



Instruction Manual

'Ultima' 4 Plate Brake Test System

Brake and Steering Test Procedure	Page	2
Test Result – Pass / Fail	Page	3
Test Result – Pass / Fail Criteria	Page	4
How to Enter Numbers	Page	5
Use of Brake Pedal Force Meter	Page	5
Shock Absorber Test Procedure	Page	6
Shock Absorber Test Results	Page	8
Weighbridge Functions	Page	9
Trouble Shooting	Page	11
PlateTronic Test Track	Page	12
PlateTronic Components	Page	13
Warranty Statement	Page	14

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BRAKE AND STEERING TEST PROCEDURE

Step 1 Stop Vehicle at least ONCE in forward motion before driving on to plates and ensure computer screen indicates **READY**



Step 2 Roll onto Plates at 5 km/h (walking pace)
Car needs to be in neutral, do NOT steer as this can influence steering results.

Step 3 Once all four wheels are on the brake plates the computer screen will indicate for you to **STOP**



Brake HARD and keep brake pedal pressed for 1 second.

1. The display will then indicate **READY**

Step 4 The PlateTronic is now ready for the handbrake test.

Drive forward until rear axle is on front plates.
When computer screen indicates **STOP** then gently pull hand brake

Pass or Fail is then displayed on the screen, test is completed and results are printed automatically.



The printout is divided into two main sections: a Brake Test Report and a Wheel Alignment Test Report.

Brake Test Report:

- THINK SAFETY:** Properly Adjusted Brakes Guarantee: Optimal brake performance + A safer vehicle.
- FRONT AXLE:** TEST SPEED 5kph (MIN 3kph, MAX 7kph); BRAKE PEDAL FORCE 797N (MIN 250N, MAX 800N); DECELERATION PEAK 63% (MIN 60%); DECELERATION AVERAGE 50% (MIN 45%).
- LEFT TO RIGHT BRAKE IMBALANCE:** FRONT AXLE 11% (MAX 30%); REAR AXLE 8% (MAX 30%).
- HAND BRAKE TEST:** DECELERATION PEAK 20% (MAX 50%, MIN 20%); TEST 86% (MAX 90%, MIN 10%).
- FRONT TO REAR BRAKE IMBALANCE:** FRONT AXLE 11% (MAX 90%, MIN 60%); REAR AXLE 20% (MAX 40%, MIN 10%).
- RESULT:** PASS

Wheel Alignment Test Report:

- SAVE MONEY:** Properly Adjusted Wheels Guarantee: Optimal tyre wear + Better fuel economy.
- FRONT AXLE:** 0mm (BETWEEN -1 to +3).
- REAR AXLE:** 2mm (BETWEEN +0 to +4).
- FOR OPTIMUM TYRE WEAR AS SPECIFIED.**
- RESULT:** PASS

Vehicle Information:

- Vehicle No: ZAU710
- Examiner No: 20.01.2010
- Inspection Station No: PUD3MO
- Calibration Due: PUD3MO
- Serial No: PUD3MO
- Workshop Solutions, P O Box 110, Potts Point 1335, support@platronic.com
- Signature: [Signature]
- Date: 24.03.2009 12.34.08

Legend: ■ PASS ■ FAIL ■ INSPECTION RECOMMENDED

Actual Test Printout

The PlateTronic ® is a precision instrument that simulates an actual emergency stop, a vital safety aspect that other brake test methods miss.

HOW TO ENTER VEHICLE AND EXAMINER Nos.

- Step 1** Click on print test button – F8
- Enter both the registration number (vin or stock number if unregistered) and examiner number on the screen
- Click OK to print test.

HOW TO USE THE PEDAL FORCE METER

The brake pedal force meter is an optional extra. It is not supplied with installations where the government authority does not require this reading.

- Step 1** Clamp foot unit safely onto brake pedal.
- Step 2** Switch remote control to **ON**. A red light on hand unit will confirm battery power.
Now follow normal test procedures. When finished, the unit will turn off automatically.



TEST RESULTS - PASS / FAIL CRITERIA

BRAKE TEST SPECIFICATIONS

Left to Right % difference front and rear axle:	Max 30%
Peak de-acceleration brake force in % G:	Min 60%
Avg de-acceleration brake force in % G:	Min 47%

These are the only readings which influence Brake Test Pass / Fail.

