If you perform maintenance yourself, be sure to follow the correct procedure given in these sections.

Items	Parts and tools
12 volt battery condition (→P. 428)	• Grease • Conventional wrench (for terminal clamp bolts)
Engine/power control unit coolant level (→P. 422)	• "Toyota Super Long Life Coolant" or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite and non-borate coolant with long-life hybrid organic acid technology. For the U.S.A.: "Toyota Super Long Life Coolant" is pre-mixed with 50 % coolant and 50 % deionized water. For Canada: "Toyota Super Long Life Coolant" is pre-mixed with 55 % coolant and 45 % deionized water. • Funnel (used only for adding coolant)

Items	Parts and tools
Brake fluid level (→P. 424)	• FMVSS No.116 DOT 3 or SAE J1703 brake fluid • Rag or paper towel • Funnel (used only for adding brake fluid)
Engine oil level (→P. 418)	• “Toyota Genuine Motor Oil” or equivalent • Rag or paper towel • Funnel (used only for adding engine oil)
Fuses (→P. 454)	• Fuse with same amperage rating as original
Radiator and condenser (→P. 424)	—
Tire inflation pressure (→P. 443)	• Tire pressure gauge • Compressed air source
Washer fluid (→P. 426)	• Water or washer fluid containing antifreeze (for winter use) • Funnel (used only for adding washer fluid)

CAUTION

The engine compartment contains many mechanisms and fluids that may move suddenly, become hot, or become electrically energized. To avoid death or serious injury observe the following precautions.

When working on the engine compartment

- Keep hands, clothing, and tools away from the moving fan.
- Be careful not to touch the engine, power control unit, radiator, exhaust manifold, etc. right after driving as they may be hot. Oil and other fluids may also be hot.
- Do not leave anything that may burn easily, such as paper or rags, in the engine compartment.
- Do not smoke, cause sparks or expose an open flame to fuel. Fuel fumes are flammable.
- Never touch, disassemble, remove or replace the high voltage parts, cables and their connectors. It can cause severe burns or electric shock that may result in death or serious injury.
- When the hybrid system is operating with the “READY” indicator on, the engine may suddenly start in some cases. When you inspect the engine compartment, be sure to turn off the hybrid system.

When working near the electric cooling fan or radiator grille

Be sure the “POWER” switch is OFF.
With the “POWER” switch in ON mode, the electric cooling fan may automatically start to run if the air conditioning is on and/or the coolant temperature is high. (→P. 424)

Safety glasses

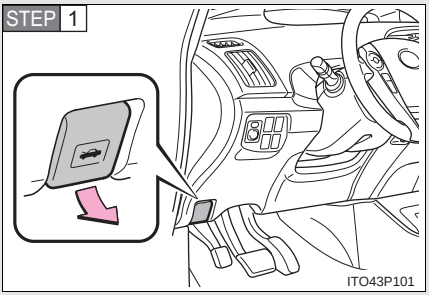
Wear safety glasses to prevent flying or falling material, fluid spray, etc. from getting in the eyes.

NOTICE

n **If you remove the air cleaner filter**

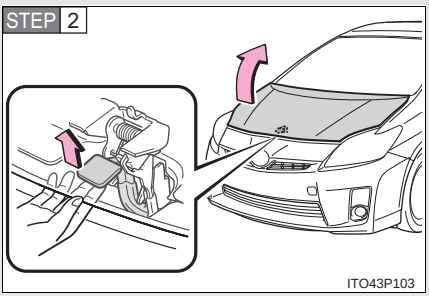
Driving with the air cleaner filter removed may cause excessive engine wear due to dirt in the air. Also a backfire could cause a fire in the engine compartment.

Release the lock from the inside of the vehicle to open the hood.

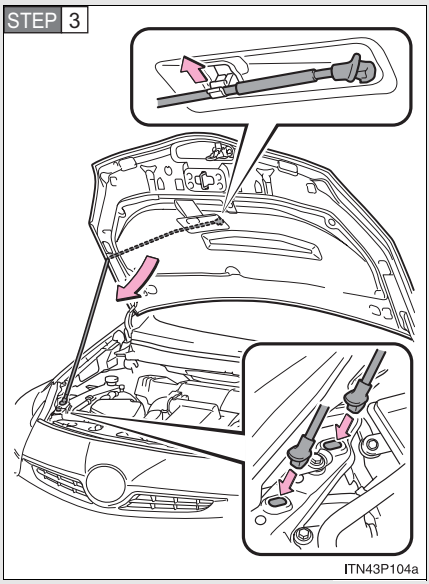


Pull the hood release lever.

The hood will pop up slightly.



Lift the hood catch and lift the hood.



Hold the hood open by inserting the supporting rod into either of the slots.

CAUTION

n **Pre-driving check**

Check that the hood is fully closed and locked.
If the hood is not locked properly it may open while the vehicle is in motion and cause an accident, which may result in death or serious injury.

n **After installing the support rod into the slot**

Make sure the rod supports the hood securely from falling down on to your head or body.

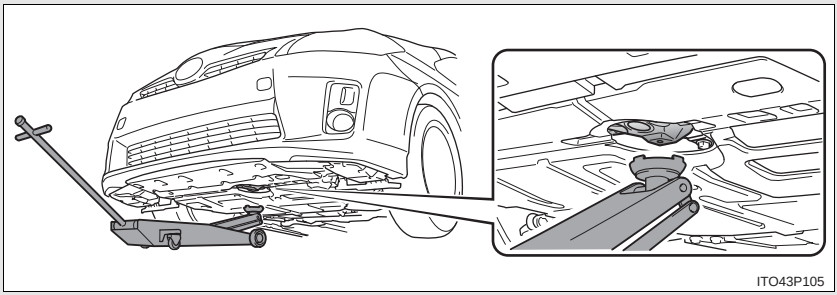
NOTICE

n **When closing the hood**

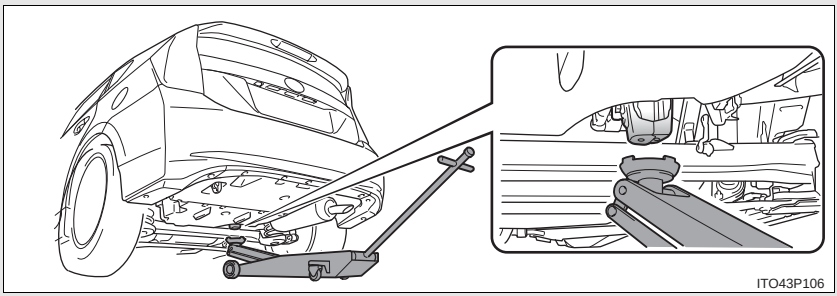
Be sure to return the support rod to its clip before closing the hood. Closing the hood with the support rod up could cause the hood to bend.

When raising your vehicle with a floor jack, position the jack correctly. Improper placement may damage your vehicle or cause injury.

▶ Front


ITO43P105

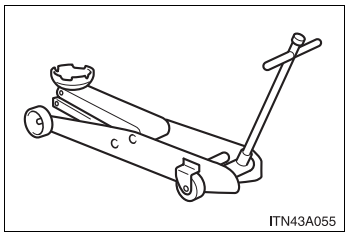
▶ Rear


ITO43P106

CAUTION

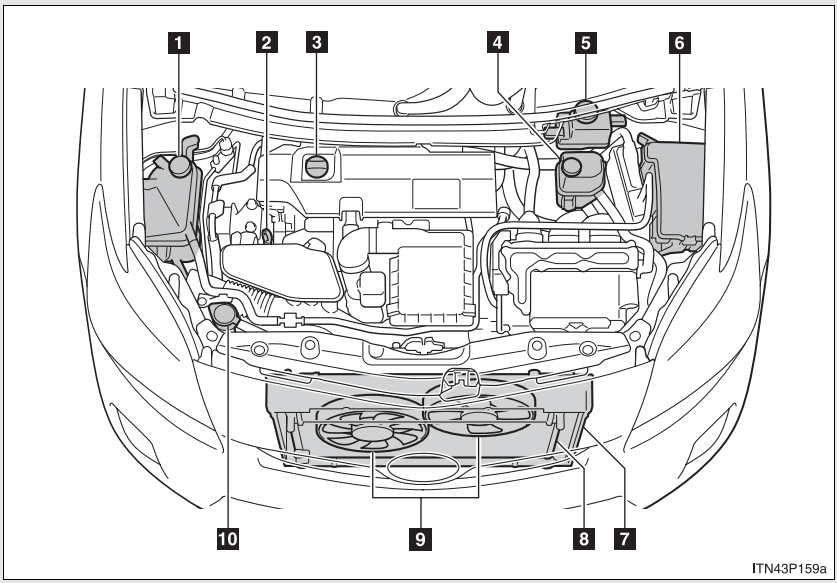
When raising your vehicle

Make sure to observe the following to reduce the possibility of death or serious injury.



- Lift up the vehicle using a floor jack such as the one shown in the illustration.

- Do not use the jack that was supplied with your vehicle.
- Do not put any part of your body or get underneath the vehicle supported only by the floor jack.
  Always use automotive jack stands or a solid, level, surface.
- Do not start the hybrid system while the vehicle is supported by the floor jack.
- Stop the vehicle on level firm ground, firmly set the parking brake and push the “P” position switch.
- Make sure to set the floor jack properly at the jack point.
  Raising the vehicle with an improperly positioned floor jack will damage the vehicle and may cause the vehicle to fall off the floor jack.
- Do not raise the vehicle while someone is in the vehicle.
- When raising the vehicle, do not place any objects on top of or underneath the floor jack.



