KEVIN WHIPPS

BOOK PORTFOLIO

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Hi.

My name is Kevin Whipps, I'm a writer based in Arizona, and I need a better headshot.

I've been writing professionally since 2000 or so, as an editor, writer, copy editor, author, copywriter and copy director. In that time I've published dozens of magazines, produced two books, written hundreds of headlines and even moved a few times. I currently live in Tucson, Ariz., but I'm open to relocating for the right position.

This portfolio is a way for me to consolidate all of the work I've done in various genres — and there's a lot of stuff to dig through. But if it does nothing else, it should give you an idea of what kind of writing I do, and the work that I'm capable of producing.

If you want to talk further, I'm on the socials pretty much everywhere as @kevinwhipps. Or you can always email me at me@kevinwhipps.com.

Kevin Whipps

TESTIMONIALS

Knew Kevin through mutual connections in the days of the Internet when blogging was the new hotness. Later, I came to work with Kevin as he was editor on an exciting new startup brand with expressions across print and digital platforms. He contracted me to write for him and I found the experience to be in the top 1% of editors I've ever worked with. He was timely, diplomatic and incisive with his edits and the final result frankly made me look like a better writer than I actually am. He's great! Work with him! I say this as a chief content officer for a major publisher and also as an industry veteran of 30 years who has worked with the best and worst the industry has to offer. Kevin is the real deal. Would cheerfully recommend him to anyone needing a quality wordsmith, and can only hope for the day when we might one day work together again on something. Anything!

Stephen George Content Leader Kalmbach Media

Kevin is an exceptional editor who not only pays attention to the details, but also will passionately advocate for good content and processes. He's got a proactive ethic that steps up to any project and is responsive to input from the rest of the team. Any publication would be lucky to get his talented hand.

A.J. Hackwith Author The Library of the Unwritten

I am so lucky to have been able to work with Kevin on Rebel. He is easily the most organized and driven editor I have met. Kevin has never missed a deadline and is easily the most important person to have on your team. Coming from the design side, these skills are make or break in the publishing industry. He not only has eyes like a hawk for editing, but he has an amazing way of telling stories that are thought provoking and inspiring.

Jenny Poon Founder CO+HOOTS/HUUB

Kevin Whipps and I both worked as copy editors at 944. During that time, we worked both together and separately on various projects. Kevin was always prepared and extremely organized, and he was great at brainstorming new ways in which we could streamline our department and production procedures. He is an incredibly detail-oriented worker who sometimes goes to great pains to do whatever it takes to guarantee that his finished product is not only his best possible work, but also exactly (or even above and beyond) what his client or coworker had in mind, making him an absolute pleasure to work with. Kevin is the guy you go to when you want something done right the first time.

Marie Look Digital Editor Masterclass.com

CHAPTER 3





The basic concept of this book is that by the time you're done, you'll have a truck that you went through from top to bottom and restored to a factory condition. And to do that, you're going to lean heavily on a lot of mechanical skills.

Bodywork, however, is different. It's not quite mechanical work, nor is it grunt work. It's an art, and as such, it takes practice. You might feel like Sisyphus with the boulder sometimes, but in this case, it is possible for you to get to the top of the mountain. It's just going to take some time.

The idea here is that bodywork is a skill, and as such it's one that you can learn. You're going to spend more time on the project as a result, and you'll burn through a lot of body filler and sandpaper in the process. You're also going to want some extra patience stored up somewhere because if this is your first time laying



The bodywork process is a long one, but when it's done, the results are well worth it. (Photo Courtesy Mark Burdo)

filler, you will get frustrated along the way. Again, take a breath, calm down, and just keep trying. You'll get it.

How do you learn? There's the obvious options like finding a local class or seeing if you can hang out at a shop for a bit, but those might not work for your situation. Maybe look at talking to a buddy or learn from other pros in the area. Ask your friends who knows how to do it and then spend time watching them perform their magic. Ask lots of questions. And if you are a little bit more serious, check with your local paint shop and see if they know anyone you could talk to or of classes in the area. (Many welding shops also have classes, and that will help too.)

All that buildup is to say that bodywork is a difficult and trying task, particularly when you start out. Which means that if you want to pay a professional to do this part for you, there's no shame in that at all.

Here's why: your truck's paint job is going to get a lot of looks. And if the bodywork underneath or the prep work to get you to paint is spotty or poorly done, the entire truck will suffer. It is an absolutely critical part of the restoration process, and it must be done correctly. So can you do it? Absolutely. But should you? Only if you know what you're doing. If not, consider having a professional do it for you. And if you have any question on whether or not you can do it, skim through this chapter and see what's up. Then you can make an accurate decision.

Stripping the Finish

Unless you were the person who paid for the truck back in the late 1960s/early 1970s, you have no idea what's really happened to it. Was it ever in a wreck? Did it get repainted in the 1980s? Face it: you'll never find out. And that's fine, but the only way to get things sorted is to take it down to the bare metal. You need a fresh start.

Chemical Methods

The first option you have to get rid of your paint is aircraft stripper. If you've never used it before, it's a process that has you pouring this gelatinous material onto the surface of the truck (or spraying it, depending on the product), and then you allow it to sit for a specified amount of time. Once the paint bubbles up, you take a scraping tool and peel it away from the metal. It may take multiple applications, but when you're done, you'll have bare metal to work with.

You have quite a few brand options to choose from. Kleen-Strip Aircraft Paint Remover does the job, and POR-15 Strip Gel Aircraft Paint Remover is a respected brand in the field. Gel tends to stay in place longer and function better, while the spray is best for areas you can't easily reach.

Here's the downside: aircraft stripper is messy. And since it's a caustic material, you're going to need to suit up with eye protection, rubber gloves, long pants and sleeves, and absolutely, above all else, an area with lots of good airflow. A mask or respirator isn't a bad idea.

Another thing to think about is the mess. Putting some plastic under the truck before you get to stripping is recommended, as there will be a lot of sludge to deal with. You don't want to try to clean that up by hand.

But with all that said, aircraft stripper is an efficient way to get paint off of your truck without damaging the metal underneath. And that can be a very valuable tool in your toolbox.



Aircraft stripper creates quite a mess, but it does get the job done for a relatively small amount of money. It needs a lot of elbow grease, but you will get a bare-metal finish once you're done if you do it correctly. (Photo Courtesy Mark Burdo)

Mechanical Methods

If you would rather stay away from the chemicals, you could just get after it with some sandpaper. Ideally, you'll have a D/A sander and a wide variety of grits to work with.

Start with a rough estimate. How much paint do you think is on the truck? If it's a lot, start with a 24-grit sandpaper. Then, as you start getting through more and more layers, work your way up to 80- or 120-grit and stop there. If the paint is already flaking away, you can start with the 80 grit and you should be fine.

The key is to move the D/A around a lot. You don't want to build up too much heat in any one area, as that gives you the potential to warp the sheet metal. Keep moving and swap out the sandpaper for fresh stuff whenever it gets clogged up and you'll be fine. That said, a D/A is nowhere near as bad at building up heat as a grinder, but if you have some delicate metal under there, you might cause some damage. Just be aware.

You will deal with a lot of dust here, so wear a mask and some eye protection. But otherwise the only issue is getting the dust off yourself when you're done. For that, take a blow gun and put it on your air hose, then give yourself a shop shower. It'll do in a pinch.

Media Blasting

If you want to take the truck down to the bare metal fairly fast, you can look into media blasting. The idea here is that you combine air from a compressor and a media to blow onto the surface. The abrasive quality will remove the paint and filler from the truck, as well as any rust, and you'll be left with a clean piece of metal to work with.



If you're going to handle the media blasting yourself, then you want to do it outside—somewhere that has lots of ventilation. Also be sure to protect yourself and put on some kind of dust protection, particularly for your lungs. (Photo Courtesy Mark Burdo)



One of the nice things about media blasting is that you can spray otherwise inaccessible areas, like inside the rear marker light pocket. (Photo Courtesy Mark Burdo)

If you're doing this at home, then you'll need a beefy compressor to handle the load. Consider a 60- to 80-gallon tank with 9 cfm of airflow at 90 psi. You'll also want to strongly consider what kind of media you need to use. If you go with something too aggressive, you could blow holes in otherwise quality metal or warp the panels from too much heat. Or, if you go for something too light, it'll take forever to get the job done. If you're looking for a general rule of thumb, then go with 60 grit for the hood and roof, and 30–60 grit for everything else. Oh, and since some media is recyclable, consider doing your work over a drop cloth. Not only will that make it easier to clean up, but you can reuse some of the media too.

There are a lot of different types of media out there, but the most common ones are silicon carbide, aluminum oxide, and glass bead, with the latter two being the most preferable. To find out if either will



What's the downside to doing media blasting yourself? Well, this. It's messy and hard to contain because it creates so many fine particles. Base your decision on what kind of workspace you have and how much time you want to dump into the process. (Photo Courtesy Mark Burdo)

work for your truck, give them a quick run along a rocker panel or the back wall of the cab-a place that's generally inconspicuous. If you think it's going to be too much, go with one of the less-abrasive options, such as corn cob or walnut shells. These two don't etch the metal and are considered to be less abrasive, yet still can take bodywork and paint off the truck while building up less heat. The thing is, walnut shells are messy to use because they get lost in crevices, and since both materials aren't as aggressive, they will take longer to do the same task.

Let's take a moment to break down some of the different types.

- Glass beads are considered to be medium abrasive, and you can reuse them up to 30 times.
- Plastic beads are more aggressive, but they don't build up a ton of heat.
- Aluminum oxide is made up of tiny grains. It's also not biodegradable, so be sure to clean it up carefully.

THE BODY

Now it's important to note here that the process itself is pretty critical. Again, if you spend too much time in one area, you could blow through the metal. And even if you don't, you can warp the panel just from the heat. So make sure to follow a few simple steps.

First off, you don't need to crank up the pressure on your air compressor to get this to work. Just 35–45 psi will work just fine. If you use more, you're almost guaranteed to damage the panel, either by penetrating it too much or just applying excess heat.

Second, the truck needs to be stripped 100 percent before you start. That means the windows, moldings, trim, taillights, rubber, and everything else should be off the truck completely. If, for some reason, you can't or don't want to remove a specific part, then you'll need to mask it a ton—and even then there's still a chance it could get damaged, particularly if it's plastic.

When it comes time to actually start blasting, begin with a plan. Each part should follow the same basic process so that things are consistent and you get better results. Keep the nozzle 9–10 inches away from the panel and tilt it approximately 45 degrees from the surface. Pick a pattern—front to back, top to bottom, or whatever—and stick with it on each piece. Make sure to follow the pattern all the way on each panel so that you don't forget to spray a spot along the way.

As you work the panel, remember that your truck probably had a few coats of paint on it, plus possibly a clear coat and some primer. Don't expect to remove it all in one shot. Go a layer at a time and be patient. You'll be able to watch the results as you go, so you will see progress. And the slower you go, the safer you will be.

If you're doing this all yourself, then you'll need to find a portable sandblaster of some kind. Fortunately, there are quite a few affordable options. Eastwood sells a kit that's around \$165, but it's made for finer materials (80 grit and up), and they recommend that you don't use walnut shells. RedLine has one for \$180, and there are all sorts of "bring your own bucket" versions that are essentially a gun and hose, and they're around \$50 or so, depending on the model.

Now at this point, there's been a lot of general talk about the topic, but let's get to a recommendation.

Soda Blasting

If you're not sure which media you want to use, give soda blasting a good look. Although it's not as hardcore as some other methods, it gives you a nice option that removes paint and small amounts of rust. It's not going to turn that rusted-out C10 of yours into rust-free perfection, but it will get rid of some basic scale and, more importantly, previous iterations of paint. On the downside, it won't be good for blasting through bodywork, so if your truck is heavy with filler, you might consider something stronger.

Soda is nice because you can use it on pretty much anything: metal (both steel and aluminum), fiberglass, and plastic. If, for some reason, you need to keep some chrome on your truck, you can spray around the shiny stuff without worrying about damaging it.

Another advantage is the finished product. A lot of media-blasted cabs and beds have an interesting texture to them. Sometimes that works to your advantage; you might not have to prep too hard before laying down primer, for example. But if you want the metal on your truck to look as new as possible, giving yourself as true factory fresh start, then soda is the best option. It doesn't create that texture found on other media options, and—as an added bonus it covers the whole part with soda. Even though it's not permanent, that's a nice way to prevent your bare metal project from rusting further. And when it comes time to prime the vehicle, you just need to rinse off the part with water. No big deal.

Now again, this is your project, and you'll have to be the one to make the big decision. If you want to do the media blasting yourself, then you'll need to choose the media. If your truck is packed with filler, something more aggressive such as walnut, aluminum oxide, silicon carbine, or glass beads may be your best choice. And if you're just not sure which way to go, well there's another option too.

Body Shop Blasting

If you do some light Googling, you'll find anywhere from one to a few dozen media blasters in your area. There are also body shops that will do the job for you too, although they may just farm it out to their favorite shop as well. But before you drop off your project, you should do a good amount of research.

You'll want to know what kind of media they use. Do they charge by the hour or by project? Do they need to have the entire truck stripped down or can you send them a rolling chassis? And, the most important one: downtime. How long will it take to get your parts done from start to finish?



