

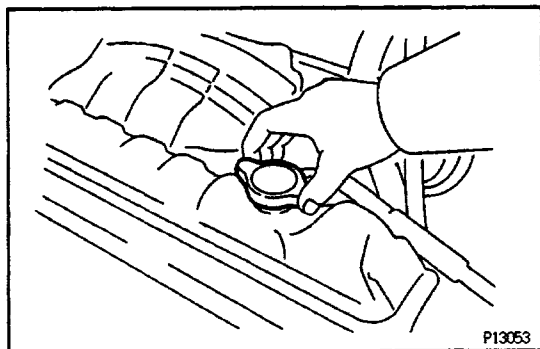
TUNE-UP

ENGINE COOLANT INSPECTION

1. CHECK ENGINE COOLANT LEVEL AT RADIATOR RESERVOIR

The engine coolant level should be between the "LOW" and "FULL" lines.

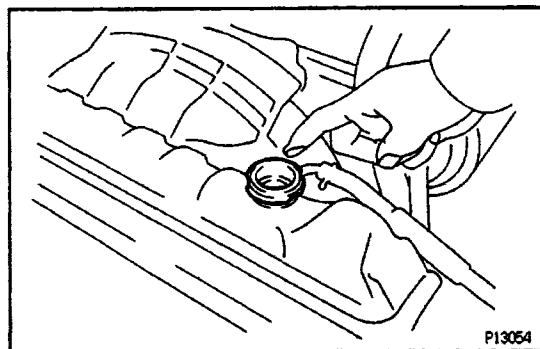
If low, check for leaks and add engine coolant up to the "FULL" line.



2. CHECK ENGINE COOLANT QUALITY

(a) Remove the radiator cap.

CAUTION: To avoid the danger of being burned, do not remove the radiator cap 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 scale around the radiator cap or radiator filler hole, and the coolant should be free from oil.

If excessively dirty, clean the coolant passages and replace the coolant.

Capacity (w/ Heater):

M/T

10.0 liters (10.6 US qts, 8.8 Imp. qts)

A/T

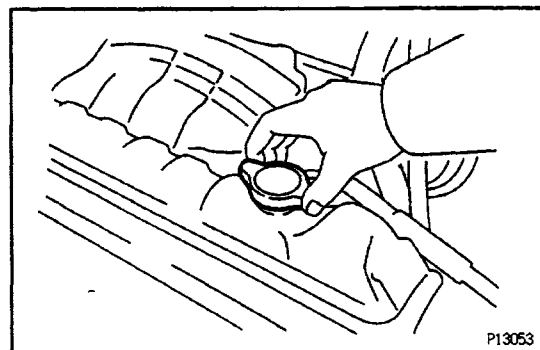
9.8 liters (10.4 US qts, 8.6 Imp. qts.)

HINT:

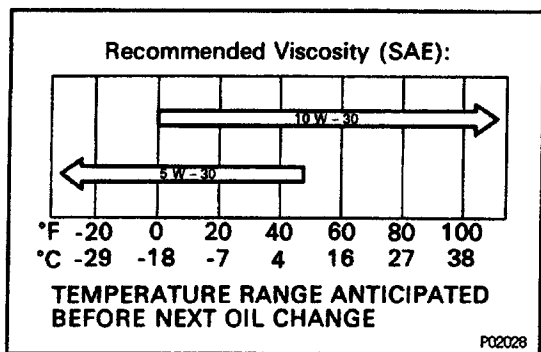
- Use a good brand of ethylene-glycol base coolant and mix it according to the manufacturer's directions.
- Using coolant which includes more than 50 96 ethylene-glycol (but not more than 70 96) is recommended.

NOTICE:

- Do not use an alcohol type coolant.
- The coolant should be mixed with demineralized water or distilled water.



(c) Reinstall the radiator cap.



ENGINE OIL INSPECTION

1. CHECK OIL QUALITY

Check the oil for deterioration, entry of water, discoloring or thinning.

If oil quality is visibly poor, replace the oil.

Oil grade:

API grade SH Energy- Conserving II or ILSAC multigrade engine oil. Recommended viscosity is as shown in the illustration.

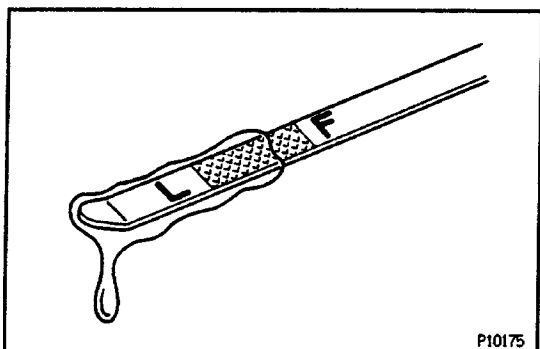
Drain and refill capacity: .

w/ Oil filter change

4.5 liters (4.8 US qts, 4.0 Imp. qts)

w/o Oil filter change

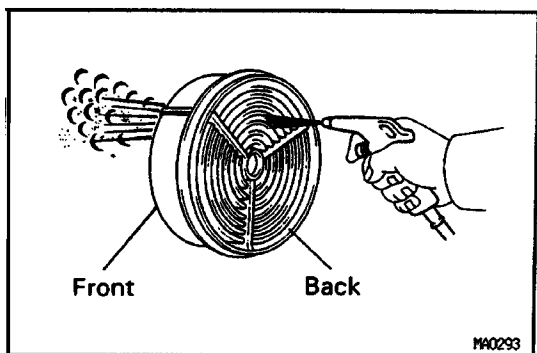
4.2 liters (4.4 US qts, 3.7 Imp, qts)



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.



AIR FILTER INSPECTION AND CLEANING

1. REMOVE AIR FILTER

2. INSPECT AND CLEAN AIR FILTER

(a) Visually check that the air filter is not excessively dirty or oily.

