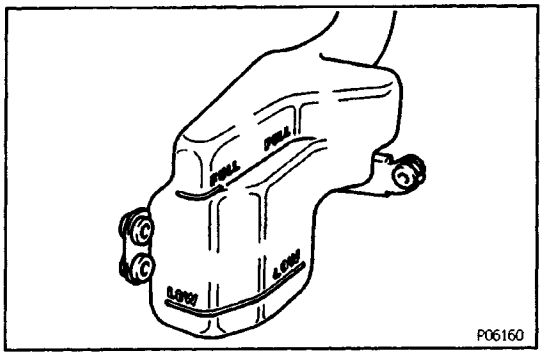
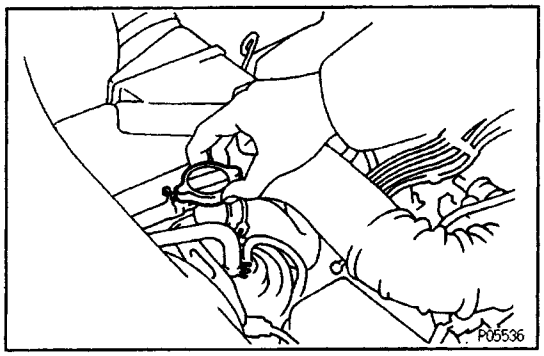


TUNE–UP

ENGINE COOLANT INSPECTION

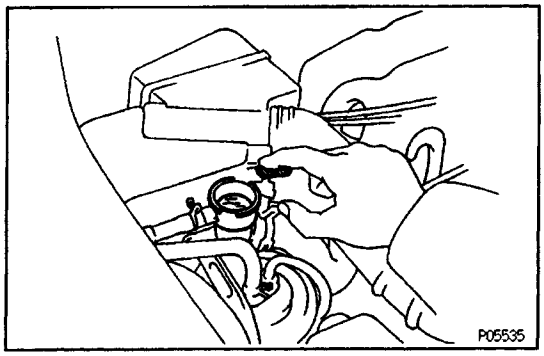
1. CHECK ENGINE COOLANT LEVEL AT RESERVOIR TANK

The engine coolant level should be between the ” LOW” and ”FULL” lines.
If low, check for leaks and add engine coolant up to the ”FULL” line.

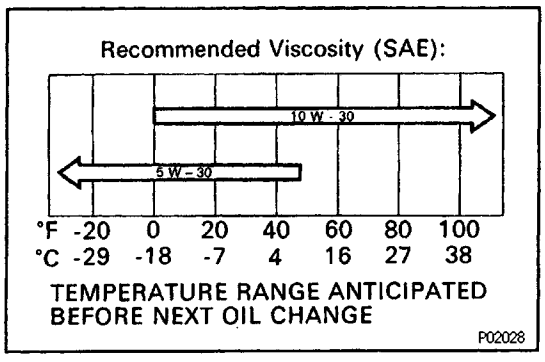


2. CHECK ENGINE COOLANT QUALITY

(a) Remove the radiator (water filler) cap.
CAUTION: To avoid the danger of being burned, do not remove it while the engine and radiator are still hot, as fluid and steam can be blown out under pressure.



(b) There should not be any excessive deposits of rust or scales around the radiator cap or radiator filler hole, and the coolant should be free from oil.
If excessively dirty, replace the coolant.
(c) Reinstall the radiator (water filler) cap.

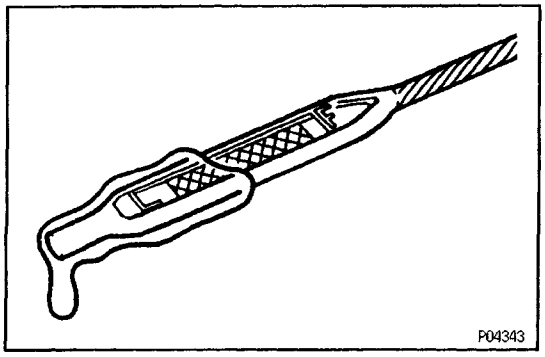


ENGINE OIL INSPECTION

1. CHECK OIL QUALITY

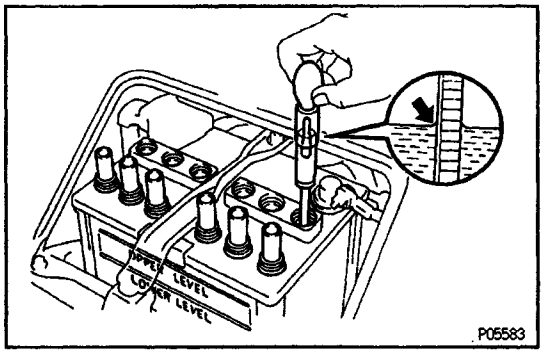
Check the oil for deterioration, entry of water, disco–loring or thinning.
If oil quality is poor, replace the oil.
Oil grade:

API grade SG Energy–Conserving II multigrade engine oil. Recommended viscosity is as shown.



2. CHECK ENGINE OIL LEVEL

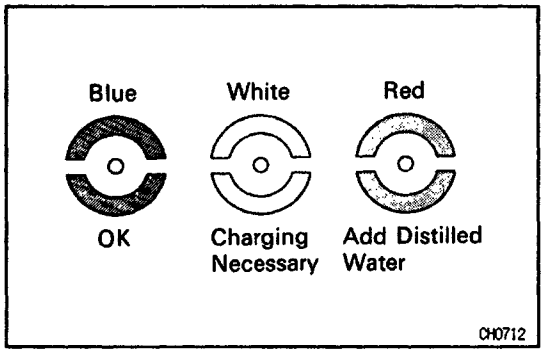
The oil level– should be between the ”L” and ”F” marks on the dipstick.
If low, check for leakage and add oil up to the ”F” mark.

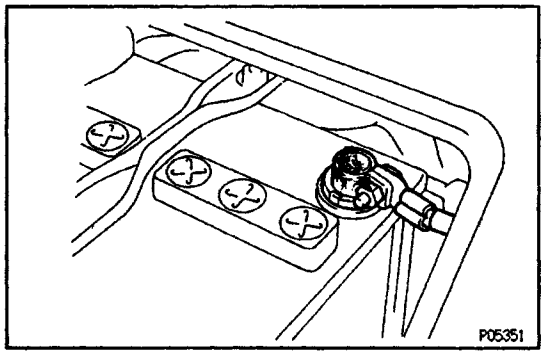


BATTERY INSPECTION

1. CHECK BATTERY SPECIFIC GRAVITY AND ELECTROLYTE LEVEL

(a) Check the electrolyte quantity of each cell.
If insufficient, refill with distilled (or purified) water.
(b) Check the specific gravity of each cell.
Standard specific gravity at 20˚C (68˚F):
1.25 – 1.27
If not within specifications, charge the battery.
HINT: Check the indicator as shown in the illustration.





