SUPPORTING STATEMENT FOR CONSOLIDATED JUSTIFICATION OF VEHICLE OWNER'S MANUAL REQUIREMENTS FOR MOTOR VEHICLES AND MOTOR VEHICLE EQUIPMENT

[49 CFR PARTS 571.108, 110, 138, 202, 205, 208, 210, 213, and 575.103, 105]

OMB Clearance Number 2127-0541

A. JUSTIFICATION

1. <u>Explain the circumstances that make the collection of information necessary</u>. <u>Attach a copy</u> <u>of the appropriate statute or regulation mandating or authorizing the collection of information</u>.

49 U.S.C. 30111, 30112, and 30117 of the National Traffic and Motor Vehicle Safety Act of 1966 authorizes the issuance of Federal Motor Vehicle Safety Standards (FMVSS) and the collection of data which supports their implementation. The agency, in prescribing a FMVSS, is to consider available relevant motor vehicle safety data, and to consult with other agencies, as it deems appropriate. Further, the Act mandates, that in issuing any FMVSS, the agency consider whether the standard is "reasonable, practicable and appropriate for the particular type of motor vehicle or item of motor vehicle equipment for which it is prescribed," and whether such standards will contribute to carrying out the purpose of the Act. The Secretary is authorized to issue, amend, and revoke such rules and regulations as deemed necessary to carry out this subchapter. The Secretary is also authorized to require manufacturers to provide information to first purchasers of motor vehicles or motor vehicle or attached to or accompanying the equipment, thereby supporting the Department's Strategic Goal of safety.

Several FMVSS and two Parts of the Code of Federal Regulations require that certain safety information be readily available to consumers and purchasers of motor vehicles and motor vehicle equipment. Included in this justification are the current requirements that certain safety precautions regarding items of motor vehicle equipment appear in the Owner's Manual. This is a consolidated justification that includes many FMVSSs. To be consistent, a representative number of 21 respondents is used throughout the following statements, representing major and small vehicle manufacturers. These current requirements are briefly described in the following listing:

FMVSS No. 108 - Lamps, Reflective Devices, and Associated Equipment

This standard requires that certain lamps and reflective devices with certain performance levels be installed on motor vehicles to assure that the roadway is properly illuminated, that vehicles can be readily seen, and that signals can be transmitted to other drivers sharing the road, during day, night and inclement weather. FMVSS No. 108 contains provisions so that owners, as well as traditional vehicle service personnel, can aim their vehicle's headlamps using equipment that is an integral part of the headlamp system. Since the specific manner in which aim is to be performed is not regulated (only the performance of the devices is), aiming devices manufactured or installed by different vehicle and headlamp manufacturers may work in significantly different ways. As a consequence, S7.8.5.2 (b) of FMVSS No 108 requires that instructions for proper use must be part of the vehicle as a label, or in the vehicle Owner's Manual.

FMVSS No. 110 – Tire Selection and Rims

This standard specifies requirements for tire selection to prevent tire overloading. The vehicle's normal load and maximum load on the tire shall not be greater than applicable specified limits. Owner's Manual information is required for the use of the spare tire and other safety information, such as correct tire size, proper inflation pressure, load limits, etc.

FMVSS No. 138 – Tire Pressure Monitoring Systems

This standard specifies requirements for a tire pressure monitoring system to warn the driver of an under-inflated tire condition. Its purpose is to reduce the likelihood of a vehicle crash resulting from tire failure due to operation in an under-inflated condition. The standard requires the Owner's Manual to include specific information on the low pressure warning telltale and the malfunction indicator telltale. In a final rule published April 8, 2005, most vehicles with a gross vehicle weight rating of 4,536 kg or less (e.g., excluding motorcycles) were required to be equipped with a tire pressure monitoring system by September 1, 2008 and include related safety information in the Owner's Manual.

FMVSS No. 202 – Head Restraints

This standard specifies requirements for head restraints. The standard, which seeks to reduce whiplash injuries in rear collisions, currently requires head restraints for front outboard

designated seating positions in passenger cars and in light multipurpose passenger vehicles, trucks and buses. In a final rule published on May 4, 2007 (69 FR 74880), FMVSS No. 202 will require that vehicle manufacturers include information about appropriate adjustment of front outboard seat head restraints in Owner's Manuals for 80 percent of vehicles manufactured on or after September 1, 2009 and of front outboard seats of all vehicles manufactured on or after September 1, 2010. The final rule will require that vehicle manufacturers include information about appropriate adjustment of optionally provided rear outboard seat head restraints in Owner's Manuals for 80 percent with rear head restraints in Owner's Manuals for 80 percent of vehicles manufactured on or after September 1, 2010. The final rule will require that vehicle manufactures include information about appropriate adjustment of optionally provided rear outboard seat head restraints in Owner's Manuals for 80 percent of vehicles manufactured with rear head restraints after September 1, 2010 and all vehicles with optionally provided rear outboard head restraints manufactured on or after September 1, 2011.

FMVSS No. 205 - Glazing Materials

This standard specifies requirements for all glazing materials used in windshields, windows and interior partitions of motor vehicles. Its purpose is to reduce the likelihood of lacerations and to minimize the possibility of occupants penetrating the windshield in a crash. Detailed information regarding the care and maintenance of such glazing items, as the glass-plastic windshield, is required to be placed in the Owner's Manual.

FMVSS No. 208 - Occupant Crash Protection

This standard specifies requirements for both active and passive occupant crash protection systems for passenger cars, multipurpose passenger vehicles, trucks and small buses. Certain safety features, such as air bags, and the care and maintenance of air bag systems, are required to be explained to the owner by means of the Owner's Manual. The Owner's Manual must describe the operation of an optionally provided air bag on/off switch. The Owner's Manual must also describe the operation of any tension relieving and locking features of the provided seat belts.

