SS 1033700 New Cascadia Cruise Control Will Not Set

Applicable Vehicles:

This solution applies to all New Cascadia's vehicles built from 9/1/2016 until 9/9/2019 that use the 3 wire service brake pressure switch P/N 12-26773-000.

Symptoms:

Cruise control will not set. The vehicle stop lamps may work or be stuck on and when accessing the Cruise Control panel in DiagnosticLink, service brake signals can be seen activating in the Common Powertrain Controller (CPC). No fault codes are present.

Issue:

Service brake state change is required to set the cruise control. Since the CPC looks to the SSAM for service brake signal the SSAM must be sending a brake signal for cruise control to function. When using DiagnosticLink to monitor the cruise function, it is recommended to use the Cascadia Cruise control panel (not the Cruise Control panel) as the Cascadia cruise control panel monitors "Service Brake Master" signal that is the normally closed circuit of the stop lamp switch (Reference G66-00279-000) wire 36E that sends a signal directly to the SSAM. Service brake signal can also be seen using the "Service and Park Brake" panel. In this panel a technician can see both the "Service Brake Master" as well as "Service Brake Switch" signals that are sent directly to the SSAM.

Solution:

When troubleshooting a cruise control system where cruise control is not functioning, due to a service brake activation, it is important that the brake lamps, and the Cruise Control panel are not used as validators for service brake application. Always use the Cascadia Cruise control panel and if needed the Service and Park Brake panel to monitor service brake application for cruise. The chart below is only an example of what might be seen if the stop lamp switch (located in the Pass-Thru Switch Manifold on the front wall) is not functioning. In the example that stop lamp switch is not sending a signal to the SSAM even though the Stroke sensor (located on the foot valve) is still functioning. As can be seen in the example, stop lamps are working and the CTP sees service brake application, but the SSAM is not seeing a signal from the stop lamp switch, therefore cruise control was not working.



