, or give up your truck for a few days while it is getting repaired at the place where you got it done.
- 14. *Check tire PSI, rotate tires.* Though it sounds more like maintenance, do it. Follow tire manufacturer recommendations. Keep tire PSI the same between left and right on the same axle.
- 15. Condition all rubber seals and plastics. (Hyper dressing, Natural Shine, etc...)
- 16. MAKE UP YOUR OWN!!! This is where your truck can have the opportunity to stand out. Be creative. And be sure to post so that the others here can benefit. We want to know what you did, how you did it, how the results came out, and whether you would do it again. (Also let us know about cost, ease of doing it, and other info like that.)

Notes:

- Microfiber towels, bonnets, applicators, etc.:
- Aggressive compounds:
 - 1. Rubbing compounds are great; however, they remove a LOT of clearcoat with each application, and require further polishing to remove the deep swirls they induce. You will rarely find a use for it, as it is harder to work with than wetsanding. An example of this is Turtle Wax's Rubbing Compound.
 - 2. Aggressive polishing compounds are very similar to rubbing compounds, just not quite so bad. They still require later polishing/buffing to remove induced swirls. An example of one is Turtle Wax's Polishing compound.

Final Remarks:

WEBSITES:

#1: http://www.waxstation.com/wsStore/131.htm

#2: www.autodetailingsolutions.com

#3: http://www.fordf150.net/howto/customemblems.php

#4: