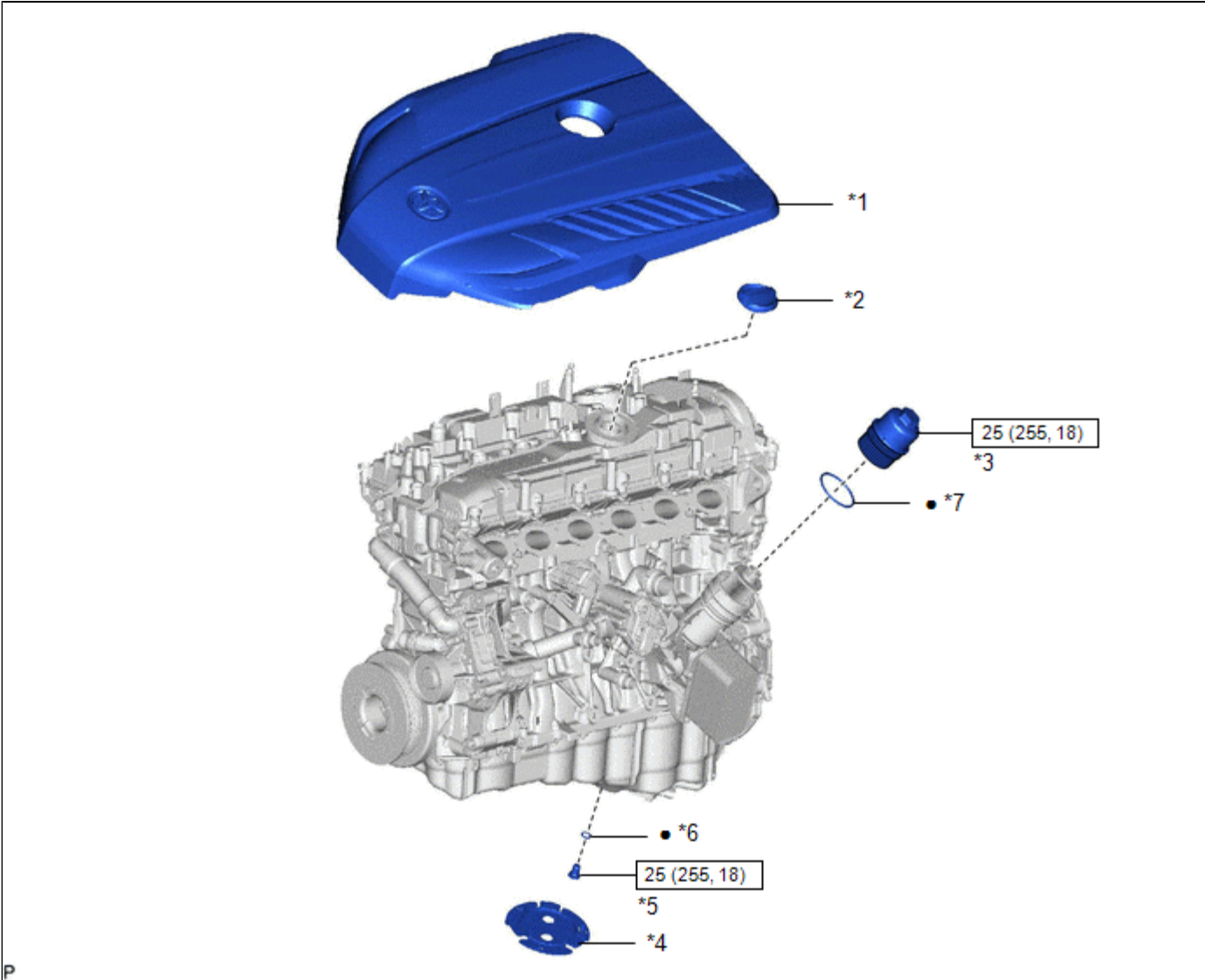


Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYK
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): ENGINE OIL COOLER: COMPONENTS; 2020 MY Supra [03/2019 -]		

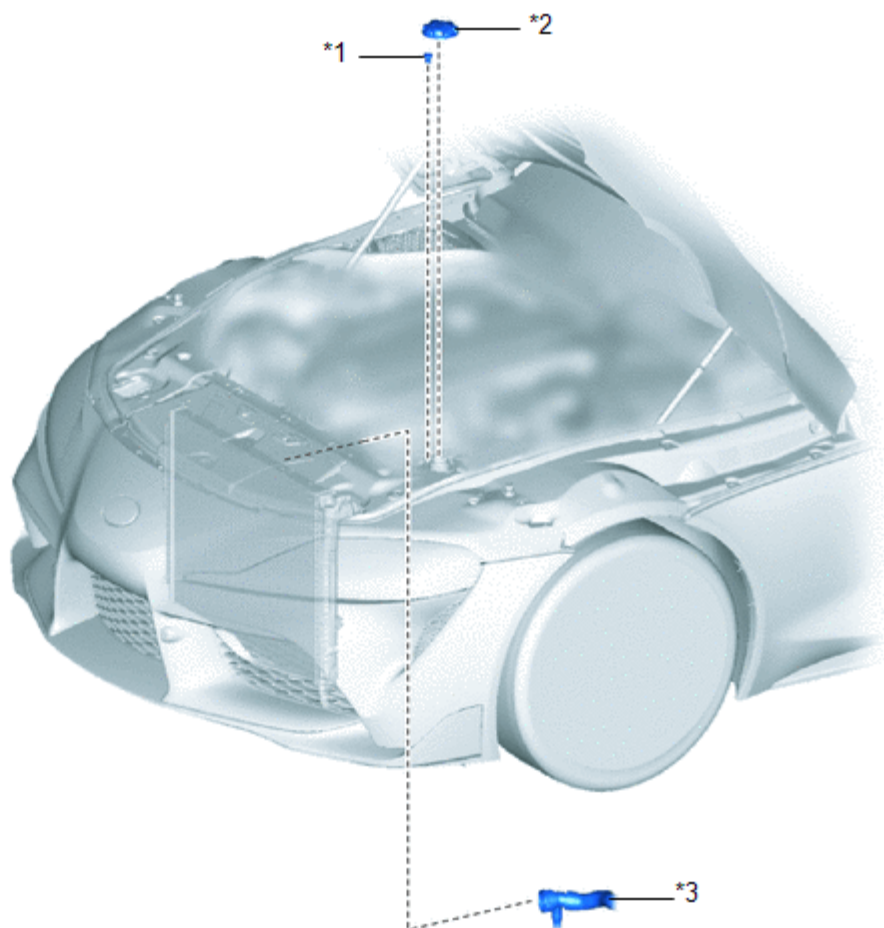
COMPONENTS

ILLUSTRATION



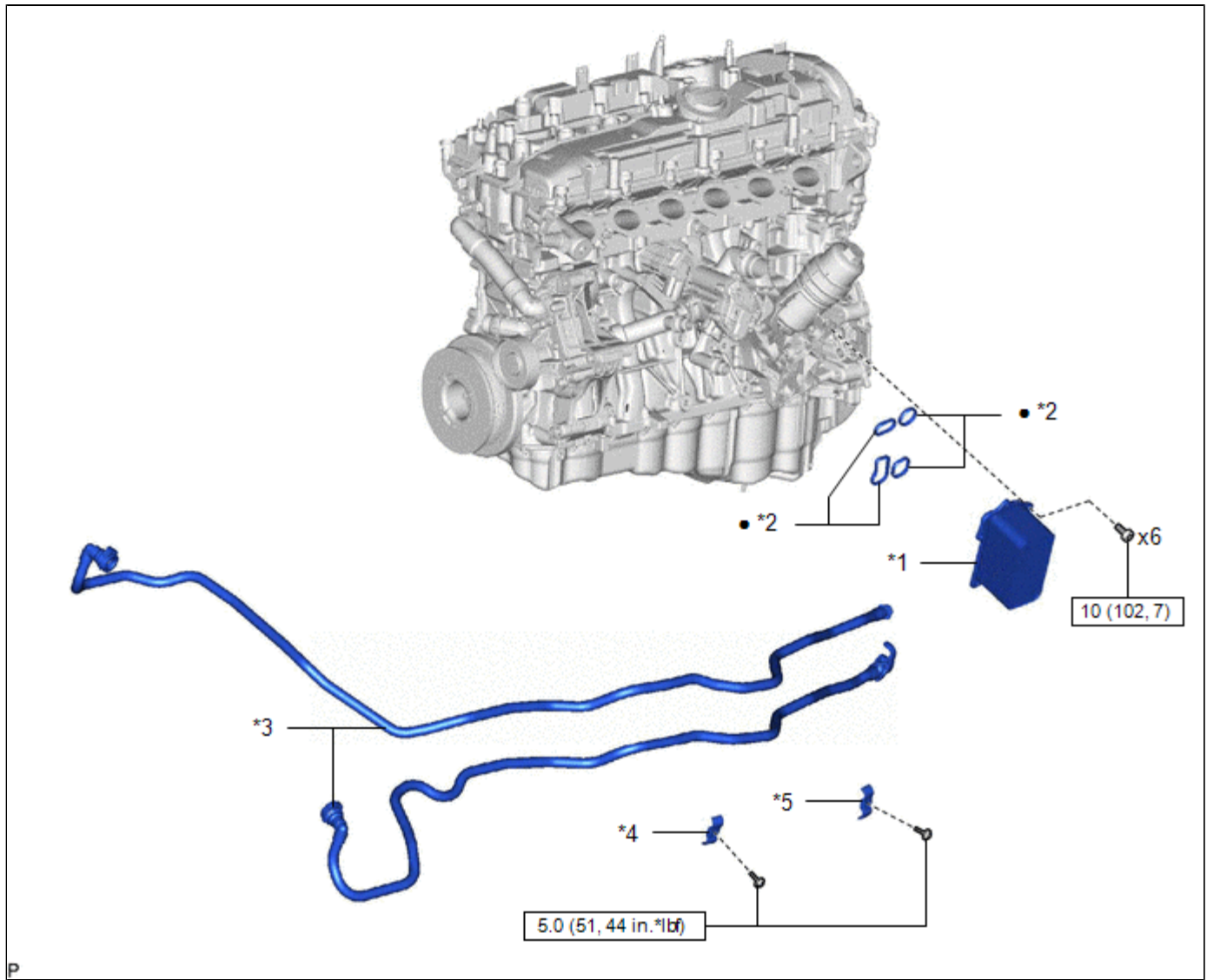
*1	NO. 1 ENGINE COVER SUB-ASSEMBLY	*2	OIL FILLER CAP ASSEMBLY
*3	OIL FILTER CAP ASSEMBLY	*4	CENTER NO. 4 ENGINE UNDER COVER
*5	OIL PAN DRAIN PLUG	*6	OIL PAN DRAIN PLUG GASKET
*7	O-RING	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

ILLUSTRATION



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

ILLUSTRATION



*1	OIL COOLER ASSEMBLY	*2	OIL COOLER GASKET
*3	OIL COOLER TUBE	*4	NO. 1 AUTOMATIC TRANSMISSION OIL COOLER TUBE CLAMP
*5	NO. 3 AUTOMATIC TRANSMISSION OIL COOLER TUBE CLAMP	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYL
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): ENGINE OIL COOLER: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

CAUTION:

- Hot fluids.

Risk of scalding!

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

PROCEDURE

1. REMOVE NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

2. REMOVE OIL FILLER CAP ASSEMBLY

Click here [INFO](#)

3. REMOVE OIL FILTER CAP ASSEMBLY

Click here [INFO](#)

4. REMOVE FRONT SUSPENSION MEMBER LOWER PROTECTOR

Click here [INFO](#)

5. DRAIN ENGINE COOLANT (for High Pressure)

Click here [INFO](#)

6. REMOVE OIL PAN DRAIN PLUG

Click here [INFO](#)

7. INSTALL OIL PAN DRAIN PLUG

Click here [INFO](#)

8. SEPARATE OIL COOLER TUBE

Click here [INFO](#)

9. REMOVE OIL COOLER ASSEMBLY

CAUTION:

- Hot fluids.

Risk of scalding!

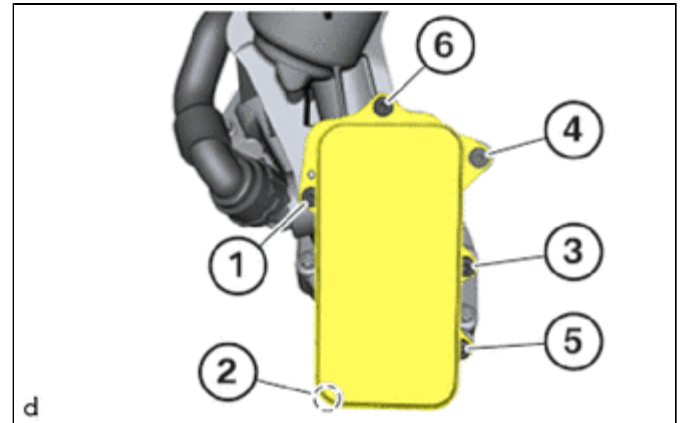
- Conduct all work in the vehicle wearing appropriate personal protective equipment only.

