62 FLASH CODE 62 – OUTPUT FAULT

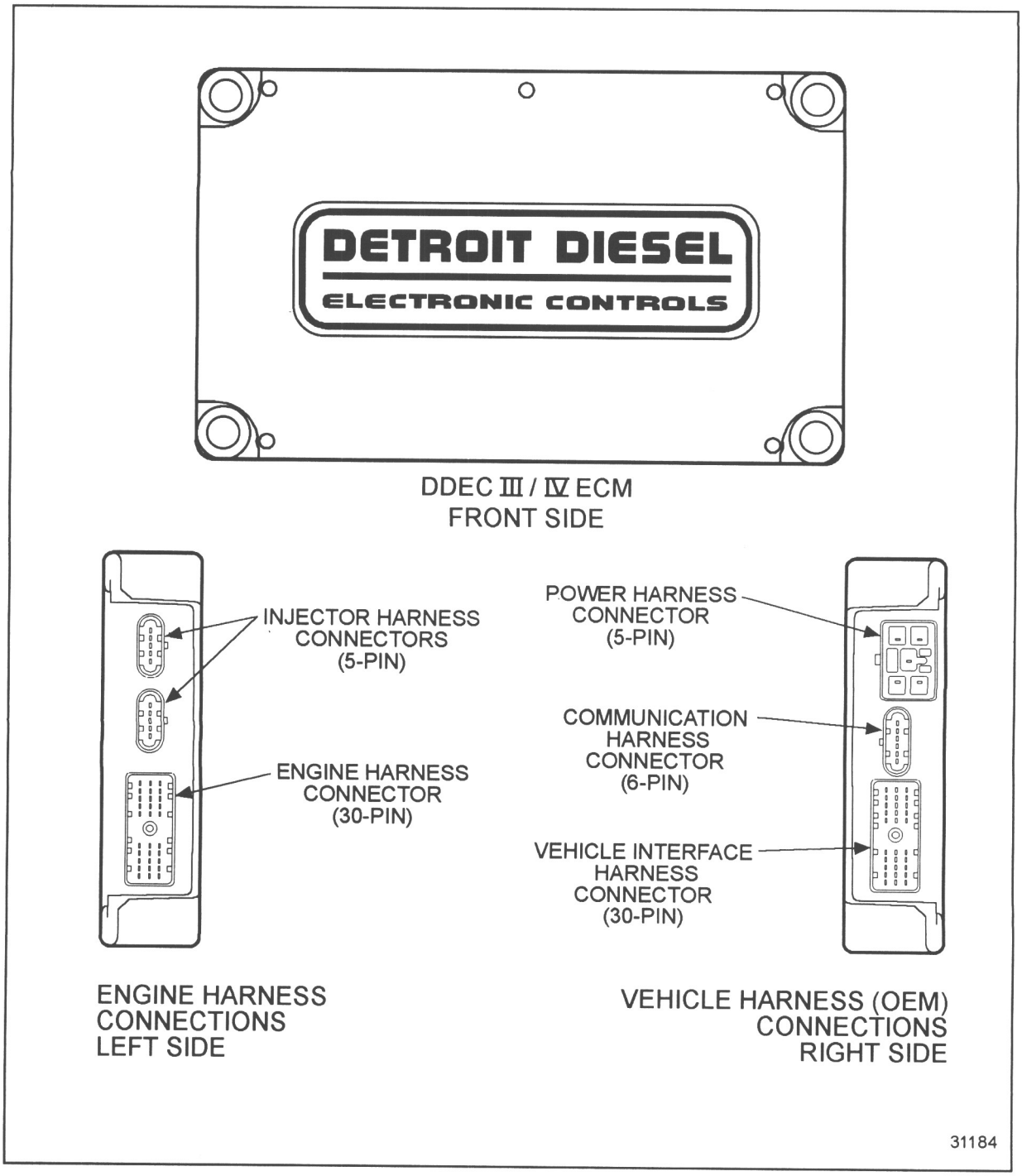

Figure 62–1 ECM

62.1 DESCRIPTION OF FLASH CODE 62

Flash Code 62 indicates that the function assigned to the Auxiliary Output #1, #2, #5, #6, #7 or #8 circuit output has an open circuit or short to battery (+). A short to battery (+) is detected when the DDEC ECM, see Figure 62-1, is unsuccessful in turning "ON" the configured function.

The DDEC III ECM supplies a switched ground to the AUXILIARY OUTPUT circuit to turn ON the function assigned.

