

# *FORD Lifeguard Design*



*...what it  
can mean  
to you and yours*

## Why Ford is dedicated to Safety



More than two years ago, Ford undertook a program of research and testing to determine the causes of accident injuries . . . so that a safer car could be built.

Safety "accidents" were staged—accidents wherein instruments and cameras recorded and measured the reaction of car "occupants" as well as the behavior of the car itself. Many thousands of dollars were spent destroying *property* in order to find out more about protecting *people*.

Simultaneously, Ford engineers consulted pioneers in the field of crash injury research at Universities, at Medical Colleges, and at State Police headquarters.

The research of these men and institutions who have worked in many cases without remuneration to save human life and lessen passenger injuries, has been invaluable in Ford's development of Lifeguard design—the first major contribution to driver and passenger safety in accidents. Grateful acknowledgment is hereby made to these pioneers:

Hugh de Haven—Father of crash injury research in the aircraft field.

Medical organizations, State Police and Departments of Public Health reports from Arizona, Connecticut, Indiana, Maryland, Minnesota, North Carolina, Vermont, Virginia and the city of Minneapolis.

John O. Moore and his colleagues—Who tabulate, analyze and interpret the above reports for the research program of the Cornell Medical College.

Dr. Frank Mayfield and his colleagues—Sub-committee on Traffic Injury Prevention of the Committee on Trauma, American College of Surgeons.

Pennsylvania Turnpike Authority—For accident analysis.

J. H. Mathewson and his colleagues—University of California, Los Angeles.

Dr. R. Arnold Griswold and his colleagues—Committee on Trauma, American College of Surgeons.

Dr. Fletcher Woodward and his colleagues—American Medical Association's Safety Committee.

Dr. Ross A. McFarland and his associates—Harvard School of Public Health.

Lt. Col. John P. Stapp, U.S.A.F.(MC)—Chief, Aero Medical Field Laboratory, Holloman Air Development Center, Holloman Air Force Base, New Mexico.

Edward R. Dye and his colleagues—Cornell Aeronautical Laboratory.

Ned H. Dearborn and his colleagues—National Safety Council.

*In this booklet you will see the tangible results of this research . . . you will see why the 1956 Ford, with Lifeguard design, makes a major contribution to driver and passenger protection.*

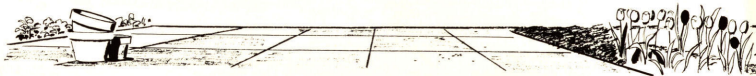
In cooperation with Cornell Medical College, the American College of Surgeons, the National Safety Council and others, Ford found that the majority of all the serious injuries in accidents were caused by drivers being thrown against the steering post . . . passengers being thrown forward against hard surfaces inside the car . . . or being thrown out of the car.

It was also found that not all of these injury-causing accidents occur, as you might expect,

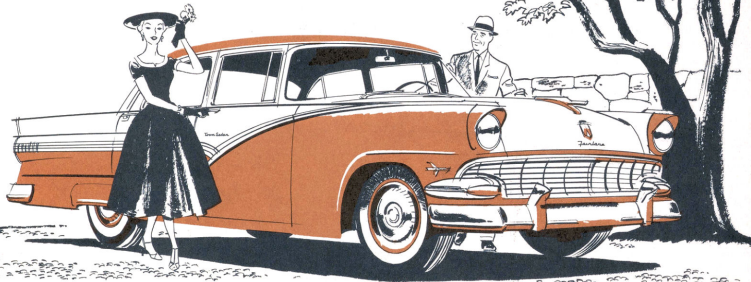
at high speeds. Several studies showed that a majority occur at speeds under 40 miles per hour.

And so—to protect you against these hazards—Ford developed Lifeguard design for '56 Ford cars and Ford trucks, a major contribution to making riders safer on today's highways . . . a Ford first for "Safety First."

In the following pages you will see what these Lifeguard features are and just what Lifeguard design means to you and yours.

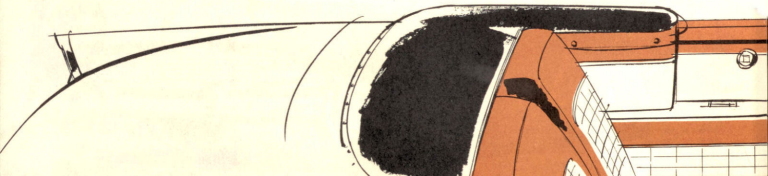


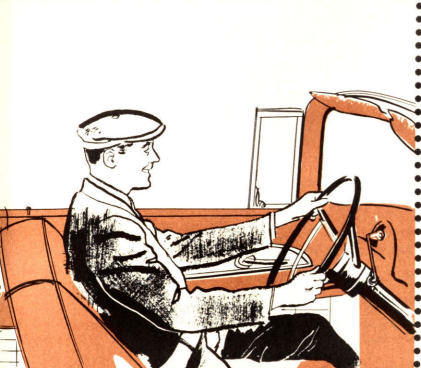
*Beautiful to look at—fun to drive—but let's  
look inside for passenger protection which is  
exclusive with Ford in its field.*



“Why isn’t it possible to design a steering wheel which would cushion the effect of a crash instead of leaving only a post which damages the driver’s chest”?