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

NOTICE:

Make sure that there are no particles or impurities in the medium openings. Coolant or foreign substances in the oil can cause engine damage such as damage to the connecting rod bearing.

(a) Loosen T30 bolts (1) to (6).



(b) Remove the oil cooler assembly from the oil filter bracket.

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYM
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): ENGINE OIL COOLER: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL OIL COOLER ASSEMBLY

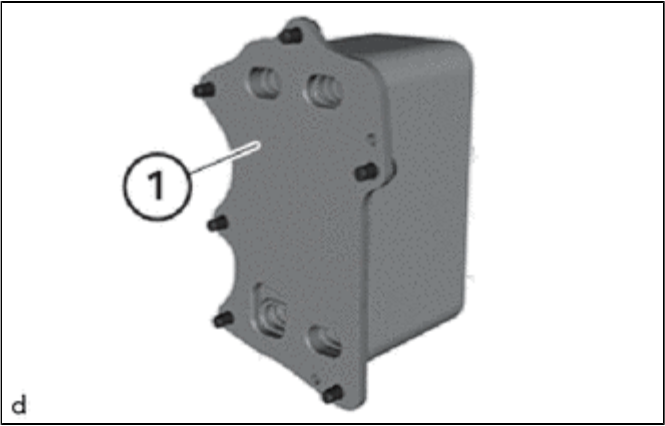
NOTICE:

- Make sure that there are no particles or impurities in the medium openings. Coolant or foreign substances in the oil can cause engine damage such as damage to the connecting rod bearing.
- Damage to the surface.

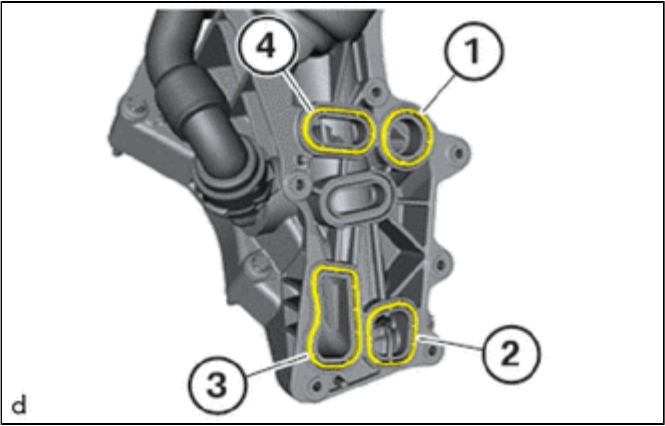
The use of metal-cutting tools (e.g. sandpaper) to clean the surfaces can damage them and lead to leaks or engine damage.

- Do not use any metal-cutting tools.

(a) Clean sealing surface (1) on oil cooler assembly.

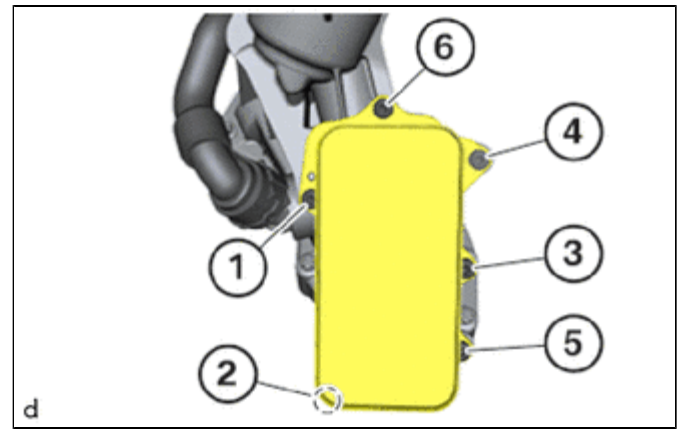


(b) Replace oil cooler gaskets (1) to (4).



(c) Install oil cooler gaskets (1) to (4).

(d) Position the oil cooler assembly on the oil filter bracket.



(e) Make sure oil cooler gaskets are correctly seated.

(f) Tighten T30 bolts in the order (1) to (6).

Torque:

10 N·m {102 kgf·cm, 7 ft·lbf}

2. INSTALL OIL COOLER TUBE

Click here [INFO](#)

3. INSTALL OIL FILTER CAP ASSEMBLY

Click here [INFO](#)

4. ADD ENGINE OIL

Click here [INFO](#)

5. INSTALL OIL FILLER CAP ASSEMBLY

Click here [INFO](#)

6. INSTALL NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

7. ADD ENGINE COOLANT (for High Pressure)

Click here [INFO](#)

8. INSPECT FOR COOLANT LEAK (for High Temperature)

Click here [INFO](#)

9. INSTALL FRONT SUSPENSION MEMBER LOWER PROTECTOR

Click here [INFO](#)

10. INSPECT FOR ENGINE OIL LEAK

Click here [INFO](#)

11. CHECK ENGINE OIL LEVEL

Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCY8
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): LUBRICATION SYSTEM: ON-VEHICLE INSPECTION; 2020 MY Supra [03/2019 -]		

ON-VEHICLE INSPECTION

CAUTION / NOTICE / HINT

CAUTION:

- Hot surfaces.

Risk of burning!

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

- 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.

PROCEDURE

1. CHECK ENGINE OIL LEVEL

HINT:

Always check the engine oil level when the engine is at operating temperature (engine oil temperature > 70°C).

Vehicle information / Control unit list / DME / Call up control unit functions / Diagnostic request / Diagnostic request / 103 Engine oil temperature

- Park vehicle on a horizontal surface.
- Stop engine.
- Wait approximately 5 minutes.
- Read off the engine oil level in the combination meter assembly or on the multi-display assembly.
- Top up engine oil if necessary.

2. INSPECT OIL PRESSURE

- Remove the No. 1 engine cover sub-assembly.

Click here [INFO](#)

- Remove the oil filter cap assembly.

Click here [INFO](#)

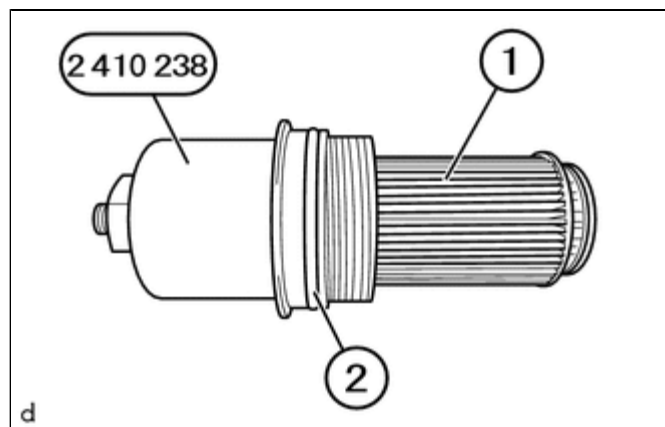
- Remove the oil filter element.

Click here [INFO](#)

- Remount the oil filter element (1) in the special tool 2 410

238.

SST: 09200-WA550



(e) If necessary, remount the O-ring (2).

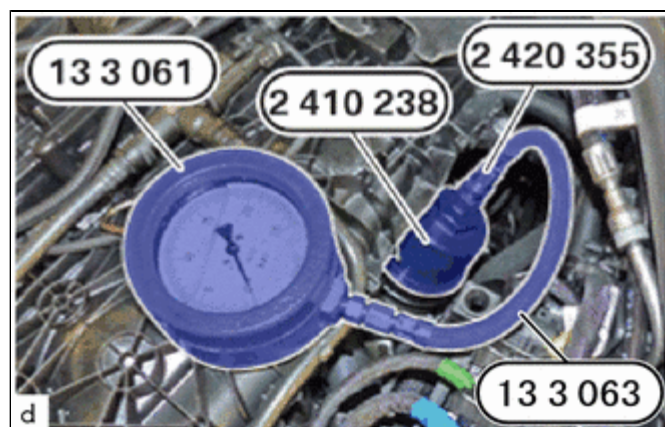
(f) Apply a small amount of engine oil to the O-ring.

(g) Using a 32 mm socket wrench, install and tighten the special tool 2 410 238.

SST: 09200-WA550

Torque:

25 N·m {255 kgf·cm, 18 ft·lbf}



(h) Connect special tool 0 491 260 (13 3 061) with special tools 0 491 262 (13 3 063), 2 420 355 and 2 410 238.

SST: 09200-WA550

SST: 09200-WA560

SST: 09200-WA930

SST: 09200-WA950

(i) Check oil pressure.

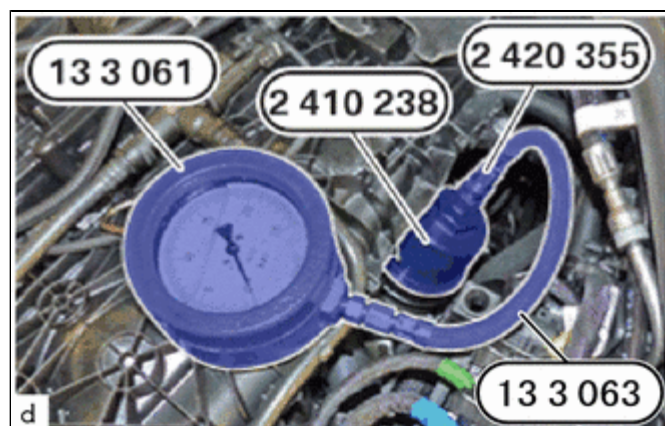
(j) Remove special tools 0 491 260 (13 3 061), 0 491 262 (13 3 063), 2 420 355 and 2 410 238.

SST: 09200-WA550

SST: 09200-WA560

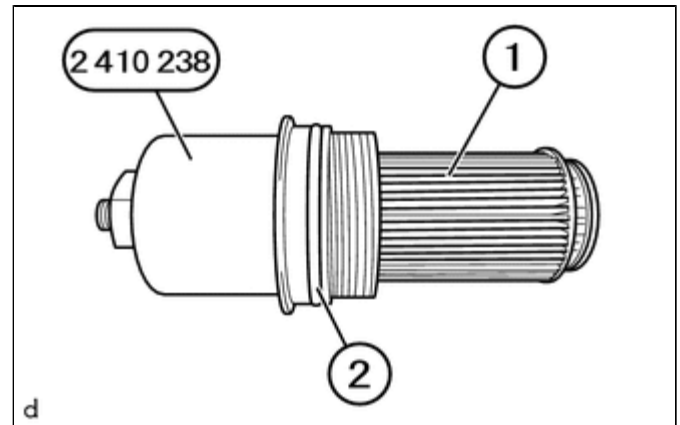
SST: 09200-WA930

SST: 09200-WA950



(k) Loosen the oil filter element (1) from the special tool 2 410 238.

SST: 09200-WA550



(l) If necessary, remount the O-ring (2).

(m) Install the oil filter element.

Click here [INFO](#)

(n) Install the oil filter cap assembly.

Click here [INFO](#)

(o) Install the No. 1 engine cover sub-assembly.

Click here [INFO](#)

(p) Check engine oil level.

