

- ATTENTION:**
- GENERAL MANAGER
  - PARTS MANAGER
  - CLAIMS PERSONNEL
  - SERVICE MANAGER

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.


© 2023 Subaru of America, Inc. All rights reserved.



QUALITY DRIVEN® SERVICE

**PRODUCT CAMPAIGN BULLETIN**

**APPLICABILITY:** 2023 MY Solterra

**NUMBER:** WRE-23

**SUBJECT:** Solterra Hub Bolt Torque

**DATE:** 02/10/23

**NHTSA ID:** TBD

Subaru of America, Inc. (Subaru) has initiated this new safety recall for certain 2023 model year Solterra vehicles to inspect the hub bolts and, if necessary, retorque them to the proper specification.

**Until the inspection/remedy is completed, these vehicles should not be driven.**

**DESCRIPTION OF THE DEFECT AND SAFETY RISK**

The vehicles included in this new safety recall had previously been contained at specific port processing facilities for repair which included the replacement and tightening of the hub bolts before delivery to Subaru retailers. The original hub bolts required replacement, because they had characteristics that could cause them to loosen under certain conditions of vehicle use. A third-party contractor was engaged to perform the repair work.

A certain contractor team did not properly complete the repair procedure resulting in the potential for under-torqued bolts. Data indicates the recall population is limited to a certain contractor team at two port locations; however, out of an abundance of caution, the recall population includes all vehicles repaired at all port locations supported by the third-party contractor.

Under-torqued hub bolts could result in all the hub bolts on a wheel to loosen to the point where they can detach. If a wheel detaches from the vehicle while driving, it could result in a loss of vehicle control, increasing the risk of a crash.

**REMEDY**

For all potentially affected vehicles, Subaru dealers will inspect the hub bolts and, if necessary, retorque them to the proper specification at no cost to the customer.

**Until the inspection/remedy is completed, customers will be instructed not to drive their vehicle and to make arrangements with their Subaru retailer to have the vehicle towed for inspection. Towing will be provided at no cost to the customer.**

<p><b>CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.</b></p>	<p><b>Subaru of America, Inc. is ISO 14001 Compliant</b></p>
<p>Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.</p>	<p>ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.</p>

*Continued...*

## AFFECTED VEHICLES

A total of 1,182 U.S. Subaru Solterra vehicles will be affected by this recall, as listed below:

Model Year	Carline	Production Date Range
2023	Solterra	March 30, 2022 – June 4, 2022

Not all vehicles in the production range listed above are affected by this recall. Coverage must be confirmed by using the Vehicle Coverage Inquiry function on [subarunet.com](http://subarunet.com) prior to repair. This information is now available.

## RETAILER RESPONSIBILITY

***Please be advised that it is a violation of Federal law for a dealer to deliver a new motor vehicle covered by a recall under a sale or lease until the defect is remedied. Therefore, any Authorized Subaru Retailer failing to perform the applicable service procedures to correct all affected vehicles in their inventory prior to the vehicle being placed in service may be subject to civil penalties of up to \$22,423 per violation (i.e., for each vehicle), as provided in 49 CFR §578.6 and will also be in breach of the Subaru Dealer Agreement.***

Any vehicles listed in any recall/campaign that are in retailer stock must be:

- Immediately identified
- Tagged or otherwise marked to prevent their delivery or use prior to repair
- Repaired in accordance with the repair procedures outlined in the Product Campaign Bulletin

Retailers are to promptly perform the applicable service procedures, to correct all affected vehicles in their inventory (used, demo & SSLP). Whenever a vehicle subject to this recall is taken into retailer inventory necessary steps should be taken to ensure the recall correction has been made before selling or releasing the vehicle.

## OWNER NOTIFICATION

Subaru will notify affected vehicle owners by first class mail on or about March 1, 2023.

## REQUIRED TOOLS:

- A ½ Inch Digital Torque Wrench with a Calibration within 12 months. The Snap On® 1/2” Drive TechAngle® Electronic Torque Wrench (15–300 ft-lb) is shown below as an example.



*Continued...*

- If wheel removal and installation is required, a wheel stud pilot pin can be used to help prevent the wheel from falling and prevent damage or injury. A recommended wheel stud pilot pin set can be purchased through the Subaru Tools and Equipment site. Solterra requires a 14 X1.50 wheel stud pilot pin.