1 Engine coolant reservoir (→P. 422)
2 Engine oil level dipstick (→P. 418)
3 Engine oil filler cap (→P. 419)
4 Power control unit coolant reservoir (→P. 422)
5 Brake fluid reservoir (→P. 424)
6 Fuse box (→P. 454)
7 Radiator (→P. 424)
8 Condenser (→P. 424)
9 Electric cooling fans
10 Washer fluid tank (→P. 426)

n **12 volt battery**

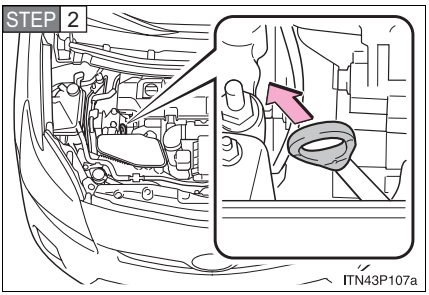
→P. 428

Engine oil

With the engine at operating temperature and turned off, check the oil level on the dipstick.

n Checking the engine oil

STEP 1 Park the vehicle on level ground. After turning off the hybrid system, wait more than 5 minutes for the oil to drain back into the bottom of the engine.



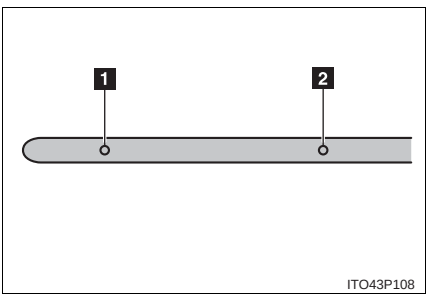
Hold a rag under the end and pull the dipstick out.

STEP 3 Wipe the dipstick clean.

STEP 4 Reinsert the dipstick fully.

STEP 5 Holding a rag under the end, pull the dipstick out and check the oil level.

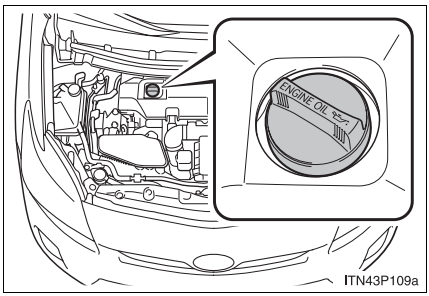
STEP 6 Wipe the dipstick and reinsert it fully.



1 Low

2 Full

n Adding engine oil



If the oil level is below or near the low level mark, add engine oil of the same type as already in the engine.

Make sure to check the oil type and prepare the items needed before adding oil.

Engine oil selection	→P. 552
Oil quantity (Low → Full)	1.6 qt. (1.5 L, 1.3 Imp. qt.)
Items	Clean funnel

STEP 1 Remove the oil filler cap.

STEP 2 Add engine oil slowly, checking the dipstick.

STEP 3 Install the filler cap, turning it clockwise.

n Engine oil consumption

- The amount of engine oil consumed depends on the oil viscosity, the quality of the oil and the way the vehicle is driven.
- More oil is consumed under driving conditions such as high speeds, frequent acceleration and deceleration.
- A new engine consumes more oil.
- When judging the amount of oil consumption, keep in mind that the oil may have become diluted, making it difficult to judge the true level accurately.
- Oil consumption: Max. 1.1 qt./600 miles, 0.9 lmp. qt./600 miles (1.0 L per 1000 km).
- If the vehicle consumes more than 1.1 qt. (1.0 L, 0.9 lmp.qt.) every 600 miles (1000 km), contact your Toyota dealer.

n After changing the engine oil (U.S.A. only)

The oil change system should be reset. Perform the following steps:

STEP 1 Turn the “POWER” switch OFF with the trip meter A shown.

STEP 2 Turn the “POWER” switch ON with the MPH or km/h button (→P. 183) held down.

STEP 3 Keep pressing the button until the odometer indicates “000000” and the multi-information display indicates that the reset is complete.

CAUTION

Used engine oil

- Used engine oil contains potentially harmful contaminants which may cause skin disorders such as inflammation or skin cancer, so care should be taken to avoid prolonged and repeated contact. To remove used engine oil from your skin, wash thoroughly with soap and water.
- Dispose of used oil and filters only in a safe and acceptable manner. Do not dispose of used oil and filters in household trash, in sewers or onto the ground.
  Call your Toyota dealer, service station or auto parts store for information concerning recycling or disposal.
- Do not leave used engine oil within the reach of children.

NOTICE

To prevent serious engine damage

Check the oil level on regular basis.

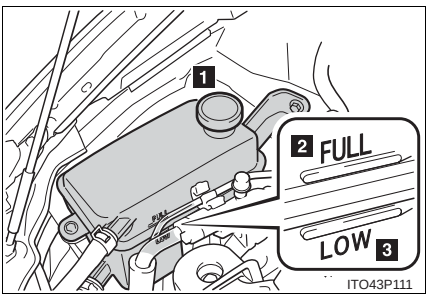
When replacing the engine oil

- Be careful not to spill engine oil on the vehicle components.
- Avoid overfilling, or the engine could be damaged.
- Check the oil level on the dipstick every time you refill the vehicle.
- Be sure the engine oil filler cap is properly retightened.

Engine/power control unit coolant

The coolant level is satisfactory if it is between the “FULL” and “LOW” lines on the reservoir when the hybrid system is cold.

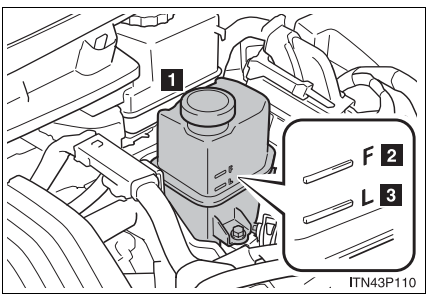
▶ Engine coolant reservoir



1 Reservoir cap
2 “FULL”
3 “LOW”

If the level is on or below the “LOW” line, add coolant up to the “FULL” line.

▶ Power control unit coolant reservoir



1 Reservoir cap
2 Full
3 Low

If the level is on or below the “L” line, add coolant up to the “F” line.

n **If the coolant level drops within a short time after replenishing**

Visually check the radiator, hoses, reservoir cap, radiator cap, drain cock and water pump.
If you cannot find a leak, have your Toyota dealer pressure test the cap and check for leaks in the cooling system.

n Coolant selection

Only use “Toyota Super Long Life Coolant” or similar high quality ethylene glycol based non-silicate, non-amine, non-nitrite, and non-borate coolant with long-life hybrid organic acid technology.

U.S.A.: “Toyota Super Long Life Coolant” is a mixture of 50 % coolant and 50 % deionized water. (Enabled: -31 °F [-35 °C])

Canada: “Toyota Super Long Life Coolant” is a mixture of 55 % coolant and 45 % deionized water. (Enabled: -44 °F [-42 °C])

For more details about engine coolant, contact your Toyota dealer.

CAUTION

n When the hybrid system is hot

Do not remove the coolant reservoir cap.
The cooling system may be under pressure and may spray hot coolant if the cap is removed, causing burns or other injuries.

NOTICE

n When adding the coolant

Coolant is neither plain water not straight antifreeze. The correct mixture of water and anti freeze must be used to provide proper lubrication, corrosion protection and cooling. Be sure to read the antifreeze or coolant label.

n If you spill coolant

Be sure to wash it off with water to prevent it damage to parts or paint.

Radiator and condenser

Check the radiator and condenser and clear any foreign objects.
If either of the above parts are extremely dirty or you are not sure of their condition, have your vehicle checked by your Toyota dealer.

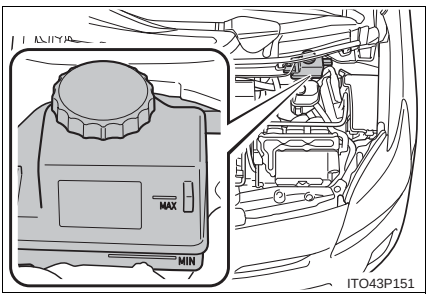
CAUTION

n **When the hybrid system is hot**

Do not touch the radiator or condenser, as they may be hot and may cause burns.

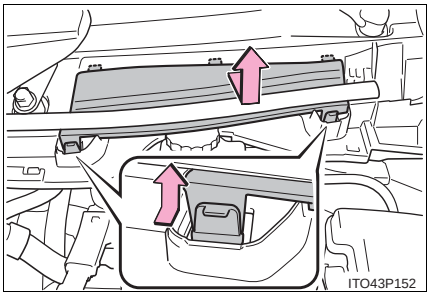
Brake fluid

n Checking fluid level



The brake fluid level should be between the “MAX” and “MIN” lines on the tank.

n Adding fluid



Push the tab in and lift the cover off.

Make sure to check the fluid type and prepare the necessary items.

Fluid type	FMVSS No.116 DOT 3 or SAE J1703 brake fluid
Items	Clean funnel

n Brake fluid can absorb moisture from the air

Excess moisture in the fluid can cause a dangerous loss of braking efficiency. Use only newly opened brake fluid.

CAUTION

n When filling the reservoir

Take care because brake fluid can harm your hands or eyes and damage painted surfaces.
If fluid gets in your eyes, flush your eyes with clean water immediately.

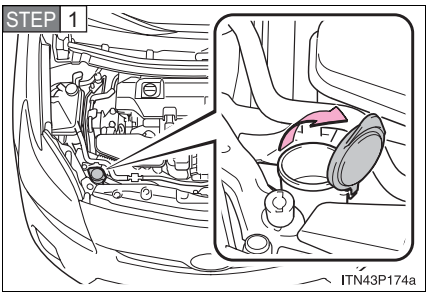
If you still experience discomfort, see a doctor.

NOTICE

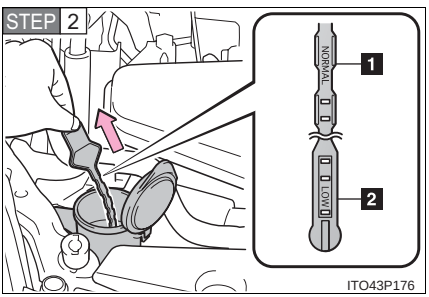
n **If the fluid level is low**

It is normal for the brake fluid level to go down slightly as the brake pads wear or when the fluid level in the accumulator is high.
If the reservoir needs frequent refilling, it may indicate a serious problem.

