

Old Cars *Weekly News & Marketplace*

Auto Restoration GUIDE



**ADVICE AND HOW-TO PROJECTS
FOR YOUR COLLECTOR CAR**

Old Cars® Weekly News & Marketplace

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FOREWORD

The old car hobby and do-it-yourself type folks just seem to go together. Behind almost every old car is an owner who is at least somewhat mechanically inclined. They might not be able to swap out an engine themselves, sew in new upholstery or paint their vehicle like a pro, but they usually know one end of a wrench from the other. And most importantly, the majority of old car hobbyists seem to have a sense of patience, self-confidence and can-do optimism that fuels their passion. And let's face it, it's a lot easier and more practical to be involved in the old car hobby if you can actually work on your own car and not rely on your buddy down the road or the local shop every time your car has a little issue that needs to be fixed.

It's for all the folks out there bloodying their own knuckles and solving their own problems that we offer the "Old Cars Weekly Auto Restoration Guide." Inside we offer restoration advice and how-to information from a variety of professional sources, as well as from regular Joes who just happen to know a lot about how to fix and restore vintage cars.

It's inspiring to hear all the stories about car owners and their struggles and triumphs with their antique vehicles. Hopefully, this book supplies a little inspiration in return.

— *From the staff of Old Cars Weekly and Old Cars Report Price Guide*

SECTION ONE

**RESTORATION
TIPS**

RESTORATION UNDERWAY

Make these rules and tips your guide



Most cars follow my “\$20,000 rule,” which is most cars considered No. 3’s by *Old Cars Price Guide* will cost \$20,000 to purchase as reliable, show-going drivers. Those cars priced at less than \$20,000 will require a total investment of about \$20,000 to get them in show-going condition. This 1955 Hudson Hornet, pictured at the Iola Old Car Show, is a good example of the rule.

By Gerald Perschbacher

“OK, so the car isn’t perfect. But with a little bit of work, I can have a great show car and lots of fun!”

This line of thought is often played when a hobbyists stands before a collector car with dreams of ownership and enjoyment. But let’s get the record straight. Only a small percentage of cars will deliver outstanding virtues for a minimum of effort and cost.

There are some rules and tips I have noticed over the years. Here they are.

RULE #1:

About 15 years ago, I employed the “\$5,000 rule.” I haven’t heard of anyone else with this same rule, but it worked for me and could have been applied to many others. If you were in the mood to buy a basic old car back then, it would cost the accumulative amount of \$5,000. That could be realized several ways. If the car was purchased for \$1,000 you could expect to put another \$4,000 into it to bring it up to par. That might mean some engine work, interior work, and new paint with a fair percentage of work also being

done yourself. If the car cost \$3,000, I expected to put \$2,000 into it—probably for brakes, exhaust, carburetor rebuild, boiled gas tank, the general process.

That rule held up well. Of course, there were exceptions. Understandably, an ultra-expensive Classic or super-rare model would be above the \$5,000 figure. The amount was mainly applied to what could be called bread-and-butter cars, the basic transportation of the bygone day. So Fords, Chevrolets, Chryslers, Dodges, Mercurys, even medium-priced Packards and especially Studebakers, Hudsons and Nashes from the 1940s and 1950s were prone to the rule.

Exceptions at the extreme low end were not covered by the \$5,000 rule, either. This would mean a near-basket case car or junked car (with numerous parts missing) could have sold for \$200 but it would have taken the equivalent of \$8,000 or more to make the vehicle presentable and reliable.

Today, you could apply a new version of that rule with the dollar amount around \$20,000, given higher costs for restoration and repairs. With this in mind, if you plan to purchase a 1964 Studebaker Hawk or 1935 Plymouth, you will probably have an accumulated expenditure of \$20,000 before the vehicle is reliable and presentable. If you want a 1957 Corvette or Thunderbird, the amount will be higher. As for a Packard Twelve from 1937, \$20,000 could be a small puddle in a big bucket, since initial purchase price will be high, not counting successive upgrades. Nevertheless, the idea of a \$20,000 rule will hold in many common purchases.

So when you stand in front of a potential new old-car acquisition to your collection, realize that the price tag may state \$7,000 but the overall cost will probably near \$12,000.

RULE #2:

Take a friend when you want to buy a car or are considering a restoration. This is an outstanding rule, and could save you many dollars and much frustration. Frequently, a buyer is dazzled by the car and looks past what may be small problems. A friend who is knowledgeable about the brand and vintage can spot problems that may become giant headaches after the purchase.

For example, a little click in the engine may not be the sign of a major problem, but a friend who knows engines may quickly diagnose the problem as a potential portent of major engine repair running into thousands of dollars. A friend who knows the sly propensity of exterior rust may realize there is a hidden problem of rusted inner panels that could mandate a major body repair. Noting broken or missing trim parts and the need for replating fragile pieces are other observations friends can make while the potential buyer just sees inner dreams of speeding down the road to a car show.