Front to Rear brake force distribution:	Front axle Min 60% Max 95%
	Rear axle Max 40% Min 5%

WHEEL ALIGNMENT SPECIFICATIONS

PlateTronic measures the actual DRAG of the Tyres on the road surface.

Readings for best Tyre Wear are

Front Axle: -1 to +3

Rear Axle: +0 to +4

SHOCK ABSORBER SPECIFICATIONS

Difference per Axle:	Front 20%
	Rear 20%

Test Criteria:	Fail:	Below 50%, Over 85%
	Passed:	Over 50% Below 85%

Very Soft	< 50
Soft	50 - 60
Comfortable	60 - 70
Firm	70 - 80
Hard	80 - 85
Extreme	> 85

These numbers are a guide line only, because you need to determine first if the car tested has got a hard, medium or soft ride quality as from the manufacturer, or as requested by the owner.

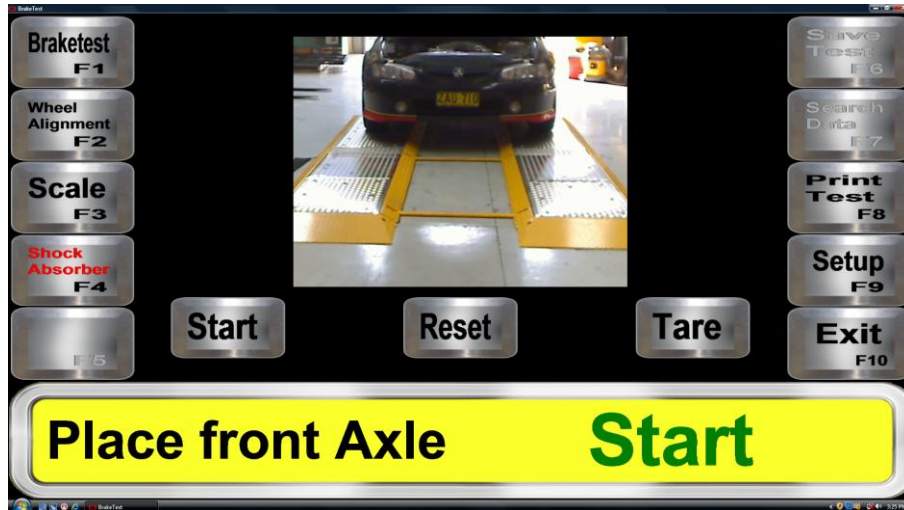


SHOCK ABSORBER TEST PROCEDURE

Caution It is recommended to open both the **BONNET** and **BOOT** of the vehicle and to press on or near the strut. **DO NOT** press on the mudguard as this could dent the panels.

Correct Tyre pressure **IS** important.

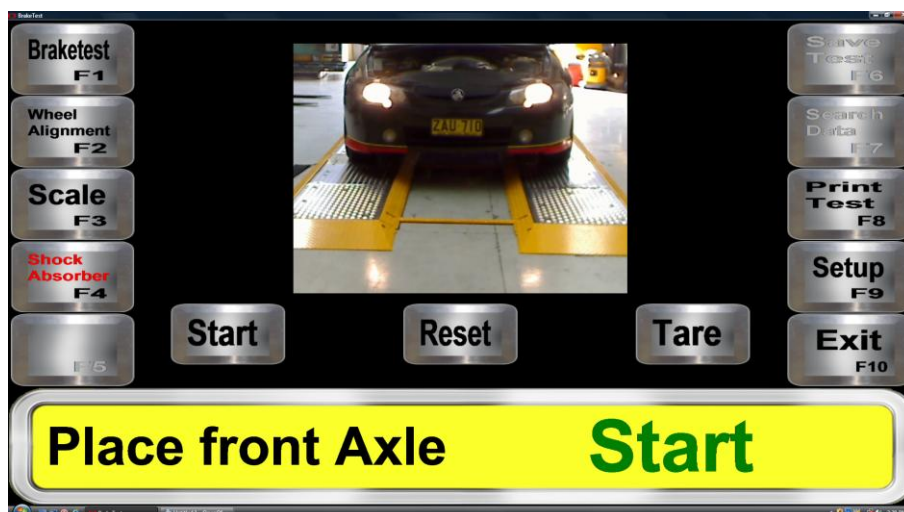
Select F4 on the computer.



