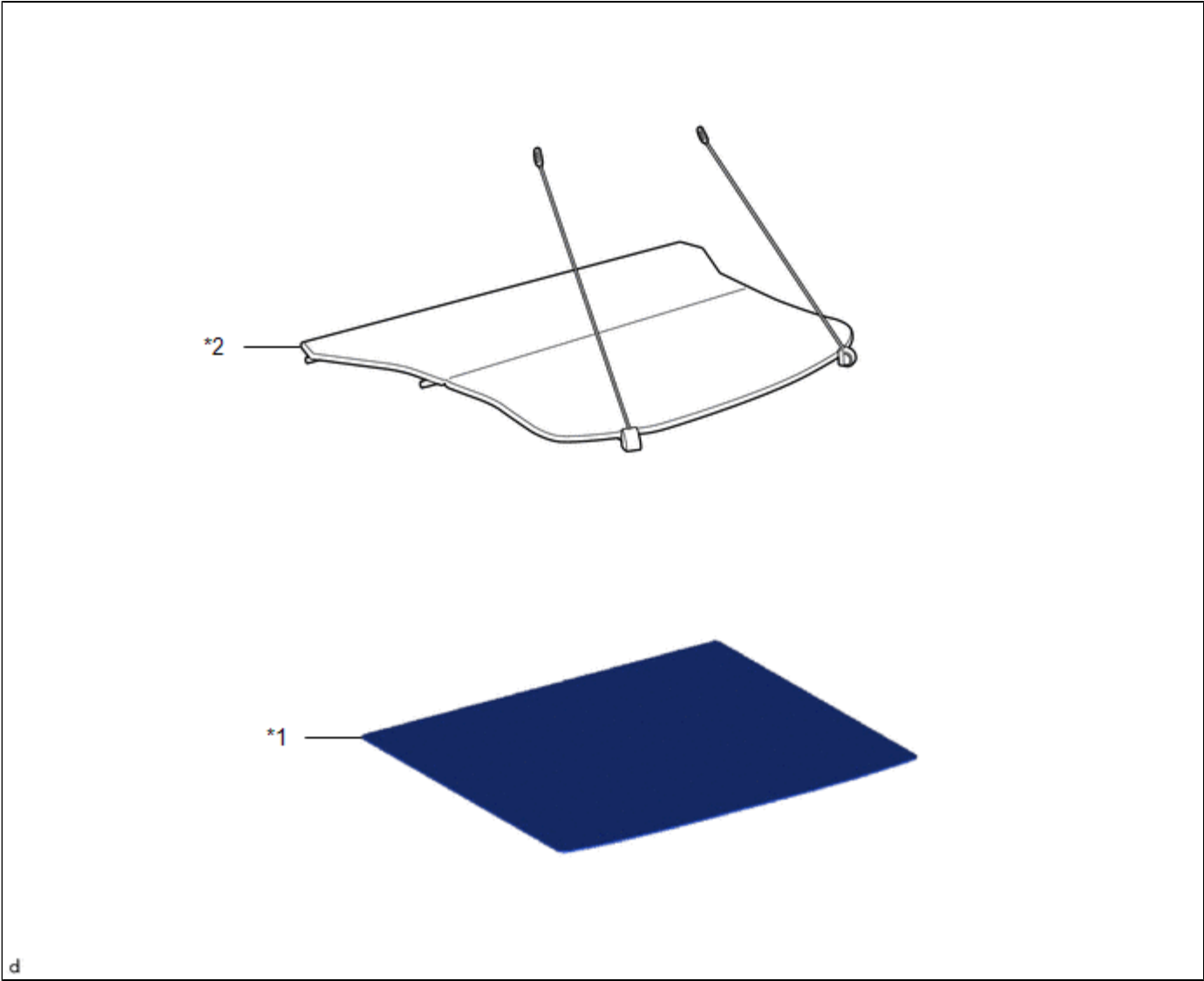


Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ8
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL LOCK ECU: COMPONENTS; 2020 MY Supra [03/2019 -]		

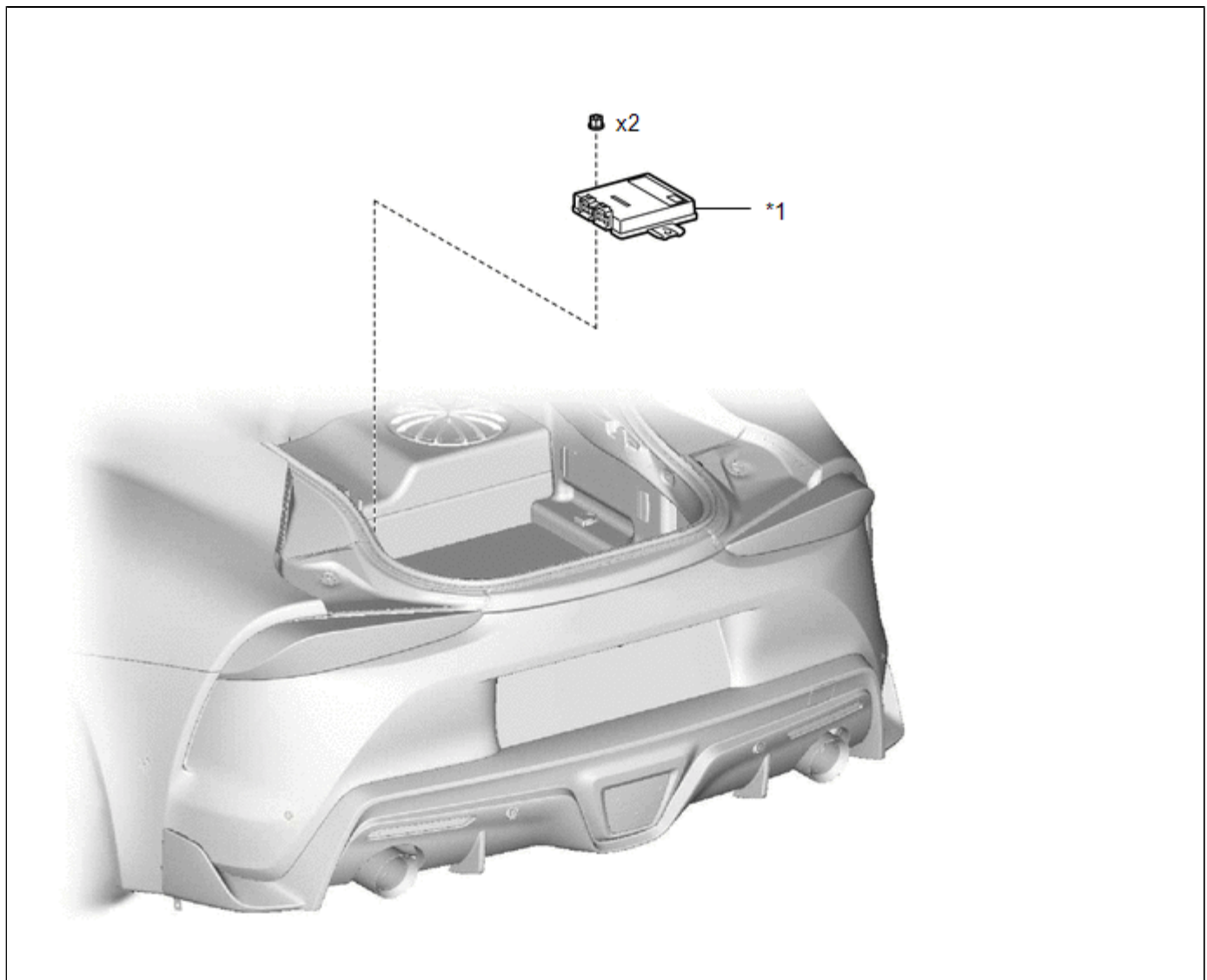
COMPONENTS

ILLUSTRATION



*1	DECK BOARD ASSEMBLY	*2	PACKAGE TRAY TRIM PANEL ASSEMBLY
----	---------------------	----	----------------------------------

ILLUSTRATION



*1	DIFFERENTIAL LOCK ECU	-	-
----	-----------------------	---	---

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ9
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL LOCK ECU: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

NOTICE:

- Electrostatic discharge.
 - Damage to or destruction of electrical components.
 - Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
 - For additional information see:

Click here [INFO](#)

PROCEDURE

1. REMOVE PACKAGE TRAY TRIM PANEL ASSEMBLY

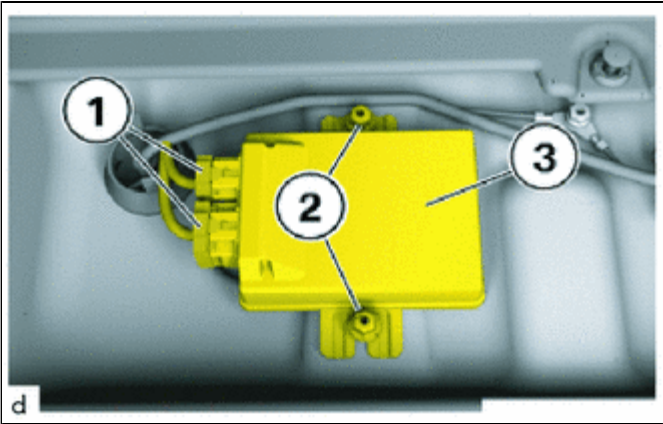
Click here [INFO](#)

2. REMOVE DECK BOARD ASSEMBLY

Click here [INFO](#)

3. REMOVE DIFFERENTIAL LOCK ECU

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



- (b) Loosen nuts (2).
- (c) Remove the differential lock ECU (3).

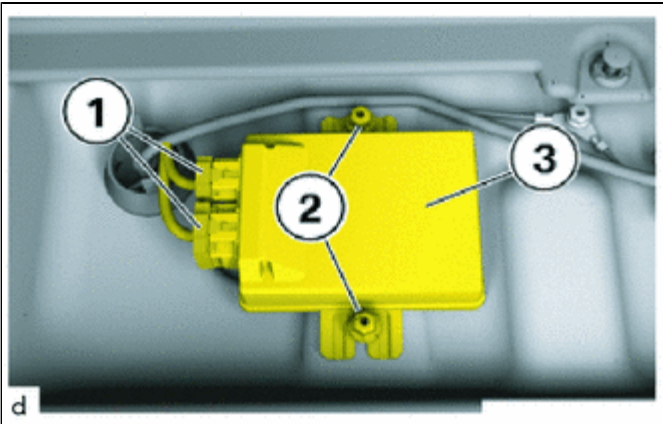
Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJA
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL LOCK ECU: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL DIFFERENTIAL LOCK ECU

(a) Position the differential lock ECU (3).



(b) Tighten nuts (2).

(c) Connect connectors (1) and lock.

2. INSTALL DECK BOARD ASSEMBLY

Click here [INFO](#)

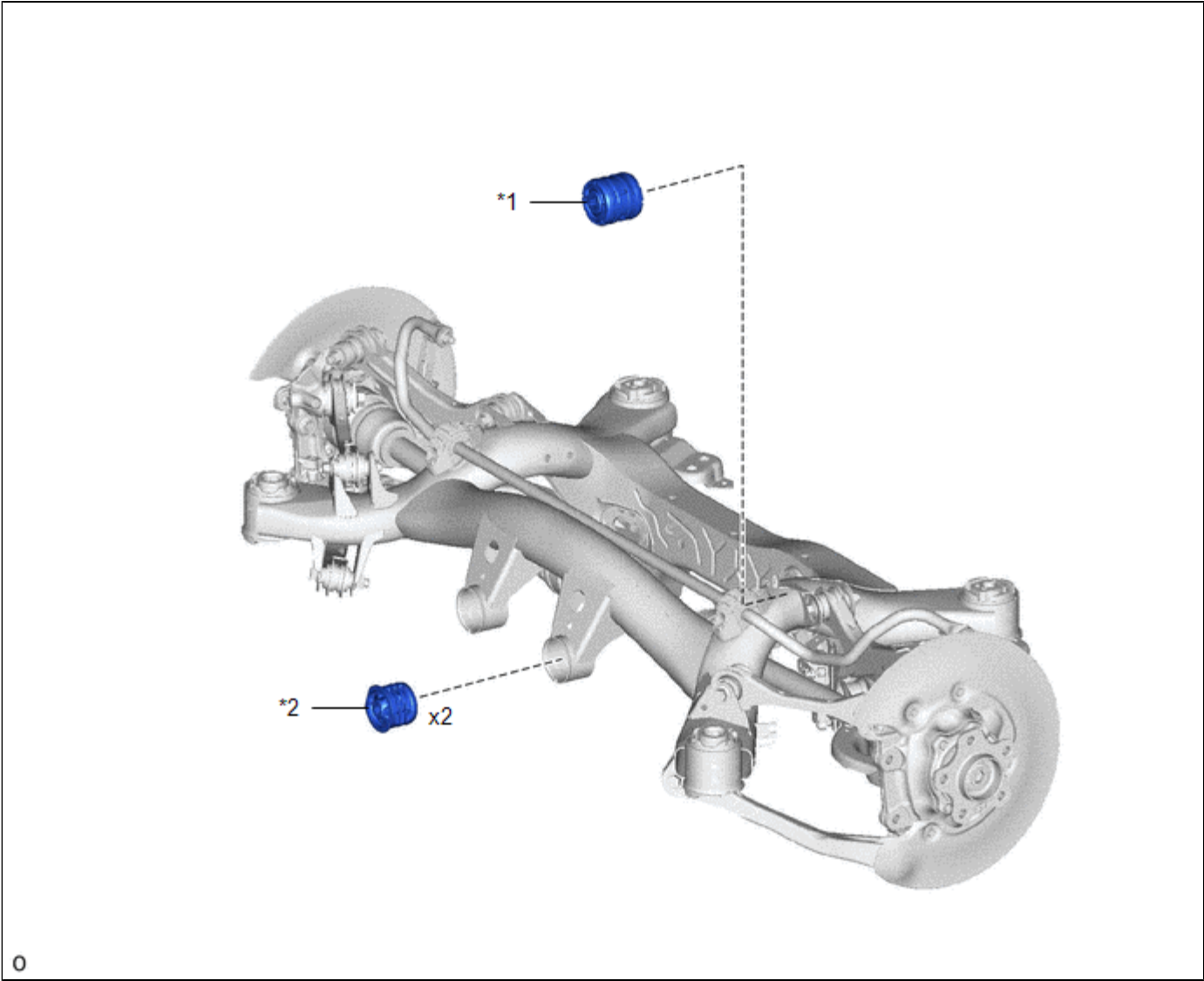
3. INSTALL PACKAGE TRAY TRIM PANEL ASSEMBLY

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ2
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL MOUNT CUSHION: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	REAR NO. 1 DIFFERENTIAL MOUNT CUSHION	*2	REAR NO. 2 DIFFERENTIAL MOUNT CUSHION
----	---------------------------------------	----	---------------------------------------

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ3
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL MOUNT CUSHION: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

PROCEDURE

1. REMOVE REAR SUSPENSION MEMBER SUB-ASSEMBLY

Click here [INFO](#)

2. REMOVE REAR NO. 2 DIFFERENTIAL MOUNT CUSHION

HINT:

Use the same procedure for the opposite side.

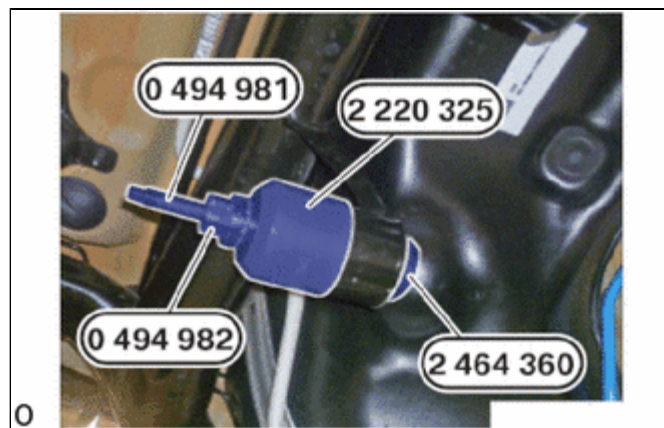
- (a) Pull rear No. 2 differential mount cushion out from the rear suspension member sub-assembly using special tools (2 464 360, 2 220 325 (33 0 181), 0 494 981 (33 4 465) and 0 494 982 (33 4 466)) and remove.

SST: 09500-WA150

SST: 09500-WA260

HINT:

Ensure that the special tool (2 220 325 (33 0 181)) is correctly positioned on the rear suspension member sub-assembly.

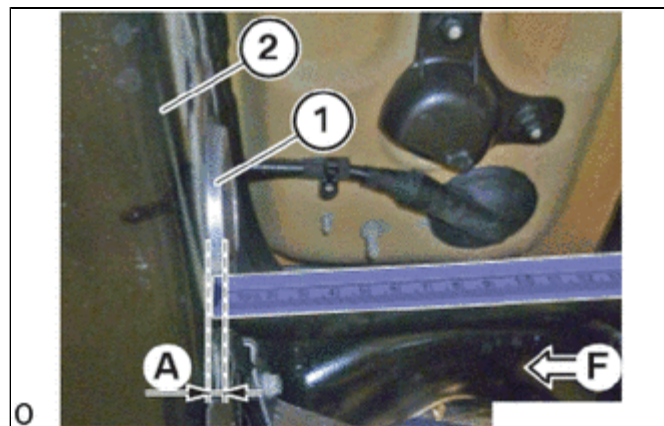


3. REMOVE REAR NO. 1 DIFFERENTIAL MOUNT CUSHION

- (a) Before removal it is essential to measure the protrusion (A) of the rear No. 1 differential mount cushion on the rear suspension member sub-assembly.

HINT:

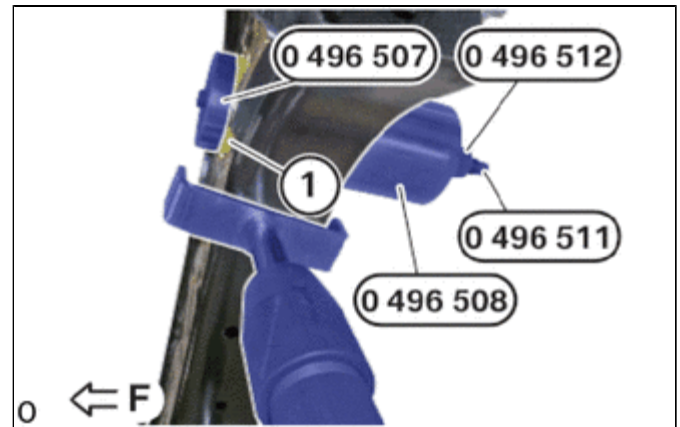
Respect direction of travel (F).



(b) Pull the rear No. 1 differential mount cushion (1) out of the rear suspension member sub-assembly using special tools (0 496 507 (33 0 031), 0 496 508 (33 0 032), 0 496 511 (33 0 035) and 0 496 512 (33 0 036)) remove.

HINT:

Respect direction of travel (F).



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ4
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL MOUNT CUSHION: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL REAR NO. 1 DIFFERENTIAL MOUNT CUSHION

- (a) Position the rear No. 1 differential mount cushion (1) before assembly so that the arrow (2) is pointing upwards.

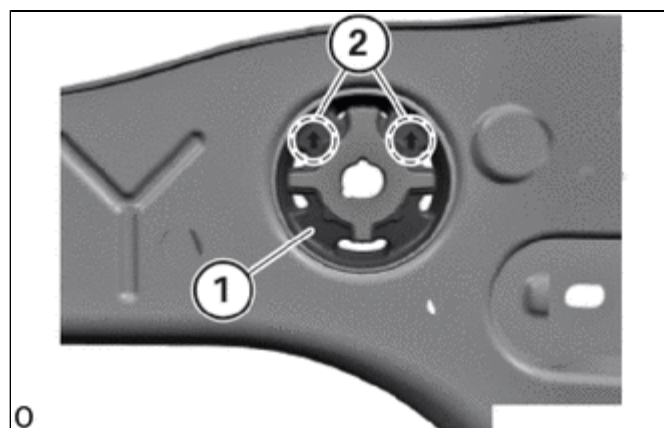
HINT:

A mark can be made on the outer area of the rear No. 1 differential mount cushion (1) to check the assembly position of the rear No. 1 differential mount cushion.

Position of the rear No. 1 differential mount cushion:

Permissible rotation in relation to the vertical

-5° to 5°

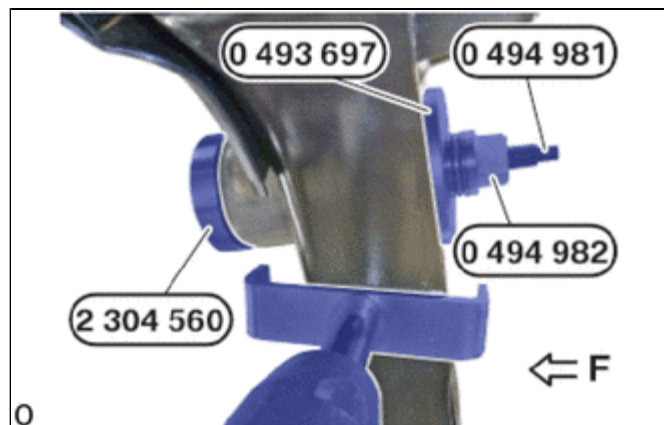


- (b) Position the rear No. 1 differential mount cushion on the rear suspension member sub-assembly using the special tools (2 304 560 , 0 493 697 (33 3 233), 0 494 982 (33 4 466) and 0 494 981 (33 4 465)).

