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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: 8HP51 AUTOMATIC TRANSMISSION / TRANSAXLE: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

Automatic Transmission Fluid

Standard Capacity	9.1 liters (9.6 US qts, 8.0 Imp. qts)	Automatic Gearbox Oil ATF 3+
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Title: SPECIFICATIONS: 8HP51 AUTOMATIC TRANSMISSION / TRANSAXLE: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

Automatic Transmission Fluid

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Automatic transmission assembly x Filler plug	35	357	26

Transmission Valve Body

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Mechatronics x Automatic transmission case		8.0	82		71
Output speed sensor x Automatic transmission case	1st	4.0	41		35
	2nd	Turn 12°			
Transmission oil sump x Automatic transmission case		10	102	7	
Automatic transmission assembly x Oil drain plug		8.0	82		71

Transmission Wire

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Transmission Wire x Cylinder head	8.0	82		71

Accumulator Assembly

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Hydraulic impulse storage x Automatic transmission case	8.0	82		71

Oil Cooler Tube

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Oil cooler tube x No. 1 automatic transmission oil cooler tube clamp	5.0	51	44

Oil cooler tube x No. 3 automatic transmission oil cooler tube clamp	5.0	51	44
Oil cooler tube x Transmission oil thermostat	8.0	82	71
Radiator side plate x Vehicle body	8.0	82	71

Transmission Oil Thermostat

PART TIGHTENED	N*M	KG*CM	IN.*LBF
No. 1 floor heat Insulator x Vehicle body	2.6	27	23
Automatic transmission assembly x Transmission oil thermostat	8.0	82	71
Oil cooler tube x Transmission oil thermostat	8.0	82	71

Shift Lever

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Transmission floor shift assembly x Vehicle body	3.3	34	29

Shift Paddle Switch

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Transmission shift switch assembly x Steering wheel	2.0	20	18

Automatic Transmission Rear Oil Seal

PART TIGHTENED	N*M	KG*CM	FT.*LBF
Output flange x Automatic transmission assembly	60	612	44

Torque Converter Radial Shaft Seal

PART TIGHTENED	N*M	KG*CM	FT.*LBF
T50 bolt x Automatic transmission assembly	1st	10	102
	2nd	Turn 90°	

Sealing Sleeve

PART TIGHTENED	N*M	KG*CM	IN.*LBF
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Slide x Automatic transmission case	8.0	82	71
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Automatic Transmission Assembly

PART TIGHTENED		N*M	KG*CM	FT.*LBF	IN.*LBF
No. 2 manifold stay x Exhaust manifold converter sub-assembly		28	286	21	
Automatic transmission assembly x Engine assembly	E10 bolt	19	194	14	
	E14 bolt	66	673	49	
Drive plate and torque converter assembly setting bolt		56	571	41	
No. 2 earth wire x Vehicle body		19	194	14	
Oil cooler tube x No. 3 automatic transmission oil cooler tube clamp		5.0	51		44
Oil cooler tube x Transmission oil thermostat		8.0	82		71
Flexible coupling x Output flange	1st	55	561	41	
	2nd	Turn 90°			
Center bearing x Vehicle body		21.4	218	16	
Rear engine mounting member x Vehicle body		19	194	14	
Rear engine mounting member x Automatic transmission assembly		19	194	14	
No. 1 floor heat Insulator x Vehicle body		3.0	31		27
No. 2 floor heat Insulator x Vehicle body		3.0	31		27
Rear engine mounting insulator x Automatic transmission assembly		19	194	14	
Rear engine mounting bracket sub-assembly x Automatic transmission assembly		48	489	35	



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Title: SPECIFICATIONS: ALIGNMENT / HANDLING DIAGNOSIS: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

Vehicle Height:

TIRE SIZE	EQUIPMENT	FRONT (A)	REAR (B)
18 inch	w/o AVS	621 mm (2.04 ft.)	619 mm (2.03 ft.)
	w/ AVS	614 mm (2.01 ft.)	612 mm (2.01 ft.)
19 inch	w/o AVS	634 mm (2.08 ft.)	632 mm (2.07 ft.)
	w/ AVS	627 mm (2.06 ft.)	625 mm (2.05 ft.)

Toe-in:

-	SPECIFIED CONDITION
Front	C + D: 0°16' +/- 0°12' (0.27° +/- 0.20°)
	B - A: 3.1 +/- 2.3 mm (0.1220 +/- 0.0906 in.)
Rear	C + D: 0°14' +/- 0°12' (0.23° +/- 0.20°)
	B - A: 2.7 +/- 2.3 mm (0.1063 +/- 0.0906 in.)

Camber:

-	EQUIPMENT	CAMBER INCLINATION	RIGHT-LEFT DIFFERENCE
Front	w/o AVS	-1°38' +/- 0°30' (-1.63° +/- 0.50°)	0°30' (0.50°) or less
	w/ AVS	-1°45' +/- 0°30' (-1.75° +/- 0.50°)	
Rear	w/o AVS	-1°50' +/- 0°25' (-1.83° +/- 0.42°)	0°30' (0.50°) or less
	w/ AVS	-2°00' +/- 0°25' (-2.00° +/- 0.42°)	

Caster:

CASTER INCLINATION	RIGHT-LEFT DIFFERENCE
7°35' +/- 0°30' (7.58° +/- 0.50°)	0°30' (0.50°) or less

Steering Axis Inclination:

STEERING AXIS INCLINATION REFERENCE
17°21' (17.35°)

Wheel Turning Angle:

INSIDE WHEEL	OUTSIDE WHEEL
38°23' (38.38°)	29°09' (29.15°)



TOYOTA

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Title: SPECIFICATIONS: ALIGNMENT / HANDLING DIAGNOSIS: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Tie rod end x Tie rod	32	326	24
Rear No. 2 suspension arm x Rear suspension member	175	1785	129
Toe control link x Rear suspension member	108	1101	80

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Title: SPECIFICATIONS: AUDIO / VIDEO: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

RADIO RECEIVER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Radio receiver assembly x Instrument panel reinforcement sub-assembly	2.3	23	20

STEREO COMPONENT AMPLIFIER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Stereo component amplifier assembly x No. 1 amplifier bracket	3.3	34	29
Stereo component amplifier assembly with brackrt x Body	6.0	61	53

LUGGAGE SPEAKER

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Deck trim rear cover x Body	6.0	61		53
Rope hook x Body	19	194	14	
Deck trim side board and deck side trim cover LH x Body	2.0	20		18
Deck trim side board and deck side trim cover RH x Body	2.0	20		18
Luggage compartment trim front cover	3.0	31		27
Rear speaker assembly x Body	4.0	41		35

FRONT DOOR SPEAKER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Front No. 1 speaker assembly x Front door	1.8	18	16

QUARTER TRIM SPEAKER

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PART TIGHTENED		N*M	KGF*CM	IN.*LBF
for 10 Speakers	Rear No. 2 speaker assembly x Body	1.8	18	16
for 12 Speakers	Rear No. 3 speaker assembly x Body	1.8	18	16
Mid-range speaker in the rear side trim panel x Speaker holder		1.8	18	16

INSTRUMENT PANEL SPEAKER

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
Front No. 3 speaker assembly x Instrument panel		2.3	23	20
Front No. 4 speaker assembly x Instrument panel		2.3	23	20

AMPLIFIER ANTENNA

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
No. 1 amplifier antenna assembly x Tailgate		3.0	31	27

NOISE FILTER

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
Noise filter x Rear window frame		4.0	41	35
Trap circuit x Rear window frame		3.0	31	27

ASC ECU

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
Stereo component equalizer assembly x holder		3.3	34	29



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Title: SPECIFICATIONS: AXLE AND DIFFERENTIAL: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

FRONT AXLE HUB

PART TIGHTENED		N*M	KG*CM	FT.*LBF
Front axle hub sub-assembly x Steering knuckle	1st	120	1224	89
	2nd	Turn 90°		

STEERING KNUCKLE

PART TIGHTENED	N*M	KG*CM	FT.*LBF	IN.*LBF
Front disc brake dust cover x Steering knuckle	8.0	82		71
Brake hose bracket x Steeringknuckle	10	102	7	
Front shock absorber x Steering knuckle	71	724	52	

REAR AXLE HUB

PART TIGHTENED		N*M	KG*CM	FT.*LBF
Rear axle hub sub-assembly x Rear axle carrier sub-assembly	1st	120	1224	89
	2nd	Turn 90°		

REAR AXLE CARRIER

PART TIGHTENED		N*M	KG*CM	FT.*LBF	IN.*LBF
Rear axle hub and bearing assembly x Rear drive shaft assembly	1st	210	2141	155	
	2nd	Turn 90°			
Rear disc brake dust cover x Rear axle carrier sub-assembly		8.0	82		71
Skid control sensor wire x Steering knuckle		11.8	120	9	

