S30-D

DATSUN 280Z

1978 OWNER'S MANUAL
MODEL S30 SERIES

A Word To DATSUN Owners

Thank you for choosing a DATSUN. We are sure you will be happy you did. To make doubly sure, in this manual we have included driving tips, information about the location and purpose of dashboard instruments, comfort and safety features, and much more that will help you know your DATSUN.

Before your dealer delivers your DATSUN to you, he gives it a careful pre-delivery inspection, checking and servicing the mechanical parts to be sure your car is ready to drive. Return it to him for regular servicing in accordance with the periodic maintenance and lubrication schedule in this manual.

Your dealer will validate your Warranty and Service Booklet each time you bring your car in for periodic servicing. This satisfies the requirement that your car has been maintained at factory standards, if you need warranty service. Keep the Warranty and Service Booklet in your glove box at all times. It is important to you. Your dealer has the equipment and experience to service your car, he is kept advised of every new technical development and—you are his customer. He wants to keep it that way. Your NISSAN/DATSUN dealer is the best place for you to take your car for any kind of service.

All information, specifications and illustrations in this manual are the latest data obtainable at the time of publication. NISSAN reserves the right to make changes or improvements at any time without notice.

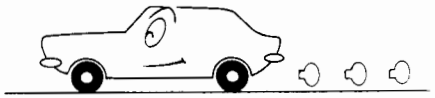
This Owner's Manual has been prepared on the assumption that your car is fully equipped (including all factory optional equipment).

In this manual, "California Models" refers to those cars sold in the state of California and the designated high altitude areas in the U.S.A. These models are equipped with a catalytic converter system.

When planning to travel in another country you should first find out if the octane rating of the gasoline available there is suitable for your car's engine. Using gasoline with too low an octane rating may cause engine damage. Therefore, avoid taking your car to areas where gasoline of the appropriate octane is not available.
California models and high altitude models can be operated only with unleaded gasoline. Also, before attempting to register your car in another country, you should check that country's regulations and requirements to make sure that your car will be able to meet all of them.

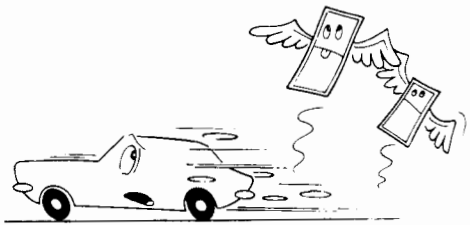
Contents

Economy Hints



EH001

Normal driving saves fuel and money.



EH002

Severe driving wastes fuel and money.

Operational economy is one of the outstanding features of your DATSUN. By developing the following good driving habits even greater economy may be attained.

1. Do not pump the accelerator. Gently depress until the desired speed has been attained and then try to maintain that speed.
2. Always drive your car in the gear which properly suits driving conditions.
3. Maintain moderate speeds on the highway. Speeds above 50 MPH (80 km/h) will considerably increase gasoline consumption.
4. Maintain a safe distance behind other cars. Avoid sudden stops. This will reduce wear on brake linings and pads and save fuel, as extra gasoline is required to accelerate back to driving speed.
5. Excessive engine idling increases gasoline consumption.
6. Keep the tires at the recommended inflation pressures for longer tire life and fuel economy.
7. Keep your engine tuned-up and follow the recommended periodic maintenance schedule. This will increase the life of all parts and lower operating costs.
8. Check your tires regularly for abnormal wear. Wheels that are out of alignment cause the tires to drag, resulting in premature tire wear and additional gasoline consumption.
9. Use the air conditioner only when necessary.

Before Driving Your DATSUN

Familiarize yourself with all the DATSUN features and safe-driving procedures.

SAFETY CHECKS

Before driving your DATSUN, be sure to check all the safety items mentioned below.

BEFORE ENTERING THE CAR

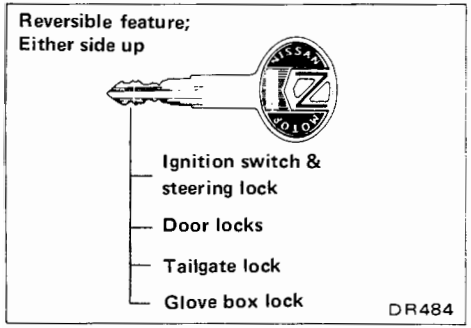
- Check that all windows and light lenses are clean.
- Visually inspect tires for condition. Also check tire pressure.
- Check that area around car is clear.
- Make sure that the hood is closed securely.

AFTER ENTERING THE CAR

- Lock all doors.
- Position seats.
- Adjust inside and outside mirrors.
- Fasten seat belts and ask all passengers to do likewise.
- Check the operation of lights, switches and horn.
- Check the operation of warning lights when key is turned to "ON" position.

Fluid levels such as engine oil, engine coolant, brake and clutch fluid, windshield washer fluid, battery fluid should be checked frequently, or at least whenever you refuel. Further details are described in "Do-it-yourself" section.

KEY

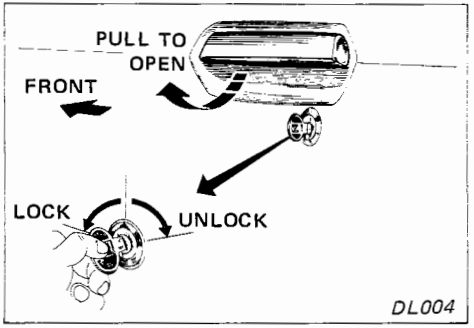


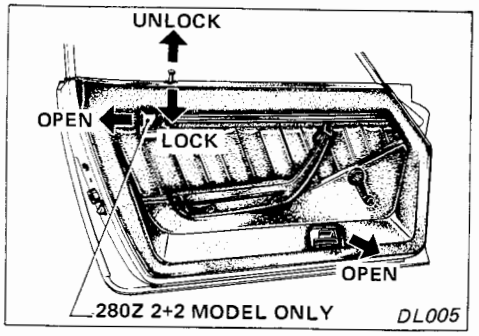
The key operates all the locks and the ignition switch on your DATSUN.
Record the key number so your NISSAN/DATSUN dealer will be able to replace a lost key.
It is also a good idea to keep your key number in your wallet together with your license.

NOTE:

To prevent theft of your car, a warning buzzer will sound when the driver's door is opened if your key has been left in the ignition switch. Be sure to remove the key from the switch when leaving your car unattended.

DOOR LOCKS





FROM OUTSIDE

To open or close the door, turn the key all the way to the left or right as shown.
The doors can also be locked from the outside without a key. Move the lock knob to the "LOCK" position and then shut the door, pulling the outside door handle upward. The door will not lock unless you keep the door handle pulled upward. This prevents accidental locking.

NOTE:

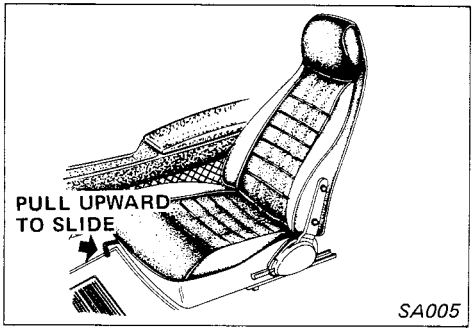
When locking the door without a key, ensure that the key has not been left inside the car.

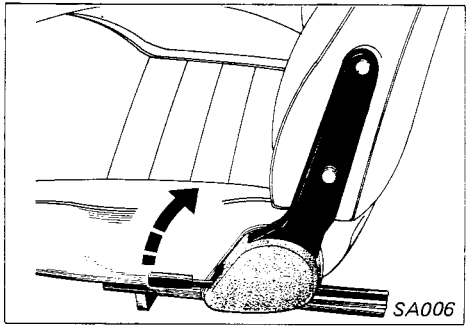
FROM INSIDE

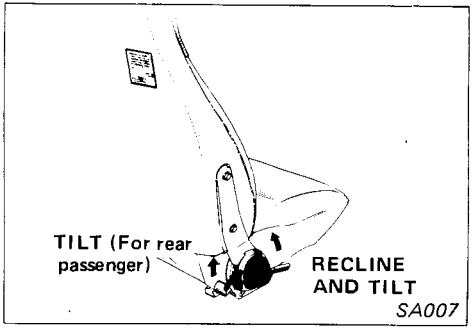
All doors can be locked from inside the car. When the door is locked, it cannot be opened by the inside door handle.
To open or close the door, move the lock knob as shown.

NOTE:

- **To prevent accidental opening of a door when driving, always lock doors from the inside, especially with small children in the car.**
- **Before opening the door, always look to be sure it is safe to do so.**







FRONT SEAT ADJUSTMENT

The fore-and-aft control lever located at the lower front of the seat releases the seat latch. To adjust the seat position, move the lever as shown and hold it while you slide the seat forward or backward to the desired position. Release the lever to lock the seat in position.

CAUTION:

Do not adjust the driver's seat while driving. The seat may suddenly jerk forward or backward, which could result in loss of control.

RECLINING SEATS

The seatback control levers are located at the outside of each front seat. To adjust the seatback, pull the lever upward, and lean back until the desired angle is obtained. To bring the seatback up again, pull the lever and it will move forward. When the desired angle is obtained, release the lever.

WARNING:

Never ride in a moving car with the seatback in reclining position. Seat belts are effective only when the wearer is in an erect posture position.

TILTING FRONT SEAT

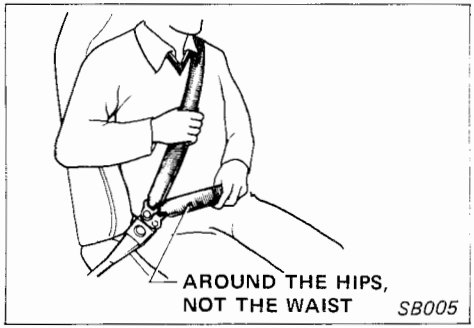
280Z 2+2 model

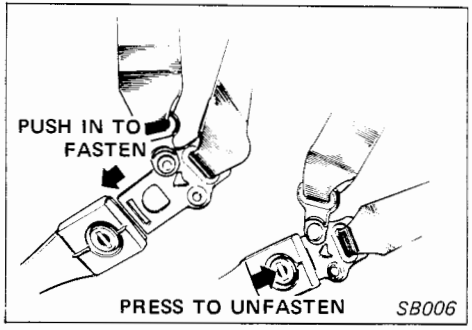
To facilitate entry to the rear seat, the front seatback tilts as illustrated.

When the latch is released, the seatback will tilt forward.

Rear seat occupant can tilt the front passenger seat by moving another lever as illustrated.

SEAT BELTS





FRONT SEAT BELTS

1. Adjust the front seat to the desired position and angle.
   (Take an erect posture position, and sit well back in the seat.)
2. The outer lap belt retractor is located behind the seat cushion along the lower edge of the door.
3. Slowly, and in one motion, pull out the lap-shoulder belt and insert the tongue into the buckle until you hear a snapping sound.
4. To unfasten the belt, press the button in the center of the buckle.
   To prevent any hindrance when getting in or out of the car, the seat belts can be stowed in their respective retractors. Slide the comfort clip down to allow the shoulder belt to rewind into the retractor.

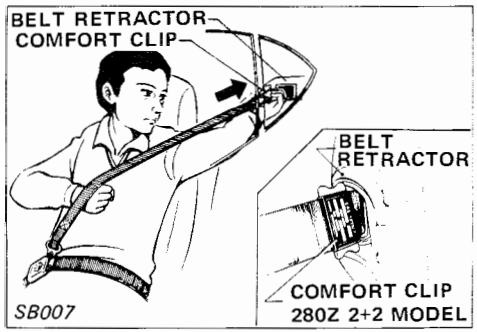
NOTE:

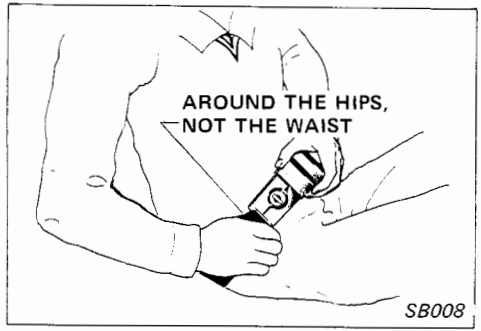
- **If the pulling motion is interrupted while you are drawing out the belt, let the belt rewind into the retractor about one inch (25 mm). The belt can then be pulled out.**
- **Excess slack from both the shoulder and lap belts is automatically taken up by the belt retractor.**
- **Under normal circumstances the belt retractor permits the belt to move freely with the occupant, locking only in the event of an abrupt stop or impact.**

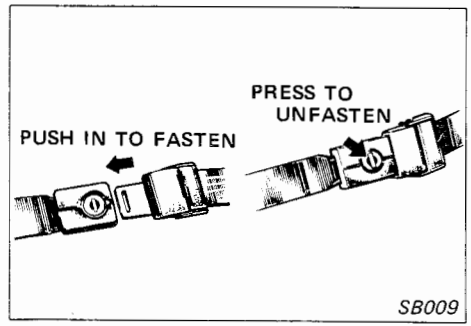
CAUTION:

Be sure to observe the following conditions. Failure to do so could increase the chance and/or severity of injury in an accident.

- **Always pass the shoulder belt over your shoulder and across your chest. Never run the belt under your arm.**
- **Position the lap belt as low as possible AROUND THE HIPS, NOT THE WAIST.**
- **Never wear the belt inside out or twisted.**
- **Do not allow more than one person to use the same belt at the same time.**
- **Some states, provinces or territories may specify that seat belts be worn at all times when a car is being operated.**







COMFORT CLIP

When worn correctly, the shoulder belt gently pushes against the shoulder.

If the pressure of the shoulder belt is uncomfortable, it can be adjusted with the comfort clip.

Loosen the belt slightly [by not more than one inch (25 mm)], and secure the new length by pushing the comfort clip against the belt guide (shoulder belt retractor).

CAUTON:

If the shoulder belt is worn too loosely, its restraint capabilities will be hampered and the chances of personal injury will be increased.

REAR SEAT BELTS

1. Pull out the outer lap belt.
2. Insert the belt tongue into the buckle until you hear a snapping sound.
3. Let the belt rewind into the retractor until it fits snugly across the hip bone.
4. To unfasten the belt, press the button in the center of the buckle.
   The seat belt will automatically retract.

NOTE:

The belt retractor is not designed to lock the belt in a rewinding direction, but in an extending direction, once it has been pulled out.

CAUTION:

Position the lap belt as low as possible AROUND THE HIPS, NOT THE WAIST.

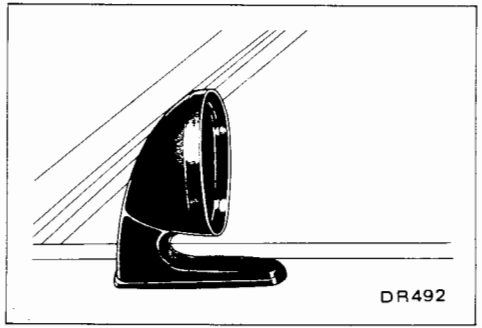
- **Never wear the belt inside out or twisted.**
- **Do not allow more than one person to use the same belt at the same time.**
- **Some states, provinces or territories may specify that seat belts be worn at all times when a car is being operated.**

SEAT BELT MAINTENANCE

- To clean the belt webbings, apply a mild soap solution or any solution recommended for cleaning upholstery or carpet, brush it, wipe with cloth and allow it to dry in the shade.
- Do not allow the belts to retract until they are completely dry.
- Do not use any other chemicals or try bleaching or re-dyeing the belt, this may weaken the webbing.
- Periodically check the belt and metal components such as buckles, tongues, retractors, flexible wires and anchors for deterioration or damage.
- If any component is found deteriorated or damaged, the belt should be replaced as an assembly.

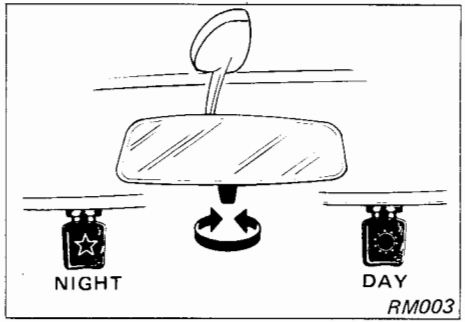
REARVIEW MIRRORS

Adjust the outside and inside mirrors before driving. For driving, rear view must be unimpaired.



OUTSIDE MIRROR

The outside mirror can be moved in any direction for better rear view.



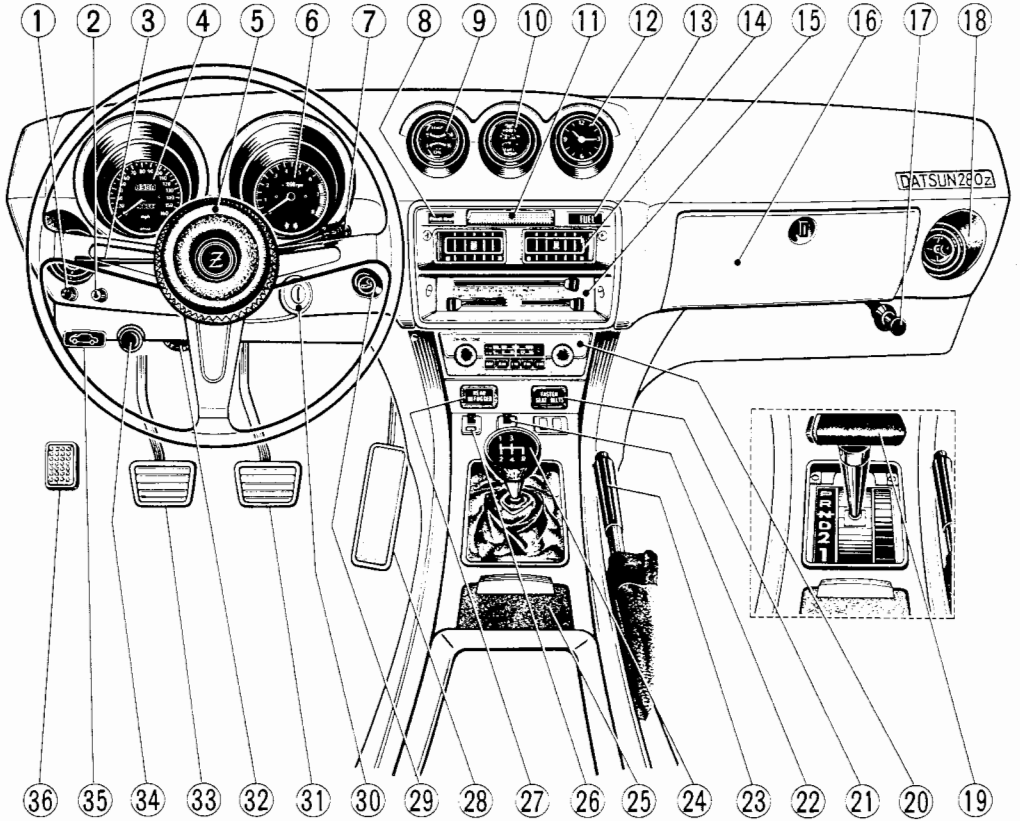
INSIDE MIRROR

The inside mirror is designed to break off at its base on impact.

The inside rearview mirror is the glareproof day-night type.

To adjust the mirror, turn the adjust knob to the sun (☼) mark for day driving and the star (☆) mark for night driving.

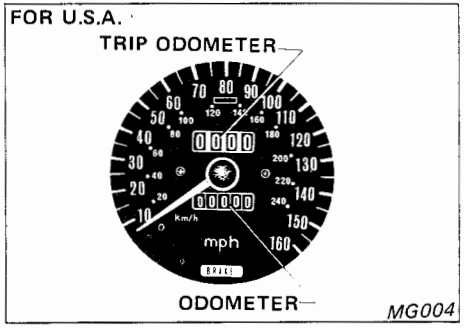
Instruments And Controls

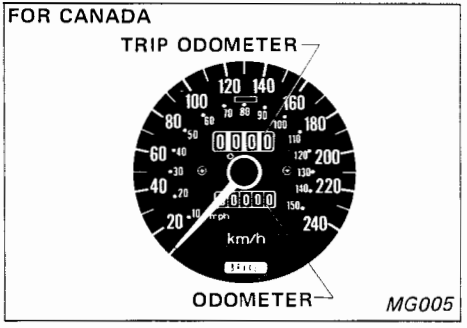


1. Trip odometer reset
2. Illumination control rheostat
3. Turn signal switch and lane changer
4. Speedometer, Odometer
5. Horn pad
6. Tachometer
7. Light switch and windshield wiper-washer switch
8. Floor temperature warning light (California models)
9. Coolant temperature-Oil pressure gauge
10. Voltmeter-Fuel gauge
11. Map light
12. Clock
13. Fuel level warning light
14. Center ventilator
15. Heater or Air conditioner control
16. Glove box
17. Dash side ventilator knob
18. Side ventilator
19. Transmission select lever (Automatic transmission)
20. Radio
21. Seat belt warning light
22. Hazard warning flasher switch
23. Parking brake lever
24. Transmission control lever
25. Ash tray
26. Rear defogger switch
27. Rear defogger indicator light
28. Accelerator pedal
29. Cigarette lighter
30. Ignition switch and steering lock
31. Brake pedal
32. Floor vent control
33. Clutch pedal
34. Dash side ventilator knob
35. Hood release handle
36. Foot rest

IC007

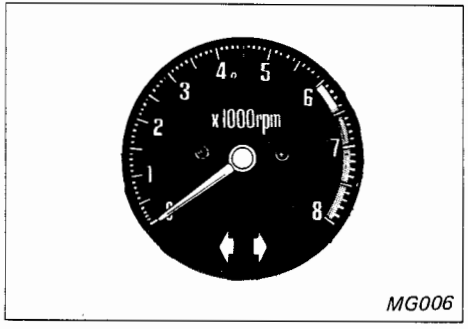
SPEEDOMETER





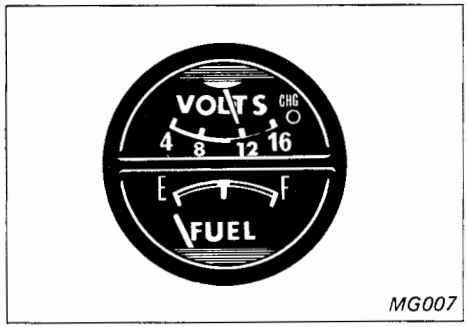
The speedometer indicates running speed in miles and kilometers per hour. The odometer records the total mileage your car has been driven and is useful for keeping a record of maintenance intervals. The trip odometer records the mileage of an individual journey after resetting. The last digit in yellow indicates 1/10 of a mile or kilometer. Reset the trip odometer to zero by turning the reset knob clockwise.

TACHOMETER



The electrically operated tachometer indicates the engine speed in revolutions per minute (rpm).
There are different colored zones on its face.
Driving the car with the needle in the red zone can lead to serious engine damage.

VOLTMETER / FUEL GAUGE



MG007

VOLTMETER

The voltmeter monitors the condition of the charging system and the state of the battery, as outlined below:

- Before starting the engine, check the position of the needle.
  If the needle is in either the YELLOW or RED zone. . . . . Check the condition of the battery.
- During starter operation
  If the needle is in the RED zone, the condition is normal.

NOTE:
After starter operation, the needle may sometimes stay within a range of 6 to 8 volts, even though nothing is wrong with the battery or charging system.
The needle will fall back as the battery is discharged.

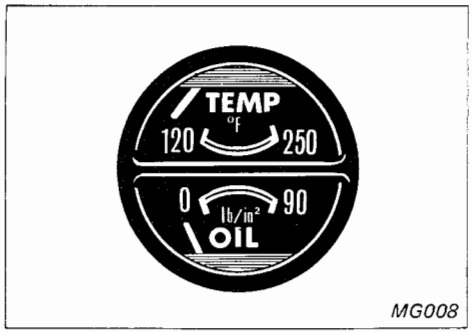
- While the engine is idling or the car is being driven, if the needle is in the uncolored zone, the condition is normal.
  If the needle is in the YELLOW or RED zone . . . . . Check for the following:
  - Loose fan belt
  - Condition of battery and alternator
  - Electrical overload

FUEL GAUGE

When the ignition switch is "ON", the fuel gauge registers the fuel level in the tank. The position of the needle will vary slightly when accelerating, braking, or when the car is going up or down hill. So check your fuel supply when the car is more or less level, whether standing still or moving.

NOTE:
It is advisable to refill the fuel tank before the gauge registers Empty.

COOLANT TEMPERATURE/ OIL PRESSURE GAUGE



COOLANT TEMPERATURE GAUGE

When the ignition switch is "ON", the coolant temperature gauge operates and the pointer indicates coolant temperature in the range from 120 to 250°F (50 to 120°C).

During ordinary driving, the pointer will indicate 170 to 220°F (75 to 105°C).

If the pointer indicates over 240°F (115°C), and remains there for more than a minute or two, stop the car and cool the engine while keeping the engine speed at 1,000 to 1,500 rpm.

Then check the coolant level, following the procedure in the "Do-it-yourself" section.

CAUTION:

Do not continue to drive your car when the pointer has swung all the way to 250°F (121°C) position. This will overheat and damage the engine.

OIL PRESSURE GAUGE

When the ignition switch is "ON", the oil pressure gauge indicates the oil pressure with the engine running.

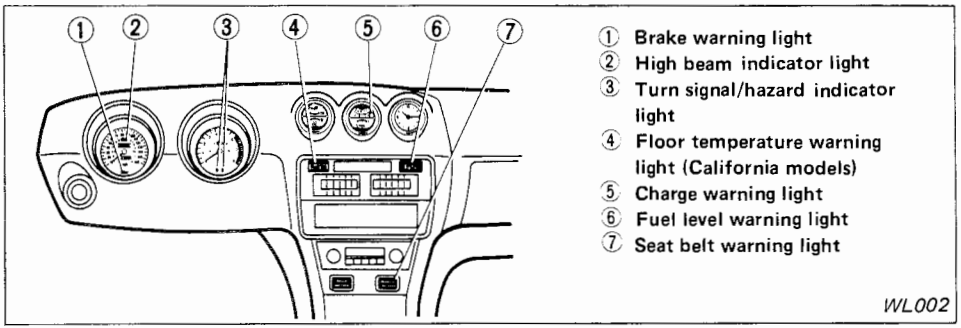
During ordinary driving, the needle will remain 35 to 70 psi (2.5 to 5 kg/cm²) at 2,000 rpm with the engine at normal operating temperature.

