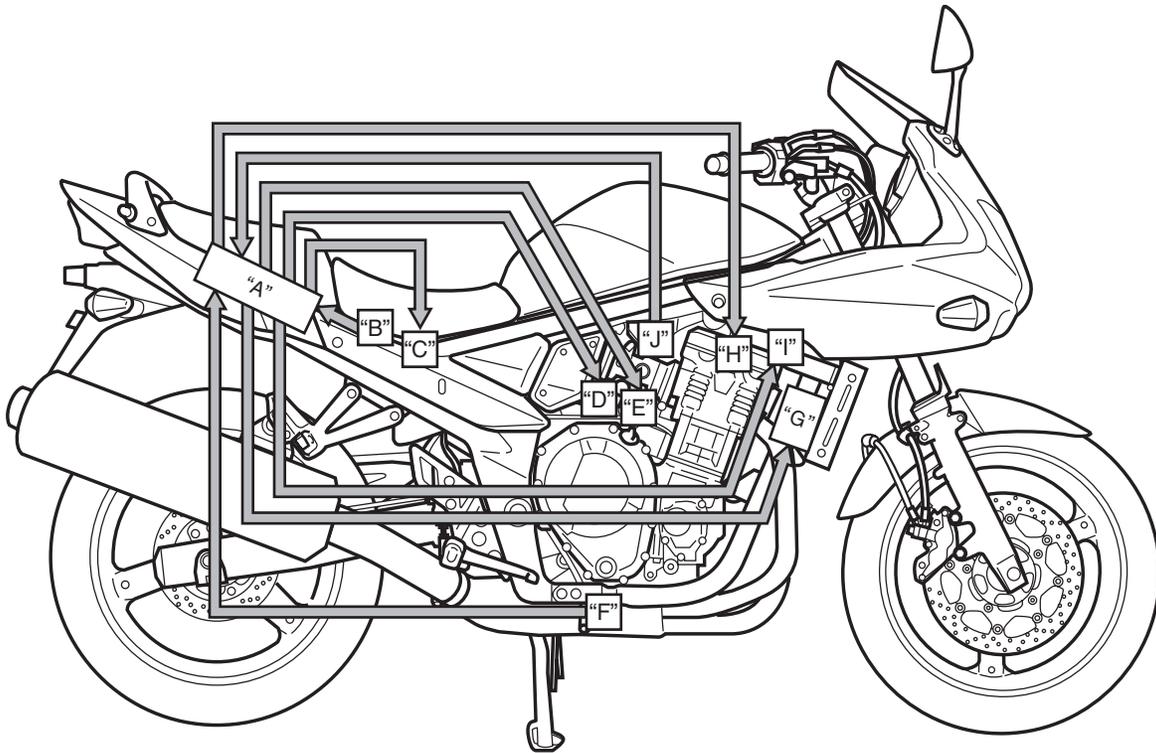


Component Location

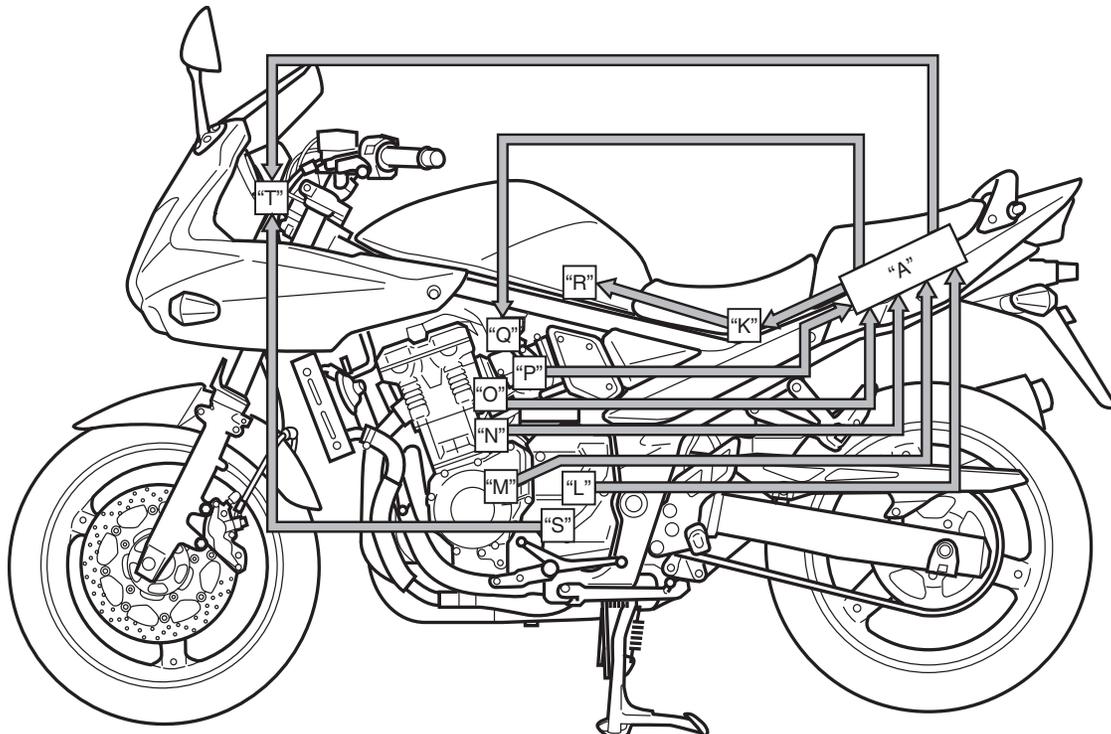
FI System Parts Location (GSF650)

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I717H1110003-02

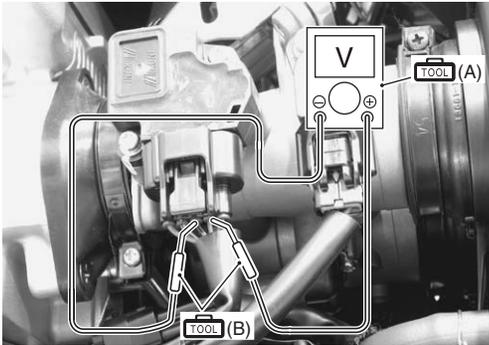
"A": ECM	"C": Cooling fan relay	"E": ISC valve	"G": Cooling fan	"I": PAIR control solenoid valve
