

# C - SPECIFICATIONS

## 1993 Mitsubishi Montero

1993 ENGINE PERFORMANCE  
Chrysler Corp./Mitsubishi Service & Adjustment Specifications

Dodge; Ram-50  
Mitsubishi; Montero, Pickup

### INTRODUCTION

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

### CAPACITIES

#### BATTERY SPECIFICATIONS

Application	Group Size	CCA Rating
2.4L .....	24F .....	430
3.0L .....	26R .....	490

NOTE: Refill capacities are approximate. Correct fluid level should be determined by mark on dipstick, if applicable.

#### FLUID CAPACITIES

Application	Quantity
Automatic Transmission (1)	
Montero .....	7.7 Qts. (7.3L)
Pickup & Ram-50 .....	7.4 Qts. (7.0L)
Cooling System (Includes Heater & Reserve Tank)	
Montero .....	10.0 Qts. (9.5L)
Pickup, Ram-50	
2WD	
Automatic Transmission .....	6.3 Qts. (6.0L)
Manual Transmission .....	6.3 Qts. (6.0L)
4WD .....	8.9 Qts. (8.4L)
Crankcase (Includes Filter)	
Montero .....	5.5 Qts. (4.9L)
Pickup, Ram-50	
4 Cylinder .....	4.0 Qts. (3.8L)
V6 .....	5.0 Qts. (4.6L)
Differential (SAE 80W-90/API GL-5)	
Montero	
Front .....	1.3 Qts. (1.2L)
Rear .....	2.7 Qts. (2.6L)
Pickup & Ram-50	
2WD .....	1.6 Qts. (1.5L)
4WD	
Front .....	1.2 Qts. (1.1L)
Rear .....	2.7 Qts. (2.6L)
Manual Transmission (SAE 75W-85/API GL-4)	
Montero .....	2.6 Qts. (2.5L)
Pickup & Ram-50	
2WD .....	2.4 Qts. (2.3L)
4WD .....	2.6 Qts. (2.5L)

Power Steering (Dexron-II)	
Pickup, Precis, Ram-50 .....	1.9 Pts. (.9L)
Montero .....	2.1 Pts. (1.0L)
Transfer Case (SAE 75W-85/API GL-4)	
Montero, Pickup & Ram-50 .....	4.7 Pts. (2.2L)

(1) - Fill with Mitsubishi Plus, Mopar Plus, or Dexron-II type automatic transmission fluid.

## QUICK-SERVICE

### SERVICE INTERVALS & SPECIFICATIONS

#### REPLACEMENT INTERVALS - MONTERO

Component	Miles
Air Filter .....	30,000
Automatic Transmission Fluid .....	30,000
Coolant .....	30,000
Front & Rear Axle Fluid .....	30,000
Oil .....	7500
Oil Filter .....	15,000
O2 Sensor (1) .....	80,000
Spark Plugs .....	30,000
Spark Plug Wires (1) .....	60,000
Timing Belt .....	60,000
Transfer Case Fluid .....	30,000
Vapor Canister (1) .....	100,000

(1) - Federal models only.

#### REPLACEMENT INTERVALS - PICKUP & RAM-50

Component	Miles
Air Filter .....	30,000
Automatic Transmission Fluid .....	30,000
Coolant .....	30,000
EGR Valve (2.4L) (1) .....	50,000
Front & Rear Axle Fluid .....	30,000
Oil .....	7500
Oil Filter .....	15,000
O2 Sensor (1) .....	80,000
Spark Plugs .....	30,000
Spark Plug Wires (1) .....	60,000
Timing Belt .....	60,000
Transfer Case Fluid .....	30,000
Vapor Canister (1) .....	100,000

(1) - Federal models only.

#### BELT ADJUSTMENT - MONTERO

Application	(1) Deflection New Belt - In. (mm)	(1) Deflection Used Belt - In. (mm)
Alternator .....	.25-.31 (6.3-7.8)	.35 (8.8)
P/S .....	.31 (7.8)	.39 (10.0)

A/C ..... .19-.23 (4.8-5.8) ... .25-.29 (6.3-7.3)

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

**BELT ADJUSTMENT - PICKUP & RAM-50**

Application	(1) Deflection New Belt - In. (mm)	(1) Deflection Used Belt - In. (mm)
<b>2.4L</b>		
Alternator ...	.27-.39 (6.8-10.0)	..... (2)
P/S .....	.23-.35 (5.8-8.8)	..... (2)
A/C .....	.33-.39 (8.3-10.0)	..... (2)
<b>3.0L</b>		
Alternator ...	.31-.39 (7.8-10.0)	..... (2)
P/S .....	.35-.47 (8.8-12.0)	..... (2)
A/C .....	.33-.39 (8.3-10.0)	..... (2)

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

(2) - Information is not available from manufacturer.