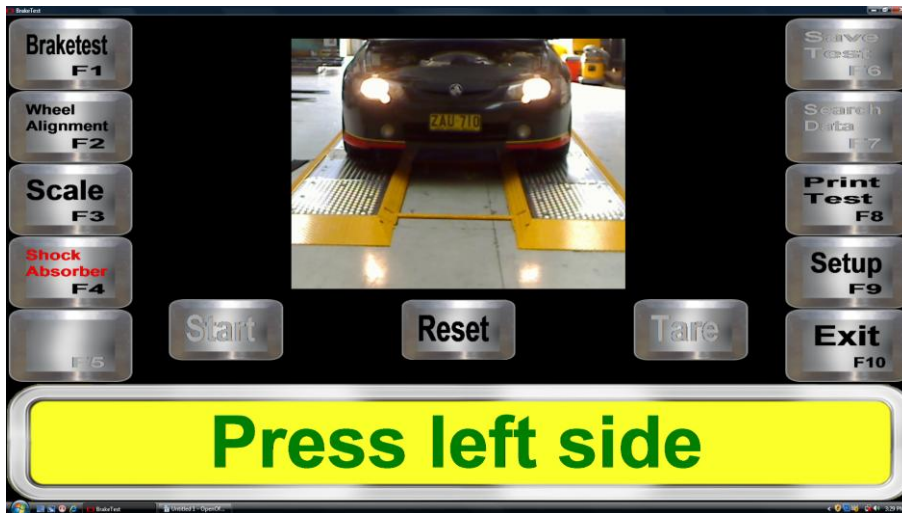
Drive on to the test track and place the front wheels on the weighbridge plates. Be careful to stop with the tyre in the centre of the plate and open the bonnet and boot.

Click the START button to commence the actual testing process. As you press the start button the photo of the vehicle will be recorded.

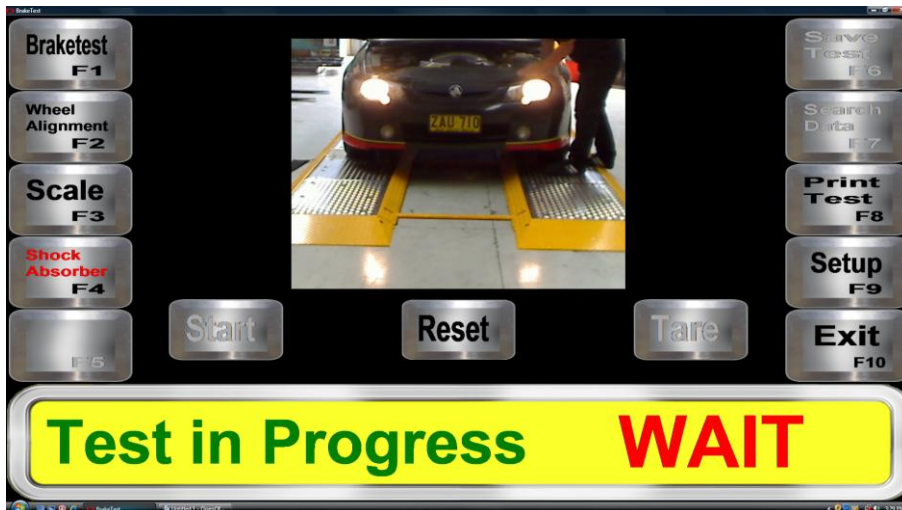
DO NOT STAND IN FRONT OF THE CAMERA!



