DEPARTMENT OF TRANSPORTATION

Adoption of Chapter 19-134
Hawaii Administrative Rules

July 11, 1986

SUMMARY

1. Chapter 19-134, Hawaii Administrative Rules, entitled "Approval of Reconstructed Vehicles", is adopted.

2. Exhibit dated 12/1/84, at end of this chapter, is incorporated in three sections.

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HAWAII ADMINISTRATIVE RULES

TITLE 19
DEPARTMENT OF TRANSPORTATION

SUBTITLE 5
MOTOR VEHICLE SAFETY OFFICE

CHAPTER 134
APPROVAL OF RECONSTRUCTED VEHICLES

Subchapter 1 General Provisions

Subchapter 2 Reconstructed Vehicle Inspectors and Reconstruction Vehicle Inspection Stations

Subchapter 3 Reconstructed Vehicle Approval Procedures

SUBCHAPTER 1

GENERAL PROVISIONS

§19-134-1 Purpose. The purpose of this chapter is to establish:

(1) Performance, construction, and equipment requirements necessary for the safe operation of reconstructed vehicles upon the public highways;
(2) Minimum procedures for the inspection of reconstructed vehicles and, upon approval, the issuance of permits to operate reconstructed vehicles upon the public highways; and
(3) The fees an inspector may charge for the inspection of a reconstructed vehicle.

[Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-2 Definitions. As used in this chapter, unless the context clearly indicates otherwise:

"Bumper" means a horizontal load bearing protective system installed on a motor vehicle which is constructed of sturdy materials that will not shatter or split upon moderate impact and provide adequate protection against damage to the front and rear external lighting and reflective devices, hood, trunk, doors, painted surfaces, cooling system, exhaust system, and other components during a low speed impact.

"Bus" means every motor vehicle designed for carrying more than ten passengers and used for the transportation of persons.

"County department" means the county department designated by the county chief executive officer as having the responsibility for the inspection, certification, issuance of permits and stickers for reconstructed

vehicles, and for providing appropriate notice as required to the county vehicle registration authority.

"Director" means the director of the state department of transportation.

"Frame or frame chassis" means the basic structural supporting assembly of a vehicle including unit body structures.

"Modified vehicle kit" means a package of components, other than original equipment or original equipment replacements, which when assembled becomes the major body assembly, or the major structural assembly, or both, used to construct or reconstruct a complete and operable vehicle.

"Modified vehicle manufacturer" means every person who manufactures or assembles two or more reconstructed vehicles having substantially the same design, construction, and equipment characteristics, and offers these vehicles for sale.

"Modified vehicle kit manufacturer" means every person who manufactures, distributes, offers for sale, or sells, a modified vehicle kit.

"Motorcycle" means every motor vehicle having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground, but excludes farm tractor as defined in section 286-2, HRS, and a moped as defined in section 286-2, HRS.

"Offset wheel" means a wheel with the mounting flange surface located to one side of the wheel centerline.

"Passenger car" means every motor vehicle, except motorcycles and motor scooters, designed for carrying ten passengers or less and used for the transportation of persons.

"Recognized manufacturer of vehicles" means every person who is engaged in the business of assembling new components into a complete and operable vehicle intended for use on the public highways and offers the vehicle for distribution and sale in the United States and is registered as a vehicle manufacturer with the United States Department of Transportation.

"Reconstructed vehicle" means a vehicle registered to be operated on a public highway which:

(1) Is assembled from new or used parts by a person other than a recognized manufacturer of vehicles; or

(2) Is modified to the extent that the identity of its make, model, or type is obscured by material changes in its appearance; or

(3) Is modified by the removal, addition, alteration, or substitution of other than original replacement

essential parts, including but not limited to its body, power train, steering system, suspension system, exhaust system, intake system, or bumper system; excluding ordinary body repair which does not change the exterior structure of the vehicle.

"Rim" means a metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

"Tire" means the rubber casing and tread assembly, with or without a tube, that is mounted on a rim to provide pneumatically cushioned contact and traction with the road.

"Truck" means a motor vehicle designed, used, or maintained primarily for the transportation of property.

"Vehicle" means every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, but excludes mopeds and devices moved by human power or used exclusively upon stationary rails or tracks.

"Wheel" means a disk or series of spokes with a rim around the outside circumference for mounting the tire and a hub at the center which turns with or revolves around an axle.

"Wheel track" means the width of the track as measured from the center to center of the tires on the same axle. [Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-3 Abbreviations and Acronyms. The abbreviations and acronyms used in this chapter shall be as follows:

"ANS"	-	American National Standards. Standards of the American National Standards Institute.
"ANSI"	-	American National Standards Institute, 1430 Broadway, New York, NY 10018.
"CFR"	-	Code of Federal Regulations.
"FMVSS"	-	Federal Motor Vehicle Safety Standards, Title 49, Part 571, Code of Federal Regulations.
"HRS"	-	Hawaii Revised Statutes.
"NSRA"	-	National Street Rod Association, 4030 Park Avenue, Memphis, Tennessee 38111.
"OEM"	-	Original Equipment Manufacturer. A part or component of the vehicle which is identical to the part or component on the original vehicle and is supplied by the recognized manufacturer of the original vehicle.

"OER" - Original Equipment Replacement. A vehicle part or component which performs the identical function as the part or component of the original vehicle but is supplied by a manufacturer other than the recognized manufacturer of the original vehicle.

"OREP" - Original Replacement Essential Part means any part or component of a vehicle which is:

(1) Identical in fact or in performance to any part or component offered as an option for that vehicle by the original manufacturer of the vehicle when new;

(2) Essential for the safe operation of the vehicle; and

(3) Purchasable through auto parts store dealerships or dealerships of the original vehicle manufacturer.

Examples include, but are not limited to, parts and components of a vehicle's engine, transmission, differential, steering system, suspension system, exhaust system, intake system, body parts, or lamps and reflectors. A part or component not offered as an option for a vehicle by the original manufacturer of that vehicle, which may alter the performance of a vehicle or may inherently affect adversely the safety or structural integrity of a vehicle, its occupants, or surrounding vehicles or individuals, unless specifically excepted in these rules, shall not be an original replacement essential part.

"SAE" - Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096. The publisher of SAE Standards and Recommended Practices.

"SEMA" - Specialty Equipment Market Association, 11540 E. Slauson Avenue, Whittier, California 90606.

"SFI" - SFI Foundation, Inc., 22930 Crenshaw Boulevard, Suite "G", Torrance, California 90505. [Eff JUL 2 : 2008] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-4 Applicability. (a) This chapter applies to all vehicles operated upon the public streets and highways except:

(1) Motor carrier vehicles subject to chapter 286, part XI, Hawaii Revised Statutes;

(2) Vehicles restored to the structural and equipment condition as originally manufactured by a recognized manufacturer of vehicles;

(3) Vehicles in which worn or damaged original structural members or parts are replaced with items which are substantially the equivalent of the original structural member or part;

(4) Vehicles in which worn or damaged original structural members or parts are repaired to a condition which is substantially equivalent to the original condition of the structural member or part;

(5) Vehicles which are modified only by the installation of special controls for the use of handicapped drivers, where the installation of those controls does not prevent the normal use of the standard controls provided in the original vehicle by the recognized manufacturer of the vehicle when new;

(6) Vehicles which are modified only by the addition of a dual control capability for the purpose of instructing drivers;

(7) New vehicles which are completed or modified by recognized manufacturers of vehicles other than the original manufacturer when those vehicles are certified and labelled in accordance with applicable federal regulations; and

(8) Cab and chassis with specially mounted rear custom made bodies designed for a special purpose which meets all FMVSS and complies with other state safety rules and county safety ordinances as long as the cab and chassis have not themselves been altered.

(b) A vehicle shall be considered to be a reconstructed vehicle subject to this chapter if any of the conditions in subsections (c) to (n) are met.

(c) Engine.

(1) The original engine installed by the recognized manufacturer of the vehicle when new is relocated in the vehicle or is replaced with an engine that is not an OREP engine;

(2) An OREP engine that can be installed with OEM mounts will not cause the vehicle to be subject to this chapter.

(d) Combustion engine fuel system.
(1) The carburetor, fuel injection system, air intake system, intake manifolds, or fuel tank of the original system installed by the recognized manufacturer of the vehicle when new are replaced with other than OREP components;
(2) The mere installation of an aftermarket supercharger or turbocharger, carburetor, intake manifold, water injection and air cleaner cataloged or otherwise designated as a street application shall not be subject to this chapter; however, the vehicle shall be capable of meeting all other criteria established in this chapter;
(3) The conversion of a gasoline fuel system to a propane or liquefied petroleum gas (LPG) fuel system or dual-fuel system shall not cause the vehicle to be subject to this chapter.
(e) Transmission.
(1) The original transmission installed by the recognized manufacturer of the vehicle when new is relocated in the vehicle or is replaced with a transmission that is not OREP equipment;
(2) Merely changing the location or type of the transmission control mechanism shall not cause the vehicle to be subject to this chapter.
(f) Rims.
(1) The original rims installed by the recognized manufacturer of the vehicle when new are reverse mounted or are replaced with other than OREP rims of a different size (plus or minus one inch rim diameter or plus or minus two inches rim width) or configuration (offset or reverse type);
(2) Merely installing special rims offered as an option by the recognized manufacturer of the vehicle when new, or merely installing special rims of the same size (plus or minus one inch rim diameter, or, plus or minus two inches rim width) which meet or exceed the SFI requirements, shall not cause the vehicle to be subject to this chapter.
(g) Suspension system.
(1) The original suspension system components (springs, torsion bars, shock absorbers, sway bars, etc.) installed by the recognized manufacturer of the vehicle when new are:
(A) Replaced with other than OREP components; or
(B) Adjusted, or equipped with added components, to change the height of the vehicle frame,

as measured from the axle to frame, from that specified by the recognized manufacturer of the vehicle when new;

(2) Installing helper or overload springs to the vehicle suspension, simply to increase the vehicle load bearing capacity, shall not cause the vehicle to be subject to this chapter, even if it raises the vehicle slightly;

(3) Installation of a single spacer block to the front suspension of a vehicle with the capability to deliver motive power to more than one axle, specifically for the purpose of leveling the front of an OEM vehicle with its rear, shall not cause the vehicle to be subject to this chapter;

(4) The conversion of a two-wheel drive vehicle to a four-wheel drive shall not cause the vehicle to be subject to this chapter so long as there is a four-wheel drive version of that make and model of vehicle and the converted vehicle does not exceed the manufacturers' specification set forth for the four-wheel drive version of the vehicle.

(h) Vehicle Body.

(1) The original vehicle body installed by the recognized manufacturer of the vehicle when new is:

(A) Replaced with a body that is other than an OEM body;

(B) Modified by replacing the hood, fenders, doors, or other body assemblies with other than OREP components;

(C) Modified by the removal of significant portions of the hood, fenders, doors, or other body assemblies;

(D) Modified by changing the size of the windshield, or by changing the size of any window or window opening;

(E) Modified by changing the location of the driver's seating position within the vehicle which requires modification of the vehicle's floor pan; or

(F) Modified by additions to the hood, fenders, doors, or other body assemblies which significantly change the appearance or function of the body component;

(2) The following modifications to the vehicle body, singly or in any combination, shall not cause the vehicle to be subject to this chapter:

(A) The removal or addition of decorative or protective items of trim;

(B) The removal or change of the front grille assembly;
(C) The removal or addition of car top or side carriers, pipe racks, plate glass racks and slide-in campers;
(D) The removal or addition of rollbars or grille guard assemblies;
(E) The removal or addition of front or rear bicycle carriers, motorcycle carriers, spare tire carriers;
(F) The filling and smoothing of body seams and small openings used for the attachment of trim, locks, etc.;
(G) The addition of small openings, such as hood louvers, roof openings, or bubble windows, which do not significantly change the overall contour of the body component;
(H) Aesthetic hoodscoops (non-operational) or hood protuberances which do not obstruct the driver's view of the roadway;
(I) The addition or removal of any radio antenna;
(J) The addition of any lamp or reflective device;
(K) The addition of any item or component, not otherwise specified in this chapter, that is located entirely within the body shell;
(L) The addition or removal of motorcycle windshields or fairings; or
(M) The addition, to the cargo box of a truck, employee carrying seats or overhead canopy or both if the addition meets county safety ordinance.

(i) Vehicle frame.
(1) The original vehicle frame, or any chassis structural assembly used as a frame, installed by the recognized manufacturer of the vehicle when new is changed or modified in any manner;
(2) Merely installing attachment devices, such as trailer hitch assemblies or supports for auxiliary equipment, shall not cause the vehicle to be subject to this chapter.

(j) Axles. An original axle, or assembly which functions as an axle, installed by the recognized manufacturer of the vehicle when new is:
(1) Replaced with other than an OREP axle;
(2) Relocated to a different position with respect to the vehicle frame; or
(3) Modified to a different configuration or dimension.

(k) Steering system.

(1) Any original steering system component installed by the recognized manufacturer of the vehicle when new is:

(A) Replaced with other than an OREP component; or

(B) Modified or relocated in any manner;

(2) Merely replacing the steering wheel with a "custom" type steering wheel of the same diameter and impact absorbing characteristics shall not cause the vehicle to be subject to this chapter.

(l) Exhaust system. The modification or replacement of exhaust system components such as the installation of headers shall not cause the vehicle to be subject to this chapter; however, any vehicle that is otherwise subject to this chapter shall be provided with an exhaust system which meets the criteria established in this chapter.

(m) Exterior lamps and reflectors.

(1) The original head lamps, tail lamps, marker lamps, signal lamps, or exterior reflectors installed by the recognized manufacturer of the vehicle when new are:

(A) Replaced with other than OREP components; or

(B) Relocated in a manner that significantly changes the appearance of the vehicle;

(2) The replacement of exterior lamps or reflectors with OREP components, or the installation of supplemental lamps or reflectors shall not cause the vehicle to be subject to this chapter; however, any vehicle that is otherwise subject to this chapter shall be provided with exterior lamps and reflectors which meet the criteria established in this chapter.

(n) Brakes. Any original service brake system or parking brake system component installed by the recognized manufacturer of the vehicle when new is:

(1) Replaced with other than OREP components;

(2) Modified in any manner except for the installation of OEM or OREP manufactured for that vehicle; or

(3) Relocated in any manner.

(o) This chapter shall apply in the following manner to those reconstructed vehicles for which a valid reconstructed vehicle permit has been issued in the name of the current registered owner or subsequent owner by an authorized county department prior to the effective date of this chapter:

(1) The reconstructed vehicle permit previously issued shall remain in effect for a period of one year after the effective date of this chapter provided that no additional alterations or modifications have been made to the vehicle subsequent to the issuance of the permit by the county department.

(2) For a period of one year after the effective date of this chapter the designated county department, with respect to permits previously issued within the county of its jurisdiction, shall issue a new valid permit and sticker, and record the transaction as required by this chapter without charge and regardless of conformity with the equipment and performance requirements of this chapter; provided that no additional alterations or modifications have been made to the vehicle subsequent to the issuance of the previous permit.

(3) One year after the effective date of this chapter, all reconstructed vehicle permits issued before the effective date of this chapter under any county ordinances shall be invalid.

[Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-5 Specific requirements. (a) A reconstructed vehicle shall not be operated on the public highways without a valid reconstructed vehicle permit.