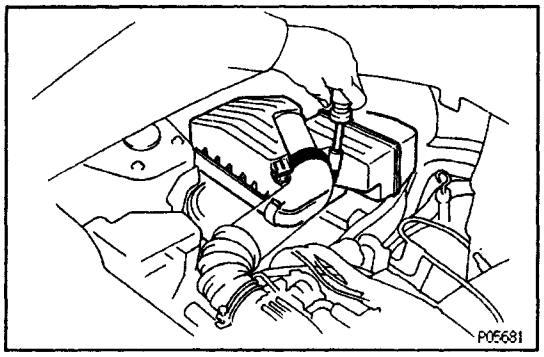
2. CHECK BATTERY TERMINALS, FUSIBLE LINK AND FUSES

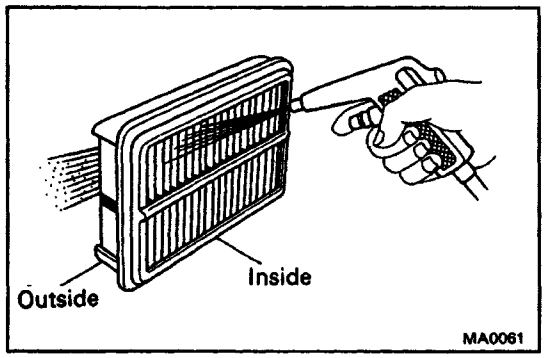
(a) Check that the battery terminals are not loose or corroded.
(b) Check the fusible link and fuses for continuity.

AIR FILTER INSPECTION AND CLEANING

1. REMOVE AIR FILTER

Remove the air cleaner cap and air filter.

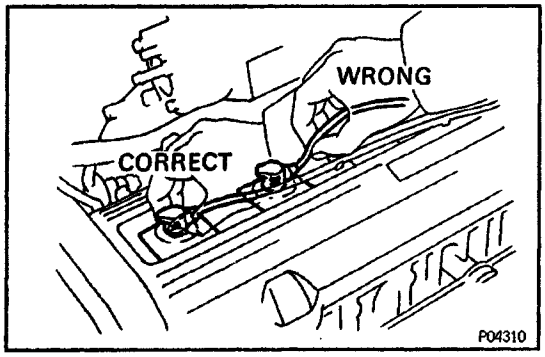




2. INSPECT AND CLEAN AIR FILTER

(a) Visually check that the air filter is not excessively damaged or only.
If necessary, replace the air filter.
(b) Clean the air filter with compressed air.
First blow from the insidethoroughly, then blow off the outside of the air filter.

3. REINSTALL AIR FILTER



HIGH–TENSION CORDS INSPECTION

1. DISCONNECT HIGH–TENSION CORDS FROM SPARK PLUGS

Disconnect the high – tension cords at the rubber boot. Do not pull on the cords.

NOTICE: Pulling on or bending the cords may damage the conductor inside.

2. REMOVE DISTRIBUTOR CAP WITHOUT DISCONNECTING HIGH–TENSION CORDS

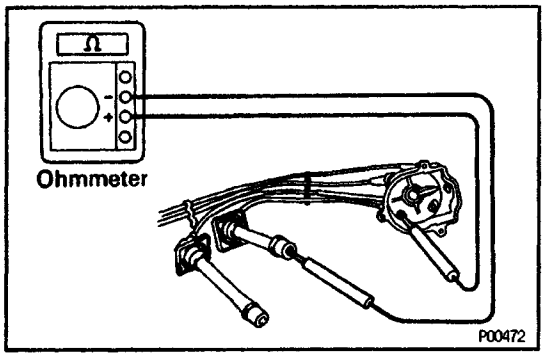
3. INSPECT HIGH–TENSION CORD RESISTANCE

Using an ohmmeter, measure the resistance without disconnecting the distributor cap.

Maximum resistance:

25 k Ω per cord

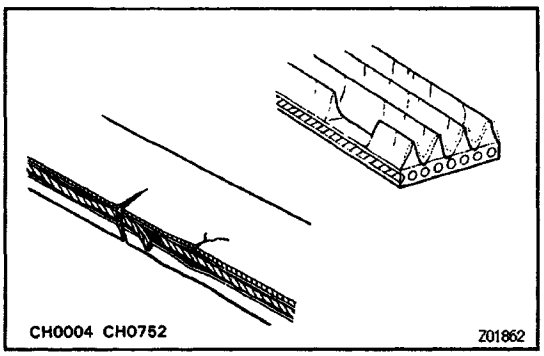
If the resistance is greater than maximum, check the terminals. If necessary, replace the high–tension cord and/or distributor cap.



4. REINSTALL DISTRIBUTOR CAP AND HIGH–TENSION CORDS

5. RECONNECT HIGH–TENSION CORDS TO SPARK PLUGS

ALTERNATOR DRIVE BELT INSPECTION

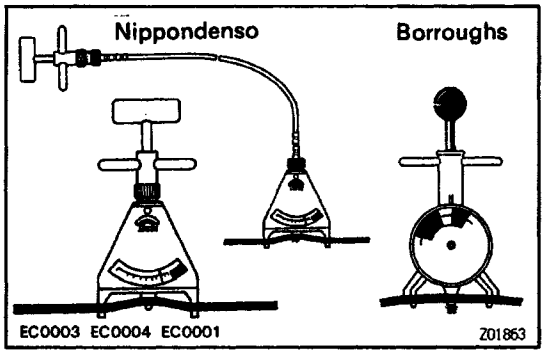


INSPECT DRIVE BELTS

(a) Visually check the belt for excessive wear, frayed cords etc.

If necessary, replace the drive belt.

HINT: Cranks on the rib side of a belt are considered acceptable. If the belt has chunks missing from the ribs, it should be replaced.



(b) Using a belt tension gauge, measure the belt tension.

