

## Navistar 23518 Chronology of Events

- 09/27/2022 – Navistar receives communication from General Motors (GM) of a vehicle fire on a 2019 Chevrolet Silverado Medium Duty vehicle and that they have initiated an investigation.
- 10/10/2022 – Navistar reviews warranty claim data for International CV vehicles for emergency brake booster pump running with ignition key off. There were 115 claims processed 05/29/2019 through 06/30/2022. There are no claims for fire or other thermal events found at this time.
- 10/20/2022 – Navistar and GM meet to review a list of six suspect GM vehicles that had a thermal event and review vehicle build configuration for clues as to the potential cause.
- 12/15/2022 – Initial testing determined that simulating a brake switch that failed in the ‘closed’ position will cause the brake assist motor to run continuously, however after 1.5 hours of running, there was no detectable increase in temperature of the wiring.
- 12/16/2022 – Navistar Supplier Recovery independently working to reduce switch warranty, receives data from pressure switch supplier (Kodiak) showing sealant cracks and delamination contributing to high warranty return rates.
- 01/31/2023 – Navistar and GM review parts received from a GM vehicle suspected of a thermal event. Inspection of the switch yielded a low resistance short between the terminals, allowing the pump to run continuously.
- 02/13/2023 – During an x-ray analysis, various parts of the switch, connector and wires were cut apart and examined. An unknown residue was found inside of the wiring. This was then sent to a lab to perform chemical analysis on the residue.
- 03/03/2023 – Received lab results showing residue in wire is brake fluid.
- 03/17/2023 – Navistar receives test data from supplier stating that returned switches start allowing brake fluid to leak internally at a pressure of 25 psi.
- 03/24/2023 – Navistar and pressure switch supplier work on design requirements eliminating the sealer application from pressure switch.
- 04/04/2023 – Navistar Compliance and Engineering meet to investigate the use of the suspect pressure switch and its impact to all vehicle models that use it.
- 04/12/2023 – Navistar Compliance and Engineering finalize the suspect population.
- 04/13/2023 – Navistar declares a Safety Recall for its CV series trucks.
- 04/14 through 04/21/2023 – Navistar Engineering reviews brake pressure switch harness design differences between the CV and MV series trucks and CE series buses.
- 04/28/2023 – Navistar locates a CE series bus and makes arrangements to perform inspection.
- 05/03/2023 – Navistar performs inspection on CE series bus and finds brake fluid present in the brake pressure switch connector and in the fuse holder.
- 05/10/2023 – Navistar receives communication from the supplier related to design difference of the MV series truck and CE series bus and a splice in the power circuit of the harness. While the splice blocks capillary action, brake fluid can still pass through the splice and heat shrink tubing.
- 05/10/2023 through 05/19/2023 – Navistar reviews all other models with hydraulic brakes, both current and previous designs and identifies three other models that are built with the same brake pressure switch and a similar harness design.
- 05/22/2023 – Navistar quarantines MV series trucks and CE series buses at the plants and finalizes the suspect population.
- 05/25/2023 – Navistar declares a safety recall.