

## Salesmen Show Safety Device Easily Defeated.

A spot check of eleven new-car dealers in the Washington, D. C., metropolitan area has shown that salesmen at nine of the dealerships were willing to suggest or demonstrate how federally required seat belt warning devices can be either circumvented or disconnected. The other two said they had not yet seen cars with the warning devices but didn't see why they couldn't be disconnected.

Only two salesmen of the eleven contacted encouraged seat belt usage, but both also offered help to "prospective buyers" who wanted to defeat the system.

The survey was conducted by staff members of the Insurance Institute for Highway Safety posing as "prospective buyers." Dealers selling cars manufactured by Ford, General Motors, American Motors, Chrysler and Volkswagen were checked. In each case salesmen were asked if the dealer would disconnect the warning system.

- One salesman said that the dealer could disconnect the device.
- Two indicated that the dealer might be able to disconnect the warning system but that they "haven't seen" any cars with the warning systems.
- Four explained or offered to show how the system could be disconnected.
- Four others either demonstrated or suggested how the "prospective buyer" could circumvent the system, but did not offer to show how it could be disconnected.

The Institute decided to conduct the survey after a staff member made an exploratory visit to a Chrysler-Plymouth dealer where a salesman demonstrated that the warning system could be defeated easily—by pulling the lap belt out of its retractor reel and tying it in a knot.

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The *Status Report* survey was conducted at the same time that the Auto Dealers Traffic Safety Council of the Highway Users Federation for Safety and Mobility, a Washington-based group, was urging dealers to "demonstrate for safety" as part of a 1972 safety campaign previewed earlier at a convention of the National Automobile Dealers Association. It includes recommendations that auto salesmen "demonstrate safety by using vehicle safety features, particularly seat and shoulder belts," according to the March 27, 1972, issue of *Automotive News*.

A federal safety regulation (FMVSS 208) requires that all cars manufactured on or after Jan. 1, 1972, be equipped either with passive restraints or with a warning light and buzzer intended to signal when either outboard front seat is occupied but its lap belt is not in use. The standard allows the warning system to be deactivated whenever the belt is pulled more than four inches from its "normally stowed position" or after a minimum activation period of one minute.

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From a current NHTSA fact sheet entitled, *Safety Belts In '72—A Step Closer To Automatic Crash-Survival*: "Until the time when all manufacturers must provide a totally automatic occupant protection system the federal goal must be to do everything possible to increase the American motorist's use of lap and shoulder belts . . . . The 1972 Improved Seatbelt Systems are harder to ignore, harder to forget, harder to avoid using."

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The approach most often suggested by the contacted salesmen for defeating the system was simply to fasten the lap belt and tuck it under the seat back. As long as the belt remains fastened the warning system is inactive. These are examples of how salesmen responded to the "prospective buyers":

**OLDSMOBILE:** A salesman replied that "it's against the law for us to disconnect them," but added that the owner might take the car to a service station where "they can cut the wire in about five minutes, no sweat." He then demonstrated "what I do" to defeat the system—which was to fasten the belt and stuff it under the seat back.

**FORD:** A salesman, who described the buzzer as a "Nader deal," demonstrated how the system on a Ford Mustang could be overridden by pulling the belt forward and tucking the buckle under the carpet to prevent it from retracting.

**DODGE:** A salesman said the warning system could be defeated if the belt is pulled from the retractor and "rolled into a ball." However, he discouraged the practice because "wearing belts is a good habit to get into. I'd recommend it."

**BUICK:** A salesman said that "we're forbidden by federal law" from disconnecting the lap belt warning system, but offered to "have someone show you how" to disconnect the system. Most people buckle their belts behind them, he said.

**AMERICAN MOTORS:** A salesman said the dealer couldn't disconnect the system because it is a "safety requirement on all cars." He suggested that the system could be defeated by pulling the belt out of the retractor and tucking it away. He also said it is possible to "cut the wire after you buy the car."

**VOLKSWAGEN:** A salesman said that "we've seen no buzzers yet." He said he supposed the dealer could disconnect the warning buzzer and light if asked, but admonished, "They're a very important reminder. It would be better to wear the belts."

