

**SCHEDULED MAINTENANCE INTERVALS**  
Mitsubishi—Diamante, Eclipse, Galant, Mirage, Lancer & Sportback

TO BE SERVICED	TYPE OF SERVICE	VEHICLE MILEAGE INTERVAL (x1000)													
		7.5	15	22.5	30	37.5	45	52.5	60	67.5	75	82.5	90	97.5	105
EVAP system (except canister)	S1									✓					
Fuel system (hoses, pipe lines, connections & fuel tank filter tube cap)	S1									✓					

R: Replace      S1: Service or inspect

**FREQUENT OPERATION MAINTENANCE (SEVERE SERVICE)**

If a vehicle is operated under any of the following conditions it is considered severe service

- Extremely dusty or sandy areas.
- Excessive use of brakes while driving.
- 80% or more of the vehicle operation is in 30° (90°F) or higher temperatures, or constant operation in temperatures below 0°C (32°F).
- Frequent idling (vehicle operation in stop and go traffic).
- Frequent short running periods (engine does not warm to normal operating temperature).
- Pulling, hook, delivery usage or trailer towing usage.

Oil & oil filter: change every 2000 miles.

Use brake pads: service or inspect over 8000 miles.

Air filter element: service or inspect every 15,000 miles.

Automatic transaxle fluid & filter: replace every 18,000 miles.

Spark plugs: replace every 15,000 miles.

Manual transaxle oil (including transfer/Lancer Evolution): replace every 35,000 miles.

## PRECAUTIONS

Before servicing any vehicle, please be sure to read all of the following precautions, which deal with personal safety, prevention of component damage, and important points to take into consideration when servicing a motor vehicle:

- Never open, service or drain the radiator or cooling system when the engine is hot; serious burns can occur from the steam and hot coolant.
- Observe all applicable safety precautions when working around fuel. Whenever servicing the fuel system, always work in a well-ventilated area. Do not allow fuel spray or vapors to come in contact with a spark, open flame, or excessive heat (a hot drop light, for example). Keep a dry chemical fire extinguisher near the work area. Always keep fuel in a container specifically designed for fuel storage; also, always properly seal fuel containers to avoid the possibility of fire or explosion. Refer to the additional fuel system precautions in this section.
- Fuel injection systems often remain pressurized, even after the engine has been turned **OFF**. The fuel system pressure must be relieved before disconnecting any fuel lines. Failure to do so may result in fire and/or personal injury.
- Brake fluid often contains polyglycol ethers and polyglycols. Avoid contact with the eyes and wash your hands thoroughly after handling brake fluid. If you do get brake fluid in your eyes, flush your eyes with clean, running water for 15 minutes. If

eye irritation persists, or if you have taken brake fluid internally, **IMMEDIATELY** seek medical assistance.

- The EPA warns that prolonged contact with used engine oil may cause a number of skin disorders, including cancer. You should make every effort to minimize your exposure to used engine oil. Protective gloves should be worn when changing oil. Wash your hands and any other exposed skin areas as soon as possible after exposure to used engine oil. Soap and water, or waterless hand cleaner should be used.
- All new vehicles are now equipped with an air bag system. The system must be disabled before performing service on or around system components, steering column, instrument panel components, wiring and sensors. Failure to follow safety and disabling procedures could result in accidental air bag deployment, possible personal injury, and unnecessary system repairs.
- Always wear safety goggles when working with, or around, the air bag system. When carrying a non-deployed air bag, be sure the bag and trim cover are pointed away from your body. When placing a non-deployed air bag on a work surface, always face the bag and trim cover upward, away from the surface. This will reduce the motion of the module if it is accidentally deployed. Refer to the additional air bag system precautions later in this section.
- Clean, high quality brake fluid from a sealed container is essential to the safe and

proper operation of the brake system. You should always buy the correct type of brake fluid for your vehicle. If the brake fluid becomes contaminated, completely flush the system with new fluid. Never reuse any brake fluid. Any brake fluid that is removed from the system should be discarded. Also, do not allow any brake fluid to come in contact with a painted surface; it will damage the paint.

