
ENGINE ELECTRICAL

CONTENTS

IGNITION SYSTEM

GENERAL	2
Outline of Change	2
GENERAL INFORMATION	2
SERVICE SPECIFICATIONS	2
ON-VEHICLE SERVICE	2

Ignition Failure Sensor	2
IGNITION COIL	3
CAMSHAFT POSITION SENSOR	4
CRANK ANGLE SENSOR	5
DETONATION SENSOR	6

IGNITION SYSTEM

GENERAL

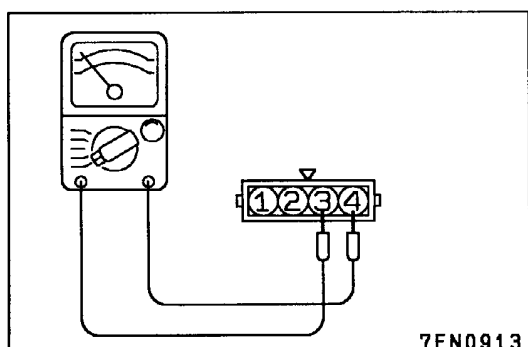
OUTLINE OF CHANGES

- The following service procedures have been established to correspond to the addition of vehicles with 4G63-MPI engine. Furthermore, other items are the same as for the 4G64-GDI engine. <SPACE WAGON>
- The following service procedures have been established in line with the introduction of the 4G64-GDI engine with Variable Valve Timing. The other items are the same as for the previous 4G64-GDI engine.
- On 4G64-GDI and 4G63-MPI engines, an ignition failure sensor has been added. The other service procedures are the same as before.

SERVICE SPECIFICATIONS

IGNITION FAILURE SENSOR

Items	4G6-GDI, 4G6-MPI
Resistance Ω	0.1 or less



ON-VEHICLE SERVICE

IGNITION FAILURE SENSOR CHECK

NOTE

An analog-type circuit tester should be used.

Check that the resistance between terminals 3 and 4 is at the standard value.

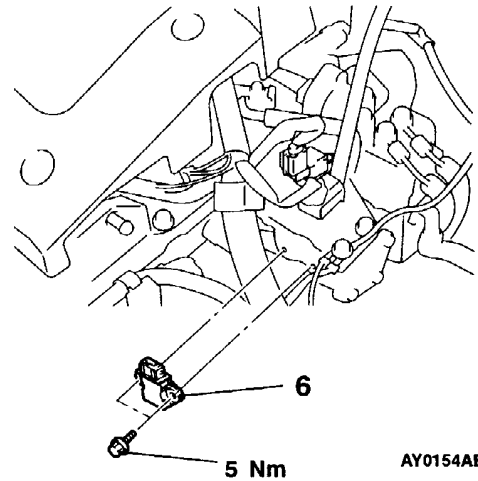
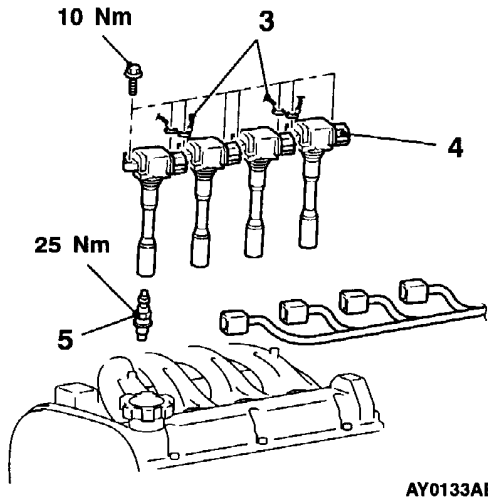
Standard value: 0.1 Ω or less