Belt tension gauge:

Nippondenso BTG–20 (95506–00020)

Borroughs No. BT–33–73F

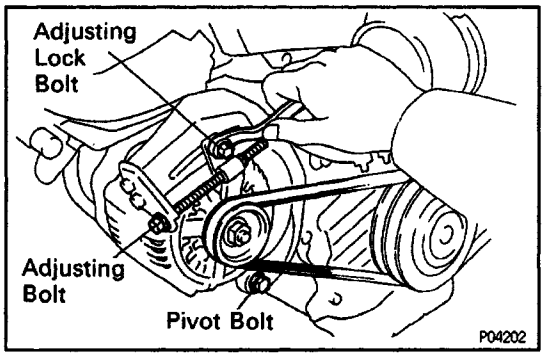
Drive belt tension:

New belt

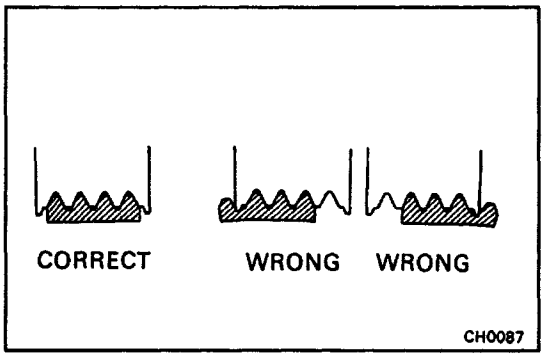
120 ± 20 lbf

Used belt

104 ± 20 lbf

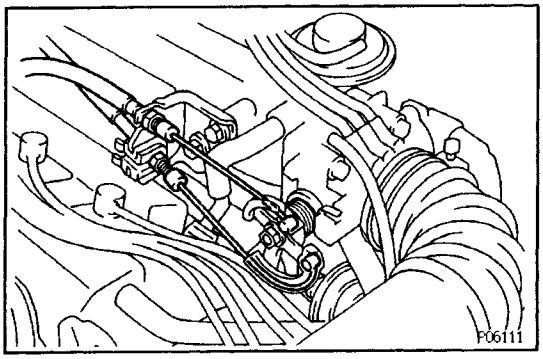


If necessary, adjust the belt tension.



HINT:

- ”New belt” refers to a belt which has been used less than 5 minutes on a running engine.
- ”Used belt” refers to a belt which has been used on a running engine for 5 minutes or more.
- After installing the belt, check that it fits properly in the ribbed grooves.
  Check by hand to confirm that the belt has not slipped out of the groove on the bottom of the pulley.
- After installing a new belt, run the engine for about 5 minutes and recheck the belt tension.



VALVE CLEARANCE INSPECTION AND ADJUSTMENT

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

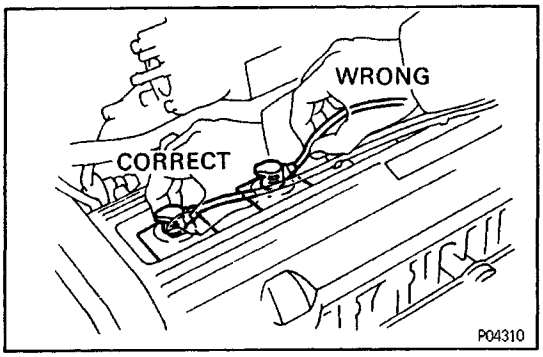
1. DISCONNECT ACCELERATOR CABLE FROM ACCELERATOR BRACKET

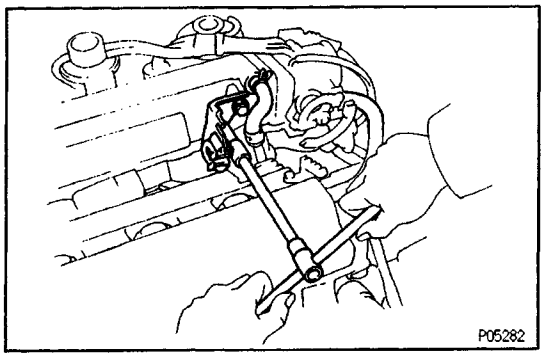
2. (A/T)
DISCONNECT THROTTLE CABLE FROM ACCELERATOR BRACKET

3. REMOVE CYLINDER HEAD COVER

(a) Disconnect the high – tension cords at the rubberboot. Do not pull on the high–tension cords.

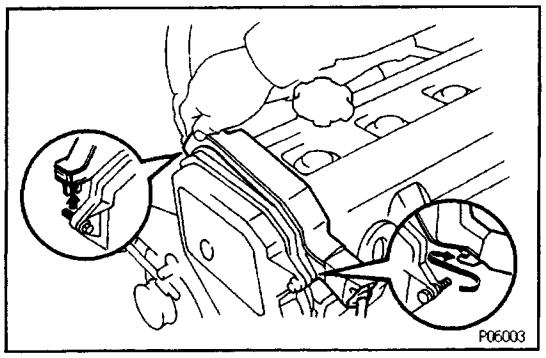
NOTICE: Pulling on or bending the cords may damage the conductor inside.



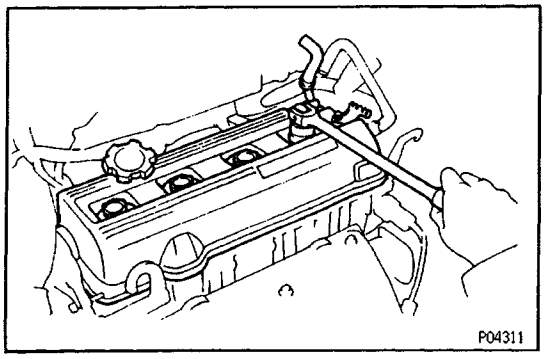


(b) Remove the two bolts and accelerator bracket.

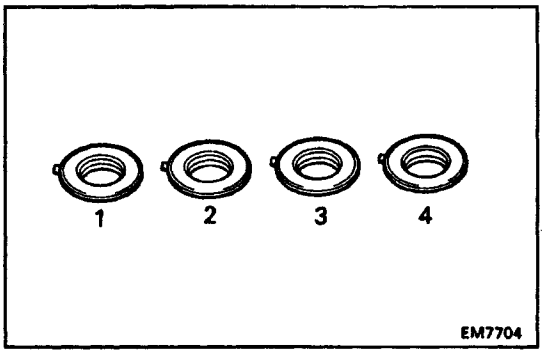
(c) Disconnect the PCV hose from the intake manifold.



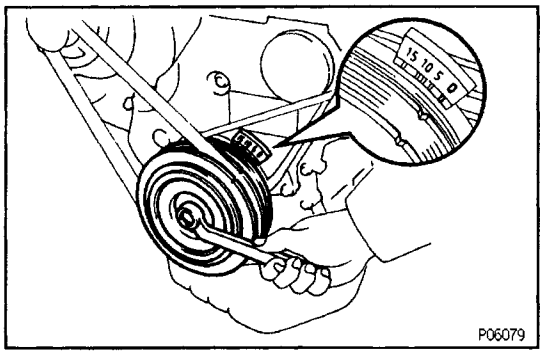
(d) Disconnect the engine wire protector between the No. 3 timing belt cover and cylinder head cover.



