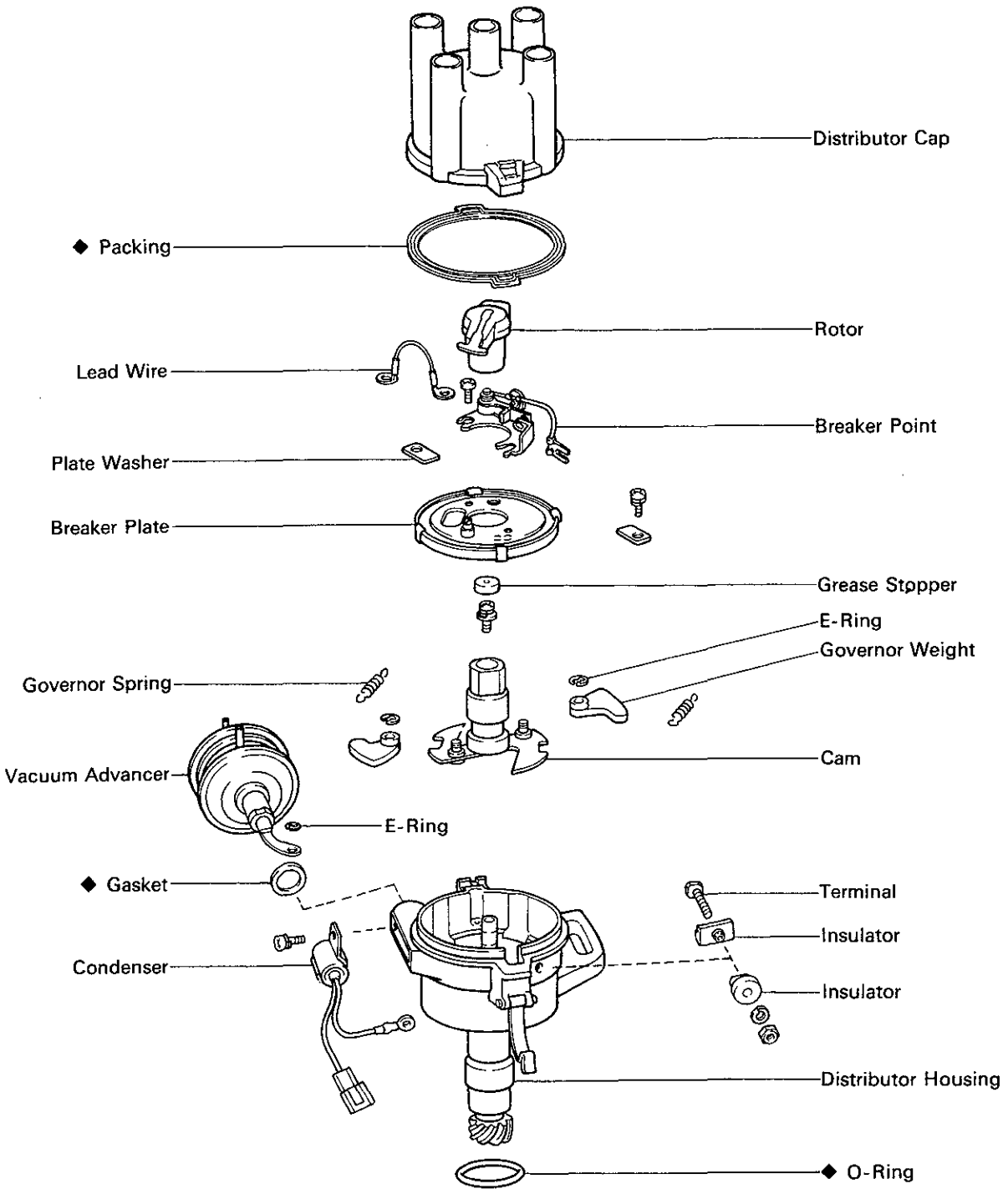
DISTRIBUTOR

1RZ (Conventional Type)

COMPONENTS

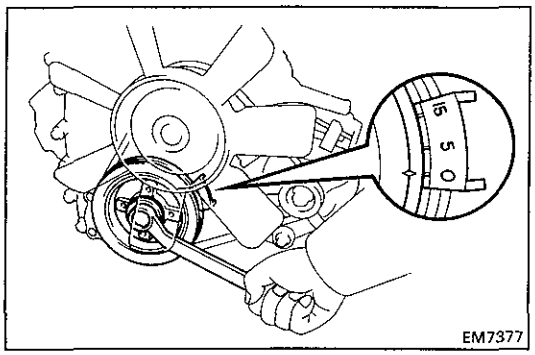


◆ Non-reusable part

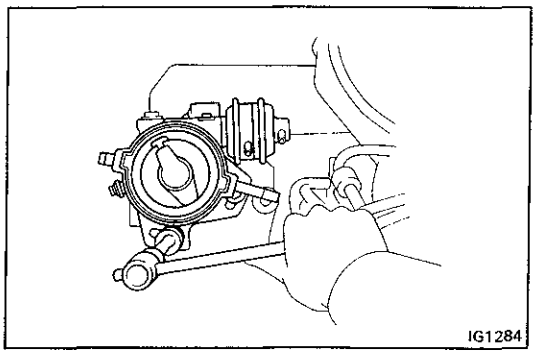
IG1253

REMOVAL OF DISTRIBUTOR

1. **DISCONNECT VACUUM HOSES**
2. **DISCONNECT HIGH-TENSION CORDS FROM DISTRIBUTOR CAP**
3. **DISCONNECT DISTRIBUTOR CONNECTOR**
4. **REMOVE DISTRIBUTOR CAP**



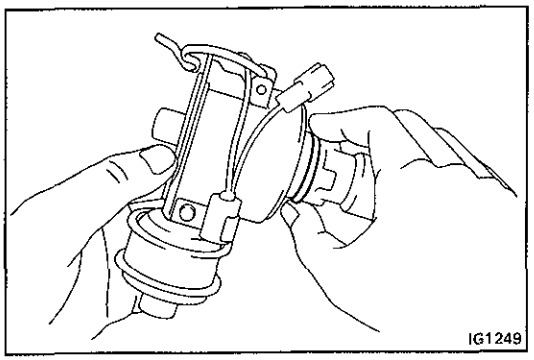
5. **SET NO.1 CYLINDER TO TDC/COMPRESSION**
   (a) Turn the crankshaft pulley until the timing mark is aligned with "0" mark on the timing chain case.



   (b) Check that the distributor rotor direction is as shown.

   If not, turn the crankshaft pulley one complete revolution.

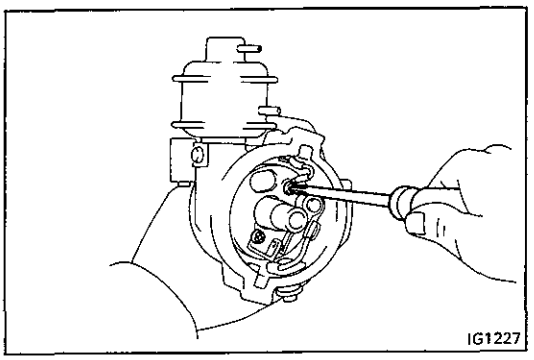
6. **REMOVE DISTRIBUTOR**
   (a) Remove the hold-down bolt.
   (b) Pull out the distributor from the cylinder head.



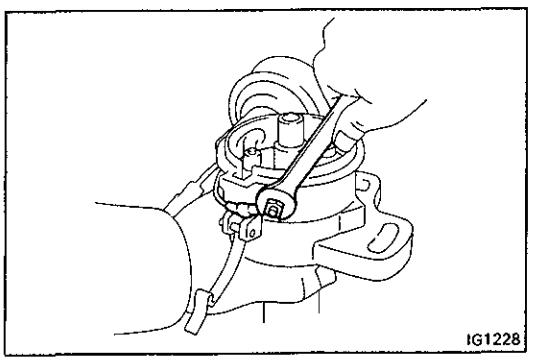
DISASSEMBLY OF DISTRIBUTOR

(See page IG-16)

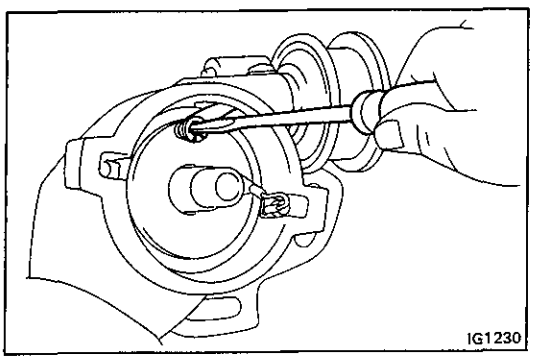
1. REMOVE O-RING
2. REMOVE ROTOR AND PACKING



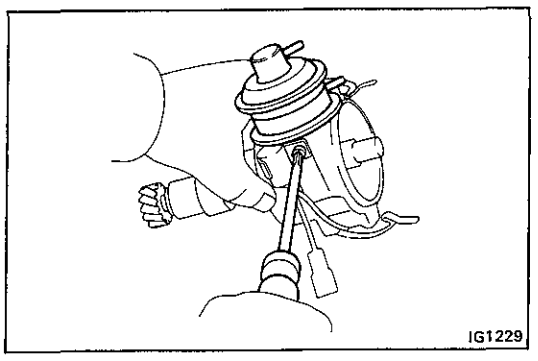
3. REMOVE BREAKER POINT
   (a) Loosen the terminal nut.
   (b) Remove the two screws and breaker point.



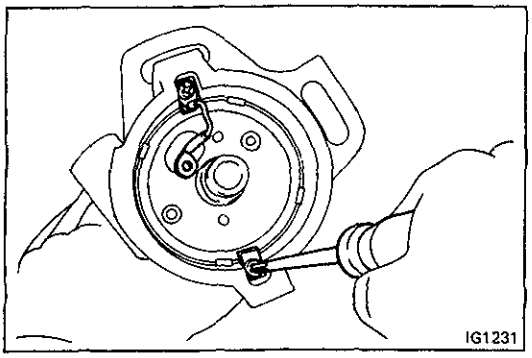
4. REMOVE TERMINAL
   (a) Remove the nut, spring washer and distributor wire.
   (b) Disconnect the condenser wire, and remove the insulator and terminal.



