VEHICLE INFORMATION SERVICES, INC.

NATIONAL ASSOCIATION OF ATTORNEYS GENERAL

2007 FALL CONSUMER PROTECTION SEMINAR

October 29, 2007
Boston, Massachusetts

Forget Five Star Crashworthiness: How Safe is Your Vehicle **after** Repair?

Consumers in Danger

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The Existing Collision Repair Debacle

No Collision Repair Standards

The National Highway Traffic Safety Administration "NHTSA") disclaims any responsibility for ensuring vehicles continue to be safe and crashworthy. Once a motor vehicle has sustained damage – even if properly repaired – it may no longer meet **any** of its former crashworthiness or safety standards.

Despite an extensive accident data collection program, NHTSA does not identify or track information as to prior repairs of vehicles involved in accidents resulting in fatalities or serious injury.

There are virtually no federal, state, or industry safety standards requiring the manner in which a vehicle may be repaired.

The vast majority of states have no education, training, certification, or oversight requirements to become a collision repairer. In all but two states there are no mandatory qualifications required to be demonstrated for an individual to be entitled to repair consumers' vehicles.

Yet, every day, consumers put their lives in the hands of collision repairers.

Insurer Interference

Insurers pay for over ninety percent (90%) of collision-related repairs to motor vehicles.

Insurers interfere daily with the judgment of collision repairer as to the manner, parts, techniques, and necessary requirements to safely and properly repair consumers' vehicles. Insurers demand that repairers use unsafe parts, e.g. "reconditioned" alloy wheels or salvage yard airbags, engage in unsafe "cost-saving" repair measures, e.g. "clipping a customer's vehicle", or omit necessary safety procedures, e.g. "aiming headlights" for the sole purpose of saving money. Often these insurer cost-saving repairs directly conflict with auto manufacturer repair recommendations or guidelines.

Most adjusters (or appraisers) from insurance companies who review vehicle damage and are given authority to determine the cost necessary to repair a vehicle have no background in automotive repair and know nothing about repairing motor vehicles. Many are novices given two weeks of "training" by an insurer, then cleared to write

damage estimates for consumers' vehicles. These adjusters never tell consumers that they have written the repair estimate to use a "clip", a welded aluminum alloy wheel, or some other part or technique that may endanger the consumer or void the manufacturer's motor vehicle limited warranty. Certain insurers have even rewritten their policy language to only pay for the cost of repair as "reasonably determined by us". The same unqualified insurance employees with only weeks of training are now acting as the final authority on the cost and method of consumers' vehicle repairs.

Insurers systematically attempt to divert consumers from collision repairers which stand up for the consumer and refuse to engage in unsafe. Insurers actively urge and often strong-arm consumers into patronizing their "direct repair program" (DRP) network of collision repair shops, which have been permitted to participate in the program because they agree to completely indemnify the referring insurer, allow the insurer to dictate business suppliers, perform much of the claims handling, agree to use aftermarket and used parts, agree to look for "betterment" (which is detrimental to consumers), and often allow the insurer to dictate the repairs. One insurer's DRP document states that it will write all of the estimates and make all determinations as to necessary repairs, and will determine the price the repairer will be paid. This same insurer's policy language only obligates it to pay for the cost of repairs as "reasonably determined by us". The repairer must accept all liability and indemnify the insurer for anything pertaining to the claim.

Collision repairer complaints to the Departments of Insurance are ignored or receive the response that the DOI has no jurisdiction over any relationships or arrangements between insurers and collision repairers. Complaints to the consumer protection sections of the Attorneys General's offices are invariably referred to the DOI. As a result, there is no effective oversight of the services and repairs collision facilities provide to consumers in any insurer-paid repair and there is absolutely no oversight of insurers' interference with collision repair practices that significantly impact consumer safety.

This situation must change to protect consumers.

STATEMENT

Contact: Steve Nantau
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snantau@ford.com

IMMEDIATE RELEASE

"CLIP" REPAIR PROCEDURE NOT RECOMMENDED

NOTE TO EDITOR: *The use of front or rear "clips" to repair major damage to a vehicle is a practice among collision repairers and insurance companies, which pay for the majority of collision repairs. The practice involves replacing an entire section of a vehicle with a similar section from a "donor" vehicle – most frequently one that has been declared a total loss. This Statement has been developed to answer frequent questions about "clipping" that Ford Motor Company receives from collision repairers.*

DEARBORN, Mich., February 28, 2005 – Ford Motor Company does not approve the use of "clips" to repair collision damage to vehicles.

The use of a "clip" to repair collision damage voids Ford's New Vehicle Limited Warranty and any variety of Ford's Extended Service Plan, as well as Ford's new vehicle service part and corrosion warranties for each part in the "clip." Use of a "clip" also voids any variety of Ford's Extended Service Plan, new vehicle service part warranty and corrosion warranty for any damage to individual components, assemblies or systems on the original vehicle caused by individual components, assemblies or systems in the "clip."

Ford strongly recommends that repairers and insurers considering the use of a "clip" carefully check state collision repair laws and regulations to determine whether the vehicle must be re-titled as "rebuilt" or "salvage" if the "clip" procedure is used. Ford also strongly recommends that repairers advise and obtain the written repair authorization of the vehicle owner, in advance, if the "clip" procedure is to be used and re-titling is required.

Ford has adopted this position because it cannot be confident "clip" repair procedures return vehicles to pre-accident condition. Because every "clip" repair is unique, it is impossible to test whether the repair technique affects the safety, performance or durability of the vehicle. Other factors weigh heavily in this position, including:

- Hidden damage to individual components, assemblies or systems in the "clip" that may not be readily apparent to the repairer.

- Improper removal techniques and exposure to weather that may degrade the performance characteristics of individual components, assemblies or systems in the "clip."

- Mismatching of individual components, assemblies or systems. Individual component, assembly and system modifications occur throughout the production life of new-model vehicles. It is possible a "clip" component, assembly or system will not be compatible with the vehicle it is being used to repair.

Ford recommends that only genuine Ford replacement parts be used for collision repair to protect all parties – vehicle owners, repairers and insurers – involved in the collision repair process.

Ford also is working diligently to control the cost of major collision repairs. After research and testing, it has developed several frame sectioning procedures – and unique frame sectioning repair parts – that have been proven not to affect the safety, performance or durability of the repaired vehicle. Ford recommends repairers and insurers consider these procedures as a practical and cost-effective alternative to "clipping."

February 28, 2005 # # #

HONDA

POSITION STATEMENT

SUBJECT: HONDA UNIBODY REPAIR

TORRANCE, Calif., June 18, 2007 – American Honda Motor Co, Inc. makes the following recommendations for repair of Honda and Acura vehicles.

Sectioning Frame Components
When body repairs are necessary, American Honda recommends that any repairs be performed by an experienced professional, using the Honda or Acura body repair manual, and that component replacement be accomplished along factory seams. Failure to do so can result in a number of problems, including improperly fitting parts, noises, tire wear, and most importantly, changes in vehicle dynamics and occupant protection in a subsequent crash.

In particular, American Honda strongly recommends against the process of joining cut pieces from separate vehicles - commonly referred to as clipping. This is not an authorized American Honda repair method. Any problems with other components resulting from such improper vehicle repairs is not covered under American Honda's factory or extended warranties.

Adhesives and Welding
Using adhesives in place of welding for component replacement is not an authorized American Honda repair method. It is important to repair at factory seams using the same procedures as the factory assembly process except where specified otherwise in the Honda or Acura body repair manual.

Door and Bumper Reinforcements
Because they are made of high strength steel, door and bumper reinforcements must not be repaired or straightened.

Replacement Parts
American Honda strongly recommends the use of Honda Genuine or Acura Precision Crafted original equipment replacement parts. Use of these parts helps return the vehicle to its pre-crash condition.

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STATEMENT

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IMMEDIATE RELEASE

STRUCTURAL REPAIRS FOR FORD VEHICLES

DEARBORN, Mich., March 1, 2006 – Ford Motor Company recommends that repairs to structural components – including frames, rails, aprons and body panels – only be completed using Ford-recommended repair procedures and factory-supplied parts.

Repair procedures are available in vehicle-specific Service Manuals, Body Repair Manuals, Technical Service Bulletins and Instruction Sheets (which accompany factory-supplied replacement parts). Repairers should contact their Ford-Lincoln-Mercury wholesale parts dealer for information on how to obtain these reference materials.

Where no factory-supplied repair information is available, repairs should be made at existing joints or seams with factory-supplied replacement parts using repair procedures that duplicate factory assembly processes/techniques.

The structural component repair procedures and repair-specific parts recommended by Ford have been validated through testing by Ford engineers to return repaired vehicles to pre-accident condition.

Alternative structural component repair procedures and/or parts recommended by others are not endorsed by Ford, and Ford cannot be certain these alternative structural component repair procedures and/or parts will return vehicles to pre-accident condition. Should alternative structural component repair procedures and/or parts be used, repairers should be aware of the potential liability they incur.

# # #

CLIPPED CARS

Few car owners realize that such a thing as clipping exists. Clipping refers to the "repair" of a severely crashed vehicle by cutting (clipping) it in half; discarding the crashed half, and welding the half of another vehicle in its place. The other vehicle was typically crashed on the other end, and it may be a different year or have higher mileage than the original vehicle. Clipping is popular because it is faster and easier than ordering and assembling all the different panels which make today's unitbody vehicles.

Although illegal in some countries, clipping occurs everyday in every state across the country. And often there is no mention of the severity of the collision damage or the repair on the vehicles title. Clipped vehicles were cut in half at places which are the least likely to be seen and require the least amount of finish work. The best way to spot these cars is to inspect the bodies at the common clipping points for signs of repainting (for example, thicker paint) or body filler.

The collision damaged rear half of the car is cut off (clipped).

The cuts were made on the windshield posts and under the carpet to minimize the body work and repainting.

A body with an undamaged rear half was bought from a salvage yard — it was even the same color!

The two halves were then welded together at the windshield posts, at the rocker panels and under the carpeting. Now only minor repainting is needed to hide the fact that this is two cars spliced together.

Hood—First check the center of the hood at the front, with the magnet or gauge, where collision damage is most likely to have occurred. Next check the front corner and then the rear corner of the hood. If the rear corners or edges have evidence of body filler, check the adjoining area on the cowl in front of the windshield. If you find repairs here, it means the crash was severe enough that the hood was pushed back.

Trunk—Inspect the trunk lid in the same manner as the hood, but check the rear most area first.

Roof—If damage exists here it is likely to have been caused by a falling tree limb, vandalism, or a roll-over.

Front Fenders—Check the front areas first. Note that the car may have a plastic or aluminum-molded housing at the front of the fender. If you can see a seam or distinguish a separate part here, don't be surprised that neither the gauge nor the magnet sticks. Check the middle areas of the fenders, particularly over the wheel well, because the fenders often bulge out here and this is the first area to get banged or scraped on the side of the car.

Doors—Again, check the middle areas but also give attention to the lower areas. Curbs or other low-lying objects often inflict damage here.

Rear Quarter Panels—Again, check the central areas first. Front fenders are often replaced when they are damaged in collisions because they can be easily unbolted. However, rear quarter panels are usually welded onto the body and require much more effort to replace. Therefore, body damage on rear quarter panels is commonly patched up and covered over.

PAINT INSPECTION

After inspecting that which supports the paint—the body—it's time to inspect the paint itself. The things to look for include thin paint, thick paint, cosmetic problems, and evidence of repainting.

Info - Refinishing Aluminum Wheels #99-08-51-007C - (06/19/2006)

Subject:

Models: **2007 and Prior Passenger Cars and Trucks (Including Saturn)**

2003-2007 HUMMER H2

2006-2007 HUMMER H3

2005-2007 Saab 9-7X

This bulletin is being revised to add additional models and model years. Please discard Corporate Bulletin Number 99-08-51-007B (Section 08 - Body and Accessories).

This bulletin updates General Motor's position on refinishing aluminum wheels. GM does not endorse any repairs that involve welding, bending, straightening or re-machining. Only cosmetic refinishing of the wheel's coatings, using recommended procedures, is allowed.

Evaluating Damage

In evaluating damage, it is the GM Dealer's responsibility to inspect the wheel for corrosion, scrapes, gouges, etc. The Dealer must insure that such damage is not deeper than what can be sanded or polished off. The wheel must be inspected for cracks. If cracks are found, discard the wheel. Any wheels with bent rim flanges must not be repaired or refinished. Wheels that have been refinished by an outside company must be returned to the same vehicle. The Dealer must record the wheel ID stamp or the cast date on the wheel in order to assure this requirement. Refer to Refinisher's Responsibility -- Outside Company later in this bulletin.

Aluminum Wheel Refinishing Recommendations

- Chrome-plated aluminum wheels

  Re-plating these wheels is not recommended.

- Polished aluminum wheels

  These wheels have a polyester or acrylic clearcoat on them. If the clearcoat is damaged, refinishing is possible. However, the required refinishing process cannot be performed in the dealer environment. Refer to Refinisher's Responsibility -- Outside Company later in this bulletin.

- Painted aluminum wheels

  These wheels are painted using a primer, color coat, and clearcoat procedure. If the paint is damaged, refinishing is possible. As with polished wheels, all original coatings must be removed first. Media blasting is recommended. Refer to GM Aluminum Refinishing Bulletin #53-17-03A for the re-painting of this type of wheel.

- Bright, machined aluminum wheels

  These wheels have a polyester or acrylic clearcoat on them. In some cases, the recessed "pocket" areas of the wheel may be painted. Surface refinishing is possible. The wheel must be totally stripped by media blasting or other suitable means. The wheel should be resurfaced by using a sanding process rather than a machining process. This allows the least amount of material to be removed.

  Important: Do not use any re-machining process that removes aluminum. This could affect the dimensions and function of the wheel.

Painting is an option to re-clearcoating polished and bright machined aluminum wheels. Paint will better mask any surface imperfections and is somewhat more durable than clearcoat alone. GM recommends using Corsican SILVER WAEQ9283 for a fine "aluminum-like" look or Sparkle SILVER WA9967 for a very bright look. As an option, the body color may also be used. When using any of the painting options, it is recommended that all four wheels be refinished in order to maintain color uniformity. Refer to GM Aluminum Refinishing Bulletin #53-17-03A for specific procedures and product recommendations.

Refinisher's Responsibility -- Outside Company

Important: Some outside companies are offering wheel refinishing services. One such company, Transwheel Corporation (800-892-3733), provides this service within GM guidelines. Other companies may also exist. Such refinished wheels will be permanently marked by the refinisher and are warranted by the refinisher. Any process that re-machines or otherwise re-manufactures the wheel should not be used.

A refinisher's responsibility includes inspecting for cracks using the Zyglo system or the equivalent. Any cracked wheels must not be refinished. No welding, hammering or reforming of any kind is allowed. The wheel ID must be recorded and follow the wheel throughout the process in order to assure that the same wheel is returned. A plastic media blast may be used for clean up of the wheel. Hand and/or lathe sanding of the machined surface and the wheel window is allowed. Material removal, though, must be kept to a minimum. Re-machining of the wheel is not allowed. Paint and/or clear coat must not be present on the following surfaces: the nut chamfers, the wheel mounting surfaces and the wheel pilot hole. The refinisher must permanently ID stamp the wheel and warrant the painted/clearcoated surfaces for a minimum of one year or the remainder of the new vehicle warranty, whichever is longer.

Important: Whenever a wheel is refinished, the mounting surface and the wheel nut contact surfaces must not be painted or clearcoated. Coating these surfaces could affect the wheel nut torque.

When re-mounting a tire on an aluminum wheel, coated balance weights must be used in order to reduce the chance of future cosmetic damage.

HONDA

POSITION STATEMENT

SUBJECT: STEEL AND ALUMINUM WHEEL REPAIR

TORRANCE, Calif., June 18, 2007 – American Honda Motor Co, Inc. does not approve of any repair of steel or aluminum wheels that involves welding, bending hammering, straightening, re-machining, reforming, or adding new material.

Any repair of steel or aluminum wheels must be strictly limited to minor cosmetic sanding or polishing that removes just the finish.

American Honda will not warrant any wheel other than an undamaged original or a new replacement part.

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STATEMENT

Contact: Steve Nantau
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IMMEDIATE RELEASE

REMANUFACTURING/REFINISHING STEEL/ALUMINUM WHEELS

NOTE TO EDITOR: *Ford Motor Company recommends use of replacement tires and wheels that are the same size and type as those originally provided by Ford Motor Company. Use of any tire or wheel not recommended by Ford Motor Company can affect the safety and performance of the vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended tires and wheels could cause steering, suspension, axle or transfer case/power transfer unit failure. In the case of recycled wheels, Ford Motor Company offers the following specific recommendations:*

DEARBORN, Mich., April 27 – Ford Motor Company **DOES NOT APPROVE THE REMANUFACTURING/REFINISHING** of steel or aluminum wheels when it involves re-machining, re-plating, welding, bending, straightening, reforming or adding new material other than cosmetic coatings.

As a general rule, Ford Motor Company **APPROVES REFINISHING** of steel or aluminum wheels only if all necessary repairs/reconditioning can be completed by cosmetic sanding or polishing that removes no metal and, instead, removes only the finish. The refinished wheel must have the same part number as the part number of the wheel it is replacing.

Any wheel that is a candidate for refinishing **MUST BE CAREFULLY INSPECTED** and **DISCARDED** if the wheel contains any of the following:

1) Cracks;
2) Corrosion, scrapes, gouges, dents or other damage that cannot be corrected with cosmetic sanding or polishing;
3) Refinishing that changes, or will change, the wheel's shape, contour, stylelines or other design features;
4) Refinishing that alters, or will alter, the wheel's rim flanges, wheel nut chamfers, wheel pilot holes or other functional surfaces;
5) Refinishing that leaves, or will leave, paint, clearcoat or other coatings on the wheel's mounting surfaces or on wheel nut contact surfaces;
6) Repainting that involves cure temperatures above 350°F;
7) Chrome plating (either re-plating or chrome plating a painted wheel).

Ford Motor Company **DOES NOT** warrant any remanufactured/refinished wheel provided by an aftermarket supplier.

Those choosing to use a remanufactured/refinished wheel from an aftermarket supplier for replacement of a damaged wheel should:

1) Request written assurance from the aftermarket supplier that the recommendations above have been followed;
2) Verify that the remanufactured/refinished wheel carries permanent markings that identify the aftermarket supplier and the date of remanufacturing/refinishing;
3) Request clarification regarding the warranty provided by the remanufacturer and/or aftermarket supplier, if any. Remember, Ford Motor Company does not warrant any remanufactured/refinished wheel provided by an aftermarket supplier;
4) Use new coated balance weight to reduce future cosmetic damage.

###

April 26, 2004

Autocraft Bodywerks, Inc.

5411 Wasson Rd. Austin, TX 78745
Phone 512-441-7444
Fax 512-444-6061

August 22, 2007

Mr. Scott Erwin
State Farm Insurance
6431 Sanger Avenue
Waco, Texas 76710

Re: Wheel Repair

Dear Scott,

Thank you for taking time to discuss the State Farm Policy on repairing wheels a few days ago. You commented how comfortable you were with the status quo, leaving quality control up to the wheel remanufacturer and that the O.E.M. technical service bulletin on the subject was not a factor to State Farm. You commented the wheel repair facilities have an insurance policy of one million dollars, and if anything goes wrong, the policy is sufficient coverage. My family is worth a lot more than that one million dollars, and if a rebuilt wheel fails going down the highway, it could be tragic. No one can put a price on his or her family, however you might have to add a few zeros if a wheel failed, which has happened in the past.

I included an article that talks about wheel rebuilding and how some of these repairs have failed. Companies that do wheel repairs boast about how they can repair practically any wheel. Also enclosed is a state farm estimate that specified a wheel repair. We sent the wheel off to the company listed on your estimate and received the wheel approximately August 13th, and I have grave concerns putting it on your insured's vehicle. There is a big weld bead on the inside of the wheel (see photos) and the inner edge is not true (you can see where hammering and bending were done). You commented State Farm would warranty this for lifetime. What does that mean in this case?

The Toyota technical service bulletin (#154) specifically states "not" to weld or straighten, but this is done continually from every wheel re-builder, and it was clearly done on this wheel. I am not against wheel repairs. What I oppose is when it contradicts the manufacturer's recommendation (after all doesn't the manufacturer know how to repair a car better than one single body shop or for that matter one particular insurance company)? We ran it on our Hunter Road Force machine (printout enclosed) and it recommends replacement. When you spin it you can see the deformity on every revolution.

You mentioned visiting some of the wheel manufacturers, I hope you had a chance to go by some of the Texas locations. The wheel is here and I look forward to showing it to you. I trust State Farm will abide by the manufacturers technical service bulletin and repair the vehicle accordingly by replacing the wheel.

In closing, a customer was picking up his vehicle and noticed the rebuilt wheel in our office and felt compelled to write a letter to me, which I am enclosing a copy of that correspondence.

I await a prompt response from you.

Sincerely,

John Borek
General Manager

Enclosures: (7)

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SFGate.com

Should you repair damaged custom wheels?

Experts question alloy-repair claims, and there are no federal standards

Ralph Vartabedian, Los Angeles Times
Sunday, February 18, 2007

Nothing looks hotter on a new car than oversized alloy wheels and low-profile tires, the look of a black rubber band around a sleek, highly polished aluminum rim.

Unfortunately, nothing is more vulnerable to the cruelties of the roadway than this combination, which has less protection from the pounding of potholes, road debris and occasional curbs.

Aluminum or alloy wheels are vulnerable and can carry a high cost to the unsuspecting car owner.

At the least, rubbing against a concrete curb can deliver a cosmetically devastating "curb rash" to a $1,000 alloy wheel. At the most, a pounding from a pothole can bend the rim or chink off a few inches of the rim lip. (The lip is the surface of the wheel that forms a seal with the tire bead, keeping it airtight. It's a piece of metal that guarantees the safety of the entire vehicle.)

