

---

# MAINTENANCE

	Page
MAINTENANCE SCHEDULE .....	MA-2
MAINTENANCE OPERATIONS .....	MA-4
GENERAL MAINTENANCE .....	MA-15

**MA**

## GENERAL NOTES:

- Every service item in the periodic maintenance list must be performed.
- Failure to do even one item can cause the engine to run poorly and increase exhaust emissions.

# MAINTENANCE SCHEDULE

Maintenance operations: A = Check and adjust if necessary;  
 R = Replace, change or lubricate;  
 I = Inspect and correct or replace if necessary

## SCHEDULE A

### CONDITION

- Towing a trailer, using a camper or car top carrier.
- Repeated short trips less than 5 miles (8 km) with outside temperatures remain below freezing.
- Extensive idling and/or low speed driving for a long distance such as police, taxi or door-to-door delivery use.
- Operating on dusty, rough, muddy or salt spread roads.

System	Service interval (Odometer reading or months, whichever comes first)	Maintenance services beyond 60,000 miles (96,000 km) should be performed at the same intervals shown in each maintenance schedule.														See page (item No.)		
		Miles x 1,000	5	10	15	20	25	30	35	40	45	50	55	60				
		Km x 1,000	8	16	24	32	40	48	56	64	72	80	88	96				
		Months	6	12	18	24	30	36	42	48	54	60	66	72				
ENGINE	Timing belt	R (1)														MA-4 (item 1)		
	Valve clearance																A	MA-7 (item 13)
	Drive belts <sup>(2)</sup>																I	MA-4 (item 2)
	Engine oil and oil filter ★	3S-FE, 3S-GE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	MA-6 (item 6)
		3S-GTE	R (3)															
		Engine and intercooler coolant <sup>(4)</sup>																R
	Exhaust pipes and mountings			I				I				I					I	MA-7 (item 12)
FUEL	Idle speed <sup>(5)</sup>	3S-GE		A				A									A	MA-7 (item 14)
	Air filter ★ <sup>(6)</sup>		I	I	I	I	I	R	I	I	I	I	I	I	I	I	R	MA-5 (item 3, 4)
	Fuel line and connections								I								I	MA-7 (item 11)
	Fuel tank cap gasket																R	MA-6 (item 10)
IGNITION	Spark plugs	3S-FE ★ *						R									R	MA-5 (item 5)
		3S-GE, 3S-GTE																
EVAP	Charcoal canister																I	MA-6 (item 9)
BRAKES	Brake linings and drums			I		I		I		I		I		I		I	I	MA-8 (item 16)
	Brake pads and discs			I		I		I		I		I		I		I	I	MA-8 (item 17)
	Brake line pipes and hoses					I						I					I	MA-8 (item 15)
CHASSIS	Steering linkage <sup>(7)</sup>			I		I		I		I		I		I		I	I	MA-9 (item 18)
	Drive shaft boots			I		I		I		I		I		I		I	I	MA-9 (item 20)
	Ball joints and dust covers			I		I		I		I		I		I		I	I	MA-10 (item 21)
	Automatic transaxle, manual transaxle, transfer differential and steering gear housing oil <sup>(8)</sup>						R					R					R	MA-11 (item 23)
																		R
	Bolts and nuts on chassis and body <sup>(7)</sup>			I		I		I		I		I		I		I	I	MA-13 (item 24)

Maintenance services indicated by a star (★) or asterisk (\*) are required under the terms of the Emission Control Systems Warranty (ECSW). See Owner's Guide or Warranty Booklet for complete warranty information.

- ★ For vehicles sold in California
- \* For vehicles sold outside California

### NOTE:

- (1) For vehicles frequently idled for extensive periods and/or driven for long distance at low speeds such as taxi, police and door-to-door delivery, it is recommended to change at 60,000 miles (96,000 km).
- (2) After 60,000 miles (96,000 km) or 72 months, inspect every 10,000 miles (16,000 km) or 12 months.
- (3) Replace every 2,500 miles (4,000 km) or 3 months, but oil filter replace every 5,000 miles (8,000 km) or 6 months.
- (4) After 60,000 miles (96,000 km) or 72 months, replace every 30,000 miles (48,000 km) or 36 months.
- (5) After 60,000 miles (96,000 km) or months, adjust every 30,000 miles (48,000 km) or 36 months.
- (6) Applicable when operating mainly on dusty roads. If not, follow the schedule B.
- (7) Applicable when operating mainly on rough and/or muddy roads. If not, follow the schedule B.
- (8) Inspect the steering gear housing, inspect for oil leakage only.

**SCHEDULE B**

**CONDITION**

Conditions other than those listed for SCHEDULE A.

System	Service interval (Odometer reading or months, whichever comes first)	Maintenance services beyond 60,000 miles (96,000 km) should be performed at the same intervals shown in each maintenance schedule.						See page (item No.)	
		Miles x 1,000	10	20	30	40	50		60
		Km x 1,000	16	32	48	64	80		96
		Months	12	24	36	48	60		72
ENGINE	Valve clearance							A	MA-7 (item 13)
	Drive belts <sup>(1)</sup>							I	MA-4 (item 2)
	Engine oil and oil filter ★	3S-FE, 3S-GE	R	R	R	R	R	R	MA-6 (item 6)
		3S-GTE	R (2)						
	Engine and intercooler coolant <sup>(3)</sup>							R	MA-6 (item 7, 8)
Exhaust pipes and mountings				I			I	MA-7 (item 12)	
FUEL	Idle speed <sup>(4)</sup>	3S-GE	A		A			A	MA-7 (item 14)
	Air filter ★				R			R	MA-5 (item 4)
	Fuel lines and connections				I			I	MA-7 (item 11)
	Fuel tank cap gasket							R	MA-6 (item 10)
IGNITION	Spark plugs	3S-FE ★ *			R			R	MA-5 (item 5)
		3S-GE, 3S-GTE						R	
EVAP	Charcoal canister							I	MA-6 (item 9)
BRAKES	Brake linings and drums			I		I		I	MA-8 (item 16)
	Brake pads and discs			I		I		I	MA-8 (item 17)
	Brake line pipes and hoses			I		I		I	MA-8 (item 15)
CHASSIS	Steering linkage			I		I		I	MA-9 (item 18)
	Drive shaft boots			I		I		I	MA-9 (item 20)
	Ball joints and dust covers			I		I		I	MA-10 (item 21)
	Automatic transaxle, manual transaxle, transfer, differential and steering gear housing oil			I		I		I	MA-10 (item 22) MA-9 (item 19)
	Bolts and nuts on chassis and body			I		I		I	MA-13 (item 24)

Maintenance services indicated by a star (★) or asterisk (\*) are required under the terms of the Emission Control Systems Warranty (ECSW). See Owner's Guide or Warranty Booklet for complete warranty information.

