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

The 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.

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

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

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 (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.

The Cheyenne Super was the top-of-the-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.

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.

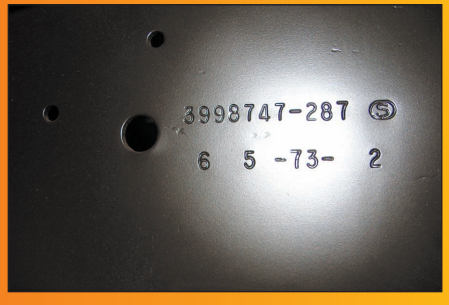
The truck, as it sits today, needs a bit of work. There's a ton of rust, particularly in the bed rails and bottoms of the fenders, but, surprisingly, the cab and cab floors are solid.

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 Square-body 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

Sixth Digit: Model Year
3 1973
4 1974
5 1975
6 1976
7 1977
8 1978

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

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)
D 5001 to 6000
E 6001 to 7000
F 7001 to 8000
G 8001 to 9000 (includes G Van Bus)
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.

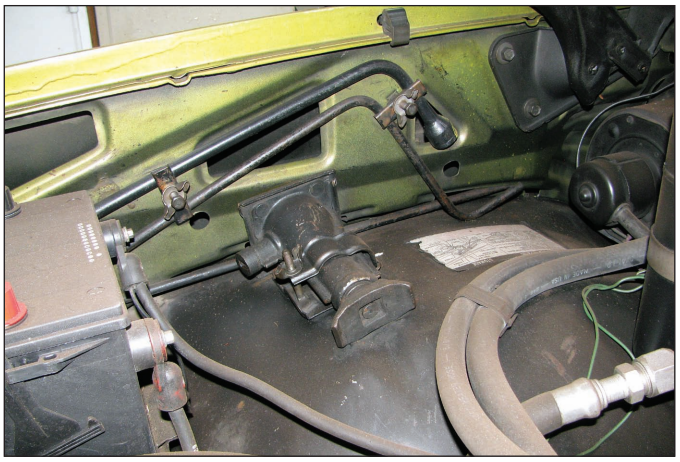
The VIN is located in a few different spots, depending on the year of the truck. There's the aforementioned doorjamb plate for pre–1978 models and the plate on the dashboard for 1979–1987 models.

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



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.

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 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.

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)

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 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)

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)

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 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

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 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.

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.

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.

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.