

OUTSIDE VEHICLE

GENERAL MAINTENANCE

MA016-01

There are the maintenance and inspection items which are considered to be the owner's responsibility. They can be done by the owner or be can have them done at a service shop. These items include those which should be checked on a daily basis, those which, in most cases, do not require (special) tools and those which are considered to be reasonable for the owner to do. Items and procedures for general maintenance are as follows.

1. GENERAL NOTES

- Maintenance items may vary from country to country. Check the owner's manual supplement in which the maintenance schedule is shown.
- Every service item in the periodic maintenance schedule must be performed.
- Periodic maintenance service must be performed according to whichever interval in the periodic maintenance schedule occurs first, the odometer reading (miles) or the time interval (months).
- Maintenance services after the last period should be performed at the same interval as before unless otherwise noted.
- Failure to do even one item can cause the engine to run poorly and increase exhaust emissions.

2. TIRES

- (a) Check the pressure with a gauge. Adjust if necessary.
- (b) Check for cuts, damage or excessive wear.

3. WHEEL NUTS

Wheel checking the tires, check the nuts for looseness or for missing nuts. If necessary, tighten them.

4. TIRE ROTATION

Check the owner's manual supplement in which the maintenance schedule is shown.

5. WINDSHIELD WIPER BLADES

Check for wear or cracks whenever they do not wipe clean. Replace if necessary.

6. FLUID LEAKS

- (a) Check underneath for leaking fuel, oil, water or other fluid.
- (b) If you smell gasoline fumes or notice any leak, have the cause found and corrected.

7. DOORS AND ENGINE HOOD

- (a) Check that all doors including the trunk lid operate smoothly, and that all latches lock securely.
- (b) Check that the engine hood secondary latch secures the hood from opening when the primary latch is released.

INSIDE VEHICLE

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2. LIGHTS

- (a) Check that the headlights, stop lights, taillights, turn signal lights, and other lights are all working.
- (b) Check the headlight aiming.

3. WARNING LIGHTS AND BUZZERS

Check that all warning lights and buzzers function properly.

4. HORN

Check that it is working.

5. WINDSHIELD GLASS

Check for scratches, pits or abrasions.

6. WINDSHIELD WIPER AND WASHER

- (a) Check operation of the wipers and washer.
- (b) Check that the wipers do not streak.

7. WINDSHIELD DEFROSTER

Check that the air comes out from the defroster outlet when operating the heater air conditioner at defroster mode.

8. REAR VIEW MIRROR

Check that it is mounted securely.

9. SUN VISORS

Check that they move freely and are mounted securely.

10. STEERING WHEEL

Check that it has the specified freeplay. Be alert for changes in steering condition, such as hard steering, excessive freeplay or strange noise.

11. SEATS

- (a) Check that all front seat controls such as seat adjusters, setback recliner, etc. operate smoothly.
- (b) Check that the front seat head restraints move up and down smoothly.
- (c) Check that the rear seat head restraints move up and down smoothly and that the locks hold securely in any latches position.

12. SEAT BELTS

- (a) Check that the seat belt system such as buckles, retractors and anchors operate properly and smoothly.
- (b) Check that the belt webbing is not cut, frayed, worn or damaged.

13. ACCELERATOR PEDAL

Check the pedal for smooth operation and uneven pedal effort or catching.

14. BRAKE PEDAL

(See page [BR-6](#))

- (a) Check that pedal for smooth operation.
- (b) Check that the pedal has the proper reserve distance and freeplay.

15. BRAKE BOOSTER

(See page [BR-18](#))

Check the brake booster function.

16. BRAKES

At a safe place, check that the brakes do not pull to one side when applied.

17. PARKING BRAKE

(See page [BR-8](#))

- (a) Check that the pedal has the proper travel.
- (b) On a safe incline, check that the vehicle is held securely with only the parking brake applied.

18. AUTOMATIC TRANSMISSION "PARK" MECHANISM

- (a) Check the lock release button of the selector lever for proper and smooth operation.
- (b) On a safe incline, check that the vehicle is held securely with the selector lever in the "P" position and all brakes released.

UNDER HOOD

MA018-01

GENERAL MAINTENANCE

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2. WINDSHIELD WASHER FLUID

Check that there is sufficient fluid in the tank.