Rear stabilizer link assembly x Rear axle carrier sub-assembly		56	571	41	
Rear upper control arm assembly x Rear axle carrier sub-assembly	1st	165	1683	122	
	2nd	Turn 90°			
Rear No. 2 upper control arm assembly x Rear axle carrier sub-assembly	1st	100	1020	74	
	2nd	Turn 90°			
Rear No. 1 suspension arm assembly x Rear axle carrier sub-assembly	1st	100	1020	74	
	2nd	Turn 90°			
Rear No. 2 suspension arm assembly x Rear axle carrier sub-assembly	1st	165	1683	122	
	2nd	Turn 90°			
Toe control link sub-assembly x Rear axle carrier sub-assembly	1st	100	1020	74	
	2nd	Turn 90°			

DIFFERENTIAL OIL

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Rear differential carrier assembly x Filler plug	60	612	44

REAR DIFFERENTIAL CARRIER ASSEMBLY

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Rear differential carrier cover x Rear differential carrier assembly		140	1428	103	
Rear differential protector set bolt		4.5	46		40
Ground wire set bolt		8.0	82		71
Rear differential carrier cover x Rear suspension member	Bolt (1)	100	1020	74	
	Nut (2)	165	1683	122	

DIFFERENTIAL OIL TEMPERATURE SENSOR

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Oil temperature sensor x Rear differential carrier assembly	13.5	138	10



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Title: SPECIFICATIONS: B58 BATTERY / CHARGING: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

GENERATOR ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
V-ribbed belt tensioner assembly x Generator assembly	28	286	21
Generator assembly x Cylinder block sub-assembly	38	387	28
Generator wire x Generator assembly	19	194	14

GENERATOR WIRE

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Generator wire x Generator assembly	19	194	14
Generator wire x Battery terminal	19	194	14

BATTERY

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Battery holder x Vehicle body	10	102	7	
Bracket x Vehicle body	8.0	82		71
Safety battery terminal x Battery terminal	5.0	51		44
No. 3 earth wire x Battery terminal	5.0	51		44

NEGATIVE BATTERY CABLE

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 3 earth wire x Vehicle body	20.5	209	15

SAFETY BATTERY TERMINAL

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PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Safety battery terminal x Battery terminal	5.0	51		44
No. 4 floor wire x Safety battery terminal	15	153	11	
No. 4 floor wire x Power distribution box	15	153	11	

FRONT POWER DISTRIBUTION BOX

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Front power distribution box x Vehicle body	19	194	14	
No. 5 floor wire x Battery terminal	19	194	14	
Generator wire, starter wiring assembly and No. 5 front wire x Battery terminal	20.5	209	15	
No. 4 engine room wire x Front power distribution box	19	194	14	
Sealing frame x Vehicle body	2.5	25		22

REAR POWER DISTRIBUTION BOX

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Rear power distribution box x Vehicle body	2.6	27		23
Positive battery cables x Rear power distribution box	15	153	11	



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Title: SPECIFICATIONS: B58 COOLING: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

Radiator

ITEM	CONDITION	SPECIFIED CONDITION
Reserve tank cap	Minimum pressure	140 kPa (1.4 kgf/cm ² , 20 psi)

Coolant (for High Temperature)

CAPACITY	CLASSIFICATION
10.5 liters (11.1 US qts, 9.2 Imp. qts)	Antifreeze and Corrosion Inhibitor Frostox HT-12

Coolant (for Low Temperature)

CAPACITY	CLASSIFICATION
4.0 liters (4.2 US qts, 3.5 Imp. qts)	Antifreeze and Corrosion Inhibitor Frostox HT-12



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Title: SPECIFICATIONS: B58 COOLING: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

WATER PUMP

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Engine water pump assembly x Water inlet housing	10	102	7	
No. 2 water by-pass hose x Engine water pump assembly	8.0	82		71
Water inlet x Engine water pump assembly	8.0	82		71

ELECTRIC WATER PUMP (for Turbo)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 2 water pump bracket sub-assembly x No. 1 water pump bracket sub-assembly	8.0	82	71

ELECTRIC WATER PUMP (for Heater)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 4 water pump bracket sub-assembly x No. 3 water pump bracket sub-assembly	8.0	82	71

WATER INLET HOUSING

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Water inlet housing sub-assembly (engine water pump) x Engine assembly	19	194	14	
Oil cooler tube x Water inlet housing sub-assembly (engine water pump)	8.0	82		71
No. 2 water by-pass hose x Engine water pump assembly	8.0	82		71

SUB RADIATOR (for LH Side)

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 1 front bumper bracket plate x Front bumper side bracket	19	194	14

SUB RADIATOR (for RH Side)

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 1 front bumper bracket plate x Front bumper side bracket	19	194	14

RADIATOR (for Low Temperature)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Radiator upper air guide plate x Radiator assembly	6.0	61	53

RADIATOR (for High Temperature)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Radiator upper air guide plate x Radiator assembly	6.0	61	53
Radiator assembly x Vehicle body	6.0	61	53

HEAT MANAGEMENT MODULE

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Water valve with bracket assembly x Engine assembly	9.0	92	80

COOLANT LINE

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 2 water by-pass hose x Engine assembly	8.0	82	71

COOLANT PIPE

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 2 water by-pass hose x Engine water pump assembly	10.5	107	8
Water inlet x Water inlet housing	10.5	107	8

FAN SHROUD

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
upper radiator support sub-assembly x Vehicle body	Bolt (1)	19	194	14	
	Bolt (2)	56	571	41	

	Bolt (3)	8.0	82		71
Fan shroud with motor assembly x Radiator assembly		6.0	61		53

SUB RADIATOR AIR DUCT (for LH Side)

PART TIGHTENED	N*M	KG*CM	FT.*LBF
No. 1 front bumper bracket plate x Front bumper side bracket	19	194	14

SUB RADIATOR AIR DUCT (for RH Side)

PART TIGHTENED	N*M	KG*CM	FT.*LBF
No. 1 front bumper bracket plate x Front bumper side bracket	19	194	14

COOLING FAN RELAY

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Cooling fan relay x Vehicle body	1.2	12	11
Position the battery cables x Cooling fan relay	5.0	51	44



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Title: SPECIFICATIONS: B58 EMISSION CONTROL: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

CANISTER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 1 charcoal canister filter x Vehicle body	8.0	82	71
Fuel filter assembly x Vehicle body	8.0	82	71

PRESSURE SWITCH

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Pressure switch x Fuel filter assembly	2.8	29	25
Fuel filter assembly x Vehicle body	8.0	82	71

DIFFERENTIAL PRESSURE SENSOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Differential pressure sensor x Cover	3.0	31	27

MONOLITHIC CONVERTER

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Exhaust pipe clamp	13	133	10
Exhaust manifold converter sub-assembly x holder	19	194	14

PCV VALVE

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Ventilation pipe sub-assembly x Crank case	13	133	10
No. 1 turbo water pipe sub-assembly x Cylinder block	19	194	14

PCV VALVE

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Ventilation pipe sub-assembly x Crank case	8.0	82	71
No. 1 turbo water pipe sub-assembly x Cylinder block	8.0	82	71



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Title: SPECIFICATIONS: B58 ENGINE CONTROL: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

CAMSHAFT TIMING GEAR BOLT

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
No. 2 electric engine water pump bracket sub-assembly x Holder		8.0	82		71
No. 1 electric water pump bracket sub-assembly x Cylinder head sub-assemnbly	Nut (1)	8.0	82		71
	Stud bolt	8.0	82		71
	Bolt (3)	8.0	82		71
Cylinder head cover sub-assembly x Cylinder head sub-assemnbly	1st	6.0	61		53
	2nd	11	112	8	
Intake camshaft timing gear bolt x Intake camshaft sub-assembly	1st	10	102	7	
	2nd	30	306	22	
	3rd	50	510	37	
	4th	Turn 35°			
Exhaust camshaft timing gear bolt x Exhaust camshaft sub-assembly	1st	10	102	7	
	2nd	30	306	22	
	3rd	50	510	37	
	4th	Turn 35°			

SERVO MOTOR

PART TIGHTENED	N*M	KGF*CM	FT.*LBF

Servo motor x Cylinder head sub-assembly	10	102	7
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THROTTLE BODY

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Throttle body with motor assembly x Intake manifold	7.0	71		62
Throttle body with motor assembly set bolt	11.8	120	9	

ACCELERATOR PEDAL

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Accelerator pedal sensor assembly x Vehicle body	7.6	77	67

MASS AIR FLOW METER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Mass air flow meter x Air cleaner assembly	1.4	14	12

AIR PRESSURE SENSOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Air pressure sensor x No. 2 air cleaner hose	4.0	41	35

CAMSHAFT POSITION SENSOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Camshaft position sensor x Cylinder head cover sub-assembly (for Intake Side)	4.0	41	35
Camshaft position sensor x Cylinder head cover sub-assembly (for Exhaust Side)	4.0	41	35

CRANKSHAFT POSITION SENSOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 3 automatic transmission oil cooler tube clamp set screw	5.0	51	44
No. 2 automatic transmission oil cooler tube clamp set bolt	8.0	82	71
Crankshaft position sensor x Cylinder block sub-assembly	4.6	47	41