A friend who has walked the restoration road can offer sage advice. That friend may save you money and many moments of hardship. Learn from

others.

RULE #3:

Don't jump at the price. Negotiate, especially if the car is a candidate for restoration. Some years ago, a car collector was telling the tale of his purchase of a 1949 Cadillac Sedanet. The seller had a truly fine, low-mileage car in very presentable condition inside and out. In fact, the interior was nearly perfect and the exterior was sporting most of its original paint in top condition. The car's history was known and documented. But the price, while not extremely high, was more than the buyer wanted to pay.

So he walked around and listed weaknesses on a notepad. Then he assessed the amount of cost needed to fix each of the problems. He took the asking price and then deducted from that point, based on the potential repairs. Soon the car was half-priced, and the seller agreed on the figure. The buyer then proceeded to put well over \$5,000 into the car for many unforeseen little problems such as electrical grounding and paint touch-up. As time progressed, he consoled himself with the initial wise purchase and the rise in value on the model, which offset the costs he had incurred.

On a related note, see if you can negotiate on restoration costs. For example, if a missing part needs to be found, do it yourself. This could reduce the cost-per-hour rate of the shop off of your billing when it involves making phone calls and placing an order which you could have handled. If the shop is willing to negotiate in other areas of work, set the standard before you commit the car to their care.

RULE #4:

There will be maintenance costs and hidden expenses. Be knowledgeable of costs relating to old car ownership. There are the basics: taxes for the purchase, title and plates. Be honest with your tax officials, otherwise it could come back against you. As for license plates, realize your options. Do you want historic plates? Vanity plates? Regular plates? Some states offer protection to vintage car owners by placing cars 25 years old or older into a special tax rate category if they carry historic plates. If not, the tax rate may rise six times. Also, in the case of regular plates, certain states mandate inspections for renewal time, while historic plates may place your car in a "no longer inspected" category. Check with your state to verify ordinances and regulations.

Don't think these are concerns for you, since you want to restore the car first? Think again. Let's say you buy a 1940 Buick. The car isn't running well, so you place an existing set of historic plates on the car just to get it home so the restoration can begin. You hold back to get the new title. Months spin off.



Sometimes, car collectors need to face the facts and determine if a restoration is right for them. If not, purchasing a car that's already been restored or a very nice original car, such as this 1959 Mercury, may be the best option.

When you finally apply for a title, you get levied with a fine because your application came past the deadline, which may be 30 or so days after purchase. Some states cap off the fine at \$250 above your normal cost.

In the new year you receive a tax increase based on the new acquisition. Since historic plates were not legally issued to it, you have no recourse but to pay.

If you are placing a newly acquired vintage car in the restoration shop, go ahead and get its title and historic plates soon after the purchase to avoid the hassle.

Other costs of ownership can include storage, insurance and general upkeep. If the car is running fine right now, be cautious of repairs just down the road. Starters may seize, a generator might lock up, a fuel line could sprout leaks, wheel cylinders might ooze and tires might develop hard-to-find air leaks. Anticipate costs for upkeep and repairs.

RULE #5:

Make wise choices on your restoration experts. Obtain endorsements from friends who have had experience with various shops and experts. If possible, keep the car near to you rather than shipping it half way across a continent. However, if specialists are hundreds of miles from your home, you might need to ship the car anyway to assure premium results that can last a lifetime. Weigh the choice in your mind and realize dealing long distance is a strain on patience and can conjure questions about uncertainty since you cannot see the progress. If distance comes between you and your car, request downloadable pictures to be sent via e-mail on a regular basis (perhaps monthly or quarterly) to feel a part of the progress.

RULE #6:

Set a plan. Budget as needed. If you project being able to afford \$4,000 in restoration costs in a year's time, then budget that as best you can. Do you have the cash in the bank? Good. Don't blow it all at once in case an unknown element enters the restoration process. If the \$4,000 is accumulative, then break it down by paycheck and set that amount aside to meet restoration bills.

RULE #7:

Nearly every restoration will cost more than you anticipate in cash, time and energy. Not all restoration shops are willing to do the work unless payment is being made in advance or at least on a regular schedule. The rust problems noted earlier may mandate a major body panel repair or replacement that could rocket your costs by hundreds, perhaps thousands, of dollars. Have some reserve cash available or the restoration process might be placed on hold by the shop until you "catch up."

Let's say you want your 1948 Pontiac to be ready for a national meet that is 10 months away. You already made arrangements with a restorer, and the time is being well spent — but then your car hits some snags. The upholsterer becomes ill and misses a month of work. You wait, because he is a recognized expert with quality results. A few trim parts that had been sent for plating are returned damaged, one is even lost in the vat. You scramble for replacements while arm wrestling with the plater over cost verses loss.

