

# Component Procedures: Ignition Coil

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# Component Procedures: Ignition Coil

## Parts and Labor (itype\_189)

### Parts

Qualifier	Part #	Name	Price	Note
Ignition Coil	56028172AB	Ignition Coil	60.50	

### Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Replace	Ignition Coil	B	0.5	0.3

## Ignition Coil (Article 2028202)

### SYSTEM OPERATION

Battery voltage is supplied to the ignition coil positive terminal from the ASD relay.

The Powertrain Control Module (PCM)

opens and closes the ignition coil ground circuit for ignition coil operation.

Base

ignition timing

is not adjustable on any engine. By controlling the coil ground circuit, the PCM is able to set the base timing and adjust the ignition timing advance. This is done to meet changing engine operating conditions.

The ignition coil is not oil filled. The windings are embedded in an epoxy compound. This provides heat and vibration resistance that allows the ignition coil to be mounted on the engine.

### IGNITION COIL-PCM OUTPUT

System voltage from the Automatic Shutdown (ASD) relay is supplied to the ignition coil positive terminal. The Powertrain Control Module

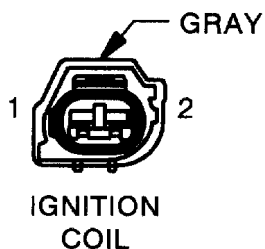
(PCM) operates the ignition coil. Ignition timing is not adjustable. The PCM adjusts ignition timing to meet changing engine operating conditions.

Refer to

Ignition System

for additional information.

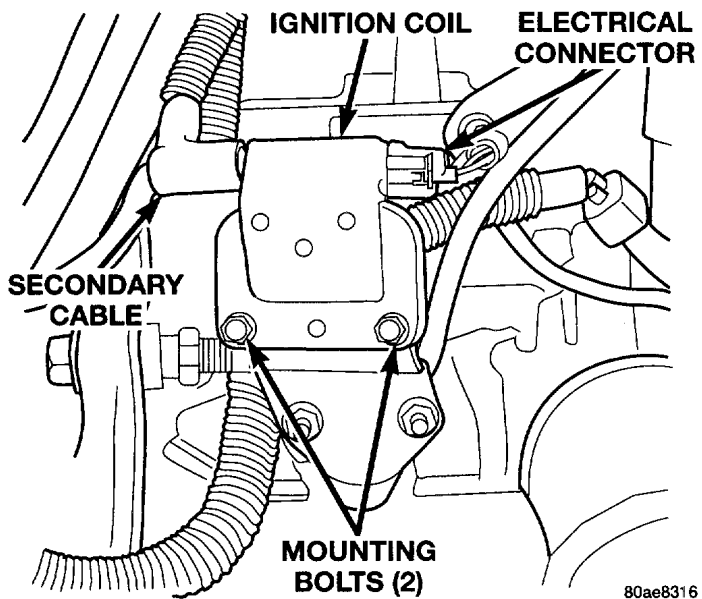
## Connector Views (itype\_47)



**IGNITION COIL - GRAY 2 WAY**

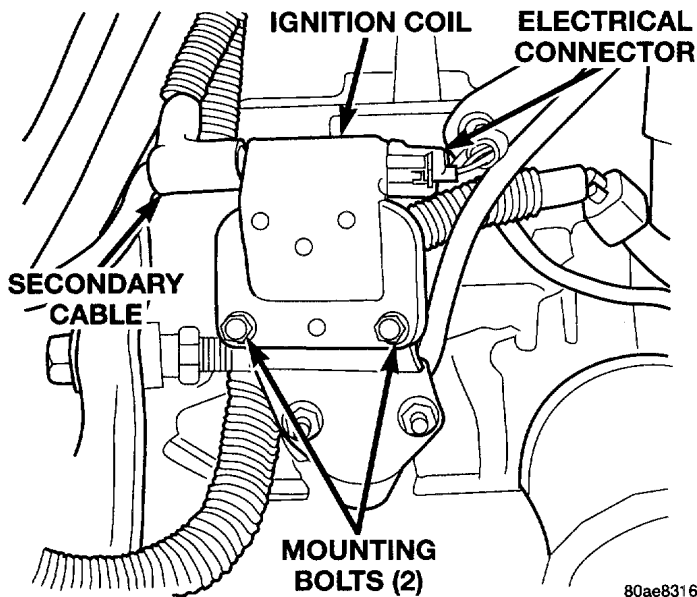
CAV	CIRCUIT	FUNCTION
1	F42 18DG/LG	AUTOMATIC SHUT DOWN RELAY OUTPUT
2	K19 18GY	IGNITION COIL NO. 1 DRIVER

## Ignition Coil (Article 2024300)



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### Procedures (itype\_376)



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### Electrical (itype\_27)

Coil Manufacturer Diamond Primary Resistance 0.97 - 1.18 ohms @ 21-27 deg C

Secondary Resistance 11,300-15,300 ohms @ 21-27 deg C

Toyodenso Primary Resistance 0.95 - 1.20 ohms @ 21-27 deg C

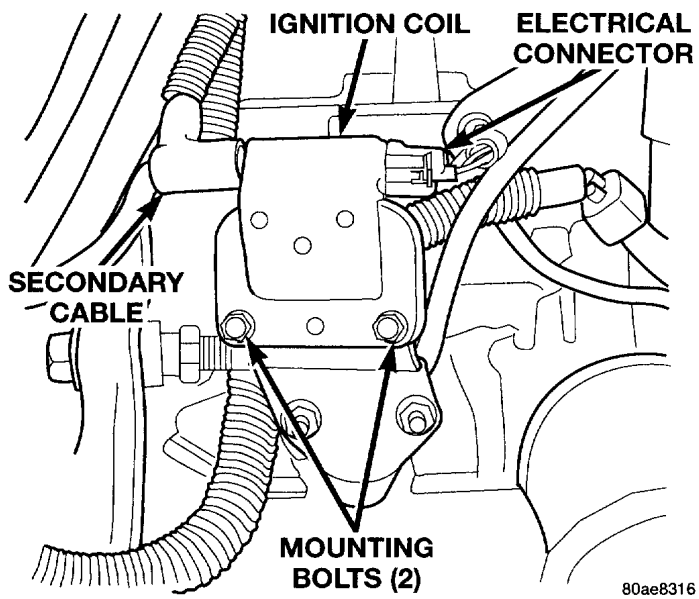
Secondary Resistance 11,300-13,300 ohms @ 21-27 deg C

### Mechanical (including Torque) (itype\_28)

Ignition Coil Nuts and Bolts 11 Nm

Ignition Coil Bolts Only 5 Nm

### Component Tests and General Diagnostics (itype\_383)



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