#### SCHEDULED SERVICES

### 1993 Mitsubishi Diamante

1992-95 MAINTENANCE
Mitsubishi Maintenance & Service Intervals

Diamante

#### \* PLEASE READ THIS FIRST \*

NOTE: All SERVICE SCHEDULES are listed for normal service vehicles. If vehicle is operated under severe service

conditions, see

SEVERE SERVICE REQUIREMENTS (PERFORM W/SERVICE SCHEDULES)

for items requiring additional maintenance.

NOTE: This article contains scheduled maintenance service information. Fluid types and capacities listed with each service in this article are only those necessary to perform that scheduled service. For specifications pertaining to fluid capacities for the entire vehicle, fuse and circuit breaker identification, wheel and tire size, battery type, warranty information, or model identification refer to the MAINTENANCE INFORMATION article in this section.

### **CAUTIONS & WARNINGS**

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

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

 $\,$  The SRS has no user-servicable parts. Always have servicing done by an authorized dealer.

When performing maintenance on air bag equipped vehicles always observe proper safety precautions.

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 the ACCESSORIES/SAFETY EOUIPMENT section.

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

## ANTI-LOCK BRAKE SYSTEM (ABS)

CAUTION: Never mix different diameter tires. On loose or uneven surfaces, the ABS system may require longer stopping distances than conventional brake systems. Exercise caution when removing mud or snow from the wheels so as not to damage the ABS wiring or speed sensors.

### **BATTERY WARNING**

WARNING: 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 appropriate COMPUTER RELEARN PROCEDURES article in the GENERAL INFORMATION section below.

### REPLACING BLOWN FUSES

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

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

### CATALYTIC CONVERTER

Continued operation of vehicle with a severe malfunction could cause converter to overheat, resulting in possible damage to converter and vehicle.

### COOLANT (PROPYLENE-GLYCOL FORMULATIONS)

CAUTION: To avoid possible damage to vehicle use only ethylene-glycol based coolants with a mixture ratio from 44-68% anti-freeze. DO NOT use 100% anti-freeze as it will cause the formation of cooling system deposits. This results in coolant temperatures of over 300° F (149°C) which can melt plastics. 100% anti-freeze has a freeze point of only -8° F (-22°C).

CAUTION: Propylene-Glycol Mixtures has a smaller temperature range than Ethylene-Glycol. The temperature range (freeze-boil) of a 50/50 Anti-Freeze/Water Mix is as follows:

Propylene-Glycol -26° F (-32°C) - 257° F (125°C)
Ethylene-Glycol -35° F (-37°C) - 263° F (128°C)

CAUTION: Propylene-Glycol/Ethylene-Glycol Mixtures can cause the destabilization of various corrosion inhibitors. Also Propylene-Glycol/Ethylene-Glycol has a different specific gravity than Ethylene-Glycol coolant, which will result in inaccurate freeze point calculations.

### 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.

#### **ENGINE OIL**

CAUTION: Never use non-detergent or straight mineral oil.

### FUEL SYSTEM SERVICE

WARNING: Relieve fuel system pressure prior to servicing any fuel system component (fuel injection models).

### 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.

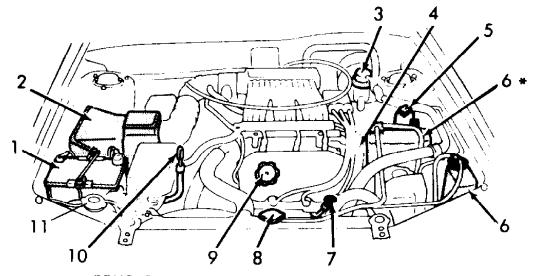
### **RADIATOR CAP**

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.