Washer fluid



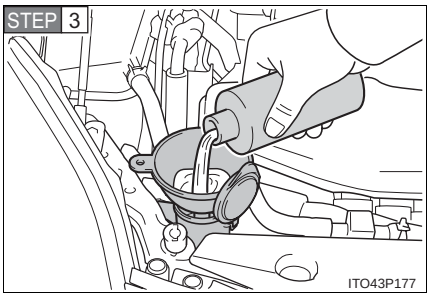
Open the lid.



Check the washer fluid level on the level gauge.

1 “NORMAL”

2 “LOW”



If the washer fluid level is at “LOW”, add washer fluid.

CAUTION

When refilling the washer fluid

Do not refill the washer fluid when the hybrid system is hot or operating, as the washer fluid contains alcohol and may catch fire if spilled on the hybrid system etc.

NOTICE

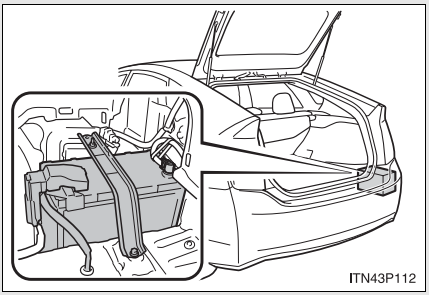
Do not use any fluid other than washer fluid

Do not use soapy water or engine antifreeze instead of washer fluid. Doing so may cause streaking on the vehicle’s painted surfaces.

Diluting washer fluid

Dilute washer fluid with water as necessary.
Refer to the freezing temperatures listed on the washer fluid tank.

n Location

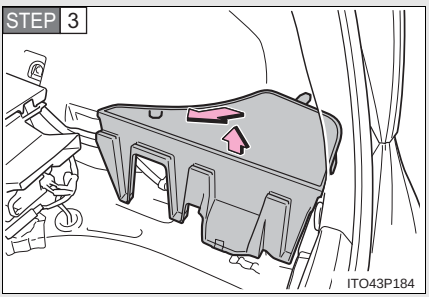


The 12 volt battery is located in the right-hand side of luggage compartment.

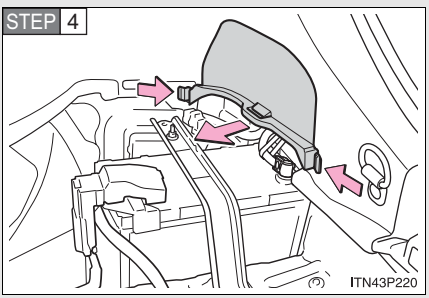
n Removing the 12 volt battery cover

STEP 1 Open the center auxiliary box. (→P. 385)

STEP 2 Remove the center auxiliary box. (→P. 518)



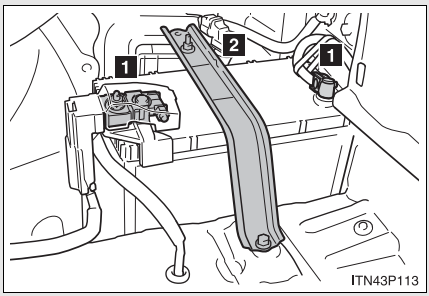
Remove the 12 volt battery cover.



Remove the 12 volt battery maintenance cover.

n 12 volt battery exterior

Make sure that the 12 volt battery terminals are not corroded and that there are no loose connections, cracks, or loose clamps.



1 Terminals
2 Hold-down clamp

n Before recharging

When recharging, the 12 volt battery produces hydrogen gas which is flammable and explosive. Therefore, before recharging:

- If recharging with the 12 volt battery installed on the vehicle, be sure to disconnect the ground cable.
- Make sure the power switch on the charger is off when connecting and disconnecting the charger cables to the 12 volt battery.

After recharging/reconnecting the 12 volt battery

- Unlocking the doors using the smart key system may not be possible immediately after disconnecting the 12 volt battery. If this happens, use the wireless remote control or the mechanical key to lock/unlock the doors.
- Start the hybrid system with the “POWER” switch in ACCESSORY mode. The hybrid system may not start with the “POWER” switch turned OFF. However, the hybrid system will operate normally from the second attempt.
- The “POWER” switch mode is recorded by the vehicle. If the battery is reconnected, the vehicle will return the “POWER” switch mode to the status it was in before the battery was disconnected. Make sure to turn off the power before disconnect the battery. Take extra care when connecting the battery if the “POWER” switch mode prior to discharge is unknown.

If the system will not start even after multiple attempts, contact your Toyota dealer.

CAUTION

Chemicals in the 12 volt battery

The 12 volt battery contains poisonous and corrosive sulfuric acid and may produce hydrogen gas which is flammable and explosive. To reduce the risk of death or serious injury, take the following precautions while working on or near the 12 volt battery:

- Do not cause sparks by touching the 12 volt battery terminals with tools.
- Do not smoke or light a match near the 12 volt battery.
- Avoid contact with eyes, skin and clothes.
- Never inhale or swallow electrolyte.
- Wear protective safety glasses when working near the 12 volt battery.
- Keep children away from the 12 volt battery.

CAUTION

Where to safely charge the 12 volt battery

Always charge the 12 volt battery in an open area. Do not charge the 12 volt battery in a garage or closed room where there is not sufficient ventilation.

How to recharge the 12 volt battery

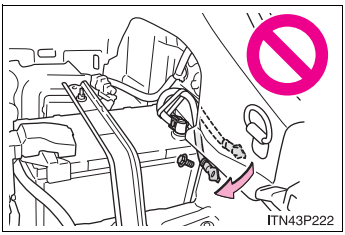
Only perform a slow charge (4.2 A or less). The 12 volt battery may explode if charged at a quicker rate.

Emergency measures regarding electrolyte

- If electrolyte gets in your eyes
  Flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If possible, continue to apply water with a sponge or cloth while traveling to the nearest medical facility.
- If electrolyte gets on your skin
  Wash the affected area thoroughly. If you feel pain or a burning sensation, seek medical attention immediately.
- If electrolyte gets on your clothes
  It can soak through clothing on to your skin. Immediately take off the clothing and follow the procedure above if necessary.
- If you accidentally swallow electrolyte
  Drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Get emergency medical attention immediately.

CAUTION

When disconnecting the 12 volt battery



Do not disconnect the negative (-) terminal on the body side as shown. The disconnected negative (-) terminal may touch the positive (+) terminal, which may cause a short and result in death or serious injury.

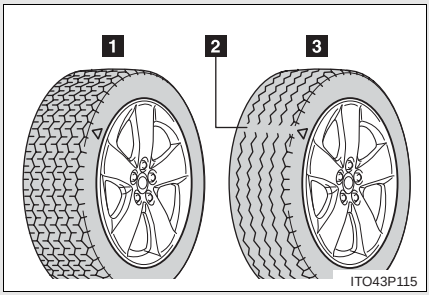
NOTICE

When recharging the 12 volt battery

Never recharge the 12 volt battery while the hybrid system is operating. Also, be sure all accessories are turned off.

Replace or rotate tires in accordance with maintenance schedules and treadwear.

n Checking tires

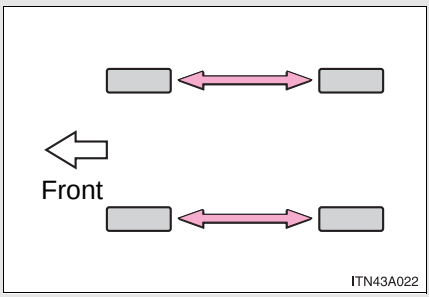


1 New tread
2 Treadwear indicator
3 Worn tread

The location of treadwear indicators is shown by the "TWI" or "Δ" marks, etc., molded on the sidewall of each tire.

Check spare tire condition and inflation pressure if not rotated.

n Tire rotation



Rotate the tires in the order shown.

To equalize tire wear and extend tire life, Toyota recommends that tire rotation is carried out at the same interval as tire inspection.

Do not fail to initialize the tire pressure warning system after tire rotation.

n The tire pressure warning system

Your Toyota is equipped with a tire pressure warning system that uses tire pressure warning valves and transmitters to detect low tire inflation pressure before serious problems arise. (→P. 491)

The compact spare tire is not equipped with a tire pressure warning valve and transmitter.

Installing tire pressure warning valves and transmitters

When replacing tires or wheels, tire pressure warning valves and transmitters must also be installed.

When new tire pressure warning valves and transmitters are installed, new tire pressure warning valve and transmitter ID codes must be registered in the tire pressure warning computer and tire pressure warning system must be initialized. Have tire pressure warning valve and transmitter ID codes registered by Toyota dealer. (→P. 436)

Initializing the tire pressure warning system

n The tire pressure warning system must be initialized in the following circumstances

- When rotating the tires on vehicles differing with front and rear tire inflation pressures.
- When changing the tire inflation pressure by changing traveling speed or load weight, etc.
- When changing the tire size.

When the tire pressure warning system is initialized, the current tire inflation pressure is set as the pressure benchmark.

n How to initialize the tire pressure warning system

STEP 1 Park the vehicle in safe place and turn the “POWER” switch OFF.

