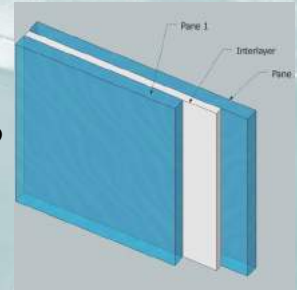


Guide to Original Date Coded Glass Mustang, Boss, Shelby and Cougar

M A R C U S A N G H E L

Note: The following article and information was in large part made possible by my recent visit to ECS Automotive. The time spent with Dave Walden and Charlie Vahey was invaluable to understanding the background on original logos that were used by Ford, and ordering correct reproduction glass. The information contained here is shared with anyone who better wants to understand these details.

BackGround: It wasn't long after cars were made that they started using glass to protect drivers from wind, gravel, and dirt. The early "wind screens" or "wind shields" were nothing more than regular glass used in houses put together as a foldable horizontal piece of plate glass. If, and when, the glass became too dirty to see out of, you would simply fold it down and keep on driving. However as much as this helped with early drivers, it created a serious problem when debris came in contact with the glass or during an accident as the glass would shatter flying into the car, or people would go head first thru the window wearing a "glass necklace".



Laminated Glass: In 1903, French chemist Edouard Benedictus stumbled upon the secret to shatter-resistant glass when he dropped a glass flask filled with a dried collodion film. He found that the glass coated with the film cracked, but kept its original shape. This was the key to developing laminated glass, however, this process wouldn't be implemented in automobiles until the 1920s.

The early manufacturers of glass included Libby-Owens, Du Pont de Nemours (aka DuPont), and Pittsburgh Plate Glass (aka PPG). It wasn't till 1928, when Libbey-Owens became the first company to produce automotive laminated safety glass and won the contract to supply Ford with windshields for the Model A. It is actually rumored that Henry Ford and his close friends were involved in an accident where flying glass proved detrimental. Because of this experience, Ford was determined to improve the safety of windshield glass—at an affordable price.

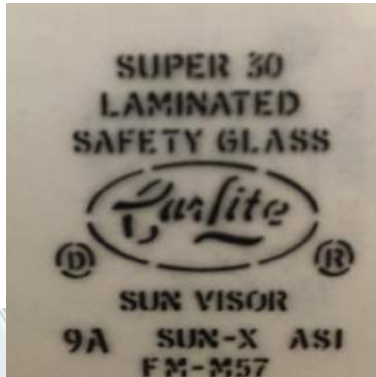


Tempered Glass: In addition to laminated glass, automakers began to use tempered glass in the late 1930s. This became popular in a large part as the design of car changed from a more open design to a closed sedan style. This type of glass became standard in the vehicle's side and back windows and gains its strength through a heating and rapid cooling process that strengthens the glass' outer surface as well as its core. Tempered glass is about four times stronger than "ordinary" glass. And unlike ordinary glass, tempered glass fractures into small, relatively harmless pieces.

As an interesting development auto manufacturers today have actually started using laminated glass on the side and rear windows to help protect in case of a roll over, help reduce break ins, and make it quieter. The trend for right now is to use more laminated glass.

Decoding the Glass:

All Mustang, Boss, Shelby, and Cougars had glass that was date coded and included specific information on what type of glass was being used. Carlite was the most common source with the only known exception being Corning that we see being used in convertible back window glass. A breakdown of the codes on the glass is as follows:



Carlite: Ford's main supplier of OEM glass. Corning was the other supplier in rare cases —see lower right example.

Super 30: Most likely refers to the thickness of the plastic (PVB—Polyvinyl Butyral) between the layers of glass of the windshield which is .030 in thickness.

Date Codes: Written in a Year/Month format. Above examples show January 1969, January 1967, and December 1967.

D or N: Refers to the plants in which the glass was made. D=Dearborn, and N=Nashville. Nashville is the most common logo that we see on glass being produced during these years.

Safety Glass: Refers to both laminated and tempered glass

Laminated: Two layers of glass with a plastic film material between them.

