

ROADSTER

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FUN IN THE SUN

Mildura Roadster Nationals blows away the Winter blues

CLASSIC DROP

WA's Fairlady Estate gives new meaning to the term Roadster Red



EUROPEAN RESTOMOD

Eric Vermeegen's modern take on a classic roadster

PARTY IN THE USA

We head to the Solvang and Mt Shasta Datsun meets, plus the Mann Sonoma Concours

A modern take on a classic roadster

An American roadster in the Netherlands undergoes a massive transformation with an S15 engine, 5-speed gearbox and new brakes.

We imported a Fairlady roadster (2009) from the USA, now (2012) it's time for a restoration. After some chitchat with other enthusiasts, the question was, 'What were we going to do with the engine?'

We had found several engine conversions for a roadster on the net, often a KA24DE or SR20DE engine (from a Nissan 240SX and Silvia S13/14/15). Modern, injection engines that are reliable and low maintenance can be used without and with turbo (a T in the engine designation).

Our search favoured a non-turbo version (what is not there, can't break down), but the Nissan Silvia 240SX is hard to find with a gearbox. Finally we were lucky - we got our own S15 engine with transmission. However, the wiring was left in the car and not sold with the

parts. That caused us some worry but then we found Yuri of wiringspecialties.com in the USA. He did an amazing job and I can highly recommend him.

Now we have a modern engine, but have no odometer and tachometer cable, so we must use an electronic signal. It is also convenient if your speedometer can receive signals from the gearbox. An S15 has no sensor sitting in its gearbox, it is in the differential but fortunately you can use a 300ZX '87-'89 speedo signal; it is a perfect fit in the S15 gearbox.

Now I have a '67.5 roadster with five gauges in black instead of the seven in chrome. The choice was an easy one; a dashboard was found from '67 and a new, modern set of Classic Instruments gauges in hot rod style was ordered, complete with the necessary sensors.

Because we live in Europe, I wanted

a km/h readout instead of miles - a practical adjustment. The dashboard recesses are welded and the two large, round gauge holes were made larger. The electrical system was re-wired, and we added an indicator light for main beam, as this is not in the new speedometer, and an alternator control light, otherwise the alternator doesn't work. I have retained the original chrome turn-signal indicator lights, used with a different colour of glass.

With all of the new wiring, it's best to use a different fuse box; the current will now be spread over 15 fuses instead of four, and a number of additional relays also make it safer. Searching the junkyard, we found a very nice fuse box on a Suzuki Alto from the '90s.