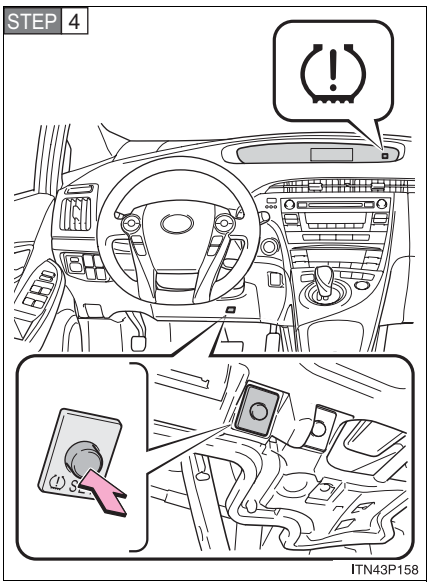
While the vehicle is moving, initialization is not performed.

STEP 2 Adjust the tire inflation pressure to the specified cold tire inflation pressure level. (→P. 557)

Make sure to adjust the tire pressure to the specified cold tire inflation pressure level. The tire pressure warning system will operate based on this pressure level.

STEP 3 Turn the “POWER” switch to ON mode.

STEP 4



Push and hold the tire pressure warning reset switch until the tire pressure warning light blinks slowly 3 times.

STEP 5 Wait for a few minutes with the ON mode, and then turn “POWER” switch OFF.

Registering ID codes

The tire pressure warning valve and transmitter is equipped with a unique ID code. When replacing a tire pressure warning valve and transmitter, it is necessary to register the ID code of tire pressure warning valve and transmitter. Have the ID code registered by your Toyota dealer.

---

n When to replace your vehicle's tires

Tires should be replaced if:

- You have tire damage such as cuts, splits, cracks deep enough to expose the fabric or bulges indicating internal damage
- A tire goes flat repeatedly or cannot be properly repaired due to the size or location of a cut or other damage

If you are not sure, consult with your Toyota dealer.

n Replacing tires and wheels

If the ID code of the tire pressure warning valve and transmitter is not registered, the tire pressure warning system will not work properly. After driving for about 20 minutes, the tire pressure warning light comes on after blinking for 1 minute to indicate a system malfunction.

n **Tire life**

Any tire over 6 years old must be checked by a qualified technician even if they have seldom or never been used or damage is not obvious.

n **If the tread wears down below 0.16 in. (4 mm) on snow tires**

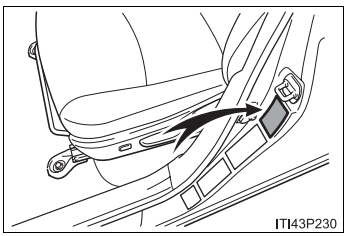
The effectiveness of snow tires is lost.

n **Low profile tires (vehicles with 17-inch tires)**

Generally, low profile tires will wear more rapidly and tire grip performance will be reduced on snowy and/or icy roads when compared to standard tires. Be sure to use snow tires or tire chains on snowy and/or icy roads and drive carefully at a speed appropriate for road and weather conditions.

n **Maximum load of tire**

Check that the maximum load of the replacement tire is greater than 1/2 of the Gross Axle Weight Ratings (GAWR) of either the front axle or the rear axle, whichever is greater.



For the GAWR, see the Certification Label. For the maximum load of the tire, see the load limit at maximum cold tire inflation pressure mentioned on the sidewall of the tire.(→P. 564)

n Tire types

1 Summer tires

Summer tires are high-speed performance tires best suited to highway driving under dry conditions. Since summer tires do not have the same traction performance as snow tires, summer tires are inadequate for driving on snow-covered or icy roads. For driving on snow-covered roads or icy roads, the use of snow tires is recommended. When installing snow tires, be sure to replace all four tires.

2 All season tires

All season tires are designed to provide better traction in snow and to be adequate for driving in most winter conditions, as well as for use year round. All season tires, however, do not have adequate traction performance compared with snow tires in heavy or loose snow. Also, all season tires fall short in acceleration and handling performance compared with summer tires in highway driving.

3 Snow tires

For driving on snow-covered roads or icy roads, we recommend using snow tires. If you need snow tires, select tires of the same size, construction and load capacity as the originally installed tires. Since your vehicle has radial tires as original equipment, make sure your snow tires also have radial construction. Do not install studded tires without first checking local regulations for possible restriction. Snow tires should be installed on all wheels. (→P. 261)

Initializing the tire pressure warning system

Initialize the tires with the tire inflation pressure adjusted to the specified level.

If you push the tire pressure warning reset switch accidentally

If initialization is performed, adjust the tire inflation pressure to the specified level and initialize the tire pressure warning system again.

When the initialization of the tire pressure warning system has failed

Initialization can be completed in a few minutes. However, in the following cases, the settings have not been recorded and the system will not operate properly. If repeated attempts to record tire inflation pressure settings are unsuccessful, have the vehicle inspected by your Toyota dealer.

- When operating the tire pressure warning reset switch, the tire pressure warning light does not flash 3 times.
- After carrying out the initialization procedure, the tire pressure warning light blinks for 1 minute then stays on after driving 20 minutes.

Routine tire inflation pressure checks

The tire pressure warning system does not replace routine tire inflation pressure checks. Make sure to check tire inflation pressure as part of your routine of daily vehicle checks.

n Tire pressure warning system certification

FCC ID: PAXPMV107J
FCC ID: PAXPMV108J
FCC ID: HYQ13BDE
IC ID: 3729A-PMV107J
IC ID: 3729A-PMV108J
IC ID: 1551A-13BDE

▶ For vehicles sold in the U.S.A.

NOTE:
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

▶ For vehicles sold in Canada

NOTE:
Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CAUTION

When inspecting or replacing tires

Observe the following precautions to prevent accidents. Failure to do so may cause damage to parts of the drive train, as well as dangerous handling characteristics, which may lead to an accident resulting in death or serious injury.

- Do not mix tires of different makes, models or tread patterns. Also, do not mix tires of remarkably different treadwear.
- Do not use tire sizes other than those recommended by Toyota.
- Do not mix differently constructed tires (radial, bias-belted or bias-ply tires).
- Do not mix summer, all season and winter tires.
- Do not use tires that have been used on another vehicle. Do not use tires if you do not know how they were used previously.

When initializing the tire pressure warning system

Do not push the tire pressure warning reset switch without first adjusting the tire inflation pressure to the specified level. Otherwise, the tire pressure warning light may not come on even if the tire inflation pressure is low, or it may come on when the tire inflation pressure is actually normal.

NOTICE

Repairing or replacing tires, wheels and tire pressure warning valves and transmitters

When removing or fitting the wheels, tires or the tire pressure warning valve and transmitter, contact your Toyota dealer as the tire pressure warning valve and transmitter may be damaged if not handled correctly.

To avoid damaging the tire pressure warning valves and transmitters

Do not use liquid sealants on flat tires.

Driving on rough roads

Take particular care when driving on roads with loose surfaces or potholes.
These conditions may cause losses in tire inflation pressure, reducing the cushioning ability of the tires. In addition driving on rough roads may cause damage to the tires themselves, as well as the vehicle's wheels and body.

Low profile tires (215/45R17 tires)

Low profile tires may cause greater damage than usual to the wheel when receiving impact from the road surface. Therefore pay attention to the following:

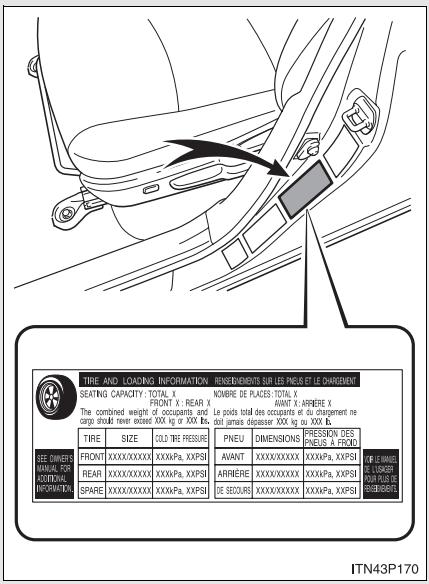
- Be sure to use proper tire inflation pressure. If tires are under-inflated, they may be damaged more severely.
- Avoid pot holes, uneven pavement, curbs and other road hazards. Failure to do so can lead to severe tire and wheel damage.

If tire inflation pressures become low while driving

Do not continue driving, or your tires and/or wheels may be ruined.

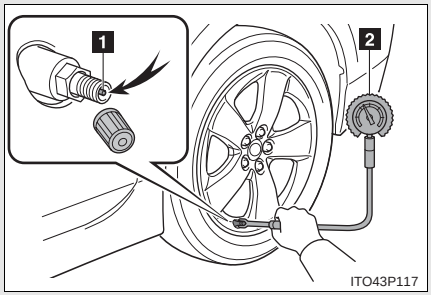
n Tire inflation pressure

The recommended cold tire inflation pressure and tire size is displayed on the tire and loading information label. (→P. 557)



ITN43P170

n Inspection and adjustment procedure



1 Tire valve
2 Tire pressure gauge

STEP 1 Remove the tire valve cap.

STEP 2 Press the tip of the tire pressure gauge onto the tire valve.

STEP 3 Read the pressure using the graduations of the gauge.

STEP 4 If the tire inflation pressure is not within the recommended levels, adjust tire pressure.
If you add too much air, press the center of the valve to lower.

STEP 5 After completing the tire inflation pressure measurement and adjustment, apply soapy water to the valve and check for leakage.

STEP 6 Reinstall the tire valve cap.

---

n Tire inflation pressure check interval

You should check tire inflation pressure every 2 weeks, or at least once a month.
Do not forget to check the spare.

Effects of incorrect tire inflation pressure

Driving with incorrect tire inflation pressure may result in the following:

- Reduced fuel efficiency
- Reduced driving comfort and tire life
- Reduced safety
- Damage to the drive train

If a tire needs frequent refilling, have it checked by your Toyota dealer.

