

OUTSIDE VEHICLE

GENERAL MAINTENANCE

9900V-02

These are maintenance and inspection items which are considered to be the owner's responsibility. They can be done by the owner or they 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 service after the last period should be performed at the same interval as before unless noted.
- Failure to do even one of the items can cause the engine to run poorly and increase the exhaust emissions.

2. TIRES

- (a) Check the pressure with a gauge. If necessary, make adjustment.
- (b) Check for cuts, damage or excessive wear.

3. WHEEL NUTS

- (a) When checking the tires, check the nuts for looseness or for missing nuts. If necessary, tighten them.

4. TIRE ROTATION (See page 28–1)

- (a) Check the owner's manual supplement in which the maintenance schedule is shown.

5. WINDSHIELD WIPER BLADES

- (a) Check for wear or cracks whenever they do not wipe clean. If necessary, replace them.

6. FLUID LEAKS

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

7. DOORS AND ENGINE HOOD

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

INSIDE VEHICLE

GENERAL MAINTENANCE

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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

- (a) Check that all the warning lights and buzzers function properly.

4. HORN

- (a) Check that the horn works normally.

5. WINDSHIELD GLASS

- (a) Check for scratches, pits or abrasions.

6. WINDSHIELD WIPER AND WASHER

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

7. WINDSHIELD DEFROSTER

- (a) Check that air comes out from the defroster outlet when operating the heater or air conditioner at defroster mode.

8. REAR VIEW MIRROR

- (a) Check that the rear view mirror is mounted securely.

9. SUN VISORS

- (a) Check that the sun visors move freely and are mounted securely.

10. STEERING WHEEL

- (a) Check that the steering wheel has the specified freeplay. Be alert for changes in steering condition, such as hard steering, excessive freeplay or strange noises.

11. SEATS

- (a) Check that all the front seat controls such as seat adjusters, seatback recliner, etc. operate smoothly.
- (b) Check that all the latches lock securely in any position.
- (c) Check that the locks hold securely in any latched position.
- (d) Check that the head restraints move up and down smoothly and that the locks hold securely in any latched position.
- (e) For folding-down of the rear seat backs, check that the latches lock securely.

12. SEAT BELTS

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

13. ACCELERATOR PEDAL

- (a) Check the pedal for smooth operation, uneven pedal effort or catching.

14. CLUTCH PEDAL (See page 42-7)

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

15. BRAKE PEDAL (See page 32-6)

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

16. BRAKES

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

17. PARKING BRAKE (See page 33-2)

- (a) Check that the lever 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) On a safe incline, check that the vehicle is held securely with the selector lever in the "P" position and all the brakes released.

UNDER HOOD

9900X-02

GENERAL MAINTENANCE

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2. WINDSHIELD WASHER FLUID

- (a) Check that there is sufficient fluid in the tank.

3. ENGINE COOLANT LEVEL

- (a) Check that the coolant level is between the "FULL" and "LOW" lines on the see-through reservoir.

4. RADIATOR AND HOSES

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

5. BATTERY ELECTROLYTE LEVEL

- (a) Check that the electrolyte level of all the battery cells is between the upper and lower level lines on the case.

6. BRAKE FLUID LEVEL

- (a) Check that the brake fluid levels are near the upper level line on the see-through reservoirs.

7. ENGINE DRIVE BELT

- (a) Check the drive belt for fraying, cracks, wear or oiliness.

8. ENGINE OIL LEVEL

- (a) Check the level on the dipstick with the engine turned off.

9. POWER STEERING FLUID LEVEL

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

10. AUTOMATIC TRANSMISSION FLUID LEVEL

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

HINT:

Wait until the engine cools down (approx. 30 min.) before checking the fluid level after extended driving at high speed, in hot weather, in heavy traffic or pulling a trailer.

11. EXHAUST SYSTEM

- (a) If any change in the sound of the exhaust or the smell of the exhaust fumes is noticed, locate and correct the cause.

ENGINE

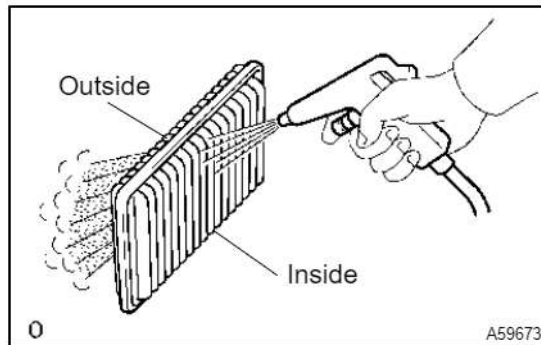
ON-VEHICLE INSPECTION

9900Y-02

HINT:

Inspect these items when the engine is cold.

1. **1MZ-FE:**
REPLACE TIMING BELT (See page [14-206](#))
2. **INSPECT DRIVE BELT** (2AZ-FE: See page [14-5](#), 1MZ-FE: See page [14-140](#))
3. **REPLACE SPARK PLUGS** (2AZ-FE: See page [18-1](#), 1MZ-FE: See page [18-3](#))



4. INSPECT AIR FILTER

- (a) Remove the air filter.
- (b) Visually check that the air filter is not excessively damaged or oily.
If necessary, replace the air filter.
- (c) Clean the filter with compressed air.
First blow from the inside thoroughly, and then blow from the outside of the filter.
- (d) Reinstall the air filter.

