LAMBORGHINI 123 Ignition

123ignition is 1 distributor, with system A for the right bank and system B for the left bank and two ignition coils.

Firing order

Cylinder 1 - 4 - 2 - 6 - 3 - 5 on each bank. Cylinder 1S (left N. 1) should have ignition when marking ASNI coincides with the arrow on the bell housing. When marking ADNI coincides with the arrow, ignition should be to the right hand cylinder N. 1.

(12) 6	1
(11) 5	2
(10) 4	3
(9) 3	4 Direction of travel
(8) 2	5
(7) 1	6

  left   B   right A

  bank   flywheel   bank

              PMSI (TDC N. 1)

Static advance ADNI   ASNI Static advance

N.1 **RIGHT** bank   N.1 **LEFT** bank

 Firing order CCW

Espada-Jarama- Countach P400-5000S 1-7-5-11-3-9-6-12-2-8-4-10

Firing order supplied cap: 1=1A 7=6B 5=5A 11=2B 3=3A 9=4B
                            6=6A 12=1B 2=2A 8=5B 4=4A 10=3B

Miura-350GT-400GT-Islero 1-7-4-10-2-8-6-12-3-9-5-11

Firing order supplied cap: 1=1A 7=6B 4= 5A 10=2B 2=3A 8=4B
                            6=6A 12=1B 3=2A 9=5B 5=4A 11=3B

Stating timing   Maximum timing

   22°   22° + 19°

The Lamborghini curve is already programmed

WIRING THE 123\TUNE +

MOUNTING THE 123\TUNE+ IN YOUR CAR

Check before removing the old distributor from the car in which direction the rotor is moving. (You can do this by first removing the wired from the distributor to the coil. Then remove the cap and ask some-one to look at the rotor whilst you activate the starter motor.) Now you know if the rotor rotates clockwise (CW) or counter clockwise (CCW) seen from the top that is. (Put that on a little note together with the proper ignition sequence.) The next thing: bring the engine to the static timing point, at the end of the compression-stroke, for cylinder number 1. (The rotor on the old distributor should point to the cable that connects to the sparkplug of cylinder number 1.

After having done all this, you can now put your 123\TUNE+in the car and find a position where the cables come out convenience.

Wiring diagram see last page

But do not connect the black and black/yellow wire (could be purple)

Turn on the ignition.

A timing LED shines through one of the holes in the aluminium disc. (123\TUNE+8 the LED shines outside the disc) Rotate the body until the LED is off. Now slowly rotate the OPPOSITE to the direction that you have found earlier, until the green LED just lights up. While turning the body, also press the rotor in the same direction to remove any free play in the driving gear. Now tighten the 123ignition securely.

Turn off the ignition.

Now connect the black and purple wire to the coil according to the schematic. Connect the spark plug leads in the proper sequence to the cap, starting with the wire for the number one cylinder at the position pointed to by the rotor of the '123'.
Also connect the high voltage wire from the coil to the centre position of the cap. Attach the cap to the distributor. Route all wires well away from high voltage leads and away from moving parts, using tie-wraps or other suitable means.

INSTALLING THE APP, HOW TO CONNECT, SETTINGS AND CHANGING CURVES.

Please download the 123\TUNE+ App in the Appstore or Playstore search for 123TUNE

123ignition TUNE+ needs a Bluetooth 4.0 device. All Apple devices of the last few years have a Bluetooth 4.0

IMPORTANT

The TUNE+ needs to be powered (6 or 12 Volt) if you like to connect with the 123\TUNE+App. **First disconnect System B, power and program system A , disconnect system A and power and program system B.**

The 123\TUNE+ App

The App has 3 windows, **Dashboard, Curves and Settings.** By default the dashboard will be shown after the first start of the App.

Touch the settings button, The upper area "devices" list all the Bluetooth devices within range, if you have activated Bluetooth on your device. If you want to **connect your device with the distributor,** touch the 123\TUNE+ in that area. After that you will be asked for a PIN code, which is 1234.
You can check whether a connection has been made by selecting the "Dashboard button".
The red dot in the lower left corner should have turned green. The PIN code will be saved in the App.

Changing the advance curve.

The advance curves cannot be changed while the engine is running. Touch the "Curves" symbol and 2 graphs with tables underneath will be displayed. The upper graph and table show the RPM-dependent advance curve, the lower graph and table show the vacuum-dependent curve.

To change the rpm-independent curve, touch the red button "Edit advance curve". In the upper area "General" you can enter a RPM limit, This results in a REV limiter, which is a so-called soft limiter, only 60% of the sparks will be random cut off. If you enter 8000 (max. value) the rev. limiter will be deactivated.
The 2nd area "Degrees crankshaft" allows you to delete timing points (touch the Dustbin button), to add timing points touch the Add point button and you can edit values of existing points.
Point "500 rpm "and "8000 rpm" cannot be deleted. You can only add points with values between those two. Degrees can have value between 0 and 50, the rpm values have to be ascending from top to bottom. To edit values just touch the value (rpm or degrees) and enter a new value.
Click after each line on "**GER** or **GEREED".** After having editing the advance curve you like click at the upper right corner on **"DONE"** Scroll up and click on **"WRITE".** The modified data will be transferred into the distributor.

Vacuüm option

123ignition.nl

B

A

Coil
Zündspule
Bobine

A

Coil
Zündspule
Bobine

B

12V/6V

Car Battery