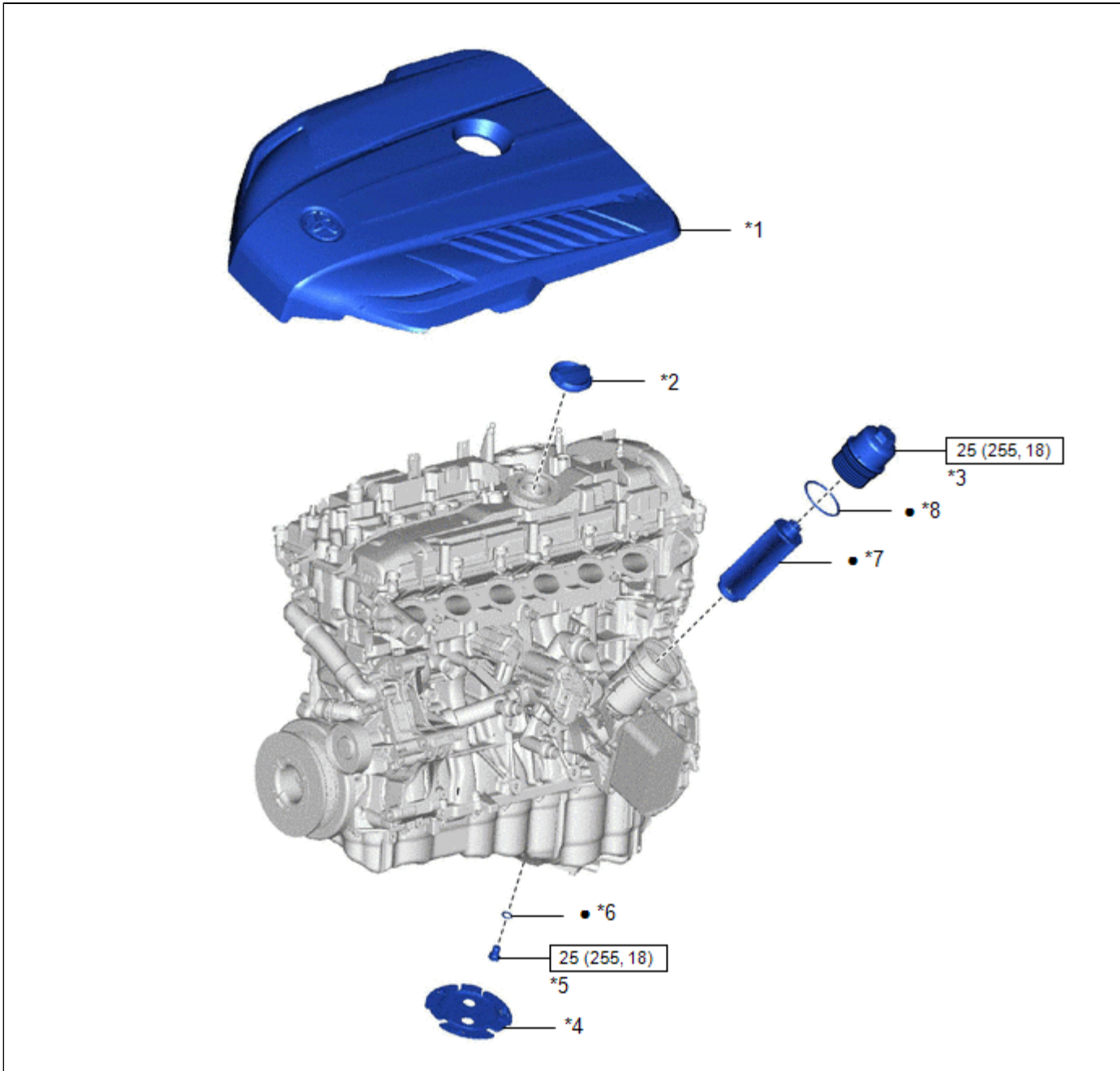
Click here



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCY9
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): 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
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Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYA
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL AND OIL FILTER: REPLACEMENT; 2020 MY Supra [03/2019 -]		

REPLACEMENT

CAUTION / NOTICE / HINT

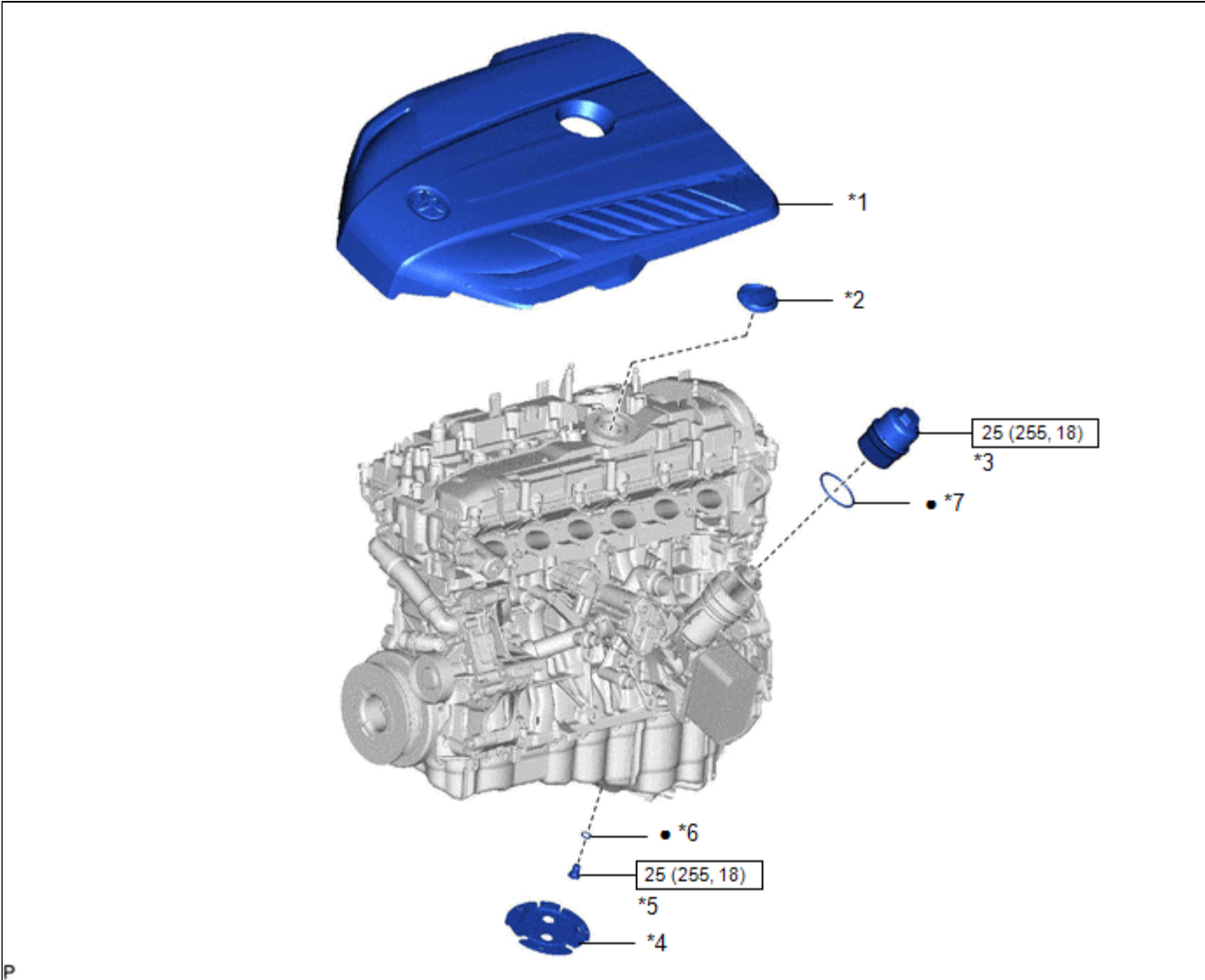
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYE
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL LEVEL SENSOR: COMPONENTS; 2020 MY Supra [03/2019 -]		

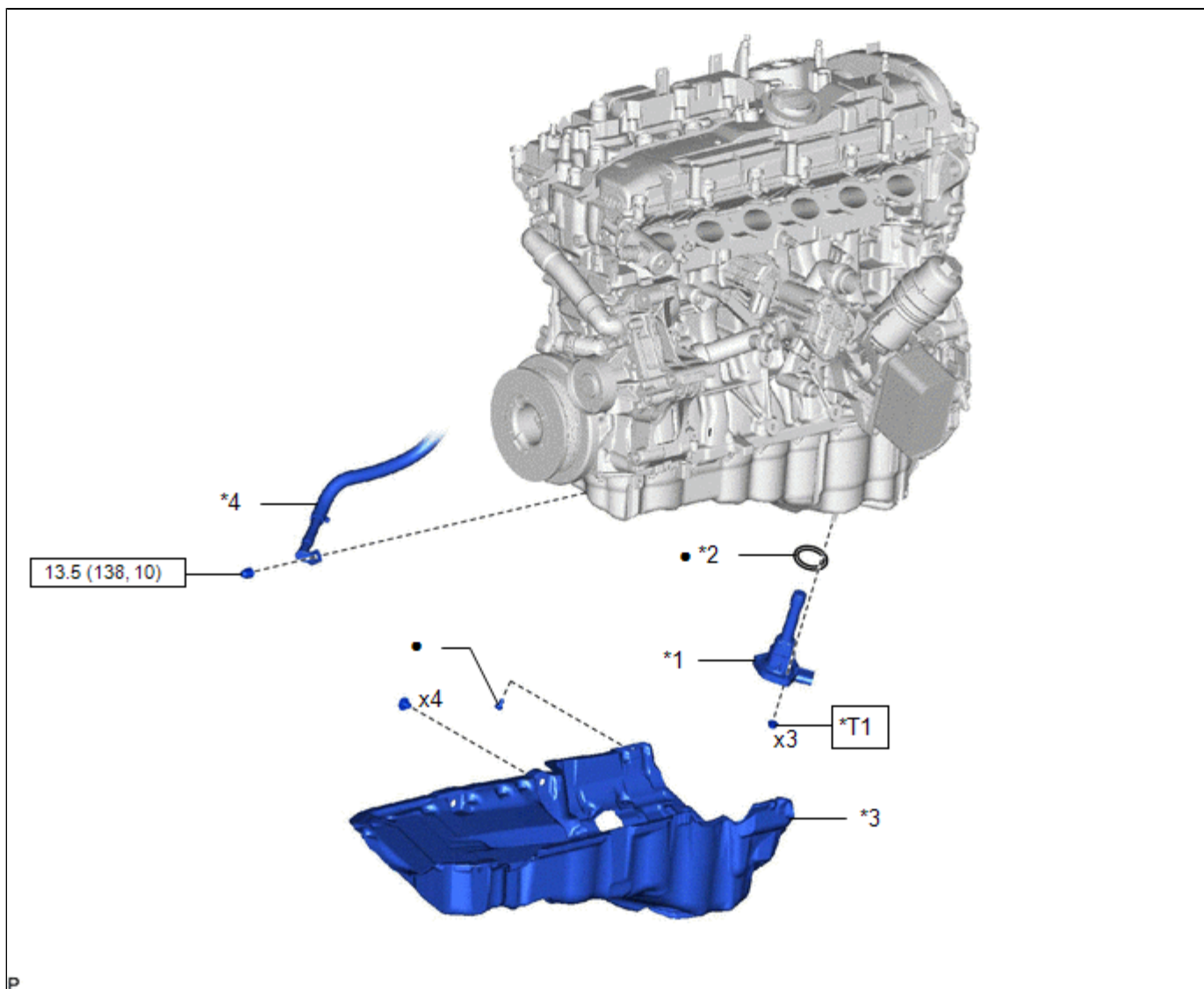
COMPONENTS

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	O-RING	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque		Non-reusable part

ILLUSTRATION



*1	ENGINE OIL LEVEL SENSOR	*2	ENGINE OIL LEVEL SENSOR GASKET
*3	OIL PAN COVER	*4	POSITIVE BATTERY CABLE
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part
*T1	1st: 2.0 (20, 18 in.*lbf) 2nd: 8.0 (82, 71 in.*lbf)	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYP
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL LEVEL SENSOR: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

CAUTION:

- Hot surfaces.

Risk of burning!

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

PROCEDURE

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

Click here [INFO](#)

2. REMOVE NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

3. REMOVE OIL FILLER CAP ASSEMBLY

Click here [INFO](#)

4. REMOVE OIL FILTER CAP ASSEMBLY

Click here [INFO](#)

5. REMOVE OIL PAN DRAIN PLUG

Click here [INFO](#)

6. REMOVE FRONT SUSPENSION MEMBER LOWER PROTECTOR

Click here [INFO](#)

7. INSTALL OIL PAN DRAIN PLUG

Click here [INFO](#)

8. REMOVE OIL PAN COVER

Click here [INFO](#)

9. REMOVE ENGINE OIL LEVEL SENSOR

CAUTION:

- 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:

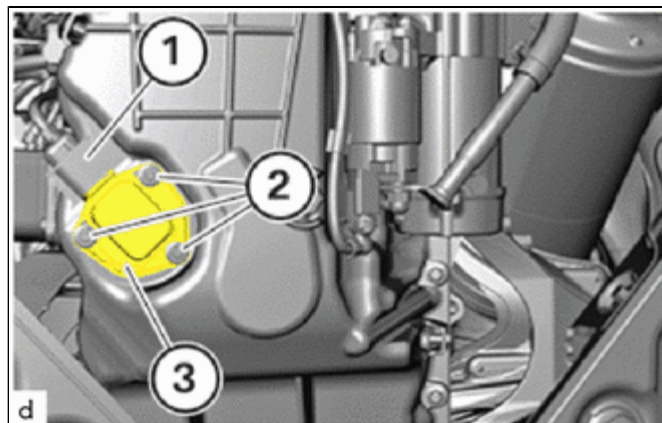
- Electrostatic discharge.

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](#)

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



(b) Loosen nuts (2).

(c) Remove the engine oil level sensor (3).



TOYOTA

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYG
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL LEVEL SENSOR: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

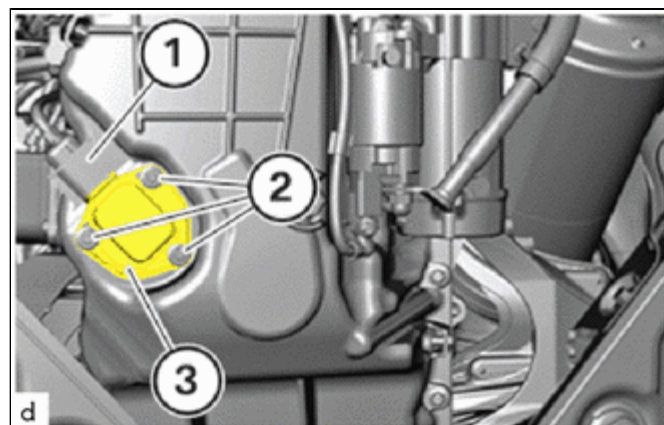
PROCEDURE

1. INSTALL ENGINE OIL LEVEL SENSOR

(a) Replace engine oil level sensor gasket (1).



