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ABSTRACT

This manual provides information on implementing a local child passenger safety program. It covers understanding the problems and solutions; deciding what can be done; planning and carrying out a project; providing adequate, accurate, and current technical information; and reaching additional sources of information. Chapter 1 provides community program ideas by describing what some people can do within their particular spheres of interest. Focus is on law enforcement personnel, health career providers, business community, educators, and civic groups. Chapter 2 provides guidelines for designing, planning, and conducting a program. Topics include exploring the local problem, getting together, training, developing the project, funding, publicity, evaluation, observation surveys of child restraint use, and safety seat loan programs. Chapter 3 offers the success stories of three child passenger safety advocacy groups, and chapter 4 describes what passenger safety advocates need to know about protecting children. This chapter covers how restraint systems protect people, safety standards for car safety seats, sources of safety seats, choosing and using car seats, demonstrating correct use, parents' questions, and when children ride with others. Appendixes include listings of print and media resources, information sources, and a glossary. (YLB)

U.S. Department of Transportation

National Highway Traffic Safety Administration

Protecting Our Own

Community Child Passenger Safety Programs

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INTRODUCTION

In the spring of 1983, a 20-month old child was in an automobile accident for the first time in her life.

Because she was riding in a car safety seat, she suffered no injuries. According to news reports, she barely cried.

But, two thousand miles away, another 20-month old girl was not so lucky. She was sitting on the front seat of the car when the accident occurred.

Because she was not restrained, she was hurled into the gear shift lever of the car, and killed.

In both States, child passenger safety laws were in effect. Both children met the definition of those to be protected.

There are many stories like these—some affirming, some tragic—in virtually every State in the country.

Motor vehicle accidents are the leading cause of death and injury for ALL Americans under age 44. Such accidents are responsible for most spinal injuries, and they are a major cause of epilepsy.

Every year, nearly 700 children under the age of 5 die while riding in motor vehicles, usually the family car. And each year, about 60,000 are injured in such crashes. Among those 60,000 injured, over half will suffer head and facial trauma. About 10 percent—6,000 youngsters a year—have brain injuries as a result.

The cost of these tragedies is enormous: in emotional distress for families, in physical pain for the one afflicted, and in dollars paid by all of us for health care, through insurance premiums, and government programs for long-term care of disabled people.

In recent years, many citizens have put their time, energy, and talents to work to reduce *all* of these costs in their own home towns. This is everyone's problem, and everyone can have a piece of the solution. How can we protect the children in our communities? It's clear that buckling children into car safety seats **will** protect them. At least 80 percent of the deaths of small children in motor vehicles could be prevented with properly used safety seats. Even safety belts can avert injuries to such children about 60 percent of the time.

Are parents accepting this notion of buckling up their children? There are some encouraging reports, yet overall, the numbers of protected children are still low. Car safety seat use doubled from 9 percent in 1979 to 19 percent in 1981, **yet fully 81 percent of all youngsters remain totally unprotected.** In urban areas in 1983, about 27 percent are riding buckled up. But over 70 percent of safety seats are being used incorrectly, and therefore unsafely, according to one 1982 study.

Laws DO help. As of mid-1983 40 States and the District of Columbia had passed laws requiring protection for child passengers. New York State has now taken the radical step of extending its law to cover children up to age 10 by 1987. And in States like Tennessee, where laws have been in effect for some time, the fatality rates for children are dropping as safety seat and safety belt use increases.

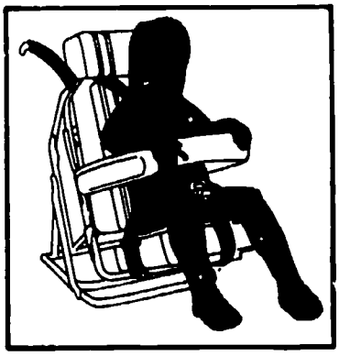
But enacting a law is not enough. As child passenger safety advocates we have to make sure that parents and other drivers understand the **requirements** of the law; we must emphasize the **importance** of using car safety seats, whether required by law or not; we have to encourage the development of the **habit** of buckling up by parents and children; and all of us, health professionals, teachers, civic leaders, parents, must demonstrate our **awareness** by our actions.

Local programs, both large and small, are springing up all over the country as people recognize the need to protect children. The problem is as close as the street in front of our homes; the solution begins with our efforts to protect the children in our communities.

This manual will help you to:

- understand the problem. . .and the solutions;
- decide on what you and your group can do;
- plan a project and carry it out;
- provide adequate, accurate, and up-to-date technical information;
- reach additional sources of information.

Please note: Throughout this manual we use the term "car safety seat" and the abbreviation "CSS" to refer to restraint devices used to protect children in cars. For a more complete discussion of terminology, please see the Glossary, at the very back of the manual.



Chapter 1

SELLING SAFETY: COMMUNITY PROGRAM IDEAS

You drive down the street, and see kids standing on the front seats of passing cars; you see a 1-year-old cuddling on her father's lap—while he drives; you see kids piled in the back of a station wagon, completely unrestrained.

You want to protect them, but what can you do?

You can find a way to approach the child passenger safety problem and make a difference. What you do and how you do it will depend on your special interests, your expertise and your associations with others in the community.

First you might like to know what others are doing. The most successful local programs have certain common elements. Generally they:

- provide accurate, practical information;
- supply safety seats for those in need;
- encourage the proper and routine use of safety seats and belts as children grow;
- impress on all family members the importance of buckling up;
- seek to make child passenger safety a routine part of child- or health-related activities of community institutions;
- build awareness of child passenger protection in all segments of the community.

This chapter will focus on what some people can do within their particular spheres of influence. In the course of their normal activities, people such as physicians, nurses, teachers, law enforcement officials, business leaders, and members of civic groups can play an important role in improving child passenger safety. The descriptions that follow show you what others have accomplished; you may use their ideas, or become inspired to tackle your own innovative plan.

Law Enforcement Personnel

As of June, 1983, 40 States and the District of Columbia have passed laws requiring young children to be protected while riding in motor vehicles. Details of the laws vary widely. Some States allow lap belt use to be substituted for a car safety seat (CSS) when a child is above a certain age; the age at which a child is no longer required to be protected also varies from State to State.

And the laws, as written, aren't always easy to understand.

"To the average person, our law is not that simple," says Police Lt. Michael Post, Commander of the Traffic Bureau of the Glendale, California, Police Department. Without correct information, law enforcement officers can be as confused as the public, he noted.

But understanding, by itself, isn't enough. Enforcing child passenger safety laws is something police officers may not regard as a priority.

In California, "there's a great variation in the level and type of law enforcement," notes Sandra Sparks, Director of the California Child Passenger Safety Association (CCPSA). A law on the books, without enforcement, is a paper tiger.

The experience in Tennessee illustrates the importance of police officials making enforcement a priority. When intially implemented in 1978, the Tennessee law was largely ignored by the police. When a new commissioner of public safety decided to make its enforcement important, the number of citations rose sharply. From September 1979 to May 1983, 8,000 tickets have been issued, more than 3,600 of them in 1982 alone.

Getting clear support from those in charge of enforcement agencies, from the police chief on down, as well as support from local elected officials, can be crucial in assuring that a law is **routinely** enforced.

We all need to remember that police departments, and to some extent, individual officers, have discretion in how they enforce laws. In Glendale, California, one criterion for evaluating individual officers is each officer's level of enforcement of the child passenger safety law. This standard has "the complete blessing of the mayor and the police chief," notes Post.

In addition, Glendale traffic officers have been turned into educators for the public; as part of their job, the motorcycle traffic officers worked at safety fairs, answering questions and providing information.

Sandra Sparks suggests that child passenger safety advocates can assist police by:

- **Helping With Training.** Volunteers can provide the department with information. Officers who understand **how** a properly used CSS protects children will be more enthusiastic about enforcing the law. (Michigan's Office of Highway Safety Planning has produced a slide show for officer training. In Tennessee, local pediatricians who spoke at police training sessions had a big impact.)
- **Making Sure That Everyone Understands The Law.** Translate the legalese into language everyone can understand. California has a one-page handout, with English on one side, Spanish on the other.
- **Dispelling Myths.** For example: "How do I know if a child is young enough to be covered under the law?" officers often ask. There's an easy answer: ask the child his or her age. Kids won't lie. And if they're too young to answer, they're probably covered.
- **Pointing Out The Positive Aspects Associated With Enforcement.** Officers often deal with the worst aspects of human nature. This is a chance for them to do something positive. Officers may be apprehensive about the public's reaction, but Post notes that his officers haven't had negative experiences. "It's pretty hard to argue against keeping kids safe."
- **Providing Information On Local Community Resources** (loan programs, educational materials) connected with child passenger safety. Suggest that the police department have brochures explaining the law, and the services available, in their patrol cars and police stations. Minnesota and Connecticut have cards for officers to hand out.
- **Having A Single Source To Provide Information To Citizens Can Be Extremely Useful.** In California, the CCPSA staffs a statewide, toll-free number (1-800-CAR SEAT) 20 hours a week, with funding from the State Office of Highway Safety.
- **Donating CSSs For Short-Term Loan By Police** to parents cited under the child passenger safety law. Tennessee has such a program.

Health Care Providers

Health professionals are in a unique and favorable position to influence child passenger safety because they:

- see parents and children frequently;
- understand (or quickly can learn) the impact of not using a safety seat, or of improper use—they see the results in their emergency rooms;
- are established authority figures for parents in areas of health maintenance;
- are able to make child safety a routine part of a preventive health care program which includes proper nutrition, vaccinations, and regular check-ups.

The hospital or health clinic is an especially appropriate place in which to set up a safety seat loan program, to supply seats for newborns and toddlers. Hospital pharmacies and gift shops can stock information on child passenger safety, and sell one or two popular, and easy to use, models of CSSs.

During prenatal care, health care providers can:

- make infant safety an **integral** part of prenatal and childbirth classes and check-ups;
- provide written literature including a list of local stores which carry safety seats;
- encourage the purchase of a car seat **before** the baby is born, in the same way that parents buy a layette;
- write a prescription for an infant car seat;
- note in the chart if the patient has purchased a car seat.

In the hospital, providers can:

- make sure parents understand the necessity of obtaining car seats **before** the infant's first ride home;
- ask if the parents have actually tried out the seat in their own car to be sure it fits;
- emphasize how much better behaved a small child riding in a car seat is likely to be;
- conduct a demonstration of proper use for groups of new parents, ideally when both mothers and fathers are present (for an outline of such a demonstration, see Chapter 4);
- allow extra time at discharge to adjust the harness, install the seat;
- document at discharge how the infant was transported home. (Some doctors **require** that infants go home in a car seat. If not, parents must sign an "against medical advice" release.)

It's important to reinforce the importance of car seats just before the parents leave the hospital. It's also very helpful for parents to have "hands on" experience, with their own baby, whenever possible. The nurse who accompanies parents and baby to their vehicle should demonstrate the installation of the baby and CSS in the car.

Pediatric care providers can:

- display information on car seats in the waiting room;
- make sure office staff are well informed about this issue, because displays are likely to generate questions;
- make available a bulletin board in the waiting room on which parents can post ads to sell used infant and toddler seats;
- have office personnel demonstrate proper use of car seats when parents need help;
- discuss the importance of safety seats and seat belts (for *all* members of the family); emphasize that a child is very likely to be better-behaved while riding buckled up;
- write a prescription for a safety seat if a child doesn't have one;
- ask on follow-up visits if restraints are being used—always;
- provide special encouragement for parents of children 9 months to 21 months of age, a time when some children resist riding buckled up;
- as children get older, talk to them directly about car seat or belt use, reward them with stickers, rubber gloves, etc., for consistent use.

Business Community

Business can be involved in two ways, by promoting safety to the public at large, and by encouraging safety among their own employees. In either case, humanitarian motives and economic benefits go hand-in-hand. For example, **League General Insurance Company,** Southfield, Michigan:

- gives Century car safety seats free to auto insurance policyholders for children born or adopted into households when the policy is in effect.
- sends CSSs to pregnant policyholders before their babies are born, thus assuring that each baby's first ride will be a "safe ride."
- has distributed over 10,000 seats through this program between 1979 and 1982.

The company's analysis has shown that injuries to children of policyholders decreased over 45 percent during the first two years of the program. "No restrained child received more than a minor injury," the study said. "The decline in injuries was sharpest for more serious injuries." Claim costs for children went down 75 percent from the preceding two years.

Some companies, like Toyota Motor Sales/U.S.A. and the Signal Products Division of the Amerace Corporation, Niles, IL, give new infant safety seats to any employee with a newborn. Others, like GEICO, lend CSSs to employees' families. Businesses can put "Buckle Up" signs in parking lots, require that employees on company business use safety belts and educate employees on family safety habits—including child passenger safety. Since most employers provide health insurance benefits for employees and their dependents, there's a clear economic benefit to companies to keep their employees' families protected.

Business/Organization Cooperation—With a Happy Ending

During the summer of 1983, the National Safety Council and McDonald's Restaurants teamed up with a "Make it Click" incentive campaign. Children received safety packages, including stickers (illustrated) and a promise card asking them to buckle up [illegible] a week. If the children followed through, they could return the card, signed by their parents, to Mc[illegible]d's for a safety certificate — and a free food item. The program stimulated tremendous interest amo[illegible] youngsters, as this letter demonstrates.

> I have had a very difficult time coaxing, convincing, and cajoaling my very active 5 year old into buckling every time we get into our car. I'm sorry to say that in the past she won out to many of the times, because I simply tired of arguing with her. But not any more!
>
> As a result of [McDonald's] "Make it Click"—Promise Card, she has buckled up every time we go out with no argument. Last Friday, she was on her seventh and final buckle [on the promise card] when we were involved in a minor accident on rain slick roads. What could have been a more serious injury resulted in no injury for either me or my daughter because of our "promise to you to buckle!" You can bet we'll continue to "Make it Click."
>
> — A mother from Tennessee, June '83

What motivates a company to start a program—large or small, in-house, or for the public at large—to promote child passenger safety?

- Humanitarian desires. "We wanted to serve our policyholders," explains David Marion, Director of Regional Operations for League General Insurance Company.
- A desire for community involvement and recognition.

- Economic benefits. These may be direct, as when a department store advertises its child safety seats and mentions that State law requires such usage for small children. Or they may be indirect, as when favorable publicity about a company's activities results in increased business. League General did not have to seek recognition. "We got lots of publicity just because what our company did was newsworthy and unique," notes Marion.

In approaching the business community, it's important to:

- **consider the cost—in time, effort and direct dollars—of their participation.** Hanging a poster in a store window requires minimal effort on the part of a retailer; allowing volunteers to train staff who sell car seats requires a bit more; asking that a company underwrite—with credit—the cost of printing brochures calls for yet another level of participation.
- **explore how the business can incorporate the promotion of safety in its normal activities.** The diaper service which publishes a newsletter for its customers can carry information—provided by your group—on child passenger safety. Retailers of children's books and toys can stock brochures for their customers. Parking lot signs can be posted; catchy information can be printed on grocery bags or milk cartons. The possibilities are endless.

Safety Activities for Safety Seat Retailers

- Participate in a window display contest, perhaps sponsored by a local safety group. Various retailers in a shopping mall compete to see who can create the best safety display. These increase public awareness and the sale of car seats.
- Allow parents, with staff help, to try safety seats in their cars before making a purchase.
- Display posters suggesting CSSs as shower gifts.
- Stock auxiliary CSS hardware such as locking clips, anchor brackets, and bolts. Make sure staff know where these are kept, and advertise their availability.

Education

Requiring high school students in driver education classes to buckle up is now a common practice, but what is being done to drive the "buckle up" message home in other school settings? Are students being taught the "**why**" behind restraint use?

Many teachers face an overloaded curriculum, so it's important to **integrate** passenger safety with other subjects. For example:

- In family life class, students can be taught the proper protection of infants and small children as well as of themselves.
- Ways to help youngsters accept riding buckled up could be discussed in a child development class.
- Math and Science students can calculate the forces involved in crashes. (A new curriculum for General Science students has been developed—see Resources in the appendix.)
- Elementary students can survey family and friends about belt use.

But perhaps it's in preschool that we most want to emphasize child pasenger safety—to teachers, parents, and the children themselves. Preschoolers **are** capable of understanding and practicing car safety. They and their parents may need encouragement in making the transition from safety seats to lap belts. Many children protected as infants ride unrestrained by age two. What the preschooler learns can influence his or her entire family's safety habits.

Suggestions for Preschool Safety Classroom Program

- Audiovisual aids—BUCKLE BEAR for younger preschoolers, BELTMAN for older ones—are useful introductions.
- Fantasy play:
  - equip a "car" with belts for five-seat positions;
  - have different types of seats, appropriate for the age/size of the children and belts with a variety of buckle-types; children can "role play" being the parent or big brother (in belt only), the baby (in infant safety seat), and themselves (in appropriate restraint);
  - children can pretend to go for a ride, take the baby to the sitter, and change places during each stop in the "trip."
- Keep an infant car seat (a used one donated by parents) in the doll corner along with the cradle and stroller.
- Equip toy vehicles with velcro lap belts for dolls.
- Help children get the "buckle up" habit by checking on a chart every time they buckle up.

Individual efforts in the classroom will go that much farther when school policy reflects the need for safety.

- The policy for class trips should be that all children use belts or parent-supplied CSSs. Permission slips for trips should reflect this policy.
- Permanent parking lot signs will remind everyone to buckle up!
- An involved parents' group can reinforce safety education.

Civic Groups

Civic Groups can promote child pasenger safety in many ways:

- by choosing on a particular child safety activity such as a loan program as their annual project; many groups either run or support loan programs, while others have created kits for nursery school safety presentations or conducted health fair demonstrations;
- by educating their members, and then being available to speak to other groups (thus multiplying the number of knowledgeable persons);
- by using group funds and members to design, produce, and distribute educational materials;
- by making the group's **own** policy reflect safety. For example, the national policy of the Boy Scouts of America requires seat belt use on field trips. The organization has developed educational materials for cubs and older scouts. Scouts can earn an "automotive merit badge" by completing requirements which include the study of safety belts, child restraints, and schoolbus safety. The Nationl 4-H Council also has a program for educating its members.

Chapter 2

HOW TO DESIGN A CHILD PASSENGER SAFETY PROGRAM FOR YOUR COMMUNITY

You may be a physician who observed that the baby you saw at the Well Child Clinic yesterday in a safety seat is riding today in grandmother's lap. . .or the parent who finds out that your son's nursery school is taking a field trip with children riding in the cargo area of a station wagon. . .or the social worker who knows that her low-income clients cannot afford to purchase safety seats to comply with a new State law for child passenger protection.

Your club may have started an infant safety seat loan program, but you now discover that when parents turn in their seats, they are not getting toddler seats. . .or, as a retailer, you find that your clerks do not know how to answer all the detailed questions that parents are asking before they purchase safety seats.

There are ways to tackle all of these problems. The previous chapter may have given you some ideas. How to make them work is the big question.

Where To Start?

Whether you choose to work within an existing organization, start a new child passenger safety advocacy group or expand an ongoing project, a little planning can save you time and make your efforts more productive. This chaper, largely based on what other child safety advocates have done, will give you some guidelines to use in planning and conducting a project.

Exploring the Local Problem

Before you plan a project, it's very useful to know:

- basic facts about child passenger safety;
- the percentage of children currently riding unprotected in your community;
- how many child passengers have been killed or seriously injured in your community or State;
- other child passenger safety activities in your area;
- whether your State has a mandatory child restraint use law and its specific requirements.

Such information is available. This manual will provide you with basic facts about child passenger protection; the data on children killed on injured should be available from State police or your Governor's Highway Safety Office. You also can collect local newspaper reports of accidents involving children. Observation surveys are the most accurate to determine out how many children ride unprotected in your community (more on surveys later in this chapter).

If there are other agencies or groups working on child passenger safety, research:

- the programs currently available;
- their past experiences with educational activities (successful and not so);
- the materials they use;
- the evaluations, if any, of their progress.

Getting Together

If others are already working on child passenger safety in your community, consider joining forces. Even if you do decide to pursue your own project (and there's plenty of room for many different

types of programs), keep in touch with the other groups. You may find that you can share resources, ideas, and access to community leaders who can give child passenger safety a sense of legitimacy.

Local chapters of national organizations like the American Red Cross, Junior Women's Clubs, Jaycee Auxiliaries (which started many of the early loan programs), and hospital and medical society auxiliaries have become active in child passenger safety in recent years.

Many national organizations are now involved in safety belt and child restraint projects, as part of the National Safety Belt Campaign of the National Highway Traffic Safety Administration. (See Appendix for a complete list and project descriptions.) You may be able to join with local members in making the national programs work on the community level. Organizations concerned primarily with combating drunk driving are promoting seat belts and child restraints as the motorists' best defense against the intoxicated driver. These groups plan their projects well in advance; make contacts with them one of your first priorities.

Safety In Numbers

"Child Passenger Safety Associations" (CPSAs) originated in Michigan, and the concept has been duplicated successfully in many parts of the country. CPSAs are coalitions of groups and individuals. They are associated nationwide with the National Child Passenger Safety Association. Local groups undertake community or statewide projects.

To get a child passenger safety association started, you need:

- **The Sponsorship** of at least one prominent individual, institution, or organization to lend credibility;
- **The Involvement of Health-Care Professionals** you may want to hold your first meeting in a hospital, both to dramatize the problem and to make it easy for hospital staff (physicians, nurses, administrators, etc.) to attend; and
- **Extensive Publicity** for meetings.

A Guide to Organizing a CPSA is available from the National Child Passenger Safety Association (see Appendix for address).

Motivating Your Allies

Whether your approach is from the professional or volunteer angle, you are going to find yourself working with people from varied backgrounds. Some may be professionals who come into frequent contact with parents and children and may be looked up to as authorities. When working with such people it is best to:

- Approach them with deference, tact, and on their own turf. If they're going to be effective, it's because they will contribute special talents to a safety project, or, better yet, because they will incorporate the promotion of child passenger safety into their everyday activities.
- Recognize the special points-of-view professional groups may have. Although you may come to a meeting prepared with suggestions, it is most effective to have ideas come from members of the group.
- Encourage prominent individuals in a profession to lead the way. Provide information and support, but be prepared to have a professional chair the meeting, initiate suggestions, etc.

