

Featured Association— National Auto Body Council (NABC)

The National Auto Body Council (NABC) is an organization created to improve the image of the collision repair industry. That is the mission of the Council, and its sole objective.

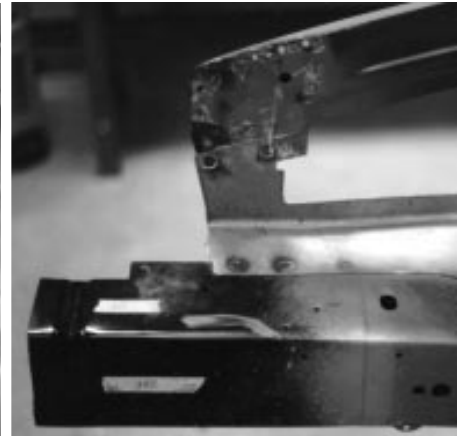
The Council considers the image problem to be a two-fold issue. First, there is the negative image of the collision industry as perceived by the public. This is largely formed as a result of stories in the media about the bad business practices of a few facilities. The negative image is also a result of the industry being identified with individuals who are not representative of the majority of those who work in collision repair.

Secondly, the self-image of people who work in the industry needs help. If someone is told often enough that he is unworthy of respect, he'll begin to believe it. This usually results in one of two actions. Either he gives up trying to improve, feeling that it's not worth the effort, or he keeps his feelings inside, but they surface in other areas. One result is that family businesses cease to be family businesses because the children aren't encouraged to stay in the business.

The Council decided to work on the self-image part of the problem first. It's not that the public image isn't just as important. But with the limited resources available, it was thought

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Sectioning Issues —Some Questions Linger



Despite the fact that sectioning has been a widely accepted practice for over ten years, there are still misunderstandings about the procedures.

It was over ten years ago that I-CAR sanctioned research on structural sectioning. The research information provided a list of general guidelines, prompted published repair techniques, and soon made sectioning a method widely accepted in the collision industry. Still today, most of the inquiries we receive at the Tech Centre concern sectioning procedures (*see above figures*). Two well-attended panel discussions at last year's NACE were titled: "Understanding Structural Sectioning Without Going To Pieces." I-CAR was represented on those panels.

This article will use a question and answer format to address the more common inquiries we receive on sectioning. Some of

the concerns that were voiced at NACE are also included.

Why section at all? Isn't replacing structural parts at the factory seams a less subjective, more straightforward, repair?

There are situations where replacing parts at factory seams is the only alternative, such as when the vehicle maker specifically recommends against sectioning. There are other situations, however, where sectioning is the more practical approach.

One example is when replacing at factory seams would require cutting

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deep into undamaged areas of the vehicle. This is the case with vehicles with “uninside” panels where the pillars, rocker panel, roof rails, and sometimes quarter panels, are all one piece (see Figure 1). If only one pillar is damaged, sectioning would be more practical than replacing the entire uninside.



Figure 1—Sectioning is usually the best approach when repairing a side that has no factory seams. (Courtesy of Toyota)

Another example where sectioning is practical occurs where front side rails are reinforced with multiple layers of steel, and attached with many resistance spot welds in areas behind the front engine crossmember. Where the reinforced side rails meet the cowl, they are often overlapped with stiffeners and reinforcements in the torque box areas. It is difficult to remove the spot welds and disassemble these areas without damaging the many flanges and mating surfaces.

Still another example is where front and rear side rails extend deep into the center section. To replace these rails at factory seams, many factory resistance spot welds would have to be removed. As a result, corrosion protection and many flanges and mating surfaces in these areas would be unnecessarily damaged.

Hydroformed parts will become more common on some vehicles. Hydroforming is a manufacturing process that forms box-section structural parts without the need for seams or flanges. GM is using this process to form the frame assembly

on the 1997 Chevrolet Corvette. Because the frame rails are built in one piece with no seams, GM has developed sectioning procedures to allow for partial replacement of frame sections, eliminating the need to replace the entire frame if there's collision damage in one small area of the frame assembly.

These are just a few examples of why sectioning is a viable repair option that is likely to be around for some time. Generally, a sectioning repair preserves more factory resistance spot welds and corrosion protection. It may also require less vehicle disassembly.

Can all structural parts be sectioned using the general sectioning guidelines?

Some parts may not qualify for sectioning because of the part design, material, or location. There must be room for proper welding, and there must be access to the inside or backside of the part to allow the application of corrosion-protection materials. Any part that can't be adequately protected from corrosion after sectioning should not be sectioned. Also, where mechanical parts must be removed to perform sectioning, it may be more efficient to replace the part at the factory seams. This decision will vary with the design of the vehicle.

