

Baddest On The Salt: Thompson LSR Looks For 500mph

“There’s not a record for baddest motherf&er on the salt, but that’s what I’m going for.”

That’s how Danny Thompson, son of the legendary Mickey Thompson, puts it when I ask him which record he’s chasing when he arrives at Bonneville in just over a week.



By baddest motherf&er of course, he means he wants the record for fastest piston-engined car, which would basically make him the fastest guy on the salt too, since thrust engines aren’t allowed to compete at SCTA events.



The fact of the matter is, there are only 11 other guys who have been 400mph-plus using a piston engine, and Danny's dad was the first American, and second in the world, to do so. In 1960 Mickey Thompson did it in a car dubbed Challenger I, but it was only a one-way pass, and thus not good enough for a record in the books. Four supercharged Pontiac engines rocketed the four-wheel drive streamliner to a speed of 406.600mph. The encore has been a long time coming.

Today Danny's weapon of choice is Challenger II, a car his dad originally built in 1968. Unfortunately a series of bad weather followed by Ford's withdrawal from the racing program foiled Mickey's plans to set records.



Fast forward to 1988 and Mickey asked Danny to team up and give it another shot. This time Mickey would run the business end of things but pass the torch to Danny for driving duties. Their plan was cut tragically short when Mickey and his wife Trudy were murdered in front of their home just a few weeks later. Understandably, Danny shelved the project.



Danny has lived out his life in Colorado, doing the only thing he knows – metal fabrication. Of course the racing and car scene isn't nearly what it is in California, so he has plied his craft in the architectural world, resulting in repeated *Architectural Digest* appearances. Deep down in his belly though, he knew his family had unfinished business. Danny knew he needed to get Challenger II back on the salt and snag that 400mph record for the Thompsons.



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The thing is, it would have been nearly impossible to update the Challenger II to modern standards in Colorado, because the racing infrastructure just isn't there. To find the talent he needed, Danny moved to Huntington Beach, California and rented out this long and narrow workspace – perfect for a streamliner.



The shop was actually occupied by another landspeed racer previously, so a lot of the fab equipment – plus this hibernating Crosley comp coupe – came with the lease.



Long story short, Danny Thompson is going for broke. Racing Challenger II and setting a record for fastest piston-engine car is now his life's ambition, and he is going to do it at all costs, literally. He's already cashed out his retirement and sold several of the historic race cars from his dad's remarkable career.



In addition to the hard costs of parts and consumables, Danny also has to employ an engineer and fabricator to get it done. He has a good crew of volunteers who want to help make history, but that's tricky business too: he has to vet anyone who touches the car because his life is literally in their hands. Even with these hurdles, Danny has managed to pull together a world-class race program that will hold its own against the fastest guys on the salt.

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You Speedhunters devotees know this already: the website has a very wide reach. As our resident hot rod guy though, I've found that most of these guys have never heard of Speedhunters.com, so I'm left trying to explain how much our audience is going to love seeing their car or shop. Danny already has *Hot Rod* magazine and CNN knocking on his door, so why would he bother with an article on a site he's never heard of? The reality is that he's grateful for any ink he can get, but you're about to see that I had another reason to contact Danny anyways and it made bringing this story to you that much easier.



