

COOLING SYSTEM SPECIFICATIONS & ENGINE COOLING FANS

1998 Mitsubishi Montero

1997-98 ENGINE COOLING

Mitsubishi Specifications & Electric Cooling Fans

Diamante, Eclipse, Galant, Mirage, Montero, Montero Sport,
3000GT

SPECIFICATIONS

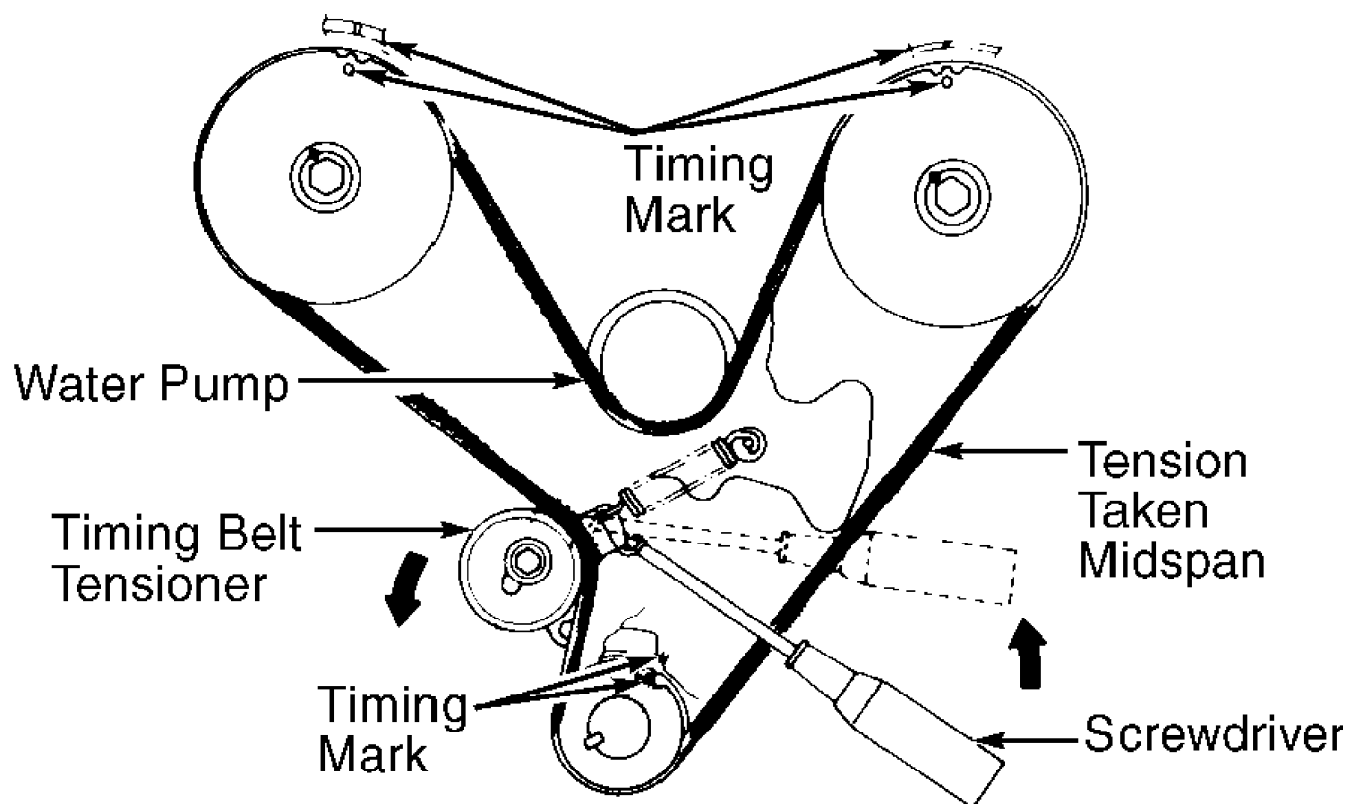
BELT ADJUSTMENT

NOTE: Use illustration for water pump drive belt routing. See Figs. 1-6. The terms alternator and generator are used interchangeably.

BELT ADJUSTMENT

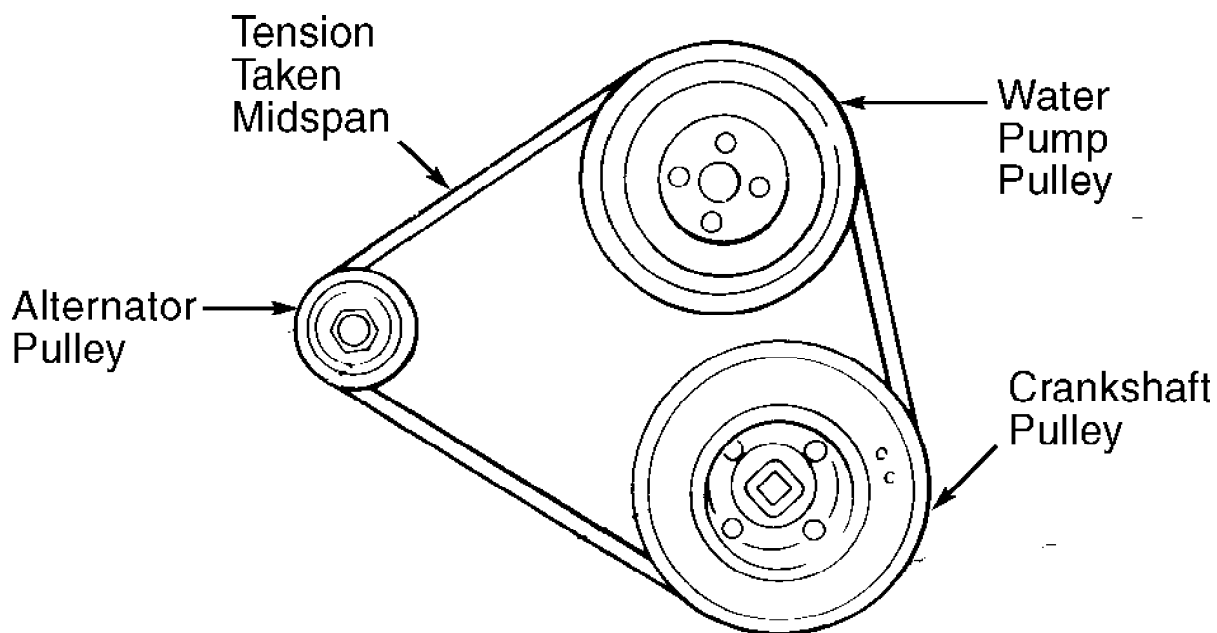
Application	Deflection (1)	In. (mm)
Diamante		(2)
Eclipse & Galant		
2.0L Non-Turbo		(2)
2.0L Turbo & 2.4L		
Generator & Water Pump	0.35-0.45	(9.0-11.4)
Water Pump & Power Steering	0.22-0.32	(5.6-8.1)
Mirage		
1.5L	0.34-0.45	(8.6-11.4)
1.8L		(2)
Montero		
A/C	0.26-0.30	(6.6-7.6)
Generator & Water Pump	(3) 0.22-0.26	(5.6-6.6)
Water Pump & Power Steering	0.54-0.70	(13.7-17.8)
Montero Sport		
2.4L		
A/C	0.24-0.26	(6.1-6.6)
Generator & Water Pump	(4) 0.28-0.35	(7.1-8.9)
Water Pump & Power Steering	0.22-0.30	(5.6-7.6)
3.0L		
A/C	0.22-0.26	(5.6-6.6)
Generator & Water Pump	(3) 0.20-0.27	(5.1-6.8)
Water Pump & Power Steering	0.52-0.68	(13.2-17.3)
3000GT		(3)

- (1) - With 22 lbs. (10 kg) pressure applied midway on belt run. Values are for a used belt.
- (2) - Water pump is driven by timing belt. Timing belt deflection is controlled by timing belt automatic tensioner.
- (3) - Measured between water pump pulley and crankshaft pulley.
- (4) - Measured between water pump pulley and generator pulley.



93H00221

Fig. 1: Routing Timing/Water Pump Belt (Diamante & 3000GT SOHC)
Courtesy of Mitsubishi Motor Sales of America.



93J00223

Fig. 2: Routing Alternator & Water Pump Belt (Eclipse - 2.0L Turbo & 2.4L, Galant & Mirage - 1.5L)
Courtesy of Mitsubishi Motor Sales of America.