Every media blaster or stripper has its own preferences when it comes to how it takes in its projects. In this case, a rolling chassis was just fine. (Photo Courtesy Lee Hurlbutt)

If they let you, take a tour of the place. There are plenty of horror stories of shops that lose parts, so make sure they run an organized facility, and that all of your stuff will be treated well (you don't want them to add dents to your already rough project).

Of course, cost will also play a role. See what they charge for the job and factor that in. If you're good with a lower price for a longer turnaround time, then that may also be an option.

Acid Dipping

There hasn't been a lot of talk thus far about acid dipping, and there's a reason for that. First, it's expensive; you'll likely pay \$1,000– \$2,000 to get your truck dipped. And second, there are some drawbacks to the process itself.

How does it work? Well, the end goal here is the same as it is with sandblasting: strip the paint and bodywork so you're left with a clean shell. The way they do it is by dipping the part in a tank filled with chemicals. These tanks vary from small—large enough for a fender—to huge. After all, your cab is nothing compared to a 1959 Impala wagon, and shops dip those too.

The first part of the process uses a solution to get all of the paint and grease off the body so that it's a relatively clean piece. They then clean off the solution (typically with water) and dip it into an acid tank. This handles the rust removal part. Finally, it's put through a process to neutralize the acid, making it safe to handle.

At this point, you'll have a truck that's free of rust, paint, and bodywork. There are two downsides. The first is that you have a ton of bare metal to deal with, and the oils in your hands will create more rust the first time you touch it. Fortunately, many shops (both for acid dipping and media blasting) can apply primer or epoxy sealer to your truck for you, stopping that process before it starts. But the big downside with acid dipping (other than the cost) is that it cleans the paint off *everywhere*. Think about all the tiny nooks and crannies



After blasting, you'll often find spots where previous repairs were performed. It's up to you to determine if they did a good job or not. (Photo Courtesy Lonnie Thompson)

embedded in your truck where you could barely fit a spray can, much less a paint gun. There are the seams between two panels where the acid can reach, but you can't. Those spots will forever be bare metal, which means they're absolutely going to rust at some point.

Now is that a deal breaker? Maybe. But if your truck is so thick with rust, paint, and filler that traditional media blasting would be cost- or time-prohibitive, acid dipping may be your best option.

Make Your Own Combination

Ultimately, this is all your call. But for many builders, the choice comes down to using some combination of all these options. Since the chassis is likely going to get powder coated, sending it off for acid dipping is a good way to remove all the gunk and road grime that would take longer to do with media blasting. Maybe you use aircraft stripper on the fenders and soda blasting on the bed while taking a D/A with some 80 grit to knock down the doors.



However, you choose to handle the tasks is up to you. Just take your time to make an informed decision, that way you get it done right the first time.

What Do You Do with a Bare Metal Truck?

After you've media blasted your truck, there comes a big question: what do you do with the panels? You don't want to let the part sit there and rust, right? Well, there are three options, and all of them come with pros and cons. They are epoxy primer, powder coat, and leaving it in bare metal. First, let's talk about why you would want to do any of these, then let's take a look at them one by one.

The moment that you've removed the finish from a panel, you're open to it getting rusty. If you live in a humidity-prone environment, such as Florida, you can leave the media blaster with a fine coat of surface rust, whereas in Arizona you could keep everything in bare metal for a few months with little to no problem. To stop rust, you can coat the metal with a material that you'll Here's a cab that just got back from the media blaster, and it's still in bare metal. (Photo Courtesy Lonnie Thompson)

remove or scuff down later when it comes time to do your bodywork.

Epoxy primer is arguably the most common way to keep the panels rust-free. You can spray it yourself in a clean environment, and if you're going to put anything on a panel, the argument could be made that it's the easiest way to go. But it does apply a little bit rough, so you won't get a perfectly smooth finish.

Now some will argue that you can't put filler on epoxy primer, while others do just that. To find out, talking to an expert—like Spencer at Arizona Rod Shop—helps. His preference is to spray with epoxy primer first, then he'll scuff it up with



See the rust here and those little pits? Those are some small to large amounts of rust that the media blasting process removed that will need to be replaced. (Photo Courtesy Lonnie Thompson)

120-grit sandpaper before he lays any filler. It's more time-consuming, but the panels are protected from the start.

Option two is powder coat, which may seem extreme but is gaining popularity recently. Why? Because with powder coat you don't have to prep the panel mechanically like you would with epoxy, and you can get powder coat into places you might not be able to reach with primer. When it comes time to paint the panel, the powder coat will keep those difficult-to-reach spots rust-free.

The downsides? Well, first off, who's going to powder coat it for you?



Once you have a part in bare metal, you have to cover it with something to prevent rust, right? In this case, yes—epoxy primer.

Creating a 1967 Clone

he argument could be made that a wide portion of the people out there who want to build one of these trucks want to do a 1967. It is the unicorn year that doesn't have the sidemarkers, you can get them with a small or large back window, and they have that slanted hood. But really, the differences between the 1967 and 1968 models come down to the sidemarker lights on the fenders and bed; the 1968s have them, the 1967s don't. If you want that 1967 look, you can do it one of two ways. You can buy NOS or reproduction 1967 fenders and bedsides, or you can weld up the ones you have.

To do that, you first need to create a metal template for the sidemarkers. It needs to fit inside where the original lens



The stock sidemarkers on a 1968 C10 can be removed entirely from the fenders and bed and welded up, giving the truck the look of a 1967.

sat, and be flush with the outside metal, so you'll have to cut out the stock mounting points as well. Then you just weld it up, alternating corners, making sure to move the tack welds around the panel so you don't build up too much heat. Once you're done, just grind down the welds, do some bodywork, and nobody will be the wiser—unless they look inside the fender well or bedside, of course.

The other option is to buy a new front clip. If you have anything other than a 1968, this is probably your best bet. You can get them from the aftermarket—Brothers Trucks, Classic Industries, etc.—or do some digging at your local wrecking yards to see what you can find. Then it's just a matter of bolting everything up and welding up the bed, and you're good to go.



Here there are two 1967 front clips. In the foreground in white is one from a wrecking yard, and the one in black is made of aftermarket parts. (Photo Courtesy Mark Burdo)

In some cases, a media blasting shop may have a partner company that does powder coating, but if not, then you have to make a second trip—and payment—to get it done. Also, powder coating is a solid finish. That's why people use it on their frames and suspension. Getting it off a panel can be tedious and time consuming.

Then there's just leaving it in bare metal. This is the easiest and cheapest method, but it's also the riskiest. Every time you touch a piece of bare metal with your hands, you're transferring the oil from your skin onto the surface. That will form rust eventually, and the longer a part is in bare metal, the more likely you are to touch it. Then there's the environment itself. Going back to the Florida/Arizona idea, Floridians would expect panels to rust fairly quickly, while people in Arizona could go with bare metal for relatively long periods of time. It's all in the humidity.

It's up to you, ultimately, but you have a lot of choices when it comes to how you store your project. Whichever you choose, make sure you do your best to keep everything clean so that the end result is what you were looking for.

Rust Inspection

These trucks were built like trucks, and for many of them, they were used the same way. So although the conditions they have seen may be rougher than you'd find on a Camaro of the same era, they were also built to handle that treatment. All that said, they still get rusty, and you're going to have to find it as you build your project.



This truck, built in the Portland, Oregon, area, sported some repairable rust in the cowl. (Photo Courtesy Lonnie Thompson)

One way to do that is with an initial inspection. Go through the body of the truck and, using either a permanent marker or chalk, mark up the truck with circles and arrows to show where potential damage may be. Remember, all the paint will come off eventually, so it's not a big deal.

Where will you find it? Well every truck is different, but there are a few standard spots. The cowl area sees a lot of water, and it usually gets clogged with leaves and debris right in the corners of the firewall. That will eat through the steel no problem, and it's a pretty typical spot for rust.

The rockers are another one that's pretty obvious, but the inner rockers are the sneaky ones that'll get you. If you have to replace the outers, make sure to buy some skins for the inners too—just in case. Inside the cab, particularly on the passenger side, will also reveal some rust. The heater core on these trucks is on the other side of the firewall, and in extreme situations, it can leak (although it's nowhere near as prevalent a problem as in the 1973–1987 models). Either way, the rockers and kick panels can see rust, which is an issue.



The rockers are always an obvious problem (this goes for most projects, regardless of make), but once you cut away the outer panel, you can see the real problem: the inner rockers. If the outers are gone, the inners probably are too. (Photo Courtesy Lonnie Thompson)

Other spots are fairly obvious once you put some thought into it. The drip rails around the top of the cab can rust out. Pockets in the fenders and bed can see rust, and so can spots near the gas tank on the inside of the cab. And, of course, the battery tray area and just underneath it can see some rust, usually from leaky batteries.



The inner kick panels usually see rust too. In this case, it's not that bad and can be repaired with some homemade patch panels. (Photo Courtesy Lonnie Thompson)

Now once you find the rust, you have to make some decisions, and it's based on what kind you've found. Is it severe or surface rust? The choice you make will dictate your path from there.

Let's start with surface rust. This is, as the term implies, rust that's just on the surface of the metal. It hasn't spent years digging in and eating away at the panel. Usually this happens when oily hands touch



This is a great example of both a poor repair and severe rust. On the bottom of the rocker (and the corners where the floor meets the rockers) is severe rust that needs to be cut out. But above it is a previous repair job that involved fiberglass mat—not the proper application for this kind of job. (Photo Courtesy Lonnie Thompson)

a bare-metal panel, or even just from exposed metal over a short period of time.

As the rust penetrates deeper, it starts to transform into scale—a term created because it looks a bit like lizard scales. At this point we're beyond surface rust, and the panel may have actually separated into layers. As the metal gets eaten away, it gets thinner. The thickness of metal is measured on a gauge chart with lower numbers being thicker and higher numbers being thinner. So with rust, what started off as 10-gauge metal may now be as thin as 12- or 14-gauge. And that also makes it weaker.

You start delving into severe rust territory when the panel is almost nonexistent. Think about the rocker panels that've been eaten alive or the bottom of the bed where you can't even see what used to be there. Those are the spots where there is no panel to salvage, so you'll have to install a new one.

But how do you get to that point? How do you know whether or not it's salvageable or not? Some of it comes down to experience, but there are a few basic steps to go through.

The first is to pick up a sheet metal gauge. It's usually a small disk that will help you figure out how thick metal is, and you can get them online for \$15–\$20 at either Eastwood or Amazon. That's handy if you know the thickness of the stock metal and what it should be, but if you don't, check the aftermarket and see how thick replacement panels are. If the metal you have is thinner than replacement pieces, then you might need to replace it. And one other thing: thinner metal is cheaper, but it will dent easier and won't be as strong.

Once you've decided to replace the panel, the question now is if you should buy a new one or fabricate



Sometimes you'll run into another problem: poorly fixed panels. In this case, the panel probably got water in the gap, so replacing it makes sense. (Photo Courtesy Lonnie Thompson)

one on your own. If you've never done any metalwork, this might seem daunting, but that just depends on the shape. If it's a corner of a kick panel, you could probably just cut something out with tin snips and you'll be good to go. But if not, and there are a lot of compound curves and the like, and you'd need better metalworking skills or tools to make it happen, then buying a new panel might be the best choice.

Basically, you should ask yourself how difficult the process is going to be. If it's going to be extremely difficult to make a new piece, or if the replacement parts seem excessive, then you have choices to make. Let's say your floor was rusted out, but the only option you have to fix it is an entire floor piece. Is it worth it to spend the extra money, or should you just patch up the parts with your own metal to save the cash? And if it's going to cost you more to put together all those little patches than it would be just to buy a floor, then maybe it's not that bad a deal.

At the end of the day, it's always better to use factory metal over aftermarket stuff. But if the part isn't salvageable, sometimes buying replacement parts is not only the only option but also the best one. It's your call.

Finding Replacement Panels

hese trucks are nothing if not popular, which means that finding replacement panels is easy. Unfortunately, the quality of these panels can sometimes be in question, too. Make sure that you do some digging before you make a purchase.

That said, a safe first place to start is with Dynacorn. You can get outer rocker panels for \$20 at Speedway Motors and cab corners for \$15. Dynacorn has pretty much everything you need for these trucks. If you're looking to buy an entire bed, you can start here and know you'll get a quality product.

The argument could also be made that you could get everything you need for these trucks at Brothers Trucks. They have options for all sorts of things, including their popular short-bed conversion kit (which is discussed in chapter 12).

Finally, LMC Truck has a catalog just for these Chevys. If you want an entire fender, it's \$160, and for \$470 you get a hood. ■

THE BODY



How do you make new templates? Easy: use poster board and scissors. Just trace onto the poster board and use that as a pattern for the real metal. After all, it's easier to fuss with the poster board than the real deal.

Panel Replacement

Although each panel should be approached on a case-by-case basis, there are some basic rules to follow.

Start by figuring out where the good metal ends and the bad metal begins. That's where you're going to put your border. You'll then cut out the bad metal using a die grinder with a cut-off wheel, an air saw, reciprocating saw, or whatever other tool you need to get the job done to give you a clean cut. Then you'll take an angle grinder with a sanding disc to grind any paint or grease off the surrounding metal. The idea here is to make sure there's no rust or dirt around the new piece and that you have a clean and straight surface to weld to.

