

# MAINTENANCE

## 1997-99 General Motors Corp. Maintenance Information

### MODEL IDENTIFICATION

#### VIN LOCATION

The Vehicle Identification Number (VIN) is located on the left side of the dash panel at the base of the windshield. The VIN chart explains the code characters.

#### VIN CODE ID EXPLANATION

Numbers preceding the explanations in the legend below refer to the sequence of characters as listed on VIN identification label. See VIN example below.

##### VIN CODE ID EXPLANATION

(VIN)	1	G	1	Y	Y	2	3	8	1	L	5	8	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

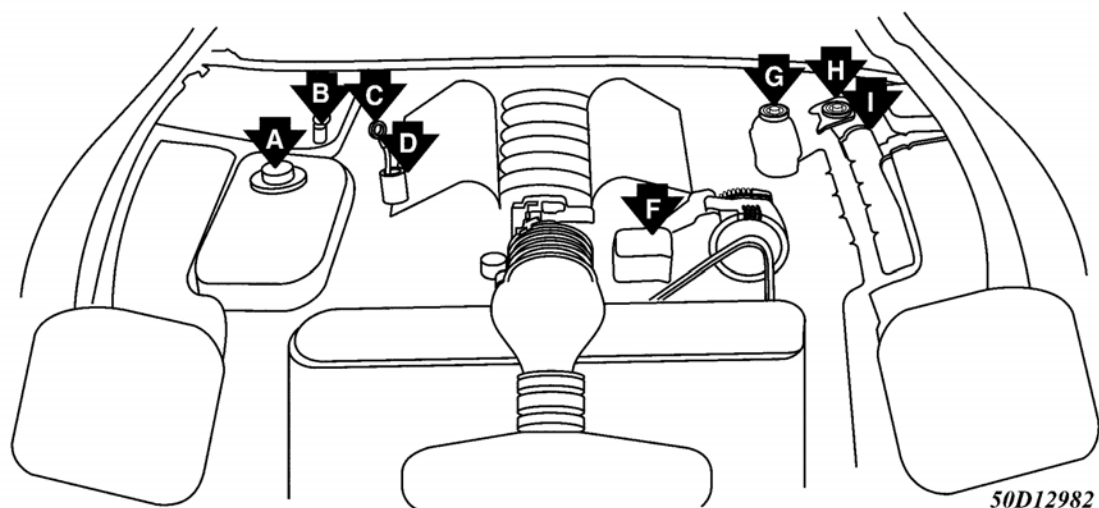
- 1 - Nation of Origin
  - 1 \* United States
- 2 - Manufacturer
  - G \* General Motors
- 3 - Division
  - 1 \* Chevrolet
- 4 & 5 - Carline/Series (1985-99)
  - YY \* Corvette
- 6 - Body Type
  - 2 \* 2-Door Hatchback/Liftback (GM style 07)
  - 3 \* 2-Door Convertible (GM style 67)
- 7 - Restraint System (1994-95)
  - 2 \* Manual Belts with Driver & Passenger Air Bags
- 8 - Engine Code
  - G \* RPO LSI, V8, 5.7L, SFI, United States Production, MCD Division
- 9 - VIN Check Digit
  - \* 0 through 9 or X
- 10 - Vehicle Model Year
  - V \* 1997
  - W \* 1998
  - X \* 1999
- 11 - Assembly Plant Code
  - 5 \* Bowling Green, Kentucky
- 12-17 - Plant Sequence Number
  - \* Serial Production Number

Fig. 1: VIN Code ID Explanation

### MAINTENANCE SERVICE INFORMATION

Service is recommended at mileage intervals based on vehicle operation. Service schedules are based on normal driving conditions.