Volunteers are often the backbone of community child passenger safety programs. They may be professionals giving their expertise in their spare time, members of civic groups or committed parents —or all three!

Tender loving care for volunteers includes:

- training: plan day and evening sessions to fit varied schedules;
- clear assignments of specific duties or tasks;
- lots of recognition for jobs well done;
- opportunities to fill a variety of jobs.

Roadblocks

You're bound to run into people or organizations who don't think child passenger safety is a priority. They're busy, they have other concerns, and they're fortunate in not having faced the death or injury of family members or friends due to traffic accidents.

Overcoming this obstacle isn't easy. In such cases, it's helpful to:

- **Re-evaluate the level of safety awareness of the people you hope to persuade.** If they haven't yet realized that parents are not the only ones responsible for the protection of child passengers, then you'll have a very hard time selling an action program.
- **Reconsider the way you're presenting your ideas.** Would an eye-opening film like CHILDREN AND INFANTS IN CAR CRASHES help make your point? Would another spokesperson be more persuasive?
- **Look at the concerns of the groups you hope to involve.** What could they get out of participating?
- **Turn your attention to other groups in the community.** Child passenger safety can be made to appeal to almost any interest group.

Training

Many otherwise well-educated people are still oblivious to the danger unprotected children face when riding in a vehicle. Encouraging them to become aware and well-informed is a necessary first step. Often a structured training session, **geared to the orientation of a specific group,** is the quickest way to reach busy people. Tips for training sessions:

- Arrange for one or more of the speakers to be a physician or member of the professional group in attendance.
- Work in conjunction with a local community college or hospital to lend credibility to the training sessions.
- Obtain continuing education credits for one or more of the professional groups which may attend. One CPSA offers credit for Registered Nurses, although other professionals and non-professionals also attend.
- Gear content to the audience, keeping it as brief as possible and considering the level of expertise you expect to achieve. Emphasize:
  - proper use of safety seats;
  - regular use, day-to-day;
  - continuing use as children grow older;
  - social and economic benefits;
  - making safety education a part of the participants' work.

Legalities For New Groups

If you've formed a new group, you may want to **incorporate** as a nonprofit organization. You also may want to obtain a **Federal tax exemption** so that contributions will be tax-deductible. . .a big help for fundraising.

Find out if you must obtain any sort of **license** (State, county, city) and whether you are liable for State or local **taxes.** If you plan to rent or sell safety seats, you need to consider **liability insurance** (see Appendix).

The easiest way to get such information is to enlist the services of a volunteer attorney and/or accountant. If you find someone who's experienced with the needs of nonprofit organizations, you're ahead.

Developing Your Project

A carefully thought-out plan can make all the difference in the success of your endeavor, regardless of its magnitude. The plan will help you gain allies, obtain funds, evaluate your progress, and make needed adjustments to your original design.

First, pick a target group, one that has immediate appeal for the members of your organization. When choosing a target group, consider:

- the size of your active membership in relation to the size of the target group;
- whether your members understand the values and culture of the group;
- how you can tailor a program to the needs of the group;
- whether you have allies who are members of the target group, or professionals with access and credibility.

Next, pick a possible project. Many are suggested in Chapter 1. Describe the problem you want to solve. It is important to clearly identify your goal. Goals should be measurable (e.g., at the end of one year, 75 percent of all infants leaving the hospital will be properly protected compared to the present rate of 20 percent).

Think through the steps required to reach the goal:

- list objectives which must be accomplished if the goal is to be reached;
- list several tasks to be done to accomplish each objective;
- think of one or two ways to measure your progress toward the goal.

Now, evaluate your plan by looking critically at the tasks:

- which ones will take the most time?
- which ones are we equipped to do now?
- which ones require the close cooperation of other groups or individuals?
- which ones cost money? How much?
- how can we raise the money and enlist the help of the people we need?

Finally, be realistic:

- can we tackle the whole plan or should we concentrate on part of it?

Funding: Where To Look

Now that you have a realistic plan, you can look for ways to support it. These can range from the simple bakesale to the complex grant-seeking process, depending on how much you need.

Fund Raising Can Raise Consciousness Too

Look for projects that also educate or remind people about your cause, like these done by community child safety groups:

- Give a bumper sticker away for every $1 contribution to the group. This quickly gets the message all over town. Many people who aren't ready to join the group will support your cause to this extent. One group got a local business to donate the cost of printing, in return for the company's name on the sticker!
- Sell T-shirts with winning motifs from a safety slogan contest or market a calendar containing poster-contest designs at fairs and exhibits.
- Raffle off safety seats for Mother's Day or coupons good for the seat of choice at a local store.

Contributions From The Business Community

Here's where a tax exemption begins to come in handy. You can make presentations to community groups (Rotary, Jaycees, etc.) and to local businesses asking for monetary support or in-kind contributions. Printing, office space, used typewriters, paper, and safety seats are often as valuable to you as dollars. Be specific about what you need and how you'll use it.

Make sure to give lots of credit for donations. One group found that printing two lists (donors and endorsers) in its program brochure helped increase the number of donors. Some loan programs put stickers with donors' names on safety seats.

Grants

Public money to start local and State traffic projects comes from the U.S. Department of Transportation, and is funneled through to the Governor's Highway Safety Representative (GR) in each State. Get in touch with your GR. (See Appendix.) Find out:

- current projects in your State and local community;
- current finding priorities;
- needs which are not being met.

Also check with your State, county, or city health department. See if your group can work with one of these agencies on a specific project.

Private money may be available through local foundations. Some foundations will want a brief letter, others a formal proposal before considering your request. Call to find out the format to follow and how often decisions are made. If you've never gone after grant money, do some research in your library on "grantsmanship." Enlist the aid of an experienced grant writer.

Publicity and Education Go Hand-In-Hand

Publicity is essential to your project. It can help you increase membership in your group, raise funds, and, most importantly, educate the community about the problem and its solutions. Every phase of your project can have a news angle. Go after the major media, but don't ignore:

- weekly newspapers and free "shoppers";
- local cable programming;
- your group's newsletter and those of other groups or businesses (one project got extensive coverage in a diaper service's customer bulletin);
- posters and leaflets about the project and upcoming events.

The media will pay attention if there's a story to be told. A story is. . .a child saved because he or she was wearing a child safety seat properly when an accident occurred.

A story is. . .the mayor of your town appearing at a health fair with her 2-year old son, and using her 60 seconds on TV air time to comment on the importance of protecting our loved ones.

A story is. . .a new hospital program which instructs new parents on the details of car seat use, or a hospital policy which doesn't allow an infant to be discharged unless he or she is riding in a car seat.

Sometimes, you don't need a story to get publicity. Letters to the editor can be powerful, and effective. They may spring from someone's experience. The following letter to the editor of the MUSKEGON CHRONICLE, April 14, 1982, has been reprinted all over the country:

> Dear Editor:
>
> I would like to tell your readers how mad I was when I was forced to go out and pay $45 for an infant seat, and to top it off we couldn't fit everybody in my pickup truck with that big bulky thing.
>
> On April 2, my wife was forced to go off highway M-120 into a ditch to avoid a collision — that's 55 MPH to a dead stop. The back of the child car seat was facing the windshield (as I was told the law required for four-month-old infants). That seat broke off the ash tray, cracked the dashboard and chipped the windshield. Our baby didn't have a scratch on her.
>
> I would like to thank God and whoever else is responsible for passing that stupid law.
>
> Greg Hibbard, Holton, Michigan

News items can generate response, too. The editorial reprinted here followed a local story, which described in the headline and the first paragraph, how two children, wearing belts, had survived a crash which killed two unbelted adults. Not only was the reporting excellent but the paper's response to its readers' comments highlighted the issue.

Develop relationships with the public information officers of hospitals, business groups, the medical association, and your local police department. Aim for **integration** of safety themes in their normal activities. For example, the police department can routinely release information on the use or non-use of safety seats or belts when reporting on an accident.

And recognize that a press release which comes from a hospital or other established organization may get more attention than one from a small volunteer group.

When preparing local mass media publicity, remember that:

- Public service announcements for TV or radio can be given a community slant by using a prominent local spokesperson as the "star." (You also can use the excellent TV PSAs developed by NHTSA and some States.)
- Newspapers and TV like photogenic subjects like babies in safety seats, but beware of inaccurate pictures. Someone from the group who knows how CSSs are properly used should supervise photo sessions. (See Picture Perils, later in this chapter.)

Improving the Fortrayal of Child Passenger Protection in the Media

- Watch for TV or magazine ads. Commend advertisers whose commercials show children riding safely. If the children are shown without correct protection, contact the advertising agency or the president of the company whose product is being advertised. (Ad agencies often overlook child safety seat use because of ignorance!)
- Pay attention to children's TV shows, especially those locally produced. Suggest to the producers that a good safety segment would generate positive public reactions.
- Call local radio and TV stations to urge them to air public service announcements when released. Better yet, hand-carry PSAs to station managers to emphasize your concern that they be aired.
- Participate in the National Safety Council's Media Watch, which gives recognition to programs which show children riding properly protected.

Pamphlets, Posters, and Other Public Information

Ways to Communicate Your Safety Message:

- pamphlets and fact sheets with basic information;
- films, film strips, slide shows;
- local store surveys comparing costs of CSSs (very useful);
- lists: of loan programs of second-hand stores which carry car seats, of auto shops which install tether and extra seat belts, of retailers who stock locking clips and tether anchors;
- car safety prescription pads for doctors to use;
- displays of safety seats: permanent, and movable. These can be placed in shopping malls, health fairs, doctor's offices, hospitals, day care centers;
- posters, billboards, dashboard stickers, bumper stickers, and parking lot signs are effective reminders.

Deciding Which Materials to Use:

Before you spend a lot of money printing, purchasing, or making materials, evaluate what has already been done. You can order sample copies of written pieces or preview audiovisual aids. Many samples are available through the **Child Passenger Safety Public Information Materials Catalogue** of the Transportation Research Institute at the University of Michigan (see Resources in the Appendix).

If possible, **have members of the target audience review the materials.** What appeals to you may turn off others. Consider these questions:

- Is the piece colorful and bold?
- Does it hold your attention long enough for the message to be absorbed?
- Is the message accurate and up-to-date? To make sure, check with a safety consultant connected with the National Child Passenger Safety Association (see Appendix for address).
- Does the material involve the audience? (E.g., a headline that asks a question, a photo in which the subject looks directly at the viewer.) Is it engrossing without being scary or horrifying?

- Is the language brief, clear, appropriate for the audience's age and educational level? (One CSS manufacturer, Questor, has posters on proper use with almost no words.)
- Is the message locally oriented or personal? (By using a local sports star or public official with a new baby, for example.)
- Does the material take into consideration cultural, ethnic, and language characteristics of the local audience?

Should You Make Your Own?

The nice thing about making your own is that you're in control—you can tailor your message to your audience. But, of course, it can be easier to criticize others' work than to improve on it. If you make your own, you can:

- provide specific, local information;
- identify the community program and credit area participants (e.g. donors to loan program);
- make use of locally donated art or printing services;
- use local involvement in the production effort as an organizing tool.

But consider:

- the time involved in research **(accuracy is essential)** and production;
- the *costs* of writing, design, photography and printing. Small quantities cost more to print, per piece, than large ones;
- the visual appeal and authoritativeness of professionally done pieces.

If You Decide to Do it Yourself:

- ALWAYS make sure you don't reprint out-of-date or incorrect information. Information in this field changes frequently. Check your copy with an expert.
- Date your piece, and identify your group.
- Get written consent from any group before borrowing from its materials. List your sources, and give credit.
- Consider copyrighting your materials, and respect other's copyrights.
- Especially useful are materials from the Insurance Institute for Highway Safety which show the effects of crashes on unrestrained children. Printed photos in the booklet, CHILDREN IN CRASHES, black and white glossies, color slides, as well as film and videotapes are obtainable. Line drawings of CSSs are available from the Michigan Office of Highway Safety Planning.

Picture Perils

Getting photos or drawings of children correctly protected in safety seats can be tricky. An inaccurate picture tells the viewer that it's OK to use safety seats in any way that is convenient or "looks right."

Many groups have "goofed" by forgetting to double and triple check the accuracy of illustrations before they were printed. Harnesses have been left out of drawings, safety belts have been threaded wrong in State brochure cover photos, adult belts have been omitted, Strolee Wee Care seats have been shown in the "packing position" instead of in the proper infant position. Some points to remember:

- The CSS must be used according to manufacturers' directions (have them on hand). **Harness** should be snug around the child, with crotch-strap short and shoulder strap retainer on chest. **Shield and/or tether** should be shown used correctly if seat has them. **Shoulder straps** must not slip off shoulders. If seat is reclined for an infant, check for **proper frame position.** CSS should be shown on auto seat with the **auto safety belt** threaded correctly around the safety seat or through its frame.
- The safety belt and CSS harness straps should be clearly visible.
- Any adult or older child shown in the car should also be wearing a safety belt, preferably a combination belt. **Lap belts** must be placed low on the hips.
- Use contract (e.g., child's light clothing against dark harness straps) for clear definition.
- Allow time for another try, in case the first set of photos or drawings isn't right.

When Information Isn't Enough

Facts are only part of what's needed to change attitudes and create new habits. Some other ways to "sell safety" include:

- **Using positive images and messages** (e.g., parents may listen when told that children are usually better behaved when buckled up, children may pay attention to what a teddy-bear puppet or a commercial symbol like Ronald McDonald tells them to do).
- **Repeating messages in different media** for reinforcement (e.g., using bumper stickers, parking lot signs, radio announcements as reminders).

- **Giving incentives** for proper and continued use (e.g., stickers, balloons, burgers).
- **Using peers** to approach others (e.g., parents speak with parents, nurses to nurses).
- **Using respected leaders** as spokespersons (e.g., physicians, sports start).

Evaluation

Evaluation is essential. It tells you and your funding sources what your program has accomplished. Evaluation can be simple or elaborate, inexpensive or costly, quick or time-consuming. Done properly, it can:

- **document the scope** of the problem.
- **measure the progress** of your project.
- **provide you with facts and figures** for public education.
- **provide important information** which may indicate you're on the right track—or that you need a mid-course correction.

But you must plan your evaluation **before** you start the project. It's impossible to tell what effect you've had if you didn't measure the situation before you started.

Child passenger safety projects can be difficult to evaluate for a couple of reasons. First, our ultimate goal, the protection of children from injury and death, is difficult to measure: it's close to impossible to document how many injuries were **prevented** due to the use of seatbelts and car seats. However, in States with strict enforcement of child passenger safety laws, accident reports may yield interesting "before and after" data. Second, in a single community the number of victims of auto accidents is relatively small each year. . .and the number of child deaths a small percentage of that total. Therefore, dramatic change from one year to the next may not be apparent.

But don't be discouraged: there **are** ways to determine whether your program is having an impact. Read on!

Observation Surveys of Child Restraint Use

Such surveys give you information on what people do, not what they say. Self-reported levels of safety belt use are always higher than actual levels, because many people don't want to admit, to themselves and to others, how often they don't buckle up. An observation survey defines the problem in local terms; it gives you a benchmark for measuring progress and, not the least of all, by generating publicity, it motivates people to get actively involved in the project.

Plus, you end up with surveyors who are "turned on" to the problem and may become active supporters.

See: NHTSA's Guide to Conducting Seat Belt and Child Restraint Observation Surveys (listed in the Appendix).

Observing Proper Use

Surveys should distinguish between overall use of child safety seats and "proper use." It is well known that many seats are used incorrectly and that this limits their effectiveness, sometimes fatally. Remember that an increased overall use rate measures a certain degree of success, while an increased correct-use rate means that your program is getting across some of the toughest concepts. Spotting common types of incorrect use can help you pinpoint a needed information campaign.

You must define *explicitly* the criteria used to guage proper use throughout your survey and train all observers to use these criteria uniformly. Seasoned observers know that it is difficult to spot accurately **all** elements of correct use, even in stopped vehicles, and to recognize what is correct for the many models of safety seats in use.

In comparing your results with those of other surveys, remember that definitions of correct use vary widely (some are based only on the presence of a lap belt holding the seat).

Other Types of Surveys

After you've finished an initial observation survey, you may want to look at the number of children injured in traffic accidents in your area. A survey of hospital emergency rooms and doctor's offices may give you a good estimate of this number. You may be able to discover the level of restraint use by children who were actually involved in accidents from State accident reports (although be warned, some States do not include this information on their forms).

You also may want to survey parents to find out how much they know about how to correctly protect children, their sources of information, and their attitudes about the value they place on such knowledge.

Follow-up surveys of the same type at regular intervals can help you measure your progress.

Sources of Assistance in Surveys

Students and teachers in nursing, public health, social work, psychology and statistics may be willing (and eager) to design questionnaires, prepare training materials, conduct surveys, and summarize the data. Making contacts with professionals in this area is good for educatin and publicity, too.

Loan A Seat For Safety: A Service That Can Start a Healthy Habit

Numerous organizations have become involved in child passenger safety by providing low-cost CSSs for infants and young children. The Jaycee Auxiliary was the first to sponsor a nationwide project, "Buckle up Babes." Now a growing number of groups, both large and small, public and private, offer "loan" or rental programs. Some operate alone while others are part of comprehensive community programs. All involve educating and encouraging parents to adopt safety habits as well as supplying hardware.

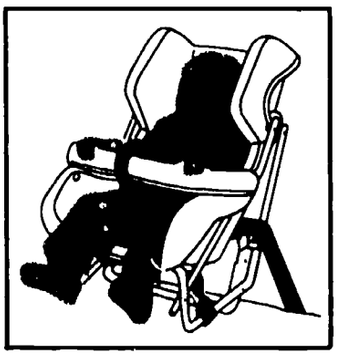
The most common type of loan program involves renting infant safety seats for a small fee plus a refundable deposit. Some services supply toddler seats. Loan programs come in all shapes and sizes:

- **Try Before You Buy.** This type of program allows the parent to use a CSS for two weeks, for a small fee. This is an especially good way for parents to "test" different models of toddler seats.
- **Buy Back Programs.** Safety seats no longer needed are purchased from parents and recycled into the loan program. (Do not accept seats which have been in crashes. See Chapter 4 for details on evaluating used seats.)
- **Free Loans.** Funding for seats, parts, and staff is not generated by the program, although deposits are advisable. From the parents' point of view, this certainly is the simplest as well as least expensive. Businesses can offer such programs to their employees.
- **Visitor Loans.** Short term loans are useful for children visiting the area—for example, to see grandparents who wouldn't have a need for safety seats otherwise.

To Have a Successful Program, You Need:

- a group willing to commit itself to operating the program for at least two years; it's usually best to make a loan program part of an established organization;
- publicity, education, and demonstration of the proper use of the safety seat;
- a method for cleaning and refurbishing returned CSSs;
- accurate recordkeeping (so you know who has what) and attention to legal issues like liability and insurance.

In the mid-seventies the first loan programs were started by small groups in such widely scattered places as Seattle, Washington, and Iron County, Michigan. Some excellent guides have since been developed for starting and running successful programs. Rather than attempting to duplicate them, we urge you to order the materials listed in the Appendix if you want detailed information.



Chapter 3

SUCCESS STORIES

Getting It All Together

Now we offer you the stories of several groups which have "gotten it together" and make a significant impact in their communities. These child passenger safety advocacy groups—very different in size and scope—are only three out of the many which are taking the lead in protecting children.

Los Angeles Area Child Passenger Safety Association

QUESTION: Can 15 volunteers make a difference in an area where 8 million people live and work?

ANSWER: YOU BET. And it doesn't have to take a long time.

In 1980, 15 people, several of whom were long-time members of Action for Child Transportation Safety, started the Los Angeles Area Child Passenger Safety Association (LAACPSA). Three years later, the organization boasts 2,000 people on their mailing list, and a membership which includes about 40 corporate members. Corporate members include day care centers, businesses, and an auto manufacturer.

LAACPSA focuses on educator workshops: free 5-hour sessions which provide participants with information and a 100-page workbook they can take back to their communities to start their own programs.

"But when the police officer, health professional, social worker, concerned parent, or teacher leaves CPSA workshop, he or she isn't alone. Follow-up is essential. The volunteer is supported by us: we act as a resource, we will help them in putting on their own training sessions in their community," says Stephanie Tombrello, LCSW, Executive Director of the LAACPSA.

The multiplier effect is evident here: one volunteer who attended a LAACPSA workshop took her knowledge back to her employer, a local hospital. She educated department heads and staff; now she has volunteers visiting each new parent; the hospital has a loan program and a comprehensive education program.

Another key element in the LAACPSA's work is cooperation with other community groups. The Auto Club of Southern California provides the printing of workshop materials, and an Auto Club staffer is a speaker at the workshop; the other sponsor of the workshop (e.g., a hospital) provides the facility, equipment, and support services; the LAACPSA provides the content.

Other contributions have given the LAACPSA a computerized mailing list (courtesy of a local diaper service); office space and furniture; accounting and legal advice.

How did the group come by these services? "We let people know what we needed," explains Tombrello, adding that it's essential to show everyone in the community how it's in his or her own self-interest to become involved.

California's law has been an asset in many ways, Tombrello says. "The #1 effect has been on other institutions: the law helps make child passenger safety a clear priority."

Peoria, Illinois, Committee for Child Passenger Safety

"We concentrate our efforts on parents," says Holly Kupper, Chairman of the Committee for Child Passenger Safety, a subgroup of the Childbirth and Parent Education Association of Peoria, Illnois.

The "parent" organization has about 300 members, but the Committee for Child Passenger Safety numbers only six. Yet these six volunteers have:

- worked with Lamaze instructors to include child passenger safety information in presentations;
- developed a "Buckle Bug" program and presented the safety information to 1,600 preschoolers in a 3-month period;
- designed educational brochures, one of which was reprinted by the Illinois Department of Transportation.

"What are the funding sources"? we wanted to know. "Beg, borrow, and steal," Kupper jokingly told us, adding that the group as yet hasn't made serious efforts at fundraising. Some monies have been provided by the parent organization and the Illinois Child Passenger Safety Association. Most of their fuel comes from their energy and enthusiasm.

Burlington/Alamance County, North Carolina, Child Passenger Safety Association

"We raised the money for 30 child safety seats in two days," says Beth Bowden of the Burlington Junior Women's Club, in Alamance County, North Carolina.

