

29-31-32 Roadster Cockpit Measurements

Here's a set of cockpit measurements for 28-29, 30-31 and 32 roadsters.
Henceforth called, 29, 31 and 32 just to make life easy in the typing dept.

It took a few days to get the measurements because a 29 wasn't readily available, but yesterday my pal was home and I measured his.

A couple of things will impinge on these measurements.
One, we all read the tape a little different, but not too different.
The other, the 29 is a Gennie, the 31 is a Brookville and the 32 is a Wescott.

The Wescott 32 is recognized as being very accurate and in my case, the body dropped right over a stock specification re-pro **Deuce** Factory frame and the two front and two rear holes in the body lined up perfectly with the threaded bolt holes in the frame.
(You have to drill the center body holes yourself.)

The Brookville roadsters are right on the money from what I read and hear.
They bolt right up to stock A frames and other factory A pieces with no problems.

The 29 may have some differing measurements vis a vis cockpit width at the rear of the doors.

This is because whoever owned the car in the past leaned against the drivers side quarter panel when driving and over time the quarter panel sagged out away from the body a bit.

Easily rectified with a little cranking on a small come-along and the addition of some square tube bracing.

The car was a running, stock Model A roadster when it fell into my pal's hands.
It didn't take long to get the A running gear out from under and a TCI frame with SBC power installed.

You've probably seen me comment that my 32 is a tad short on legroom, but it's not bad.

Sweetie and I spend the day in it now and then with no problems.

We take breaks every hour or two depending on what we're doing and where we're going.

The 31 is a long term project and right now it's a roller with seating, pedals and steering installed.

It looks like it's going to be a more than comfortable car when you consider the good ergonomics of the mid-90's ChryCo Soccer Mom mini-van two passenger - true middle - seat.

As an aside, this particular seat can be ID'd by looking for armrests on both sides of the seat.

A while back I got another one at a garage sale, reputed to be from a later year ChryCo mini-van and it only had an armrest on the right side.

It's ok in the comfort dept., but not as cushy as the older version.

This particular seat could be useful to someone trying to get as low in the cockpit as possible since the seat bottom including frame is a bit thinner than the mid-90's seat I have in the 31.

Along with that, this seat has a simpler base that would be easier to adapt to the 30's era - and probably earlier - thin fender cars.

N/A (Not Available).

The measurements:

Length

From back surface of the eyebrow - which is the raised piece at the back of the cowl under the windshield - to the center of the top edge of the rear cockpit rail:

29 = N/A

31 = 40 1/2"

32 = 42"

Width

Across the cockpit at the front door gap:

29 = 42 3/4"

31 = 42 3/8"

32 = 41 1/2"

Across the cockpit at the rear door gap:

29 = 49"

31 = 49 3/8"

31 = 48"

Between the tabs that the middle arm of the top irons pivot on (just behind the rear door gap):

29 = 49"

31 = 51 1/2"

32 = 49 5/8"

Width

Taken at floor level.

This **measurement** has a small bit of estimation factored in due to the tape measure being held at trans tunnel height, but it should be pretty close:

At the front door gap:

29 = 36"

31 = 37"

32 = 37"

At the rear door gap:

N/A due to all three cars have the seat installed.

Depth

Straight down, just to the right of the steering column and equal from the top of the eyebrow to the bare floor:

29 = 28 3/4"

31 = 28 1/2"

32 = 30 1/4"

(The 32 is has carpet, jute backing and a wood floor so this **measurement** is a bit of an estimate, but it should be close.) - (A height **measurement** taken in the center won't work here due to the differing height of the trans tunnels.)

Straight down from the lower edge of the rear cockpit rail to the floor:

29 = N/A

31 = 26 1/2" (27 1/2" to the top of the cockpit rail from the floor.)

32 = N/A

These figures are N/A due to the seats are installed and you can't get behind them without dis-assembly.

Vertical height of the door at the front door gap. **Measurement** taken to the sill plate - or call it the body's frame support for the body and not the chassis proper:

29 = 22"

31 = 24"

32 = 26 3/8"

Vertical height of the door opening at the rear gap, again, taken to the sill plate:

29 = 22 1/2"

31 = 24"

32 = 25 1/2"

A small bit of the disparity between front and rear measurements on the cars is due to the very front top of the doors sweeps up a bit or a bit more depending on the which car we're looking at.

The rear gap **measurement** was taken at the opening due to the sill plate - and floor - are not accessible with the door closed and the seat installed.

Length of the door top, **measurement** taken at the top of the belt line:

29 = 22 3/8"

31 = 24 1/8"

32 = 26 3/8"

Diagonal **measurement** taken from extreme left of toeboard/floor juncture going up the to middle of rear cockpit rail:

29 = 56"

31 = 58 3/4"

32 = 60 1/2"

Keep in mind that the cars the measurements were taken from all run 14 1/2" steering wheels.

The 31 & 32 have Grant wheels, the 29 has an aftermarket wheel that's retained by eight machine screws to the adapter.

