

*3	FRONT DISC BRAKE CYLINDER ASSEMBLY	*4	PAD WEAR INDICATOR WIRE LH
*5	FRONT FLEXIBLE HOSE	*6	PISTON SEAL
*7	FRONT DISC BRAKE PISTON	*8	CYLINDER BOOT
*9	TORQUE PIN	*10	NO. 1 ANTI-RATTLE SPRING
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part
	Brake pad paste		Syntheso Glep 1 Lubricating Grease

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT BRAKE: 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:

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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.

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- 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 The brake power assistance is no longer active.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:

- 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 PAD WEAR INDICATOR WIRE LH

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3. REMOVE FRONT DISC BRAKE PAD

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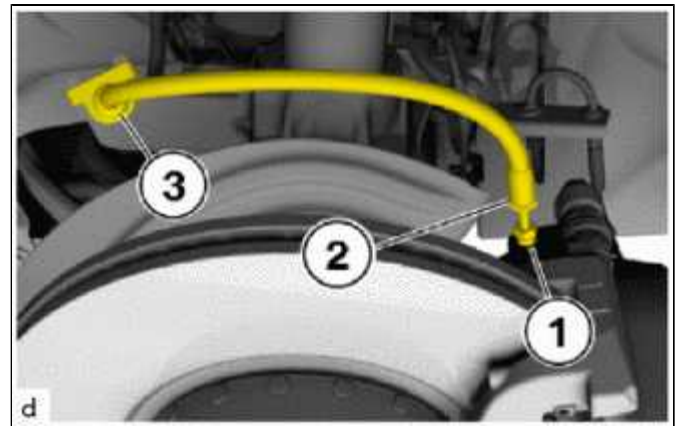
4. REMOVE FRONT DISC BRAKE CYLINDER ASSEMBLY

NOTICE:

Schematic diagram is for example purposes. Some parts may differ in certain details.

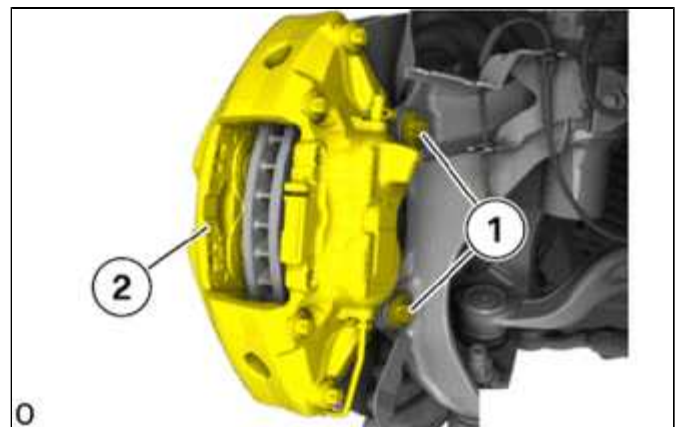
- (a) Release 11 mm union nut on the front flexible hose (1), counter support on the knurl (2).

SST: 09700-WA070



- (b) If necessary, detach front flexible hose (1) from the holder (3).

- (c) Loosen E16 bolts (1).

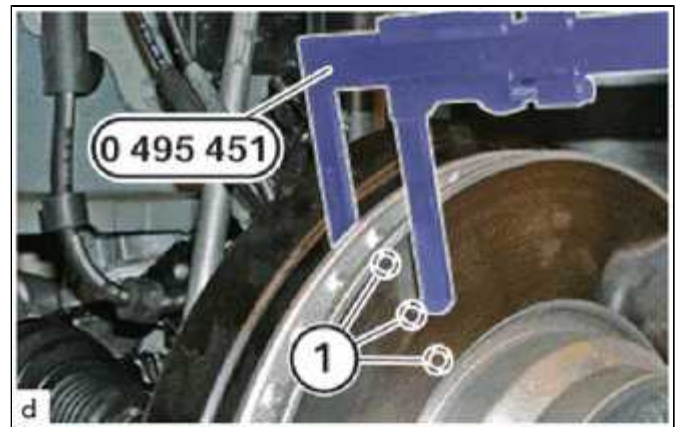


- (d) Remove the front disc brake cylinder assembly (2).