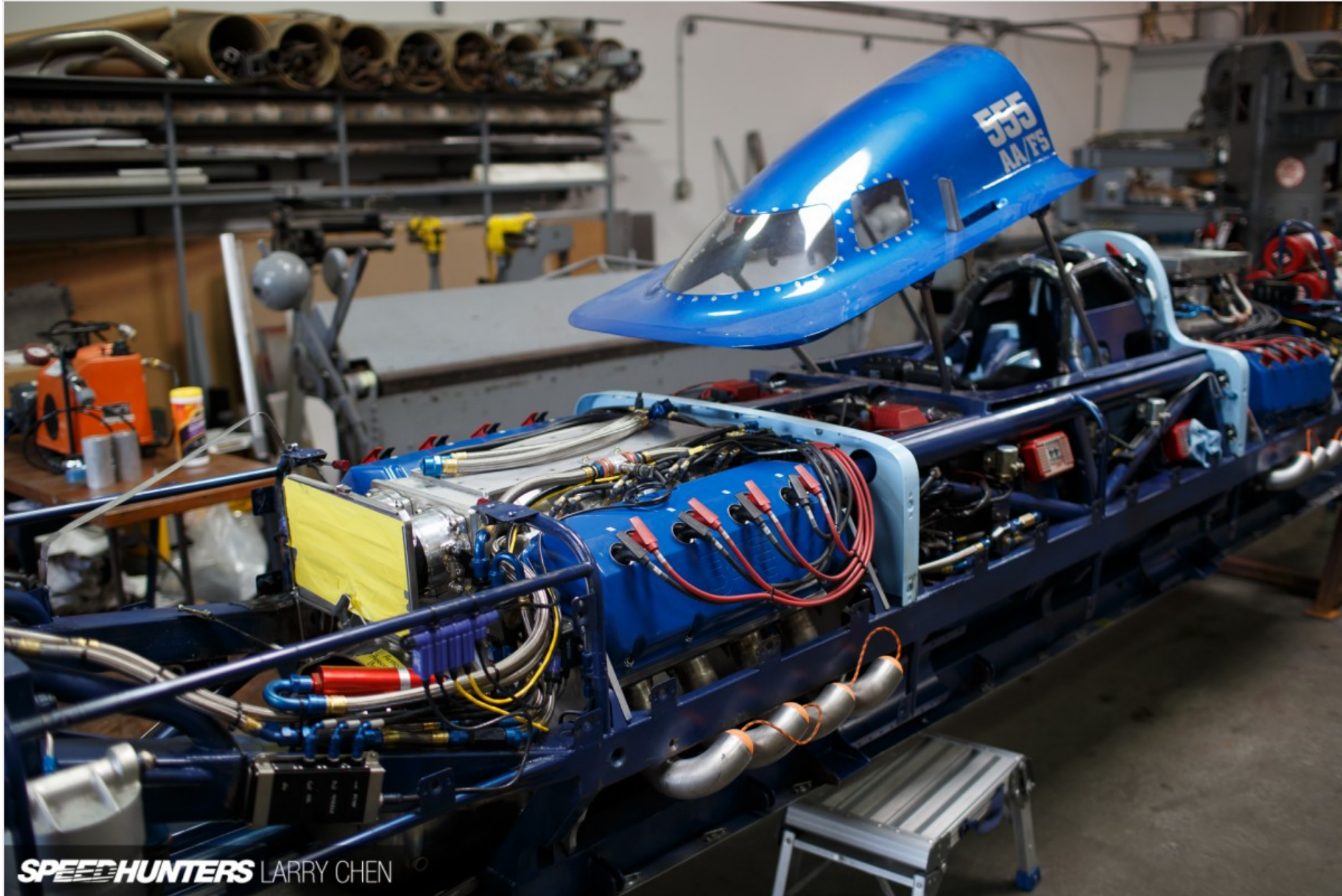
Last year before Larry and I left for Bonneville, my boss at Airaid mentioned that we would be sponsoring Danny's Challenger II project, just because he wanted to stand behind Danny's mission. Smash-cut to last month, and I was tasked with designing some foam air scoop plugs for the car as part of the sponsorship.



Why? Because we're an air filter company and we sponsored the project, but Challenger II doesn't run filters since it needs to make every last bit of power – even at the cost of inhaling dirt and salt into the engines. Next thing I knew I was standing in Danny's Huntington Beach shop shaping the Airaid-inscribed foam plugs, which will be used to block off the intakes when the car is in transit or in the pits. They might not have *anything* to do with making the car go faster, but I'm honored to even get to touch the car at all.



With a stroke of luck, Larry happened to be available to shoot the shop the same day I would be in town, and it's always easier to be there during the shoot when writing a story like this. What I found was that Danny is one of the most humble and friendly guys you could hope to meet. He welcomed us into his shop, even in the final week before he would be heading to Bonneville Speed Week to make history.