FMVSS No. 210 - Seat Belt Assembly Anchorages

This standard specifies requirements for seat belt assembly anchorages to ensure effective occupant restraint and to reduce the likelihood of failure in a crash. FMVSS No. 210 requires that the Owner's Manual for vehicles with a gross vehicle weight rating of 10,000 pounds or less manufactured after September 1, 1987 shall include:

- a. A section explaining that child restraints are designed to be secured by means of the vehicle seat belts, and that children could be endangered in a crash if their child restraints are not properly secured in the vehicle.
- b. In a vehicle with rear designated seating positions, a statement alerting vehicle owners that children are always safer in the rear seat.

These requirements are specified in S6 of FMVSS No. 210.

FMVSS No. 213 - Child Restraint Systems

This standard specifies requirements for child restraint systems and requires that manufacturers provide consumers with detailed information relating to child safety in air bag-equipped vehicles. The vehicle Owner's Manual must include information about the operation and do's and don'ts of built-in child seats.

Part 575.103 - Truck Camper Loading

Manufacturers of slide-in campers designed to fit into the cargo bed of pickup trucks are required to provide certain consumer information relating to safe vehicle loads when certain trucks are equipped with campers. Manufacturers must affix a label to each camper that contains information relating to certification, identification and proper loading, and must provide truck owners detailed loading information in the camper Owner's Manual. Truck manufacturers must also provide information in their Owner's Manual on the proper accommodation of slide-in campers.

Part 575.105 – Vehicle Rollover

This regulation requires manufacturers of utility vehicles to alert drivers that the particular handling and maneuvering characteristics of utility vehicles require special driving practices when these vehicles are operated on paved roads. A statement is provided in the regulation, which manufacturers shall include, in its entirety or equivalent form, in the Owner's Manual.

2. <u>Indicate how, by whom, and for what purpose the information is to be used</u>. <u>Indicate actual use of information received from the current collection</u>.

The Federal program for reducing highway fatalities, injuries and crashes is likely to be adversely affected if the information is not collected, since consumers would not be made readily aware of certain important safety provisions that apply to critical components of the vehicle. The following information has been identified as critical by the Code of Federal Regulations for safe operation of the vehicle and its equipment, and includes a wide range of topics:

Lighting

Without this information, consumers would be unable to perform simple headlamp alignment procedures.

<u>Tires</u>

Without this information, consumers would be unable to have important information regarding the use of their spare tire and other tire safety information, such as correct tire size, proper inflation pressure, load limits, etc.

Tire Pressure Monitoring Systems

Without this information, consumers may not understand the meaning of the low tire pressure telltale or the malfunction indicator telltale lamps. The information required in the Owner's Manual provides consumers with instructions on corrective action needed when either of these lamps illuminate.

Head Restraints

Without this information, consumers may not understand the proper positioning of their head restraint. Proper adjustment of the head restraint is required in order to minimize the risk of severe injury in the event of a crash. Consumers may also not understand how to remove and reinstall head restraints appropriately.

Glazing

Without this information, consumers would not have a readily accessible source of information dealing with the optimum manner of treatment for certain types of glazing, such as glass-plastic composites. Consumers without the proper information could damage the glazing by using inappropriate cleaning techniques. For example, the glazing could become scratched and hazy, thereby reducing driving visibility and increasing the risk of injury or fatality.

Occupant Crash Protection

Occupant crash protection is enhanced by two basic means of protection: the manually-operated safety belt and the automatic operation of the air bag. To achieve maximum benefit from the available protection provided in the modern vehicle, both the safety belt and the air bag must be used. Safety belts, if not worn, provide no benefit to the occupant, while air bags, if used improperly, can cause serious harm and even fatality when sitting too close to the air bag. Information relating to the proper use of the seat belt locking feature to tightly secure a child restraint system and the proper location and placement of infants and small children with respect to the air bag is vital knowledge for all occupants. The driver must be particularly aware of the pitfalls to be avoided in restraining small children and infants. Installing a rear facing infant seat in the front seat of a vehicle equipped with a passenger air bag could have lethal consequences. The Owner's Manual is an important source of this information because it accompanies the vehicle at first sale and usually remains accessible in the vehicle (for example, stored in the glove compartment).

Other vital information is also required to explain the operation of the air bag system, and to provide information regarding the care and maintenance of the system. These do's and don'ts are important messages for every vehicle driver or occupant. Without this information, consumers have no easily available source of information that relates the specific information needed to safely operate a specific model equipped with vehicle-specific hardware.

Seat Belt Anchors

Seat belt anchors are important because they anchor the seat belt to the solid structure of the vehicle. Manufacturers locate seat belt anchors to meet stringent physical requirements in the Federal Regulations and to prevent any lap belt, for example, from pulling away from the vehicle structure during a severe crash. The vehicle owner is made aware, through the information required by the seat belt anchor standard, that all child restraints are designed to be secured by the vehicle belts and that children are always safer in the rear seat.

Child Restraint Systems

Misuse of certain types of child restraint systems has been identified as contributing to certain infant and child fatalities. An extensive consumer education campaign that includes more information on the labels that are affixed to the vehicle as well as the child restraint system is helping reduce misuse. However, some child seats are built into the vehicle's seat by the manufacturer of the vehicle. Vehicle owners have no source except the manufacturer for the information necessary to use these devices safely. Built-in child restraint systems are unique because they are not an after market item that can be purchased from several sources and then installed by the vehicle owner. Built-in child seats are always manufactured as an integral part of the vehicle's seating arrangement and have their own belt system and other unique requirements for their safe use.

Information that informs the vehicle owner about the special features to be found in manufacturer-installed child seats must be readily available to the owner. A requirement in the Federal Regulations for child restraint systems specifies the content of the information that is required. Without this information, the vehicle owner would have difficulty installing the child correctly in the built-in seat, because this information is not available any place else.

Camper Loading Provisions

(Only pickup trucks carry campers). If truck owners are unaware of the pitfalls of overloading a camper, or of installing a camper incorrectly, truck instability problems may arise that could place the truck and its occupants at risk from overturning. Truck manufacturers are required to inform the truck owner about the proper way to distribute a camper load to minimize the effects of off-center loading, overloading, or misusing a truck camper. This information must originate from the vehicle manufacturer because only the manufacturer knows how truck stability is affected by overloading or improper loading. If this information is not provided to the occupant, the truck may be overloaded and become unstable. Truck camper loading information is important and is required to be placed in the Owner's Manual for these reasons. Corresponding details about the camper must be included with the camper Owner's Manual so that the truck owner can be assured of a safe and proper installation.