(e) Remove the four nuts, grommets, cylinder head cover and gasket.



HINT: Arrange the grommets in correct order, so that they can be reinstalled into their original positions. This minimizes any possibility of oil leakage due to reuse of grommets.

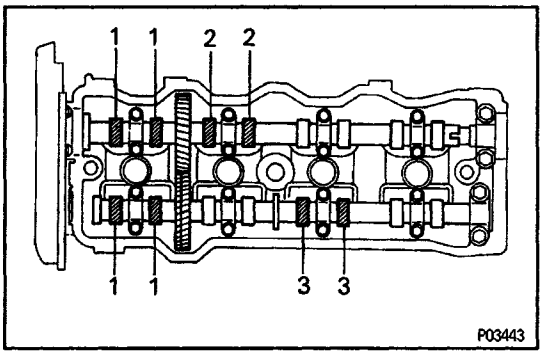


4. SET NO.1 CYLINDER TO TDC/COMPRESSION

(a) Turn the crankshaft pulley and align its groove with timing mark ”0” of the No.1 timing belt cover.

(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 be–tween the valve lifter and camshaft.

Record the out – of – specification valve clear–ance measurements. They will be used later to determine the required replacement adjusting shim.

Valve clearance (Cold):

Intake

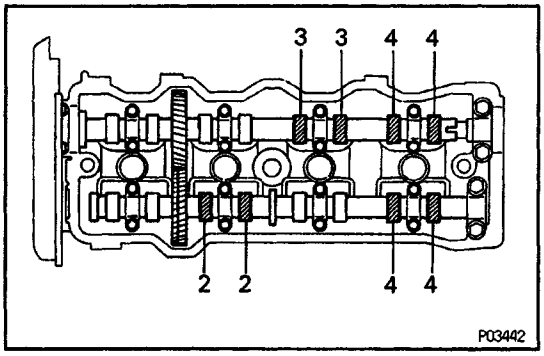
0.19 – 0.29 mm (0.007 – 0.011 in.)

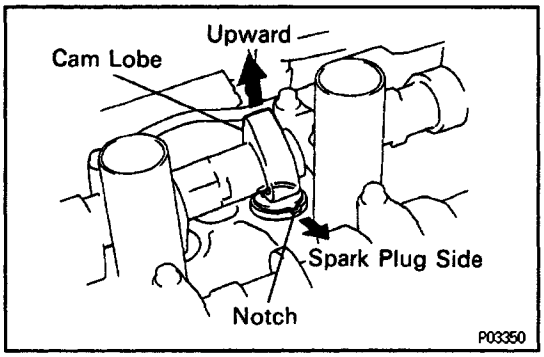
Exhaust

0.28 – 0.38 mm (0.011 – 0.015 in.)

(b) Turn the crankshaft one revolution (360˚) and align the mark as above. (See procedure in step 8)

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

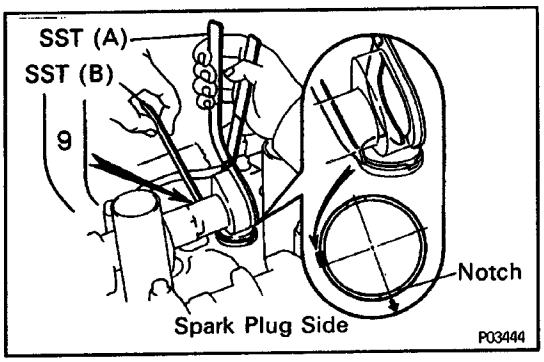




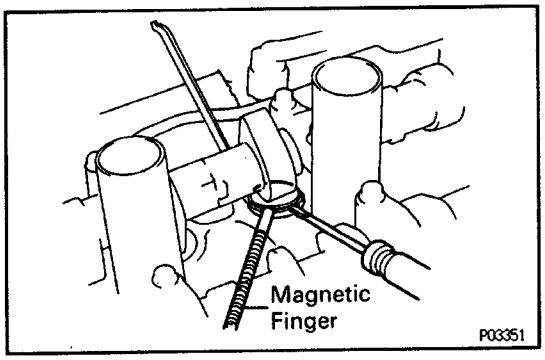
6. ADJUST VALVE CLEARANCE

(a) Remove the adjusting shim.

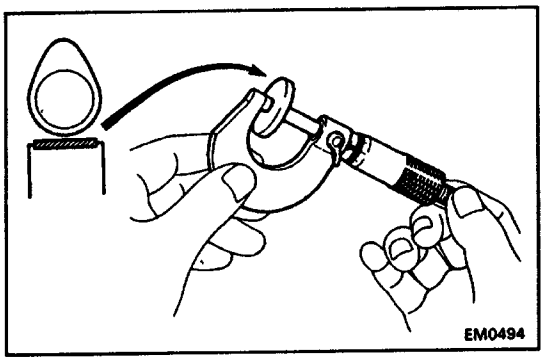
- Turn the crankshaft so that the cam lobe of the camshaft on the adjusting valve upward.
- Position the notch of the valve lifter facing the spark plug side.



Using SST (A), press down the valve lifter and place SST (B) between the camshaft and valve lifter. Remove SST (A).
SST 09248–55020 (09248–05011, 09248–05021)
HINT: Apply SST (B) at slight angle on the side marked with ”9”, at the position shown in the illustration.



Remove the adjusting shim with a small screw–driver 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:

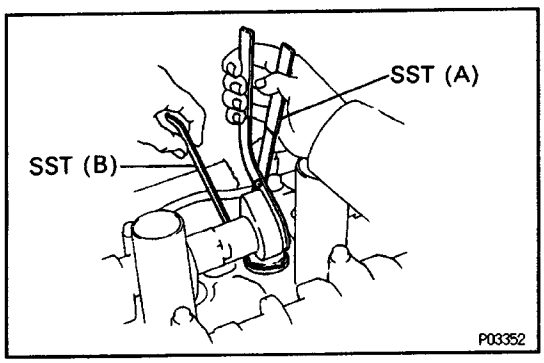
N = T + E (A – 0.24 mm (0.009 in.))

Exhaust:

N = T + (A – 0.33 mm (0.013 in.))