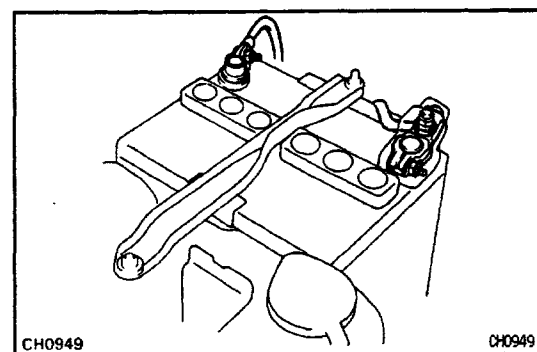
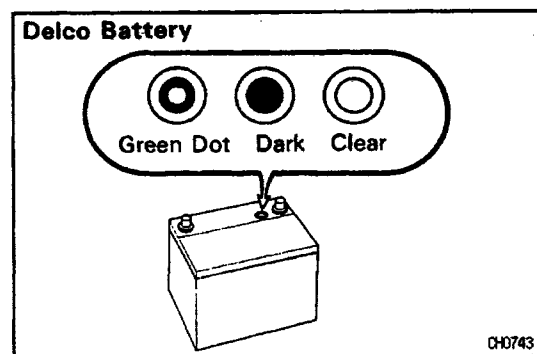
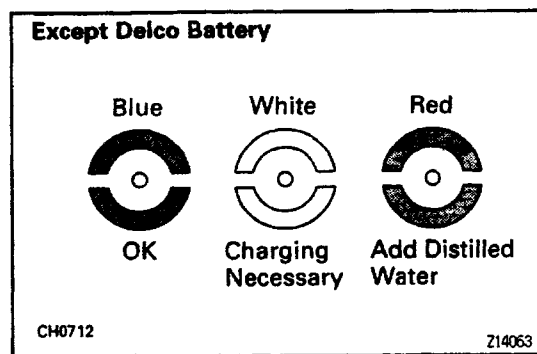
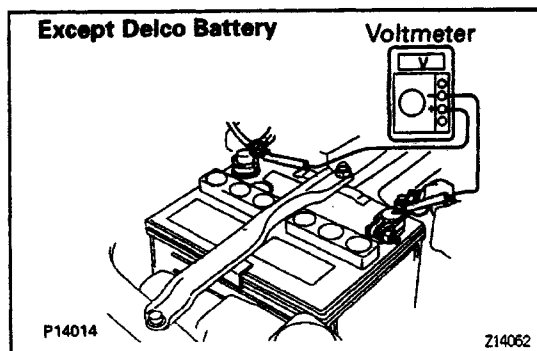
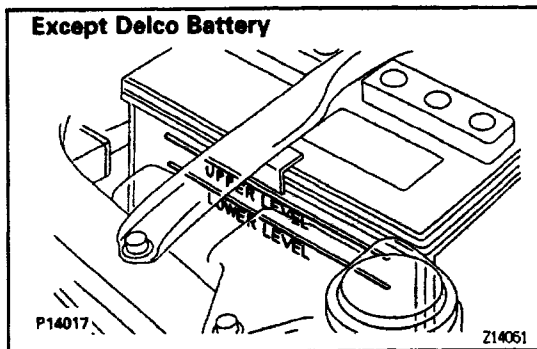
HINT: Oiliness may indicate a stuck PCV valve.

If necessary, replace the air filter.

(b) Clean the air filter with compressed air.

First blow from the inside thoroughly, then blow off the outside of the air filter.

3. REINSTALL AIR FILTER



BATTERY INSPECTION

1. Except Delco Battery:

CHECK BATTERY ELECTROLYTE LEVEL AND VOLTAGE

- (a) Check the electrolyte quantity of each cell.
If under the lower level, replace the battery (or add distilled water if possible.). Need to check the charging system.

- (b) Measure the battery voltage between the terminals negative (-) and positive (+) of the battery.

Standard voltage:

At 20° C (68° F): 12.7 – 12.9 V

HINT:

- Before measuring the voltage, turn the ignition switch OFF and turn off the electrical systems (headlight, blower motor, rear defogger etc.) for 60 seconds to remove the surface charge.
- If the vehicle has been running, wait 5 minutes or more after the vehicle stops before measuring the battery voltage.
If the voltage is less than specification, charge the battery.

HINT: Check the indicator as shown in the illustration.

2. Delco Battery:

CHECK HYDROMETER

Green Dot visible:

Battery is adequately charged.

Dark (Green Dot not visible):

Battery must be charged.

Clear or Light Yellow:

Replace battery.

HINT: There is no need to add water during the entire service life of the battery.

3. 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.

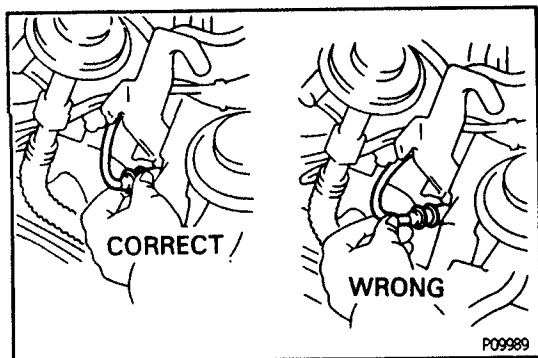
HIGH-TENSION CORDS INSPECTION

1. DISCONNECT HIGH-TENSION CORDS FROM SPARK PLUGS

Disconnect the high - tension cords at the rubber boot.

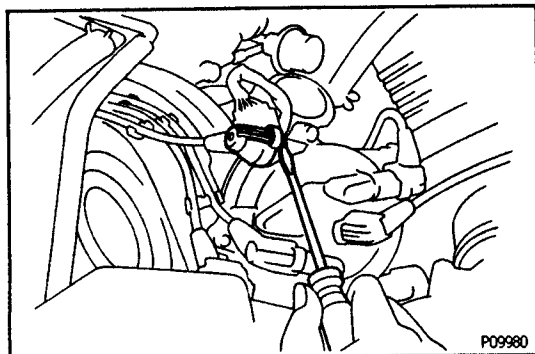
DO NOT pull on the cords.

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



2. DISCONNECT HIGH-TENSION CORDS FROM DISTRIBUTOR CAP AND IGNITION COIL

(a) Using a screwdriver, lift up the lock claw and disconnect the holder from the distributor cap (ignition coil),

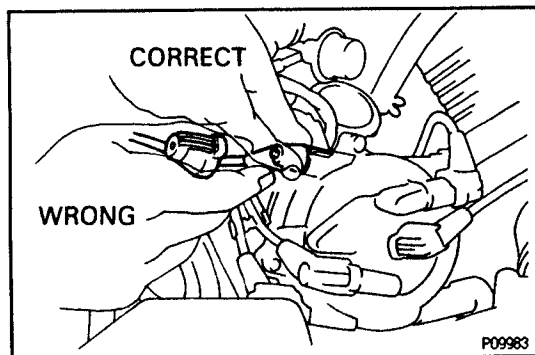


(b) Disconnect the high-tension cord at the grommet. DO NOT pull on the cord.

NOTICE:

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

Do not wipe any of the oil from the grommet after this high-tension cord is disconnected.



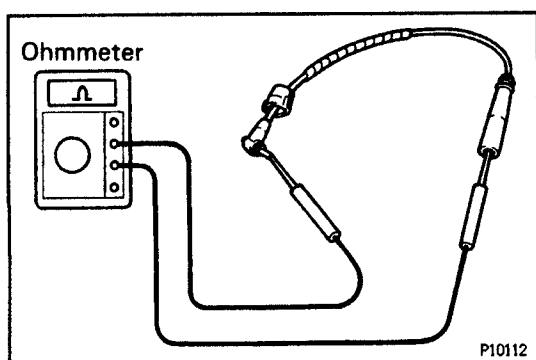
3. INSPECT HIGH -TENSION C4RD RESISTANCE

Using an ohmmeter, measure the resistance.

