

C - SPECIFICATIONS

1991 Mitsubishi Montero

1991 ENGINE PERFORMANCE Service & Adjustment Specifications

Chrysler Motors: Colt, Colt 200, Colt Vista,
Ram-50, Stealth, Summit
Mitsubishi: Eclipse, Galant, Mirage, Montero,
Pickup, 3000GT

INTRODUCTION

Use this article to quickly find specifications related to servicing and on-vehicle adjustments. This is a quick reference article for when you are familiar with an adjustment procedure and only need a specification.

CAPACITIES

BATTERY SPECIFICATIONS

Application	Amp. Hr. Rating
Colt, Mirage & Summit	
Type 1	48
Type 2	36
Colt Vista	36
Colt 200	52
Eclipse	50
Galant	40
Montero	52
Pickup	
2.4L	36
3.0L	52
Ram-50	
2.4L	36
3.0L	
Standard	52
Optional	55
Stealth & 3000GT	52

FLUID CAPACITIES

Application	Quantity
Automatic Transaxle (Dexron-II)	
Colt, Colt 200, Colt Vista, Galant & Mirage	6.4 Qts. (6.1L)
Galant (AWD)	6.8 Qts. (6.5L)
Eclipse	
Except Turbo	6.4 Qts. (6.1L)
Turbo	7.4 Qts. (7.0L)
Stealth & 3000GT	7.9 Qts. (7.5L)
Summit	6.1 Qts. (5.8L)
Automatic Transmission (Dexron-II)	
Montero	7.6 Qts. (7.2L)
Pickup & Ram-50	7.4 Qts. (7.0L)
Cooling System (Includes Heater & Reserve Tank)	
Colt, Colt 200, Mirage & Summit	5.3 Qts. (5.0L)
Colt Vista	7.4 Qts. (7.0L)
Eclipse	

1.8L	6.6 Qts.	(6.2L)
2.0L	7.6 Qts.	(7.2L)
Galant	7.6 Qts.	(7.2L)
Montero	10.0 Qts.	(9.5L)
Pickup (2WD)		
Automatic Transmission	6.4 Qts.	(6.1L)
Manual Transmission	6.3 Qts.	(6.0L)
Pickup (4WD)	8.9 Qts.	(8.4L)
Ram-50 (2WD)		
Automatic Transmission	6.5 Qts.	(6.1L)
Manual Transmission	6.3 Qts.	(6.0L)
Ram-50 (4WD)		
2.4L		
Automatic Transmission	6.5 Qts.	(6.1L)
Manual Transmission	6.6 Qts.	(6.2L)
3.0L		
Automatic Transmission	8.8 Qts.	(8.3L)
Manual Transmission	8.9 Qts.	(8.4L)
Stealth & 3000GT	8.8 Qts.	(8.3L)
Crankcase (Includes Filter)		
Colt, Colt 200, Mirage & Summit	4.2 Qts.	(4.0L)
Colt Vista	4.0 Qts.	(3.8L)
Eclipse	(1) 4.5 Qts.	(4.3L)
Galant		
2.0L (SOHC)	4.0 Qts.	(3.8L)
2.0L (DOHC)	(1) 4.5 Qts.	(4.3L)
Montero	5.5 Qts.	(5.3L)
Pickup	4.5 Qts.	(4.3L)
Ram-50	5.5 Qts.	(5.3L)
Stealth & 3000GT	(1) 4.5 Qts.	(4.3L)
Differential (SAE 80W-90/API GL-5)		
Colt Vista (4WD), Eclipse	1.5 Pts.	(.7L)
Galant, Stealth & 3000GT	1.5 Pts.	(.7L)
Montero		
Front	1.2 Qts.	(1.1L)
Rear	2.7 Qts.	(2.6L)
Pickup & Ram-50		
Front		
2.4L	1.6 Qts.	(1.5L)
3.0L	2.7 Qts.	(2.6L)
Rear		
2WD	1.6 Qts.	(1.5L)
4WD		
2.4L	1.6 Qts.	(1.5L)
3.0L	2.7 Qts.	(2.6L)
Manual Transaxle (SAE 75W-85/API GL-4)		
Colt, Colt 200, Mirage & Summit		
4-Speed	3.6 Pts.	(1.7L)
5-Speed	3.8 Pts.	(1.8L)
Colt Vista		
2WD	2.6 Qts.	(2.5L)
4WD	2.2 Qts.	(2.1L)
Eclipse (FWD)		
Except Turbo	1.9 Qts.	(1.8L)
Turbo	2.3 Qts.	(2.2L)
Eclipse & Galant (AWD)	2.4 Qts.	(2.3L)
Galant	1.9 Qts.	(1.8L)
Stealth & 3000GT	2.4 Qts.	(2.3L)
Manual Transmission (SAE 75W-85/API GL-4)		
Montero	2.3 Qts.	(2.2L)
Pickup & Ram-50		
2WD	2.4 Qts.	(2.3L)
4WD	2.3 Qts.	(2.2L)