Once your prized alloy wheel is damaged, your choices are limited: Replace the wheel with an identical design, pick up one that doesn't match, buy a new set of wheels or repair the damaged wheel.

In some cases, particularly on a car that is more than a couple of years old, it is difficult to find an identical alloy wheel, particularly one that was an option or an aftermarket purchase. Many vendors offer alloys on the Internet, and junkyards are another source.

Buying a wheel that doesn't match is about as downscale as you can get. Conversely, buying four new alloys will set you back hundreds or thousands of dollars, making downscale seem an attractive alternative. If you're lucky, you have a full-size spare with an identical alloy wheel that you can use.

Let's look more closely at alloy repairs. Plenty of companies have popped up to repair alloy wheels, saying that they take almost any banged-up aluminum rim and return it to an acceptable condition. Some experts are not convinced it's a good idea, however.

Alloy wheels have been around for a long time, though they have gained overwhelming popularity in the last 10 years. But the industry is still struggling with the difficulty of casting aluminum for the demanding loads imposed on a wheel. An academic paper published in the journal of the Minerals, Metals and Material Society a year ago acknowledged, "Defects in automotive aluminum alloy casting continue to challenge metallurgists and production engineers as greater emphasis is placed on product quality and cost."

The engineering professors who wrote the paper examined "a range of casting-related defects found in low-pressure die-cast aluminum wheels" from a sample of several industrial plants. They found pores and other kinds of imperfections.

If you take those issues and compound them with road damage and then hand a wheel over to an unregulated repair facility, what you have is today's status quo.

The federal government's main automotive safety agency, the National Highway Traffic Safety Administration, has no standards or guidelines on the safety of repairing alloy wheels. As in so many other critical areas of car safety, the agency has not provided advice to consumers on any aftermarket products or issues.

Notably, British Columbia has adopted repair guidelines. But in the United States, the matter is largely left to industry self-regulation and the decisions of companies about what they will repair or not. In general, there seem to be few wheels they will not repair. Their ads feature comely models, draped around either alloy wheels or the proprietors.

One major alloy repair factory boasts, for example, that it can handle 95 percent of the damaged wheels sent by consumers. Another repair operation boasts, "Yes, we can repair severely damaged wheels." Yet another company asserts, "If we can't do it, nobody can."

I'm not sure I'd bet my life on that kind of silly bravado. Neither would Ken Zion, an automotive collision expert who conducted a study of alloy wheel repair for a major insurance company. What he found troubles him.

Zion says he would never repair an alloy wheel, other than polishing out minor scuff marks. But he routinely sees machining of dings and scrapes that take forty-thousandths of an inch or more off the rims.

"If you think about it, why would an alloy wheel manufacturer make a rim a certain dimension if they could save money by taking ten-thousandths or twenty-thousandths off? So what makes somebody who comes along later to repair that wheel think they can safely remove that material or more?" Zion asked.

Transwheel Corp., which describes itself as the largest alloy repair vendor in the nation, handles more than 150,000 wheel repairs annually, according to company officials. The cost ranges from $130 to $300 per wheel, substantially less than replacing a wheel, said a company manager, who asked not to be identified because the operation had just been acquired and he did not know if he was authorized to speak to the media. Under company guidelines, it will remove up to twenty-thousandths of an inch of material in a resurfacing repair.

Many repair facilities do much more than machine out surface damage. In many cases, cracks are

welded and bent rims are reshaped. In an e-mail boasting of its capability, one company in Fontana (San Bernardino County) wrote to me: "When they are bent and we have straightened them, they are not as true to form as the original, but we get 95 percent of the damage repaired. Meaning that there may be a bit of shaking if the wheel is placed on the front of the car rather than the rear."

Zion said he was astounded by the statement, saying such a repair would be completely unacceptable, and at the very least accelerate tire and suspension wear.

Zion was recently called in to investigate an alloy wheel failure after it had been repaired. Fortunately, the vehicle was parked in the driveway when the repaired section gave way and the alloy wheel crumbled apart. Had the vehicle been on the freeway, failure likely would have caused a sudden and drastic loss of vehicle control, Zion said.

His report to the insurance company, which he said he could not identify, found that a repair should not have been attempted in the first place and that in general insurers should not authorize repairs to alloy wheels.

Insurers typically do specify repairs are acceptable. Every insurer differs, and some will not go so far as to authorize welding repairs and major straightening of bent wheels.

"Sometimes, it is minor damage like a scuff mark, and we can repair it," said Robert Villegas, a spokesman for State Farm. "Our primary concern is: Can the repair be safely done?"

http://sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/02/18/MTGPBO6GBN1.DTL

This article appeared on page J - 9 of the San Francisco Chronicle

STATE FARM INSURANCE COMPANIES
AUSTIN AREA CLAIMS
(512) 918-4780 LOCAL
(888) 888-2114 TOLL FREE
SUPPLEMENT FAX (512) 918-6580 TOLL FREE SUPPLEMENT FAX (800) 378-6402

CD LOG NO [redacted] -0 [redacted]

ESTIMATE

CLAIM INFORMATION

CLAIM #	[redacted]	POLICY #	
COMPANY	STATE FARM	CLAIM REP	Laskie x30321, Margaret
FAX		WORK PH#	(888) 888-2114
INSURED	[redacted]	LOSS DATE	07-30-07
CLAIMANT		LOSS TYPE	COLLISION

INSPECTION

TYPE	FIELD		
PRIMARY POI	RIGHT FRONT FENDER	SECOND POI	
APPRAISER NAME	CHAD PALMER		
ADDRESS		[redacted]	

OWNER [redacted]

REPAIR

	ATTN MURRY VINCENT	SHOP LIC#	
	AUTO CRAFT BODY WERKS	CAR IN	
	5411-A WASSON RD	CAR OUT	
	AUSTIN TX 78745-	REPAIR DAYS	
	SHOP PHONE (512) 441-7444	FAX	(512) 444-6061

VEHICLE
2005 LEXUS RX330 STD 4 DR WAGON
6CYL GASOLINE 3.3

OPTIONS

THREE-STAGE - EXTERIOR USER DEFINE	TWO-STAGE - INTERIOR SURFACES
LUGGAGE RACK	MOONROOF
POWER TAILGATE	

BODY COLOR	WHITE	MILEAGE	31,029
CONDITION		VIN	[redacted]
LICENSE #	[redacted]	CODE	LX61
LICENSE STATE	TX	VEH INSP #	

REMARKS:

OP CODES:

* = USER-ENTERED VALUE	E = REPLACE OEM	NG = REPLACE NAGS
EC = ** NON-OEM PART	UC = RECOND PART	UM = REMAN/REBUILT PART
EU = RECYCLED PART	EP = ** NON-OEM PART	PC = RECOND PART

2005 LEXUS RX330 STD 4 DR WAGON
CLAIM # [redacted] [redacted] -0 08-02-07 1:26 PM

PM = REMAN/REBUILT PART TE = PARTL REPL PRICE ET = PARTL REPL LABOR
IT = PARTIAL REPAIR I = REPAIR L = REFINISH
BR = BLEND REFINISH TT = TWO-TONE CG = CHIPGUARD
SB = SUBLET N = ADDITIONAL OPERATION RI = R&I ASSEMBLY
P = CHECK RP = RP-RELATED PRIOR UP = UP-UNRELATED PRIOR

OP	GDE	MC	DESCRIPTION		MFR.PART NO.	PRICE	AJ%	B%	HOURS	R
N	0008		FRT BUMPER CVR OVERHA		ADDITIONAL OPERAT				INC	1
UC	0006		COVER,FRONT BUMPER		RECOND PART	230.00*			1.7	1
	>>DC BUMBERS 1-800-492-4485 IN STOCK									
L	0006		COVER,FRONT BUMPER		REFINISH				4.5	4
					2.6 Surface					
					1.0 Three-stage setup					
					0.9 Three-stage					
E	0015		ABSORBER,FRONT ENERGY		526110E011	70.33			0.3	1
RI	0012		BRKT,FRONT BUMPER MTG		R&I ASSEMBLY				0.2	1
E	0020		BRKT,FRONT BUMPER M RT		521450E010	34.79			INC	1
RI	0028		GRILLE ASSEMBLY		R&I ASSEMBLY				0.3	1
E	0042		HEADLAMP ASSY,HALOG RT		8113048200	275.42			INC	1
N	0944		FOG LAMPS AIM		ADDITIONAL OPERAT				0.4	1
N	0973		HEADLAMPS AIM		ADDITIONAL OPERAT				0.5	1
E	0324		LAMP ASSEMBLY,FOG	RT	812100E010	213.03			INC	1
BR	0083		PANEL,HOOD		BLEND REFINISH				1.9	4
					0.9 Blend					
					1.0 Three-stage					
E	0104		FENDER,FRONT	RT	538010E010	305.51			1.1	1
L	0104		FENDER,FRONT	RT	REFINISH				3.2	4
					1.9 Surface					
					0.5 Edge					
					0.7 Three-stage					
					0.1 Two-stage edge					
E	0101		SKIRT,INNER FENDER	LT	538060E010 DAMIEN	83.04			0.3	1
UC	0993		WHEEL,FRONT	RT	RECOND PART ↓@	137.50*			0.2	1
	>>WHEEL TECHNOLOGIES 512-339-9036 INC. MOUNT/BALANCE AND DELIVERY									
N	0974		SUSPENSION ALIGN,FRT		ADDITIONAL OPERAT				1.8	2
E	0660	01	ABSORBER,STRUT	R/F	48510A9360	190.15			1.6	2
E	0526		MLDG ASSY,W/S REVEAL		755330E010	53.81			3.0	1
	>>INC R&I OF GLASS									
L	0166		PILLAR,WINDSHIELD	RT	REFINISH				0.6	4
					0.5 Surface					
					0.1 Two-stage edge					
RI	1499		MLDG,PILLAR BELT	RT	R&I ASSEMBLY				0.1	1
BR	0202		PANEL,BODYSIDE OTR	RT	BLEND REFINISH				0.9	4
					0.4 Blend					
					0.5 Three-stage					
RI	0268		MLDG,ROCKER PANEL	RT	R&I ASSEMBLY				0.4	1
BR	0210		PNL,FRONT DOOR OUTE	RT	BLEND REFINISH				1.4	4
					0.7 Blend					
					0.7 Three-stage					
RI	0261		W/STRIP,FRT DOOR BO	RT	R&I ASSEMBLY				0.5	1
RI	0232		PNL,INNER DOOR TRIM	RT	R&I ASSEMBLY				INC	1

13/08/2007

13/08/2007

Wheel Technologies, Inc.
9603 Saunders Ln. # Q-1
Austin, TX 78758
(512) 339-9036 Phone

SALES INVOICE

SI-1007263	8/13/2007

Customer	Contact	Ship To
AUTOCRAFT BODYWERKS INC 5411 WASSON RD. AUSTIN TX 78745 Tel: (512)-4417444 Fax: (512)-4446061		AUTOCRAFT BODYWERKS INC 5411 WASSON RD. AUSTIN TX 78745 Tel: (512)-4417444 Fax: (512)-4446061

Account	Terms	Due Date	Account Rep	Schedule Date
116	DUE ON THE 10TH OF FOLLOWING MONTH	9/10/2007	AUS3- CSR AUS3	8/9/2007

Sales Order	PO #	Reference	Ship VIA	Page	Printed
SO-1012437	[redacted]	MURRAY	COMPANY	1	8/13/2007 9:28:24AM

L	Item / Model / Brand Description	Order	Ship	Price UM	Discount %	Amount
1	REC 74152B LEXUS	1	1	$98.00 EA		$98.00
2	TT 225 70 16 BS	1	1	$3.00 EA		$3.00

No returns authorized without RMA#. Call (800)210-2371 to obtain RMA#. All items returned may incur a restocking fee, plus applicable shipping charges.***NO REFUNDS ON SPECIAL ORDER ITEMS***Payment must be made within terms. All past due balances may incur the maximum interest rate allowable. Venue is Dallas County, Texas.

X_____

Tax Details
EXE $0.000

Payment Details

Taxable	$0.00
Total Tax	$0.00
Exempt	$101.00
Total	$101.00
Payment Disc	$0.00
Paid	$0.00
Balance	$101.00

COLLISION REPAIR INFORMATION

FOR THE TOYOTA DEALER

TITLE: WHEEL REPAIR & RECONDITIONING

SECTION: EXTERIOR BULLETIN # 154

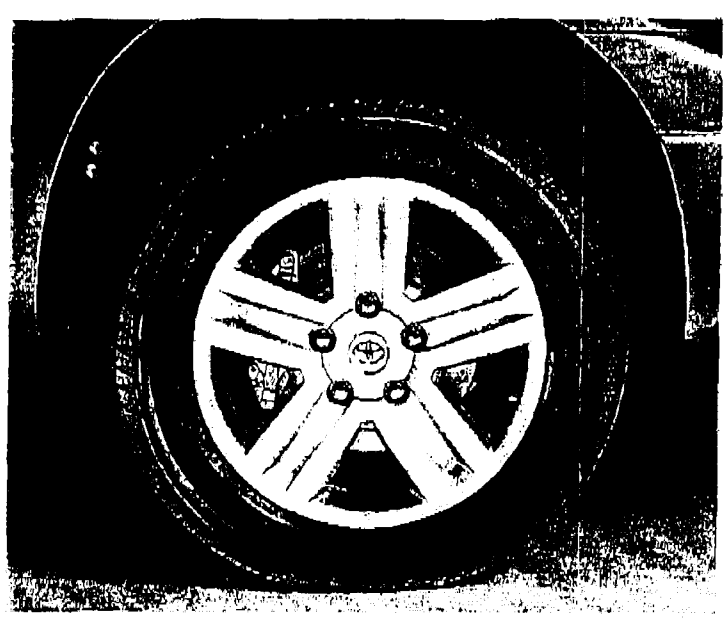
MODELS: ALL TOYOTA, LEXUS, and SCION MODELS

DATE: JUNE 2007

Toyota does not approve of "reconditioning wheels" or endorse the use of reconditioned wheels on any Toyota, Lexus, or Scion vehicle. **Use of any wheel or tire not recommended by Toyota may compromise safe motor vehicle operation, and cause loss of control which may result in injury or death.**

Reconditioning of damaged wheels typically involves processes that may include heating, straightening, welding, material removal, reshaping, or re-plating. It is nearly impossible to anticipate every conceivable damage scenario or countermeasure, or to certify that reconditioned wheels meet original equipment specifications.

All wheels suspect of damage should be thoroughly inspected and evaluated with the highest regard for safety. Use only Toyota recommended replacement wheels and tires. **Approved wheel repairs are limited to cosmetic sanding and refinishing processes that remove and replace only paint coatings.**



PLEASE ROUTE THIS BULLETIN TO YOUR COLLISION REPAIR CENTER MANAGER AND COLLISION REPAIR TECHNICIANS

Autocraft Bodywerks Inc.
5411 Wasson Road #A
Austin, Texas 78745

August 20, 2007

Re: Welding of Aluminum Vehicle Wheels

Dear John,

When I was in last Friday I was looking at a wheel in your front lobby that made the hairs stand up on the back of my neck. Someone had taken the wheel and in an attempt to save the cost of a replacement wheel, had welded it. I asked Darryl about this and he told me that your company had been advised to do so by one of the insurance companies as a way to save the cost of a new wheel. John, it is not my habit to stick my nose in where it does not belong but in this case I have to advise you based on my professional opinion because someone could be injured or killed.

I am an Automotive Engineer with over thirty years of experience in structural issues related to Motor Vehicles. I am a Member of the Society of Automotive Engineers (SAE) and a member of the American Society of Mechanical Engineers (ASME). I am a Senior Test Engineer for the ASME and am certified to conduct destructive testing and report results as a part of the structural analysis of automotive components. I was Senior Mechanical Engineer for the Kenworth Truck Company in Seattle and have worked most recently on the Ford GT Project for Ford Motor Company. I am currently doing structural design work on the C7 Corvette Project.

I do not know who instructed you and your company to use welded wheels as a method of repair but this is an extremely dangerous practice! Welding or straightening an Aluminum wheel is contained in Technical Service Bulletins from both Ford Motor Company and General Motors (attached). Alcoa Wheel Division who supplies a significant portion of the Class 6, 7, and 8 Heavy Duty Truck Market specifically states not to use any aluminum wheel that has been straightened or welded.

There are a number of issues that come into play with an aluminum wheel that has been straightened or welded. If an aluminum wheel has been damaged it is because an external force has been applied to the structure (the wheel) that has proven to be in excess of the yield point of the material. This force has disrupted the grain structure of the material (which is where the strength of the material comes from). If the wheel has a crack in it this is because the material has become so stressed that it has actually fractured and the grain structure has shredded. Simply applying force again to the wheel does not fix it, this practice will actually amplify the problem because it disrupts the grain structure a second

time. If you were to conduct a Finite Element Analysis of the material you would see that the force required to alter the original shape of the material causes the grain structure to lose the original "compactness of structure" that gives it strength as light weight in the first place.

As regards welding of a wheel, this is the most dangerous practice of all and is an act that would be regarded as negligence in a court of law. You should speak with your company's attorney to clarify the element of shared liability. In the case of a catastrophic failure where a welded wheel fractures, your company could share liability for the death or injury of any person riding in the vehicle that you put a repaired wheel on. This component may have been ordered to be used by the insurance company and provided by their approved supplier, but your employees installed it. Hence the shared liability.

Welding of an Aluminum Wheel is not permitted because of several issues. I will give a short summary below.

1.) Alloy Identification- wheels are manufactured out of many different alloys that have distinct properties and incompatibilities. A cast wheel of A206 will not perform the same as a cast wheel of A356 or A357. The chemistry is too different and they react totally differently to welding. A Billet Machined Wheel out of 6063 or even 7075 (Aircraft Rated) achieves strength by aging and tempering.
2.) Heat Treatment and Physical Properties- Once welded, the temper of the wheel has been changed in the area of the weld and cannot be corrected.
3.) Weld Rod Alloy- Since wheels come out of different materials and processes, a welder will not have the ability to determine with certainty the origin alloy of the wheel. A cast wheel will be fully machined and as such it is not possible to say that the material is of billet or cast alloy. If you use the wrong rod, the joint (along with the other issues), will differ from the native material of the wheel.
4.) Heat Effected Zone- Any object made out of aluminum or any other material capable of being welded, will have a boundary of uncertain chemical characteristics and temper around the point where the heat required to cause a change in state occurs. This area will tend to have been annealed (softened) to a degree that does not conform to the original temper of the aluminum.
5.) Dynamics- an Aluminum Vehicle Wheel is a dynamic structure that works with incredible strength with extreme lightness of weight. It performs because it is able to flex and move within a very small range in reaction to forces and loads. The Aluminum in "As Cast", As Extruded", "As Forged" is in equilibrium at all times because the physical integrity of the component has never been disturbed.

Summary- With an Aluminum Wheel, once that equilibrium has been disrupted, it cannot be re-established with absolute certainty to insure that the component will perform as designed for the life of the component. It is not worth risking

innocent lives in the interest of corporate profitability. Ford knows it, GM knows, it, Alcoa knows it.

Best Regards,

Joseph F. Raterson
15 Encinitas Drive
Johnson City, Texas 78636

Ford

STATEMENT

June 1, 2004

Contact: Steve Nantau
734-523-1305
snantau@ford.com

IMMEDIATE RELEASE

REMANUFACTURING/REFINISHING STEEL/ALUMINUM WHEELS

NOTE TO EDITOR: *Ford Motor Company recommends use of replacement tires and wheels that are the same size and type as those originally provided by Ford Motor Company. Use of any tire or wheel not recommended by Ford Motor Company can affect the safety and performance of the vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended tires and wheels could cause steering, suspension, axle or transfer case/power transfer unit failure. In the case of recycled wheels, Ford Motor Company offers the following specific recommendations:*

Dearborn, Mich., June 1, 2004 – Ford Motor Company does not approve the remanufacturing/ refinishing of steel or aluminum wheels when it involves re-machining, re-plating, welding, bending, straightening, reforming or adding new material other than cosmetic coatings.

As a general rule, Ford Motor Company approves refinishing of steel or aluminum wheels only if all necessary repairs/reconditioning can be completed by cosmetic sanding or polishing that removes no metal and, instead, removes only the finish. The refinished wheel must have the same part number as the part number of the wheel it is replacing.

Dearborn, Mich., June 1, 2004 – Ford Motor Company does not approve the remanufacturing/ refinishing of steel or aluminum wheels when it involves re-machining, re-plating, welding, bending, straightening, reforming or adding new material other than cosmetic coatings.

As a general rule, Ford Motor Company approves refinishing of steel or aluminum wheels only if all necessary repairs/reconditioning can be completed by cosmetic sanding or polishing that removes no metal and, instead, removes only the finish. The refinished wheel must have the same part number as the part number of the wheel it is replacing.

Any wheel that is a candidate for refinishing must be carefully inspected and discarded if the wheel contains any of the following:

Cracks;

Corrosion, scrapes, gouges, dents or other damage that cannot be corrected with cosmetic sanding or polishing;

Refinishing that changes, or will change, the wheel's shape, contour, stylelines or other design features;

Refinishing that alters, or will alter, the wheel's rim flanges, wheel nut chamfers, wheel pilot holes or other functional surfaces;

Refinishing that leaves, or will leave, paint, clearcoat or other coatings on the wheel's mounting surfaces or on wheel nut contact surfaces;

POSSIBLE CHANGE TO TEMPER OF ALUMINUM WHEELS →

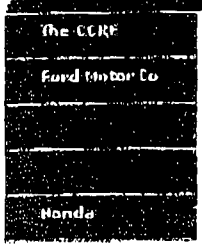
Repainting that involves cure temperatures above 350°F;

Chrome plating (either re-plating or chrome plating a painted wheel).

Ford Motor Company does not warrant any remanufactured/refinished wheel provided by an aftermarket supplier.

