

SS 1033364 - New Cascadia Forward Chassis Harness Chafe

SS 1033364 - New Cascadia - Forward Chassis Harness Chafe

Applicable Vehicles

New Cascadia (P4) manufactured prior to 2/9/2018.

Symptoms

Possible symptoms depend on the circuits affected. Fault codes, intermittent function, or potential loss of feature support of the systems in that harness (list of features in text below, spreadsheet of circuits affected attached below). May also result in an active ABS light and messages in the instrument cluster.

Issue

Routing concerns along the entire length of the chassis harness (as it runs forward then along the closing cross member from driver's to passenger's side) could lead to wiring chafe related problems.

Case Study

Features potentially impacted:

Air Dryer Heater

Antilock Brake Valves and Sensors (ABS)

Collision Warning and Mitigation / Forward Looking Radar (CWS / CMS)

Communication Busses (J1939, H1939, or Detroit Assistance CAN)

Daytime Running Light (DRL)

Fog Light / Road Light

Headlamp / Headlight (HDLP)

Heated Hood Mirrors

Tire Pressure Monitoring System (TPMS)

Solution

If you suspect a wiring related problem with one of those features, inspect this forward chassis harness for potential chafe points, assess and repair any damaged wiring in accordance with TSB 54-290, then correct routing and clipping as described in the attachment.

FSPR 29653 / FRACAS 12973

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

DAIMLER

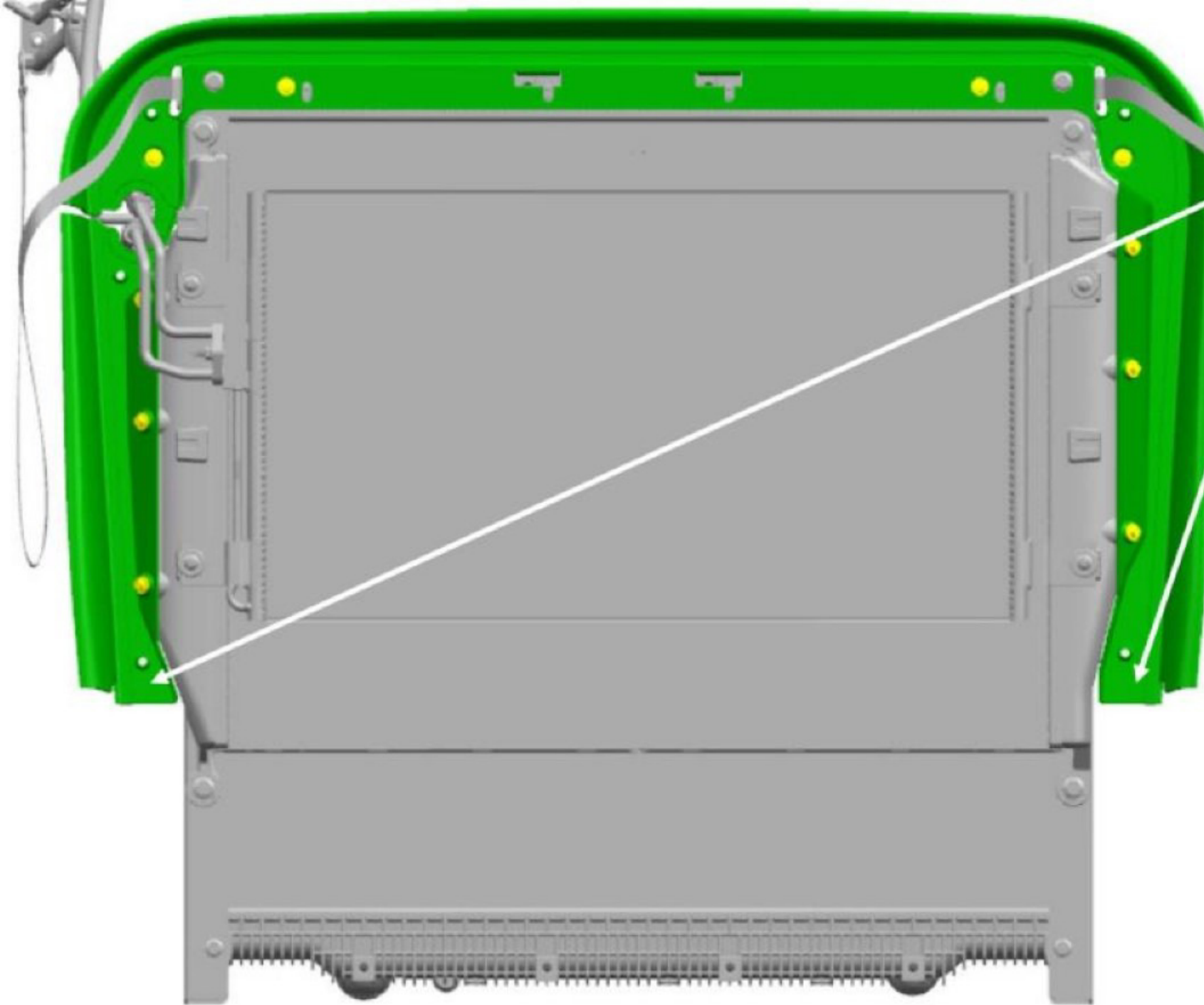
Inspection / Correction Process for New Cascadia (P4) Forward Harness Chafing