Power Steering (Dexron-II)	
Colt, Colt Vista, Colt 200, Mirage & Summit	1.9 Qts. (.9L)
Eclipse & Galant	1.9 Qts. (.9L)
Montero	2.2 Pts. (1.0L)
Pickup & Ram-50	1.9 Qts. (.9L)
Stealth & 3000GT	
2-Wheel Steering	1.9 Pts. (.9L)
4-Wheel Steering	2.5 Pts. (1.2L)
Transfer Case (SAE 75W-85/API GL-4)	
Colt Vista	1.5 Pts. (.7L)
Eclipse & Galant	1.3 Pts. (.6L)
Montero, Pickup & Ram-50	4.7 Pts. (2.2L)
Stealth	.3 Pt. (.2L)
3000GT	.6 Pt. (.3L)

(1) - Add 1.0 Pt. (.5L) with oil cooler.

QUICK-SERVICE

SERVICE INTERVALS & SPECIFICATIONS

REPLACEMENT INTERVALS

Component	Miles
Colt, Colt 200, Mirage & Summit	
Air Filter	30,000
Automatic Transaxle Fluid	30,000
Belts	30,000
Coolant	30,000
Fuel & Vapor Hoses	50,000
Oil	7500
Oil Filter	15,000
Spark Plugs	30,000
Timing Belt	60,000
Colt Vista	
Air Filter	30,000
Automatic Transaxle Fluid	30,000
Belts	30,000
Coolant	30,000
EGR Valve (1)	50,000
Fuel & Vapor Hoses	50,000
Oil	7500
Oil Filter	15,000
O2 Sensor (1)	80,000
Rear Axle Fluid	30,000
Spark Plugs	30,000
Spark Plug Wires (1)	60,000
Timing Belt	60,000
Vapor Canister (1)	100,000
Mirage	
Air Filter	30,000
Automatic Transaxle Fluid	30,000
Belts	30,000
Coolant	30,000
Fuel & Vapor Hoses	50,000
Oil	7500
Filter	15,000
Spark Plugs	30,000
Timing Belt	60,000
Eclipse	