Those choosing to use a remanufactured/refinished wheel from an aftermarket supplier for replacement of a damaged wheel should:

- Request written assurance from the aftermarket supplier that the recommendations above have been followed;
- Verify that the remanufactured/refinished wheel carries permanent markings that identify the aftermarket supplier and the date of remanufacturing/refinishing;
- Request clarification regarding the warranty provided by the remanufacturer and/or aftermarket supplier, if any. Remember, Ford Motor Company does not warrant any remanufactured/refinished wheel provided by an aftermarket supplier;
- Use new coated balance weight to reduce future cosmetic damage.



Info - Refinishing Aluminum Wheels #99-08-51-007A - (03/07/2002)

- Refinishing Aluminum Wheels
- 2003 and Prior Passenger Cars and Trucks
- This bulletin is being revised to add additional model years. Please discard Corporate Bulletin Number 99-08-51-007 (Section 08 - Body and Accessories).
- This bulletin updates General Motor's position on refinishing aluminum wheels. GM does not endorse any repairs that involve welding, bending, straightening or re-machining. Only cosmetic refinishing of the wheel's coatings, using recommended procedures, is allowed.
- **Evaluating Damage**
- In evaluating damage, it is the GM Dealer's responsibility to inspect the wheel for corrosion, scrapes, gouges, etc. The Dealer must insure that such damage is not deeper than what can be sanded or polished off. The wheel must be inspected for cracks. If cracks are found, discard the wheel. Any wheels with bent rim flanges must not be repaired or refinished. Wheels that have been refinished by an outside company must be returned to the same vehicle. The Dealer must record the wheel ID stamp or the cast date on the wheel in order to assure this requirement. Refer to Refinisher's Responsibility -- Outside Company later in this bulletin.

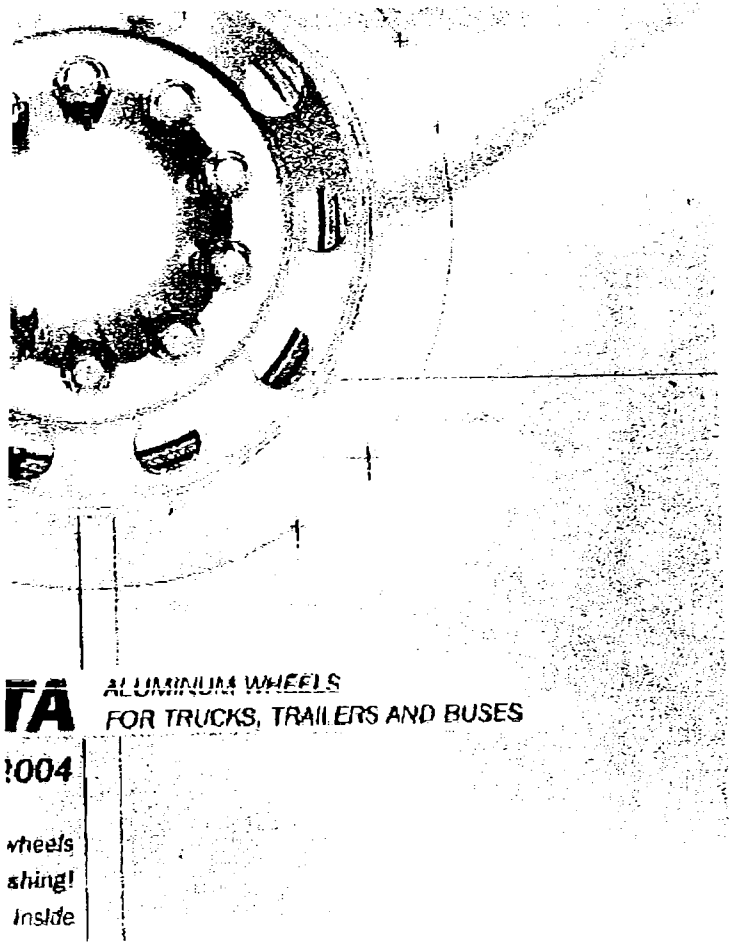
  - **Aluminum Wheel Refinishing Recommendations**
  - Chrome-plated aluminum wheels Re-plating these wheels is not recommended.
  - Polished aluminum wheels These wheels have a polyester or acrylic clearcoat on them. If the clearcoat is damaged, refinishing is possible. However, the required refinishing process cannot be performed in the dealer environment. Refer to Refinisher's Responsibility -- Outside Company later in this bulletin.
  - Painted aluminum wheels These wheels are painted using a primer, color coat, and clearcoat procedure. If the paint is damaged, refinishing is possible. As with polished wheels, all original coatings must be removed first. Media blasting is recommended. Refer to GM Aluminum Refinishing Bulletin #53-17-03A for the re-painting of this type of wheel.
  - Bright, machined aluminum wheels These wheels have a

polyester or acrylic clearcoat on them. In some cases, the recessed "pocket" areas of the wheel may be painted. Surface refinishing is possible. The wheel must be totally stripped by media blasting or other suitable means. The wheel should be resurfaced by using a sanding process rather than a machining process. This allows the least amount of material to be removed.

- **Important**
- Do not use any re-machining process that removes aluminum. This could affect the dimensions and function of the wheel.

- Painting is an option to re-clearcoating polished and bright machined aluminum wheels. Paint will better mask any surface imperfections and is somewhat more durable than clearcoat alone. GM recommends using Corsican SILVER WAEQ9283 for a fine "aluminum-like" look or Sparkle SILVER WA9967 for a very bright look. As an option, the body color may also be used. When using any of the painting options, it is recommended that all four wheels be refinished in order to maintain color uniformity. Refer to GM Aluminum Refinishing Bulletin #53-17-03A for specific procedures and product recommendations.
- **Refinisher's Responsibility -- Outside Company**
-
- **Important**
- Some outside companies are offering wheel refinishing services. One such company, Transwheel Corporation (800-892-3733), provides this service within GM guidelines. Other companies may also exist. Such refinished wheels will be permanently marked by the refinisher and are warranted by the refinisher. Any process that re-machines or otherwise re-manufactures the wheel should not be used.
- A refinisher's responsibility includes inspecting for cracks using the Zyglo system or the equivalent. Any cracked wheels must not be refinished. No welding, hammering or reforming of any kind is allowed. The wheel ID must be recorded and follow the wheel throughout the process in order to assure that the same wheel is returned. A plastic media blast may be used for clean up of the wheel. Hand and/or lathe sanding of the machined surface and the wheel window is allowed. Material removal, though, must be kept to a minimum. Re-machining of the wheel is not allowed. Paint and/or clear coat must not be present on the following surfaces: the nut chamfers, the wheel mounting surfaces and the wheel pilot hole. The refinisher must permanently ID stamp the wheel and warrant the painted/clearcoated surfaces for a minimum of one year or the remainder of the new vehicle warranty, whichever is longer.
- **Important**
- Whenever a wheel is refinished, the mounting surface and the wheel nut contact surfaces must not be painted or clearcoated. Coating these surfaces could affect the wheel nut torque.
- When re-mounting a tire on an aluminum wheel, coated balance

weights must be used in order to reduce the chance of future cosmetic damage.



TA ALUMINUM WHEELS
FOR TRUCKS, TRAILERS AND BUSES

2004

wheels
shing!
Inside

stud standout. P/N 7896R, 7896L (Grade 8).

with aluminum inner and aluminum outer wheels. Prevents stud from bottoming out in cap nut. P/N 5988R, 5988L (Grade 8)

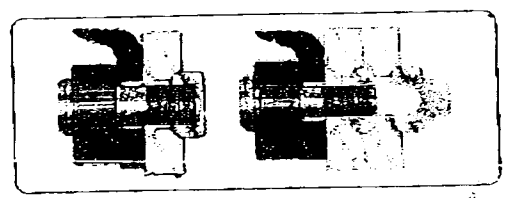
FOLLOW PROPER SERVICE AND OPERATING PROCEDURES

Alcoa wheels for heavy duty trucks and for motorhomes are as easy to service as other disc wheels. It is important that the tools be kept smooth and free of nicks or spurs to avoid damage to the wheel surfaces. Tire mounting, tire demounting and wheel inspection procedures are also the same for most Alcoa aluminum wheels, with the exception of the 19.5° RW wheels. Alcoa 19.5° RW wheels must have the tires mounted and demounted over the disc of the wheel only. For complete instructions on the proper mounting and demounting of tires on Alcoa 19.5° RW wheels, contact Marlkinetics Inc., Alcoa Inquiry Fulfillment System, P.O. Box 809, Marietta, Ohio 45750, or call (800) 242-9898, option 1.

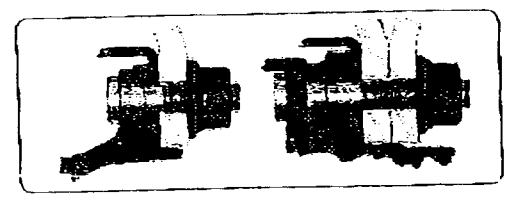
Correct torque is as important for aluminum as it is for steel disc wheels. Overtorquing stresses the studs and damages the wheels. Undertorquing results in loose wheels. To get the right tightness, use the right torque ... no more, no less. Inner and single cap nuts used with stud located wheels should be tightened to a torque of 450-500 foot-pounds if the threads are not lubricated; if the threads are lubricated, nuts should be tightened to a torque of 350-400 foot-pounds. Note: When dualing steel wheels with Alcoa aluminum wheels, follow the steel wheel manufacturer's recommendations regarding the proper torque and use of thread lubricants to mount the wheel. Two-piece cone lock cap nuts with a 33mm hex head design used with hub piloted wheels should be tightened to a torque of 450-500 foot-pounds. Follow the same safety precautions and OSHA regulations for both steel and aluminum disc wheels. These include using an OSHA-approved safety cage to inflate the tires; do not overinflate and never use a tube in a tubeless tire.

Do not weld or heat aluminum wheels. Destroy and scrap damaged wheels. Wheels get their strength from heat treating. The heat of welding destroys the strength of the wheel.

Follow the procedures outlined in the Alcoa Aluminum Truck Wheel Service Manual and Operating Instructions. To request a copy of the truck wheel service manual, call toll-free 800-242-9898, option 1. To view online, go to www.alcoawheels.com.



Typical configuration of single wheel and dual wheel mounting on stud located, ball seat (double cap nut) wheels.



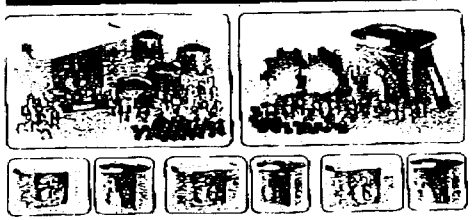
Typical assembly of single and dual wheels of hub piloted type.

ALCOA

Alcoa Wheel and Forged Products
1600 Harvard Avenue
Cleveland, Ohio 44105
800-242-9898
www.alcoawheels.com

ALCOA FORGED ALUMINUM WHEEL ACCESSORIES

HUB COVER SYSTEMS



The Alcoa Hub Cover System is made from high impact strength ABS/PC plastic, has a glistening chrome plated finish that resists corrosion, in the sizes listed. Fits 19 hole, 22.5 and 24.5" wheels with 285.75 mm (11.25") bolt circle. Nuts/Lugs not included. P/N 200618 for bolt plated lugs and P/N 200620 for ball seat lugs, are included.

Hub Piloted Wheel Kits — Clamp-On, Hi-Z Clamp	
P/N 200618	Clear, with chrome plated flat face bolt plated lugs
P/N 200619	Clear, with chrome flat face bolt plated lugs

Ball Seat Stud Centered Wheel Kits — Clamp-On, Hi-Z Clamp	
P/N 200620	Clear, with chrome flat face bolt plated lugs
P/N 200621	Clear, with chrome flat face ball seat lugs

Hub Piloted Wheel Kits — Stud-Mounted Clamp	
P/N 200622	Clear, with chrome flat face bolt plated lugs
P/N 200623	Clear, with chrome flat face ball seat lugs

To order the Alcoa Wheel Accessories in the product guide, call 1-800-242-6406, select option 1. Or see www.alcoawheels.com to find your nearest distributor.

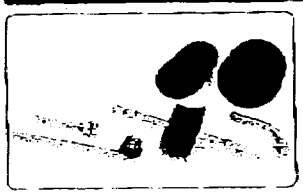
NUT & LUG COVERS

Plug-A-Lug® snap nut covers snap on, snap off by hand. Available to fit ball seat or hub piloted lug nuts. Alcoa Plug-A-Lug® caps and covers are made of impact resistant ABS plastic and have a brilliant chrome finish.

Ball Seat Stud Nut and Cap Nut Covers		
P/N	TYPE	FITS NUT SIZE
200624	Truck, Bus, Motorhome	1 1/8" Hex, 1" Height

Hub Piloted Cap Nut Covers		
P/N	TYPE	FITS NUT SIZE
200625	Bus	33mm Hex, 38mm Height
200626	Truck	33mm Hex, 27.3 mm Height
200627	Truck	1 1/16" Hex, 1 7/16" Height
200628	Bus	1 1/16" Hex, 1" Height

AIR VALVES, VALVE EXTENSIONS AND VALVE PROTECTION STANDARDS SYSTEMS



All Alcoa drop center wheels for tubeless tires come with nickel-plated air valves installed.

Valve numbers TR-413 and TR-413 should be installed with 10 to 14 lbs. in. torque. Valve numbers TR-543, TR-543C, TR-544E, TR-544E, TR-570, TR-570E, TR-415E, TR-415E and 8666327N should be installed with 6 to 8 lbs. in. TR. lbs. torque.

Valve stem extensions and tubeless system valves lower dual valve stem easy access for inflation, reducing extension breakage. For use with aluminum inner and stainless outer dual wheel applications only. Available for 19.5", 22.5", 24.5" Alcoa Classic and New Generation hub piloted or ball seat mounting wheels. Contact your local Alcoa wheel sales representative for complete part number and fitment information.

SPEC DATA

ALUMINUM WHEELS FOR TRUCKS, TRAILERS AND BUSES

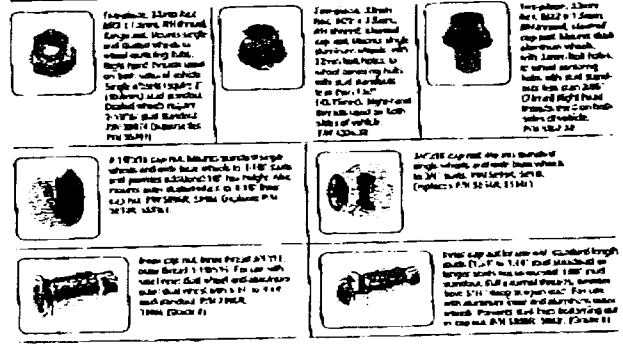
JANUARY 2004

Alcoa Dura-Bright® wheels

Shine without polishing!

Specs inside

ALCOA FORGED ALUMINUM WHEEL MOUNTING HARDWARE



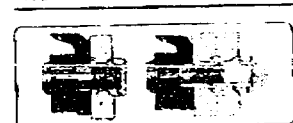
FOLLOW PROPER SERVICE AND OPERATING PROCEDURES

Alcoa wheels for heavy duty trucks and bus applications are used every bit as carefully as other disc wheels. It is important that the studs be kept smooth and free of debris or metal damage to the wheel surfaces. The mounting nut wheel seat portion should also be free from dirt. Alcoa aluminum wheels with the exception of the 19.5" DW wheels, Alcoa 19.5" DW wheels, and Alcoa 16.5" DW and Alcoa 22.5" DW wheels require a complete separation every 20,000 miles for inspection and cleaning of face on Alcoa 16.5" DW wheels, contact Hendrickson Inc. Alcoa Inquiry Fulfillment System, P.O. Box 888, Hendrick, Ohio 43532 or call (800) 242-6406, option 3.

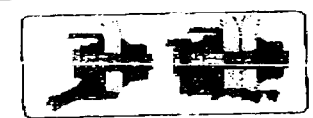
Correct torque is as important for the attachment nuts as it is for proper disc wheels. Overtightening stresses the studs and damages the wheels. Undertightening results in loose wheels. In turn, this can cause the nuts, studs and wheels to wear and become wheels should be tightened to a torque of 450-500 foot pounds. If the wheels are not lubricated, 1 the wheels are lubricated, they should be tightened to a torque of 350-400 foot pounds. Make sure during these wheels, and Alcoa aluminum wheels, lubricants cannot affect manufacturer's recommendations regarding this torque. Do not exceed use of these lubricants as it may cause the wheels. Two piece cone bolt lug nuts with a 33mm hex head design and with hub piloted wheels are tightened to a torque of 450-500 foot pounds. Follow the same safety procedures and OSHA regulations for both steel and aluminum disc wheels. These include wearing an OSHA-approved safety cage to inflate the tires, the use of tubeless and never use a tube on a tubeless tire.

Do not weld or heat aluminum wheels. Heat or any scrap damaged wheels. Wheels get their strength from heat treating. The heat of welding destroys this strength and the wheel.

Follow the procedures outlined in the Alcoa Aluminum Truck Wheel Service Manual and Operating Procedures. To request a copy of the truck wheel service manual, call toll free 800-242-6406, option 1. To view online, go to www.alcoawheels.com



Typical configuration of single wheel and dual wheel mounting on dual hubdrive, live axle pilotable cap nut wheels.



Typical assembly of single and dual wheels on hub piloted type

ALCOA

Alcoa Wheel and Forged Products
1600 Harvard Avenue
Cleveland, Ohio 44105
800-242-6406
www.alcoawheels.com

State Farm®
Providing Insurance and Financial Services

September 25, 2007

John Borek
Autocraft Bodywerks Inc.
5411 Wasson Rd.
Austin, TX 78745

Re: Wheel Repair

Dear Mr. Borek,

Thank you for your letter dated August 22, 2007 regarding your concerns with wheel repair. We appreciate you bringing this matter to our attention.

State Farm relies on wheel remanufacturers to maintain quality control processes that produce a safe and quality product Additionally, State Farm provides our customers with a Guarantee of Satisfaction for replacement parts including, but not limited to, remanufactured wheels that may be specified on State Farm repair estimates.

If you should ever have a concern or problem with a remanufactured wheel in the future, we would ask that you promptly address the matter with the supplier so that it can be resolved. If the supplier is not able to provide a resolution, we would ask that you promptly submit a supplement request to our Austin supplement desk.

We will make arrangements to view the wheel identified in your letter.

Sincerely,

Scott Irwin, Estimatic Team Manager
6431 Sanger Ave.
Waco, TX 76710

CC:

National Transportation Safety Administration
1200 New Jersey Avenue, SE
West Building
Washington, DC 20590

Edward B. Rust Jr., Chairman and CEO
State Farm Insurance
One State Farm Plaza
Bloomington, IL 61710

Kirk Watson, Texas State Senator
P.O. Box 12068
Austin, TX 78711

Eddie Rodriguez, Texas State Representative
P.O. Box 12068
Austin, TX 78711

CC:

Dean Schwartz, Estimatics Section Manager
P.O. Box 799100
Dallas, TX 75379

Connie Burgess, Estimatics Team Manager
8900 Amberglen Blvd.
Austin, TX 78729

Generic Auto Parts Don't Make the Grade

Not every cost-reduction idea is a good idea, as the Allianz Center for Technology (AZT) recently proved. Its study of collision repairs with inexpensive generic parts produced less than satisfactory results.

This summer, AZT published the results of a study on repairs with generic parts it carried out during 1999-2000. In two stages, AZT's objective with this study was to examine the extent to which generic parts can be used technically in the repair of accident damage and then to assess whether such use could result in actual cost savings.

The study represented the second part of AZT's research into car repairs in line with their current market value. In 1998, the group's first paper on automobile repairs with used parts sparked off a lively debate among recycling firms, the automobile industry, repair associations, consumer associations and the insurance industry.

Though many were initially opposed to this repair method, AZT showed it to be flawless and economical, and it is now being more widely applied.

"We were very excited about all the attention the used parts study got and felt encouraged to extend our research of cost-effective alternatives for car repairs to include generic parts," explained Hans Grossmann, one of the authors of the latest study.

People can generally look to three alternatives for replacement car parts:

- Original equipment manufacturer (OEM) parts that bear the logo of the vehicle manu-

facturer and are sold through the manufacturer's dealer and workshop network.

- Identical parts, actually OEM parts without the manufacturer's logo, from the same production run and commonly outsourced parts like headlights, radiators or windshields.
- Generic parts, which are generally less expensive spare parts made by independent manufacturers based on the original part but not bound by the vehicle manufacturer's test criteria.

AZT's study focused on using generic parts for damage to car models representative of the German market, but the results are valuable for car markets elsewhere. German insurance laws regarding the suitability of generic parts and an insurer's ability to insist on their use also differ from those in other countries, but there are widespread concerns regarding the cost savings in relation to the quality of generic parts.

In Spain, for example, where the use of generic auto parts is common, consumers and insurers look to the Centro Zaragoza, an automotive research group, to certify and guarantee the quality of generic parts. Centro Zaragoza, like AZT, is a member of the Research Committee for Automotive Repair, an international group dedicated to exchanging information on car repair and safety that also addresses such concerns.

Scope of study

AZT technicians focused on three cars popular in Germany. Of those, two were mass-market models, a domestic 1997 VW Golf III and an imported 1995 Nissan Primera 2.0 SLX. The third model was a high-end 1992 BMW 520i.

Attention was given to replacing standard parts for those models like front and rear bumpers, lights, radiator grills, hoods, doors and front end panels. The AZT technicians gathered information on the parts, specifically their product ranges, prices, availability, quality, fit and quality of material.

On first examination, AZT ascertained that generic parts tended to be 38 percent cheaper, on average, than OEM parts. But only the most commonly replaced parts are available as generics. One part, the doors, was not available at all. This problem reduced the actual difference in price to 26 percent, since the areas to repair also required OEM parts and thus raised costs.

"We also discovered very quickly how much the designations of the same parts differ from manufacturer to manufacturer, both among OEM producers and the generic manufacturers, which made it very difficult to order, evaluate and compare," said Grossmann.