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IGNITION COIL AND SPARK PLUG

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Ignition coil assembly x Cylinder head cover sub-assembly	8.0	82	71

ENGINE COOLANT TEMPERATURE SENSOR (for Engine)

PART TIGHTENED	N*M	KG*CM	FT.*LBF
Engine coolant temperature sensor x Cylinder block sub-assembly	13.5	138	10

ENGINE OIL TEMPERATURE SENSOR

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Oil temperature sensor x Cylinder block sub-assembly	8.0	82	71

INTAKE AIR TEMPERATURE SENSOR

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Intake air temperature sensor x No. 2 air cleaner hose	1.8	18	16

KNOCK SENSOR

PART TIGHTENED	N*M	KG*CM	FT.*LBF	IN.*LBF
Knock sensor x Cylinder block sub-assembly (for Bank1)	21.5	219	16	
Knock sensor x Cylinder block sub-assembly (for Bank2)	21.5	219	16	
Intake manifold stay set bolt	8.0	82		71

VACUUM SENSOR

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Vacuum sensor assembly x Intake manifold	4.0	41	35

AIR FUEL RATIO SENSOR

PART TIGHTENED	N*M	KG*CM	FT.*LBF
Specified tightening torque	50	510	37

Air fuel ratio sensor x Exhaust manifold converter sub-assembly				
	For use with SST	42.9	437	32

HEATED OXYGEN SENSOR

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Heated oxygen sensor x Exhaust manifold converter sub-assembly	Specified tightening torque	50	510	37
	For use with SST	42.9	437	32

ENGINE WIRE HARNESS

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Ground cables set nut	5.0	51	44



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Title: SPECIFICATIONS: B58 ENGINE MECHANICAL: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

ENGINE

Ignition timing	Minimum standard compression pressure	900 kPa (9.2 kgf/cm ² , 131 psi)
	Maximum pressure difference between each cylinder	250 kPa (2.5 kgf/cm ² , 36 psi)

CRANKSHAFT

Crankshaft	Thrust clearance	Maximum	0.09 to 0.314 mm (0.0035 to 0.0124 in.)
	Coefficient of friction	Maximum	12 N*m (122 kgf*cm, 9 ft.*lbf)

PISTON

Piston	Diameter	Distance (A) to the lowerend of the piston skirt 14 mm (0.551 in.)	Standard	81.938 to 81.956 mm (3.226 to 3.227 in.)
		Distance (A) to the lowerend of the piston skirt 26 mm (1.02 in.)	Standard	81.870 to 81.884 mm (3.223 to 3.224 in.)
		Distance (A) to the lowerend of the piston skirt 49 mm (1.93 in.)	Standard	81.285 to 81.309 mm (3.200 to 3.201 in.)
Cylinder bore	Diameter	Distance from the upperedge of the cylinder barrelto the measuring point 0 to 60 mm (0 to 2.36 in.)	Standard	82.000 to 82.014 mm (3.228 to 3.229 in.)
		Distance from the upperedge of the cylinder barrelto the measuring point 60 to 80 mm (2.36 to 3.15in.)	Standard	82.008 to 82.022 mm (3.2287 to 3.2292 in.)
		Distance from the upperedge of the cylinder barrelto the measuring point 80 to 115 mm (3.15 to 4.53 in.)	Standard	82.021 to 82.037 mm (3.2292 to 3.2298 in.)
		Distance from the upperedge of the cylinder barrelto the measuring point 115 to 135 mm (4.53 to 5.31 in.)	Standard	82.033 to 82.057 mm (3.230 to 3.231 in.)

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: B58 ENGINE MECHANICAL: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

V-RIBBED BELT TENSIONER

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
V-ribbed belt tensioner assembly x Generator assembly	28	286	21

DEFLECTING ELEMENT

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Deflecting element x V-ribbed belt tensioner assembly	28	286	21

ENGINE MOUNTING

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
No. 1 front engine mounting bracket RH x Cylinder block sub-assembly		38	387	28	
No. 1 front engine mounting bracket LH x Cylinder block sub-assembly		38	387	28	
Front engine mounting insulator x Front suspension crossmember sub-assembly		19	194	14	
Front suspension crossmember sub-assembly x Front upper suspension arm assembly LH	1st	100	1020	74	
	2nd	Turn 90°			
Front suspension crossmember sub-assembly x Front upper suspension arm assembly RH	1st	100	1020	74	
	2nd	Turn 90°			
Coolant hose x Front suspension crossmember sub-assembly		11.8	120	9	
Floor wire x Front suspension crossmember sub-assembly		8.0	82		71
Front engine mounting insulator x No. 1 front engine mounting bracket		100	1020	74	

TIMING CHAIN

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 1 chain vibration damper x Cylinder block sub-assembly	20	204	15

CHAIN TENSIONER

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 1 chain tensioner assembly x Cylinder head sub-assembly	1st	20	204
	2nd	Turn 40°	

OIL PUMP DRIVE CHAIN

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Oil pump drive shaft sprocket x Oil pump assembly	1st	5.0	51
	2nd	Turn 90°	

CAMSHAFT

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Camshaft sensor wheel x Intake camshaft sub-assembly	4.5	46		40
Exhaust camshaft bearing cap x Cylinder head sub-assembly	9.6	98		85
Camshaft bearing cap x Cylinder head sub-assembly	9.6	98		85

CAMSHAFT (for No. 3)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Bearing cap x Intake camshaft sub-assembly	9.6	98	85

CYLINDER HEAD GASKET

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Cylinder head sub-assembly x Cylinder block sub-assembly	1st	30	306	22
	2nd	Turn 90°		

	3rd	Turn 180°		
Cylinder head sub-assembly x Timing gear case	19	194	14	
Camshaft sensor wheel x Intake camshaft sub-assembly	4.5	46		40
Bearing journal x Cylinder block sub-assembly	20	204	15	
Chain damper guide x Cylinder head sub-assembly	8.0	82		71
No. 2 water by-pass hose x Cylinder head sub-assembly	8.0	82		71
No. 4 engine cover x Cylinder head sub-assembly	8.0	82		71
Engine wire x Cylinder head sub-assembly	8.0	82		71
Transmission wire x Cylinder head sub-assembly	8.0	82		71
Inlet turbo oil pipe sub-assembly, No. 2 turbo water pipe sub-assembly x Turbocharger sub-assembly	8.0	82		71
No. 2 turbo water pipe sub-assembly x Cylinder block sub-assembly	8.0	82		71
No. 1 turbo water pipe sub-assembly x Cylinder block sub-assembly	8.0	82		71
Turbocharger stay x Cylinder block sub-assembly	19	194	14	
Turbocharger stay x Turbocharger sub-assembly	19	194	14	

CRANKSHAFT

PART TIGHTENED		N*M	KG*CM	FT.*LBF
Crankshaft bearing cap x Cylinder block sub-assembly	1st	25	255	18
	2nd	Turn 65°		
	3rd	Turn 65°		
No. 1 oil pan baffle plate x Cylinder block sub-assembly	1st	15	153	11

	2nd	Turn 45°	
Oil pan sub-assembly x Cylinder block sub-assembly, timing gear case	24	245	18
Turbocharger stay x Cylinder block sub-assembly	19	194	14
Turbocharger stay x Turbocharger sub-assembly	19	194	14

FRONT CRANKSHAFT OIL SEAL

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Crankshaft pulley assembly x Crankshaft	1st	40	408	30
	2nd	Turn 120°		

TIMING GEAR CASE

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
Crankshaft position sensor x Cylinder block sub-assembly		4.6	47	41
Timing gear case x Cylinder block sub-assembly	1st	8.0	82	71
	2nd	Turn 90°		

REAR CRANKSHAFT OIL SEAL

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Drive plate and ring gear sub-assembly x Crankshaft	1st	45	459	33
	2nd	Turn 40°		

OIL FILTER BRACKET

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Oil filter bracket x Cylinder block sub-assembly	1st	4.0	41		35
	2nd	10	102	7	

ENGINE ASSEMBLY

PART TIGHTENED		N*M	KG*CM	FT.*LBF	IN.*LBF
No. 1 front engine mounting bracket RH x Cylinder block sub-assembly		38	387	28	
No. 1 front engine mounting bracket LH x Front engine mounting insulator LH		100	1020	74	
No. 1 front engine mounting bracket RH x Front engine mounting insulator RH		100	1020	74	
Suction pipe sub-assembly x Compressor with magnet clutch		19	194	14	
Air conditioning tube assembly x Compressor with magnet clutch		19	194	14	
Generator wire x Generator assembly		19	194	14	
Oil cooler tube x Automatic transmission oil cooler tube clamp		5.0	51		44
Engine room ECM box x Vehicle body		8.0	82		71
Wire harness clamp bracket x Cylinder head cover sub-assembly		19	194	14	
Starter wire x Front power distribution box		19	194	14	
Generator wire x Front power distribution box		19	194	14	
No. 2 cowl top ventilator louver protector x Vehicle body		2.6	27		23
Cowl top ventilator louver protector x Vehicle body		2.6	27		23
Upper front suspension center brace x Vehicle body	1st	56	571	41	
	2nd	Turn 90°			

