MAINTENANCE INFORMATION

1998 Mitsubishi Montero

1997-98 MAINTENANCE
Mitsubishi Maintenance Information

Montero Sport

* PLEASE READ THIS FIRST *

NOTE: For scheduled maintenance intervals and the related fluid capacities, fluid specifications and labor times for major service intervals, see SCHEDULED SERVICES article below:

* SCHEDULED SERVICES

Warranty information and specifications for fluid capacities, lubrication specifications, wheel and tire size, and battery type are covered in this article.

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)	J	A	4	F	J	4	3	E	1	H	J	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

1 - Manufacturing Country
J * Japan

2 - Manufacturer
A * Mitsubishi Motor Corp.

3 - Vehicle Type
4 * Multi-Purpose Vehicle

4 - GVW & Brake Type
M * 5001-6000 Lbs., Hydraulic Brakes

5 - Vehicle Line
R * Montero

6 - Vehicle Series
4 * High
5 * Premium

7 - Body Type
1 * 5-Door Wagon

8 - Engine Type
  M * 3.5L V6

9 - VIN Check Digit
     * 1 Through 9 Or X

10 - Vehicle Model Year
  V * 1997
  W * 1998

11 - Assembly Plant
  J * Nagoya, Japan

12-17 - Serial Number
     * Sequential Production Number

MAINTENANCE SERVICE INFORMATION

SEVERE & NORMAL SERVICE DEFINITIONS

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)

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

* Driving In Dusty Conditions
* Towing A Trailer, Police, Taxi, Or Commercial Type Operation
* Extensive Idling, Driving In Stop And Go Traffic
* Short-Trip Operation At Freezing Temperatures (Engine Not Thoroughly Warmed Up)
* Driving In Sandy Areas
* Driving In Salty Areas
* More Than 50% Operation In Heavy City Traffic Or At Sustained High Speeds During Hot Weather Above 90°F (32°C)
* Driving On Off-Road

CAMSHAFT TIMING BELT

Replace the camshaft timing belt every 60,000 miles. It is recommended that the timing belt be inspected every 30,000 miles after replacement.

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

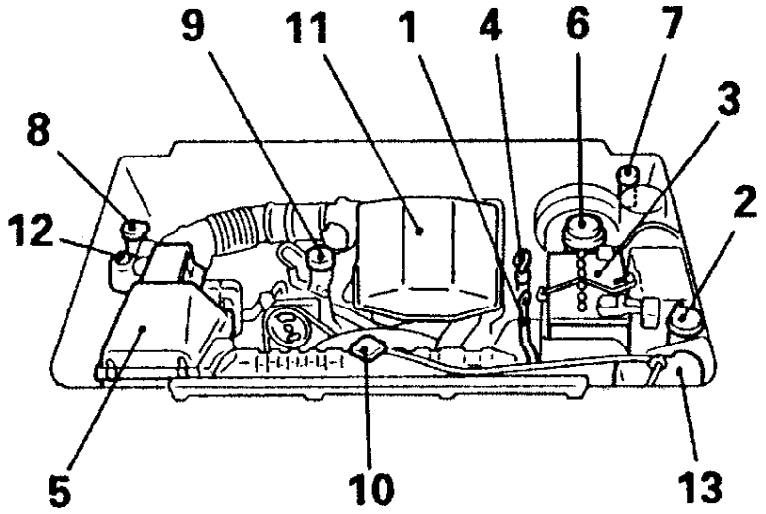
The condition of camshaft drive belts should always be checked on vehicles which have more than 50,000 miles. Although some manufacturers do not recommend belt replacement at a specified mileage, others require it at 60,000-100,000 miles. A camshaft drive belt failure may cause extensive damage to internal 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

SERVICE POINT LOCATIONS



1 – Engine oil level dipstick
2 – Windshield washer reservoir
3 – Battery
4 – Automatic transmission fluid level dipstick (vehicles with an automatic transmission)
5 – Air cleaner filter
6 – Brake fluid reservoir
7 – Clutch fluid reservoir (vehicles with a manual transmission)
8 – Headlight washer reservoir (if so equipped)
9 – Engine oil filler cap
10 – Radiator cap
11 – Spark plug
12 – Power steering fluid reservoir
13 – Engine coolant reservoir

50G12894

Fig. 1: Service Point Locations
Courtesy of Mitsubishi Motor Sales of America.