Other information emerged after several orders. Interesting, for example, was that different suppliers' parts were often made by the same manufacturer. The Nissan parts were in fact all made by the same manufacturer, and those parts were produced for an earlier model.

Installation key

Installation and installation time, however, became the key issues. Whereas the OEM parts fit as expected, the generic parts deviated considerably in their accuracy of fit due to dimensional variance, mismatching edges and lower quality pressing for metal parts. In some cases it was impossible to smooth out the uneven joints and wavy edges that resulted.

Inaccuracy increased installation time considerably. On average it took 47 percent longer to replace damaged parts with generic equivalents. This brought total replacement costs up almost to parity with OEM parts (see Fig. 1).

The further disadvantage of generic parts lay in their quality. Material tests of the metal parts showed them to be roughly the same in quality as their OEM equivalents, but in most cases they lacked the outer zinc plating that slows rusting. Tests of the plastic bumpers revealed that they become brittle and unsafe at low temperatures.

Additional costs such as repainting ultimately reduced cost savings even further. AZT concluded that generics were unsuitable for the German market for a combination of the following reasons:

- minimal cost differences to OEM parts
- safety concerns
- availability of only the most widely used parts
- the unattractiveness of mismatched parts

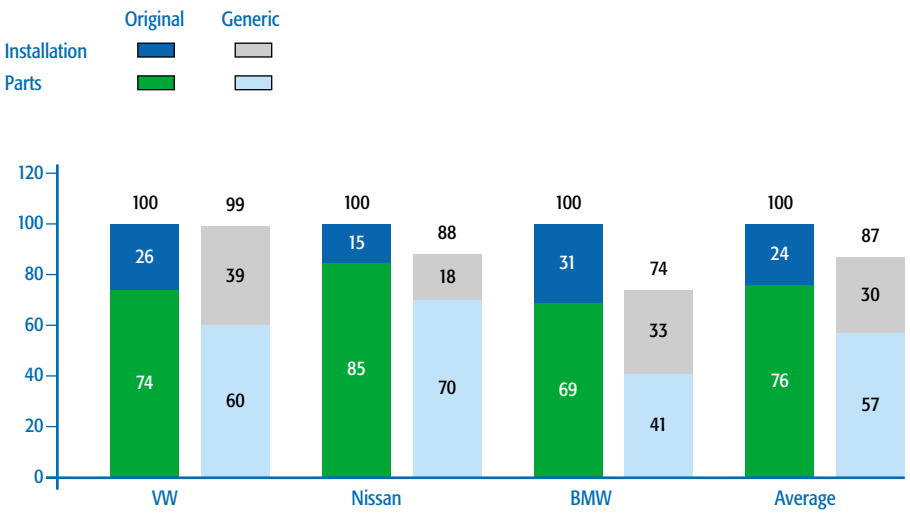
"In the end, despite the lower prices for generic parts, installation problems meant that they really cost almost the same as original parts. But the quality was far inferior to OEM parts," Grossmann added.

Compiled by Richard Manson

Fig. 1

Cost comparison for replacing frontal car parts

(OEM = 100%)



Source: AZT Automotive Division study on car part replacement in Germany, 2001

Contact:
Hans Grossmann
Allianz Center for Technology
Automotive Engineering Division
Ismaning
E-mail: hans.grossmann@allianz.de
www.allianz.de/azt
www.rcar.org

Richard J. DeFallo
400 Division Street Ext
Hopewell, PA 15001

6/21/2007

Attn: John Paoloemilio

REF: Ford F-250 Super Duty
Aftermarket Radiator Support Structural Analysis

Gauge Metal thickness readings were taken at various locations on the aftermarket radiator support and the OEM radiator support. The following is a summary:

No.	Reading Location	OEM in.	Aftermarket in.	Diff in.	% Less OEM
1	Driver Support Baffle Top	0.052	0.038	0.014	27
2	Driver Support Baffle Mid	0.053	0.037	0.016	30
3	Driver Support Baffle Bottom	0.052	0.038	0.014	27
4	Pass Support Baffle Top	0.053	0.039	0.014	26
5	Pass Support Baffle Mid	0.053	0.038	0.015	28
6	Pass Support Baffle Bottom	0.052	0.038	0.014	27
7	Top Cross Bar	0.055	0.055	0.000	0
8	Trans. Cooler Bracket	0.093	0.079	0.014	15

Three readings were taken at the driver side baffle and the passenger side baffle. Only one reading could be taken on the upper tie bar due to access. The lower tie bar could not be measured due to access. One reading was taken on each transmission cooler bracket. With the exception of the top cross bar, the aftermarket radiator support is 26-30% thinner than the OEM specification and the mounting brackets are 15% thinner.

The Structural strength of the radiator support is a factor of the cross-sectional area of the steel. If the gauge metal steel is thinner, the area is less, and the strength is reduced proportionally.

The other factor for determining strength is material grade. There are various grades of steel and each grade has different strengths. I assumed for this analysis that the material grades are the same between the OEM and the aftermarket. But it would be interesting to know if the aftermarket steel meets the same ASTM specification as the OEM steel. I couldn't even find a manufacturer's name or a piece mark, much less to think they have documentation of Material Test Reports for the steel used.

The welded joints on the radiator support are the biggest non-conformance as relates to strength. There are four stitch welds, equaling six linear inches, where the support baffle attaches to the tie bar on the OEM radiator support. There are only four spot welds, at the

same locations on the aftermarket support, equaling ½" of weld. **The strength capacity of the welded joint is only 8% of the OEM welded joint.**

Dimensionally, the aftermarket radiator was checked for overall sizes. The greatest discrepancy was 3/32" at the upper tie bar, which could be within manufacturing tolerance.

In summary, it might fit, but it is inferior in strength.

It is displeasing, to think that Nationwide Insurance approves structural aftermarket products that are inferior in strength, especially regarding automobile safety.
It is even more troubling to think that my Insurance provider, who I have trusted for the last 20 years, is unaware or ignorant to the structural integrity of these aftermarket parts and that I have to take time out of my day to discover it and check quality.

Richard J. DeFallo

Structural Engineer
AWS Weld Inspector

Press Release

Society of Collision Repair Specialists • P.O. Box 909, Prosser, WA 99350 • (877) 841-0660 • Fax (877) 851-0660

FOR IMMEDIATE RELEASE

For Further Information
Contact Dan Risley, SCRS Executive Director
Phone: (708) 598-3384 or e-mail: danrisley@scrs.com

SCRS-Sponsored Survey Highlights, Confirms the Most Critical Issues Facing Today's Repairers

Findings by CSi Complete underscore formidable challenges in the current business environment.

Prosser, Washington, September 28, 2007 — The results of a new, statistically valid, third-party survey of collision repairers are in, and they reinforce what many have suspected: these are challenging times in the collision industry.

The project entitled "SCRS' Report on Repair Facility and Insurance Company Relationships," which is based on the survey conducted by CSi Complete, a nationally known provider of customer satisfaction indexing, who specializes in the collision repair, claims and other service industries. A representative sample of shops from across the nation—including both DRP and non-DRP facilities—were polled with results ranked at a 95% confidence level.

The survey was commissioned by SCRS to confirm what many collision repairers have come to believe: that the business climate has grown increasingly difficult, and the industry is in desperate need of change.

"Conversations between SCRS members, and informal polling on our part, implied that certain key factors were threatening the health of collision repair businesses," explains SCRS Executive Director Dan Risley. "We needed something scientific to confirm these assertions. After some discussion, the Board concluded that a credible, qualified outside party performing statistically valid research was needed, so we contacted CSi Complete."

The compiled survey results contain two main areas of emphasis. The first section provides feedback from participating repairers on what issues impact their businesses most and to what degree. The second part sheds light on how participants perceive their relationships with thirteen major insurance companies. This press release summarizes SCRS' findings in relation to industry impacts. A follow-up release will cover findings in regard to repairer-insurer relationships.

Survey participants were asked to evaluate the impact of nine pressing issues on their businesses. Impacts were classified four ways: "Dramatically Impacts," "Somewhat Impacts," "Little Impact" or "No Impact." Table 1 shows a breakdown of the issues and how they were ranked in order of dramatic impact:

– Continues –

Table 1.

Issue	Impact on Business (in percent)			
	Dramatically Impacts	Somewhat Impacts	Little Impact	No Impact
Suppressed Labor Rates	51.66	31.33	8.33	8.66
Losing Customers to Steering	40.66	25.66	22.66	11.00
Lack of Insurance Field Staff Training	33.33	40.00	16.66	10.00
Database Abuse/Manipulation	31.00	33.33	16.00	19.66
Insurer Dictating the Repair	26.66	35.00	20.66	17.66
Refusal to Acknowledge P-Pages	25.00	33.00	18.66	23.33
DRP Requirements	23.07	34.11	18.06	24.74
Fear of Reprisal or Threats from Insurer	20.33	25.33	19.66	34.66
Desk Reviews	15.33	38.00	25.00	21.66

Table 2 shows the *total impact* to repairer from greatest to lowest (Total Impact = Dramatically Impact + Somewhat Impacts + No Impact):

Table 2.

Issue	Total Impact on Business
Lack of Insurance Field Staff Training	91.32
Losing Customers to Steering	89.99
Suppressed Labor Rates	88.98
Refusal to Acknowledge P-Pages	82.32
Database Abuse/Manipulation	80.33
DRP Requirements	78.33
Fear of Reprisal or Threats from Insurer	76.66
Insurer Dictating the Repair	75.24
Desk Reviews	65.32

“The results were revealing in that they confirmed what SCRS members thought all along,” states SCRS Chairman Farzam Afshar. “As an association, you like to think you have your finger on the pulse of your members and the industry as a whole. This survey helps prove it.”

Risley agrees that the survey uncovered no real surprises. “For example, we could tell the adequacy of labor rates was a concern from the vast number of bills being introduced around the country to address the issue,” he says. “The same is true of steering practices, which many states likewise have tried to address through legislation. Unfortunately, enforcement of such laws traditionally poses a challenge because hard evidence of steering is difficult to obtain, although we are hoping this may change as a number of collision repairers have begun to initiate lawsuits against insurers in an effort to show that steering cannot be tolerated.”

The survey also asked participants to rank, in relation to same nine issues, those insurers that had the most dramatic impact for each. In other words, if an issue had a dramatic impact, what insurance companies contributed most to its effect. Table 3 shows the top three insurers for each issue:

Table 3.

Issue	Insurers	% Dramatic Impact
Suppressed Labor Rates	Progressive Allstate State Farm	20 17 13
Losing Customers to Steering	Progressive Allstate GEICO	23 19 14
Lack of Insurance Field Staff Training	Progressive GEICO Allstate	39 13 11
Database Abuse/Manipulation	Progressive Allstate State Farm	23 18 12
Insurer Dictating the Repair	Progressive Allstate Nationwide.	22 19 12
Refusal to Acknowledge P-Pages	Progressive Allstate Nationwide	20 19 12
DRP Requirements	State Farm Allstate Farmers	23 14 11
Fear of Reprisal or Threats from Insurer	State Farm Progressive Nationwide	21 16 13
Desk Reviews	Allstate State Farm Nationwide	16 10 8

SCRS hopes that statistical validation of issues will help the industry set the right priorities and strategize more effectively. “Before you can take steps to solve a problem, you have to clearly identify it,” says Afshar. “Backed by the reassurance of the survey, we can pursue solutions for our members with even greater confidence, knowing we are pointed in the right direction as we again try to show that ‘Working Together Is the Most Important Work We Do’.”

Through its direct members and 34 affiliate associations, SCRS is comprised of 6,000 collision repair businesses and 58,500 specialized professionals who work with consumers and insurance companies to repair collision-damaged vehicles. Additional information about SCRS including other news releases is available at the SCRS web site: www.scrs.com. You can e-mail SCRS at the following address: info@scrs.com.

REPAIR SHOP PROGRAM AGREEMENT

This Repair Shop Program Agreement ("Agreement") is entered into as of the , by and between Progressive Casualty Insurance Company, an Ohio corporation, on behalf of itself and all other participating subsidiaries of The Progressive Corporation, ("Progressive") and ,a (n) _____ _____ _____ (“Contractor").

In consideration of the mutual covenants and agreements set fort herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

I. Designation; Referrals; Repairs

1.1 Program. Progressive hereby designates Contractor as a participant in Progressive's Repair Shop Program (the "Program"), which entitles Contractor to the benefits of this Agreement.

1.2 Definitions. Under this Agreement, the following definitions will apply:

a. "Claimant" means any Progressive insured or any person who was involved in an accident with a Progressive insured.

b. "Claimant Referral" means Contractor's receipt of an electronic notice of a repair order from Progressive indicating that Contractor's customer is a Claimant, and the delivery of a vehicle by such Claimant directly to Contractor for repairs.

c. "Progressive Coordinated Repair" means Contractor's receipt of an electronic notice of a repair order from Progressive indicating that a Claimant has requested that Progressive coordinate repairs on the Claimant's behalf, and the delivery of the Claimant's vehicle to Contractor for repairs. Delivery of vehicles pursuant to a Progressive Coordinated Repair will normally take place when Contractor picks up the vehicle at a Progressive facility, as further described below, but Progressive may also require that the vehicle be picked up from storage or an accident site. Progressive Coordinated Repairs will not be initiated where prohibited by law.

1.3 Contractor's Acknowledgment. Under the Program, vehicles may be delivered to Contractor for repairs either by a Claimant Referral or pursuant to a Progressive Coordinated Repair. Contractor acknowledges, however, that under the Program, Progressive has no obligation to refer vehicles to Contractor and Claimants are not required to use Contractor's services.

1.4 Contractor's Obligations. Contractor will repair or cause to be repaired all Claimant motor vehicles delivered, referred or assigned to, or picked up by, Contractor during the term of this Agreement which have incurred physical damage due to collision, upset, accident or other casualty and will restore such vehicles to their pre-accident condition, according to the terms of this Agreement. Any vehicles at a repair facility operated by Contractor (a "Repair Facility") which are not subject to this Agreement, or are no longer subject to this Agreement, will be the sole responsibility of the vehicle owner.

1.5 Contractor's Right to Opt Out. Notwithstanding anything in this Agreement to the contrary, Contractor shall have the right, if and when the Progressive Coordinated Repair program is initiated in Contractor's geographic area, to decide not to participate in such program. Contractor may invoke this right, and decline to accept vehicles pursuant to Progressive Coordinated Repairs, at any time after initiation of such program by providing written notice thereof to Progressive.

II. Purpose

The principal purpose of this Agreement is to develop the foundation for a productive working relationship between Progressive and Contractor, involving one or more Repair Facilities operated by Contractor, in order to:

a. achieve a high level of Claimant satisfaction with the automotive physical damage repair process;
b. ensure that vehicles referred or assigned to Contractor for repair hereunder are afforded a high level of attention and care by the Repair Facilities; and
c. ensure that such repairs are completed properly, in a cost effective manner and in accordance with ICAR and industry standards and applicable Laws (defined below).

III. Contractor Requirements

3.1. Compliance; Professional Standards.

a. In the performance of this Agreement and in operating the Repair Facilities, Contractor will:

i. comply with all applicable federal, state and local laws, rules, ordinances and regulations ("Laws");
ii. perform all work in a professional, competent and timely manner; and
iii. secure and maintain all licenses, permits and bonds required by Law for the operation of each Repair Facility.

b. Contractor hereby certifies that no employee or agent of Contractor has been convicted of a felony involving breach of trust or dishonesty.

3.2. Insurance. Contractor will procure and maintain, at all times throughout the term of this Agreement, the following minimum insurance coverage's:

a. Garage Policy of insurance, including, without limitation, the following coverage's:

i. Garage Liability Insurance including Product Liability, Contractual Liability and Completed Operations coverage's, in an amount not less than $1.0 million combined single limit per occurrence;
ii. Garage keepers Insurance in an amount not less than $250,000 combined single limit per occurrence; and
iii. Automobile Insurance in an amount not less than $1.0 million per occurrence, including, without limitation, the following coverage's: Bodily Injury and Property Damage Liability, Comprehensive, Collision, Uninsured and Underinsured Liability and Property Damage Coverage's, and Personal Injury Protection in those states where Personal Injury Protection applies;
b. Excess Liability Insurance coverage in an amount not less than $1.0 million combined single limit per occurrence; and
c. Workers' Compensation coverage in an amount not less than that mandated under applicable state law.

Contractor will cause Progressive Casualty Insurance Company, its parent corporation and each of their respective subsidiaries and affiliates, to be named as Additional Insureds under each policy of such insurance maintained by Contractor (except Worker's Compensation) to the full extent of the coverage limits thereof. Any deductible or self insured retention under such policies shall not exceed $5,000.00. Each such policy of insurance will be written on an occurrence basis and will provide that it will not be canceled or amended without at least thirty (30) days' prior written notice to Progressive. Contractor will provide Progressive with certificates of insurance, declaration pages from each insurance policy, and copies of the Additional Insured endorsements described above, upon execution of this Agreement, and thereafter Contractor shall provide to Progressive replacement certificates, declaration pages and endorsements at least fifteen (15) days prior to the expiration of such insurance policies evidencing the renewal of such policies or the replacement of such policies in accordance with the requirements of this Section.

Progressive shall not be liable to Contractor for any damage to any real or personal property (including vehicles) owned, leased or used by Contractor or any subcontractor, or for any injury (including death) to any employee of Contractor or any subcontractor, regardless of cause. Contractor, on its own behalf and on behalf of any party claiming under, by or through Contractor by way of subrogation or

otherwise, hereby waives any and all claims it may have against Progressive and its corporate affiliates, and each of their respective officers, directors, or employees, for any such damage or injury. Contractor shall provide to Progressive, at the same time as the issuance of certificates of insurance as required above, endorsements to each applicable insurance policy evidencing the insurance company's waiver of its rights of subrogation against Progressive and its corporate affiliates, and each of their respective officers, directors and employees.

3.3 Education and Training. Contractor agrees to provide continuing formal education for all of its management and technical personnel to ensure that proper repair techniques are mastered and utilized. If Contractor performs frame repairs, applicable Repair Facility personnel must be trained to repair both full frame and unibody constructed vehicles. Certification of appropriate repair shop personnel from I-CAR and ASE, and additional training available from manufacturers, distributors and suppliers of motor vehicles, vehicle components and repair equipment, are also recommended and strongly encouraged. All body and frame technicians will have passed the I-CAR MIG Welding Qualifications Test or will have completed comparable training and demonstrated equivalent capabilities.

IV. Repair Facilities Requirements

4.1 Repair Facilities. Contractor may own and/or operate one or more Repair Facilities. If Contractor owns and/or operates more than one Repair Facility, each Repair Facility which is subject to the terms of this Agreement shall be listed in a Multiple Repair Facilities Rider and attached to this Agreement. Repair Facilities not so listed on the attached Multiple Repair Facilities Rider are not included in the Program. As to each Repair Facility so listed, Contractor will provide to Progressive, and update as and when necessary, the address of such Repair Facility, days and hours of operation, the identity of the management personnel and shop liaison at such facility and other pertinent information. Each Repair Facility must maintain the capabilities and equipment described in this Article IV, and ensure that its personnel meet the qualifications and complete the training set forth in Section 3.3 above.

4.2 Shop Capabilities; Sublet Work. Contractor agrees that each Repair Facility will maintain the ability to provide high quality state-of-the-art automotive physical damage repair service. Notwithstanding the foregoing, Contractor will: (a) ensure that each of its subcontractors meets the applicable requirements of this Agreement as if such subcontractor was the "Contractor" hereunder; (b) ensure that any subcontracted repairs are performed in accordance with the terms and conditions of this Agreement, including, but not limited to, all applicable quality standards; and (c) warrant the subcontractor's repairs as if those repairs had been performed by Contractor. Contractor will be fully responsible for all subcontracted repairs under this Agreement.

4.3 Required Repair Equipment. Each Repair Facility maintained by Contractor must contain the necessary equipment to restore damaged vehicles to their pre-accident condition. At a minimum, each Repair Facility must contain the following items of equipment, or must sublet repairs subject to this Agreement to subcontractors that have the following items of equipment and can document the training required in Section 3.3 of this Agreement:

a. If frame repairs are performed at the Repair Facility, unibody and full frame repair equipment capable of restoring damaged full frame and unibody vehicles to their pre-accident condition in terms of function, safety and appearance;
b. A gas metal arc welder (GMAW/MIG);
c. Painting systems, methods and materials that are capable of producing an OEM type finish;
d. A spray booth conforming to all federal regulations and local zoning laws; and
e. Air conditioning evacuation equipment.

All repair equipment must be maintained in good and safe working order and state of repair at all times, in accordance with all applicable legal and regulatory requirements.

V. Standards of Conduct

5.1 Conflicts of Interest. Contractor will report to Progressive any known or suspected conflicts of interest involving relationships between Contractor's, any Repair Facility's or any

subcontractor's personnel, on the one hand, and Progressive employees, on the other hand (for example, friends or relatives of Progressive employees who may be employed by Contractor or any of its Repair Facilities).

5.2 Salvage. Progressive employees and agents are prohibited from purchasing Progressive salvage. Contractor and/or the Repair Facility may purchase salvage from Progressive only if prior written authorization is received from the Head of Claims of the local Progressive Business Unit or his/her designee ("Local PGR Manager").

5.3 Gifts, etc. Contractor and/or Repair Facility personnel will not offer or give any gifts, gratuities, commissions, financial incentives, event tickets, meals, travel or entertainment, personal discounts, preferential treatment for goods or services, or any other favors or incentives to any Progressive employee, agent or Claimant (provided that Contractor and/or Repair Facility personnel may treat Progressive employees, as a group, to an occasional meal or local sporting event, subject to the prior approval of the Local PGR Manager).