Instructions for checking tire inflation pressure

When checking tire inflation pressure, observe the following:

- Check only when the tires are cold.
  If your vehicle has been parked for at least 3 hours and has not been driven for more than 1 mile or 1.5 km, you will get an accurate cold tire inflation pressure reading.
- Always use a tire pressure gauge.
  The appearance of the tire can be misleading. In addition, tire inflation pressures that are even just a few pounds off can degrade ride and handling.
- Do not bleed or reduce tire inflation pressure after driving. It is normal for the tire inflation pressure to be higher after driving.
- Never exceed the vehicle capacity weight.
  Passengers and luggage weight should be placed so that the vehicle is balanced.

CAUTION

Proper inflation is critical to save tire performance

Keep your tires properly inflated. Otherwise, the following conditions may occur and result in an accident causing death or serious injury.

- Excessive wear
- Uneven wear
- Poor handling
- Possibility of blowouts resulting from overheated tires
- Poor sealing of the tire bead
- Wheel deformation and/or tire separation
- A greater possibility of tire damage from road hazards

NOTICE

When inspecting and adjusting tire inflation pressure

Be sure to reinstall the tire valve caps.
Without the valve caps, dirt or moisture could get into the valve and cause air leakage, which could result in an accident. If the caps have been lost, replace them as soon as possible.

If a wheel is bent, cracked or heavily corroded, it should be replaced.
Otherwise, the tire may separate from the wheel or cause loss of handling control.

n Wheel selection

When replacing wheels, care should be taken to ensure that they are equivalent to those removed in load capacity, diameter, rim width, and offset.
Replacement wheels are available at your Toyota dealer.

Toyota does not recommend using:

- Wheels of different sizes or types
- Used wheels
- Bent wheels that have been straightened

n Aluminum wheel precautions

- Use only Toyota wheel nuts and wrenches designed for use with your aluminum wheels.
- When rotating, repairing or changing your tires, check that the wheel nuts are still tight after driving 1000 miles (1600 km).
- Be careful not to damage the aluminum wheels when using tire chains.
- Use only Toyota genuine balance weights or equivalent and a plastic or rubber hammer when balancing your wheels.

When replacing wheels

The wheels of your Toyota are equipped with tire pressure warning valves and transmitters that allow the tire pressure warning system to provide advanced warning in the event of a loss in tire inflation pressure. Whenever wheels are replaced, the tire pressure warning valves and transmitters must be installed. (→P. 434)

CAUTION

When replacing wheels

- Do not use wheels that are a different size from those recommended in the Owner's Manual, as this may result in loss of handling control.
- Never use an inner tube in a leaking wheel which is designed for a tubeless tire. Doing so may result in an accident, causing death or serious injury.

NOTICE

Replacing tire pressure warning valves and transmitters

- Because tire repair or replacement may affect the tire pressure warning valves and transmitters, make sure to have tires serviced by your Toyota dealer or other qualified service shop. In addition, make sure to purchase your tire pressure warning valves and transmitters at your Toyota dealer.
- Ensure that only genuine Toyota wheels are used on your vehicle.
  Tire pressure warning valves and transmitters may not work properly with non-genuine wheels.

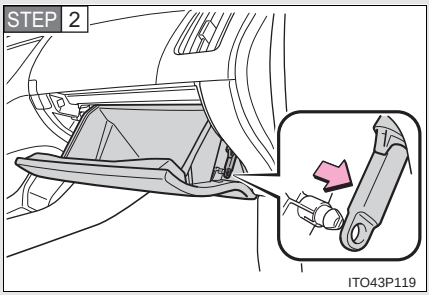
The air conditioning filter must be cleaned or changed regularly to maintain air conditioning efficiency.

n Removal method

STEP 1 Turn the “POWER” switch OFF.

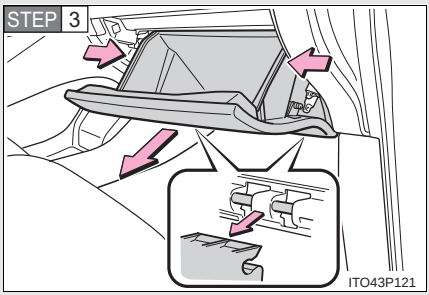
Vehicles with solar ventilation system: Turn the solar ventilation system off and make sure not to operate the remote air conditioning system.

STEP 2

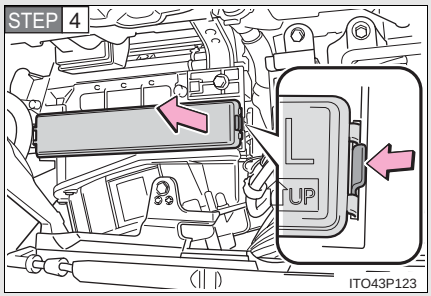


Open the glove box. Slide off the damper.

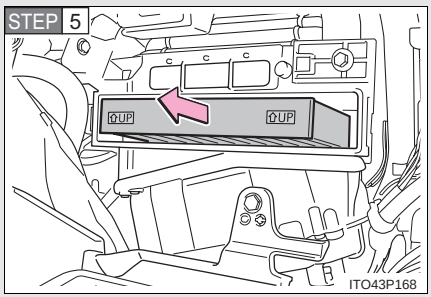
STEP 3



Push each side of the glove box to release the pins. Then disconnect the claws at the bottom and remove the glove box.

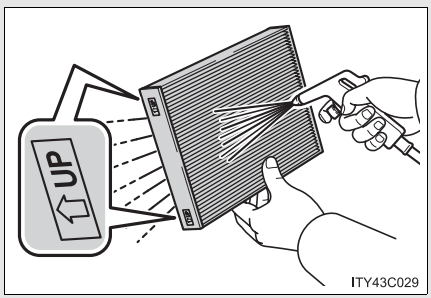


Remove the filter cover.



Remove the filter.

n Cleaning method

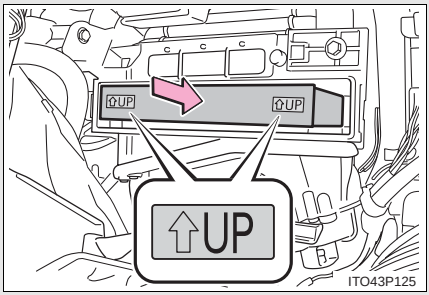


If the filter is dirty, clean by blowing compressed air through the filter from the downward side.

Hold the air gun 2 in. (5 cm) from the filter and blow for approximately 2 minutes at 72 psi (500 kPa, 5.0 kgf/cm^2 or bar).

If it is not available, have the filter cleaned by your Toyota dealer.

n Replacement method



Replace the air conditioning filter with a new one.

The "↑UP" marks shown on the filter should be pointing up.

n Checking interval

Inspect, clean and replace the air conditioning filter according to the maintenance schedule. In dusty areas or areas with heavy traffic flow, early replacement may be required. (For scheduled maintenance information, refer to the "Owner's Manual Supplement/Scheduled Maintenance Guide".)

n If air flow from the vents decreases dramatically

The filter may be clogged. Check the filter and replace if necessary.

NOTICE

n To prevent damage to the system

- When using the air conditioning system, make sure that a filter is always installed.
- When cleaning the filter, do not clean the filter with water.

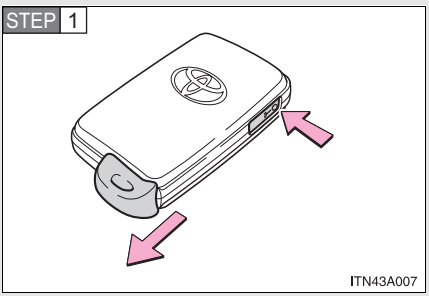
Replace the battery with a new one if it is discharged.

n **You will need the following items:**

- l Flathead screwdriver (To prevent damage to the key, cover the tip of the screwdriver with rag)
- l Small Phillips-head screwdriver
- l Lithium battery (CR1632)

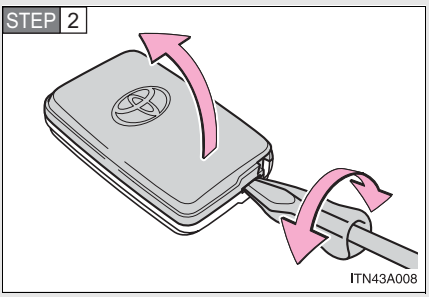
n **Replacing the battery**

STEP 1



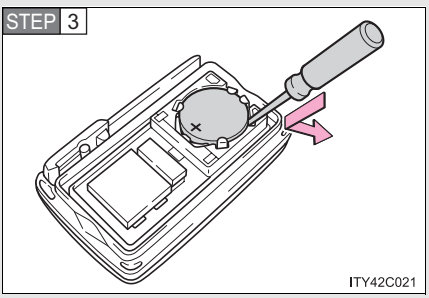
Take out the mechanical key.

STEP 2



Remove the cover.

STEP 3



Remove the depleted battery.

Insert a new battery with the "+" terminal facing up.

If the electronic key battery is discharged

The following symptoms may occur.

- The smart key system and wireless remote control will not function properly.
- The operational range is reduced.

Use a CR1632 lithium battery

- Batteries can be purchased at your Toyota dealer, jewelers, or camera stores.
- Replace only with the same or equivalent type recommended by a Toyota dealer.
- Dispose of used batteries according to the local laws.

CAUTION

Removed battery and other parts

Keep away from children.
These parts are small and if swallowed by a child they can cause choking.

NOTICE

For normal operation after replacing the battery

Observe the following precautions to prevent accidents.

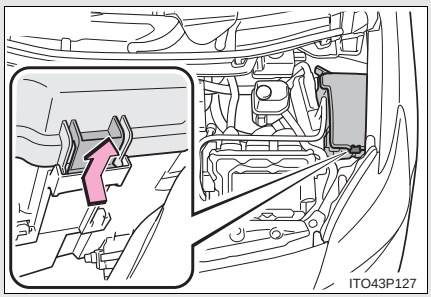
- Always work with dry hands.
  Moisture may cause the battery to rust.
- Do not touch or move any other components inside the electronic key.
- Do not bend the battery terminals.

