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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°		

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
	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	KGF*CM	FT.*LBF
Crankshaft bearing cap x Cylinder block sub-assembly	1st	25	255	18
	2nd	Turn 65°		
	3rd	Turn 65°		

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

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
	2nd	10	102	7	

ENGINE ASSEMBLY

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 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	KGF*CM	FT.*LBF

PART TIGHTENED	N*M	KGF*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
	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