Now that the visible stuff is out, you need to evaluate what's underneath. Sometimes—as is the case on a rocker panel—you have an inside panel to deal with as well. If it needs rust repair, then that's where everything has to start. If not, here's a quick tip: remove any scale or surface rust with a grinder and then spray



MIG vs. TIG

A brief note here about welders. Most people use a MIG welder for this type of work for a few reasons. It's quick, easy to work with, and generally an affordable option. That said, you could TIG weld all this work as well. However, it's more expensive to get into TIG welding, and it does take more skill (and hands) to get done properly.

If you choose to go MIG, use one with a shielding gas like 75 percent Argon/25 percent CO2–never weld flux-core, particularly with sheet metal, as it's much more finicky. Use 0.023 or 0.30 wire depending on the thickness of the metal you're working with.

You can use either MIG or TIG when you're welding in replacement panels. Either way, just be sure to take your time and do it the right way. ■

the area with weld-through primer. This lets you weld over the panel but will prevent future corrosion to the hidden part.

The next step depends on the type of panel you're working on. If you're putting two flat pieces of metal next to each other, one option is to flange the replacement piece. In this scenario, you're creating a small step in the patch panel so that the step sits under the good metal. Then you can create a stronger surface for a weld.

To do that, you create the replacement part and its flange, then drill holes in the original panel right about where the flange will sit. Place the replacement piece in, clamp the two panels together, and tack weld through those holes to give you a super strong connection.

The act of "tack welding" also needs some explanation. A tack weld is a quick, one-hit, one-second burst with the torch so that the two pieces of metal can be fused together. The idea here is that you don't want to build up too much heat by laying down a bead of weld, as that will cause the sheet metal panels to warp and buckle. That heat principle continues to apply as you go through the process. Space your tack welds around the panel so that too much heat doesn't build up in one area. Move to opposite corners, space them out by a few inches—whatever works to keep the heat down. And, eventually, you fill in the gaps with more tack welds. Yes, it's a laborious process, but it's better than spending hours beating that panel straight or applying way too much body filler.

Once everything is welded up, you need to grind down those welds. You can do this a variety of different ways, but again, heat. One option is to use an angle grinder with a 40-grit sanding disc to knock down the high spots in the weld. Move it around a lot, but never go so deep that the weld is level with the surrounding metal. Once that is the case, swap to an 80-grit disc and start sanding again until it is level. Once it looks like a seamless joint, you're good to go.

Yes, it is a tedious task, and it's one you'll have to do a whole bunch in course of the restoration. But the results are worth it.

Rocker Panel Replacement

Although these trucks come in a wide variety of conditions, one of the most common areas to find rust is in the rocker panels. These are the sections on the outside of the body that run parallel to the ground and curl into the doorjamb. When they rust, both the inner and outer panels get exposed, which can reveal a whole ton of problems.

How common is it? Even bone-dry Arizona trucks have rusty rockers. Needless to say, it's something that the average automotive restorer will run into.

Cutting Out the Inner Rocker Panel



This is a pretty typical example of what's out there in the field. At this point, the previous owner already cut off the rockers to see the damage and took it in to have it repaired properly.



2 The crew took the time to make a new inner panel by hand with a sheet metal brake, and the first step to getting the panel repaired is to cut out the rusty metal.



3 The panel came off in two pieces: the large lower section and then the part that connects to the floorboard.

Fitting and Installing the New Inner Rocker Panel



4 Mike then test fits the panel in the cut-out area. Once he's sure it'll sit in there perfectly, he grinds down the surrounding metal with a die grinder and a sanding disc to bring it down to bare metal.



5 With the panel clamped in place in the corners, Mike tack welds it in place. Then he'll check the fitment yet again and adjust as necessary.



6 One way to make sure the replacement piece is installed correctly is to test fit the outer rocker panel on the truck.



There are small square holes in each corner that also need to be filled. Mike then takes a Sharpie and marks out where he'll have to cut down the scrap piece of metal to make a new filler piece. This needs to be done on both the front and rear of the panel.



8 With the new panel made, Mike tack welds it in place. The welds here look like one solid bead because he took the time to tack weld slowly and space them out, doing the process until they all stacked up nicely.



9 Next the rest of the panel is tack welded in place and the welds are ground down smooth with a die grinder and a sanding disc.



10 Once the install is done, the entire inner edge of the panel is tack welded to create one straight section of weld.

Fitting the New Outer Rocker Panel



The outer rocker panel replacement piece is now fitted into place and clamped down.



2 This is a good example of how an inexpensive replacement part can fit: poorly. The customer brought these panels to the shop, but they don't fit in the back—they're too shallow. The problem can be fixed, but it's going to take some work.



After pre-drilling some holes and spraying some weld-through primer on the inner panel, Mike temporarily screws the outer replacement panel to the body.



5 He starts by knocking the bottom of the rocker out farther using a block of wood to dissipate the blow from his hammer.





4 To make sure the rocker lines up correctly, the crew bolts up the original door to the body and gaps it properly.



6 A

After some banging and hammering, the panel now fits much better.

The panel is then tack welded in place.

larger area.

Cab Corner Replacement

The cab corners, being so close to the rocker panels, are also common casualties to rust. It's usually eas-

Replacing a Cab Corner



Using a piece of tape as a guide, Mike lays out where he's going to put the new patch panel for the cab corner. Everything above the tape line is good, and below is where they'll replace.



iest to replace both of these panels at the same time,

as then it's easier to space out the tack welds across a

2 The replacement panel is then held in place and marked with a permanent marker to give them a rough starting point.



3 Then Mike cuts down the panel with a cut-off wheel on a die grinder. Again, he won't need all of the replacement panel, just what's going under the tape line.



4 Now the replacement panel is held in place. Once it's in the right spot, Mike can start cutting out the bad metal.



5 The rusted metal needs to come out, so Mike attacks it with a cut-off wheel. The goal here is to keep as much of the original metal as possible but still have enough strength in the panel that the new piece can be welded in properly.



6 The inside of the panel is pretty rusted out too. It's covered in sand from the media blasting process, as well as rust.



Using some poster board as a template, Mike marks out the area that he needs to replace. He'll use this as a guide on a piece of sheet metal so that it all fits like factory.



The replacement panel is fit back in place again, and now the tedious process of fitting, trimming, and fitting again begins. This will repeat itself until the panel fits perfectly on the body.



9 Once the piece is cut and shaped, it's tack welded in place inside the cab corner.



10 Now that the panel has been fitted correctly, Mike clamps it in place on the truck so that he can weld it in properly.



11 The panel is then tack welded in place. Once the panel is confirmed to be straight, he'll finish tack welding the panel and grind down the welds so there's no sign the repair ever happened.



If you look closely around the perimeter of the stereo and climate controls, you'll see the seam where the new panel was cut and welded in place. It will eventually be bodyworked and sanded down until it's invisible. portion of the dashboard out of an unrestored truck—a parts truck would work great here. You can also buy the sheet metal from Brothers Trucks or Classic Parts. They sell a Dash Face Repair Panel for \$60, which is certainly better than the alternative. Weld it in place by doing slow tack welds around the perimeter so that the panel doesn't warp, and then grind down the welds.

Ideally, your perfect project truck doesn't have that issue. But if it does, this is a relatively easy fix.

Dashboard Solutions

Since these trucks have been around for over 40 years now, many people have done their fair share of customization to their vehicles. One of the more popular hacks is with the stereo. The original model has a push-button body with two knobs to the side, while most cars today use a DIN (2 x 7-inch) or even a double-DIN (4 x 7-inch) stereo. Although today you can find aftermarket stereos that will fit in the original slot complete with modern amenities like Bluetooth streaming, not everyone has (or had) the patience for that, so they just cut a DIN-sized hole in the dash with an air saw or something similar. The result is a dash that's definitely not factory, and it typically looks horrible.

If your project has that same problem, don't stress about it too much. You can, as shown here, cut out the climate control and stereo

Floorboard Fixes

Although the cab corners and rockers see a lot of the rust damage, those aren't the only spots. The floorboards tend to see rust as well, particularly around the kick panels. Fixing them appropriately depends on the amount of damage that's present. If the entire floor is rotted out, then a replacement floor panel or panels should be used. If not, small pieces can be made as necessary.

Replacement Floor Patches



This particular section of floor is right on the passenger side kick panel, and it's larger than it appears. Not only is it part of the seam between the floor and the panel, but it's also the pinch weld in the doorjamb.





Δ



There's a notch that needs to go in the panel as well, so it's drilled out with a unibit. Why the notch? Because Mike wants to keep the original look of the spot welds in the doorjamb, so this piece of metal will weld in around the spot welds, not over them.



The affected area is then cut out with a die grinder and a cut-off wheel.





The new panel is then held in place and traced so that Mike knows where to cut out the original metal.



6 The piece is then tack welded in place, once again, spacing the tacks out and working their way around the panel.

Now, with the welding complete, all that needs to be done is some grinding and light bodywork.



Rotten cab mounts look pretty rough, as evidenced by this pair. (Photo Courtesy Lee Hurlbutt)

Cab Mount Installation

The bed of your project truck is bolted directly to the frame, and

there's no rubber cushion between the two, but your cab isn't. Instead, there are small pieces of rubber sitting between the cab and the frame, and if they're worn down, there will be problems. Your doors may not line up or shut well. The fenders could be misaligned with your doors or hood. And the entire back half of the cab could just sag down.

So why is this included in the bodywork chapter? Because the first step in your bodywork process is to make sure that your panels are all aligned properly. If they're not, then when you're laying on filler and sanding panels, your bodylines won't be straight, and neither will the panels in comparison to each other. It seems like a simple thing, but making sure your mounts are new and in good shape is important to the bodywork process.

The solution is new cab mounts, and you have two options when it comes time to install them. If your truck is blown apart, then put the new cab mounts on the frame and lift the cab in place. If not, you can place a jack under the cab and lift it up, replacing it one corner at a time. Either way, it's a pretty straightforward process.



There are two different heights of cab mounts, and they're labeled when you buy replacements. Make sure you're putting the right ones in the correct places so you don't have alignment issues.



Removing the old cab mounts is pretty simple: unbolt them, jack up the side of the truck, and then lift them out. If you're concerned about damaging the rockers, use a block of wood between the jack and the panel to distribute the load.



A quick comparison between the old and the new mounts shows how big a difference there is.



The new rubber mounts (you can buy polyurethane ones too) come in multiple pieces but ultimately will stack up like this on the truck. See that gap in the middle? That's where the frame mount sits.



Once the new top part of the mount is in place, it's easy to see the difference.

Gapping the Panels

If you think about the standards of today's vehicles compared to what they were in the late 1960s, things have changed quite a bit. The fit and finish of today's vehicles is much better than what they had back then. Granted, they designed everything on drafting tables with slide rulers as opposed to on a computer with AutoCAD, but still, improvements can be made.



And with both sides in, you can see how the completed setup looks. Now the process just needs to be repeated on the remaining corners.

Sometimes that comes in the form of gapping panels. Essentially, what you're trying to do is make sure that the gap—the distance between two panels such as the doors and fenders, hood and cowl, etc.—are consistent throughout. You can do that through shims and shifting things around, but at some point you just might have to get out the welder and grinder to make something happen.

Since the goal is to even out the gaps, every scenario will be different. Sometimes you'll need to remove metal to make the gap the same as the rest. Other times you'll have to add it. You might even have to do the same on one stretch of material. The key is to make sure you do a clean and quality job so that the truck looks just like it would've out of the factory.

Fixing Factory Issues

One common issue with these trucks involves the hood. They used big, heavy springs to keep them up without a hood strut; but over time, those hinges wear out. The problem is that the rivet in the middle of the



Once all the welding was done, it was ready for bodywork, so nobody would be the wiser. (Photo Courtesy Lonnie Thompson)



Here's a great example of panel gapping on a cowl. The factory piece didn't line up right, so they added some metal, then welded it all in place. (Photo Courtesy Lonnie Thompson)



The top part of the cowl by the pillars needed help too. To close that gap, they first cut the cowl with a cut-off wheel and lifted the remaining metal up. Then they filled in that gap with weld as shown. (Photo Courtesy Lonnie Thompson)

CHAPTER 3



See how the hood doesn't align with the cowl? That's because of worn-out hood springs.

hood hinge will oval out over time, and that causes the back of the hood by the cowl to raise up. It's annoying, and it's not aesthetically pleasing either.

You have a few options to fix them. There are aftermarket hinges out there that will do the job nicely if you want to drop the cash. Sometimes they're even extra fancy and made out of billet aluminum. Then there are firewall-mounted options that also look good and include shocks. And, of course, you can buy new ones from the aftermarket. But if you want to keep the original parts, then you have another choice.

Take the hinge to a local machine shop. They can remove the factory rivet, re-machine the hole so it's round again, and install a new rivet. Then your hood will open and close like new and won't stick up in the back either. Problem solved.

Body Repair

The first step in any good bodyworking project is to figure out where all the dents are and what you need to fix. The solution? Chalk or a permanent marker. Walk around your truck and find all of the high and low spots. If there's a wave, circle it.



