

IMPORTANT UPDATE

TECHNICAL INSTRUCTIONS FOR SAFETY RECALL 20TA16 POTENTIAL FUEL TANK LEAK CERTAIN 2020-2021 SUPRA

UPDATE 05/04/2021

Update 05/04/21

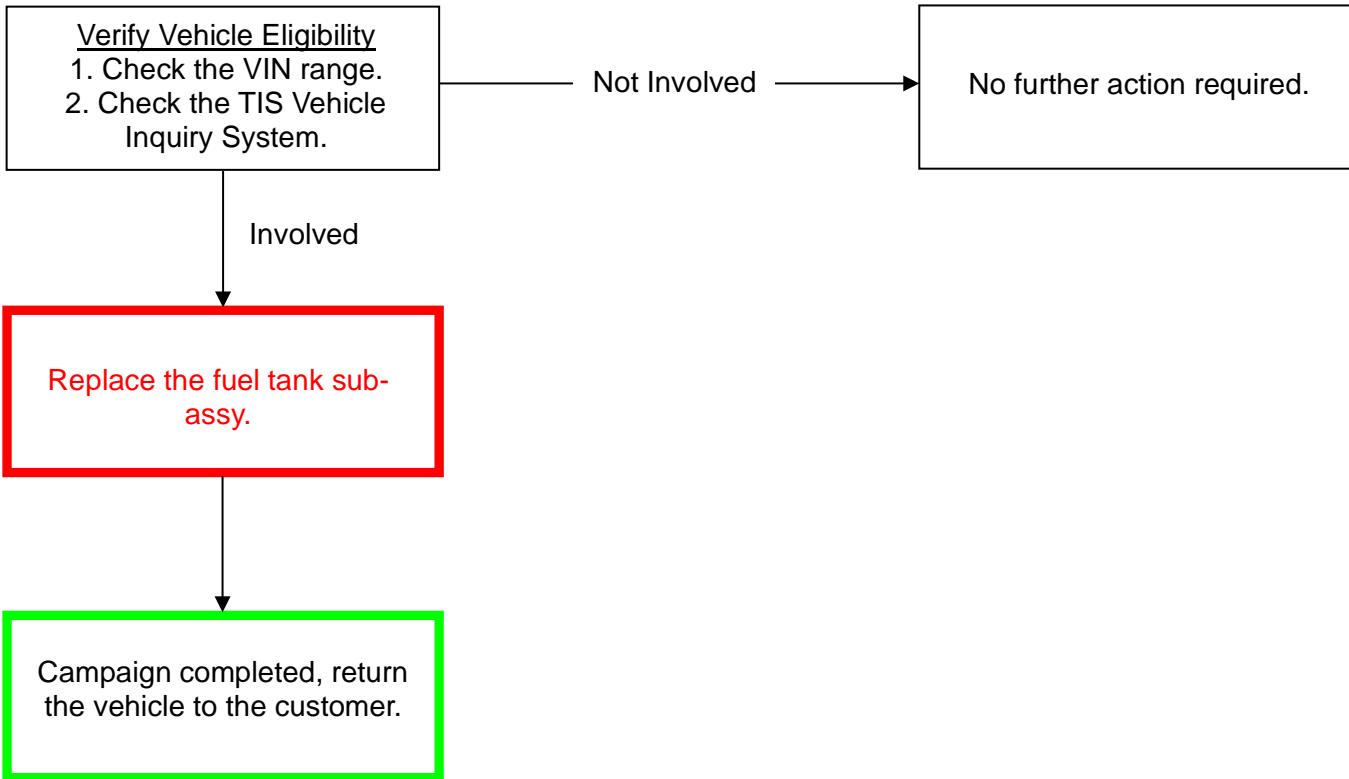
- Instructions for ordering the fuel tank SST have been revised

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course “Safety Recall and Service Campaign Essentials” and completed instructor led course TIN519B. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold at least one of the following certification levels:

- Expert Technician (any specialty) + TIN519B Instructor led course
- Master Technician + TIN519B Instructor led course
- Master Diagnostic Technician + TIN519B Instructor led course

It is the dealership’s responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY NOTE:

- Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity	Remarks
77001-WAA01	Fuel Tank Sub-assy	1	
77169-WAA01	Fuel Suction Tube Set Gasket	1	
41204-WAA01	Nut (for Drive Pinion Companion Flange Rear)	1	
90118-WA203	Bolt (for Flexible Coupling)	3	ENGINE MODEL: B58
90118-WA834			ENGINE MODEL; B48
90118-WA699	No.2 Nut (for Propeller Shaft & Differential Setting)	3	ENGINE MODEL: B58
90118-WA205			ENGINE MODEL; B48
90118-WA387	Exhaust Pipe Clamp	1	ENGINE MODEL: B58
90118-WA472			ENGINE MODEL; B48
90118-WA264	Nut	1	
90118-WA063	Nut	5	
77651-WAA01	Fuel Tank Cushion No.1	10	

B. SUPRA SST

- Torque Wrench Adapter Set – PN 88000003L7

To obtain a tool through the Supra Loaner tool program please follow the instructions below. NOTE the tool listed above is not available through the Supra Loaner tool website. It is only available by sending the email below.

Please send the request to the ToyotaLoanTools@service-solutions.com with the following information in the e-mail:

Subject line: Toyota Supra Fuel Pump Campaign

- Dealer name
- Dealer region
- Dealer Contact person and phone number
- Ship to address
- Part Number 88000003L7 (Supra 20TA16 Tool)
- VIN: *Add VIN here*

Note: you must include all the information above in the email to receive the tool. If you do not include all of the information above, a tool will not be shipped.

C. TOOLS AND EQUIPMENT

- Standard Hand Tools
- High Mission Jack
- Lashing Belt
- Engine Lifter
- Cutoff wheel
- TOYOTA-ISTA
- For ISTA Cable
- Battery Charger
- Torque Wrench
- Hose (Inner diameter: Φ 9mm, length: 5m)
- Socket Wrench 18mm
- Offset Wrench 16*18
- "Torx" Socket Wrench E-Type E14
- Deep Socket Wrench 13mm

SST – These Special Service Tools Required For This Repair:

Part Number	Part Description	Quantity	Remarks
09500-WA170	50mm Wrench	1	For releasing and tightening propeller shaft
09900-WA040	Breaker Bar	1	
09900-WA280	Drive Wrench Adapter	1	For tightening propeller shaft
09650-14010	Wheel Guide Pin	1	For ensuring safety when removing and installing wheel
09800-WA290	Wrench	1	For removing and installing fuel pump gauge retainer
09700-WA050	Releasing Tool	1	For forced release

D. MATERIALS

- Brake Pad Paste or Equivalent
- Lubricant Olistamoly 2 LN 584 LO or equivalent Molybdenum based grease
- Plastic bag
- Marker Pen

IV. WORK PROCEDURE TABLE OF CONTENTS

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INSTALL THE FUEL TANK SUB-ASSY.....	SECTION VIII.
DISPOSE OF FUEL TANK PROPERLY TO PREVENT FIRE (DISCHARGE FUEL VAPOR) ..	SECTION IX.
APPENDIX.....	SECTION X.

V. SAFETY PRECAUTIONS



1. Always remember **“SAFETY FIRST”**.
2. Be extremely careful when handling fuel to prevent fires from occurring.
3. Before beginning work on the fuel system, perform the following safety check list.
4. Before removing any fuel system part, drain all fuel to prevent spilling.

A. AIR VENTILATION

- Perform work in a well ventilated area.
- DO NOT** work underground or in an area where fuel vapors may fill the room due to poor ventilation.
- Quickly clean up any spilled fuel with a dry cloth and dissipate the fuel vapors.
- Dry all cloths that have come in contact with fuel in a well ventilated area and dispose of them properly (according to applicable local regulations).

B. FIRES AND IGNITION SOURCES ARE STRICTLY PROHIBITED

- Fires and ignition sources are prohibited while working on the fuel system.
- Clearly display the sign found on the next page stating **“WORKING WITH GASOLINE, NO FIRES OR IGNITION SOURCES”**.
- Smoking is prohibited near the work area.
- DO NOT** work in areas where there are welders, grinders, drills, electric motors, heaters, etc.
- DO NOT** use work lamps or any other electrical appliance due to the risk of sparks flying from the power switch or a rise in temperature.
- DO NOT** use metal hammers while working, due to the risk of flying sparks.
- DO NOT** start any engines or perform any of the above in neighboring work bays.

C. FIRE EXTINGUISHER

- Have a fire extinguisher ready and available before beginning work.

D. PREVENT STATIC ELECTRICITY

- To help prevent static electricity, lightly wet the floor with water, but not to the point where it creates a hazardous working condition.
- Place appropriate warning cones or stand signs around the area as a caution.

E. PRECAUTIONS WHEN USING A LIFT

- For bays equipped with auto lifts, cover all access cover joints with duct tape.
- In the event that fuel has leaked inside the auto lift, remove the access cover and clean up any spilled fuel. Dissipate fuel vapors until the smell is gone.

F. PREVENT THE FUEL FROM SPRAYING

- When disconnecting any fuel tubes, pipes, hoses or connectors there may still be some pressure remaining, even after discharging the system. To prevent the fuel from spraying, cover the tubes, pipes or connectors with a shop rag before disconnecting.
- Remember to always wear protective goggles especially when disconnecting fuel tubes, pipes, hoses or connectors.

G. PREVENT THE FUEL FROM CONTACTING OTHER PARTS

- DO NOT** allow the fuel to come in contact with any parts made of rubber or leather.

H. ASSIGN A SAFETY SUPERVISOR

- Assign a safety supervisor to be in charge of all safety precautions and fire hazards around the work area.