### SERVICE POINT LOCATIONS



SOHC: Car with Single overhead camshaft engine \*: Cars with anti-lock braking system

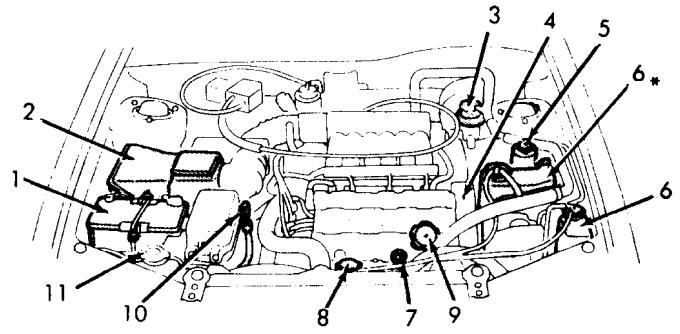
### SOHC

- Battery
- 2 Air Cleaner Element
- 3. Brake Fluid Reservoir
- 4. Drive Belt

- Power Steering Belt
- Engine Oil Level Dipstick
- 8. Radiator Cap
- 9 Engine Oil Filler Cap
- 10. Automatic Transaxle Fluid Level Dipstick
- 6. Engine Coolant Reservoir 11. Windshield Washer Reservoir

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Fig. 1: Service Point Locations (SOHC Engine) Courtesy of Mitsubishi Motor Sales of America.



DOHC: Car with Double overhead camshaft engine

# **DOHC**

- 1. Battery
- 2. Air Cleaner Element
- 3. Brake Fluid Reservoir
- 4. Drive Belt
- 5. Power Steering Belt
- 7. Engine Oil Level Dipstick
- 8. Radiator Cap
- 9. Engine Oil Filler Cap
- 10. Automatic Transaxle Fluid Level Dipstick
- 6. Engine Coolant Reservoir 11. Windshield Washer Reservoir

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Fig. 2: Service Point Locations (DOHC Engine) Courtesy of Mitsubishi Motor Sales of America.

### CAMSHAFT TIMING BELT REPLACEMENT INFORMATION

CAUTION: Failure to replace a faulty camshaft timing belt may result in serious engine damage.

The condition of camshaft drive belts should always be checked on vehicles which have more than 50,000 miles. Although some manufacturers do not recommend belt replacement at a specified mileage, others require it at 60,000-100,000 miles. A camshaft drive belt failure may cause extensive damage to internal engine components on most engines, although some designs do not allow piston-to-valve contact. These designs are often called "Free Wheeling".

Many manufacturers changed their maintenance and warranty schedules in the mid-1980's to reflect timing belt inspection and/or replacement at 50,000-60,000 miles. Most service interval schedules in this manual reflect these changes.

Belts or components should be inspected and replaced if any of the following conditions exist:

- \* Cracks Or Tears In Belt Surface
- \* Missing, Damaged, Cracked Or Rounded Teeth
- \* Oil Contamination
- \* Damaged Or Faulty Tensioners
- \* Incorrect Tension Adjustment

Replace camshaft timing belt at 60,000 mile intervals.

### **SEVERE & NORMAL SERVICE DEFINITIONS**

NOTE: Use the Severe Service schedule if the vehicle to be serviced is operated under ANY (one or more) of these conditions:

Service is recommended at mileage intervals based on vehicle operation. Service schedules are based on the following primary operating conditions:

Normal Service

- \* Driven More Than 10 Miles Daily
- \* No Operating Conditions From Severe Service Schedule

Severe Service (Unique Driving Conditions)

- \* Driving In Dusty Conditions
- \* Police, Taxi, Or Commercial Operation
- \* Extensive Idling
- \* Short-Trip Operation At Freezing Temperatures
- \* Driving In Sandy Conditions
- \* Driving In Salty Areas
- \* More Than 50% Operation In Heavy Traffic During Hot Weather

### SEVERE SERVICE REQUIREMENTS (PERFORM W/SERVICE SCHEDULES)

NOTE:

The following services are to be performed on vehicles subjected to severe service. See SEVERE & NORMAL SERVICE DEFINITIONS. This service is to be performed in addition to the normal services listed in the NORMAL MAINTENANCE SERVICE SCHEDULES.

