

## IE 1.8T 20V (06A) Manual Timing Belt Tensioner Kit Install Guide IE Part Number: IEBEVA5-S15

Thank you for purchasing another high quality Integrated Engineering product! This instruction guide is used for installation of Integrated Engineering's Manual Timing Belt Tensioner for 1.8T 20V (06A block) engines. This timing kit fits all longitudinal and transverse VW & Audi 1.8T 06A block engines, due to the massive variances in chassis timing service steps this guide will serve as an outline for installing your IE kit parts only. Be sure to follow the factory service steps for accessing and setting timing for your specific vehicle as outlined in the official VW/Audi service manual or equivalent Bentley manual. IE is not responsible for damage due to improper timing service and recommends all timing procedures be performed by a trained professional.

## Kit Contents:

- (1) Mechanical Tensioner
- (1) Mechanical Tensioner Washer
- (1) Mechanical Tensioner Stud
- (1) Mechanical Tensioner Nut
- (1) Mechanical Tensioner Spacer
- (1) Idler Roller Bracket
- (1) Idler Roller
- (1) Idler Roller Spacer
- (1) Idler Roller Bolt

## Recommended tools & parts to complete install:

- New Replacement Timing Belt
- New Replacement Water Pump
- Water pump Gasket & RTV sealant
- 2-Pin Timing Tool
- Metric Socket Set
- Verified Torque Wrench
- Allen Socket Set

Before you begin the installation, verify that your 1.8T engine is the proper 06A block and not an early longitudinal 058 block. Open your IE Manual Tensioner Kit and verify the parts and quantities.



Follow the factory outlined procedure for your vehicle to access and remove the timing belt, be sure to verify all timing marks are correct and they do not move during the installation process.



Remove the factory installed tensioner setup completely.



If you purchased a new water pump (recommended), replace it now following your service manual's recommended procedure.



Place the idler spacer and roller onto the idler bracket as seen below.



Thread the idler bolt through the roller and spacer and tighten by hand.



Install the idler roller assembly onto the engine block in place of the old hydraulic tensioner reusing two of the original bolts, tighten bolts with a 10mm socket to 11 ft-lbs. Tighten idler bolt to 34 ft-lbs.



Thread the tensioner stud into the cylinder head by hand until it bottoms out. Slide the tensioner spacer over the stud.



Place the tensioner onto the stud making sure the back of the tensioner is seated into the spacer. Install the tensioner washer and nut by hand only, do not tighten nut in this step.



Install new timing belt onto the lower pulley and camshaft gear. Take special care not to move the timing marks on the camshaft gear or crankshaft pulley.



Route the timing belt over the idler roller and tensioner as seen below.



Using a 2-pin timing belt tensioner tool (available separately) tighten the tensioner pulling the slack out of the belt. You should tighten the belt until there is approximately, but not exceeding 90 degrees of flex in the belt in both directions. It should allow you to turn it flat, but with tension.



When you have reached the appropriate amount of tension on the belt, tighten the tensioner nut to 33 ft-lbs with a 17mm socket and verified torque wrench. *Do not exceed the torque spec, this can cause the tensioner to cave in, split, or become unbalanced.* 



Rotate the crankshaft by hand for 4 complete rotations and verify your timing marks are correct as outlined in your service manual. If your timing marks do not line up, restart the procedure.



Follow your service manual to complete the timing service and reassembly of your vehicle. Follow the manufacturer recommended start-up and timing verification procedure as outlined for your make & model. Enjoy your improved timing system reliability!

Note: Routine maintenance is required to ensure proper long-term operation of your timing system. Timing belts tend to "stretch-in" after installation, we recommend you check your belt tension often (every oil change) and adjust if necessary. Timing belts may also increase/decrease in size minimally during seasonal temperature changes, always check tension and adjust as necessary during heavy temperature fluctuations.



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