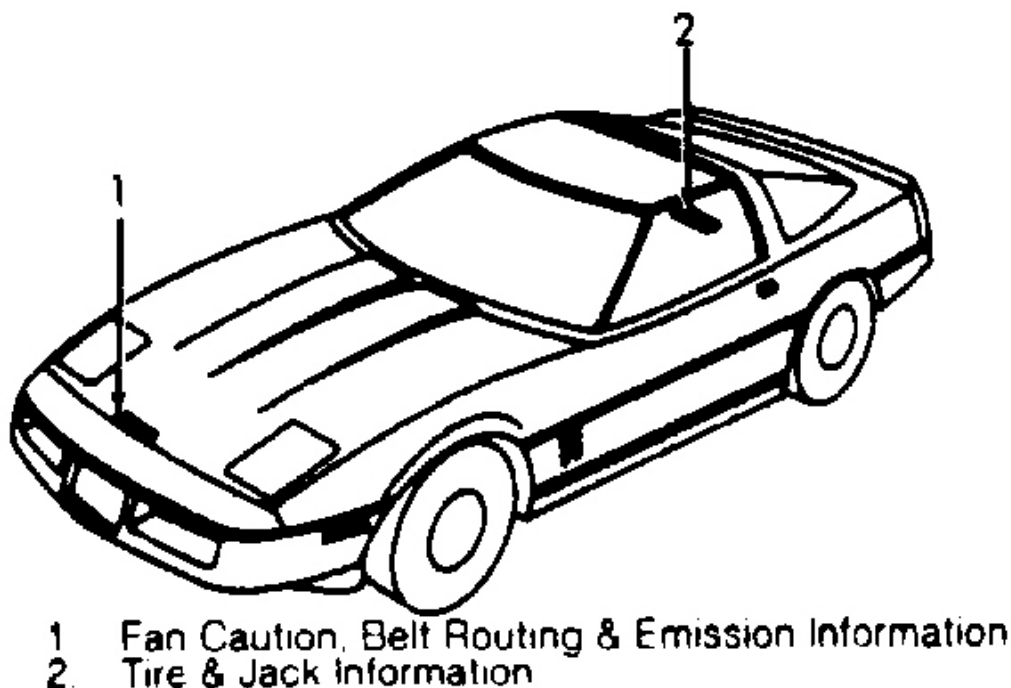
## SERVICE POINT LOCATIONS



50D12982

**Fig. 2: Service Point Locations (Typical)**  
Courtesy of GENERAL MOTORS CORP.

## INFORMATION LABEL LOCATIONS



**Fig. 3: Information Label Locations**  
Courtesy of GENERAL MOTORS CORP.

## **WHEEL & TIRE SPECIFICATIONS**

### **TIRE REPLACEMENT**

Replace tires with the same Tire Performance Criteria Specification number shown on the original tire's sidewall. If tires are replaced with those that do not have a TPC Specification number then replace tires that are the same size, load range, speed rating, and construction type.

### **TIRE INFLATION**

The tire specification decal is located on rear of the driver's door.

### **WHEEL TIGHTENING**

Tighten wheel lug nuts to 100 ft. lbs. (140 N.m).

## **BATTERY SPECIFICATIONS**

**CAUTION:** When battery is disconnected, vehicles equipped with computers may lose memory data. When battery power is restored, driveability problems may exist on some vehicles. These vehicles may require a relearn procedure. See the **COMPUTER RELEARN PROCEDURES** article in the **GENERAL INFORMATION** section.

All new model Corvettes have a Delco Freedom Battery. Water is never needed to be added to one of these batteries. If replacement is required it is recommended a Delco Freedom Battery be used, get one that has the same replacement number shown on the original battery's label.

## **CAUTIONS & WARNINGS**

### **ENGINE OIL & OIL FILTER**

**CAUTION:** To prevent leakage of oil filters, it is very important that you closely follow the installation procedure below or engine damage may result.

**NOTE:** Ensure vehicle is **LEVEL** during the entire procedure. Once the engine oil drain plug and the engine oil filter are removed, allow a minimum of 7 minutes for the engine to fully drain.

#### **Removal**

1. Raise and suitably support vehicle. Remove engine oil drain plug and allow the oil to drain.
2. Remove oil filter by turning the oil filter counterclockwise and allow any remaining oil to drain.

#### **Installation**

1. Clean gasket sealing area on the engine oil filter mounting surface with a clean dry cloth. Lightly oil the replacement oil filter gasket, use clean oil.

**NOTE:** Use a cap-type wrench, AC Delco OF17W or equivalent, or a strap-type wrench with swivel handle to insure proper installation.

2. Tighten the oil filter 3/4 to 1 full turn, after the oil filter gasket contacts the oil filter mounting surface.
3. Wipe the engine oil drain plug with a clean, dry cloth. Install engine oil drain plug and tighten to 18 ft.lbs. (25 N.m).

**NOTE:** Allow a minimum of 3 minutes for the new engine oil to fully fill the engine oil pan.

4. Fill the engine with proper type and amount of new engine oil. DO NOT use any engine oil additives in Corvette engines. Run engine for 3 minutes and thoroughly inspect the oil filter and oil pan drain plug.
5. Allow engine to cool for a minimum of 3 minutes. Recheck the engine oil level. Top-off the engine oil to

the full mark on the dipstick. Lower vehicle.

