

Technical data on the vehicle

Make Chrysler Model Voyager 2,0 Year Engine ECB Variant	Date: 06-01-2013 Owner _____
	Registration No. _____ VIN _____ 1. Reg. Date _____

Technical item	Data
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Engine

Engine ID code	ECB
Number of cylinders	R4
Number of valves	16, OHC
Capacity/ (bore/ stroke)	1996 cm ³ (87,5/ 83,0)
Compression ratio (RON)	9.8: 1 (92 unleaded)
Max. output kW (din hp)/ rpm	98 (133)/ 5900
Max. torque NM/ rpm	176/ 4800
Engine code location	Engine block left side behind starter
Vehicle Identification Number location	Windscreen left side
Vehicle identification plate location	Type plate in the left door frame/closing plate
Production year code in VIN	10th digit, model year, i
Valve clearance, inlet (cold/ hot)	(Hydraulic)
Valve clearance, exhaust (cold/ hot)	(Hydraulic)
Valve angle/ seat angle	45° - 45° 30'/ 45°
Compression pressure, bar	11.7 - 15.5 (Max. difference 25 %)
Oil pressure/ rpm, bar	Min. 0.25/ idle speed (1.70 - 5.50/ 3000)
Radiator cap, bar/ thermostat °C	0,97 - 1,24/ 91° C i
Repair time: Clutch renewal	2 hours
Timing belt: Renewal interval	96,000 km/ 3 years i
Repair time: Timing belt renewal	2 hours
Noise measurement, dB(A) at rpm	85/ 3000

Engine management

Engine management system	MPI
Spark plug	Champion RC 9 YC
Electrode gap, mm	0,84 - 0,96
Firing order	1 - 3 - 4 - 2 (Cylinder 1 at timing gear) i
Ignition timing (BTDC)	i
Diagnostic connector	Under dashboard left side i
Max. timing advance (max. rpm)	(Electronic)
Ignition coil: Primary/ secondary resistance	0,45 - 0,65 ohm/ 7,00 - 15,80 kohm
Fuel pressure, w/wo vacuum, bar	/ 3.3 (Pump max. 6,35)
Injector resistance, ohm	12,0
Min. idle manifold vacuum, mbar	590
Coolant temperature sensor 20°/ 80°C	7,0 - 13,0 kohm/ 0,7 - 1,0 kohm
TPS voltage, volt	Closed 0.38 - 1.2 (Open 3.1 - 4.4)

Electrical system

Battery	12 V 60 Ah
Starter motor current (cranking), A	73 A/ 3400 rpm
Voltage relay, Volt at/ amp.	12.9 - 15.0 V/ (Controlled by engine management)
Terminal definitions DIN 72 552	
Alternator max, A	86/ 98

Wheel alignment

Load	Unloaded (Vehicle height)
Toe-in, °	0° 06' ± 12'
Camber°	0° 09' ± 24' i
Caster°	1° 24' ± 1° i
Caster, max. difference on R and L side	1°

Technical item	Data
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Wheel alignment

Rear camber°	0° ± 15'	
Rear toe-in °	0° ± 24'	i
Tyre size	215/ 65 R 15	
Tyre pressure, front/ rear, bar	2.5/ 2.5	
Free play in suspension parts	Factory data	i
Wheel offset, mm	6½J x 15 = 40 mm	

Tightening torques

Tightening, NM	Torque standards	
Cylinder head bolts, stage 1, Nm	34 Nm oiled	i
Cylinder head bolts, stage 2, Nm	68 Nm	
Cylinder head bolts, stage 3, Nm	68 Nm	
Cylinder head bolts, stage 4, Nm	+ 90°	
Cylinder head bolts, stage 5, Nm	(No retightening)	i
Repair time: Cylinder head gasket	4 hours and 25 minutes	
Main bearings, Nm	M8 = 30 Nm (M11 = 81 Nm)	
Connection rod bearings, Nm	27 Nm + 90° oiled	
Flywheel, Nm	95	
Crankshaft pulley/ vibration damp. Nm	142	
Camshaft pulley/ bearings, Nm	115 Nm/ 28 Nm	
Timing belt tensioner, Nm	28 (Hydraulic 31 Nm/ 68 Nm)	
Spark plugs, Nm	28	
Wheel nuts/ bolts, Nm	135	
Wheel hub, front/ rear, Nm	244/ (4 flange bolts 129 Nm)	
Repair time: Renew one rear wheel bearing	18 minutes	
Repair time: Renew one front wheel bearing	30 minutes	

Brakes

Front, min. thickness (new)	22,5 mm (24,0 mm)	
Rear, min. thickness (new)	11,25/ 251,5 mm (12,5/ 250,0 mm)	i
Repair time: Front brake disc renewal (2 pc.)	40 minutes	
Repair time: Rear brake drum renewal (2 pc.)	36 minutes	

Capacities

Engine oil/ - incl. filter, litre	3,8/ 4,3 (API. SH. SH/CD-SAE 5W30)	
Manual transmission, litre	1,9 - 2,2 (API. SG - SG/ CD SAE 5W30)	i
Power steering, litre	0.8	
Cooling system, litre	9.0	
A/C fluid, type/ gram	R134a/ 960 (With A/C in rear 1360)	
A/C oil, type/ cm ³	Dens Oil 8 PAG/ 150 (With A/C in rear 220)	

Environmental parametres

Idle speed, rpm	600 - 875 (Not adjustable)	
CO% at idle speed	Max. 0,5	i
CO% at Increased idle speed	Max. 0.3	
Lambda	1,00 ± 0,03	

Remarks

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xxx
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Order No.: _____

Mechanic _____