What are I-CAR's general sectioning guidelines?

The I-CAR sectioning guidelines explain how to determine if a part qualifies for sectioning, and where the joint should be located if it does qualify. Sectioning should be done in a uniform area that allows enough clearance to perform quality welding operations. I-CAR recom-

mends against sectioning in or near these areas:

- suspension, engine, and drivetrain mounting locations
- holes larger than 3 mm (1/8")
- compound shapes or structures
- reinforcements
- hinge locations
- seat belt D-ring attachment points
- locations where vertical and horizontal panels meet
- collapse or crush zones

There are guidelines on how to avoid these areas. For example, when sectioning in areas with reinforcements, find all the reinforcements before cutting, and plan the cuts so the reinforcements are not affected. If sectioning recommendations are available from the vehicle maker, usually they will indicate areas that should not be sectioned (see Figure 2).

What is the kink vs. bend rule, and what does it have to do with sectioning?

The kink vs. bend rule generally defines the “repair or replace” issue for structural parts. The rule states: If it's kinked, replace it. If it's bent, repair it. The definition of a kink and a bend, and the many factors that

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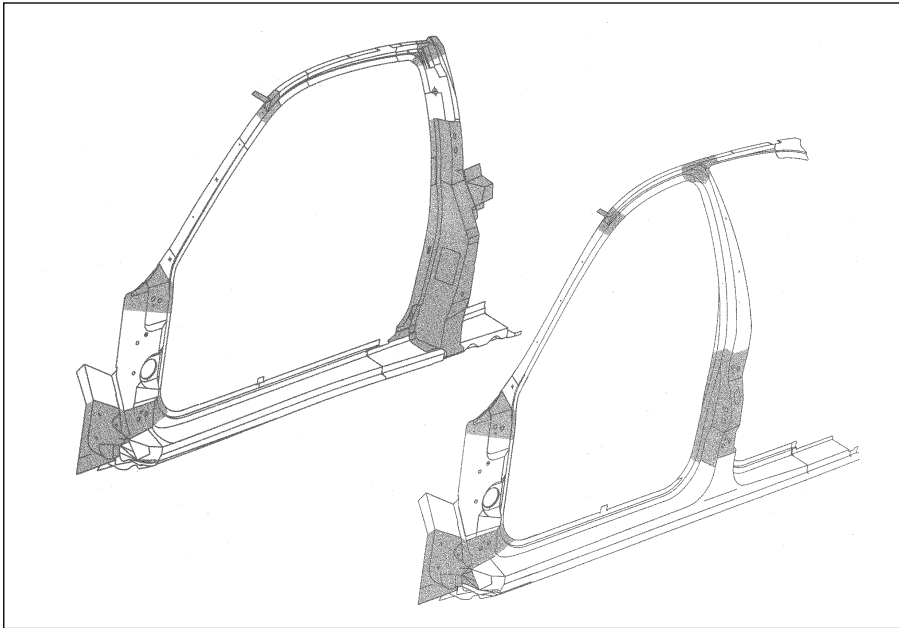


Figure 2—Sectioning guidelines are listed in some vehicle-specific body repair manuals. (Courtesy of GM)

also must be considered before deciding whether to repair or replace a structural part, are discussed in detail in other articles (see "Repair Or Replace—The Kink Vs. Bend Issue" in the January-February 1989 issue, and "Kink Vs. Bend—An Update" in the November-December 1992 issue of the *Advantage*). An alternative to replacing the entire kinked part is to replace just the kinked portion of the part, by sectioning.

Does the kink vs. bend rule also apply to crush zones? The sectioning guidelines caution against locating the joint in the crush zone, but is it better to straighten or section rails that contain crush zones?

It is more difficult to apply the kink vs. bend rule in crush zones because of the various shapes of some of these areas. Crush zones can take the form of dimples, folds, and convolutions, only to name a few. Replacing a damaged crush zone by sectioning is more likely to

ensure that the energy-absorbing properties designed into the part are restored.

After a damaged rail is pulled, the shape may appear to be restored perfectly, with no visible distortion or cracks. But will it react the same as a new rail? Tests, done by Tech-Cor and other testing facilities, have shown that some severely damaged rails that were straightened had lost as much as 45% of their original strength.

Ford has issued a general warning against straightening, or making other general repairs, to convoluted areas on unibody and full-frame vehicles. Ford also offers replacement parts and procedures for sectioning rails, to more effectively restore the performance of crush zones (see Figure 3). Other vehicle makers may not be as specific on guidelines for restoring crush zones.