—DR. R. ARNOLD GRISWOLD, Chairman of the Committee  
on Trauma, American College of Surgeons





Notice the three scientifically designed and equally spaced spokes supporting this new 1956 Ford steering wheel. The steering post is deeply recessed— $3\frac{1}{8}$  inches deeper than the rim of the wheel itself.

In a case of what the engineers call “sudden deceleration” the spokes of this wheel, being equally spaced to give the same protection in any steering position, will bend away from the driver—the rim of this wheel will serve to cushion the shock. Ford’s Lifeguard Steering Wheel provides exactly what Dr. Griswold asked for.

Accident studies show that death and injury on the highway can be cut 50 percent or more *IF* safety belts are properly installed and *IF* riders will wear them all the time.

—Statement based on a recent article  
"How to avoid Sudden Death" in the  
SATURDAY EVENING POST

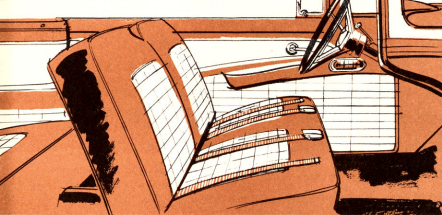
"The National Safety Council is very much interested in . . . automobile seat belts. We believe that their general use would reduce injuries in certain types of motor vehicle accidents."

—NED H. DEARBORN, President,  
National Safety Council

"Not the least of the advantages of these belts is that they lessen fatigue on long trips because they reduce the muscular activity needed to maintain equilibrium."

—DR. HORACE E. CAMPBELL, Chairman of the Automotive  
Safety Committee, Colorado State Medical Society



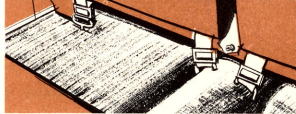


Are you familiar with Seat Belts in Airliners? Well, these optional Ford Seat Belts are one-third **STRONGER** than C.A.A. specifications

Not only are the Ford seat belts better-looking than ordinary car safety belts, they are also *stronger*. They even exceed the extra-high requirements of the Civil Aeronautics Administration who state that airline safety belts

must withstand a like force of 3,000 lbs.

Ford's nylon-rayon cord (not cotton webbing) seat belts *must withstand a force of 4,000 lbs.!* Genuine Ford seat belts are identified by the mark, FoMoCo on the underside of the buckle.



*-and look how they're anchored!*

Ford Seat Belts are solidly anchored to the steel body structure, by attachment to the steel flooring, reinforced by an extra-thick steel plate and bolstered by a steel body cross member.



*Look! One hand!*

One second (and one hand) is all you need to quick-release—or loosen—or tighten this Ford Seat Belt.

**Choice of colors!** Belts are available for front and rear seats in a variety of colors to harmonize with any interior.

"Our analysis of photographs, special accident reports and medical data from cooperative automotive crash injury research programs in eight states shows this: Even in what might otherwise have been harmless accidents, people are injured because car doors unlatch under impact and

passengers are thrown out. While it is true that safety belts would prevent this, it would offer double passenger protection if car manufacturers would work out a better door closure—one that would prevent doors swinging open when the car body is temporarily jolted out of alignment."

—JOHN O. MOORE, Director—Crash Injury Research—  
Cornell Medical College of Cornell University, New York City

# Ford pioneers Lifeguard Double-Grip Door Latch

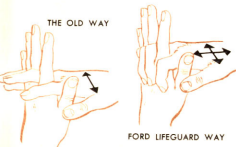
*You're twice as safe if you stay IN the car*

Surprising as it may seem, accident statistics show that you're safer if you are able to stay in the car in an accident than if you're thrown out . . .

In addition, Ford research reveals when doors stay closed, they reinforce the roof in the event of roll-overs.

They keep the body a unit . . . retain its strength.

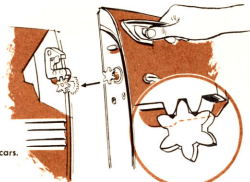
So, the problem was to design a door latch which would give added protection against the door springing open—whether locked or not—when the door frame “stretches,” as it is apt to do in a collision.



