5. **RECONNECT INJECTION PUMP (FUEL CUT SOLENOID) CONNECTOR**
6. **REINSTALL GLOW PLUGS**
   (See steps 14 to 17 in cylinder head installation)
   Torque: 12.5 N·m (127 kgf·cm, 9 ft·lbf)
7. **START ENGINE AND CHECK FOR LEAKS**

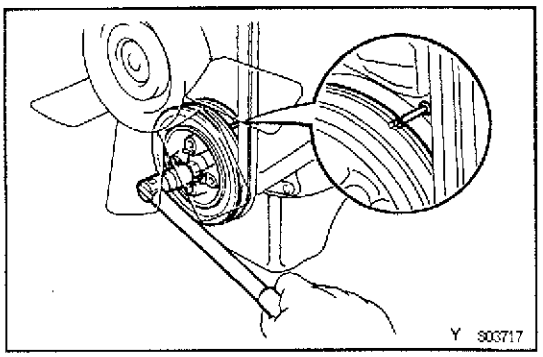
EG

VALVE CLEARANCE INSPECTION AND ADJUSTMENT

EG7A4-01

HINT: Inspect and adjust the valve clearance when the engine is cold.

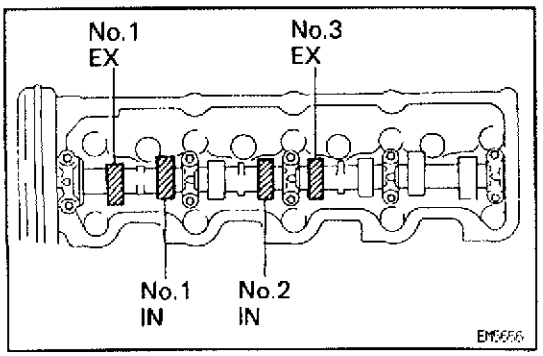
1. **LH:**
   REMOVE INTAKE AIR CONNECTOR
   (See steps 2 and 3 in cylinder head removal)
2. **LY Europe:**
   REMOVE NO.2 CYLINDER HEAD COVER
   (See steps 2 and 4 in cylinder head removal)
3. **REMOVE CYLINDER HEAD COVER**
   (See step 15 in cylinder head removal)



4. **SET NO.1 CYLINDER TO TDC/COMPRESSION**

(a) Turn the crankshaft pulley and align its groove with timing pointer.

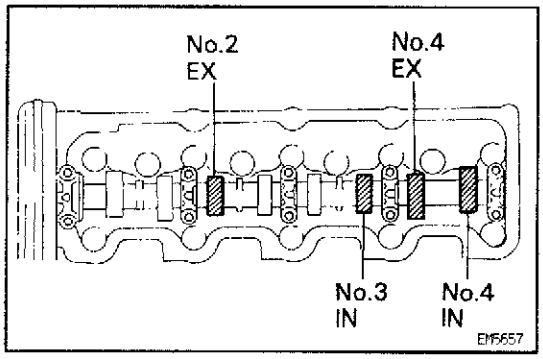
(b) Check that the valve lifters on the No.1 cylinder are loose and valve lifters on the No.4 are tight.
If not, turn the crankshaft one revolution (360°) and align the mark as above.



5. **INSPECT VALVE CLEARANCE**

(a) Check only the valves indicated.

- Using a feeler gauge, measure the clearance between the valve lifter and camshaft.
- Record the out – of – specification valve clearance measurements. They will be used later to determine the required replacement adjusting shim.



Valve clearance (Cold):

Intake

0.20 — 0.30 mm (0.008 — 0.012 in.)

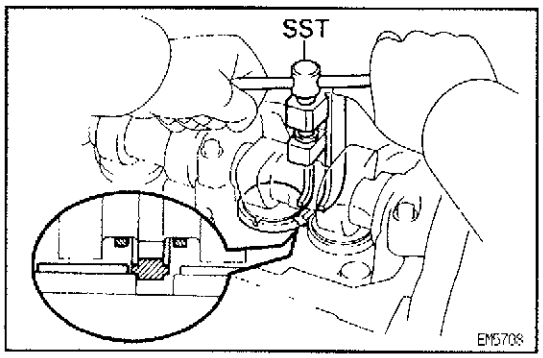
Exhaust

0.40 — 0.50 mm (0.016 — 0.020 in.)