Intake Camshaft Sprocket

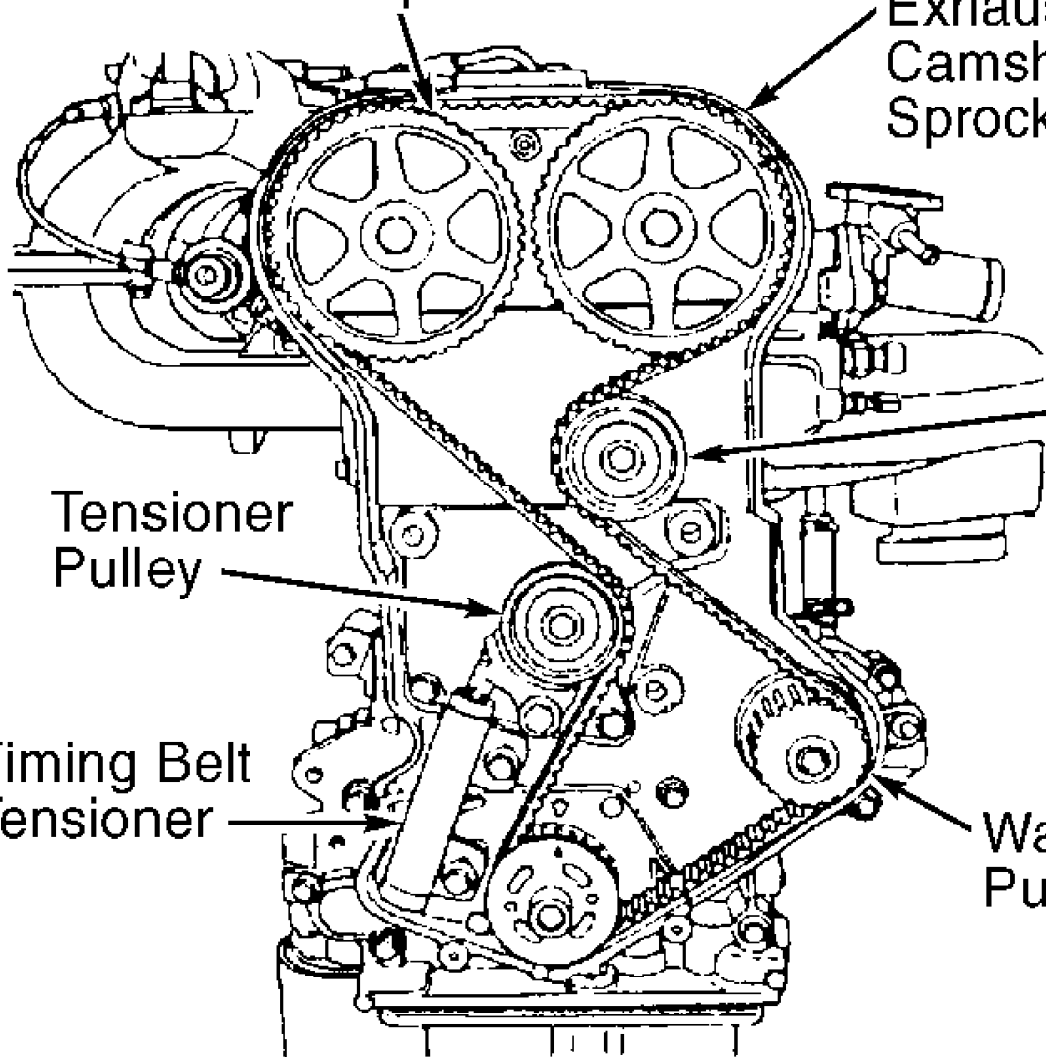
Exhaust
Camshaft
Sprocket

Idler
Pulley

Tensioner
Pulley

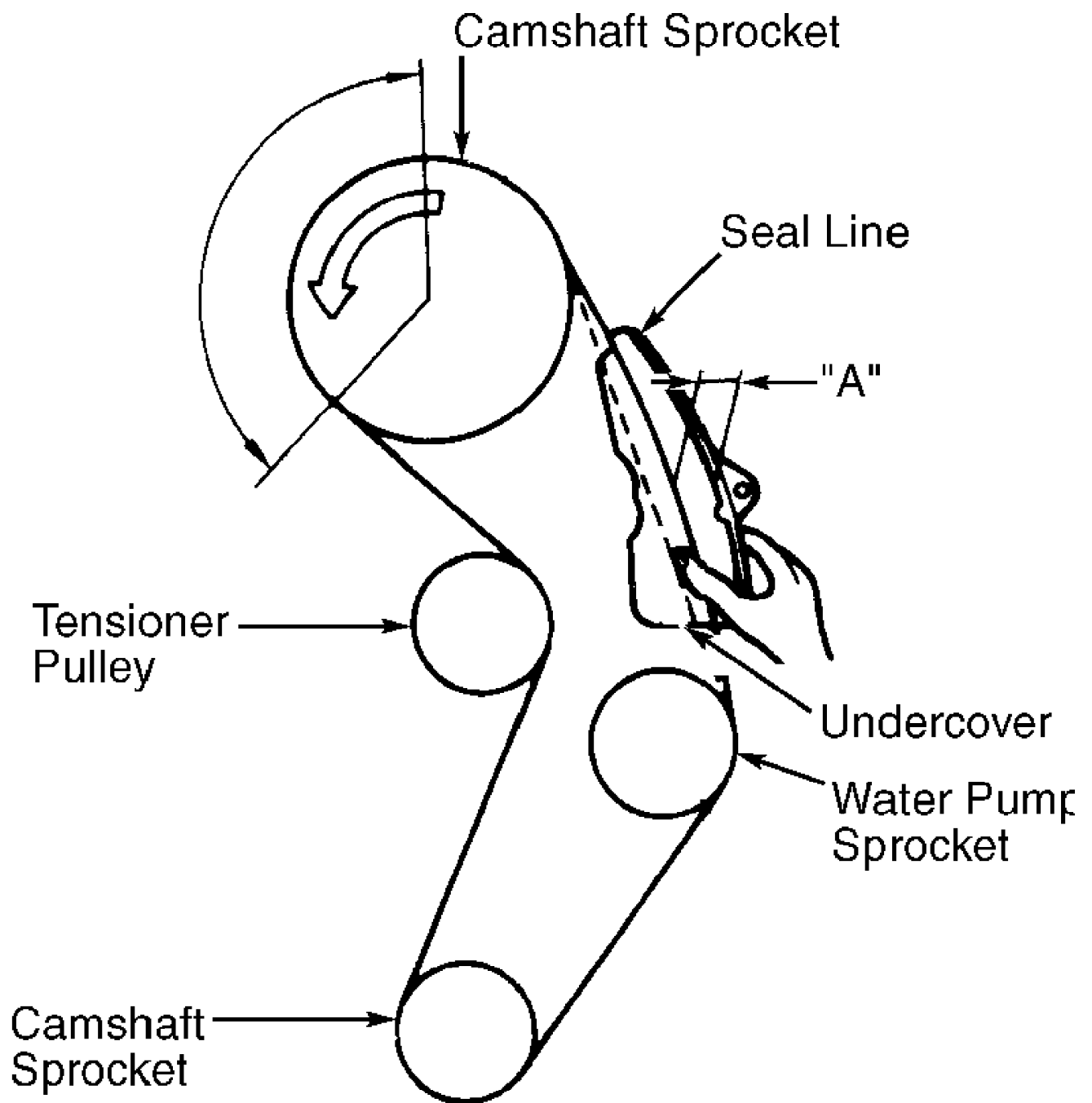
Timing Belt
Tensioner

Water Pump
Pulley



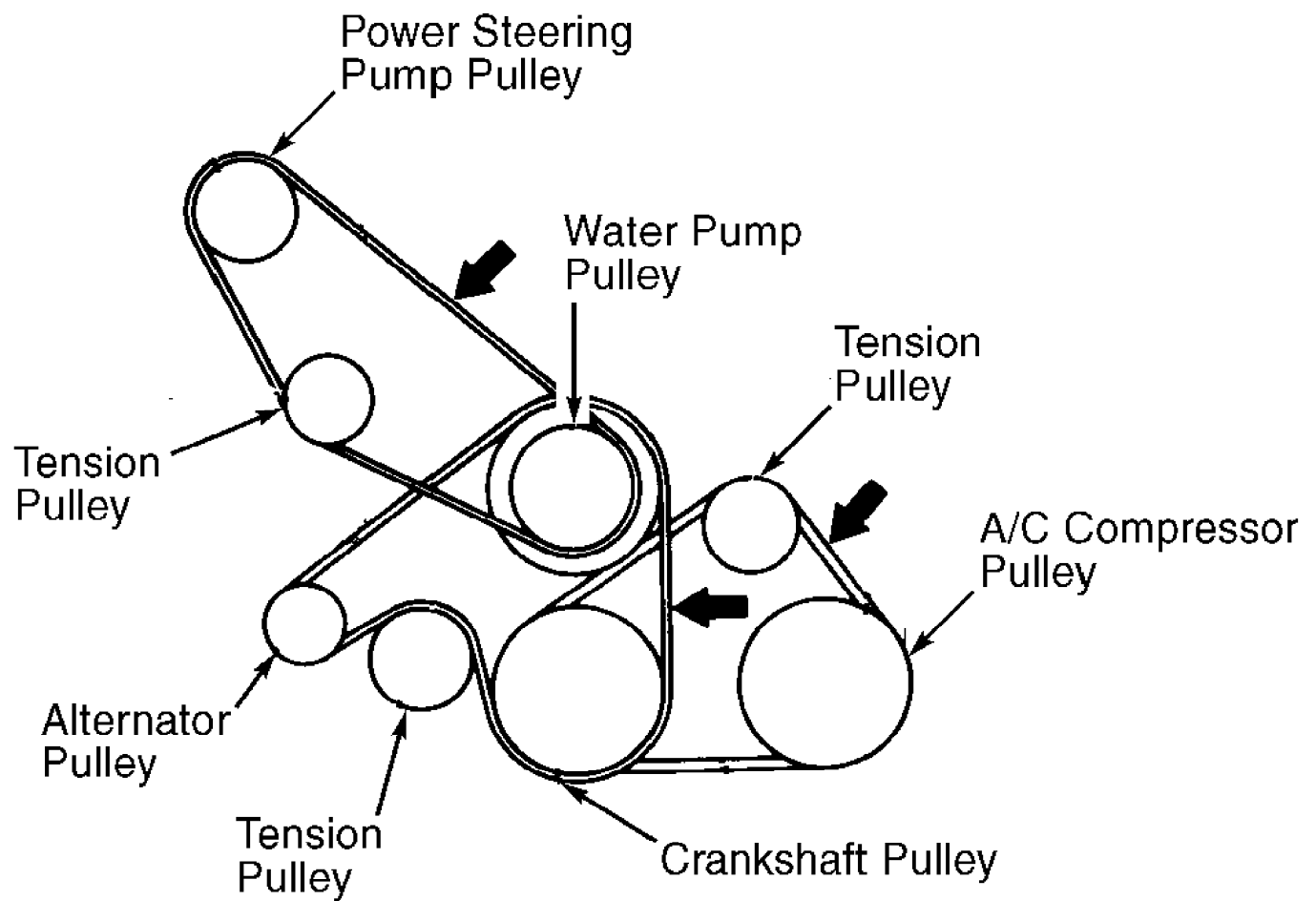
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Fig. 3: Routing Timing/Water Pump Belt (Eclipse - 2.0L Non-Turbo)
Courtesy of Mitsubishi Motor Sales of America.



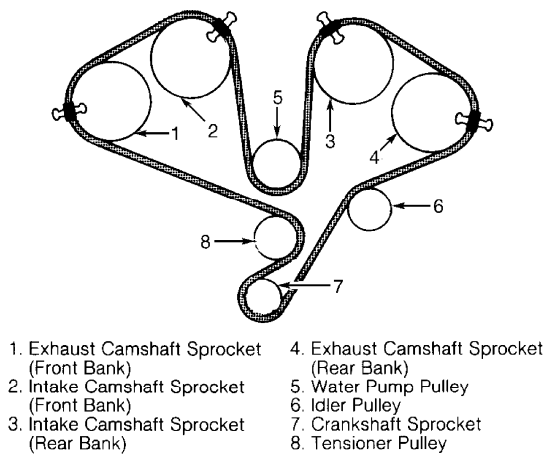
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Fig. 4: Routing Timing/Water Pump Belt (Mirage - 1.8L)
Courtesy of Mitsubishi Motor Sales of America.



94H46158

Fig. 5: Routing Accessory Drive Belts (Montero - 3.5L & Montero Sport - 3.0L; Montero Sport - 2.4L Similar)
Courtesy of Mitsubishi Motor Sales of America.



94F46156

Fig. 6: Routing Timing/Water Pump Belt (3000GT - DOHC)
Courtesy of Mitsubishi Motor Sales of America.

COOLING SYSTEM SPECIFICATIONS

COOLING SYSTEM SPECIFICATIONS

Application	Specification
Coolant Replacement Interval	30,000 Miles Or 24 Months
Coolant Capacity (Includes Heater & Reserve Tank)	
Diamante	10.0 Qts. (9.5L)
Eclipse	7.4 Qts. (7.0L)
Galant	7.4 Qts. (7.0L)
Mirage	
1.5L	5.3 Qts. (5.0L)
1.8L	6.3 Qts. (6.0L)
Montero	10.0 Qts. (9.5L)
Montero Sport	
2.4L	
With Rear Heater	9.5 Qts. (9.0L)
Without Rear Heater	8.5 Qts. (8.0L)
3.0L	
With Rear Heater	10.6 Qts. (10.0L)
Without Rear Heater	9.5 Qts. (9.0L)
3000GT	8.5 Qts. (8.0L)
Pressure Cap	
Except Eclipse 2.0L Non-Turbo	11-15 psi
Eclipse 2.0L Non-Turbo	14-18 psi
Thermostat Opens	
Diamante	
1997	
Starts To Open	180 °F (82 °C)
Fully Open	203 °F (95 °C)
1998	
Starts To Open	192 °F (89 °C)
Fully Open	203 °F (95 °C)
Eclipse	
2.0L Turbo & 2.4L	
Starts To Open	180 °F (82 °C)
Fully Open	203 °F (95 °C)
2.0L Non-Turbo	
Starts To Open	195 °F (90.5 °C)
Fully Open	216 °F (102 °C)
Galant	
Starts To Open	180 °F (82 °C)
Fully Open	203 °F (95 °C)
Mirage	
Starts To Open	177-183 °F (80.5-83.9 °C)
Fully Open	203 °F (95 °C)
Montero	
1997	
Starts To Open	180 °F (82 °C)
Fully Open	203 °F (95 °C)
1998	
Starts To Open	190 °F (88 °C)
Fully Open	212 °F (100 °C)
Montero Sport	
Starts To Open	177-183 °F (80.5-83.9 °C)
Fully Open	203 °F (95 °C)
3000GT (SOHC)	
Starts To Open	180 °F (82 °C)
Fully Open	203 °F (95 °C)
3000GT (DOHC)	
Starts To Open	170 °F (77 °C)
Fully Open	194 °F (90 °C)

