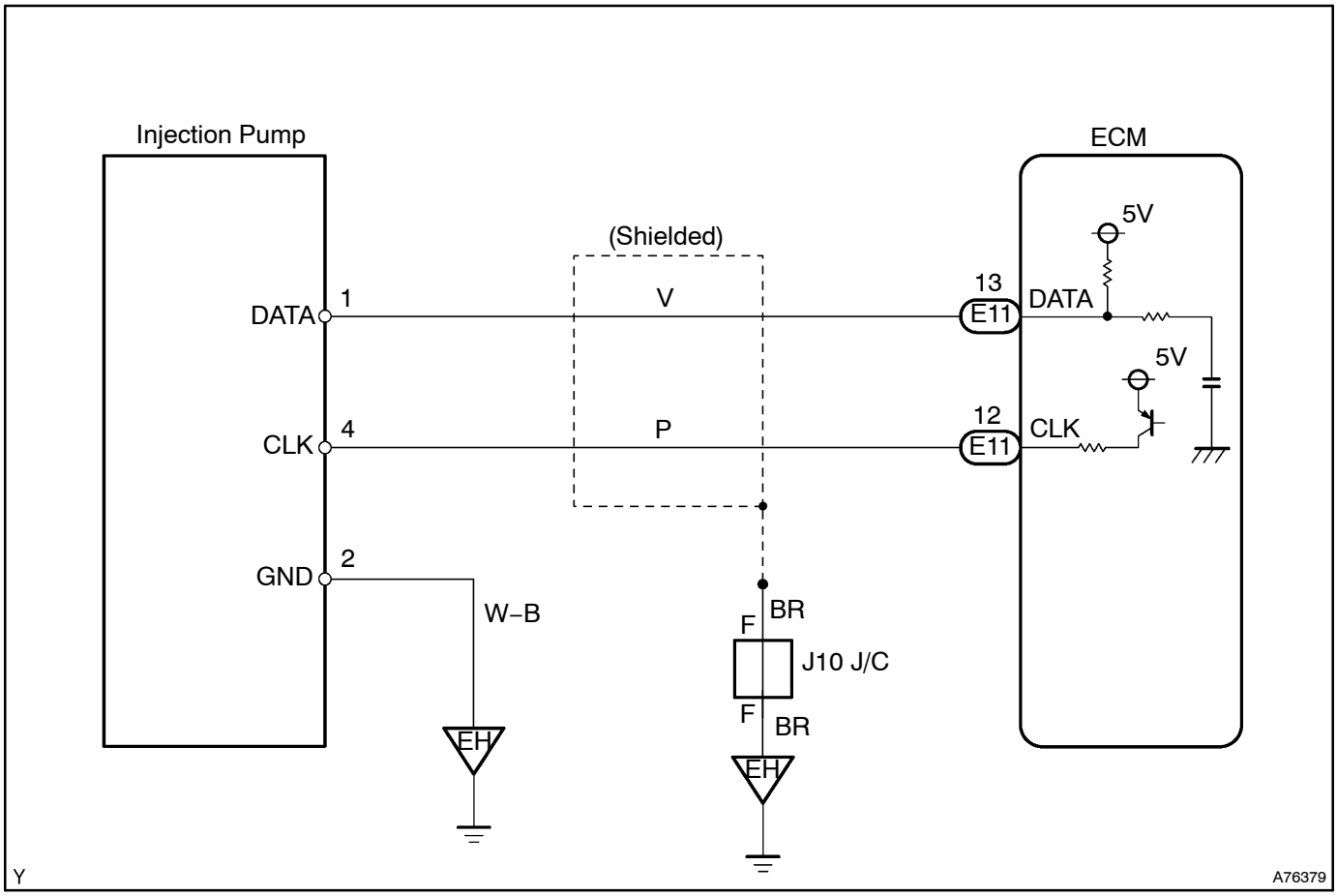
DTC 32 INJECTION PUMP SYSTEM MALFUNCTION

CIRCUIT DESCRIPTION

The correction system is correcting a few vary between each injectors pumps.

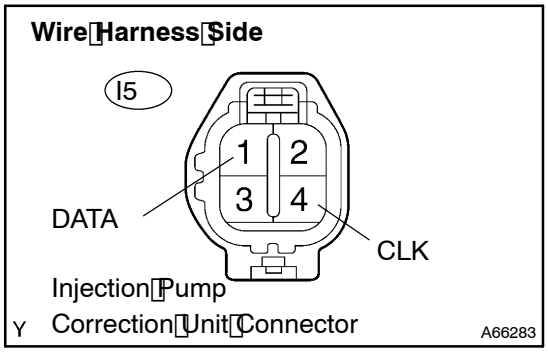
DTC No.	DTC Detection Condition	Trouble Area
32	When the ignition was turned on, or when ECM determines whether it is an error of RAM in ECM or not, ECM conducts a single communication. And if any one of the following status is occurred in the communication, ECM conducts one more communication. While ECM is conducting the communication, if (a) is duplicated 20 times continuously, or if (b) is duplicated 20 times continuously, or if (c) is duplicated 2 times continuously, ECM detects the DTC code 32. (a) There was a communication error when receiving data. (b) Both BCC data, one which is obtained by receiving and another one which is calculated by receiving, do not be matched one another. (c) Receiving data from the pump ROM do not be input in the period of 1024ms.. Although the determining process is completed without a problem, ECM conducts the communication again if an undefined code is found while checking an identification code of the receiving data. If the undefined code was duplicated 20 times in a row, so that ECM detects the DTC code.	• Open or short injection pump correction unit circuit • Injection pump correction unit • ECM

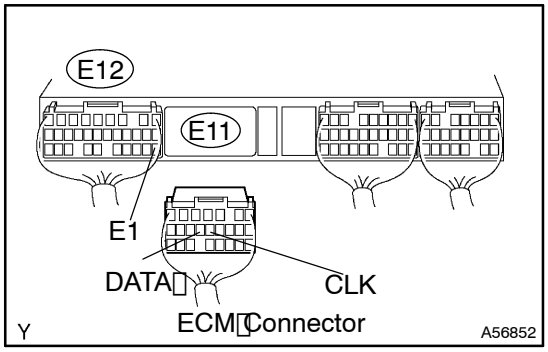
WIRING DIAGRAM



INSPECTION PROCEDURE

1	CHECK HARNESS AND CONNECTOR (ECM – INJECTION PUMP CORRECTION UNIT)





(a) Disconnect the injection pump correction unit connector.
(b) Disconnect the ECM E11 connector.
(c) Check the continuity between the wire harness side connector.

Standard (Check for open):

Symbols (Terminal No.)	Specified condition
DATA (I5 – 1) ⇔ DATA (E11 – 13)	Continuity
CLK (I5 – 4) ⇔ CLK (E11 – 12)	

Standard (Check for short):

Symbols (Terminal No.)	Specified condition
DATA (E11 – 13) ⇔ E1 (E12 – 22)	No continuity
CLK (E11 – 12) ⇔ E1 (E12 – 22)	

NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

2	REPLACE INJECTION OR SUPPLY PUMP ASSY (See page 11–81)

GO

3	READ OUTPUT DTC (DTC 32 IS OUTPUT AGAIN)

(a) Clear the DTC (See page 05–303).
(b) Turn the ignition switch ON.
(c) Check the DTC (See page 05–303).

Result:

Display (DTC output)	Proceed to
DTC 32 is output again	A
No DTC output	B

B → SYSTEM OK

A

CHECK AND REPLACE ECM