(b) Install the engine oil level sensor (3).



(c) Temporarily tighten nuts (2).

Torque:

2.0 N·m {20 kgf·cm, 18 in·lbf}

(d) Fully tighten nuts (2).

Torque:

8.0 N·m {82 kgf·cm, 71 in·lbf}

(e) Connect and lock the connector (1).

HINT:

The connector (1) must engage audibly.

2. INSTALL OIL PAN COVER

Click here [INFO](#)

3. INSTALL FRONT SUSPENSION MEMBER LOWER PROTECTOR

Click here [INFO](#)

4. INSTALL OIL FILTER CAP ASSEMBLY

Click here [INFO](#)

5. ADD ENGINE OIL

Click here [INFO](#)

6. INSTALL OIL FILLER CAP ASSEMBLY

Click here [INFO](#)

7. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

Click here [INFO](#)

8. INSPECT FOR ENGINE OIL LEAK

Click here [INFO](#)

9. CHECK ENGINE OIL LEVEL

Click here [INFO](#)

10. INSTALL NO. 1 ENGINE COVER SUB-ASSEMBLY

Click here [INFO](#)

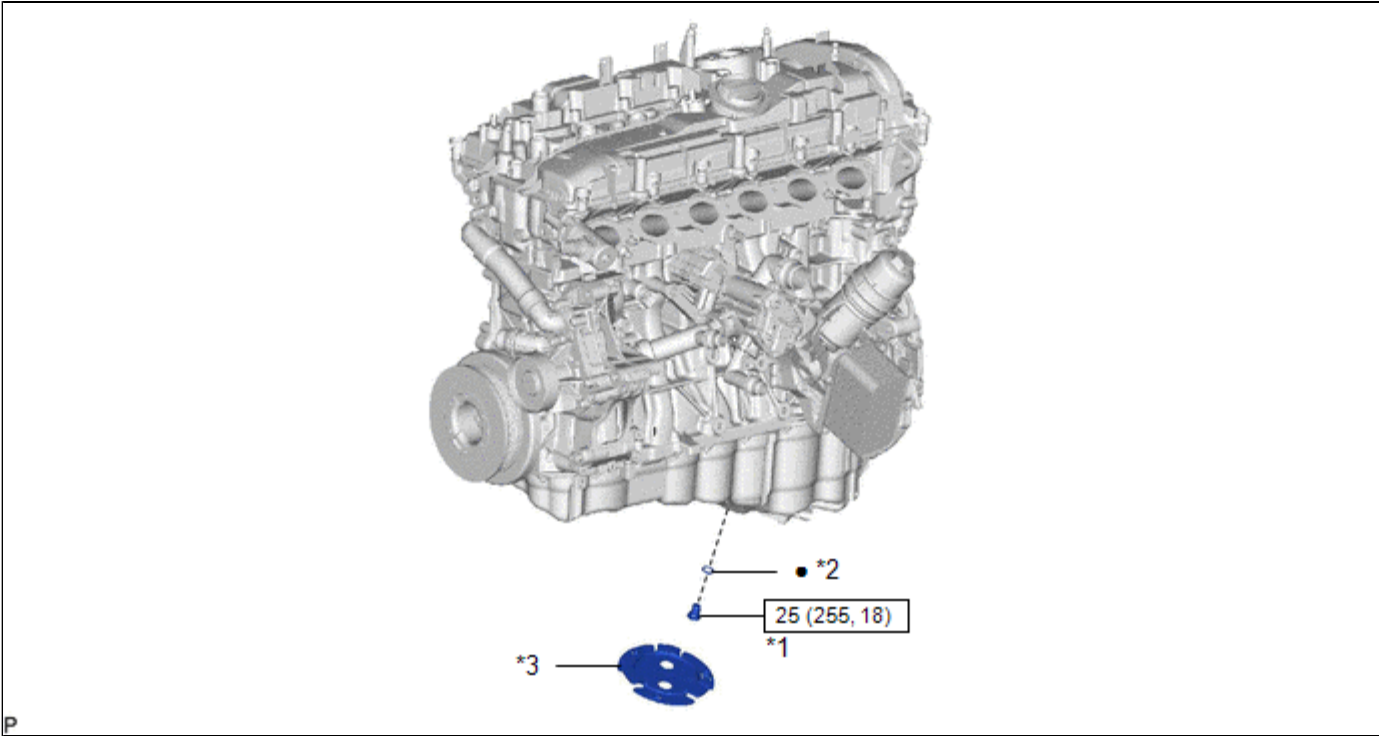


TOYOTA

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYN
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PAN: COMPONENTS; 2020 MY Supra [03/2019 -]		

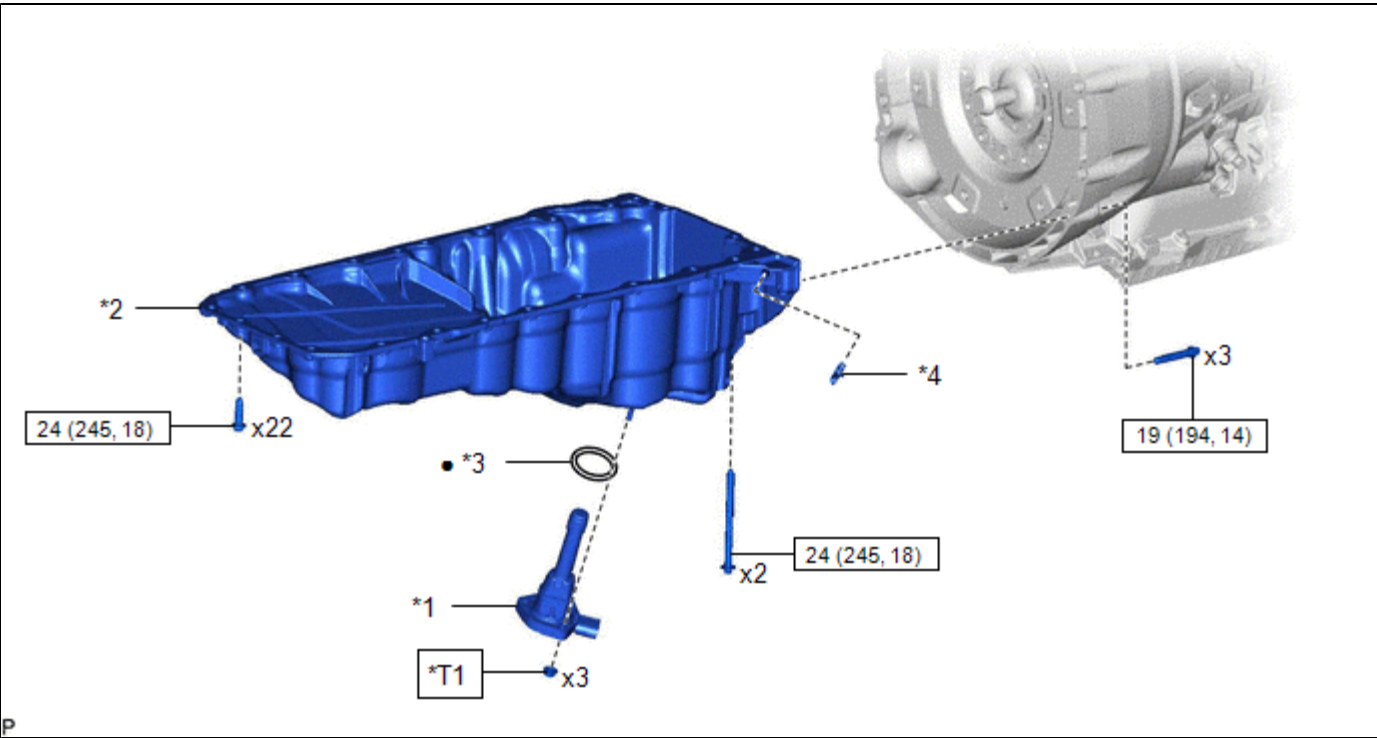
COMPONENTS

ILLUSTRATION



*1	OIL PAN DRAIN PLUG	*2	OIL PAN DRAIN PLUG GASKET
*3	CENTER NO. 4 ENGINE UNDER COVER	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part

ILLUSTRATION



*1	ENGINE OIL LEVEL SENSOR	*2	OIL PAN SUB-ASSEMBLY
*3	ENGINE OIL LEVEL SENSOR GASKET	*4	SEAL PLUG
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part
*T1	1st: 2.0 (20, 18 in.*lbf) 2nd: 8.0 (82, 71 in.*lbf)	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYO
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PAN: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

HINT:

Perform wheel alignment after installation.

PROCEDURE

1. SEPARATE FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY

Click here [INFO](#)

2. REMOVE OIL PAN DRAIN PLUG

Click here [INFO](#)

3. INSTALL OIL PAN DRAIN PLUG

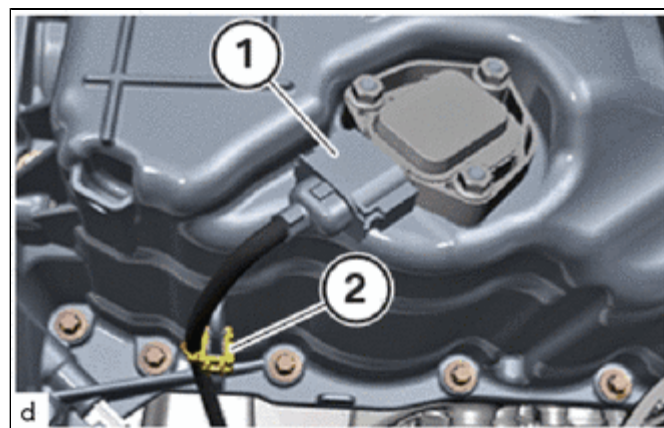
Click here [INFO](#)

4. REMOVE STARTER ASSEMBLY

Click here [INFO](#)

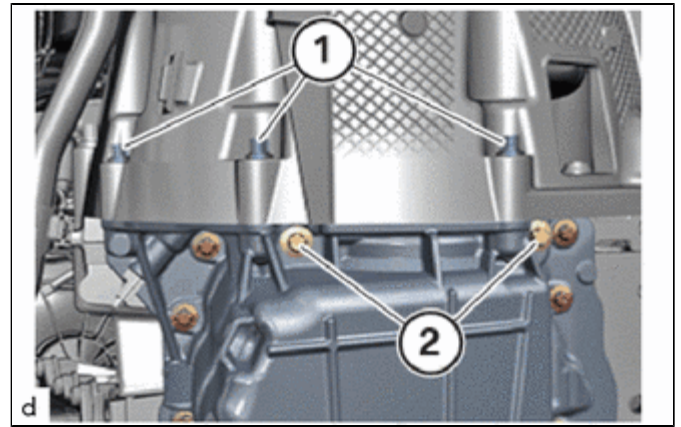
5. REMOVE OIL PAN SUB-ASSEMBLY

(a) Unlock and loosen connector (1).



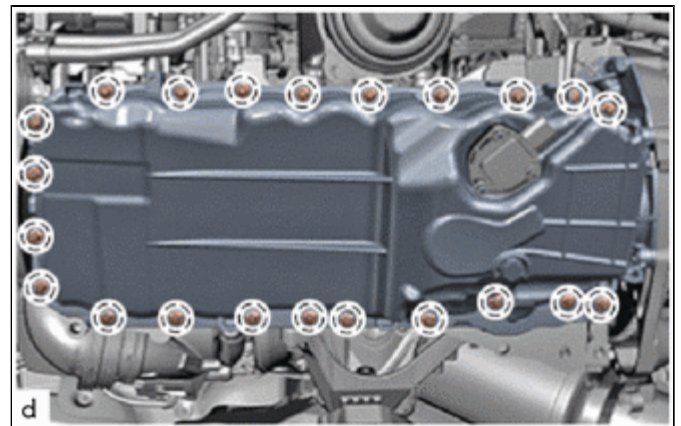
(b) Loosen clamp (2).

(c) Loosen E10 bolts (1).



(d) Loosen E10 bolts (2).

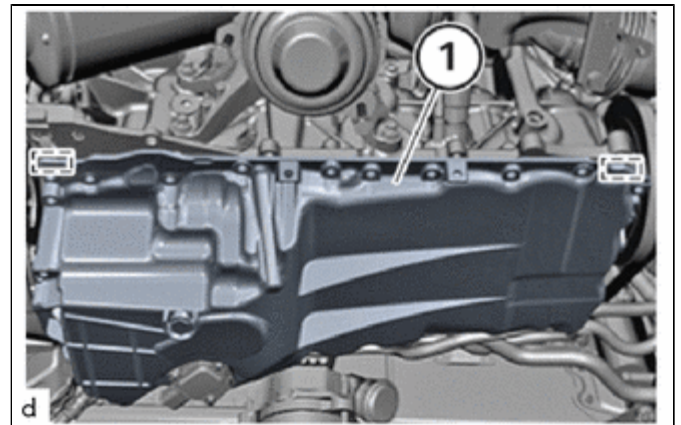
(e) Unscrew all of the E10 bolts (marks).