## **SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)**

**NOTE:** See the **AIR BAG RESTRAINT SYSTEM** article in the **ACCESSORIES/SAFETY EQUIPMENT** Section.

Modifications or improper maintenance, including incorrect removal and installation of the Supplemental Restraint System (SRS), can adversely affect system performance. DO NOT cover, obstruct or change the steering wheel horn pad in any way, as such action could cause improper function of the system. Use only plain water when cleaning the horn pad. Solvents or cleaners could adversely affect the air bag cover and cause improper deployment of the system.

**WARNING:** To avoid injury from accidental air bag deployment, read and carefully follow all warnings and service precautions. See appropriate **AIR BAG RESTRAINT SYSTEM** article in **ACCESSORIES/SAFETY EQUIPMENT**.

Modification to the air bag system component or wiring can adversely affect system performance and possibly cause injury.

**CAUTION:** The Diagnostic Energy Reserve Module (DERM) can maintain enough voltage to cause a deployment of the inflator module for up to 10 minutes after the ignition switch is turned off and the battery is disconnected. Many of the service procedures require disconnection of the inflator module to avoid an accidental deployment.

**CAUTION:** Disconnect negative battery cable before servicing any air bag system, steering column or passenger side dash component. After any repair, turn ignition key to the ON position from passenger's side of vehicle in case of accidental air bag inflation

## **AIR CONDITIONING SERVICING**

**WARNING:** Avoid breathing R-134a refrigerant and PAG lubricant vapors, exposure may irritate eyes, nose and throat. To remove R-134a from system use R-134a recycling equipment that meets SAE J2210 specifications. If accidental system discharge occurs, ventilate work area before resuming service.

**WARNING:** R-134a service equipment or vehicle A/C systems SHOULD NOT be pressure tested or leak tested with compressed air. Some mixtures of air/R134a have shown to be combustible at elevated pressures. These mixtures are dangerous and may cause fire and/or explosions. See **AIR CONDITIONING SERVICE** article in **GENERAL INFORMATION** section.

## ANTI-LOCK BRAKE SYSTEM

**CAUTION:** The anti-lock brake system contains electronic equipment that can be susceptible to interference caused by improperly installed or high output radio transmitting equipment. Since this interference could cause the possible loss of the anti-lock braking capability, such equipment should be installed by qualified professionals.

On models equipped with anti-lock brake systems, ALWAYS observe the following cautions:

- DO NOT attempt to bleed hydraulic system without first referring to the appropriate **ANTI-LOCK BRAKE SYSTEM** article in the BRAKES Section.
- DO NOT mix tire sizes. As long as tires remain close to the original diameter, increasing the width is acceptable. Rolling diameter must be identical for all 4 tires. Some manufacturers recommend tires of the same brand, style and type. Failure to follow this precaution may cause inaccurate wheel speed readings.
- Use ONLY recommended brake fluids. DO NOT use silicone brake fluids in an ABS-equipped vehicle.

## REPLACING BLOWN FUSES

**CAUTION:** Before replacing a blown fuse, remove ignition key, turn off all lights and accessories to avoid damaging the electrical system. Be sure to use fuse with the correct indicated amperage rating. The use of an incorrect amperage rating fuse may result in a dangerous electrical system overload.

## BRAKE PAD WEAR INDICATOR

**CAUTION:** Indicator will cause a squealing or scraping noise, warning that brake pads need replacement.

## CATALYTIC CONVERTER

**CAUTION:** To prevent catalytic converter overheating, DO NOT allow engine to idle for more than 20 minutes.

## COOLANT

**CAUTION:** All models have DEX-COOL engine coolant installed at the factory. DEX-COOL coolant is a silicate-free coolant that is orange in color.

**NOTE:** It should not be mixed with regular ethylene-glycol coolant. To avoid possible damage to vehicle cooling system, visually check engine coolant color before adding and/or changing engine coolant. Vehicle should have an identification

label placed under the hood stating what type coolant is installed.

**WARNING:** Do NOT add only plain water to the cooling system. Plain water, or some other liquid like alcohol, can boil before the proper coolant mix will. The vehicle's coolant warning system is set for the proper coolant mix only. With plain water or the wrong mix, the engine could get too hot, but the overheat warning may not appear. The engine could catch fire and passengers in the vehicle could be seriously injured.

