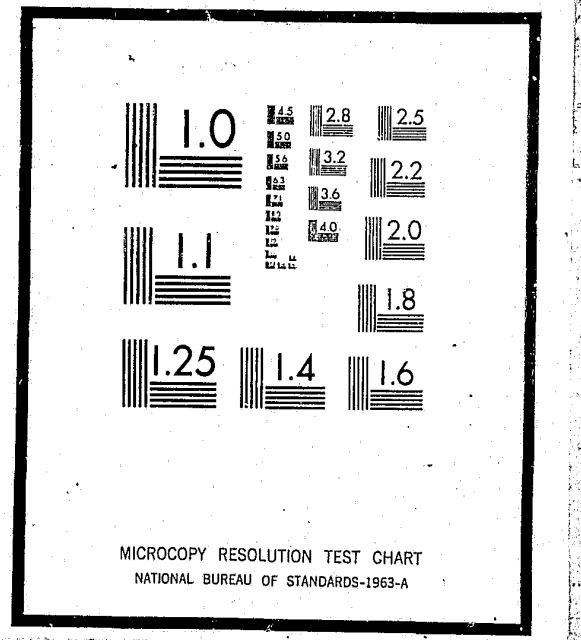


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LAW ENFORCEMENT STANDARDS PROGRAM

TERMS AND DEFINITIONS FOR POLICE PATROL CARS

prepared for the
National Institute of Law Enforcement and Criminal Justice
Law Enforcement Assistance Administration
U.S. Department of Justice

by

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FOREWORD

Following a Congressional mandate* to develop new and improved techniques, systems, and equipment to strengthen law enforcement and criminal justice, the National Institute of Law Enforcement and Criminal Justice (NILECJ) has established the Law Enforcement Standards Laboratory (LESL) at the National Bureau of Standards. LESL's function is to conduct research that will assist law enforcement and criminal justice agencies in the selection and procurement of quality equipment.

In response to priorities established by NILECJ, LESL is (1) subjecting existing equipment to laboratory testing and evaluation and (2) conducting research leading to the development of several series of documents, including national voluntary equipment standards, user guidelines, state-of-the-art surveys and other reports.

This document, LESP-RPT-0401.00, Terms and Definitions for Police Patrol Cars, is a law enforcement equipment report prepared by LESL and issued by NILECJ. Additional reports, as well as equipment standards, guidelines, state-of-the-art surveys, and other reports will be issued under the LESL program in the areas of protective equipment, communications equipment, security systems, weapons, emergency equipment, investigative aids, vehicles and clothing.

Technical comments and suggestions concerning the subject matter of this report are invited from all interested parties. Comments should be addressed to the Program Manager for Standards, National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U.S. Department of Justice, Washington, D. C. 20530.

Lester D. Shubin, Manager
Standards Program

* Section 402 (b) of the Omnibus Crime Control and Safe Streets Act of 1968, as amended.

TERMS AND DEFINITIONS FOR POLICE PATROL CARS

ABSTRACT

This document contains the definitions of terms related to four-wheeled, on-road vehicles used in law enforcement. The terms and definitions have been selected on the basis of usefulness to those responsible for the selection, procurement, and use of those vehicles.

INTRODUCTION

The purpose of this glossary is to assist law enforcement agencies in the selection and procurement of four-wheeled, on-road police vehicles by improving communications between the users and the producers of the vehicles. It is intended that the document will be updated as required to include new terms and to reflect changes in definitions.

This document consists of terms related to four-wheeled, on-road vehicles oriented specifically to law enforcement use. For this reason, not all automotive vehicle terminology is included. The guidelines used for including terms and developing definitions were as follows:

1. The primary criterion for each definition is that it be clear and useful to law enforcement agencies, with emphasis on the intended performance or use rather than on a technical or physical description.

2. Selection of terms is confined to those related to the acquisition, use, and disposition of patrol cars and other vehicles by law enforcement agencies.

3. Definitions are given for vehicle components and equipment which affect functional performance for law enforcement activities. The parts and devices that are basic to the vehicle or normally provided on every vehicle, and over which a law enforcement agency exercises little or no procurement control, are not included.

4. Wherever appropriate, definitions provided by generally recognized sources such as the Federal Motor Vehicle Safety Standards (FMVSS) or the Society of Automotive Engineers (SAE) are used to minimize proliferation and duplication.

TERMS AND DEFINITIONS

ACCEPTANCE INSPECTION—An inspection of a vehicle by its owner or designated representative to determine: 1) whether a new vehicle being delivered satisfies the terms of the sales contract, has been properly serviced, and has no apparent manufacturing defects; or 2) whether maintenance or repairs contracted for on an existing vehicle were properly performed.

ACCESSORY—An added part, component, or assembly that does not replace an existing item of standard equipment. See also **OPTIONAL EQUIPMENT**.

ACTIVE RESTRAINT SYSTEM—An occupant restraint safety device which requires the user to perform some act or action to make the device effective. See also **SEAT BELT ASSEMBLY**, **LAP BELT**, and **SHOULDER HARNESS**.

ADJUSTABLE STEERING WHEEL—An

option which provides the capability of changing the position of the steering wheel on the steering column to locate the wheel in a more favorable position for different size drivers. See also **TILT STEERING WHEEL**.

ADMINISTRATIVE VEHICLE—An unmarked police vehicle used to transport administrative personnel.

AIRBAG—A type of passive vehicle occupant restraint system in which a bag is inflated between the occupants and the dashboard and steering column to minimize personal injury in the event of a front end collision.

AIR CUSHION—See **AIRBAG**.

AIR SPRING—A component of the suspension system which utilizes confined gas to assist in absorbing and damping the effect of road shocks on the vehicle.

ALTERNATOR—A device which transforms a portion of the mechanical power output of a vehicle's engine into electrical power to operate the electrical components of the vehicle. An alternator performs the same function as a generator but maintains a higher electrical output at vehicle engine idle speed.

AMMETER—An instrument that indicates in amperes the rate at which the battery is being charged or discharged.

ANTI-LOCKING BRAKES—See **WHEEL LOCK CONTROL**.

ANTI-SKID BRAKES—See **WHEEL LOCK CONTROL**.

ANTI-SWAY BAR—See **STABILIZER BAR**.

ANTI-THEFT ALARM SYSTEM—A system which may be installed on a vehicle to attract attention, usually by activating an audible and/or visual alarm, when an attempt is made to gain access to, or to start the vehicle, by means other than the normal door and ignition key.

A-PILLAR—The forward-most vertical structural member of the body that supports the windshield, front door, and roof. Also known as A-post.

AUTHORIZED DEALER—A facility that has been franchised or otherwise designated to sell and service an automotive manufacturer's products.

AUTHORIZED SERVICE AGENCY—A facility that has been franchised or otherwise designated by an automotive product manufacturer to service and maintain its products.

AUTOMATIC PARKING BRAKE RELEASE—A device which provides for release of the parking brake without effort by the driver when the vehicle is placed in gear.