(b) A reconstructed vehicle shall not continue to be operated on the public highways without reinspection, approval and issuance of a new reconstructed vehicle permit whenever:

(1) An additional alteration or modification, which alone would require approval as a reconstructed vehicle, is performed on the vehicle;

(2) Previously approved alterations or modifications are changed to the extent that the basic identifiable characteristics of the previously approved alteration or modification cannot be determined; or

(3) A previously issued reconstructed vehicle permit has been cancelled by the county department.

(c) Replacement of previously approved equipment items or components with items or components which are substantially equivalent in design, mode of operation and appearance shall not require reinspection and approval.

(d) The director may waive any requirement of this chapter when it is determined that the waiver will not

subject any person to a greater degree of hazard than that usually encountered in the operation of a vehicle. [Eff JUL 24 1988] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-6 Administration. (a) Each county, through its chief executive officer, as required by section 286-85, Hawaii Revised Statutes, shall designate a county department to administer this chapter.

(b) The designated county department shall be responsible for:

(1) The appointment of reconstructed vehicle inspectors;
(2) The designation of specific locations where reconstructed vehicle inspections shall be conducted;
(3) Providing all instructions, forms, stickers and any other material necessary to administer this chapter;
(4) Insuring that reconstructed vehicle inspections are available to applicants at reasonable times and with reasonable frequency;
(5) Insuring that reconstructed vehicle inspections and certifications are conducted in accordance with this chapter; and
(6) Notifying the county treasurer of all reconstructed vehicles that have been inspected, approved, and issued reconstructed vehicle permits. [Eff JUL 24 1988] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-7 Determination of reconstructed vehicle date of manufacture. (a) Certain federal regulations, incorporated by reference, apply only to vehicles manufactured on or after dates as specified in the federal regulations. Title 49, Chapter V, parts 566, 567, 568, 571, and 581 of the Code of Federal Regulations, as it existed on October 1, 1982, is made a part of this chapter. Except as otherwise indicated in this chapter, the referenced federal regulations shall apply to reconstructed vehicles with a date of manufacture on or after the effective date of the referenced federal regulations. For the purpose of this chapter the date of manufacture of a reconstructed vehicle shall be determined as provided in subsections (b) to (e).

(b) For those reconstructed vehicles that retain the basic chassis frame and at least that forward portion of

the body that contained the windshield, the driver's controls and the driver's seat of the original vehicle, or, for those reconstructed vehicles that retain the basic unit body of the original vehicle, if so constructed, the date of manufacture of the reconstructed vehicle shall be the first day of January of the earliest year that can be determined by applying any of the following criteria:

(1) The model year of the vehicle, as specified by the recognized manufacturer of vehicles who manufactured the original vehicle, plus one year;

(2) The year of manufacture of the original vehicle, as specified by the recognized manufacturer of vehicles who manufactured the original vehicle, plus one year;

(3) The model year of the vehicle as shown on the vehicle registration certificate for the original vehicle; or

(4) The "date first sold" shown on the registration certificate for the original vehicle.

(c) For those reconstructed vehicles that are constructed with a chassis frame from one original vehicle and a body from another original vehicle; the date of manufacture of the reconstructed vehicle shall be the first day of January of the earliest year that can be determined by applying any of the following criteria:

(1) The model year of the original vehicle from which the chassis frame was obtained, as specified by the recognized manufacturer who manufactured the original vehicle, plus one year;

(2) The year of manufacture of the original vehicle from which the chassis frame was obtained, as specified by the recognized manufacturer of vehicles who manufactured the original vehicle, plus one year;

(3) The model year shown on the vehicle registration certificate for the original vehicle from which the chassis frame was obtained; or

(4) The "date first sold" shown on the vehicle registration certificate for the original vehicle from which the chassis frame was obtained.

(d) For those reconstructed vehicles that incorporate a modified vehicle body or structural kit, the date of manufacture of the reconstructed vehicle shall be the date of sale of the kit as specified on the original invoice by the manufacturer or authorized representative of the manufacturer.

(e) For all reconstructed vehicles that cannot be identified in the manner specified in subsections (b) to (d), including those vehicles constructed from various

combinations of new and used parts, the date of manufacture of the reconstructed vehicle shall be the earliest date determined by applying either of the following criteria:

(1) The date that the plans and specifications for the reconstructed vehicle are submitted to the director for approval; or

(2) The date that the reconstructed vehicle was first presented for inspection as a reconstructed vehicle under this chapter. [Eff JUL 24 1985] (Auth: HRS §286-85) (Imp: HRS §286-85)

SUBCHAPTER 2

RECONSTRUCTED VEHICLE INSPECTORS AND RECONSTRUCTED VEHICLE INSPECTION STATIONS

§19-134-11 General. The county department may use either or both of the following procedures to accomplish the inspection and certification of reconstructed vehicles:

(1) Provide county employees and facilities; or

(2) Appoint reconstructed vehicle inspectors and designate reconstructed vehicle inspection facilities from the automotive repair and servicing industry. [Eff JUL 24 1988] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-12 Requirements for county inspection personnel and facilities. (a) County employees assigned as reconstructed vehicle inspectors shall meet the following requirements:

(1) Be a high school graduate or have an equivalent education level certificate;

(2) Have at least one year of employment experience in automotive repair or a related technical field (one year of experience in vehicle safety inspection activities or the supervision of vehicle safety inspection activities, may be substituted for this requirement); and

(3) Be thoroughly conversant with this chapter and the federal regulations and standards which are incorporated by reference in this chapter.

(b) County inspection facilities shall be adequate to permit the inspection of all reconstructed vehicle equipment and components as required by this chapter. [Eff JUL 24 1988] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-13 Requirements for appointed inspectors and designated inspection facilities. (a) The reconstructed vehicle inspectors appointed from the automotive repair and service industry shall be appointed by the county department and shall meet the following qualifications:

(1) Have a valid vehicle safety inspector's certificate issued by the county agency;

(2) Have demonstrated superior performance as a certified vehicle safety inspector in the Hawaii periodic vehicle inspection program for a period of at least one year;

(3) Be thoroughly conversant with this chapter and the federal regulations and standards which are incorporated by reference in this chapter; and

(4) Be employed by, and have access to the facilities of, an official vehicle safety inspection station which has been designated by the county department as a reconstructed vehicle inspection station.

(b) The reconstructed vehicle inspection stations designated by the county department from the automotive repair and service industry shall meet the following requirements:

(1) Be licensed by the county department as an official vehicle safety inspection station servicing the public in the Hawaii periodic vehicle safety inspection program;

(2) Have facilities and equipment adequate to permit the inspection of reconstructed vehicles, including equipment and components, as required by this chapter; and

(3) Have at least one employee who has been appointed by the county department as a reconstructed vehicle inspector. [Eff JUL 24 1985] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-14 Application for and appointment as a reconstructed vehicle inspector. (a) Application for appointment as a reconstructed vehicle inspector shall be made to the county department on a form provided by the county department. The application shall include the following information:

(1) The name and address of the applicant;

(2) The periodic vehicle safety inspector certificate number of the applicant;

(3) The number of years the applicant has been certified as a periodic vehicle safety inspector;

(4) The name and address of the official periodic vehicle safety inspection station, designated by the county department as a reconstructed vheicle inspection station where the applicant is employed and will conduct reconstructed vehicle inspections; and

(5) The signature of the applicant.

(b) The county department shall appoint only those applicants meeting the requirements specified in section 19-134-13 as reconstructed vehicle inspectors.

(c) Upon appointment of the applicant as a reconstructed vehicle inspector, the county department shall indicate the appointment on the reverse side of the applicant's official vehicle safety inspector's certificate.

(d) Upon disapproval of an application, the county department shall indicate the reason, in writing, for disapproval upon the application and notify the applicant of the determination.

(e) All applications for appointment as a reconstructed vehicle inspector shall be retained by the county department for at least three years after the applications are submitted. [Eff JUL 24 1998] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-15 Application for, and designation as a reconstructed vehicle inspection station. (a) Application for designation as a reconstructed vehicle inspection station shall be made only by the owner, manager, or supervisor of an official periodic vehicle safety inspection station as shown in the records of the county.

(b) The application shall be made to the county department on a form provided by the county department. The application shall contain the following information:

(1) The name and address of the applicant;

(2) The name, address, and periodic vehicle safety inspector certificate number of the reconstructed vehicle inspector appointed by the county department and regularly employed at the station;

(3) An application for appointment as a reconstructed vehicle inspector shall accompany the application for designation as a reconstructed vehicle inspection station if there are no reconstructed

vehicle inspectors appointed by the county department and regularly employed at the station; and

(4) The signature of the applicant.

(c) The county department shall not designate any station not meeting the requirements of section 19-134-13 as a reconstructed vehicle inspection station.

(d) The county department may limit the number of designated reconstructed vehicle inspection stations to those actually necessary for the convenience of the public; provided that any applicant found qualified for designation, but not designated, shall be designated before any subsequent applicant located in the same general geographical area is designated.

(e) Upon designation of the applicant's station as a reconstructed vehicle inspection station, the county department shall indicate the designation on the official vehicle safety inspection station permit of the station.

(f) Upon disapproval of an application, the county department shall indicate the reason, in writing, for the disapproval upon the application and notify the applicant of the determination.

(g) All applications for designation as a reconstructed vehicle inspection station shall be retained by the county department for at least three years after the applications are submitted; and

(h) The county department shall post a list of the names and addresses of all designated reconstructed vehicle inspection stations in a place which is accessible to the public. [Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-16 Hours of operation. (a) County reconstructed vehicle inspectors and facilities shall be made available on a regularly scheduled basis and for such periods of time as may be necessary to insure that all reconstructed vehicles are inspected in an efficient and expeditious manner.

(b) Reconstructed vehicle inspection stations designated by the county department shall have at least one appointed reconstructed vehicle inspector available to conduct inspections for a total of at least four hours during the period from 6:00 a.m. to 10:00 p.m., five days a week, except designated holidays. [Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

SUBCHAPTER 3

RECONSTRUCTED VEHICLE APPROVAL PROCEDURES

§19-134-21 Reconstructed vehicle owner requirements. (a) For the purposes of this chapter, the owner of a reconstructed vehicle is considered to be:

(1) A person shown as a legal owner on the current, valid, certificate of registration for the vehicle;

(2) A person who is not the legal owner, but is shown as the registered owner on the current, valid, certificate of registration;

(3) If the certificate of registration is not current:

(A) A person shown as a legal owner on a valid certificate of ownership for the vehicle; or

(B) A person whose signature appears as the buyer on the properly executed release portion of the certificate of ownership;

(4) A person named in a bill of sale signed by the authorized representative of a dealer in motor vehicles licensed under chapter 437, Hawaii Revised Statutes;

(5) A person named in a bill of sale issued under section 286-48(b), Hawaii Revised Statutes; or

(6) If the reconstructed vehicle contains no major body or structural parts identifiable to a specific vehicle, a person who provides proof of ownership of the engine of the vehicle and a vehicle identification number (VIN) assigned by the county director of finance.

(b) The owner of a reconstructed vehicle shall be responsible for all testing required by this chapter and for providing proper certification of compliance as required by this chapter.

(c) The owner of a reconstructed vehicle or the owner's representative having knowledge of the nature of the vehicle modifications, and as designated in writing by the owner shall appear in person to execute the procedure required by this chapter. [Eff JUL 24 1998] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-22 Design approval requirements. (a) A reconstructed vehicle manufactured by a modified vehicle manufacturer shall be approved by a county department only after the modified vehicle manufacturer has:

(1) Submitted design plans and specifications approved by a registered professional engineer to the director;
(2) Certified that the design plans and specifications meet the requirements of this chapter and the requirements of all federal regulations applicable to new vehicles; and
(3) Obtained documented approval of the vehicle design plans and specifications from the director.

(b) A vehicle reconstructed by use of a modified vehicle kit shall be approved by the county department only after the modified vehicle kit manufacturer has:
(1) Submitted design plans and specifications approved by a registered professional engineer to the director;
(2) Certified that all components of the kit meet the applicable requirements of this chapter and the requirements of all federal regulations applicable to the same components when used in the manufacture of new vehicles; and
(3) Obtained documented approval of the kit design and specifications from the director.

(c) A reconstructed vehicle of a design which is not in conformance with the equipment requirements of this chapter shall be approved only after the person desiring approval has:
(1) Submitted design plans and specifications, approved by a registered professional engineer to the director;
(2) Identified the design features which are not in conformity with the requirements of this chapter;
(3) Provided a rationale explaining why the nonconforming design feature will not degrade the safety of operation of the vehicle or subject the vehicle occupants or other persons in the vicinity of the vehicle to additional hazard; and
(4) Obtained documented approval of the vehicle design plans and specifications from the director.

(d) Any vehicle owner may submit design plans and specifications for the modification or reconstruction of a vehicle to the director for approval prior to the actual modification or reconstruction of the vehicle. Approval of the design plans and specifications by the director shall not relieve the vehicle owner from meeting all of the requirements of this chapter. [Eff JUL 24 1985] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-23 Reconstructed vehicle permits. (a) Application for a reconstructed vehicle permit shall be made at a place or places designated by the county department.

(b) Application for a reconstructed vehicle permit shall be made on the form prescribed in the exhibit entitled "Reconstructed Vehicle Permit Application", dated 12/1/84, located at the end of this chapter.

(c) The county department shall furnish the prescribed application form and additional copies necessary to meet record keeping requirements.

(d) The reconstructed vehicle owner or a person designated by the owner in accordance with section 19-134-21(3) or (4) shall:

(1) Complete those portions of the application form that identify the applicant, the vehicle owner, the vehicle, and the description of components; or furnish the required information as may be required by the county department;

(2) Provide such documents, licenses, or certificates as may be required by this chapter or by the county department to reasonably establish applicant identity, vehicle owner identity, quality of workmanship, condition of vehicle components or systems, and identity of parts;

(3) Have the vehicle inspected and certified by a reconstructed vehicle inspector appointed by the county department; and

(4) After inspection certification, present the application form and all required documents to the person designated by the county department for review and approval or disapproval action.

(e) Approval signatures shall be affixed to reconstructed vehicle permits only by persons having written authorization from the county department.

(f) A permit number, determined by the county department, shall be inscribed upon the approved application form by the county department.

(g) The serial number of the reconstructed vehicle sticker issued for the vehicle shall be inscribed upon the approved application form by the county department. This action validates the application as the reconstructed vehicle permit.

(h) The validated reconstructed vehicle permit is then issued to the applicant and is valid for an indefinite period.

(i) The reconstructed vehicle permit shall be available in the reconstructed vehicle whenever the vehicle is operated on the public streets and highways.

(j) The driver of a reconstructed vehicle operating on the public streets or highways shall display the reconstructed vehicle permit upon request by a police officer, or any other person as authorized by the county department or the director.

(k) The county department shall provide, without charge, a copy of the reconstructed vehicle permit to the reconstructed vehicle owner as a replacement for a previously issued permit which has become unusable due to wear or mutilation. The reconstructed vehicle owner shall surrender the unusable permit to the county department in exchange for the replacement permit.

(l) If a reconstructed vehicle permit is lost or has otherwise disappeared, the applicant shall be issued a duplicate permit at no charge.

(m) A reconstructed vehicle permit shall be cancelled and withdrawn by the county department upon the request of the reconstructed vehicle owner under the following conditions:

(1) The reconstructed vehicle owner provides evidence as required by the county department that all parts and components of the vehicle have been returned to substantial conformance with those supplied by the recognized manufacturer of the original vehicle; and

(2) The reconstructed vehicle owner surrenders the reconstructed vehicle permit and sticker to the county department.