"B": TO sensor	"D": STV actuator	"F": HO2 sensor	"H": Ignition coil	"J": IAP sensor (#1)



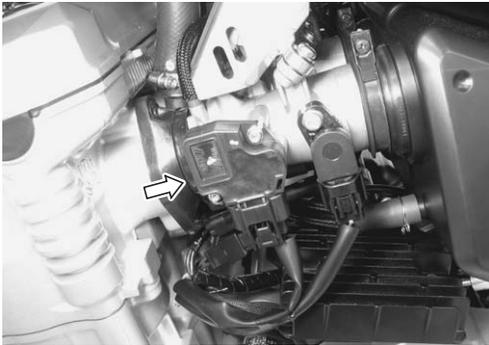
I717H1110004-01

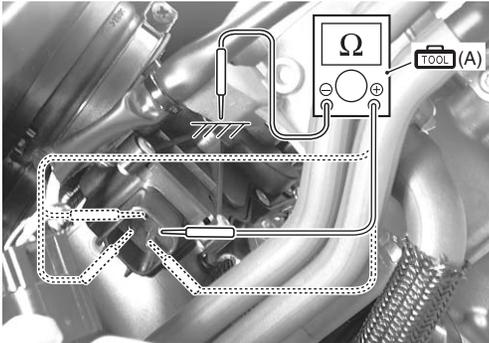
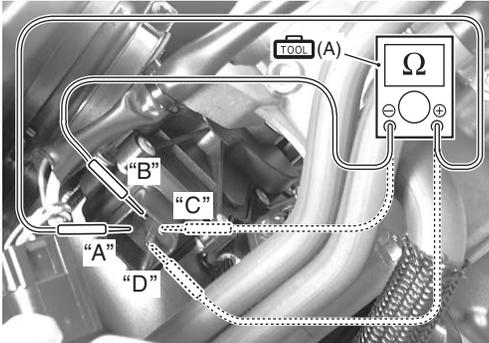
"A": ECM	"M": CKP sensor	"P": STP sensor	"S": Speed sensor
"K": Fuel pump relay	"N": ECT sensor	"Q": Fuel injector	"T": Speedometer
"L": GP switch	"O": IAP #2/TP/IAT sensor	"R": Fuel pump	