(f) Release the oil pan sub-assembly (1) in the marked areas.

HINT:

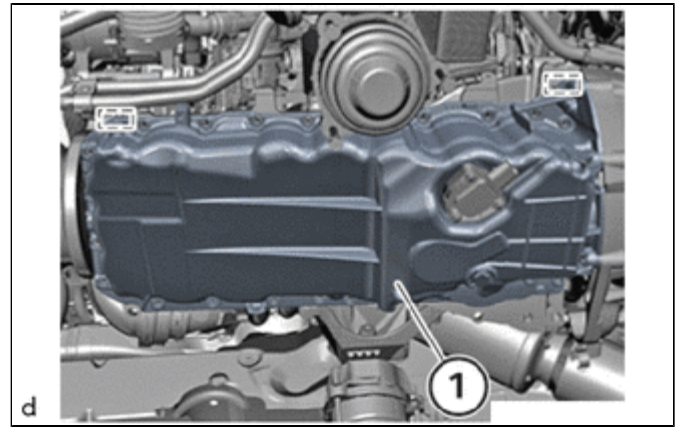
Increased force may be necessary during disassembly because the component is bonded with seal packing.



(g) Release the oil pan sub-assembly (1) in the marked areas.

HINT:

Increased force may be necessary during disassembly because the component is bonded with seal packing.



(h) Guide out oil pan sub-assembly (1) toward the bottom and remove.

6. REPLACE OIL PAN SUB-ASSEMBLY

CAUTION:

- 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:

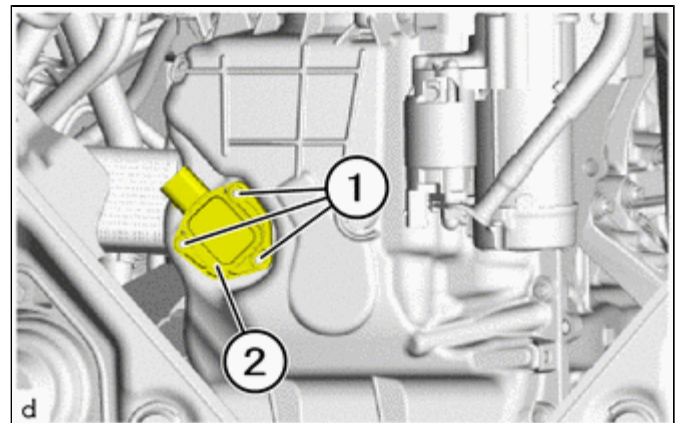
- Electrostatic discharge.

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:

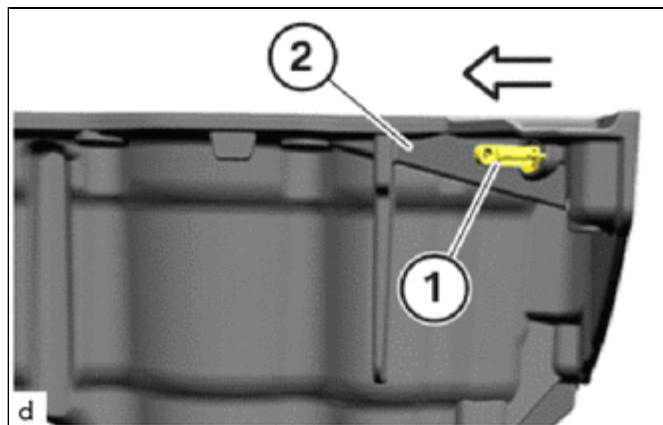
Click here [INFO](#)

(a) Loosen nuts (1).



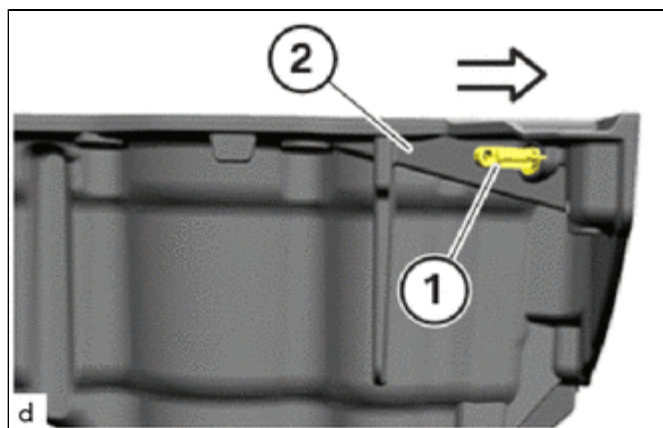
(b) Remove the engine oil level sensor (2).

- (c) Guide the seal plug (1) out of the oil pan sub-assembly (2) in the direction of the arrow and remove.



- (d) Replace oil pan sub-assembly.

- (e) Guide the seal plug (1) into the oil pan sub-assembly (2) in the direction of the arrow and install.



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PAN: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

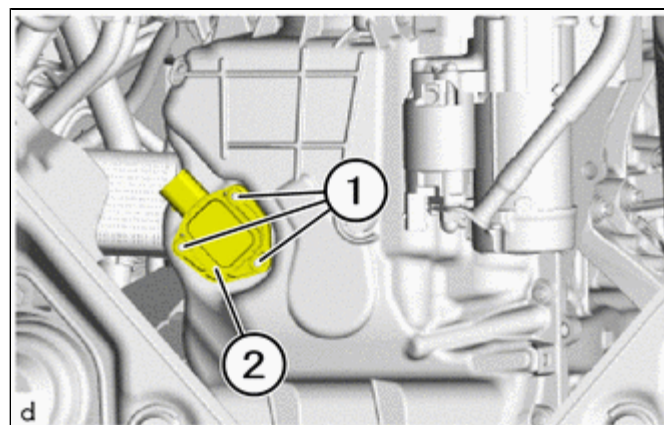
PROCEDURE

1. INSTALL ENGINE OIL LEVEL SENSOR

(a) Replace engine oil level sensor gasket (1).



(b) Install the engine oil level sensor (2).



(c) Temporarily tighten nuts (1).

Torque:

2.0 N·m {20 kgf·cm, 18 in·lbf}

(d) Fully tighten nuts (1).

Torque:

8.0 N·m {82 kgf·cm, 71 in·lbf}

2. INSTALL OIL PAN SUB-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.

- Damage to the surface.

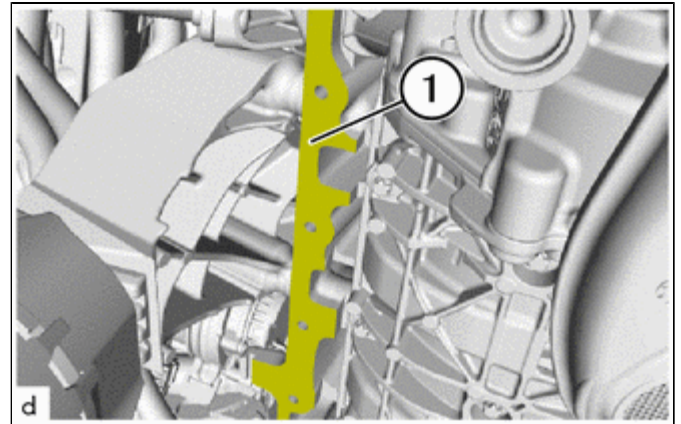
The use of metal-cutting tools (e.g. emery cloth) to clean the surfaces can damage them and lead to leaks or engine damage.

- Do not use any metal-cutting tools.

- (a) Remove coarse seal packing remains on the sealing surface of the cylinder block (1) and the sealing surface on the oil pan sub-assembly.

NOTICE:

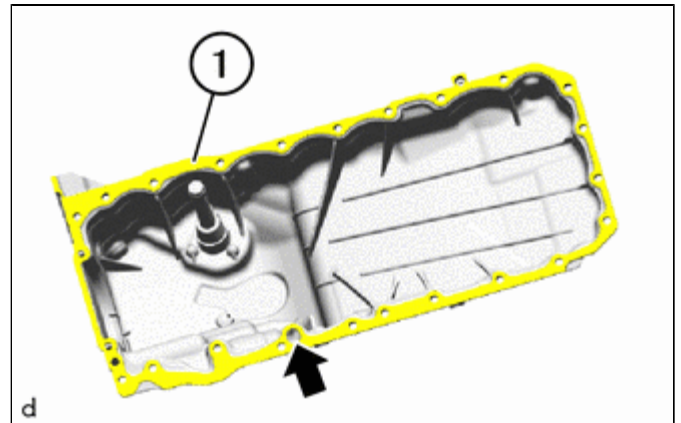
The sealing surfaces must be free from oils, grease and cleaning agents.



- (b) Remove fine seal packing remains on the sealing surface of the oil pan sub-assembly (1) and the sealing surface on the cylinder block.

NOTICE:

The sealing surfaces must be free from oils, grease and cleaning agents.



- (c) Load the sealer gun with the seal packing.

Seal Packing:

Loctite 5970 Flange Sealant

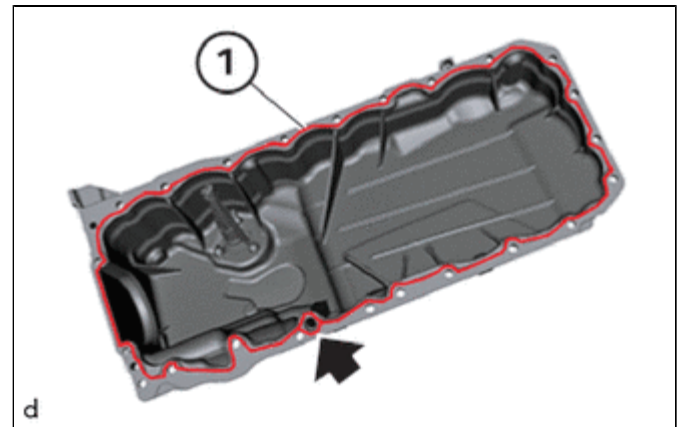
- (d) Apply sealing bead (1) with the seal packing in the marked area along the inner edge.

Height of the Sealing Bead:

2.0 to 2.5 mm (0.0787 to 0.0984 in.)

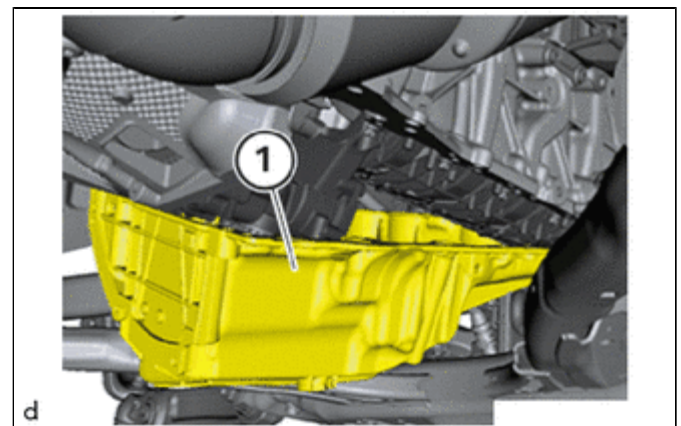
NOTICE:

The maximum application time of the seal packing is 12 minutes.

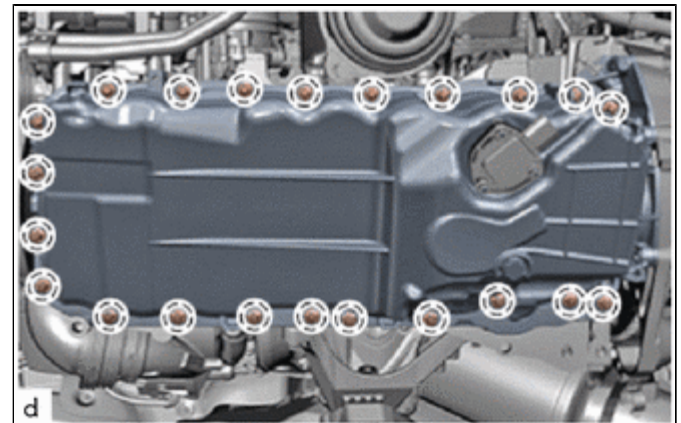


(e) Completely encircle the oil return orifice (arrow) with the sealing compound.

(f) Insert oil pan sub-assembly (1) upwards and forwards and position.



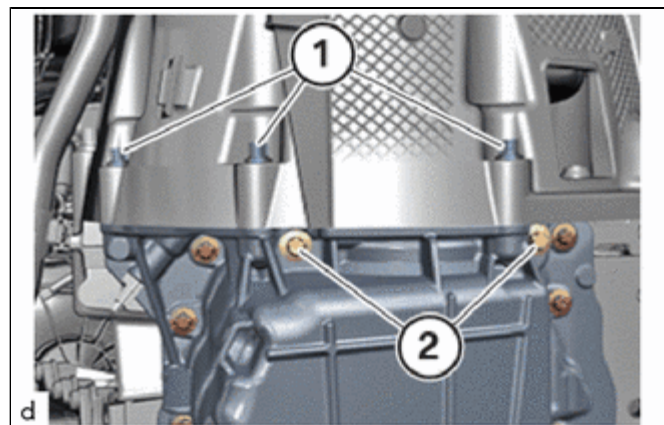
(g) Tighten all the oil pan sub-assembly E10 bolts (marks) hand-tight, do not yet tighten fully.



