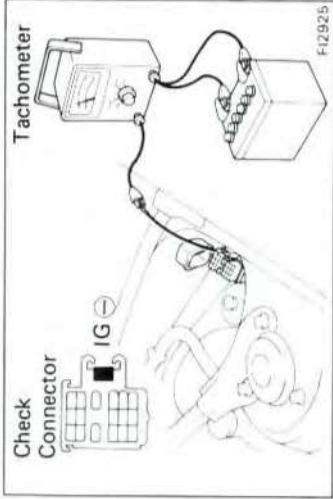


IGNITION SYSTEM

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IGNITION SYSTEM CIRCUIT	IG-3
ON-VEHICLE INSPECTION	IG-4
DISTRIBUTOR	IG-8

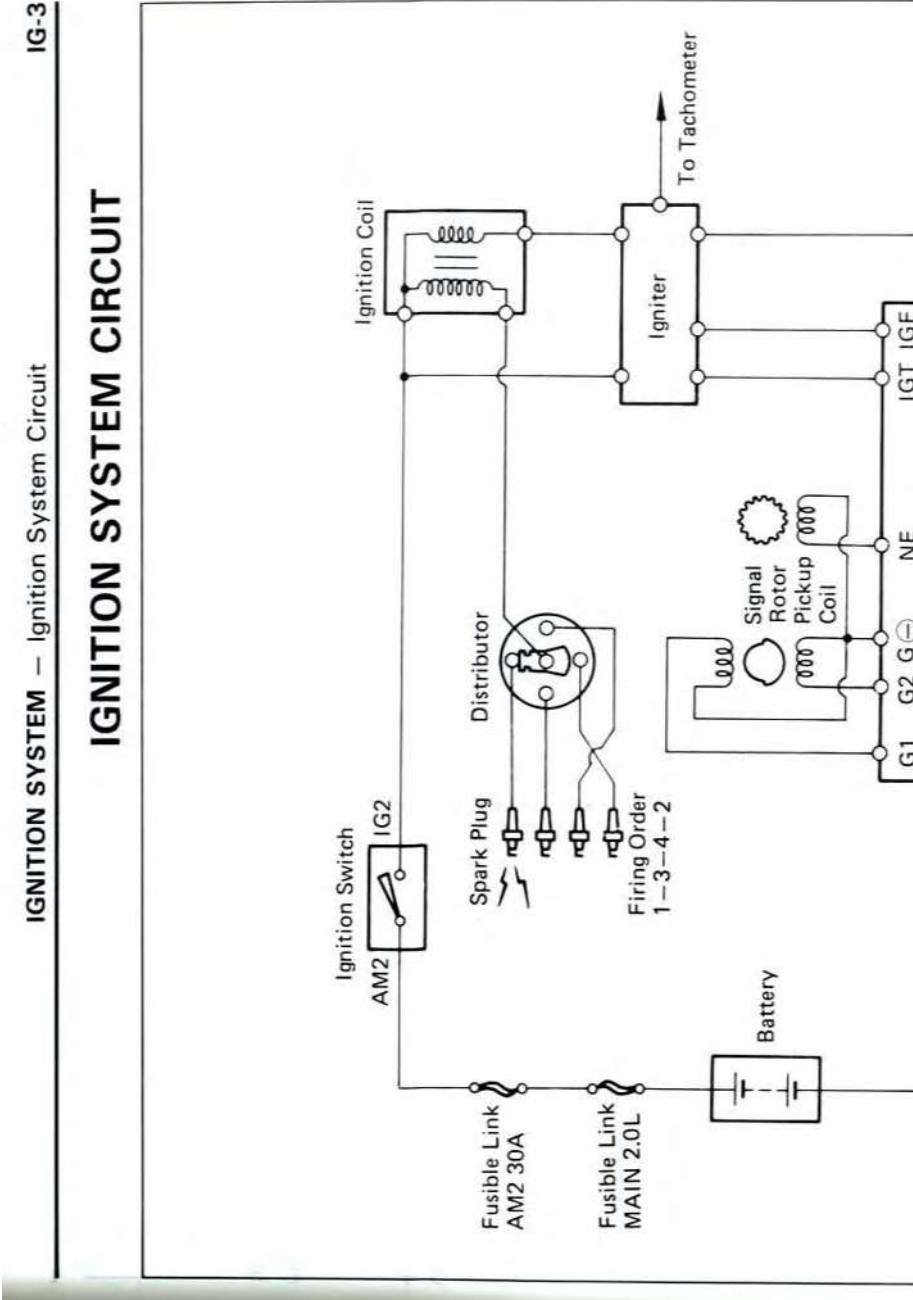


PRECAUTIONS

- 1. Do not leave the ignition switch on for more than 10 minutes if the engine will not start.
- 2. When a tachometer is connected to the system, connect the test probe of the tachometer to terminal IG  of the check connector.
- 3. As some tachometer are not compatible with this ignition system, we recommend that you confirm the compatibility of your unit before using.
