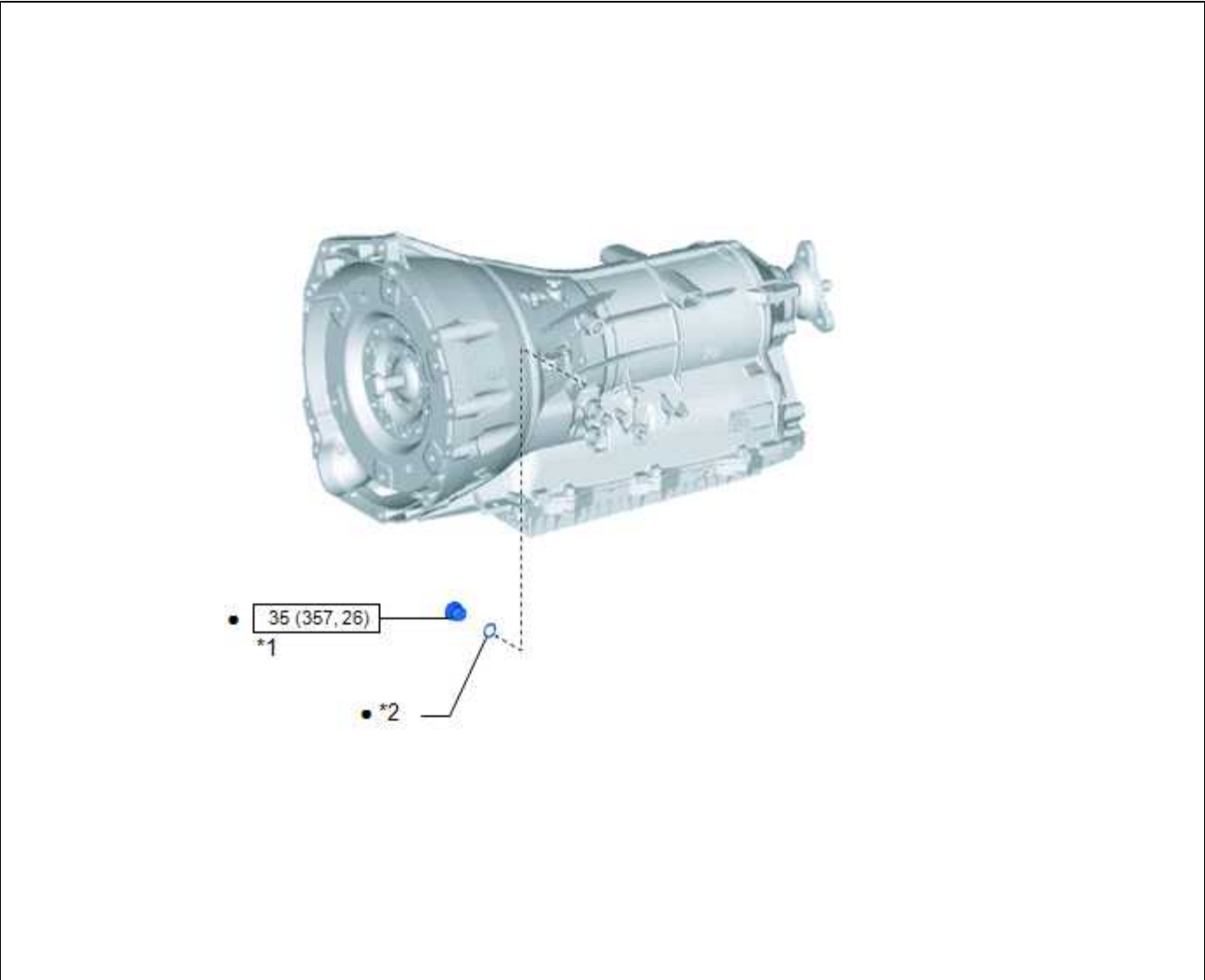


Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC95
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: 8HP51 AUTOMATIC TRANSMISSION FLUID: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	FILLER PLUG	*2	SEALING RING
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC96
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: 8HP51 AUTOMATIC TRANSMISSION FLUID: ADJUSTMENT; 2020 MY Supra [03/2019 -]		

ADJUSTMENT

PROCEDURE

1. REMOVE FRONT FLOOR COVER

Click here [INFO](#)

2. ADJUST AUTOMATIC TRANSMISSION FLUID LEVEL

CAUTION:

- Materials harmful to health.

Contact with fluids harmful to health!

- Note and follow safety information on containers.
- Conduct all work in appropriate personal protective equipment only.

HINT:

- To set the correct oil level, it is mandatory that the service function "ABL Transmission control unit: Oil-level adjustment" is carried out with the diagnosis system.
- Performing oil-level adjustment:

Certain fault memory entries may require an oil-level adjustment in the automatic transmission assembly and after repairs have been completed (e.g. exchange of mechatronics, exchange of the converter, exchange of the automatic transmission assembly, servicing of automatic transmission fluid).

(a) Prerequisite:

- (1) Vehicle in horizontal position.
- (2) The vehicle is secured against rolling away.

(b) Preconditions for the oil-level adjustment with the diagnosis system:

- (1) Precondition for beginning: automatic transmission fluid temperature 30 °C (86 °F) to 40 °C (104 °F).
- (2) Precondition for ending: automatic transmission fluid temperature 40 °C (104 °F) to 50 °C (122 °F).

(c) Connect diagnosis system.

(d) Call up service function (drive).

(e) Carry out oil-level adjustment in accordance with instructions.

(f) Top up the automatic transmission fluid.



(g) Loosen the oil filler plug (1) using the special tool 2 405 614.

SST: 09300-WA070

(h) Top up automatic transmission fluid according to the instructions in the diagnosis system.

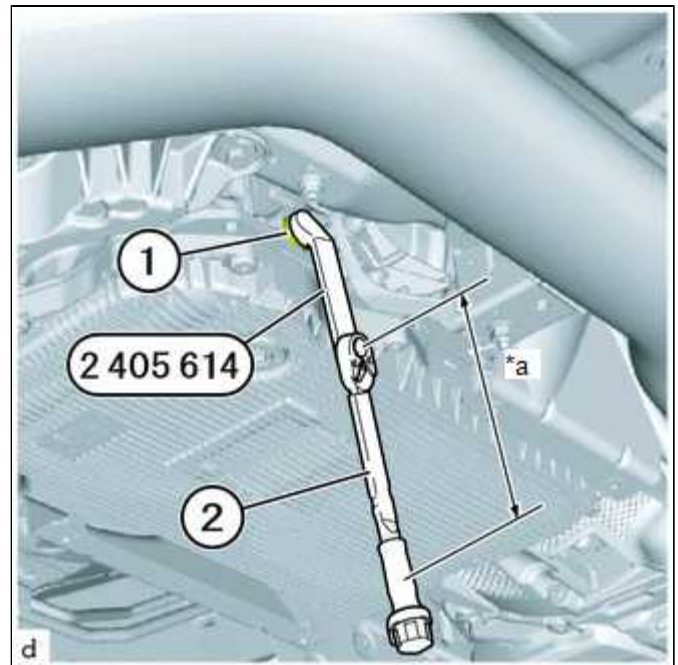
Automatic transmission fluid:

Automatic Gearbox Oil ATF 3+

Standard Capacity:

9.1 liters (9.6 US qts, 8.0 Imp. qts)

(i) Replace the oil filler plug (1) and the sealing ring.



*a	Torque Wrench Fulcrum Length
----	------------------------------

(j) Make sure that the special tool 2 405 614 and the torque wrench (2) align while tightening the oil filler plug (1).

SST: 09300-WA070

Torque:

Specified tightening torque :

35 N·m {357 kgf·cm, 26 ft·lbf}

HINT:

Calculate the torque wrench reading when changing the fulcrum length of the torque wrench.

[Click here](#) [INFO](#)

3. INSTALL FRONT FLOOR COVER

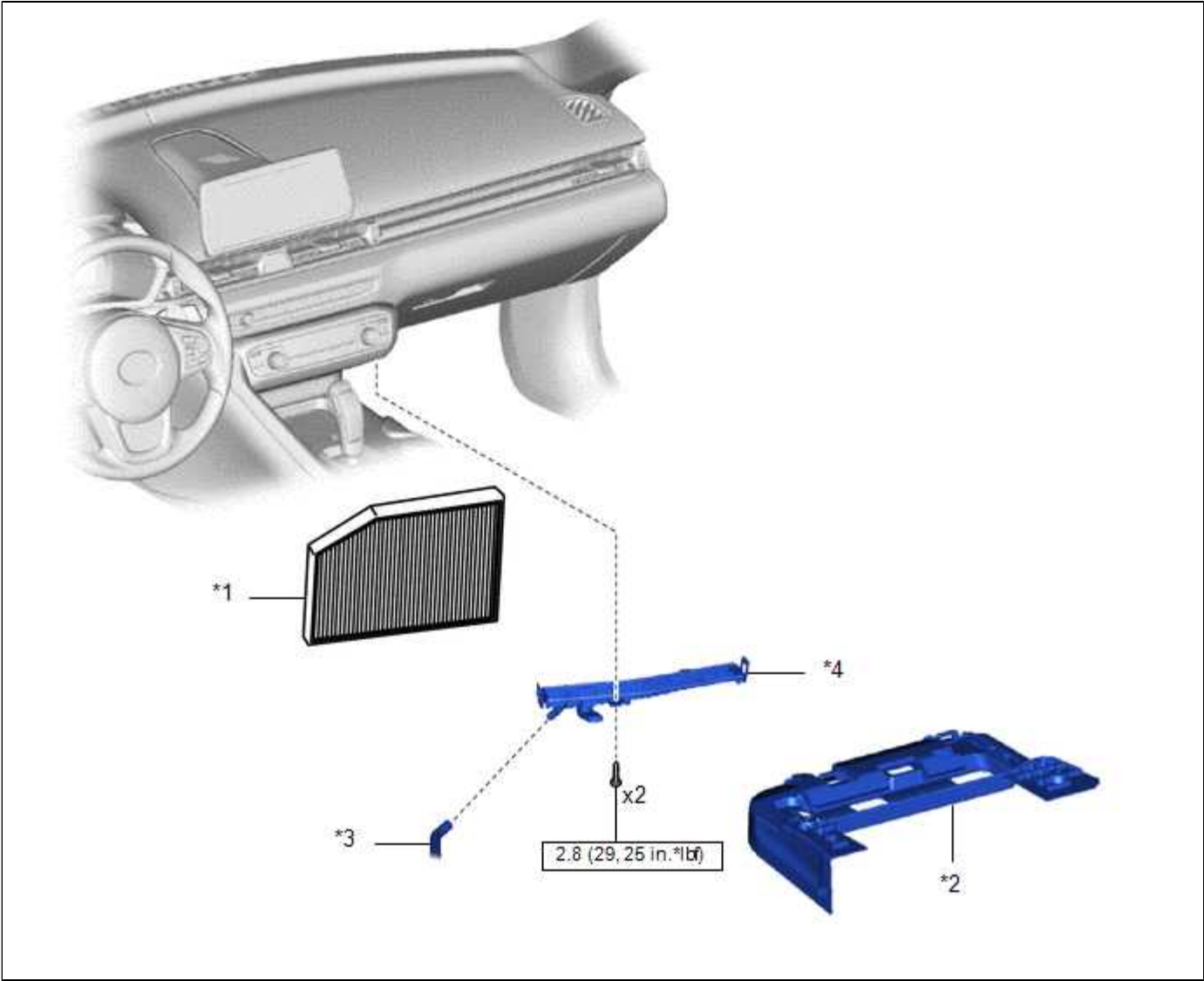
[Click here](#) [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8R
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: AIR CONDITIONING FILTER: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	CLEAN AIR FILTER	*2	NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY
*3	DRAIN COOLER HOSE	*4	COVER
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8S
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: AIR CONDITIONING FILTER: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

NOTICE:

- Damage to the heating and air conditioning system.
- Use of unapproved clean air filter may cause impairment of functions in the air conditioning.
- Only operate the heating and air conditioning system with the specified clean air filter.

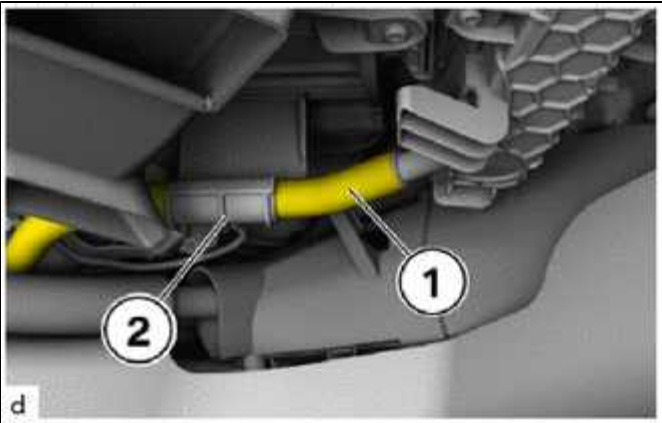
PROCEDURE

1. REMOVE NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

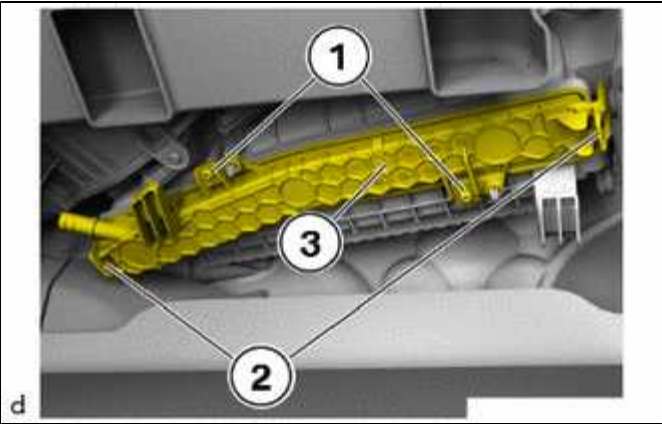
Click here [INFO](#)

2. REMOVE CLEAN AIR FILTER

(a) Pull off the drain cooler hose (1).



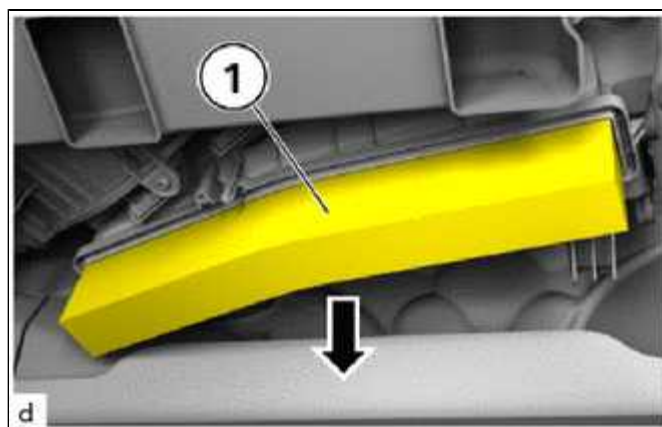
(b) Thread the drain cooler hose (1) out of the bracket (2).



(c) Remove T20 screws (1).

(d) Disengage claws (2) and remove cover (3).

(e) Remove the clean air filter (1) as shown in the illustration.



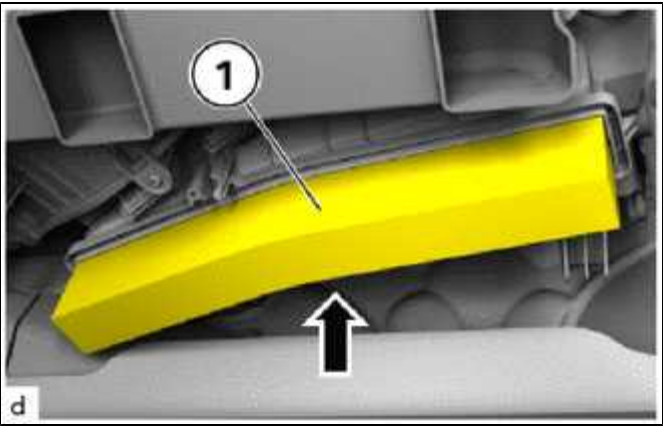
Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8T
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: AIR CONDITIONING FILTER: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

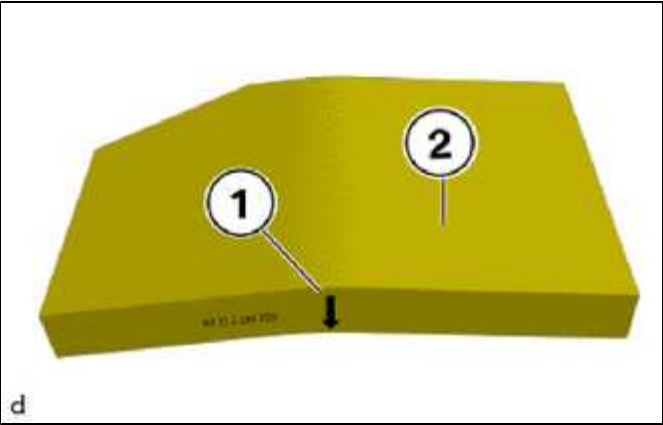
PROCEDURE

1. INSTALL CLEAN AIR FILTER

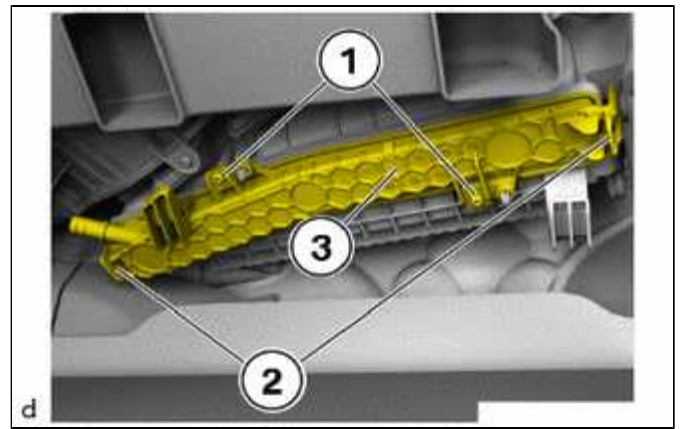
(a) Install the clean air filter (1) as shown in the illustration.



HINT:
Please note that the arrow (1) on the clean air filter (2) must always point in the direction of travel during installation.



(b) Make sure that the cover (3) is correctly inserted into the latch mechanisms (2) of the blower housing.

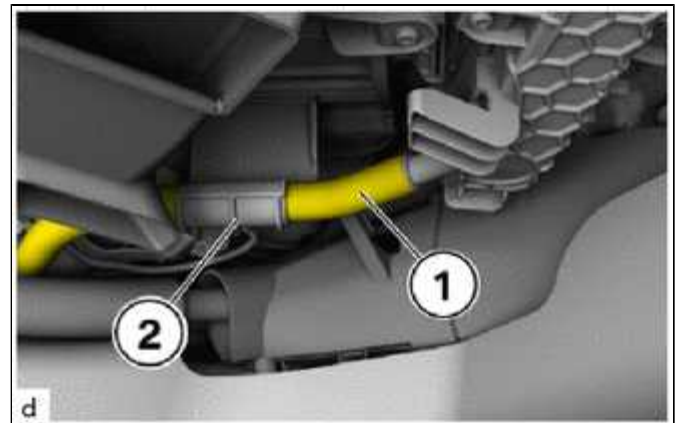


(c) Tighten the T20 screws (1).

Torque:

2.8 N·m {29 kgf·cm, 25 in·lbf}

(d) Connect drain cooler hose (1).



(e) Insert the drain cooler hose (1) into the holder (2).

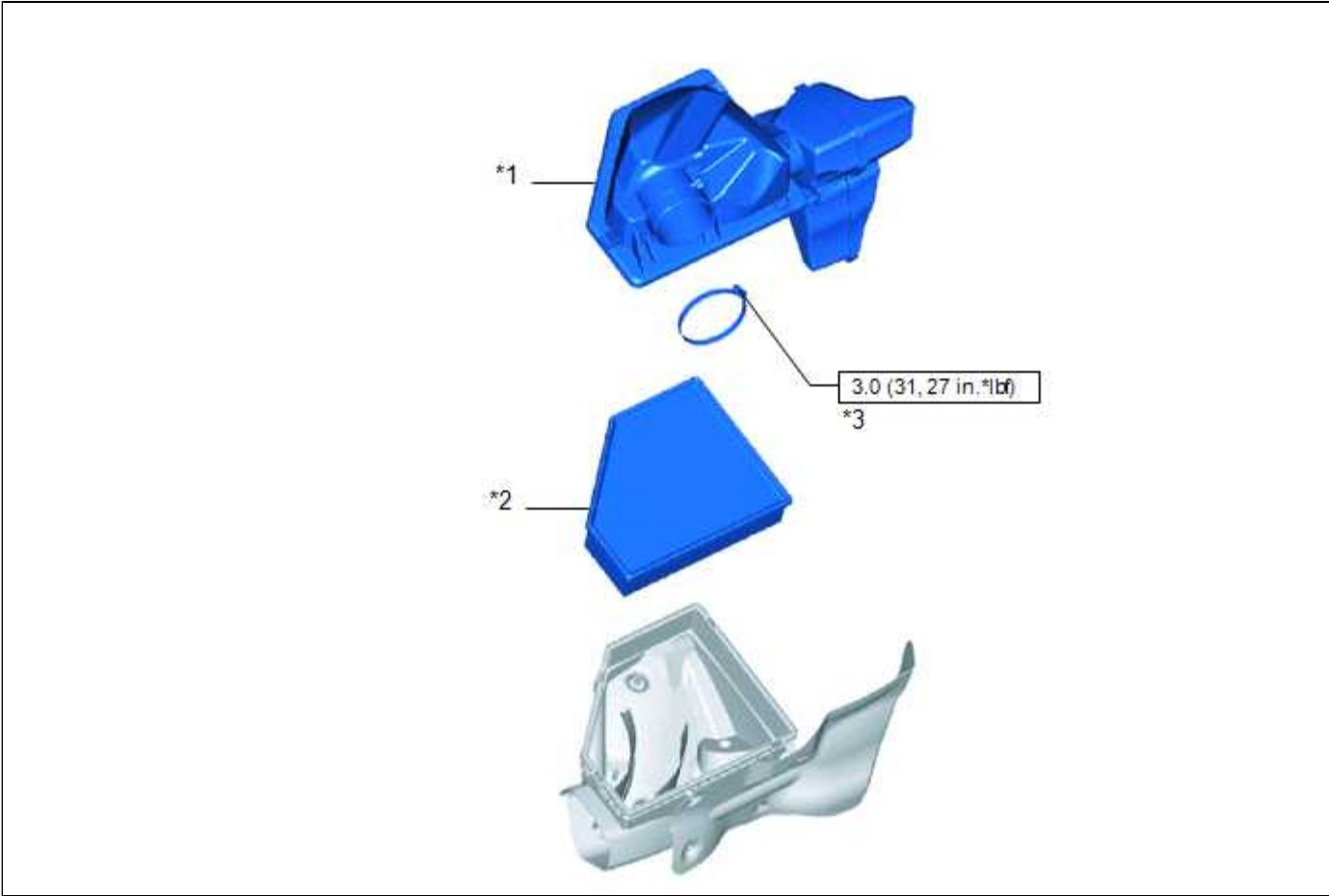
2. INSTALL NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC97
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 AIR CLEANER FILTER ELEMENT: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	AIR CLEANER CAP SUB-ASSEMBLY	*2	AIR CLEANER FILTER ELEMENT SUB-ASSEMBLY
*3	CLAMP	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

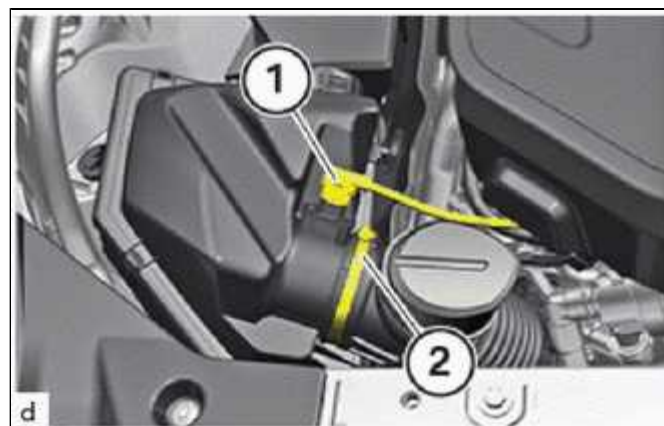
Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC98
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 AIR CLEANER FILTER ELEMENT: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

PROCEDURE

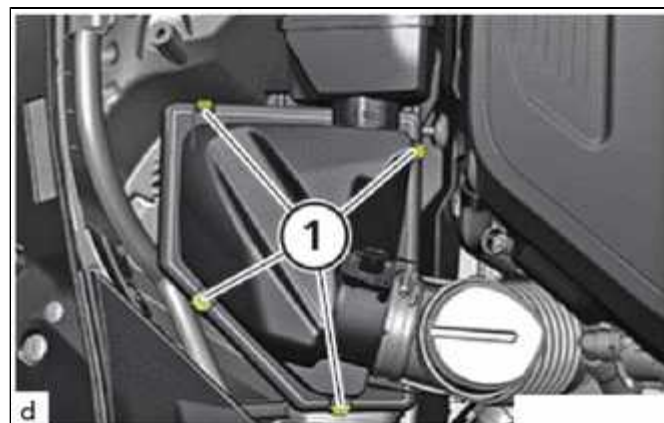
1. REMOVE AIR CLEANER FILTER ELEMENT SUB-ASSEMBLY

(a) Unlock plug connection (1) and disconnect.

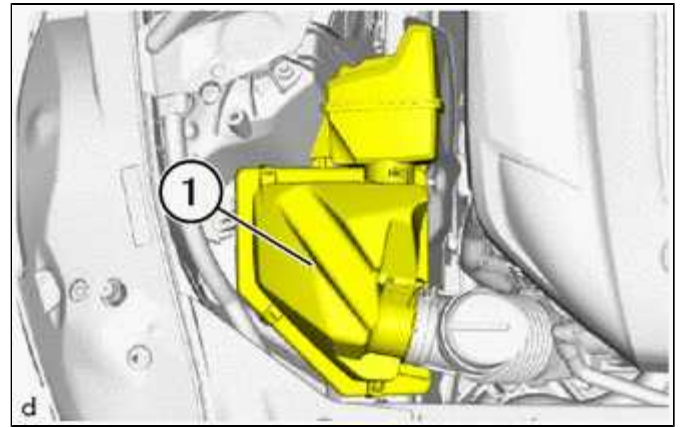


(b) Unfasten clamp (2).

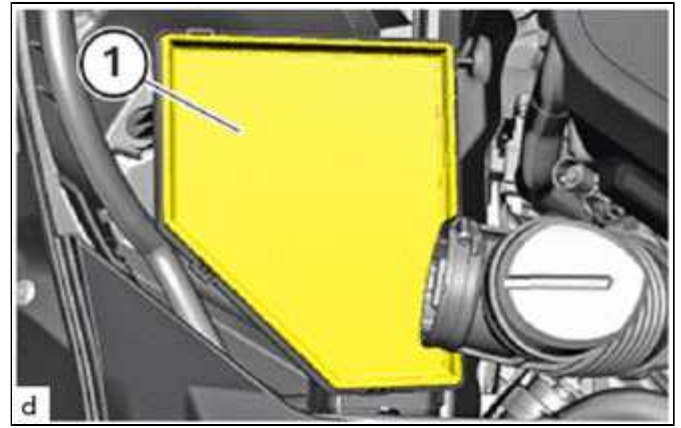
(c) Loosen clamps (1).



(d) Thread out the air cleaner cap sub-assembly (1) and remove.



(e) Remove the air cleaner filter element sub-assembly (1).



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC99
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 AIR CLEANER FILTER ELEMENT: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL AIR CLEANER FILTER ELEMENT SUB-ASSEMBLY

CAUTION:

- Swirling dirt particles caused by compressed air.
- Danger of injury!
 - Collect dirt particles, e.g. when blowing out, use cloth to do so.
 - Wear safety goggles.

- (a) Clean inside of air cleaner case sub-assembly.
- (b) Install the air cleaner filter element sub-assembly.
- (c) Thread in the air cleaner cap sub-assembly and install.
- (d) Lock clamps.
- (e) Connect connectors and lock.

HINT:

- The connector must engage audibly.
 - Note the installation position of the component. The component may be installed in various installation positions.
- (f) Tighten clamp.

Torque:

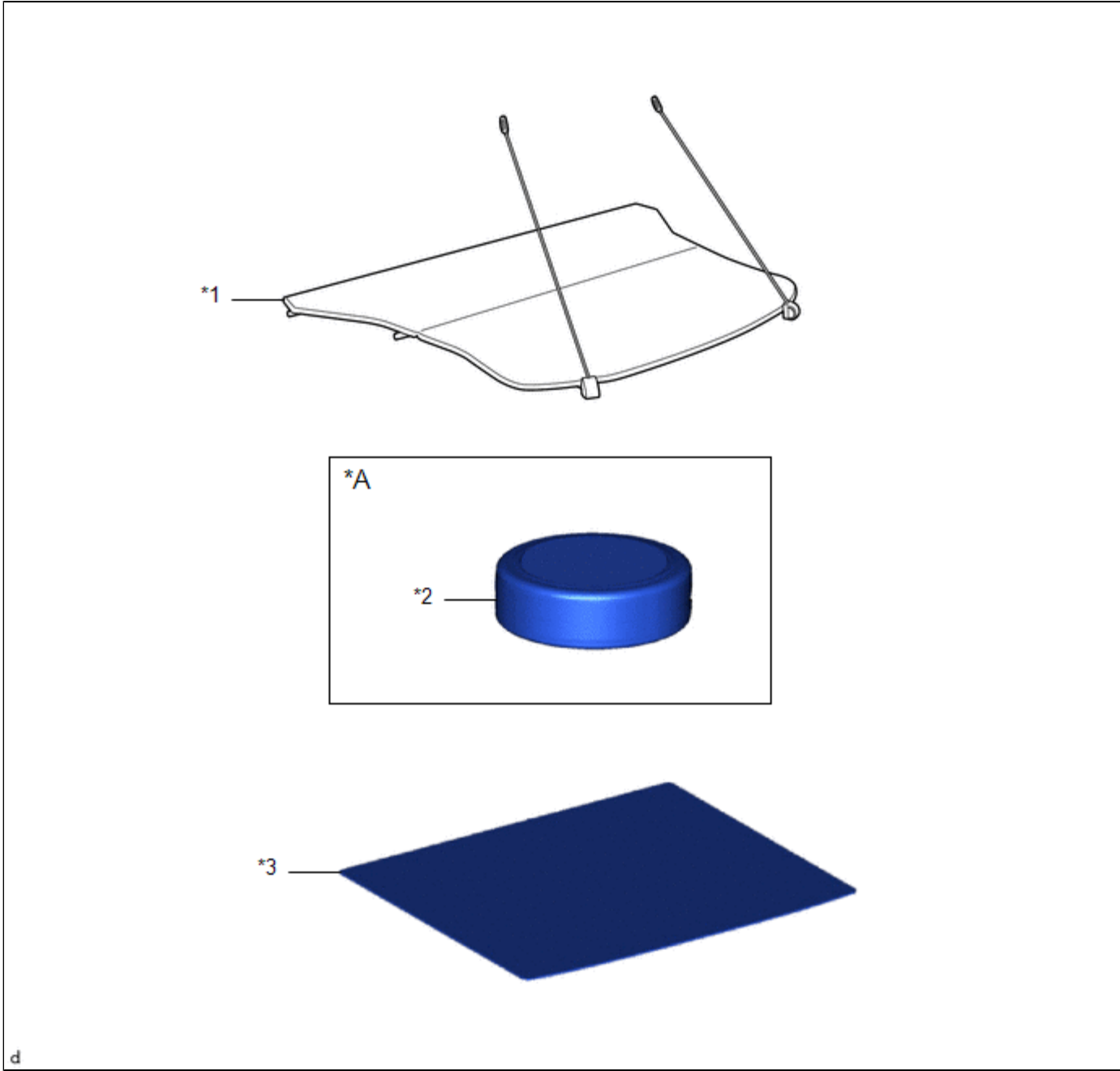
3.0 N·m { 31 kgf·cm, 27 in·lbf }



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCA9
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 BATTERY: COMPONENTS; 2020 MY Supra [03/2019 -]		

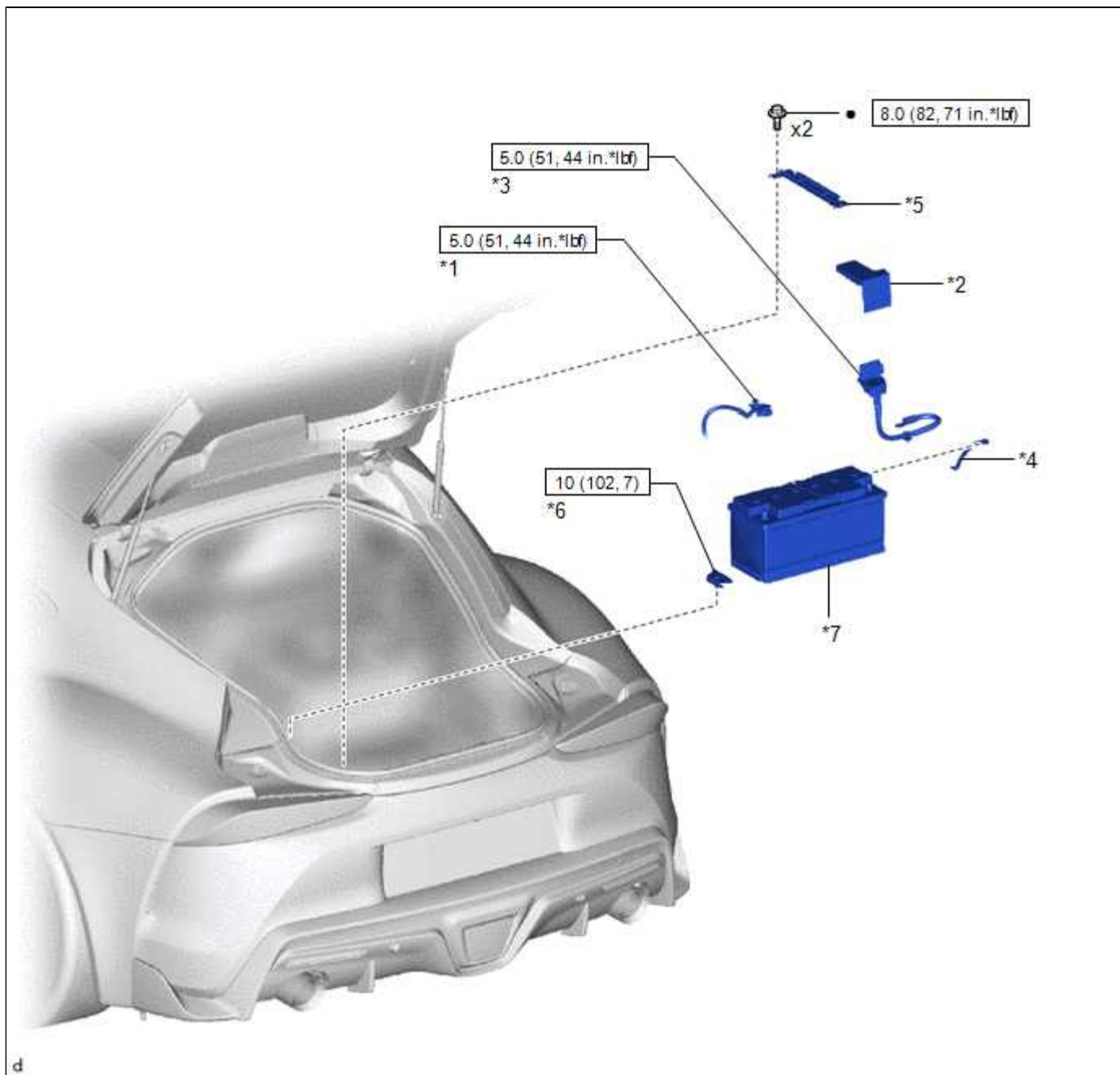
COMPONENTS

ILLUSTRATION



*A	w/ Spare Tire	-	-
*1	PACKAGE TRAY TRIM PANEL ASSEMBLY	*2	SPARE TIRE
*3	DECK BOARD ASSEMBLY	-	-

ILLUSTRATION



*1	NO. 3 EARTH WIRE	*2	CONNECTOR COVER
*3	SAFETY BATTERY TERMINAL	*4	BATTERY HOSE
*5	BRACKET	*6	BATTERY HOLDER
*7	BATTERY	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCA7
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 BATTERY: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

CAUTION:

- Working on 12 V vehicle electrical system.