INFORMATION LABEL LOCATIONS

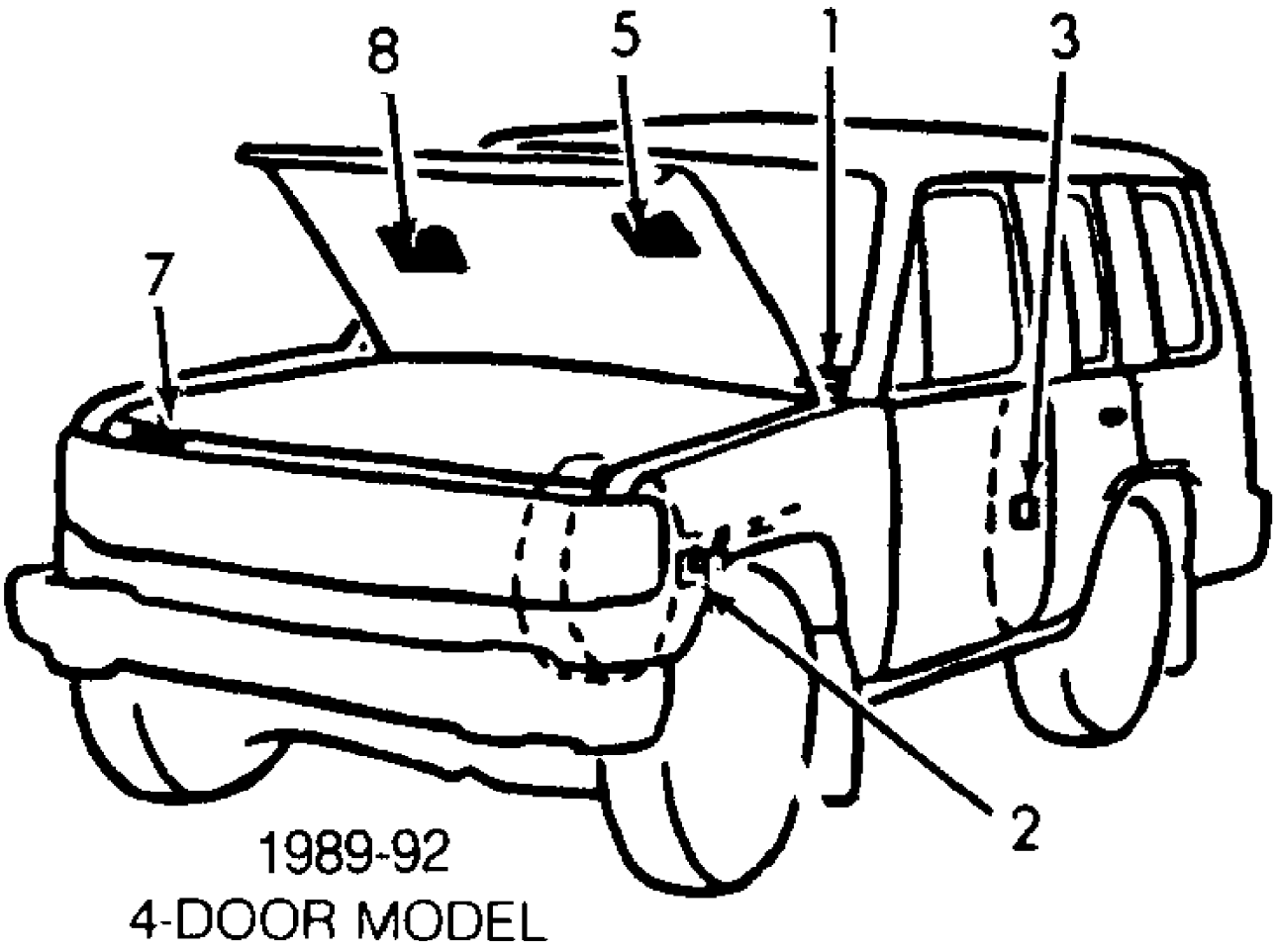


Fig. 2: Information Label Locations
Courtesy of Mitsubishi Motor Sales of America.

