

SS 705-WST 2021 49X XMC Output Reliability

Applicable Vehicles

49X vehicles built with XMC

Symptoms

Post DTNA production wiring installations, 20amp outputs from XMC's are arbitrary and sometimes intermittent, systems may be inoperable.

Issue

Reliability issue with the six 20 Amp outputs (DO1-DO6) on the XMC's

Solution

A software revision is now available to allow 20 Amp outputs work reliably on XMC's for 49X. The software fix is effective for all XMC's and should be loaded on all XMC modules that are mounted and connected to the truck. This suggestion is not limited only to trucks that have an XMC3 or XMC4. One of the more common field problems that will be resolved with new software is Beacon Lamp outputs on XMC1.

Procedure:

- Check the software version of all residing XMC's on the truck you are working on. The minimum version required for 20A reliability is 21.18.0 (Version Format is: Year.Week.Version that Week). If the version is later than 21.18.0, the XMC does not need to be programmed for 20A output reliability.
- For programming the XMC, select 'NEWEST' (or NEWEST + CHEC for XMC3 and XMC4)
- Verify the new version of software on the XMC
- **!Important!** It may be necessary to update the Central Gateway (CGW) to allow the new version of software to load to the XMC. If the CGW is updated, it is common to see a message

at the top of the Diagnostic Link screen in a yellow background stating that other truck modules are not compatible. If that occurs, click on the message and Diagnostic Link will inform you what modules need to be updated to be compatible with the new version of CGW software.

Providing the above information does not satisfy your requirements, an alternative solution is provided below:

For Western Star 49X trucks that implement XMC's, there is more than one way to take advantage of the flexible programming capabilities, using the CHEC tool to program existing XMC's in the field. For reference, to output names and wiring on Western Star 49X wiring, refer to PartsPro subgroup 35M per serial number.

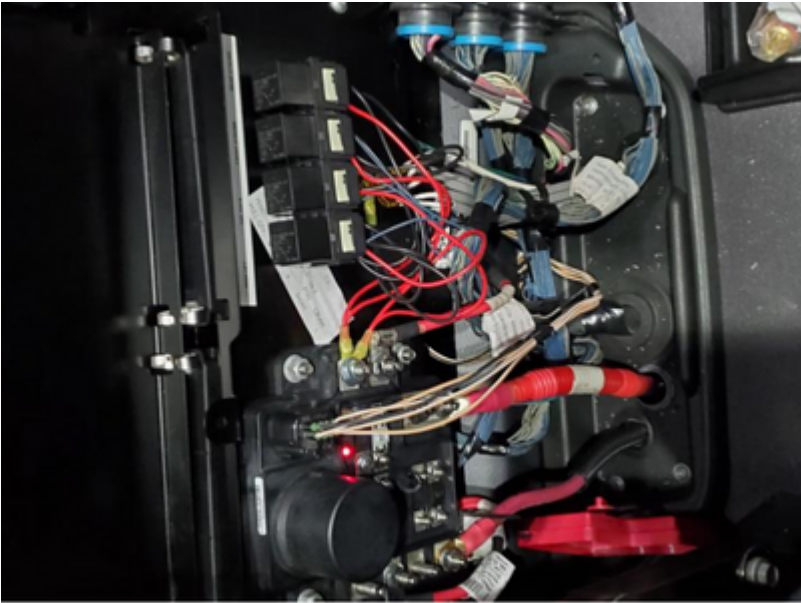
On the XMC's, there are four 5 Amp outputs (D07-D10), and eight 2 Amp outputs (D11-D17). All of the 5 and 2 Amp outputs are working reliably on XMC's. If your current requirements do not exceed these ratings, you can freely program the XMC's for your purposes and connect to the output pins.

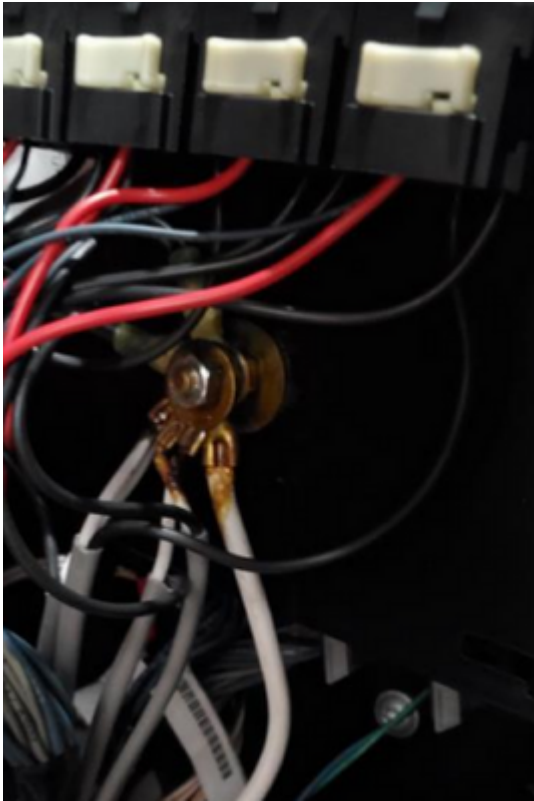
Applications that require higher current capacity may use any of the 2 or 5 Amp outputs to trigger relays to source higher current. There is the option of adding relays individually on a 49X or you can choose the process noted in the paragraph below. Referring to schematic G66-17097-002 (see attached document) in PartsPro module 35M for sample truck S/N MS2152 will provide useful diagrams to implement relays.

There is a released sales code as a viable factory option for higher current applications. It uses 2 Amp outputs to control relays. Sales code 35M-012 (refer to truck S/N MS2152 for wiring information) provides eight 20 Amp, relay driven circuits. Modifying trucks to this sales code provides a feature documented and supported by DTNA. To implement a new sales code on an existing Western Star, follow Service Bulletin 00-004 to submit the truck and desired features to the Modifications department.

Do not use sales code 35M-011 as a solution, the 20A relay circuits in that configuration use the same 20A outputs that are currently failing as the trigger for the relays.

example of field modification (dealer supplied materials, see per serial module 35M for correct part numbers):





Labels :

49X

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Attachments



3 Kudos

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