AUTOMOTIVE ENGINEER—An individual specifically trained or educated in the field of land vehicle design, development, manufacture, maintenance, use, and performance.

AUTOMOTIVE SAFETY INSPECTION—A function assigned to some law enforcement agencies or authorized inspection stations in support of State and local ordinances in which automobiles or other vehicles are inspected for required equipment and safe operating conditions.

AUXILIARY TRANSMISSION COOLER—An auxiliary heat exchanger that provides cooling in addition to that normally provided for the automatic transmission fluid.

BALL JOINT—An assembly of two members consisting of a ball on one and a socket on the other to permit movement of the front wheels for steering.

BARREL—A component of the carburetor of an internal combustion engine which serves the function of mixing vaporized fuel with air. A carburetor may consist of one or more barrels (abbreviated as bbl) and is described as 1-bbl, 2-bbl, or 4-bbl. See also **VENTURI**.

BATTERY COMPARTMENT SHIELD—An item of equipment that protects the battery from damage by engine heat. Also known as heat shield.

Bbl—An abbreviation for **BARREL**.

BEAD—A system of high strength wires, embedded in the inner ring of a tire, which anchors

the ply chords, holds the tire to the wheel rim and maintains the airtight seal.

BELTED BIAS PLY TIRE—A bias ply tire which contains two or more additional layers of ply cords in the form of belts placed between the body plies and the tire tread. Material used in the belt cords may be rayon, fiber glass, steel, or other high strength material. See also **BIAS PLY TIRE** and **RADIAL TIRE**.

BENCH SEAT—A seat in a vehicle which extends from one side of the vehicle to the other without a break in the seat portion. The seat back may be divided.

BIAS PLY TIRE—A tire in which the cords in the plies crisscross the center line of the tire at an angle which is substantially less than 90 degrees. Cords may be arranged in two or more (even number) plies depending, in general, on the strength desired in the finished tire. Materials used in body cords include nylon, rayon, and polyester. See also **BELTED BIAS PLY TIRE** and **RADIAL TIRE**.

BID—A formal or informal proposal, submitted by a vendor or supplier in response to a purchase request, that specifies the terms and conditions under which he will provide a requested product, material, or service.

BID PROPOSAL—A solicited or unsolicited proposal by a vendor to supply products, materials, or services.

BODY—The exterior shell of a vehicle which houses the engine, passengers and/or cargo.

BODY LEAN—The tendency of the body of a vehicle to roll about its longitudinal axis during a change in direction.

BODY-ON-FRAME—A method of automobile construction in which the body and frame are fabricated in two separate assemblies. The body is bolted to the frame which is the primary structural unit of the vehicle.

BODY TYPE—The passenger or cargo compartment of a vehicle which often indicates the

number of doors, seats, roof construction, or intended use. Also referred to as body style.

BOOSTER SPRING—A device installed on the springs or shock absorbers that acts to compensate for an overload which would cause the springs to sag and the vehicle to assume a non-level attitude. Also known as a helper spring, or overload spring.

B-PILLAR—Counting from the windshield, the second vertical structural member of an automobile body that forms the door pillar at the rear of the front door and supports the rear door and roof, except in hardtop or convertible body styles. Also known as B-post.

BRAKE—See **DISC BRAKE** and **DRUM BRAKE**.

BRAKE AREA—See **BRAKE LINING AREA**.

BRAKE FAILURE WARNING LIGHT—A red indicator located at the driver's position that illuminates when a hydraulic-type failure has occurred in the braking system. (Ref: FMVSS 105)

BRAKE HORSEPOWER—See **SAE NET HORSEPOWER**.

BRAKE LINING AREA—The surface area of the friction material which seats on the braking surface when the brakes are activated.

BRAKE LOCK-UP—The condition existing when the wheels stop rotating during braking as a result of the application of excessive pressure on the brake pedal. Also called wheel lock-up.

BRAKE LOSS—A reduction in, or complete loss of, braking effectiveness. See also **FADE**.

BRAKE PEDAL RESERVE—The distance remaining between the floor board and the brake pedal when maximum force has been exerted on the brake pedal.

BRAKE RECOVERY—The return of full brake effectiveness after a temporary reduction due to heat or water fade.

BRAKE SYSTEM—A combination of one or more brakes and their related control devices that retards, stops, or prevents a vehicle from moving.

BREAK-AWAY OF TIRES—A condition in which a vehicle's tires begin to lose traction and to skid out of a turn or during sudden acceleration. Sometimes referred to as "a wheel breaking loose."

BUCKET SEAT—A free-standing seat designed for occupancy by only one person.

BULLET-PROOF GLASS—Glazing material designed to resist or prevent the passage of ballistic projectiles.

BURNISHING—The conditioning and sizing of the brake lining and drum or disc surface when the brake linings and drums or discs are new.

CALIBRATED SPEEDOMETER—An instrument that indicates the speed at which a vehicle is moving and that is certified as to accuracy.

CALIFORNIA EMISSIONS PACKAGE—A special automobile emission control system designed specifically to meet the emission standards set by the State of California.

CAMBER—The vertical angle between the center line of the wheel and the road surface. Positive camber is when the wheels are closer together at the point of road contact. Negative camber is when the wheels are closer together at the top.

CANNIBALIZE—To remove usable parts or components from one vehicle for use on another vehicle.

CARBURETOR—A device which supplies an internal combustion engine with a vaporized fuel mixed with air.

CASTER—The backward tilt of the turning axis of a front wheel which helps maintain the straight ahead alignment of the wheel and assists in bringing the wheel to a straight ahead position after negotiating a turn.

CENTRALIZED MAINTENANCE—A concept in which the operator of a fleet of vehicles conducts all maintenance and repair functions for the entire fleet in a single facility.

CERTIFICATE OF ORIGIN—A document that identifies a vehicle by serial number and shows

the name and location of the manufacturing facility at which the vehicle was assembled.

CHASSIS—The collection of systems which constitute the basic operating motor vehicle. These systems include the frame, wheels, engine, suspension, steering, brakes, and controls. The chassis does not include the body, accommodations for driver, passengers, property, and equipment not related to control. (Ref: SAE J687c)

CHASSIS DYNAMOMETER—A class of test instruments used in obtaining dynamic measurement of vehicle brake, engine and power train performance.

CHUNKING—The separation of the tread from a tire in pieces that may range from a very small size to several square inches.

C.I.D.—The abbreviation for CUBIC INCH DISPLACEMENT.

CLOSED END CONTRACT—See CLOSED END LEASE.

CLOSED END LEASE—A type of lease contract which requires periodic payments to the lessor covering equipment cost, financing costs, and profit for a fixed period of time at the end of which the lessee's financial obligation ceases. See also OPEN END LEASE.

CLUTCH-OFF SWITCH FOR AIR CONDITIONER—An electric switch which may be used to stop the operation of the air conditioner compressor either at the option of the vehicle operator, or automatically when the desired temperature is reached.

COIL SPRING—A component of the suspension system which utilizes a tempered steel rod wound in the form of a coil to assist in absorbing and damping the effect of road shocks on the vehicle.