Steering column length from toeboard to bottom front edge of the steering wheel:

29 = 28 1/4"

31 = 27 3/8"

32 = 28"

Both the 31 and 32 have home-built aluminum ball bearing steering columns and the 29 runs a GM tilt column of unknown vintage and origin.

The 29 column is tilted up one notch due to the column proper is installed at a little steeper angle than the 31 and 32 non-tilt columns.

Since the 29 column was set where it's driven I left it as is and took the measurements.

Distance from the back edge of the eyebrow to the front top of the steering wheel:

29 = 4 3/4"

31 = 4 1/2"

32 = 4 3/4"

Distance from bottom edge of steering wheel to floor:

29 = 18 1/2"

31 = 15 1/2"

32 = 18 3/4"

Steering column

Taken from the front edge of the door top to the center of the column. Keep in mind all three of these roadsters are modified from stock as desired by the owner, so this **measurement** won't be a whole lot of use to a stock steering column Model A roadster owner.

29 = N/A - lost this figure somewhere along the line, but it appears close to the 31& 32.

31 = 9 1/4"

32 = 9"

Center of seat back to top surface of brake pedal.

Realize that brake pedal height as well as angle and seat back cushion thickness will create a disparity in these figures:

29 = N/A

31 = 39"

32 = 39"

Center of seat back to top surface of throttle pedal - spoon type in the 32, similar aluminum round piece in the 31.

Throttle pedal travel is about the same in both cars:

29 = N/A

31 = 42"

32 = 41"

Center of seat back to toe board about 2" above the 45 degree juncture between toeboard and floor:

29 = N/A

31 = 45 1/2"

32 = 46"

The figures to the seat back center could be off a small amount as the seat back centers are in different places on the 31 and 32, but that was taken into account.

Even so, the same point on each car's seat back was used to take the three figures from both the 31 & 32.

A small bonus **measurement**:

Hoodtop centerline, **measurement** taken on the hood proper and not the opening:

29 = 27 3/4"

31 = 32 3/8" - note that this is not a stock **measurement** due to the 31 sits on a 32 frame and has a Rootlieb custom length hoodtop. (Stock hood center line length on 31's is 31 5/8".)

32 = 32"

All in all, an interesting little project.

I was a little surprised to see how close the cars came in most areas.

Especially so when comparing my pal's 29 to my 31 & 32.

I'm 6' tall with a 32" inseam and weigh 195#.

He's 5'11" with a shorter inseam and about 40# heavier than I.

Even so, his 29 is comfortable for me to drive.

One of the reasons could be that his seat is tipped rearward a little more than is the seat in my 31.

My 32's seat back cushion is a little too vertical, but it works since it has good lumbar support and a raised area under the backs of the legs toward the knees.

The 32's seats are 3/4" birch veneer plywood - chosen due to higher quality and lack of voids as compared to regular plywood.

Price differences between the two types aren't a whole lot nowadays, all of which makes the birch veneer plywood price a little easier to take.

My pal complains about the lack of under knee support in my 32, but it works well for me.

My car, my choice.

His car his choice.

And Sweetie thinks the 32's seat is just right so maybe that's all that counts.

In any event, the drivers got it made in either of these little cars.

As a small aside, I have a 6'7" friend who put in about an hour driving my 32 roadster. He did ok, but when we stuck him in the seat I was wondering how it was gonna work out.

Part of it, perhaps he was used to making do when it came to fitting into small cars, but he commented that it wasn't bad.

I noted that he had no problems operating the throttle or brake pedals as well as there was plenty of room for his legs under the steering wheel.

Even so, he'd be a lot happier in the 31 if I ran the seat all the way to back - which would gain 2".

That would be about as close to the rear cockpit rail as you'd want to go since you'd be lying against it when accelerating.

A thinner back cushion than the ChryCo mini-van cushion could help and you may be able to gain up to 4" more backspace.

I hope these measurements help some who are in the building stage or even in the making a choice of cars stage.

The roadsters aren't too difficult to set up for a big guy as long as you start thinking about it early on.

Coupes are just about as easy and - as we know - the sedan guys got it made.

Even when sedan seats are back a ways, the rear passengers still have a lot of leg room.

One place where I see a lot of conflict in these cars is, guys set the engine in - which is understandable because the engine pretty much has to go where it fits the best although you can gain some room on the drivers side by setting the engine over to the right a ways - in US cars.

Where a lot of guys run into problems is installing the exhaust manifold or header and then try to fit the steering around it.

Far better imo to install the steering where ergonomics dictate and then build the header around it.

And if you're using exhaust manifolds, most engines have other manifolds available which can get you to where you want to go.

In any event, don't let the engine or exhaust dictate where the steering, brake pedals et al have to go.

It will to an extent, but the main thing is to build the car with good ergonomics and build it to fit you.

If it's not reasonably comfortable and fun to drive, why bother?

Keep in mind these are my measurements with my tapes and someone else may come up with slightly different figures.

I did take a lot of care when measuring and if nothing else this list will give you a basis of comparison.

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This pic shows the legroom in my 31 roadster with 4" **firewall** recess.  
I'm 6' tall and have a 31" inseam fwiw.