(n) The county department shall notify the vehicle registration authority of every vehicle which has been found by the county department to have been returned to a substantially original condition. [Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-24 Reconstructed vehicle stickers. (a) Reconstructed vehicle stickers shall be of a design approved by the director.

(b) The county department shall provide and issue one reconstructed vehicle sticker to be affixed to each reconstructed vehicle for which a reconstructed vehicle permit has been issued by the county department.

(c) The reconstructed vehicle sticker shall be affixed by the county department to the rear bumper of the reconstructed vehicle in close proximity to the rear license plate where it is clearly visible from a position fifty feet behind the vehicle; or, if no such bumper location is available, the sticker shall be affixed by the county department to another location, as determined by

the county department, in close proximity to the rear license plate, where it is clearly visible from a position fifty feet behind the vehicle.

(d) Lost, stolen, or destroyed reconstructed vehicle stickers shall be replaced by the county department when the following conditions are met:

(1) The reconstructed vehicle owner presents the reconstructed vehicle permit issued for the vehicle and submits a written statement of the circumstances concerning the loss of the sticker including the approximate time, date, and location of the vehicle when the loss occurred;

(2) The county department determines that the identity of the vehicle owner, the identity of the vehicle, and the description of components are the same as indicated on the reconstructed vehicle permit; and

(3) The reconstructed vehicle owner pays the cost of the replacement sticker and any other fee determined by the county department for the replacement of the sticker.

(e) Upon issuance of a replacement reconstructed vehicle sticker, the county department shall enter the number of the replacement sticker on the reconstructed vehicle permit. [Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-25 Reconstructed vehicle inspection procedure. (a) The inspection of reconstructed vehicles shall be conducted only at reconstructed vehicle inspection stations designated by the county department and only by reconstructed vehicle inspectors appointed or assigned by the county department.

(b) Every reconstructed vehicle shall be certified by a reconstructed vehicle inspector as meeting the standards and criteria prescribed in the exhibit entitled "Reconstructed Vehicle Standards and Criteria", dated 12/1/84, located at the end of this chapter, prior to the issuance of a reconstructed vehicle permit by the county department.

(c) Every defect, by periodic vehicle inspection standards, found during the reconstructed vehicle inspection, shall be corrected prior to the issuance of a reconstructed vehicle inspection certification.

(d) When inspecting a reconstructed vehicle, the reconstructed vehicle inspector shall:

(1) Use the reconstructed vehicle inspection checklist, exhibited on the reverse side of the

exhibit entitled "Reconstructed Vehicle Permit Application and Inspection Form", dated 12/1/84, located at the end of this chapter; and

(2) Initial and date opposite each item on the checklist that is found to meet the requirements of this chapter.

(e) The reconstructed vehicle owner, or applicant designated by the owner, shall present the following items to the reconstructed vehicle inspector at a reconstructed vehicle inspection station:

(1) The reconstructed vehicle;

(2) An application for a reconstructed vehicle permit, properly completed and signed by the owner or applicant; and

(3) All certificates and other documents required by this chapter.

(f) The reconstructed vehicle owner, or applicant designated by the owner, shall pay the reconstructed vehicle inspection fee to the reconstructed vehicle inspector before the reconstructed vehicle is inspected.

(g) No additional inspection fee shall be required for the reinspection of items found to be deficient on the initial inspection if the reconstructed vehicle is presented for reinspection within ninety days after the date of the initial inspection.

(h) When more than ninety days have elapsed from the date of the initial inspection and failure of certification of a reconstructed vehicle, the entire application and inspection procedure shall be initiated again by the reconstructed vehicle owner or applicant designated by the owner and an additional inspection fee may be required from the reconstructed vehicle owner. An additional sixty days may be granted when the delay is due to delivery of back ordered parts. The delay must be substantiated with a written document from the business that has the part on order. The written document shall be submitted to the county department when requesting an extension.

(i) When the reconstructed vehicle inspector has completed the inspection of a reconstructed vehicle and finds that the vehicle meets all the inspection requirements of this chapter, the inspector shall certify this fact by affixing the inspector's signature, inspector number, and the date in the space provided on the face of the application form. [Eff JUL 24 1989] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-26 Reconstructed vehicle inspection fee. The maximum fee that may be charged by a reconstructed vehicle

inspector for the inspection of a reconstructed vehicle other than a motorcycle is $15. The maximum fee that may be charged by a reconstructed vehicle inspector for the inspection of a reconstructed motorcycle is $8.
[Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-27 Reconstructed vehicle records. (a) The county department shall maintain a record file containing a copy of each currently valid reconstructed vehicle permit issued by the department.

(b) The copy of the reconstructed vehicle permit may be removed from the county department record file when the reconstructed vehicle permit is cancelled.
[Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-28 Suspension, cancellation, and reinstatement of reconstructed vehicle permits. (a) A reconstructed vehicle permit may be suspended by the county department when the vehicle owner is found to be in violation of this chapter.

(b) A reconstructed vehicle permit shall be cancelled by the county department:

(1) At the request of the vehicle owner when:
    (A) The owner provides evidence as required by the county department that all added, substituted, or modified parts or components of the vehicle, which required the issuance of the permit, have been returned to substantial conformance with those supplied by the recognized manufacturer of the vehicle when new; and
    (B) The vehicle owner surrenders the reconstructed vehicle permit and sticker to the county department;
(2) When the reconstructed vehicle owner fails to renew the vehicle registration certificate within ninety days after the expiration thereof. Vehicles stored with proper documents shall not cause the vehicle's reconstruction permit to be suspended;
(3) At the discretion of the county department when:
    (A) The reconstructed vehicle permit has been suspended more than once in any three hundred sixty-five day period; or
    (B) A suspended reconstructed vehicle permit has not been reinstated within sixty days; and

(C) The county department has afforded a hearing, and has given thirty days notice of the intent to cancel the permit to the vehicle owner by certified mail at the address shown on the most recent vehicle registration certificate.

(c) The county department shall reinstate suspended reconstructed vehicle permits when:

(1) The offending condition has been corrected; and

(2) The county department may require the vehicle owner to have the reconstructed vehicle reinspected to the extent necessary to confirm conformance with this chapter and to require the owner to pay the inspection fee and the cost of any reissued sticker before the reconstructed vehicle permit is reinstated.

[Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-29 Appeal procedures. Whenever a person is aggrieved by any decision of the county department under this chapter, that person may appeal the decision of the county department to the director within twenty days after the decision, or within an additional time as may be granted in writing by the county department. The aggrieved person shall submit an informal appeal to the director setting forth the appellant's name, a general statement as to the reason for the appeal, a description of the motor vehicle involved, the circumstances of the county department's decision, and the date the decision was rendered. A copy of the notice of appeal shall be served upon, or mailed, postage prepaid, by registered mail with return receipt, to the director. The director shall appoint a panel of at least four members to assist in reviewing and recommending disposition of all appeals submitted by an aggrieved person. The decision rendered by the director shall be final. [Eff JUL 24 1986] (Auth: HRS §286-85) (Imp: HRS §286-85)

SUBCHAPTER 4

SEVERABILITY AND EFFECTIVE DATE

§19-134-41 Severability. If any portion of this chapter is held invalid for any reason, the invalidity

shall not affect the validity of the remainder of this chapter. [Eff JUL 24 1998] (Auth: HRS §286-85) (Imp: HRS §286-85)

§19-134-42 Effective date. This chapter shall take effect ten days after it is filed with the lieutenant governor. [Eff JUL 24 1998] (Auth: HRS §286-85) (Imp: HRS §286-85)

DEPARTMENT OF TRANSPORTATION

Chapter 19-134, Hawaii Administrative Rules, on the Summary Page dated July 11, 1986, was adopted on July 11, 1986, following public hearings held on January 27, 29, and 30, 1986 and on February 5, 1986, after public notice was given in the Honolulu Advertiser, Hawaii Tribune-Herald, Maui News, and Garden Island News on December 30, 1985.

These rules shall take effect ten days after filing with the Office of the Lieutenant Governor.

WAYNE J. YAMASAKI
Director of Transportation

APPROVED AS TO FORM:

Deputy Attorney General

APPROVED:

GEORGE R. ARIYOSHI
Governor
State of Hawaii

Date: 7-11-86

Filed

RECONSTRUCTED VEHICLE PERMIT APPLICATION

AND

INSPECTION FORM

EXHIBIT

Date: 12/1/84

APPLICATION FOR
RECONSTRUCTED VEHICLE PERMIT

COUNTY _____

PERMIT NO. _____

STICKER NO. _____

APPLICANT: Name _____ Dr. Lic. No. _____
Last First Init.

Address _____ Phone No. _____

VEHICLE: Owner's Name _____ Phone No. _____

Make _____ Year _____ Model _____ Body Type _____ Color _____

VIN _____ License No. _____ Emblem No. _____

DESCRIPTION OF COMPONENTS: (Circle applicable word(s), fill in appropriate blanks)

ENGINE: OEM Replaced Gasoline Diesel LPG Electric Other _____

NO. CYL.: 1 2 3 4 5 6 8 12 Eng. No. _____ Displ. _____ cu. in./cc

TRANSMISSION: OEM Modified Manual Auto. CONTROL: Floor Column Other _____

STEERING CONTROL: OEM Modified Manual Power M/C HANDLEBARS: OEM Modified

EXHAUST SYSTEM: OEM Modified BRAKES: OEM Modified

FRONT SUSPENSION: OEM Raised Lowered Heavy Duty Spacers Lift Kit Coil Leaf Torsion Independent Solid Axle M/C Extended Fork Other _____

REAR SUSPENSION: OEM Raised Lowered Heavy Duty Extended Shackles Helper Springs Coil Leaf Torsion Independent M/C Solid Other _____

FRONT WHEEL RIMS: OEM Special Reversed Offset Other _____ Tire Size _____

REAR WHEEL RIMS: OEM Special Reversed Offset Other _____ Tire Size _____

FRAME: OEM Shortened Extended Kit Other _____ M/C FRAME: OEM Modified

BODY TOP/PANELS: OEM Modified Kit FENDERS: OEM Modified HOOD: OEM Modified

GRILLE: OEM Modified TRUNK/BED: OEM Modified BUMPERS: OEM Modified

I certify that the above information is correct to the best of my knowledge. I understand that any changes in the above listed components voids this permit and requires re-application. An approved copy will be retained in the vehicle.

APPLICANT'S SIGNATURE _____ DATE _____

INSPECTION CERTIFICATION: I certify that the above identified vehicle has been inspected and found to meet the requirements of the Hawaii Reconstructed Vehicle Regulations issued by the Director of Transportation.

INSPECTOR'S SIGNATURE: _____ NO. _____ DATE _____

REGISTRATION VALIDATION: The vehicle registration records for the above identified vehicle have been adjusted to record any changes as may be required.

SIGNATURE: _____ TITLE _____ DATE _____

APPROVAL: The above identified vehicle has been found to meet the requirements of the Hawaii Reconstructed Vehicle Regulations issued by the Director of Transportation and is permitted to operate on the public highways.

SIGNATURE: _____ TITLE _____ DATE _____

RECONSTRUCTED VEHICLE INSPECTION FORM

PASSENGER CAR OR TRUCK					
SYSTEM	Original	Modified	Defect	Corrected	Inspector Initials
1. Vehicle Identification					
2. Power Unit					
3. Fuel System					
4. Exhaust System					
5. Transmission					
6. Suspension System					
7. Steering System					
8. Wheels and Tires					
9. Brake System					
10. Body/Glazing Materials					
11. Frame					
12. Welding					
A-1 and A-2 Comments: _____					

MOTORCYCLE					
SYSTEM	Original	Modified	Defect	Corrected	Inspector Initials
1. Motorcycle Identification					
2. Power Unit					
3. Fuel and Oil System					
4. Exhaust System					
5. Transmission					
6. Suspension System					
7. Steering System					
8. Brake System					
9. Wheels and Tires					
10. Frame/Chassis					
11. Electrical System					
12. Rearview Mirror					
13. Speedometer/ Odometer					
14. Welding					

(Reverse of Application Form)

RECONSTRUCTED VEHICLE STANDARDS

AND

CRITERIA

EXHIBIT

Date: 12/1/84

EXHIBIT Reconstructed Vehicle Inspection Standards and Criteria

I. GENERAL. Those components or items of equipment which have been added, substituted or modified in a manner which makes the vehicle subject to these Rules, shall be inspected in accordance with the standards and criteria set forth herein. In addition, all other items of equipment subject to the periodic vehicle inspection requirements shall be in conformance with the criteria established therein.

Those added, substituted, or modified components or items of equipment which have been inspected and approved in accordance with these Rules shall be deemed to meet the required equipment criteria of the periodic vehicle inspection requirements and all such components and items of equipment shall be required to meet the appropriate performance criteria on all subsequent periodic vehicle inspections.

Reconstructed vehicle inspectors shall inspect reconstructed vehicles in accordance with the applicable standards, criteria, and procedures established herein. Inspection certification for a reconstructed vehicle shall be issued only when, upon inspection, the reconstructed vehicle inspector determines that the reconstructed vehicle meets these standards and criteria.

II. INSPECTION STANDARDS, CRITERIA AND PROCEDURES - PASSENGER CARS AND TRUCKS

1. Vehicle Identification.

a. Requirements.

(1) The Vehicle Identification Number (VIN) or factory serial number of the vehicle, if any; and

(2) The license plate number, if any; and

(3) The emblem (validation sticker) number, if any, shall correspond with the numbers shown on the vehicle registration certificate, or other required document, and the reconstructed vehicle permit application.

b. Procedure. Visually inspect and confirm agreement between the various numbers. Record the

numbers on the inspection form. Note: Some vehicles may not have one or more of the above numbers; in these cases record "none" in the appropriate space on the inspection form.

2. Power Unit (Engine(s) or Motor(s))

a. Requirements. Every power unit that has been replaced with a power unit that is not an OREP power unit for the vehicle and every power unit that has been relocated to a position in the vehicle other than that provided by the original recognized manufacturer of the vehicle shall:

(1) Be located outside of any compartment of the vehicle that is intended for use by the driver or any passenger; and

(2) Be shielded from any compartment intended for use by the driver or any passenger by a flame-proof and fume-proof barrier; and

(3) Be securely fastened to the vehicle frame or unit body with bolts and mounting hardware designed to accommodate the power unit; and

(4) Have suitable screening or shielding provided for all moving parts and components which may cause personal injury and are accessible to inadvertent contact during normal operating condition, by persons standing outside of the vehicle; and

(5) Be provided with a driver-operated power control that automatically returns to the lowest power position when released by the driver. Vehicles equipped with cruise control are exempt when actuated; and

(6) Be provided with a driver-operated control that prevents the inadvertent starting or actuation of the power unit; and

(7) Be correctly described on the permit application form; and

(8) Vehicles operated without a hood or engine compartment covering shall have suitable screening or shielding provided for all moving parts which are exposed less than two inches from the hood line.

b. Procedure.

(1) Visually inspect for conformance to the location, mounting, and shielding requirements; and

(2) Have applicant operate the power unit to determine compliance with the control requirements; and

(3) Confirm the correct description of the power unit on the permit application form.

3. Fuel System (combustion power units only).

a. Requirements.

(1) Each fuel system orifice provided for the introduction of air to be used for the combustion of fuel (air intake) shall be equipped with a device which will:

(a) Prevent the ejection into the atmosphere of any ignited fuel/air mixture.