- 4. NEVER allow the tachometer terminal to touch ground as this could damage the igniter and/or ignition coil.
- 5. Do not disconnect the battery when the engine is running.
- 6. Check that the igniter is properly grounded to the body.

TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Engine will not start/ hard to start	Incorrect ignition timing ECU problem	Reset timing Inspect ECU	IG-9



ON-VEHICLE INSPECTION

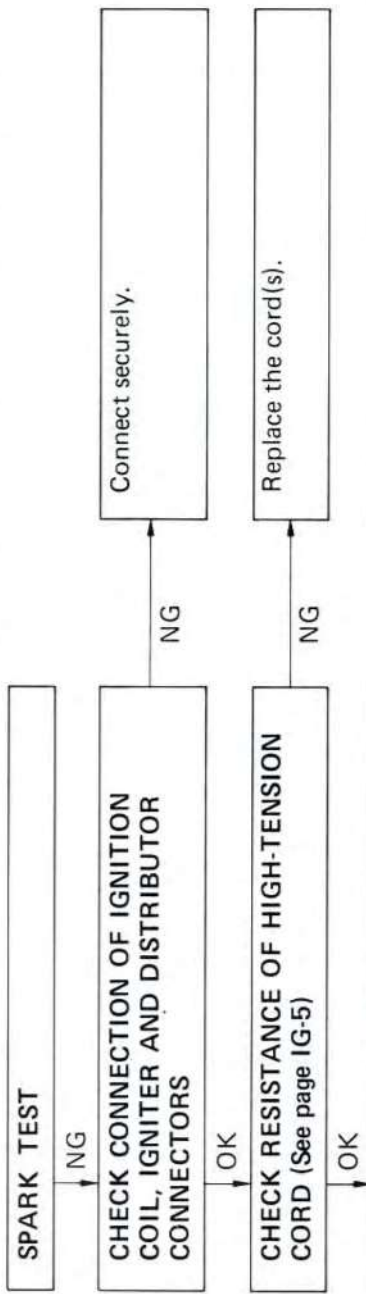
SPARK TEST

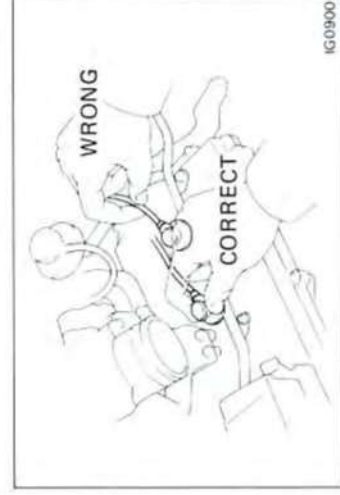
CHECK THAT SPARK OCCURS

- (a) Disconnect the high-tension cord from the distributor.
- (b) Hold the end about 12.5 mm (0.492 in.) from body of car.
- (c) See if spark occurs while engine is being cranked.