LUBRICATION SPECIFICATIONS

LUBRICATION SPECIFICATIONS TABLE

Material	Condition	Specification

Engine Oil (1)	Ambient Temperature Less Than 0°F (-18°C) To 100°F (38°C)	SAE 5W-30
	Ambient Temperature Above 0°F (-18°C) To Over 100°F (38°C)	SAE 10W-30
Power Steering Fluid	All	Automatic Transmission Fluid DEXRON II
Engine Coolant	All	50/50 Mixture Of Distilled Water & Ethylene Glycol
Transfer Case	All	API Classification GL-4 SAE 75W-85W Or 75W-90
Front Axle	All	API Classification GL-5 Or Higher (2)
Clutch Fluid	All	DOT 3 Or DOT 4
Hook Lock Catch, Door Lock Strikers Seat Adjust-ers, Backdoor Lock, Parking Brake Cable Mechanism	All	Multipurpose Grease NLGI Grade 2
Front Wheel Bearings	All	Multipurpose Grease NLGI Grade 2 Or Equivalent
Door Hinges, Back Door Hinges	All	Engine Oil
A/C Refrigerant	All	HFC-134a
Manual Transmission	All	API Classification GL-4 SAE 75W-85W Or 75W-90
Automatic Transmission	All	"ATF DEXRON II" Or Equivalent
Brake Fluid	All	DOT 3 Or DOT 4
Rear Axle	All	API Classification GL-5 Or Higher (2)

(1) - SAE 5W-30 engine oil is preferred. SAE 10W-30 may be used if the Ambient Temperature is above 0° F (-18° C).
(2) - SAE90, 85W-90, 80W-90 may be used in temperatures above -10° F (-23° C). SAE 80W, 80W-90 may be used in temperatures from -30° F (-34° C) to -10° F (-23° C). SAE 75W may be used in temperatures below -30° F (-34° C).

FLUID CAPACITIES

FLUID CAPACITIES TABLE (1)

Item	Condition	Specification
Engine Oil (1)	Oil Pan	4.5 Qts. (4.3L)
	Oil Filter	0.32 Qts. (0.3L)
	Oil Cooler	0.32 Qts. (0.3L)
Power Steering	Drained	1.1 Qts. (1.0L)
Automatic Transmission	Drained	8.9 Qts. (8.5L)
Manual Transmission	Drained	3.3 Qts. (3.2L)
Transfer Case	Drained	2.6 Qts. (2.5L)
Front Axle	Drained	1.3 Qts. (1.2L)
Rear Axle	Drained	3.3 Qts. (3.2L)
A/C Refrigerant	Drained	27 oz (760 g)
Fuel Tank	Capacity	24 gal (92L)

(1) - Capacities are recommended or calculated levels. Always use dipstick to measure level.

WHEEL & TIRE SPECIFICATIONS

Tire specifications are imprinted on the tire side wall. The recommended cold tire inflation pressures are listed on a label attached to the rear face of the driver's door. These pressures provide the best combination of ride comfort, tire wear and stability under normal conditions.

CAUTION: DO NOT mix tires of different design such as radial ply with bias or bias-belted tires. Mixing tire types will adversely affect road handling and may lead to loss of vehicle control. When using snow tires, they must be used in set of four for maneuverability and safety. DO NOT use tire chains on front wheels.

TIRE & WHEEL SPECIFICATIONS TABLE

Wheel Size	Tire Size
15 x 6JJ (Steel or Aluminum)	P235/75R15
15 X 7JJ (Aluminum)	P265/70R15

WHEEL TIGHTENING

Tighten wheel lug nuts to 72-87 ft. lbs. (100-120 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 COMPUTER RELEARN PROCEDURES article in the GENERAL INFORMATION Section.

Battery is maintenance-free and does not normally require additional water. However, under severe conditions it is advisable to check battery fluid periodically. Use only distilled water to fill battery cell should it become necessary to add water. Charge condition can be checked by a visual test indicator on top of battery.