Air Filter	30,000
Automatic Transaxle Fluid	30,000
Belts	30,000
Coolant	30,000
Fuel & Vapor Hoses	50,000
Oil	
Non-Turbo	7500
Turbo	5000
Oil Filter	
Non-Turbo	15,000
Turbo	10,000
Spark Plugs	30,000
Timing Belt	60,000
Galant	
Air Filter	30,000
Automatic Transaxle Fluid	30,000
Belts	30,000
Coolant	30,000
Fuel & Vapor Hoses	50,000
Oil	
Non-Turbo	7500
Turbo	5000
Oil Filter	
Non-Turbo	15,000
Turbo	10,000
Rear Axle Fluid	30,000
Spark Plugs	30,000
Timing & Balance Shaft Belts	60,000
Montero	
Air Filter	30,000
Automatic Transmission Fluid	30,000
Belts	30,000
Coolant	30,000
Front & Rear Axle Fluid	30,000
Fuel Filter	50,000
Fuel & Vapor Hoses	50,000
Oil	7500
Oil Filter	15,000
O2 Sensor (2)	80,000
Spark Plugs	30,000
Spark Plug Wires (2)	60,000
Timing Belt	60,000
Transfer Case Fluid	30,000
Vapor Canister (2)	100,000
Pickup & Ram-50	
Air Filter	30,000
Automatic Transmission Fluid	30,000
Belts	30,000
Coolant	30,000
EGR Valve (2.4L) (2)	50,000
Front & Rear Axle Fluid	30,000
Fuel Filter	50,000
Fuel & Vapor Hoses	50,000
Oil	7500
Oil Filter	15,000
O2 Sensor (2)	80,000
Spark Plugs	30,000
Spark Plug Wires (2)	60,000
Timing Belt	60,000
Transfer Case Fluid	30,000
Vapor Canister (2)	100,000
Stealth	
Air Filter	30,000

Automatic Transaxle Fluid	30,000
Belts	30,000
Coolant	30,000
Front & Rear Axle Fluid	30,000
Fuel & Vapor Hoses	50,000
Oil	
Non-Turbo	7500
Turbo	5000
Oil Filter	
Non-Turbo	15,000
Turbo	10,000
Spark Plugs	60,000
Timing Belt	60,000
3000GT	
Air Filter	30,000
Belts	30,000
Coolant	30,000
Fuel & Vapor Hoses	50,000
Front & Rear Axle Fluid	30,000
Oil	
Non-Turbo	7500
Turbo	5000
Oil Filter	
Non-Turbo	15,000
Turbo	10,000
Spark Plugs	60,000
Timing Belt	60,000

- (1) - Federal 4WD models only.
(2) - Federal models only.

BELT ADJUSTMENT

Application	Deflection (1) In. (mm)
Colt, Colt 200, Mirage & Summit	
1.5L .....	.28-.35 (7.1-8.9)
1.6L .....	.35-.45 (8.9-11.4)
Colt Vista	
2.0L .....	.28-.40 (7.1-10.2)
Eclipse	
1.8L .....	.32-.43 (8.1-11.1)
2.0L .....	.35-.45 (8.9-11.4)
Galant	
Alternator Belt .....	.35-.45 (8.9-11.4)
A/C Belt .....	.32 (8.1)
Power Steering Belt .....	.24-.35 (6.1-8.9)
Montero	
3.0L .....	.20-.24 (5.1-6.1)
Pickup & Ram-50	
2.4L .....	.27-.39 (6.8-9.9)
3.0L .....	.32-.39 (8.1-9.9)
Stealth & 3000GT	
SOHC	
Alternator & Power Steering Belt .....	.24-.35 (6.1-8.9)
A/C Belt .....	.28-.37 (7.1-9.5)
DOHC	
Alternator Belt (With or Without A/C) ...	.16-.22 (4.1-5.6)
Power Steering Belt .....	.35-.43 (8.9-11.1)

- (1) - With 22 lbs. (10 kg) pressure applied midway on belt run.

MECHANICAL CHECKS

ENGINE COMPRESSION

Check engine compression with engine at normal operating temperature at specified cranking speed, all spark plugs removed and throttle wide open.

