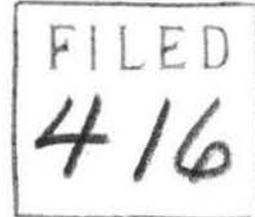


MOTOR VEHICLES: Pneumatic tires made of rubber, nylon, or some  
TIRES: similar synthetic, studded with metal inserts  
STUDS: as described herein, are not prohibited by  
statute in the State of Missouri.

OPINION NO. 416

December 17, 1965

Honorable Jasper Brancato  
State Senator, 11th District  
601 West 12th Street  
Kansas City, Missouri



Dear Senator Brancato:

This is in response to your inquiry for a formal opinion concerning metal studded tires.

You submitted the following question:

"I am requesting a formal opinion on whether tires with metallic studs or inserts are permitted to be used on the highways in the State of Missouri."

Missouri has no legislation dealing directly with the type of tire you mention. Some confusion, however, has arisen over the interpretation of Section 304.250, RSMo 1959, the pertinent portion of which is as follows:

"No metal tired vehicle shall be operated over any of the improved highways of this state, except over highways constructed of gravel or clay bound gravel, if such vehicle has on the periphery of any of the road wheels any lug, flange, cleat, ridge, bolt or any projection of metal or wood which projects radially beyond the tread or traffic surface of the tire, unless the highway is protected by putting down solid planks or other suitable material, or by attachments to the wheels so as to prevent such vehicles from damaging the highway, except that this prohibition shall not apply to tractors or traction engines equipped with what is known as caterpillar treads, when such caterpillar does not contain any projection of any kind likely to injure the surface of the road.

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Tractors, traction engines and similar vehicles may be operated which have upon their road wheels "V" shaped, diagonal or other cleats arranged in such manner as to be continuously in contact with the road surface if the gross weight on the wheels per inch of width of such cleats or road surface, when measured in the direction of the axle of the vehicle, does not exceed eight hundred pounds."

We note that some States have recently enacted legislation pertaining to the type of tire about which you inquire, including Kansas, which in its recent session of the legislature enacted K.S.A. 9-5, 106. Missouri has not enacted any recent legislation regulating the use of tires with metal inserts.

The Missouri statute, Section 304.250, supra, was first enacted in 1921 (approved July 30, 1921. Laws of 1921, First Extra Session, page 91; New Section). It appeared in the Revised Statutes of Missouri 1929, as Section 7776(c). The insignificant modification of pluralizing the word vehicle in the first phrase appeared when the excerpt was carried forward into Section 8384 (c), RSMo 1939. Subsequently, it was incorporated into the 1959 statutes as Section 304.250, with the word vehicle in the singular.

Consideration should be given to the date of original passage of this statute. At that time "metal tired vehicles" pertained to certain types of vehicles including, but not limited to, farm tractors and other farm implements with metal tires having metal cleats thereon. This statute must be considered and interpreted in the sense and in the light of the conditions and circumstances at the time it was enacted, that is, pertaining to those metal tired vehicles described therein.

The sentence structure of this statute makes it plain that the subject is "metal tired vehicle" and the prohibition is against any "such vehicle" using any "lug, flange, cleat, ridge, bolt or any projection of metal or wood." The thing that is prohibited to be done all relates back to the subject of metal tired vehicle. Manifestly the problem under study here, however, is the use by "rubber tired vehicles" with metal studs.

The statute refers to "vehicle," not to "motor vehicle." Chapter 301 relates to licensing of motor vehicles and Section

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301.010(28) defines "vehicle;" Section 301.010(15) defines "motor vehicle;" Section 301.010(20) defines "pneumatic tires;" and Section 301.010(24) defines "solid tires." There are other definitions in the statutes of "motor vehicle" but we are unable to find a definition of a "metal tired vehicle." The term therefore should be deemed to be used in its commonly understood sense.

Study of the rest of the language in this fairly lengthy section of the statutes reinforces the belief that the condition which the legislature sought to prohibit was the use of metal tired tractors and other farm implements with metal lugs on hard surfaced highways. For example, note the last sentence of Section 304.250, above quoted, which permits tractors with "V" shaped, diagonal or other cleats arranged in such manner as to be continuously in contact with the road surface.

The statutory prohibition operates against vehicles equipped with tires which have both of the following characteristics:

- (1) Tires made of metal; and
- (2) Tires having projections as described in Section 304.250.

As we understand them, the tires you are inquiring about are pneumatic tires made of rubber, nylon, or some similar synthetic material, which fit onto a metal wheel. In fact, the only significant difference between the tires you describe and the tires almost universally used on all automobiles, is that the tires you describe have inserts made of metal or carbide which are imbedded in the tread of the tire. These inserts are about  $\frac{1}{2}$ -inch in length and are approximately  $\frac{1}{8}$ -inch in diameter, with the exception of the flat head or shoulder presumably designed to prevent the insert from punching through the tire or ejecting at high speed. This flat head or shoulder is approximately  $\frac{3}{8}$ -inch in diameter. These inserts are so spaced as to constitute only a fraction of that portion of the tire's surface which comes into contact with the road. Likewise, the inserts constitute only a fraction of the material of which the tire is made. Based on the sample tires we have observed, there are 72 to 150 inserts per tire, depending upon the size of the tire and the manufacturer's design. The inserts project appreciably beyond the tread, or traffic surface of the tire, thus being a projection of metal within the contemplation of Section 304.250.

It is true that the metal studs are so arranged that metal is always in contact with the road surface. From this premise it may be argued that this constitutes a "metal tired vehicle."

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This would seem to be a rather strained construction of the language used in the statute. It does not seem to give the words used in the statute their usual and commonly understood meaning.

Our investigation of the problem indicates that there is a conflict of opinion as to whether the metal studs do or do not damage the highways. If, however, we concede that such studs do cause damage to highways, this does not authorize a strained construction of this statute in order to prohibit their use. This presents a matter for possible corrective action by the legislature and this office should not attempt such action by strained or distorted interpretation.

The tire consists predominantly of rubber, nylon or some similar synthetic. The inclusion of a small percentage of metal in the form of inserts is not sufficient to make the tire a metal tire or a metal tired vehicle; therefore, a motor vehicle using the tires described above would not be a "metal tired vehicle" within the meaning of Section 304.250, RSMo 1959.

#### CONCLUSION

Therefore, it is the opinion of this office that pneumatic tires made of rubber, nylon, or some similar synthetic, studded with metal inserts as described herein, are not prohibited by statute in the State of Missouri.

The foregoing opinion, which I hereby approve, was prepared by my assistant, J. Gordon Siddens.

Yours very truly,

  
NORMAN H. ANDERSON  
Attorney General