Putting an American V8 Engine into a Mercedes 107 Chassis

Most owners find a 450SL's power to be "adequate." It's a heavy car for its size, though, and it's stately rather than aggressive or impressive in its acceleration. In addition, the high cost of an engine rebuild leads many to consider swapping in an American V8 as an alternative to having their 4.5 liter V8 rebuilt when the time comes for a rebuild.

"So why aren't engine swaps more frequently done?"

First of all, there are no "kits" of engine mounts, electrics, and so forth that would make such a swap easier (there are kits for Jaguars, but not for older Mercedes). As a result, every swap is "from scratch" as a fellow 450SL owner commiserated:

"(Chevy 350) engine is in the car but (does) not fit, the oil filter casing is up against the steering box, we will have to use the remote oil filtering kits that are out there, if we can just get the casing to clear the box.

When I decided to start to put money into the project I put an add in the Denver Post (that is where I'm from) to see if there were any shop's or mechanics out there capable of the swap. This was after researching the project and deciding I wanted to try it because of the cost of the MBZ engine and its lack of power. I had already had the top end rebuilt several years back and considered it then. I had several calls and settled on the one who seemed the most optimistic about the project. Needless to say if (such swaps) have been done, the information is not really out there. I went with a Mechanic who had his own machine shop.....he machined the mounts and may have to machine a custom pan and reconfigure the tunnel for the transmission, my meeting on Saturday is going to be to discuss the time it would take to undertake this type of fabrication. Money will start to be an issue. The engine is new with out a mile on it, all the parts I have purchased are high quality so I have about $8000 in the parts including the engine. Have not paid the Mechanic yet but that will not be cheap I will have to draw a line somewhere along the way. I can still get the money back out of my parts but if I committed to the major re-fabrication the cost of the Mechanic may be greater than the outcome. So I'm getting to the point of either pulling the plug or jumping in 100%.

I did consider other drive trains at the time but was only able to come up with the little information I was able to find on the Chevy swap. Nothing at all on the Ford or Mopar. There is an old publication of a book called engine swaps that had some information on the 350 into the 300 MBZ (sedan). This is where the suggestion of the Nova oil pan was found, also showed the link up from the tranny to the rear end. A few other suggestions that we thought would work in this application that have not yet panned out.

As it looks now if the pan is not the solution, moving the power steering is something that would cost more. Also the (widening) of the tunnel is a time thing; I do not really think that is a problem but the labor starts to add up. Tie rods were a problem also but it looks like my guy has figured that one out. The accel and trans linkage were both addressed in the book I talked about so those are not a problem... I talked to someone else this morning and they suggested a dry sump with a shallower racing oil pan."
It has been done, though. The Chev V8 in the 1975 450SL to the right was listed on eBay, but the seller wouldn't respond to my request for more info, so I can't tell you any more about it beyond what was in the listing:

"This SL mercedes has front tube frame with mustang II rack-pinion steering. The engine is a 1967 396-350 HP. Has been freshen with new rings and bearings. Has eldebrock alum. intake.. New eldebrock carb. Headers and new aluminized exhaust with flowmaster.. 700 R transmission."

How far can you take the concept?

Consider Brad Martin's 1978 450SL Pro Street Hot Rod (below) - the project took a professional shop ten months to complete, working on it 40-50 hours per week. The cost of the conversion was somewhere over $45,000, and the finished car has been appraised at $65,000.

Brad describes it this way: "The car has MB stock suspension with the crossmember modified, new rack, motor mounts, oil pan (double sump) with #10 line to join them together. Custom headers and exhaust. Inner fenders are for looks as is the tin work on the firewall. The motor is a crate ZZ4 Chevy 350 with 355 hp and 406 foot pounds of torque. A 350 trans was used because a 4-speed AT

was too big. The rear was tubbed for M/T 29x18.5" tires and a narrowed 9" Ford rear end (4.10:1 gears). An aluminum fuel tank was built to fit between a 2x3" frame from the seats back. Other features include: 1968 Camaro bumpers (rebent and finished without bolts showing), stock MB front brakes, Wilwood Racing brakes in the rear, Boyd wheels (15x7 and 15x14), and stock interior, climate control, and both tops. I'd be willing to sell it for $35,000."

If you're interested, email him at grininbrad@aol.com (Minneapolis, MN)
Not a Chevy fan?

A successful, though very complex, transplantation of a **Mustang 5.0 drivetrain** into a 1980 450SL is described at [http://www.geocities.com/benzswap/](http://www.geocities.com/benzswap/). Can you say, "Not for the faint of heart?!"

Nevertheless, the dream persists, and more will be posted here as others share their stories with me. I've decided to go another way - the **BIGGER MERCEDES ENGINE** swap!

- M D "Doc" Nugent