(h) Tighten the E10 bolts (1).

Torque:

19 N·m {194 kgf·cm, 14 ft·lbf}



(i) Tighten down E10 bolts (2).

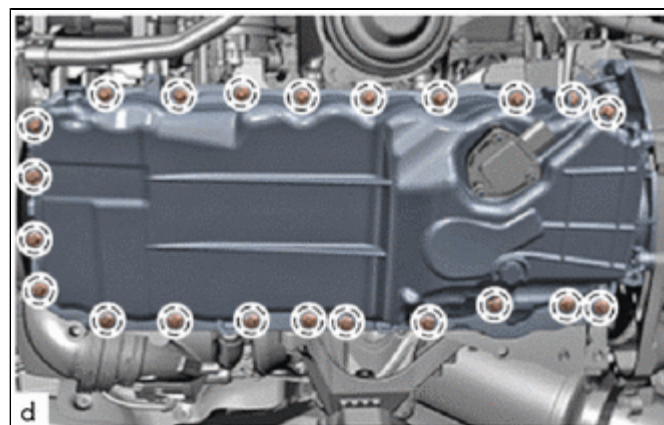
Torque:

24 N·m {245 kgf·cm, 18 ft·lbf}

(j) Tighten all E10 bolts (marks).

Torque:

24 N·m {245 kgf·cm, 18 ft·lbf}



(k) Connect connector and lock.

HINT:

Make sure the connector engages audibly.

(l) Secure clamp.

3. INSTALL STARTER ASSEMBLY

Click here [INFO](#)

4. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY

Click here [INFO](#)

5. ADD ENGINE OIL

Click here [INFO](#)

6. INSPECT FOR ENGINE OIL LEAK

Click here [INFO](#)

7. CHECK ENGINE OIL LEVEL

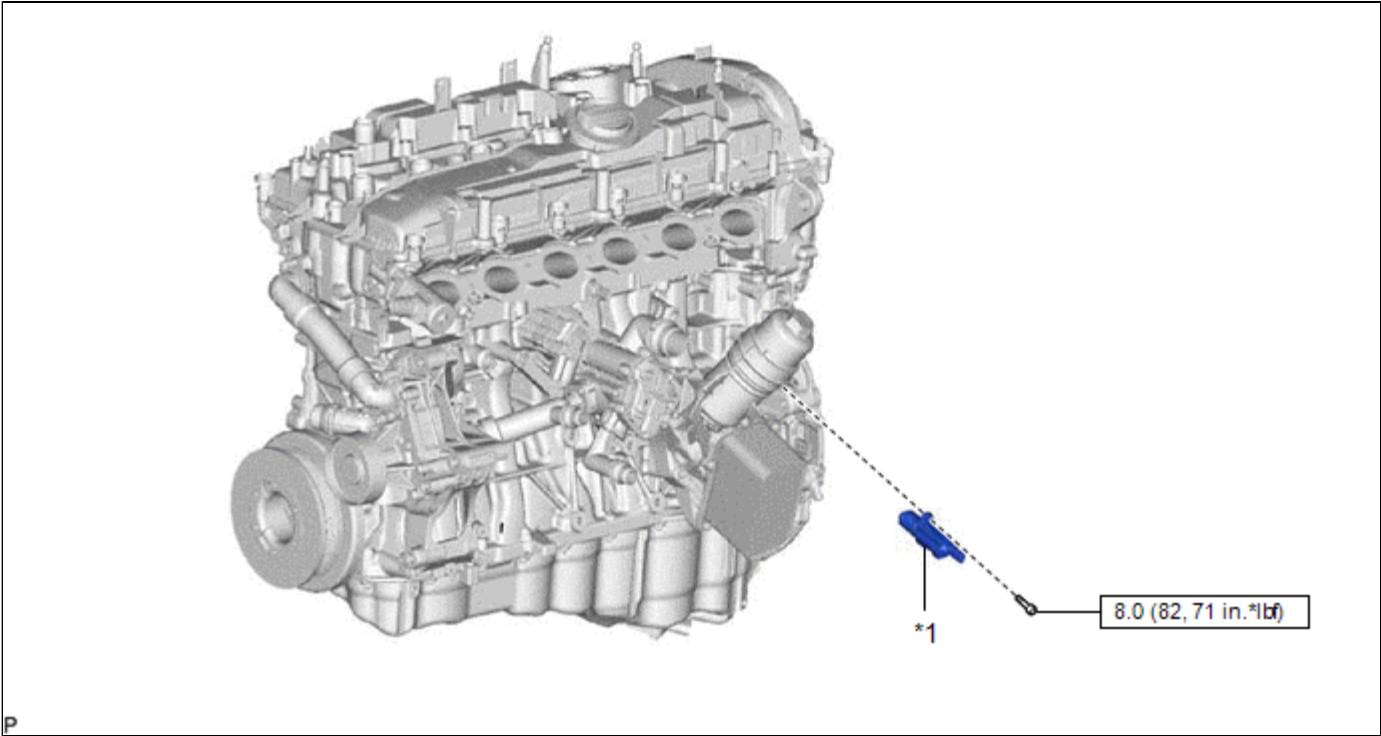
Click here [INFO](#)



Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYQ
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PRESSURE CONTROL VALVE: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	OIL PRESSURE CONTROL VALVE ASSEMBLY	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	-	-

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYR
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PRESSURE CONTROL VALVE: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

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.

PROCEDURE

1. REMOVE INTAKE MANIFOLD

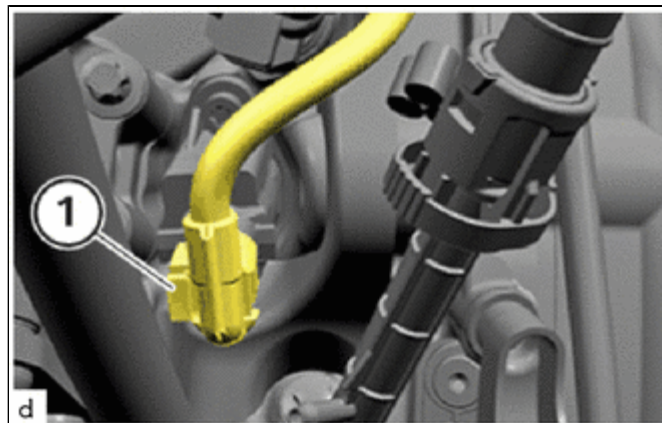
Click here [INFO](#)

2. REMOVE OIL PRESSURE CONTROL VALVE ASSEMBLY

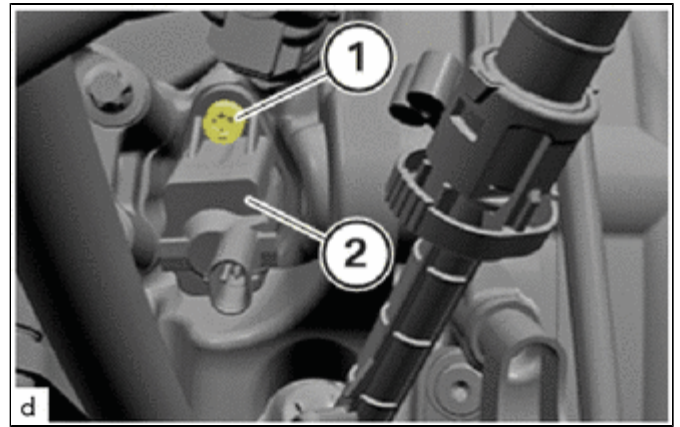
CAUTION:

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

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



(b) Loosen T30 bolt (1).



(c) Removing the oil pressure control valve assembly (2).

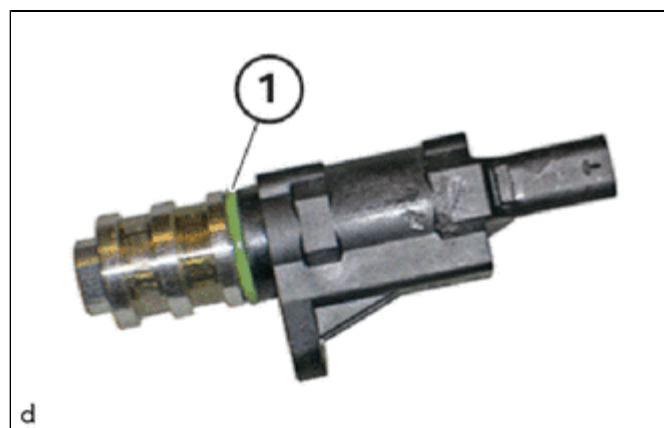
Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYS
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PRESSURE CONTROL VALVE: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL OIL PRESSURE CONTROL VALVE ASSEMBLY

- (a) Check the O-ring (1) for damage and replace the oil pressure control valve assembly as needed.



- (b) Install the oil pressure control valve assembly.

- (c) Tighten down T30 bolt.

Torque:

8.0 N·m {82 kgf·cm, 71 in·lbf}

- (d) Connect and lock the connector.

2. INSTALL INTAKE MANIFOLD

Click here [INFO](#)

3. INSPECT FOR ENGINE OIL LEAK

Click here [INFO](#)

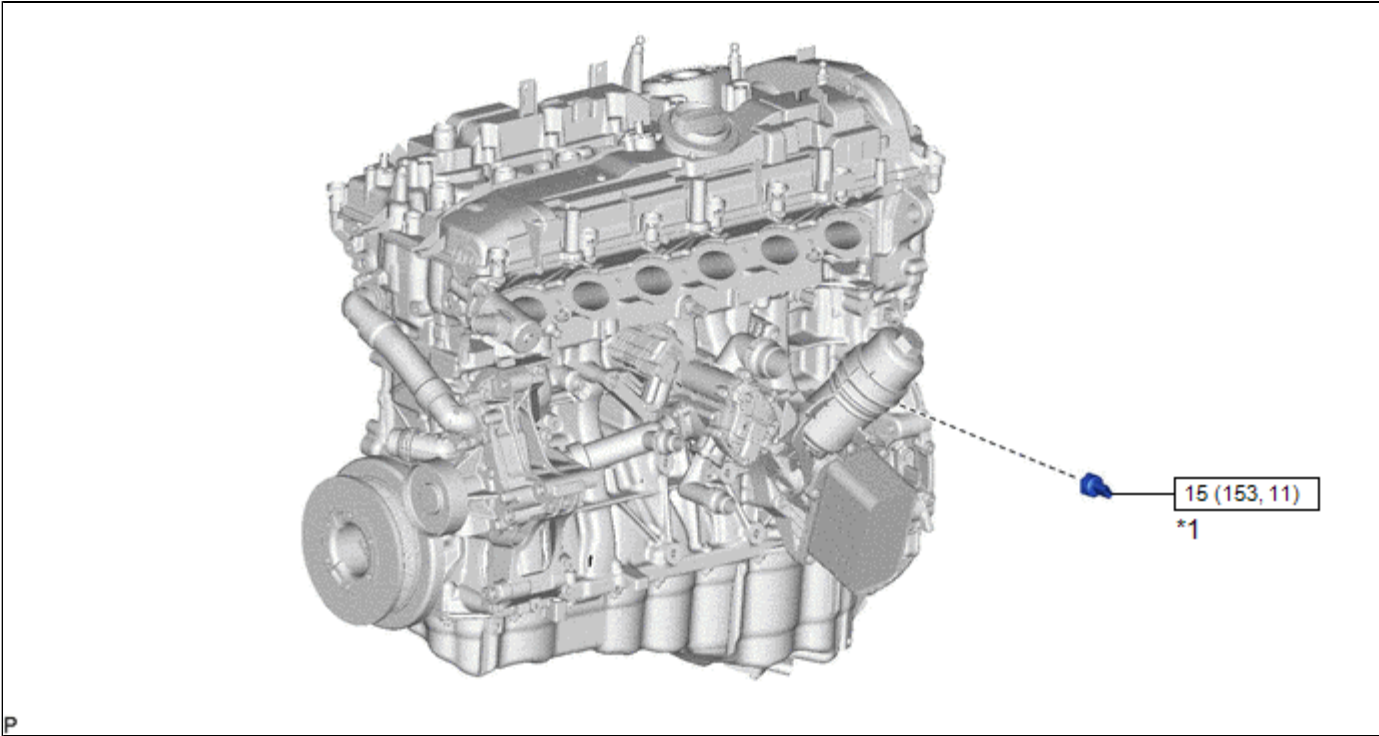
4. CHECK ENGINE OIL LEVEL

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYB
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PRESSURE SENSOR: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



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

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYC
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PRESSURE SENSOR: 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!
- Detach battery earth lead from battery.

