

Steel Reinforcing Built In

Steel frame built inside body shell

Wescott bodies are designed with an internal steel structure for strength, safety, and rigidity. The doors, trunk lid, rumble lid, and 39-40 hoods also have an internal steel structure. Many bodies have steel side rail reinforcement to protect against side impact, as well as seat belt mounts to the steel frame. The steel structure includes mounting points for most hardware. The structure supports the fiberglass and keeps the bodies and parts dimensionally stable.

Bodies are laminated in one piece inside a large mold which is dimensionally correct, and extensively steel reinforced. The mold is carefully levelled. Most of the body steel support structure is built into the body while it is in the mold. The steel support structures are bonded at certain points to the fiberglass with a special glue, and parts of the steel framework are welded together during the assembly process.



Steel installation in the cowl section of a '32 roadster

The floor pan and firewall (on most models) are also installed in the body at this time, with fixtures to assist proper alignment. (Doors and deck lids are constructed separately, and mounted later.)

The mold keeps the body square and in alignment. When the body shell is finished the mold is disassembled and the body is "dropped", ready to go to body assembly.

Quality Construction

On Wescott bodies, bonding reinforcing structures or other fiberglass panels to the body panels is avoided whenever possible. A common incorrect installation method is to lay up fiberglass around, or "glass in" a reinforcing member in order to attach it to an outer body panel. This almost always warps the outer panel enough to be visible. Wood reinforcing is especially susceptible to this kind of problem because it does not handle tension stress well and is subject to warpage because of humidity changes. Instead, in a Wescott body, reinforcing is bonded to door

Hardware Mounts to Steel

Bodies are assembled with hardware mounting to steel framework

The body shell is brought into the body assembly area. The body is then assembled with most hardware installed. (See the individual body style page in section B for details.)

The steel support structures reinforces critical stress areas. Door hinge, latch, dovetail mounts, top and windshield post mounts, and many body-to-frame mounts are reinforced. These hardware parts bolt directly to the steel frame or "sandwich" the fiberglass between the part and the steel frame.

Doors and deck lids are constructed separately in special jigs, as an inner and outer fiberglass panel with a steel reinforcing structure inside. After construction they are fitted to the body and installed. The overall body steel skeleton creates rigidity that helps with door and deck lid fit as well as opening and closing solidly.

Additional hardware and parts, such as specialty window kits, may be installed. With a few more finishing touches, the body is complete.



Steel installation inside a '34 roadster door

jamb, under windshield post mounts, and other areas away from the body panels. Bonds between fiberglass panels are usually on flanged edges, along reveal lines, or in other areas where a seam line will not show.

Stress problems in the Corvette, the only successful mass production American fiberglass bodied car, were solved by using similar steel frameworks and attachment methods. The durability of Wescott bodies have proven these techniques to be a very workable method of attaching steel to fiberglass.