5. INSPECT FRONT DISC

- (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:

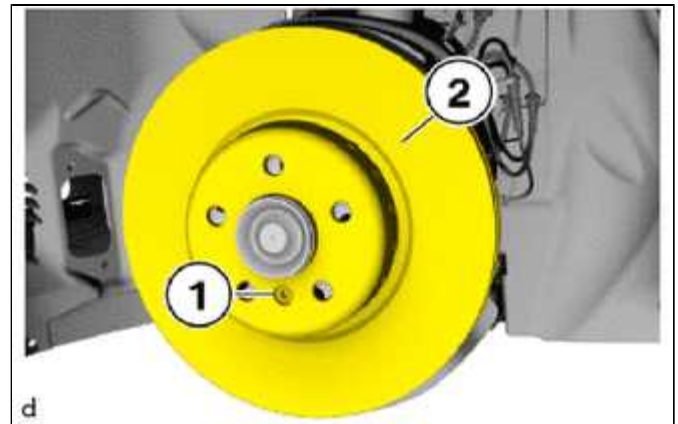
New front disc brake pads must only be installed if the front disc thickness is greater than the minimum front disc thickness.

6. REMOVE FRONT DISC

- (a) Loosen 5 mm hexagon bolt (1).

HINT:

- Note the following for the removal of the front disc:
 - Do not under any circumstances strike the friction ring with a hammer or similar tool.
 - If necessary, carefully tap with a rubber mallet against the front disc chamber.



- (b) Remove the front disc (2).

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Title: BRAKE (FRONT): FRONT BRAKE: DISASSEMBLY; 2020 MY Supra [03/2019 -]		

DISASSEMBLY

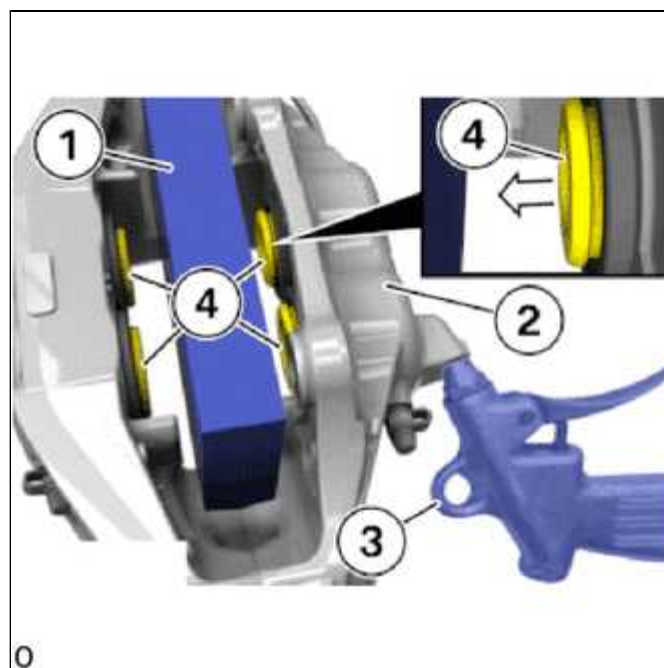
PROCEDURE

1. REMOVE FRONT DISC BRAKE PISTON

- (a) Position protective plate (e.g. Made of hardwood, hardened felt or rubber) (1) in front disc brake cylinder (2).

CAUTION:

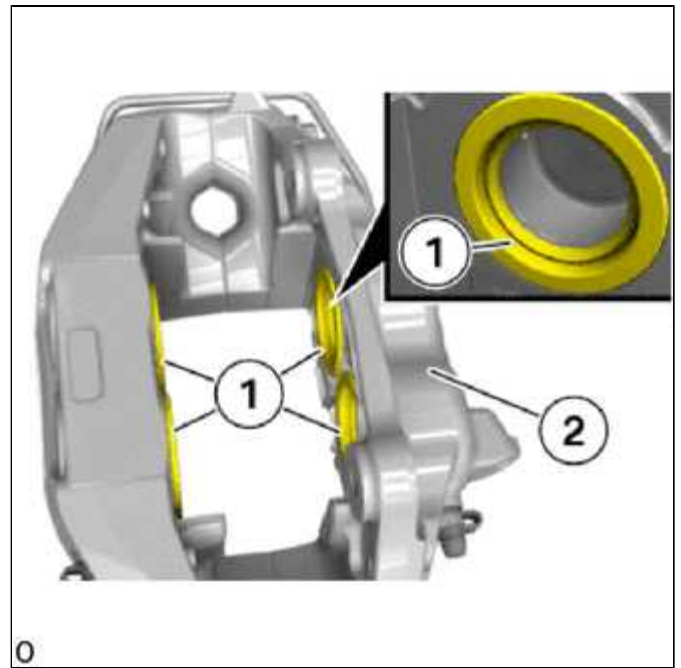
In this process, do not hold the front disc brake piston (4) with your fingers as there is a pinch hazard.