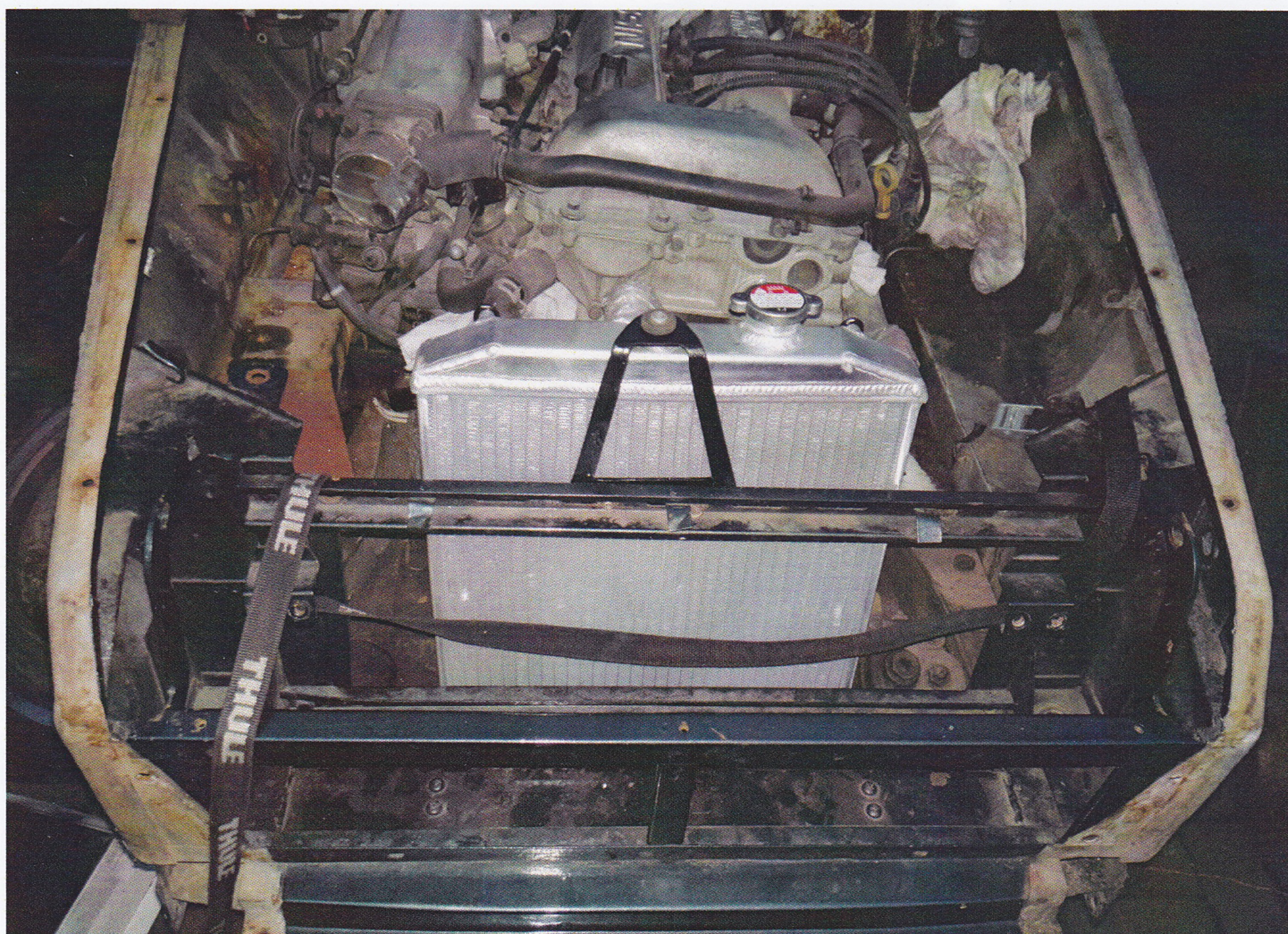
After the disassembly of the interior, wiring, windshield, dashboard, bumpers and other parts, we could easily hoist the body from the chassis. The chassis was in the garage where the grinding and welding begun. There is a lot of modification information on the internet, however, we always want to know why people had made these suggestions.

The X-frame was adapted to suit the gearbox and the holes for the larger exhaust pipe were also modified. We also made a neat little support to keep the exhaust rattle-free. The front of the chassis has been adapted to suit the engine and the old engine mounts have been removed. Some room was also made to change the oil filter.

The new engine mounts came from a Datsun 510, and we made new brackets for a Honda del Sol radiator. The most important thing is the alignment of the engine from gearbox to differential, this may differ at most by 1 degree, otherwise the universal joints will suffer. Make sure you actually measure this, it is very important, especially if you have wrong shock absorbers at the back and lowering springs used in the front!

Since big brake parts are expensive,

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we made a set ourselves. My thanks for this braking specification goes to a friendly Nissan dealer and my husband. In the USA, Nissan 300ZX Twin Turbo calipers and discs are often fitted. This is an expensive procedure and requires a different anchor plate. The cover plate can no longer be used and the 14inch rim can not be retained.

Because these calipers have dual pistons, they work very well and you should still have a very hard brake pedal.