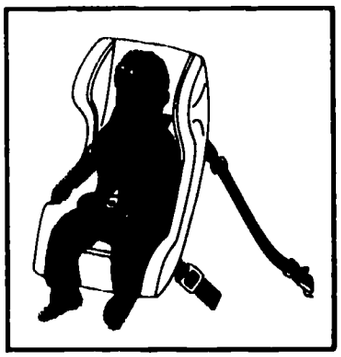
She's talking about a child passenger safety association (CPSA) program which could serve as as model of productive cooperation between volunteers and government. Seats provided by the Junior Women's Club were matched, seat for seat, with those from the Governor's Highway Safety Program. The current loan program supplies 140 seats, with local hospitals, the Club, and the Alamance County Health Department all participating.

The community involvement of the Burlington/Alamance CPSA extends to projects beyond the initial loan program. The CPSA volunteers have:

- educated nurses, teachers, police personnel and parents;
- helped to introduce child pasenger safety into home economics classes;
- developed a local buyer's guide.

"We started off with about two members, and two public health nurses who really got us interested," says Bowden. "Now we have about 80 volunteers who help out in one way or another."

Members of the CPSA include doctors, public health nurses, and representatives from area hospitals, schools, and service organizations.



Chapter 4

HOW TO PROTECT CHILDREN: WHAT CHILD PASSENGER SAFETY ADVOCATES NEED TO KNOW?

How Restraint Systems Protect People: The Human Collision

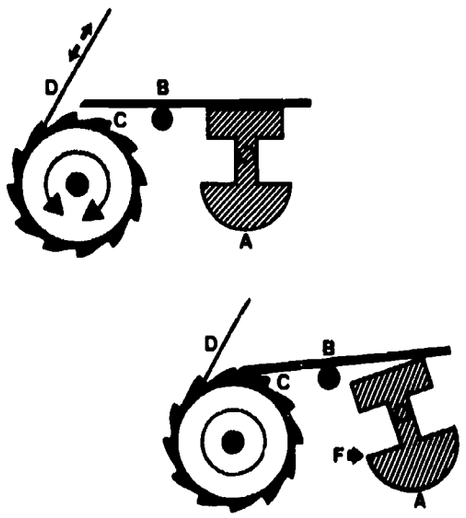
Crashes that wreck cars need not wreck lives.

Injuries occur when a person is thrown against the interior of the car or ejected from the vehicle after the car's collision. Safety belts or car safety seats prevent the human collision from occurring. To put it another way, a person in a restraint collides against the system itself, which is designed to absorb crash forces without causing injury.

The force with which an unrestrained person hits the windshield or pavement is hard to imagine. Think of the impact of a child falling from a third-story window onto the pavement head first. That's about the force with which he or she would collide in a 30 mile—per—hour crash.

How do restraint systems protect their users?

- Under stress, belts and harnesses stretch and hold the body, so it slows down with the car. The system takes advantage of the energy absorbed by the car in the process of crushing steel. Loosely fastened belts or straps can cause a severe jolt to the body because they do not stretch gradually as the body is thrown against them. This is one reason why safety belts must be worn tightly fastened. Tight belts also prevent excessive stretch over the length of the restraint system, which could allow the person to strike the car's interior.
- Restraint systems are designed to contact the strongest parts of the person's body, the hips and shoulders, to avoid crushing fragile internal organs. This is why:
  - the lap belt must be worn as low as possible, not up on the soft, vulnerable abdomen;
  - shoulder belts should be worn over the shoulder. Tucking the belt under the arm closest to the door could cause the rib cage to be crushed during impact, affecting the heart and lungs.
- Restraints reduce the effects of crash forces by spreading these forces over a large area of the body. This is why belts and harness straps are wide and should not be used when twisted or rolled.
- safety belts which lock **only** when the vehicle decelerates rapidly (vehicle sensitive systems) are mistrusted by many people. This diagram shows how they work:
  In the first diagram, showing normal driving conditions, the retractor (C) permits the belt (D) to move freely in and out.



In the second, the force of the crash (F) tilts the pendulum device (A). The pendulum moves the locking bar (B) into the racket mechanism of the retractor (C) which locks the belt, holding the passenger firmly in place.

Safety Standards for Car Safety Seats: How do we know CSSs will protect their users?

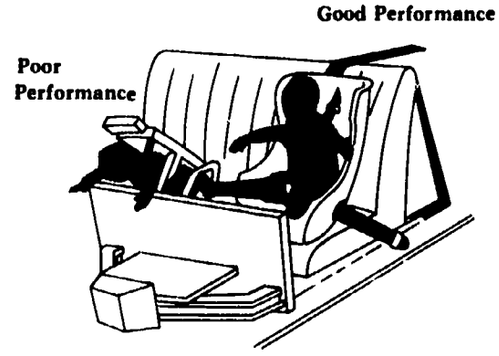
When used correctly, car safety seats do an excellent job of reducing the effects of severe crash forces on children's bodies, as crash studies and statistical analyses have shown. Their manufacture is regulated by the U.S. Department of Transportation's Federal Motor Vehicle Safety Standard (FMVSS) 213 as follows:

- **CSSs made on or after January 1, 1981** must pass strict performance ("dynamic") tests, which simulate severe crash conditions. Seats must be labeled with the month and year of manufacture. A summary of the 1981 version of FMVSS 213 is given below.
- **Car seats made between 1971 and 1981** were required to pass a less stringent version of FMVSS 213, which called for "static" testing only, and did not cover infant safety seats.
- **Date of manufacture** is the only way to tell from the label which version of the standard the seat is designed to pass. The number of the FMVSS does not indicate which version applies.
- **Some restraints made before 1981** were, however, designed for crash protection and passed crash tests similar to those now required. Those models provided substantially the same protection as newer ones when used according to directions. You will find a list of these pre-1981 crashworthy models, many of which are still in use, in the Appendix.
- **Car seats made before 1971** were totally unregulated and the vast majority afforded **NO** protection for their users. Some are still in use.

Major Requirements of "FMVSS 213" (1981 Version)

Federal Motor Vehicle Safety Standard (FMVSS) 213, Child Restraint Systems, applies to all child passenger protection devices made on or after January 1, 1981. The Department of Transportation conducts periodic crash tests of off-the-shelf models to make sure that manufacturers are meeting this standard. FMVSS 213:

- Covers all types of systems made to carry children weighing up to 50 pounds in motor vehicles. This includes infant and child safety seats, harnesses and car beds.
- Requires 30 mile-per-hour frontal dynamic tests that simulate car crashes (see diagram). Prohibits systems from collapsing and requires them to retain infant and child test dummies during dynamic tests.



Michigan Office of Highway Safety Planning

- Requires that CSSs equipped with top tether straps or armrests provide a minimum level of safety performance in 20 mile-per-hour crash tests when misused. Tether seats must work satisfactorily without the tether fastened and armrests must provide a reasonable level of restraint without the built-in five-point harness. (A loophole allows CSSs with armrests to

avoid this test if the armrest cannot be used without the harness in place. Spring-loaded armrests have not passed this misuse test.)

- Requires warnings concerning proper use to be permanently and visibly affixed to the CSS which must also have a place for storing the manufacturer's instruction booklet.

Protecting Children: Seats, Straps, and Shields Explained

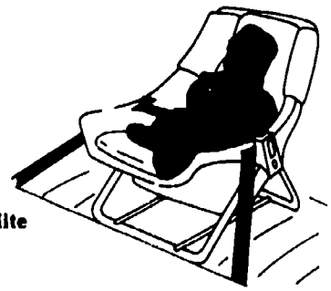
The Unborn Child:

The greatest hazard to the unborn child is the serious injury or death of the mother. Pregnant women can best protect their fetuses by using snugly-fitted lap and shoulder belts whenever they travel. Lap belts should be fastened beneath the "bulge."

The Infant:

Infant safety seats fit children from birth to 17-20 pounds, or about nine months of age. They may be designed exclusively for this size child or may be convertible to fit an older child as well. Major features are:

- **Baby faces rearward.** This allows major crash forces to be absorbed through the back of the CSS, thus putting minimal stress on the child's body, neck or head. Since an infant's shoulders are extremely flexible (think of their ability to pass through the birth canal), a harness system **cannot** be the main means of containment.



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Michigan Office of Highway Safety Planning

- **Semi-reclined position** permits the baby to be reasonably comfortable while preventing the CSS from tipping so far forward on impact that the baby could be thrown out head first. Although some parents worry about putting a tiny baby in this position, there is no evidence that it is harmful. Manufacturers' directions regarding the angle of tilt for in-car use must be followed strictly, as some also can be reclined further for in-home use.
- **Harness** helps keep the infant within the CSS at the time of impact and rebound, or during a roll-over. Straps must be placed on infant's shoulders, close to the neck.
- **Seat belt** holds the restraint to the auto seat, and must be tightly fastened.

Toddlers and Preschoolers:

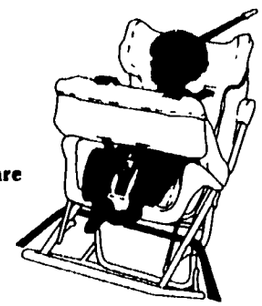
Restraints for this group, 17-45 pounds, 9 months-4 years, are either convertible from the infant mode or built specifically for this size child. Child must be strong enough to sit up unaided before placed in this type of seat. Major features include:

- **Forward-facing, upright position** allows the child to see out and provides space for long legs. The upright position gives better protection than a forward-facing reclined position.

- **Harness** is the primary means of restraint built into most safety seats. Many harnesses have five straps, two over hips, two over the shoulders, and another between the legs. Crotch strap must be short to keep hip straps from riding up onto the abdomen. Some seats have shoulder and crotch straps attached to a small padded shield, which takes the place of hip straps.
- **Harness with Armrest** provides no additional safety for the child. Five-point harness restrains the child, although the armrest may look like a safety shield and even be called a shield in sales brochures. Unfortunately, many parents mistakenly use the armrest without the harness. Newer models have springs attached to the armrest, which must be held in place with the safety harness. (Armrests are a sales feature, used by manufacturers who realize that many parents believe "something in front of the child," will protect him. In reality, an armrest does not protect and isn't particularly convenient to use.
- **Shield** is a close-fitting, broad, curved surface placed in front of the child. A partial or mini-shield is used with a shoulder-crotch harness. The largest shields provide protection without any harness.
- **Safety belt** hold the CSS to the auto seat. The CSS must be pushed into seat cushion to fasten belt snugly. Belts on some CSSs are fastened through the frame, while in other models, belts wrap around the front of the restraint.
- **Tether** is a single or Y-shaped strap anchoring the top of some models, to keep the child from pitching forward in a crash, which could allow the

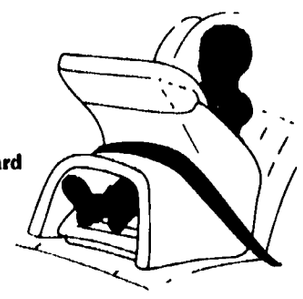
Cosco/Peterson
Safe-T-Seat 78-A

Michigan Office of Highway Safety Planning



Strolee Wee Care

Questor SAFE PASSAGE



Fort Tot Guard

Michigan Office of Highway Safety Planning

child's head to hit the inside of the car (illustrated on Strolee Wee Care shown above). If the CSS is placed in the rear, the tether must be secured to a permanently installed tether bracket. When the CSS is used in the front seat, the tether is fastened to a rear seat lap belt. A tether model provides an added measure of safety, but if the tether is not used, as is often the case, the seat will give **less** protection than would a model designed for safety without the tether. (See Day-to-Day Difficulties for installation instruction.)

- **Auto booster seats** are firm, sturdy seats with no permanently attached backs, designed for children over 20 pounds, and especially suitable for children who have outgrown toddler safety seats. An auto booster must be used with a combination lap and shoulder belt system, or with a lap belt **and** shield, or with a special body harness for upper-body proteciton. Belt-guides or small arm rests:

Century Safe-T-Rider

Michigan Office of Highway Safety Planning

- hold the lap belt in a safe position low over the child's upper thighs;
- keep the booster from sliding forward and out from under the child;
- position the shoulder belt properly across the child's chest.

Boosters should **never** be used with the lap belt alone although many parents do this. A booster and lap belt combination could permit the child to pivot far enough forward on impact to violently hit his or her head. Parents should be warned that the child would be better off using the lap belt alone.

The Older Child

Auto booster seat with harness or shoulder belt gives excellent protection for the larger child (age 4-8). (See above.)

An auto lap belt is the next best choice. The child should sit down on the seat (not on a makeshift booster or cushion) with buttocks against the seat back. The lap belt should fit low under the abdomen and be tight.

The shoulder belt should be used if the child is seated in the front seat or if the rear seat has shoulder belts. The child's height and the car's type of belt will determine whether the shoulder belt fits properly. It should not lie across the child's face. If the chld is too short, slip the shoulder belt behind the child and use the lap belt alone. Never put the shoulder belt under the armpit.

An automatic belt should not be used by a child unless it has an adjustable lap belt as well as the automatic belt. Consult the auto owner's manual. VW recommends that children ride only in the rear

seats of Rabbits equipped with automatic belts because the knee bolsters, which the place of lap belts in the front seat, are too far in front of the child's knees to work properly.

Special Protection for Physically Handicapped Children

Dynamic tests of various types of equipment used to seat handicapped children in cars, vans, and buses have shown that a number of the systems commonly used may be inadequate for crash protection. Among the devices in questions:

- velcro-fastened vests
- padded lap belts
- wheelchairs facing sidewards in vans
- wheelchairs which fold up for placement on a vehicle seat.

Two restraints have been designed and approved as crashworthy under FMVSS 213, as of October 1983. Each would be useful for children with certain specific physical needs for support.

The Britax Handicapped Child Seat is a large shell-type seat with a five-point harness and thick padding that can be adjusted to conform to and support a handicapped child's unique physical condition. It fits children from 20 to 80 pounds and is marketed in the U.S. by Questor.

The E-Z-On Vest by Rupert Industries can be fastened either to a schoolbus-type seat or in the family car. It has a special anchor strap that wraps around the bus seat and fastens to the vest in four places at the hips and shoulders. In a car it is anchored with a lap belt and top tether strap. It comes in a wide range of sizes to fit toddlers, children, and adults.

Sources of Safety Seats

Loan Programs for care safety seats are run in many communities by hospitals, health departments, and civic organizations. They rent out infant and/or toddler safety seats at low cost to families which cannot afford or prefer not to purchase seats. Parents usually pay a small fee and a refundable deposit.

Retailers such as large catalogue stores, local department, and speciality stores carry CSSs. Prices vary widely so parents should be encouraged to comparison shop or use a local shopping guide developed by a community group. The advantage of buying from a local retailer is that proximity makes it easier for parents to try a seat in their car to make sure that it will fit, and to exchange the seat if fit is a problem.

A second-hand market exists, through trades or loans among friends acquaintances, or through bulletin board sales, garage sales, or second-hand shops. A used seat may be a bargain, but only if the purchaser will go to the trouble of checking it out and refurbushing it if necessary. Buyers must know:

- **Is the CSS crashworthy?** Seats with a manufacture date of January 1981 or later can be considered safe. For CSSs made before that time, the model must be listed as having passed crash tests (See list, Appendix).
- **Has the seat been used during an accident?** Check the frame and body for cracks and bends, but remember that crash damage may not be noticeable, so, if possible, ask the owner. If in doubt, don't buy it, no matter how great a bargain it may be.
- **Are the manufacturer's directions provided with the seat?** If not, order from maker. (See Illustrated Guide to Pre-1981 CSSs in Appendix)
- **Are all harness parts present?** If not, order immediately.
- **Does the seat require a tether?** If so, be sure to install it.

Car Rental Agencies including Hertz, Avis, and National are providing infant and toddler seats at little or no cost to their customers, so families have the convenience of safe restraints when they travel. Always reserve CSSs in advance.

Choosing and Using Car Safety Seats

So you've convinced parents to get a safety seat. What next?

Choosing "the best" safety seat

An informed choice can make the difference between successfully protecting the child and frustrating both parents and child to the point where they misuse the CSS or stop using it altogether.

More than half of all CSSs are incorrectly used, according to some studies. Accident investigations and crash tests of seats used improperly have shown that children can be seriously injured due to such mistakes as:

- using an infant safety seat facing forward;
- failing to fasten the safety belt tightly around the safety seat;
- fastening the safety belt in the wrong place;
- failing to use the tether strap, if the model needs one;
- ignoring the child's harness and/or shield;
- leaving the harness or tether slack.

Why do parents have so many problems?

Car safety seats are often complicated to use, and their instructions may not be entirely clear. What may appear at first to be an excellent feature of one model may turn out, in practice, to be frustrating or impossible to use.

Not only is there a wide variety to choose from but the equally wide variety of auto belts and seats complicates matters. For example, if the belt does not fit through or around the CSS it cannot protect the child. If the rearward-facing CSS is too long to fit between front and rear seats when reclined, parents are tempted to turn it forward while the baby is very small.

What do parents need to know to choose the best seat for them?

- Parents can often avoid these problems if they choose their child safety seats carefully, understanding how each part protects. It is essential to pick a model that is:
  - compatible with their car's safety belts;
  - easy to use;
  - comfortable for the child.

- **A child's acceptance of the seat** has been found to be the most critical factor involving the parents' satisfaction with the child safety seat and, consequently, their willingness to use it. Unfortunately, parents are often unable to anticipate which seat will most appeal to the child. Also, seats are not always designed to take the child's comfort into account. Factors affecting the child's comfort include:
  - freedom of arm movement;
  - relatively unobstructed view inside and out;

- comfort of the body in harness or shield as the child grows or puts on bulky winter clothing.

- **Why safety seats work the way they do, and why misuse is a serious problem.** Information that emphasizes the way seats function will help motivate parents to make a good choice and to use it well.
- **How to evaluate the convenience of various features.** Generally, the fewer setps the parent must follow in daily use, the more likely he or she is to use the CSS properly.
- **Even a well chosen seat may not serve the family's needs for the entire time a child fits it.** Purchase of a new car with incompatible belts, discomfort of the growing child, or participation in a car pool may make the originally-chosen seat inconvenient or impossible to use. If so, it should be replaced.

Several papers listed in the Bibliography are excellent references on proper use: Shelness and Jewett, Weber, and Weber and Allen.

The chart on the following pages, **Guide to the Selection of a Safety Seat,** was designed to help parents assess various features of CSSs and safety belts for compatibility. Other problems which should be taken into account in determining compatibility with the automobile include:

- the length of a convertible CSS in the rear-facing position when placed in front or rear seat;
- the length of the seat belt;
- the buckles which meet the frame of the restraint in such a way as to make tightening very difficult.

The bottom line is to try the CSS in both front and rear seats of the car and make sure the belts can be used and fastened tightly.

Demonstrating Correct Use

Seeing how a CSS is used and handling it helps parents to remember what they are learning about proper use. The goal of a demonstration is to show **how** and **why** CSSs are used as they are.

Equipment needed:

- CSSs available locally new or used from local loan programs;
- Chair with lap belt attached, or junk-yard bucket seat with lap belt;
- Dolls of proper size, or infant and child (only if predictably well behaved);
- Locking clip;
- Blanket with harness slots cut for infant use.

Common features of infant and child CSSs to be stressed:

- A CSS protects by keeping the child from being thrown about inside the car, or ejected entirely, and by spreading crash forces over the strongest parts of the child's body. It can only do this if:
  - harness and/or shield are fastened around the child, with no more than one inch slack over the child's chest. And the crotch strap must be short;
  - safety belt holds CSS to car, and is tightly fastened, in the correct place on the CSS;
  - instructions are followed carefully. Labels on seat do **not** contain complete instructions.

Guide to the Selection of a Safety Seat for Toddlers (20 to 40 pounds)

Prepared by the University of North Carolina Highway Safety Research Center, CTP 197-A, Chapel Hill, N.C. 27514.

What type of safety seat do you want to buy? (You have three choices.)

TODDLER SEATS

Advantages: Some models can be used for children up to 50 pounds. Shield type is very easy to use.

Disadvantages: They cannot be used as infant carriers for later children. Selection of models is limited.

Do you want a shield type or harness type?

SHIELD

Advantages: Shields can accommodate children up to 50 pounds and are very simple to use.

Disadvantages: Shields have no side protection, so center rear installation is recommended. Also children can climb out while car is in motion.

RECOMMENDED MODELS

Ford Tot Guard
Chrysler Mopar Child Seat

HARNESS

Advantages: Harness seats offer increased side protection and are harder for children to get out of.

Disadvantages: Harness seats are not as simple to use as shields.

RECOMMENDED MODELS

* Century Child Love Seat #4600
* GM Child Love Seat
Kantwet Safeguard 301
Strokee Wee Care 595A

CONVERTIBLE MODELS

Advantages: Convertible models can be used as infant carriers for later children. A wide selection of models is available.

Disadvantages: Some models in the infant and/or toddler mode do not fit some seat belts.

Do you want a safety seat that sits low on the car seat or do you want a model that will elevate your child?

ELEVATED MODEL

Advantage: Some children are more content and better behaved when they can see out of the window.

Do you want a tethered or non-tethered model?

TETHERED MODEL

Advantages: Tether straps increase the stability of the seat. Because they allow less forward movement of the head, they can be used in both the front and rear seats of small cars.

Disadvantages: To use a tethered model in the front seat requires the use of the rear seat belt and eliminates use of that rear position. To use a tethered model in the rear seat requires drilling a hole in the rear window shelf or cargo area for anchoring bracket. Transferring from car to car is more difficult, requiring anchor bracket installation in each car (or front seat use).

RECOMMENDED MODELS

Strokee Wee Care 597A, 599, P599
Kantwet One Step (tether required on models manufactured before 11/81)
Bobby Mac Super (threading of oversized buckle is difficult in infant position)

NON-TETHERED MODEL

Advantages: Lap belt alone is able to secure non-tethered seats, so they transfer easily from car to car without need for special installation. Non-tethered models perform better than improperly tethered models.

Disadvantages: Non-tethered seats allow more forward movement of the head in a crash, so toddler mode use in front seat of small cars is discouraged.

If your car is Japanese-made, is the rear seat belt wind-up reel part of the buckle?

Yes, reel is part of buckle.

RECOMMENDED MODELS

International/Teddy Tot Astronaut
Kantwet One step (tether required if manufactured before 11/81)
Welsh Travel Tot
Wonda Chair #810

No, car is non-Japanese or reel is not part of buckle (reel is on the floor beside seat, under seat, or in hidden location).

