DTC	86 (1)	INJECTOR CIRCUIT MALFUNCTION (CYLINDER 1)

DTC	86 (2)	INJECTOR CIRCUIT MALFUNCTION (CYLINDER 2)

DTC	86 (3)	INJECTOR CIRCUIT MALFUNCTION (CYLINDER 3)

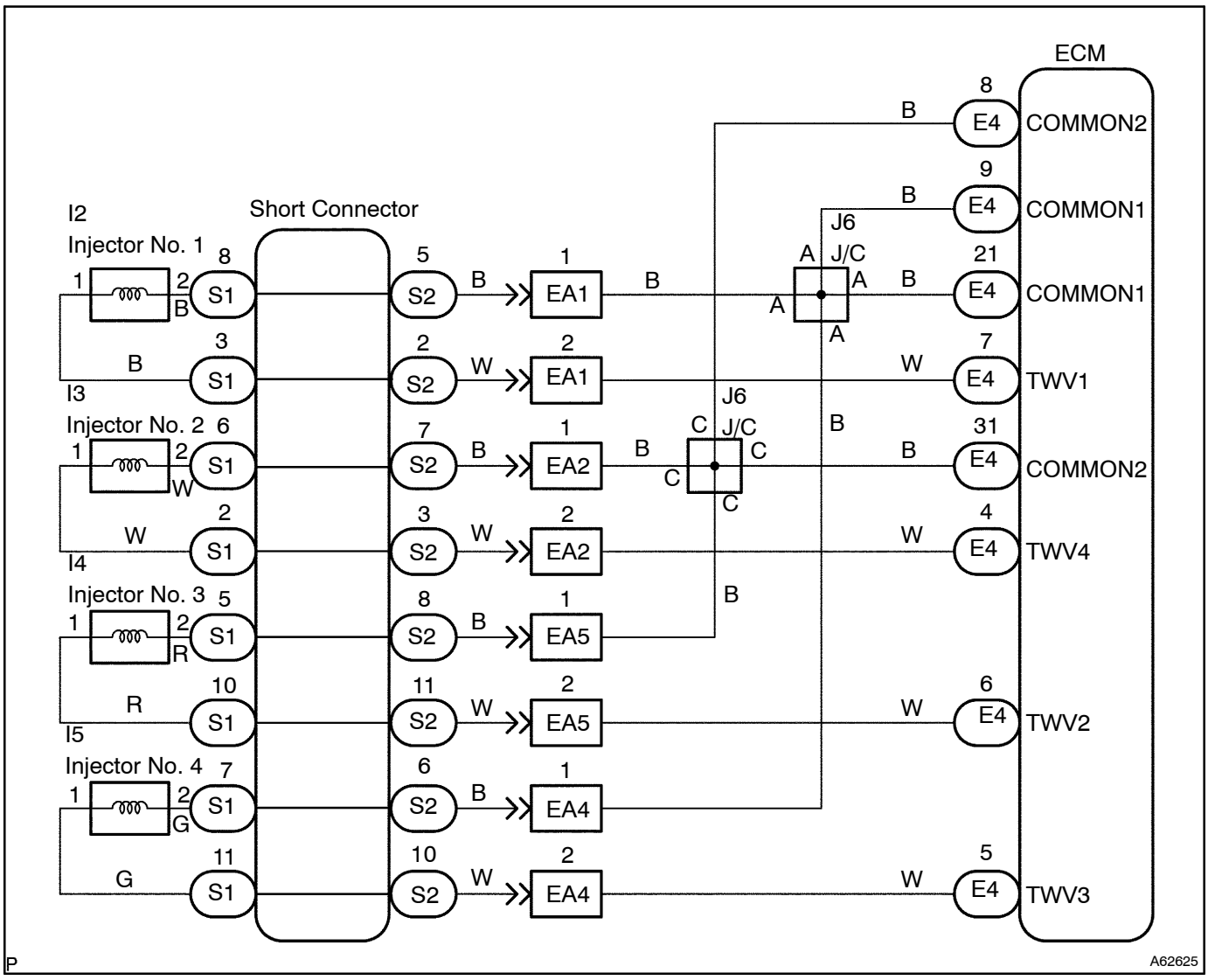
DTC	86 (4)	INJECTOR CIRCUIT MALFUNCTION (CYLINDER 4)

CIRCUIT DESCRIPTION

When the ECM transmits a signal to the injectors, fuel is injected.