- ★ For vehicle sold in California
- \* For vehicles sold outside California

**NOTE:**

- (1) After 60,000 miles (96,000 km) or 72 months, inspect every 10,000 miles (16,000 km) or 12 months.
- (2) Replace every 5,000 miles (8,000 km) or 6 months, but oil filter replace every 10,000 miles (16,000 km) or 12 months.
- (3) After 60,000 miles (96,000 km) or 72 months, replace every 30,000 miles (48,000 km) or 36 months.
- (4) After 60,000 miles (96,000 km) or 72 months, adjust every 30,000 miles (48,000 km) or 36 months.

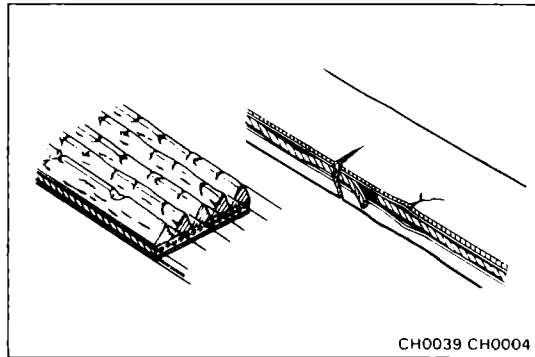
# MAINTENANCE OPERATIONS

## ENGINE

### Cold Engine Operations

#### 1. REPLACE TIMING BELT

- (a) Remove the timing belt.  
 3S-FE (See pages EM-27 to 30)  
 3S-GE and 3S-GTE (See pages EM-38 to 41)
- (b) Install the timing belt.  
 3S-FE (See pages EM-33 to 37)  
 3S-GE and 3S-GTE (See pages EM-44 to 48)



CH0039 CH0004

#### 2. INSPECT DRIVE BELT

- (a) Visually check the belt for separation of the adhesive rubber above and below the core, core separation from the belt side, severed core, separation of the rib from the adhesive rubber, cracking or separation of the ribs, torn or worn ribs or cracks in the inner ridges of the ribs.

If necessary, replace the drive belt.

- (b) Using a belt tension gauge, measure the drive belt tension.

#### Belt tension gauge:

Nippondenso BTG-20 (95506-00020)  
 Borroughs No.BT-33-73F

#### Drive belt tension:

##### Alternator (3S-FE)

w/ A/C	New belt	175 ± 5 lb
	Used belt	130 ± 10 lb
w/o A/C	New belt	125 ± 25 lb
	Used belt	95 ± 20 lb

##### Alternator (3S-GE and 3S-GTE)

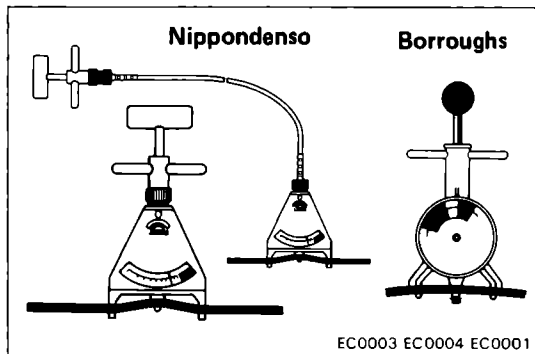
w/ A/C	New belt	175 ± 5 lb
	Used belt	115 ± 20 lb
w/o A/C	New belt	150 ± 25 lb
	Used belt	130 ± 25 lb

PS pump	New belt	125 ± 25 lb
	Used belt	80 ± 20 lb

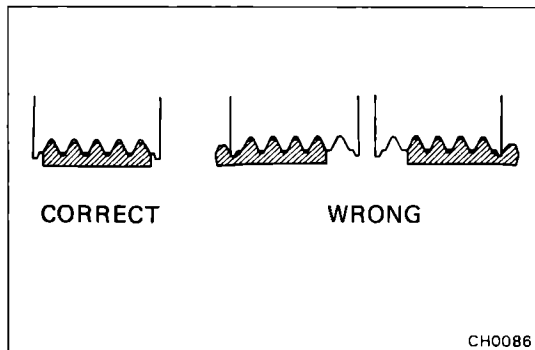
If necessary, adjust the drive belt tension.

#### NOTE:

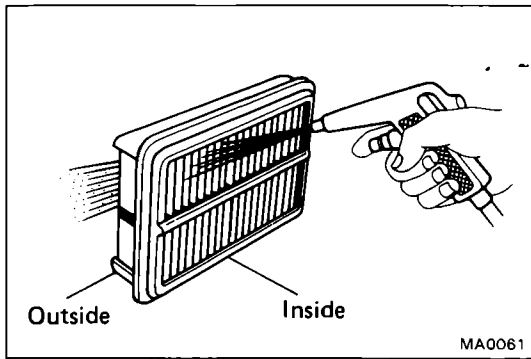
- "New belt" refers to a belt which has been used 5 minutes or less on a running engine.
- "Used belt" refers to a belt which has been used on a running engine for 5 minutes or more.
- After installing the belt, check that it fits properly in the ribbed grooves.
- Check by hand to confirm that the belt has not slipped out of the groove on the bottom of the pulley.
- After installing a new belt, run the engine for about 5 minutes and recheck the belt tension.



EC0003 EC0004 EC0001



CH0086



**3. INSPECT AIR FILTER**

(a) Visually check that the air cleaner element is not excessively, damaged or oily.

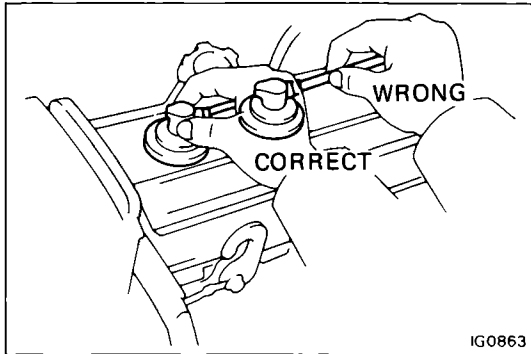
If necessary, replace the air cleaner element.

