

SS 732-WST 2022 Low Power Complaint

Applicable Vehicles

This solution applies to 47X & 49X vehicles built with added floor insulation typically found in data code 772-037 : BLACK MATS WITH ADDED FLOOR HEAT AND NOISE INSULATION WITH ACCELERATOR RUB PAD. This solution could also apply to vehicles that receive aftermarket floor mats that eliminate the clearance between the throttle pedal and the floor.

Note: Vehicles receiving this added heat insulation built after mid year 2023 will be having the added heat insulation removed in the areas documented in figures 2 and 3.

Symptoms

Drivers typically complain of low power when experiencing this issue. Drivers may comment noticing more power when operating the vehicle in cruise control as apposed to the throttle pedal.

Issue

When additional floor heat insulation is ordered, the throttle pedal in some cases (when the throttle is fully depressed) may not reach 100% (full throttle). This can also occur if aftermarket floor mats are added to the vehicle.

Solution

The throttle pedal installed in the Western Star vehicle is designed in a way that allows the pedal to pivot on the floor, as the throttle is moved through its range of motion. Although the pedal can pivot on the floor, it typically requires clearance between the floor and the pedal to achieve 100% (full throttle). Referencing Figure 1, when the pedal is placed in the full throttle position by applying pressure to the top of the pedal, there should be some clearance between the floor and the pedal, allowing the pedal to reach 100% movement. If a customer complains of low engine power, make sure to check for clearance between the throttle pedal and the floor as displayed in figure 1. If there is still a concern with the pedal movement, monitor the throttle pedal position using the

appropriate diagnostic tool (DiagnosticLink for Detroit engines and Cummins Insite for Cummins engines). While fully depressing the throttle pedal, monitor the pedal position within the diagnostic tool, the pedal position should read 100%. If an aftermarket floor mat has been added, it is best to start by removing the floor mat and testing the throttle again, fully depressing the pedal while monitoring the pedal position within the tool. If 100% throttle is achieved then no further action is required and the aftermarket floor mat should not be reinstalled. If there is no aftermarket floor mat, fully depressing the throttle pedal, the throttle pedal should display 100% when monitoring it with the diagnostic tool. If the throttle pedal does not read 100% and there is no clearance between the throttle pedal and the floor, it is recommended that the extra heat insulation be removed from the drivers station as noted in Figure 2 for left hand drive vehicles and figure 3 for right hand drive vehicles. A picture of the foil faced heat insulation that will be removed is shown in Figure 4. Upon removal of the foil faced insulation, the throttle pedal should be checked one final time for clearance between the pedal and the floor, while while monitoring the diagnostic tool when the pedal in in the full throttle position validating 100% pedal position is achieved.

Figure 1 Checking for clearance between the throttle pedal and the floor in the full throttle position.