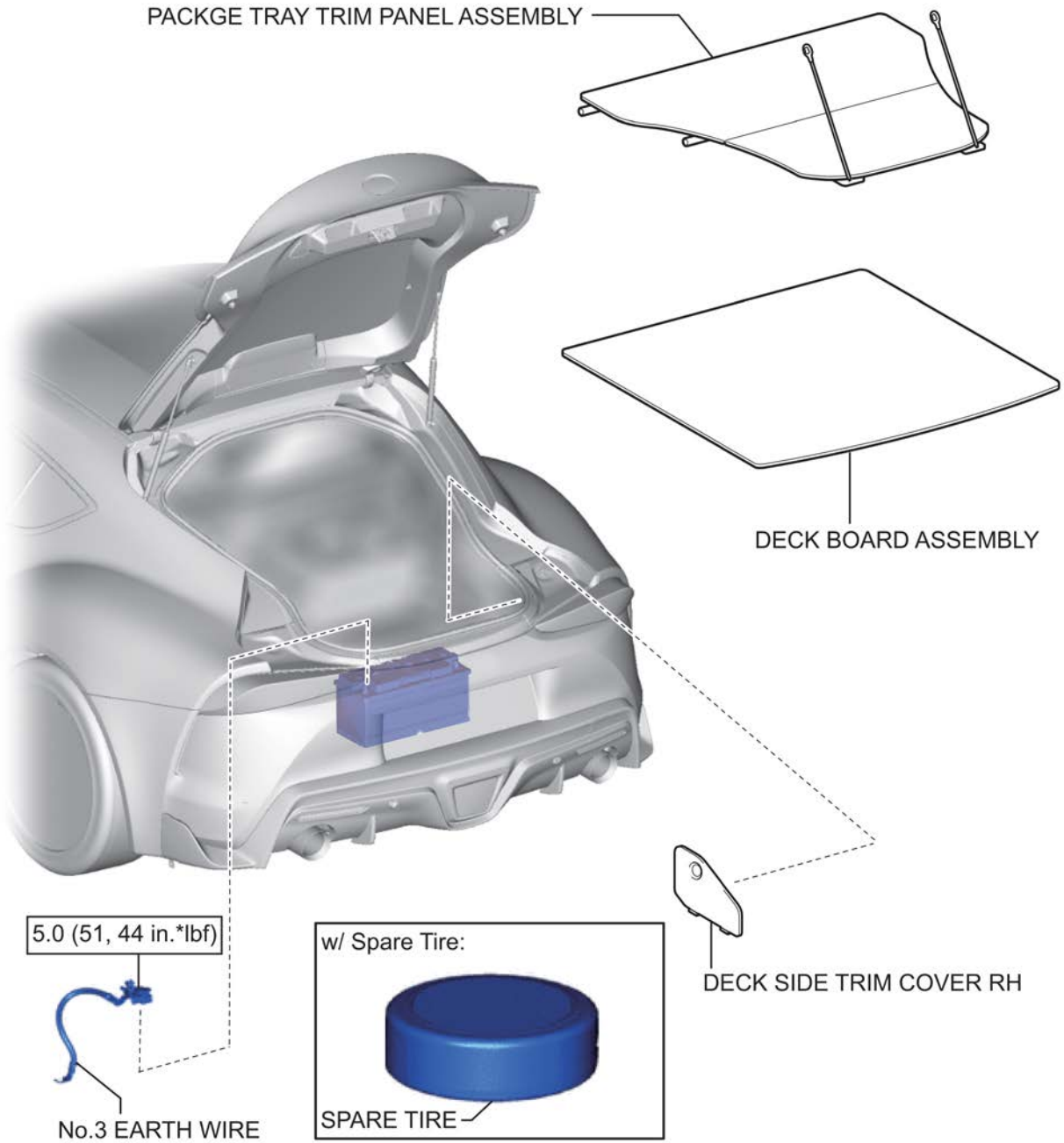
■ Copy And Display When Working

**WORKING WITH
GASOLINE**

**NO FIRES
NO IGNITION
SOURCES**

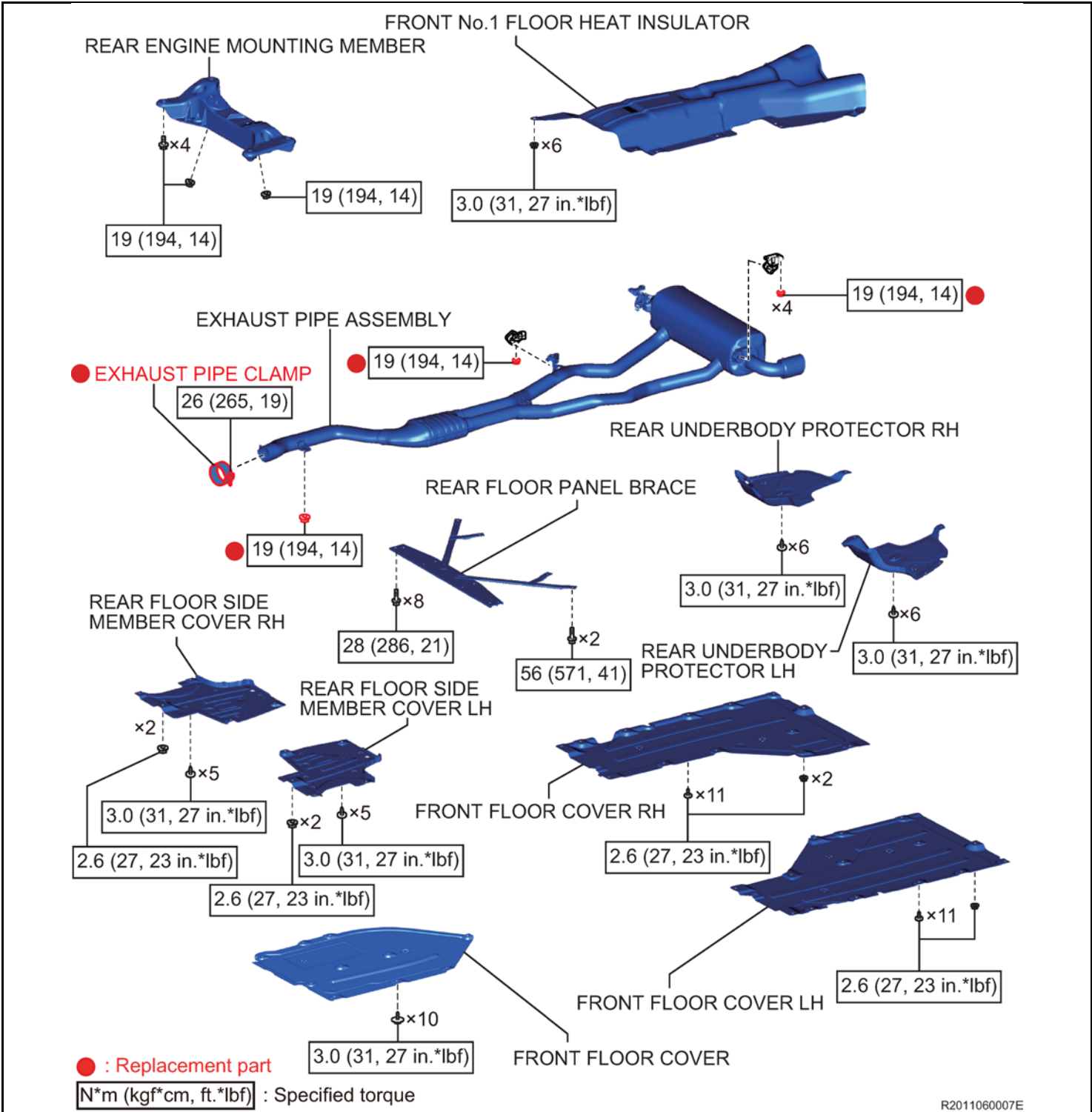
Supervisor

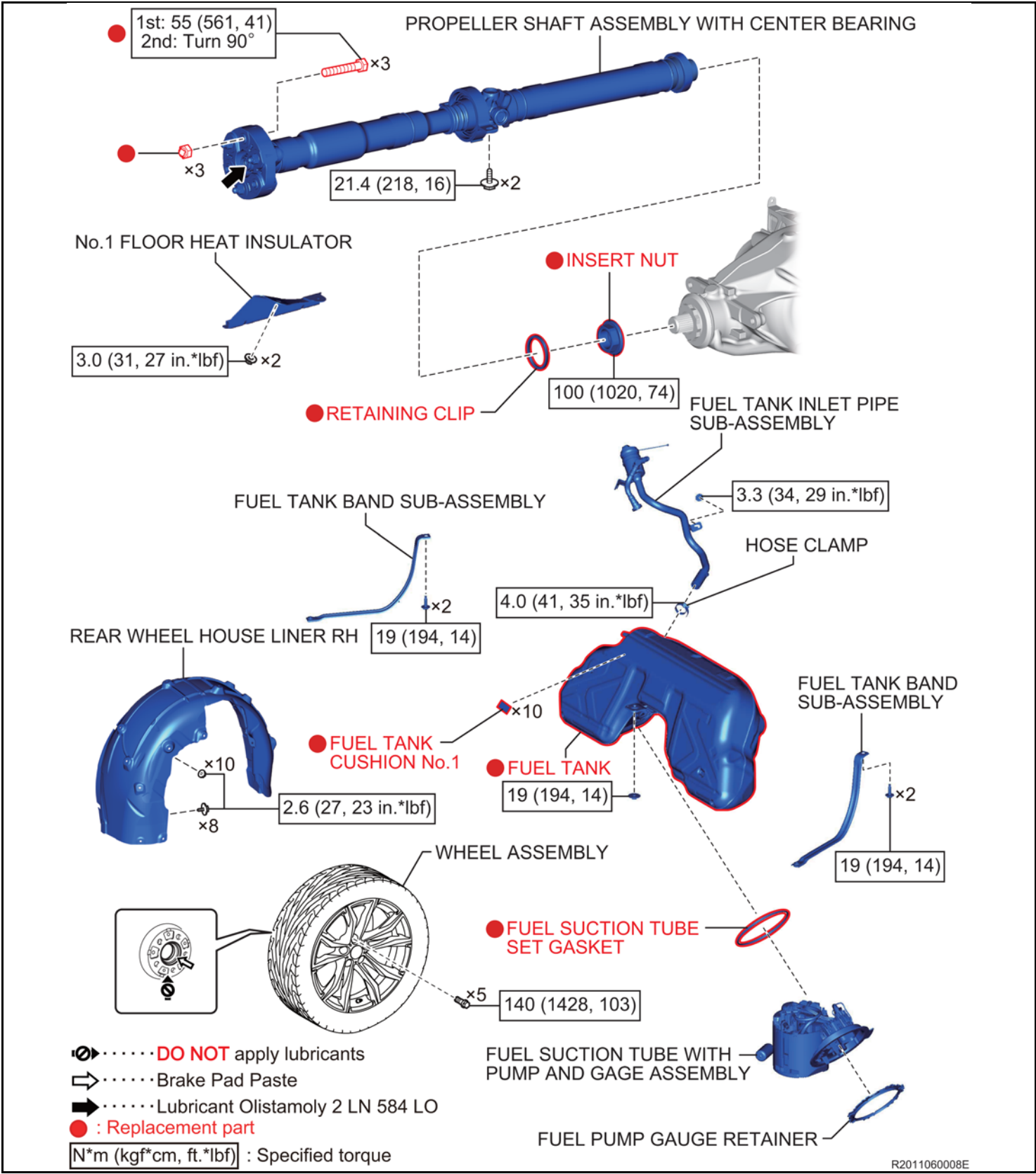
VI. COMPONENTS



N*m (kgf*cm, ft.*lbf) : Specified torque

R2011110001E

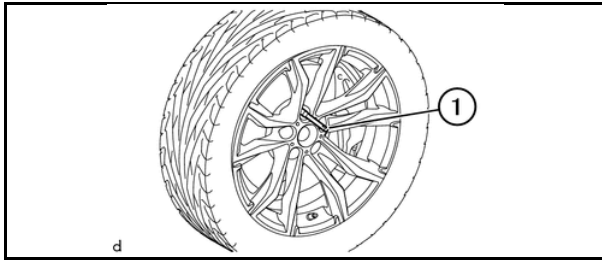




VII. REMOVE THE FUEL TANK SUB-ASSY

1. CHECK FOR DTCs

- a) When error codes are output, confirm and record the codes and the freeze frame data, and repair as necessary.



2. REMOVE WHEEL ASSEMBLY

- a) Loosen the axle hub bolts approximately 90°.
- b) Lift up the vehicle.
- c) Remove the axle hub bolt and then install SST (1) to the hole where the axle hub bolt was removed as shown in the illustration.

SST 09650-14010

NOTE:

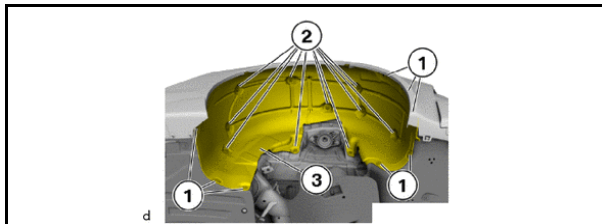
- Place the mounting position of SST at the top.
- Be sure to screw in the thread of SST completely.

- d) Remove the 4 remaining axle hub bolts and then use SST as a guide to remove the wheel assembly.

HINT:

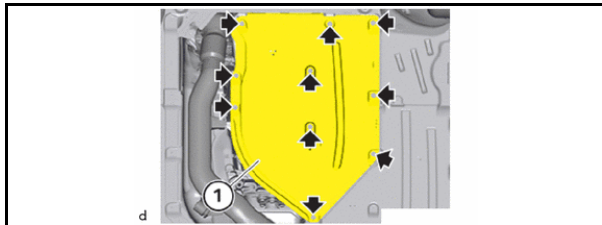
Because this vehicle does not have wheel studs, SST is used as a guide to assist with removal and installation of the wheel assembly.

- e) Remove SST.



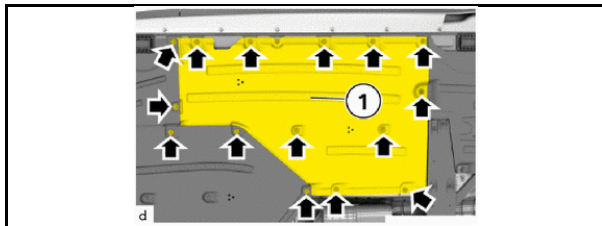
3. REMOVE REAR WHEEL HOUSE LINER RH

- a) Loosen screws (1).
- b) Unscrew the nuts (2) and feed the rear wheelhouse liner (3) out.



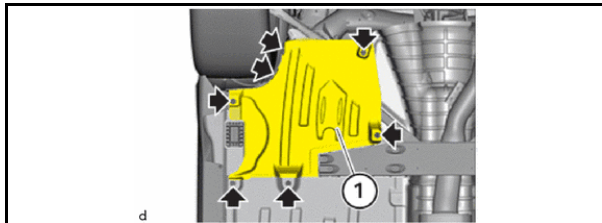
4. REMOVE FRONT FLOOR COVER

- a) Remove screws (arrows).
- b) Remove the front floor cover (1).



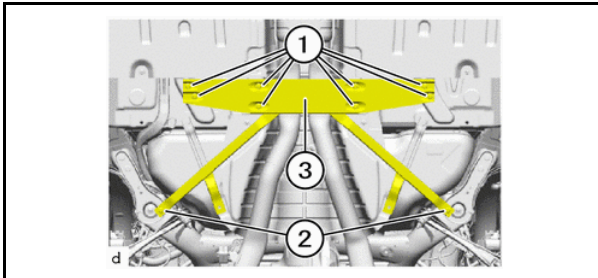
5. REMOVE FRONT FLOOR COVER LH&RH

- a) Unscrew all screws and nuts (arrows).
- b) Remove the front floor cover LH (1).
- c) Remove the front floor cover of the RH side using the same procedure.



6. REMOVE REAR FLOOR SIDE MEMBER COVER LH&RH

- a) Remove screws and plastic nuts (arrows).
- b) Guide the rear floor side member cover LH (1) out.
- c) Remove the rear floor side member cover of the RH side using the same procedure.

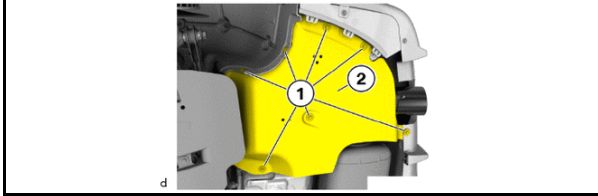


7. REMOVE REAR FLOOR PANEL BRACE



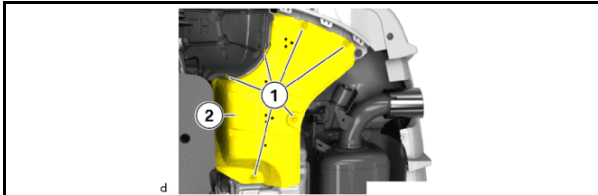
Driving without the rear floor panel brace or rear lower suspension member stopper is not permitted.

- Loosen bolts (1).
- Unscrew the E14 bolts (2) on the rear lower suspension member stopper and remove the rear floor panel brace (3).



8. REMOVE REAR UNDERBODY PROTECTOR LH&RH (for B48)

- Loosen screws (1).
- Remove the rear underbody protector LH (2).
- Remove the rear underbody protector of the RH side using the same procedure.



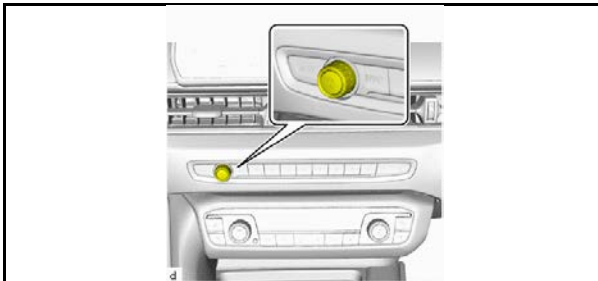
9. REMOVE REAR UNDERBODY PROTECTOR LH&RH (for B58)

- Loosen screws (1).
- Remove the rear underbody protector LH (2).
- Remove the rear underbody protector of the RH side using the same procedure.

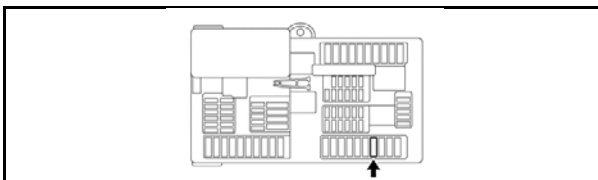
10. DISCHARGE FUEL SYSTEM PRESSURE



- **Make sure the engine coolant temperature is 60°C (140°F) or less when performing this procedure.**
- **DO NOT disconnect any part of the fuel system until you have discharged the fuel system pressure.**
- **Pressure will still remain in the fuel lines even after performing the following procedure. When disconnecting a fuel line, cover it with a piece of cloth to prevent fuel from spraying or coming out.**



- Check that the START-STOP button (engine switch) off.
HINT:
Pressing and holding the AUDIO button changes the power source mode to IG OFF.