1A-61 Engine General Information and Diagnosis:

Step	Action	Yes	No
4	<p>1) Turn the ignition switch OFF.</p> <p>2) Connect the ECM coupler and IAP sensor coupler.</p> <p>3) Insert the needle pointed probes to the lead wire coupler.</p> <p>4) Starter the engine at idle speed and measure the IAP sensor output voltage at the wire side coupler between G/B wire and B/Br wire.</p> <p>Special tool  (A): 09900-25008 (Multi-circuit tester set)  (B): 09900-25009 (Needle pointed probe set)</p> <p>Tester knob indication Voltage (---)</p> <p>IAP sensor #2 output voltage 2.0 – 3.0 V at idle speed (+) terminal: G/BI – (-) terminal: B/Br</p>  <p style="text-align: right; font-size: small;">I718H1110173-03</p> <p><i>Is the voltage OK?</i></p>	<ul style="list-style-type: none"> • G/B, R or B/Br wire open or shorted to the ground, or poor 9, 11 or 29 connection. • If wire and connection are OK, intermittent trouble or faulty ECM. • Recheck each terminal and wire harness for open circuit and poor connection. • Replace the ECM with a known good one, and inspect it again. Refer to “ECM Removal and Installation in Section 1C (Page 1C-1)”. 	<ul style="list-style-type: none"> • Open or short circuit in the G/B wire. • If wire is OK, replace the IAP sensor with a new one. Refer to “IAP / TP / IAT Sensor Removal and Installation in Section 1C (Page 1C-2)”.

P1750 (Use of SDS)

Step	Action	Yes	No
1	<p>1) Check the IAP sensor is installed securely on the throttle body.</p>  <p style="text-align: right; font-size: small;">I717H1110018-01</p> <p><i>OK?</i></p>	Intermittent trouble.	<ul style="list-style-type: none"> • Retighten the IAP sensor. • Replace the IAP sensor. Refer to “Throttle Body Removal and Installation in Section 1D (Page 1D-10)”.

Step	Action	Yes	No
2	<p>1) Turn the ignition switch OFF.</p> <p>2) Move the throttle body right side. Refer to "Throttle Body Removal and Installation in Section 1D (Page 1D-10)".</p> <p>3) Disconnect the STVA lead wire coupler.</p> <p>4) Check the continuity between each terminal and ground.</p> <p>Special tool TOOL (A): 09900-25008 (Multi-circuit tester set)</p> <p>Tester knob indication Resistance (Ω)</p> <p>STVA continuity $\infty \Omega$ (Infinity) (Terminal – Ground)</p>  <p style="text-align: right; font-size: small;">I718H1110192-02</p> <p>5) If OK, then measure the STVA resistance (between the B wire "A" and P wire "B") and (between the G wire "C" and W/BI wire "D").</p> <p>STVA resistance Approx. 7.0 Ω (Terminal "A" – Ground "B", Terminal "C" – Ground "D")</p>  <p style="text-align: right; font-size: small;">I718H1110193-02</p> <p><i>Is the resistance OK?</i></p>	<ul style="list-style-type: none"> W/B, P/W, G and B/Lg wire open or shorted to the ground, or poor 1, 2, 18 and 19 connection. If wire and connection are OK, intermittent trouble or faulty ECM. Recheck each terminal and wire harness for open circuit and poor connection. Replace the ECM with a known good one, and inspect it again. Refer to "ECM Removal and Installation in Section 1C (Page 1C-1)". 	<ul style="list-style-type: none"> Loose or poor contacts on the ECM coupler. Replace the STVA with a new one. Refer to "STV Actuator Removal and Installation in Section 1C (Page 1C-5)".

