

# THE 107—THE “PANZERWAGEN”

## A BRIEF BUYERS GUIDE TO THE 350SL, 450SL, 380SL, 560SL, 450SLC, AND 380 SLC

**T**here is nothing better than a convertible for a backroad drive on a comfortable summer's day, and Mercedes made some of the best. But the prices on the 300SL roadsters long ago went into museum territory, cabriolet prices reflect their rarity and restoration costs, and even 190SL and Pagoda prices are rising rapidly. However, the 107 chassis SLs, built from 1971 through 1989, are a great alternative to these pricier models, and a perfect entry point into the classic side of the Mercedes hobby. The SLC coupes are an interesting variant with their own advantages.

### Background

The 107 chassis SLs are icons of an era and one of the few classic Mercedes-Benz convertibles available in bountiful supply and at reasonable prices. Last-year production 560SLs are turning 20 years old this year, and the first examples to leave Stuttgart are a sprightly 38. It thus follows that the common cautions surrounding a vintage car purchase apply. Bruce Adams's article in the May-June issue touches on these points.

The 107 chassis incorporated many significant changes from the 113 pagoda-roof roadsters. Though the engines were larger, and produced higher horsepower, concerns about safety and crash-worthiness, especially in the United States, meant that these cars were considerably heavier. The engineers working on the design referred to them as “panzerwagens” and that nickname stuck. However, what the cars gave up in speed and acceleration, they gained in comfort. They became a favorite grand touring convertible in a period when few manufacturers were making two-seat models of any type.

In addition, the 107s were fitted with removable hardtops, so they offered both summer fun and winter protection, increasing their attraction and helping explain why they sold in such large numbers. There was even a coupe version, the SLC, available with 4.5-, 3.8-, and 5-liter engine from 1973 to 1981.

Like any vintage car, there are pitfalls to be avoided that can drain your savings almost as quickly as a Wall Street Ponzi scheme. A seller listing his or her prized SL at a premium price in no way guarantees the car is worth even half of it. Likewise, a budget SL at a discount price is probably a money pit. However exceptions do come around from time to time. The keys to a successful purchase are not to be blinded by passion, and to allow yourself the time to perform your due diligence.

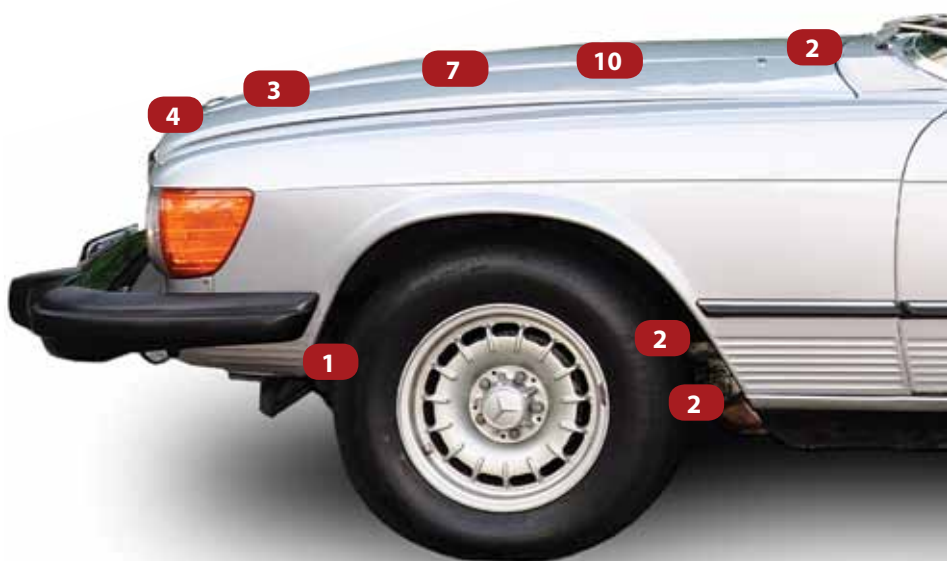
### Reasons to Buy a 107

- The 107s combine refinement and sportiness.
- Timeless classic styling.
- Super reliable if properly maintained.
- Durable V-8 power plants that can go for many miles without major work, with equally durable gearboxes.
- Good suspension and good braking systems with confident handling.
- Parts are readily available and good service is easy to find.

- Reasonable acceleration, except for the 380.
- Safety, safety, safety. Exceptional roll-over protection compared to other convertibles, and later cars have ABS, air bags, and other safety gear.
- A good example is relatively affordable and will hold its value.

### Reasons Not to Buy a 107

- Suspension issues due to design and rust proneness.
- Automatic climate control on 1977-1981 models can be troublesome.
- Timing chain issues, especially on 1981-1983 models.
- Poor traction on icy roads.
- Many examples have not received proper servicing.
- Cylinder and head issues on cars with aluminum engines.
- Air-conditioning might be inadequate in hot climates.
- Fuel efficiency is low, even for the period.
- A bad one will drain your pocket quickly.
- There's not enough value to justify extensive restoration.



## CHECKPOINTS

1. The front subframe on 1972-1980 models was prone to cracking at attachment points, but most have been replaced under recall. Have this area checked carefully.