If the needle moves below 25 psi (2 kg/cm²) at 2,000 rpm, stop the engine and check the engine oil level.

NOTE:

In cold weather, the engine oil pressure will increase slightly until the engine has reached its normal operating temperature.

WARNING/INDICATOR LIGHTS



BRAKE WARNING LIGHT

This warning light functions for both the parking brake and foot brake systems. The warning light glows when the ignition switch is turned to the "ON" position and the engine is not running. If the light does not glow, check the electrical system for a burned-out bulb or an open circuit.

Parking brake system

The warning light will continue to glow when the parking brake is applied with the engine running.

Brake fluid level indicator system

The warning light glows when the fluid level is lower than the prescribed level, the ignition switch is "ON", the engine is running, and the parking brake is free.

If the warning light glows, while you are driving, brake fluid level should be checked immediately. Add brake fluid as necessary. Do not drive unless it is unavoidable, and then only at a reduced speed to the nearest service station.

CHARGE (Alternator) WARNING LIGHT

The "CHG" warning light indicates functioning of the alternator and electrical wiring system.

If this warning light glows when the ignition switch is in the "ON" position (engine off), the bulb and electrical wiring are satisfactory. The light should go out when the engine is started. If the light glows when the engine is running, the alternator and electrical system should be checked as soon as possible.

NOTE:

If the electrical load is too heavy despite of the normal condition of the alternator and electrical system, the charge warning light may glow slightly. When this has occurred, there is no need to check the alternator and electrical system.

SEAT BELT WARNING LIGHT AND BUZZER

The driver's seat is equipped with a seat belt warning light and buzzer system.

The seat belt warning light "FASTEN BELTS" comes on for about six seconds whenever the ignition switch is placed in the "ON" position.

The seat belt warning buzzer will sound for about six seconds when placing the ignition switch in the "ON" position if you do not fasten the driver's seat belt securely.

FLOOR TEMPERATURE WARNING LIGHT (California models)

The floor temperature warning light comes on while the ignition switch is turned to the "START" position.

If the light does not glow, check the electrical system for a burned-out bulb or an open circuit.

If the floor temperature rises to an abnormal level, while the engine is running, this warning light will come on to tell the driver that the engine is malfunctioning or operating under severe conditions. For details, refer to the "Starting and Operating" section.

FUEL LEVEL WARNING LIGHT

With the ignition switch "ON", the fuel warning light comes on when the fuel in the fuel tank drops below 2 5/8 US gal (2 1/4 Imp gal, 10 liters). When the fuel warning light comes on, refuel at the nearest gas station.

HIGH BEAM INDICATOR LIGHT

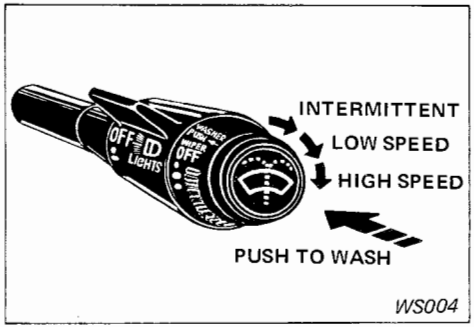
The headlights have two beams to meet varying night driving conditions.

The high beams give you better long range visibility on dark roads in suburban areas. With the headlights on, the beam indicator glows whenever the high beams are being used, and goes off when the low beams are selected.

TURN SIGNAL/HAZARD INDICATOR LIGHTS

The green indicator light on the instrument panel flashes simultaneously with the exterior turn signal lights.

WINDSHIELD WIPER AND WASHER SWITCH



The windshield wiper has three speed positions. In the first position, wiper blades operate intermittently. The second position is for low speed and the third for high speed.

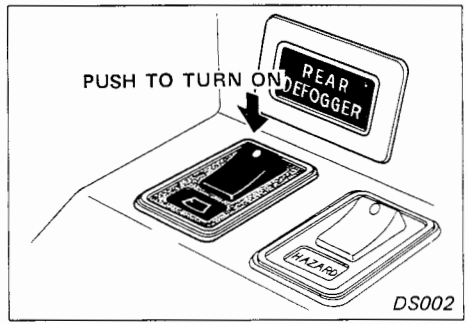
The wiper switch also controls the windshield washer. To operate the washer, push the button located at the end of the lever and hold it until there is enough fluid on the windshield to wash off dirt.

NOTE:

- **Check washer fluid level regularly.**
- **Do not operate the washer continuously for more than thirty seconds.**
- **In cold weather, defrost the windshield glass before operating the washer.**
- **Do not substitute radiator anti-freeze for windshield washer solutions.**

- **Do not wipe the glass with a dry cloth. It may scratch the glass.**
- **Do not operate the washer if the reservoir is dry.**

REAR WINDOW DEFOGGER SWITCH



An electric defogger is built into the rear window.

To heat the rear window glass, move the switch to the "ON" position.

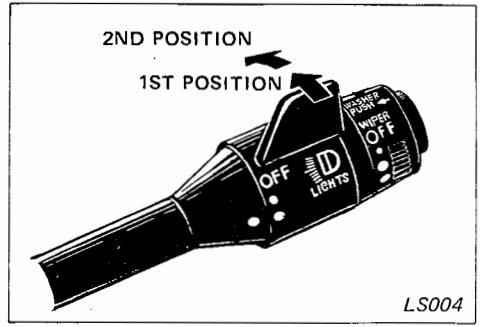
A light installed in the switch will glow to indicate the system is on. When the window is clear, turn the switch off.

The switch operates only when the ignition switch is in the "ON" or "ACC" position.

CAUTION:

When you clean the car, do not clean the inner side of the window with abrasive-type cleaners, and do not use any type of scraper to remove foreign deposits from the inner glass surface as this may damage the electrical conductors.

LIGHT SWITCH



The light switch controls parking (or clearance) lights, headlights, taillights, license plate light, side marker lights and instrument panel lights (and —on cars with automatic transmission— the light for the selector lever indicator).

With the light switch knob turned on, the following lights will come on.

1ST POSITION

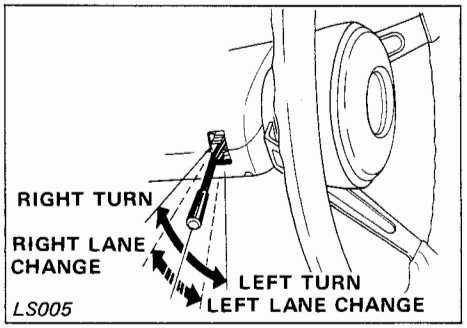
Parking (or clearance), tail, license plate, side marker, automatic transmission selector lever indicator and instrument panel lights.

2ND POSITION

Headlights and all the above lights.

(The headlight beams are controlled by the turn signal lever.)

TURN SIGNAL SWITCH AND HEADLIGHT BEAM SELECTOR



NOTE:
Be sure to turn off the light switch when you leave the car as the headlights are on irrespective of the ignition switch.

TURN SIGNAL

To signal a right turn, push the turn signal switch lever upward.

For a left turn signal, push the lever downward.

With the lever at either position, lights flash on the front and rear of the car, indicating the direction you are about to turn.

A corresponding turn signal indicator light on the instrument panel tells you which set of signals –right or left– is operating.

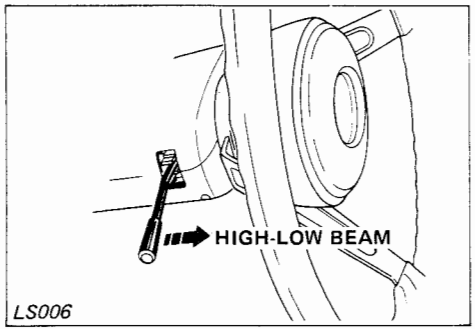
The turn signals cancel automatically when you have completed a turn and steering wheel has returned to the straight ahead position.

Occasionally the turn may be so wide and gradual that the steering wheel will not rotate far enough to cancel the turn indicator.

If this happens, just flick the lever to neutral position.

LANE CHANGE SIGNAL

To indicate a lane change, the lever can be moved up or down to a point where it will begin flashing. The lever will return to the neutral position when released.

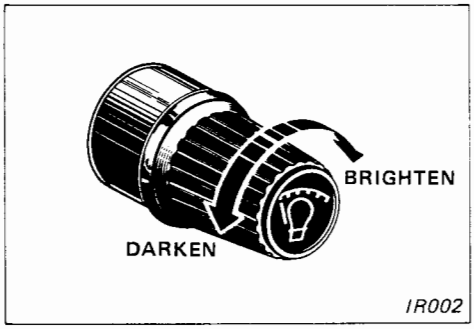


HEADLIGHT BEAM SELECTOR

The turn signal switch lever also controls headlight high-low beam when the light switch is turned to the 2nd position.

If the high beam is on, the high beam indicator light on the instrument panel glows.

ILLUMINATION CONTROL RHEOSTAT

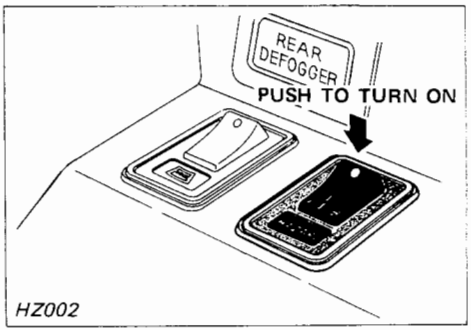


The illumination control rheostat is located on the instrument panel. The brightness of all illuminated switches, gauges and instrumentation lights can be adjusted by turning the control knob.

Turning the knob clockwise will brighten the illumination lights.

When the light switch is turned on, the rheostat control will be activated.

HAZARD WARNING FLASHER SWITCH



By pushing the rocker switch down, all directional signals flash at the same time to warn other drivers and pedestrians that your car is disabled or parked under emergency conditions.

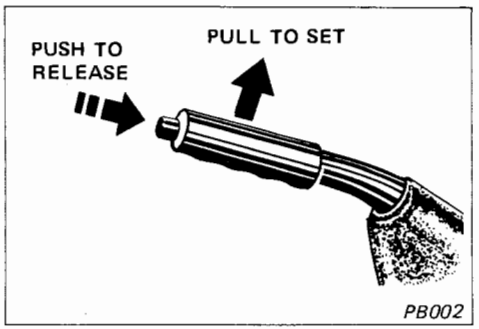
The flasher can be actuated with the ignition switch either off or on.

To stop the flashing action, push the opposite end of the rocker switch.

NOTE:

- **Avoid stopping on the roadway if possible.**
- **When stalled or stopped under emergency conditions, move the car well off the road.**
- **Do not use the switch while moving on the highway unless unusual circumstances force you to drive so slowly that your car might become a hazard to other traffic. Some state laws, however, may prohibit the use of the hazard warning flasher switch under any circumstances.**
- **Turn signals do not work when the switch is operating.**

PARKING BRAKE LEVER



To set the parking brake, pull the lever upwards. It is a good practice to depress the foot brake pedal at the same time.

To release, pull upward. Then depress the push button and push down all the way.

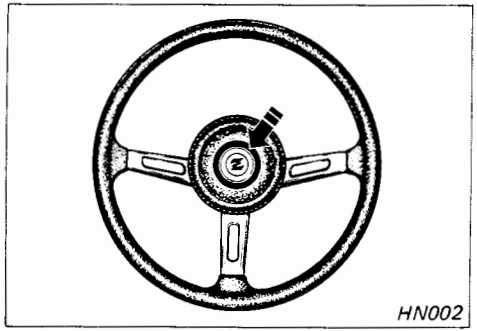
If the engine is running, the brake warning light will continue to glow as long as the parking brake is engaged.

CAUTION:

If you drive a car with the parking brake partially engaged, the rear brake shoes may be damaged.

Make sure that the parking brake is completely released before driving.

HORN



The horn sounds when the horn button (or pad) is pressed firmly.
Use the horn to warn pedestrians or other drivers of the possibility of danger. Excessive use of the horn should be avoided.

Starting And Operating

BREAK-IN SCHEDULE

All new cars require careful driving during the break-in period. Pistons, cylinder walls, and bearings must have time to seat properly and produce smooth, long wearing surfaces. Too much strain on a new engine impedes this gradual break-in process and is likely to shorten engine life.

During the first 1,000 miles (1,600 km) do not drive at full throttle, or exceed the upper speed limit except for brief periods. However, the engine should not be allowed to labor before downshifting when climbing a hill. Variable speeds are best during the break-in period. Always drive so that the engine runs fast enough to prevent strain.

Fuel economy will vary in the first few thousand miles (kilometers) of operation due to engine break-in. Also it is dependent upon driving habits and proper maintenance.

Therefore to conserve fuel and assist the break-in:

- Do not drive at high speeds before the engine has sufficiently warmed up.
- Avoid fast starts.
- Do not allow the engine to labor in any gear.
- Avoid driving at full throttle for the first 1,000 miles (1,600 km).
- Do not race the engine.
- Avoid extended idling periods.
- Except in an emergency, avoid heavy braking or rough usage of the brakes. This will allow the brakes to seat properly.

Break-in speed limit MPH (km/h)

		1st	2nd	3rd	4th	5th
Manual transmission	4-speed	0 to 25 (0 to 40)	15 to 40 (25 to 65)	22 to 65 (35 to 105)	30 to 90 (50 to 145)	–
	5-speed	0 to 25 (0 to 40)	15 to 40 (25 to 65)	22 to 65 (35 to 105)	30 to 90 (50 to 145)	35 to 90 (55 to 145)

	"1" Low	"2" Second	"D" Drive
Automatic transmission	0 to 30 (0 to 50)	20 to 55 (30 to 90)	0 to 80 (0 to 130)

THE CAR EQUIPPED WITH CATALYTIC CONVERTER (California models)

On all California models, a catalytic converter for emission control is installed along the exhaust pipe. Inside this converter, exhaust gases are burned at high temperatures to remove harmful exhaust gas components.

NOTE:

If the engine is kept running at high speeds when continuous misfiring occurs, the temperature of the exhaust system components and exhaust gases will become excessively high.

As a safety factor, a floor temperature warning light device is installed.

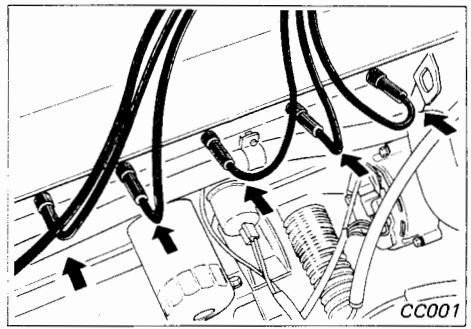
CAUTION:

a) Keep an eye on your fuel gauge; running out of gas could possibly cause damage to the catalytic converter.
b) Refrain from racing the engine.
c) Do not stop or park the car over inflammable materials, such as dry grass, waste paper, or rags that may come into contact with the exhaust system.
d) When parking, ensure that people or inflammable materials are kept away from the exhaust pipe.

FLOOR TEMPERATURE WARNING LIGHT

* When the ignition switch is turned to the "START" position, the light comes on.
* If while the engine is running, the floor temperature rises to an abnormal level, this warning light will come on.
* It will go out when the floor temperature returns to normal.

WHEN THE WARNING LIGHT COMES ON



* If the light should come on while the car is being driven, reduce the speed immediately. After the light goes out return to normal driving speed.
* If this warning light should start to come on frequently, or if you should notice unusual power loss or abnormal engine vibration, stop the engine. Then check the spark plug cables of the engine. If any of them are disconnected, reconnect them correctly.
* If the spark plug cables are properly connected, have the car inspected by an authorized NISSAN/DATSUN dealer or other competent service facility.

STARTING THE ENGINE

WARNING:

Never inhale exhaust gases; they contain carbon monoxide, a colorless, odorless extremely dangerous gas which can cause death. If you should suspect that exhaust fumes are getting into the passenger compartment, have the car examined and the leakage corrected immediately.

1. It is not advisable to sit for any length of time in a parked car with the engine running.
2. Do not run the engine in closed spaces such as a garage for any longer than is absolutely necessary.
3. When a car has been stopped in an open area with its engine running for any significant length of time, turn the ventilator on to force outside air into the car.
4. If the tailgate is not closed while driving, exhaust gases could be drawn into the car. Thus avoid driving at high speeds for any length of time with the tailgate open.
5. Always maintain the front ventilator inlet grille free from snow, leaves or any other kind of obstruction so that the car's ventilation system will be able to function properly at all times.
6. The exhaust system and body should be inspected by a qualified mechanic whenever:

a. The car is raised for service.
b. You suspect that exhaust fumes are getting into the passenger compartment.
c. You notice a change in the sound of the exhaust system.
d. You have had an accident involving damage to the exhaust system, underbody, or rear of the car.

PARKING

Before leaving your car:

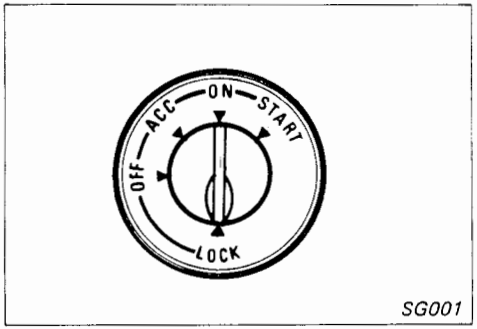
1. Set the parking brake.
2. Place the gearshift lever in the "Reverse" position (on the automatic transmission models, the "P" position).

NOTE:

When parking on an uphill grade in the manual transmission model, place the gearshift lever in the "1st" position.

3. Turn the ignition key to the "LOCK" position.
4. Remove the ignition key.
5. Lock all doors.

IGNITION SWITCH



The 5-position ignition switch is located on the right side of the steering column. The switch includes the anti-theft steering lock device and also controls the ignition system and most of the electrical equipment:

"LOCK" Normal parking position
The ignition key can be inserted and removed at the "LOCK" position only. The steering can be locked by turning the key to the "LOCK" position, removing it, and rotating the steering wheel until the locking plunger clicks into position.
To unlock the steering, insert the key and turn it to the "OFF" position. For easier key operation when unlocking, rotate the steering wheel slightly to relieve pressure on the steering lock.

"OFF"
This position permits turning the engine off without locking the steering wheel.

"ACC" (Accessories)
This position allows you to use all the electrical accessories controlled by the switch.

"ON" Normal operating position
This position turns on the ignition system and electrical circuits.

"START"
This position starts the engine. After the engine has started, release the key. It will automatically return to the "ON" position.

BEFORE STARTING THE ENGINE

1. After each person is seated, close and lock doors.
2. Fasten the driver's seat belt and passenger's seat belt (if occupied).
3. Make sure the parking brake is applied.
4. Place the gearshift lever into "NEUTRAL" (in "N" or "P" position for the automatic transmission).
5. With a manual transmission, depress the clutch pedal to reduce drag from transmission gears.

NOTE:
The "FASTEN BELTS" warning light comes on for about six seconds when the ignition switch is placed in the "ON" position.
The warning buzzer will sound for about six seconds when placing the ignition switch in the "ON" position if you do not fasten the driver's seat belt securely.

TIPS ON STARTING

- To start the engine, turn on the ignition switch without depressing the accelerator pedal.

NOTE:

a) If the engine is very hard to start in extremely cold or hot weather, use the accelerator pedal to help start the engine.

b) In the summer, when restarting the engine within 30 minutes after it has been stopped, crank the engine keeping the pedal fully depressed.

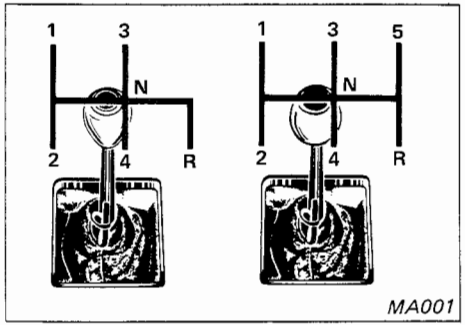
- As soon as the engine starts running under its own power, release the ignition key.
- If the engine stops or falters in starting, wait 3 or 4 seconds before restarting. This will prevent possible damage to the starter or engine.

Warm-up

Always allow the engine to idle for at least 30 seconds after starting and drive at moderate speed for a short distance, especially in cold weather.

- **If it becomes necessary to start the engine with a booster battery and jumper cables, the instructions and cautions contained in the "In Case of Emergency" section should be carefully followed.**

DRIVING WITH MANUAL TRANSMISSION



Your car is equipped with a 4-forward speed (or 5-forward) and 1-reverse speed transmission.

To start the car moving, depress the clutch pedal fully and engage first gear. Then, release the clutch pedal slowly while gradually depressing the accelerator.

Accelerate until the car attains enough speed to upshift to second gear and follow the same steps you did in engaging first gear. Shift up to the higher gears as required in the same manner.

CORRECT SHIFT-UP SPEEDS

The table below indicates the recommended speeds for shifting up to a higher gear. Following these recommendations and shifting to a higher gear as soon as possible, without lugging or pinging, will give you better fuel economy and increased engine life and efficiency.

When driving at altitudes, shifting should be done at a higher car speed than normal. This is because at high altitudes, where thinner air is present, a higher speed is required to develop sufficient engine power.

Unit: MPH (km/h)

Shifting			1→2	2→3	3→4	4→5
Shift-up speed	Low altitude	4-speed	10 (15)	20 (30)	40 (65)	–
		5-speed	10 (15)	20 (30)	40 (65)	50 (80)
	*High altitude	4-speed	15 (25)	25 (40)	40 (65)	–
		5-speed	15 (25)	25 (40)	40 (65)	50 (80)

* Counties specified by law at altitudes over 4,000 feet.

SPEED RANGES IN EACH GEAR

The following table indicates the speed ranges in which the car may be driven or downshifted in each gear without over-revving. Never run the engine in a higher gear than is required for the speed you are traveling as this will place a great strain on the components and may damage the engine or drive train. Always downshift when slowing to negotiate a sharp turn, when proceeding up a steep hill, or when slowing down appreciably for any reason.

When braking, disengage the clutch when your speed has fallen to 10 to 15 MPH (15 to 25 km/h) and continue braking to a stop.

Unit: MPH (km/h)

Gear position	1st	2nd	3rd	4th	5th
4-speed	0 to 38 (0 to 60)	10 to 60 (15 to 95)	20 to 95 (30 to 155)	Over 30 (50)	–
5-speed	0 to 38 (0 to 60)	10 to 60 (15 to 95)	20 to 95 (30 to 155)	Over 30 (50)	Over 35 (55)

NOTE:

a) When you are shifting from one gear to another, be certain to press the clutch pedal all the way to the floor to avoid crunching or chipping the gears.

b) Shift into reverse gear only after the car has come to a complete stop.

c) Do not use the clutch pedal as a foot rest between gear changes as this may result in clutch damage.

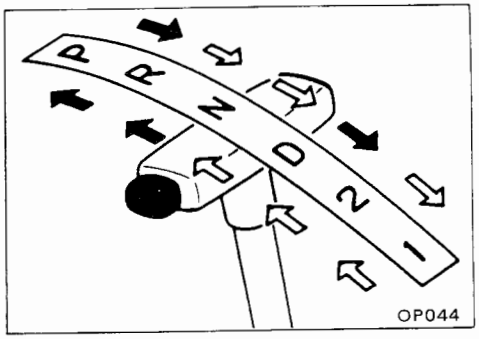
d) Never hold the car in position on a steep hill by slipping the clutch.

e) To maintain safe speeds on steep down grades and to help save the brakes, shift to a lower gear before you start down.

f) When quick acceleration is required, shift to a lower gear and accelerate until the car reaches the maximum speed in each gear. Do not exceed the speed limit of any gear.

g) The figures listed in the chart above refer to potential speed ranges for each gear. The speed at which you drive, however, should conform to all federal, state, province and territory laws, and to the condition which will permit safe operation.

DRIVING WITH AUTOMATIC TRANSMISSION



Cars equipped with an automatic transmission have two pedals, one for braking and the other for accelerating. The automatic transmission eliminates the clutch pedal, providing fully automatic operation for selecting and shifting gears.

HOW TO OPERATE SELECTOR LEVER

Push the button located on the end of the selector lever when engaging "R" and "P" and when shifting from "D" to "2", as indicated by the arrow " ➡ ".
The lever can be shifted freely into any position indicated by the arrow " ⇨ ".

NOTE:

a) Start the engine in the "P" or "N" position.

b) Always apply the parking brake or foot brake before shifting into any driving position. This prevents the car from creeping.

c) Keep the engine at idling speed while shifting from "N" to any driving position.

d) Do not accelerate to keep the car halted on a steep hill.

"P" PARKING:

After parking, apply the parking brake and set the selector lever in the "P" position. This position locks the transmission and rear wheels. Do not shift into "P" while the car is moving.

"R" REVERSE:

Shift into the "R" position only after the car has completely stopped. Then gently depress the accelerator pedal to back up.

"N" NEUTRAL:

In the "N" position, neither forward nor reverse gear is engaged.

"D" NORMAL DRIVE POSITION:

This position is used for most city and highway driving. Press the accelerator pedal slowly to start the car and increase car speed. The 3-forward gears are up-shifted automatically from low to second and to third. When speed decreases, down-shifting is also automatic.

"2" SECOND GEAR:

Use the "2" position when starting on slippery roads or ascending hills and for effective engine braking on downhill grades.
Do not downshift into the "2" position at speeds over 70 MPH (115 km/h). Do not exceed 70 MPH (115 km/h) in the "2" position.

"1" LOW GEAR:

The "1" low gear is helpful for driving up very steep hills and for braking the car on downhill grades. When downshifting into the "1" position, move the selector lever from "D" to "2" and then to "1".
Even if the selector lever is downshifted into "1", the car remains in second gear until the car speed drops below 30 MPH (50 km/h). Do not shift into the "1" position at speeds over 70 MPH (115 km/h). Do not exceed 45 MPH (70 km/h) in the "1" position.