- Remove the deck side trim cover RH.
- Remove the fuse (30A) from the position shown in the illustration.

- Release the parking brake.
- Start the engine.
- Wait until the engine stops on its own.

NOTE:

DO NOT increase the engine speed or drive the vehicle while waiting for the engine to stop on its own.

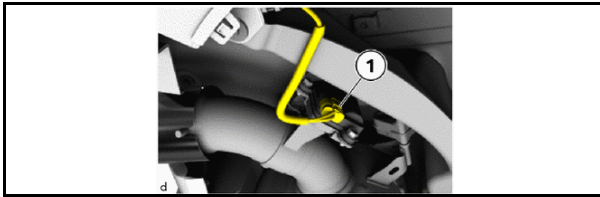
- Crank the engine again and make sure that the engine does not start.
- Install the fuse (30A).
- Install the deck side trim cover RH.

11. REMOVE EXHAUST PIPE ASSEMBLY (for B48)

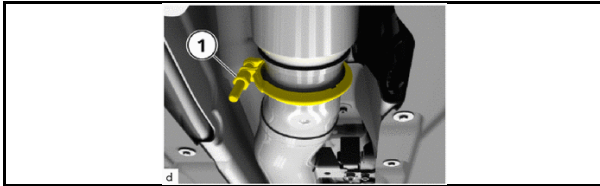


- **Hot surfaces. Risk of burning!**
 - Perform all work only on components that have cooled down.
- **Component with heavy weight. Danger of injury!**
 - Note component's center of gravity.

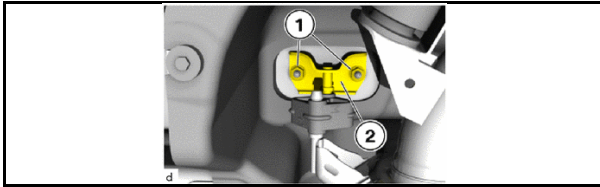
- Support component using a jack.
- Secure component against falling off the jack.
- Heavy component. Heavy components can lead to injury or damage.
- Remove and install heavy components with the aid of another person/other persons.



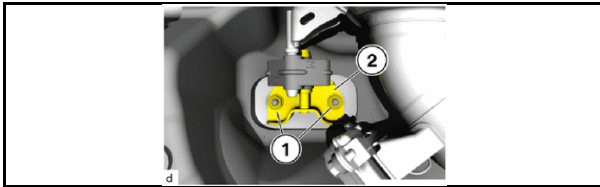
a) Unlock plug connection (1) and disconnect.



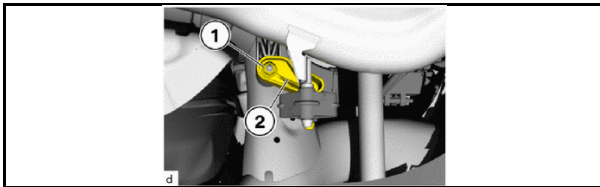
b) for V-band Clamp:
 (1) Loosen V-band clamp (1).



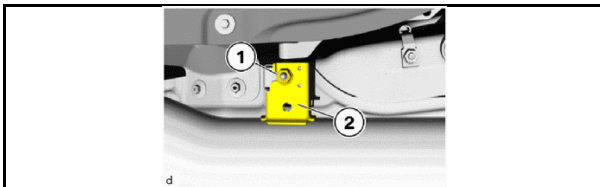
c) Unscrew the nuts (1) on the holder (2).
 d) Store the removed nuts in a separate container.



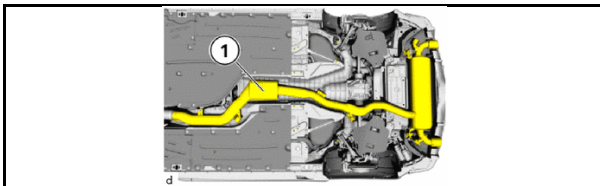
e) Unscrew the nuts (1) on the holder (2).
 f) Store the removed nuts in a separate container.



g) Unscrew the nut (1) on the holder (2).
 h) Store the removed nuts in a separate container.



i) Unscrew the nut (1) on the holder (2).
 j) Store the removed nuts in a separate container.

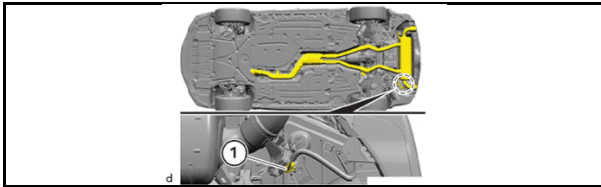


k) Guide the exhaust system (1) out with an auxiliary person and remove.

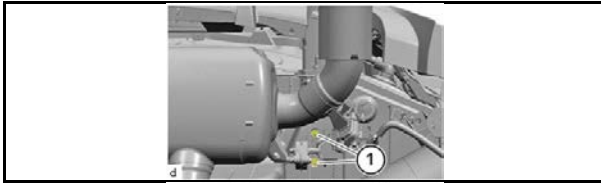
12. REMOVE EXHAUST PIPE ASSEMBLY (for B58)



- Hot surfaces. Risk of burning!
 - Perform all work only on components that have cooled down.
- Component with heavy weight. Danger of injury!
 - Note component's center of gravity.
 - Support component using a jack.
 - Secure component against falling off the jack.
- Heavy component. Heavy components can lead to injury or damage.
 - Remove and install heavy components with the aid of another person/other persons.

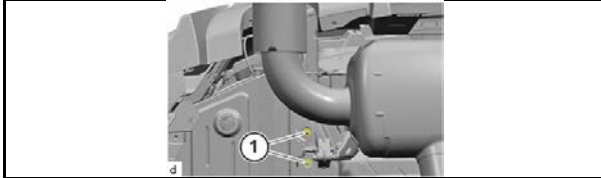


a) Unlock plug connection (1) and disconnect.



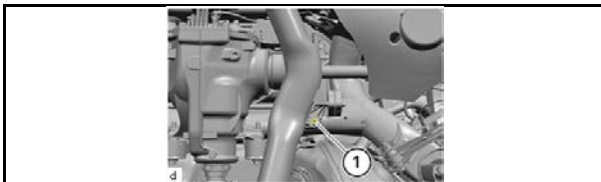
b) Loosen nuts (1).

c) Store the removed nuts in a separate container.



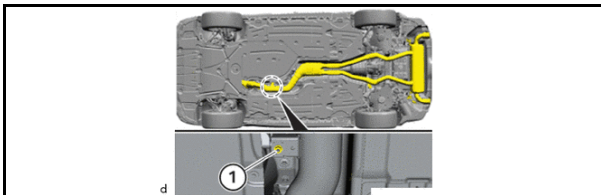
d) Loosen nuts (1).

e) Store the removed nuts in a separate container.



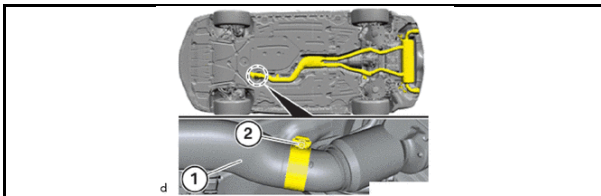
f) Unfasten nut (1).

g) Store the removed nuts in a separate container.



h) Unfasten nut (1).

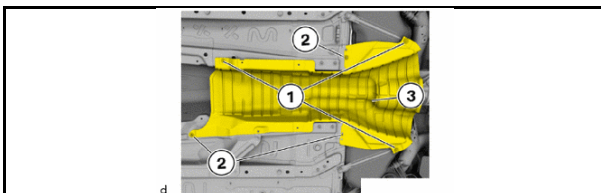
i) Store the removed nuts in a separate container.



j) for Ribbon Clamp:

(1) Unscrew nut (2) on the exhaust pipe assembly (1).

(2) Lower the exhaust pipe assembly (1) with an auxiliary person, guide out and remove.



13. REMOVE FRONT NO. 1 FLOOR HEAT INSULATOR

a) Loosen screws (1).

b) Unscrew the sheet metal nuts (2).

c) Remove the front No. 1 floor heat insulator of the tank (3).



14. REMOVE THE FUEL

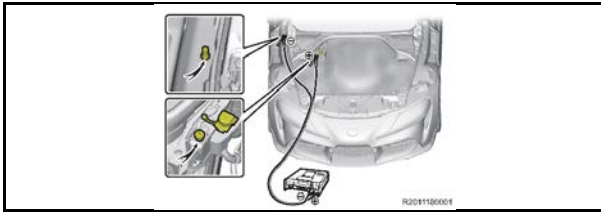
a) When disconnecting the fuel line, make sure to wear protective glasses and to cover with a shop cloth as the fuel may splatter due to the pressure remaining.

b) Release the 2 locks of the fuel line by pressing them at the same time and disconnect the fuel line.

c) Protect the disconnected fuel line with a plastic bag from scratching and adhesion of foreign matter.

d) Connect the hose.





e) Connect the battery charger to the vehicle.



f) Connect ISTA to the vehicle and select in the following order:
 (1) Vehicle information
 (2) Control unit tree
 (3) DME
 (4) Call up control unit functions

HINT:

- It takes about 10 minutes to establish the connection of ISTA.
- Control unit tree will be displayed once the connection with the vehicle is secured.



(5) Component Triggering
 (6) General

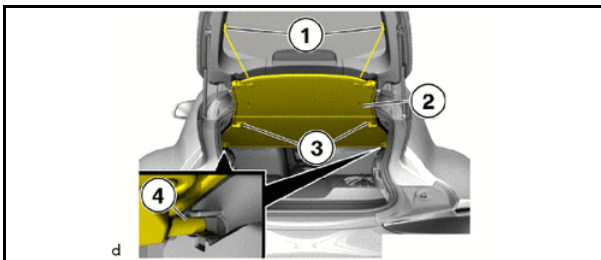


g) Select "Electric fuel pump" and start "Trigger component" to remove the fuel.

h) Disconnect ISTA from the vehicle once removal.

HINT:

It takes about 20 minutes to remove the fuel from a fully filled tank.



15. REMOVE PACKAGE TRAY TRIM PANEL ASSEMBLY

a) for Manual Seat:

(1) Operate the front seat adjuster assembly to move the front seat assembly RH to the foremost position.

b) for Power Seat:

(1) Operate the power seat switch assembly to move the front seat assembly RH to the foremost position.

c) Detach the retaining straps (1).

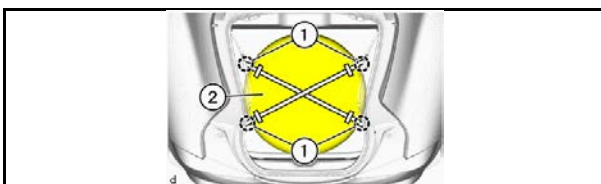
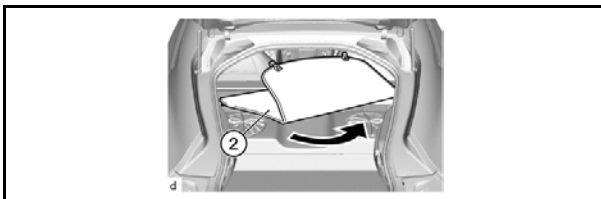
d) Detach the rear mountings (3) to the top.

e) Detach the front guides (4) to the rear.

f) Fold the package tray trim panel assembly (2) together and remove.

HINT:

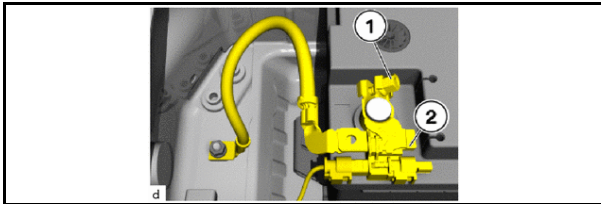
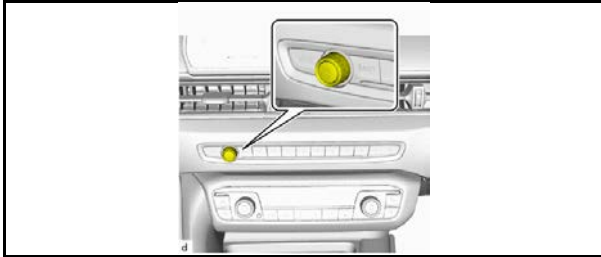
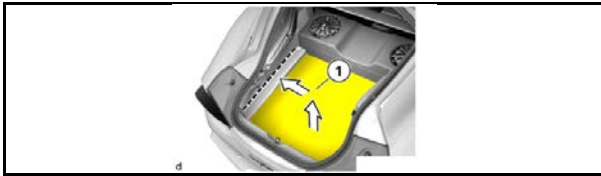
Turn the package tray trim panel assembly (2) approximately 45° counterclockwise and remove it from the tailgate.



16. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTE:

- When disconnecting the cable, turn the **START-STOP button (engine switch)** and **headlight switch** off and **loosen the cable nut completely**. Perform these operations without twisting or prying on the cable. Then disconnect the cable.
- **Clock settings, radio settings, audio system memory, DTCs and other data will be cleared when the cable is disconnected from the negative (-) battery terminal. Write down any necessary data before disconnecting the cable.**



- a) Slightly lift the deck board assembly (1) on the right side with a suitable tool.
- b) Slide the left edge of the deck board assembly (1) into the recess in the direction of the arrow of the deck board assembly.
- c) Remove the deck board assembly (1) in the direction of the arrow.

NOTE:

Check that the START-STOP button (engine switch) off.

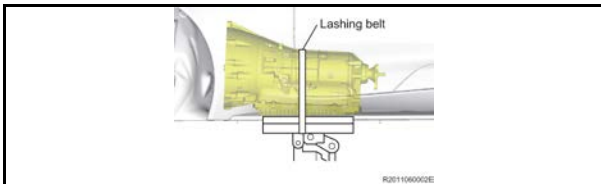
HINT:

Pressing and holding the AUDIO button changes the power source mode to IG OFF.

- d) Unfasten nut (1).
- e) Disconnect the No. 3 earth wire (2) from the negative (-) battery terminal.