SST: 09500-WA320

HINT:

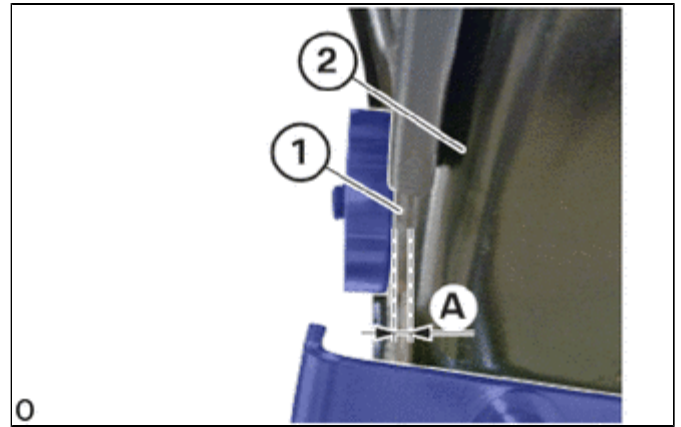
Respect direction of travel (F).



- (c) Pull rear No. 1 differential mount cushion (1) into the rear suspension member sub-assembly (2) using special tool until the protrusion (A) is reached.

HINT:

Prepare protrusion (A), which has been determined before removing the rear No. 1 differential mount cushion.



(d) Remove special tools.

2. INSTALL REAR NO. 2 DIFFERENTIAL MOUNT CUSHION

HINT:

Use the same procedure for the opposite side.

- (a) Position the rear No. 2 differential mount cushion before installation so that the arrows in the marked areas point upwards.

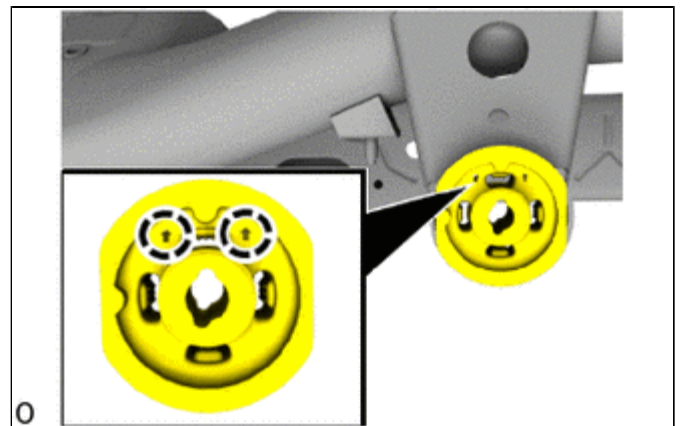
HINT:

A mark can be made on the outer area of the rear No. 2 differential mount cushion to check the installation position of the rear No. 2 differential mount cushion.

Position of the rear No. 2 differential mount cushion:

Permissible rotation in relation to the vertical

-7° to 7°



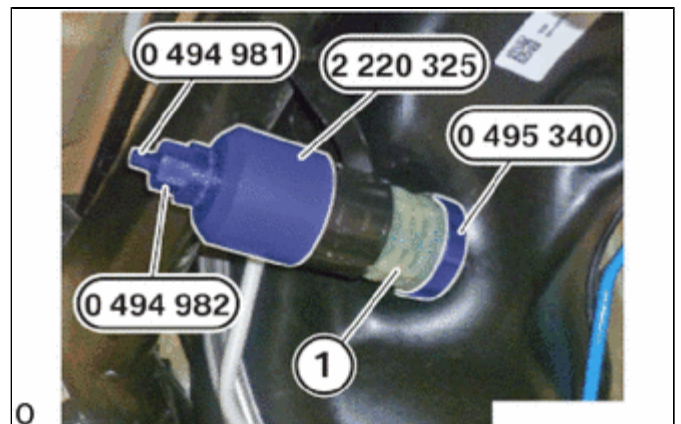
- (b) Pull the rear No. 2 differential mount cushion into the rear suspension member sub-assembly using special tools (0 495 340 (33 4 351), 2 220 325 (33 0 181), 0 494 981 (33 4 465) and 0 494 982 (33 4 466)).

SST: 09500-WA150

SST: 09500-WA260

HINT:

Ensure that the special tool (2 220 325 (33 0 181)) is correctly positioned on the rear suspension member sub-assembly.



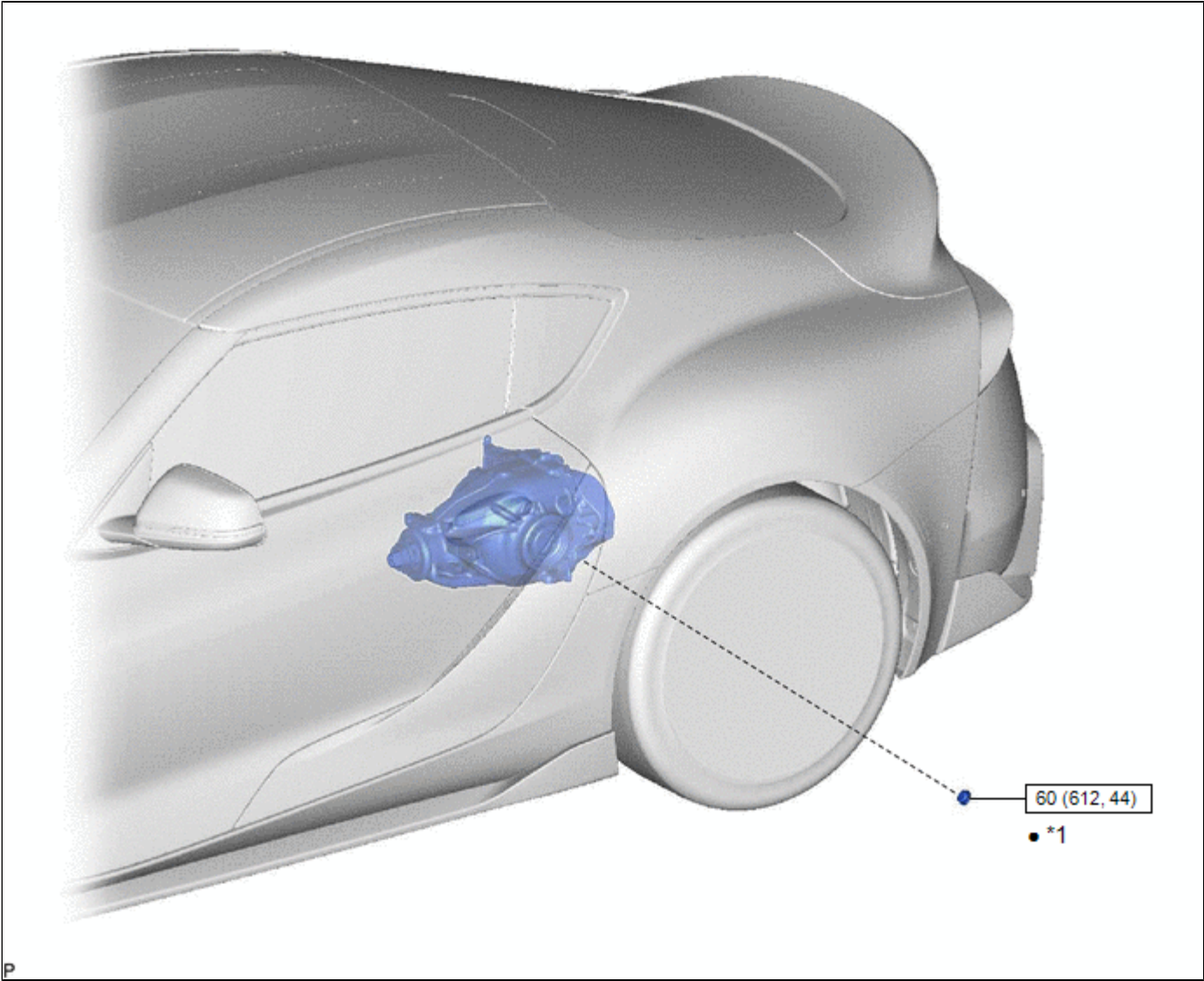
(c) Remove special tools.

3. INSTALL REAR SUSPENSION MEMBER SUB-ASSEMBLY

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIS
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: 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: RM100000001JDIU
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL OIL: ON-VEHICLE INSPECTION; 2020 MY Supra [03/2019 -]		

ON-VEHICLE INSPECTION

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.

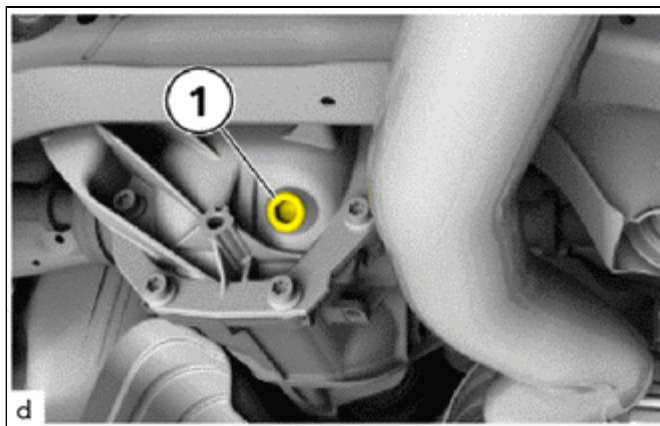
HINT:

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

PROCEDURE

1. INSPECT DIFFERENTIAL OIL

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



- (b) Check oil level:

- (1) If necessary, 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:

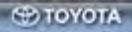
1.0 liters (1.1 US qts, 0.9 Imp. qts)

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

(d) 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: RM100000001JDIT
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL OIL: REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

CAUTION / NOTICE / HINT

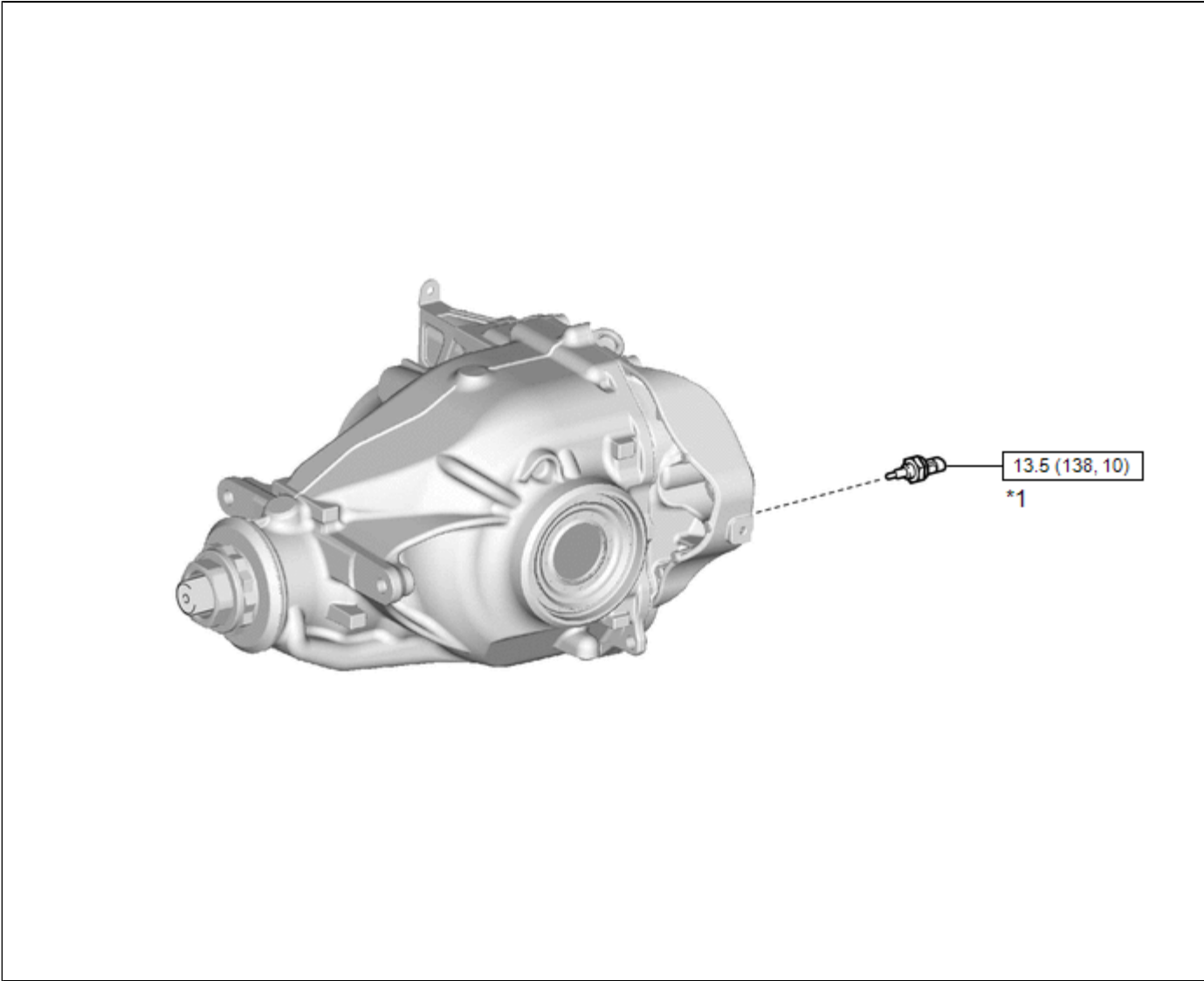
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ5
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL OIL TEMPERATURE SENSOR: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	OIL TEMPERATURE SENSOR	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ6
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL OIL TEMPERATURE SENSOR: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

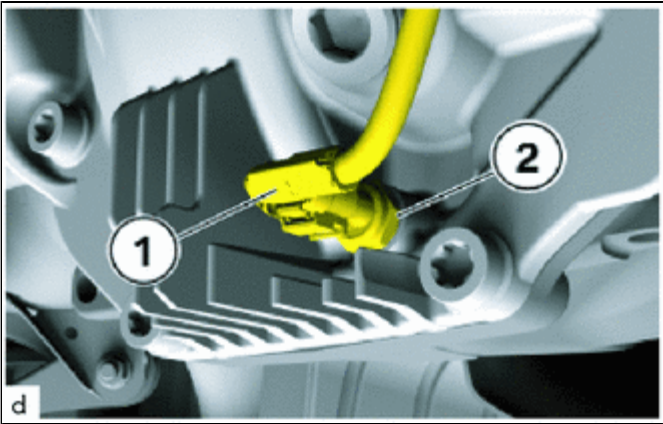
PROCEDURE

1. DRAIN DIFFERENTIAL OIL

Click here [INFO](#)

2. REMOVE OIL TEMPERATURE SENSOR

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



(b) Using a 17 mm deep socket wrench, release and remove oil temperature sensor (2).

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ7
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: DIFFERENTIAL OIL TEMPERATURE SENSOR: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL OIL TEMPERATURE SENSOR

- (a) Install the oil temperature sensor.
- (b) Using a 17 mm deep socket wrench, tighten the oil temperature sensor.

Torque:

13.5 N·m {138 kgf·cm, 10 ft·lbf}

- (c) Connect connectors and lock.

2. ADD DIFFERENTIAL OIL

Click here [INFO](#)

3. INSPECT DIFFERENTIAL OIL

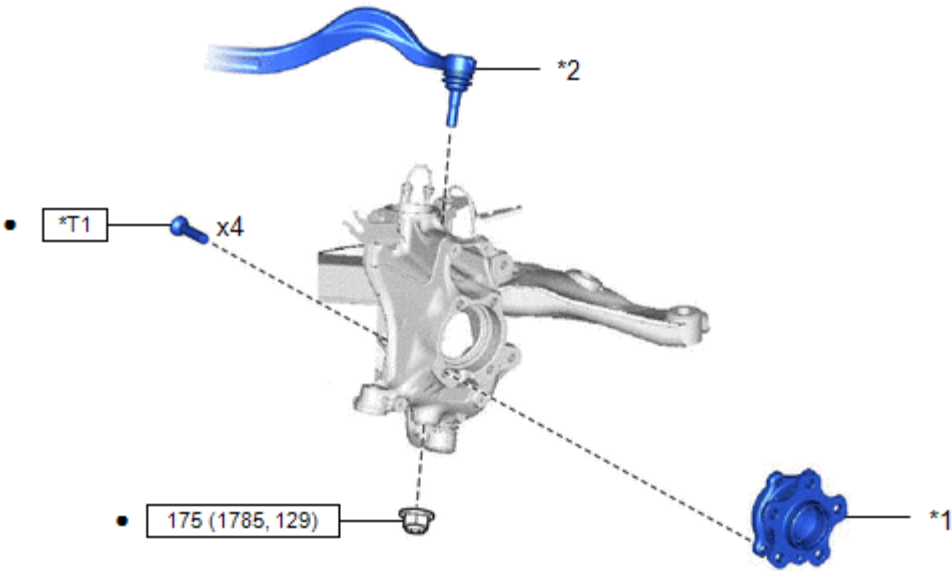
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIG
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: FRONT AXLE HUB: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	FRONT AXLE HUB SUB-ASSEMBLY	*2	FRONT UPPER SUSPENSION ARM ASSEMBLY
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

*T1	1st: 120 (1224, 89) 2nd: Turn 90°	-	-
-----	--------------------------------------	---	---

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIH
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: FRONT AXLE HUB: 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](#)

HINT:

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

PROCEDURE

1. REMOVE FRONT BRAKE DISC

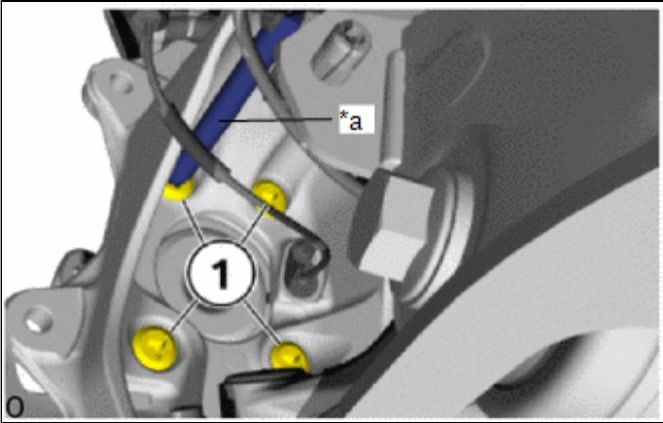
Click here [INFO](#)

2. DISCONNECT FRONT UPPER SUSPENSION ARM ASSEMBLY

Click here [INFO](#)

3. REMOVE FRONT AXLE HUB SUB-ASSEMBLY

(a) Release the T60 bolts (1).



*a	Long "TORX" Socket Wrench
----	---------------------------

(b) Remove front axle hub sub-assembly.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001LYGM
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: FRONT AXLE HUB: INSPECTION; 2020 MY Supra [03/2019 -]		

INSPECTION

PROCEDURE

1. NOTES ON WHEEL BEARING REPLACEMENT FOLLOWING ACCIDENT DAMAGE

- (a) In the event of accidents or driving conditions similar to accidents, shock-like loads to the wheel bearing units can cause slight damage to the bearing track. Despite initial running without noise, with continued use, this results in later noise generation at the wheel bearing.

2. PROCEDURE FOR WHEEL BEARING

- (a) The wheel bearing must be replaced on the damaged side of the axle if one or several of the following points apply.
- (1) Visible or noticeable damage to the wheel bearing
 - (2) Rolling noises, radial/lateral runout on the wheel bearing
 - (3) Permissible tolerance for the wheel alignment is exceeded and no longer adjustable without the exchange of additional components
 - (4) Damage, permanent deformation or breakages on wheel rims (severe damage) and simultaneous negative result of the wheel alignment
 - (5) Damage, permanent deformation or breakages on shock absorber assemblies, steering knuckles or axle hubs
 - (6) Damage, permanent deformation or breakages on suspension arms
 - (7) Damage, permanent deformation or breakages on pressure and rear floor panel brace or stabilisers with this function
 - (8) Damage, permanent deformation or breakages on body side attachment points of wheel guide parts
 - (9) Damage, permanent deformation or breakages on tie rod end sub-assemblies
 - (10) Damage, permanent deformation or breakages on steering gear mounting



TOYOTA

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDII
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: FRONT AXLE HUB: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

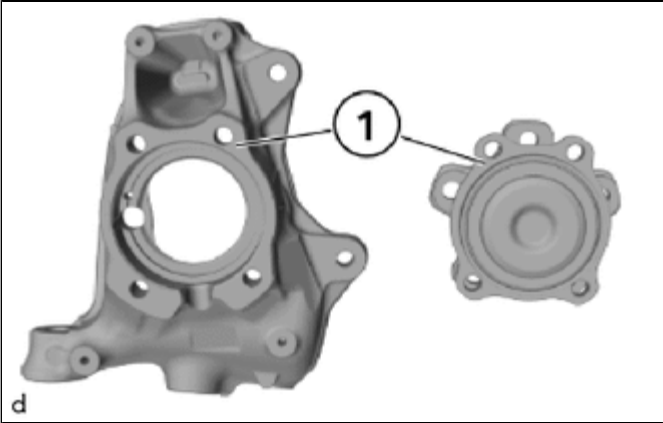
HINT:

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

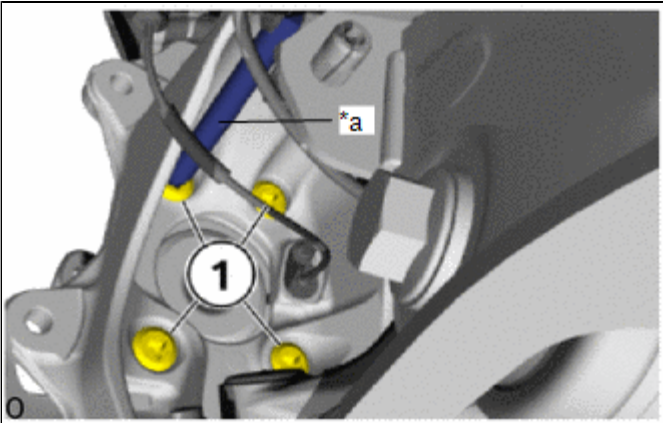
PROCEDURE

1. INSTALL FRONT AXLE HUB SUB-ASSEMBLY

- (a) Make sure that the contact surfaces (1) on the steering knuckle and front axle hub sub-assembly are clean and free from oil and grease.



