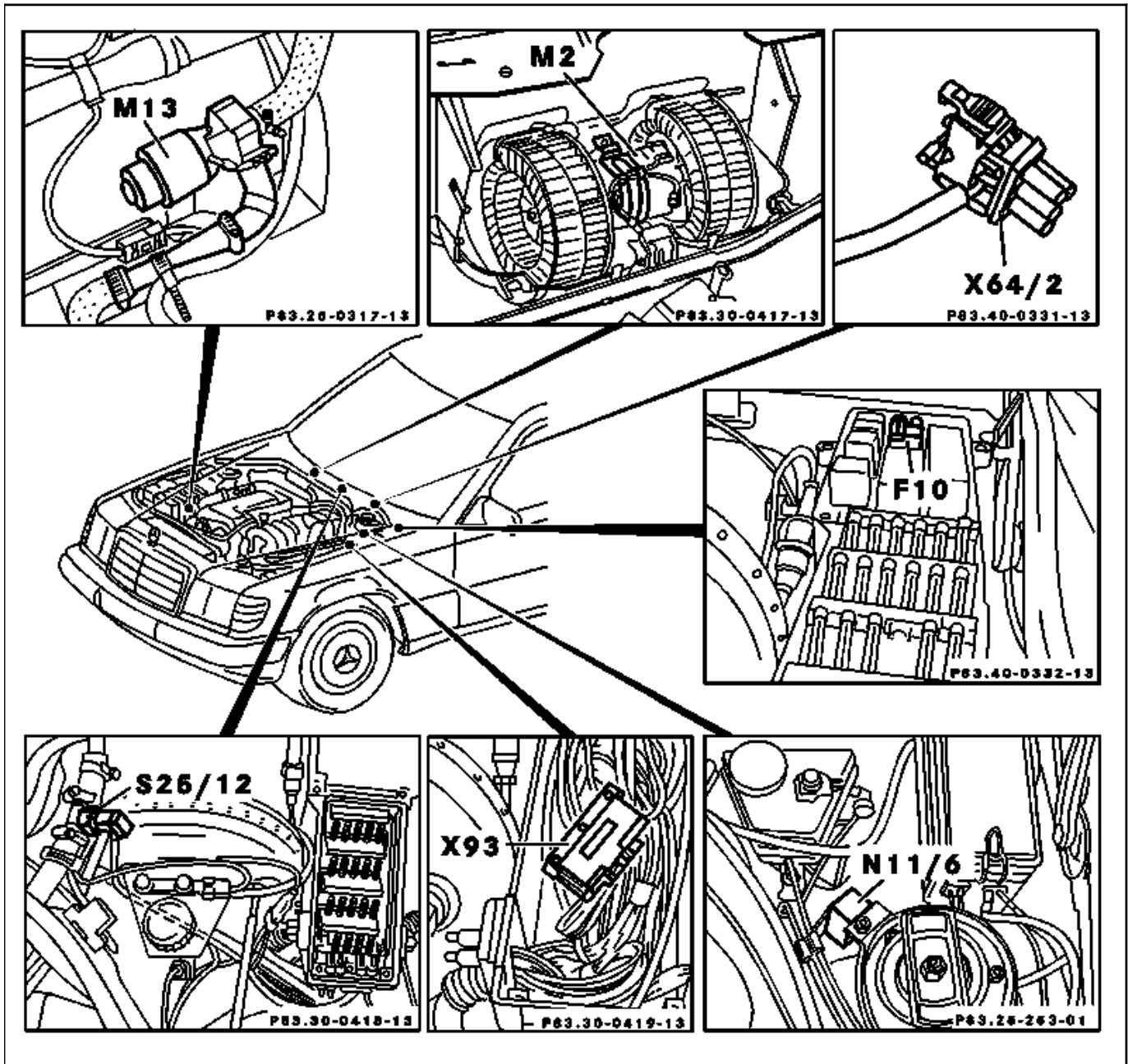


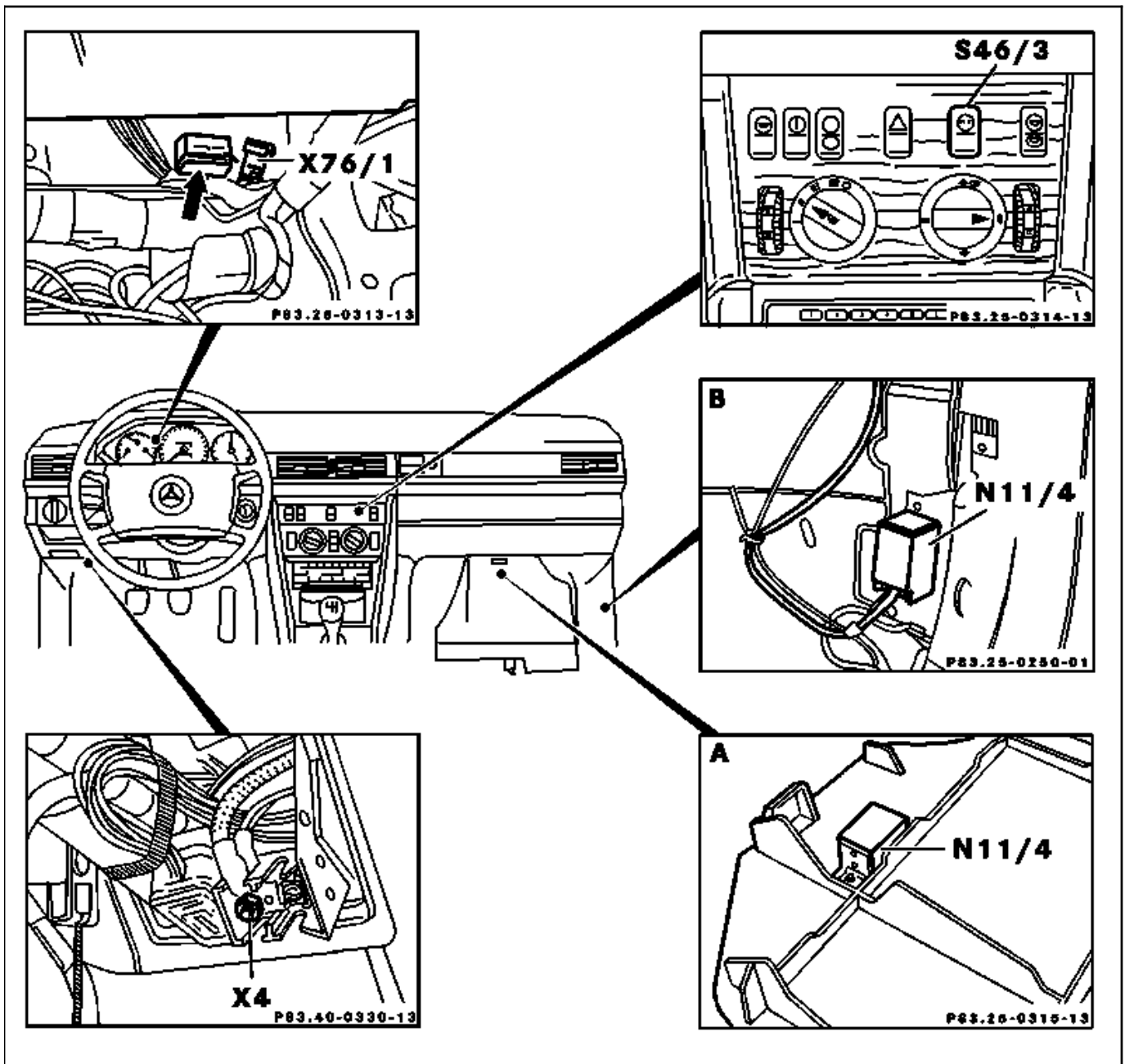
83-300 Function of residual engine heat utilization system

Operation No. of Operation Texts and Work Units,
Standard Texts and Flat Rates:



P83.25-0316-59



- F10 Auxiliary fuse holder, residual engine heat utilization system
- M2 Blower motor
- M13 Circulation pump
- N11/6 Automatic heater control time-limit relay
- S25/12 60 °C temperature switch, residual engine heat utilization system up to 05/93
- X64/2 Intermediate connector, blower regulator, residual engine heat utilization system (vehicles with automatic climate control only)
- X93 Terminal block, Tempmatic/residual engine heat utilization (1-pole)