- (b) Position air gun (3) on the connecting bore of the front disc brake cylinder (2).

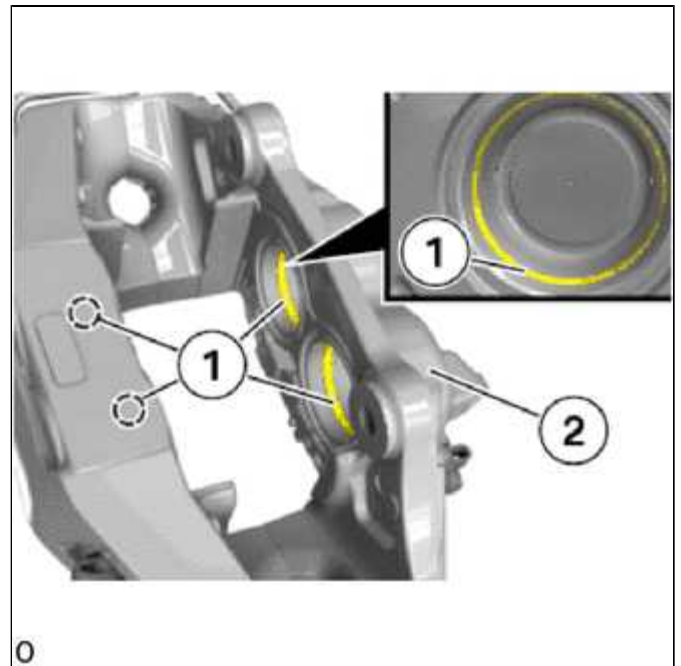
- (c) Carefully push out the front disc brake piston (4) with compressed air in direction of arrow and remove.

- (d) Remove cylinder boot (1) from the front disc brake cylinder (2).

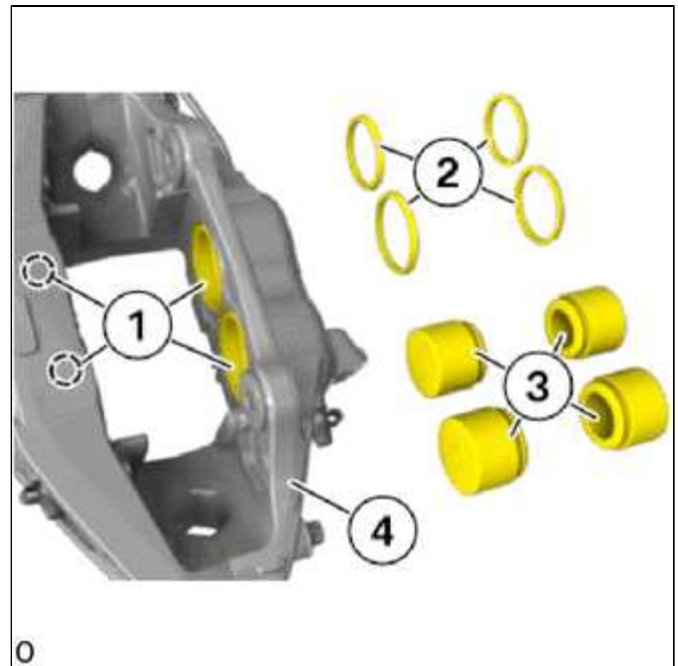


2. REMOVE PISTON SEAL

(a) Carefully remove piston seal (1) from the front disc brake cylinder (2).



(b) Clean the cylinder of the front disc brake cylinder, the piston seal (2) and the front disc brake pistons (3) and dry with compressed air.



(c) Check the cylinder of the front disc brake cylinder (4), the piston seal (2), the front disc brake pistons (3) and the flange surfaces for damage, if necessary, replace the front disc brake cylinder (4).

NOTICE:

Any processing of the cylinder of the front disc brake cylinder (4) and the front disc brake piston (3) is not allowed.



