

Subject

3 Piece Piston Ring Set - Installation Instructions

Market

USA

Service Category

Engine/Hybrid System

Section

Lubrication

Applicability

2AZ-FE and 2AZ-FXE Equipped Models

APPLICABLE VEHICLES

2007-2009	Camry	2006-2008	RAV4
2009-2013	Matrix	2007-2008	Solara
2009-2011	Corolla	2007-2011	Camry HV

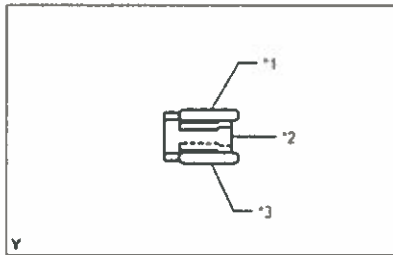
CONDITION

- There has been some concern with 3 Piece Piston Ring installations for 2AZ-FE and 2AZ-FXE engines.
- This Tech Tip contains the accepted installation method required for Toyota vehicles.

RECOMMENDATIONS

Install Piston Ring Set

1.) Install the oil ring expander and 2 oil ring side rails by hand.



*1	Upper Oil Ring Side Rail
*2	Oil Ring Expander
*3	Lower Oil Ring Side Rail

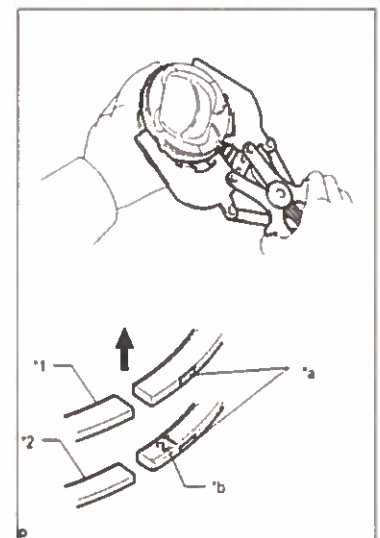
NOTE: When installing oil expander ring, do NOT overlap the ends.



Ends cannot overlap and must point to bottom of piston.

2.) Using a piston ring expander, install the No. 1 compression ring and No. 2 compression ring with the code mark positioned as shown in the illustration.

*1	No. 1 Compression Ring
*2	No. 2 Compression Ring
*a	Paint Mark
*b	Code Mark (2T)
	Upward



NOTE: Install the No. 2 compression ring with the code mark facing upward.

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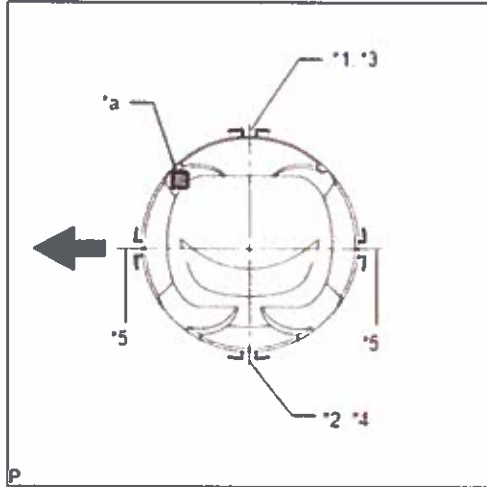
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RECOMMENDATIONS

3.) Position the piston rings so that the ends are as shown in the illustration.



*1	No. 1 Compression Ring
*2	No. 2 Compression Ring
*3	Upper Oil Ring Side Rail
*4	Lower Oil Ring Side Rail
*5	Oil Ring Expander
*a	Front Mark
	Front Side

HINT: The oil ring expander can be installed with the ring ends in either of the directions shown in the illustration.

LINK REFERENCES

This Tech Tip does not contain any link references