Use a 50/50 mixture of distilled water and DEX-COOL engine coolant.

## **ELECTROSTATIC DISCHARGE SENSITIVE (ESD) PARTS**

**WARNING:** Many solid state electrical components can be damaged by static electricity (ESD). Some will display a warning label, but many will not. Discharge personal static electricity by touching a metal ground point on the vehicle prior to servicing any ESD sensitive component.

## **FUEL SYSTEM SERVICE**

**WARNING:** Relieve fuel system pressure prior to servicing any fuel system component.

## **HALOGEN BULBS**

**WARNING:** Halogen bulbs contain pressurized gas which may explode if overheated. DO NOT touch glass portion of bulb with bare hands. Eye protection should be worn when handling or working around halogen bulbs.

## **METHANOL GASOLINE**

**CAUTION:** Fuel that is more than 5% methanol should not be used in this vehicle. It can corrode metal parts in the fuel system, and damage plastic and rubber parts. Even at 5% methanol or less, solvents and corrosion preventers must be used with this fuel to avoid these problems.

## **RADIATOR CAP**

**CAUTION:** Always disconnect the fan motor when working near the radiator fan. The fan is temperature controlled and could start at any time even when the ignition key is in the OFF position. DO NOT loosen or remove radiator cap when cooling system is hot.

## **RADIATOR FAN**

**WARNING:** Keep hands away from radiator fan. Fan is controlled by a thermostatic switch which may come on or run for up to 15 minutes even after engine is turned off.

## **SPARK PLUGS**

**NOTE:** Allow engine to cool before removing spark plugs from aluminum cylinder heads.

## **TRACTION CONTROL SYSTEM (IF EQUIPPED)**

**CAUTION:** If tires are allowed to spin at high speeds when TRACTION OFF light is on, tires can explode. Also, spinning the tires with the warning light on can cause the transaxle to overheat. DO NOT spin wheels above 35 MPH.

## **WARRANTY INFORMATION**

**CAUTION:** Due to the different warranties offered in various regions and the variety of after-market extended warranties available, please refer to the warranty package that came with the vehicle to verify all warranty options.

### **BUMPER-TO-BUMPER PLUS COVERAGE LIMITED WARRANTY**

Everything covered for 3 years or 36,000 miles, whichever occurs first. Covered by this warranty are any repairs to vehicle which have proven defective during material and workmanship in normal use (tires excluded). Warranty repairs (parts and labor) will be made by the dealer at no charge using new or remanufactured parts by the dealer.

### **CORROSION COVERAGE**

Body sheet metal panels are covered against rust for 3 years or 36,000 miles, whichever comes first.

Any body-sheet metal panel that is perforated due to corrosion is covered for 6 years or 100,000 miles, whichever occurs first.

### **EMISSIONS "DEFECT" & "PERFORMANCE" WARRANTIES (EXCEPT CALIFORNIA)**

The Emissions Defect Warranty and the Emissions Performance Warranty begin on the date the vehicle is first delivered or put into use and continues for a period of 2 years or 24,000 miles, whichever occurs first.

Defect Warranty ensures that vehicle meets applicable EPA regulations and that vehicle's emission control system is free from defects in materials and workmanship.

The Performance Warranty covers all costs of repairing or adjusting any components or parts as needed in order for the vehicle to pass a Federally required state or local emissions test.



Other emission control parts related to these components are covered by the Performance Warranty, where applicable. If another part fails due to the failure of one of these components, both parts are covered. See customer's copy of warranty information for specific items covered.

Under the Defect Warranty and the Performance Warranty, if a catalytic converter or vehicle (powertrain) control module is found to be defective, the parts are covered for a period of 8 years or 80,000 miles, whichever occurs first.

### **EMISSION "PERFORMANCE" WARRANTY (CALIFORNIA)**

If vehicle fails a Smog Check inspection, all necessary repairs and adjustments will be made by manufacturer to ensure that vehicle passes the inspection. Warranty begins at warranty start date and lasts for a period of 3 years or 50,000 miles, whichever occurs first.

### **EMISSION "DEFECT" WARRANTY (CALIFORNIA)**

If any emission-related part on the vehicle is defective, the part will be repaired or replaced by manufacturer. Warranty begins at warranty start date and lasts for a period of 3 years or 50,000 miles, whichever occurs first.