COLD RETREADING—A process for applying a tread to a tire at a temperature below 107°C (225°F).

COMMERCIAL ENFORCEMENT—See TRUCK INSPECTION.

COMMUNICATIONS CARRIER—A function provided by a vehicle equipped with radio communications.

COMPRESSION RATIO—The ratio of the maximum volume to the minimum volume in the combustion chamber of an internal combustion engine. (Ref: SAE J604c)

CONFISCATED VEHICLE—A vehicle that has been acquired by an authorized law enforcement agency because its owner has either temporarily or permanently surrendered his right of ownership by violation of an ordinance or law which provides for confiscation.

CONSOLE—A cabinet-like device designed to provide a centralized location for controls, instruments, and/or storage of equipment. Usually located under the dash or between the two front seating positions.

COOLANT RECOVERY SYSTEM—A system designed to recover and return overflow liquid coolant in a cooling system to prevent loss of fluid.

COOLING SYSTEM—The subsystem of an engine which absorbs and dissipates waste heat from the engine.

CORD—A textile, fiber glass, steel, or other high strength strand used in forming the plies in a tire. See also PLY. (Ref: SAE J918c)

CORNERING—The handling characteristics of a vehicle during an abrupt change of direction.

C-PILLAR—Counting from the windshield, the third vertical structural member of an automobile body that supports the roof. Also known as the C-post.

CUBIC INCH DISPLACEMENT—The total displacement of an internal combustion engine measured in cubic inches. See also DISPLACEMENT.

CURB WEIGHT—The total weight of a vehicle including a full load of oil, coolant, and fuel but without any passengers or cargo.

DECENTRALIZED MAINTENANCE—A concept in which the operator of a fleet of vehicles

assigns specified maintenance and/or repair functions to more than one facility.

DECK LID—The hinged cover that provides access to the luggage compartment.

DEPRECIATION—The difference between the original cost of a vehicle and its present book value.

DESIGN SPECIFICATION—A technical document which defines the performance, operational, and technical objectives and features of a product proposed for manufacture or purchase.

DETECTIVE VEHICLE—An unmarked vehicle used for law enforcement activities which may be equipped with a communication radio, portable flashing lights, a siren, or other items.

DIAGNOSTIC SERVICE—The function of performing necessary dynamic and static tests and visual or electronic inspections in accordance with specified criteria to detect and identify malfunctioning parts and/or systems of a vehicle.

DIESEL ENGINE—An internal combustion engine system in which air is compressed to a high pressure and low octane fuel is injected into the cylinder and caused to ignite by the temperature of the air without the use of a spark plug.

DIGITAL READ-OUT SPEEDOMETER—A speedometer which presents on its face only those numbers (digits) that show the speed at which the vehicle is moving.

DISC BRAKE—A type of braking system in which brake pads are applied against a disc-like steel surface to retard, stop, or prevent a vehicle from moving.

DISPLACEMENT—The difference between the maximum volume and the minimum volume of each combustion chamber multiplied by the number of chambers in an internal combustion engine.

DIVE—The tendency of the front end of a vehicle to "nose down" or "dip" during braking.

D-PILLAR—The rearmost vertical structural member of a station wagon body that supports the roof.

DRIFT—A controlled four wheeled slide around a turn. Also, the tendency of an unsteered automobile to deviate from a straight line when traveling on a level surface.

DRIVING SIMULATOR—A device used for testing, training or research, which simulates vehicle operation in a controlled, reproducible manner under a variety of conditions.

DRUM BRAKE—A type of braking system in which the brake lining material is applied against the interior surface of a cylindrical steel housing to retard, stop, or prevent a vehicle from moving.

DUAL EXHAUST—A two pipe system for conducting the exhaust combustion gases from the engine exhaust manifold to points external to the vehicle.

DURABILITY—The serviceable life of a motor vehicle and its components with normal maintenance.

DYNAMOMETER—See CHASSIS DYNAMOMETER.

ELECTRIC REMOTE CONTROL DECK LID RELEASE—See INTERIOR TRUNK RELEASE.

ELECTRICAL SYSTEM—Those components of a vehicle that use and/or supply electrical power; i.e., battery, alternator (generator), ignition system, horn, wiring, and lighting system.

ELECTRICALLY CONTROLLED SPOTLIGHT—A spotlight mounted on the exterior of a vehicle which can be activated and aimed remotely from the interior of the vehicle through an electrical circuit.

ELECTRONIC IGNITION SYSTEM—An ignition system for internal combustion engines employing the use of solid-state semiconductors for switching purposes. (Ref: SAE J139)

EMERGENCY LOCKING RETRACTOR—A seat belt webbing retractor which incorporates adjustment hardware having a locking mechanism that is activated by vehicle acceleration, movement of webbing relative to the vehicle, or other automatic action during an emergency and which is

capable, when locked, of withstanding restraint forces. Also called INERTIA REEL. (Ref: FMVSS 209)

EMERGENCY VEHICLE—Any vehicle such as a patrol car, van, station wagon, or tow truck, which is equipped to respond to emergency situations common to police operations.

EMISSION STANDARDS—A set of values which prescribe the limits on the amount of hydrocarbons, carbon monoxide and nitrogen oxides which a vehicle may emit.

ENGINE BLOCK HEATER—A device for prewarming an engine to facilitate starting at low ambient temperatures.

ENGINE DISPLACEMENT—See DISPLACEMENT.

ENGINE EMISSIONS—By-products of engine operation, such as heat, vaporized unburned fuel, and exhaust gases. Included in such by-products are hydrocarbons, carbon monoxide, carbon dioxide, nitrogen oxides and water vapor.

ENGINE ROLL RESTRAINT—A device installed on the engine mount to minimize the effect of mount failure.

EQUIPMENT CARRIER—The function of a patrol car in providing for the transportation of various items required by an officer to carry out law enforcement duties. This equipment may include weapons, emergency lights, communication equipment, rescue equipment, firefighting equipment, warning devices, and other miscellaneous items.

ESTIMATE—A vendor's written or verbal cost proposal for providing a service or a product.

EXTERNAL CRANKCASE OIL COOLER—A heat exchanger mounted external to the crankcase through which the lubricating oil is passed to dissipate excess heat.

FADE—A temporary reduction of brake effectiveness due to loss of friction between the braking surfaces as a result of excessive heat build-up during extended or hard use of brakes.

FAST STEERING—A characteristic of a steering system which provides lock-to-lock turning of the front wheels with relatively few turns of the steering wheel.

FEDERAL MOTOR VEHICLE SAFETY STANDARDS—Mandatory vehicle performance, design features, and objectives established by the National Highway Traffic Safety Administration of the Department of Transportation to enhance vehicle and occupant safety. Often abbreviated as FMVSS.

FINANCE LEASE—See OPEN END LEASE.

FISHTAILING—The tendency of the rear end of a vehicle to make rapid uncontrolled side-to-side movements while moving forward.

FLEET ADMINISTRATOR—An individual concerned with carrying out a set of policies provided by an organization which controls a number of vehicles.

