GABRIEL SUSPENSION TESTER

QUESTIONS & ANSWERS

Q: Is the Gabriel Suspension tester easy to use and maintenance friendly?

A: This market leading equipment is designed to be hassle free and maintenance easy, however with all testing equipment some basic maintenance checks will be needed as well as a required routine calibration (12month or when the equipment is moved). Regarding using the software interface, Gabriel South Africa have spent a great deal of time ensuring that the software is compliant to the local car park and user. Incorporating customised installations, vehicle drop downs, automated part number selection and clear visuals, the progress of testing a vehicle is made as simple as possible. Also with the support of our development partners, specific customer requests in regards to reports and further development may be considered.

Q: I see that the testing equipment does not come with computers and printers why?

A: To reduce costs Gabriel South Africa believe that you will be able to either use an existing computer and printer or purchase the items locally with a support contract much cheaper than if supplied through our company.

Minimum PC Requirements

- OS: Win XP Pro or Win 7 (32 bits)
- Processor 1,6 GHz
- 2 Gig RAM DDR2
- 1 port PS2 mouse and 1 port PS2 keyboard and 3 USB ports or 5 ports USB 2.0 at back
- Video definition : 1024x768 (16M colours)
- 1 port RJ45 if network connection.
- HDD 160 Go 7200 rpm.
- Dimension: A4 (mini-PC)

Screen: Compatible with the video definition of the PC

Printer: Standard model, colour printer, no particular specification

Notes: We recommend using a power regulator to protect the computer equipment however please note that the Pit version is delivered with a power regulator. No consequence on the warranty of the suspension testers if a power regulator is used. Otherwise, the electronic parts will be excluded from the warranty.

Q: If I decided on the "above the ground version", will the Gabriel Suspension Tester move when vehicles drives on and off it?

A: With the exception of the "in the ground version" the equipment is designed in such a way to not be fixed to the ground and this design will allow you to decide on the most optimum location within your business. Normally though,owners who have decided on the location or intend to leave it in the same place for extended periods of time, will secure it or recess it into the floor.

Q: You have stated that the Gabriel Suspension Tester can be recessed into the ground?

A: Yes, We understand that once you have decided on the optimum location within your outlet you may wish to make the unit a more permanent addition while not incurring the expense of changing to an "in the ground" version. In this regard the machine has the arability to be recessed into the ground slightly to allow you to remove the ramps and have the pressure pads in line with the floor.

GABRIEL SUSPENSION TESTER

INTRODUCTION

Gabriel Shock Absorbers

Gabriel manufactures a comprehensive range of shock absorbers that are designed and engineered to suit the conditions of South African roads and also its vehicle park.

Drivers who use Gabriel Shock Absorbers comment on the smooth ride of their vehicles, however shock absorbers are not just for comfort, as their primary purpose is to keep wheels in contact with the road surface.

Shock absorbers also affect the steering, handling and braking of your vehicle, which is why they are vital for your safety.

Our years of research and testing has resulted in Gabriel developing a shock absorber that is firm enough to prevent the wheels from leaving the surface, but also flexible enough in their damping to ensure that the occupants are not directly subjected to the vehicle forces.

Our shock absorbers also control the bouncing movement of the wheels by controlling the rate at which the springs compress and extend. In so doing, the shock helps maintain traction of the tyres and control of the body, as well as the pitch and roll of the car during cornering, braking and acceleration. With more accurate control and steering,

Gabriel shock absorbers enhance safety through good road holding.

Gabriel Suspension Tester

Faulty or worn shock absorbers cannot easily be detected by the motorist as they wear out gradually over time.

With this gradual wear the driver grows accustomed to this poorer ride quality, therefore making them unaware that the product needs replacing, which places both their and other people's lives in danger. This danger lies with the primary function of a shock absorber "being it is designed to ensure that the tyres of a vehicle are kept in contact with the ground", so a faulty or worn Shock Absorber will work against this function and could possibly lead to a serious accident as well as added running costs associated to the vehicle.

