ENGINE ELECTRICAL

IGNITION SYSTEM

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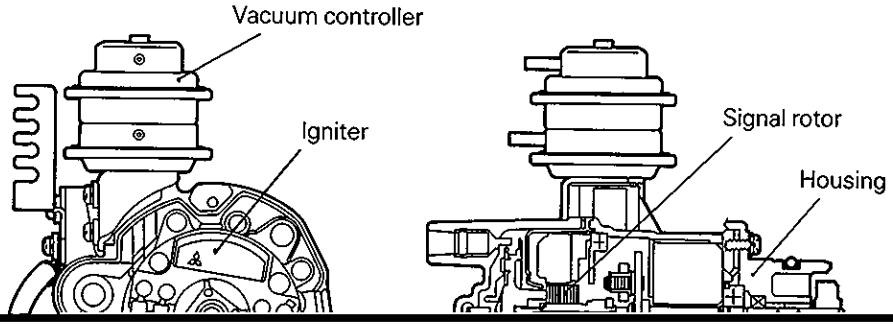
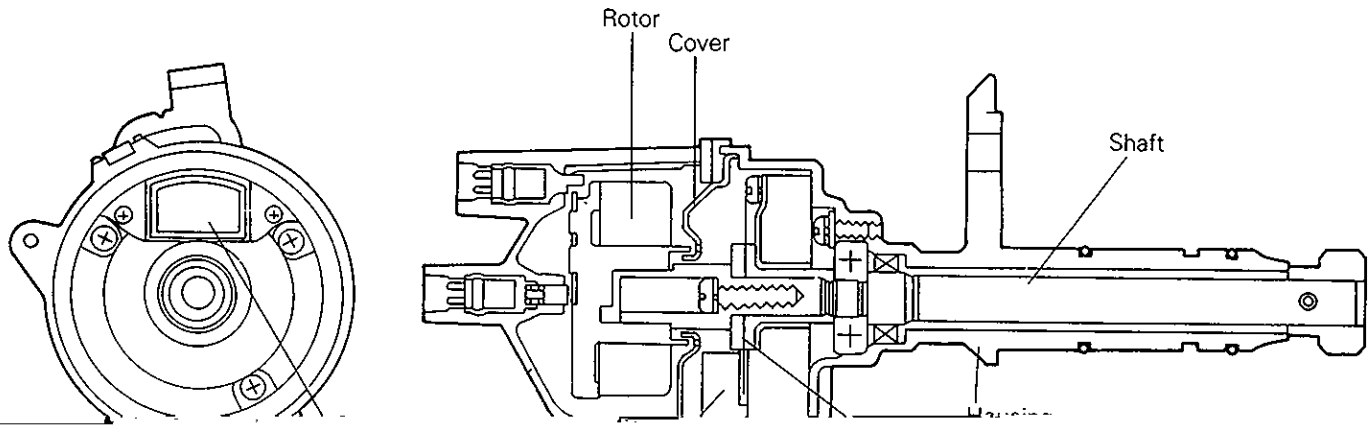
CEI TYPE DISTRIBUTOR (MITSUBISHI TYPE WITH BUILT-IN IGNITION COIL)



ELECTRONIC ADVANCE CONTROL TYPE DISTRIBUTOR



NOTES

1. SPECIFICATIONS

GENERAL SPECIFICATIONS

DISTRIBUTOR

Contact Point Type

Part No.	Identification No.	Timing control device	Diaphragm type	Point gap mm (in.)

Part No.	Identification	Timing control	Diaphragm	Igniter	Air gap	Ignition coil resistance

HEI Type

CRANK ANGLE SENSOR

Part No.	Identification No.	Timing control device
MD121786	T1T49071	Electronic
MD148147	T1T49073	Electronic
MD148855	T1T49571	Electronic
MD152651	T1T49074	Electronic
MD180939	T1T49771A	Electronic

IGNITION COIL

Oil-Filled Type

Part No.	Identification No.	Primary coil resistance (Ω)	Secondary coil resistance (kΩ)	External resistor resistance (Ω)

SPARK PLUG

NGK	ND	CHAMPION	Spark plug gap mm (in)
B7ES	K16P-U	N-9Y	0.7 – 0.8 (0.028 – 0.031)
BK5E	K20P-U	N-12Y	0.7 – 0.8 (0.028 – 0.031)
BK6E	W16EP	C-9YC	0.7 – 0.8 (0.028 – 0.031)
BP5ES	W20EP	C-12YC	0.7 – 0.8 (0.028 – 0.031)
BP6ES	W22EP	N-7YC	0.7 – 0.8 (0.028 – 0.031)