FLEX-FAN—An engine cooling fan with a fixed drive and flexible metallic or reinforced plastic blades designed to respond to varying cooling load demands.

FMVSS—Abbreviation for FEDERAL MOTOR VEHICLE SAFETY STANDARDS.

FOOT-POUND—A unit of measure commonly used to describe the amount of torque or rotational force produced by an engine. The correct term is pound-foot. See also TORQUE.

FRAME REINFORCEMENT—See HEAVY DUTY FRAME.

FREEWAY PATROL—The law enforcement function concerned with management and surveillance of traffic on a freeway. This function may include rendering assistance, accident investigation, traffic direction, and traffic law enforcement. It may be accomplished with automobile, motorcycle, or aircraft patrol.

FRONT END ALIGNMENT—An adjustment of the positioning of the front wheels to conform with the vehicle manufacturer's specifications to

optimize tire wear, steering and handling characteristics.

FRONT SPINDLE—The part of the front axle on which the wheel rotates.

FT-LB—The abbreviation for FOOT-POUND.

FUEL INJECTION—A fuel-air mixing system in which fuel is metered directly into the air at the intake port of the combustion chamber rather than into a fuel-air distribution system such as an intake manifold.

FUNCTION—As applied to law enforcement vehicles, the use, duty, activity, or requirement of a law enforcement system that can be provided by a vehicle. These functions may include traffic patrol, moving surveillance, emergency road service, highway patrol, undercover work, crime patrol, transporting prisoners and noncriminal personnel, communications carrier, patrolman's office, and high speed pursuit.

GARAGE—An enclosed facility in which vehicles are maintained, repaired, or stored when not in use.

GLAZE—The surface hardening of the brake lining material caused by excessive heat that results in a reduction of braking effectiveness due to loss of friction between the braking surfaces. Also known as lining glaze.

GRAB—The result of a condition in which braking does not occur uniformly and smoothly on all four wheels. Also referred to as brake pull.

GUARANTEED DEPRECIATION—An agreement between the supplier and purchaser of a product that specifies the terms and amount for which the supplier will repurchase the product after a specified period of time and/or use.

GUARANTEED MAINTENANCE—The level and type of maintenance that is specified in a maintenance contract (usually at a predetermined cost) between a vehicle operator and a maintenance facility (shop).

HANDLING—The stability and control characteristics of a vehicle.

HAND THROTTLE CONTROL—A device which provides for hand control of the engine speed. See also **MANUAL FAST IDLE CONTROL**.

HARDTOP—A body type having a fixed roof in which the B-pillar does not extend above the window sill level.

HEADLINER—The material on the inside of the passenger compartment, fastened to the underside of the roof, which conceals the roof structure. It may also provide some safety padding, and sound and heat insulation.

HEAD ROOM—The distance from the headliner to the seat, when the seat is compressed by an average occupant. (Ref: SAE J826a)

HEAVY DUTY—Surpassing the capacity of a standard production item to withstand strain, exposure, temperature, wear, and/or use. Also called maximum duty.

HEAVY DUTY FRAME—The frame of a vehicle which has additional welds and/or structural members to provide it with greater structural integrity than the standard frame for that vehicle. See also **FRAME REINFORCEMENT**.

HEAVY DUTY RADIATOR—A radiator which has a higher cooling capacity than a standard model.

HEAVY DUTY SEAT—A seat designed to endure greater usage than standard seating.

HEAVY DUTY SHOCK ABSORBER—A shock absorber designed for use in a vehicle subject to high stress conditions. See also **SHOCK ABSORBER**.

HEAVY DUTY SPRINGS—A set of springs having a higher load rating (spring rate) than standard springs and which provide better handling characteristics under high stress conditions.

HEAVY DUTY SUSPENSION—A suspension system designed for use in a vehicle subject to high stress conditions. It may include heavy duty springs, shock absorbers, stabilizer bars, etc.

HEAVY DUTY UPHOLSTERY—Material designed to be more durable and more readily cleaned than standard material used to cover seating.

HEAVY DUTY WHEEL—A road wheel designed for high stress use which has been reinforced and/or has a wider rim than is normally supplied with a vehicle.

HIGH CAPACITY—Capable of greater performance. See also **HEAVY DUTY**.

HIGH END PERFORMANCE—The ability of a motor vehicle to accelerate at the upper end of its speed range.

HIGH STRESS CONDITIONS—The stresses to which law enforcement vehicles are subjected in functions requiring performance beyond the demands placed on standard vehicles. These stresses may develop from such activities as high speed pursuit, operation at temperature extremes, and extensive operation of vehicle equipment while the engine is idling.

HIP ROOM—The distance across the vehicle interior at seated hip level. (Ref: SAE J826a)

HOOD AIR SCOOP—An opening in the hood of a vehicle intended to supply more air to the engine compartment to improve engine performance and facilitate cooling.

HOOD LATCH SYSTEM—The system employed to retain the hood in a closed position relative to the vehicle body with provisions for a controlled two-step release.

HOT RETREADING—A process for applying a tread to a tire at a temperature above 107°C (225°F).

HYDROPLANING—A condition in which the tire tread of a moving vehicle loses contact with the road surface, and thus traction, due to a film of water on the road surface.

IDENTIFIED CAR—See **MARKED CAR**.

INERTIA REEL—See **EMERGENCY LOCKING RETRACTOR**.

INTELLIGENCE—A function of law enforcement agencies concerned with the acquisition of information related to crime.

INTERCEPTION—See **PURSUIT**.

INTERIOR HOOD RELEASE—A control for releasing the primary catch of the hood latch from the interior of the vehicle.

LAP BELT—That portion of a seat belt assembly which extends across an occupant's lap. See also **SEAT BELT ASSEMBLY**.

LARGE BRAKE AIR SCOOP—An option which increases the volume of air flow over a brake for additional cooling.

LEAF SPRING—A component of the suspension system which utilizes a tempered steel bar in flexure (bending) to assist in absorbing and damping the effect of road shocks on the vehicle.

LEASE—A contract between two parties which specifies the terms and conditions under which one party will obtain the sole use of a product that is owned by the other party. See also **OPEN END LEASE**, **CLOSED END LEASE** and **LEASE PURCHASE**.

LEASE PURCHASE—A particular type of lease contract which provides an option under which the lessee may purchase the item being leased. See also **OPEN END LEASE**.

LEG ROOM—The straight line distance, plus 25.4 cm (10 inches), between a driver's hip point and ankle point. The measurement is made with the driver seated, the front seat in the rearmost position, and the driver's foot on the accelerator pedal. (Ref: SAE J826a)

LESSEE—The party of a lease contract who is contracting for the sole use of a product owned by another party (lessor).

LESSOR—The party of a lease contract who owns the product that is being leased.

LIFE CYCLE COSTING—A method for comparing the effect of alternative decisions on the cost of an item or project over the term of its useful life. In law enforcement fleet management

these alternatives might include such things as: lease vs. purchase, tire selection, contract vs. in-house maintenance, various vehicle replacement policies, and methods of vehicle disposal.

