

**Statement before the Property-Casualty
Insurance Committee of the National
Conference of Insurance Legislators**

**Institute Research on Cosmetic
Crash Parts**

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**INSURANCE INSTITUTE
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The Insurance Institute for Highway Safety is a nonprofit research and communication organization that identifies ways to reduce motor vehicle crashes and losses. The Institute is funded by automobile insurers. I am the Chief Operating Officer of the Institute, and I am here to discuss the results of Institute research showing that cosmetic repair parts are irrelevant to a vehicle's ability to protect its occupants in the event of a crash.

A car's cosmetic repair parts (often called crash parts) include fenders, door skins, bumper covers, and the like. In the continuing debate about whether such parts from aftermarket suppliers are as good as cosmetic parts from original-equipment manufacturers, the issue of safety keeps cropping up. Claims are made that using cosmetic crash parts from sources other than original-equipment manufacturers could compromise safety. But the fact is, the source of the parts is irrelevant to safety because the cosmetic parts themselves serve no safety function. They merely cover a car like a skin. With the possible exception of the hood, their behavior in a crash



will not affect overall safety. Car hoods can affect occupant safety in a crash or even without a crash. But there is no evidence that hoods from aftermarket suppliers fail to perform as well as original-equipment hoods.

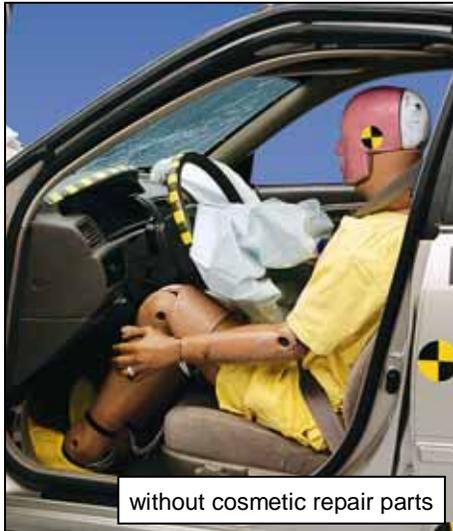


To demonstrate the irrelevance of safety in the cosmetic crash parts debate, the Institute in February 2000 released test results for a 1997 Toyota Camry (top photo) from which the front fenders, door skins, and front bumper cover were removed (middle photo).¹



The original-equipment hood was replaced with a CAPA-certified hood from an aftermarket supplier. The test results then were compared with results involving a 1997 Camry with its original-equipment parts intact (bottom photo).

Both Camrys performed with distinction in 40 mph frontal offset crash tests. Both earned good crashworthiness ratings according to the Institute's evaluation procedures. This meant that at the time of the test, a Camry that did not have any of its front-end cosmetic parts rated better in a frontal crash than many competing midsize cars that had their original-equipment parts.



During each test, researchers recorded measures on the driver dummy to assess the likelihood that people in on-the-road crashes would be injured. These measures were similar. The dummy in the Camry without its cosmetic parts recorded slightly lower results for leg injuries, but the differences were well within the expected range of test-to-test variability.



After each test, researchers also measured intrusion into the occupant compartment. There was slightly more intrusion in the footwell of the Camry without its cosmetic parts (again, the differences were within the range of test-to-test variability), while measurements of instrument panel and A-pillar movement were almost identical. Control of the crash test dummies and measured steering column movement also were similar. In each test, the dummy's head hit the B-pillar during rebound. Head acceleration from this impact in the Camry without its cosmetic parts was lower. Both the original-equipment and aftermarket hoods performed well, buckling as they are designed to do. Neither one was pushed back anywhere near the windshield, so front-seat occupants in real crashes similar to these tests would not be endangered.

Because there essentially was no difference in crashworthiness performance, both Camrys were rated good. The cosmetic parts did not influence the results. At the time the Camry was tested, only 3 other midsize four-door cars the Institute had tested matched the Camry's crashworthiness rating. In contrast, 10 cars in this class were rated acceptable, 2 were marginal, and 11 were poor. So a 1997 Camry without cosmetic parts offered more protection in a serious frontal crash than many competing cars with all cosmetic parts supplied by the original-equipment manufacturers.

The crash test of a 1997 Toyota Camry into a deformable barrier at 40 mph is not the first time the Institute has used tests to show the irrelevance of safety to the cosmetic repair parts debate. When this controversy first heated up in the 1980s, the safety-related claim of the moment was that cars repaired with cosmetic parts from aftermarket suppliers might not comply with federal motor vehicle safety standards. The Institute entered this dialogue in 1987, saying there is no reason to believe — let alone assume — that cosmetic crash parts significantly influence car crashworthiness. To reinforce this conclusion, Institute researchers demonstrated the point in a crash test. In the test, a 1987 Ford Escort was crashed into a rigid barrier at 30 mph (see photo)



to measure compliance with the federal motor vehicle safety standards that specified crash test requirements at the time.² Like the Camry, the Escort was crashed without its front fenders, door skins, or grille. The original-equipment hood was replaced with a certified aftermarket part to measure compliance with federal requirements, according to which the hood must not intrude into the windshield or a defined zone around it in a 30 mph crash.