Maximum resistance:

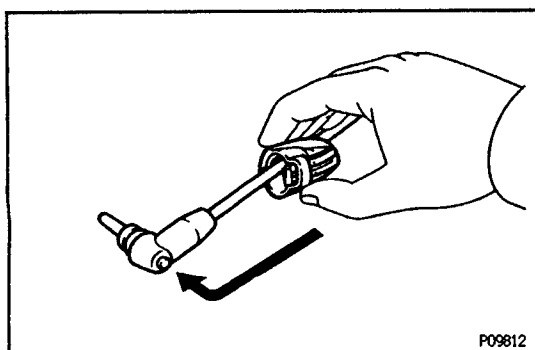
25 kΩ per cord

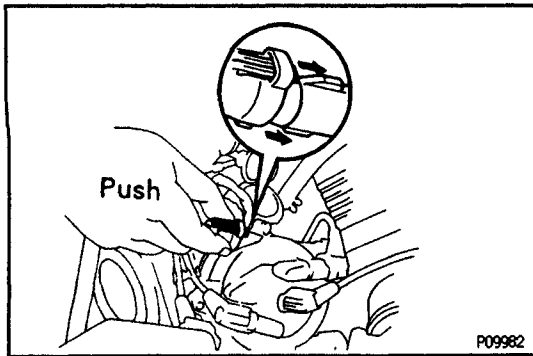
If the resistance is greater than maximum, check the terminals. If necessary, replace the high - tension cord.



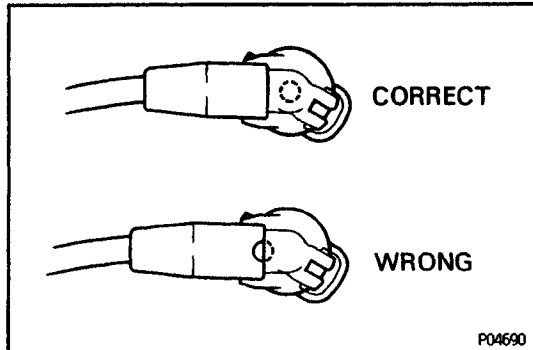
4. RECONNECT HIGH-TENSION CORDS TO DISTRIBUTOR CAP AND IGNITION COIL

(a) Assemble the holder and grommet.

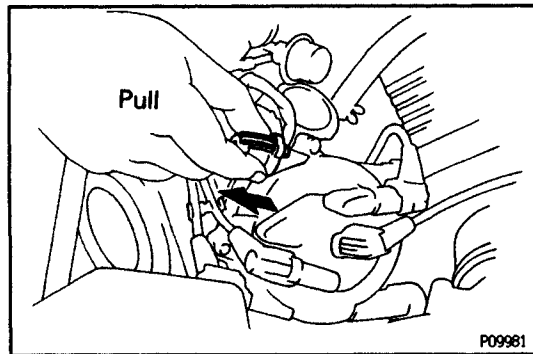




- (b) Align the spline of the distributor (ignition coil) with the spline of the holder, and push in the cord.

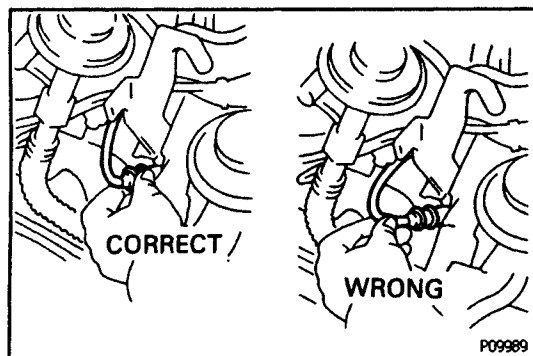


NOTICE: Check that the holder is correctly installed to the grommet and distributor cap as shown in the illustration.



- (c) Check that the lock claw of the holder is engaged by lightly pulling the holder.

5. RECONNECT HIGH-TENSION CORDS TO SPARK PLUGS



SPARK PLUGS INSPECTION

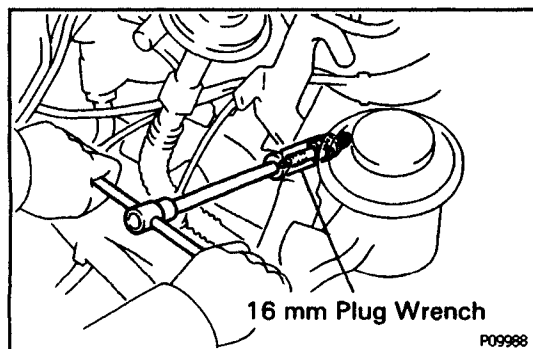
1. DISCONNECT HIGH-TENSION CORDS FROM SPARK PLUGS

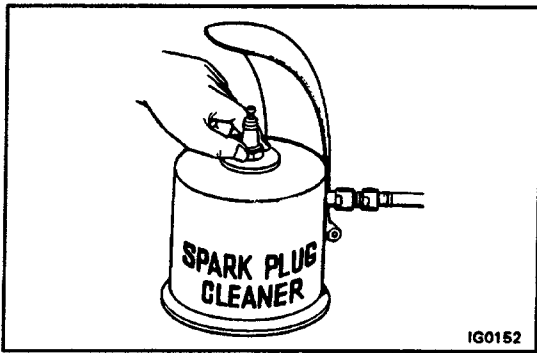
Disconnect the high - tension cords at the rubber boot. Do not pull on the cords.

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

2. REMOVE SPARK PLUGS

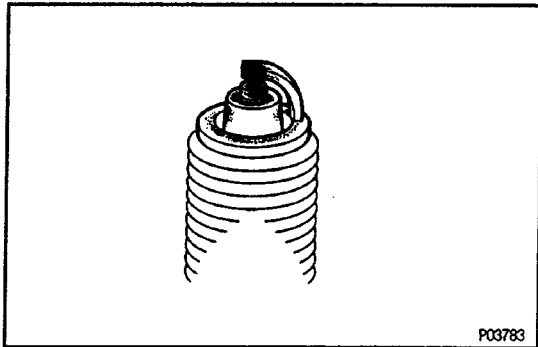
Using a 16 mm plug wrench, remove the 6 spark plugs.





3. CLEAN SPARK PLUGS

Using a spark plug cleaner or wire brush, clean the spark plug.



4. VISUALLY INSPECT SPARK PLUGS

Check the spark plug for electrode wear, thread damage and insulator damage.

If abnormal, replace the spark plug.