RECOMMENDED MODELS

Century 100, 200, 300
Collier-Keyworth Safe-N-Sound
Cosco/Peterson Safe and Easy, Safe & Snug, Safe-T-Seat, Safe-T-Shield
International/Teddy Tot Astronaut
Graco Little Traveler #310, #315
Kolcraft Hi Rider, Rodi Rider, Rodi Rider with E-Z-Gard
Pride-Trimble Pride Ride 830, 830
Strokee Wee Care #612, #618
Welsh Travel Tot
Wonda Chair #310

MODEL THAT SITS LOW

Advantage: None of these models require tether straps.

RECOMMENDED MODELS

Bobby Mac 2 in 1, 3 in 1
Bobby Mac Champion, Champion 3 in 1
Bobby Mac Deluxe, Deluxe II

BOOSTER SEATS

Advantages: The main use for booster seats is to elevate children who have outgrown their safety seats but are too short to use the adult lap and shoulder belts and see out of the car.

Disadvantages: Since booster seats offer no side protection, a safety seat is preferred for children who can still fit in one. Also booster seats require the use of lap and shoulder belts or a body harness that must be anchored to the car like a tether strap.

RECOMMENDED MODELS

Century Safe-T-Rider Deluxe, Safe-T-Rider II, Safe-T-Rider II Deluxe
Collier-Keyworth Co-Pilot
Cosco/Peterson Travel Hi-Lo #83A, #183A, Deluxe Travel Hi-Lo #383A
International/Teddy Tot Astrorider
Kolcraft Tot-Rider, Tot-Rider XI
Strokee Wee Care 602, 604
Volvo Child Safety Cushions (over 50 pounds only)

Safety Seat for Handicapped Children

Britax Handicapped Child Safety Seat—Seat adapts to fit children with a variety of special needs, will accommodate children up to at least 60 inches and 80 pounds. Currently seat must be special ordered. Call TOT LINE for additional information.

Guide to the Selection of a Safety Seat for Infants (Birth to 20 pounds)

Prepared by the University of North Carolina Highway Safety Research Center, CTP 197-A, Chapel Hill, N.C. 27514.

Do you want an infant carrier or convertible model?

INFANT CARRIER

ADVANTAGES: Infant carriers are designed for use by infants only. Generally, they are easier to install in cars, easier to secure infants in, and fit almost all cars. Lighter weight than convertible models, they are easier to carry a baby around in, and substitute well for household "feeder seats." (But household feeder seats DO NOT work as safety seats.)

Disadvantages: A second purchase, either a toddler seat or convertible model, must be made when the child reaches 17-20 pounds, so they are more expensive in the long run than the convertible models.

RECOMMENDED MODELS
Century Infant Love Seat
Cosco/Peterson Fun Ride
Ford Infant Carrier
GM Infant Love Seat
Mopar Infant Safety Carrier
Questor Dyn-O-Mite

CONVERTIBLE MODEL

ADVANTAGES: Convertible models convert from infant carrier to toddler seat so they can be used from birth through 40 pounds (about 4 years). Since no additional purchases are necessary, they are the most cost efficient choice. They are also the best choice for a large infant who will soon outgrow the infant position.

Disadvantages: Usually convertible seats are more cumbersome than infant carriers when used as a substitute for household "feeder seats." Some models do not fit some seat belts in both infant and toddler positions.

It is important when choosing a convertible seat for your infant that you choose a seat that will also suit your needs when your child becomes a toddler. The following questions deal with convertible seats when used as toddler seats.

Do you want a safety seat that sits low on the car seat or do you want a model that will elevate your child?

ELEVATED MODEL

Advantage: Some children are more content and better behaved when they can see out of the window.

Do you want a tethered or non-tethered model?

TETHERED MODEL

Advantages: Tether straps increase the stability of the seat. Because they allow less forward movement of the head, they can be used in both the front and rear seats of small cars.

Disadvantages: To use a tethered model in the front seat requires the use of the rear seat belt and eliminates use of that rear position. To use a tethered model in the rear seat requires drilling a hole in the rear window shelf or cargo area for anchoring bracket. Transferring from car to car is more difficult, requiring anchor bracket installation in each car (or front seat use).

RECOMMENDED MODELS
Strollee Wee Care 597A, 599, P599
Kantwet One Step (tether required on models manufactured before 11/81)
Bobby Mac Super (threading of oversized buckle is difficult in infant position)

NON-TETHERED MODEL

ADVANTAGES: Lap belt alone is able to secure non-tethered seats, so they transfer easily from car to car without need for special installation. Non-tethered models perform better than improperly tethered models.

Disadvantages: Non-tethered seats allow more forward movement of the head in a crash, so toddler mode use in front seat of small cars is discouraged.

If your car is Japanese-made, is the rear seat belt wind-up reel part of the buckle?

Yes, reel is part of buckle.

RECOMMENDED MODELS
International/Teddy Tot Astroseat
Kantwet One Step (tether required if manufactured before 11/81)
Welsh Travel Tot
Wonda Chair #810

No, car is non-Japanese or reel is not part of buckle (reel is on the floor beside seat, under seat, or in hidden location).

RECOMMENDED MODELS
Century 100, 200, 500
Collier-Keyworth Safe-N-Sound
Cosco/Peterson Safe and Easy, Safe & Snug, Safe-T-Seat, Safe-T-Shield
International/Teddy Tot Astroseat
Kolcraft Hi Rider, Redi Rider, Redi Rider with E-Z-Gard
Pride-Trimble Pride Ride 820, 830
Strollee Wee Care #612, #618
Welsh Travel Tot

Seat Belts For Young Children

There is no safe way to transport an infant (under 20 pounds) other than in a safety seat. Children who weigh at least 20 pounds and who are able to sit up by themselves can safely use an adult seat belt. Seat belts do not provide the same amount of protection as safety seats, but should be used when no safety seat is available or if parents decide not to obtain and install a safety seat. The lap belt should be snug and as low on the child's hips as possible. An attached shoulder belt that crosses the child's face or neck should be placed behind the child's back, not under the arm. Pillows or cushions should not be used to boost a child since they can slide out from under the child allowing him or her to submarine under the lap belt, or allowing the child's head to move so far forward that it strikes the car's interior.

Large Buckles

Many Japanese-made cars have rear seat belts with bulky wind-up reels attached to the male end of the buckle. These oversized buckles are too large to be threaded through some safety seat frames and even when threading is possible, cannot be adequately tightened. If your car has oversized buckles, carefully select a seat that allows room for the threading and tightening of such buckles or replace the belts with a different type.

Oversized Buckle

Demonstrating Infant Safety Seats

Securing infant within seat:

- Suggest doing this with the seat out of the car the first time, to allow for adjusting the harness easily.
- Prepare CSS for baby by placing it in manufacturer's recommended reclined position, if adjustable, and making sure straps on a convertible seat are in the lower slots.
- Place infant into the CSS buttocks first, holding the head and shoulders with one hand and the thighs with the other. Baby's back should be flat against the CSS—not slouched.
- Place straps over the shoulders and adjust for snug fit. Emphasize double threading of single buckles in harness system. Position shoulder strap retainer under infant's chin to hold straps in place.
- Tuck a warm blanket over the child, after buckling the harness. Show use of a blanket with slots cut for harness straps.
- Point out that the baby should wear clothes with legs so the crotch strap can be correctly placed.
- Show how to pad the sides of the safety seat with small towels or receiving blankets to support very small infants.

Securing the CSS to the Car:

- Place CSS on demonstration chair or auto seat. Buckle the belt as tightly as possible, pushing it down on seat. Note that belt placement varies from one CSS to another.
- **Emphasize that infant safety seats must face the rear of the car.** Facing the seat forward is a very common, hazardous error.
- Note that infant CSSs must be used only on auto seats with locking backs that are free of hard objects, such as speaker grills or folded armrests which could cause injury if the infant in its CSS is thrown back against the auto seat on rebound. Adjustable head restraints must be in the down position.
- Show how the CSS's base can be leveled with a rolled-up towel if the auto seat cushion slopes excessively.

Demonstrating Toddler Safety Seats

Preparing the CSS for the Child:

- Initial fitting of the harness should be done outside the car where there is room to maneuver.
- Using a convertible CSS, demonstrate steps necessary to change shoulder straps from infant to toddler position. Change position of any tubular supports for the frame and set reclining mechanism in the most upright position.

Securing CSS to Auto:

- Place CSS on demonstration seat facing forward.
- Thread and tighten auto lap belt through the back of CSS if so directed in manufacturer's instructions. Show how to fasten belt tightly.
- Secure the top tether strap, if CSS uses one. Tighten it firmly, explaining that the tether keeps the seat from pivoting forward in a crash. If impossible to simulate tether anchorage, show hardware and discuss anchor points for front and rear seat use.

- Seat child (or doll) in CSS, securing the harness and tightening it. Mention the importance of double-threading the buckles and using a shoulder strap retainer.
- Place any shield or armrest in position, explaining the difference between the two. Note that spring-loaded armrest must be fastened in place with the harness, which is the protective element of this system.
- If model uses belt in front of the child, secure the belt, Discuss the problems with emergency locking belts, and the various ways to tighten them, showing a locking clip.

Emphasize Family Safety

Everyone should buckle up because:

- anyone riding loose can injure others in the car;
- parents should set a good example for their children;
- children who ride protected are not infrequently survivors in crashes which seriously injure or kill their unrestrained parents.

Parents should be given time to give a return demonstration to the child safety instructor, or to try out various models and ask questions.

Practical Problems: Answering Parents' Questions

Many of the barriers to correct use can be overcome if parents' questions can be adequately answered. This section will help safety advocates anticipate most common problems and give practical answers to parents' questions.

How can I help my child accept using a safety seat?

General Hints:

- Praise children often for their good behavior in the car: "I'm really pleased that you sat in your seat all the way to the store."
- Stop the car and give the children attention before they become fussy, as a reward for good behavior.
- Talk to them and keep them busy with soft, non-hazardous toys.
- If a safety seat is new to a toddler, make it a special gift and allow to be played with in the house first. Start with short trips.
- Stop the car at once if a child gets out of the seat. Don't start up again until he or she sits down and is buckled up.
- Remember that releasing children from their seats because you're tired of the fussing will encourage them to fuss more next time.
- Carry a supply of easy-to-eat snacks, such as apple slices or bagels, that won't mess up the car if thrown or dropped.
- Sooth children with favorite music on a portable tape recorder. A large supply of tapes will help maintain parents' sanity.
- Plan long trips at nap time. Consolidate your errands to avoid making many short trips or many stops.
- Make sure that both parents and older children demonstrate good safety habits by buckling up.

Taming the "Obstreperous Ones" (9-21 months of age):

- If your child resists the seat, remember that this often difficult stage will pass when your child has outgrown the need to constantly demonstrate climbing ability.
- Tie soft toys to the restraints on short strings so they won't get lost under the seat.
- Talk with children, pointing out objects outside the car that they can see, like signs, bridges, trees.
- Avoid very long trips at this age, for everyone's sanity.

Reaching the "Teachable Twos" (18-36 months of age):

- Personalize their safety seats with stickers, their names, racing strips. Let them help you do this.
- Allow children to play with their seats outside of the car, sitting in them to watch TV or have a snack; buckling in dolls and teddy bears for imaginary rides.
- Keep a set of safe travel games and books for use only in the car.
- Sing simple songs together, even if you're no Caruso.

Encouraging Preschoolers' Safety Habits:

- Help them feel grown-up and knowledgable by serving as role models for younger children or friends.
- Encourage them to pretend to be race car drivers or astronauts when they buckle up. (Remember there are some women in those occupations now.)
- Use picture books and coloring books with safety messages and talk with them about why they buckle up, e.g. "to keep from bumping your head if I suddenly have to put on the brakes."
- Play simple verbal games in the car, or sing along together. Books of games are available in public libraries.
- On nursery school or day care field trips, arrange for all children to ride buckled up.

Long-distance Travel Tips:

- Plan regular stops to allow children to run around and babies to stretch out or be cuddled. Stop before they get too restless, making the stop a reward for good behavior. Travel in early morning, at nap times or at night when children will sleep.
- Pack snacks and a "surprise bag" of special toys for the car. Bring out items one at a time.
- Read aloud, if more than one adult is in the car. Taped musical favorites also are a great help in relieving boredom.
- Allow children to change places in the car for variety, if their seats are easily moved. Seat an adult with a child in the back seat part of the time, so each child will have periods of special attention.

Helping Elementary School-Age Children Accept Safety Belts

For Those Who Already Use Belts:

- Discuss reactions to negative peer pressure with them; help them think of ways to counteract it.
- Provide them with detailed information about why safety belts are important so they won't be buckling up just "because Mom and Dad make me."
- Use dashboard stickers to help them remember and to remind their friends of your "buckle up" policy.

For Kids to Whom Safety Belt Use is a New Idea:
- Provide opportunities for them to practice using and adjusting different types of belts.
- Help them get the seat belt habit by rewarding those who buckle up for an entire week or month.

For All Kids This Age:
- Show them the film, "Infants and Children in Car Crashes."
- Help them practice in speaking up to adults when they need help finding or adjusting a belt, and in responding to adults who say, "you don't need a belt in my car." (Sample responses: "I feel more comfortable belted"; "my parents want me belted.")

Day-To-Day Difficulties Parents Face: Answering Common Questions Parents Ask

How can I help my child accept using a safety seat?

- Present the safety seat as a "special" place for the child to sit.
- Allow toddlers to play with the seat in the house, using it to hold their dolls or teddy bears.
- See tips for various ages in the previous section.
- Make sure other family members also buckle up so the child doesn't feel he or she is asked to do something others don't have to do.

Where is a child safest in the car?

- The center rear seat is safest, because it is generally furthest from points of possible impact and from hard interior surfaces.
- Rear side positions are safer than the front seat.
- The front seat should be used if the driver must closely supervise the child, or if all rear seats are taken.

What if no car safety seat is available for use?

A child should never ride in the lap or arms of another person because:
- moderate or severe crash forces can tear a baby from the arms of even a strong adult wearing a safety belt.
- if the adult is unbelted, he or she will be thrown forward, crushing the child.
- putting a lap belt around both adult and child could result in adult crushing the child's body against the belt.

n infant, there is no substitute for a rearward-facing CSS.

- A cloth chest carrier worn by an adult provides no protection. The carrier would very likely be torn apart by impact forces as a dynamic test demonstrated. If not, the baby's head would be struck forcefully by the forward snap of the adult's head.
- A home feeding seat also cannot safeguard a child. Its structure and harness straps are not designed to withstand crash forces.

A child who can sit up alone should use a lap belt.

The growing consensus among experts is that a rear seat lap belt is an adequate, although not optimal form of protection for a small child because:

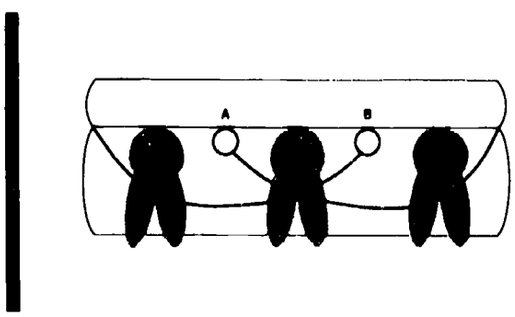
- lap belts will prevent ejection and other causes of irreversible head injuries;
- crash studies show that belts, when fitted correctly, are not likely to damage a child's internal organs. In rare instances, a safety belt may cause injury. In such severe crashes, the person usually would not have survived without the belt.

Correct fit is low and tight, across the upper thighs and under the belly. This can only be done when the child sits upright, with buttocks against the seat back.

- A pillow should never be placed between the child and the belt. This increases the possibility that the belt will ride up onto the abdomen.
- A make-shift booster cushion should never be used. It could slide out from under the child at the time of impact, allowing the belt to ride up.

What if I have more children to carry than I have safety belts?

- **The safest solution is to take another larger vehicle or a second one to handle the overflow.** Certainly, if the situation is a permanent or frequent one, extra passengers should not be carried (e.g., if your family increases in size or you participate in an on-going car pool).
- **Two children should not share one belt.** The two would be thrown against each other, hitting their heads. A trade-off would have to be considered between the potential for the unbelted child to be ejected or thrown into the windshield and the hazard to the two children belted together. Both situations could cause dangerous head injuries. Any driver considering this would have to weigh the risks.
- **Three children in the rear can share two belts, in some cars.** This is a relatively safe method, according to crash tests, but should not be relied on for long-term use. Place the largest child in the center and crisscross the belts, as the diagram shows. This can only be done in cars where the distance between belt anchor points A and B is at least as wide as the child's hips.



What can I do if my car's belts aren'ts compatible with my child's seat?

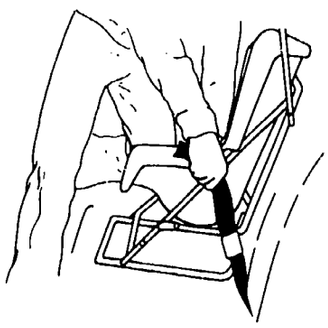
Finding Belts that will work with car safety seats:

- Front and rear, center and side belt systems will differ, so parents should try the CSS in all locations. **The center rear belt is most likely to be manually adjustable, and therefore the easiest to use.** If no location proves satisfactory, there are two options, given below. In any case, let the auto manufacturer know that you found the belts difficult to use and why.

- Use a different model of CSS that accommodates the design of the existing safety belts.
- Replace one or more rear belts with long, manually adjustable belts which can be adjusted both at the anchor point and the buckle. Adjust the buckle end short, the latch-plate end long, for most CSSs. This type of belt is inexpensive and versatile. (Installation information is found later in this section.)

Tightening safety belts securely around car safety seats:

- All CSSs are designed to be used with very tight lap belts. This can be difficult or impossible to do with some types of belts.
- Parents often are confused about the types of belts they have and how to handle them. CSS manufacturers' instructions regarding belts are not always clear.
- Regardless of belt type, the CSS should be pressed firmly into the seat cushion while the belt is adjusted. When the belt is tight enough the CSS should be very difficult to move by hand.
- Families with hard-to-adjust belts may want to select CSSs around which the belts can be left fastened permanently, unless they frequently move the CSS from car to car. In this case, replacing the problem belts might be the least frustrating solution in the long run.



Anchoring Seat Tightly with a Manual Belt

Questor SAFE PASSAGE

Manually-adjustable belts: there are several types, all easy to use.

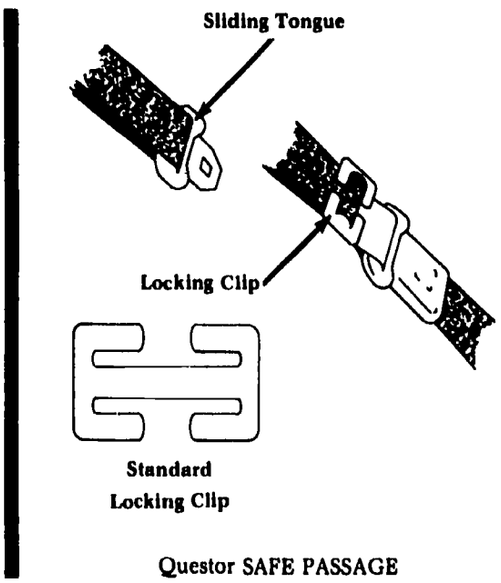
- One kind of lap belt is adjusted simply by pulling the webbing through the buckle.
- Another type locks on a retractor when pulled out and released. Adjust by latching the belt, then feeding the belt smoothly back into the retractor until snug.
- A third type is a combination lap/shoulder belt with a latch-plate that, when buckled, locks the lap portion while allowing the shoulder belt to move in and out on a retractor. Tighten lap belt before latching.

Self-adjusting belt systems: These allow free movement of the belts under normal driving conditions, locking only in response to motion of the car or passenger's body. Two types demand different approaches.

- **Belt-Sensitive system:** A belt of this type will lock when the belt is jerked firmly. To tighten, buckle the belt while pushing CSS into auto seat cushion firmly and feeding the lap belt webbing into the retractor as far as possible. Then jerk on belt to lock it. The pressure of the CSS on the belt should hold it.
- **Vehicle-Sensitive system:** This type can be tested by driving the car at about 5 miles per hour and slamming on brakes, which should lock belts. (Try this on a back

road or empty parking lot.) Belts with this type of locking device can be either lap or combination belts. Methods of tightening them differ, as discussed below. (See "How do restraint systems protect their users?" earlier in this chapter for description of how this system works. It is very important that users understand that these belts can be trusted to operate in a crash.)

Combination Vehicle-Sensitive System. This has one piece of webbing which goes through a free-sliding latch plate (see illustration) and has a single retractor at the top of the shoulder belt. **It is the only type of belt for which a locking clip is useful.** The clip is used to hold the lap portion tight at the latch plate. First buckle the belt around the safety seat, pulling the lap webbing tight. Then, holding the webbing firmly at the latch plate, unbuckle the belt. Shorten the lap portion several inches more for a really tight fit, by sliding it through the latch plate. Thread the locking clip onto both pieces of webbing close to the plate and rebuckle. (See diagram.)



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Lap belt with its own vehicle-sensitive retractor: This may or may not have a shoulder belt sewn to the latch-plate. Toyota has devised a way of shortening this kind of lap belt, using its specially designed locking clip, which is much larger and stronger than clips marketed by other auto and child restraint manufacturers. The belt is wrapped around the clip to take up all the slack, then buckled. **No other "H" shaped clip, or the out-moded "S" shaped clip should be used in this manner.** Without the special clip, this type of belt cannot be tightened and should not be used, if posible.

If a seat must be used with a vehicle-sensitive system that is not modified as suggested, a top tether would help provide stability for the seat and better crash protection.

Belts which are too short:

- Use a CSS designed for a belt which is threaded through the frame, behind the child.

Buckles that are too big:

- Use a CSS designed for a belt that wraps around the front or one that has a particularly large space between frame and shell through which the buckle is inserted.

Belts that originate too far forward on the auto seat:

- Use a CSS with a belt that wraps around the front. This type of belt could allow too much forward motion of a seat with the belt threaded behind the child.