CAUTIONS & WARNINGS

SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)

NOTE: See the AIR BAGS 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: Service on or around Air Bag System Components or Wiring must be preformed only by an authorized Suzuki dealer. Please observe all WARNINGS and SERVICE PRECAUTIONS.

WARNING: Technical service work must be started at least 90 seconds after the ignition switch is turned to the LOCK position and the cable is disconnected from the battery.

WARNING: Never attempt to disassemble or repair the passenger air bag (inflator) module. If any abnormality is found, be sure to replace it with new one as an assembly.

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 EQUIPMENT 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

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.

AIR CLEANER FILTER

WARNING: Operating the engine with the air cleaner off can cause you or others to be burned. The air cleaner not only cleans the air, it stops flame if the engine backfires. Do not drive with it off, and be careful working on the engine with the air cleaner off.

ANTI-LOCK BRAKE SYSTEM

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.

AUTOMATIC TRANSAXLE SERVICE

WARNING: Make certain that no fluid is spilled when the transaxle fluid is inspected, or when fluid is added soon after driving (since the engine is hot). If the fluid spills onto the exhaust manifold, there is danger of fire.

BATTERY SERVICE

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 COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION section.

WARNING: Batteries produce flammable hydrogen gas. Keep flames and sparks away from the battery or and explosion may occur. Never smoke when working in the vicinity of the battery.

WARNING: When checking or servicing the battery, disconnect the negative cable. Be careful not to cause a short circuit by

allowing metal objects to contact the battery posts and the vehicle at the same time.

CAUTION: Never disconnect the battery while the engine is running; doing so could damage the car's electrical components.

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.

BRAKE FLUID

WARNING: DO NOT use reclaimed fluid or fluid that has been stored in old or open containers. It is essential that foreign particles and other liquids are kept out of the brake fluid reservoir.

CATALYTIC CONVERTER

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

ENGINE COOLANT SERVICE

WARNING: To avoid the danger of being scalded never change the coolant when the engine is hot.

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

CAUTION: When adding or replacing engine coolant, use a high quality ethylene glycol antifreeze diluted with 50% distilled water. When putting the cap on the reserve tank, line up the arrow on the cap and the arrow on the tank, or coolant can leak out

ENGINE DRIVE BELT SERVICE

WARNING: Be sure the ignition key is OFF. The engine could rotate unexpectedly.

ENGINE OIL

WARNING: The engine oil may be high enough to burn your fingers when the drain plug is loosened. Wait until the drain plug is cool enough to touch with you bare hands.

WARNING: Continuous contact with used engine oil has been found to cause skin cancer in laboratory animals. Brief contact with used engine oil may irritate skin. To minimize your exposure to used oil, wear a long sleeve shirt and moisture-proof gloves when changing oil. If oil contacts your skin, wash

thoroughly with soap and water.

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

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.

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.