ELECTRIC COOLING FAN

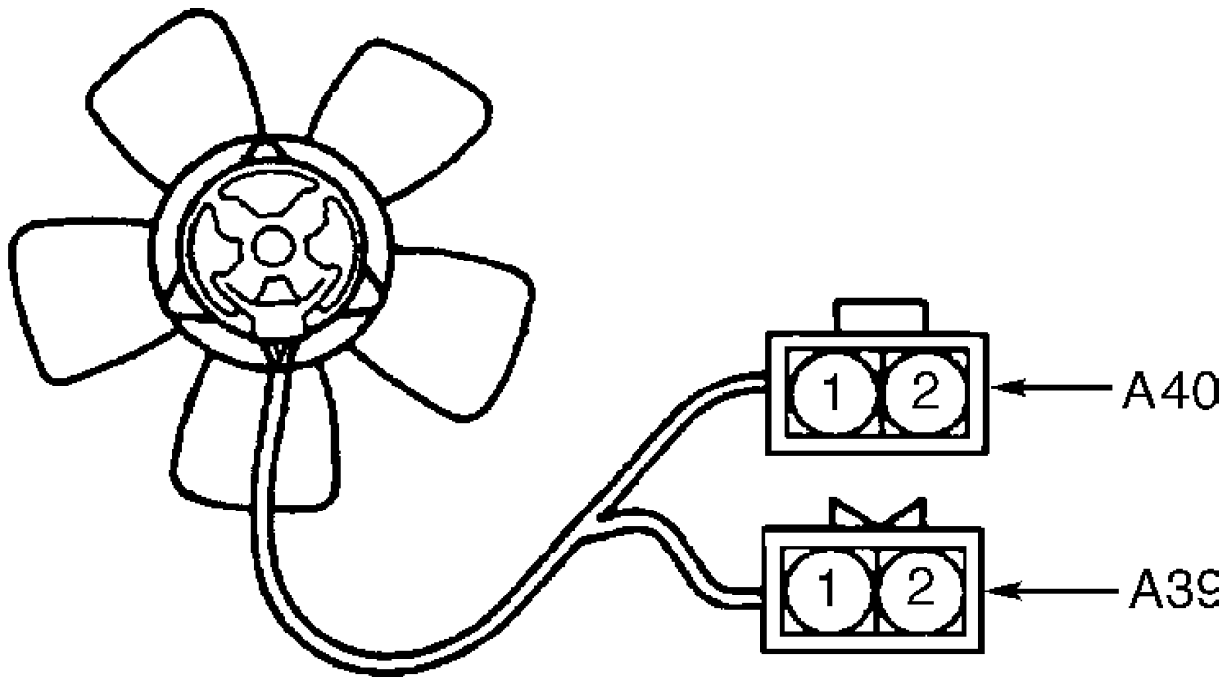
COMPONENT TESTING

Radiator Fan Motor (Diamante)

1) Disconnect radiator fan motor connectors A39 and A40. Ground fan motor connector A39 terminal No. 2 (Black wire). Using a fused jumper wire, connect battery voltage to fan motor connector A39 terminal No. 1 (Blue/Black wire). See Fig. 7. See WIRING DIAGRAMS. Fan motor should operate at low speed with no abnormal noises or interferences. Repair or replace components as necessary.

2) Ground fan motor connector A39 terminal No. 2 (Black wire) and connector A40 terminal No. 2 (Black wire). Using a fused jumper wire, connect battery voltage to fan motor connector A39 terminal No. 1 (Blue/Black wire). See Fig. 7. See WIRING DIAGRAMS. Fan motor should operate at medium speed with no abnormal noises or interferences. Repair or replace components as necessary.

3) Ground fan motor connector A39 terminal No. 2 (Black wire) and connector A40 terminal No. 2 (Black wire). Using 2 fused jumper wires, connect battery voltage to fan motor connector A39 terminal No. 1 (Blue/Black wire) and to connector A40 terminal No. 1 (Green wire). See Fig. 7. See WIRING DIAGRAMS. Fan motor should operate at high speed with no abnormal noises or interferences. Repair or replace components as necessary.



98C11058

Fig. 7: Testing Radiator Fan Motor (Diamante)
Courtesy of Mitsubishi Motor Sales of America.

Radiator Fan Motor (Eclipse)

1) Disconnect radiator fan motor 4-pin connector. Ground fan

motor connector terminal No. 2 (Black wire). Using a fused jumper wire, connect battery voltage to fan motor connector terminal No. 1 (White/Black wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

2) On all models except 1998 2.0L non-turbo, ground fan motor 4-pin connector terminal No. 4 (Black wire). Using a fused jumper wire, connect battery voltage to fan motor connector terminal No. 3 (White/Blue wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

Radiator Fan Motor (Galant)

1) Disconnect radiator fan motor 4-pin connector. Ground fan motor connector terminal No. 2 (Black wire). Using a fused jumper wire, connect battery voltage to fan motor connector terminal No. 1 (Blue wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary. If no problems exist, go to next step.

2) Ground fan motor 4-pin connector terminal No. 4 (Black wire). Using a fused jumper wire, connect battery voltage to fan motor connector terminal No. 3 (Blue/Black wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

Radiator Fan Motor (Mirage)

Disconnect radiator fan motor 2-pin connector. Ground fan motor 2-pin connector terminal No. 2 (Black wire). Using a fused jumper wire, connect battery voltage to 2-pin connector terminal No. 1 (Blue/Black wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

Radiator Fan Motor (3000GT)

1) Disconnect radiator fan motor 4-pin connector. Ground fan motor connector terminal No. 4 (Blue/Green wire). Using a fused jumper wire, connect battery voltage to fan motor connector terminal No. 2 (Red/Black wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary. If radiator fan motor operates as specified, go to next step.

2) Disconnect battery voltage and ground from radiator fan motor 4-pin connector. Using an ohmmeter, measure resistance between radiator fan motor 4-pin connector terminals No. 1 (Black wire) and No. 3 (Yellow/Blue wire). See WIRING DIAGRAMS. Resistance should be 0.29-0.35 ohms. Replace radiator fan motor if resistance is not as specified.

Condenser Fan Motor (Diamante)

1) Using a fused jumper wire, connect battery voltage to condenser fan motor 4-pin connector terminal No. 1 (Blue/White wire). Connect ground to connector terminal No. 2 (Black wire). Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary. If no problems exist, go to next step.

2) Using a fused jumper wire, connect battery voltage to condenser fan motor 4-pin connector terminal No. 3 (Yellow wire). When terminal No. 4 (Black wire) is connected to ground, condenser fan should operate faster. Replace condenser fan if operation is not as specified. Ensure there are no abnormal noises or interferences during fan operation.

Condenser Fan Motor (Eclipse)

1) Using a fused jumper wire, connect battery voltage to condenser fan motor 4-pin connector terminal No. 1 (Blue wire). Connect ground to connector to terminal No. 4 (Black wire). Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary. If no problems exist, go to next step.

2) Using a fused jumper wire, connect battery voltage to condenser fan motor 4-pin connector terminal No. 3 (Blue/White wire). When terminal No. 2 (Black wire) is connected to ground, condenser fan should operate faster. Replace condenser fan if operation is not as specified. Ensure there are no abnormal noises or interferences during fan operation.

Condenser Fan Motor (Galant)

1) Using a fused jumper wire, connect battery voltage to condenser fan motor 4-pin connector terminal No. 1 (Blue wire). Connect ground to connector to terminal No. 2 (Black wire). Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary. If no problems exist, go to next step.

2) Using a fused jumper wire, connect battery voltage to condenser fan motor 4-pin connector terminal No. 3 (Blue/White wire). When terminal No. 4 (Black wire) is connected to ground, condenser fan should operate faster. Replace condenser fan if operation is not as specified. Ensure there are no abnormal noises or interferences during fan operation.

Condenser Fan Motor (Mirage)

Disconnect radiator fan motor 2-pin connector. Ground fan motor 2-pin connector terminal No. 2 (Black/Blue wire). Using a fused jumper wire, connect battery voltage to 2-pin connector terminal No. 1 (Black/Orange wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

Condenser Fan Motor (Montero & Montero Sport)

Disconnect radiator fan motor 2-pin connector. Ground fan motor 2-pin connector terminal No. 1 (Blue/Black wire). Using a fused jumper wire, connect battery voltage to 2-pin connector terminal No. 2 (Blue/White wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

Condenser Fan Motor (1997 3000GT)

1) Disconnect both condenser fan motor 2-pin connectors located on driver side of radiator. Ground fan motor 2-pin connector terminal No. 2 (Black wire). Using a fused jumper wire, connect battery voltage to 2-pin connector terminal No. 1 (Blue wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary. If no problems exist, go to next step.

2) Ground fan motor 2-pin connector terminal No. 2 (Blue/Black wire). Using a fused jumper wire, connect battery voltage to 2-pin connector terminal No. 1 (Blue/White wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

Condenser Fan Motor (1998 3000GT)

1) Disconnect condenser fan motor 3-pin connector located on driver-side of radiator. Ground fan motor 2-pin connector terminal No. 3 (Black wire). Using a fused jumper wire, connect battery voltage to 3-pin connector terminal No. 1 (Blue/White wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences.

Repair or replace components as necessary. If no problems exist, go to next step.

2) Ground fan motor 3-pin connector terminal No. 3 (Black wire). Using a fused jumper wire, connect battery voltage to 3-pin connector terminal No. 2 (Blue wire). See WIRING DIAGRAMS. Fan motor should operate with no abnormal noises or interferences. Repair or replace components as necessary.

Engine Coolant Temperature (ECT) Sensor

Remove ECT sensor from vehicle. Suspend sensor in water so that sensor does not touch container. Slowly heat water. Using an ohmmeter, check sensor continuity as temperature increases. Replace ECT sensor if resistance is not as specified. See ENGINE COOLANT TEMPERATURE SENSOR RESISTANCE table.

ENGINE COOLANT TEMPERATURE SENSOR RESISTANCE

Temperature °F (°C)	Ohms
Diamante, Eclipse 2.0L Turbo & 2.4L	
32 (0)	5100-6500
68 (20)	2100-2700
104 (40)	900-1300
176 (80)	260-360
Eclipse Non-Turbo	
77 (25)	900-1100
212 (100)	600-800
Galant & Mirage	
68 (20)	2100-2700
176 (80)	260-360
Montero	
68 (20)	2130-2610
176 (80)	258-322
Montero Sport	
68 (20)	2100-2700
176 (80)	260-360
3000GT	
32 (0)	5800
68 (20)	2400
104 (40)	1100
176 (80)	300

Electric Cooling Fan Relay (Diamante, Eclipse, Galant & Mirage)

1) Remove radiator fan motor relay from relay box located at right side of engine compartment. Check for continuity between relay terminals No. 1 and 3. If continuity exists, go to next step. If continuity does not exist, replace cooling fan relay. See Fig. 8.