PROCEDURE

1. REMOVE INTAKE MANIFOLD

Click here [INFO](#)

2. REMOVE OIL PRESSURE SENSOR

CAUTION:

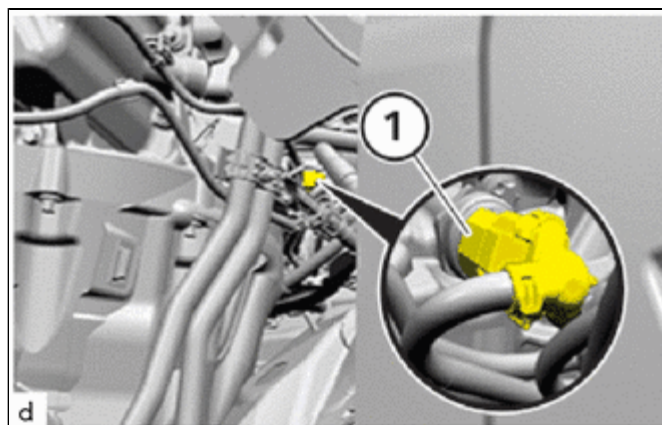
Collect and dispose of emerging fluids. Observe country-specific waste disposal regulations.

NOTICE:

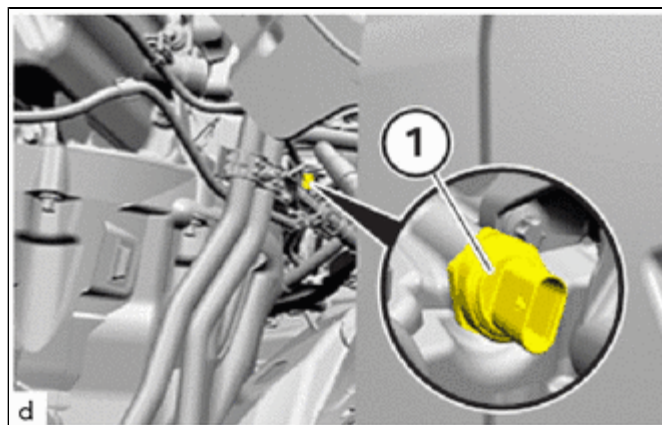
- Electrostatic discharge.
- Damage to or destruction of electrical components.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
 - For additional information see:

Click here [INFO](#)

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



(b) Using a 24 mm deep socket wrench, detach and remove the oil pressure sensor (1).



(c) Catch and dispose of emerging engine oil.

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PRESSURE SENSOR: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

1. INSTALL OIL PRESSURE SENSOR

- (a) Guide in and install the oil pressure sensor.
- (b) Using a 24 mm deep socket wrench, tighten the oil pressure sensor.

Torque:

15 N·m {153 kgf·cm, 11 ft·lbf}

- (c) Connect and lock the connector.

HINT:

The connector must engage audibly.

2. INSTALL INTAKE MANIFOLD

Click here [INFO](#)

3. INSPECT FOR ENGINE OIL LEAK

Click here [INFO](#)

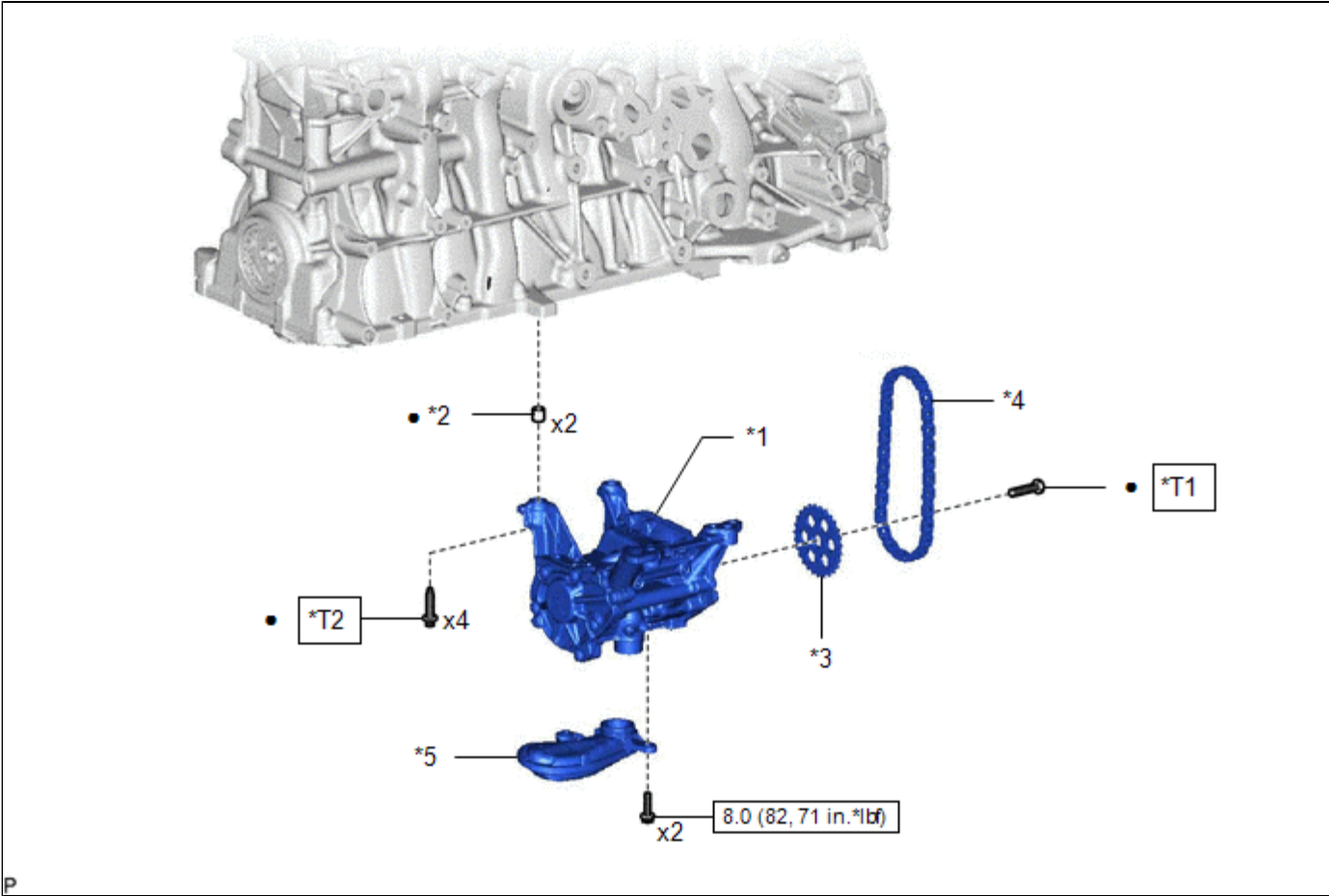
4. CHECK ENGINE OIL LEVEL

Click here [INFO](#)

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYH
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PUMP: COMPONENTS; 2020 MY Supra [03/2019 -]		

COMPONENTS

ILLUSTRATION



*1	OIL PUMP ASSEMBLY	*2	OIL PUMP SET PIN
*3	OIL PUMP DRIVE SHAFT GEAR	*4	OIL PUMP DRIVE CHAIN SUB-ASSEMBLY
*5	OIL STRAINER SUB-ASSEMBLY	-	-
	N*m (kgf*cm, ft.*lbf): Specified torque	•	Non-reusable part
*T1	1st: 5.0 (51, 44 in.*lbf) 2nd: Turn 90°	*T2	1st: 15 (153, 11) 2nd: Turn 45°

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PUMP: REMOVAL; 2020 MY Supra [03/2019 -]		

REMOVAL

CAUTION / NOTICE / HINT

HINT:

Perform wheel alignment after installation.

PROCEDURE

1. REMOVE OIL PAN SUB-ASSEMBLY

Click here [INFO](#)

2. REMOVE OIL PUMP ASSEMBLY

CAUTION:

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.

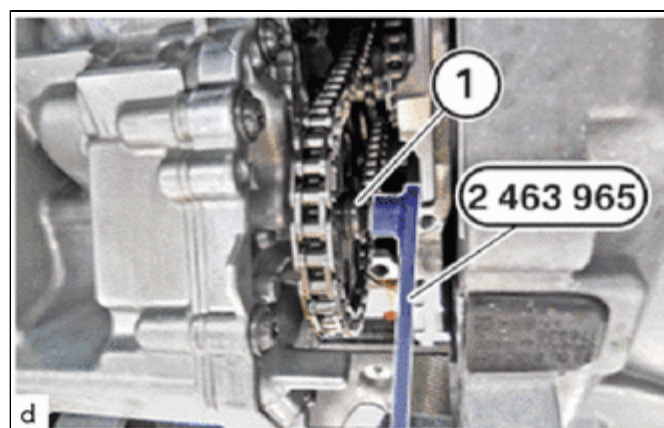
- Adhere to the utmost cleanliness.
- Protect components from contamination e.g. by covering.
- Close off line connections with seal plugs.

(a) Release T45 bolt (1) with the special tool 2 463 965.

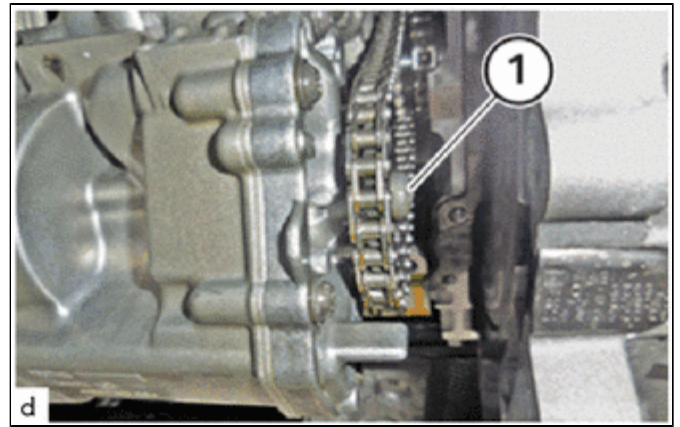
SST: 09900-WA180

HINT:

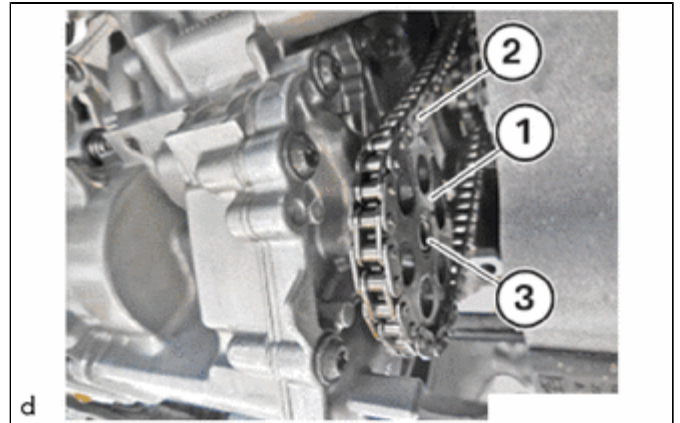
The thread is a left-hand thread.



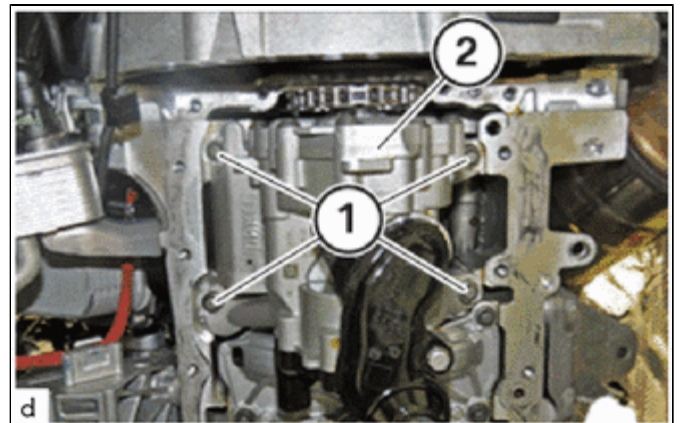
(b) Thread out the T45 bolt (1) and remove it.



(c) Detach the oil pump drive shaft gear (1) from the oil pump assembly (3).



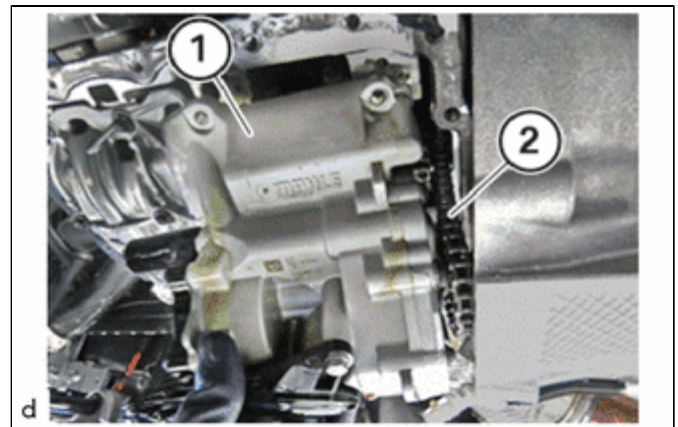
(d) Feed the oil pump drive shaft gear (1) out of the oil pump drive chain sub-assembly (2) and remove it.