5.4 Prior Authorization of Repairs. If any Repair Facility plans to repair a Progressive insured vehicle that is owned by Contractor, the Repair Facility, any subcontractor, or any of their respective employees, or a friend or relative of any such employee, or by an individual known by Contractor to be a Progressive employee, notification and prior authorization must be received from the Local PGR Manager before repairs are started.

5.5 Standards. In performing services hereunder, neither Contractor, nor any Repair Facility, nor any subcontractor will:

a. charge to replace parts which were not damaged as a result of the accident or other occurrence;
b. charge for labor hours or repair work that was not performed;
c. cause additional damage to the vehicle which did not result from the accident or other occurrence;
d. charge for OEM parts when recycled, reconditioned, salvage or after-market parts were used in the repair of the vehicle;
e. give or receive any gift, compensation, rebate or other consideration to or from any Progressive claims personnel, agent or Claimant;
f. arrange for or accept any "kickback", payment or other benefit from any subcontractor or vendor who provides any work, service, parts or supplies for any vehicle repaired hereunder (This section will not prevent Contractor from taking advantage of usual and customary prompt payment discounts and/or volume discounts);
g. enter into a separate agreement with any Claimant to pay a rebate, lower the quality of repair of the vehicle in exchange for a rebate or other benefit, alter or inflate the cost of a repair to reduce or eliminate a deductible or allow repairs of prior or other unrelated damages in order that they may be paid under the covered claim; or
h. file or assist others in filing false or fraudulent insurance claims with Progressive.

5.6 High Ethical Standards. In performing their respective responsibilities under this Agreement, and in all dealings with Claimants, Progressive and Contractor will act with integrity and adhere to high ethical standards. All Claimants will be treated courteously and with respect.

5.7 Responsibility for Subcontractors. Contractor will further ensure that each of its subcontractors adheres to the standards set forth in this Article V.

VI. Service and Repair Standards

6.1 Service. Each Repair Facility will provide Progressive and/or its Claimants with a level of service (in terms of scheduling priority, cycle time and quality) which is equal to or exceeds that provided to any other insurance carrier(s) by the Repair Facility, and with pricing (rates) which are prescribed by Progressive, within a range of prevailing market rates.

6.2 Repairs. Contractor will complete all repairs necessary to restore the vehicle to its pre-accident condition in terms of form, fit, finish, appearance, durability, functionality and safety. All such repairs shall be completed in accordance with or shall exceed industry standards then in effect. Contractor will complete all structural and/or safety related repairs in accordance with ICAR standards. Contractor will be responsible to ensure that all subcontracted repairs satisfy these standards.

6.3 Web Tracker Compliance.

a. Each Repair Facility must have internet access at its shop facility and must be able to accept and schedule repair orders electronically via Progressive's web tracker system ("Web Tracker"). Each Repair Facility will log each Web Tracker event onto the Web Tracker system within 24 hours of the occurrence of such event.

b. When a vehicle arrives at the Repair Facility, the Repair Facility will log the vehicle into Web Tracker as "at shop." Once a vehicle is repaired, the Repair Facility will log the vehicle into Web Tracker as "repair complete". In the case of each vehicle delivered to the Repair Facility by a Claimant Referral, once the Claimant accepts the vehicle, the Repair Facility will log the vehicle into Web Tracker as "delivered to customer."

c. Each Repair Facility will further comply with new Web Tracker requirements as enhancements or new functionalities become available.

6.4 Pick up and Delivery pursuant to Progressive Coordinated Repairs. Upon receiving electronic notice of a Progressive Coordinated Repair from Progressive, the Repair Facility will accept such Progressive Coordinated Repair electronically via Web Tracker. Upon such acceptance, the Repair Facility will pick up the vehicle (including towing, if necessary) from the Progressive facility or such other location specified by Progressive and, upon completion of the repairs required in accordance with this Agreement, the Repair Facility will deliver the vehicle to the Progressive facility or such other location as Progressive may reasonably specify. If the repairs do not pass the inspection of either Progressive or the vehicle owner, the Repair Facility will make arrangements to promptly return the vehicle back to the Repair Facility for any necessary work and to deliver the vehicle back to the Progressive facility upon completion thereof. All pickup and delivery services will be at no charge to Progressive or the Claimant, unless otherwise required by law. Contractor will have sole responsibility for each such vehicle during the time that the vehicle is in Contractor's care, custody or control, including, without limitation, for any damage to property (including such vehicle) or personal injury (including death) which might occur while such vehicle is being transported by Contractor.

6.5 Parts Use; Variation from Estimate. If Progressive's estimate (or a supplement) specifies an OEM part and Contractor desires to substitute a non-OEM part, or if Progressive's estimate (or a supplement) states that a part should be replaced and Contractor desires to repair the existing part instead, Contractor will notify Progressive and will not substitute such non-OEM part or repair, rather than replace, the existing part, without Progressive's prior written consent.

6.6 Quality Assurance Program

a. Contractor will maintain and provide a quality assurance program at each Repair Facility, subject to Progressive's reasonable approval, which shall include, without limitation, a quality assurance check on all repaired vehicles prior to delivery to Progressive or the Claimant.

b. Progressive will have the right at any time or times to review Contractor's performance under this Agreement. Areas of performance subject to review include, without limitation: (i) quality of repairs, (ii) service promptness, including pickup and delivery of vehicles pursuant to Progressive Coordinated Repairs and completion of repairs, (iii) cost control efforts, (iv) administrative compliance, and (v) repair cycle time reduction. Repair cycle time will be evaluated on acquisition speed (report to arrival), and in-shop duration (labor hrs/per shop day). Notwithstanding the foregoing, Contractor acknowledges that repair quality is of paramount importance and may never be compromised for other goals. The reviews may include management reports, review of Paper Files, evaluation of data compiled by Web Tracker, customer surveys and both scheduled and unscheduled review of vehicle repairs by Progressive claims managers and/or quality control

personnel. Progressive personnel will be given full access to each Repair Facility at all times to conduct such audits and to inspect vehicles that are under repair, as well as repairs that have been completed. The Repair Facility inspections may be scheduled in advance or occur unannounced. Contractor and the Repair Facilities will provide Progressive personnel the assistance and cooperation they need to complete their tasks. Results will be reviewed with Contractor and the Repair Facility.

VII. Estimates, Supplements, Inspections

7.1 Estimates. Progressive will write all initial estimates in accordance with the policy contract provisions.

7.2 Supplements.

a. Progressive will write all supplemental estimates ("supplements").
b. Prior to beginning repairs, Contractor will contact Progressive via Web Tracker if Contractor believes that the items listed on the initial Progressive estimate are not sufficient to allow Contractor to repair the vehicle to pre-accident condition in accordance with the requirements of this Agreement or if Contractor disagrees with the estimate for any reason. If there is potential for undiscovered damage, then within 48 hours after the vehicle arrives at the Repair Facility, Contractor will (i) tear down the vehicle in order to identify any additional work that may be required and (ii) if appropriate, request a supplement from Progressive via Web Tracker.
c. If, at any point during the course of repairs, hidden damage is discovered or if Contractor believes that the repair process described on the initial estimate should be modified or adjusted, Contractor will immediately contact Progressive via Web Tracker. Contractor may continue with repairs and may order additional parts, as needed, after Contractor contacts Progressive via Web Tracker regarding the need for a supplement; provided, however, that Contractor will immediately discontinue repairs at Progressive's request. A Progressive representative will reinspect the vehicle promptly after receipt of such notice. Upon completion of the reinspection, the parties will determine and agree upon any additional repair work that may be necessary and any resulting supplement.

7.3 Inspection. Contractor will allow Progressive to inspect vehicles before, during and after the repairs are completed to confirm that repairs are completed as specified on the estimate, confirm any additional damages discovered by Contractor and/or determine the quality of repairs completed.

VIII. Pricing

Contractor's final charges for the repairs will be equal to the total amount shown on the Progressive estimate, including any written supplements or revisions made or approved in writing by Progressive. Vehicles repaired under this Agreement will not be subject to storage charges, unless otherwise agreed by Progressive in writing. Towing charges for a Claimant Referral will be reimbursed at the lesser of Progressive's local towing reimbursement policy as in effect from time to time and Contractor's actual cost charged by a third party towing company. Vehicles picked up or delivered pursuant to a Progressive Coordinated Repair will not be subject to towing or other transportation charges.

IX. Repair Authorization; Final Invoice and Payment

9.1 Claimant Referral. If the vehicle is delivered -to the Repair Facility as a result of a Claimant Referral, the following will apply:

a. Prior to beginning repairs, Contractor will be required to obtain the vehicle owner's permission;
b. Prior to beginning repairs, Contractor will also contact Progressive's local claims office to verify that coverage and liability are in order. Progressive's procedure is to estimate all vehicles involved in a loss immediately, regardless of pending coverage and liability issues. As a result, a Claimant Referral may be made even though there is a serious

liability or coverage issue. Progressive shall have no responsibility for payment on any particular vehicle unless Contractor has confirmed Progressive's position regarding payment and Progressive has indicated that it accepts coverage and liability for the loss; and

c. Contractor is responsible for collecting the full cost of repairs from the vehicle owner. Payments will be issued to the vehicle owner and his/her lienholder, if applicable, unless Contractor provides Progressive with a direction to pay Contractor directly, in form acceptable to Progressive, executed by the vehicle owner and any lienholder. If Contractor provides Progressive with a completed direction to pay Contractor directly, duly executed by the vehicle owner and lienholder (if any), Progressive will issue the payment to Contractor and the vehicle owner jointly. Unless otherwise directed by the local claims office, Contractor should not assume that any payments will be issued directly to Contractor as sole payee.

9.2 Progressive Coordinated Repair. If the vehicle is delivered to or picked up by the Repair Facility pursuant to a Progressive Coordinated Repair, the following will apply:

a. The electronic notice from Progressive to the Repair Facility to pick up the damaged vehicle will constitute the authority to begin repairs, subject to the provisions of this Agreement;

b. All communications regarding the repair of such vehicle will be with Progressive, and Contractor will not initiate contact with the Claimant directly unless required to do so by Law and then only with prior notice to Progressive; and

c. Payment for the repairs will be made by Progressive to Contractor promptly upon the vehicle being returned to Progressive at Progressive's facility with all required repairs completed to Progressive's satisfaction.

9.3 Final Invoice. Upon completion of the repair work, Contractor will provide the Claimant (in the case of a Claimant Referral) or Progressive (in the case of a Progressive Coordinated Repair) with a final shop invoice. The invoice will specify the work that was done, the amount charged and whether non-OEM replacement parts are included in the repair. The form and content of such invoice and notice regarding the use of non-OEM parts must comply with all applicable legal requirements.

X. Warranties

10.1 Limited Lifetime Warranty. Contractor hereby grants to Progressive and to each Claimant a limited lifetime warranty of all work performed by Contractor or any subcontractor pursuant to this Agreement (the "Warranty"). Under this Warranty, the Contactor, at no cost to Progressive or the Claimant, will (a) remedy any defects in workmanship and/or any workmanship that fails to meet generally accepted industry standards in effect at the time of the work with respect to form, fit, finish, appearance, durability, functionality and safety ("Industry Standards"), and (b) replace any and all parts which are defective or otherwise fail to meet Industry Standards. All work performed and replacement parts used by Contractor under this Warranty will conform to Industry Standards. Contractor will also pay for associated repair costs and the cost of a rental vehicle necessitated by repair work covered by this Warranty. Notwithstanding anything to the contrary herein, this Warranty: (i) does not cover normal wear and tear or damage caused by improper maintenance, neglect or abuse; (ii) covers each part only for the time period after installation which is equivalent to the duration of the applicable manufacturer's warranty for such part (it being understood that the Contractor will replace such defective parts in accordance with this Warranty and will seek recovery under any manufacturer's warranty separately); and (iii) applies as long as the Claimant owns or leases the vehicle (except that, with respect to parts only, the duration of the warranty period may be limited under the immediately preceding clause (ii)).

10.2 Written Warranty. Contractor will provide each Claimant with a comprehensive written parts and workmanship warranty for all work performed on the vehicle, including, without limitation, any subcontracted work, which written warranty will, at a minimum, conform to the Warranty provided in Section 10.1 hereof. The form and scope of Contractor's written warranty will be subject to Progressive's prior review and approval.

10.3 Delivery of Progressive Guarantee. For each Claimant Referral, when the Claimant picks up the repaired vehicle, the Repair Facility will deliver to the Claimant (i) Progressive's written lifetime guarantee in a form to be provided by Progressive, and (ii) a final copy of the Progressive estimate.

XI. Problem Solving

11.1 Resolving Repair Complaints. The parties will cooperate to resolve all complaints pertaining to the operation of Contractor's Repair Facilities, the quality of its repair work, the selection of parts and materials, and actions of its personnel. The parties will use all reasonable effort to resolve all Claimant complaints promptly and in a fair and equitable manner. Contractor will immediately notify Progressive of each such complaint that is brought to the attention of Contractor or the Repair Facility. Good judgment must be exercised at all times and the Claimant's best interests must be given full recognition.

11.2 Insurance Claims. Contractor and its Repair Facilities may not attempt to adjust any claim or handle any complaints from a Claimant which relate to the provisions of a Progressive insurance policy or the actions or procedures of Progressive. All such complaints must be referred to Progressive's designated representative ("Progressive Contact") immediately. The Repair Facility may communicate potential or existing complaints to the Progressive Contact or to the Progressive claim representative handling the specific file.

XII. Recordkeeping; Inspection Rights

12.1 Web Tracker Compliance; Paper File. Each Repair Facility will maintain current vehicle event status information pursuant to Progressive's Web Tracker requirements or such other system as Progressive may specify from time to time. Each Repair Facility will also maintain a related paper file for all repair work performed under this Agreement, including, without limitation, all pertinent information regarding the vehicle, including, but not limited to, work orders, photographs taken, invoices for parts delivered, Progressive's initial estimate, all written supplements, parts ordering information/documentation, authorizations, disclosures and disclaimers ("Paper File").

12.2 File Retention. Photos and other documentation in the Paper File (collectively, the "Claim File") will be retained by the Repair Facility for a minimum of five years ("Minimum Retention Period"). In the event of any dispute or litigation between any Claimant and Progressive or the Repair Facility which is not concluded prior to the expiration of the Minimum Retention Period, all materials in the related Paper File will be retained until such claim or litigation is finally resolved. Progressive, or its representatives, will have the right to inspect, audit and make copies of the Paper File at any and all times during normal business hours.

XIII. Confidentiality

13.1 Confidentiality Agreement. Contractor acknowledges that the property-casualty insurance markets are highly competitive and that the provisions of this Agreement have been designed, in large part, to implement Progressive's strategy for competing in those markets. Accordingly, Contractor agrees to maintain the provisions of this Agreement in strict confidence and that it will not, directly or indirectly, copy, reveal, discuss, disseminate, transmit or otherwise disclose this Agreement, or any of the provisions hereof, to any third party without the prior written consent of Progressive.

13.2 Other Confidential Information. From time to time, Progressive may disclose to Contractor information that is confidential or proprietary to Progressive ("Confidential Information"). Confidential Information includes, but is not limited to, any information or documentation relating to the business, affairs, marketing or operating strategies, operating methods, claim adjusting techniques or other procedures of Progressive. Contractor agrees to hold the Confidential Information in strict confidence and will not disclose, copy, disseminate, reveal or transmit any of the Confidential Information to any third party without the prior written consent of Progressive and will use the Confidential Information solely to provide repair services pursuant to this Agreement.

13.3 Nonpublic Personal Information. "Nonpublic Personal Information" shall be defined with reference to the Gramm-Leach-Bliley Act of 1999, 15 U.S.C. §§ 6801 et *seq.,* and applicable federal and

state laws and regulations implementing the act (hereinafter, "Privacy Laws"). For purposes of this Agreement, Nonpublic Personal Information shall include any information: (i) a Claimant provides to either party to obtain vehicle repairs; (ii) about a Claimant resulting from any such transaction; (iii) otherwise obtained about a Claimant in connection with providing the vehicle repairs to such Claimant; and (iv) any list, description, or other grouping of Claimants that is derived using any of the foregoing information.

In order to secure vehicle repairs hereunder, Progressive or Claimant may disclose to the Contractor and/or Repair Facility, or the Contractor and/or the Repair Facility may otherwise obtain, certain Nonpublic Personal Information regarding Claimant, including but not limited to his/her name, address and telephone number. Repair Facility agrees that: (i) it will use and disclose any such Nonpublic Personal Information only in the ordinary course of its repair business and only to the extent necessary to carry out the purpose(s) for which it was disclosed, and Repair Facility will inform any such recipient of the confidential nature of such information; (ii) it will hold all Nonpublic Personal Information in strict confidence and safeguard it from unauthorized use or disclosure; and (iii) it will not further disclose Nonpublic Personal Information without the authorization of Progressive or the Claimant to whom the Nonpublic Personal Information relates.

XIV. Advertising

Contractor will not produce, publish or distribute, or cause to be produced, published or distributed, any advertisement, brochure, promotional materials or other materials in which Progressive's name is mentioned, Progressive's trade names, service marks, trade dresses or logos are used, or language is used from which any connection between Contractor or any Repair Facility and Progressive, or any of its affiliates, may reasonably be inferred or implied, without Progressive's prior written consent, which consent may be withheld or conditioned in Progressive's sole discretion. Consent by Progressive may only be granted by Progressive's Corporate TotalPro Process Leader, whose address is 6055 Parkland Blvd., Mayfield Heights, Ohio 44124.

XV. Indemnification

Contractor will bear full and sole responsibility for all repair work performed on Claimant vehicles pursuant to the terms of this Agreement, including, without limitation, subcontracted repairs. Contractor will indemnify, defend and hold harmless Progressive, its affiliates and Claimants, and each of their respective directors, officers, employees and agents, (collectively, "Indemnified Parties") from and against any and all suits, actions, claims, liabilities, losses, damages, payments, judgments, settlements, penalties, fines, costs and expenses (including reasonable attorneys' fees) asserted against or incurred by the Indemnified Parties, or any of them, arising out of or relating to: (i) any bodily injury (including death) to any person or damage to the property, tangible or intangible, of any person or entity, to the extent that such injury or damage has resulted from or is attributable to the willful or negligent acts or omissions of Contractor, or any of its subcontractors, officers, employees or agents, and/or any defective or faulty repair work performed by Contractor or its subcontractors, and/or the failure of Contractor to perform repair work required to be performed by Contractor pursuant to this Agreement; (ii) any failure on the part of Contractor or any subcontractor to comply with any Laws, including, without limitation, any Laws relating to the privacy of Nonpublic Personal Information and Laws relating to aftermarket parts use and disclosure requirements; and/or (iii) Contractor's or any subcontractor's failure to comply with any of the terms and provisions of this Agreement.

XVI. Termination

16.1 Termination for Convenience. Either party may terminate this Agreement, with or without cause, at any time by providing the other party with not less than thirty (30) days' prior written notice of termination. If Contractor owns or operates more than one Repair Facility, either party may terminate this Agreement as to all such Repair Facilities or as to any one or more of such Repair Facilities pursuant to this Section 16.1.

16.2 Termination for Cause. Either party may terminate this Agreement at any time upon written notice to the other party ("Defaulting Party") if the Defaulting Party fails to observe or perform, in any material respect, any of its covenants or obligations under this Agreement, and such failure continues for seven (7) or more days after the Defaulting Party has received written notice thereof. If Contractor

owns or operates more than one Repair Facility, Progressive may terminate this Agreement as to all such Repair Facilities or as to any one or more such Repair Facilities pursuant to this Section 16.2.

16.3 Post-Termination Obligations. Upon any termination of this Agreement, Contractor and each affected Repair Facility will:

a. at Progressive's election, either promptly complete the repairs as to each vehicle then at the Repair Facility in accordance with the requirements of this Agreement, or promptly return each such vehicle to Progressive together with all funds paid by either Progressive or the Claimant for the repair of such vehicle; and
b. return to Progressive all procedural manuals and promotional materials furnished by Progressive.

16.4 Survival. The provisions of Articles X, XII, XIII, XIV, XV and XVII, and this Article XVI, will survive any termination of this Agreement.

XVII. Dispute Resolution Procedures

In the event the parties are unable to resolve any claim, dispute or controversy hereunder ("Dispute"), the parties will resolve the Dispute not by litigation or other judicial means, but through a Dispute Resolution Process consisting of a progression of the following: discussions at the management level, mediation, and if unsuccessful, binding arbitration. In the event of any Dispute, either party may initiate the Dispute Resolution Process by delivering written notice thereof to the other party. Any mediation or arbitration proceedings will be conducted in accordance with the applicable rules of the Center for Public Resources ("CPR"), as then in effect, except as otherwise agreed by the parties. Nothing herein will prohibit either party from: (a) seeking a temporary restraining order, preliminary injunction or other provisional relief if, in its judgment, such action is necessary to avoid irreparable damage or to preserve the status quo or from bringing and pursuing legal action to specifically enforce the provisions of this Article; or (b) terminating this Agreement pursuant to Section 16.1 above. In any such arbitration proceeding, the tribunal may award only compensatory damages and is not empowered to award punitive or exemplary damages. Attorneys' fees and disbursements may be awarded to the prevailing party. Any such award shall be binding upon the parties hereto, and will not be appealable to any court or other tribunal. The arbitration award may be entered in any court of competent jurisdiction and enforced through the court processes.

XVIII. Miscellaneous

18.1 Independent Contractor. In performing services pursuant in this Agreement, Contractor will act as, and will be deemed to be, an independent contractor and will have sole and exclusive control of the work and the manner in which it is performed. Contractor is not to be considered the agent or employee of Progressive and no partnership, agency or joint venture relationship exists, or will be deemed to exist, between the parties hereto.

18.2 Savings Clause. In the event any one or more of the provisions contained herein are hereafter held to be unenforceable in any respect for any reason under the law of any state or of the United States of America, it may be adjusted by a court of competent jurisdiction rather than voided, if possible, in order to achieve the intent of the parties to this Agreement to the fullest extent possible. No such unenforceability will affect any other provision of this Agreement, all of which will remain in full force and effect in accordance with their respective terms.