Vehicle Rollover Information

Utility vehicles are characterized by a short wheelbase and relatively high center of gravity. These attributes work against vehicle stability in certain dynamic maneuvers, such as sharp turns or sudden changes in direction. To ensure that the utility vehicle owner does not misuse the vehicle because of a lack of information, Federal Regulations require that the manufacturer provide certain warnings about vehicle stability and safe driving tips. These warnings are required to be placed in the vehicle Owner's Manual. If this information is not provided to the utility vehicle owner, serious errors could occur because the operator did not know beforehand the consequences of certain maneuvers. Although relatively benign in vehicles with a long wheelbase or a low center of gravity, certain maneuvers could increase the risk of injury or fatality if carried out in a utility vehicle.

If the above information is not collected, it is likely that manufacturers could interpret that the Federal Government no longer cares about the publication of this information for consumer use. Manufacturers would then be at liberty to pursue other alternatives and could possibly stop publishing the information entirely. If publication of this information ceased, vehicle consumers would be placed in possible jeopardy because important safety information would no longer be available.

3. <u>Describe whether the collection of information involves the use of technological collection</u> techniques or other forms of information technology.

There are no technical or legal obstacles to reducing burden and it is believed that the actual burden imposed is minimal. Although the FMVSS and Parts cited in this justification do not require electronic processing of Owner's Manual information, there are no prohibitions against the use of electronic means to disseminate such information, as for example, the use of holographic heads-up displays of the text of the Owner's Manual on a part of the windshield or other part of the vehicle using computer controlled electronic processing. Generally, Owner's Manual information is provided to the vehicle's owner using a printing process, and the extent to which manufacturers use electronic means to print the text and graphics is not mandated by any of the FMVSS and Parts herein. The agency does not independently receive anything from the manufacturers regarding the owner's manual.

4. <u>Describe efforts to identify duplication</u>. Show specifically why similar information cannot be <u>used</u>.

The National Highway Traffic Safety Administration (NHTSA) is the only Federal agency requiring manufacturers to place critical information regarding the safety of motor vehicles in vehicle Owner's Manuals, as for example, information about the proper use of air bag systems. There is no similar information in existence, since Owner's Manuals represent a unique source of specialized information dealing with safe vehicle operation. No one else publishes this information, and it is available on the aftermarket only in the form of a replacement Owner's Manual, which must be purchased from the manufacturer. Consequently, there is no duplication.

5. <u>If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.</u>

It is anticipated that the following 22 respondents (manufacturers) could be affected by the

requirements to publish the specified information in the Owner's Manual:

American Honda BMW Chrysler Corporation Daewoo Fiat Motors of America Ford Motor Company General Motors Corporation Hyundai Isuzu Motors of America Kia Landrover

Lotus Mazda Motor Corporation Mercedes Benz USA Mitsubishi Nissan Motor Corporation Porsche Subaru Suzuki Toyota Volkswagen of America Volvo

All of these manufacturers may be considered to be in the category of large businesses. The Small Business Administration considers that a manufacturing firm employing less than 500 employees is a small business. None of the prospective respondents listed above fall in this category, and it is therefore not required to describe the methods used to minimize burden.

However, in the event that a manufacturer is considered to be a small business because of less than 500 employees, it is expected that the annual publication of Owner's Manuals by that firm will be on a much smaller scale than the large manufacturers, commensurate with the relative difference in size. A proportionate reduction in paperwork burden may be predicted for the small firms because their reduced production capacity will tend to reduce the number of manuals produced.

The collection of information from which to develop the appropriate Owner's Manual material should not be a large burden for any manufacturer because the information should be readily available in the technical material that is assembled for the vehicle's Service Manual. The Service Manual must be made available to dealers as soon as vehicles are placed on sale so that technicians can service new models. Additional burden due to technical reproduction of this material for the Owner's Manual would then be limited to a small amount of editorial review. The cost of printing the required information in the proper format would be the only significant cost associated with providing the information in the Owner's Manual. The information required is such a slight burden that it should not be an element discouraging small businesses from the market. There are no alternatives to those proposed to reduce the anticipated burden for these reasons. Consequently, there is no appreciable burden on small businesses.

6. <u>Describe the consequence to Federal Program or policy activities if the collection is not</u> <u>collected or collected less frequently.</u>

The consequences to FMVSS Nos. 108, 110, 138, 202, 205, 208, 210, 213 and Part 575.103 and 575.105, if the collection of information were conducted less frequently, would be to render ineffective the requirement that manufacturers provide instructions to vehicle owners regarding certain safety precautions. This would adversely affect the mission of NHTSA because it would

not be possible to evaluate the effectiveness of the standards and it would not be possible to determine if the mandated requirements for both active and passive types of occupant crash protection systems for passengers are actually effective in mitigating harm during vehicle crashes. More importantly, vehicle owners need accurate safety information to make the most effective use of the particular items for safety purposes.

To illustrate the relative importance of the Owner's Manual information, Executive Order 12291, dated February 17, 1981, requires Federal agencies to perform evaluations of their existing regulations, including those rules which result in an annual effect on the economy of \$100 million or more. The evaluation is undertaken to determine the actual costs and actual benefits of the existing rule. NHTSA began to evaluate its existing FMVSSs in 1975 with the goal of monitoring actual benefits and costs of safety equipment installed in production vehicles in response to the standards, and more generally, to assess whether a standard has met the specifications of the Act.

If the information were collected less frequently, it could be expected that some motor vehicle occupants would be placed at greater risk due to their misunderstanding or lack of understanding of the proper use of certain items of motor vehicle equipment, such as truck campers, air bags, or plastic coated windshields. This is particularly important in the area of child safety. As future crash statistics are compiled and used to analyze safety effectiveness of the standards, the data should reflect that an informed consumer minimizes the severity of traffic crashes. If information were collected less frequently, the reverse might be true, jeopardizing the ultimate determination of effectiveness as required by Executive Order 12291.