NOTE: To prevent gasoline from being injected from injectors during this test, crank the engine for no more than 1 — 2 seconds at a time.

If the spark does not occur, perform the test as follows:

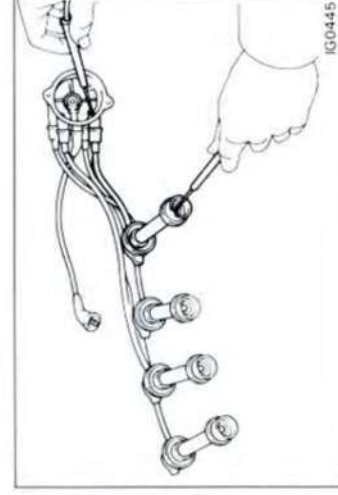




IG0900

INSPECTION OF HIGH-TENSION CORDS

1. **REMOVE INTERCOOLER**
(See steps 1, 3 and 7 on page TC-10)
2. **CAREFULLY REMOVE HIGH-TENSION CORDS BY THEIR RUBBER BOOTS FROM SPARK PLUGS**
CAUTION: Pulling on or bending the cords may damage the conductor inside.



IG0445

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.

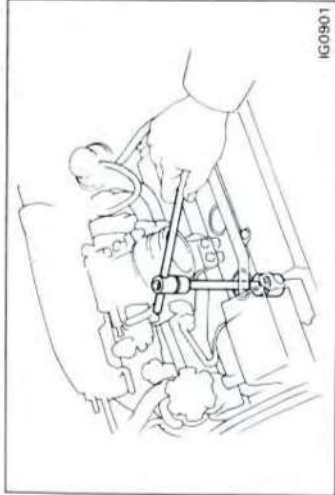
4. **INSTALL INTERCOOLER**
(See steps 11, 16 to 18 on page TC-14)

INSPECTION OF SPARK PLUGS

CAUTION:

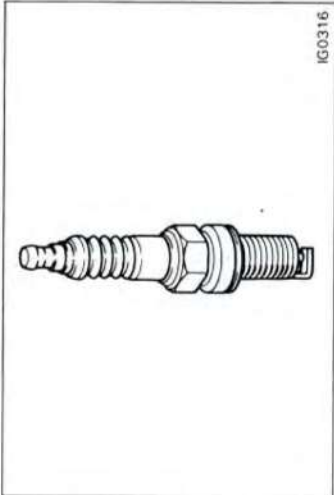
IG-6

IGNITION SYSTEM — On-vehicle Inspection



3. REMOVE SPARK PLUGS

Using a plug wrench (16 mm), remove the spark plug.



4. VISUALLY INSPECT SPARK PLUGS

Check the spark plug for thread or insulation damage. If abnormal, replace the spark plug.

Recommended spark plug: ND PQ16R8
NGK BCPR5EP8



5. INSPECT ELECTRODE GAP

Maximum electrode gap: 1.0 mm (0.039 in.)

If the gap is greater than maximum, replace the spark plug.

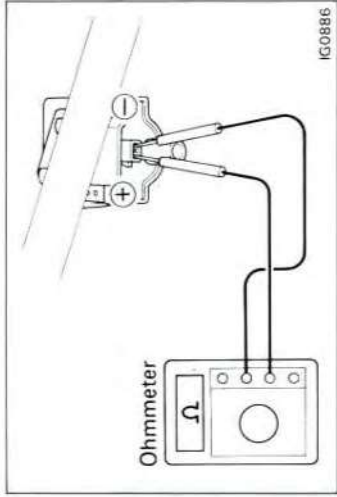
INSPECTION OF IGNITION COIL

1. INSPECT PRIMARY COIL RESISTANCE

Using an ohmmeter, measure the resistance between positive (+) and negative (–) terminals.

Primary coil resistance (Cold): 0.40 – 0.50 Ω

If the resistance is not as specified, replace the ignition coil.