5. REPLACE AIR FILTER

- (a) Replace the air filter with a new one.

6. REPLACE ENGINE OIL AND OIL FILTER

(2AZ-FE: See page [17-7](#), 1MZ-FE: See page [17-22](#))

7. REPLACE ENGINE COOLANT (2AZ-FE: See page [16-6](#), 1MZ-FE: See page [16-20](#))

8. INSPECT GASKET IN FUEL TANK CAP

(2AZ-FE: See page [12-1](#), 1MZ-FE: See page [12-11](#))

9. INSPECT FUEL LINES AND CONNECTIONS AND FUEL TANK VAPOR VENT SYSTEM HOSES AND FUEL TANK BANDS

- (a) Visually check the fuel lines for cracks, leakage, loose connections, deformation or tank band looseness.

10. INSPECT EXHAUST PIPES AND MOUNTINGS

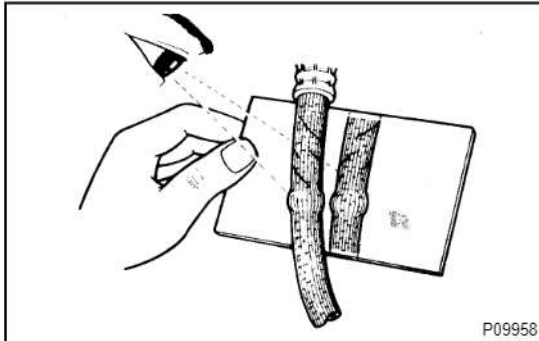
- (a) Visually check the pipes, hangers and connections for severe corrosion, leaks or damage.

11. INSPECT VALVE CLEARANCE (2AZ-FE: See page [14-7](#), 1MZ-FE: See page [14-142](#))

BRAKE

ON-VEHICLE INSPECTION

9900Z-02



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 the brake lines and hoses for:
 - Damage
 - Wear
 - Deformation
 - Cracks
 - Corrosion
 - Leaks
 - Bends
 - Twists
- (b) Check all the 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 install in grommets pass through the center of the grommets.

2. INSPECT FRONT BRAKE PADS AND DISCS (See page 32-25)
 3. INSPECT REAR BRAKE PADS AND DISCS (See page 32-33)
 4. INSPECT REAR BRAKE LININGS AND DRUMS (See page 32-39)
 5. INSPECT OR CHANGE BRAKE FLUID (See page 32-4)
- Fluid: SAE J1703 or FMVSS No.116 DOT3

CHASSIS

9901A-01

ON-VEHICLE INSPECTION

1. INSPECT STEERING LINKAGE

- (a) Check the steering wheel freeplay. (See page 50-3)
- (b) Check the steering linkage for looseness or damage.
 - (1) Check that the tie rod ends do not have excessive play.
 - (2) Check that the dust seals and boots are not damaged.
 - (3) Check that the boot clamps are not loose.

2. INSPECT STEERING GEAR HOUSING OIL

- (a) Check the steering gear housing for oil leakage.

If leakage is found, check and repair the cause.

3. INSPECT BALL JOINTS AND DUST COVERS

- (a) Inspect the ball joints for excessive looseness.
 - (1) Jack up the front of the vehicle and place wooden blocks with a height of 180 – 200 mm (7.09 – 7.87 in.) under the front tires.
 - (2) Lower the jack until there becomes about half a load on the front coil spring. Place stands under the vehicle for safety.
 - (3) Check that the front wheels are pointing straight ahead, and block them with chocks.
 - (4) Using a lever, pry up the end of the lower arm, and check the amount of play.

Maximum ball joint vertical play: 0 mm (0 in.)

If there is any play, replace the ball joint.

- (b) Check the dust cover for damage.

4. INSPECT DRIVE SHAFT BOOTS

- (a) Check the drive shaft boots for clamp looseness, oil leakage or damage.

5. CHECK TRANSAXLE OIL (FLUID)

- (a) Visually check the transaxle for oil (fluid) leakage.

If leakage is found, check and repair the cause.

6. ROTATE TIRES (See page 28-1)

BODY

9901B-01

ON-VEHICLE INSPECTION

1. Canada:

TIGHTEN BOLTS AND NUTS ON CHASSIS AND BODY

- (a) Where necessary, tighten all the parts of the chassis.
 - Front axle and suspension
 - Drive train
 - Rear axle and suspension
 - Brake system
 - Engine mounting, etc.
- (b) Where necessary, tighten all the parts of the body.
 - Seat belt system
 - Seats
 - Doors and hood
 - Body mountings
 - Fuel tank
 - Exhaust pipe system, etc.

2. **REPLACE AIR CONDITIONING FILTER**

- (a) Remove the glove compartment assembly.
- (b) Remove the filter case from the filter outlet.
- (c) Remove the filter from the filter case.
- (d) Replace the filter with a new one.
- (e) Installation is in the reverse order of removal.