5. REMOVE VACUUM ADVANCER
   (a) Using a small screwdriver, remove the E-ring.



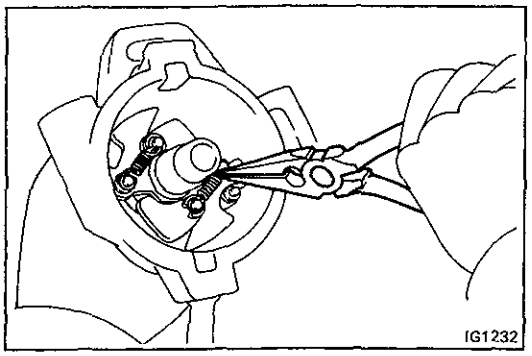
   (b) Remove the mounting screw, condenser and gasket from the distributor housing.
   (c) Turn and pull out the vacuum advancer.



6. REMOVE BREAKER PLATE

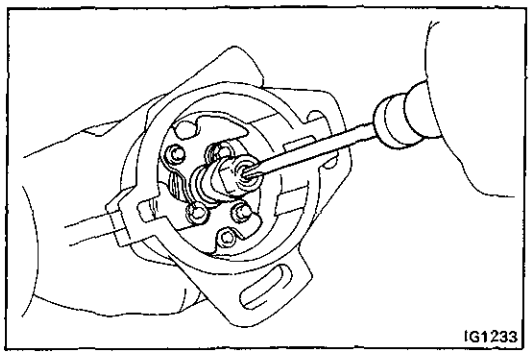
(a) Remove the two screws, lead wire and plate washers.

(b) Pull out the breaker plate.



7. REMOVE GOVERNOR SPRINGS

Using needle-nose pliers, remove the two springs.

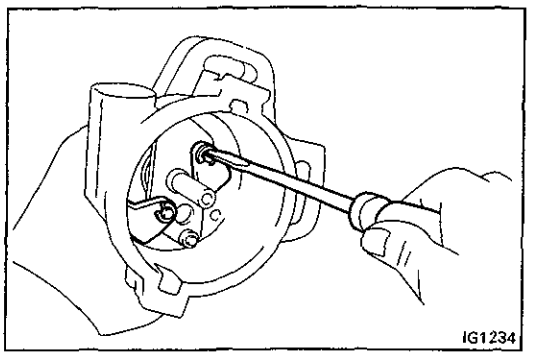


8. REMOVE CAM

(a) Remove the grease stopper.

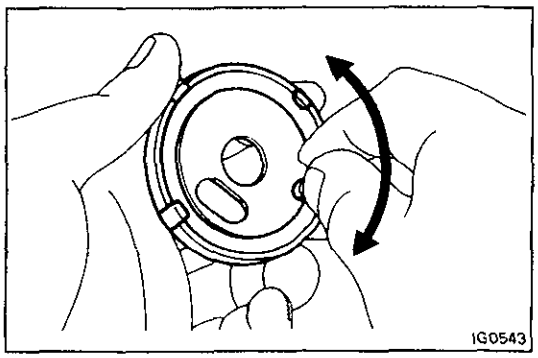
(b) Remove the screw at the top of the governor shaft.

(c) Pull out the cam.



9. REMOVE GOVERNOR WEIGHTS

Using a small screwdriver, remove the E-ring and pull out the weight.

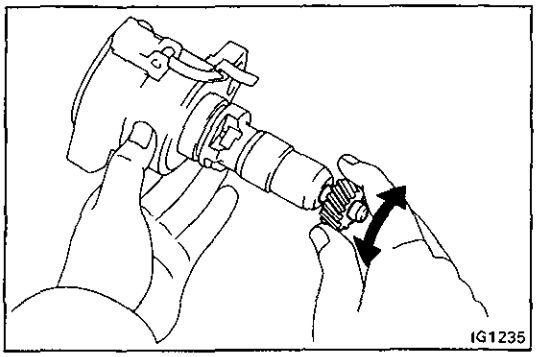


INSPECTION OF DISTRIBUTOR

1. INSPECT BREAKER PLATE

Turn the breaker plate and check that it has a slight drag.

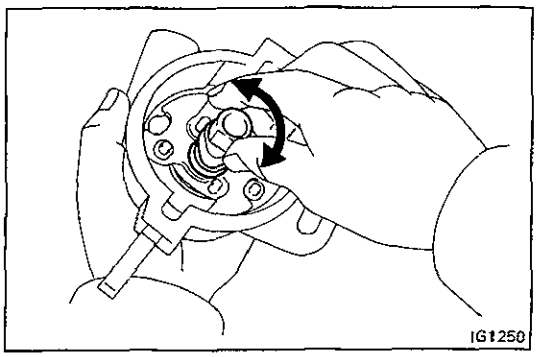
If it sticks or strongly resists, replace the breaker plate.



2. INSPECT GOVERNOR SHAFT

Turn the governor shaft and check that it is not rough or worn.

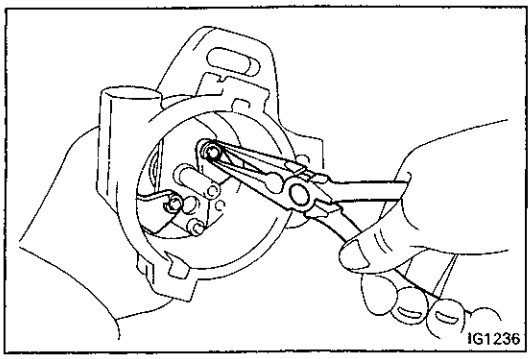
If it feels rough or worn, replace the distributor housing.



3. INSPECT CAM

Temporarily install the cam to the governor shaft and check that they fit correctly.

If they don't fit, replace the cam and/or distributor housing.



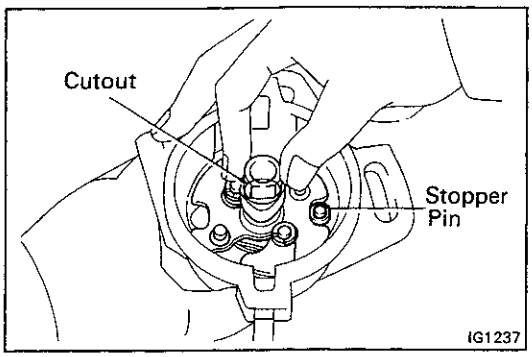
ASSEMBLY OF DISTRIBUTOR

(See page IG-16)

1. INSTALL GOVERNOR WEIGHTS

(a) Slide the weights over the small shafts.

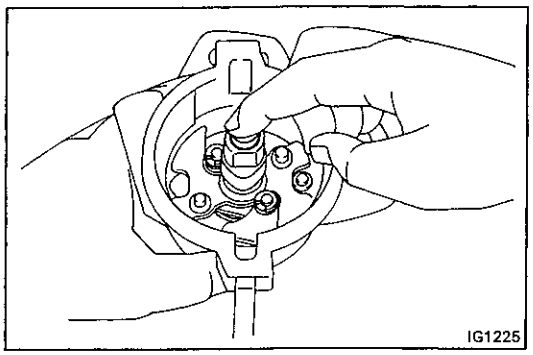
(b) Using needle-nozzle pliers, install the E-rings.



2. INSTALL CAM

(a) Lightly coat the governor shaft with high-temperature grease.

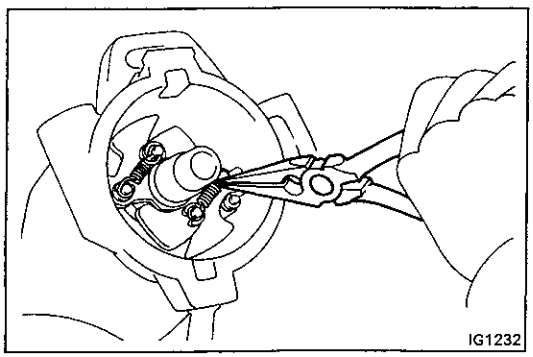
(b) Install the cam on the governor shaft as shown.



(c) Install and tighten the screw.

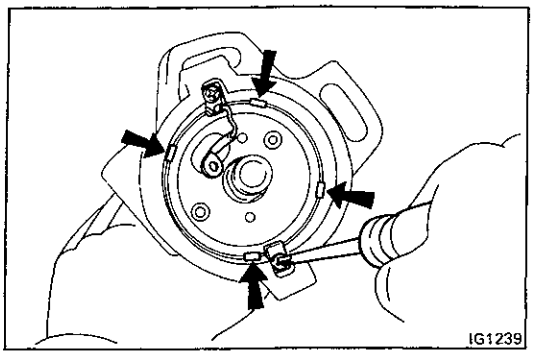
(d) Pack high-temperature grease into the shaft.

(e) Push on the grease stopper with your finger.



3. INSTALL GOVERNOR SPRINGS

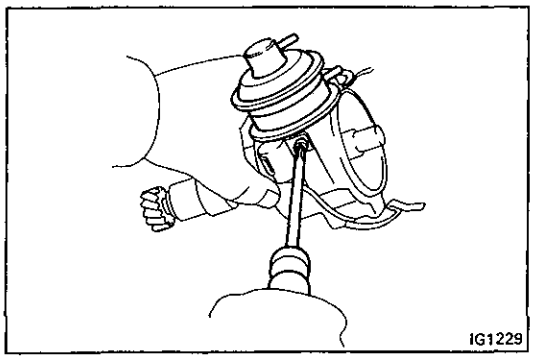
Using a needle-nose pliers, install the two springs.



4. INSTALL BREAKER PLATE

(a) Align the four clips on the breaker plate with the cutout parts of the housing and insert the breaker plate.

