

DART: Rear Upper Radius Rod Bracket Repair



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Property name and top bus number: DART

Issue: Rear upper radius rod bracket broken, DART bus #39001(one bus)

Reason/ cause: The bracket was overloaded by unknown reason.

Solution: Repair area according to this work instruction.

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Number of affected buses: 1 (bus # 39001)

Estimate repair hours/bus: 24 hours.

Necessary parts:

Bracket, upper radius rod, CS,	Part #: 506-6143-010T ,	1 / bus,
Denatured alcohol,	Part #: NPN ,	as required,
Industrial grade primer	Part #: NPN ,	1 can/bus,
Rubberized undercoating,	Part #: NPN ,	1 can/bus,

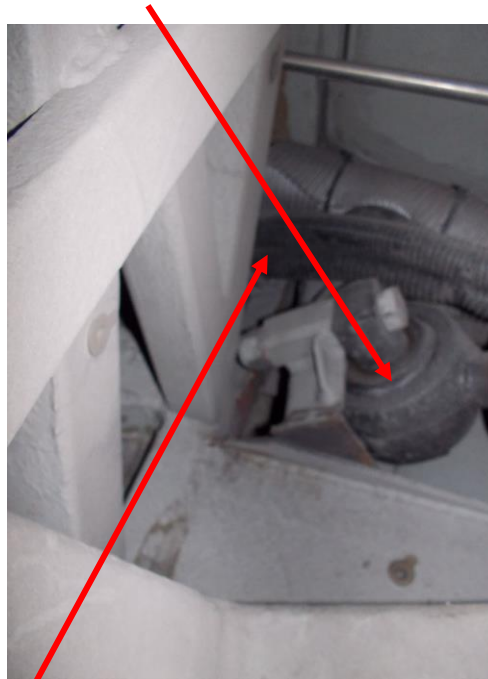
Necessary tools: Usual hand tools (wrenches, sockets, ratchet, screwdrivers, pliers), grinder, grinding disc, sand disc, GTAW welding equipment (see attached **WPS-NABI-2014-001-CS** Welding Procedure Specifications)

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SAFETY PRECAUTIONS MUST BE FOLLOWED ACCORDING TO ACCEPTED INDUSTRY STANDARDS AND LOCAL/PROPERTY REQUIREMENTS.

1. Turn off the battery disconnect switch(es).
2. Tag and disconnect the batteries cables.
3. Disconnect the ECU of engine, transmission, ABS. Disconnect the destination signs. Turn off and disconnect the PA system.
4. Lift the bus and place jack stands underneath the colored official jacking pads. **Note:** *only trained personnel can operate lifts. Follow safety instructions of NABI Maintenance Manual.*
5. Support C-frames/axle with jack stands.
6. Remove curb side rear wheels, forward airbag and shock absorber. *Follow safety instructions of NABI Maintenance Manual.*
7. Disconnect curb side (CS) upper radius rod.

