



TECHNICAL SERVICE BULLETIN

TSB #:	TSB55102302	Release Date:	10/26/2023
Main Group:	55 - Body Closures		
Subject:	Hood Bolt Rivet Nut Attachment		
Vehicle: 32	FM29 OCEAN	Production Range:	ALL
Model Year(s):	2023	Region(s):	Global
Mobile Service:	NO		

Complaint:

Hood attachment rivet nuts may come loose and start spinning when trying to remove or re-attach the attachment bolts.

Cause:

Usage of excessive force (such as power tools) for removing the bolts securing the hood to the upper metal bracket can damage or break loose the rivet nut. When this happens, a new rivet nut needs to be attached to the vehicle.

Hood Rivet nut attachment:

The mounting brackets & bolts that keep the hood in a closed position are located behind the service lid on the front end of the vehicle. The bolts are attached to a Rivet nut fitted on the upper metal bracket cross member.

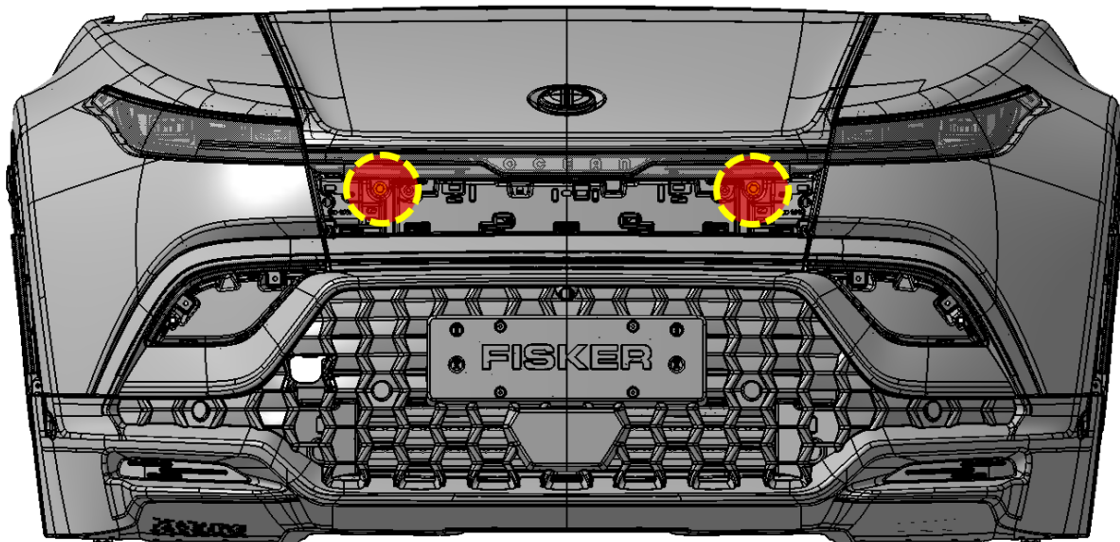


Figure 1.- Ocean front view, highlighted bolts position.

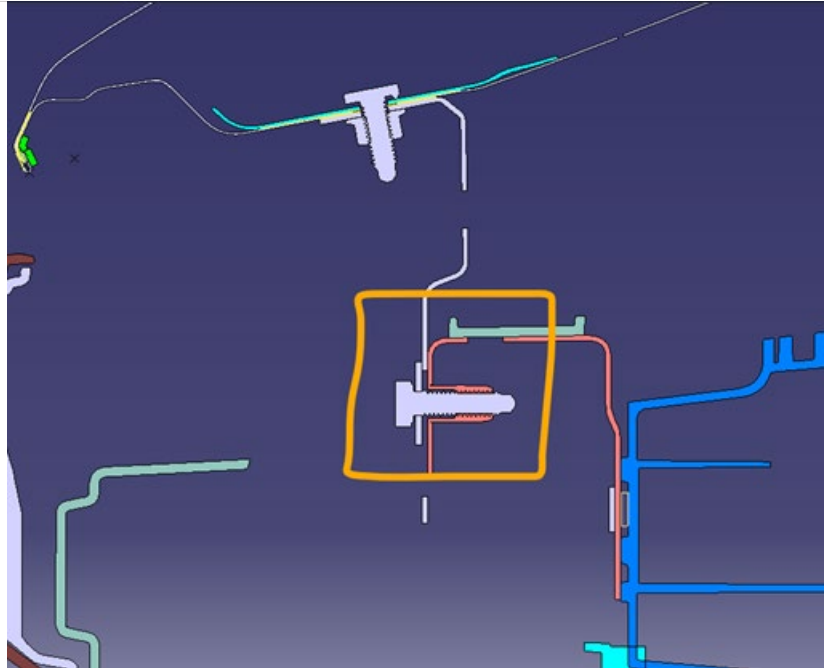


Figure 2.- cross section showing bracket, bolt & rivet nut interaction.

