

**Product Name :**  
Shock Absorber Trainer

**Product Code :**  
AutomobileLab0014



### Description :

Shock Absorber Trainer

### Technical Specification :

A trainer for suspension and shock absorbers featuring a computer for data acquisition of test data and analysis of results. The trainer explores the construction and performance of shock absorbers as well as the operation and characteristics of suspensions.

The test stand features a standard automotive tire and independent suspension system which is interactively operable with variable road conditions. The test stand consists of a rear axle with wheel, suspension, shock absorber and coil spring all of which are original genuine automotive parts. Conditions are simulated electrically by means of a drive roller and an oscillation generator. The wheel is rotated by a heavy duty rotating drum which simulates the road surface. The drum is able to be oscillated up and down with a variable speed control thereby simulating a variety of rough and smooth road surfaces. The upper part of the trainer above the wheel simulates the car body-chassis and the active effects of the suspension may be observed by the resulting motion of the body and interaction with different weight loads.

### Features

1. Main test stand featuring the wheel, suspension system and drive system.
2. One coil spring.
3. One hydraulic shock absorber.
4. One gas filled shock absorber.
5. One set of chassis weights.
6. One set of axle weights.

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7. Computer with Data Acquisition System.

The test stand includes a computer with a data Acquisition system to record and analyze the performance of the suspension and shock absorber. Position sensors are placed on the chassis, axle and road-drum surface. The computer will display in graphic form the oscillation and movement of these factors as the tests are conducted. The data is also recorded in the computer for later analysis. A training manual to be provided during the bidding process to ensure all experiments are met.

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