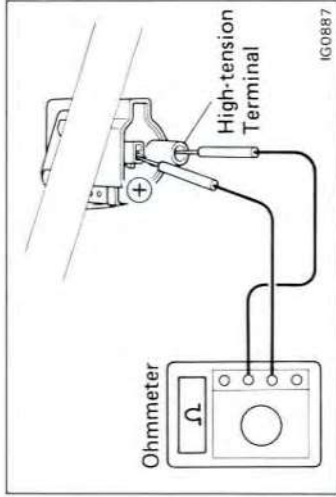


2. INSPECT SECONDARY COIL RESISTANCE

Using an ohmmeter, measure the resistance between positive (+) and high-tension terminals.

Secondary coil resistance (Cold): 10.2 – 13.8 kΩ

If the resistance is not as specified, replace the ignition coil.



DISTRIBUTOR

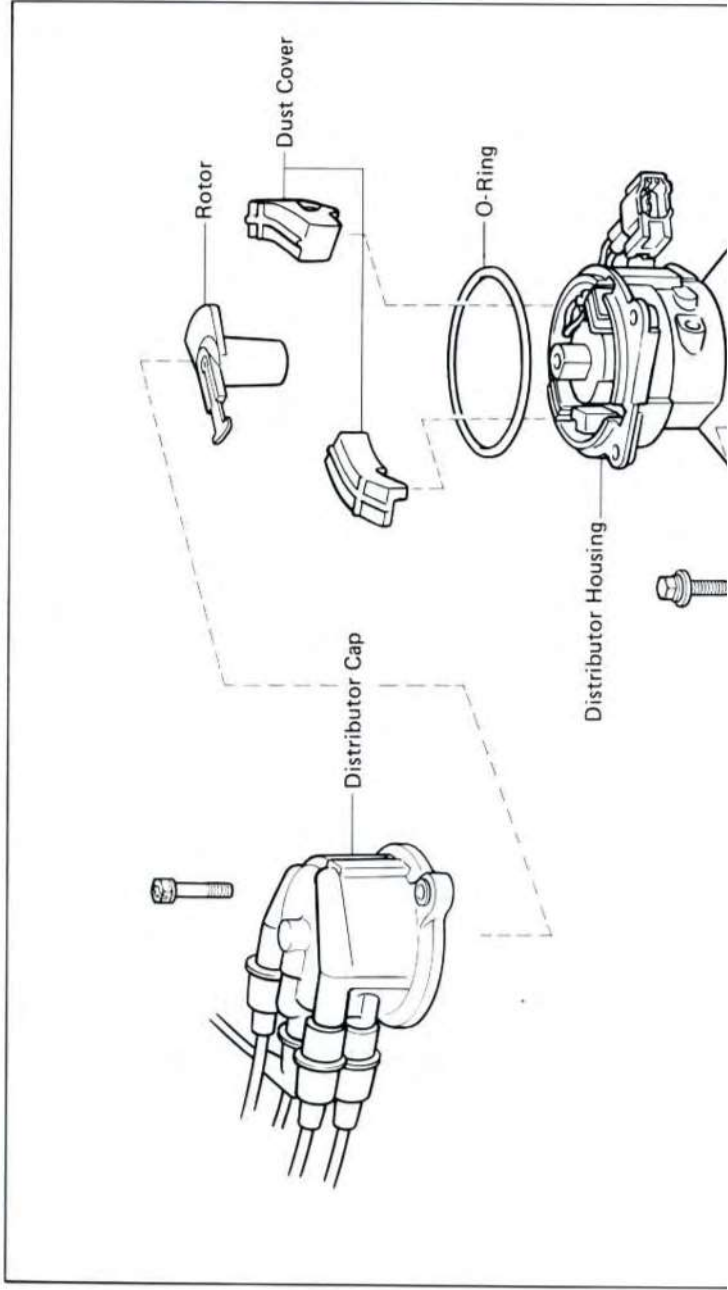
1. INSPECT AIR GAP

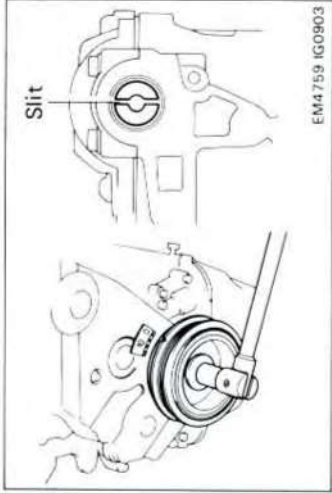
NE Pickup	G1 Pickup	G2 Pickup
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IG-8