Daimler Trucks



Overview

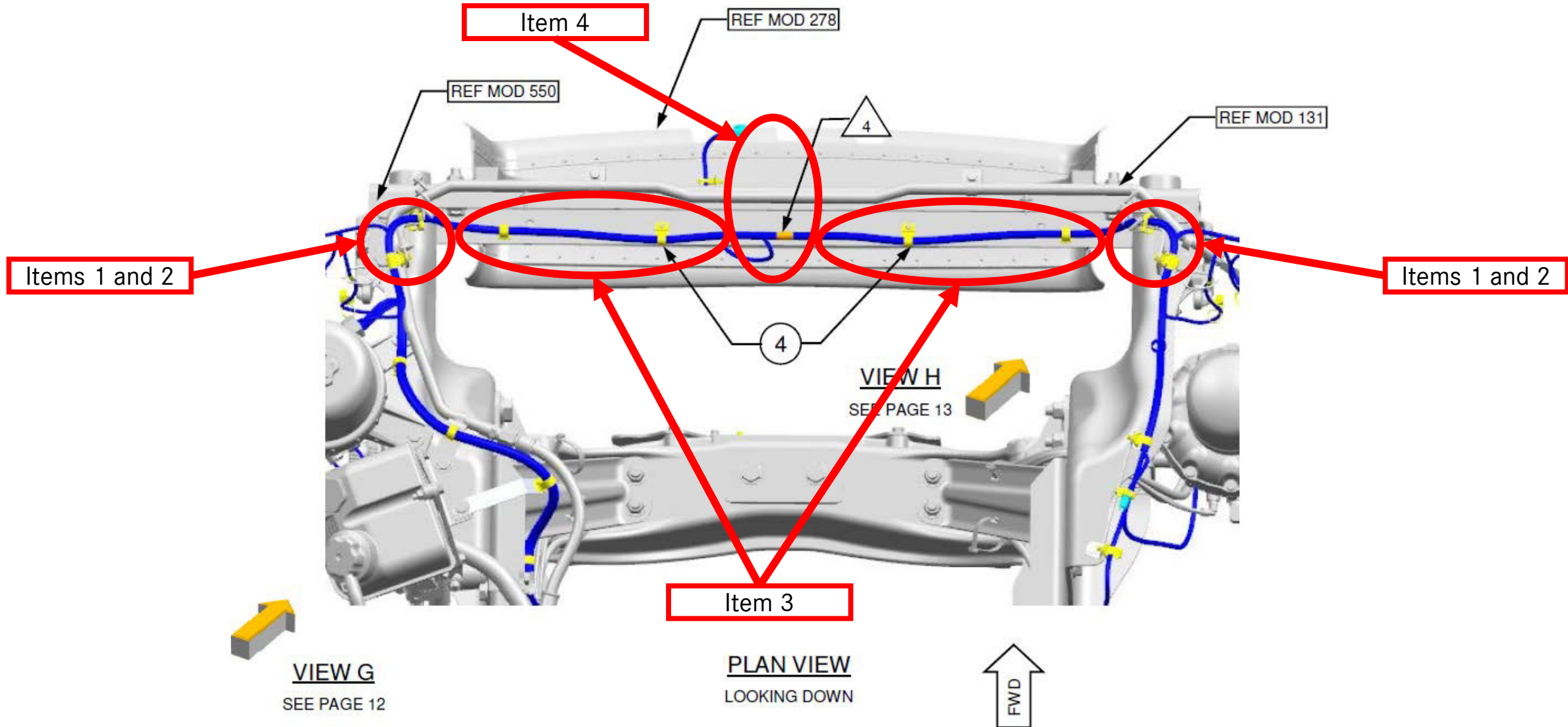
- Modify radiator baffle as described
- Inspect forward chassis harness and breakouts for chafing and damage along the entire length
- Repair harness, if needed, according to TSB 54-290
- Tie strap secure to prevent future damage
 - Recommended parts
 - A 681 997 08 90 (RETAINER CLAMP, “caddy clamp”) x 1
 - 23-09796-309 (TIE STRAP-8" X .19" ,BLACK,NYLON) x 1
 - 23-13477-100 (CLIP-EDGE 1-3MM CA TIE PERP-EN, “rock guard clip”) x 1
 - TYC DCT110HIR (TIE STRAP, “butterfly tie strap”) x 4
 - 23-14137-000 (CABLE TIE-FIR TREE MOUNT,TYC) x 4
 - 23-13279-008 (STRAP-TIE,STD MNT,5/ 16 PUSH ON) x 2