The Bolt is attached to 19Nm without the addition of any Loctite (or similar thread lock adhesive) thread addition.

When removing the bolts for opening the hood, you need to make sure that the applicable torque of the tool does not exceed **24Nm** for removal.

FISKER RECOMMENDS THE USE OF THE FOLLOWING TOOLING:



A) Manual Ratchet



B) Manual Torque Wrench (24Nm max)

TECHNICAL SERVICE BULLETIN



C) 13mm magnetic socket



D) 6" extension for 3/8" ratchet.

DO NOT USE THESE TOOLS

Any power tool that can generate more than 24Nm is strictly forbidden from being used to remove the hood bolts. Ignoring this crucial step can damage the rivet and cause it to start spinning with the bolt.

In the event of such a failure, rework instructions are provided below.

Examples of forbidden tools are:



A) Impact drill



B) Hammer drill

Parts Info:

Part Number	Description	Quantity
FM2960200116A	UPPER_METAL_BRACKET	1
5550000197	PRESSURE_RIVET_NUT-M8-ST	2



Warranty Info:

Information provided below must be used when completing the Work Order Line item associated to this complaint and repair, covered under the terms of the Fisker New Vehicle Limited Warranty:

Job Code:	55.10	Body Closures
Defect Code:	551016860005	Hood Bolt Rivet Nut
Labor Operation	Labor Time	Description
60440006	1.4	Rivet Nut Replacement - TSB Bulletin

Procedure:

Hood Rivet Nut Re-Work.

Required Tools:

1. Plastic pry tool
2. 3/8" Ratchet
3. 6" extension for 3/8" ratchet
4. 13mm magnetic socket
5. 10mm socket
6. 13mm wrench
7. 6in adjustable wrench
8. 3/8" Torque wrench (62.4 NM torque spec)
9. Power drill
10. 8mm drill bit
11. Manual riveting machine
12. M8 pressure rivet nut (as needed)



Steps to remove for access:

1. Remove Service Lid.



1. Using fish bone tool, release clips (x9) securing service lid to front bumper assembly.

Caution: Take extra care when releasing clips to avoid paint damage.

NOTE: Start releasing clips from side of service lid.

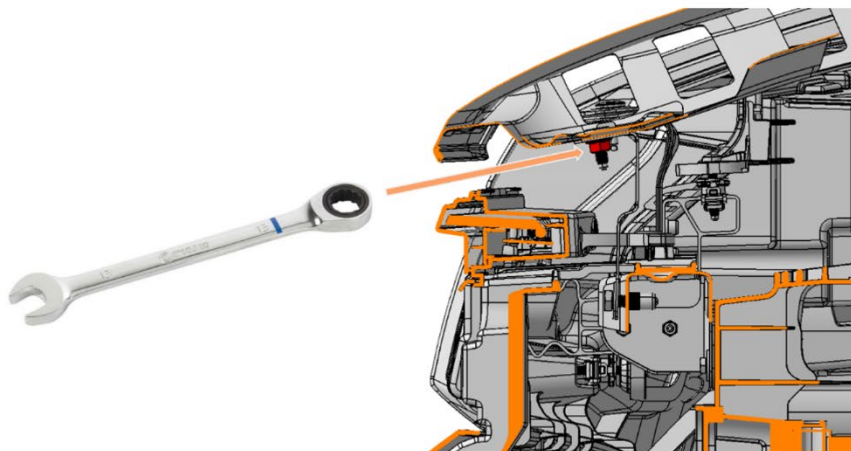
2. Remove the bolt securing the hood. If any of the bolts cannot be removed, proceed to the next step.



3. Remove M8x25 bolts (x2) securing hood to front bumper assembly. **Torque 19 Nm.**

Caution: Do not allow bolts to drop into gap between bumper and cooling system.

3. For the spinning bolt(s), attempt to lose as much as you can the hood. The hood needs to be able to move enough to create a gap.
4. Hold the hood as open as possible, use a 13mm wrench to remove the nut of the hood latch bracket.



Fisker recommends that a second person help hold the hood up while doing this step.

5. Remove front bumper.



Bumper Assembly - Front

Removal

1. Remove center headlamp assembly. Refer to [Headlamp Assembly - Center](#).
2. Remove LH wheel. Refer to [Wheel - Front - LH](#).
3. Remove RH wheel.

NOTE: Procedure is the same as for left side component.



F0GM002

4. Remove push pins (x3) securing LH fender liner to fender.



F0GM003

5. Remove M4x15 screws (x3) securing LH fender liner to front bumper and fender cladding. **Torque 2.2 Nm.**
6. Repeat steps 4 through 5 for RH fender liner.



