

Members Present: Chairman Glover
Mr. Howard
Mr. Dini
Mr. May

Members Absent: Mrs. Hayes
Mr. Dreyer They were excused for
Mr. Jacobsen other committee meetings

Guests: Representing
Don Crosby Nevada Highway Dept
C.P. Brechler Clark Co Regional St & Highways
Glen Griffith Dept of Fish and Game
Edward A Devere Milne Tow Service
Bill Young Nev Highway Dept
James Lambert Nevada Highway Patrol
John Ciardelli Motor Vehicle Dept
Howard Hill Motor Vehicle Dept
Noel Clark Public Service Commission
William Burkett Vespa of America

Chairman Glover called the meeting to order at 4:30 p.m.

The first bill discussed was S.J.R. 21.

S.J.R. 21 - Urges the United States Secretary of Transportation to designate to the State of Nevada the additional mileage necessary to construct the Interstate 15 Spur in the Las Vegas Valley

Mr. Brechler, representing Clark Co Regional St & Highways, told the committee the passage of this resolution would show the support of the Legislature to the project of getting the spur on Interstate 15. He said they were asking for about 72 million dollars from the U.S. Transportation Dept for this. Mr. May made a motion for Do Pass; Mr. Howard seconded, and the motion was unanimous.

S.B. 434 - Requires department of motor vehicles to issue license plates having representation of the desert bighorn sheep

Senator Young, introducer of the bill, told the committee this bill would provide for the sale of a type of personalized license plate displaying a big horn sheep and the word "wildlife" on the plate. He said the proceeds of \$5.00 for the issuance and \$2.00 for the renewal would go to the Fish and Game Dept. The Fish and Game Dept would pay the cost of the die.

Mr. Howard asked how many he felt could be sold. Mr Young said maybe 200. He indicated that he did not feel it would be a big seller or cut into the income from personalized plates now.

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Mr. John Ciardelli, Dept of Motor Vehicles, said he could see no problem with the bill. They would use the same license plate format and would only have to purchase a small die.

Don Crosby, representing the highway dept, stated they were opposed to the bill. He said the highway dept is slowly going broke and license plates have always been a source of revenue to them. By giving this revenue to the Fish and Game Dept instead of the Highway Dept, would just hurt them more.

Glen Griffith, representing the Fish and Game Dept, said this would be an outstanding opportunity for those who are interested in the out of doors to show their interest and express their support. He ask that the word "reserve" be deleted from page 3, line 7 of the bill

A.B. 151 - Transfers certain driver license revocation provisions

Bill Fitzpatrick, Driver's License Division of Motor Vehicles, explained an amendment to the bill. He said this removes the provisions of suspensions from 484 and puts them back into 483. It also deletes the phrase "under this section".

A.B. 676 - Increases permissible unladen weight of certain tow cars

Edward Devere submitted written testimony against this bill. (See attached)

Bob Guinn pointed out that if the committee does approve the bill it would be necessary to go to chapter 706 and amend that chapter.

S.B. 308 - Requires payment of fee for permit to operate flashing amber lights on certain vehicles.

James Lambert, Nevada Highway Patrol, said the reason for requesting this bill was to try to relieve some of the drain on the highway fund and put in a charge that would cover the cost of the services rendered in issuing certificates and permits for vehicles that request amber lights in their operation.

Chairman Glover asked how much money would this bring in. Lambert said it would put about 16 or 17 hundred dollars into the highway fund.

S.B. 123 - Provides more stringent requirements for mirrors on motor vehicles

James Lambert spoke for this bill also. He said this bill amends the requirement for mirrors on vehicles. The present statutes do not provide adequately for vehicles in combination or vehicles so loaded that you were required to place mirrors to see the rear traffic from both sides of the vehicle.

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Glover asked if he knew of many accidents where this was the cause. Lambert said they really don't keep a record of this.

S.B. 174 - Exempts motor-assisted bicycles from motor vehicle registration and driver's license provisions and provides for application of traffic laws and certain equipment provisions to motor assisted bicycles.

Bill Burkett, representing Vespa of America, presented written testimony to all committee members. (a copy is included in the Secretary's minute book).

Chairman Glover asked if registration wouldn't help to control problem of stolen mopeds.

Mr. May asked how many states do exempt these vehicles from being registered. Burkett said 5 now and 3 more are considering.

Senator Monroe stated that he felt there was no reason for registering these vehicles. They are more like a bicycle, and he felt people would rather take the chance of losing their moped than having to pay a registration fee.

Glover asked how old would a person have to be to drive one. Burkett answered 16. Glover asked if we would need to enforce the helmet law. Senator Monroe said no. They were just like a bicycle and there was probably less chance of an accident than on a bike.

Howard Hill said if it was the intent to license these mopeds then they would have to be licensed as a class 4 drivers license which is like a motorcycle license. Otherwise they would have to create a new class 5 and this would cause problems with the photo driver's license bill. He was also concerned with the fact of wearing helmets. He questioned how a police officer would be able to determine the difference between a motorcycle or a moped.

Chairman Glover announced that the committee would probably meet one more time--Thursday, May 8.

After the guests were excused, the following action was taken: Hayes, Dreyer, and Jacobsen were absent for the voting.

S.B. 123 Mr. Howard moved a Do Pass. That motion died for lack of second. Mr. May moved for indefinite postponement. Mr. Howard seconded, and it was unanimous.

S.B. 308 Mr. Dini made a motion for Do Pass; Mr. May seconded and the motion was unanimous.

A.B. 151 Mr. Dini made a motion for amend and Do Pass; Mr Howard seconded, and the motion was unanimous.

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- A.B. 676 -- Mr. May made a motion to indefinitely postpone the bill, Mr. Howard seconded, and it was unanimous.
- S.B. 434 -- Mr. May made a motion for Do Pass. That motion died for lack of a second. It was decided by the Committee to hold this bill.
- S.B. 174 -- Committee decided to hold this bill.

Chairman Glover asked Mr. May to speak on the floor on SJR 21 and Mr. Howard to speak on SB 308.

The meeting was adjourned at 5:15 p.m.

Respectfully submitted,

Camille Lee
Assembly Attache

ASSEMBLY
HEARING

COMMITTEE ON... TRANSPORTATION.....

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Date Thursday-May 1 Time 3:00 P.M. Room 214.....

THIS AGENDA SUPERSEDES PREVIOUS AGENDA

Bill or Resolution to be considered	Subject
A.B. 151	Transfers certain driver license revocation provisions
A.B. 676	Increases permissible unladen weight of certain tow cars
S.B. 174	Exempts motor-assisted bicycles from motor vehicle registration and driver's license provisions and provides for application of traffic laws and certain equipment provisions to motor assisted bicycles.
S.B. 123	Revises provisions and exempts mobile homes from additional lighting equipment requirements. <i>Provides more stringent requirements for vehicles</i>
S.B. 308	Requires payment of fee for permit to operate flashing amber lights on certain vehicles.
S.B. . 434	Requires department of motor vehicles to issue license plates having representation of the desert bighorn sheep.
S.J.R. 21	Urges the United States Secretary of Transportation to designate to the State of Nevada the additional mileage necessary to construct the Interstate 15 Spur in the Las Vegas Valley.

Ciao



Vespa Press Kit



Everybody's Buying a Vespa!

The two-wheeler trend is sweeping the country and Vespa Motor Scooters and Ciaos (pronounced Chow) are more popular than ever. Vespa is the vehicle for all adult ages, seasons,

life-styles and occupations. Everybody wants more miles to the gallon. You can get about 100 mpg with a Vespa Scooter and a fantastic 168 mpg with a Ciao.

PUBLIC LAW No. 81

[S. 310. Approved April 17, 1973.]

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AN ACT to amend IC 1971, 9-4-1 concerning motor vehicles as it relates to the therapeutic bicycle.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. IC 1971, 9-4-1-2, as amended by Acts 1972, P.L. 77, SECTION 1, is amended to read as follows: Sec. 2. (a) Vehicle. Every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, except devices moved by human power or used exclusively upon stationary rails or tracks.

(b) Motor Vehicle. Every vehicle which is self-propelled and every vehicle which is propelled by electric power obtained from overhead trolley wires, but not operated upon rails.

(c) Motorcycle. Every motor vehicle having a saddle for the use of the rider and designed to travel on not more than three (3) wheels in contact with the ground but excluding a tractor or a therapeutic bicycle.

(f) Bicycle. Any foot-propelled vehicle, irrespective of the number of wheels in contact with the ground.

(g) Private Bus. Every motor vehicle, designed and constructed for the accommodation of passengers and which is used for transportation of passengers by a religious organization, fraternal, charitable, benevolent, or youth association. The term "private bus" shall include either the chassis or the body of the vehicle, or shall include both the body and the chassis of any such vehicle: Provided, That any vehicle having the seating capacity of ten (10) persons or less shall not be deemed to be a private bus, nor shall any school bus or any bus used to carry passengers for hire be considered a private bus.

(h) Therapeutic bicycle. Any two (2) wheeled, foot-propelled vehicle, with a helper motor rated less than one (1) brake horsepower and designed primarily for therapeutic purposes.

An Act To Amend Act No. 287 Of 1973 Which Amended Sections 46-139 And 46-215, Code Of Laws Of South Carolina, 1962, Relating To The Definition Of A Bicycle, So As To Further Provide Therefor.

Be it enacted by the General Assembly of the State of South Carolina :

SECTION 1. Section 1 of Act No. 287 of 1973 is amended to read as follows :

"Section 1. The definition of a bicycle as defined in Item (2) of Section 46-139 and Section 46-215 of the 1962 Code shall include pedal bicycles with helper motors rated less than one brake horsepower which produce only ordinary pedaling speeds up to a maximum of twenty miles per hour."

SECTION 2. This act shall take effect upon approval by the Governor.

In the Senate House the 16th day of April

In the Year of Our Lord One Thousand Nine Hundred and Seventy-four.

L. MARION GRESSETTE,

President Pro Tempore of the Senate.

REX L. CARTER,

Speaker of the House of Representatives.

Approved the 18th day of April, 1974.

JOHN C. WEST,

Governor.

HOUSE BILL NO. 1512
Offered January 20, 1975

Handwritten initials

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A BILL to amend and reenact § 46.1-1, as amended, of the Code of Virginia, relating to definitions concerning motor vehicles.

Patron—Sheppard

Referred to the Committee on Roads and Internal Navigation

Be it enacted by the General Assembly of Virginia:

1. That § 46.1-1, as amended, of the Code of Virginia is amended and reenacted as follows:

§ 46.1-1. Definitions.—The following words and phrases when used in this title shall, for the purpose of this title have the meanings respectively ascribed to them in this section except in those instances where the context clearly indicates a different meaning:

(1) "Business district". - The territory contiguous to a highway where seventy-five per centum or more of the property contiguous to a highway, on either side of the highway, for a distance of three hundred feet or more along the highway is occupied by land and buildings actually in use and operation for business purposes.

