MERCEDES-BENZ 2008–13 R350

PRECAUTIONS

Warning: Risk of explosion when charging lead batteries with battery electrolyte containing sulfuric acid. A highly explosive gas mixture is created that ignites by means of fire, sparks, open flames and smoking.

Warning: The battery electrolyte contains diluted sulfuric acid that causes caustic burns to the skin, eyes and mucous membranes in the event of contact. Bonded electrolyte is just as caustic as liquid electrolyte. Battery electrolyte mist causes caustic burns to eyes. If inhaled, this can result in caustic burns to mucous membranes and respiratory tracts.

Warning: In event of a short circuit from battery positive to ground, battery terminals and conductive objects causing short circuit, such as a tool or jewelry, become hot in seconds and cause burns.

Warning: If battery electrolyte is swallowed, this can result in symptoms of poisoning such as headache, dizziness, stomach ache, respiratory paralysis, unconsciousness, vomiting, caustic burns and cramps. Absorption of lead in body through contact with leaded components (battery terminals, lead plates in damaged batteries) damages blood, nerves and kidneys; lead compounds are also toxic for reproduction.

Caution: Wear acid-resistant gloves and clothing and safety glasses with side guards.

Only charge lead batteries in well-ventilated rooms with appropriate voltage and appropriate current with approved chargers, taking into account the instructions of battery and charger manufacturers.

Caution: Do not place any conductive objects on battery, and do not wear any conductive jewelry (risk of short circuit).

Always disconnect the ground terminal first; always connect positive terminal first (risk of short circuit caused by tool).

Only store, transport and install batteries with liquid battery electrolyte horizontally, otherwise battery electrolyte can escape from the degassing holes.

BATTERY

Primary

REMOVAL

1. Move righthand front seat (1) completely to rear, **Fig. 1.**
2. Switch off all electrical consumers. All electrical consumers must be switched off, otherwise they may be damaged when unclipping and clipping on ground line (12), **Fig. 1.**
3. Switch off ignition and remove transmitter key from EIS (EZS) control unit, or press Keyless Go start/stop button repeatedly until ignition is switched off. Remove transmitter key from vehicle, and store it in a location beyond its transmission range (at least six feet).
4. Unclip lefthand rail cover (2) to front (arrow A), as well as cover (3), and remove, **Fig. 1.**
5. Unclip righthand rail cover (5), and detach from rail to front (arrow C). To unclip, use a suitable tool to move into opening of rail cover (5) (arrow B), and unclip rail cover (5), **Fig. 1.**
6. Lift up floor covering (8) between front seat (1) and bottom B-Pillar trim (9) upwards (arrow E), **Fig. 1.**
7. Move righthand front seat (1) completely to front, **Fig. 1.**
8. Loosen nut on terminal of battery pole (11), and disconnect ground line (12) of battery (G1). All consumers must be switched off, as otherwise vehicle electrical system may be damaged. It must be ensured that no remote starting unit is connected to vehicle, **Fig. 1.**
9. Unclip and remove rear rail covers (13), **Fig. 1.**
10. Unclip and remove cover (14), **Fig. 1.**
11. Remove bolt (15), **Fig. 1.**
12. Remove anchoring lug (16), **Fig. 1.**
13. Take off cover (17), **Fig. 1.**
14. Lift rear floor covering (7) upwards (arrow F), **Fig. 1.**
15. Remove nuts (18) and cover (19), **Fig. 1.**
16. Detach bleed hose (20) including plastic support from battery (G1), **Fig. 1.**
17. Remove cover of positive battery terminal (21), loosen nut on terminal of positive battery terminal (22), and disconnect positive line (23), **Fig. 1.**
18. Remove nuts (24) and retaining plate (25), **Fig. 1.**
19. Remove battery.