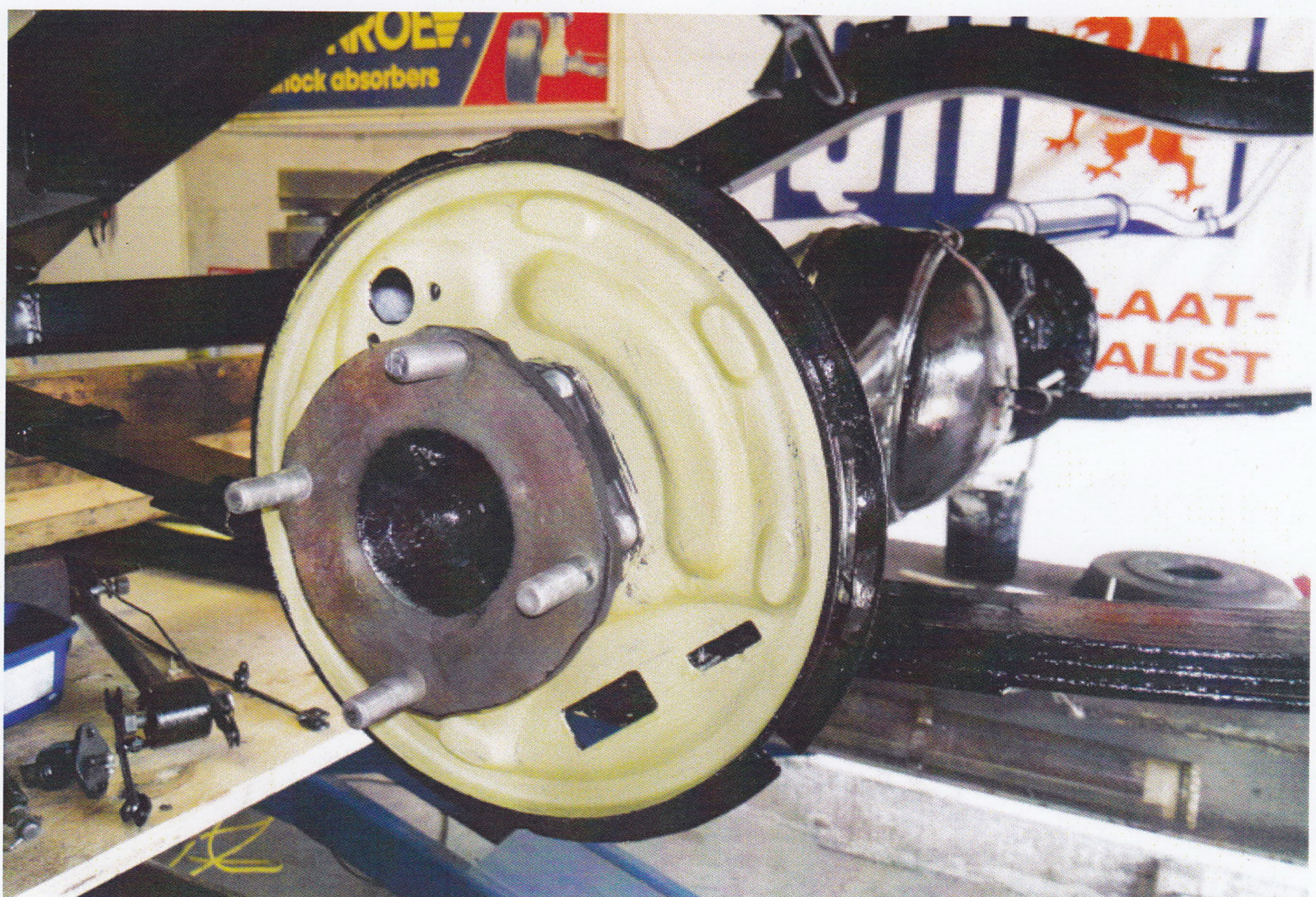
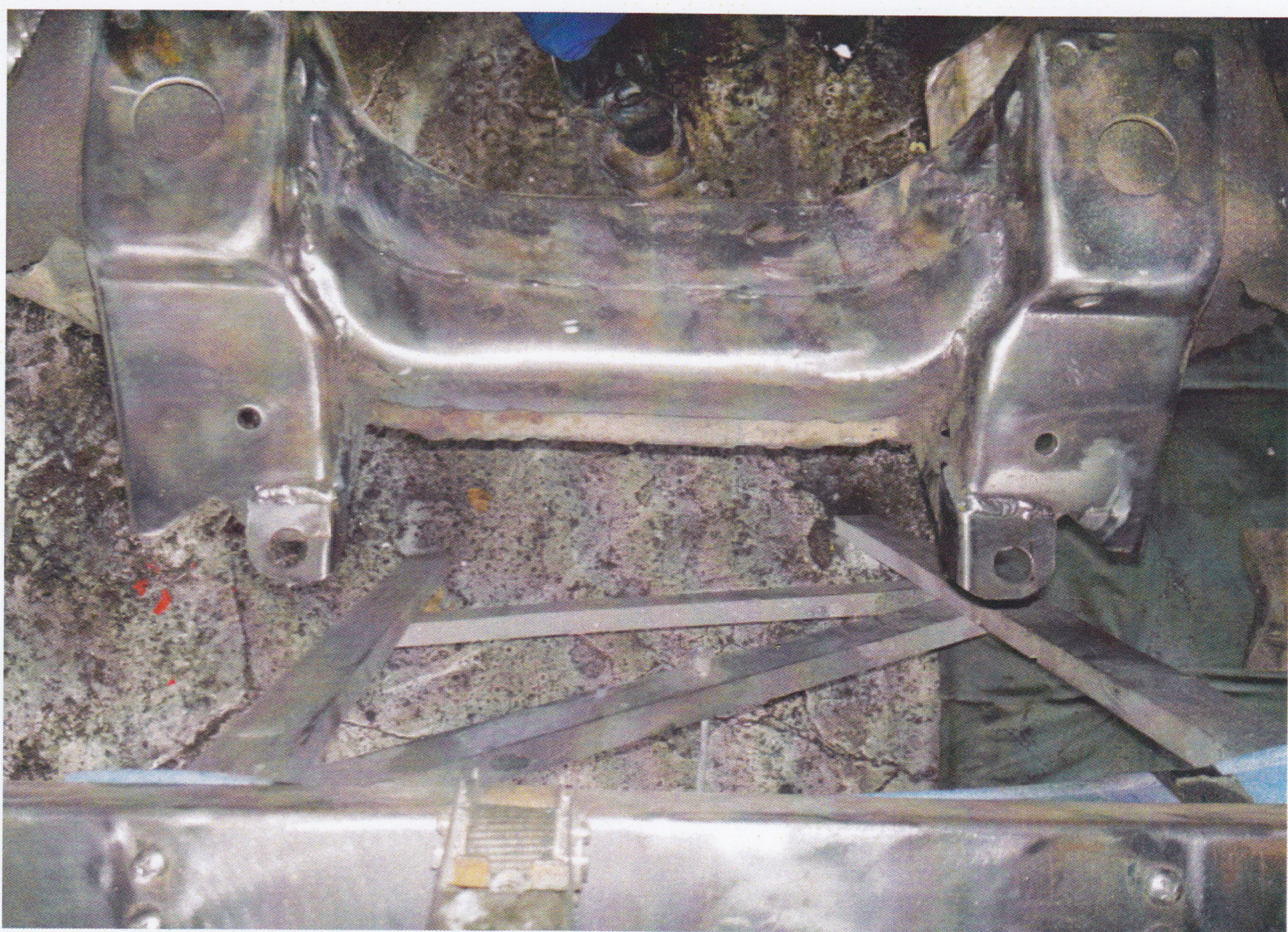
My husband has checked all the Daewoo Nexias at the junkyard and decided to use the version with the most horsepower (90hp). These calipers must be slightly modified to create space for the pushrods. My husband also wanted ventilated discs.