- (b) Position front axle hub sub-assembly.



*a	Long "TORX" Socket Wrench
----	---------------------------

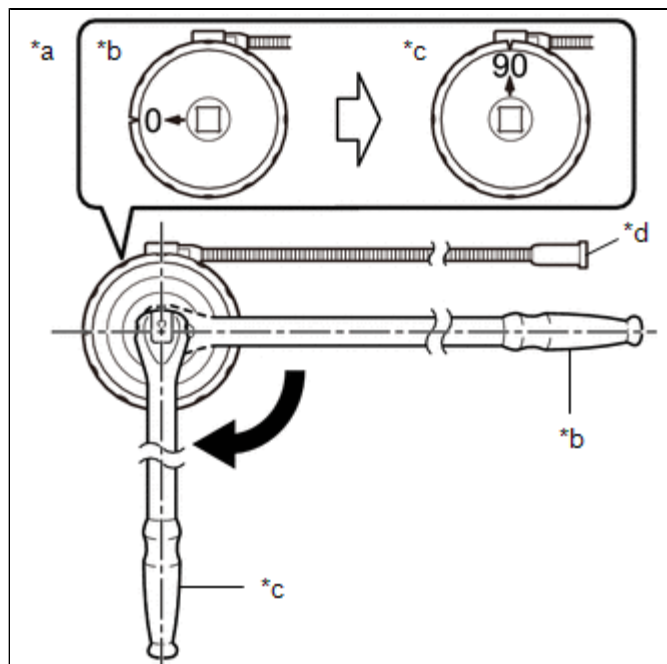
- (c) Replace T60 bolts (1).
- (d) Tighten the T60 bolts (1).

Torque:

120 N·m {1224 kgf·cm, 89 ft·lbf}

(e) Using SST, tighten the T60 bolts (1) an additional 90°.

SST: 09900-WA010



*a	Example
*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

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

2. CONNECT FRONT UPPER SUSPENSION ARM ASSEMBLY

Click here [INFO](#)

3. INSTALL FRONT BRAKE DISC

Click here [INFO](#)

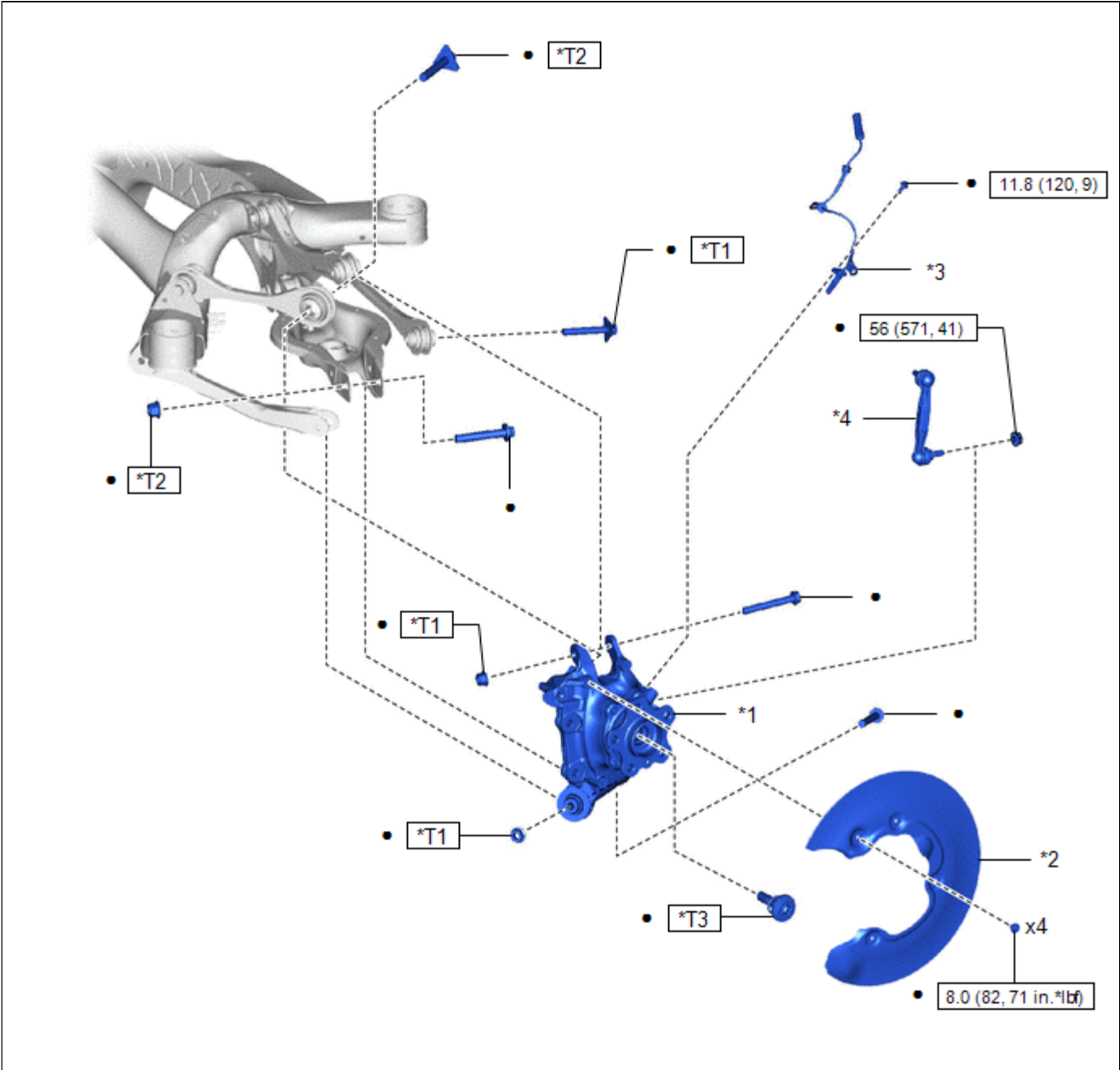
4. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIP
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR AXLE CARRIER: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	REAR AXLE CARRIER SUB-ASSEMBLY	*2	REAR DISC BRAKE DUST COVER
*3	SKID CONTROL SENSOR	*4	REAR STABILIZER LINK ASSEMBLY
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

			
*T1	1st: 100 (1020, 74) 2nd: Turn 90°	*T2	1st: 165 (1683, 122) 2nd: Turn 90°
*T3	1st: 210 (2141, 155) 2nd: Turn 90°	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIQ
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR AXLE CARRIER: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

CAUTION:

- Motor vehicle may slip off the vehicle hoist if the weight is distributed unevenly.

Danger! Life-threatening injuries!

- Ensure there is a specific weight compensation on the motor vehicle.

- 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.

HINT:

- Tighten the screw connection in the normal position.
- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.
- During work on the rear brake, it must be ensured that the button for the electromechanical parking brake cannot be pressed.

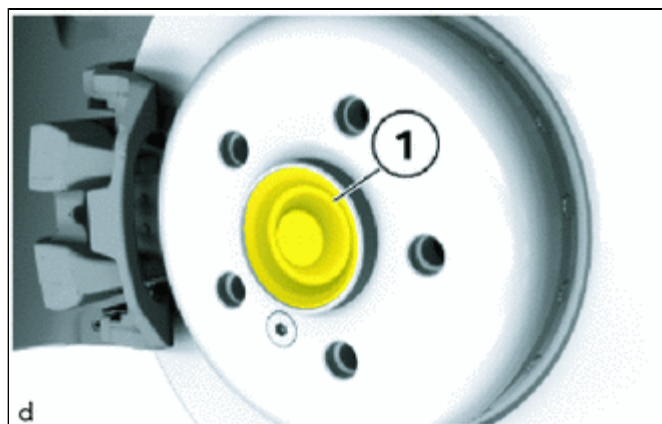
PROCEDURE

1. REMOVE REAR WHEEL

Click here [INFO](#)

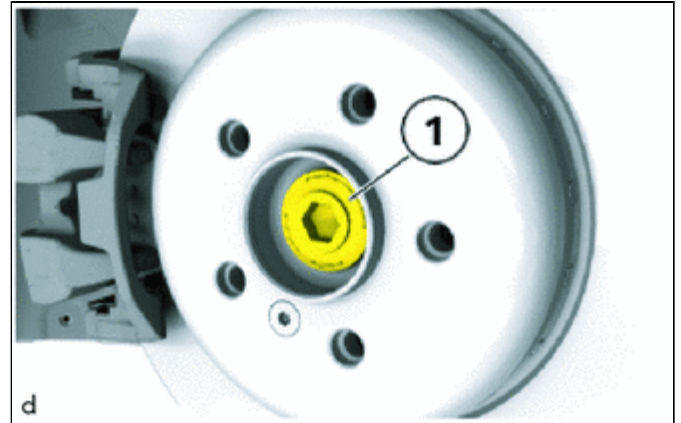
2. SEPARATE REAR DRIVE SHAFT ASSEMBLY

(a) Remove the sealing cap (1).



(b) Press brake pedal.

(c) Using a 17 mm straight hexagon wrench, loosen the 17 mm hexagon bolt (1).



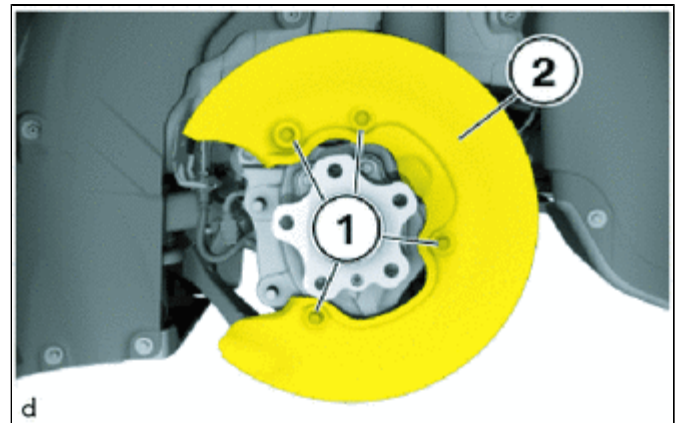
(d) Separate the rear drive shaft assembly towards the center of vehicle.

3. REMOVE REAR BRAKE DISC

Click here [INFO](#)

4. REMOVE REAR DISC BRAKE DUST COVER

(a) Loosen bolts (1).



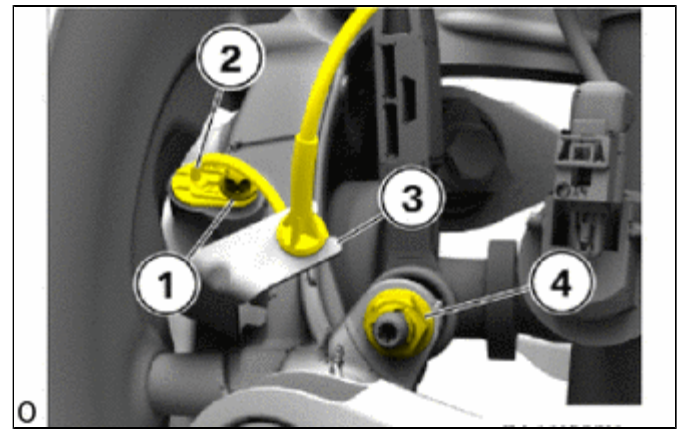
(b) Remove the rear disc brake dust cover (2).

5. REMOVE REAR COIL SPRING

Click here [INFO](#)

6. REMOVE REAR AXLE CARRIER SUB-ASSEMBLY

(a) Loosen E11 bolt (1).



(b) Remove the skid control sensor wire (2) and place to one side.

(c) Detach the cable from the holder (3).

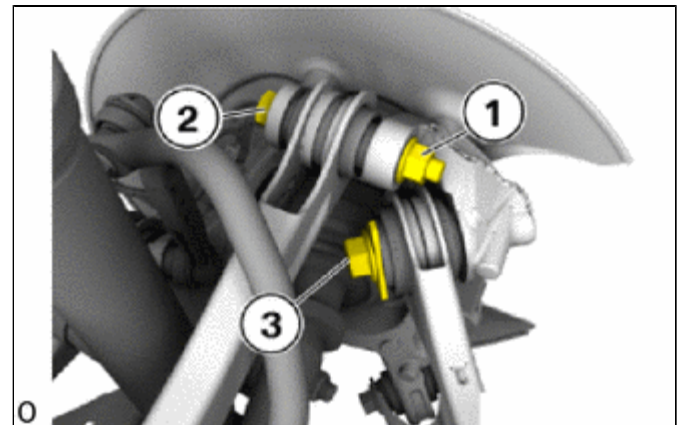
(d) Loosen the 16 mm nut (4).

HINT:

If necessary, counter-hold the T30 "TORX" socket wrench.

(e) Remove the rear stabilizer link assembly from the rear axle carrier sub-assembly.

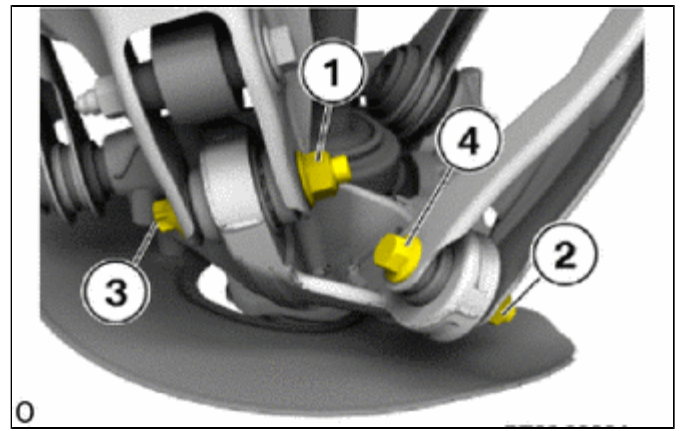
(f) Unfasten 18 mm nut (1).



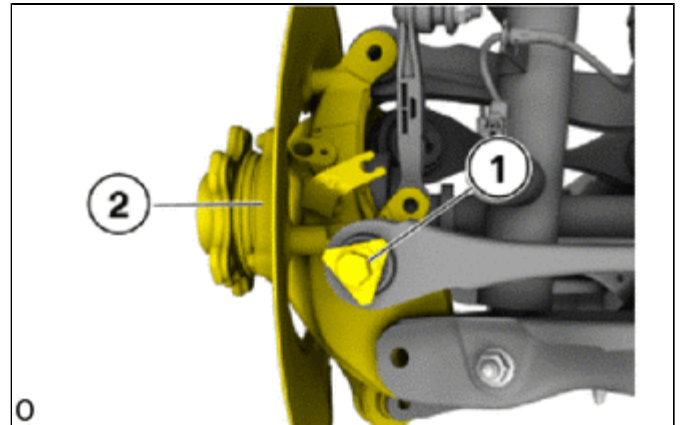
(g) Pull out 18 mm bolt (2).

(h) Release and remove bolt (3).

(i) Unfasten nut (1).



- (j) Loosen 18 mm nut (2).
- (k) Pull out E20 bolt (3).
- (l) Pull out 16 mm bolt (4).



- (m) Loosen bolt (1).

- (n) Guide out and remove rear axle carrier sub-assembly (2).

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIR
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR AXLE CARRIER: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

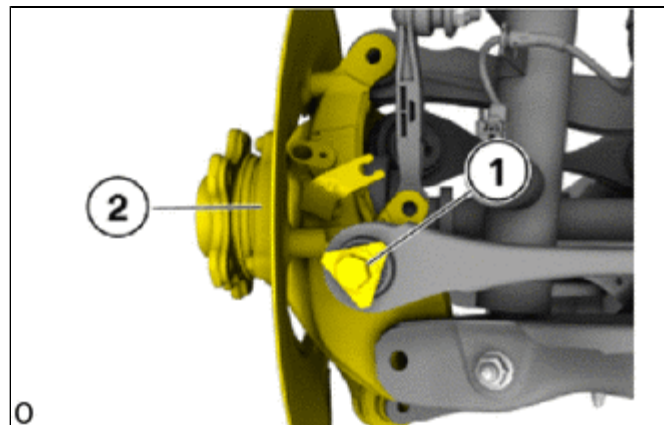
HINT:

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

PROCEDURE

1. INSTALL REAR AXLE CARRIER SUB-ASSEMBLY

(a) Insert and install the rear axle carrier sub-assembly (2).



(b) Replace the bolt (1).

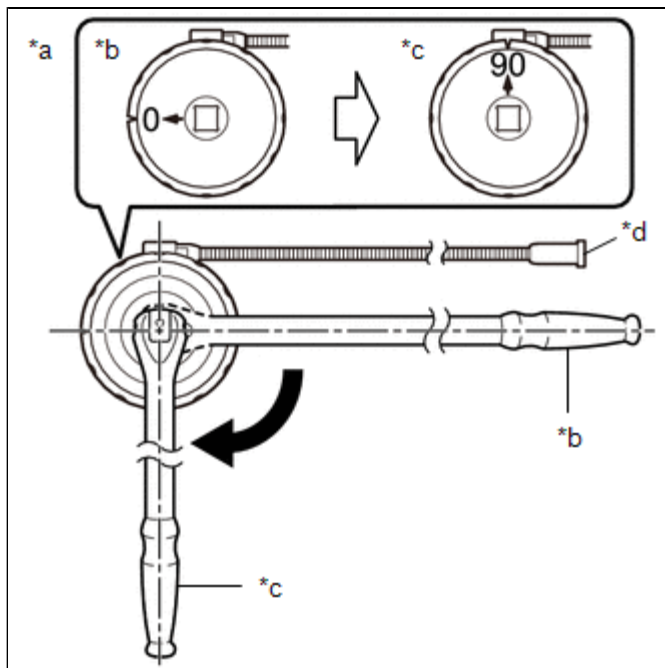
(c) Tighten down bolt (1).

Torque:

100 N·m {1020 kgf·cm, 74 ft·lbf}

(d) Using SST, tighten the bolt (1) an additional 90°.

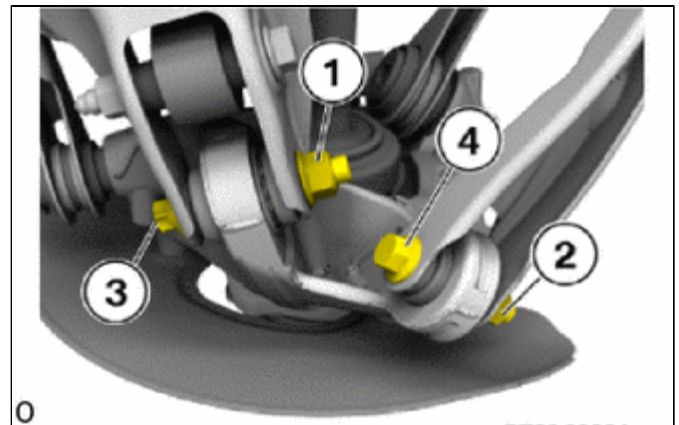
SST: 09900-WA010



*a	Example
*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

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

(e) Replace the nut (1) and 18 mm nut (2).



(f) Replace the E20 bolt (3) and 16 mm bolt (4).

(g) Insert E20 bolt (3) and 16 mm bolt (4).

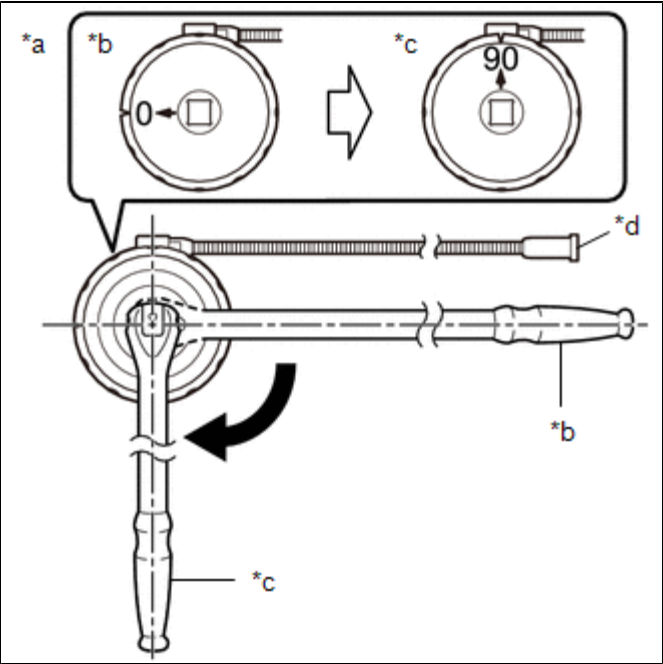
(h) Tighten nut (1).

Torque:

165 N·m {1683 kgf·cm, 122 ft·lbf}

(i) Using SST, tighten the nut (1) an additional 90°.

