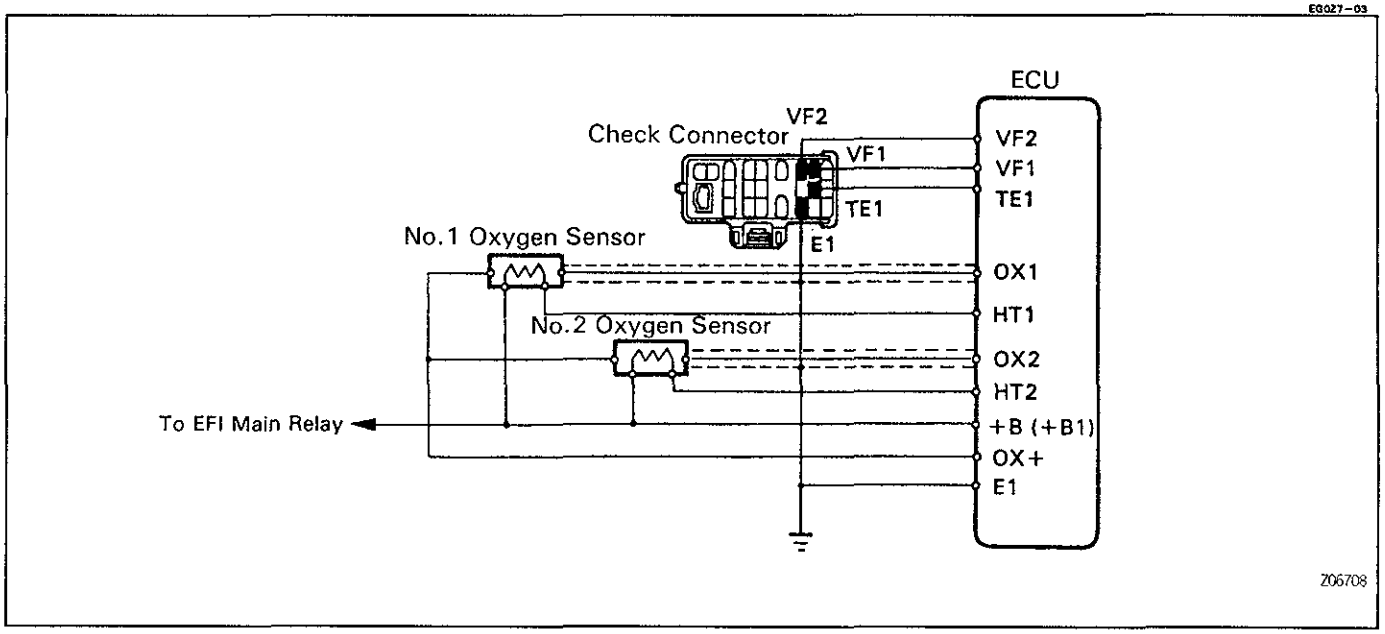
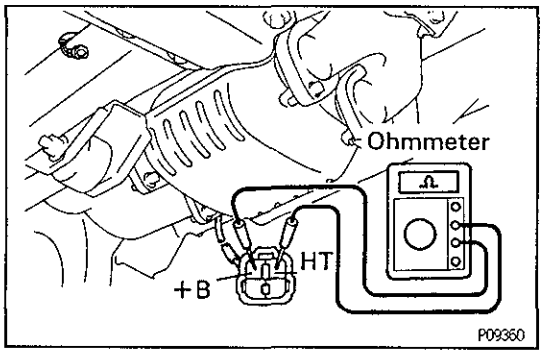
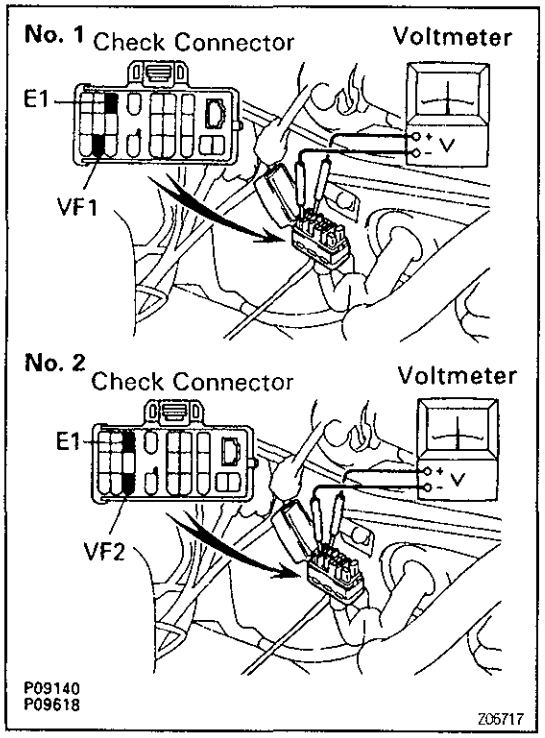
OXYGEN SENSOR