COMPRESSION SPECIFICATIONS

Application (1)	Specification
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Compression Ratio

1.5L (VIN A)	9.4:1
1.6L (VIN Y)	9.2:1
1.8L (VIN T)	9.0:1
2.0L (VIN R)	9.0:1
2.0L (VIN U)	9.0:1
2.0L (VIN V)	8.5:1
2.4L (VIN W)	8.5:1
3.0L (VIN B)	10.0:1
3.0L (VIN C)	8.0:1
3.0L (VIN S)	8.9:1

Compression Pressure (2)

1.5L (VIN A)	137 psi (9.6 kg/cm ²)
1.6L (VIN Y)	171 psi (12.0 kg/cm ²)
1.8L (VIN T)	131 psi (9.2 kg/cm ²)
2.0L (VIN R)	137 psi (9.6 kg/cm ²)
2.0L (VIN U)	114 psi (8.0 kg/cm ²)
2.0L (VIN V)	119 psi (8.4 kg/cm ²)
2.4L (VIN W)	119 psi (8.4 kg/cm ²)
3.0L (VIN B)	139 psi (9.8 kg/cm ²)
3.0L (VIN C)	115 psi (8.1 kg/cm ²)
3.0L (VIN S)	119 psi (8.4 kg/cm ²)

- (1) - See A - ENGINE/VIN ID article in the ENGINE PERFORMANCE Section for VIN information.
- (2) - Maximum variation between cylinders is 14 psi (1.0 kg/cm²)
-

VALVE CLEARANCE

NOTE: Valve adjustment is required on 1.5L engines only. Check adjustment at 15,000 mile intervals.

VALVE CLEARANCE SPECIFICATIONS - 1.5L

Application	(1) In. (mm)
Hot Engine	
Intake	.006 (.15)
Exhaust	.010 (.25)
Cold Engine	
Intake	.003 (.07)
Exhaust	.007 (.17)

- (1) - Adjust valves with engine hot.
-

IGNITION SYSTEM

IGNITION COIL

IGNITION COIL RESISTANCE - Ohms @ 68°F (20°C)

Application	Primary	Secondary
1.5L (VIN A) .....	.9-1.2	20,000-29,000
1.6L (VIN Y) (1) .....	.77-.95	10,300-13,900
1.8L (VIN T) .....	.9-1.1	19,000-27,000
2.0L (VIN R & U) (1) .....	.77-.95	10,300-13,900
2.0L (VIN V) .....	.72-.88	10,800-13,200
2.4L (VIN W) .....	.72-.88	10,300-13,900
3.0L (VIN B & C) (1) .....	.67-.81	11,300-15,300
3.0L (VIN S) .....	.72-.88	10,300-13,900

(1) - Distributorless ignition.

HIGH TENSION WIRE RESISTANCE

HIGH TENSION WIRE RESISTANCE

Application (1)	Ohms
1.5L (VIN A)	
Coil Wire	(2)
No. 1 Wire	11,500
No. 2 Wire	9100
No. 3 Wire	9000
No. 4 Wire	6700
1.8L (VIN T)	
Coil Wire	(2)
No. 1 Wire	10,100
No. 2 Wire	11,500
No. 3 Wire	12,000
No. 4 Wire	13,000
2.0L (VIN R & U)	
Coil Wire	Not Used
No. 1 Wire	5800
No. 2 Wire	8400
No. 3 Wire	10,600
No. 4 Wire	9700
2.0L (VIN V)	
Colt Vista	
Coil Wire	2700
No. 1 Wire	10,100
No. 2 Wire	11,800
No. 3 Wire	13,100
No. 4 Wire	13,000
Galant	
Coil Wire	2700
No. 1 Wire	10,100
No. 2 Wire	11,800
No. 3 Wire	11,800
No. 4 Wire	14,200
2.4L (VIN W)	
Coil Wire	3000
No. 1 Wire	10,000
No. 2 Wire	12,000

No. 3 Wire	.....	12,000
No. 4 Wire	.....	14,000
3.0L (VIN B & C)		
Coil Wire	.....	Not Used
No. 1 Wire	.....	8600
No. 2 Wire	.....	13,900
No. 3 Wire	.....	6400
No. 4 Wire	.....	11,500
No. 5 Wire	.....	4500
3.0L (VIN S)		
Coil Wire	.....	3000
No. 1 Wire	.....	9000
No. 2 Wire	.....	8500
No. 3 Wire	.....	10,000
No. 4 Wire	.....	9000
No. 5 Wire	.....	12,000
No. 6 Wire	.....	10,000
No. 6 Wire	.....	11,700

- (1) - See A - ENGINE/VIN ID article in the ENGINE PERFORMANCE Section for VIN information.
- (2) - Information not available from mfg.