(2) All fuel system components, such as tank, tubing, hoses, clamps, etc., shall:

(a) Be located outside of any compartment intended for use by the driver or any passenger (except OEM or OREP components); and

(b) Be securely attached with fasteners designed for this purpose; and

(c) Not be positioned above, or nearer than three (3) inches to any exhaust system component, except in the engine compartment, unless appropriate shielding is provided (except OEM or OREP components); and

(d) Be positioned so as not to contact any moving vehicle component; and

(e) Be free of any fuel leakage.

(3) The fuel line connection to the engine shall be of a flexible design, and of a length sufficient to accommodate all engine vibrations and movements of the engine with respect to the vehicle frame.

(4) The fuel tank shall:

(a) Not be located in the engine compartment (except OEM or OREP components); and

(b) Be shielded from any compartment intended for use by the driver or any passenger by a flame-proof barrier (except OEM or OREP components); and

(c) Be equipped with a filler cap designed to prevent fuel spillage from the filler opening when the cap is in place; and

(d) Be located within the lateral perimeter of the vehicle frame or unit body to minimize crash damage rupturing.

(5) Auxiliary liquid fuel tanks described as an additional fuel tank and any other components attached directly thereto designed to supplement the vehicle's liquid fuel carrying capacity beyond that provided by the vehicle manufacturer shall meet the requirements of Regulation VESC-22 (Minimum Performance Standard for Auxiliary Liquid Fuel Tanks).

b. Procedure.

(1) Visually inspect for the installation of the required fuel system components; and

(2) Visually inspect for conformance to the location, mounting, and shielding requirements; and

(3) Have applicant start the engine. Visually inspect the components for fuel leakage; and

(4) Have the applicant abruptly increase the engine speed several times to approximately twice the speed of idle; observe the adequacy of the flexible fuel line between the engine and the frame.

4. Exhaust System (combustion power units only).

a. Requirements.

(1) All reconstructed vehicles shall be equipped with a system of components to conduct exhaust gases from the engine to a safe discharge point outside of the vehicle.

(2) All exhaust system components, such as manifolds, headers, exhaust pipes, resonators, mufflers, converters, tail pipes, etc., shall:

(a) Be located outside of any compartment intended for use by the driver or any passenger; and

(b) Be securely attached with fasteners designed for this purpose; and

(c) Be positioned so as not to contact any moving vehicle component; and

(d) Be free of any leakage; and

(e) Have suitable shielding provided for all components which may cause personal injury and are accessible to inadvertent contact by persons standing outside of the vehicle under normal operating conditions; and

(f) Suitable heat shielding shall be provided for:

(i) Any catalytic converter located less than three inches below the floor pan or from any flammable material; and

(ii) Any other exhaust system component located less than one and one-half inches below the floor pan or less than three inches from any flammable material; and

(g) Have no temporary patches or makeshift repairs. Lasting repairs with materials which have been specifically designed for such purpose and are used in accordance with the manufacturer's recommendations are acceptable.

(3) The exhaust system shall contain a muffler or mufflers.

(4) The exhaust system shall discharge the engine exhaust gases outward from the vehicle to the atmosphere; and

(a) Exhaust systems on property-carrying vehicles shall discharge the exhaust gases to the rear of that part of the vehicle designed and normally used for carrying the driver and passengers; and

(b) Exhaust systems on passenger vehicles shall discharge the exhaust gases at a location to the rear of the vehicle body or direct the exhaust gases outward from the side of the vehicle body at a location rearward of any operable side window; and

(c) No part of the exhaust system shall pass through any area of the vehicle that is used as a passenger compartment, nor in close proximity to the fuel system without being properly shielded. No part of the exhaust system may contain a muffler cut-out or by-pass.

b. Procedure.

(1) Visually inspect for the installation of the required components; and

(2) Visually inspect for conformance to the location and mounting requirements; and

(3) Have the applicant start the engine. Check entire exhaust system for leaks. (Temporarily covering the tailpipe outlet(s) should indicate pressure and no audible [hissing] indication of leakage.)

5. Transmission.

a. Requirements. Every transmission that is not an OREP or an OEM transmission for the vehicle, and every transmission that has been relocated to a position in the vehicle other than that established by the recognized manufacturer of the vehicle when new shall:

(1) Be located outside of any compartment of the vehicle that is intended for the use of the driver and any passenger; and

(2) Be securely mounted in the vehicle with bolts and mounting hardware designed to accommodate the transmission; and

(3) Be provided with controls which are operable through the entire range of gear selection by the seated driver without interfering with the operation of any power unit control or steering control; and

(4) If equipped with a manual transmission having other than a three speed forward standard "H" pattern and the vehicle is manufactured after January 1, 1968, be provided with identification of the shift lever pattern permanently displayed in view of the driver (FMVSS No. 102 - 49 CFR §571.102); and

(5) If powered with a combustion engine and equipped with an automatic transmission, be provided with an interlock that causes the engine starter to be inoperative when the transmission shift lever is in a forward or reverse drive position; and

(6) If manufactured after January 1, 1968, powered with a combustion engine, and equipped with an automatic transmission; be provided with a shift lever which:

(a) Has a neutral position located between the forward drive positions and the reverse drive positions; and

(b) Moves in a clockwise direction from the reverse drive positions to the forward drive positions when mounted on the steering wheel column; and

(c) Has any optional "park" position located at the end of the selection sequence adjacent to the reverse drive position; and

(d) Has identification of the shift lever positions permanently displayed in view of the driver (FMVSS No. 102 - 49 CFR §571.102); and

(7) Have any opening through the floor or into the engine compartment from the driver's compartment covered and sealed.

b. Procedure.

(1) Visually inspect for conformance to mounting, location, shift lever sequence, shift lever position identification, and covering and sealing of any opening requirements; and

(2) When the vehicle is equipped with an automatic transmission, have applicant attempt to operate the engine starter with the shift lever in each position other than "park" and "neutral"; and

(3) Have applicant operate the transmission shift lever through its entire range while seated in the driver's position to determine the accessibility and freedom from interference of the control; and

(4) Check permit application for the correct description of the transmission.

6. Suspension System.

a. Requirements.

(1) Every reconstructed vehicle shall be equipped with a flexible primary suspension component (spring, torsion bar, etc.) mounted between the vehicle frame, or unit body, and each axle, or other component to which the wheels are mounted (trailing arms, control arms, etc.), which:

(a) Permits vertical relative movement between the frame and the axle; and

(b) Permits negligible lateral (side to side) or longitudinal (front to rear) horizontal movement between the frame and the axle; and

(c) Is securely attached to both the frame and the axle with mounting hardware designed for this purpose; and

(d) Provides adequate support for the safe control of the vehicle under all normal conditions of operation upon public streets and highways.

(2) The suspension system of a reconstructed vehicle shall not be altered, supplemented or adjusted to increase the bumper height of the vehicle by more than the maximum requirements of the bumper height law (Act 291, SLH 1984).

(3) Whenever the suspension system provided by the original recognized vehicle manufacturer has been altered, supplemented, or adjusted in a manner which changes the height of the vehicle frame:

(a) All suspension components on the same axle shall be changed in an equivalent manner; and

(b) The lateral (side to side) aspect of the vehicle frame shall be horizontal when the vehicle is at rest on a level surface; and

(c) The longitudinal (front to rear) slope of the vehicle is permitted so long as all other suspension system and body height requirements within this appendix are satisfactorily met.

(4) Each position on an axle of a reconstructed vehicle where one or more wheels are mounted shall be equipped with at least one shock absorber which:

(a) Is mounted between, and securely attached to, the axle and the frame with mounting hardware designed for this purpose; and

(b) Provides a damping action on all vertical motion (double acting) throughout the entire vertical motion range of the primary suspension component.

(5) At each position where one or more wheels are mounted, the suspension system of a reconstructed vehicle shall provide a minimum range of vertical motion between the axle and the frame of two inches for compression and two inches for rebound when the empty vehicle is standing upon a level surface.

(6) The suspension system of a reconstructed vehicle shall permit visible vertical motion upon the application of downward pressure at a point on the chassis above each flexible primary suspension component.

(7) The range of movement between the axle and the frame of a reconstructed vehicle shall be limited in a manner which, under all normal conditions of suspension compression and rebound, will prevent:

(a) Contact between the wheels, including the tires, and any part of the vehicle frame or chassis; and

(b) Contact between the suspended and unsuspended portions of the vehicle except at suspension component attachment points and at those points which are designed and suitably cushioned to limit extreme suspension movement; and

(c) Prevent any brake hose from becoming fully extended.

(8) Any primary or supplemental coil springs used in the suspension system of a reconstructed vehicle shall not be capable of being fully compressed or fully extended within the limits of vertical motion of the system.

(9) A reconstructed vehicle shall have sufficient ground clearance between the vehicle undercarriage and the road surface on which the vehicle rests. Sufficient ground clearance shall be determined in the following manner with the vehicle resting on a level surface.

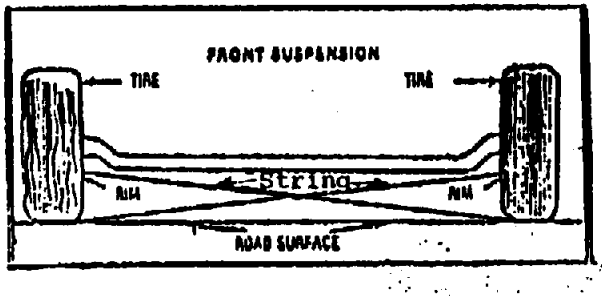
(a) Front or rear suspension ground clearance: Extend a string from the bottom of the wheel to the bottom of the tire on the opposite side of the same axle. Extend another string in the same manner from the opposite direction of the same axle. The two strings should form an "X" under the center portion of the axle being tested (see diagram). No part of the vehicle body or undercarriage should be located below the top half of the "X" formed by the two extended strings.

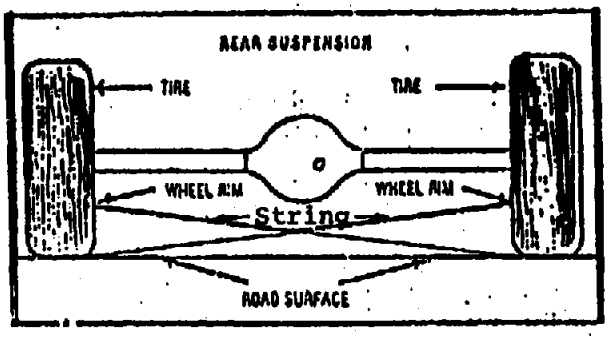
(b) Front to rear ground clearance: Extend a string from the bottom of the front wheel to the bottom of the rear wheel located on the same side of the vehicle (see diagram). No part of the body or undercarriage should be located below the extended string.

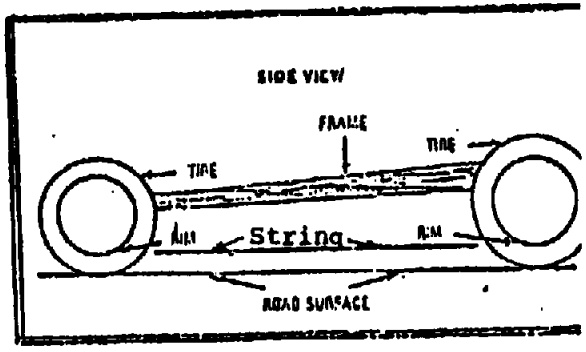
(10) No less than thirty percent of the empty weight of a reconstructed vehicle shall be supported by either the front axle or the rear axle of the vehicle.

(11) When used in the suspension system of a reconstructed vehicle, all leaf spring hanger (shackle) extensions shall:

PROCEDURE TO CHECK GROUND CLEARANCE







(a) Have a maximum effective length of no more than two inches over the OEM shackle as measured between the upper and lower bolt centers; and

(b) Be assembled with bolts and hangers specifically designed with adequate extra strength for this purpose.

(12) Ball joint spacer blocks or ball joint "lift kits" which are attached with a single bolt shall not be used in the suspension system of a reconstructed vehicle.

(13) No more than two spacer inserts shall be used between the winds in any coil spring used as a flexible primary suspension component in a reconstructed vehicle.

(14) No more than one spacer block shall be used under any front coil or leaf spring used as a flexible primary suspension component.

(15) No coil spring, leaf spring, or torsion bar used in the suspension system of a reconstructed vehicle shall be welded or otherwise repaired except by replacement.

(16) Every reconstructed vehicle equipped with a suspension system containing other than OEM or OREP components, or containing modified OEM or OREP components, shall be tested for conformance to the original vehicle manufacturer's caster, camber and toe-in suspension system alignment criteria by a vehicle repair facility suitably manned and equipped to perform such testing.

b. Procedure.

(1) The vehicle shall be placed on a surface that is approximately flat and level.

(2) Visually inspect for conformance to Requirements 6.a.(1)(c) and (d); (2); (3)(a) and (b); (4)(a); (7)(a), (b), and (c); (8); (12); (13); (14); and (15).

(3) Determine conformance to Requirements 6.a.(1)(a); (4)(b); and (6) by applying cyclic vertical pressure, at the front and at the rear, on any appropriate point of the suspended portion of the vehicle. There shall be noticeable vertical movement between the frame and the axle. The movement shall cease within two cycles of the suspension system after the application of the cyclic pressure is terminated.

(4) Determine conformance with Requirement 6.a.(1)(b) by applying cyclic horizontal pressure to a side and to the front or rear of the vehicle at the approximate height of the vehicle frame. There shall be negligible horizontal movement between the vehicle body or frame and the axles.

(5) Determine conformance to Requirement 6.a.(5) by visually examining, and measuring, where necessary, the range of vertical travel available between the vehicle frame and axles on compression and on rebound.

(6) Determine conformance with Requirement 6.a.(9) (a) and (b) by visually examining the underside of the vehicle for any part which extends below the top half of the "X" formed by the strings drawn across the front and rear suspension system of the vehicle or below the string which is drawn along the side of the vehicle.

(7) Determine conformance with Requirement 6.a.(11)(a) by measuring the distance between the upper and lower bolt centers on leaf spring hanger extensions (shackles).

(8) Determine conformance with Requirement 6.a.(11)(b) by examining the shackle hanger manufacturer's specifications for the product. These specifications shall be provided by the owner of the reconstructed vehicle. In no case will extensions (shackles) that are not substantially thicker and wider than the original be permitted.

(9) Reconstructed vehicles which have had extensive modifications affecting the proportionate weight distribution on the front and the rear axles such as: power unit relocation, body replacement, axle relocation or change in wheelbase dimensions; shall have the amount of the empty weight of the vehicle supported by the front and by the rear axle determined at an official weight scale. The reconstructed vehicle owner shall provide an official weight certificate showing these axle loads. Verify conformance with Requirement 6.a.(10).

(10) Verify evidence of alignment testing provided by the reconstructed vehicle owner in conformance with Requirement 6.a.(16).

7. Steering System.

a. Requirements.

(1) The steering control mechanism of a reconstructed vehicle shall:

(a) Consist of a control device attached to a shaft in a manner such that the rotary motion of the control device turns the shaft which will cause the moving vehicle to move to the right when the control is rotated in a clockwise direction and to the left when the control is rotated in a counterclockwise direction; and

(b) Be securely attached to a structural member of the vehicle; and

(c) Be located forward of the driver's seating position; and

(d) Be operable through its entire control range by a person seated against the seat back at the driver's position; and

(e) Not interfere with the driver's vision through the windshield nor interfere with any other vehicle control mechanism; and

(f) Be so constructed that no components or attachments, including horn actuating mechanisms and trim hardware can catch the driver's clothing or jewelry during normal driving maneuvers.