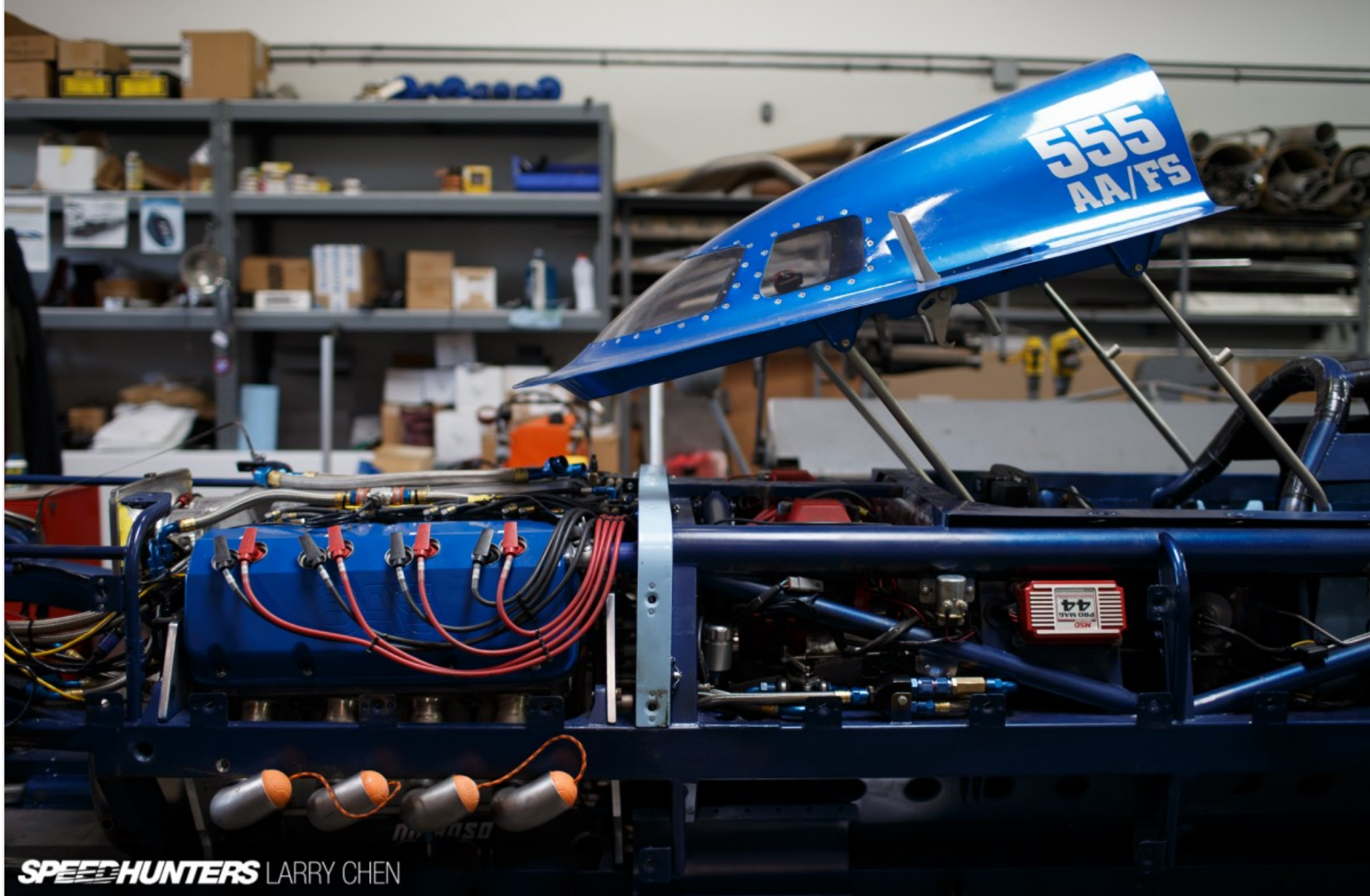
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The scoop shown above feeds the first engine, the one in the front. It's a 2000hp, 500ci Brad Anderson HEMI, and there's a matching one in the back. They're both started on alcohol, then switched to nitro once warmed up: That's when they really start to sound nasty. Let's just say ear protection and a gas mask are required equipment when the switch to nitro occurs.



The custom-built, air-bagged trailer for Challenger II houses an alcohol tank and the red booms will swing out over the streamliner to gravity-feed alcohol via quick disconnect hoses when it's time to fire the engines. If you're interested you can watch the sequence in the video below. It's fascinating and well worth a few minutes to see the beast come alive.

