

# C - SPECIFICATIONS

## 1992 Infiniti G20

1992 ENGINE PERFORMANCE  
Infiniti Service & Adjustment Specifications  
G20, M30, Q45

### 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	Amp Hr. Rating
G20	
55D23L (California) .....	60
80D26L (Federal) .....	65
M30	
65D26R (Standard) .....	65
80D26R (Optional) .....	65
Q45	
95D31R .....	80

#### FLUID CAPACITIES - G20

Application	Quantity
Crankcase (Includes Filter) .....	3.6 Qts. (3.4L)
Cooling System (Includes Heater)	
M/T .....	6.5 Qts. (6.2L)
A/T .....	6.9 Qts. (6.5L)
M/T (SAE 80W-90/API GL-4) .....	3.8-3.9 Qts. (3.5-3.7L)
A/T (Dexron-II) .....	7.4 Qts. (7.0L)

#### FLUID CAPACITIES - M30

Application	Quantity
Crankcase (Includes Filter) .....	4.6 Qts. (4.4L)
Cooling System (Includes Heater) .....	9.6 Qts. (9.2L)
A/T (Dexron-II) .....	8.8 Qts. (8.3L)
Differential (SAE 80W-90/API GL-5) .....	1.4 Qts. (1.3L)

#### FLUID CAPACITIES - Q45

Application	Quantity
Crankcase (Includes Filter) .....	6.4 Qts. (6.0L)
Cooling System (Includes Heater) .....	10.9 Qts. (10.3L)
A/T (Dexron-II) .....	10.8 Qts. (10.2L)
Differential (SAE 80W-90/API GL-5) .....	1.6 Qts. (1.5L)

## QUICK-SERVICE

### SERVICE INTERVALS & SPECIFICATIONS

#### REPLACEMENT INTERVALS (1)

Component	Interval (Miles)
Air Filter .....	30,000
Cam Timing Belt (2) .....	60,000
Coolant .....	30,000
Fuel Filter .....	30,000
Oil & Filter .....	7500
Spark Plugs (3) .....	60,000

(1) - More often under severe operating conditions.

(2) - M30 only.

(3) - Platinum tip.

#### BELT ADJUSTMENT - G20

Application	New Belt (1) Deflection	Used Belt (1) Deflection
Alternator		
With A/C .....	.28" (7.0 mm)	.31" (8.0 mm)
Without A/C .....	.31" (8.0 mm)	.34" (8.5 mm)
Power Steering .....	.16" (4.0 mm)	.22" (5.0 mm)

(1) - With 22-lb. (10 kg) pressure applied at center of longest belt run.

#### BELT ADJUSTMENT - M30

Application	New Belt (1) Deflection	Used Belt (1) Deflection
Alternator .....	.6" (7 mm)	.3" (8 mm)
A/C Compressor .....	.3" (8 mm)	.4" (10 mm)
Power Steering .....	.5" (13 mm)	.6" (15 mm)

(1) - With 22-lb. (10 kg) pressure applied at center of longest belt run.

#### BELT ADJUSTMENT - Q45

Application	New Belt (1) Deflection	Used Belt (1) Deflection
Alternator .....	.31" (8.0 mm)	.41" (10.0 mm)
A/C Compressor .....	.31" (8.0 mm)	.38" (9.5 mm)
Power Steering		
With HICAS (2) .....	.25" (6.0 mm)	.31" (8.0 mm)
Without HICAS (2) ...	.31" (8.0 mm)	.41" (10.0 mm)

(1) - With 22-lb. (10 kg) pressure applied at center of longest belt run.

(2) - Full active suspension.

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## MECHANICAL CHECKS

### ENGINE COMPRESSION

Check engine compression at normal operating temperature at specified cranking speed. Release fuel pressure, and disconnect coil wire at distributor. Remove all spark plugs, and hold throttle wide open.

NOTE: On Q45, remove air duct and harness connector bracket from left bank. Also remove ornament cover from cylinder head to access ignition coil and spark plug wires.

#### COMPRESSION SPECIFICATIONS - G20

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Application	Specification
Compression Ratio .....	9.5:1
Normal Compression Pressure .... (1) 178 psi (12.5 kg/cm <sup>2</sup> )	
Minimum Compression Pressure .....	149 psi (10.5 kg/cm <sup>2</sup> )
Maximum Variation Between Cylinders ..	14 psi (1.0 kg/cm <sup>2</sup> )

(1) - Measured at 300 RPM.

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#### COMPRESSION SPECIFICATIONS - M30

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Application	Specification
Compression Ratio .....	9.0:1
Normal Compression Pressure .... (1) 173 psi (12 kg/cm <sup>2</sup> )	
Minimum Compression Pressure .....	128 psi (9 kg/cm <sup>2</sup> )
Maximum Variation Between Cylinders ....	14 psi (1 kg/cm <sup>2</sup> )

(1) - Measured at 300 RPM.