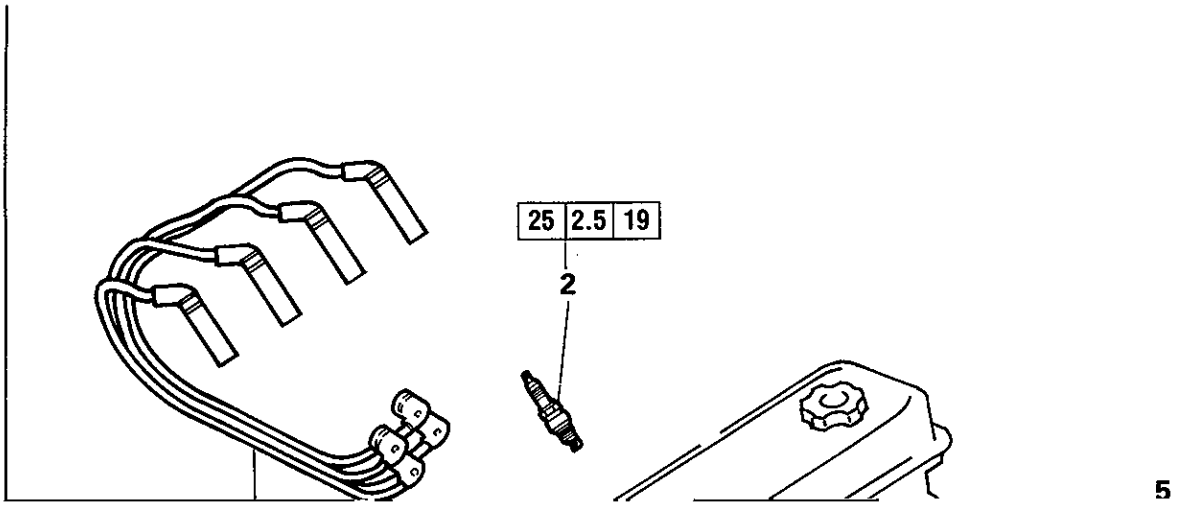
TORQUE SPECIFICATIONS

	Torque Nm	kgm	ft.lbs.
Cooling fan bolt	9	0.9	7
Fan clutch	11	1.1	8
Distributor bolt	13	1.3	9
Distributor mounting nut (except 6G72 engine)	12	1.2	9
(6G72 engine)	14	1.4	11
Spark plug	25	2.5	19
Crank angle sensor mounting nut	12	1.2	9
Throttle body stay bolt and nut	19	1.9	14
Ignition coil mounting bolt (Molded type)			
SOHC engine (except 4G6 16-valve and 4G9 16-valve engine for rear wheel drive and 6G72 engine)	14	1.4	11