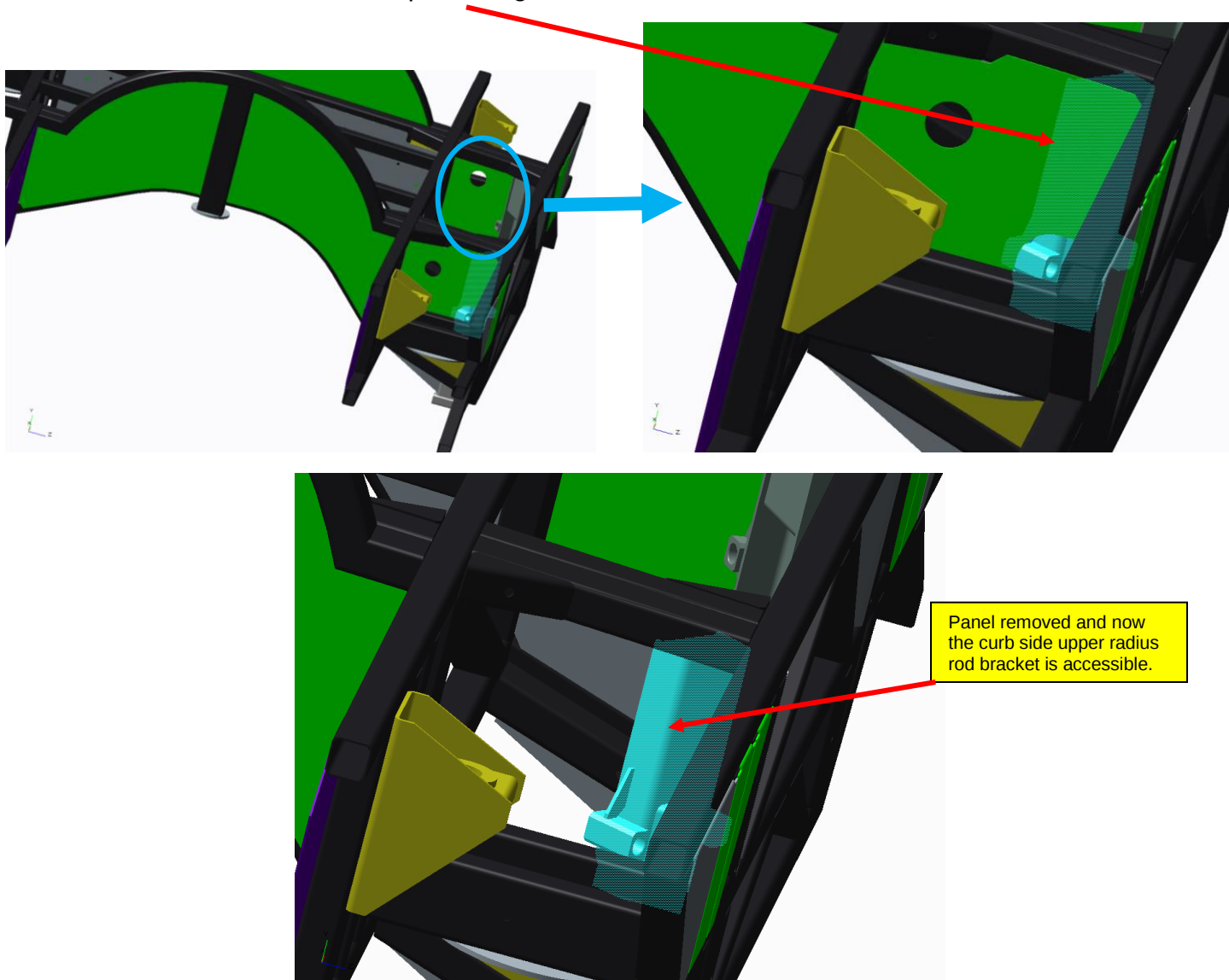


8. Remove hoses and harnesses to get access to the upper radius rod bracket.

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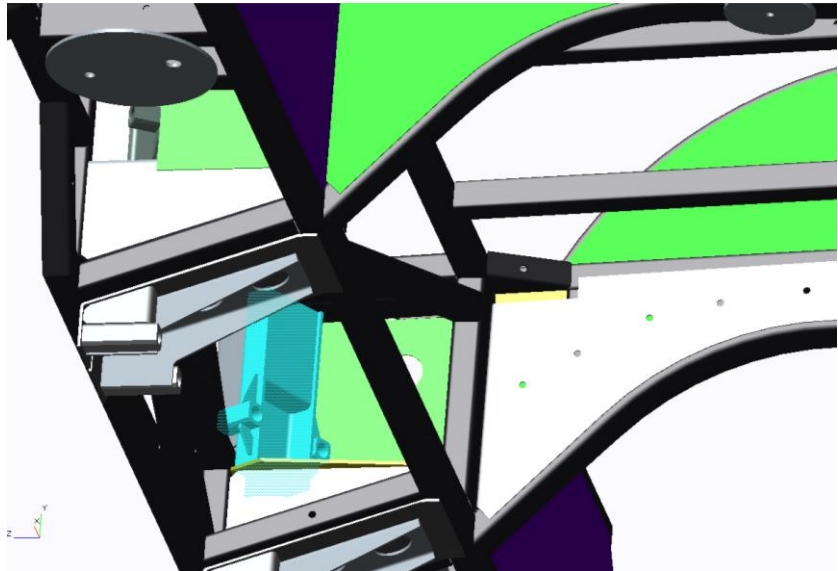
9. Cut and remove curb side panel to gain better access to the bracket.



