SERVICE TRAINING AND PUBLICATION BULLETIN

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Date : 2020/6/10

TRAINING	
PUBLICATION	■
INFORMATION	
ADVANCE ORDER	
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APPLICABLE COUNTRIES:

	ALL COUNTRIES		N. AMERICA	■	GENERAL COUNTRIES, EUROPE
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To: Service Manager

CORRECTION TO
- [x] REPAIR MANUAL
- [ ] ELECTRICAL WIRING DIAGRAM
- [ ] NEW CAR FEATURES
- [ ] BODY REPAIR MANUAL
- [ ] SERVICE DATA SHEET

The following manual has revised service information:

Pub. No.: **RM00S0E** Pub. Name: **YARIS Repair Manual**

Section	Title	Paragraph
SERVICE SPECIFICATIONS	1NZ-FE ENGINE MECHANICAL	SERVICE DATA (2005/08-)
	2NZ-FE ENGINE MECHANICAL	SERVICE DATA (2005/08-)

The revised pages listed above are attached.
(The corrected parts are indicated by arrows.)

Please attach the accompanying revised pages to the applicable pages in the manual above.

This Bulletin does not cause the Flat Rate Manual to be changed.

This bulletin is also available on the OASIS Global Service Information Center.
Inquiries : BM_correction_information@mta.mx.toyota.co.jp

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TOYOTA
QUALITY SERVICE

TOYOTA MOTOR CORPORATION
SERVICE ENGINEERING DEPARTMENT
TECHNICAL SERVICE DIVISION
CUSTOMER FIRST PROMOTION GROUP

1NZ-FE ENGINE MECHANICAL

SERVICE DATA

New V belt deflection		8.0 to 9.0 mm (0.31 to 0.35 in.)
Used V belt deflection		12.5 to 13.5 mm (0.49 to 0.53 in.)
New V belt tension		700 to 800 N (71 to 82 kg, 157 to 180 lb)
Used V belt tension		300 to 400 N (31 to 41 kg, 67 to 90 lb)
Ignition timing		8 to 12 °BTDC
Idle speed	Manual transaxle Automatic transaxle	650 +- 50 rpm 700 +- 50 rpm
Compression pressure		1,471 kPa (15.0 kgf/cm^2, 213 psi)
Minimum pressure		1,079 kPa (11.0 kgf/cm^2, 156 psi) ← [Corrected]
Difference between each cylinder		98 kPa (1.0 kgf/cm^2, 14 psi)
Valve clearance (cold)	Intake Exhaust	0.15 to 0.25 mm (0.006 to 0.010 in.) 0.25 to 0.35 mm (0.010 to 0.014 in.)
Chain elongation	Maximum	123.2 mm (4.850 in.)
Camshaft timing gear diameter (w/ chain)	Minimum	96.2 mm (3.787 in.)
Camshaft timing sprocket diameter (w/ chain)	Minimum	96.2 mm (3.787 in.)
Chain tensioner slipper thickness	Maximum	1.0 mm (0.039 in.)
Chain vibration damper thickness	Maximum	1.0 mm (0.039 in.)
Cylinder head set bolt length	Standard Maximum	143.5 mm (5.6496 in.) 144.2 mm (5.6772 in.)
Cylinder head warpage	Maximum cylinder block surface Intake manifold surface Exhaust manifold surface	0.05 mm (0.0020 in.) 0.10 mm (0.0039 in.) 0.10 mm (0.0039 in.)
Intake valve overall length	Standard Minimum	89.25 mm (3.5138 in.) 88.75 mm (3.4941 in.)
Intake valve stem diameter		4.970 to 4.985 mm (0.1957 to 0.1963 in.)
Intake valve margin thickness	Standard Minimum	1.0 mm (0.039 in.) 0.5 mm (0.020 in.)
Exhaust valve overall length	Standard Minimum	87.90 mm (3.4606 in.) 87.40 mm (3.4409 in.)
Exhaust valve stem diameter		4.965 to 4.980 mm (0.1955 to 0.1961 in.)
Exhaust valve margin thickness	Standard Minimum	1.15 mm (0.045 in.) 0.5 mm (0.020 in.)
Valve spring free length		45.05 to 45.15 mm (1.774 to 1.778 in.)
Valve spring deviation	Maximum	1.6 mm (0.063 in.)
Valve spring angle (reference)	Maximum	2°
Valve spring installed tension at 32.5 mm (1.280 in.)		149 to 165 N (15.2 to 16.8 kgf, 33.5 to 37.1 lbf)
Valve spring working tension at 23.9 mm (0.941 in.)	Maximum	286 to 316N (29.1 to 32.2 kgf, 64.2 to 71.0 lbf)
Bushing inside diameter		5.010 to 5.030 mm (0.1972 to 0.1980 in.)
Valve guide bushing oil clearance	Standard intake Standard exhaust	0.025. to 0.060 mm (0.0010 to 0.0024 in.) 0.030. to 0.065 mm (0.0012 to 0.0026 in.)
	Maximum intake Maximum exhaust	0.08 mm (0.0032 in.) 0.10 mm (0.039 in.)
Valve guide bush diameter	Standard O/S	9.685 to 9.706 mm (0.3813 to 0.3821 in.) 9.735 to 9.755 mm (0.3833 to 0.3841 in.)
Bushing Protrusion height		9.0 to 9.4 mm (0.354 to 0.370 in.)
Lifter diameter		30.966 to 30.976 mm (1.291 to 1.2195 in.)