Risk of short circuits! Risk of fire!

- Disconnect the cable from the negative (-) battery terminal.

- Unprotected battery terminals.

Risk of short circuits! Risk of fire!

- Cover the vehicle battery.

PROCEDURE

1. REMOVE PACKAGE TRAY TRIM PANEL ASSEMBLY

Click here [INFO](#)

2. REMOVE DECK BOARD ASSEMBLY

Click here [INFO](#)

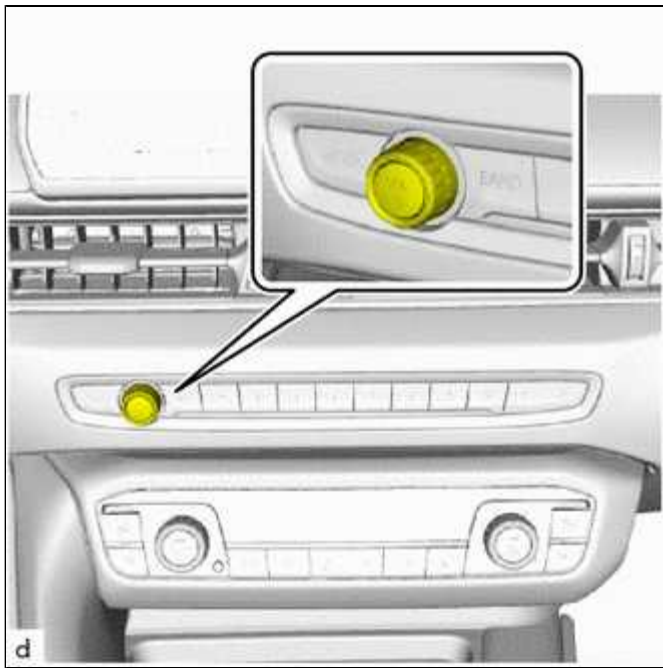
3. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

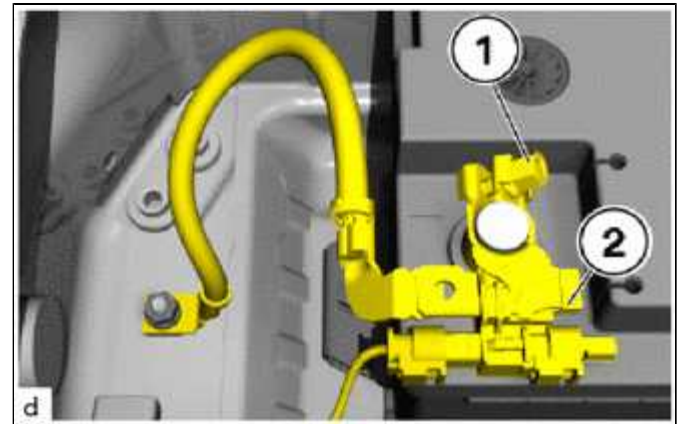
Check that the START-STOP button (engine switch) off.

HINT:

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



(a) Unfasten nut (1).



(b) Disconnect the No. 3 earth wire (2) from the negative (-) battery terminal.

NOTICE:

- Damage to 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 to and fro. Do not pry off using a tool.

4. REMOVE BATTERY

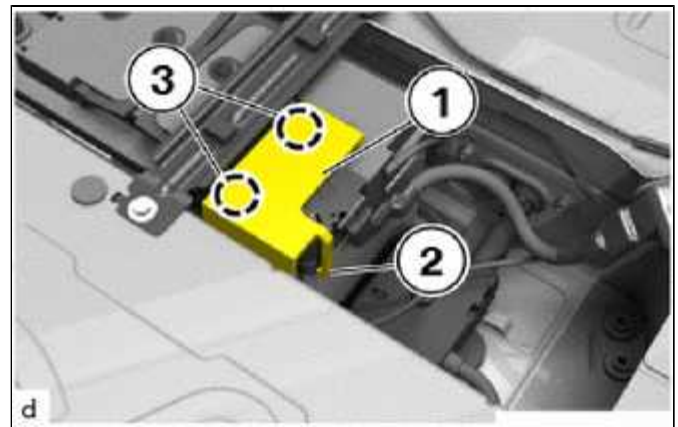
CAUTION:

- Unprotected battery terminals.

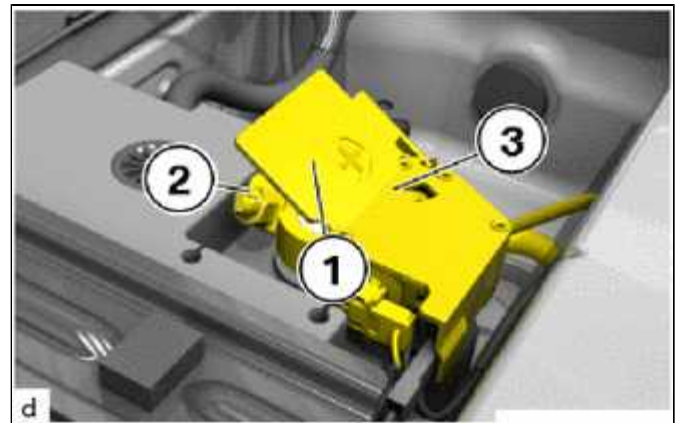
Risk of short circuits! Risk of fire!

- Cover the vehicle battery.

(a) Release latch mechanism (2) and thread the connector cover (1) out the guides (3) to the top and remove.



(b) Open the cover (1) of the safety battery terminal.



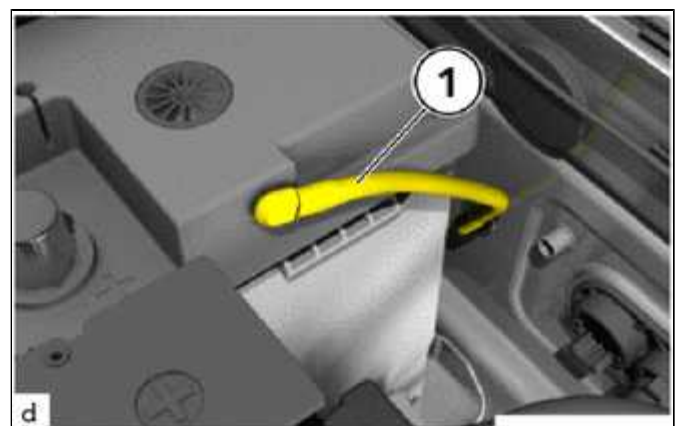
(c) Unfasten nut (2).

(d) Disconnect the safety battery terminal (3) from the positive (+) battery terminal.

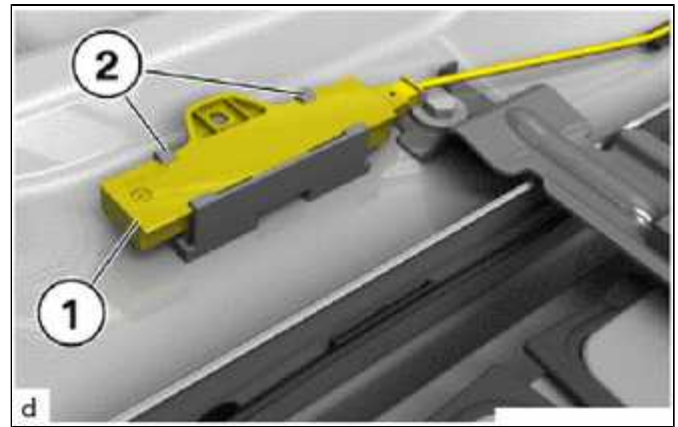
NOTICE:

- Damage to 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 to and fro. Do not pry off using a tool.

(e) Pull off the battery hose (1).

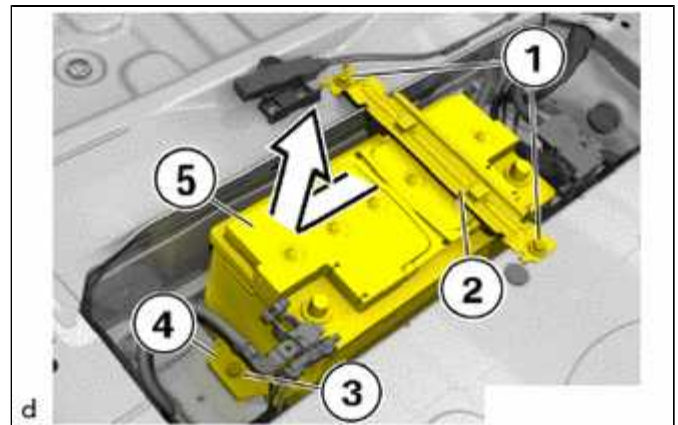


- (f) Disengage the No. 1 indoor electrical key antenna assembly (1) from the latch mechanisms (2) of the holder.



- (g) Set the No. 1 indoor electrical key antenna assembly (1) aside.

- (h) Unscrew the bolts (1) and remove the bracket (2) of the removable panel.



- (i) Unscrew the bolt (3) and remove the battery holder (4).
(j) Remove the battery (5) in the direction of the arrow.

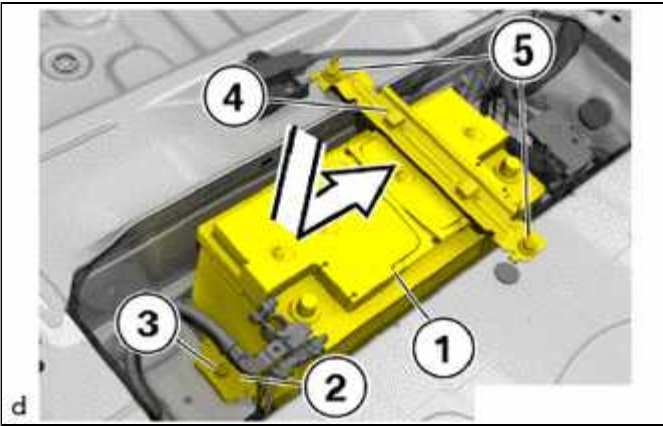
Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCA8
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 BATTERY: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL BATTERY

(a) Install battery (1) in the direction of the arrow.



(b) Position the battery holder (2) and tighten the bolt (3).

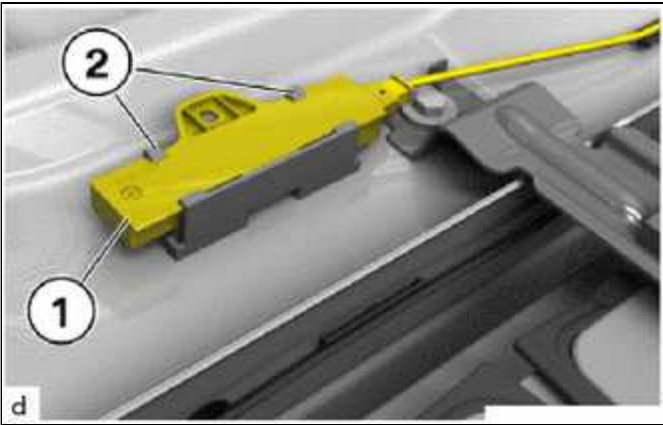
Torque:
10 N·m {102 kgf·cm, 7 ft·lbf}

(c) Replace bolts (5).

(d) Position the bracket (4) of the removable panel and tighten the bolts (5).

Torque:
8.0 N·m {82 kgf·cm, 71 in·lbf}

(e) Clip No. 1 indoor electrical key antenna assembly (1) into the latch mechanisms (2) of the holder.



(f) Mount battery hose and make sure it is fitted correctly.

CAUTION:

- Gas emission.

Danger of injury! Danger of explosion!

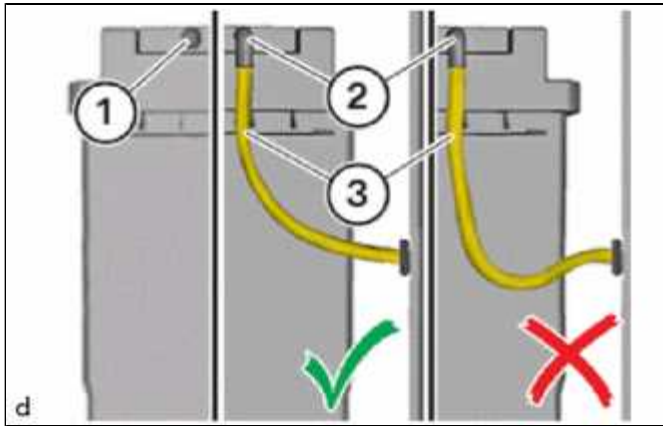
- Assign the vent holes correctly.
- Route the battery hose correctly.

HINT:

The battery has two vent holes, opposite:

One vent hole (1) must be closed correctly with a dummy plug.

The battery hose (3) must be correctly connected and routed at the other vent hole (2).



(1) Check if the vent hole (1) is correctly closed with a dummy plug.

HINT:

No dummy plug.

Close the vent hole (1) correctly with a dummy plug.

(2) Check if the vent hole (2) has a correctly connected battery hose (3).

HINT:

The battery hose (3) is not correctly connected.

At the vent hole (2), connect the battery hose (3) correctly.

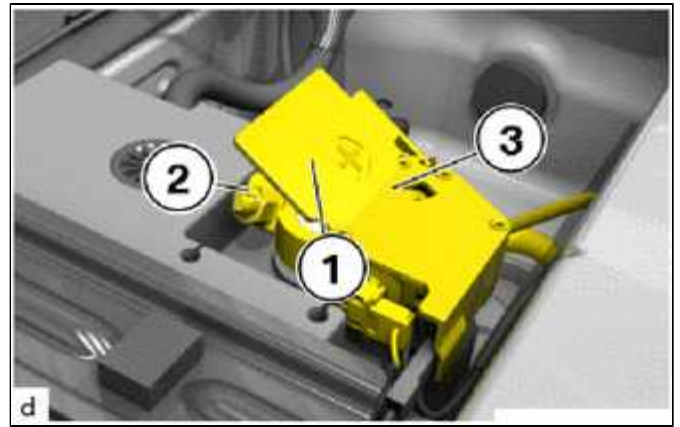
(3) Check if battery hose (3) is routed to the outside with a downhill gradient (no siphon formation!).

HINT:

The battery hose (3) is not correctly routed as shown in the image on the right.

Route the battery hose (3) correctly as shown in the center image.

(g) Connect the safety battery terminal (3) to the positive (+) battery terminal.

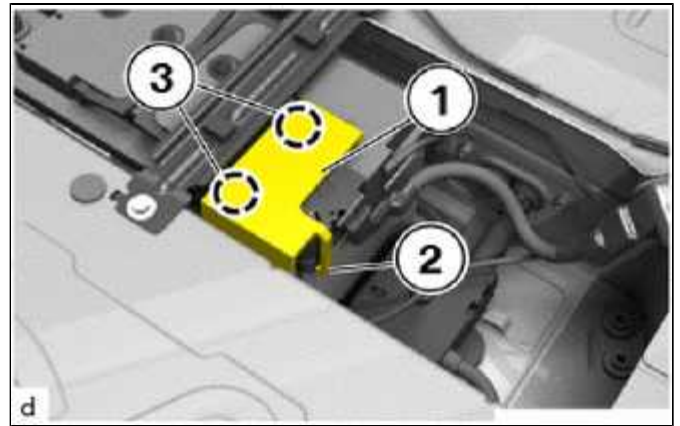


(h) Tighten nut (2).

Torque:

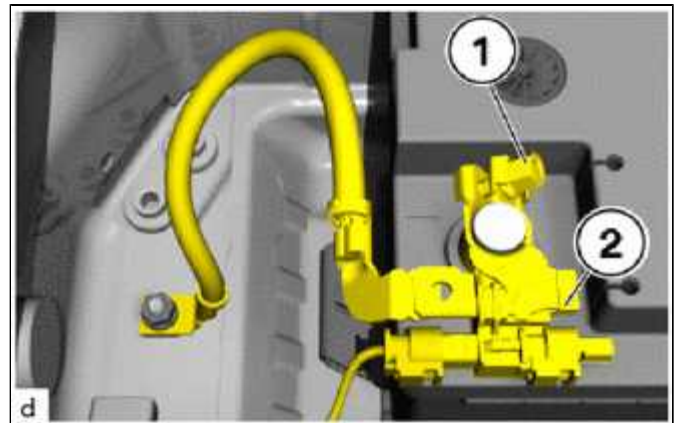
5.0 N·m { 51 kgf·cm, 44 in·lbf }

(i) Close the cover (1) of the safety battery terminal.



(j) Insert the connector cover (1) at the guides (3) and engage in the latch mechanism (2).

2. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL



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

(b) Tighten nut (1).

Torque:

5.0 N·m { 51 kgf·cm, 44 in·lbf }

3. INSTALL DECK BOARD ASSEMBLY

Click here [INFO](#)

4. INSTALL PACKAGE TRAY TRIM PANEL ASSEMBLY

Click here [INFO](#)

5. REGISTER BATTERY EXCHANGE

(a) Connect the diagnosis system to the vehicle and enter the following menus:

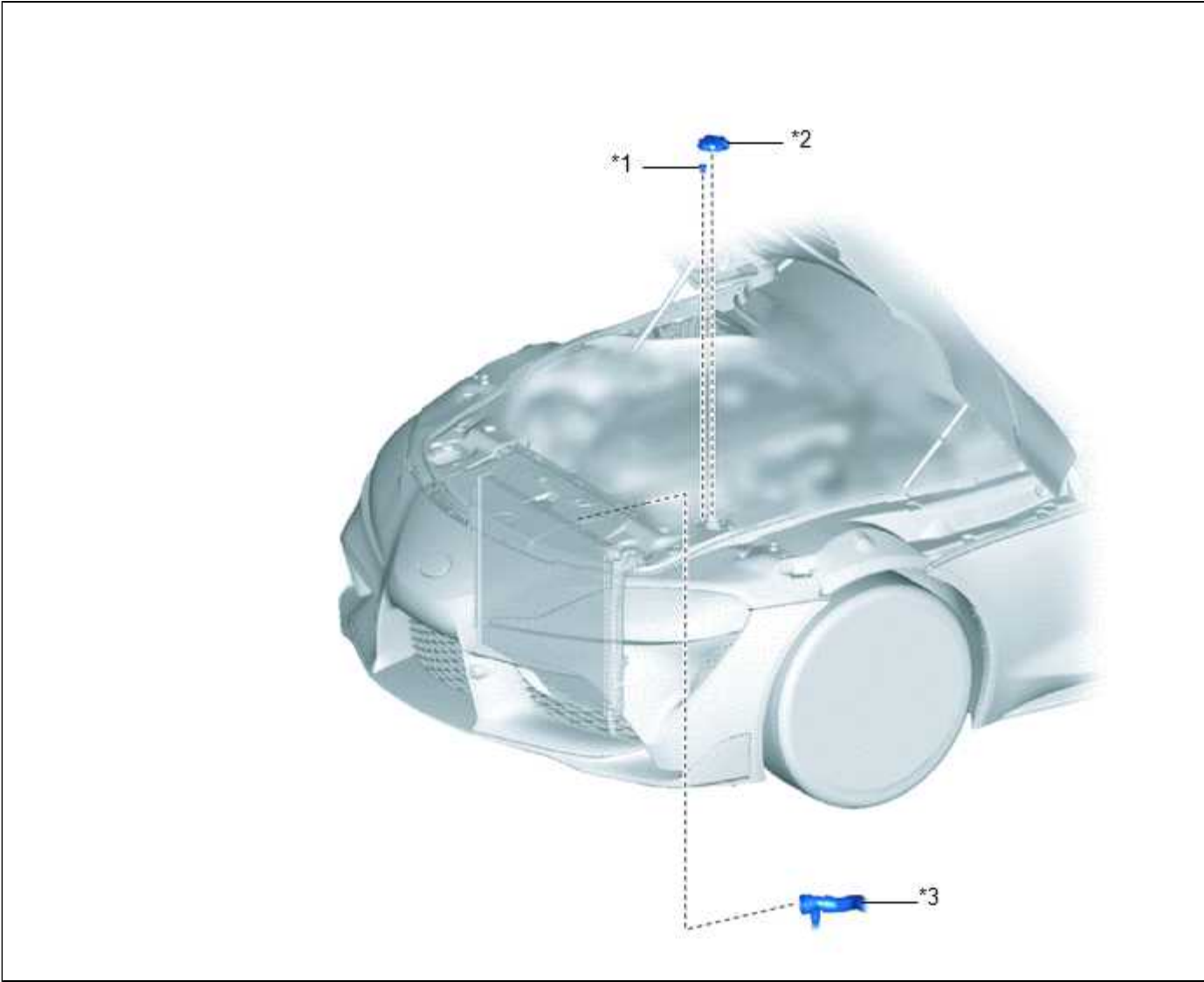
Vehicle management / Service functions / Body / Voltage supply / ABL Register battery change



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9W
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 COOLANT (for High Temperature): COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	BLEEDER SCREW	*2	RESERVE TANK CAP SUB-ASSEMBLY
*3	NO. 1 RADIATOR HOSE	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9X
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 COOLANT (for High Temperature): REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

PROCEDURE

1. REMOVE FRONT SUSPENSION MEMBER LOWER PROTECTOR

Click here [INFO](#)

2. DRAIN ENGINE COOLANT

CAUTION:

- Hot fluids.

Risk of scalding!

- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

NOTICE:

- Life-long fill of coolant!
- Do not reuse used coolant.

When replacing and removing components which rely on the corrosion protection effect of the coolant, it is essential to change the coolant. The cooling system must therefore be emptied and refilled.

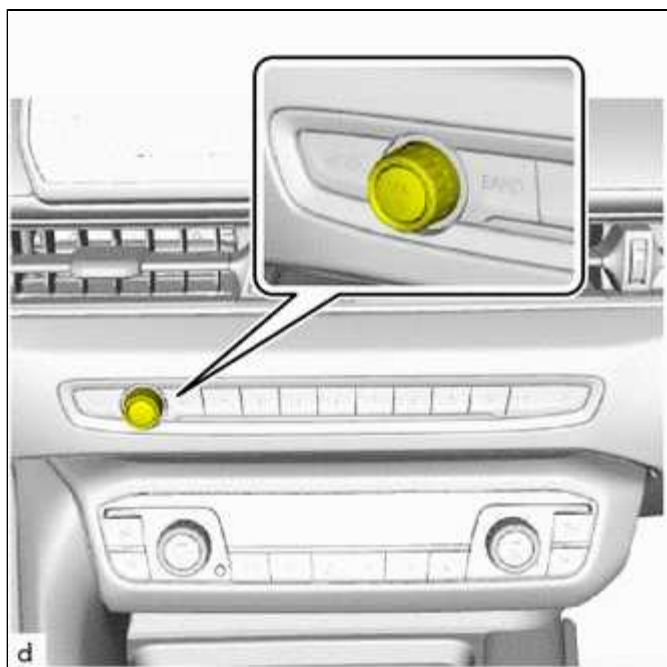
In the case of other removal work involving the draining of part quantities of coolant, the coolant level must be topped up with new coolant.

- Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

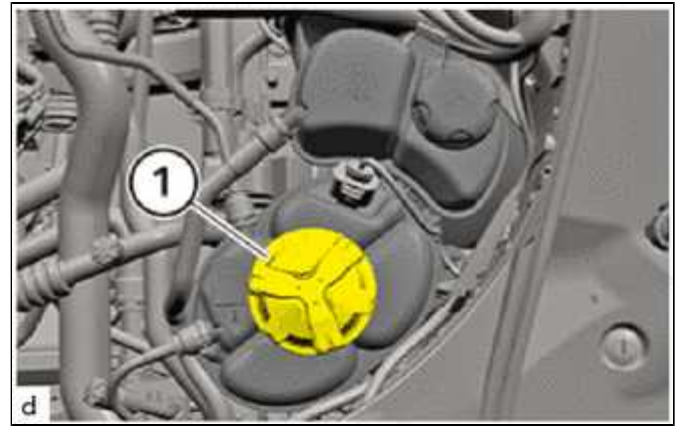
(a) Check that the START-STOP button (engine switch) off.

HINT:

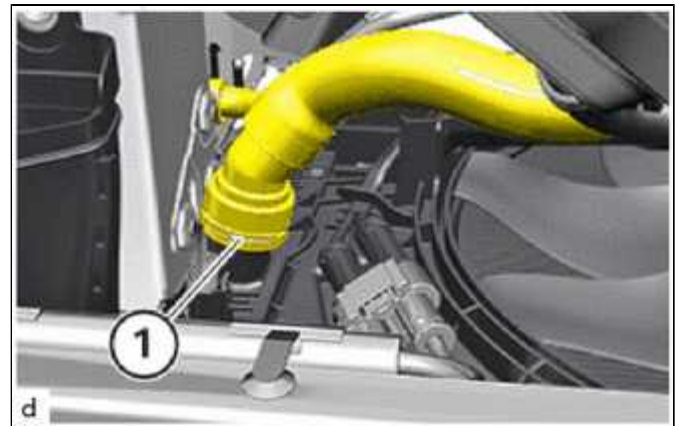
Pressing and holding the AUDIO button changes the power source mode to IG OFF.



(b) Loosen reserve tank cap sub-assembly (1).



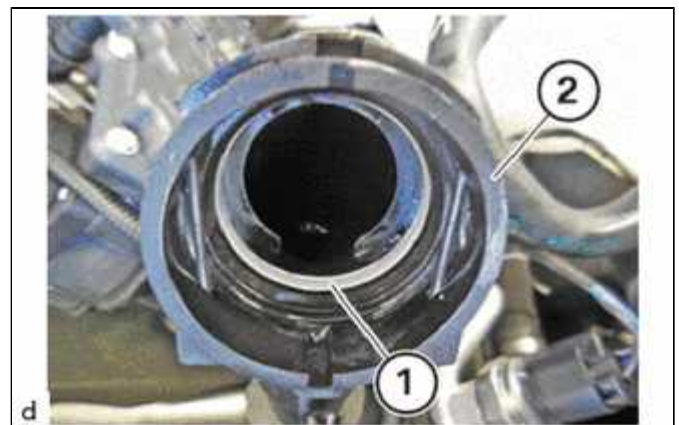
(c) Unlock and disconnect the No. 1 radiator hose (1).



(d) Catch and dispose of escaping coolant.

(e) Check the sealing ring (1) of the No. 1 radiator hose (2) for damage and renew it with the SST, if necessary.

SST: 09800-WA010



(f) Connect and lock the No. 1 radiator hose.

HINT:

Make sure that the connections are locked correctly. The locks must engage audibly.

3. ADD ENGINE COOLANT

NOTICE:

- Life-long fill of coolant!
- Do not reuse used coolant.

When replacing and removing components which rely on the corrosion protection effect of the coolant, it is essential to change the coolant. The cooling system must therefore be emptied and refilled.

In the case of other removal work involving the draining of part quantities of coolant, the coolant level must be topped up with new coolant.

- Mixing different coolants is not permitted.

Non-compliance will result in danger of component damage and/or engine damage.

- Filling specification absolutely must be adhered to.

The operation of the vehicle is not permitted unless the filling procedure has been completed. Otherwise, functional limitations (degradation) and/or overheating may occur.

A bleeding procedure is required after a part has been exchanged in the cooling system and/or after refilling the cooling system.

HINT:

- Before starting the automatic cooling system bleeding routine, make sure that all coolant circuits are filled. If the cooling system bleeding routine is started while one of the coolant circuits is empty, there is a risk of damage to the electric coolant pump when running it dry.
- Make sure that negative (-) battery terminal is not disconnected for the bleeding procedure. Switch on low-beam headlights and hazard warning lights. If the low-beam headlights and hazard warning lights are not switched on, the engine switch off automatically after a certain period of time and interrupt the bleeding procedure.

(a) Add engine coolant to the level shown in the illustration.

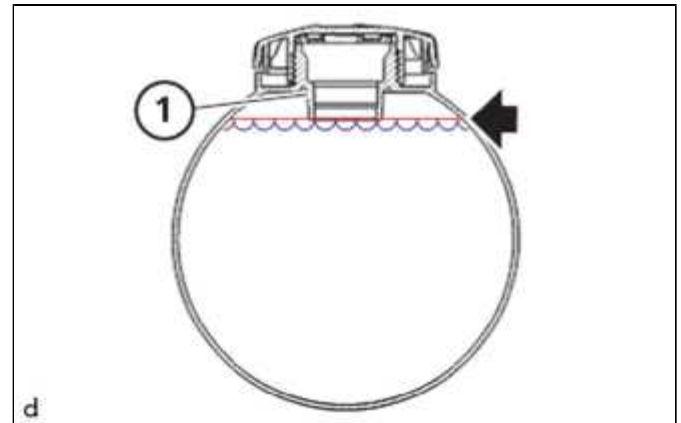
Standard Capacity:

10.5 liters (11.1 US qts, 9.2 Imp. qts)

(1) Expendable materials : Antifreeze and Corrosion Inhibitor Frostox HT-12

HINT:

When using Antifreeze and Corrosion Inhibitor Frostox HT-12, dilute the Antifreeze and Corrosion Inhibitor Frostox HT-12 to 50% before using it.



(b) Open the bleeder screw on the radiator reserve tank assembly for the high-temperature coolant circuit and close it again after approx. 10 s.

(1) You can close the bleeder screw prior to expiry of the 10 s once coolant escapes.

(c) Close the reserve tank cap sub-assembly on the radiator reserve tank assembly of the high-temperature cooling circuit.

(d) Make sure the bonnet is closed.[*1]

(e) Make sure that the wheels touch the ground.[*2]

(f) Engage the parking brake.[*3]

(g) Engage into both "P" or "N" automatic transmissions.[*4]

(h) Press the START-STOP button (engine switch) 3 times within 0.8 seconds to enter Diagnostic (PAD) Mode.[*5]

(i) Turn on low-beam headlight and the hazard warning light.[*6]

HINT:

If the low-beam headlights and hazard warning lights are not switched on, the engine switch off automatically after a certain period of time and interrupt the bleeding procedure.

- (j) Adjust the heating to maximum temperature and adjust the blower to the lowest stage.[*7]
- (k) Hold the accelerator pedal down for at least 10 s at limit position and do not step onto the brake pedal.[*8]
- (l) Start engine.[*9]
- (m) The cooling system bleeding routine has been started, pay attention to the display on the instrument cluster (KOMBI). ("Service function started")[*10]

HINT:

- The engine speed (up to 3500 rpm) and the actuators in the cooling system are activated automatically for 11 minutes according to a cooling system bleeding routine.
- The cooling system bleeding routine ends approx. 11 min after the engine starts.
- The engine speed drops to the idle speed.
- Observe the display in the instrument cluster (KOMBI).
- If the service function is interrupted, the cooling system bleeding routine must be repeated.