7. <u>Explain any special circumstances that require the collection to be conducted in a manner inconsistent with the guidelines set forth in 5 CFR 1320.6.</u>

The procedures specified for these data collections are fully consistent with the guidelines set forth in 5 CFR 1320.6.

8. <u>Provide a copy of the FEDERAL REGISTER document soliciting comments on extending</u> the collection of information, a summary of all public comments responding to the notice, and a description of the agency's actions in response to the comments. Describe efforts to consult with persons outside the agency to obtain their views.

A copy of the Federal Register notice (73 FR 65444) soliciting comments on extending the collection of information (Consolidated Owner's Manual Requirements) is provided. No comments were received.

9. <u>Explain any decision to provide any payment or gift to respondents, other than</u> <u>remuneration of contractors or grantees.</u>

No payment or gift will be provided to respondents.

10. <u>Describe any assurance of confidentiality provided to respondents.</u>

No assurance of confidentiality is involved. Owner's Manual information is intended to inform the public of the satisfactory safety performance of the product.

11. <u>Provide additional justification for any questions on matters that are commonly considered</u> <u>private.</u>

The requirements for Owner's Manual information are determined through public notice and comment for the individual requirements represented in this consolidation, are not of a sensitive nature, and are intended for public consumption. The agency believes no questions of a sensitive mater are involved in this information collection.

12. <u>Provide estimates of the hour burden of the collection of information on the respondents.</u>

Estimates of the hour burden of the collection of information on the respondents are developed in the following parts of Section 12. Because this is a consolidation of many different requirements for Owner's Manual information, the estimates are derived for each requirement separately, and then added together to create a lump sum estimate for all burden hours. To aid the reader in following along, the estimates will be presented in the order shown in Table 1, which summarizes the results for each unique requirement in the Code of Federal Regulations for Owner's Manual information.

Part/Section	Brief Title	Special Considerations
Part/Section 571.108 571.110 571.202 571.205 571.205 571.208 571.210 571.213 575.103	Lighting Tire Selection and Rims Tire Pressure Monitoring Head Restraints Glazing Crash Protection Belt Anchors Child Restraints Truck-Campers	See Note 1 See Note 2
575.105 Others not reported	Utility Vehicle	See Note 3

Table 1
Identification of Owner's Manual Requirements

Note 1: Only the requirements for inclusion in the vehicle Owner's Manual are included in this supporting statement.

Note 2: In the OMB justification statement submitted on April 15, 1995, estimates were provided for 571.126 (Truck-camper loading). This FMVSS was rescinded (see 61 FR 36657, July 12,1996) as part of the Regulatory

Reform Initiative. However, the basic requirements for specific information regarding truck-camper loading appears in Part 575.103. Part 575.103 specifies that certain information regarding truck camper loading be placed in the truck's vehicle Owner's Manual and in the camper Owner's Manual has therefore, been included in this list.

Note 3: FMVSS No. 120 includes an Owner's Manual requirement for non-pneumatic truck spare tires. However, FMVSS No. 120 Truck Tires is <u>not</u> included in the table because manufacturers are not producing non-pneumatic spare tire assembles.

FMVSS No. 303 includes requirements for the vehicle's Owner Manual. However, FMVSS No. 303, CNG Integrity is <u>not</u> included because of the low volume of CNG (compressed natural gas) vehicles in the vehicle fleet.

Part 571.108 (Lighting burden)

Part 571.108 requires that the aiming instruction for on-vehicle headlamp aimers be provided on a vehicle label or in the vehicle Owner's Manual to ensure correct aiming of headlamps. Manufacturers would need to amend the Owner's Manual only when this type of aimer was being added to a model for the first time. This burden in estimated as follows:

Review of existing publications text

It is estimated that manufacturers provided manuals for about 337 different model lines for passenger cars, light trucks, and vans, including sport utility models. Manufacturers would need to review text in existing manuals. Because of familiarity with model lines and because manual content would need to change only due to introduction of new technology, review time and time to prepare any technical changes is estimated at 4 hours per manual. Part 571.108 permits manufacturer a choice in placing headlamp aiming instruction in the Owner's Manual or on a label affixed to the vehicle. About half of the on-vehicle aim applications are estimated to use labels, with the remainder using information in the Owner's Manual to convey the necessary information. Based on these numbers, review time is estimated as follows:

	Model lines reviewed		337
Х	Review time per model manual	X	4 hours
х	Fraction using Owner's Manuals as the means of providing aiming information	Х	0.5
• • • • • • • • • • •		=	674 burden hours

Additional burden for new requirements

...

New requirements would require additional burden to implement for the first time. The burden is expected to be slight because this information is usually available from the vehicle Service Manual and should be readily transferable. The manufacturer would have already accumulated the technical information necessary to publish the information for aiming in the Service Manual. A technical writer would be required to transfer the text and illustrations to the format required for an Owner's Manual. It is assumed that text transplant is carried out using modern computerized word processing capabilities. It is further assumed that the technical writer or publication engineer can minimize the time required for electronic transfer of information and associated text editing to 1 hour per manual per model line. It is further estimated that no more than 5 percent of the model lines would need revision or addition annually, because this type of aiming method is out of favor on newly designed vehicles.

Based on these assumptions, this additional burden would be:

	Model lines		337		
Х	Transplant time per model manual	х	1 hour		
Х	Fraction of model manuals that would need addition		х	0.05	
•••••		=	16.85 bur	den hours	•

Total burden to manufacturers

For Part 571.108, the total annual burden to manufacturers is the sum of the text review burden and the text transplant burden explained above, or,

Total burden (571.108) = 674 hours + 16.85 hours = 690.85 hours

Part 571.110 (Tire selection and rim burden)

This standard specifies requirements for tire selection to prevent tire overloading. Owner's Manual information is required for the use of the spare tire and other safety information, such as correct tire size, proper inflation pressure, load limits, etc. We estimate that it would take the vehicle manufacturer 1.5 hours per vehicle model line to assemble all of the tire related information to include in the Owner's Manual, and that manufacturers perform a review of this information each model year as tire sizes and rim designations may change.