The Escort complied with all front-into-barrier crash test performance requirements specified in five separate federal standards. It met these requirements with room to spare. There was no appreciable movement of the steering column. Head injury measures for driver and passenger dummies were far below the threshold used to indicate injury likelihood. Chest and upper leg injury measures also were low. Windshield retention was 100 percent. The hood buckled and did not intrude into the protected zone (see photo). Fuel spillage was zero.

The Institute is not the only research group to conduct such a test. In 1995, England's Motor Insurance Repair Research Centre tested a 1995 Vauxhall Astra from which the fenders and door skins had been removed and the hood replaced with an aftermarket part.³ The result of this front-into-rigid-barrier impact at 30 mph was similar to the Escort test. That is, the Astra complied with the same U.S. safety standards. According to the Astra's certification report, "comparison of the test vehicle with a previously tested vehicle of identical type tested to the same standard indicated that the presence of 'non-indigenous' panels had little effect on failure mode, as did the absence of the front outer wing panels and doorskins."

Unlike other cosmetic crash parts used in auto repairs, the car hood is the single cosmetic crash part that could influence safety. There are two possible concerns. The first has nothing to do with performance in a crash. It has to do with whether a hood latch or attachment points could fail while driving and allow the hood to fly up suddenly, obscuring the driver's view. In its 1999 article on cosmetic crash parts, *Consumer Reports* cited an unverified claim that an aftermarket hood failed in this manner and caused a crash.⁴ A notable absence from the same article is acknowledgement that hoods from original-equipment manufacturers can, and do, have defective latches and/or attachment points that fail in the same manner. Auto manufacturers have conducted 53 safety-related recalls involving original-equipment hoods, mostly because of hood latches and attachment hardware. More than 7.9 million vehicles were covered by these recalls (see appendix). Many cases have involved hoods that flew up, causing some reported crashes. Such a large number of safety-related recalls of original-equipment hoods lends perspective to the unsubstantiated allegation in *Consumer Reports* that aftermarket hoods are necessarily inferior.

The second possible concern relates to hood performance in crashes — whether they will buckle, as new-car hoods are designed to do, so a hood does not get driven back near the windshield. The Certified Automotive Parts Association (CAPA) certifies hoods by ensuring that the same buckle points present in hoods from car companies also are present in the aftermarket hoods it approves. Hoods must buckle as they are supposed to, or else safety could be compromised. It obviously is not feasible to crash test every aftermarket hood. But in the tests conducted by the Institute and the Motor Insurance Repair Research Centre in which original-equipment hoods had been replaced by aftermarket ones, the replacement hoods performed exactly as they should. This is to be expected because the buckle points are built in.

In addition to these results, the Institute is aware of one additional vehicle crash test demonstrating that aftermarket hoods do not pose a safety problem. In 1990, the National Highway Traffic Safety Administration, the federal agency that regulates motor vehicle safety, wrote to Ford, General Motors, and Chrysler asking for information and testing on aftermarket parts safety. In response, Chrysler told the agency it had conducted a 30 mph frontal barrier crash test “to observe the effectiveness of an offshore manufactured hood with respect to FMVSS No. 219 — Windshield Zone Intrusion. As indicated in the report, no windshield zone intrusions were noted.”⁵

In conclusion, the crash testing done by the Institute and others demonstrates that cosmetic crash parts such as door skins, fenders, and bumper covers are irrelevant to the crashworthiness performance of the vehicles. It is the design of the underlying structure of a vehicle — not its

cosmetic skin — that provides protection in the event of a crash. Hoods are the only cosmetic crash part that could be a source of possible safety problems. However, in crash tests done by the Institute and others, aftermarket hoods have performed in the same manner as original equipment hoods. In the early 1990s, the National Highway Traffic Safety Administration examined safety concerns about aftermarket parts and concluded that “there are no data or analyses available at this time to suggest a safety problem with aftermarket or replacement components.”⁶ There still are not.

References

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6. Curry, J.R., NHTSA Administrator. 1991. Letter to the U.S. House of Representatives, Committee on Energy and Commerce, concerning replacement crash parts. November 7. Washington, DC: National Highway Traffic Safety Administration.