CYLINDER HEAD

PART TIGHTENED		N*M	KG*CM	FT.*LBF
Gate x Bearing cap		20.5	209	15
Servo motor x Cylinder head sub-assembly		10	102	7

ENGINE INSTALLATION POSITION

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 1 front engine mounting bracket LH x Front engine mounting insulator LH	100	1020	74
No. 1 front engine mounting bracket RH x Front engine mounting insulator RH	100	1020	74

PISTON

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Connecting rod bearing cap x Connecting rod	1st	20	204	15
	2nd	Turn 70°		
	3rd	Turn 70°		

ENGINE WIRE HARNESS (for No. 1)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Engine wire x Cylinder block sub-assembly	8.0	82	71

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Title: SPECIFICATIONS: B58 FUEL: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

FUEL INJECTOR

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
Fuel injector assembly x Fuel delivery pipe	1st	5	51	44
	2nd	Turn 90°		

FUEL TUBE (for Front)

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Fuel tube sub-assembly x Fuel delivery pipe	33	337	24

FUEL TUBE (for Rear)

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Fuel tube sub-assembly x Fuel delivery pipe	31	316	23	
Fuel tube sub-assembly clamp x Cylinder head cover sub-assembly	6.5	66		58

FUEL FILTER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Fuel filter assembly x Fuel filter assembly bracket	8.0	82	71

FUEL-FILLER PIPE

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Fuel filler pipe clamp	4.0	41	35
Fuel tank inlet pipe sub-assembly x Vehicle body	3.3	34	29

FUEL PRESSURE SENSOR

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
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Fuel pressure sensor x Fuel delivery pipe	30	306	22
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FUEL PUMP (for High Pressure)

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Fuel pump assembly x Cylinder head cover sub-assembly	12	122	9

FUEL PUMP ECU

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Fuel pump control ecu x Vehicle body	3.0	31	27

FUEL TANK

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Fuel tank sub-assembly x Vehicle body	19	194	14	
Fuel tank band sub-assembly x Vehicle body	19	194	14	
Fuel filler pipe clamp	4.0	41		35
Rear wheel house liner RH x Vehicle body	2.6	27		23



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: B58 INTAKE / EXHAUST: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

Air Cleaner Assembly

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Clamp x Air cleaner assembly	3.0	31	27

No. 2 Air Cleaner Hose

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 2 air cleaner hose x Throttle body with motor assembly	8.0	82	71
Nut x No. 2 Water Pump bracket sub-assembly	8.0	82	71

Inlet Compressor Elbow

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Compressor inlet elbow x Turbocharger sub-assembly	8.0	82	71

Intake Manifold

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Throttle body with motor assembly x Intake manifold	7.0	71		62
No. 3 fuel tank breather tube x Intake manifold	3.0	31		27
Vacuum sensor x Intake manifold	4.0	41		35
Intake manifold x Cylinder block sub-assembly	10	102	7	
Intake manifold x Intake manifold stay	8.0	82		71
Throttle body with motor assembly x holder	11.8	120	9	
Control unit holder x Vehicle body	8.0	82		71

Turbocharger

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Turbocharger sub-assembly x Cylinder block sub-assembly	18	184	13	
Turbocharger stay x Turbocharger sub-assembly	19	194	14	
No. 1 turbo water pipe sub-assembly x Cylinder block sub-assembly	8.0	82		71
Inlet turbo oil pipe sub-assembly x Cylinder block sub-assembly	8.0	82		71
No. 2 turbo water pipe sub-assembly x Cylinder block sub-assembly	8.0	82		71

Turbo Charger Actuator and Link

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Turbocharger actuator and link assembly x Compressor housing	2.0	20		18

Outlet Turbo Oil Pipe

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Outlet turbo oil pipe x Turbocharger sub-assembly	8.0	82	71
Outlet turbo oil pipe x Cylinder block sub-assembly	8.0	82	71

Exhaust Manifold Heat Insulator

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
No. 1 exhaust manifold heat Insulator x Cylinder block sub-assembly	19	194	14

Main Muffler Heat Insulator

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Main muffler heat Insulator x Vehicle body	2.6	27	23
Rear No. 2 floor heat Insulator sub-assembly x Screw	Nut	2.6	27
	Screw	2.0	20

Main muffler heat Insulator RH x Vehicle body	Nut	3.0	31	27
	Screw	2.6	27	23
Main muffler heat Insulator LH x Vehicle body	Nut	3.0	31	27
	Screw	2.6	27	23

Tail Exhaust Pipe Assembly

PART TIGHTENED	N*M	KG*CM	FT.*LBF	IN.*LBF
Exhaust tail pipe assembly x Vehicle body	19	194	14	
Rear No. 1 exhaust tail pipe clamps x Nut	45	459	33	

Exhaust Pipe

PART TIGHTENED		N*M	KG*CM	FT.*LBF	IN.*LBF
Exhaust pipe assembly x Vehicle body		19	194	14	
Exhaust pipe clamp (for V-band Clamp) x Nut		25	255	18	
Exhaust pipe clamp (for Ribbon Clamp) x Nut		26	265	19	
Rear floor cover LH x Vehicle body		3.0	31		27
Rear floor cover RH x Vehicle body		3.0	31		27
Rear floor panel brace x Vehicle body	E14 bolt	56	571	41	
	Bolt	28	286	21	
No. 2 floor under cover x Vehicle body	Screw	3.0	31		27
	Nut	2.6	27		23

Center Exhaust Pipe

PART TIGHTENED	N*M	KG*CM	FT.*LBF
Exhaust pipe assembly x Vehicle body	19	194	14

Exhaust pipe clamp (for Ribbon Clamp) x Nut	26	265	19
Exhaust pipe clamp (for V-band Clamp) x Nut	25	255	18
Rear No. 1 exhaust tail pipe clamps x Nut	45	459	33

Turbo Water Pipe (for Outlet Side)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 2 turbo water pipe sub-assembly x Turbocharger sub-assembly	8.0	82	71

Exhaust Pipe Gas Control Actuator Sub-Assembly

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Actuator with bracket assembly x Exhaust tail assembly	8.5	87	75



TOYOTA

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Title: SPECIFICATIONS: B58 LUBRICATION: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

Oil Pressure Sensor

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Oil pressure sensor x Cylinder block sub-assembly	15	153	11

Oil Level Sensor

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
Engine oil level sensor x Oil pan sub-assembly	1st	2.0	20	18
	2nd	8.0	82	71

Oil Pump

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Oil strainer sub-assembly x Oil pump assembly		8.0	82		71
Oil pump drive shaft gear x Oil pump assembly	1st	5.0	51		44
	2nd	Turn 90°			
Oil pump assembly x Cylinder block sub-assembly	1st	15	153	11	
	2nd	Turn 45°			

Engine Oil Cooler

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Oil cooler assembly x Oil filter bracket	10	102	7

Oil Pan

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
	1st	2.0	20		18

Engine oil level sensor x Oil pan sub-assembly				
	2nd	8.0	82	71
Oil pan sub-assembly x Automatic transmission assembly		19	194	14
Oil pan sub-assembly x Cylinder block sub-assembly, timing gear case		24	245	18

Oil Pressure Control Valve

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Oil pressure control valve assembly x Cylinder block sub-assembly	8.0	82	71

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: B58 STARTING: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

STARTER ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Starter assembly x Cylinder block sub-assembly	19	194	14
Starter wiring assembly x Starter assembly	13.5	138	10

STARTER WIRING ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
No. 2 front floor heat Insulator x Vehicle body	3.0	31		27
Starter wiring assembly x Starter assembly	13.5	138	10	
Starter wiring assembly x Battery terminal	19	194	14	

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

SERVICE DATA

Minimum brake disc thickness (Nominal dimension 330x24)	22.4 mm (0.882 in.)
Minimum brake disc thickness (Nominal dimension 348x36)	34.4 mm (1.35 in.)



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

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Front disc x Front axle hub sub-assembly	16	163	12
Front disc brake cylinder assembly x Steering knuckle	80	816	59
Front flexible hose x Front disc brake cylinder assembly	17	173	13



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: BRAKE (REAR): SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

Minimum brake disc thickness (nominal dimension 330x20)	18.4 mm (0.724 in.)
Minimum brake disc thickness (nominal dimension 345x24)	22.4 mm (0.882 in.)