05-33754-000

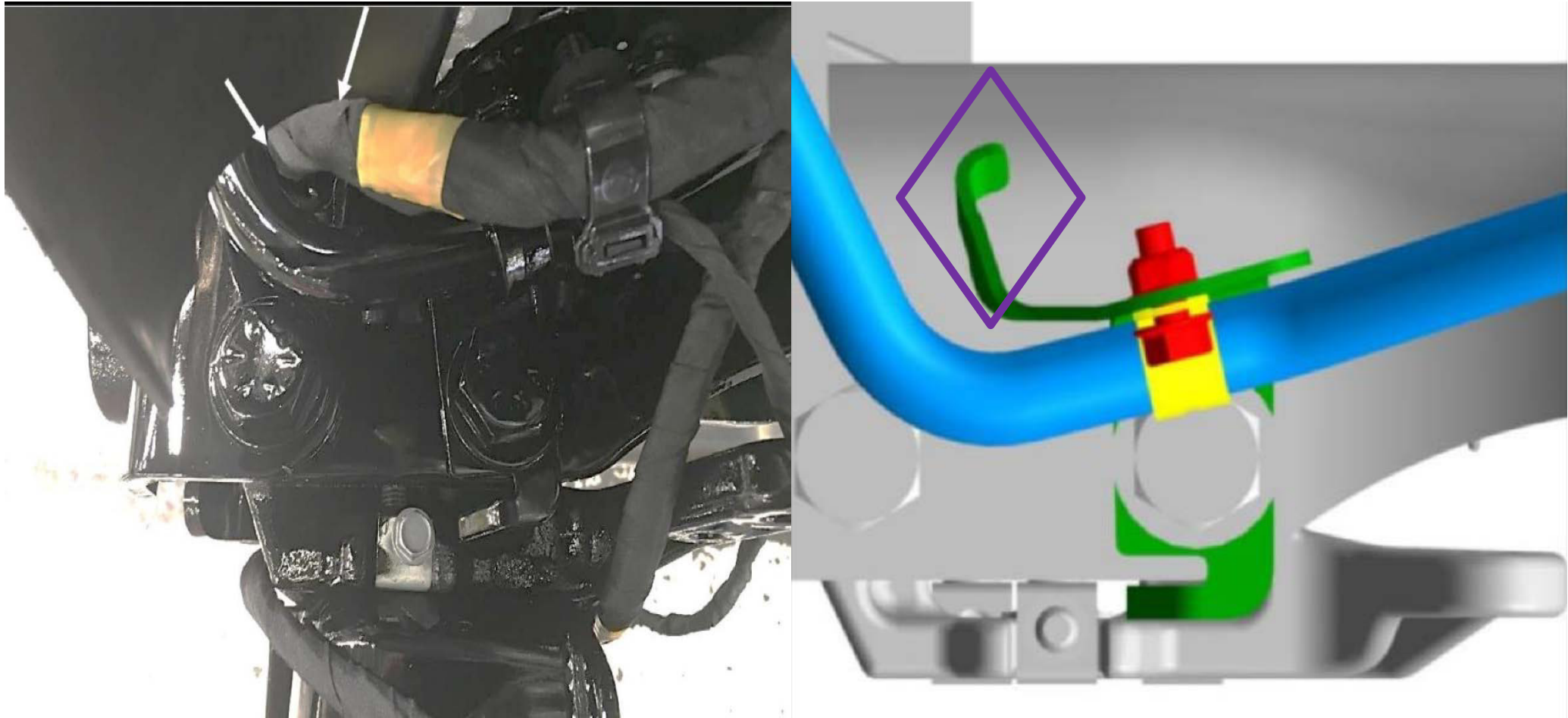
Need to trim 25mm
Off each bottom end
Of the recirculation
Baffles.

Inspection Points for Forward Harness Chafing (View looking down, Engine not shown)



Items 1 and 2 (Driver side shown, Passenger side similar)

Radiator baffle pictured below is before trimming (white arrows show chafe points). Trim baffle. Bend the purple diamond area of the green bracket (for both the driver and passenger sides of the vehicle), so it is parallel to the closing cross member. This will help separate the harness from rubbing on the tube at this junction. Inspect the entire area, adding butterfly tie straps (p/n TYC DCT110HIR) between the harness and tube as needed to maintain separation, and to prevent rubbing on the bracket.