After rebuild, the engine is expectedly tight and the car tends to overheat. More delays are realized as the rebuild kits for the carburetor and brake cylinders were not right and the correct units are not in stock. Days slip into weeks, and the restoration seems to be stuck in a bog through no one's fault.

If you are rushing a deadline, realize that you may make it but regret the results. Some cars have been rushed to the point of new paint one day then to the show the next day. Craftsmanship should not be rushed for quality results. Sure, your car may take a trophy at the show, but you know parts of the paint job were not as good as you wanted, so the car may go back to the shop and run the risk of not matching the color on the second try.

When it comes to time, set your deadline, but realize it might need changing. Unless your budget is endless and the restoration shop is willing to go the extra mile, you may have to adjust your thinking.



When it comes time to bring your restored car to a swap meet and sell it, bring the restoration records to justify your asking price. Such documentation is particularly important for muscle cars, such as this 1968 Buick GS.

A restoration demands a high level of energy. This comes on two fronts: energy expended by the restorer and energy expended by you. That's right. You may think you have passed the project to the shop, but it will still come back to you when final decisions are to be made. This type of pressure results in energy loss, worry, and second guessing. I once saw a friend who received the bill for restoration work on his old car, then went to the bar to drown his despair, only to lead a car club meeting that evening. He repeated himself three times and constantly mumbled about the high price of restoration. And that was in the 1970s! Imagine what the costs could do to someone today.

Be prepared to have extra energy to also find parts, make phone calls to consult experts, and dig into books and brochures to verify restoration features before the shop moves forward in a given area. For example, if you want your car pinstriped, research the options on color and position before the shop arrives at that point.

RULE #8:

How much is the car worth to you? If your vintage car carries a booked value of \$14,000 then don't expect its value to rise just because you spent \$20,000 on its restoration. I have witnessed people who spent more than \$30,000 on a relatively common and far-from-rare model, even though the car was not valued higher than \$11,000. They justified the cost since the car had belonged to their father, carried special memories of their youth or was the car of their dream. It's your call, ultimately. But if you ever intend to sell

the car, recognize the loss margin and accept it.



When it comes to restoration, patience is truly a virtue. Whether restoring a valuable Classic, such as this Cord L-29 Cabriolet, or a Volkswagen Beetle, moving steadily and not cutting corners will result in a better restoration. This Cord L-29 started out as a basket case project, and although it's missing a few small, hard-to-find details, its owners have not rushed the restoration or used incorrect parts while searching for the finishing touches. Even without these details, this car remains a jaw-dropper welcome at nearly any automotive event.

On the other hand, if your vintage car is only worth fair market value to you, don't let the restoration get out of hand. To do this, you need to monitor every step. Cut costs without making the final results suffer. Don't feel inclined to take every extra step in every aspect of restoration. If you are restoring a car in order to turn a profit, you have two recourses: spend extravagant amounts to realize the very best restoration and set a new standard of value (which could be risky), or concentrate on the most visible and apparent areas of the car. Perhaps a perfect undercarriage is sacrificed for a perfect engine compartment. That's not to say the undercarriage is neglected. It just means that more time is spent on more crucial sections with high visibility.

RULE #9:

Keep records. If you should sell the car, those records will verify the type and cost of work accomplished. This could help set the car's value in the deal.

If you are restoring a vintage passenger car, limousine, truck, hearse, ambulance or taxi and will use it with your business, consult a tax expert on declaring costs. This could involve regular use, such as a limousine service, or occasional promotional use such as parades and special openings with signage about your company.

While the car is being restored, take numerous pictures. Download them digitally or take good old 35mm shots with a high-resolution camera. Take plenty of close-ups, especially of areas that will be hard to reach once the car comes together. These photos will be a cherished resource for you, a great reference for historians and other restorers and a proud visual record of the experience.

RULE #10:

If you want a car that will provide miles of touring with few, if any, breakdowns, consider obtaining a restored car. The initial cost might be higher than you expected, but it may be more affordable in the final analysis. There are no hidden restoration costs. There are no surprises out of the ordinary. True, the car may need some tuning and a little special care, but overall, it may be less costly.

Some good bargains may be obtained by buying an older restoration. The car may no longer be a best-of-show winner but may still be a contender for a first place in class. It may have been dormant for five or so years, so it will need attention on mechanical components and its fuel system. Such cars often are sold “as is” and should not be considered reliable for long drives until thoroughly checked and reconditioned. This can avoid hardship and damage. The nice thing about buying a car already restored is that it often takes only a modest amount of time to bring it back to its former glory and make it roadworthy for tours. You can meet your deadline while avoiding stress.