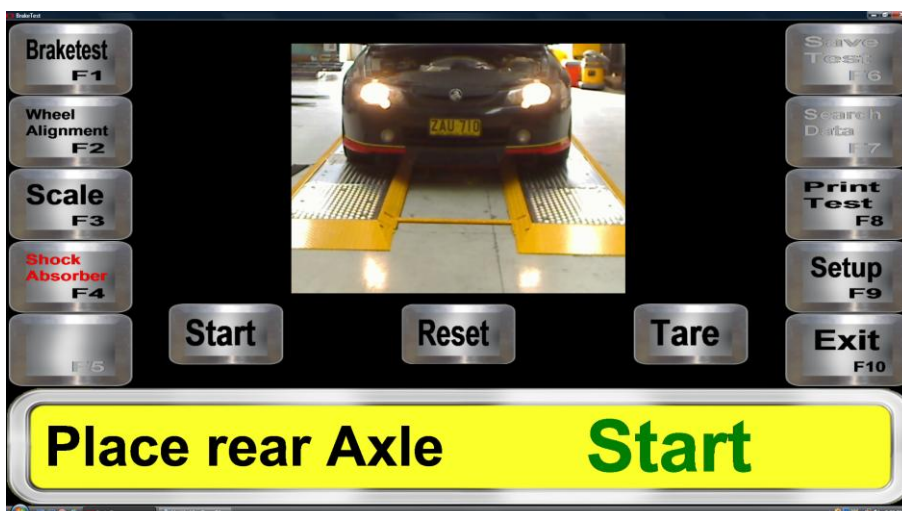
FOLLOW THE PROMPTS IN THE YELLOW BOX!



Once you have pressed down on the left axle, computer will note that the test is in progress and will record the levels for the first shock absorber.



Computer will then indicate that it is ready to test the right hand shock absorber, so press down firmly on the right hand side.



When that is recorded, the screen will indicate to roll the vehicle forward and place the rear axle on the weighbridge plates.

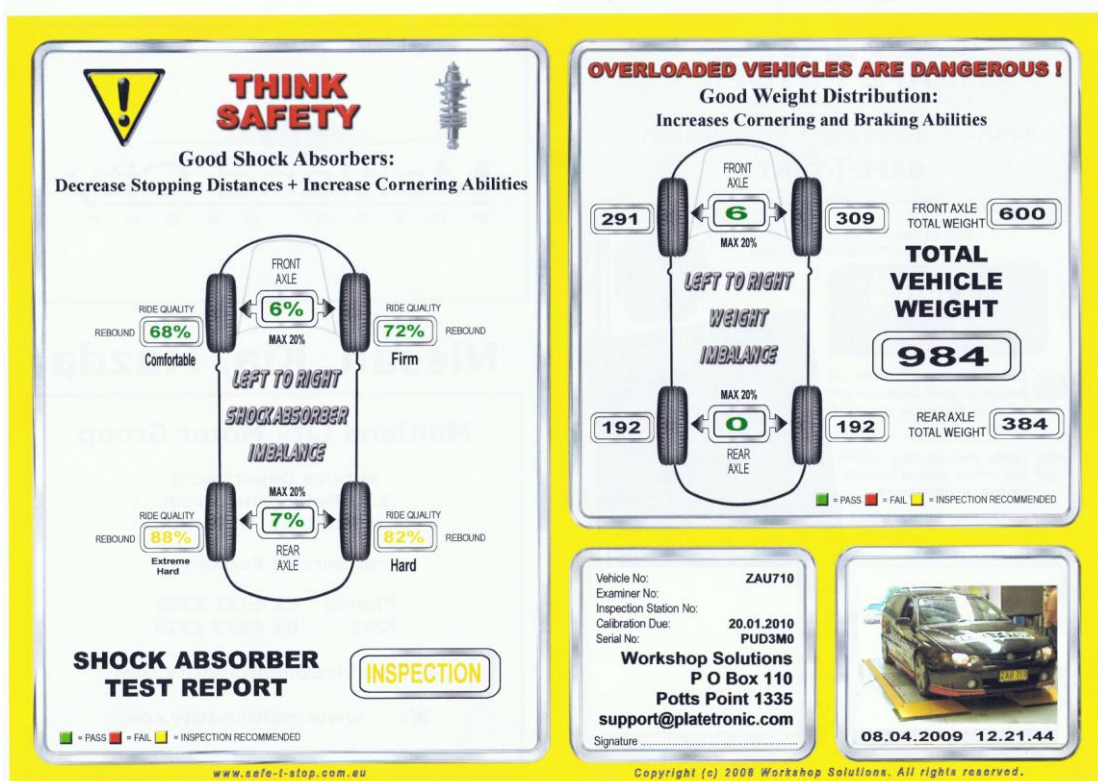
Repeat the process again for the rear shock absorbers.



