User Manual Version 7.12

AUTO STOP Heavy

In Vehicle Brake Tester





Table of Contents

Auto *Stop* Heavy User Manual Version 7.12

1.	UNPACKING AND FIRST TIME USE	2
1.1	Activating your meter	2
2.	USE OF BATTERY CHARGER AND CARE OF BATTERY	3
3.	OPERATION	4
3.1	Options: Changing & Viewing	4
3.2	Test Conditions & Test Area	4
3.3	Set-Up in Vehicle	4
3.4	Running the Test	4
3.5	Special Characters	5
3.6	Test Instructions Summary	6
4.	TEST DATA STORAGE (OPTIONAL)	8
4.1	Using the Data Logger	8
4.2	Downloading Data	8
4.2	2.1 Download Instructions	8
5.	CHECKING SENSORS AND OTHER FUNCTIONS	.10
6.	CALIBRATION PROCEDURE	.11
6.1	Return of AutoStop Heavy for Calibration	.11
6.1	.1 Packaging	.11
6.1	.2 Shipping	.11
6.1	.3 Documentation	.11
7.	TROUBLESHOOTING	.12
8.	SPECIFICATIONS	.12
9.	CHANGING PAPER	.14
10.	CHANGING PRINTER RIBBON	.15
11.	WARRANTY	.16
12.	QUICK GUIDE	.17

1. UNPACKING AND FIRST TIME USE

Congratulations on your choice of an AutoTest Brake Meter. Please take the time to read this User's Manual before using the AutoStop Heavy Brake Meter in the field. Incorrect or inappropriate use of this instrument may void the warranty. Retain the packing materials for future shipping and transport of the unit for periodic calibration. Please complete the warranty registration card and post it to AutoTest Products Pty Ltd, alternatively visit our website www.autotest.net.au and complete your warranty registration on line. Your warranty registration ensures that you are kept up to date on any software or hardware changes to your AutoStop Brake Tester. The packing box of your AutoStop Heavy should contain the following:

- 1. AutoTest Brake Meter, Model AutoStop HEAVY, complete with Pedal Sensor
- 2. Long strap for restraining Brake Meter Unit Case
- 3. Battery Charger
- 4. User Manual
- 5. Warranty Registration Card
- 6. Calibration Certificate
- 7. Interface Cable (download option only)
- 8. Program Disc (download option only)

1.1 Activating your meter

Initially, each meter is locked prior to its shipment. So, before you can perform any brake tests, you must first activate your meter.

- Step 1: Switch on meter by pressing the On/Off button;
- Step 2: Wait for the scrolling prompt ">Examiner ID? |(Y/N)", then press the "Yes" button:
- Step 3: Next, a scrolling message "SENSOR CHECK Please take foot off pedal sensor..." should appear, press the "Yes" button to move onto the next screen;
- Step 4: At this point, you should see "**Ready>**" on the screen. Press "A" to enter the activation menu:
- Step 5: In the activation menu, press "Y" in response to the prompt ">Meter is currently LOCKED. Activate meter? |(Y/N)";
- Step 6: Instructions on how to activate the meter should be scrolling across the screen at this point. Press the "Yes" button to begin the activation sequence;
- Step 7: At the prompt "Code: ", enter the 5-digit serial number of your brake meter (which is printed to the left of the On/Off button) and press "Yes";

Step 8: Upon entering the correct serial number, you should see "Meter Activated!" on the display. Now the Test menu is accessible from the "Ready>" prompt by pressing "R".

Note: The activation process is a one-time procedure, after which the meter cannot be locked again.

2. USE OF BATTERY CHARGER AND CARE OF BATTERY

AutoStop Heavy is fitted internally with a long-life 12volt, fully sealed, rechargeable lead acid battery, which must be charged for up to 10 hours before initial use. The battery charger input is located to the right of the printer. With proper care and use, the battery should last between two and five years.

It is recommended to recharge the battery nightly if the Brake Meter is used regularly. Only an approved battery charger with the correct voltage, waveform and terminal polarity should be used. The battery must never be allowed to fully discharge as it will void the warranty.

The battery should always be recharged if the battery voltage falls below 12 volts (for more information see Section 6 "Checking Calibration"). As a guide, if the Brake Meter is used for one to two tests per day, the battery should be recharged weekly. If the Brake Meter is used more frequently, the battery should be recharged daily.