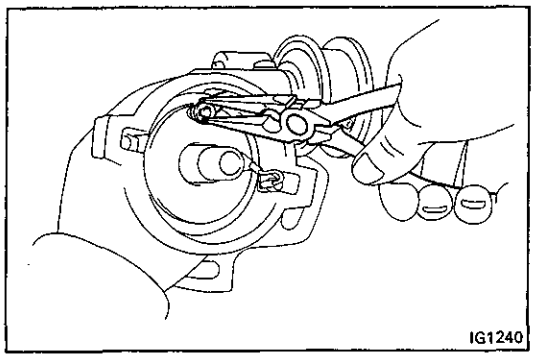
(b) Install one end of the lead wire and two plate washers with screws.



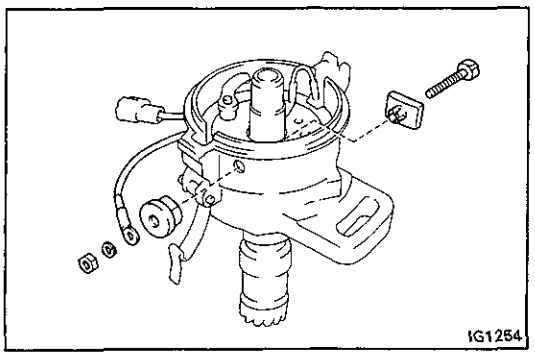
5. INSTALL VACUUM ADVANCER

(a) Insert the vacuum advancer with the packing into the housing, position the lever hole over the plate pin.

(b) Install the screw with the condenser to the distributor housing.



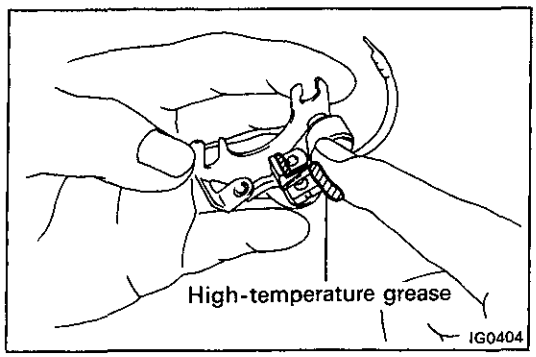
(c) Install the E-ring on the pin.



6. INSTALL TERMINAL

(a) Install the terminal and insulator, and connect the condenser wire.

(b) Loosely install the spring washer and nut.

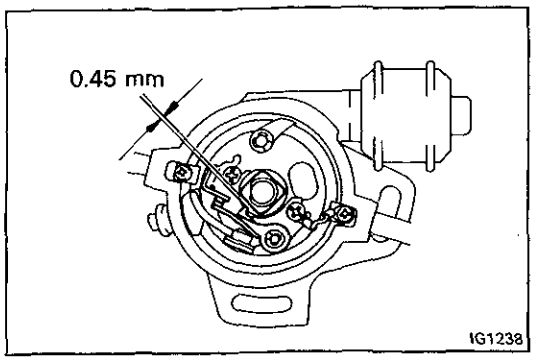


7. INSTALL AND ADJUSTING BREAKER POINT

(a) Clean the contact surfaces of the points with a piece of cloth saturated in solvent.

(b) Apply high-temperature grease to the rubbing block.

(c) Loosely install the breaker point and one end of lead wire with the two screws.



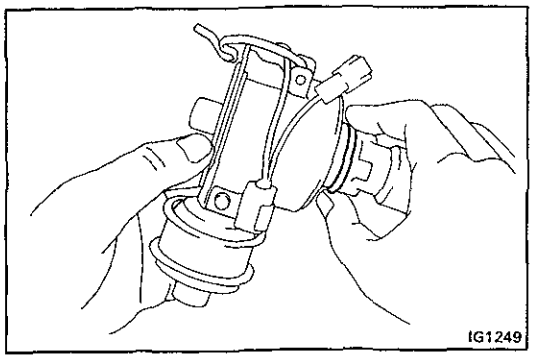
(d) Using a thickness gauge, adjust the gap between the cam and rubbing block.

Rubbing block gap: 0.45 mm (0.018 in.)

(e) Tighten the two screws.

(f) Tighten the terminal nut.

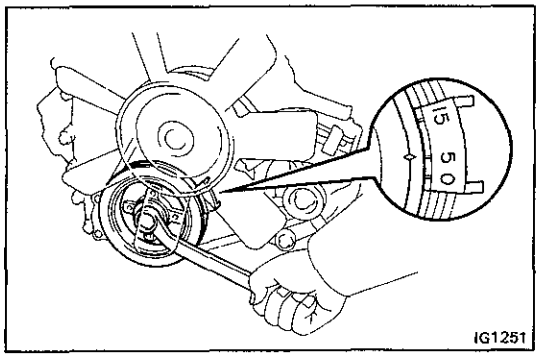
8. INSTALL ROTOR



9. INSTALL O-RING

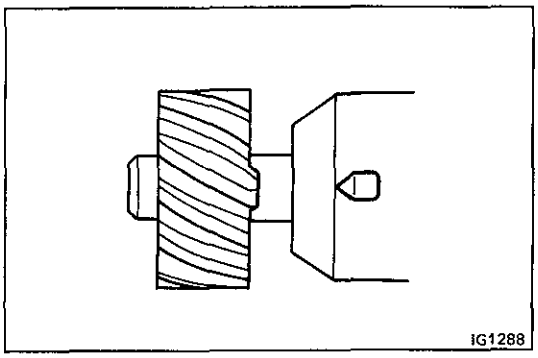
(a) Install a new O-ring to the housing.

(b) Apply a light coat of engine oil on the O-ring.

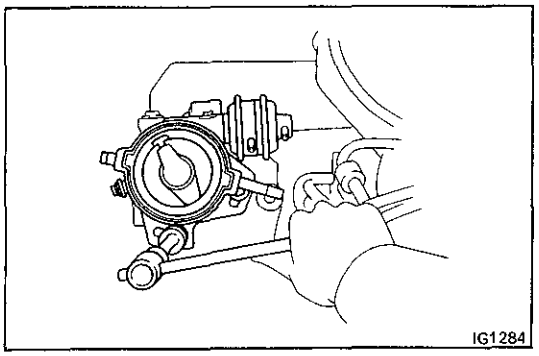


INSTALLATION OF DISTRIBUTOR

1. **SET NO.1 CYLINDER TO 0° BTDC (CHAINA) OR 5° BTDC (EX. CHAINA)**



2. **INSTALL DISTRIBUTOR**
   (a) Align the protrusion of the driven gear with the protrusion of the housing.



   (b) Insert the distributor, aligning the center of the flange with that of the bolt hole on the cylinder head.
   (c) Lightly tighten the hold-down bolts.

3. **INSTALL PACKING AND DISTRIBUTOR CAP**

4. **CONNECT DISTRIBUTOR CONNECTOR**

5. **CONNECT HIGH-TENSION CORDS TO DISTRIBUTOR CAP**

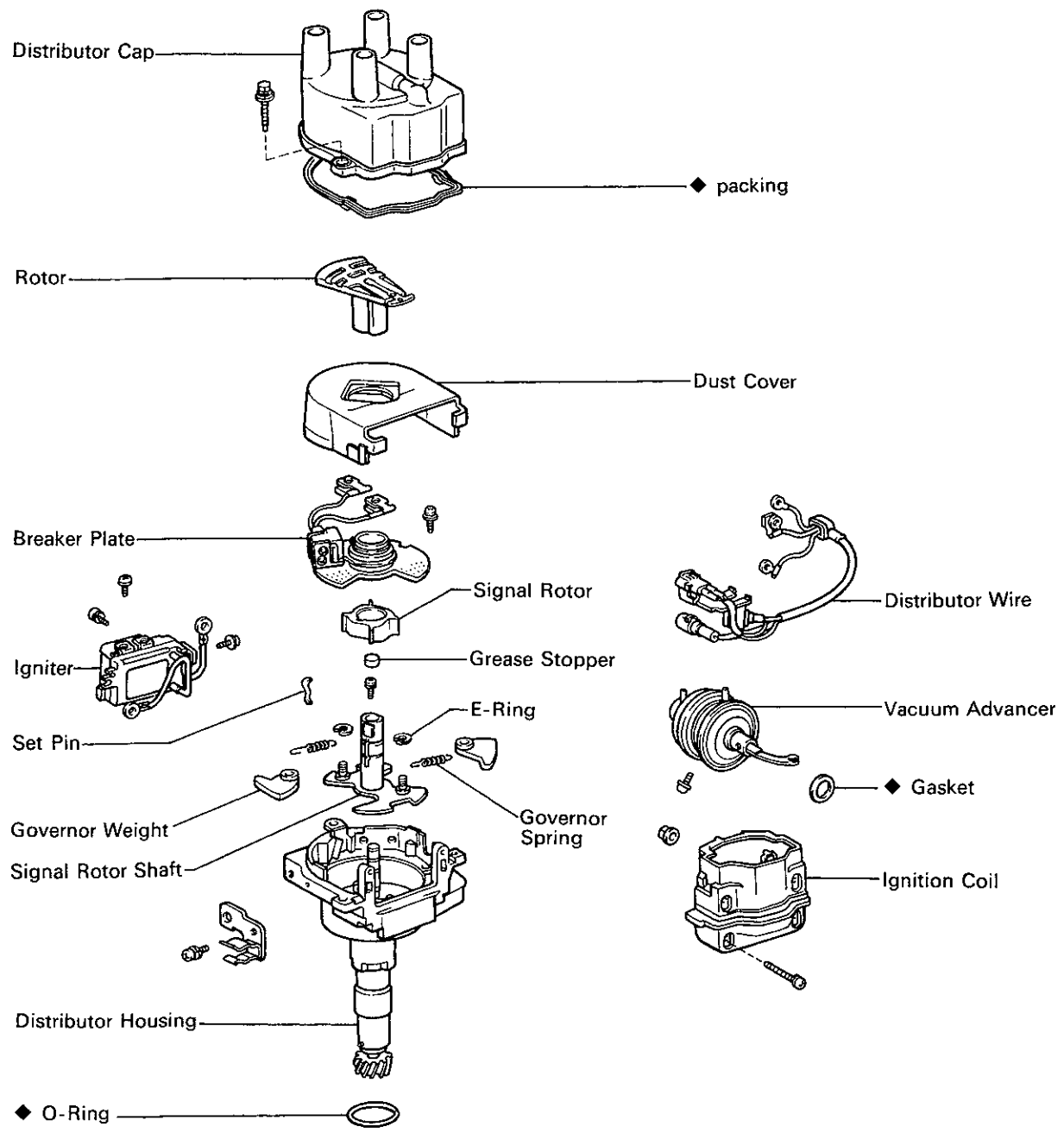
   Firing order: 1-3-4-2

6. **CONNECT VACUUM HOSES**

7. **ADJUST IGNITION TIMING**
   (See page EM-24)