<https://www.subaruretailersolutions.com/equipment/product/15828>



## SERVICE PROCEDURE / INFORMATION:

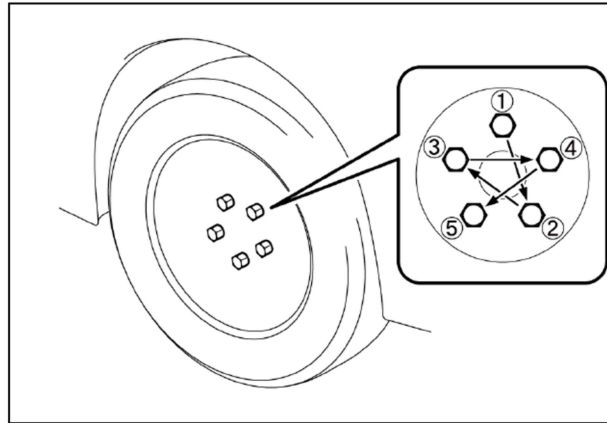
**REMINDER: Customer satisfaction and retention starts with performing quality repairs.**

**STEP 1:** Mark every bolt and wheel using a water-based paint marker or waxed pen so any movement of the bolt will be visible. Ensure you mark both the bolt and wheel in a straight line, so any change can be identified after torque is applied to the bolt.



*Continued...*

**STEP 2:** Using a Digital Torque Wrench, set the torque wrench to 90 ft-lbs (122 Nm). **CAREFULLY** torque **ALL** wheel bolts on **ALL** wheels in the pattern shown below.



**STEP 3:** Inspect each wheel bolt identification mark for a deviation from the identification mark on the wheel. If any of the wheel bolts required tightening or showed movement based on the marks, before reaching a torque value of 90 ft-lb (122 Nm), mark the bolt head using a water-based paint marker or waxed pen.

**CAUTION: DO NOT** allow the vehicle to move while performing this procedure. Vehicle movement may cause an inaccurate torque result.

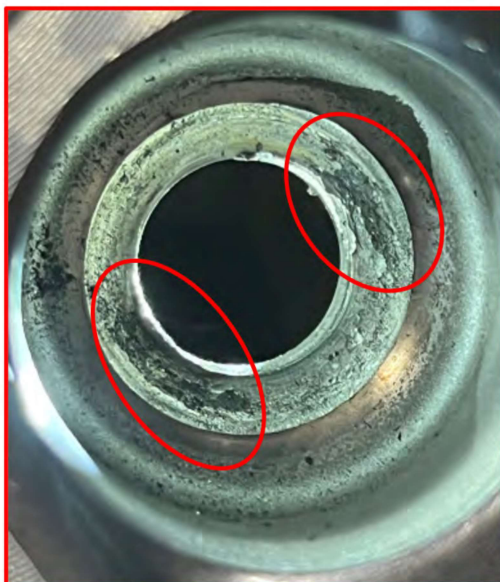
Did any of the wheel bolts move before reaching a torque of 90 ft-lbs (122 Nm)?

**YES** – Proceed to STEP 4.

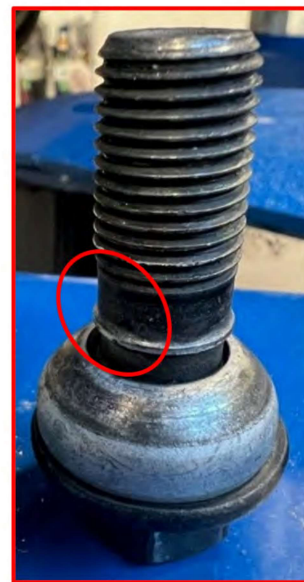
**NO** – Proceed to STEP 7.

**STEP 4:** Remove each affected bolt one at a time and inspect the wheel and bolt for any signs of damage, reinstalling and torquing each bolt to 103 ft-lbs. after each inspection detailed in the following Steps. See the example images below.

**Example of wheel damage**



**Example of bolt damage**



*Continued...*

**STEP 5:** Is there any damage detected on any of the affected wheel(s)?

**YES** – Replace the affected wheel(s) and the associated bolt(s) and proceed to STEP 7.

**NO** – Proceed to STEP 6.

**STEP 6:** Is there any damage detected on the affected bolt(s)? Check for damage to the O-ring or to the conical washer or threads would indicate a need to replace the bolt(s).