- (n) Switch off engine.[*11]
- (o) Allow the coolant temperature to cool down to < 50°C.[*12]
- (p) Connect the diagnosis system to the vehicle and enter the following menus:
Vehicle information / Control unit list / DME / Call up control unit functions / Diagnostic request / Diagnostic request / 102 Coolant temperature
- (q) Loosen reserve tank cap sub-assembly.[*13]
- (r) Check that the engine coolant level is maximum mark.[*14]
- (s) If the engine coolant level is below the maximum mark, repeat steps [*1] through [*14] until the water level in the radiator reserve tank assembly stops decreasing.
- (t) Adjust the filling level in the radiator reserve tank assembly of the high-temperature coolant circuit to 200 ml over the maximum mark.

NOTICE:

- After the cooling system bleeding routine, the cooling system is topped up above the maximum mark.
- Overfilling the cooling system serves to balance the remaining air in the cooling system.
- The normal filling level of the coolant is reached while driving.

- (u) Close reserve tank cap sub-assembly.
- (v) Close the reserve tank cap sub-assembly until the arrows are flush.
- (w) Disconnect battery charger.

4. INSPECT FOR COOLANT LEAK

Click here [INFO](#)

5. INSTALL FRONT SUSPENSION MEMBER LOWER PROTECTOR

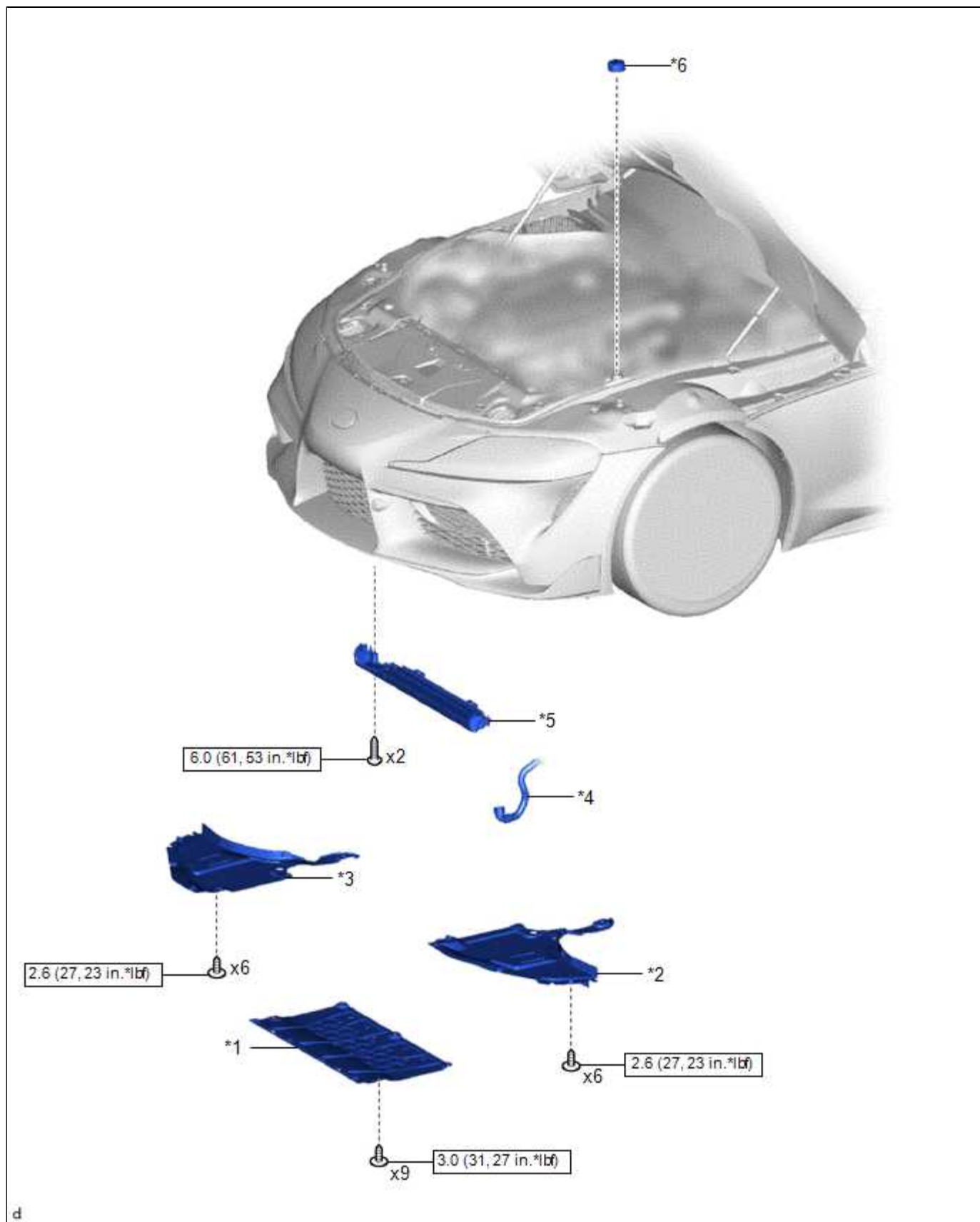
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9U
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 COOLANT (for Low Temperature): COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	NO. 1 ENGINE UNDER COVER ASSEMBLY	*2	FRONT FENDER SPLASH FRONT SHIELD LH
*3	FRONT FENDER SPLASH FRONT SHIELD RH	*4	NO. 6 RADIATOR HOSE
			RADIATOR RESERVE TANK CAP SUB-

*5	RADIATOR LOWER AIR GUIDE PLATE	*6	ASSEMBLY
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9V
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 COOLANT (for Low Temperature): REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

PROCEDURE

1. REMOVE NO. 1 ENGINE UNDER COVER ASSEMBLY

Click here [INFO](#)

2. REMOVE FRONT FENDER SPLASH FRONT SHIELD LH

Click here [INFO](#)

3. REMOVE FRONT FENDER SPLASH FRONT SHIELD RH

HINT:

Use the same procedure as for the LH side.

4. DRAIN ENGINE COOLANT

CAUTION:

- Hot fluids.

Risk of scalding!

- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

NOTICE:

- Life-long fill of coolant!
- Do not reuse used coolant.

When replacing and removing components which rely on the corrosion protection effect of the coolant, it is essential to change the coolant. The cooling system must therefore be emptied and refilled.

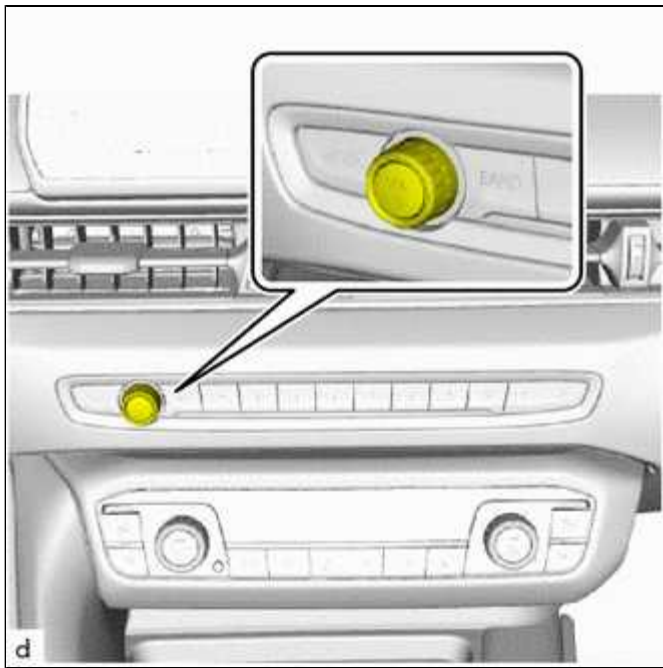
In the case of other removal work involving the draining of part quantities of coolant, the coolant level must be topped up with new coolant.

- Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

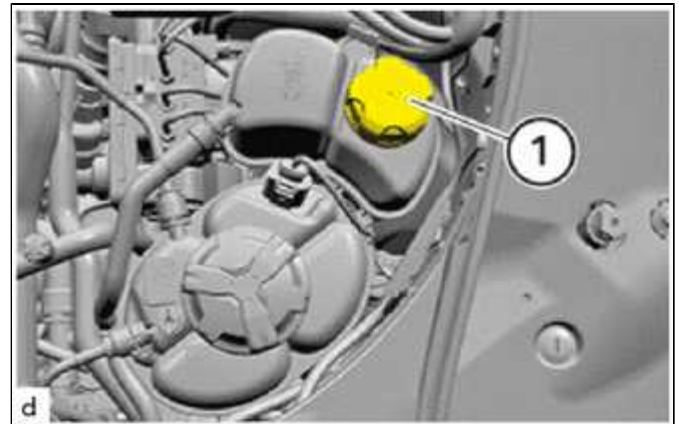
(a) Check that the START-STOP button (engine switch) off.

HINT:

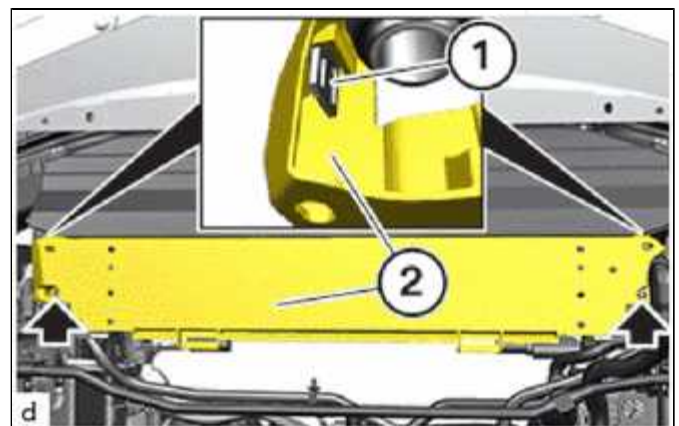
Pressing and holding the AUDIO button changes the power source mode to IG OFF.



(b) Loosen radiator reserve tank cap sub-assembly (1).



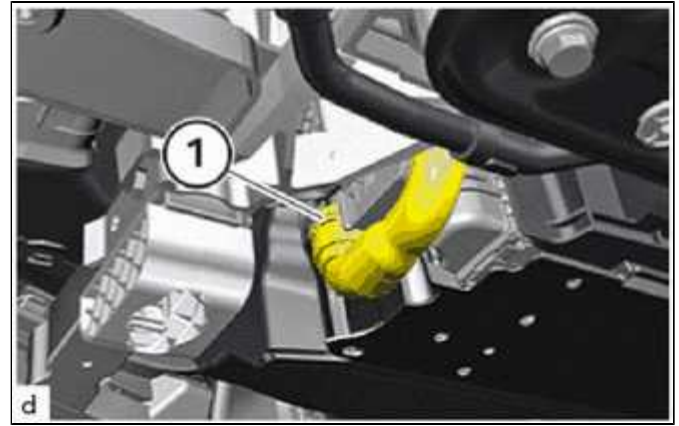
(c) Remove T30 screws (arrows).



(d) Unlock the locks (1).

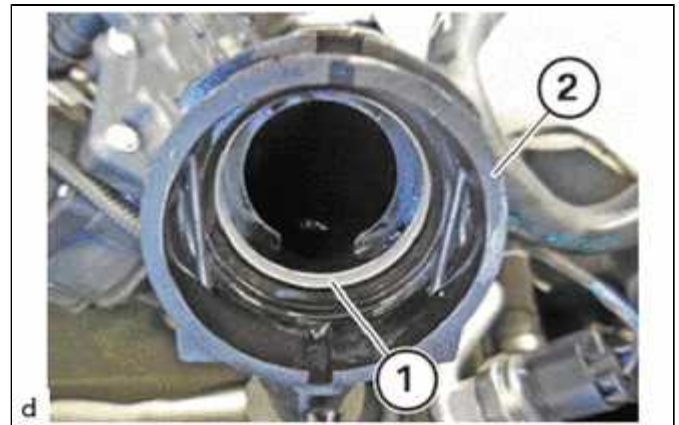
(e) Remove the radiator lower air guide plate (2) from the radiator assembly.

- (f) Unlock No. 6 radiator hose (1) on radiator reserve tank sub-assembly for low-temperature cooling system and release.



- (g) Catch and dispose of escaping coolant.

- (h) Check the sealing ring (1) of the No. 6 radiator hose (2) for damage and renew where required.



- (i) Connect No. 6 radiator hose on radiator reserve tank sub-assembly for low-temperature cooling system and lock.

HINT:

Make sure that the connections are locked correctly. The locks must engage audibly.

- (j) Install the radiator lower air guide plate to the radiator assembly.

(1) The locks must engage audibly.

- (k) Tighten T30 screws (arrows).

Torque:

6.0 N·m { 61 kgf·cm, 53 in·lbf }

5. ADD ENGINE COOLANT

NOTICE:

- Life-long fill of coolant!
- Do not reuse used coolant.

When replacing and removing components which rely on the corrosion protection effect of the coolant, it is essential to change the coolant. The cooling system must therefore be emptied and refilled.

In the case of other removal work involving the draining of part quantities of coolant, the coolant level must be topped up with new coolant.

- Mixing different coolants is not permitted.

Non-compliance will result in danger of component damage and/or engine damage.

- Filling specification absolutely must be adhered to.

The operation of the vehicle is not permitted unless the filling procedure has been completed. Otherwise, functional limitations (degradation) and/or overheating may occur.

A bleeding procedure is required after a part has been exchanged in the cooling system and/or after refilling the cooling system.

HINT:

- Before starting the automatic cooling system bleeding routine, make sure that all coolant circuits are filled. If the cooling system bleeding routine is started while one of the coolant circuits is empty, there is a risk of damage to the electric coolant pump when running it dry.
- Make sure that negative (-) battery terminal is not disconnected for the bleeding procedure. Switch on low-beam headlights and hazard warning lights. If the low-beam headlights and hazard warning lights are not switched on, the engine switch off automatically after a certain period of time and interrupt the bleeding procedure.

(a) Add engine coolant to the level shown in the illustration.

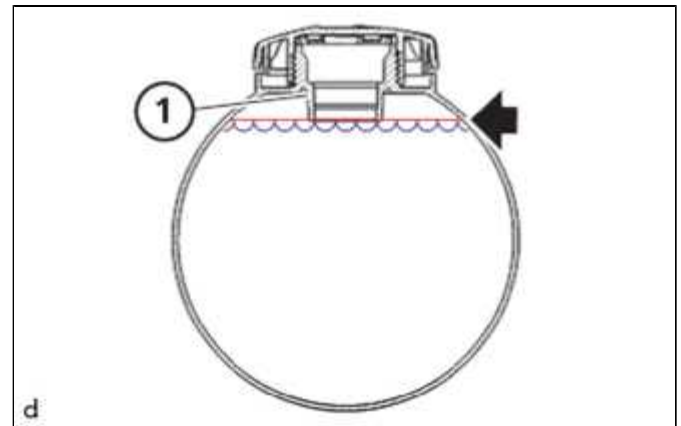
Standard Capacity:

4.0 liters (4.2 US qts, 3.5 Imp. qts)

(1) Expendable materials : Antifreeze and Corrosion
Inhibitor Frostox HT-12

HINT:

When using Antifreeze and Corrosion Inhibitor Frostox HT-12, dilute the Antifreeze and Corrosion Inhibitor Frostox HT-12 to 50% before using it.



(b) Ensure that the bonnet is open.

(c) Connect battery charger.

NOTICE:

For additional information see:

[Click here](#) **INFO**

(d) Press the START-STOP button (engine switch) 3 times within 0.8 seconds to enter Diagnostic (PAD) Mode.[*1]

(e) Turn on low-beam headlight and the hazard warning light.[*2]

HINT:

If the low-beam headlights and hazard warning lights are not switched on, the engine switch off automatically after a certain period of time and interrupt the bleeding procedure.

(f) Adjust the heating to maximum temperature and adjust the blower to the lowest stage.[*3]

(g) Hold the accelerator pedal down for at least 10 s at limit position and do not step onto the brake pedal.[*4]

(h) Do not start engine.

(i) The cooling system bleeding routine will start.[*5]

HINT:

- The electric water pump in the low-temperature coolant circuit is activated for 11 minutes according to a cooling system bleeding routine.
- The cooling system bleeding routine ends after 11 minutes.
- Observe the display in the instrument cluster (KOMBI).

(j) While adding coolant to the reserve tank sub-assembly to keep the coolant at the maximum mark and compensate for the drop in the coolant level as the air bleeds.[*6]

HINT:

If the service function is interrupted, the cooling system bleeding routine must be repeated.

(k) If the engine coolant level is below the maximum mark, repeat steps [*1] through [*6] until the water level in the radiator reserve tank assembly stops decreasing.

(l) Adjust the filling level in the radiator reserve tank sub-assembly of the low-temperature coolant circuit to 100 ml above the maximum mark.

(m) Close radiator reserve tank cap sub-assembly.

NOTICE:

- After the cooling system bleeding routine, the cooling system is topped up above the maximum mark.
- Overfilling the cooling system serves to balance the remaining air in the cooling system.
- The normal filling level of the coolant is reached while driving.

(n) Disconnect battery charger.

6. INSPECT FOR COOLANT LEAK

Click here [INFO](#)

7. INSTALL FRONT FENDER SPLASH FRONT SHIELD LH

Click here [INFO](#)

8. INSTALL FRONT FENDER SPLASH FRONT SHIELD RH

HINT:

Use the same procedure as for the LH side.

9. INSTALL NO. 1 ENGINE UNDER COVER ASSEMBLY

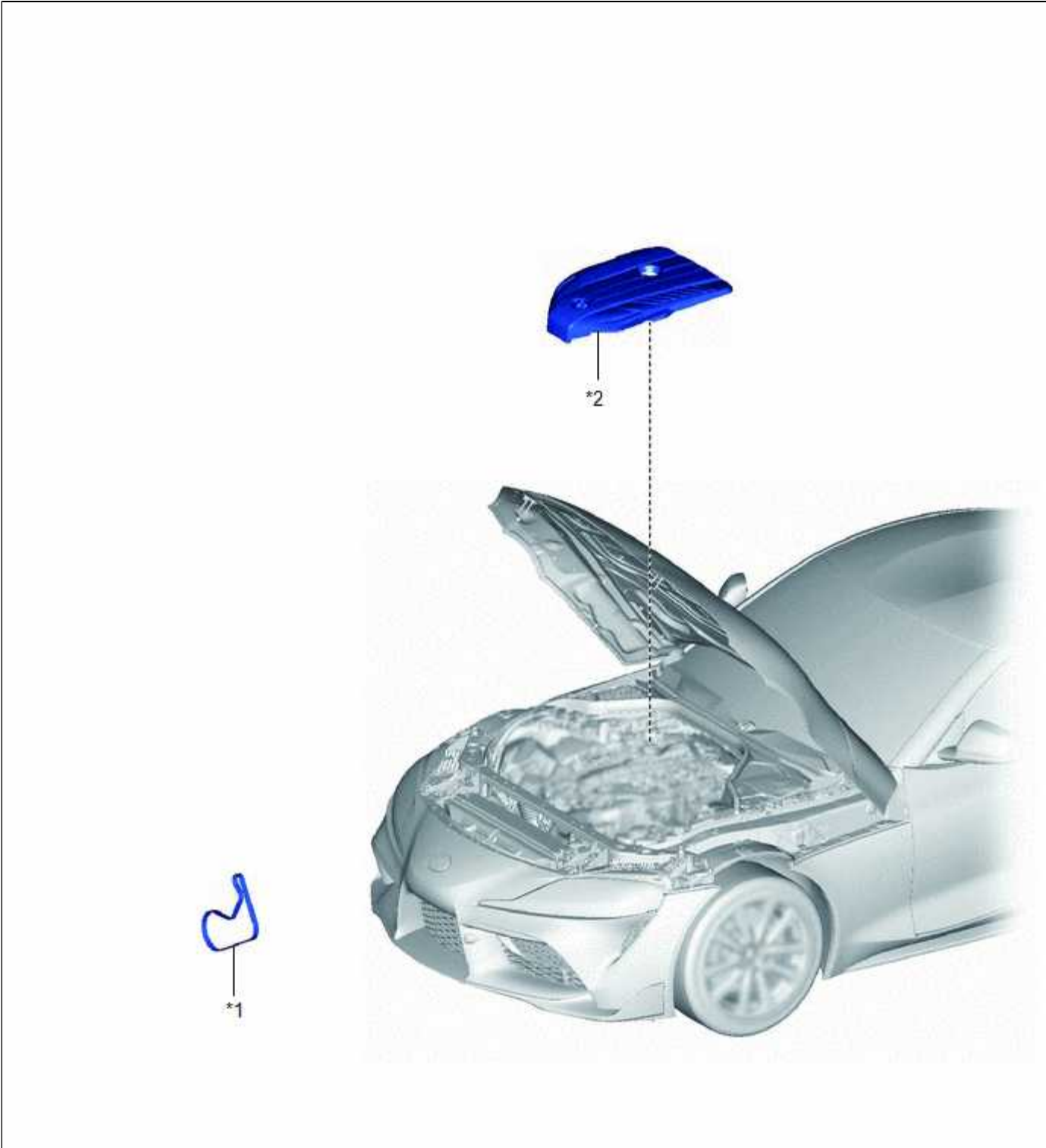
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCA1
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 DRIVE BELT: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	FAN AND GENERATOR V BELT	*2	NO. 1 ENGINE COVER SUB-ASSEMBLY
----	--------------------------	----	---------------------------------



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCA2
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 DRIVE BELT: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

PROCEDURE

1. REMOVE NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

2. REMOVE NO. 2 AIR CLEANER HOSE

Click here [INFO](#)

3. REMOVE FAN AND GENERATOR V BELT

CAUTION:

- Component with preload.

Danger of injury!

- Reduce preload as far as possible before disassembly. Relieve component.

HINT:

If the fan and generator V belt for the alternator is reused: Mark the direction of travel and reinstall the fan and generator V belt for the alternator in same direction of travel.

- (a) Using 15 mm socket wrench, increase the preload on the belt tensioner in the direction of arrow.



*a	4 mm Hexagon Wrench
----	---------------------

- (b) Secure the belt tensioner with the 4 mm hexagon wrench.
(c) Remove the fan and generator V belt for the alternator (1).



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCA3
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 DRIVE BELT: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL FAN AND GENERATOR V BELT

CAUTION:

- Component with preload.

Danger of injury!

- Reduce preload as far as possible before disassembly. Relieve component.

HINT:

If the fan and generator V belt for the alternator is reused: Mark the direction of travel and reinstall the fan and generator V belt for the alternator in same direction of travel.

- (a) Position the fan and generator V belt for alternator (1) on the ancillary components.



*a	4 mm Hexagon Wrench
----	---------------------

- (b) Using 15 mm socket wrench, Increase preload on belt tensioner.

- (c) Remove 4 mm hexagon wrench from belt tensioner.

2. INSTALL NO. 2 AIR CLEANER HOSE

Click here [INFO](#)

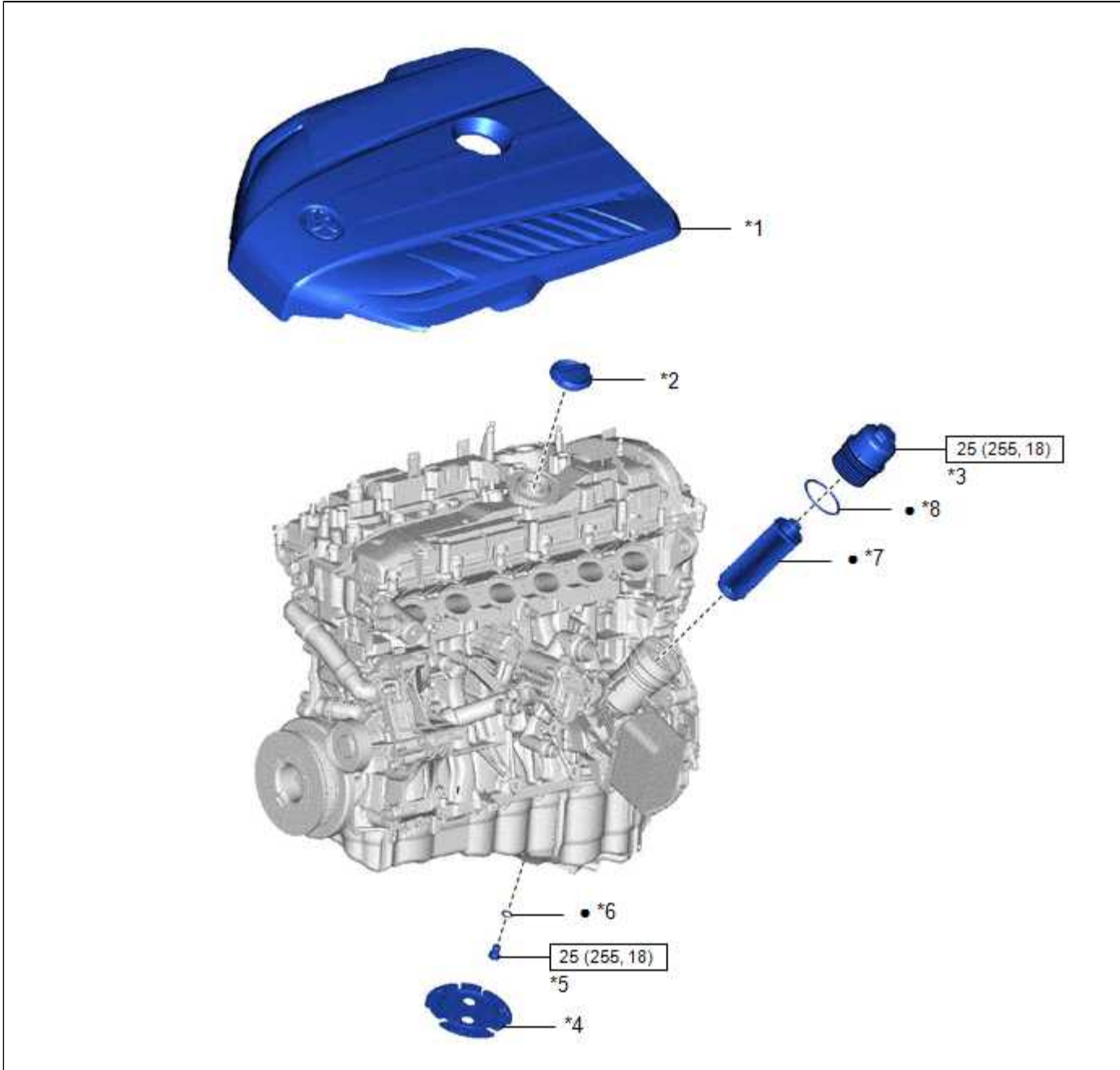
3. INSTALL NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9L
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 OIL AND OIL FILTER: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	NO. 1 ENGINE COVER SUB-ASSEMBLY	*2	OIL FILLER CAP ASSEMBLY
*3	OIL FILTER CAP ASSEMBLY	*4	CENTER NO. 4 ENGINE UNDER COVER
*5	OIL PAN DRAIN PLUG	*6	OIL PAN DRAIN PLUG GASKET
*7	OIL FILTER ELEMENT	*8	O-RING
N*m (kgf*cm, ft.*lbf): Specified			

	torque	•	Non-reusable part
---	--------	---	-------------------

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9M
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 OIL AND OIL FILTER: REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

CAUTION / NOTICE / HINT

CAUTION:

- Hot fluids.

Risk of scalding!

- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

NOTICE:

- Engine damage caused by excessively filling the engine with engine oil.

Filling an excessive quantity of engine oil may cause engine damage.

- Observe the exact engine oil filling capacity.
- Drain the engine oil.

PROCEDURE

1. REMOVE NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

2. REMOVE OIL FILLER CAP ASSEMBLY

NOTICE:

- Contaminant or foreign body.

Contamination can result in malfunctions, operating failure or leaks.

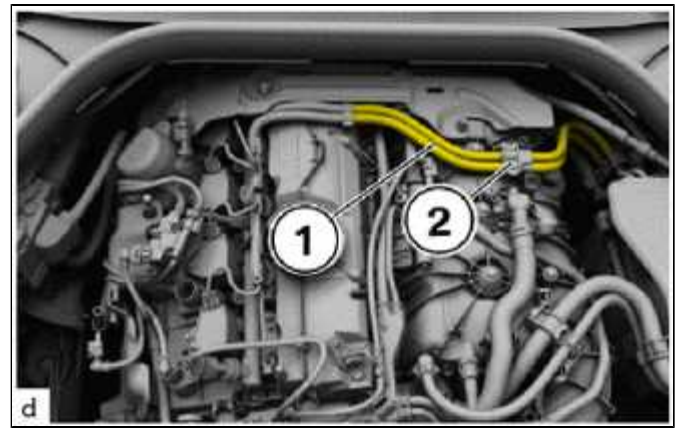
- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.
- Close off line connections with seal plugs.

(a) Open oil filler cap assembly (1).



3. REMOVE OIL FILTER CAP ASSEMBLY

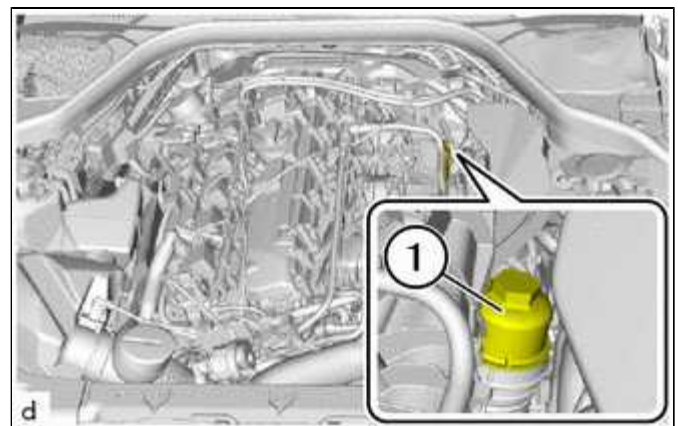
(a) Unclip the engine wiring harness (1) from the holder (2).



(b) Using a 32 mm socket wrench, loosen the oil filter cap assembly (1).

HINT:

Engine oil flows out of the oil filter bracket and back into the oil pan sub-assembly.



4. REMOVE OIL PAN DRAIN PLUG

CAUTION:

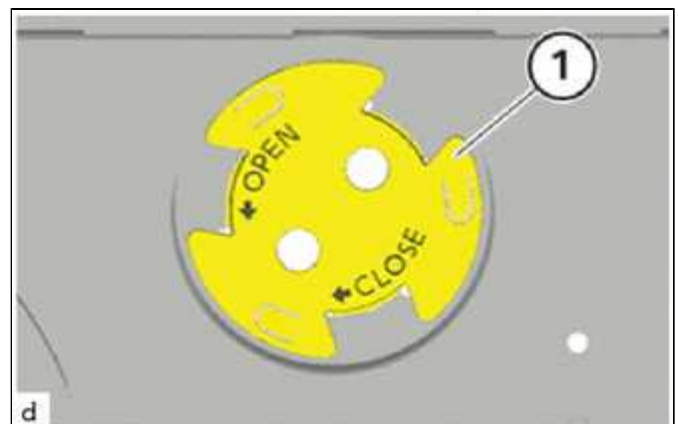
- Hot fluids.

Risk of scalding!

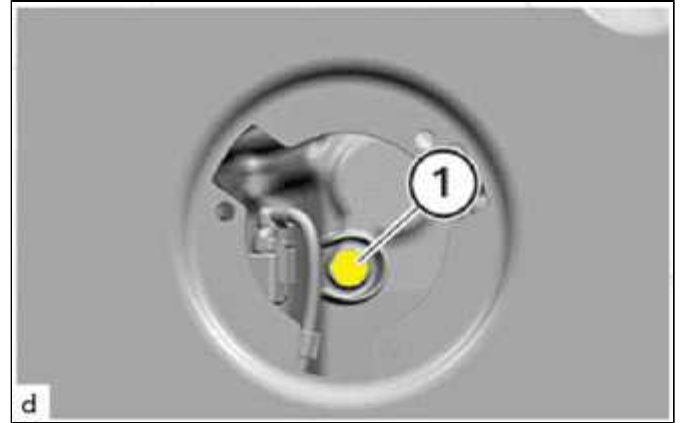
- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

- Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

(a) While pulling the center No. 4 engine under cover (1) downward, rotate it and remove it.



(b) Release oil pan drain plug (1).



(c) Catch and dispose of emerging engine oil.

5. INSTALL OIL PAN DRAIN PLUG

(a) Replace the oil pan drain plug gasket.

(b) Position oil pan drain plug on the oil pan sub-assembly and tighten.

Torque:

25 N·m {255 kgf·cm, 18 ft·lbf}

(c) Install center No. 4 engine under cover.

6. REMOVE OIL FILTER ELEMENT

CAUTION:

- Hot fluids.

Risk of scalding!

- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

- Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.

- Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

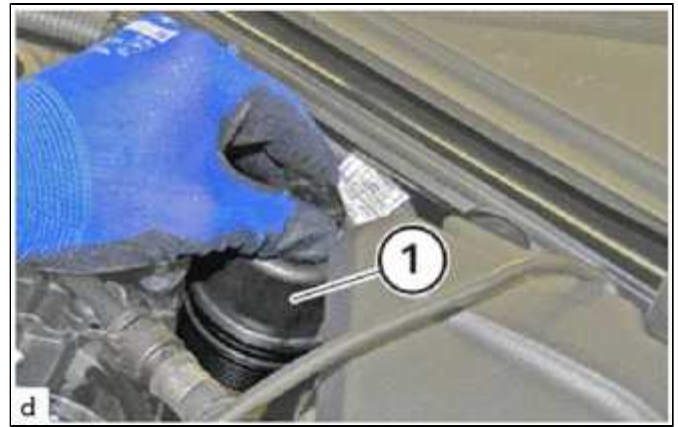
NOTICE:

- Contaminant or foreign body.

