

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2004 JEEP Wrangler OEM Service and Repair Workshop Manual

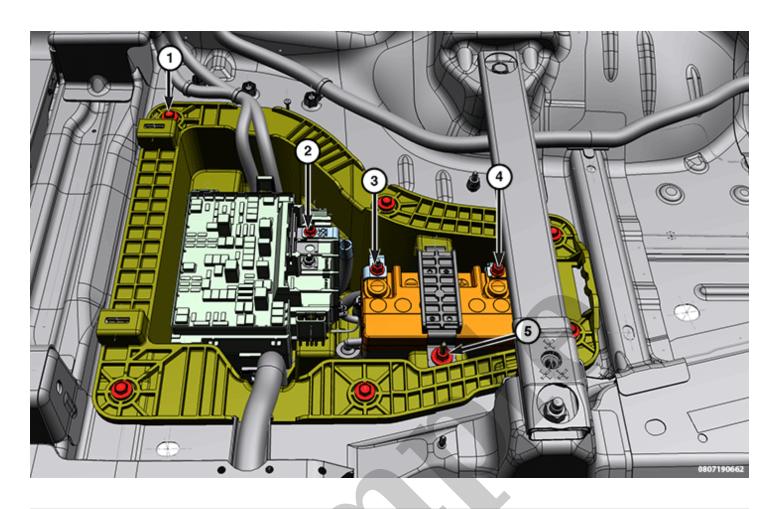
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To protect the hands from battery acid, a suitable pair of heavy duty rubber gloves should be worn when removing or servicing a battery. Safety glasses also should be worn.

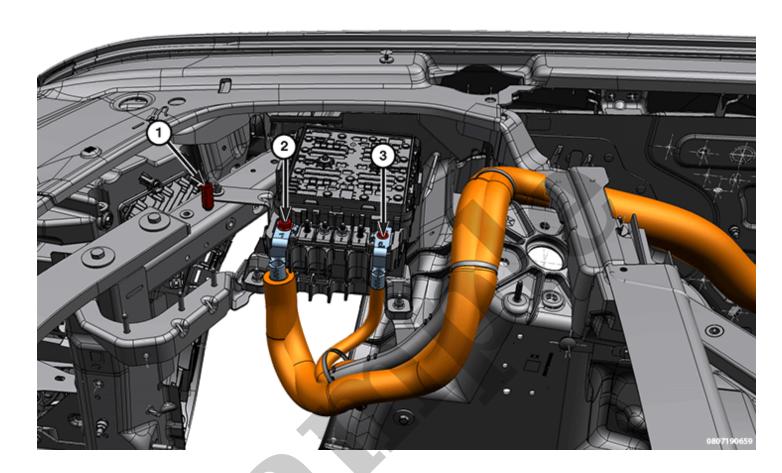
WARNING

Remove metallic jewelry to avoid injury by accidental arcing of battery current.