[1RZ (IIA Type) AND 2RZ]

COMPONENTS

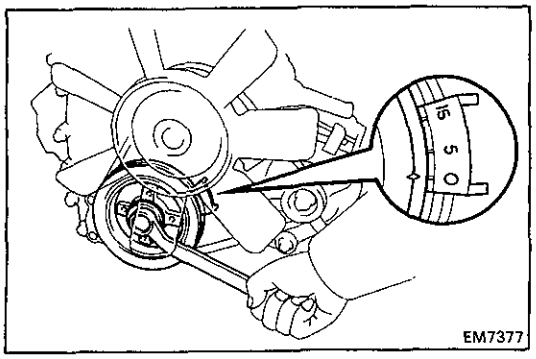


◆ Non-reusable part

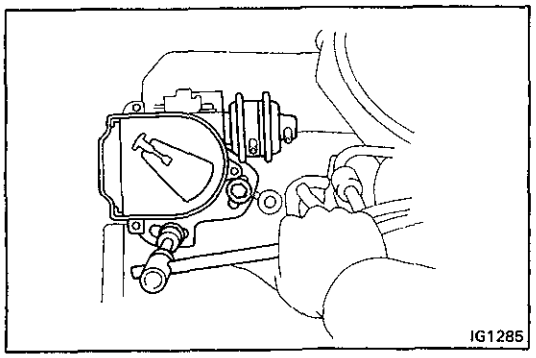
IG1265

REMOVAL OF DISTRIBUTOR

1. **DISCONNECT VACUUM HOSES**
2. **DISCONNECT HIGH-TENSION CORDS FROM DISTRIBUTOR CAP**
3. **DISCONNECT DISTRIBUTOR CONNECTOR**
4. **REMOVE DISTRIBUTOR CAP**



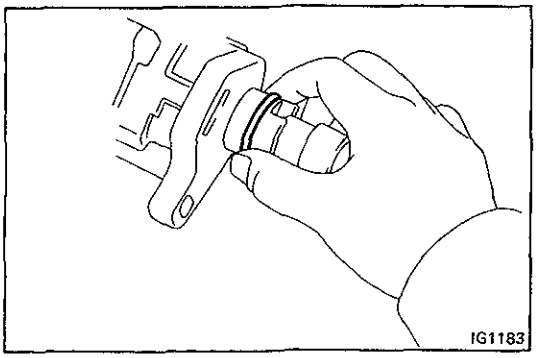
5. **SET NO.1 CYLINDER TO TDC/COMPRESSION**
   (a) Turn the crankshaft pulley until the timing mark is aligned with "0" mark on the timing chain cover.



   (b) Check that the distributor rotor direction is as shown.

   If not, turn the crankshaft pulley one complete revolution.

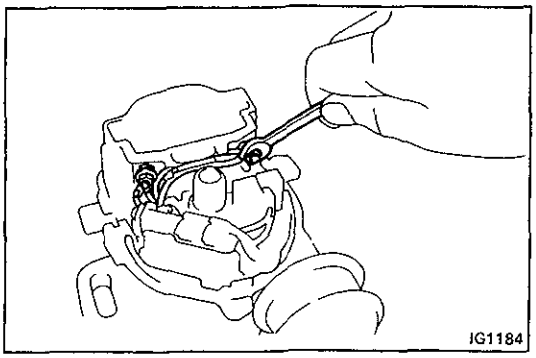
5. **REMOVE DISTRIBUTOR**
   (a) Remove the two hold-down bolts.
   (b) Pull out the distributor from the cylinder head.



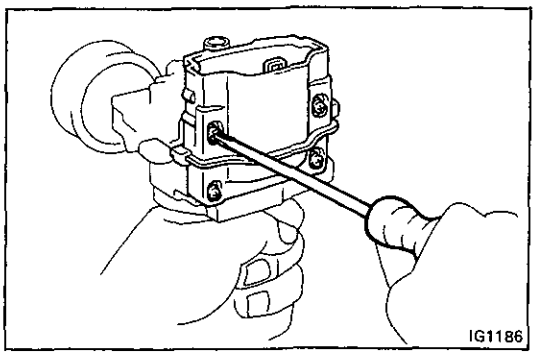
DISASSEMBLY OF DISTRIBUTOR

(See page IG-25)

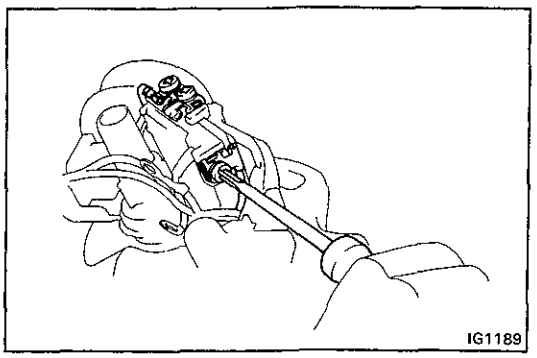
1. REMOVE O-RING
2. REMOVE ROTOR
3. REMOVE IGNITION COIL DUST COVER AND PACKING



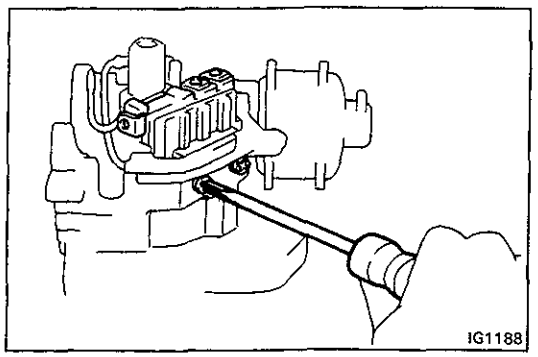
4. REMOVE IGNITION COIL
   (a) Remove the two nuts, and disconnect the four wires from the terminals of the ignition coil.



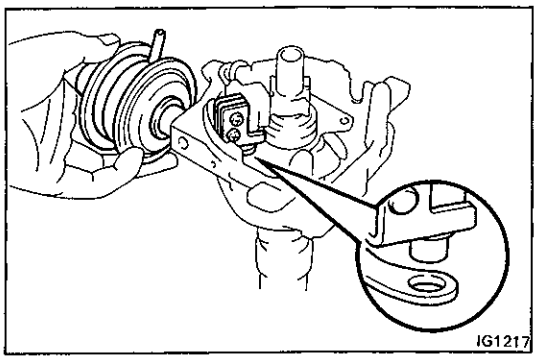
   (b) Remove the four screws and ignition coil.



5. REMOVE IGNITER
   (a) Remove the three screws, and disconnect the distributor wire from the igniter.



   (b) Remove the two screws and igniter.

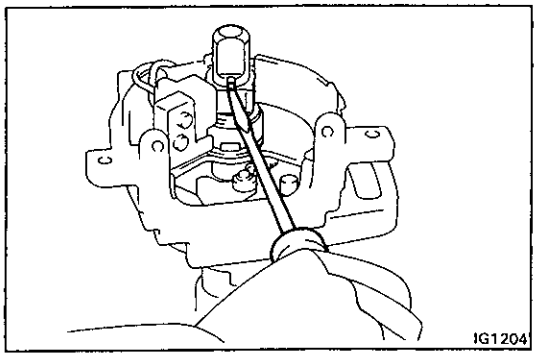


6. REMOVE VACUUM ADVANCER

(a) Disconnect the advancer link hole from the breaker plate pin.

(b) Remove the screw and vacuum advancer.

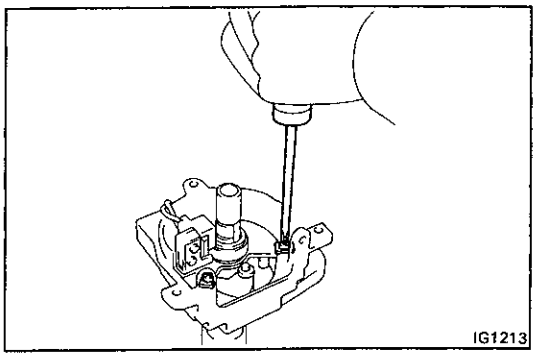
7. REMOVE DISTRIBUTOR WIRE



8. REMOVE SIGNAL ROTOR

(a) Using a small screwdriver, pry out the rotor set spring.

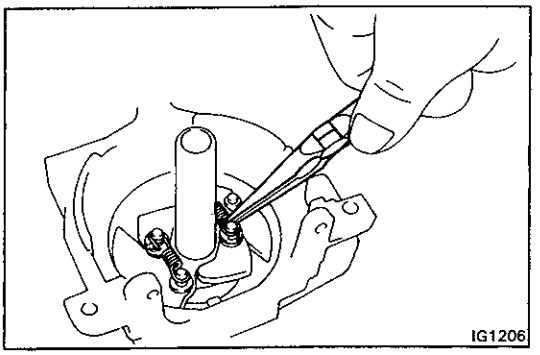
(b) Pull out the signal rotor.