18.3 Notices. All notices and other communications hereunder will be in writing and will be deemed to have been duly given when delivered in person or by telegram, telex or e-mail, or three days after being mailed by registered or certified mail (postage prepaid, return receipt requested), or one day after being sent via a courier of national reputation to the respective parties, as follows:

If to Progressive: Progressive Casualty Insurance Company

If to Contractor: _____

_____

Attention : _____

Fax #: _____

E-Mail : _____

or to such other address as the party to whom notice is given may have previously furnished to the other in the manner set forth above (provided that notice of any change of address will be effective only upon receipt thereof). Notwithstanding the foregoing, all requests with respect to advertising shall be sent to Progressive at the address set forth in Article XIV.

18.4 Entire Agreement. This Agreement constitutes the entire understanding and agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior or contemporaneous promises, representatives, agreements, understandings, negotiations and discussions,
both written and oral, between the parties hereto with regard to such subject matter, including, without limitation, any prior TotalPro agreements.

18.5 Benefits; Binding Effect; Assignment. This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns. Except as expressly provided herein, neither party may assign this Agreement, or any of its rights or interests herein, or delegate any of its obligations hereunder, without the prior written consent of the other party; *provided, however,* that, without such consent, the benefits of this Agreement may be extended to any or all of Progressive's corporate affiliates.

18.6 Amendments and Waivers. This Agreement may not be modified or amended except by an instrument in writing signed by both parties. Either party hereto may, only by an instrument in writing, waive compliance by the other party hereto with any term or provision hereof. The waiver by any party hereto of any term or provision of this Agreement, or of any breach thereof, will not be construed as a waiver of any other term or provision or of any subsequent breach thereof.

18.7 No Third Party Beneficiary. Except as expressly provided herein, nothing contained in this Agreement is intended, or will be construed, to confer upon or give to any person other than the parties hereto and their respective successors and permitted assigns any rights or remedies under or by reason of this Agreement.

18.8 Amendments. This Agreement may not be released, discharged, altered, amended or modified except by a writing signed by both of the parties hereto.

18.9 Non-exclusivity. This Agreement will not be exclusive as to either party and does not establish any exclusive rights or territories.

18.10 Riders. The following Riders are attached to this Agreement and incorporated herein for all purposes: _____

_____

_____

IN WITNESS WHEREOF, the parties hereto have each executed and delivered this Agreement, in multiple counterparts, as of the day and year first above written.

PROGRESSIVE CASUALTY INSURANCE COMPANY

By: _____

Title: _____

MULTIPLE REPAIR FACILITIES RIDER

This Multiple Repair Facilities Rider is attached to the Repair Shop Program Agreement between the undersigned parties (the "Agreement") and made a part thereof. Contractor owns and/or operates more than one Repair Facility. Notwithstanding anything to the contrary contained in the Agreement, only the Repair Facility or Repair Facilities located at the following address(es) are designated by Progressive as participating in the Program pursuant to the terms of this Agreement:

If necessary, additional Repair Facilities may be identified on an attached page. Other repair shops owned and/or operated by Contractor that are not listed are not included in the Program.

Contractor acknowledges and agrees that only Progressive may add to the foregoing list other repair shops owned and/or operated by Contractor. Any such addition will become effective only upon Contractor's receipt of written notice thereof from Progressive, upon which each such added repair shop shall be deemed a "Repair Facility" for purposes of this Agreement.

The parties further acknowledge and agree that one or more Repair Facilities may be removed from the list (whether such Repair Facilities are included on the foregoing list or are added to the list by Progressive in accordance herewith), by either party in accordance with the termination provisions in Article 16.

PROGRESSIVE CASUALTY INSURANCE COMPANY

By: _____

Title: _____

PROGRESSIVE CLAIMS SERVICE

By selecting us to assist you in arranging the Covered Repair or by selecting an Authorized Repair Facility to perform the Covered Repair, you receive a Lifetime Guarantee of the Covered Repair ("Guarantee") for as long as you own or lease your vehicle.

The Covered Repair is a repair of damage to your vehicle that is described in a written damage assessment prepared by Progressive Claims Service ("Progressive") and completed by an Authorized Repair Facility. An Authorized Repair Facility means a repair facility in Progressive's repair shop network.

What This Guarantee Covers:
This Guarantee covers, and is limited to, the Covered Repair. Under this Guarantee, Progressive, at no cost to you, will arrange for the correction of any Covered Repair that fails to meet generally accepted industry standards for form, fit, finish, durability and functionality, as commonly recognized in the U.S. automobile repair industry at the time of the Covered Repair ("Generally Accepted Industry Standards"). Additionally, Progressive, at no cost to you, will provide you with a rental vehicle while the corrective repairs provided under this Guarantee are being completed.

What This Guarantee Does Not Cover:
This Guarantee does not cover normal wear and tear or damage caused by improper maintenance, neglect, abuse or subsequent accident.

This Guarantee does not apply to any work on the Covered Repair performed by anyone other than an Authorized Repair Facility. Work on the Covered Repair by anyone other than an Authorized Repair Facility will void this Guarantee.

How Long This Guarantee Lasts:
This Guarantee applies for as long as you own or lease your vehicle. This Guarantee is not transferable and terminates if you sell or otherwise transfer your vehicle.

How To Get Service:
To get service under this Guarantee, notify Progressive of any problems related to the Covered Repair by calling 1-800-274-4641.

To report a claim or get service on an existing claim, call 1-800-PROGRESSIVE.

THIS GUARANTEE IS PROGRESSIVE'S EXCLUSIVE OBLIGATION WITH RESPECT TO THE COVERED REPAIR. PROGRESSIVE DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES.

THIS GUARANTEE IS LIMITED TO THE CORRECTION OF ANY COVERED REPAIR THAT FAILS TO MEET GENERALLY ACCEPTED INDUSTRY STANDARDS. ACCORDINGLY, PROGRESSIVE SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES THAT RESULT FROM THE COVERED REPAIR.

Some states may not allow the exclusion or limitation of incidental or consequential damages, so these limitations and exclusions may not apply to you.

PROGRESSIVE®

IN THE COSHOCTON MUNICIPAL COURT
COSHOCTON COUNTY, OHIO

RICK'S AUTO SALES AND SERVICE INC.	:	
Plaintiff	:	
-vs-	:	*JUDGMENT ENTRY*
PROGRESSIVE INSURANCE CO	:	*CVI 0700004*
Defendant	:	

* * * * * * * *

This matter came before the Court on the 30th day of January, 2007, upon plaintiff's small claim complaint filed January 5, 2007, and upon the answer of defendant, Progressive Insurance Company, filed by Attorney Gretchen M. R. Lipari, on January 29, 2007. Rick Little, owner of Rick's Auto Sales and Service, Inc. was present in Court, represented by Attorney James R. Skelton; Attorney Lipari was present in behalf of defendant, along with representatives of defendant.

After consideration of the pleadings, the testimony, and the exhibits, the matter was taken under advisement by the Court.

FACTS

John W. Jones owned a 2005 Pontiac Grand Prix that sustained damage to its' hood and door. Mr. Jones made a claim under the collision/comprehensive coverage of his policy of insurance with defendant, Progressive Insurance Company. Mr. Jones took his vehicle to plaintiff, Rick's Auto Sales and Service, Inc. Plaintiff provided an estimate for repair to Mr. Jones. Defendant's claims adjuster also provided an estimate to Mr. Jones. Both estimates contained identical work required to return the vehicle to its' pre-existing condition. Defendant's estimate, however, reduced "paint time" by one-half because only a small part of the hood and a small part

of the fender were damaged, not the entire hood or the entire fender. This reduction also affected the "paint supplies" charge as the "paint supplies charge" is based upon the same hours as "paint time". Plaintiff's estimate therefore exceeded defendant's estimate by $237.51.

When defendant's adjuster provided its' estimate to Mr. Jones, he also wrote him a check for the damage, based upon the adjuster's estimate. The defendant's estimate contained the following language, in capital letters, (see Exhibit "C"):

> *"THE OWNER OF THE VEHICLE MAY SELECT THE REPAIR FACILITY OF HIS/HER CHOICE."*
>
> *"PROGRESSIVE HONORS THE PREVAILING LABOR MARKET RATE IN YOUR AREA FOR YOUR PROPERTY. IF YOU CHOOSE A REPAIR SHOP THAT CHARGES IN EXCESS OF PREVAILING LABOR RATES, YOU WILL BE RESPONSIBILE FOR THE DIFFERENCE."*

Mr. Jones was also advised by the defendant's adjuster that if he took his car to defendant's recommended shop, he could have the work done for the amount of the check.

Plaintiff repaired Mr. Jones vehicle; however, Mr. Jones did not pay plaintiff's bill in full. Mr. Jones only paid plaintiff the amount that was paid to him by defendant, which was the amount contained in defendant's estimate. Mr. Jones also assigned any claim he may have against defendant to plaintiff. Plaintiff then brought this small claims petition to recover the balance of $237.51 as contained in plaintiff's estimate.

Both parties agree that the body repair shops in Ohio and the insurance companies work with certain "standards". That is, there is a standard charge allowed for specific repairs to certain vehicles. For example, the standards provide that to

repaint the hood of a 2005 Grand Prix is three hours labor. Plaintiff used "Motors" as a standard for their estimate; Defendant used "Mitchells" as their standard for their estimate.

*Along with the standards are rates---a paint labor rate and a paint supplies rate. In this case, both parties agree that the prevailing paint labor rate was $42.00 per hour and the prevailing paint supplies rate was $26.00 per hour. Therefore, if the standard, or book, is three hours to repaint the hood, then the appropriate charge would be 3 hours times $42.00, or $126.00, **plus** 3 hours times $26.00, or $78.00, for a total of $204.00. Obviously if the standard could be reduced to 1.5 hours, the charge would be reduced by $102.00.*

Standards are generally used in an industry to allow for uniformity and as a way to monitor the conduct of the parties involved. Although "standards" can often benefit one party, or the other, they can also work to the detriment of one party or another. However, the concept is that these benefits and detriments off-set each other over time. The standards help to add predictability to an otherwise unpredictable business. Therefore, sometimes the body shop will benefit and the insurance company will lose and sometimes the insurance company will benefit and the body shop will lose.

Defendant's estimate was $237.51 less than plaintiff's because they reduced paint time from the standard allowed by "Motors" and by "Mitchells" by 50% claiming that the entire panel and hood did not need repainted. Plaintiff claims "Motors" does not recommend a reduction for paint time for a part of a hood or panel but defendant claims "Mitchells" does, and that it is a common practice by them to reduce the time allowed. Plaintiff provided a physical demonstration to show that the

time involved to do a partial paint job on a hood is not significantly less, if at all less, than to paint the entire hood because it may take longer to "blend" the new paint to the old paint, and that the material cost is the same.

Defendant provided the Court with a copy of Mr. Jones policy language which states in part:

> *". . . . . in determining the amount necessary to repair damaged property to its pre-loss physical condition, the amount to be paid by **us**:*
>
> *(1) shall not exceed the prevailing competitive labor rates charged in the area where the property is to be repaired, and the cost of repair or replacement parts and equipment as reasonably determined by **us**: . . . . .".*

*Defendant argues that this last language limits their liability to the amount they approve, i.e., that this policy should be read to mean that the "cost of repair" is limited to an amount "reasonably determined by **us**". Therefore they have reasonably determined that the amount to repair Mr. Jones' vehicle does not include the $237.51 demanded by plaintiff because plaintiff should not be able to charge the standard charge to paint the revelant parts.*

FINDING

*This Court cannot agree that the language of Mr. Jones' policy limits defendant's responsibility to the "cost of repair" as "reasonably determined by **us**". The language of the policy states "the amount to be paid shall not exceed the prevailing competitve labor rates" (which the parties agree it does not) **and** shall not exceed "the cost of repair or replacement parts and equipment, as reasonable determined by **us**" (defendant). This second clause refers to the cost of parts and equipment (either repair or replacement). In other words, defendant will pay for parts and labor; the parts can*

be repaired parts or replacement parts; and, the labor charge cannot exceed the prevailing labor rate for this area. Neither party disputed the cost of parts.

It does not take much to see behind defendant's intent. Defendant's true purpose is to reduce its' loss by reducing its' self-determined reasonable charge (despite the standards provided by the industry) and attempt to steer clients to "approved" body shops that will agree to the reduced charge in order to obtain more business from the defendant. This then allows defendant to reduce the premiums it charges to clients and allows it to advertise those reduced rates to obtain more clients.

Plaintiff charged the prevailing rate and it's charges for parts and labor were reasonable based upon industry standards, and because Mr. Jones can select the repair facility and chose plaintiff, it is this Court's finding that plaintiff is entitled to judgment.

Judgment is accordingly awarded in favor of plaintiff, Rick's Auto Sales and Service, Inc., and against defendant, Progressive Insurance Company, in the sum of Two Hundred Thirty-seven and 51/100 Dollars ($237.51), plus interest at the current rate of 8% per annum, commencing January 3, 2007, and the costs of this action.

Timothy L. France, Municipal Judge

CERTIFICATE OF SERVICE

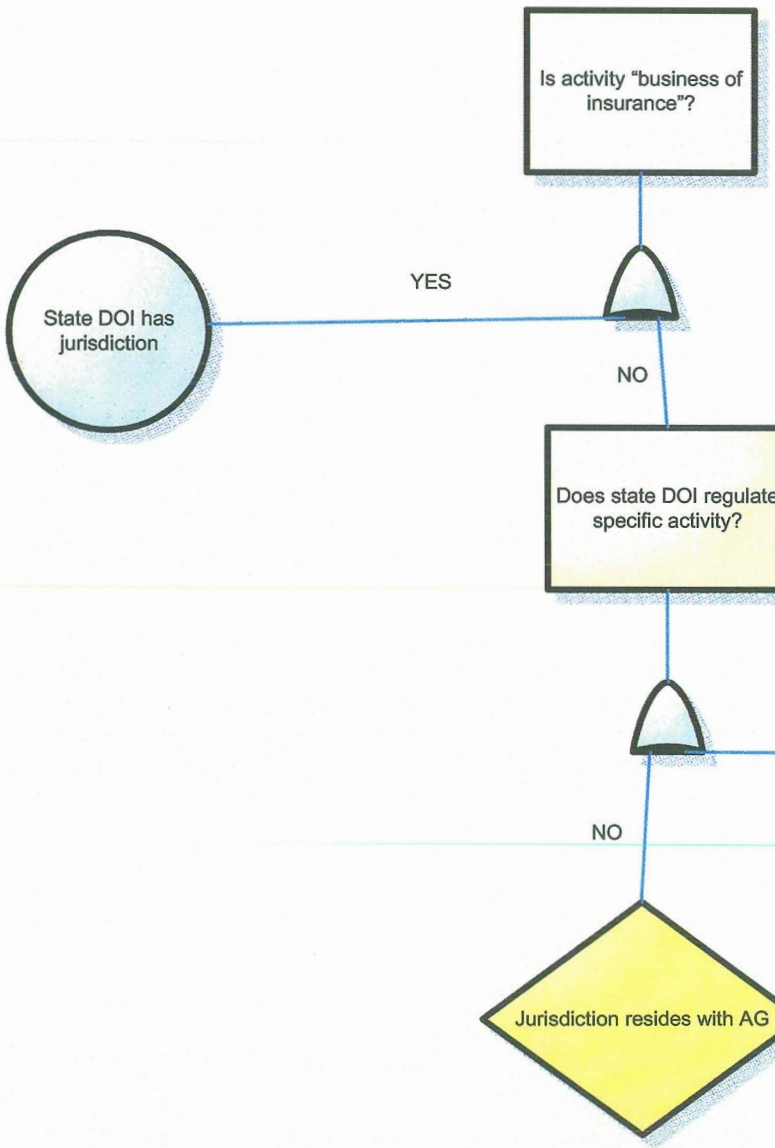
I hereby certify that a true copy of the foregoing judgment entry was served upon Attorney James R. Skelton, by placing same in his mailbasket located in the clerk's office; and by regular U. S. Mail upon Attorney Gretchen M. R. Lipari, at 5500 Frantz Road, Suite 157, Dublin, Ohio 43017, on this 23rd day of February, 2007.

Clerk *Deputy Clerk*

Vehicle Information Services, Inc.

Jurisdictional Analysis of Activities of Insurance Companies

12/6/2006



Insurance-Collision Repair agreements not the "business of insurance"

GROUP LIFE & HEALTH INSURANCE CO. v. ROYAL DRUG CO,
440 U.S. 205; 99 S. Ct. 1067; 59 L. Ed. 2d 261 (1979)

"If agreements between an insurer and retail pharmacists are the "business of insurance" because they reduce the insurer's costs, then so are all other agreements insurers may make to keep their costs under control -- whether with automobile body repair shops or landlords. n40 Such agreements [*233] would be exempt from the antitrust laws if Congress had extended the coverage of the McCarran-Ferguson Act to the "business of insurance companies." n41 But that is precisely what Congress did not do."

State Action Doctrine

OHIO Department of INSURANCE

Bob Taft, Governor
Ann Womer Benjamin, Director

2100 Stella Court, Columbus, OH 43215-1067
(614) 644-2658 www.ohioinsurance.gov

July 5, 2006

Re: Complaint against Progressive Ins. Co.

Dear Mr.

Thank you for bringing your concerns to the Ohio Department of Insurance. The complaint you submitted to the Department's Enforcement Division was forwarded to my attention for review. I have analyzed the concerns you raised in your letter, within the context of the regulatory framework established in the Ohio insurance statutes and regulations.

Based on the information you provided, the concerns you expressed arise from an apparent business dispute with reimbursement rates from Progressive Insurance Company. While the Department enforces fair claim handling procedures between insurers and consumers, it is not charged with the regulation of business relationships between body shops and insurance companies. Repair fees and costs, including caps on fees for paint or other auto body parts, are part of the contractual relationship between insurance companies and collision repair shops and are not subject to Department oversight or review. However, consumers who believe insurers are not honoring the provisions of their policies may contact the Department for assistance.

Again, thank you for contacting the Ohio Department of Insurance regarding this issue.

Very truly yours,

Steven E. Herman, Esq.
Office of Legal Services

United States General Accounting Office

GAO

Report to Congressional Requesters

January 2001

MOTOR VEHICLE SAFETY

NHTSA's Ability to Detect and Recall Defective Replacement Crash Parts Is Limited

GAO-01-225

Contents

Abbreviations

ARA	Automotive Recyclers Association
CAPA	Certified Automotive Parts Association
ICBC	Insurance Corporation of British Columbia
IIHS	Insurance Institute for Highway Safety
NHTSA	National Highway Traffic Safety Administration
ODI	Office of Defects Investigation
OEM	original equipment manufacturer

GAO
Accountability * Integrity * Reliability

United States General Accounting Office
Washington, D.C. 20548

January 31, 2001

The Honorable Byron L. Dorgan
United States Senate

The Honorable John F. Tierney
House of Representatives

The National Highway Traffic Safety Administration (NHTSA), the federal agency responsible for reducing accidents, deaths, and injuries resulting from motor vehicle crashes on the nation's highways, estimates that over 6 million automobile accidents occurred in the United States in 1999. To repair crash-damaged vehicles, consumers spent over $8 billion and bought over 61 million sheet metal and plastic body parts (including exterior fenders, bumpers, hoods, and doors). Consumers and body shops that repair crash-damaged vehicles have a choice in many instances of buying new replacement parts from either the original equipment manufacturer or other sources, commonly called aftermarket manufacturers. These aftermarket manufacturers produce their parts by copying the design of the original vehicle parts.

Concerns have been raised for many years about the quality and safety of aftermarket crash parts.[1] A number of auto manufacturers and repair shop owners argue that aftermarket crash parts are inferior to original parts and pose a possible safety risk. Conversely, many aftermarket manufacturers and auto insurers argue that aftermarket crash parts can be equal in quality to original parts, are safe, and can cost up to 65 percent less than the original equipment manufacturer's parts. Public awareness was heightened in October 1999 after judgments totaling over $1 billion were entered against State Farm Mutual Automobile Insurance Company in response to a class action complaint concerning the use of aftermarket crash parts. The trial court concluded that State Farm breached its insurance policies by requiring the use of aftermarket parts that did not return damaged vehicles to their precrash condition. The court also found that State Farm's conduct violated the Illinois Consumer Fraud and Deceptive Business Practices Act.

[1]Crash parts are generally made of sheet metal or plastic and installed on the exterior of a motor vehicle. These parts include bumper components, hoods, doors, fenders, and trunk lids. Crash parts exclude mechanical parts such as batteries, filters, shock absorbers, and spark plugs.

State Farm has appealed this decision. In light of the decision, State Farm has suspended its specification of aftermarket crash parts in repairs.

Concerns have also been raised about the safety of replacing deployed airbags with nondeployed airbags taken from old or otherwise damaged vehicles. Many maintain that the airbag is such an important safety item that only new bags produced by the original manufacturer should be used to replace deployed bags. Others contend that recycled airbags pose no safety issues when properly handled and installed and that their use can save the consumer hundreds of dollars in repair costs.

Because of potential concerns about the safety of aftermarket crash parts and recycled airbags, you asked us to provide information on

- studies on the safety of aftermarket crash parts and recycled airbags,
- NHTSA's authority over aftermarket crash parts and recycled airbags, and
- NHTSA's ability to identify and remove unsafe aftermarket crash parts and recycled airbags from the nation's roadways.

To respond to these questions, we identified and reviewed existing safety studies on aftermarket crash parts and recycled airbags; reviewed NHTSA's legal authority over aftermarket crash parts and recycled airbags; reviewed NHTSA's defect identification, investigation and recall processes; toured two crash test facilities; and interviewed representatives of over 40 government and industry organizations. Appendix I provides a detailed discussion of our scope and methodology.