(1a) "Bicycle".—Every device propelled by human power upon which any person may ride, having two tandem wheels either of which is over twenty inches in diameter. "Bicycle" shall include pedal bicycles with helper motors rated less than one brake horsepower transmitted by friction and not by gear or chain, which produce only ordinary pedaling speeds up to a maximum of twenty miles per hour.

(2) "Chauffeur". - Every person employed for the principal purpose of operating a motor vehicle and every person who drives a motor vehicle while in use as a public or common carrier of persons or property.

(3) "Commission". - The State Corporation Commission.

(4) "Commissioner". - The Commissioner of the Division of Motor Vehicles of this State.

(4a) "Crosswalk". - (a) That part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from the curbs or, in the absence of curbs, from the edges of the traversable

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MICHIGAN DEPARTMENT OF STATE

RICHARD H. AUSTIN • SECRETARY OF STATE

STATE TREASURY BUILDING



LANSING
MICHIGAN 48918

MS file
MS Janak's collection
TV

January 15, 1973

23 GEN. 1973

Piaggio and Company
Genoa, Italy

Gentlemen:

Information submitted in response to our request has been reviewed by personnel of the Department of State for the purpose of determining whether or not the Ciao and Boxer model bicycles manufactured by Piaggio and Company meet the requirements of Section 257.4 of the Michigan Vehicle Code which defines a bicycle as distinguished from a motor driven cycle. Section 357.4 defines a bicycle as "Every device propelled by human power upon which any person may ride, having two dandem wheels either of which is over 20 inches in diameter. It includes pedal bicycles with helper motors rated less than one brake horsepower transmitted by friction and not by gear or chain, which produce only ordinary pedaling speeds up to a maximum of 20 miles per hour." In our opinion, from the information submitted, both the Ciao and Boxer bicycles meet the requirements of the definition.

While the Ciao and Boxer bicycles need not be registered as motor vehicles, I should caution you that such vehicles are subject to certain provisions of the Michigan Vehicle Code, limiting the use of such vehicles on the public highways.

If any further information is desired, please advise.

Sincerely,

Hugh Roach

Hugh Roach
Legal Officer

HR:s

The moped as a weapon against pollution

The environment's pureness improves the driver's physical conditions, thus becoming an essential safety factor.

Most cars moving around a city, particularly during rush hours, carry just one or two persons, and at the same time have to go on at an extremely slow pace, while their motors exhale highly polluting gases and run in quite different conditions than those they were built for. Mopeds can positively help reducing air pollution: as it is known, all other conditions being equal, the oxygen consumption and polluting gas output are proportional to the motor's displacement.

In our case, it will be between 20 and 100 times lower than with motorcars.

Anti-pollution devices can be adopted to mopeds. Actually, nitrogen oxide exhalations are almost negligible with two-stroke motors, and therefore unburnt hydrocarbons can be more easily destroyed.

Conclusions

In the foregoing pages, we have proved that, from the constructional and functional points of view, a moped can be likened more to a bicycle than to a conventional motor-cycle.

In fact, the moped may also be defined as a bicycle, having a helper motor, suitable for use in town and over short distances.

It is however known that the main obstacle to mopeds' diffusion in the United States is the fact that they are under the same laws and standards in force for heavier motorcycles, which are intended for very different use and users.

In Michigan and Connecticut, however, there is a reverse trend already. In Michigan, the moped has been equalized to a regular bicycle equipped with a helper motor, and its use is only limited to highways.

Attached is a copy of a letter from the Michigan Department of State to Messrs. Piaggio (end of an exchange of correspondence), to confirm the above said important principle. In Connecticut a similar ruling for mopeds has been recently proposed to the legislative assembly.

It is hoped that competent state and federal authorities will act along the same lines, thus encouraging a greater diffusion of mopeds and contributing to the solution of city traffic and environment problems.

GENERAL ASSEMBLY OF NORTH CAROLINA

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1973 SESSION (2nd SESSION, 1974)

RATIFIED BILL

CHAPTER 1403

SENATE BILL 1494

AN ACT TO AMEND CHAPTER 1143 OF THE 1973 SESSION LAWS TO DELETE CERTAIN DESIGN REQUIREMENTS OF MOTOR ASSISTED BICYCLES THAT ARE EXEMPT FROM THE TITLE AND REGISTRATION PROVISIONS OF CHAPTER 20 OF THE GENERAL STATUTES.

The General Assembly of North Carolina enacts:

Section 1. Chapter 1143 of the 1973 Session Laws is hereby amended after the words "one brake horsepower or less" and before the words "incapable of exceeding 20 miles per hour" by deleting the following words: "and driven by friction or belt, not gears or chain".

Sec. 2. Chapter 1143 of the 1973 Session Laws is hereby amended after the words "less than one brake horsepower" and before the words "which produce only ordinary pedaling speeds" by deleting the following words: "transmitted by friction or belt and not by gear or chain,".

(D) "Commercial tractor" except as defined in division (C) of this section means any motor vehicle having motive power designed or used for drawing other motor vehicles, or designed or used for drawing another motor vehicle while carrying a portion of such other motor vehicle or its load, or both.

(E) "Passenger car" means any motor vehicle designed and used for carrying not more than nine persons.

(F) "Motor bus" means any motor vehicle having motor power designed and used for carrying more than nine passengers.

(G) "Commercial car" means any motor vehicle having motor power designed and used for carrying merchandise or freight, or used as a commercial tractor.

→ (H) "BICYCLE" MEANS A TWO-WHEEL VEHICLE PROPELLED BY HUMAN POWER, HAVING A TANDEM ARRANGEMENT OF WHEELS EQUIPPED WITH TIRES EITHER OF WHICH IS OVER TWENTY INCHES IN DIAMETER; AND INCLUDES ANY SUCH VEHICLE FITTED WITH A HELPER MOTOR RATED LESS THAN ONE BRAKE HORSEPOWER TRANSMITTED BY FRICTION AND NOT BY GEAR OR CHAIN, WHICH PRODUCES ONLY ORDINARY PEDALING SPEEDS UP TO A MAXIMUM OF TWENTY MILES PER HOUR. ←

[~~(H)~~] (I) "Trailer" means any vehicle without motive power designed or used for carrying property or persons wholly on its own structure and for being drawn by a motor vehicle, and includes any such vehicle when formed by or operated as a combination of a semitrailer and a vehicle of the dolly type such as that commonly known as a trailer dolly, and a vehicle used to transport agricultural produce or agricultural production materials between a local place of storage or supply and the farm when drawn or towed on a public road or highway at a speed greater than twenty-five miles per hour, except a house trailer.

[~~(I)~~] (J) "House trailer" means any self-propelled and non-self-propelled vehicle so designed, constructed, reconstructed, or added to by means of accessories in such manner as will permit the use and occupancy thereof for human habitation, when connected to indicated utilities, whether resting on wheels, jacks, or other temporary foundation and used or so constructed as to permit its being used as a conveyance upon the public streets or highways.

[~~(J)~~] (K) "Semitrailer" means any vehicle of the trailer type without motive power so designed or used with another and separate motor vehicle that in operation a part of its own weight or that of its load, or both, rests upon and is carried by such other vehicle furnishing the motive power for propelling itself and the vehicle referred to in this division, and includes, for the purpose only of registration and taxation under such chapters, any vehicle of the dolly type, such as a trailer dolly, designed or used for the conversion of a semitrailer into a trailer.

TEXT OF LAWS ENACTED

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vehicle furnishing the motive power for propelling itself and the vehicle referred to in this division, and includes, for the purpose only of registration and taxation under such chapters, any vehicle of the dolly type, such as a trailer dolly, designed or used for the conversion of a semitrailer into a trailer.

~~(K)~~ (L) "Travel trailer" means a vehicular portable structure built on a chassis and not exceeding a gross weight of four thousand five hundred pounds when factory equipped for the road or an overall length of thirty feet and designed to be used as a temporary dwelling for travel, recreational, and vacation uses.

~~(I)~~ (M) "Pneumatic tires" means tires of rubber and fabric or tires of similar material, inflated with air.

~~(M)~~ (N) "Solid tires" means tires of rubber or similar elastic material not dependent upon confined air for support of the load.

~~(N)~~ (O) "Solid tire vehicle" means any vehicle equipped with two or more solid tires.

~~(O)~~ (P) "Farm machinery" means all machines and tools used in the production, harvesting, and care of farm products, including trailers used to transport agricultural produce or agricultural production materials between a local place of storage or supply and the farm when drawn or towed on a public road or highway at a speed of twenty-five miles per hour, or less.

~~(P)~~ (Q) "Owner" includes any person, firm, or corporation other than a manufacturer or dealer having title to a motor vehicle, except that in sections 4505.01 to 4505.19 [inclusive] of the Revised Code, it includes in addition manufacturers and dealers.

~~(Q)~~ (R) "Manufacturer" and "dealer" include all persons, firms, and corporations regularly engaged in the business of manufacturing, selling, displaying, offering for sale, or dealing in motor vehicles, at an established place of business which is used exclusively for the purpose of manufacturing, selling, displaying, offering for sale, or dealing in motor vehicles. A place of business which is used for manufacturing, selling, displaying, offering for sale, or dealing in motor vehicles shall be deemed to be used exclusively for those purposes even though farm machinery is sold or displayed for sale thereat, or even though repair, accessory, gasoline and oil, storage, parts, service, or paint departments are maintained thereat, or, in any county having a population of less than seventy-five thousand persons at the last federal census, even though a department in a place of business is used to dismantle, salvage, or rebuild motor vehicles by means of used parts, if such departments are operated for the purpose of furthering and assisting in the business of manufacturing, selling, displaying, offering for sale, or dealing in motor vehicles. Places of business or departments, in a place of business used to dismantle, salvage, or rebuild motor vehicles by means of using used parts are not considered as being maintained for the purpose of assisting or furthering the manufacturing, selling, displaying, and offering for sale or dealing in motor vehicles.

~~(R)~~ (S) "Operator" includes any person who drives or operates a motor vehicle upon the public highways.

~~(S)~~ (T) "Chauffeur" means any operator who operates a motor vehicle, other than a taxicab, as an employee for hire; or any operator whether or not the owner of a motor vehicle, other than a taxicab, operating such vehicle for transporting, for gain, compensation, or profit, either persons or property owned by another.

~~(T)~~ (U) "State" includes the territories and federal districts of the United States, and the provinces of the Dominion of Canada.

~~(U)~~ (V) "Public roads and highways" for vehicles includes all public thoroughfares, bridges, and culverts.

~~(V)~~ (W) "Manufacturer's number" means the manufacturer's original serial number affixed to or imprinted upon the chassis or other part of the motor vehicle.