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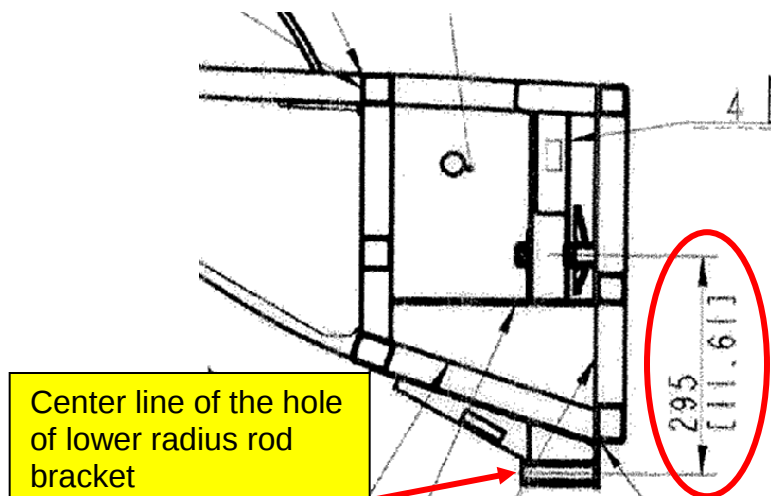
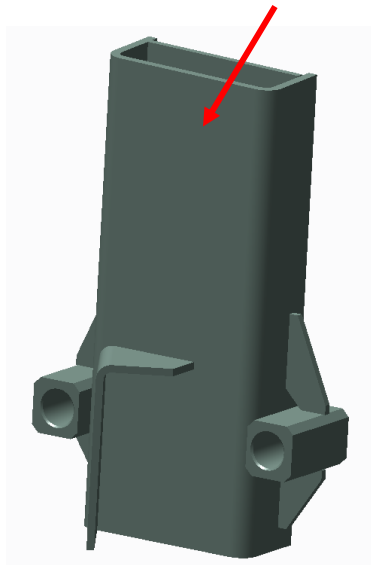
10. Cut out and remove original bracket from chassis.