Installing a belt for the rear center seating position:

- This can be done in the small cars which come with only two rear belts.
- Your car dealer won't want to do this for you because he cannot legally alter the number of belts without being able to certify that the anchor points meet special standards.
- An auto repair or upholstery shop can do the work, at the owner's risk. Care must be taken to make sure the belts are positioned properly and holes are caulked. Belt installation points should be wider apart than the occupant's hips.

Using automatic belts:

- Generally, these belts cannot hold CSSs at all, unless an adjustable lap belt is available for use. Check the owner's manual for recommendations.

When is a tether model the best choice?

- A tether does limit forward flexing of the CSS more than does a non-tether model. It is, therefore, especially appropriate for use in a very small car, especially in the front seat, or where the distance between front seat and dash board or front and rear seats is especially short.

When should an optional tether be used?

- If the safety seat is to be moved from the family car to those of others who do not have tether anchor brackets installed, an optional-tether model will give tether-type protection when anchored and good safety performance when the tether cannot be used. This is preferable to using a tether model without an installed anchor bracket.
- A tether strap can be added to any CSS which has a steel bar across the top of the frame.

Is the tether necessary when a tether CSS is reclined facing forward?

- Yes, it is just as important as when the CSS is in the upright position. The tether must be readjusted for tightness when the CSS is repositioned.

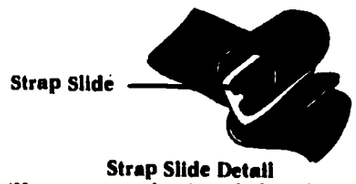
How should a tether seat be anchored properly?

- Front seat, rear sedan, or station-wagon seat, hatchback and truck installation all have have their special instructions. Those given by manufacturers vary in their explicitness, especially for unusual applications. Those reprinted on the following four pages, from Century Child Love Seat Instruction Manual, cover most situations well. Special points to remember:
  - Tethers must always be tight or they will not work, as with belts and harnesses.
  - Some cars have predrilled anchor holes, e.g. most 1979 General Motors cars and all 1983 Toyotas (all 1982 Toyotas except Tercel). Check the owner's manual. Holes are likely to be hidden under interior trim.
  - Toyota predilled holes have **metric** weld nuts, so only metric bolts will fit. Toyota provides a kit for use when installing tether anchor plates (part #04731-22010).

- Placing tether in front seats with headrests: If the headrest is adjustable, put the tether strap under it, on the inside (away from the door). Cover post edges if sharp to prevent fraying. If using a bucket seat with integral head rest, be sure the tether strap is tight enough so it won't slip off. An even better solution is to use a split-tether available with Bobby Mac Super CSS (see illustration).
- Angle of tether strap when anchored should be not more than 45 percent from the horizontal plane.

How tight should the harness be?

- It should be snug, allowing a maximum of 1-inch slack (two fingers' width) between body and webbing. Consequences of a loose harness may be ejection out of the harness during a crash, or magnification of crash forces as the child is jerked to a stop by a previously loose harness that has not stretched during impact.
- Crotch strap, if adjustable, must be short, to keep the hip straps below the abdomen.
- Harness should be adjusted frequently as child grows and seasonal clothing changes. Adjust when not in a hurry.
- Buckles on harness or tether that look like this (drawing of strap slide) should always be double-threaded as shown to make sure that straps don't pull out. (answers continue following tether instructions.)



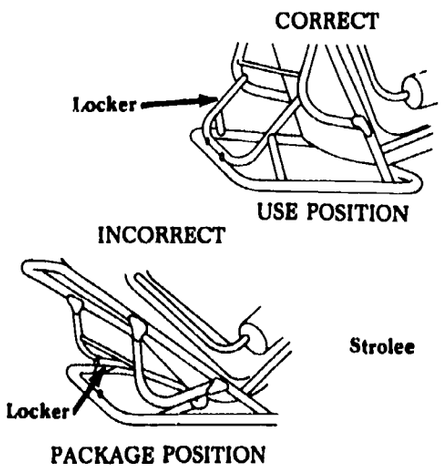
Strap Slide Detail
(Harness must be threaded as shown.)
Questor SAFE PASSAGE

- Harness retainer straps or clips should be used to hold shoulder straps in place. This item can be added to a seat that does not come with one.

How far should the seat be reclined?

Rearward-facing infant seats:

- Do not recline further than manufacturer's instructions indicate for in-car use. Reclining too far could allow the baby to shoot out head first in a crash. Note: Strolee Wee Care seats come packed in a extremely reclined position **not** intended for auto use. (See diagram above.) Many parents wrongly assume that this if the correct infant position.



- If the slope of the vehicle seat tilts the infant restraint so that the baby sits almost upright, the base of the restraint can be propped up slightly with a rolled-up towel to level it.

Forward-facing toddler seat:

- The more upright, the more protective the seat will be. A reclined seat could concentrate impact forces on the base of the child's spine. It is therefore preferable for toddlers to sit fully upright.

How can I make my infant comfortable in a safety seat?

- If the CSS is a convertible model, be sure that the shoulder harness is in the infant position (the lower slots).
- Use rolled-up receiving blankets or towels to pad the sides of the CSS to prop up a very tiny infant. Do not wad padding **under** the child's body.
- Dress the baby in clothes with legs, so the crotch strap can be used.
- For warmth, a blanket should be tucked around the baby, **over** the harness straps. One can be used to line the carrier and wrap over the baby if slots have been cut in the blanket to allow the harness to be pulled through and used.
- If the baby is premature, a seat that can be reclined to a low position may be preferred. Bobby-Mac Delux II (made after 4/82) and Bobby-Mac Champion (made after 6/82) can be reclined further than other seats for in-car use, due to special engineering features of the shell and frame.
- To keep the baby from being seated too upright, the base of the CSS can be leveled (see previous answer).

When should an infant graduate to a forward-facing seat?

- An infant-only CSS should **never** be turned around and used facing forward.
- Follow manufacturer's instructions on maximum height and weight for the infant position. In general, the baby is safer riding backwards as long as possible, so keep using the system as long as the child is comfortable and the head does not rise above the top of the safety seat. For example, a 17-pound four-month-old should be kept in the infant CSS until he or she can sit up unaided. The Century Infant Love Seat will hold a heavier baby than most.

When should a child graduate to a lap belt?

- Age four is not a magic number. Follow manufacturer's recommendations on height and weight. The longer the child can be given upper-body protection, the better, but a lap belt is much better than no protection at all.
- See previous section on helping children to accept safety seats.

Are rear seat shoulder belts advantageous? Can I get them installed?

- Although currently available in only a few types of cars, they do provide additional safety.
- All passenger cars made since 1972 must have anchor points for rear seat shoulder belts. When purchasing a new car, you may be able to special-order such belts. Manufacturers need to see some actual demand before they will make such safety features easily available.
- Some safety-minded people have installed combination belts in their rear seats, with varying degrees of difficulty. (J. C. Whitney supplies one combination belt, which is manually adjustable but somewhat inconvenient to use. Installation depends on locating the anchor points beneath interior trim.)

USAGE INSTRUCTIONS FOR FRONT SEAT INSTALLATIONS

For passive or automatic belt systems, refer to your vehicle Owner's Manual.

1. Position adjustable seat backs in normal upright position.
2. Place the Child Seat firmly against the vehicle seat back in the desired seating position and properly harness the child in the Child Seat. (See detailed harness adjustment instructions page 16).
3. Buckle and SNUGLY POSITION THE VEHICLE LAP BELT over the armrests of the Child Seat. If vehicle shoulder belt is attached to the vehicle lap belt, route the shoulder belt portion behind the Child Seat.
4. Latch the top strap hook onto the rear seat lap belt latch plate located most directly behind the Child Seat and SECURELY TIGHTEN THE TOP STRAP. If there is no lap belt latch plate within 250 mm (10") of being directly behind the Child Seat do not use the Child Seat in that position. Rear lap belts with windup devices must be in a fully extended or locked position when the top strap attachment is made. If the vehicle front seat is moved, retighten the vehicle lap belt and the Child Seat top strap.

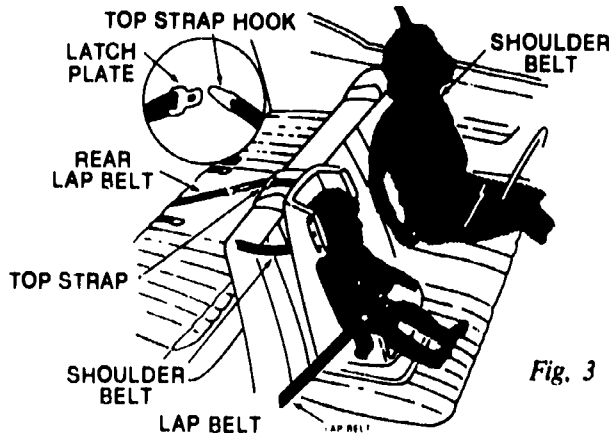


Fig. 3

CAUTION: To help lessen the chance and/or severity of injury to the child in an accident, ALWAYS USE THE CHILD SEAT TOP STRAP AND VEHICLE LAP BELT TO SECURE CHILD SEAT TO VEHICLE. Check to be sure all slack has been removed from the top strap by pulling forward on top of Child Seat. Excessive slack in the top strap could reduce the amount of protection because it would not be able to properly restrain the seat and child in an accident.

Revised 6-1-81

USAGE INSTRUCTIONS FOR REAR SEAT INSTALLATIONS

1. Install the Child Seat anchor bracket assembly directly behind the seating position in which the Child Seat is to be used. (See detailed anchor bracket installation instructions in Fig's. 5, 6 or 7 depending on vehicle type. **(The anchor bracket must always be attached to a structurally sound integral part of the vehicle.)**
2. Place the Child Seat firmly against the vehicle seat back in the seating position for which the anchor bracket has been installed.
3. Properly harness the child in the Child Seat. (See detailed harness adjustment instructions on Page 16.)
4. Buckle and SNUGLY POSITION THE VEHICLE LAP BELT over the armrests of the Child Seat.
5. Latch the Child Seat top strap hook onto the anchor bracket and SECURELY TIGHTEN THE TOP STRAP.

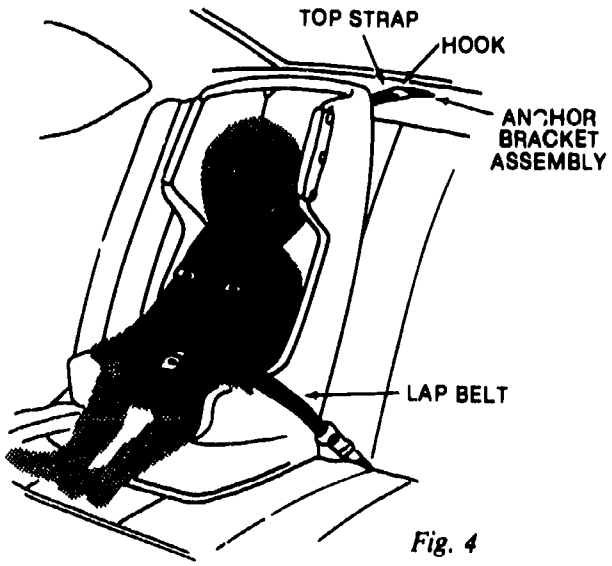


Fig. 4

CAUTION: To help lessen the chance and/or severity of injury to the child in an accident, ALWAYS USE THE CHILD SEAT TOP STRAP AND VEHICLE LAP BELT TO SECURE CHILD SEAT TO VEHICLE. Check to be sure all slack has been removed from the top strap by pulling forward on top of Child Seat. Excessive slack in the top strap could reduce the amount of protection because it would not be able to properly restrain the seat and child in an accident.

CENTURY PRODUCTS INC.

CHILD SEAT ANCHOR BRACKET INSTALLATION INSTRUCTIONS

For Rear Seat Usage In Passenger Cars which have a Rear-Seat-Back-to-Back-Window Integral Metal Filler Panel.

1. Place the Child Seat in the rear seating position in which the Child Seat is to be used and secure the vehicle lap belt over the armrests of the Child Seat. This will correctly position the Child Seat for the anchor bracket installation.
2. Select a suitable anchor bracket mounting location on the filler panel. The location must be:
   A. In solid metal at least 31 mm (1¼") away from any large holes in the metal portion of the filler panel. (speaker holes, defogger holes, etc.)
   B. Far enough behind the Child Seat to allow the top strap to be securely tightened. (Approximately 250 mm (10) inches or more behind the Child Seat back.)
   C. As close to the centerline of the Child Seat as possible, but in no case more than 50 mm (2") outboard or 150 mm (6") inboard of the Child Seat centerline. If this condition can not be met, then do not use the Child Seat in that position.
3. CAUTION: To help prevent personal injury, particularly to the eyes, safety glasses should be worn for the following drilling operation. From inside your car's trunk, drill an 8 mm (5/16") diameter hole up through the metal filler and trim panel at the selected mounting location. Care must be taken not to hit the rear window with the tip of the drill as this could cause the rear window to shatter.

Beginning in 1980 holes have been provided in the metal filler panels on most GM coupes and sedans so that this drilling operation will not be required. It will still be necessary to pierce a corresponding hole in the trim panel.

4. Assemble and securely tighten the bolt, anchor bracket, anchor plate (2½" O.D. washer) and the lock nut to the metal filler panel and trim as shown.
5. Use the Child Seat only in the rear seating position for which the anchor bracket has been installed. Use the Child Seat as directed in the usage instructions on page 7, latching the Child Seat top strap hook to the anchor bracket as shown.

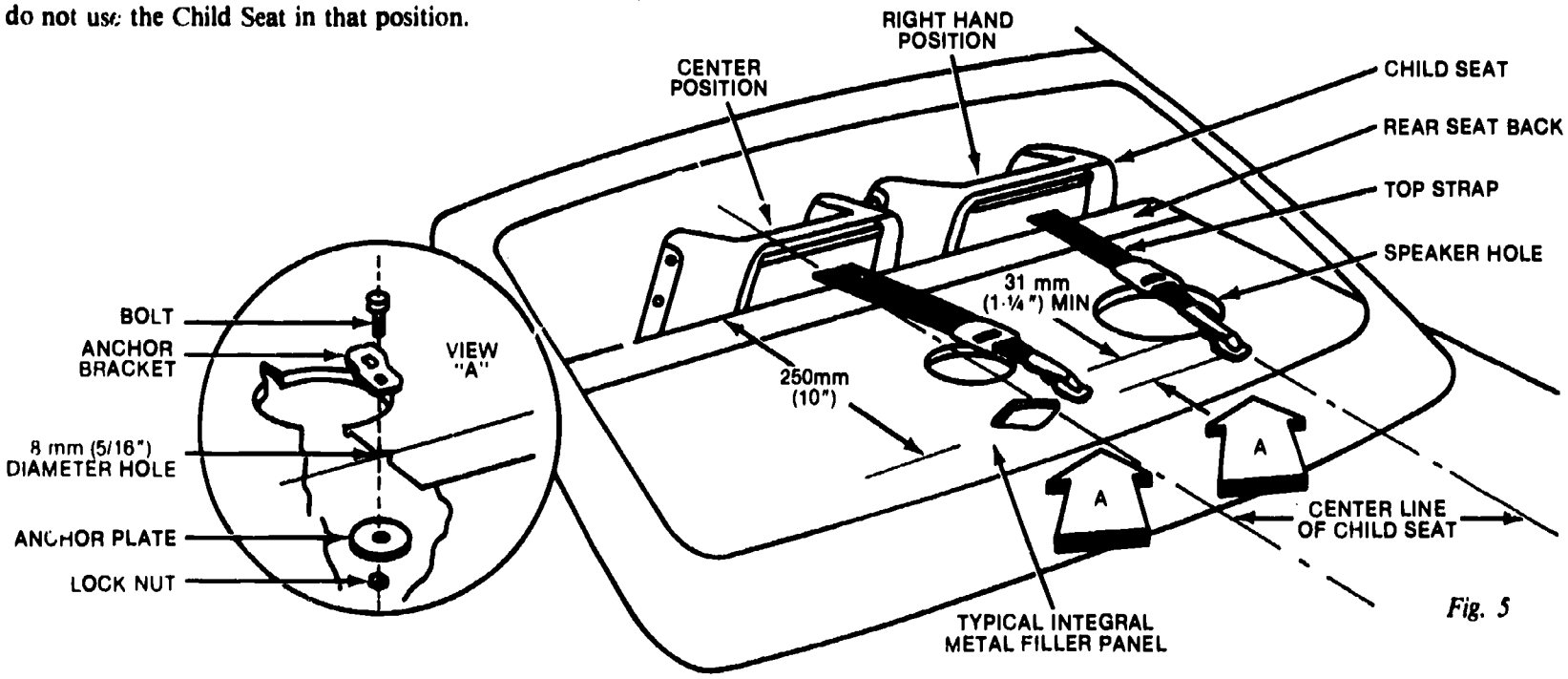


Fig. 5

CHILD SEAT ANCHOR BRACKET

For Rear Seat Usage in Vans, Hatchbacks, Station Wagons and Utility Trucks

1. Place the Child Seat in the rear seating position in which the Child Seat is to be used and secure the vehicle lap belt over the armrests of the Child Seat. This will correctly position the Child Seat for the anchor bracket installation.

2. Select a suitable anchor bracket mounting location on the floor of the vehicle. See Fig. 6. The location must be:

   A. On a flat metal surface which is a welded-in integral part of the vehicle body. DO NOT attach anchor bracket assembly to folding seat back panels or movable load floors, filler panels, spare tire covers, or any screw-on panels.

   B. In a position clear of fuel tank, fuel lines, brake lines, exhaust systems, etc.

   C. In a position where the angle between the Child Seat top strap and the load floor does not exceed 45° (horizontal angle).

   D. As close to the centerline of the Child Seat as possible, but in no case must the angle between the Child Seat centerline and top strap exceed 20° (side to side angle).

   E. If conditions A, B, C, and D cannot be met, do not use the Child Seat in that seating position. Move the Child Seat to another seating position which satisfies conditions A, B, C, and D.

3. Drill an 8 mm (5/16") diameter hole through the floor at the selected location.

4. Assemble and securely tighten the bolt, anchor bracket, anchor plate, (2½" O.D. washer) and the lock nut to the floor using a suitable sealer* around the hole. **If the hole has been drilled through the floor to the outside of the vehicle make certain that the hole is properly sealed to prevent exhaust fumes from entering the vehicle.**

INSTALLATION INSTRUCTIONS *continued*

5. Use the Child Seat only in the rear seating position for which the anchor bracket has been installed. Use the Child Seat as directed in the usage instructions on Page 8, latching the Child Seat top strap hook to the anchor bracket as shown.

CAUTION: In the event that the Child Seat anchorage assembly is removed, the 8 mm (5/16") diameter hole must be properly resealed to prevent toxic exhaust fumes from entering the vehicle.

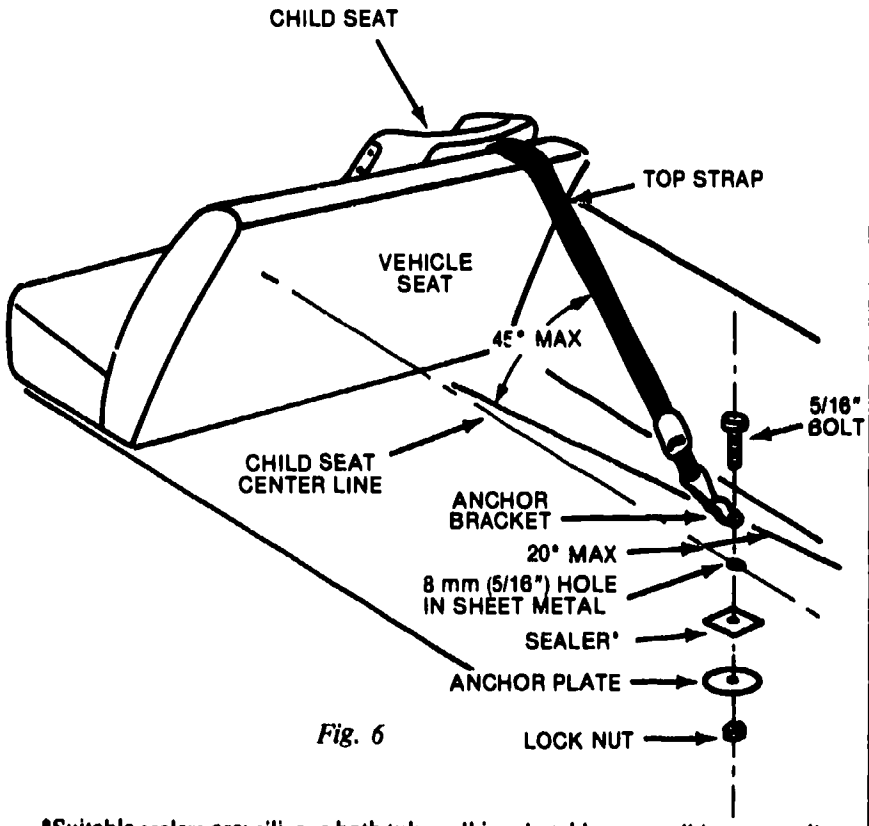


Fig. 6

*Suitable sealers are: silicone bath tub caulking, butyl house caulking or acrylic house caulking.

CHILD SEAT ANCHOR BRACKET

For Pickup Trucks and Trucks with Chassis Cabs

1. Place the Child Seat in the front seating position (rear seating position on four door models) in which the Child Seat is to be used and secure the vehicle lap belt over the armrests of the Child Seat. This will correctly position the Child Seat for the anchor bracket installation.
2. Select a suitable anchor bracket mounting location on the cab back panel. (See Fig. 7.) The location must be:
   A. Located near the rear window reinforcement. If a lower mounting position is desired, the angle between the Child Seat top strap and horizontal should not exceed 45°.
   B. As close to the centerline of the Child Seat as possible, but in no case more than 50 mm (2 inches) outboard or 150 mm (6 inches) inboard of the Child Seat centerline.
   C. In a position clear of fuel tank, fuel lines, brake lines, exhause system, etc.
3. Drill an 8 mm (5/16") diameter hole through the cab back panel of the selected location.
4. Assemble and securely tighten bolt, anchor bracket, anchor plate (2½" O.D. washer) and lock nut to the cab panel using a suitable sealer around the hole. **Make certain that the hole is properly sealed to prevent exhaust fumes from entering the cab.**
5. Use the Child Seat only in the seating position for which the anchor bracket has been installed. Use the Child Seat as directed in the usage instructions on Page 7, latching the Child Seat top strap hook to the anchor bracket as shown.