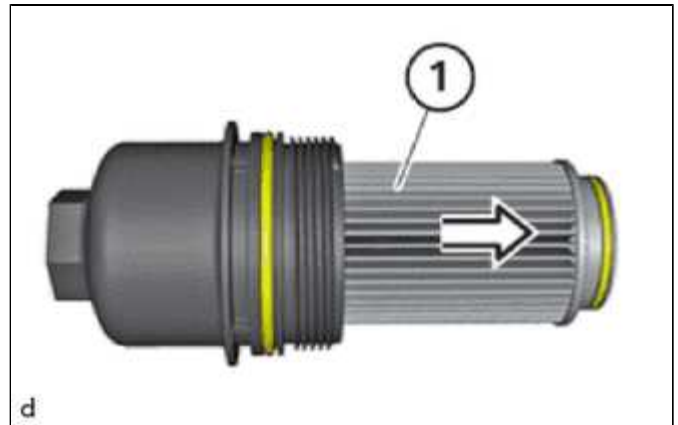
Contamination can result in malfunctions, operating failure or leaks.

- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.
- Close off line connections with seal plugs.

(a) Feed the oil filter cap assembly (1) including oil filter element out to the top.



(b) Loosen the oil filter element (1) from the oil filter cap assembly.



(c) Replace oil filter element.

7. INSTALL OIL FILTER ELEMENT

NOTICE:

- Contaminant or foreign body.

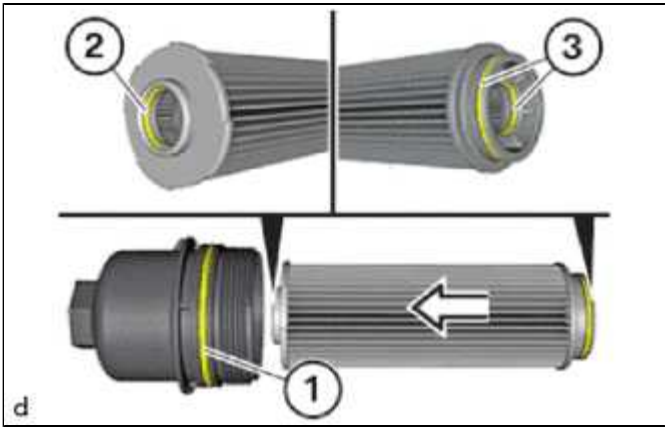
Contamination can result in malfunctions, operating failure or leaks.

- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.
- Close off line connections with seal plugs.

(a) Replace O-ring (1).

HINT:

Before installation, coat the O-ring (1) with engine oil.



- (b) Coat O-ring (2) with engine oil.
- (c) Coat both O-rings (3) with engine oil.
- (d) Push the oil filter element (2) into the oil filter cap assembly.

HINT:

The oil filter element (2) must engage audibly.

- (e) Install the oil filter cap assembly including oil filter element.

8. INSTALL OIL FILTER CAP ASSEMBLY

- (a) Apply a small amount of engine oil to the O-ring.
- (b) Using a 32 mm socket wrench, tighten the oil filter cap assembly.

Torque:

25 N·m {255 kgf·cm, 18 ft·lbf}

- (c) Clip in the engine wiring harness in the holder.

9. ADD ENGINE OIL

NOTICE:

- Engine damage caused by excessively filling the engine with engine oil.

Filling an excessive quantity of engine oil may cause engine damage.

- Observe the exact engine oil filling capacity.
- Drain the engine oil.

- (a) Fill in engine oil at the oil filler neck.

Standard Oil:

Toyota Genuine Motor Oil SN 0W-20 C5 for GR Toyota Supra

Standard Capacity

ITEM	STANDARD CONDITION
Drain and refill with oil filter change	6.5 liters (6.9 US qts, 5.7 Imp. qts)

10. INSTALL OIL FILLER CAP ASSEMBLY

NOTICE:

- Contaminant or foreign body.

Contamination can result in malfunctions, operating failure or leaks.

- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.
- Close off line connections with seal plugs.

(a) Close oil filler cap assembly.

11. INSPECT FOR ENGINE OIL LEAK

(a) Start the engine. Make sure that there are no engine oil leaks from the area that was worked on.

12. CHECK ENGINE OIL LEVEL

Click here [INFO](#)

13. INSTALL NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

14. PERFORM CBS RESET

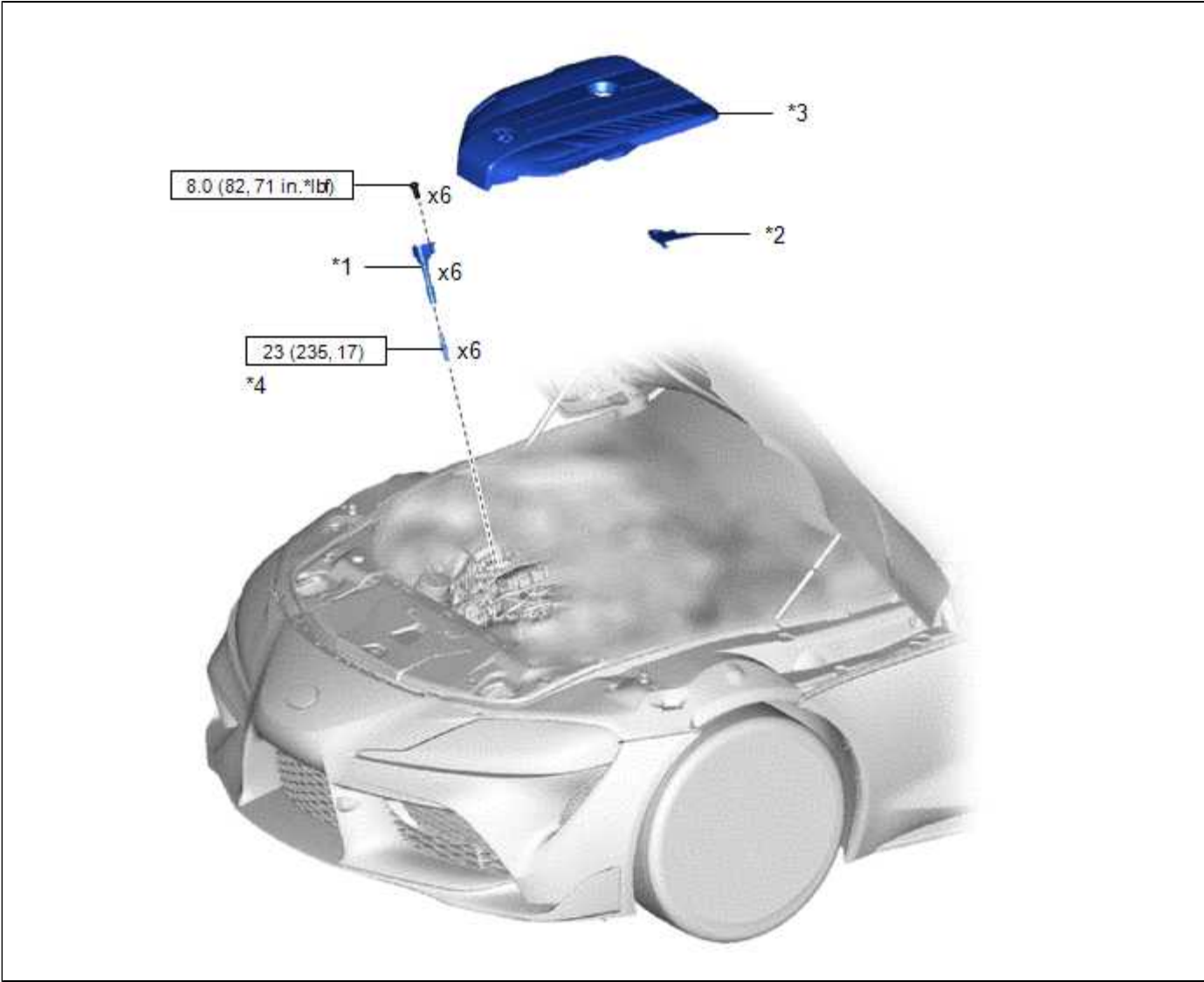
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9G
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 SPARK PLUG: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	IGNITION COIL	*2	NO. 1 ENGINE COVER
*3	NO. 1 ENGINE COVER SUB-ASSEMBLY	*4	SPARK PLUG
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9H
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 SPARK PLUG: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

PROCEDURE

1. REMOVE NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

2. REMOVE NO. 1 ENGINE COVER

Click here [INFO](#)

3. REMOVE IGNITION COIL

Click here [INFO](#)

4. REMOVE SPARK PLUG

CAUTION:

- Hot surfaces.

Risk of burning!

- Perform all work only on components that have cooled down.

- Swirling dirt particles caused by compressed air.

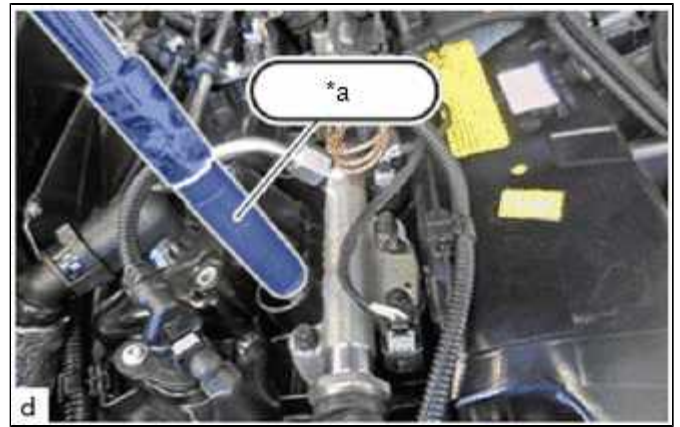
Danger of injury!

- Collect dirt particles, e.g. when blowing out, use cloth to do so.
- Wear safety goggles.

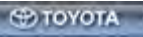
HINT:

- Clean spark plug slot with compressed air.
- The spark plug shaft must be cleaned using compressed air after having removed the ignition coils and before removing the spark plugs. After having removed the spark plugs, once again check the sealing surface for contamination and (if necessary) clean using a moist cloth or clean using compressed air.
- Deposits that are not removed according to instructions may enter the combustion chamber and lead to uncontrolled combustion. Remaining deposits on the spark plug sealing surfaces may lead to leaks and the spark plugs may come loose during engine operation.
- Spark plug threads must not be greased or oiled. Insufficiently tightened spark plugs may cause leaks and the spark plugs may come loose during engine operation.
- Exclusively swivelling extensions may be used for the reversible ratchet. Rigid mounting tool and variable plug connections with rigid option may not be used; there is a risk that the insulator breaks.

(a) Using a 14 mm spark plug wrench, unscrew spark plugs.



*a	14 mm Spark Plug Wrench
----	-------------------------



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9I
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: B58 SPARK PLUG: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL SPARK PLUG

(a) Using a 14 mm spark plug wrench, install the spark plugs to the cylinder head sub-assembly.

Torque:

23 N·m {235 kgf·cm, 17 ft·lbf}

NOTICE:

- Do not drop spark plug into spark plug shaft!
 - This can lead to a reduction of the electrode gap and can thus impair smooth running of the engine, especially in idle position.

HINT:

Exclusively swivelling extensions may be used for the reversible ratchet. Rigid mounting tool and variable plug connections with rigid option may not be used; there is a risk that the insulator breaks.

2. INSTALL IGNITION COIL

Click here [INFO](#)

3. INSTALL NO. 1 ENGINE COVER

Click here [INFO](#)

4. INSTALL NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8X
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: BRAKE FLUID: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

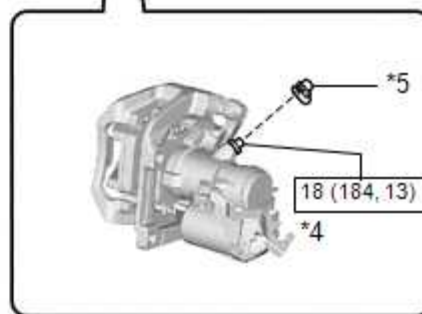
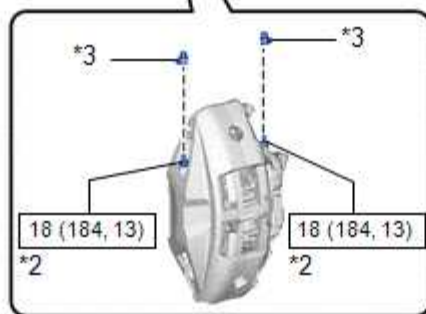
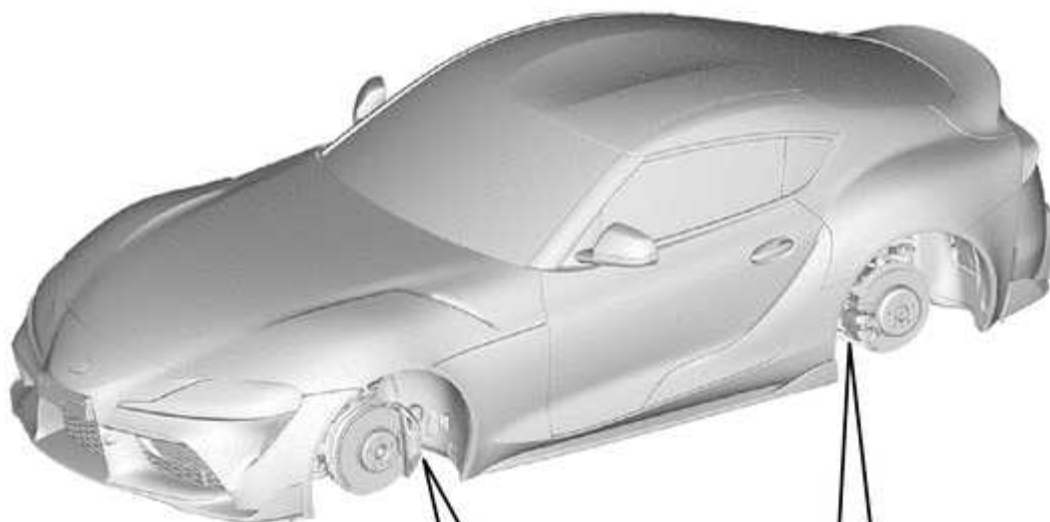
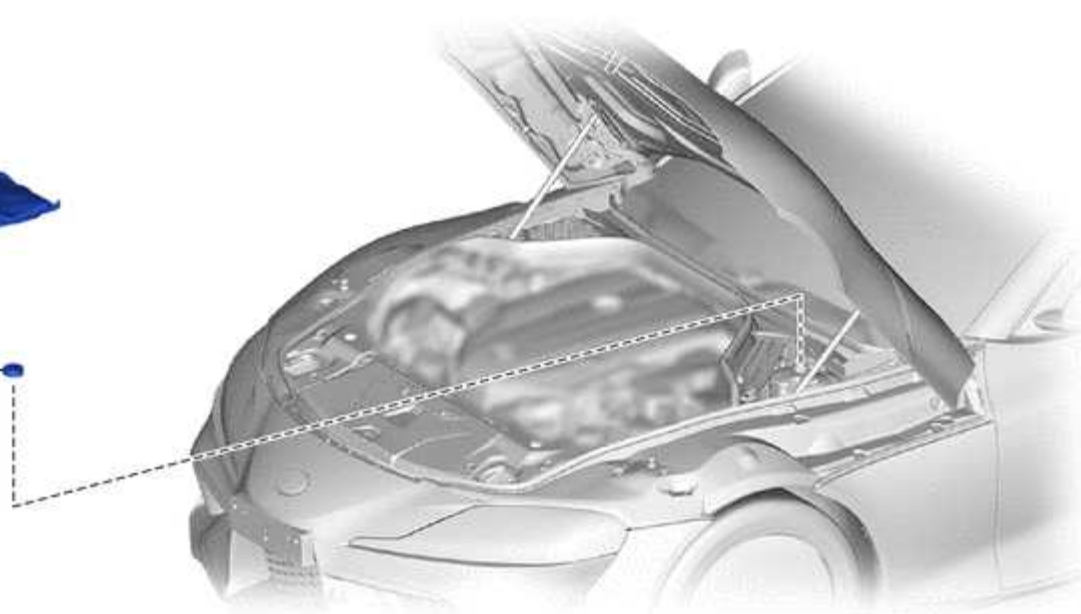
ILLUSTRATION



*6



*1



0

*1	BRAKE MASTER CYLINDER RESERVOIR FILLER CAP	*2	FRONT DISC BRAKE BLEEDER PLUG
*3	FRONT DISC BRAKE BLEEDER PLUG CAP	*4	REAR DISC BRAKE BLEEDER PLUG
	REAR DISC BRAKE BLEEDER PLUG		

*5	CAP	*6	COWL VENT COVER
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8Y
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: BRAKE FLUID: REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

CAUTION / NOTICE / HINT

NOTICE:

- Paint damage.

Mechanical or chemical action may lead to paint damage.

- Cover up working area with specified covering material only.

- Use only approved brake fluids, see operating fluids.

HINT:

- Use the same procedure for RHD and LHD vehicles.
- The procedure listed below is for LHD vehicles.

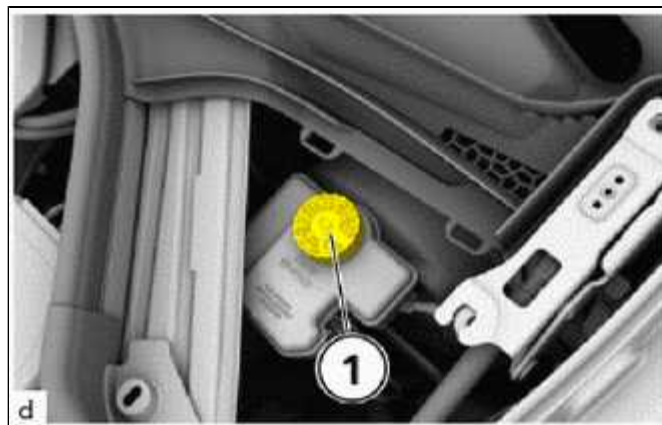
PROCEDURE

1. REMOVE COWL VENT COVER

Click here [INFO](#)

2. FILL RESERVOIR WITH BRAKE FLUID

(a) Remove the brake master cylinder reservoir filler cap.



(b) Top up the brake fluid expansion tank to the lower edge of the thread (1) with new brake fluid.

Brake Fluid and Hydraulic Fluid:

Brake fluid DOT4, low viscosity

NOTICE:

Use only approved brake fluids, see operating fluids.



3. BLEED REAR BRAKE

NOTICE:

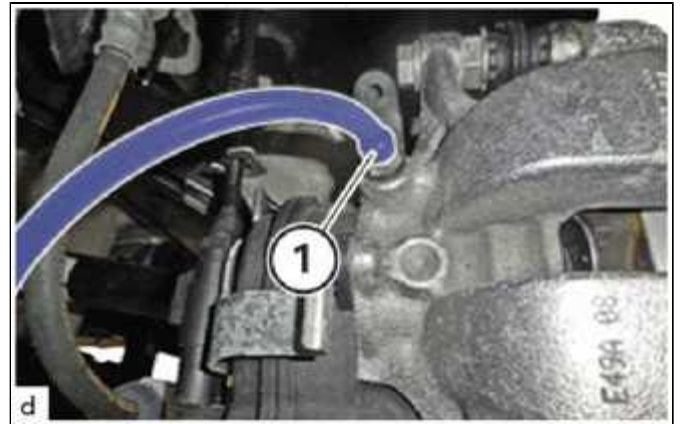
- Bleed the brake line of the wheel farthest from the master cylinder first.
- Add brake fluid to keep the level between the MIN and MAX lines of the reservoir while bleeding the brake lines.

HINT:

- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

(a) Start flushing at the rear right.

(b) Connect a vinyl tube to the bleeder plug (1) on rear disc brake cylinder assembly.



(c) Depress the brake pedal several times, and then loosen the bleeder plug with the pedal depressed.*1

(d) When fluid stops coming out, tighten the bleeder plug and release the brake pedal.*2

(e) Repeat steps *1 and *2 until all the air in the brake fluid is completely bled out and new brake fluid comes out.

(f) Tighten the bleeder plug completely.

Torque:

18 N·m {184 kgf·cm, 13 ft·lbf}

(g) Carry out the same procedure on the rear left wheel brake.

4. BLEED FRONT BRAKE

NOTICE:

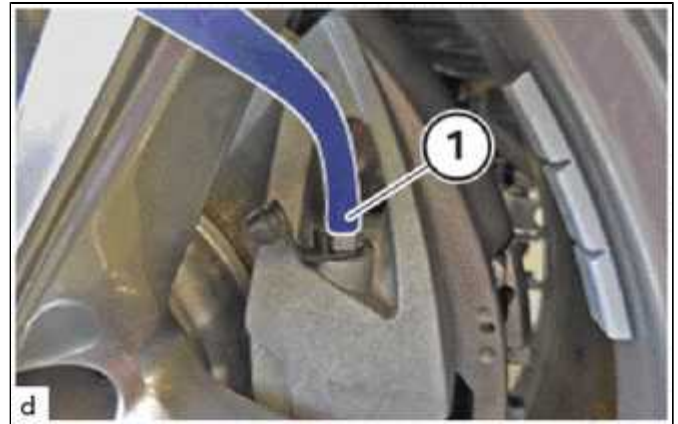
- Bleed the brake line of the wheel farthest from the master cylinder first.
- Add brake fluid to keep the level between the MIN and MAX lines of the reservoir while bleeding the brake lines.

HINT:

- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

(a) Start flushing at the front right.

(b) Connect a vinyl tube to the bleeder plug (1) on front disc brake cylinder assembly.



(c) Depress the brake pedal several times, and then loosen the bleeder plug with the pedal depressed.*1

(d) When fluid stops coming out, tighten the bleeder plug and release the brake pedal.*2

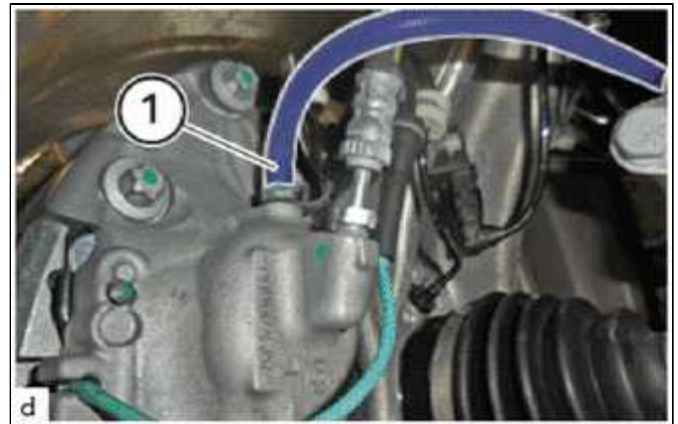
(e) Repeat steps *1 and *2 until all the air in the brake fluid is completely bled out and new brake fluid comes out.

(f) Tighten the bleeder plug completely.

Torque:

18 N·m {184 kgf·cm, 13 ft·lbf}

(g) Connect a vinyl tube to the bleeder plug (1) on front disc brake cylinder assembly.



(h) Depress the brake pedal several times, and then loosen the bleeder plug with the pedal depressed.*1

(i) When fluid stops coming out, tighten the bleeder plug and release the brake pedal.*2

(j) Repeat steps *1 and *2 until all the air in the brake fluid is completely bled out and new brake fluid comes out.

(k) Tighten the bleeder plug completely.

Torque:

18 N·m {184 kgf·cm, 13 ft·lbf}

(l) Carry out the same procedure on the rear left wheel brake.

(m) Install the brake master cylinder reservoir filler cap.

HINT:

Check the seal (1) on the sealing cap, replace if necessary.



5. INSPECT FOR BRAKE FLUID LEAK

6. INSPECT BRAKE FLUID LEVEL IN RESERVOIR

Click here [INFO](#)

7. INSTALL COWL VENT COVER

Click here [INFO](#)

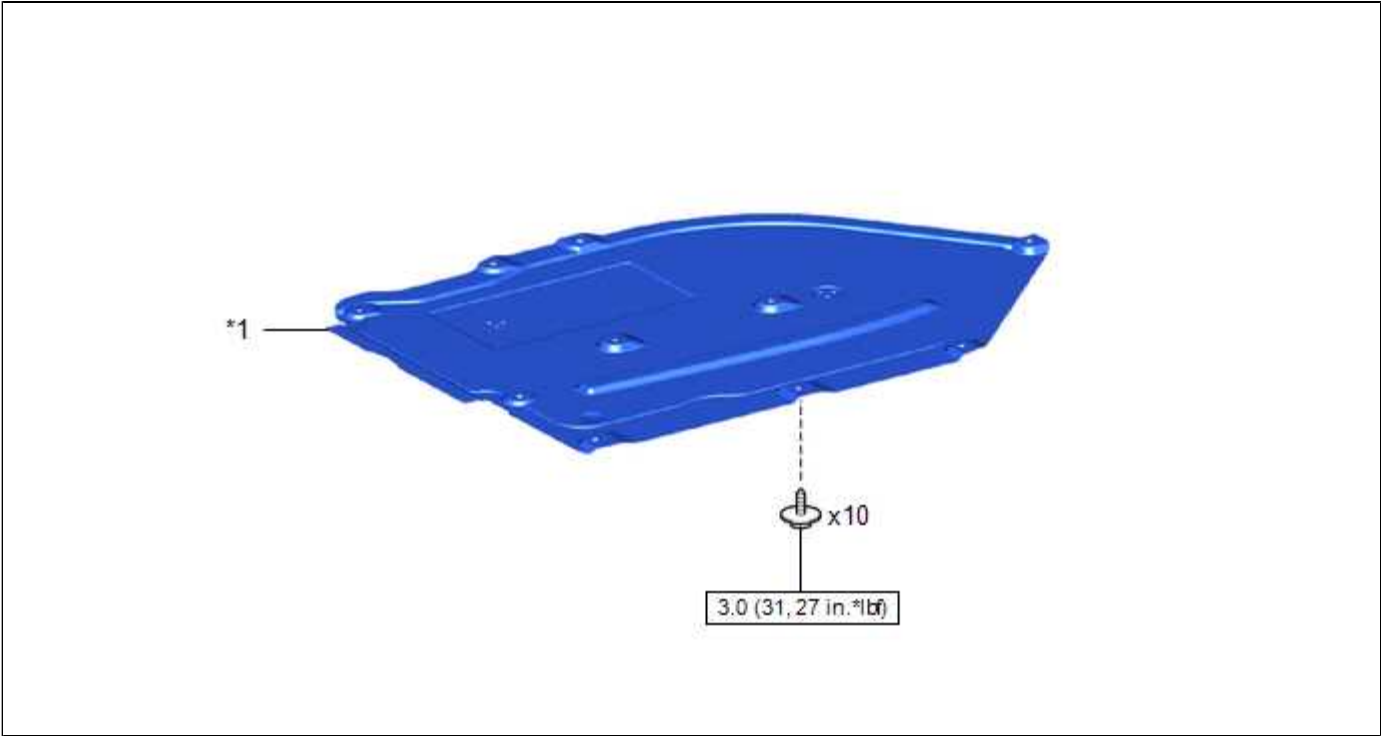
8. PERFORM CBS RESET

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8Z
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: BRAKE VACUUM HOSE: COMPONENTS; 2020 MY Supra [03/2019 -]		

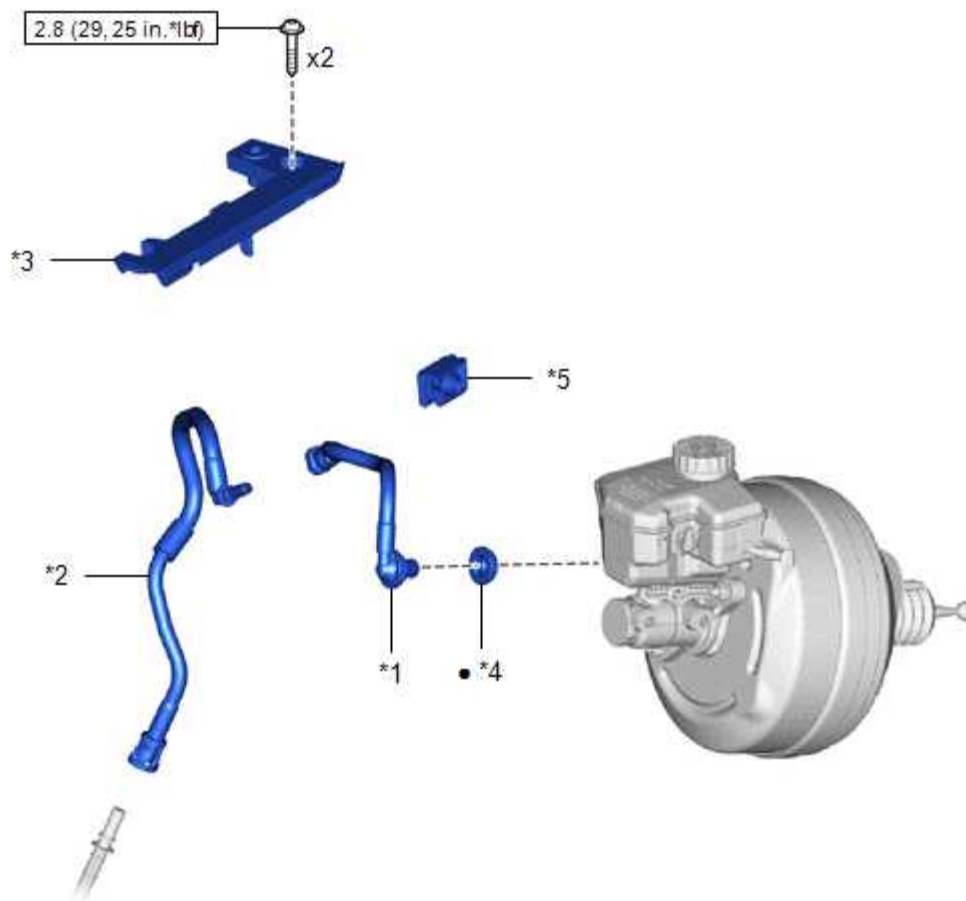
COMPONENTS

ILLUSTRATION



*1	FRONT FLOOR COVER	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

ILLUSTRATION



0

*1	CHECK VALVE TO BRAKE EBOOSTER HOSE	*2	NO. 1 HOSE TO HOSE TUBE
*3	SEALING FRAME	*4	GROMMET
*5	HOLDER	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC90
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: BRAKE VACUUM HOSE: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

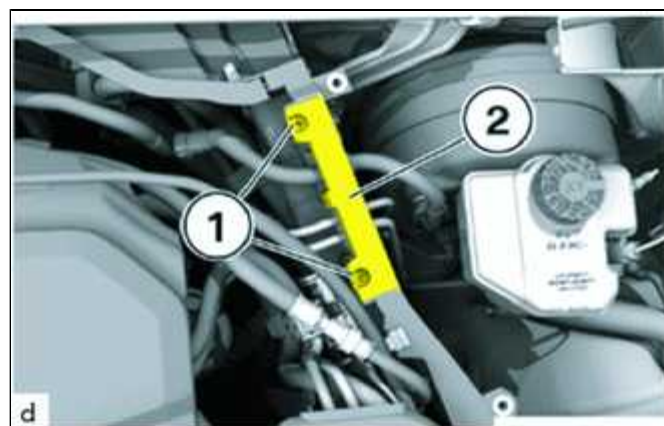
PROCEDURE

1. REMOVE UPPER FRONT SUSPENSION CENTER BRACE

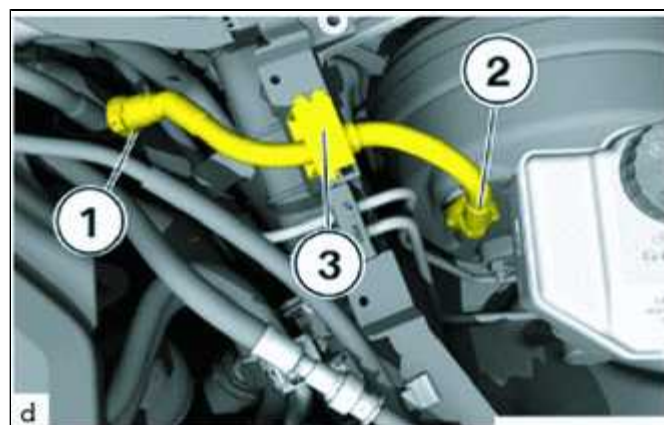
Click here [INFO](#)

2. REMOVE NO. 1 HOSE TO HOSE TUBE

- (a) Unscrew the T25 screws (1) and remove the sealing frame (2).



- (b) Unlock the snap fastener (1) and disconnect the No. 1 hose to hose tube.



- (c) Remove the No. 1 hose to hose tube (2) from the brake booster.
 (d) Detach the No. 1 hose to hose tube from the holder (3).
 (e) Remove the No. 1 hose to hose tube (2).