LIMITED SLIP DIFFERENTIAL—A clutch mechanism in the differential which automatically guides the power to the non-slipping drive wheel when the other loses traction.

LOCK-TO-LOCK—The full angle through which the front wheels may be turned.

LOCKING GAS CAP—A cap for the filling neck of a fuel tank which is provided with a key operated and/or electrically operated lock to prevent unauthorized removal of the cap.

LOGISTICAL SUPPLY VEHICLE—A vehicle, generally a van-type or a station wagon, used to carry extra supplies, special equipment, or emergency equipment for police activities in special situations.

LOW END PERFORMANCE—The ability of a motor vehicle to accelerate at the low end of its speed range.

LOW GEAR LOCKOUT—A feature that prevents an automatic transmission from being manually shifted into low gear.

MAGNETIC DRAIN PLUG—A magnetized plug for the drain in an oil pan (transmission or crankcase) to collect metallic particles from the oil.

MANUAL BRAKES—A braking system in which the pressure applied to activate the brakes is supplied entirely by the driver.

MANUAL DOOR LOCKS—Interior vehicle door locks which must be engaged manually and individually on each door to lock the exterior door handles and, in some cases, the interior door handles.

MANUAL FAST IDLE CONTROL—A device which provides a means of changing, within a limited range, the speed at which an engine idles. See also **MANUAL THROTTLE CONTROL**.

MANUAL STEERING—A steering system in which the force applied by the driver on the steering wheel is the entire force used to turn the front wheels.

MANUFACTURER'S GUARANTEE—A document which defines the terms and conditions under which the manufacturer will assume the responsibility for correcting or replacing specified components of a vehicle which may have been defective or improperly installed when the vehicle was manufactured, or through a specified period of time or mileage.

MANUFACTURER'S WARRANTY—See **MANUFACTURER'S GUARANTEE**.

MARKED CAR—A vehicle which is plainly and prominently marked as a police vehicle.

MAXIMUM—Sometimes used in place of **HEAVY DUTY**.

MAXIMUM COOLING PACKAGE—Modifications to a standard engine cooling system to increase the waste heat dissipation capability. These modifications may include a larger radiator and fan, a fan shroud, special heat shields, etc.

MAXIMUM HANDLING PACKAGE—See **POLICE HANDLING PACKAGE**.

MAXIMUM VOLUME—The internal volume of a combustion chamber when the compressing device is positioned to provide the largest volume in the combustion chamber.

MESSENGER VEHICLE—See **ADMINISTRATIVE VEHICLE**.

METALLIC LINING—A brake lining material made from sintered metal which has the characteristic of resisting fade at high braking temperatures generated by continuous hard brake usage.

MINIMUM VOLUME—The internal volume of a combustion chamber when the compressing device is positioned to provide the smallest volume in the combustion chamber.

MISSION—The task or function assigned to an organization or a person.

MOBILE COMMAND POST—A vehicle containing communications and other operations control equipment which permits control of an operation to be moved to a temporary location from the normal fixed location.

MOBILE COMMUNICATION VAN—See **MOBILE COMMAND POST**.

MOBILE CRIME LABORATORY—A vehicle, usually a van-type, equipped with investigative instruments, equipment, and supplies which can be moved to the site of an investigation for immediate analysis of materials and clues found at the scene of an incident.

MOBILE OFFICE—A function provided by a patrol car or other vehicle for the officer using the vehicle.

MODEL—An automotive manufacturer's designation of a particular vehicle which includes the make, car line, series, body type, and model year. (Ref: SAE J218)

MODIFICATION—Any change or alteration to parts or components of a vehicle that is not described or included in the manufacturer's specifications as optional equipment for the vehicle.

MOTOR CARRIER SAFETY ENFORCEMENT—See **TRUCK INSPECTION**.

MOUNTAIN RESCUE VEHICLE—A special type of vehicle designed to function in mountainous terrain and appropriately equipped to conduct the type of rescue operations required in rugged terrain.

MOVING SURVEILLANCE—A function of law enforcement in which a suspect in a moving vehicle is kept under observation by officers in an unmarked vehicle or vehicles.

NARCOTICS PATROL—A function of law enforcement concerned with narcotics law violations for which unmarked vehicles are generally used.

NET HORSEPOWER—See **SAE NET HORSEPOWER**.

NEUTRAL STEER—A handling characteristic of a vehicle that tends to follow the desired course during a turn with a minimum of adjustment of the steering wheel by the driver.

NOISE ENFORCEMENT—A function of law enforcement concerned with violations of local noise control ordinances.

OPEN END CONTRACT—See **OPEN END LEASE**.

OPEN END LEASE—A type of lease contract which requires periodic payments covering equipment cost, financing costs, and profit to the lessor for a fixed period of time at the end of which the lessee (user) guarantees payment of the predetermined residual value of the equipment to the lessor. See also **CLOSED END LEASE**.

OPERATIONS—The activity resulting from planning and controlling the current ongoing activities of a police force. This term may also refer to the office or communications center from which current operations are controlled.

OPTIONAL EQUIPMENT—A motor vehicle part, component, or system, usually installed at the factory, that replaces an existing part, component, or system classified as "standard equipment." See also **ACCESSORY**.

ORGANIC LINING—A brake lining material made from an organic composite designed for normal usage but which may have a tendency to fade at higher braking temperatures created by heavy use of the brakes during a short time period.

OVERALL STEERING RATIO—The ratio between the total angular travel of the steering wheel and the total angular travel of the front wheels from lock-to-lock. See also **FAST STEERING**.

OVERSTEER—A handling characteristic of a vehicle that tends to reduce the desired radius as the vehicle progresses through a turn, requiring the driver to rotate the steering wheel away from the direction of the turn.

OVERWEIGHT SUSPENSION—See **HEAVY DUTY SUSPENSION**.

OWNER'S MANUAL—A document published by the vehicle manufacturer that contains information on the features and normal service requirements to assist the owner in the proper operation and care of the vehicle.

PANIC STOP—A stop in which the driver applies maximum pressure on the brake pedal which usually causes the wheels to stop rotating so that the vehicle slides to a stop. See also **WHEEL LOCK CONTROL**.

PARKING BRAKE WARNING LIGHT—A warning light located at the driver's position which illuminates when the parking brake is applied with the ignition turned on.

PARTS LIST—A product manufacturer's list identifying all of the individual parts, components, and sub-assemblies that are contained in the product. Also called parts book. (Ref: FMVSS 105)

PASSENGER VEHICLE INSPECTION—A law enforcement function which monitors conformance of passenger vehicles with State or local safety and/or pollution laws and ordinances.

PASSIVE RESTRAINT SYSTEM—An occupant restraint safety device which requires no action on the part of the user to make it effective. See also **AIRBAG**.

PATROL—A function of a law enforcement agency in which a geographical area is kept under observation by members of the agency. Also, the individuals who conduct the patrol function.

PATROL AREA—See **PATROL BEAT**.