P83.25-0312-59

- N11/4 Residual engine heat utilization time-limit relay
up to 11/93
- S46/3 Pushbutton switch
- X4 Terminal block, terminal 30, fuse and relay box
- X76/1 Connector, air volume switch/3x residual engine heat utilization system, 1-pole (only in vehicles with automatic heating system or Tempmatic climate control system)
- A up to 11/93
- B as of 12/93

After switching off a warm engine, the residual engine heat utilization system may be operated in conjunction with the vehicle's heater. It serves to heat the passenger compartment by exploiting the residual thermal energy contained in the coolant. The system is operational with the key in the steering lock at position 0 or 1, or with the key withdrawn. The coolant temperature must be higher than 60 °C. The heating duration of the system depends on the set temperature. The higher the set temperature, the shorter the heating duration. Before switching on the residual engine heat utilization system, the settings of the heater and ventilation should be noted:

- Move the air volume switch to blower stage "I". A higher blower stage heats the passenger compartment better, but puts more strain on the battery.
- Set the temperature selectors of the vehicle heater to the desired passenger compartment temperature. The in-car temperature automatically remains at the set level, e.g. 22 °C
- In vehicles with automatic climate control, one of the keys of the automatic climate control must be pressed (except key ). Pressing the key  is not recommended as the existing residual thermal energy is used up more quickly.

Switching on:

Press the switch; the lamp in the switch lights up.

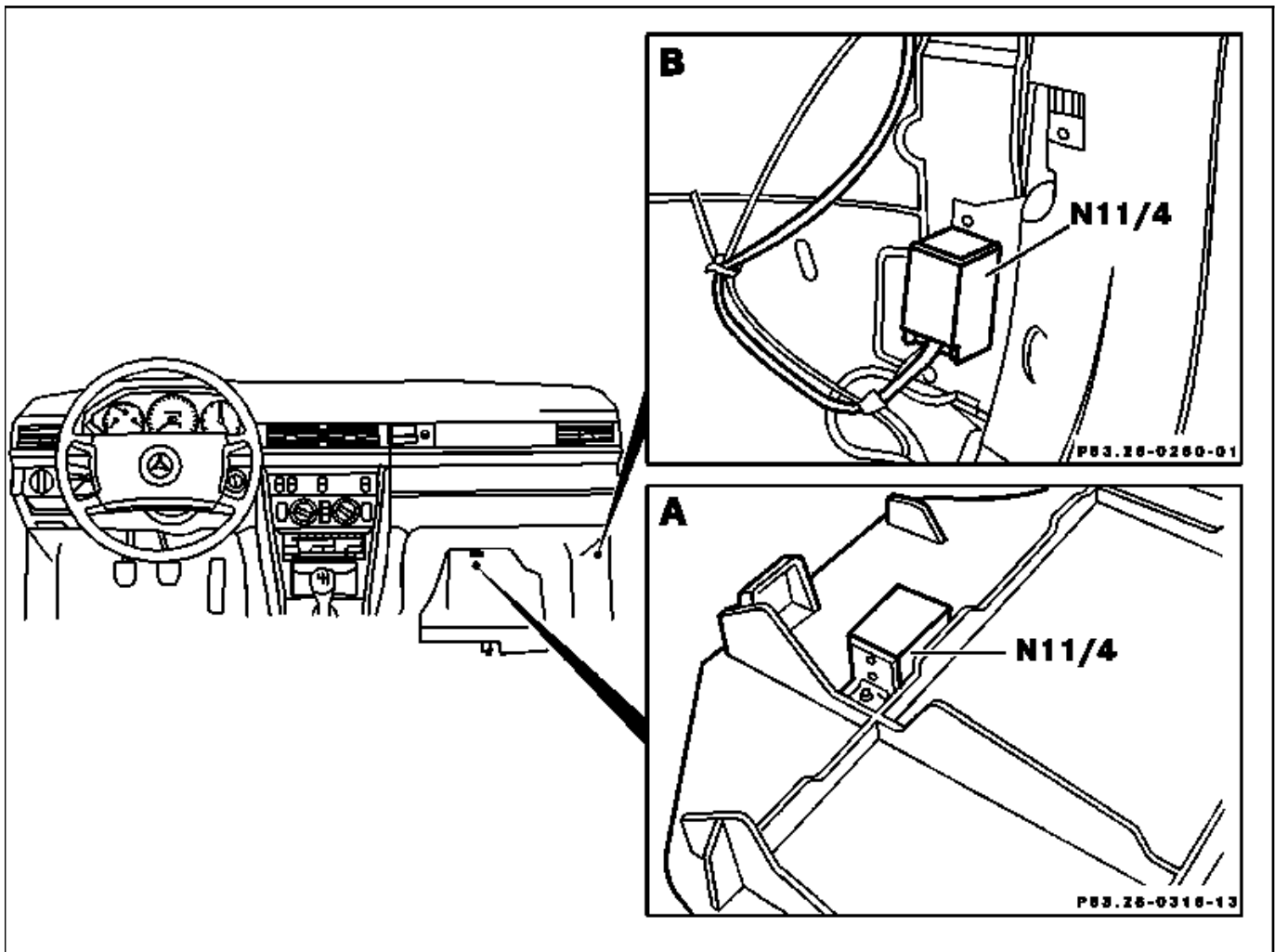
Switching off:

- turning the ignition key to position 2
- automatically after approx. 15 minutes

- automatically when the coolant temperature drops below approx. 60 °C
- with the switch

83-320 Checking function of residual engine heat utilization system

Operation No. of Operation Texts and Work Units,
Standard Texts and Flat Rates:



P83.25-0331-57

A. Up to 11/93

B. As of 12/93

Expose residual engine heat utilization system timer relay (N11/4). Open cover of connector (do **not** disconnect wiring harness).

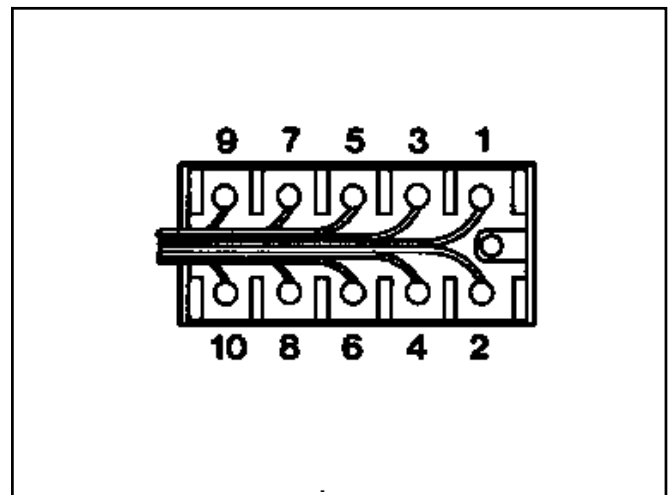
Commercially available tools and test instruments, MB test instruments
(see Workshop Equipment Manual)

Designation	e. g., order no.
Multimeter	Sun, DMM5

Requirements for the test

Battery voltage: 11-14 V

Connect voltmeter to contacts of opened connector.