**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
<b>Compression Ratio</b>	
2.4L (VIN G) .....	8.5:1
3.0L (VIN H) .....	8.9:1
<b>Compression Pressure</b>	
2.4L (VIN G) .....	171 psi (12.0 kg/cm <sup>2</sup> )
3.0L (VIN H) .....	171 psi (12.0 kg/cm <sup>2</sup> )
Maximum Variation Between Cylinders ..	14 psi (1.0 kg/cm <sup>2</sup> )

(1) - See A - ENGINE/VIN ID article in this section for VIN information.

**VALVE CLEARANCE**

NOTE: These models do not require periodic valve adjustment.

**IGNITION SYSTEM**

**IGNITION COIL**

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

Application	Primary	Secondary
2.4L (VIN G) .....	.72-.88	10,300-13,900
3.0L (VIN H) .....	.72-.88	10,300-13,900

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## HIGH TENSION WIRE RESISTANCE

### HIGH TENSION WIRE RESISTANCE - 2.4L (VIN G)

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Application (1)	Ohms
Coil Wire .....	3000
No. 1 Wire .....	10,000
No. 2 Wire .....	12,000
No. 3 Wire .....	12,000
No. 4 Wire .....	14,000

(1) - See A - ENGINE/VIN ID article in this article for VIN information.

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### HIGH TENSION WIRE RESISTANCE - 3.0L (VIN H)

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Application (1)	Ohms
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

(1) - See A - ENGINE/VIN ID article in this article for VIN information.

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## SPARK PLUGS

### SPARK PLUG TYPE

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Application	Nippondenso No.
2.4L (VIN G, 8 Valve) .....	W20EPR-11
2.4L (VIN G, 16 Valve) .....	K16EPR-11
3.0L (VIN H) .....	W16EPR-11

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### SPARK PLUG SPECIFICATIONS

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Application	Gap In. (mm)	Torque Ft. Lbs. (N.m)
All Models ....	.039-.043 (1.0-1.1)	.... 15-21 (20-30)

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## 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. 2.

