Technical Support Request 121075833

TSR Information

Contact Date:	Jul-16-2025 2:44:20
Dealer Contact:	DENNIS SMITH
VIN:	1FTER4LR2RLE08394
P&A Code:	04814
Repair Order Number:	611631
R.O. Date:	Jul-15-2025
R.O. Line Number:	B
Vehicle:	2024 Ranger

Description of Vehicle Concern:
My mode, mode, and damper modes does not work.

Please list any diagnostics already performed:
Verified complaint

Parts Replaced:
None here. Sarasota Ford replaced steering wheel switches.

Do you have a module programming concern?
No

Your Question:
The previous contact on this is #049451187 at Sarasota Ford. Customer has come here to continue instead of returning to Sarasota Ford. I verified the complaint and checked for relevant DTCs. I observed the drive mode, my mode, and damper mode function KOEO but stop working about 30 seconds after starting engine. We reprogrammed the PCM with no change. I do not know what Sarasota Ford has done for sure or where they were to go next in diag. or repair. The switches appear to be working since in KOEO they function normally and in KOER they say the mode we are trying to select as unavailable. Can you direct me in the next step Sarasota was to go to and provide me a more detailed description on what they did?

Additional Diagnostics/Comments

2025-07-17T14:56:04.077 Ford

Dennis,

It appears that the previous repair direction was to perform an SCCM and PSCM configuration and then re-evaluate the customer concern. If the concern is still present, replacement of the SCCM would be the next recommended step.

Based off of the FDRS vehicle history, it doesn't appear that the previously provided repair direction was completed so I would recommend starting with running the configuration app for the SCCM and PSCM.

2025-07-23T15:24:26.217 DEALER

Dealership changed the status changed from Diagnostics/Repair Suggested to Further Assistance Needed [d-smi35] [WEB]

2025-07-23T15:24:26.217 DEALER

Performed SCCM and PSCM reconfiguration. No change. Replace SCCM and perform PMI, no change. Mode switches work KOEO but do not work KOER. [d-smi35][WEB]

2025-07-24T19:45:01.5 Ford

Dennis,

Based on the modes working in KOEO but not KOER, I would recommend performing the Recovery method PMI on the modules you have replaced per WSM 418-01 > General Procedures. Before doing this, make sure to use an FDRS that has never been connected to this vehicle and is the latest version. Also, disconnect the 12V battery and have the cables touch for 15 minutes prior to programming. Determine if the concern will remain after recovery PMI.

If it does, verify the parts you have replaced with COPIS to ensure that the incorrect module was not sent to you either because of the catalog or a boxing issue.

-FSE Erik

2025-07-25T09:07:31.643 DEALER

Dealership changed the status changed from Diagnostics/Repair Suggested to Further Assistance Needed [d-smi35] [WEB]

2025-07-25T09:07:31.643 DEALER

This might be a stupid question, but I have to ask it, since mode switches work KOEO but become unavailable within about 30 seconds of engine start. Is it designed to work that way to keep people from accidently switching into an off road only mode while driving on the highway? [d-smi35][WEB]

2025-07-25T16:47:08.277 DEALER

Dealership changed the status changed from Further Assistance Needed to Further Assistance Needed [d-smi35] [WEB]

2025-07-25T16:47:08.277 DEALER

Disconnected the battery and touched the positive and negative cables together for over 15 minutes before reconnecting and reperforming PMI. Performed PMI with no change. Contacted COPIS #CXH-05067405-K0P8T6, still waiting for a reply. [d-smi35][WEB]

2025-07-28T12:07:19.453 Ford

Hello Dennis,
Thanks for contacting us.

There is no information in the WSM about a safety feature preventing switching modes with the vehicle running, and neither the owner's manual states that changing modes is only available in KOEO. To verify if this is a normal characteristic of the vehicle, you can compare the operation with a like unit.

The steering column and steering wheel switches interface with other modules and components on the vehicle through the SCCM, which communicates on the High Speed Controller Area Network 2 (HS2-CAN).

Therefore, carry out an individual on-demand self-test of the SCCM and PSCM. Doing so will put the most load on the modules as opposed to running a standard network test. Both modules should fully complete the test under both CMDTCs and ODDTCs. If any codes set, address those first.

