Weight Watchers

Slimming A '51 Chevy By Sectioning

By **Dakota Wentz**

When Neil Emory and Clayton Jensen opened the doors of Valley Custom they concentrated on keeping things subtle, simple, and most importantly, classy. Yet as things progressed, the legacy of Valley Custom took an ironic turn. Sure, classy was always at the forefront, but most remember Emory and Jensen for perfecting the art of what is the most complicated and drastic custom measure one can take: sectioning. Their sectioning legacy began with a '40 Ford convertible and reached its height with the iconic '50 Oldsmobile Holiday 88, known as the "Polynesian". In 1953 the Polynesian hit the pages of *Hot Rod* and *R&C* in a series of stories documenting the section. Long story short, those pages and Valley Custom brought the art of sectioning to the custom world and it has since stayed.

If there's one thing about customizing, it's that no one car is alike. Although many may look similar in appearance or traits, there's always something a bit off; and naturally so, as each customizer has their own preference and ideas—not to mention, there's a thousand different ways to tackle custom concepts and each will give distinctive results. Take sectioning for instance. The general theory in the beginning was to find the flattest point of the panels to be cut. From there, create an equator along that panel and then split the difference in the section from north and south; being 2 inches north of the equator and 2 inches south of the equator will ultimately yield a 4-inch section. In theory, that concept allows one to remove as much curve from both areas of the panel, which makes mating the halves back together as easy as it can be. Yet, as time went on, each person has a different approach and idea; and the varying styles will tweak the body portions depending upon where material is removed. What it all boils down to is, although the car may be sectioned 4 inches, the different styles of 4-inch sections will have their own distinctive look, bringing us full circle where, although cars

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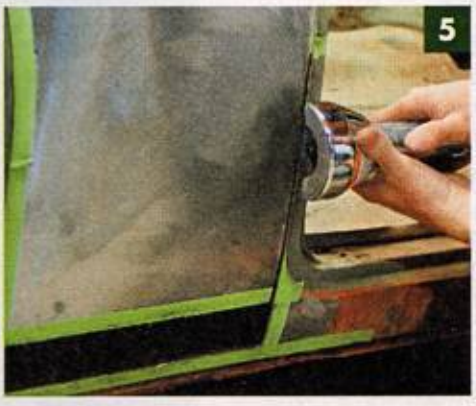
Here's the layout of the section on a side view. The area between the green tape on the body, doors, and fenders will be removed. The tape following the contour of the quarter-panel is where the rest of body gets sliced.

The rear will be sliced along the outside edge of the green tape running along the quarter-panels. The real estate below the trunk (between the tape) will be removed as well.

Before I got started I braced the car with some support beams. The vertical supports will act as linear lifts. The bottom bracing is 1-inch conduit with nuts welded to it—the bolts will act as setscrews, while the upper portion is 3/4-inch conduit. The upper brace will slide down into the lower allowing me to adjust and set the new body height easily.

The trunk also received some bracing, seeing as the integrity of the body will be cut out of it.



My first cut was to remove the 2 inches between the green tape. I then followed up along the door's edge of the C-pillar up to my cut line on the doorjamb.

From there the doorjamb was cut 2 inches. I went up the doorjamb to stay out of the bottom curve of the doorjamb, and keep things on a flat and even keel. At this time I also had to cut the inner structure of the 'jambs, and I made a few cuts in the inner sheetmetal structure. (On a side note, the internal structure along the body will need to be cut to allow the body to drop. We just sliced the structure and allowed it to overlap itself as it dropped to keep things simple.)

In the end, this is how things shaped up. The only thing holding the body up is the "state-of-the-art" linear actuators. Once I loosen the bolts, the body will drop down in place and fit like a glove.

No metal actually gets removed from the sides of the body. Instead, I'll cut along the outside edge of the tape, and the body will fall down below the fenders.

may be similar, no one custom is exactly the same! (And isn't that how it should be? We think so!)

Here at Star Kustom Shop we have our own ideas and methods as well. Our latest project is a '51 Chevy hardtop-turned-roadster. The owner of the car is after a section that doesn't just downsize the car and keep factory proportions. Instead, he's after something that will downplay the bulkiness of the body while accentuating other features. What we came up with is a section that will do just that.

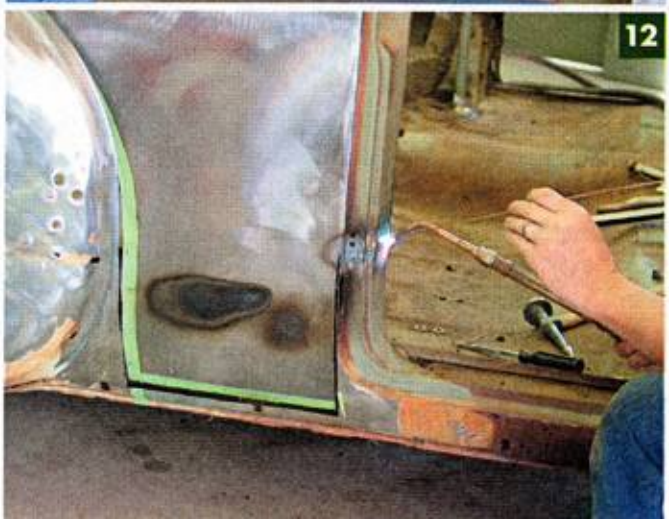
Star Kustom also wants to keep the eye guessing, "Is that sectioned?", so we're starting with a mild 2-inch slice. However, the theory of finding the flattest panel is out. Instead, we're going to take our 2 inches from the bottom of the car. In doing so, we will focus on removing 2 inches from the bottom of the fender, door, and body just behind the C-pillar. This approach will shrink the body down to a smaller, sleeker size, yet retain all of the beltlines and curves at stock proportions.