IGNITION COIL

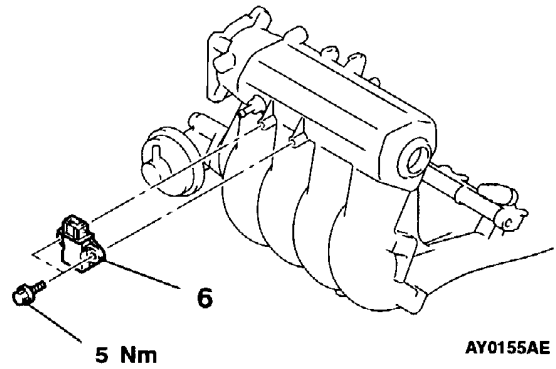
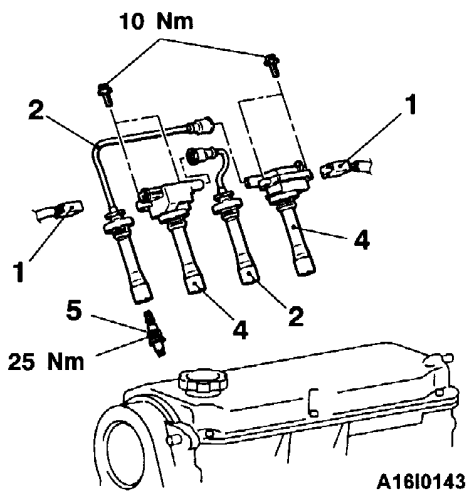
REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operation
 Engine Cover Removal and Installation<4G6-GDI>

<4G6-GDI>



<4G6-MPI>



Ignition coil removal steps

1. Ignition coil connector
2. Spark plug cable
3. Earth cable connection
4. Ignition coil
5. Spark plug

Ignition failure sensor removal

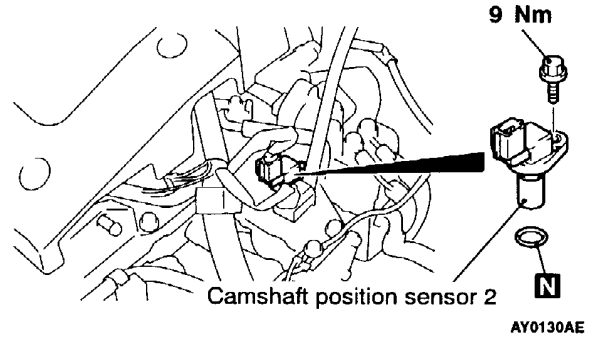
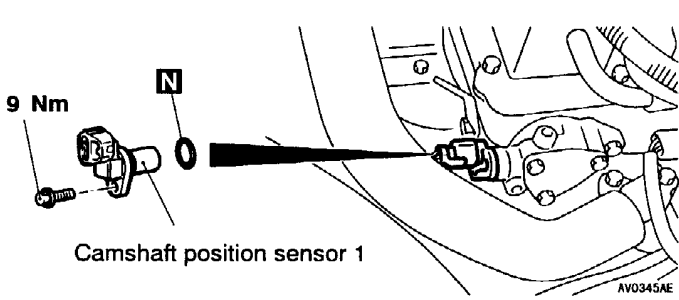
6. Ignition failure sensor