IGNITION SYSTEM — Distributor

DISTRIBUTOR COMPONENTS





INSTALLATION OF DISTRIBUTOR

1. SET NO.1 CYLINDER TO TDC/COMPRESSION

Turn the crankshaft clockwise, and position the slit of the intake camshaft as shown.



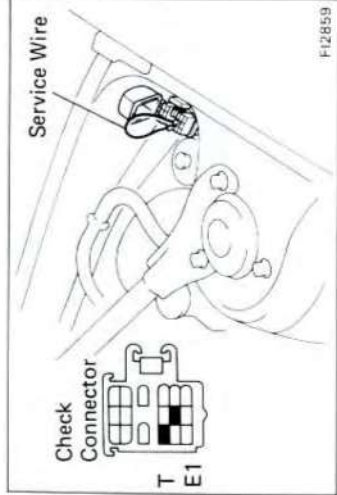
2. INSTALL DISTRIBUTOR

- (a) Install a new O-ring to the housing.
- (b) Apply a light coat of engine oil on the O-ring.
- (c) Align the cutout of the coupling with the groove mark of the housing.
- (d) Insert the distributor, aligning the center of the flange with that of the hole hole on the engine block.



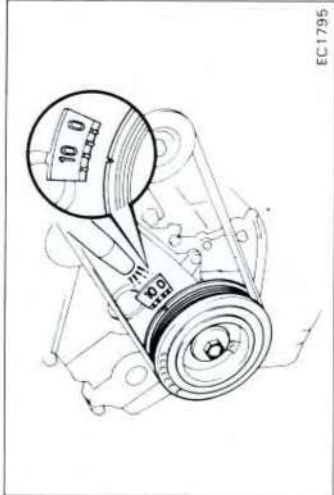
IG-10

IGNITION SYSTEM — Distributor



9. ADJUST IGNITION TIMING

- (a) Using a service wire, short terminals T and E1 of the check connector.

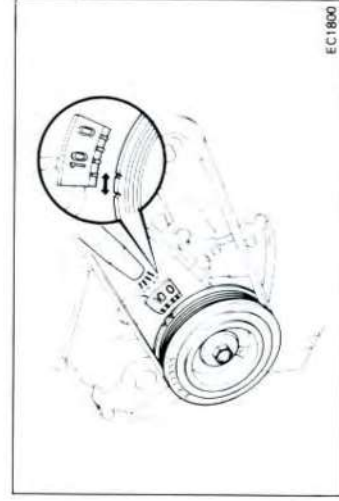
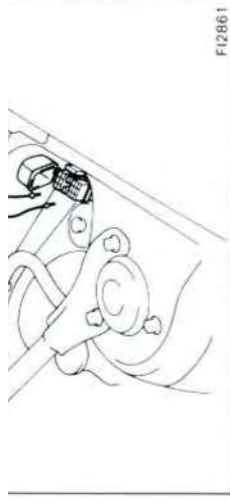


- (b) Using a timing light, check the ignition timing.
Ignition timing: 10° BTDC @ idle
- (c) Loosen the two hold-down bolts, and adjust by turning the distributor.
- (d) Tighten the hold-down bolts, and recheck the ignition timing.

Torque: 400 kg-cm (29 ft-lb, 39 N·m)



- (e) Remove the service wire.



10. FURTHER CHECK IGNITION TIMING

Ignition timing: 14 – 19° BTDC @ idle

NOTE: The timing mark moves in a range between 14° and 19°.