Appendix – Motor Vehicle Recall Campaigns for Hood-Related Defects

NHTSA No.	Manufacturer	Model Year, Make, and Series	Number of Vehicles
67V092	Chrysler Corporation	Jeep Jeepster (manufacturer did not supply model year)	3,606
69V077	Ford Motor Company	1969 Mercury Cougar	354,000
69V170	Chrysler Corporation	1970 American Hornet	3,502
70V066	Jaguar Cars	1970 Land Rover 3500S	1,292
71V225	Mercedes-Benz of N.A.	1972 Mercedes 350SL	96
72V011	Chrysler Corporation	1972 American Javelin	6,889
72V052	Nissan Motors	1970-72 Nissan 110, KL110	86,429
72V058	Ford Motor Company	1972 Lincoln Mark IV	24,538
72V296	Chrysler Corporation	1973 Dodge Truck D100, D200, D300, W200, W100, W300	10,301
73V054	Jensen Motors	1973 Jensen Healey	580
74V077	General Motors	1974 Chevrolet Laguna	3,404
75V016	General Motors	1974 Cadillac	234,669
77V240	Chrysler Corporation	1976-78 Chrysler Lebanon, Dodge Aspen, Dodge Diplomat, Plymouth Volare	1,214,416
80V138	Chrysler Corporation	1980 Dodge Omni, Plymouth Horizon	231,382
82V105	Ford Motor Company	1983 Ford F-350 Truck, Ford F-250 Truck	662
83V049	General Motors	1983 Chevrolet Camaro	4,399
83V125	Nissan Motors	1984 Nissan 300ZX	9,858
83V131	American Honda Motor Corporation	1984 Honda Civic	10,421
84V008	Chrysler Corporation	1984 Dodge Daytona, Plymouth Laser	11,262
84V111	Ford Motor Company	1983-84 Ford Ranger Truck	460,918
84V139	Nissan Motors	1983-84 Nissan Pulsar	86,742
86V121	General Motors	1985-86 Oldsmobile Calais	206,208
86V165	General Motors	1987 Chevrolet Beretta, Chevrolet Corsica	7,990
88V039	General Motors	1987-88 Chevrolet Beretta, Chevrolet Corsica	282,255
88V065	General Motors	1988 Buick Regal, Pontiac Grand Prix	12,547
90V038	Hyundai Motor	1989-90 Hyundai Sonata	39,631
91V012	Porsche Cars N.A. Incorporated	1989-90 Porsche 911, Carrera 4; 1990 Carrera 2, Cabrio, Coupe, Targa	2,537
91V073	Utilimaster Motor Corporation	1990-91 Utilimaster Aeromate	542
91V135	General Motors	1987-88 Chevrolet Beretta, Chevrolet Corsica	290,563
91V147	Ford Motor Company	1991 Lincoln Town Car	78,796
91V166	General Motors	1992 Chevrolet Cavalier, Pontiac Sunbird	3,236
91V186	General Motors	1991-92 Buick Roadmaster, Chevrolet Caprice, Oldsmobile Custom Cruiser	224,953
92V070	Chrysler Corporation	1992 Chrysler Lebanon	17,207
93V189	General Motors	1989-93 Geo Metro	356,211
93V189	Suzuki Motor Corporation	1989-93 Suzuki Swift	38,232
94V039	Toyota Motor Company	1992 Lexus ES300	16,036
95V056	Chrysler Corporation	1994-95 Dodge Ram Truck	180,988
95V091	Ford Motor Company	1990-91 Lincoln Town Car	178,873
95V229	General Motors	1996 Cadillac Concours, Cadillac Deville	12,792
95V151	Ford Motor Company	1991-92 Lincoln Town Car	73,881
96V010	Mercedes-Benz of N.A.	1996 Mercedes 202	41,081
97V024	Ford Motor Company	1992-97 Ford Crown Victoria	182,333
97V027	Utilimaster Motor Corporation	1996-97 Utilimaster Walk-in-Van	3,132
97V095	Chrysler Corporation	1996-97 Chrysler Cirrus, Dodge Stratus, Plymouth Breeze	222,548
97V180	Ford Motor Company	1994-96 Ford Mustang, 1995-96 Ford Windstar Truck	732,579
97V232	General Motors	1998 Cadillac Deville	14,429
98V160	Volkswagen	1993-96 Volkswagen Golf, Volkswagen GTI, Volkswagen Jetta	238,000
00E069000	Mazda	1993-1995 Mazda RX-7	16
00V394000	Ford Motor Company	2001 Ford Ranger	137,700
01V040000	DaimlerChrysler	1994-96 Dodge Ram Pickup	701,000
03V332000	DaimlerChrysler	2004 Chrysler 300M, Chrysler Concorde	20,978
98V271000	Jaguar Cars	1994 Jaguar XJ-12	1,457
99V164000	Ford Motor Company	1998-99 Mercury Mountaineer, Ford Explorer	854,288
Total			7,932,385

Special issue: cosmetic repair parts

STATUS REPORT

INSURANCE INSTITUTE
FOR HIGHWAY SAFETY

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Cosmetic repair parts irrelevant to safety

If car crashworthiness isn't influenced by whether or not a vehicle's cosmetic crash parts are on the car or removed, then it follows that the source of the parts also is irrelevant to crashworthiness. This is demonstrated in a new test of a Toyota Camry from which the front-end cosmetic parts were removed.