(2) Any steering wheel (a circular steering control device) that has been replaced by other than an OEM or an OREP device, or has been modified shall:

(a) Have a major axis (largest diameter) of no less than 13 inches; and

(b) Have no other component or structure located between the driver and the device except safety belts; and

(c) Have no other component or structure located in the plane of rotation nearer than 3 inches outside of the path of the maximum radius of the control device; and

(d) Have a range of rotation (lock to lock) of no less than 2 turns (360 degree rotation per turn) and no more than 6 turns and shall be free of any jamming or binding throughout this range.

(3) A reconstructed vehicle equipped with a steering system that has been modified in any manner except replacement of the steering wheel shall:

(a) Be tested for conformance to the original vehicle manufacturer's caster, camber and toe-in alignment criteria by a vehicle repair facility suitably manned and equipped to perform such testing; and

(b) Have a minimum turning diameter of no more than 65 feet in either direction, measured to the outside edge of the outside front wheel tire track; and

(4) The steering gear box or other mechanism which translates the rotary motion of the control shaft to linear motion to move the wheels shall be securely attached to the vehicle frame with hardware designed for this purpose.

(5) All components of the steering system shall be connected with fittings designed for the purpose and adjusted to eliminate any unnecessary free play or lash. Steering system lash shall be within the limits shown in the following table:

Steering Wheel Diameter		Allowable Lash	
In.	Cm.	In.	Cm.
16 or less	40 or less	2	5.1
18	46	2 1/4	5.7
20	51	2 1/2	6.4
22	56	2 3/4	7.0

(6) All welding used in the modification of any steering system component or attachment shall be accomplished by an electric arc welding process.

(a) Gas welding is permitted for those types of metal not suitable for electric arc welding.

(b) No welding repairs or welding modifications of any type shall be permitted on cast iron or factory cast steering components, including the steering shaft.

b. Procedure.

(1) Inspect with the vehicle standing or, where required, operated on a surface that is approximately flat and level.

(2) Visually inspect for conformance to Requirements 7.a.(1)(a), (b), (c), and (f); and (4); and

(3) Have applicant, while seated in the driver's position of the vehicle, operate the steering control throughout its entire range (with engine running for vehicles equipped with power steering). Verify conformance to Requirements 7.a.(1)(d) and (e); and (2)(b), (c), and (d); and

(4) Measure the major axis (diameter) of the steering wheel for conformance to Requirement 7.a.(2)(a); and

(5) With the vehicle in a standing position and the engine running, have applicant turn the steering wheel full right or left and execute a complete 360 degree turn with the vehicle; repeat the maneuver in the opposite direction. Measure each turning circle diameter to the outside of the tire track of the outside front tire. Check measurement for conformance to Requirements 7.a.(3)(b); and

(6) With the vehicle in a standing position, inspect all steering system components, pitman arm, idler arm, tie rods, etc. for proper connecting fittings and check for worn or loose connections in conformance with Requirement 7.a.(5). Use the following procedure to check steering system lash for conformance to the tolerances listed in the table in Requirement 7.a.(5).

(a) With the steered wheels in the straight ahead position, turn the steering wheel until turning motion is observed at the steered wheels.

(b) Align a reference point on the steering wheel rim with a ruler.

(c) Slowly turn the steering wheel in the opposite direction until motion is observed at the steered wheels.

(d) Measure the distance the reference point on the steering wheel rim has moved with reference to the ruler.

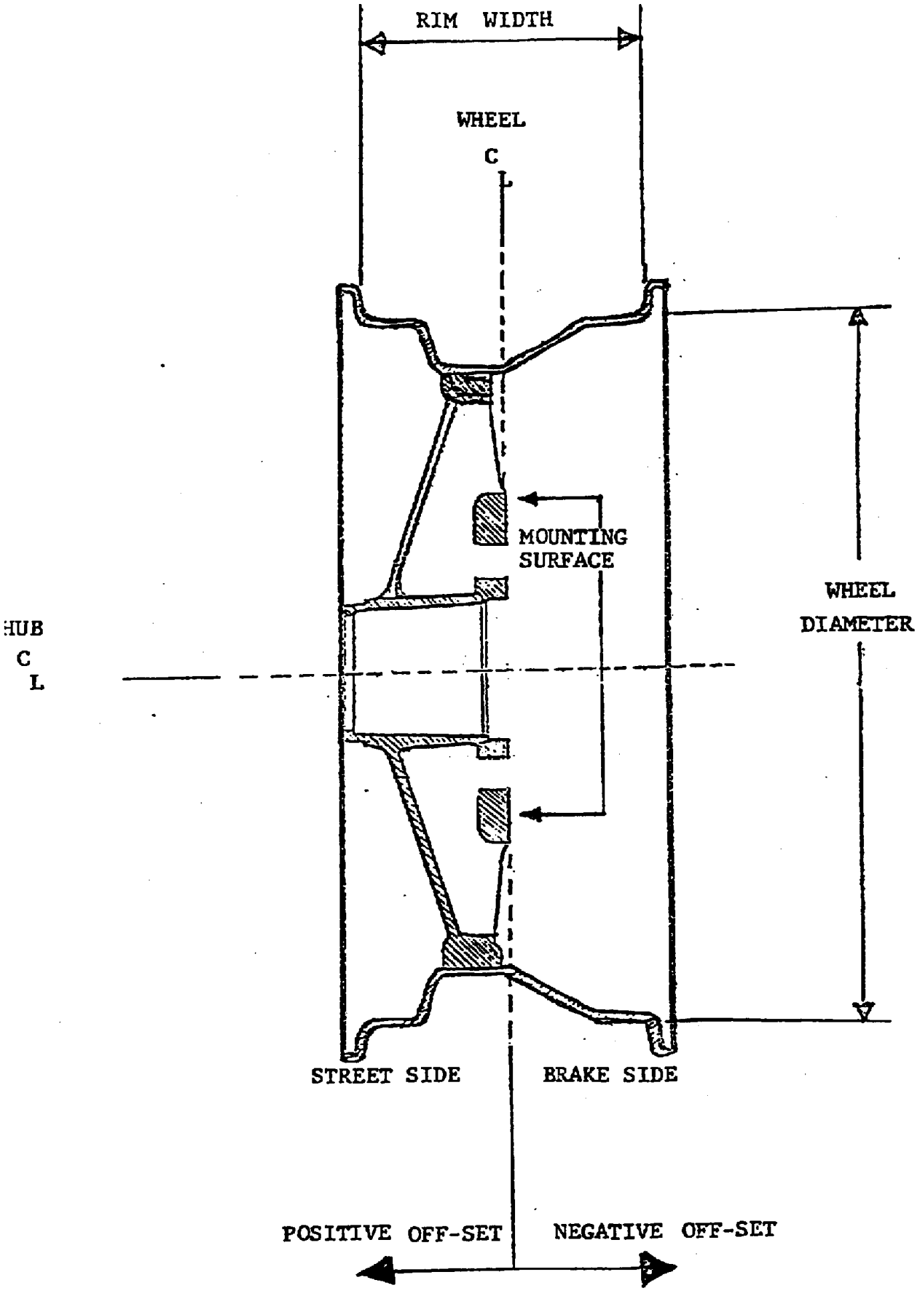
(7) Verify evidence of alignment testing provided by the reconstructed vehicle owner in conformance with Requirement 7.a.(3)(a); and

(8) Visually examine any welding performed on the steering system components or attachments.

8. Rims and Tires.

a. Requirements.

(1) The rims mounted on a reconstructed vehicle, if other than OEM (including options) or OREP; i.e., special rims, shall meet or exceed the specifications established for such rims by SFI; and


RIM WIDTH
WHEEL
C
L
MOUNTING
SURFACE
WHEEL
DIAMETER
HUB
C
L
STREET SIDE
BRAKE SIDE
POSITIVE OFF-SET
NEGATIVE OFF-SET

(2) All rims mounted on a reconstructed vehicle shall be free of cracks, rim dents, warpage, and repairs of any kind; and

(3) All rim mounting studs, nuts, or bolts shall be present, in good condition, and securely tightened; and

(4) All rims mounted on a particular axle, or equivalent front or rear suspension component, shall be of identical size, design, and material (all front rims the same and all rear rims the same); and

(5) The rim diameter of the rims mounted on the front axle shall be no less nor no greater than one and one-half inch as the rim diameter of the OEM rims for the suspension system used. Larger or smaller rims may be used on certain front suspension system which has been modified or adjusted to correctly accommodate such rims; and

(6) The use of any combination of reverse mounted or special rims, adapters, or spacers shall not increase the negative off-set of the front rims by more than one and one-half inch over the standard or optional rims whichever is greater as specified by the recognized manufacturer of the vehicle when new. The reconstructed vehicle owner shall provide the rim off-set specifications and the manner of measurement from the recognized manufacturer of the vehicle when it was new. The use of negative off-set rims on any front wheel drive (FWD) only, passenger type vehicle is prohibited; and

(7) Although it is recommended that all tires mounted on the rims of a reconstructed vehicle be of the same type, radial tires may be mixed with other types of tires as long as the tires are the same type on each axle and that the radial tires are mounted on the rear axle; and

(8) All tires mounted on the rims of a reconstructed vehicle shall be of a size designated for use with a rim of that type and width. Front tires shall measure a minimum of 40% of the tread width of the rear tires; and

(9) All tires used on the rims of a reconstructed vehicle shall have a load rating of sufficient capacity to support the weight imposed on both the tire and rim; and

(10) All tires mounted on the rims of a reconstructed vehicle shall be tires designed specifically for highway use (FMVSS No. 109 and No. 119) including those designed for highway use and retreaded in accordance with FMVSS No. 117. The use of tires designed, retreaded, or designated for any other purpose is not permitted; and

(11) Every tire mounted on the rims of a reconstructed vehicle shall have an average tread depth of no less than 2/32 of an inch; and

(12) The tread surface of tires (surface that contacts the road) mounted on a reconstructed vehicle shall not extend laterally beyond the outboard edge of the fender, the fender well, or other wheel enclosure including flared fender openings when viewed from above.

b. Procedure.

(1) Visually inspect the rims and tires for conformance to Requirements 8.a.(2) and (3); and

(2) Make appropriate measurements to determine conformance to Requirements 8.a.(6), (11), and (12); and

(3) Inspect markings on the tire sidewalls to determine conformance to Requirements 8.a.(4), (5), and (7); and

(4) Compare vehicle owner furnished specifications on rim type and width with the tire manufacturer's specifications to determine compliance with Requirement 8.a.(8). (Tire distributors and dealers have tabular information indicating compatible tire sizes and rim type/widths); and

(5) Determine compliance with Requirement 8.a.(9) by comparing the load rating marked on the tire sidewall with the weight imposed on the tire. The weight imposed on a tire shall be determined from the empty vehicle weight in the following manner:

(a) If the actual empty vehicle axle loads (weight on an axle) are known, or are furnished, the weight on a tire mounted on that axle shall be 110 percent of the axle load divided by the number of wheels mounted on that axle; or

(b) If the actual axle loads are unknown, the axle nearest the power unit (engine) of the vehicle shall be considered to support 60 percent of the empty vehicle weight and the axle farthest from the power unit to support 40 percent of the empty vehicle weight. When the axle loads have been determined in this manner, compute the wheel load as in subparagraph 8.b.(5)(a) above; and

(6) Determine conformance to Requirement 8.a.(10) by examining the markings on the tire sidewalls. The

marking "DOT" should appear on every tire manufactured for highway use and also on every tire retreaded for highway use. Tires manufactured prior to September 1, 1974 and tires made for vehicles manufactured before 1948 will not be marked as specified; however, these tires shall be of a standard automotive type and have a tread pattern similar to that used on tires designated for highway use and marked with the symbol "DOT". Tires having restrictive markings of any kind or having markings indicating a specific use, other than highway use, are not permitted.

(7) Determine compliance with Requirement 8.a.(1) by examining the rim manufacturer's certification which indicate that the rim meet or exceed the SFI specifications. The reconstructed vehicle owner shall furnish the documents.

9. Brake Systems.

a. Requirements.

(1) Every reconstructed vehicle shall be equipped with a service brake system which will:

(a) Provide braking action at each wheel except OEM system; and

(b) Is actuated by pressure applied to a pedal control by the driver's foot; and

(c) Is actuated primarily by the use of hydraulic fluid (actuation primarily by mechanical means, rods, or cables, is not permitted even if the OEM system was so designed).

i. If the original engine, power train and brake system are unaltered (OEM or OREP), and the brake system is mechanical, the brake system may be left mechanical.

(2) Reconstructed vehicles with a date of manufacture on or after January 1, 1968 shall be equipped with a service brake system which:

(a) Is designed to prevent the complete loss of the braking function in the event of a rupture or leakage-type failure of any single pressure component except structural failures of the master cylinder (split system required); and

(b) Is equipped with a brake failure warning lamp or master cylinder low level indicator lamp visible to the driver.

(3) Brake tubing and brake hose installed on a reconstructed vehicle shall be:

(a) Securely attached with hardware designed for this purpose, in a manner which will prevent chafing, kinking, or other mechanical damage; and

(b) Of sufficient length and flexibility to accommodate, without damage, all normal movements of the parts to which it is attached; and

(c) Located in a manner that prevents contact with any component of the vehicle's exhaust system.

(4) All tubing, other than OEM, used in the service brake system of a reconstructed vehicle shall be of a type that meets the requirements of SAE Recommended Practice J1047, Tubing - Motor Vehicle Brake System, Hydraulic.

(5) All hoses, other than OEM, used in the service brake system of a reconstructed vehicle shall be of a type that meets the requirements of SAE Standard J1401a, Road Vehicle - Hydraulic Brake Hose for use with Non-petroleum Base Hydraulic Brake Fluids.

(6) The service brake system of a reconstructed vehicle shall be capable of stopping the vehicle within a distance of 25 feet from a speed of 20 miles per hour without departing from a lane 12 feet wide with no corrective steering action applied.

(7) Every reconstructed vehicle shall be equipped with a parking brake system which:

(a) Provides braking action on at least two wheels of the same axle; and

(b) Is actuated by a control that is operated by the driver's hands or foot and remains set in the applied position until released by a separate action; and

(c) Is actuated by a means independent of the service brake system except that the brake shoes and drums, or pads and discs, may be common to both the service and parking brake systems.

(8) The parking brake system of a reconstructed vehicle shall be capable of holding the vehicle stationary on any incline on which the vehicle is operated.

b. Procedure.

(1) Visually inspect the components of the service brake system and the parking brake system for conformance to Requirements 9.a.(1)(a), (b), and (c); (2)(a); (3)(a), (b), and (c); and (7)(a), (b), and (c).

(2) Determine conformance to Requirement 9.a.(2)(b) by setting the parking brake control in the applied position; turn the ignition switch to the "on" position. The illuminated brake failure indicator lamp should be visible at the driver's position.

(3) Determine compliance with Requirements 9.a.(4) and (5) by visual examination of the brake tubing and brake hoses; specifications shall be supplied by the reconstructed vehicle owner.

(4) Have applicant operate the reconstructed vehicle at a speed of 20 miles per hour on a clean, dry, level surface, apply the service brakes and measure the stopping distance for conformance to Requirement 9.a.(6).

