

# Correction to “High-Speed Rail Suspension System Health Monitoring Using Multi-Location Vibration Data”

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1 IN THE above article [1], Tables I, III, and IV should show “N/m”  
2 instead of “kN/m” and they should also show “Ns/m” instead of  
3 “kNs/m.” The revised tables are shown below.

4 Also, in (1), “ $k_p \dot{w}$ ” should be changed to “ $k_p w$ .” And on page  
5 2952, first line, in the left column, “They also found...” should be  
6 changed to “We also found...”

TABLE I  
PARAMETERS OF THE VEHICLE SUSPENSION SYSTEM

	Description	Unit
$M_p$	Mass of bogie frame $\frac{1}{4}$	kg
$M_s$	Mass of car body $\frac{1}{4}$	kg
$k_p$	Primary spring stiffness per wheelset	N/m
$k_s$	Secondary spring stiffness per bogie	N/m
$c_p$	Primary damping coefficient per wheelset	Ns/m
$c_s$	Secondary damping coefficient per bogie	Ns/m

TABLE III  
AM96 VEHICLE PARAMETERS

	Description	Unit
$M_p$	Mass of bogie frame $\frac{1}{4}$	1725 kg
$M_s$	Mass of car body $\frac{1}{4}$	6300 kg
$k_p$	Primary spring stiffness per wheelset	$1.30 \times 10^6$ N/m
$k_s$	Secondary spring stiffness per bogie	$0.69 \times 10^6$ N/m
$c_p$	Primary damping coefficient per wheelset	$3.7 \times 10^3$ Ns/m
$c_s$	Secondary damping coefficient per bogie	$22.6 \times 10^3$ Ns/m

## REFERENCES

- [1] N. Hong *et al.*, “High-speed rail suspension system health monitoring using multi-location vibration data,” *IEEE Trans. Intell. Transp. Syst.*, vol. 21, no. 7, pp. 2943–2955, Jul. 2020.

TABLE IV  
OVERVIEW OF SIMULATION ANALYSIS - COMPONENT DEGRADATION IMPACT

Simulation Group	Components	Standard Value	Simulation Range	Response Curves
I	Primary spring stiffness	$1.30 \times 10^6$ N/m	50–200% (1%)	364816
	Secondary spring stiffness	$0.69 \times 10^6$ N/m	50–200% (1%)	
	Mass of car body	6300 kg	50–200% (10%)	
II	Primary damping coefficient	$3.7 \times 10^3$ Ns/m	50–200% (1%)	364816
	Secondary damping coefficient	$22.6 \times 10^3$ Ns/m	50–200% (1%)	
	Mass of car body	6300 kg	50–200% (10%)	

AQ:2 Manuscript received June 23, 2021; accepted June 23, 2021. (*Corresponding author: Lishua Li.*)

This work did not involve human subject or animals in its research.

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Digital Object Identifier 10.1109/TITS.2021.3092455