(b) Clean the element with compressed air.

First blow from the inside thoroughly, then blow off the outside of the element.

**4. REPLACE AIR FILTER**

Replace the air cleaner element with a new one.

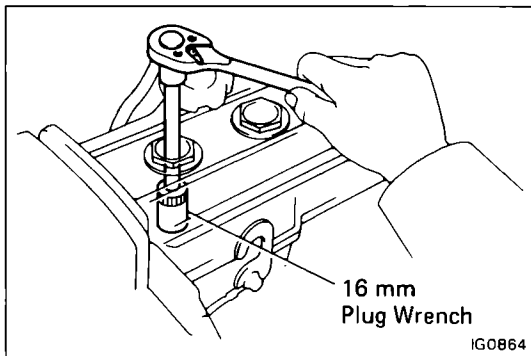


**5. REPLACE SPARK PLUGS**

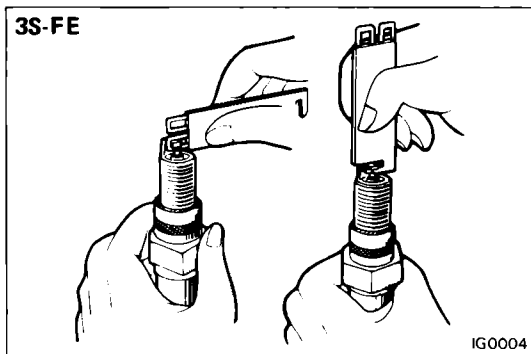
(a) (3S-GTE)

Remove the intercooler. (See page TC-9)

(b) Disconnect the spark plug cords at the rubber boot. DO NOT pull on the cords.



(c) Using a 16 mm plug wrench, remove the spark plugs.

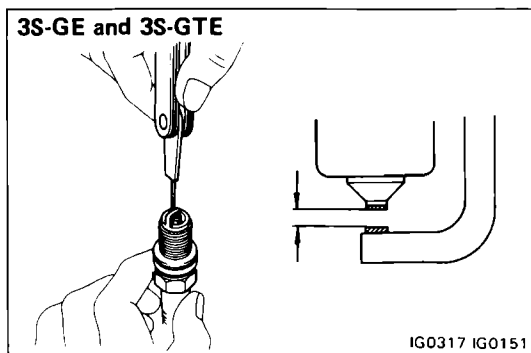


(d) (3S-FE)

Adjust the electrode gap of new spark plugs.

**Correct electrode gap: 1.1 mm (0.043 in.)**

**Recommended spark plugs: ND Q16R-U11  
NGK BCPR5EY11**



(e) (3S-GE and 3S-GTE)

Check the electrode gap of new spark plugs.

**Correct electrode gap:**

**3S-GE 1.1 mm (0.043 in.)**

**3S-GTE 0.8 mm (0.031 in.)**

**Recommended spark plugs:**

**3S-GE ND PQ16R**

**NGK BCPR5EP11**

**3S-GTE ND PQ16R8**

**NGK BCPR5EP8**

**NOTE:** If adjusting the gap of a new plug, bent only the base of the ground electrode. DO NOT touch the tip. Never attempt to adjust the gap on a used plug.

## 6. REPLACE ENGINE OIL AND OIL FILTER (See page LU-7)

Oil grade: API grade SF or SF/CC, multigrade viscosity and fuel-efficient oil

Drain and refill with oil filter change capacity:

3S-FE	4.1 liters (4.3 US qts, 3.6 Imp. qts)
3S-GE	3.9 liters (4.1 US qts, 3.4 Imp. qts)
3S-GTE	3.6 liters (3.8 US qts, 3.2 Imp. qts)

## 7. REPLACE ENGINE COOLANT (See page CO-6)

Used a good brand of ethylene-glycol base coolant, mixed according to the manufacturer's instructions.

Coolant capacity (w/ Heater):

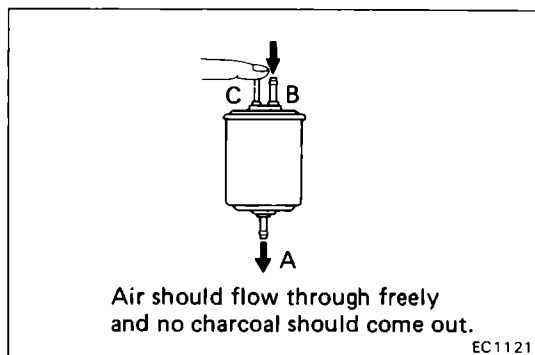
3S-FE	M/T	6.3 liters (6.7 US qts, 5.5 Imp. qts)
	A/T	6.2 liters (6.6 US qts, 5.5 Imp. qts)
3S-GE	M/T	6.2 liters (6.6 US qts, 5.5 Imp. qts)
	A/T	6.1 liters (6.4 US qts, 5.4 Imp. qts)
3S-GTE		6.4 liters (6.8 US qts, 5.6 Imp. qts)

## 8. (3S-GTE) REPLACE INTERCOOLER COOLANT (See page TC-7)

Used a good brand of ethylene-glycol base coolant, mixed according to the manufacturer's instructions.

Coolant capacity:

1.6 liters (1.7 US qts, 1.4 Imp. qts)



## 9. INSPECT CHARCOAL CANISTER

- Disconnect the hoses to the charcoal canister. Label hoses for correct installation.
- Plug pipe C with your finger, and blow compressed air (3 kg/cm<sup>2</sup>, 43 psi or 294 kPa) through pipe B (fuel tank side).
  - Check that air comes out of the bottom pipe A without resistance.
  - Check that no activated charcoal comes out.

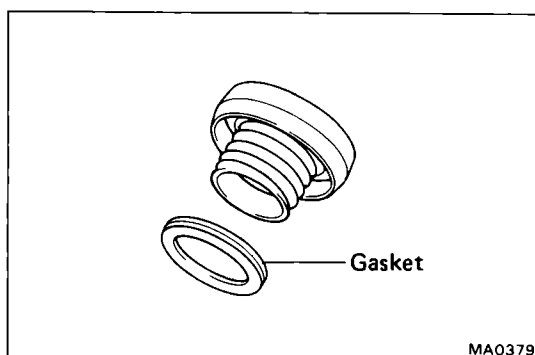
If necessary, replace the charcoal canister.

