

Easy as:

1



Check Display is in "GO" Mode (auto)

Enter Exam +Rego No (optional)



Line up vehicle – Pump brakes once – Check display  
Roll onto test lane at **5 km/h** (walking pace)  
Do not move steering wheel!

2



Display Reads: Front brake results - Max force in N  
Front Alignment results +/- mm in Toe/Drage



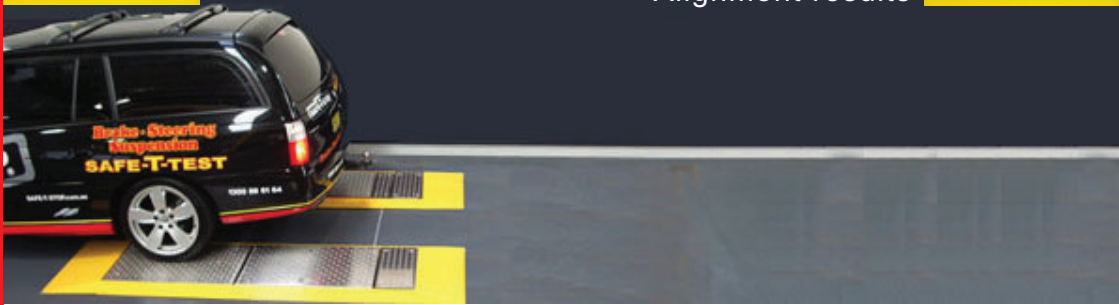
Once front wheels are on the brake plates (photo)  
Push brake pedal firmly and hold for 1 second  
Then wait until "B" appears on the display

3



Check Display is in "B" Mode

Display then reads: Rear brake and Alignment results



Roll forward until rear wheels are on the brake plates, transmission should be in neutral, then push brake pedal firmly and hold for 1 second  
Wait until "H" appears on the display

4



Check Display is in "H" Mode

Results are printed Automatically



Reverse until rear wheels are back behind weighbridge plates (photo), then roll forward and gently pull handbrake when rear wheels are on the brake plates again – **Drive Off** – **Test Completed!**

3-Stop Brake and Wheel Alignment Test



## Instruction Manual 'WS' 2 Plate Brake Test System

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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 Overhead display reads: **GO**

**Step 2** Roll onto Plates at 5-10 km/h ( walking pace )

**Step 3** Once front wheels are on the brake plates ( Large End Plates ) brake **HARD** and keep brake pedal pressed for 1 second.

The display now shows:

1. Maximum brake force in N & % difference on front axle
2. Overall drag front axle

**Step 4** Wait for the display **B** , drive forward and stop rear axle on brake plates.

The display now shows:

1. Maximum brake force in N & % difference on rear axle
2. Overall drag rear axle

The display now shows **H** and the PlateTronic is now ready for the handbrake test.

**Option A:** Reverse off the plates until rear axle is on the approach to the plates again, wait for the display to flash **<<**; drive vehicle forward until rear wheels are on the brake plates, then pull on the hand brake. Test results will now be printed.

**Option B:** On vehicles with front handbrake **ONLY**. Reverse off the plates until front axle is on the approach to the plates again, wait for the display to flash **<<**; drive vehicle forward until front wheels are on the brake plates, then pull on the hand brake. Test results will now be printed.

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



## TEST RESULTS - PASS / FAIL CRITERIA

### BRAKE TEST SPECIFICATIONS

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

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

Front to Rear brake force distribution:	<b>Front axle Min 60% Max 95%</b>
	<b>Rear axle Max 40% Min 5%</b>

### WHEEL ALIGNMENT SPECIFICATIONS

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

Readings for best Tyre Wear are

Rear wheel drive cars:	Front Alignment: + 2 mm	Rear Alignment: + 2 mm
Front and 4WD cars:	Front Alignment: - 1 mm	Rear Alignment: + 2 mm

Accepted tolerance: +/- 2mm

### SHOCK ABSORBER SPECIFICATIONS

R1 = Rebound

**70% or more is Hard / very good**  
**60% is medium / acceptable**  
**50% or less is soft / needs replacing**

R2 = Compression

**90% or more is Hard / very good**  
**80% is medium / acceptable**  
**70% or less is soft / needs replacing**

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.



## HOW TO ENTER VEHICLE AND EXAMINERS NO

**Step 1** Aim Remote Control at Main Display and press the **1** button. This activates the keyboard.

**Step 2** At Keyboard choose from the keys **F1, F2, F3, or F4** which hold stored Examiners Numbers or Names. Then go straight to Step 3.

Or

Use the **F5** key which allows you then to enter your personal details (up to 8 characters)

Then press **ENTER**.

**Step 3** Enter Vehicle Registration Number (Up to 8 characters)

Then press **ENTER**

**Useful Hint** The **F7** key is used as the backspace key.

These details are now stored for three minutes.