SPARK PLUGS

SPARK PLUG TYPE

Application	Nippondenso No.
1.5L (VIN A)	..... W20EPR-11
1.6L (VIN Y)	..... W20EPR-11
1.8L (VIN T)	..... W20EPR-11
2.0L (VIN R)	..... W20EPR
2.0L (VIN U & V)	..... W20EPR-11
2.4L (VIN W)	..... W20EPR-11
3.0L (VIN B & C)	..... PK20PR-P11
3.0L (VIN S)	..... W16EPR-11

SPARK PLUG SPECIFICATIONS

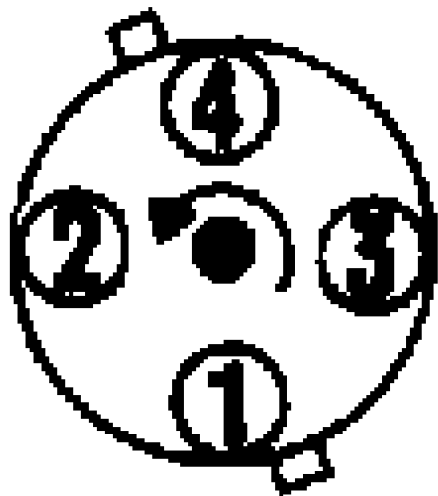
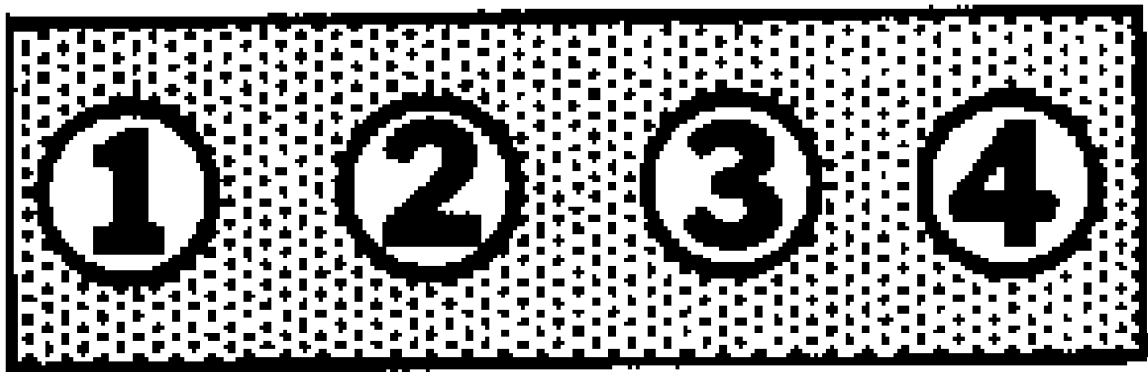
Application	Gap In. (mm)	Torque Ft. Lbs. (N.m)
2.0L (VIN R & U)	..... .028-.031 (.7-.8)	..... 15-21 (20-30)
All Others	..... .039-.043 (1.0-1.1)	..... 15-21 (20-30)

FIRING ORDER & TIMING MARKS

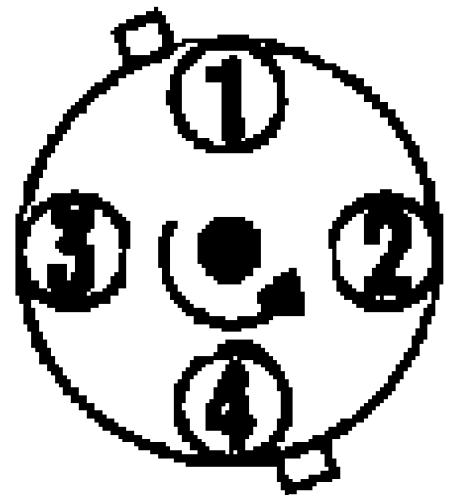
WARNING: On the 3.0L V6, the firing order and the spark plug connection order on the top of the distributor do not match. Circuits internal to the distributor cap differ from the external spark plug wire connections. This is intentional and is done to avoid spark plug wires crossover. See Fig. 3.