The AutoStop Heavy is fitted with a low voltage cut-out switch in the circuitry to protect the battery from excessive discharge. If the battery is allowed to discharge to zero (0) volts, and left standing for a long period of time, severe sulfation would occur, raising the internal resistance of the battery to abnormally high levels. In such extreme cases, the battery may not accept a charge. It is vital that the battery of the AutoStop Brake Meter is regularly charged to prevent accidental battery damage.

3. OPERATION

3.1 Options: Changing & Viewing

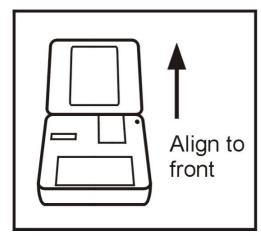
To view or change items, ensure the Brake Tester is in the ready mode. "Ready>"

То:	Press	Screen Display
Set Graph Mode 0	From the Ready> position, press "X", then toggle "G"	Print Graph: can be toggled between 1 and 0 by pressing "G" 1 = On - print the graph with test 0 = Off- don't print the graph with test. Press "Enter" to return to Ready>
Change from Imperial to Metric	From the Ready> position, press "X", then toggle "I"	Imperial: can be toggled between 1 and 0 by pressing "I" 1 = Imperial, 0 = Metric Press "Enter" to return to Ready>

3.2 Test Conditions & Test Area

While the vertical angle of the Brake Meter will be automatically calculated and compensated for prior to testing, the greatest accuracy will be obtained when the Brake Meter is level to the surface of the road. Therefore, the area used for the test should be as flat as possible. The head wind should be less than 10kph.

3.3 Set-Up in Vehicle



the brake pedal.

AutoStop Heavy must be secure during the entire duration of the test. Misalignment or movement can cause lower (worse) deceleration readings. This could mean test failure if the brake performance is close to the required limits. Secure Heavy in a level or horizontal position in the vehicle with the lid open and facing forward. To prevent movement, use the long strap provided by wrapping it around the brake tester and the passenger seat. Another method is placing a sand bag behind Heavy, thus holding it against a firm surface. Attach the pedal sensor to

3.4 Running the Test

Note: The vehicle must be stationary (at a complete stop) prior to commencement of the test. Ideal conditions are to test the vehicle at a location where other vehicles are not present. However, if it is necessary to use another area, such as a public

road, only commence the test if no other vehicles are in the area and there is no danger of an accident.

When the Brake Meter and the pedal sensor are both properly secured, turn the unit on and follow the instructions in Section 3.6.

If an incorrect keystroke entry is pressed at any time, press the back-arrow key to erase and then re-enter the correct keystrokes. The "beep" signal indicates the key has been properly pressed and has registered on the display.

3.5 Special Characters

By using the following procedure you may obtain the following Special Characters: To obtain the following characters, press and hold the "-" key, then press the listed character to obtain the special character.

Press "-" and HOLD, then Press:	Displayed Character	Press "-" and HOLD, then Press:	Displayed Character
Α	!	N	
В	"	0	/
С	#	Р	(SPACE)
D	\$	Q	!
E	%	R	
F	&	S	#
G	(T	\$
Н	(U	%
I)	V	&
J	*	W	£
K	+	Х	(
L	,	Y)
M	-	Z	*