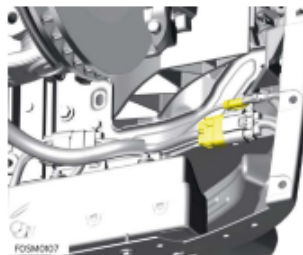
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7. Remove push pin securing front bumper assembly to LH fender cladding.
8. Partially release LH fender cladding from front bumper assembly.



F0GM006

9. Remove push pin securing front bumper assembly to RH fender cladding.
10. Partially release RH fender cladding from front bumper assembly.



F0GM007

11. Disconnect harness connectors (x2) from front bumper harness.



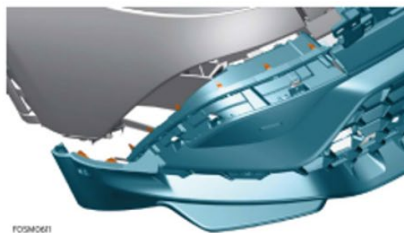
TECHNICAL SERVICE BULLETIN



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12. Remove M5x20 bolts (x4) securing front bumper assembly to front undercover.

Torque 2 Nm.

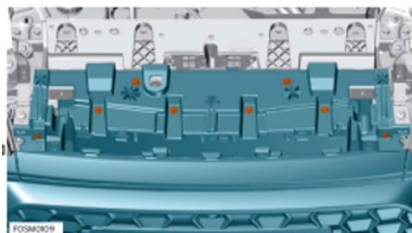


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15. Release clips (x8) securing front bumper assembly to RH fender.

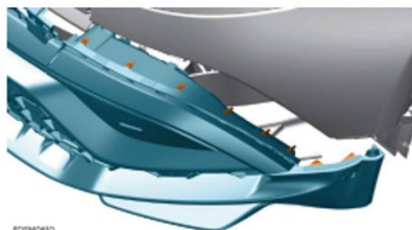
16. Using assistance, remove front bumper assembly.

CAUTION: Place on secure suitable surface to prevent damage.



F03M0009

13. Remove M6x20 bolts (x8) securing front bumper assembly to front end. **Torque 3.5 Nm.**

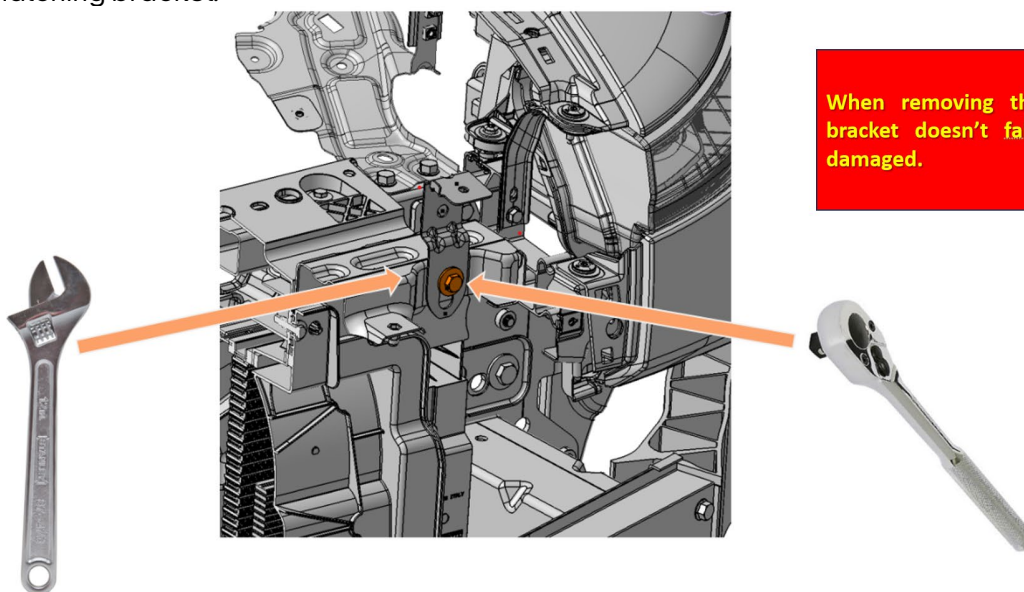


F03M0010

14. Release clips (x8) securing front bumper assembly to LH fender.

Bumper removal will provide better access to the affected rivet nut and will help avoid dropping the rivet nut to the floor of the motor compartment.

6. Set and keep an adjustable wrench on the damaged rivet nut.
7. Use a 13mm socket & ratchet (or the same wrench as step 4) and remove the bolt from the hood latching bracket.