	Model lines reviewed		337
Х	Owner's Manual per model line	X	1
Х	Review time per model manual	Х	1.5 hours
•••••		= 50	5.5 burden hours

Part 571.138 (Tire pressure monitoring system burden)

The standard requires the Owner's Manual to include specific information on the low pressure

warning telltale and the malfunction indicator telltale. Statements are provided in the regulation which manufacturers shall include in the Owner's Manual. There is no burden to the respondents because the information required by Part 571.138 may be taken from the Federal regulations in its entirety.

Part 571.202 (Head restraints burden)

Federal regulations for head restraints require that the owner's manual for each vehicle must include an accurate description of the vehicle's head restraint system in an easily understandable format. The owner's manual must clearly identify which seats are equipped with head restraints. If the head restraints are removable, the owner's manual must provide instructions on how to remove the head restraint by a deliberate action distinct from any act necessary for adjustment, and how to reinstall head restraints. The owner's manual must warn that all head restraints must be reinstalled to properly protect vehicle occupants. Finally, the owner's manual must describe, in an easily understandable format the adjustment of the head restraints and/or seat back to achieve appropriate head restraint position relative to the occupant's head. The discussion must include, at a minimum, accurate information on the following topics:

- (1) A presentation and explanation of the main components of the vehicle's head restraints.
- (2) The basic requirements for proper head restraint operation, including an explanation of the actions that may affect the proper functioning of the head restraints.
- (3) The basic requirements for proper positioning of a head restraint in relation to an occupant's head position, including information regarding the proper positioning of the center of gravity of an occupant's head in relation to the head restraint.

It is estimated that it would take approximately 4 pages of the owner's manual to disclosure the required head restraint information. Assuming that a page of owner's manual information represents a typical density of 300 words per page, manufacturers would need to publish about 1,200 words of instructions or cautioning information in the Owner's Manual. There is <u>no</u> burden associated with using 'previously owned' text because the text and statements about head restraint safety are already on file and available as archive material.

However, manufacturers would need to improve the manuals to include the latest technical information, and this could be done on an annual basis. It is estimated that about 25 percent of the Owner's Manuals need major revision each year. The estimated burden to produce the required text and information is based on technical writing to consolidate the required new facts and/or information into text suitable for publication in the Owner's Manual. Since a great deal of the background information dealing with head restraints is probably already available from the manufacturers engineering staff, it is estimated that no more than 5 hours (0.63 man days) of effort should be needed to compile the new text material.

Based on these assumptions, the estimate for head restraint burden is:

Number of model lines reviewed annually		337
x Owner's Manuals per model line	Х	1
x Fraction that require update annually	Х	0.25
x Man-hours required per update	Х	5
	= 42	21.25 burden hours

Part 571.205 (Glazing burden)

Part 571.205 currently allows the use of a variety of glass-plastic glazing, either tempered or annealed, for application in various window locations in a motor vehicle. Manufacturers are permitted to refer to information in the Owner's Manual for more detailed care instructions. Manufacturers must place specific cleaning instructions for certain glazing material, such as glass-plastic windshields, in the Owner's Manual in order to minimize the possibility of haze build-up if owners clean their windshields improperly. The manuals also include information furnished on a voluntary basis that provides specific cleaning instructions for each item of glazing material with specific tips on how to remove frost and ice and generally clean the glazing to minimize loss of transparency.

It is estimated that the burden to provide information in the Owner's Manual is negligible because manufacturers already provide information about the care and cleaning of the vehicle, and would add precautionary information in the vehicle cleaning and maintenance section of the Owner's Manual. Thus, no new or additional burden would be accrued because the basic information about cleaning is already available or has been previously prepared.

Thus, the burden to the respondents would be zero.

Part 571.208 (Occupant crash protection burden)

Federal regulations require that certain safety features, such as air bags, or the care and maintenance of air bag systems, be explained to the owner by means of the Owner's Manual. For example, the Owner's Manual must describe the vehicle's air bag system and provide precautionary information about the proper positioning of the occupants, including warnings about sitting too close to an air bag. The Owner's Manual must also warn that no objects, such as shotguns carried in police cars, should be placed over or near the air bag covers. These requirements, when added to the previous requirements, ensure that owners receive the most current information about do's and don'ts for air bags and that owners are made aware of risk that they incur if they position themselves or their children too close to an air bag.

For example, Part 571.208 now requires the following Owner's Manual information:

If some regular maintenance or replacement of the inflatable restraint system(s) in a vehicle is recommended by the vehicle manufacturer, the owner's manual shall also set forth the recommended schedule for maintenance or replacement.

The Owner's Manual for any vehicle equipped with an inflatable restraint system shall include a description of the vehicle's air bag system in an easily understandable format. The Owner's Manual shall include a statement to the effect that the vehicle is equipped with an air bag and a lap/shoulder belt at one or both front outboard seating positions, and that the air bag is a supplemental restraint at those seating positions. The information shall emphasize that all occupants, including the driver, should always wear their seat belts whether or not an air bag is a laso provided at their seating position to minimize the risk of severe injury or death in the event of a crash. The Owner's Manual shall also provide any necessary precautions regarding the proper positioning of occupants, including children, at seating positions equipped with air bags to ensure maximum safety protection for those occupants. The Owner's Manual shall also explain that no objects should be placed over or near the air bag on the steering wheel or on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the air bag to inflate.

In addition, the Owner's Manual provides additional information about the operation of seat belt assemblies that provide 'lockability' of the belt webbing for use with small child safety restraints. None of the requirements are written in verbatim text that can be directly exported into a vehicle Owner's Manuals. However, most manufacturers go to great lengths to provide the basic information necessary to acquaint an informed consumer with the basic information needed to optimize the safety benefits.