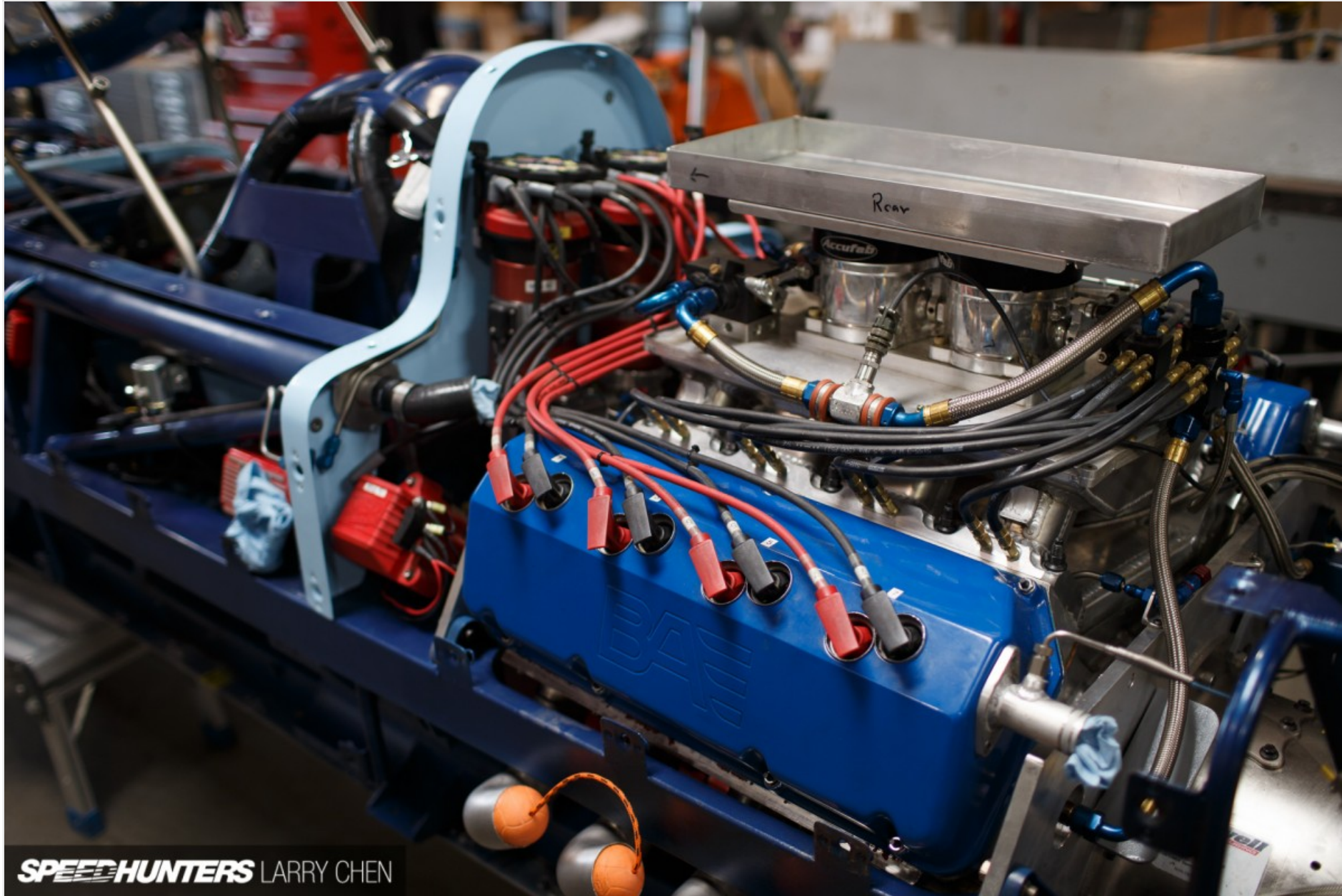
One thing to note at this point is the complete lack of secrecy in Danny's race program. Larry and I were a bit surprised by this, but I suppose when you're operating at this level of motorsport the secrets don't matter so much. There are very few people who can even compete on this level and believe me, they know what they're doing too.



When Mickey Thompson built the Challenger II in '68 he installed two Ford SOHC motors, each having a direct drive to the ground. Forty six years later Danny saw a safer, more modern approach, so he linked the new engines via driveshafts and cogged blower belts that give just enough leeway for things to be slightly out of sync.



As an added benefit, the belts act as fuses and allow the front or rear axle to freewheel should an engine shut down or seize. Although they weren't installed when we shot these photos, you can see some of the parts here.