(b) Turn the crankshaft one revolution (360°) and align the mark as above. (See procedure in step 4)

(c) Check only the valves indicated as shown. Measure the valve clearance. (See procedure in step (a))

EG

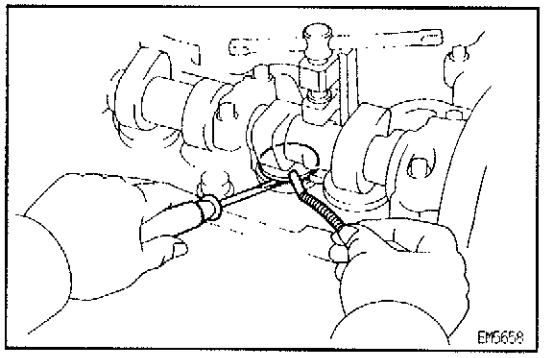


6. ADJUST VALVE CLEARANCE

(a) Remove the adjusting shim.

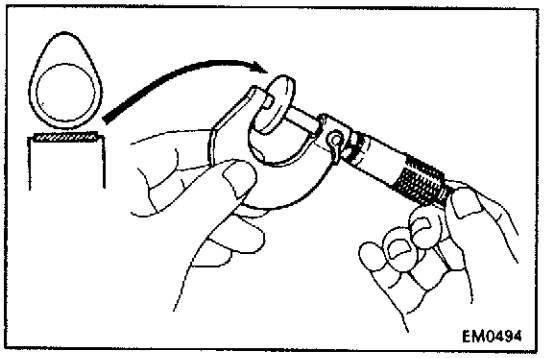
- Turn the crankshaft so that the cam lobe of the camshaft on the adjusting valve points upward.
- Using SST, press down the valve lifter.
- Position the notch of the valve lifter facing the exhaust manifold side.

SST 09248—64011



HINT:

- Remove the adjusting shim with a small screwdriver and magnetic finger.



(b) Determine the replacement adjusting shim size by following the Formula or Charts:

- Using a micrometer, measure the thickness of the removed shim.
- Calculate the thickness of a new shim so that the valve clearance comes within specified value.

T ..... Thickness of removed shim

A ..... Measured valve clearance

N ..... Thickness of new shim

Intake:

N = T + (A — 0.25 mm (0.010 in.))

Exhaust:

N = T + (A — 0.45 mm (0.018 in.))

- Select a new shim with a thickness as close as possible to the calculated value.

HINT: Shims are available in 17 sizes in increments of 0.05 mm (0.0020 in.), from 2.50 mm (0.0984 in.) to 3.30 mm (0.1299 in.).

Adjusting Shim Selection Using Chart

INTAKE

Installed shim thickness mm (in.)