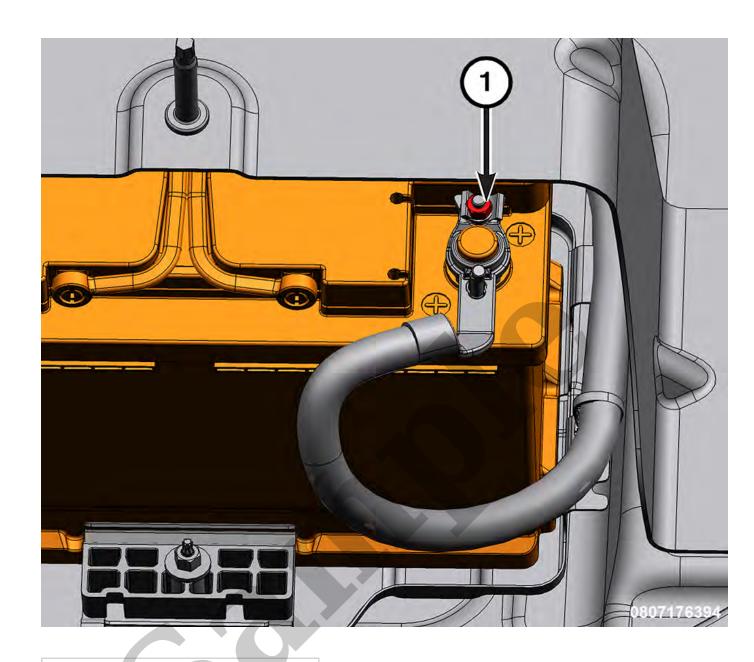
- 1. Disconnect and isolate both negative battery cable(s) (Refer to Electrical/Battery System/Standard Procedure).
- 2. Remove the fasteners that secure the front passenger seat and tip it forward to gain access to the auxiliary battery.
- 3. Remove the rear heat floor duct (Refer to Heating and Air Conditioning/Distribution/DUCT, Floor Distribution/Rear/Removal and Installation).
- 4. Remove the auxiliary battery floor cover from below the seat.
- 5. Remove IBS2 (Refer to Electrical/Battery System/SENSOR, Intelligent Battery 2 (IBS2)/Removal and Installation).



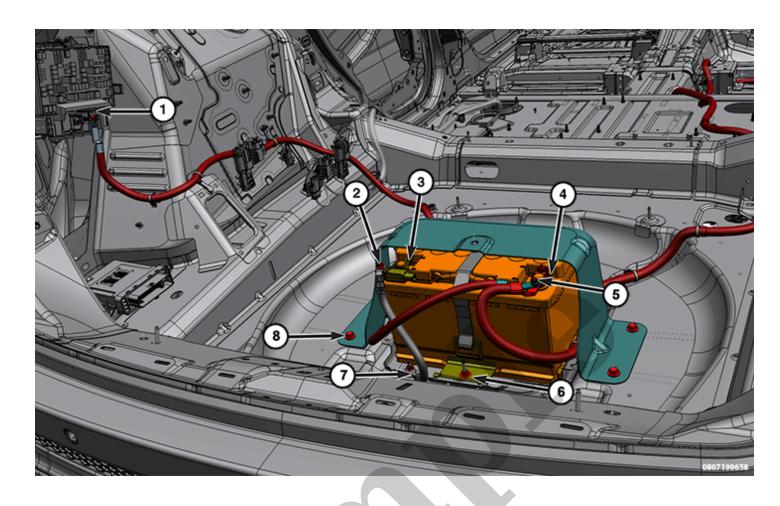
| CALLOUT | DESCRIPTION | SPECIFICATION | COMMENT |
|---------|--|-------------------------|---------|
| 1 | Battery Tray Bolts | 10 N·m (89 In. Lbs.) | _ |
| 2 | Battery Positive B(+) at Power Distribution Center (PDC) M8 Nut | 15 N·m (11 Ft. Lbs.) | _ |
| 3 | AUX Battery M6 Nut to Battery Cable | 5 N·m (44 In. Lbs.) | _ |
| 4 | AUX Battery M6 Double Torx Stud | 7 N·m (63 In. Lbs.) | _ |
| 5 | AUX Battery Hold Down Nut | 5 N·m (44 In. Lbs.) | _ |