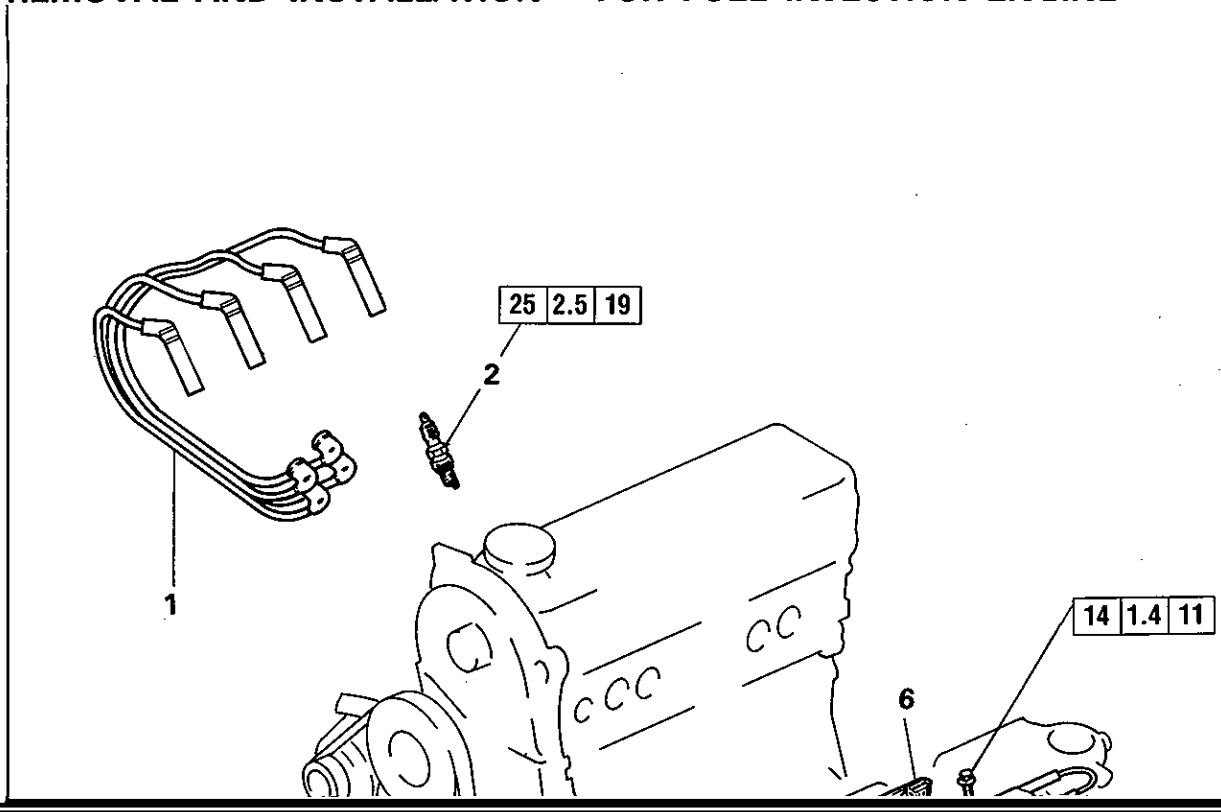
NOTES

2. IGNITION SYSTEM

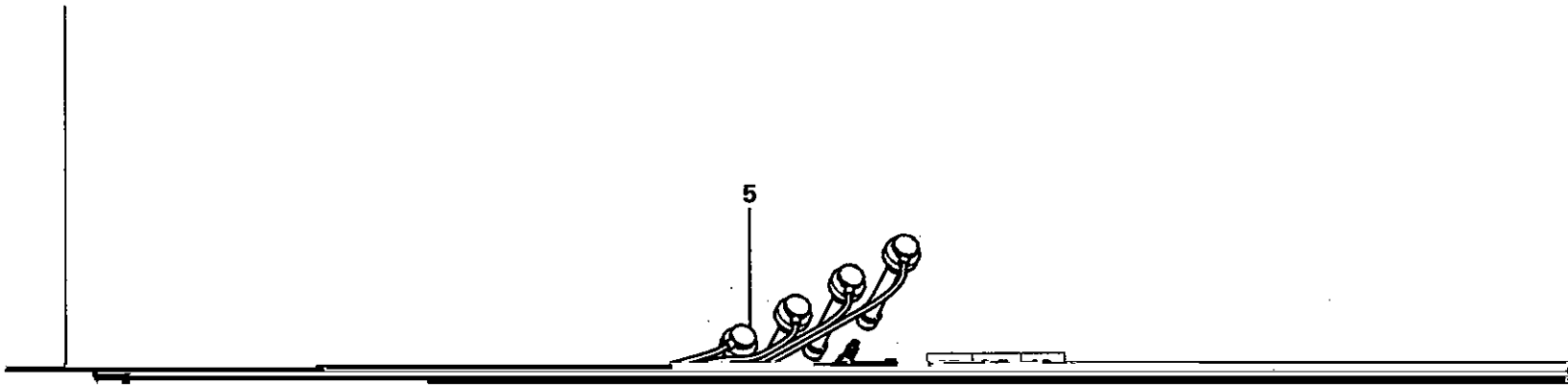
REMOVAL AND INSTALLATION – FOR CARBURETOR ENGINE



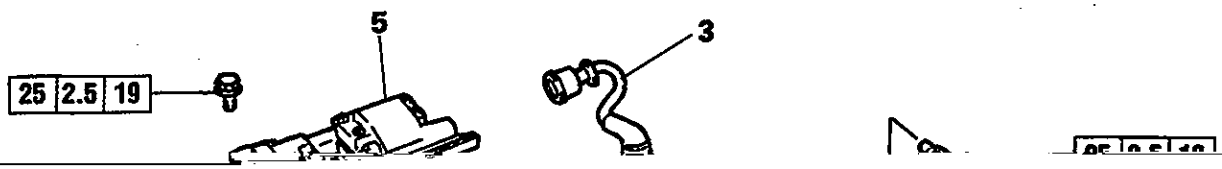
REMOVAL AND INSTALLATION – FOR FUEL INJECTION ENGINE



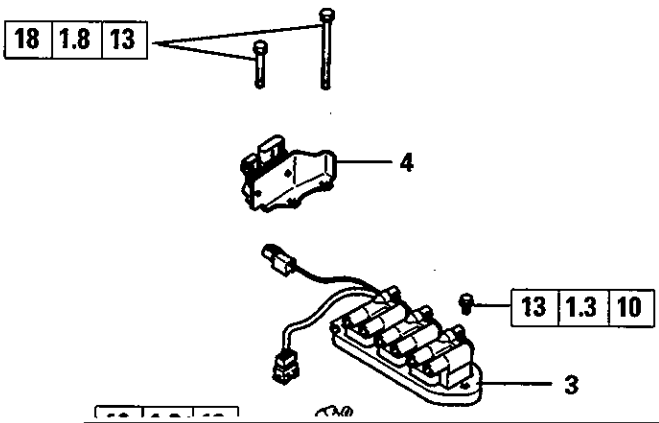
REMOVAL AND INSTALLATION – FOR 4G6 SOHC 16-VALVE AND 4G9 SOHC 16-VALVE ENGINES FOR REAR WHEEL DRIVE VEHICLES