Measured clearance mm (in.)	2.500 (0.0984)	2.520 (0.0992)	2.540 (0.1000)	2.550 (0.1004)	2.560 (0.1008)	2.580 (0.1016)	2.600 (0.1024)	2.620 (0.1031)	2.640 (0.1039)	2.650 (0.1043)	2.660 (0.1047)	2.680 (0.1055)	2.700 (0.1063)	2.720 (0.1071)	2.740 (0.1079)	2.750 (0.1083)	2.760 (0.1087)	2.780 (0.1094)	**2.800 (0.1102)**	2.820 (0.1110)	2.840 (0.1118)	2.850 (0.1122)	2.860 (0.1126)	2.880 (0.1134)	2.900 (0.1142)	2.920 (0.1150)	2.940 (0.1157)	2.950 (0.1161)	2.960 (0.1165)	2.980 (0.1173)	3.000 (0.1181)	3.020 (0.1189)	3.040 (0.1197)	3.050 (0.1201)	3.060 (0.1205)	3.080 (0.1213)	3.100 (0.1220)	3.120 (0.1228)	3.140 (0.1236)	3.150 (0.1240)	3.160 (0.1244)	3.180 (0.1252)	3.200 (0.1260)	3.220 (0.1268)	3.240 (0.1276)	3.250 (0.1280)	3.260 (0.1283)	3.280 (0.1291)	3.300 (0.1299)
0.000 - 0.020 (0.0000 - 0.0008)													01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47
0.021 - 0.040 (0.0008 - 0.0016)												01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31
0.041 - 0.060 (0.0016 - 0.0024)										01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31
0.061 - 0.080 (0.0024 - 0.0031)									01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31
0.081 - 0.100 (0.0032 - 0.0039)								01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48
0.101 - 0.120 (0.0040 - 0.0047)							01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48
0.121 - 0.140 (0.0048 - 0.0056)						01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36
0.141 - 0.160 (0.0056 - 0.0063)				01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36
0.161 - 0.180 (0.0063 - 0.0071)			01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36
0.181 - 0.199 (0.0071 - 0.0078)		01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49
0.200 - 0.300 (0.0079 - 0.0118)																																																	
0.301 - 0.320 (0.0119 - 0.0126)	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41	
0.321 - 0.340 (0.0126 - 0.0134)	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41		
0.341 - 0.360 (0.0134 - 0.0142)	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41			
0.361 - 0.380 (0.0142 - 0.0150)	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41					
0.381 - 0.400 (0.0150 - 0.0157)	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41						
0.401 - 0.420 (0.0158 - 0.0165)	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41							
0.421 - 0.440 (0.0166 - 0.0173)	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41								
0.441 - 0.460 (0.0174 - 0.0181)	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41									
0.461 - 0.480 (0.0181 - 0.0189)	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41											
0.481 - 0.500 (0.0189 - 0.0197)	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41												
0.501 - 0.520 (0.0197 - 0.0205)	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41													
0.521 - 0.540 (0.0205 - 0.0213)	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41														
0.541 - 0.560 (0.0213 - 0.0220)	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41															
0.561 - 0.580 (0.0221 - 0.0228)	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41																	
0.581 - 0.600 (0.0229 - 0.0236)	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	49	48	36	36	36	36	49	49	41	41	41	41	41																		
0.601 - 0.620 (0.0237 - 0.0244)	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																			
0.621 - 0.640 (0.0244 - 0.0252)	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																				
0.641 - 0.660 (0.0252 - 0.0260)	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																					
0.661 - 0.680 (0.0260 - 0.0268)	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	49	36	36	36	49	49	49	41	41	41	41																							
0.681 - 0.700 (0.0268 - 0.0276)	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																								
0.701 - 0.720 (0.0276 - 0.0283)	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																									
0.721 - 0.740 (0.0284 - 0.0291)	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																										
0.741 - 0.760 (0.0292 - 0.0299)	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																											
0.761 - 0.780 (0.0300 - 0.0307)	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41																													
0.781 - 0.800 (0.0307 - 0.0315)	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																														
0.801 - 0.820 (0.0315 - 0.0323)	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																															
0.821 - 0.840 (0.0323 - 0.0331)	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																																
0.841 - 0.860 (0.0331 - 0.0339)	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																																	
0.861 - 0.880 (0.0339 - 0.0346)	31	48	48	48	36	36	36	49	49	49	41	41	41	41																																			
0.881 - 0.900 (0.0347 - 0.0354)	49	48	36	36	36	36	49	49	41	41	41	41	41																																				
0.901 - 0.920 (0.0355 - 0.0362)	48	36	36	36	36	49	49	41	41	41	41	41																																					
0.921 - 0.940 (0.0363 - 0.0370)	36	36	36	49	49	49	41	41	41	41	41																																						
0.941 - 0.960 (0.0370 - 0.0378)	36	36	49	49	49	41	41	41	41	41																																							
0.961 - 0.980 (0.0378 - 0.0386)	36	49	49	49	41	41	41	41																																									
0.981 - 1.000 (0.0386 - 0.0394)	49	49	41	41	41	41	41																																										
1.001 - 1.020 (0.0394 - 0.0402)	49	41	41	41	41	41																																											
1.021 - 1.040 (0.0402 - 0.0409)	41	41	41	41	41																																												
1.041 - 1.060 (0.0410 - 0.0417)	41	41	41	41																																													
1.061 - 1.080 (0.0418 - 0.0425)	41	41																																															
1.091 - 1.100 (0.0426 - 0.0433)	41																																																

New shim thickness mm (in.)