SST: 09900-WA010



*a	Example
*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

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

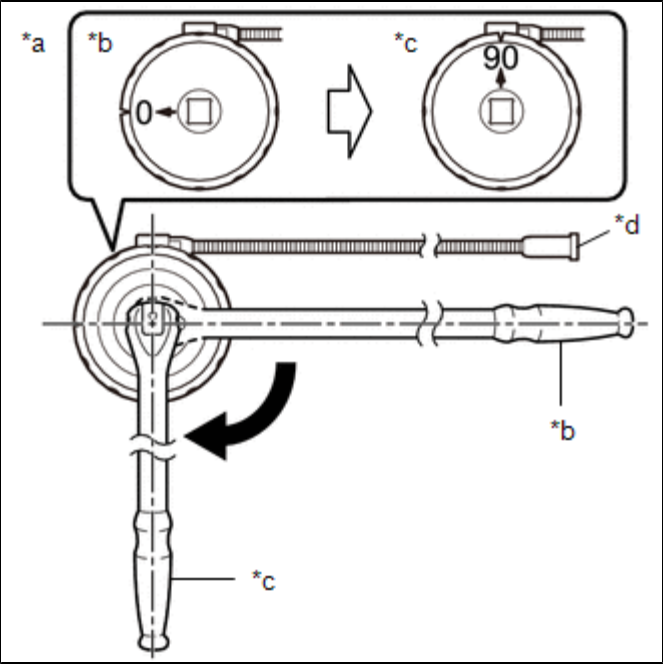
(j) Tighten 18 mm nut (2).

Torque:

100 N·m {1020 kgf·cm, 74 ft·lbf}

(k) Using SST, tighten the 18 mm nut (2) an additional 90°.

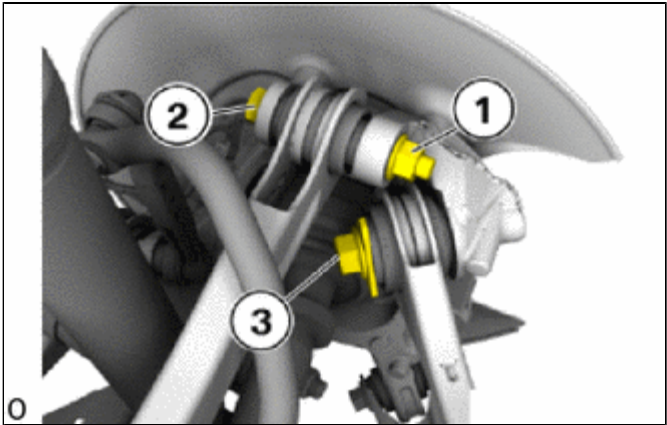
SST: 09900-WA010



*a	Example
----	---------

*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

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



(l) Replace the 18 mm nut (1).

(m) Replace the 18 mm bolt (2) and bolt (3).

(n) Insert the 18 mm bolt (2).

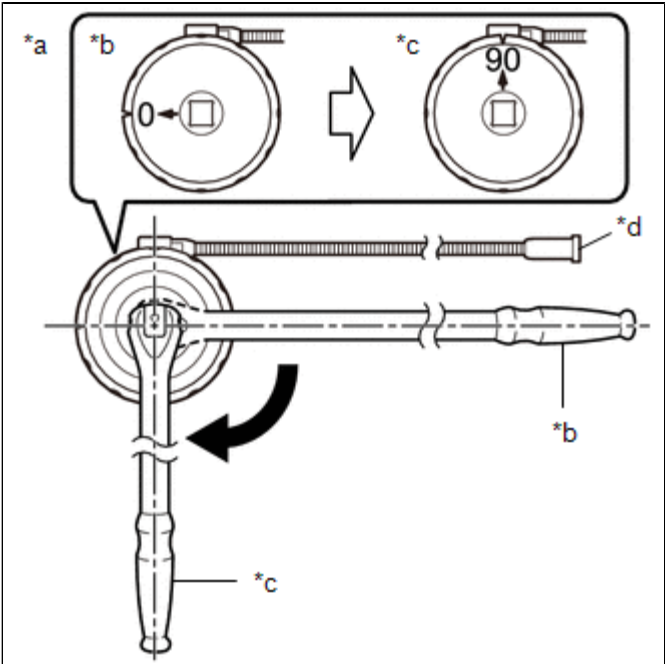
(o) Tighten 18 mm nut (1).

Torque:

100 N·m {1020 kgf·cm, 74 ft·lbf}

(p) Using SST, tighten the 18 mm nut (1) an additional 90°.

SST: 09900-WA010



*a	Example
*b	Before Tightening

*c	After Tightening
*d	Magnetic Portion

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

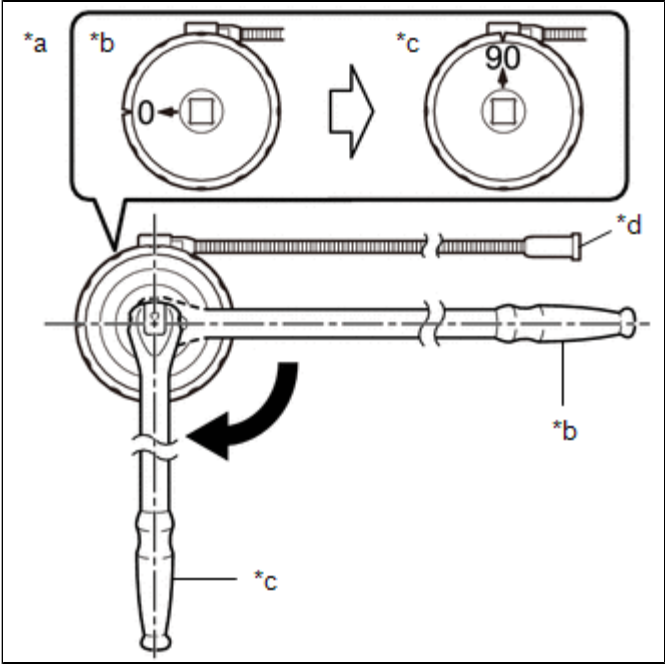
(q) Tighten down bolt (3).

Torque:

165 N·m {1683 kgf·cm, 122 ft·lbf}

(r) Using SST, tighten the bolt (3) an additional 90°.

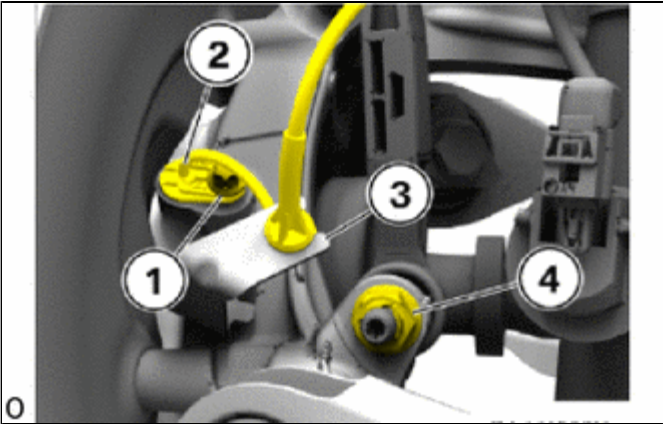
SST: 09900-WA010



*a	Example
*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

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

(s) Install the rear stabilizer link assembly on the rear axle carrier sub-assembly.



(t) Replace 16 mm nut (4).

(u) Tighten the 16 mm nut (4).

Torque:

56 N·m {571 kgf·cm, 41 ft·lbf}

HINT:

If necessary, counter support the T30 "TORX" socket wrench.

(v) Install skid control sensor wire (2).

(w) Replace the E11 bolt (1).

(x) Tighten down E11 bolt (1).

Torque:

11.8 N·m {120 kgf·cm, 9 ft·lbf}

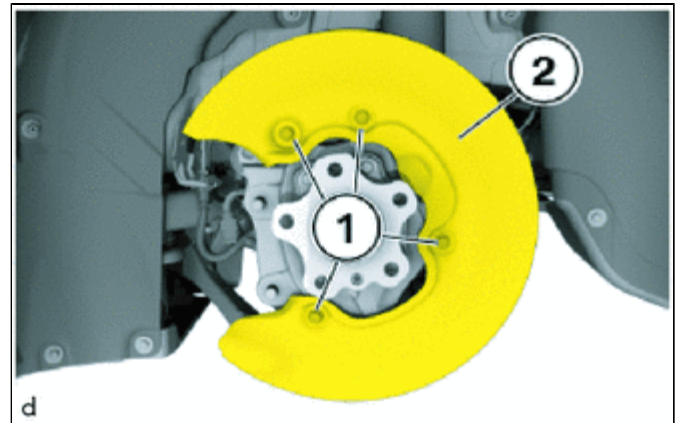
(y) Attach the cable in the holder (3).

2. INSTALL REAR COIL SPRING

Click here [INFO](#)

3. INSTALL REAR DISC BRAKE DUST COVER

(a) Install the rear disc brake dust cover (2).



(b) Replace bolts (1).

(c) Tighten the bolts (1).

Torque:

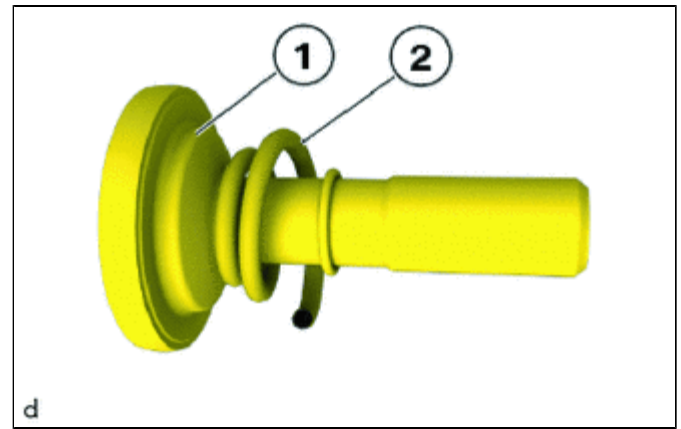
8.0 N·m {82 kgf·cm, 71 in·lbf}

4. INSTALL REAR BRAKE DISC

Click here [INFO](#)

5. INSTALL REAR DRIVE SHAFT ASSEMBLY

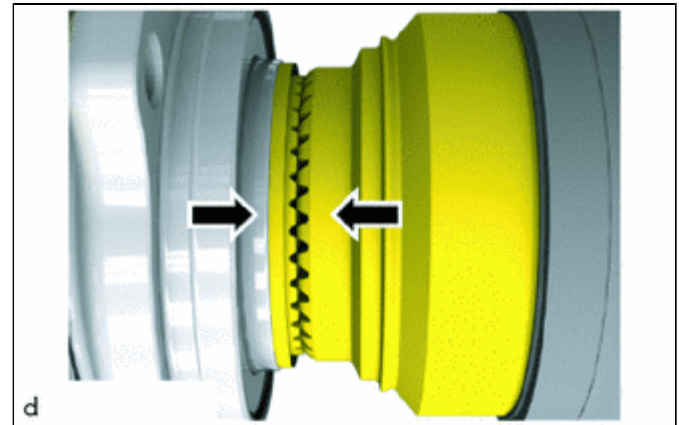
(a) Replace bolt (1) and compression spring (2).



(b) Position the rear drive shaft assembly on the rear axle hub and bearing assembly from the center of the vehicle.

(c) Hand-tighten the bolt (1) with the compression spring (2).

(d) Check whether front gearing is locked tooth in tooth by reciprocally rotating the rear axle hub and bearing assembly and the rear drive shaft assembly.



(e) If positive locking is ensured: Press brake pedal.

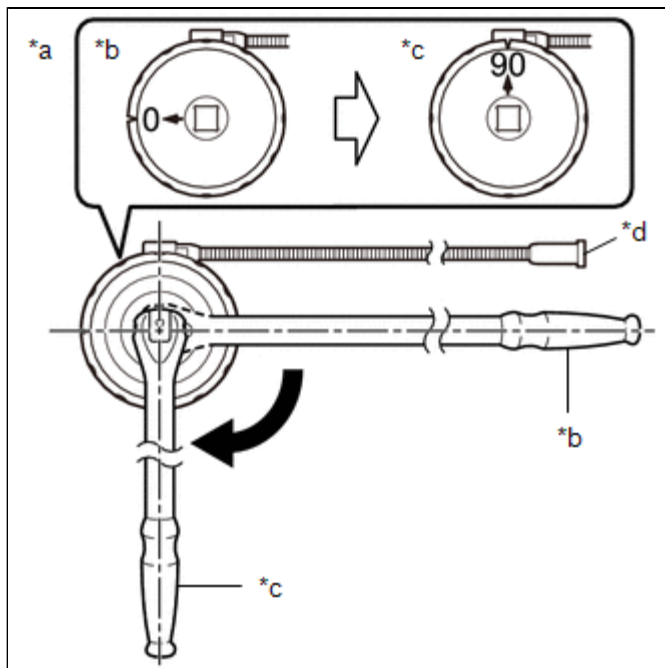
(f) Using a 17 mm straight hexagon wrench, tighten the bolt (1).

Torque:

210 N·m {2141 kgf·cm, 155 ft·lbf}

(g) Tighten the bolt (1) an additional 90°.

SST: 09900-WA010



*a	Example
*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

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

(h) Install the sealing cap.

6. INSTALL REAR WHEEL

Click here [INFO](#)

7. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

Click here [INFO](#)

8. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

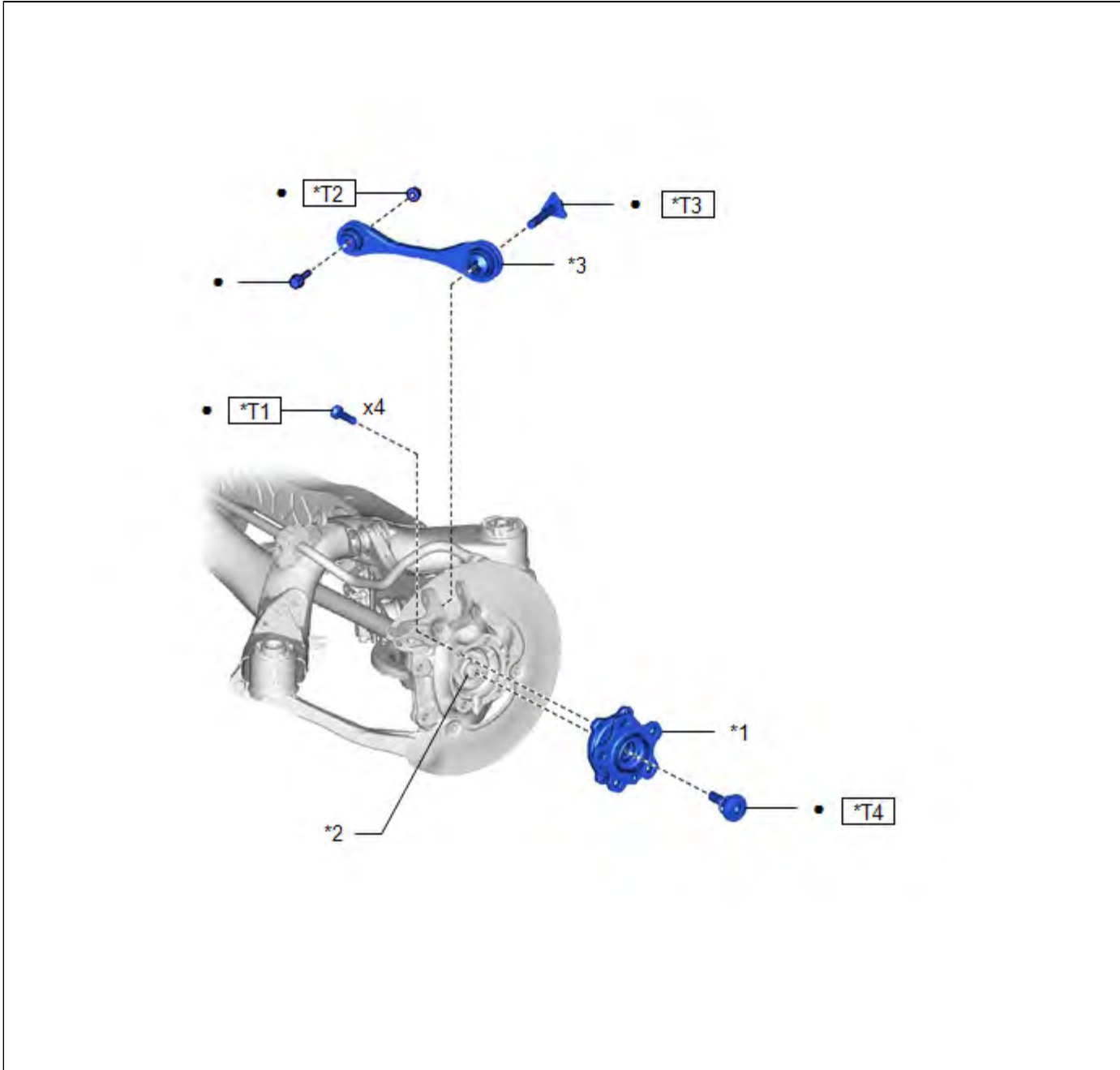
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIM
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR AXLE HUB: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	REAR AXLE HUB AND BEARING ASSEMBLY	*2	REAR DRIVE SHAFT ASSEMBLY
*3	REAR UPPER CONTROL ARM ASSEMBLY	-	-

	N*m (kgf*cm, ft.*lbf): Specified torque	-	-
*T1	1st: 120 (1224, 89) 2nd: Turn 90°	*T2	1st: 100 (1020, 74) 2nd: Turn 90°
*T3	1st: 165 (1683, 122) 2nd: Turn 90°	*T4	1st: 210 (2141, 155) 2nd: Turn 90°

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIN
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR AXLE HUB: 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. SEPARATE REAR DRIVE SHAFT ASSEMBLY

Click here [INFO](#)

3. REMOVE REAR BRAKE DISC

Click here [INFO](#)

4. REMOVE REAR SUSPENSION MEMBER SUB-ASSEMBLY

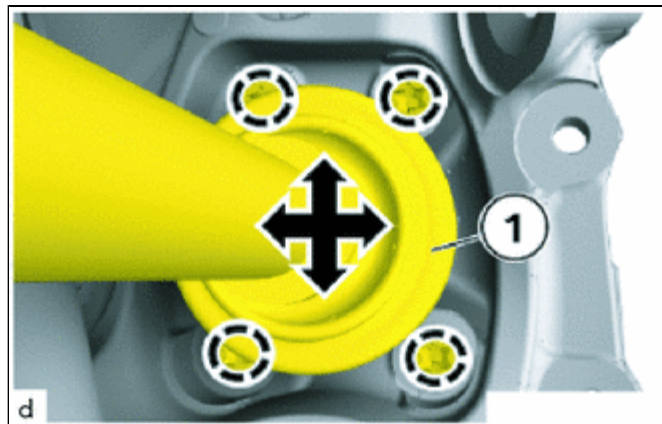
Click here [INFO](#)

5. REMOVE REAR UPPER CONTROL ARM ASSEMBLY

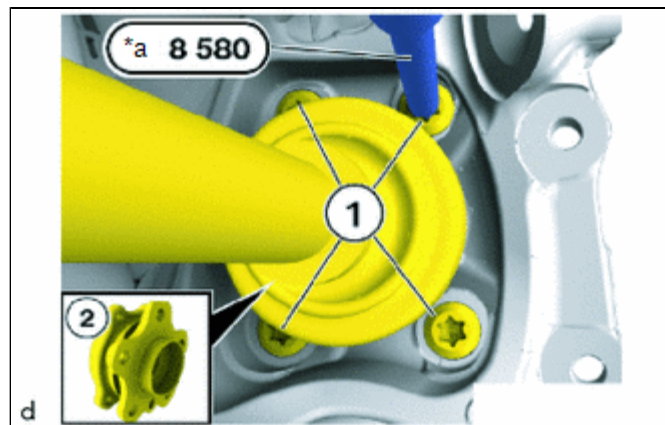
Click here [INFO](#)

6. REMOVE REAR AXLE HUB AND BEARING ASSEMBLY

- (a) Slightly tilt rear drive shaft assembly (1) in order to access the bolts (markings).



(b) Release the T60 bolts (1).



*a	Long "TORX" Socket Wrench
----	---------------------------

(c) Remove rear axle hub and bearing assembly (2).



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001LYGN
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR AXLE HUB: INSPECTION; 2020 MY Supra [03/2019 -]		

INSPECTION

PROCEDURE

1. NOTES ON WHEEL BEARING REPLACEMENT FOLLOWING ACCIDENT DAMAGE

- (a) In the event of accidents or driving conditions similar to accidents, shock-like loads to the wheel bearing units can cause slight damage to the bearing track. Despite initial running without noise, with continued use, this results in later noise generation at the wheel bearing.