3.6 Test Instructions Summary

Step	Initial Screen Display	Instruction	Keys to Press	Final Screen Display
1	Blank Screen	Switch On.	"On/Off"	AutoTest HEAVY Brake Test Unit Software Version No Cal Due Date- Examiner ID? Y/N
2	Examiner ID? Y/N	To retain ID (identification of examiner) as listed.	" Y "	If N is pressed New ID: (Step 3), if Y is pressed Sensor Check (Step 4)
3	NEW Examiner ID	To change ID: Enter your personal Examiner ID (any alpha/numeric key entry up to 19 digits).	Press the digits of your examiner ID (max 19 digits) then press " Yes ".	Scrolling message regarding pedal sensor Auto Zero. Sensor Check-Take Foot off Pedal Sensor and Press Any Key.
4	Sensor Check	Remove all pressure from the pedal sensor. Upon pressing the enter key the unit measures and then compensates for the slope of the vehicle and the 0 Newton point of the pedal sensor.	"Yes"	Ready>
5	Ready>		"["	Reg No?
6	Reg. No?	Enter the vehicle ID Number. Up to 19 alpha/numeric characters may be entered. Example VIN No Company ID No License Plate No.	Press the digits of the vehicle registration, VIN, or other designated numbers and then press " Yes "	Srvc/Emrg? S/E
7	Srvc/Emrg? S/E	Enter "S" if the service brakes are to be tested, or enter "E" if the emergency brakes are to be tested. Entering "E" bypasses the pedal sensor and no brake pedal pressure will be recorded or printed. "E" is also used when testing parasitic braking devices such as retarders. Note: An emergency test is similar to a pendulum type brake test.	Press " S " or " E "	Commence/Reset? C/R
8	Commence/ Reset? C/R	Commence or Abort the test. At this point there should not be any load on the pedal sensor. Pressing "C" will begin measurements and unit will await start criterias such as deceleration and pedal pressure. Pressing "R" will abort the test.	Press " C " or " R "	Prelude (if the C key is pressed). Ready> (if R key is pressed). If the Brake tester is not sufficiently level after pressing "C", the following message will flash onto the screen, together with several warning beeps: Slope too large, adjust unit. The LCD will then return to Ready>

3.6 Test Instructions Summary (cont'd)

	B	The Duelse Tester to seed at		Onlandation :
9	Prelude	The Brake Tester is ready to		Calculating
		start recording. If the vehicle		If data logger is fitted
		is at a stop, release the brake		screen will display Save
		and gently accelerate the		Y/N? Otherwise straight to
		vehicle to the required speed.		Print Y/N?
		Apply the brakes by pressing		
		on the pedal sensor attached		
		to the brake pedal (or by		
		using the emergency brake).		
		For Service Brakes, the test		
		is triggered when the pedal		
		sensor detects a load greater		
		than 100 Newtons followed by		
		the vehicle decelerating by		
		more than 0.1g. (Note: both		
		must be met). For emergency		
		brakes, the test is triggered		
		only by the vehicle		
		decelerating by more than		
		01.g. If the vehicle is in		
		motion, you may gently		
		accelerate to the required		
		speed and follow the same		
		instructions as above.		
11	Save Y/N	If the Datalogging option is	Press " Y " or " N "	If the memory is full, it will
		not installed, this will not		not save and will display:
		appear and the LCD will		"Not Enough Mem.". If it is
		move directly to "DUPLICATE		not full and the "Y" is
		Y/N". If the Datalogging		pressed, it will save test. If
		option is installed, you have		"N" is pressed, the test will
		the option to save the test by		not be saved. In either case
		pressing "Y".		the LCD will show Print Y/N
12	Print Y/N	Allow the report to be printed.	Press "Y" or "N"	If "Y" the LCD will show
	1 11114 1714	тако ило торотто во разлиси.		"Official Copy". The unit
				will begin to print and LCD
				will then show Normalising
				as it calculates data for
				graph presentation. As it
				prints the graph, the LCD
				will show Graph. The LCD
				will now show Duplicate . If
				"N" the unit will return to
		1.00		Repeat Y/N
13	Duplicate Y/N	If you require an additional	Press " Y " or " N "	If "Y" the display will show
		copy of the test Press "Y". If		"Customer Copy", the unit
		one copy is sufficient then		will begin to print and LCD
		press "N"		will then show Normalising
				as it calculates data for
				graph presentation. As it
				prints the graph the LCD
				will show Graph The LCD
				will then show Repeat Y/N
14	Repeat? Y/N	Repeat the test by pressing	Press "Y" or "N"	Svrc/Emrg? S/E if "Y" is
		" Y ", stop testing and return to		pressed, Ready > if " N " is
		Ready mode by pressing " N "		pressed
L	L	ricady inicad by probbing 11		p. 00000

4. TEST DATA STORAGE (OPTIONAL)

4.1 Using the Data Logger

The data logger has about 32K of memory available to store tests and allows you to recall and either print or upload them to any IBM or IBM compatible computer at a later time. Depending on the length of the tests, you can store up to 30 tests.