3. REMOVE FRONT CENTER FLOOR COVER

4. REMOVE CHECK VALVE TO BRAKE EBOOSTER HOSE

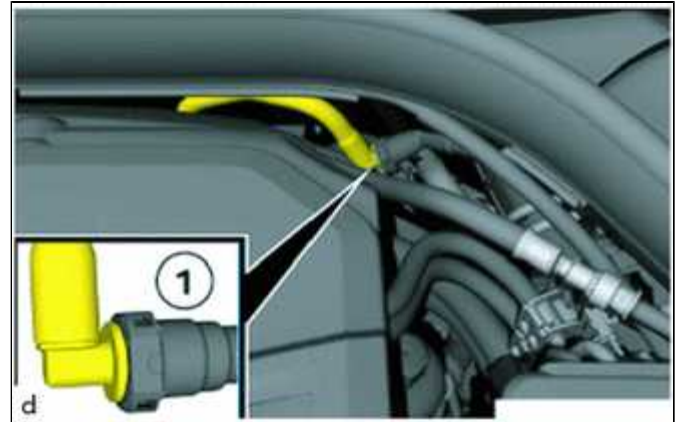
CAUTION:

- Hot surfaces.

Risk of burning!

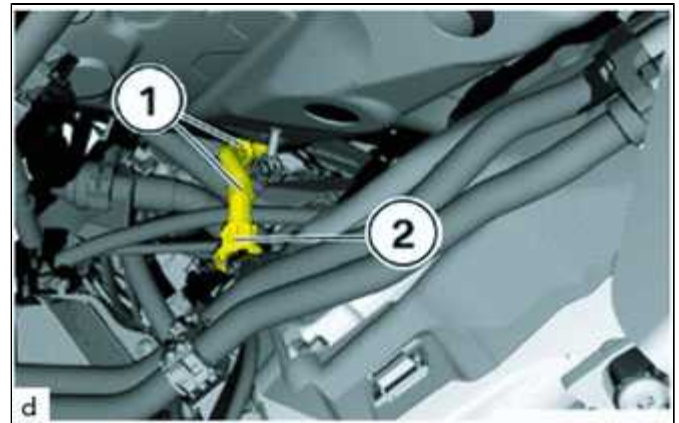
- Perform all work only on components that have cooled down.

(a) Unlock snap fastener (1).



(b) Detach check valve to brake booster hose.

(c) Unclip the check valve to brake booster hose from the holder (1).



(d) Unlock snap fastener (2).

(e) Detach check valve to brake booster hose.

(f) Feed out the check valve to brake booster hose toward the bottom and remove.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC91
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: BRAKE VACUUM HOSE: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

PROCEDURE

1. INSTALL CHECK VALVE TO BRAKE EBOOSTER HOSE

- (a) Connect and lock the snap fastener.

NOTICE:

The snap fastener must engage correctly.

- (b) Clip the check valve to brake booster hose into the holder.
- (c) Connect and lock the snap fastener.

NOTICE:

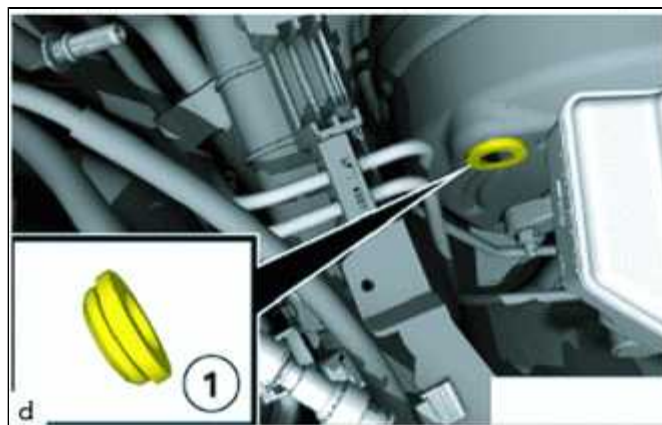
The snap fastener must engage correctly.

2. INSTALL FRONT CENTER FLOOR COVER

Click here [INFO](#)

3. INSTALL NO. 1 HOSE TO HOSE TUBE

- (a) Check the grommet on the brake booster and replace, if necessary.



- (b) Connect the snap fastener.

NOTICE:

The snap fastener must engage correctly.

- (c) Install the No. 1 hose to hose tube in the brake booster.
- (d) Install the No. 1 hose to hose tube in the holder.
- (e) Position the sealing frame and tighten the T25 screws.

Torque:

2.8 N·m {29 kgf·cm, 25 in·lbf}

4. INSTALL UPPER FRONT SUSPENSION CENTER BRACE

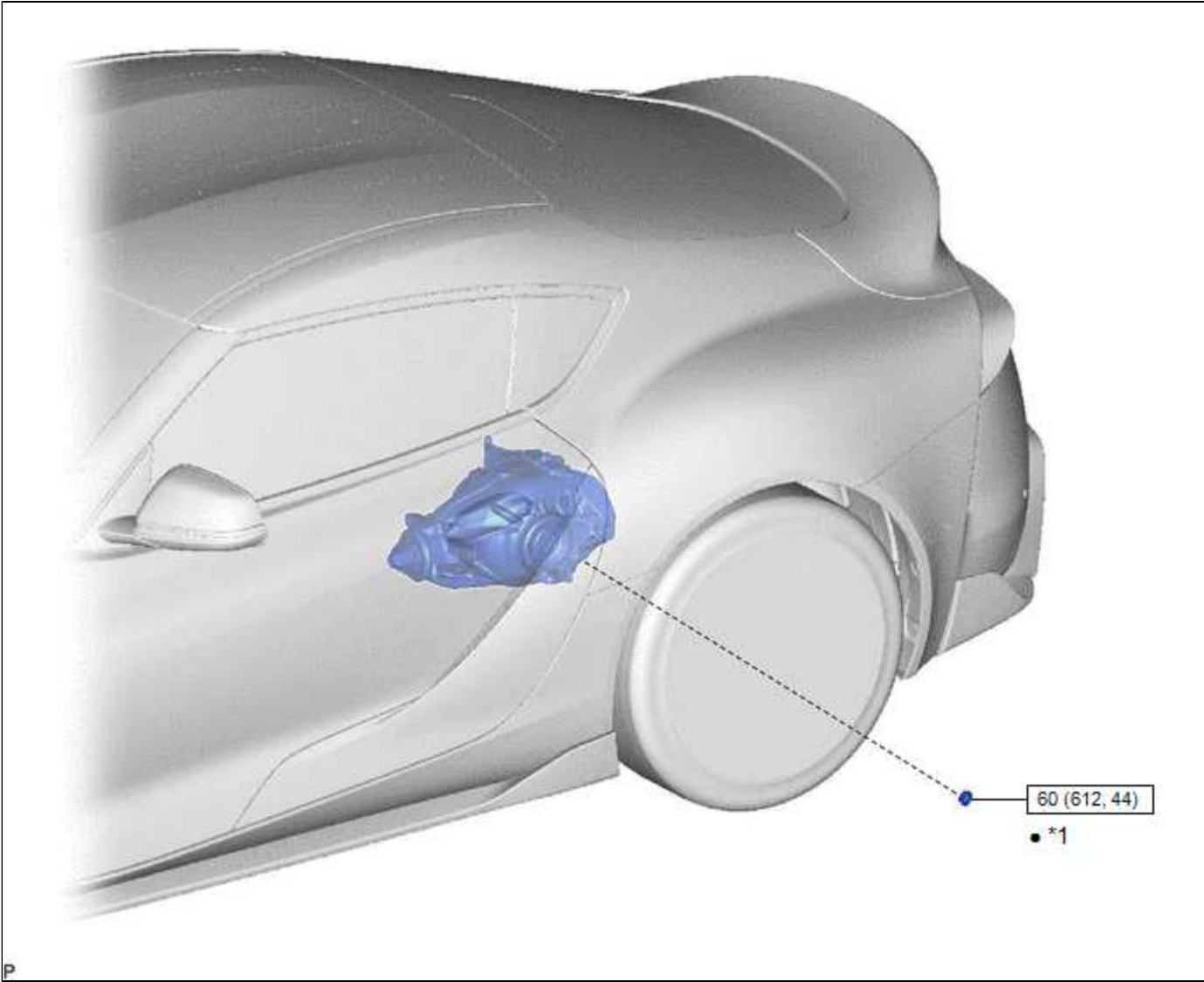
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCAD
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: DIFFERENTIAL OIL: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	OIL FILLER PLUG	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCAE
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: DIFFERENTIAL OIL: REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

CAUTION / NOTICE / HINT

CAUTION:

- Hot fluids.

Risk of scalding!

- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

- Contact with hazardous fluids.

Hazardous to health!

- Note and follow safety information on containers.
- Conduct all work in appropriate personal protective equipment only.

NOTICE:

- Damage to rear differential carrier assembly.

Failure to comply with the oil specifications can result in serious damage to the rear differential carrier assembly.

- After completion of repair work, check the differential oil level in the rear differential carrier assembly.
- Use only the approved differential oil.

HINT:

Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

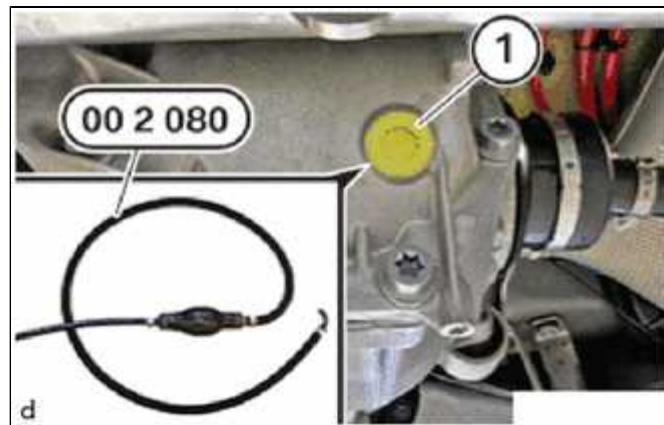
PROCEDURE

1. DRAIN DIFFERENTIAL OIL

HINT:

Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

- (a) Using a 14 mm straight hexagon wrench, open the oil filler plug (1).



- (b) Draw off the rear differential carrier assembly oil with the special tool 0 493 337 (00 2 080).

2. ADD DIFFERENTIAL OIL

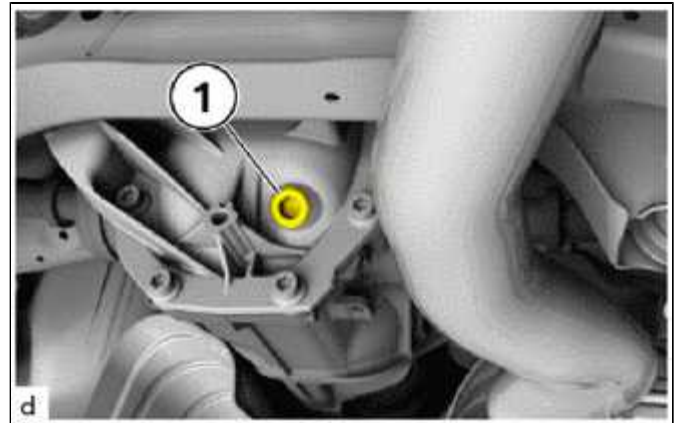
- (a) Top up rear differential carrier assembly oil up to the lower edge of the oil filler plug opening (1).

Differential oil:

Hypoid Axle Oil G4

Standard differential oil capacity:

1.0 liters (1.1 US qts, 0.9 Imp. qts)

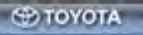


- (b) Replace the oil filler plug with O-ring (1).

- (c) Using a 14 mm straight hexagon wrench, tighten the oil filler plug (1).

Torque:

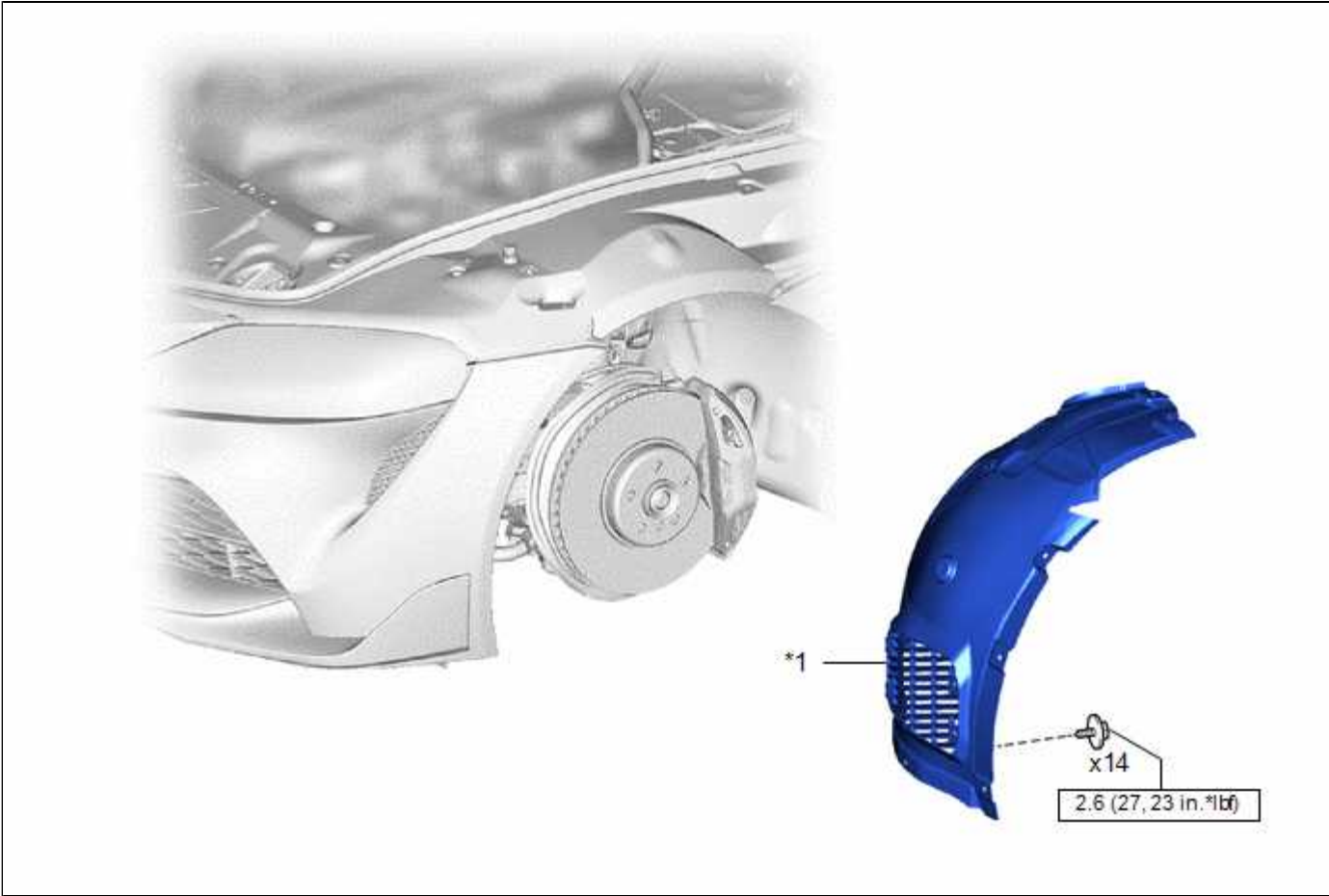
60 N·m {612 kgf·cm, 44 ft·lbf}



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8I
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT BRAKE FLEXIBLE HOSE: COMPONENTS; 2020 MY Supra [03/2019 -]		

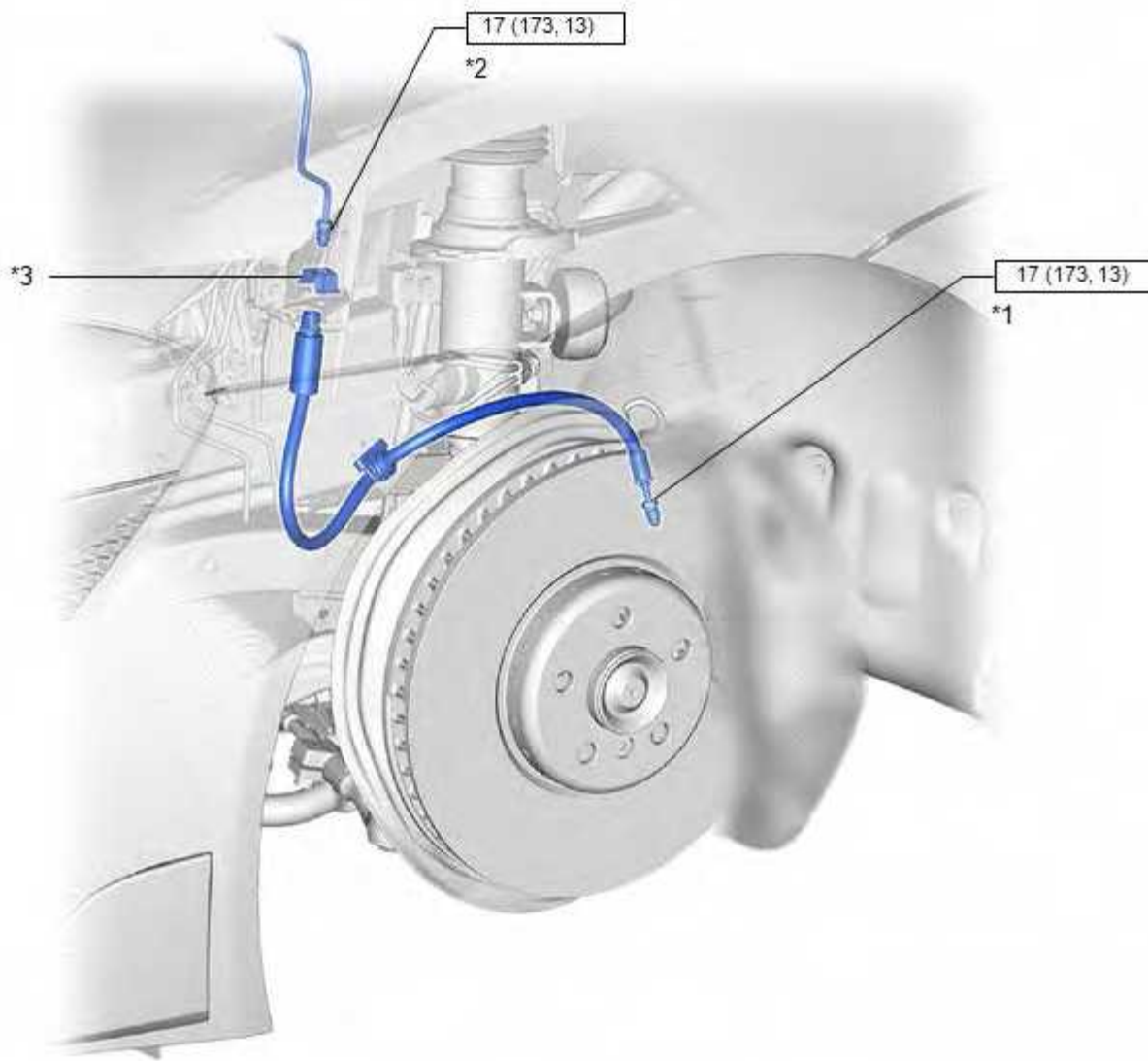
COMPONENTS

ILLUSTRATION



*1	FRONT FENDER LINER	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

ILLUSTRATION



0

*1	FRONT FLEXIBLE HOSE	*2	BRAKE TUBE
*3	CLIP	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8J
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT BRAKE FLEXIBLE HOSE: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

HINT:

- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

PROCEDURE

1. REMOVE FRONT WHEEL

Click here [INFO](#)

2. REMOVE FRONT FENDER LINER

Click here [INFO](#)

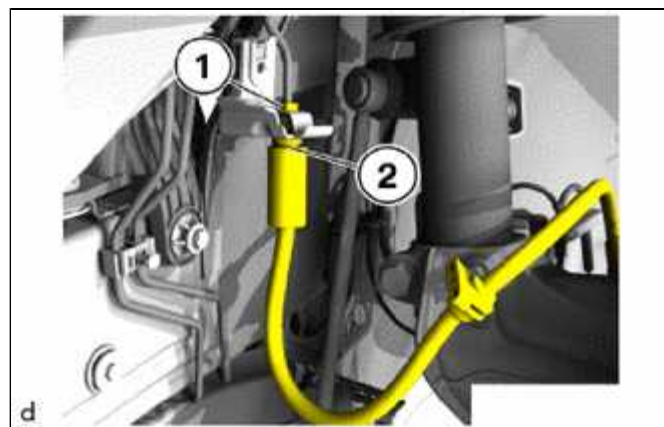
3. INSTALL BRAKE PEDAL PRESSURE

Click here [INFO](#)

4. REMOVE FRONT FLEXIBLE HOSE

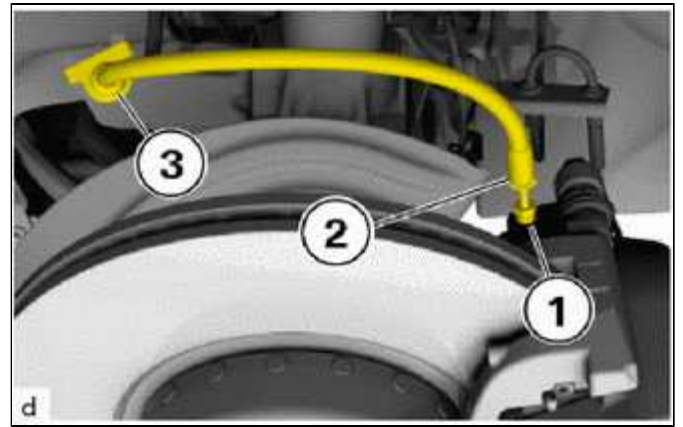
- (a) Release the 11 mm union nut (1) on the brake tube, use the hexagon head (2) for counter support if necessary.

SST: 09700-WA070



- (b) Release the 11 mm union nut (1) on the front flexible hose, use the knurling (2) for counter support if necessary.

SST: 09700-WA070



(c) Detach the front flexible hose from the bracket (3).

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8K
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT BRAKE FLEXIBLE HOSE: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

- HINT:**
- Use the same procedure for the RH side and LH side.
 - The following procedure is for the LH side.

PROCEDURE

1. INSTALL FRONT FLEXIBLE HOSE

(a) Position front flexible hose on the front disc brake cylinder assembly.

(b) Tighten 11 mm union nut (1), if necessary counter at the knurling (2).

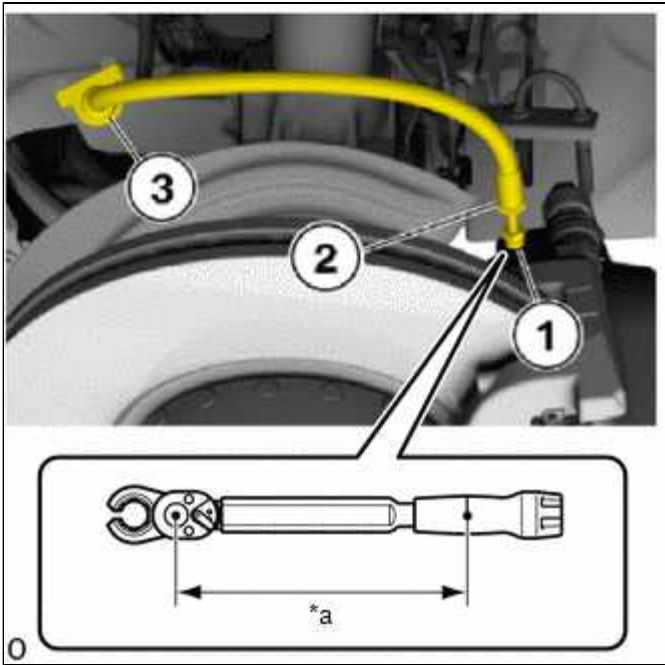
SST: 09700-WA070

Torque:

Specified tightening torque :

17 N·m {173 kgf·cm, 13 ft·lbf}

- HINT:**
- Calculate the torque wrench reading when changing the fulcrum length of the torque wrench.
- [Click here](#) INFO



*a	Torque Wrench Fulcrum Length
----	------------------------------

(c) Attach cable to the bracket (3).

(d) Tighten 11 mm union nut (1) on the brake tube, if necessary counter on the hexagon head (2).

SST: 09700-WA070

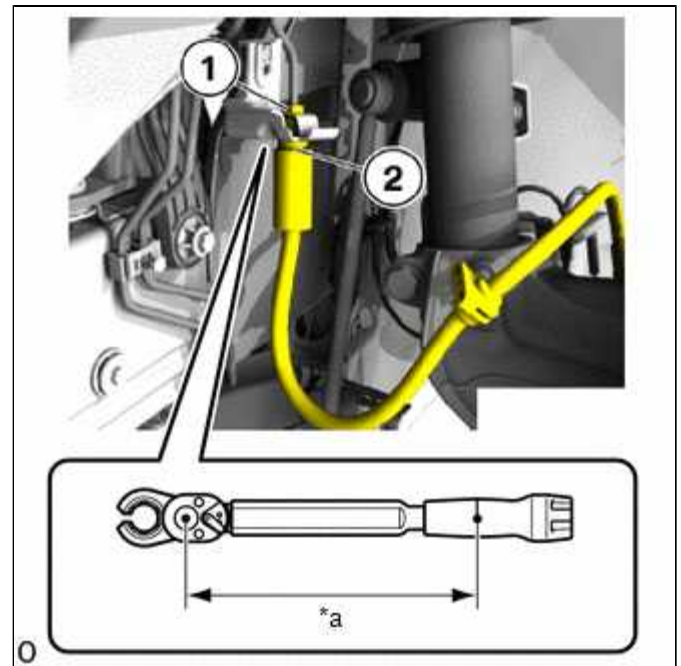
Torque:

Specified tightening torque :
17 N·m {173 kgf·cm, 13 ft·lbf}

HINT:

Calculate the torque wrench reading when changing the fulcrum length of the torque wrench.

Click here [INFO](#)



*a	Torque Wrench Fulcrum Length
----	------------------------------

2. INSTALL FRONT FENDER LINER

Click here [INFO](#)

3. REMOVE BRAKE PEDAL PRESSURE

Click here [INFO](#)

4. BLEED BRAKE LINE

Click here [INFO](#)

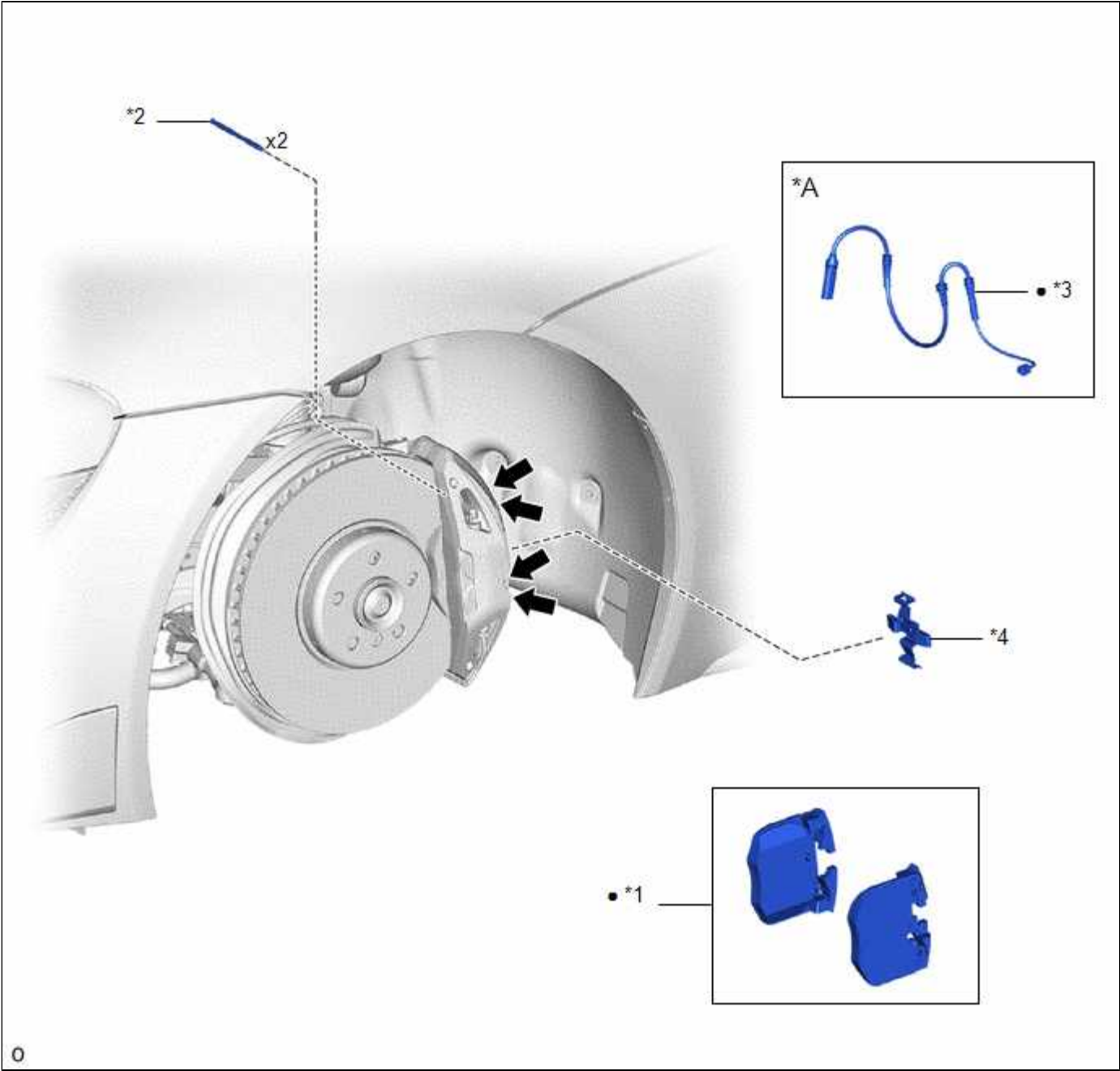
5. INSTALL FRONT WHEEL

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8F
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT DISC BRAKE PAD: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	FRONT DISC BRAKE PAD	*2	TORQUE PIN
*3	PAD WEAER INDICATOR WIRE LH	*4	NO. 1 ANTI-RATTLE SPRING
•	Non-reusable part	➡	Brake pad paste



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8G
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT DISC BRAKE PAD: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

CAUTION:

- Vehicle may slip off the vehicle hoist if the vehicle hoist is handled incorrectly.

Danger! Life-threatening injuries!

- Observe safety information on raising the vehicle using a vehicle hoist.
- For additional information see:

Click here [INFO](#)

NOTICE:

- General information on changing the brake pads:
 - For vehicles older than 48 months it is recommended to replace the retaining spring or expanding spring.
 - The pad wear indicator wire LH must be replaced once it has been removed because the pad wear indicator wire LH loses its retention capability in the brake pad.
- A CBS reset must be done after every brake pad exchange:
 - A CBS reset in the vehicle is possible in the event of a partially ground down pad wear indicator wire LH. The CBS display in the multi-display is active.
 - In the event of a pad wear indicator wire LH that is not partially ground down, a CBS reset is only possible with the diagnosis system. No CBS display in the multi-display.

Click here [INFO](#)

- To prevent damage to the surface coating:
 - With floating calipers on the brake caliper mounting bracket or with fixed calipers in the brake caliper housing, do not clean the contact surfaces for the brake pads to the extent that it is possible.
 - Clean the contact surfaces. Next, apply a thin coat of brake pad paste.
 - Spread brake pad paste on the marked surfaces with a brush.
- After a front disc brake pad exchange and before applying the brake pedal:
 - Apply the electromechanical parking brake.
 - In case of non-compliance, a CC message appears and the brake system switches to the emergency program. The brake power assistance is no longer active.
- When exchanging brake pads, reset the CBS display in accordance with factory specification (CBS reset).
- Carry out test braking while driving at low speed because the effectiveness of the brakes may be reduced during the initial braking operations.
- Exaggerated emergency and continuous braking operations for faster bedding-in are not permitted.
- Advise the customer not to perform intentional emergency braking operations for the first 200 km (124 mile) after the brakes have been replaced.

HINT:

- The following procedure is for the LH side.
- Use the same procedure for the RH side and LH side.

PROCEDURE

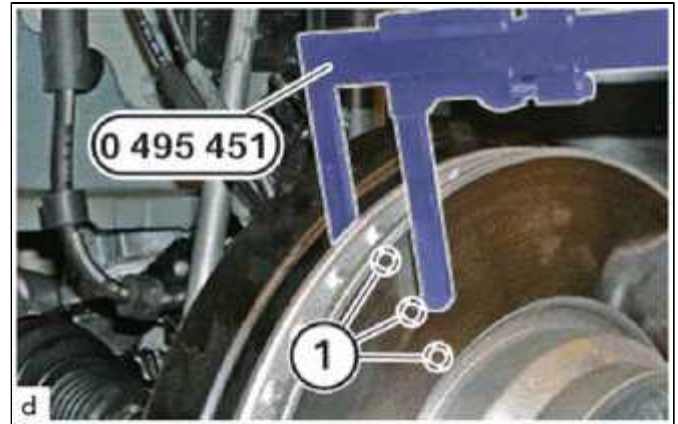
1. REMOVE FRONT WHEEL

Click here [INFO](#)

2. MEASURE MINIMUM BRAKE DISC THICKNESS

- (a) Place the special tool 0 495 451 (34 1 280) at three measuring points in area (1) and measure.

SST: 09700-WA090



- (b) Compare the measuring results and compare the lowest value with the setpoint value.

Minimum brake disc thickness:

Nominal dimension 348x36

34.4 mm (1.35 in.)

