

Restoring The Pagoda Hardtop

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Evolution of Mercedes-Benz hardtop/soft top configurations began with the so-called combination coupe of the 1930s. The first post-war production model with a hardtop was the 190SL, followed by the 300SL Roadster. These 1950s single-shell hardtops were likely designed after the car was already drawn; they seemed to be almost afterthoughts. The first SL designed with a hardtop in mind was the 113-chassis 230SL.

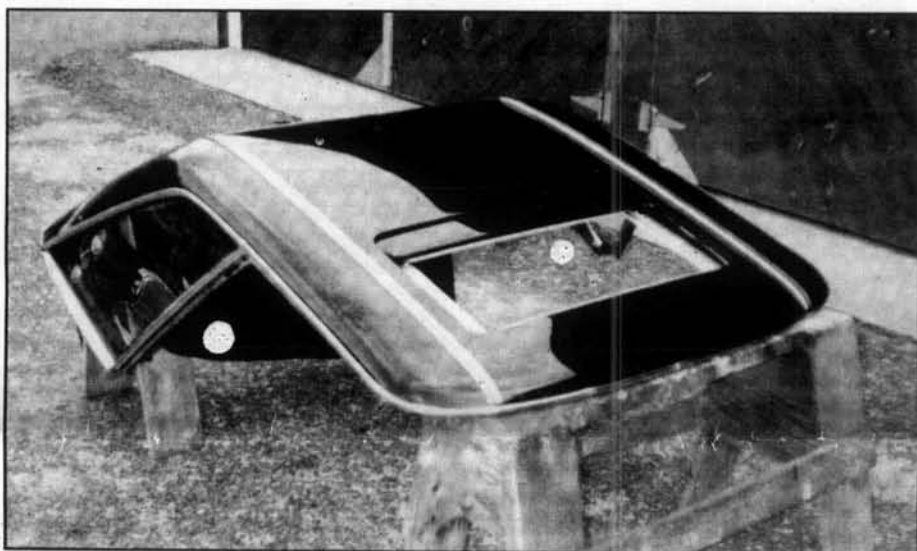
Major differences between the 190/300SL hardtop and the 230/250/280SL top are the shape and the means of attachment and sealing to the body. The 230SL hardtop is in every way superior to the former versions and is an obvious result of designing body and top together. This design was subject to safety aspects and proved to be well beyond the standards of the period. Rigid double-wall construction with large glass area for excellent all-around visibility resulted in a heavy, somewhat over-engineered hardtop. The name "pagoda" originated from the low center and high side lines of this design, which remind one of an oriental pagoda roof.

Due to its thorough construction, restoration of this top is complex and time consuming. The later W107 SL hardtop is easier to restore, since it is built with about half as many parts as a W113 hardtop. For example, headliner installation can take up to 20 hours on a 230SL compared to about 5 on a 450SL.

Disassembly

The first step is preparation of the work area, which should include two saw horses, electric or air drill, putty knife, scissors, masking tape, carpet knife, and common hand tools. Materials needed are listed at the end of this article and depend on the extent of restoration.

Cover the top of the saw horses with a blanket or other non-abrasive material and position them 32 inches apart. Now, place the top upside-down on the saw horses. If your top doesn't have the two optional



The steel hardtop is heavy, so a secure support is an absolutely necessity. Besides its very rare sunroof, this top has the more usual chrome trim bars for attachment of a factory roof rack.

chrome bars for the ski/luggage rack, be extra careful. Since the hardtop is very heavy, safely positioning it requires two people. All work except removal of the top chrome bars and the rear glass can be done in the upside-down position.

Every part removed from the hardtop should be marked left and right accordingly. Begin disassembly by removing all rubber gaskets, i.e., the top to windshield seal, the door glass seals, and the rear top to body seal. Since there are so many different moldings on this hardtop, we will refer to Figure 1 and use the numbers there for better understanding.

Remove the rear lower chrome molding (12) and the wood trim (14) around the rear glass seal. Once the chrome trim (12) is removed, you will find two sheet metal screws in each lower corner of the chrome surrounding the rear glass (10). After removing the screws, pry out the trim with a wooden wedge. Now the rear glass can be removed.

The factory used plenty of sealer on the rear glass seal. Over time this dries to a stone-hard mass, which can make removal difficult. To avoid breaking the glass (tinted glass is very expensive), cut the seal on the inside around the headliner with a carpet knife, which makes it easier to press out the glass. Cutting the seal will ruin the headliner, so this is only

recommended if the liner is to be replaced. If you need to keep the headliner intact, use silicone spray between the seal and the liner. Glass removal can be done in the upside-down position but is much easier if you turn the top right side up.

With the top upside-down, remove the front locking devices (29) and the weatherstrip channels (16, 19). Next, detach the front chrome surround (2) by removing the center clip (3), the sheet metal screws inside the seal channel, and the two screws on each side which were exposed after removal of the weatherstrip channels. These two screws are often hidden by caulking material applied during top assembly. The same material causes the chrome pieces to stick to the top as if cemented in place, so they need careful loosening when being detached.

The most difficult part of disassembly is removal of the quarter windows. See Figures 1 and 2. The procedure is the same on the left and right side, starting with removal of the chrome trim piece (25) which comes off with the inserted rubber spacer (24). Next, remove the long rubber spacer (23). Use silicone spray or a similar lubricant to loosen the glass with its seal inside the channel. When the glass moves freely in the channel, cut the seal with a carpet knife and pull it out completely. Then take a