Preliminary Function	То	Press	Screen Display
From the Ready> position,	Print the	"R"	1) XXXX (Reg no # desired is displayed
press "L". To recall the	Data		on the LCD. Then Press "C" for an
data, press "R"			Customer Copy or "O" for a Official Copy.
From the Ready> position,	Clear the	" C "	Pressing "C" will show "Clear all (Y/N)
press "L". To clear the	Data		Pressing " Y " will clear Data
data, press "C"	Logger		Pressing "N" will not clear the data.
From the Ready> position,	Display	"["	Tests saved: xx
press "L". To display	Data		Note: This screen displays the Number of
storage status information,	Logger		tests stored in the Data Logger. Press any
press "I"	storage		key to go to the next screen.
	status		
	information		Mem: xx % used
			Note: Data Logger memory usage in
			percentage

4.2 Downloading Data

The downloadable model of the AutoStop Heavy is provided with a serial port to attach to any IBM or IBM compatible computer with a spare COM port. An interface cable and download software are required to download test results from the Brake Meter. These are provided with the unit. The uploaded data, formatted as a text file, can be imported into spreadsheet programs such as Excel and Lotus for further detailed examination, or printed. Heavy Brake Meters are shipped with download software (also available on the AutoTest website) for PCs running Windows 95/98/2000. Version 7.0 and greater Brake Meters require Version 1.4 of the download software. Earlier version Brake Meters require Version 1.21 of the download software. You will receive the appropriate software with the unit.

4.2.1 Download Instructions

If you have downloaded the software from the web, simply double-click on the downloaded file to install the software. If you have received the software on CD, insert the CD into your computer CD drive. If the setup program does not run automatically, run the setup.exe program located on the CD to install the software. After the program installation is finished, there will be two new icons on your desktop.

Double-click on the 'Maxi/Heavy Data Logger' icon to run the download software, or double-click on the 'Maxi/Heavy Data Logger Data' icon to access the directory

containing all the data files that have been downloaded from the Brake Meter. Each time you download test data from a Brake Meter, two log-files are automatically saved into this directory (folder). The filename is displayed in the download software after a download, and is a combination of the Vehicle Registration, Test Date and Test Time. The log-files can be re-opened and printed at any time using the download software, or opened in spreadsheet programs such as Microsoft Excel.

The software is provided free of charge, however you must pay a license fee for each Brake Meter that you wish to use with the software. For example, if you own two brake meters and wish to use them both with the download software, you will need to purchase a license code for each of these brake meters and enter it into the software before you can download the test data. License codes may be purchased from the AutoTest Products website, http://www.autotest.net.au. Go to the 'Buy Online' section of the website and enter your contact details to gain access to the Online Catalog. Near the bottom of the list is the option titled 'Download Software License Code for 1 Brake Meter'. Select 1 of these items, then proceed to Step 3 to enter your Purchasing details. After making the purchase, you will be contacted via email or phone and asked for a serial number, then supplied with the license code for your Brake Meter. Note that for a limited time these license codes may be available free of charge, however you will still need to follow this procedure to receive a license code for each Brake Meter.

Once you have purchased a license code, you must enter it into the download software. To do this, load the software and click the button labelled 'Help / Add License', then select the 'Add a License' tab at the top of the screen. On the subsequent screen you will see a list of brake meters that have been authorised for use on that computer. To add a brake meter to the list, enter the serial number, along with the license code that you purchased for that specific brake meter, then click the 'Authorise' button. If you entered the license code correctly, the serial number of the brake meter will be added to the list of authorised brake meters, and you will be able to download test data from that brake meter.

Note that if you install the software on a different computer, or under a different login name, you will need to re-enter the license code(s). Be sure to save any purchased codes. AutoTest Products cannot be held responsible for lost license codes.

Procedure for downloading tests to your PC:

- Step 1: Connect your Brake Meter via the supplied RS232 cable to a spare Com Port of your computer.
- Step 2: On your PC, click the Download test(s) button, then select the Com Port to which the Brake Meter is connected and click Next.

- Step 3: Enter the serial number of the Brake Meter. (Note that you must own a license for the Brake Meter, and have entered the License Code in the 'Add License' section of this program see below for more information). Then click Next.
- Step 4: Enter any comments for this test. These will be saved in the output file. Then click Next.
- Step 5: When you are ready, click the Next button to put the PC into Ready mode. The PC display will read 'Turn on your Brake Meter now'.
- Step 6: Turn on your Heavy Brake Meter. After displaying the product name, serial number and revision, the display will read 'Connection..' while the Brake Meter communicates with the PC. If the connection is successful, the Brake Meter will display 'Data Logging...' while the data is uploaded to the PC, then will switch itself off.
- Step 7: After the data is downloaded and displayed on the screen, click the 'More Data' button to see the full test data, or select Print from the toolbar to print the test and chart data to your printer.