9. REMOVE BREAKER PLATE AND SIGNAL GENERATOR (PICKUP COIL) ASSEMBLY

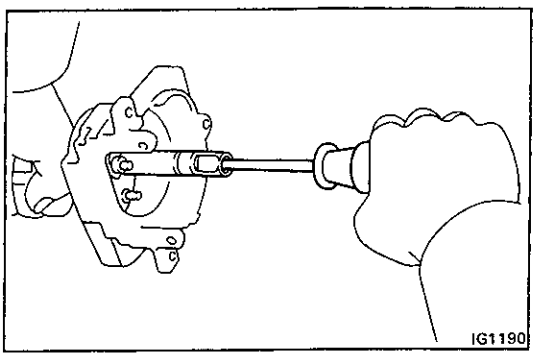
(a) Remove two screws and two washers.

(b) Pull out the breaker plate and signal generator (pickup coil) assembly.



10. REMOVE GOVERNOR SPRINGS

Using a needle-nose pliers, remove the two springs.

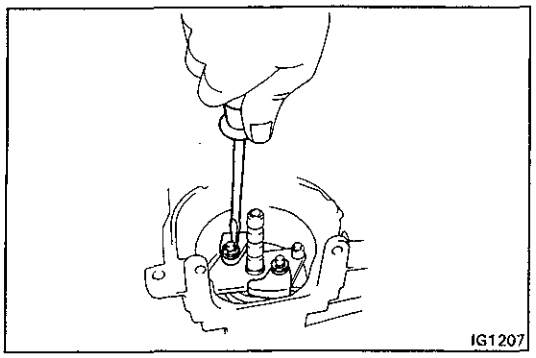


11. REMOVE SIGNAL ROTOR SHAFT

(a) Pry out the grease stopper.

(b) Remove the screw at the top of the governor shaft.

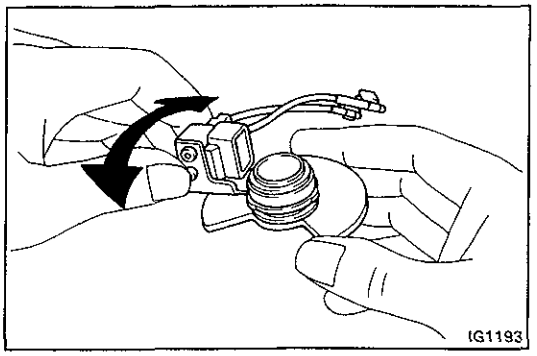
(c) Pull out the signal rotor shaft.



12. REMOVE GOVERNOR WEIGHTS

Using a small screwdriver, remove the E-ring and pull out the weight. Remove the two weights.

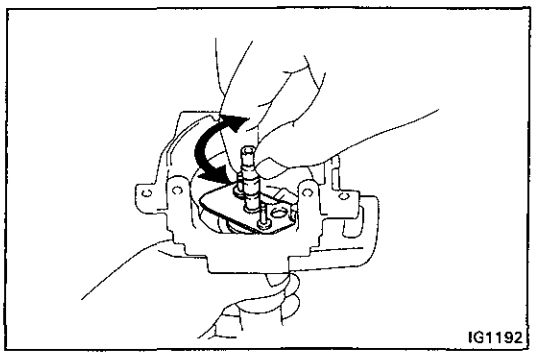
INSPECTION OF DISTRIBUTOR



1. INSPECT BREAKER PLATE

Turn the breaker plate and check that it has a slight drag.

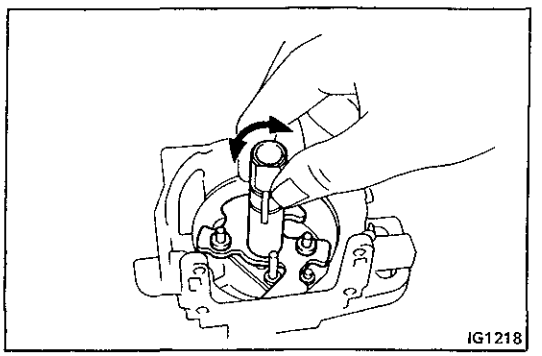
If it sticks or strongly resists, replace the breaker plate with the signal generator (pickup coil) assembly.



2. INSPECT GOVERNOR SHAFT

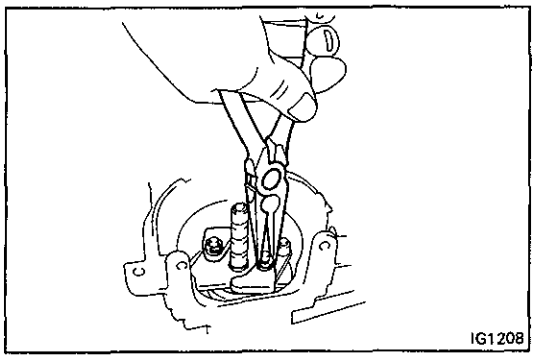
Turn the governor shaft and check that it is not rough or worn.

If it feels rough or worn, replace the distributor housing.



3. INSPECT SIGNAL ROTOR SHAFT

Temporarily install the signal rotor shaft to the governor shaft and check that they fit correctly.
If they don't fit, replace the signal rotor shaft and/or distributor housing.



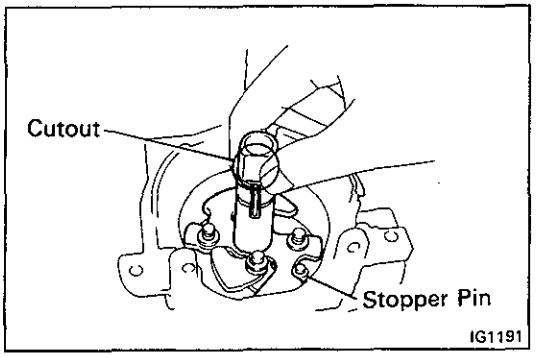
ASSEMBLY OF DISTRIBUTOR

(See page IG-25)

1. **INSTALL GOVERNOR WEIGHTS**

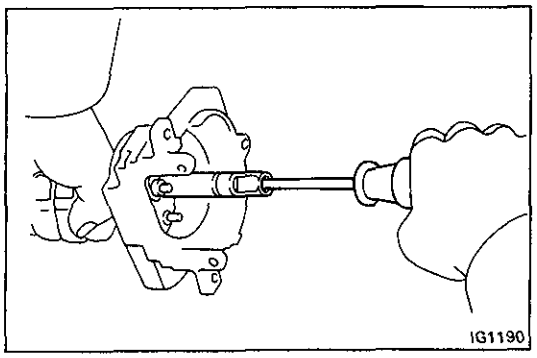
   Using needle-nose pliers, install the weight with the E-ring. Install the two weights.

2. **LIGHTLY GOVERNOR SHAFT WITH HIGH-TEMPERATURE GREASE**



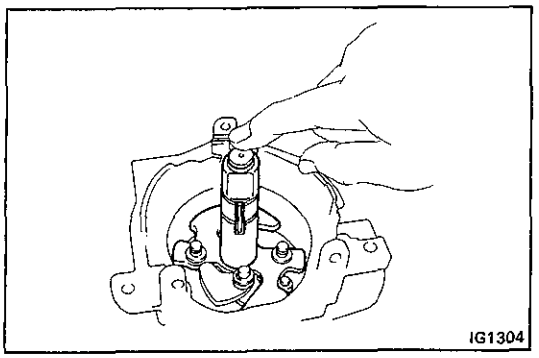
3. **INSTALL SIGNAL ROTOR SHAFT**

   (a) Install the signal rotor shaft on the governor shaft as shown.

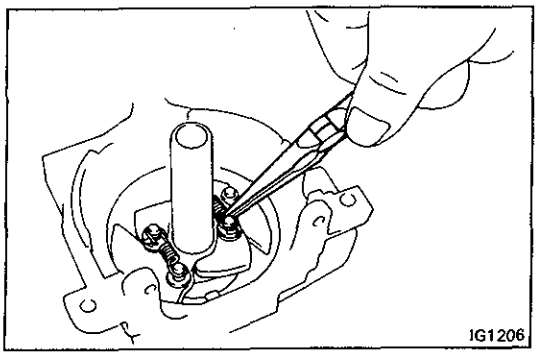


   (b) Install the screw.

   (c) Pack high-temperature grease into the shaft.

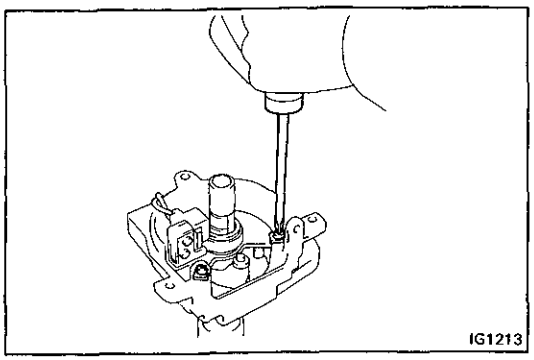


   (d) Push on the grease stopper with your finger.



4. **INSTALL GOVERNOR SPRINGS**

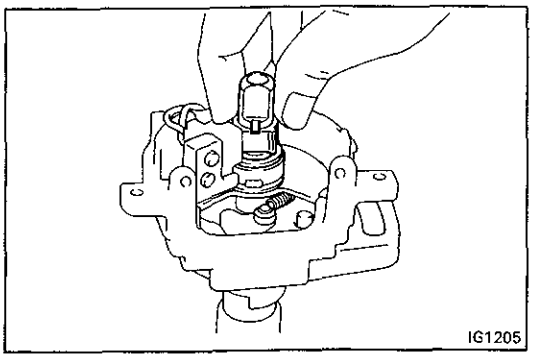
   Using needle-nose pliers, install the two springs.