Gabriel South Africa, in a Sub-Saharan exclusive partnership with Actia Muller BEM (a world leader in equipment testing), have developed a retail turnkey solution in conjunction with local leading fitment centres, to help identify worn or faulty shocks absorbers in a quick and professional way. The solution allows trained staff to assess a comprehensive database of vehicles in South Africa, automatically test the shock absorbers as a part of the vehicles suspension, report both technically and simply against the test and give a recommendation of the correct product to fit.

If used as a part of a process, local South African studies have shown real in store unit growth of shock absorbers of between 15-20%, as well as increases in complimentary suspension parts.

Be safe. Be sure
Gabriel®

ACTIA MULLER
www.actiamuller.com

GABRIEL SUSPENSION TESTER

QUESTIONS & ANSWERS

Q: Will the Gabriel Suspension Tester work on all vehicles?

A: Currently the test equipment is rated for passenger vehicles and other types of vehicles, including fixed axle 4x4's with a maximum axle load of 2500 Kg.

Q: But what about lowered suspension and new vehicles?

A: There should be no reason to test the suspension of a new vehicle outside of specific cases, however if performed and the vehicle is not available on the selection screen, make sure that it matches the dimensions of the tester. There is no guarantee that the result may be accurate against a new vehicle, as the design and suspension may not have been considered in the version of software you would be using. Further should the vehicle have lowered suspension, it is advisable not to use the "above ground vision" with standard ramps, rather the extended ramps or the "in the ground version"

Q: You state that the Gabriel Suspension Tester should pay for itself?

A: Most vehicle owners on the road are not aware that their shocks need replacing. By running proactive promotion and using the tester correctly and in conjunction with trained technical and sales staff, local South African Studies have shown real unit growth of between 15 – 20%. Please visit www.gabriel.co.za / equipment / suspension tester for more information on programs available.

Q: What power supply do I need before considering purchasing this unit

A: The Standard Machines ideally run off a 400V, 3 phases due to the torque of the motors, however a specially ordered machine can run 220v mono but this reduction in power will reduce axle load capacity to 1500 Kg. The computer and printer equipment would need single phase 220V.

Q: Who will install, set up and maintain the unit, Gabriel?

A: In order to ensure optimum onsite support during and after the installation, Gabriel South Africa has appointed an experienced and professional person within the company to manage this process through for you. Included in the supplied pricing is a full breakdown of the costing in relation to installation, service and Maintenance Contracts.

SUSPENSION TESTER: THE SOLUTION

Solution Driven

Testing time, Ease of Reporting, User and Consumer Interfaces were the three main drivers when developing a solution for local Market and after working closely with recognised fitment centres in South Africa, Gabriel South Africa believe that the solution offered has met all of these criteria. Unlike many other machines, automated testing opposed to the old "bounce test" is the only true way to ensure that the frequency and pressure on a shock absorber is repeatedly achieved. Analysing the shock absorbers response to its variable resonance frequency ensures that the results obtained are independent of other factors such as vehicle load. The Gabriel Suspension tester offers this functionality through a quick and easy 3 minute test.

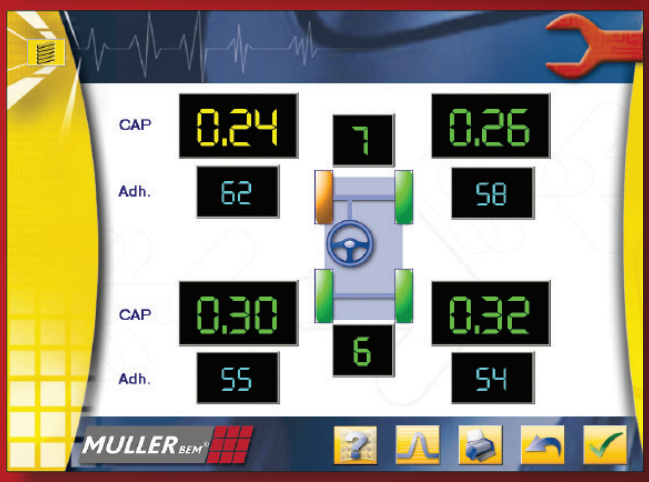
Once tested and depending on the test report loaded on the machine, you will either get a printed or screen based report which displays a simple Green (Pass), Red (fail) coding or you will get a non colour defined report, that allows the outlet to interpret the results by means of the graphs only. These reports should be used to define if a visual inspection should be performed on the shocks or suspension or not.