This is the troublesome rivet in question, but if you're going to get the hinge rebuilt, you might as well do all the rivets.

If there's a dent, point to it. Make sure that everything is documented right there on the truck itself, and then take photos of the entire thing. Once you're sure that everything is covered, you can get to work.

Most bodywork starts with the truck in bare metal. And if your project is pretty far gone, chances are you've already gone through the media blasting process in some form. If your truck is doing okay and only needs some minor work, then you can get away with roughing up the surface and applying a skim coat of metal glaze or sanding putty, but chances are that's not the case. Your next step is to start sanding.



Use a light to see down the side of the panels, looking for waves and imperfections. When you find one, circle it. You'll have to deal with it later.

Work the surface around your dents down to the bare metal with 80-grit sandpaper, usually on a D/A sander. Give the dent a wide berth because you'll be extending body filler over and beyond the dent itself. This is where you're going to start the bodyworking process.

Ask the first question: is this a raised imperfection or a dent? If it's raised, you need to start by hammering it down. Don't just start beating



Always use a mixing pad of some kind when mixing up your filler. A lot of people use cardboard, but that can soak up some of the liquid in the filler and cause it to react differently than it should. (Photo Courtesy Mark Burdo)



The filler is swiped on with a squeegee, and as you can see, it's kept as flat as possible but isn't perfect. That's fine; it'll get sanded down anyway. (Photo Courtesy Mark Burdo)



Take a peek at that right corner. That's how the filler should look once it's sanded down. It may take multiple applications until it feels right, but that's okay. (Photo Courtesy Mark Burdo)

on it with any old tool, though. Get a body hammer and lightly tap the high spot down until it's flat—or an approximation of flat. If necessary, you can always tap the high spot into a low spot, but try to keep it as perfect as possible.

If you have a low spot—a dent, crease, or other imperfection—then you also may need to hammer the dent out, just from the inside of the panel. Again, the goal is to get the panel as straight as possible.

Once you have something to work with, you can apply filler. The goal is to use nothing more than 1/8 inch of product. Why? Because body filler shrinks back, and the more you have, the more it'll shrink. And if it's really thick, it'll just crack on you—and that's obviously not a good thing. Keep it low and you'll be fine.

Working a Panel from Start to Finish

Until this point, there's been some overall talk about how to handle bodywork but nothing in-depth. So with that in mind, let's walk through an entire panel from start to finish and see how it all works out. In this case, it's a fender from a 1968 C10, and it needs just minor repairs.

Prepping the Panel



With the fender on a stand, the first step is to clean off the entire piece. In this case, it's wax and grease remover.



Using a clean, lint-free paper towel, the entire panel is then dried off. Notice that he's wearing gloves? That's to keep away from further contamination. This clean and dry process is done twice overall to ensure that everything is spotless.



Now the panel is clean, but the filler needs a mechanical connection to stick to the panel-often referred to as "tooth." He's using 80-grit sandpaper on a D/A sander to ensure that the filler will stick properly.

Types of Body Fillers

here are a few different types of body filler you'll use with your project:

- Glaze putty
- Lightweight or premium body filler
- Reinforced body filler

Let's break each one down.

Glaze putty is a thin, lightweight polyester putty designed to fill small holes or super small waves. It can be put directly over sanded paint, which means that if you're just reworking a minor dent, you don't have to take the truck down to the bare metal. But it's also not designed for anything deep, so don't go applying 25 layers of it to get 1/8 inch thick. Auto Body Toolmart sells a 30 oz. container for \$41.

you'll use the most. It's designed for dent repair in all shapes and forms, and it can be applied up to

1/8-inch thick. The main differences between lightweight and premium filler is the amount of shrink back you get and the sanding ability. Lightweight fillers are less expensive and can shrink more, which causes your smooth lines to turn into waves. That doesn't mean you can't use them, it's just that you need to account for the shrinking time when you're doing your build. Premium fillers are also usually easier to sand, which means you'll go through less sandpaper. Evercoat Rage is a great option in that scenario.

Reinforced body filler is pretty much what it sounds like: body filler with additional materials that make it stronger. Typically, this is fiberglass. Strands of fiberglass mat are mixed with the filler, which means you can fill deeper dents than with traditional filler. So why would you want to use it? It's standard for fiberglass work, but you won't have any of that on your C10 (or you shouldn't anyway). But if you



Lightweight or premium body filler is the stuff From left to right: glazing putty, lightweight body filler, and premium body filler.

do have a dent that you can't get out but it's a bit over the 1/8-inch mark, fiberglass-reinforced filler can help you out. First you build up a base with the fiberglass filler, then you use premium or lightweight filler on top. It's not ideal, but some people prefer this method to the alternatives. One gal-Ion of USC Duraglass is \$45 at Auto Body Toolmart.

So who do you use for fillers? Evercoat, USC, and 3M make some amazing products, and they're all quite reliable. You can get a gallon of USC Pro-Gold ES Premium Autobody Filler at Auto Body Toolmart for \$41. A gallon of Evercoat Rage will set you back \$73 at the same shop.

You're going to go through a lot of filler, and it will set you back some money, that's for sure. But remember that the more you spend on quality materials, the more you'll see it back in the final result. It may not seem like it when you're sanding away at 2 a.m., but it's true.

Metalworking the Panel



There's a tiny imperfection in the fender lip, and it's best to start by working it with a hammer and dolly. Notice how the dolly is on the backside of the panel and the hammer is on the face. He'll strike one against the other to smooth out the piece.

Epoxy Primer and Filler Prep



The panel is then epoxy primed. Why? Well, it would be a week before it was worked on again, so this would provide some protection against rust. But also because it helps show dents like this one in the leading edge of the fender.





The epoxy primer protects the panel, but you want a more consistent finish for the filler. Now he uses 120-grit sandpaper on a D/A to put a consistent tooth in the panel.

Once the D/A has done its job, it's time to sand any remaining spots by hand. At this point you can do it with a block or without, just make sure to avoid putting finger sanding lines in your primer.



The entire panel is then lightly scuffed with a red Scotch-Brite pad. This is to hit any spots that may have been missed by the D/A, and it's done fairly quickly.



Back to the wax and grease remover we go with the entire panel getting another treatment of the cleaner. Just like before, he'll go over it with a lint-free paper towel, apply another round of cleaner, then paper towel a final time.

Body Filler Dry Times

There are two things to consider when you're working with body filler. First, the dry time—that's the amount of time it takes for the filler to go from a gel state to a sandable form. Second, the work time—the window you have where sanding the product is ideal. Traditionally, those times have varied widely based on ambient temperature and the products you use. But in recent times, that's changed.

Evercoat makes the popular Rage line of body fillers, and they intro-



You can pick up your own version of this chart from your local autobody supply store. It's a great reference tool as you go along this project, particularly as the weather and temperatures change. duced a new way to mix some of their products to get the work and dry times you need.

For the purposes of this example, let's say that you're working at a shop in the summertime in Arizona. If you were to use all Rage Ultra filler, you'd have just over a minute to apply the product, and then a 14-minute window to sand it down. That's virtually impossible to do-particularly in temps above 105 degrees. So instead, if you were to mix half Rage Ultra with half Rage Ultra Extreme, you'd have 5 minutes to apply the filler and 17 minutes to sand it. If you're working on a small panel like a fender, that kind of time window would work pretty well.

Mixing filler is not an exact science. You don't need to weigh and measure the amount of each type that you use, just eyeball it. But knowing that you can mix two different types to get the working and drying times you want is a great thing to have in your pocket. Consider using a chart like this the next time you're working



When you mix body filler, you want to be sure to work it consistently so as not to add bubbles into the material.



If you start with a clean, well-organized workspace, you're ahead of the game. Notice how the table is taped and masked with paper? That's for easy clean up, and it also helps with the process.

on your truck because it could save you time and money in the long run.

Mixing Body Filler

The process of mixing body filler, on the surface, seems pretty easy. And it's not difficult to do per se, but it is easy to screw up.

The first issue is making sure you have the right work surface. Some people use cardboard scraps as a spot to mix their filler. However, it's not only too soft but it also soaks up liquid from the filler, lessening its consistency. Instead, use either a specialized mixing pad from the start, or one that has tearable scraps on top. This way you'll always have a good surface to work with, and you don't have to stress about mixing the filler improperly.

The next issue is your working and dry times, which are addressed on page 62. If you don't follow a chart as shown there, then you risk either making too much material and wasting it, or spending too much time mixing and not being able to apply it properly. The key is to find out your times before you get going, then work within those parameters.

And finally, cleanliness. Working with a dirty mixing pad or used squeegees with dried filler on them creates an environment that's going to cause problems. Dried filler will get into your panel, and it won't sand at the same rate as anything else. And if it's another contaminant such as hair or dirt? Who wants that in their truck? Use clean materials for each job and you'll get better results.



The idea here is to use a 50/50 mix of Rage Ultra and Rage Ultra Extra based on the temperature and work time needed. To do that, the raw filler is placed onto the mixing pad with a paint stick.



Now the two fillers are mixed together with a metal squeegee. This isn't done haphazardly; the two fillers are almost kneaded like bread dough, being sure not to push air into the process. It's tricky to do at first, but it gets much easier with practice.



The hardener is put on next, and the general rule is to run a straight line of the product across the width of the filler. Hardener comes with every can of filler, but it's not inside the can. So if it's not handed to you at the paint counter, ask for it because you'll need it.



The hardener and the filler are mixed again, using pressing motions to push any air out of the material. The contrasting blue color should be thoroughly diffused in the filler before you move on to applying the product.

Applying the Filler



The filler is applied with a firm, consistent pressure from top to bottom. Again, the idea is to push out pinholes while still applying enough material. You want to go over the dent entirely, as well as beyond it by about 20 percent.



Once the filler is applied everywhere it needs to be, it's worked again, this time to smooth out any lines that were left vertically. What you're doing is making sure that everything gets sanded evenly instead of having mammoth peaks and valleys.



When it's dried most of the way, any excess on the edges is cut off using the end of a metal squeegee.

Sanding Body Filler



Using a piece of 80-grit sandpaper and a sanding block, the panel is gone over in an X pattern. This will ensure that lines aren't put into the panel by sanding the same direction constantly. It also keeps the panel straight.



See that black spot? That's where the panel is high compared to the filler, and that's a good thing. We want the filler to look even and have smooth, tapered edges that blend into the panel. That's the goal.



There's a lot of feeling and smoothing to make sure the panel is straight, and this is where the art comes into play. It takes experience to know when a panel is straight or not, and it'll take time for you to develop the skill.



A dry guide coat is applied next. This powder works its way into the filler and the panel and provides a contrasting color to the rest of the piece. Here it's dusted on so it's easy to figure out what to sand next.



The panel is sanded again, but this time with 120-grit sandpaper. This will be the last grit before laying down primer, which is the stage just before paint. This will also help fine-tune the panel to make sure it's straight as a board.



The completed piece is now ready for primer.

Prepping for Paint

You've completed the bodywork on the truck, and it feels like a victory. And yes, it's a huge accomplishment. But it's all going to go to hell in a handbasket if you don't close the deal. You need to prep the truck, and prep it right.

There's a lot of emphasis placed on proper prep work, and there's a reason. With painting, the quality you get out of every step is predicated on the quality of the previous step. And it's all cumulative. If you do a shoddy job prepping the body for filler, then it could not adhere properly, eventually failing and causing your pretty paint job to develop a major flaw. The point here is that you want to do this job the correct way, which means taking your time and doing it right the first time. It's the fastest way to do it, after all.

But there's another angle here, too. Let's say you're not going to paint the truck yourself. Instead, you're going to let a professional do it for you. That's fine—nothing wrong with that at all—but you can save some money if you prep the job yourself. The closer to the finish line you can bring your truck, the better off you'll be. If it's primed, wet sanded, and ready for a tack rag, your painter may appreciate the extra work put in. That could also save you some money too.

And if you're doing it all yourself, that's also great. You will burn through some time doing all the prep, but it's time well spent. Again, the results will show for it. If you're ever in doubt, take a moment and make sure it's right. If not, do it over. You'll hate yourself later if you don't.

So what's the first step? At this point, you've probably got a truck

with a bunch of filler all over the place and it's probably showing at least some bare metal. How do you proceed?

The next step is going to be primer, and the specifics are covered in the next chapter. However, it's solid information to know at this point, mainly so you know what you're getting into. That, and some background information is good too.

There's a basic concept here that should be explained before you get painting, and it has to do with getting your truck straight. Up to this point, you've done some epoxy priming, sanding things down, doing some metalwork, and applying filler. It feels straight, and the patterns in the filler say it's straight. So, in theory, you should just be able to lay down some primer real quick and get it painted, right? No.

Even though a panel may feel perfect, chances are it's not. And each successive layer you put onto your truck gives you another chance to level it all out. That's what priming your truck is all about. It's fine tuning your bodywork to the point that it's perfect. But let's get into the logistics.

You'll start the process by using a fine Scotch-Brite pad everywhere on the truck that's going to see paint. The interior, headliner, engine bay, bed, back cab wall—the entire thing. If you're spraying it, scuff it up. Going back to the bodywork, you're creating a tooth for the primer to grab, so be super thorough with your sanding—work it all around, all directions.

