4AG 20V Camshaft Position Pin Explanations

We recommend that all TODA Racing camshafts should be used in conjunction with TODA Racing free adjusting cam pulleys.

In the case that the STD cam pulley is to be used (Intake with VVT function) the following information is required: TODA's 4AG2OV IN camshaft is based on the AE1 01 engine, so no extra modifications are required. The AE1 11 engine (Black rocker cover) can also use this IN camshaft but may require the following modifications. This is due to the cam dowel pin location on the STD camshaft. The position of the STD cam center angle when used with the STD pulley of the AE1 11 engine is 1 20deg.

TODA's camshaft center angle become 1 25deg when used with the STD pulley, this may require the camshaft to be advanced by 5deg.

Thoughts wanting to re-time the cam to the manufactures STD central cam timing position, we recommend that you use the two stepped dowel pin (TODA Parts Numbers: 14100-111-000/2,000yen). Draw the pin out being careful not to damage it as you may require it later. Inset the two step dowel pin using a plastic hammer as shown in fig1. Note the hole is deeper than required. The camshaft is very delicate be careful not to damage it especially around the oil seal area and the front of the shaft. Insert the camshaft onto the cam-pulley and rotate the cam with the cam-pulley position fixed in the direction of engine rotation.

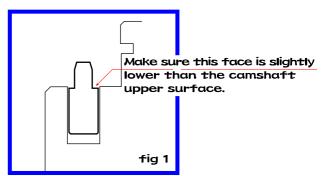
This new position of the camshaft advances the timing by the required 5deg (from 1 25deg up to 1 20deg as AE111 standard central angle).

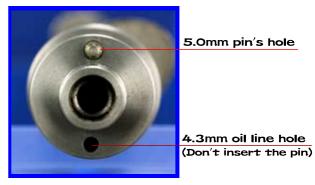
The above information does not guarantee improved performance, only that the cam can be positioned to the manufactures original setting.

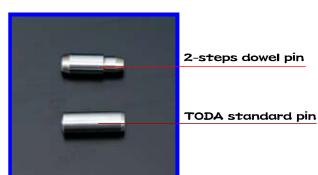
We strongly recommend that all TODA Racing camshafts should be used in conjunction with TODA Racing free adjusting cam pulleys.

Think carefully before caring out the above work.











株式会社 戸田レーシング 〒714-1215 岡山県小田郡矢掛町中 640-1 TEL 0866-83-1202 / FAX 0866-83-1203