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

HINT: Shims are available in seventeen sized in in–crements of 0.05 mm (0.0020 in.), from 2.50 mm (0.0984 in.) to 3.30 mm (0.1299 in.).

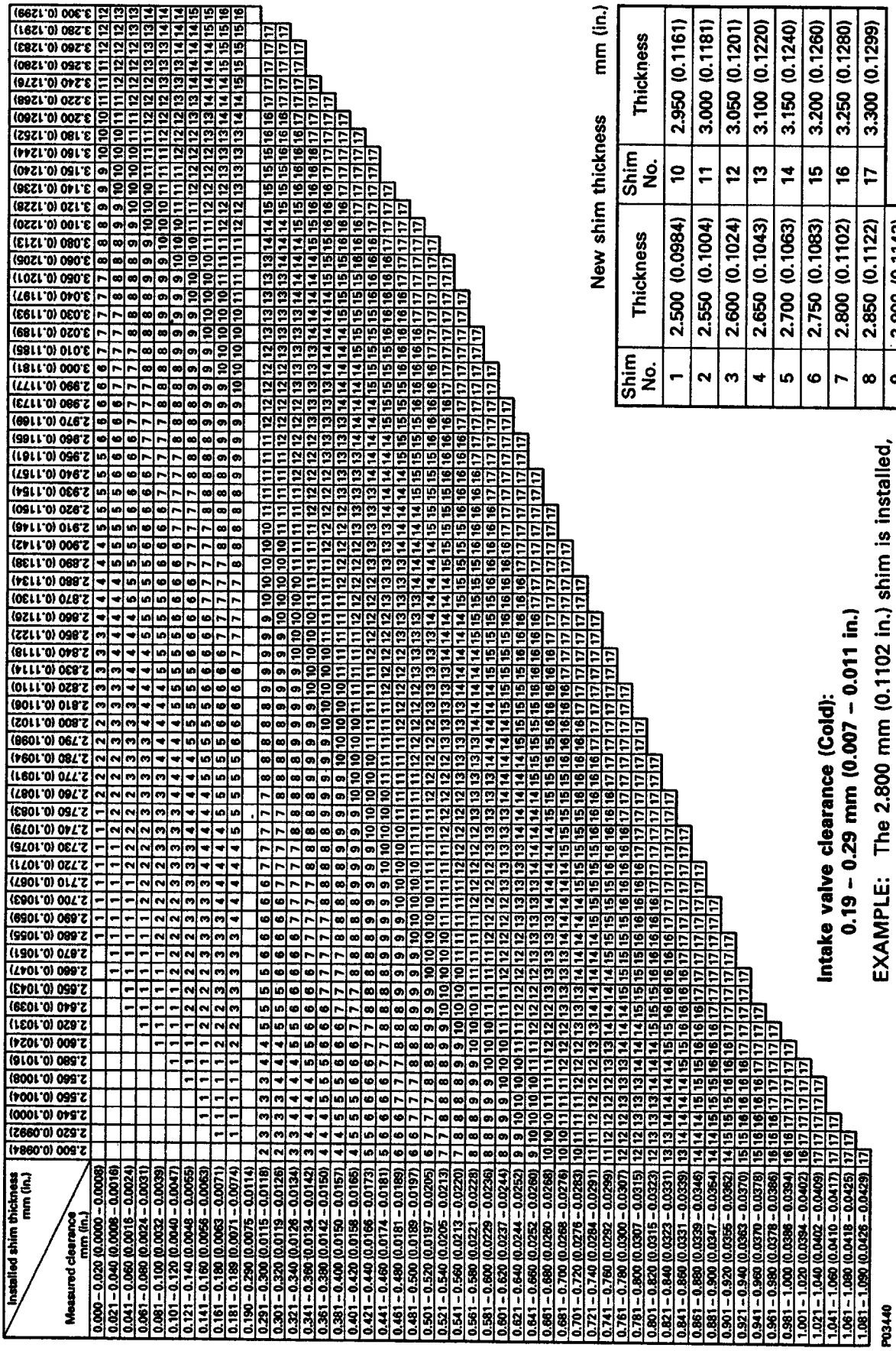


(c) Install a new adjusting shim.

- Place a new adjusting shim on the valve lifter.
- Using SST (A), press down the valve lifter and remove SST (B).
  SST 09248–55020 (09248–05011, 09248–05021)

(d) Recheck the valve clearance.

Adjusting Shim Selection Chart (Intake)



P03440

Intake valve clearance (Cold):
0.19 – 0.29 mm (0.007 – 0.011 in.)

EXAMPLE: The 2.800 mm (0.1102 in.) shim is installed, and the measured clearance is 0.450 mm (0.0177 in.). Replace the 2.800 mm (0.1102 in.) shim with a new No.11 shim.

New shim thickness mm (in.)

Shim No.	Thickness	Shim No.	Thickness
1	2.500 (0.0984)	10	2.950 (0.1161)
2	2.550 (0.1004)	11	3.000 (0.1181)
3	2.600 (0.1024)	12	3.050 (0.1201)
4	2.650 (0.1043)	13	3.100 (0.1220)
5	2.700 (0.1063)	14	3.150 (0.1240)
6	2.750 (0.1083)	15	3.200 (0.1260)
7	2.800 (0.1102)	16	3.250 (0.1280)
8	2.850 (0.1122)	17	3.300 (0.1299)
9	2.900 (0.1142)		

HINT: New shims have the thickness in millimeters imprinted on the face.

V00867

Adjusting Shim Selection Chart (Exhaust)