Once the right hand side has been recorded the test is complete.

At this point, close the bonnet and boot of the vehicle and drive off.

To print the test result, press F8 on the computer, enter the registration details then OK to print.



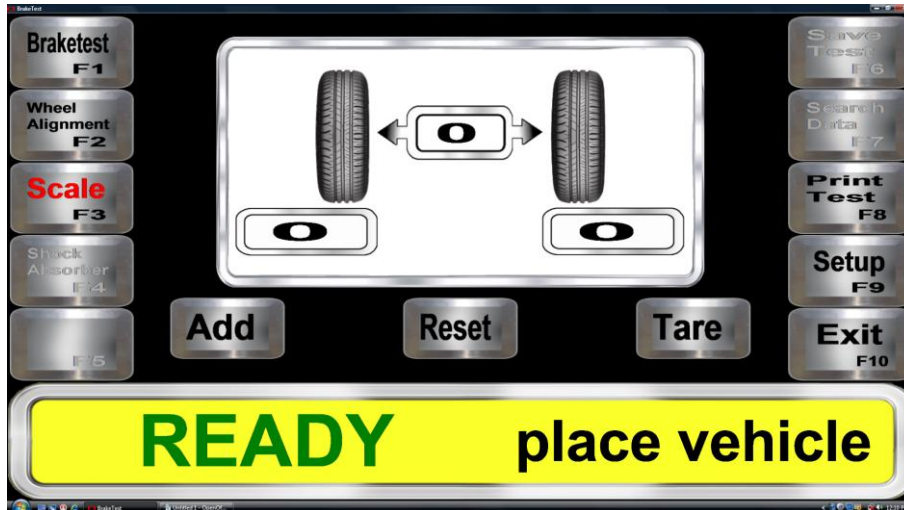
Actual Shock Absorber Test Result



WEIGHBRIDGE FUNCTION

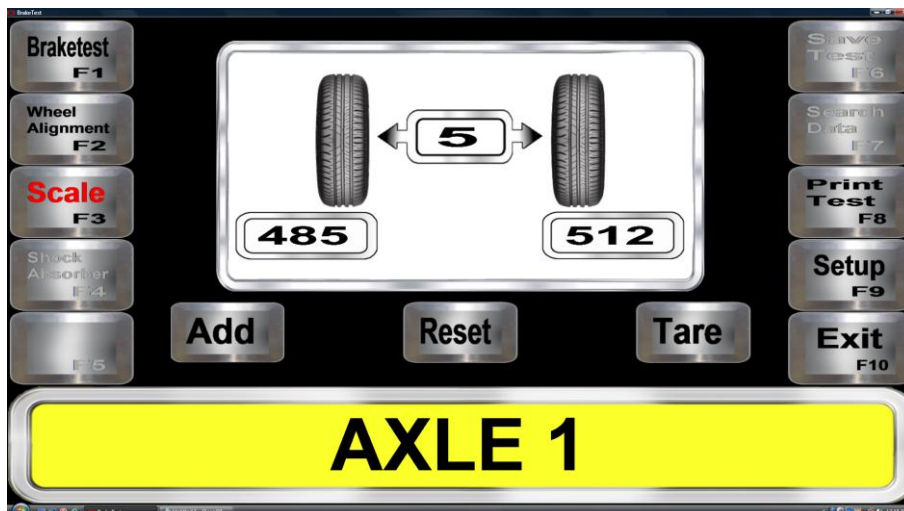
This is not a certified public weighbridge.

On computer click F3 Scale to commence weighing function.
Screen will indicate for the vehicle to be placed on weighbridge plates.