NOTE: Do not attempt to wash the charcoal.

- Connect the hoses to the charcoal canister.

## 10. REPLACE GASKET IN FUEL TANK CAP

- Remove the old gasket (O-ring) from the tank cap. Do not damage the cap.
- Install a new gasket by hand.
- Check the cap for damage or cracks.
- Install the cap and check the torque limiter.



**11. INSPECT FUEL LINES AND CONNECTIONS**

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

**12. INSPECT EXHAUST PIPES AND MOUNTINGS**

Visually check the pipes, hangers and connections for severe corrosion, leaks or damage.

**13. ADJUST VALVE CLEARANCE**

**3S-FE** (See page EM-12)

**3S-FE and 3S-GTE** (See page EM-16)

**Valve clearance (Cold):**

<b>3S-FE Intake</b>	<b>0.19 — 0.29 mm</b> (0.007 — 0.011 in.)
<b>Exhaust</b>	<b>0.28 — 0.38 mm</b> (0.011 — 0.015 in.)

**3S-GE and 3S-GTE**

<b>Intake</b>	<b>0.15 — 0.25 mm</b> (0.006 — 0.010 in.)
<b>Exhaust</b>	<b>0.20 — 0.30 mm</b> (0.008 — 0.012 in.)

**Hot Engine Operations**

**14. (3S-GE)**

**ADJUST IDLE SPEED**

(a) Preparation

- Engine at normal operating temperature
- Air cleaner installed
- All pipes and hoses of air induction system connected
- All vacuum lines connected

**NOTE:** All vacuum hoses for EGR systems, etc. should be properly connected.

- EFI system wiring connector fully plugged
- All accessories switched OFF
- Transmission in N range

(b) Connect a tachometer to the engine.

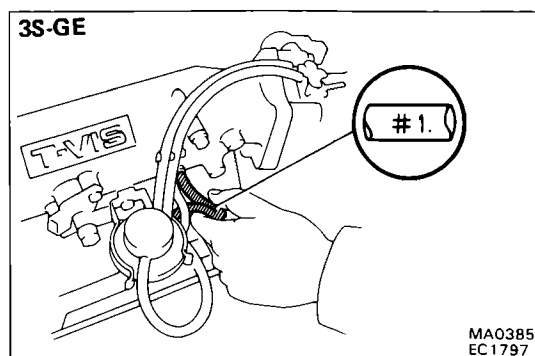
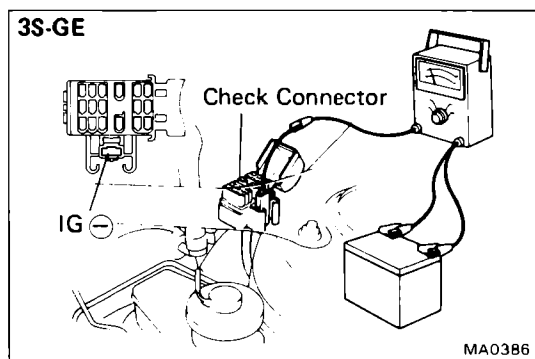
Connect the test probe of a tachometer to terminal IG ⊖ of the check connector.

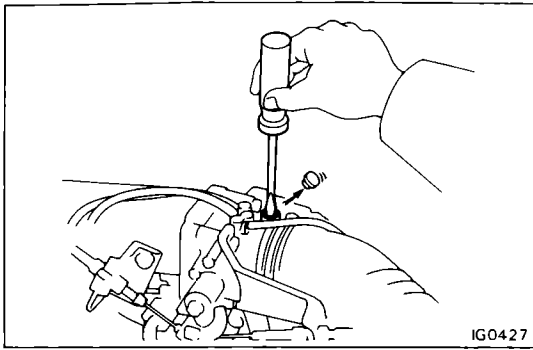
**CAUTION:**

- **NEVER** allow the tachometer test probe to touch ground as it could result in damage to the igniter and/or igniter coil.
- As some tachometer are not compatible with this ignition system, we recommend that you conform the compatibility of your until before use.

(c) Race the engine at 2.500 rpm for approx. 2 minutes.

(d) Pinch the vacuum hose No.1 of the air intake chamber.





IG0427

- (e) Adjust the idle speed by turning the IDLE SPEED ADJUSTING SCREW.

**Idle speed: 750 rpm**

**NOTE:** Make adjustments with the engine cooling fan OFF.

## BRAKES

### 15. INSPECT BRAKE LINE PIPES AND HOSES

**NOTE:** 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.

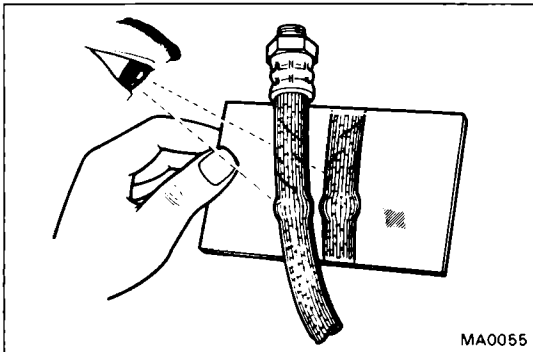
- (a) Check all brake lines and hoses for:

- 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.



MA0055

### 16. INSPECT BRAKE LININGS AND DRUMS

(See page BR-44 or 61)

- (a) Check the lining-to-drums contact condition and lining wear.

**Minimum lining thickness: 1.0 mm (0.0039 in.)**

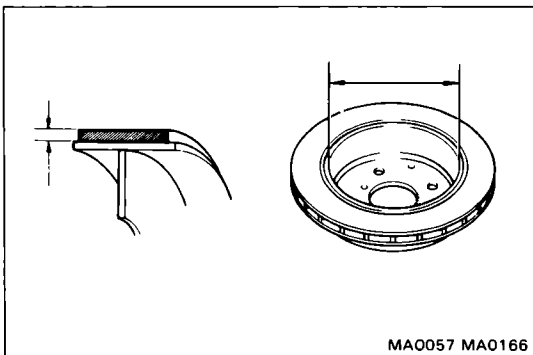
- (b) Check the brake drums for scoring or wear.