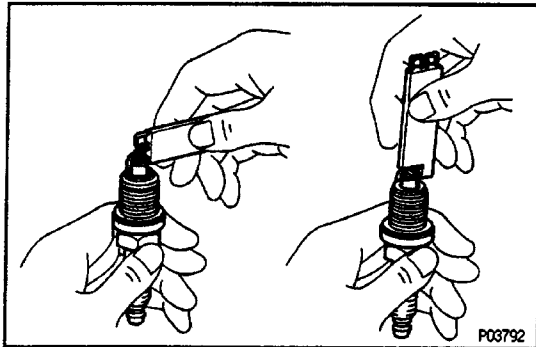
Recommended spark plug:

ND

K16R-U

NGK

BKR5EYA

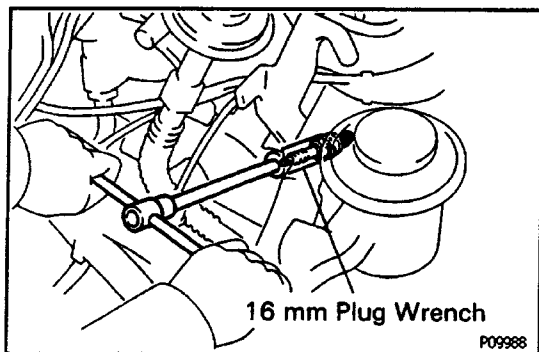


5. ADJUST ELECTRODE GAP

Carefully bend the outer electrode to obtain the correct electrode gap.

Correct electrode gap:

0.8 mm (0.031 in.)



8. INSTALL SPARK PLUGS

Using a 16 mm plug wrench, install and torque the 6 spark plug.

Torque: 18 N-m (180 kgf-cm, 13 ft-lbf)

7. RECONNECT HIGH-TENSION CORDS TO SPARK PLUGS

8m-11

GENERATOR DRIVE BELT INSPECTION

INSPECT DRIVE BELTS

- (a) Visually check the belt for excessive wear, frayed cords etc. If necessary, replace the drive belt.

HINT: Cracks 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:

BTG-20 (95506-00020) for Nippondenso

No. BT-33-73F for Borroughs

Drive belt tension:

New belt

160 ± 20 lbf

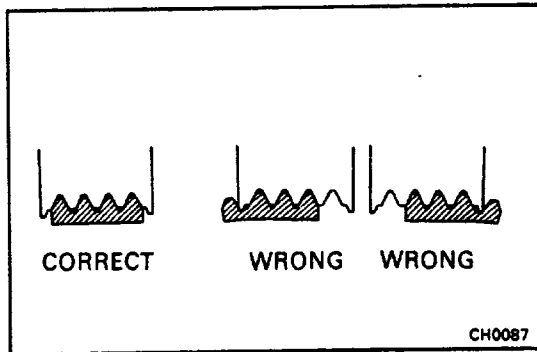
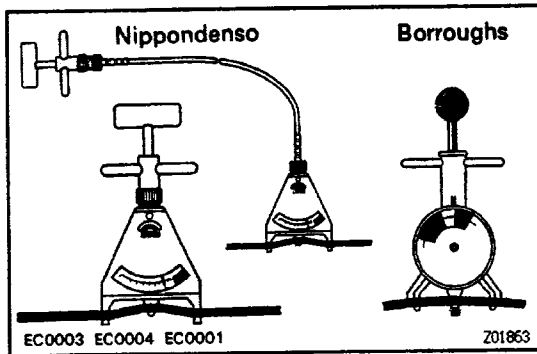
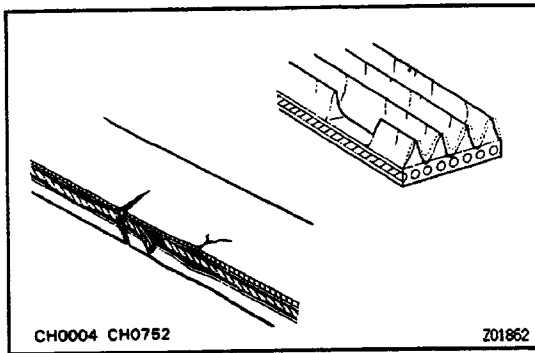
Used belt

100 ± 20 lbf

If necessary, adjust the belt tension.

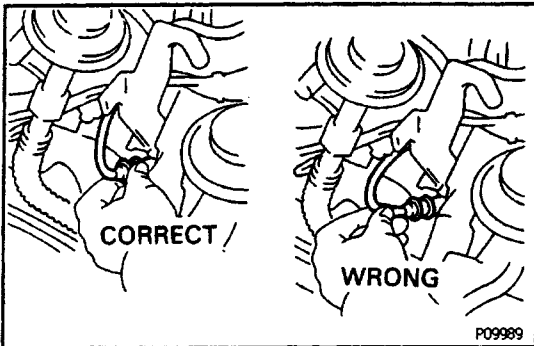
HINT:

- "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 no1 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

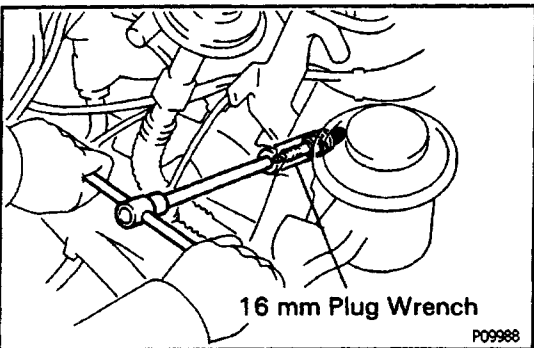
HINT: Inspect and adjust the valve clearance when the engine is cold.



1. DISCONNECT HIGH-TENSION CORDS FROM SPARK PLUGS

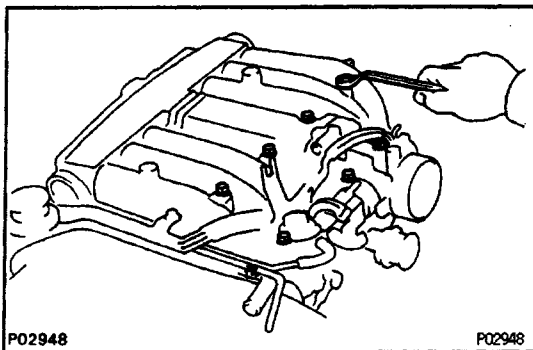
Disconnect the high – tension cords at the rubber boot. Do not pull on the cords.

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



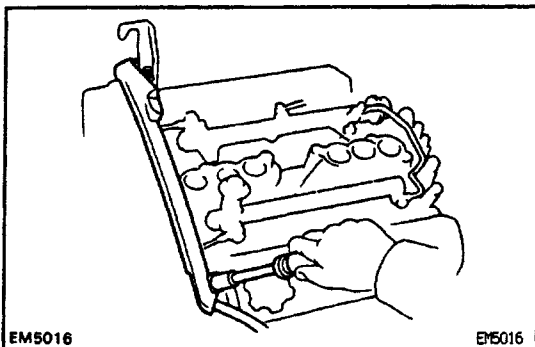
2. REMOVE SPARK PLUGS

Using a 16 mm plug wrench, remove the 6 spark plugs.