After hours of searching, he found Nissan Primera P11 discs. The diameter had to be reduced to 270mm and to make the braking a little lighter, a test setup was made with a Suzuki Alto brake booster. Everything worked out great. Please note that not everyone can use a brake booster under the hood. We have a pocket in the body and we use this space for the brake booster. The brake pedal is very close to the steering shaft and we found a Nissan 300ZX automatic brake pedal has the right measurements, and the footrest can be made smaller.

You should always be thinking ahead and during the process we purchased stainless steel bumpers, had various parts re-chromed and ordered necessary parts from the USA. Door-seals and window-seals were purchased by gorubber.nl (very helpful) and the cover for the convertible top, and a seat repair, were handled by Koning special repairs. The drive shaft also had to be shortened and rebalanced by Techno Trans.

Always take photos before you loosen something as not everything is explained in the workshop manual - 'before' pictures will be handy if your memory fails you. A welcome resource for me is 311s.org, as well as our Dutch roadster owners. In addition, Gary, an American who started an engine swap almost at the same time, and I keep tabs on each other's progress via Facebook.

Gary discovered that the oil filter can't be changed with the engine and body in place, so this means that you



have to remove your alternator, or place an oil filter adapter with hoses to locate the filter mount in a more accessible place. Because that option cost money, we made our alternator mount adjustable so that it is easier to disassemble, and also made a plug to the wiring so that it is easy to disconnect.

The SR20DE engine has been stripped of its power steering, alternator and exhaust manifold. These are inappropriate and unnecessary. Some people build air con, but it is not necessary in this country. The exhaust manifold is not properly fitted because of the control rod, however there is a Primera exhaust manifold 4 to 2, and we used the first part of the outlet flange.