REMOVAL AND INSTALLATION – FOR 6G72 SOHC 12-VALVE ENGINE

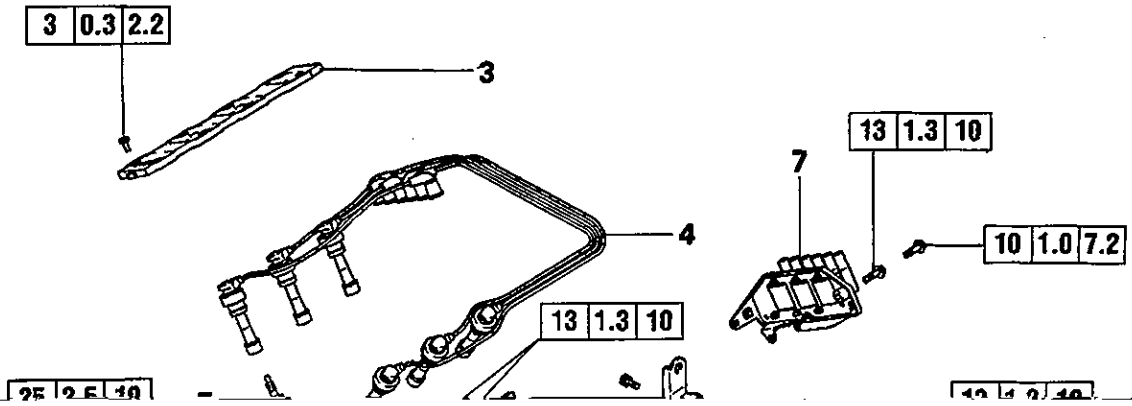


REMOVAL AND INSTALLATION – FOR 6G72 SOHC 24-VALVE ENGINE

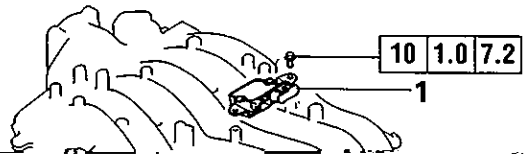


REMOVAL AND INSTALLATION – FOR 6G72, 6G73 DOHC ENGINE

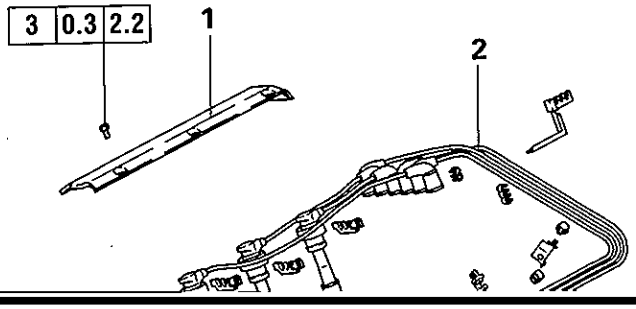
Up to 1992 model



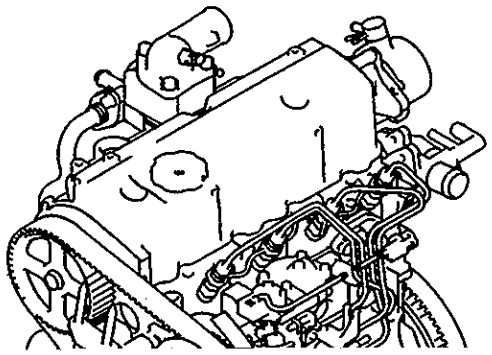
REMOVAL AND INSTALLATION – FOR 6G74 DOHC ENGINE

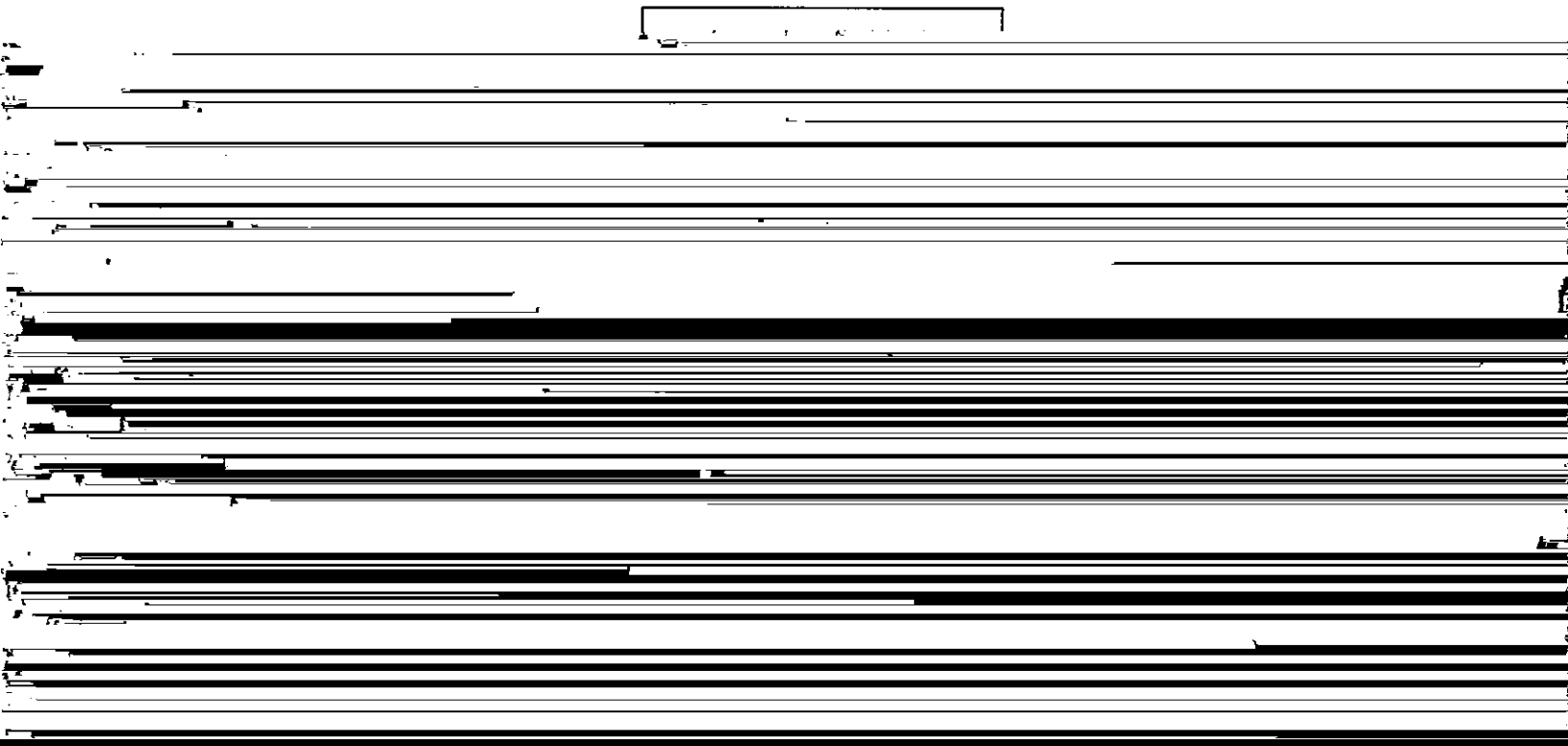


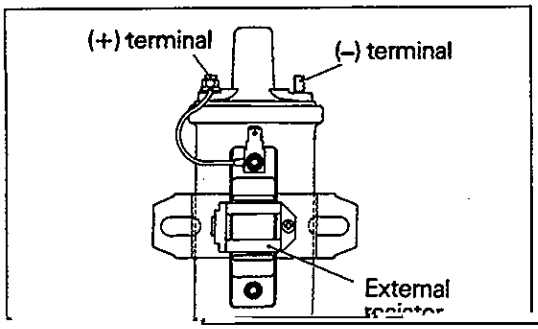
REMOVAL AND INSTALLATION – FOR 6A12 ENGINE



REMOVAL AND INSTALLATION – FOR 4D68 with ELECTRONICALLY CONTROLLED FUEL INJECTION SYSTEM