**Maximum drum inside diameter:**

<b>Drum brake</b>	<b>201.0 mm (6.913 in.)</b>
<b>Disc brake</b>	<b>171.0 mm (6.732 in.)</b>

- (c) Clean the brake parts with a damp cloth.

**NOTE:** Do not use compressed air to clean the brake parts.



MA0057 MA0166

### 17. INSPECT FRONT AND REAR BRAKE PADS AND DISCS

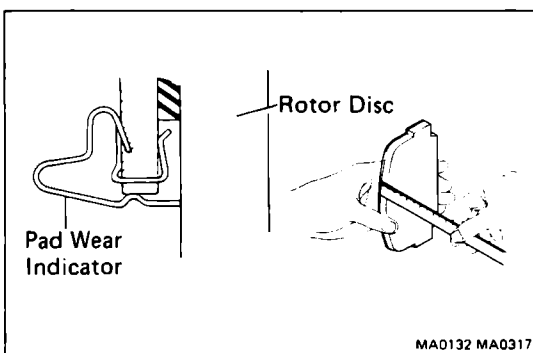
**Front (See page BR-30 or 38)**

**Rear (See page BR-56)**

- (a) Check the thickness of the disc brake pads and check for irregular wear.

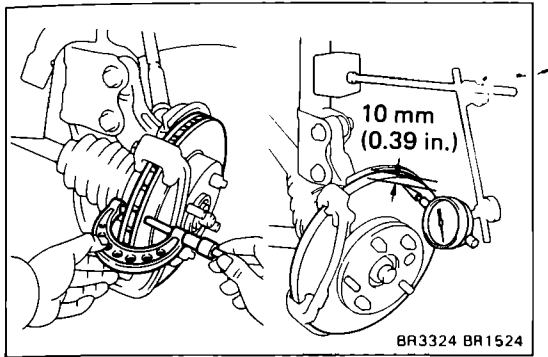
**Minimum pad thickness: 1.0 mm (0.039 in.)**

**NOTE:** If a squealing or scraping noise comes from the brake during driving, check the pad wear indicator contacting the disc rotor, the disc pad should be replaced.



MA0132 MA0317





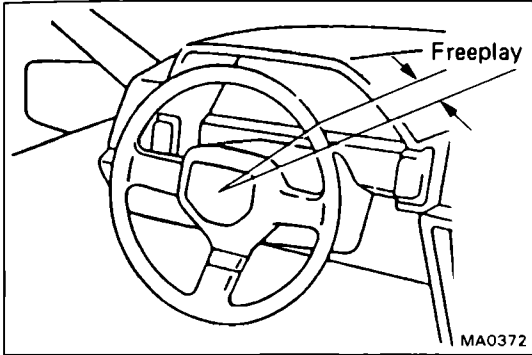
(b) Check the disc for wear or runout.

**Minimum disc thickness:**

<b>Front</b>	<b>w/o A.B.S.</b>	<b>21.0 mm (0.827 in.)</b>
	<b>w/ A.B.S. and 4WD</b>	<b>24.0 mm (0.945 in.)</b>
<b>Rear</b>		<b>9.0 mm (0.354 in.)</b>

**Maximum disc runout:**

<b>Front</b>	<b>0.07 mm (0.0028 in.)</b>
<b>Rear</b>	<b>0.15 mm (0.0059 in.)</b>



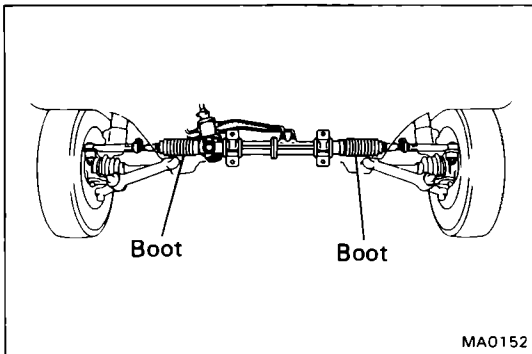
**CHASSIS**

**18. INSPECT STEERING LINKAGE**

(a) Check the steering wheel freeplay.

**Maximum steering wheel freeplay: 30 mm (1.18 in.)**

With the vehicle stopped and pointed straight ahead, rock the steering wheel gently back and forth with light finger pressure.



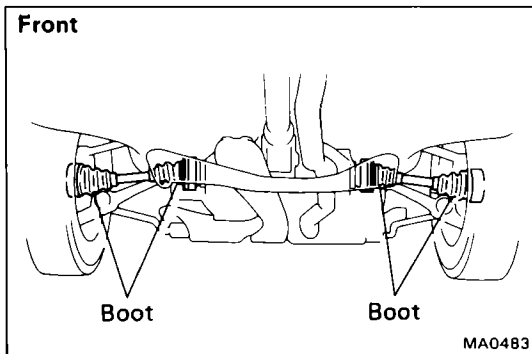
(b) Check the steering linkage for looseness or damage.

Check that:

- Tie rod ends so not have excessive play.
- Dust seals and boots are not damage.
- Boot clamps are not loose.

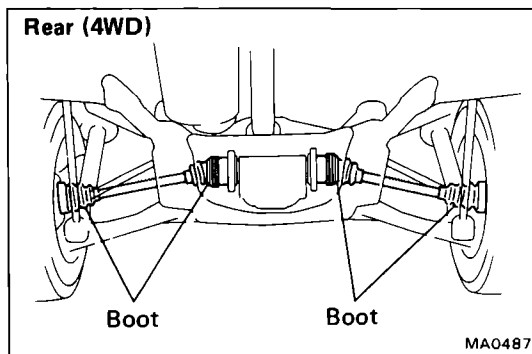
**19. INSPECT STEERING GEAR HOUSING OIL**

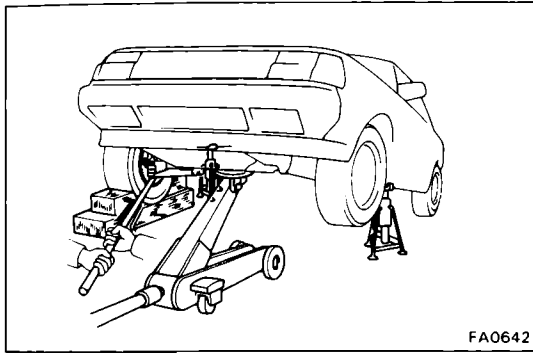
Check the steering gear box for oil leakage.