● FRONT OF VEHICLE

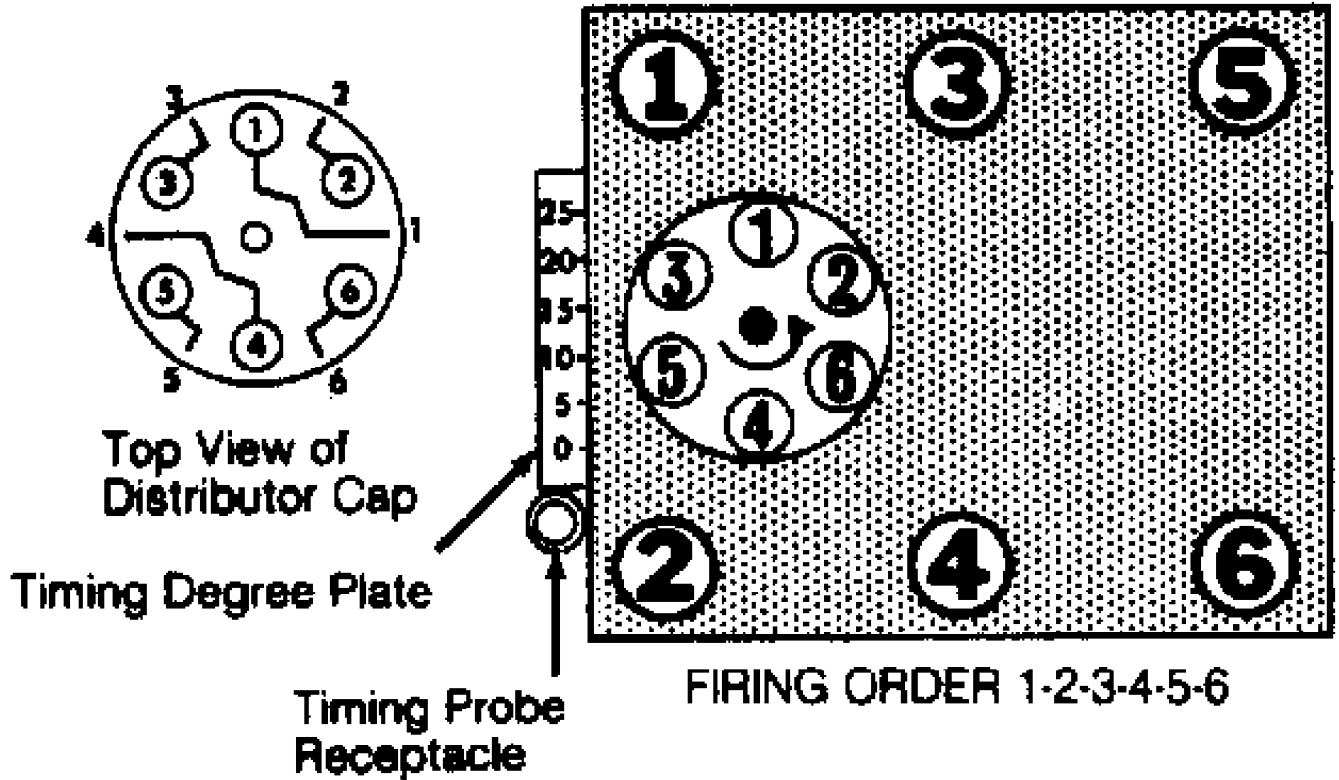


Fig. 1: Firing Order & Distributor Rotation (2.4L)

● FRONT OF VEHICLE

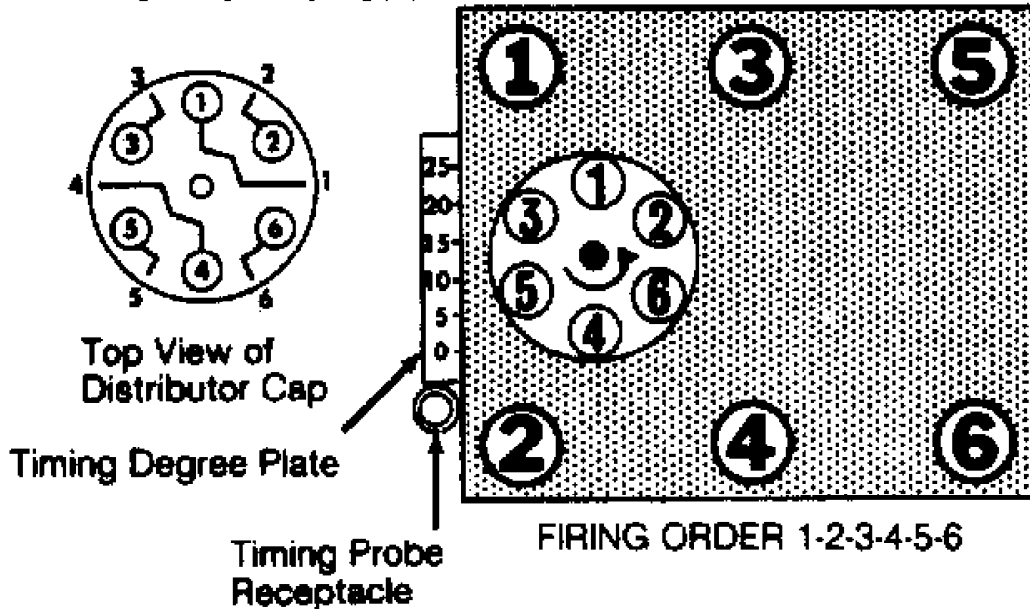


Fig. 2: Firing Order & Distributor Rotation (3.0L)

IGNITION TIMING

IGNITION TIMING (Degrees BTDC @ RPM)

Application	(1) Basic	(2) (3) Actual
2.4L .....	3-7 @ 600-800 .....	8 @ 600-800
3.0L		
Montero .....	3-7 @ 600-800 .....	15 @ 600-800
Pickup & Ram-50 .....	3-7 @ 650-850 .....	15 @ 650-850

- (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 <sup>2</sup> )	At Idle w/o Vacuum psi (kg/cm <sup>2</sup> )
All Models .....	38 (2.6) .....	47-50 (3.3-3.5)

### INJECTOR RESISTANCE

#### INJECTOR RESISTANCE

Application	Ohms
All Models .....	13-16

### THROTTLE POSITION SENSOR (TPS)

#### TPS SPECIFICATIONS

Application	(1) Volts
2.4L .....	.48-.52
3.0L .....	.4-1.0

- (1) - At idle.