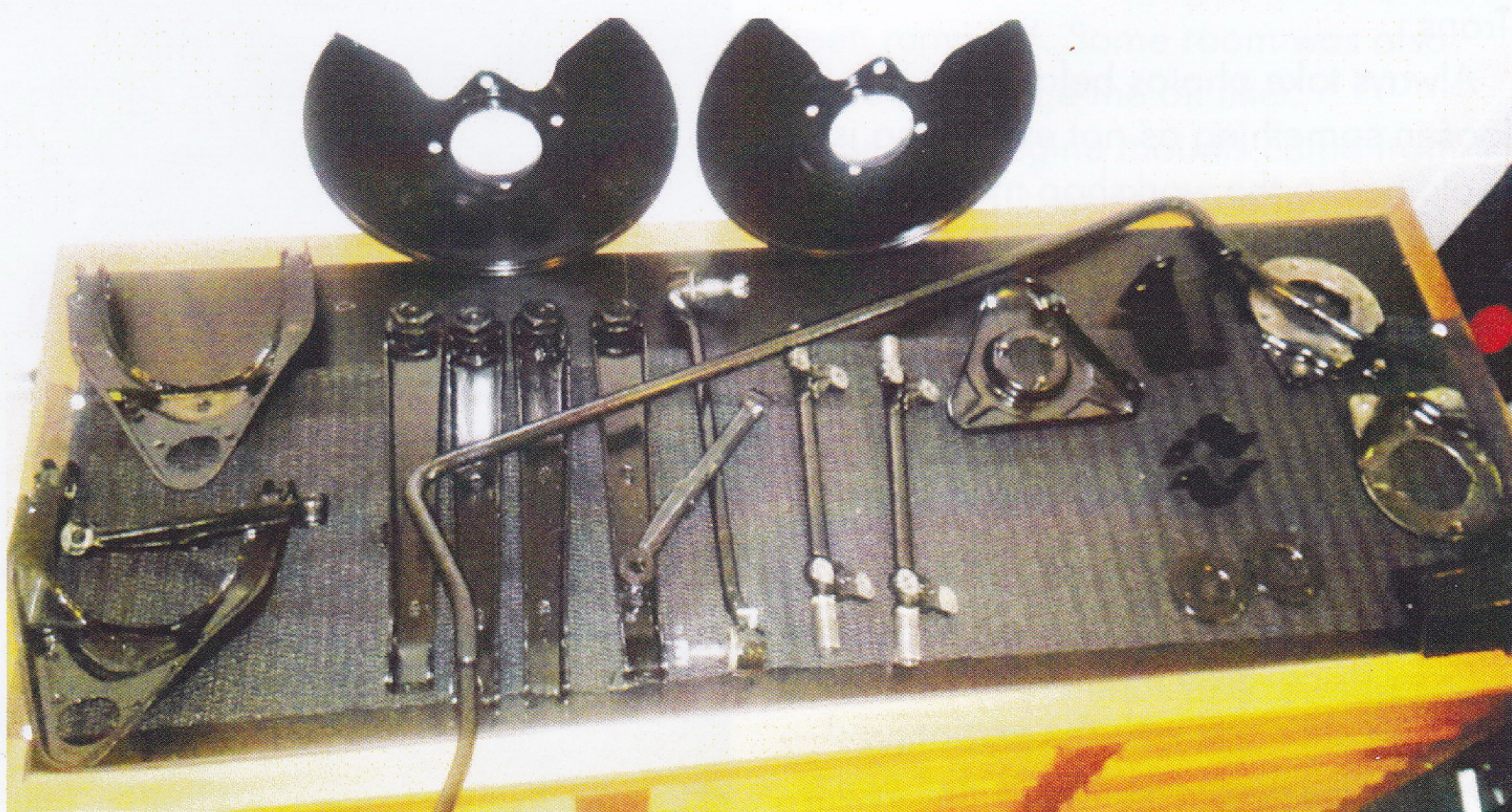
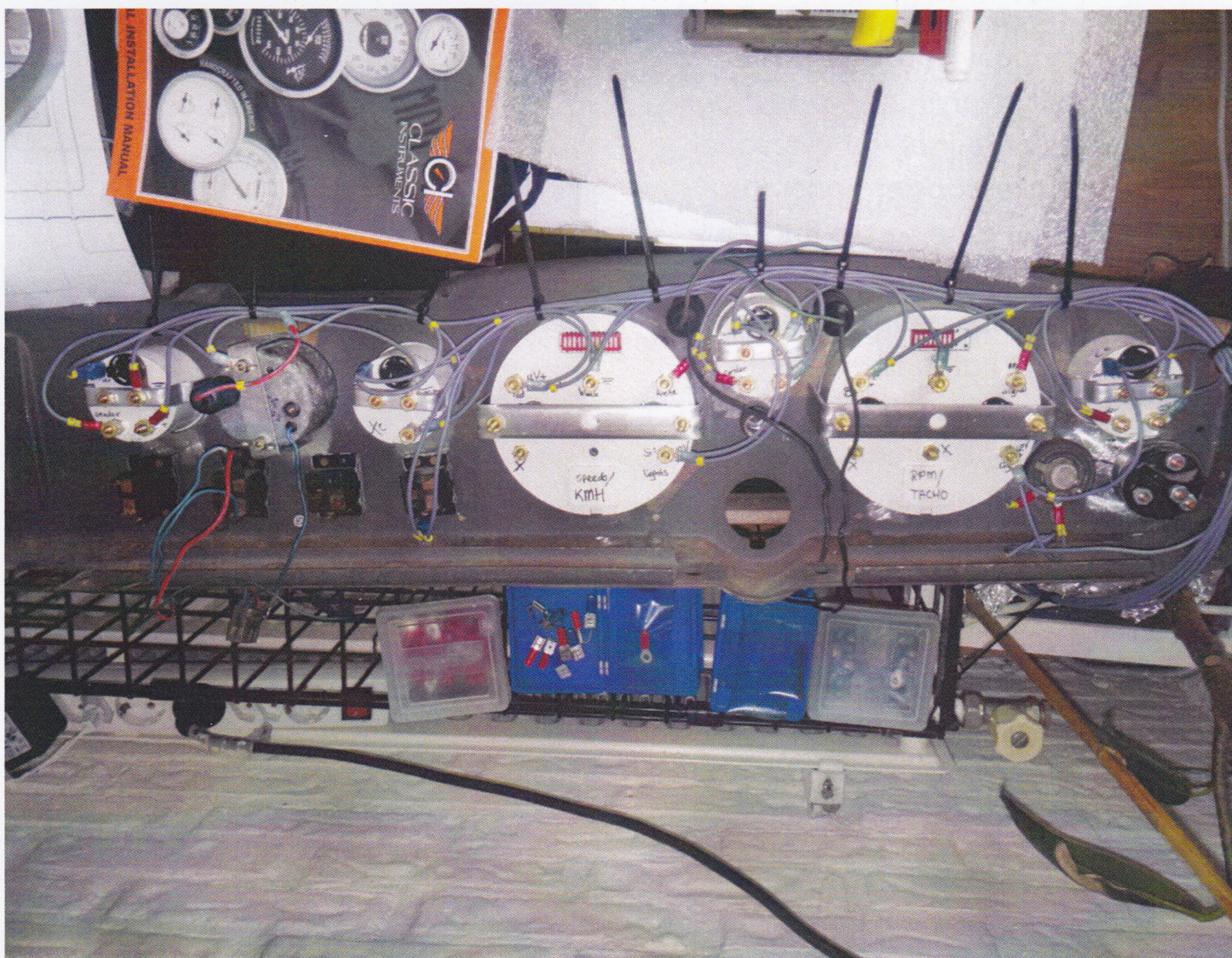
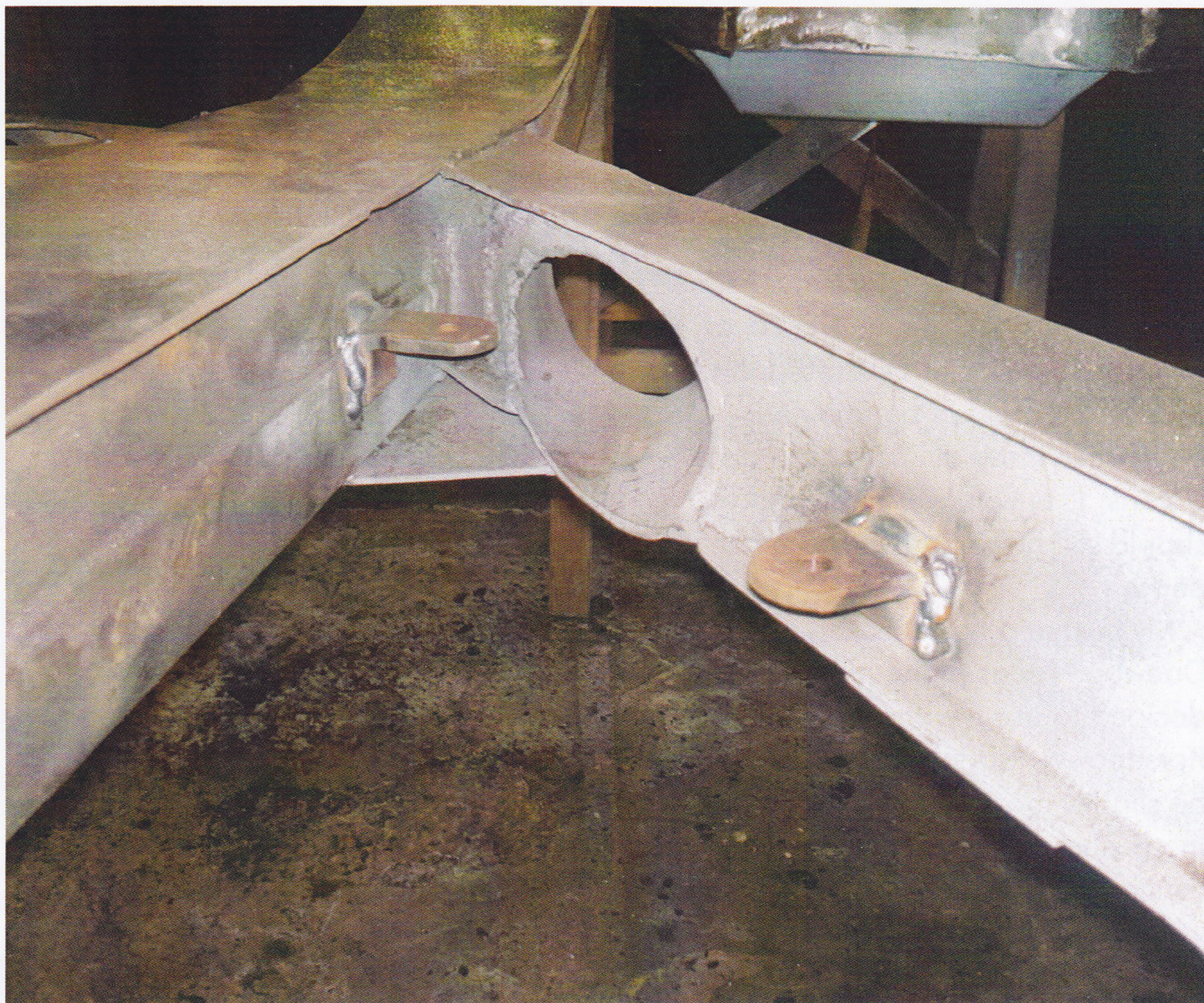
The rest is made of stainless steel. We bought a stainless steel flexible part, 2 in 1 pipe, 90 degree bend, 2 x 1 metre straight pipe, 2 cherry bomb mufflers, propeller shaft bend and 4 stainless steel clamps. A friend did the welding and the job was done.