Flash Code 62 may also indicate that the function assigned to the Auxiliary Output #1, #2, #5, #6, #7 or #8 circuit output is open, shorted to ground. This diagnostic condition is detected when the Auxiliary Output #"X" function is OFF and the DDEC III ECM measures a low voltage on the circuit output.

62.2 SAE J1587 EQUIVALENT CODE FOR FLASH CODE 62

The SAE J1587 equivalent codes for Flash Code 62 are listed in Table 62-1.

SAE J1587 Code	Output Number	Fault
s 026 3	Auxiliary output #1	Short to battery
s 026 4	Auxiliary output #1	Open circuit
s 040 3	Auxiliary output #2	Short to battery
s 040 4	Auxiliary output #2	Open circuit
s 053 3	Auxiliary output #5	Short to battery
s 053 4	Auxiliary output #5	Open circuit
s 054 3	Auxiliary output #6	Short to battery
s 054 4	Auxiliary output #6	Open circuit
s 055 3	Auxiliary output #7	Short to battery
s 055 4	Auxiliary output #7	Open circuit
s 056 3	Auxiliary output #8	Short to battery
s 056 4	Auxiliary output #8	Open circuit

Table 62-1 Auxiliary Output Open or Short to Battery

62.3 TROUBLESHOOTING FLASH CODE 62

The following procedure will troubleshoot Flash Code 62.

62.3.1 Code Check

Perform the following steps to check for codes.

1. Turn vehicle ignition ON.
2. Plug in the diagnostic data reader (DDR).
3. Record codes logged.
4. Clear codes.
5. Start and run the engine for one minute.
   [a] If the code becomes active, refer to section 62.3.3.
   [b] If the code does not become active, refer to section 62.3.2.

62.3.2 Intermittent Code Check

Perform the following steps to check intermittent codes.

1. Perform road test.
   [a] If the code returns, refer to section 62.3.3.
   [b] If the code does not return, return the vehicle to service, or refer to section 10.1.1.

62.3.3 Auxiliary Output Cavity Determination

Perform the following steps to determine which auxiliary output cavity is associated with the logged codes.

1. Determine which auxiliary output cavity is associated with the code or codes being logged. The SAE code descriptions of the flash codes and the DDC wire numbers are listed in Table 62–2. Continue troubleshooting. Refer to section 62.3.4.

SAE Code Description – Flash Code	DDC Wire Number	Cavity
Auxiliary Output #1 (026 3 or 026 4) 62	499	F_3 (VIH)*
Auxiliary Output #2 (040 3 or 040 4) 62	555	A_2 (VIH)
Auxiliary Output #5 (053 3 or 053 4) 62	563	W_3 (ESH)†
Auxiliary Output #6 (054 3 or 053 4) 62	564	X_3 (ESH)
Auxiliary Output #7 (055 3 or 055 4) 62	565	Y_3 (ESH)
Auxiliary Output #8 (056 3 or 056 4) 62	988	A_1 (VIH)

* Vehicle Interface Harness

† Engine Sensor Harness

Table 62–2 Auxiliary Output Cavities

62.3.4 Electrical Check

Perform the following steps to check connectors, dash light or vehicle power-down relay, or item being driven.

1. Check the connectors of the output wire associated with the code logged at the vehicle harness connector or engine sensor harness connector.
2. Check the connectors of the output wire associated with the code logged at the item being driven.
   [a] If the connectors are not good, repair or replace the terminals. Refer to section 62.3.6.
   [b] If the connectors are good and the items being driven (e.g. relay, light) are not in good condition, repair or replace the device. (Contact OEM for test procedure.) Refer to section 62.3.6.
   [c] If the connectors are good and the items being driven (e.g. relay, light, are in good condition, refer to section 62.3.5.

62.3.5 Measure Resistance

Perform the following steps to measure the resistance.

1. Turn ignition OFF.
2. Connect the engine sensor harness or vehicle interface harness (connector with output fault).
3. Disconnect the output wire associated with the code logged at the component.
4. Measure the resistance between the removed connector and the ECM case.
   [a] If the reading is 47,000 Ω (± 3,000 Ω,), contact Detroit Diesel Technical Service.
   [b] If the reading is less than 44,000 Ω or greater than 50,000 Ω, this wire is shorted to the battery or open. Repair or replace this wire. Refer to section 62.3.6.

62.3.6 Verify Repairs

Perform the following steps to verify repairs.

1. Reconnect all connectors.
2. Plug DDR into the connector.
3. Clear all codes.
4. Start and run the engine.
   [a] If the output code returns, refer to section 62.3.1.
   [b] If the output code does not return, troubleshooting is complete.