As for the rest of the body, Star Kustom will drop it down into the body. If that sounds like a double-negative, let's explain. The quarter-panels will stay the same, but they will be sliced about an inch away from the trunk opening all the way down the front to the C-pillar. Essentially, we're going to separate the quarter-panel from the body, which will allow the body to drop down in place. Making sure the body doesn't fall more than 2 inches, the panel just below the trunk will receive a 2-inch section. The rest of the section will focus around removing 2 inches from the bottom of the doors. The bottom of the skin will be set free and 2 inches will get removed from the internal structure. At that point the excess skin hanging below will be trimmed and welded back to the structure. The front fenders will also get whacked 2 inches, again from the bottom. Lastly, the core support and cowl will get 2

9 The 2 inches between the tape just below the trunk must be removed, but I'll stop cutting once I get about an inch past the body seam.

10 At this point the bulk of the car is sectioned and down in place, and you can visually see how it's 2 inches smaller. However, the rear fenders and beltlines of the car all stay intact, which leaves the car looking stock—to the untrained eye that is!

11 The body needs a set point to work around, and the easiest point is the doorjamb; therefore they'll get welded back up first. Yet, before any welding takes place, I took some measurements to make sure things were squared up.



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inches removed from the middle. By removing from the middle of the cowl, neither door hinge has to be relocated.

Why are we sectioning the Chevy like this? Several key reasons: by keeping the quarter-panels at the same height, and removing 2 inches from the body, the beltline beginning at the hood will flow flawlessly into the valley between the trunk and fender. In the end, the beltline will begin from nothing at the rear and flow uninterrupted into the nose of the hood. Also, with the trunk down into the fender, it will remove some of the "hump-back" look to the rear end. Yet, the biggest reason is we want to exaggerate the rear look of the fenders and trunk without taking things to comical proportions. By keeping the fender up high, and re-working the trunk valleys, we can achieve a more streamlined boat-tail look (for a visual think something in the vein of a '53-59 Corvette rear end).

Like I said earlier, there's more than one way to skin a cat. This treatment will give us a section that suits our desires. Another bonus is the fact we will stay away from welding body panels right dead in the middle! Enough verbiage for now, let's get to work. Because of the massive amount of work, and wanting to point out key details, this section will be broken down into two installments. In this installment, the body and cowl will be conquered, while the doors, fenders, and core support will follow next month. RaC

Source

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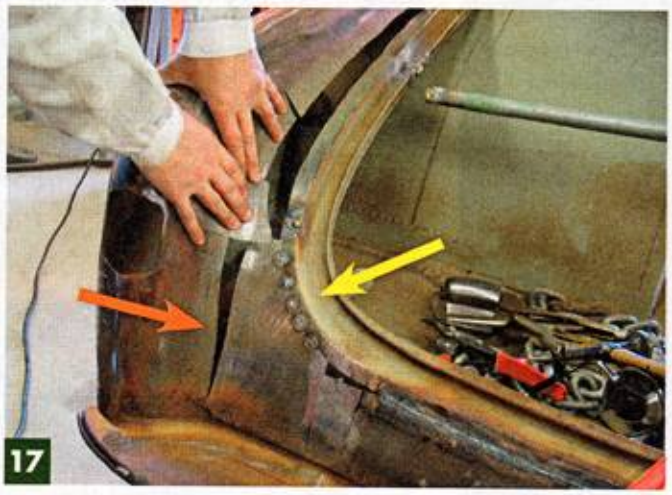
13 Next, the back of the body is leaned in to align with the trunk and the two body panels are tacked together.

14 With the body set in its final resting place, the fenders are then welded back on. I began at the bottom front of the fenders and then worked my way back. This kept things from buckling.

15 I tacked the driver side quarter to my liking. At that point I welded the passenger side quarter to match the measurements of the driver side. Here I'm taking several measurements off the driver side, which will be transferred to the opposite side.

16 Here's where things get tricky. Because I dropped the body down into, well, the body, there's going to be a gap between the trunk and fenders; therefore I'm going to have to make a new valley between the two.



Before the valley is created, I first laid the corner of the trunk into position *(yellow arrow)* by making a vertical cut down the quarter *(orange arrow)*. At this point I could begin to visually see what needed to be done.

Like an '80s movie montage, the valley is now created! As you can see though, I made the valley in several pieces to flow with the swooping lines.

When it comes to cutting the cowl, I didn't want to bother relocating a hinge, therefore I found the flattest spot from jamb-to-jamb, which was about 2 inches below the upper hinge. The cowl was then marked all around, and again the 2 inches between the tape will be removed.

I made my first cut along the top of the cowl and removed it. Then the remainder of the cowl was cut. However, before I made any cuts, I measured my doorjamb distances vertically, horizontally, and diagonally.

With the bottom of the cowl cut, I placed the upper half back on and began tallying my measurements. Once things were squared, the cowl was tacked back together.

Here's where we're at so far. Next month we'll finish slicing and fitting the doors and the front clip.