3. ENGINE COOLANT LEVEL

Check that the coolant level is between the LEVEL lines on the see-through reservoir at normal temperature (20°C (68°F)).

4. RADIATOR AND HOSES

- Check that the front of the radiator is clean and not blocked with leaves, dirt or bugs.
- Check the hoses for cracks, kinks, rot or loose connections.

5. BATTERY ELECTROLYTE LEVEL

- Check the indicator.
- When the indicator color is blue, the condition is satisfactory. A red color indicates that distilled water must be added, and white indicates that charging is necessary.

6. BRAKE FLUID LEVELS

Check that the brake fluid level is near the upper level line on the see-through reservoir.

7. ENGINE DRIVE BELTS

Check drive belt for fraying, cracks, wear or oiliness.

8. ENGINE OIL LEVEL

Check that level on the dipstick with the engine turned off.

9. POWER STEERING FLUID LEVEL

- Check the level on the dipstick.
- The level should be in the "HOT" or "COLD" range depending on the fluid temperature.

10. AUTOMATIC TRANSMISSION FLUID LEVEL

- Park the vehicle on a level surface.
- With the engine idling and the parking and foot brake applied, shift the selector into all positions from "P" to "L", and then shift into "P".
- Turn and pull out the dipstick and wipe off the fluid with a clean rag. Re-insert the dipstick fully and check that the fluid level is in the HOT range.
- Do this check with the fluid at normal driving temperature (70 – 80°C (158 – 176°F)).

If the level is at the low side, add fluid.

NOTICE:

Do not overfill.

HINT:

Wait about 30 minutes before checking the fluid level after extended driving at high speeds in hot weather, driving in heavy traffic or with a trailer.

11. EXHAUST SYSTEM

Visually inspect for cracks, holes or loose supports.

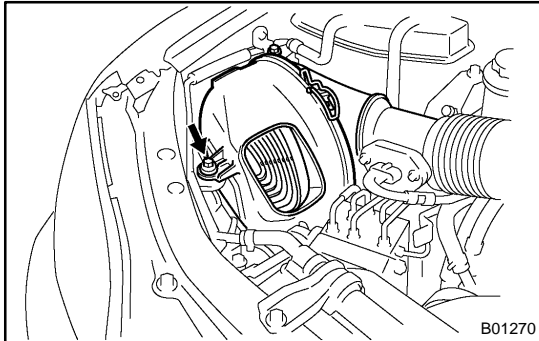
If any change in the sound of the exhaust or smell of the exhaust fumes is noticed, have the cause located and corrected.

ENGINE INSPECTION

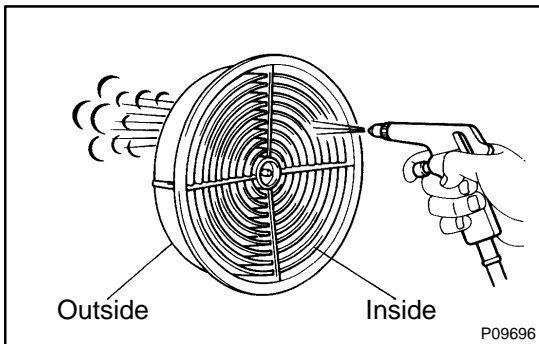
HINT:

Inspect these items when the engine is cold.

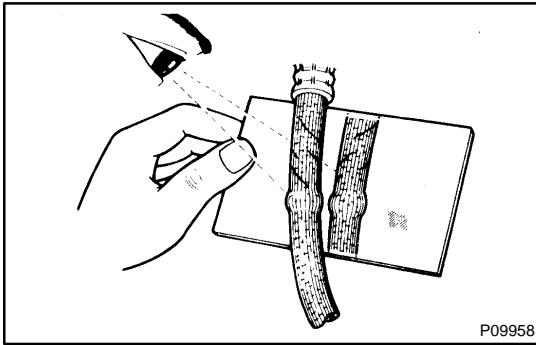
1. **REPLACE TIMING BELT**
(See page [EM-15](#))
2. **INSPECT DRIVE BELT**
(See page [CH-2](#))
3. **REPLACE SPARK PLUGS**
(See page [IG-1](#))
4. **INSPECT AIR FILTER**
 - (a) Remove the battery clamp cover.
 - (b) Remove the air cleaner inlet.
 - (c) Remove the air cleaner case and air filter.
 - (d) Visually check that the air filter is not excessively damaged or oily.