Ford designed an interlocking striker plate to overlap the door latch rotor to reduce the possibility of this happening. In effect it works like the hand clasp at left.

The steel used in the interlocking striker plate is one of the strongest types available—high-tensile chrome-molybdenum steel.

Ask your Ford Dealer to show you this door latch, now standard equipment on all Ford cars.



“If there were some practical way to cover instrument panels with padding, there is not the slightest doubt that head injuries would be lessened or, in many cases, prevented.”

—DR. FRANK MAYFIELD, Sub-committee  
on Traffic Injury Prevention of the Committee  
on Trauma, American College of Surgeons



## LIFEGUARD Cushioning for Instrument Panel

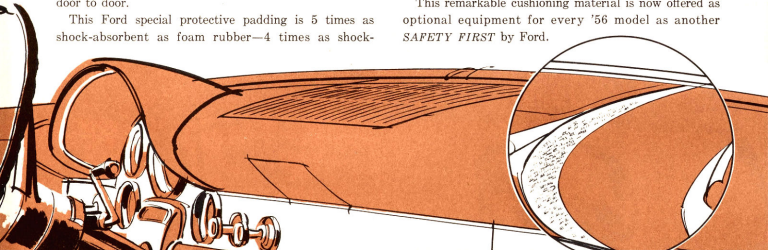
Ford tested hundreds of different materials before adopting the special cushioning material shown here—developed padding which covers the instrument panel from door to door.

This Ford special protective padding is 5 times as shock-absorbent as foam rubber—4 times as shock-

absorbent as woolen blankets piled to the same thickness.

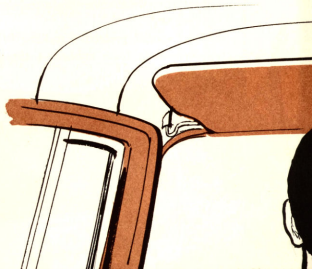
An egg was dropped out of a second-story window onto a pad of this material . . . and *it did not break!*

This remarkable cushioning material is now offered as optional equipment for every '56 model as another *SAFETY FIRST* by Ford.



“Our recommendation, on a basis of experience,  
is that sun visors should be padded or made  
more pliable to cushion the windshield header.”

—DR. R. ARNOLD GRISWOLD,  
Chairman of the Committee on Trauma,  
American College of Surgeons

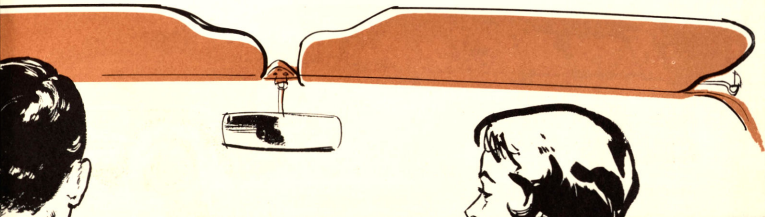


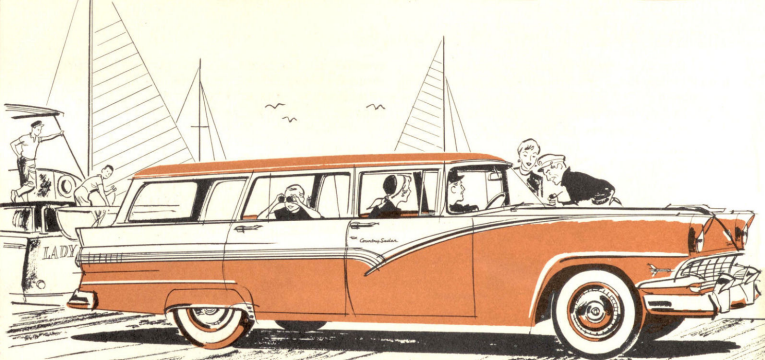
## LIFEGUARD Cushioned Sun Visors

Ford determined that new and effective protection was needed for one of the most critical injury areas in car accidents—the steel framing at the top of the windshield. Ford engineers, using a special padding material,

developed new Lifeguard Sun Visors to cushion both the windshield header and visors in the event of an accident.

