

LAMPIRAN

Adjusting Shim Selection Chart

INTAKE

Measured Clearance (mm)	Installed Shim Thickness (mm)
2.500	2.525
2.525	2.550
2.550	2.575
2.575	2.600
2.600	2.625
2.625	2.650
2.650	2.675
2.675	2.700
2.700	2.725
2.725	2.750
2.750	2.775
2.775	2.800
2.800	2.825
2.825	2.850
2.850	2.875
2.875	2.900
2.900	2.925
2.925	2.950
2.950	2.975
2.975	2.980
2.980	3.025
3.025	3.050
3.050	3.075
3.075	3.080
3.080	3.100
3.100	3.125
3.125	3.140
3.140	3.150
3.150	3.160
3.160	3.175
3.175	3.180
3.180	3.200
3.200	3.225
3.225	3.250
3.250	3.275
3.275	3.300
3.300	3.325
3.325	3.350
3.350	3.375
3.375	3.400
3.400	3.425
3.425	3.450
3.450	3.475
3.475	3.500
3.500	3.525
3.525	3.550
3.550	3.575
3.575	3.600
3.600	3.625
3.625	3.650
3.650	3.675
3.675	3.700
3.700	3.725
3.725	3.750
3.750	3.775
3.775	3.800
3.800	3.825
3.825	3.850
3.850	3.875
3.875	3.900
3.900	3.925
3.925	3.950
3.950	3.975
3.975	4.000
4.000	4.025
4.025	4.050
4.050	4.075
4.075	4.100
4.100	4.125
4.125	4.150
4.150	4.175
4.175	4.200
4.200	4.225
4.225	4.250
4.250	4.275
4.275	4.300
4.300	4.325
4.325	4.350
4.350	4.375
4.375	4.400
4.400	4.425
4.425	4.450
4.450	4.475
4.475	4.500

Measured Clearance (mm)		Installed Shim Thickness (mm)		Shim thicknesses mm (in.)	
Measured Clearance (mm)	Installed Shim Thickness (mm)	Shim No.	Thickness	Shim No.	Thickness
0.441 - 0.450	1.212	14.14	16.16	18.18	28.28
0.451 - 0.470	1.212	14.14	16.16	18.18	28.28
0.471 - 0.475	1.214	14.14	16.16	18.18	28.28
0.476 - 0.490	1.414	16.16	18.18	18.18	28.28
0.491 - 0.500	1.414	16.16	18.18	18.18	28.28
0.501 - 0.520	1.416	16.16	18.20	20.20	28.28
0.521 - 0.525	1.416	16.16	18.20	20.20	28.28
0.526 - 0.540	1.616	18.18	20.20	20.20	28.28
0.541 - 0.550	1.616	18.18	20.20	20.22	28.28
0.551 - 0.570	1.618	18.20	20.22	22.22	28.28
0.571 - 0.575	1.618	18.20	20.22	22.22	28.28
0.576 - 0.590	1.818	20.20	22.22	22.22	28.28
0.591 - 0.600	1.818	20.20	22.22	22.22	28.28
0.601 - 0.620	1.820	20.22	22.24	24.24	28.28
0.621 - 0.625	1.820	20.22	22.24	24.24	28.28
0.626 - 0.640	2.020	22.22	24.24	24.24	28.28
0.641 - 0.650	2.020	22.22	24.24	24.24	28.28
0.651 - 0.670	2.022	22.24	24.26	26.26	28.28
0.671 - 0.675	2.022	22.24	24.26	26.26	28.28
0.676 - 0.690	2.222	24.24	26.26	26.26	28.28
0.691 - 0.700	2.222	24.24	26.26	26.26	28.28
0.701 - 0.720	2.224	24.26	26.28	28.28	28.28
0.721 - 0.725	2.224	24.26	26.28	28.28	28.28
0.726 - 0.740	2.424	26.28	28.28	28.28	30.30
0.741 - 0.750	2.424	26.28	28.28	28.28	30.30
0.751 - 0.770	2.426	26.28	28.28	28.28	30.30
0.771 - 0.775	2.426	26.28	28.30	30.30	32.32
0.776 - 0.790	2.626	28.28	30.30	30.32	32.32
0.791 - 0.800	2.626	28.28	30.30	32.32	32.32
0.801 - 0.820	2.628	28.30	30.32	32.32	32.32
0.821 - 0.825	2.628	28.30	30.32	32.32	32.32
0.826 - 0.840	2.828	30.30	32.32	32.32	34.34
0.841 - 0.850	2.828	30.30	32.32	32.32	34.34
0.851 - 0.870	2.830	30.32	32.34	34.34	34.34
0.871 - 0.875	2.830	30.32	32.34	34.34	34.34
0.876 - 0.890	3.030	32.32	34.34	34.34	34.34
0.891 - 0.900	3.030	32.32	34.34	34.34	34.34
0.901 - 0.925	3.032	32.34	34.34	34.34	34.34
0.926 - 0.950	3.232	34.34	34.34	34.34	34.34
0.951 - 0.975	3.232	34.34	34.34	34.34	34.34
0.976 - 1.000	34.34				
1.001 - 1.025	34.34				

Intake valve clearance (cold):
0.15 - 0.25 mm (0.006 - 0.010 in.)