- If necessary, replace the air filter.
- (e) Clean the filter with compressed air.
First blow from the inside thoroughly, then blow off the outside of the filter.
 - (f) Reinstall the air filter and air cleaner case.
 - (g) Reinstall the air cleaner inlet.
 - (h) Reinstall the battery clamp cover.



5. **REPLACE AIR FILTER**
Replace the air filter with a new one.
6. **REPLACE ENGINE OIL AND OIL FILTER**
(See page [LU-3](#))
7. **REPLACE ENGINE COOLANT**
(See page [CO-2](#))
8. **INSPECT CHARCOAL CANISTER**
(See page [EC-7](#))
9. **REPLACE GASKET IN FUEL TANK CAP**
(See page [EC-7](#))
10. **INSPECT FUEL LINES AND CONNECTIONS**
(See page [EC-7](#))
11. **INSPECT EXHAUST PIPES AND MOUNTINGS**
12. **ADJUST VALVE CLEARANCE**
(See page [EM-4](#))



BRAKE INSPECTION

MA01A-01

1. INSPECT BRAKE LINE PIPES AND HOSES

HINT:

Check in a well lighted area. Check the entire circumference and length of the brake hoses using a mirror as required. Turn the front wheels fully right or left before checking the front brake.

- (a) Check all brake lines and hoses for:
 - Damage
 - Wear
 - Deformation
 - Cracks
 - Corrosion
 - Leaks
 - Bends
 - Twists
- (b) Check all clamps for tightness and connections for leakage.
- (c) Check that the hoses and lines are clear of sharp edges, moving parts and the exhaust system.
- (d) Check that the lines installed in grommets pass through the center of the grommets.

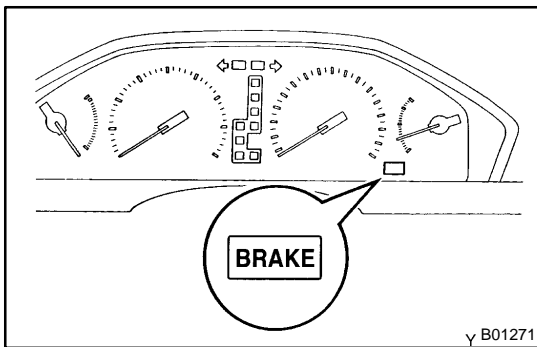
2. INSPECT FRONT AND REAR BRAKE PADS AND DISCS

(FRONT PADS: See page [BR-23](#))

(REAR PADS: See page [BR-33](#))

(FRONT DISCS: See page [BR-28](#))

(REAR DISCS: See page [BR-38](#))



If the pad wear indicator warning light on the instrument panel lights up, check the pad thickness of all the disc brakes. If necessary, replace the pads and pad wear indicators.

HINT:

The warning light normally comes on when the ignition switch is turned ON and the engine is not running.

3. INSPECT PARKING BRAKE LININGS AND DRUMS

(See page [BR-44](#))

4. INSPECT OR CHANGE BRAKE FLUID

- (a) Visually inspect the master cylinder for leaks.
- (b) Change brake fluid.

(See page [BR-4](#))

Fluid: SAE J1703 or FMVSS No.116 DOT3

CHASSIS INSPECTION

1. INSPECT STEERING LINKAGE

- (a) Check the steering wheel freeplay.
(See page [SR-9](#))
- (b) Check the steering linkage for looseness or damage.
Check that:
 - Tie rod ends do not have excessive play.
 - Dust seals and boots are not damaged.
 - Boot clamps are not loose.

2. INSPECT SRS AIRBAG

(See page [RS-3](#))

3. INSPECT STEERING GEAR HOUSING OIL

Check the steering gear housing for oil leakage.