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)	2.670 (0.1051)	2.680 (0.1055)	2.690 (0.1059)	2.700 (0.1063)	2.710 (0.1067)	2.720 (0.1071)	2.730 (0.1075)	2.740 (0.1079)	2.750 (0.1083)	2.760 (0.1087)	2.770 (0.1091)	2.780 (0.1094)	2.790 (0.1098)	2.800 (0.1102)	2.810 (0.1106)	2.820 (0.1110)	2.830 (0.1114)	2.840 (0.1118)	2.850 (0.1122)	2.860 (0.1126)	2.870 (0.1130)	2.880 (0.1134)	2.890 (0.1138)	2.900 (0.1142)	2.910 (0.1146)	2.920 (0.1150)	2.930 (0.1154)	2.940 (0.1157)	2.950 (0.1161)	2.960 (0.1165)	2.970 (0.1169)	2.980 (0.1173)	2.990 (0.1177)	3.000 (0.1181)	3.010 (0.1185)	3.020 (0.1189)	3.030 (0.1193)	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)																						1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10	11
0.021 – 0.040 (0.0008 – 0.0016)																				1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10	11	11
0.041 – 0.060 (0.0016 – 0.0024)																		1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10	11	11	11
0.061 – 0.080 (0.0024 – 0.0031)																1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	8	8	9	9	9	9	10	10	11	11	11	11	12
0.081 – 0.100 (0.0032 – 0.0039)														1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	9	9	9	9	10	10	11	11	11	11	12	12
0.101 – 0.120 (0.0040 – 0.0047)												1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	9	9	9	10	10	10	11	11	11	12	12	12	13
0.121 – 0.140 (0.0048 – 0.0055)										1	1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	9	9	9	10	10	10	11	11	11	12	12	12	13	13
0.141 – 0.160 (0.0056 – 0.0063)									1	1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	10	10	10	11	11	11	12	12	12	13	13	13
0.161 – 0.180 (0.0063 – 0.0071)								1	1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10	11	11	11	11	12	12	13	13	13	13	14
0.181 – 0.200 (0.0071 – 0.0079)							1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	11	11	11	11	12	12	13	13	13	13	14	14
0.201 – 0.220 (0.0079 – 0.0087)						1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	11	11	11	12	12	12	13	13	13	14	14	14	15
0.221 – 0.240 (0.0087 – 0.0094)				1	1	1	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	11	11	11	12	12	12	13	13	13	14	14	14	15	15
0.241 – 0.260 (0.0095 – 0.0102)			1	1	1	1	1	2	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	12	12	12	13	13	13	14	14	14	15	15	15
0.261 – 0.279 (0.0103 – 0.0110)		1	1	1	1	1	2	2	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	12	12	13	13	13	13	14	14	15	15	15	15	16
0.280 – 0.380 (0.0110 – 0.0150)																																																																	
0.381 – 0.400 (0.0150 – 0.0157)	2	3	3	3	3	4	4	5	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	15	15	15	15	16	16	17	17	17	17	17	
0.401 – 0.420 (0.0158 – 0.0165)	3	3	3	4	4	4	5	5	5	6	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	15	15	15	16	16	16	17	17	17	17	17		
0.421 – 0.440 (0.0166 – 0.0173)	3	3	4	4	4	5	5	5	6	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	15	15	15	16	16	16	17	17	17	17	17			
0.441 – 0.460 (0.0174 – 0.0181)	3	4	4	4	5	5	5	6	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	16	16	16	17	17	17	17					
0.461 – 0.480 (0.0181 – 0.0189)	4	4	5	5	5	5	6	6	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	16	16	17	17	17	17	17						
0.481 – 0.500 (0.0189 – 0.0197)	4	5	5	5	5	6	6	7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	17	17	17	17	17							
0.501 – 0.520 (0.0197 – 0.0205)	5	5	5	6	6	6	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	17	17	17	17	17								
0.521 – 0.540 (0.0205 – 0.0213)	5	5	6	6	6	7	7	7	8	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	17	17	17	17	17									
0.541 – 0.560 (0.0213 – 0.0220)	5	6	6	6	7	7	7	8	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17											
0.561 – 0.580 (0.0221 – 0.0228)	6	6	7	7	7	7	8	8	9	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17												
0.581 – 0.600 (0.0229 – 0.0236)	6	7	7	7	7	8	8	9	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17													
0.601 – 0.620 (0.0237 – 0.0244)	7	7	7	8	8	8	9	9	9	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17														
0.621 – 0.640 (0.0244 – 0.0252)	7	7	8	8	8	9	9	9	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17															
0.641 – 0.660 (0.0252 – 0.0260)	7	8	8	8	9	9	9	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																	
0.661 – 0.680 (0.0260 – 0.0268)	8	8	9	9	9	9	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																			
0.681 – 0.700 (0.0268 – 0.0276)	8	9	9	9	9	10	10	11	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																					
0.701 – 0.720 (0.0276 – 0.0283)	9	9	9	10	10	10	11	11	11	12	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																							
0.721 – 0.740 (0.0284 – 0.0291)	9	9	10	10	10	11	11	11	12	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																									
0.741 – 0.760 (0.0292 – 0.0299)	9	10	10	10	11	11	11	12	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																											
0.761 – 0.780 (0.0300 – 0.0307)	10	10	11	11	11	11	12	12	13	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																													
0.781 – 0.800 (0.0307 – 0.0315)	10	11	11	11	11	12	12	13	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																															
0.801 – 0.820 (0.0315 – 0.0323)	11	11	11	12	12	12	13	13	13	14	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																																	
0.821 – 0.840 (0.0323 – 0.0331)	11	11	12	12	12	13	13	13	14	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																																			
0.841 – 0.860 (0.0331 – 0.0339)	11	12	12	12	13	13	13	14	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																																					
0.861 – 0.880 (0.0339 – 0.0346)	12	12	13	13	13	13	14	14	15	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																																							
0.881 – 0.900 (0.0347 – 0.0354)	12	13	13	13	13	14	14	15	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																																									
0.901 – 0.920 (0.0355 – 0.0362)	13	13	13	14	14	14	15	15	15	16	16	16	16	16	17	17	17	17	17	17	17	17																																											
0.921 – 0.940 (0.0363 – 0.0370)	13	13	14	14	14	15	15	15	16	16	16	16	17	17	17	17	17	17	17	17																																													
0.941 – 0.960 (0.0370 – 0.0378)	13	14	14	14	15	15	15	16	16	16	17	17	17	17	17	17	17	17																																															
0.961 – 0.980 (0.0378 – 0.0386)	14	14	15	15	15	15	16	16	17	17	17	17	17	17	17	17																																																	
0.981 – 1.000 (0.0386 – 0.0394)	14	15	15	15	15	16	16	17	17	17	17	17	17	17																																																			
1.001 – 1.020 (0.0394 – 0.0402)	15	15	15	16	16	16	17	17	17	17	17	17																																																					
1.021 – 1.040 (0.0402 – 0.0409)	15	15	16	16	16	17	17	17	17	17																																																							
1.041 – 1.060 (0.0410 – 0.0417)	15	16	16	16	17	17	17	17																																																									
1.061 – 1.080 (0.0418 – 0.0425)	16	16	17	17	17	17	17																																																										
1.081 – 1.100 (0.0426 – 0.0433)	16	17	17	17	17	17																																																											
1.101 – 1.120 (0.0433 – 0.0441)	17	17	17	17	17																																																												
1.121 – 1.140 (0.0441 – 0.0449)	17	17	17	17																																																													
1.141 – 1.160 (0.0449 – 0.0457)	17	17																																																															
1.161 – 1.180 (0.0457 – 0.0465)	17																																																																	

P03441

Exhaust valve clearance (Cold):
0.28 – 0.38 mm (0.011 – 0.015 in.)

