

Engine

Model	2.4 L 4-cylinder (T24A-FTS)
Type	4-cylinder in line, 4-cycle, gasoline (with turbocharger)
Bore and stroke	3.44 × 3.91 in. (87.5 × 99.5 mm)
Displacement	146.0 cu. in. (2393 cm ³)
Valve clearance	Automatic adjustment
Drive belt tension	Automatic adjustment

Fuel

Fuel type	Unleaded gasoline only
Octane rating	91 (Research Octane Number 96) or higher
Fuel tank capacity (Reference)	17.9 gal. (68 L, 14.9 Imp.gal.)

Electric motor (traction motor)

Type	Permanent magnet synchronous motor
Maximum output	36 kW
Maximum torque	184 ft•lbf (250 N•m, 25.5 kgf•m)

Hybrid battery (traction battery)

Type	Nickel-metal hydride battery
Voltage	7.2 V/module
Capacity	6.5 Ah
Quantity	40 modules
Nominal voltage	288 V

Lubrication system

■ Oil capacity (Drain and refill [Reference*])

With filter	5.9 qt. (5.6 L, 4.9 Imp.qt.)
Without filter	5.6 qt. (5.3 L, 4.7 Imp.qt.)

*: The engine oil capacity is a reference quantity to be used when changing the engine oil. When actually adding the engine oil, make sure that the oil level is between the low level mark and refill upper limit mark (→P.546). Warm up the engine and turn off the hybrid system, wait about 5 minutes, and check the oil level on the dipstick.

■ Engine oil selection

"Toyota Genuine Motor Oil" is used in your Toyota vehicle. Use Toyota approved "Toyota Genuine Motor Oil" or equivalent to satisfy the following grade and viscosity.

Oil grade:

ILSAC GF-6A multigrade engine oil

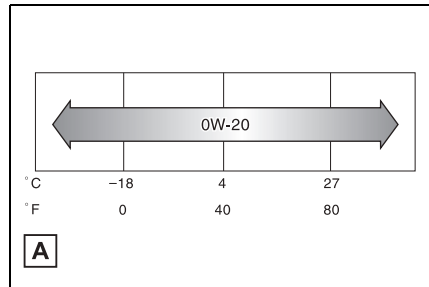
Recommended viscosity:

SAE 0W-20

SAE 0W-20 is the best choice for good fuel economy and good starting in cold weather.

If SAE 0W-20 is not available, SAE 5W-20 oil may be used. However, it must be replaced with SAE 0W-20 at the next oil

change.



A Outside temperature

Oil viscosity (0W-20 is explained here as an example):

- The 0W in 0W-20 indicates the characteristic of the oil which allows cold startability. Oils with a lower value before the W allow for easier starting of the engine in cold weather.
- The 20 in 0W-20 indicates the viscosity characteristic of the oil when the oil is at high temperature. An oil with a higher viscosity (one with a higher value) may be better suited if the vehicle is operated at high speeds, or under extreme load conditions.

How to read oil container label:

The International Lubricant Specification Advisory Committee (ILSAC) Certification Mark is added to some oil containers to help you select the oil you should use.



Cooling system

Capacity*1	Gasoline engine	12.2 qt. (11.5 L, 10.1 Imp.qt.)*2 14.3 qt. (13.5 L, 11.9 Imp.qt.)*3
	Power control unit	2.5 qt. (2.4 L, 2.1 Imp.qt.)
Coolant type		Use either of the following: <ul style="list-style-type: none">• “Toyota Super Long Life Coolant”• Similar high-quality ethylene glycol-based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology Do not use plain water alone.

*1: The coolant capacity is the quantity of reference. If replacement is necessary, contact your Toyota dealer.

*2: Vehicles without rear air conditioning system

*3: Vehicles with rear air conditioning system

Ignition system

■ Spark plug

Make	NGK DILZKAR8E7H
Gap	0.028 in. (0.7 mm)

NOTICE

Iridium-tipped spark plugs

Use only iridium-tipped spark plugs. Do not adjust gap when tuning engine.