What does I-CAR say about the use of inserts?

I-CAR recommends using inserts whenever practical, unless recommended otherwise by the vehicle maker.

A snug-fitting insert can perform a number of functions:

- Maintains alignment of the parts during installation. This can be especially helpful when fitting large assemblies.
- Acts as a heat sink to help reduce the heat-affected area produced by MIG welding.
- Provides an area of base metal in the joint to allow easier and more complete penetration of the weld bead.

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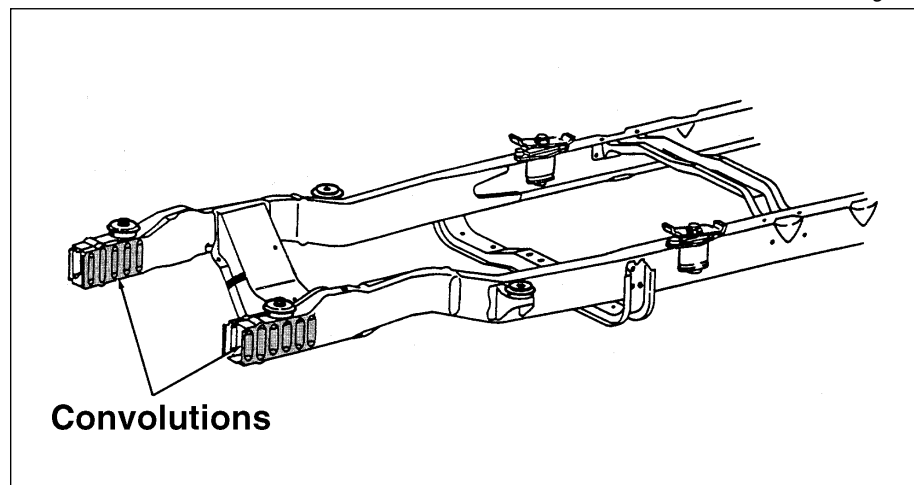


Figure 3—Ford specifies that sectioning, rather than straightening, should be done in areas with convolutions. (Courtesy of Ford Motor Company)

- Provides an area for MIG plug welds to strengthen the joint (see Figure 4).

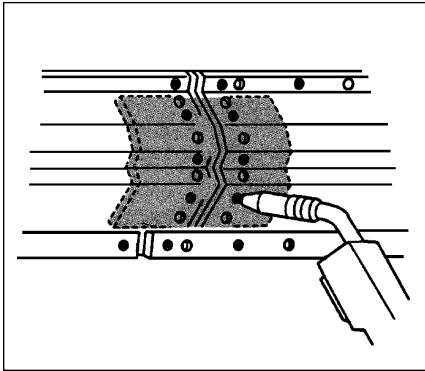


Figure 4—Inserts provide joint reinforcement, especially when combined with plug welds. (Courtesy of GM)

Because front and rear rails must absorb energy, there is concern that an insert may over-reinforce or stiffen the part. Although some vehicle makers recommend a butt joint with backing in the sectioning joint, a more common recommendation is a lap joint with a very short overlap (see Figure 5).

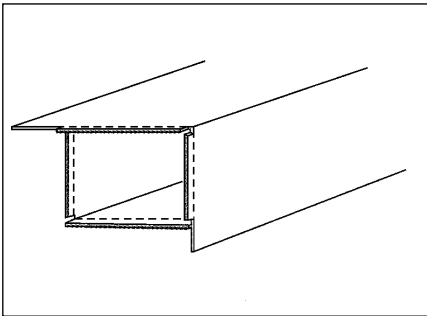


Figure 5—A lap joint with a very short overlap is a common sectioning joint recommendation. (Courtesy of GM)

I-CAR recommends the use of inserts whenever practical in pillars and rocker panel areas. These panels make up the center section and “passenger cage.” They’re not designed to collapse the same as front and rear rails, and they’re usually not designed with crush zones. If the strength of a rocker or pillar increases slightly, it would not be a concern.

A concern with any insert is the restoration of corrosion protection in the sectioning location. Corrosion protection should be applied before the insert is installed and before the parts are aligned.

More information on rocker-panel and pillar sectioning will emerge, as improvements in side-impact protection are developed.

Cutting an access window in a structural part, to gain access to the backside of other parts during straightening, is actually a form of sectioning. What does I-CAR say about this?

This practice is often used to access rear-rail hat channels through the trunk floor. Another location often considered is the front rails where cutting out part of an apron allows access to the backside of the inner rail.

I-CAR has no specific position on cutting access windows. Removing one structural part at factory seams to access the backside of another part would be a more straightforward approach.