3. REMOVE AIR INTAKE CHAMBER

(See step 17 in cylinder heads removal in cylinder head)

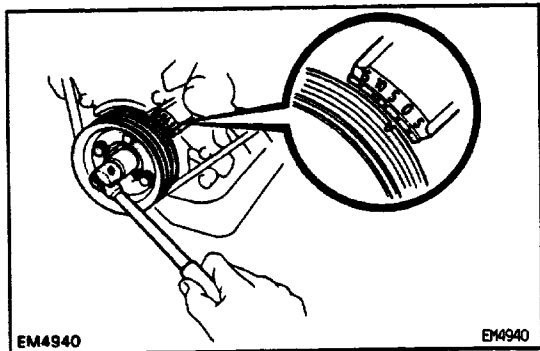


4. REMOVE ENGINE WIRE

Remove the 2 bolts and engine wire.

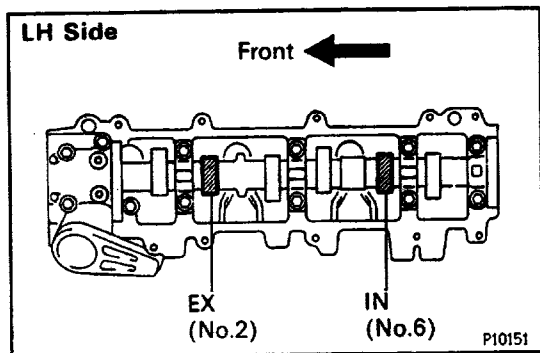
5. REMOVE CYLINDER HEAD COVERS

(See step 34 in cylinder heads removal in cylinder head)



6. SET NO.1 CYLINDER TO TDC/COMPRESSION

- Turn the crankshaft pulley and align its groove with timing mark '0' of the No.1 timing belt cover.
- 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 1 revolution (360°) and align the mark as above.



7. INSPECT VALVE CLEARANCE

- Check the clearance of the IN (No.6) and EX (No.2) valves.

- 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.

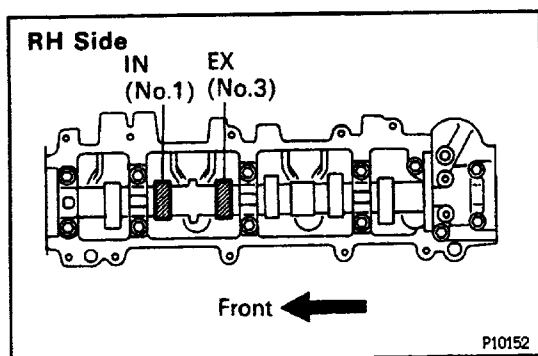
Valve clearance (Cold):

Intake

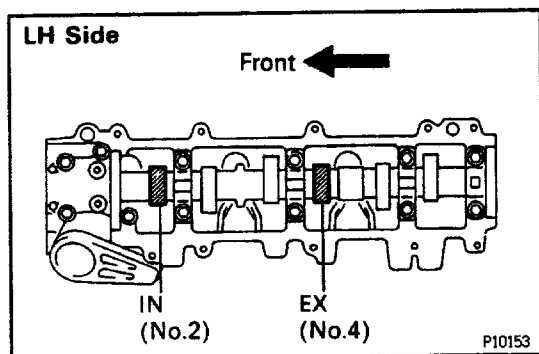
0.18 – 0.28 mm (0.007 – 0.011 in.)

Exhaust

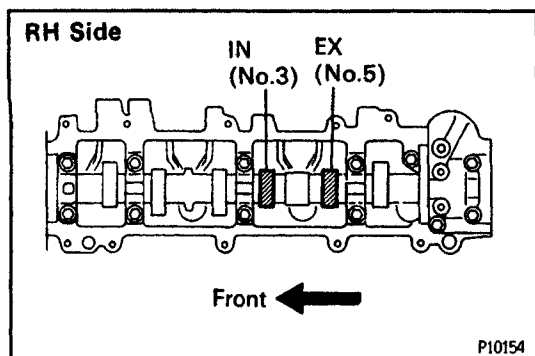
0.22 – 0.32 mm (0.009 – 0.013 in.)



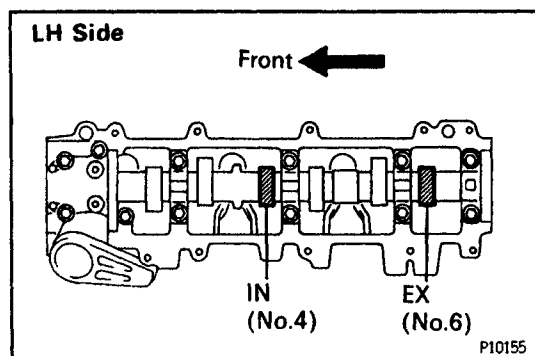
- Turn the crankshaft $1/3$ revolution (120°), check the clearance of the IN (No.1) and EX (No.3) valves. Measure the valve clearance.
(See procedure in step (a))



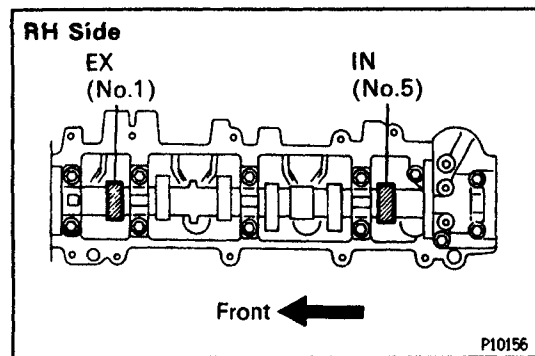
- Turn the crankshaft $1/3$ revolution (120°), check this clearance of the IN (No.2) and EX (No.4) valves. Measure the valve clearance.
(See procedure in step (a))



- (d) Turn the crankshaft 1/3 revolution (120°), check the clearance of the IN (No.3) and EX (No.5) valves. Measure the valve clearance.
(See procedure in step (a))



- (e) Turn the crankshaft 1/3 revolution (120°), check the clearance of the IN (No.4) and EX (No.6) valves. Measure the valve clearance.
(See procedure in step (a))

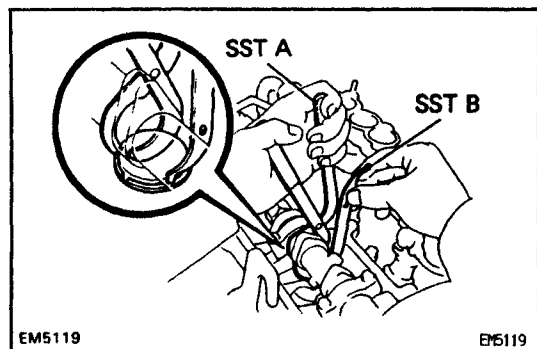


- (f) Turn the crankshaft 1/3 revolution (120°), check the clearance of the IN (No.5) and EX (No.1) valves. Measure the valve clearance.
(See procedure in step (a))