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#### COMPRESSION SPECIFICATIONS - Q45

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Application	Specification
Compression Ratio .....	10.2:1
Normal Compression Pressure .... (1) 185 psi (13 kg/cm <sup>2</sup> )	
Minimum Compression Pressure .....	142 psi (10 kg/cm <sup>2</sup> )
Maximum Variation Between Cylinders ....	14 psi (1 kg/cm <sup>2</sup> )

(1) - Measured at 300 RPM.

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### VALVE CLEARANCE

NOTE: All vehicles are equipped with hydraulic lifters. No adjustments are required.

### IGNITION SYSTEM

#### IGNITION COIL

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

Application	Primary	Secondary
G20 & M30	1.0	10,000
Q45	0.7	8000

## DISTRIBUTOR SENSORS

### CRANK ANGLE SENSOR

Application	(1) Fluctuating Voltage
All Models	Between 5 And 0

(1) - Rotate crank angle sensor slowly by hand. Includes sub-crank angle sensor on Q45.

## HIGH TENSION WIRE RESISTANCE

### HIGH TENSION WIRE RESISTANCE (1)

Application	Ohms
G20 & M30	30,000 Maximum

(1) - Not applicable to Q45 distributorless ignition system.

## SPARK PLUGS

### SPARK PLUG TYPE

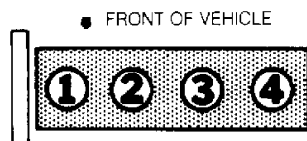
Application	NGK No.
All Models	PFR6B-11

### SPARK PLUG SPECIFICATIONS

Application	Gap In. (mm)	Torque Ft. Lbs. (N.m)
All Models	.039-.043 (1.00-1.10)	14-22 (20-29)

## FIRING ORDER & TIMING MARKS

NOTE: For firing order, see Figs. 1-3. Q45 uses a distributorless ignition system. Firing order for Q45 is controlled by ECU through left and right power transistors. Adjustments to timing are not possible.



Firing Order 1-3-4-2

Fig. 1: Firing Order (G20)

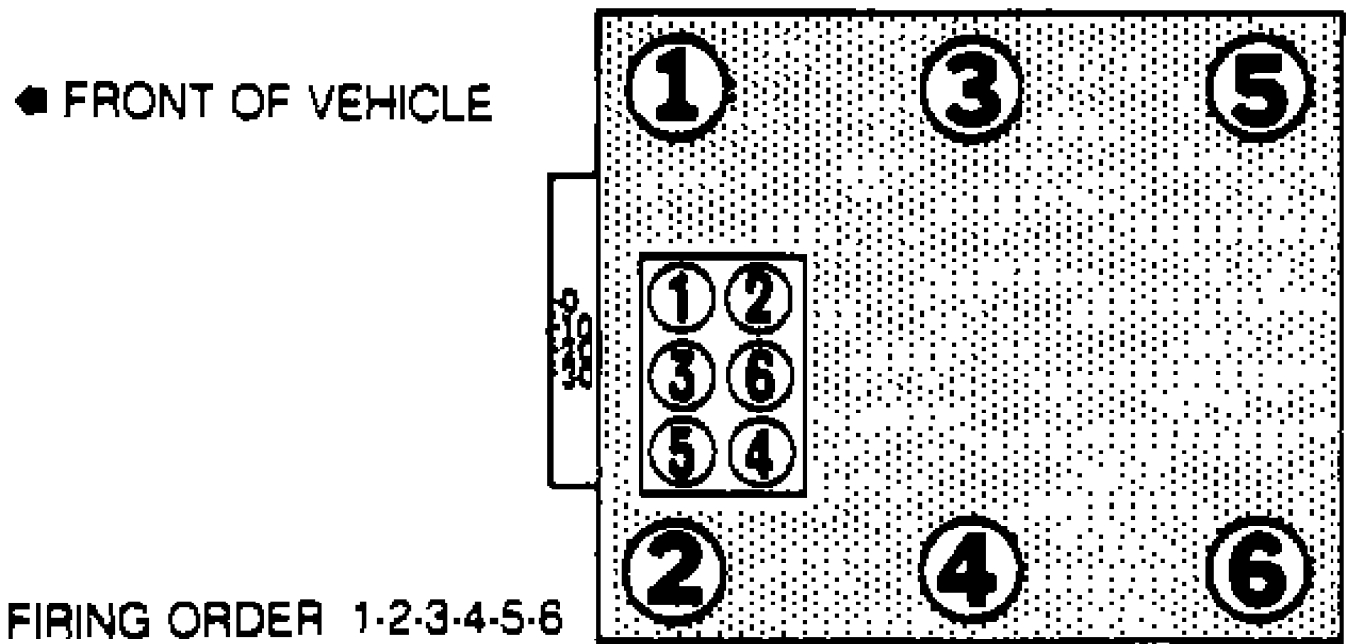
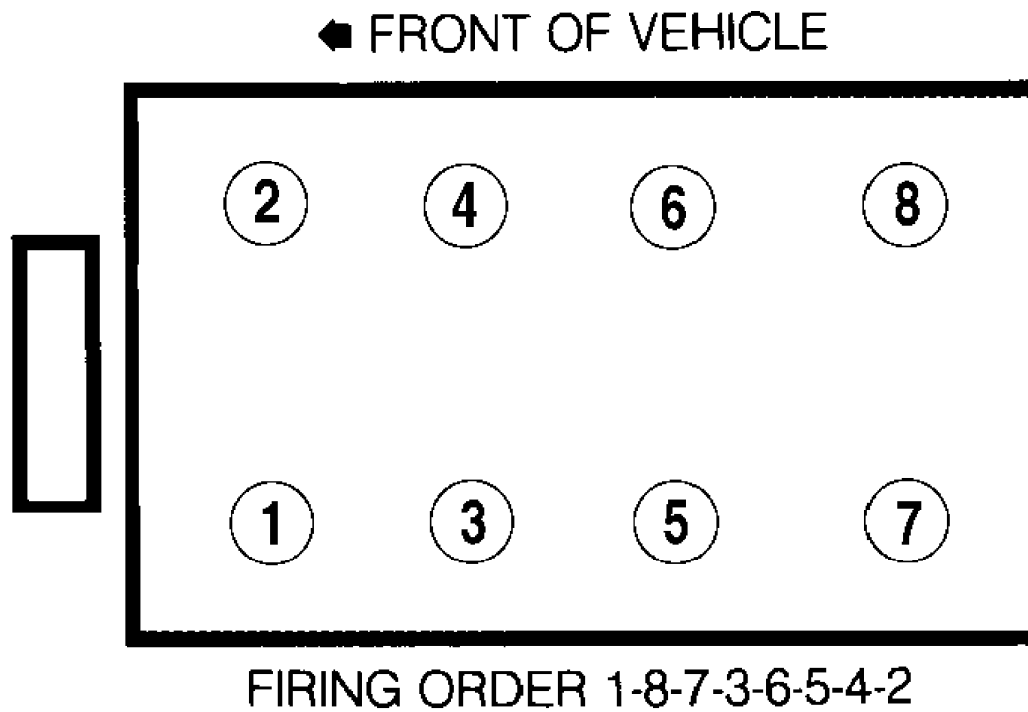


