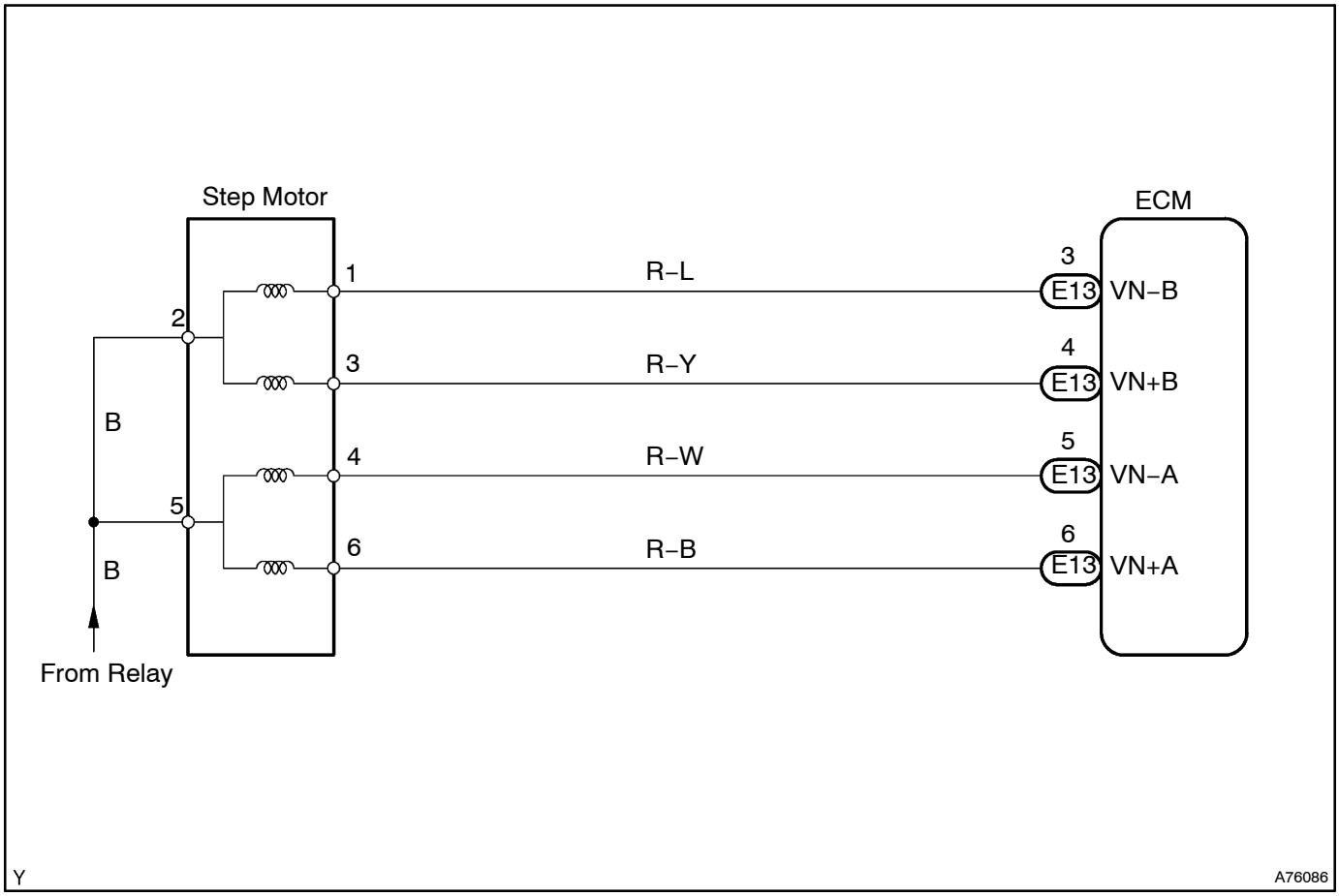
DTC	34(1)	STEP MOTOR FOR TURBOCHARGER CONTROL CIRCUIT MALFUNCTION (OPEN/SHORT)

CIRCUIT DESCRIPTION

DTC No.	DTC Detecting Condition	Trouble Area
34 (1)	When temporary error* is detected and, while the step motor control is kept, 31 errors are detected within 0.5 sec.	• Step motor • Wire harness • ECM

*: When an error is detected from comparison between the current condition of the step motor and the monitor signal.

WIRING DIAGRAM



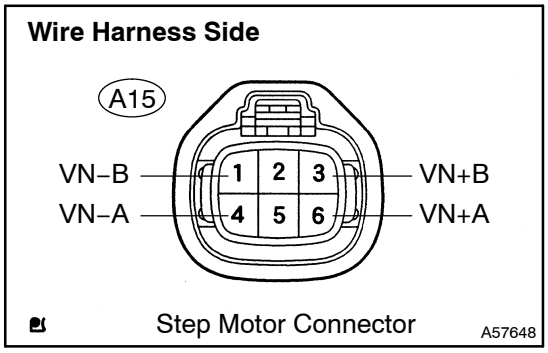
INSPECTION PROCEDURE

1	INSPECT TURBOCHARGER SUB–ASSY(STEP MOTOR) (See page 13–13)

NG → REPLACE TURBOCHARGER SUB–ASSY

OK

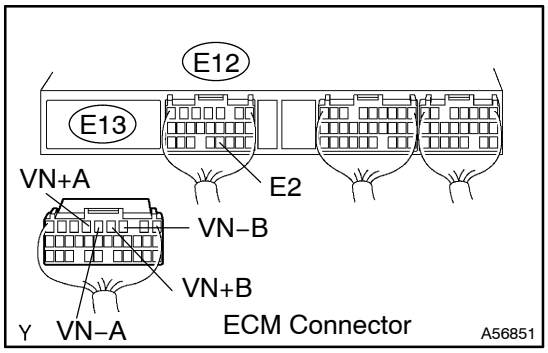
2	CHECK HARNESS AND CONNECTOR(STEP MOTOR – ECM)



(a) Disconnect the step motor connector.
(b) Disconnect the ECM E12 and E13 connector.
(c) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
VN–B (A15 – 1) ⇔ VN–B (E13 – 3)	Continuity
VN+B (A15 – 3) ⇔ VN+B (E13 – 4)	
VN–A (A15 – 4) ⇔ VN–A (E13 – 5)	
VN+A (A15 – 6) ⇔ VN+A (E13 – 6)	



Standard (Check for short):

Symbols (Terminal No.)	Specified condition
VN–B (E13 – 3) ⇔ VN+B (E13 – 4)	No continuity
VN–A (E13 – 5) ⇔ VN+A (E13 – 6)	
VN–B (E13 – 3) ⇔ E2 (E12 – 20)	
VN+B (E13 – 4) ⇔ E2 (E12 – 20)	
VN–A (E13 – 5) ⇔ E2 (E12 – 20)	
VN+A (E13 – 6) ⇔ E2 (E12 – 20)	

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

CHECK AND REPLACE ECM