If no problems are found, we recommend performing a voltage drop test in the SCCM power and ground circuits to identify any unwanted resistance.
Also, inspect the SCCM connectors for damage, corrosion, spread terminals, pushed-out pins, or pin fit issues using the appropriate flex probes.

Address any issues found and reevaluate. If you require further assistance, we will be happy to help.

Thanks,
Rodrigo D.
Ford TAC.

2025-07-29T16:34:49.363 DEALER

Dealership changed the status changed from Diagnostics/Repair Suggested to Further Assistance Needed [d-sml35] [WEB]

2025-07-29T16:34:49.363 DEALER

Ran self-test on SCCM and PSCM separately and together, no DTCs. Checked pin fit, pin fit is good. Ran voltage drop test on CBP37 and GD284 no voltage drop on either circuit, right around .04 volts, (sorry didn't wright it down right away, jumped right into load testing circuits. Circuits passed load test. Before running self-test, I checked operation on the mode switches on the steering wheel and on the console 3 times. Each time I switched through the switches for about 10 to 15 minutes KOEO, but 20 toe 30 seconds after starting the engine I would get a unavailable or disabled message for the mode switches. I don't know if this helps but it seems that after the engine is started something is disabling the mode switches. The damper and my mode are disabled on the steering wheel and the drive mode switch on the console is disabled. All the other switches on the steering column continue to function. I can't imagine what would disable the switches because the engine is running. [d-sml35][WEB]

2025-07-30T13:48:25.653 Ford

Dennis,

The adaptive dampers are controlled by the VDM, let's perform an individual self-test on the VDM. Diagnose any DTC's present in the VDM. If no DTCs lets view VDM PIDs, if there are any PIDS related to drive mode or damper mode see if

that can be manipulated. Let's also ensure that the VDM and perform a successful calibration as outlined in WSM 204-05 Description and Operation. Make sure the vehicle is stock and has not been modified, any modifications may interfere with the function of the dynamic suspension.

Thanks,
Dan – Ford TAC

2025-08-01T09:15:36.107 DEALER

Dealership changed the status changed from Diagnostics/Repair Suggested to Further Assistance Needed [d-smi35] [WEB]

2025-08-01T09:15:36.107 DEALER

OK. Checked the VDM for DTCs and configured it. With FDRS still hooked up it was working normally. After I disconnected it, shut the vehicle off and restarted it the concern returned. When hooked up the FDRS again went to DATALOGGER for VDM it was working normally again. After disconnecting and restarting the concern returned. This morning tried to see if hooking up the VCM or connecting FDRS had anything to do with it. After connecting to FDRS the concern was gone. I was showing my mentoree the network test and the concern returned. Ran all CMDTCS and returned to normal operation. Returned to network test and it continued to function normally. After disconnecting it worked normally a couple of times, but the concern returned after letting it sit. [d-smi35][WEB]

2025-08-01T16:05:08.627 Ford

Hello Dennis,

Further information is being gathered at this time, and this form will be updated once obtained. Due to the number of contacts, this may take some time, and your patience is appreciated.

Best regards,

Tyler S.
Ford Technical Assistance Center

2025-08-05T13:16:05.133 Ford

Dennis,

I have opened a ticket with our engineering team for their review. I will update you when I hear back.

Thanks.
Chris C.
Technical Support Case Analyst – BODY/HVAC

2025-08-05T14:33:34.763 Ford

Dennis,

I've heard back from engineering. They have made some changes to the IPC data. Please use a copy of FDRS that has

never connected to the vehicle and perform PMI on the IPC using the following procedure:

1.) Disconnect the VCM device from the DLC and PC
2.) Launch FDRS and log in
3.) In the Device Manager window that populates, select CANCEL
4.) Manually enter the VIN and select GO.
5.) In the Vehicle Communication Device Not Detected window that populates, select CONTINUE. If a Device Explorer window populates, select CANCEL
6.) Once the session has fully started, reconnect the VCM device to the DLC and the PC. The VCM device icon should turn green in the bottom right corner of the screen. If it does not, troubleshoot the FDRS to VCM device connection
7.) From the Toolbox menu, navigate to the desired module and Download/Run the PMI application. Follow the on-screen prompts. When asked if the original module is installed, select NO and continue through the PMI application.

Following the above steps exactly will force FDRS to pull the required data from the server. Let me know if the concern is still present following the above procedure.

Thanks.
Chris C.
Technical Support Case Analyst – BODY/HVAC