~~(W)~~ (X) "Motor number" means the manufacturer's original number affixed to or imprinted upon the engine or motor of the vehicle.

~~(X)~~ (Y) "Bill of sale" means the written statement or document of transfer or conveyance required prior to January 1, 1938, to be executed and delivered by the corporation, partnership, association, or person selling, giving away, transferring, or passing title to a motor vehicle.

4511.01 Definitions.

Sec. 4511.01. As used in sections 4511.01 to 4511.80 [inclusive] and 4511.99 of the Revised Code:

(A) "Vehicle" means every device in, upon, or by which any person or property may be transported or drawn upon a highway, except devices moved by power collected from overhead electric trolley wires, or used exclusively upon stationary rails or tracks, and except devices other than bicycles moved by human power.

(B) "Motor vehicle" means every vehicle propelled or drawn by power other than muscular power or power collected from overhead electric trolley wires, except road rollers, traction engines, power shovels, power cranes, and other equipment used in construction work and not designed for or employed in general highway transportation, hole-digging machinery, well-drilling machinery, ditch-digging machinery, farm machinery, trailers used to transport agricultural produce or agricultural production materials between a local place of storage or supply and the farm when drawn or towed on a public road or highway at a speed of twenty-five miles per hour, or less, threshing machinery, hay-baling machinery, and agricultural tractors and machinery used in the production of horticultural, floricultural, agricultural, and vegetable products.

(C) "Motorcycle" means every motor vehicle, other than a BICYCLE WITH A MOTOR AS PROVIDED IN DIVISION (G) OF THIS SECTION OR A tractor, having a saddle for the use of the operator and designed to travel on not more than three wheels in contact with the ground, including, but not limited to, motor vehicles known as "motor-driven cycle," "motor bicycle," "motor scooter," "bicycle with motor attached," or "motorcycle" without regard to weight or brake horsepower.

(D) "Emergency vehicle" means vehicles of salvage corporations organized under sections 1709.01 to 1709.07 [inclusive] of the Revised Code, emergency vehicles of municipal or county departments or public utility corporations when identified as such as required by law, the director of [highways] HIGHWAY SAFETY, or local authorities, and motor vehicles when commandeered by a police officer.

(E) "Public safety vehicle" means ambulances, motor vehicles used by public law enforcement officers or other persons sworn to enforce the criminal and traffic laws of the state, and the vehicles used by fire departments, including motor vehicles when used by volunteer firemen responding to emergency calls in the fire department service when identified as required by the director of highway safety.

(F) "School bus" means every bus designed for carrying more than nine passengers which is owned by a public, private, or governmental agency or institution of learning and operated for the transportation of children to or from a school session or a school function, or owned by a private person and operated for compensation for the transportation of children to or from a school session or a school function; provided "school bus" does not include a bus operated by a municipally owned transportation system, a mass transit company operating exclusively within the territorial limits of a municipal corporation, or within such limits and the territorial limits of municipal corporations immediately contiguous to such municipal corporation, nor a common passenger carrier certified by the public utilities commission unless such bus is devoted exclusively to the transportation of children to and from a school session or a school function.

(G) "Bicycle" means a two-wheel vehicle propelled by human power, having a tandem arrangement of wheels equipped with tires either of which is over twenty inches in diameter; AND INCLUDES ANY SUCH VEHICLE FITTED WITH A HELPER MOTOR RATED LESS THAN ONE BRAKE HORSEPOWER TRANSMITTED BY FRICTION AND NOT BY GEAR OR CHAIN, WHICH PRODUCES ONLY ORDINARY PEDALING SPEEDS UP TO A MAXIMUM OF TWENTY MILES PER HOUR.

(H) "Commercial tractor" means every motor vehicle having motive power designed or used for drawing other vehicles and not so constructed as to carry any load thereon, or designed or used for drawing other vehicles while carrying a portion of such other vehicles, or the load thereon, or both.

(I) "Agricultural tractor" means every self-propelling vehicle designed or used for drawing other vehicles or wheeled machinery but having no provision for carrying loads independently of such other vehicles, and used principally for agricultural purposes.

(J) "Truck" means every motor vehicle, except trailers and semitrailers, designed and used to carry property.

(K) "Bus" means every motor vehicle designed for carrying more than nine passengers and used for the transportation of persons, and every motor vehicle, automobile for hire, or funeral car, other than a taxicab, designed and used for the transportation of persons for compensation.

The chief shall employ, subject to the approval of the director of natural resources, field assistants and such other employees as are necessary for the performance of the work prescribed by Chapters 1503. and 1513. of the Revised Code, and for the performance of the other work of said division, prescribe their duties, and fix their compensation in accordance with such schedules as are provided by law for the compensation of state employees.

All employees of the division, unless specifically exempted by law, shall be employed subject to the classified civil service laws in force at the time of employment.

1503.99 Interim penalties.

Sec. 1503.99. (A) Whoever violates section 1503.11 of the Revised Code shall be fined not less than ten nor more than one hundred dollars.

(B) Whoever violates section 1503.12 of the Revised Code shall be fined not more than twenty-five dollars.

(C) Whoever violates section 1503.15 of the Revised Code shall be fined not more than one hundred dollars.

(D) Whoever violates section 1503.18 of the Revised Code shall be fined not more than five hundred dollars.

(E) Whoever violates section 1503.19 of the Revised Code shall be fined not more than one thousand dollars or imprisoned not more than six months, or both.

(F) Whoever violates section 1503.20 or 1503.21 of the Revised Code shall be fined not more than two hundred dollars.

(G) WHOEVER VIOLATES SECTION 1503.01 OF THE REVISED CODE SHALL BE FINED NOT LESS THAN TWENTY NOR MORE THAN ONE HUNDRED DOLLARS.

THIS SECTION IS AN INTERIM SECTION EFFECTIVE UNTIL JANUARY 1, 1974.

SECTION 2. That existing sections 1503.01 and 1503.99 of the Revised Code are hereby repealed.

SECTION 3. That section 1503.99 of the Revised Code as amended by Am. Sub. H. B. 511 of the 109th General Assembly, be amended to read as follows, effective January 1, 1974:

1503.99 Penalties.

Sec. 1503.99. (A) Whoever violates section 1503.11 or 1503.12 of the Revised Code is guilty of a minor misdemeanor.

(B) Whoever violates section 1503.18 of the Revised Code shall be fined not more than five hundred dollars.

(C) Whoever violates section 1503.20 or 1503.21 of the Revised Code shall be fined not more than two hundred dollars.

(D) WHOEVER VIOLATES SECTION 1503.01 OF THE REVISED CODE SHALL BE FINED NOT LESS THAN TWENTY NOR MORE THAN ONE HUNDRED DOLLARS.

SECTION 4. That existing section 1503.99 of the Revised Code, as amended by Am. Sub. H. B. 511 of the 109th General Assembly, and section 1503.99 of the Revised Code, as amended by Section 1 of this act, are hereby repealed, effective January 1, 1974.

Introduced by: Meshel et al.

AM. SEN. BILL 108

Eff. 11-21-73

Passed 7-27-73 Approved by Governor 8-21-73
Filed 8-21-73 File No. 91

To amend sections 4501.01 and 4511.01 of the Revised Code to prevent certain motor-equipped bicycles from being classified as motor vehicles.

Be it enacted by the General Assembly of the State of Ohio:

SECTION 1. That sections 4501.01 and 4511.01 of the Revised Code be amended to read as follows:

4501.01 Definitions.

Sec. 4501.01. As used in Chapters 4501., 4503., 4505., 4507., 4509., 4511., 4513., 4515., and 4517. of the Revised Code, and in the penal laws, except as otherwise provided:

(A) "Vehicles" means everything on wheels or runners, except vehicles operated exclusively on rails or tracks or from overhead electric trolley wires and vehicles belonging to any police department, municipal fire department, volunteer fire department, or salvage company organized under the laws of this state or used by such department or company in the discharge of its functions.

(B) "Motor vehicle" means any vehicle propelled or drawn by power other than muscular power or power collected from overhead electric trolley wires, except road rollers, traction engines, power shovels, power cranes, and other equipment used in construction work and not designed for or employed in general highway transportation, well drilling machinery, ditch digging machinery, farm machinery, trailers used to transport agricultural produce or agricultural production materials between a local place of storage or supply and the farm when drawn or towed on a public road or highway at a speed of twenty-five miles per hour, or less, threshing machinery, hay baling machinery, corn sheller, hammermill and agricultural tractors and machinery used in the production of horticultural, agricultural, and vegetable products.

(C) "Agricultural tractor" and "traction engine" mean any self-propelling vehicle designed or used for drawing other vehicles or wheeled machinery but having no provisions for carrying loads independently of such other vehicles, and used principally for agricultural purposes.

(D) "Commercial tractor" except as defined in division (C) of this section means any motor vehicle having motive power designed or used for drawing other motor vehicles, or designed or used for drawing another motor vehicle while carrying a portion of such other motor vehicle or its load, or both.

(E) "Passenger car" means any motor vehicle designed and used for carrying not more than nine persons.

(F) "Motor bus" means any motor vehicle having motor power designed and used for carrying more than nine passengers.

(G) "Commercial car" means any motor vehicle having motor power designed and used for carrying merchandise or freight, or used as a commercial tractor.

(H) "BICYCLE" MEANS A TWO-WHEEL VEHICLE PROPELLED BY HUMAN POWER, HAVING A TANDEM ARRANGEMENT OF WHEELS EQUIPPED WITH TIRES EITHER OF WHICH IS OVER TWENTY INCHES IN DIAMETER; AND INCLUDES ANY SUCH VEHICLE FITTED WITH A HELPER MOTOR RATED LESS THAN ONE BRAKE HORSEPOWER TRANSMITTED BY FRICTION AND NOT BY GEAR OR CHAIN, WHICH PRODUCES ONLY ORDINARY PEDALING SPEEDS UP TO A MAXIMUM OF TWENTY MILES PER HOUR.

(I) "Trailer" means any vehicle without motive power designed or used for carrying property or persons wholly on its own structure and for being drawn by a motor vehicle, and includes any such vehicle when formed by or operated as a combination of a semitrailer and a vehicle of the dolly type such as that commonly known as a trailer dolly, and a vehicle used to transport agricultural produce or agricultural production materials between a local place of storage or supply and the farm when drawn or towed on a public road or highway at a speed greater than twenty-five miles per hour, except a house trailer.

(J) "House trailer" means any self-propelled and non-self-propelled vehicle so designed, constructed, reconstructed, or added to by means of accessories in such manner as will permit the use and occupancy thereof for human habitation, when connected to indicated utilities, whether resting on wheels, jacks, or other temporary foundation and used or so constructed as to permit its being used as a conveyance upon the public streets or highways.