CAUTION: In the event that the Child Seat anchorage assembly is removed, the 8 mm (5/16") diameter hole *must* be properly re.ealed to prevent toxic exhaust fumes from entering the cab.

INSTALLATION INSTRUCTIONS *continued*

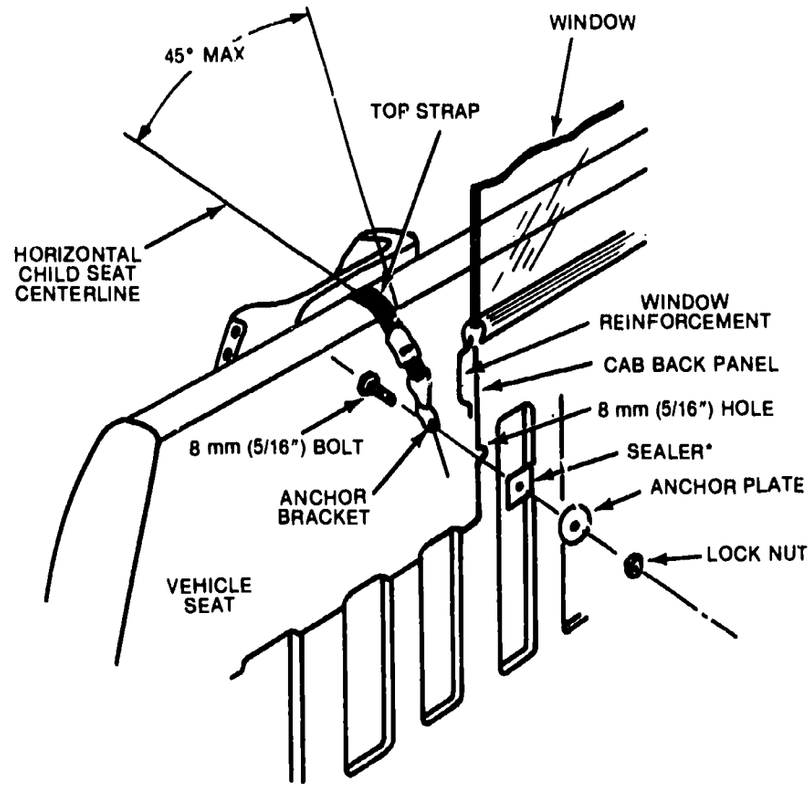


Fig. 7

*Suitable sealers are: silicone bath tub caulking, butyl house caulking or acrylic house caulking.

What if my child fusses and tries to get out of the safety seat?

- All children complain from time to time, so don't assume that the seat is the root cause. Kids also test their parents' resolve routinely. If allowed to get out of their seats when the car is moving, they will learn that fussing gets results. Specific methods of dealing with this depends on the child's age.
- If unhappiness is prolonged, try a different seat, perhaps one that gives the child more view out of the window or allows more room for arm movement.

Can a child sleep in a safety seat?

- YES, most learn to sleep easily in their seats, especially if they are conditioned from infancy to ride buckled up. A small pillow that holds the head steady is a help.
- For older children in lap belts, a large pillow or rolled sleeping bag will give them something to lean against. Lying down with the lap belt on could displace the belt up onto the abdomen.

What if I have to get my child out of the car quickly? Genuine emergencies, when speed is crucial in evacuating passengers, are very infrequent, occurring in less than 1 percent of all accidents. Nevertheless, many people worry about such situations.

- Parents could practice this type of evacuation, to find the quickest method. Also, they could look for a seat with only one simple harness buckle to unfasten.
- If parents use lap and shoulder belts themselves, they will be less likely to be injured and thus more capable of getting their children out of the car.

What special precautions are needed in sunny, hot or cold weather?

Heat and sun:

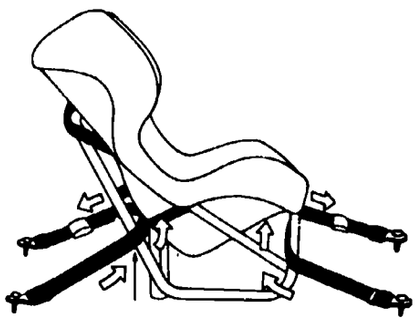
- Vinyl covers and metal parts can get hot enough to burn a baby's skin, while sitting in a closed are on a sunny day, even in winter. Cover the seat with a light-colored cloth when the car is parked. A cloth cover for the CSS pad will help.
- Test seat surfaces and buckles with your hand. Wrap a hot buckle in a folded diaper or washcloth, especially if the child is lightly dressed.

Cold:

- Keep an infant CSS in the house, so it will be warm when the baby is put into it.

How can a safety seat be secured in the back of a van with no seats?

- A convertible model can be well anchored to the floor of a van by using two sets of lap belts, one holding the seat from its front and the other from its back. For the infant, the seat would be faced rearward, and, for the older child, frontward. This method has been successfully crash tested. Full instructions from Highway Safety Research Center.



Highway Safety Research Center

When Children Ride With Others
Conducting a Safe Car Pool: A Guide for Parents

Establishing an Understanding of Safety Procedures Among Participants:

- Get together with other parents before the pool gets underway and agree on how to handle discipline and safety seat use. Resist the temptation to pool more children than you have belts, for the risk far exceeds the convenience.
- Discuss agreed-upon rules with children.

What CSSs or belts should be used?

- All drivers and passengers should be buckled up. There must be one belt or CSS for each child. Have participants install extra belts if needed, or reduce the number of riders. Never put two people in one belt or allow chldren to ride in the cargo area of a station wagon.
- For preschoolers, crashworthy safety seats are best. However, when it's not feasible to transfer these from car to car, adult lap belts, properly fastened, should be used.
- If a child sits in front, use the combination lap/shoulder belt for protection, slipping the shoulder portion behind the child's back after buckling him in if the strap crosses his face. Alternatively, provide an auto booster seat, which will position both lap and shoulder belts properly.

What is your liability?

- Be sure to have liability insurance. $100,000 coverage per passenger and $300,000 total is wise and not much more expensive than regular coverage. (Safety belt or safety seat use is the best "insurance policy" against injury.)

How to keep the children well behaved?

- Plan games or provide picture books to keep children quiet during the ride. Be firm about limiting noise, so you can concentrate on the road.

- If the group gets out of hand, find a safe place to pull over before you try to settle them down. If anyone is impossible to control take him or her right home.

Safety for informal trips children make with friends

- Make sure that drivers know that you want your child to ride belted, and would prefer that all occupants be restrained.
- Teach your child how to ask for a belt.

School and youth group field trips

- Check out the group's or school's belt use policy, and how it's enforced.
- Specify on any blanket permission form that your permission must be obtained for each trip your child takes, and that you insist on belt use. You can check transportation arrangements before each trip.

Implementing a school or group safety belt use policy:

- Present it as a means of teaching good health habits and a means of encouraging good behavior. Avoid scare tactics. You can bring up the school's potential liability in case of a field trip accident, however.
- Propose a clearly written policy statement that says not only that a seat belt must be provided for each child, but that each child, and each driver, must wear it.
- People who recruit drivers must inform them of the policy.
- Seat belt education in the classrooms should be done on a regular basis.

Safe Day Care Transportation

- Some States have administrative rules requiring belt use for day care transportation, while other child passenger protection laws cover day care centers and homes.
- Even where no rules cover these centers, parents or advocacy groups can work to upgrade safe transportation procedures.
- In small centers, where passenger cars are used, child restraints or safety belts should be used for all children.
- In larger centers, which may use vans or schoolbuses for transportation, vehicles with belts should be used whenever possible. Refer to following section on schoolbus belt use.
- Any center that is purchasing safety seats for use shuld choose an easily installed model with an easily adjusted harness, to minimize hassles for drivers. Children can be taught to buckle up their own harnesses or seat belts by the time they are three years old.
- Safety seat and belt education programs for parents and children should be conducted.

Seat Belts on Schoolbuses

Why don't buses have belts? What to tell parents:

- Parents whose children have always ridden buckled up often raise this question.

Putting belts on buses is a complex problem, not impossible but hindered by various road blocks. The up-front cost of installing belts and fears that children cannot be taught to use them preoccupy school transportation officials. Child safety advocates, on the other hand, see a bus with belts as the perfect classroom for teaching good safety habits.

- When a bus crash occurs, its effects are often more catastrophic than necessary because of the absence of belts, according to numerous studies of crashes by the National Transportation Safety Board.
- The number of child passengers killed on buses each year is very low, lower than that for child pedestrians killed at the bus stop by passing cars of their own buses.
- Large buses generally do not have belts, because:
  - Those built before 1977 were not required to meet any safety standards pertaining to occupant protection. Their seats and floors were not constructed to withstand crash forces. If seat belts were installed they would be ripped out of the floor in an impact.
  - Buses built during or after 1977 must meet federal motor vehicle safety standards for passenger protection. They have stronger seats and bodies, which contribute to better passenger protection. Seats have higher backs and are well padded and flexible, to soften the impact of bodies flung forward against them.
- Small buses (under 10,000 pounds, 16 passenger capacity) made since 1977 are required to have belts installed, because they are more often involved in crashes and their occupants are more vulnerable to injuries than in large buses.

What can be done to make buses safer?

- Make sure your school district is using buses meeting current Federal safety standards.
- Encourage the use of belts on small buses which have them.
- Eliminate "standees," pupils who do not even have a place to sit down to benefit from the degree of protection afforded by the bus seat itself.
- Work toward installation of belts on new local buses. A few districts have done this on their own, and have taught pupils to use them.
- Information on belts on buses and other aspects of schoolbus safety is available. (See Appendix.)

Protecting Children in Airplanes

Allowing car safety seats to be used during flight is important both to ensure their safety during survivable plane crashes or turbulance and to encourage parents to take CSSs with them on trips, so their children will be protected in vehicles used at their destination.

Federal Aviation Administration regulations, which have banned child safety restraints until recently and required children under two to sit on an adult's lap during take-off and landing, have been changed in 1983. Certified child safety seats are now permitted for infants and toddlers. Certification procedures are not totally worked out, as of October 1983, but several models have been approved (Cosco/Peterson #78, Century 100, 200, 300, Infant Love Seat). Now that the airlines do allow parents to use certain CSSs, parents must be sure to purchase a child's ticket well in advance. All airline ticket agents are not familiar with these new rules, so parents must be sure to reserve a seat for their child (at the child's fare rate) so parents may need to check with a reservation supervisor, to make sure that the airline will honor the certification.

APPENDIXES - MORE HELP WHEN YOU NEED IT

NEWSLETTERS TO KEEP YOU CURRENT

State Traffic Safety Newsletters
Many States have these. Contact your State highway safety office.

State or Local Child Passenger Safety Association Newsletters
These exist in some States. Contact through your State highway safety office or the National Child Passenger Safety Association.

National Newsletters Covering Child Passenger Protection:
For addresses, see listings under Organizations

AAAM Journal:
American Association for Automotive Medicine (for members or by subscription)

NCPSA News:
National Child Passenger Safety Association (for members)

PAS News:
Physicians for Automotive Safety (for members or by subscription)

Safe Ride News:
American Academy of Pediatrics (for members and community leaders)

Status Report:
Insurance Institute for Highway Safety (for community and business leaders)

Traffic Safety:
National Safety Council (for members)

Traffic Safety Newsletter:
National Highway Traffic Safety Administration

MAJOR ORGANIZATIONS CONCERNED WITH CHILD PASSENGER PROTECTION

American Academy of Pediatrics (AAP)
Division of Public Education
141 Northwest Point Road
P.O. Box 927
Elk Grove Village, IL 60007
(312) 228-5005
(800) 433-9016

American Association for Automotive Medicine (AAAM)
40 Second Ave.
Arlington Heights, IL 60005
(312) 640-8440

American Automobile Association (AAA)
Local Clubs, Public Relations Dept.
(Try local office first for all materials)

AAA Foundation for Traffic Safety
8111 Gatehouse Rd., Room 328
Falls Church, VA 22047
(703) 222-6891
(for films, PSAs, research documents)

AAA Traffic Safety Department
8111 Gatehouse Road
Falls Church, VA 22047
(703) 222-6341
(for pamphlets, posters)

Consumer Association of Canada
2660 Southvale Crescent, Level 3
Ottawa, K1B 5C4
Canada
(613) 733-9450

Highway Safety Research Center (HSRC)
University of North Carolina
CTP-197A
Chapel Hill, NC 27514
(919) 962-2202

Highway Users Federation for Safety and Mobility (HUFSAM)
1776 Massachusetts Ave., NW
Washington, DC 20036
(202) 857-1235

Insurance Institute for Highway Safety (IIHS)
Watergate 600
Washington, DC 20037
(202) 333-0770

Juvenile Products Manufacturers' Association (JPMA)
66 East Main St.
Moorestown, NJ 08057
(609) 234-9155

Motor Vehicle Manufacturers' Association (MVMA)
300 New Center Building
Detroit, MI 48202
(313) 872-4311

National Association of Women Highway Safety Leaders (NAWHSL)
7206 Robinhood Dr.
Upper Marlboro, MD 20772
(301) 868-7583

National Child Passenger Safety Association (NCPSA)
PO Box 841
Ardmore, PA 19003
(add phone when available)

National Highway Traffic Safety Administration (NHTSA)
U.S. Department of Transportation
Office of Occupant Protection
400 Seventh St., SW
Washington, DC 20590
(202) 426-9294
Hotline: (800) 424-9393

National Safety Council (NSC)
444 N. Michigan
Chicago, IL 60611
(312) 527-4800

Physicians for Automotive Safety (PAS)
PO Box 430
Armonk, NY 10504
(914) 273-6446

Society of Automotive Engineers (SAE)
400 Commonwealth Dr.
Warrendale, PA 15096
(412) 776-4841

University of Michigan Transportation Research Institute (UMTRI)
Public Information Materials Center
2901 Baxter Rd.
Ann Arbor, MI 48109
(313) 764-2171

CAR SAFETY MANUFACTURERS AND DISTRIBUTORS: Past and Present

American Motors Corporation
(Contact Century or Hamill for questions about Love Seats)

Babyhood Industries
508 Boston Turnpike
Shrewsbury, MA 01545
(617) 845-4231

Bobby-Mac Company, Inc.
(Contact Questor)

Century Products, Inc.
1366 Commerce Drive
Stow, OH 44224
(216) 686-3000

Chrysler Corporation
Contact Century about Infant Love Seats
For Mopar seat:
Parts Order Dept., Nat'l Depot
Centerline, MI 48015
(313) 497-0940

Collier Keyworth
P.O. Box 258
Gardner, MA 01440
(617) 632-0120

Cosco/Peterson
2525 State Street
Columbus, IN 47201
(812) 372-0141

Ford Motor Company
Parts and Service - Accessories Merchandising
3000 Schafer Rd.
P.O. Box 1902
Dearborn, MI 48121
(313) 323-0119

Graco Childrens' Products
Main Street
Elverson, PA 19520
(215) 286-5951

Hamill Manufacturing Co.
Love Seat Sales
New Product Dept.
P.O. Box 305-LS
Washington, MI 48094
(313) 755-7700

Hedstrom Company
P.O. Box 432
Bedford, PA 15522
(814) 623-9041

International Manufacturing Co.
2500 Washington St.
Boston, MA 02119
(617) 442-9700

Kolcraft Products, Inc.
3455 West 31st Pl.
Chicago, IL 60623
(312) 247-4494

Love Seat Headquarters
(for GM parts only)
222 So. Elm
Ososso, MI 48867
(517) 723-8161

Pride Trimble
P.O. Box 450
Southern Pines, NC 28387
(919) 692-7541

Questor Juvenile Furniture Co.
1801 Commerce Drive
Piqua, OH 45356
(513) 773-3971
773-3559 (after 5)

Rose Manufacturing Co.
2250 So. Tejon St.
Englewood, CO 80110
(303) 922-6246

Rupert Industries
P.O. Box 624
Wheeling, IL 60090
(312) 537-0066
(800) 323-6598

Strolee of California
P.O. Box 5786
Rancho Dominquez, CA 90224
(213) 639-9300

Welsh Company
1535 So. Eighth St.
St. Louis, MO 63104
(314) 231-8822

Volvo North America
Parts Division
Rockleigh Industrial Park
Rockleigh, NJ 07647
(201) 768-7300

STATE HIGHWAY SAFETY OFFICES: GOVERNOR'S HIGHWAY SAFETY REPS.

State, Highway Safety Offices. These offices either have a State Occupant Restraint/Child Safety Seat Coordinator or can refer you to that person if located in another department.

ALABAMA
Traffic Safety Division
Department of Community & Economic Affairs
P.O. Box 2939
Montgomery, AL 36105-0939
(205) 284-8790

ALASKA
Highway Safety Planning Agency
Pouch N
Juneau, AK 99801
(907) 465-4371

ARIZONA
Arizona Department of Transportation
Office of Highway Safety
1801 W. Jefferson St., Room 465
Phoenix, AZ 85007
(602) 255-3216

ARKANSAS
Arkansas Highway Safety Program
1 Capitol Mall, Level 4B, Suite 215
Little Rock, AR 72201
(501) 371-1101

CALIFORNIA
Office of Traffic Safety
Business and Transportation Agency
State of California
7000 Franklin Blvd., Suite 300
Sacramento, CA 95823
(916) 445-0527

COLORADO
Division of Highway Safety
4201 East Arkansas Avenue
Denver, CO 80222
(301) 757-9381

CONNECTICUT
Department of Transportation
Bureau of Highways
24 Wolcott Hill Road
Wethersfield, CT 06109
(203) 566-4248

DELAWARE
Office of Highway Safety
Suite 363 Thomas Collins Bldg.
540 S. Dupont Highway
Dover, DE 19901
(302) 736-4475

DISTRICT OF COLUMBIA
Highway Safety Program Coordinator, DPW Transportation Safety Branch
Presidential Building - Suite 314
415 12th Street, N.W.
Washington, D.C. 20004
(202) 727-5777

FLORIDA
Bureau of Public Safety Management
Department of Community Affairs
2571 Executive Center Circle East
Tallahassee, FL 32301
(904) 488-5455

GEORGIA
Office of Highway Safety
P.O. Box 1497
959 Confederate Ave., S.E.
Atlanta, GA 30301
(404) 656-6996

HAWAII
Department of Transportation Motor Vehicle Safety Office
79 S. Nimitz Highway
Honolulu, HI 96813
(808) 548-5755

IDAHO
Office of Highway Safety
Idaho Dept. of Transportation
P.O. Box 7129
Boise, ID 83707
(208) 334-2533

ILLINOIS
Bureau of Safety Programs
Illinois Department of Transportation
2300 South Dirksen Parkway
Springfield, IL 62764
(217) 782-4974

INDIANA
Division of Traffic Safety
Department of Highways
Room 801, State Office Building
Indianapolis, IN 46204
(317) 232-1287

IOWA
Governor's Highway Safety Office
Office for Planning and Programming
523 East 12th Street, Capitol Hill Annex
Des Moines, IA 50319
(515) 281-3868

KANSAS
Transportation Safety Administrator
Kansas Department of Transportation
State Office Building - 10th Floor
Topeka, KS 66612
(913) 296-3576

KENTUCKY
Highway Safety Standards Section
Kentucky State Police Headquarters
919 Versailles Road
Frankfort, KY 40601-9980
(502) 695-6356

LOUISIANA
Louisiana Highway Safety Commission
P.O. Box 66336
Baton Rouge, LA 70896
(504) 925-6991

MAINE
Bureau of Safety
Maine Department of Public Safety
36 Hospital Street
Augusta, ME 04330
(207) 289-2581

MARYLAND
Transportation Safety
(Division of) DOT
P.O. Box 8755
Baltimore-Washington International
Baltimore, MD 21240-0755
(301) 859-7157

MASSACHUSETTS
Governor's Highway Safety Bureau
Saltonstall State Ofc. Bldg.
100 Cambridge St., Room 2104
Boston, MA 02202
(617) 727-5074

MICHIGAN
Office of Highway Safety Planning
111 S. Capitol Avenue
Lower Level
Lansing, MI 48913
(517) 373-8011

MINNESOTA
Director of Traffic Safety
Department of Public Safety
Transportation Building
St. Paul, MN 55155
(612) 296-6953

MISSISSIPPI
Governor's Highway Safety Program
510 George Street, Suite 246
Jackson, MS 39201
(601) 354-6892

MISSOURI
Division of Highway Safety
P.O. Box 749
Jefferson City, MO 65102
(314) 751-4161

MONTANA
Highway Traffic Safety Division
Department of Justice
303 N. Roberts
Helena, MT 59620
(406) 444-3412

NEBRASKA
N[illegible]a Highway Safety Program Office
St[illegible]House Station 94612
Lincoln, NE 68509
(402) 471-2515

NEVADA
Highway Safety Coordinator Traffic Safety Division
Department of Motor Vehicles
555 Wright Way, Room 258
Carson City, NV 89711
(702) 885-5720

NEW HAMPSHIRE
N. H. Highway Safety Agency
117 Manchester Street
Concord, NH 03301
(603) 271-2131

NEW JERSEY
New Jersey Highway Safety Office
CN-048
Trenton, NJ 08625
(609) 292-3900

NEW MEXICO
Traffic Safety Bureau
P.E.R.A. Building, Room 224
P.O. Box 1028
Santa Fe, NM 87503
(505) 827-4776

NEW YORK
Traffic Safety Committee
Swan Street Building
Empire State Plaza
Albany, NY 12228
(518) 474-5777

NORTH CAROLINA
Governor's Highway Safety Representative
215 East Lane Street
Raleigh, NC 27601
(919) 733-3083

NORTH DAKOTA
Program Manager, Driver License Division
North Dakota Highway Department
600 E. Boulevard Avenue
Bismarck, ND 58505-0178
(701) 224-4397

OHIO
Office of Governor's Highway Safety Representative
Dept. of Highway Safety
P.O. Box 7167
Columbus, OH 43205
(614) 466-3250

OKLAHOMA
Oklahoma Highway Safety Office
200 N.E. 21st St. ODOT Building D-4
Oklahoma City, OK 73105
(405) 521-3314

OREGON
Oregon Traffic Safety Commission
State Library Building - 4th Floor
Salem, OR 97310
(503) 378-3669

PENNSYLVANIA
Bureau of Safety Programming and Analysis
215 Transportation Safety Building
Harrisburg, PA 17120
(717) 787-7350

RHODE ISLAND
Governor's Office on Highway Safety
345 Harris Avenue
Providence, RI 02909
(401) 277-3024

SOUTH CAROLINA
Division of Public Safety Programs
Edgar A. Brown State Office Building
1205 Pendleton Street, Room 453
Columbia, SC 29201
(803) 758-2237

SOUTH DAKOTA
State and Community Programs
Department of Public Safety
118 West Capitol Avenue
Pierre, SD 57501
(605) 773-3675

TENNESSEE
Governor's Highway Safety Program
505 Deaderick St., Suite 600
James K. Polk State Office Bldg.
Nashville, TN 37219
(615) 741-2848

TEXAS
Traffic Safety Section
State Dept. of Highways and Public Transportation
11th and Brazos
Austin, TX 78701
(512) 465-6360

UTAH
Highway Safety Division
Department of Public Safety
4501 South 2700 West
Salt Lake City, UT 84109
(801) 965-4410

VERMONT
Highway Safety Coordinator
Vermont Highway Safety Program
Agency of Transportation
133 State Street
Montpelier, VT 05602
(802) 828-2706

VIRGINIA
Department of Transportation Safety
P.O. Box 27412
Richmond, VA 23269
(804) 257-6620

WASHINGTON
Washington Traffic Safety Commission
1000 Cherry Street
Olympia, WA 98504
(206) 753-6197

WEST VIRGINIA
Governor's Highway Safety Representative
Office of Economic and Community Development
5790-A MacCorkle Avenue,
Charleston, WV 25304
(304) 348-8814

WISCONSIN
Wisconsin Highway Safety Coord.
4802 Sheboygan Avenue
P.O. Box 7910
Madison, WI 53707
(608) 266-0402

WYOMING
State Highway Safety Engineer
Wyoming Highway Safety Department
Highway Safety Branch
P.O. Box 1708
Cheyenne, WY 82002-9019
(307) 777-7296

AMERICAN SAMOA
Office of Traffic Safety
Government of American Samoa
Pago Pago, American Samoa 96799
Int. Op. 639-9188 or 82

GUAM
Highway Safety Coordinator
Office of Highway Safety
Government of Guam
P.O. Box 2950
Agana, GU 969120
Thru Int. Op. 646-5333, Ext. 60

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
Office of Highway Safety
Department of Public Safety, CNMI
Saipan, Northern Mariana 96950
Int. Op. 160 and 671
Office No. 7212/7153

PUERTO RICO
Traffic Safety Commission
Box 41289
San Turce, PR 00940
(809) 726-5290

VIRGIN ISLANDS
Virgin Islands Office of Highway Safety
P.O. Box 1847
Fredricksted, St. Croix
VI 00840
(809) 772-3025 & 2946

INDIAN STATE
Bureau of Indian Affairs
Division of Safety Management
P.O. Box 2186
Alburquerque, NM 87103
(505) 766-2863

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION REGIONAL OFFICES

NHTSA maintains regional offices in ten cities. These offices work closely with State highway safety programs and respond to citizen requests.

