

NAV SD Card Removed Error : The Sequence of Fixes: Finally a Solution

There are a number of Forum Threads both Corvette and other GM vehicles using the same infotainment system defining an error. NAV SD Card Removed: When it's NOT! Tried several solutions, some helped, some didn't and the GM Bulletin on the subject listing other GM cars had NO SOLUTION!

My issue started about a year after I got my C8. That is when I stopped using the Free XM Radio August 2021 and used the Thumb Drive with ~1300 songs as I did in my 2014 Z51 and 2017 Grand Sport that worked fine. The final solution was another Brand of Thumb Drive other than SanDisk. The "probable" reason and the brand that worked is outlined in the following, but 1st other solutions tried.

THE PROBLEM:

Basically, you get a message on the right side of the driver's center screen on startup that says SD Card Removed. You have to press OK to eliminate the message. Subsequently pressing NAV on the center screen, it tries to load the NAV SD card but gets so far and stops. The message and picture you get in the center screen is shown below. Says NAV SD Card removed- BUT ITS NOT!

Considering the message, I and a number of others including dealers, first assumed it was the contacts on the NAV SD card so we cleaned them. Thought my contact cleaning looked like it worked. But soon the same message. A dealer even installed a new reader. No help.



GOOD CLUE FROM FORUM POSTER:

Z06DevilCar had the "NAV SD Car Missing" error with his 2020 Z51 Coupe and posted in January 2021.

He (and I) googled and found this problem not only occurs on the C8 but also other GM products such as Blazer, Camaro, Equinox, Malibu etc. after 2019 with the new NAV. It's reported as very intermittent. Thinking through the sequence of events he realized that one thing he had done the night before was insert a USB Thumb drive with MP3 music and that music was streaming during the NAV startup which does a significant amount of reading from the NAV SD card. That is where my issue started!

He removed the USB Thumb drive and failures stopped. He then built 2 USB drives with music. The first "Drive" had songs recorded at a bit rate of 160 kbps and lower, the second has songs all recorded at a bit rate of 320 kbps.

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To make this problem occur the music must be streaming from the USB drive to the media app while the NAV is starting up. (*In fact, that is how I have my C8 set, music starts when I start the car.*) He tested the 160 kbps USB drive for 3 weeks without a failure. Then replaced that USB drive with the one recorded and 320 kbps and the failure occurred the second time the car was started the car.

The obvious conclusion was that the NAV SD card and the USB media share the same data bus, and with the higher bit rate music playing while trying the read from the NAV SD card during its initiation creates “interference” on the data bus. The SD Card control software is not able to recover thus the “NAV SD Card Removed” message.

Doing some additional research, he went to a couple of dealers who thought he was nuts or wanted to remove the center console and replace the SD Card reader. He notes the service departments in the Chevy dealers don't acknowledge this problem and want to reseal your SD card and send you on your way. He mentioned that this problem exists on other GM brands with the new NAV. I found a Technical Service Bulletin 19-NA-279 with the Subject - Radio Software Version V807. I looked at the Bulletin and although not for the C8 it states:

“SD Card Error code 0x40000 • SD Card Removed message when card has not been removed • Cause The cause of the condition may be software anomalies.”

Bottom Line: What GM Bulletin States Is No Help!

A partial solution followed *Z06DevilCar's* advice. Cut the error from ~33% of my starts to ~15%. How I achieved the positive result is interesting.

With my Daughter's help, loaded open office software she suggested that allows any song “Bit Rate” to be adjusted. However, the free one she suggested has an interesting feature that caused the solution to happen serendipitously. Not sure why but when I simply copied and pasted my whole Thumb Drive file with ~1000 songs in the “open office program” it automatically lowers the bit rate for songs higher than 160 kbps to that level. It left lower bit rates alone!

Didn't even run the program, which would have taken a lot of time to change some 300 songs to a lower bit rate with each done separately. Just copied and pasted the file as it appeared once it was in the open office program back to a Thumb drive!

Details of Things Tried:

- Reduced Bit Rate, worked about 85% For Me. Not great but better!
- Bought a new Updated NAV card from GM. Result No Different.
- Found an apparent “Solution” on a GM Truck Forum Website that said NAV SD Card must be Locked. Tried and if anything, it was worse.
- While having my year 2 engine oil/filter changed mentioned to the Corvette Tech. He updated the Audio software and found a comment on the GM Service Website that said DON'T USE A SANDISK Thumb Drive. No reason, just a comment. Bought a Verbatim 16GB Store 'n' Stay Nano USB 3.0.
- Software update in August 2022 was no help. BUT new “different Brand” Thumb Drive has been working with no errors for ~2 months!