- Never operate the engine without the proper amount and type of engine oil; doing so will result in severe engine damage.
- Timing belt maintenance is extremely important. Many models utilize an interference-type, non-freewheeling engine. If the timing belt breaks, the valves in the cylinder head may strike the pistons, causing potentially serious (also time-consuming and expensive) engine damage. Refer to the maintenance interval charts in the front of this section for the recommended replacement interval for the timing belt, and to the timing belt procedure for belt replacement and inspection.
- Disconnecting the negative battery cable on some vehicles may interfere with the functions of the on-board computer system(s) and may require the computer to undergo a relearning process once the negative battery cable is reconnected.
- When servicing drum brakes, only disassemble and assemble one side at a time, leaving the remaining side intact for reference.

## ENGINE REPAIR

⚠ **Disconnecting the negative battery cable on some vehicles may interfere with the functions of the on board computer systems and may require the computer to undergo a relearning process, once the negative battery cable is reconnected.**

### Distributor

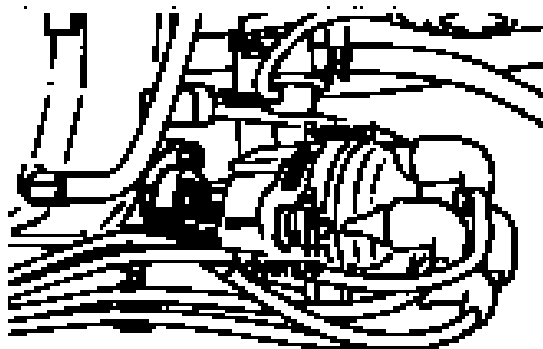
#### REMOVAL

Before removing the distributor, position No. 1 cylinder at TDC on the compression stroke and align the timing marks.

1. Before servicing the vehicle, refer to the precautions at the beginning of this section.
2. Remove or disconnect the following:
  - Negative battery cable

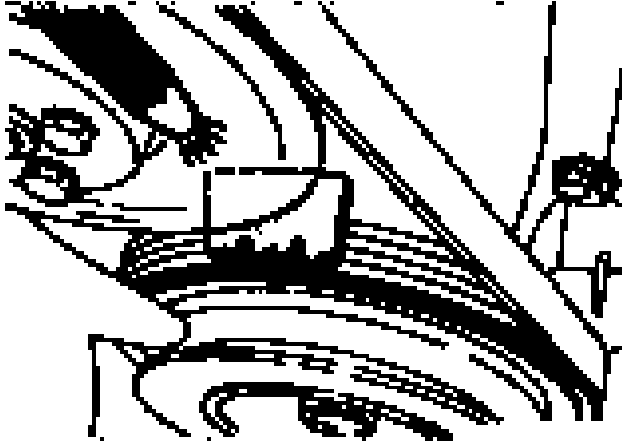
- Ignition wire cover, if equipped
- Distributor harness connector
- Distributor cap with all ignition wires still connected
- Coil wire, if necessary

3. Matchmark the rotor to the distributor housing, and the distributor housing to the engine.
4. Remove or disconnect the following:
  - Hold-down nut



7923PG01

Adjusting the distributor—1.5L Mirage shown



7923PG02

Checking the ignition timing—1.5L Mirage shown

- Distributor from the engine

### INSTALLATION

#### Timing Not Disturbed

1. Install or connect the following:
  - New distributor housing O-ring and lubricate with clean oil
  - Distributor in the engine, match-marks aligned
  - Hold-down nut
  - Distributor harness connectors
  - Distributor cap
  - Coil wire, if removed
  - Negative battery cable
2. Adjust the ignition timing and tighten the hold-down nut to 96 inch lbs. (11 Nm).

#### Timing Disturbed

1. Install a new distributor housing O-ring and lubricate with clean oil.
2. Position the engine so the No. 1 piston is at TDC of its compression stroke and the mark on the vibration damper is aligned with **O** on the timing indicator.
3. Align the distributor housing and gear mating marks. Install the distributor in the engine so the slot or groove of the distributor's installation flange aligns with the distributor installation stud in the engine block. Be sure the distributor is fully seated. Inspect alignment of the distributor rotor making sure the rotor is aligned with the position of the No. 1 ignition wire in the distributor cap.
4. Install or connect the following:
  - Hold-down nut
  - Distributor harness connectors
  - Distributor cap
  - Negative battery cable
5. Adjust the ignition timing and tighten the hold-down nut to 96 inch lbs. (11 Nm).