5. INSTALL BREAKER PLATE WITH SIGNAL GENERATOR (PICKUP COIL)

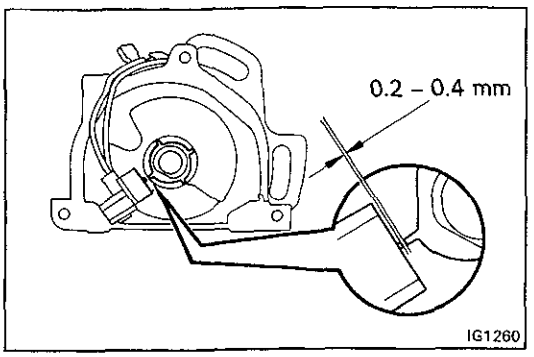
(a) Align the cutout parts of the breaker plate and housing, and install the breaker plate with the signal generator (pickup coil).

(b) Secure the breaker plate with the two screws.



6. INSTALL SIGNAL ROTOR

Push on the rotor with a new spring.

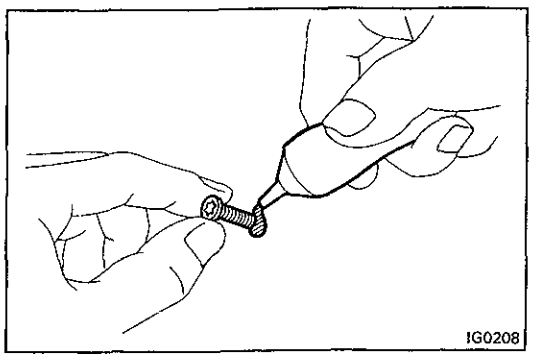


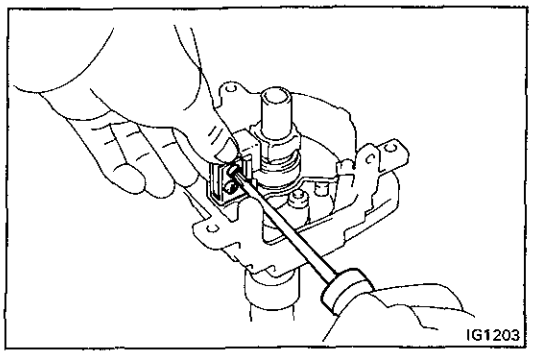
7. INSPECT AIR GAP

Using a thickness gauge, check the gap between the signal rotor and signal generator (pickup coil).

Air gap: 0.2 – 0.4 mm (0.008 – 0.016 in.)

If not within specification, replace the breaker plate with the signal generator (pick up coil).





8. IF NECESSARY, REPLACE BREAKER PLATE WITH SIGNAL GENERATOR (PICKUP COIL)

(a) Remove the signal rotor.
(See step 8 on page IG-28)

(b) Remove the breaker plate with signal generator (pickup coil).
(See step 9 on page IG-28)

(c) Clean a new pickup set screws and pickup screw holes of any oil and foreign particles.

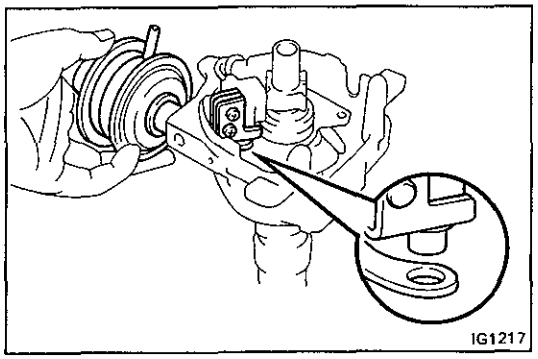
(d) Apply sealant to 3 or 5 mm (0.12 or 0.20 in.) of the screw end.

Sealant: Part No. 08833-00070, adhesive 1324, THREE BOND 1324 or Sealant:

(e) Using a trox driver, install the set screws and adjust the air gap.

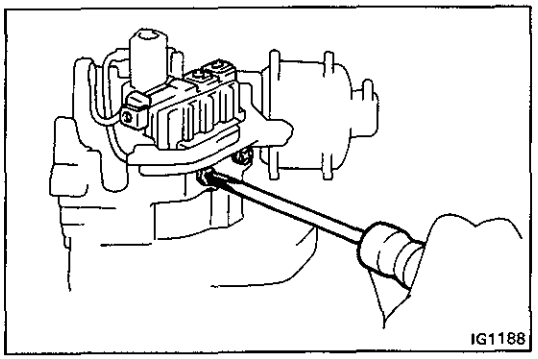
HINT: After installing, do not run the engine for at least 30 min., or at high speed for at least 120 min.

9. INSTALL DISTRIBUTOR WIRE



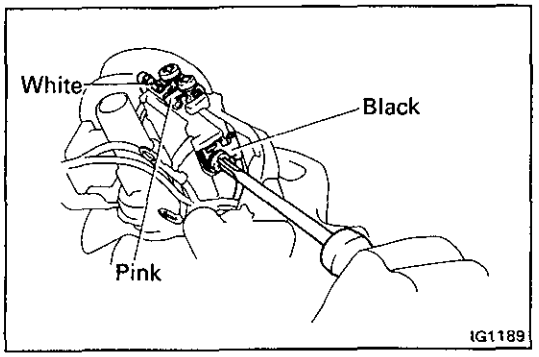
10. INSTALL VACUUM ADVANCER

Connect the advancer link to the breaker plate pin and install the advancer with the screw.

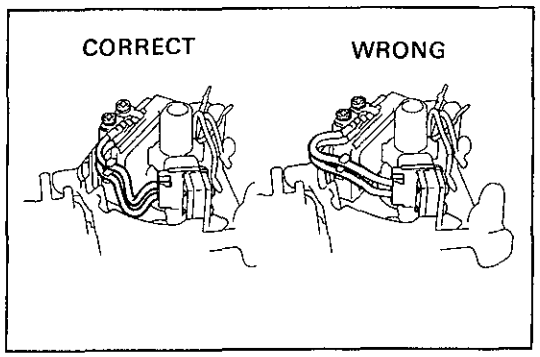


11. INSTALL IGNITER

(a) Install the igniter with the two screws.

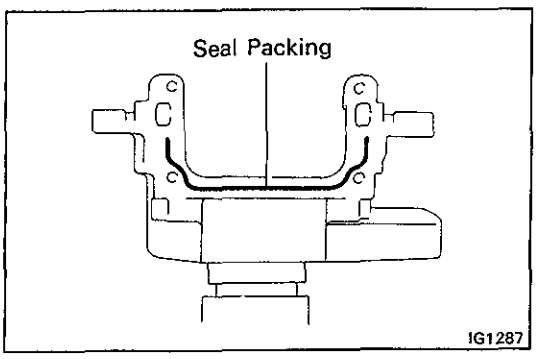


(b) Connect the three wires to the igniter with the three screws.



(c) As shown in the figure, secure the pickup coil wires in the clips, allowing sufficient slack.

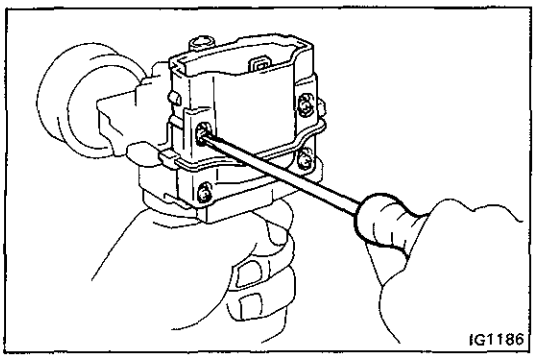
NOTICE: Be sure that the wires do not contact with signal rotor or distributor.



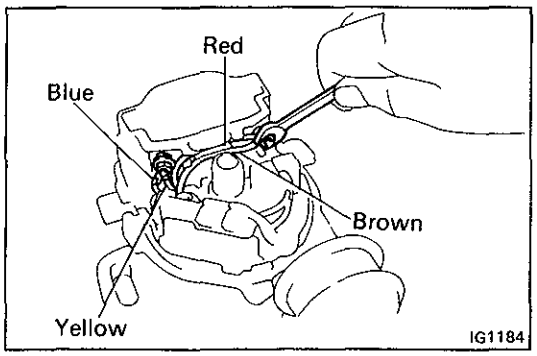
12. INSTALL IGNITION COIL

(a) Apply seal packing to the ignition coil installing surface of the distributor.

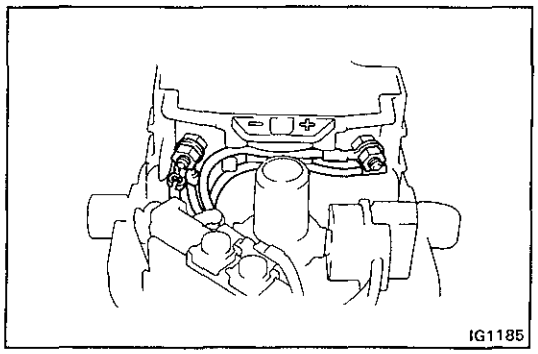
Seal packing: Part No. 08826-00080 or equivalent



(b) Install the ignition coil with the four screws.



(c) Connect the four wires to the terminals of the ignition coil with the two nuts as shown.