ACCELERATOR DOWNSHIFT —IN "D" POSITION—

You can get extra power and acceleration for rapid passing or hill climbing by floor-

ing the accelerator pedal to downshift the gears. The accelerator downshift makes the transmission downshift into second gear when driving below 60 MPH (95 km/h) and into low gear when driving below 30 MPH (50 km/h).

TIPS ON DRIVING

DRIVING UPHILL

When starting on a steep grade it is sometimes difficult to operate the brake and clutch. The operation of the parking brake, clutch pedal and accelerator pedal is very important.

The engine brake is the most effective for descending hills. The gearshift lever should be placed in the lower speed position prior to descending. With the automatic transmission car, the "2" or "1" position should be selected.

WET BRAKES

After washing the car or when driving under extremely wet conditions, the brake linings sometimes get wet. Gently apply the brakes several times as the car is moving slowly to dry the linings. Do not drive the car at high speeds until the brakes are functioning correctly.

SPARK PLUGS

The factory-installed spark plugs on your car are designed to meet normal driving conditions. If your car is operated under either of the following conditions, it is recommended that optional spark plugs of the proper heat range be installed.

1. When the car is used primarily for short distance travel, so that the engine does not run long enough to reach its normal operating temperature, use hot-type spark plugs.
2. When the car is frequently operated with throttle wide open for long periods of time, use cold-type spark plugs.

For spark plug types, please consult your NISSAN/DATSUN dealer or other competent service facility.

Recommended spark plugs

Destination	Hot type	Standard type	Cold type
All areas except Canada	B5ES-11 *BR5ES-11	B6ES-11 *BR6ES-11	B7ES-11 *BR7ES-11
Canada	*BR5ES	*BR6ES	*BR7ES

Always use the spark plug, or equivalent, indicated in the above chart.

* Resistor built-in type spark plug

IN COLD WEATHER

STARTING OFF ON SLIPPERY ROADS

When rain or snow makes the roads slippery, use caution in throttling and engaging the clutch. If the clutch is engaged too abruptly and with too much throttle, the wheels may spin and the car will not move forward. To stop the spin, back up a little. Repeatedly rolling backward and forward will get you away from the slippery patch. In an emergency situation, the car carpet can be used as skid-matting.

DRIVING ON SLIPPERY ROADS

When driving on wet or slippery roads, never brake hard. Instead, shift to a lower gear and use the braking effect of the engine.

When driving on icy roads, always proceed slowly and cautiously, turn the steering wheel gently, and use the brakes only very lightly. Moreover, always change gears smoothly, and never drive with the clutch pedal depressed.

If you should go into a skid, do not apply the brakes. Release the accelerator slowly and turn into the direction of the skid. As the car recovers its balance, straighten out the wheels and accelerate lightly.

PARKING

If freezing temperatures are anticipated, park on a level surface, shift the gear lever to the "1st" or "Reverse" position (Manual transmission), or the "P" position (Automatic transmission), and secure the wheels with the wheel chocks.

NOTE:

When there is a possibility that the brake linkage might become frozen, it is recommended that the parking brake not be applied.

FREEING A FROZEN DOOR LOCK

To prevent a door lock from freezing, apply de-icer or glycerin to it through the key hole. Should the lock become frozen, heat the lock key before use.

ANTI-FREEZE

In the winter when it is anticipated that the temperature will drop below 32°F (0°C), add anti-freeze (ethylene glycol base) to the cooling water.

For details, refer to "Engine cooling system" under the heading "Do-it-yourself" section.

[Example]

Coolant capacity		10 ⅞ US qt (9 ⅛ Imp qt) (10.3 liters)
Anti-freeze	1 ¾ US qt (1 ½ Imp qt) (1.7 liters)	19°F (−7°C)
	3 ⅝ US qt (3 Imp qt) (3.4 liters)	0°F (−18°C)
	5 ½ US qt (4 ⅝ Imp qt) (5.1 liters)	−31°F (−35°C)

REPLACING LUBRICANT

When the temperature drops below 10°F (−12°C), it is recommended that the lubricating oil be replaced with one of a lower viscosity. Refer to "Recommended SAE Viscosity Number" under the heading "Do-it-yourself" section.

BATTERY

If the correct specific gravity of the battery electrolyte is not maintained during extremely cold weather conditions, the electrolyte may freeze and damage the battery. To maintain maximum efficiency, the battery should be checked regularly.

DRAINING OF ENGINE COOLANT

If the car is to be left outside without anti-freeze, drain the coolant by opening the draincock located under the radiator. Refill before operating the car.

TIRE EQUIPMENT

1. If you have snow tires installed on your car, they should be of the same size, load range and construction in type (bias, bias-belted or radial) as the front tires.
2. If the car is to be operated in severe winter conditions, snow tires may be installed on all four wheels.
3. For additional traction on icy roads, studded tires may be used, however, some Provinces and States prohibit their use. Therefore, before installing studded tires, check local, state and provincial laws.

CAUTION:

Skid and traction capabilities of studded tires, on wet or dry surfaces, may be poorer than that of non-studded snow tires.

SPECIAL WINTER EQUIPMENT

It is recommended that the following items be carried in the car during winter:

1. A scraper and stiff-bristled brush to remove ice and snow from the windows.
2. A sturdy, flat board to be placed under the jack to give it firm support.
3. A shovel to dig the car out of snow-drifts.

CORROSION PROTECTION

Chemicals used for road surface de-icing are extremely corrosive and will accelerate rust and the deterioration of underbody components such as the exhaust system, fuel and brake lines, brake cables, floor pan and fenders.

Flushing all components at frequent intervals with plain water will greatly reduce the harmful effects of these chemicals.

In areas where heavy concentrations of these corrosive chemicals are used, the car should, in addition to frequent washing, be thoroughly washed, flushed and carefully inspected for signs of deterioration or corrosive action, at least several times per year. Repairs should be performed accordingly.

For additional protection against rust and corrosion, which may be required in some areas, consult your local NISSAN/DATSUN dealer or other competent service facility.

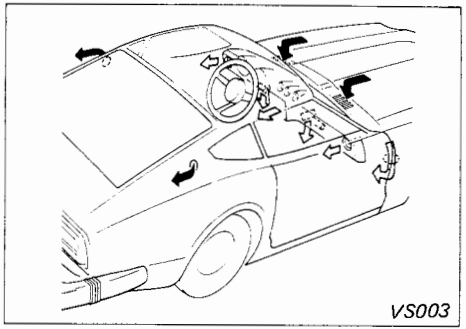
IN HOT WEATHER

REPLACING THE LUBRICANT

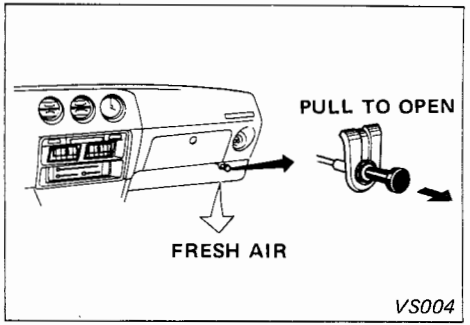
When the temperature stays over 90°F (32°C), the lubricating oil should be replaced with one of a higher viscosity.

Comfort And Convenience Features

VENTILATION SYSTEM

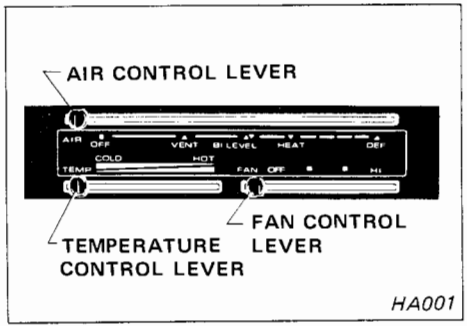


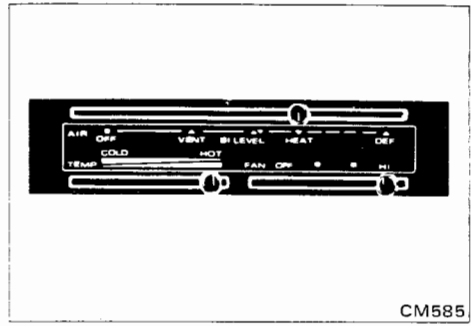
Flow-away outlets that act like one-way valves are provided in the rear quarter panels. When all the windows are closed, they allow air to flow out of the car but not into it, providing constant, draft-free circulation.



SIDE VENTILATOR

To open the side ventilator, pull the knob out. To close push it in.





The heating system also includes the function of forced ventilation. To actuate the system, manipulate the control levers on the heater control panel.

"AIR" CONTROL LEVER

Heating and ventilating requirements are handled by a variety of system which can be selected by the "AIR" control lever.

"TEMP" CONTROL LEVER

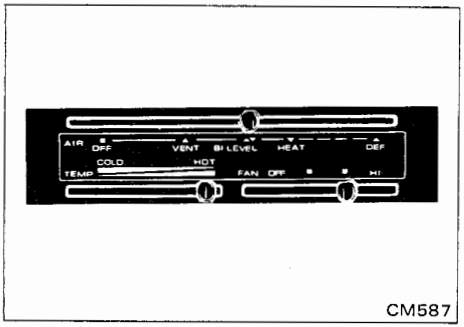
The "TEMP" control lever can be set at any position between "COLD" and "HOT" to regulate the temperature to your preference.

"FAN" CONTROL LEVER

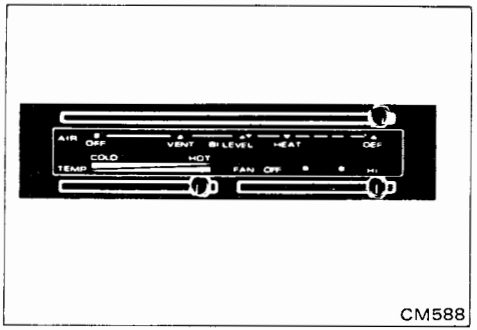
The fan switch has four positions.
One position for "OFF", and three others to control fan speed.

HEATING

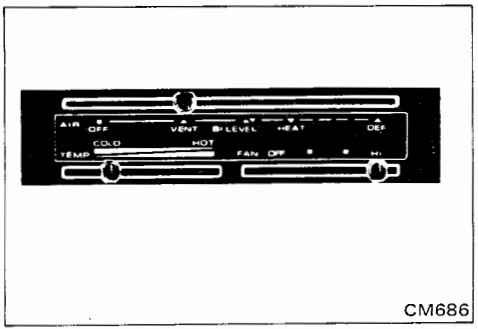
Move the "AIR" control lever to the "HEAT" position. Move the "TEMP" control lever toward the "HOT" position for the desired temperature.
Move the "FAN" control lever to the desired blower speed.
Heated air is discharged from the lower heater outlet.



CM587



CM588



CM686

BI-LEVEL OPERATION

Set the "AIR" control lever at the "BI-LEVEL" position, and the "TEMP" control lever at any desired position.

Move the "FAN" control lever to the desired blower speed.

Outside air is discharged from the center outlets and heated air is discharged from the lower outlets.

DEFROSTING AND DEFOGGING

Move the "AIR" control lever to the "DEF" position, the "TEMP" control lever to the right and the "FAN" control lever to the high speed position.

Heated air is discharged towards the windshield glass.

VENTILATION

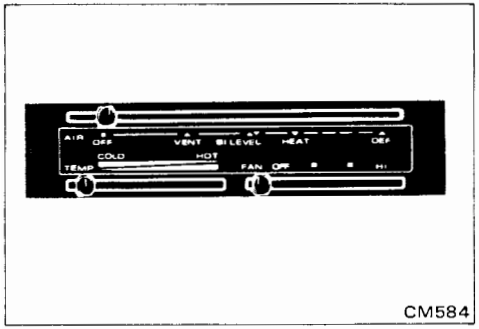
Move the "AIR" control lever to the "VENT" position and the "TEMP" control lever to the "COLD".

Move the "FAN" control lever to the desired blower speed.

Outside air is discharged from the center outlets.

Push side vent knobs at either side of the instrument panel to open the side vent.

Air is discharged from the side vents through the heater fan.



CM584

OUTSIDE AIR CONTROL

Move the "AIR" control lever to the "OFF" position.

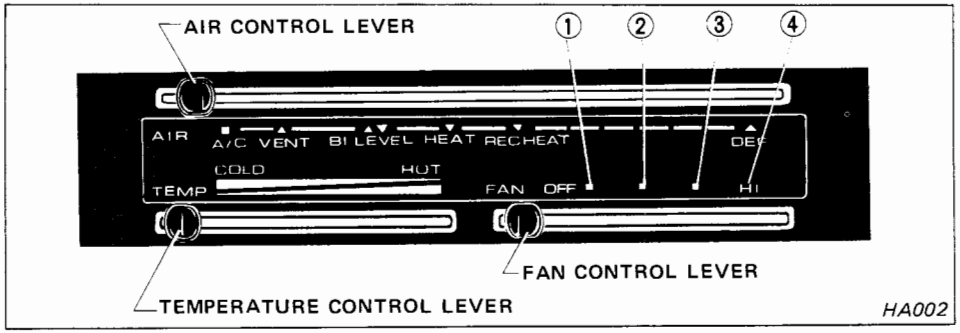
Shut off the outside air while driving on dusty roads.

OPERATING TIPS

- Clear any snow and ice from the air inlet in front of the windshield to improve heater and defroster efficiency.
- Always remove snow and ice from the front, side and rear windows to improve defogging efficiency and ensure proper visibility.

  Remove snow and ice from the outside mirrors and lights at the same time.
- For adequate rear seat heating, keep the areas beneath the front seats clear, and operate the fan as required.

AIR CONDITIONER



The air conditioning system combines the functions of cooling, heating and ventilating into one unit. The system is operated by the control levers located on the air conditioner control panel.

"AIR" CONTROL LEVER

Cooling heating and ventilating requirements are handled by a variety of systems which can be selected by the "AIR" control lever; this lever must be set at the "A/C" position when cooling is required.

"TEMP" CONTROL LEVER

The "TEMP" control lever can be set at any position between "COLD" and "HOT" to regulate the cooling temperature to your preference.

The cooling system automatically switches on and off to continually maintain the car interior at the desired cooling temperature.

"FAN" CONTROL LEVER

The fan switch has four positions from ① to ④ . The position "④" of the "FAN" lever is provided for emergency use, at which the maximum air discharge is obtained.

COOLING

Set the "AIR" control lever at the "A/C" position.

Move the "FAN" control lever to any position other than the "OFF" position.

Move the "TEMP" control lever to any position for the desired temperature.

Cooled air is discharged into the interior through four outlets. Three of these outlets are located on the instrument panel: one in the center and one at each side. The other is located on the left side under the instrument panel.

RECIRCULATION

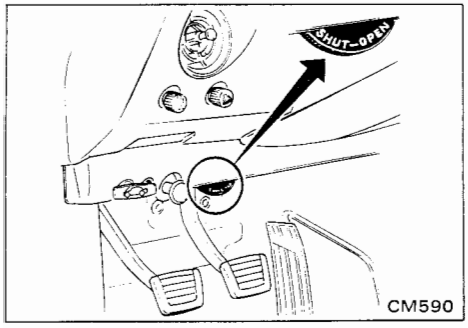
Move the "AIR" control lever to the "REC HEAT" position. Move the "TEMP" control lever toward the "HOT" position for the desired temperature.

Move the "FAN" control lever to the desired blower speed.

Heated air is discharged from the lower heater outlets, allowing a small amount of heated air to flow to the windshield glass. This position is useful not only for quickly heating the interior air, but also for driving on dusty roads; it shuts off outside air without hampering the heating function.

HEATING, VENTILATION, BI-LEVEL OPERATION, DEFROSTING AND DEFOGGING

Use the same porcedure as for the heater.



FLOOR VENT CONTROL

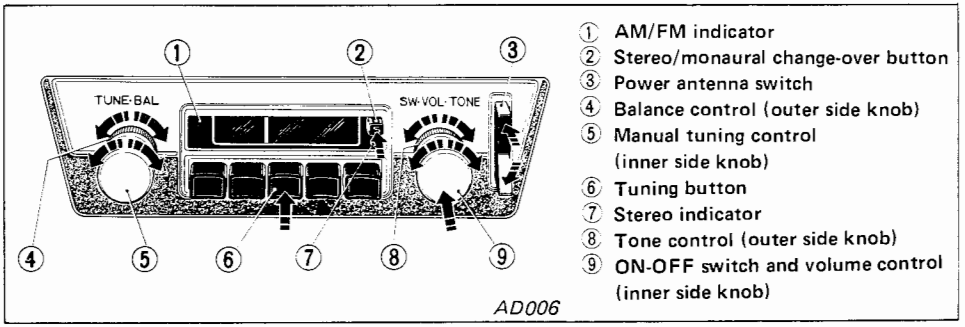
The floor vent control, located under the instrument panel at driver's side, controls the positioning of the floor vent. When it is set at the open position, cooled air is directed to the floor. The vent is shut when it is at the shut position.

OPERATING TIPS

- If your car has been parked in the sun for a period of time with all the windows closed, drive for two or three minutes with all windows open. This will allow the air conditioner to function more quickly, as the hot air will be forced from the car.
- If stopped in traffic during hot weather, place the automatic transmission lever in PARK "P" position to increase the engine idle speed. This helps to cool the engine and assists air conditioning efficiency.
- Keep any vents and windows closed while the air conditioner is in operation.
- If someone in the car smokes, a window should be opened slightly.
- If windows have been closed for an extended period of time, briefly set the "AIR" control lever at the "VENT" position to take in outside air.

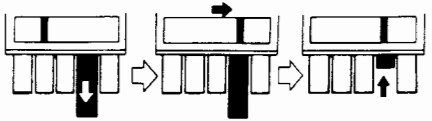
NOTE:

- **If the cooling system has not been used for a week or more, or if the ambient temperature range is below 60°F (15.6°C), the system should be run in by turning the switch on and off several times at three second intervals, with the engine running at low speed. This will add much to the service life of the system.**
- **If anything unusual is noted, shut off the system immediately. Have checked by your NISSAN/DATSUN dealer.**
- **It is suggested that the system be run for about ten minutes or so at least once a month in winter, so that it will be ready for use next season.**
- **At the start of the season, it is recommended that the air conditioning system be checked by your NISSAN/DATSUN dealer.**



AD006

① AM/FM indicator
② Stereo/monaural change-over button
③ Power antenna switch
④ Balance control (outer side knob)
⑤ Manual tuning control (inner side knob)
⑥ Tuning button
⑦ Stereo indicator
⑧ Tone control (outer side knob)
⑨ ON-OFF switch and volume control (inner side knob)



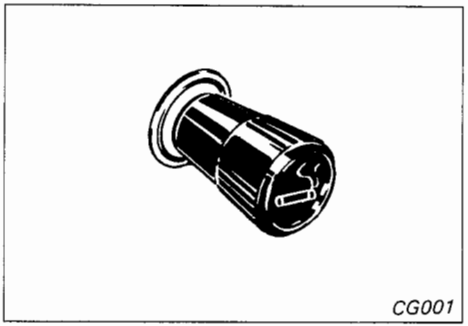
AD002

The radio has five push buttons for station selection. Other stations may be selected by the manual tuning knob.
The ignition key must be in "ON" or "ACC" position.

SETTING PUSH BUTTONS

1. Pull the selector button straight out until it stops. Tune in the station you want with the manual tuning knob of the radio dial.
2. After the station is clearly tuned in, push the selector button straight in until it stops, then release it.
3. Repeat steps 1 and 2 for the remaining station selector buttons.

CIGARETTE LIGHTER



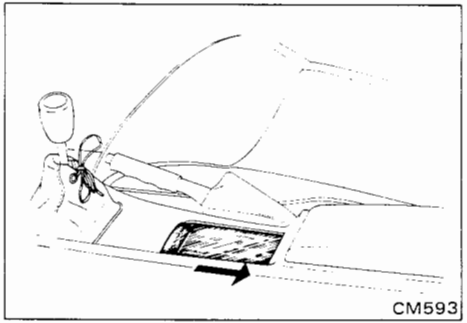
Push the knob in all the way and release it. When the lighter springs back to its original position, it is ready for use.

NOTE:

Replace the lighter in its original position after use.

The lighter illumination light glows in the lighter socket when the light switch is switched on.

ASH TRAYS



The ash tray is located on the floor console.

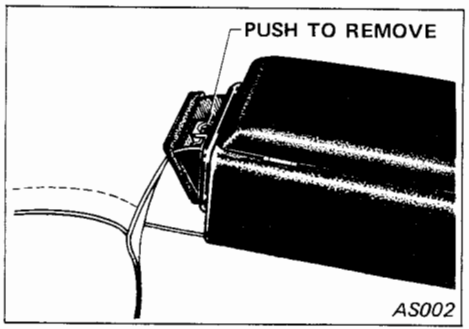
To remove it for cleaning, open its cover and pull out at the rack.

The illumination light inside the ash tray glows when the light switch is switched on.

NOTE:

a) Do not use the ash tray as a waste receptacle.

b) Close the ash tray after use.

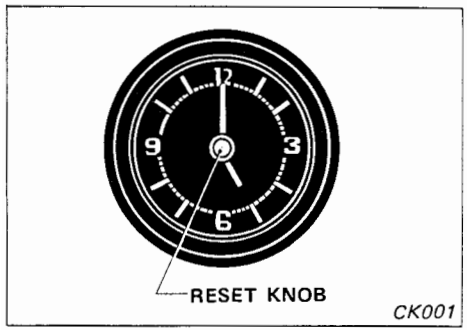


280Z 2+2 MODEL

The ash tray for rear seat occupants is located at the rear end of the console.

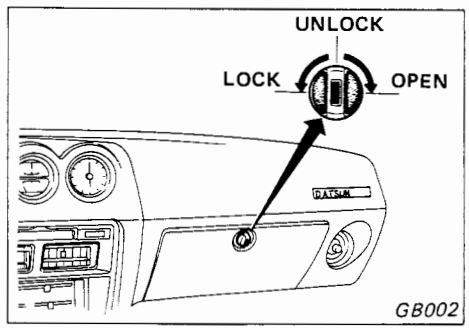
It can be removed by depressing the center lever.

CLOCK



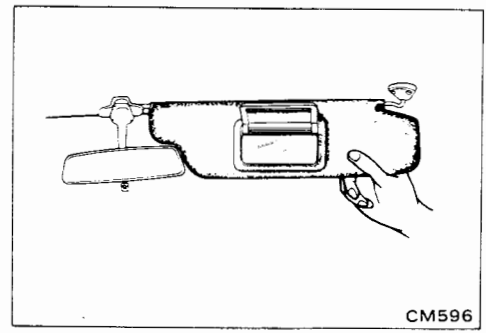
To reset the clock, push the knob in and reset to the desired position.
Turn the knob clockwise to advance the hands, and counterclockwise to retard the hands.

GLOVE BOX



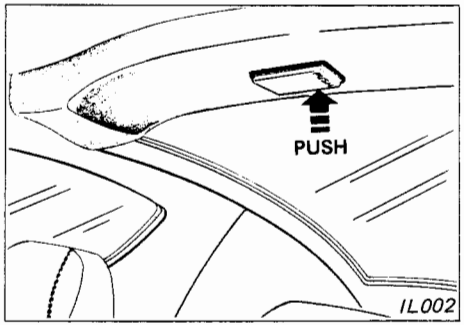
The glove box provides handy storage space.
The light will come on when the glove box is opened with the light switch turned on.

SUN VISORS AND VANITY MIRROR



You can lift the sun visors from their center mounting and turn them toward the windows to block glare from the sides.
The vanity mirror is located behind the passenger sun visor.

INTERIOR LIGHT

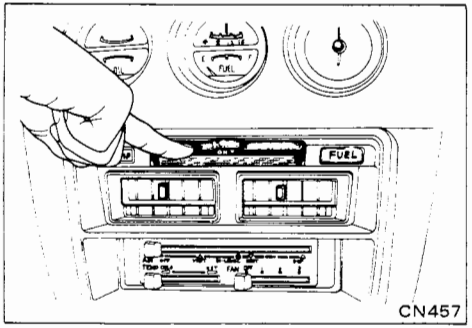


To switch the interior light "ON" and "OFF", press the "Push" switch.
The interior light comes on whenever the doors are opened, regardless of the switch position.

280Z 2+2 MODEL

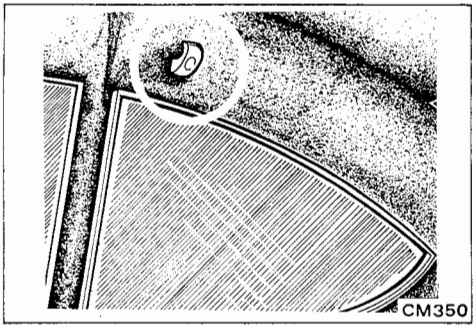
With the tailgate open, the interior light glows.

MAP LIGHT



The map light will come on when the map light assembly is pushed downward, and go out when the assembly is returned to the upward position.

COAT HANGERS



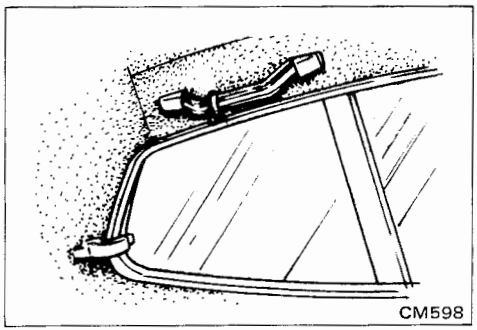
280Z 2 SEATER MODEL

The coat hangers are located on each side of the rear roof.

NOTE:

Avoid hanging anything on the hanger in such manners that might obstruct the driver's view.

