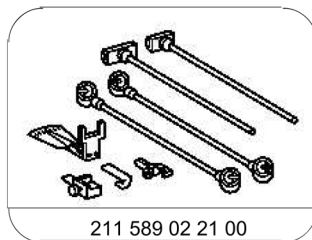


### Wiper arm test and adjustment values

Number	Designation		Model 129	Model 202
BE82.30-P-1001-01G	Wiper arm angle of incidence in park position	Left-hand drive vehicle $\Delta^\circ$	-2.0 to -6.0	-2.0 to -6.0
		Right-hand drive vehicle $\Delta^\circ$	+2.0 to +6.0	+2.0 to +6.0

### Wiper arm test and adjustment values

Number	Designation		Model 208	Model 210
BE82.30-P-1001-01G	Wiper arm angle of incidence in park position	Left-hand drive vehicle $\Delta^\circ$	-2.0 to -6.0	-2.0 to -6.0
		Right-hand drive vehicle $\Delta^\circ$	+2.0 to +6.0	+2.0 to +6.0



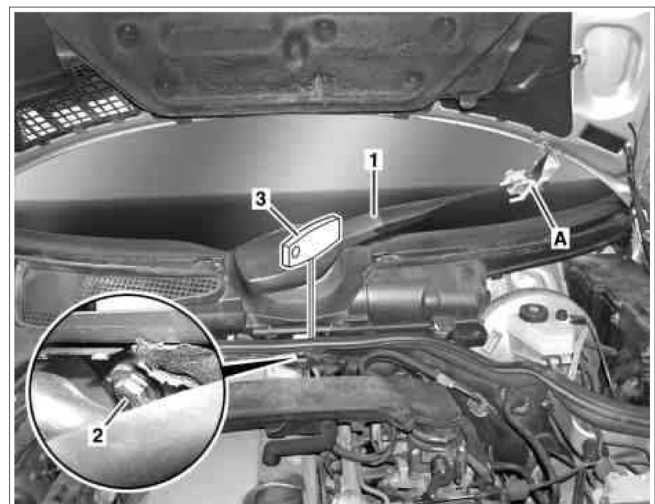
211 589 02 21 00

Adjustment tool set

**i** The wiper system may only be adjusted if the test value of the wiper system deviates from the tolerance range in park position.

#### Illustrated on model 210

- 1 Attach angle gauge (A) with adapter to wiper arm (1).
- 2 Ensure bolt (2) to firewall is accessible.  
**i** The horizontal installation position for the wiper system can be altered at this wiper arm attachment point.
- 3 Release bolt (2) and slide bracket for wiper system using extraction hook (3) horizontally until the correct adjustment value is shown on the dial of the angle gauge (A).
- 4 Tighten bolts (2) fully.
- 5 Detach angle gauge (A) with adapter from wiper arm (1).
- 6 Place wiper arm (1) carefully onto windshield.



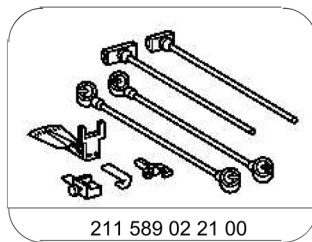
P82.30-2432-11

### Wiper arm test and adjustment values

Number	Designation		Model 129	Model 202
BE82.30-P-1001-01G	Wiper arm angle of incidence in park position	Left-hand drive vehicle $\Delta^\circ$	-2.0 to -6.0	-2.0 to -6.0
		Right-hand drive vehicle $\Delta^\circ$	+2.0 to +6.0	+2.0 to +6.0

### Wiper arm test and adjustment values

Number	Designation		Model 208	Model 210
BE82.30-P-1001-01G	Wiper arm angle of incidence in park position	Left-hand drive vehicle $\Delta^\circ$	-2.0 to -6.0	-2.0 to -6.0
		Right-hand drive vehicle $\Delta^\circ$	+2.0 to +6.0	+2.0 to +6.0

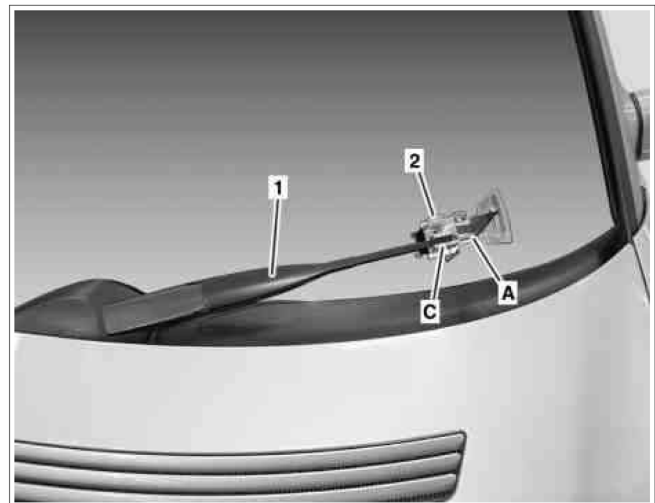


211 589 02 21 00

Adjustment tool set

### Shown on model 210 with wiper system in park position

- 1 Clamp adapter (C) with angle gauge (A) by tightening the knurled screw (2) at the head of the wiper arm (1).
- 2 Lower wiper arm (1) until all three contact points on the base of the angle gauge (A) touch the windshield.
- 3 Read off angle of incidence for wiper arm (1) on dial of angle gauge (A), write it down, and compare it to the test and adjustment value.
- 4 Detach angle gauge (A) with adapter (C) from wiper arm (1).
- 5 Place wiper arm (1) carefully onto windshield.



