





The **AeroVee 2180 Engine Kit** is designed for ease of build-up and maintenance for the Experimental Aircraft Builder. This manual is a "Check List" guide and reference to the **AeroVee Engine Assembly Video** for assembly of the engine.

THE EXPERIMENTAL AEROVEE 2180 ENGINE KIT IS SOLD "AS IS". NO WARRANTY IS EXPRESSED OR IMPLIED!

The Purchaser/builder is responsible for the engine suitability of application, assembly, installation and operation. **AeroConversions, Inc.** and its Agents will not assume any liability for and will not pay you for any injuries caused to you or others by any misuse, modification, redesign, or alteration of our products. **AeroConversions, Inc.** will not be responsible for any incidental or consequential damage including direct or indirect labor, repair, medical, or legal expense in any way attributable to the use of any **AeroConversions, Inc.** product or to the delay or inconvenience caused by the necessity of replacing or repairing any such item.

You are encouraged to familiarize yourself with other supplemental" VW" engine manuals, books, video, etc., for specific details on assembly, maintenance and repair of the engine. We specifically recommend "How to Rebuild Your Volksawagen Air-Cooled Engine" by Tom Wilson.

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Specifications

HP @ 3400 RPM Bore Stroke Displacement Compression Ratios

Oil Capacity . Oil Type Firing Order Spark Plugs Spark Plug Gap Top Plugs Bottom Plugs Timing Ignition Module Gap Carburetor Starter Alternator Weight (Less Oil & Exhaust) Length Width Height Propeller Drive Prop Bolt Pattern Prop Drive Bushings Valve Adjustment Battery Required (minimum)

80 92mm 82mm 2180cc 7.0:1 (90 Oct. Min.) 8.0:1 (100LL Avgas Min.) 2 3/4 US Qts. SAE Multigrade 20/50 1-4-3-2 Autolite MP4163 or = .018" .032" Fixed @ 28⁰ BTDC .010-.014" Aero-Carb ACV-C03-32mm Geared 10 amp 160 Lbs. 25" 30" 14" 1:1 6-5/16' @ 4' center 9/16' dia.X 7/16" long .006-.008' 12v @ 20 amp

Operation Limitations

Idle RPM Cruise RPM Maximum RPM Oil Temp. Min. Oil Temp. Max. Oil Pressure Min. Oil Pressure Max. Oil Pressure @ Cruise CHT @ Cruise CHT @ Climb (5min.) CHT Max. EGT Max. 700-900 3200 +/- 200 4,000 160⁰ 230⁰ 20 PSI 100PSI 40-50 PSI 350⁰-375⁰F 420⁰F 455⁰ 1400⁰

Specifications subject to change without notice!



Torque Values			
Item Soc	ket Size	ft. Ibs.	In. Ibs.
Large Case Nuts	19 mm	25	300
Small Case Nuts	13mm	14	168
8mm Cyl. Head Nuts	15mm	18	216
Rocker Arm Nuts	13mm	14	168
Prop Hub Nut	30mm	70-80	840-960
Flywheel Gland Nut	36mm	227	2724
Connecting Rod Nuts	14mm	25	300
Oil Pump Cover	13mm	14	168
Oil Pan Cover Nuts	10mm	5	60
Rear Unit mount bolts	17mm	25	300
Prop Bolts/Nuts	1/2"	11	132
Spark Plugs	11/16"	22	264

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