2) Using a fused jumper wire, connect battery voltage to cooling fan relay terminal No. 1. Using another jumper wire, connect cooling fan relay terminal No. 3 to battery ground. With cooling fan relay energized, there should be continuity between cooling fan relay terminals No. 4 and 5. With cooling fan relay not energized, there should be no continuity between terminals No. 4 and 5. If continuity does not exist as specified, replace cooling fan relay. See Fig. 8.

Electric Cooling Fan Relay (Montero, Montero Sport & 3000GT)

1) Remove relay from relay box in engine compartment relay box. Check for continuity between relay terminals No. 2 and 4. If continuity exists, go to next step. If continuity does not exist, replace cooling fan relay. See Fig. 9.

2) Using a fused jumper wire, connect battery voltage to

cooling fan relay terminal No. 2. Using another jumper wire, connect cooling fan relay terminal No. 4 to battery ground. With cooling fan relay energized, there should be continuity between cooling fan relay terminals No. 1 and 3. With cooling fan relay not energized, there should be no continuity between terminals No. 1 and 3. If continuity does not exist as specified, replace cooling fan relay. See Fig. 9.

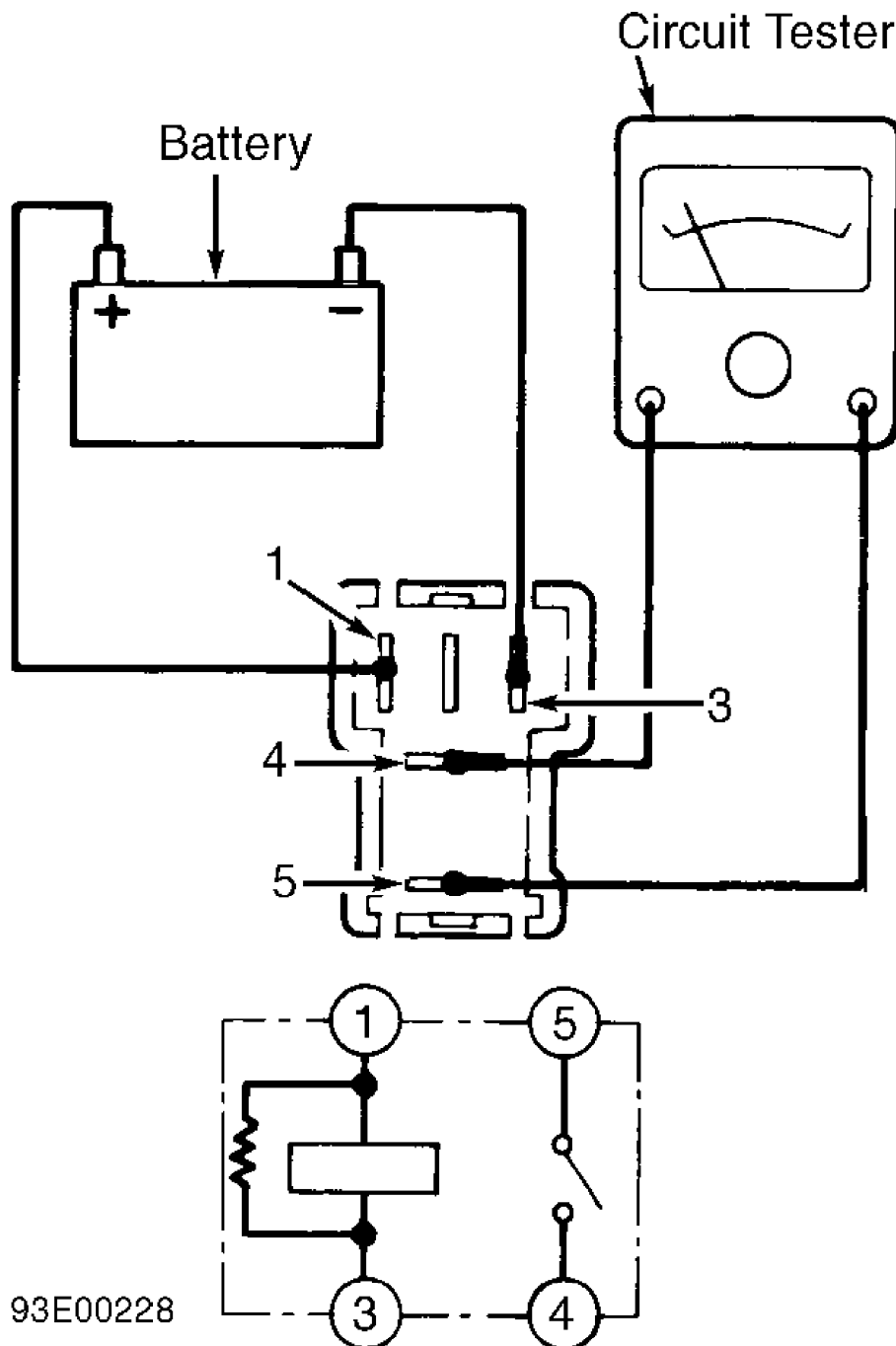
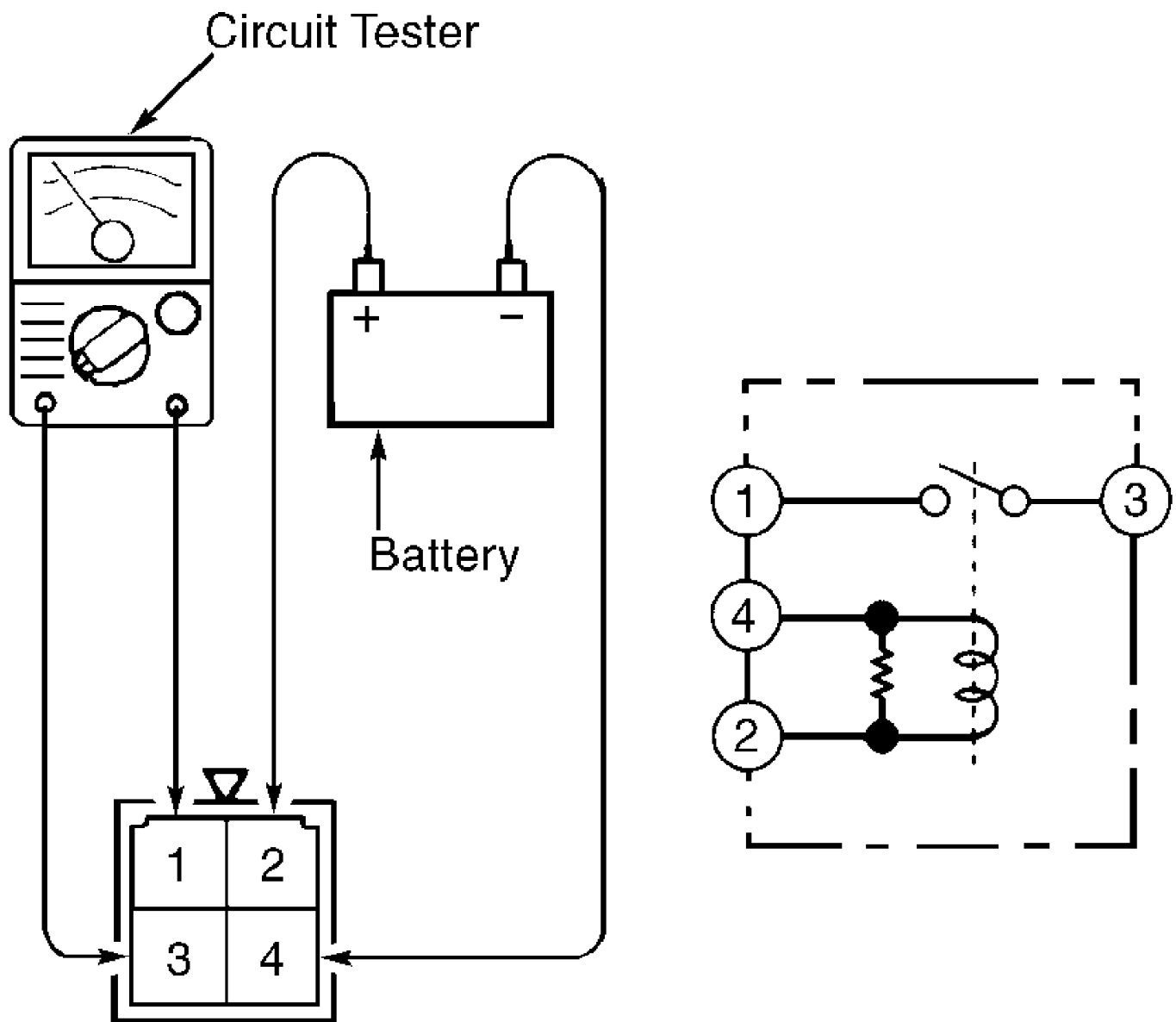


Fig. 8: Testing Electric Cooling Fan Relay (Diamante, Eclipse, Galant & Mirage)
Courtesy of Mitsubishi Motor Sales of America.



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Fig. 9: Testing Electric Cooling Fan Relay (Montero, Montero Sport & 3000GT)

Courtesy of Mitsubishi Motor Sales of America.

SYSTEM TESTING

NOTE: For appropriate wiring diagram, see WIRING DIAGRAMS.

NOTE: Radiator fan on Montero and Montero Sport is mounted to a hydraulic fan clutch which is mounted to the water pump. Replace fan clutch if leaks are detected at case joints and seals, fan can be rotated with very light resistance or the bimetallic strip is damaged.

NOTE: Operation of radiator and condenser fans is controlled by vehicle Powertrain Control Module (PCM). Based on vehicle

speed, coolant temperature and A/C operation request, PCM will command low, medium or high speed fan operation.

Diamante

1) If only the radiator fan does not operate, check fusible link No. 6 located in engine compartment relay box. If only the condenser fan does not operate, check dedicated fuse No. 16 (20-amp) located in engine compartment relay box. See WIRING DIAGRAMS. Repair as necessary.

2) If radiator fan and condenser fan operate in all speeds except low, check appropriate low speed relay. See COMPONENT TESTS. See WIRING DIAGRAMS. If low speed relay is okay, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE.

* G - TESTS W/CODES - 1997

* G - TESTS W/CODES - 1998

3) If radiator fan and condenser fan operate in all speeds except high, check appropriate high speed relay. See COMPONENT TESTS. See WIRING DIAGRAMS. If high speed relay is okay, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE.

* G - TESTS W/CODES - 1997

* G - TESTS W/CODES - 1998

4) To confirm radiator fan or condenser fan operation, see FAN OPERATING MODE (DIAMANTE) table. If fan operation is not as specified, check wiring harness for opens or shorts. Repair as necessary.

FAN OPERATING MODE (DIAMANTE) (1)

Coolant Temp. °F (°C)	Power Circuit				Radiator Fan Speed		Condenser Fan Speed	
	Operating Low/High							
13 MPH (2)								
221 (105) (2)		On/Off	.....	Low	.....	Low	.....	Low
221 (105) (3)		Off/On	.....	Mid	.....	Mid	.....	Mid
239 (115) (3)		On/On	.....	High	.....	High	.....	High
13 MPH (3)								
221 (105) (2)		On/Off	.....	Low	.....	Low	.....	Low
221 (105) (2)		On/On	.....	High	.....	High	.....	High
30 MPH (2)								
203 (95) (2)		Off/Off	.....	Off	.....	Off	.....	Off
203 (95) (3)		On/Off	.....	Low	.....	Off	.....	Off
221 (105) (3)		Off/On	.....	Mid	.....	Mid	.....	Mid
30 MPH (3)								
194 (90) (2)		Off/Off	.....	Off	.....	Off	.....	Off
194 (90) (3)		On/Off	.....	Low	.....	Off	.....	Off
221 (105) (3)		On/On	.....	High	.....	Mid	.....	Mid
50 MPH (3)								
221 (105) (2)		Off/Off	.....	Off	.....	Off	.....	Off
221 (105) (3)		On/On	.....	High	.....	Mid	.....	Mid

(1) - A/C request switch is turned off.