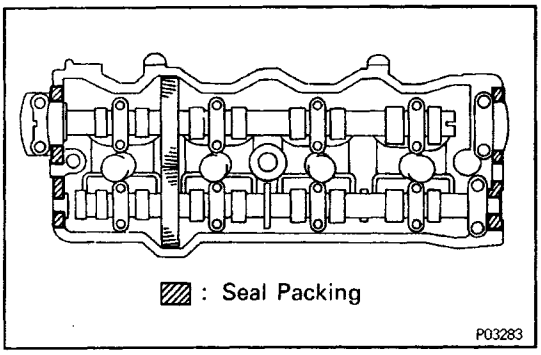
EXAMPLE: The 2.800 mm (0.1102 in.) shim is installed, and the measured clearance is 0.450 mm (0.0177 in.). Replace the 2.800 mm (0.1102 in.) shim with a new No.9 shim.

New shim thickness mm (in.)

Shim No.	Thickness	Shim No.	Thickness
1	2.500 (0.0984)	10	2.950 (0.1161)
2	2.550 (0.1004)	11	3.000 (0.1181)
3	2.600 (0.1024)	12	3.050 (0.1201)
4	2.650 (0.1043)	13	3.100 (0.1220)
5	2.700 (0.1063)	14	3.150 (0.1240)
6	2.750 (0.1083)	15	3.200 (0.1260)
7	2.800 (0.1102)	16	3.250 (0.1280)
8	2.850 (0.1122)	17	3.300 (0.1299)
9	2.900 (0.1142)		

HINT: New shims have the thickness in millimeters imprinted on the face.

V00868



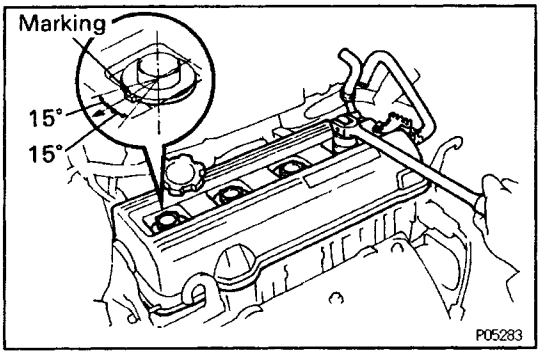
7. INSTALL CYLINDER HEAD COVER

(a) Remove any old packing (FIPG) material.

(b) Apply seal packing to the cylinder head as shown in the illustration.

Seal packing:

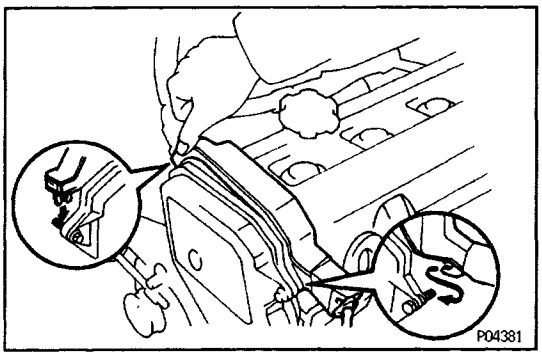
Part No. 08826–00080 or equivalent



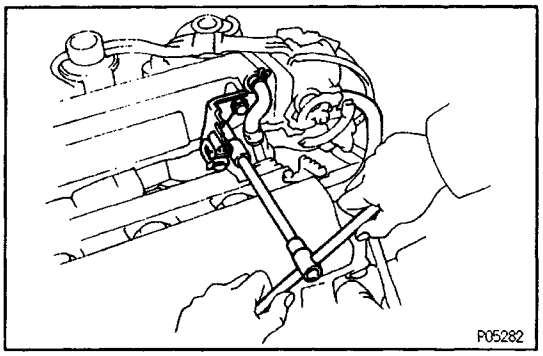
(c) Install the gasket to the cylinder head cover.

(d) Install the cylinder head cover with the four grommets and nuts.

Torque: 23 N–m (230 kgf–cm, 17 ft–lbf)



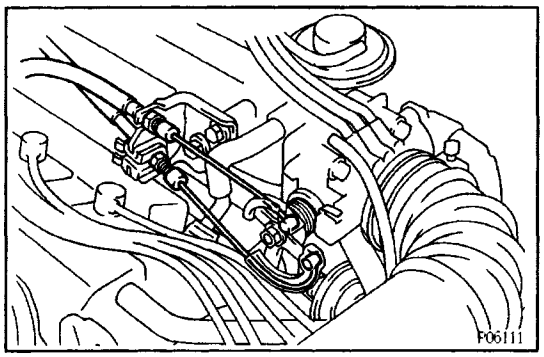
(e) Install the two clamps of the engine wire protector to the each bolts.



(f) Connect the PCV hose to the intake manifold.

(g) Install the accelerator bracket with the two bolts.

(h) Connect the four high–tension cords to the spark plugs.



8. INSTALL ACCELERATOR CABLE TO ACCELERATOR BRACKET

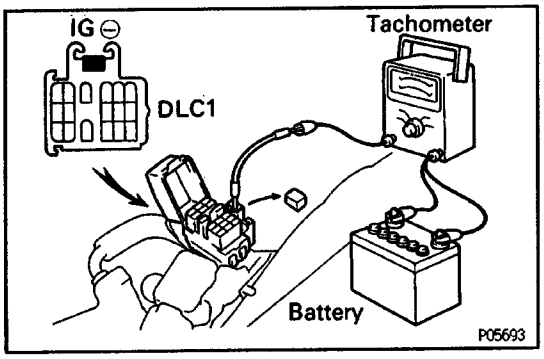
9. INSTALL THROTTLE CABLE TO ACCELERATOR BRACKET

IGNITION TIMING INSPECTION AND ADJUSTMENT

1. REMOVE RH ENGINE HOOD SIDE PANEL

2. WARM UP ENGINE

Allow the engine to warm up to normal operating temperature.



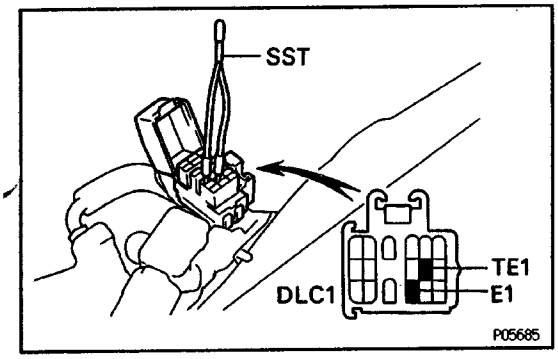
3. CONNECT TACHOMETER AND TIMING. LIGHT TO ENGINE

Connect the test probe of a tachometer to terminal IG (–) of the data link connector 1.

