

Enginetech Inc
For Technical Assistance Call:
1-800-410-3664 ext 340 or ext 237

TECHNICAL BULLETIN		Mfg:	TOYOTA
	June 1996 TB 1347	Model:	CAMRY
		Liter:	2.2L
		V I N:	5SFE
		Year:	90-01

Balance Shaft Assembly Installation On
1992-2000 Toyota 2.2L 5SFE Engines

The AERA Technical Committee advises members of the correct procedure to install the balance shaft assembly on 1992-2000 Toyota 2.2L 5SFE engines. This engine uses a balance shaft assembly bolted to the bottom of the block to reduce inherent engine harmonics. This assembly must also be positioned and timed correctly to the crankshaft when it is installed for full effectiveness. The balance shaft unit is installed while the crankshaft is positioned with the number one piston at top dead center.

The assembly has punch marks on both balance shafts and machined grooves in the cover housing. Those marks should be aligned when the assembly is installed to the block as shown in Figures 1 & 2. To mount the assembly to the block, torque the six mounting bolts to 36 ft/lbs as shown in Figure 5.

The balance shaft end play and gear backlash should be measured as shown in Figures 3 & 4. The end play specification is .0026-.0043" (.065-.110 mm). Backlash measurements should be made in 8 equally spaced locations, an average measurement should be obtained. The desired backlash measurement is .0008-.0030" (.020-.075 mm). To adjust backlash, use spacer shims under the balance assembly. The housing cover bolts should be torqued in sequence to 16 ft/lbs + 90° as shown in Figure 6.

Assembly to Block Mounting Torque	Housing Cover Mounting Bolt Torque	End Play Spec.	Backlash Spec.
36 ft/lbs	16 ft/lbs + 90° turn	.0026-.0043"	.0008-.0030"

For additional information see AERA Technical Bulletin TB 1346
The AERA Technical Committee

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Reference:	
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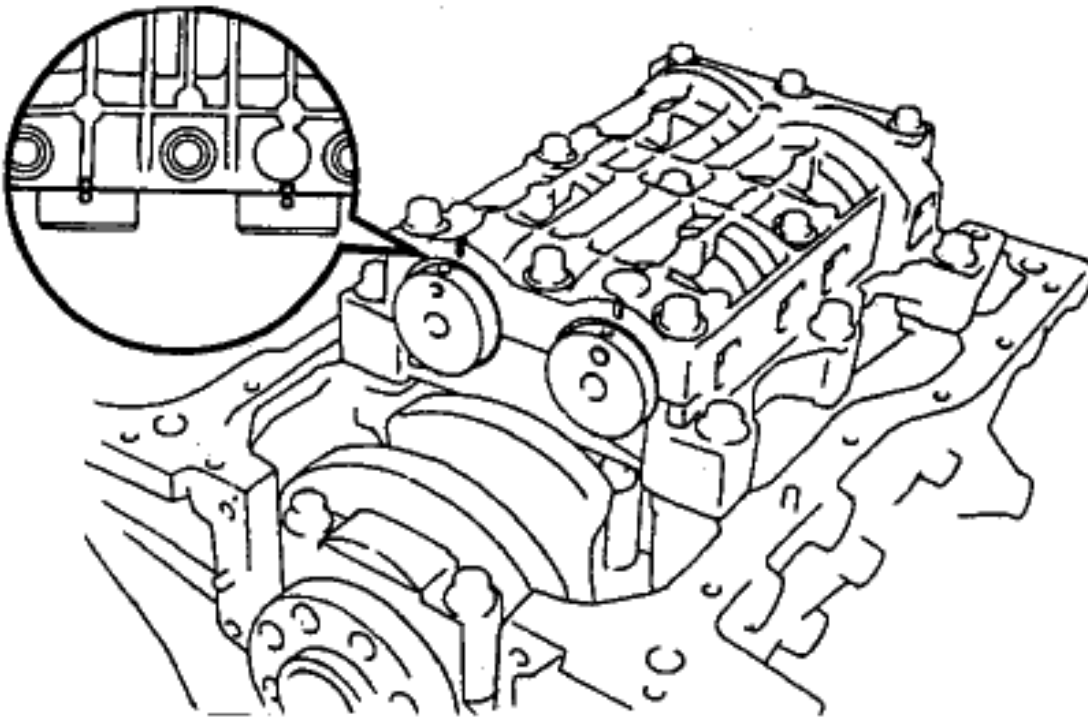