2. PROCEDURE FOR WHEEL BEARING

- (a) The wheel bearing must be replaced on the damaged side of the axle if one or several of the following points apply.
- (1) Visible or noticeable damage to the wheel bearing
 - (2) Rolling noises, radial/lateral runout on the wheel bearing
 - (3) Permissible tolerance for the wheel alignment is exceeded and no longer adjustable without the exchange of additional components
 - (4) Damage, permanent deformation or breakages on wheel rims (severe damage) and simultaneous negative result of the wheel alignment
 - (5) Damage, permanent deformation or breakages on shock absorber assemblies, steering knuckles or axle hubs
 - (6) Damage, permanent deformation or breakages on suspension arms
 - (7) Damage, permanent deformation or breakages on pressure and rear floor panel brace or stabilisers with this function
 - (8) Damage, permanent deformation or breakages on body side attachment points of wheel guide parts
 - (9) Damage, permanent deformation or breakages on tie rod end sub-assemblies
 - (10) Damage, permanent deformation or breakages on steering gear mounting



TOYOTA

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIO
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR AXLE HUB: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

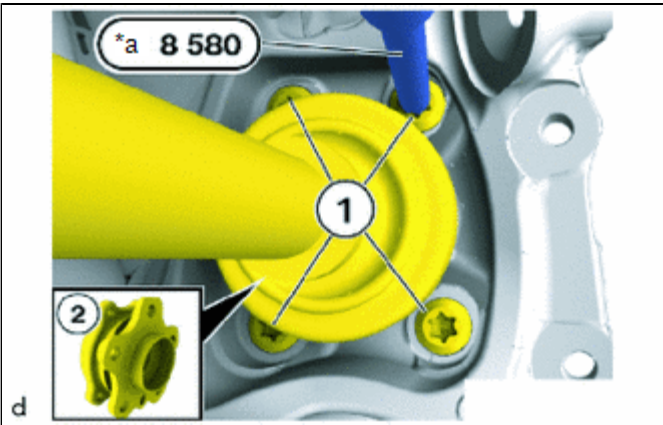
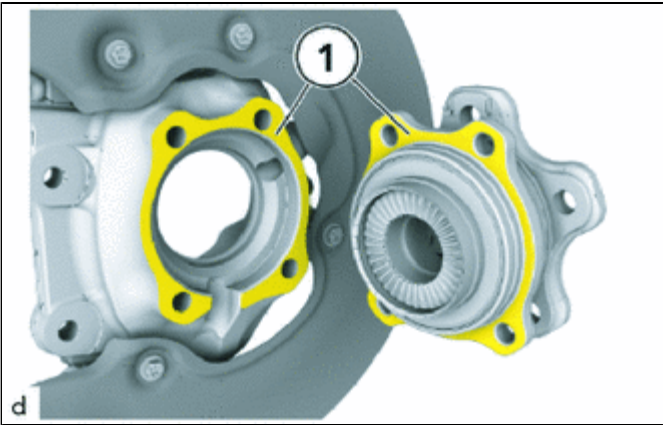
- HINT:**
- Use the same procedure for the RH side and LH side.
 - The following procedure is for the LH side.

PROCEDURE

1. INSTALL REAR AXLE HUB AND BEARING ASSEMBLY

- (a) Make sure that the contact surfaces (1) of the wheel carrier and rear axle hub sub-assembly are clean, and free from oil and grease.

- HINT:**
- If necessary, clean the contact surfaces (1).



*a	Long "TORX" Socket Wrench
----	---------------------------

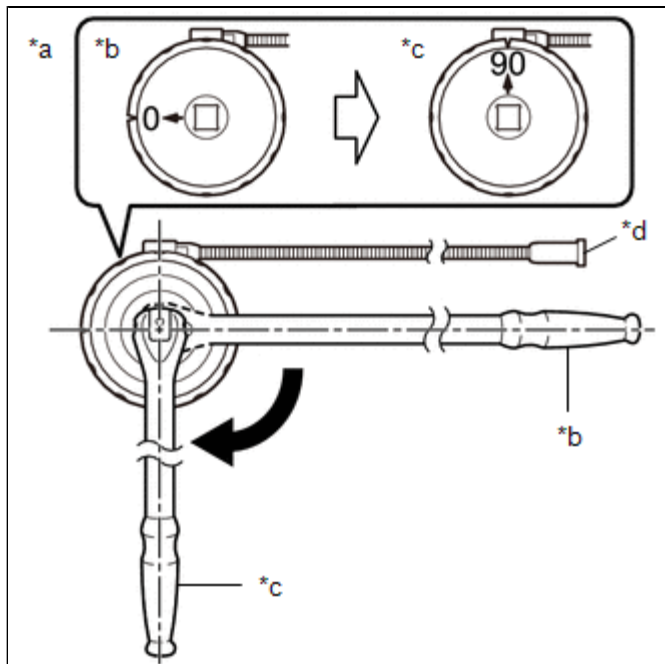
- (c) Replace T60 bolts (1).
- (d) Tighten the T60 bolts (1).

Torque:

120 N·m {1224 kgf·cm, 89 ft·lbf}

(e) Using SST, tighten the T60 bolts (1) an additional 90°.

SST: 09900-WA010



*a	Example
*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

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

2. INSTALL REAR UPPER CONTROL ARM ASSEMBLY

Click here [INFO](#)

3. INSTALL REAR SUSPENSION MEMBER SUB-ASSEMBLY

Click here [INFO](#)

4. INSTALL REAR BRAKE DISC

Click here [INFO](#)

5. INSTALL REAR DRIVE SHAFT ASSEMBLY

Click here [INFO](#)

6. INSTALL REAR WHEEL

Click here [INFO](#)

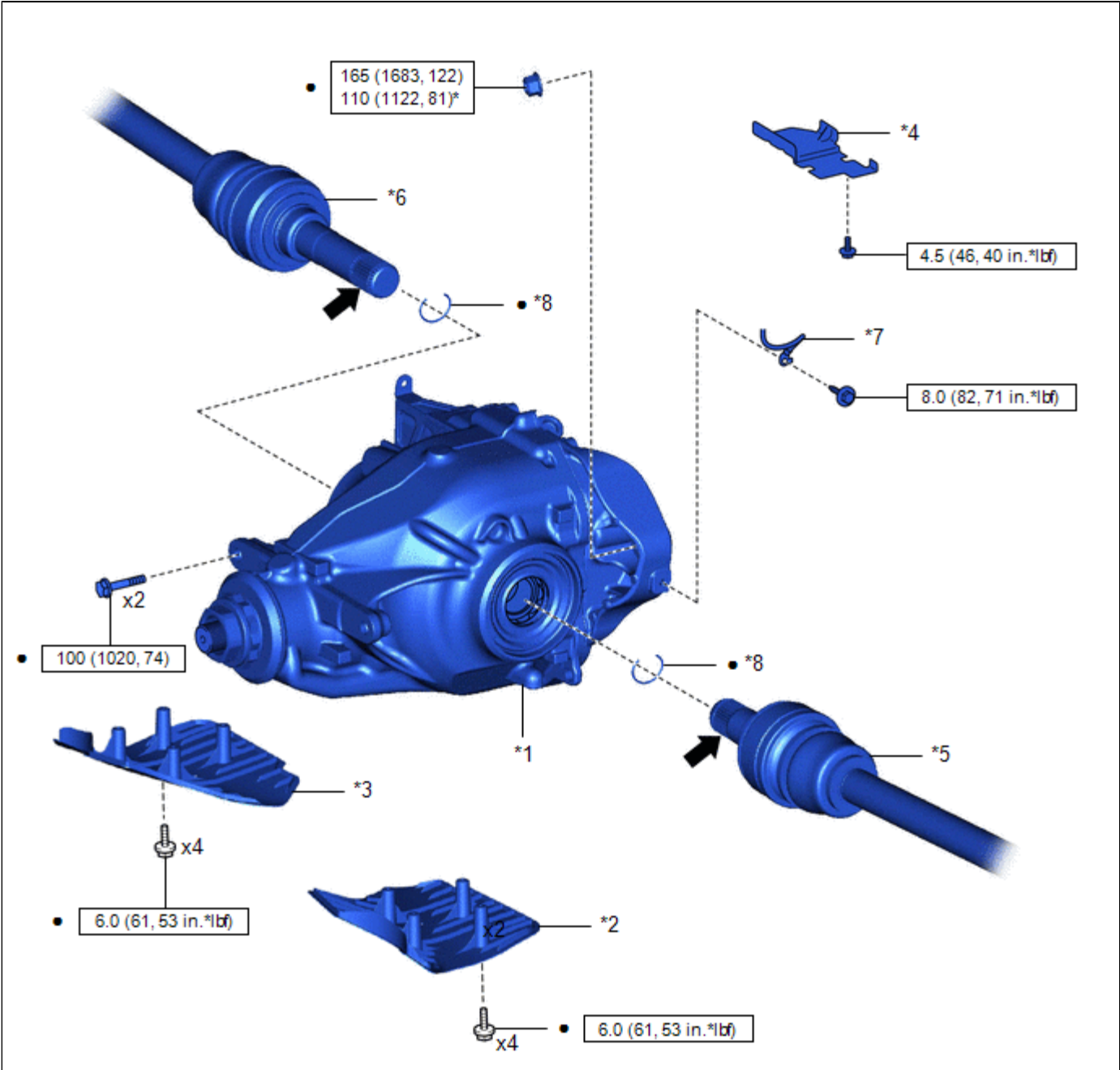
7. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIX
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL CARRIER ASSEMBLY: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

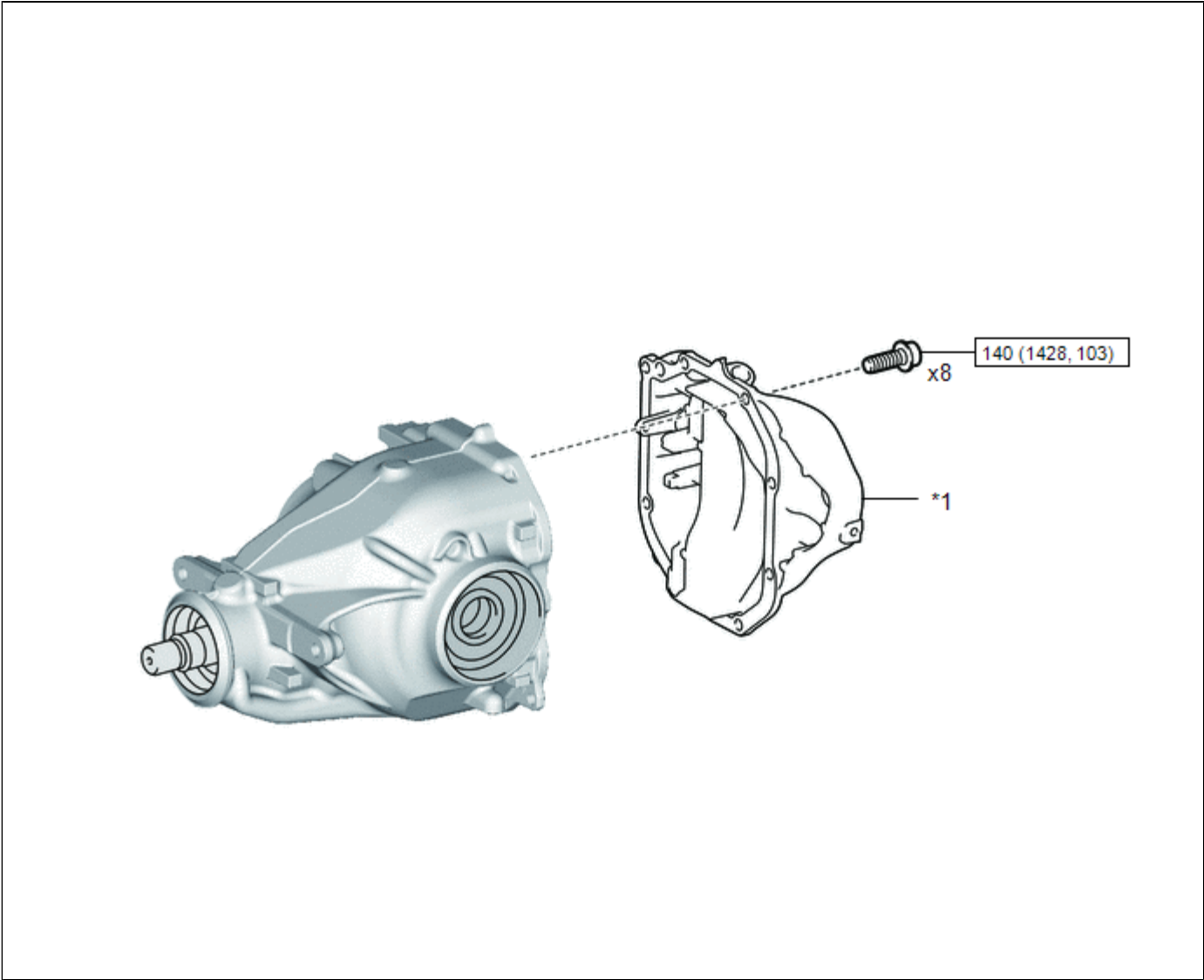
ILLUSTRATION



*1	REAR DIFFERENTIAL CARRIER ASSEMBLY	*2	REAR SUSPENSION ARM COVER LH
*3	REAR SUSPENSION ARM COVER RH	*4	REAR DIFFERENTIAL PROTECTOR

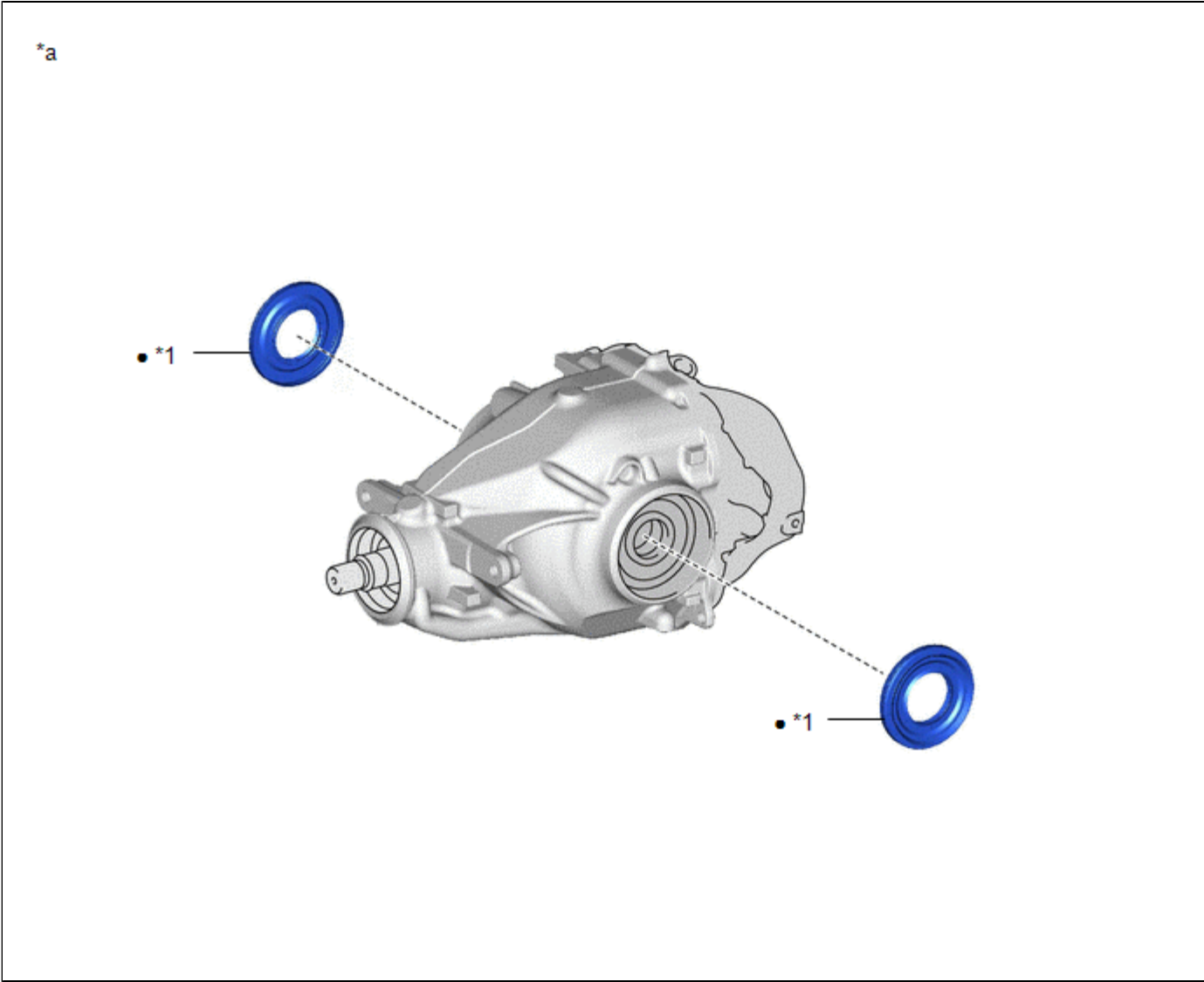
*5	REAR DRIVE SHAFT ASSEMBLY LH	*6	REAR DRIVE SHAFT ASSEMBLY RH
*7	GROUND WIRE	*8	SHAFT SNAP RING
	N*m (kgf*cm, ft.*lbf): Specified torque	*	For use with SST
•	Non-reusable part		Differential Oil

ILLUSTRATION



*1	REAR DIFFERENTIAL CARRIER COVER	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

ILLUSTRATION



*1	REAR DRIVE SHAFT OIL SEAL	-	-
●	Non-reusable part	-	-
*a	Oil Seal for Replacement	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIY
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL CARRIER ASSEMBLY: 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:

- 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 transmission oil level in the rear differential carrier assembly.
- Use only the approved differential oil.

PROCEDURE

1. REMOVE PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

Click here [INFO](#)

2. REMOVE REAR SUSPENSION ARM COVER LH

Click here [INFO](#)

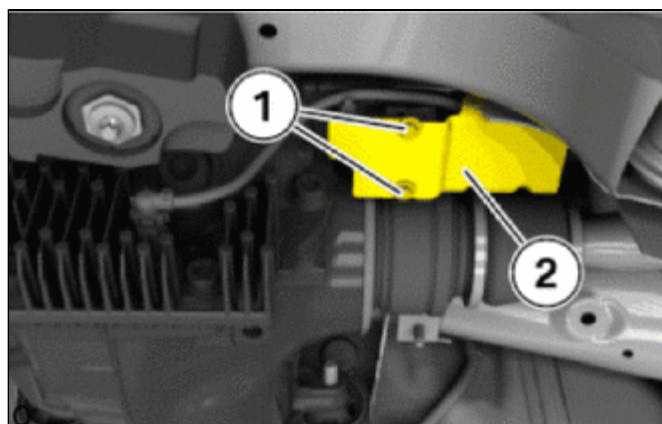
3. REMOVE REAR SUSPENSION ARM COVER RH

HINT:

Use the same procedure as for the LH side.

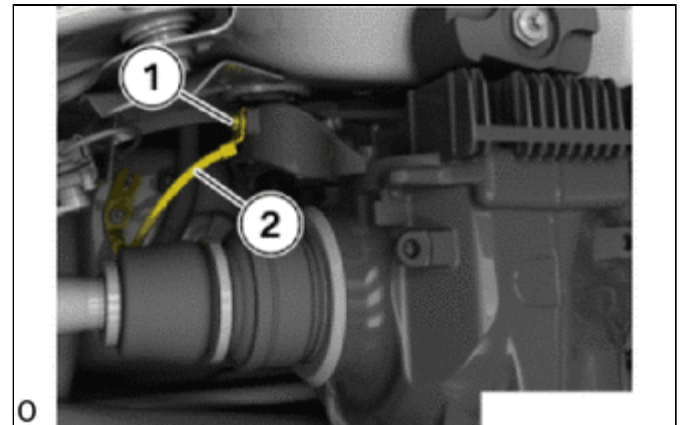
4. REMOVE REAR DIFFERENTIAL CARRIER ASSEMBLY

(a) Loosen bolts (1).

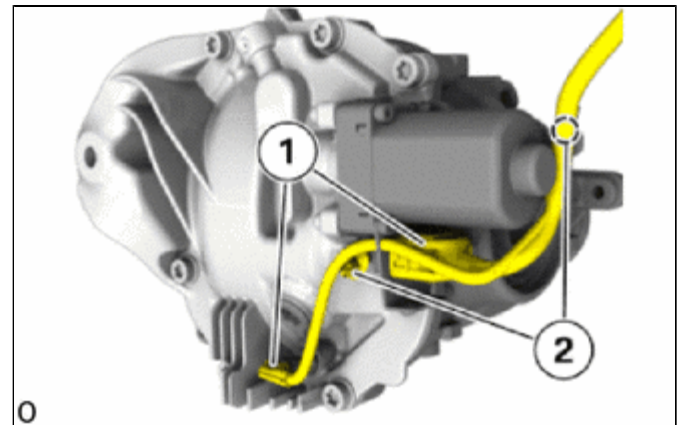


(b) Remove rear differential protector (2).

(c) Remove the bolt (1) to disconnect the ground wire (2).

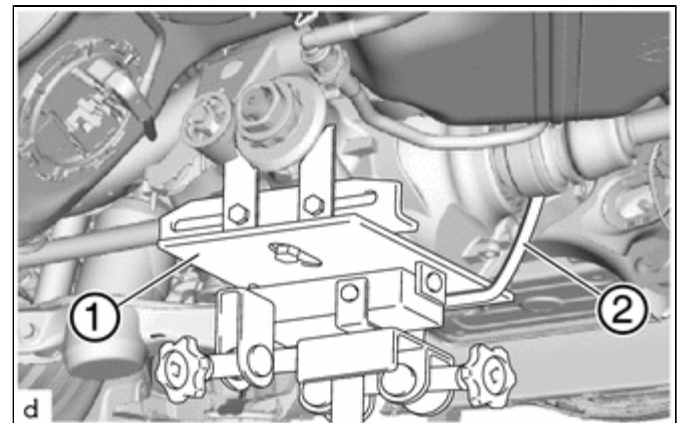


(d) Unlock and disconnect plug connections (1).



(e) Loosen the cable clips (2).

(f) Support the rear differential carrier assembly with the transmission jack (1).