- 🚗 FRONT OF VEHICLE (FWD)
- 🚘 FRONT OF VEHICLE (RWD)

FIRING ORDER 1-3-4-2



1.5L



1.8L

Fig. 1: Firing Order & Distributor Rotation (1.5L, 1.8L, 2.0L & 2.4L)

● FRONT OF VEHICLE

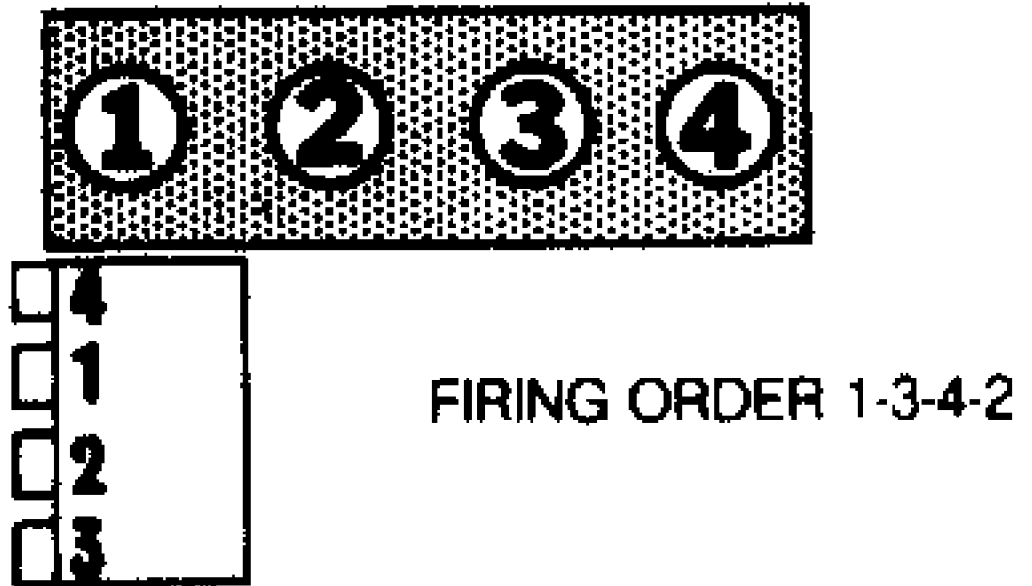


Fig. 2: Firing Order (1.6L & 2.0L DOHC)

