

12.7 Mirror, Steering Column Adjustment, Heated Mirrors (MSC) Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Recalling Actual Values using HHT

The following tests and activations are possible **via the Hand-Held Tester**.

Preparation for recalling actual values:

1. Connect the Hand-Held Tester (HHT) to X11/4, according to diagram, see section 0,
2. Voltage supply to control modules and CAN data lines ok, see DM, B&A, Vol. 2, section 7.1, 23,
3. Review section: C/1, 12, 13, 20, 21, 22, 31,
4. Battery voltage >11 V,
5. Ignition: **ON**
6. All CAN data lines must be connected,
7. Fuses ok.



Actual values for the system being checked may be located in other control modules, therefore it is important to check the DTC memory on all control modules that are relevant to the system being checked.

When calling up actual values, all actual values will appear for that particular control module.



Erasing the Mirror, steering column adjustment, heated mirrors (MSC) DTC memory, will also erase the DTC memory for the Combination Control Module (N10-1) and Convenience Feature (CF).

Abbreviations:

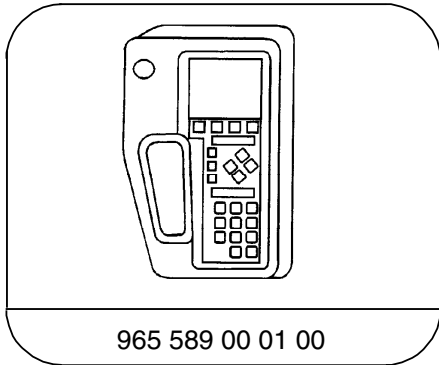
ESV L Left seat adjustment
UBF Lower control field control module (N72)
TSG 1 Front driver-side door control module (N69/1)
TSG 2 Front passenger-side door control module (N69/2)

The above noted abbreviations are in the second column of the following actual values tables in **bold type** to advise of hints (regarding in which of the control modules the actual values or activations are stored).

12.7 Mirror, Steering Column Adjustment, Heated Mirrors (MSC) Models 202, 208, 210 as of M.Y. 1998

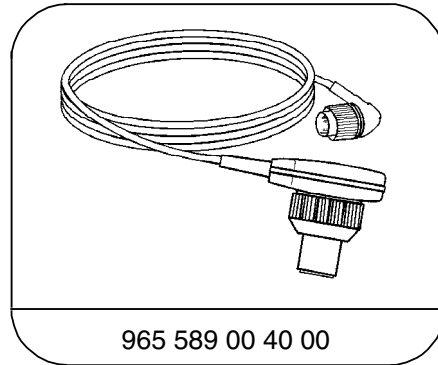
Electrical Test Program – Test Actual Values

Special Tools



965 589 00 01 00

Hand-Held-Tester







965 589 00 40 00

Test cable





12.7 Mirror, Steering Column Adjustment, Heated Mirrors (MSC) Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Actual Values with Memory

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	T56 1 T56 2 Outside Mirror	Low voltage		> 10V <10 V	✓ F	See DM, B&A, Vol. 2, section 7.1, 23
2.0	T56 1 T56 2 Outside Mirror	Excessive voltage		< 15.5 V > 15.5 V	✓ F	See DM, B&A, Vol. 2, section 7.1, 23
3.0	UBF Outside Mirror	Outside rearview mirror- vertical horizontal adj. (N72s6, N72s7) Left outside mirror		Set outside rearview mirror-left/right (N72s8) to driver-side mirror (left) and adjust mirror: Up adjustment: Down adjustment: Left adjustment: Right adjustment:	UP DOWN LEFT RIGHT	Lower control field control module (N72).





12.7 Mirror, Steering Column Adjustment, Heated Mirrors (MSC) Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Actual Values with Memory

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
4.0	UBF Outside Mirror	Outside rearview mirror- vertical horizontal adj. (N72s6, N72s7) Right outside mirror		Set outside rearview mirror-left/right (N72s8) to passenger-side mirror (right) and adjust mirror: Up adjustment: UP Down adjustment: DOWN Left adjustment: LEFT Right adjustment: RIGHT	UP DOWN LEFT RIGHT	Lower control field control module (N72).
5.0	UBF Outside Mirror	Outside rearview mirror- left/right (N72s8)		Set outside rearview mirror-left/right (N72s8) to: Left mirror Right mirror	LEFT RIGHT	Lower control field control module (N72).
6.0	UBF Outside Mirror	Right outside rearview mirror "Park-position"		Engage reverse gear using selector lever: Reverse gear engaged: Reverse gear not engaged:	YES NO	Wiring, Starter lock-out/back-up lamp switch (S16/1), Back-up lamp switch (S16/2), Starter lock-out/back-up lamp switch (transmission range recognition) (S16/3).




12.7 Mirror, Steering Column Adjustment, Heated Mirrors (MSC) Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Actual Values with Memory

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
7.0	TSG 1 TSG 2 Outside Mirror	Left/right outside mirror adjustments (M21/6m1, M21/6m2 M21/7m1, M21/7m2)		Press outside rearview mirror-vertical/horizontal adjustment (N72s6, N72s7) to: Up adjustment: Down adjustment: Left adjustment: Right adjustment:	UP DOWN LEFT RIGHT	Wiring, Front driver-side door control module (N69/1), Passenger-side door control module (N69/2).
8.0	TSG 1 TSG 2 Outside Mirror	Vertical/horizontal adjustment motor(M21/6m1, M21/7m1) (left/right) Potentiometer		Press outside rearview mirror-vertical/horizontal adjustment (N72s6, N72s7) to: Up adjustment, Down adjustment, Left adjustment, Right adjustment.	Values change as adjustments are made.	Wiring, Vertical adjustment motor (M21/6m1), Vertical adjustment motor (M21/7m1).
9.0	TSG 1 TSG 2 Outside Mirror	Vertical/horizontal adjustment motor(M21/6m2, M21/7m2) (left/right) Potentiometer		Press outside rearview mirror-vertical/horizontal adjustment (N72s6, N72s7) to: Up adjustment, Down adjustment, Left adjustment, Right adjustment.	Values change as adjustments are made.	Wiring, Vertical adjustment motor (M21/6m2), Vertical adjustment motor (M21/7m2).




12.7 Mirror, Steering Column Adjustment, Heated Mirrors (MSC) Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Actual Values with Memory

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
10.0	TSG Steer Col. Adj.	Steering column up/down switch (S91/2s11) (Model 210 only)		Press steering column up/down switch (S91/2s11) to: Up adjustment: Down adjustment:	UP DOWN	Wiring, S91/2s11
11.0	TSG Steer Col. Adj.	Steering column in/out switch (S91/2s12) (Model 210 only)		Press steering column in/out switch (S91/2s12) to: In adjustment: Out adjustment:	IN OUT	Wiring, S91/2s12

12.7 Mirror, Steering Column Adjustment, Heated Mirrors (MSC) Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Actual Values with Memory

⇒		Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
12.0	ESV L	Telescopic adjustment motor (M20m1) (in/out) Potentiometer (Model 210 only)		Press steering column in/out switch (S91/2s12) to: Out adjustment: In adjustment:	Raising values, steering column extends. Falling values, steering column retracts.	Wiring, (M20m1).
13.0	ESV L	Tilt adjustment motor (M20m2) (up/down) Potentiometer (Model 210 only)		Press steering column up/down switch (S91/2s11) to: Up adjustment: Down adjustment:	Raising values, steering column raises. Falling values, steering column drops.	Wiring, (M20m2).