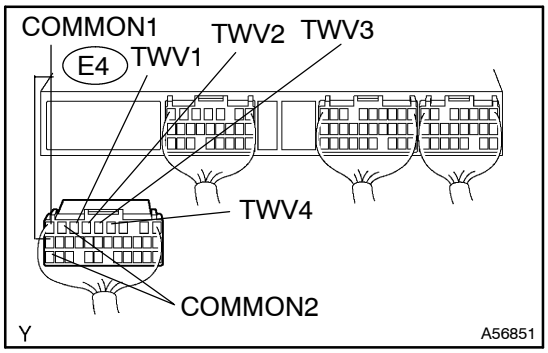
DTC No.	DTC Detection Condition	Trouble Area
86 (1)	Open in No. 1 injector wire harness	• Open or short in injector circuit • Injector • Wire harness • ECM
86 (2)	Open in No. 2 injector wire harness	
86 (3)	Open in No. 3 injector wire harness	
86 (4)	Open in No. 4 injector wire harness	

WIRING DIAGRAM



INSPECTION PROCEDURE

1 CHECK WIRE HARNESS



(a) Turn the ignition switch to LOCK.
(b) Disconnect the E4 ECM connector.
(c) Check the resistance of the terminals of the ECM connector.

Standard:

Symbols (Terminal No.)	Specified Condition
TWV1 (E4–7) ⇔ COMMON1 (E4–9, E4–21)	2.7 ± 0.1 Ω
TWV2 (E4–6) ⇔ COMMON2 (E4–8, E4–31)	
TWV3 (E4–5) ⇔ COMMON1 (E4–9, E4–21)	
TWV4 (E4–4) ⇔ COMMON2 (E4–8, E4–31)	

NG → **REPAIR OR REPLACE WIRE HARNESS AND CONNECTORS**

OK

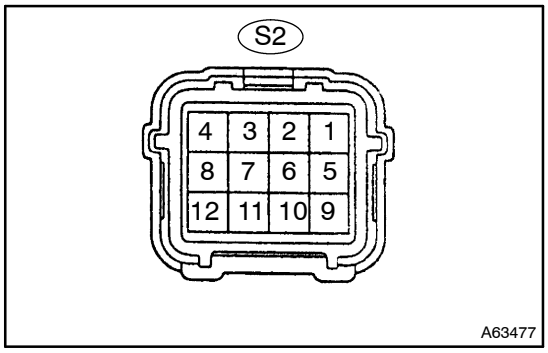
2 CHECK DTC (CHECK SAME DTC IS OUTPUT AGAIN?)

(a) Reconnect the ECM connector E3.
(b) Start the engine.
(c) Check for the DTC.

YES → **REPLACE ECM**

NO

3 CHECK CONTINUITY WIRE HARNESS



(a) Disconnect the short connector.
(b) Check the resistance of the terminals.
(c) At the male side of the short connector, measure the resistance between the terminals.

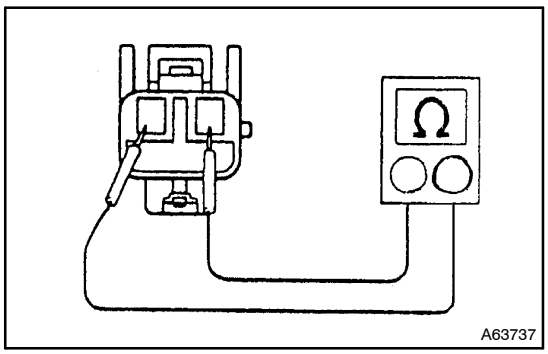
Resistance:

Terminal No.	Specified Condition
S2–2 ⇔ S2–5	2.7 ± 0.1 Ω
S2–3 ⇔ S2–7	
S2–8 ⇔ S2–11	
S2–6 ⇔ S2–10	

NG → **REPAIR OR REPLACE WIRE HARNESS AND CONNECTOR**

OK

4	CHECK WIRE HARNESS

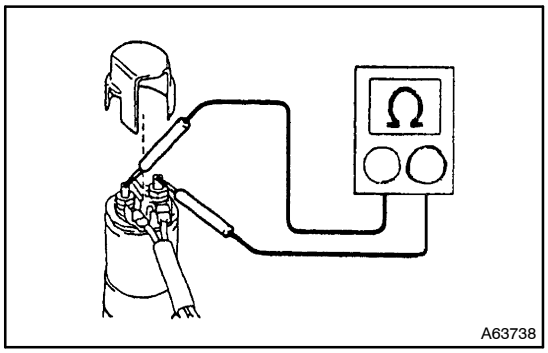


(a) Remove the injector connector of the cylinder shown by the DTC.
(b) Check the resistance of the injector wire harness.
Standard: 2.7 ±0.1 Ω at 20°C (68°F)

NG → **REPAIR OR REPLACE WIRE HARNESS AND CONNECTOR**

OK

5	CHECK INJECTOR ASSY



(a) Measure the resistance between the injector terminals of the cylinder shown by the DTC.
Standard: 2.7 ±0.1 Ω at 20°C (68°F)

NG → **REPLACE INJECTOR ASSY**

OK

CHECK AND REPLACE ECM