LFW: Corrosion Repair

Prepared by: Kalman Takacs
Sr. Field Service Engineer

Approved by: Dan Allen
Chief Engineer

Property name and Top bus number: NABI LFW

Issue: Corrosion issues were reported by the customer.

Solution: Repair the effected area per this work instruction.

Effected buses: as required

Estimate repair hours/bus: 16 hours/bus

Necessary parts:

POR 15 Rust Preventive, 1 QT,	Part #: **NPN**,	as required (1/4 buses),
Rubberized undercoating, 1 QT,	Part #: **700-2603-003**,	as required (1/4 buses),
Sikaflex 221, sealer, white,	Part #: **416.00.7311.909**,	as required,
Acetone,	Part #: **NPN**,	as required

See some pictures below about the possible usable products.

Necessary tools:

Usual hand tools (wrenches, screwdrivers, hammer, chisel, etc.) putty knife, Sika applicator gun, angle grinder, wire wheel, 36G and 60G abrasive discs, de-burr bits

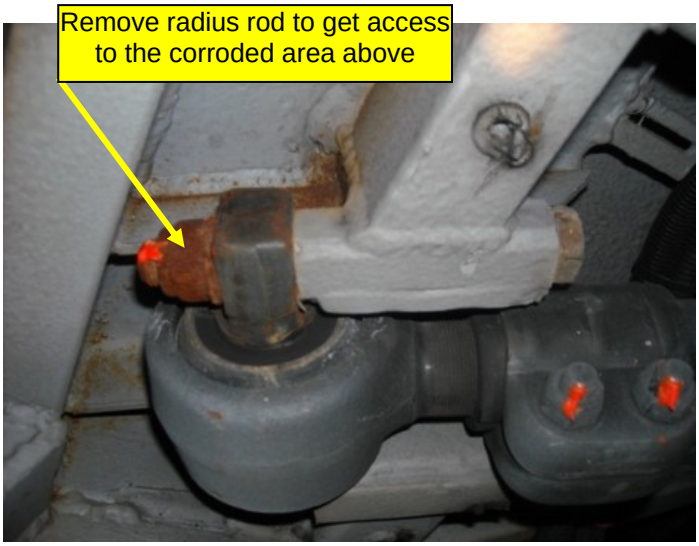
SAFETY PRECAUTIONS MUST BE FOLLOWED ACCORDING TO ACCEPTED INDUSTRY STANDARDS AND LOCAL/PROPERTY REQUIREMENTS.
Stop welding 45 minutes before planning to leave the bus.

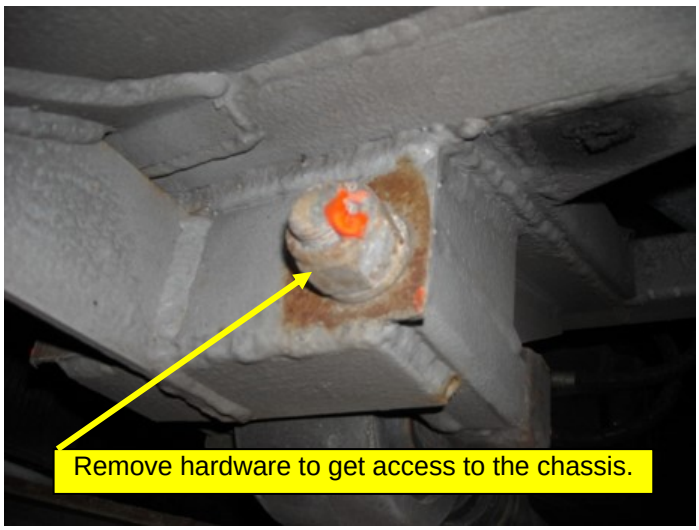
1. For the chassis inspection/repair the bus needs to be lifted. Place wheel lifts underneath the wheels and lift the bus approximately 2 feet from the ground. ***Follow safety precautions when lifting the bus. Only trained personnel can operate bus lift!***
2. If bus parked on a scissors type lift then apply parking brake and also place wheel chocks underneath the B-axle wheels.
3. Turn off the battery disconnect switches.

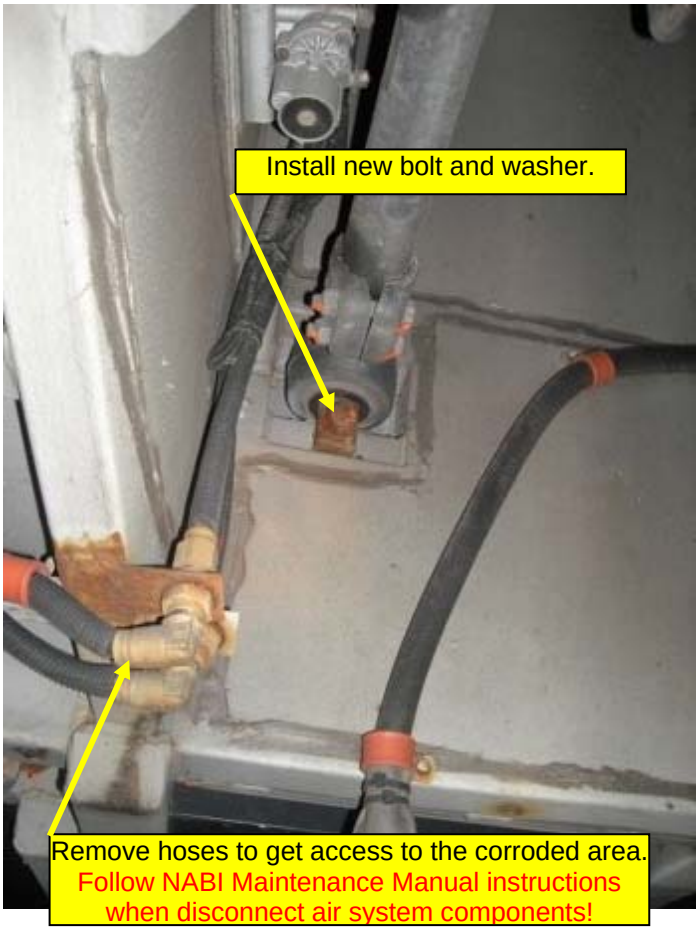
4. Lift the bus up as high as required to perform inspection/repair underneath the bus. ***Follow safety precautions when lifting the bus. Only trained personnel can operate bus lift!*** Use jack stands underneath the official jacking pads.