(2) - Approximate vehicle speed/coolant temperature or less.

(3) - Approximate vehicle speed/coolant temperature or more.

NOTE: Operation of radiator and condenser fans is controlled by vehicle Powertrain Control Module (PCM). Based on vehicle speed, coolant temperature and A/C operation request, PCM

will command low, medium or high speed fan operation.

Eclipse

1) If only the radiator fan does not operate, check fusible link No. 7 (20-amp) located in engine compartment relay box. If only the condenser fan does not operate, check dedicated fuse No. 9 (20-amp) located in engine compartment relay box. See WIRING DIAGRAMS. Repair as necessary.

2) If radiator fan and condenser fan operate in all speeds except low, check appropriate low speed relay. See COMPONENT TESTS. See WIRING DIAGRAMS. If low speed relay is okay, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE.

- * G - TESTS W/CODES - 2.0L NON-TURBO - 1997
- * G - TESTS W/CODES - 2.0L TURBO - 1997
- * G - TESTS W/CODES - 2.4L - 1997
- * G - TESTS W/CODES - 2.0L NON-TURBO - 1998
- * G - TESTS W/CODES - 2.0L TURBO & 2.4L - 1998

3) If radiator fan and condenser fan operate in all speeds except high, check appropriate high speed relay. See COMPONENT TESTS. See WIRING DIAGRAMS. If high speed relay is okay, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE.

- * G - TESTS W/CODES - 2.0L NON-TURBO - 1997
- * G - TESTS W/CODES - 2.0L TURBO - 1997
- * G - TESTS W/CODES - 2.4L - 1997
- * G - TESTS W/CODES - 2.0L NON-TURBO - 1998
- * G - TESTS W/CODES - 2.0L TURBO & 2.4L - 1998

4) To confirm radiator fan or condenser fan operation, see FAN OPERATING MODE (ECLIPSE NON-TURBO) or FAN OPERATING MODE (ECLIPSE 2.0L TURBO & 2.4L) table. If fan operation is not as specified, check wiring harness for opens or shorts. Repair as necessary.

FAN OPERATING MODE (ECLIPSE NON-TURBO)

Coolant Temp. °F (°C)	With A/T Radiator Fan Speed	With M/T Radiator Fan Speed	Condenser Fan Speed
28 MPH (1) (2)			
203 (95) (2)	Off	Off	Off
203-210 (95-99)	Mid	High	Off
210 (99) (3)	High	High	Mid
28-50 MPH (1)			
194 (90) (2)	Off	Off	Off
194-210 (90-99)	Mid	High	Off
210 (99) (3)	High	High	Mid
50 MPH (1) (3)			
210 (99) (2)	Off	Off	Mid
210 (99) (3)	High	High	Off
12 MPH (2) (4)			
210 (99) (2)	Mid	High	Mid
210-242 (99-117)	High	High	High
242 (117) (3)	High	High	High
12-50 MPH (4)			
210 (99) (2)	Mid	High	Mid
210-242 (99-117)	High	High	High
242 (117) (3)	High	High	High
50 MPH (3) (4)			
210 (99) (2)	Mid	High	Mid
210-242 (99-117) (3) ..	High	High	High

242 (117) (3) High High High

- (1) - A/C request switch is turned off.
- (2) - Approximate vehicle speed/coolant temperature or less.
- (3) - Approximate vehicle speed/coolant temperature or more.
- (4) - A/C request switch is turned on.

FAN OPERATING MODE (ECLIPSE 2.0L TURBO & 2.4L)

Coolant Temp. °F (°C)	With A/T Radiator Fan Speed	With M/T Radiator Fan Speed	Condenser Fan Speed
28 MPH (1) (2)			
203 (95) (2)	Off	Off	Off
203-210 (95-99)	Low	Mid	Off
210 (99) (3)	High	High	Mid
28-50 MPH (1)			
194 (90) (2)	Off	Off	Off
194-210 (90-99)	Low	Mid	Off
210 (99) (3)	High	High	Mid
50 MPH (1) (3)			
210 (99) (2)	Off	Off	Off
210 (99) (3)	High	High	Mid
12 MPH (2) (4)			
210 (99) (2)	Low	Mid	Mid
210-242 (99-117)	High	High	High
242 (117) (3)	High	High	High
12-50 MPH (4)			
210 (99) (2)	Low	Mid	Mid
210-242 (99-117)	High	High	High
242 (117) (3)	High	High	High
50 MPH (3) (4)			
210 (99) (2)	Low	Mid	Mid
210-242 (99-117) (3) ..	High	High	High
242 (117) (3)	High	High	High

- (1) - A/C request switch is turned off.
- (2) - Approximate vehicle speed/coolant temperature or less.
- (3) - Approximate vehicle speed/coolant temperature or more.
- (4) - A/C request switch is turned on.

NOTE: Operation of radiator and condenser fans is controlled by vehicle Powertrain Control Module (PCM). Based on vehicle speed, coolant temperature and A/C operation request, PCM will command low, medium or high speed fan operation.

Galant

1) If only the radiator fan does not operate, check fusible link No. 5 (30-amp) located in engine compartment relay box. If only the condenser fan does not operate, check dedicated fuse No. 3 (30-amp) located in engine compartment relay box. See WIRING DIAGRAMS. Repair as necessary.

2) If radiator fan and condenser fan operate in all speeds except low, check appropriate low speed relay. See COMPONENT TESTS. See WIRING DIAGRAMS. If low speed relay is okay, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE.

- * G - TESTS W/CODES - 1997
- * G - TESTS W/CODES - 1998

3) If radiator fan and condenser fan operate in all speeds except high, check appropriate high speed relay. See COMPONENT TESTS. See WIRING DIAGRAMS. If high speed relay is okay, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE.

- * G - TESTS W/CODES - 1997
- * G - TESTS W/CODES - 1998

4) To confirm radiator fan or condenser fan operation, see appropriate FAN OPERATING MODE (GALANT) table. If fan operation is not as specified, check wiring harness for opens or shorts. Repair as necessary.

FAN OPERATING MODE (GALANT) (1)

Coolant Temp. °F (°C)	Radiator Fan Speed	Condenser Fan Speed
28 MPH (2)		
203 (95) (2)	Off	Off
203-221 (95-105)	Low	Low
221 (105) (3)	High	High
28-50 MPH		
194 (90) (2)	Off	Off
194-221 (90-105)	Low	Low
221 (105) (3)	High	High
50 MPH (3)		
221 (105) (2)	Off	Off
221 (105) (3)	High	High
Any Speed (4)		
221 (105) (2)	Low	Low
221 (105) (3)	High	High

- (1) - A/C request switch is turned off.
- (2) - Approximate vehicle speed/coolant temperature or less.
- (3) - Approximate vehicle speed/coolant temperature or more.
- (4) - A/C request switch is turned on.

NOTE: Operation of radiator and condenser fans is controlled by vehicle Powertrain Control Module (PCM). Based on vehicle speed, coolant temperature and A/C operation request, PCM will command low, medium or high speed fan operation.

Mirage

1) If only the radiator fan does not operate, check fusible link No. 5 (30-amp) located in engine compartment relay box. If only the condenser fan does not operate, check fusible link No. 2 (100-amp) and dedicated fuse No. 1 (25-amp) located in engine compartment relay box. See WIRING DIAGRAMS. Repair as necessary.

2) If fusible links and dedicated fuse are okay, check appropriate fan relay and/or fan motor for proper operation. See COMPONENT TESTS. See WIRING DIAGRAMS. If fan relay and motor are okay, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE.

- * G - TESTS W/CODES - 1.5L - 1997
- * G - TESTS W/CODES - 1.8L - 1997
- * G - TESTS W/CODES - 1998

3) To confirm radiator fan or condenser fan operation, see appropriate FAN OPERATING MODE (MIRAGE) table. If fan operation is not as specified, check wiring harness for opens or shorts. Repair as

necessary.

FAN OPERATING MODE (MIRAGE)

Coolant Temp. °F (°C)	Power Circuit		Radiator Fan Speed	Condenser Fan Speed
	Operating			
	RAD/COND			
203 (95) (1) (2)	Off/Off	Off	Off	Off
203-221 (95-105) (1) ...	On/Off	On	On	Off
221 (105) (1) (3)	On/On	On	On	On
All Temp. (4)	On/On	On	On	On

- (1) - A/C request switch is turned off.
- (2) - Approximate coolant temperature or less.
- (3) - Approximate coolant temperature or more.
- (4) - A/C request switch is turned on.

NOTE: Operation of radiator and condenser fans is controlled by vehicle Powertrain Control Module (PCM). Based on vehicle speed, coolant temperature and A/C operation request, PCM will command low, medium or high speed fan operation.

3000GT

1) If neither the radiator fan nor the condenser fan operate, check fusible link No. 5 (40-amp). See WIRING DIAGRAMS. If only the condenser fan does not operate, check dedicated fuse No. 8 (20-amp).

2) If the condenser fan operates in all speeds except low and A/C compressor clutch does not enter the ON state, check for A/C compressor lock controller unit output signal. If the A/C compressor clutch does enter the ON state, check condenser fan low speed relay operation.

3) If the radiator fan and the condenser fan operate in all speeds except high, check PCM. See appropriate G - TESTS W/CODES article in ENGINE PERFORMANCE. If fan operation is not as specified, check wiring harness for opens or shorts. Repair as necessary.

- * G - TESTS W/CODES - NON-TURBO - 1997
- * G - TESTS W/CODES - TURBO - 1997
- * G - TESTS W/CODES - 1998

4) To confirm radiator fan or condenser fan operation, see appropriate FAN OPERATING MODE (3000GT) table. If fan operation is not as specified, check wiring harness for opens or shorts. Repair as necessary.

FAN OPERATING MODE (3000GT)

Coolant Temp. °F (°C)	Power Circuit		Radiator Fan Speed	Condenser Fan Speed
	Operating			
	Low/High			
50 MPH (1) (2)				
203 (95) (2)	Off/Off	Off	Off	Off
203-221 (95-105)	On/Off	Low	Low	Off
221 (105) (3)	On/On	High	High	High
50 MPH (1) (3)				
221 (105) (2)	Off/Off	Off	Off	Off
221 (105) (3)	On/On	High	High	High
All Speeds				
221 (105) (2)	On/Off	Low	Low	Low
221 (105) (3)	On/On	High	High	High

- (1) - A/C compressor lock controller output is low (zero volts).
- (2) - Approximate vehicle speed/coolant temperature or less.
- (3) - Approximate vehicle speed/coolant temperature or more.
- (4) - A/C compressor lock controller output is high (12 volts).