ASSIST GRIPS AND COAT HANGERS



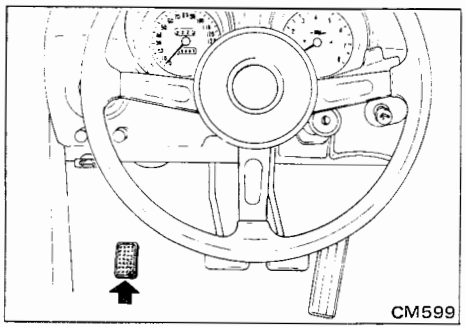
280Z 2+2 MODEL

The assist grip with a coat hanger is located above the roof rail on either side of the rear passenger compartment.

NOTE:

Avoid hanging anything on the assist grip in such manners that might obstruct the driver's view.

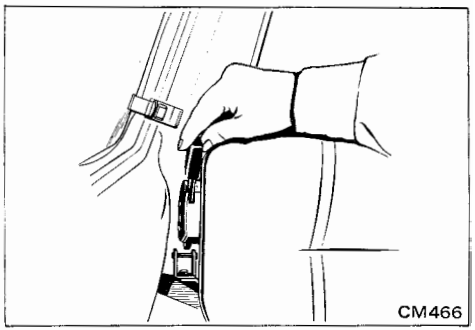
FOOT REST



A convenient foot rest is provided for the driver's left foot.

In cornering, put your left foot on the foot rest to support your body.

FOLDING REAR SEAT



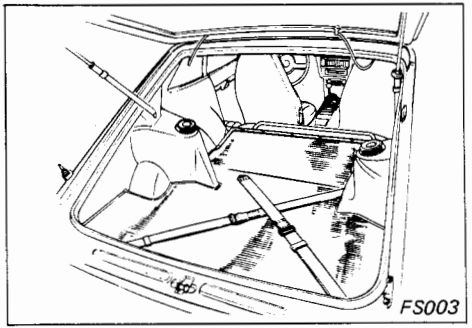
280Z 2+2 MODEL

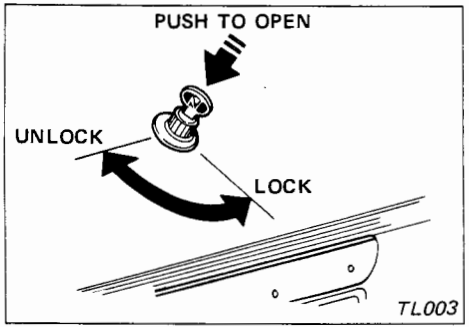
The rear seat may be quickly and easily converted into luggage space when needed. The seat back is equipped with interlocking lock mechanisms on both sides. Release either one and the seat can be folded forward or folded flush to the floor.

NOTE:

When the seat back is in its normal position, make sure it is locked securely.

TAILGATE LOCK





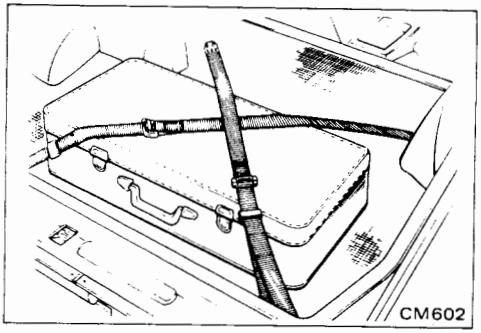
To open the tailgate, insert the key and turn it securely.
To close the gate, push it down firmly.
To lock, insert the key and turn it securely.

280Z 2+2 MODEL

With the tailgate open, the room light glows.

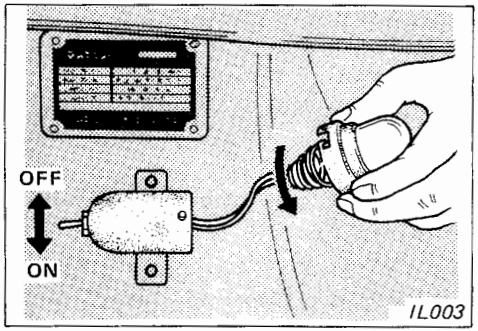
CAUTION:
Be careful not to bump against the tailgate when it is open.

BAGGAGE STRAPS



There are straps in the baggage space to secure baggage while travelling.

INSPECTION LIGHT



The inspection light is located on the left side hood ledge of the engine compartment.
To switch "ON", push the lever down. To remove the light for underhood inspection, push and turn the light rim and detach.

In Case Of Emergency

HAZARD WARNING

Use the hazard warning flasher to warn other drivers that your car is disabled or parked under emergency conditions.
Avoid stopping the car on the roadway if possible.

FREEING IMMOBILIZED CAR

If it becomes necessary to rock the car to free it from sand, mud, snow, ice, etc., you should move the gearshift lever from second to reverse in a repeat pattern while simultaneously depressing the accelerator gently. (On automatic transmission models, operate the selector lever from "D" to "R" position).
If the car is not freed by the above procedures, anti-skid materials should be placed under the spinning wheel(s) or the car should be towed out.

CAUTION:
To get the best possible traction under such circumstances, avoid racing the engine.
This is because one drive wheel spins at twice the speedometer reading when the other drive wheel is stopped resulting in tire and differential damage.

TOWING THE CAR

Should it become necessary to tow your car, it is recommended that local towing services be utilized. If proper lifting and other towing equipment is not used, your car could be damaged.

In towing your car, you must, of course, follow all State (Provincial in Canada) and local regulations. Towing instructions are available from your NISSAN/DATSUN dealer. Local service operators will generally be familiar with the applicable laws and procedures for towing. To assure proper towing and to prevent accidental damage to your car, it is advisable to have the service operator carefully read the following precautions.

- Before towing, make sure that the transmission, axles, steering system and power train are in good order. If any unit is damaged, a dolly must be used.
- Release the parking brake and set the gearshift lever in "Neutral" position before starting to tow the car.
- The key must remain in the ignition in the "OFF" position to prevent the steering mechanism from locking.

TOWING WITH FRONT WHEELS RAISED

– With Automatic Transmission –

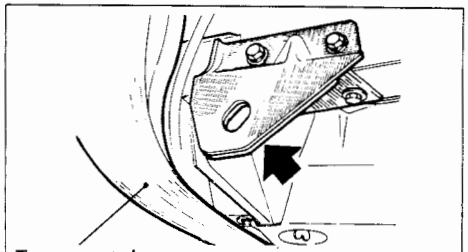
When towing an automatic transmission model, try to restrict towing speed below 20 MPH (30 km/h) and towing distance less than 6 miles (10 km).

If the speed or distance must necessarily be greater, remove the propeller shaft beforehand to prevent damage to the transmission.

TOWING WITH REAR WHEELS RAISED

With the ignition key turned off, secure the steering wheel in a straight-ahead position. Towing a car with the ignition key removed while the ignition key lock is engaged will result in damage to the lock mechanism. If the steering wheel cannot be fixed securely, a dolly must be used.

TOWING HOOK



To prevent damage, remove the front apron and front fender front. TC001

The towing hook should be used only in emergency situations, e.g., to pull the car out of a ditch, a snow bank or mud. Always pull the cable in a straight direction with respect to the hook. Do not apply force to the hook in a side direction.

To prevent damage, do not take up slack in the cable too quickly.

CAUTION:

Only the front hooks at the right and left sides may be used for towing purposes.

When the front hooks are used for towing, remove the front apron and front fender front to prevent possible interference with the towing cable.

If the rear hooks have been left on your car, be sure to have them removed at your NISSAN/DATSUN dealer.

PUSH STARTING

WITH MANUAL TRANSMISSION

Non-California models

If you cannot start your engine in the normal manner, it can be started by pushing.

As the push begins, turn the ignition key to "ON", place the shift lever in second or third gear, and keep your foot all the way down on the clutch pedal.

Hold the accelerator pedal about halfway down.

When the car reaches a speed of about 10 MPH (16 km/h), slowly release the clutch pedal to start the engine.

CAUTION:

Never try to start the car by towing it; when the engine starts, the forward surge could cause the car to collide with the tow vehicle.

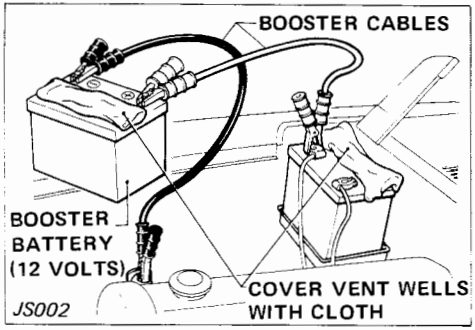
California models

California models should not be pushed or pulled to start, or the catalytic converter may be damaged.

WITH AUTOMATIC TRANSMISSION

Cars equipped with automatic transmissions cannot be started by pushing. Forcibly trying to do so will result in a seized transmission.

JUMP STARTING WITH BOOSTER BATTERY



Because explosive hydrogen gas is always present in the vicinity of the battery, keep all sparks and flames away from it. Whenever charging or using a battery in a closed environment always ensure that there is suitable ventilation.

Do not, under any circumstances, allow battery fluid to come into contact with eyes, skin, cloth or painted surfaces. Battery fluid is a corrosive sulphuric acid solution which can cause severe burns. If the fluid should come into contact with anything, immediately flush any contacted area with water.

Whenever working on or near a battery, always wear suitable eye protectors (e.g., goggles or industrial safety spectacles) and remove rings, metal bands, or any other metal jewelry.

Keep battery out of the reach of children.

If done incorrectly, jump starting can be hazardous.

Always follow the instructions below.

1. Position the two cars in such a manner that their batteries are in close proximity to each other. Set parking brakes. On manual transmission models set the shift lever in "neutral". On automatic transmission models set the lever in "P" position. Switch off all unnecessary electrical systems (light, heater, fan, etc.).

CAUTION:

- **If it becomes necessary to start the engine with a booster battery and jumper cables, the booster battery voltage must not exceed 12 volts, or electric components and the control unit of the fuel injection system will be damaged.**
- **If the battery cables are disconnected they should be tightly clamped to the battery terminals to secure a good contact.**
- **Do not allow the two cars to touch.**

2. To reduce the explosion hazard inherent in connecting a live booster battery to a discharged battery, remove the vent caps from both batteries and place a cloth over their open vent wells.
3. Run one jumper cable from the positive terminal (identified by "+" on the battery case, post, or clamp) of the booster battery to the positive terminal of the discharged battery.
4. Connect the other cable to the booster battery's negative terminal and to the engine lift bracket of the car with the discharged battery **[not to negative (–) terminal of battery]**.

CAUTION:

Do not connect the positive lead to the negative terminal or vice versa. Doing so could cause damage to both charging systems or could even result in serious personal injury.

5. Start the engine of the other car. After letting it run for a few minutes, start your engine in the normal manner.
6. Once you have your engine running carefully disconnect the jumper cables, exactly reversing the connection procedure.
7. Replace the vent caps. Because the cloths used to cover the vent wells may have been contaminated with corrosive acid, be sure to dispose of them in a safe manner.

IF YOUR CAR OVERHEATS

Pull the car off the road in a safe place, put the transmission in "Neutral" (automatic transmission in "P" position) and lift the engine hood. If the air conditioning is on, turn it off. Do not stop the engine.
Check belts for damage or looseness. Also check the cooling fan for proper operation, and the radiator hoses and radiator for leakage.

CAUTION:
Be careful not to allow your hands or clothing to come into contact with, or to get caught in, the running fan or belts.

If engine overheating is not caused by a faulty cooling system but by something else, as for example climbing a long hill on a hot day, abrupt reduction of car speed after high-speed driving or repeated stop-and-go driving in congested areas, the engine coolant temperature will start to drop when the engine is run at idle for one or two minutes.

Should the coolant start leaking or the fan belt become damaged or loose, the engine must be stopped immediately and your car brought to the nearest NISSAN/DATSUN dealer or other competent service facility for repair.

To effectively reduce the coolant temperature, it is a good practice to run the engine for several minutes at a speed twice as high as the normal idle speed.

- After the engine has cooled down to the normal operating temperature, again check for leakage and, with the engine running, add coolant as necessary. After starting the car again, drive slowly for the first ten minutes, checking for any sign of abnormality. If no abnormality is noted that time, resume normal driving.

WARNING:
To avoid the danger of being burned, never remove the radiator cap when the engine is still hot. When the radiator cap of a hot engine is removed, pressurized hot water will spurt out, possibly causing serious personal injury.

Emission Control Systems

The control of automotive air pollution largely depends upon the development of effective emission control systems. To meet this demand, NISSAN has been making consistent and continuous efforts toward the further development of such devices.

Your DATSUN is equipped with emission control systems that are designed and built in accordance with the Federal Clean Air Act. These systems provide the proper emission performance under normal use when serviced at regular intervals.

Under the laws of some states in the U.S.A. and provinces of Canada, the owner is subject to penalties for any modification to the emission control systems after delivery.

WARRANTY STATEMENT

The emission control system warranty is described in your Warranty and Service Booklet.

OWNER'S RESPONSIBILITY FOR DOCUMENTATION

Federal Regulations provide that the emission system warranty is valid only when the systems are maintained in accordance with the manufacturer's maintenance instructions. Accordingly, records in the form of receipts, invoices or signed coupons must be maintained as proof of compliance.

For your convenience, the coupons in the Warranty and Service Booklet have been designed to incorporate the signature of your authorized NISSAN/DATSUN dealer upon completion of the required maintenance service. This signed coupon is proof of compliance and should be kept in the glove box.

All receipts, along with the Warranty and Service Booklet should be transferred to each subsequent owner of the vehicle.

NORMAL VEHICLE USE

The emission standards may be satisfied by having the vehicle inspected periodically and by meeting the requirements listed below:

1) The vehicle should be operated within the prescribed passenger and load limitations.
2) Use an unleaded or low-lead gasoline with a minimum octane rating of 91 RON (Research Octane Number).
3) For vehicles equipped with catalytic converters, be sure to use only unleaded gasoline to avoid contaminating the converter.
4) The vehicle should always be maintained in accordance with the specifications stipulated by NISSAN.

RECOMMENDATION OF GENUINE NISSAN PARTS IN REQUIRED MAINTENANCE

The emission control system on your NISSAN vehicle is designed, built and tested in accordance with Federal and some State Regulations.

To assure the best results and to maintain the original quality built into the systems, it is recommended that genuine NISSAN parts be used when servicing the system. The use of replacement parts which are inferior to genuine NISSAN parts may reduce the effectiveness of the system, and affect the Nissan Emission Control Warranty.

Therefore, if it becomes necessary to utilize other than genuine NISSAN parts, the owner should make certain that such parts are warranted by their manufacturer to be equivalent to genuine NISSAN parts in quality.

EMISSION CONTROL SYSTEMS ON YOUR DATSUN

All new DATSUNs are equipped with an emission control system which satisfies all applicable regulations.

With this emission control system built into your DATSUN, the discharge of pollutants has been reduced substantially.

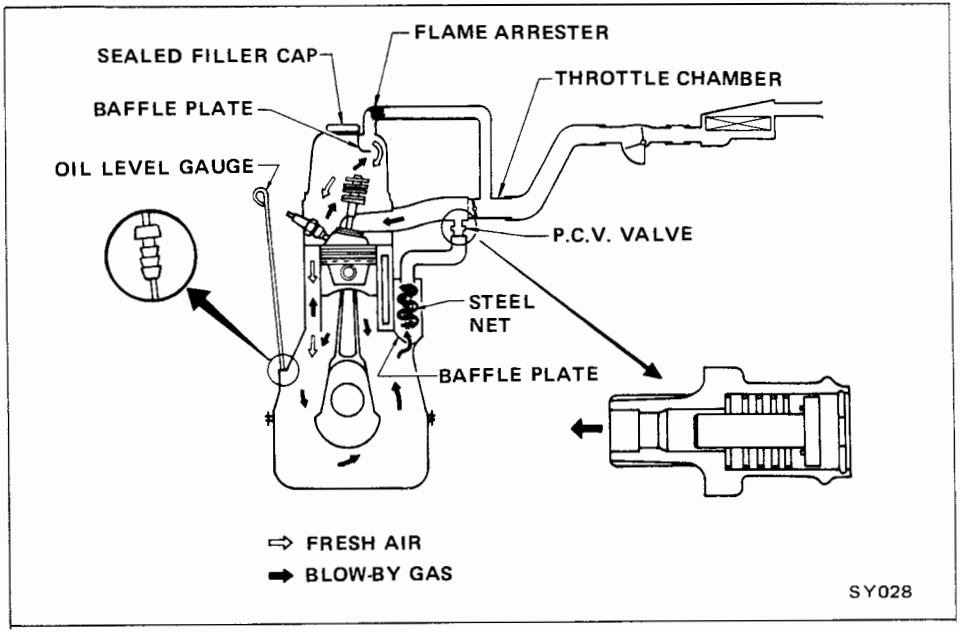
These pollutants are primarily hydrocarbons, nitrogen oxides and carbon monoxide.

Hydrocarbons and nitrogen oxides when exposed to sunlight under certain conditions produce photochemical smog.

Carbon monoxide is toxic when highly concentrated in the air.

The emission control system consists of (1) a crankcase emission control system, (2) an exhaust emission control system, and (3) an evaporative emission control system. These systems are outlined below.

1. CRANKCASE EMISSION CONTROL SYSTEM



This system is designed to send blow-by gases back to the combustion chamber for reburning, and at the same time to send filtered air into the crankcase for ventilation. Thus, it serves to prevent the emission of blow-by gases into the atmosphere.

The function of this system depends upon the positive crankcase ventilation (P.C.V.) control valve which returns blow-by gases to the combustion chamber.

2. EXHAUST EMISSION CONTROL SYSTEM

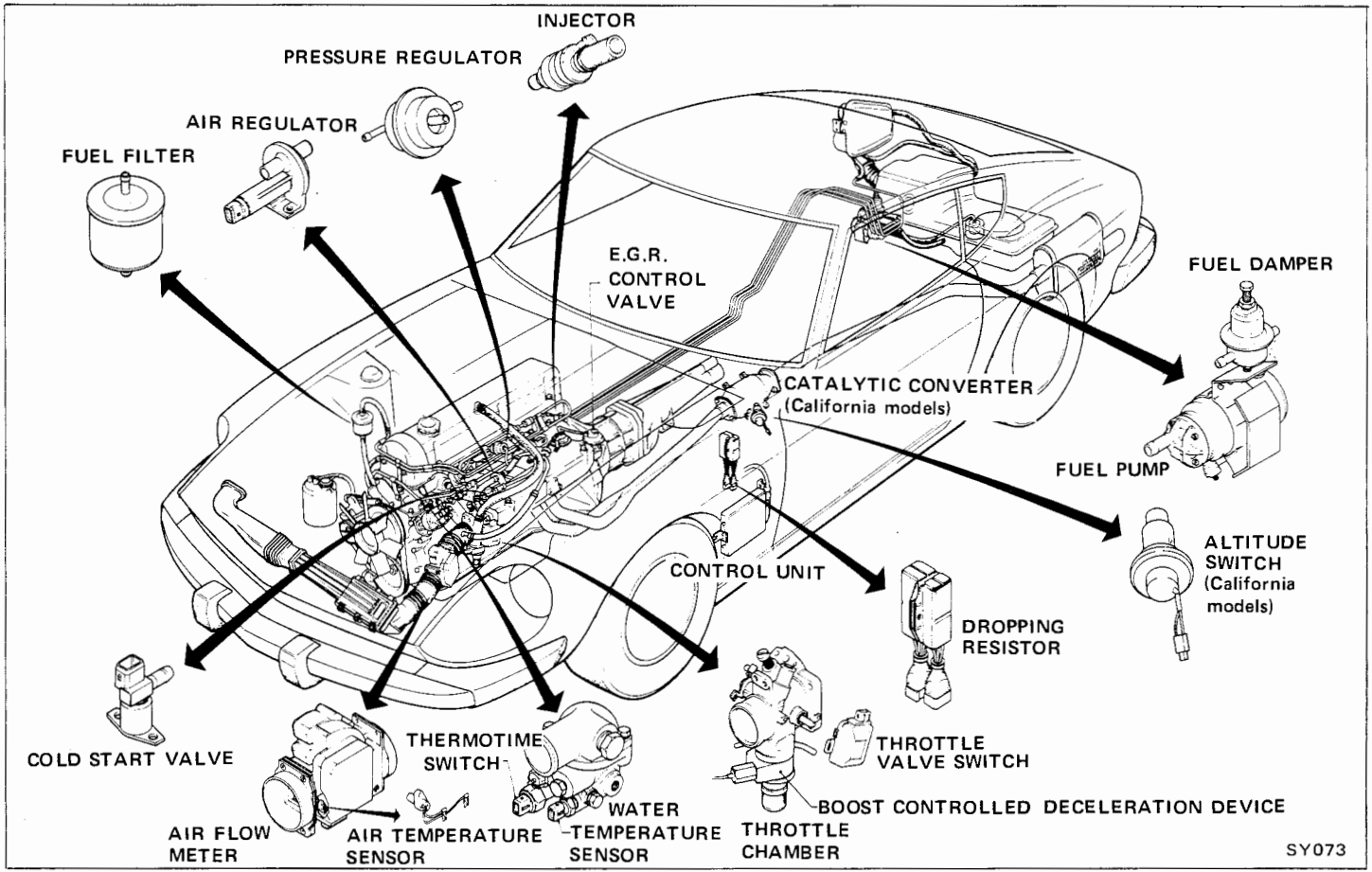
There is a considerable difference between the exhaust emission control system for California models and that for non-California models. The system includes the following components.

1) Electronic Fuel Injection System (All models)
2) Boost Controlled Deceleration Device (B.C.D.D.) (All models)
3) Exhaust Gas Recirculation (E.G.R.) System (All models)
4) Catalytic Converter (California models)
5) Altitude Compensator (California models)

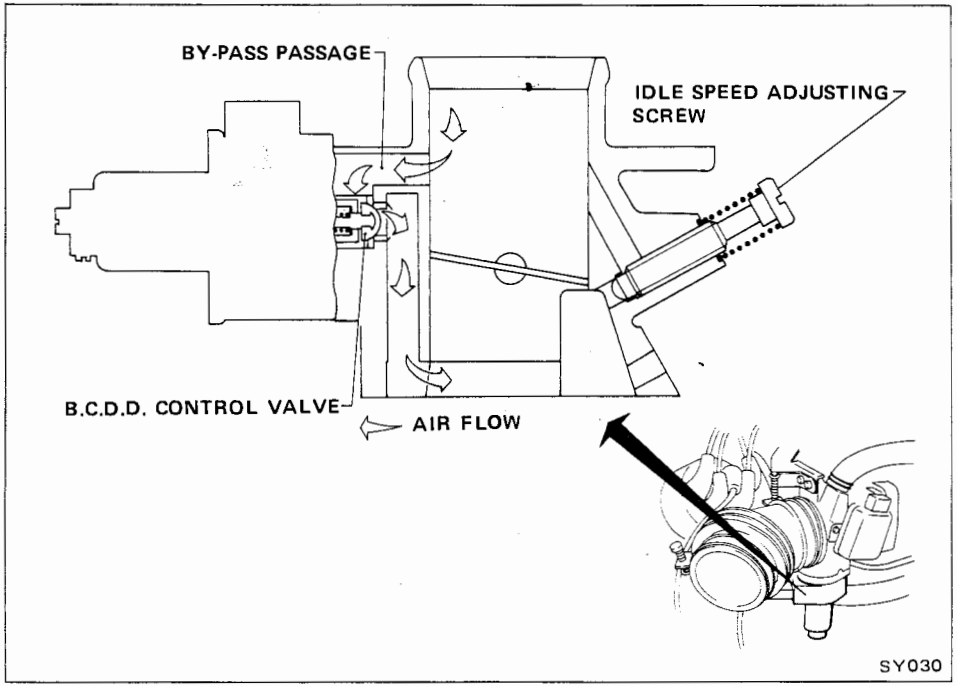
ELECTRONIC FUEL INJECTION SYSTEM (All models)

The electronic fuel injection system monitors the operating conditions of the engine through various types of sensors. The electrical signals transmitted from the sensors enter the control unit where the correct injection open-valve time period is computed on the basis of preset conditions for optimum fuel injection.

This system permits operation of the car with lean air-fuel mixture, and improves exhaust performance and fuel economy.


INJECTOR
PRESSURE REGULATOR
AIR REGULATOR
FUEL FILTER
E.G.R. CONTROL VALVE
FUEL DAMPER
CATALYTIC CONVERTER (California models)
FUEL PUMP
ALTITUDE SWITCH (California models)
CONTROL UNIT
DROPPING RESISTOR
COLD START VALVE
THERMOTIME SWITCH
THROTTLE VALVE SWITCH
BOOST CONTROLLED DECELERATION DEVICE
AIR FLOW METER
AIR TEMPERATURE SENSOR
WATER TEMPERATURE SENSOR
THROTTLE CHAMBER
SY073

BOOST CONTROLLED DECELERATION DEVICE (B.C.D.D.) (All models)



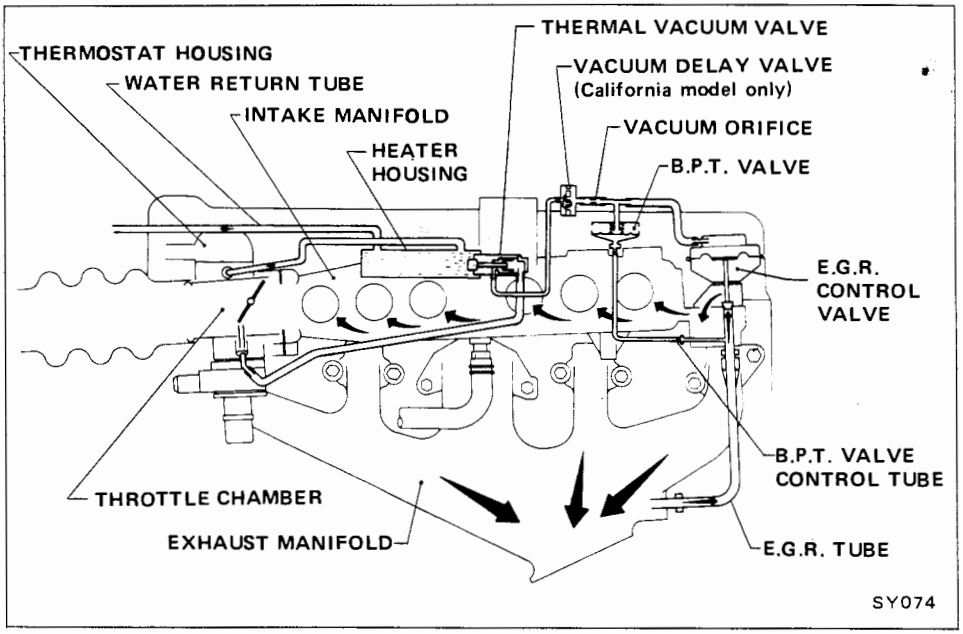
The B.C.D.D. is mounted on the bottom of the throttle chamber. The B.C.D.D. function is to open an air passage which by-passes the throttle valve during deceleration.