Some current Owner's Manuals devote 20 or more pages to the disclosure of air bag and safety belt information. Assuming that these pages represent a typical density of 300 words per page, manufacturers publish about 6,000 words of instructions or cautioning information in the Owner's Manual. There is <u>no</u> burden associated with using 'previously owned' text because the text and statements about air bag safety are already on file and available as archive material.

However, manufacturers would need to improve the manuals to include the latest technical information, and this could be done on an annual basis. It is estimated that about 25 percent of the Owner's Manuals need major revision each year. The estimated burden to produce the required text and information is based on technical writing to consolidate the required new facts and/or information into text suitable for publication in the Owner's Manual. Since a great deal of the background information dealing with air bags is probably already available from the manufacturers engineering staff, it is estimated that no more than 16 hours (2 man days) of effort should be needed to compile the new text material.

Based on these assumptions, the estimate for air bag burden is:

Number of model lines reviewed annually 337

Х	Owner's Manuals per model line	х	1	
Х	Fraction that require update annually	Х	0.25	
Х	Man-hours required per update	Х	16	
		= 1,34	48 burden hours	

Part 571.210 (Anchor location burden)

FMVSS No. 210 requires that the Owner's Manual for vehicles with a gross vehicle weight rating of 10,000 pounds or less manufactured after September 1, 1987 shall include:

- a. A section explaining that child restraints are designed to be secured by means of the vehicle seat belts, and that children could be endangered in a crash if their child restraints are not properly secured in the vehicle.
- b. In a vehicle with rear designated seating positions, a statement alerting vehicle owners that children are always safer in the rear seat.

It is estimated that manufacturers would need no more than an hour to review the Owner's Manual for each of the models to verify that the content is current and correct, and to add engineering corrections to bring the information current, as required. The requirements have been applied to production vehicles for many years. Based on these assumptions, the burden for seat belt anchors is:

Number of model lines reviewed annually	337
x Owner's Manuals per model line	x 1
x Fraction that require update annually	x 0.25
x Man-hours required per manual	x 1
	= 84.25 burden hours

Part 571.213 (Child safety burden)

Part 571.213 requires that vehicle manufacturers provide specific information to the consumer dealing with add-on child restraint systems. As stated in Part 571.213, the information must be available on certain strategically place labels within the vehicle, but must also be made available in the Vehicle Owner's Manual. For the purpose of this justification, it is assumed that all the necessary information is already available from the information required to produce the labels. The burden to the respondents would therefore, be negligible.

Part 575.103 (Truck-camper burden)

Part 575.103 is a new citation for the old requirements for specific information on truck-camper loading information to be supplied in the vehicle Owner's Manual. There should be no burden to the respondents because no change has been made to the loading requirements for truck-campers.

Part 575.105 (Vehicle rollover burden)

This regulation requires manufacturers of utility vehicles to alert drivers that the particular handling and maneuvering characteristics of utility vehicles require special driving practices when these vehicles are operated on paved roads. A statement is provided in the regulation which manufacturers shall include, in its entirety or equivalent form, in the Owner's Manual. There is no burden to the respondents because the information required by Part 575.105 may be taken from the Federal regulations in its entirety.

Table 2 summarizes the total burden estimates.

Burden Summary				
Part/Section	Brief Title	Total Yearly Burden		
		(hours)		
571.108	Lighting	690.85		
571.110	Tire Selection and Rims	505.5		
571.138	Tire Pressure Monitoring	0		
571.202	Head Restraints	421.5		
571.205	Glazing	0		
571.208	Crash Protection	1,348		
571.210	Belt anchors	84.25		
571.213	Child restraints	0		
571.103	Truck-campers	0		
571.105	Utility vehicles	0		
Total		3,051 hrs.		

Table 2

The annual burden hours of the collection of information on the 22 respondents (manufacturers) is 3,051 hours. The cost associated with these burden hours is determined as follows:

3,051 burden hours x \$20 per hr. (clerical support) = \$61,020

13. <u>Provide estimates of the total annual cost to the respondents or record keepers resulting from the collection of information (do not include the cost of any hour burden shown in Question 12)</u>

If the entire Owner's Manual and all of its contents were required to be published by Federal Regulation, the preparation of a total estimate to account for all the consolidated requirements would be straightforward. In this case, the cost to the respondents would simply be the entire cost of the Owner's Manual. This is not the case because only a fraction of the content is governed by Federal Regulation. For that fraction, the cost to the respondents may vary because

the Owner's Manual may repeat some sections that were published the previous year, while adding new sections for the current year. The new sections, in turn, may or may not require extra burden on the part of the manufacturers, depending on the amount of specialized analysis required to obtain and make ready the text for publication. For example, the manufacturer may need to conduct a technical analysis and prepare special instructions before proceeding with the actual assembly and printing of the manual. Or, manufacturers may decide to re-issue last year's publication, updating as necessary to account for all the new automotive features. In all of theses cases, a judgment of how to decide the burden requirement needs to be made before proceeding to develop the estimate.

If the Owner's Manual requirements are explicitly stated in the Federal Regulations, the only costs of the text required by Federal regulation would simply be the pragmatic cost of the ink required to print the text, the cost of the paper the text is printed on, and the unit cost of the printing process. Also, if no change occurs in the material that is published annually, the only cost would be the pragmatic costs associated with the printing process.

Production publication information received from technical staff at the Government Printing Office indicates that about one-fourth of the total pragmatic cost to produce a document is required for the printing process. For example, a document that costs X dollars to produce could cost X/4 dollars to print.

The following estimating procedure is developed for the pragmatic cost to print a part of the Owner's Manual that includes contracting out, paying for side service and for total operation and manufacturer costs not previously covered by wages or salaries. The procedure is based on estimating the cost to print one word and then extending the estimate to account for the total number of words required by the manufacturer.

As explained in the previous supporting statement, an equivalent cost per word of \$0.00013 was determined. This unit cost is expressed as 130 microdollars per word.