June 1996

TB 1347

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Bulletin Diagram: Untitled Graphic #2169 for TB 01347



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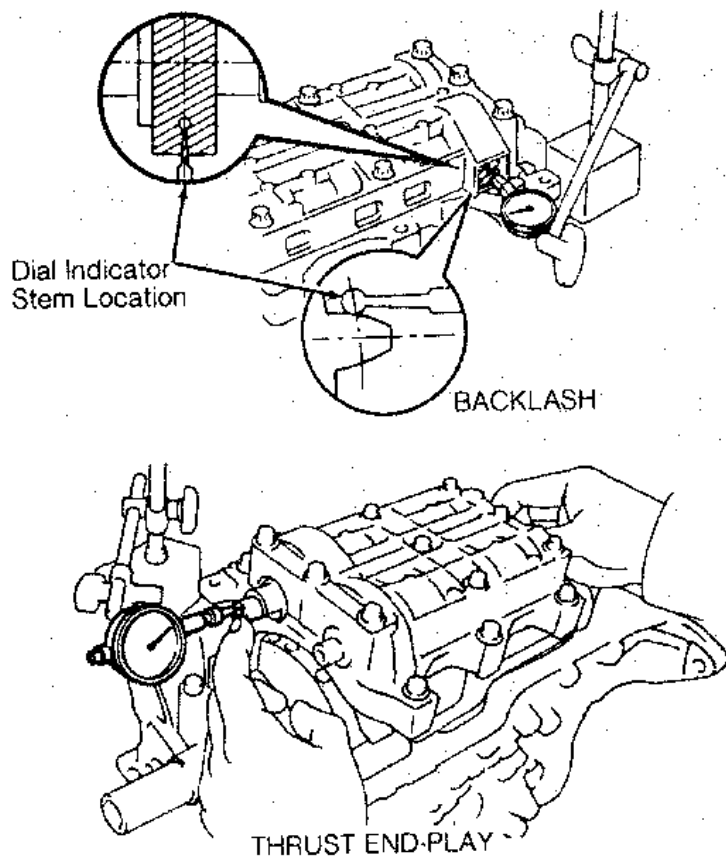