#### SEVERE SERVICE CONDITIONS/ACTIONS TABLE

Condition	Action	Item	Perform Every (1)
Driving In Dusty Conditions	Replace	Engine Oil	3,000 Miles or 3 Months
	Replace	Engine Oil Filter	6,000 Miles or 6 Months
Police, Taxi, Or	Replace	Engine Oil	3,000 Miles or 3 Months
Commercial Operation	Replace	Engine Oil Filter	6,000 Miles or 6 Months
Extensive Idling	Replace	Engine Oil	3,000 Miles or 3 Months
	Replace	Engine Oil Filter	6,000 Miles or 6 Months
Short-Trip Operation At Freezing	Replace	Engine Oil	3,000 Miles or 3 Months
	Replace	Engine Oil	6,000 Miles or 6 Months

Temperatures	L	Filter	
Driving In Sandy Conditions	Replace	Engine Oil	3,000 Miles or 3 Months
	Replace	Engine Oil Filter	6,000 Miles or 6 Months
Driving In Salty	Replace	Engine Oil	3,000 Miles or 3 Months
Areas	Replace	Engine Oil Filter	6,000 Miles or 6 Months
More Than 50% Operation In Heavy Traffic During Hot Weather	Replace	Engine Oil	3,000 Miles or 3 Months
	Replace	Engine Oil Filter	6,000 Miles or 6 Months

<sup>(1) -</sup> Perform these services at the mileage or number of months (since the last time), whichever comes first.

## NORMAL MAINTENANCE SERVICE SCHEDULES

The following service schedules refer to vehicles driven under normal operating conditions. For vehicles driven under severe conditions, additional services may be necessary. See SEVERE SERVICE REQUIREMENTS (PERFORM W/SERVICE SCHEDULES) above in this article for additional service requirements.

## 7500 MILE (12,000 KM) SERVICE

7500 MILE (12,000 KM) SERVICE

Service Or Inspect
Change Engine Oil
Lubrication Specifications
Application Specification
Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)
Fluid Capacities
Application Quantity
Engine Oil (Including Filter) 4.5 Qts. (4.3L)

## 15,000 MILE (24,000 KM) SERVICE

15,000 MILE (24,000 KM) SERVICE

<u></u>
Verify Last Major Service Was Performed
Disc Brake Pads
Brake Hoses
Drive Shaft Boots
Automatic Transaxle Fluid Level
Replace
Engine Oil & Filter
Lubrication Specifications
Application Specification
Automatic Transaxle Diamond ATF Or Equivalent Engine Oil  Minimum Temperature  Greater Than 32°F (0°C) SAE 20W-50 API SG/CD  Greater Than -10°F (-23°C) SAE 10W-30 Or 10W-40 API SG/CD  Maximum Temperature  Less Than 60°F (16°C) SAE 5W-30 API SG/CD
Fluid Capacities
Application Quantity
Automatic Transmission
Service Labor Times
Application Hours
3.0L SOHC

# 22,500 MILE (36,000 KM) SERVICE

22,500 MILE (36,000 KM) SERVICE

Service Or Inspect	_
Verify Last Major Service Was Performed	
Change Engine Oil	
Lubrication Specifications	
Application	Specification
Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)	

Fluid Capacities	
Application	Quantity
Engine Oil (Including Filter)	 4.5 Qts. (4.3L)

## 30,000 MILE (48,000 KM) SERVICE

30,000 MILE (48,000 KM) SERVICE

Serv	vice Or Inspect
Veri	ify Last Major Service Was Performed
Driv	ve Belt For Generator
Fue]	l Hoses
Disc	Brake Pads
Brak	ke Hoses
Ball	l Joint & Steering Linkage Seals
Driv	ve Shaft Boots
Exha	aust System
Repl	lace
Engi	ine Oil & Filter
Air	Cleaner Filter
Spar	rk Plugs (SOHC Engine Only)
Auto	omatic Transaxle Fluid
Engi	ine Coolant
Lubi	rication Specifications
Applicati	ion Specification
Engine Co Engine Oi Minimum Greate Greate Maximum	C Transaxle Diamond ATF Or Equivalent colant Ethylene Glycol-Based Antifreeze Coolant il m Temperature er Than 32°F (0°C) SAE 20W-50 API SG/CD er Than -10°F (-23°C) SAE 10W-30 Or 10W-40 API SG/CD m Temperature Than 60°F (16°C) SAE 5W-30 API SG/CD
Flui	id Capacities
Applicati	ion Quantity
Cooling S	Transmission 7.9 Qts. (7.5L) System (1) 8.5 Qts. (8.0L) il (Including Filter) 4.5 Qts. (4.3L)