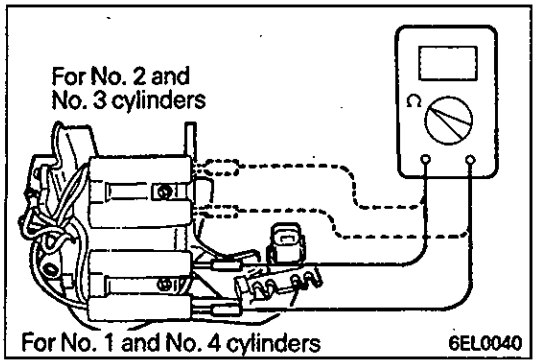
INSPECTION

IGNITION COIL (OIL-FILLED TYPE)

(1) Measure the resistance of the primary and secondary coils using a circuit tester. The coils are free from open or short circuits if the resistance is within the standard value.

Primary coil resistance (Ω) at 20°C (68°F)

E-019	**1.13 – 1.38**
E-064, E-089	**1.08 – 1.32**
LB-63	**1.17 – 1.43**



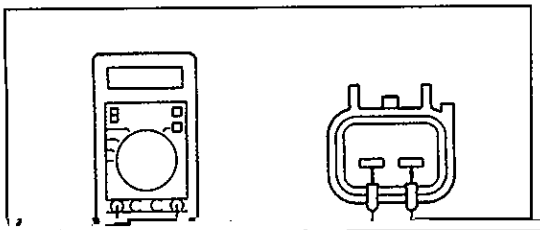
(2) Measurement of the secondary coil resistance.
Measure the resistance between the high-voltage terminals for the No. 1 and No. 4 cylinders, and between the high-voltage terminals for the No. 2 and No. 3 cylinders.