During deceleration, the air-fuel mixture ratio becomes unbalanced and normal combustion cannot continue.

Thus, a great amount of unburned hydrocarbons are emitted.

The B.C.D.D. supplies additional air into the intake manifold to balance the air-fuel mixture ratio and prevent such unburned hydrocarbons from being emitted.

EXHAUST GAS RECIRCULATION (E.G.R.) SYSTEM
(All models)

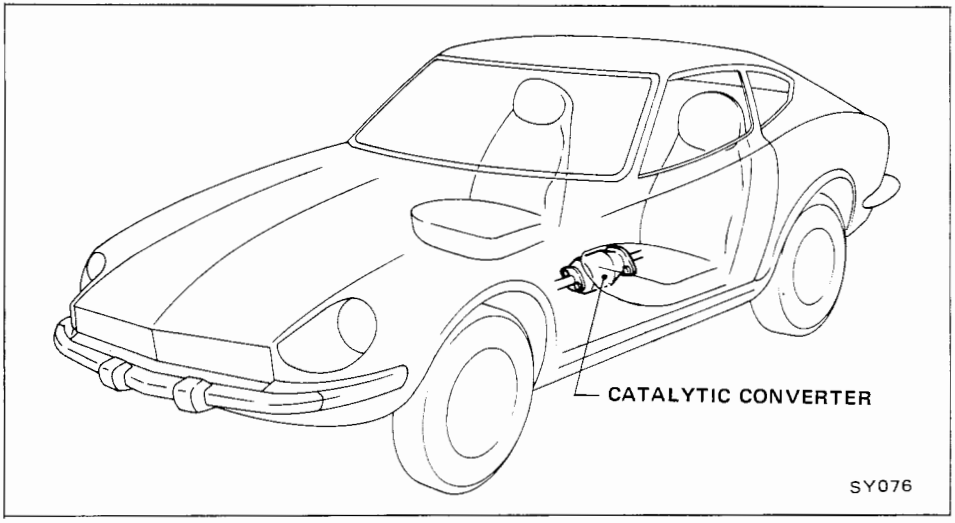


The purpose of the E.G.R. system is to direct burnt gases into the intake manifold so that they re-enter the engine combustion chambers.

This system controls the engine combustion temperature, thus reducing NOx emission.

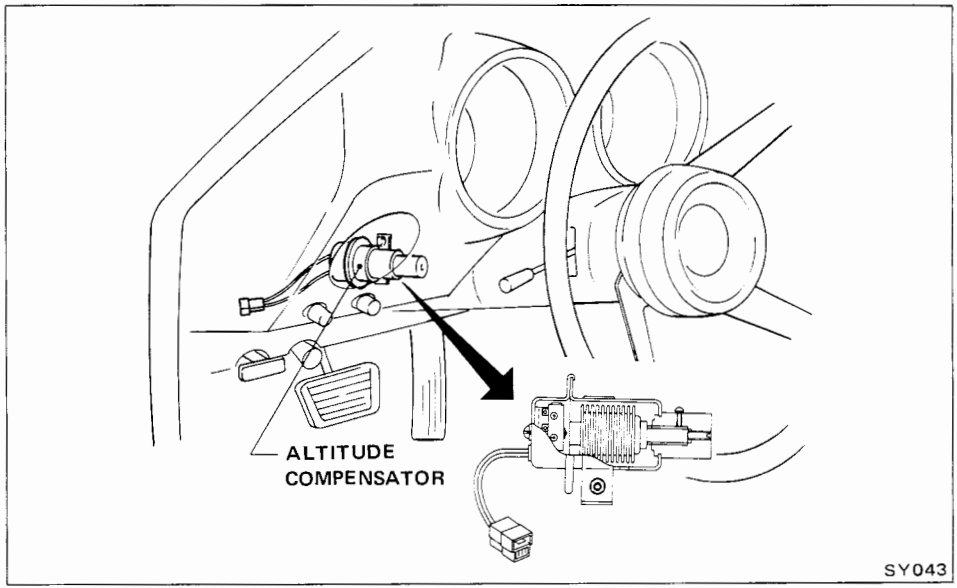
The supply of exhaust gases is controlled in accordance with the engine operating condition. Engine operation indications, such as cooling water temperature, engine load and exhaust gas pressure, are monitored by separate devices.

CATALYTIC CONVERTER
(California models)



The catalytic converter is installed only on California models. It is located midway along the exhaust tube, where the primary muffler is installed on non-California models. This converter promotes the oxidization of HC and CO, thereby substantially reducing CO and HC emissions.

ALTITUDE COMPENSATOR
(California models)



The higher the altitude, the richer the air-fuel mixture ratio and therefore, the higher exhaust gas emissions, even though the engine is properly adjusted for low altitude driving.

Your DATSUN is designed to meet Emission Standards for driving in both low and high altitudes with the aid of an altitude compensator.

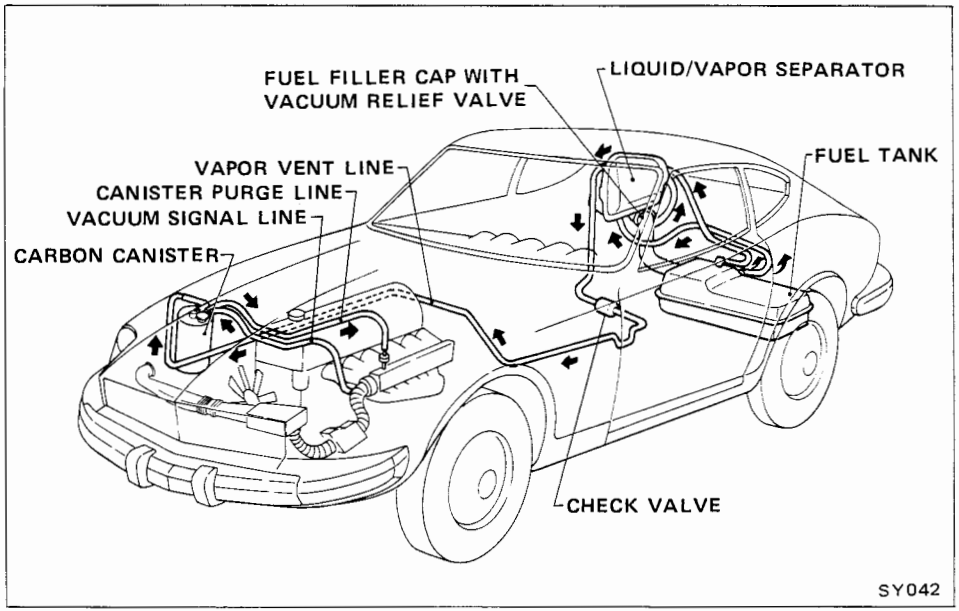
The altitude compensator is located in the driver's compartment. It automatically regulates fuel injection by sending a signal to the control unit identifying whether the car is being operated in a high or low altitude, thus satisfying Emission Standards.

CAUTION:

a) Only California models are equipped with the altitude compensators. The Emission Control Information Label on your car will tell you if it is equipped with an altitude compensator.

b) Non-California models are not equipped with such an altitude compensator to meet Emission Standards of high altitude driving.

3. EVAPORATIVE EMISSION CONTROL SYSTEM



The evaporative emission control system prevents evaporative gases in the fuel tank from entering the atmosphere. When the vacuum pressure in the fuel tank is too high, air passes through the vacuum relief valve in the fuel filler cap.

At the same time, the fuel filler cap prevents evaporative gases from being expelled into the atmosphere.

Therefore, evaporative gases are stored in the carbon canister.

When the engine is running, the stored evaporative gases are sucked into the intake manifold.

A filter which is vented to the atmosphere is located on the bottom of the carbon canister. When the evaporative gases inside the carbon canister are sucked into the intake manifold, air is sucked through the filter element and then passes through the activated carbon.

This intake of air cleans the activated carbon and prevents decompression in the fuel tank.

Maintenance Schedule

Before delivery of your new car, your dealer provides a pre-delivery inspection and adjustment service specified by the factory and designed to ensure satisfactory performance.

The following tables list the periodic maintenance servicing required to ensure good emission control performance, good engine performance and good mechanical condition in your new DATSUN, and should be attended to as indicated by a NISSAN/DATSUN dealer or other competent service facility.

The first 1,000 mile (1,600 km) service is one of the most important services required to ensure the maximum emission control performance and optimum engine condition of your new DATSUN.

It is also important that emission control components be replaced at the designated time or mileage. If frequently used under unusual operating conditions (driving on a dusty road, not used for a long period of time, used for repeated travel of less than several miles, or for short trips in freezing temperature), the car might require additional maintenance. For example, increased frequency of air cleaner filter replacements, cleaning or replacement of spark plugs, or changing of the oil and oil filter may become necessary.

If maintenance service is required, or if your car exhibits malfunctions, or if the idle-adjustment is not correct, have the systems checked and tuned by an authorized NISSAN/DATSUN dealer or any other qualified service outlet.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL						
Periodic maintenance should be performed at number of miles, kilometers or months, whichever comes first.	Miles x 1,000	1	7.5	15	22.5	30	37.5	45
	(Kilometers x 1,000)	(1.6)	(12)	(24)	(36)	(48)	(60)	(72)
	Months	–	6	12	18	24	30	36

EMISSION CONTROL MAINTENANCE

(1)	Intake & exhaust valve clearance		A		A		A		A
(2)	Drive belts		A		I		I		I
(3)	Engine oil & oil filter	(1)		R	R	R	R	R	R
(4)	Engine coolant						R		
(5)	Cooling system hoses & connections				I		I		I
(6)	Vacuum fitting hoses & connections				I		I		I
(7)	Idle rpm & mixture ratio	idle rpm	A		A		A		A
		mixture ratio	I		I		I		I
(8)	Air regulator hoses				I		I		I
(9)	Fuel filter	(2)					R		
(10)	Fuel lines (hoses, piping, connections, etc.)						I		
(11)	Air cleaner filter	(2)					R		
(12)	Ignition timing				A		A		A
(13)	Spark plugs				R		R		R
(14)	Ignition wiring				I		I		I
(15)	Positive crankcase ventilation (P.C.V.) valve						R		
(16)	Ventilation hoses						I		
(17)	Vapor lines						I		
(18)	Fuel tank vacuum relief valve						I		
(19)	Carbon canister filter						R		
(20)	Cable harness & connectors						I		

The above charts show the normal maintenance schedule.
Depending upon weather and atmospheric conditions, varying road surfaces, individual driving habits and vehicle usage, additional or more frequent maintenance may be required.

Abbreviations: A = Adjust R = Replace
I = Inspect, correct, replace if necessary
L = Lubricate

MAINTENANCE OPERATION Periodic maintenance should be performed at number of miles, kilometers or months, whichever comes first.		MAINTENANCE INTERVAL						
	Miles x 1,000	1	7.5	15	22.5	30	37.5	45
	(Kilometers x 1,000)	(1.6)	(12)	(24)	(36)	(48)	(60)	(72)
	Months	–	6	12	18	24	30	36
UNDERHOOD MAINTENANCE								
Brake, clutch & automatic transmission fluid level & leaks			I	I	I	I	I	I
Brake fluid				R		R		R
Master-Vac vacuum hoses & check valve						I		
Air conditioning system hoses, connections & refrigerant leaks						I		
UNDER VEHICLE MAINTENANCE								
Brake, clutch, fuel & exhaust systems for proper attachment, leaks, cracks, chafing, abrasion, deterioration, etc.			I	I	I	I	I	I
Manual transmission & differential gear oil			I	I	I	R	I	I
Steering gear box & linkage, suspension parts & propeller shaft for damaged, loose & missing parts		I		I		I		I
Steering linkage & front suspension ball joints						L		
Rear axle drive shaft joints						L		
OUTSIDE AND INSIDE MAINTENANCE								
Rotate wheel position & inspect wheel balance & wheel alignment				I		I		I
Disc brake pads & other brake components for wear, deterioration & leaks	(3)		I	I	I	I	I	I
Brake drums, linings & other brake components for wear, deterioration & leaks	(3)			I		I		I
Wheel bearing grease						L		
Locks, hinges & hood latch	(3)		L	L	L	L	L	L
Seat belts, buckles, retractor, anchors & adjuster				I		I		I
Foot brake, parking brake & clutch for free play & operation Master-Vac, NP-valve or load sensing valve for operation			I	I	I	I	I	I

NOTE: (1) If vehicle is operated under severe conditions: short distance driving, extensive idling or driving in dusty conditions, change engine oil every 3,000 miles (5,000 km) or 3 months, whichever comes first.

(2) More frequent maintenance if under dusty driving conditions.

(3) If vehicle is operated in areas using road salt or other corrosive materials, inspect every 3,000 miles (5,000 km) or 3 months, whichever comes first.

MAINTENANCE INSTRUCTIONS FOR EMISSION CONTROL SYSTEMS

(1) Intake and exhaust valve clearance

Proper adjustment of the valve clearance is essential to exhaust emission control.
Be sure to meet this requirement since valve noise or unstable idling may occur.

(2) Drive belts

Check drive belts for wear, fraying or cracking and proper tension.
To check the proper tension of the drive belts, depress the belt at the recommended position to the specified value and observe the deflection in the belt.
Replace the drive belts if found damaged.

(3) Engine oil and oil filter

Engine oil and oil filter should be changed every 7,500 miles (12,000 km) or 6 months, whichever comes first.

(4) Engine coolant

The engine coolant should be checked for proper level.
Engine coolant including permanent anti-freeze coolant (Ethylene Glycol base) should be changed every 30,000 miles (48,000 km) or 24 months, whichever comes first.
Whenever the coolant is changed, the cooling system must be flushed and refilled.

(5) Cooling system hoses and connections

Check the cooling system, hoses and connections for damage or looseness.
If a leaky hose or connection is found, replace it.

(6) Vacuum fitting hoses and connections

Check hoses and connections for looseness or damage.
If a deteriorated or damaged hose is found, replace it.

(7) Idle rpm and mixture ratio

Inspection and adjustment should be made with a CO-meter and tachometer.
Proper mixture and idle rpm have been set at the factory.

(8) Air regulator hoses

Check the air regulator hoses for correct insertion, cracks, damage, or clogging. If any hose is found faulty, replace it.

(9) Fuel filter

The fuel filter should be replaced every 30,000 miles (48,000 km) or 24 months, whichever comes first.

(10) Fuel lines (hoses, piping, connections, etc.)

Check the fuel hoses, piping and connections for leak, looseness or deterioration. Replace any parts if they are damaged.

(11) Air cleaner filter

Under normal driving conditions, the air cleaner filter should be replaced every 30,000 miles (48,000 km) or 24 months, whichever comes first.
However, driving the car in dusty areas will cause rapid clogging of the filter. Consequently, the filter may have to be replaced more frequently.

(12) Ignition timing

Ignition timing must be adjusted with the proper equipment.

(13) Spark plugs

The spark plugs should be replaced every 15,000 miles (24,000 km) or 12 months, whichever comes first.

(14) Ignition wiring

Check the ignition wiring for cracking of exterior insulation and for a proper fit on the distributor cap and spark plugs.

(15) Positive crankcase ventilation (P.C.V.) valve

The P.C.V. valve should be replaced every 30,000 miles (48,000 km) or 24 months, whichever comes first.

(16) Ventilation hoses

The ventilation hoses should be blown out with air to make certain that it is clean when the P.C.V. valve is replaced. Ensure that the flame arrester is securely inserted in the hose between the rocker cover and the throttle chamber.

(17) Vapor lines

Check vapor lines and connections for failure or looseness.
If leaks are found, replace them.

(18) Fuel tank vacuum relief valve

A damaged vacuum relief valve may sometimes leak evaporative gas or cause fuel tank deformation. If replacement of the valve becomes necessary, replace the fuel filler cap assembly.

(19) Carbon canister filter

The carbon canister filter should be replaced every 30,000 miles (48,000 km) or 24 months, whichever comes first.
Make sure that the filter is positioned on the bottom of the carbon canister.

(20) Cable harness and connectors

Check the harness connectors for correct insertion, and the harness connector terminals for deformation or rust. Replace any parts found faulty.

EMISSION CONTROL TROUBLE SHOOTING CHART

The chart shown below will be extremely helpful in trouble shooting the emission control system of your DATSUN. Whenever the condition of any part of the emission control system is questionable, use this chart as a guide to locate and correct the cause of trouble.

Satisfactory performance and operation of the emission control system are assured only when the system is properly cared for.

NOTE:

a) Before checking or repairing any part of the emission control system, ensure that all safety precautions are taken.

b) Idling and ignition timing adjustments require the use of special equipment or instruments.

Condition	Probable cause	Corrective action
Engine will not crank or cranks very slowly.	Discharged or damaged battery.	Charge or replace.
	Loose connection. • Battery	Check both cable connections on battery and grounded end.
	• Starter	Check connections at magnetic switch mounted on starter.
	Damaged starter motor.	Repair or replace.
	Malfunction in electronic fuel injection system.	Replace.
Engine will crank normally but will not start.	Ignition system Loose connection in ignition system.	Check for loose connections at ignition coil, distributor and spark plugs.

Condition	Probable cause	Corrective action
	Weak spark or no spark occurs on spark plugs. Test procedure Disconnect high tension cable from one spark plug and hold it about 0.4 in (10 mm) from the engine block and crank engine. **NOTE:** **Hold high tension cable with a dry piece of cloth.**	If good spark occurs. Check spark plugs and clean or replace. Check fuel system and clean or repair. Check ignition timing. Check cylinder compression. If weak spark or no spark occurs. Check and clean distributor cap and rotor. Check ignition system.
	Fuel system No fuel in fuel line.	Check fuel level. Refill if necessary. Check fuel pump system.
	Clogged fuel line.	Check for clogged fuel strainer and piping.
	Malfunction in pressure regulator.	Check pressure regulator, replace if necessary.
	Malfunction in electronic fuel injection system.	Replace.
High engine idle speed.	Binding accelerator linkage. Malfunctioning B.C.D.D. system.	Check and correct accelerator linkage. If engine idling speed rises above 1,800 to

Condition	Probable cause	Corrective action
		2,000 rpm, the cause may be a malfunctioning B.C.D.D. system. Check B.C.D.D. system. Repair or replace if necessary.
	Malfunctioning air regulator.	Replace.
	Incorrect adjustment of idle speed adjusting screw.	Correct.
Rough or unstable engine idle.	Improper valve clearance.	Adjust valve clearance.
	Incorrect idle adjustment.	Adjust idle speed.
	Clogged air cleaner filter.	Replace air cleaner filter.
	Malfunction in E.G.R. control valve.	Clean or replace.
	Loose manifold and cylinder head bolts.	Retighten bolt.
	Damaged or disconnected carbon canister purge line hose.	Connect or replace.
	Damaged or disconnected crankcase ventilation hoses.	Connect or replace.
	Malfunction in pressure regulator.	Replace.
	Malfunction in electronic fuel injection system.	Replace.
	Malfunction in altitude compensator (California models only).	Check or replace.

Condition	Probable cause	Corrective action
Engine knocking.	Use of fuel with insufficient octane rating.	Change to recommended fuel. Check ignition timing if necessary.
	Laboring engine.	Select a lower gear.
Backfire or after fire.	Irregular combustion.	Check spark plugs for gap, carbon deposit or incorrect heat range. Check ignition timing.
	Damaged E.G.R. control valve.	Replace.
	Malfunction in electronic fuel injection system.	Replace.
	Malfunction in altitude compensator (California models only).	Check or replace.
Charge warning light comes on while driving.	Loose connection.	Check for loose connections of alternator.
	Loose fan belt.	Adjust belt tension.
	Damaged alternator.	Repair or replace alternator.
Floor temperature too high (California models only) (Refer to the Starting and Operating section.)	Damaged heat insulator.	Check and replace.
	Problem in fuel or ignition system.	Check the systems. Replace damaged parts.

Do-It-Yourself

PRECAUTIONS

When performing any inspection or maintenance work on your car, always exercise care to prevent accidental personal injury to yourself or damage to the car.

The following are general precautions which should be closely observed in carrying out any servicing operation.

- Do not work on the engine while it is hot. Always turn it off and allow it to cool down.
- If you must work with the engine running, remove necktie and any jewelry, such as rings, watch, etc. Keep your hands, clothing, hair and tools away from moving fans and fan belts.
- Never get under the car while it is supported by a jack.
- Do not smoke or jump sparks near gasoline or battery.
- Never connect or disconnect either the battery or any transistorized component while the ignition key is on.

This "Do-It-Yourself" section gives instructions regarding only those items which are relatively easy for an owner to perform.

The "Periodic Maintenance and Lubrication Schedule" is included in the Warranty and Service Booklet and this booklet. However, sustained heavy duty or high speed operations or operation under adverse conditions may necessitate more frequent servicing. You should be aware that incomplete or improper servicing may result in operating difficulties or excessive emissions, and could affect your warranty coverage. If in doubt about any servicing, have it done by an authorized NISSAN/DATSUN dealer or other competent service facility.

Before changing oil, check for a suitable way to dispose of the old oil.

Do not pour it down sewage drains, onto garden soil, or into open streams.

Your zoning or environmental regulations will give you more detailed instructions on such disposal.

We suggest that you have your oil changed at your authorized NISSAN/DATSUN dealer or other competent service facility.

OIL AND FUEL RECOMMENDATION

FUEL RECOMMENDATION

Non-California models are designed to operate on either unleaded or low-lead gasoline with a research octane rating of at least 91.

All California models are designed to operate on unleaded gasoline only of at least 91 octane (RON).

Under no circumstances should a leaded fuel be used since this will damage the catalytic converter.

Incorrect ignition timing, or the use of a fuel whose octane rating is too low, will result in knocking, after-run or overheating.

This in turn will cause excessive fuel consumption or damage to the engine. If any of the above symptoms are encountered, have your car checked at a NISSAN/DATSUN dealer or other competent service facility.

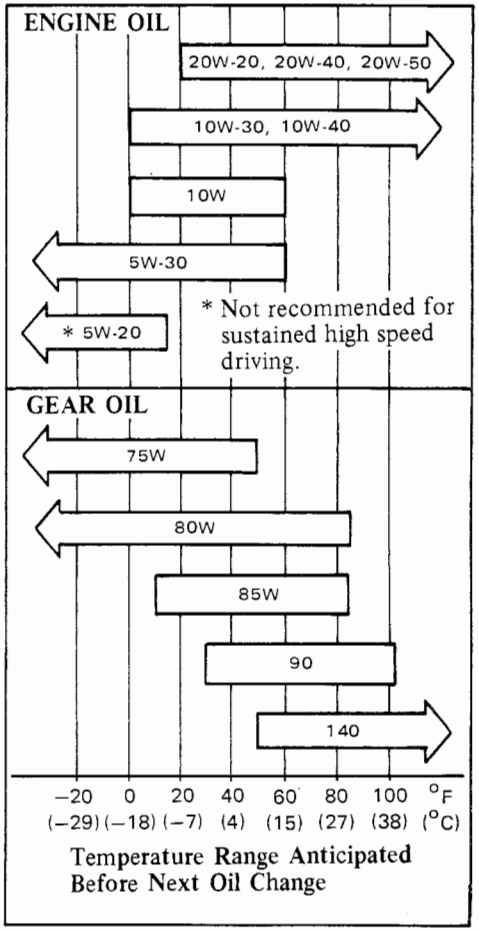
ENGINE OIL RECOMMENDATION

Use only the engine oil listed in the "Recommended Lubricant Specifications". Change engine oil at the intervals recommended in the "Emission Control Maintenance Schedule". It should be noted that oil change intervals longer than those listed above will seriously reduce engine life.

Operation under the following conditions may require more frequent oil changes.

- short distance driving at cold outside temperatures,
- driving in dusty conditions,
- severe driving.

RECOMMENDED SAE VISCOSITY NUMBER



RECOMMENDED LUBRICANT SPECIFICATIONS

Lubricant		Specifications	Remarks
Gasoline engine oil		API SE	Further details, refer to recommended SAE viscosity chart.
Gear oil	Transmission and steering	API GL-4	
	Differential	API GL-5	
Automatic T/M fluid		Type DEXRON	————
Multi-purpose grease		NLGI 2	Lithium soap base
Brake and clutch fluid		DOT 3	————
Anti-freeze		————	Ethylene glycol base

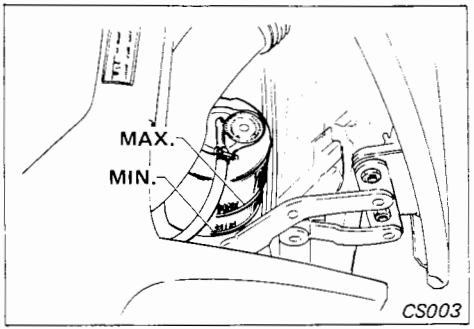
ENGINE COOLING SYSTEM

The engine cooling system is filled at the factory with a high-quality, year-round, anti-freeze coolant solution (anti-freeze/water mixture ratio: 50/50) which will ensure protection against freezing down to $-31^{\circ}F$ ($-35^{\circ}C$).

When replenishing or replacing the coolant, be sure to use an ethylene glycol anti-freeze.