● FRONT OF VEHICLE

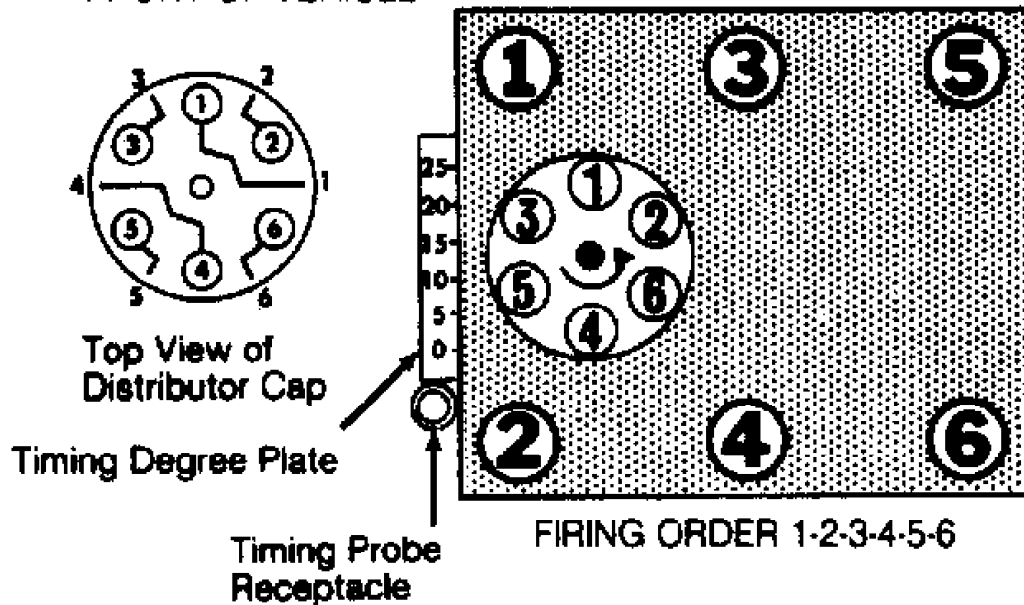
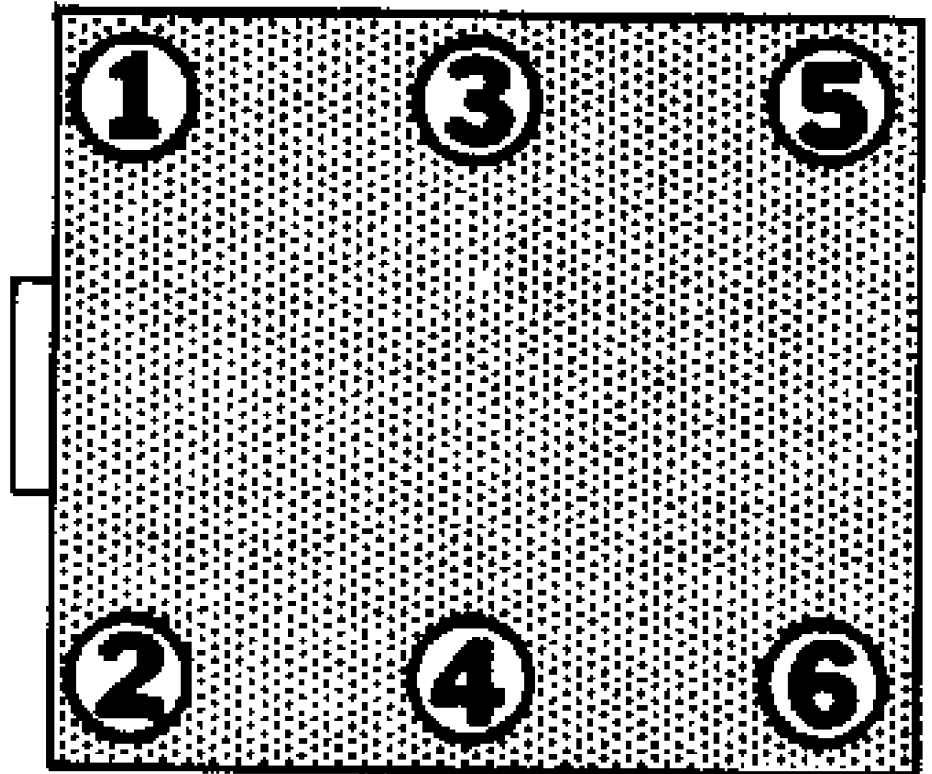
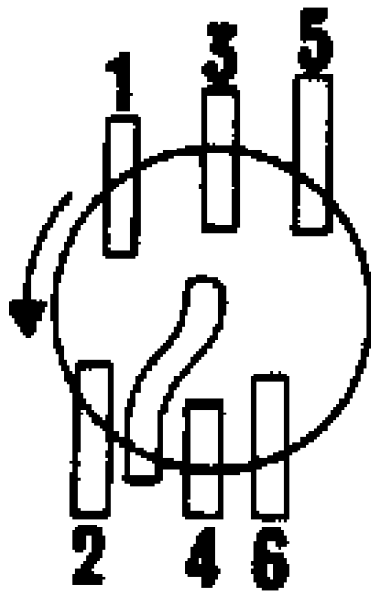