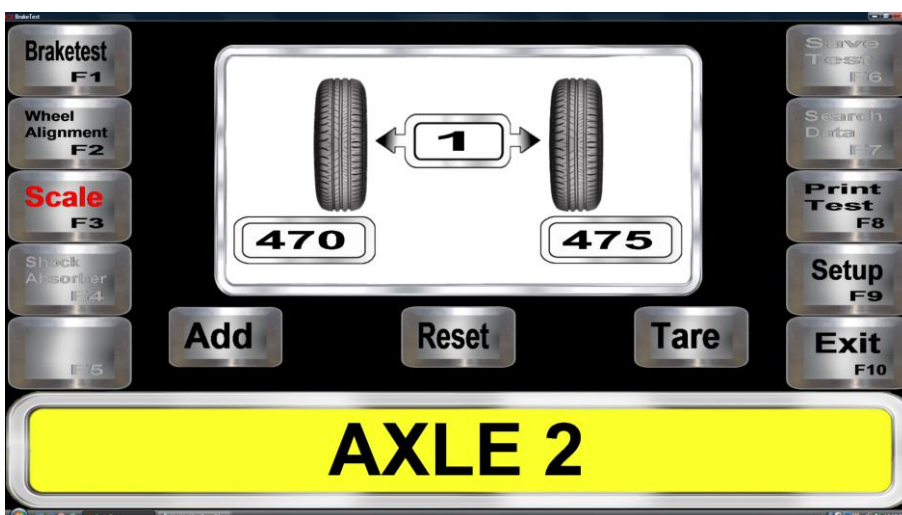


Drive vehicle onto weighbridge plates making sure that the front wheels are in the centre of the plate. Screen will then show the weight of the front axle / corner weights.

Click Add to store the front axle result.



At this point drive forward, again making sure that the rear wheels are in the centre of the weighbridge plates and click Add to store rear axle. Click F8 to print results.



TROUBLE SHOOTING

If you should encounter a computer problem, please shut down the computer and restart.

This will allow the computer to reset itself. Your brake test program will start automatically.

Test Results not printing:

Please check the following:

- Sufficient paper in paper drawer
- Toner cartridge needs replacing
- Paper jam has occurred

The printer warranty is covered by manufacturer. If the problem persists, please contact your nearest authorised Lexmark repairer.

Printer Details: Lexmark Laser Printer
Model Code C543

OnSite / LexExpress Service

To request service:

Tel - Australia : **1300 362 192**

Tel - New Zealand: **0800 LEXMARK** (0800 539 6275)

Fax - Australia : +61 2 8401 4394

Technical Support

For technical assistance:

Tel - Australia: **1300 362 192**

Tel - New Zealand: **0800 LEXMARK** (0800 539 6275)

Fax - Australia: +61 2 8401 4393

If any problems remain unresolved:

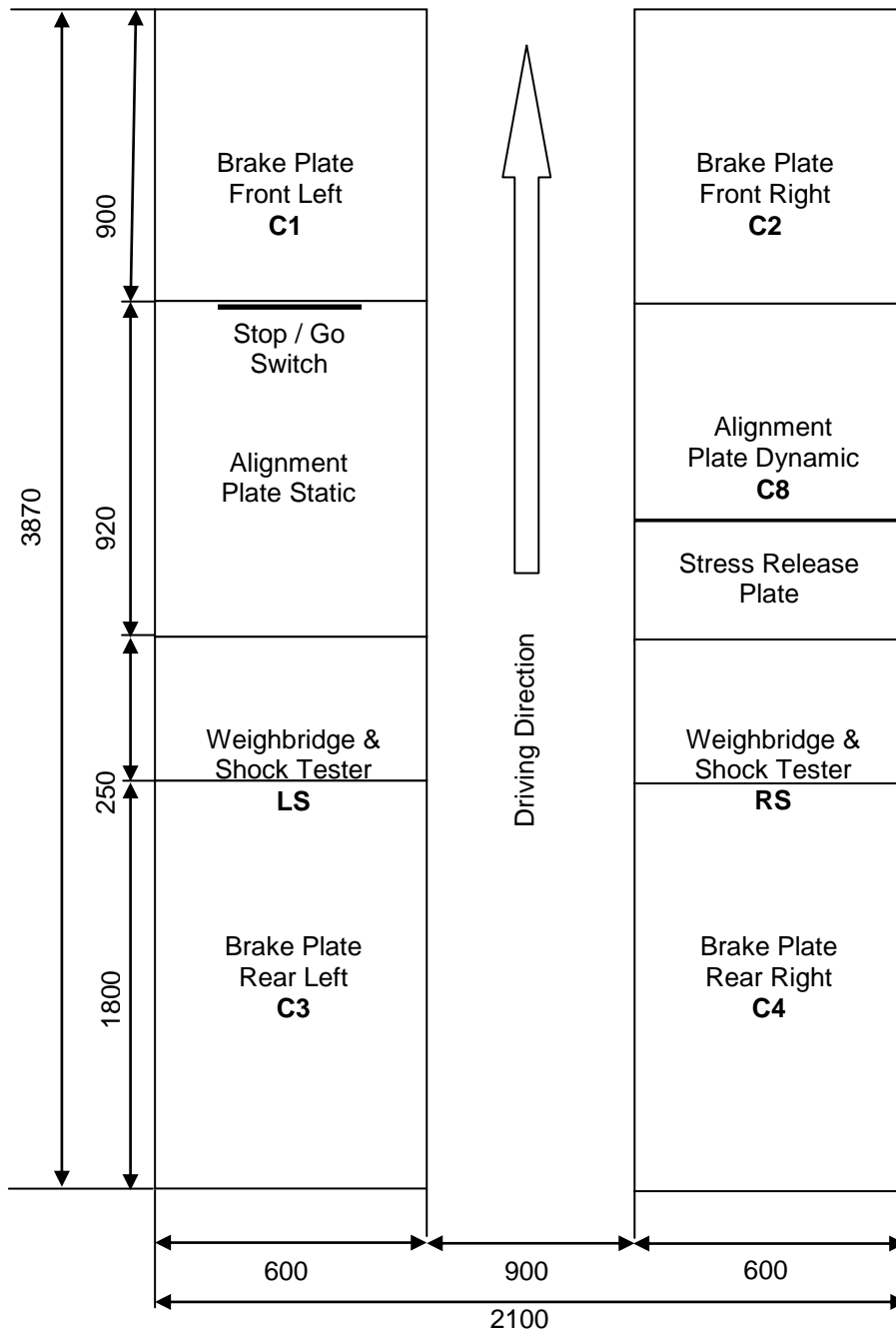
Call PlateTronic on 02 9605 6060 or 1300 88 61 64.



SAFE-T-STOP ULTIMA 4 IN 1 SAFETY TEST TRACK

- Caution:** Maximum Load Capacity: Vehicles up to 4.5 tonne
 NO forklifts or heavy trolleys allowed
 Avoid walking on the plates as the alignment plate moves
- Test Speed:** 5 kph

- Dimensions:** Above ground installation 2350W x 4670L x 50H
 In ground installation 2100W x 3870L x 50D
- Skid Plates:** Stainless Steel plates, perforated for maximum grip
- Weight:** Approximately 550kg
- Shear Beam** Maximum Power Output: 12v
- Load Sensors:** Maximum Measuring Range: 1000kg
 Maximum Load Capacity: 1500kg
 Temperature Range: -10 / +50° C
 Accuracy Class: (+ / - 0.1%)



SYSTEM COMPONENTS

Test Track



Computer with 22" Monitor and Camera



Black Box



Colour Laser Printer – Lexmark C543
(or other if stock is unavailable)



Brake Pedal Force Meter (installed if required by government authority)



PLATETRONIC WARRANTY STATEMENT

The PlateTronic Brake, Steering and Suspension Testing System installed by Workshop Solutions, is warranted against faulty workmanship and materials for a period of twelve (12) months from the installation date. Please note that load cells carry a three year warranty period.

Conditions

The PlateTronic System must not be modified in any way or added to without the company's approval. It must be used under correct operating conditions.

4.5 tonne gross weight limit

No forklifts on plates

No trolley jacks or other equipment with steel or hard plastic or steel rollers or wheels pushed or driven over the plates.

Warranty Exclusions

Damage caused by misuse, abuse or neglect

Damage from modifications or incorporating other parts

Damage resulting from an act of God

Please Note:

Printer, Computer and Camera are covered by the manufacturer's warranty