Local studies have shown that once a visual inspection concurs that either the shock absorbers or other suspension parts are faulty, the printed report can be used as part of the sales process.

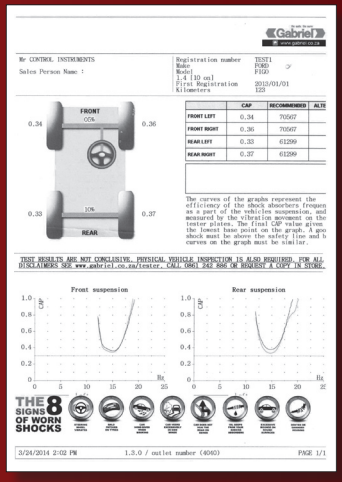
The reports have a unique feature were a quote with part numbers can be given for the customer to consider for a possible later purchase.

All data is stored within the test machines software and all reports of vehicles tested can be accessed directly or remotely.

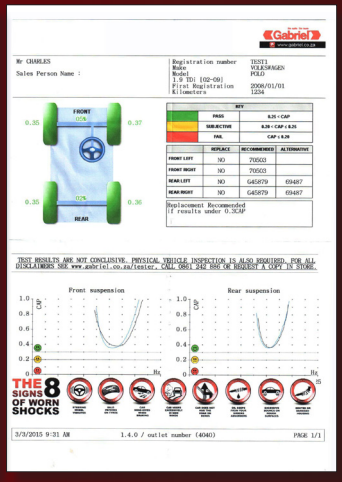
REPORT EXAMPLES



Black and White



Colour



PART NUMBER: 144294

GABRIEL SUSPENSION TESTER: OPTION 1

FIXED IN THE FLOOR VERSION WITH CONSOLE

This version is designed to be a permanent additional to your operation and is fitted into the floor via the construction of a pit that will drain water as well as house the machines cabling. The power unit and the electronic control of the testing equipment are housed inside the supplied computer console. It's therefore compulsory to fix and protect all the connecting cables.

The solution also comes with a selection of Gabriel Floor Decals to draw attention to the tester while also being used to market to Customers.

Main technical specifications

- Dimension of the pit:2350 x 590 x 280 mm
- Bench weight (without console): 240 kg
- Protective coating: Zinc-plated and black painting
- Dimension of plate: 640 x 250 mm
- Maximum passage load: 2500 kg
- Weighing capacity: 2500 daN
- Minimum axle passage: 850 mm
- Maximum axle passage: 2100 mm
- Engines 2 x 2,2 kW
- Supply voltage: 230 V (PC) and 400 V (tester) – 3ph
- Supply frequency: 50 or – 60 Hz

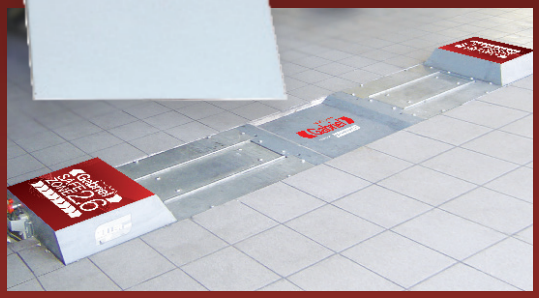
Recommended outlet use and machine advantages

- This version is recommended for larger outlets that have enough space to allow the unit to be permanently fixed.
- Designed to be fully integrated in the outlet traffic flow so avoiding any congestion.
- Accommodates the testing of passenger vehicles with low ground clearance.
- Also this version can be upgraded and integrated in a full vehicle pre-inspection test line including a brake tester and/or a slide slip tester if required
- Installation plan N°110190-GC

PART NUMBER: 144295

GABRIEL SUSPENSION TESTER: OPTION 2

FIXED ON THE FLOOR



This version is designed to be placed on the ground without any civil engineering work. The bench can be moved around until the optimum location is found and then it can be fixed (recommend). Its low central slope makes it possible to test vehicles with a ground clearance of 130 mm otherwise ramp extensions (additional) can be added in order to allow very low ground clearance vehicles less than 100 mm. The power unit and the electronic control of the tester are placed inside the computer console. It's recommended to fix and (or at least) protect all the connecting cables above surface when using the machine.