(5) Determine conformance with Requirement 9.a.(8) by having the applicant set the parking brake control and start the engine of the reconstructed vehicle:

(a) If the vehicle is equipped with an automatic transmission, have applicant move the selector to the "drive" position (manually hold the parking brake if movement of the selector automatically releases the parking brake), and increase the engine rpm to about twice the idle speed. The vehicle should not move.

(b) If the vehicle is equipped with a manual transmission, have applicant depress the clutch pedal, move the gear shift lever to the lowest forward speed position, increase the engine rpm to about twice the idle speed, and slowly release the clutch pedal. The vehicle should not move.

10. Vehicle Body.

a. Requirements.

(1) Body Structure. The body structure of a reconstructed vehicle shall be free of sharp edges and projections in all interior and exterior locations where they may be contacted by persons in the normal use and care of the vehicle. This requirement does not include those locations usually accessible only when the vehicle is hoisted or partially dismantled for the purpose of maintenance or repair.

(a) The body to frame mounts shall be in accordance with OEM specifications with a maximum three inch body block, provided the body block manufacturer's instructions for modification of the steering column, brake hose location and pedal controls are followed when required. The reconstructed vehicle owner shall provide the instructions and evidence that the modifications were performed correctly.

(2) Doors and Latches.

(a) A reconstructed vehicle shall be provided with a means of entry and exit on each side of the vehicle which provide ready access to the seats in the vehicle by vehicle occupants.

(b) On vehicles not equipped with doors, approved type occupant restraining devices shall be installed within the vehicle and be readily accessible to the occupants.

(c) The doors used to provide access to the passenger compartment of a reconstructed vehicle shall be of a hinged type and shall be readily operable and be provided with a two-position self-acting latch which functions in each latching position to keep the door from opening. This requirement does not apply to doors that are designed to be easily attached to or removed from reconstructed vehicles designed for operation without doors.

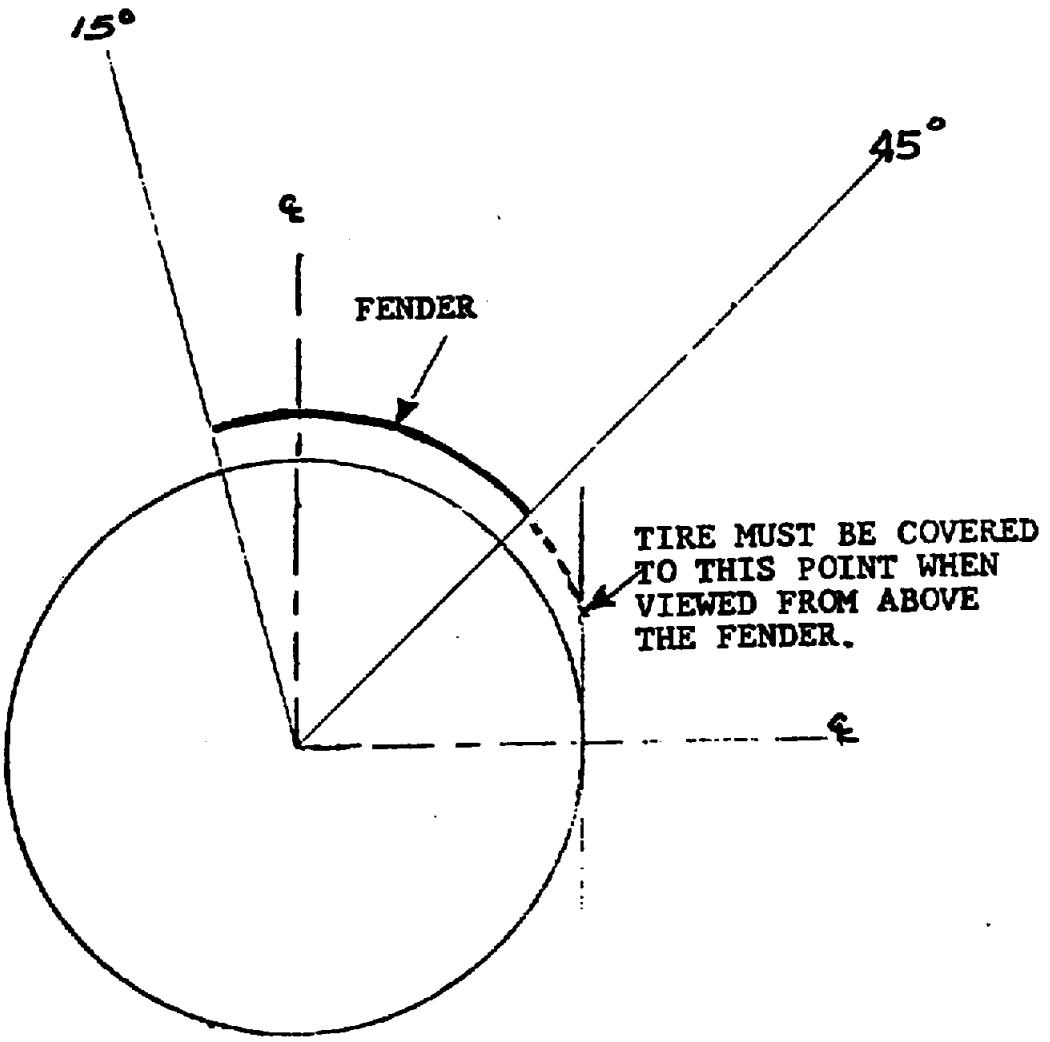
(d) All doors shall be equipped with a latch control on the interior of the door and at least one door on each side of the vehicle shall be equipped with an exterior latch control.

(3) Hood and Trunk Latches.

(a) A hood, a trunk lid, or any compartment cover forward of the windshield, which opens along the edge toward the front of a reconstructed vehicle shall be equipped with a two-position self-acting latch which functions in each latching position to keep the hood, lid, or cover closed. A minimum of two hood pins designed for that purpose can be substituted for the two-position self-acting latch.

(b) A hood, trunk lid, or compartment cover which opens along an edge toward the sides or the rear of a reconstructed vehicle shall be equipped with at least one latch which holds the hood, lid, or cover in the closed position.

(4) Fenders. Each tire of a reconstructed vehicle which contacts the surface of the road shall be equipped



MINIMUM FENDER REQUIREMENT

with a fender, or other body structure, which covers the entire width of the tire tread above that portion of the circumference from 15 degrees in front to 45 degrees to the rear of the vertical line through the center of the wheel hub and covers the full rear portion of the tire tread when viewed from above the fender. Note: Any attachment added to the body or fender of the vehicle to meet the requirements of this part shall be securely mounted and free of any sharp edges or protuberances.

(5) Windshield. Every reconstructed vehicle shall be equipped with a windshield which meets the following criteria:

(a) Is made of safety glass designated as American National Standard AS-1 safety glazing material; and

(b) If not an OEM or OREP windshield, a windshield that provides continuous frontal protection over the entire width of the passenger compartment forward of the driver's seat; and

(c) The windshield has a minimum unobstructed vertical height of no less than 6 inches over its entire width.

(6) Windows. All windows, including any rear window, provided in a reconstructed vehicle shall be of the appropriate American National Standard AS designated safety glazing material specified for the window location in FMVSS No. 205, Glazing Materials.

(7) Driver Visibility. Every reconstructed vehicle in which the windshield, the windows to the immediate right and left of the driver, the rear window in passenger cars, or the driver's seat has been relocated shall provide the driver with:

(a) Continuous horizontal visibility through a 180 degree arc extending forward from 90 degrees to the left to 90 degrees to the right, measured from a point 6 inches forward of the center of the driver's seat back, with the seat in its most rearward position. The driver's horizontal visibility may be interrupted by door pillars and vertical framing at the edges of the windshield not to exceed 3 inches in width each (except OEM). A vertical center joining strip no greater than 1 inch in width is permitted on a two-piece windshield unless OEM installed.

(b) An uninterrupted, except for windshield wiper components and framing, forward view of the road surface, spanning the width of the front of the vehicle,

starting at a point no more than 35 feet forward of the driver's seat back with the seat in the rearmost position.

(c) An unobstructed indirect view to the rear, through use of an interior rearview mirror, of the road surface at least 12 feet wide starting at a point no more than 35 feet to the rear of the driver's seat back with the seat in the rearmost position or have an outside rearview mirror of unit magnification; or

(d) Have an unobstructed view to the rear, through use of an exterior rearview mirror of unit magnification, adjustable in both horizontal and vertical directions, mounted on the driver's side of the vehicle, and capable of viewing an area 8 feet outward at a point 35 feet to the rear of the driver's seat back with the seat in the rearmost position.

(8) Windshield Wipers and Washers.

(a) A reconstructed vehicle may be equipped with properly functioning windshield wipers and washers which are OEM or OREP equipment provided that all windshield wipers shall be power operated.

(b) A reconstructed vehicle shall be equipped with a two or more speed power operated device, which is controlled by the driver and capable of cleaning or clearing rain and moisture from no less than 50 percent of the windshield surface.

(c) Vehicles with a date of manufacture on or after January 1, 1968 shall be equipped with a washer system that effectively distributes fluid over the wiped or cleared area of the windshield.

(9) Seats and Safety Belts.

(a) Every reconstructed vehicle shall be equipped with a regular driver's seat designed for this purpose, securely anchored to the vehicle structure, and located in a position that permits the seated driver to reach all controls which are required to operate the vehicle safely.

(b) All passenger seats provided in a reconstructed vehicle shall be securely anchored to the vehicle structure.

(c) Reconstructed passenger cars with a date of manufacture on or after January 1, 1968 shall be equipped with lap type safety belt, properly anchored to the vehicle structure, for each seating position

and, except for convertible or open body type passenger cars, a shoulder type safety belt, properly anchored to the vehicle structure, for each outboard (side of the seat cushion is within 12 inches of the interior surface of the vehicle side) front seating position (FMVSS No. 208 - 49 CFR §571.208).

(d) All reconstructed vehicles, except buses, with a date of manufacture on or after July 1, 1971 shall be equipped with a lap type safety belt, properly anchored to the vehicle structure, for each seating position and; except for convertibles, open body passenger vehicles, and walk-in type vans; a shoulder type safety belt, properly anchored to the vehicle structure, for each outboard (outboard side of the seat cushion is within 12 inches of the interior surface of the vehicle side) front seating position (FMVSS No. 208 - 49 CFR §571.208).

(e) Reconstructed buses with a date of manufacture on or after July 1, 1971 shall be equipped with a lap type safety belt, properly anchored to the vehicle structure, for the driver's seating position (FMVSS No. 208 - 49 CFR §571.208).

(10) Odometer/Speedometer. Every reconstructed vehicle shall be equipped with a properly functioning speedometer and odometer as porvided by state law.

(11) Lamps and Reflectors.

(a) Every reconstructed vehicle shall be equipped with all exterior lamps and reflectors provided by the original manufacturer of the vehicle or of a type approved under Part II, 10.a.(11)(c) of subparagraph below.

(b) Every reconstructed vehicle shall be equipped with lamps and reflectors as required by FMVSS No. 108 - 49 CFR §571.108.

(c) All exterior lamps and reflectors shall be of a type that is approved by the Director of Transportation.

(12) Horn. Except for OEM, every reconstructed vehicle shall be equipped with an electrically powered or air operated sound warning device that:

(a) Has an operating control readily accessible to the seated driver; and

(b) Capable of emitting sound audible under normal conditions from a distance of not less than 200 feet, but no horn or other warning device shall emit an unreasonably loud or harsh sound or a whistle; and

(c) Electrically powered horns shall meet the performance requirements of SAE Standard J377, Performance of Vehicle Traffic Horns.

(13) Batteries. Every battery used to store electrical energy for the electrical system in a reconstructed vehicle shall:

(a) Be securely attached in a permanent mounting specifically designed for the purpose; and

(b) Be provided with adequate ventilation to the exterior of the vehicle; and

(c) If mounted within the passenger or cargo area of the vehicle, be provided with an insulating cover and a drain to the exterior of the vehicle, both specifically designed for the purpose.

(14) Electrical Wiring, Switches, and Indicators.

(a) All electrical wiring in a reconstructed vehicle shall be covered with insulation in good condition, appropriately secured to the body or frame with fittings designed for this purpose, provided with proper terminal connectors at electrical circuit attachment points and, except for the ignition, starter and horn circuits, be equipped with appropriate fuses or circuit breakers.

(b) All electrical switches shall be securely mounted in a manner that protects the switch terminals from inadvertent contact in normal use.

(c) Illuminated indicator lamps, clearly visible to the driver, shall be provided to indicate the use of headlamp high beams, electrical turn signals, and hazard warning lamps.

(d) The speedometer/odometer dial face shall be illuminated when the headlamps or parking lamps are illuminated.

b. Procedure.

(1) Visually inspect the vehicle body components for conformance to Requirements 10.a.(1); (2)(a); (5)(a) and (b); (9)(a), (b), (c), (d), and (e); (13); and (14)(a) and (b).

(2) Determine conformance to Requirement 10.a. (6) by visually checking the required markings placed on the glazing material by the glazing material manufacturer or installer.

(3) Visually inspect and measure as indicated to determine conformance with Requirements 10.a.(2)(b); (4); (5)(c); (7)(a), (b), (c), and (d).

(4) Visually inspect and operate the component(s) to determine conformance to Requirements 10.a.(2)(c); (3)(a) and (b); (8)(a), (b), and (c); (11)(a), (b), and (c); (12); and (14)(c) and (d).

(5) Visually inspect for conformance of Requirement 10.a.(10).

11. Vehicle Frame.

a. Requirements.

(1) Frame. A reconstructed vehicle shall be equipped with a frame consisting of structural beams or channels, or structural tubing, or unitized construction capable of supporting the vehicle, its load, and the torque produced by the power source under all conditions of operation. The frame structure shall be essentially rigid, free of cracks and visual indications of weakness, such as bending or buckling.

(2) Floor Pan. A reconstructed vehicle shall be equipped with a floor pan which:

(a) Covers the area beneath the passenger compartment and any cargo (luggage) compartment that is not entirely separate from the passenger compartment. (Entirely separate means that there are no components shared by both compartments, such as roof, floor, or sides.); and

(b) Is capable of supporting the weight of the number of occupants, including seats and any cargo the vehicle is designed to carry; and

(c) Has sufficient strength to adequately anchor the seats and safety belts; and

(d) Is free of openings which are not sealed or provided with covers which are specifically designed to prevent the transit of fumes and airborne particles.

(3) Bumpers. A reconstructed vehicle shall be equipped with a bumper on the front and on the rear of the vehicle with the exception of trucks, utility and special motor vehicles where the original or predominant body configuration, provided by a recognized manufacturer, did not include such bumper or bumpers in the design of the vehicle. OEM or OREP bumpers are acceptable.

Whenever the bumpers installed on a reconstructed vehicle are altered, modified, replaced, or whenever the vehicle ground clearance height has been altered or modified, the bumpers installed on the vehicle shall:

(a) Conform with the requirements of the bumper height law (Act 291, SLH 1984).

(b) Be of a sturdy construction; and

(c) Be securely attached to the vehicle with attaching components specifically designed for the purpose which are equivalent in strength to the bumper; and

(d) Have no pointed projections or sharp edges; and

(e) Have a smooth outward face.

b. Procedure.

(1) Visually inspect the frame, floor pan, and bumpers for conformance to Requirements 11.a.(1); (2)(a) and (d); and (3)(a), (b), (c), and (d).