Shim No.	Thickness	Shim No.	Thickness
01	2.50 (0.0984)	46	2.95 (0.1161)
42	2.55 (0.1004)	26	3.00 (0.1181)
06	2.60 (0.1024)	47	3.05 (0.1201)
43	2.65 (0.1043)	31	3.10 (0.1220)
11	2.70 (0.1063)	48	3.15 (0.1240)
44	2.75 (0.1083)	36	3.20 (0.1260)
16	2.80 (0.1102)	49	3.25 (0.1280)
45	2.85 (0.1122)	41	3.30 (0.1299)
21	2.90 (0.1142)		

Intake valve clearance (Cold):
0.20 – 0.30 mm (0.008 – 0.012 in.)

EXAMPLE: The 2.800 mm (0.1102 in.) shim is installed and the measured clearance is 0.350 mm (0.0138 in.). Replace the 2.800 mm (0.1102 in.) shim with a No.21 shim.

V07956

Adjusting Shim Selection Using Chart

EXHAUST

Measured clearance mm (in.)	Installed shim thickness mm (in.)																																															
	2.500 (0.0984)	2.520 (0.0992)	2.540 (0.1000)	2.550 (0.1004)	2.560 (0.1008)	2.580 (0.1016)	2.600 (0.1024)	2.620 (0.1031)	2.640 (0.1039)	2.650 (0.1043)	2.660 (0.1047)	2.680 (0.1055)	2.700 (0.1063)	2.720 (0.1071)	2.740 (0.1079)	2.750 (0.1083)	2.760 (0.1087)	2.780 (0.1094)	**2.800 (0.1102)**	2.820 (0.1110)	2.840 (0.1118)	2.850 (0.1122)	2.860 (0.1126)	2.880 (0.1134)	2.900 (0.1142)	2.920 (0.1150)	2.940 (0.1157)	2.950 (0.1161)	2.960 (0.1165)	2.980 (0.1173)	3.000 (0.1181)	3.020 (0.1189)	3.040 (0.1197)	3.050 (0.1201)	3.060 (0.1205)	3.080 (0.1213)	3.100 (0.1220)	3.120 (0.1228)	3.140 (0.1236)	3.150 (0.1240)	3.160 (0.1244)	3.180 (0.1252)	3.200 (0.1260)	3.220 (0.1268)	3.240 (0.1276)	3.250 (0.1280)	3.260 (0.1283)	3.280 (0.1291)	3.300 (0.1299)
0.000 – 0.020 (0.0000 – 0.0008)																									01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45
0.021 – 0.040 (0.0008 – 0.0016)																								01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21
0.041 – 0.060 (0.0016 – 0.0024)																						01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21
0.061 – 0.080 (0.0024 – 0.0031)																					01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21
0.081 – 0.100 (0.0032 – 0.0039)																				01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46
0.101 – 0.120 (0.0040 – 0.0047)																			01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46
0.121 – 0.140 (0.0048 – 0.0055)																		01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26
0.141 – 0.160 (0.0056 – 0.0063)																01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26
0.161 – 0.180 (0.0063 – 0.0071)															01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26
0.181 – 0.200 (0.0071 – 0.0079)														01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47
0.201 – 0.220 (0.0079 – 0.0087)													01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47
0.221 – 0.240 (0.0087 – 0.0094)												01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31
0.241 – 0.260 (0.0095 – 0.0102)										01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31
0.261 – 0.280 (0.0103 – 0.0110)									01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31
0.281 – 0.300 (0.0111 – 0.0118)								01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48
0.301 – 0.320 (0.0119 – 0.0126)							01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48
0.321 – 0.340 (0.0126 – 0.0134)						01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36
0.341 – 0.360 (0.0134 – 0.0142)				01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36
0.361 – 0.380 (0.0142 – 0.0150)			01	01	01	01	01	42	42	42	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36
0.381 – 0.399 (0.0150 – 0.0157)		01	01	01	01	01	42	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49
0.400 – 0.500 (0.0157 – 0.0197)																																																	
0.501 – 0.520 (0.0197 – 0.0205)	42	06	06	06	06	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41	
0.521 – 0.540 (0.0205 – 0.0213)	06	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41		
0.541 – 0.560 (0.0213 – 0.0220)	06	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41			
0.561 – 0.580 (0.0221 – 0.0228)	06	43	43	43	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41					
0.581 – 0.600 (0.0229 – 0.0236)	43	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41						
0.601 – 0.620 (0.0237 – 0.0244)	43	11	11	11	11	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41							