There are several questions to consider before deciding whether cutting an access window is the best repair for the situation. Some considerations that may apply are:

- Does the area being cut qualify for sectioning using OEM or I-CAR general sectioning guidelines?
- Is sectioning in that area prohibited by the vehicle maker?
- Is the part being cut a primary structural part? If the part being cut is not a primary structural part, the impact of the access window would be less significant. If a part closes

out a three-sided primary structural part, it would have structural significance.

- If the part being accessed for straightening has enough damage to require accessing the rear of the panel, is the part even repairable under the kink vs. bend guidelines?
- A rail is designed to bend first in the crush zone before the damage spreads further along the part. Is the damage that is being accessed in a crush zone? This part may need to be replaced.
- What type of joint will result from cutting the window? Many times the three-sided access window needs a butt joint weld along the cut seam. This can be a difficult welding process.
- Will this type of repair be cosmetically acceptable? Access windows cut in a trunk floor may be difficult to finish to pre-accident appearance.

What is I-CAR’s position on sectioning quarter and rear body panels?

I-CAR’s general sectioning guidelines were developed with considerations to primary structural parts such as rails, rockers, and pillars. Quarter panels may be considered primary structural parts by the vehicle maker.

One of the concerns that vehicle makers have with quarter-panel sectioning is the durability of the repair. Many welded exterior body panels are subject to varying amounts of stress from body flex. This continuous flexing could cause a failure of the sectioned quarter-panel joint.

Although I-CAR has not tested any quarter-panel sectioning procedures, such tests are being consid-

ered. Some of the testing challenges include the various designs of quarter panels, the amount and location of stationary and movable glass, etc. Without test results, it would be very difficult for I-CAR to develop general quarter-panel sectioning procedures that could apply to a wide variety of vehicles.

What does I-CAR say about using salvage parts and recycled assemblies for collision repair?

I-CAR says to replace a damaged part with a known good part. I-CAR does not say where that part should be obtained. That is a business decision, influenced by many factors.

I-CAR maintains that the use of salvage parts for collision repair can be a quality repair option. The benefits of using salvage assemblies are similar to the advantages of sectioning, including helping to preserve factory welds and corrosion protection.

I-CAR and Tech-Cor worked together with the Automotive Recycling Association to produce the Recycled Parts Request Form (see Figure 6). This order form was designed to improve communication between the recycler and the repair facility when ordering recycled assemblies or parts (see "I-CAR and Tech-Cor Develop Recycled Parts Request Form" in the March-April 1994 issue of the Advantage).

I-CAR also offers a special certificate to recyclers who have completed specific units of the *Collision Repair 2000* and *Advanced Vehicle Systems* courses.

Another consideration in the use of salvage parts is the warranty provided by the vehicle maker.

Some vehicle makers may suspend portions of their warranties, if welded-on parts are replaced with salvage parts.

Where do I get sectioning information?

Ask OEM parts suppliers for body repair manuals. If sectioning information is available from the OEM, it will be in the body repair manual or in the body repair section of the service manual. Compilation manuals will also have some sectioning information. Some collision estimating guides refer to sectioning procedures, and indicate the source of the information (see Figure 7).

Tech-Cor is another source of bulletins and video tapes on sectioning research. For a list of Tech-Cor bulletins, see "Tech-Cor Activities" in the September-October 1994 issue of the Advantage.

The I-CAR *Collision Repair 2000* course has two units on sectioning.

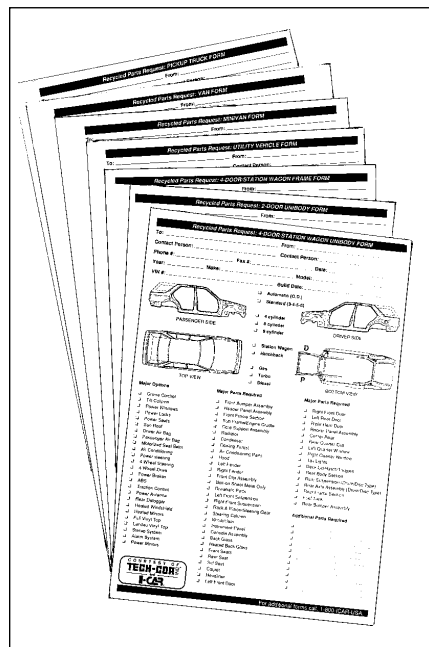


Figure 6—The Recycled Parts Request Form simplifies the process of ordering recycled assemblies or parts.