Before detailing the crash test, here's a little background: A car's cosmetic repair parts (often called crash parts) include fenders, door skins, bumper covers, and the like. In the continuing debate about whether such parts from aftermarket suppliers

are as good as cosmetic parts from original-equipment manufacturers, the issue of safety keeps cropping up (see *Status Report*, Nov. 21, 1987). Claims are made that using cosmetic crash parts from sources other than original-equipment manufacturers could compromise safety. But the fact is, the source of the parts is irrelevant to safety because the parts themselves, except possibly the hood, serve no safety or structural function. They merely cover a car like a skin.

“The safety claims are red herrings to try to frighten people. With the possible exception of hoods, there are no safety implications of using cosmetic crash parts from any source,” Institute president Brian O’Neill says. Car hoods can affect occupant safety in a crash or even without a crash (see p. 5). But there’s no evidence that hoods from aftermarket suppliers fail to perform as well as original-equipment hoods.

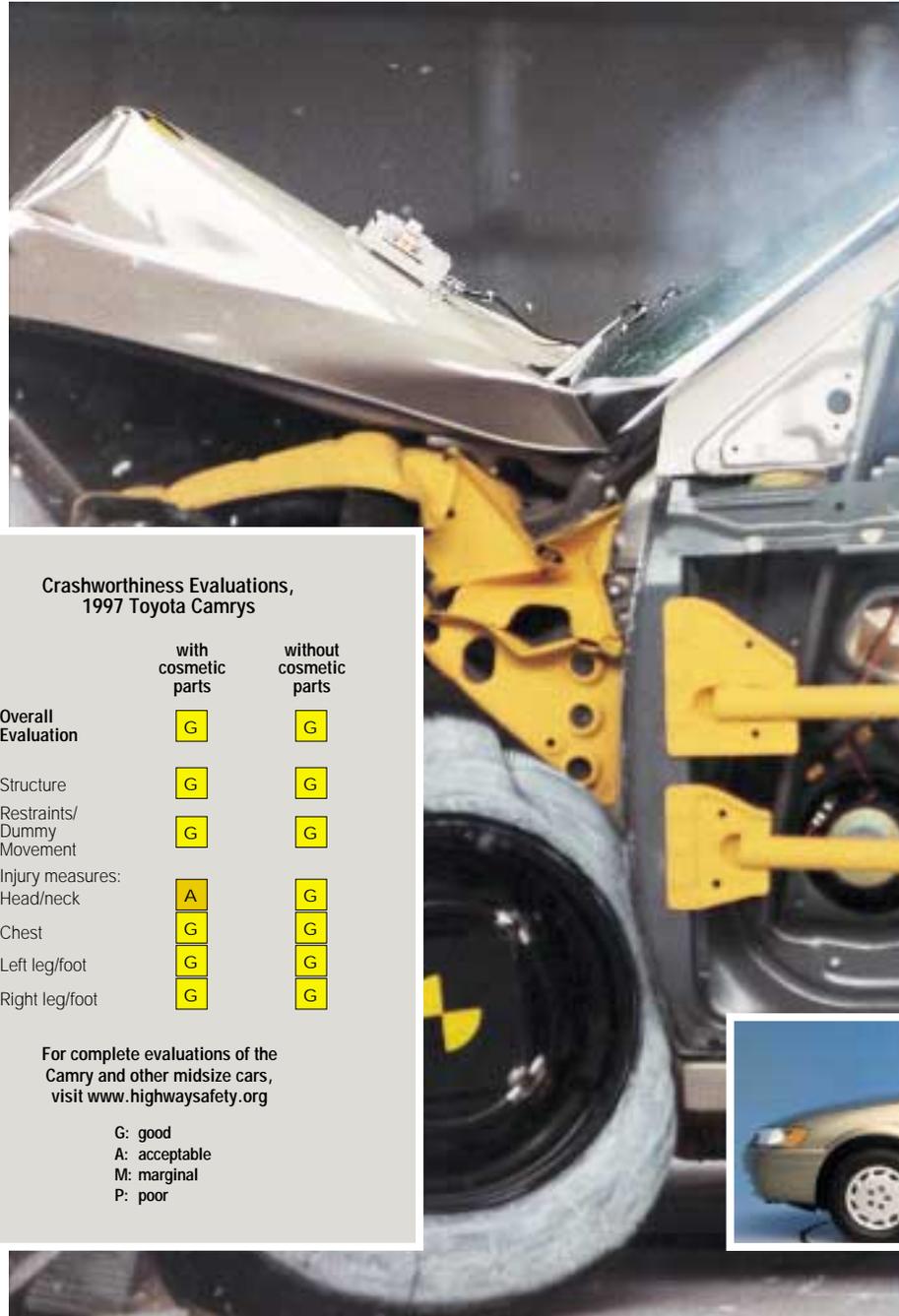
To again demonstrate the irrelevance of safety in the cosmetic crash parts debate — such demonstrations have been conducted before (see p. 4) — the Institute recently tested a 1997 Toyota Camry from which the front fenders, door skins, and front bumper cover were removed. The original-equipment hood was replaced with a certified hood from an aftermarket supplier. The test results then were compared with results involving a 1997 Camry with its original-equipment parts intact.