(K) "Semitrailer" means any vehicle of the trailer type without motive power so designed or used with another and separate motor vehicle that in operation a part of its own weight or that of its load, or both, rests upon and is carried by such other

INTRODUCED BY
 Rept. Shirley H. Miller

 _____, read first time and
 referred: PUBLIC SAFETY

DIGEST

Amends IC 1971, 9-4-1-2 concerning motor vehicles; includes vehicles which have helper motors rated less than one (1) brake horsepower within the definition of "bicycle"; gives local government authorities the power to regulate such bicycles.

A BILL FOR AN ACT to amend IC 1971, 9-4-1 concerning motor vehicles.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF INDIANA:

- 1 SECTION 1. IC 1971, 9-4-1-2, as amended by Acts 1973,
 2 P.L. 81, SECTION 1 is amended to read as follows: Sec. 2.
 3 (a) Vehicle. Every device in, upon, or by which any person
 4 or property is or may be transported or drawn upon a
 5 highway, except devices moved by human power or used
 6 exclusively upon stationary rails or tracks.
 7 (b) Motor Vehicle. Every vehicle which is
 8 self-propelled and every vehicle which is propelled by
 9 electric power obtained from overhead trolley wires, but not
 10 operated upon rails.
 11 (c) Motorcycle. Every motor vehicle having a saddle
 12 for the use of the rider and designed to travel on not more
 13 than three (3) wheels in contact with the ground but
 14 excluding a tractor or a therapeutic bicycle.
 15 (d) Authorized Emergency Vehicle. Vehicles of the fire
 16 department, police vehicles, and such ambulances as are
 17 operated by or for health and hospital corporations pursuant

H-1476

1 to IC 1971, 16-12-21: Provided, however, That ambulances
2 and other vehicles which are owned by persons, firms or
3 corporations other than hospitals, and are used in emergency
4 service, may be designated as emergency vehicles if such
5 vehicles are authorized to operate as such by the public
6 service commission of Indiana as herein provided. The
7 public service commission of Indiana is hereby authorized
8 and empowered to designate and authorize the operation of
9 such other emergency vehicles pursuant to such rules and
10 regulations as the said commission may prescribe.

11 (e) School Bus. Every motor vehicle owned by a public
12 or governmental agency and operated for the transportation
13 of children to or from school or privately owned and
14 operated for compensation for the transportation of children
15 to and from school.

16 (f) Bicycle. Any foot-propelled vehicle, irrespective
17 of the number of wheels in contact with the ground, to
18 include any two (2) wheeled, foot-propelled vehicle with a
19 helper motor rated less than one (1) brake horsepower.

20 (g) Private Bus. Every motor vehicle, designed and
21 constructed for the accommodation of passengers and which is
22 used for transportation of passengers by a religious
23 organization, fraternal, charitable, benevolent, or youth
24 association. The term "private bus" shall include either
25 the chassis or the body of the vehicle, or shall include
26 both the body and the chassis of any such vehicles
27 Provided, That any vehicle having the seating capacity of
28 ten (10) persons or less shall not be deemed to be a private

LC 5 1182

and stand in the place of any and all other penalties 120
 for delinquency in the registration provided for in this 121
 Section on or before the first day of April in each 122
 4 year: Provided, further, that the provisions of this 123
 5 Section shall not apply to motor vehicles, trailers, 124
 6 tractors or motorcycles owned by the State of Georgia or 125
 7 any municipality or other political subdivision of this 126
 8 State and used exclusively for governmental functions: 127
 9 Provided, further, that the provisions of this Section 128
 10 shall not apply to any trailer that has no springs and 129
 11 is being employed in hauling unprocessed farm products
 12 to their first market destination, nor to any trailer 130
 13 that has no springs, which is pulled from a tongue, and 131
 14 used primarily to transport fertilizer to the farm: 132
 15 Provided, further, that the provisions of this Section 133
 16 shall not apply to a motorized cart as defined by Code 134
 17 Section 68-101.1 of this Code Title or to a motorized 135
 18 bicycle as defined by Code Section 68-101.2 of this Code 136
 19 Title."

21 Section 3. This Act shall become effective upon 139
 22 its approval by the Governor or upon its becoming law 140
 23 without his approval. 141

25 Section 4. All laws and parts of laws in conflict 144
 26 with this Act are hereby repealed. 145

STATE OF NEW YORK

S. 1371

A. 1418

1975-1976 Regular Sessions

370

SENATE—ASSEMBLY

January 22, 1975

IN SENATE—Introduced by Sen. BELLAMY—read twice and ordered printed, and when printed to be committed to the Committee on Transportation

IN ASSEMBLY—Introduced by Mr. BLUMENTHAL—read once and referred to the Committee on Transportation

AN ACT

to amend the vehicle and traffic law, in relation to allowing vehicles too slow for all highways in the state to be operated on low speed highways

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

1 Section 1. Section one hundred two of the vehicle and traffic law,
2 as amended by chapter five hundred of the laws of nineteen hundred
3 seventy-three, is hereby amended to read as follows:

4 § 102. Bicycle. Every two or three wheeled device upon which a
5 person or persons may ride, propelled by human power, *or a motor of*
6 *one horsepower or less*, through a belt, a chain, *friction drive* or gears
7 with such wheels in a tandem or tricycle, except that it shall not

EXPLANATION — Matter in *italics* is new; matter in brackets [] is old law to be omitted.

1 include such a device having solid tires and intended for use only on
2 a sidewalk by pre-teenage children.

3 § 2. Section one hundred twenty-five of such law, as last amended
4 by chapter eight hundred thirty-nine of the laws of nineteen hundred
5 seventy-three, is hereby amended to read as follows:

6 § 125. Motor vehicles. Every vehicle operated or driven upon a
7 public highway which is propelled by any power other than muscular
8 power, except (a) electrically-driven invalid chairs being operated or
9 driven by an invalid, (b) vehicles which run only upon rails or tracks,
10 [and] (c) snowmobiles as defined in article forty-seven of this
11 chapter, and (d) bicycles propelled by engines of one horsepower or
12 less being operated by a person at least sixteen years of age. For the
13 purposes of title four, the term motor vehicle shall exclude fire and
14 police vehicles. For the purposes of titles four and five the term motor
15 vehicles shall exclude farm type tractors used exclusively for
16 agricultural purposes, or for snow plowing, other than for hire, farm
17 equipment, including self-propelled machines used exclusively in
18 growing, harvesting or handling farm produce, and self-propelled
19 caterpillar or crawler-type equipment while being operated on the
20 contract site.

21 § 3. Section twelve hundred thirty-two of such law is hereby
22 amended by adding thereto a new subdivision, to be subdivision (c),
23 to read as follows:

24 (c) *No person under the age of sixteen years shall operate a bicycle,*
25 *propelled by other than human power.*

26 § 4. This act shall take effect on the first day of June next
27 succeeding the year in which it shall have become a law.

28



VESPA OF AMERICA CORPORATION

322 E. GRAND AVE. / SO. SAN FRANCISCO, CA 94080 / PHONE 415-871-2470

372

May 1, 1975

State of Nevada
Committee on Transportation

My name is William Burkett, representing Vespa of America. We are the importors and distributors for the United States of the Piaggio products from Italy. Vespa Motorscooters have been distributed in the West since 1959--for over 15 years. In addition we have been bringing in the "Ciao" which is a typical moped, "MOTORIZED PEDAL BICYCLE", or "bicycle with a helper motor", since 1968.

Senate Bill 174 in your committee refers to "Motor Assisted Bicycles", or mopeds, and I would like to offer testimony to this committee with the sole purpose of better acquainting you with this new vehicle concept. "Motor Assisted Bicycle" is such an unfamiliar term that people imagine anything from a "mini-bike" to a large Harley Davidson Motorcycle. In Nevada it has been virtually unseen and unknown as mopeds could not be registered until early this year and then only as motorcycles. In Europe there are over 13 million mopeds or motor assisted bicycles in use today. During 1973 over 2 million alone were sold.

The Piaggio Technical and Commercial Departments made a report to the Second Annual International Congress on Automotive Safety held in San Francisco in 1973. Its purpose was to introduce the motor assisted bicycle concept as a possible solution to the problems of road safety and practicability, noise and air pollution. The report provides some very interesting information and statistics. We urge you to look over this material and we will try to answer any questions that you might have.

Some states, such as Ohio, Michigan, North Carolina, South Carolina and Virginia, have already passed legislation establishing a separate category for mopeds due to their limited performance, light weight, low speed--which is less than that of a 10-speed bicycle--, their low acceleration, low power, simplicity in design and ease of operation. In addition to your own state of Nevada; Arizona, Georgia, Indiana, and New York have similar legislation pending.

The Federal Department of Transportation's National Highway Traffic Safety Administration which governs the safety importation requirements

for motor vehicles has modified the requirements for mopeds due to their limited speed and weight. They have eliminated the requirements for directional signals on vehicles up to 30 M.P.H. or less and have reduced illumination requirements of the lighting system.

Needless to say, all levels of the government recognize the need for fighting inflation and economizing our National Resources. The "Motor Assisted Bicycle" is one possible answer to such problems of:

Pollution- Both air and that of noise

Traffic Congestion - Parking congestion as well

Fuel Economy- Mopeds get from 150 to 160 mpg

Health- Even more important as we get older, older people can pedal the mopeds for exercise and turn the motor to ride back home so as not to over-fatigue themselves...

As a point of fact the state of Indiana has recognized the motor assisted bicycle as a therapeutic bicycle and is exempt from licensing.

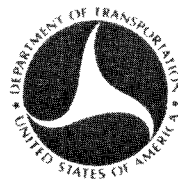
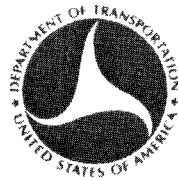
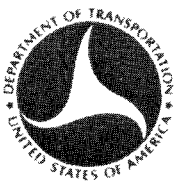
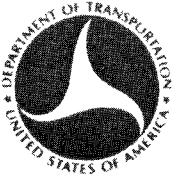
In studying the buyers' records of mopeds sold by our dealers we find that almost every walk of life is represented--from attorneys to zoologists, while the average age is 41.3 years old. The primary reasons for purchase consist of economical transportation, ease of operation, recreational use, small size, light weight, and low cost.

The moped is not necessarily a youth-only vehicle--young people often want noisy, high powered, and fast vehicles---not mopeds.

The typical moped costs approximately 1/10 that of a small economy car to purchase and to run with little or no maintenance.

There are estimated to be approximately 20,000 mopeds in the U.S.A. The best way to really acquaint yourself with a typical moped is for you to see it and try it out. I have one available and would like to show it to you in the parking lot behind the Legislature Building.