(2) Conformance with Requirement 11.a.(2)(b) shall be deemed to exist if there is no visible flexing of the floor pan when an adult occupant enters or leaves the seat, or when moderate horizontal pressure is applied to the top of the seat back in any direction.

(3) Conformance to Requirement 11.a.(2)(c) shall be deemed to exist if there is no flexing of the floor pan when any muscular force is applied to the seat belts that are anchored to the floor pan.

12. Welding.

a. Requirements. All welding on structural (load bearing) components and mechanical control components on a reconstructed vehicle shall be:

(1) Accomplished with a type of welding appropriate to the material being welded.

(2) The owner shall be totally responsible for all damages and bodily injuries incurred by others due to failure or inferior workmanship of any welding work performed on structural components and mechanical control components of a reconstructed vehicle.

b. Procedure.

(1) Visually examine all welds made on structural or mechanical control components to insure that all welds are smooth, complete, and otherwise in conformance with Requirement 12.a.(1); and

(2) If the welding appears to be of doubtful quality, invoke the specifications of Requirement 12.a.(2).

III. INSPECTION STANDARDS, CRITERIA AND PROCEDURES - MOTORCYCLES

The inspection standards and procedures contained in this Part apply to both two-wheeled and three-wheeled motorcycles unless different standards and procedures are specified.

1. Vehicle Identification. The inspection requirements and procedures for the identification of reconstructed motorcycles are the same as those set forth for passenger cars and trucks in Part II.1.a and b. of this Appendix.

2. Power Unit (Engine or Motor)

a. Requirements. Every power unit that has been replaced with a power unit that is not an OREP power unit for the motorcycle, and every power unit that has been relocated to a position in the motorcycle other than that provided by the original recognized manufacturer of the motorcycle shall:

(1) Be mounted in a position that does not interfere with the driver's control of the motorcycle; and

(2) Be securely fastened to the motorcycle frame with bolts and mounting hardware designed to accommodate the power unit; and

(3) Have suitable screening or shielding provided for all moving parts and components which may cause personal injury and are accessible to inadvertent contact by the motorcycle driver or passengers; and

(4) Be correctly described on the application form.

b. Procedure.

(1) Visually inspect for conformance to the location, mounting, and shielding requirements; and

(2) Have applicant operate the power unit to determine compliance with the control requirements; and

(3) Confirm the description of the power unit on the permit application form.

3. Fuel and Oil Systems (Combustion power units only).

a. Requirements.

(1) Each fuel system orifice provided for the introduction of air to be used for the combustion of fuel (air intake) shall be equipped with a device that will prevent the ejection into the atmosphere any ignited fuel/air mixture.

(2) All fuel system and external oil system components such as tanks, tubing, hoses, clamps, etc., shall:

(a) Be securely attached with fasteners designed for this purpose; and

(b) Be positioned, and shielded where necessary, to prevent contact with any exhaust system component; and

(c) Be positioned so as not to contact any moving motorcycle component; and

(d) Be free of any fuel, or oil as appropriate, leakage.

(3) For normal operating positions fuel and oil tanks should be equipped with filler caps designed to prevent fuel or oil, as appropriate, spillage from the filler opening when the cap is in place.

b. Procedure.

(1) Visually inspect for the installation of the required fuel system and oil system components; and

(2) Visually inspect for conformance to the location and shielding requirements; and

(3) Have applicant start the power unit (engine). Visually inspect for any fuel or oil leakage from fuel or oil system tubing or tanks.

4. Exhaust System (Combustion power units only).

a. Requirements.

(1) All reconstructed motorcycles shall be equipped with a system of components to conduct exhaust gases from the engine to a discharge point towards the rear or side of the motorcycle and away from all riders.

(2) All exhaust system components, such as manifolds, headers, exhaust pipes, mufflers, tail pipes, etc., shall:

(a) Be securely attached with fasteners designed for this purpose; and

(b) Be positioned so as not to contact any moving component; and

(c) Be free of any leakage; and

(d) Have suitable shielding provided for all components which may cause personal injury and are accessible to inadvertent contact by persons riding normally on the motorcycle; and

(e) Have no makeshift or tie wire repairs.

(3) The exhaust system shall not contain any muffler bypass or cut-out.

(4) The exhaust system shall not contain any component which is designed to increase the sound level of the motorcycle exhaust.

b. Procedure.

(1) Visually inspect for the installation of the required components; and

(2) Visually inspect for conformance to the location and mounting requirements; and

(3) Have applicant start the engine. Check the entire system for leaks.

5. Transmission/Power Train.

a. Requirements.

(1) Every transmission that is not an OEM or an OREP transmission for the motorcycle, and every transmission that has been relocated to a position on the motorcycle other than that established by the recognized manufacturer of the motorcycle when new, shall be securely mounted on the motorcycle with bolts and mounting hardware designed to accommodate the transmission.

(2) Every transmission control provided on a reconstructed motorcycle shall be operable through its entire range by the seated driver without interfering with the operation of the power unit, the steering, or the brakes.

(3) Every manually-operated transmission mounted on a two-wheeled motorcycle, or on a three-wheeled motorcycle equipped with handlebars, shall:

(a) If equipped with a manual clutch, control, or an integrated clutch and gear change control, have the control located in such a manner that it will operate properly under normal conditions.

(4) Transmissions installed on reconstructed motorcycles not equipped with handlebar clutch control, shall have the gear change control hand operated.

(5) The moving components of the power train which supply power to the driven wheel(s) on a reconstructed motorcycle shall have appropriate shielding to prevent personal injury to persons riding on the motorcycle in the normal riding position.

b. Procedure.

(1) Visually inspect for conformance to:

(a) Transmission mounting requirements; and

(b) Transmission control location requirements; and

(c) Protective shielding requirements.

(2) With power available to the transmission (combustion power unit running), have applicant operate any gear change control, any integrated clutch and gear change control, and any manual clutch control to insure conformance with the requirements.

6. Suspension System.

a. Requirements. Reconstructed motorcycles having suspension system components other than those supplied as original equipment for the motorcycle by a recognized manufacturer when new shall meet the following requirements:

(1) Wheel Alignment.

(a) The rear wheel of a two-wheel motorcycle shall track as accurate as possible (zero inch) behind the front wheel with both wheels in a vertical plane when the motorcycle is operating on a straight course.

(b) The rear wheels of a three-wheel motorcycle shall have a wheel track distance of no less than thirty inches, unless OEM equipped, measured to the mid point of the tire track. The mid point of the rear wheel track distance shall be within one-quarter inch of the front wheel track when the motorcycle is operating on a straight course or conform to OEM specifications..

(c) An adjustment feature shall be provided to permit correction to proper wheel tracking.

(2) Weight Distribution. The front suspension system of the three-wheel motorcycle shall support no less than twenty-five percent of the weight of the unoccupied motorcycle. When required, the motorcycle owner shall provide appropriate proof of weight distribution.

(3) Front Suspension.

(a) The total rake angle shall be no greater than fifty degrees, measured between the vertical and the steering axis of the front fork. See Figure 1.

MOTORCYCLE FRONT END GEOMETRY

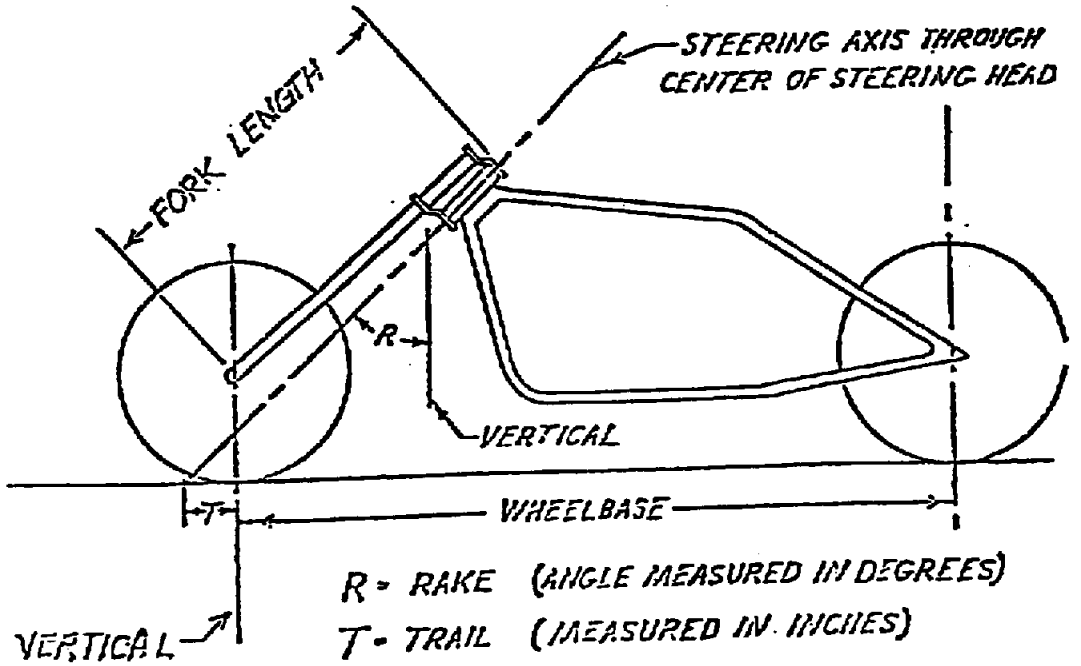


Figure 1.

(b) Trail distance shall be no less than two inches, measured on the horizontal surface upon which the front wheel rests, forward from a vertical line through the wheel hub to the projected steering axis. See Figure 1. The minimum trail distance does not apply to three-wheel motorcycles and two-wheel motorcycles with side car attached.

(c) The front suspension system shall be equipped with flexible components that will permit vertical movement.

(d) The maximum length of a modified front fork shall be of a length that will allow the seated driver in the normal operating position to rest both feet on the level ground.

(e) Only modified front forks marketed by a recognized manufacturer of this kind of component shall be permitted in the front suspension system.

(f) The use of front forks that have been modified by welding, heating, bending, or changed in shape by any means, is prohibited.

(g) A modified front fork shall be installed at a rake angle that is no greater than that provided for in section 6.a.(3)(a) of this chapter and for which it is designed as indicated by the manufacturer.

(4) Rear Suspension.

(a) Modification of the rear suspension of a two-wheel motorcycle shall be limited to replacement with components designed for the purpose of changing a flexible suspension system to a rigid suspension mounting.

(b) All welding necessary to convert from a flexible to a rigid rear suspension system shall conform to the requirements for structural welding.

(c) The modification of rear suspension components changed in shape by any means through heating is prohibited.

(5) General Safety.

(a) There shall be no contact between the wheel, tire, rim, or chain; and the fork, frame, fenders, or other accessories mounted on the motorcycle during normal operating conditions.

(b) Modified suspension assemblies shall be of sufficient strength to support the motorcycle under all

conditions of operation and shall be free of cracks and indications of bending and/or buckling.

b. Procedure.

(1) Visually inspect the suspension system to insure conformance with Requirements 6.a.(1)(c); (3)(c), (e), and (f); (4)(a), (b), and (c); and (5)(b).

(2) Have applicant operate the motorcycle over a level surface in a manner that the wheel tracks can be identified. Measure the wheel tracks to determine conformance with Requirements 6.a. (1)(a) and (b).

(3) If it appears that the weight distribution specified in Requirement 6.a.(2) is questionable, require the motorcycle owner to provide certification of the amount of weight supported by the front and the rear wheels. The weight supported by the front wheel divided by the total weight supported by the front and the rear wheels and multiplied by 100 equals the percent of the total weight supported by the front wheel.

(4) With the motorcycle in an upright position on a level surface, measure the rake angle, the trail distance, and the fork length to determine conformance with Requirements 6.a.(3)(a), (b), and (c).

(5) Have applicant operate the motorcycle as is appropriate to determine conformance with Requirement 6.a.(5)(a).

(6) Determine conformance with Requirement 6.a.(5)(b) from manufacturer's specifications supplied by the motorcycle owner.

7. Steering System.

a. Requirements.

(1) All two-wheel reconstructed motorcycles shall be equipped with a handlebar type steering system.

(2) Three-wheel reconstructed motorcycles shall be equipped with a handlebar type, a tiller type, or a steering wheel type steering system.

(3) The steering system of a reconstructed motorcycle shall permit free movement throughout the entire range of control.

(4) Modified handlebars on a reconstructed motorcycle shall:

(a) Be equipped with handgrips of a non-slip design and material at the ends of the handlebars; and

(b) Be capable of withstanding a force of one hundred (100) pounds applied in any direction at the handgrip; and

(c) Have the handgrips located no more than fifteen (15) inches above the top surface of the unoccupied seat when positioned straight ahead; and

(d) Have a spacing between the outside edge of the handgrips of no less than eighteen (18) inches; and

(e) Have a straight line distance from the end of each handgrip to the center of the top triple clamp (pivot point or steering axis) of no less than nine (9) inches and no more than twenty-one (21) inches; and

(f) Have all handlebar mounted control cables, wires, lines, and hoses so located as not to become pinched between various components when the steering control is rotated completely to the left and right.

(5) Tiller type steering controls on a three-wheel reconstructed motorcycle shall:

(a) Be equipped with a "horizontal loop" type handgrip, at the end of the tiller, covered with one-half (1/2) inch of padded material and having an opening for the hand at least five (5) inches wide and three (3) inches deep; and

(b) Be capable of withstanding a force of one hundred (100) pounds applied in any direction at the handgrip; and

(c) Have the handgrip located no more than fifteen (15) inches above the top surface of the unoccupied seat when positioned straight ahead; and

(d) Have a straight line distance between the end of the handgrip and the center of the top triple clamp (pivot point or steering axis) of no less than twenty (20) inches and no more than thirty (30) inches; and

(e) Permit the seated driver to execute a turning circle of thirty (30) feet or less in diameter.

(6) Modified steering controls (handlebars, tillers, or steering wheels) installed on a reconstructed motorcycle shall:

(a) Be an assembly designed for this purpose; and

(b) Not be a unique assembly of various components that have been heated or brazed.

(7) Modification steering systems shall be free of cracks and visual indications of weakness like bending and/or buckling.

b. Procedure.

(1) Visually inspect the steering system to insure conformance with Requirements 7.a.(1); (2); (4)(a) and (b); (5)(a) and (b); (6)(a) and (b); and (7); and

(2) With the motorcycle in an upright position on a level surface, make the necessary measurements of the steering system to insure conformance with Requirements 7.a.(4)(c), (d), and (e); and (5)(c) and (d); and

(3) With the motorcycle in an upright position and the front wheel blocked to prevent steering movement, have applicant apply moderate horizontal and vertical force to the handgrip(s) while seated on the motorcycle to determine conformance with Requirements 7.a.(4)(b) or (5)(b) as is appropriate; and

(4) While seated on the upright motorcycle, have applicant move the steering control through the entire range to determine conformance with Requirements 7.a.(3) and (4)(f); and

(5) Require the applicant to demonstrate conformance with Requirement 7.a.(5)(e) by operating the motorcycle in a 360 degree turn.

8. Brake Systems.

a. Requirements.

(1) Every reconstructed motorcycle shall be equipped with a service braking system which will provide braking action to at least the rear wheels.

(2) The service brake system of a reconstructed motorcycle shall:

(a) Either be a hydraulic system; or

(b) Be a mechanical or hydraulic system in which the brake(s) on the rear wheel(s) are actuated by the application of pressure to a pedal control by the driver's foot, and the brake on the front wheel (optional installation) is independently actuated by squeezing a hand-operated control mounted on the handlebar.