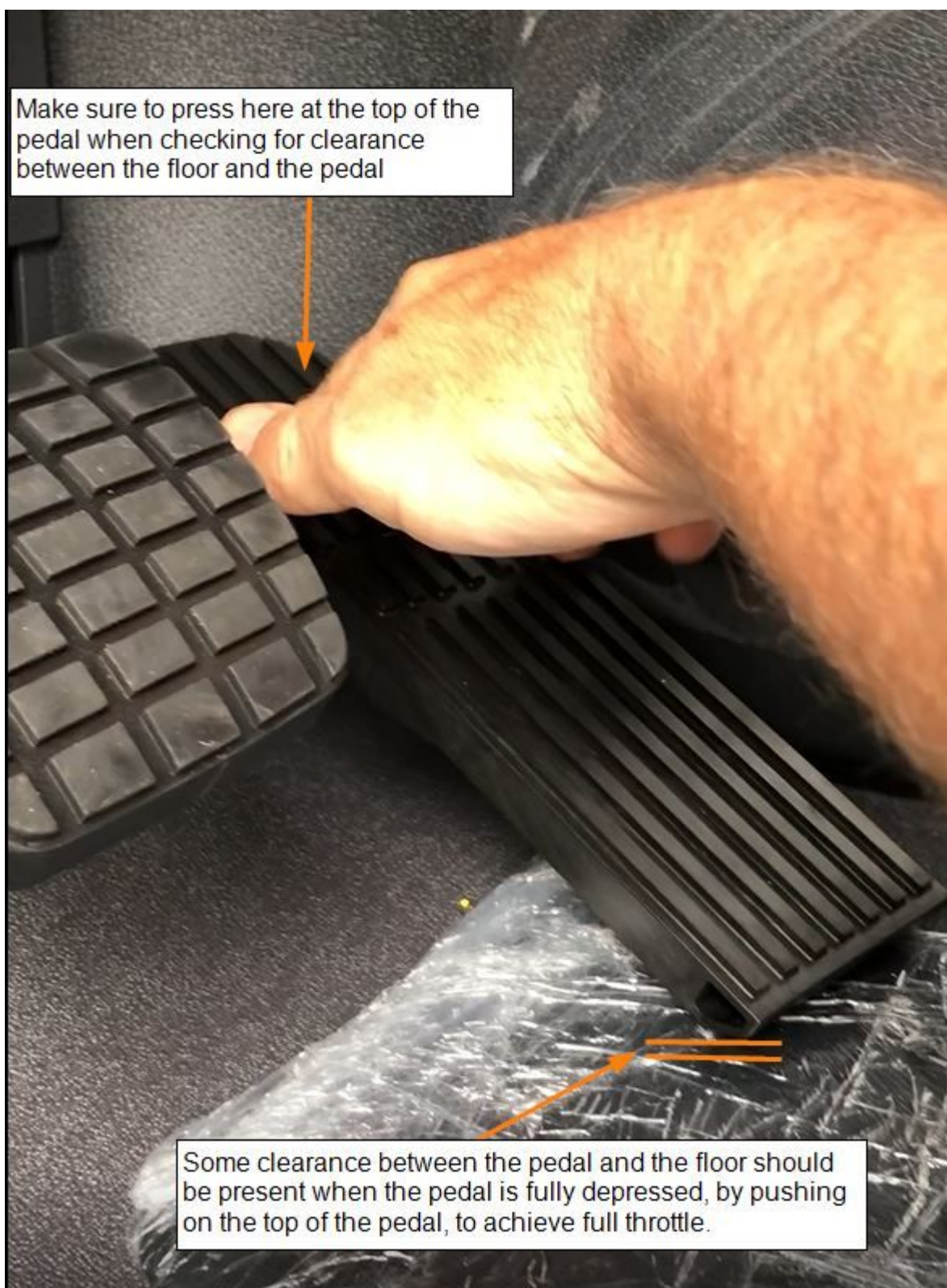


Figure 2 For left hand drive vehicles, the added insulation marked in red box should be removed to provide additional floor clearance for the throttle pedal when needed.