REGION 1:
Connecticut, Maine, Massachusetts, New Hampshire, Vermont, Rhode Island

NHTSA - Region 1
Transportation Systems Center
Kendall Square--Code 903
Cambridge, MA 02142
Phone: 617/494-2680

REGION 2:
New York, New Jersey, Puerto Rico, Virgin Islands

NHTSA-Region 2
222 Mamaroneck Ave., Suite 204
White Plains, NY 10605
Phone: 914/683-9690

REGION 3:
Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia

NHTSA-Region 3
793 Elkridge Landing Rd., Room D-203 Airport Plaza Building
Linthicum, MD 21090
Phone: 301/962-3877

REGION 4:
Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee

NHTSA-Region 4
Suite 501
1720 Peachtree Rd., NW
Atlanta, GA 30309
Phone: 404/881-4537

REGION 5:
Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

NHTSA-Region 5
Suite 214, Executive Plaza
18209 Dixie Highway
Homewood, IL 60430
Phone: 312/799-6067

REGION 6:
Arkansas, Louisiana
New Mexico, Oklahoma, Texas

NHTSA - Region 6
819 Taylor St./Room 11A26
Fort Worth, TX 76102
Phone: 817/334-3653

REGION 7:
Iowa, Kansas, Missouri, Nebraska

NHTSA-Region 7
Box 19515
Kansas City, MO 64141
Phone: 816/926-7887

REGION 8:
Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming

NHTSA-Region 8
555 Zang St., 1st Floor
Denver, CO 80228
Phone: 303/234-3253

REGION 9:
Arizona, California, Hawaii, Nevada, American Samoa, Guam, North Mariana Islands

NHTSA-Region 9
211 Main St., Suite 1000
San Francisco, CA 94105
Phone: 415/974-9840

REGION 10:
Alaska, Idaho, Oregon, Washington

NHTSA-Region 10
3140 Federal Bldg.
915 Second Ave.,
Seattle, WA 98174
Phone: 206/442-5934

NHTSA SAFETY BELT PROGRAM: 1983 PROJECTS OF NATIONAL ORGANIZATIONS

The National Highway Traffic Safety Administration is working to promote the use of safety belts and car safety seats nationwide. One aspect of the program is the effort being made by a number of national voluntary organizations to institutionalize the promotion of occupant protection to and through their members. Groups and projects involved include:

The American Academy of Pediatrics
Incentive grants for promotion of the First Ride - Safe Ride Campaign.

American College of Obstetricians and Gynecologists
Member and patient education, including activities by affiliated nurses association.

National Science Teachers Assn.
Kit and curriculum for General Science classes.

Parent Teacher Association
Pilot programs in schools, audio-visual kits for chapter use.

American Red Cross
Distribution of an audio-visual kit for chapter use.

Boy Scouts of America
Materials for use of scouts of various ages, produced and distributed for troop use.

National Child Passenger Safety Assn.
Development of a national network to promote child passenger protection.

American Women in Radio and Television
Developing better promotion of safety in the broadcast media, with model chapter projects and promotion of the importance of including safety belt use in auto accident reports.

American Assn. of Secondary School Principals and National Assn. of Student Councils
Program guides for use in high schools. Training for members in promoting safety belts and alcohol safety.

American Assn. of Retired Persons
Education for older persons, including the importance of using safety seats for their grandchildren. Audio-visual package for health fairs.

National Assn. of Women Highway Safety Leaders
Training for members.

Consumer Product Safety Network
Development of local coalitions to institutionalize occupant restraint programs. Intensive work in Seattle, Milwaukee, Lawrence (KS), Maryland, and San Francisco.

American College of Preventive Medicine
Education of its members and other health professionals, production of a kit for use by the preventive medicine/health community.

American Public Health Assn.
Occupant protection awareness project to sensitize a larger number of public health professionals to the cost-effectiveness and efficacy of safety belt programs as a health promotion measure.

Association for the Advancement of Health Education
Promote occupant protection as a health issue to health educators, by distributing an instructors guide for secondary school health educators.

International Assn. of Chiefs of Police

National Assn. of State Directors of Law Enforcement Training

National Extension Homemakers

General Federation of Women's Clubs

National Safety Council

American Automobile Assn.

American Academy of Family Physicians

Assn. of State and Territorial Health Officials

American Trauma Society

Healthy Mothers, Healthy Babies Coalition

American Driver and Traffic Safety Education Assn.

Girl Scouts of America

CHECK LIST FOR *USED* SAFETY SEATS

Use this checklist and the following illustrated guide to crashworthy safety seats made before 1981 as references. They can help you reduce the risks of using older, second-hand safety seats.

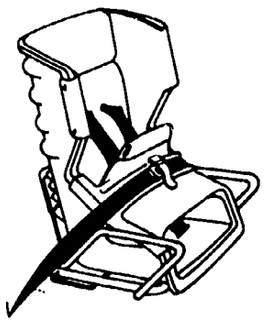
Any seats manufactured before 1981 were required to meet no standards for crash protection. The safety seats listed on the following pages were, however, designed for protection under crash conditions. Sample models performed satisfactorily in privately conducted 30 mile-per-hour frontal crash tests when used according to manufacturer's installation instructions.

Manufacturers listed are those currently supplying parts for these older models, **not** the original manufacturers.

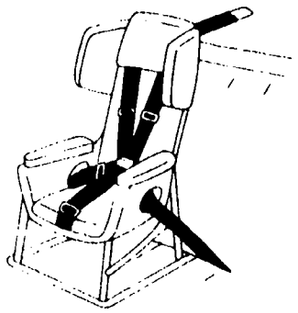
Remember: when you purchase any car seat from a private party, the risks are your own. The manufacturer's guarantees probably will not be valid. A safety seat must be properly used to provide protection.

1. Make sure to get manufacturer's instructions and diagrams for use of seat. Write to manufacturers if seller doesn't provide instructions with seat.
2. Ask if safety seat has previously been involved in an accident. If so, don't use it, as it may have been weakened in an unnoticeable way.
3. Examine the car seat to determine if the plastic body is intact and has not been tampered with or modified. Is the metal frame intact, with no bends, warps, cracks or breaks? (Swing-up armrests—the narrow, steel bars with thin padding—have no safety value and may have been, or can be, safely removed.)
4. Refer to attached illustrated guide as you check to make sure all removable parts (harness, padding, retainer clips, etc.) are included. Replacement parts can usually be obtained from national distributors/manufacturers listed in the guide.
5. If a top tether is required, are the strap and anchoring hardware with the seat? If not, order and install immediately.
6. Have small children and toddlers try seat for comfort. Are the straps easily adjustable for your child's size?
7. Try the seat in your car to make sure belts will fit through the proper place in the frame or around the front (as specified in directions) and can be tightened.

American Safety Seat
Swyngomatic/Graco, Main St.
Elverson, PA 19520
top tether
3 pt. harness with abdominal pad

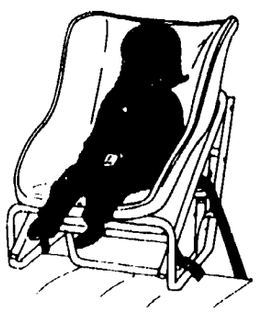


Bobby Mac Deluxe
Questor, 1801 Commerce Dr., Piqua, OH 45356
3 or 5 pt. harness and strap retainer
partial shield



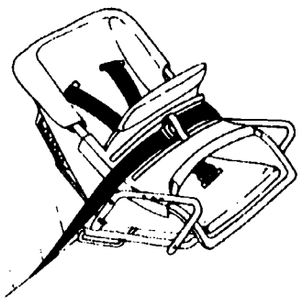
Astroseat V
International Mfg.
2500 Washington St., Boston, MA 02119
top tether
5 pt. harness

Bobby Mac Super
Questor, 1801 Commerce Dr., Piqua, OH 45356
Y-shaped top tether
5 pt. harness with strap retainer



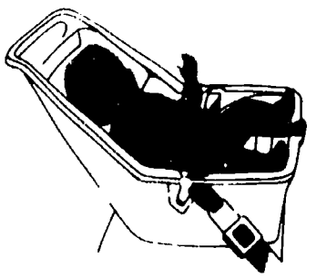
Astroseat 9100 Series
International Mfg.
2500 Washington St., Boston, MA 02119
5 pt. harness with shoulder strap retainer
harness recalled · contact manufacturer

Child Love Seat or Motor Toter
Century, 1366 Commerce Dr., Stow, OH 44224
top tether
5 pt. harness



Boby-Mac 2-in-1 or 3-in-1
Questor, 1801 Commerce Dr., Piqua, OH 45356
4 or 5 pt. harnesses and strap retainer
partial shield

Infanseat Harness
Questor, 1801 Commerce Dr., Piqua, OH 45356
top tether
5 pt. harness and shoulder harness plate



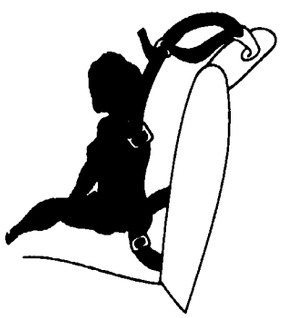
Infant Love Seat
Century, 1366 Commerce Dr., Stow, OH 44224
3 pt. harness and strap retainer

Kantwet 985, 986, 987, 988
Questor, 1801 Commerce Dr., Pique, OH 45356
5 pt. harness

Kantwet Fitz-All Deluxe
Questor, 1801 Commerce Dr., Piqua, OH 45356
top tether
5 pt. harness

Kantwet One Step 401
Questor, 1801 Commerce Dr., Piqua, OH 45356
2 shoulder straps and one crotch strap attached to padded arm rest
top tether

Little Rider Harness
Rose Manufacturing Co.
2250 So. Tejon St., Englewood, CO 80110-1051
5 pt. harness with D-shaped slide adjustment

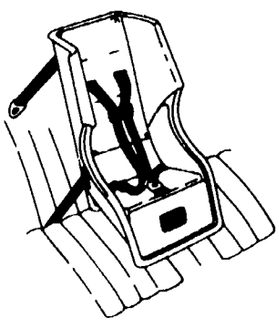


Kantwet 884, 885
Questor, 1801 Commerce Dr., Piqua, OH 45356
top tether
5 pt. harness

Mopar Child Seat
Chrysler Corp.
Parts Order Dept., Nat'l Depot.
26311 Lawrence, Centerline, MI 48015
one piece padded shield

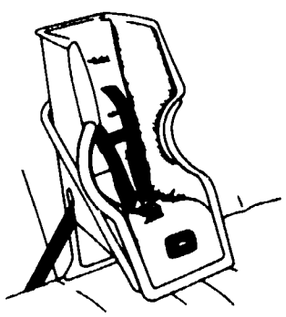
Positest
Hedstrom, P.O. Box 432, Bedford, PA 15522
5 pt. harness with strap retainer
side anchor strap

Safety Shell 74 (for Toddler)
Cosco/Peterson (address above)
shield with crotch strap
side tether



Safe N Easy 203
Cosco/Peterson
2525 State St., Columbua, IN 47201
top tether
5 pt. harness with strap retainer

Safety Shell 74 (for 3-4 year old)
(Cosco/Peterson (address above)
5 pt. harness
side tether
(order extra retainer clip)



Safe N Easy 13-313, 314
Cosco/Peterson (address above)
5 pt. harness with retainer clip

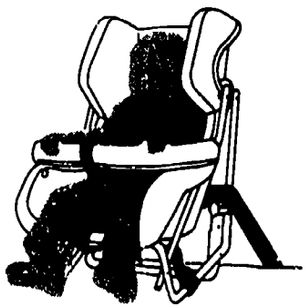
Safe-T-Seat 78
Cosco/Peterson
2525 State St., Columbus, IN 47201
top tether before 1980
5 pt. harness with retainer

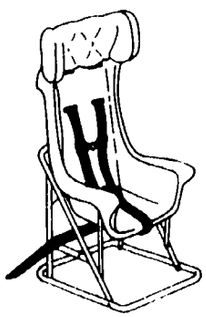
Safety Shell 75, or 74 plus 72 insert
Cosco/Peterson (address above)
3 pt. harness
side tether
screw-in plastic insert (#72)

Safe-T-Rider
Century, 1366 Commerce Dr., Stow, OH 44224
tethered harness (defective before 1980)

Sweetheart II, 48, 70, 71
Unilando-Bunny Bear (out of business)
5 pt. harness

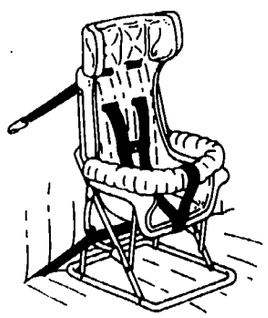
Trav-L-Guard
Century, 1366 Commerce Dr., Stow, OH 44224
5 pt. harness with strap retainer
armrest strap
armrest (can be removed)

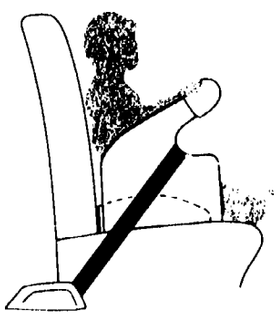




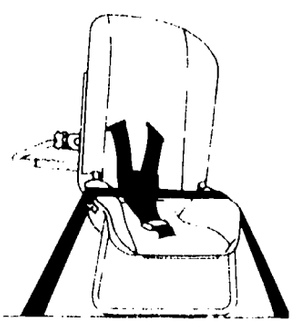
Toddler Car Seat 595
Strolee, P.O. Box 5786
Rancho Dominguez, CA 90224
5 pt. harness with strap retainer

Wee Care 597, 597S
Strolee, P.O. Box 5786
Rancho Dominguez, CA 90224
top tether
5 pt. harness with strap retainer
armrest strap
armrest (can be removed)





Tot Guard
Ford, Accessories Merchandising,
P.O. Box 1902, Dearborn, MI 48121
padded shield
booster cushion



Travel-L-Ette
Century, 1366 Commerce Dr., Stow, OH 44224
3 pt. harness with strap retainer

Child Safety Cushion
Volvo, Parts Div., Industrial Park,
Rockleigh, NJ 07647
upholstered one piece booster base for use with lap/shoulder belts only.

Special Note on Wee Care 597, 597S
(Picture shows the only safe infant position)
Modify seats made before April '80 by using two #32 auto hose clamps to secure support bar to base at back.

RESOURCES FOR YOUR PROGRAM

The selected materials listed here are among the most current, most accurate, and, in the authors' eyes, the most useful for a comprehensive community program. It is up-to-date as of the summer of 1983. Loaned sample copies of those that have "UMTRI" and a catalogue number after them are available from the Public Information Materials Center (see below).

Sources of materials include the National Highway Traffic Safety Administration, (NHTSA), State offices of highway safety, school districts' educational resource centers, car safety sat manufacturers, and national organizations concerned—involved in the Safety Belt Campaign. Addresses of many suppliers are listed in sections 2 and 4 in the Appendix.

The Public Information Materials Center provides free three-week loans for examination or study. Use the UMTRI number given here or order from the **Child Restraint Public Information Materials Catalogue,** which is available for $5 ($3.50 for NCPSA members) from:

Public Information Materials Center
UMTRI
2901 Baxter Rd.
Ann Arbor, MI 48109
(Attn: Ann Grimm, NCPSA)
(Make checks payable to the University of Michigan.)

You may also want to consult NHTSA's 1983 **Guide to Audiovisual and Print Materials on Safety Belts and Child Car Safety Seats.** Order DOT HS 806 418.

Manuals and Guides

Training Materials for Child Safety Advocates and Educators

HOW DO THE CHILDREN RIDE? (1979) UNTRI #44232, 44233 in Spanish, 44337 cassette
30-minute slide show with script to train people for observation surveys in English and Spanish.
American Academy of Pediatrics.

MEDICAL SCHOOL CURRICULUM
Expected to be finished in later half of 1984. Approximately 500 page book covering the waterfront of traffic safety in 3 phases: precrash, crash, and postcrash. Being tested in classrooms in spring '84.
American Assoc. for Automotive Medicine

Rx FOR SAFETY UMTRI (no number yet)
Videotape aimed at persuading health professionals to become child passenger safety advocates in their practices. Send a blank 15 minute ¾" videotape.
MI State Police, Office of Highway Safety Planning

TRAINING FOR CHLD PASSENGER SAFETY LAW ENFORCEMENT
MI State Police, Office of Highway Safety Planning

OBSERVED MISUSE OF CHILD RESTRAINTS (1983)
60 slides with detailed script for sale.
Physicians for Automotive Safety.

BACKGROUND MATERIALS

CAR SAFETY SEATS: MANUFACTURERS' INSTRUCTIONS
Periodically updated. Collection of manufacturers' instruction manuals for all crashworthy infant & chld restraints, both current and discontinued.
Seattle Action for Child Transportation Safety
14348 Sunrise Drive NE
Bainbridge Island, WA 98110
(206) 842-3277

POLICY UPDATE: CHILD RESTRAINT LEGISLATION
Periodically updated. Overview of activity in all States.
National Safety Council Office of Federal Affairs
1705 DeSales St., N.W.
Washington, D.C. 20036
(202) 293-2270

CHILDREN IN CRASHES
Periodically updated. Illustrated booklet, reviews problems and countermeasures which can be taken to reduce a national public health tragedy.
Communications Department
Insurance Institute for Highway Safety

GENERAL MOTORS TETHER INSTALLATION DIRECTIONS
Details on placement of tether anchorages in GM vehicles other than sedans, manufactured between 1971 and 1981. Your Governor's Highway Safety Representative was sent a copy by NHTSA.

THE TENNESSEE CHILD PASSENGER SAFETY PROGRAM (1980)
A series of 11 reports available separately under their individual titles, the first report, #DOT-H-805-801, bearing the title above. The reports are numbered consecutively with the final report #DOT-H-805-811.
The impact of a child passenger restraint law & a public information & education program in Tennessee.
Development of materials & public relations efforts to promote child passenger safety.
Use of telephone surveys to determine awareness of Tennessee child passenger protection law.
Organizational network for promoting child passenger safety.
Judicial perspectives on child passenger protection legislation.
Enforcement of the child passenger protection law.
Development of child passenger safety component for driver education programs.
Parents' knowledge, attitudes, and behavior about child passenger safety.
Child restraint device loaner program.
Compliance with the child passenger protection law.
Effects of a loaner program for low-income mothers
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22151
(703) 487-4600

THE HUMAN COLLISION - HOW INJURIES OCCUR—HOW SEAT BELTS PREVENT THEM
Seat Belt Information Centre
Motor Vehicle Branch
Ministry of Transportation,
communications & Highways
Victoria, British Columbua V8T 5A3
Canada
(604) 387-3228

TRANSPORTATION SAFETY RULES FOR MICHIGAN'S LICENSED CHILD CARE CENTERS (June 1980) UMTRI #39152
Michigan Office of Highway Safety Planning
Michigan Dept. of Social Services
Div. of Child Care Center Licensing
General Office Building
Lansing, MI 48913
(517) 373-8011

How-To Materials

EARLY RIDER INFANT/CHILD SAFETY SEAT PROJECT (1979) (To be updated.) A three-booklet collection of basic information.
EARLY RIDER PUBLICITY HANDBOOK offers techniques for working with the media and how-tos for conducting an observation survey.
EARLY RIDER EDUCATIONAL CURRICULUM for health professionals in prenatal, post-partum, and pediatric settings.
EARLY RIDER LOAN A SEAT program manual.
"BABYSITTER" Poster UMTRI #39368
National Highway Traffic Safety Administration

GUIDELINES FOR CONDUCTING A SURVEY OF THE USE OF SAFETY BELTS AND CHILD SAFETY SEATS (1983)
How to conduct observation surveys, plus sample data forms.
National Highway Traffic Safety Administration

Loan-A-Seat Program Guides

INFANT SAFETY SEAT LOANER PROGRAM: A GUIDE FOR HEALTH PROFESSIONALS IN A HOSPITAL SETTING (1980) and
INFANT SAFETY SEAT LOANER PROGRAM: A GUIDE FOR SERVICE GROUPS (1980)
Two separate manuals; each gives a step-by-step outline of options and necessities for starting a loaner program. Free in the State, $4 each out-of-State.
University of North Carolina
Highway Safety Research Center

SAFE PASSAGE. RENTING AND SELLING CHILD CAR SAFETY SEATS: (1983)
Free 27 page manual. UMTRI #49762
Questor Juvenile Furniture Co.