If any of the electrical components do not operate, a fuse may have blown. If this happens, check and replace the fuses as necessary.

STEP 1 Turn the “POWER” switch OFF.
Vehicles with solar ventilation system: Turn the solar ventilation system off and make sure not to operate the remote air conditioning system.

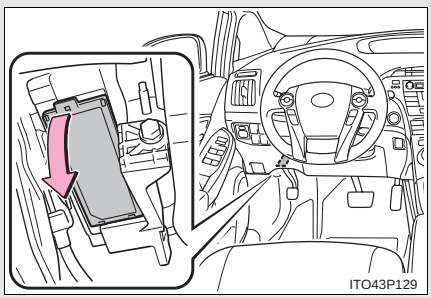
STEP 2 Open the fuse box cover.

▶ Engine compartment



Push the tabs in and lift the lid off.

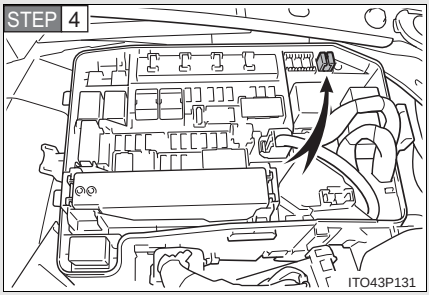
▶ Left side instrument panel



Remove the lid.

STEP 3 After a system failure, see “Fuse layout and amperage ratings” (→P. 457) for details about which fuse to check.

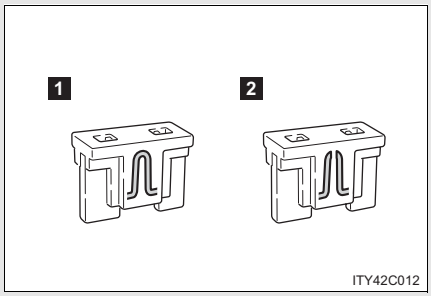
STEP 4



Remove the fuse with the pull-out tool.

STEP 5 Check if the fuse has blown.

▶ Type A

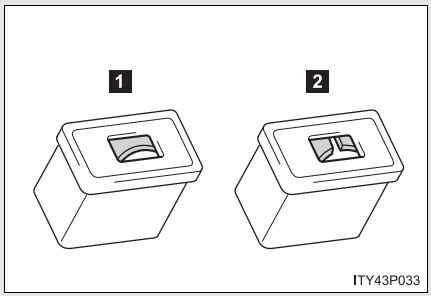


1 Normal fuse

2 Blown fuse

Replace it with one of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

▶ Type B

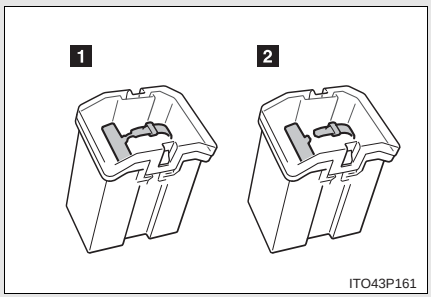


1 Normal fuse

2 Blown fuse

Replace it with one of an appropriate amperage rating. The amperage rating can be found on the fuse box lid.

▶ Type C



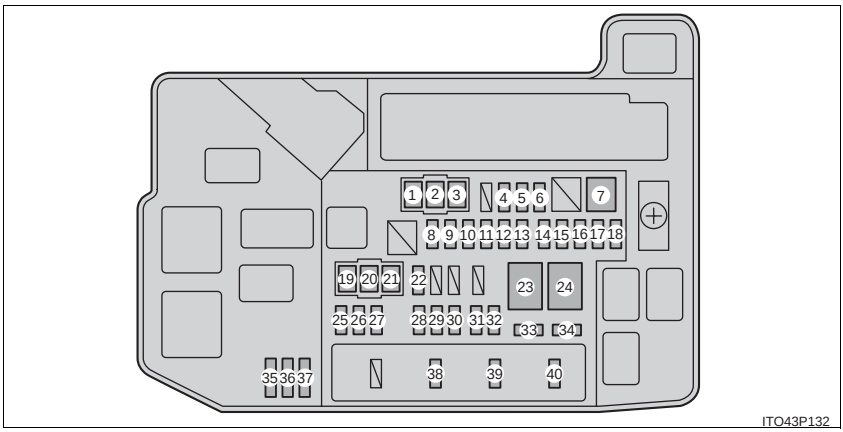
1 Normal fuse

2 Blown fuse

Contact your Toyota dealer.

Fuse layout and amperage ratings

n Engine compartment

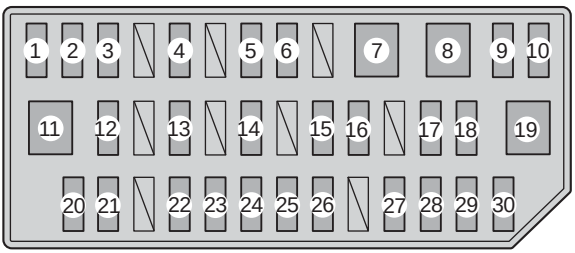


FUSE		Ampere	Circuit
1	HTR	50A	Air conditioning system
2	RDI	30A	Electric cooling fans
3	CDS	30A	Electric cooling fans
4	S-HORN	10A	No circuit
5	ENG W/P	30A	Cooling system
6	ABS MAIN NO.2	7.5A	Anti-lock brake system
7	H-LP CLN	30A	Headlight cleaner
8	AMP	30A	Audio system
9	IGCT	30A	PCU, IGCT NO.2, IGCT NO.3
10	DC/DC-S	5A	Inverter and converter
11	P CON MAIN	7.5A	Parking control system, transmission

FUSE		Ampere	Circuit
12	AM2	7.5A	Power windows
13	ECU-B2	7.5A	Smart key system
14	MAYDAY	10A	No circuit
15	ECU-B3	10A	Air conditioning system
16	TURN & HAZ	10A	Turn signal lights
17	ETCS	10A	Multiport fuel injection system/ sequential multiport fuel injection system
18	ABS MAIN NO.1	20A	Anti-lock brake system
19	P/I 2	40A	Parking control system, horn, right-hand headlight (low beam), left-hand headlight (low beam), back-up lights
20	ABS MTR 1	30A	Anti-lock brake system
21	ABS MTR 2	30A	Anti-lock brake system
22	H-LP HI MAIN	20A	H-LP HI RH, H-LP HI LH, headlight switch, daytime running light system
23	P/I 1	60A	IG2, EFI MAIN, BATT FAN
24	EPS	60A	Electric power steering
25	PCU	10A	Inverter and converter
26	IGCT NO.2	10A	Hybrid system, parking control system, power windows, inverter and converter

FUSE		Ampere	Circuit
27	MIR HTR	10A	Outside rear view mirror defoggers
28	RAD NO.1	15A	Audio system, navigation system
29	DOME	10A	Door courtesy lights, personal lights, interior lights, front foot lights, vanity lights, inside rear view mirror, garage door opener, electric power steering
30	ECU-B	7.5A	Smart key system, multiplex communication system, personal lights, gauges and meters
31	H-LP LH HI	10A	Left-hand headlight (high beam)
32	H-LP RH HI	10A	Right-hand headlight (high beam)
33	EFI NO.2	10A	Multiport fuel injection system/ sequential multiport fuel injection system
34	IGCT NO.3	10A	Cooling system
35	SPARE	30A	Spare fuses
36	SPARE	15A	Spare fuses
37	SPARE	7.5A	Spare fuses
38	EFI MAIN	20A	Multiport fuel injection system/ sequential multiport fuel injection system, EFI NO.2
39	BATT FAN	10A	Battery cooling fan
40	IG2	20A	Multiport fuel injection system/ sequential multiport fuel injection system, MET-IGN, IGN, power windows

n Left side instrument panel



FUSE		Ampere	Circuit
1	CIG	15A	Power outlets
2	ECU-ACC	10A	Multiplex communication system, outside rear view mirrors, driver support system, audio system, navigation system
3	PWR OUTLET	15A	Power outlets
4	SEAT HTR FR	10A	Seat heater
5	SEAT HTR FL	10A	Seat heater
6	DOOR NO.1	25A	Power door lock system
7	PSB	30A	Pre-Collision System
8	PWR SEAT FR	30A	Front seat lumber support
9	DBL LOCK	25A	Tilt & telescopic steering
10	FR FOG	15A	Front fog lights
11	PWR SEAT FL	30A	Front seat lumber support
12	OBD	7.5A	On-board diagnosis system
13	RR FOG	7.5A	No circuit
14	STOP	10A	Stop lights, high mounted stop-light, brake system, power windows, driver support system

FUSE		Ampere	Circuit
15	P FR DOOR	25A	Power windows
16	D FR DOOR	25A	Power windows
17	DOOR RR	25A	Power windows
18	DOOR RL	25A	Power windows
19	S/ROOF	30A	Electric moon roof
20	ECU-IG NO.1	10A	Electric cooling fans, multiplex communication system
21	ECU-IG NO.2	10A	Driver support system, Pre-Collision System, LKA system, inside rear view mirror, garage door opener, yaw rate & G sensor, brake system, electric power steering, navigation system, electric moon roof, tire pressure warning system, seat belt pretensioners, audio system, emergency flashers, turn signal lights, windshield wipers, headlight cleaner
22	GAUGE	10A	Headlight leveling system, front passenger's seat belt reminder light, gauges and meters
23	A/C	10A	Air conditioning system, solar ventilation system, remote air conditioning system
24	WASHER	15A	Windshield washer

FUSE		Ampere	Circuit
25	RR WIP	20A	Rear window wiper and washer
26	WIP	30A	Windshield wipers
27	MET	7.5A	Gauges and meters
28	IGN	10A	Brake system, driver support system, multiport fuel injection system/sequential multiport fuel injection system, SRS airbag system, occupant detection sensor, power windows, smart key system
29	PANEL	10A	Air conditioning system, emergency flashers, seat heaters, transmission, “P” position switch, navigation system, solar ventilation system, remote air conditioning system, advanced parking guidance system, headlight cleaner, front passenger’s seat belt reminder light, headlight leveling system, glove box light, clock, audio system
30	TAIL	10A	Headlight leveling system, parking lights, tail lights, license plate lights, front fog lights, side marker lights

n After a fuse is replaced

- If the lights do not turn on even after the fuse has been replaced, a bulb may need replacement. (→P. 464)
- If the replaced fuse blows again, have the vehicle inspected by your Toyota dealer.

n If there is an overload in the circuits

The fuses are designed to blow before the entire writing harness is damaged.