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: BRAKE (REAR): TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Rear disc x Rear axle hub and bearing assembly		16	163	12
Rear flexible hose x Rear disc brake cylinder assembly	Specified tightening torque	22	224	16
	For use with a union nut wrench	19.1	195	14
Rear disc brake cylinder mounting x Rear axle carrier sub-assembly		110	1122	81
Rear disc brake cylinder assembly x Rear disc brake cylinder mounting		35	357	26

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

BRAKE ACTUATOR (for LHD)

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Brake actuator assembly x Body	8.0	82		71
Brake actuator assembly x Brake pipe	17	173	13	
Front skid control sensor wire x Steering knuckle	11.8	120	9	
Rear skid control sensor wire x Rear axle carrier sub-assembly	11.8	120	9	

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: BRAKE SYSTEM (OTHER): TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Brake pipe x Frexible hose	17	173	13	
Brake pipe x Squea end	17	173	13	
Brake pipe x Master cylinder body	17	173	13	
Brake pipe x Brake actuator assembly	17	173	13	
Sealing frame x body	2.8	29		25
Brake pedal support assembly x Brake booster assembly x Body	21.4	218		189
Master cylinder body x Brake booster assembly	21	214	15	
Brake master cylinder reservoir sub-assembly x Master cylinder body	4.0	41		35
Booster air valve x Cylinder block sub-assembly	8.0	82		71
Holder x Cylinder block sub-assembly	8.0	82		71
Upper holder x Holder	5.0	51		44



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Title: SPECIFICATIONS: CELLULAR COMMUNICATION: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

DCM(TELEMATICS TRANSCEIVER)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
DCM (telematics transceiver) x Body	8.0	82	71

TELEPHONE ANTENNA

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Emergency GSM aerial x Body	6.0	61	53

TELEPHONE AND GPS ANTENNA

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Multiple-band aerial x Body	3.0	31	27

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JJ7P
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: CRUISE CONTROL: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

MILLIMETER WAVE RADAR SENSOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Millimeter wave radar sensor x Lower side radiator grille RH	8.0	82	71



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: DOOR / HATCH: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Hood hinge x Hood		19	194	14	
Hood lock striker x Hood		8.0	82		71
Hood support bracket x Vehicle body		1.4	14		12
Hood lock assembly RH x Vehicle body		8.0	82		71
Front door hinge x Front door panel		19	194	14	
Front door lock striker plate assembly x Vehicle body		21	214	15	
Front door check assembly x Front door panel		8.0	82		71
Front door check assembly x Vehicle body		28	286	21	
Front door window regulator assembly x Front door panel		9.2	94		81
Front door window regulator assembly x Sound insulation		9.2	94		81
Sound insulation x Front door panel		8.0	82		71
Front door trim board sub-assembly x Front door inside handle	Replacing	2.3	23		20
Front door trim board sub-assembly x Front door panel		3.0	31		27
Front door glass sub-assembly x Front door window regulator assembly		9.0	92		80
Back door lock striker assembly x Vehicle body		19	194	14	
Back door panel x Vehicle body		28	286	21	
Back door trim board x Back door panel		2.8	29		25

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: DOOR LOCK: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Front door lock with motor assembly x Front door panel	8.8	90		78
Front door outside handle frame sub-assembly x Front door panel	3.0	31		27
Back door Lock assembly x Back door panel	19	194	14	

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: DRIVE SHAFT / PROPELLER SHAFT: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

Propeller Shaft Assembly

Propeller shaft spline sleeve (for Front Side)	Centering protrusion: 4 to 6 mm (0.1575 to 0.2362 in.)
Propeller shaft spline sleeve (for Rear Side)	Centering protrusion: 17.8 mm (0.701 in.)



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: DRIVE SHAFT / PROPELLER SHAFT: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

Rear Drive Shaft Assembly

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Rear drive shaft assembly x Wheel bearing	1st	210	2141	155
	2nd	Turn 90°		

Propeller Shaft Assembly

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Flexible coupling x Propeller shaft assembly with center bearing	1st	55	561	41	
	2nd	Turn 90°			
Flexible coupling x Three-hole frange	1st	55	561	41	
	2nd	Turn 90°			
Center mount x Body		21.4	218	16	
Front floor cover LH x Body		3.0	31		27
Front floor cover RH x Body		3.0	31	2	
Front No. 1 floor heat insulator x Body	Screw	2.6	27		23
	Nut	3.0	31		27
Insert nut		100	1020	74	



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Title: SPECIFICATIONS: EXTERIOR PANELS / TRIM: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

RM TITLE	PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
FRONT BUMPER	Front fender liner x Vehicle body		2.6	27		23
	Front bumper assembly x Vehicle body	Bolt	8.0	82		71
		Screw	3.0	31		27
	No. 1 engine under cover assembly x Vehicle body		3.0	31		27
	Front fender front splash shield x Vehicle body		2.6	27		23
	Front bumper inner support x front bumper upper retainer		4.0	41		35
	Front bumper upper retainer x Front crossmember		8.0	82		71
	Radiator upper air deflector x Vehicle body		19	194	14	
	Front crossmember x No. 1 cool air intake duct		19	194	14	
	Front crossmember x Radiator support		19	194	14	
	Front bumper reinforcement support x Front bumper reinforcement sub-assembly		19	194	14	
	Front bumper reinforcement sub-assembly x Vehicle body	T45 bolt	19	194	14	
		18 mm bolt	100	1020	74	
	Front bumper side support x Front bumper reinforcement		8.0	82		71
	Radiator brace rod sub-assembly x Front bumper reinforcement		19	194	14	
	Bottom cooler module mount x Vehicle body		8.0	82		71

	Front bumper reinforcement x Vehicle body		19	194	14	
	Front bumper retainer x Vehicle body		8.0	82		71
	Radiator support x Vehicle body		19	194	14	
	Lower front bumper reinforcement x Front bumper lower side support		19	194	14	
	Front bumper lower side support x Vehicle body	E10 bolt	19	194	14	
		E8 bolt	8	82	6	
REAR BUMPER	Rear bumper assembly x Vehicle body	Screw <A>	2.0	20		18
		Screw 	2.6	27		
	Rear registration plate x Rear bumper assembly		3.0	31		27
	Rear bumper side support sub-assembly x Vehicle body	Screw <A>	2.0	20		18
		Screw 	3.0	31		27
		Nut	8.0	82		71
	No. 1 rear bumper support x Vehicle body		8.0	82		71
	Bumper energy absorber x Vehicle body		3.0	31		27
	Rear bumper reinforcement sub-assembly x Vehicle body		108	1101		956
ROCKER PANEL MOULDING	No. 1 side panel moulding x Vehicle body		3.0	31		27
FRONT DOOR OUTSIDE MOULDING	Front door outside moulding sub-assembly x Front door		3.0	31		27

WINDSHIELD OUTSIDE MOULDING	Roof drip side finish moulding x Vehicle body		1.8	18		16
WHEEL OPENING MOULDING	Rear wheel house liner x Vehicle body	Screw	2.6	27		23
		Nut	2.6	27		23
	Quarter outside moulding x Vehicle body		3.0	31		27



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Title: SPECIFICATIONS: FRONT SUSPENSION: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

FRONT SHOCK ABSORBER

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Front fender splash front shield x Vehicle body		2.6	27		23
Front fender liner x Vehicle body		2.6	27		23
Front No. 2 fender liner x Vehicle body	Screw	2.6	27		23
	Nut	2.6	27		23
Front shock absorber assembly x Front stabilizer link assembly		56	571	41	
Front lower suspension arm assembly x Steering knuckle		175	1785	129	
Front upper suspension arm assembly x Steering knuckle		175	1785	129	
Front shock absorber with coil spring x Vehicle body	1st	28	286	21	
	2nd	Turn 90°			
Front shock absorber with coil spring x Steering knuckle	1st	56	571	41	
	2nd	Turn 90°			
Front support to front shock absorber nut x Front shock absorber assembly		71	724	52	

FRONT UPPER SUSPENSION ARM

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Front fender splash front shield x Vehicle body		2.6	27		23
Front upper suspension arm assembly x Front suspension crossmember sub-assembly	1st	100	1020	74	

	2nd	Turn 90°		
Front upper suspension arm assembly x Steering knuckle		175	1785	129

FRONT LOWER SUSPENSION ARM

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Front No. 2 fender liner x Vehicle body	Screw	2.6	27		23
	Nut	2.6	27		23
Front lower suspension arm assembly x Front suspension crossmember sub-assembly	1st	100	1020	74	
	2nd	Turn 90°			
Front lower suspension arm assembly x Steering knuckle		175	1785	129	

FRONT STABILIZER BAR

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Front shock absorber assembly x Front stabilizer link assembly	56	571	41
Front stabilizer bar x Front stabilizer link assembly	56	571	41
Front No. 1 stabilizer bracket x Front suspension crossmember sub-assembly	19	194	14

FRONT SUSPENSION MEMBER

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Front engine mounting insulator x No. 1 engine mounting bracket	100	1020	74	
Coolant hose holder x Front suspension crossmember sub-assembly	11.8	120	9	
Front stabilizer bar x Front stabilizer link assembly	56	571	41	
Wire harness mounting x Front suspension crossmember sub-assembly	8.0	82		71
Front lower suspension arm assembly x Front suspension crossmember sub-assembly	1st	100	1020	74
	2nd	Turn 90°		