CAMSHAFT POSITION SENSOR

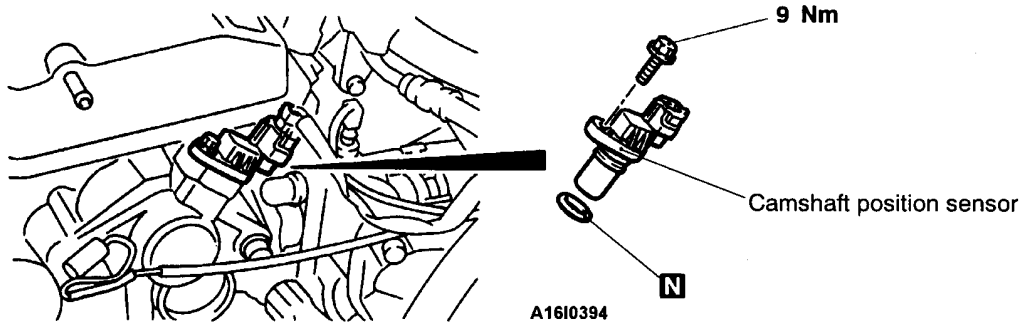
REMOVAL AND INSTALLATION

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<4G6-GDI>



<4G6-MPI>



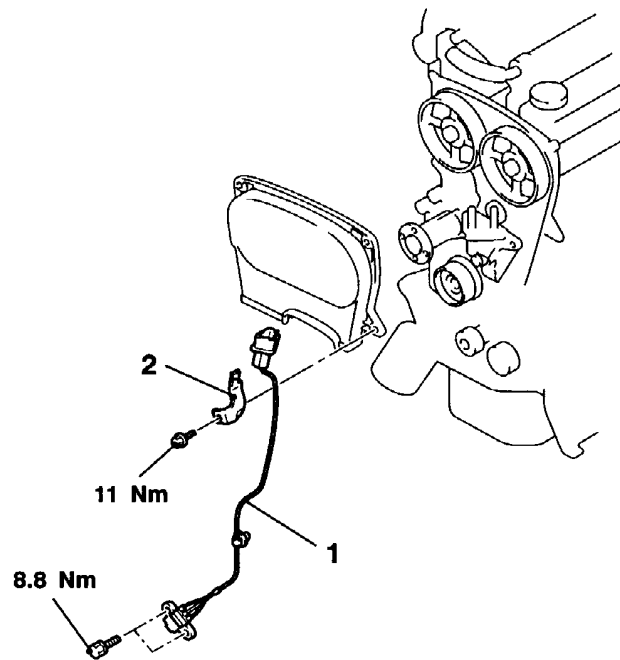
CRANK ANGLE SENSOR

REMOVAL AND INSTALLATION

Pre-removal and Post-Installation Operation

- Power Steering Oil Pump Bracket Removal and Installation (Refer to GROUP 37A.)
- Timing Belt Removal and Installation (Refer to GROUP 11A.)

<4G6-GDI>



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Removal steps

1. Crank angle sensor
2. Connector bracket

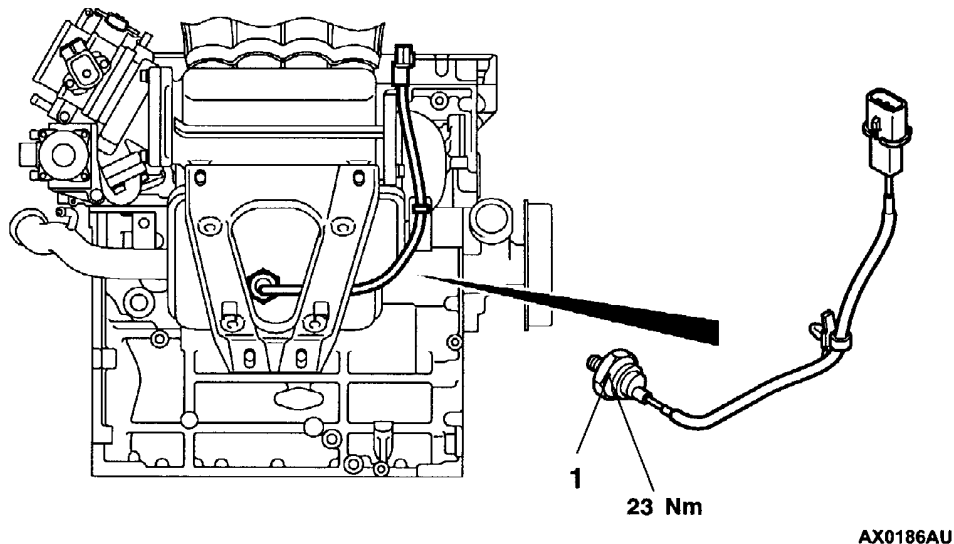
DETONATION SENSOR

REMOVAL AND INSTALLATION

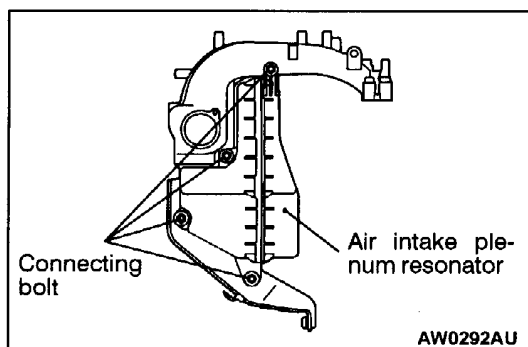
Caution

Do not subject the detonation sensor to any shocks.

<4G6-GDI>



◀A▶ ▶A◀ 1. Detonation sensor



REMOVAL SERVICE POINT

◀A▶ DETONATION SENSOR REMOVAL

Remove the air intake plenum resonator connecting bolts to slide away the resonator. Then use the special tool to remove the detonation sensor.

INSTALLATION SERVICE POINT

▶A◀ DETONATION SENSOR INSTALLATION