### Alternator

#### REMOVAL

##### 1.5L, 1.8L, and 2.4L Engines

1. Before servicing the vehicle, refer to the precautions at the beginning of this section.
2. Remove or disconnect the following:
  - Negative battery cable

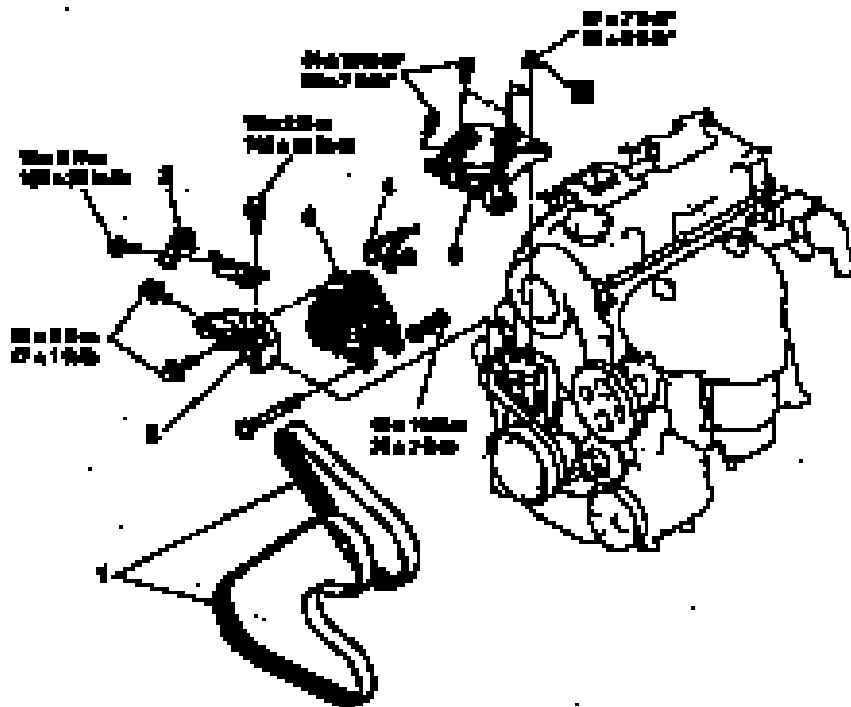
- Left side cover panel under the vehicle
- Air intake hose, on turbocharged Galant models
- Drive belts
- Water pump pulleys
- Alternator upper bracket/brace
- Alternator wiring connectors
- Alternator mounting bolts and remove the alternator

##### 2.0L SOHC Engine

1. Before servicing the vehicle, refer to the precautions at the beginning of this section.
2. Remove or disconnect the following:
  - Negative battery cable
  - Drive belts
  - Power steering hose clamp
  - Alternator brace
  - Alternator electrical connector
  - Engine mount, on vehicles with Anti-lock Brake Systems (ABS)
  - Alternator, tilting the engine as necessary

##### 2.0L DOHC Turbo Engine

1. Before servicing the vehicle, refer to the precautions at the beginning of this section.



1. DRIVE BELT
2. POWER STEERING HOSE CLAMP
3. DISTRIBUTOR BRACE

4. ALTERNATOR ELECTRICAL CONNECTOR
5. ENGINE MOUNT-ABSOLUTING WITH ABS
6. ALTERNATOR

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Exploded view of the alternator and related components—Lancer with 2.0L engine