⚠ CAUTION

n To prevent system breakdowns and vehicle fire

Observe the following precautions.
Failing to do so may cause damage, and possibly a fire or injury.

- Never use a fuse of a higher amperage rating than indicated, or use any other object in place of a fuse.
- Always use a genuine Toyota fuse or equivalent.
  Never replace a fuse with a wire, even as a temporary fix.
  This can cause extensive damage or even fire.
- Do not modify fuses or the fuse box.

⚠ NOTICE

n Before replacing fuses

Have the cause of electrical overload determined and repaired by your Toyota dealer.

You may replace the following bulbs yourself. The difficulty level of replacement varies depending on the bulb. If necessary bulb replacement seems difficult to perform, contact your Toyota dealer.

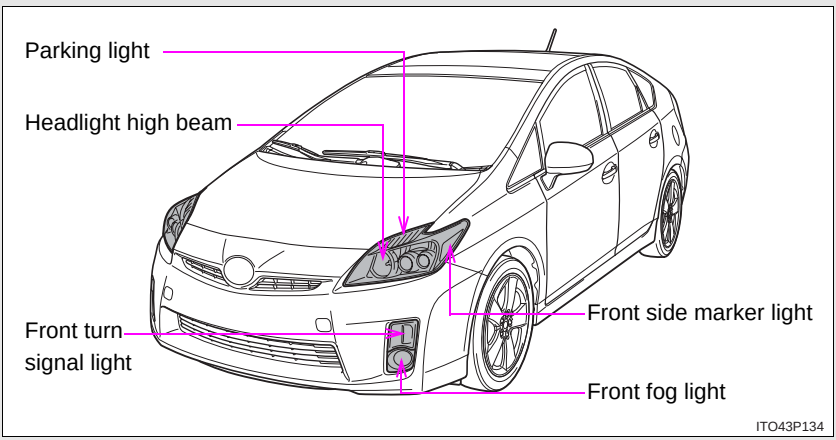
For more information about replacing other light bulbs, contact your Toyota dealer.

n Prepare a replacement light bulb.

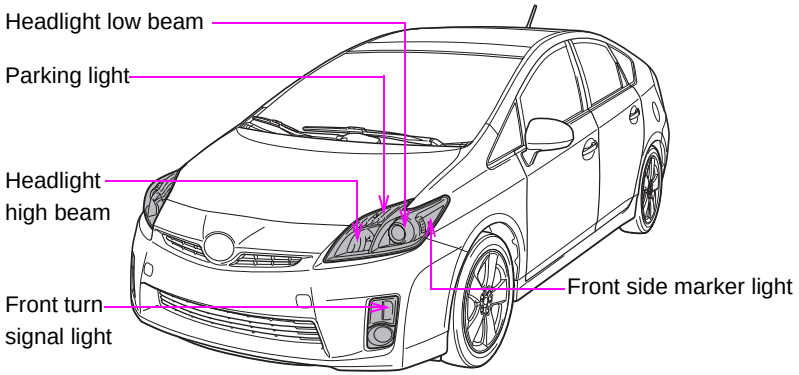
Check the wattage of the light bulb being replaced. (→P. 559)

n Front bulb locations

▶ Vehicles with LED headlights

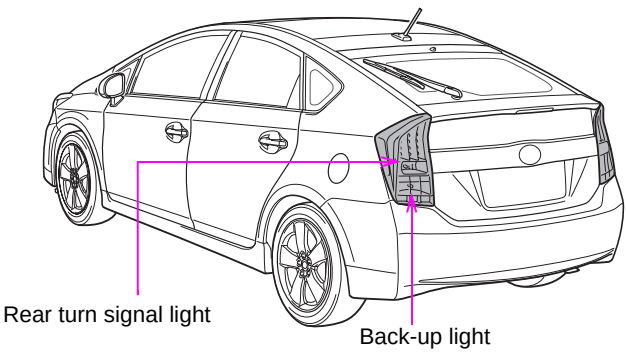


▶ Vehicles with halogen headlights



ITO43P135

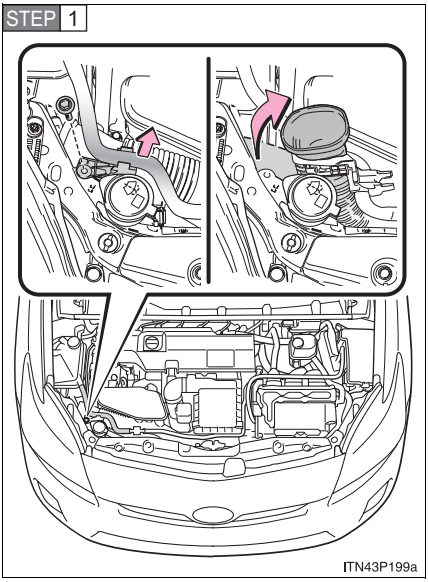
n Rear bulb locations



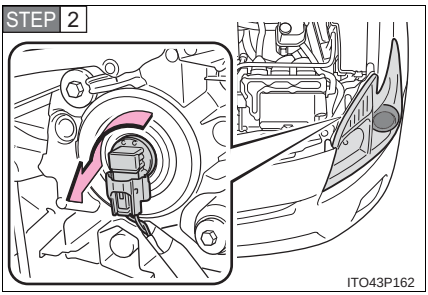
ITO43P138

Replacing light bulbs

n Headlight low beams (halogen bulbs)

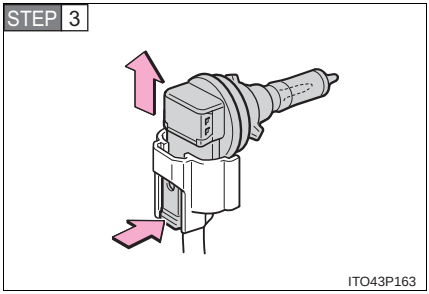


For the right side only:
Remove the bolt and unclip the engine coolant reservoir hose. Then lift up the air cleaner inlet duct.



Turn the bulb base counterclockwise.

STEP 3



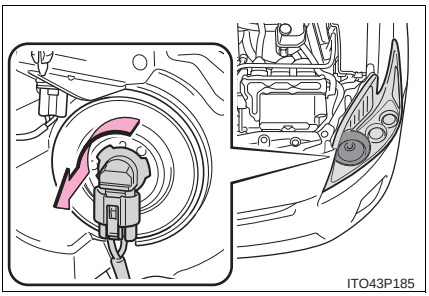
Unplug the connector while pushing the lock release.

n Headlight high beams

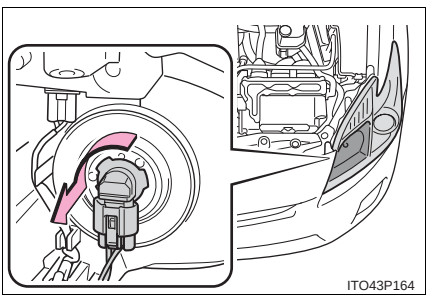
STEP 1 For the right side only: Remove the bolt and unclip the engine coolant reservoir hose. Then lift up the air cleaner inlet duct. (→P. 466)

STEP 2 Turn the bulb base counterclockwise.

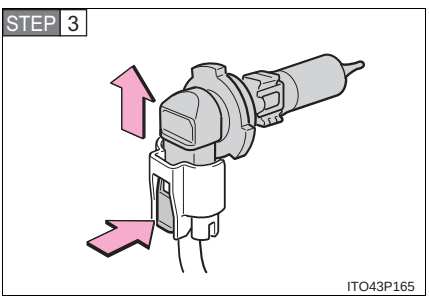
▶ Vehicles with LED headlights



▶ Vehicles with halogen headlights



STEP 3



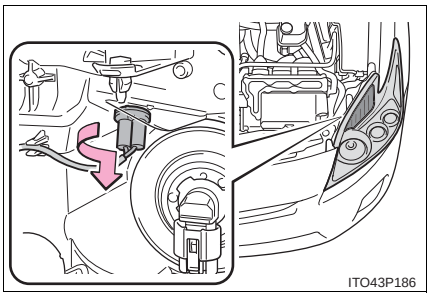
Unplug the connector while pushing the lock release.

n Parking lights

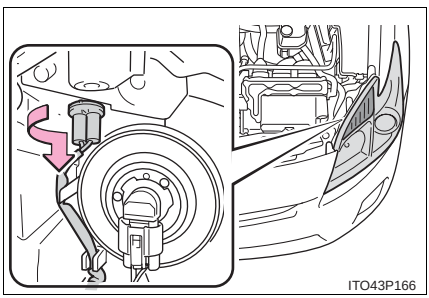
STEP 1 For the right side only: Remove the bolt and unclip the engine coolant reservoir hose. Then lift up the air cleaner inlet duct. (→P. 466)

STEP 2 Turn the bulb base counterclockwise.