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Due to packaging restraints, the rear throttle bodies face upward and are fed by scoops in the side of the aluminum body, versus the forward-facing scoop we saw in the nose for the front engine.



You can see the silver scoops in the rear panel here, stacked with the rest of the '68 body panels.



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All that power makes it to the salt through these massive quick-change differentials, which were custom made out of magnesium during the initial build. The original steering was what Danny calls a 'stagecoach' setup and has since been outlawed. Danny had to completely repackage the uprights and steering to update it to modern safety standards.



Also among the required changes was to update the rollcage to meet current regulations. Danny says this was a real, ahem, pain in the ass. Not only did the new hoop need to fit within the original cockpit's sheetmetal, but Danny also had to fit inside with all his gear on, then be able to perform a timed bail-out in front of SCTA tech personnel.



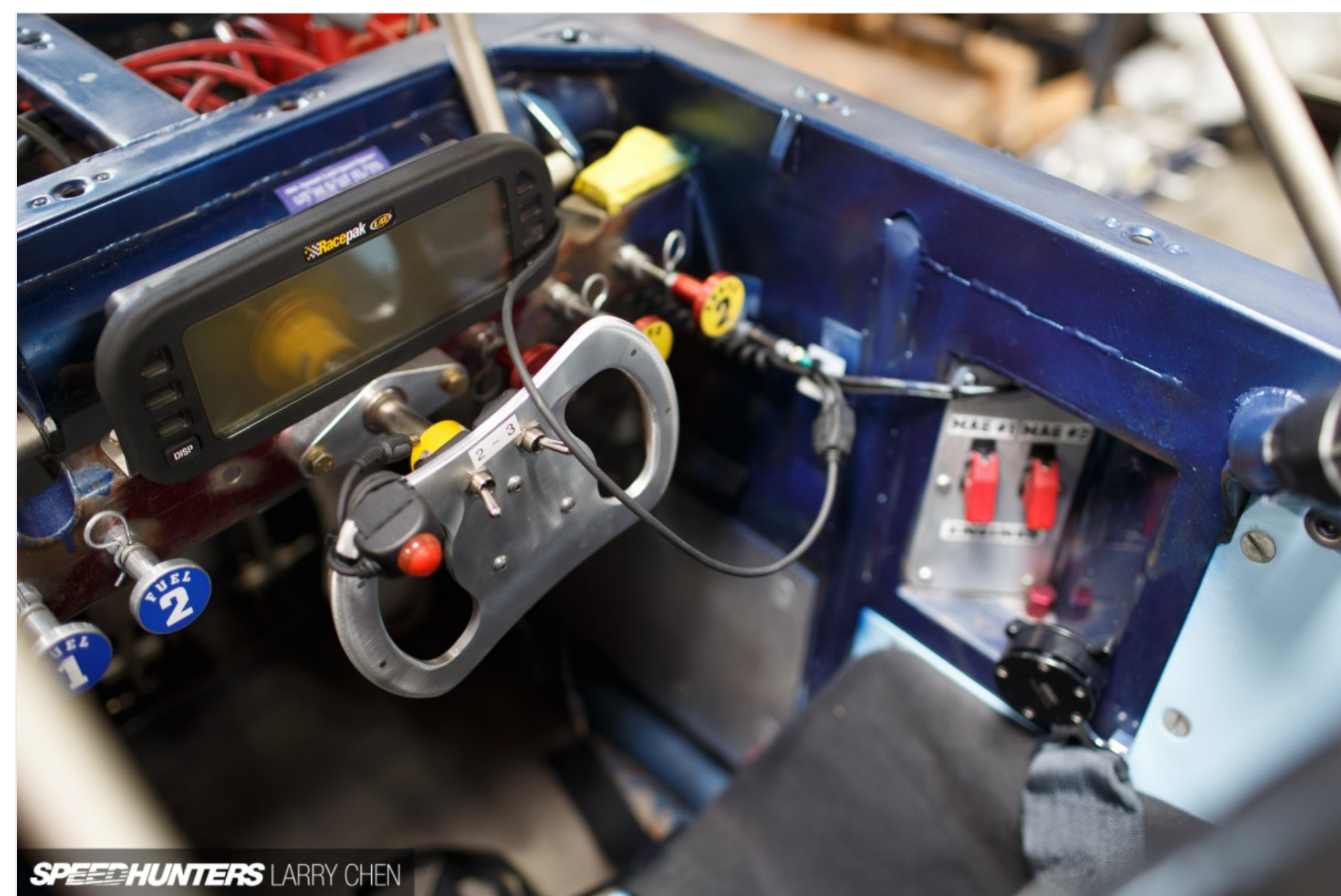
It certainly makes for some tight quarters inside the office. As Danny explained how he reaches everything while seated, I noticed he was crossing his arms a lot to demonstrate. Once the arm restraints are on and he's squeezed into the seat, he can only reach the left switch panel with his right hand and vice-versa. He's got it down though, and he can perform nearly all of the necessary functions without the ability to see what he's reaching for.