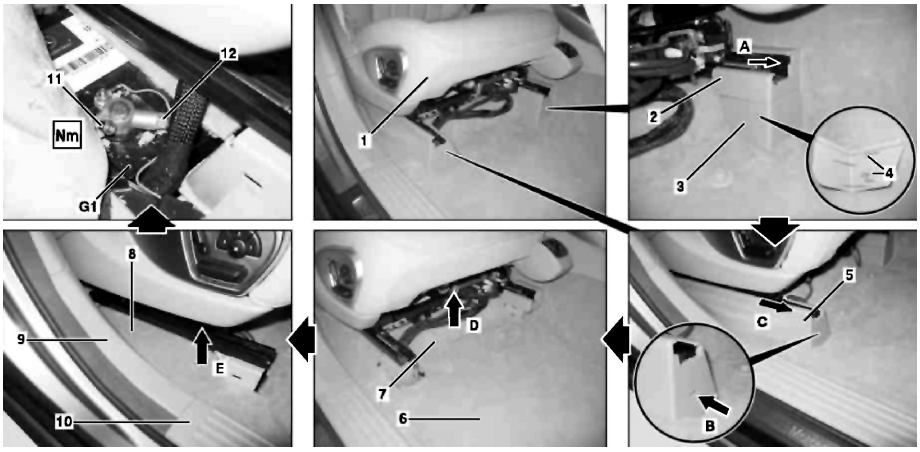

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Fig. 1 Primary battery removal (Part 1 of 2)

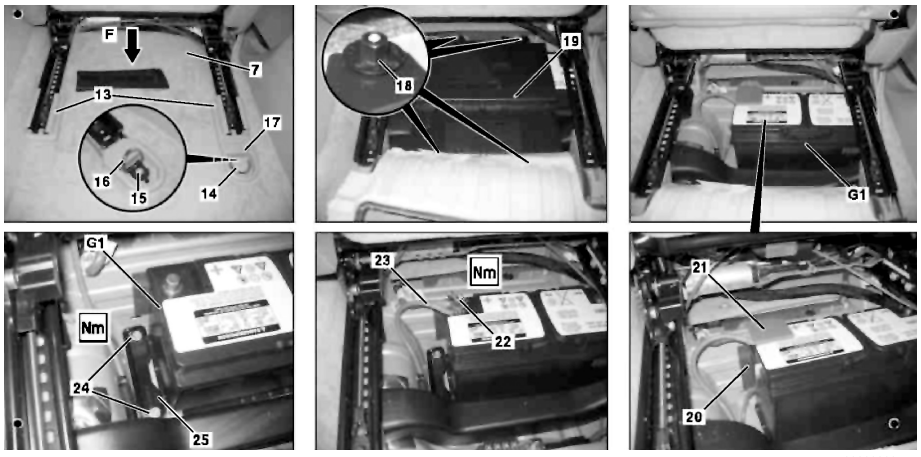

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Fig. 1 Primary battery removal (Part 2 of 2)