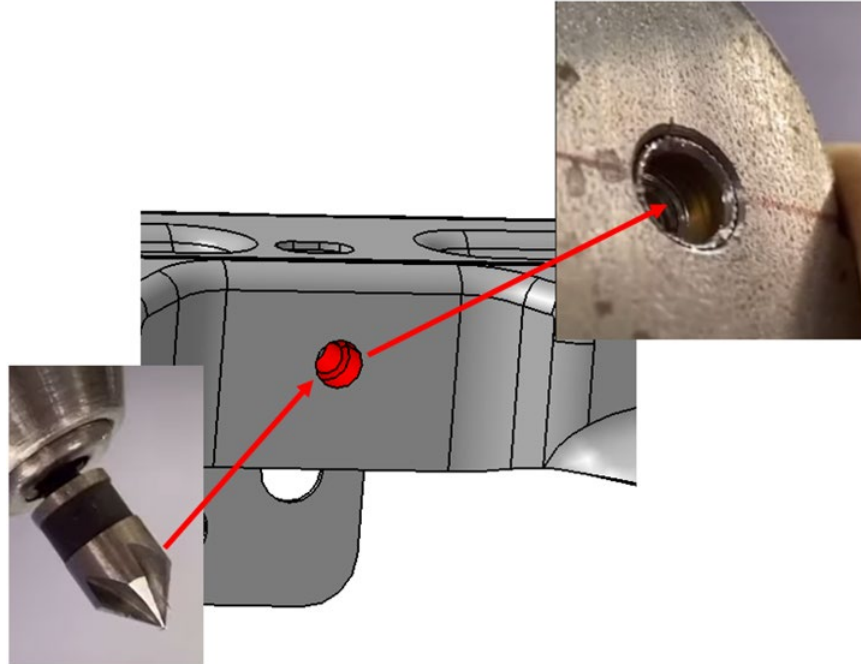
When removing the bolt, ensure the bracket doesn't fall down and/or get damaged.

- 8.

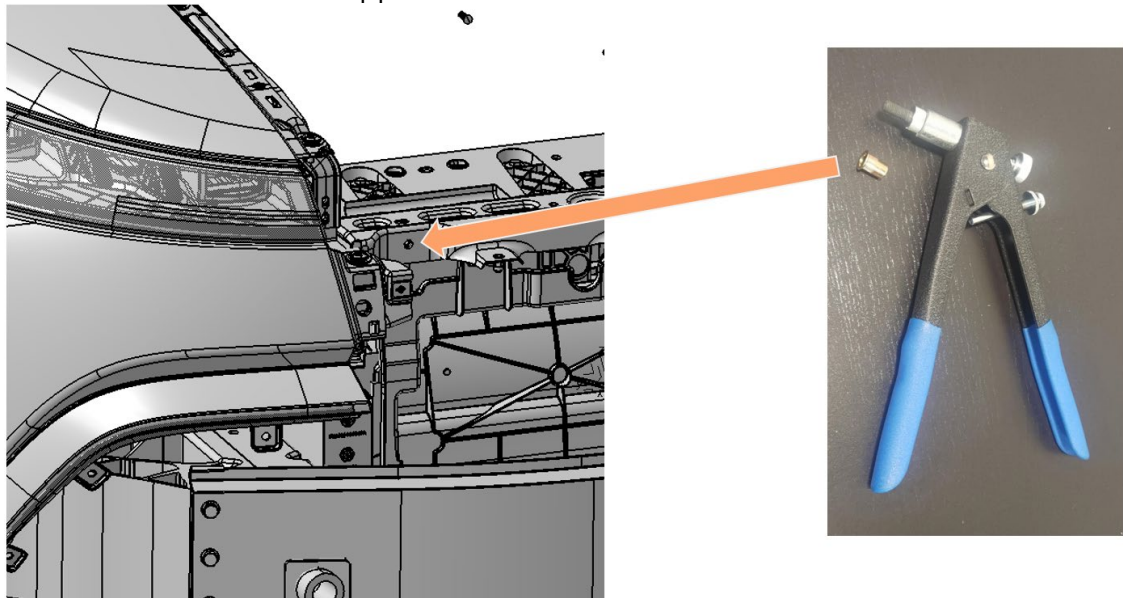


Steps rework damaged rivet nut:

1. Use a drill bit of the correct size to break the head of the rivet.



2. Punch out the remaining part of the rivet nut.
3. Deburr the hole to make sure that you have a flat mounting face.
4. Using a standard manual riveting tool, prepare the riveting tool and get M8 Pressure Rivet Nut for step that follows.
5. Install the M8 rivet nut to the upper metal bracket hole.



6. Repeat the steps if both rivet nuts need to be reworked.



Assembly:

After installation of the new rivet nut, you can close the hood following assembly instructions and recommendations.

Assembly torque of hood bolts needs to be **19Nm**.