Both Camrys performed with distinction in 40 mph frontal offset impacts. Both earned good crashworthiness ratings according to the Institute’s evaluation procedures. This means a Camry that doesn’t have any of its front-end cosmetic parts is rated better than most competing midsize cars that still have such parts.

Detailed results of the performances of the Camrys in the offset tests were similar. During each test, researchers recorded measures on the driver dummy to assess the likelihood that people in on-the-road crashes would be injured. These measures were similar. The dummy in the Camry without its cosmetic parts recorded slightly lower results for leg injuries, but the differences were well within the expected range of test-to-test variability.

After each test, researchers also measured intrusion into the occupant compartment. There was slightly more intrusion in the footwell of the Camry without its cosmetic parts (again, the differences were within the range of test-to-test variability), while measurements of instrument panel and A-pillar movement were almost identical.

Control of the crash test dummies and measured steering column movement also were similar. In each test, the dummy’s head hit the B-pillar during rebound. Head acceleration from this impact in the Camry without its cosmetic parts was lower.



**Crashworthiness Evaluations,
1997 Toyota Camrys**

	with cosmetic parts	without cosmetic parts
Overall Evaluation	G	G
Structure	G	G
Restraints/ Dummy Movement	G	G
Injury measures:		
Head/neck	A	G
Chest	G	G
Left leg/foot	G	G
Right leg/foot	G	G

For complete evaluations of the Camry and other midsize cars, visit www.highwaysafety.org

G: good
A: acceptable
M: marginal
P: poor

Both the original-equipment and aftermarket hoods performed well, buckling as they’re designed to do. Neither one was pushed back anywhere near the windshield, so front-seat occupants in real crashes similar to these tests wouldn’t be endangered.

“There essentially was no difference in crashworthiness performance. Both Camrys were rated good. The cosmetic parts didn’t (continues on p.6)

	Injury measures		
	HIC	Peak gs from hard contact	Chest Maximum compression (mm)
1997 Toyota Camry with original-equipment cosmetic crash parts	470	127	36
1997 Toyota Camry without cosmetic crash parts	582	40	37

Injecting safety into the continuing debate about cosmetic crash parts

Even though safety is irrelevant to the debate about original-equipment versus aftermarket cosmetic crash parts, numerous attempts have been made to inject safety into the controversy. For example:

In a 1999 article entitled "Shoddy Auto Parts," *Consumer Reports* conceded there are "little data on the safety of replacement parts." Without any objective evidence of safety problems, *Consumer Reports* relied on anecdotal evidence, of which the article says "there is enough . . . to raise concern." Yet no convincing evidence was offered.

During consideration of legislation on aftermarket crash parts, a 1999 report from the Florida House of Representatives cited *Consumer Reports* extensively as well as the views of automakers. A Ford representative, for example, is quoted as saying "no testing has been conducted to verify that the performance of imitation crash parts . . . in front-end crashes will be compatible with Ford airbag systems . . . Because so little is known about the effect of imitation parts on an airbag system and component integrity, Ford believes genuine Ford crash parts should be used."

This statement was issued despite one from Ford's vice president for environmental and safety engineering, Helen Petrauskas, in 1987. She told Institute president Brian O'Neill that "after a review of the information you provided, as well as other data available to us, we have concluded that, in general, fenders and door 'skins' are components whose design or manufacture is not likely to have a significant effect on vehicle safety."

Still, some car company representatives continue to raise the safety issue. For example, a 1997 General Motors statement said "any deviation in the use of parts not specifically designed to meet the original specifications can compromise the integral balance between the safety systems."

According to a bill introduced last year (but not enacted) in the New York legislature, "the use of genuine crash parts (parts manufactured by or for the company that manufactured the vehicle itself) should be required to assure quality, safe repairs. Studies have shown that some alternative parts create unnecessary safety risks due to improper fitting." However, neither the studies nor details of their findings were specified.

Responsible studies linking aftermarket parts to safety compromises don't exist. And, as *Consumer Reports* conceded, the National Highway Traffic Safety Administration "hasn't been getting complaints about the safety of replacement parts." In fact, the agency responded to a query from U.S. Congressman John Dingell in 1991, noting that "there are no data or analyses available at this time to suggest a safety problem with aftermarket or replacement components." There still aren't.