LINCOLN-MERCURY: A salesman at a Lincoln-Mercury dealer gave two "prospective buyers" a ride in a Mercury Montego demonstrator in which he said the warning system had been defeated. He was asked if the system was "easy to fix." He told the shoppers, "All you have to do is to remove a fuse." When asked, "Can you do that?" he answered, "Yes, we can do that."

A dealer who disconnects the lap belt warning device on a car before it is sold is subject to prosecution under the National Traffic and Motor Vehicle Safety Act of 1966. Violations of the law are punishable by a fine of up to \$1,000 for each violation.

In its court fight against the safety administration's passive restraint rule, Ford has said that "Ford and other manufacturers repeatedly urged" that the administration consider various ways of increasing belt usage. The auto maker claimed that "dramatic improvement" in lap belt usage rates can be obtained by "installation of visible and audible warning devices in front seat lap belts to remind occupants to fasten their belts."

## Smaller Ford Control Arms: Probe Urged

The Center for Auto Safety has asked the National Highway Traffic Safety Administration to conduct a safety defect investigation of the lower control arms found on some small size Ford Motor Company cars. A larger and differently styled control arm found on some full size Fords already is suspected of being defective and is under investigation.

In a letter to safety administrator Douglas Toms, the Center has urged that the defect investigation include Mercury Cougars, Comets and Montegos, and Ford Mustangs, Torinos, Mavericks, Falcons and Fairlanes of the model years 1965 through 1969, in addition to full size Mercurys and Fords already under investigation. The Center's letter cited evidence that the suspension arms—which hold the front wheels in place—are subject to failure. (When the control arm breaks, the front wheel collapses out of position.)

The move results in large measure from a successful Colorado suit involving a 1965 Ford Falcon Ranchero owned by a rancher, B. V. Conrady, of Stratton, Colo. The failure occurred less than a year after the Falcon had been purchased.

Conrady testified in court that he was driving on a smooth, dry road in a normal fashion when the vehicle veered to the left across the highway. He testified he was unable to steer or control the vehicle and that it went off the road into a ditch. He and his son were injured. The jury found that a defect did exist and awarded him damages. On appeal, the Colorado Court of Appeals upheld the lower court's decision on the issue of the defect, and the Colorado Supreme Court refused to hear the case.

In citing the case, the Center for Auto Safety sent NHTSA a copy of an engineering report on the broken Falcon control arm made by Van Schwartz & Associates, Inc., of Denver, Colo. The report states, "The ultimate failure occurred where . . . latent defects or the cracks had extended sufficiently to cause a grossly significant reduction in the load-carrying capacity of this critical and important structural member of the machine." The report stated that "large areas of nonmetallic" substance in the metal of the arm, evident "corrosion" and "the inevitable propagation to failure created (the arm's) untimely, total fracture under the normal operating loads and stresses."

The Center also cited five other cases in which control arms reportedly failed on small size Ford cars, allegedly resulting in 16 injuries. Additionally, the Center said, "A lower control arm failure in a Ford Fairlane was reportedly the cause of a crash which claimed the life of Louis Lomax, a noted black author."

As further evidence of the problem, the Center cited distribution of a replacement arm by J. C. Whitney & Co., a Chicago distributor that advertises itself as "the world's largest automotive department store" offering "the world's largest and most complete line of automotive parts and accessories."

Its "Automotive Accessories and Parts" catalogue includes only one lower control arm—for use on 1962-1971 model Comets, Cougars, Fairlanes, Falcons, Mavericks, Mustangs, Montegos and Torinos, the small Ford-built models cited in the Center's letter. The distributor's catalogue says the replacement arm is "40 percent more rugged" and "1½ times thicker than" the original factory-installed small size Ford control arms. The Center stated in its letter, "We conclude that there must be a market—and hence a profit—for these replacement arms. Apparently a portion of this market is supplied by in-use failures."

The small car control arm failures reported are similar to those reported earlier in connection with larger 1965-1969 Ford made cars. In 1970, at the urging of the Department of Transportation, Ford recalled about 85,000 full size Fords in use as police pursuit vehicles. At the time both NHTSA and Ford maintained that other full size Fords should be excluded from the recall because "it is the severe impact loading encountered by police pursuit vehicles (for example, in crossing a median strip or a curb at high speed) that will initiate the lower control arm cracking that leads—under further severe impact loading—to a sudden failure."