NOTE:

- DO NOT damage the battery terminal, the safety battery terminal or the battery state sensor.
- Damaged battery terminals can lead to malfunctions or vehicle electrical system faults.
- Pull off battery terminal from battery pole by carefully moving the terminal back and front. DO NOT pry off using a tool.



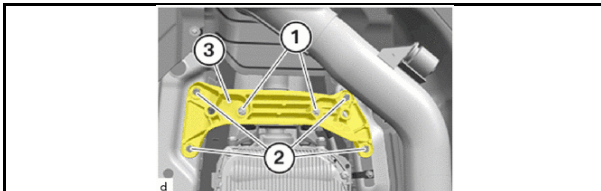
17. REMOVE REAR ENGINE MOUNTING MEMBER

- a) Support the automatic transmission assembly with a transmission jack.

STOP Secure the automatic transmission assembly to the transmission jack using a lashing belt, etc. to prevent it from falling.

NOTE:

- Place attachments on the transmission jack saddle.
- Make sure that the attachments and the transmission oil sump are centered on the transmission jack.



- b) Loosen the bolts (2).
- c) Loosen nuts (1).
- d) Remove the rear engine mounting member (3).



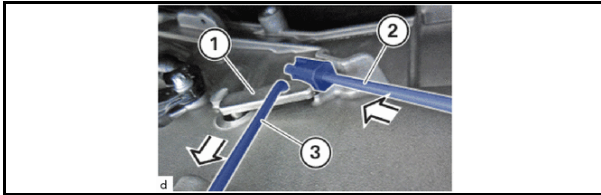
18. REMOVE No.1 FLOOR HEAT INSULATOR

- a) Loosen nuts.
- b) Remove the No. 1 floor heat insulator.

19. REMOVE PROPELLER SHAFT ASSEMBLY WITH CENTER BEARING

NOTE:

- **DO NOT** damage the propeller shaft assembly during removal.
- Failing to observe the removal guidelines for the propeller shaft assembly on the rear axle differential may cause severe damage.
 - **DO NOT** disassemble the three-hole flange, flexible coupling and propeller shaft assembly. The three-hole flange to the rear axle differential is balanced with the flexible coupling and propeller shaft assembly.
 - Loosen the insert nut against the direction of travel in clockwise direction. The propeller shaft assembly must be loosened on the insert nut only and exclusively in the direction of rotation otherwise, the anti-twist lock of the bi-hexagonal flange nut is damaged.
 - In the event of a damaged anti-twist lock on the bi-hexagonal flange nut: Replace the rear axle differential.



- a) Pull selector shaft journal (1) downwards using special tool 2 355 850 (3).

SST 09700-WA050

- b) Install special tool 2 355 850 (2) between selector shaft journal (1) and transmission housing.

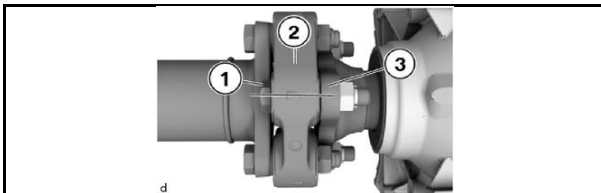
SST 09700-WA050

HINT:

The parking lock is unlocked.

NOTE:

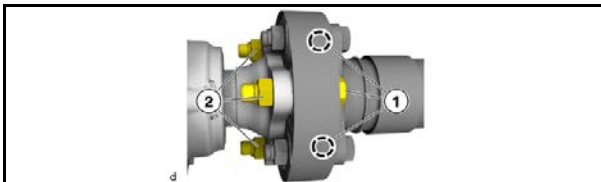
You will need to lock and release the parking lock as needed during removal.



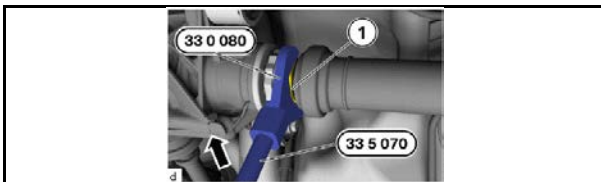
- c) Mark the installation position of the bolt connection (1), the flexible coupling (2) and the three-hole flange (3) on the same level.

HINT:

The mark makes it possible for the propeller shaft assembly with center bearing to be installed again in the same position. This should prevent a humming noise from the drive train during driving.



- d) Release 18 mm bolts (1) and counter the 18 mm nuts (2).

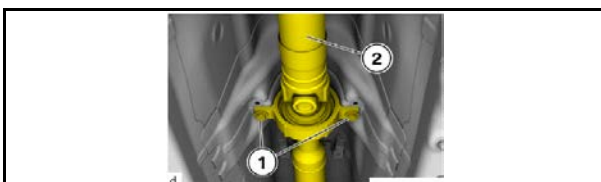


- e) Release insert nut (1) in direction of arrow using the special tools 0 496 959 (33 0 080) and 0 495 554 (33 5 070).

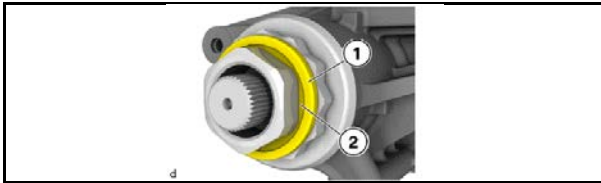
SST 09900-WA040, 09500-WA170

NOTE:

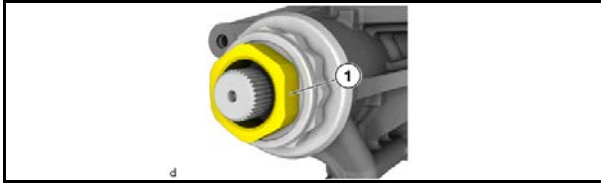
- **The insert nut is reverse-thread screw.**
- **DO NOT** damage the rear axle differential.
- Failing to observe the removal and installation guidelines may cause severe damage to the rear axle differential.
 - **DO NOT** use the double hexagon head flange nut as counter support.



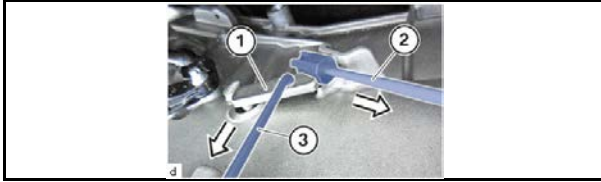
- f) Release 13 mm bolts (1) and remove the propeller shaft assembly with center bearing (2).



g) Remove retaining clip (1) and the seal (2).



h) Remove insert nut (1).



i) Pull selector shaft journal (1) downwards using special tool 2 355 850 (3).

SST 09700-WA050

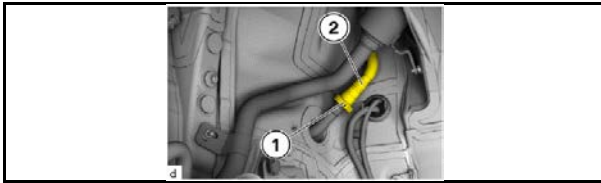
j) Remove special tool 2 355 850 (2).

SST 09700-WA050

HINT:

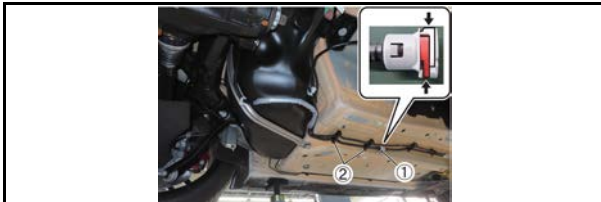
The parking lock is locked.

20. REMOVE FUEL TANK



a) Unlock and pull off snap fastener (1).

b) Pull off the tank ventilation line (2).

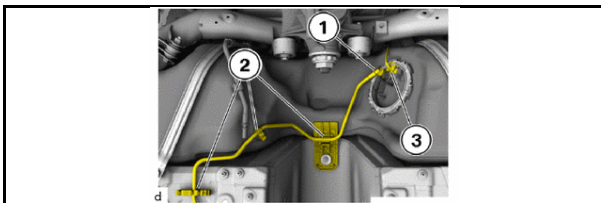


c) Release the 2 locks of the retainer by pressing them at the same time and disconnect the tank ventilation line.

d) Unclip the tank ventilation line from the bracket (2).

NOTE:

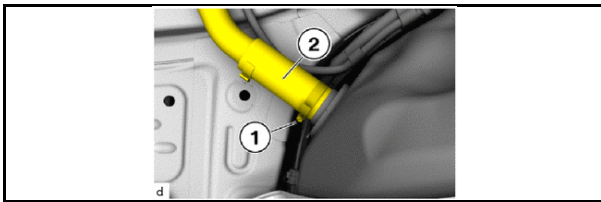
Bracket must be handled with care as it is thin and easy to break.



e) Unclip fuel line (1) from the holders (2).

f) Unlock plug connection (3) and disconnect.

g) Loosen hose clamp (1).

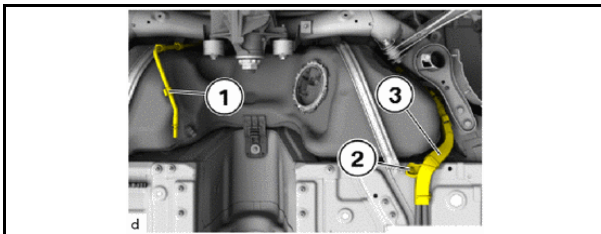


h) Loosen the pipe clamp.

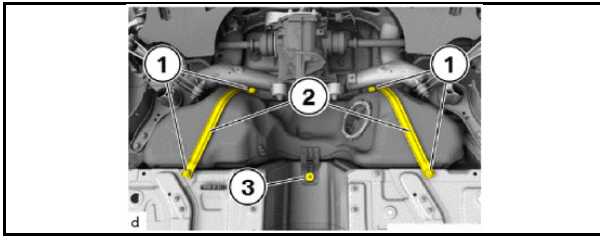


i) Remove the 2 nuts.

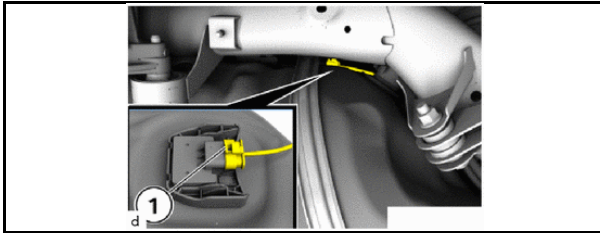
j) Pull the rubber hose (2) off the fuel tank.



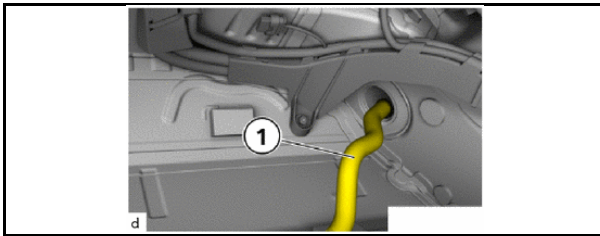
k) Tie up the purge air line (1) to one side.



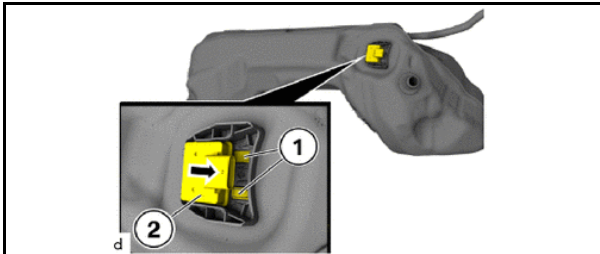
- l) Heavily support the fuel tank.
- m) Release the screws (1) and remove the retaining straps (2).
- n) Release the nut (3) and lower the fuel tank a few inches.



- o) Unlock plug connection
 - (1) Disconnect plug



- p) Continue to support the fuel tank.
- q) Have another person remove the tank ventilation line (1) towards the wheel arch.
- r) Remove the fuel tank towards the bottom.
- s) Mark the removed fuel tank to avoid installing the old part again.



- t) Push the fuel temperature sensor out of the holder in the direction of the arrow.

21. REMOVE FUEL SUCTION WITH PUMP AND GAGE TUBE ASSEMBLY



Working on fuel system. Risk of fire! Danger of explosion!

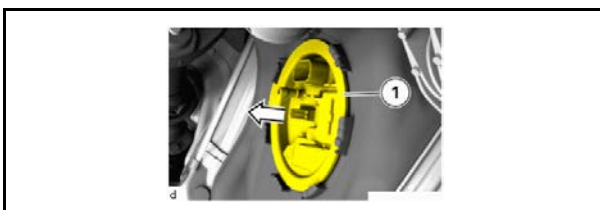
- When working on the fuel system, make sure that the work bay is sufficiently ventilated, e.g. using extraction unit.
- Tightly seal off open lines and connections; collect any leakage fuel directly at the point of exit.
- No fire, sparks, open flames or smoking.



- a) Place the fuel tank assembly on the workbench and fix it using a lashing belt.



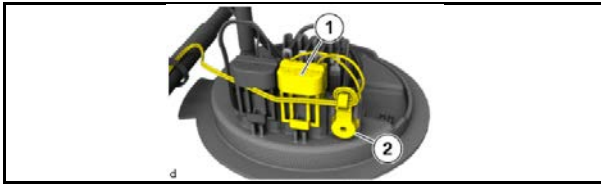
- b) Place special tool 2 445 958 on the locking ring (1).
SST 09800-WA290
- c) Loosen fuel pump gauge retainer counterclockwise and remove.



- d) Lift the flange cover (1) in the direction of the arrow.



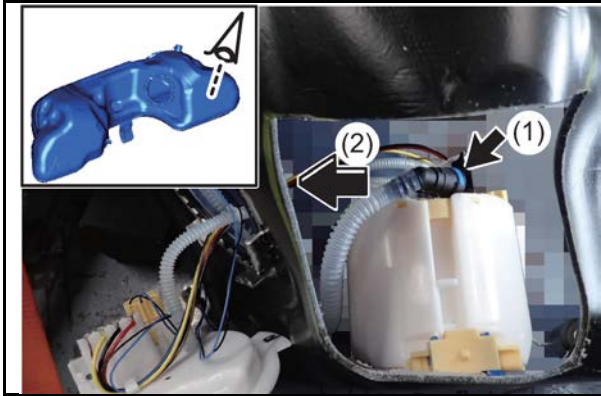
Before removing the flange cover, ensure the workspace is well-ventilated and there is no fires or ignition source as the fuel vapor will diffuse.