WIRING DIAGRAMS

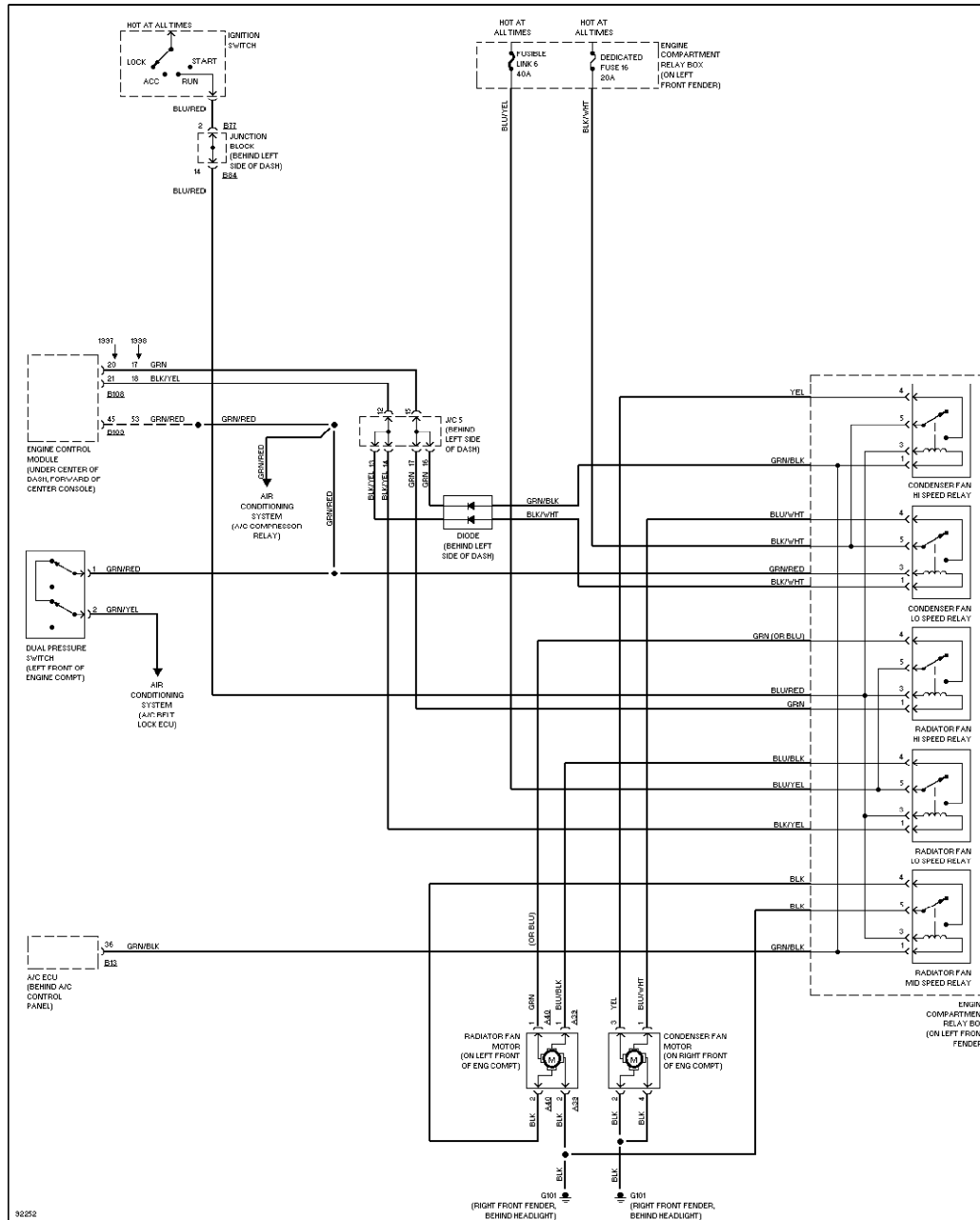


Fig. 10: Wiring Diagram (1997-98 Diamante)

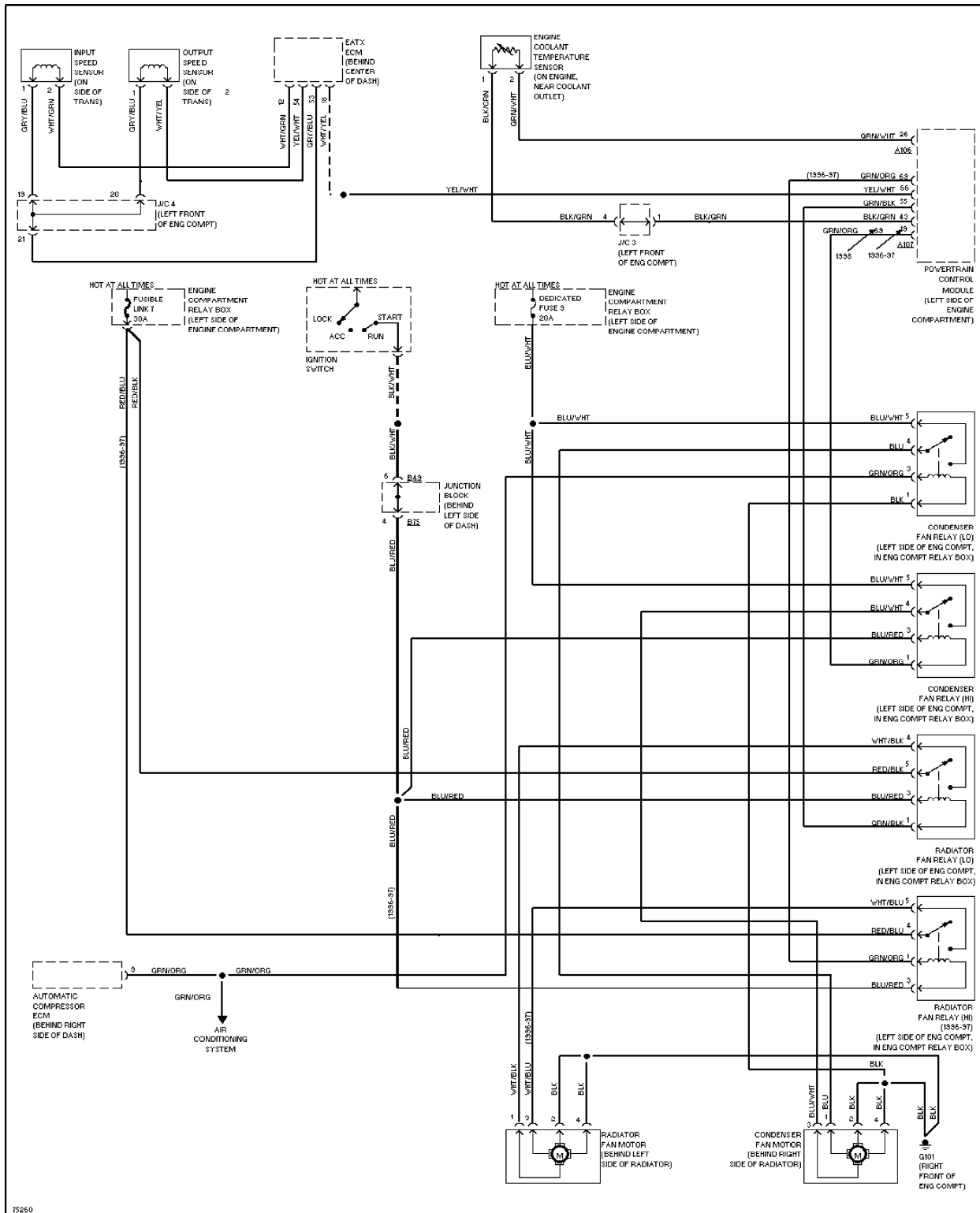


Fig. 11: Wiring Diagram (1997-98 Eclipse - 2.0L A/T)

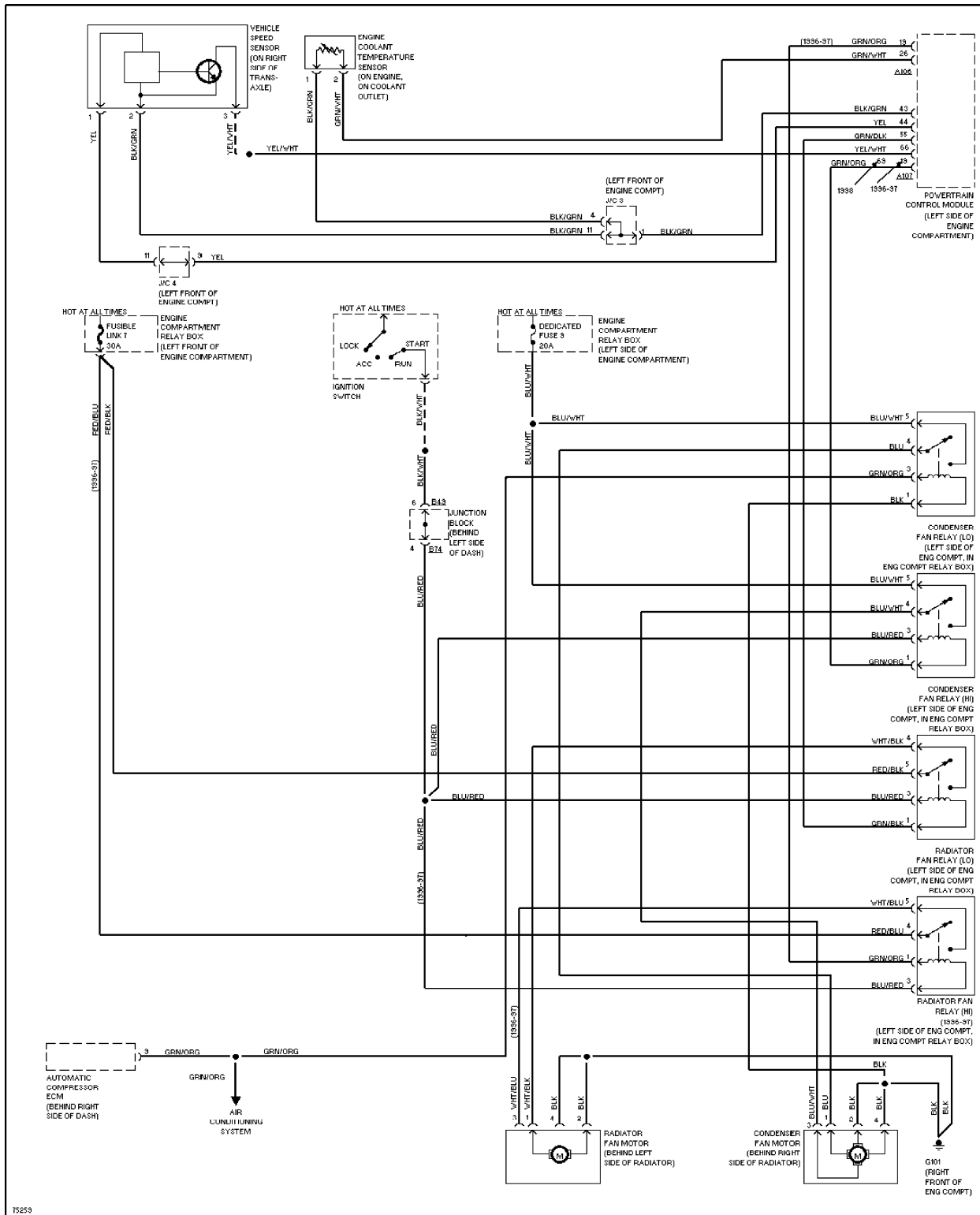


Fig. 12: Wiring Diagram (1997-98 Eclipse - 2.0L M/T)



Fig. 13: Wiring Diagram (1997-98 Eclipse - 2.0L Turbo & 2.4L)