For the sake of fighting pollution, inflation, and conserving our fuel resources, we urge this committee on transportation to support the passing of Senate Bill 174 to the State Assembly.



technical paper

SECOND INTERNATIONAL ³⁷⁴ CONGRESS ON AUTOMOTIVE SAFETY

Theme
*Motorcycle and
Recreational
Vehicle Safety*

Paper No. 73053

A NEW OPPORTUNITY FOR SAFETY &
ECOLOGY – PIAGGIO CIAO MOPEDS

Technical & Commercial Departments,
Piaggio and C., S.p.a.

July 16–18, 1973



Hotel St. Francis
San Francisco, California, USA

Abstract

375

Our report is intended not so much to propose technical modifications to existing vehicles, but rather to propose the Moped as a possible solution to the problems of road safety and practicability, noise and air pollution.

A survey is made of the diffusion of mopeds in Europe, of their markets, their popularity, and of the special laws and standards provided by a number of European countries. It is moreover proved that mopeds are the safest and most economical vehicles of all, and that the noise and pollution they cause are negligible.

More specifically, Piaggio's Ciao moped is analyzed in its technique and constructive features, which concur to make it the typical moped as it is unanimously considered in Europe.

In conclusion, and in view of the fact that no special laws in this matter are provided for in the United States, with the exception of Michigan and Connecticut, it is proposed that Federal and State authorities consider the possibility of issuing special laws and standards for mopeds, as in Europe, to make easier their launching and thus contribute to the solution of many problems in connection with fuel consumption, road practicability, safety and ecology.

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Foreword

This paper is intended to disclose the great diffusion of mopeds.

In its accepted meaning, the moped is but a bicycle, operated by a helper engine. There are on the road more than 13 million mopeds in the most industrialized European countries, out of approximately 16 million two-wheeled vehicles. (In US the two-wheeled vehicles on the road are about 5,000,000).

This remarkable figure is mainly due to the fact that European law givers have chosen to adopt special standards for this vehicle, quite different from the laws in force for other two-wheeled motor vehicles, which are heavier and characterized by higher speed.

The reason for this preference is to be found in the fact that, after a number of tests, the moped has proved to be safe and totally reliable.

By our report, we hope to contribute to the theme of this congress: "Motorcycle and Recreational vehicle safety", not by suggesting technical modifications to existing vehicles, but rather by presenting a typical vehicle as an alternative solution.

Indeed, we believe - and will try to demonstrate in the course of this survey - that the moped can solve many safety, fuel consumption, noise and pollution problems.

They are obviously partial solutions, and we do not intend to go as far as to say that the moped is a perfect alternative, particularly because it cannot be used on highways or similar roads.

We strongly believe that it would be very useful for law-givers to objectively study the problem and consider the possibility of issuing laws and standards for mopeds along the European lines.

We are in fact convinced that only thus our contributions and proposals can lead to the best results.

Definition of "moped"

In this report, the term "moped" is used in its largest meaning, including all two-wheeled vehicles which can be characterized by the following definition: "Moped = bicycle equipped with a helper engine, having a piston displacement lower than 50 cc."

Laws and standards in Europe

In Europe, the existing law provisions on moped traffic are as follows:

Table no. 1

(January 1, 1973)

	Piston displac. cc.	H.P.	Km. p.h.	Vehicle weight in running condit.	Compulsory pedals	Compulsory insu- rance	Noise: DB (A)	Age
Italy	50	1,5	40	16+	No	No	83	14
Switzerland	50	0,8	30	42	Yes	Yes	70	14
Germany	50	=	40	=	No	Yes	73	16
France	50	=	45	=	Yes	Yes	73	14
Belgium	50	=	40	=	No	Yes	75	16°
Austria	50	=	40	=	No	Yes	80	16
Netherland	50	=	40	=	Yes	Yes	73	16

Notes:

- + For Italy the figure refers to the engine weight
- ° 18 years if with passenger

It is interesting to note that, although differing in some details, all highly industrialized countries have chosen a favorable regulation for the moped and consider it more a bicycle than a real motor-vehicle, guidable without number plate, stop lights and driving licence.

Table no. 2

Registrations of mopeds and conventional motorcycles in some European countries in 1971.*

	Mopeds	Motorcycles
France	803,842	45,400
Germany	263,140	16,231
Netherlands	249,603	5,100
Belgium	35,000	4,100
Austria	32,630	1,271
Switzerland	106,962	6,182
Italy	536,359	63,927
TOTAL	2,027,536	142,211

* The above are and must be taken as approximate figures; their purpose is to give an idea of the size and trends of the markets considered.

Table no. 3

Number of two-wheeled vehicles on the road in 1971 (in some European countries)

	Number of mopeds	Number of motor-cycles
France	6,396,030	449,107
Germany	1,102,525	201,452
Netherlands	1,945,000	55,000
Belgium	403,151	46,705
Austria	482,945	113,133
Switzerland	631,762	703,362
Italy	2,399,545	1,115,845
TOTAL	13,360,958	2,684,604

The European Community Moped

On account of mopeds growing popularity throughout Europe, and more particularly throughout the EEC area, the European Communities' Committee (The Common Market's executive body) has studied and prepared a plan for more uniformity in the member countries' standards

for approved mopeds.

By it, the following Community definition of a "moped" has been arrived at:

"two-wheeled vehicle, equipped with a thermal motor for propulsion, characterized in that the maximum piston displacement is 50 cc. and in that the maximum speed does not exceed 45 Km/h, when newly built".

Analysis of a typical moped: Piaggio's CIAO

In this chapter, we shall analyse the technical and constructive features of a modern moped, the Ciao, which may well be considered as the term of comparison of the many European mopeds on the market to-day.

In order to have the vehicle suit all Clients' requirements, Piaggio have provided for a number of versions of the "Ciao" moped, beeing the difference in the suspensions and/or transmission gearings.

The gear ratio may be constant or automatically varying, according to the local orography, so as to climb 10 or 15% gradients respectively, without pedaling.

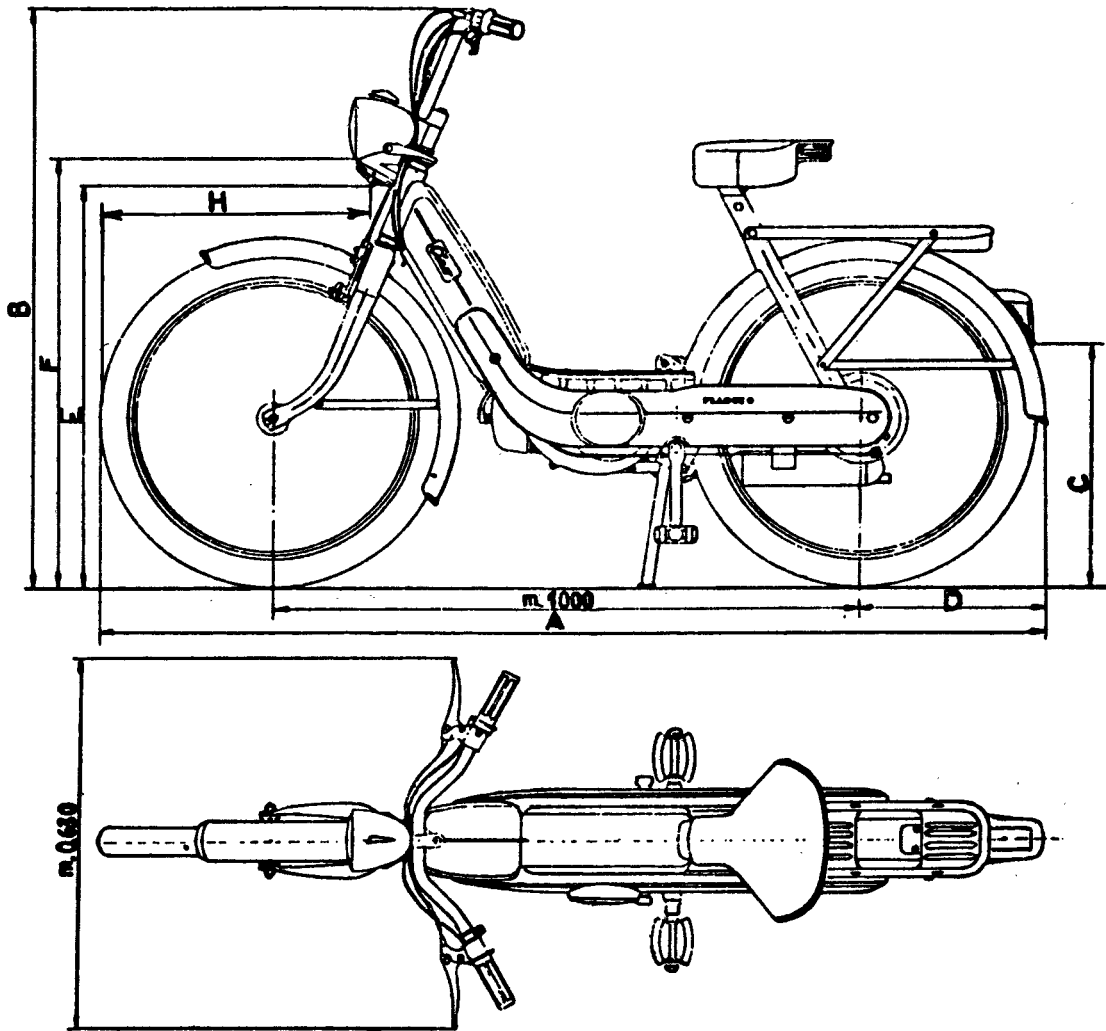
Engine and frame's position

The Ciao moped is operated by an engine housed in the low central part of the frame, in the best position to ensure safety and stability.

The engine is housed between two plate brackets, into which the lower part of the frame is split.

NOTE: PIAGGIO & C., manufacturers of "Ciao", are the biggest producers of two-wheeled vehicles in Europe, and among the most important all over the world in the two-stroke motor field. Piaggio's factories in Italy have a total area of 601,886 mq., of which 218,938 are sheltered, their staff numbers over 8,000.

In 1972, PIAGGIO manufactured over 400,000 vehicles, of which 50% for export.