PATROL BEAT—An area to which a patrol is assigned and for which it has primary responsibility for responding to calls for police assistance.

PATROL BUS—Bus type vehicle used to transport police officers, prisoners or other personnel in connection with law enforcement functions.

PATROL CAR—An automobile, usually modified with "police options" or special equipment,

used by law enforcement agencies in performing the patrol function.

PATROL DISTRICT—A geographical area which consists of more than one patrol beat and which may have its own police station and vehicle maintenance facilities.

PATROL WAGON—A van or bus type vehicle used primarily to transport people from the site of an incident to a police station. Also called prisoner wagon.

PERFORMANCE—The manner in which a vehicle, system, or component performs, reacts or fulfills mission or functional requirements.

PERFORMANCE CERTIFICATION—A document issued by a product manufacturer or a testing agency to certify that a product has been tested under specified conditions and is capable of achieving specified performance objectives.

PERFORMANCE REQUIREMENT—A functional use or need required of a vehicle, defined by the manner in which the vehicle or its systems should respond or react to fulfill the requirement.

PERFORMANCE SPECIFICATION—A procurement statement which describes the performance required of a product, material, or service in order to satisfy a specified function.

PERFORMANCE STANDARD—A description of the level of acceptable performance of a product, service, or material for meeting the requirements of a given function when measured in accordance with specified procedures and conditions.

PLOWING—The tendency for the front end of a vehicle to "nose down" and lean to the outside during a turn. Also called corner lean.

PLY—A layer of rubber-coated parallel cords forming the tire body. (Ref: SAE J918c)

PLY SEPARATION—A parting (failure) of the rubber compound between adjacent plies of a tire. (Ref: SAE J918c)

PNEUMATIC SPRING—See AIR SPRING.

POLICE HANDLING PACKAGE—A special set of equipment options, such as "heavy duty" suspension, for a particular vehicle which is designed to provide the handling characteristics under high stress conditions required of vehicles used for police functions.

POLICE SUSPENSION—See HEAVY DUTY SUSPENSION and POLICE HANDLING PACKAGE.

POWER ASSIST—The use of some of the power generated by the engine to reduce the work required by the driver in operating certain vehicle systems, such as brakes and steering.

POWER BRAKE—A braking system in which the pressure applied on the brake pedal by the driver to activate the brakes is multiplied by a vacuum power assist system.

POWER DOOR LOCK—A power operated mechanism by which all door locks can be actuated simultaneously either by a control at the driver's position, or by a key.

POWER SEAT—A seat whose position can be adjusted by using electric power supplied by the vehicle.

POWER STEERING—A steering system in which the force applied by the driver on the steering wheel to turn the front wheels is multiplied by a hydraulic power assist system.

POWER STEERING OIL COOLER—An accessory that provides additional cooling to the fluid in the power steering system for vehicles which will be subjected to more than normal use.

PRE-OPERATION INSPECTION—A visual inspection of the general condition of a vehicle, usually conducted by the driver, to assure that the vehicle is in serviceable condition.

PREVENTIVE MAINTENANCE—Inspections, adjustments, and maintenance performed, usually at specified intervals, on a serviceable vehicle to minimize the possibility of operational failures and to extend the service life of the vehicle.

PRISONER TRANSPORTATION—A func-

tion of law enforcement requiring the movement of persons in custody from one point to another.

PROCUREMENT POLICY—An expressed or written statement that defines the terms, conditions and other relevant criteria under which a using body, such as a law enforcement agency, procures goods or services.

PULL CORD FOR ROUTING RADIO ANTENNA—A device used to thread a radio antenna cable through a conduit or concealed portions of a vehicle body.

PURCHASE SPECIFICATION—Definitive and complete statements of what the purchaser requires of the vendor. See also DESIGN SPECIFICATION and PERFORMANCE SPECIFICATION.

PURSUIT—A function which involves pursuing and overtaking another vehicle, sometimes at high speeds or under hazardous environmental conditions.

PURSUIT VEHICLE—A vehicle specially modified to enable a police officer to pursue and overtake another vehicle under emergency conditions.

PUSH BAR—See PUSH BUMPER.

PUSH BUMPER—A device mounted on the front bumper to reduce the possibility of damage when pushing another vehicle.

RACK AND PINION STEERING GEAR—A steering system in which a pinion gear at the end of the steering shaft operates directly on a notched horizontal shaft (rack) to turn the front wheels.

RADIAL TIRE—A tire in which the ply cords forming the body are laid at approximately right angles to the circumferential centerline of the tire and may be arranged in one or more plies or layers. In addition, two or more belt plies of relatively inextensible material are laid over the radial carcass to support the tread. Materials used for the radial ply cords include rayon, nylon, or polyester; for the belt ply cords, rayon, fiber glass, steel, or other high strength material. See also BIAS BELTED PLY TIRE and BIAS PLY TIRE.

RADIATOR FAN SHROUD—A housing which extends from the rear of the radiator to the periphery of the fan which directs the air passing through the radiator to the fan.

RADIO ANTENNA CABLE—An electrical cable that connects a remotely located antenna to the radio.

RADIO CONDUIT—A tube or other enclosure through which electrical cable is routed to connect remotely located components of the radio system.

RADIO SHIELDING—Devices installed in a vehicle to reduce the effect on radio transmission and reception of electromagnetic radiation generated by the vehicle.

RADIO WIRING CONDUIT—See RADIO CONDUIT.

REAR AXLE HOP—The tendency for the rear wheels of a vehicle to make rapid, vertical movements during fast starts or hard braking.

REAR CROSS MEMBER REINFORCEMENT—An additional structural member added to the frame to provide greater structural integrity.

REAR WINDOW DEFOGGER—A fan which directs air against the interior surface of the rear window to keep it clear of condensation.

REAR WINDOW DEFROSTER—An accessory designed to heat the rear window to keep it clear of condensation, frost, ice, and snow.

RECIRCULATING BALL AND NUT STEERING GEAR—A steering system incorporating ball bearings confined in a ball nut, a threaded shaft (worm), a sector shaft and pitman arm. The rotary motion of the steering wheel moves the ball nut back and forth along the worm. A rack on the ball nut engages the sector shaft and moves the pitman arm which controls the turning of the front wheels.

REMOTE CONTROL SIDEVIEW MIRROR—A device which permits adjustment of the field of view of an outside side mirror by means of a

control located inside the vehicle convenient to the driver.

REMOTE INTERIOR TRUNK RELEASE—A device which permits the occupant of a motor vehicle to release the latch of the deck lid from inside the vehicle.

REPLACEMENT COST—The difference between the dollar value that can be obtained for a presently owned item and the cost of purchasing a new like item.

REPLACEMENT POLICY—An agreement or decision, based on economic and other considerations (such as age, condition, or other relevant factors) which determines when a vehicle should be replaced.

RESCUE VEHICLE—A vehicle specially equipped for rescue and emergency functions in situations of natural and man-made disasters.

RESTRAINT SYSTEM—A safety system designed to limit the movement of occupants within a vehicle. See also **ACTIVE RESTRAINT SYSTEM** and **PASSIVE RESTRAINT SYSTEM**.