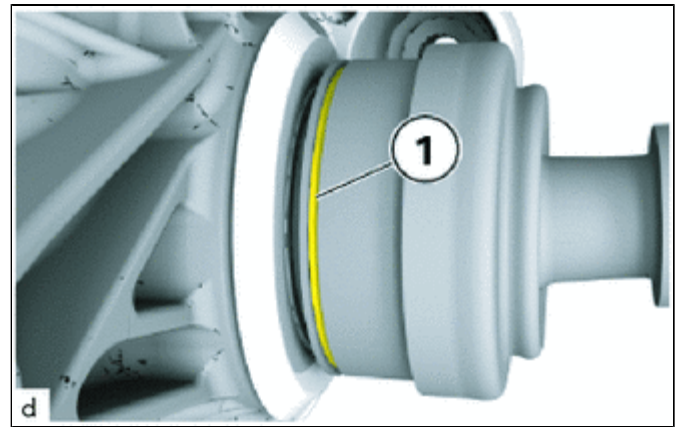


(g) Secure the rear differential carrier assembly with the lashing belt (2) on the transmission jack (1).

- (h) Make sure that the special tool 0 495 856 (33 5 124) or 2 240 465 is inserted in the circumferential slot (1) of the rear drive shaft assembly.

SST: 09500-WA020

SST: 09500-WA030



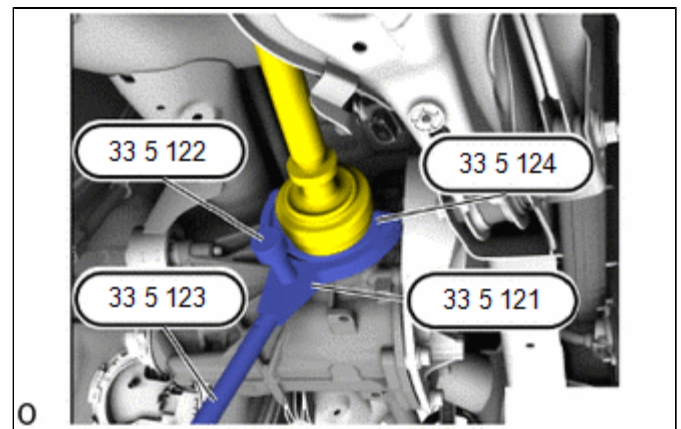
- (i) Use special tools 0 495 854 (33 5 122), 0 495 855 (33 5 123), 0 495 856 (33 5 124) / 0 495 853 (33 5 121) to push the rear drive shaft assembly out of the rear differential carrier assembly by jerking.

SST: 09500-WA020

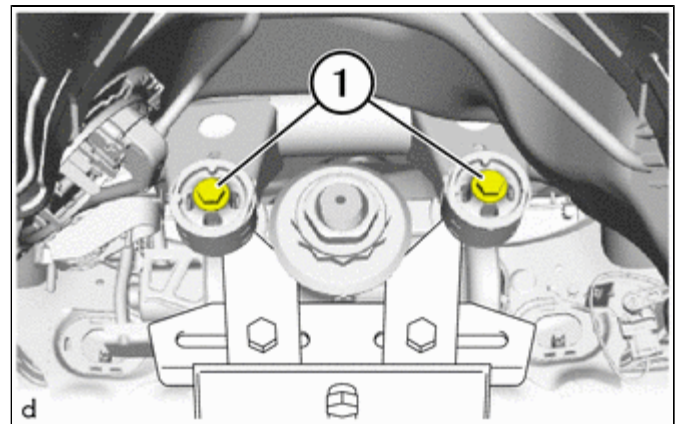
SST: 09500-WA030

HINT:

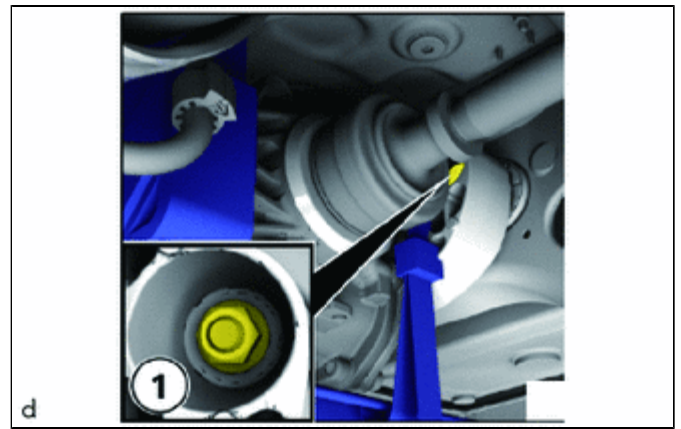
Use the same procedures for the opposite side.



- (j) Loosen 18 mm bolts (1).

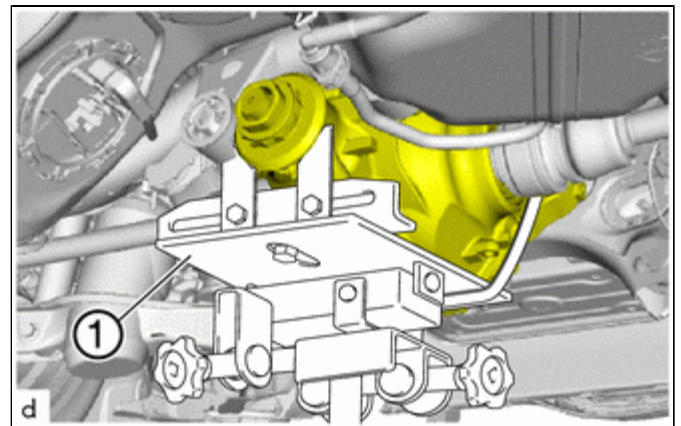


- (k) Loosen nut (1).

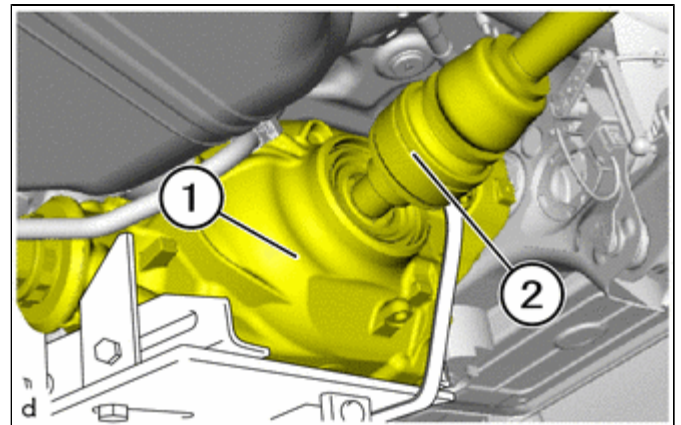


(l) Slide bolt backwards up to the limit position.

(m) Lower the rear differential carrier assembly with the transmission jack (1).



(n) Press (tilt) the right rear differential carrier assembly (1) upwards.



(o) Feed out the left rear drive shaft assembly (2) downwards and tie up.

(p) Swing the rear differential carrier assembly (1) towards the left side.

(q) Remove rear differential carrier assembly.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIZ
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL CARRIER ASSEMBLY: DISASSEMBLY; 2020 MY Supra [03/2019 -]		

DISASSEMBLY

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:

- Damage to rear differential carrier assembly.

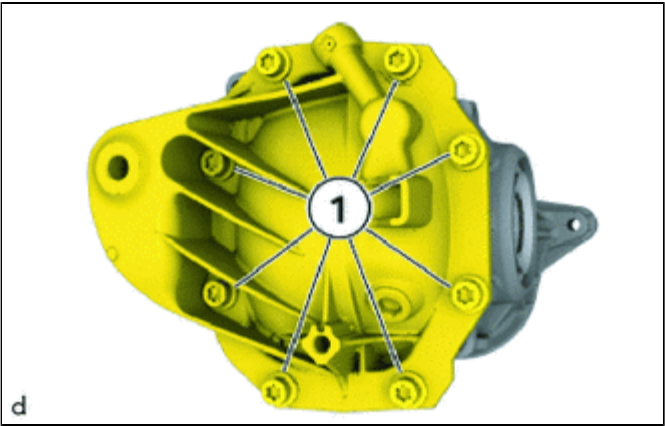
Failure to comply with the oil specifications can result in serious damage to the rear differential carrier assembly.

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

PROCEDURE

1. REMOVE REAR DIFFERENTIAL CARRIER COVER

(a) Loosen T55 bolts (1).



(b) Take off rear differential carrier cover.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ0
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL CARRIER ASSEMBLY: REASSEMBLY; 2020 MY Supra [03/2019 -]		

REASSEMBLY

PROCEDURE

1. INSTALL REAR DIFFERENTIAL CARRIER COVER

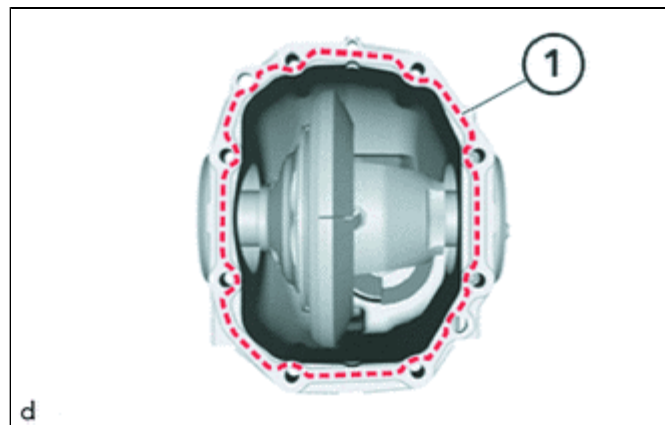
- (a) Apply liquid sealing compound along the dotted line (1) on the sealing surface of the rear differential carrier assembly.

Seal packing:

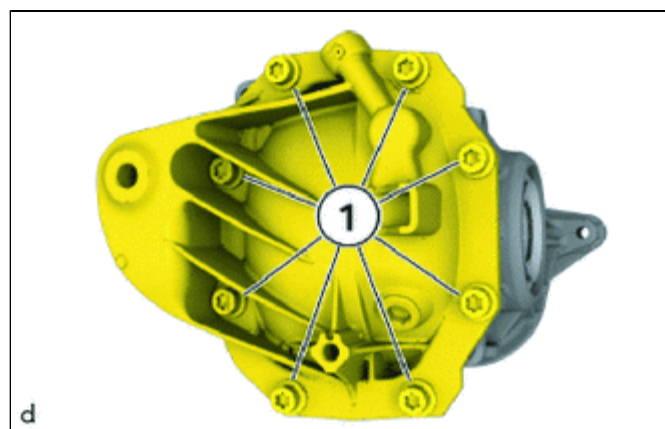
Loctite 5970 Flange Sealant

NOTICE:

The sealing bead must run along the inner edge.



- (b) Position the rear differential carrier cover on the rear differential carrier assembly.



- (c) Tighten the T55 bolts (1).

Torque:

140 N·m {1428 kgf·cm, 103 ft·lbf}

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJ1
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL CARRIER ASSEMBLY: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. REPLACE REAR DRIVE SHAFT OIL SEAL

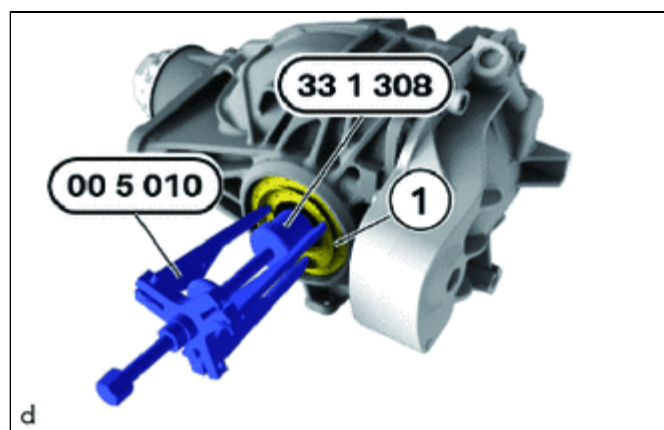
HINT:

When reusing the rear differential carrier assembly, use this procedure.

- (a) Pull out the rear drive shaft oil seal (1) using special tool 0 490 466 (00 5 010) or 0 492 104 (33 1 308).

SST: 09500-WA090

SST: 09900-WA210

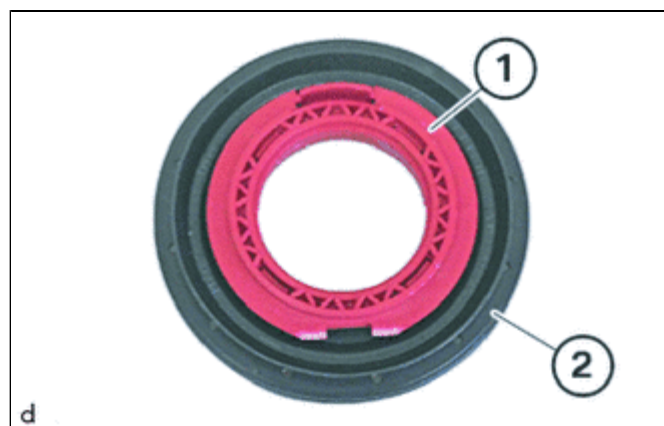


- (b) Replace rear drive shaft oil seal at front.

HINT:

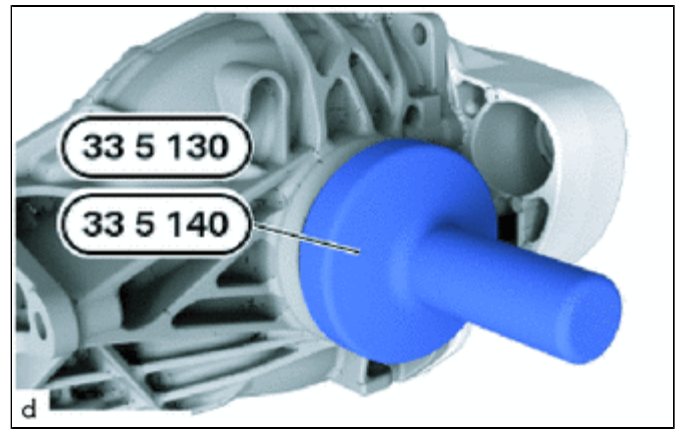
Rear drive shaft oil seal ring are equipped with an installation protection ring. The installation protection ring is used to protect the sealing lip when installing the rear drive shaft assembly.

- (c) Install the rear drive shaft oil seal (2) using the installation protection ring (1).



- (d) Make sure that the installation protection ring does not slide out of the rear drive shaft oil seal.

- (e) Coat housing sheet metal flange and the sealing lips of the new rear drive shaft oil seal with approved differential oil.



- (f) Tap in rear drive shaft oil seal with special tools 0 495 860 (33 5 130) and 0 495 862 (33 5 140) up to the limit position.

SST: 09500-WA060

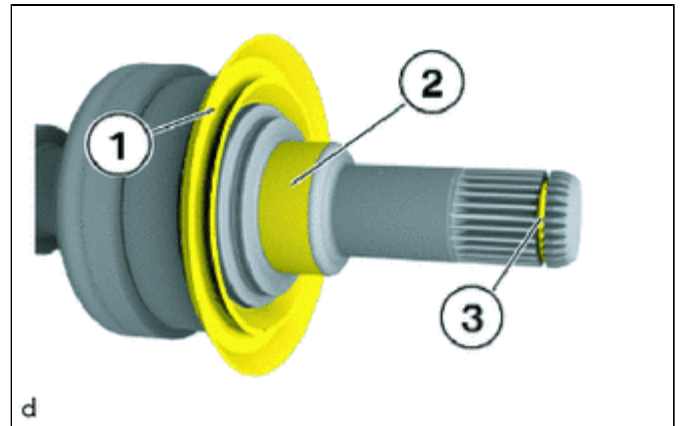
SST: 09500-WA210

2. INSTALL REAR DIFFERENTIAL CARRIER ASSEMBLY

NOTICE:

Extreme force being required during installation is an indication that the component is damaged or deformed. Check the component; replace if necessary.

- (a) Check the gearing of the rear drive shaft assembly for damage; replace the components if necessary.



- (b) Check the dust plate (1) for damage; replace if necessary.
(c) Replace the shaft snap ring (3).

NOTICE:

It is essential to replace the shaft snap ring of the rear drive shaft assembly.

- (d) Coat the contact surface (2) of the rear drive shaft assembly with approved differential oil.

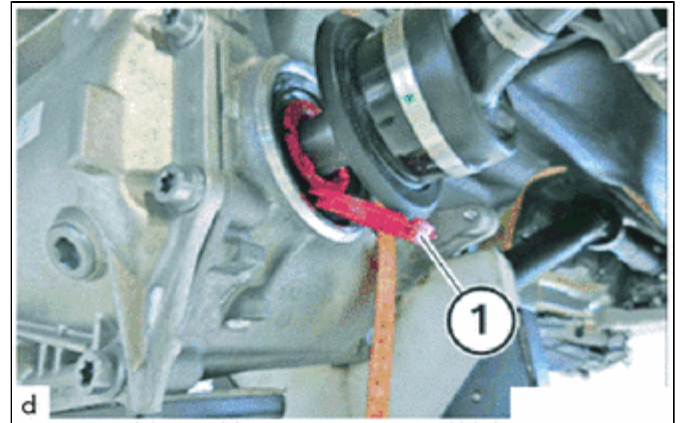
HINT:

Use the same procedures for the opposite side.

- (e) Lift rear differential carrier assembly.
(f) Swing the rear differential carrier assembly towards the left side.
(g) Press (tilt) the right rear differential carrier assembly downwards.

- (h) Guide in the left rear drive shaft assembly upwards.
- (i) Insert rear drive shaft assembly into rear differential carrier assembly.

- (j) Pull on the tab (1) of the installation protection ring until one of the two predetermined breaking points breaks.



- (k) Pull out the assembly protection ring.

HINT:

Use the same procedures for the opposite side.

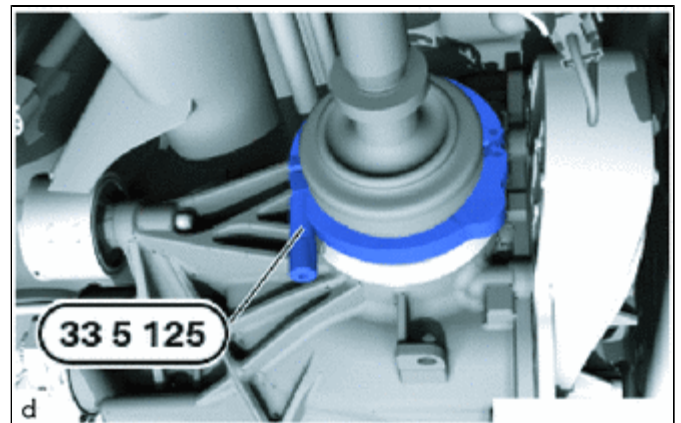
- (l) Drive rear drive shaft assembly with special tool 0 495 857 (33 5 125) and a rubber mallet into rear differential carrier assembly.

SST: 09500-WA020

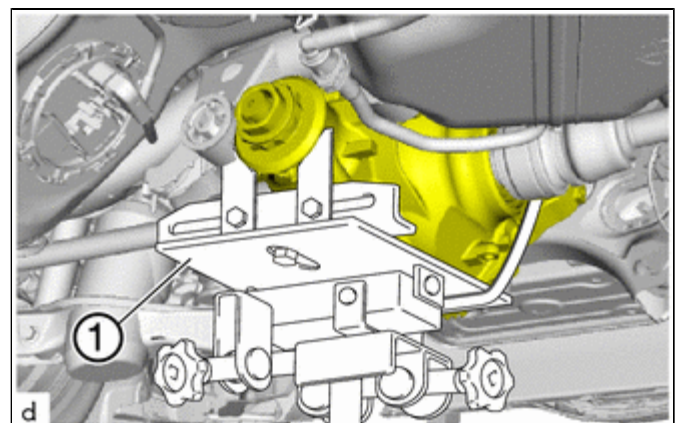
SST: 09500-WA030

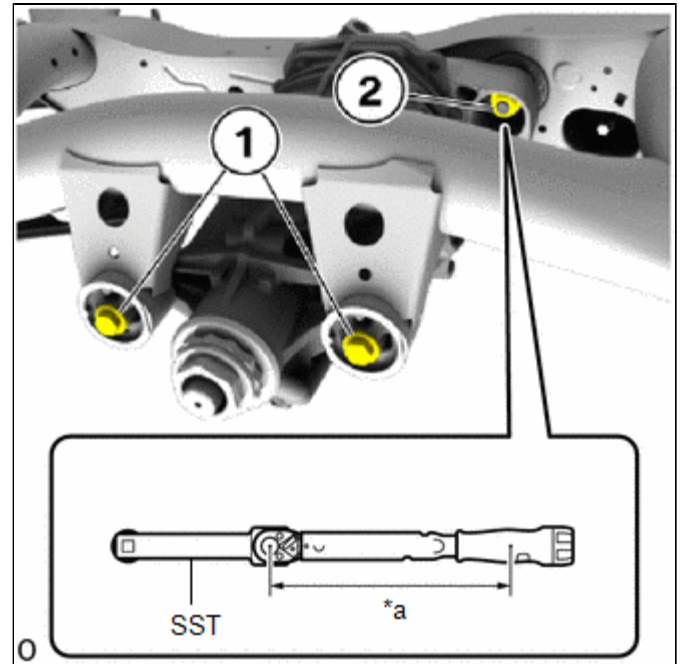
HINT:

Use the same procedures for the opposite side.



- (m) Insert the rear differential carrier assembly into the rear suspension member sub-assembly using the transmission jack (1).





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

(n) Replace 18 mm bolts (1).

(o) Hand-tighten the 18 mm bolts (1).