Subsequent studies conducted by the National Bureau of Standards for DOT and by Value Engineering Laboratory, an independent testing laboratory, for the Insurance Institute for Highway Safety provided evidence that severe impact loads did not play a prominent role in the failures. (See *Status Report*, Vol. 7, No. 4, Feb. 28, 1972.)

NHTSA has full size non-police use Ford control arms under continuing investigation. In the agency's recently issued list of defect investigations (see related story and chart beginning below), the suspected defect problem is identified as "possible fatigue failure."

## **NHTSA Gives New Data On Defect Investigations**

The National Highway Traffic Safety Administration has increased the amount of information it makes public on possible defects that it has under investigation. The new information is included in its latest, just-released list of defect investigations, dated at the end of February 1972.

A significant disclosure made in the new information is that NHTSA now attributes failures of Ford lower control arms to "possible fatigue." The agency publicly announced in an October 1970 "consumer protection bulletin" that the failures result from "severe wheel impacts." To date NHTSA has made no public announcement of its changed position, nor has there been an explanation of why arms on Ford police pursuit vehicles — which have been recalled — would be more susceptible to "possible fatigue failure" than cars driven by the general public.

Another significant disclosure concerns the investigation of rusting of Chevrolet frames. During February, NHTSA issued a "public advisory" asking consumers to furnish the agency with details of "severe rusting" of automobile frames, an action the agency said would be an "important contribution" to its "ongoing investigation" of the problem. The just-released list of defect investigations, however, shows that at the same time it was asking for consumer input the agency had apparently discontinued its only investigation involving rusting frames — one, according to earlier lists, in which the agency had been investigating rusting frames on 1965 model Chevrolets.

(When it issued its "public advisory" the agency warned that "chassis frames of *all* automobile makes which have been in use five years or longer may be subject to the rusting out condition." It advised that "good owner practice" calls for "periodic flushing of the frame with a garden hose and inspection for accumulation of dirt and debris." The advisory claimed that "frames that are severely rusted may be made safe by welding on steel plates to 'bridge' the affected areas.")

## Subjects Of Current NHTSA Safety-Related Defect Investigations

Priority I

February 29, 1972

CASE	MAKE	MODEL	YEAR	COMPONENT	POSSIBLE PROBLEM
258	American Motors, Checker, Chrysler, Ford, General Motors	All models	1965-1969	Engine mounts	Secondary effects from shearing of engine mount
161	American Motors Chrysler, Ford, General Motors	All models	1963-1971	Power brake vacuum check valve	No power assist with loss of valve cover
297	Firestone	Front tires on GMC parcel delivery vans 4903 and 4905	1969-1970	Tires	Excessive heat buildup
098	Ford	Mustang, Cougar	1966-1970	Ford drop in fuel tank vent	Certain vents exposed to rup- ture by shifting luggage
140	Ford	Mustang, Cougar	1968-1969	Seat back pivot arm	Inboard pivot failure
212	Ford	Full size	1965-1969	Lower control arms	Possible fatigue failures
266	Ford	Full size	1969	Ignition switch	Poor connection between harness plug and switch
282	Ford	Standard size	1965-1970	15x5 wheel	Inner bead seat and/or spider failure
282.b	Ford	Ford sedan	1968-1971	15x6.5 wheels	Inner bead seat and/or spider failure
287	Ford	Galaxie	1968-1969	Front wheel spindle	Possible fatigue crack in heel area
279	Chevrolet	Corvair	1960-1963	Chassis and suspension	Handling and stability

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Priority I

CASE	MAKE	MODEL	YEAR	COMPONENT	POSSIBLE PROBLEM
252	Chevrolet	½-ton van and passenger cars	1969	Tie rod	Suspected fatigue failure in thread section
132	General Motors	All models	1965-1969	Quadrajct carburetors	Fuel leakage at plugs
249.b	Volkswagen	All models	Pre-1963	Heater	Engine fumes in passenger compartment
278	Volkswagen	All models	1965-1971	Seat and seat track	Seat track separation during crashes
228	Volvo	140, 164, P-1800	1969	Accelerator linkage	Throttle valve sticking