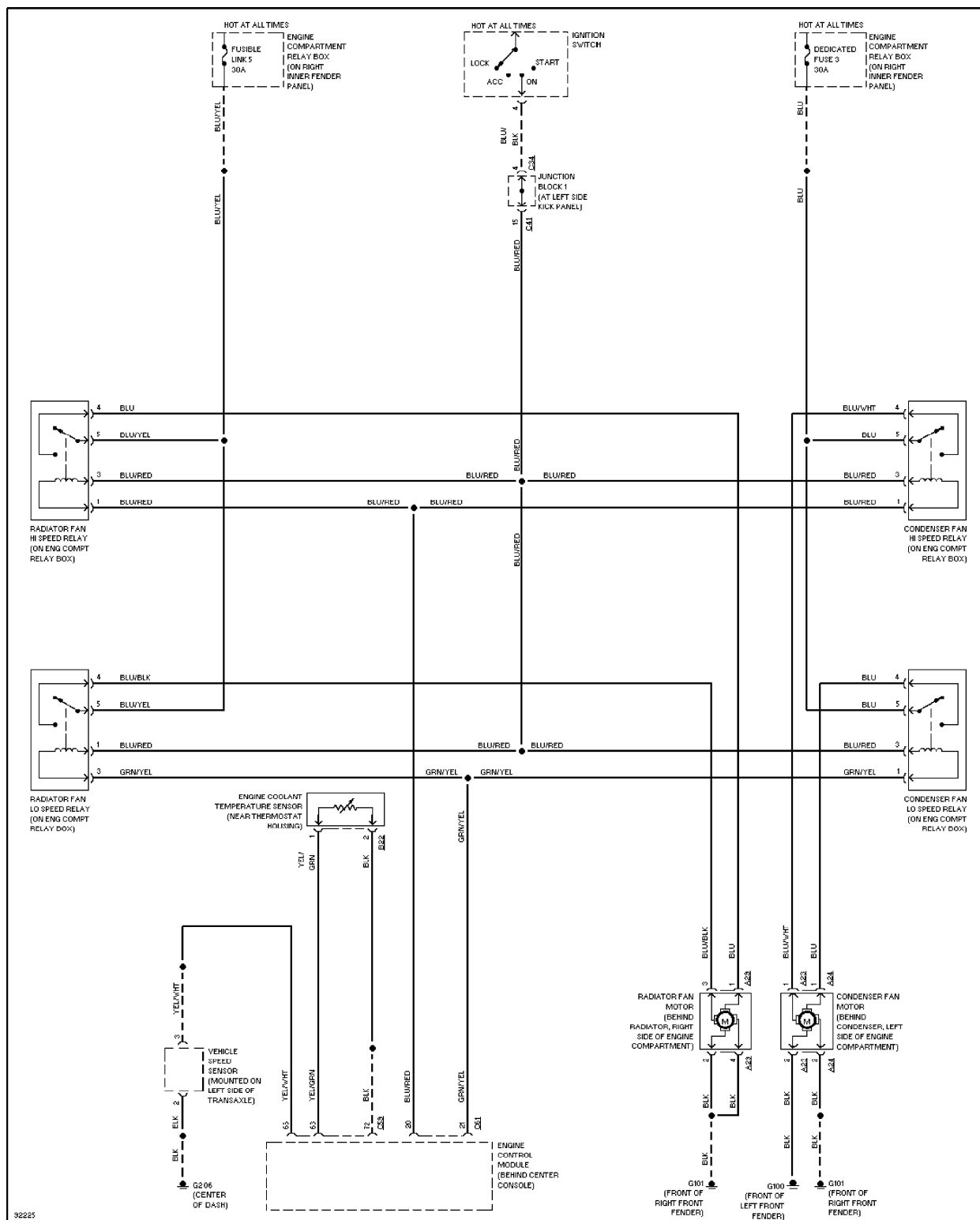


Fig. 14: Wiring Diagram (1997-98 Galant)

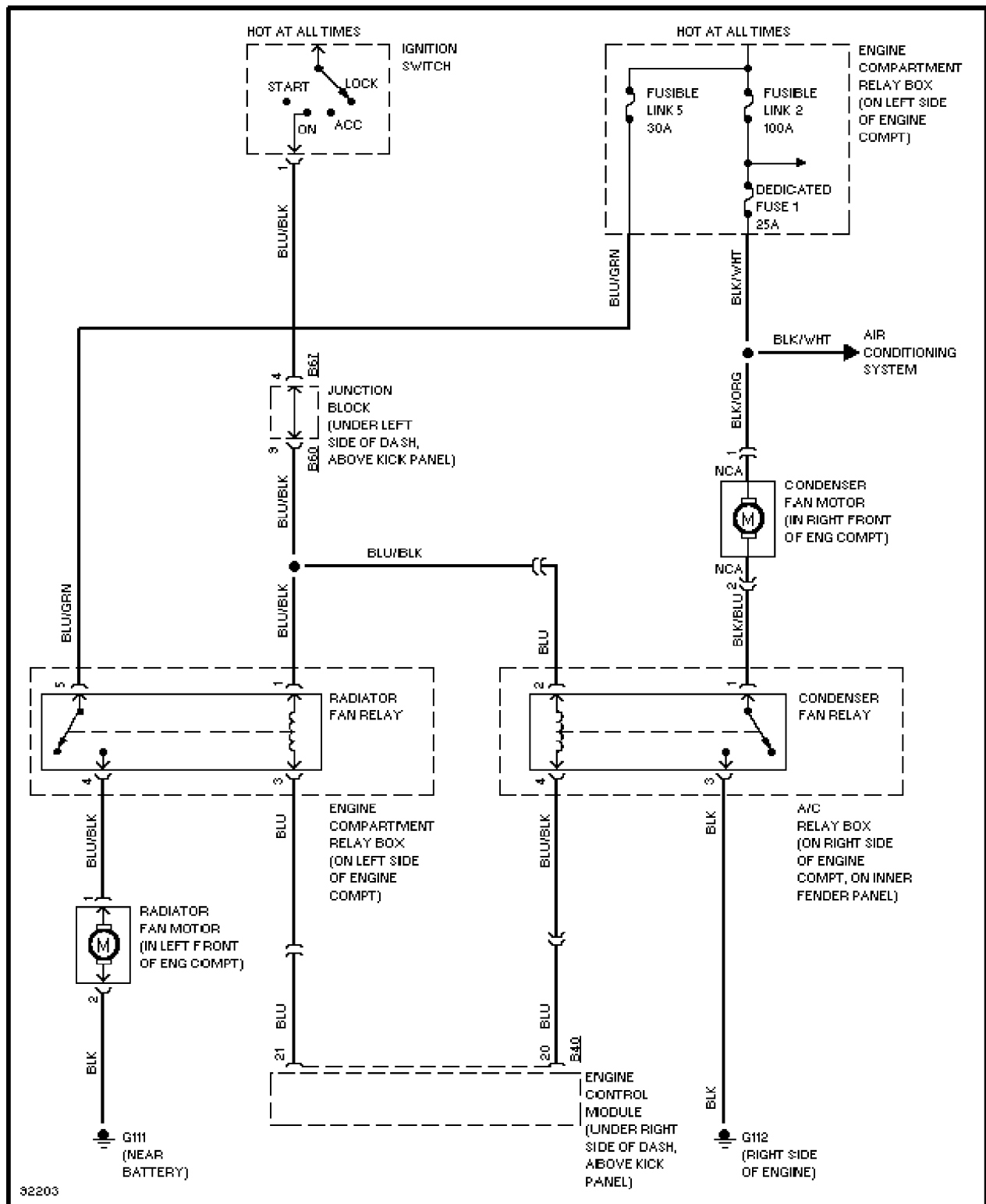


Fig. 15: Wiring Diagram (1997-98 Mirage)

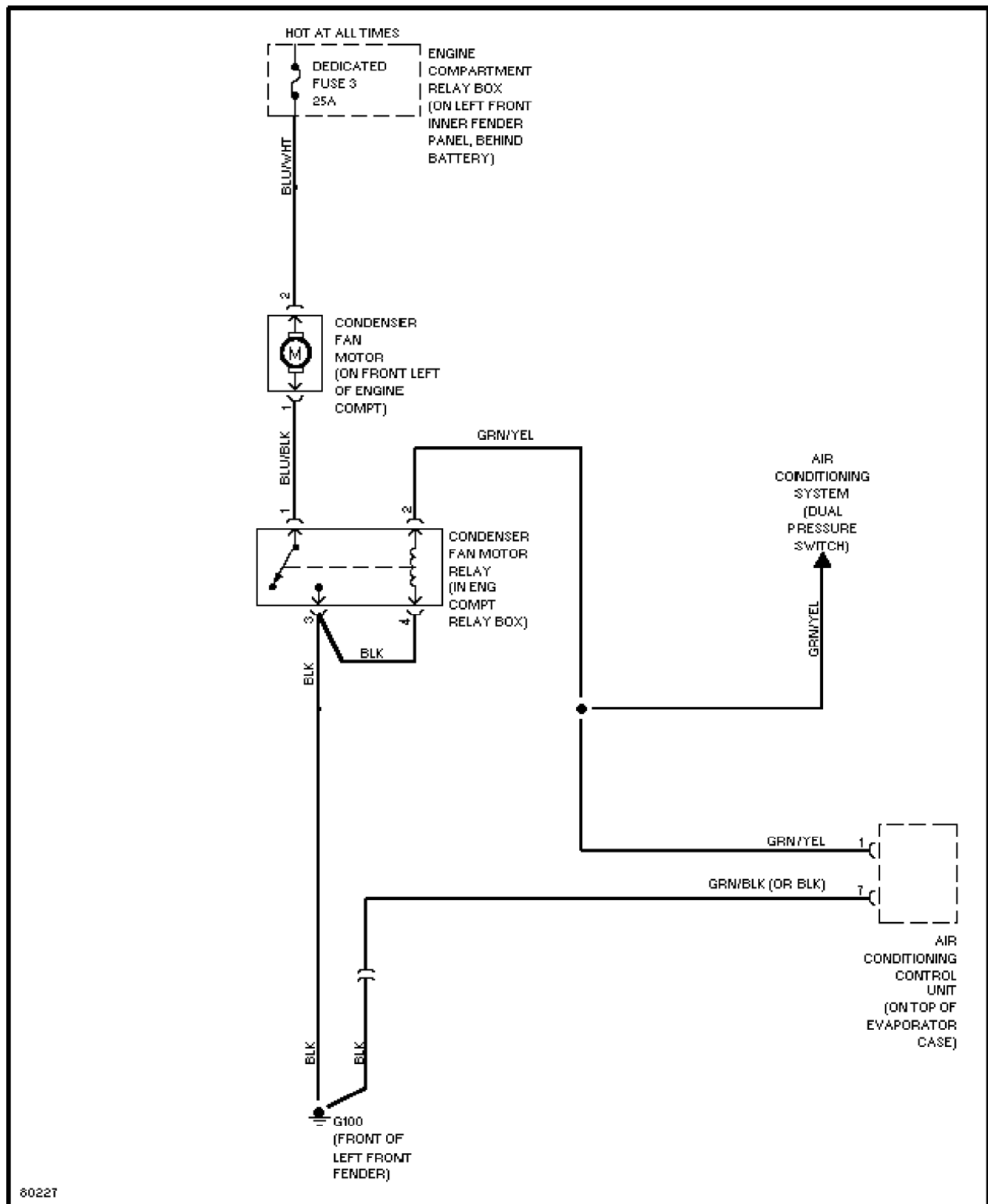


Fig. 16: Wiring Diagram (1997-98 Montero)