Since the anti-freeze solution also serves as a rust and corrosion inhibitor, it is recommended that no rust or anti-rust products be intermixed with it. To ensure the proper anti-freeze/water mixture ratio, carefully read the instructions on the container label. For optimum engine operation, it is advisable to use an anti-freeze/water mixture ratio of 50/50 in your cooling system. The radiator is equipped with a 13 psi (0.9 kg/cm^2) pressure cap. Under extreme weather conditions the engine coolant will probably exceed the boiling point, yet will not boil due to high pressure within the cooling system, maintained by the pressurized cap.

CHECKING COOLANT LEVEL



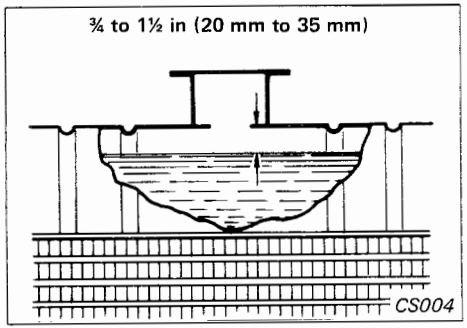
With coolant reservoir

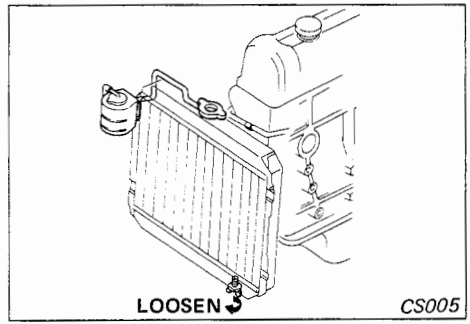
Visually check the amount of coolant in the reservoir tank when the engine is cold. If the coolant level is below the "MIN" level, remove the reservoir tank filler cap and add coolant until the "MAX" level is reached. If the reservoir tank is empty, check the coolant level in the radiator. If there is insufficient coolant in the radiator, pour coolant into the radiator up to the cap and also pour it into the reservoir tank up to the "MAX" level. If it becomes necessary to add coolant with excessive frequency, your cooling system should be inspected by your NISSAN/DATSUN dealer or other competent service facility.

WARNING:

Never remove the radiator cap when the engine is hot; serious burns could be caused by high pressure fluid escaping from the radiator.

Carefully remove the cap by turning it a quarter turn to allow built-up pressure to escape and then turn the cap all the way off.





Without coolant reservoir

Regularly check the amount of coolant in the radiator when the engine is cold. If it is found to be insufficient, add coolant up to the specified level. If it becomes necessary to add coolant with excessive frequency, your cooling system should be inspected by your NISSAN/DATSUN dealer or other competent service facility.

WARNING:

Never remove the radiator cap when the engine is hot; serious burns could be caused by high pressure fluid escaping from the radiator.

Carefully remove the cap by turning it a quarter turn to allow built-up pressure to escape and then turn the cap all the way off.

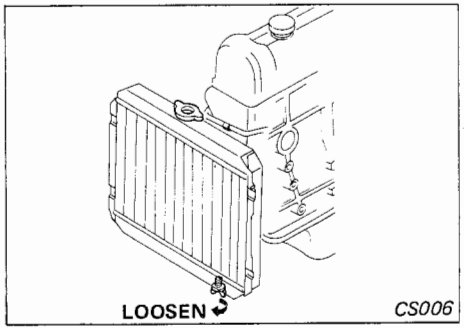
With coolant reservoir

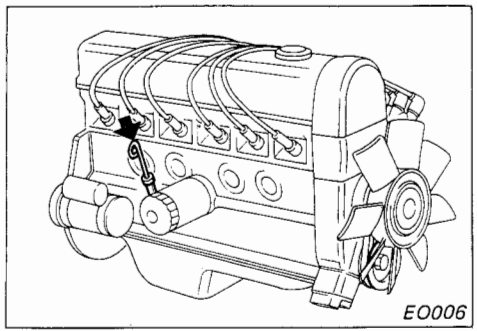
WARNING:

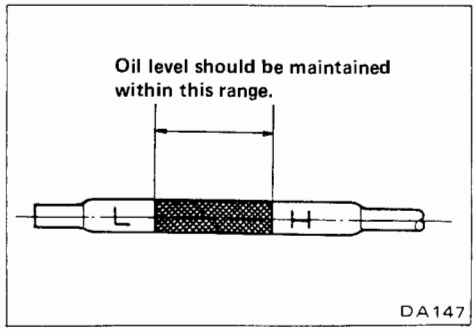
To avoid the danger of being scalded, never attempt to change the coolant when the engine is hot.

1. Carefully remove the radiator cap.
2. Open the drain valve to drain the coolant. Then flush the cooling system.
3. Close the drain valve securely.
4. Fill the radiator with coolant up to the filler opening. Run the engine for a few minutes. If necessary, add coolant. Fill the reservoir tank with coolant up to the "MAX" level.
5. Install the radiator cap. Check the drain valve for any sign of leakage.

CHECKING ENGINE OIL LEVEL







Without coolant reservoir

WARNING:

To avoid the danger of being scalded, never attempt to change the coolant when the engine is hot.

1. Carefully remove the radiator cap.
2. Open the drain valve to drain the coolant. Then flush the cooling system.
3. Close the drain valve securely.
4. Fill the radiator with coolant up to the specified level.
5. Run the engine for a few minutes until air in the cooling system is released. Add coolant as necessary.
6. Install the radiator cap. Check the drain valve for any sign of leakage.

The engine oil should be maintained at the correct level. The best time to check the oil level is several minutes after the engine has been turned off at operating temperature. This will allow oil accumulated in the engine to drain back into the oil pan.

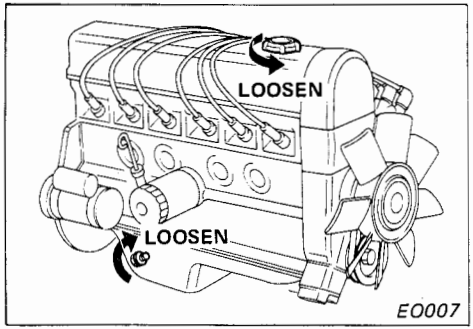
To make an accurate oil level check:

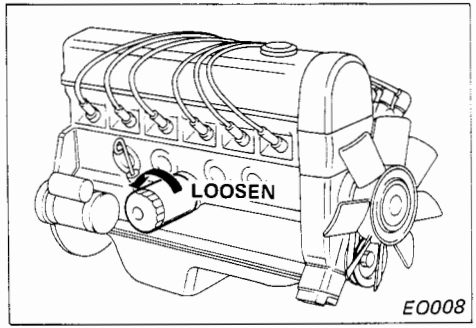
1. Park the car on a level surface.
2. Remove the dipstick and wipe it clean.
3. Reinsert it all the way into the tube for an accurate reading.
4. Remove the dipstick and check the oil level. It should be between the "H" and "L" marks.
5. After taking the reading, reinsert the dipstick.

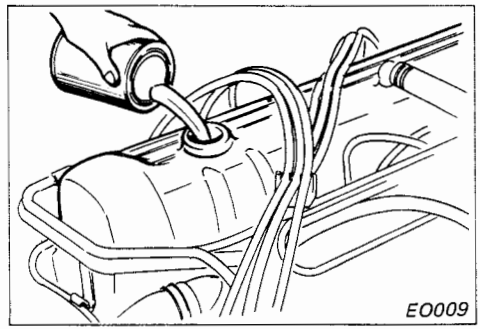
If the oil level is at or below the "L" mark, add sufficient oil into the oil filler, located on the cylinder head cover, to raise the level to the "H" mark. Do not overfill.

It is not abnormal to add some oil between oil changes or during the break-in period, depending on the severity of operating conditions.

CHANGING ENGINE OIL AND OIL FILTER







The engine oil and oil filter should be replaced periodically.

1. Park the car on a level surface.
2. Warm up the engine until it reaches operating temperature, and then turn it off.
3. Place a drain pan under the drain plug of the oil pan.
4. Remove the oil filler cap.
5. Remove the drain plug with a wrench and completely drain the oil.

NOTE:
Be careful not to burn yourself, as the engine oil may be hot.

6. Clean and re-install the drain plug with washer. Tighten the plug with a wrench, but do not use excessive force.

It is recommended that the oil filter be replaced at the same time.

a. Remove the oil filter. If the oil filter is hard to remove by hand, use an oil filter wrench.
b. Wipe the engine oil filter mounting surface with a clean rag.
c. Screw in the oil filter 2/3 turn by hand from the point where it touches the engine closely.

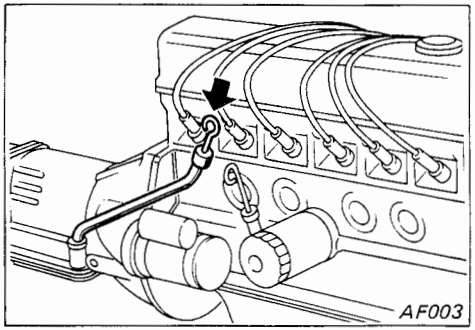
NOTE:
Do not tighten with the oil filter wrench.

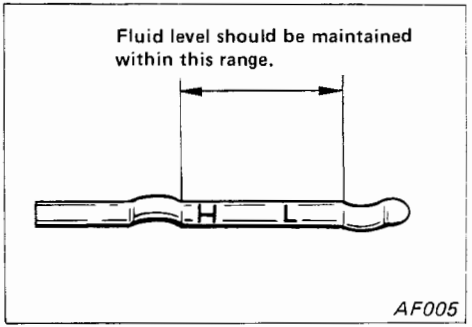
7. Refill oil and install the cap securely.

NOTE:
With oil filter
4 ¾ US qt
(4 Imp qt, 4.5 liters)
Without oil filter
4 ¼ US qt
(3 ½ Imp qt, 4.0 liters)

8. Start the engine. Check the area around the drain plug and oil filter for any sign of oil leakage.
   If any leakage is evident, these parts have not been properly installed.
9. Run the engine until it reaches operating temperature. Then turn it off and wait several minutes. Check the oil level. If necessary, add engine oil.

CHECKING AUTOMATIC TRANSMISSION FLUID LEVEL

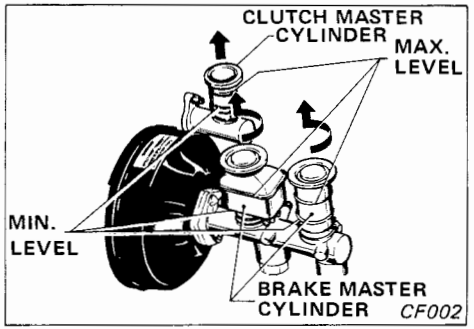




1. Drive the car several miles (kilometers) to bring the transmission up to normal operating temperature. [Approximately 158°F (70°C)]
2. Park the car on a level surface.
3. Set the parking brake
4. Place the selector lever in the park "P" position and leave the engine running.
5. Remove the dipstick and wipe it clean.
6. Reinsert the dipstick all the way into the charging pipe.
7. Remove the dipstick and note reading.

If the fluid level is at or below the "L" mark, add sufficient fluid from the charging pipe to raise the level to the "H" mark. Do not overfill above "H" mark. See the "Recommended Lubricants" for fluid.

CHECKING BRAKE AND CLUTCH FLUID LEVEL



Check the fluid level in each reservoir. It should be between the Max. and Min. lines on the reservoir. If it is below the Min. line, add brake fluid DOT 3 up to the Max. line.

NOTE:

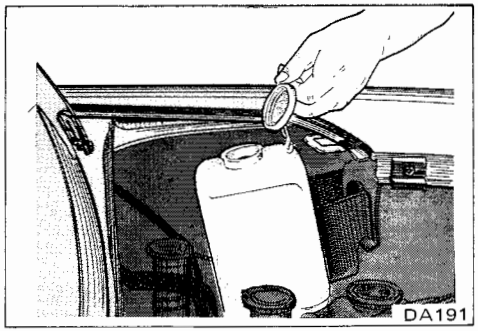
a) Use only new brake fluid. Use of an old or inferior brake fluid may endanger the functioning of the brake and clutch systems.

b) Do not allow the brake fluid to come into contact with the painted surface. This may damage the painting.

c) Before opening the reservoir cap, wipe it with a rag.

If a frequent supply of the brake fluid is required, the system should be thoroughly checked by your NISSAN/DATSUN dealer or other competent service facility.

CHECKING WINDSHIELD WASHER FLUID LEVEL



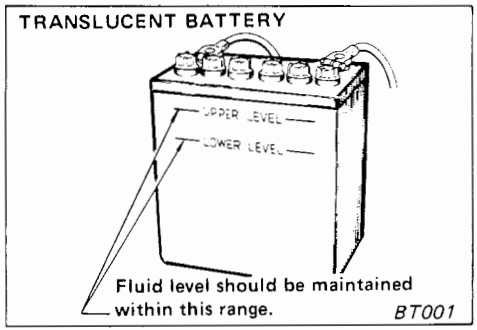
Check fluid level in the reservoir and add fluid if necessary.

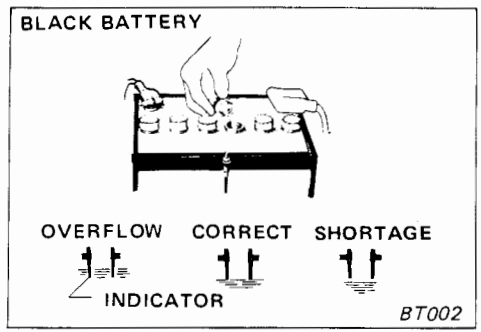
Add a windshield washer solvent to the water as clear water is usually not adequate for cleaning the windshield. In the winter season, add a windshield washer anti-freeze and follow the manufacturer's instructions for the correct amount to be used.

CAUTION:

Do not substitute radiator anti-freeze for windshield washer solution. This may result in damage to the paint work.

CHECKING BATTERY FLUID LEVEL AND CONDITION



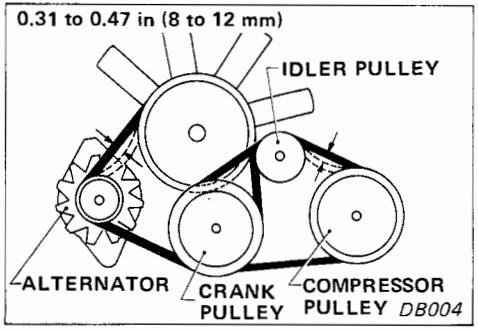


WARNING:

Do not expose the battery to flames or electrical sparks. Hydrogen gas generated by battery action is explosive. Do not allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. If the acid contacts the eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention. In freezing weather, run the engine for a while after adding distilled water, to make sure that the water mixes properly with the fluid. Otherwise the water may freeze and damage the battery.

- Check the fluid level in each filler. If necessary, add only distilled water to bring the level to the indicator in each filler opening. Do not overfill.
- The battery surface should be clean and dry. Periodically apply a small amount of grease to each terminal to prevent corrosion.

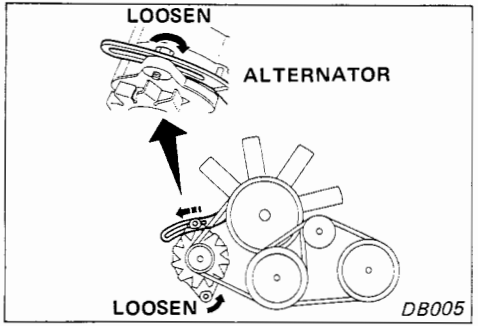
CHECKING DRIVE BELTS



Be sure the engine is off and the transmission is in "Neutral". Engage the parking brake securely.

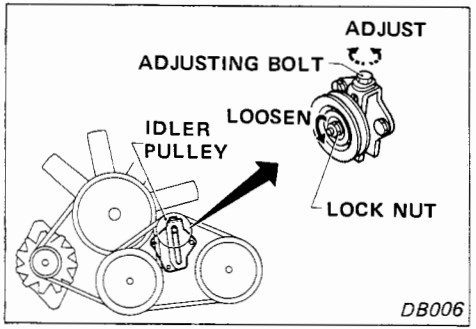
1. Visually inspect the belt for signs of unusual wear, cuts or fraying. If the belt is in poor condition, have it replaced by your NISSAN/DATSUN dealer or other competent service facility.
2. Check the belt tension by applying moderate thumb pressure midway between the pulleys. The belt should deflect within the specified amount as shown in the illustration.

ADJUSTING DRIVE BELTS



FAN AND ALTERNATOR BELT

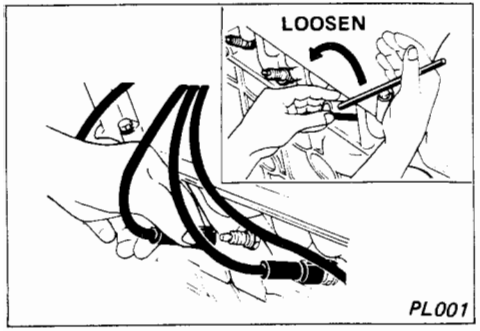
1. Loosen the upper and lower alternator securing bolts until the alternator can be moved slightly.
2. Move the alternator with a prying bar until the belt tension is within the specified range. Then tighten the bolts securely.
3. Check the belt tension again to see if it is correct.

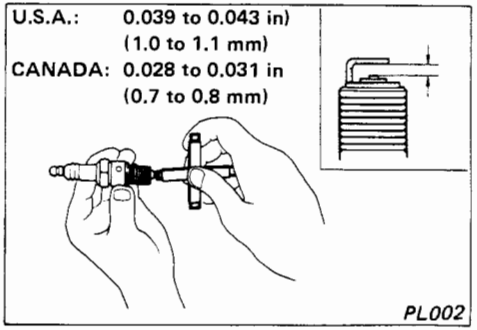


AIR CONDITIONER COMPRESSOR BELT

1. Loosen the idler pulley lock nut for the belt being adjusted.
2. Adjust the adjusting bolt until the belt tension is within the specified range.
3. Tighten the idler pulley lock nut securely.
4. Check the belt tension again to see if it is correct.

REPLACING SPARK PLUGS



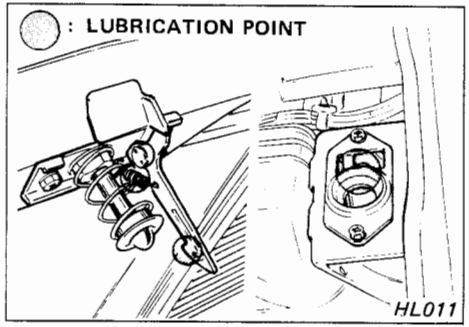


1. Disconnect high tension cables (spark plug cables).

NOTE:
When disconnecting, always hold the boots – not the cables. Mark all cables to identify their original locations.

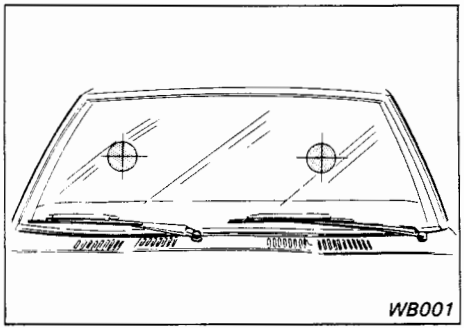
2. Remove spark plugs with a spark plug wrench.
3. Before installing new spark plugs, check each spark plug gap with a feeler gauge to see if it is within the specified range. If it is not, bend the side electrode until the gap is within the specified range.
4. When installing a plug, screw it in two or three turns by hand and then tighten with a spark plug wrench.
   Be careful not to overtighten it.
5. Holding the boots, re-connect the high tension cables to their proper locations.

CHECKING HOOD LOCK



Check the hood to see if it is closed and locked properly.
Lubricate hood lock assembly periodically as recommended in the "Periodic Maintenance and Lubrication Schedule".
Coat all functioning parts with grease after wiping off any accumulation of dirt on lock parts.
Make certain that the lock and release mechanisms operate smoothly.

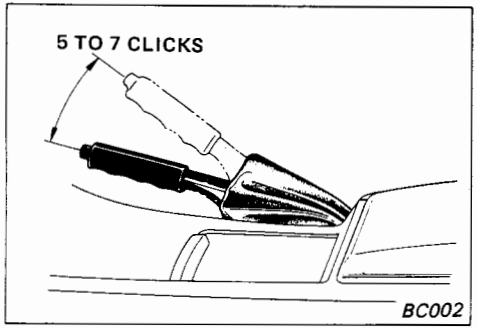
CHECKING WINDSHIELD WIPER BLADES



Check the wiper blades for operation and cleanliness. If the wiper blades do not wipe the windshield clean after the blades have been wiped with a cloth, replace the blades.

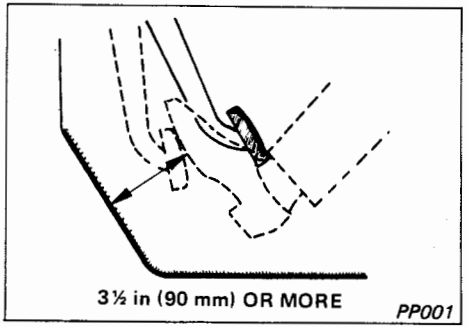
To adjust the washer spray, move the nozzles toward the center of each half of the windshield.

CHECKING PARKING BRAKE CONDITION



From the completely released position, apply the parking brake slowly and firmly, counting the clicks. If the number of clicks is as shown in the illustration, the parking brake is in good condition. If the number is excessive, have the parking brake adjusted by your authorized NISSAN/DATSUN dealer or other competent service facility.

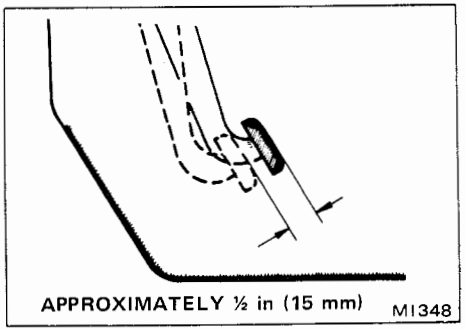
CHECKING BRAKE PEDAL DISTANCE



When the brake pedal is fully depressed, the distance between the upper surface of the pedal and the carpet should be as shown in the illustration.

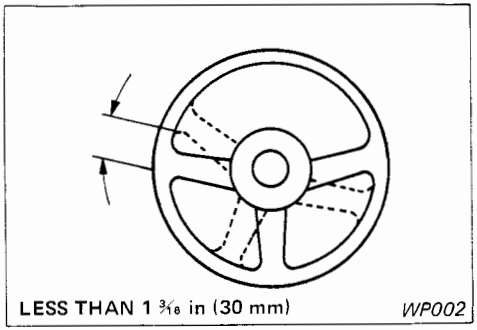
When this distance approaches the prescribed limit value, have the brake checked by your authorized NISSAN/DATSUN dealer or other competent service facility. If the distance should abruptly be shortened, there is something wrong with the brake system. Stop driving your car immediately.

CHECKING CLUTCH PEDAL FREE TRAVEL



The clutch pedal should not encounter resistance to the specified travel shown in the illustration. Resistance should then be felt by hand depressing the pedal. If very little or no free travel is evident, have the clutch checked by your authorized NISSAN/DATSUN dealer or other competent facility.

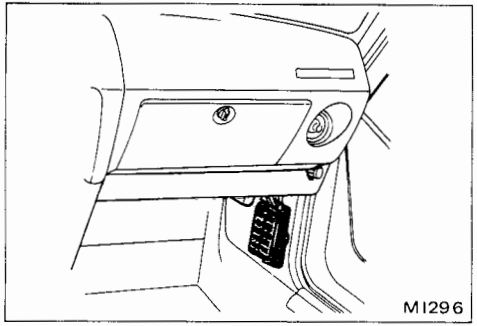
CHECKING STEERING WHEEL PLAY



With the steering wheel in straight ahead position, measure the amount of steering wheel play. Turn the steering wheel in both directions within the range where the front tires remain stationary as seen with the eyes; the amount of circumferential movement of the steering wheel at this time is the steeirng wheel play.

If the play is out of order, have the steering wheel adjusted by your authorized NISSAN/DATSUN dealer or other competent service facility.

CHECKING FUSES



Should an electrical failure occur, check for a burned-out fuse. Fuses are located under the instrument panel.

1. Remove the fuse and check. If it is burned out, replace.

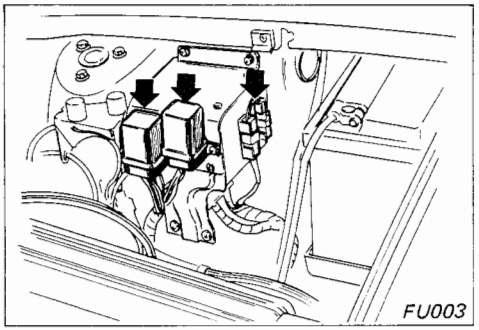
NOTE:

Before replacing any fuse, be sure to check the fuse specifications listed on the fuse box cover.

Never use a fuse of higher amperage rating than that specified.

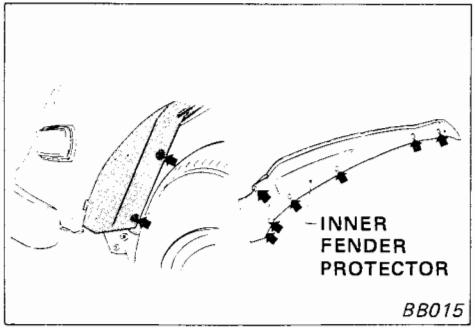
2. Should a replacement fuse burn out again, there is some trouble in the electrical system. Have it checked and repaired by your authorized NISSAN/DATSUN dealer or other competent service facility.

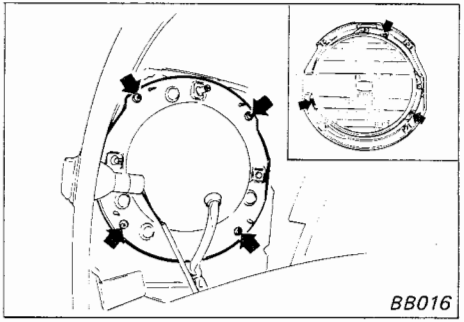
CHECKING FUSIBLE LINKS



When electrical failure has occurred and fuses are in good order, check the condition of the fusible links. These are located on the relay bracket and at the battery positive terminal of the electronic fuel injection harness and included in the wiring system. Should an overload occur, these fusible links melt, preventing damage to the wiring harness, electronic fuel injection system and electrical equipment. Replace a fusible link only with one of an equal rating.

