

C - SPECIFICATIONS - GASOLINE

Article Text

1991 Volkswagen Vanagon
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Saturday, March 18, 2000 09:02PM

ARTICLE BEGINNING

1990-91 ENGINE PERFORMANCE
Volkswagen Service & Adjustment Specifications

1990-91 Passat
1991 Cabriolet, Corrado, Fox, Golf GL, GTI, Jetta,
Jetta GLI, Vanagon

MODEL APPLICATION

NOTE: Information in this article applies to gasoline engine models only.

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 TABLE

AA

Application	Amp Hr. Rating
-------------	----------------

Cabriolet, Fox, Jetta,
Jetta GLI & Passat

Without A/C	54
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With A/C	63
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Corrado, Golf GL, GTI & Vanagon	63
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FLUID CAPACITIES TABLE

AA

Application	Quantity
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Auto. Transaxle (Dexron-II)	(1) 3.2 Qts. (3.0L)
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Auto. Transaxle Final Drive

(SAE 90/API GL-5)

Except Vanagon	(2) .8 Qts. (.76L)
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Vanagon	1.4 Qts. (1.3L)
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Cooling System (Includes Heater)

Cabriolet	5.1 Qts. (4.8L)
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Corrado	6.0 Qts. (5.5L)
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Fox	6.9 Qts. (6.5L)
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Golf GL, GTI,

Jetta & Jetta GLI	7.0 Qts. (6.6L)
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Passat	5.9 Qts. (5.6L)
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Vanagon	18.4 Qts. (17.5L)
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Crankcase (Includes Filter)

Fox	3.7 Qts. (3.5L)
Vanagon	4.8 Qts. (4.5L)
All Other Models	4.3 Qts. (4.1L)
Man. Transaxle (SAE 80W-90/API GL-4)	
Fox	1.8 Qts. (1.7L)
Vanagon	3.2 Qts. (3.0L)
All Other Models	2.1 Qts. (2.0L)

(1) - Refill capacity.

(2) - Filled for service life. No oil change.

AA

QUICK-SERVICE

SERVICE INTERVALS & SPECIFICATIONS

BELT ADJUSTMENT TABLE

AA

Application	(1) Deflection	In. (mm)
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All Models Except Vanagon

Alternator

New	(2) 5/64 (2)
Old	13/64 (5)

A/C Compressor

New	3/8 (10)
Old	3/8 (10)

Power Steering

New	5/64 (2)
Old	13/64 (5)

Vanagon

Alternator	3/8-9/16 (10-15)
A/C Compressor	3/8 (10)

(1) - Deflection is with 22 lbs. (10 kg) pressure applied midway on longest belt run.

(2) - 3/8" (10 mm) on models with A/C.

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REPLACEMENT INTERVALS TABLE

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Component	Miles
Air Filter	30,000
Coolant	30,000
Fuel Filter (1)	15,000
Oil & Filter	7500
Spark Plugs	30,000

(1) - Discard mini-fuel filter at 1000-mile maintenance interval. Install new copper gaskets.

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HIGH TENSION WIRE RESISTANCE

HIGH TENSION WIRE RESISTANCE TABLE

AA

Application	Ohms
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Vanagon

Coil Wire With Connectors	1200-2800
Spark Plug Wire/Connector	4600-7400
Spark Plug Connector	4000-6000
Suppressor (1)	600-1400

Except Vanagon

Coil Wire Only	(1)
Coil Wire With Connector	1600-2400
Spark Plug Wire/ Connector	4000-6000
Suppressor (2)	600-1400

(1) - Check for continuity.

(2) - Suppressor is located between ignition wire and distributor cap.

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SPARK PLUGS

SPARK PLUG TYPE TABLE

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Application	Bosch	Champion
-------------	-------	----------

Cabriolet	W7DTC	N7BYC
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Corrado, Fox

Golf GL & Jetta 1.8L	WR7DS	N8GY
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Jetta GLI 2.0L & Passat	F6DSR	N8GY
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Vanagon	W7CCO	N288
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SPARK PLUG SPECIFICATIONS TABLE

AA

Application	Gap In. (mm)	Torque Ft. Lbs. (N.m)
-------------	-----------------	--------------------------

All Models028-.032 (.70-.80)	14 (19)
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FIRING ORDER & TIMING MARKS

1.8L & 2.0L

Timing mark location is on flywheel. Timing pointer is on timing hole on transaxle bellhousing.

2.1L

Timing mark on crankshaft belt pulley and notch on "V" belt pulley must align with separating line of crankcase.