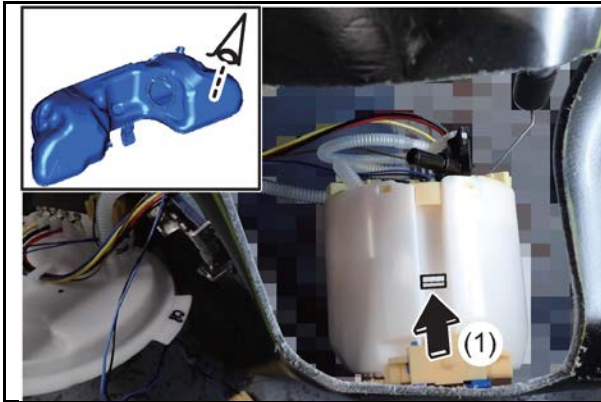
- e) Unlock and disconnect plug connection (1).
- f) Unclip the cable holder (2).

HINT:

The following procedure of fuel delivery unit removal will be performed inside the fuel tank and you cannot see the work space. Therefore a part of the fuel tank is cut out to show the clearer image of the tank structure.

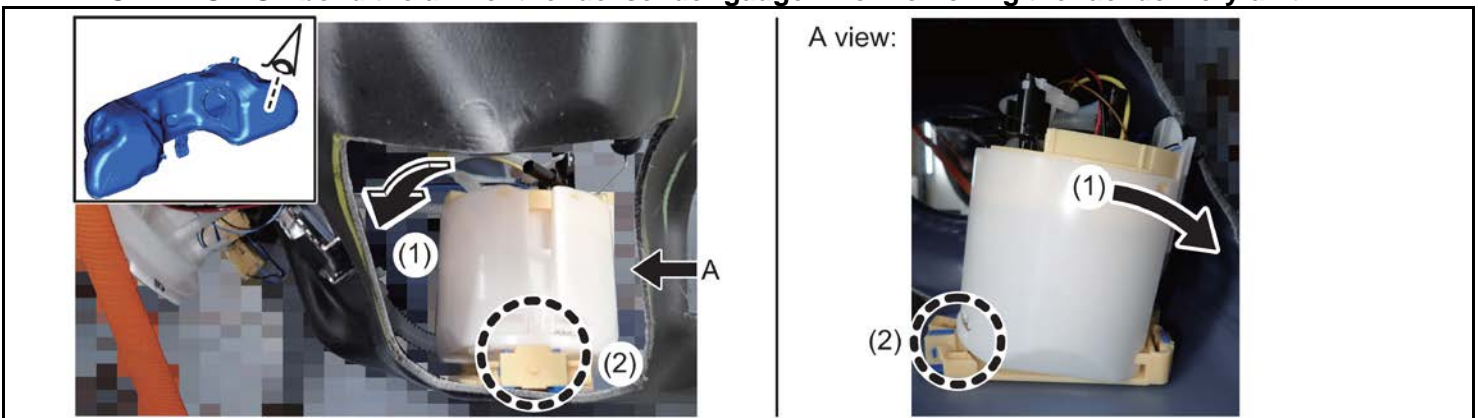


- g) Unlock the quick release (1) and remove in the direction of arrow (2).



- h) Release the lock (1) in the direction of the arrow upwards.
NOTE:
Slide the lock until a click sound is heard so that the lock is fully released.

- i) Slightly push the fuel delivery unit towards the direction of the arrow (1) and release the claw (2) to remove.
NOTE: DO NOT bend the arm of the fuel sender gauge when removing the fuel delivery unit.



The fuel tank is filled with fuel vapor after removing the fuel and is in dangerous condition. Reference page 30 [IX. DISPOSE OF FUEL TANK PROPERLY TO PREVENT FIRE (DISCHARGE FUEL VAPOR)] and dispose of the tank after removing fuel vapor inside.

VIII. INSTALL THE FUEL TANK SUB-ASSY

1. INSTALL FUEL SUCTION WITH PUMP AND GAGE TUBE ASSEMBLY



Working on fuel system.

Risk of fire! Danger of explosion!

- When working on the fuel system, make sure that the work bay is sufficiently ventilated, e.g. using extraction unit.
- Tightly seal off open lines and connections; collect any leakage fuel directly at the point of exit.
- No fire, sparks, open flames or smoking.



- a) Place the **NEW** Fuel tank assembly on the workbench and fix it using a lashing belt.

Parts No.: 77001-WAA01

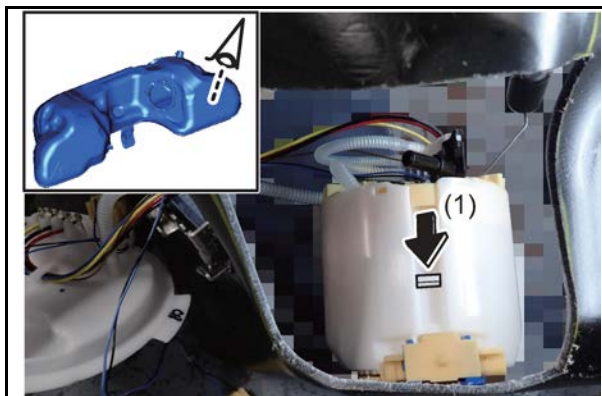
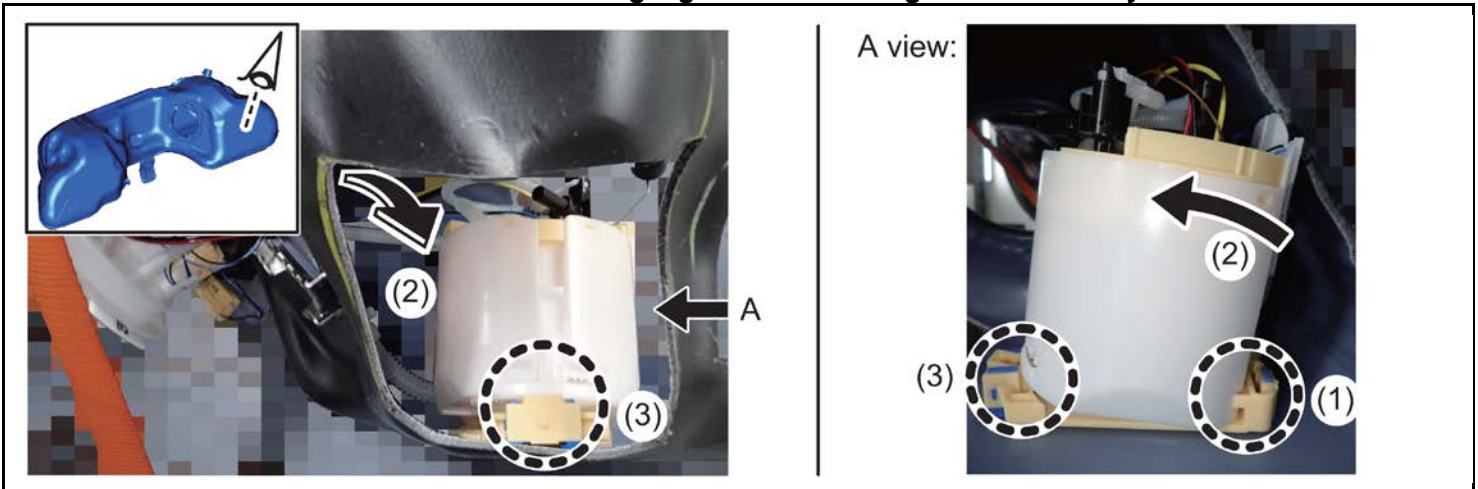
HINT:

The following procedure of fuel delivery unit installation will be performed inside the fuel tank and you cannot see the workspace. Therefore a part of the fuel tank is cut out to show the clearer image of the tank structure.

- b) Set the fuel delivery unit to the claw (1) of the receptacle.
c) Push the fuel delivery unit to the direction of the arrow (2) to lock (3) the fuel delivery unit to the receptacle.

NOTE:

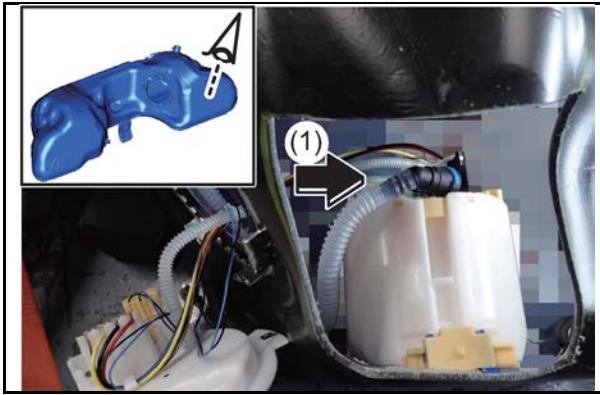
DO NOT bend the arm of the fuel sender gauge when installing the fuel delivery unit.



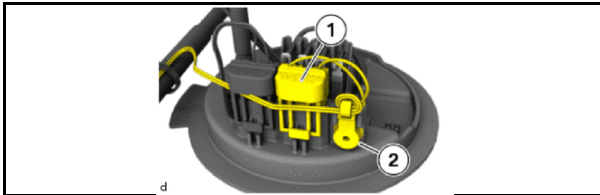
- d) Lock the lock (1) in the direction of the arrow downwards.

NOTE:

Slide the lock until a click sound is heard so that the fuel delivery unit is fully fixed.

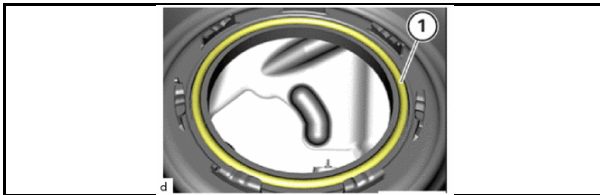


e) Apply and lock the quick release (1).



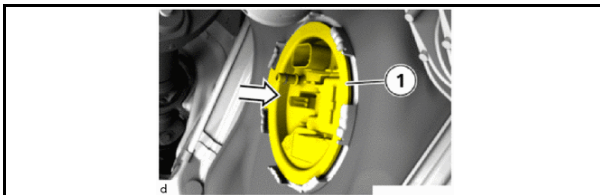
f) Connect and lock connector (1).

g) Clip in the cable holder (2).



h) Replace **NEW** sealing ring (1).

Parts No.: 77169-WAA01



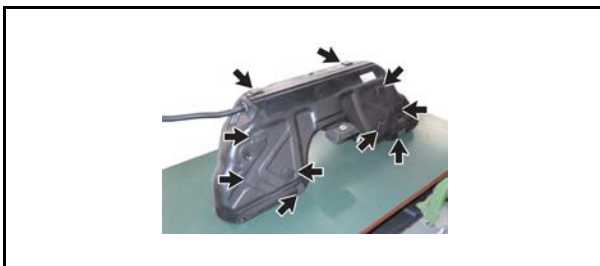
i) Install flange cover (1) in direction of arrow.



j) Place special tool on the lock ring (1).

SST 09800-WA290

k) Tighten the special tool clockwise until it hits the protrusions of the fuel pump gauge retainer.



2. INSTALL **NEW** FUEL TANK CUSHION No.1

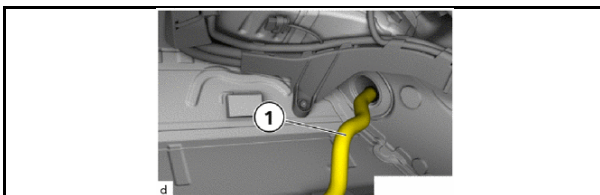
a) Clean the fuel tank.

b) Apply 10 pieces of the **NEW** fuel tank cushion No.1 to the positions shown.

NOTE:

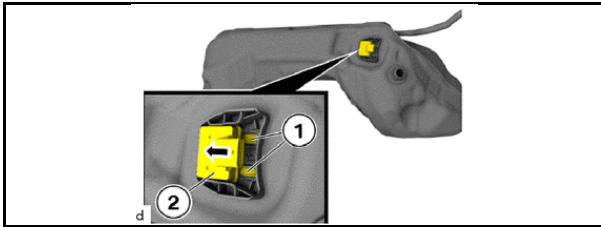
If the cushions are remained on body side, remove and apply **NEW cushions to the fuel tank.**

Parts No.: 77651-WAA01

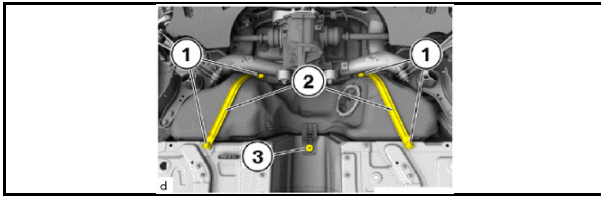


3. INSTALL FUEL TANK

a) Raise the fuel tank and, while doing so, thread the tank ventilation line (1) through the rear axle support.



- b) Push the fuel temperature sensor out of the holder in the direction of the arrow until the locks audibly engage
- c) Connect connectors and lock



- d) Raise the fuel tank to the installation position, observing the installation position of the tank ventilation line while doing so.
- e) Tighten nut (3).

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

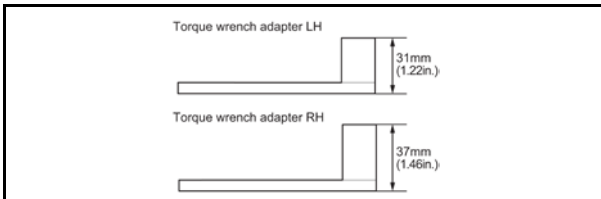


- f) Place the fuel tank band sub-assembly and tighten the bolts of the front side.

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

- g) Using the torque wrench adapter (provided), tighten the bolts of the rear side.

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)



HINT:

The torque wrench adapter LH and RH (provided) are different in size. Make sure to check and use the correct adapter.

NOTE:

- Connect torque wrench straight to the torque wrench adapter.
- Use the following formula to calculate the reading of the torque wrench when an extension tool is used.

