2022 Dodge or Ram Truck RAM 3500 Truck 4WD L6-6.7L DSL Turbo
Vehicle > Steering and Suspension > Steering > Steering Wheel > Testing and Inspection > Component Tests and General Diagnostics

HEATED STEERING WHEEL

HEATED STEERING WHEEL

NOTE:

Vehicles equipped with the heated steering wheel option utilize a low voltage cut-off feature. This feature turns off power to the heated steering wheel anytime vehicle voltage is below 11.7 volts or above 15.5 volts. Be certain to check the vehicle electrical system for proper voltage anytime the heated steering wheel appears inoperative.

NOTE:

If a Diagnostic Trouble Code (DTC) can not be verified, it is a good indication that an INTERMITTENT fault condition may be present. To help find an intermittent problem, move the steering wheel around while testing continuity. Also wiggle the heated steering wheel wire harness and electrical connectors while testing continuity.

NOTE:

For complete circuit diagrams, see Wiring Information. The wiring information includes wiring diagrams, details of wire harness routing and retention, connector pin-out information and location views for the various wire harness connectors, splices and grounds. For proper wire repair, (Refer to 29 - Non-DTC Diagnostics/Circuit Testing Procedures/Standard Procedure) and connector repair procedures, (Refer to 29 - Non-DTC Diagnostics/Circuit Testing Procedures/Removal) and (Refer to 29 - Non-DTC Diagnostics/Circuit Testing Procedures/Installation).

Before testing any individual components in the heated steering wheel system, check the following:

- Check the ignition fuse in the Power Distribution Center (PDC). Repair as necessary.
- Using a diagnostic scan tool, check for any Diagnostic Trouble Codes (DTCs) related to the Comfort Seat
 Wheel Module (CSWM) and the Uconnect® touchscreen module (Display Screen Module/DSM or radio and
 screen, as equipped). If any DTCs are found, repair as necessary (Refer to 28 DTC-Based Diagnostics for
 more information).
- Check the vehicles battery open-circuit voltage and charging system performance. If the vehicle's electrical system is ineffective or weak, it may not be suppling sufficient energy to operate the heated steering wheel system.
- If there are no DTCs and the heated steering wheel system functions properly but the heated steering wheel
 indicator does not illuminate, the entire Uconnect® touchscreen module (DSM) or radio and screen, as
 equipped, must be replaced (Refer to 08 Electrical/8E Electronic Control Modules/MODULE, Display
 Screen/Removal and Installation) or (Refer to 08 Electrical/8E Electronic Control Modules/RADIO/Removal
 and Installation).

Vehicle	Wheel Type	Heat Element Resistance Ω ±10% @ 23°C	
	All leather	1.72	
HD RAM - DJ/DF/D2/DP/DD	Wood/Leather	1.62	
DS	All leather	1.82	
	All leather	1.49	
DT	Wood/Leather	1.88	
DT TRX	All leather	1.49	

TEMPERATURE SENSOR RESISTANCE						
°C	°F	Nominal (Ohms)	Minimum (Ohms)	Maximum (Ohms)		
0	32	32650	30601	34699		
5	41	25388	23861	26914		
10	50	19900	18754	21046		
15	59	15708	14842	16574		
20	68	12490	11831	13149		
25	77	10000	9500	10500		
30	86	8057	7632	8482		
35	95	6531	6173	6889		
40	104	5327	5024	5630		
45	113	4369	4111	4626		
50	122	3603	3384	3822		
55	131	2986	2799	3174		
60	140	2488	2327	2649		
65	149	2083	1945	2221		
70	158	1752	1633	1871		
75	167	1481	1378	1585		
80	176	1258	1168	1348		
85	185	1072	994.2	1151		
90	194	917.7	849.4	986.0		
95	203	788.5	728.6	848.4		

TEMPERATURE SENSOR RESISTANCE						
°C	°F	Nominal (Ohms)	Minimum (Ohms)	Maximum (Ohms)		
100	212	680.0	627.4	732.6		