NOTICE:

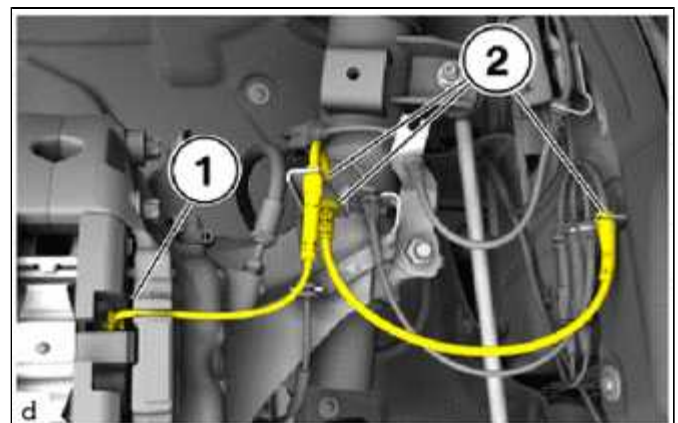
New front disc brake pads must only be installed if the brake disc thickness is greater than the minimum brake disc thickness.

3. REMOVE PAD WEAR INDICATOR WIRE LH

NOTICE:

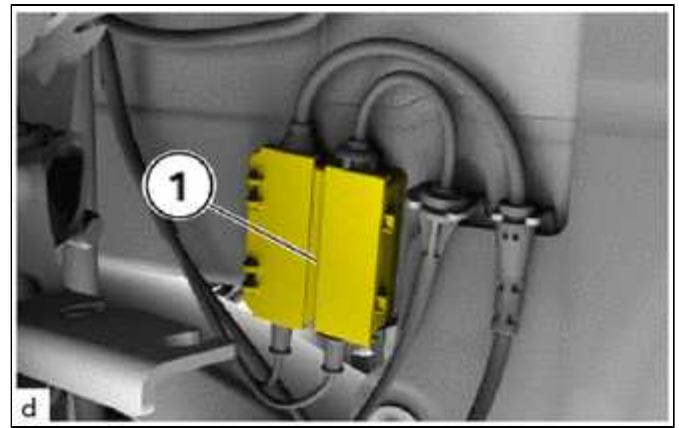
- The pad wear indicator wire LH must be replaced once it has been removed because the pad wear indicator wire LH loses its retention capability in the front disc brake pad.
- If a pad wear indicator wire LH that has already been ground has to be replaced even though the minimum front disc brake pad thickness has not yet been reached, you must observe the following:
- The new sliding contact must be filed down with a file to the same length as the sanded sliding contact.

- (a) Remove the pad wear indicator wire LH (1) from the brake pad in the direction of the arrow.

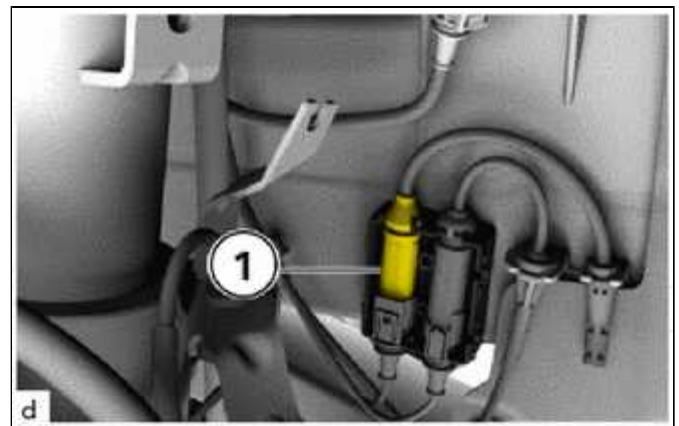


- (b) Detach the cable of the pad wear indicator wire LH from the brackets (2).

(c) Open the connection box (1).



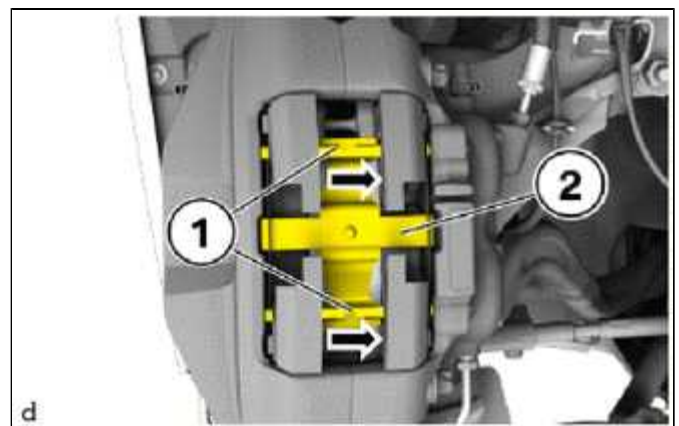
(d) Unlock plug connection (1) and disconnect.



(e) Remove pad wear indicator wire LH.

4. REMOVE FRONT DISC BRAKE PAD

(a) Drive out torque pins (1) in direction of arrow.



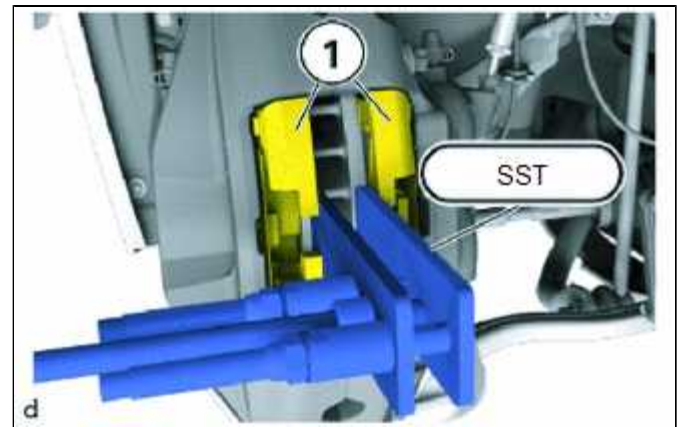
(b) Take off the No. 1 anti-rattle spring (2).

- (c) Press back front disc brake piston against the weights (1) with SST.

SST: 09719-77010

NOTICE:

- When pressing the front disc brake piston back, note the brake fluid level in the brake master cylinder reservoir assembly.
 - Overflowing brake fluid will damage the paintwork.

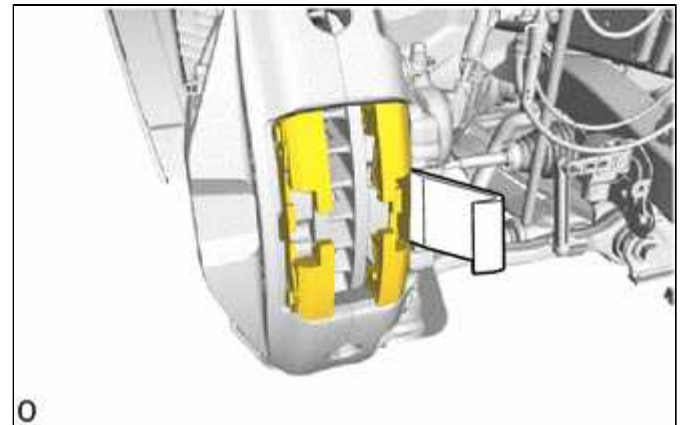


- (d) Press back the front disc brake piston up to the limit position.

- (e) Remove the front disc brake pads from the front disc brake cylinder assembly with the help of moulding remover D.

NOTICE:

- Note the following for the removal of the front disc brake pads:
 - To prevent damage to the paintwork of the front disc brake cylinder assembly:
 - i. Do not remove the front disc brake pads from the front disc brake piston with a hammer or screwdriver.
 - Use moulding remover D to remove the front disc brake pads.
- The front disc brake pads are bonded onto the front disc brake piston.
- Do not re-use front disc brake pads.
- Once the front disc brake pads have been released from the front disc brake piston, the front disc brake pads must not be reused.



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8H
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT DISC BRAKE PAD: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL FRONT DISC BRAKE PAD

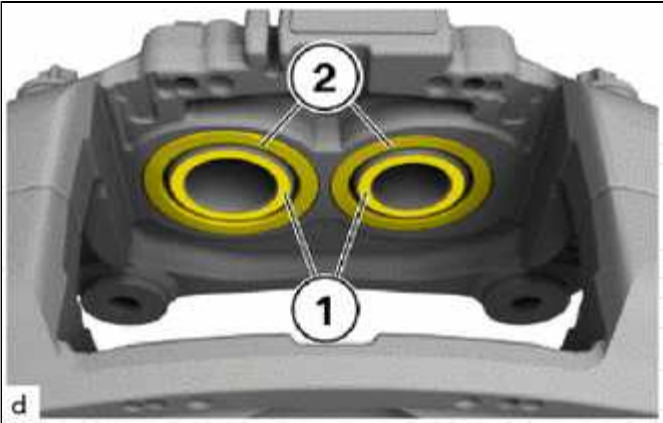
NOTICE:

- After the brake pads have been installed, the brake pads must immediately be bonded to the brake pistons:
 - Press the brake pedal to the floor and hold the pressure for 1 minute. This causes the front disc brake pads to adhere to the front disc brake pistons.

(a) Clean the contact surfaces (1) of the front disc brake pistons (4 pieces) with brake cleaner.

NOTICE:

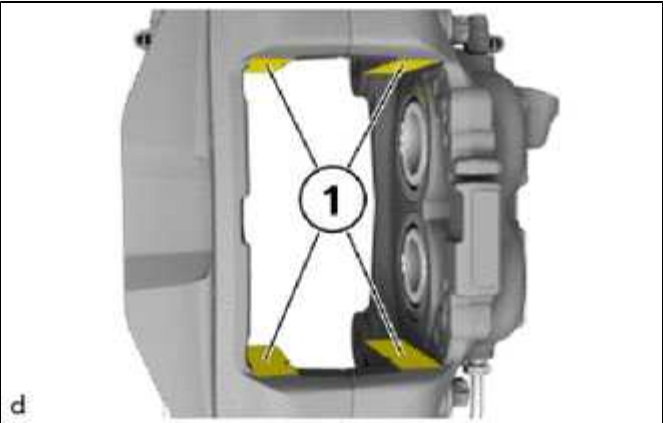
Adhesive residue must be completely removed.



- (b) Check the cylinder boot (2) for damage and replace if necessary.
- (c) Clean the contact surfaces (1) using brake cleaner and thinly coat with brake pad paste.

NOTICE:

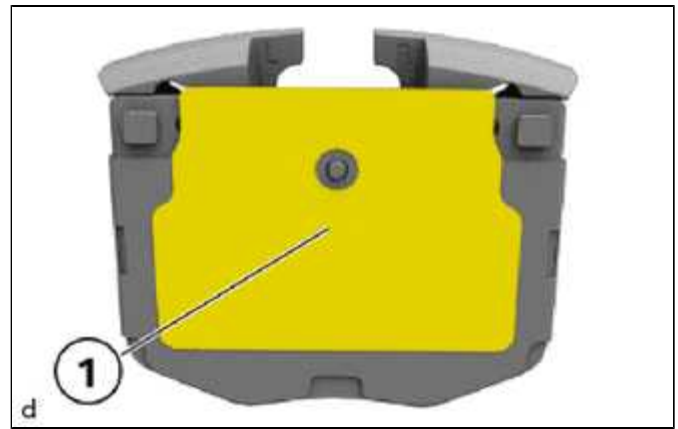
Do not mechanically clean the contact surfaces (1) for the front disc brake pads at the front disc brake cylinder assembly to prevent damage to the surface coating.



- (d) Remove the protective film of the adhesive layer (1) at the front disc brake pads.

NOTICE:

The adhesive layer (1) must not be touched.

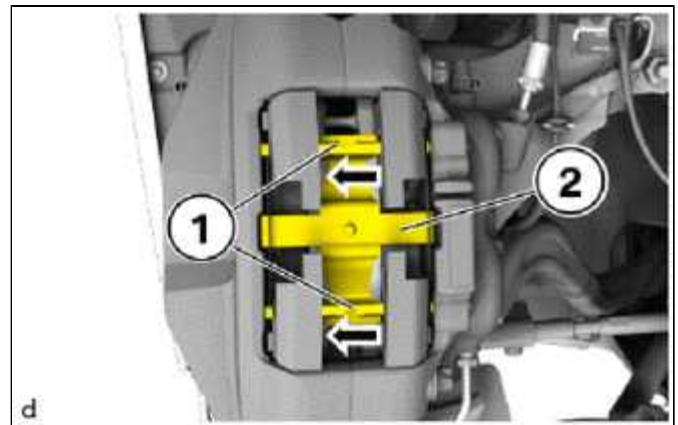


- (e) Insert front disc brake pads into the front disc brake cylinder assembly.

NOTICE:

The adhesive layer must not touch the front disc brake piston.

- (f) Position the No. 1 anti-rattle spring (2).



- (g) Drive in torque pins (2) in the direction of the arrow.

- (h) Bond the front disc brake pads to the front disc brake piston. For this purpose, fully press the brake pedal and maintain the pressure for 1 minute.

2. INSTALL PAD WEAR INDICATOR WIRE LH

- (a) Replace the pad wear indicator wire LH.
(b) Insert the pad wear indicator wire LH into the front disc brake pad.

NOTICE:

Ensure pad wear indicator wire LH fits correctly in front disc brake pad.

- (c) Attach cable of pad wear indicator wire LH in brackets.
(d) Connect connectors and lock.
(e) Close the connection box.

3. INSTALL FRONT WHEEL

Click here [INFO](#)

4. INSPECT FRONT BRAKE

NOTICE:

- When exchanging brake pads, reset the CBS display in accordance with factory specification (CBS reset).
- Carry out test braking while driving at low speed because the effectiveness of the brakes may be reduced during the initial braking operations.
- Exaggerated emergency and continuous braking operations for faster bedding-in are not permitted.
- Advise the customer not to perform intentional emergency braking operations for the first 200 km (124 mile) after the brakes have been replaced.

(a) Fully depress brake pedal several times so that brake pads contact brake discs.

(b) Adjust the brake fluid level to the maximum mark.

(c) Perform a functional check on the brake test stand to ensure compliance of the brake system with statutory guidelines.

5. PERFORM CBS RESET

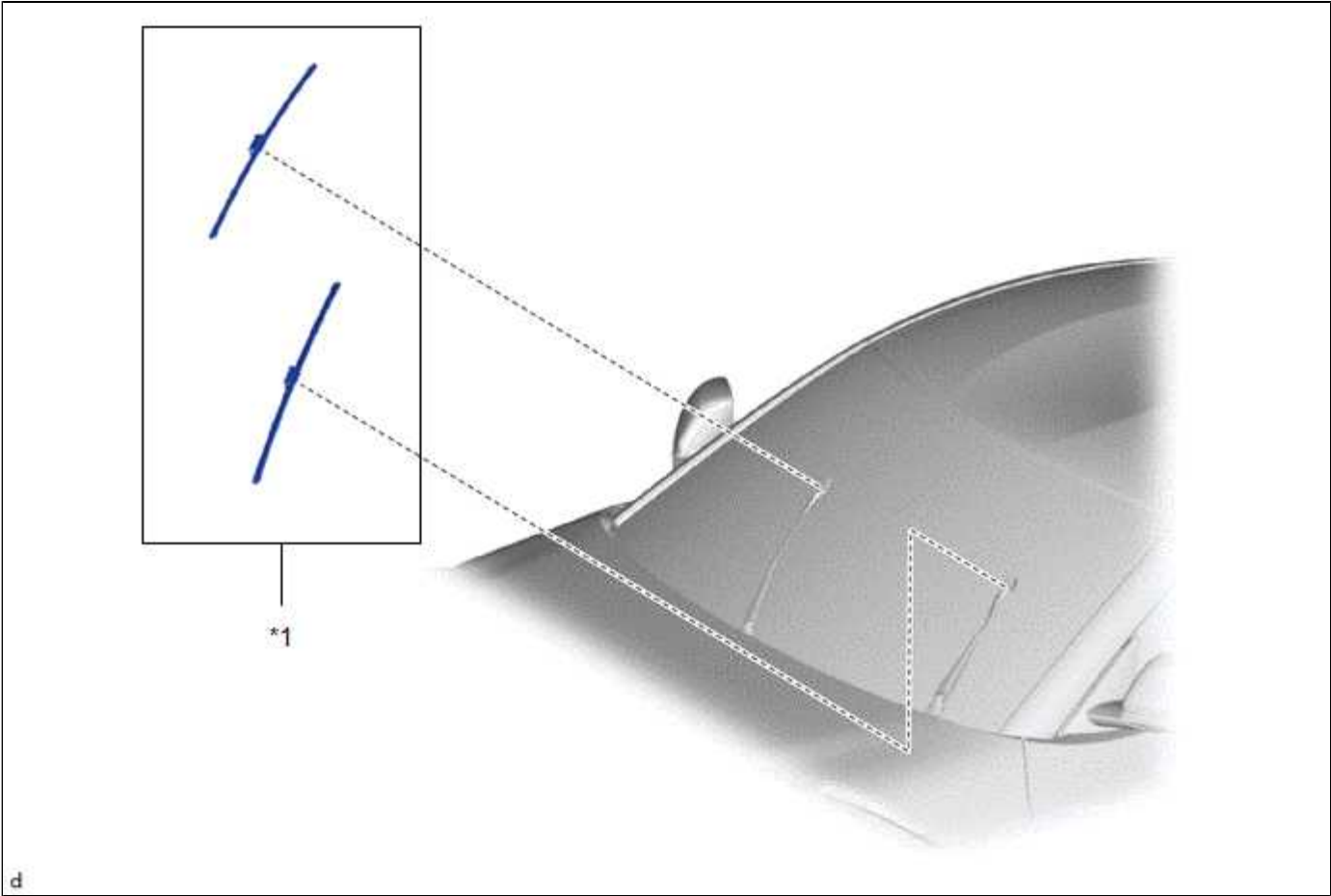
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8U
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT WIPER RUBBER: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	FRONT WIPER BLADE	-	-
----	-------------------	---	---

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8V
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT WIPER RUBBER: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

NOTICE:

- The wiper arm must not touch the windshield glass without a wiper blade. Otherwise the windshield glass could be damaged.
- In the event of a customer complaint about the cleaning or wiper performance and/or noise (windscreen wiper judder, squeaking noise) of the wiper blades, proceed as follows.
 - First, check if the customer complaint is caused by contamination (preservation wax with new vehicles, tree resins or other environmental influences) on the windshield glass. If necessary, clean the windshield glass thoroughly.
 - Replace the wiper blades only if cleaning the windshield glass fails to remedy the situation.

HINT:

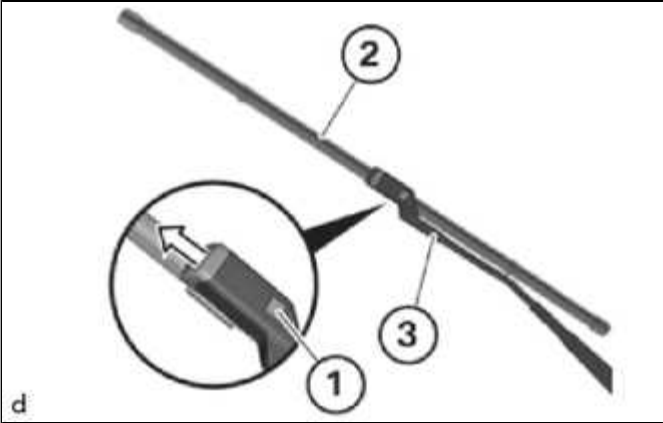
Description is for left component only. Procedure on the right side is identical.

PROCEDURE

1. REMOVE FRONT WIPER BLADE

- (a) Open the front door.
- (b) Hold the wiper lever down until the wipers stand still in a roughly vertical position.

- (c) Fold out the front wiper arm (3) and open the lock (1).



- (d) Remove the front wiper blade (2) from the front wiper arm (3) in the direction of the arrow.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8W
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: FRONT WIPER RUBBER: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

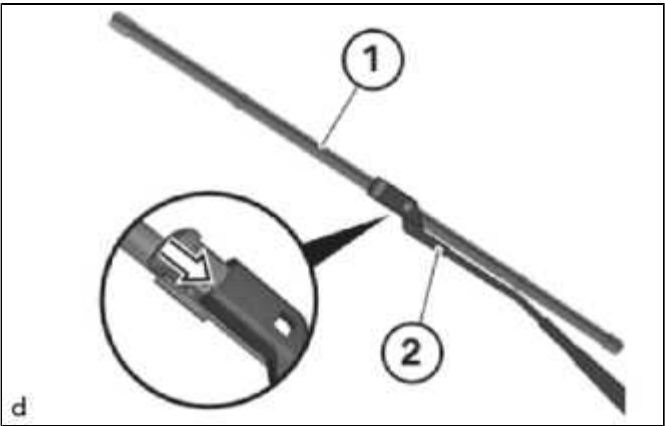
CAUTION / NOTICE / HINT

HINT:
Description is for left component only. Procedure on the right side is identical.

PROCEDURE

1. INSTALL FRONT WIPER BLADE

(a) Clip in the front wiper blade (1) in the direction of the arrow on the front wiper arm (2).



- (b) Fold in the front wiper arm (2) and check the lock.
- (c) Press the START-STOP button (engine switch) or hold the wiper lever down again.
- (d) Wipers move back to wiper park position and are again operational.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JFJ7
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: GENERAL MAINTENANCE: OUTSIDE VEHICLE; 2020 MY Supra [03/2019 -]		

OUTSIDE VEHICLE

Performing the following maintenance checks on the vehicle is the owner's responsibility. The owner may perform the maintenance or take the vehicle to a service center. Check the parts of the vehicle described below on a daily basis. In most cases, special tools are not required. It is recommended that the owner perform these checks. The procedures for general maintenance are as follows.

GENERAL NOTES

- Maintenance requirements vary depending on the country.
- Check the maintenance schedule in the owner's manual supplement.
- Following the maintenance schedule is mandatory.
- Determine the appropriate time to service the vehicle using either distance driven or time (months) elapsed, whichever reaches the specification first.
- Maintain similar intervals between periodic maintenance, unless otherwise noted.
- Failing to check each vehicle part could lead to poor engine performance and increased exhaust emissions.

TIRES

- (a) Inspect the tires for proper inflation pressure.

Click here [INFO](#)

- (b) Check the surfaces of the tires for cuts, damage or excessive wear.

WHEEL BOLTS

- (a) Check for bolts that are loose or missing. Tighten the bolts if necessary.

TIRE ROTATION

HINT:

Tire rotation cannot be performed on this vehicle.

WINDSHIELD WIPER BLADES

- (a) Check the blades for wear or cracks when they are unable to wipe the windshield clean. Replace them if necessary.

FLUID LEAKS

- (a) Check under the vehicle for leaking fuel, oil, water or other fluids.

NOTICE:

If you smell gasoline fumes or notice any leaks, locate the cause and correct it.

DOORS AND ENGINE HOOD

- (a) Check that all of the doors operate smoothly, and that all the latches lock securely.
- (b) When the engine hood primary latch is released, check that the engine hood secondary latch prevents the hood from opening.
- (c) Confirm the expiration date on the hood support.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JFJ8
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: GENERAL MAINTENANCE: INSIDE VEHICLE; 2020 MY Supra [03/2019 -]		

INSIDE VEHICLE

Performing the following maintenance checks on the vehicle is the owner's responsibility. The owner may perform the maintenance or take the vehicle to a service center. Check the parts of the vehicle described below on a daily basis. In most cases, special tools are not required. It is recommended that the owner perform these checks. The procedures for general maintenance are as follows.

GENERAL NOTES

- Maintenance requirements vary depending on the country.
- Check the maintenance schedule in the owner's manual supplement.
- Determine the appropriate time to service the vehicle using either distance driven or time (months) elapsed, whichever reaches the specification first.
- Maintain similar intervals between periodic maintenance unless noted.
- Failing to check each vehicle part could lead to poor engine performance and increased exhaust emissions.

LIGHTS

- Check that the headlights, stop lights, taillights, turn signal lights and other lights illuminate or blink properly. Also, check that they have enough brightness.
- Check that the headlights are aimed properly.

WARNING LIGHTS AND BUZZERS

- Check that all the warning lights and buzzers are working.

HORNS

- Check that the horn is working.

WINDSHIELD GLASS

- Check for scratches, pits or abrasions.

WINDSHIELD WIPER AND WASHER

- Check that the washers are aimed properly. Also, check that the washer fluid hits the windshield in the center of the operating range of each wiper.
- Check if the wipers streak or not. Replace the wipers if necessary.

WINDSHIELD DEFROSTER

- When the heater or air conditioner is on the defroster setting, check that air comes out of the defroster outlet.

REAR VIEW MIRROR

- Check that the rear view mirror is securely mounted.

SUN VISORS

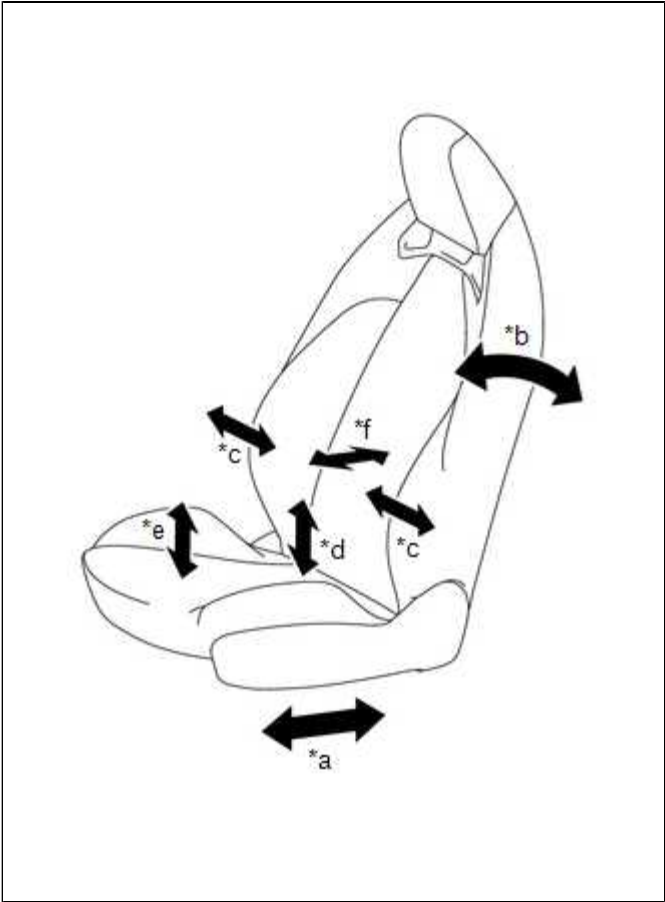
- Check that the sun visors move freely and are securely mounted.

STEERING WHEEL

- Check that the steering wheel free play. Also check for steering difficulty and unusual noises.

SEATS

- (a) Check that the seat adjusters, seatback recliner and other seat controls operate smoothly.
- (b) Check that all the latches lock securely in all positions.
- (c) Check that the locks hold securely in all positions.
- (d) Check that the headrests move up and down smoothly and that the locks hold securely in all latched positions.
- (e) for Power Seat:
 - (1) Operate the power seat switches and check that the following seat functions operate properly:



*a	Slide Function
*b	Reclining Function
*c	Back Side Adjustment Function
*d	Rear Lifter Function
*e	Front Vertical Function
*f	Lumbar Support Adjustment Function

- Slide function
- Reclining function
- Back side adjustment function
- Rear lifter function
- Front vertical function
- Lumbar support adjustment function

SEAT BELTS

- (a) Check that the seat belt components, such as the buckles, retractors and anchors, operate properly and smoothly.
- (b) Check that the belt webbing is not cut, frayed, worn or damaged.

ACCELERATOR PEDAL

- (a) Check that the pedal operates smoothly. In other words, check that the pedal does not have uneven pedal resistance or become stuck in certain positions.

BRAKE PEDAL

- (a) Check that the pedal operates smoothly.
- (b) Check that the pedal has the proper reserve distance and free play.
- (c) Start the engine and check the brake booster function.
- (d) Start the engine and check the brake system indicator.

BRAKES

- (a) In a safe place, check that the vehicle remains straight when applying the brakes.

PARKING BRAKE

- (a) On a slight grade, check that the parking brake alone can hold the vehicle in place.

AUTOMATIC TRANSMISSION "PARK" MECHANISM

- (a) Check the operation of the P position switch.
- (b) Check that park (P) can be disengaged by operating the shift lever.
- (c) With park (P) selected, release all brakes in an area that has a slight grade and check that the vehicle is stable.

FLOOR MATS

- (a) Check that the correct floor mats are used, and that they are properly installed.



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JFJ9
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: GENERAL MAINTENANCE: UNDER HOOD; 2020 MY Supra [03/2019 -]		

UNDER HOOD

GENERAL NOTES

- Maintenance requirements vary depending on the country.
- Check the maintenance schedule in the owner's manual supplement.
- Following the maintenance schedule is mandatory.
- Determine the appropriate time to service the vehicle using either distance driven or time elapsed, whichever reaches the specification first.
- Maintain similar intervals between periodic maintenance unless noted.
- Failing to check each vehicle part could lead to poor engine performance and increased exhaust emissions.

WINDSHIELD WASHER FLUID

- (a) Check that there is sufficient fluid in the tank.

ENGINE COOLANT LEVEL (for Low Temperature)

- (a) Check that the coolant level is between the "max" and "min" lines in the reserve tank.

ENGINE COOLANT LEVEL (for High Temperature)

- (a) Check that the coolant level is between the "max" and "min" lines in the reserve tank.

RADIATOR AND HOSES

- (a) Check that the front of the radiator is clean and free of leaves, dirt and bugs.
- (b) Check the hoses for cracks, kinks, rotting or loose connections.

BRAKE FLUID LEVEL

- (a) Check that the brake fluid level is near the upper level line on the see-through reservoir.

ENGINE DRIVE BELT

- (a) Check the drive belt for fraying, cracks, wear or oiliness.

EXHAUST SYSTEM

- (a) Visually inspect for severe corrosion, cracks, holes or loose supports.

HINT:

If any change in the sound of the exhaust or smell of the exhaust fumes is noticed, inspect and repair the exhaust system.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JFJA
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: GENERAL MAINTENANCE: ENGINE; 2020 MY Supra [03/2019 -]		

ENGINE

HINT:

Perform these procedures after the engine has cooled down.

INSPECT DRIVE BELT

- (a) Inspect the drive belt.

Click here [INFO](#)

INSPECT ENGINE OIL

- (a) Inspect the engine oil.

Click here [INFO](#)

REPLACE ENGINE OIL AND OIL FILTER

- (a) Replace the engine oil and oil filter.

Click here [INFO](#)

INSPECT ENGINE COOLANT

- (a) Inspect the engine coolant.

Click here [INFO](#)

REPLACE ENGINE COOLANT (for Low Temperature)

- (a) Replace the engine coolant.

Click here [INFO](#)

REPLACE ENGINE COOLANT (for High Temperature)

- (a) Replace the engine coolant.

Click here [INFO](#)

REPLACE SPARK PLUGS

- (a) Replace the spark plugs.

Click here [INFO](#)

REPLACE BATTERY

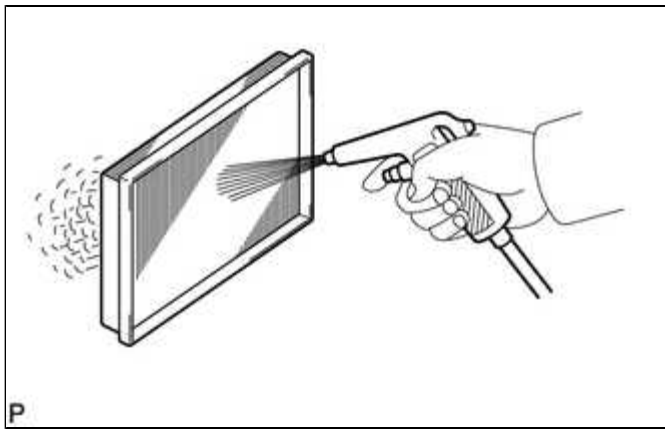
- (a) Replace the battery.

Click here [INFO](#)

INSPECT AIR CLEANER FILTER ELEMENT

- (a) Remove the air cleaner filter element.
- (b) Check that the air cleaner filter element is not excessively dirty.

If the air cleaner filter element is excessively dirty, replace the air cleaner filter element.



(c) If cleaning the air cleaner filter element, blow compressed air as shown in the illustration to clean it.

(d) Reinstall the air cleaner filter element.

INSPECT EXHAUST PIPES AND MOUNTINGS

(a) Visually check the pipes, hangers and connections for severe corrosion, leaks or damage.

INSPECT FUEL TANK CAP GASKET

(a) Visually check that the fuel tank cap gasket is not deformed or damaged.

INSPECT FUEL LINES, CONNECTIONS, FUEL TANK VAPOR VENT SYSTEM HOSES, AND FUEL TANK BANDS

(a) Visually check the fuel lines and hoses for cracks, leaks, loose connections, or deformation.

(b) Check for tank band looseness or deformation.

REPLACE CHARCOAL CANISTER

(a) Replace the charcoal canister.

Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JFJB
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: GENERAL MAINTENANCE: BRAKE; 2020 MY Supra [03/2019 -]		

BRAKE

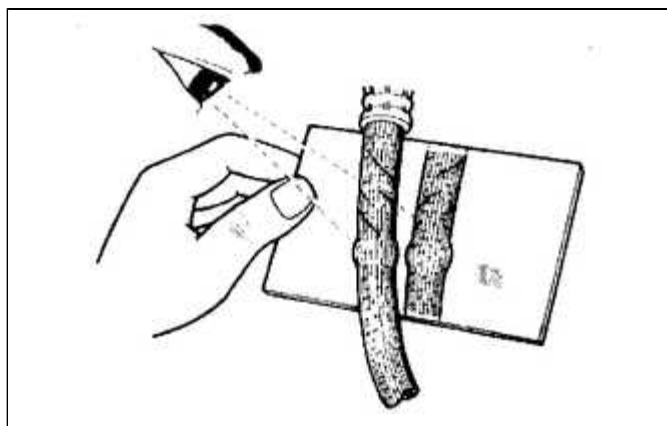
INSPECT BRAKE LINE PIPES AND HOSES

HINT:

Work in a well-lighted area. Turn the front wheels fully to the right or left before beginning the inspection.

(a) Using a mirror, check the entire circumference and length of the brake lines and hoses for:

- Damage
- Wear
- Deformation
- Cracks
- Kinks
- Corrosion
- Leaks
- Twists



(b) Check all the clamps for tightness and check the connections for leakage.

(c) Check that the hoses and lines are not near sharp edges, moving parts or the exhaust system.

(d) Check that the lines are installed properly and pass through the center of the grommets.

INSPECT BRAKE PEDAL

(a) Check that the pedal has the proper reserve distance and free play.

INSPECT PARKING BRAKE

(a) Inspect the parking brake.

Click here [INFO](#)

INSPECT FRONT BRAKE

(a) Inspect the front brake pads and discs.

Click here [INFO](#)

INSPECT REAR BRAKE

(a) Inspect the rear brake pads and discs.

Click here [INFO](#)

INSPECT BRAKE FLUID

(a) Inspect the brake fluid.

Click here [INFO](#)

REPLACE BRAKE FLUID

(a) Replace the brake fluid.

Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JFJC
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: GENERAL MAINTENANCE: CHASSIS; 2020 MY Supra [03/2019 -]		

CHASSIS

INSPECT STEERING LINKAGE AND GEAR BOX

- (a) Check the steering wheel free play.
- (b) Check the steering linkage for looseness or damage.
 - (1) Check that the tie rod ends do not have any play.
 - (2) Check that the dust seals and boots are not damaged.
 - (3) Check that the boot clamps are not loose.
 - (4) Check that the steering gear housing is not damaged.

INSPECT SUSPENSION BALL JOINT AND DUST COVER

- (a) Check the ball joints for excessive looseness.
- (b) Check the dust cover for damage.

INSPECT AXLE HUB BEARING

- (a) Check the axle hub bearings for excessive looseness.

INSPECT DRIVE SHAFT BOOTS

- (a) Check the drive shaft boots for loose clamps, cracks, grease leaks, kinks or damage.

INSPECT AUTOMATIC TRANSMISSION

- (a) Visually check the transmission for fluid leaks. If fluid is leaking, find the cause and repair it.

INSPECT AUTOMATIC TRANSMISSION FLUID COOLER HOSE AND CONNECTIONS

- (a) Check the automatic transmission fluid cooler hoses (oil cooler hoses) for cracks, leakage, loose connections and deformation.

REPLACE AUTOMATIC TRANSMISSION FLUID

- (a) Replace the automatic transmission fluid.

Click here [INFO](#)

INSPECT DIFFERENTIAL

- (a) Visually check the differentia for fluid leaks. If fluid is leaking, find the cause and repair it.

REPLACE DIFFERENTIAL OIL

- (a) Replace the differential oil.

Click here [INFO](#)

INSPECT FRONT AND REAR SUSPENSION

- (a) Inspect the front and rear suspension.

for Front Suspension: Click here [INFO](#)

for Rear Suspension: Click here [INFO](#)

TIGHTEN PROPELLER SHAFT BOLT

(a) Tighten the propeller shaft bolts.

Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JFJD
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: GENERAL MAINTENANCE: BODY; 2020 MY Supra [03/2019 -]		

BODY

TIGHTEN BOLTS AND NUTS ON CHASSIS AND BODY

(a) If necessary, tighten the bolts and nuts on the chassis parts listed below.

- Front axle and suspension
- Drivetrain
- Rear axle and suspension
- Brake system
- Engine mounts
- Other chassis parts

(b) If necessary, tighten the bolts and nuts on the body parts listed below.

- Seat belt system
- Seats
- Doors and hood
- Body mounts
- Fuel tank
- Exhaust system
- Other body parts

CLEAN OR REPLACE AIR CONDITIONING FILTER

(a) Remove the air conditioning filter.

Click here [INFO](#)

(b) Visually inspect the surface of the air conditioning filter.

(c) If the air conditioning filter is contaminated with foreign matter, clean or replace it according to the maintenance schedule.

NOTICE:

Some filters are not able to be cleaned.

ROAD TEST

- Check the engine and chassis for abnormal noises.
- Check that the vehicle does not wander or pull to one side.
- Check that the brakes work properly and do not drag.
- Bed-in the parking brake pads.

BODY INSPECTION

- Check the body exterior for dents, scratches and rust.
- Check the underbody for rust and damage.

If necessary, replace any damaged parts or repair any damaged areas.

FINAL INSPECTION

(a) Check the operation of the body parts.

- (1) Hood

- Auxiliary catch operates properly.
- Hood locks securely when closed.

(2) Front doors

- Door locks operate properly.
- Doors close properly.

(3) Back door

- Door lock operates properly.

(4) Seats

- Seats adjust easily and lock securely in any position.
- Front seatbacks lock securely in any position.

(5) Be sure to deliver a clean car. Make sure to check the following:

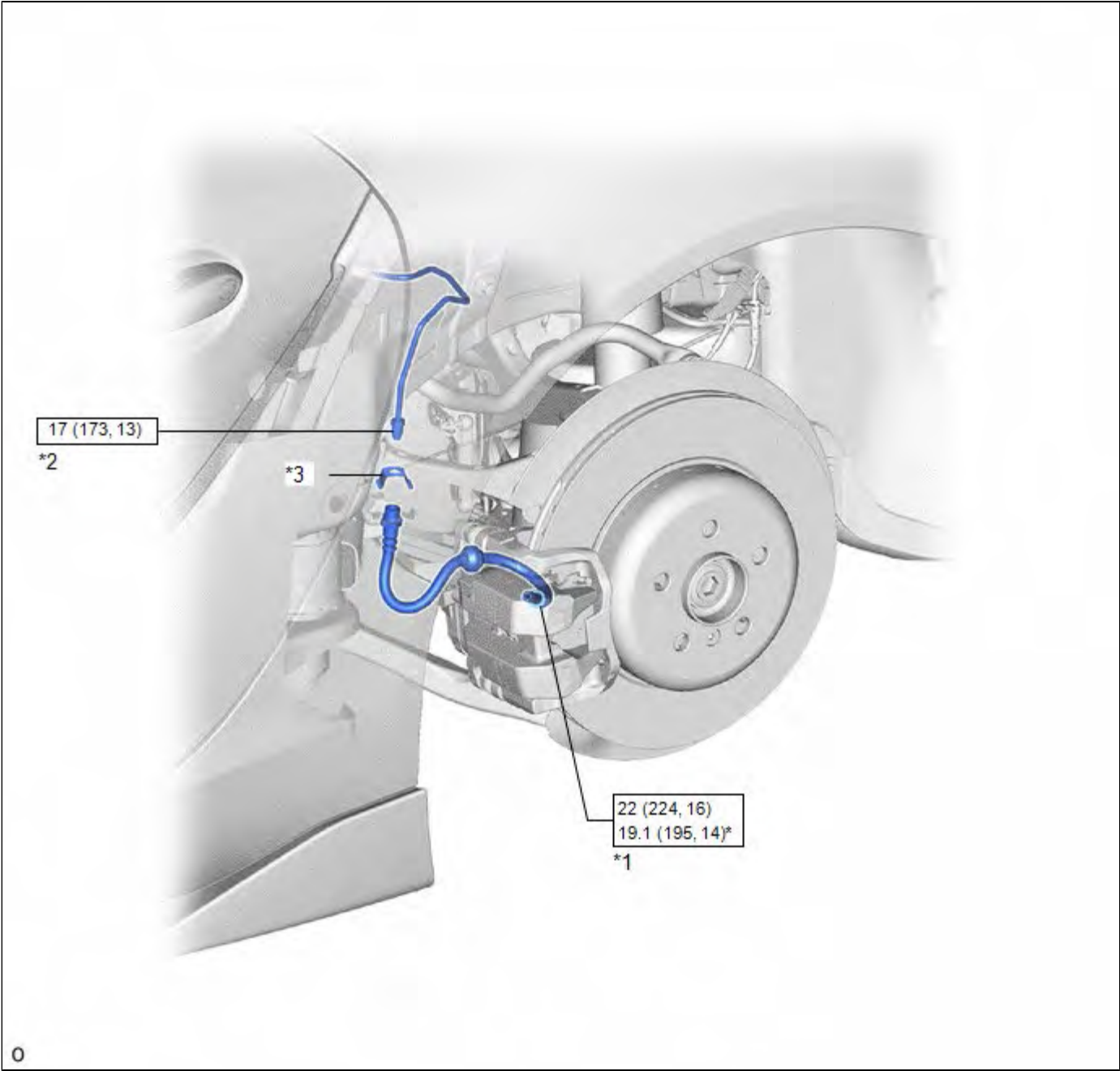
- Steering wheel
- Shift lever knob
- All switches and knobs
- Door handles
- Seats



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8O
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: REAR BRAKE FLEXIBLE HOSE: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	REAR FLEXIBLE HOSE	*2	BRAKE TUBE
*3	CLIP	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	*	For use with a union nut wrench



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8P
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: REAR BRAKE FLEXIBLE HOSE: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

HINT:

- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

PROCEDURE

1. REMOVE REAR WHEEL

Click here [INFO](#)

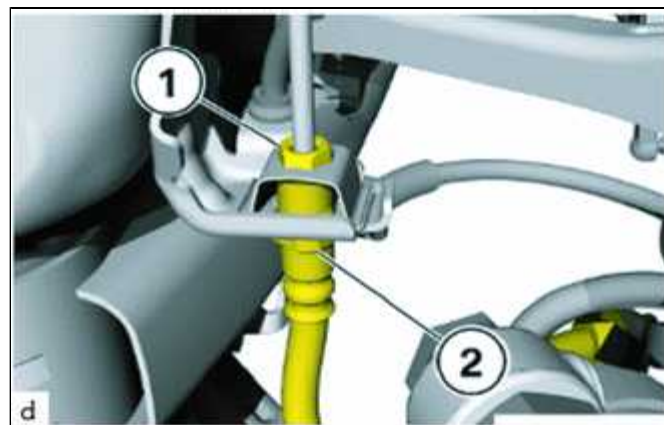
2. INSTALL BRAKE PEDAL PRESSURE

Click here [INFO](#)

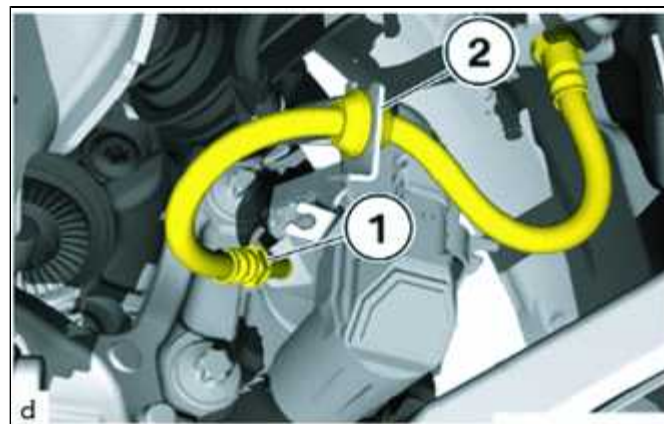
3. REMOVE REAR FLEXIBLE HOSE

- (a) Release 11 mm union nut (1), if necessary counter on the square shaft (2).

SST: 09700-WA070



- (b) Detach rear flexible hose (1) from rear disc brake cylinder assembly.



(c) Remove the rear flexible hose (1) from the bracket (2).



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8Q
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: REAR BRAKE FLEXIBLE HOSE: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

- HINT:
- Use the same procedure for the RH side and LH side.
 - The following procedure is for the LH side.

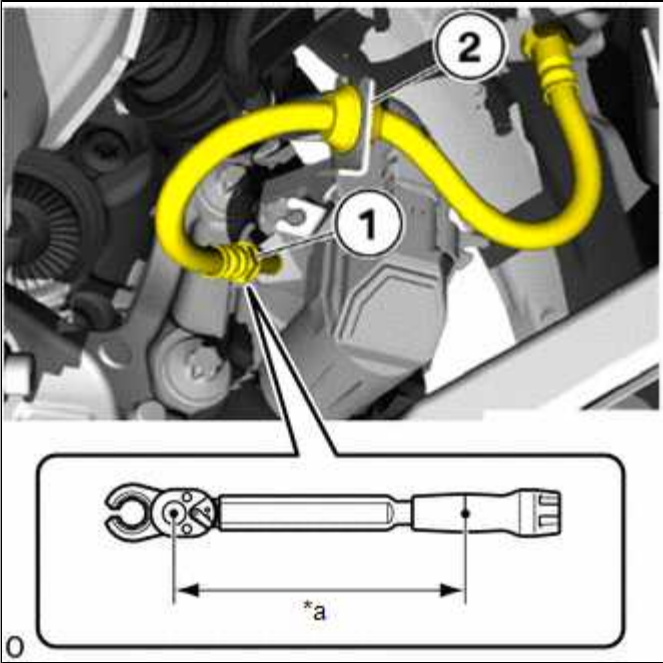
PROCEDURE

1. INSTALL REAR BRAKE HOSE

(a) Using a 14 mm union nut wrench, tighten the rear flexible hose (1) on the rear disc brake cylinder assembly.

Torque:
Specified tightening torque :
22 N·m {224 kgf·cm, 16 ft·lbf}

- HINT:
- Calculate the torque wrench reading when changing the fulcrum length of the torque wrench.
- Click here [INFO](#)
- When using a special tool (fulcrum length of 25.0 mm (0.984 in.)) + torque wrench (fulcrum length of 162 mm (6.38 in.)): 19.1 N·m (195 kgf·cm, 14 ft·lbf)



*a	Torque Wrench Fulcrum Length
----	------------------------------

(b) Insert the rear flexible hose into the holder (2).

NOTICE:

Make sure that the rear flexible hose does not rest against the components fixed to the body and that it is not twisted.

(c) Position and tighten the 11 mm union nut (1). If necessary, use the square end (2) for counter support.

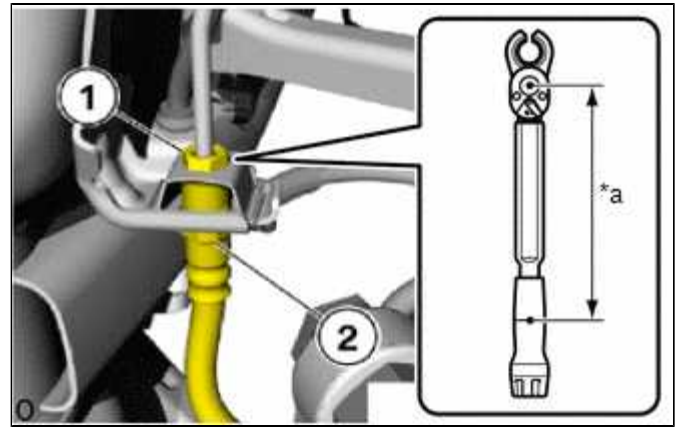
SST: 09700-WA070

Torque:
Specified tightening torque :
17 N·m {173 kgf·cm, 13 ft·lbf}

HINT:

Calculate the torque wrench reading when changing the fulcrum length of the torque wrench.

Click here [INFO](#)



*a	Torque Wrench Fulcrum Length
----	------------------------------

2. REMOVE BRAKE PEDAL PRESSURE

Click here [INFO](#)

3. BLEED BRAKE LINE

Click here [INFO](#)

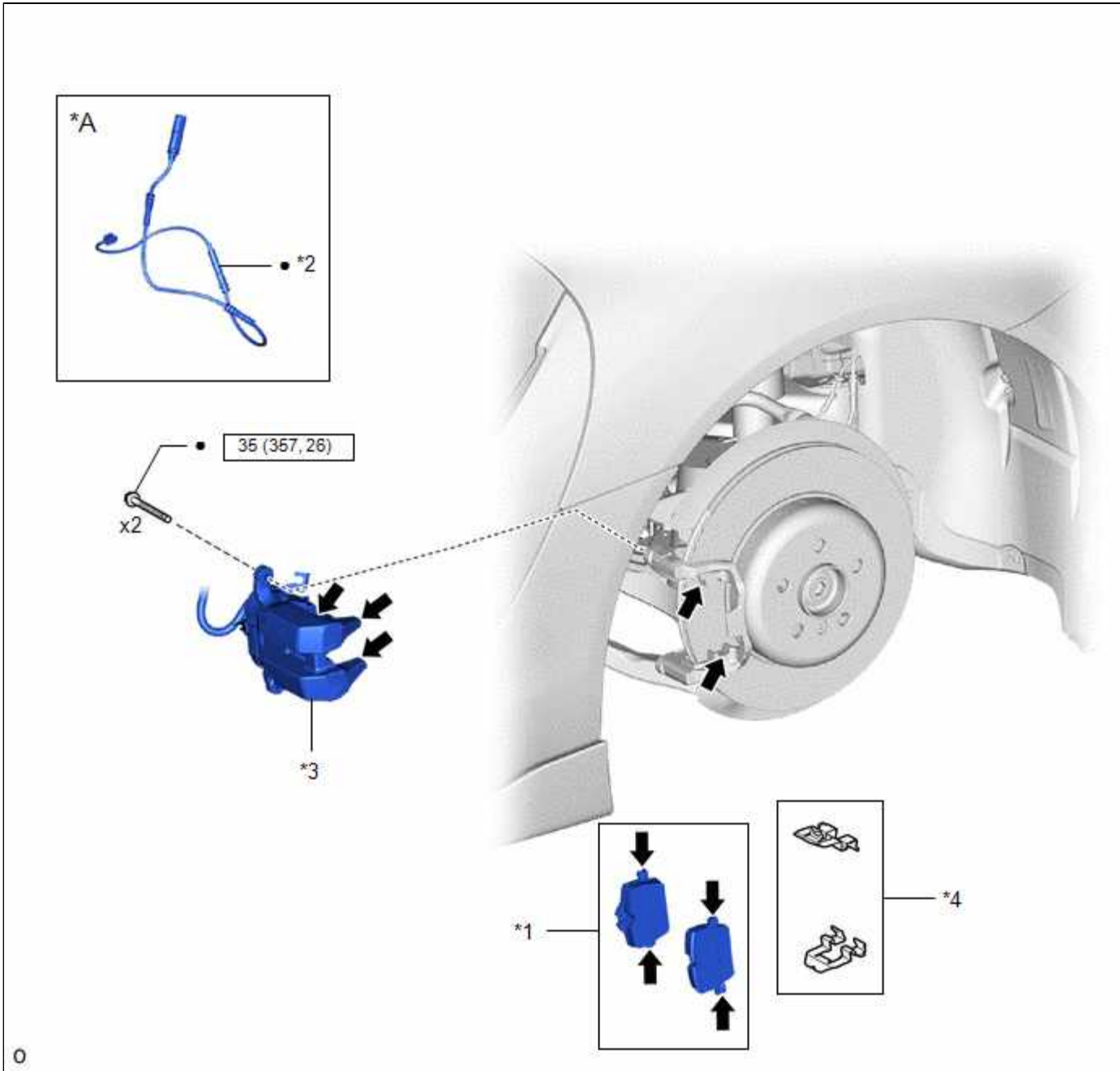
4. INSTALL REAR WHEEL

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8L
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: REAR DISC BRAKE PAD: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*A	for RH Side	-	-
*1	REAR DISC BRAKE PAD	*2	PAD WEAR INDICATOR WIRE RH
*3	REAR DISC BRAKE CYLINDER ASSEMBLY	*4	REAR DISC BRAKE PAD SUPPORT PLATE
N*m (kgf*cm, ft.*lbf): Specified			

	torque	•	Non-reusable part
	Brake Pad Paste	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8M
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: REAR DISC BRAKE PAD: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

CAUTION:

- Vehicle may slip off the vehicle hoist if the vehicle hoist is handled incorrectly.

Danger! Life-threatening injuries!

- Observe safety information on raising the vehicle using a vehicle hoist.
- For additional information see:

Click here [INFO](#)

- Effects on other persons.

Danger of injury! Risk of damage!

- Make sure that no other persons are in or around the vehicle.
- After a rear disc brake pad exchange and before applying the brake pedal:
 - Apply the electromechanical parking brake.
 - In case of non-compliance, a CC message appears and the brake system switches to the emergency program. The brake power assistance is no longer active.

NOTICE:

- General information on changing the brake pads:
 - For vehicles older than 48 months it is recommended to replace the retaining spring or expanding spring.
 - The pad wear indicator wire RH must be replaced once it has been removed because the pad wear indicator wire RH loses its retention capability in the brake pad.
- A CBS reset must be done after every brake pad exchange:
 - A CBS reset in the vehicle is possible in the event of a partially ground down pad wear indicator wire RH. The CBS display in the multi-display is active.
 - In the event of a pad wear indicator wire RH that is not partially ground down, a CBS reset is only possible with the diagnosis system. No CBS display in the multi-display.

Click here [INFO](#)

- During work on the rear brake, it must be ensured that the button for the electromechanical parking brake cannot be pressed.
- To prevent damage to the surface coating:
 - With floating calipers on the brake caliper mounting bracket or with fixed calipers in the brake caliper housing, do not clean the contact surfaces for the brake pads to the extent that it is possible.
 - Clean the contact surfaces. Next, apply a thin coat of brake pad paste.
 - Spread brake pad paste on the marked surfaces with a brush.
- When exchanging brake pads, reset the CBS display in accordance with factory specification (CBS reset).
- Carry out test braking while driving at low speed because the effectiveness of the brakes may be reduced during the initial braking operations.
- Exaggerated emergency and continuous braking operations for faster bedding-in are not permitted.
- Advise the customer not to perform intentional emergency braking operations for the first 200 km (124 mile) after the brakes have been replaced.

HINT:

- The following procedure is for the LH side.
- Use the same procedure for the RH side and LH side.

PROCEDURE

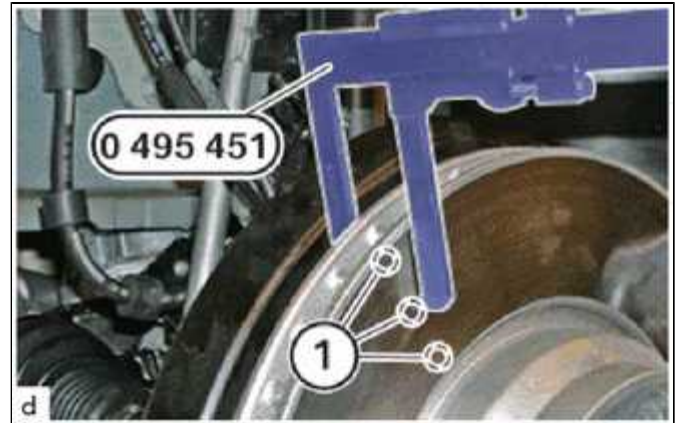
1. REMOVE FRONT WHEEL

Click here [INFO](#)

2. MEASURE MINIMUM BRAKE DISC THICKNESS (REAR BRAKE)

- (a) Place the special tool 0 495 451 (34 1 280) at three measuring points in area (1) and measure.

SST: 09700-WA090



- (b) Compare the measuring results and compare the lowest value with the setpoint value.

HINT:

New rear disc brake pads must only be installed if the rear disc thickness is greater than the minimum rear disc thickness.

Minimum brake disc thickness:

Nominal dimension 330x20

18.4 mm (0.724 in.)

Nominal dimension 345x24

22.4 mm (0.882 in.)

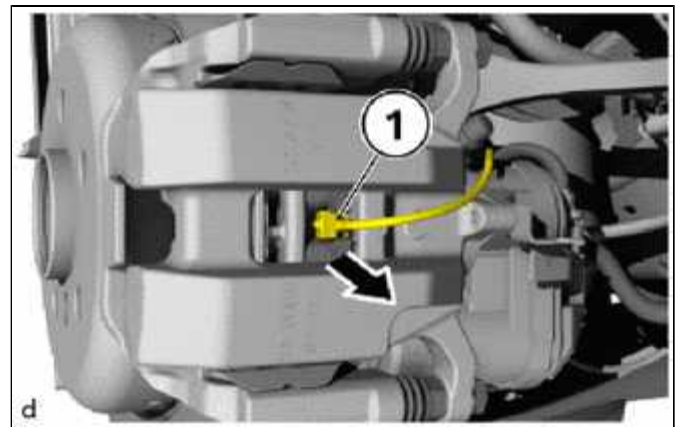
3. REMOVE PAD WEAR INDICATOR WIRE RH (for RH Side)

HINT:

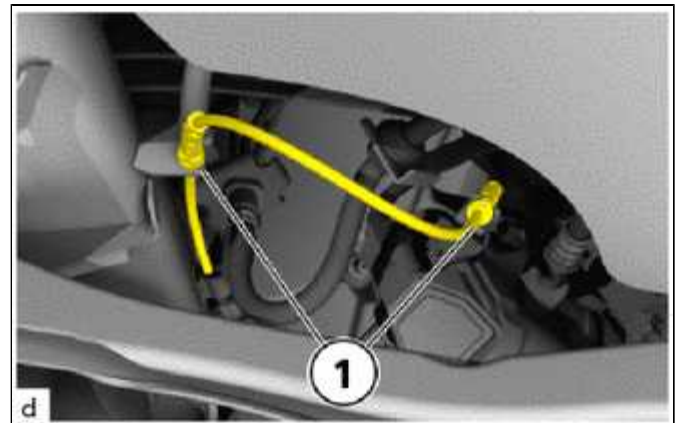
- The pad wear indicator wire RH must be replaced once it has been removed because the pad wear indicator wire RH loses its retention capability in the rear disc brake pad.
- If a pad wear indicator wire RH that has already been ground has to be replaced even though the minimum rear disc brake pad thickness has not yet been reached, you must observe the following:
 - The new sliding contact must be filed down with a file to the same length as the sanded sliding contact.

- (a) Remove the pad wear indicator wire RH (1) from the rear

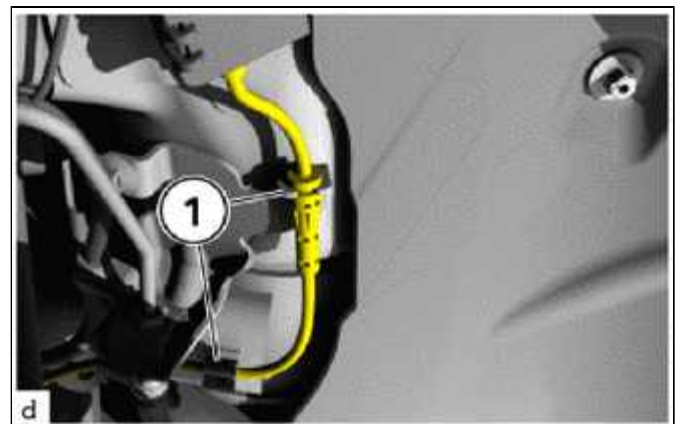
disc brake pad in the direction of the arrow.



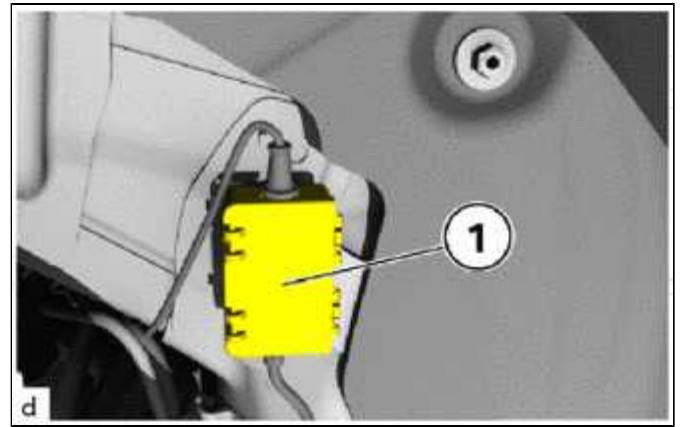
(b) Detach the cable of the pad wear indicator wire RH from the brackets (1).



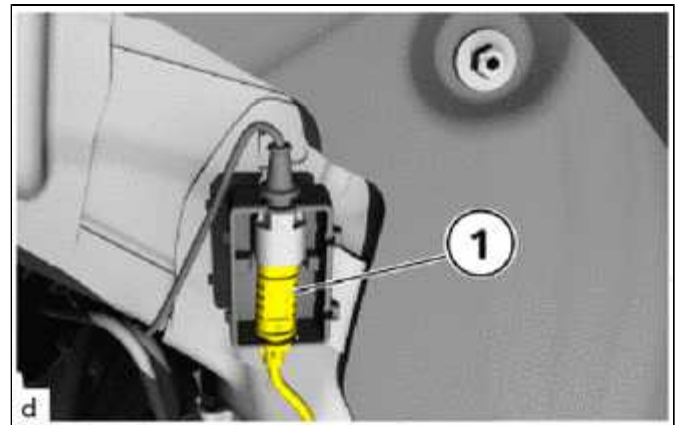
(c) Detach the cable of the pad wear indicator wire RH from the brackets (1).



(d) Open the connection box (1).



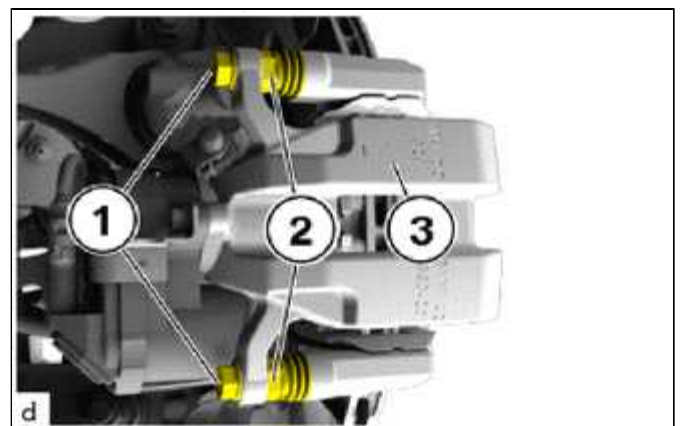
(e) Unlock plug connection (1) and disconnect.



(f) Remove pad wear indicator wire RH.

4. REMOVE REAR DISC BRAKE PAD

(a) Release the 15 mm bolts (1), if necessary use the hexagon head (2) for counter support.

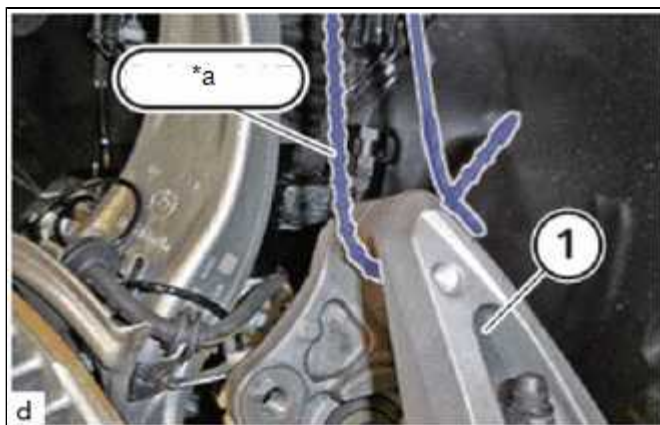


(b) Remove rear disc brake cylinder assembly (3).

(c) Tie up the rear disc brake cylinder assembly (1) with the rope.

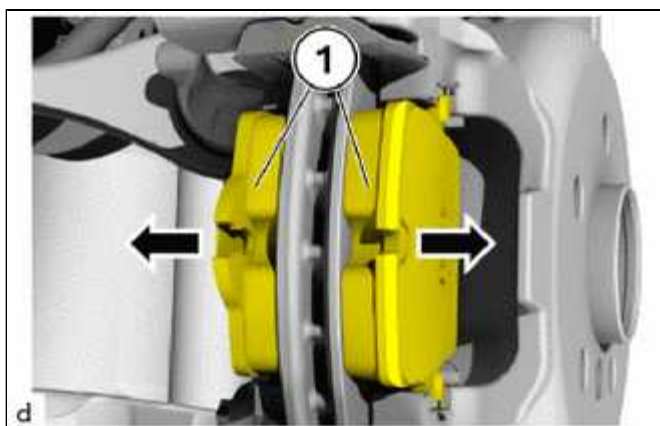
NOTICE:

Do not hang the rear disc brake cylinder assembly from the rear flexible hose.



*a	Rope
----	------

(d) Remove the rear disc brake pad (1) in the direction of the arrows.

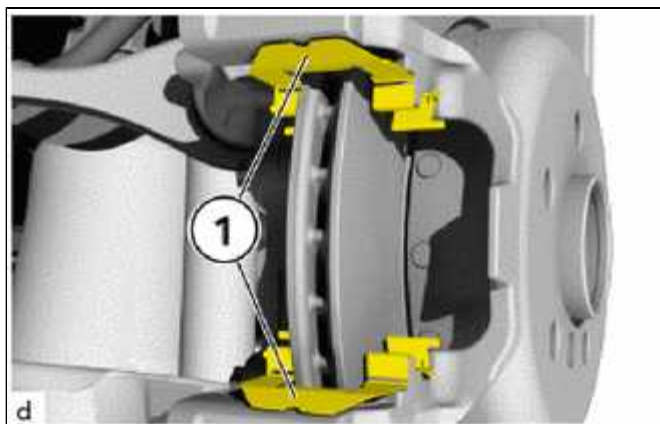


(e) Mark any worn brake pads.