INSTALLATION

1. Before installation of battery, ensure that no cables are located within area of battery fixture, as they may be damaged when battery is installed.
2. Install battery.
3. Install retaining plate.
4. **Torque** battery retaining plate to frame floor nut to 18 ft. lbs.
5. Connect positive line to positive battery terminal.
6. **Torque** positive battery cable to battery terminal nut to 53 inch lbs.
7. Attach bleed hose (20) including plastic support from battery. Route bleed hose (20) without kinks, **Fig. 1.**
8. Install cover (19), **Fig. 1.**
9. Install rear floor covering.
10. Install cover (17), **Fig. 1.**
11. Install anchoring lug (16), **Fig. 1.**
12. Ensure that guide lugs are installed correctly.
13. Install bolt (15), **Fig. 1.**
14. **Torque** cargo retainers to body bolts to 18 ft. lbs.
15. Install cover (14), **Fig. 1.**
16. Install rear rail covers (13), **Fig. 1.**
17. Connect ground line to battery terminal.
18. **Torque** battery ground cable to battery terminal nut to 53 inch lbs.
19. Observe correct seating of floor covering (8) under bottom B-Pillar trim (9) and door sill molding (10), **Fig. 1.**
20. Install lefthand and righthand rail covers.
21. Ensure that maxi-fuses in pre-fuse box in battery compartment are not loosened inadvertently when installing and removing battery.
22. Connect a suitably programed scan tool, read out fault memory, and erase if required.
23. Set time on instrument cluster (see operator's manual).
24. Normalize power windows as follows:
    a. Close all doors and switch on ignition.
    b. Move each window to upper end position using switch. In this position, press each switch in power window and outside mirror adjustment switch group for at least one second.
    c. Normalization of power windows procedure is also available in operator's manual.
25. Normalize power glass tilting/sliding roof, if equipped, as follows:
    a. Switch on ignition.
    b. Move power glass tilting/sliding roof to raised position using switch until maximum raised position is reached. Keep switch pressed when in this position for approximately one second.
    c. Actuate express function (as described in operator's manual) by briefly pressing switch (beyond point of resistance). If power glass tilting/sliding roof is then fully opened, normalization was successful. If required, repeat procedure.
    d. Normalization of power glass tilting/sliding roof procedure is also available in operator's manual.
26. Normalize third seat row power windows, if equipped.
27. Calibrate compass (see operator's manual).

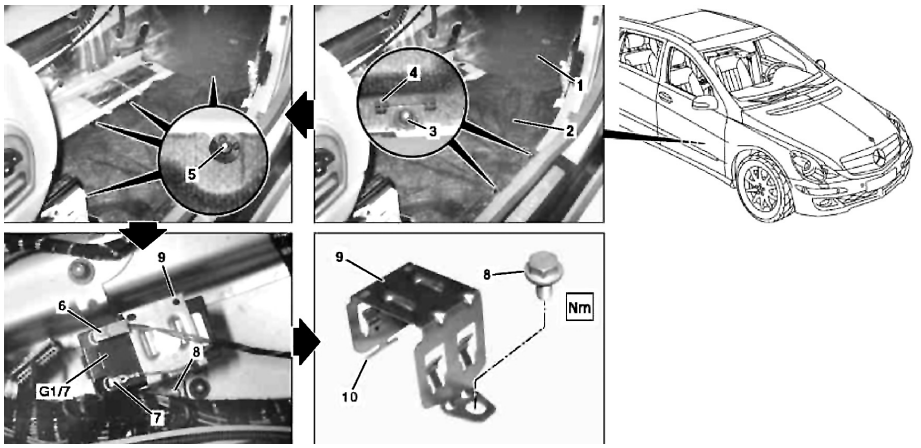

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Fig. 2 Auxiliary battery removal

Auxiliary

REMOVAL

1. Remove front righthand floor covering.
2. Remove impact absorber (1), **Fig. 2.**
3. Remove nuts (3, 5) and clips (4), **Fig. 2.**
4. Remove intermediate bottom (2), **Fig. 2.**
5. Detach plug on ground terminal (7) of auxiliary battery (G1/7), **Fig. 2.**
6. Detach plug on positive terminal (6) of auxiliary battery (G1/7), **Fig. 2.**
7. Remove bolt (8) and open retaining clamp (9), **Fig. 2.**
8. Remove auxiliary battery.

INSTALLATION

1. Install auxiliary battery.
2. Install bolt (8) and close retaining clamp (9), **Fig. 2.**
3. Ensure that anchorage fitting (10) engages into retaining panel, **Fig. 2.**
4. Attach plug on positive terminal to auxiliary battery.
5. Attach plug on ground terminal to auxiliary battery.
6. Install intermediate bottom (2), **Fig. 2.**
7. Install clips (4). Pay attention to correct seat of clips (4), **Fig. 2.**
8. Install nuts (3, 5). Do not mix up nuts (3) and nuts (5), **Fig. 2.**
9. **Torque** auxiliary battery bracket nuts to 44 inch lbs.
10. Install impact absorber.
11. Install front righthand floor covering.

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