## HOW TO USE THE PEDAL FORCE METER

**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

**DO NOT FORGET TO SWITCH OFF WHEN FINISHED**

## CODES FOR REMOTE

**M 1** Settings for the print Header. (AIS No, Serial No, Workshop Address)

**M2** Factory settings - can only be accessed via Pass word.

**M 3** Weighbridge functions

**M 4** Automatic Brake Test Program. (Normal Setting.)

**M 5** Print last Test

**M 6** Calibration Check

**C 1** Left Brake Plate

**C 2** Right Brake Plate

**LS** Static Weighbridge Left Side

**RS** Static Weighbridge Right Side

**C 6** Pedal Force Meter

**C 8** Alignment Plate



## WEIGHBRIDGE FUNCTIONS

**Step 1** Aim remote control at display and press the **M** button until the display reads **M3** then press **E**.

The shock test plates are now in 'Weighbridge' Mode

**Step 2** Drive front axle onto weighbridge plates. Make sure car is parallel on test track and in the centre of the weighbridge sensors.

Now press **1** with remote control to store front axle weight.

**Step 3** Repeat for rear axle.

Press **2** with remote control to store rear axle weight.

**Step 4** Press **4** on remote control to start printing the results.

**Step 5** To exit, drive vehicle off plates, then press **E** on remote control twice.

**Useful Hint** With the remote, you can change between corner weights and total axle weight by pressing the **M** button.

- **1** will memorise the Front Axle weight
- **2** will memorise the Rear Axle weight
- **4** will print the results

This is not a certified public weighbridge.




## 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.

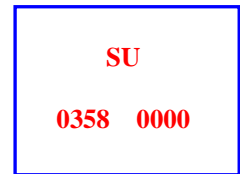
Correct Tyre pressure **IS** important.


**Step 1** Load pre printed stationary into printer.

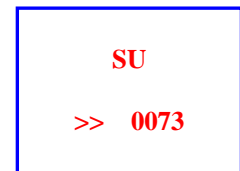
**Step 2** Press **4** on the remote control. Display panel now reads 




**Step 3** Drive with front axle onto shock absorber test plates. Display will now show corner weights (approx 6 secs). During this time the driver should get out of the car. Countdown is now on from 9 – to – 0. During this time the vehicle needs to be stable (Do not touch) The right side of the display will now 'zero' itself and the right suspension test can begin. 

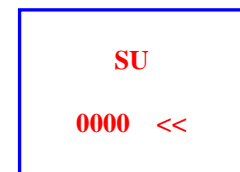


**Step 4** Press corner down sharply and release quickly. A minimum pressure of 70kg is necessary to activate the test. If successful, the display will show two arrows to the Right and the First Rebound measurement (**R1**) The measurement is displayed in percentage. 



**Step 5** Once the arrows point to the left, the other side is ready to be tested by repeating the same procedure.

**Step 6** The display will now show the Rebound (**R1**) in % and Compression (**R2**) in  



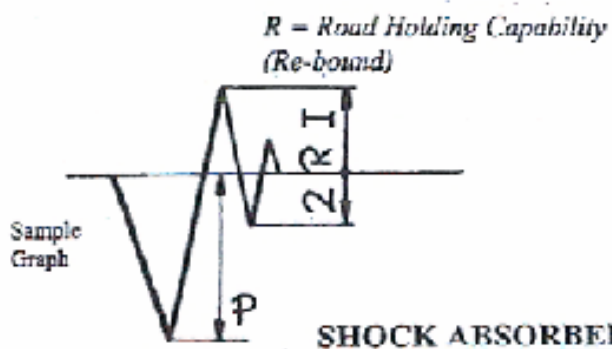
The higher the number on **R1** and **R2** the **BETTER** (harder) is the suspension dampening effectiveness.

**Step 7** Now drive the vehicle off, wait for display to read **RE**, and repeat on the rear axle.



**SAFETY TEST TRACK by WORKSHOP SOLUTIONS**

HUNTER HOLDEN 603 VICTORIA RD RYDE NSW 2112 PH 9808 9123 FAX 98074901	Date, Time : 10.09.1999 14:22 AIS Nr. : A2454 Serial Nr : 109J7104 Next Cal : JUL 2002
VEHICLE Nr.: ADR 356      EXAMINERS Nr.: ELO368	SIGNATURE:



The higher the % numbers achieved on R1 & R2, the better (harder) is the suspensions dampening effectiveness!

A high % Difference, means an unstable and potentially dangerous car!

**SHOCK ABSORBER TEST RESULTS**

<u>FRONT AXLE</u>			<u>SHOCK ABSORBER</u>		
<u>Left</u>	<u>Difference</u>	<u>Right</u>	<u>Good</u>	<u>Worn</u>	<u>Poor</u>
R1 = 58 %	00 %	58 %	✓	[ ]	[ ]
R2 = 95 %	04 %	92 %	✓	[ ]	[ ]
<u>REAR AXLE</u>			<u>Comments:</u>		
R1 = 26 %	62 %	67 %	Rear Left Shock is inoperative!		
R2 = 91 %	04 %	94 %			

**WEIGHBRIDGE RESULTS in KG**

F/L Corner	F/R Corner	Front Axle
325	334	659
R/L Corner	R/R Corner	Rear Axle
200	186	386
Comments:		<b>Total Vehicle Weight</b>
		1045

## TROUBLE SHOOTING

Display shows **'GO'** but Safe-T-Stop is 'locked up'

Switch display off at power point for the duration of ONE MINUTE.