(p) Replace the nut (2).

(q) Hand-tighten the nut (2).

(r) Loosen tensioning strap.

(s) Release the transmission jack and put away.

(t) Tighten the 18 mm bolts (1).

Torque:

100 N·m {1020 kgf·cm, 74 ft·lbf}

(u) Tighten nut (2).

SST: 09961-01270

Torque:

165 N·m {1683 kgf·cm, 122 ft·lbf}

HINT:

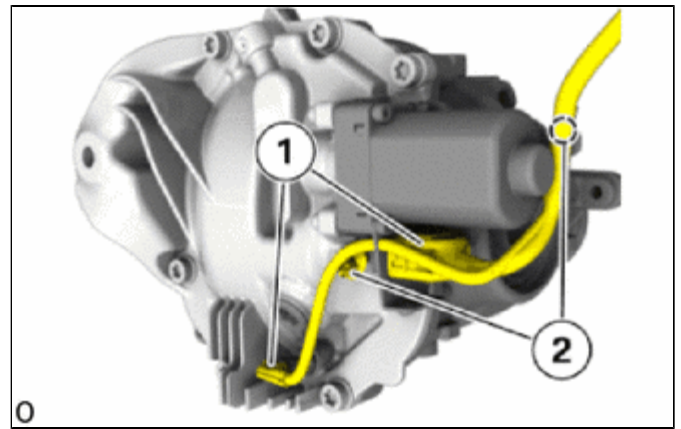
- Calculate the torque wrench reading when changing the fulcrum length of the torque wrench.

Click here [INFO](#)

- When using SST (fulcrum length of 200 mm (7.87 in.)) + torque wrench (fulcrum length of 400 mm (13.12 in.)):

110 N·m (1122 kgf·cm, 81 ft·lbf)

(v) Connect connectors (1) and lock.



(w) Attach the cable clip (2).

(x) Connect the ground wire with the bolt.

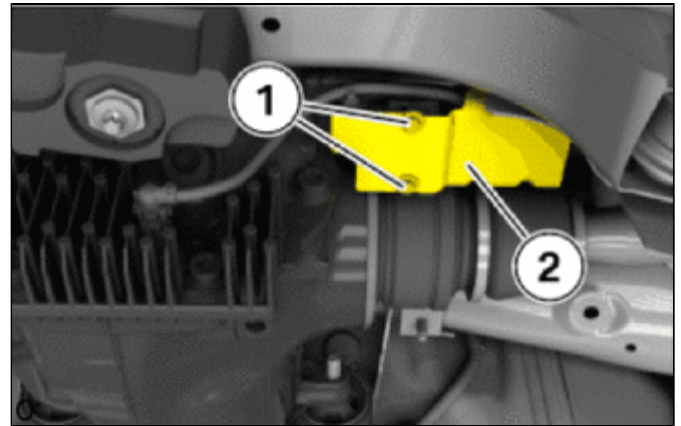
Torque:

8.0 N·m { 82 kgf·cm, 71 in·lbf }

(y) Install the rear differential protector (2) with the bolts (1).

Torque:

4.5 N·m { 46 kgf·cm, 40 in·lbf }



3. INSTALL REAR SUSPENSION ARM COVER LH

Click here [INFO](#)

4. INSTALL REAR SUSPENSION ARM COVER RH

HINT:

Use the same procedure as for the LH side.

5. INSTALL PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

Click here [INFO](#)

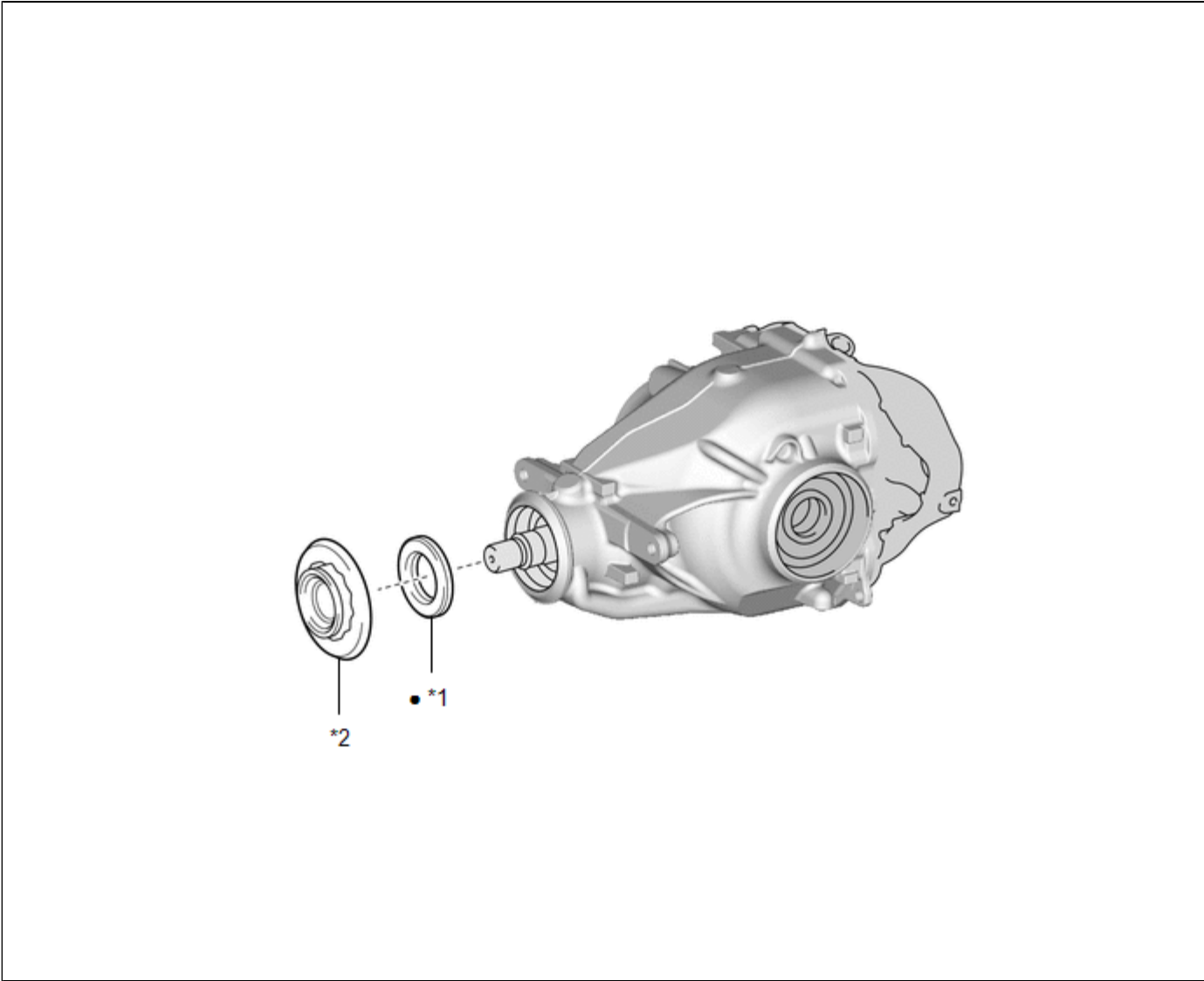
6. INSPECT DIFFERENTIAL OIL

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIV
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL CARRIER OIL SEAL: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	REAR DIFFERENTIAL CARRIER OIL SEAL	*2	FLANGE NUT
•	Non-reusable part	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIW
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL CARRIER OIL SEAL: REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

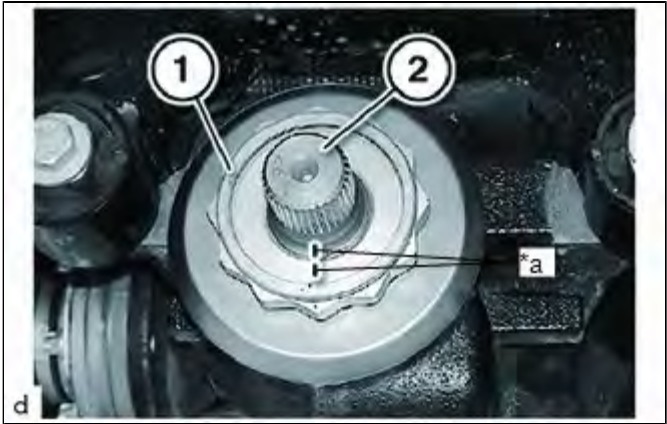
PROCEDURE

1. REMOVE PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

Click here [INFO](#)

2. REMOVE REAR DIFFERENTIAL CARRIER OIL SEAL

- (a) Mark the position of the flange nut (1) for the bevel pinion (2).



*a	Match Mark
----	------------

- (b) Warm up flange nut using a hair dryer.

CAUTION:

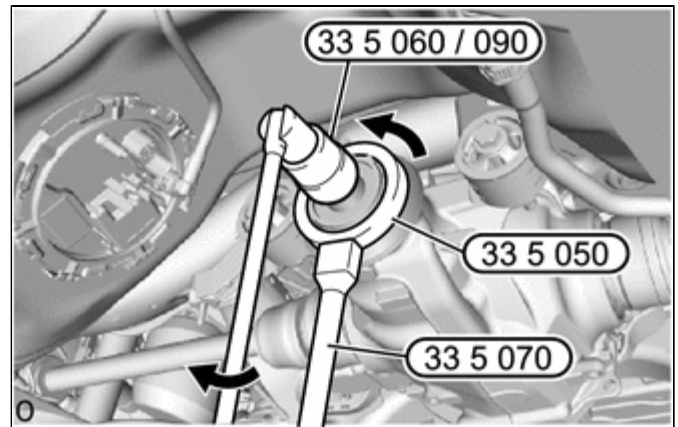
- Do not touch the hair dryer and heated parts, touching the hair dryer may result in burns.
- Touching heated parts for a long time may result in burns.

NOTICE:

- Do not heat beyond the dimension required to open the flange nut.
- Do not use open flames for heating.

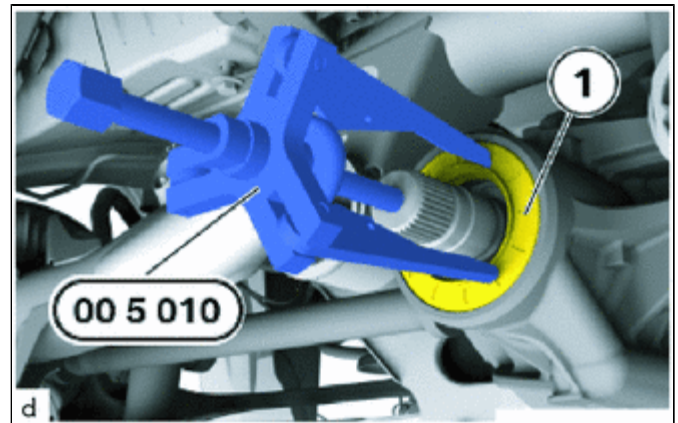
- (c) Unscrew the flange nut with the special tools 0 495 552 (33 5 050) and 0 495 554 (33 5 070) counterclockwise. Provide counter support at the bevel pinion with special tools 0 495 553 (33 5 060) and 0 495 554 (33 5 070).

SST: 09500-WA040
SST: 09500-WA050
SST: 09900-WA040



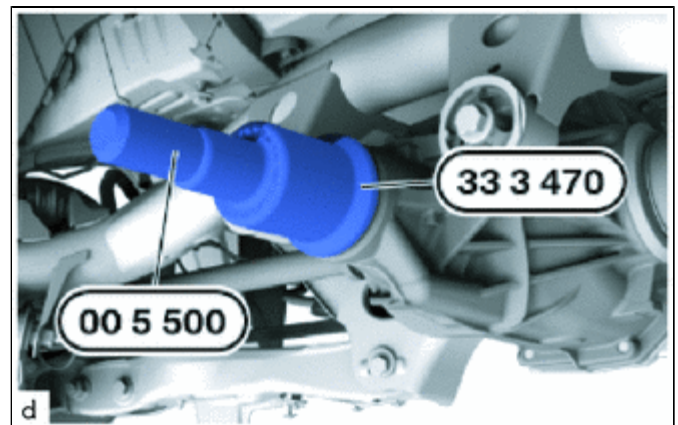
(d) Pull the rear differential carrier oil seal out with the special tool 0 490 466 (00 5 010).

SST: 09500-WA090



3. INSTALL REAR DIFFERENTIAL CARRIER OIL SEAL

(a) Coat the sealing lip of the new rear differential carrier oil seal and sealing surface of the bevel pinion with differential oil.

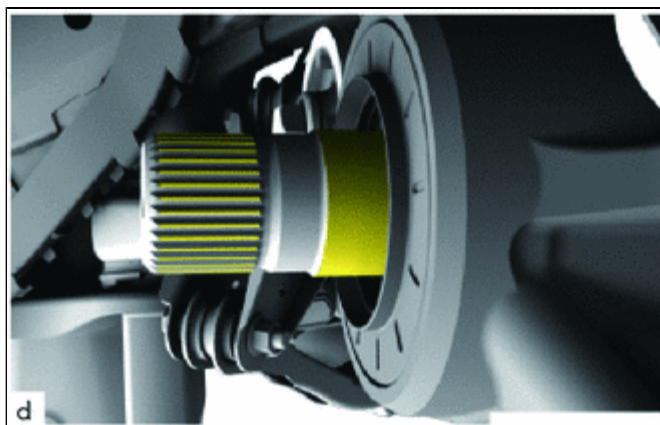


(b) Drive in the rear differential carrier oil seal with special tool 0 490 475 (00 5 500) or 0 492 343 (33 3 470).

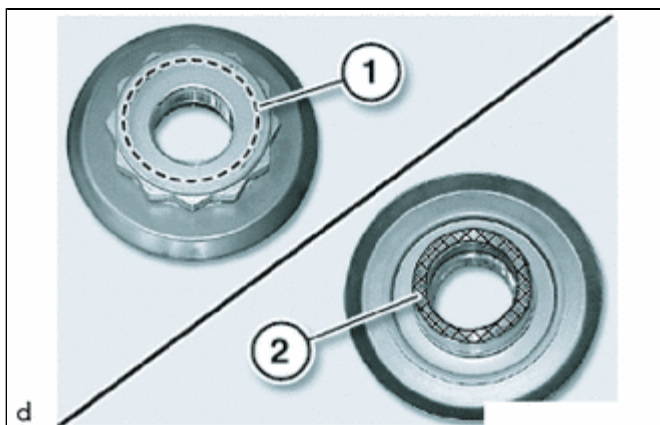
SST: 09500-WA070

SST: 09500-WA180

(c) Clean bevel pinion thoroughly to remove remnants of screw locking agent.



(d) Check dust plate for damage, replace if necessary.



(e) Clean the flange nut thoroughly to remove remnants of grease and screw locking agent.

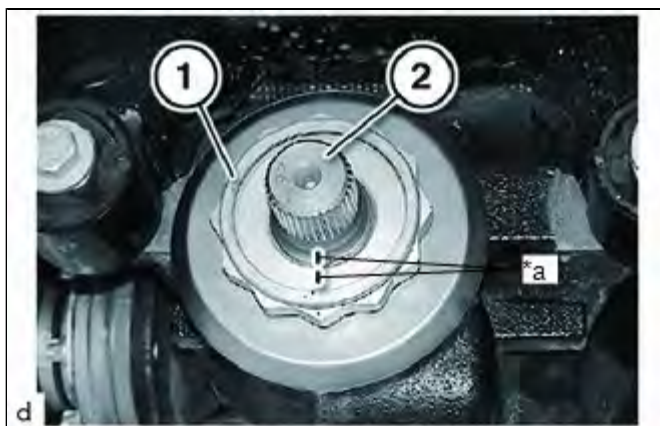
(f) Top up the collar insert (1) of the flange nut with grease.

(g) Apply a thin coating of grease to shaded area (2) of the flange nut.

(h) Tighten the flange nut (1) up to the marker point of the bevel pinion (2).

NOTICE:

To avoid damage to the rear differential carrier assembly, the flange nut must not be applied beyond the mark!



*a	Match Mark
----	------------

4. INSTALL PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

Click here [INFO](#)

5. INSPECT DIFFERENTIAL OIL

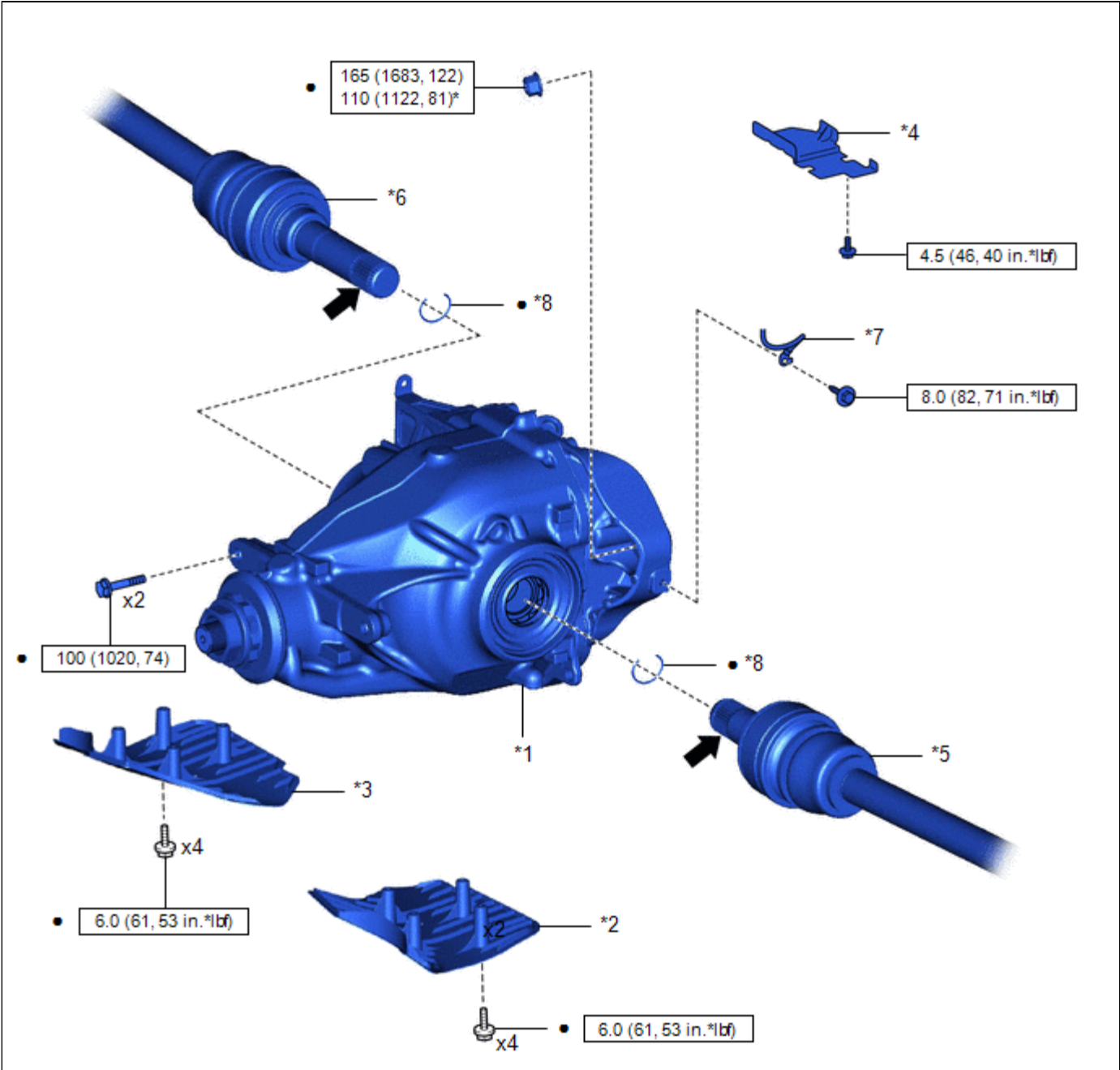
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJB
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL SIDE GEAR SHAFT OIL SEAL: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

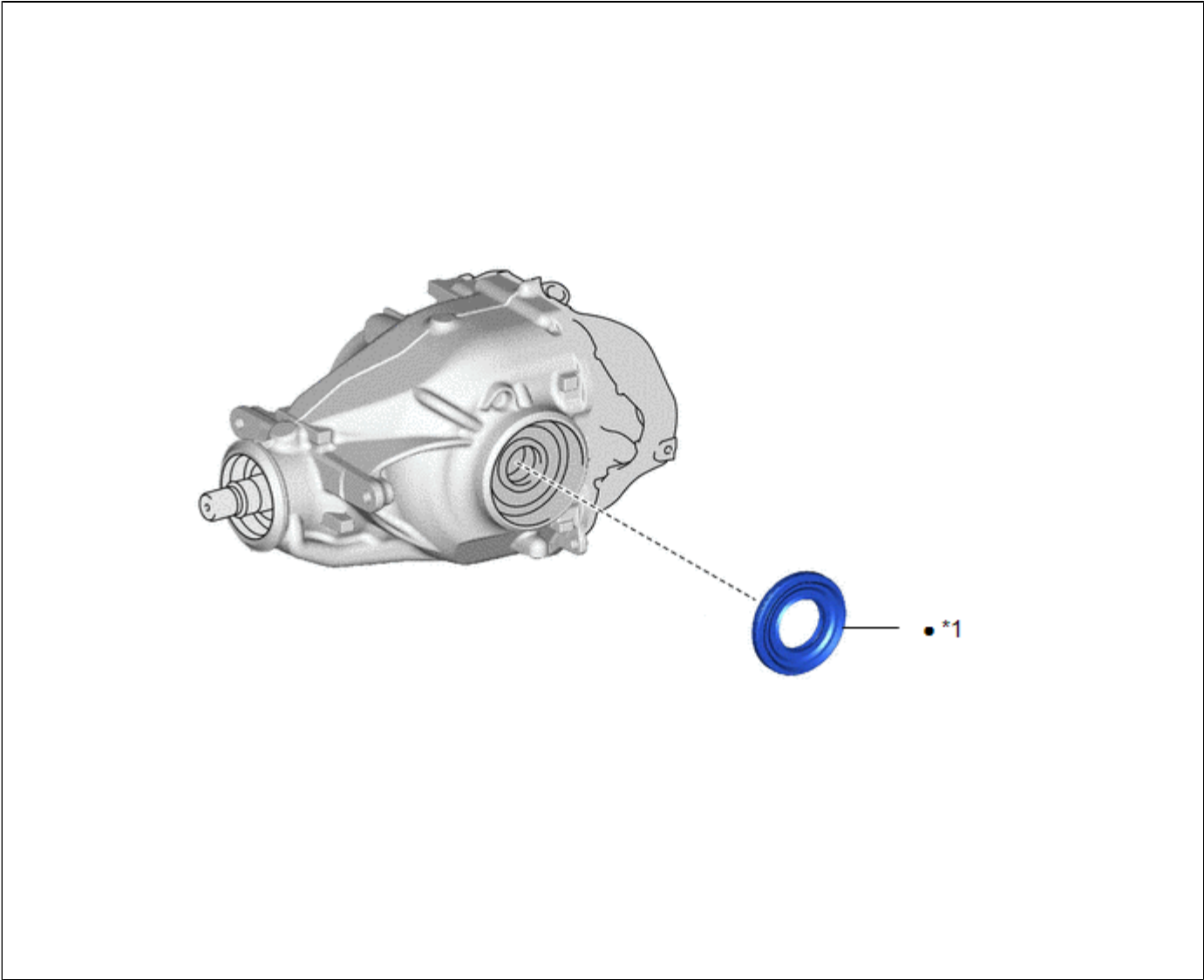
ILLUSTRATION



*1	REAR DIFFERENTIAL CARRIER ASSEMBLY	*2	REAR SUSPENSION ARM COVER LH
*3	REAR SUSPENSION ARM COVER RH	*4	REAR DIFFERENTIAL PROTECTOR

*5	REAR DRIVE SHAFT ASSEMBLY LH	*6	REAR DRIVE SHAFT ASSEMBLY RH
*7	GROUND WIRE	*8	SHAFT SNAP RING
	N*m (kgf*cm, ft.*lbf): Specified torque	*	For use with SST
•	Non-reusable part		Differential Oil

ILLUSTRATION



*1	REAR DRIVE SHAFT OIL SEAL	-	-
•	Non-reusable part	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDJC
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: REAR DIFFERENTIAL SIDE GEAR SHAFT OIL SEAL: REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

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 PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

Click here [INFO](#)

2. REMOVE REAR SUSPENSION ARM COVER LH

Click here [INFO](#)

3. REMOVE REAR SUSPENSION ARM COVER RH

HINT:

Use the same procedure as for the LH side.