2. The bodies can rust in the frame rails, front fenders (due to poor drainage), the HVAC blower box, and the battery housing in the trunk.

3. Have the timing chain, upper chain guides, timing-chain tensioner and cam lobes checked. Timing chains need to be replaced periodically, early single-link chains were prone to breakage, and cam lobes can have problems.

4. Cooling systems, especially in the 1974-1977 450SL, were very prone to overheating due to catalytic converter position.

5. Automatic climate-control systems from 1977-1981 were very problematic.

6. Watch out for water damage on the interior; these cars were not as watertight as they should have been.

7. The 280SL and V-8 cars with aluminum blocks can be prone to oil leakage from their head gaskets.

8. The oil pans on the 107s are made of cast aluminum and tend to break if one hits a parking curb or major pothole.

9. The 560SLs need to have their airbags replaced every 10 years.

10. Watch out for D-Jetronic engines; anyone who messes with these engines and doesn't know what they're doing can create expensive problems.



## CHRONOLOGY

- 1971:** First examples of W107 350SL/SLC are sold in Europe. The car was designed by Bruno Sacco with a good deal of help from Rudi Uhlenhaut. The car replaces the W113 SL Pagodas.
- 1972:** The 107, badged as "350SL 4.5," is introduced in the United States at the same time the 280SE 4.5 comes into production.
- 1973:** U.S. market model is renamed the "450SL." A 450SLC coupe becomes available. Oil crisis hits at the end of the year, reducing demand.
- 1974:** 280SL and SLC with M110 inline-six engine, and Bosch D-Jetronic fuel injection with optional 5-speed manual introduced in Europe.
- 1977:** The 107 model range receives the Automatic Climate control, one year after the rest of the Mercedes models, standard in the United States and optional in Europe.
- 1977:** The 450SLC 5.0 is put into production. Mercedes used this model as a homologation tactic to use 107s in European rallying.
- 1980:** The 500SLC and 380SL/SLC debut in Europe with a new 4-speed 722.3 automatic.
- 1981:** The 380SL/SLC introduced in America. The 500SL introduced in Europe.
- 1981:** SLC production ends in September.
- 1984:** 380SL timing-chain revision in September, replacing single-row with double-row chain.
- 1986:** U.S. market gets 560SL. In Europe, the 380SL is replaced by the 420SL, and the 280SL is replaced by the 300SL, as the 420SEL and 300SEL sedans are introduced. The 500SL continues as the flagship in Europe.
- 1989:** Production of all 107 models ends.

## BUT WHAT IS IT?

The 450SL came to North America in late 1971. Non-North American markets saw the true 350SL, but these cars were never officially imported to North America. However, the first U.S. imports were badged as 350SLs and often later rebadged as 450SLs. A number of the 350SL-badged cars are still out there and are often misrepresented as real (European model) 350SLs in their ads. A real 350SL will have a short-stroke, quick-revving 3.5 liter V-8 motor coded m116. The 450SL has the 4.5-liter V-8 coded m117. Besides checking motor numbers, the simple way to determine which car you are examining is to check the vehicle identification number (VIN). A 450SL will begin with 107.044, whereas the 350SL begins 107.043. As a rule, when buying any vintage Mercedes-Benz, it is wise to check the VIN to be sure the car is actually what it is represented to be.



The SLC (C107) was an attractive alternative to the R107 roadster body style. This 1981 450SLC is in exceptional condition, illustrating how careful use and good maintenance can preserve these cars.

## THE NITTY-GRITTY

The 107s experienced a number of systems changes during their production run. Besides the cosmetic changes in the bumpers and turn signals on the post-1973 models, major changes were made in the fuel-injection and climate-control systems. Areas of concern include climate control, fuel injection, timing chains, front subframe, and rust potential.

**Climate Control:** The climate-control system from 1972-1977 was the first Mercedes factory-installed air conditioning system outside the high-end luxury saloons. It was controlled with manual levers and knobs, and was relatively simple and robust. Beginning with VIN 042310 in 1977, the "improved" system used vacuum actuators for vent control, with components which can deteriorate, and a servo to regulate temperature and vacuum routing which can fail, leaking coolant into the engine compartment. The system was upgraded in 1982 to alleviate problems, and there are fixes available for the '77-'82 system. But regardless, when considering any 450SL, make sure all climate control functions work properly, because completely refurbishing this system can easily cost thousands of dollars.

**Fuel Injection:** The fuel-injection system changed in 1975 from the Bosch D-Jetronic system, robust and reliable if in good condition, to the mechanical CIS (Continuous Injection System) K-Jetronic system, which in turn was replaced by the upgraded computer-controlled CIS-E system in 1986. Careful inspection of these systems is essential. If the fuel injectors, related seals, and holders are original to the vehicle, they may need replacement. A poor system can cause poor performance or danger of fuel fires.

**Timing Chains:** The 380SL from 1981-1983 used a single-row timing chain that needed to be changed every 60,000 miles and if it breaks, can cause catastrophic engine failure. It should be checked carefully, even if records indicate it's been replaced, but it can be replaced with the stronger double-row chain used on later models. Have your technician remove the valve covers and check the cam lobes for excessive wear at the same time.