Peak gs, 3 ms clip	Maximum tibia index		Steering column movement		Measures of occupant compartment intrusion						
	Left	Right	Upward (cm)	Rearward (cm)	A-pillar movement Rearward (cm)	Instrument panel rear movement		Footwell intrusion			
						Left (cm)	Right (cm)	Left (cm)	Center (cm)	Right (cm)	Footrest (cm)
39	0.57	0.68	5	2	2	3	3	11	12	11	4
36	0.48	0.60	3	4	2	3	3	16	18	13	9

Two crash tests, one 13 years old, show irrelevance of safety to crash parts debate

The recent crash test of a 1997 Toyota Camry into a deformable barrier at 40 mph (see p. 1) isn't the first time the Institute has used tests to show the irrelevance of safety to the cosmetic repair parts debate. When this controversy heated up in the 1980s, the safety-related claim of the moment was that cars repaired with cosmetic parts from aftermarket suppliers might not comply with federal motor vehicle safety standards.

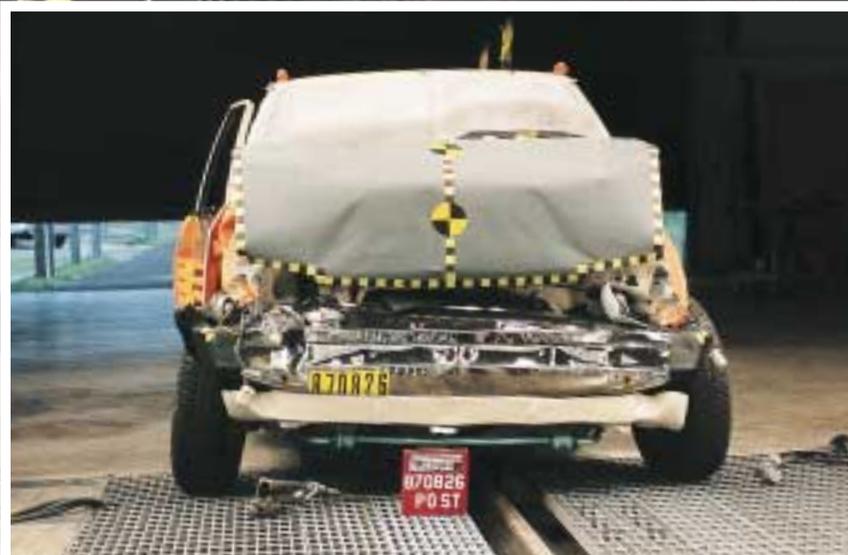
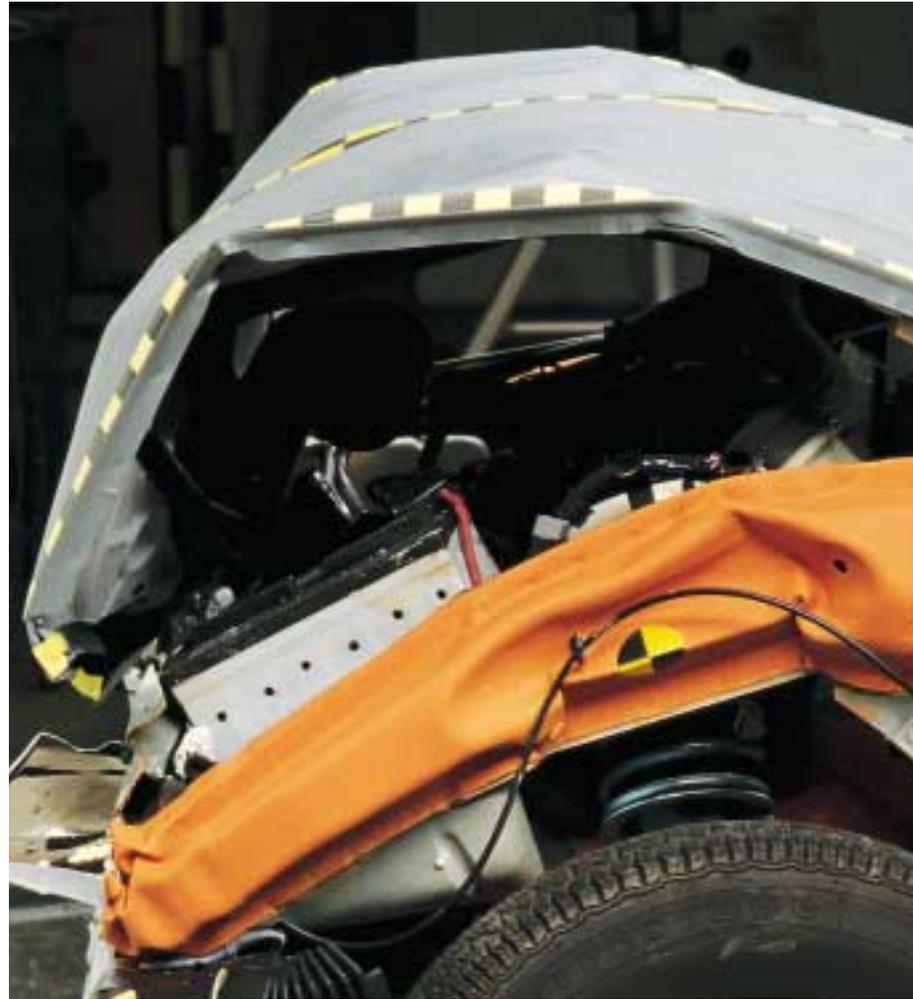
The Institute entered this dialogue in 1987, saying "there's no reason to believe — let alone assume — that cosmetic crash parts significantly influence car crashworthiness." To reinforce this conclusion, Institute researchers demonstrated the point in a crash test.