Front upper suspension arm assembly x Front suspension crossmember sub-assembly		1st	100	1020	74	
		2nd	Turn 90°			
Front upper suspension arm assembly x Steering knuckle			175	1785	129	
Front suspension crossmember sub-assembly set bolt			19	194	14	
Front suspension crossmember sub-assembly x Vehicle body	Bolt (1)	1st	56	571	41	
		2nd	Turn 45°			
	Bolt (2), (3), (4)	1st	108	1101	80	
		2nd	Turn 45°			
Front engine mounting insulator x Front suspension crossmember sub-assembly			19	194	14	

FRONT SUSPENSION MEMBER LOWER PROTECTOR

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
No. 1 engine under cover assembly x Vehicle body		3.0	31		27
Front fender splash front shield x Vehicle body		2.6	27		23
Front center floor cover x Vehicle body		3.0	31		27
Front No. 2 fender liner x Vehicle body		3.0	31	2	
Front suspension member lower protector x Front suspension crossmember sub-assembly	1st	56.0	571	41	
	2nd	Turn 45°			



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: HEATING / AIR CONDITIONING: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

Refrigerant charge volume (for HFC-134a (R134a))	550 g (19.4 oz)
Refrigerant charge volume (for HFO-1234yf (R1234yf))	550 g (19.4 oz)



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: HEATING / AIR CONDITIONING: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

AIR CONDITIONING UNIT

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Lower radiator case sub-assembly x Air conditioning radiator assembly		1.2	12		11
Air conditioning radiator assembly x Lower radiator case sub-assembly		1.2	12		11
Blower housing x Lower radiator case sub-assembly		1.2	12		11
Heater radiator unit sub-assembly x Air conditioning unit assembly		1.2	12		11
Water pipe sub-assembly holder x Air conditioning unit assembly		1.2	12		11
No. 1 air conditioning radiator damper servo sub-assembly (M9) x Air conditioning unit assembly		1.2	12		11
Air conditioning unit assembly x Vehicle body		2.8	29		25
No. 1 air duct sub-assembly x Air conditioning unit assembly		2.8	29		25
Instrument panel reinforcement sub-assembly x Air conditioning unit assembly		4.0	41		35
Instrument panel reinforcement sub-assembly x Vehicle body	Bolt	21	214	15	
	Nut	21	214	15	
No. 1 instrument panel bracket x Instrument panel reinforcement sub-assembly		21	214	15	
No. 1 instrument panel bracket x Vehicle body		21	214	15	
No. 1 air conditioning radiator damper servo sub-assembly (M21b) x Air conditioning unit assembly		1.2	12		11
No. 1 air conditioning radiator damper servo sub-assembly (M16) x Air conditioning unit assembly		1.2	12		11

No. 1 air conditioning radiator damper servo sub-assembly (M61) x Air conditioning unit assembly	1.2	12		11
No. 1 air conditioning radiator damper servo sub-assembly (M7a) x Air conditioning unit assembly	1.2	12		11
No. 1 air conditioning radiator damper servo sub-assembly (M69) x Air conditioning unit assembly	1.2	12		11
No. 1 air conditioning radiator damper servo sub-assembly (M23a) x Air conditioning unit assembly	1.2	12		11
No. 1 air conditioning radiator damper servo sub-assembly (M83a) x Air conditioning unit assembly	1.2	12		11
No. 1 air duct x Instrument panel reinforcement sub-assembly	2.8	29		25
No. 2 air duct x Instrument panel reinforcement sub-assembly	2.8	29		25
Air conditioner tube assembly x Cooler expansion valve	13	133	10	
Air conditioner tube assembly x Air conditioning condenser	13	133	10	
Suction pipe sub-assembly x Air conditioner tube assembly	19	194	14	

FRONT BLOWER MOTOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Blower motor with fan sub-assembly x Air conditioning unit assembly	1.2	12	11

COOLER EXPANSION VALVE

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Cooler expansion valve x Air conditioning unit assembly	5.5	56	49

COMPRESSOR

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Compressor with pulley assembly x Engine	38	387	28
Discharge tube G x Compressor with pulley assembly	19	194	14

Suction pipe sub-assembly x Compressor with pulley assembly	19	194	14
Oil filler plug x Compressor with pulley assembly	30	306	22

CONDENSER

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Cooler condenser assembly x Vehicle body	8.0	82		71
Air conditioner tube assembly x Cooler condenser assembly	13	133	10	
Discharge tube G x Cooler condenser assembly	13	133	10	

AIR CONDITIONING PRESSURE SENSOR

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Air conditioner pressure sensor x Air conditioner tube assembly	10	102	7

AIR CONDITIONING PANEL

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Air conditioning control assembly x Instrument panel finish lower panel	1.8	18	16



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Title: SPECIFICATIONS: HORN: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

RM TITLE	PART TIGHTENED	N*M	KGF*CM	FT.*LBF
HORN	High pitched horn assembly x Front bumper reinforcement	11.8	120	9



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Title: SPECIFICATIONS: INTERIOR PANELS / TRIM: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

INSTRUMENT PANEL SAFETY PAD

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Instrument panel safety pad assembly x Instrument panel reinforcement sub-assembly	1.8	18	16
Front pillar garnish LH x Body	2.5	25	22
Front pillar garnish RH x Body	2.5	25	22
No. 2 instrument panel register assembly x Instrument panel safety pad assembly	2.3	23	20
No. 1 instrument panel register assembly x Instrument panel safety pad assembly	2.3	23	20
Glove compartment door assembly x Instrument panel safety pad assembly	1.8	18	16
No. 1 instrument panel garnish sub-assembly x Instrument panel safety pad assembly	1.8	18	16
Cowl side trim sub-assembly LH x Body (for LHD)	2.0	20	18
Cowl side trim board RH x Body (for RHD)	2.0	20	18
Instrument lower panel x Instrument panel safety pad assembly	3.0	31	27

FRONT CONSOLE BOX

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Console box assembly x Body (Bolt)	4.6	47	41
Console box assembly x Body (T20 screw)	1.8	18	16
Instrument panel finish lower panel x Instrument panel safety pad assembly	1.8	18	16
Console panel x Console panel retainer	2.3	23	20

Console box assembly x Console panel retainer	2.3	23	20
Front console armrest assembly x Console box assembly	2.3	23	20
Console box cup holder x Front console armrest assembly	2.3	23	20
No. 1 box panel x Upper console panel sub-assembly	3.0	31	27

ROOF HEADLINING

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Roof headlining assembly x Body	8.0	82	71
Roof headlining support x Roof headlining assembly	3.0	31	27

COMBINATION SWITCH (for Console Box)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Pattern select switch assembly x Upper console panel sub-assembly	1.5	15	13



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: LIGHTING (EXT): TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

RM TITLE	PART TIGHTENED		N*M	KGF*CM	IN.*LBF
HEADLIGHT ASSEMBLY	Headlight assembly x Vehicle body	Bolt <A>	8.0	82	71
		Bolt 	5.0	51	44
	Headlight LED unit assembly x Headlight assembly		1.5	15	13
REAR COMBINATION LIGHT ASSEMBLY	Rear combination light assembly x Vehicle body		4.0	41	35
REAR LIGHT ASSEMBLY	Back-up light assembly x Rear bumper assembly		2.0	20	18
HEADLIGHT DIMMER SWITCH	Turn signal switch assembly x Steering column assembly		3.0	31	27
HEIGHT CONTROL SENSOR	Front height control sensor sub-assembly x Vehicle body		5.0	51	44
	Rear height control sensor sub-assembly x Vehicle body		5.0	51	44
HEADLIGHT ECU	Light control LED ECU x Headlight assembly		1.5	15	13

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Title: SPECIFICATIONS: MAINTENANCE: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

ITEM	CAPACITY
B58 Coolant (for Low Temperature)	4.0 liters (4.2 US qts, 3.5 Imp. qts)
B58 Coolant (for High Temperature)	10.5 liters (11.1 US qts, 9.2 Imp. qts)
B58 Engine Oil (Drain and refill with oil filter change)	6.5 liters (6.9 US qts, 5.7 Imp. qts)
Automatic Transmission Fluid	9.1 liters (9.6 US qts, 8.0 Imp. qts)
Differential Oil	1.0 liters (1.1 US qts, 0.9 Imp. qts)



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Title: SPECIFICATIONS: MAINTENANCE: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

B58 Spark Plug

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Spark plug x Cylinder head sub-assembly	23	235	17

B58 Coolant (for Low Temperature)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Radiator lower air guide plate x Radiator assembly	6.0	61	53

B58 Air Cleaner Filter Element

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Air cleaner cap sub-assembly x Clamp	3.0	31	27

B58 Oil and Oil Filter

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Oil pan drain plug x Oil pan sub-assembly	25	255	18
Oil filter cap assembly x Oil filter bracket	25	255	18

8HP51 Automatic Transmission Fluid

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Oil filler plug x Automatic transmission assembly	35	357	26

Differential Oil

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Oil filler plug x Rear differential carrier assembly	60	612	44