Electrical system (12-volt battery)

Open voltage at 68°F (20°C):	12.0 V or higher (Turn the power switch to OFF and turn on the high beam headlights for 30 seconds.)
Charging rates:	5 A max.

Differential

Oil capacity	Front	1.29 qt. (1.22 L, 1.07 Imp.qt.)
	Rear	5.94 qt. (5.62 L, 4.94 Imp.qt.)
Oil type and viscosity		Toyota Genuine Differential Gear Oil LT 75W-85 GL-5 or equivalent

Your Toyota vehicle is filled with “Toyota Genuine Differential Gear Oil” at the factory.

Use Toyota approved “Toyota Genuine Differential Gear Oil” or an equivalent of matching quality to satisfy the above specification. Please contact your Toyota dealer for further details.

Automatic transmission

Fluid capacity (Reference)	13.2 qt. (12.5 L, 11.0 Imp.qt.)
Fluid type	Toyota Genuine ATF WS

The fluid capacity is the quantity of reference. If replacement is necessary, contact your Toyota dealer.



NOTICE

Automatic transmission fluid type

Using transmission fluid other than the above type may cause abnormal noise or vibration, or damage the transmission of your vehicle.

Transfer

Oil capacity	1.48 qt. (1.40 L, 1.23 Imp.qt.)
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Oil type*	Toyota Genuine Transfer Gear oil LF or equivalent
Recommended oil viscosity	SAE 75W

*: Your Toyota vehicle is filled with “Toyota Genuine Transfer Gear oil LF” at the factory. Use Toyota approved “Toyota Genuine Transfer Gear oil LF” or an equivalent of matching quality to satisfy the above specification. Please contact your Toyota dealer for further details.

Brakes

Pedal clearance*	5.03 in. (128 mm)
Pedal free play	0.04 — 0.24 in. (1 — 6 mm)
Brake pad wear limit	0.04 in. (1 mm)
Fluid type	SAE J1703 or FMVSS No. 116 DOT 3 SAE J1704 or FMVSS No. 116 DOT 4

*: Minimum pedal clearance when depressed with a force of 67 lbf (300 N, 31 kgf) while the hybrid system is operating.

Chassis lubrication (propeller shafts)

► Front

Spider	Lithium base chassis grease, NLGI No.2
Slide yoke	Molybdenum-disulfide lithium base chassis grease, NLGI No.2 or lithium base chassis grease, NLGI No.2

► Rear

Spider	Lithium base chassis grease, NLGI No.2
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Steering

Free play	Less than 1.18 in. (30 mm)
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Tires and wheels

► 20-inch tires

Tire size	265/60R20 112H
Tire inflation pressure (Recommended cold tire inflation pressure)	Front: 33 psi (230 kPa, 2.3 kgf/cm ² or bar) Rear: 33 psi (230 kPa, 2.3 kgf/cm ² or bar) Spare: 33 psi (230 kPa, 2.3 kgf/cm ² or bar)
Wheel size	20 × 7 1/2J
Wheel nut torque	97 ft•lbf (131 N•m, 13.4 kgf•m)

► 18-inch tires (type A)

Tire size	245/70R18 110H
Tire inflation pressure (Recommended cold tire inflation pressure)	Front: 33 psi (230 kPa, 2.3 kgf/cm ² or bar) Rear: 33 psi (230 kPa, 2.3 kgf/cm ² or bar) Spare: 33 psi (230 kPa, 2.3 kgf/cm ² or bar)
Wheel size	18 × 7 J
Wheel nut torque	97 ft•lbf (131 N•m, 13.4 kgf•m)

► 18-inch tires (type B)

Tire size	265/70R18 116S
Tire inflation pressure (Recommended cold tire inflation pressure)	Front: 33 psi (230 kPa, 2.3 kgf/cm ² or bar) Rear: 33 psi (230 kPa, 2.3 kgf/cm ² or bar) Spare: 33 psi (230 kPa, 2.3 kgf/cm ² or bar)
Wheel size	18 × 7 1/2J
Wheel nut torque	97 ft•lbf (131 N•m, 13.4 kgf•m)