Ford Escort test: A 1987 Ford Escort was crashed into a rigid barrier at 30 mph to measure compliance with the federal motor vehicle safety standards that specified crash test requirements at the time. Like the Camry, the Escort was crashed without its front fenders, door skins, or grille. The original-equipment hood was replaced with an aftermarket part to measure compliance with federal requirements, according to which the hood must not intrude into the windshield or a defined zone around it in a 30 mph crash.

And the result? The Escort complied with all front-into-barrier crash test performance requirements specified in five separate federal standards. It met these requirements with room to spare. There was no appreciable movement of the steering column. Head injury measures for driver and passenger dummies were far below the threshold used to indicate injury likelihood. Chest and upper leg injury measures also were low. Windshield retention was 100 percent. The hood buckled and didn't intrude into the protected zone. Fuel spillage was zero.

Vauxhall Astra test: The Institute isn't the only research group to conduct such a test. In 1995, England's Motor Insurance Repair Research Centre tested a 1995 Vauxhall Astra from which the fenders and door skins had been removed and the hood replaced with an aftermarket part.

The result of this front-into-rigid-barrier impact at 30 mph was similar to the Escort test. That is, the Astra complied with the same U.S. safety standards. According to the Astra's certification report, "comparison of the test vehicle with a previously tested vehicle of identical type tested to the same standard indicated that the presence of 'non-indigenous' panels had little effect on failure mode, as did the absence of the front outer wing panels and doorskins."



1987 Ford Escort
30 mph federal compliance crash test



Unlike other cosmetic crash parts used in auto repairs, the hoods of cars could influence safety

The hood is the single cosmetic part that could be a source of safety problems. There are two possible concerns.

In the absence of a crash: The first possible concern has nothing to do with performance in a crash. It has to do with whether a hood latch or attachment points could fail while driving and allow the hood to fly up suddenly, obscuring the driver's view. *Consumer Reports* has cited an unverified claim that an aftermarket hood failed in this manner and caused a crash.

A notable absence from the same article is acknowledgement that hoods from original-equipment manufacturers can, and do, have defective latches and/or attachment points that fail in the same manner. Auto manufacturers have conducted 47 safety-related recalls involving original-equipment hoods, mostly because of hood latches and attachment hardware. A total of 6,216,946 vehicles have been recalled. Many cases have involved hoods that flew up, causing some reported crashes.

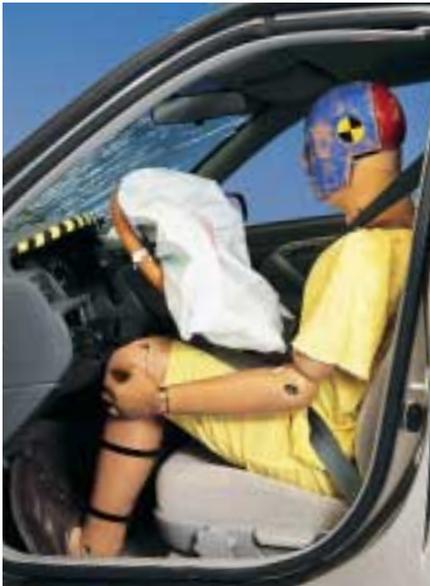
"Such a large number of safety-related recalls of original-equipment hoods lends perspective to the unsubstantiated allegation in *Consumer Reports* that aftermarket hoods are somehow inferior," Institute president Brian O'Neill notes.

The quality of many aftermarket crash parts used for auto repairs, including car hoods, is evaluated by the Certified Automotive Parts Association (CAPA). "All hood latches and strikers are subject to additional testing," CAPA says, "to evaluate their dimensions, retention, and hardness of core and case." Other than hoods, the parts CAPA certifies aren't safety related. This group doesn't certify parts that are subject to the requirements of federal motor vehicle safety standards.