**YES** – Replace the affected bolt(s) and proceed to STEP 7.

**NO** - Proceed to STEP 7.

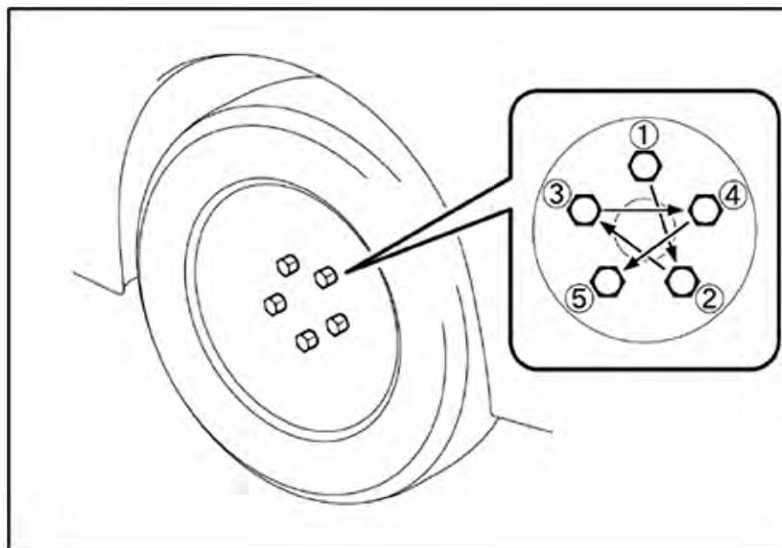
**IMPORTANT NOTE:** When wheel replacement is required, a detailed QMR (Quality Monitoring Report) with clear photos **MUST** be submitted for claim approval.

**STEP 7:** Adjust the Digital torque wrench to 103 ft-lbs (140 Nm).

**CAREFULLY** torque **ALL** wheel bolts in a star pattern to 103 ft-lbs (140 Nm). as shown below.

NOTE:

- Follow the tightening order as shown in the illustration below
- The number 1 bolt is always closest to the air valve and the movement is clockwise
- Do Not continue to tighten the bolt once the torque is reached



**STEP 8:** **CAREFULLY** torque **ALL** wheel bolts to 103 ft-lbs (140 Nm) a second time in a clockwise circular pattern starting at the bolt closest to the air valve. This procedure will confirm the proper torque value has been reached.

**NOTE: DO NOT** allow the vehicle to move while performing this procedure. Vehicle movement may cause an inaccurate torque result.

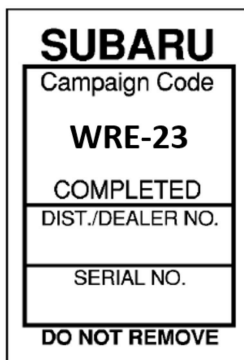
*Continued...*



**SERVICE PROGRAM IDENTIFICATION LABEL:**

Type or print the necessary information on a Campaign Identification Label. The completed label should be attached to the vehicle’s upper radiator support. Additional labels are available through normal parts ordering channels. The part number is **MSA6P1302**, which comes as one sheet of 20 labels.

Part Number	Applicability	Description	Order Quantity
MSA6P1302	All Models	Campaign Completion Labels (contains one sheet of 20 labels)	1



**CLAIM REIMBURSEMENT AND ENTRY PROCEDURES:**

Credit to perform this recall will be based on properly completed repair order information. Retailers may submit claims through [Subarunet.com](http://Subarunet.com).

Labor Description	Labor Operation #	Labor Time	Fail Code
INSPECT/TORQUE ALL WHEEL BOLTS	A113-130	.2	<b>WRE-23</b>
INSPECTION/TORQUE - REPLACE ONE OR ALL WHEEL BOLT	A113-139	.4	
INSPECT/ TORQUE - REPLACE ONE OR ALL WHEEL BOLT, ONE WHEEL R&R	A113-146	0.7	
INSPECT/ TORQUE - REPLACE ONE OR ALL WHEEL BOLT, TWO WHEEL R&R	A113-147	1.0	
INSPECT/ TORQUE - REPLACE ONE OR ALL WHEEL BOLT, THREE WHEEL R&R	A113-148	1.3	
INSPECT/ TORQUE - REPLACE ONE OR ALL WHEEL BOLT, FOUR WHEEL R&R	A113-149	1.6	

**IMPORTANT REMINDERS:**

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.