Fig. 3: Firing Order & Dist. Rotation (Montero, Pickup & Ram-50 3.0L)

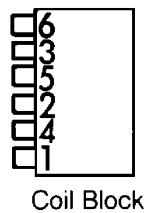
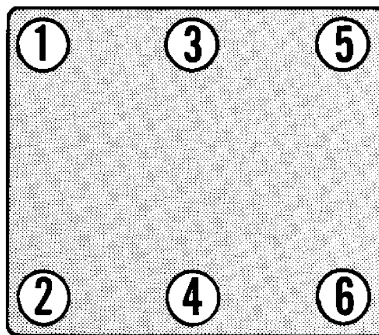
▲ FRONT OF VEHICLE



FIRING ORDER 1-2-3-4-5-6

Fig. 4: Firing Order & Distributor Rotation (Stealth 3.0L SOHC)

▲ FRONT OF VEHICLE



FIRING ORDER 1-2-3-4-5-6

Fig. 5: Firing Order (3.0L DOHC)

IGNITION TIMING

IGNITION TIMING (Degrees BTDC @ RPM)

Application	(1) Basic	(2)	(3)	Actual
1.5L				
Colt & Colt 200	5 @ 650-850	.....	10 @ 650-850	
Mirage & Summit	5 @ 650-850	.....	10 @ 650-850	
1.6L				
Mirage	5 @ 650-850	.....	8 @ 650-850	
1.8L				
Eclipse	5 @ 600-800	.....	10 @ 600-800	
2.0L				
Colt Vista & Galant (VIN V)	5 @ 600-800	.....	10 @ 600-800	
Eclipse	5 @ 650-850	.....	8 @ 650-850	
Galant				
(VIN R)	5 @ 650-850	.....	8 @ 650-850	
(VIN U)	5 @ 650-850	.....	12 @ 650-850	
2.4L				
Pickup & Ram-50	5 @ 650-850	.....	8 @ 650-850	
3.0L				
Montero, Pickup & Ram-50	5 @ 600-800	.....	15 @ 600-800	
Stealth & 3000GT	5 @ 600-800	.....	15 @ 600-800	

- (1) - With ignition timing adjustment connector grounded or vacuum hose (farthest from distributor) disconnected.
- (2) - With ignition timing adjustment connector ungrounded or vacuum hose (farthest from distributor) connected. Ignition timing may fluctuate.
- (3) - If vehicle altitude is more than 2300 ft. above sea level, actual timing may be advanced.

FUEL SYSTEM

FUEL PUMP

REGULATED FUEL PRESSURE

Application	At Idle w/Vacuum psi (kg/cm ²)	At Idle w/o Vacuum psi (kg/cm ²)
Eclipse 2.0L (VIN U)		
With Man. Trans.	33 (2.3)	..... 36-38 (2.5-2.7)
With Auto. Trans.	33 (2.3)	..... 41-46 (2.9-3.2)
Galant 2.0L (VIN V), Montero (3.0L), Pickup (3.0L) & Ram-50 (3.0L)	38 (2.7)	..... 47-50 (3.3-3.5)
Stealth & 3000GT (VIN B & S)	38 (2.7)	..... 47-50 (3.3-3.5)
Stealth & 3000GT (VIN C)	34 (2.8)	..... 43-45 (3.0-3.2)
All Others	38 (2.7)	..... 47-50 (3.3-3.5)

INJECTOR RESISTANCE

INJECTOR RESISTANCE

Application	Ohms
Non-Turbo	13-16
Turbo	2-3

THROTTLE POSITION SENSOR (TPS)

TPS SPECIFICATIONS

Application (1) Volts

Montero 3.0L4-1.0

Except Montero48-.52

(1) - At idle.