FUSES & CIRCUIT BREAKERS

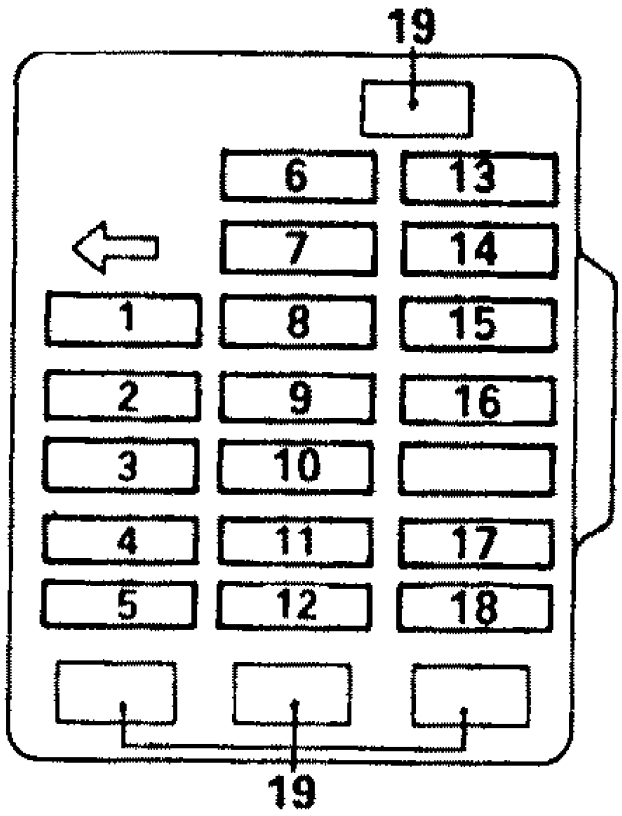
FUSE PANEL LOCATION

The electrical system is protected against shorts by fuses that are designed to fail, to prevent damage to the wire harness. The fuse block is located under the instrument panel on the driver’s side. If a fuse is blown, locate the cause before replacing the fuse. Spare fuses are contained in the fuse block.

FUSE PANEL IDENTIFICATION

Fuse & Circuit Breaker Identification

PASSENGER COMPARTMENT



Passenger compartment

1 –	15A	Cigarette lighter
2 –	10A	(Radio)
3 –	10A	Heater relay
4 –	10A	4A/T (vehicles with an automatic transmission only)
5 –	20A	(Front and rear air conditioner)

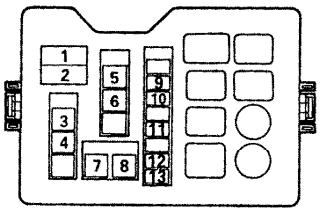
50H12895

Fig. 3: Passenger Compartment Fuse Box
Courtesy of Mitsubishi Motor Sales of America.

1 - 15 Amp (Light Blue)
Cigarette Lighter

2 - 10 Amp (Red)
Radio
3 - 10 Amp (Red)
Heater Relay
4 - 10 Amp (Red)
4A/T
5 - 20 Amp (Yellow)
Front & Rear Air Conditioner
6 - 10 Amp (Red)
Turn Signals
7 - 10 Amp (Red)
Meters
8 - 10 Amp (Red)
Horn
9 - 15 Amp (Light Blue)
Wiper
10 - 10 Amp (Red)
Power Window Control
11 - 10 Amp (Red)
Four Wheel Drive System, Overdrive Control (Vehicles With Automatic Transmission Only)
12 - 15 Amp (Light Blue)
Power Door Locks
13 - 10 Amp (Red)
Doom Light, Clock
14 - 15 Amp (Light Blue)
Backup Lights
15 - 15 Amp (Light Blue)
Stoplights
16 - 25 Amp
Heater
17 - 15 Amp (Light Blue)
Accessory Socket
18 - 10 Amp (Red)
Rear Heater
19 - Spare Fuse

ENGINE COMPARTMENT



Fusible Links
1 - 60A Battery
2 - 100A Alternator
3 - 20A Multi-point injection
4 - 40A Igntion switch
5 - 30A Rear window deffoger
6 - 30A Power window control
7 - 30A (Air conditioner)
8 - 40A Lights

Fuses
9 - 10A (Aircon compressor)
10 - 25A Condenser fan
11 - 10A Tail lights
12 - 10A Headlight upper beam
13 - 10A Hazard warning flashers
( ): indicates optional equipment

50J12897

Fig. 4: Engine Compartment Fusible Links
Courtesy of Mitsubishi Motor Sales of America.

1 - 60 Amp
Battery
2 - 100 Amp
Alternator
3 - 20 Amp (Yellow)
Multipoint Injection
4 - 40 Amp
Ignition Switch
5 - 30 Amp (Green)
Rear Window Defogger
6 - 30 Amp (Green)
Power Window Control
7 - 30 Amp (Green)
Air Conditioner
8 - 40 Amp
Lights
9 - 10 Amp (Red)
AIR CONDITIONING & HEAT Compressor
10 - 25 Amp
Condenser Fan
11 - 10 Amp (Red)
Tail Lights
12 - 10 Amp (Red)
Headlight Upper Beam
13 - 10 Amp (Red)
Hazard Warning Flashers