0.621 – 0.640 (0.0244 – 0.0252)	11	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41								
0.641 – 0.660 (0.0252 – 0.0260)	11	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41									
0.661 – 0.680 (0.0260 – 0.0268)	11	44	44	44	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41											
0.681 – 0.700 (0.0268 – 0.0276)	44	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41												
0.701 – 0.720 (0.0276 – 0.0283)	44	16	16	16	16	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41													
0.721 – 0.740 (0.0284 – 0.0291)	16	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41														
0.741 – 0.760 (0.0292 – 0.0299)	16	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41															
0.761 – 0.780 (0.0300 – 0.0307)	16	45	45	45	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41																	
0.781 – 0.800 (0.0307 – 0.0315)	45	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																		
0.801 – 0.820 (0.0315 – 0.0323)	45	21	21	21	21	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																			
0.821 – 0.840 (0.0323 – 0.0331)	21	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																				
0.841 – 0.860 (0.0331 – 0.0339)	21	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																					
0.861 – 0.880 (0.0339 – 0.0346)	21	46	46	46	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41																							
0.881 – 0.900 (0.0347 – 0.0354)	46	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																								
0.901 – 0.920 (0.0355 – 0.0362)	46	26	26	26	26	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																									
0.921 – 0.940 (0.0363 – 0.0370)	26	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																										
0.941 – 0.960 (0.0370 – 0.0378)	26	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																											
0.961 – 0.980 (0.0378 – 0.0386)	26	47	47	47	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41																													
0.981 – 1.000 (0.0386 – 0.0394)	47	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																														
1.001 – 1.020 (0.0394 – 0.0402)	47	31	31	31	31	48	48	36	36	36	36	49	49	41	41	41	41	41																															
1.021 – 1.040 (0.0402 – 0.0409)	31	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																																
1.041 – 1.060 (0.0410 – 0.0417)	31	31	48	48	48	36	36	36	49	49	49	41	41	41	41	41																																	
1.061 – 1.080 (0.0418 – 0.0425)	31	48	48	48	36	36	36	49	49	49	41	41	41	41																																			
1.081 – 1.100 (0.0426 – 0.0433)	48	48	36	36	36	36	49	49	41	41	41	41	41																																				
1.101 – 1.120 (0.0433 – 0.0441)	48	36	36	36	36	49	49	41	41	41	41	41																																					
1.121 – 1.140 (0.0441 – 0.0449)	36	36	36	49	49	49	41	41	41	41	41																																						
1.141 – 1.160 (0.0449 – 0.0457)	36	36	49	49	49	41	41	41	41	41																																							
1.161 – 1.180 (0.0457 – 0.0465)	36	49	49	49	41	41	41	41																																									
1.181 – 1.200 (0.0465 – 0.0472)	49	49	41	41	41	41	41																																										
1.201 – 1.220 (0.0473 – 0.0480)	49	41	41	41	41	41																																											
1.221 – 1.240 (0.0481 – 0.0488)	41	41	41	41	41																																												
1.241 – 1.260 (0.0489 – 0.0496)	41	41	41	41																																													
1.261 – 1.280 (0.0496 – 0.0504)	41	41																																															
1.281 – 1.300 (0.0504 – 0.0512)	41																																																

New shim thickness mm (in.)

Shim No.	Thickness	Shim No.	Thickness
01	2.50 (0.0984)	46	2.95 (0.1161)
42	2.55 (0.1004)	26	3.00 (0.1181)
06	2.60 (0.1024)	47	3.05 (0.1201)
43	2.65 (0.1043)	31	3.10 (0.1220)
11	2.70 (0.1063)	48	3.15 (0.1240)
44	2.75 (0.1083)	36	3.20 (0.1260)
16	2.80 (0.1102)	49	3.25 (0.1280)
45	2.85 (0.1122)	41	3.30 (0.1299)
21	2.90 (0.1142)		

Exhaust valve clearance (Cold):

0.40 – 0.50 mm (0.016 – 0.020 in.)

EXAMPLE: The 2.800 mm (0.1102 in.) shim is installed and the measured clearance is 0.350 mm (0.0138 in.). Replace the 2.800 mm (0.1102 in.) shim with a No.11 shim.

V07956