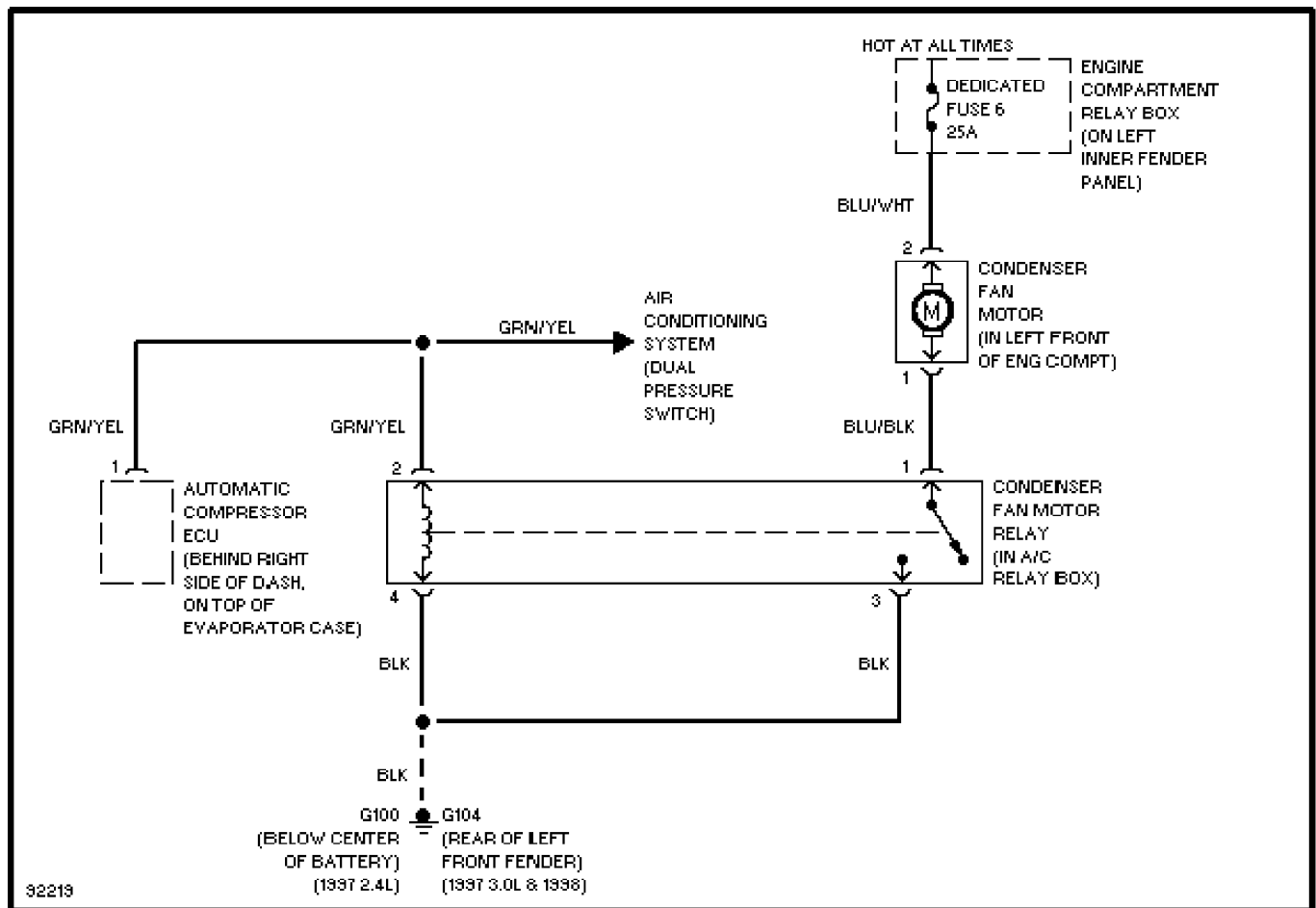


Fig. 17: Wiring Diagram (1997-98 Montero Sport)

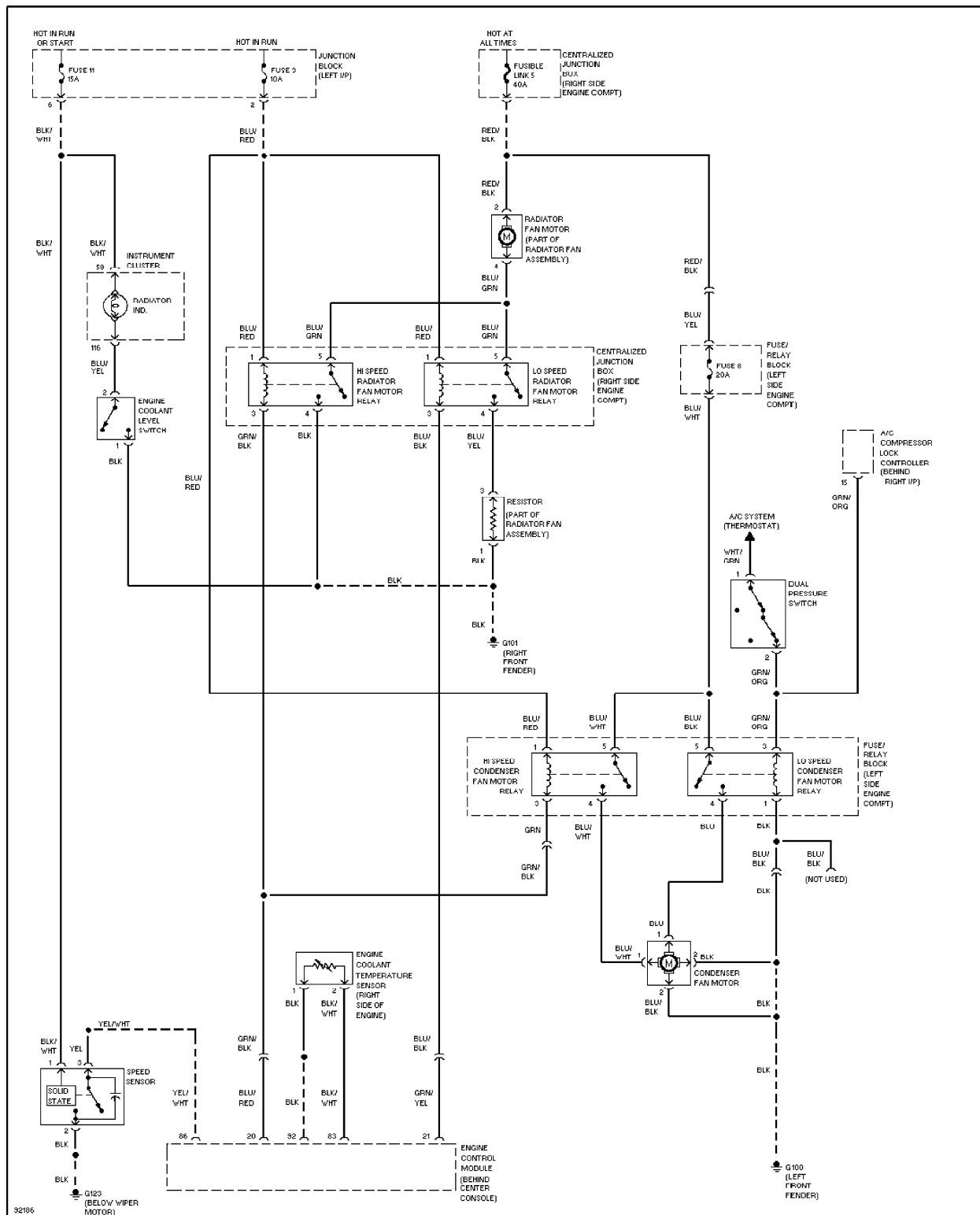


Fig. 18: Wiring Diagram (1997 3000GT)

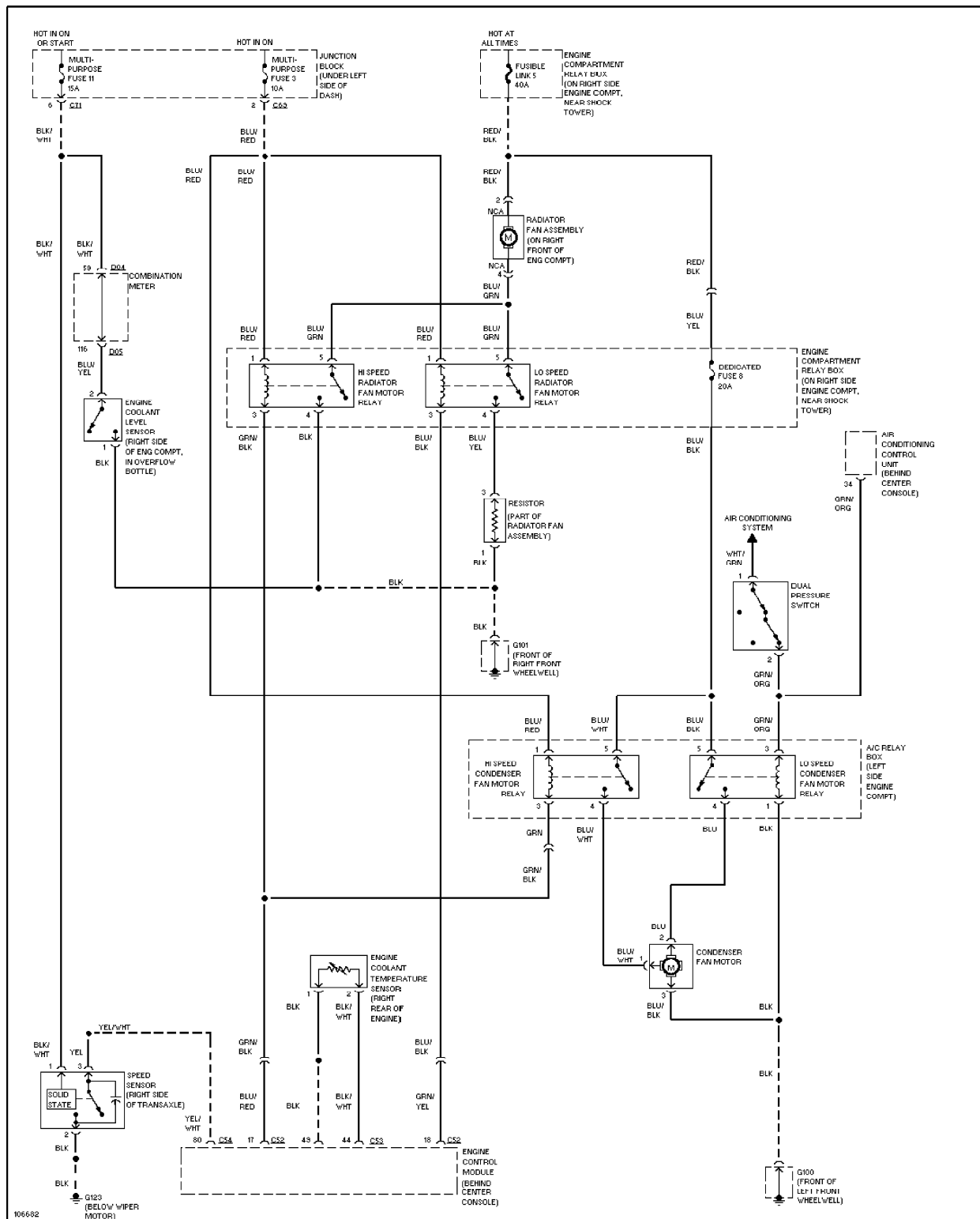


Fig. 19: Wiring Diagram (1998 3000GT)