CHALMERS

ERRATA LIST

Online and Offline Identification of Tyre Model Parameters

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- Page Vii, Paper I is now published as:
  Albinsson, A., Bruzelius, F., Jacobson, B., & Bakker, E. (2018). Evaluation of vehicle-based tyre testing methods. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 0954407018760953.

- Page ix, The first K_u on the page should have the unit $[kg \cdot \frac{rad}{N}]$. The second K_u should be m, and the unit should be [kg]

- X-axis on Figure 3.1 should read $\mu_{x,max}$ instead of μ

- Page 15. Reference to section 3.4.4 should read section 3.7

- Page 17, reference to section 3.4.5 should read section 3.9

- Page 17, reference to section 3.4.6 should read section 3.10

- Page 18, the sentence “Of the excitation strategies investigated in the work within this thesis, a simple force ramp proved to be the most successful” should read, “Of the excitation strategies investigated in the work within this thesis, a simple force ramp, although with different slopes for different tyre models, proved to be the most successful”

- Page 33, The sentence, “Furthermore, the difference between the resulting tyre models from different steering wheel angle rates is greater than the accepted tolerance defined in ISO19364 (71) for validation of simulations models in steady-state cornering manoeuvres.” can no longer be supported by the results in paper J and should be removed.

- Page 36, the sentence “It was found a simple force ramp excitation provides is a good compromise for all road surfaces, tyre models and noise levels” should read “It was found a simple force ramp excitation, although with different slopes for different tyre models, provides a good compromise for all road surfaces, tyre models and noise levels”

- In printed version: Paper J
  - Reference in paragraph just before figure 2: Reference should be to figure 3 instead of figure 2.
  - An error for the slow sweep tyre model has been discovered. It is in the form a constant lateral force offset on the front and right tire. The offset had been changed to see the effect of offsets on the resulting tyre model but it was unfortunately left when fitting the tyre model. The new offset has been set so match the force from the magic tyre formula based on the flat belt testing with the measured lateral force at the beginning of the manoeuvre when the vehicle is driving straight ahead. A small offset (150N) in the vertical force was also changed for the Hällered model and the slow slip sweep rate but this had a minor impact on the results.

- The tyre model parameterization based on the Hällered measurements that were used in the simulations were not fitted with the parameter LCY, this has been changed and the figures updated with very minor impact on the results.
- For figure 3,4,5,6,8,9 the slow sweep model is more similar to the other models with an increased scale factor LMUY of 3.5%.
- Figure 10 should be replaced with another figure,

  Notice the changed steering wheel angle in order to differentiate between vehicle stability. All models were stable at 150 degrees steering wheel angle. The sentence in the text paragraph above the text should also be changed from,
  "The different tyre model parametrizations indicate different levels of vehicle stability during the manoeuvre with the slow sweep rate model giving the worst vehicle stability" to "The different tyre model parametrizations indicate different levels of vehicle stability during the manoeuvre with the original model giving the worst vehicle stability".

Figure 10, Sine with dwell manoeuvre with 160 degrees steering wheel amplitude for the different tyre models based on the constant velocity manoeuvre with different steering wheel angle rates.

- Figure 11 should be replaced with another figure

Note that the slow sweep manoeuvre no longer is outside the boundaries for the original tyre model. However, the difference to the fast and medium sweep model on the same road surface is still large.

Figure 11, Steady-state cornering, constant speed, with tolerances as specified for validation of simulation tool in ISO19364 [16].