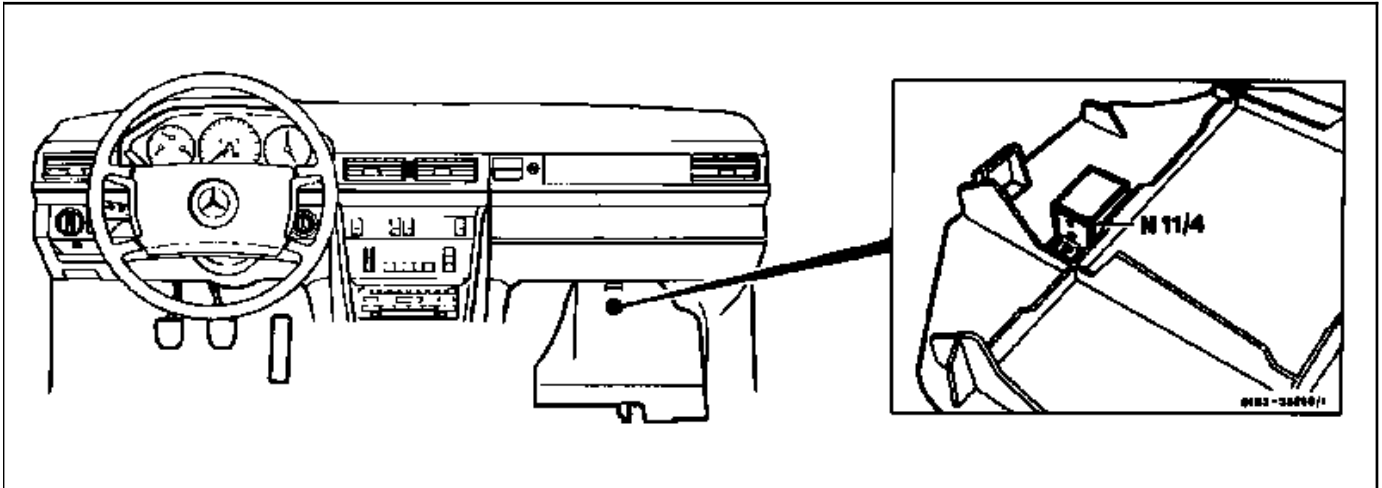


P83-6305-13

83-330 Removal, reinstallation of residual engine heat utilization system timer relay (N11/4)

Operation No. of Operation Texts and Work Units,
Standard Texts and Flat Rates:

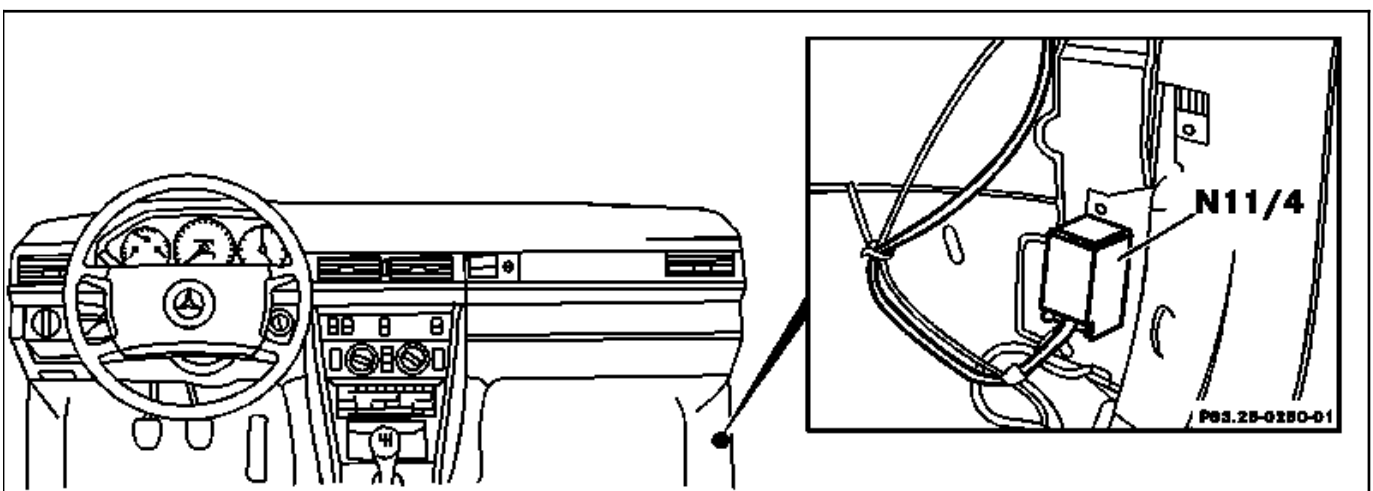
A. Up to 11/93



P83-6304-53

- Front right foot mat take out.
- Foot support remove.
- Connector of wiring harness at control unit N11/4 disconnect.
- Control unit N11/4 unscrew from foot support.
- Install in the reverse sequence.
- Function test at coolant temperature > 60 °C.

B. As of 12/93



P83.30-0421-53

- Paneling on A-pillar in right front footwell remove.
- Control module (N11/4) remove, 1 screw.
- Connector on wiring harness on control module disconnect.

Reinstall..... in opposite order.
Function check..... perform before installing.