In summary

If you’ve been in the old car hobby for several years and have undergone some good experiences, you may be able to add to this list. It does not pretend to be all-inclusive. It does, however, give a good basis for the ins and outs of undergoing a restoration.

Having been there, I can say a restoration has many benefits and is a worthy achievement if properly guided and enjoyed. Yes, enjoyed. After all, that’s a big plus for our hobby—the enjoyment of old cars, even under restoration!

SECTION TWO

PAINT AND BODY

BA-DA BOOM, BA-DA DING

Painless Dent Removal for the Novice

Story and Photos by Jeff Lilly Restorations

Parking lots filled with dreaded abandoned shopping carts, playful children, other drivers and even ourselves can be the cause of dents, but few of these groups can undo the damage they can cause. However, by practicing these steps, you can join the list of people who can pound out dents like the pros.

To demonstrate this project, Jeff Lilly Restorations of San Antonio used a 1936 Ford truck cab with three dents of different depths. The steps outlined here are the top three methods used by the professionals and can be used on any vehicle with a steel body.

Example No. 1: Deep Dents



1. Three dents with different depths were found on this 1936 Ford truck cab to demonstrate dent repair. The three top methods of dent repair will be shown using these dents.



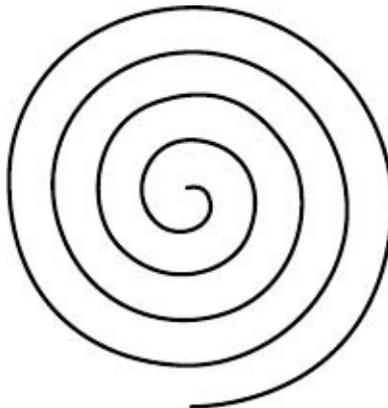
2. The tools of the dent repair trade include these items: hammers, dollies, slap files, angle grinders and metal files.



3. In this example, we'll start with the deepest dent. In general, any dent that is $\frac{1}{8}$ inch in depth or more should be worked out to around 80 percent using a hammer with the correct face and a matched dolly.



4. This hammer has a slight crown or dome, which keeps it from making contact on the outside edge, thus providing a smoother finish. The dolly has the same slight crown.



5. Pounding out a dent in a spiral design is the key to dent removal. More often than not, a dent is not perfectly round, but we will use this for demonstration purposes. Start on the outside of the dent and work the dolly and hammer in a circular motion until you meet in the center, thus gathering up the metal bit by bit.



6. Bob, a south-paw, holds the hammer in his left hand and the dolly in his right (a right-handed person would place them in opposite hands).

Bob holds the dolly so the center makes most of the contact. If you do not have the vehicle apart, you cannot gain access to the back side. This is important, but in the final steps, we will show you another technique that will allow you to remove smaller dents without access to the rear of the dent.



7. Get comfortable so you can get a nice swing and make even contact with the panel. How you hold the dolly is important. Pounding just $\frac{1}{8}$ to $\frac{1}{4}$ inch inside the dent, away from where the hammer strikes on the outside of the dent, is best. This will allow easy dent removal without having to strike the panel so hard.



8. Bob works his magic and the dent is disappearing. After he removes about 80 percent of the dent, he moves on to slap filing for final removal. In the next step, we will show you how to use this slap file method, which is how this dent is finished.

Example No. 2: Mid-Depth Dents



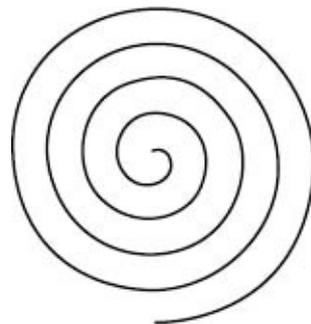
9. This second dent is $\frac{1}{8}$ -inch deep, and we chose it to demonstrate its removal using a slap file and dolly without a hammer.



10. This dolly is smaller and has an hourglass configuration, which allows its user to hold it with their fingers and get closer to the panel. We will remove this entire dent using this technique. As noted in Step 8, this second technique is how we will finish out the first dent to completion, but to avoid duplication of steps, we will use this second dent to show this different technique.



11. This close-up view shows the serrated teeth of a slap file. This method of dent repair is actually reverse of the hammer-and-dolly method. You still use the spiral technique, but instead of pounding out the dent the opposite way it was put in, you actually slap the panel the same way the dent was put into the panel. The dolly is placed on the back side and with a small amount of force (about 2 pounds), place it on the outer edge of the dent. When using the slap file, it needs to be directly placed on the same spot where the dolly is placed on the opposite side. In other words, they should “meet.” The teeth on the file allows the metal being pushed from the dolly to work itself into the teeth, allowing the dent to come back to the surface.



12. The same spiral method is used again.