BULB REPLACEMENT





HEADLIGHT

The headlight is a sealed beam type in which the lens, reflector and filament are of a unitized construction.

1. Remove the inner fender protector.
2. Remove the four screws retaining the headlight housing to the fender panel. These screws can be removed through the wheel opening of the front fender panel.
3. Remove the headlight assembly from the body.

NOTE:

To facilitate removing the headlight assembly from the body, turn the steering wheel all the way to the right or left from which the headlight is removed.

Then, remove the headlight retaining ring by loosening three screws.
The retaining ring can be taken out.

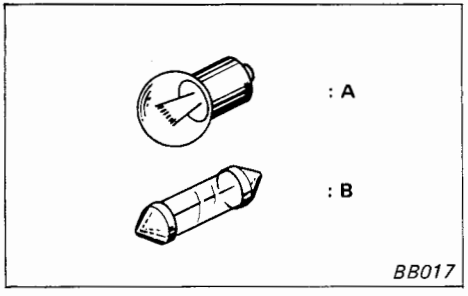
NOTE:

Be careful not to disturb aiming adjusting screws.

4. Remove the sealed beam unit from the housing, and disconnect the connector. The sealed beam can then be taken out.
5. In installing the new unit, be sure that the "TOP" raised on the lens is on the upper side.

NOTE:

When aiming adjustment is necessary, see your NISSAN/DATSUN dealer or other competent service facility.



OTHER LAMPS

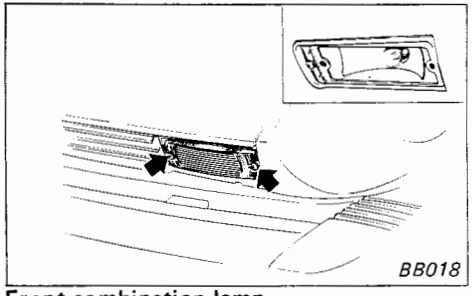
All other lamps are either type A or B.
When replacing a bulb, first remove the lens and/or cover and then proceed as follows:

Type A:

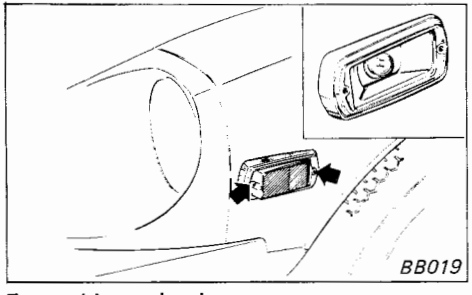
Press and turn the bulb counterclockwise.

Type B:

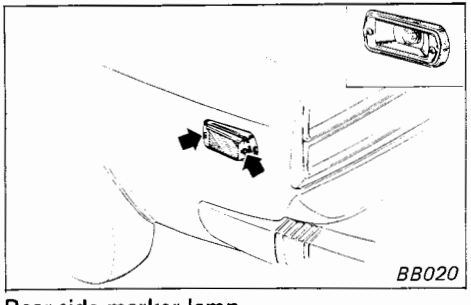
Pull the bulb out from its holder clips.
The bulb can be installed in the reverse order of removal.



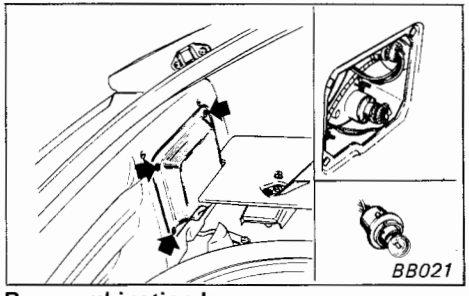
Front combination lamp



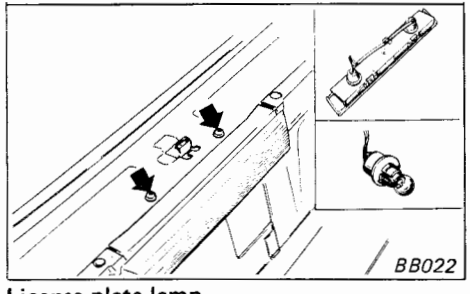
Front side marker lamp



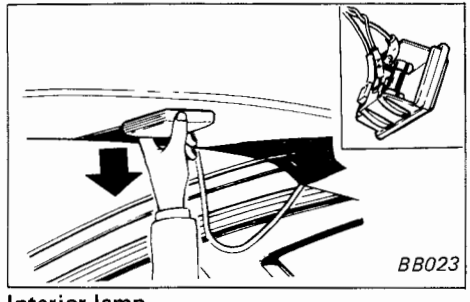
Rear side marker lamp



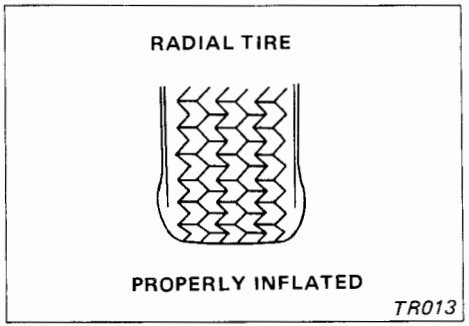
Rear combination lamp

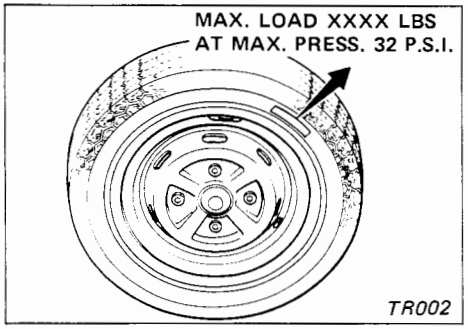


License plate lamp



Interior lamp





TIRE INFLATION PRESSURES

Tire pressure should be checked when tires are COLD.

COLD pressure: After car has been parked for three hours or more or driven less than 1 mile (1.6 km).

Proper tire pressures are shown on the tire placard affixed to the glove box lid or in "Tire Inflation Pressure" under the heading "Gas Station Information" in this Manual.

If tires are not properly inflated, tire life and car performance may be adversely affected. Insufficient air pressure may cause tires to become overheated, and may result in uneven wear, poor car handling characteristics and excessive fuel consumption.

Excessive air pressure may not only cause uneven tire wear and poor car handling characteristics, but may also lead to increased vulnerability to damage from road surface impact.

Do not allow inflation pressures to exceed the maximum value shown on the side wall of the tire.

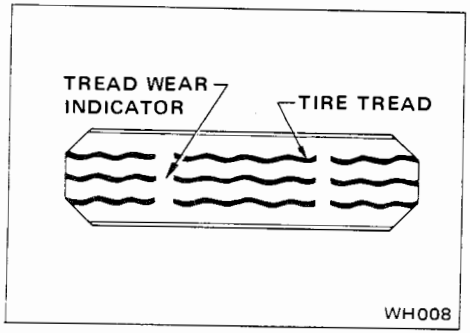
NOTE:

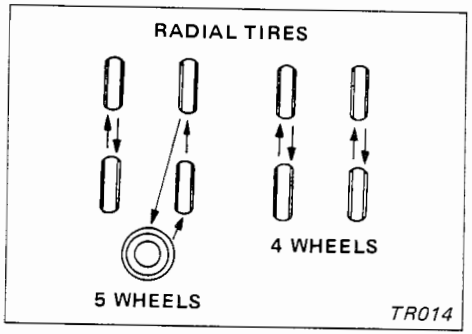
Since a hot tire will exceed the specified COLD pressure, do not bleed air out of hot tires.

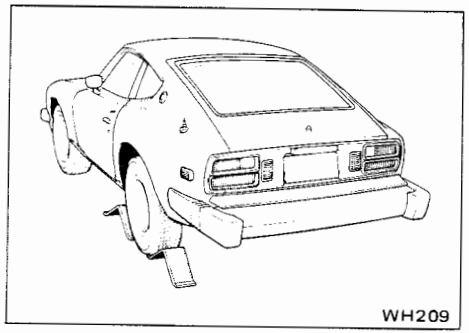
CAUTION:

The car capacity weight is indicated on the tire placard. Do not load your car beyond this capacity. Overloading your car may result in reduced tire load carrying capacity and could also lead to a serious accident.

Before taking a long trip, or whenever you have loaded your car heavily, use a tire pressure gauge to ensure that the tire pressure is at the specified level.







TIRE CARE

Tires should be replaced if the tread depth is less than 1/16 in (1.6 mm) and/or if the tire is damaged.

When replacing a worn or damaged tire, use a replacement tire of the same size and load carrying capacity as that with which the car was equipped when manufactured. The use of different size and/or load capacity tires will not only shorten tire service life but may also result in a serious accident. The use of tires and wheels other than those recommended or the mixed use of tires of different brands or tread patterns can adversely affect the ride, braking, handling, ground clearance, body-to-tire clearance, and speedometer calibration.

TIRE ROTATION

Periodic rotation of tires will serve to minimize tire problems and will result in longer tire life. Tires should be rotated as recommended in the illustrated rotation system.

As to the tire rotation interval, refer to "Maintenance Schedule" section.

CAUTION:

a) All the tires should be of the same type.

b) Bias, bias belted and radial-ply tires must not be mixed under any circumstances.

c) Do not include the space saver spare in tire rotation.

CHANGING TIRES

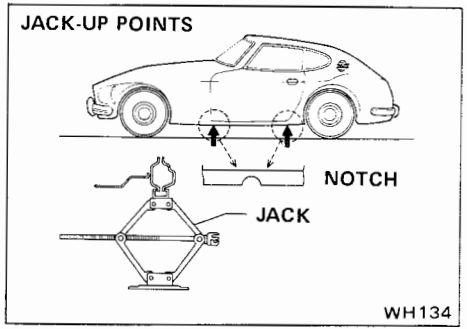
When changing tires, carefully take the following steps.

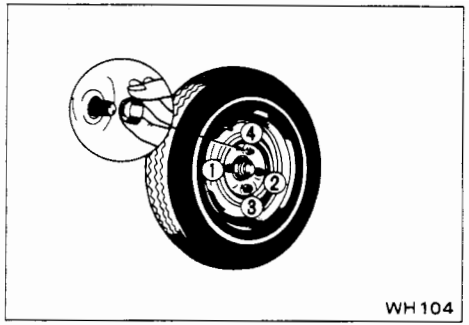
1. Park on a level surface and set parking brake firmly. Set manual transmission in reverse (automatic transmission in "P").
2. If parked on or near road, activate hazard warning flasher.
3. Remove the spare tire and tools from the stowage compartment.

NOTE:

Your car is equipped with a space saver spare tire for emergency use. Refer to page 86 for specific instructions concerning the space saver spare tire.

4. Place wheel chocks at both the front





and back of the wheel diagonally opposite the jack position.

5. Place the jack under the jack-up point indicated.
6. Using the flat end of the wheel nut wrench **(not your bare hands)**, remove the wheel cover and loosen the wheel nuts one or two turns each by turning them counterclockwise.

NOTE:
Do not remove the wheel nut until the wheel is raised off the ground.

7. Raise the car slowly until the wheel clears the ground. Remove the wheel nuts and replace the wheel.
8. Slightly tighten the wheel nuts alternately and evenly by turning them clockwise. Be sure that the beveled end of the nuts faces inward.

CAUTION:
If NISSAN aluminum wheels are installed, use only wheel nuts designed for aluminum wheels. Refer to page 89, "Care of aluminum wheels".

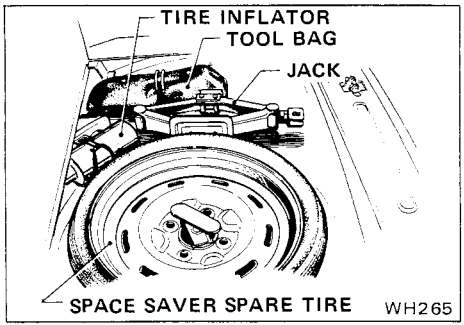
9. Lower the car slowly until the wheel touches the ground, and then securely tighten the wheel nuts in the same sequence.

NOTE:
Adjust tire pressure to the specified value indicated on the tire placard or inside the back cover of this manual.

10. Remove the wheel chocks, replace the tools and spare tire.

CAUTION:
Ensure, without fail, that the spare tire and jacking equipment are properly secured after use. Such items can become lethal projectiles in a serious accident.

WARNING:
Never get under the car while it is supported only by the jack.
Always use safety stands to support the frame when you have to get under the car.
Do not start or run engine while car is on the jack.



SPARE TIRE AND TOOL/JACK STOWAGE

The spare tire is located in the luggage compartment. Remove the carpet and the spare tire lid, then release the spare tire clamp.

The jack, jack handle, wheel chocks and the other tools are stowed under the spare tire lid.

To eliminate the possibility of the jack, chocks, etc., rattling while the car is moving, stow them properly.

SPACE SAVER SPARE TIRE (Size C78-14)

Your car is equipped with Space Saver Spare Tire (S.S.T.). The S.S.T. is a foldable spare tire designed for emergency use only. The S.S.T. is stored in a deflated condition. An inflator (canister) has been provided to inflate the spare.

The S.S.T. can be used repeatedly for emergency situations. However, the inflator (canister) must be replaced after each inflation.

Replacement inflators may be purchased from your NISSAN/DATSUN dealer or any authorized tire dealer. Be sure you obtain the proper size inflator for your S.S.T. tire size C78-14.

After you have it properly installed, the S.S.T. can take you safely to the nearest service station where the damaged tire can be repaired or replaced.

Once you are there you can switch back to your conventional tire and stow the S.S.T. away for the next use.

CAUTION:

The S.S.T. is restricted in driving speed up to a maximum of 50 MPH (80 km/h) for short distances and emergency use only.

Inflation with approved inflator

1. Before changing tires, carefully read the caution and directions affixed on both the inflator and the S.S.T.
2. Remove the uninflated S.S.T. and the inflator canister from rear compartment.

CAUTION:

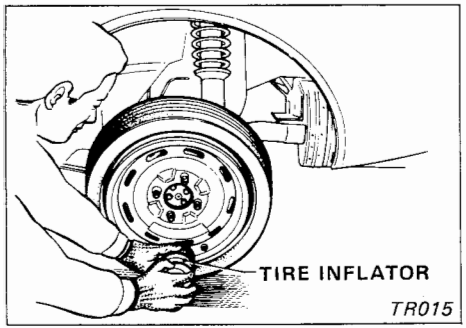
Do not inflate at this point.

3. Jack up your car (follow the instructions under the heading "Changing Tires") and remove the damaged tire. Then mount the uninflated S.S.T. to the axle. (Tighten wheel nuts slightly.)

CAUTION:

If your car is equipped with aluminum wheels, be sure to use spare wheel nuts in the tool bag.

The wheel nuts for aluminum wheels must not be used on the S.S.T. wheel. The wheel may come off the axle and cause personal injury.



4. With tire valve at 6 o'clock position, inflate the S.S.T. with the inflator (canister). Place tire inflator on the tire inflation valve and push squarely until gas can be heard entering the tire. It takes about 3 minutes.

CAUTION:
The metal parts of the inflator become extremely cold during inflation and can cause frost bite. Avoid contact with the metal, and use a glove or other means of protection.

5. To ensure complete emptying of the inflator, hold the inflator in position for one minute after sound stops.

NOTE:
If the temperature is below 10°F (–12.2° C), the canister must be warmed on the windshield defroster for five to ten minutes.

6. Lower car and fully tighten wheel nuts as per jacking instructions.

NOTE:
a) Do not install the wheel cover on the S.S.T.
b) In cold weather, the tire may not look fully inflated. Therefore, drive slowly for the first mile, as the tire temperature rises the pressure will increase.

Deflation

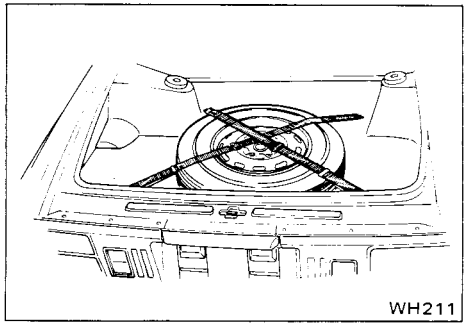
1. Deflate the tire by depressing the button on the tire inflation valve or by removing the valve core.

CAUTION:
To avoid personal injury, do not inhale the gas which is vented while the tire is deflating.

2. Flatten tire. The S.S.T. folds gradually while deflating.
3. Store tire in rear compartment.

Repair

Repairing, mounting, or dismounting of the S.S.T. on the wheel is not recommended under any circumstance.
Improper service can result in serious personal injury.
Contact authorized B.F. Goodrich dealers if service is required.


WH211

CAUTION:
When stowing a tire replaced by a spare, the tire should be placed in the baggage area and secured with baggage straps, as illustrated.

CHANGING WHEELS

When selecting new tires or wheels, pick only those types and sizes recommended in "Wheels and Tires" under the heading "Specificaitons". Additionally, follow the car manufacturer's recommendation when selecting wheel rim widths and offsets so that they correspond with the tire size. Use of any other tire or wheel will not only hinder the safety and performance of the car, but will render the warranty ineffective.

NOTE:
a) It is advisable that the deformed wheel not be reinstalled, even if repaired.
b) It is recommended that a tube not be used on a tubeless tire wheel.
c) Avoid installing a used wheel. If the wheel has been used under severe operating conditions, its life may have been significantly shortened.

TIRE DAMAGE AND REPAIR

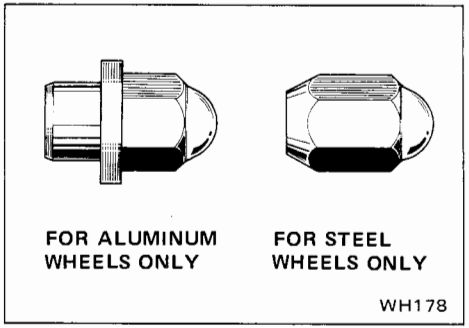
Tires should be periodically inspected for scratches, bulging or objects caught in the tread. If cracks, bulging or deep cuts are found, the tire should be replaced. If a tire is suspected of being unsafe, it should be taken to your NISSAN/DATSUN dealer or other competent service facility.

If a blowout or sudden loss of pressure occurs while driving, do not travel further than is necessary to stop safely. Driving even a short distance can damage a tire beyond repair.

Temporary measures, such as use of patches or other items applied to the outside of the tire, should not be taken except in emergencies.

If they must be used, keep in mind the temporary nature of these measures and go to the NISSAN/DATSUN dealer or other competent service facility as soon as possible for complete repair.

CAUITON:
Concerning repair of the space saver spare tire, refer to page 87 for specific instructions.



CARE OF ALUMINUM WHEELS

- Wash the wheels while washing the rest of the car to maintain their appearance.
- Clean the inner side of the wheels each time one is changed or the underside of the car is washed.

CAUTION:

a) Do not use abrasive cleaners when washing the wheels.

b) Inspect wheel rims regularly for dents or rust, which cause loss of pressure and damage the tire bead.

c) Consider the application of car wax to protect against the salt chloride used during winter.

d) The wheel nut tightening torque is 58 to 72 ft-lb (8 to 10 kg-m).

e) Use the wheel nut in aluminum wheels exclusively.

CLEANING YOUR CAR

The finish and upholstery on your car continually receives abuse from industrial fumes, dirt, mud, road salt, etc.
Yet your car will always look well-cared for if you follow these helpful hints on car care.
The best way to preserve the finish and maintain its original beauty is to keep it clean.
The longer dirt is left on the surface, the greater the probability of some damage to the finish.
In areas where excessive road salt is used, or where sea winds blow, the car should be cleaned more often to protect the finish.
The underside of the car also picks up dirt and road salt which should not be allowed to build up.
Therefore, the underside of the car should be sprayed with a powerful jet of water, at regular intervals, to remove these corrosive deposits.

WASHING YOUR CAR

Spray water over the car to remove loose dirt.

NOTE:
Do not wash your car in the direct rays of the sun.

Clean with a soft bristle brush or soft sponge and soap and water solution.
Rinse well. Wipe with a chamois to keep from water-spotting.

REMOVING SPOTS

Remove spots from the painted surface as soon as possible to prevent staining.

Tar or road oil

Remove tar or oil immediately as permanent staining may result.
Use a tar and road oil remover. If you do not have a remover, use turpentine. Then wash with a soap and water solution. Wax to preserve the finish.

Insects or tree sap

Remove with a lukewarm soap and water solution. Do not allow tree sap to harden on the paint surface.

WAXING

Apply liquid wax or paste wax to obtain a long-lasting, durable finish.
Wax at periodic intervals, depending on the environment where your car is used.

LEATHERETTE AND INTERIOR TRIM

Wipe leatherette and interior trim clean with a damp or wet cloth or use a recommended cleaner.

CAUTION:
Make sure the cleaner selected is not harmful to the material.

CLOTH UPHOLSTERY AND CARPET

Clean with a vacuum cleaner or hard brush. Stains should be removed with a soap and water solution or a spot remover. Wipe with a damp clean cloth from outside of stain toward center.

CAUTION:
Only use spot removing fluids in a well ventilated area and keep out of the reach of children.
Do not use gasoline, kerosene, naphtha, nail polish remover or other volatile cleaning fluids. They may be toxic or flammable or hazardous in other ways.

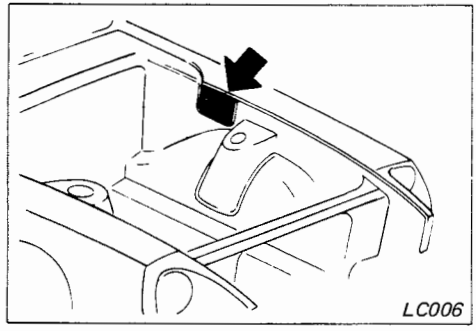
CLEANING THE VINYL TOP

Wash the vinyl top frequently, using neutral soap suds, water and a soft bristle brush.
Rinse well to remove all traces of soap.
If additional cleaning is required, a mild cleanser can be applied.
After cleaning the entire top, rinse with clean water to remove all traces of cleanser.

NOTE:
Do not apply volatile cleanser or household bleaching agents to the vinyl top.

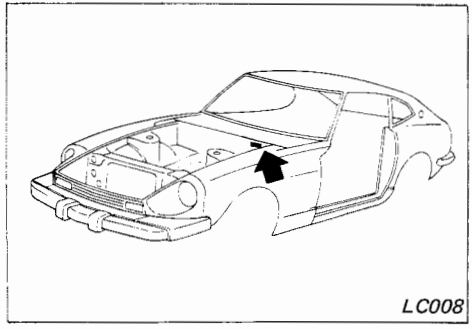
Specifications

CAR IDENTIFICATION PLATE LOCATION



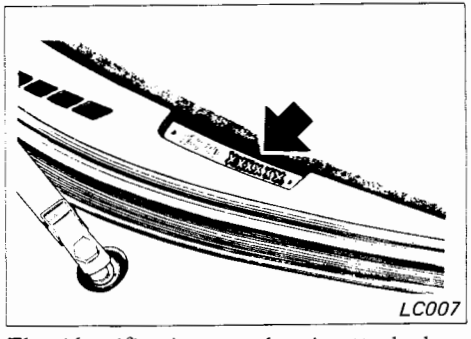
The car identification plate is located on the left hoodledge panel at the back of the strut housing.

CAR SERIAL NUMBER LOCATION



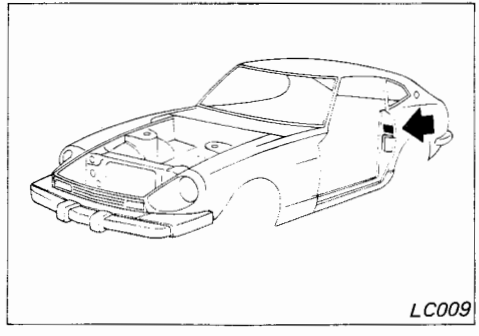
The car serial number is stamped on the left side of the dash panel.

IDENTIFICATION NUMBER PLATE LOCATION



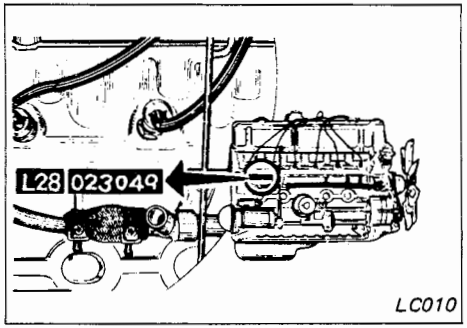
The identification number is attached on the upper end of the instrument panel.

M.V.S.S. CERTIFICATION LABEL LOCATION



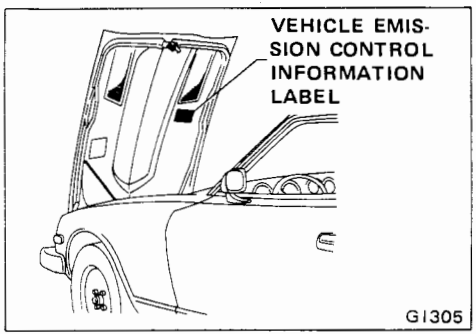
The M.V.S.S. certification label is affixed to the upper portion of the left lock pillar.

ENGINE SERIAL NUMBER LOCATION



The engine number is stamped on the right side of the cylinder block.

EMISSION CONTROL INFORMATION LABEL LOCATION



The emission control information label is stuck on the inside panel of the hood.