(1) - Includes heater and coolant reserve system.	
Service Labor Times	
Application Hou	rs
3.0L SOHC	.7

## 37,500 MILE (60,000 KM) SERVICE

37,500 MILE (60,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Change Engine Oil
Lubrication Specifications
Application Specification  Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)
Fluid Capacities
Application Quantity
Engine Oil (Including Filter) 4.5 Qts. (4.3L)

# 45,000 MILE (72,000 KM) SERVICE

45,000 MILE (72,000 KM) SERVICE

Service Or Inspect	
Verify Last Major Ser	rvice Was Performed
Disc Brake Pads	
Brake Hoses	
Drive Shaft Boots	
Automatic Transaxle H	Fluid Level
Replace	
Engine Oil & Filter	
Lubrication Specifica	ations
Application	Specification

Automatic Transaxle Diamond ATF Or Equivalent Engine Oil Minimum Temperature Greater Than 32°F (0°C) SAE 20W-50 API SG/CD
Greater Than -10°F (-23°C) SAE 10W-30 Or 10W-40 API SG/CD Maximum Temperature  Less Than 60°F (16°C) SAE 5W-30 API SG/CD
Fluid Capacities
Application Quantity
Automatic Transmission

## 52,500 MILE (84,000 KM) SERVICE

52,500 MILE (84,000 KM) SERVICE

Service Or Inspect	
Verify Last Major Service Was Performed	
Change Engine Oil	
Lubrication Specifications	
Application Specificat:  Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)	CD CD
Fluid Capacities	
Application Quant:	∟ty
Engine Oil (Including Filter) 4.5 Qts. (4.3	L)

## 60,000 MILE (96,000 KM) SERVICE

60,000 MILE (96,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Fuel Hoses
Disc Brake Pads
Brake Hoses
Ball Joint & Steering Linkage Seals
Exhaust System

L _L _	
Drive Belt For Generator	
Drive Shaft Boots	
Replace	
Engine Oil & Filter	
Air Cleaner Filter	
Spark Plugs	
Camshaft Timing Belt	
Automatic Transaxle Fluid	
Engine Coolant	
Lubrication Specifications	
Application Specification	
Automatic Transaxle	
Fluid Capacities	
Application Quantity	
Automatic Transmission	
(1) - Includes heater and coolant reserve system.	
Service Labor Times	
Application Hours	
3.0L SOHC	

## 67,500 MILE (108,000 KM) SERVICE

67,500 MILE (108,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Change Engine Oil
Lubrication Specifications

Application	Specification
Greater Than -10°F (-23°C) Maximum Temperature	SAE 20W-50 API SG/CD SAE 10W-30 Or 10W-40 API SG/CD  SAE 5W-30 API SG/CD
Fluid Capacities	
Application	Quantity
Engine Oil (Including Filter)	4.5 Qts. (4.3L)

# 75,000 MILE (120,000 KM) SERVICE

75,000 MILE (120,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Disc Brake Pads
Brake Hoses
Drive Shaft Boots
Automatic Transaxle Fluid Level
Replace
Engine Oil & Filter
Lubrication Specifications
Application Specification
Automatic Transaxle Diamond ATF Or Equivalent Engine Oil  Minimum Temperature  Greater Than 32°F (0°C) SAE 20W-50 API SG/CD  Greater Than -10°F (-23°C) SAE 10W-30 Or 10W-40 API SG/CD  Maximum Temperature  Less Than 60°F (16°C) SAE 5W-30 API SG/CD
Fluid Capacities
Application Quantity
Automatic Transmission
Service Labor Times
Application Hours
3.0L SOHC

## 82,500 MILE (132,000 KM) SERVICE

82,500 MILE (132,000 KM) SERVICE

Service Or Inspect	
Verify Last Major Service Was Performed	
Change Engine Oil	
Lubrication Specifications	
Application Specification	
Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)	
Fluid Capacities	
Application Quantity	
Engine Oil (Including Filter) 4.5 Qts. (4.3L)	