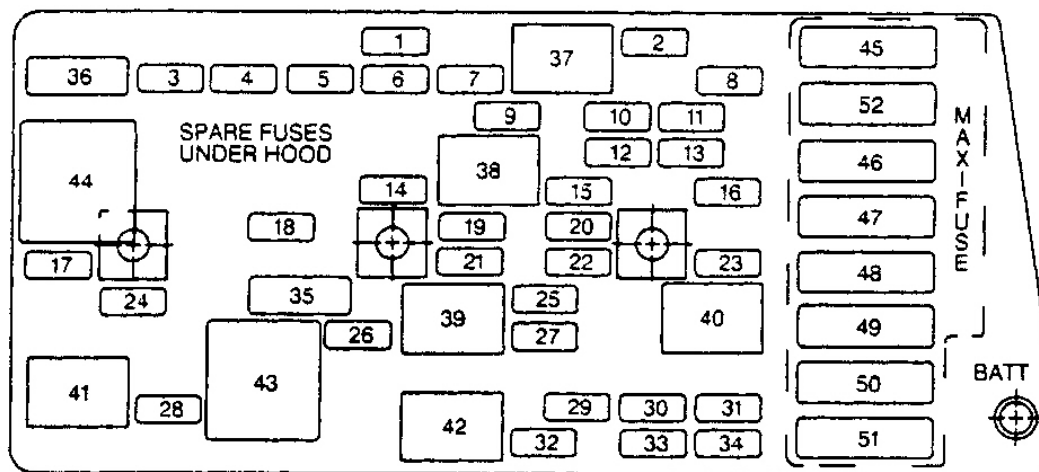
Some emission-related parts are warranted for 7 years or 70,000 miles, whichever occurs first, and will be repaired or replaced by manufacturer if found to be defective in material or workmanship. See customer's copy of warranty information for specific items covered.

## **FUSES & CIRCUIT BREAKERS**

### **FUSE PANEL LOCATION**

There are two fuse block locations. The interior fuse center is on the passenger's side of the vehicle, under the instrument panel and under the toe-board. Remove the toe-board and carpet covering to access the fuse block. The engine compartment fuse block is located in the engine compartment on the passenger's side in front of the battery.

### **FUSE PANEL IDENTIFICATION**



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**Fig. 4: Fuse Panel Identification**

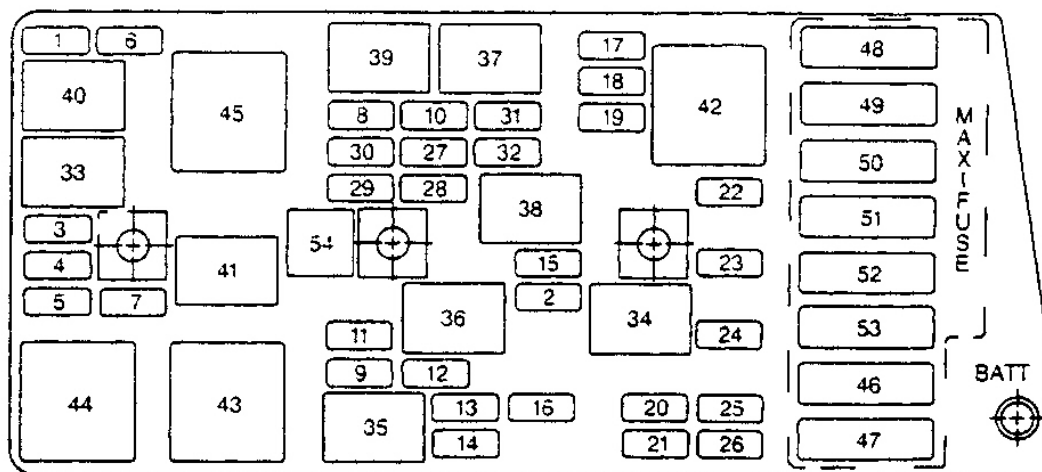
Courtesy of GENERAL MOTORS CORP.

