

SPECIFICATIONS

Operating voltage	: 4,0 - 15,0V
Operating current	: < 100 mA
Range	: 500 - 8000 rpm crankshaft
Direction	: Clockwise and Counterclockwise
No. of cylinders	: 6
Temperature	: -30 to 95 degrees Celsius
Coil	: stock- or High Energy- coil primary coil NOT below 1,0 ohm
Dwell	: constant current, fully automatic
Time-out	: after 1 second current is switched off
Vacuum-sensor	: 0 to 100 kPascal
Timing error	: < 0,1 degree crankshaft

CHECK THIS FIRST !

1. Make sure that you ordered the correct I23ignition :

- Cars with the minus-pole of the battery connected to the car-body are referred to as 'NEGATIVE EARTH' ; use the 'diagram for cars with NEG.EARTH' (see the last pages of this manual).

Hence, cars with the plus-pole of the battery connected to the car-body are 'POSITIVE EARTH'. Many classic English cars were wired this way. For these cars ONLY the I23ignition with the 'POS'-option can be used. Use the 'diagram for cars with POS.EARTH' (see the last pages of this manual)

- Cars with 'BOSCH D-Jetronic' injection, had a distributor with a three-pole connector on the side. For such cars you need a I23ignition with the 'IE'-option.

- The I23ignition can be supplied with the high-tension cables coming out upward ('R'-model) or sideward ('A'-model).

- Cars with vacuum-advance need a I23ignition with the 'V'-option.

WITH THE OLD DISTRIBUTOR STILL IN PLACE

2. Find out in which direction the rotor rotates.
Mark the output towards cylinder #1 on the cap.
Remove the low-voltage cable from the distributor to the coil, and remove the cap.
Now ask someone to crank the starter, and make a note : is the rotor rotating clockwise (CW) or is it rotating counter-clockwise (CCW) ?
3. Crank the engine in its normal direction until you see that the rotor points towards the mark you made for cylinder #1, and verify that the static timing-marks of your engine align.
Do not rotate the engine anymore!
4. Check the firing order of the cylinders.
Use your workshop-manual, or follow the cables from the cap to the spark plugs.
You start with cylinder #1, and remember to count in the direction hat you have found earlier.
Make a note of the firing order too, e.g. '1-4-2-6-3-5'
5. Check which advance-curve is required for your engine. Use your workshop-manual, check the model-number of the existing distributor (although sometimes a wrong one is mounted by an earlier owner of the car). Also compare the curve-listings for the various models in this manual.

If after reading the instructions you are unsure of the procedure to be followed, please ask someone who knows.

OUT WITH THE OLD DISTRIBUTOR, IN WITH THE 123IGNITION !

6. Turn the ignition off, and (with the engine still in the static timing-position for cylinder #1) remove the old distributor.
7. Using an 8-mm Allen wrench, open the cap at the side of the 123ignition. Rotate the micro-switch to select the proper advance-curve using a small screw-driver. Close the cap tightly.
8. Mount the unit carefully, and ensure that the drive-dog mates correctly. Find a position so that the vacuum-nipple and cables come out conveniently. Fasten it in such a way, that you can still rotate the new distributor.
9. Follow the appropriate wiring-diagram on the last two pages of the manual, but leave the black wire unconnected for now.
10. Turn the ignition on. A timing LED shines through one of the six holes in the aluminium disc. Rotate the body until the LED is 'off'.
Now slowly rotate the body OPPOSITE to the direction that you have found under point 2, 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 drive-gear. Now, tighten the 123ignition securely.
11. Connect the black wire to the coil. Connect the sparkplug leads in the proper sequence to the new cap (see point 4), starting with cylinder #1, to which the new rotor is pointing. Also connect the high voltage lead from the coil to the centerposition of the cap. Attach the cap to the 123ignition. Keep low-voltage wiring well away from the high-voltage cables and from moving parts. Do not connect the vacuum-tube yet.
12. You can now start your engine. Use a stroboscope to adjust the maximum advance for your engine. If that is correct, you can attach the vacuum-tube to the nipple of the 123ignition with the 'V'-option.

Enjoy your 123ignition !

123\MERC-6 (FOR MOST CLASSIC 6-CYL. MERCEDES-ENGINES)

curve	advance table [degree-advance] [rpm/degree-advance]	max advance [rpm/degree-advance]	vac adv start [mmHg]	vac adv end [mmHg/deg]	remarks	REMARK
0	600	4600 / 37,0	100	400/11,0	0231.116.048, 0231.116.052, 0231.142.003/4	W114 230/250, W108 280S, 1:9,0
1	0600	4600 / 40,0	100	400/11,0	BOSCH as curve 0	idem, for low compression engines
2	0600	5000 / 35,0	100	300/10,0	BOSCH 0231.116.048, 0231.116.038	W110 230, W111 230S, W108 250
3	0800	2500 / 25,0	150	400/14,0	BOSCH VJU6 BR49T, VJU6 BR45T	W111 220 SEb 1&2 1:8,7 230SL
4	0600	5000 / 28,0	100	100/12,0	BOSCH VJU6 BR47T, 0231.116.038	W111 220b 220Sb 1:8,7
5	0600	2000 / 20,0	100	300/12,0	BOSCH 0231.116.049, 0231.116.042	W111 220SEb-3 1:8,7
6	1500	2500 / 22,0	100	300/11,0	BOSCH 0231.116.050, 0231.116.046	W113 230SL-2 1:9,5
7	0600	1600 / 21,0	100	300/12,0	BOSCH ZV/PBUR 6R1T, 0231.141.001/2	W112 300SE & 300SEb, W108 & W109
8	1000	2500 / 22,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		BOSCH 0231.116.051, 0231.185.009	W108, W109, W111, W113
9	1000	2500 / 22,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		BOSCH as curve 8	optimised for E85 & LPG
A	1000	3000 / 24,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		BOSCH 0231.187.004	W123 before 1980
B	1000	3000 / 24,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		BOSCH as curve A	optimised for E85 & LPG
C	1000	3000 / 22,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		BOSCH 0231.301.015, 0231.130.1004	W115 250CE
D	1000	2600 / 22,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		BOSCH 0231.116.051, 0231.116.047	W108, W111 250SE, W113 250SL
E	1000	2500 / 20,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		0231.116.061, 0231.116.062, 0231.116.066	W108 280SE, W109 300SEL, W113 280SL
F	1000	3500 / 30,0	10 DEGREES NEGATIVE VACUUM !!!!!!!		BOSCH 0231.116.068, 0231.185.011	W108 280SE, USA export