

# A.W.E. Tuning Turbo Warranty Registration Certificate

Dear Customer,

Thank you for your purchase. Please take a few minutes to familiarize yourself with the conditions of our warranty as outlined on the last page of this document. Please complete the information below and submit this registration certificate to our address listed below.

erial Number of tur	bos (foun	d on plate	riveted to con	npressor housi	ng):
Customer Name:					
Address:					
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Submission of this form is required to activate your turbo warranty.

Mail to:

A.W.E. TUNING 199 Precision Drive Horsham, PA 19044



Thank you for your purchase of the Audi RS4 turbos for Audi S4/A6/allroad. Installation of the kit should be performed by qualified personnel. There are several critical steps, outlined below, to ensuring reliability of the K04 turbo.

#### **PARTS LIST**

- 2 RS4 K04 turbo (1 passenger side, 1 driver side)
- 2 upper turbo inlet tube (1 passenger side, 1 driver side)
- 2 lower turbo inlet tube (1 passenger side, 1 driver side)
- 2 inlet tube coupler
- 4 hose clamp for coupler, 40-60mm
- 8 stud, turbo to downpipe, 10mmx1.5mmx37
- 2 silicone o-ring for turbo compressor inlet
- 2 hose clamp for fuel tank purge lines, 8-12mm
- 2 oil return line gasket
- 8 coolant/oil line crush gasket, large
- 6 oil feed line crush gasket, small
- 2 manifold to turbo gasket
- 2 turbo to downpipe gasket

### INSTALLATION

- 1. We highly recommend using K04 specific software with the RS4 turbos. If you purchased these turbos as part of our entire RSK04 turbo kit, please send us your ECU for K04 chip installation as soon as possible, using the order form included with the install instructions of our fueling kit.
- 2. Always inspect factory oil feed line during install to determine if line has become coked with oil residue. If the oil feed line has dark, hardened coating inside of it, replace it with a new Audi part.
- 3. After the K04 turbocharger has been bolted onto the manifold and the oil feed and return lines have been reconnected, replace the oil filter and refill the engine with oil. Because of extreme oil operating temps, use synthetic engine oil only. A.W.E. Tuning recommends 15W50 Mobil 1.
- 4. Before restarting the engine for the first time, the engine, oil lines and turbocharger must be primed with oil. To perform this procedure, first locate the engine ECU and disconnect the multipin connectors from the ECU. Next turn the ignition to the RUN position and crank the starter motor in several 4-5 second bursts. (Your oil pump will

circulate oil, however no spark or fuel will be introduced into the engine.) Next turn the ignition key to the OFF/LOCK position and reconnect the multipin connectors to the ECU. If new GIAC software is to be used, it should be installed at this point and initial start-up procedure should be followed as outlined on software spec sheet.

After initial start-up, allow the vehicle to idle for several minutes. Do not rev the motor at this time. Shut down the engine and check the oil level. Top off if necessary.

#### **OPERATION**

K04 users should always bring their vehicle to a complete stop and allow the engine to idle prior to shutting down the engine. Recommended idle times vary from 1 minute after mild driving, to 5 minutes after aggressive driving. The idle-down procedure circulates fresh oil and coolant through the turbocharger, allowing it to cool gradually, prior to shutdown.

Cool down is required to be performed at the end of every hard driving session. Otherwise, the rapid heat build-up from high boost/high rpm operation can cause the turbine shaft to soften, and allow the turbine head to droop. The result is an imbalance that ultimately leads to turbine shaft failure. Improper cool down in the most common cause of turbo failure and is grounds for warranty denial.

Aftermarket boost control devices, electronic or mechanical, are not to be used with this kit. All boost control is done by fuel injection computer, and excessive boost without fuel injection control can lead to engine and turbo damage. Use of these devices is grounds for warranty denial.

An aftermarket turbo bypass (diverter) valve is highly recommended to achieve optimum performance from your K04 turbos. The factory bypass valve has been superceded several times, yet the current design is still not able to provide consistent performance. A.W.E. Tuning carries the Bailey Motorsport alloy bypass valve.

Please contact us about this product and the problem it cures if you need more information.

#### **MAINTENANCE**

1. Engine oil and filter should be replaced every 3000 miles. Do not change engine oil without installing a new oil filter. Check your engine oil level frequently. The turbocharger shaft spins over 10 times faster than your engine's crankshaft, so an adequate oil supply is critical.

- 2. Periodically inspect the turbochargers to determine if the wastegate rods and hardware have been bent or damaged. The K04 wastegate rod comes from the factory with a locking clip over the adjustment nuts. DO NOT attempt to recalibrate the wastegate by moving the adjustment nuts. Any tampering with the wastegate can dramatically alter the boost characteristic of the turbocharger and lead to serious engine damage.
- 3. In the event that any air intake hoses are removed or disconnected during any service, thoroughly inspect every hose and remove any foreign objects or debris that may have fallen or collected inside the hose(s). Any loose objects inside the air intake tract may be sucked into the turbocharger upon start up, seriously damaging the compressor blades.

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AWE Tuning 199 Precision Drive Horsham, PA 19044

215-658-1670 performance@AWE-Tuning.com

Thank you for choosing A.W.E. Tuning as your performance automotive parts supplier. Please remember that a performance car is only as strong as its weakest link. Therefore, it is vital that you maintain your vehicle to factory specifications.

## **Limited Warranty**

The following warranty is valid only in the United States and Canada.

The Manufacturer's full warranty applies to all products sold.

By installing or using the purchased product, the Consumer accepts this warranty.

Secor Ltd. (A.W.E. Tuning) warrants to the original retail purchaser (Consumer) the following warranty on this turbo kit:

90 days on the turbos 1 year on the balance of the components

Upon verification of warranty coverage, A.W.E. Tuning will replace the defective product without charge. This is the only remedy the Consumer has for any loss or damage, however arising, due to nonconformity in or defect of the product. This warranty does not cover consequential damage, loss of time or revenues, inconvenience, loss of use of vehicle, damage to the vehicle or components, or other incidental or indirect damage.

All warranties are void if the product was not installed by a certified auto mechanic, improperly serviced, modified, or used in a way not intended by the Manufacturer.

Please contact us first for any warranty claims or explanations of this document.