The solution also comes with a selection of Gabriel Floor Decals to draw attention to the tester while also being used to market to Customers.

Main technical specifications

- Bench dimensions with ramps:3446 x 1983 x 230 mm
- Minimum ground clearance: 130 mm
- Bench weight (without console): 310 kg
- Protective coating: Zinc-plated and grey painting
- Static load at the axle: 2500 Kg
- Dynamic load at the axle: 2000 Kg
- Minimum load at the axle: 0 kg
- Amplitude of excitation: 25 - 0 Hz
- Scanning rate: +/- 3 mm
- Dimension of plate: 640 x 250 mm
- Weighing capacity: 2500 daN
- Minimum axle passage: 836mm
- Maximum axle passage: 2096 mm
- Engines 2 x 2,2 kW
- Supply voltage: 400 V – 3ph
- Supply frequency: 50 or – 60 Hz

Recommended outlet use and machine advantages

- This version is recommended for all types of workshops especially for those not having enough space nor time to permanently install an in the ground tester.
- Quick and easy to install
- Movable when required
- Can be slightly recessed into the ground (if required) so by removing the ramps.
- Does not need any civil engineering
- Installation plan n° 121351

PART NUMBER: 144296

GABRIEL SUSPENSION TESTER: OPTION 3

MOBILE VERSION

This version is designed in a kit format to be easily assembled and dismantled. Supplied with a handling kit, this machine can be installed in less than 15 minutes. Its low central slope makes it possible to test vehicles with a ground clearance of 130 mm otherwise ramp extensions (additional) can be added in order to allow very low ground clearance vehicles less than 100 mm . The power unit and the electronic control of the tester are placed within the tester opposed to the other option which is housed inside the computer console. It's recommended to fix and (or at least) protect all the connecting cables above surface when using the machine.

Main technical specifications

- Bench dimensions with ramps: 3446 x 1983 x 230 mm
- Minimum ground clearance: 130mm
- Bench weight: 310kg
- Protective coating: Zinc-plated and grey painting
- Static load at the axle: 2500kg
- Dynamic load at the axle: 2000kg
- Minimum load at the axle: 0kg
- Amplitude of excitation: 25 - 0 Hz
- Scanning rate: +/- 3mm
- Dimension of plate: 640 x 250mm
- Weighing capacity: 2500 daN
- Minimum axle passage: 836mm
- Maximum axle passage: 2096mm
- Engines with rotation direction reversion: 2 x 2,2 kW
- Supply voltage: 400 V (bench)– 3ph
- Supply frequency: 50 or – 60 Hz
- Emergency shutdown: 24 VAC
- USB2 connection to PC and CAN connection to Bluetooth module

Recommended outlet use and machine advantages

- This version is recommended for all types of outlets especially though with multiple sales points and companies who wish to use the equipment outside
- Very easy to move
- Convenient for outdoor use
- Can be transported in a van or a small trailer
- Installation plan n° 121352

DISCLAIMERS
IN VIEW OF THE CONSUMER PROTECTION ACT, THE CUSTOMER MUST BE MADE AWARE OF THE FOLLOWING:

Test results are only an indication of the state of the shock absorber performance.
The interpretation of the test results must include a full inspection of the shocks, tyre pressures, suspension, steering rack and other components which will affect the results and the safety aspect of the vehicle.
The test results may vary when testing shock absorber from different suppliers and in some instances may even fail.

Contact your Gabriel Sales Representative on
0861 242 886
to enquire about purchasing your shock tester.

Be safe. Be sure
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www.gabriel.co.za GabrielShocksZA gabrielshocksza