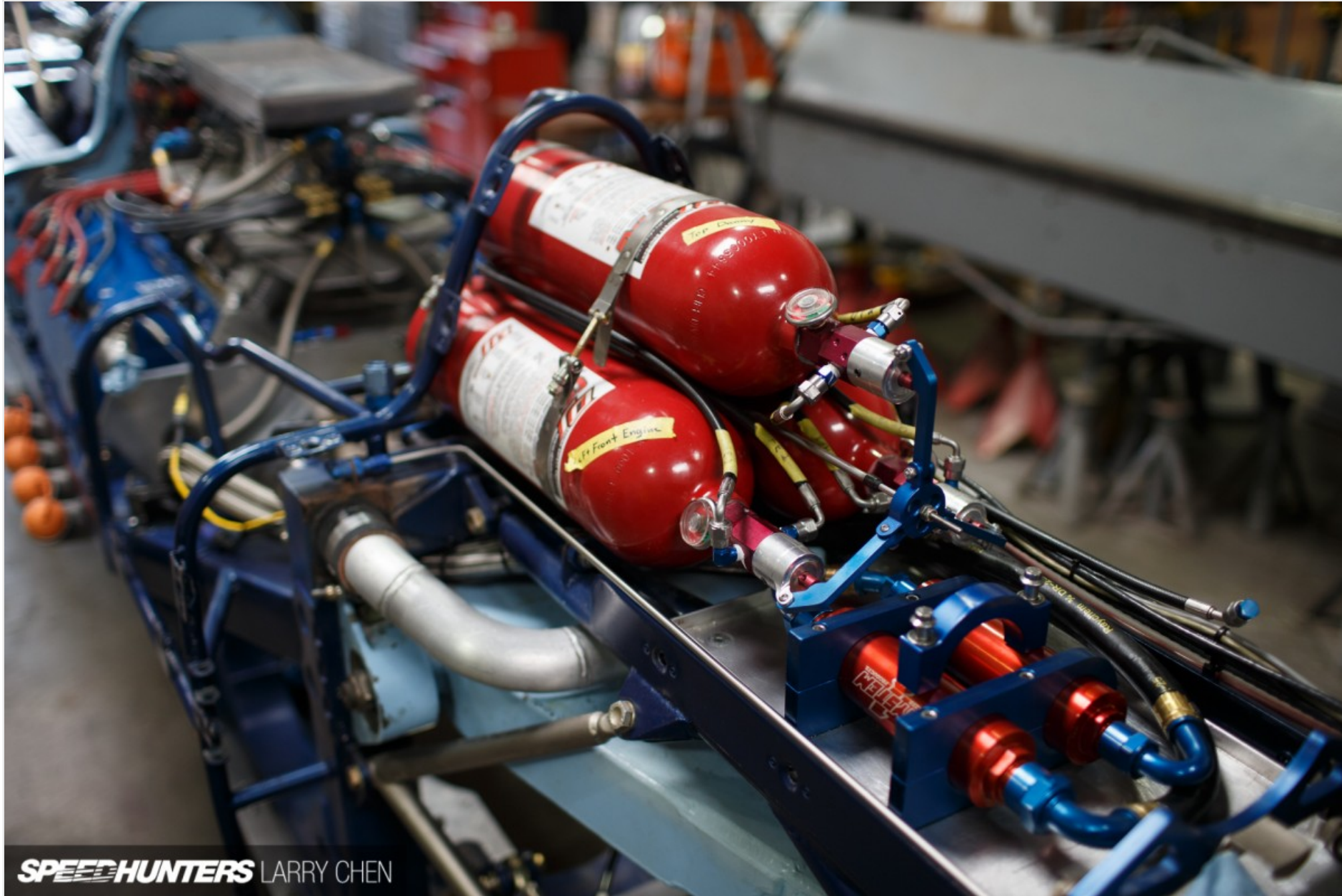
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One other interesting thing is the pedal layout. On right is the gas, in the middle is the clutch which is only used to take off from a stop, and on the left is the brake. Packaging restraints dictated this layout, but Danny knows what's what.