Connect straight

Torque Spec: 14 ft.lbs

Length of Crowfoot (C): inches	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	
	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5

Computation expression $T' = T \times L2 / (L1 + L2)$

T'	Reading value of torque wrench [N*m(kgf*cm, ft.*lbf)]
T	Specified torque [N*m(kgf*cm, ft.*lbf)]
L1	Effective range of the extended tool [mm] (90mm)
L2	Effective range of the torque wrench [mm]

R1409290017AE

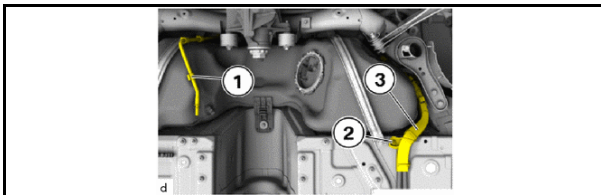
Torque Wrench Setting (ft.lbs)

Length of Torque Wrench (L): inches

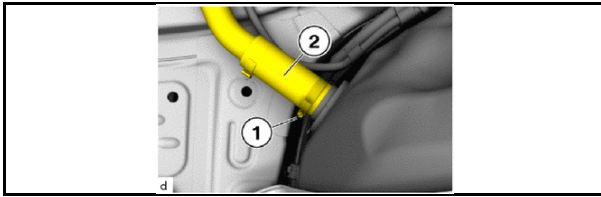
12.0	12.5	13.0	13.5	14.0	14.5
10.8	10.9	11.0	11.1	11.2	11.3

Torque Setting = $\frac{\text{Torque Spec} \times L}{C + L}$

L	Length of torque wrench (in.)
C	Length of crowfoot wrench (in.)



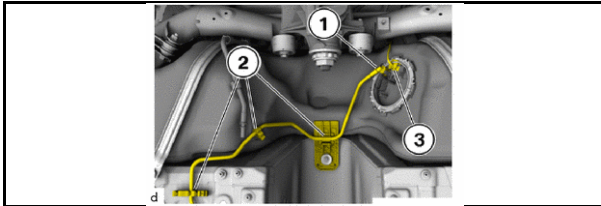
- h) Position the purge air line (1).
- i) Position the cable channel (3) and tighten the nut (2).
- j) Secure the rubber hose (2) on the fuel tank.



- k) Tighten the hose clamp (1).
Torque: 4.0 N*m (41 kgf*cm, 35 in.*lbf)



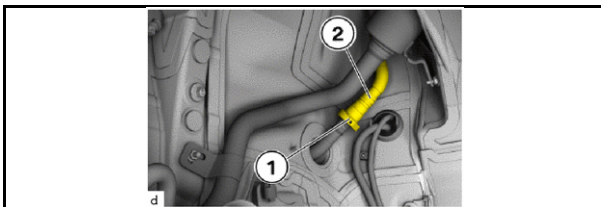
- l) Install the 2 nuts.
Torque: 3.3 N*m (34 kgf*cm, 29 in.*lbf)



- m) Connect and lock the fuel line (1).
 n) Clip the fuel line (1) into the holder (2).
 o) Connect connectors (3) and lock.



- p) Connect and lock the snap fastener (1).
 q) Clip the tank ventilation line into the holder (2).

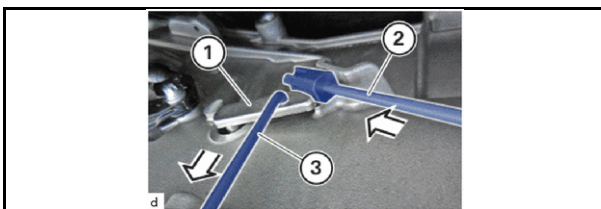


- r) Push on the tank ventilation line (2).
 s) Connect and lock the snap fastener (1).

4. INSTALL PROPELLER SHAFT ASSEMBLY WITH CENTER BEARING

NOTE:

- **DO NOT** damage the propeller shaft assembly with center bearing during installation.
- **Failing to observe the installation guidelines for the propeller shaft on the rear axle differential may cause severe damage.**
 - **Always** replace the insert nut on the rear axle differential. **Screw locking must be available.**
 - **Strictly observe a minimum hardening time of 3 hours after having screwed in the insert nut. The hardening time may be longer at lower temperatures.**



- a) Pull selector shaft journal (1) downwards using special tool 2 355 850 (3).

SST 09700-WA050

- b) Install special tool 2 355 850 (2) between selector shaft journal (1) and transmission housing.

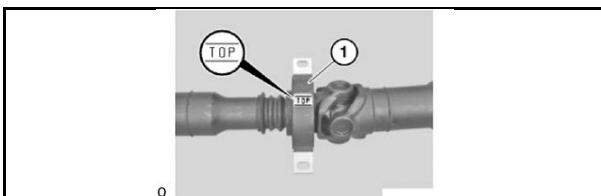
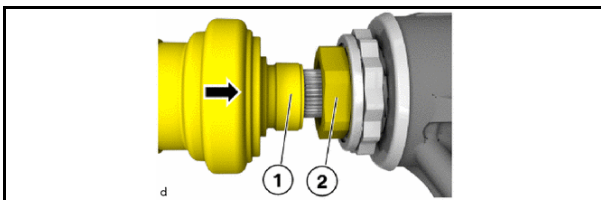
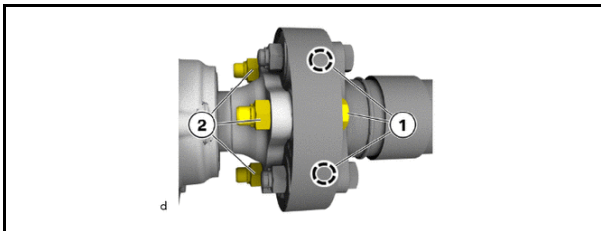
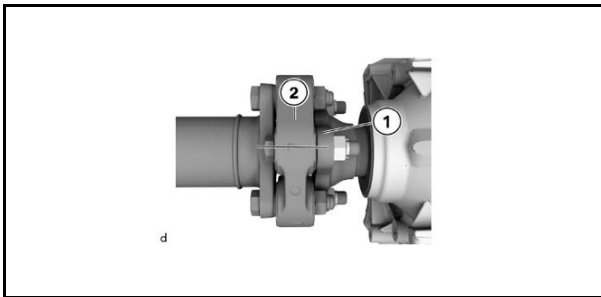
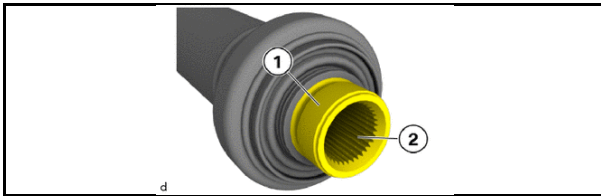
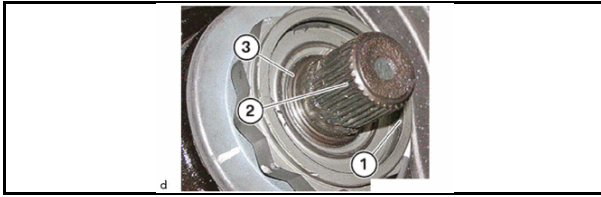
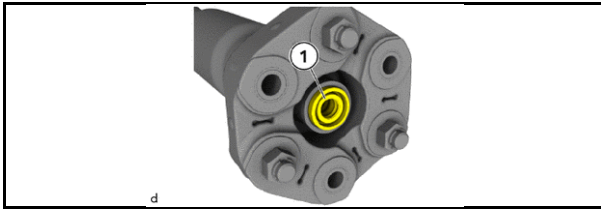
SST 09700-WA050

HINT:

The parking lock is unlocked.

NOTE:

You will need to lock or release the parking lock as needed during removal.



- c) Check propeller shaft spline sleeve (1) for damage; replace if necessary.
- d) Coat the propeller shaft spline sleeve (1) of the propeller shaft assembly with center bearing with Lubricant Olistamoly 2 LN 584 LO or equivalent molybdenum grease.

- e) Clean all residue from the recessed collar (1) of the flange nut and the gearing (2) on the bevel gear (3) and degrease the components.
- f) Coat the collar insert (1) of the propeller shaft assembly with center bearing with Lubricant Olistamoly 2 LN 584 LO or equivalent molybdenum grease.

NOTE:

- **DO NOT damage the output flange.**
- **Failure to observe the greasing specifications may lead to damage on the output flange.**
 - **DO NOT contaminate the thread of the output flange with grease.**

- g) Remove adhesive residue from the thread (1) of the propeller shaft hub and clean it.
- h) Clean the hub gearing (2) and subsequently coat it with grease.
- i) Replace insert nut.
- j) Insert the **NEW** insert nut.

Parts No.: 41204-WAA01

- k) Replace the seal and the retaining clip.
- l) Position the seal and the retaining clip.
- m) In order to avoid a humming noise of the drivetrain after reinstalling the propeller shaft assembly with center bearing: It is essential to reassemble the three-hole flange with the flexible coupling in the highlighted position.

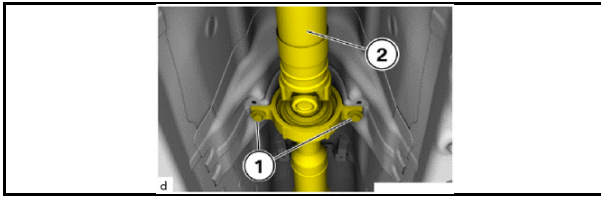
NOTE:

The mark makes it possible for the propeller shaft assembly with center bearing to be installed again in the same position. This should prevent a humming noise from the drive train during driving.

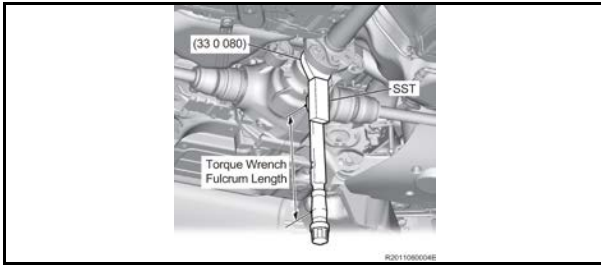
- n) Replace the 18 mm bolts and the 18 mm nuts.
- o) Temporarily install the propeller shaft assembly with center bearing with the **NEW** 18 mm bolts and 18 mm nuts.

**Parts No.: 90118-WA203 (Bolt for engine model: B58)
90118-WA834 (Bolt for engine model: B48)
90118-WA699 (Nut for engine model: B58)
90118-WA205 (Nut for engine model: B48)**

- p) Push the propeller shaft assembly with center bearing (1) in the direction of the arrow against the insert nut (2) up to the limit position.
- q) Manually screw on and tighten the insert nut (2) onto the propeller shaft assembly with center bearing (1) by a minimum of two threads.
- r) center mount with TOP marking:
 - (1) The center mount (1) must be installed with the TOP marking at the top in the gearbox tunnel.



s) Install the propeller shaft assembly with center bearing (2) with the bolts (1).



t) Tighten the insert nut in anti-clockwise direction using SST 0 496 959 (33 0 080) and SST.

SST 09900-WA280, 09500-WA170

Torque: 100 N*m (1020 kgf*cm, 74 ft.*lbf)

NOTE:

- **DO NOT** damage the flange nut.
- **Failure to observe the installation specifications may lead to serious damage to the flange nut and the rear axle differential.**
- **DO NOT** use the double hexagon flange nut as counter support.
- **Screw in the insert nut within 5 minutes.**

DO NOT start the engine within 3 hours after tightening the insert nut

NOTE:

- **Connect SST straight to the torque wrench.**
- **Use the following formula to calculate the reading of the torque wrench when an extension tool is used.**

Connect straight

Torque Spec: 74 ft.lbs

Length of Crowfoot (C): inches

	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5
4.00	52.9	53.6	54.3	54.9	55.5	56.1	56.6	57.1	57.6	58.0

Computation expression $T' = T \times L2 / (L1 + L2)$

T'	Reading value of torque wrench [N*m(kgf*cm, ft.*lbf)]
T	Specified torque [N*m(kgf*cm, ft.*lbf)]
L1	Effective range of the extended tool [mm] (100mm)
L2	Effective range of the torque wrench [mm]

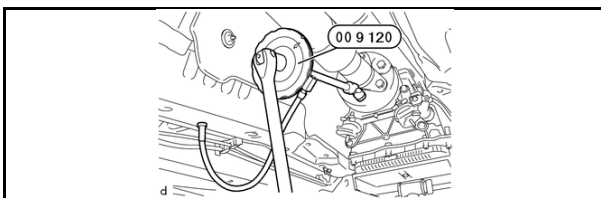
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Torque Wrench Setting (ft.lbs)

Length of Torque Wrench (L): inches

Torque Setting = $\frac{\text{Torque Spec} \times L}{C + L}$

L	Length of torque wrench (in.)
C	Length of crowfoot wrench (in.)

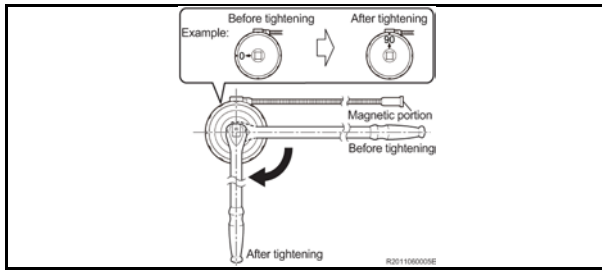


u) Screw the insert nut within 5 min.
 v) Hold down the 18 mm bolts of the flexible coupling on the 18 mm nuts and tighten over the 18 mm bolts.

SST 09900-WA010

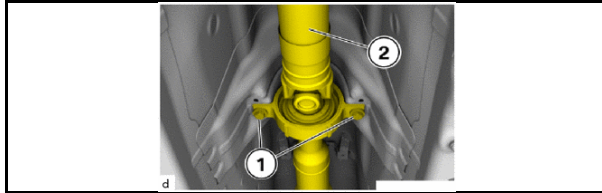
Torque: 55 N*m (561 kgf*cm, 41 ft.*lbf)

w) Tighten the 18 mm bolts an additional 90° and counter support them at the 18 mm nuts.



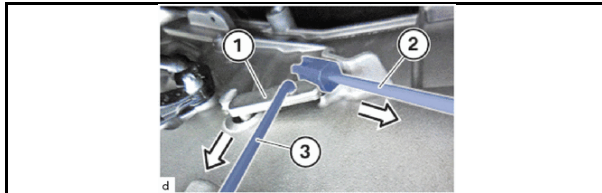
HINT:

- The magnetic portion is used to secure the gauge to the vehicle.
- After first adjusting the needle of the gauge to 0°, tighten to the specified angle.
- Perform the work procedure carefully so that the gauge, etc. does not become tilted.



x) Tighten the bolts.