11. Clean the area by using grinder, sand disc and wire wheels.

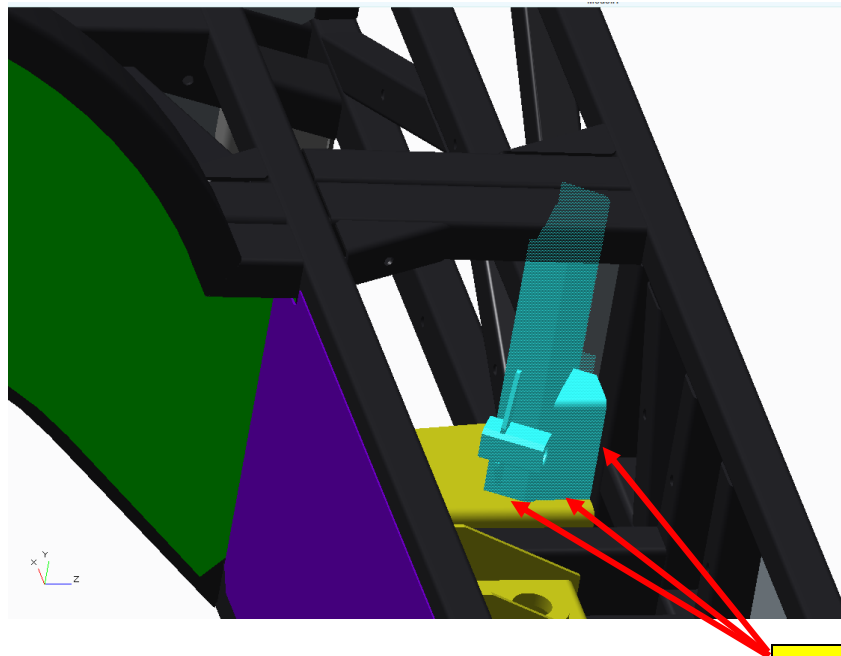
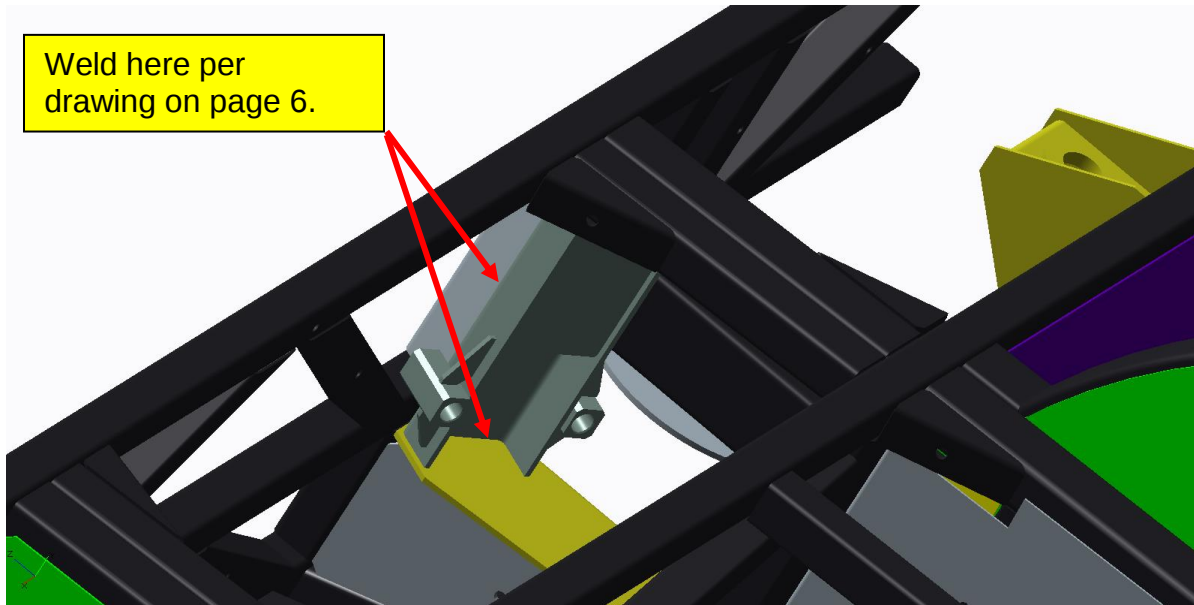
12. Degrease the area with denatured alcohol.

13. Position the new bracket sub assembly according to the drawings below (see red circles).



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15. Reinstall the side panel that was cut out at paragraph 9th.
16. Apply industrial primer to the bare metal surfaces.
17. Spray rubberized undercoating to the primed area.
18. Reinstall radius rod. ***Make sure that the radius rod is adjusted to the correct length because an incorrect radius rod installation can damage the bracket.***
19. Reinstall airbag, shock absorber, hoses, etc.
20. Tongue all reinstalled bolts (radius rods, airbags, etc.) according to NABI Maintenance Manual.
21. Remove all the tools and unused parts from work area.
22. Remove jacks from underneath the bus.

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23. Lower the bus.
24. Reconnect the ECUs, destination signs, and PA system, reconnect batteries and turn the main electric switch back on.
25. Check axle alignment according to NABI Maintenance Manual and adjust it if necessary.
26. Make sure that all electronic components are working properly.
27. Ensure that all air components (brake, airbags) are working properly.
28. Record bus #, date of repair, mileage and the name of technicians who completed the repair.