

ERRATUM

H. K. Sachs and C. C. Chou, "On the Stability in the Sense of Liapunov of a Rubber Tire Vehicle" published in the June, 1976, issue of the JOURNAL OF DYNAMIC SYSTEMS, MEASUREMENT, AND CONTROL, TRANS. ASME, Series G, Vol. 98, No. 2, pp. 180-185.

The second inequality of (11b) on page 182, of the June 1976 Journal issue should read:

$$u^2 < - \frac{C_1}{I} \lambda^2(a + b)^2/(b - a)$$

Substitution of this expression on the left-hand side of the first inequality in (11b) and approaching the limit allowing us to write

$$-\lambda^2(a + b)^2 = \lambda^4 - 2ab\lambda^2 + (a^2 + b^2)/4$$

yields

$$\lambda^2 = - \frac{a^2 + b^2}{2}$$

But λ (the radius of gyration) must be a positive real number and it is thereby proven that there does not exist a real parameter λ satisfying (11b). It follows that the stable singular point cannot be a node but only a focal point.

The discussion on the relation of the character of singular points relative to oversteer, understeer and neutral steer beginning with the phrase

<<It is interesting to note...>>

is basically correct except for the statement

<<The trajectories are *either* spiral curves or parabolas depending on the magnitude of the forward speed u in relation to the vehicle parameters>>

This sentence should read:

The trajectories are always spiral curves their configurations being dependent on forward speed u and all vehicle parameters.