So, Ford now offers cushioned sun visors as optional equipment *for the first time in the automotive industry.*







# Lifeguard Design one more example of Ford Leadership

Lifeguard design is exclusive with Ford and here, in quick review, are the four major Lifeguard features:

## STANDARD:

- The Lifeguard deep-center steering wheel
- Lifeguard double-grip door latches

## OPTIONAL:

- Ford webbed nylon seat belts
- Lifeguard special cushioning on instrument panel and sun visors

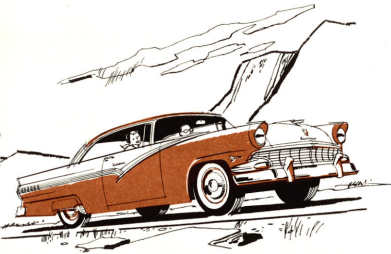
Designed to give you extra protection in the area where more than half of the serious accident injuries occur, these Lifeguard design features are one more impressive evidence of Ford's traditional leadership in automotive design.

Ford has perhaps the longest history of engineering "firsts" in the automobile industry. And yet, in all probability, there has never been one which Ford has presented with more pride than the new Lifeguard design in the '56 Ford.



# Ford for '56 brings you even more

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## *In Protection*

You know, now, that Ford has given special consideration to the protection of driver and passengers with new, exclusive Lifeguard design. But let's not overlook the fact that there are a great many more safety features in the '56 Ford. There are double-anchored seats, full-swivel safety-type Lifeguard rear-view mirror, heavy-gage steel body, King-Sized weather-sealed brakes, and Ford's traditional super-strong K-bar frame—all part of the safety picture, too.

And you get this safety in the car which borrowed the beauty of the Thunderbird. In addition to the Thunderbird, Ford for '56 offers 18 brilliant models—one to fit your own particular need. Besides the attractive Mainline and Customline Series there's the beautiful Fairlane Series, plus America's most popular Station Wagons which number six for '56. From this wide choice of '56 Ford models you'll find the exact degree of luxury and practicality you want.



## *In Power*

Now, in every eight-cylinder Fairlane and Station Wagon model, Ford gives you the same powerful engine that made the Thunderbird famous . . . and at no extra cost. It's the new Thunderbird Y-8 engine—and it sets a new high in performance and durability. It gives you trigger-quick response for greater confidence in every driving situation. Its deep, Y-block design gives you new smoothness and quietness of operation . . . which makes for longer engine life. The new Thunderbird Y-8, along with the new Y-8 and I-Six engines, is the result of Ford's 24 years of V-8 experience.



## *In Styling and Comfort*

You'll see the Thunderbird influence in every '56 Ford. You'll note a new, more massive grille, new wrap-around parking lights, big jet-tube tail lights, new Thunderbird-type instrument panel—the same attention to detail you expect in so fine a car. Further evidence of Ford's fineness are the Luxury Lounge interiors . . . designed for beauty and comfort. New deep-cushioned seats are upholstered in exquisite new fabrics and are custom-tailored and color-harmonized with all other interior trim. Here indeed, is fine-car décor . . . in a truly *fine* car. A car that is at home . . . anywhere.

# A word to the driver no matter what kind of car you're driving now

No manufacturer can build good judgment and road courtesy into a car. These are prerogatives of the driver.

"Good judgment" means, above everything, the ability to *anticipate* the unexpected. "Road Courtesy" simply means handling your car in relation to the other fellow as you would like him to handle his.

While the 1956 Ford provides an extra margin of protection from injuries in case of accident, it is the driver himself who must foresee and prevent the many accidents *which do not need to happen*.

Observe these 10 simple rules—and remember, *the life you save may be your own*:

1. Look both ways before pulling out from a curb, parking space or onto a main highway from a lesser road.
2. Pay attention to highway signs. They are put there for your protection. For example: STOP means stop; NO PASSING means it is not safe to pass.
3. Never pass until you can see that you have a clear road ahead.



4. Don't follow too closely. Keep at least 3 car lengths behind the car you are following at 30 miles per hour. The faster both cars are moving, the farther you should stay behind the car ahead... so drop back one car length for each 10 miles of speed.

5. Don't idle along on main highways. Traffic flows along at, or near, the speed limit on most main roads and a 20-mile-an-hour driver on a 50-mile-an-hour road can cause "desperation-accidents" in which he himself may be involved.

6. Don't try to "beat" the light. The time "saved" isn't worth it.

7. Don't "overdrive" your lights at night. You can't see a curve as far ahead at night as in the daytime and should, therefore, in general, drive more slowly.

8. Use your turn-indicator lights, or hand signals, if you're going to turn left or right. This is a good example of road courtesy. Give the driver behind the same warning you would like to have from the driver ahead!

9. Have your car safety-inspected at least every 5,000 miles—particularly brakes, steering, tires and lights.

10. Don't drive if you're sleepy, and in most states there are severe penalties for driving "under the influence of intoxicating liquor." Good judgment demands wide-awake driving.