Picture no. 1 - Plan and front view of the Ciao moped

- A = Total length: m. 1.615
- B = Max. height: m. 1.040
- C = Tail lamp height: m. 0.425
- D = Rear overhang: m. 0.320

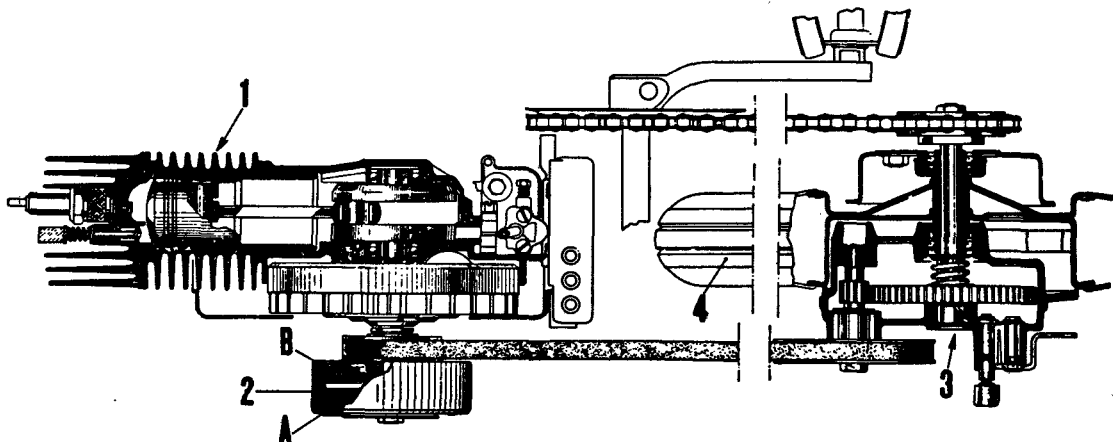
Head lamp ϕ 95 and electric horn { height E: m. 0.730
 height F: m. 0.750
 position H: m. 0.475

Rectangular shaped headlamp and electric horn { height E: m. 0.775
 height F: m. 0.890
 position H: m. 0.455

This arrangement allows for reduced height, the cradle frame being quite open and easily accessible, and at the same time providing for a lot of safety space between the engine and the ground.

The space between the engine-housing brackets is closed on the top with a plastic cover, so as to keep the engine separated from the outside, and hide it completely from view.

The front end of the frame is used as fuel tank. The frame's irremovably welded structure is completed by a forward-bent member, supporting the saddle and a strut, the latter being a force element as well as an extension of the rear fender. Parcel grid and rear fender are bolted.



Picture no. 2 - Engine and transmission diagram for mopeds "Ciao".

1. Engine group - 2. Automatic clutch group: A) Centrifugal weights for transmission motion from engine; B) Centrifugal weights for starting - 3. Rear hub and reduction gear unit - 4. Rear drive wheel.

The engine-wheel transmission takes place through a trapeze-shaped belt combined with a reduction gear unit embodied in the rear wheel hub.

The pedal transmission, which is quite independent, is achieved by means of a sprocket with crank, roller chain and free wheel sprocket.

The pedals' transmission chain and the trapeze-shaped belt are comprised inside the brackets into which the frame is split.

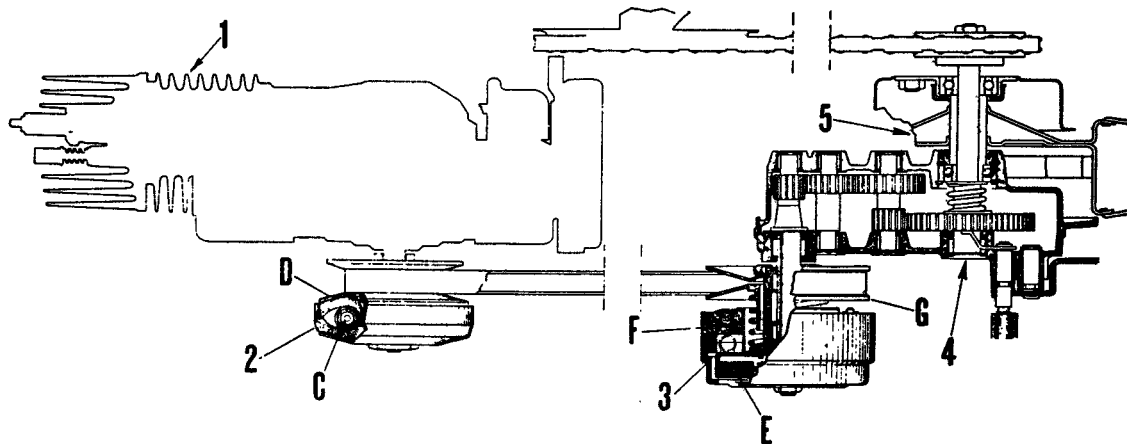
Therefore, said brackets, together with two easily removable plastic side covers, are used also as close containers for both engine and pedals' transmissions.

The advantages of an engine transmission by means of belt and gears are silence and elasticity. The belt being protected against dust by the side cover and the incorporated reduction gear being enclosed in oil sumps are a guarantee of a long life and unchanged performance.

More particularly, the typical drawbacks of chain transmission - noise and dust and mud wear - are removed.

In the "Ciao" moped, the pedal transmission is the only one chain transmission; it goes without saying that it works only when pedals are the choice, and it is in any case sheltered by the right side plastic cover.

The engine-wheel transmission is completed by a double automatic starting and running clutch, practically undestroyable, keyed to the driving shaft in the single gear models and to the belt propeller shaft in models having a centrifugal speed governor.



Picture no. 3 - Transmission diagram for Ciao mopeds with automatic speed governor.

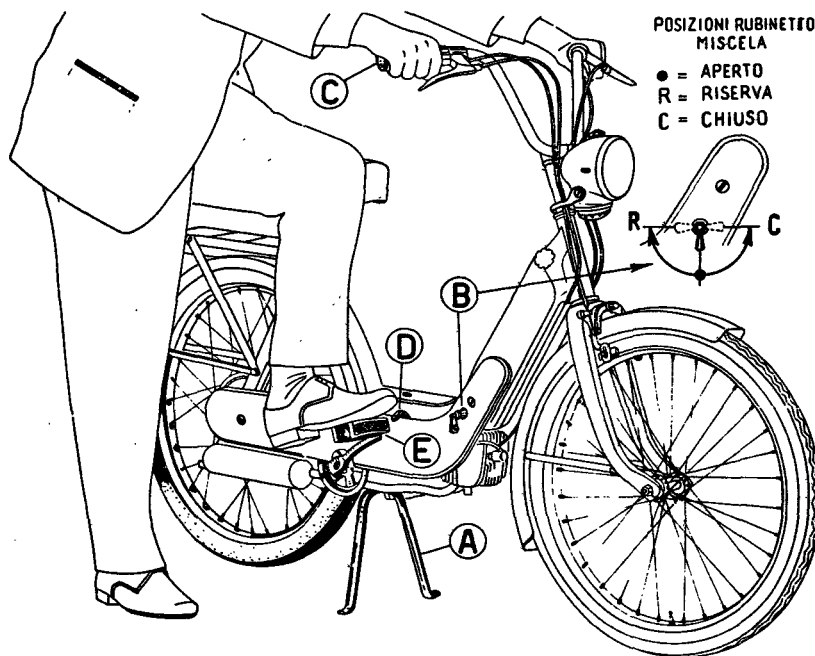
1 - 5. Engine and wheel groups like those of fig. no. 2 - 2. Automatic speed governor: C) Centrifugal weights of the governor; D) Expanding type pulley - 3. Automatic clutches group: E) Centrifugal weights for starting - F) Centrifugal weights for transmission motion from engine; G) Expanding type pulley - 4. Rear hub and reduction gear unit.

In these latter models, the pulleys on which the trapeze-shaped belt is, would have a variable diameter, with centrifugal governor control on the driving shaft; the gear reduction unit is equipped with a double gearing down so as to obtain the required ratios.

The engine starter

All Ciao models are started by pedalling the machine till 4-5 Kms./h are obtained, when the starting clutch is automatically actuated.

This operation is made easier by opening the engine decompression valve, by means of a handle bar lever. It can be made also when the vehicle is still on the stand, with the rear wheel off the ground.



Picture no. 4 - Ciao moped: operations for starting

A. Put the vehicle on stand, the rear wheel must be off the ground -
B. Open fuel tap (turn the lever as indicated on fig.) - C. Throttle twist grip at idling speed - D. Pull down the starter control lever (with cold engine) - E. Act on the pedal.

Wheels - Brakes - Controls - Front spring suspension

The wheel section is 2" x 19". The rear brake drum diameter is 135 mm., the front brake drum diameter is 90 mm.

The brake throttles are placed on the handlebars. Beside the two brake controls, similar to those of a conventional bicycle, the handlebars are equipped with a gas control grip and a decompression valve control lever.

For cold starts, the choke is controlled by a lever projecting from the lower frame, to be operated before the start, which will be automatically disconnected when turning up the gas.

On the left side of the vehicle, in correspondence with the rear wheel hub, is the engine transmission disconnecting knob, so that the "Ciao" can be used as a regular bicycle; to connect the transmission, free the knob by acting on the lever.

The front fork spring suspension consists of wishbones and helical springs. In the "Superconfort" version, the rear suspension is featured by a sturdy spring device under the saddle in both single and speed change gear models.

Performances

Ciao's performances - acceleration, fuel consumption and noiselessness - are the result of Piaggio's long experience in the field of two-stroke engines (including the 50 cc. ones), and are guaranteed by the following engine characteristics: piston displacement 49,77 cc., fuel: a gasoline-oil mixture (2% oil) with asymmetric input and rotary distribution; the driving shaft is mounted on ball bearings, roller cage and forced cooling system - the latter being a rare feature in a moped.

The engine is equipped with a high torque with low number of revolutions which, although the speed is limited, allows for a good pick-up.

This is a remarkable advantage in city traffic, which requires slowing down, stopping and starting again at traffic lights.

The time needed even to start the vehicle on its stand is indeed very short.

Furthermore, the engine's running is quite resilient and "Ciao" was designed and built so as to be as noiseless as possible.

The models equipped with an automatically variable transmission ratio differ from the single gear ones because of their capability to climb steeper gradients without pedaling.

Single gear models can climb 10% gradients, which is quite sufficient for city and country traffic.

The models equipped with automatically variable transmission ratio can climb even 15% gradients, so as to cover even the steepest hill or mountain roads.

Fuel consumption is quite limited: as an average, more than 70 Kms. with one liter (1/4 gal.) of gasoline - oil mixture. This is another advantage to be added to the engine's remarkable performance.

The moped as a safe vehicle

On account of its high traffic rate, and of the popularity of mopeds, Italy is a clear example of the greater safety afforded by motorcycles in general - and mopeds in particular - as compared to other transportation means.

In 1971, the mopeds in Italy numbered approximately 2.4 million (about 15% of all vehicles on the road), motorcycles were approximately 1.2 million, whilst 4-wheels motorvehicles were 12.4 million.