ROLL—See **BODY LEAN**.

ROLL BAR—An additional structural member installed within a vehicle to prevent the roof from collapsing in the event of a roll-over accident.

ROOF BOW—A structural cross member which conforms to the contour of the roof and is connected to the roof side rails. The roof bow supports the roof panels, the headliner and the dome light, and helps resist roof collapse.

ROOF CROSS MEMBER—See **ROOF BOW**.

ROOF FLASHER WIRING HARNESS—See **ROOF WIRING**.

ROOF REINFORCEMENT—An optional structural member to provide support for lights, sirens, loud speakers, or other equipment mounted on the roof of a vehicle.

ROOF WIRING—A system of electrical wires installed between the roof sheet metal and the

headliner to furnish electrical power to equipment mounted on a vehicle roof.

ROTARY ENGINE—An engine in which the heat energy generated by the combustion of a fuel-air mixture is translated directly into a rotating motion in contrast to the reciprocating motion of a piston engine.

SAE—Abbreviation for Society of Automotive Engineers.

SAE NET HORSEPOWER—The power available from a fully equipped engine at the fly wheel or other output member for a given application at a given (rated) speed as specified by the manufacturer. [A fully equipped engine includes all the accessories necessary to perform its intended functions unaided plus (but not restricted to) the intake air system, exhaust system, cooling system, generator, starter, and emission control equipment.] (Ref: SAE J245)

SALVAGE—To remove usable parts or components from a vehicle or device which may no longer be satisfactory for police service due to obsolescence, wear, or damage.

SEAT BELT—See **LAP BELT** and **SEAT BELT ASSEMBLY**.

SEAT BELT ASSEMBLY—An active restraint system installed in a motor vehicle to reduce personal injuries in the event of an accident. The assembly includes necessary straps, webbing, buckles, fasteners and other hardware. See also **LAP BELT** and **SHOULDER HARNESS**. (Ref: FMVSS 209)

SEDAN, 2-DOOR—A type of closed body having a single door on either side which provide access to both the front and rear seats of the vehicle.

SEDAN, 4-DOOR—A type of closed body having two doors on either side which provide individual access to the front and rear seats of the vehicle.

SEMI-METALLIC LINING—A brake lining material composed of a mixture of metallic and organic components intended to provide good

braking characteristics at both low and high braking temperatures. Also called semi-organic lining.

SERVICE BULLETIN—A document issued by an automotive product manufacturer to its authorized service agencies containing information or instructions concerning service or maintenance of its products.

SERVICE CONTRACT—A legal agreement between a vehicle owner and a maintenance facility which defines the terms, conditions, and maintenance to be performed by the maintenance facility for the vehicle owner. See also **GUARANTEED MAINTENANCE**.

SERVICE LIFE—The time during which a piece of equipment or a product provides reliable operation or service with only normal or routine maintenance.

SERVICE MANUAL—A document prepared and issued by a product manufacturer that contains detailed information and instructions for performing maintenance and repair of the product.

SERVICE VEHICLE—A vehicle used in any support activity other than direct law enforcement, such as a tow truck, administrative vehicle, maintenance vehicle, etc.

SHOCK ABSORBER—The component of a suspension system whose function is to damp the oscillating action of the springs.

SHOP—A facility with trained personnel, tools, and equipment for maintaining and repairing vehicles.

SHOP MANUAL—See **SERVICE MANUAL**.

SHOULDER BELT—See **SHOULDER HARNESS**.

SHOULDER HARNESS—That part of a seat belt assembly that restrains the shoulders or upper torso of the user.

SHOULDER ROOM—The distance across a vehicle interior at seated shoulder level. (Ref: SAE J826a)

SINGLE EXHAUST—A single pipe through

which the exhaust combustion gases are carried from the engine exhaust manifold to some point external to the vehicle.

SINGLE KEY LOCKING SYSTEM—An arrangement in which a single key will actuate all locks on the vehicle as opposed to the usual arrangement where one key actuates the ignition and external door locks and another key actuates the rear deck lid and glove compartment locks. See also **UNIVERSAL SINGLE KEY LOCKING SYSTEM**.

SIREN MOUNTING PLATFORM—An optional structural reinforcement for supporting a siren installation.

SKID—A controlled or uncontrolled slide by the vehicle resulting from the loss of friction between the road surface and the tires.

SNOW TIRE—A tire having a tread designed to provide more traction through snow and mud than a standard tire.

SOUND PROOFING—Material used to reduce the transmission of noise into, or absorb sound inside of, the passenger compartment of a motor vehicle.

SPECIAL EQUIPMENT—Accessories or features installed on or modifications made to a vehicle to permit it to perform a function that is beyond the normal capability of the vehicle with standard or regular optional equipment.

SPECIFICATION—A description of the technical, operational, and other pertinent features of a product, material or service. See also **DESIGN SPECIFICATION**, **PERFORMANCE SPECIFICATION**, and **PURCHASE SPECIFICATION**.

SPLIT BENCH FRONT SEAT—A bench-type front seat which is divided into two parts so that the parts may be individually adjusted for different size occupants. Also called "50-50" and "60-40" bench seat.

SPORTS SUSPENSION—See **HEAVY DUTY SUSPENSION**.

SPRING—See AIR SPRING, COIL SPRING, LEAF SPRING and TORSION BAR.

SPRING RATE—A measure of the deflection of a spring under load. A high spring rate indicates a small deflection, hence a stiffer spring action.

SQUAT—The tendency of the rear end of a vehicle to settle or depress upon sudden acceleration.

STABILIZER BAR—A suspension system device that is installed parallel to the front and/or rear axles to reduce body roll (sway) during cornering.

STANDARD EQUIPMENT—Equipment, accessories, and features listed by the manufacturer as included in a standard or basic product.

STANDARD WHEEL—A wheel which is supplied as standard equipment on a vehicle. See also HEAVY DUTY WHEEL.

STATION WAGON—A type of body in which the interior functions as a combined passenger and cargo compartment by extending the roof line to the rear of the body and providing an entrance door in the rear end of the body. The upright portion of the rear passenger seat may be folded down to extend the usable length of the cargo floor in the rear of the body.

STEERING SYSTEM LINKAGE—The system of rods and linkages that converts a rotational movement of the steering shaft into an angular deflection of the front wheels.

SUSPENSION SYSTEM—The vehicle subsystem which supports and connects the engine, frame, and body to the axles, wheels, and tires. The components of the system include the springs, shock absorbers, stabilizer bars, and control arms and struts.

SWAY—See BODY LEAN.

SWAY BAR—See STABILIZER BAR.

SWIVEL SEAT—A seat mounted on a device which permits the seat to be rotated toward the

door of the vehicle providing easier entrance and exit.

TAXI SUSPENSION—See HEAVY DUTY SUSPENSION.

TECHNICAL REQUIREMENTS—A description of the technical, operational, and performance requirements for a product or material that can be used as a basis for designing a new product or for obtaining bids on an existing product.