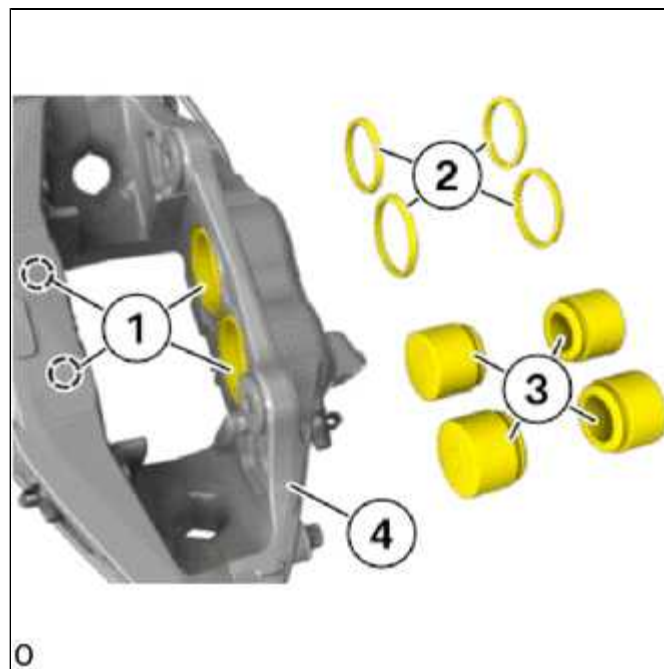
Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC81
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT BRAKE: REASSEMBLY; 2020 MY Supra [03/2019 -]		

REASSEMBLY

PROCEDURE

1. INSTALL PISTON SEAL

- (a) Clean the cylinder of the front disc brake cylinder, the piston seal (2) and the front disc brake pistons (3) and dry with compressed air.



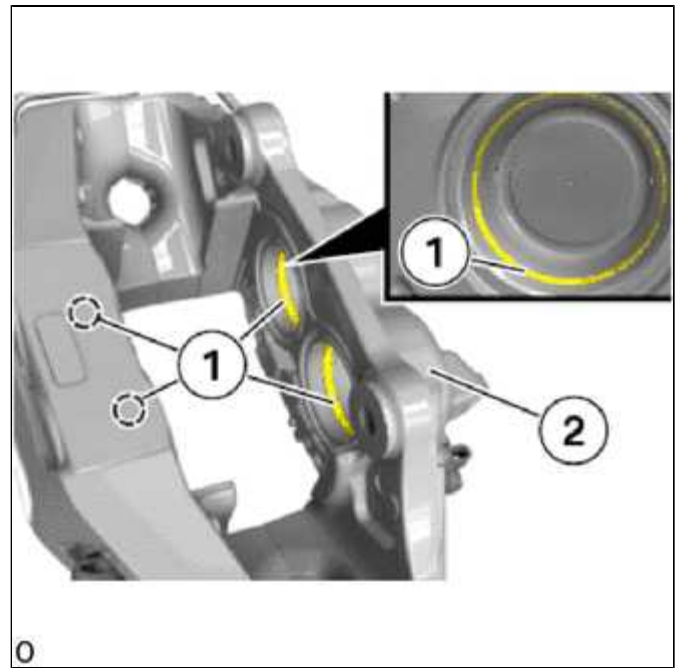
- (b) Check the cylinder of the front disc brake cylinder (4), the piston seal (2), the front disc brake pistons (3) and the flange surfaces for damage, if necessary, replace the front disc brake cylinder (4).

NOTICE:

Any processing of the cylinder of the front disc brake cylinder (4) and the front disc brake brake piston (3) is not allowed.

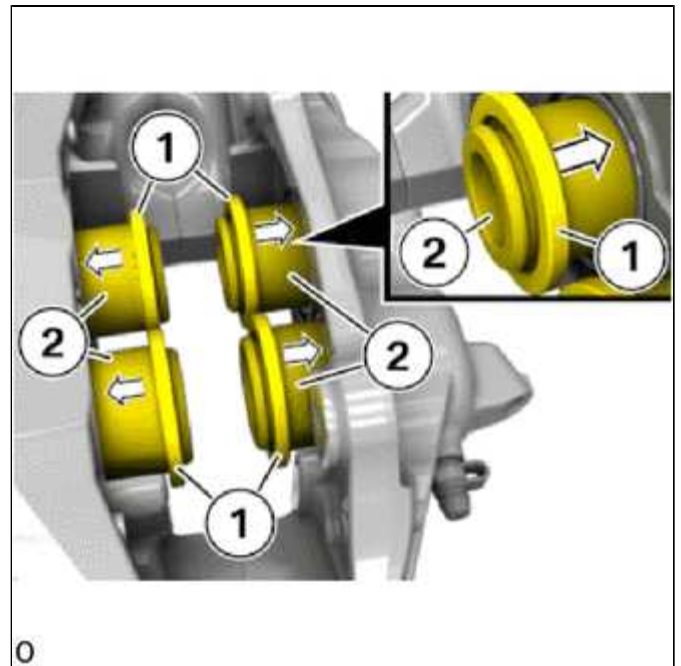
- (c) Lightly coat the cylinder of the front disc brake cylinder (4), the piston seal (2) and the front disc brake pistons (3) with Syntheso Glep 1 Lubricating Grease.