(3) Brake cables, tubing, and hoses installed on a reconstructed motorcycle shall be:

(a) Securely attached, with hardware designed for the purpose, in a manner which will prevent chafing, kinking, or other mechanical damage; and

(b) Of sufficient length and flexibility to accommodate, without damage, all normal movements of the parts to which it is attached; and

(c) Located in a manner that prevents contact with any component of the motorcycle exhaust system or engine components.

(4) All hydraulic brake tubing used in the service brake system shall be of a type that meets the requirements of SAE Recommended Practice J1047, Tubing - Motor Vehicle Brake System, Hydraulic.

(5) All hydraulic brake hoses used in the service brake system shall be of a type that meets the requirements of SAE Standard J1401a, Road Vehicle - Hydraulic Brake Hose for use with Non-petroleum Base Hydraulic Brake Fluids.

(6) The service brake system of a reconstructed motorcycle shall be capable of stopping the motorcycle within a distance of thirty (30) feet from a speed of twenty-five (25) miles per hour.

(7) Every reconstructed three-wheel motorcycle shall be equipped with a friction type parking brake system which:

(a) Provides braking action on at least one wheel; and

(b) Is actuated by a means which is independent of the service brake system except that the friction producing components may be common to both the service and parking brake systems; and

(c) Is actuated by a control that remains in the applied position until released by (except OEM) a separate action; and

(d) Is capable of holding the motorcycle stationary on any incline on which it is operated.

b. Procedure.

(1) Visually inspect the components of the service brake system for conformance to Requirements 8.a.(1); (2)(a) and (b); (3)(a), (b), and (c).

(2) On three-wheel motorcycles, visually inspect the components of the parking brake system for conformance with Requirement 8.a.(7)(b).

(3) On three-wheel motorcycles, have applicant operate the parking brake control to determine conformance with Requirements 8.a.(7)(a) and (b).

(4) On three-wheel motorcycles, test for conformance with Requirement 8.a.(7)(d) by having applicant set the parking brake control in the "applied" position; set the transmission gear selector control, if any, in the "neutral" position. Apply maximum forward horizontal muscular pressure on an appropriate structural portion at the rear of the motorcycle; there should be no rotation of the braked wheels.

(5) Determine compliance with Requirements 8.a.(4) and (5) for all hydraulic brake hoses and tubing, other than OEM, by examination of the manufacturer's specifications for the brake hose and tubing; such specifications to be supplied by the reconstructed motorcycle owner.

(6) Have applicant operate the reconstructed motorcycle at a speed of twenty-five (25) miles per hour on a clean, dry, level surface; apply the service brakes and measure the stopping distance for conformance with Requirement 8.a.(6).

9. Rims and Tires.

a. Requirements.

(1) The rims mounted on a reconstructed motorcycle, if other than OEM (including options) or OREP; i.e., special rims shall meet the specifications established for such rims; and

(2) All rims mounted on a reconstructed motorcycle shall be free of cracks, rim dents, warpage, and any signs of bending or buckling; and

(3) All rim spokes, mounting studs, nuts, or bolts shall be present, in good condition and securely tightened; and

(4) The diameter of rims mounted on a reconstructed motorcycle shall be ten (10) inches or greater; and

(5) All tires mounted on the rims of a reconstructed two wheel motorcycle shall be motorcycle tires designed specifically for highway use (FMVSS No. 119); and

(6) All tires used on a rim of a reconstructed motorcycle shall have a load rating of sufficient capacity to support the weight imposed on the rim; and

(7) All tires mounted on the rims of a reconstructed motorcycle shall be of a size designated for use with a rim of that type and width; and

(8) Every tire mounted on the rims of a reconstructed motorcycle shall have an average tread depth of no less than two thirty-seconds (2/32) of an inch; and

(9) The tread surface of the tires (surface that contacts the road) mounted on a reconstructed motorcycle shall not extend laterally beyond the outboard edge of the fenders or other wheel enclosure when viewed from above.

b. Procedure.

(1) Visually inspect the rims and tires of the reconstructed motorcycle for conformance to Requirements 9.a.(2) and (3).

(2) Make appropriate measurements to determine conformance to Requirements 9.a.(4), (8), and (9).

(3) Determine conformance with Requirements 9.a.(5) by examining the markings on the tire sidewalls. The marking "DOT" appears on all highway use tires manufactured on and after March 1, 1975. The tire configuration shall be that designed for use on motorcycles. Motorcycle tires manufactured prior to March 1, 1975 will not contain the "DOT" or load rating markings; however, these tires shall be of a standard motorcycle type and have a tread pattern similar to that used on tires marked with the "DOT" symbol. The use of tires having any restrictive marking whatsoever is prohibited.

(4) Compare motorcycle owner furnished specifications on rim type and width with the tire manufacturer's specifications to determine compliance with Requirement 9.a.(7). (Tire distributors and dealers have tabular information indicating compatible tire sizes and rim type/widths.)

(5) Determine compliance with Requirement 9.a.(6) by comparing the load rating marked on the tire sidewall with the weight imposed on the wheel as furnished by the motorcycle owner.

10. Frame/Chassis.

a. Requirements.

(1) The frame/chassis of a reconstructed motorcycle shall:

(a) Be capable of supporting the motorcycle, its load, and the torque produced by the power source under all conditions of operation, and be free of cracks and visual indications of weakness, such as bending or buckling;

(i) Any motorcycle frame which incorporates the engine block as an integral part of the frame to support the entire motorcycle must be rejected.

(b) Have no integral part or accessory attachment that extends more than six (6) feet vertically above the surface upon which the unoccupied motorcycle rests; and

(c) A reconstructed motorcycle shall have sufficient ground clearance to permit the motorcycle to stand on a level surface supported on its rims without tires with no other part of the motorcycle touching that surface, except for accessory parts allowed in this chapter, such as exhaust system components.

(2) Driver Seat. A reconstructed motorcycle shall be equipped with a seat for the driver which shall be securely attached to the motorcycle frame/chassis with hardware designed for the purpose.

(3) Passenger Seats. If a motorcycle is equipped with seats for passengers, such seats shall:

(a) Be securely attached to the frame/chassis with hardware designed for the purpose; and

(b) Be located on the longitudinal centerline and to the rear of the driver's seat on two-wheel motorcycles; and

(c) Be located to the rear or side of the driver's seat on three-wheel motorcycles in such a manner that a seated passenger does not interfere with the driver's control or operation of the motorcycle.

(4) Footrests. A reconstructed motorcycle shall be equipped with footrests for each seating position. Passenger footrests on a two-wheel motorcycle shall fold rearward and upward when not in use. (FMVSS No. 123 - 49 CFR §571.123)

(5) Fenders. A reconstructed motorcycle shall be equipped with a fender, or equivalent assembly on each wheel (front fender optional installation), which covers the entire width of the tire tread above that portion of the tire circumference from 15 degrees in front to 45 degrees to the rear of the vertical line through the center of the wheel hub and covers the full rear portion of the tire tread when viewed from above the fender.

(6) Stand. A reconstructed two-wheel motorcycle shall be equipped with a stand. The stand may be of a side or center type, and capable of supporting the motorcycle when left unattended. The stand shall retract rearward and upward as it contacts the road surface when the motorcycle is moving in a forward direction except OEM equipped. (FMVSS No. 123 - 49 CFR §571.123)

b. Procedure.

(1) Visually inspect the frame/chassis and attached components for conformance with Requirements 10.a.(1)(a); (2); (3)(a), (b), and (c); (4); and (6).

(2) Make appropriate measurements to determine conformance with Requirements 10.a.(1)(b) and (c); and (5).

11. Electrical System.

a. Requirements.

(1) Lamps and Reflectors.

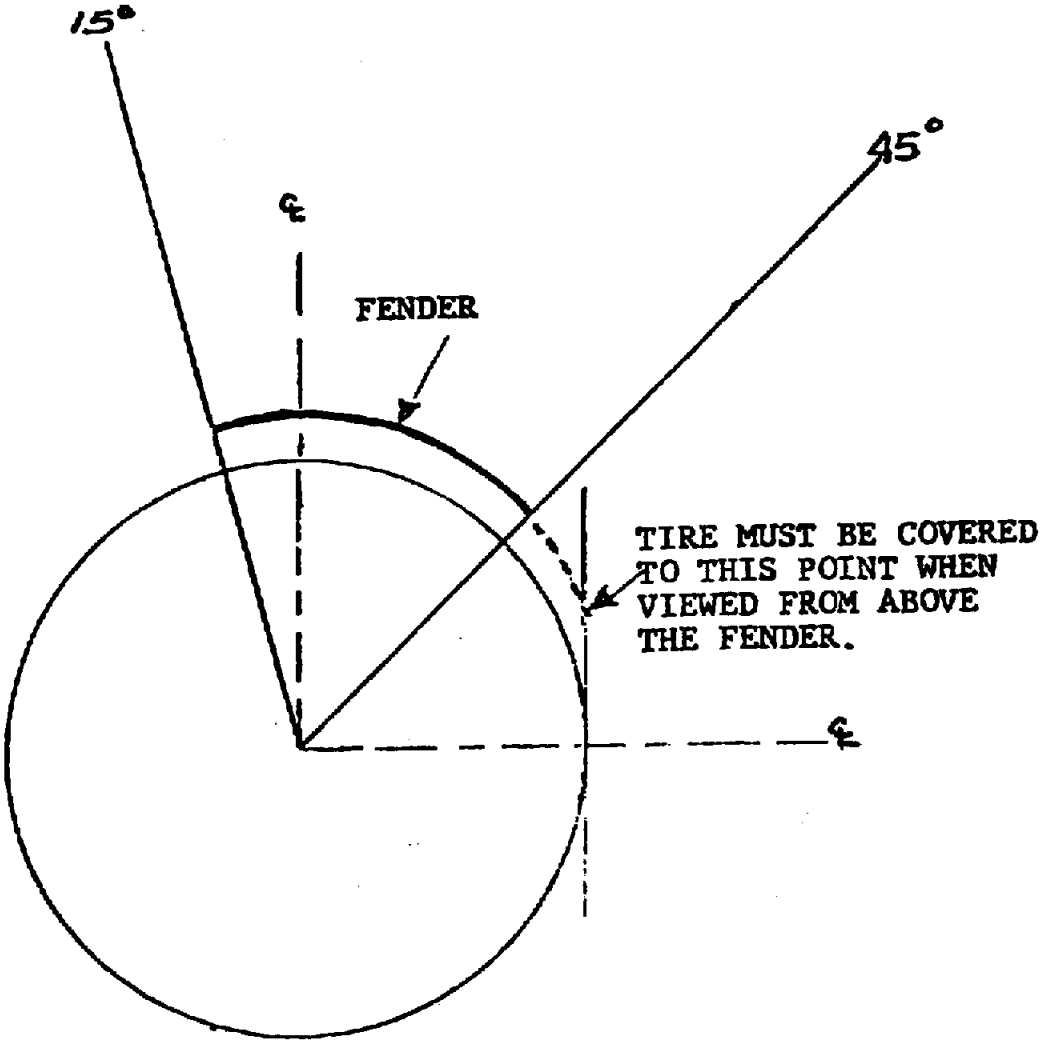
(a) Every reconstructed motorcycle shall be equipped with all exterior lamps and reflectors provided by the original manufacturer of the motorcycle when new, or of a type approved under Part II, 11.a.(1)(c) of this chapter.

(b) Every reconstructed motorcycle with date of manufacture on or after January 1, 1973 shall be equipped with operable turn signal lamps.

(c) All exterior lamps and reflectors shall be of a type that is approved by the Director of Transportation.

(d) On two-wheel reconstructed motorcycles, any headlamp upper-lower beam control shall be located so as to be easily accessible to the operator.

(e) Every reconstructed motorcycle having an upper-lower beam headlamp capability shall be equipped



MINIMUM FENDER REQUIREMENT

with an upper beam indicator lamp clearly visible to the driver.

(2) Horn. Every reconstructed motorcycle shall be equipped with a warning device that:

(a) Meets the performance requirements of SAE Standard J377, Performance of Vehicle Traffic Horns.

(b) Has an operating control that is readily accessible to the seated driver.

(3) Battery. Every battery used to store electrical energy for the electrical system of a reconstructed motorcycle shall be securely attached in a permanent mounting specifically designed for this purpose.

(4) Electrical Wiring and Switches.

(a) All electrical wiring in a reconstructed motorcycle shall be covered with insulation in good condition, appropriately secured to the frame/chassis with fittings designed for this purpose, provided with proper terminal connectors at electrical circuit attachment points, and be equipped with appropriate fuses or circuit breakers.

(b) All electrical switches shall be securely mounted in a manner that protects the switch terminals from inadvertent contact in normal use.

(c) When the main switch is not readily visible from the driver's seated position, then a kill switch shall be installed that is readily visible from the driver's seated position.

b. Procedure.

(1) Visually inspect the components of the electrical system for conformance with Requirements 11.a.(1)(a), (b), (c), and (d); (2)(a); (3); and (4).

(2) Visually inspect and have applicant operate the components of the electrical system to determine conformance with Requirements 11.a.(1)(e); and (2)(b).

12. Rearview Mirrors.

a. Requirements.

(1) Every reconstructed motorcycle shall be equipped with at least one rearview mirror that:

(a) Is the OEM rearview mirror provided by the recognized manufacturer of the motorcycle when new; or

(b) Is of unit magnification with not less than twelve and one-half (12.5) square inches of reflective surface, or a convex mirror with not less than ten (10) square inches of reflective surface and an average radius of curvature not less than twenty (20) inches and not greater than sixty (60) inches. (FMVSS No. 111-76 - 49 CFR §571.111-76);

(c) Is installed with a stable support. (FMVSS No. 111-76 - 49 CFR §571.111-76); and

(d) Is mounted so that the horizontal center of the reflective surface is at lease eleven (11) inches outward of the longitudinal centerline of the motorcycle. (FMVSS No. 111-76 - 49 CFR §571.111-76); and

(e) Is adjustable by tilting in both the horizontal and vertical directions. (FMVSS No. 111-76 - 49 CFR §571.111-76)

b. Procedure.

(1) Visually inspect the rearview mirror for conformance with Requirements 12.a.(1)(a), (b), (c), and (e).

(2) Make the appropriate measurement to determine conformance with Requirement 12.a.(1)(d).

13. Speedometer/Odometer.

a. Requirements.

(1) Every reconstructed motorcycle shall be equipped with a properly operating speedometer and odometer that:

(a) Is calibrated in miles per hour and miles, respectively; and

(b) Is mounted so that the face of the instrument is in plain view of the driver.

b. Procedure.

(1) Have applicant operate the motorcycle over a measured distance to determine proper operating characteristics; and

(2) Visually inspect the speedometer/odometer for conformance with Requirements 13.a.(1)(a) and (b); and

(3) Activate the headlamp(s) of the motorcycle to determine proper instrument face illumination.

14. Welding. The welding requirements and procedures for reconstructed motorcycles are the same as the welding requirements and procedures listed for reconstructed passenger cars and trucks.

15. General Safety. All components attached to the frame, chassis and steering system of a reconstructed motorcycle shall be free of overtly dangerous pointed projections and sharp edges which could inflict personal injury or snagging of clothing to the rider(s) and to people standing in close proximity to the motorcycle.