Procedure for opening a previously saved log-file:

- Step 1: Run the Heavy Data Logger software. Click the 'Open test(s)' button and use the mouse to select one or more tests to open. If you hold down the CTRL key you can select multiple tests.
- Step 2: The log-files will be opened and the first test will be displayed on screen. Use the buttons and the list at the top of the screen to view all the different tests or print the data.

5. CHECKING SENSORS AND OTHER FUNCTIONS

With the Brake Meter in Ready mode, the battery voltage, deceleration, pedal force, date and time can be checked. **Note:** None of these readings can be adjusted by the operator.

То:	Press	Screen Display
Check battery life	"B"	Bat. life: xxx %
-		The Battery is considered flat when the percentage falls
		below 85%
Check calibration	" C "	Cal: x.xx g Acceleration reading
(Toggle between		This should read close to 0.000 +/- 0.05 on a surface
accelerometer &		measured as being horizontal and +/- 1.000 +/- 0.05

pedal sensor		when vertical
reading)	" C "	Cal: xxx N Pedal Sensor reading - this should be within
		20N of zero when no load is applied.
Check the date	" D "	Date: dd mmm yy
Check the time	" T "	Time: hh:mm:ss
		Note: The internal clock can be changed from Local
		Standard Time to Day Light Savings. After seeing "T" you
		may toggle between Standard and Day Light time by
		pressing "D". Daylight Savings time is indicated with "*".
Check printer feed	"P"	Paper advances until any key is pressed
Contrast on LCD	" O "	BL= on or BL = Off Contrast X.
Display		Backlight features are not standard (special order).
		The Contrast may be changed by pressing "U" to go up
		or "D" to go down. Pressing "E" will exit this function.

6. CALIBRATION PROCEDURE

The Brake Meter must be re-calibrated periodically. The reason for this is to maintain creditability in tests and acceptance of data according to international standards. Each time the unit is turned on, the LCD will show the date that the recalibration is due. The calibration due date is also shown on all printouts and upload reports. At the time the unit is due for re-calibration, testing will not be possible. The LCD screen will show: "Calibration due! Contact your vendor for recalibration." Return Brake Meter to AutoTest Products (See Section 6.2).

6.1 Return of AutoStop Heavy for Calibration

6.1.1 Packaging

The Brake Meter should be packaged in the original shipping container. However, where this container is not available, remember that you are shipping an electronic instrument. Bubble pack or foam should surround the Brake Tester and should be inserted into a sturdy cardboard box.

6.1.2 Shipping

Labelling - A label noting "Electronic Device - Fragile" should be placed on the box. Freight Carrier - Container should be sent "Freight Prepaid". AutoTest Products has no preference on freight carriers. However, the unit should be forwarded by companies such as WARDS, IPEC, UPS, or Federal Express if a expedient delivery is required.

Ship to: The Service Department, AutoTest Products Pty Ltd, 279 Normanby Road, Port Melbourne, VIC 3207, Australia. Phone: (+61 3) 9647 9797.

6.1.3 Documentation

A copy of the purchase order for re-calibration and a packing slip must be included with the shipment. It should note the Purchase Order Number, Date, Serial Number and the address where the unit should be returned to.

7. TROUBLESHOOTING

Problem	Potential Cause & Action Necessary	
Brake Meter will not turn on	Battery has discharged - charge battery for 12 to 16 hours. Battery charger has failed - check battery charger output with multimeter, check condition of fittings. Battery or internal electronics have failed - return unit for servicing.	
Brake Meter does not record keypad input.	Battery discharged - refer above	
Brake Meter turns itself off during use	Battery discharged - refer above	
No printout	Out of paper = remove printer cover plate and check paper roll. Refer Section 4	
Printout illegible or hard to read	Printer ribbon needs replacing - refer Section 5	
"Time out " displayed on printout	Unit not secured into position properly. Foot has been lifted from pedal before vehicle has stopped.	

For other problems, contact AutoTest Products or any Authorised Service Center in Australia on (61 3) 9647 9706 or fax details of the problem to (61 3) 9646 3427. Repairs should only be done by an Authorised AutoTest Service Center in order to ensure the Brake Tester retains its calibration. Refer to Section 11 regarding warranty. For instructions on returning products for calibration or servicing, see Section 6.2.