Masking for Primer

At this point, you don't necessarily need to have your truck in a booth to get it primed perfectly. Yes, cleanliness is important at any stage, but right now you're doing a ton of sanding, and it's okay if you prime out in the open. But to do any of that, you'll be doing at least some masking on various jams and panels, and you need to make sure you get those correct. Basically, you need to know about masking with a hard edge and masking with a soft edge.

Imagine taking a piece of paper, sticking it flat against a panel, and then taping the paper right onto the surface. That edge where the tape meets the metal? That's a hard edge; if you peel the tape off, you'll be able to feel an edge where the thickness of the primer is different. Sometimes you need to do that for one reason or another. Other times you can't get around it, like with doing a two-tone roof or center stripe. The point is, plan around it. Place your tape lines under trim or in spots where it's not noticeable, then you'll have a more professional result.

Soft edges are different. Do the same thing you did before: place a piece of paper against a panel, then stick the tape to the surface and the paper. But now pull the paper up and over the tape so that part of the sticky side is now exposed. This is called a soft edge because when the paint gun sprays against it, the paper and tape diffuse it a bit, and there's no hard edge that you're working against. It's not always the best way to go, but it is a better option in situations where you don't want the finish to become wavy—like primer.

Now you'll give the whole thing a strong cleaning with wax and grease remover so that all of the oils from your hands are gone. Then you can start spraying a sandable primer. Put on a decent coat, let it dry, apply some guide coat,

Working With Filler

ne thing to consider when you're doing bodywork is the amount of time you'll have between sanding sessions. For example, say that you're working on the door of your C10 and you just finished putting some filler on the door and shaping it out. The panel probably needs another skim coat, but you decide to put that off until you have a bit more time. A month later, you come back and decide to do another coat, but the results aren't that great. Why?

Once body filler has dried, there's a working window where the material is not only easiest to sand, but it's the most efficient time to do so. After a while, it sets and starts to not only shrink back, but it becomes more difficult to work with. If you put another layer of filler on top, you'll come to a point where you're sanding both old filler and new filler in the same panel. They will sand at different rates, and that means you won't get a straight piece no matter what you do.

What's the solution? First, if you start doing filler, finish it. Don't leave spread filler on a panel without sanding it, and don't call a job "done for now." If you can complete the heavy filler work and just leave it for a skim coat of glaze, then fine. But otherwise, finish each step as you go on each panel. That way you won't run into any sanding issues along the way.



This can of Evercoat Rage Ultra is your likely baseline for your project. Rage Ultra is a super popular product found at body shops around the country. It's not inexpensive, but you want to use a high-quality filler on your project. If you don't, you risk pinholes and shrink-back issues, and those will cause problems with your paint later.

and now your job is to sand that smooth until the guide coat is all gone. You can wet sand it with 120-grit sandpaper or dry sand with the same—your call. Once you have it straight, you go through the process again—degrease, prime, guide coat, sand. Do that two, maybe three times total, possibly just spot priming places where you see bare metal. Once you're confident that you've worked out all the kinks, it's time to ask yourself some questions. Primer, bodywork, and glaze all tend to shrink back over time. Sometimes heat causes it, other times it's just changes in weather. But the longer you wait, the more likely you'll see some kind of shrink in your finish. Because of that, some people like to let their trucks sit in the primer stage for a month or two, then block sand it one last time to make sure it's perfect.

How you handle that is up to you. But the point here is that you

want to add multiple layers onto your truck and gradually sand them all so that they create the flattest, smoothest layer you can get. There's only one other time you can do this, and that's with color sanding and buffing your clear coat. So take your time now, and you'll get the smoothest paint job possible. Just like a house, a good paint job needs a solid foundation. Take your time, and you'll have that and be ready to start the next chapter.

CHAPTER 1

FINDING A PROJECT SQUAREBODY

The best restoration project begins with a solid foundation, and that means a solid body. These trucks have very little rust and need very little mechanical work. Trucks in this condition are more difficult to find and highly sought after. On the other hand, if you start with a truck that needs substantial restoration and bodywork, you are going to spend much more for the restoration. In other words, you get what you pay for. Before you embark on a restoration project, carefully evaluate the condition of the truck and assess the time, expense, and parts required to bring it to original condition. Some trucks are far too rusty and in such poor condition that a restoration is just too costly. In that case, a better option is to sell the truck and find one in better condition for restoration. Chapter 2 discusses how you come up with the total cost for a restoration.

For some, this truck is complete with a great patina and reliable engine. But if the ultimate goal is to return the truck to showroom condition, this truck needs bodywork and a new paint job.

Many trucks with various powertrains, trim levels, and cab and box sizes are available on the market. so you have lots of options. However, be conscientious and careful when shopping for one. You should be able to prescreen some trucks and ask the owners specific questions to reveal the condition, equipment package, trim level, and other information. Be prepared that the owner does not understand or know everything about the truck he or she owns. Some owners say they're short beds, but they are actually long beds, customized with no hope of restoration. Some owners feel that their trucks are worth six figures because that's what the TV tells them. This whole process is going to be a fun experience.

This chapter is all about figuring out the truck that best fits your needs and what you want in your next project. I start with the basics about a truck, including some analysis of the vehicle identification number (VIN), and I break down the body styles and years so that you know what you're looking for and can narrow it down. This also helps you identify the fakes from the real deals.

Whatever truck you find, it is going to be a big commitment to

The Gas Tank/NBC Issue

he first model year of the generation, 1973, introduced a ton of changes compared to the previous 1967–1972 trucks. The first change, and one that became the most controversial, came to the gas tank. In previous years, the gas tank was located behind the bench seat. As time wore on, rubber seals leaked and the interior eventually developed a noxious smell, which became hazardous.

To solve that problem, Chevrolet beefed up the frame rails and mounted the gas tank(s) on the outside of the frame. Now the gas filler door(s) sat on the outside of the bed. In addition, General Motors wanted to increase the fuel capacity to 40 gallons for marketing purposes, which required mounting a second tank on the opposite side of the truck.

This was fine until November 17, 1992. *Dateline*, an NBC program, premiered its "Waiting to Explode" episode, which was an hour-long investigation into the 1973–1991 Chevrolet trucks, including how the gas tank exploded when hit in a low-speed side-impact collision. According to the *Dateline* video (which you can easily find online), the tanks ruptured at speeds as low as 33 mph, causing them to burst into a fiery explosion, potentially killing everyone inside.

Obviously, this was not good news for General Motors. The 1973–1987/1991 trucks were, at this point, a done deal, and they had moved on to the new C/K product line. Millions of these trucks were on the road, and if the company had to compensate owners, it could cost millions and possibly bankrupt the company.

However, after the taping, one of the firefighters on the scene of the NBC demonstration contacted General Motors to report what happened. General Motors started its own investigation as a result, hiring Failure Analysis Associates (FaAA). What it found was that smoke was visible from the gas tank six frames before the actual impact of the second car. Acting on a tip received from someone involved in the *Dateline* program and after combing through 22 yards in an Indiana wrecking yard, they found the trucks used in the episode.

The results were damning. General Motors discovered that the producers of the program had placed remote-controlled model rocket engines inside the trucks' gas tanks. Just before the impact occurred, the producers triggered the rockets, causing the tanks to ignite and explode. Furthermore, the speed that *Dateline* quoted, 30 mph, was not what they actually showed on the screen. In fact, the car was traveling at 40 mph at the time of impact. When General Motors techs found the trucks used in the test, they X-rayed the tanks and determined that there were no holes at all.

As a result, General Motors sued NBC for defamation and libel on February 8, 1993, and put on a two-hour demonstration for the press explaining why the *Dateline* presentation was not possible, and that the public was not in danger. NBC settled the lawsuit by the end of the week, and Jane Pauley, co-anchor of *Dateline*, apologized publicly on the program for the error.

This is not to say that these trucks never exploded from a side impact, just that the way NBC performed the investigation was faulty. There have been several lawsuits over the years about the issue, and, as of a report in 1993 (decided just days prior to General Motors suing NBC), more than 200 people had died in full-size Chevrolet and GMC trucks of that era. At that point, six lawsuits had gone to trial: General Motors won half of them.

Today, controversy about the gas tanks continues, and entire websites are dedicated to the problem. Should you have any concern about the issue with your own project, you have a few options.

First, you can purchase a fuel cell. Aftermarket fuel cells come in all shapes and sizes, and have increased safety standards, depending on where you purchase them.

You can purchase a plastic foam-filled tank made to meet NHRA specifications and mount it between the frame rails just behind the axle.

You can purchase a gas tank from a Chevrolet Blazer or GMC Jimmy of the era, which also mounts behind the axle between the frame rails. You have to change some plumbing and wiring, but it at least has a factory appearance, even if it's not in the stock location.

Finally, you can always leave it the way it is. If you're not planning on driving the truck very often, your risk of injury is less. Plus, even if you do drive the truck every day, the chances of you being hit in the same manner that would cause the tank to puncture is minimal, so keep that in mind.

Whatever you chose to do, just be aware of the problem so that you can address it if necessary. ■

restore it, both to your pocketbook and your time. Make sure that you take those extra few days, months, or even years to find what you want in a condition that you're prepared to work with. Otherwise, you waste your time on a project that eats up your cash.

Overview of the 1973–1987 Chevrolet Pickup

Although the 1973–1987 Chevrolet pickup had the longest run of any line of Chevy trucks to date, some purists divide the generation into two distinct groups: 1973–1980 and 1981–1987. If you want to get technical, the Suburbans, duallys, Blazers, and crew cabs were available until 1991, creating, essentially, a third generation, depending on how you look at things.

Chevrolet first referred to them as the "Rounded Line" of trucks, but today enthusiasts often call them a "Squarebody." To most people, it's the most square of the current and past body styles.

Body Style Changes

The 1973 model received the "Rounded Line" moniker because almost every corner or angle on the truck had a rounded edge. For example, the windshields had rounded corners, as did the windows and front fenders. The taillights also wrapped around the bed sides, which was the first time that was done on any Chevy truck.

The purpose of the Rounded Line was to increase fuel efficiency by using aerodynamics. The bed sides also featured a double-wall construction, which, in some earlier years, also produced some rust complaints because water pooled between the two walls of the bed, causing rust. Keep an eye out for truck beds with poorly patched panels.

Three bed models were available at first. The Wideside (also called the Fleetside model) came in a short or long bed; the Stepside (called Fenderside by GMC) also came in a short or long bed; and the "Big Dooley" (now referred to as a "dually"), which was a long Fleetside bed with fenders on the outsides to accommodate the dual rear wheels on the 1-ton trucks. The Stepside/Fenderside also came standard with wood floors, which were replaced by metal floors in 1980.

The cabs came in two choices: standard and crew cab. The latter had two versions: a "bonus cab" that had no rear seat and included a lockable storage compartment instead, and a "3+3" that had bench seats front and rear.

Because of these new cab and bed sizes, three wheelbases were offered for the trucks: 117½ inches for the standard-cab/short-bed pickups, 131½ for the standard-cab/long-bed trucks, and 164½ inches for the crew-cab/long-bed (or Big Dooley).

Other variants of the truck also use the same chassis, including the Custom Deluxe with camper, Blazer/ Jimmy, and Suburban.

Year-by-Year Changes

The Squarebody evolved substantially over its 14-year model run, and I've highlighted most of the major changes below. This will help you find the truck that best fits your needs.

1973

Compared to the previous 1967– 1972 trucks, this first year of the body style had 21 percent more glass area, an optional radio antenna embedded in the glass, and a bigger cab. Front disc brakes became standard, and the entire suspension was beefed up to go along with Chevrolet's motto, "Built to Stay Tough." The crew cab was also introduced this year. As for the engine, this was the last year that you could buy the 307 V-8; the 402 big-block available in previous years was now replaced with the 454. There was also

The body style went through a major change in 1973 and again in 1981, as was the case with this later-model example.

an inline 250- and 292-ci 6-cylinder as well as the 350-ci V-8. If you want a two-tone paint job, your second color option is white, and only white.

1974

The exterior of the truck was mostly the same, except that rain gutters became available for the areas around the side windows. Both 1973 and 1974 shared a grille commonly referred to as the recessed "egg crate" grille, named for its appearance.

1975

Higher trim levels (discussed below) came with aluminum panels on the tailgate, filling in the typically recessed area. Rain gutters were now standard on all trucks, as was a modified tailgate latch mechanism on Fleetside beds. The Scottsdale trim level was introduced. On the inside of the truck. the windshield wiper switch was modified slightly, which changed the bezels found in the 1973s and 1974s. HEI ignitions were now standard, as were catalytic converters. The front grille now featured three horizontal bars. which also eliminated the recessed feature of the previous years. This was the last year that you could find out the displacement of the engine based on the badge on the grille.

1976

Because of rust issues, General Motors added more zinc to its primer. Buyers could purchase chrome bumpers with rubber impact strips, plus they could select Rally wheels and/or a Sport model. You could now order a two-tone vehicle with a color other than white, and the Bonanza trim option was introduced. This was also the last year that the engine block was orange.