Results in Brief

We identified seven studies of aftermarket crash parts or recycled airbags. Five studies examined issues relating to the safety of aftermarket crash parts, but their results do not conclusively resolve the issue of safety. One of the studies, published by Consumer Reports, concluded that aftermarket crash parts are generally of poorer quality, fit improperly, rust more quickly, and may compromise safety. Another study, conducted by Ford, stated that aftermarket crash parts are inferior to Ford genuine parts and are not of "like kind and quality." The three other studies, sponsored by vehicle insurance companies and related associations, concluded that crash parts, whether original or aftermarket, do not influence motor vehicle safety. Two studies on the safety of recycled airbags concluded that recycled airbags function within their original specifications when undamaged and properly handled and installed. Although these studies are useful, they do not

resolve the debate over the safety of aftermarket crash parts and recycled airbags because they reach different conclusions and are limited in number and scope.

NHTSA has broad authority to set safety standards for aftermarket crash parts.[2] The Motor Vehicle Safety Act provides NHTSA with the authority to prescribe safety standards for new motor vehicles and new motor vehicle equipment sold in interstate commerce—a category that includes aftermarket crash parts. Although NHTSA has the authority to regulate aftermarket crash parts, it has not determined that these parts pose a significant safety concern and therefore has not developed safety standards for them. The act also provides NHTSA with more limited authority to prescribe safety performance standards for used motor vehicles in order to encourage and strengthen state motor vehicle inspection programs. Because NHTSA may set motor vehicle safety standards for vehicle systems (like brakes and lights) as well as for an entire vehicle, the agency could elect to develop safety standards for occupant restraint systems, which could incorporate airbags, under the used vehicle provision. NHTSA has not developed such standards because it has not identified significant problems with occupant restraint systems that could be addressed by state motor vehicle inspection programs.

NHTSA's ability to identify and recall unsafe aftermarket parts is limited. The agency relies heavily on a database of complaints from vehicle owners and other concerned people to identify possibly unsafe automotive products—whether from the original equipment manufacturer or the aftermarket crash parts manufacturer. However, limitations in the database may hamper NHTSA's ability to identify trends in defects. For example, the database may contain only a small fraction of the complaints that customers make to manufacturers. In addition, aftermarket crash parts may not be identified as such in the database because consumers who complain to NHTSA may not know they have aftermarket crash parts or their complaints may not indicate that such parts are involved. Because existing studies of aftermarket crash parts do not conclusively resolve the issue of safety, NHTSA needs to have an effective oversight program that

[2]NHTSA was established in 1970 as a separate operating administration within the Department of Transportation to administer the Department's motor vehicle and highway safety programs. NHTSA carries out safety programs under the National Traffic and Motor Vehicle Safety Act of 1966 and the Highway Safety Act of 1966. The Motor Vehicle Safety Act was subsequently recodified under title 49 of the U.S. Code in chapter 301, Motor Vehicle Safety.

will detect safety-related defects, regardless of the type or source of the unsafe parts. Furthermore, even if NHTSA's database were to identify unsafe aftermarket crash parts, the agency might not be able to require manufacturers to recall them because some of these parts do not identify the product manufacturer and documentation on their purchasers is limited. Recent legislation gives NHTSA an opportunity to look at ways to improve its systems so that it will be in a better position to identify defective automotive parts and require manufacturers to recall them.

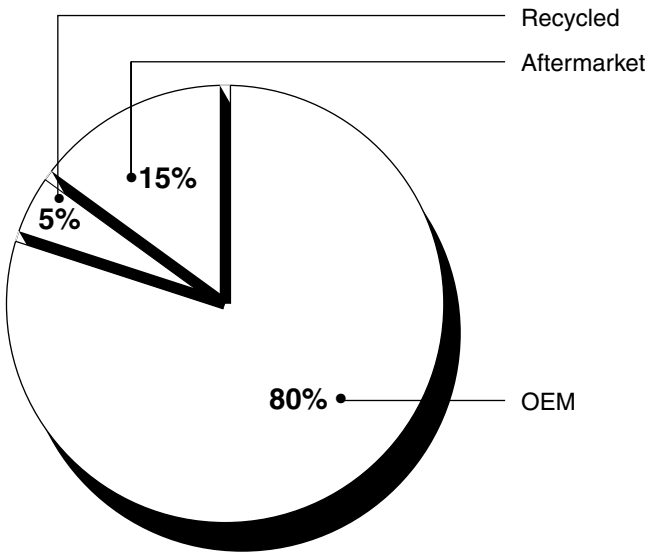
This report contains recommendations to strengthen NHTSA's ability to detect and order the recall of unsafe vehicle parts from the nation's roadways. NHTSA generally agreed with these recommendations. However, in commenting on a draft of this report, NHTSA clarified its regulatory authority over recycled airbags. We modified the report to reflect NHTSA's comments.

Background

Crash parts are generally made of sheet metal or plastic and installed on the exterior of a motor vehicle. These parts include hoods, doors, fenders, and trunk lids. Crash parts exclude mechanical parts such as batteries, filters, shock absorbers, and spark plugs. Body shops often use a mix of parts in collision repairs, but we use the term "crash parts" in this report to refer to parts used on the exterior of a vehicle. Aftermarket crash parts are the replacement automotive crash parts that are not made by the original equipment manufacturer (OEM). Many of these aftermarket crash parts manufacturers are located overseas. Recycled airbags are salvaged nondeployed airbags removed from damaged or old vehicles.

Crash parts are big business. In 1999, drivers had an estimated 6 million automobile crashes in the United States costing over 40,000 lives and about $8 billion in damage—of which $1.2 billion represents the costs of aftermarket crash parts. Overall, about 60 cents out of every dollar of automobile insurance claims is spent on repairing collision damage to vehicles. Insurance companies estimate that using aftermarket instead of OEM parts saves hundreds of millions of dollars each year. Until the mid-1980s, consumers and auto body shops could purchase new replacement crash parts only from the original automobile manufacturer. At that time, independent parts manufacturers began offering aftermarket replacement parts at substantially lower prices. Still, the crash parts industry remains highly concentrated, and OEM parts account for about 80 percent of the market. Figure 1 shows the replacement crash parts market by source.

Figure 1: Replacement Automobile Crash Parts by Source, December 2000



Source: Center for Auto Safety.

Some aftermarket crash parts are certified as to their quality. In 1987, the insurance industry funded the nonprofit Certified Automotive Parts Association (CAPA), whose objective is to ensure the quality of aftermarket crash parts. To determine the quality of these parts, the association examines a manufacturer's plant, equipment, manufacturing processes, and resulting products. If the association finds the aftermarket crash parts to be equivalent in appearance, fit, material composition, and mechanical properties to new OEM parts, it certifies the parts as functionally equivalent to OEM parts. In addition, it periodically purchases parts in the open market and checks them to ensure they meet the association's standards. According to the association, in 1999, about 35 percent of all aftermarket crash parts were certified. This represents about 5 percent of the total aftermarket crash parts market—which would include OEM, aftermarket, and recycled parts combined.

More recently, in 2000, Global Validators, an automotive quality consultant, started a new certification process directed at improving the quality of aftermarket crash parts. The Manufacturers' Qualification and Validation Program, similar to the CAPA program, is a set of guidelines that outline policies and quality management practices designed to ensure that aftermarket crash parts are equal in form, fit, function, performance,

durability and appearance to OEM parts. This program is based on the QS-9000 standard, a production quality standard developed in the automotive industry. Consumers can search an on-line database to determine if a specific part has been reviewed under the program.

At the federal level, NHTSA is responsible for reducing accidents, deaths, and injuries resulting from motor vehicle crashes. NHTSA accomplishes this, in part, by setting and enforcing safety performance standards that apply to new motor vehicles and motor vehicle equipment. Under these standards, manufacturers of motor vehicles and equipment must assure that their products comply with all applicable safety standards and certify such compliance. The federal standards are written in terms of minimum safety performance requirements for motor vehicles and equipment. Examples of standards include hydraulic brake system requirements to ensure safe braking performance, vehicle lamp requirements to provide adequate illumination, and hood latch requirements to ensure that hoods remain fastened securely.

The Motor Vehicle Safety Act requires manufacturers to inform NHTSA when a vehicle or equipment is defective or when a vehicle or equipment does not comply with an applicable motor vehicle safety standard. These requirements also apply to persons who import motor vehicles and equipment into the United States. NHTSA does not approve vehicles or equipment. Instead, federal law establishes a "self-certification" process under which each manufacturer is responsible for certifying that its products meet all applicable safety standards. The law also gives NHTSA the authority to investigate possible safety-related defects, to decide whether a defect exists, and to order a manufacturer to notify consumers and to remedy any defect.

NHTSA's process for identifying a possible defect in motor vehicles and motor vehicle equipment begins with screening the complaints it receives in its Office of Defects Investigation (ODI). Sources of complaints include a toll-free hotline, a Web page, e-mail, telephone calls, and letters. In an average year, ODI receives between 40,000 and 50,000 complaints. These complaints are entered into a complaint database, which ODI analyzes to identify potential defect trends.

When the screening identifies a potential problem, ODI opens an investigation called a preliminary evaluation. This evaluation involves notifying the manufacturer and the public and gathering information on the potential defect. If this process continues to indicate that a defect trend

may exist, the investigation moves to a second stage called an engineering analysis. In this stage, ODI analyzes the character and scope of the potential defect in more detail. This analysis may include inspections, surveys, tests, and efforts to obtain additional information from the manufacturer. If ODI continues to believe that a defect trend may exist, a panel of experts from the agency may be convened to review the data.

If the expert panel concurs with ODI, a recall request letter is sent to the manufacturer. If the manufacturer declines to conduct a recall in response to the letter, NHTSA's Associate Administrator for Safety Assurance may issue an initial decision that a defect exists and convene a public meeting on the issue. After the meeting, the NHTSA Administrator may issue a final decision and order the manufacturer to conduct a recall. If necessary, the agency will then go to court to enforce such an order. In almost all cases, the manufacturer agrees to conduct the recall without NHTSA's forcing it to do so. According to NHTSA officials, the agency opens between 80 and 100 defect investigations each year, of which more than half result in recalls. In addition, manufacturers conduct an average of 200 defect recalls each year that are not influenced by NHTSA's investigations. In 2000, there were over 385 recalls for safety-related defects affecting over 18 million vehicles.

States are also involved in the regulation of aftermarket crash parts and recycled airbags. According to the National Association of Independent Insurers, 40 states have enacted some form of legislation governing the use of aftermarket crash parts in vehicle repairs.[3] Most of this legislation is directed at ensuring that vehicle owners are aware that aftermarket parts are being used in repairs. For example, 33 states require that written repair estimates contain a disclosure statement notifying consumers that aftermarket crash parts will be used in the repair, and 8 states require the consent of the consumer to use aftermarket crash parts. Furthermore, according to the Automotive Occupants Restraints Council, New York was the only state that had enacted a law regulating the sale and installation of recycled airbags as of December 2000. Appendix II provides a summary of state law provisions covering aftermarket crash parts and recycled airbags. In addition, in early 2000, the Massachusetts Auto Damage Appraiser Licensing Board conducted two hearings to discuss the safety of OEM, aftermarket, and recycled parts used in collision repair. In September 2000, the Board voted three to two that aftermarket cosmetic parts are not exact

[3]The National Association of Independent Insurers represents about 675 insurance companies.

duplicates of OEM parts and may jeopardize the safety and value of a vehicle.

The Debate on Aftermarket Crash Parts

The debate on the quality and safety of aftermarket crash parts is highly polarized, reflecting a range of opinions on the safety of aftermarket crash parts:

- Aftermarket crash parts are unsafe. According to this position—held generally by many collision-repair associations and repair shop owners—aftermarket crash parts are inferior to OEM parts in fit and finish and are dangerous. The evidence for this argument is mostly anecdotal, although we saw aftermarket crash parts that were clearly different from their OEM counterparts.
- Aftermarket crash parts may be unsafe. According to this position—held generally by new vehicle manufacturers—the impact of aftermarket crash parts on occupants' safety is unknown. Therefore, the manufacturers recommend that only OEM parts be used to ensure that repaired vehicles perform to their original safety specifications.
- Aftermarket crash parts are safe. According to this position—held generally by insurance companies and aftermarket manufacturers—aftermarket crash parts are cosmetic only and do not affect vehicle safety.

The Debate on Recycled Airbags

The debate on the use of recycled airbags is also divided. General opinions include the following:

- Recycled airbags may be unsafe. Advocates of this position—generally OEMs, some insurance companies, and body shop owners—maintain that deployed airbags should be replaced only with new OEM airbags. Advocates of this position maintain that airbags are a vital safety feature and the potential risks of recycled airbags should preclude replacing a deployed airbag with anything other than a new airbag. Furthermore, they argue that recycled airbags do not undergo the same intensive quality checks as newly manufactured units. They add that many undetectable variables, like water damage to the airbag, could prevent a recycled airbag from deploying properly. Finally, they contend that the existence of a recycled airbag market will further increase airbag theft.
- Recycled airbags are safe. Advocates of this position—generally recycling organizations and some insurance companies—maintain that reusing nondeployed OEM airbags is a viable, economical, and safe

alternative to using new, more costly OEM airbags when the recycled airbags are properly matched, handled, and installed. The advocates add that lower-income drivers may not be able to afford to replace their airbags with new, more expensive OEM airbags. Therefore, recyclers are creating a market in which drivers can purchase replacement airbags that are 50 percent to 70 percent cheaper than new airbags.

Studies of Aftermarket Crash Parts and Recycled Airbags Do Not Conclusively Resolve Safety Issues

We identified seven studies of aftermarket crash parts or recycled airbags, but their results do not conclusively resolve the issue of safety. Five studies—one by consumer advocates, one by an auto manufacturer, and three by the insurance industry—examined the use of aftermarket crash parts. Two studies—one by the recycling industry and the other by an insurance company—focused on the safety of recycled airbags. Although these studies are useful, they do not resolve the debate over the safety of aftermarket crash parts and recycled airbags because they reach different conclusions and are limited in number and scope.

Consumer Reports Test

In February 1999, Consumer Reports published the results of its study and fueled the debate on the quality of aftermarket crash parts.[4] Consumer Reports compared OEM and aftermarket bumpers and CAPA-certified fenders for a 1993 Honda Accord and a 1993 Ford Taurus. It tested fender corrosion resistance, bumper protection, and the overall quality of the parts' fit. Consumer Reports found that CAPA-certified aftermarket fenders rusted more quickly and did not always fit properly. The report also stated that aftermarket bumpers did not fit properly and did not provide sufficient protection in low-speed collisions. The aftermarket bumpers tested, which were not CAPA-certified, shattered in a variety of tests at 5 miles per hour or less. One aftermarket bumper did not prevent damage to the Ford headlight mounting panel, radiator support, and air conditioner condenser. Another bumper allowed damage to the Honda radiator, air conditioner condenser, radiator support, and other parts. The report concluded that (1) aftermarket crash parts are inferior to OEM parts, (2) consumers are ill served by the use of aftermarket crash parts, and (3) aftermarket crash parts may influence vehicle safety. Consumer Reports' study also noted that comprehensively determining the safety of aftermarket crash parts through testing is very difficult, if not impossible. According to Consumer

[4]"Cheap Car Parts Can Cost You a Bundle," Consumer Reports, Feb. 1999.

Reports, crash testing—which would ultimately resolve questions about the safety of these parts—is very complex and expensive to conduct for all combinations of replacement crash parts and original vehicles.

Ford Test

In 1994, Ford compared its replacement crash parts to certified and noncertified aftermarket crash parts. Ford tested the parts for fit, finish, structural integrity, corrosion resistance, material composition, and dent resistance. According to the study, Ford replacement parts outperformed the aftermarket replacement parts for all quality factors. On the basis of this testing, Ford concluded that aftermarket crash parts are inferior to Ford replacement parts and are not of "like kind and quality." The Ford testing, like the Consumer Reports testing, focused on the quality, not the safety, of aftermarket crash parts.

Insurance Industry Tests

The Insurance Institute for Highway Safety (IIHS) conducted two studies of aftermarket crash parts.[5] IIHS sought to determine whether aftermarket crash parts pose a safety risk. In its 1987 study, IIHS crashed a 1987 Ford Escort without its front fenders, door skins, and grill and with an aftermarket hood installed. The Escort complied with all front-into-barrier crash test performance requirements specified in federal standards. IIHS concluded that aftermarket crash parts do not affect occupants' safety during a collision. In February 2000, IIHS released the results of a similar test with a 1997 Toyota Camry and reached the same conclusion. In that test, IIHS compared the results of a crash test of two vehicles—(1) a 1997 Toyota Camry with the front fenders, door skins, and front bumper removed and a CAPA-certified aftermarket hood installed and (2) a factory original 1997 Camry. The study found no significant difference in the performance of the two vehicles, leading IIHS to conclude that crash parts are irrelevant to safety with the possible exception of hoods. IIHS noted two possible safety-related concerns with hoods: (1) a hood latch could fail while driving, allowing the hood to fly up suddenly, obscuring the driver's view, and (2) a hood may not buckle properly during a crash, allowing it to be driven back near or into the windshield in a collision.

[5]The Institute is a nonprofit scientific and educational organization funded by automobile insurers. Its mission is to reduce the losses–deaths, injuries, and property damage—from crashes on the nation's highways.

In 1995, Thatcham—an insurance industry research facility located in England—conducted a test similar to the 1987 IIHS study.[6] Thatcham crash-tested a 1995 Vauxhall Astra with the front fenders, door skins, and front bumper removed and an aftermarket hood installed. It found that the Astra complied with all front-into-barrier crash test performance requirements specified in federal standards—consistent with IIHS' findings. The Thatcham study concluded that aftermarket crash parts do not affect the crashworthiness of a vehicle.

Recycled Airbag Tests

The Automotive Recyclers Association (ARA) funded a study in 1998 at Garwood Laboratories in California to test 196 recycled airbags and 5 new OEM airbags.[7] The study showed that 195 out of 196 recycled airbags deployed within the manufacturer's specifications. An association official stated that the laboratory pre-identified one flood-damaged airbag and was not surprised when the airbag did not deploy within the manufacturer's specifications. Thus, the association concluded that recycled airbags are a viable, economical, and safe alternative to new, more costly OEM airbags when properly handled, shipped, and professionally installed.

In 2000, the Insurance Corporation of British Columbia (ICBC) tested 136 recycled airbags from various automobiles.[8] This study sought to determine if there was any appreciable difference in deployment between factory-new OEM airbags and recycled airbags.[9] An official with ICBC stated that the study showed that there is no appreciable difference between OEM and recycled airbags when the airbags are properly replaced and have not been exposed to flood damage. ICBC expects to begin specifying that repairers use recycled airbags in early 2001. An official from ICBC stated that it expects to use only certified recycled airbags in replacing deployed units.

[6]Thatcham was established in 1969 by the British Insurance Association and undertakes a wide range of automotive research.

[7]The Automotive Recyclers Association represents approximately 2,000 automotive recyclers that provide replacement parts.

[8]The Insurance Corporation of British Columbia is a government-operated corporation and the sole automobile insurance provider in British Columbia.

[9]As of December 2000, ICBC had not issued a paper on the results of its testing.

Recycled Airbag Certification Company Tests

We identified two U.S. companies that are developing testing procedures to certify the safety and reliability of recycled airbags. Both organizations use electrical engineering and other methods to detect flood damage, foreign matter, and electronic problems. One of the companies said that it had tested 58 recycled airbags and found that the recycled airbags it tested deployed within the manufacturer's specifications. These companies said that their approaches could ensure that a recycled airbag performs within the manufacturer's specifications. Both organizations stated that the key to the safety of recycled airbags is the proper matching, handling and installation of the recycled airbags. One company has begun certifying recycled airbags, and the other plans to start certifying airbags in early 2001.

Studies Do Not Definitively Answer the Question of Safety

While the studies and tests conducted on aftermarket crash parts and recycled airbags provide useful information, they do not appear sufficient to resolve the question of whether aftermarket crash parts and recycled airbags are safe. The limited number and scope of the studies make it difficult to draw conclusions about all parts. In the studies of aftermarket crash parts, only three vehicles were crash-tested—a 1987 Ford Escort, a 1997 Toyota Camry, and a 1995 Vauxhall Astra. These vehicle models represent only a small percentage of the hundreds of makes, models, and years of vehicles on the roads today. The primary focus of the Consumer Reports study was on the quality of aftermarket crash parts, although it raised questions about their safety. The study also stated that the large number of vehicles and parts available may make it impossible to answer the safety question through testing. Although the two recycled airbag studies conducted by ARA and ICBC showed that undamaged and properly installed airbags will deploy within the manufacturer's specifications, they did not develop measures to ensure that recycled airbags are undamaged. They highlighted the need to develop testing procedures to ensure that recycled airbags are undamaged and not taken from flood-damaged vehicles.

NHTSA's Authority Over Aftermarket Crash Parts and Recycled Airbags

The Motor Vehicle Safety Act gives the Secretary of Transportation broad authority to prescribe safety standards to reduce traffic accidents, deaths, and injuries on the nation's roads. The act authorizes the Secretary to prescribe safety standards for new motor vehicles and motor vehicle equipment.[10] The Motor Vehicle Safety Act prohibits, in part, the manufacturing, selling, and importing of new vehicles and new vehicle equipment that do not comply with NHTSA's safety standards. These provisions could apply to both new OEM and new aftermarket crash parts since new parts are classified as new motor vehicle equipment. Although NHTSA has the authority to regulate aftermarket crash parts, the agency has not determined that these parts pose a significant safety concern and therefore has not developed safety standards for them. According to agency officials, the agency has not developed safety standards for aftermarket crash parts because

- testing by IIHS concluded that the use of aftermarket crash parts does not affect vehicle safety;
- problems with aftermarket crash parts tend to focus on the fit and finish of the parts, rather than on safety;
- the agency has not identified any trends in the complaints it receives about the safety of aftermarket crash parts and recycled airbags; and
- those who voiced concerns about the use of aftermarket crash parts, including manufacturers of original replacement parts, have not provided conclusive evidence that aftermarket crash parts pose a significant safety concern.