Standard value: 10.29 – 13.92 kΩ

Caution

- **Be sure, when measuring the resistance of the secondary coil, to disconnect the connector of the ignition coil.**

IGNITION COIL (MOLDED TYPE for front wheel drive vehicles)



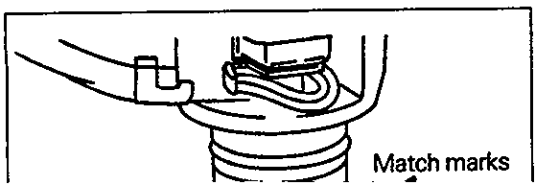
IGNITION COIL (6G74 DOHC ENGINE)

Measurement of Primary Winding Resistance

(1) Measure the resistance across the terminals, shown in the illustration, of the ignition coil for each of three pairs of cylinders (No.1 – No.4, No.2 – No.5 and No.3 – No.6).

Standard value: 0.69 – 0.85 Ω

SERVICE POINTS OF INSTALLATION



◆D◆ INSTALLATION OF DISTRIBUTOR

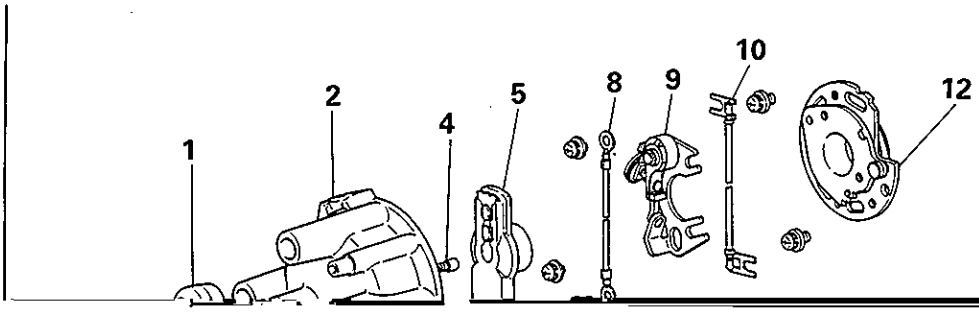
(1) Turn the crankshaft clockwise to place the piston in No. 1 cylinder at top dead center on the compression stroke.
(2) Align the match mark on the distributor housing with that on the gear.

	G4 CAMSHAFT POSITION SENSING CYLINDER

NOTES

3. CONTACT POINT TYPE DISTRIBUTOR

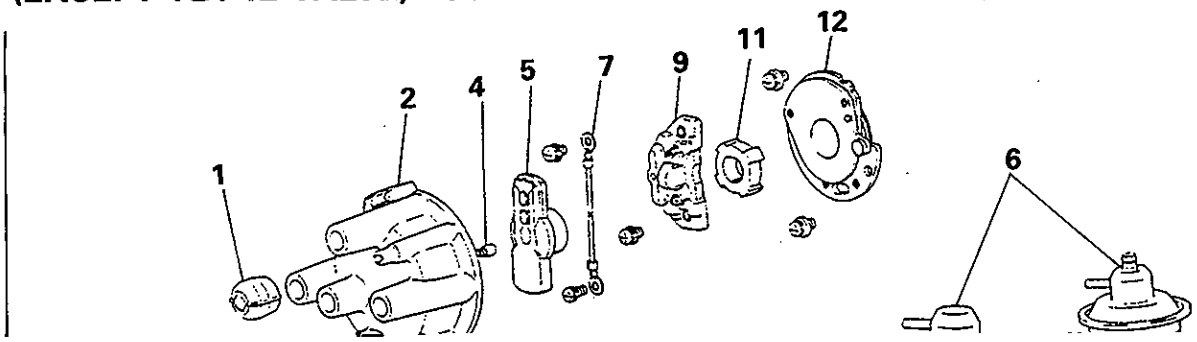
DISASSEMBLY AND REASSEMBLY – MITSUBISHI TYPE



NOTES

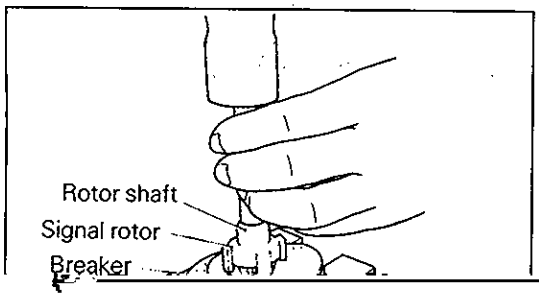
4. CEI TYPE DISTRIBUTOR (MITSUBISHI TYPE)

DISASSEMBLY AND REASSEMBLY (EXCEPT 4G1 12-VALVE, 4G6 16-VALVE AND 4G9 ENGINES)



DISASSEMBLY AND REASSEMBLY (FOR 4G1 12-VALVE ENGINE, 4G6 16-VALVE

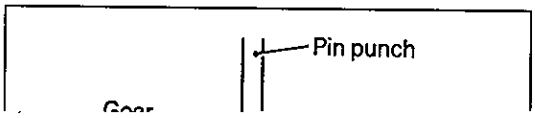
DISASSEMBLY AND REASSEMBLY



SERVICE POINTS OF DISASSEMBLY

⟨A⟩ REMOVAL OF SIGNAL ROTOR SHAFT / SIGNAL ROTOR

(1) Remove the signal rotor shaft from the signal rotor.