Priority II

190	All manufacturers	Travel trailers	1965-1970	Wheels/axles/tires	Possible overloading of suspension components
C2-09	All manufacturers	All models	All	Motorcycle helmets	Possible units providing inadequate protection
C2-05	American Motors	Jeepster	1971	Service brakes	Rear brake lock-up
C2-13	Army M151 Jeep	M151	All	Handling and Stability	(None listed)
C2-17	Aros Mfg., Fife Metal, Tacoma Wheel, Trailrite Trailer Company, Wallstrong Mfg.	Boat trailers	Various	Axle wheel hub	Loosening of wheel stud in hub
169	Bonanza	15', 17' trailers	Various	Wheel lug bolts	Lug nuts not compatible with wheels

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Priority II

CASE	MAKE	MODEL	YEAR	COMPONENT	POSSIBLE PROBLEM
289	British Leyland	Austin America, all models	1971	Exhaust system	Excessive heat transfer from exhaust system to tunnel area
150	Budd, Firestone, Kelsey-Hayes	RH5 <sup>o</sup> wheels for medium trucks	Various	Wheels	Accidental explosive disassembly
264	Dodge	S500 Chassis	1964-1967	Brake drum	Flawed surface
128	Ford	16" two-piece wheels for light trucks	Various	Wheels	Lock ring gutter failures
265	Ford	All models	1970-1971	Locking pawl grommet, shoulder harness	Plastic cracks on retention stud
C2-06	Ford	Capri	1971	Evaporative emission system	Possible charring of air cleaner element
C2-25	Ford	School bus	1966	Brake lines	Corrosion failure
C2-31	Ford	Standard size	1971	Steering tie rod	Separation
C2-37	Ford	Standard size	1969	Master cylinder	Possible malfunction
209	Chevrolet	Biscayne	1969	Rear track bar	Possible failure under load
233	General Motors	GMC school bus	1965-1970	Brake wheel cylinder	Wheel cylinder failure due to non-retention of piston
C2-20	General Motors	Oldsmobile Cutlass	1971	Service brakes	Excessive heat buildup
C2-29	General Motors	Vega	1971-1972	Dash panel	Flammability
C2-32	General Motors	GMC, Chevrolet pick-up	Various	15", 16" single piece wheel	Inner bead seat failure
C2-35	General Motors	Vega	1971	Throttle solenoid bracket breakage	Bracket breakage
C2-33	General Motors	Pontiac Firebird	1972	Lower B-post	Possible inadequate support welding

(cont'd. on page 8)

Priority II

CASE	MAKE	MODEL	YEAR	COMPONENT	POSSIBLE PROBLEM
C2-40	General Motors	Full size Chevrolet and Chevelle	1971-1972	Steering mechanism	Possible lock-up due to foreign objects
248	International Harvester	1600, 1700S 1800 bus	1958-1970	Brake shoe	Shoe separation from reinforcement web
276	International Harvester	1200D	1970	Front spring U-bolt	Breakage
C2-08	International Harvester	Step-in van	1970-1971	Steering linkage	Wheel oscillations over rough surfaces
283	International Harvester	Loadstar	1969	Rear axle housing	(None listed)
C2-23	Mack trucks	Mack truck tractor	1969-1970	Front suspension, saddle block and U-bolt	Breakage
C2-30	Mack trucks	Various	Various	Rear spring retention	Progressive cracking and breakage
C2-10	Peterson Manufacturers	Model 63	All	Child seating	Possible inadequate restraint security
C2-39	Pullman, Inc. Trailmobile Division	40-foot trailer	1966	Axle	Spindle breakage
C2-18	Rockwell Standard	Various trucks	1970-1971	Front axle hub	Failure to meet manufacturer's specifications
C2-19	Rockwell Standard	Tandem axle trailers	1960-1963	Axle spindles	Overstress condition
060	Volkswagen	All	1958-1969	Windshield wiper arms	Loss of wiper arm lock to transmission shaft

(cont'd. on page 9)



Priority II

CASE	MAKE	MODEL	YEAR	COMPONENT	POSSIBLE PROBLEM
C2-28	Warner Electric Brake Company	Various	Various	Electric brakes	Magnet clutch failure
C2-38	Webb Wheel Division	Various	Various	20" wheel	Possible flaw in casting
307	Western Unit Corporation	Butler trailers	Various	Drawbar and dollybar	Failures due to possible over-loading
296	Various trucks	Various	Various	Torque arms	Fatigue failure
051	(In litigation)*			3-piece wheel	

\*NHTSA was asked which investigation this referred to but declined comment. The case was not included in NHTSA's earlier lists of defect investigations.