HINT:

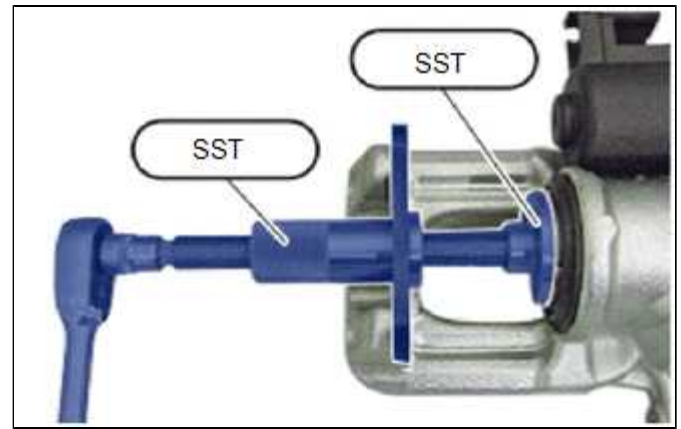
If the rear disc brake pad wear exists on one side, they must not be mixed up.

(f) Remove the rear disc brake pad support plates (1).



(g) Press back the brake piston using the SST.

SST: 09719-12010



TOYOTA

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8N
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: REAR DISC BRAKE PAD: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

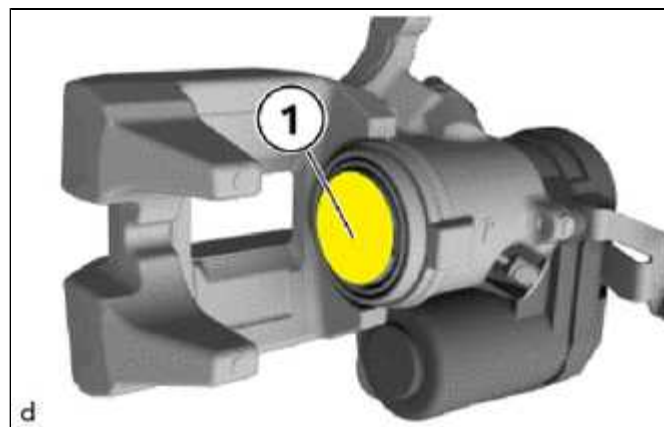
HINT:

- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

PROCEDURE

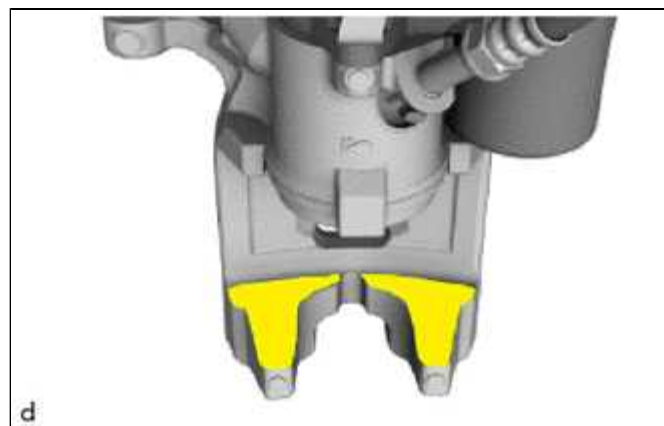
1. INSTALL REAR DISC BRAKE PAD

- (a) Clean contact surface (1) of the brake piston with brake cleaner and apply a thin coat of brake pad paste.



- (b) Check cylinder boot for damage, replace if necessary.

- (c) Clean contact surface of the rear disc brake cylinder assembly with brake cleaner and apply a thin coat of brake pad paste.

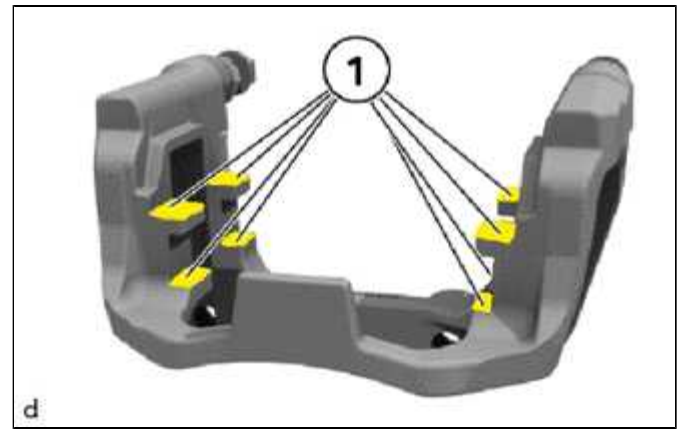


- (d) Clean the contact surfaces of the rear disc brake pad

support plates (1) with brake cleaner and apply a thin coating of brake pad paste.

NOTICE:

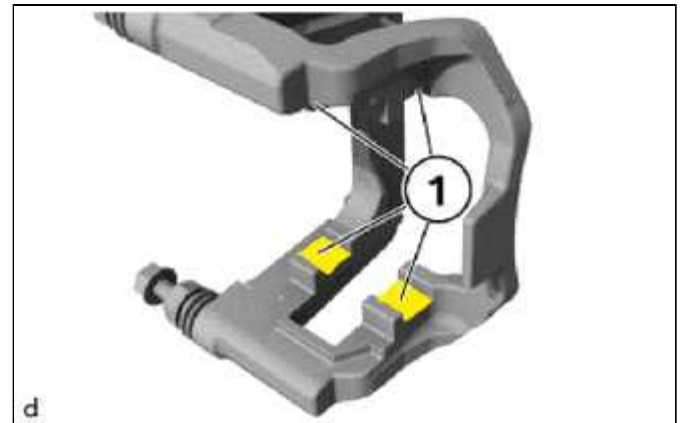
The contact surfaces of the rear disc brake pad support plates (1) for the rear disc brake pads on the rear disc brake cylinder mounting must not be cleaned mechanically to avoid damage to the surface coating.



(e) Clean the contact surfaces of the rear disc brake pad support plates (1) with brake cleaner and apply a thin coating of brake pad paste.

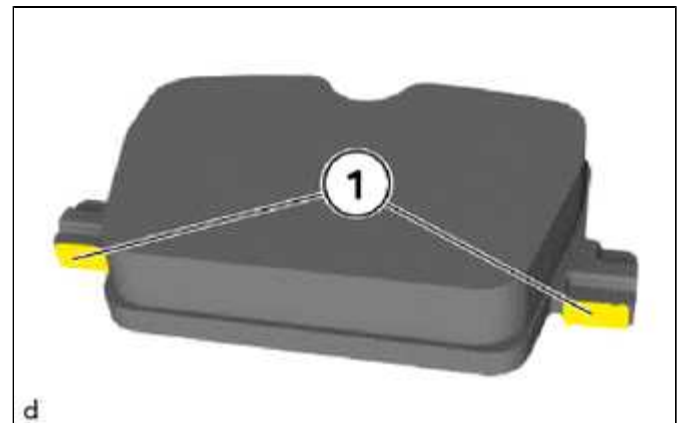
NOTICE:

The contact surfaces of the rear disc brake pad support plates (1) for the rear disc brake pads on the rear disc brake cylinder mounting must not be cleaned mechanically to avoid damage to the surface coating.



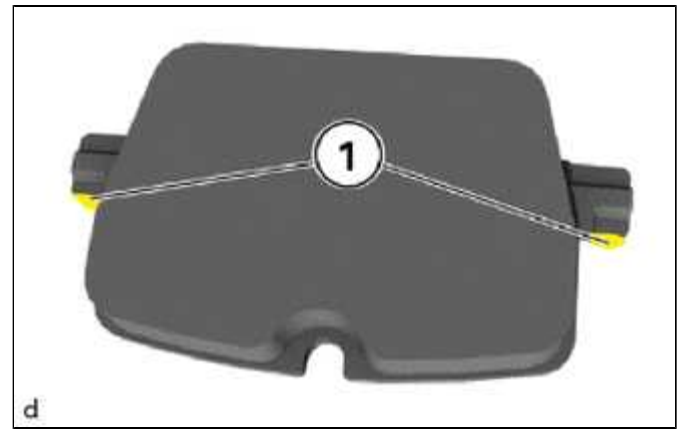
(f) Install the rear disc brake pad support plates.

(g) Coat the T-head of outer rear disc brake pad in the marked area (1) in each case with a thin coating of brake pad paste.

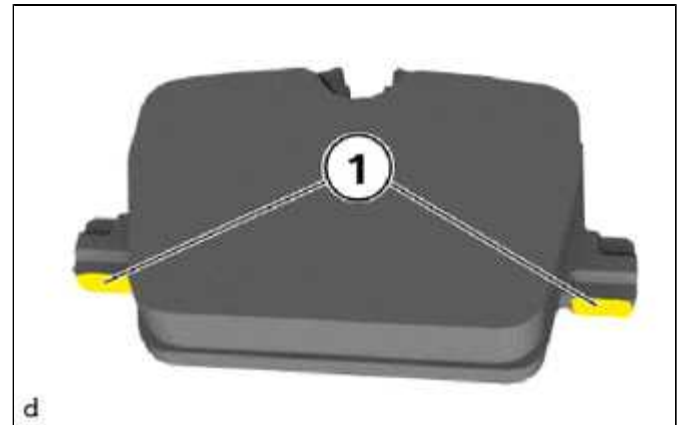


(h) Coat the T-head of outer rear disc brake pad in the marked

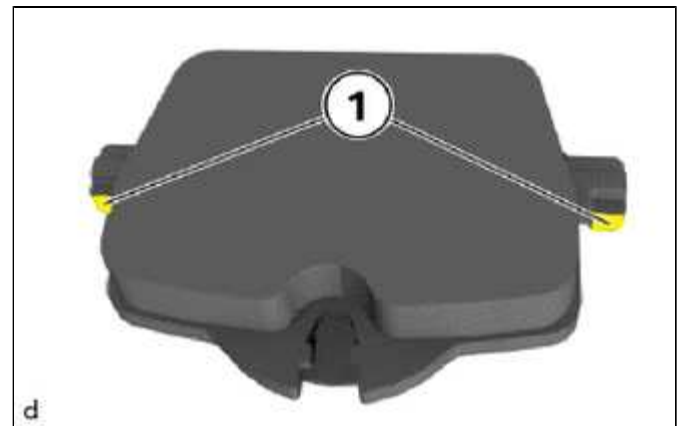
area (1) in each case with a thin coating of brake pad paste.



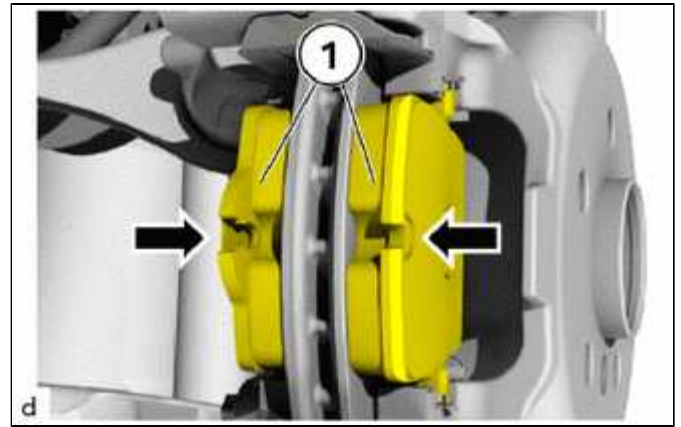
- (i) Coat the T-head of outer rear disc brake pad in the marked area (1) in each case with a thin coating of brake pad paste.



- (j) Coat the T-head of outer rear disc brake pad in the marked area (1) in each case with a thin coating of brake pad paste.



- (k) Install the rear disc brake pads (1) in the direction of the arrows.



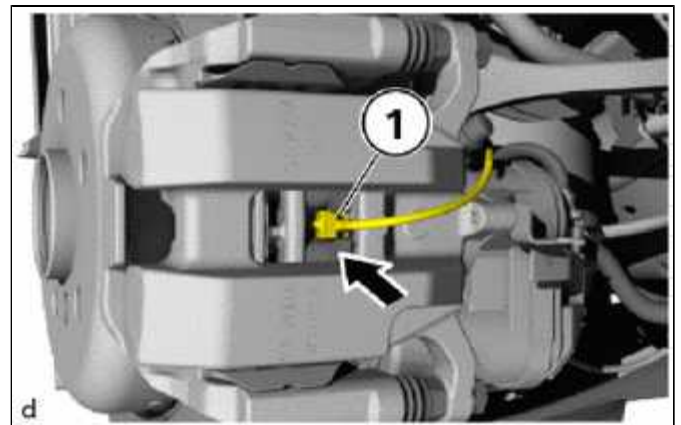
- (l) Detach the rear disc brake cylinder assembly from the rope and position on the rear disc brake cylinder assembly.
- (m) Replace 15 mm bolts.
- (n) Tighten the 15 mm bolts, if applicable, hold against the hexagon head.

Torque:

35 N·m {357 kgf·cm, 26 ft·lbf}

2. INSTALL PAD WEAR INDICATOR WIRE RH (for RH Side)

- (a) Replace the pad wear indicator wire RH (1).

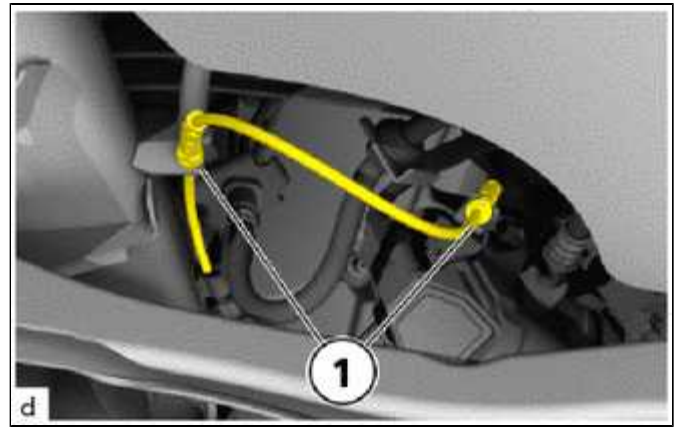


- (b) Insert the pad wear indicator wire RH (1) into the rear disc brake pad in the direction of the arrow.

HINT:

Ensure pad wear indicator wire RH (1) fits correctly in rear disc brake pad.

- (c) Attach cable of pad wear indicator wire RH in brackets (1).



(d) Attach cable of pad wear indicator wire RH in brackets (1).

(e) Connect connectors and lock.

(f) Close the connection box.

3. INSTALL REAR WHEEL

Click here [INFO](#)

4. START-UP OR BEDDING-IN OF NEW BRAKE PADS AND DISCS

NOTICE:

- When exchanging brake pads, reset the CBS display in accordance with factory specification (CBS reset).
- Carry out test braking while driving at low speed because the effectiveness of the brakes may be reduced during the initial braking operations.
- Exaggerated emergency and continuous braking operations for faster bedding-in are not permitted.
- Advise the customer not to perform intentional emergency braking operations for the first 200 km (124 mile) after the brakes have been replaced.

(a) Fully depress brake pedal several times so that brake pads contact brake discs.

(b) Use the parking brake button to open, close and open the parking brake again.

(c) Adjust the brake fluid level to the maximum mark.

(d) Perform a functional check on the brake test stand to ensure compliance of the brake system with statutory guidelines.

5. PERFORM CBS RESET

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCAB
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: TIRE AND WHEEL: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

CAUTION:

- Vehicle may slip off the vehicle hoist if the vehicle hoist is handled incorrectly.

Danger! Life-threatening injuries!

- Observe safety information on raising the vehicle using a vehicle hoist.

Click here [INFO](#)

PROCEDURE

1. REMOVE WHEEL ASSEMBLY

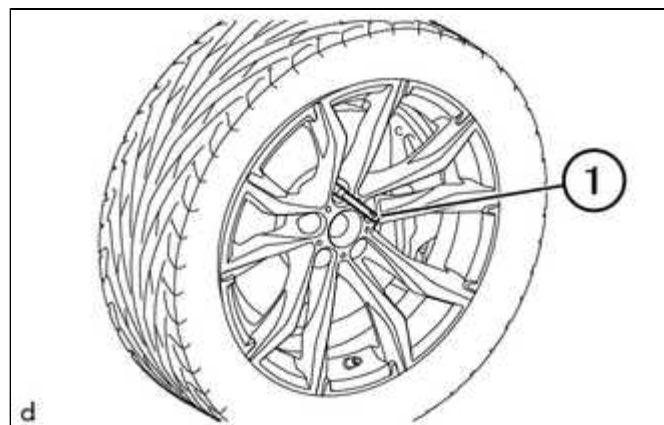
- Loosen the axle hub bolts approximately 90°.
- Lift up the vehicle.

- 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

NOTICE:

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



- 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.

- Remove SST.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCAC
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: TIRE AND WHEEL: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL WHEEL ASSEMBLY

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

NOTICE:

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

NOTICE:

Do not operate special tool 2 344 011 with an impact wrench.



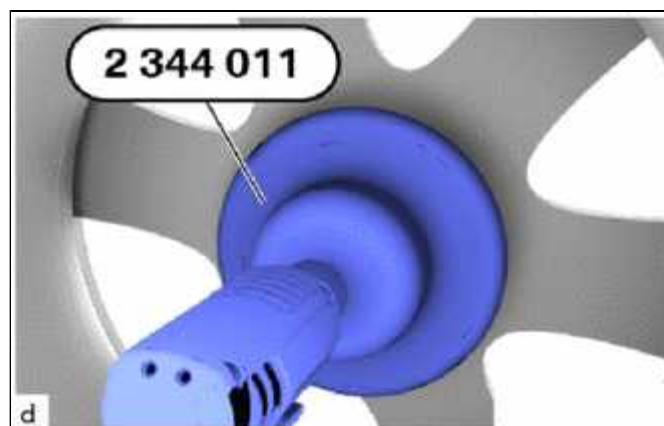
- (2) In the event of grease residue in the area of the axle hub bolt holes, remove and clean the brake disc.

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

SST: 09600-WA010

NOTICE:

Do not operate special tool 2 344 011 with an impact wrench.



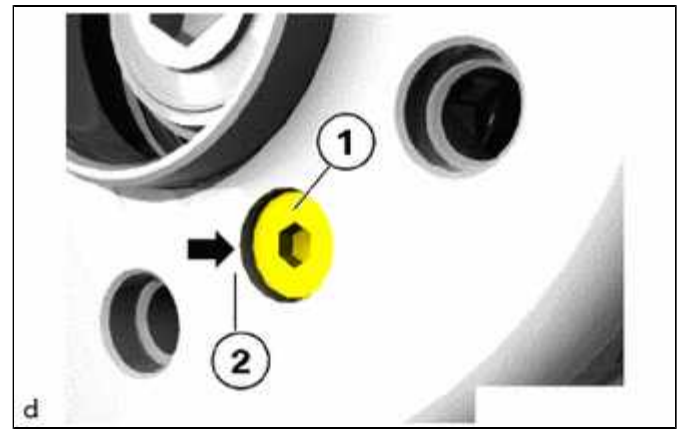
- (4) Check that the mounting bolt (1) for the brake disc is securely seated.

Torque:

16 N·m {163 kgf·cm, 12 ft·lbf}

NOTICE:

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



(b) Clean the axle hub bolts.

HINT:

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

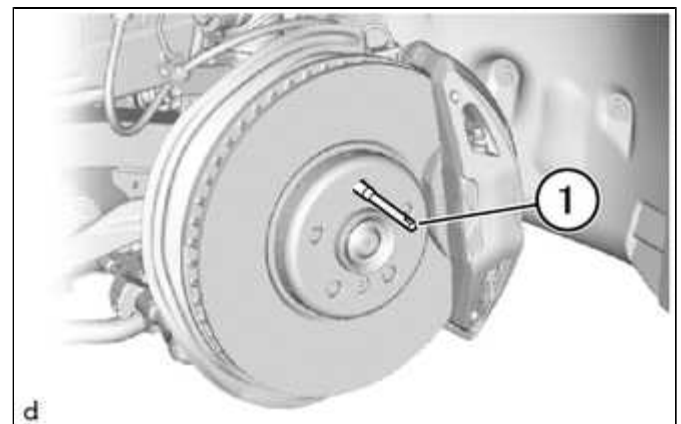
(c) Tighten the axle hub bolts as follows:

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

SST: 09650-14010

NOTICE:

- 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.

NOTICE:

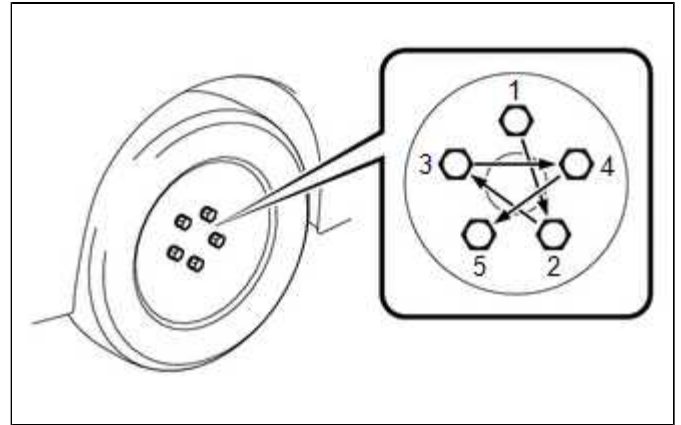
- Never use impact wrench or electric screwdrivers to screw in and tighten the axle hub bolts.
- The wheel rim must rest uniformly against the brake disc.
- Do not apply oil to the axle hub bolts.

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.

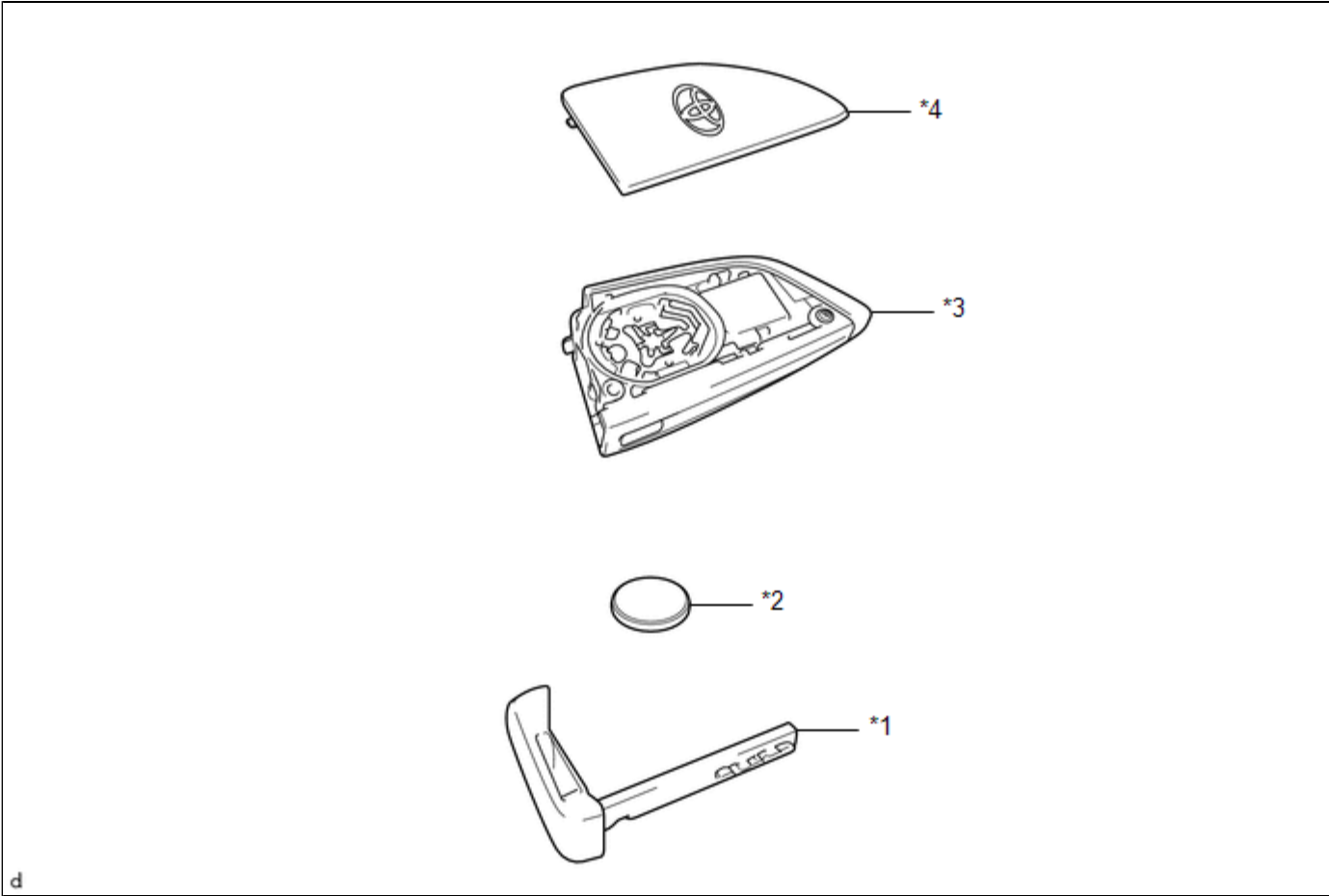
Torque:

140 N·m {1428 kgf·cm, 103 ft·lbf}

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9A
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: TRANSMITTER BATTERY: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	CUT KEY	*2	TRANSMITTER BATTERY
*3	TRANSMITTER HOUSING CASE	*4	TRANSMITTER HOUSING COVER

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9B
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: TRANSMITTER BATTERY: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

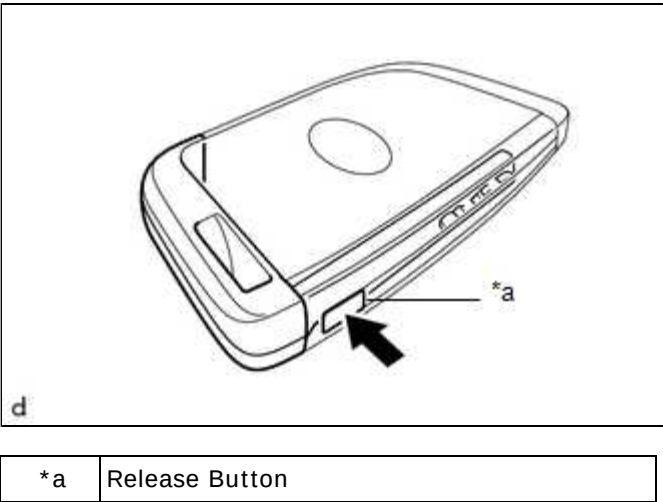
CAUTION / NOTICE / HINT

NOTICE:
Take extra care when handling these precision electronic components.

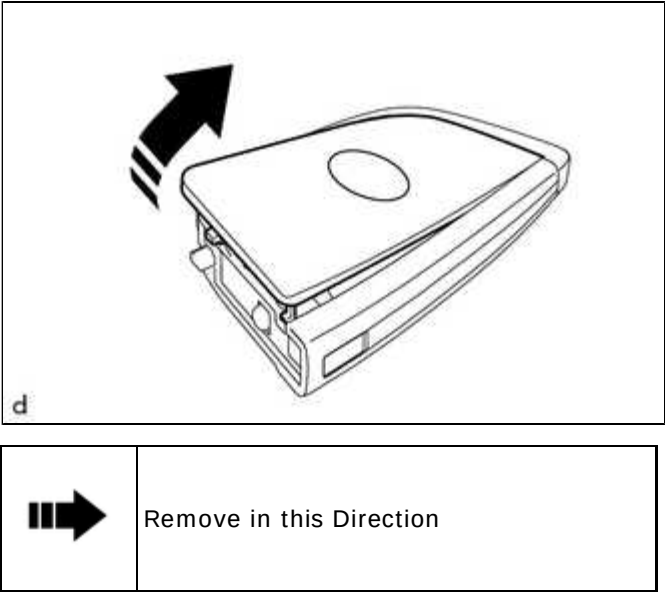
PROCEDURE

1. REMOVE TRANSMITTER BATTERY

(a) Press the release button to remove the cut key.



(b) Remove the transmitter housing cover as shown in the illustration.

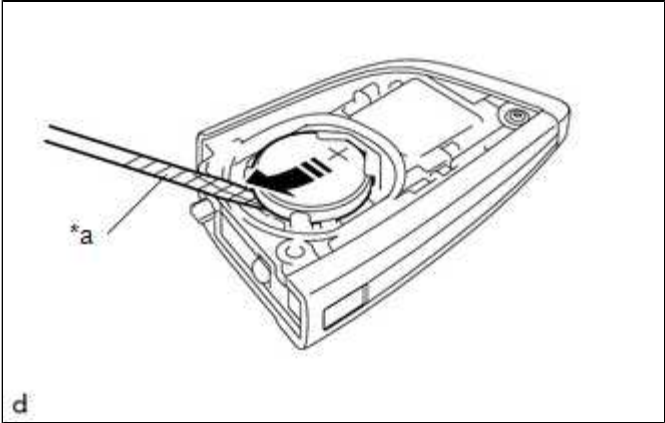


NOTICE:
Do not use excessive force when prying apart the transmitter housing cover.

(c) Using a screwdriver with its tip wrapped in protective tape, remove the transmitter battery as shown in the illustration.

NOTICE:

- Do not push the terminals with your finger.
- Do not forcibly pry up the transmitter battery as the terminals may be damaged.
- Do not touch the transmitter battery with wet hands. Moisture may cause rust.
- Do not touch or move any components inside the transmitter housing case. It may interfere with proper operation.
- When replacing the transmitter battery, before starting work, remove static electricity that has built up in the body by touching, for example, the vehicle to prevent the electrical key transmitter sub-assembly from being damaged.



*a	Protective Tape
	Remove in this Direction

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC9C
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: MAINTENANCE: TRANSMITTER BATTERY: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

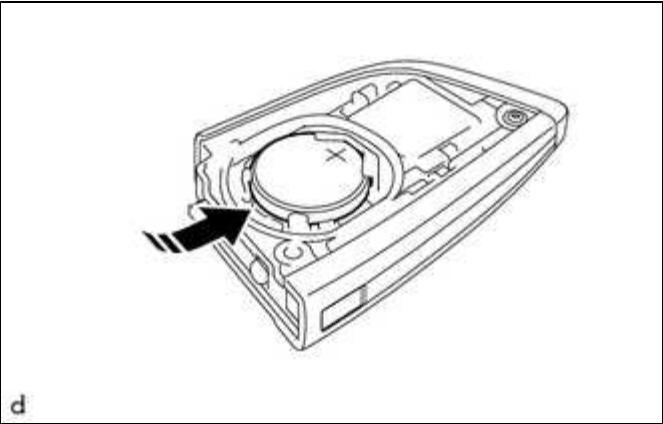
NOTICE:
Take extra care when handling these precision electronic components.

PROCEDURE

1. INSTALL TRANSMITTER BATTERY

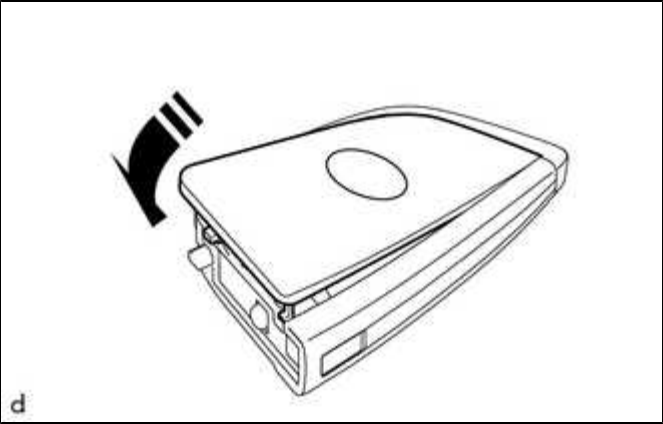
(a) Install a new transmitter battery with the positive (+) side facing upward, as shown in the illustration.

- NOTICE:**
- Do not bend the transmitter battery electrode during installation.
 - Keep the inside of the transmitter housing cover free of dust and oil.
 - When replacing the transmitter battery, before starting work, remove static electricity that has built up in the body by touching, for example, the vehicle to prevent the electrical key transmitter sub-assembly from being damaged.



Install in this Direction

(b) Install the transmitter housing cover by pressing down on it as shown in the illustration.

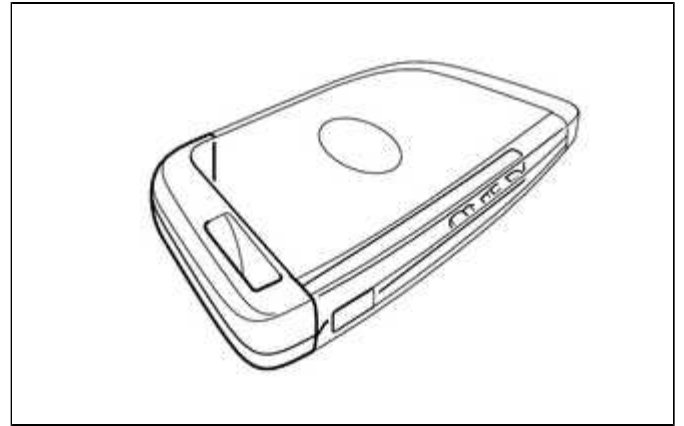


--	--



Install in this Direction

(c) Insert the cut key into the transmitter.



TOYOTA