Crash performance: The second possible concern relates to hood performance in crashes — whether they will buckle, as new-car hoods are designed to do, so a hood doesn't get driven back near the windshield. CAPA certifies hoods by ensuring that the same buckle points present in hoods from car companies also are present in the aftermarket hoods it approves.

"Hoods must buckle as they're supposed to, or else safety could be compromised," O'Neill says. "It's obviously not feasible to crash test every aftermarket hood. But in several tests in which original-equipment hoods have been replaced by aftermarket ones, the replacement hoods have performed exactly as they should. This is to be expected because the buckle points are built in."

(continued from p.2) influence the results,” O’Neill points out. “Only three other midsize four-door cars we’ve tested match the Camrys’ crashworthiness ratings. In contrast, 10 cars in this class are rated acceptable, 2 are marginal, and 11 are poor. So a Camry without cosmetic parts offers more protection in a serious frontal crash than many competing cars with all cosmetic parts supplied by the original-equipment manufacturers.”



These photos, taken after the 40 mph offset crash test, show how well the driver space was maintained in both Camrys. The space was maintained regardless of the presence (top photo) or absence (above) of cosmetic crash parts.



Real issue about cosmetic parts is cost of original-equipment parts, not safety of aftermarket parts

There's no merit to the safety questions that have been raised about cosmetic auto crash parts from aftermarket suppliers. But there's a very big pocketbook issue associated with using repair parts from original-equipment suppliers — they cost a lot more than the aftermarket parts.

The Alliance of American Insurers recently toted up the cost of rebuilding a 1999 Toyota Camry with parts supplied by the car company. The tab came to

\$101,355.55, compared with the Camry's sticker price of about \$23,000. And the cost of the rebuilt car could have been even higher except for markdowns because of competition from aftermarket suppliers. The Alliance's Kirk Hansen, director of claims, points out that "if the aftermarket parts didn't exist, the price of the Camry would be closer to \$200,000."

To demonstrate just how the introduction of aftermarket parts influences the



**SALE
PRICE**
\$101,355.55

**SALE
PRICE**

1992 Toyota Camry
Fender price comparisons

	Original-equipment	After-market
1992	\$253	none
1993	264	\$202
1994	265	209
1995	259	168
1996	143	60
1997	143	63
1998	143	77
1999	146	56

price of cosmetic parts supplied by the car companies, the Alliance points to a study involving Toyota Camry parts prices. This automaker priced a fender at \$253. In comparison, an aftermarket fender fitting the same car was introduced the next year at \$202. As the price of the aftermarket part came down during the following years, Toyota lowered its price to \$143.

“Opponents of using aftermarket cosmetic parts would like consumers to believe ominous safety consequences will follow from using anything other than original-equipment parts,” Hansen says. “But the truth is that the ominous consequences come from using the original-equipment parts, which hit both car owners and their insurers in the pocketbook.”

STATUS REPORT

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Special issue

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This special issue focuses on the safety of cosmetic repair parts from competing suppliers. Recent special issues have focused on the following subjects:

Graduated licensing	34:10 (1999)
Vehicle compatibility in crashes	34:9 (1999)
Child safety	34:8 (1999)
Neck injuries	34:5 (1999)
Vehicle safety advancements	34:4 (1999)
Pedestrian deaths, injuries	34:3 (1999)
Truck safety	33:8 (1998)
Urban crashes	33:4 (1998)
Crash compatibility	33:1 (1998)
Airbags	32:9 (1997)



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Amwest Insurance Group	The Hartford	PEMCO Insurance Companies
Auto Club South Insurance Company	Idaho Farm Bureau	The Progressive Corporation
Automobile Club of Michigan Group	Kansas Farm Bureau	The Prudential
Baldwin & Lyons Group	Kemper Insurance Companies	Response Insurance
Bituminous Insurance Companies	Liberty Mutual Insurance Group	Royal & SunAlliance
Brotherhood Mutual	Merastar	SAFECO Insurance Companies
California Insurance Group	Mercury General Group	SECURA
California State Automobile Association	MetLife Auto & Home	Shelter Insurance Companies
Cameron Companies	Middlesex Mutual	State Auto Insurance Companies
Church Mutual	Montgomery Insurance Companies	State Farm Insurance Companies
Colonial Penn	Motor Club of America Insurance Company	The St. Paul Companies
Concord Group Insurance Companies	Motorists Insurance Companies	Tokio Marine
Cotton States	Motors Insurance	USAA
Country Companies	MSI Insurance Companies	Virginia Mutual Insurance Company
Erie Insurance Group	National Grange Mutual	Warrior Insurance Group
Farmers Insurance Group of Companies	Nationwide Insurance	Yasuda Fire and Marine of America
Farmers Mutual of Nebraska	North Carolina Farm Bureau	Zurich U.S.
Fidelity & Deposit	Northland Insurance Companies	