Fig. 2: Firing Order & Timing Marks (M30)



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Fig. 3: Firing Order (Q45)

IGNITION TIMING

IGNITION TIMING (Degrees BTDC @ RPM)

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Application	Specification
G20 .....	(1) 13-17 @ 700-800
M30 .....	(2) 13-17 @ 750-850
Q45 .....	(2) 13-17 @ 600-700

(1) - With Consult Tester (J-38465) in IGN TIMING ADJ in WORK SUPPORT mode or with throttle position sensor harness connector disconnected (A/T in Neutral). Adjust ignition timing by rotating distributor.

(2) - Transmission in Neutral and no load on engine. Adjust ignition timing by rotating crank angle sensor.

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## FUEL SYSTEM

### FUEL PUMP

#### FUEL PRESSURE

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Application	(1) psi (kg/cm <sup>2</sup> )	(2) psi (kg/cm <sup>2</sup> )
G20 .....	36 (2.5)	43 (3.0)
M30 & Q45 .....	34 (2.4)	43 (3.0)

(1) - With vacuum hose connected at fuel pressure regulator.

(2) - With vacuum hose disconnected at fuel pressure regulator.

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### INJECTOR RESISTANCE

#### INJECTOR RESISTANCE SPECIFICATIONS

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Application	Ohms
All Models .....	10-14

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### IDLE SPEED

#### IDLE SPEED SPECIFICATIONS (1)

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Application	RPM
G20 .....	(1) 700-800
M30 .....	(2) 750-850
Q45 .....	(2) 600-700

(1) - With Consult Tester (J-38465) in IGN TIMING ADJ in WORK SUPPORT mode or with throttle position sensor harness connector disconnected (A/T in Neutral). Adjust idle speed by turning adjustment screw on AAC valve.

(2) - With Consult Tester (J-38465) in DATA MONITOR mode or with transmission in Neutral and no load on engine. Adjust idle speed by selecting AAC VALVE ADJ in WORK SUPPORT mode or by disconnecting AAC valve harness connector. Turn adjustment screw on AAC valve. Adjust idle speed to 700 RPM on M30 and 575-625 RPM on Q45.

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## THROTTLE POSITION SENSOR

### THROTTLE POSITION SENSOR SPECIFICATIONS

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Application	(1) Volts
G20 .....	0.45-4.00
M30 & Q45 .....	0.40-4.00

(1) - Voltage variation from closed throttle (idle) to wide open throttle.

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