- (d) Install piston seal (1) into the front disc brake cylinder (2).



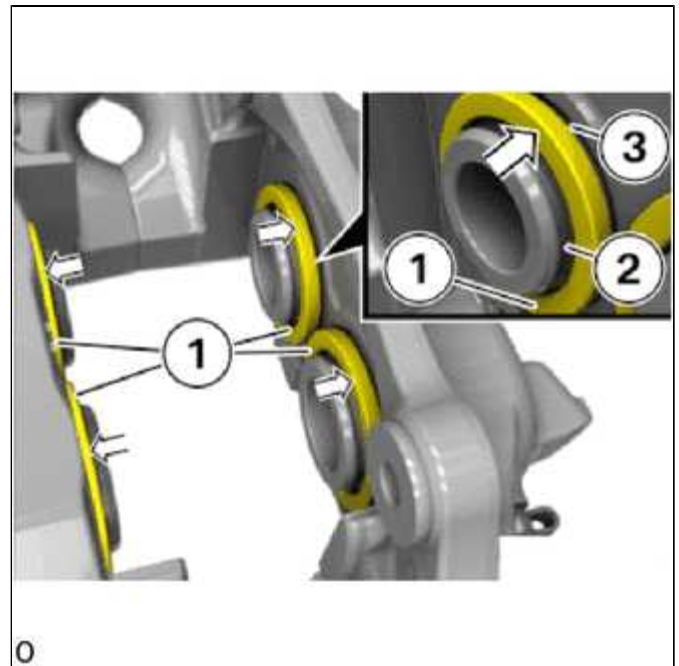
2. INSTALL FRONT DISC BRAKE PISTON

(a) Slide cylinder boot (1) onto the front disc brake pistons (2).



(b) Press in the front disc brake piston (2) into the cylinder of the front disc brake cylinder. In this process, the front disc brake pistons (2) must not tilt.

- (c) Insert cylinder boot (1) into the respective annular groove (2) of the front disc brake piston.



- (d) Evenly push the cylinder boots (1) into the respective groove (3) in the direction of arrow on the front disc brake cylinder up to the limit position.

NOTICE:

- To guarantee that the cylinder boots (1) fit perfectly:
 - Keep the areas between the cylinder boots (1) and the front disc brake cylinder dry.
 - The areas between the cylinder boots (1) and the front disc brake cylinder must not come in contact with the lubricating grease or brake fluid.



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC82
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Title: BRAKE (FRONT): FRONT BRAKE: 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 DISC

NOTICE:

- Brake front discs must only be replaced in pairs (per axle).
- Fit new front discs only together with new front disc brake pads.

- Position front disc on front axle hub sub-assembly.
- Replace 5 mm hexagon bolt.
- Tighten the 5 mm hexagon bolt.

Torque:

16 N·m {163 kgf·cm, 12 ft·lbf}

2. INSTALL FRONT DISC BRAKE CYLINDER ASSEMBLY

- Install front disc brake cylinder assembly.
- Replace E16 bolts.
- Tighten the E16 bolts.

Torque:

80 N·m {816 kgf·cm, 59 ft·lbf}

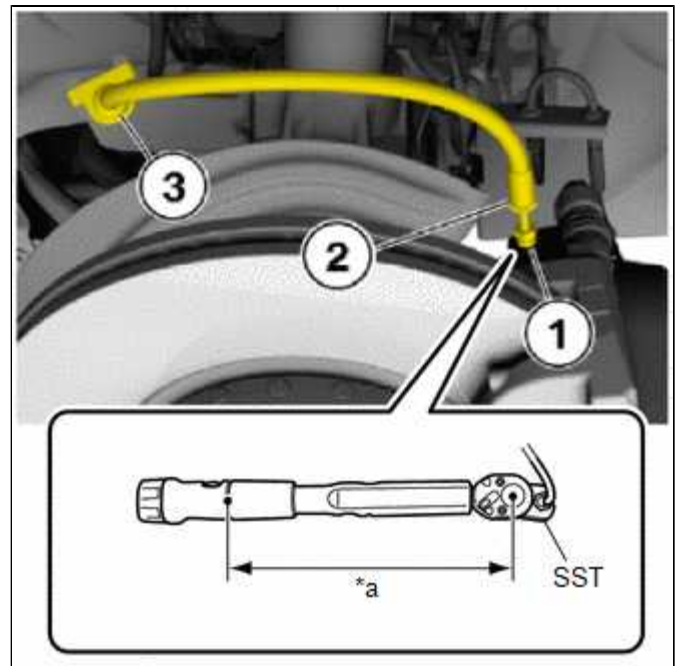
- Position front flexible hose (1) on the front disc brake cylinder assembly.