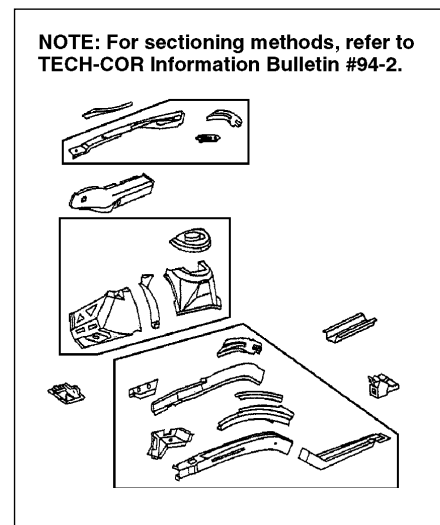


Figure 7—References to sectioning procedures are included in some collision estimating guides. (Courtesy of Mitchell International)

The eight hours of instruction includes videos showing how to section, as well as hands-on student exercises using cardboard parts. This technique allows students to experience the concepts shown on the videos (see Figure 8).



Figure 8—Students in the "Collision Repair 2000" course get hands-on experience in designing sectioning joints.

I-CAR also plans to include OEM sectioning information in the *Uniform Procedures For Collision Repair*, where the information is available.

What information is available on sectioning full frames?

Although sectioning full frames has been done by some collision repair technicians in the industry, little

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documentation exists on how this should be done.

The only documented procedures that we know of were developed by Ford and Tech-Cor for the front rails of the Ranger/Explorer and the Econoline. Repair kits are available from Ford that include templates and step-by-step procedures explaining how to section the parts (see Figure 9).

These procedures use a butt joint with backing, and include specific welding equipment and preparation steps.

Can I-CAR general sectioning guidelines be used in place of OEM sectioning procedures? And who is ultimately responsible for a sectioning repair?

The I-CAR Tech Centre receives many calls requesting vehicle-specific, documented repair information. Many of these requests stem from concerns about lawsuits resulting from the use of undocumented, subjective repair procedures. Some shops are attaching repair procedures, or I-CAR text pages, to the vehicle estimates or repair orders. This provides valuable documentation in the event of litigation.

Regardless of who orders or pays for the repairs, the repair facility is ultimately responsible and liable for any and all services performed on the premises, as well as for those repairs that are subtle.

To ensure the best repair possible, and to minimize liability exposure, I-CAR has always recommended, and will continue to recommend, using the procedures provided by the vehicle maker when they are available.

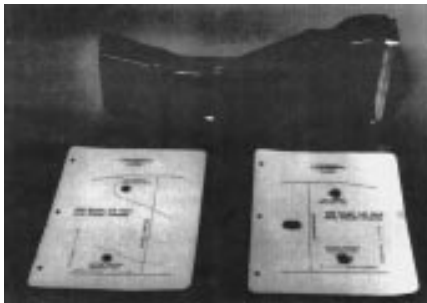


Figure 9—The Ford/Tech-Cor sectioning procedure on front frame rails is the only documented, full-frame, sectioning information available. (Courtesy of Tech-Cor)

The second choice is to use a vehicle-specific procedure that has been developed by a research and development organization such as Tech-Cor, MGA, or I-CAR. The final option is to see if the part qualifies for sectioning using I-CAR general sectioning guidelines. If the part qualifies for sectioning, the I-CAR general sectioning guidelines can also help determine the location of the sectioning joint. If the part qualifies for sectioning, the vehicle owner, the repair facility, and the insurance company (if the repair is an insurance claim) must understand and agree to the repair method.

Will sectioning, using documented sectioning procedures, produce safe, quality repairs, and limit my liability?

Having the accepted procedure is only one ingredient in the equation. The best procedure is no good without quality workmanship. Performing quality repairs helps reduce the risk that the repair facility will be found at fault.

Important processes, such as restoring corrosion protection to the repair area, are just as important as the sectioning procedure. If the structural part being replaced or repaired is weakened or de-

stroyed by corrosion, the vehicle may be just as dangerous as one with a faulty sectioning repair. This is probably the area that is most commonly overlooked, even in shops that provide quality repairs in every other respect. Corrosion protection is almost impossible to see, even if a post-repair inspection is performed, so it is easy to overlook. Even when a technician makes a conscious effort to restore corrosion protection, it is difficult to restore the kind of corrosion protection that was put in place by the vehicle maker. Restoring corrosion protection is a process that must be included in the repair plan, and performed throughout the entire repair operation. It cannot be an afterthought.

Another common concern about sectioning is that some technicians may not be skilled enough to perform the type of measuring, joining, and welding operations necessary for a quality sectioning repair. In response to that concern, if a technician does not have the skill to perform sectioning, does that technician have the skill to replace an entire rail, where many more critical welding and fitting operations are required? Safe repairs are not the result of deficient skills!