Solution Sequence of Attempted Fixes With Photos

The final solution was what was found in a note by the Corvette Tech who updated the audio software in August 2022. He found a note in the GM Service Hits for Audio, although not directly mentioning the NAV SC Card Removed error said: "Do not use SanDisk USB flash drive with "no reason."

The software did not help, still had ~15% of start Card Removed Error. Bought a Verbatim 16GB Store 'n' Stay Nano USB 3.0 flush mount thumb drive right and it has worked for XX weeks.

The possible reason IMO WHY, is in the Appendix.



The SanDisk I had used for my 2014 Z51 and 2017 was a 2.0, capable of a max read rate of 480 Mbps. Thought perhaps I needed a higher read rate, 3.0 (5 Gbps.) Unlikely the 3.1 Gen 2, 10 Gbps. So in May 2022 bought this SanDisk thumb drive, a 16 GB Ultra Fit 3.1 flush mount.

Had the same ~15% error rate.

Bought a new Updated SD NAV Card from GM to see if that helped. It DID NOT! Note pic is not the card, the one purchased is # 5531.

Included pic right because a GM Truck forum post discussing the same error and said they solved it my putting the Card in Lock Mode. That did not help. A call to the folks who supply the official GM Cards said it won't work in Locked Mode. Not true and they had no knowledge of the Card Removed error! They validated it should be unlocked.



How I was able to change my songs, so they were a maximum of 160 kbps is interesting. It also provided free software to RIP any song playing on my PC. Checked my USB Thumb drive to see what the bit rate was of my ~1300 songs. Turned out about a 1/3 were above the "recommended" 160 kbps rate! Explains why about a 1/3 of the time I started the car the Thumb Drive was trying to load along with the NAV SD in had the "NAV SD Card Error." BUT, as mentioned, it was NOT a 100% solution, NAV Card still failed to load about 15% of starts.

What Software is Needed to Change Higher Bit Rate Songs to Max 160 kbps?

Daughter is a former IT Manger at her Alma Mater, Scripps College in Claremont CA. Her area was called Academic Computing where she had to introduce the faculty and students to computers! Was not easy as some old time College Board Members (*and large doners*) were upset because typewriters reduced penmanship skills!

She managed computers set-up in the dorms, and over 30 in what were called PC labs. This job started around 1982 when we didn't even have PCs at our work. She employed a number of student computer assistances who were a big help. I recall her issues with viruses, Professors using copyrighted pics and the College getting sued etc.!

She uses mostly free open office software and suggested a very good one, *Audacity*



Great program and allows you to export songs into a various kbps. But doing 1/3 of 1000 songs was going to take time! However, got lucky! Don't know why but when I loaded all my songs into Audacity with a simple copy and paste, pic below is what I got:

Same File Opened in Audacity
ALL 160 kbs or less!

Just copied this file and pasted in a Thumb Drive! IT WORKS!

APPENDIX

***What's Wrong With The SanDisk Brand That Caused This Issue??
IMO Perhaps Nothing for a Legitimate Card!***

Funny had a similar issue with my PDR SanDisk SD Card. Trip recordings were stopping after 5 to 10 minutes. Others reported similar issues and several blamed it on "Counterfeit Cards" bought on Amazon! I changed to a Lexan SD Card and the issue was fixed! Frankly in our rural area Amazon is the easiest purchase choice BUT there are always several vendors. One Internet Suggestion to avoid Counterfeits was "*be careful buying from the cheapest vendor!*"

Why SanDisk Cards and possible USB drives may be more vulnerable to cheap copies? My industry experience with one of our strong trademark brands: Heliarc Torches, collet, collet bodes etc, proves the clue. We were the market leader back-in-the-day. The company had developed all the many air and water cooled Heliarc Brand TIG welding torches, invented the gas lens etc. These were patented in the 1950's and 1960's. When the patents expired the "copiers" did the logical thing! They copied the high volume market leader. They often used cheaper materials and less a complex design (*as in the case of a gas lens.*) But from the outside they looked the same!

Perhaps the case with "Counterfeit" SD Cards and possibly USB Thumb Drives (flash drives.) Many sellers on Amazon so possible some of those may be selling cheap copies, 2nds, or products that don't meet the specs that can be sent to the manufacturer. Can't be sure but in these two cases it worked for me.

All Songs Loaded with a maximum of 160 kbps. Those lower stayed that way!
I even loaded songs from another file, and some were larger. Simply sorted on the Bit Rate column (*which I added*) and dropped the ones that exceeded 160 kbps. Now have a Thumb Drive with max 160 kbps!

“56” C8, 2017 Grand Sport & 2014 Z51 Stingray Mods, Info Available As PDFs:



56 PDFs discuss improvements or info about a C8, 2017 Grand Sport, 2014 Z51 Stingray function and/or esthetics. Some are minor and others, like the installing “Low Dust Brake Pads” on C8 & C7s, have detailed information.