NOTICE:

Make sure that the front flexible hose (1) does not rest against the components fixed to the body and that it is not twisted.

HINT:

Schematic diagram is for example pur poses. Some parts may differ in certain details.



*a	Torque Wrench Fulcrum Length
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(e) Tighten 11 mm union nut of the front flexible hose (1) on the front disc brake cylinder assembly; if necessary counter-hold 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.

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3. INSTALL FRONT DISC BRAKE PAD

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

4. INSTALL PAD WEAR INDICATOR WIRE LH

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

5. BLEED BRAKE LINE

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

6. INSTALL FRONT WHEEL

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

7. 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 front disc brake pads contact front 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.
 - (d) Attach mirror tag to inside mirror.

8. PERFORM CBS RESET

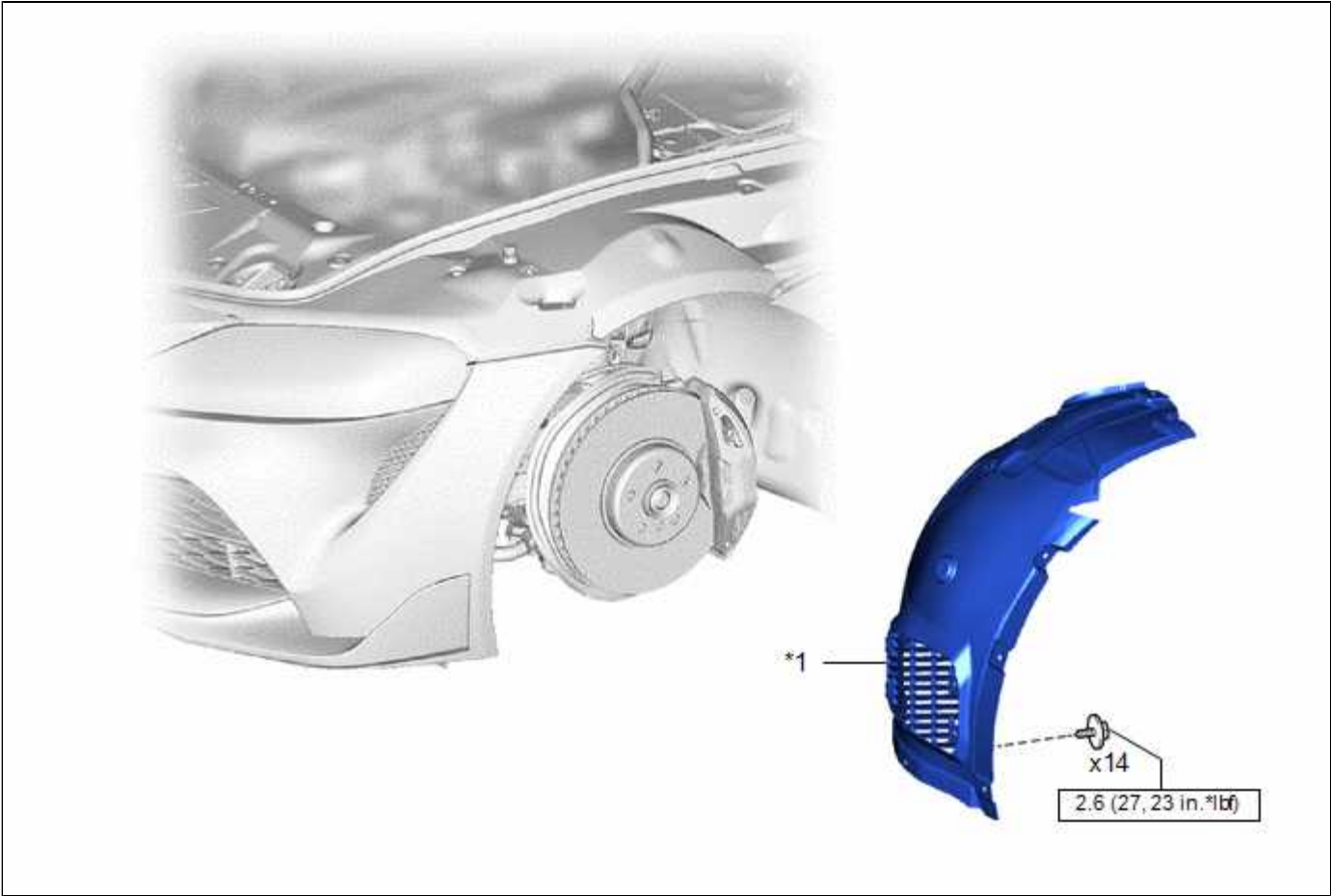
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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT BRAKE FLEXIBLE HOSE: COMPONENTS; 2020 MY Supra [03/2019 -]		