1977

Power options were available for the first time, including intermittent wipers, power windows, and power door locks. The door panels and door internal components were also different from previous years. Bucket seats came in two variations: early models had low backs and later models had high backs; it depended on when in the model year the truck was built. An inside hood release became an option and the grille changed one of the horizontal bars and four of the vertical bars were removed. A yellow/gold stripe was an option for the center of the moldings, and, other than the 1975 GMC Gentleman Jim Special Edition, this was the only year it was an option. General Motors introduced the 305 V-8, and a rear defroster also became optional.

1978

A 350 diesel engine became optional in 1/2-ton trucks. The frame was tweaked slightly to fit catalytic converters, which were now required on California trucks. This also meant that California trucks did not have a dual exhaust option available. Brushed-aluminum trim became standard on the top trim levels, replacing the wood grain. The bed received a gas door, rather than the flush gas cap found on previous years. Sometime during this model year, spade fuses were used, so glass fuses can still be found in early production units.

1979

The headlight bezels and turn signals were now combined into one unit, and General Motors added an apron underneath the grille. It also added a "decorative ridge" to the front of the hood. Trucks with a gross vehicle weight (GVW) up to 8,500 pounds now had catalytic converters as standard.

1980

The Silverado trim levels now featured rectangular headlights; other trim levels still had the round lights found in 1979. The grille gained the "egg crate" styling again (although it's different from the 1973 version), the mirrors sat lower on the cab, and cast aluminum wheels became standard. The 292 V-6 model now had a dual exhaust option.

1981

The front end of the truck was completely changed in 1981, and it stayed essentially the same until 1987. It now had a new grille with four headlights (with two as an option) and horizontal side-marker lights. There were also new bumpers and the tailgate was also changed. The dashboard changed shape slightly, as did the seats, gauge cluster, and sill plates. The 305 V-8 now came in a California-only edition and one for the remaining 49 states. The gas tank also was relocated to the driver's side of the truck. These changes reduced the truck's weight by 300 pounds.

1982

The chrome grille and front bumper were now standard features. The 6.2 diesel was introduced and came with the 700R4 automatic overdrive. The 305 V-8 with the 2-barrel was discontinued. The Cheyenne trim level was discontinued.

1983

The front turn signals were relocated from the bumper to behind the grille by the headlights, and now the 700R4 automatic overdrive transmission became optional for all trucks.

1984

The quadruple headlights introduced in 1981 were now optional equipment. The wiper controls, cruise control, and high-beam lights relocated to the turn-signal stalk.

1985

This year introduced the Vor-Tex V-6 with a 4-barrel carburetor. Two-tone paint became optional again, and the grille changed slightly.

1986

This was the first year that didn't have any major changes to the lineup. The trucks were effectively the same as in 1985.

1987

An engine equipped with throttle body injection (TBI) was introduced, and came with computerized ignition controls. This was the last year that a Stepside bed was available; the next-generation GM trucks had a "Sportside." This was the last year of this body style, however. The 1-ton trucks, 3/4-ton trucks, Suburbans, and Blazer/Jimmys remained with few changes until 1991.

Trim Levels

In 1973 and 1974, Chevrolet and GMC offered four trim levels for their trucks. The Custom line for both brands was considered the standard model. It was the base truck and had no option code.

The next tier was the Custom Deluxe (Chevrolet) and Super Custom (GMC), considered the mid-range truck. These had an option code of Z62.

The luxury trim was named the Cheyenne (Chevrolet) and Sierra (GMC), and had an option code of Z84.

The highest-tier luxury trucks were the Cheyenne Super (Chevrolet) and Sierra Grande (GMC). They used a YE9 option code.

All of the option codes remained the same until 1987.

In 1975, the names changed again. The base model was now the Custom Deluxe (Chevrolet) and Sierra (GMC). The mid-range tier was the Scottsdale (Chevrolet) and Sierra Grande

The Cheyenne Super was the top-ofthe-line trim level in 1973 and 1974, and it showed. The badging on the fenders was the first sign of something special, and the two-tone paint job and interior trim stood out as well.

This truck hasn't been restored, but it does have all of the Custom Deluxe original trim and materials, plus low mileage (less than 90,000). If you can get past the rust on the hood, trucks like this are perfect project vehicles.

(GMC). The luxury trim was named the Cheyenne (Chevrolet) and High Sierra (GMC). The top-of-the-line luxury trucks became known as the Silverado (Chevrolet) and Sierra Classic (GMC). These were in place until 1981.

In 1982, the lineup looked like this: Base model trucks were still the Custom Deluxe (Chevrolet) and Sierra (GMC). The mid-range tier was the Scottsdale (Chevrolet) and High Sierra (GMC), which was a name shift for the GMC line. There was no more luxury line (option code Z84), but the top-of-the-line luxury trim remained the Silverado (Chevrolet) and Sierra Classic (GMC). This was how the lineup looked until 1987, when the 1/2-ton trucks ended their run.

Base-model trucks had very little chrome on the exterior. There was no carpet; instead, it came with a rubber mat on the inside. The seats usually came in vinyl, although in 1982, custom or deluxe cloth became an option that you could buy at the dealer. There was also very little interior insulation, the door panels were wrapped in vinyl, there was no headliner, and the dashboard was a simple, black-trimmed model.

The mid-range model (Z62 option) was a base-model truck with a few added amenities. The exterior featured slightly more chrome, for example.

On the inside, the floor mat was now the same color as the rest of the interior, but was still not carpeted, except in certain rare cases. For upholstery, buyers could choose between "custom cloth" and "custom vinyl," which you could also buy in the Z84 and YE9 models, but the Z62 models had some unique patterns and colors that you could only buy in those trim levels. There was also no headliner, just as in the base model; the insulation still was minimal; and the door panels featured slightly more trim, including chrome and wood grain.

The next two levels, Z84 and YE9, were both considered to be luxury models, and were close to each other in options. The Z84 had a deluxe molding package, plus a tailgate insert on the Fleetside bed models. An insulated headliner appeared on the interior for the first time, as did cut-pile carpeting. The door panels were now longer in appearance, with the addition of a map pocket at the base, and they also had either brushed-aluminum or wood-grain panel inserts. Finally, General Motors added insulators located at the hood and cab to the fender, which reduced noise. The Z84 option was available from 1973-1981 only, and was likely discontinued because of its similarity to the YE9.

The top-of-the-line trim level, YE9, took the truck to even higher luxury levels. In addition to the Z84 exterior trim, additional items were added to the truck.

In 1980, the V22 chrome grille/ Deluxe front appearance package became standard, although other trim level models could have the package for a price. The interior of the YE9 trucks included the BC2 Deluxe instrument panel, which came in either wood grain or brushed aluminum, and it had full gauges all the way around rather than warning lights on the outer gauge spots. The rest of the interior was the same as that found in the Z84 trim until 1975.

From 1976 forward, carpet trim was added to the lower door panels, as was a grab handle. The kick panels also came in full vinyl.

Those four models were the primary optional trim levels, but other packages were available as well. For example, from 1976 to 1981, the 1/2-ton short-bed trucks in both product lines had a Z77 option, which was referred to as the Chevy Sport or GMC Street Coupe. This kit used the interior trim from the Z62, plus the V22 Deluxe front appearance option and BC2 Deluxe instrument cluster usually found on the YE9. They also included special rally wheels, the N67, which are difficult to find today and highly desirable as a result.

Another option is a bit more rare, depending on your perspective. These were the years of the truck wars, and because Chevrolet and Ford were competing for sales, they often offered year-end promotional packages. For Chevrolet, these were called the Bonanza: GMC called them the Royal Sierra. These trucks were usually set up with the Z62 trim level, but they came with standard carpeting as found on higher models. That promotion ran until 1980, and from 1981 to 1987, you could choose between the Z84 and YE9 interior packages.

Finally, let's talk about the Canadian offering. If you happen to stumble upon a Chevrolet/GMC Wrangler, you've found a truck that was only available in Canada. If you're building it in the United States, you definitely have a collectible, albeit common, vehicle. These trucks have unique paint schemes and exterior decals, both of which were never available in the United States, making them special.

One other interesting note about Squarebodies: From 1981 to 1987, you could walk into a Canadian dealership and order the 350-ci V-8 on a 1/2-ton two-wheel-drive truck. That wasn't possible in the United States.

Special Editions

Chevrolet built several special edition trucks over the years, which are usually difficult to find. They celebrated all sorts of different events and themes and always sold in small runs. Finding information about them is difficult, as it involves digging through magazines from the 1970s. The following are a few examples.

The 1979 GMC Amarillo GT had special badging, custom wheels, and a 454 big-block engine, all in a 1/2-ton truck. It also included the Sierra Classic interior package, but with an additional CB radio.

The GMC Beau James edition had a tonneau cover; custom red, white, and blue "Beau James" stickers on the bed; and the Sierra Classic trim.

The 1979 Chevrolet Big 10 was a 1/2-ton short-bed Chevy with a 454 big-block V-8. This, and the Amarillo GT, were likely produced because of the upcoming emissions regulation changes put in place with the gas shortage of the 1970s.

GMC California Sundancers came in yellow with gray accents and two-tone blue pinstriping. They also had 15X7 Mag Sprinter Western wheels, tube bumpers, a roll bar, and a sunroof.

The 1975 GMC Gentleman Jim was painted in black with a gold strip in the center of the truck and gold accents inside the chrome trim. The dashboard and interior were color matched (a rarity for this time period), and it even came with an eight-track tape player and a CB radio.

The 1977 GMC Indy 500 Special came with custom paint and decals, including a multicolor eagle design that went from the bodyline down-

1975 GMC Indy 500 Special

One of the guys who I refer to in this book is Joe Yezzi, the owner of Squarebody Syndicate. In the course of writing this book, I discovered that he had a new restoration project that just had to be included.

It's a 1975 Indy 500 GMC, which ran in the 1975 Indianapolis 500 (of course), carrying a huge steel bass drum in the bed. Joe found it in the state of Washington, sitting in an overgrown blackberry bush, just rotting away. The owner wanted to get rid of it, and Joe was just the guy to buy it.

The truck, as it sits today, needs a bit of work. There's a ton of rust, particularly in the bed rails and bottoms of the fenders, but, surprisingly, the cab and cab floors are solid.

How to Spot a Fake

Because these trucks have been off the sales floor for more than 20 years, a lot of people have worked on, customized, or modified one of them. That also means that there are a few fakes out there, and it's important that you're able to sort out the good from the bad.

The rarest models are usually the ones that came in the most limited runs and, therefore, are the ones most likely to be faked. The Indy 500 models are one example, but more common are the Big 10 trucks. After all, it's easy to put a 454 in a truck and call it a Big 10, but that doesn't make it so.

Also, the earliest years tend to be faked but for different reasons. In some states, the earlier models are still smog exempt. California, for example, requires smog checks for vehicles made in the 1976 model year or newer, so some owners swap the front ends on their trucks and even go so far as to change the VIN just to appear as if their truck were older. Always make sure to check the VIN in all locations.

When inspecting a truck, check the production date stamped in the side of the frame. If it doesn't match with the year of the truck, say a frame stamped with "76" on a 1984 Silverado, it may be a rebuilt or salvage vehicle. ward and stood out against the silver paint. A total of 500 of these trucks were made. GM trucks were the official truck of the Indianapolis 500 12 times over the course of this body style's run, so there are other variants of this special edition as well.

The 1976 GMC Olympic Edition was available in Canada only. It had a white base coat with a red stripe that went down the upper half of the body and came across the hood. It also had a custom Olympic emblem on the hood and stickers on the windows, and it came in the Z62 trim with chrome bumpers.

The 1976 GMC Spirit of '76 celebrated the U.S. bicentennial. It was a white base coat with red and blue decals and custom badging on the interior. The seats were also done in red, white, and blue upholstery, with matching blue carpet.

VIN Decoding

The easiest way to sort things out is by decoding the VIN and analyzing what the truck does and doesn't have. If you don't know the year of the truck, there are a few tips on sorting things out correctly.

First, count the number of digits in the VIN. If there are 13 total, and the VIN is mounted on a plate in the driver-side doorjamb, the truck is a 1973–1978 model.

If the truck has a VIN on the dashboard, but it's not 17 digits, it's a 1979–1980 model. And if the VIN has 17 digits and is on the dashboard, it's a 1981–1987 model. For example, should you approach a seller and he tells you that the truck is a 1973, but the VIN is clearly on the dashboard, it may be a 1981–1987 with a front clip swap. That's quite common, as the earlier front ends are considered

Decoding a VIN

The 1973–1987 Chevy/GMC truck line uses a conventional 13-digit VIN system. The VIN system changed three times during the course of the Squarebody truck production run.