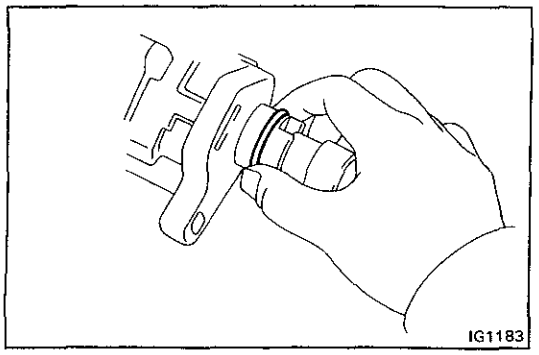


NOTICE:

- **When connecting the wire to the ignition coil, insert both properly into their groove found on the side of the ignition coil.**
- **Be sure that the wires do not contact with signal rotor or distributor housing.**

13. INSTALL IGNITION COIL DUST COVER AND GASKET

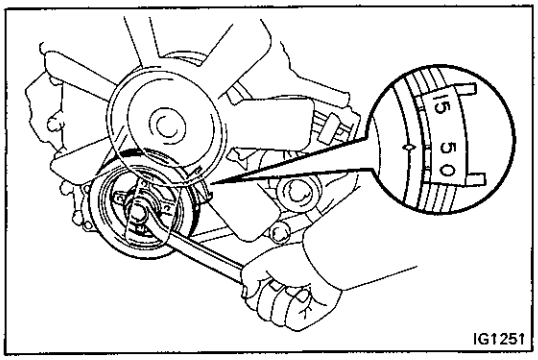
14. INSTALL ROTOR



15. INSTALL O-RING

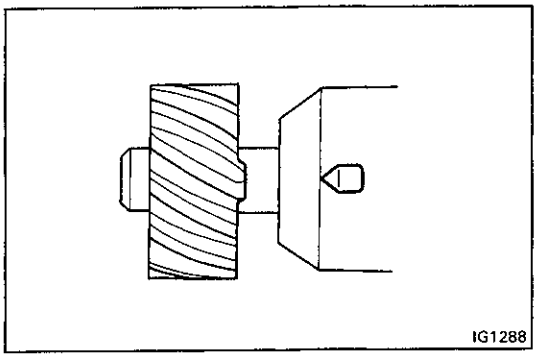
(a) Install a new O-ring to the housing.

(b) Apply a light coat of engine oil on the O-ring.

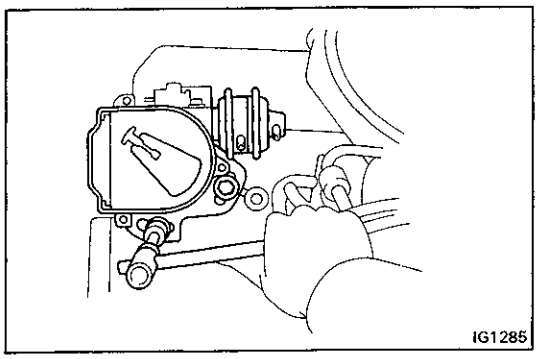


INSTALLATION OF DISTRIBUTOR

1. **SET NO.1 CYLINDER TO 5° BTDC**



2. **INSTALL DISTRIBUTOR**
   (a) Align the protrusion of driven gear with the protrusion of the housing.

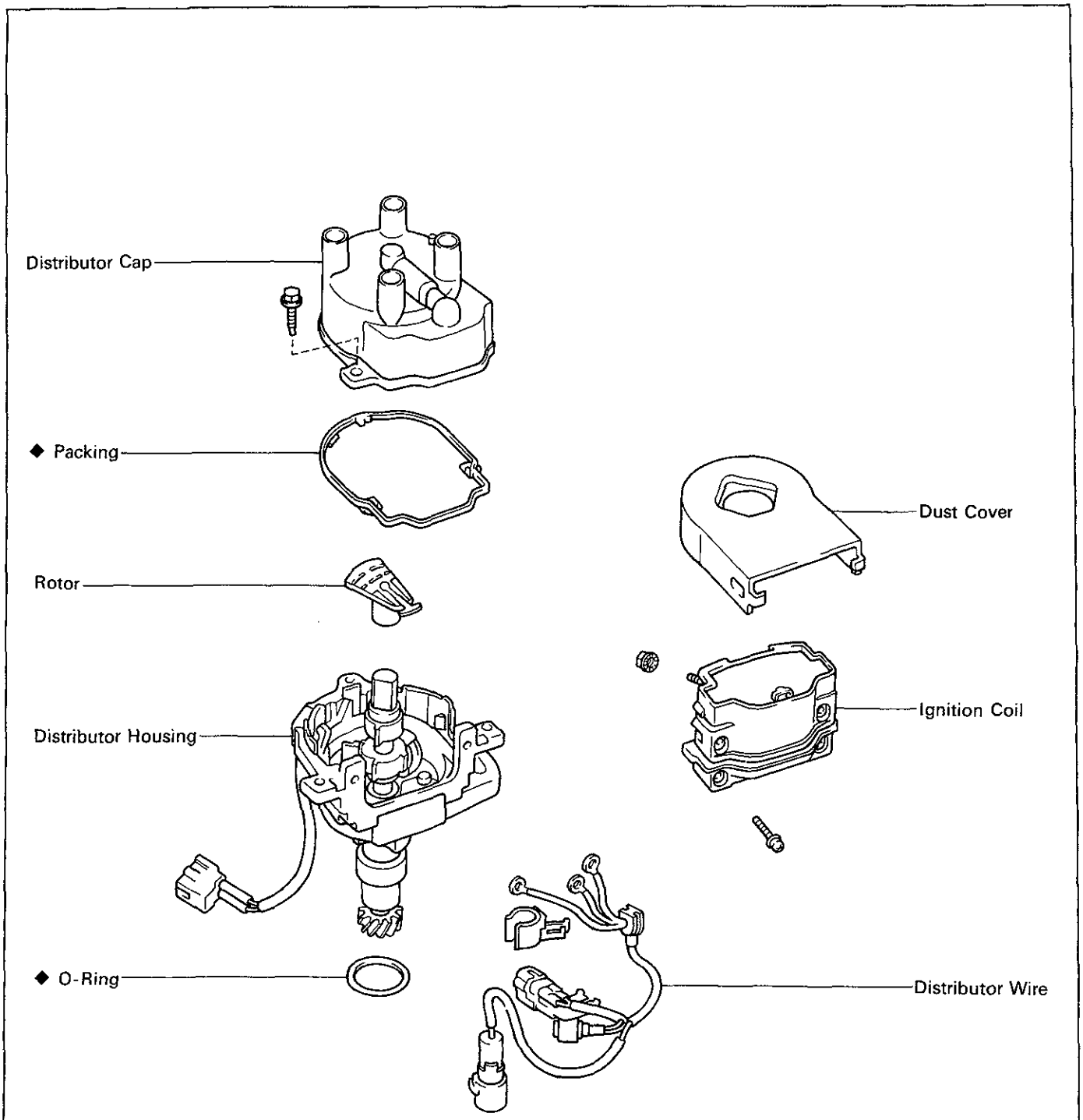


   (b) Insert the distributor, aligning the center of the flange with that of the bolt hole on the cylinder head.
   (c) Lightly tighten the two hold-down bolts.

3. **INSTALL PACKING AND DISTRIBUTOR CAP**
4. **CONNECT DISTRIBUTOR CONNECTOR**
5. **CONNECT HIGH-TENSION CORDS TO DISTRIBUTOR CAP**
   Firing order: 1-3-4-2
6. **CONNECT VACUUM HOSES**
7. **ADJUST IGNITION TIMING**
   (See psges EM-25, 26)

[2RZ-E]

COMPONENTS



◆ Non-reusable part

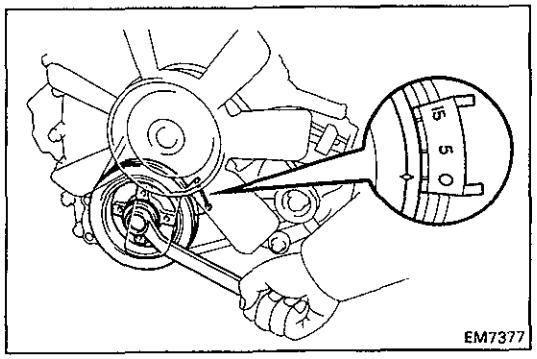
IG1252

REMOVAL OF DISTRIBUTOR

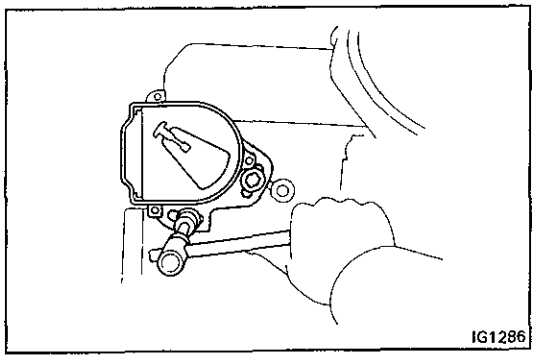
1. **DISCONNECT HIGH-TENSION CORDS FROM DISTRIBUTOR CAP**

2. **DISCONNECT DISTRIBUTOR CONNECTOR**

3. **REMOVE DISTRIBUTOR CAP**



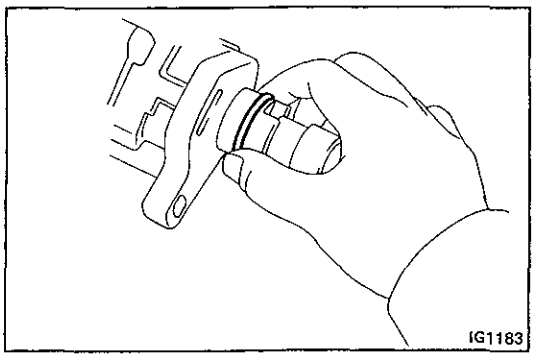
4. **SET NO.1 CYLINDER TO TDC/COMPRESSION**
   (a) Turn the crankshaft pulley until the timing mark is aligned with "0" mark on the No.1 timing belt cover.



   (b) Check that the distributor rotor direction is as shown.

   If not, turn the crankshaft pulley one complete revolution.

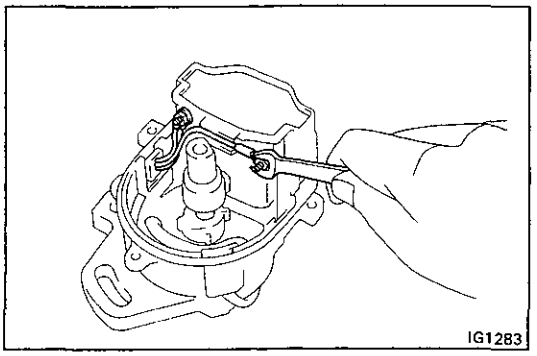
5. **REMOVE DISTRIBUTOR**
   (a) Remove the two hold-down bolts.
   (b) Pull out the distributor from the cylinder head.