#### Fuse & Circuit Breaker Identification

- 1 - Console Cigarette Lighter
- 2 - Monitored (Inadvertant) Load Control
- 3 - Lumbar Seat
- 4 - Driver Seat Control Module
- 5 - Radio
- 6 - Parking Lamps, Taillamps
- 7 - Cigar Lighter
- 8 - Stop Hazard Flashers
- 9 - Body Control Module
- 10 - Windshield Wiper/Washer
- 11 - Accessory Power
- 12 - Blank
- 13 - Body Control Module
- 14 - Crank
- 15 - Hazard/Turn Signal
- 16 - Air Bag
- 17 - Blank (1997) TONN REL (Convertible Only - 1998)
- 18 - HVAC Controls

- 19 - Instrument Panel Control
- 20 - Cruise Control
- 21 - Brake Transmission Shift Interlock
- 22 - Body Control Module - Ignition 3
- 23 - Body Control Module - Ignition 2
- 24 - Radio Antenna
- 25 - Body Control Module - Ignition 1, Instrument Panel Control
- 26 - Hatch/Trunk Release
- 27 - HVAC Controls
- 28 - Bose Speakers
- 29 - Diagnostic
- 30 - Right Door Control Module
- 31 - Power Feed Door Right
- 32 - Fuel Tank Door
- 33 - Door Control Module Left
- 34 - Power Feed Door Left
- 35 - Driver Power Seat (Circuit Breaker)
- 36 - Passenger Power Seat (Circuit Breaker)
- 37 - Micro Relay - Monitored (Inadvertent) Load Control
- 38 - Micro Relay - Right Daytime Running Lamp
- 39 - Micro Relay - Hatch Release
- 40 - Micro Relay - Left Daytime Running Lamp
- 41 - Blank (1997) TONN REL (Convertible Only - 1998)
- 42 - Micro Relay - Courtesy Lamp
- 43 - Bose Mini Relay - Speakers
- 44 - Mini Relay - Rear Defogger
- 45 - Maxifuse - Ignition 2
- 46 - Maxifuse - Rear Defogger
- 47 - Blank
- 48 - Maxifuse - Ignition
- 49 - Maxifuse - Blower Motor
- 50 - Starter
- 51 - Blank
- 52 - Maxi Circuit Breaker - Headlamps

## **ENGINE COMPARTMENT FUSE BLOCK IDENTIFICATION**



50F12984

**Fig. 5: Engine Compartment Fuse Block Identification**  
 Courtesy of GENERAL MOTORS CORP.

**WARNING:** Always disconnect battery ground cable before servicing "high-current fuses. It is recommended that "high-current" fuses be replaced by a qualified technician.

#### Fuse Identification

- 1 - Rear Fog Lamp (1997) ABS TRANS (1998)
- 2 - Approach
- 3 - Right Headlamp Motor
- 4 - Left Headlamp Motor
- 5 - Anti-Lock Brakes (1997) Blank (1998)
- 6 - Fog Lamp
- 7 - Selective Real Time Damping
- 8 - Headlight Low Beam Right
- 9 - Headlight High Beam Right
- 10 - Headlight Low Beam Left
- 11 - Horn
- 12 - Headlight High Beam Left
- 13 - Fuel Pump
- 14 - Cooling Fan - Ignition 3
- 15 - Oxygen Sensor

- 16 - Powertrain Control Module
- 17 - Throttle Control
- 18 - Injector 2
- 19 - Engine Ignition
- 20 - Blank
- 21 - Blank
- 22 - Injector 1
- 23 - Powertrain Control Module
- 24 - Air Conditioning
- 25 - Blank
- 26 - Blank
- 27-32 - Spare
- 33 - Micro Relay - Air Pump
- 34 - Micro Relay - Air Conditioner & Clutch
- 35 - Micro Relay - Fuel Pump
- 36 - Micro Relay - Horn
- 37 - Micro Relay - Rear Fog Lamp (1997) Micro Relay - ABS TRANS (1998)
- 38 - Micro Relay - Back-Up Lamps
- 39 - Micro Relay - Fog Lamp
- 40 - Micro Relay - AIR Solenoid
- 41 - Micro Relay - Selective Real Time Damping
- 42 - Mini Relay - Ignition
- 43 - Mini Relay - Cooling Fan 2
- 44 - Mini Relay - Cooling Fan 3
- 45 - Mini Relay - Cooling Fan 1
- 46 - Maxi Fuse - Cooling Fan 2
- 47 - Blank
- 48 - Blank
- 49 - Maxi Fuse - Cooling Fan 1
- 50 - Maxi Fuse - Air Pump
- 51 - Blank
- 52 - Maxi Fuse - Anti-Lock Brakes
- 53 - Anti-Lock Brakes & Selective Real Time Damping Electronics
- 54 - Fuse Puller