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The increased information in the new list, in the form of skeletal descriptions of the possible defects, coincides with the appointment of Andrew G. Detrick to head the agency's defect investigations office. He replaces Joseph H. Clark, Jr., who has been placed in charge of the NHTSA compliance test facility now under construction. Clark told *Status Report* last month that the agency was considering ways to increase the amount of information that it gives to the public. (See *Status Report*, Vol. 7, No. 3, Feb. 14, 1972.)

Earlier NHTSA investigation lists failed to characterize what was suspected of being wrong with the vehicle or component under investigation. For example, "case 266" involves an investigation of the "ignition switch" on 1969 "full size" Fords. The earlier lists gave no indication why the "ignition switch" was suspect. The revised list, however, describes the suspected hazard as a "poor connection between (the) harness plug and (the) switch." The list still does not indicate the type of dangers that may result from the alleged defects, however.

The agency also dropped five other investigations from its list:

- Three investigations were dropped because, according to an NHTSA official, the alleged defects were "isolated incidents." Those three involved 1970 model MG Midget master cylinder seals (Case C2-15), 1972 model Toyota Celica accelerator and linkage systems (Case C2-34) and 1966 model Ford Mustang steering shafts (Case C2-24).

- Two of the investigations were discontinued as a result of recall campaigns. White Motor Corp. recalled 997 vehicles because of allegedly defective "accelerator return springs" (Case C2-22), and Ford recalled 15,607 Cortinas and Capris manufactured in 1970 and 1971 because of allegedly defective steering wheels (Case C2-36).

Also, three new investigations have been added since the previous list was published by NHTSA in January. They involve:

- A “possible flaw in casting” of “various” model 20-inch wheels manufactured by Webb Wheel Division (Case C2-38).
- “Spindle breakage” of axles on 1966 model 40-foot trailers manufactured by Pullman, Inc.’s Trailmobile Division (Case C2-39).
- “Possible lock-up due to foreign objects” of steering mechanisms on 1971 and 1972 model full size Chevrolets and Chevelles (Case C2-40). (See *Status Report*, Vol. 7, No. 5, March 13, 1972.)

## House Panel Reconsidering ‘Bumper Bill’

The future of federal legislation to authorize the setting of federal auto damageability standards has grown cloudy as a result of action by the House Interstate and Foreign Commerce Committee.

Meeting in executive session, the committee has decided to recommit the legislation to its Commerce and Finance Subcommittee for further consideration. The subcommittee earlier had voted against the standards-setting provision and had replaced it with a “consumer information” substitute. (See *Status Report*, Vol. 7, No. 5, March 13, 1971.)

At press time the subcommittee was reconsidering the bill. It is believed that the panel will send the bill back to the full committee with a compromise provision being advocated by Rep. Bob Eckhardt (D-Tex.) that would require the Department of Transportation to set damageability standards but limit their scope.

As originally drafted, the House bill (H.R. 11627) is similar in thrust to the auto damageability bill (S. 976) passed earlier by the Senate. (See *Status Report*, Vol. 6, No. 22, Nov. 19, 1971.) It would authorize DOT to set standards to prevent front and rear end auto damage in low speed collisions, and also would establish a supplementary program to inform consumers of damageability characteristics of cars.

However, the original version was scrapped by the subcommittee at the request of auto manufacturers, who successfully persuaded the lawmakers to replace it with language depending entirely on the “consumer information” approach. The substitute measure came under sharp attack from Ralph Nader and consumer and auto insurance interests, who charged that it would be as ineffective as DOT’s existing program to inform consumers of comparative vehicle safety performance characteristics.

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## STATUS REPORT

**Ralph W. Hoar, Jr., Editor**

INSURANCE INSTITUTE for HIGHWAY SAFETY  
WATERGATE SIX HUNDRED • WASHINGTON, D.C. 20037  
(AREA CODE 202-333-0770)

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