

Vehicle remains fully in lane

Test Problem	
Name:	Vehicle remains fully in lane
Description:	Verification of moving-load analysis when the option is specified for a vehicle to remain fully in lane.
Program:	SAP2000
Version:	
Model ID:	na

Overview

This test problem verifies the option for a [vehicle](#) to remain fully in lane during [moving-load](#) analysis. A 10m-long simply-supported beam is modeled such that the length of a three-axle vehicle is slightly shorter than the structure. A large load is assigned to the interior axle, and very small loads are assigned to the exterior axles such that reactions and end shears should each be approximately half of the large load. However, these values are nearly the full value of the large load.

Attachments

- [SAP2000 models and hand calculations](#) (zipped SDB and PDF files)