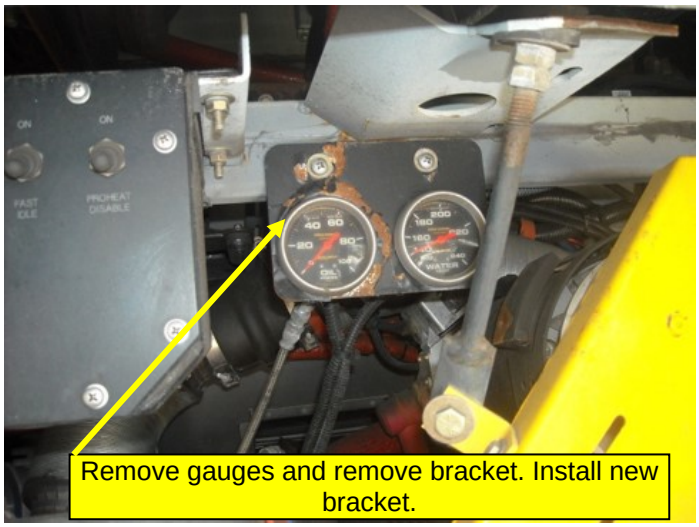
5. Inspect chassis from front to back and identify areas (if any) that needs to be repaired (see some examples below). If corrosion was found follow the steps written below. The below repair is an example and other area of the chassis should be repaired the same way.

6. Remove nearby components (clamps, hoses, bolts, suspension components, etc.) as required (See some examples below.). Drain cooling and/or hydraulic system as required. Follow the safety precautions and recommendation of NABI Maintenance Manual.

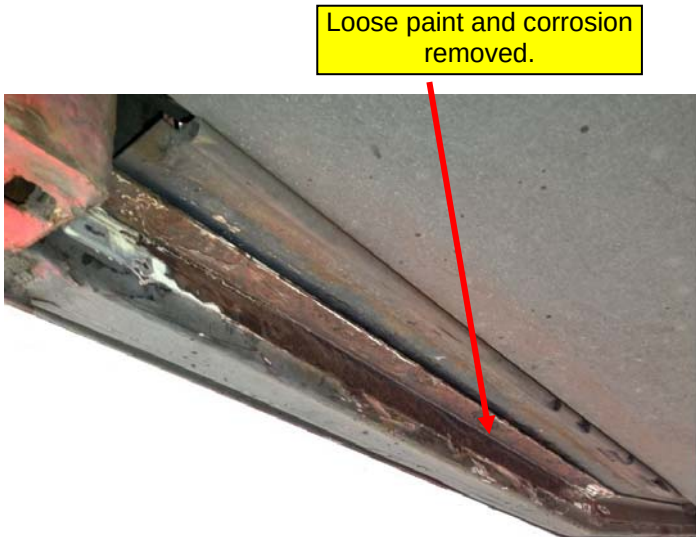






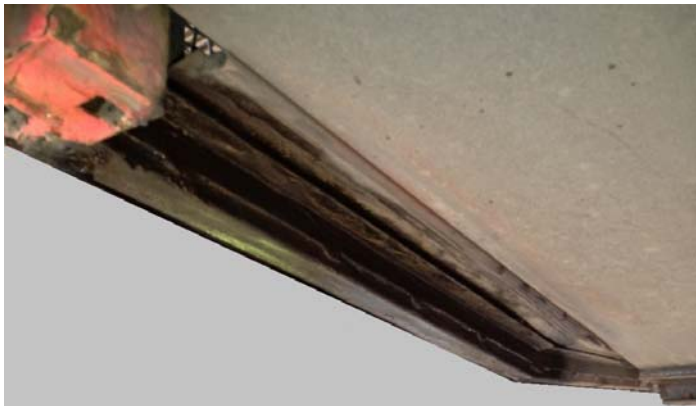


7. Remove loose undercoating by using scraper.
8. Remove corrosion from the effected area. Use electric grinder first then the 36G abrasive wheel and finally the 60G abrasive wheel. Use different size and shape of wire wheels as required. Ensure that all corrosion is removed.



9. Degrease surface with acetone.

10. Apply POR 15 to the degreased area. Follow instruction written on the can. Let POR 15 dries before proceeding with the next step.



11. If Sikaflex sealer was present originally (for example between the top edges of structural tubes and floor panels) then reapply Sikaflex 221 sealer as required.
12. After the POR 15 (and or Sikaflex 221) dried apply undercoating to the primed area. Follow instructions written on the can.

Final operation

13. Reinstall previously removed components.
14. Install new hardware as required.
15. Torque hardware per NABI Maintenance Manual.
16. Lower the bus.
17. Refill cooling and/or hydraulic system if they were drained.
18. Turn battery disconnect switches on.
19. Start the bus (certified technician) and ensure that no warning lights (check engine, check transmission, etc.) are on.
20. De-aerate cooling and/or hydraulic system per NABI Maintenance Manual as required.
21. Present the repaired bus for inspection to a delegated person.
22. Record bus number, mileage, date of completing and the name of the technician who completed the repair.