

# **Component Procedures: Coolant Temperature Sensor/Switch (For Computer)**

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# Component Procedures: Coolant Temperature Sensor/Switch (For Computer)

## Parts and Labor (itype\_189)

### Parts

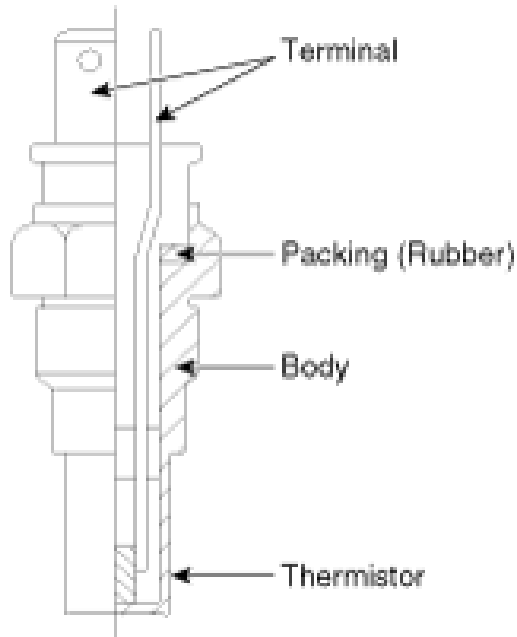
Qualifier	Part #	Name	Price	Note
Powertrain Control	3922038030	Coolant Temp Sensor	68.69	

### Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Remove & Replace	Powertrain Control > Coolant Temp Sensor, R&R	B	0.5	0.0

## Engine Coolant Temperature Sensor (ECTS) - Description and Operation (Article 44209)

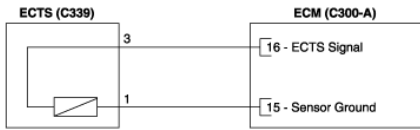
- Description



## Engine Coolant Temperature Sensor (ECTS) - Schematic Diagrams (Article 44211)

- Circuit Diagram

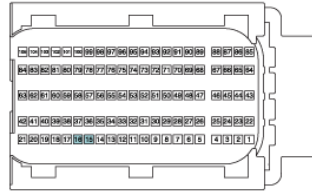
[Circuit Diagram]



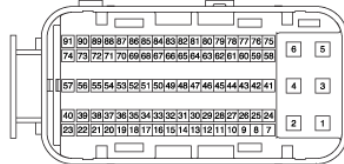
[Connection Information]

Terminal	Connected to	Function
1	ECM C300-A (15)	Sensor Ground
2	-	-
3	ECM C300-A (16)	ECTS Signal

[Harness Connector]



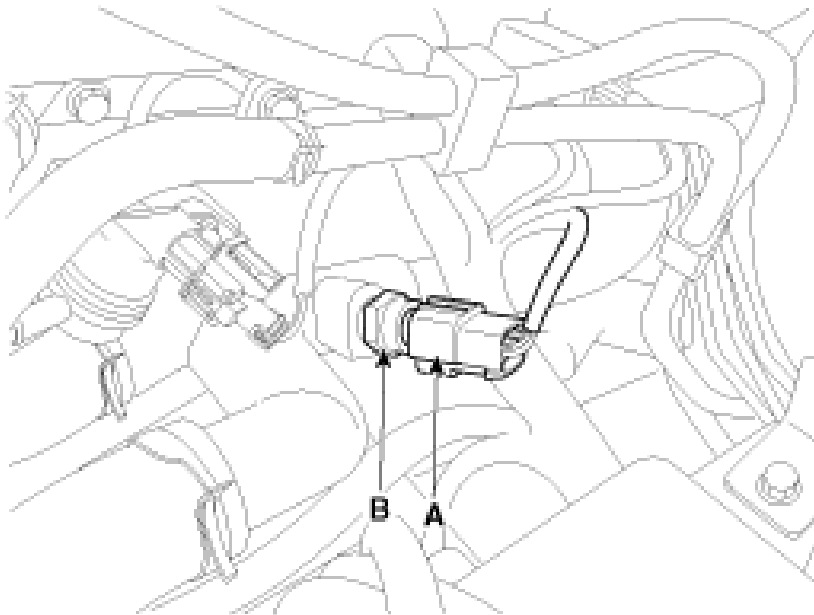
C300-A



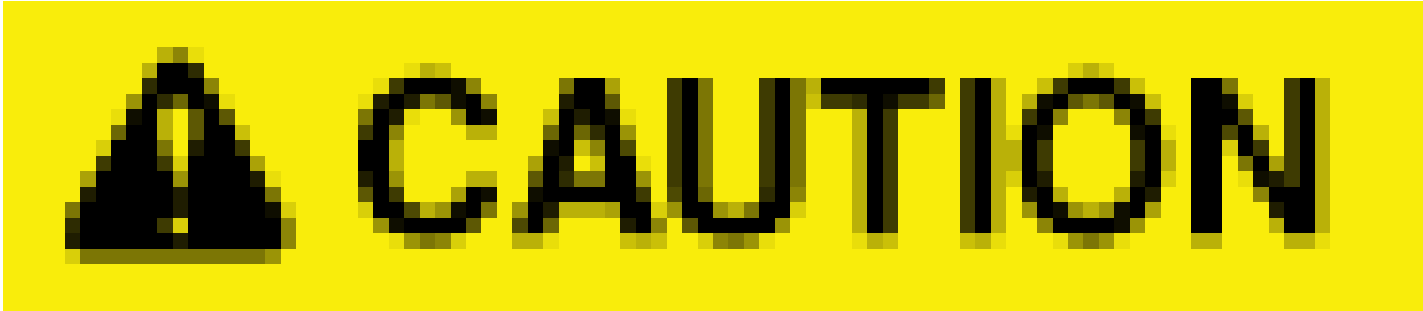
C300-B  
ECM

## Engine Coolant Temperature Sensor (ECTS) - Repair Procedures (Article 44213)

- Inspection
- Turn the ignition switch OFF.
- Disconnect the ECTS connector.
- Remove the ECTS.
- After immersing the thermistor of the sensor into engine coolant, measure resistance between the ECTS terminals 1 and 3.
- Check that the resistance is within the specification. Specification : Refer to "Specification"
- Removal
- Turn the ignition switch OFF and disconnect the battery negative (-) cable.
- Disconnect the engine coolant temperature sensor connector (A).
- Remove the sensor (B). Note that engine coolant may be flowed out from the water temperature control assembly when removing the sensor.



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- Supplement the engine coolant. (Refer to Engine Mechanical System - "Coolant")

- Installation

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- Installation is reverse of removal. Engine coolant temperature sensor installation : 29.4 - 39.2 N.m (3.0 - 4.0 kgf.m, 21.7 - 28.9 lb-ft)

### **Engine Coolant Temperature Sensor (ECTS) - Specifications (Article 44210)**

- Specification

Temperature Resistance (k $\Omega$ )

°C °F

-40 -40 48.14

-20 -4 14.13 - 16.83

0 32 5.79

20 68 2.31 - 2.59

40 104 1.15

60 140 0.59

80 176 0.32