4. REMOVE REAR DIFFERENTIAL CARRIER ASSEMBLY

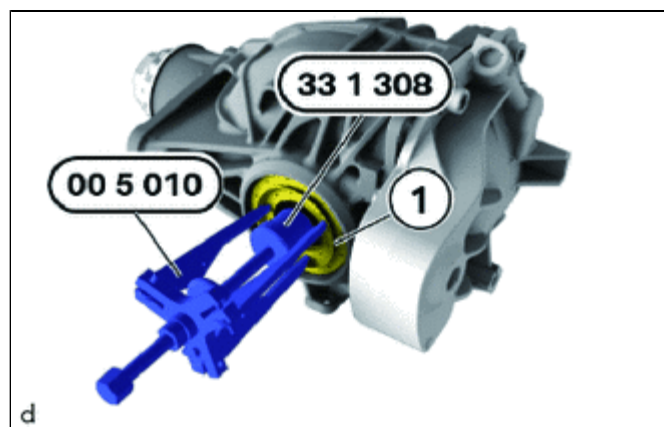
Click here [INFO](#)

5. REMOVE REAR DRIVE SHAFT OIL SEAL

- (a) Pull out the rear drive shaft oil seal (1) using special tool 0 490 466 (00 5 010) or 0 492 104 (33 1 308).

SST: 09500-WA090

SST: 09900-WA210



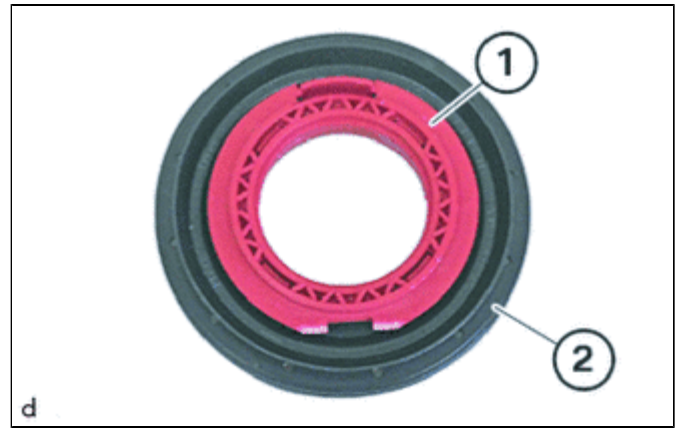
6. INSTALL REAR DRIVE SHAFT OIL SEAL

- (a) Replace rear drive shaft oil seal at front.

HINT:

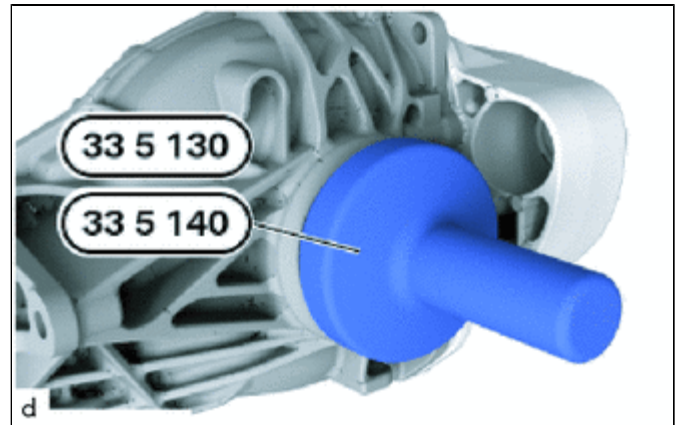
Rear drive shaft oil seal are equipped with an installation protection ring. The installation protection ring is used to protect the sealing lip when installing the rear drive shaft assembly.

(b) Install the rear drive shaft oil seal (2) using the installation protection ring (1).



(c) Make sure that the installation protection ring does not slide out of the rear drive shaft oil seal.

(d) Coat housing sheet metal flange and the sealing lips of the new rear drive shaft oil seal with approved differential oil.



(e) Tap in rear drive shaft oil seal with special tools 0 495 860 (33 5 130) and 0 495 862 (33 5 140) up to the limit position.

SST: 09500-WA060

SST: 09500-WA210

7. INSTALL REAR DIFFERENTIAL CARRIER ASSEMBLY

Click here [INFO](#)

8. INSTALL REAR SUSPENSION ARM COVER LH

Click here [INFO](#)

9. INSTALL REAR SUSPENSION ARM COVER RH

HINT:

Use the same procedure as for the LH side.

10. INSTALL PROPELLER SHAFT WITH CENTER BEARING ASSEMBLY

Click here [INFO](#)

11. INSPECT DIFFERENTIAL OIL

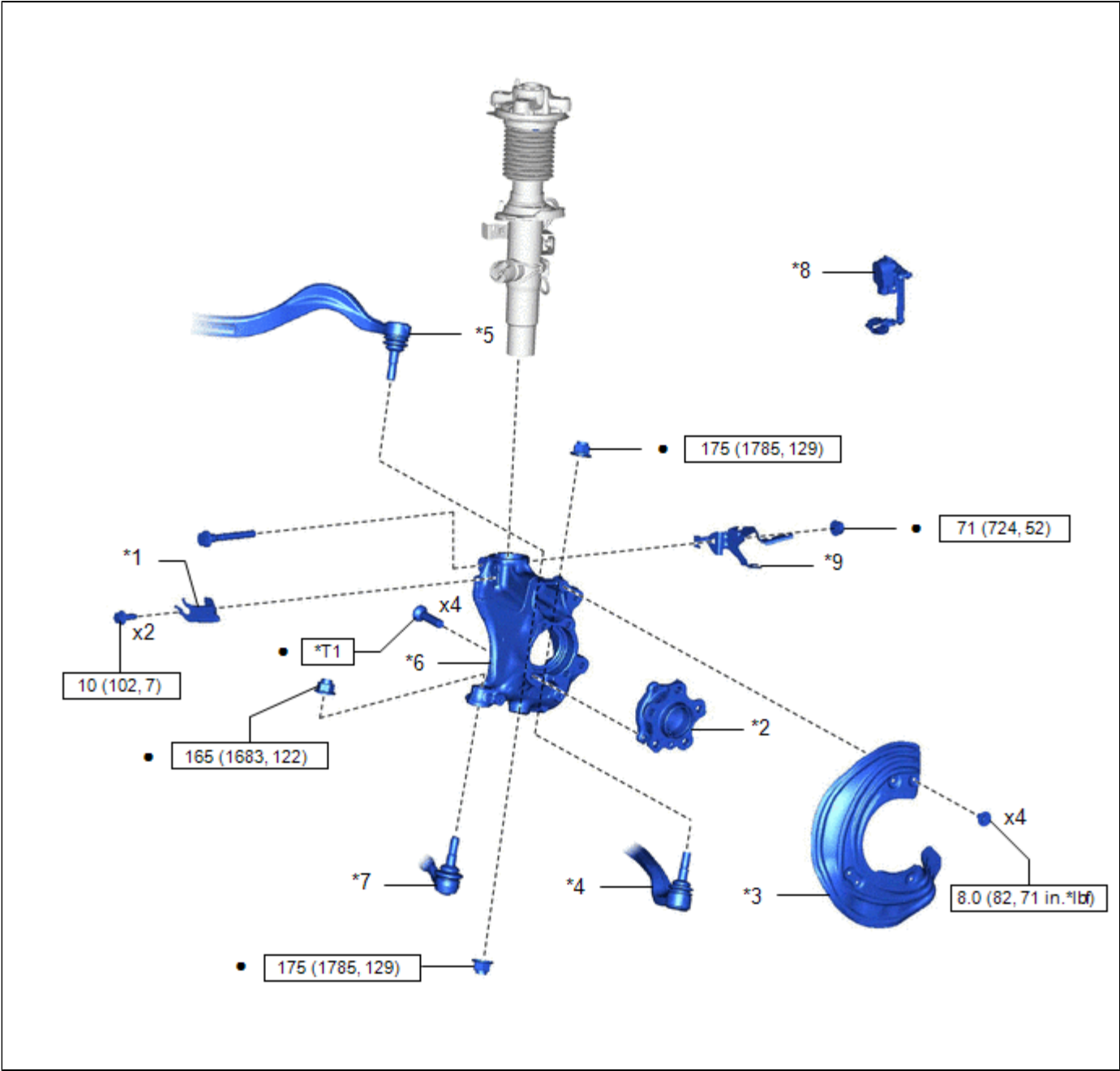
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JD1J
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: STEERING KNUCKLE: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	BRAKE HOSE BRACKET	*2	FRONT AXLE HUB SUB-ASSEMBLY
*3	FRONT DISC BRAKE DUST COVER	*4	FRONT LOWER SUSPENSION ARM ASSEMBLY

*5	FRONT UPPER SUSPENSION ARM ASSEMBLY	*6	STEERING KNUCKLE
*7	TIE ROD END SUB-ASSEMBLY	*8	HEIGHT CONTROL SENSOR
*9	HOLDER	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part
*T1	1st: 120 (1224, 89) 2nd: Turn 90°	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIK
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: STEERING KNUCKLE: 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](#)

HINT:

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

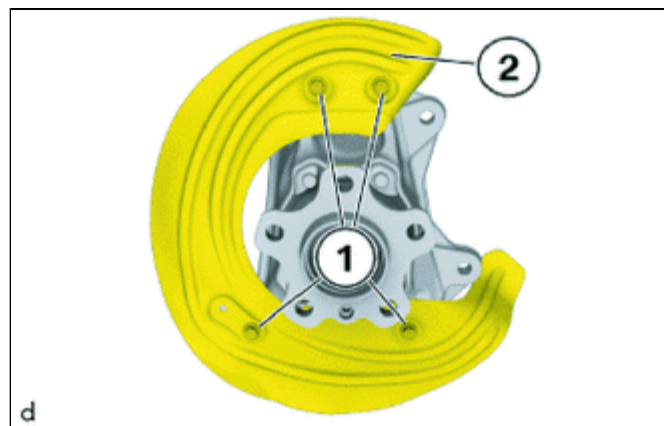
PROCEDURE

1. REMOVE FRONT BRAKE DISC

Click here [INFO](#)

2. REMOVE FRONT DISC BRAKE DUST COVER

(a) Loosen bolts (1).



(b) Remove the front disc brake dust cover (2).

3. DISCONNECT FRONT UPPER SUSPENSION ARM ASSEMBLY

Click here [INFO](#)

4. REMOVE FRONT AXLE HUB SUB-ASSEMBLY

Click here [INFO](#)

5. DISCONNECT FRONT LOWER SUSPENSION ARM ASSEMBLY

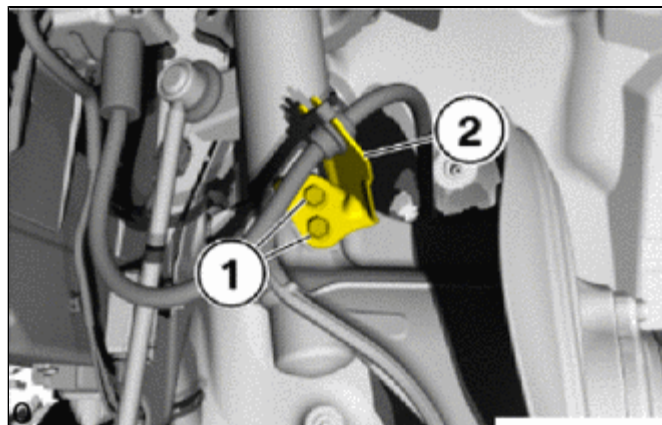
Click here [INFO](#)

6. DISCONNECT TIE ROD END SUB-ASSEMBLY

Click here [INFO](#)

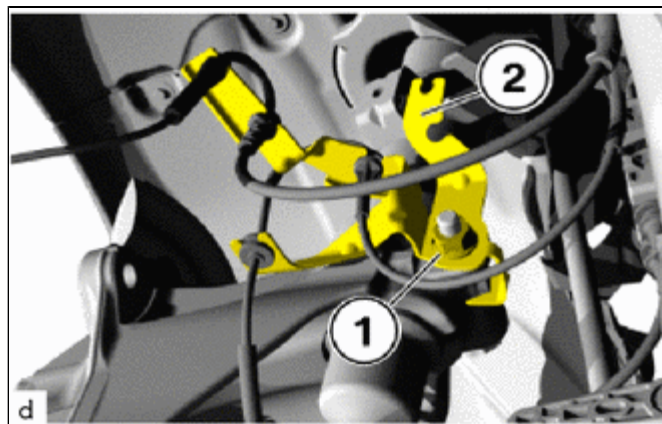
7. REMOVE BRAKE HOSE BRACKET

- (a) Release the bolts (1) and remove the brake hose bracket (2) on the steering knuckle.



8. REMOVE STEERING KNUCKLE

- (a) Unfasten 16 mm nut (1).



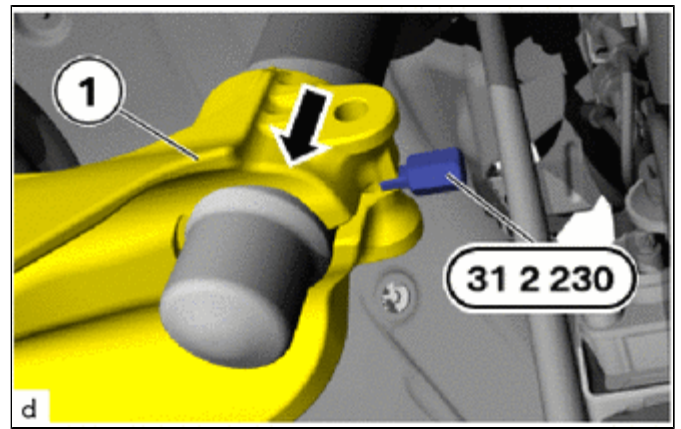
- (b) Remove holder (2).

- (c) Spread the steering knuckle (1) with the special tool 0 494 541 (31 2 230).

SST: 09600-WA030

NOTICE:

Secure component against falling.



(d) Pull the steering knuckle (1) in the direction of arrow and remove from the front shock absorber assembly.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JDIL
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: AXLE AND DIFFERENTIAL: STEERING KNUCKLE: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

HINT:

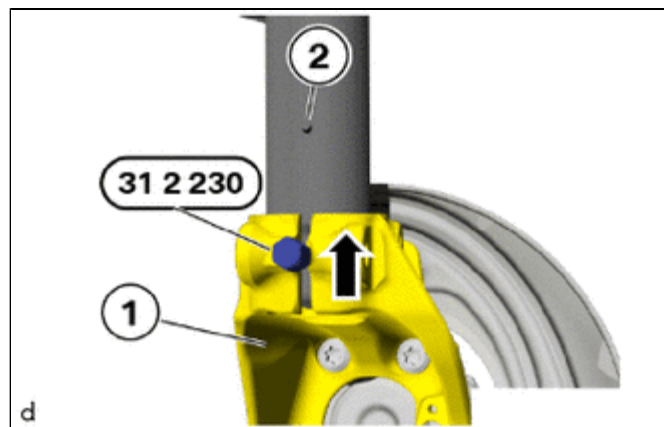
- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

PROCEDURE

1. INSTALL STEERING KNUCKLE

- (a) Spread the steering knuckle (1) apart using special tool 0 494 541 (31 2 230).

SST: 09600-WA030



- (b) Correctly align the gap at the steering knuckle (1) with the positioning pin (2) at the spring strut.
- (c) Install holder.
- (d) Replace 16 mm nut.
- (e) Tighten 16 mm nut.

Torque:

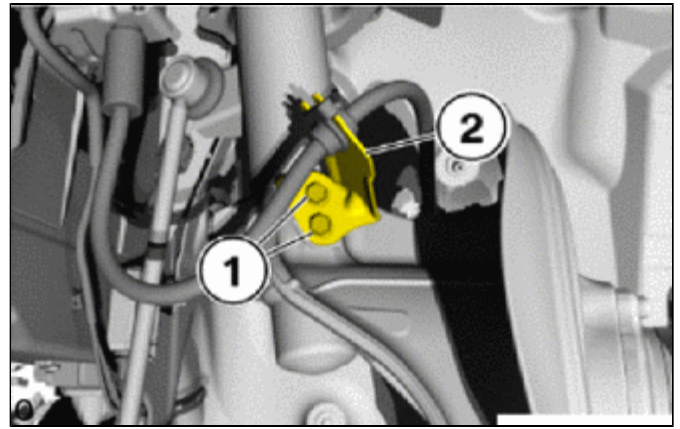
71 N·m {724 kgf·cm, 52 ft·lbf}

2. INSTALL BRAKE HOSE BRACKET

- (a) Position the brake hose bracket (2) on the steering knuckle and tighten with the bolts (1).

Torque:

10 N·m {102 kgf·cm, 7 ft·lbf}



3. CONNECT TIE ROD END SUB-ASSEMBLY

Click here [INFO](#)

4. CONNECT FRONT LOWER SUSPENSION ARM ASSEMBLY

Click here [INFO](#)

5. INSTALL FRONT AXLE HUB SUB-ASSEMBLY

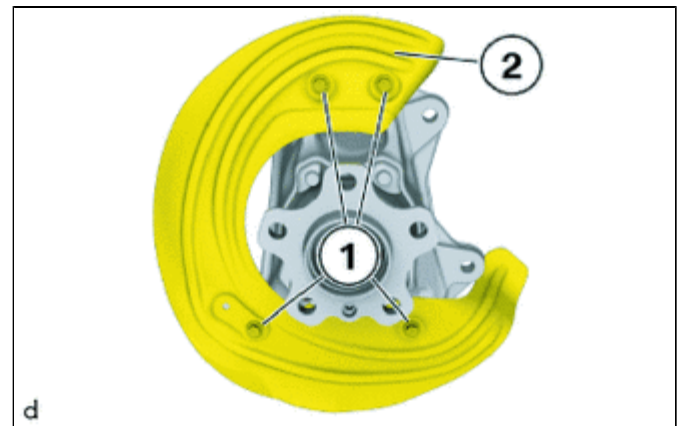
Click here [INFO](#)

6. CONNECT FRONT UPPER SUSPENSION ARM ASSEMBLY

Click here [INFO](#)

7. INSTALL FRONT DISC BRAKE DUST COVER

(a) Install the front disc brake dust cover (2).



(b) Replace bolts (1).

(c) Tighten the bolts (1).

Torque:

8.0 N·m {82 kgf·cm, 71 in·lbf}

8. INSTALL FRONT BRAKE DISC

Click here [INFO](#)

9. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

Click here [INFO](#)