Repair Instructions

Heated Oxygen Sensor (HO2S) Removal and Installation

B817H31206001

Removal

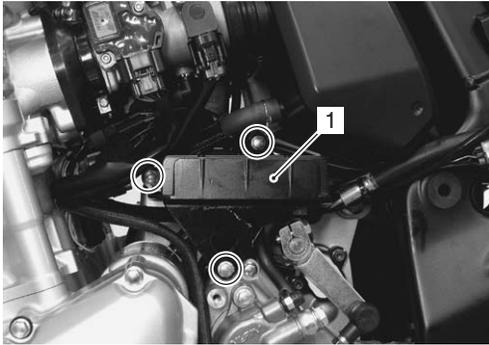
⚠ WARNING

Do not remove the HO2 sensor while it is hot.

⚠ CAUTION

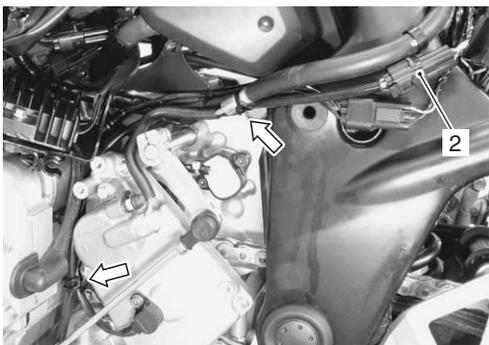
- Be careful not to expose the HO2 sensor to excessive shock.
- Do not use an impact wrench when removing or installing the HO2 sensor.
- Be careful not to twist or damage the sensor lead wires.

- 1) Remove the left frame cover. Refer to "Exterior Parts Removal and Installation in Section 9D (Page 9D-6)".
- 2) Remove the engine sprocket outer cover. Refer to "Engine Sprocket Removal and Installation in Section 3A (Page 3A-2)".
- 3) Move the regulator/rectifier assembly (1) by removing the regulator/rectifier bracket mounting bolts.



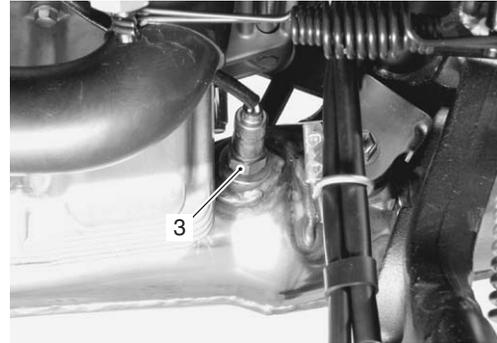
I718H1120018-01

- 4) Disconnect the HO2 sensor coupler (2).
- 5) Release the HO2 sensor lead wire from the clamps.



I717H1120002-01

- 6) Remove the HO2 sensor (3).



I717H1120003-01

Installation

Install the HO2 sensor in the reverse order of removal. Pay attention to the following points:

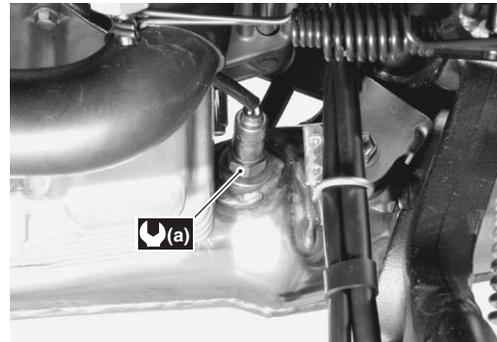
⚠ CAUTION

Do not apply oil or other materials to the sensor air hole.

- Tighten the HO2 sensor to the specified torque.

Tightening torque

HO2 sensor (a): 25 N·m (2.5 kgf-m, 18.0 lb-ft)



I717H1120004-01

- Route the HO2 sensor lead wire properly. Refer to "Wiring Harness Routing Diagram in Section 9A (Page 9A-5)".

Heated Oxygen Sensor (HO2S) Inspection

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Refer to "DTC "C44" (P0130/P0135): HO2 Sensor (HO2S) Circuit Malfunction in Section 1A (Page 1A-104)".