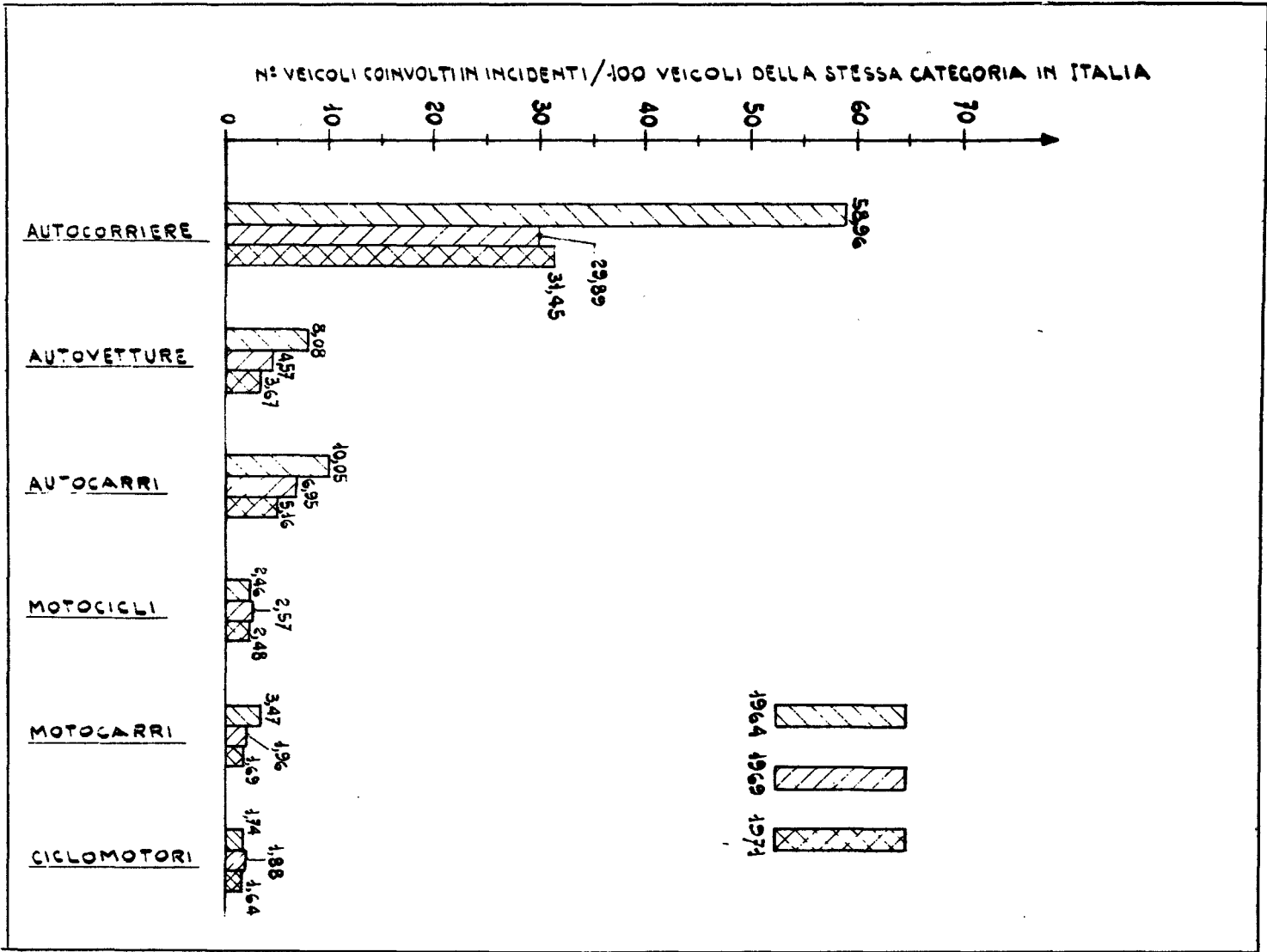
By making a percentage comparison of the road accidents with vehicles of the various categories, it is possible to establish their comparative dangerousness. See table no. 5.

Said percentages, for the years 1964, 1969 and 1971, are drawn from data supplied by the Italian Central Statistics Institute.

Such a comparison clearly points out that dangerousness is directly proportional to the speed and weight of the various types of vehicles. Mopeds appear to be the least dangerous of all.

According to this index, mopeds are between 1.52 and 1.81 times safer than motorcycles, and between 1.68 and 3.08 safer than motor-cars.

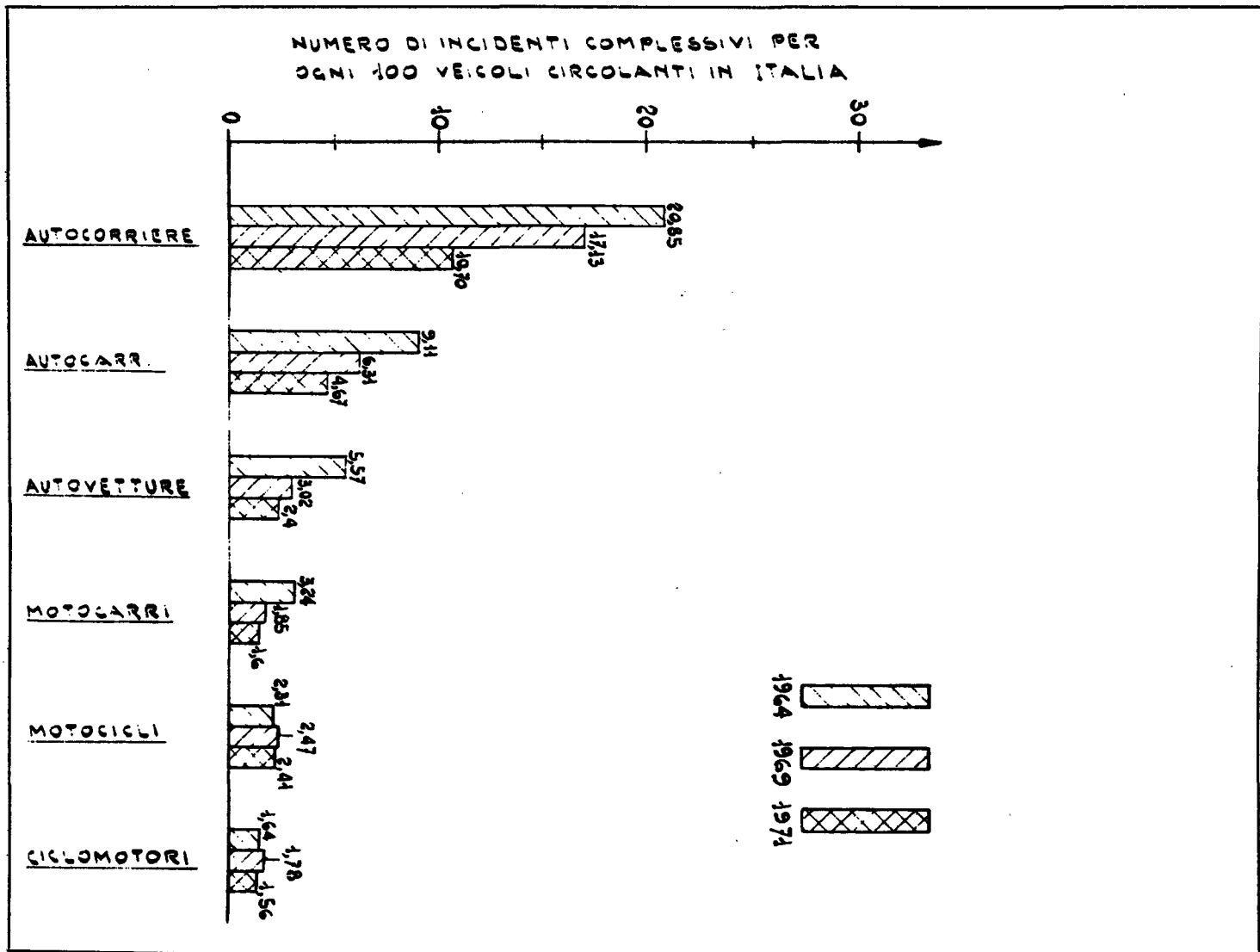
This fact is also confirmed by comparing percentages of accidents referred to each vehicles, either isolately or against other vehicles.



Picture no. 5 - Number of vehicles involved in accidents per 100 vehicles of the same class (in Italy).

Autocorriere = bus
 Autocarri = trucks
 Autovetture = cars

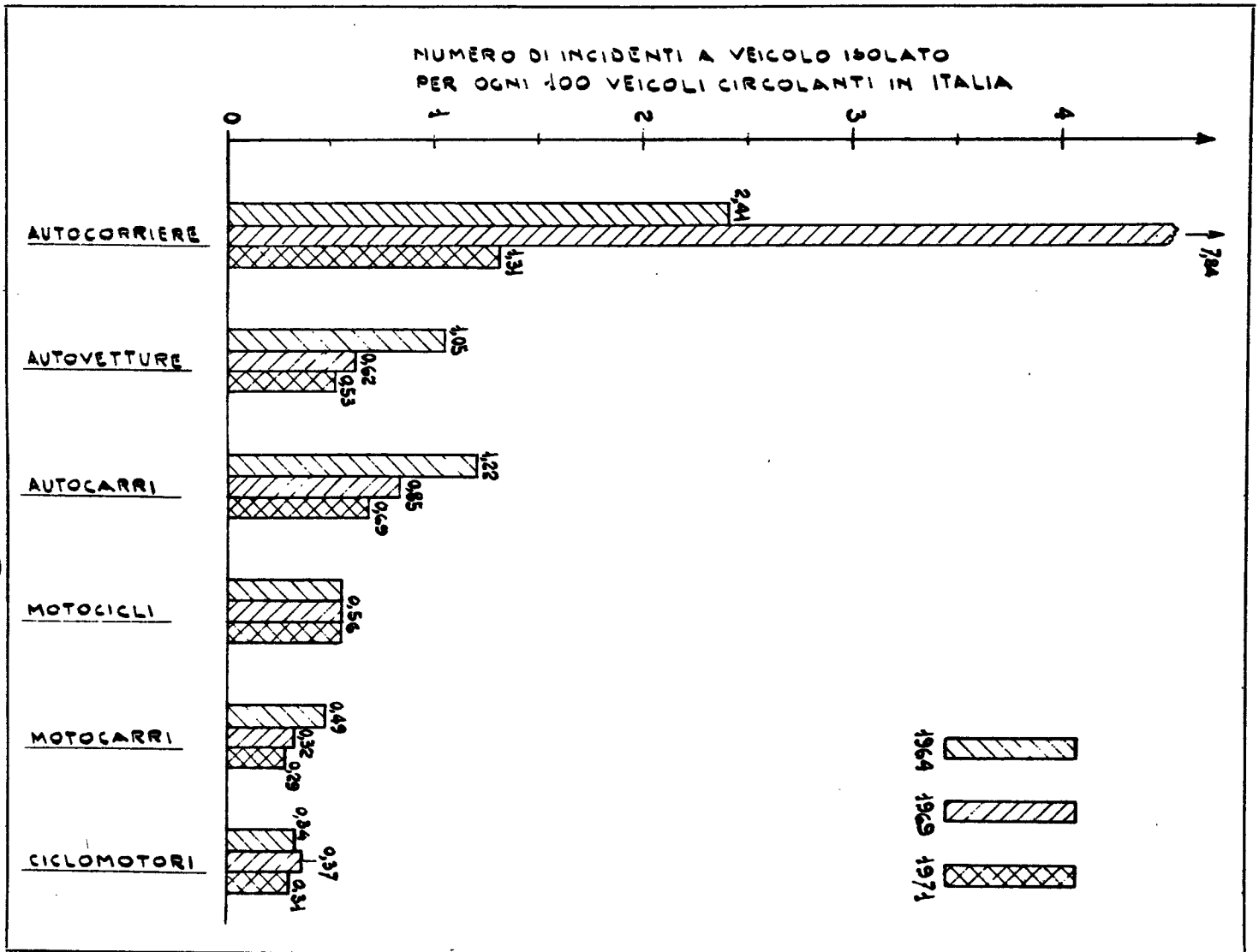
Motocarri = threewheeled vehicles
 Motocicli = motorcycles
 Ciclomotori = mopeds



Picture no. 6 - Number of total accidents per every 100 vehicles on the road in Italy.

