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HMP 1-A

Model: 0120.00

Rev doc: 00

Electronic throttle tester

Users Manual

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Connecting power supply

The device need for work 12Vdc continuous. Become with 2 cocodriles to allow connect to car battery.

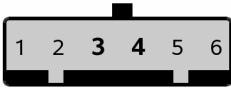
DO NOT USE battery chargers without a car battery.

Choosing the right cable

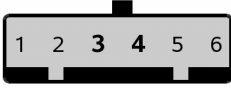
Before test any throttle body, the first is choose the right cable. For this you must search in the following list, not only the right form, also must check right connections.

This images are front view, seeing the throttle body.

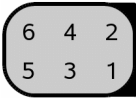
A) Bosch 0280750085

Peugeot 307/Citroen C3,C4	Pin	Func.	Pin	Func.
	1	Coil+	4	TPS2
	2	Coil-	5	5V
	3	GND	6	TPS1

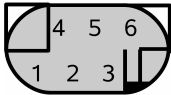
B) Magnetti Marelli 44SMG2

Siena/Palio RST II 1.8	Pin	Func.	Pin	Func.
	1	GND	4	Coil+
	2	TPS1	5	5V
	3	Coil-	6	TPS2

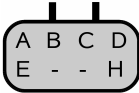
C) Magnetti Marelli 44SMF8/36SMF7 - Bosch 032133062 Siemens VDO 022133062 / 408238329001 / 036133062P

Fiat Palio/Siena 1.4,1.0 - VW Fox/Gol/Golf /Polo/Bora/ - Audi	Pin	Func.	Pin	Func.
	1	TPS1	4	TPS2
	2	GND	5	Coil+
	3	Coil-	6	5v

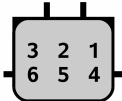
D) Bosch 0280750137

Fiat Punto / Viper / Dodge RAM	Pin	Func.	Pin	Func.
	1	Coil+	4	Coil-
	2	GND	5	TPS2
	3	5V	6	TPS1

E) Delphi-GM 93397800/94705389/24579418

Chevrolet Corsa/Meriva/Montana 1.4/1.8	Pin	Func.	Pin	Func.
	A	5V	D	GND
	B	TPS2	E	Coil+
	C	TPS1	H	Coil-

F) Hitachi SERA576

Nissan 350z	Pin	Func.	Pin	Func.
Unconfirmed Pinout 	1	5V	4	TPS1
	2	TPS2	5	GND
	3	Coil-	6	Coil+

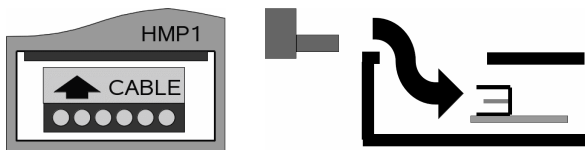
New cables

In the future you will add new connectors. So you will need know about device connections looking the image.

6	●	Coil+
5	●	Coil-
4	●	GND
3	●	Tps2
2	●	Tps1
1	●	5v

Connecting terminal block

Once you choose the appropriate cable you must plug in the rear connector.



Testing of electronic throttle

- 1) THE ENGINE MUST BE STOPPED. The engine can be damaged if is over accelerated moving the butterfly manually.
- 2) Choose the appropriate cable, check the connections, specially the coil connection in the cable A & cable B.
- 3) Plug 12Vdc and throttle body and wait for “plug throttle” letter, then press ”OK”.
- 4.A) Pressing the button + the butterfly open
4.B) Pressing the button - the butterfly close
4.C) Pressing + y - simultaneously the butterfly will open & close continuously.

Into the screen you can see the coil current, and the sensors data. The TPS1 + TPS2 must be equal to 100 in all moment. The maximum acceptable difference can vary from car to car, but generally the difference is lower than 3%.

Report on screen

After moving the butterfly from extreme to extreme, the device has all information to show the test result.

Press the button "OK".

Result 1: integrity of TPS1, will show the minimum and maximum TPS1 data.

Result 2: integrity of TPS2, will show the minimum and maximum TPS2 data.

Result 3: The maximum difference between TPS1 & TPS2, normally 3% ($100 - (T1 + T2)$).

Result 4: The maximum current of the coil. This is important to discard short circuits.

When the report ends, all data are erased to a new test.

Determining common fails

-The coil has consumption, but the butterfly didn't move.

Exhausted gears.

-The difference between TPS1 & TPS2 is more than 5%.

TPS dirty or exhausted.

-The movement is not smooth.

Suciedad, o engranaje dañado

-The throttle body is ok, but the car have idle problems.

Dirty in the closing point, normally dust is accumulated between the butterfly and the venturi. Clean with dirty cloth.



Most common trouble solutions

The device does not power up.

- Verify the right connection to 12V.

The butterfly close and the screen show "Short Error".

-A short circuit is detected. The system will stay freezed until you push OK button.

The butterfly close and the screen show "Fuse Error".

-The internal fuse is opened due coil consumption excess. Wait few minutes and press OK button. The fuse is automatically restored.

With the butterfly, the TPS1 show more than 50% and/or the TPS2 show few than 50%.

-TPS1 & TPS2 are inverted

-TPS1 or TPS2 is damaged.

Short circuit protection

The device have a over consumption protection that abort the test and show on screen until you press the "OK" button.



The device can be damaged in short circuits, and this damages will void the warranty.

General Warnings

-Do not wet the device, do not use chemicals to clean. Only a slightly damp cloth.

-This device must do not enter in touch with hydrocarbons. (Oil, Gas, Diesel, alcohol, etc etc etc)

-Do not connect the device to any voltage different to 12V.

-Do not plug more than one throttle body at once.

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Note 2: All mentioned trademarks in this manual are propriety of their respective owners and only are mentioned with the only idea that the customer identify correctly the components.

Warranty conditions

-General condition of warranty

SCHdev, warrant the right working of this product.

The warranty is for the following 3 (three) months starting in the purchase date, this cover the materials and had handwork defects.

If while warranty is running, the device fail, SCHdev will repair the product. The repair work is done into SCHdev placement and the shipping cost will be charged to the customer.

All accessories that not are manufactured by SCHdev, the warranty are kepted by the respective providers.

This warranty is the only gived by SCHdev, so any other claim are excluded.

- Conditions

The warranty only will be recognized with the presentation of this certificate with the date of purchase, or the bill of purchase. The present warranty only will work with the customer that are at day with the payments.

- Execution of warranty

1.- Periodic controls, maintenance, reparations, and pieces substitutions of pieces or spare parts as result of normal usage.

2.- Any malfunction due bad usage, shocks, or usage out of specifications and any defect not produced by defect of construction.

3.- Product, installed, modified, repaired, mounted or handled by personal unauthorized by SCHdev.

4.- Accidents due to force major or other causes (water, fire, lightning, electromagnetic fields, etc.) that do not depend SCHdev.

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GLC3: Closed loop for NGV cars

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SCH dev

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