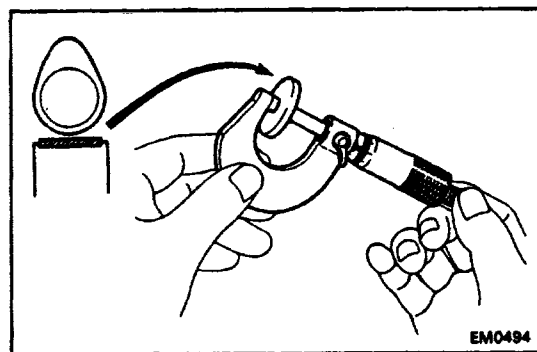
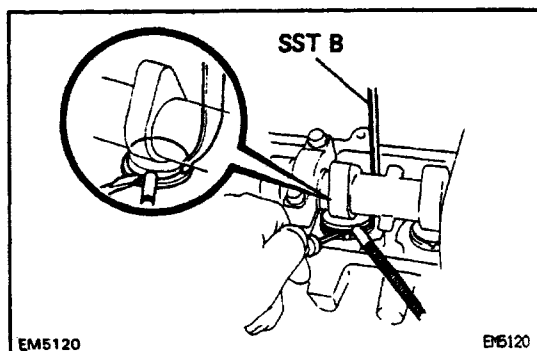
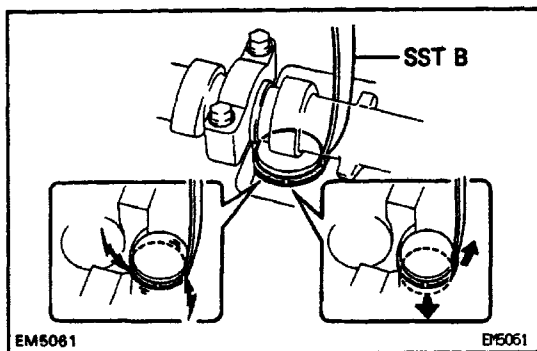
8. ADJUST VALVE CLEARANCE

- (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 09248-55040 (09248-05410, 09248-05420)



HINT: For easy removal of the shim, when setting SST

B, set it on the lifter so there is a wide space in the removal direction.

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

(b) Determine the replacement adjusting shim size by following the Formula or charts on the next 2 pages:

- 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:

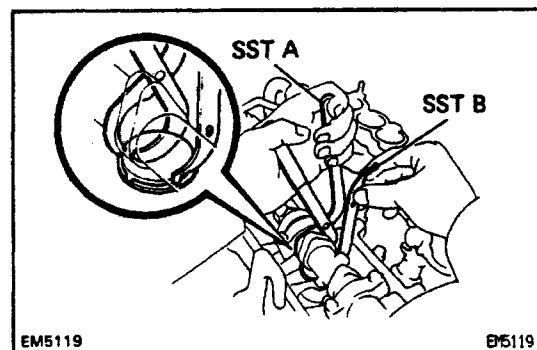
$$N = T + (A - 0.23 \text{ mm (0.009 in.)})$$

Exhaust:

$$N = T + (A - 0.27 \text{ mm (0.011 in.)})$$

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

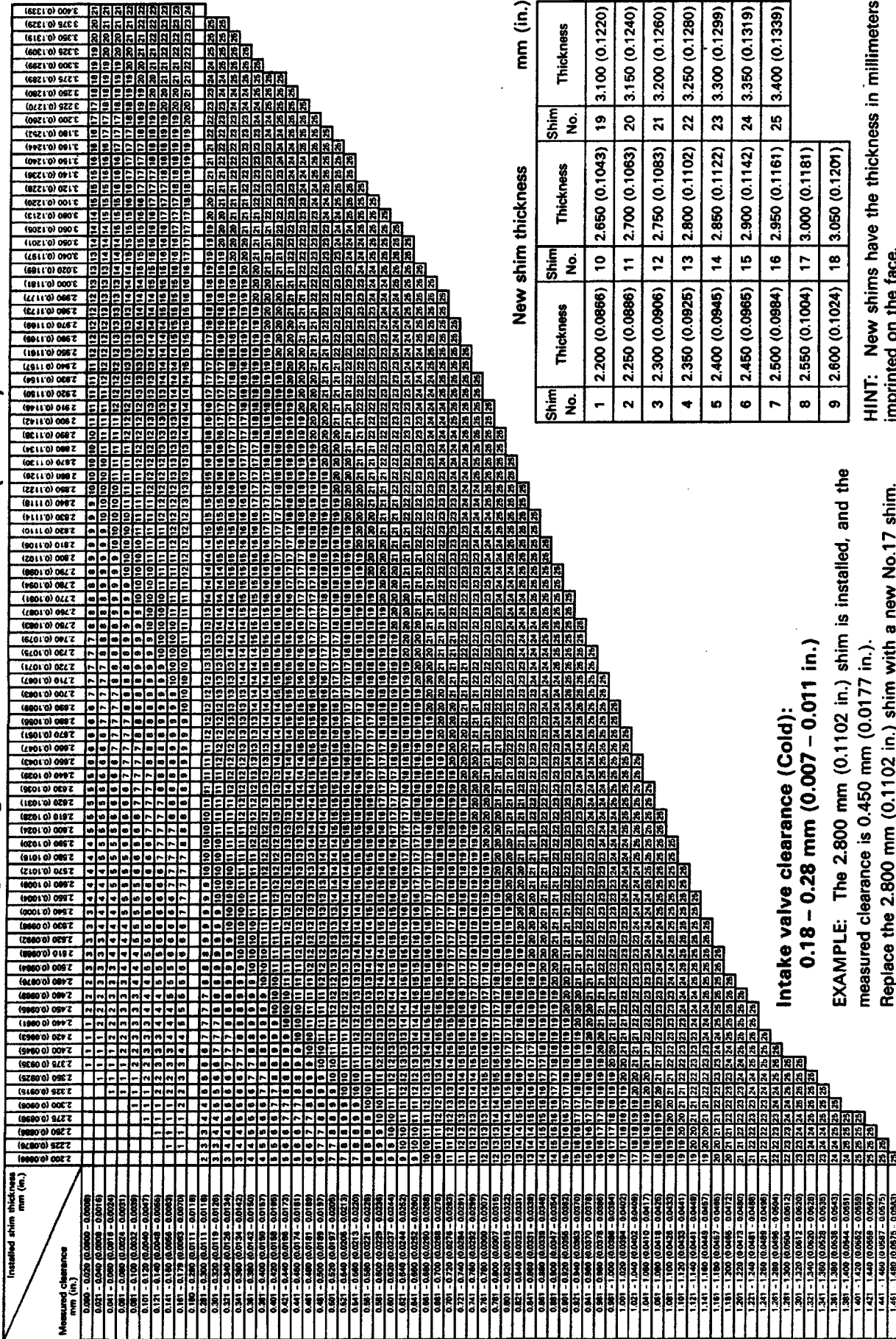
HINT: Shims are available in 25 sizes in increments of 0.05 mm (0.0020 in.), from 2.20 mm (0.0984 in.) to 3.40 mm (0.1299 in.).