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Everything grows in scale when you want to go this fast – the car, the power, the budget, and the cojones of the driver too.



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Standing near the car and realizing how brutally powerful this machine was, it hit me. I would be scared to death to strap into this rocket, but I had an inkling that Danny didn't see it that way at all. I asked him if he was scared or excited and his answer held a lot of wisdom. "If you're scared you have no business getting behind the wheel of car like this. Am I respectful? Yes. You have to respect the machine, because it can bite you in the ass, but scared? No way. I couldn't be more excited to drive this thing, it's been a long time coming."



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This isn't the kind of car you become intimately familiar with by spending hours behind the wheel either. Considering it costs \$10,000 to \$20,000 to take it for a test run, Thompson has been extremely calculated in every step to make sure each test is the most efficient use of time and funds.

This was the first of three test runs Danny has had in the car to date. He hit around 180mph at less than one third throttle, the car barely breaking a sweat.

He followed it up just a couple weeks ago with runs of 246mph at part throttle and 317mph at full throttle – but only using two of three gears and half the course. To say the car has more in it would be an understatement, and I can't wait to see what Danny can do at full tilt!



So if you can't become intimately familiar with your vehicle by driving it for countless hours and miles, what do you do? Well, if you're Danny Thompson, you become so engulfed in the building of the car that you know every weld, wire, line and bolt on the thing. Says Danny, "This thing is packaged so tightly you could drop a quarter anywhere over the car and it wouldn't hit the ground." You'd better believe he knows where everything is and why.



Most of the car remains as it was in 1968, which made this build much more difficult to accomplish in 2014. The truth is, it would have been easier to start from scratch than integrate the updates Danny had to make. But then he wouldn't be taking care of unfinished business in the Challenger II now either, would he?



Thompson is going for every record he can since this project is basically his entire life at the moment. To that end, he is looking at both the FIA and SCTA rulebooks and coming up with tricks to make things easier when he competes at different events.



For an FIA record to count, you have to back it up by running the course in the reverse direction within one hour. That means changing the oil and plugs, adjusting the valves, repacking the parachutes and turning the car around, with no time to spare. Thinking creatively, Danny came up with the removable parachute canisters seen above, which can simply be changed out for a fresh set, rather than re-stuffing the 'chutes between runs.



As you might imagine a streamliner has an enormous turning radius, so instead of driving or towing the car around in a huge circle, they will simply lift the car on these vintage aircraft air cylinders to turn it around. They were sourced by one of Mickey Thompson's guys back in the '60s from a military boneyard. He then cut off all the extraneous bracketry and machined them smooth.



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Once the belly of the car is up in the air, it's set down on this turntable and spun 180 degrees. Easy, right? That's something I hope I get to see one day.



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Besides the logistics of actually getting the car down the track and back again, the ThompsonLSR crew also has to plan for things like fuel and tire consumption, spare parts and contingency plans. Right now they are having another custom set of quick-change differential gears made in case they want to change the gearing. They haven't come this far to have something like a gear ratio end the fun early.



Other last minute details include fabricating a starter cart that houses three Optima yellow top batteries. This will be used to spin the starters on the line, then unplugged and moved away.



As you probably noticed, the car has been torn down since the last test at Bonneville a couple weeks ago. The three-speed transmissions were gone through, and most of the related parts are organized on tables nearby.



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Communication is of paramount importance, so you'll find notes on everything.



Mickey Thompson's name lives on in the wheel and tire industry and besides being a major sponsor, they provide these landspeed race only slicks. Danny says they're really just cords with rubber painted on to make you feel good. There's not much rubber, nor grip to be found here.



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With just about a week until their departure for Speed Week, a significant portion of the car lies on pop-up tables around the shop. You might expect everyone to be running around like a bad episode of *Monster Garage*, but the mood couldn't be more mellow.