Tire and Wheel

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Brake disc mounting bolt	16	163	12
Axle hub bolt	140	1428	103

Brake Fluid

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Rear disc brake bleeder plug	18	184	13
Front disc brake bleeder plug	18	184	13

Brake Vacuum Hose

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Sealing frame x Body	2.8	29	25

Front Brake Flexible Hose

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Front flexible hose x Front disc brake cylinder assembly	17	173	13
Front flexible hose x Brake tube	17	173	13

Rear Disc Brake Pad

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Rear disc brake cylinder assembly x Rear disc brake cylinder mounting	35	357	26

Rear Brake Flexible Hose

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Rear flexible hose x Rear disc brake cylinder assembly	Specified tightening torque	22	224	16
	For use with a union nut wrench	19.1	195	14
Rear flexible hose x Brake tube		17	173	13

B58 Battery

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Battery holder x Body	10	102	7	
Bracket x Body	8.0	82		71
Safety battery terminal x Positive (+) battery terminal	5.0	51		44
No. 3 earth wire x Negative (-) battery terminal	5.0	51		44

Air Conditioning Filter

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Cover x Blower housing	2.8	29	25

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: METER / GAUGE / DISPLAY: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

COMBINATION METER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Combination meter assembly x Instrument panel safety pad assembly	1.5	15	13

HEADUP DISPLAY

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Meter mirror sub-assembly x Instrument panel reinforcement sub-assembly	8.0	82	71



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: MIRROR (EXT): TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Outer mirror visor x Outer rear view mirror assembly	1.2	12	11
No. 2 outer mirror cover x Outer rear view mirror assembly	1.2	12	11
Side turn signal light assembly x Outer rear view mirror assembly	1.2	12	11
Outer rear view mirror assembly x Front door panel	6.0	61	53

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Title: SPECIFICATIONS: NAVIGATION / MULTI INFO DISPLAY: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

NAVIGATION RECEIVER

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Radio receiver assembly x Instrument panel reinforcement sub-assembly	2.3	23	20

GPS ANTENNA

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Multiple-band aerial x Tailgate	3.0	31	27



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: PARKING BRAKE: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Parking brake actuator assembly x Rear disc brake cylinder assembly x Holder	9.5	97	7
Electric parking brake switch assembly x Upper console panel sub-assembly	1.5	15	1



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: POWER DISTRIBUTION: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

FUSE BOX

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Rear power distribution box x Positive battery cable	15	153	11



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: POWER OUTLETS (INT): TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

REAR POWER OUTLET SOCKET

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Deck trim side board and Deck side trim cover RH x No. 2 power outlet socket assembly	3.0	31	27

USB-HUB

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
USB hub x Instrument panel reinforcement sub-assembly	6.0	61	53

LTE LINE COMPENSATOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
LTE compensator x Body	3.0	31	27

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: REAR SUSPENSION: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

REAR STRUT BAR

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Transverse pipe x Vehicle body	20	204	15

REAR SHOCK ABSORBER

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Rear suspension arm cover x Rear No. 2 suspension arm assembly		6.0	61		53
Rear shock absorber assembly x Rear No. 2 suspension arm assembly	1st	100	1020	74	
	2nd	Turn 90°			
Rear shock absorber assembly x Vehicle body		28	286	21	
Rear support to rear shock absorber nut	Specified tightening torque	41	418	30	
	For use with SST	23.4	239	17	

REAR UPPER ARM

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Rear upper control arm assembly x Rear axle carrier sub-assembly	1st	165	1683	122
	2nd	Turn 90°		
Rear upper control arm assembly x Rear suspension member sub-assembly	1st	100	1020	74
	2nd	Turn 90°		
Rear No. 2 upper control arm assembly x Rear axle carrier sub-assembly	1st	100	1020	74

	2nd	Turn 90°		
Rear No. 2 upper control arm assembly x Rear suspension member sub-assembly	1st	100	1020	74
	2nd	Turn 90°		
Rear No. 1 stabilizer bar bracket x Rear suspension member sub-assembly		21.4	218	16

REAR LOWER ARM (for No. 1 Arm)

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Rear No. 1 suspension arm assembly x Rear suspension member sub-assembly	1st	100	1020	74
	2nd	Turn 90°		
Rear No. 1 suspension arm assembly x Rear axle carrier sub-assembly	1st	100	1020	74
	2nd	Turn 90°		

REAR LOWER ARM (for No. 2 Arm)

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Rear No. 2 suspension arm assembly x Rear suspension member sub-assembly		175	1785	129	
Rear No. 2 suspension arm assembly x Rear axle carrier sub-assembly	1st	165	1683	122	
	2nd	Turn 90°			
Rear No. 2 suspension arm assembly x Rear shock absorber assembly	1st	100	1020	74	
	2nd	Turn 90°			
Rear height control sensor sub-assembly set nut		5.0	51		44

TOE CONTROL LINK

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Toe control link sub-assembly x Rear axle carrier sub-assembly	1st	100	1020	74
	2nd	Turn 90°		

Toe control link sub-assembly x Rear suspension member sub-assembly	Specified tightening torque	108	1101	80
	For use with a union nut wrench	100	1020	74

REAR STABILIZER BAR

PART TIGHTENED	N*M	KG*CM	FT.*LBF
Rear stabilizer link assembly x Rear stabilizer bar	56	571	41
Rear stabilizer link assembly x Rear axle carrier sub-assembly	56	571	41
Rear No. 1 stabilizer bar bracket x Rear suspension member sub-assembly	21.4	218	16

REAR SUSPENSION MEMBER

PART TIGHTENED			N*M	KG*CM	FT.*LBF	IN.*LBF	
Rear No. 2 suspension arm assembly x Rear shock absorber assembly		1st	100	1020	74		
		2nd	Turn 90°				
Rear differential protector set bolt			4.5	46		40	
Ground wire set bolt			8.0	82		71	
Rear suspension member rear lower brace x Vehicle body		Bolt (1)		108	1101	80	
		Bolt (2)	1st	47	479	35	
			2nd	Turn 45°			
Rear lower suspension member stopper x Vehicle body		Bolt (1)	1st	47	479	35	
			2nd	Turn 45°			
		Bolt (2)		108	1101	80	

REAR SUSPENSION MEMBER BODY MOUNTING CUSHION

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PART TIGHTENED			N*M	KG*CM	FT.*LBF	IN.*LBF
Rear differential protector set bolt			4.5	46		40
Ground wire set bolt			8.0	82		71
Rear suspension member rear lower brace x Vehicle body	Bolt (1)		108	1101	80	
	Bolt (2)	1st	47	479	35	
		2nd	Turn 45°			
Rear lower suspension member stopper x Vehicle body	Bolt (1)	1st	47	479	35	
		2nd	Turn 45°			
	Bolt (2)		108	1101	80	

REAR SUSPENSION MEMBER DAMPER

PART TIGHTENED			N*M	KG*CM	FT.*LBF
Rear suspension member damper x Rear suspension member sub-assembly			28	286	21
Vibration absorber x Rear suspension member sub-assembly	Specified tightening torque	1st	56	571	41
		2nd	Turn 90°		
	For use with a union nut wrench and SST	1st	28	286	21
		2nd	Turn 90°		



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: SEAT: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

FRONT SEAT ASSEMBLY (for Manual Seat)

PART TIGHTENED		N*M	KGf*CM	FT.*LBF	IN.*LBF
Front seat assembly x Body		42	428	31	
Separate type front seatback spring assembly x Front seat adjuster assembly		44	449	32	
Front seat airbag assembly x Separate type front seatback spring assembly		6.5	66		58
Front seat cushion shield x Front seat adjuster assembly		1.5	15	1	
Seat lifter lever sub-assembly x Front seat adjuster assembly		19.5	199	14	
Vertical adjusting handle x Front seat adjuster assembly		19.5	199	14	
Seat position sensor x Front seat adjuster assembly	w/ Seat Position Airbag Sensor	1.3	13		12
Separate type front seat cushion cover with pad x Front seat adjuster assembly	w/ Occupant Detection ECU	7.5	76		66

FRONT SEAT ASSEMBLY (for Power Seat)

PART TIGHTENED		N*M	KGf*CM	FT.*LBF	IN.*LBF
Front seat assembly x Body		42	428	31	
Separate type front seatback spring assembly x Front seat adjuster assembly		44	449	32	
Front seat airbag assembly x Separate type front seatback spring assembly		6.5	66		58
Seat position sensor x Front seat adjuster assembly	w/ Seat Position Airbag Sensor	1.3	13		12
Separate type front seat cushion cover with pad x Front seat adjuster assembly	w/ Occupant Detection ECU	7.5	76		66

BACK SIDE SUPPORT ADJUSTER ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Seatback side support adjuster assembly x Separate type front seatback spring assembly	1.7	17	15

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: SEAT BELT: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

FRONT SEAT INNER BELT ASSEMBLY

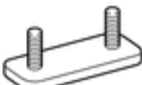
PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Front seat inner belt assembly x Front seat aseembly	42	428	31