## 90,000 MILE (144,000 KM) SERVICE

90,000 MILE (144,000 KM) SERVICE

Servi	ice Or Inspect
Verit	fy Last Major Service Was Performed
Drive	e Belt For Generator
Fuel	Hoses
Disc	Brake Pads
Brake	e Hoses
Ball	Joint & Steering Linkage Seals
Drive	e Shaft Boots
Exhau	ust System
Repla	ace
Engir	ne Oil & Filter
Air	Cleaner Filter
Spark	k Plugs (SOHC Engine Only)
Autor	matic Transaxle Fluid
Engir	ne Coolant

Lubrication Specifications
Application Specification Specification
Automatic Transaxle Diamond ATF Or Equivalent Engine Coolant Ethylene Glycol-Based Antifreeze Coolant Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)
Fluid Capacities
Application Quantity
Automatic Transmission       7.9 Qts. (7.5L)         Cooling System (1)       8.5 Qts. (8.0L)         Engine Oil (Including Filter)       4.5 Qts. (4.3L)
(1) - Includes heater and coolant reserve system.
Service Labor Times
Application Hours
3.0L SOHC

# 97,500 MILE (156,000 KM) SERVICE

97,500 MILE (156,000 KM) SERVICE

Service Or Inspect	
Verify Last Major Service Was Performed	
Change Engine Oil	
Lubrication Specifications	
Application Specification	
Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)	
Fluid Capacities	
Application Quantity	
Engine Oil (Including Filter) 4.5 Qts. (4.3L)	

## 105,000 MILE (168,000 KM) SERVICE

Service Or Inspect	
Verify Last Major Service Was Performed	
Disc Brake Pads	
Brake Hoses	
Drive Shaft Boots	
Automatic Transaxle Fluid Level	
Replace	
Engine Oil & Filter	
Lubrication Specifications	
Application Specification	
Automatic Transaxle Diamond ATF Or Equivalent Engine Oil	
Minimum Temperature Greater Than 32°F (0°C)	
Fluid Capacities	
Application Quantity	
Automatic Transmission	

## 112,500 MILE (180,000 KM) SERVICE

## 112,500 MILE (180,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Change Engine Oil
Lubrication Specifications
Application Specification
Engine Oil  Minimum Temperature  Greater Than 32°F (0°C)
Fluid Capacities
Application Quantity

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Engine Oil (Including Filter) ...... 4.5 Qts. (4.3L)
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## 120,000 MILE (192,000 KM) SERVICE

120,000 MILE (192,000 KM) SERVICE

Service Or Inspect	
Verify Last Major Service Was Performed	
Fuel Hoses	
Disc Brake Pads	
Brake Hoses	
Ball Joint & Steering Linkage Seals	
Exhaust System	
Drive Belt For Generator	
Drive Shaft Boots	
Replace	
Engine Oil & Filter	
Air Cleaner Filter	
Spark Plugs	
Camshaft Timing Belt	
Automatic Transaxle Fluid	
Engine Coolant	
Lubrication Specifications	
Application Specification	
Automatic Transaxle	
Less Than 60°F (16°C) SAE 5W-30 API SG/CD	
Fluid Capacities	
Application Quantity	
Automatic Transmission       7.9 Qts. (7.5L)         Cooling System (1)       8.5 Qts. (8.0L)         Engine Oil (Including Filter)       4.5 Qts. (4.3L)	
(1) - Includes heater and coolant reserve system.	

Service Labor Times			
Application	n Hours	3	
3.0L SOHC 3.0L DOHC			

## **LUBRICATION SPECIFICATIONS**

LUBRICATION SPECIFICATIONS TABLE

Application	Fluid Specifications
Automatic Transaxle	DOT 3 Or DOT 4
Minimum Temperature Greater Than 32°F (0°C) Greater Than -10°F (-23°C) SAE Maximum Temperature	
Less Than 60°F (16°C)	

## **FLUID CAPACITIES**

FLUID CAPACITIES TABLE

Application	Quantity
A/C System R-12 Refrigerant 1992-93	
1994 Automatic Transmission 7.9 Cooling System (2) 8.5	Qts. (7.5L) Qts. (8.0L) Qts. (4.3L) Qts. (0.9L) Qts. (1.5L)
Power Steering (2WS) 0.95	
<ul><li>(1) - Use of R-12 in a R134a system will result in SEV</li><li>(2) - Includes heater and coolant reserve system.</li><li>(3) - Includes filter.</li></ul>	ERE DAMAGE.