June 1996

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Mfg: TOYOTA
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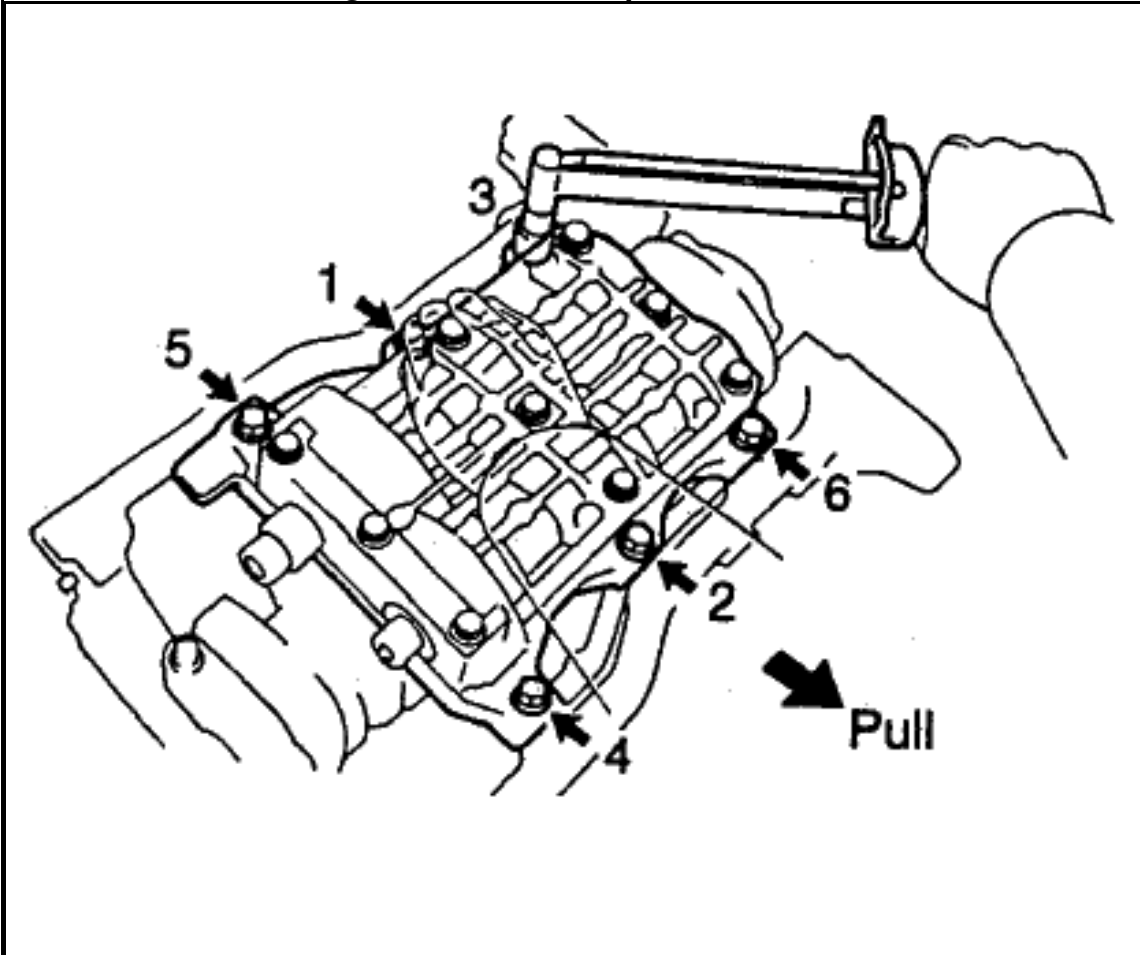
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June 1996
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Mfg: TOYOTA
Model: CAMRY
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Year: 90-01

Bulletin Diagram: Untitled Graphic #2171 for TB 01347



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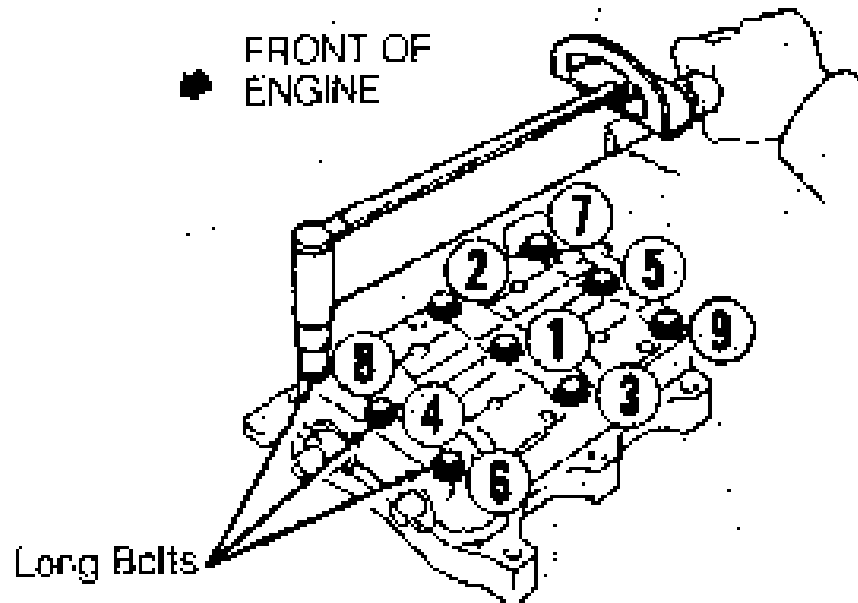


June 1996

TB 1347

Mfg: TOYOTA
Model: CAMRY
Liter: 2.2L
VIN: 5SFE
Year: 90-01

Bulletin Diagram: Untitled Graphic #2172 for TB 01347



NOTE: Remove bolts in reverse order of tightening sequence

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