Tempered: Heat treated glass designed to break into small pieces.

Solid: Single piece of glass with no layers. Refers to all glass except the windshield

Sun-X: Glass that is tinted (green). Non tinted glass simply has nothing mentioned and the same space is left blank.

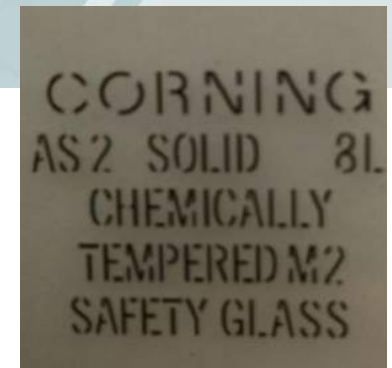
R: Registered Trademark

AS1 or AS2: American National Standards Institute for glass. AS-1 for windshields, and AS-2 for tempered glass.

Sunvisor: When the top part of the windshield is shaded. The shading is actually in the plastic film.

Temp-R-Plate: Etching applied to rear glass only. This reference was used till about 1968 only.

FM: Ford Motor Company codes for glass indicates if glass is tinted or not. Examples of this would be a tinted windshield is M57 where M55 is clear. Doors and quarters we usually see M61 and M31 for tinted, M60 and M30 for clear.



The etching process: The actual etching of original glass could have been done either on the outside of the glass or the inside of the glass. This seems to vary over time and for different pieces of glass. In addition, the etching could appear reverse as well. It appears that this was random and changed so there is no correct side or orientation for the etching. Any type of glass that is not etched (and used ink) is later service replacement glass. (see below).



January 1970 original etching



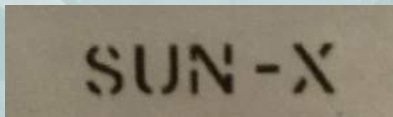
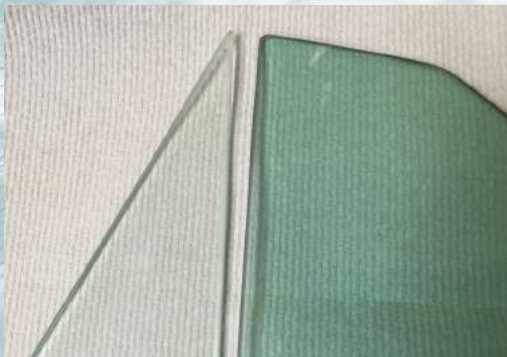
January 1970 reverse etching



Later service piece of glass— not etched like originals

Tinted vs non tinted glass:

The tinted glass that Ford used in the 1960's and 1970's is not the same type of tinted windows people see and use today since its not that obvious. The non-tinted glass was clear and the tinted glass (called Sun -X) had a green tint to the glass. Sometimes hard to see the difference once installed unless layed out side by side with a neutral background.



NOS Glass: Carlite NOS original glass is always a great find if/when available. Here are some photos for reference. The blue stickers/labels indicate the clear glass and the green stickers/labels indicate the tinted or Sun-X glass.



Special thanks and resources:

Dave Walden of ECS in St. Louis Missouri was invaluable in his experience and research in reproduction glass. Its no surprise since he has been at this longer than any other supplier making the absolute most correct reproduction glass for our cars. Started in 1998 ECS was founded on one principle—to improve and perfect the restoration products on the market. Dave's journey started with a 1970 Boss 302 where he found that tags and decals were not representative of the originals. After many hours of research and documentation ECS was started.

Today ECS produces the most correct reproduction glass and reproduction decals on the market not only for Ford but also Chevrolet and Chrysler products. Get in touch with ECS to see how they can help you.

<http://ecsautomotive.com/> or 1-855-532-7846



History lesson with Dave Walden



ANGHEL RESTORATIONS

Phone: 602 628 2522 Website:
www.anghelrestorations.com
 E-mail: marcus@anghelrestorations.com