Torque: 21.4 N*m (218 kgf*cm, 16 ft.*lbf)



y) Pull selector shaft journal (1) downwards using special tool 2 355 850 (3).

SST 09700-WA050

z) Remove special tool 2 355 850 (2).

SST 09700-WA050

HINT:

The parking lock is locked.

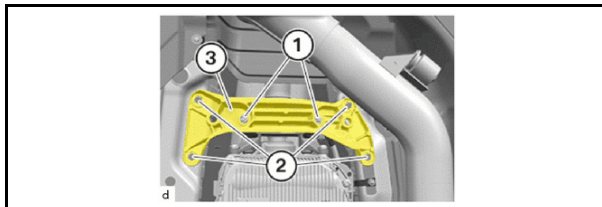


5. INSTALL No.1 FLOOR HEAT INSULATOR

a) Install the No. 1 floor heat insulator.

b) Install the nuts and tighten.

Torque: 3.0 N*m (31 kgf*cm, 27 in.*lbf)



6. INSTALL REAR ENGINE MOUNTING MEMBER

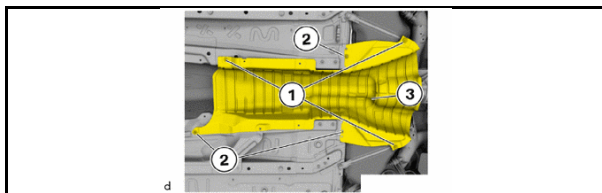
a) Install the rear engine mounting member (3).

b) Tighten the nuts (1).

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

c) Tighten down the bolts (2).

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)



7. INSTALL FRONT NO. 1 FLOOR HEAT INSULATOR

a) Position the front No. 1 floor heat insulator of the tank.

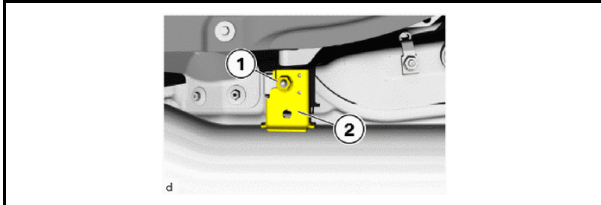
b) Tighten the sheet metal nuts.

Torque: 3.0 N*m (31 kgf*cm, 27 in.*lbf)

8. INSTALL EXHAUST PIPE ASSEMBLY (for B48)



- **Hot surfaces. Risk of burning!**
 - Perform all work only on components that have cooled down.
- **Component with heavy weight. Danger of injury!**
 - Note component's center of gravity.
 - Support component using a jack.
 - Secure component against falling off the jack.
- **Heavy component. Heavy components can lead to injury or damage.**
 - Remove and install heavy components with the aid of another person/other persons.



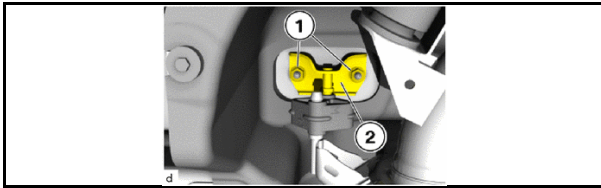
a) Insert and install the exhaust pipe assembly with the help of another person.

b) Replace **NEW** nut.

Parts No.: 90118-WA264

c) Tighten the nut on the holder.

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

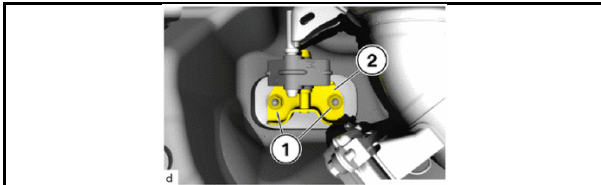


d) Replace **NEW** nuts.

Parts No.: 90118-WA063

e) Tighten the nuts on the holder.

Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

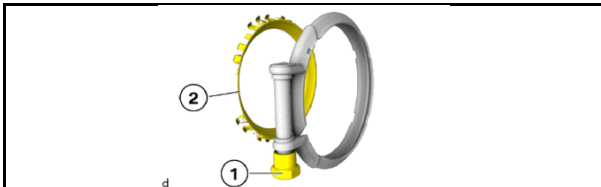


f) Replace **NEW** nuts.

Parts No.: 90118-WA063

g) Tighten the nuts on the holder.

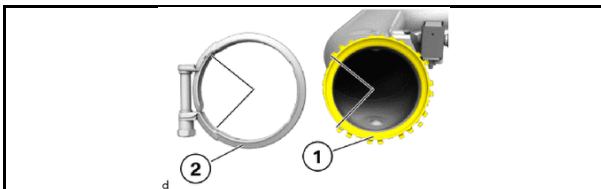
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)



h) for **NEW** V-band Clamp:

(1) Unscrew the nut (1) and remove the sealing ring (2).

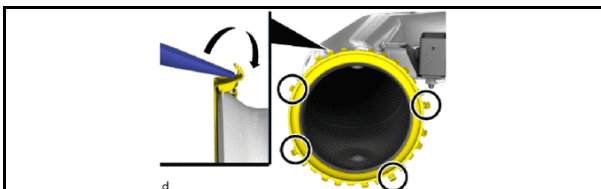
Parts No.: 90118-WA472



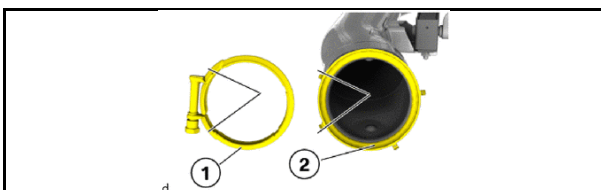
(2) Mount the sealing ring (1) on the exhaust pipe assembly.

NOTE:

Make sure that the sealing ring (1) is correctly positioned for the V-clip (2).



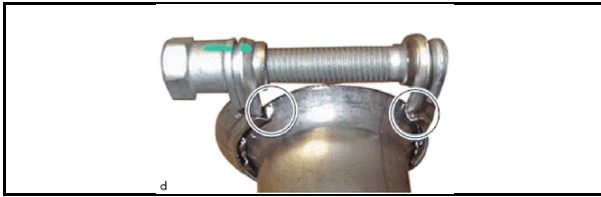
(3) Bend all sheet metal tabs over with a suitable tool, except those in the marked areas.



(4) Mount the V-clip (1) on the sealing ring (2).

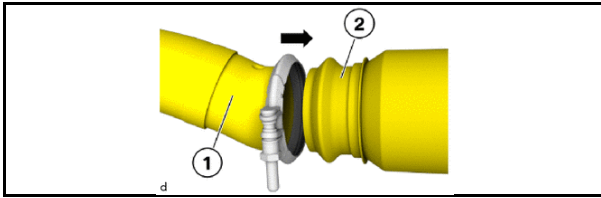
NOTE:

Make sure that the V-clip (1) is positioned correctly on the sealing ring (2).

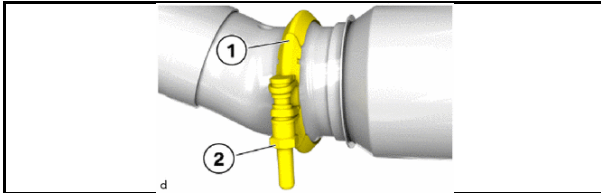


NOTE:

Make sure that the V-clip rests against the sheet metal tabs after mounting (marks).



- (5) Connect the exhaust pipe assembly (1) with the catalytic converter (2) and position correctly.

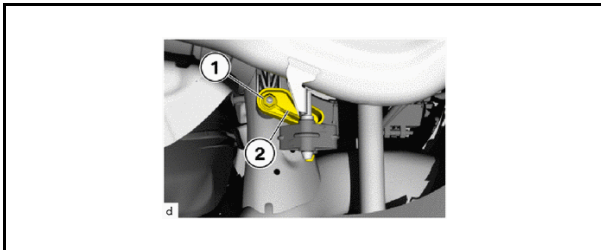


NOTE:

Make sure that V-clip (1) is fitted correctly.

- (6) Tighten down screw (2).

Torque: 25 N*m (255 kgf*cm, 18 ft.*lbf)



- i) Check the rubber mounts for damage and replace, if necessary.

- j) Replace **NEW** nut.

Part No.: 90118-WA063

- k) Tighten the nut on the holder.

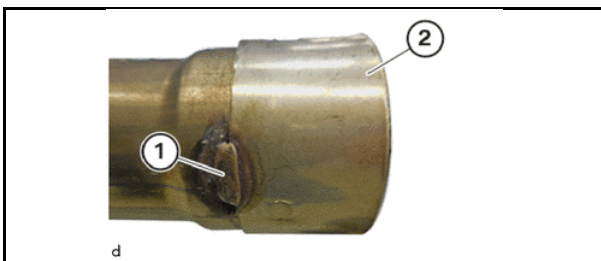
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

- l) Connect connectors and lock.

9. INSTALL EXHAUST PIPE ASSEMBLY (for B58)



- **Hot surfaces. Risk of burning!**
 - Perform all work only on components that have cooled down.
- **Component with heavy weight. Danger of injury!**
 - Note component's center of gravity.
 - Support component using a jack.
 - Secure component against falling off the jack.
- **Heavy component. Heavy components can lead to injury or damage.**
 - Remove and install heavy components with the aid of another person/other persons.



- a) for **NEW** Ribbon Clamp:



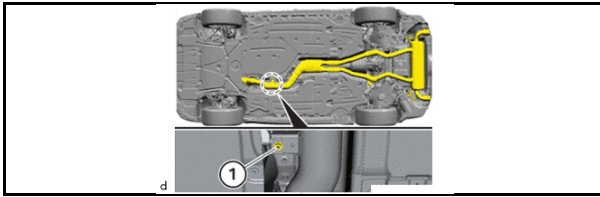
Ensure the exhaust is away from fuel or any other potential source of ignition for the following procedure. Failure to follow this procedure can result in fire or explosion

- (1) Open the weld seam (1) with a cutoff wheel.
 (2) Remove the exhaust pipe clamp (2).
 (3) Replace the **NEW** exhaust pipe clamp.

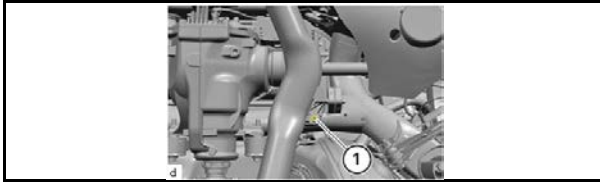
Parts No.: 90118-WA387

- (4) Guide in the exhaust pipe assembly with the assistance of a second person and connect it to the exhaust manifold converter sub-assembly.
 (5) Tighten the exhaust pipe clamp.

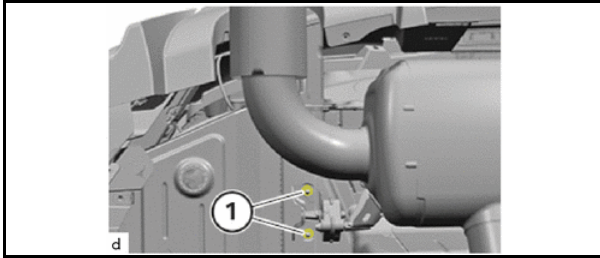
Torque: 26 N*m (265 kgf*cm, 19 ft.*lbf)



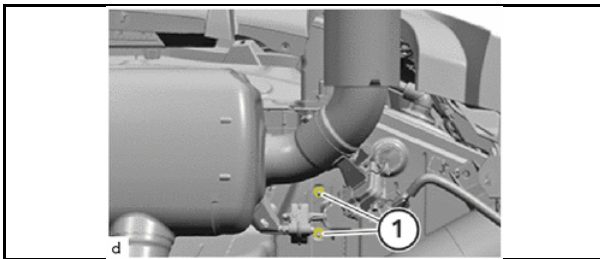
- b) Replace **NEW** nut.
Parts No.: 90118-WA264
 c) Tighten nut.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)



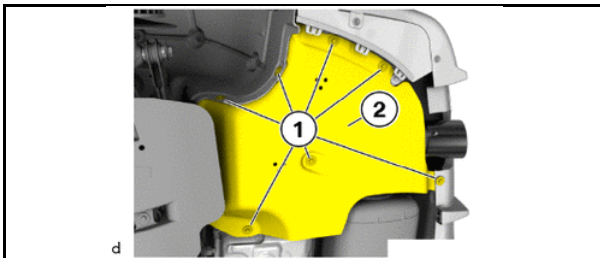
- d) Replace **NEW** nut.
Parts No.: 90118-WA063
 e) Tighten nut.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)



- f) Replace **NEW** nuts.
Parts No. 90118-WA063
 g) Tighten nuts.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)

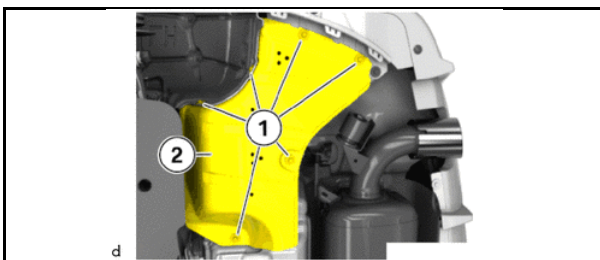


- h) Replace **NEW** nuts.
Parts No.: 90118-WA063
 i) Tighten nuts.
Torque: 19 N*m (194 kgf*cm, 14 ft.*lbf)
 j) Connect connectors and lock.



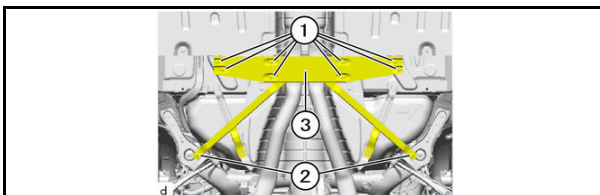
10. INSTALL REAR UNDERBODY PROTECTOR LH&RH (for B48)

- a) Install the rear underbody protector LH (2).
 b) Tighten the screws (1).
Torque: 3.0 N*m (31 kgf*cm, 27 in.*lbf)
 c) Install the rear underbody protector of the RH side using the same procedure.