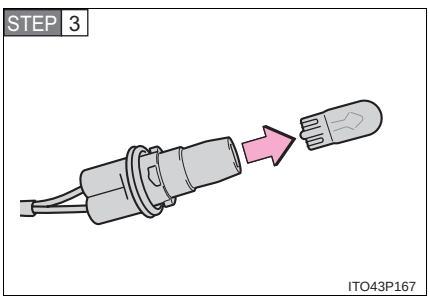
▶ Vehicles with LED headlights



▶ Vehicles with halogen headlights



STEP 3



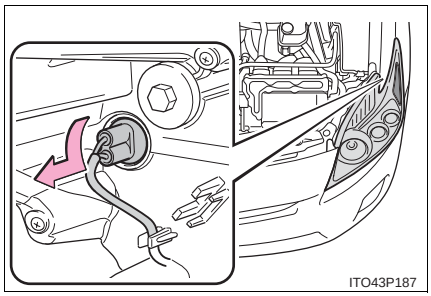
Remove the light bulb.

n Front side marker lights

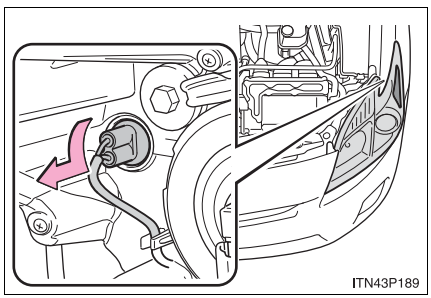
STEP 1 For the right side only: Remove the bolt and unclip the engine coolant reservoir hose. Then lift up the air cleaner inlet duct. (→P. 466)

STEP 2 Turn the bulb base counterclockwise.

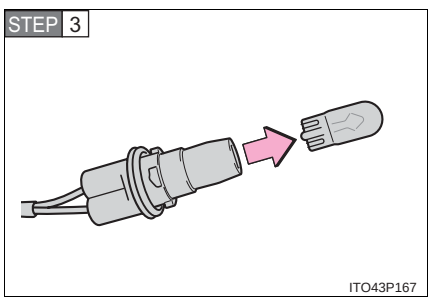
▶ Vehicles with LED headlights



▶ Vehicles with halogen headlights

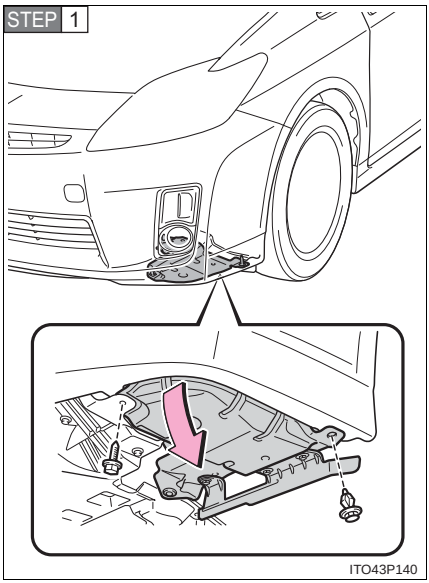


STEP 3

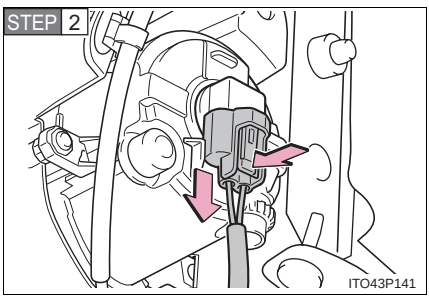


Remove the light bulb.

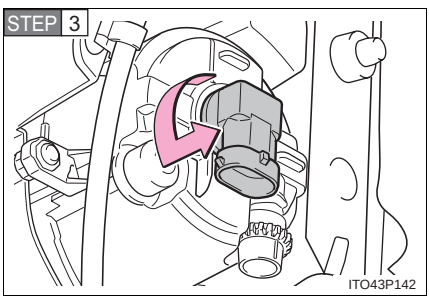
n Front fog lights (vehicles with LED headlights)



Remove the engine under cover bolt and clip and pull down the engine under cover.



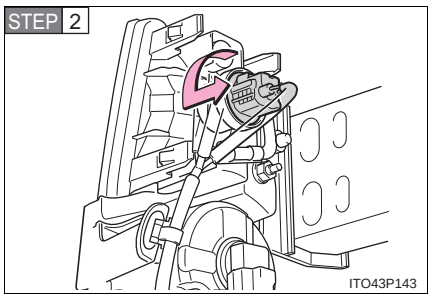
Unplug the connector while pushing the lock release.



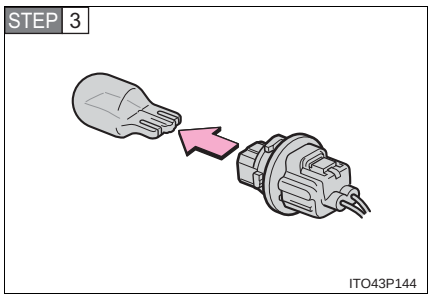
Turn the bulb base counterclockwise.

n Front turn signal lights

STEP 1 Remove the engine under cover bolt and clip and pull down the engine under cover. (→P. 471)

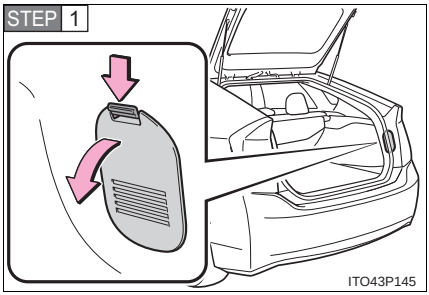


Unplug the connector while pushing the lock release.

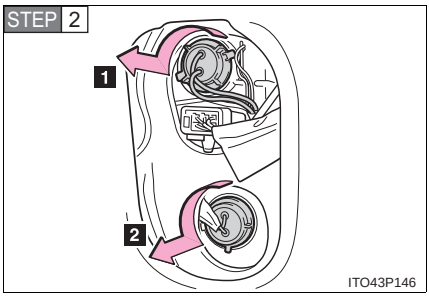


Remove the light bulb.

n Rear turn signal lights and back-up lights

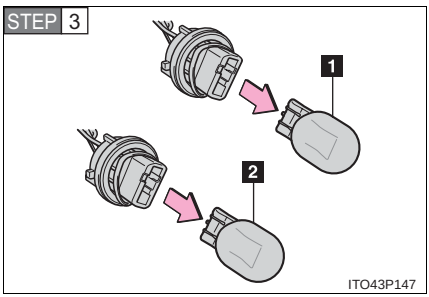


Open the back door and remove the cover.



Turn the bulb base counterclockwise.

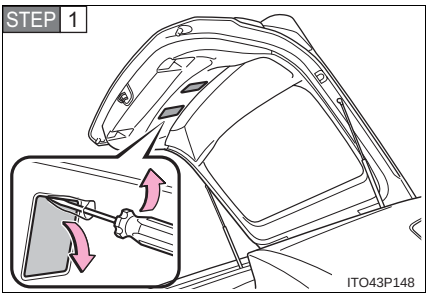
1 Rear turn signal light
2 Back-up light



Remove the light bulb.

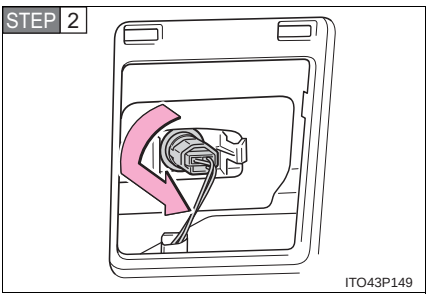
1 Rear turn signal light
2 Back-up light

n License plate lights

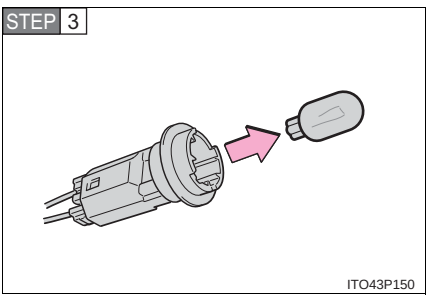


Open the back door and remove the cover.

To protect the cover, place a rag between the flathead screwdriver and cover as shown in the illustration.



Turn the bulb base counterclockwise.



Remove the light bulb.

n Lights other than the above

If any of the lights listed below has burnt out, have your Toyota dealer replace it.

- Headlight low beams (LED type)
- Stop/tail lights
- High mounted stoplight

n Condensation build-up on the inside of the lens

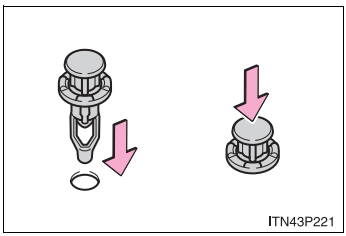
Contact your Toyota dealer for more information in the following situations. Temporary condensation build-up on the inside of the headlight lens does not indicate a malfunction.

- l Large drops of water are built up on the inside of the lens.
- l Water has built up inside the headlight.

n LED lights

The headlight low beams (LED type), stop/tail lights and high mounted stoplight consist of a number of LEDs. If any of the LEDs burn out, take your vehicle to your Toyota dealer to have the light replaced.

n Installing the engine under cover clip



Insert the clip.

CAUTION

Replacing light bulbs

- Turn off the headlights. Do not attempt to replace the bulb immediately after turning off the headlights.
  The bulbs become very hot and may cause burns.
- Do not touch the glass portion of the light bulb with bare hands. Hold the bulb by the plastic or metal portion.
  If the bulb is scratched or dropped it may blow out or crack.
- Fully install light bulbs and any parts used to secure them. Failing to do so may result in heat damage, fire, or water entering the headlight unit. This may damage the headlights or cause condensation to build up on the lens.
- Do not attempt to repair or disassemble light bulbs, connectors, electric circuits or component parts.
  Doing so may result in death or serious injury due to electric shock.

To prevent damage or fire

Make sure bulbs are fully seated and locked.