SERVICE POINTS OF REASSEMBLY

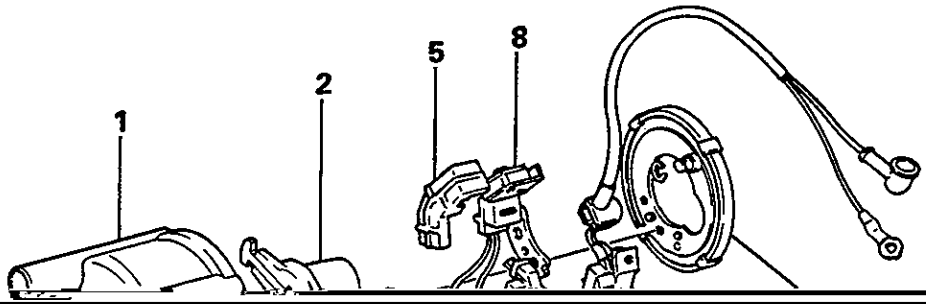
▶A◀ INSTALLATION OF GEAR

(1)

NOTES

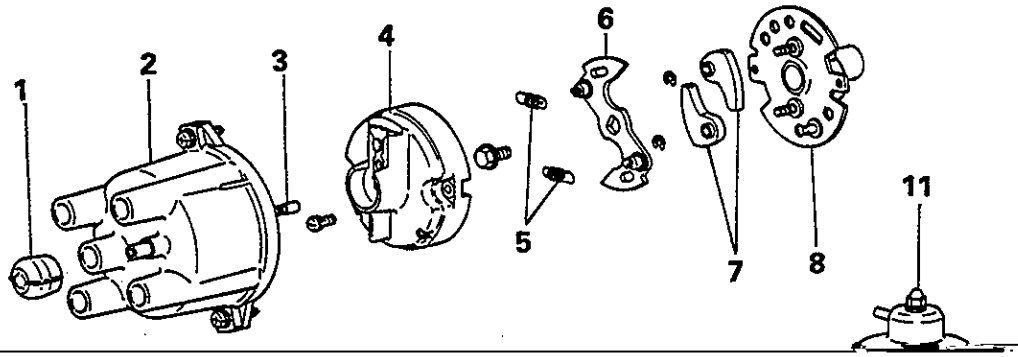
5. CEI TYPE DISTRIBUTOR (DENSO TYPE)

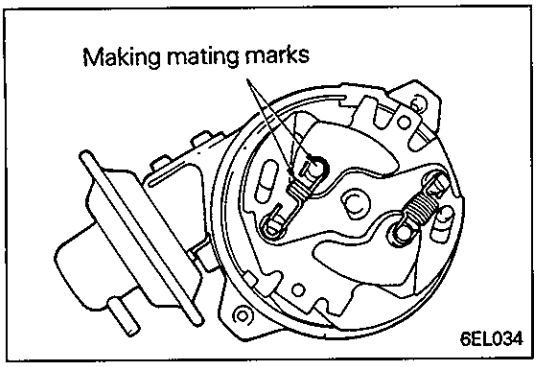
DISASSEMBLY AND REASSEMBLY



6. HEI TYPE DISTRIBUTOR

DISASSEMBLY AND REASSEMBLY

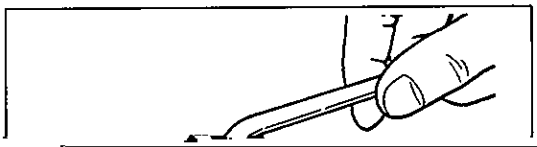




SERVICE POINTS OF DISASSEMBLY

⟨A⟩ REMOVAL OF GOVERNOR SPRING

(1) Make marks on either one of the governor pin and spring combinations for reference at reassembly.
Remove both governor springs.

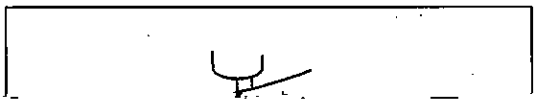


⟨B⟩ REMOVAL OF GOVERNOR PLATE

(1) Remove retaining bolt, then the governor plate.