Autocorriere = bus
 Autocarri = trucks
 Autovetture = cars

Motocarri = threewheeled vehicles
 Motocicli = motorcycles
 Ciclomotori mopeds



Picture no. 7 - Number of accidents to isolated vehicles per every 100 vehicles on the road in Italy.

Autocorriere	= bus	Motocarri	= threewheeled vehicles
Autocarri	= trucks	Motocicli	= motorcycles
Autovetture	= cars	Ciclomotori	= mopeds

Facts therefore prove what is already obvious, in the light of logic and common sense, namely that the type of vehicle is a fundamental factor in possible road accidents: drivers of manageable vehicles, of small dimensions and limited maximum speed, as all mopeds are, are responsible for a much lower number of accidents than drivers of the more cumbersome, less manageable vehicles, capable of very high top speeds.

The moped, as an economic vehicle

Because of its piston displacement (50 cc.), the simple structure of its mechanic parts and its limited performances, the moped is truly the most economic of all vehicles: running and maintenance costs are kept to a minimum and, most important of all, so is fuel consumption.

In the following table, the average fuel consumption on the road of a European moped (Piaggio's Ciao), is compared with the ones of other two-wheeled vehicles and a 1.500 cmc. motor-car.

Table no. 4

	Fuel	Average consumption on the road (lt. per 100 km.)
PIAGGIO mopeds	2% mixture	1.8
Motorscooters up to 200 cc.	mixture	2.8
Motorcycles up to 200 cc.	10% & 90% mix.	3.5
Motorcycles above 200 cc.	gasoline	6.5
Medium size European car	gasoline	11.50

The moped, as a noiseless vehicle

The influence of a vehicle noise on safety is known to everybody. Noise is disturbing for the driver, his communicability with the environment, his reaction capability to external stimuli, and does not allow him to hear other drivers' sound signals.

Reduced noise is one of the features which make the moped different from other vehicles.

In the following table, a comparison is made among noise measured on conventional motorcycles on a typical European moped (Piaggio's Ciao) and a medium size 1,500 cmc. European car.

It will be noted that Ciao's noise does not exceed 65.5 db.

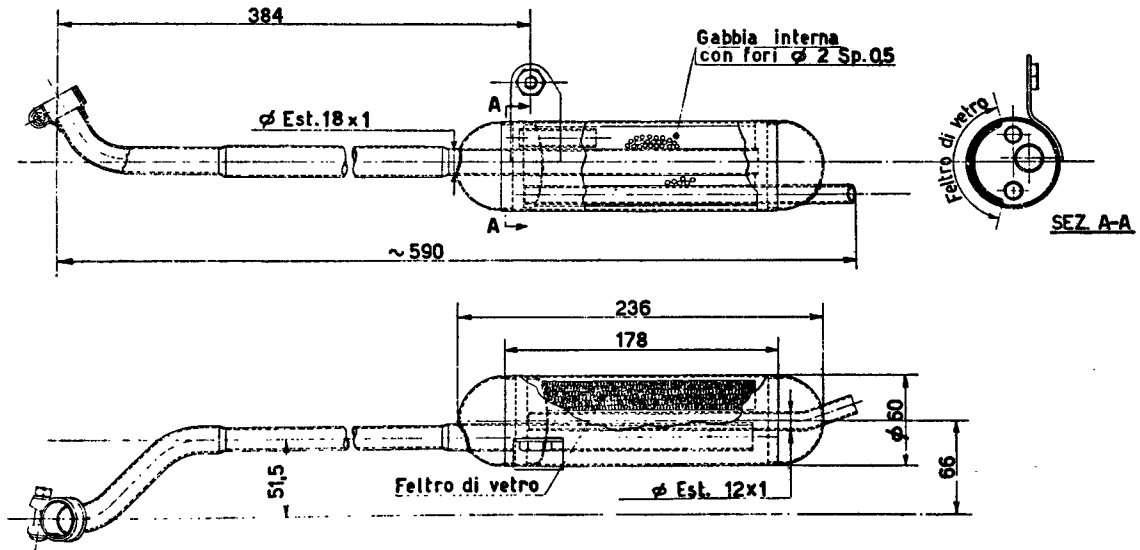
Table no. 5

Noise comparison between conventional motor-cycles, Piaggio's Ciao mopeds, and medium-size European cars (1,500 cc.).

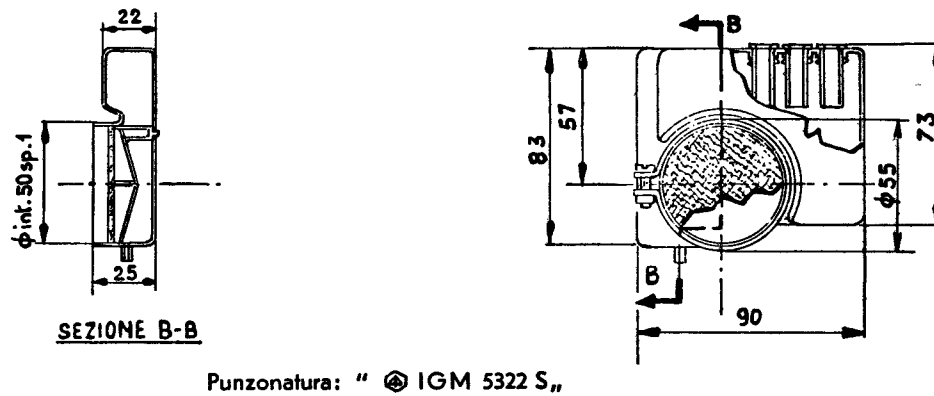
TYPE OF VEHICLE	NOISE IN DB.	WAY OF TESTING
Motorcycles		
Suzuky 750 GT	94 db.	Monza Autodrome
Honda CB 750	92 db.	Phonometric detector Bzuel & Kjaer mod. 2203 1613
Kawasaky 750 H2	98.1 db.	
Ciao Moped cc. 49.77	65 db. (measured at left) 65.5 db. (measured at right)	Belgian Ministry of Transports
Car Audi 80 GL Piston displacement 1,500 cc.	noise measured inside car 100 db. (front seat) 101 db. (rear seat)	Test carried out by the Italian magazine "Quattroruote". April 1973 Background noise: 62 db.

These results were achieved by means of a three-chamber discharge muffler, rather big in size and equipped with regular sound filters and soundproofing walls (fig. no. 8), a suction muffler, equipped with a number of pipes (fig. no. 9) a noiseless transmission consisting in a light rubber toothed belt (instead of a chain, as in other mopeds) and in accurately adjusted reduction gears (fig. no. 2).

Finally, the accurate balancing and the motor's favorable position reduce vibrations on the frame.



Picture no. 8 - Muffler for Ciao moped



Punzonatura: " IGM 5322 S,,

Picture no. 9 - Filter and suction muffler for Ciao moped.

The moped as a weapon against pollution

The environment's pureness improves the driver's physical conditions, thus becoming an essential safety factor.

Most cars moving around a city, particularly during rush hours, carry just one or two persons, and at the same time have to go on at an extremely slow pace, while their motors exhale highly polluting gases and run in quite different conditions than those they were built for. Mopeds can positively help reducing air pollution: as it is known, all other conditions being equal, the oxygen consumption and polluting gas output are proportional to the motor's displacement.

In our case, it will be between 20 and 100 times lower than with motorcars.

Anti-pollution devices can be adopted to mopeds. Actually, nitrogen oxide exhalations are almost negligible with two-stroke motors, and therefore unburnt hydrocarbons can be more easily destroyed.

Conclusions

In the foregoing pages, we have proved that, from the constructional and functional points of view, a moped can be likened more to a bicycle than to a conventional motor-cycle.

In fact, the moped may also be defined as a bicycle, having a helper motor, suitable for use in town and over short distances.

It is however known that the main obstacle to mopeds' diffusion in the United States is the fact that they are under the same laws and standards in force for heavier motorcycles, which are intended for very different use and users.

In Michigan and Connecticut, however, there is a reverse trend already. In Michigan, the moped has been equalized to a regular bicycle equipped with a helper motor, and its use is only limited to highways.

Attached is a copy of a letter from the Michigan Department of State to Messrs. Piaggio (end of an exchange of correspondence), to confirm the above said important principle. In Connecticut a similar ruling for mopeds has been recently proposed to the legislative assembly.

It is hoped that competent state and federal authorities will act along the same lines, thus encouraging a greater diffusion of mopeds and contributing to the solution of city traffic and environment problems.

MICHIGAN DEPARTMENT OF STATE

RICHARD H. AUSTIN • SECRETARY OF STATE
STATE TREASURY BUILDING



LANSING
MICHIGAN 48918

MS file
MS Kanate
TV

January 15, 1973

23 GEN 1973

Piaggio and Company
Genoa, Italy

Gentlemen:

Information submitted in response to our request has been reviewed by personnel of the Department of State for the purpose of determining whether or not the Ciao and Boxer model bicycles manufactured by Piaggio and Company meet the requirements of Section 257.4 of the Michigan Vehicle Code which defines a bicycle as distinguished from a motor driven cycle. Section 357.4 defines a bicycle as "Every device propelled by human power upon which any person may ride, having two dandem wheels either of which is over 20 inches in diameter. It includes pedal bicycles with helper motors rated less than one brake horsepower transmitted by friction and not by gear or chain, which produce only ordinary pedaling speeds up to a maximum of 20 miles per hour." In our opinion, from the information submitted, both the Ciao and Boxer bicycles meet the requirements of the definition.

While the Ciao and Boxer bicycles need not be registered as motor vehicles, I should caution you that such vehicles are subject to certain provisions of the Michigan Vehicle Code, limiting the use of such vehicles on the public highways.

If any further information is desired, please advise.

Sincerely,
Hugh Roach

Hugh Roach
Legal Officer

HR:s