2NZ-FE ENGINE MECHANICAL

SERVICE DATA

New V belt deflection		8.0 to 9.0 mm (0.31 to 0.35 in.)
Used V belt deflection		12.5 to 13.5 mm (0.49 to 0.53 in.)
New V belt tension		700 to 800 N (71 to 82 kg, 157 to 180 lb)
Used V belt tension		300 to 400 N (31 to 41 kg, 67 to 90 lb)
Ignition timing		8 to 12 °BTDC
Idle speed	Manual transaxle Automatic transaxle	650 +- 50 rpm 700 +- 50 rpm
Compression pressure		1,471 kPa (15.0 kgf/cm^2, 213 psi)
Minimum pressure		1,079 kPa (11.0 kgf/cm^2, 156 psi) [Corrected]
Difference between each cylinder		98 kPa (1.0 kgf/cm^2, 14 psi)
Valve clearance (cold)	Intake Exhaust	0.15 to 0.25 mm (0.006 to 0.010 in.) 0.25 to 0.35 mm (0.010 to 0.014 in.)
Chain elongation	Maximum	123.2 mm (4.850 in.)
Camshaft timing gear diameter (w/ chain)	Minimum	96.2 mm (3.787 in.)
Camshaft timing sprocket diameter (w/ chain)	Minimum	96.2 mm (3.787 in.)
Chain tensioner slipper thickness	Maximum	1.0 mm (0.039 in.)
Chain vibration damper thickness	Maximum	1.0 mm (0.039 in.)
Cylinder head set bolt length	Standard Maximum	143.5 mm (5.6496 in.) 144.2 mm (5.6772 in.)
Cylinder head warpage	Maximum cylinder block surface Intake manifold surface Exhaust manifold surface	0.05 mm (0.0020 in.) 0.10 mm (0.0039 in.) 0.10 mm (0.0039 in.)
Intake valve overall length	Standard Minimum	89.25 mm (3.5138 in.) 88.75 mm (3.4941 in.)
Intake valve stem diameter		4.970 to 4.985 mm (0.1957 to 0.1963 in.)
Intake valve margin thickness	Standard Minimum	1.0 mm (0.039 in.) 0.5 mm (0.020 in.)
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Valve spring deviation	Maximum	1.6 mm (0.063 in.)
Valve spring angle (reference)	Maximum	2°
Valve spring installed tension at 32.5 mm (1.280 in.)		149 to 165 N (15.2 to 16.8 kgf, 33.5 to 37.1 lbf)
Valve spring working tension at 23.9 mm (0.941 in.)	Maximum	286 to 316N (29.1 to 32.2 kgf, 64.2 to 71.0 lbf)
Bushing inside diameter		5.010 to 5.030 mm (0.1972 to 0.1980 in.)
Valve guide bushing oil clearance	Standard intake Standard exhaust	0.025. to 0.060 mm (0.0010 to 0.0024 in.) 0.030. to 0.065 mm (0.0012 to 0.0026 in.)
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Valve guide bush diameter	Standard O/S	9.685 to 9.706 mm (0.3813 to 0.3821 in.) 9.735 to 9.755 mm (0.3833 to 0.3841 in.)
Bushing Protrusion height		9.0 to 9.4 mm (0.354 to 0.370 in.)
Lifter diameter		30.966 to 30.976 mm (1.291 to 1.2195 in.)