The following hypothetical example illustrates how the estimating relationships will be used to develop cost estimates for this section. For example, the cost to print 1,000 words may be estimated as the number of Owner's Manuals that are required to convey the information specified in the Code of Federal Regulations for the standards identified in this justification, multiplied by the cost factor (130 microdollars per word), multiplied by the printing factor (25%), multiplied by a factor to account for a slight overproduction to accommodate aftermarket or replacement logistic requirements (assumed to be 10% for most of the estimates made in this justification). Thus, if the Federal requirement applied to both cars and light trucks and vans (estimated for example at 15,000,000 units of production), the cost of a 1,000 word addition to the Owner's Manual would be:

	Number of vehicles requiring Owner's Manuals	15	5,000,000
Х	Text words required per manual	х	1,000

	Recurring cost to manufacturers	\$536,	250*, annually
Х	Cost to produce 1 word	Х	\$0.00013
х	Printing factor to establish pragmatic cost	Х	0.25
Х	Production factor to allow for aftermarket	Х	1.1

Using the general estimating relationships explained above, estimates of cost to the respondents are made for each of the requirements in the Federal regulations, as follows:

Part 571.108 (Lighting cost)

The total recurring cost to the respondents to comply with the requirements of Part 571.108 (Lighting) are limited to the reproduction (printing) cost of the information for instructing technicians or owners on how to aim on-vehicle headlamp aiming devices.

There are no associated burden costs for this estimate because the manufacturers have already invested professional staff resources in preparing the necessary text for the identical operation for publication in the vehicle Service Manual for use by dealership repair technicians.

The cost estimate should account for the total number of Owner's Manuals that need to be published for inclusion with the vehicle at the point of sale, as well as account for a limited number of manuals for distribution to the dealer's parts department or the aftermarket for replacement of lost manuals or to satisfy consumer requests for additional copies. It is estimated that an additional amount of 10 percent would satisfy the aftermarket demand.

As reported in Section 12 of this justification, Owner's Manuals could be necessary for as many as 337 model lines. About half of the on-vehicle aim applications are estimated to require an entry in the Owner's Manual (the other half of the prospective applications would opt for the use of an in-vehicle label). It is further estimated that there are 16,200,000 new vehicle sales annually.

On-vehicle aiming devices are currently not as popular with manufacturers, who are exploring ways to take advantage of new technology of headlamp aiming recently permitted in the Federal regulations. It is estimated that 75 percent of the vehicles will use this new technology, with only 25 percent opting for on-vehicle aiming. The printing costs are estimated as 130 microdollars per word. A typical Owner's Manual entry to explain headlamp aiming requires about 500 words. The total estimate for the Owner's Manual cost for Part 571.108 (lighting) is estimated, using the above information, as follows:

Number of vehicles requiring Owner's Manuals 16,200,000

Х	Text words required per manual	х	500
Х	Production factor to allow for aftermarket	Х	1.1
х	Printing factor to establish pragmatic cost	X	0.25
X	Cost to produce 1 word	Х	\$0.00013
	Annual recurring cost to manufacturers for lighting		\$ 289,575

Part 571.110 (Tire selection and rims cost)

The recurring cost to the respondents to include the information required by Part 571.110 is based on an estimate of the average length of the cautionary notices that are required. The word content of these notices is estimated to be 2,400 for the average Owner's Manual. If an Owner's Manual is provided for every new vehicle, the total recurring cost estimate is:

	Number of vehicles requiring Owner's Manuals	1	6,200,000	
Х	Text words required per manual	X	2,400	
х	Production factor to allow for aftermarket	х	1.1	
х	Printing factor to establish pragmatic cost	х	0.25	
х	Cost to produce 1 word	Х	\$0.00013	

Annual recurring cost to manufacturers for tire selection and rims \$1,389,960

Part 571.138 (Tire pressure monitoring system cost)

The recurring cost to the respondents to include the information required by Part 571.138 is based on the typical length of the tire pressure monitoring system information that is required, including depictions of the low pressure telltale and, if equipped, a separate malfunction indicator telltale. We estimate that this information is equivalent to 400 words of text for the average Owner's Manual. If

an Owner's Manual is provided for every new vehicle, the total recurring cost estimate is:

	Number of vehicles requiring Owner's Manuals		200,000
х	Text words required per manual	Х	400

Х	Production factor to allow for aftermarket	Х	1.1
Х	Printing factor to establish pragmatic cost	Х	0.25
Х	Cost to produce 1 word	х	\$0.00013
	Annual recurring cost to manufacturers for TPMS		\$ 231,660

Part 571.202 (Head restraint cost)

The recurring cost to the respondents to include the information required by Part 571.202 is based on an estimate of the average length of the cautionary notices that are required. The word content of these notices is estimated to be 1,200 for the average Owner's Manual. Since an Owner's Manual is required for every new vehicle, the total recurring cost estimate is:

	Number of vehicles requiring Owner's Manuals	1	6,200,000
Х	Text words required per manual	х	1,200
Х	Production factor to allow for aftermarket	х	1.1
Х	Printing factor to establish pragmatic cost	х	0.25
Х	Cost to produce 1 word	х	\$0.00013
	Annual recurring cost to manufacturers for head restraint	ts	\$ 694,980

Part 571.205 (Glazing cost)

The total recurring cost to the respondents to comply with the requirements of Part 571.205 (Glazing) is difficult to estimate with precision because manufacturers may opt to place a majority of the required information on a label that affixes to the glazing. For example, the 1993 Owner's Manual for the VW Corrado devotes 106 words to cleaning glass, while the 1998 Owner's Manual for the GM Monte Carlo devotes 210 words to the subject. Since these precautions would probably be written into the Owner's Manual in the complete absence of any Federal regulation, it is estimated that the burden to the respondents would be small, and a zero net recurring cost is assumed.

Part 571.208 (Crash Protection)

The total recurring cost to respondents to comply with the Owner's Manual requirements for Part 571.208 (occupant crash protection) depends on the amount and type of information that each manufacturer chooses to include in its instructions. Part 571.208 does not provide verbatim

text that can be copied from the regulation. Manufacturers are given wide latitude to develop the technical explanations as required to best meet the system needs and to satisfy corporate legal guidelines.