This will allow the computer to reset itself to original position.

Display shows **'PR'**

This means there is a printer problem.

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 Brother repairer.

Printer Details:      Brother Laser Printer  
                                 Model Code HL-2070N

Brother Product Support  
Address:      7 Khartoum Road, North Ryde 2113  
Phone:      02 9887-4344



## SAFE-T-STOP 'WS' 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 2770L x 50H

In ground installation 2100W x 1970L x 50D

Skid Plates: Stainless Steel plates, perforated for maximum grip

Weight: Approximately 350kg

Maximum Power Input: 240v

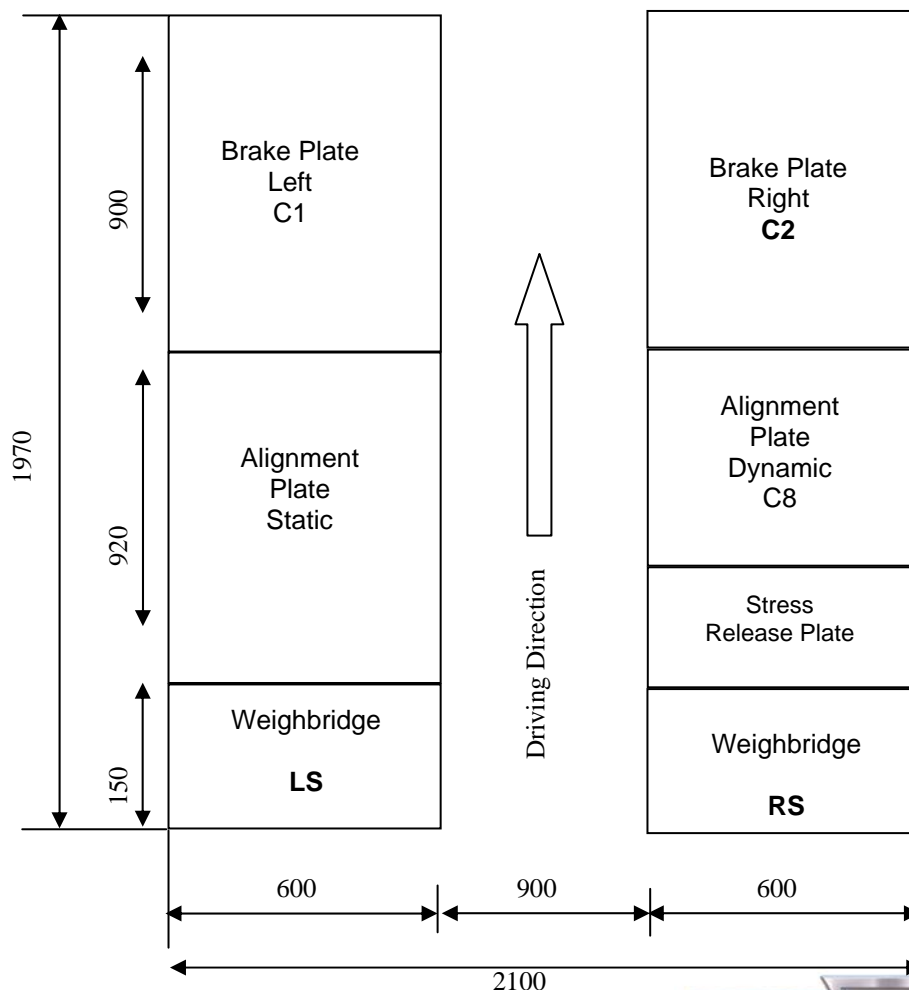
Maximum Power Output: 12v

Load Sensors: Maximum Measuring Range: 1000kg

Maximum Load Capacity: 1500kg / wheel

Temperature Range: -10 / +50° C

Accuracy Class: ( + / - 0.1% )



## SYSTEM COMPONENTS



### Main Display

Dimensions: 600w x 350h x 250d  
 Sturdy steel casing  
 Large LED lights  
 Weight approximately 12 kg  
 Power input 240v output 12v



### Keyboard

Dimensions: 270w x 250h x 120d  
 Sturdy Steel casing  
 Weatherproof, washable surface.  
 Large LCD Display with light  
 Power output 12v



### Remote Control

Infra Red  
 1 x 9v battery



### Brake Pedal Force Meter

Radio controlled for easy use  
 2 x AA Batteries



### Printer

Brother HL-2070N  
 Mono Laser Printer  
 20 ppm

## SAFE-T-STOP WARRANTY STATEMENT

The Safe-T-Stop 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 Safe-T-Stop 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, violent storms, lightning or an act of God