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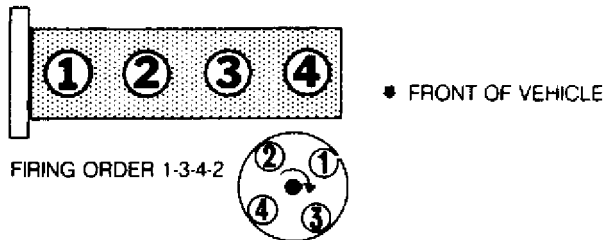


Fig. 1: Firing Order & Distributor Rotation (1.8L & 2.0L)
Courtesy of Volkswagen United States, Inc.

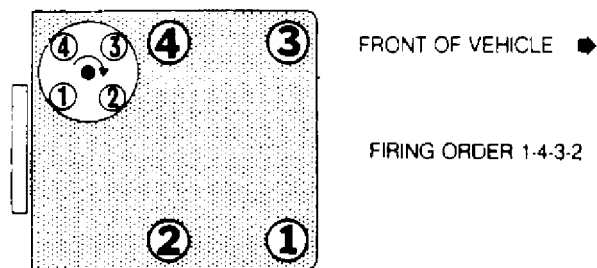


Fig. 2: Firing Order & Distributor Rotation (2.1L)
Courtesy of Volkswagen United States, Inc.

IGNITION TIMING

NOTE: Always reference under-hood label for latest specifications.

IGNITION TIMING TABLE - (Degrees BTDC @ RPM)

Application			
Checking		Adjusting	
1.8L	4-8 @ 870-930	5-7 @ 870-930	
2.0L	4-8 @ 770-830	5-7 @ 770-830	
2.1L	4-8 @ 800-900	5-7 @ 800-900	

NOTE: Off idle timing is computer controlled on models with knock sensor. For adjustment procedures, see D - ADJUSTMENTS article in the ENGINE PERFORMANCE Section.

DISTRIBUTOR SPECIFICATIONS

DISTRIBUTOR ADVANCE TABLE

Application		Degrees Total Advance	RPM
Cabriolet & Fox	22-26	4500	
Golf GL, Jetta & Passat	23-27	6000	
Vanagon	21-25	3400	

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[illegible]

FUEL PUMP

FUEL PUMP PERFORMANCE TABLE (AFC-Digifant)

[illegible]

Cabriolet, Corrado,					
Golf GL, GTI & Jetta	.	29-36	(2.0-2.5)	.....	1.0 (.5)
Vanagon	.....	33-39	(2.3-2.7)	.....	1.0 (.5)

[illegible]

FUEL PUMP PERFORMANCE TABLE (CIS-E & CIS-Motronic)

[illegible]

Fox		
10	.....	.8 (.36)
11	.....	1.1 (.52)
12	.....	1.4 (.68)

Jetta	GLI & Passat	
10	.....	1.0 (.46)
11	.....	1.3 (.62)
12	.....	1.6 (.75)

[illegible]

REGULATED FUEL PRESSURE TABLE

[illegible]

Fox	38.0 (2.6)	75-82 (5.3-5.8)
Jetta GLI	48.0 (3.3)	89-95 (6.1-6.6)
Cabriolet, Corrado, Golf GL, GTI, Jetta & Passat	29-36 (2.0-2.5)	75-82 (5.2-5.6)
Vanagon	29-36 (2.0-2.5)	(2) 33 (2.2)

- (1) - After checking fuel pressure at idle, turn ignition switch to OFF position.
- (2) - With pressure regulator vacuum hose disconnected, pressure should be 36 psi (2.5 kg/cm²).

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INJECTOR RESISTANCE

INJECTOR RESISTANCE SPECIFICATIONS TABLE

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Application	Ohms
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Vanagon	16.0-16.4
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Except Vanagon	(1) 3.7-5.0
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(1) - Resistance measured at main electrical
connector on end of fuel rail.

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IDLE SPEED & MIXTURE

IDLE SPEED & CO LEVEL TABLE

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Application	Idle RPM	CO Level %
-------------	----------	------------

Cabriolet	750-850 (1)	.3-1.1
-----------------	-------------	--------

Corrado	750-850	.3-1.1
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Fox	875-925	(2) 1.2-1.5
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Golf GL, Jetta & GTI

1.8L (Digifant)	750-850	.3-1.1
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2.0L (CIS-E)	N/A (3)	.2-1.2
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Passat	700-900 (3)	.2-1.2
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Vanagon	830-930	.3-1.1
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(1) - Disconnect Blue coolant temperature sensor connector.

(2) - Clamp crankcase breather hose near emission control
valve.

(3) - Not adjustable.

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END OF ARTICLE