4. INSPECT LOWER BALL JOINTS AND DUST COVERS

- (a) Jack up the front of the vehicle and support it with stands.
- (b) Make sure the front wheels are in a straight-ahead position, and depress the brake pedal.
- (c) Jack up the lower suspension arm until there is about half a load on the front coil spring.
- (d) Inspect the dust cover for damage.

5. CHECK AUTOMATIC TRANSMISSION AND DIFFERENTIAL OIL

Visually check the automatic transmission and differential for oil leakage.

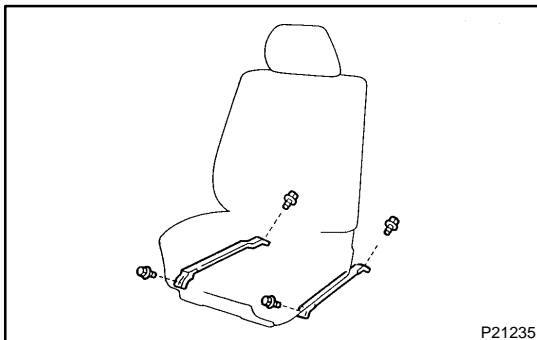
If leakage is found, check for the cause and repair it.

6. REPLACE AUTOMATIC TRANSMISSION FLUID

(See page [DI-173](#))

7. REPLACE DIFFERENTIAL OIL

(See page [SA-71](#))

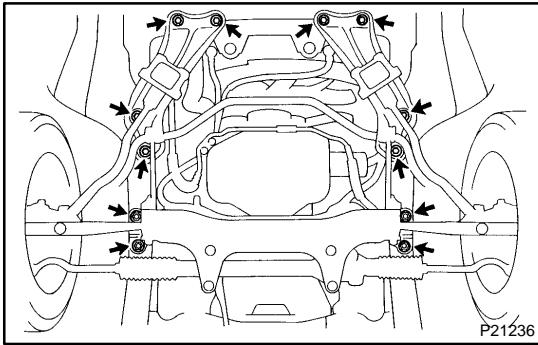


8. TIGHTEN BOLTS AND NUTS ON CHASSIS AND BODY

Tighten these parts:

- Front seat mounting bolts

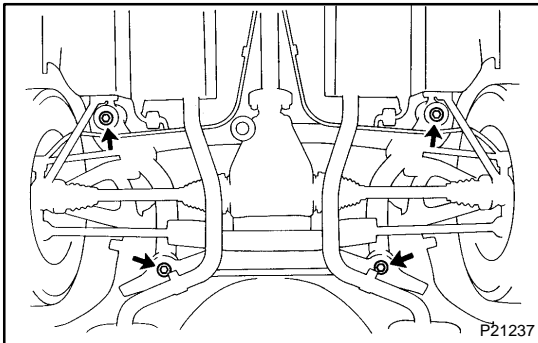
Torque: 37 N·m (375 kgf·cm, 27 ft·lbf)



- Strut/stabilizer bar bracket-to-body mounting bolts
Torque: 72 N·m (730 kgf-cm, 53 ft-lbf)

- Front suspension lower crossmember-to-body mounting nuts

Torque: 98 N·m (1,000 kgf-cm, 72 ft-lbf)



- Rear suspension member-to-body mounting bolts
Torque: 180 N·m (1,840 kgf-cm, 133 ft-lbf)

9. BODY INSPECTION

- Check the body exterior for dents, scratches and rust.
- Check the underbody for rust and damage.

If necessary, replace or repair.

10. REPLACE REFINER AIR FILTER

(See page [AC-99](#))

11. ROAD TEST

- Check the engine and chassis for abnormal noises.
- Check that the vehicle does not wander or pull to one side.
- Check that the brakes work properly and do not drag.
- Do setting of the parking brake shoes and drum.

12. FINAL INSPECTION

- Check the operation of the body parts:
 - Hood:
 - Auxiliary catch operates properly
 - Hood locks securely when closed
 - Front and rear doors:
 - Door locks operate properly
 - Doors close properly
 - Luggage compartment door:
 - Door lock operates properly
 - Seats:
 - Seat adjusts easily and locks securely in any position
 - Front seat back locks securely in any position
- Be sure to deliver a clean car. Especially check:
 - Steering wheel
 - Shift lever knob
 - All switch knobs
 - Seats