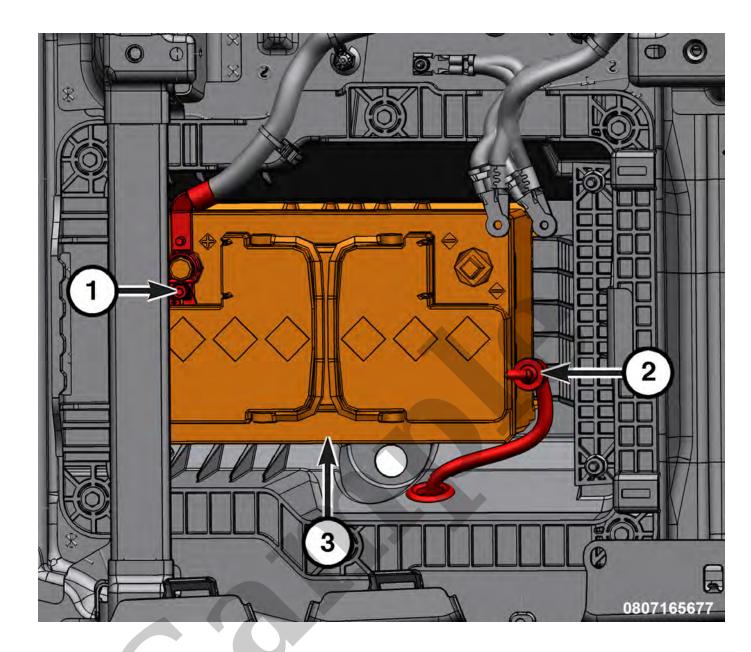
| CALLOUT | DESCRIPTION | SPECIFICATION | COMMENT |
|---------|--|-------------------------|---------|
| 1 | Negative Jump Start Post to Core Support | 11 N·m (8 Ft. Lbs.) | _ |
| 2 | Battery Positive B(+) at Power Distribution Center (PDC) M8 Nut | 15 N·m (11 Ft. Lbs.) | - |
| 3 | Battery Positive B(+) at Power Distribution Center (PDC) M6 Nut | 8 N·m (71 In. Lbs.) | - |
| - | Battery Negative Cable to Engine Block | 41 N·m (30 Ft. Lbs.) | - |
| - | Battery Positive B(+) at Bulkhead Captured Nut | 15 N·m (11 Ft. Lbs.) | - |



- 1 Battery Positive Cable Pinch Nut (M5)
- 4. Loosen the pinch bolt, disconnect and isolate the positive battery cable.



| CALLOUT | DESCRIPTION | SPECIFICATION | COMMENT |
|---------|--|-------------------------|---------|
| 1 | Battery Positive B(+) at Power Distribution Center (PDC) M8 Nut | 15 N·m (11 Ft. Lbs.) | - |
| 2 | 12 Volt Negative Battery Cable to Intelligent Battery Sensor (IBS) | 10 N·m (7 Ft. Lbs.) | - |
| 3 | Intelligent Battery Sensor (IBS) to the Battery Negative Post | 8 N·m (71 In. Lbs.) | - |
| 4 | Battery Positive Cable Pinch Bolt (M5) | 7 N·m (62 In. Lbs.) | - |
| 5 | Battery Positive Cable Nut (M6) | 8 N·m (71 In. Lbs.) | _ |
| 6 | Battery Hold Down Bolt | 9 N·m (80 In. Lbs.) | - |
| 7 | 12 Volt Battery Negative Battery Cable to Floor | 9 N·m (80 In. Lbs.) | - |
| 8 | Spare Tire Bracket to Floor | 17 N·m (13 Ft. Lbs.) | - |

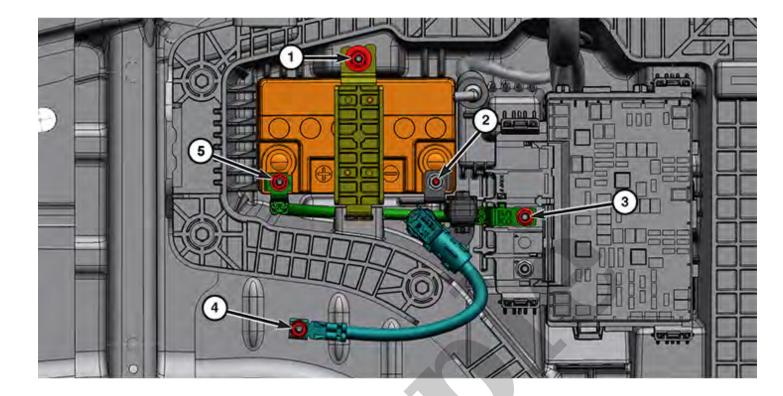


- 1 Positive Battery Cable End Nut
- 2 Battery Vent Tube
- 3 Battery

NOTE

On dual battery systems the positive cable end **MUST** be isolated.