In order to ensure good workmanship, start by getting all of the updated training and information that you can find. Attend I-CAR courses in your area. Ask the vehicle and equipment makers about training programs. Get ASE-certified. If you're a welder, practice your welds and take the *I-CAR Automotive MIG Welding Qualification Test*. Then seek out the available information on the repair, and perform the repair like a professional. **A**

the Council would have a better chance of making a difference with improving the industry's self-image.

PRIDE

Most of what the Council is doing can be summed up in the single word "Pride." Two years ago at NACE, the organization passed out lapel pins that were cast with the word "Pride," along with a card inscribed with a message that encouraged people to be proud of the business they were in and the work they did (see Figure 1). This applied not only to shop owners and their employees, but to everyone else in the industry as well. The Council is trying to get the message across that image problems affect not only those directly involved in repairing vehicles, but insurance appraisers and equipment and material representatives as well. It is a huge brush that paints the whole collision industry negatively.



Figure 1—The "Pride" logo represents the mission of the NABC: to improve the image of the collision repair industry. (Courtesy of the NABC)

In 1995, the Council held its first collision industry Pride Awards Ceremony at the I-CAR Annual Meeting. It was the Council's attempt to publicize the fact that there are good people in the collision industry that give a lot back to their communities. The Pride Awards are a way not only to take the group's message to the general public, but also to tell people in the industry that there are things to be proud of.

Something else the Council is proud of is that DuPont saw fit to put the

Pride logo on the back of Jeff Gordon's #24 DuPont Monte Carlo (see Figure 2). Jeff was NASCAR's Winston Cup Champion in 1995, and having the Pride logo on the car exposed the NABC message to millions of people that otherwise would not have been reached.



Figure 2—The "Pride" message is prominent among the stickers on the back of Jeff Gordon's winning NASCAR Monte Carlo.

COALITION-BUILDING

In 1997, the Council is targeting coalition-building. In order for the mission to be accomplished, it's essential for every industry organization to buy into the Council's mission. That includes manufacturers, insurers, industry associations of all types, as well as individual collision repair businesses. Industry representatives must agree that improving the industry's image is a worthwhile cause, and then support it both philosophically and financially.

Contributions Needed

Financially, the Council requires help in releasing messages. Two of the better known messages the Council distributed were the "Industry Letter" response to the CBS News "Eye To Eye" segment, and the more recent response to the advertising program sponsored by Pep Boys Auto Stores (see Figure 3). The cost of writing, printing, stuffing envelopes, stationary, and postage came to over \$500 for each of these responses. Efforts like this must be done hundreds of times each year to make an impact.



Figure 3—Among the methods the NABC is using to get the message out are comment letters on issues that affect the image of the collision repair industry. (Courtesy of the NABC)

Other efforts by the Council that need financing include teaching people how to create their own positive messages for distribution in their communities. The Council would also like to air public service announcements.

The Council would like every collision repair business to financially demonstrate their support of the Council's mission. Those contributing \$250 or more will receive a custom-engraved plaque that features the shop's name and the Pride logo, as well as the Council's message:

"I am part of an ethical, trustworthy, honorable business in the collision industry. I take pride in my professionalism and my ability to serve my customer. I continue to study my profession and I am a participant in my community. I am proud to work in my chosen industry."

For more information, or to send contributions, write the National Auto Body Council:
NABC
12 Carriage Lane
Walpole, MA 02081 **A**

Update— The National Rule And Other VOC Regulations

Air quality rules limiting volatile organic compounds (VOCs) are being implemented worldwide. Starting this summer, automotive paint suppliers in the U.S. will be regulated with a nationwide rule on VOC limits. The "National VOC Emission Standards for Automotive Refinish Coatings," usually called the "National Rule," will be officially republished this March, and will become law in July 1997. Countries outside the U.S. also have, or will soon have, similar laws.

VOCs include nearly all paint solvents. As the solvents evaporate, the VOCs react with sunlight and other compounds to form ground-level ozone, or smog. VOC content-limit regulations, such as the National Rule, set maximum limits on the amount of VOCs contained in each category of product. The amount of VOCs in a product is stated as grams per liter, or pounds per gallon, of the product. The chart in *Figure 1* is a list of the VOC content limits set by the National Rule.

Cleaners, such as wax and grease removers and plastic cleaners, are not regulated in the National Rule.