Bad Cross Member Harness Routing (could result in wiring and cooler failure)

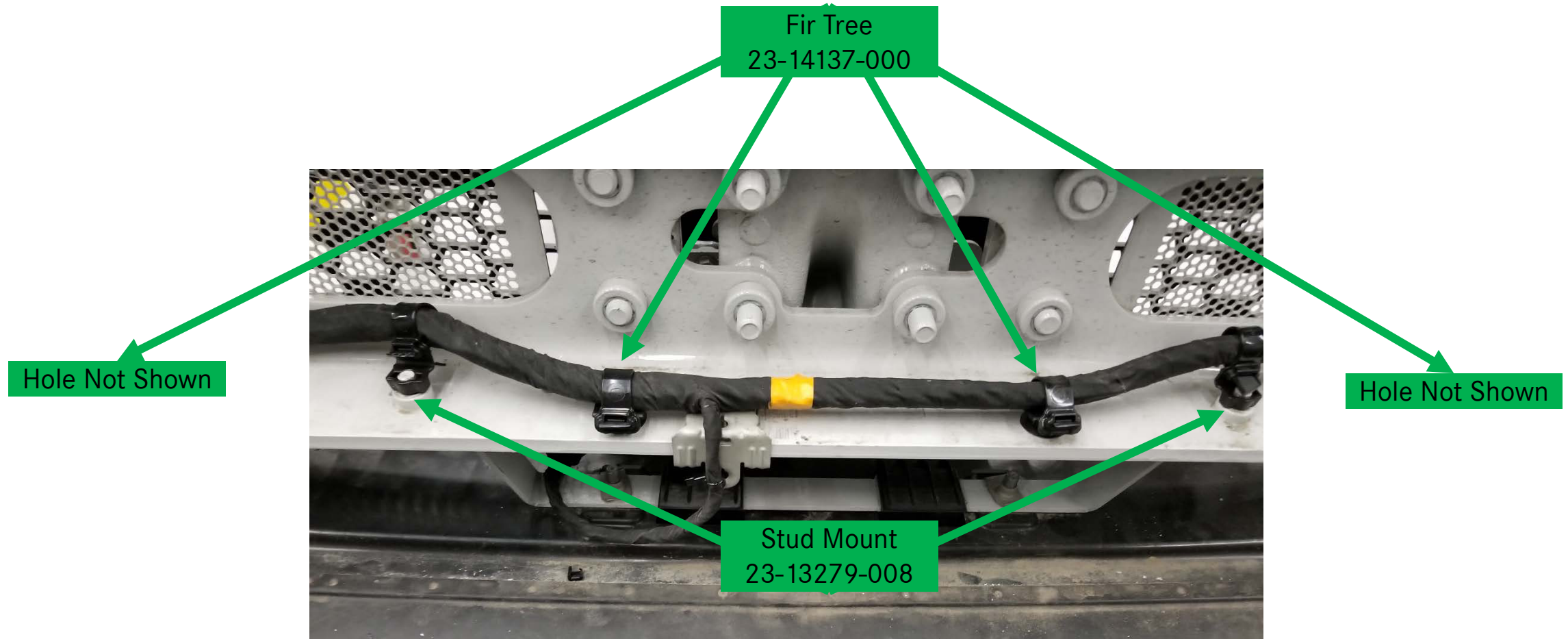


View from Passenger side

Item 3

Closing cross member harness attachment points

Inspect the forward harness routed inside the closing cross member for any potential chafe points. Ensure the main harness is securely fastened to the cross member as shown, to maintain separation between it and any other components.

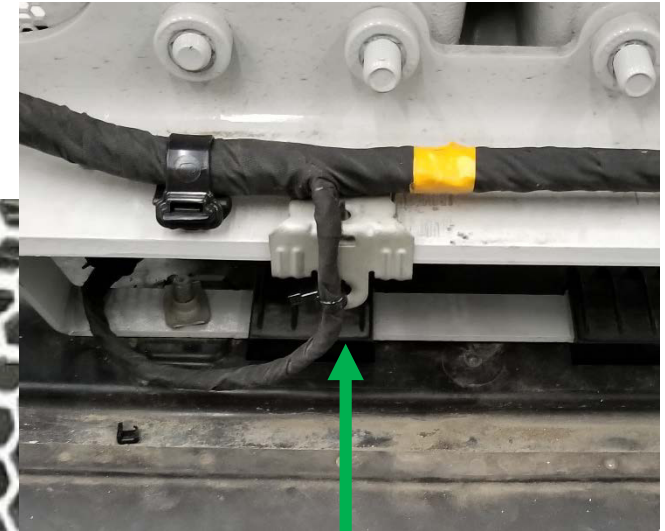


Item 4 Forward radar harness

If equipped with forward radar, inspect the break-out where it leaves the main harness. Add a caddy clamp and tie strap to prevent chafing on the cross member. Also add an edge clip at the rock guard to prevent rubbing.



Edge Clip
23-13477-100



Caddy Clamp
A 681 997 08 90
Tie Strap
23-09796-309