Danny and crew have a plan, and they're sticking to it. No reason to stress.



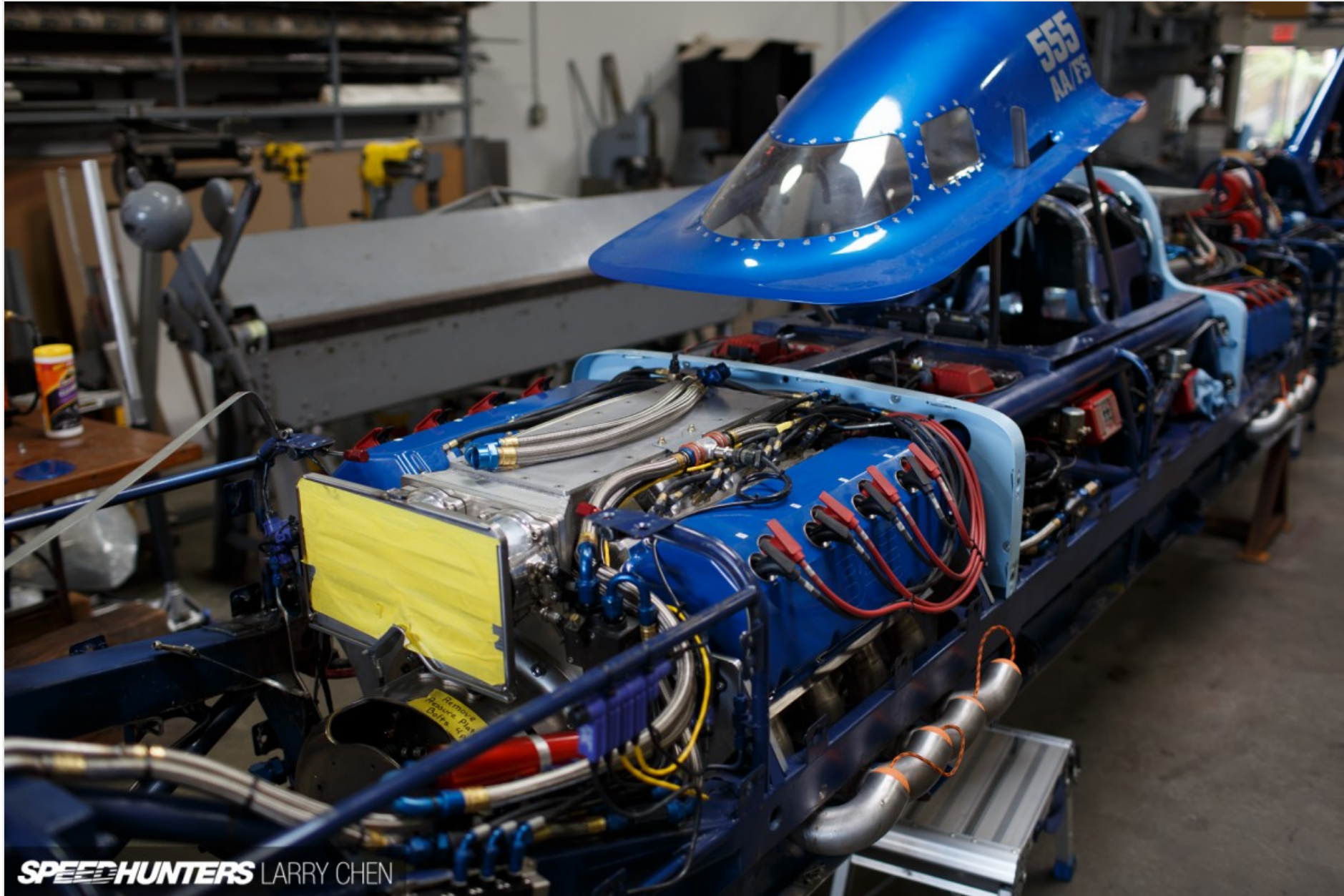
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It's far more important to work patiently and thoroughly, to ensure everything is done 100 per cent.



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This man has waiting plenty long, and there's no reason to panic in the eleventh hour.



It's been decades in the making, and he's pulled out all the stops for this moment.



I know he can't wait to see this view, except with salt filling that little aerodynamic window instead of toolboxes and spare parts.

Let's go Danny, show us who the baddest motherf&er is now!

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