NOTICE:

Never allow the tachometer terminal to touch ground as it could result in damage to the igniter and/or ignition coil.

- As some tachometers are not compatible with this ignition system, we recommend that you confirm the compatibility of your unit before use.

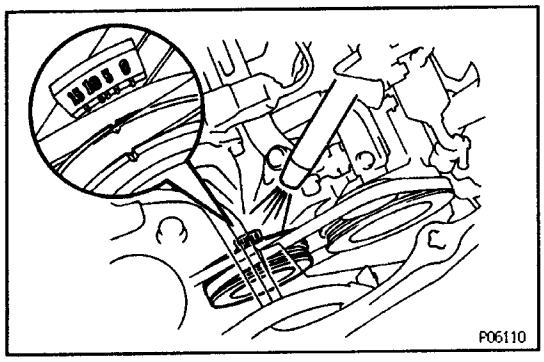


4. ADJUST IGNITION TIMING

(a) Using SST, connect terminals TE1 and E1 of the the data link connector 1.

SST 09843–18020

HINT: After engine rpm is kept at 1,000 – 1,300 rpm for 5 seconds, check that it returns to idle speed.

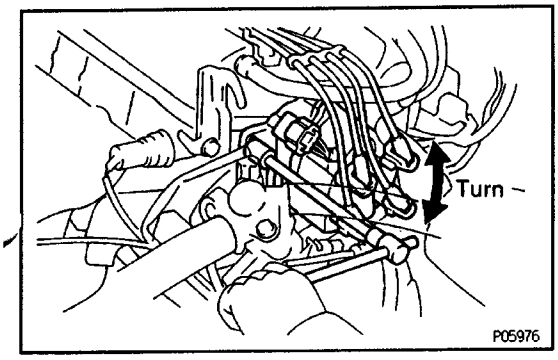


(b) Using a timing light, check the ignition timing.

Ignition timing:

10° BTDC @ idle

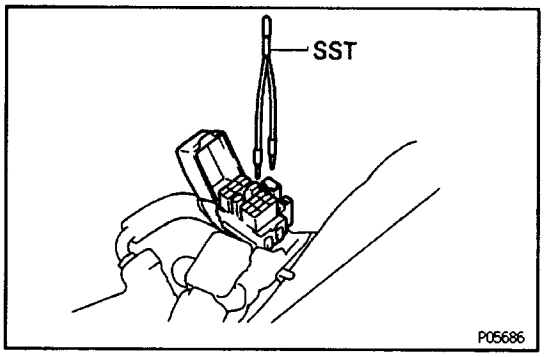
(Transmission in neutral position)



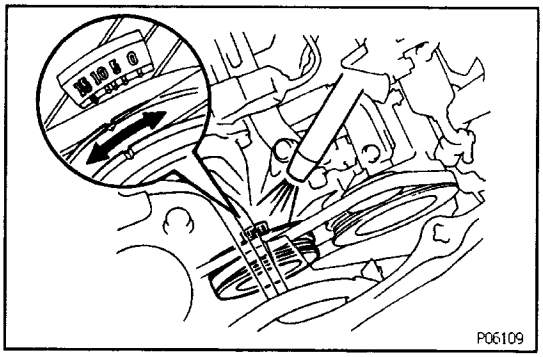
(c) Loosen the two hold–down bolts, and adjust by turning the distributor.

(d) Tighten the two hold–down bolts, and recheck the ignition timing.

Torque: 19 N–m (195 kgf–cm, 14 ft–lbf)



(e) Remove the SST from the data link connector 1.
SST 09843–18020



5. FURTHER CHECK IGNITION TIMING
Ignition timing:
13 – 22˚ BTDC @ idle
(Transmission in neutral position)
HINT: The timing mark moves in a range between 13˚ and 22˚.

6. DISCONNECT TACHOMETER AND TIMING LIGHT FROM ENGINE
7. REINSTALL RH ENGINE HOOD SIDE PANEL

IDLE SPEED INSPECTION

1. INITIAL CONDITIONS

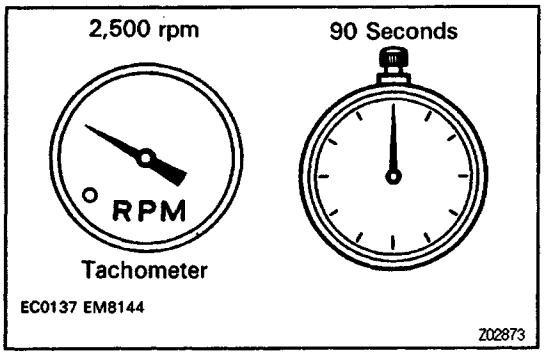
(a) Engine at normal operating temperature
(b) Air cleaner installed
(c) All pipes and hoses of air induction system connected
(d) All accessories switched OFF
(e) All vacuum lines properly connected

HINT: All vacuum hoses for EGR systems, etc. should be properly connected.

(f) MPI system wiring connectors fully plugged
(g) Ignition timing set correctly
(h) Transmission in neutral position

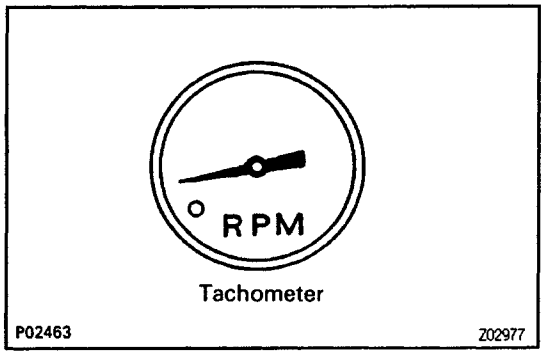
2. CONNECT TACHOMETER

(See step 2 in Ignition Timing Inspection and Adjustment)



3. INSPECT IDLE SPEED

(a) Race the engine speed at 2,500 rpm for approx. 90 seconds.



(b) Check the idle speed.

Idle speed:

750 ± 50 rpm for USA M/T
700 ± 50 rpm for USA A/T
850 ± 50 rpm for CANADA M/T

If the idle speed is not as specified, check the IACV.

4. DISCONNECT TACHOMETER