The VOC content limits for two-stage, or basecoat/clearcoat, and multi-stage topcoats are for an average of the complete system. Specialty coatings include adhesion promoters, chip-resistant coatings, rubberized undercoatings, anti-glare coatings, weld-through primers, and other coatings for specialized applications. The VOC content limit on these coatings is high because they're applied in limited amounts.

The VOC content limits are for the product as it is applied. Some of the products come that way, and the VOC content is labeled "as-applied." Products that must be reduced, or that require hardeners or other additives to be added before they're applied, are labeled "as-packaged." If your facility has a computerized mixing system, the "as-applied" VOC content is calculated automatically. Most paint makers also supply "Ready-To-Spray" charts, which show the "as-applied" VOC content of all their products.

The National Rule states that products that exceed the limits can't be made, or imported for sale, in the U.S. after July 1st. There are no "point-of-sale" restrictions on the

purchase of refinish products. In other words, suppliers and jobbers can still sell non-compliant stock that's on hand.

REGIONAL RULES

Regional rules can be more strict than the National Rule. If the VOC content rules are more strict than the National Rule, the regional rules will prevail. Some of the regional rules have been in effect since shortly after the Clean Air Act of 1990 started the concern over VOCs. One of the earliest, and the strictest set of regulations in the world by far, is California's rule 1151. The rule covers the Los Angeles metropolitan area. Compare the category limits in *Figure 2* to the National Rule.

VOC content-limit rules basically prohibit the manufacture of high-solvent paint materials, such as lacquer coatings. They do not include requirements to use high-solid materials and waterbornes. Most enamel products and other "medium-solids" still comply with most regulations. Refinishers in most areas of the country will not have to change their products or habits much at all, at least for the products they're currently using.

Equipment Regulations

There are no plans, at least in the U.S., to regulate the type of equipment that can be used in refinishing facilities nationwide. This is again where some regional rules go further than the National Rule.

Regional rules often include the required use of high transfer-efficiency spray equipment, either high-volume, low-pressure (HVLP) spray guns or electrostatic equipment. The use of enclosed, recycling gun cleaners is another

NATIONAL RULE LIMITS

Category	grams/liter (lb/gal)
Pretreatments	780 (6.5)
Primer/Primer-surfacer	575 (4.8)
Primer-sealer	550 (4.6)
Single-stage/Two-stage	600 (5.0)
Multi-stage topcoats	625 (5.2)
Specialty coatings	840 (7.0)

Figure 1—VOC content limits, per the National Rule.

RULE 1151 LIMITS (Southern California)

Category	grams/liter (lb/gal)
Primer/Primer-surfacer	252 (2.1)
Primer-sealer	420 (3.5)
Single-stage solids	420 (3.5)
Multi-stage topcoats	420 (3.5)
Specialty coatings	840 (7.0)

Figure 2—VOC content limits, per Rule 1151.

common requirement (see Figure 3). Some areas also have requirements for regular record-keeping, on a yearly, monthly, weekly, or even daily basis. This is easily done with a shop computer equipped with record-keeping software. Some regional rules also enforce a point-of-sale restriction, forbidding the sale of existing non-compliant materials. Exemptions to the rules are often granted to small-volume shops and training centers.

CANADIAN EFFORTS

Canadian efforts toward limiting VOC emissions are still in the



Figure 3—An enclosed gun cleaner, that recycles the cleaning solvents used, is a requirement in several regional VOC regulations. (Courtesy of Becca Recycling Technologies, Inc.)

proposal stage. The Canadian Council of Ministers of the Environment (CCME) proposes nearly the same VOC content limits as the U.S. National Rule. In addition to the U.S. list, the CCME VOC content list includes a 780 grams/liter (6.5 lb/gal) limit for plastic cleaners and a 200 grams/liter (1.7 lb/gal) limit for metal and other surface cleaners. The CCME also proposes a national requirement for the use of high transfer-efficiency spray equipment and approved spray gun cleaning equipment.

An education and training program for both management and painters is detailed in the proposed Canadian rules. The program would be divided into two parts: a classroom course and a practical, hands-on course. The CCME recommends that regional authorities require the successful completion of the two-part program before allowing an automotive refinishing facility to start in their area.

Timing

The CCME proposes that effective July 1st, 1998, only products which comply with the recommended VOC content limits be allowed to be made or imported into Canada. Also on that date, new shops, or existing shops adding another spraybooth, could use only high transfer-efficiency equipment and

approved gun-cleaning equipment. Existing facilities would have until July 1st, 2000 to comply with the spray and gun-cleaning equipment requirements.

The two-part training program would begin to be developed within three months after the day the July timetables are approved and adopted by the CCME. The curriculum for the classroom part of the program would have to be available within six months after the approval date. It's recommended that the hands-on training program be started as soon as products become available, and that the program be available for use by January 1st, 1998.

