

MODEL 164.1 as of model year 09/YoM 08 model refinement package
MODEL 164.8, 251.0 /1 as of model year 09/YoM 08

General function requirements

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Wiping windshield, general

The windshield wiping function keeps the windshield free of water, snow, etc.

Function sequence for interrupting wiping during engine start

When engine start is recognized, actuation of the wiper motor (M6/1) is disabled by the front SAM control unit (N10).

Any wiping procedure already started is terminated.

The engine start is recognized by transmitting circuit 50 from the EIS [EZS] control unit (N73) to the front SAM control unit.

Intermittent wipe function sequence

Intermittent wiping is switched on by turning the combination switch (S4) to position "1" or position "2".

Intermittent wiping is interrupted by the wipe-stop function or by turning the combination switch to position "0", "3" or "4".

Intermittent wiping is interrupted by the wash, touch wiping, after-wiping, wiper start suppression functions or a "defective" rain/light sensor.

Function sequence of wiping at specified speed

By turning the combination switch to position "3" (continuous wipe with slow speed) or to position "4" (continuous wipe with fast speed), the continuous wipe function is switched on. The position of the combination switch is read in by the steering column tube module and placed on the engine compartment CAN. The central gateway control unit routes the signals to the interior CAN.

The front SAM control unit actuates the wiper motor accordingly upon receiving the signal.

Wiping at predefined speed is interrupted by turning the combination switch to position "0", "1" or "2".

The windshield wiping function is comprised of the subfunctions:

- **Function sequence for interrupting wiping during engine start**
- **Intermittent wipe function sequence**
- **Function sequence of wiping at specified speed**
- **Touch wiping function sequence**

The wiper motor is actuated depending on the degree of wetting of the windshield. The request from the rain/light sensor (B38/2) is transmitted via the overhead control panel control unit (N70) to the front SAM control unit.

The position of the combination switch is read in by the steering column tube module (N80) and transmitted to the engine compartment CAN. The central gateway control unit (N93) routes the signals to the interior CAN.

The front SAM control unit actuates the wiper motor accordingly upon receiving the signal.

Touch wiping function sequence

The touch wiping function can only be activated when the combination switch is in position "0", "1" or "2".

- Single wiping: For single touch wiping, briefly push combination switch as far as the detent point.
- Repeated wiping: When operated for a longer period of time, wiping takes place corresponding to the length of operation.

The touch wiping speed corresponds to the wiping speed in position "3".

The position of the combination switch is read in by the steering column tube module and placed on the engine compartment CAN. The central gateway control unit routes the signals to the interior CAN.

The front SAM control unit actuates the wiper motor accordingly upon receiving the signal.

PE	Electrical function schematic for windshield wiper	Model 164	PE82.30-P-2051-97MAA
		Model 251	PE82.30-P-2051-97RAA
	Front SAM control unit, component description	N10	GF54.21-P-7010GM
	Overhead control panel control unit, component description	N70	GF82.20-P-5216GM
	Component description for the EZS control unit	N73	GF80.57-P-6003GM
	Component description for the steering column module control unit	N80	GF54.21-P-6051GM
	Central gateway control unit, component description	N93	GF54.21-P-4170GM