

PISTON AND RING SPECIFICATIONS

All measurements are given in inches.

Year	Engine Displacement Liters (cc)	Engine ID/VIN	Piston Clearance	Ring Gap			Ring Side Clearance		
				Top Compression	Bottom Compression	Oil Control	Top Compression	Bottom Compression	Oil Control
1990	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.020	①	0.008-0.027	0.002-0.003	0.001-0.003	NA
	3.0 (2960)	VG30E	0.0006-0.0014	0.008-0.017	0.007-0.017	0.008-0.030	0.002-0.003	0.001-0.003	0.001-0.007
1991	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.020	①	0.008-0.027	0.002-0.003	0.001-0.003	NA
	3.0 (2960)	VG30E	0.0006-0.0014	0.008-0.017	0.007-0.017	0.008-0.030	0.002-0.003	0.001-0.003	0.001-0.007
1992	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.020	①	0.008-0.027	0.002-0.003	0.001-0.003	NA
	3.0 (2960)	VG30E	0.0006-0.0014	0.008-0.017	0.007-0.017	0.008-0.030	0.002-0.003	0.001-0.003	0.001-0.007
1993	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.020	0.018-0.027	0.008-0.027	0.002-0.003	0.001-0.003	NA
	3.0 (2960)	VG30E	0.0006-0.0014	0.008-0.017	0.007-0.017	0.008-0.030	0.002-0.003	0.001-0.003	0.001-0.007
1994	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.020	0.018-0.027	0.008-0.027	0.002-0.003	0.001-0.003	0.003-0.005
	3.0 (2960)	VG30E	0.0006-0.0014	0.008-0.017	0.007-0.017	0.008-0.030	0.002-0.003	0.001-0.003	0.001-0.007
1995	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.020	0.018-0.027	0.008-0.027	0.002-0.003	0.001-0.003	0.003-0.005
	3.0 (2960)	VG30E	0.0006-0.0014	0.008-0.017	0.007-0.017	0.008-0.030	0.002-0.003	0.001-0.003	0.001-0.007
1996	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.021	0.018-0.027	0.008-0.027	0.0016-0.0031	0.0012-0.0028	0.0026-0.0053
	3.0 (2960)	VG30E	0.0010-0.0018	0.008-0.017	0.007-0.017	0.008-0.030	0.0016-0.0031	0.0012-0.0025	0.0005-0.0075
	3.3 (3277)	VG33E	②	0.0083-0.0157	0.0197-0.0272	0.0079-0.0272	0.0009-0.0030	0.0012-0.0028	0.0006-0.0073
1997	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.021	0.018-0.027	0.008-0.027	0.0016-0.0031	0.0012-0.0028	0.0026-0.0053
	3.0 (2960)	VG30E	0.0010-0.0018	0.008-0.017	0.007-0.017	0.008-0.030	0.0016-0.0031	0.0012-0.0025	0.0005-0.0075
	3.3 (3277)	VG33E	②	0.0083-0.0157	0.0197-0.0272	0.0079-0.0272	0.0009-0.0030	0.0012-0.0028	0.0006-0.0073
1998	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.021	0.018-0.027	0.008-0.027	0.0016-0.0031	0.0012-0.0028	0.0026-0.0053
	3.0 (2960)	VG30E	0.0010-0.0018	0.008-0.017	0.007-0.017	0.008-0.030	0.0016-0.0031	0.0012-0.0025	0.0005-0.0075
	3.3 (3277)	VG33E	②	0.0083-0.0157	0.0197-0.0272	0.0079-0.0272	0.0009-0.0030	0.0012-0.0028	0.0006-0.0073
1999-00	2.4 (2389)	KA24E	0.0008-0.0016	0.011-0.021	0.018-0.027	0.008-0.027	0.0016-0.0031	0.0012-0.0028	0.0026-0.0053
	3.3 (3277)	VG33E	②	0.0083-0.0157	0.0197-0.0272	0.0079-0.0272	0.0009-0.0030	0.0012-0.0028	0.0006-0.0073

NA - Not available

① Grade 1 (R or T): 0.018 - 0.027

Grade 2 (N): 0.022 - 0.028

② Except cylinders 3 and 4: 0.0010 - 0.0018 in.

Cylinders 3 and 4: 0.0006 - 0.0010 in.