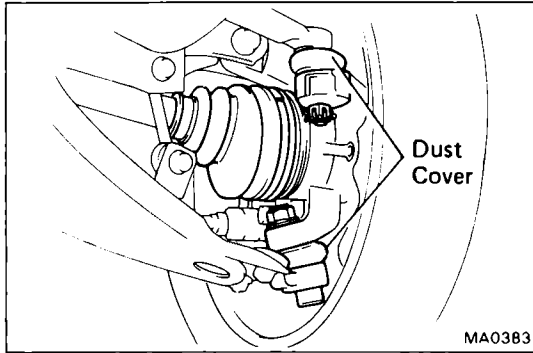
**20. INSPECT FRONT AND REAR DRIVE SHAFT BOOTS**

Check the drive shaft boots for clamp looseness, leakage or damage.





FA0642



MA0383

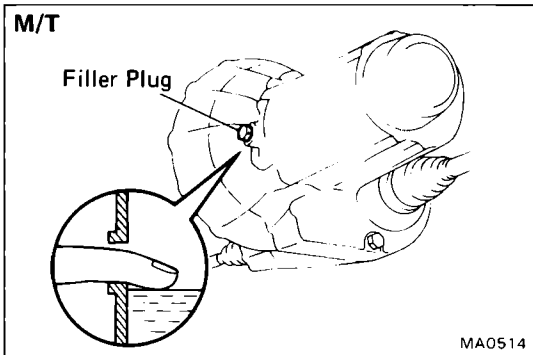
**21. INSPECT BALL JOINTS AND DUST COVERS**

- (a) Inspect the ball joints for excessive looseness.
  - 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.
  - Lower the jack until there is about half a load on the front coil springs. Place stands under the vehicle for safety.
  - Check that the front wheels are in a straight forward position, and block them with chocks.
  - 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 play, replace the ball joint.

- (b) Check the dust cover for damage.



MA0514

**22. CHECK TRANSAXLE AND DIFFERENTIAL OIL (FLUID)**

**A. (M/T)**

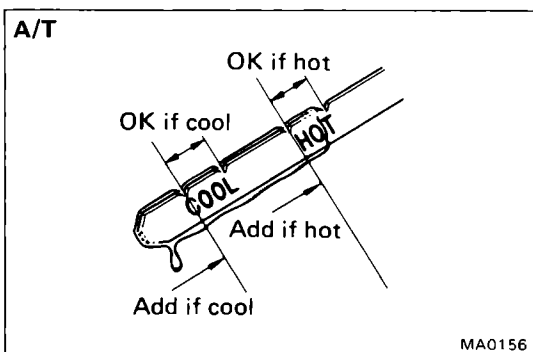
**Check manual transaxle fluid**

- (a) Visually check the transaxle for oil (fluid) leakage. If leakage is found, check for cause and repair.
- (b) Remove the filler plug and feel inside the hole with your finger. Check that the oil (fluid) comes to within 5 mm (0.20 in.) of the bottom edge of the filler hole.

If the level is low, add oil (fluid) until it begins to run out the filler hole.

**Transaxle fluid (2WD): See item 23 (A)**

**Transaxle oil (4WD): See item 23 (B)**



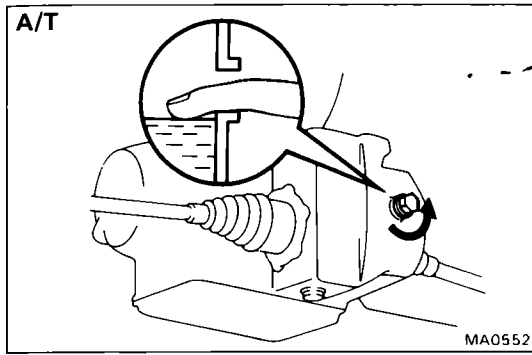
MA0156

**B. (A/T)**

**Check automatic transaxle fluid**

- (a) Visually check the transaxle for fluid leakage. If leakage is found, check for cause and repair.
- (b) (Transmission) Check the fluid level. If the level is low, add fluid.

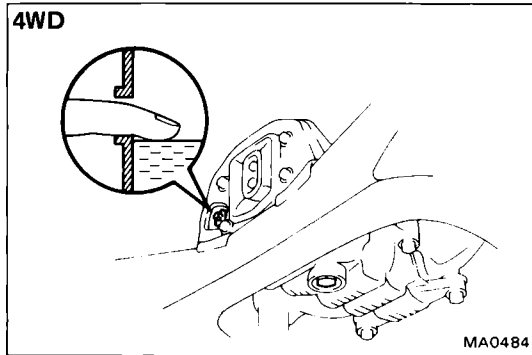
**Transmission fluid: See item 23 (C)**



- (b) (Front Differential)  
Remove the filler plug and feel inside the hole with your finger. Check that the fluid comes to within 5 mm (0.20 in.) of the bottom edge of the filler hole.

If the level is low, add oil until it begins to run out the filler hole.

**Differential fluid:** See item 23 (C)



- C. (4WD)  
**Check rear differential oil**

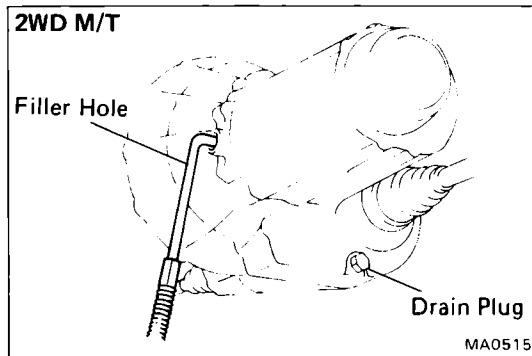
- (a) Visually check the differential for oil leakage.

If leakage is found, check for cause and repair.

- (b) Remove the filler plug and feel inside the hole with your finger. Check that the oil comes to within 5 mm (0.20 in.) of the bottom edge of the filler hole.

If the level is low, add oil until it begins to run out the filler hole.