Below are the PDF's available. Click on picture or Blue PDF link or copy and paste the PDF link (Blue type) into your browser. Or email me at GUtrachi@aol.com and state the title desired, shown in Yellow:

C8 Install High Wing

How To Remove Rear Bumper- Install Wing
http://netwelding.com/C8_High_Wing.pdf



C8, C7 eLSD vs Positraction

eLSD is a Modern Dif; Positraction is from 1960s
http://netwelding.com/eLSD_VS_Pos.pdf



C8 FWD Hybrid

WFWD Hybrid Provides More Power & MPG
http://netwelding.com/C8_FWD_Hybrid.pdf



C8 Edge Red Engine Cover

Engine Cover Matches Valve Covers
http://netwelding.com/Engine_Cover.pdf



C8 Engine Compartment Lights

Multicolor Lights Remote operated
http://netwelding.com/Engine_Lights.pdf



C8 Side Skirts & Splitter

Install C7 Carbon side skirts & splitter on C8
http://netwelding.com/Side_Skirts.pdf



C8 Z51, GS/C7 Z51 Ceramic Brake Pads

Performance Vettes have dusty brakes. These help!
http://netwelding.com/Ceramic_Pads.pdf



C8 Low Restriction Air Intake

Low Restriction Air Filter Why & How To

http://netwelding.com/C8_Air_Intake.pdf



C8 & C7 Splitter & C8 Condenser Mesh

Mesh Protects AC Condenser & Splitter Install

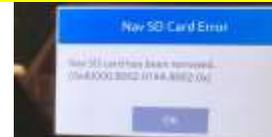
http://netwelding.com/CF_Splitter.pdf



C8 NAV SD Card Removed Error

Error When SD Card and Reader Are Fine

http://netwelding.com/NAV_SD_Card.pdf



C8/GS/C7 Splash Guards

GM splash guards. ACS Best Front Guards for GS.

http://netwelding.com/Splash_Guard.pdf



Jacking a C8/GS/C7 Vette

Safely jacking either front only or back & front

http://netwelding.com/Jacking_A_C7.pdf



C8 & C7 Plates & Frame;

Must Meet South Carolina Law

http://netwelding.com/License_Plate_Frame.pdf



Change GS/C7 Oil

WHY change your own oil and C7 Lifting Methods

http://netwelding.com/Changing_Oil.pdf



C8/GS/C7 Mirror Proximity Alarm

Limit switch alarm warns when close to door frame

http://netwelding.com/Mirror_Proximity_Alarm.pdf



Jacking Pads for C8/GS/C7

Manual says Jacking Pads 2 1/2-inch max OD..

http://netwelding.com/Jacking_pads.pdf



C8/GS/C7 Radar Power

For C7 tapped rear fuse panel. For GS tapped mirror

http://netwelding.com/Radar_Detector_Power.pdf



C8 & C7 Wheel Chatter/Hop

Why sharp, low speed turns with cold tires causes the front tires to chatter/hop.

http://netwelding.com/Wheel_Chatter.pdf



C8/GS/C7 Wheel Locks

Wheel locks, help protect your expensive wheels.

http://netwelding.com/Wheel_Locks.pdf



Deer Whistle Installed on C8/GS/C7

Do they work? Plus Install Info

http://netwelding.com/Deer_Whistle.pdf



C8 & C7 Splitter Protector

Scrape Armor Protection for Splitter

http://netwelding.com/Splitter_Protectors.pdf



C8 & C7 Cargo Area

Rear cargo area storage device and rear protector
http://netwelding.com/Rear_Cargo_Area.pdf



C8 Coilover Tower Covers

Prevent water from filling Cast aluminum cavities
http://netwelding.com/Tower_Covers.pdf



C8.R Info & GS Rear Diffuser (Fits Any C7)

Rear Carbon Flash Composite Diffuser
http://netwelding.com/Rear_Diffuser.pdf



GS/C7 Belt Rattle

Passenger seat belt rattles against the seat back.
http://netwelding.com/Eliminate_Rattle.pdf



Aluminum C7 Chassis and Weld Repair

The C7 aluminum chassis. Includes weld repair info.
http://netwelding.com/Aluminum_Chassis.pdf



Manage GS/C7 Spilled Gas & Door Lock

Protect when filling gas. Preventing door lock failure.
http://netwelding.com/Manage_Spilled_Gas.pdf



GS/C7 License Plate & Cargo Lights

LED license plate light & cargo area bulbs
http://netwelding.com/License_Plate_Light.pdf



GS/C7 Door Panel Protector

Black plastic protector prevents scuffing of door
http://netwelding.com/Door_Panel_Protector.pdf