The act's provisions that apply to aftermarket parts do not apply to recycled airbags because they are used rather than new equipment. For used vehicles, the Motor Vehicle Safety Act directs the Secretary to prescribe safety performance standards for used motor vehicles, in order to encourage and strengthen state motor vehicle inspection programs. Under this provision, the agency could elect to develop safety standards for occupant restraint systems, which might incorporate airbags. NHTSA has not developed such standards because it has not identified significant problems with occupant restraint systems that could be addressed by state motor vehicle inspection programs. The agency has, however, determined that water damage can undermine the performance of airbag systems. Through its defect investigation process, NHTSA has identified several

[10]The Secretary has delegated the authority over these matters to NHTSA.

safety defects in motor vehicles that were related to the failure of the airbags to operate properly after being exposed to flood damage or the intrusion of other liquids. The resulting recalls affected over 725,000 vehicles. Several other manufacturers have recalled vehicles to address similar problems without being influenced by NHTSA's investigations. According to NHTSA officials, the agency could conduct a study of recycled airbags and, if appropriate, issue consumer warnings or issue a report to the Congress on its findings.

NHTSA's Ability to Detect and Order the Recall of Unsafe Aftermarket Crash Parts Is Limited

NHTSA has the authority to order manufacturers of replacement parts that contain a safety-related defect to recall the defective items. Manufacturers must notify owners, purchasers, and dealers of the defect and remedy the defect (either through repair or replacement) free of charge. However, NHTSA's ability to detect parts with safety-related defects is limited because the agency's database of complaints from vehicle owners and others contains only a fraction of the complaints that manufacturers receive. Moreover, even if NHTSA were to identify unsafe aftermarket crash parts, it would likely have difficulty having them recalled. Recent legislation creates opportunities for NHTSA to gather additional information needed for identifying possible defects and improve its management and analysis of vehicle safety data.

NHTSA's Complaint Database Has Limitations

An essential component of NHTSA's overall process is the agency's ability to detect safety-related defects. To decide whether to investigate a possible safety-related defect, including any relating to OEM and aftermarket crash parts, NHTSA relies heavily on its complaint database. However, this database contains only a fraction of the complaints that customers report to manufacturers. In addition, aftermarket crash parts may not be identified as such in the database because consumers who complain to NHTSA may not know they have aftermarket crash parts or their complaints may not indicate that such parts are involved.

NHTSA's ODI receives consumer complaints about possible defects in motor vehicles and motor vehicle equipment from a toll-free consumer hotline, an on-line computer Web page, e-mail, telephone calls, surveys, and letters. As of August 2000, the database contained about 400,000 complaints gathered over the last 10 years. In an average year, ODI receives between 40,000 and 50,000 complaints.

The number of complaints in the database may represent only a small percentage of all complaints being made about possible defects. For example, in September 2000, the Administrator of NHTSA testified on the investigation and recall of Firestone tires. The Administrator said that by the end of 1999, NHTSA had received 46 reports of incidents involving these tires. NHTSA did not open a defect investigation at that time because of the large number of tires in use and the variety of possible causes of tire failure. However, after press reports in February 2000 highlighted two fatalities and alluded to a number of other crashes and fatalities, NHTSA opened an investigation. After obtaining additional information from the manufacturers involved and the attendant publicity, the Administrator reported that as of August 31, 2000, NHTSA had received over 1,400 complaints. In addition, according to the former Chief of ODI's Trends and Analysis Division, the complaints NHTSA receives about safety-related defects may represent only 10 percent of all the complaints that manufacturers receive. This estimate was based on the results of past requests for information made to manufacturers after ODI had opened investigations. For example, in February 2000, ODI began an investigation of plastic door garnish moldings on 1998 and 1999 Sebring Coupe vehicles. This investigation responds to 21 consumer complaints of partial and complete detachment, some of which occurred while the consumer was driving.[11] During the preliminary evaluation phase of the investigation, ODI requested information from DaimlerChrysler Corporation and obtained 276 additional complaints that the manufacturer had received. According to NHTSA officials, the agency has made efforts over the past few years to encourage repair shops and others to report safety-related problems with either OEM or aftermarket crash parts; however, the agency has received relatively few complaints about these parts.

Aftermarket crash parts may not be identified as such in NHTSA's database because consumers who complain to NHTSA may not know they have aftermarket crash parts or their complaints may not indicate that such parts are involved. According to data supplied by the National Association of Independent Insurers, 10 states do not have any form of legislation addressing the use of aftermarket crash parts. In these states, it is not necessary to tell an owner specifically about the use of an aftermarket part in a vehicle repair or to receive the owner's consent to use the parts. Furthermore, there are no requirements for informing the purchaser of a

[11]The door garnish molding is the trim panel that attaches to the lower portion of the vehicle. It is composed of a molded thermoplastic and is 50 inches long and 14 inches high.

used vehicle that aftermarket crash parts have been used in an earlier repair. In these instances, the complainant would be unlikely to identify the defective part as an aftermarket part. In addition, in submitting a complaint to NHTSA, a complainant is free to describe the problem in any way he or she chooses. The choice of words in a complaint is important because the process NHTSA follows in identifying potential defect trends begins with a search of key words in the database. For example, we asked NHTSA to search for "aftermarket" and found six complaints that contained that term. However, complainants could have used a variety of other words to describe their complaint or might not have thought to mention the term.

Recalling Unsafe Aftermarket Crash Parts May Be Difficult

Even if NHTSA were to conclude that certain aftermarket crash parts contained a safety-related defect, its ability to recall them would be hampered because the parts do not always indicate the manufacturer and it may be difficult to identify the vehicles on which the parts were used.

According to Consumer Reports, many aftermarket crash parts are essentially invisible to NHTSA's complaint and recall system, mainly because the parts have no manufacturer's name stamped on them. During our review, we also saw several aftermarket crash parts that did not carry the manufacturer's identification. However, the extent to which parts are unlabeled is unknown. Taiwan Auto Body Parts Association officials stated that, since 1994, nearly all of the aftermarket crash parts its members manufacture are stamped with the manufacturer's name and a production lot number.[12] Furthermore, according to a CAPA official, the aftermarket parts certification process requires manufacturers to mark each part with the manufacturer's name and production lot number to facilitate identification and recall if necessary. However, CAPA recognizes that its certified parts represent only a third of all aftermarket crash parts and some noncertified parts do not indicate the manufacturer.

Even if the manufacturers of aftermarket parts were clearly identified, little information exists on the purchasers of those parts, making the recall process difficult. When automotive manufacturers recall vehicles, they rely on information they obtained when the vehicles were purchased and on registration records maintained by state departments of motor vehicles to identify and locate vehicle owners. With aftermarket crash parts, however,

[12]The Taiwan Auto Body Parts Association represents nearly 40 Taiwan-based aftermarket crash parts manufacturers.

this information is typically not available. Vehicle owners may purchase aftermarket crash parts at automotive retail stores and install the parts themselves, or body shops may install aftermarket parts that they obtained through parts distributors. In either instance, it is unlikely that the owners of vehicles with unsafe aftermarket crash parts could be specifically identified because it is unlikely that shops or distributors would maintain the information needed to locate the owners of the unsafe parts. Consequently, it would be necessary to recall unsafe aftermarket crash parts using a broad-based approach similar to a consumer product safety recall. Under this approach, public announcements are made to alert consumers to the product's safety-related defect. NHTSA officials recognize that it would be very difficult to identify and recall aftermarket crash parts using this approach.

Recent Legislation Identifies Weaknesses in NHTSA's Ability to Identify Safety-Related Defects

The Firestone tire recall, together with the subsequent congressional investigations and legislative initiatives, focused attention on weaknesses in NHTSA's regulatory and enforcement program. Likewise, congressional oversight reports expressed concerns about the effectiveness and efficiency of NHTSA's process of gathering and analyzing data on vehicle defects and initiating investigations and recalls. The Transportation Recall Enhancement, Accountability, and Documentation Act was signed into law in November 2000. In addition to requirements specifically addressing tires, the act sought to increase NHTSA's legal authority, improve its regulatory programs and access to safety information, and increase its funding levels by $9.1 million. For example, the act requires manufacturers to report to NHTSA safety recalls of their products (which would include OEM and aftermarket crash parts) in other countries, increases civil penalties, and establishes criminal penalties for persons who knowingly violate the act. The act also requires NHTSA to conduct a comprehensive review of all standards, criteria, procedures, and methods, including the data management and analysis systems it uses to open a defect or noncompliance investigation.

Conclusions

The validity of concerns about the use of aftermarket crash parts and recycled air bags has been debated for many years. As a result, a number of states have enacted legislation to ensure that vehicle owners are aware that aftermarket crash parts are being used in repairs. Existing studies on the safety of aftermarket crash parts and recycled airbags show mixed results, are limited in number and scope, and fail to resolve the debate. Although NHTSA has the authority to regulate aftermarket crash parts, the agency

has not developed safety standards for them because it has not determined that any aftermarket crash parts contain safety-related defects. NHTSA has more limited authority to regulate the use of recycled airbags. NHTSA could elect to develop safety standards for occupant restraint systems under the used vehicle provisions of the Motor Vehicle Safety Act. These standards could apply to systems containing recycled airbags, but the standards would apply to the restraint system as a whole and not to its individual components. NHTSA has not developed such standards because it has not identified significant problems with occupant restraint systems that could be addressed by state motor vehicle inspection programs.

Absent a comprehensive study that resolves the issue of safety, NHTSA is left to rely on its complaint system to identify possible safety-related defects in aftermarket crash parts and recycled airbag systems. However, NHTSA's defect identification and recall system has limitations. The key database used to identify unsafe parts contains only a small fraction of the complaints received by manufacturers. Apparently, many vehicle owners are either unaware of NHTSA's complaint program or choose not to participate in it. In addition, aftermarket crash parts may not be identified as such in the database because consumers who complain to NHTSA may not know they have aftermarket crash parts or their complaints may not indicate that aftermarket parts are involved. These limitations may hamper NHTSA's ability to detect safety-related trends through broad key-word searches of its complaint database and make it unlikely that NHTSA can identify all unsafe parts. In addition, the ability to recall unsafe aftermarket crash parts is limited because some parts are not stamped with the manufacturer's name and there is no trail leading from the manufacturer to the ultimate user of the part. Therefore, even if an aftermarket part were found to contain a safety-related defect, the product might have to be recalled using a broad-based announcement similar to a consumer product safety recall.

The two studies on the safety of recycled airbags that we identified concluded that they can be a potentially safe, economical alternative to new airbags as long as they are undamaged and properly handled and installed. However, the failure of some flood-damaged air bags to deploy correctly also demonstrates the potential for serious safety consequences. Resolving the safety issues associated with using recycled airbags is important because it appears likely that their use will grow, especially if the Insurance Corporation of British Columbia begins specifying their use in early 2001.

The recently enacted Transportation Recall Enhancement, Accountability, and Documentation Act gives NHTSA an opportunity to improve its systems for detecting and recalling defective products. It provides NHTSA with the authority to require additional data from manufacturers and others that it can consider in determining the need to initiate an investigation. In addition, the act's provisions requiring a comprehensive review of all standards, criteria, procedures, and methods used to open a defect or noncompliance investigation give NHTSA an opportunity to improve its processes for identifying potentially unsafe parts.

Recommendations for Executive Action

The Secretary of Transportation should direct the Administrator of the National Highway Traffic Safety Administration, as part of the legislatively required review, to consider taking the following actions:

- Identify additional sources of information to include in the agency's complaint database. This might include obtaining additional data from manufacturers and insurance companies.
- Heighten consumers' awareness of NHTSA's complaint reporting system with the goal of increasing consumers' participation.
- Investigate the safety of using recycled airbag systems, particularly those taken from flood-damaged vehicles, and determine if any action is appropriate concerning their use.

Agency Comments and Our Evaluation

We provided copies of a draft of this report to the Department of Transportation for its review and comment. We discussed the report with NHTSA officials, including the Associate Administrator for Safety Assurance, the acting Chief Counsel, and the Director of the Office of Defects Investigation. They emphasized that NHTSA has statutory authority to issue standards only if they would meet the need for motor vehicle safety and to seek recalls only if there is evidence that particular products made by a specific manufacturer contain a safety-related defect. They added that NHTSA has not taken action to regulate aftermarket crash parts because studies conducted to date and other data and analyses do not demonstrate that there are safety-related problems with the parts. They also maintained that NHTSA does not have statutory authority to regulate recycled airbags. They indicated that their authority over used vehicles is limited to prescribing standards applicable to used motor vehicles for the purpose of encouraging and strengthening state inspections of those vehicles. As a result, NHTSA can issue performance-based standards for

used vehicle inspections, but cannot differentiate between new or used individual parts or the history of those parts. We revised this report to reflect NHTSA's comments on its authority over recycled airbags. NHTSA also provided other technical clarifications and information, which we incorporated in the report as appropriate.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies of this report to the Honorable Norman Y. Mineta, Secretary of Transportation and the Honorable Robert Shelton, Acting Administrator of the National Highway Traffic Safety Administration. We will also make copies available to others on request.

If you have any questions about the report, please contact me at (202) 512-2834. Key contributors to this report were Samer Abbas, Bert Japikse, David Lehrer, John Rose, and Glen Trochelman.

Sincerely yours,

Phyllis F. Scheinberg
Director, Physical Infrastructure Issues

Scope and Methodology

To determine whether any studies have been conducted on the safety of aftermarket crash parts and recycled airbags, we conducted a literature search using the Internet, periodicals, trade journals, and Lexis/Nexis. To identify additional studies, we interviewed federal, state, and industry experts. At the federal level, we interviewed officials from the National Highway Traffic Safety Administration's (NHTSA) Office of Defects Investigation, Office of Regulatory Analysis and Evaluation, Office of Vehicle Safety Compliance, and Office of Vehicle Safety Research. At the state level, we interviewed officials from New York and Ohio. To gain an industry perspective, we interviewed representatives from organizations representing manufacturers and distributors of aftermarket and original equipment manufacturers' parts, collision repair shops and collision repair specialists, consumer advocacy groups, insurance providers, and vehicle safety experts. (A complete listing of the organizations we contacted appears at the end of this appendix.) In addition, we met with representatives of eight collision repair shops located in Illinois and Massachusetts to obtain their views on the safety and quality of aftermarket crash parts and recycled airbags. Illinois was selected because it was the site of the State Farm case and Massachusetts because the Massachusetts Auto Damage Appraisers Licensing Board recently conducted two hearings to discuss the safety of original, aftermarket, and recycled parts used in collision repair.

To determine the extent of NHTSA's authority over aftermarket crash parts and recycled airbags, we reviewed applicable legislation, regulations, program guidance, and other documentation on NHTSA's vehicle safety process and procedures. We also interviewed officials in NHTSA's Office of Defects Investigation, Office of Regulatory Analysis and Evaluation, Office of Vehicle Safety Compliance, Office of Vehicle Safety Research, and Office of General Counsel to gain an understanding of NHTSA's rules, regulations, policies, and procedures.

To determine NHTSA's ability to identify and remove unsafe aftermarket crash parts and recycled airbags from the nation's roadways, we reviewed NHTSA's policies and procedures for identifying safety-related defects. We reviewed consumer complaints on aftermarket crash parts contained in NHTSA's complaint database and reviewed the data and reports on the complaints. We also gathered information on the actions NHTSA has taken with respect to the safety of aftermarket crash parts. To identify potential ways to improve the effectiveness of NHTSA's safety program, we interviewed NHTSA officials, industry associations, and consumer advocacy groups.

We did not analyze the accuracy or quality of the over 400,000 complaints contained in NHTSA's database because such an analysis was beyond the scope of our review. We performed our review from June 2000 through January 2001 in accordance with generally accepted government auditing standards.

Organizations Interviewed by GAO

Aeromotive Automotive Electrical Engineering Field Services
Airbag Testing Technology, Inc.
Alliance of American Insurers
Alliance of Automotive Manufacturers
American Insurance Association
Auto Body Parts Association
Automotive Aftermarket Industry Association
Automotive Occupant Restraints Council
Automotive Engine Rebuilders Association
Automotive Parts Rebuilders Association
Automotive Recyclers Association
Automotive Service Association
California Autobody Association
Center for Auto Safety
Certified Automotive Parts Association
Coalition for Auto Repair Equality
Consumer's Union (Consumer Reports)
DaimlerChrysler Corporation
Detroit Testing Laboratories
Eagle Automotive, Inc.
Entela Laboratories
Ford Motor Company
General Motors Corporation
Insurance Corporation of British Columbia
Insurance Institute for Highway Safety
Keystone Automotive Industries, Inc.
Massachusetts Auto Body Association
Massachusetts Auto Damage Appraisers Licensing Board
Mitsubishi Motors America, Inc.
National Association of Independent Insurers
National Association of Mutual Insurance Companies
Nationwide Insurance companies
New York State Department of Motor Vehicles
Nissan North America, Inc.
North Star Automotive Group

Ohio Board of Motor Vehicle Collision Repair Registration
Specialty Equipment Manufacturers Association
Society of Collision Repair Specialists
Taiwan Auto Body Parts Association
Tech-Cor, Inc.
Toyota Motor Sales, U.S.A., Inc.
USAA Property and Casualty Insurance
Volkswagen of America, Inc.

State Legislation Governing Aftermarket Crash Parts and Recycled Airbags

Forty states have enacted some form of legislation governing the use of aftermarket crash parts in vehicle repairs, according to data supplied by National Association of Independent Insurers. According to the association's data, of the 40 states with existing legislation, 90 percent (36 states) require that repair estimates identify each aftermarket crash part used in the repair, and about 83 percent (33 states) require that the repair estimate disclose that aftermarket crash parts are being used in the repair. A manufacturer's warranty is required by 68 percent (27 states), and about 58 percent (23 states) require a manufacturer's identification on any aftermarket crash parts used. The provisions that the states have enacted vary but can be grouped in nine categories. Figure 1 summarizes the states' aftermarket crash parts legislative provisions.

Figure 2: State Aftermarket Crash Parts Legislative Provisions as of November 2000

State	Disclosure statement required on consumer's estimate[a]	Consumer consent required[b]	Estimate must identify aftermarket parts[c]	Aftermarket parts must be "of like kind and quality" to OEM parts[d]	Manufacturer's warranty required[e]	Disclosure required about the effect of part's use on vehicle warranty[f]	Insurer cannot require use of aftermarket parts[g]	Manufacturer's identification required on part[h]	No regulation[i]
Ala.	■		■		■			■	
Alaska									■
Ariz.	■		■	■	■			■	
Ark.	■	■	■		■			■	
Calif.	■		■		■			■	
Colo.	■		■		■			■	
Conn.	■		■		■				
Del.									■
Fla.	■		■		■				
Ga.	■		■		■			■	
Hawaii	■	■	■	■	■				
Idaho	■		■		■			■	
Ill.	■		■	■	■			■	
Ind.		■							
Iowa			■		■			■	
Kans.	■		■		■				
Ky.			■	■					
La.	■		■		■			■	
Maine									■
Md.	■					■			
Mass.	■		■		■				
Mich.	■		■		■				
Minn.							■		
Miss.	■		■		■			■	
Mo.	■		■		■			■	
Mont.									■

State	Disclosure statement required on consumer's estimate[a]	Consumer consent required[b]	Estimate must identify aftermarket parts[c]	Aftermarket parts must be "of like kind and quality" to OEM parts[d]	Manufacturer's warranty required[e]	Disclosure required about the effect of part's use on vehicle warranty[f]	Insurer cannot require use of aftermarket parts[g]	Manufacturer's identification required on part[h]	No regulation[i]
Nebr.	■		■	■				■	
Nev.									■
N.H.	■		■	■				■	
N.J.	■		■	■	■			■	
N.Mex.									■
N.Y.			■	■	■				
N.C.	■		■	■					
N.Dak.									■
Ohio	■	■	■		■			■	
Okla.	■		■		■			■	
Oreg.		■	■		■	■		■	
Pa.									■
R.I.	■	■	■						
S.C.									■
S.Dak.	■		■		■			■	
Tenn.	■		■		■			■	
Tex.		■							
Utah	■		■		■			■	
Vt.									■
Va.	■		■			■			
Wash.	■		■						
W.Va.	■		■			■			
Wis.	■		■		■			■	
Wyo.	■	■	■	■				■	
Total	**33**	**8**	**36**	**10**	**27**	**4**	**1**	**23**	**10**

[a]Some states require that written repair estimates contain a disclosure statement notifying consumers that aftermarket crash parts will be used in the repair.

[b]Some states specify that aftermarket crash parts can only be used after the consumer has signed a written consent for their use.

[c]Some states require that written repair estimates contain a detailed listing of any aftermarket crash parts that will be used in the repair.

[d]Some states require that any aftermarket crash parts used must be comparable in kind and quality to original equipment parts.

[e]Some states require that the manufacturers of aftermarket crash parts provide a written warranty covering each part used in the repair.

[f]Some states require that consumers be notified when the use of an aftermarket crash part will change the terms of their vehicle warranty.

[g]Some states require that insurance companies give consumers the option of using either aftermarket or original equipment crash parts in the repair.

[h]Some states require that all aftermarket crash parts used in a repair indicate the manufacturer of those parts.

[i]Some states have no aftermarket crash parts legislation.

Source: National Association of Independent Insurers.

According to an Automotive Occupant Restraints Council official, only New York had laws governing the sale and installation of recycled airbags. New York requires that each recycled airbag be certified according to standards established by an approved, nationally recognized testing, engineering, and research body. [1] On May 2, 2000, the New York Supreme Court for Albany County granted a preliminary injunction concerning the requirement that all recycled airbags be certified before installation. The judge determined that, since there was no existing way to certify recycled airbags, it was impossible to abide by the law. The New York State Department of Motor Vehicles has since begun reviewing one company's recycled airbag certification procedures to determine whether the procedures address the concerns of the court.

[1]New York Consolidated Laws, chapter 71, section 415-c.

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