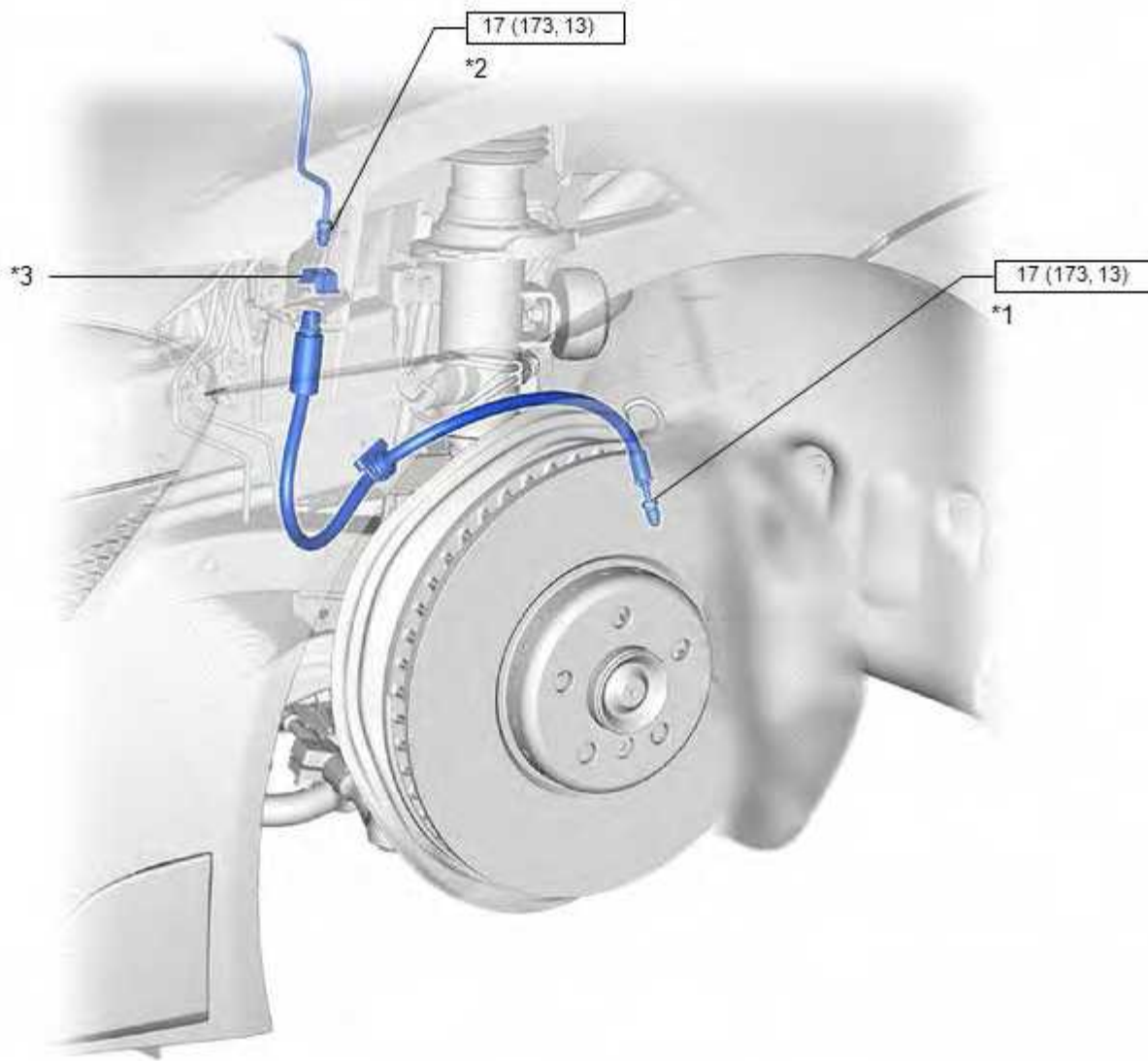
COMPONENTS

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	-	-



TOYOTA

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8A
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT BRAKE FLEXIBLE HOSE: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC8B
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT BRAKE FLEXIBLE HOSE: INSTALLATION; 2020 MY Supra [03/2019 -]		