**Differential oil:** See item 23 (D)



**23. REPLACE TRANSAXLE AND DIFFERENTIAL OIL (FLUID)**

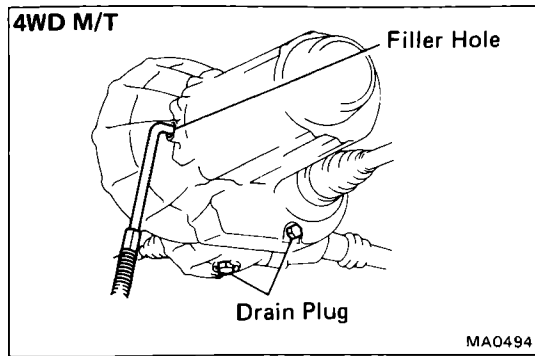
- A. (2WD M/T)  
**Replace transaxle fluid**

- (a) Remove the engine under cover.
- (b) Remove the filler and drain plugs, and drain the fluid.
- (c) Reinstall the drain plug securely.
- (d) Add new fluid until it begins to run out of the filler hole.

**Transaxle fluid:** ATF DEXRON® II

**Capacity:** 2.6 liters (2.7 US qts, 2.3 Imp. qts)

- (e) Reinstall the filler plug securely.
- (f) Reinstall the engine under cover.



**B. (4WD M/T)**

**Replace transaxle (incl. transfer) oil**

- (a) Remove the engine under cover.
- (b) Remove the filler and drain plugs, and drain the oil.
- (c) Reinstall the drain plug securely.
- (d) Add new oil until it begins to run out of the filler hole.

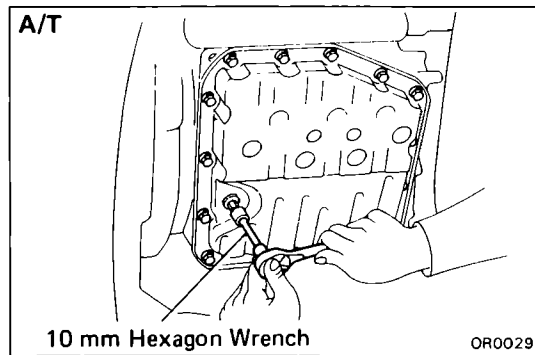
**Transaxle oil: Transaxle oil E50 (08885-80206) or equivalent**

**Recommended transaxle oil:**

**Oil grade** API GL-5  
**Viscosity** SAE 75W-90 or 80W-90  
 Above – 18°C (0°F) SAE 90  
 Below – 18°C (0°F) SAE 80W

**Capacity: 4.8 liters (5.1 US qts, 4.2 Imp. qts)**

- (e) Reinstall the filler plug securely.
- (f) Reinstall the engine under cover.

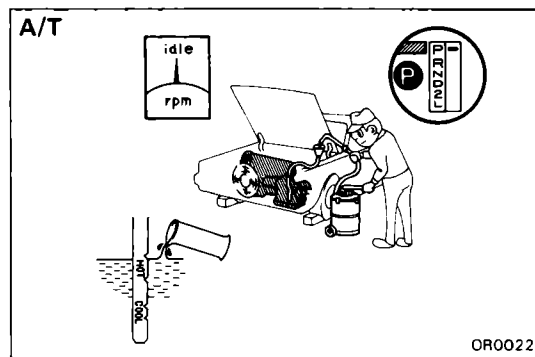


**C. (A/T)**

**Replace transaxle fluid**

**(Transmission)**

- (a) Remove the engine under cover.
- (b) Using a 10 mm hexagon wrench, remove the drain plug, and drain the fluid.
- (c) Reinstall the drain plug securely.



- (d) With the engine OFF, add new fluid through the dipstick tube.

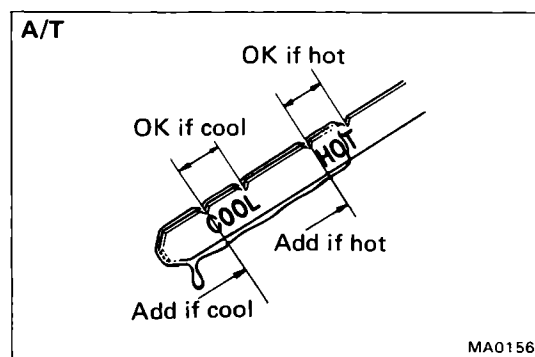
**Transmission fluid: ATF DEXRON® II**

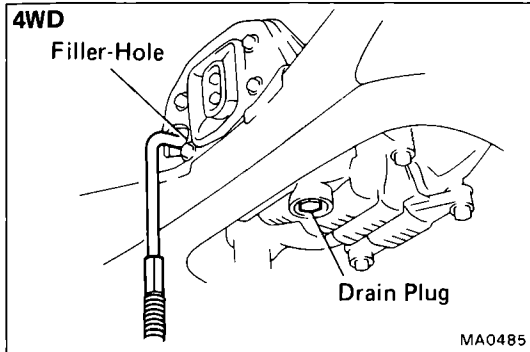
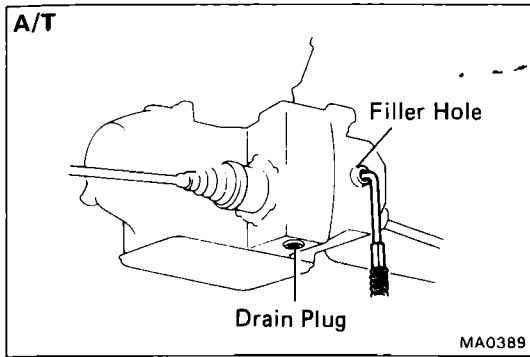
**Drain and refill capacity: 2.5 liters (2.6 US qts, 2.2 Imp. qts)**

- (e) Start the engine and shift the selector into all positions from "P" through "L", and then shift into "P".
- (f) With the engine idling, check the fluid level. Add fluid up to the "COOL" level on the dipstick.

**CAUTION: Do not overfill. The transmission and differential are separate units.**

- (g) Recheck the fluid level with the normal temperature (70 – 80°C (158 – 176°F)) and add as necessary.
- (h) Reinstall the engine under cover.





**(Front Differential)**

- (a) Reinstall the engine under cover.
- (b) Using a 10 mm hexagon wrench, remove the drain plug, and drain the fluid.
- (c) Reinstall the drain plug securely.
- (d) Add new fluid until it begins to run out of the filler hole.

**Transaxle fluid: ATF DEXRON® II**

**Capacity: 1.6 liters (1.7 US qts, 1.4 Imp. qts)**

- (e) Reinstall the filler plug securely.
- (f) Reinstall the engine under cover.