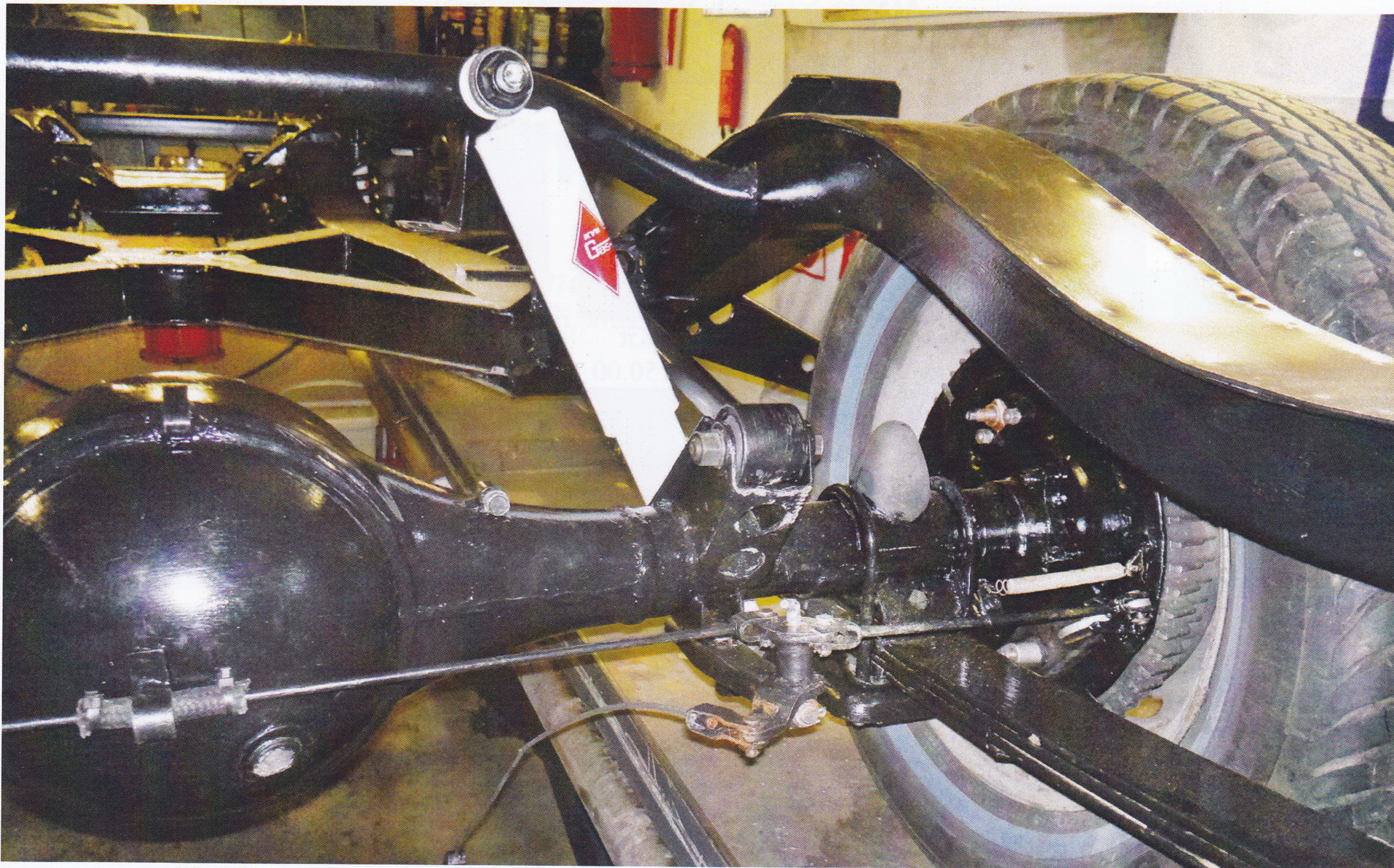
The alternator was replaced by a Subaru Vivio item, which is a lot smaller and the pulley is from a Chevrolet Beretta. We custom made a support for the alternator. The water pump is from a Nissan 300ZX '87-'89 and we use a water pump pulley with a spacer in between.