[INSTALLATION](#)

[CAUTION / NOTICE / HINT](#)

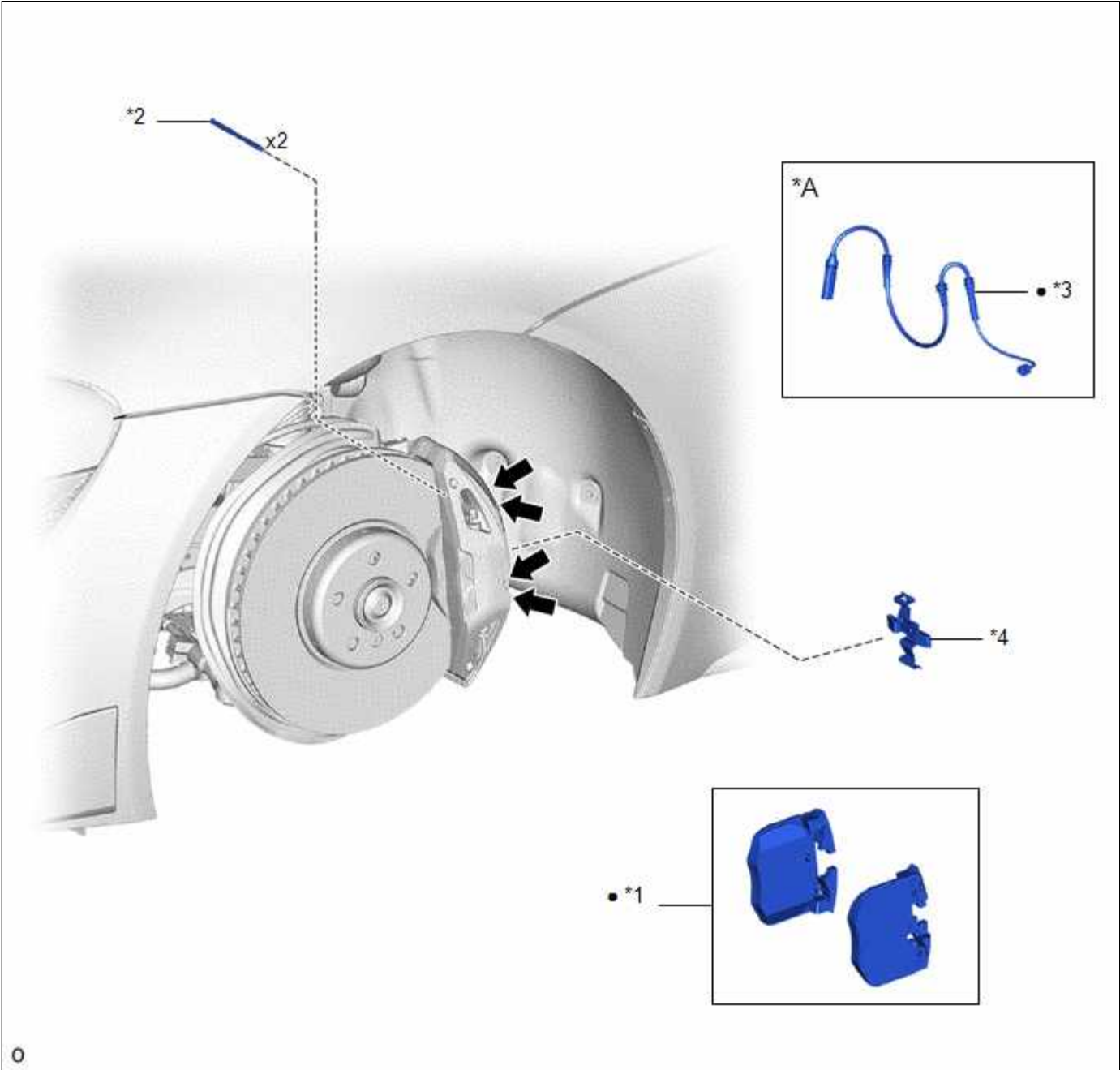
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Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC86
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT DISC BRAKE PAD (for 4-Pot Caliper): COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	FRONT DISC BRAKE PAD	*2	TORQUE PIN
*3	PAD WEAR 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: RM100000001JC87
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT DISC BRAKE PAD (for 4-Pot Caliper): REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

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Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC88
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: BRAKE (FRONT): FRONT DISC BRAKE PAD (for 4-Pot Caliper): INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

CAUTION / NOTICE / HINT

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