FRONT SEAT OUTER BELT ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Front seat outer belt assembly x Body	42	428	31	
Quarter trim upper panel x Body	2.0	20		18

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: STANDARD BOLT: HOW TO DETERMINE BOLT STRENGTH; 2020 MY Supra [03/2019 -]		

HOW TO DETERMINE BOLT STRENGTH

Bolt Type					
Hexagon Head Bolt			Stud Bolt	Weld Bolt	Class
Normal Recess Bolt		Deep Recess Bolt			
	No Mark 	No Mark 	No Mark 		4T
			-	-	5T
	w/ Washer 	w/ Washer 		-	6T
			-	-	7T
				-	8T
			-	-	9T
			-	-	10T
			-	-	11T

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: STANDARD BOLT: SPECIFIED TORQUE FOR STANDARD BOLTS; 2020 MY Supra [03/2019 -]		

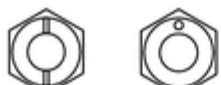
SPECIFIED TORQUE FOR STANDARD BOLTS

CLASS	DIAMETER (MM)	PITCH (MM)	SPECIFIED TORQUE					
			HEXAGON HEAD BOLT			HEXAGON FLANGE BOLT		
			N*M	KGf*CM	FT.*LBF	N*M	KGf*CM	FT.*LBF
4T	6	1	5	55	48 in.*lbf	6	60	52 in.*lbf
	8	1.25	12.5	130	9	14	145	10
	10	1.25	26	260	19	29	290	21
	12	1.25	47	480	35	53	540	39
	14	1.5	74	760	55	84	850	61
	16	1.5	115	1150	83	-	-	-
5T	6	1	6.5	65	56 in.*lbf	7.5	75	65 in.*lbf
	8	1.25	15.5	160	12	17.5	175	13
	10	1.25	32	330	24	36	360	26
	12	1.25	59	600	43	65	670	48
	14	1.5	91	930	67	100	1050	76
	16	1.5	140	1400	101	-	-	-
6T	6	1	8	80	69 in.*lbf	9	90	78 in.*lbf
	8	1.25	19	195	14	21	210	15
	10	1.25	39	400	29	44	440	32
	12	1.25	71	730	53	80	810	59
	14	1.5	110	1100	80	125	1250	90
	16	1.5	170	1750	127	-	-	-
7T	6	1	10.5	110	8	12	120	9
	8	1.25	25	260	19	28	290	21
	10	1.25	52	530	38	58	590	43
	12	1.25	95	970	70	105	1050	76
	14	1.5	145	1500	108	165	1700	123
	16	1.5	230	2300	166	-	-	-
8T	8	1.25	29	300	22	33	330	24
	10	1.25	61	620	45	68	690	50
	12	1.25	110	1100	80	120	1250	90
9T	8	1.25	34	340	25	37	380	27
	10	1.25	70	710	51	78	790	57

	12	1.25	125	1300	94	140	1450	105
10T	8	1.25	38	390	28	42	430	31
	10	1.25	78	800	58	88	890	64
	12	1.25	140	1450	105	155	1600	116
11T	8	1.25	42	430	31	47	480	35
	10	1.25	87	890	64	97	990	72
	12	1.25	155	1600	116	175	1800	130

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: STANDARD BOLT: HOW TO DETERMINE NUT STRENGTH; 2020 MY Supra [03/2019 -]		

HOW TO DETERMINE NUT STRENGTH

Nut Type			
Present Standard Hexagon Nut	Old Standard Hexagon Nut		Class
	Cold Forging Nut	Cutting Processed Nut	
No Mark 	-	-	4N
No Mark (w/ Washer) 	No Mark (w/ Washer) 	No Mark 	5N (4T)
	-	-	6N
-			7N (5T)
	-	-	8N
		No Mark 	10N (7T)
	-	-	11N
	-	-	12N

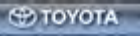
HINT:

- *: Nut with 1 or more marks on one side surface of the nut.
- Use a nut with the same nut strength classification number (or more) as the bolt strength classification number when

tightening parts with a bolt and nut.

Example:

- Bolt = 4T
- Nut = 4N or more



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: STEERING COLUMN: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

STEERING COLUMN ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Steering column assembly x Instrument panel reinforcement assembly	28	286	21

STEERING COLUMN HOLE COVER

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
No. 1 steering column hole cover sub-assembly x Vehicle body	8.0	82		71
Steering intermediate shaft assembly x Steering column assembly	28	286	21	

STEERING INTERMEDIATE SHAFT

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Steering intermediate shaft assembly x Steering column assembly	28	286	21
Steering intermediate shaft assembly x Steering gear assembly	28	286	21

STEERING WHEEL

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Steering wheel assembly x Steering column assembly	62.5	637	46	
Steering wheel motor x Steering wheel assembly	4.0	41		35
Cable set screw	4.0	41		35

STEERING PAD SWITCH

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Steering pad switch assembly x Steering wheel assembly	4.0	41	35



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: STEERING GEAR / LINKAGE: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

STEERING GEAR

PART TIGHTENED		N*M	KG*CM	FT.*LBF
Tie rod end sub-assembly x Steering knuckle		165	1683	122
Steering intermediate shaft assembly x Steering gear assembly		28	286	21
Steering link assembly x Front suspension crossmember sub-assembly	1st	100	1020	74
	2nd	Turn 90°		

TIE ROD

PART TIGHTENED		N*M	KG*CM	FT.*LBF
Tie rod assembly x Steering shaft		105	1071	77
Tie rod end sub-assembly x Tie rod assembly		32	326	24
Tie rod end sub-assembly x Steering knuckle		165	1683	122

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: SUPPLEMENTAL RESTRAINT SYSTEMS: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

KNEE AIRBAG ASSEMBLY (for Driver Side)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Lower No. 1 instrument panel airbag assembly x Instrument panel reinforcement assembly	8.0	82	71

KNEE AIRBAG ASSEMBLY (for Front Passenger Side)

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Lower No. 2 instrument panel airbag assembly x Instrument panel reinforcement assembly	8.0	82	71

FRONT PASSENGER AIRBAG ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Instrument panel passenger without door airbag assembly x Instrument panel safety pad assembly	2.3	23	20

CURTAIN SHIELD AIRBAG ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Curtain shield airbag assembly x Body	8.0	82	71

FRONT SEAT SIDE AIRBAG ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Front seat airbag assembly x Separate type front seatback spring assembly	6.5	66	58

CENTER AIRBAG SENSOR ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Airbag ECU assembly x Body	8.0	82	71

FRONT AIRBAG SENSOR

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PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Airbag sensor x Body	8.0	82	71

REAR AIRBAG SENSOR

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Airbag sensor x Body	8.0	82	71

SEAT POSITION SENSOR

PART TIGHTENED		N*M	KGF*CM	IN.*LBF
Seat position airbag sensor x Front seat adjuster assembly	for Manual Seat	1.3	13	12
Seat position airbag sensor x Front seat adjuster assembly	for Power Seat	1.3	13	12

Last Modified: 09-05-2019	6.9:8.0.49	Doc ID: RM100000001JC6G
Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: SUSPENSION CONTROL: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

Suspension Control ECU

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Absorber Control ECU x Vehicle body	2.6	27	23

Front Acceleration Sensor

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Acceleration sensor assembly x Front shock absorber assembly	8.0	82	71



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: THEFT DETERRENT / KEYLESS ENTRY: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

ENGINE HOOD COURTESY SWITCH

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Engine hood courtesy switch (Hood lock assembly) x Body	8.0	82	71

SECURITY HORN ASSEMBLY

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Theft warning siren assembly x Rear bumper side support sub-assembly LH	6.0	61	53
Rear bumper side support sub-assembly LH x Vehicle body	Screw <A>	2.0	20
	Screw 	3.0	31
	Nut	8.0	82

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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: TIRE / WHEEL: SERVICE DATA; 2020 MY Supra [03/2019 -]		

SERVICE DATA

Maximum tire runout	Vertical	1.1 mm (0.0433 in.) or less
	Lateral	1.3 mm (0.0512 in.) or less
Maximum wheel imbalance		4.0 g (0.0088 lb)



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: TIRE PRESSURE MONITORING: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KG*CM	IN.*LBF
Tire pressure warning valve and transmitter set nut	8.0	82	71



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: WINDOW / GLASS: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Power window regulator motor assembly x Front door window regulator assembly	4.0	41	35
Trap circuit x Vehicle body	3.0	31	27



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Model Year Start: 2020	Model: Supra	Prod Date Range: [03/2019 -]
Title: SPECIFICATIONS: WIPER / WASHER: TORQUE SPECIFICATIONS; 2020 MY Supra [03/2019 -]		

TORQUE SPECIFICATIONS

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Front wiper motor and link assembly x Vehicle body	11.8	120	9	
Front wiper arm and blade assembly x Wiper link assembly	35	357	26	
Turn signal switch assembly x Steering column assembly	3.0	31		27
Windshield washer jar assembly x Vehicle body	8.0	82		71