GS/C7 Improved Cup Holder

A solution to the cup holder spilling
http://netwelding.com/Improved_cup_Holder.pdf



C7 Carbon Fiber Grille Bar

Install genuine carbon fiber grille bar overlay
http://netwelding.com/CF_Grille_Bar.pdf



Replacing C7 Battery

Tricks for installing battery!
http://netwelding.com/Battery_Issues.pdf



GS/C7 Window Valet

Lower Windows With FOB Helps Latch Hatch
http://netwelding.com/Hatch_Latch.pdf



GS/C7 Blind Spot Mirror

Smaller rear and side windows cause C7 blind spots. Small "blind spot mirrors" help
http://netwelding.com/Blind_Spot.pdf



GS/C7 Skid Pad Protector

After the air dam, the aluminum "skid pad" hits
http://netwelding.com/Skid_Pad_Protector.pdf



GS/C7 OnStar Lights

Rear view mirror OnStar LED's, at a quick glance,
look like a police car flashing light! This is a fix.
http://netwelding.com/OnStar_Lights.pdf



GS/C7 Skip Shift Eliminator

Skip Shift Eliminator install with suggestions on
jacking a C7.
http://netwelding.com/Skip_shift_Eliminator.pdf



GS/C7 Catch Can & Clean Oil Separator

What is Coking and how to reduce the potential
http://netwelding.com/Catch_Can.pdf



GS MGW Flat Stick Shifter

The MGW shifter shortens throw and is more precise
http://netwelding.com/MGW_Shifter.pdf



GS/C7 Round Shift Knob

A round shift knob shortens throw on OEM shifter
http://netwelding.com/Shift_Knob.pdf



GS/C7 Stingray Sill Plate

Stingray sill plate replaces original.
http://netwelding.com/Sill_Plate.pdf



GS/C7 Nylon Bra

Nylon Bra Stops Bugs. Fits with Stage 3 Winglets
http://netwelding.com/Nylon_Bra.pdf



GS/C7 Clutch Fluid Change

Clutch fluid after 3000 miles gets dirty
http://netwelding.com/Clutch_Fluid.pdf



C7 Carbon Fiber Hood Vent

Replaces Plastic Hood Vent
http://netwelding.com/Hood_Vent.pdf



GS/C7 Cold Air Intake

Low Restriction Air Filter & Duct
http://netwelding.com/Cold_Air_Intake.pdf



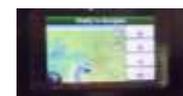
GS/C7 Soler Modified Throttle Body

For Improved Throttle Response
http://netwelding.com/Soler_Mod_TB.pdf



Garmin GPS for GS Cubby

Garmin Mounts in GS Cubby & Apple CARPLAY
http://netwelding.com/GPS_In_Cubby.pdf



GS Splitter Stage 3 Winglet

Stage 3 Winglets Integrate with Spats
http://netwelding.com/Stage_3_Winglets.pdf



<p>C7 Removing GM Plastic Film <i>How To Remove The Rocker Panel Film</i> http://netwelding.com/Rocker_Panel_Film.pdf</p>	
<p>GS 2LT to 2.5 LT <i>Red Upper Dash Pad Like 3LT</i> http://netwelding.com/Red_Dash_Pad.pdf</p>	
<p>Jake Emblem/Decals for GS <i>Jake Symbols Support GS Racing Image</i> http://netwelding.com/Jake_Emblems.pdf</p>	
<p>Rusty GS/C7 Muffler <i>Why the C7 muffler rusts way to turn matte black.</i> http://netwelding.com/Muffler_Rust.pdf</p>	
<p>GS Engine Compartment Mods <i>Cosmetic Additions in Engine Compartment</i> http://netwelding.com/Engine_Compartment.pdf</p>	
<p>GS Vitesse Throttle Controller: Fits All C7s <i>Adjustable Throttle-by-Wire Control</i> http://netwelding.com/Throttle_Control.pdf</p>	
<p>Boomy Bass Solution <i>Use Presets to Adjust Bass etc. Tone/Balance</i> http://netwelding.com/Boomy_Bass</p>	
<p>GS/C7 Air Dam, Functions <i>Why Missing from Z51, Some GS & Z06</i> http://netwelding.com/Air_Dam.pdf</p>	
<p>Rusty GS/C7 Muffler <i>Why the C7 muffler rusts way to turn matte black.</i> http://netwelding.com/Muffler_Rust.pdf</p>	
<p>Engineering a ProStreet Rod <i>How Our '34 ProStreet Rod Was Designed and Built</i> http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf</p>	
<p>Motorsports Welding Article <i>Wrote a 5 Page Article for AWS March 2018 Journal Covers NHRA and NASCAR Chassis Design</i> http://netwelding.com/Motorsports_Welding_2018.pdf</p>	