(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 09248-55440 (09248-05410, 09248-05420)

Adjusting Shim Selection Chart (Intake)



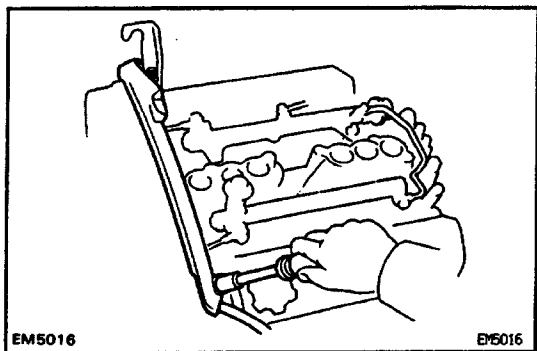
Intake valve clearance (Cold): 0.18 - 0.28 mm (0.007 - 0.011 in.)

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.17 shim.

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

Adjusting Shim Selection Chart (Exhaust)

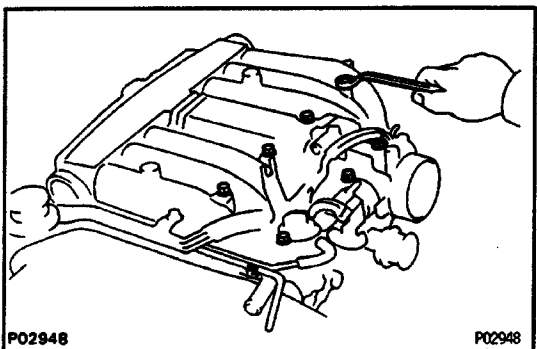
Measured clearance mm (in.)	Installed shim thickness mm (in.)																									
	2.200 (0.0866)	2.225 (0.0874)	2.250 (0.0886)	2.275 (0.0894)	2.300 (0.0906)	2.325 (0.0918)	2.350 (0.0930)	2.375 (0.0938)	2.400 (0.0946)	2.425 (0.0954)	2.450 (0.0962)	2.475 (0.0970)	2.500 (0.0978)	2.525 (0.0986)	2.550 (0.0994)	2.575 (0.1002)	2.600 (0.1010)	2.625 (0.1018)	2.650 (0.1026)	2.675 (0.1034)	2.700 (0.1042)	2.725 (0.1050)	2.750 (0.1058)	2.775 (0.1066)	2.800 (0.1074)	
0.000 (0.0000) - 0.0005	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.005 (0.0005) - 0.0010	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.010 (0.0010) - 0.0105	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.015 (0.0015) - 0.0110	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.020 (0.0020) - 0.0115	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.025 (0.0025) - 0.0120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.030 (0.0030) - 0.0125	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.035 (0.0035) - 0.0130	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.040 (0.0040) - 0.0135	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.045 (0.0045) - 0.0140	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.050 (0.0050) - 0.0145	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.055 (0.0055) - 0.0150	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.060 (0.0060) - 0.0155	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.065 (0.0065) - 0.0160	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.070 (0.0070) - 0.0165	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.075 (0.0075) - 0.0170	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.080 (0.0080) - 0.0175	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.085 (0.0085) - 0.0180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.090 (0.0090) - 0.0185	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.095 (0.0095) - 0.0190	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.100 (0.0100) - 0.0195	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.105 (0.0105) - 0.0200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.110 (0.0110) - 0.0205	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.115 (0.0115) - 0.0210	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.120 (0.0120) - 0.0215	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.125 (0.0125) - 0.0220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.130 (0.0130) - 0.0225	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.135 (0.0135) - 0.0230	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.140 (0.0140) - 0.0235	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.145 (0.0145) - 0.0240	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.150 (0.0150) - 0.0245	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.155 (0.0155) - 0.0250	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.160 (0.0160) - 0.0255	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.165 (0.0165) - 0.0260	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.170 (0.0170) - 0.0265	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.175 (0.0175) - 0.0270	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.180 (0.0180) - 0.0275	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.185 (0.0185) - 0.0280	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.190 (0.0190) - 0.0285	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.195 (0.0195) - 0.0290	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.200 (0.0200) - 0.0295	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.205 (0.0205) - 0.0300	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.210 (0.0210) - 0.0305	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.215 (0.0215) - 0.0310	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.220 (0.0220) - 0.0315	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.225 (0.0225) - 0.0320	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.230 (0.0230) - 0.0325	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.235 (0.0235) - 0.0330	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.240 (0.0240) - 0.0335	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.245 (0.0245) - 0.0340	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.250 (0.0250) - 0.0345	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.255 (0.0255) - 0.0350	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.260 (0.0260) - 0.0355	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.265 (0.0265) - 0.0360	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.270 (0.0270) - 0.0365	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.275 (0.0275) - 0.0370	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.280 (0.0280) - 0.0375	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.285 (0.0285) - 0.0380	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.290 (0.0290) - 0.0385	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.295 (0.0295) - 0.0390	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.300 (0.0300) - 0.0395	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.305 (0.0305) - 0.0400	1	1	1																							

**9. INSTALL CYLINDER HEAD COVERS**

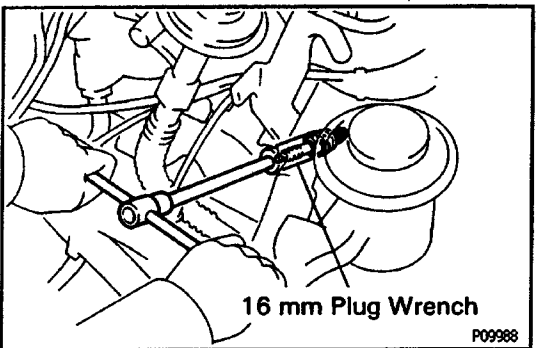
(See step 7 in cylinder heads installation in cylinder head)

10. INSTALL ENGINE WIRE

Install the engine wire with the 2 bolts.

**11. INSTALL AIR INTAKE CHAMBER**

(See step 24 in cylinder heads installation in cylinder head)

**12. INSTALL SPARK PLUGS**

Using a 16 mm plug wrench, install the 6 spark plugs.

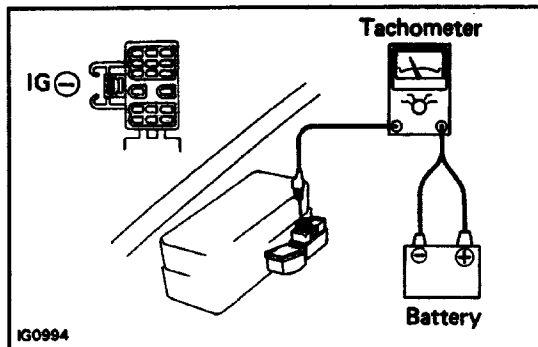
Torque: 18 N-m (180 kgf-cm, 13 ft-lbf)

13. RECONNECT HIGH-TENSION CORDS TO SPARK PLUGS

IGNITION TIMING INSPECTION AND ADJUSTMENT ⁰⁹¹²⁷⁻⁰⁴

1. WARM UP ENGINE

Allow the engine to warm up to normal operating temperature.



2. CONNECT TACHOMETER AND TIMING LIGHT TO ENGINE

Connect the test probe of a tachometer to terminal IG (-) of the DLC1.

