

Service Codes	Quick Test Mode
81—IAS circuit failure	O
81—Air management 2 circuit failure	O
82—Air management 1 circuit failure	O
82—Supercharger bypass circuit failure	O
83—High speed electro drive fan circuit failure	O
83—Low speed fuel pump circuit failure	O/C
84—EGR vacuum solenoid circuit failure	O
84—EGR vacuum regulator circuit failure	O/R
85—Canister purge circuit failure	O/R
85—Canister purge solenoid circuit failure	O
85—Adaptive fuel lean limit reached	C
86—3-4 shift solenoid circuit failure	O
86—Adaptive fuel rich limit reached	C
87—Fuel pump primary circuit failure	O/C
87—Fuel pump primary circuit failure	O/C/R
87—Fuel pump primary circuit failure	O
88—Electro drive fan circuit failure	O
89—Converter clutch override circuit failure	O
89—Lock-up solenoid circuit failure	O
91—HEGO sensor indicates system lean	R
91—No HEGO switching detected	C
92—HEGO sensor indicates system rich	R
93—TP sensor input low at maximum motor travel	O
94—Thermactor air system inoperative-left side	R
95—Fuel pump secondary circuit failure—ECA to ground	O/C
96—Fuel pump secondary circuit failure—Battery to ECA	O/C
96—High speed fuel pump circuit open	O/C
98—Hard fault present	R
99—EEC has not learned to control idle: ignore codes 12 & 13	R

No Codes: Cannot begin self-test or cannot transmit codes
 Codes Not Listed: Do not apply to vehicle being tested
 O—Key on, engine off test
 R—Key on, engine running test
 C—Continuous memory
 ⊕ Front HEGO
 ⊙ Right HEGO
 ⊖ Left HEGO
 ⊗ Rear HEGO

93144G06

EEC-IV trouble codes —(3 of 3)

Key On Engine Off (KOEO) Test

♦ See Figures 70 thru 76

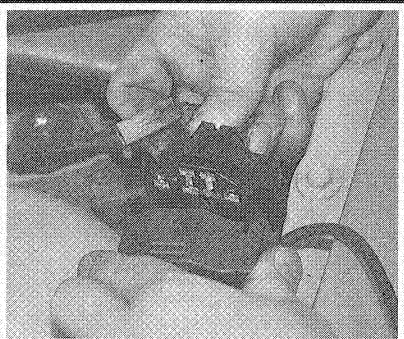
1. Connect the scan tool to the self-test connectors. Make certain the test button is unlatched or up.
2. Start the engine and run it until normal operating temperature is reached.
3. Turn the engine **OFF** for 10 seconds.
4. Activate the test button on the STAR tester.
5. Turn the ignition switch **ON** but do not start the engine.
6. The KOEO codes will be transmitted. Six to nine seconds after the last KOEO code, a single separator pulse will be transmitted. Six to nine seconds after this pulse, the codes from the Continuous Memory will be transmitted.
7. Record all service codes displayed. Do not depress the throttle on gasoline engines during the test.

Key On Engine Running (KOER) Test

♦ See Figures 66, 75, and 77

84924042

1. Make certain the self-test button is released or de-activated on the STAR tester.
2. Start the engine and run it at 2000 rpm for two minutes. This action warms up the oxygen sensor.
3. Turn the ignition switch **OFF** for 10 seconds.
4. Activate or latch the self-test button on the scan tool.
5. Start the engine. The engine identification



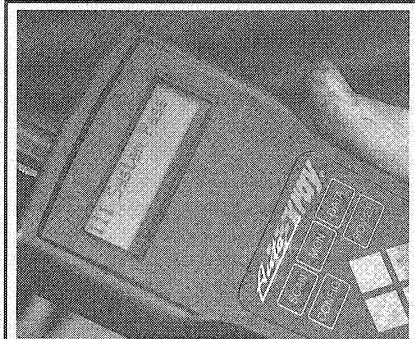
91054P04

Fig. 70 Connect the scan tool to the DLC connector



91054P05

Fig. 71 The scan tool menu will be displayed, follow the instructions included with the scan tool



91054P08

Fig. 72 This PCM had no DTC's stored and passed the KOEO



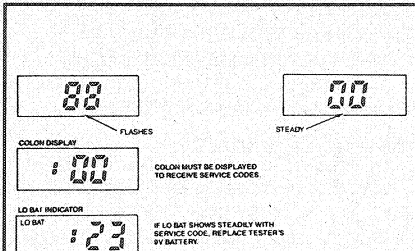
91054P06

Fig. 73 This PCM had a DTC 113 stored. Most scan tools will give a code definition on-screen as the Auto X-ray shown here informs what code 113 is for—the IAT sensor



91054P07

Fig. 74 If the A/C or Blower motor is left on, a code 539 will be tripped. Turn the A/C or blower motor off and retest



84924040

Fig. 75 STAR tester displays; note that the colon must be present before codes can be received