- 5. Loosen the positive battery cable end nut and remove the positive battery cable.
- 6. Remove the battery vent tube.

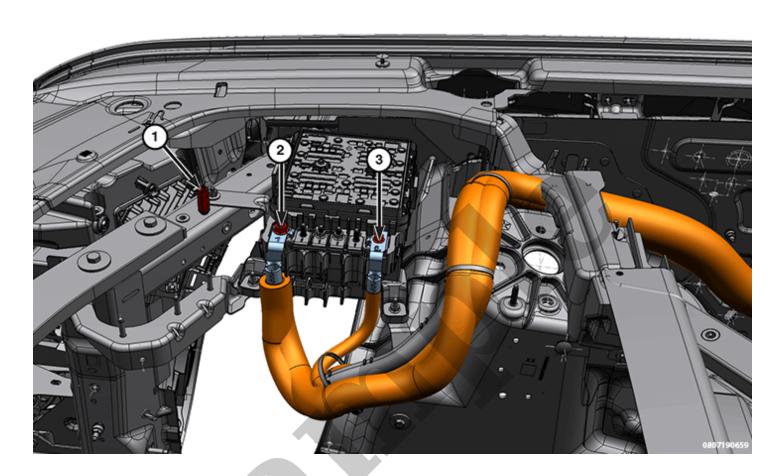


| CALLOUT | DESCRIPTION | SPECIFICATION | COMMENT |
|---------|--|-------------------------|---------|
| 1 | AUX Battery Hold Down Nut | 5 N·m (44 In. Lbs.) | - |
| 2 | AUX Battery M6 Double Torx Stud | 7 N·m (63 ln. Lbs.) | _ |
| 3 | Battery Positive B(+) at Power Distribution Center (PDC) M8 Nut | 15 N·m (11 Ft. Lbs.) | _ |
| 4 | Battery Negative Cable to Body | 10 N·m (89 In. Lbs.) | - |
| 5 | AUX Battery M6 Nut to Battery Cable | 5 N·m (44 In. Lbs.) | - |
| 5 | Intelligent Battery Sensor (IBS) Sensor to Negative Post - ADAS Equipped Vehicles | 6 N·m (53 ln. Lbs.) | - |

- 1 Interior Battery Cable Clamp to Battery Post
- 2 Wire Harness Retaining Clip
- 3 Battery Positive B(+) at Power Distribution Center (PDC)
- 4 Wire Harness Trough Push Pins
- 5 Fuse Holder Electrical Connector

Loosen and disconnect the interior battery cable clamp to battery post.

- 3. Disconnect the fuse holder electrical connector.
- 4. Remove the nut securing the battery positive cable to the PDC.
- 5. Remove the wire harness and wire harness trough retainers.



| CALLOUT | DESCRIPTION | SPECIFICATION | COMMENT |
|---------|--|-------------------------|---------|
| 1 | Negative Jump Start Post to Core Support | 11 N·m (8 Ft. Lbs.) | _ |
| 2 | Battery Positive B(+) at Power Distribution Center (PDC) M8 Nut | 15 N·m (11 Ft. Lbs.) | - |
| 3 | Battery Positive B(+) at Power Distribution Center (PDC) M6 Nut | 8 N·m (71 In. Lbs.) | - |
| _ | Battery Negative Cable to Engine Block | 41 N·m (30 Ft. Lbs.) | - |
| - | Battery Positive B(+) at Bulkhead Captured Nut | 15 N·m (11 Ft. Lbs.) | - |