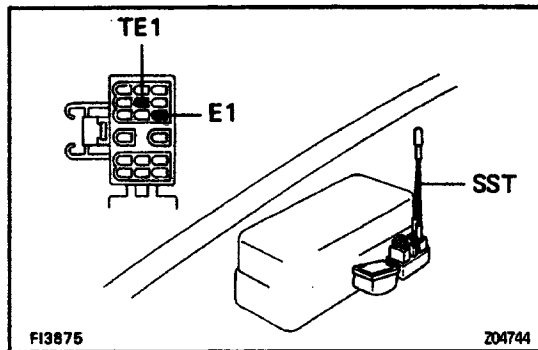
NOTICE:

- 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.

3. ADJUST IGNITION TIMING

(a) Using SST, connect terminals TE1 and E1 of the DLC1.

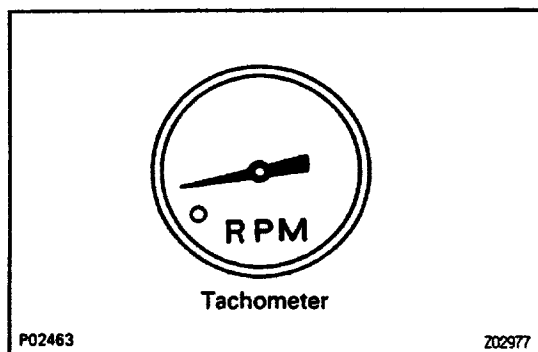
SST 09843-18020



(b) Check the idle speed.

Idle speed:

800 ± 50 rpm



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

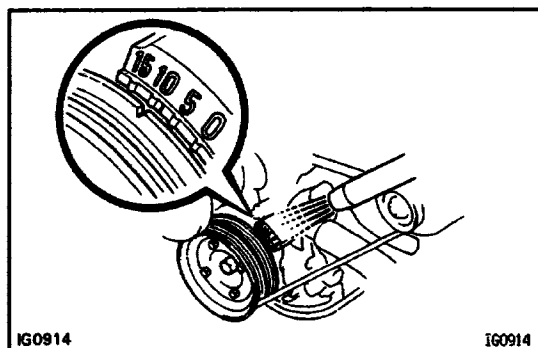
Ignition timing:

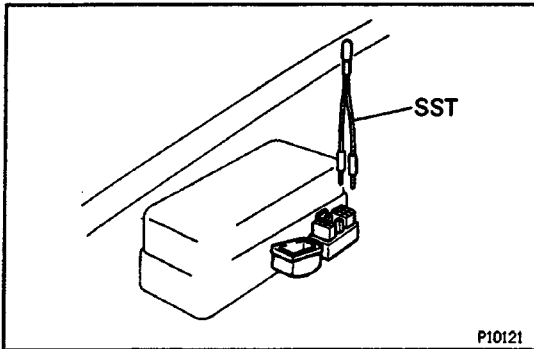
10 ° BTDC @ idle

(Transmission in neutral position)

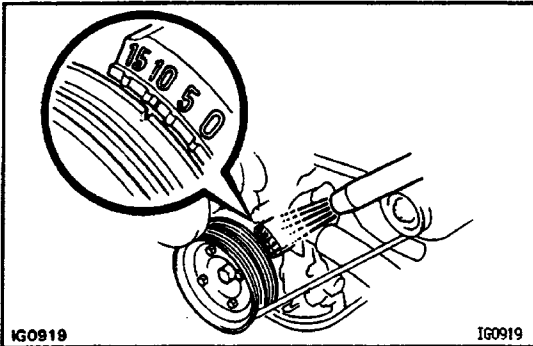
(d) Loosen the hold-down bolt, and adjust by turning the distributor.

(e) Tighten the hold-down bolt, and recheck the ignition timing.





- (f) Remove the SST from the DLC 1.
SST 09843-18020



4. FURTHER CHECK IGNITION TIMING

Check that the ignition timing advances.

Ignition timing:

8 ° BTDC @ idle

5. DISCONNECT TACHOMETER AND TIMING LIGHT FROM ENGINE

IDLE SPEED INSPECTION AND ADJUSTMENT

1. INITIAL CONDITIONS

- Engine at normal operating temperature
- Air cleaner installed
- All pipes and hoses of air induction system connected
- All accessories switched OFF
- All vacuum lines properly connected

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

- MFI system wiring connectors fully plugged
- Ignition timing set correctly
- Transmission in neutral position

2. CONNECT TACHOMETER

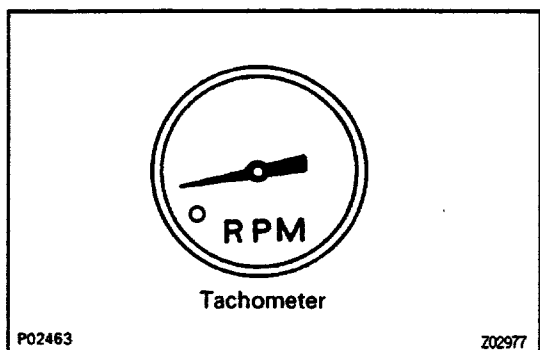
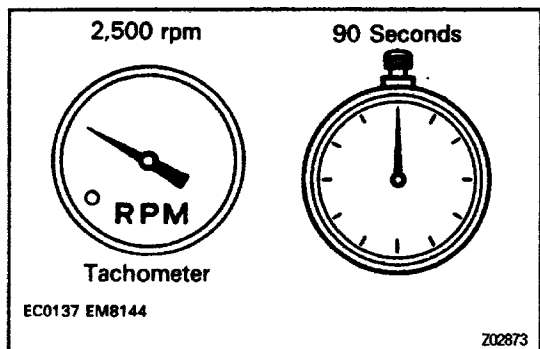
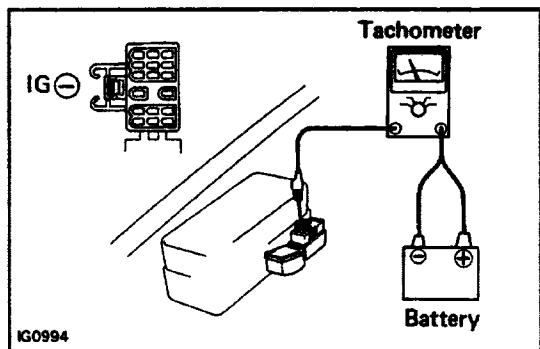
Connect the test probe of a tachometer to terminal IG (-) of the DLC1.

NOTICE:

- Never allow the tachometer terminal to touch ground as it could result in damage to the igniter and/or ignition coil.
- A: some tachometers are not compatible with this ignition system, we recommend that you confirm the compatibility of your unit before use.

3. ADJUST IDLE SPEED

- Race the engine speed at 2,500 rpm for approx. 90 seconds.



- Check the idle speed.

Idle speed:

800 ± 50 rpm

- Adjust the idle speed by turning the idle speed adjusting screw.

4. DISCONNECT TACHOMETER