8. SPECIFICATIONS

AutoStop Heavy Brake Tester

Battery 12 V. 1.9 AH fully sealed lead acid rechargeable

Charger Output 12 V DC, center positive, 300 mA

Pedal Sensor Rated to less then +/- 1N over 0 to 1000N Accelerometer Rated to less than + /- 2% over -2.5 to 2.5g

Paper

Wood-free paper

Max roll diameter 50mm

Width 44.5mm (+/-0.5mm) Thickness 0.06mm (+/-0.001mm)

Basic Weight 52.3gms (14lb/500 sheet 17"x22")

Ribbon

Epson type ERC-05

Ribbon Life Equivalent to 3 paper rolls

Print Speed 1.0 line/sec Colour Purple or Black

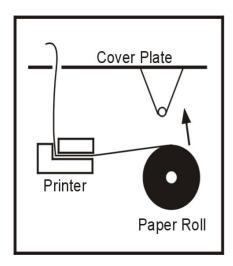
Dimensions approx. 74mm (w) x 25mm (d) x 7mm (h)

Note: The use of proper paper is very important to the operation of the printer. Use of non standard paper will jam the printer or wear the print head and will void the

warranty. Paper and ribbons are available from AutoTest Products as a kit, containing 3 rolls of paper and one ribbon. The replacement of any other components must be carried out by AutoTest Products or an Authorised AutoTest Service Center.

9. CHANGING PAPER

- 1. Switch the Brake Meter "On" and enter Examiner I.D. to get to the "Ready" mode.
- 2. Remove the printer cover plate on the top of the keypad by inserting a screwdriver in the buttons and twisting through 90 degrees.
- 3. Lift out printer cover plate, empty paper roll.



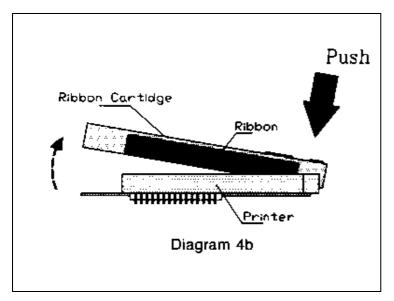
- 4. Tear off any remaining paper. With the Brake Meter turned on and at the "Ready" mode, press the "P" key on the keyboard to feed any remaining paper through the printer.
- 5. Press any key to halt paper feed.
- 6. Remove the old paper core and spindle by gently springing apart the sides of the paper holder. Discard the paper core.
- 7. Prepare a clean starting edge on the new roll by cutting off the top of the paper.
- 8. Mount the paper roll on the spindle and load into the paper holder in the orientation shown on the

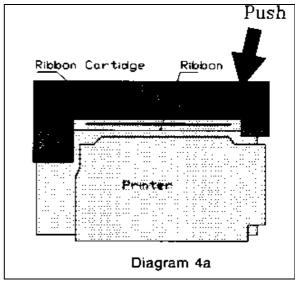
printer cover.

- 9. Feed the edge of the paper into the printer, press the "P" key on the keypad (at the Ready mode) to feed paper through the printer. Feed 50 to 75mm through the printer.
- 10. Press any key to halt paper feed
- 11. Wind up any slack in the paper roll, replace the printer cover plate fitted with the new paper roll and press the hold-down buttons home. Note: The buttons must be correctly aligned before they will click home.
- 12.Press "Off" when complete.
- 13.It is important that the paper is of an approved type. Use of an unapproved paper will damage the printer mechanism and void warranty.

10. CHANGING PRINTER RIBBON

- 1. It is recommended that a new printer ribbon be fitted for every three paper rolls consumed.
- 2. Remove the printer cover plate by following steps 1-3 for changing the paper roll.
- 3. Gently push down on the right hand side of the printer ribbon (the word PUSH is embossed on the ribbon cartridge. The left side will flip up and the ribbon may be removed from the printer.
- 4. Replace the ribbon in the same orientation; with the ribbon facing towards the keypad and the word "PUSH" and "EJECT" on the right hand side. Locate the left hand side of the ribbon cartridge in position first; with the ribbon fitting between the metal plate and paper feed guide.
- 5. Wind up any slack in the paper roll, replace the printer cover plate fitted with the new paper roll and press the hold-down buttons home. Note: The buttons must be correctly aligned before they will click home.
- 6. Press "Off" when complete.