(e) Loosen E10 bolts (1) of the oil pump assembly (2).

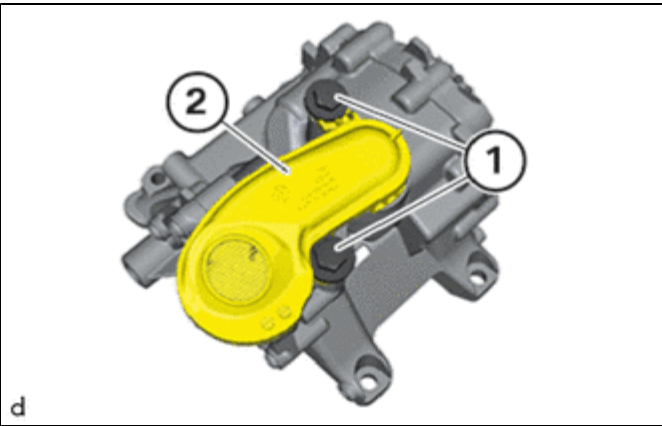
(f) Pull the oil pump assembly (1) down slightly, work it out

from the oil pump drive chain sub-assembly (2) and remove.



3. REPLACE OIL STRAINER SUB-ASSEMBLY

(a) Loosen bolts (1).

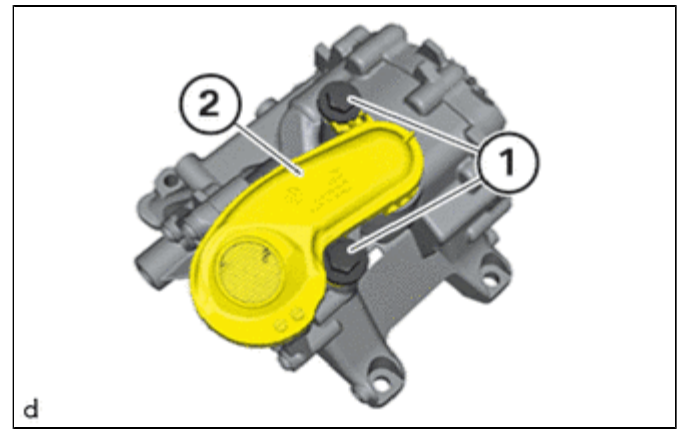


(b) Feed out and remove oil strainer sub-assembly (2) from the oil pump assembly.

(c) Check the O-ring for damage and replace the oil strainer sub-assembly if needed.



(d) Feed in and position oil strainer sub-assembly (2).



(e) Tighten the bolts (1).

Torque:

8.0 N·m { 82 kgf·cm, 71 in·lbf }



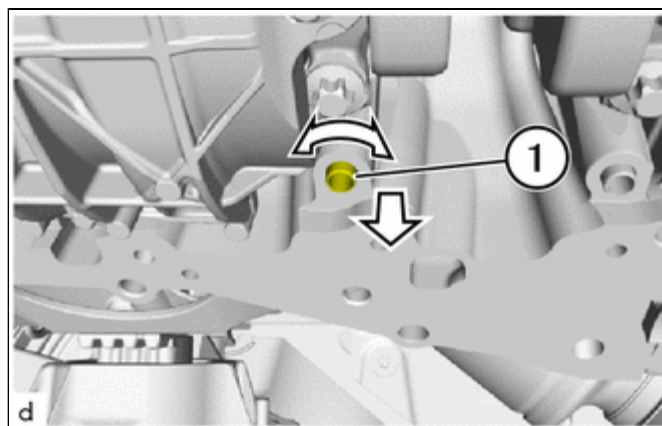
Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JCYJ
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: B58 (LUBRICATION): OIL PUMP: INSTALLATION; 2020 MY Supra [03/2019 -]		

INSTALLATION

PROCEDURE

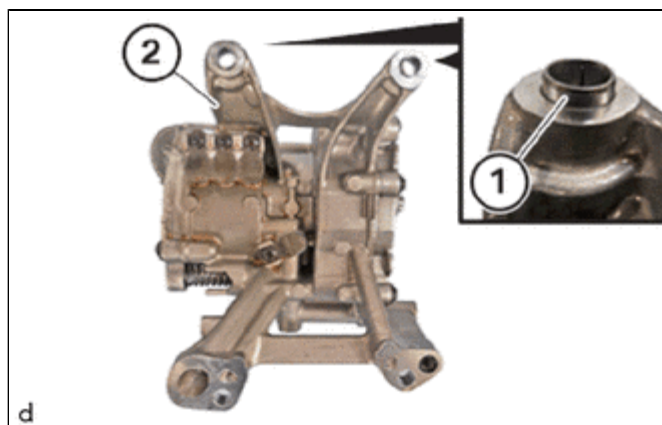
1. INSTALL OIL PUMP ASSEMBLY

- (a) Work oil pump set pins (1) out of the crankcase in the direction of the arrow and remove.



- (b) Replace the oil pump set pins (1).

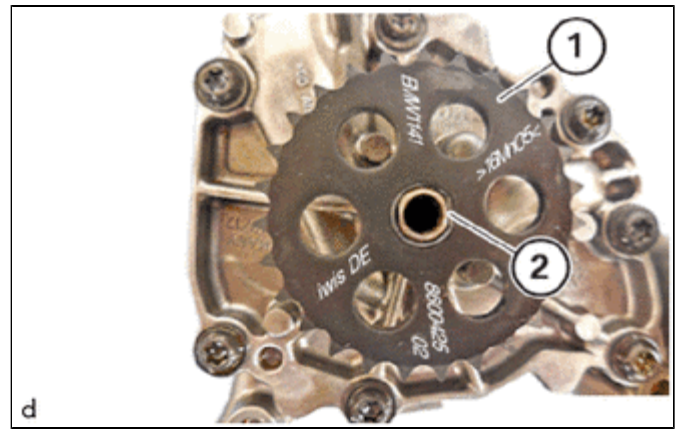
- (c) Insert oil pump set pins (1) in to the oil pump assembly (2) and install.



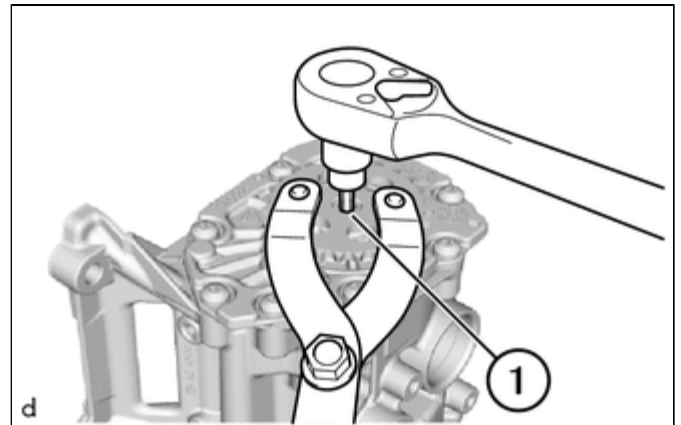
- (d) Position oil pump drive shaft gear (1) on the oil pump assembly (2).

NOTICE:

The labelling on the oil pump drive shaft gear (1) must face away from the oil pump assembly (2).



(e) Replace the T45 bolt (1).



(f) Insert T45 bolt (1) and fit.

HINT:

The thread is a left-hand thread.

(g) Hold oil pump drive shaft gear with SST and tighten T45 bolt (1).

SST: 09960-10010

09962-01000

09963-00700

Torque:

5.0 N·m {51 kgf·cm, 44 in·lbf}

HINT:

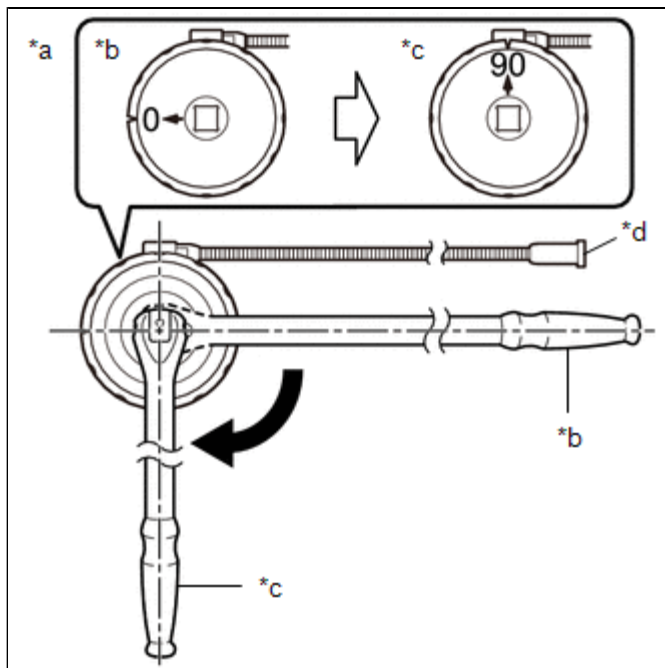
Conduct the following operation with the assistance of a second person.

(h) Using SST, tighten the T45 bolt (1) an additional 90°.

SST: 09900-WA010

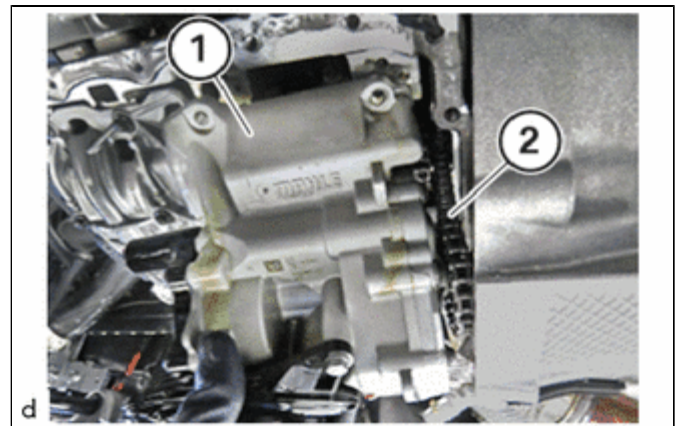
HINT:

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

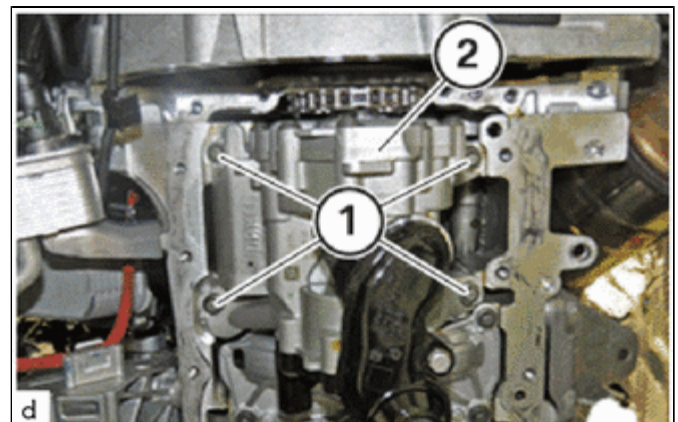


*a	Example
*b	Before Tightening
*c	After Tightening
*d	Magnetic Portion

- (i) Feed the oil pump assembly (1) into the oil pump drive chain sub-assembly (2) and position it.



- (j) Replace E10 bolts (1).



(k) Tighten the E10 bolts (1).

Torque:

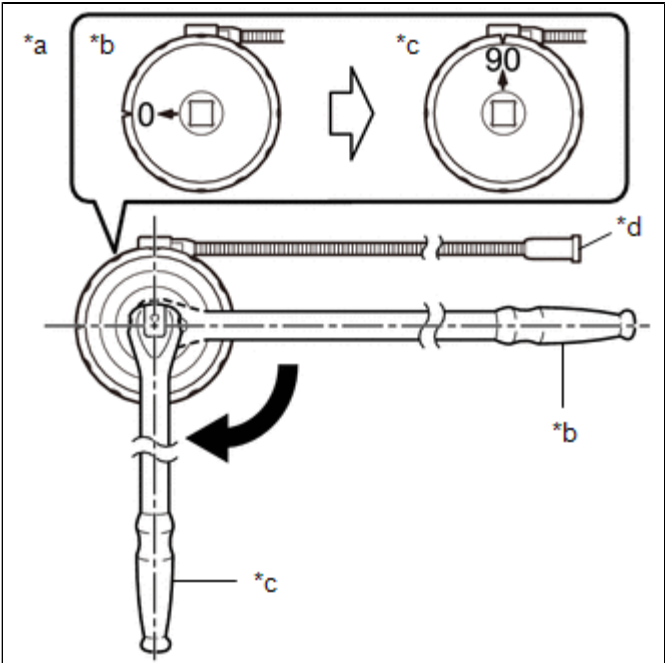
15 N·m {153 kgf·cm, 11 ft·lbf}

(l) Using SST, tighten the E10 bolts (1) an additional 45°.

SST: 09900-WA010

HINT:

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



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

2. INSTALL OIL PAN SUB-ASSEMBLY

Click here [INFO](#)