We adapted the support bracket under the intake manifold so that it could be retained. We have replaced the connecting rod bearings, as the block has now clocked 170,000km. Luckily, there was nothing wrong. We also replaced a PCV valve and the clutch. The spark plugs have been replaced with long life type (100,000km), the oil filter was replaced and the oil and coolant are drained.

The original transmission mount is adjusted so that it fits within the X-frame of the chassis and is accessible, as is the speed sensor.

We had to replace the radiator because we needed a filler cap on the radiator (the original sits on the engine). Also, we had to swap all the hoses. A 2000 radiator can be used, but this is something like Abarth parts - as soon as it is named, it is expensive. I have used a Honda del Sol radiator as this has all the connections in the right place. More importantly, it is about the same size and can deliver sufficient cooling for the engine (165hp).





An electric cooling fan was included. We made the brackets for the fan and the radiator and it fits perfect under the hood.

The chassis was sandblasted, zinc coated, epoxy primed and finished with black lacquer. Do not forget to cover your VIN!

The suspension parts were all coated terribly with sand and grease but there was no rust at all. After much cleaning, the result looks great. The chassis has been injected inside with Teroson V400 of Henkel, this is one of the best anti-rust products around. This treatment should be repeated every three years.

A modern injection engine needs sufficient fuel supply. You can opt for an external fuel pump, however they do make some noise. We took a fuel pump of a 300ZX but since this pump is too long and has too many fuel connections, we closed some pipes by welding, and welded a small can on the bottom of the fuel tank. The mounting ring for the pump has been cut from the 300ZX fuel tank and welded onto the roadster tank.

We make use of an aftermarket float and a fuel gauge that can be calibrated for the correct fuel quantity indication. We still need to check the fuel tank for leakage.

So far part one... **D**