11. WARRANTY

AutoTest Products Pty Ltd or any Authorised AutoTest Service Center warrants this product against defects in material and workmanship for a period of 12 months from the original date of purchase. This warranty applies only to products and components supplied by AutoTest Products which can be identified by the trade name or logo affixed to them or by other documents. AutoTest Products does not warrant any products not supplied by AutoTest Products.

Note: The use of proper paper is very important to the operation of the printer. Use of non standard paper will jam the printer and/or wear the print head. Use of non-standard paper will void the warranty. Paper and printer ribbon cartridge are available from AutoTest Products.

During the warranty period, AutoTest Products or any Authorised Service Center will repair (or at its option replace) any defective component(s) without charge for parts or labor, provided the product is freight prepaid to an authorised AutoTest Service Center. Transit insurance and return freight will be at the owner's expense.

In order to obtain calibration, warranty or non-warranty service, ship the product, freight and insurance prepaid to your nearest AutoTest Service Center. Attach to the product your name, address, contact phone numbers, description of the problem and if a warranty claim, proof of purchase (dated sales receipt or invoice).

AutoTest Products or any Authorised AutoTest Service Center reserves the right to refuse warranty repair if accident, abuse, misuse or misapplication has damaged the product. In transit or as a result of service or modification by other than an Authorised Service Center, nor are any other warranties expressed or implied, including any regarding merchantability or fitness for any other particular purpose.

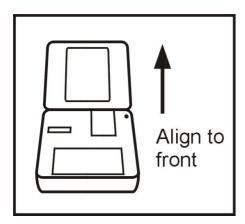
AutoTest Products or any Authorised Service Center is not responsible for incidental or consequential damages resulting from the breach of any express or implied warranty, including damage to property and, to the extent permitted by law, damages for personal injury.

12. QUICK GUIDE

After Unpacking

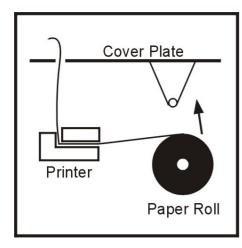
Charge the battery for 10 hours before initial use. The battery charger input is located to the right of the printer. With proper care and use, the battery should last between two and five years. It is recommended to recharge the battery nightly if the AutoStop Brake Tester is used regularly. Only an approved battery charger with the correct voltage, waveform and terminal polarity should be used. The battery must never be allowed to fully discharge as it will void the warranty.

Set-Up & Testing



- 1. Secure AutoStop Heavy in vehicle and attach pedal sensor to brake pedal. This will vary from vehicle to vehicle; a mounting bracket or straps may be used.
- 2. Press "ON".
- 3. Enter Examiner ID and press "Yes".
- 4. Remove pressure from pedal sensor. Processor measures zero level of the pedal sensor.
- 5. Press "Yes" again.
- 6. Mistakes may be corrected by using the "<" or backspace key.
- 7. At the "Ready>" prompt, press "I" to initiate test. Enter the vehicle registration number (or VIN number) and press "Yes".
- 8. Srvc/Emrg? S/E. Select Service (S) or Emergency (E) test.
- 9. Ensure it is safe to run the test.
- 10. Before starting or repeating the test, remove foot from pedal sensor and brake pedal.
- 11. Press "C" to commence the test (or "R" to reset/abort).
- 12. Accelerate to speed and stop when safe.
- 13. Press "Y" to save or "N" to not save the results (if Brake Tester has data logging option).
- 14. Press "Y" to print or "N" to skip printing a duplicate.
- 15.Press "Y" to repeat test, "N" to end test.
- 16.Press "OFF".

Change Paper



- 1. Remove printer cover from panel.
- 2. Remove paper roll spindle from cradle.
- 3. Load new roll (see 'Paper Specifications' regarding special paper).
- 4. Press "ON".
- 5. Enter Examiner ID and press "Yes".
- 6. Press "P" to feed paper through printer.
- 7. Press any key to halt paper feed
- 8. Replace paper roll assembly and printer cover.
- 9. Press "OFF".

NOTES:		



AUTO TEST Products Pty Ltd

279 Normanby Road, Port Melbourne VIC 3207 Australia Phone: (+61 3) 9647 9797 Sales: (+61 3) 9647 9707 Fax: (+61 3) 9646 3427 Email: service@autotest.net.au info@autotest.net.au www.autotest.net.au www.autotest.net.au