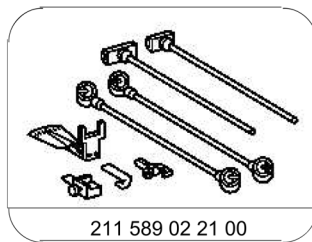
P82.30-2444-11

### Wiper arm test and adjustment values

Number	Designation		Model 129	Model 202
BE82.30-P-1002-01G	Wiper arm angle of incidence in center position	Left-hand drive vehicle	$\Delta^\circ$ +1.0 to -1.0	+1.0 to -1.0
		Right-hand drive vehicle	$\Delta^\circ$ -1.0 to +1.0	-1.0 to +1.0








### Wiper arm test and adjustment values

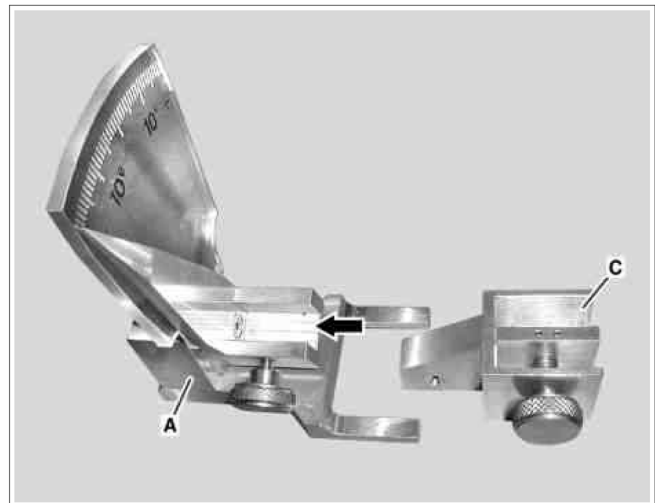
Number	Designation		Model 208	Model 210
BE82.30-P-1002-01G	Wiper arm angle of incidence in center position	Left-hand drive vehicle	$\Delta^\circ$ +1.0 to -1.0	+1.0 to -1.0
		Right-hand drive vehicle	$\Delta^\circ$ -1.0 to +1.0	-1.0 to +1.0



211 589 02 21 00








Adjustment tool set

-  Insert adapter (C) into the guide (arrow) of the  angle gauge (A) and fasten with  knurled bolt to  angle gauge (A).  
 Use adapter (C) and  angle gauge (A) from the  adjustment tool set.



P82.30-2303-11

**Shown on model 210 with wiper system in center position**

- 2  Clamp adapter with  angle gauge (A) by tightening the side  knurled bolt at the head of the wiper arm (1).
- 3 Lower wiper arm (1) until all three contact points on the base of the  angle gauge (A) touch the windshield.
- 4 Read off angle of incidence for wiper arm (1) on dial of  angle gauge (A), write it down, and compare it to the test and adjustment value.
- 5.1  Detach angle gauge (A) from wiper arm (1) and lock wiper arm (1) in raised condition.  
 Only when the wiper arm (1) angle of incidence is in the center position within the specified tolerance.



P82.30-2445-11

**Model 129, 202, 208, 210**

**Model 164, 166, 167, 171.4, 172.4, 190, 197, 203, 204, 205, 207, 209, 211, 212, 213, 215, 217, 218, 220, 222, 230, 231, 238, 240, 251, 253, 257, 290, 292, 293**

**Model 219.3**

**Model 447, 448, 907, 910**

**model 129, 202, 208, 210**

When checking the angle of incidence of the wiper arm in the park and center position, it is determined whether the wiper arm or windshield wiper system must be adjusted.

**Adjusting wiper arm**

If the test value deviates from the tolerance range in the center position.

Change in the angle of incidence is achieved by "twisting" (folding) the wiper arm by means of the adjustment lever. The angle of incidence for the wiper arm relative to the windshield must always be adjusted in the center position.

When in the center position, the wiper arm must be positioned exactly parallel to the windshield. Correct offset of the wiper arm in the center position is necessary for low-wear and low-noise wiper blade movement on the windshield.

**Adjust windshield wiper system**

Only if the test value deviates from the tolerance range in the park position.

**Model 164, 166, 167, 171.4, 172.4, 190, 197, 203, 204, 205, 207, 209, 211, 212, 213, 215, 217, 218, 219.3, 220, 222, 230, 231, 238, 240, 251, 253, 257, 290, 293, 292, 447, 448, 907, 910**

By checking the angle of incidence of the wiper arms in parked position and reversing position, it can be assessed whether one wiper arm, both wiper arms or the wiper system are to be adjusted.

The wiper arms are adjusted in case the check values deviate from the tolerance range in reversing position or in case the check values deviate from the tolerance range in reversing position and parked position.

The angle of incidence is changed by twisting (crossing over) the wiper arms with the aid of the adjustment lever. The angle of incidence of the wiper arm always has to be adjusted in parked position.

In doing so the angle of incidence in parked position and reversing position changes by the same amount. The angle of incidence of the wiper arm to be adjusted is altered by at least the tolerance deviation value in the reversing position. In order to ensure that both set values lie within the tolerance range, the angle of incidence must be checked in the parked position again and corrected if necessary.

If there is any deviation in the check values for both wiper arms from the tolerance range the windshield wiper system is set to the parked position.