SAFETY SEAT LOANER PROGRAMS: PROTECTING YOUR COMMUNITY'S CHILDREN (slide show) (1983)
80 slides with audio cassette for sale. Use in training volunteers running loaner programs.
University of North Carolina
Highway Safety Research Center

DO LOAN-A-SEAT PROGRAMS NEED LIABILITY COVERAGE?
Describes the legal risks of loaner programs. Details risk-reducing actions a program can take.
National Child Passenger Safety Association

Preschool and Elementary Materials

THE ADVENTURES OF BELTMAN
Multi-media passenger/pedestrian safety program for older preschoolers thru grade 3, starring a "super hero." Includes a real lap belt, 3 filmstrips with cassettes, stickers, games, teacher guides, and more.
FLI Learning Systems, Inc.
(formerly Film Loops, Inc.)
PO Box 2233
Princeton, NJ 08540
(609) 466-9000

THE BUCKLE UP BOX (1979) UMTRI #44231
Multi-media kit which takes a behavioral approach to safety belt usage. 20-page flip chart, 2 soundsheet records, classroom mobile, 30 paper safety belts, plus Buckle Up Books, stickers and personalized achievement awards. Parents are asked to observe children on "daily missions."
Media Intensive Learning Corp.
1623 South Lamar
Austin, TX 78704
(512) 444-6734

RIDING WITH BUCKLE BEAR (1982) UMTRI #49759
Multi-media kit for preschool and kindergarten which includes a filmstrip or 25 slides with audio cassette.
Weiner/Seaman Productions
1505 Winchester Ave.
Glendale, CA 91201

PRESCHOOL PASSENGER PROTECTION: TEACHING CHILDREN ABOUT TRANSPORTATION SAFETY (1980)
100 page resource unit containing activities and background materials organized around program areas typically included in early education programs. Transportation safety concepts and program area concepts are identified for each activity. (Available for cost of reproduction)
Jo Lynn Cunningham
c/o Child and Family Studies
University of Tennessee
Knoxville, TN 37996
(615) 974-5316

SAFETY TOWN
Ten-day course using a miniature town children can walk or drive through to learn safety awareness and prevention procedures, includes "buckling up" training before taking cars from the Safety Town parking area.
National Safety Town Center
PO Box 39312
Cleveland, OH 44139
(216) 831-7433

THE BUKCLE UP COLORING BOOK (1982) UMTRI #49560
Features Captain Click. A couple of pages of text in French. More sophisticated messages than most coloring books. (Master available)
Traffic Safety Education Dept.
Insurance Corp. of British Columbia
151 W. Esplanade
N. Vancouver, B.C. V7M 3H9 Canada
(604) 661-6651

CAPTAIN CLICK'S ALPHABET - WHO'S WHO (1982) UMTRI #49559
Pamphlet offers a comical character for every letter of the alphabet, Each one promotes belt use.
Traffic Safety Education Dept.
(address above)

Senior High Materials

CHILD PASSENGER SAFETY: A FAMILY AFFAIR
Resource unit for home economics students sufficient to occupy 2 to 5 class meetings. Publication No. A261-08440
Home Economics Education Association
1201 Sixteenth Street, NW
Washington, DC 20036
(202) 833-4138

PHYSICS AND AUTOMOBILE SAFETY BELTS UMTRI #44176
Booklet containing a collection of problems and experiments for physics classes. GPO Stock No. 050-003-00254-2
Superintendent of Documents
Government Printing Office
Washington, DC 20402

SEAT BELT SCIENCE: ACTIVITIES FOR GENERAL SCIENCE (1982) UMTRI #49713
55 page manual plus film, "Dynamics of a Crash"
National Highway Traffic Safety Administration

WHEELS
Kit for an eight week training course for pre-driving teenagers and their parents which involves local experts as speakers. One kit containing written materials, cassette tapes and 180 slides was sent to each State's Cooperative Extension agent in charge of 4-H programs. Two page Promotional Leaflet (PR002), 24-page Organizations Guide (PR003), Reference List (PR004) and eight page camera-ready Suggested Final Event Activity (PR005) are available free from National 4-H Council. Kits (Order No. CO 610) may be purchased from:
National 4-H Council
7100 Connecticut Ave.
Chevy Chase, MD 20815
(301) 656-9000

Parking Lot Signs

FASTEN CHILDREN'S SEAT BELTS AND FASTEN SEAT BELT
Black on white, 12" x 18", 18" x 24", or 24" x 30" signs, each ranging in price from $4.95 to $137.55 depending on construction material and size.
Order No. 09NA342 (children's sign)
Order No. 01NA670 (seat belt sign)
ABC Manufacturing
Box 401
Raleigh, MS 39153
1-800-647-7065 except in Mississippi call collect
(601) 733-2264

WE NEED YOU - BUCKLE UP (1982)
Blue, red and white, 18" x 24" sign available to State governments, IRS recognized non-profit tax-exempt organizations, and the Federal Government. $10 plus shipping, Poster copy, UMTRI #49651
Deputy Director
Bureau of Michigan Industries
3222 S. Logan
Lansing, MI 48913
(517) 373-6323

SAFETY BELTS: ARE THEY FASTENED? UMTRI (no number yet)
Blue and white, reflectorized, 18" x 24" sign, $7 plus shipping
LTC Marketing
P.O. Box 251
Canton, MA 02021
(617) 828-3481

Films

All are 16mm, unless otherwise specified, and in color. For an explanation of the target audience codes, refer to the listing below:

C - Civic Groups
DE - Driver Ed Classes
ES - Employee Safety Programs
G - General Adult Audiences
HP - Health Professional, Health Depts
JH - Junior High
K - Kindergarten
LP - Loaner Programs
N - Nursery Schools, Day Care Centers
P - Prenatal, Postnatal, and Parenting Classes, PTA, Pediatric Offices

DON'RISK YOUR CHILD'S LIFE: HOW TO PROTECT YOUNG AUTOMOBILE PASSENGERS (1983)
14 minutes
Audience: G, HP, LP, P
Dramatic crash footage illustrates impact forces. Correct use of infant and child restraints and of standard belts for older children. Special attention to misuse problems. (This is entirely new version of PAS film "Car Safety: Don't Risk Your Child's Life" which was originally produced in 1978 and updated in 1980.)
For sale or rent from: Physicians for Automotive Safety
Also in videocassette format.

CHILDREN AND INFANTS IN CAR CRASHES: RESTRAINED AND UNRESTRAINED (1979) UMTRI #49131
5 minutes or 10 minutes
Audience: C, G, HP, LP, P, JH, DE
Silent footage of crash tests with seat belted and unrestrained dummies, depicting infant on unbelted mothers lap, kids in station wagon cargo area, and kids loose in a van.
For sale or loan from Insurance Institute for Highway Safety.
Loan: Modern Talking Picture Service
500 Park St. No.
St. Petersburg, FL 33709
(813) 541-7571

SECURE YOUR CHILD'S FUTURE (1979) UMTRI #49906
13 minutes
Audience: C, DE, ES, G, JH, P
Excellent Canadian production which combines entertaining drama and in-depth documentary. Emphasizes the buckling up of the whole family including pregnant women.
For sale from:
Crawley Films
19 Fairmont Ave.
Ottawa, Ontario K1Y 3B5
Canada
(613) 728-3513

LIFE IS PRECIOUS, BUCKLE THEM IN (1982)
14 minutes
Audience: C, G, HP, P
Effectively narrated by a Canadian pediatrician. Covers the 4 stages of protection: The fetus, infant, toddler, and young child. Also gives pointers on how to shop for a safety seat, install tether straps, covert a seat from infant to toddler positions.
For sale from:
Film House
380 Adelaide St.
West Toronto, Ontario M5V 1R7
Canada
(416) 364-4321

FOR JAMIE (1979) UMTRI #44442
24 minutes
Audience: C, G, HP, P
Emotional film focuses on car safety needs of 9 month to 8-year-old child. Excells in addressing parental excuses and offers behavioral tips for gaining child acceptance.
For sale from:
Visucom Productions, Inc.
P.O. Box 5472
Redwood City, CA 94063
(415) 364-5566

THE PERFECT GIFT (1980) UMTRI #44441
22 minutes
Audience: C, G, HP, P
To inform and motivate expectant and new parents to acquire and use an infant car safety seat. Crash test scenes show results of proper use and misuse of safety seats.
For sale from Visucom Productions, Inc.

HUMAN COLLISION
20 minutes
Audience: C, DE, ES, G, HP, JH
Documentary presents bio-mechanical and bio-medical aspects of crashes, function of belts, and dispels myths associated with safety belt use.
For sale from:
Film House
380 Adelaide St.
West Toronto, Ontario M5V 1R7
Canada
(416) 364-4321

DYNAMICS OF A CRASH (1976) UMTRI #49130
2½ minutes
Audience: ES, G, DE
Shows unbelted dummies in crash test of head-on collision from both interior and exterior viewpoints. Part of "Seat Belt Science: Activities for General Science" kit
Loan: NHTSA

DYNAMIC TESTING OF CHILD OCCUPANT PROTECTION CONCEPTS (1982) UMTRI #49563
15 minutes
Audience: G, HP, P, N
Silent footage of crash tests of dummies belted different ways, safety seats without tethers attached or wrongly attached, and infant in cloth chest pack.

ROOM TO LIVE (1979) UMTRI #49893
27 minutes
Audience: C, DE, ES, G, HP, JH
Dramatic and powerful "chalkboard" presentation by Michigan State Police Trooper emphasizing wearing of seat belts.
For sale or rent from:
The Media Group
2215 29th St.
Grand Rapids, MI 49503
(616) 247-1364

Filmstrips

ADVENTURES OF BELTMAN (1978)
8 minutes with audio cassette
Audience: K, N, Grades 1-3
"Super Hero" teaches safe in-car behavior and pedestrian habits. Part of multi-media kit.
For sale from:
FLI Learning Systems, Inc.
(formerly Film Loops, Inc.)
P.O. Box 2233
Princeton, NJ 08540
(609) 466-9000

BELTMAN IN THE LAND OF GIANTS (1981)
14 minutes
Audience: K, N, Grade 1-3
Mostly pedestrian safety; however, includes some frames on seat belt usage. Uses a "Super Heroine" physician in this science fiction adventure.
For sale from:
FLI Learning Systems, Inc.

BELTMAN "CREATE YOUR OWN FILMSTRIP"
Audience: K, N, Grades 1-3
A class coloring activity which is converted into an audio filmstrip by FLI Learning Systems, Inc. and returned to the school.
For sale from:
FLI Learning Systems, Inc.

BELTMAN MEETS THE TEACHER (1981)
10 minutes
Audience: K, N, Grades 1-3 teachers
Humerous characterization of a not-so-super "hero." Beltman presents motivating reasons for teacher to include seat belt use education in her lesson plans.
For sale from:
FLI Learning Systems, Inc.

DO YOU BUCKLE UP? (1976)
20 frames plus 8 minute 16 mm movie
Audience: Grades 4-9
Humerous, debunks excuses for not wearing belts.
For sale from:
FLI Learning Systems, Inc.

Filmstrips

DO YOU CARE ENOUGH? (1977)
7 minutes or 25 minute 16 mm film
Audience: HP, P
Designed to motivate new parents to use infant safety seats. Emphasizes feeder seats, car beds, and mother's arms are inadequate. 1983 version refers to mandatory use laws.
For sale from:
FLI Learning Systems, Inc.

RIDING WITH BUCKLE BEAR (1982) UMTRI #49759
5 minutes with audio cassette, also as 25 slides
Audience: K, N
Rhymed story using a family of stuffed animals to show need for using child safety seats and seat belts. Part of a kit.
For sale from:
Weiner/Seaman Productions
1505 Winchester Ave.
Glendale, CA 91201
(203) 224-3263

Slide Shows

SAFE PASSAGE (1983) UMTRI #49760
17 minutes with audio cassette
Audience: C, G, HP, LP, P
Designed for expectant and new parents in childbirth, hospital, and health dept. education programs. Part of a kit.
For sale or loan from:
Questor Juvenile Furniture Co.

CHILDSAFE (1980) UMTRI #49057
14 minutes with audio cassette
Audience: G, HP, LP, P
States need for and depicts types of safe infant and child restraints. Shows how to best use restraints.
For sale from:
National Safety Council

RIDING WITH BUCKLE BEAR (1982) UMTRI #49759
5 minutes
(see listing under filmstrips)

CHILDREN AND INFANTS IN CAR CRASHES: RESTRAINED AND UNRESTRAINED (excerpts)
12 slides only
Frames taken from movie of same name (see films)
For sale from:
Insurance Institute for Highway Safety

Pamphlets, Posters

DON'T RISK YOUR CHILD'S LIFE (1982) UMTRI #49530
Updated frequently, it lists currently marketed restraints by name, manufacturer, and design features. Concise, accurate, complete information about the whys and hows of restraints. Can be purchased with personalized imprints of sponsor's name.
Physicians for Automotive Safety

SAFE PASSAGE (1983) UMTRI (no number yet)
Excellent graphics and attention to details of everyday use of safety seats. 50 copies free. Also part of a larger educational kit. Graphics of pamphlet made into a poster.
Questor Juvenile Furniture Co.

WILL YOU GIVE YOUR CHILD THE PERFECT GIFT? (1981) UMTRI #49332, in Spanish #49168
Good use of a true accident story. Lists safe seats by name in a chart. California contact:
CA Child Passenger Safety Assoc.
3820 Kemper St., Suite 102
San Diego, CA 91240
(619) 224-2731

For information on ordering 500-1000 copies for outside California, write:
Transportation Hazards Committee
American Academy of Pediatrics
California Chapter 2
P.O. Box 2134
Inglewood, CA 90305

CHILD SAFETY SEATS FOR YOUR AUTOMOBILE (1982)
Gives good information on top tether installation. No listing of individual restraints. 50 copies free. Negatives available for reprinting.
Your Governor's Highway Safety Rep. or
NHTSA Regional Offices, or
National Highway Traffic Safety Admin.

DON'T FORGET, YOU'RE BUCKLING UP FOR TWO NOW! (1981) UMTRI #49183
For pregnant women. Particularly noteworthy for its design, accurate pictures, clear message, and attention to continuity of protection for the baby after birth. Up to 100 copies free. Camera-ready photomasters available for loan or purchase. (Illustrated in Chapter Four).
Project KISS
Health Education Center
Maryland Department of Health & Mental Hygiene
300 West Preston St., Rm 410
Baltimore, MD 21201
(301) 383-7290

WHAT YOU CAN DO TO PROTECT THE CHILDREN (1982) UMTRI #49650
Spells out ways of institutionalizing child passenger safety information programs.
National Child Passenger Safety Assoc.

AUTO SAFETY AND YOUR CHILD (1980).
More tips on managing child behavior than NHTSA pamphlet: 50 copies free. Publication no. (OHDS) 78-30123. (Available in Spanish, Publication no. (OHDS) 78-30132). UMTRI #44403
Department of Health & Human Services
Publications Distribution Mgt.
Room 356G
Hubert Humphrey Bldg.
200 Independence Ave., S.W.
Washington, DC 20201
(202) 472-5543

Posters

"WHY LET THE GOOD DIE YOUNG?" UMTRI #49172
Red and blue on white
(illustrated in Introduction.) Sample available. Arrangements for reproduction can be made by contacting City of Milwaukee Health Dept., Municipal Bldg., Room 209, 841 N. Broadway, Milwaukee, WI 53202 (414) 278-3635

"A SHOT & A SEAT — CARE ENOUGH" UMTRI #44400
Red background
For sale from:
FLI Learning Systems, Inc.
P.O. Box 2233
Princeton, NJ 08540
(609) 466-9000

"I'M NOT GOING ANYWHERE UNTIL YOU BUCKLE ME UP!"
Orange background; UMTRI #39431
Photostate masters from Governor's Traffic Safety Council:
212 Transportation and Safety Bldg.
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GLOSSARY OF TECHNICAL TERMS

Air Bag - A restraint system which automatically inflates a bag in front of driver and front-seat passengers to cushion crash forces. Must be used with a lap belt for roll-over protection.

Anchor Strap - see Tether Strap.

Armrest - (Guard Rail or Armrest/shield) A feature of many car safety seats (CSS) that has **NO** safety function. A padded, U-shaped bar or convex surface that swings down in front of the child. The five-point safety harness provides protection. The armrest should not be mistaken for a safety shield. Many parents use armrests without harnesses.

Auto Booster Seat - A seat without a permanent back, designed specially for crash protection. It elevates the child and properly positions both lap and shoulder belts on the youngster's body. Most have tethered harnesses for use in rear seats; a few use shields instead of harnesses. (Note: Avoid using the short term "booster seat" which may indicate to some the type made for home use, which are not designed for crash protection.)

Automatic Belts - A restraint system with a belt that wraps around the passenger without any action on his or her part.

Belt-Sensitive Emergency-Locking Belt System - A safety belt which only locks tight when the belt is jerked strongly, as when the occupant's body is thrown against it in a crash.

Car Safety Seat (CSS) - A generic term for a device designed to protect an infant or child passenger from injury in an auto collision. (There are many other terms in use, some of which have misleading implications to some people, so be sure to define for your audience the word you use. "Car seat" is used by many manufacturers but may imply old-style seats not designed for crash protection. "Infant seat" or "Infant carrier" may mean a flimsy household baby holder. "Child restraint" or "Child restraint device" may have negative connotations or seem too technical for use with parents or community members. "Infant car safety seat" and "Toddler car safety seat" are neutral and nontechnical. (At present all such devices look like seats. If car beds or harnesses become available, the term may have to be changed.)

Car Seat - A term for devices made for use by children in cars, but **NOT** designed for crash protection. Most seats made before the mid-1970s were of this type and were used by parents to keep children out of the way and help them see out of the car.

Combination Belt - An auto safety belt system with a diagonal shoulder restraint as well as a lap belt.

Continuous-Loop Combination Belt - A lap and shoulder belt made of one piece of webbing that slides through the latch plate.

Crash Test - See "Dynamic Test."

Dynamic Test - This laboratory test simulates the intense, split-second forces of a real collision. It is used to measure whether CSSs meet the Federal safety standard. A CSS with a 6-month or 3-year-old instrumented dummy strapped in is belted to a "test sled," accelerated to 20 or 30 miles per hour and then brought to an abrupt stop, as if a car were hitting a cement wall.

Emergency-Locking Belt - This type of belt system tightens only in an emergency, when its occupant is thrown against it or when the automobile's speed is suddenly reduced.

Excursion - The amount of movement of an occupant's body toward the direction of impact in a collision or dynamic test.

FMVSS 213 - Federal Motor Vehicle Safety Standard which regulates the manufacturer of CSSs for children up to 50 pounds. The original standard took effect in 1971, and the same number was retained when it underwent major revisions which became effective in 1981.

Five-Point Harness - A system of straps built into a CSS that restrains and anchors the child's body at five points - both shoulders, crotch, both hips.

Inertia Reel Belt - See "Emergency-Locking Belt."

Infant Safety Seat - Shortened term for Car Safety Seats (CSSs) used specifically for babies, usually younger than 9 months of age.

Lap Belt - A simple auto safety belt system that is fastened over the hips. (Note: Avoid calling this an "**adult** belt," which implies incorrectly that it should not be used for children.)

Latch Plate - The flat metal plate on a safety belt that fits into the buckle.

Locking Clip - An "H" shaped metal part, used to keep tension on the lap portion of a continuous-loop emergency-locking belt, so it can be used for a CSS.

Mini-Shield, Partial Shield - terms for a padded device which is part of the harness system of a CSS and takes the place of hip straps.

Restraint System - A device designed to hold the human body in place in a motor vehicle and prevent injury in a crash.

Shield - A large, padded, somewhat flexible, C-shaped surface which is part of a CSS and fits close to the child's abdomen. It replaces all or part of a restraint harness.

Shoulder-Strap Retainer - A small looped strap or plastic clip which holds the shoulder harness straps of a CSS so they won't slip off the shoulders. (Also called "retainer strap," "chest strap," "shoulder strap tie.")

Sliding Tongue - See Latch Plate.

Spring-Loaded Armrest - A type of armrest, attached to newer models (1981 or later), which pops up when not fastened down with the CSS harness. This is **NOT** part of the restraint system for the seat.

Static Test - The type of test applied to children's car seats between 1971 and 1981 under FMVSS 213. A torso-sized wooden block is harnessed into the car seat, which is belted to an auto seat. An increasingly strong pull is exerted on the block. The car seat passes if it retains the block and allows no more than 12" forward movement of the block.

Tether Anchor Assembly - Hardware with a large washer and bolt, used to fasten the tether strap of certain CSSs to the auto body.

Tether Strap - Also called an "Anchor Strap." A strap attached to the top of certain CSS models, which must be attached to the vehicle to keep the CSS from pivoting forward in a head-on crash.

Three-Point Harness - A harness built into some CSSs, which anchors the child in place at shoulders and crotch.

Vehicle-Sensitive Emergency-Locking Belt System - A safety belt that only locks when the vehicle slows down suddenly, as when it hits a solid object.

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