1973–1978 VIN Designations

First Digit: Division

C Chevrolet

T GMC

Second Digit: Chassis Type

- C Two-wheel-drive
- G Light Duty, Forward Control
- K Four-wheel-drive
- P Forward Control

Third Digit: Engine

- Y V-8, 454 ci, 4-barrel carburetor (P Models)
- S V-8, 454 ci, 4-barrel carburetor (C Models)
- R V-8, 400 ci, 4-barrel carburetor
- L V-8, 350 ci, 4-barrel carburetor
- U V-8, 305 ci, 2-barrel carburetor
- T Inline-6, 292 ci, 1-barrel carburetor
- D Inline-6, 250 ci, 1-barrel carburetor

Fourth Digit: Series

- 1 1/2 Ton
- 2 3/4 Ton
- 3 1 Ton
- 4 Heavy Half/Big 10

Fifth Digit: Body Style

- 2 Forward Control Chassis Only
- 3 Cab-Chassis
- 4 Pickup and Van
- 5 Panel
- 6 Suburban
- 7 Motorhome
- 8 Utility

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Sixth Digit: Model Year

Seventh Digit: Assembly Plant

- A Lakewood
- B Baltimore
- F Flint
- J Janesville
- V GM Truck-Pontiac
- S St. Louis
- U Lordstown
- F Freemont
- 1 Oshawa
- 3 GMAD Detroit
- 4 Scarborough

Remaining Digits

The remaining digits are a sequential serial number, unique to the truck.

1979–1980 VIN Designations

First Digit: Division

C Chevrolet T GMC

Second Digit: Chassis Type

- C Two-wheel-drive
- K Four-wheel-drive

Third Digit: Engine

- D Inline-6, 250 ci
- L V-8, 350 ci
- R V-8, 400 ci
- T Inline-6, 292 ci

Fourth Digit: Series

- 1 1/2 Ton
- 2 3/4 Ton
- 3 1 Ton
- 4 Heavy Half/Big 10

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Fifth Digit: Body Type

- 3 Cab-Chassis
- 4 Pickup

Sixth Digit: Model Year

- 9 1979
- A 1980

Seventh Digit: Assembly Plant

- A GMAD-Lakewood
- B GMAD-Baltimore
- D GMAD-Doraville
- F Chevrolet-Flint
- J GMAD-Janesville
- K GMAD-Leeds
- R GMAD-Arlington
- S GMAD-St. Louis
- V GMT&C-Pontiac
- Z GMAD-Freemont
- 1 GM of Canada-Oshawa
- 3 Chevrolet-Detroit
- 4 GM of Canada-Scarborough
- 7 GMAD-Lordstown

Remaining Digits

The remaining digits are a sequential serial number, unique to the truck.

1981–1987 VIN Designations

First Digit: Nation of Origin

- 1 United States
- 2 Canada

Second and Third Digits: Division

GC Chevrolet

GT GMC

Fourth Digit: GVWR Brake System

- B 3001 to 4000
- C 4001 to 5000 (includes El Camino)

G 8001 to 9000 (includes G Van Bus)

- D 5001 to 6000
- E 6001 to 7000 F 7001 to 8000

H 9001 to 10000

- J 10001 to 14000
- K 14001 to 16000

Fifth Digit: Line and Chassis

- C Conventional Cab, two-wheel-drive (1981–1986)
- K Conventional Cab, four-wheel-drive (1981–1986)
- P Forward Control Chassis, two-wheel-drive
- G Van, Sport Van, cutaway, two-wheel-drive
- R Conventional Cab, two-wheel-drive (1987–1989)
- V Conventional Cab, four-wheel-drive (1987–1989)
- W El Camino, two-wheel-drive

Sixth Digit: Series

- 1 1/2 Ton
- 2 3/4 Ton
- 3 1 Ton
- 4 Heavy Half/Big 10
- 8 El Camino

Seventh Digit: Body Type

- 0 Sedan Pickup
- 1 Hi-Cube/Cutaway Van
- 2 Forward Control
- 3 Four-door Cab
- 4 Two-door Cab
- 5 Van
- 6 Suburban
- 7 Motorhome

- 8 Blazer
- 9 Stake/Platform

Eighth Digit: Engine Designation 1981 Models

D Inline-6, 250 ci
T Inline-6, 292 ci
G V-8, 305 ci, 2-barrel carburetor
F, H V-8, 305 ci, 4-barrel carburetor
L V-8, 350 ci
M V-8, 350 ci, Heavy Duty
Z V-8, 350 ci, Diesel
W V-8, 454 ci

1982–1984 Models

- D Inline-6, 250 ci
 T Inline-6, 292 ci
 H V-8, 305 ci
 L V-8, 350 ci
 M V-8, 350 ci, Heavy Duty
 C V-8, 6.2, Diesel
 J V-8, 6.2, Diesel
- W V-8, 454 ci

1985–1986 Models

- T Inline-6, 292 ci
 N V-6, 262 ci
 H V-8, 305 ci
 L V-8, 350 ci
 M V-8, 350 ci, Heavy Duty
 C V-8, 6.2, Diesel
 J V-8, 6.2, Diesel
- W V-8, 454 ci

1987 Model

- T Inline-6, 292 ci
- Z V-6, 262 ci, Throttle Body Injection
- H V-8, 305 ci, Throttle Body Injection
- K V-8, 350 ci, Throttle Body Injection
- C V-8, 6.2, Diesel
- J V-8, 6.2, Diesel
- W V-8, 454 ci, 4-barrel carburetor
- N V-8, 454 ci, Throttle Body Injection

Ninth Digit: Check Digit

Tenth Digit: Model Year

- B 1981
 C 1982
 D 1983
 E 1984
 F 1985
 G 1986
 H 1987
- J 1988
- K 1989

Eleventh Digit: Assembly Plant

- F Flint
- J Janesville
- S St. Louis
- Z Freemont
- 1 Oshawa

Remaining Digits

The remaining digits are a sequential serial number, unique to the truck.

more desirable, so be aware.

The VIN is located in a few different spots, depending on the year of the truck. There's the aforementioned doorjamb plate for pre–1978 models and the plate on the dashboard for 1979–1987 models.

If the dashboard is intact, you can also find a factory options decal located in the glove box. This should help you determine the trim level of the truck.

Once you know the VIN, the next step is to decode the information according to the various generations and designations.

The easiest way to find out if you have a fake is to start with either the sixth (1973–1980) or tenth (1981–1987) digit in the VIN. This tells you

the year of the truck, and it's something you can compare against what the owner tells you.

In addition, you can check for VIN locations in other spots on the truck to ensure that all of them match. Compare the glove box number with the one on the dashboard, for example, or the one on the frame (underneath the cab on the passenger

side between the mounting holes for the forward bed bolts). There is also a VIN stamped on the engine block and transmission, but if the truck is either missing the drivetrain or it has been swapped, you're out of luck.

The next thing to look for is sheet-metal changes. As previously mentioned, some eras of front clips are preferred to others, and it changes based on taste. It's entirely likely that you find a 1981–1987 truck with 1973–1980 front fenders, hood, and grille because that was the owner's favorite style. But what's also common is the wrong grille on a specific year.

Another general rule is to gently knock on the metal with your knuckles, listening for differences in tone. If body filler was used, the sound tends to sound much less hollow than metal without bodywork. You can also look inside the fenders and under the hood for paint overspray or dents, both of which indicate either replacement or previous bodywork. Pay particular attention to the area around the lower bed sides on the earlier trucks, as they could have been replaced at some point as well.

Let's say that you find a truck online that you like and go to check it out. The owner tells you it's a 1981 The more factory parts and stickers present on the truck, the more valuable it is. This truck had all of the factory stickers in the correct spots. In addition, the original jack and tire iron were still in the fenderwell.

Chevrolet Silverado with the 6.2 diesel. When you look closely, you see that the turn-signal lenses are in the grille, not the bumper, which tells you that it's at least a 1983. Now that your suspicion is raised, you remember that the 6.2 diesel engine wasn't introduced until 1982, so the truck can't be a 1981.

What you do with that information is up to you. If you prefer what the year actually is versus what they're telling you, you can proceed. Just be sure that the title or paperwork for the truck indicates the correct year and model; otherwise, you could be purchasing a stolen truck or one with fouled paperwork.

The Right Truck for You

Here's a very basic two-part question to get you started: Do you like short beds or long beds, and of those, do you prefer a Stepside or Fleetside?

Over 14 years, General Motors produced more than 4.2 million of these trucks (4,206,467 to be exact). Out of those, more than 1 million were 1/2-ton trucks. Thousands of these trucks are out there for you to find. And in contrast to previous generations when short-bed trucks were rare, this body style has so many options that it's relatively easy to find the more desirable models.

If you need to narrow it down further, the next question relates to trim level. The luxury models are difficult to find, although many sellers claim that they're selling a Silverado, because they assume (incorrectly) that it's a general term used with the truck.

If you're looking for power options, nicer materials, and a generally higher-end vehicle, yes, search for those lines. But if not, or if you're okay with essentially creating a clone by upgrading a lesser trim with the higher end stuff, go for it. If the current owner has all the documentation, it's a strong indication that the truck has been well taken care of.

The engine and transmission are major components to consider when purchasing a truck. If your plan is to buy a new crate engine and move forward, feel free to skip this portion. However, some restoration enthusiasts want numbers-matching trucks. They prefer the original engine and transmission package in the original truck, and they restore or rebuild whatever drivetrain is present. If that's the case, you're going to have a harder time finding your preferred vehicle, particularly if you want a big-block 454 or similar in a standard cab.

Why? Trucks are driven a lot. And some of these trucks became work vehicles that saw more than 100,000 miles in their first year. This means that a sizable number no longer have their original engines, which were long ago replaced. Take a good look at how important that is to your build; you might be causing yourself more headache and heartache in the process. If you're a novice, and you're not sure how to do a lot of the work yourself, you should look for a truck in better condition. You may spend less trying to elevate the truck to a restorable condition, but you will spend more money on the initial purchase. Conversely, if you can buy a truck for less money that's in poor condition, you may spend more time and money on it in the long run.

Ownership Documents

You're going to find that a lot of trucks come cheap with the caveat that they're missing the most important part: ownership documents. With older vehicles, there's always the chance that one owner lost the paperwork and sold the truck to someone else with just a bill of sale. Although that's legal in some areas, if another person finds the original title or pink slip, he or she has every right to put the paperwork into his or her name and claim the truck as stolen. And that's another reason that the paperwork is missing: The truck was stolen.

Another scenario you may run into is salvage titles. A salvage title follows the vehicle for the rest of its existence. Because it's a salvage title. the resale value is dramatically lower than a truck without one. That saves you money, sure, but it also costs you on the back end once the truck is repaired. Buyers always wonder exactly how far gone the damage was, and what you had to do to fix it. That's enough for many to just walk away, and you should probably do the same before starting such a project (although you could use it as a parts truck, which I discuss in chapter 2).

Every state has different rules on how the ownership paperwork is handled. Whatever your situation is, make sure you have all of it and that there is no lien or other issue hanging over your head. That paperwork needs to be free and clear, 100 percent, or you risk losing the truck entirely. And if you've already finished the build when one of these issues surfaces, you're in for a world of hurt.

Customized Versus Stock Trucks

Many trucks have been customized to some degree, and they're often for sale. It can be difficult and expensive to bring the truck back to stock condition. You could buy that truck and be happy with it, and that's fine. But will it be perfect for your next restoration project? Probably not. This book focuses squarely on performing a stock or near-stock restoration.

You're better off in the long run avoiding customized trucks. If the truck has been customized, stock body parts and panels often don't fit correctly. You never truly know what's causing the problem. In addition, you never know how far the customization extends into the project until you buy it.

Let's say you find a truck that's lowered, and all the work looks good, so you get it for a steal. Once you strip it down, you notice that the rear frame has a C-shaped hole in the frame above the rear axle

This 1981 Chevrolet Cheyenne was my first step into the world of Squarebodies. It wasn't a good purchase because, even though it didn't appear to be modified, it had quite a bit of work done to it. The engine wasn't stock, I never learned what the keyhole in the fender activated, and the tailgate, well . . .

The tailgate wasn't even a real tailgate. Instead, it was a custom piece. In the end, even though I saved money on the purchase price of the vehicle, I spent a ton more on buying replacement parts.

Buying someone else's abandoned project often isn't worth it because there are too many missing parts that are expensive to replace. This is my old two-wheel-drive

Blazer, which is missing a frame and multiple parts, and it didn't even roll. Because there was so much to find and assemble, plus I didn't do any of the disassembly, I ended up abandoning the project and giving it to a friend who needed a donor truck for parts. Usually, if someone abandoned his or her project, there's a good reason.

to allow the axle to travel farther, thus improving the ride on a lowered truck because the axle isn't hitting the frame. Fixing that C-notch is not easy and, depending on the quality of work, may require you to buy either a new back half or an entire new frame.

Or, let's say the truck has a custom paint job. Once you have the truck down to bare metal to refinish it, you find that most of the bodywork is backed by duct tape and fiberglass. Always assume that there's more customization done to the truck than is readily apparent.

One other thing to note is that unless you've built one before, don't buy someone else's abandoned project that's now in parts. This is a guaranteed way that you never discover where something is supposed to go, how it's supposed to fit, and so on.

Rust Versus No Rust

Rust is one of the single most important factors when assessing a restoration. Extensive rust substantially increases the cost of any restoration. For 40-some states and all of Canada, rust is a real issue for older vehicles, and something to watch out for, particularly in the 1973 and 1974 models. Some of those years had major rust issues in the bed.

Common places to find rust include the cab corners, rockers, fenders, and wheel arches. These are the spots that are prone to leaks when window rubber fails or that take the brunt of the impact when driving on a salty road in the winter.