Caution

Be very careful when loosening the retaining bolt



⟨E⟩ REMOVAL OF GEAR / DISTRIBUTOR SHAFT

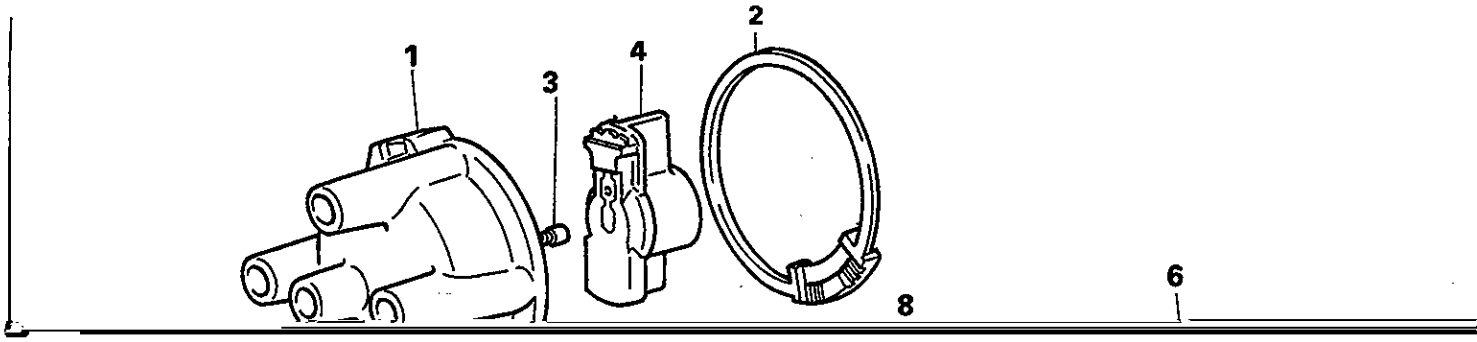
(1) Mark the location of gear on distributor shaft.

SERVICE POINTS OF REASSEMBLY

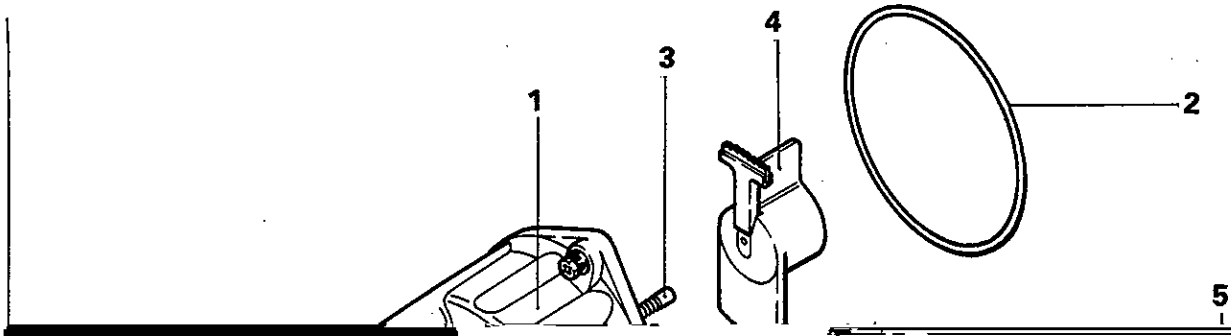
[redacted]

7. ELECTRONIC ADVANCE CONTROL TYPE DISTRIBUTOR

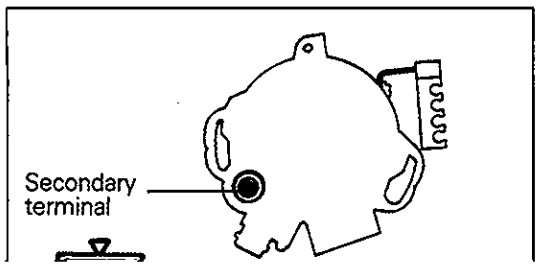
DISASSEMBLY AND REASSEMBLY – 4G15 8 VALVE, 4G63 8-VALVE AND 4G64 8-VALVE ENGINE



DISASSEMBLY AND REASSEMBLY – 6G72 ENGINE



DISASSEMBLY AND REASSEMBLY – 4G37 (BUILT-IN IGNITION COIL TYPE)

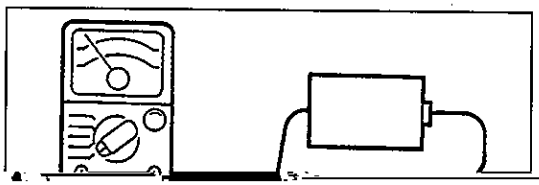


INSPECTION

IGNITION COIL – 4G1 12-VALVE, 4G9 AND 4G6 16-VALVE ENGINES FOR FRONT WHEEL DRIVE VEHICLES

(1) Measurement of primary coil resistance
Measure the resistance of the positive ① terminal and negative ② terminal of the ignition coil.

Standard value: 0.9 – 1.2 Ω



POWER TRANSISTOR – 4G1 (12- VALVE), 4G37 (1991 AND SUBSEQUENT YEAR MODELS) AND 4G9

(1) Connect the negative (–) terminal of a 1.5V power supply to terminal ⑤ of the power transistor; then check whether there is continuity between terminal ⑥ and terminal ⑧

NOTES