SPECIFICATIONS

DIMENSIONS

		HLS30 (2 seater)	GHLS30 (2+2 seater)
Overall length	in (mm)	173.4 (4,405)	185.6 (4,715)
Overall width	in (mm)	64.2 (1,630)	65.0 (1,650)
Overall height	in (mm)	51.0 (1,295)	51.4 (1,305)
Ground clearance	in (mm)	5.9 (150)	5.9 (150)
Wheelbase	in (mm)	90.7 (2,305)	102.6 (2,605)
Turning circle [wall to wall]	ft (m)	34.8 (10.6)	36.8 (11.2)

WEIGHTS

		HLS30		GHLS30	
		Manual T/M 4-speed Automatic T/M	Manual T/M 5-speed	Manual T/M 4-speed Automatic T/M	Manual T/M 5-speed
Gross Vehicle Weight Rating					
Non-California models lb (kg)		3,185 (1,445)	3,192 (1,448)	3,575 (1,622)	3,582 (1,625)
California models lb (kg)		3,203 (1,453)	3,210 (1,456)	3,593 (1,630)	3,600 (1,633)
Gross Axle Weight Rating					
Non-California models lb (kg)	Front	1,468 (666)	1,473 (668)	1,600 (726)	1,605 (728)
	Rear	1,717 (779)	1,719 (780)	1,975 (896)	1,977 (897)
California models lb (kg)	Front	1,477 (670)	1,482 (672)	1,609 (730)	1,614 (732)
	Rear	1,726 (783)	1,728 (784)	1,984 (900)	1,986 (901)
Seating capacity		2	2	2+2	2+2

ENGINE

	L28
Cylinder arrange	6 cylinder in-line
Type	4 cycle OHC
Bore x Stroke in (mm)	3.39 x 3.11 (86 x 79)
Displacement cu in (cc)	168.0 (2,753)
Compression ratio	8.3
Firing order	1-5-3-6-2-4

GEAR RATIO

Transmission	Manual		Automatic
	4-speed	5-speed	
1st	3.321	3.321	2.458
2nd	2.077	2.077	1.458
3rd	1.308	1.308	1.000
4th	1.000	1.000	–
5th	–	0.864	–
Reverse	3.382	3.382	2.182
Differential carrier	3.545		

WHEEL & TIRE

Road wheel size	Steel	5J-14	
	Alumi-num	5½J-14	
Tire	Type	Radial, tubeless	Space saver spare tire
	Size	195/70HR-14	C78-14

ENGINE TUNE-UP

Idling speed	rpm	
(M/T)		800
(A/T "D" position)		700
Ignition timing	degree/rpm	
(M/T)		10°/800
(A/T "D" position)		10°/700
CO percentage at idling speed	%	
California models		0.5 or lower
Non-California models		1.0 or lower
*Distributor air gap	in (mm)	0.008 to 0.016 (0.2 to 0.4)
Spark plug gap	in (mm)	
B6ES-11, B5ES-11, B7ES-11, BR6ES-11, BR5ES-11, BR7ES-11, L45W-11, L46W-11, L44W-11 (U.S.A.)		0.039 to 0.043 (1.0 to 1.1)
BR6ES, BR5ES, BR7ES (Canada)		0.028 to 0.031 (0.7 to 0.8)
Valve clearance (Hot) Intake	in (mm)	0.010 (0.25)
Exhaust	in (mm)	0.012 (0.30)
Belt deflection (all)	in/lb (mm/kg)	0.31 to 0.47/22 (8 to 12/10)

* On models for Canada, a resistor built-in rotor head is used.

CAPACITIES

			US measure	Imp measure	Liter
Fuel tank			17 1/8 gal	14 1/4 gal	65
Coolant					
M/T	With heater		10 7/8 qt	9 1/8 qt	10.3
	Without heater		10 qt	8 3/8 qt	9.5
A/T	With heater		10 5/8 qt	8 7/8 qt	10.1
	Without heater		9 7/8 qt	8 1/8 qt	9.3
Engine	With oil filter		4 3/4 qt	4 qt	4.5
	Without oil filter		4 1/4 qt	3 1/2 qt	4.0
Transmission					
	M/T	4-speed	3 5/8 pt	3 pt	1.7
		5-speed	4 1/4 pt	3 1/2 pt	2.0
	A/T		5 7/8 qt	4 7/8 qt	5.5
Differential carrier		R200	2 3/4 pt	2 1/4 pt	1.3
		R180	2 1/8 pt	1 3/4 pt	1.0
Windshield washer tank			2 3/8 qt	2 qt	2.2
Air condition system					
Compressor oil			9.1 fl oz	9.5 fl oz	270 cc
Refrigerant			1.8 lb	1.8 lb	0.8 kg

TIGHTENING TORQUE

Unit: ft-lb (kg-m)

Valve rocker arm nut	36 to 43 (5.0 to 6.0)
Cylinder head bolt	51 to 61 (7.0 to 8.5)
Manifold nut	
0.315 in (8 mm) dia. bolt	10 to 13 (1.4 to 1.8)
0.394 in (10 mm) dia. bolt	25 to 36 (3.5 to 5.0)
Spark plug	11 to 14 (1.5 to 2.0)
Oil pan bolt	4.3 to 7.2 (0.6 to 1.0)
Oil pan drain plug	14 to 22 (2.0 to 3.0)
Transmission drain plug	18 to 25 (2.5 to 3.5)
Differential carrier	
Drain plug	30 to 50 (4.2 to 6.9)
Filler plug	30 to 50 (4.2 to 6.9)
Wheel nut	
Steel	58 to 65 (8.0 to 9.0)
Aluminum	58 to 72 (8.0 to 10.0)

BULBS

	Wattage (W)	SAE trade number
Headlight unit	50/40	6012
Side clearance and turn signal light	8/23	1034
Side marker light	8	67
License plate light	7.5	89
Rear combination light		
Tailight	8	67
Tail/Stop (brake) light	8/23	1034
Turn signal light	23	1073
Back-up light	23	1073
Meter illumination light	3.4	57X
Brake warning light	3.4	57X
Turn signal indicator light	3.4	57X
Headlight beam indicator light	3.4	57X
Engine compartment inspection light	8	67
Interior light	10	–
Glove box light	3.4	57X
Clock illumination light	3.4	57X
Cigarette lighter illumination light	1.7	–
Hazard illumination light	1.4	–
Heater control illumination light	3.4	57X
Seat belt warning light	1.4	–
Rear defogger indicator light	1.4	–
Floor temperature warning light	1.4	–
Fuel warning light	3.4	57X
Charge warning light	3.4	57X
Ash tray illumination light	3.4	57X

FUSES (Fuse box)

Item	Ampere (A)
Light (R)	10A
Light (L)	10A
Flasher	10A
Fuel gauge	10A
Air conditioner	20A
Wiper	15A
Radio	10A
Park · Tail	15A
Interior lamp	10A
Cigarette lighter	10A
Horn · Stop	15A
Hazard	10A
Defogger	20A
Floor temperature lamp	1A

FUSIBLE LINKS

Color	Size in^2 (mm^2)	Usage
Black	0.0019 (1.25)	Power supply "ACC" at fuse box
Brown	0.0005 (0.3)	Ignition switch
Brown	0.0005 (0.3)	Headlight circuit
Brown	0.0005 (0.3)	Power supply "IGN" at fuse box
Green	0.0008 (0.5)	Electronic fuel injection circuit
Green	0.0008 (0.5)	Electronic fuel injection circuit

Consumer Information

Dear DATSUN Owner:
To find your vehicle information, refer to the chart indicated by a check. If no check is made, have your NISSAN/DATSUN Dealer check the column applicable to your vehicle.

INTRODUCTION

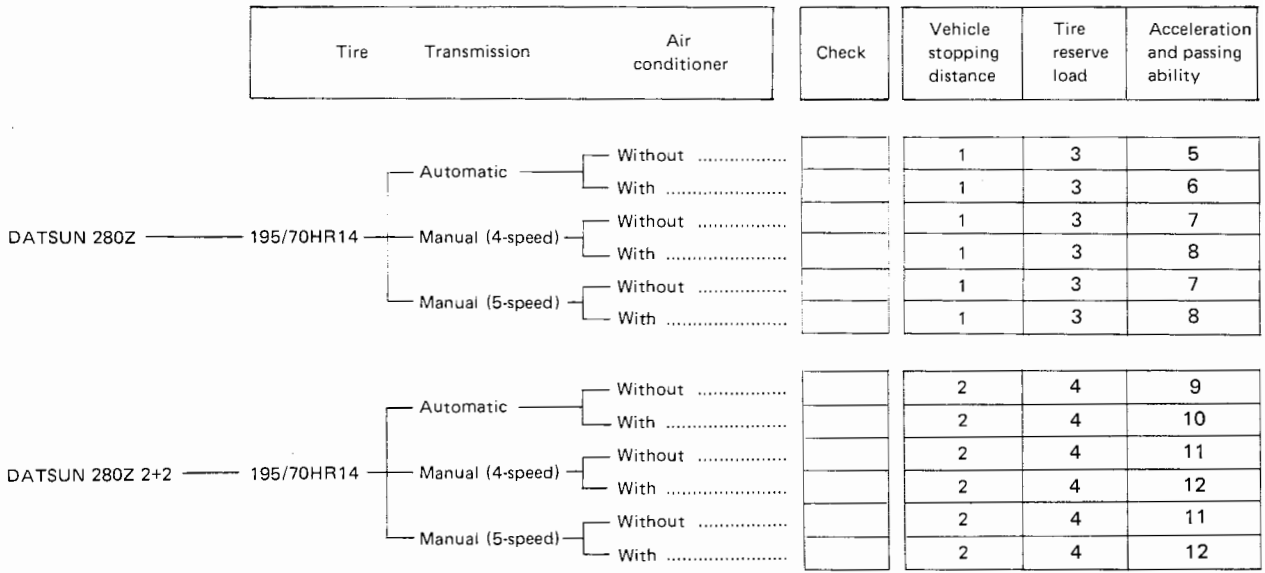
The figures contained in the following summary apply to all NISSAN/DATSUN vehicles in the particular group.

In compliance with the National Traffic and Motor Vehicles Safety Act (15 U.S.C. 1401, 1407), our NISSAN/DATSUN vehicles have been tested extensively and the results compiled to cover completely our total range of automobiles.

It is essential, we feel, that our users should carefully study the data before driving their new NISSAN/DATSUN so that they are familiar with the potential ability of the vehicle PRIOR to using it.

The National Highway Traffic Safety Administration of the United States Department of Transportation has carefully evaluated the statistics relating to the following minimum safety figures and has laid down specific guidelines that we, the manufacturers, must use when arriving at the figures stated in the following pages.

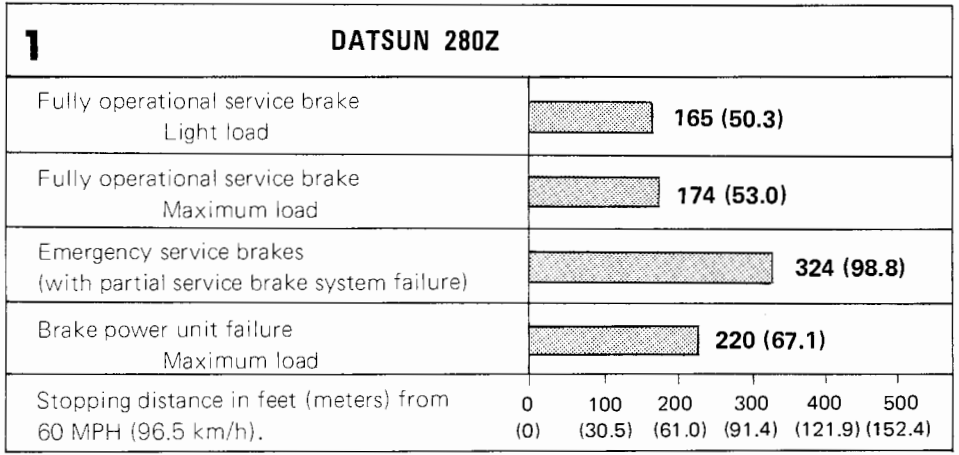
The following results were obtained by skilled drivers under controlled road and vehicle conditions, and may not representative of results obtainable under other conditions.

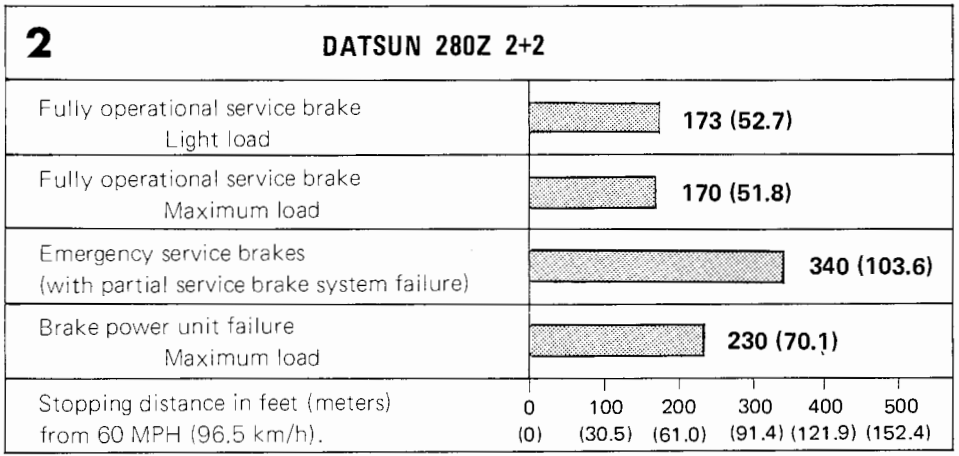

Tire
Transmission
Air conditioner
Check
Vehicle stopping distance
Tire reserve load
Acceleration and passing ability
DATSUN 280Z
195/70HR14
Automatic
Manual (4-speed)
Manual (5-speed)
Without
With
1 3 5
1 3 6
1 3 7
1 3 8
1 3 7
1 3 8
DATSUN 280Z 2+2
195/70HR14
Automatic
Manual (4-speed)
Manual (5-speed)
Without
With
2 4 9
2 4 10
2 4 11
2 4 12
2 4 11
2 4 12

VEHICLE STOPPING DISTANCE

This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels, under different conditions of loading and with partial failures of the braking system.

The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.





TIRE RESERVE LOAD

This table lists the tire size designations recommended by the manufacturer for use on the vehicles to which it applies, with the recommended inflation pressure for maximum loading and the tire reserve load percentage for each of the tires listed. The tire reserve load percentage indicated is met or exceeded by each vehicle to which the table applies.

WARNING:

Failure to maintain the recommended tire inflation pressure or to increase tire pressure as recommended when operating at maximum loaded vehicle weight, or loading the vehicle beyond the capacities specified on the tire placard affixed to the vehicle, may result in unsafe operating conditions due to premature tire failure, unfavorable handling characteristics, and excessive tire wear. The tire reserve load percentage is a measure of tire capacity, not of vehicle capacity. Loading beyond the specified vehicle capacity may result in failure of other vehicle components.

* The difference, expressed as a percentage of tire load rating, between (a) the load rating of a tire at the vehicle manufacturer's recommended inflation pressure at the maximum loaded vehicle weight and (b) the load imposed upon the tire by the vehicle at that condition.

3 DATSUN 280Z

Recommended tire size		195/70HR14
Recommended cold inflation pressure psi (kg/cm^2)	Front	28 (2.0)
	Rear	28 (2.0)
Tire reserve load % *		29.2

4 DATSUN 280Z 2+2

Recommended tire size		195/70HR14
Recommended cold inflation pressure psi (kg/cm^2)	Front	28 (2.0)
	Rear	28 (2.0)
Tire reserve load % *		18.6

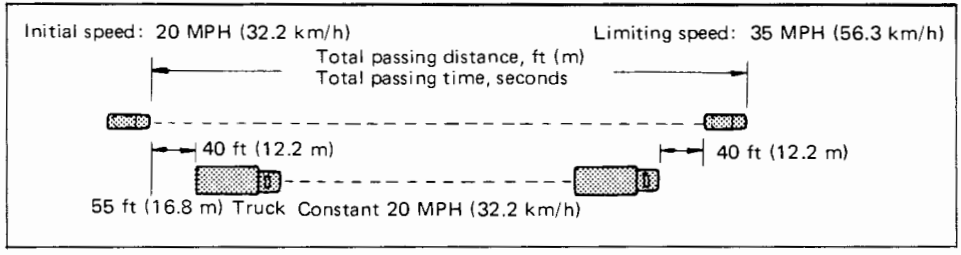
ACCELERATION AND PASSING ABILITY

This figure indicates passing times and distances that can be met or exceeded by the vehicles to which it applies, in the situations diagrammed in the figures.

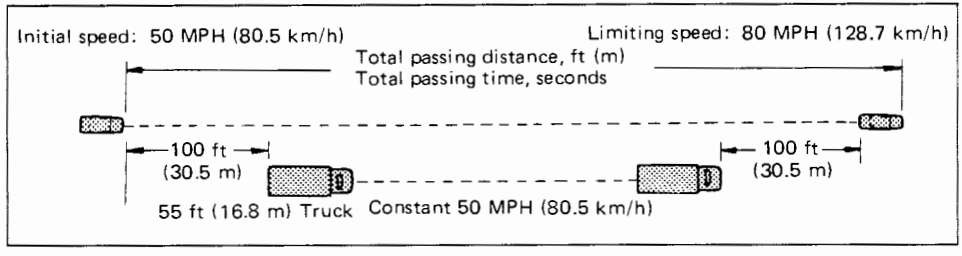
The low-speed pass assumes an initial speed of 20 MPH (32.2 km/h) and a limiting speed of 35 MPH (56.3 km/h).

The high-speed pass assumes an initial speed of 50 MPH (80.5 km/h) and a limiting speed of 80 MPH (128.7 km/h).

LOW-SPEED



HIGH-SPEED



5 DATSUN 280Z
with Automatic Transmission

Low-speed pass	405 feet (123.4 m);	8.7 seconds
High-speed pass	1,203 feet (366.7 m);	12.8 seconds

6 DATSUN 280Z
with Automatic Transmission & Air Conditioner

Low-speed pass	408 feet (124.4 m);	8.8 seconds
High-speed pass	1,245 feet (379.5 m);	13.3 seconds

7 DATSUN 280Z
with Manual Transmission

Low-speed pass	373 feet (113.7 m);	7.6 seconds
High-speed pass	1,164 feet (354.8 m);	12.2 seconds

8 DATSUN 280Z
with Manual Transmission & Air Conditioner

Low-speed pass	376 feet (114.6 m);	7.7 seconds
High-speed pass	1,201 feet (366.1 m);	12.7 seconds

9 DATSUN 280Z 2+2
with Automatic Transmission

Low-speed pass	415 feet (126.5 m);	9.0 seconds
High-speed pass	1,282 feet (390.7 m);	13.8 seconds

10 DATSUN 280Z 2+2
with Automatic Transmission & Air Conditioner

Low-speed pass	418 feet (127.4 m);	9.1 seconds
High-speed pass	1,319 feet (402.0 m);	14.3 seconds

11 DATSUN 280Z 2+2
with Manual Transmission

Low-speed pass	380 feet (115.8 m);	7.8 seconds
High-speed pass	1,231 feet (375.2 m);	13.1 seconds

12 DATSUN 280Z 2+2
with Manual Transmission & Air Conditioner

Low-speed pass	383 feet (116.7 m);	7.9 seconds
High-speed pass	1,268 feet (386.5 m);	13.6 seconds

NOTE:

Original Owner's Name: ..... Phone Number: .....

Owner's Address: .....

Purchase Date: .....

Dealer's Name: ..... Phone Number: .....

Dealer's Address: .....

Car Model: ..... Color: .....

Car Number: .....

Engine Number: .....

Registration Number: ..... Key Number: .....

Subsequent Owner's Name: ..... Phone Number: .....

Owner's Address: .....

Purchase Date: .....

Mileage Shown on Speedometer on Day of Purchase: .....

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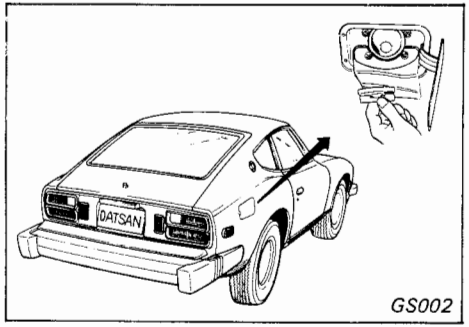
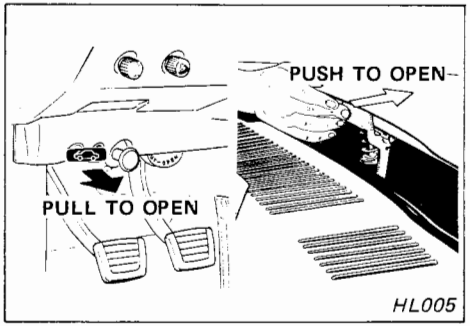
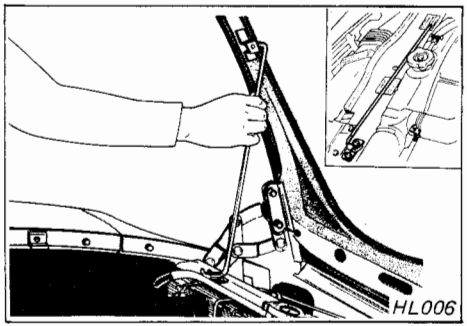
Index

Gas Station Information

Further details and precautions are described in "Do-it-yourself" section.







FUEL FILLER CAP

It is located at right rear side of the car.

NOTE:

Do not forget to replace the filler cap after refilling.

FUEL RECOMMENDATION

Use an unleaded or low-lead gasoline with a minimum octane rating of 91 based on the Research Octane Number.

Tank capacity: 17 ⅛ US gal
(14 ¼ Imp gal, 65 liters)

NOTE:

In California models, only unleaded gasoline can be used. The fuel filler opening is designed for use with an unleaded fuel gun [nozzle diameter less than 0.84 in (21.3 mm)] only.

HOOD RELEASE

Pull the hood release handle located below the instrument panel and release the safety catch and raise the hood by hand.

TIRE INFLATION PRESSURE

Unit: psi (kg/cm²)

RECOMMENDED COLD TIRE INFLATION PRESSURE		
Car speed / Tire size	For normal speed [under 100 MPH (160 km/h)]	For high speed [over 100 MPH (160 km/h)]
* 195/70HR14	28 (2.0)	32 (2.3)
Spare tire C78-14	Do not use in excess of 50 MPH (80 km/h).	
	28 (2.0)	

Tire pressure should be checked when tires are COLD.

* For high-speed driving, inflate the tires to the pressure specified in the chart when they are cold.

ENGINE OIL ❶

The engine oil dipstick is located on the right side of the cylinder block.

The best time to check the oil level is at operating temperature several minutes after the engine has been turned off. Maintain oil level between "H" and "L" marks on dipstick.

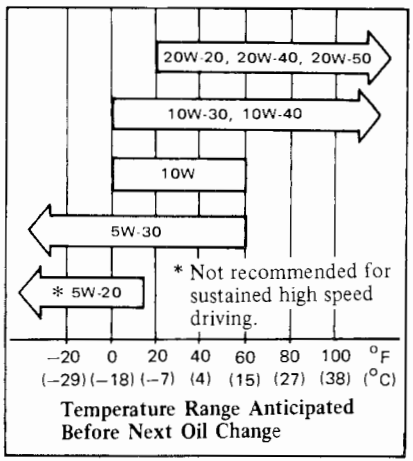
Capacity at oil change

with filter: 4 ¾ US qt (4 Imp qt, 4.5 liters)

without filter: 4 ¼ US qt (3 ½ Imp qt, 4.0 liters)

ENGINE OIL RECOMMENDATION

Use only recommended engine oil according to API classification SE.



BRAKE ❷ AND CLUTCH ❸ FLUID

Check brake and clutch reservoir fluid level. Use only recommended fluid DOT 3.

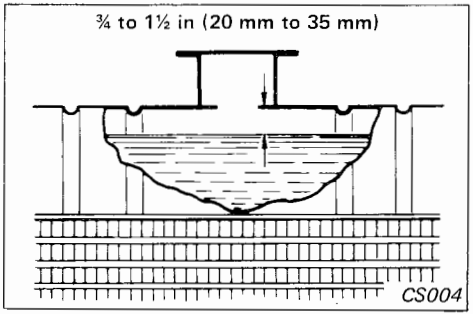
WINDSHIELD WASHER ❹

Check reservoir fluid level. Always use NISSAN windshield washer liquid or equivalent.

ENGINE COOLANT ❺

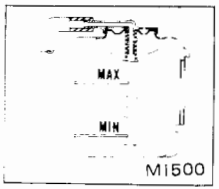
Check engine coolant level when system is cool.

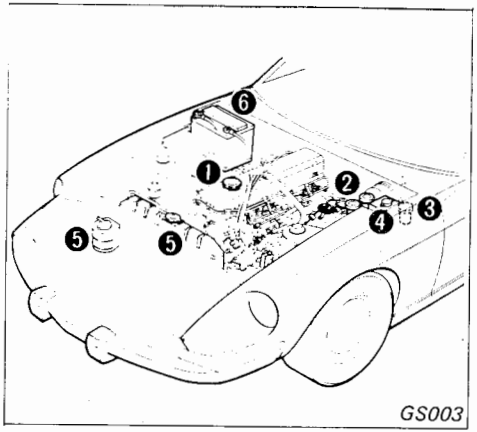
Without coolant reservoir



With coolant reservoir

Coolant level should be maintained between Max. and Min. lines.



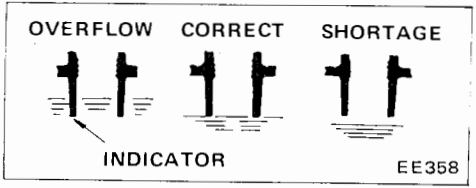


BATTERY ❻

Check the battery fluid level at least once a month.

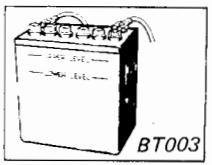
If necessary add distilled water.

Black Battery



Translucent Battery

Fluid level must be between upper and lower levels.



S30-D

CHECK YOUR **NISSAN/DATSUN**

WARRANTY AND SERVICE BOOKLET

FOR

FULL DETAILS OF OUR

WARRANTY TO

THE MOST IMPORTANT PERSON,

PURCHASER OF ONE OF

NISSAN/DATSUN'S NEW VEHICLES

THANK YOU !

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