CONCLUSION

All of the VOC regulations aimed at the refinishing industry, when combined, will reduce VOC emissions by only a tiny fraction of the VOCs emitted from all sources. Still, it is a contribution to a cleaner environment.

There are other side benefits to refinishing facilities, especially in areas where there are equipment requirements. Use of HVLP spray equipment, approved spray gun cleaners, and low-VOC finishes results in less overspray and solvents released into the air. It also results in less overspray collecting on spraybooth walls, regulators, air hoses, and sprinkler heads. The end result is fewer required spraybooth cleanings and filter changes, painter's suits staying cleaner and lasting longer, and an overall healthier work environment.

I-CAR has recently completed updating the three-part *Finish Matching* course. Discussions on the latest low-VOC equipment and materials are included. Watch for it in your area. **A**

Product Stewardship Partnership For The Automotive Refinish Industry

—Partnering Government And Industry For Worker And Environmental Protection



Figure 1—The Environmental Protection Agency proposed the idea for a government and industry partnership. (Courtesy of the EPA)

A new effort is bringing industry associations and U.S. government agencies together to look at how to better protect worker health and safety, and the environment, during automotive refinishing operations. The idea for the “Government/ Industry Product Stewardship Partnership for the Automotive Refinish Industry” was proposed by the Environmental Protection Agency (EPA) (see Figure 1).

Members will be asked to sign a commitment to the partnership goals, though all involvement will be voluntary. The partnership goal is to promote improvements in worker health and safety during automotive refinishing operations (see Figure 2). This will be done by building on existing product stewardship and training programs. Partnership members will offer suggestions and volunteer to review existing pro-

grams that promote worker health and safety. For example, I-CAR will have better access to the EPA, the Occupational Safety and Health Administration (OSHA), and the National Institute for Occupational Safety and Health (NIOSH) in supplementing course material.

Industry members include organizations that manufacture coatings, including product makers and suppliers of raw materials. Equipment suppliers and product distributors are also participating, as well as collision repair organizations, representing the users of the coatings. I-CAR brings its training experience and knowledge to the partnership. This is a partial list of other participants lending technical support and assistance:

- EPA
- NIOSH
- OSHA
- National Paint and Coatings Association (NPCA)
- Automotive Service Association (ASA)
- National Automotive Dealer’s Association (NADA)
- Automotive Service Industry Association (ASIA)

Besides technical support and assistance, each organization will be able to make a unique contribution. For example, product makers have existing training programs that can be pooled into a more comprehensive, consistent effort. Government partners will be able to provide incentives where possible, such as chemical regulatory relief for chemical developers and



Figure 2—Promoting consistent use of respiratory protection when refinishing is one goal of the partnership.

incentives for refinishing shops that implement the programs.

TIMING IS RIGHT

A number of events are taking place that helped prompt the development of the partnership effort. The automotive refinish industry is currently adapting to new equipment, practices, and products in order to meet state and federal VOC rules (see article on page 8 in this issue). The NPCA is in the process of developing its own safety awareness program. And NIOSH recently released an alert on the dangers of isocyanates in paint materials.

NIOSH Study

The need for consistent training and incentives for worker health and safety is well known. Safety warnings are spelled out on every product label and material safety data sheet. Government agencies threaten fines for violating health and environmental regulations. Many hours are spent lecturing and demonstrating how to handle hazardous materials in the paint shop. Still, a recent NIOSH study, looking at control of paint overspray in six collision repair shops, found inappropriate use of respirators in all of the shops.

None of the facilities had a written respirator program, a requirement for every facility in both the U.S. and Canada. According to NIOSH, their findings were consistent with information reported from similar studies.

The main reason for the non-compliance is that product warnings, regulations, and training can only deliver the message. It's up to the individual refinisher to learn how to use the provided equipment, and use it for every job. This partnership effort will work toward providing workers in every refinish-

ing workplace the right incentive to make health, safety, and environmental protection a natural part of their job.

DEVELOPMENT STAGE

This could be the first of several articles on this new partnership effort. We will keep you up-to-date on its progress. As of this article, the government and industry members are still working on finalizing the scope and developing the structure for the partnership. The group meets every 4–6 weeks.

The next meeting in January will focus on present training initiatives.

The partnership is looking for input from people in the automotive refinishing industry, including shop personnel and industry supporters. If you have information or a concern you feel should be included in this effort, contact your local trade association.

Or call Cathy Fehrenbacher at the EPA: (703) 308-8179. **A**