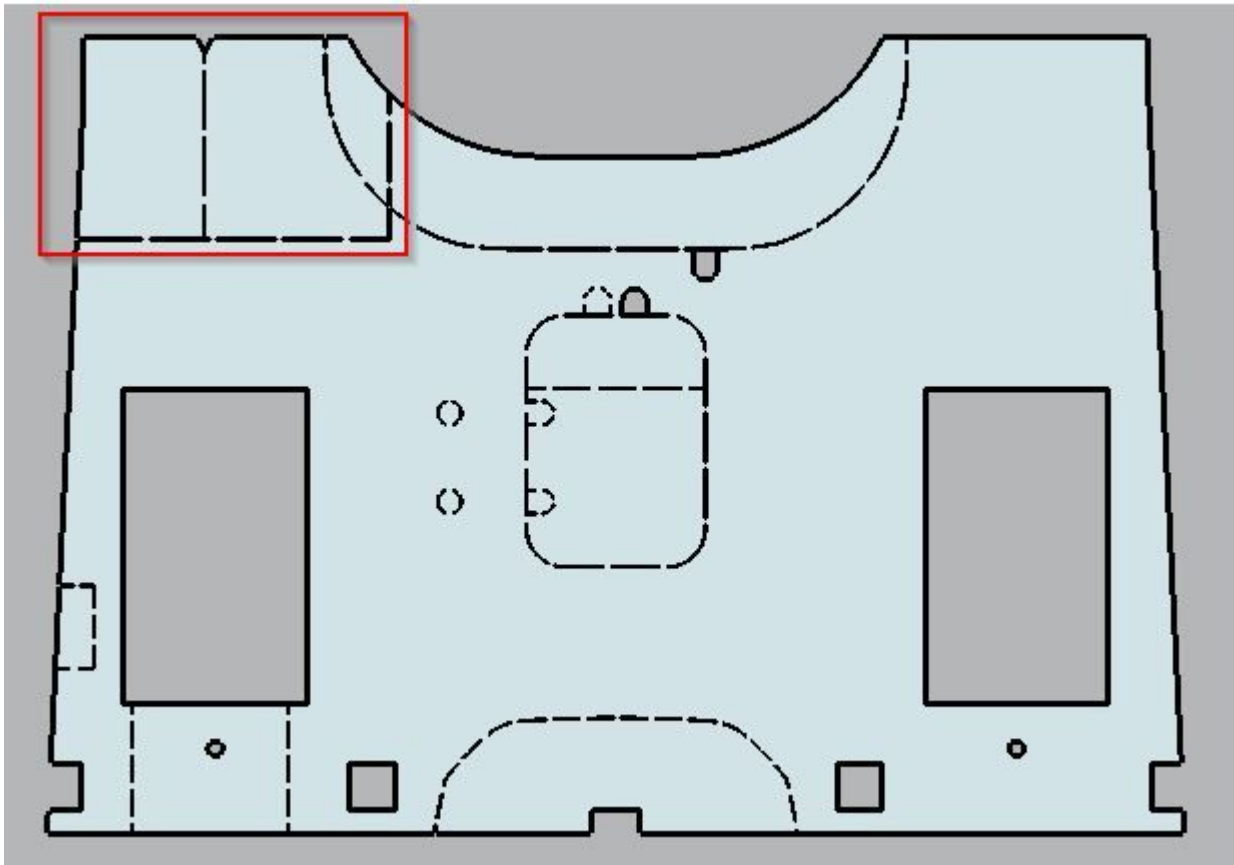


Figure 3 For right hand drive vehicles, the added insulation marked in green box should be removed to provide addition floor clearance for the throttle pedal when needed.

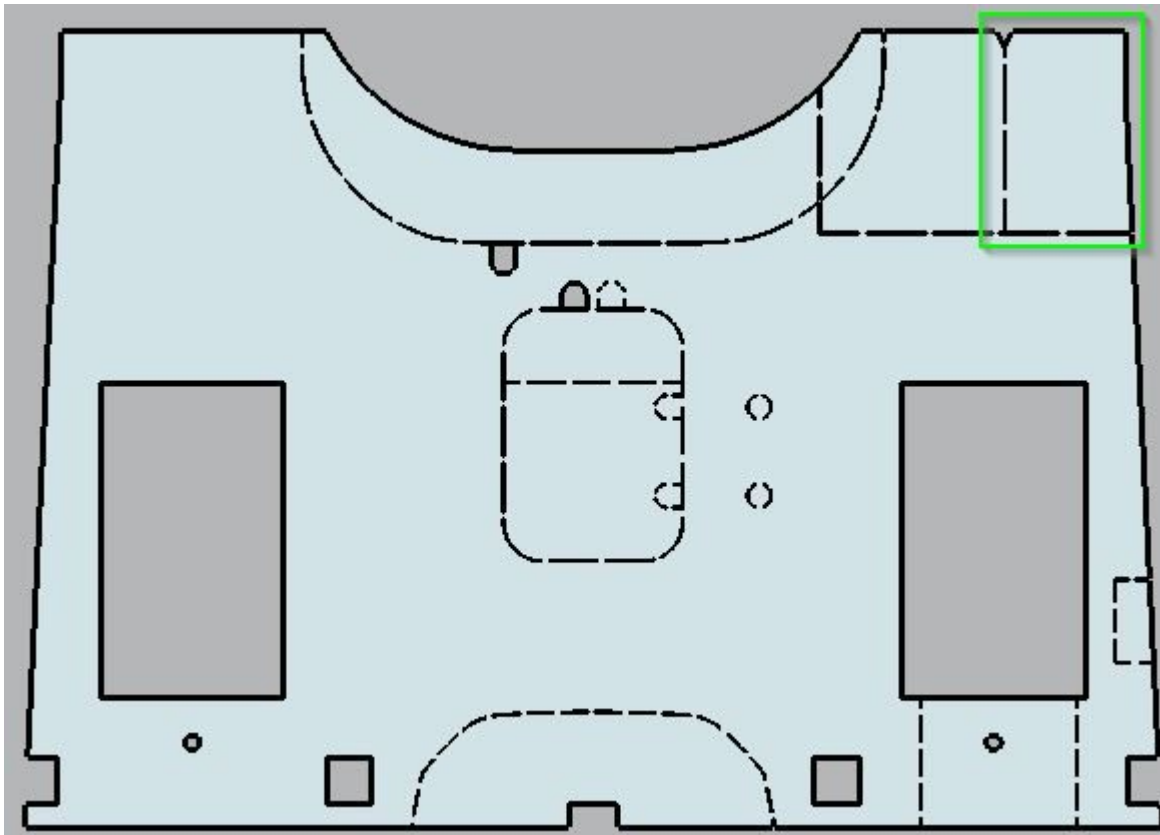


Figure 4 Added insulation (foil faced) to be removed as documented in figure 2 or figure 3 depending on the drive position.



Labels :

49X

Add tags

0 Kudos

Comment