Example:
A 2.800 mm shim is
installed and the measured
clearance is 0.450 mm.

Replace the 2.800 mm shim
with shim No. 24 (3.050 mm).

Adjusting Shim Selection Chart

EXHAUST

Measured Clearance (mm)	Installed Shim Thickness (mm)
2.500	0.000 - 0.009
0.010 - 0.025	0.020 - 0.02
0.026 - 0.040	0.020 - 0.02
0.041 - 0.050	0.020 - 0.02
0.051 - 0.070	0.020 - 0.02
0.071 - 0.090	0.020 - 0.02
0.091 - 0.100	0.020 - 0.02
0.101 - 0.120	0.020 - 0.02
0.121 - 0.140	0.020 - 0.02
0.141 - 0.150	0.020 - 0.02
0.151 - 0.170	0.020 - 0.02
0.171 - 0.190	0.020 - 0.02
0.191 - 0.199	0.020 - 0.02
0.200 - 0.300	0.020 - 0.02
0.301 - 0.320	0.040 - 0.06
0.321 - 0.325	0.040 - 0.06
0.326 - 0.340	0.060 - 0.08
0.341 - 0.350	0.060 - 0.08
0.351 - 0.370	0.060 - 0.08
0.371 - 0.375	0.060 - 0.08
0.378 - 0.390	0.080 - 0.10
0.391 - 0.400	0.080 - 0.10
0.401 - 0.420	0.080 - 0.10
0.421 - 0.425	0.080 - 0.10
0.426 - 0.440	0.100 - 0.12
0.441 - 0.450	0.100 - 0.12
0.451 - 0.470	0.100 - 0.12
0.471 - 0.475	0.100 - 0.12

Measured Clearance (mm)	Installed Shim Thickness (mm)	Shim thicknesses mm (in.)
2.500	2.525	0.441 - 0.450 10.10 12.12 14.14 16.16 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.451 - 0.470 10.12 12.14 14.16 16.16 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.471 - 0.475 10.12 12.14 14.16 16.16 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.476 - 0.490 12.12 14.14 16.16 16.16 18.18 18.20 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.491 - 0.500 12.12 14.14 16.16 16.18 18.18 18.20 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.501 - 0.520 12.14 14.16 16.18 18.18 18.20 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.521 - 0.525 12.14 14.16 16.18 18.18 18.20 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.526 - 0.540 14.14 16.16 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.541 - 0.550 14.14 16.16 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.551 - 0.570 14.16 16.18 18.20 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.571 - 0.575 14.16 16.18 18.20 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.576 - 0.590 16.16 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.591 - 0.600 16.16 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.601 - 0.620 16.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.621 - 0.625 16.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.626 - 0.640 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.641 - 0.650 18.18 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.651 - 0.670 18.20 20.22 22.24 24.24 26.26 28.28 30.30 32.32 34.34 0.671 - 0.675 18.20 20.22 22.24 24.24 26.26 28.28 30.30 32.32 34.34 0.676 - 0.690 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.691 - 0.700 20.20 22.22 24.24 26.26 28.28 30.30 32.32 34.34 0.701 - 0.720 20.22 22.24 24.26 26.26 28.28 30.30 32.32 34.34 0.721 - 0.725 20.22 22.24 24.26 26.26 28.28 30.30 32.32 34.34 0.726 - 0.740 22.22 22.24 24.26 26.26 28.28 30.30 32.32 34.34 0.741 - 0.750 22.22 22.24 24.26 26.26 28.28 30.30 32.32 34.34 0.751 - 0.770 22.24 24.26 26.28 28.28 30.30 32.32 34.34 0.771 - 0.775 22.24 24.26 26.28 28.28 30.30 32.32 34.34 0.776 - 0.790 24.24 26.26 28.28 28.30 30.30 32.32 34.34 0.791 - 0.800 24.24 26.26 28.28 28.30 30.30 32.32 34.34 0.801 - 0.820 24.26 26.28 28.30 30.30 32.32 34.34 0.821 - 0.825 24.26 26.28 28.30 30.30 32.32 34.34 0.871 - 0.875 26.28 28.30 30.32 32.32 34.34 0.876 - 0.890 28.28 30.30 32.32 34.34 0.891 - 0.900 28.28 30.30 32.32 34.34 0.901 - 0.925 28.30 30.32 32.34 34.34 0.926 - 0.950 30.30 32.32 34.34 0.951 - 0.975 30.32 32.34 34.34 0.976 - 1.000 32.32 34.34 1.001 - 1.025 32.34 34.34 1.026 - 1.050 34.34

Exhaust valve clearance (cold):
0.20 - 0.30 mm (0.008 - 0.012 in.)
Example: A 2.800 mm shim is installed
 and the measured clearance
 is 0.450 mm.
 Replace the 2.800 mm shim
 with shim No. 22 (3.000 mm).