**D. (4WD)**

**Replace rear differential oil**

- (a) Remove the filler and drain plugs, and drain the oil.
- (b) Reinstall the drain plug securely.
- (c) Add new oil until it begins to run out of the filler hole.

**Rear differential oil:**

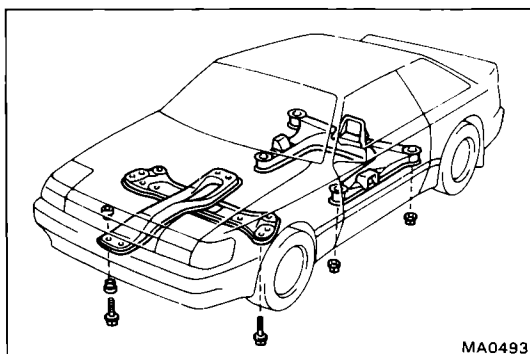
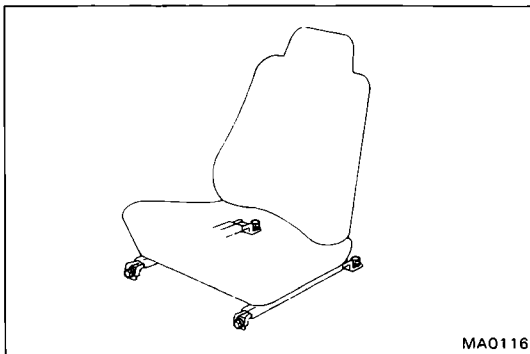
**Oil grade API GL-5 hypoid gear oil**

**Viscosity Above -18°C (0°F) SAE 90**

**Below -18°C (0°F) SAE 80W-90**

**Capacity: 1.1 liters (1.2 US qts, 1.0 Imp. qts)**

- (d) Reinstall the filler plug securely.



**24. TIGHTEN BOLTS AND NUTS ON CHASSIS AND BODY**

Tighten the following parts:

- Front seats mount bolts

**Torque: 375 kg-cm (27 ft-lb, 37 N·m)**

- Engine mounting center member-to-body mount bolts

**Torque: 400 kg-cm (29 ft-lb, 39 N·m)**

- Front suspension lower crossmember-to-body mount bolts

**Torque: 2,125 kg-cm (154 ft-lb, 208 N·m)**

- (4WD)

Rear suspension lower crossmember-to-body mount bolts

**Torque: 1,620 kg-cm (117 ft-lb, 159 N·m)**

**25. FINAL INSPECTION**

- (a) Check the operation of the body parts:
- Hood
    - Auxiliary catch operation properly
    - Hood locks securely when closed
  - Front and rear doors
    - Door locks operate properly
    - Doors close properly
  - Luggage compartment door and back door
    - Door sock operates properly
  - Seats
    - Seat adjusts easily and locks securely in any position
    - Front seat back locks securely in any position
    - Folding-down rear seat backs lock securely
- (b) 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.
  - Perform bedding down of the parking brake shoes and drum. (See page MA-8)
- (c) Be sure to deliver a clean car especially check:
- Steering wheel
  - Shift lever knob
  - All switch knobs
  - Door handles
  - Seats

## GENERAL MAINTENANCE

These are the maintenance and inspection items which are considered to be the owner's responsibility. They can be performed by the owner or he 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 perform. Items and procedures for general maintenance are as follows.

### OUTSIDE VEHICLE

#### 1. TIRES

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

#### 2. WHEEL NUTS

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

#### 3. TIRE ROTATION

It is recommended that tires be rotated every 7,500 miles (12,000 km).

#### 4. WINDSHIELD WIPER BLADES

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

#### 5. 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.

#### 6. DOORS AND ENGINE HOOD

- (a) Check that all doors including the trunk lid and back door 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

#### 7. LIGHTS

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

#### 8. WARNING LIGHTS AND BUZZERS

Check that all warning lights and buzzers function properly.

#### 9. HORN

Check that it is working.

#### 10. WINDSHIELD GLASS

Check for scratches, pits or abrasions.

#### 11. WINDSHIELD WIPER AND WASHER

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

#### 12. WINDSHIELD DEFROSTER

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

#### 13. REAR VIEW MIRROR

Check that it is mounted securely.

#### 14. SUN VISORS

Check that they move freely and are mounted securely.

#### 15. STEERING WHEEL

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

#### 16. SEATS

- (a) Check that all front seat controls such as seat adjusters, seatback recliner, etc. operate smoothly.
- (b) Check that all 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 rear seat backs, check that the latches lock securely.

#### 17. 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.

**18. ACCELERATOR PEDAL**

Check the pedal for smooth operation and un-even pedal effort or catching.

**19. CLUTCH PEDAL (See page CL-3)**

Check the pedal for smooth operation.

Check that the pedal has the proper freeplay.

**20. BRAKE PEDAL (See page BR-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.

**21. BRAKES**

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

**22. PARKING BRAKE (See page BR-8)**

(a) Check that the lever has the proper travel.

(b) On a safe incline, check that vehicle is held securely with only the parking brake applied.

**23. 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 vehicle is held securely with the selector lever in the "P" position and all brakes released.

**UNDER HOOD****24. WINDSHIELD WASHER FLUID**

Check that there is sufficient fluid in the tank.

**25. ENGINE COOLANT LEVEL**

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

**26. RADIATOR AND HOSES**

(a) Check that the front of the radiator is clean and not blocked with leaves, dirt or bugs.

(b) Check the hoses for cracks, leaks, rot or loose connections.

**27. BATTERY ELECTROLYTE LEVEL**

Check that the electrolyte level of all battery cells is between the upper and lower level lines on the case. If level is low, add distilled.

**28. BRAKE AND CLUTCH FLUID LEVELS**

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

(b) Check that the clutch fluid level is within  $\pm 5$  mm (0.20 in.) of the reservoir hem.

**29. ENGINE DRIVE BELTS**

Check all drive belts for fraying, cracks, wear or oiliness.

**30. ENGINE OIL LEVEL**

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

**31. 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.

**32. 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 positions from "P" to "L", and then shift into "P".

(c) Pull out the dipstick and wipe off the fluid with a clean rag. Re-insert the dipstick and check that the fluid level is in the HOT range.

(d) Perform this check with the fluid at normal driving temperature (70 — 80°C or 158 — 176°F).

NOTE: 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.

**33. 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.