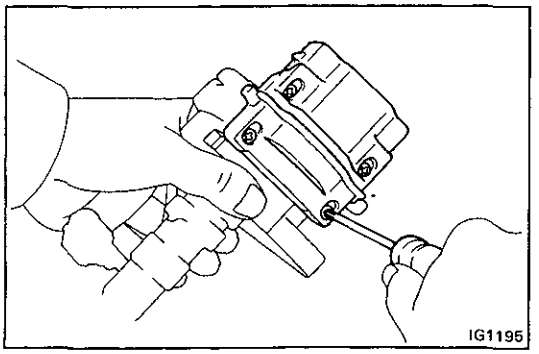
DISASSEMBLY OF DISTRIBUTOR

(See page IG-35)

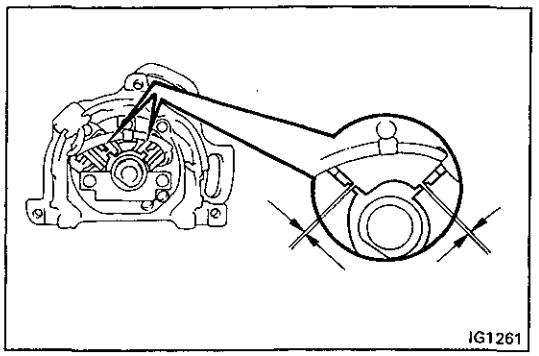
1. REMOVE O-RING
2. REMOVE ROTOR
3. REMOVE IGNITION COIL DUST COVER AND PACKING



4. REMOVE IGNITION COIL
   (a) Remove the two nuts, and disconnect the three wires from the terminals of the ignition coil.



   (b) Remove the four screws and ignition coil.
5. REMOVE DISTRIBUTOR WIRE



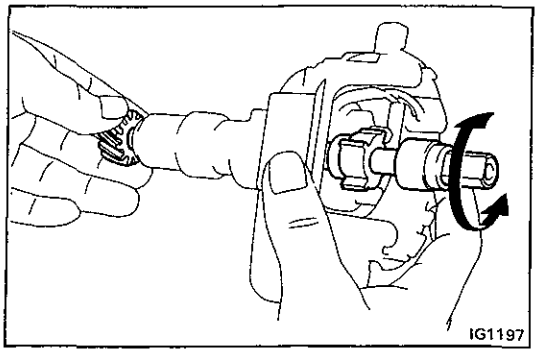
INSPECTION OF DISTRIBUTOR

1. INSPECT AIR GAPS

   Using a thickness gauge, measure the gap between the signal rotor and signal generator (pickup coil) projection.

   Air gap: 0.2 – 0.4 mm (0.008 – 0.016 in.)

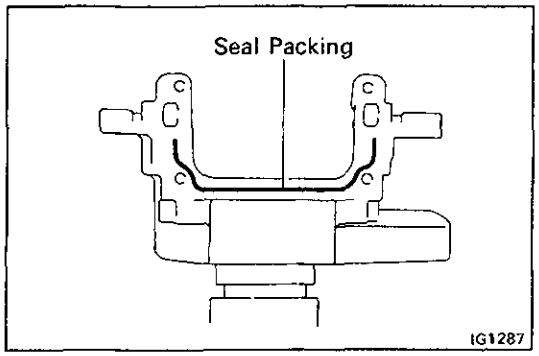
   If the gap is not within specification, replace the distributor housing.



2. INSPECT GOVERNOR SHAFT

   Turn the governor shaft and check that it is not rough or worn.

   If it feels rough or worn, replace the distributor housing.



ASSEMBLY OF DISTRIBUTOR

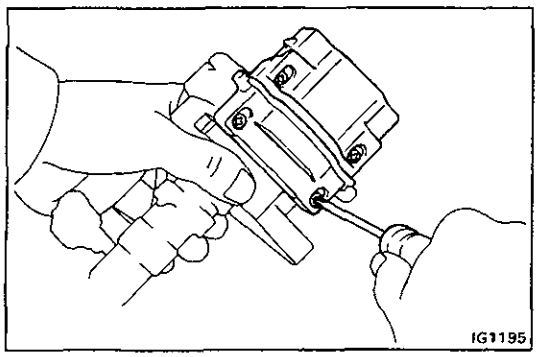
(See page IG-35)

1. **INSTALL DISTRIBUTOR WIRE**

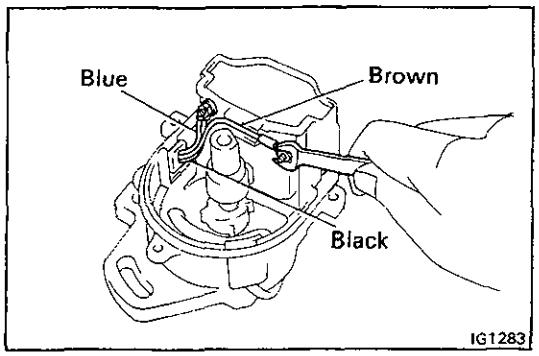
2. **INSTALL IGNITION COIL**

   (a) Apply seal packing to the ignition coil installing surface of the distributor.

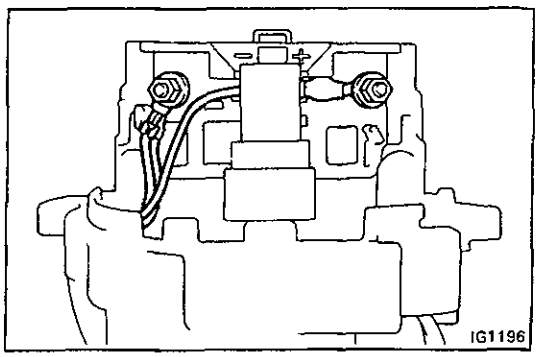
   Seal packing: Part No. 08826-00080 or equivalent



   (b) Install the ignition coil with the four screws.



   (c) Connect the three wires to the terminals of the ignition coil with the two nuts as shown.

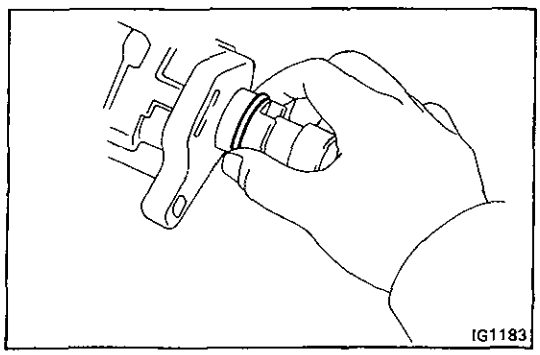


NOTICE:

- **When connecting the wire to the ignition coil, insert both properly into their groove found on the side of the ignition coil.**
- **Be sure that the wires do not contact with signal rotor or distributor housing.**

3. **INSTALL IGNITION COIL DUST COVER AND GASKET**

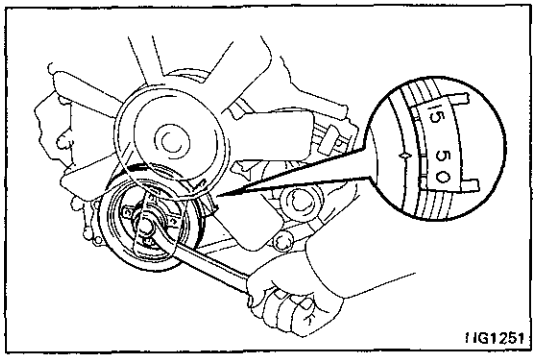
4. **INSTALL ROTOR**



5. **INSTALL O-RING**

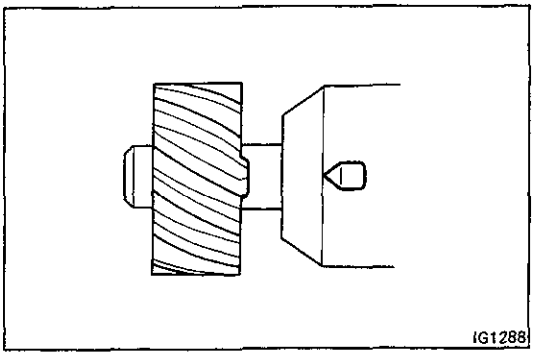
   (a) Install a new O-ring to the housing.

   (b) Apply a light coat of engine oil on the O-ring.

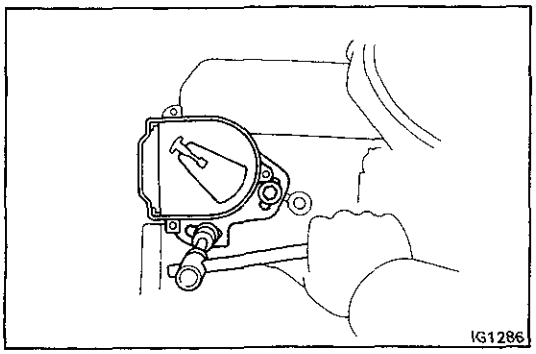


INSTALLATION OF DISTRIBUTOR

1. **SET NO.1 CYLINDER TO 5° BTDC**



2. **INSTALL DISTRIBUTOR**
   (a) Align the protrusion of driven gear with the cavity of the housing.



   (b) Insert the distributor, aligning the center of the flange with that of the bolt hole on the cylinder head.
   (c) Lightly tighten the two hold-down bolts.

3. **INSTALL PACKING AND DISTRIBUTOR CAP**

4. **CONNECT DISTRIBUTOR CONNECTOR**

5. **CONNECT HIGH-TENSION CORDS TO DISTRIBUTOR CAP**

   Firing order: 1-3-4-2

6. **ADJUST IGNITION TIMING**
   (See pages EM-31, 32)