

## 07.5—500 Checking and adjusting closing angle (dwell angle) and firing point

### Closing angle (dwell angle)

#### Normal coil ignition (S)

Closing angle (dwell angle)  
Testing and **adjusting value** at idle<sup>1)</sup> Change between idle and 3000/min

39–42° max. ± 3°

<sup>1)</sup> When installing new breaker points, adjust closing angle (dwell angle) to 42 ± 1°.

#### Transistorized ignition system (J) (USA)

**Identification:** blue ignition coil, two pre-resistors and transistorized switchgear.

Closing angle (dwell angle)  
Testing and **adjusting value** at idle<sup>2)</sup> Change between idle and 3000/min

30–40° max. ± 3°

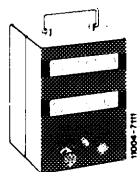
<sup>2)</sup> When installing new and when adjusting used breaker points, adjust closing angle (dwell angle) to 34 ± 1°.

### Firing point

Ignition distributor Bosch no.	Adjusting value of firing point  with vacuum at idle	Test value Ignition adjustment without vacuum			Vacuum adjustment after		Installation value of ignition distributor at starting speed  without vacuum
		1500/min	3000/min	4500/min	"retard" at idle	"advance" at 4500/min (total)	
<b>(S) 1976</b>							
0 231 309 001	TDC	11–17°	26–30°	26–30°	4–6°	8–12° (34–42°)	5° before TDC
<b>(J) 1976</b>							
0 231 311 001	7° before TDC	10–16°	26–33°	29–35°	—	—	7° before TDC
<b>(USA) 1973/74</b>							
0 231 310 002	4° after TDC	13–17°	31–35°	37–41°	9–13°	—	7° before TDC
<b>(USA) 1975/76</b>							
0 231 311 001	7° before TDC	10–16°	26–33°	29–35°	—	—	7° before TDC

### Special tools

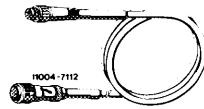
Digital tester



001 589 54 21 00

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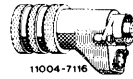
Connecting cable



000 589 04 90 00

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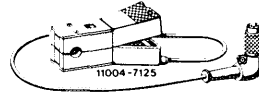
Intermediate plug (adaptor)



000 589 72 63 00

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Trigger



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### Conventional tools

Revolution counter, stroboscope, closing angle (dwell angle) measuring instrument

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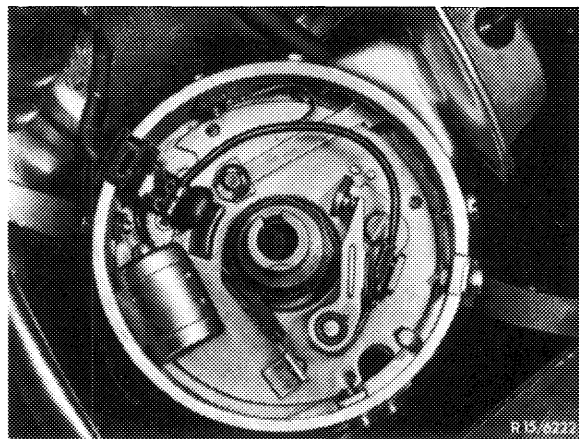
### Checking and adjusting closing angle (dwell angle)

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- 1 Measure closing angle (dwell angle) at idle speed.
- 2 Measure closing angle (dwell angle) change between idle speed and 3000/min, max. change  $\pm 3^\circ$ .
- 3 Adjust closing angle (dwell angle), if required or replace breaker points (07.5–505).

With used breaker points, the closing angle (dwell angle) can be adjusted only with transistorized ignition.

Large dwell angle — small point spacing  
Small dwell angle — large point spacing



### Checking and adjusting firing point

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- 4 Measure firing point with stroboscope or digital tester at specified speed with or without vacuum.

5 Loosen ignition distributor and set adjusting value of firing point by turning ignition distributor.

Screw down ignition distributor and check firing point.

6 Check centrifugal and vacuum adjustment of ignition distributor. For this purpose, run through specified test values with or without vacuum adjustment.