EG1SS-02

OXYGEN SENSORS INSPECTION

1. INSPECT HEATER RESISTANCE OF OXYGEN SENSOR

(a) Disconnect the oxygen sensor connector.

(b) Using an ohmmeter, measure the resistance between terminals +B and HT.

Resistance:

5.0 – 6.5 Ω at 20°C (68°F)

If resistance is not as specified, replace the oxygen sensor.

(c) Reconnect the heated oxygen sensor connector.

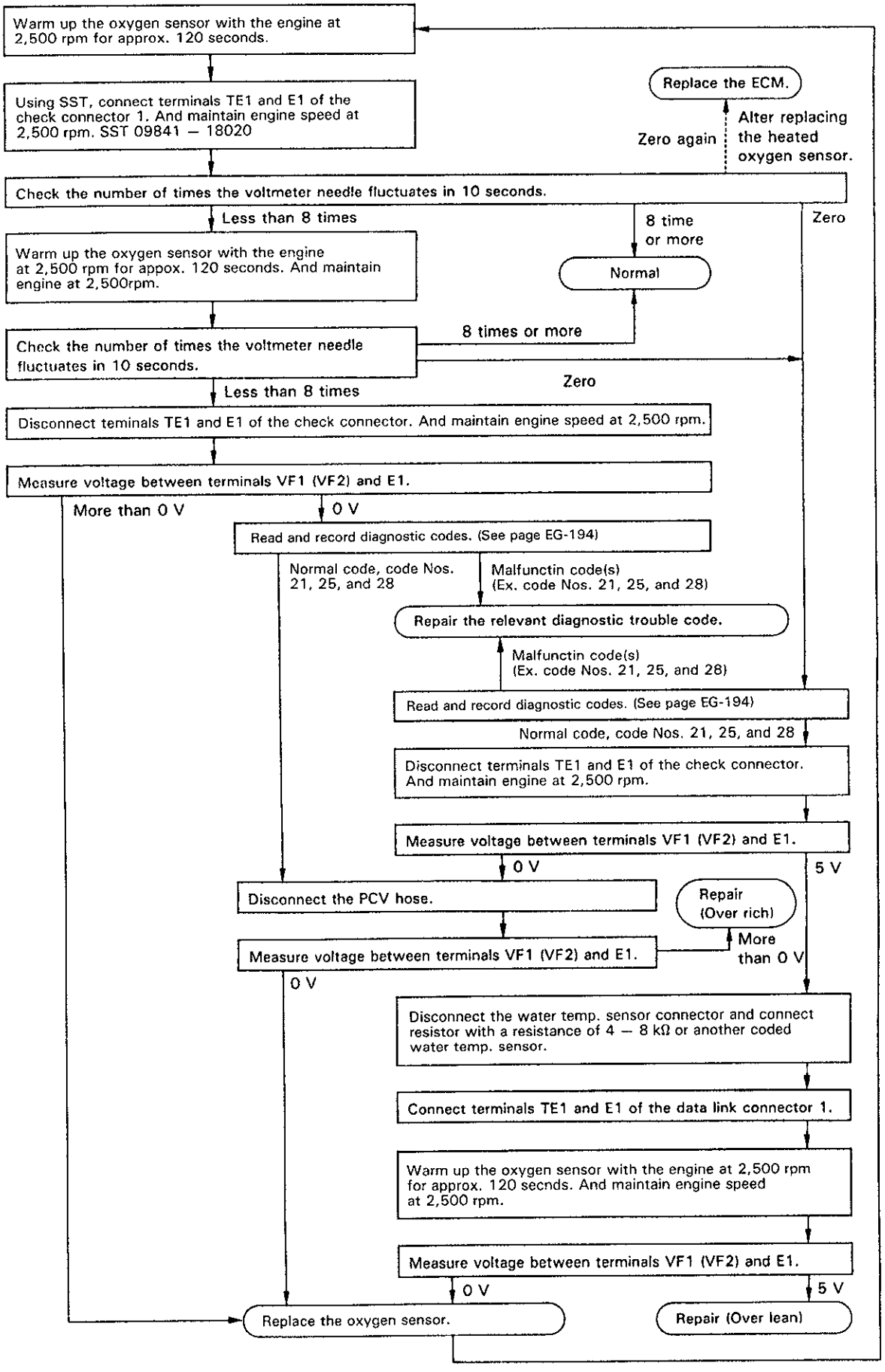
2. WARM UP ENGINE

Allow the engine to warm up to normal operating temperature.

3. INSPECT FEEDBACK VOLTAGE

Connect the positive (+) probe of a voltmeter to terminal VF1 or VF2 of the check connector, and negative (–) probe to terminal E1. Perform the test as follows:

EG


Warm up the oxygen sensor with the engine at 2,500 rpm for approx. 120 seconds.
Using SST, connect terminals TE1 and E1 of the check connector 1. And maintain engine speed at 2,500 rpm. SST 09841 — 18020
Replace the ECM.
Zero again
Alter replacing the heated oxygen sensor.
Check the number of times the voltmeter needle fluctuates in 10 seconds.
Less than 8 times
8 time or more
Zero
Normal
Warm up the oxygen sensor with the engine at 2,500 rpm for appox. 120 seconds. And maintain engine at 2,500rpm.
Check the number of times the voltmeter needle fluctuates in 10 seconds.