TILT STEERING WHEEL—A steering wheel which may be adjusted in the vertical plane to locate the wheel in a more favorable position for different size drivers and to facilitate the entrance and exit of the driver. See also ADJUSTABLE STEERING WHEEL.

TINTED GLASS—A type of glass which has been shaded to reduce light and heat transmission.

TIRE BREAK-AWAY—See BREAK-AWAY OF TIRES.

TIRE ROLL—The tendency of a tire to deflect to the side during a turn so that in extreme cases the tire sidewall, or even the wheel rim, may be in contact with the road surface.

TIRE SPILL—A loss of air from a tire caused by the tire bead pulling away from the rim during a hard turn.

TIRE TREAD—That portion of a tire that comes into contact with the road. (Ref: SAE J918C)

TOE-IN—The alignment of the front wheels so that they are angled toward the centerline of the vehicle such that the wheels are closer together at front than at the back.

TOE-OUT—The alignment of the front wheels so that they are angled away from the centerline of the vehicles such that the wheels are farther apart at the front than at the back.

TOP SPEED—The maximum speed of which a vehicle is capable on a straight, smooth, level surface.

TORQUE—The rotational or turning force

produced by an engine at a specified speed, measured in pound-feet at the output member. See also FOOT-POUND.

TORSION BAR—A component of the suspension system which utilizes a straight tempered steel rod in torsion (twisting) to assist in absorbing and damping the effect of road shocks on the vehicle.

TRACK—The distance between the center lines of the tires on one axle measured at ground level. Also referred to as tread.

TRAFFIC MANAGEMENT—The function of law enforcement to assist in the orderly flow of vehicles on streets and highways and to enforce the laws regulating vehicle use.

TRANSPORT DELIVERY—The delivery of vehicles over extended distances by tractor-trailer.

TRANSPORTATION POLICY—A set of guidelines established by an authority governing the acquisition, use, maintenance, and disposition of vehicles or a transportation system.

TREAD—See TRACK and TIRE TREAD.

TREAD DEPTH—The distance, measured near the centerline of the tire, from the base of the tread design to the top of the tread.

TREAD DESIGN—The non-skid pattern on the tread portion of the tire.

TRUCK INSPECTION—The function of law enforcement requiring the on-the-road inspection of vehicles classified as trucks for conformance with laws and regulations.

TURNING RADIUS—The distance from the turning center of a vehicle to the center of tire contact with the road of the wheel (usually the outside front wheel) describing the largest circle while the vehicle is executing its sharpest practicable turn. (Ref: SAE J695)

UNDERCOATING—A supplementary coating of sealing material applied to the underside of the body and fenders of a vehicle to increase protection from corrosion damage. Undercoating may also

provide some sound insulation against road and tire noise. Also called full undercoating.

UNDERSTEER—A handling characteristic of a vehicle that tends to increase the desired radius as the vehicle progresses through a turn requiring the driver to apply increasing force on the steering wheel toward the direction of the turn.

UNIDENTIFIED CAR—See UNMARKED CAR.

UNIT BODY—See UNITIZED BODY.

UNIT CONSTRUCTION—See UNITIZED BODY.

UNIT CONSTRUCTION WITH STUB FRAME—A method of automobile construction in which the body and frame are fabricated as an integral unit except for a partial structural frame (stub frame) which is bolted to the fire wall. Sometimes loosely, but incorrectly, called unitized body.

UNITIZED BODY—A method of automobile construction in which the body and frame are fabricated as an integral unit. Also referred to as unit construction, unit body, and "unibody."

UNIVERSAL SINGLE KEY LOCKING SYSTEM—A single key locking system in which one key will fit all locks on all vehicles in a fleet. See also SINGLE KEY LOCKING SYSTEM.

UNMARKED CAR—A vehicle which is not marked to identify it as belonging to a law enforcement agency.

USE FACTOR—A measure of the amount of time equipment is actually in use or available for use by the using organization.

USER REQUIREMENT—A definition of the operational needs or uses required of vehicles by a using organization. These requirements may be expressed in terms of functions, performance, or a technical description of the vehicle.

UTILITY TRANSPORTATION—See ADMINISTRATIVE VEHICLE.

V—Abbreviation for VENTURI

VAN—A truck with a rectangular shaped body in which the driver and cargo are in the same compartment.

VARIABLE RATIO STEERING—A steering system which differs from the conventional system in that the steering ratio is not constant but varies continuously as the wheels are turned from the straight ahead position toward either turning limit. For instance, the ratio may be 16 to 1 at the straight ahead position gradually changing to 13 to 1 at the turning limit.

VARIABLE SPEED FAN—An engine cooling fan driven through a clutch designed to respond to varying cooling demands of the engine.

VEHICLE ARMOR—A missile resistant material that can be installed on a vehicle to protect its occupants from gunfire.

VEHICLE ATTITUDE—The angle between the longitudinal axis of a vehicle and the horizontal surface on which the vehicle is standing. Also referred to as vehicle posture or vehicle trim.

VEHICLE IDENTIFICATION NUMBER (VIN)—A permanent and unique number assigned to and placed on each vehicle by an automotive manufacturer for identification purposes. It may indicate the vehicle's model, engine displacement, place and year of manufacturer, and sequence in the manufacturer's production. (Ref: FMVSS 115)

VEHICLE SPECIFICATION—See SPECIFICATION.

VEHICLE SURVEY—An information system designed to provide current information on the mechanical condition and operational status of a fleet of vehicles.

VENDOR—A person or organization that sells a service or a product.

VENTURI—A component of the carburetor of

an internal combustion engine which serves the function of mixing vaporized fuel with air. A carburetor may consist of one or more venturis (abbreviated as V) which are designated as 1V, 2V, or 4V. Also called BARREL.

VIN—Abbreviation for VEHICLE IDENTIFICATION NUMBER.

VOLTAGE INDICATOR—An instrument that indicates voltage output of the alternator or generator.

WHEELBASE—The distance between the vertical center lines of the front and rear wheels.

WHEEL LOCK CONTROL—A type of braking system in which the wheels are prevented from locking (except momentarily) during braking as in a panic stop. Also called anti-skid and anti-lock brakes.

WHEEL LOCK-UP—See BRAKE LOCK-UP.

WIND DEFLECTOR—A device mounted externally on the body of a vehicle for controlling or directing the flow of air around the body in the vicinity of the device.

WINDSHIELD DISTORTION—The result of a defect that causes objects viewed through that area of the windshield to appear displaced or in unnatural shapes or forms.

WINDSHIELD WIPERS-ADJUSTABLE—A windshield wiper system in which the wiper blades can be operated at any speed between their lowest and highest speeds.

WINDSHIELD WIPERS-TWO SPEED, THREE SPEED—A windshield wiper system in which the wiper blades can be operated at two or three fixed speeds. (Ref: FMVSS 104)

ZIPPERED HEADLINER—A headliner with a zippered opening to permit access for installation and maintenance of the electrical wires that power equipment mounted on the roof of a vehicle.

END