For example, for the air bag on-off switch, the requirements in Part 571.208 for the Owner's Manual are simply:

S4.5.4.4 The vehicle owner's manual shall provide, in a readily understandable format:

- (a) Complete instructions on the operation of the cutoff device;
- (b) A statement that the cutoff device should only be used when a rear-facing infant restraint is installed in the front passenger seating position; and,
- (c) A warning about the safety consequences of using the cutoff device at other times.

Based on the previous estimate provided in Section 12 of this justification, it is assumed that manufacturers require 6,000 words (20 pages of Owner's Manual text x 300 words per page) to respond to all Owner's Manual requirements in Part 571.208. The only cost associated with publishing this information would be the cost of printing the required text. Therefore, the cost to manufacturers would be:

Nun	ber of vehicles requiring Owner's Manuals	16,2	200,000	
Х	Text words required per manual	Х	6,000	
Х	Production factor to allow for aftermarket	Х	1.1	
Х	Printing factor to establish pragmatic cost	Х	0.25	
Х	Cost to produce 1 word	X	\$0.00013	
	Annual recurring cost to manufacturers	\$3,4	474,900	

Part 571.210 (Anchor cost)

The recurring cost to the respondents to include the information required by Part 571.210 is based on an estimate of the average length of the cautionary notices that are required. The word content of these notices is estimated to be 400 for the average Owner's Manual. Since an Owner's Manual is required for every new vehicle, the total recurring cost estimate is:

Number of vehicles requiring Owner's Manuals	16,200,000
x Estimated word content of cautionary notices	x 400

х	Production factor to allow for aftermarket	x 1.1
Х	Printing factor to establish pragmatic cost	x 0.25
Х	Cost to produce 1 word	x \$0.00013
An	nual recurring cost to manufacturers	\$ 231,660

Part 571.213 (Child safety cost)

The recurring cost to the respondents to include the information required for child safety according to Part 571.213 includes, as a minimum, the specific information detailed in Section S5.5.4 of that Part. It is estimated that the requirements in Section S5.5.4 could be satisfied with a text section no longer than 500 words.

The total cost to the respondents is estimated as follows:

	Number of vehicles requiring Owner's Manuals	1	6,200,000	
Х	Text words required per manual	Х	500	
Х	Production factor to allow for aftermarket	х	1.1	
Х	Printing factor to establish pragmatic cost	Х	0.25	
X	Cost to produce 1 word	Х	\$0.00013	
	Annual recurring cost to manufacturers		\$ 289,575	

Part 575.103 (Truck camper cost)

Manufacturers are required to place truck-camper loading information as specified in Part 575.103. Approximately 480 words are required, as a minimum. The information needs to appear in Owner's Manuals for pickup trucks and camper units. It is estimated that there are approximately 2,500,000 pickup trucks produced annually with a GVWR less than 8500 pounds, and an additional 250,000 are manufactured with a GVWR greater than 8500 pounds, and that 11,000 truck camper units are produced annually, for a total annual production of 2,761,000 units, annually, requiring truck camper information in Owner's Manuals.

Only printing costs apply. The cost estimate is therefore:

Number of vehicles requiring Owner's Manuals 2,761,000

Х	Text words required per manual	Х	480
х	Production factor to allow for aftermarket	х	1.1
х	Printing factor to establish pragmatic cost	Х	0.25
х	Cost to produce 1 word	х	\$0.00013
	Annual recurring cost to manufacturers	9	\$ 47,379

Part 575.105 (Utility costs)

The cost to the respondents include the printing costs associated with printing approximately 117 words in the appropriate Owner's Manual. The population of utility vehicles with 4WD and a wheelbase of 110 inches or less is estimated as 2.7 million vehicles.

The cost estimate is:

	Number of vehicles requiring Owner's Manuals	2,2	700,000
Х	Text words required per manual	X	117
Х	Production factor to allow for aftermarket	X	1.1
х	Printing factor to establish pragmatic cost	х	0.25
Х	Cost to produce 1 word	x	\$0.00013
	Annual recurring cost to manufacturers	\$	11,293

The total annual cost to the respondents is summarized in Table 3.

Part/section	Brief title	Mfr cost (\$)
571.108	Lighting	289,575
571.110	Tire selection and rims	1,389,960
571.138	Tire pressure monitoring	231,660
571.202	Head restraints	694,980
571.205	Glazing	0
571.208	Occupant crash protection	3,474,900
571.210	Seat belt anchorages	231,660
571.213	Child restraints	289,575
571.103	Truck-campers	47,379
571.105	Utility vehicles	11,293
Total		\$ 6,660,982

Table 3 Cost summary

14. <u>Provide estimates of annualized cost to the Federal Government.</u>

The Federal Government does not have a special procedure to verify the accuracy of an Owner's Manual. A total of 40 man hours is estimated to periodically check the Owner's Manual on an ad hoc basis to verify contents (as for example, to provide consumer assistance). At an assumed rate of \$20 per hour, the total cost to the Federal Government would be \$800. This 'blanket' assessment covers all Owner's Manual requirements.

15. <u>Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I.</u>

Adjustments or changes have been made to the information reported on the 83-I form section 13 and 14. These were not due to a program change. The adjustments are based on the available forecasting data that supports the trend that more SUVs are replacing passenger cars, revised estimates of burden based upon a review of current Owner's Manuals, and the addition of tire pressure monitoring information requirements.

16. <u>For collections of information whose results will be published, outline plans for tabulation, and publication.</u>

This collection of information will not have the results published for statistical use.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

Approval is not being sought to not display the expiration date for OMB approval of the information collection.

18. <u>Explain each exception to the certification statement identified in Item 19,</u> '<u>Certification for Paperwork Reduction Act Submissions,' of OMB Form 83-1.</u>

There are no exceptions.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS.

This collection of information does not employ statistical methods.

NHTSA: NVS-112: LSummers: th: x61740: 2/4/2021 LSummers/SKratzke Filename: /home/ec2-user/sec/disk/omb/icr/200902-2127-001/doc/10379101