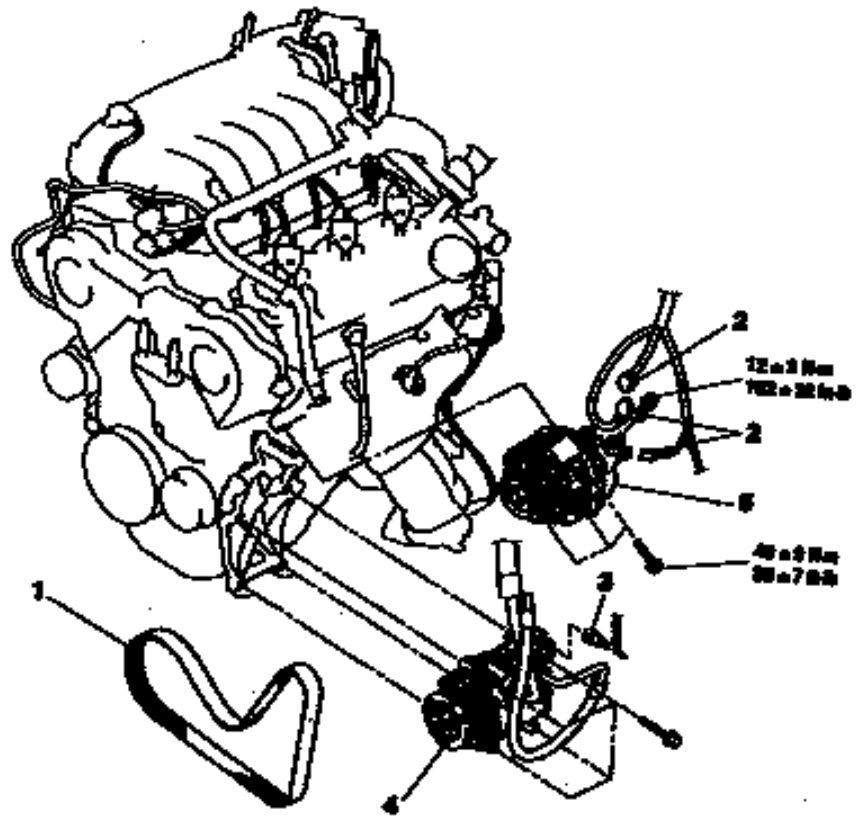
2. Disconnect the negative battery cable.
3. Remove the oil dipstick and tube assembly.
4. Disconnect the fuel pressure solenoid connector.
5. Disconnect the knock sensor connector.
6. Disconnect the evaporative emissions purge solenoid connector.
7. Disconnect the ground cable connection.
8. Remove the fuel injectors.
9. Remove the accessory drive belt.
10. Disconnect the alternator wiring harness.
11. Remove engine mounting bolt.
12. Raise the engine slightly with a floor jack and remove the alternator from the vehicle.

### 3.0L and 3.5L Engines

1. Before servicing the vehicle, refer to the precautions at the beginning of this section.
2. Remove or disconnect the following:
  - Negative battery cable
  - Air intake hose
  - Alternator drive belt
3. On California models, remove the rear bank converter assembly.
4. Remove the engine roll stopper stay bracket assembly.
5. On the 3.0L engine, disconnect the Exhaust Gas Recirculation (EGR) temperature sensor wire and remove the EGR pipe assembly.
6. On the 3.0L engine, remove the intake plenum stay bracket assembly.
7. Remove or disconnect the following:
  - Alternator wiring harness connectors
  - Alternator upper and lower mounting bolts
8. From beneath the vehicle, remove the alternator.

### 3.8L Engine

1. Before servicing the vehicle, refer to the precautions at the beginning of this section.
2. Disconnect the negative battery cable.
3. Remove the accessory drive belt.
4. Disconnect the alternator wiring harness.
5. Disconnect the A/C compressor assembly connector.
6. Remove the A/C compressor assembly from its mounting bracket with the A/C hose still connected and move off to one side.



1. Accessory drive belt
2. Alternator connectors
3. A/C compressor assembly connector
4. A/C compressor assembly
5. Alternator

Exploded view of the alternator and related components—3.8L engine

67170-GALA-G10

7. Remove the alternator from under the vehicle.

### INSTALLATION

#### 1.5L, 1.8L, and 2.4L Engines

1. Position the alternator on the lower mounting fixture and install the lower mounting bolt and nut. Tighten nut just enough to allow for movement of the alternator.
2. Install or connect the following:
  - Alternator upper bracket/brace and connect the alternator electrical harness
  - Water pump pulleys
  - Drive belts and adjust to the proper tension

3. On turbocharged Galant models, install the air intake hose.
4. Install or connect the following:
  - Left side cover panel under the vehicle as required
  - Negative battery cable and check for proper operation

#### 2.0L SOHC Engine

1. Install or connect the following:
  - Alternator
  - Engine mount, if removed
  - Alternator connector
  - Alternator brace
  - Power steering hose clamp
  - Drive belts
  - Negative battery cable
2. Adjust drive belts.