**Front Subframes:** On 1972-1980 models, the front subframe was vulnerable to cracking. Most of these have been replaced under warranty, which is still active, but if the car lacks repair records, be sure to have it checked out no matter what.

**Bottom Line:** Start by looking for a car with complete service records indicating careful maintenance. Then the best money you can spend is for an inspection by a technician who is knowledgeable about this range of cars. In addition to checking for rust, he should check out each of the critical systems. If any red flags are raised, walk away; there are good buys out there, but there is no money in the value of this car for any significant body work or mechanical overhaul.

## OUR TAKE

Here's our evaluation of the various models and years:

**450:** 1972-1973s with smaller bumpers are most attractive. D-Jet cars through 1975 are difficult to get repaired; parts are expensive and hard to find. Manual climate control a plus. Best of the bunch: 1978/1979 with K-Jet fuel injection but check climate control system. Avoid 1980 cars: least powerful due to emission requirements.

**380:** Underpowered. Check timing chain on pre-'84 models; if not in good shape, should be converted to double chain. Check heads and block for any evidence of overheating. Later models with double chain and improved climate control better.

**560:** Best of the lot: more power, better climate control and mechanical components. Generally in better condition.

**SL or SLC?** SLCs may be less sexy than ragtop SLs, but they're roomier, more stable on the highway, and generally less expensive to buy.

**Rare and desirable:** Gray market 450/500 SLCs, homologated for rallying, and Euro-market 1978-1985 500SLs are attractive and very fast. Be sure the car can be registered in your state before buying.

### VALUE ESTIMATES

	Low	Average	High
1972-1981 450SL	\$4,500	\$8,000	\$14,000
1977-1981 450SLC	3,000	5,000	9,000
1981-1984 380SL	4,000	7,000	12,000
1984-1986 500SL	6,000	10,000	16,000
1986-1989 560SL	6,500	11,000	18,000

With the hardtop installed (a two-person job, but good garage hoists are available), the SL looks quite stylish, is more weathertight, and feels more solid on the road.



## 107 Models By the Numbers (U.S. MODELS ONLY)

### Years and Production

350/450SL	71-72	15,304
450SL	72-77	45,097
	78-80	21,201
450SLC	72-77	20,619
	78-80	11,120
380SL	80-83	24,083
380SLC	81	1,991
380SL	84-85	19,805
560SL	86-89	49,347

### Engines

<b>450</b>	
Displacement	4520cc
Max Power	180-230 hp
Max Torque	220-238 lb/ft
0-60 mph	10.5 sec
Max Speed	124 mph

<b>380</b>	
Displacement	3839cc
Max Power	155 hp
Max Torque	196 lb/ft
0-60 mph	9-9.8 sec
Max Speed	134 mph

<b>560</b>	
Displacement	5547cc
Max Power	227 hp
Max Torque	279 lb/ft
0-60 mph	8 sec
Max Speed	137 mph

### 107 Dimensions

Length	172 in - 180 in
Width	70.5 in
Height	50.8 in - 51.2 in
Wheelbase	96.9 in

### References

#### Good sources for information:

- [www.mercedesheritage.com](http://www.mercedesheritage.com).
- [w107.pbworks.com](http://w107.pbworks.com).
- [www.dianasmercedes.com](http://www.dianasmercedes.com).
- *Illustrated Mercedes-Benz Buyer's Guide* by Frank Barrett, out-of-print but avail. through Toad Hall Books.
- *Mercedes-Benz Buyer's Guide* by Fred Larimer. Motorbooks, 2004.
- *Standard Catalog of Mercedes-Benz* by Jim Luikens. Krause Pubs, 2008.

## A REAL-WORLD EXAMPLE

Our example, a 1978 450SL, has been owned by the same person since 1984, and has accumulated 238,500 miles. A California car since new, it has been garaged all its life and, according to the detailed records kept by the present owner, has received every A, B, and C service at correct intervals. The front subframe was replaced under warranty. The timing chain and belts were replaced in 1990, the top end of the engine was serviced in 1994, it was repainted and the windshield replaced in 1995, and the top was replaced in 1996. It has just passed California smog inspection. Family circumstances motivate the sale.

### The Good News

The engine starts readily and runs smoothly, and the transmission shifts easily from gear to gear.

Records indicate replacement of the front subframe and timing chain, and a mechanical inspection confirms the subframe repair.

The car shows absolutely no indications of structural or superficial rust in the battery box, floor boards, or panels.

All A/C controls work and servos do function properly.

An aftermarket radio/cassette player has been installed, and the automatic antenna is functional.

### The Bad News

Not surprisingly, the dash cover is cracked, and rubber door seals and fabric draft seals are very worn. Like most SLs of its generation, it has had sheepskin covers since new, and the M-B Tex is in good shape, but the driver's seat has a rip on the outside bolster and the springs and padding are tired.

### Bottom Line

The car is safe and reliable as-is for casual weekend use, but some interior repair could be done, though a new OEM dash top would be too expensive to be worthwhile. This 450SL would be a good buy in the \$5,000 range.