In general, rust starts where water settles inside the body. This means that the common areas previously mentioned are good places to start, so walk around the truck and get up close with the metal. If there are obvious signs of rot, holes in the body, and so forth, you know there's a potential repair in your future and can plan accordingly.

Another thing that you can do is perform the magnet test. It goes pretty much the way it sounds: You place a magnet on various areas of the truck, including the wheelwells, rockers, cab corners, and so on. If

Here's a great example of the type of rust you find on some trucks. This is in the rocker on a 1973, as well as the lower portion of the door. A little bit of cleanup work has already been done. (Photo Courtesy Lonnie Thompson)

Notice the bubbles around the perimeter of the holes in this door skin? That's how rust can look at first, before it does major damage. If you see this on a panel without holes, there's likely more rust underneath. (Photo Courtesy Lonnie Thompson)

the magnet doesn't stick, which indicates that there's body filler (typically a sizable amount) underneath the paint, that tells you that the truck has been repainted and/or repaired. You should, of course, ask the truck owner's permission before you stick a magnet all over the finish, but if he or she is okay with it, go for it. You might be surprised at what you find.

Less obvious signs of rust are small bubbles in the paint or even tiny pinholes. With bubbles, you're looking for clusters of imperfections in the paint. They may not have broken through the surface yet, but

Many trucks of this era may have had a camper shell on them, and some of those have used a rubber gasket between the shell and the cab. If so, they may have a telltale rust line outside the normal boundaries of the rear window. (Photo Courtesy Lonnie Thompson)

it makes the metal look similar to the surface of the moon. By rapping lightly on a metal panel and surrounding area with your knuckles, you can listen for tone differences. If it starts to sound different from the rest of the body (particularly in a usually rust-free area such as the center of a door), you know that's likely where the rust begins.

If the body part has an area that you can move for more access, open it. The tailgate, for example, may have rust in the lower corners near the hinges. Open the tailgate and take a look, pulling it away from the body if possible. Open the doors and inspect both sides of the door skin, plus the bottom of the door itself. Look behind the rocker panels and the lower areas of the bed. Just because rust is not obvious on the outside, doesn't mean that it's not on the inside.

The bottom of the cab is a bit more difficult. Assuming that the

The cab corner on this truck is obviously damaged and needs to be replaced. But how about the rocker just forward of it? In this case, it seemed fine, but it's always good to look for damage if adjacent panels have issues as well. (Photo Courtesy Jefferson Bryant)

truck is stock height, stick your head underneath and look for areas that are red in color. There may or may not be bubbles in the finish, as some regions used rust proofing on their vehicles right off the dealership lot.

Rust on the cab floor is usually hidden on the inside by carpet, but you should be able to see any obvious patch panels or repairs from previous jobs. If the welds look like peanut butter or the work looks sloppy, prepare your offer accordingly.

The bed is another spot where rust can rear its ugly head. In the early years, Chevrolet had some problems with premature rust, which, depending on your source, was either from poor metal choices or a faulty primer. This rust showed up on the fenders as well, as both the bed sides and the fenders used the same materials. This was mainly a problem in the early years of 1973–1975, but depending on the truck, you may find it in later models. To know if these trucks have the bed sides that were replaced early on, look for the color of the primer on the inside of the bed; gray is the original primer color, and black is for the replacements from the recall. Some also have obvious patch panels.

Now, rust isn't a deal breaker. It's likely that you will find it no matter where your truck has lived during the previous few decades. Finding excessive rust is when you realize that you're going to have to replace more than 50 percent of the sheet metal, and it could be worse than that. The first rule with rust is to always assume there's at least 20 percent more of it than you can see; it might be lurking under paint and bodywork.

That 50-percent number may seem low, as you may enjoy or have experience doing metal repair. To others, that may seem too high because they don't want to do any metal work if they can avoid it. It all comes down to experience. Just know that you need to keep that other 20-percent figure in your head because you always find more rust than you expected.

Engine and Transmission

You can take your truck to an ASE-certified mechanic, have him conduct an inspection, and uncover any problems. He can hook the truck up to a scope and identify any readily apparent problems. At a bare minimum, you should take your Squarebody on a test drive to evaluate the current condition of the engine and drivetrain. Drive it around the block a few times before you hit the freeway.

Does it sound like it's misfiring? Can you smell excessive amounts of

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gas? Does it blow out white, blue, or black smoke? White smoke indicates coolant in the oil. Blue smoke often means that it has worn valve seals and seats. Black smoke is a telltale sign that the fuel injection or carburetor is not correctly calibrated. Each one of these questions helps you determine whether or not the engine is worth keeping or if it needs some work.

The same goes for the transmission. If each automatic shift feels clunky and it sometimes misses a gear, that transmission needs to be inspected thoroughly. If it's a manual and the clutch barely grips and it grinds into every gear, it also needs work.

It's difficult to know if you have a cracked block, but one very basic test is to try to turn the crankshaft. Using a long-handled ratchet and socket, turn the crankshaft bolt (in the centerline of the engine, toward the bottom) to move the pistons. If they move, it's a good sign. If they don't, or if they require a serious amount of force to get moving, there are likely other issues, such as a seized piston, bent pushrod(s), bent crank, and so on. No matter what they are, it's likely that the engine is pretty well damaged, so you might want to consider it a wash. Worst case is that you have to buy a new engine; best case is that it needs a mild rebuild.

Performing a leak-down test and a compression test are two other ways to determine the condition of an engine. A leak-down test is used to test pressure retention on each cylinder. Two- and single-gauge models are available, but for more accurate results, use a two-gauge type.

With the engine warmed up

and turned off, remove the spark plug on the cylinder that you're testing. Turn the engine over to top dead center (TDC), using a ratchet on the crankshaft, and put the air fitting adapter into the spark plug hole. With the gauge at zero, connect the air line from your air compressor to the other end of the tool. Now check the gauge to see how much air is leaking. If the number is between 8 and 12 percent, you're fine; the engine should be great. Test the rest of the cylinders; a variance of up to 5 percent among them is acceptable. If the numbers are between 15 and 20 percent, it's time to figure out where the leak is coming from.

With air pressure in the engine, listen to see if you can determine the source of the leak. If it's coming out around the dipstick tube or valvecover breather, it's leaking past the rings. If it's out of the carb, it's past the intake valves. If it's leaking out of the exhaust valve, you may hear the noise anywhere in the exhaust, including the tailpipe.

If the leakage number is higher than 20 percent and it's past the rings, it's time to move on. The engine needs some work, and although it's drivable, you may experience some horsepower loss. If the leakage number is more than 30 percent at the exhaust valves, pass on the engine. If it's more than 20 percent on the intake valve, you're there as well. Granted, these aren't hard and fast numbers, and the decision is ultimately up to you. But consider your options.

A compression test is similar to a leak-down test, but it uses an older technique. Remove all of the spark plugs and then pop the coil lead off the coil. Connect a compression tester to a spark plug hole. Crank over the engine using the key and starter, and count how many engine revolutions it takes for the gauge to top out at maximum pressure (you may want to have a helper turn the key while you check the gauge). Do this for every cylinder, taking notes along the way, until they're all checked.

You're looking for consistent pressure in each cylinder, and to ensure that the numbers are within 10 percent of one another, give or take. If your gauge reads less than 30 percent, the engine has a compression leak, and you may want to move on (or negotiate the price of the truck lower accordingly).

If you're not good at these types of mechanical projects, consider paying a professional mechanic to give the truck a once-over. Many mechanics can check out a project for you on the side, depending on the price you offer. If you don't know or trust any mechanics (or you don't have the extra cash), maybe one of your experienced friends could do it. Either way, it's always good to have a second opinion, particularly if he or she has more experience than you do.

Take your time when looking over a potential project's drivetrain. What you find could determine whether or not it becomes your next project or the next guy's.

Chassis, Suspension, and Brakes

The chassis, suspension, and brakes are similar to the drivetrain, in that it's handy if you can drive the truck. Cruising at slow speeds, it's easy to listen for squeaky bushings or go over a bump to notice how the steering wheel feels. Giving the truck a series of basic braking tests at various speeds and seeing how the truck handles overall is a huge help to decide whether to buy it.

If you do not have the opportunity to drive the truck, grab a flashlight and get down on the ground to check things out further. When it comes to the suspension, look for worn bushings with obvious cracks. If you can pull on a tire and hear the suspension clunking, you likely have poor bushings or bad ball joints, both of which can be dangerous if not fixed (that said, ball joint replacement is something that most home mechanics can do themselves).

Be sure to consider the suspension of the truck. Up front, upper and lower control arms, tie-rod ends, coil springs, and so on should be straight and free of any wrinkles or major bends. If you see a problem, the truck has likely seen some kind of impact or maybe a *Dukes of Hazard*-style jump. Coil springs that look like limp noodles were likely heated at some point, the result of an inexperienced person's attempts to lower the front end.

As for the leaf springs, look for any obvious cracks, twists, or other damage in the steel. There should be a few individual leafs in the pack; if there's just one, the truck has been lowered. Also, make sure that the axle is located underneath the leaf springs. If there are only two or three leaves in the pack, you have to decide whether or not a new set of leaf springs is worth the purchase.

Brakes are obviously a critical component on a truck, and if they're seized, there's not much to

Inspect the brake fluid when you check out a truck; that could point out more clues, too. This particular truck was very well cared for, but the brake fluid was grimy and full of dirt and rust. It meant that the entire braking system should be gone through, so that new fluid could be flushed through the system. It wasn't life threatening or dangerous, but it was another cost to add to the overall project.

test. You have to break them free before you can determine how well they work, but you could also make the argument that if they're frozen, they need to be replaced entirely.

Look for holes or leaks around the brake lines, cracks in the rubber hoses leading to the calipers, and rust inside the master cylinder. Brake lines are made of rubber and the rubber stretches, fades, and cracks over time. If this is the case, all of the lines may need to be replaced. Remember that your brakes are a safety device, and safety must never be compromised. If it looks abnormal, it likely is, and that's obviously a problem.

The chassis of the truck needs to be solid, unless you plan on purchasing a new one for the project. Look for rust spots and note if any of them penetrate all of the way through the frame. Although fixing a chassis is doable, it can be a big project, and it may be going further than you want to attempt.

The bushings on this project truck worked, and the truck drove fine, but they didn't last for much longer. The cracks visible along the edges of the bushings were pretty substantial, and the bushings needed replacement soon, anyway.

Beater Options

A "beater" is one of those friendly terms for a truck or car that's had a hard service life. These vehicles are often in such poor condition and need such substantial restoration that it's not worth the investment. However, a beater could be used as a parts truck. The thing is, you have to assess the truck as it stands and see what you can realistically fix. A truck that's been lowered may be easy to raise back up to stock height, but was the frame cut to drop it? Does it have drag marks on the frame? Is anything bent or tweaked? A lot of times a cheap truck is one that has a bunch of problems, so be wary.

Yes, you could, in theory, rescue a beater truck. And when you check it out, it may seem that it's not beyond repair, and that you could give it a new home. In the process, however, you will probably spend thousands of dollars trying to get the truck back up to specs. And who knows what other problems you might find.

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Believe me, it's better to save your money and get something nicer to begin with, rather than hoping that a cheap beater will work.

Determining Your Skill Level

The key is to find a truck that fits your needs, budget, and skill level. The argument could be made that this is the hardest step of the process. How do you know what you're capable of before you take on the project?

Let's assume that if you've purchased this book you're not an expert in the field. You may be a skilled bodyman, painter, or welder, but these specific trucks aren't your bread and butter. Many owners have done some kind of mechanical work, so you have the expertise to rebuild the engine, brakes, rear end, and suspension.

You could be the one who installed a new top end on your last small-block engine. If you've done brakes before and know how to tear apart a suspension the right way, or you've made any number of mechanical improvements or repairs to a vehicle before, chances are that you have the mechanical skills necessary to restore a truck.

Think about what you can and can't do. The simplest way to do that is by making a list. Skim through the following chapters and try to figure out what it is that you can do. Jot down the tasks that you feel confident about, then make another column for things that you're iffy about, and a last column for tasks that you have zero confidence in at all.

If the list of things you can't do outweighs the number of things you can or are iffy on, you could be farming out a lot of this work, which is fine as long as you can afford it. Alternatively, you could also spend the time to learn how to perform the procedures. At the end of the day, it comes down to how much time you want to devote to the project, including learning (and fixing mistakes) in the process.

If your "can't do" list is virtually everything, don't let it get you down. First off, there are many automotive restoration projects that pretty much anyone with patience and time can handle. It doesn't take a genius to clean up and install tailgate latches for example, or learn how to do some basic wiring, either. The main thing to remember is that many of the projects are simple mechanical restorations. It went together years ago, and all you have to do is make sure it goes back together the same way. If it helps, think of trucks as big LEGO blocks, just with a lot more components.

My 1981 Cheyenne was a beater, and I knew it. But my theory was that I was going to redo the truck anyway, so why spend the money on something nicer? The interior was a great example

of the problem. It was past the point of restoration, which meant that the only option I had was to replace everything.

My 1981 was equipped with a 305, but my goal was to find a 350-equipped truck that had more performance potential. After owning the truck for a short time, I decided to sell it.