8 times or more
Zero
Less than 8 times
Disconnect teminals TE1 and E1 of the check connector. And maintain engine speed at 2,500 rpm.
Measure voltage between terminals VF1 (VF2) and E1.
More than 0 V
0 V
Read and record diagnostic codes. (See page EG-194)
Normal code, code Nos. 21, 25, and 28
Malfunctin code(s) (Ex. code Nos. 21, 25, and 28)
Repair the relevant diagnostic trouble code.
Malfunctin code(s) (Ex. code Nos. 21, 25, and 28)
Read and record diagnostic codes. (See page EG-194)
Normal code, code Nos. 21, 25, and 28
Disconnect terminals TE1 and E1 of the check connector. And maintain engine at 2,500 rpm.
Measure voltage between terminals VF1 (VF2) and E1.
0 V
5 V
Disconnect the PCV hose.
Repair (Over rich)
Measure voltage between terminals VF1 (VF2) and E1.
More than 0 V
0 V
Disconnect the water temp. sensor connector and connect resistor with a resistance of 4 — 8 kΩ or another coded water temp. sensor.
Connect terminals TE1 and E1 of the data link connector 1.
Warm up the oxygen sensor with the engine at 2,500 rpm for approx. 120 secnds. And maintain engine speed at 2,500 rpm.
Measure voltage between terminals VF1 (VF2) and E1.
0 V
5 V
Replace the oxygen sensor.
Repair (Over lean)

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