11. INSTALL REAR UNDERBODY PROTECTOR LH&RH (for B58)

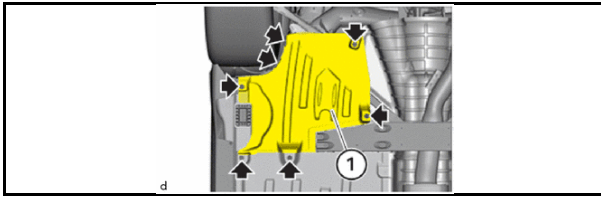
- a) Install the rear underbody protector LH (2).
 b) Tighten the screws (1).
Torque: 3.0 N*m (31 kgf*cm, 27 in.*lbf)
 c) Install the rear underbody protector of the RH side using the same procedure.



12. INSTALL REAR FLOOR PANEL BRACE



- a) Position the rear floor panel brace (3) and tighten the E14 bolts (2).
Torque: 56 N*m (571 kgf*cm, 41 ft.*lbf)
 b) Tighten the bolts (1).
Torque: 28 N*m (286 kgf*cm, 21 ft.*lbf)



13. INSTALL REAR FLOOR SIDE MEMBER COVER LH&RH

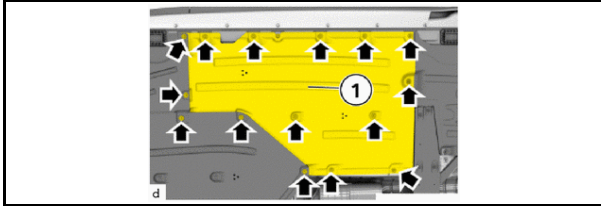
- a) Insert the rear floor side member cover LH (1).
- b) Tighten the nuts and screws.

Torque:

Screw :3.0 N*m (31 kgf*cm, 27 in.*lbf)

Nut : 2.6 N*m (27 kgf*cm, 23 in.*lbf)

- c) Install the rear floor side member cover of the RH side using the same procedure.

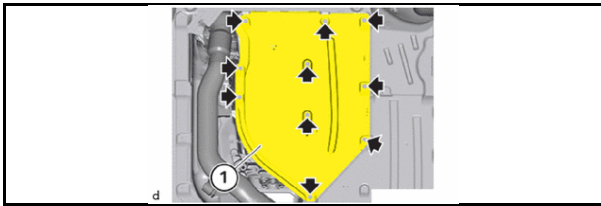


14. INSTALL FRONT FLOOR COVER LH&RH

- a) Insert the front floor cover LH (1).
- b) Tighten all screws and nuts.

Torque: 2.6 N*m (27 kgf*cm, 23 in.*lbf)

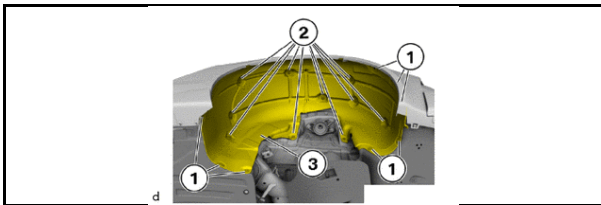
- c) Install the front floor cover of the RH side using the same procedure.



15. INSTALL FRONT FLOOR COVER

- a) Position front floor cover (1).
- b) Tighten screws (arrows).

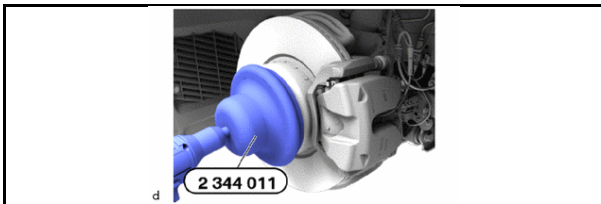
Torque: 3.0 N*m (31 kgf*cm, 27 in.*lbf)



16. INSTALL REAR WHEEL HOUSE LINER RH

- a) Guide the rear wheel arch cover (3) in.
- b) Tighten the bolts (1) and nuts (2).

Torque: 2.6 N*m (27 kgf*cm, 23 in.*lbf)



17. INSTALL WHEEL ASSEMBLY

- a) Clean the contact surfaces between the brake disc and the wheel rim.

NOTE:

The contact surface between the brake disc and the wheel rim must be clean and free from oil and grease. There is otherwise a risk of the wheel becoming loose at a later time.

- (1) Remove dirt, grease residues and corrosion from the contact surface with a drill and the special tool 2 344 011.

SST 09600-WA010

NOTE:

DO NOT operate special tool 2 344 011 with an impact wrench.

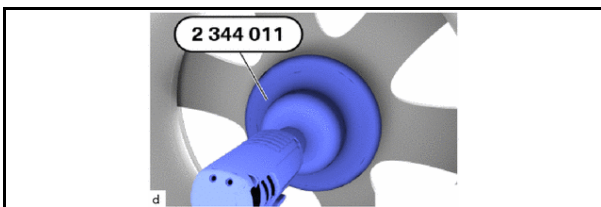
- (2) In the event of grease residue in the area of the axle hub bolt holes, remove and clean the brake disc.

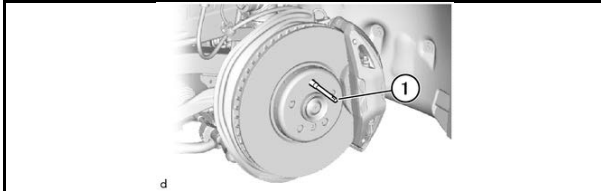
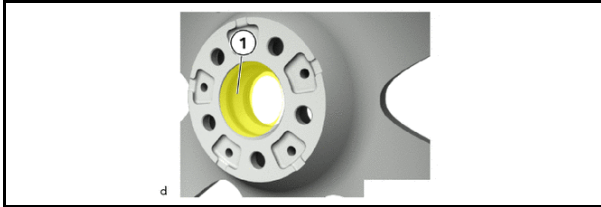
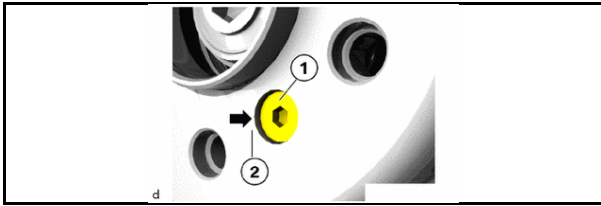
- (3) Remove dirt, grease residues and corrosion from the contact surface with a drill and the special tool 2 344 011.

SST 09600-WA010

NOTE:

DO NOT operate special tool 2 344 011 with an impact wrench.





- (4) Check that the mounting bolt (1) for the brake disc is securely seated.

Torque: 16 N*m (163 kgf*cm, 12 ft.*lbf)

NOTE:

The mounting bolt (1) for the brake disc must not under any circumstances protrude onto the contact surface (2) between the brake disc and the wheel rim.

- (5) Thinly grease the wheel centering (1) in the wheel rim.
Grease: Brake Pad Paste or equivalent

- b) Clean the axle hub bolts.

HINT:

Check the axle hub bolts and threads for damage, replace the axle hub bolts if necessary.

- c) Tighten the axle hub bolts as follows:

- (1) Install SST (1) at the position as shown in the illustration.

SST 09650-14010

NOTE:

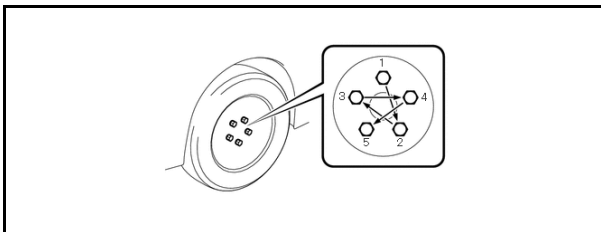
- Place the mounting position of SST at the top.
- Be sure to screw in the thread of SST completely.

- (2) Use SST as a guide to install the wheel assembly and then temporarily install the 4 axle hub bolts by hand.

NOTE:

- Never use impact wrench or electric screwdrivers to screw in and tighten the axle hub bolts.
- The wheel rim must rest uniformly against the brake disc.
- DO NOT apply oil to the axle hub bolts.

HINT: Because this vehicle does not have wheel studs, SST is used as a guide to assist with removal and installation of the wheel assembly.

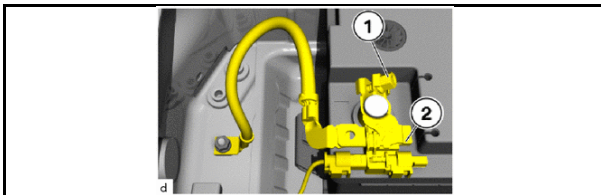


- (3) Remove SST and then temporarily install the axle hub bolt by hand.

- (4) Temporarily tighten the axle hub bolts in the order shown in the illustration.

- (5) Lower the vehicle then fully tighten the axle hub bolts in the order shown in the illustration.

Torque: 140 N*m (1428 kgf*cm, 103 ft.*lbf)

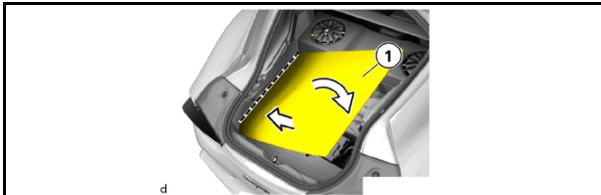


18. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

- a) Connect the No. 3 earth wire (2) to the negative (-) battery terminal.

- b) Tighten nut (1).

Torque: 5.0 N*m (51 kgf*cm, 44 in.*lbf)



19. INSTALL DECK BOARD ASSEMBLY

- a) Slide the left edge of the deck board assembly (1) into the recess in the direction of the arrow of the deck board assembly.

- b) Pivot deck board assembly (1) in the direction of the arrow and position centered in the vehicle.

20. FILL THE FUEL TANK WITH FUEL

21. INSPECT FOR FUEL LEAK

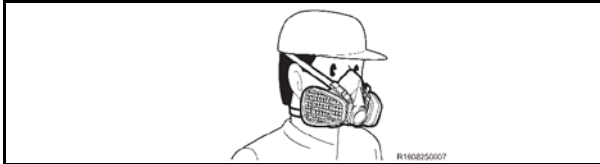
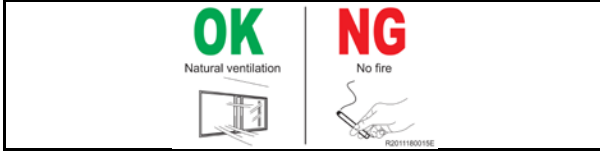
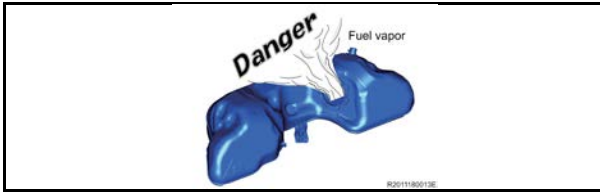
NOTE:

Make sure that more than 3 hours have passed since tightening the insert nut of the propeller shaft.

22. INSPECT FOR EXHAUST GAS LEAK

23. CHECK FOR DTCs

IX. DISPOSE OF FUEL TANK PROPERLY TO PREVENT FIRE (DISCHARGE FUEL VAPOR)



NOTE:

The fuel tank is filled with fuel vapor after removing the fuel and is in dangerous condition. So make sure to discharge the fuel vapor inside the tank following the instructions below.

NOTE:

Make sure to perform work in a well ventilated area and strictly prohibit fire and ignition sources since fuel vapor is going to be discharged from the fuel tank.

NOTE:

Wear an organic solvent mask as needed to prevent feeling sick by inhaling fuel vapor (organic solvent), while making sure natural ventilation.

1. DISCHARGE FUEL VAPOR

- a) Before drying with compressed air, remove the remaining fuel inside fuel tank into a new tank using a hand operated pump (**DO NOT** use electric pump as there is a risk of fire).

NOTE:

Never use the manual pump used to transfer gasoline to transfer kerosene. In case that gasoline remains in the pump, there is a risk of a fire accident.

- b) Blow compressed air from each hole of the fuel tank in order to evaporate all the fuel remaining inside the fuel tank.

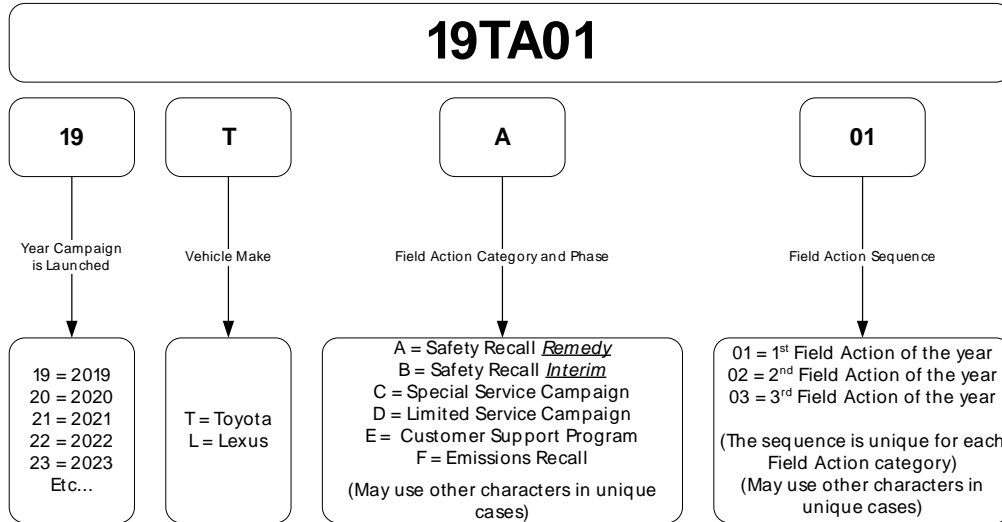
◀ VERIFY REPAIR QUALITY ▶

- Ensure that 3 hours have passed since installing and tightening the prop shaft insert nut before starting the engine
- Ensure there are no fuel leaks around the fuel tank, below the vehicle, or around the filler neck
- Ensure there are no DTC's present
- Ensure the pump is operational by driving the vehicle under various loads.

If you have any questions regarding this update, please contact your regional representative.

X. APPENDIX

A. CAMPAIGN DESIGNATION DECODER



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019
 20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020
 21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021

B. CAMPAIGN PARTS DISPOSAL

As required by Federal Regulations, please make sure all campaign parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, **unless requested for parts recovery return.**