





## INSPECTION PROCEDURE

## 1 READ VALUE ON INTELLIGENT TESTER

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch to the ON position and push the intelligent tester main switch on.
- (c) Select the item below in the DATA LIST, and read the displays on the intelligent tester.

## DATA LIST ENGINE AND ECT ALL:

Item	Measurement Item/Display (Range)	Normal Condition	Diagnostic Note
A/C signal (A/C Sig)	A/C signal/ON or OFF	A/C ON: ON	-

OK:

The display is as specified in the normal condition.

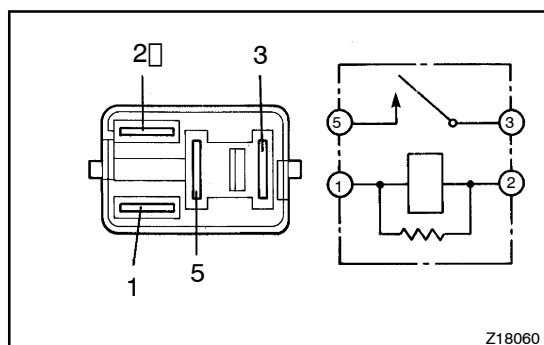
NG

Go to step 2

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE  
(SEE PAGE 05-862)

## 2 INSPECT A/C COMP RELAY (MAGNET CLUTCH RELAY)



Z18060

- (a) Remove the A/C COMP relay (Magnet clutch relay) from the engine room No.1 R/B.
- (b) Measure the resistance according to the value(s) in the table below.

## Standard:

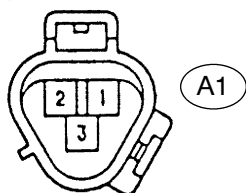
Tester connection	Condition	Specified condition
3 - 5	Always	10 kΩ or higher
3 - 5	When battery voltage applied to terminals 1 and 2	Below 1 Ω (When battery voltage applied to terminals 1 and 2)

NG

REPLACE RELAY

OK

## 3 INSPECT MAGNET CLUTCH ASSY

Magnet Clutch Assy Connector  
Front View:

le-3-2

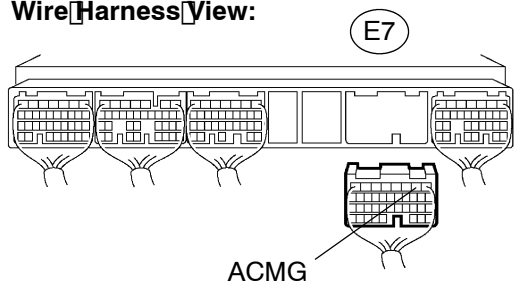
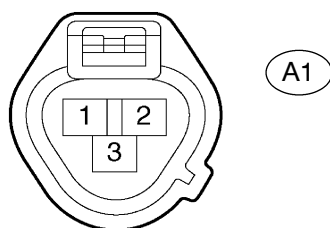
E05280

- (a) Disconnect the connector from the magnet clutch assy.
- (b) Connect the positive (+) lead from the battery to terminal 3 and negative (-) lead to body ground, then check that the magnet clutch assy is engaged.

NG

REPLACE MAGNET CLUTCH ASSY

OK

**4 CONFIRM ENGINE TYPE****Result:****A:** 1 AZ-FE**B:** 1 CD-FTV**NG****Go to step 9****A****5 CHECK HARNESS AND CONNECTOR (ECM - MAGNET CLUTCH ASSY)**  
(SEE PAGE 01-32)**ECM Connector  
Wire Harness View:****Magnet Clutch Assy Connector Wire  
Harness View:**

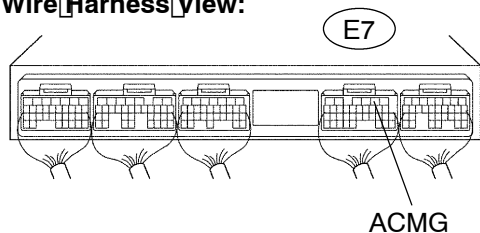
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I36498

- Remove the ECM and disconnect the connector.
- Turn the ignition switch to the ON position.
- Measure the voltage according to the value(s) in the table below.

**Standard:**

Tester connection	Condition	Specified condition
A1-3 - Body ground	Ignition switch to ON position. When terminal E7-2 (ACMG) is connected to body ground with service wire	10 to 14 V
A1-3 - Body ground	Ignition switch to ON position. When terminal E7-2 (ACMG) is not connected to body ground with service wire	Below 1 V

**NG****REPAIR OR REPLACE HARNESS AND CONNECTOR****OK****6 INSPECT ECM****ECM Connector  
Wire Harness View:**

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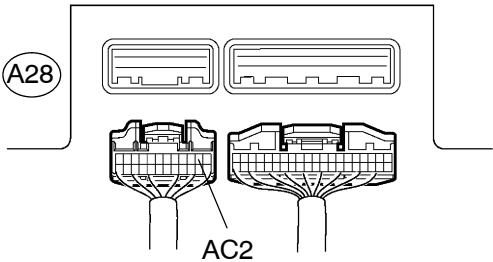
- Connect the connector to the ECM.
- Measure the voltage according to the value(s) in the table below.

Tester connection	Condition	Specified condition
E7-2 (ACMG) - Body ground	Magnet clutch ON	Below 1 V
E7-2 (ACMG) - Body ground	Magnet clutch OFF	10 to 14 V

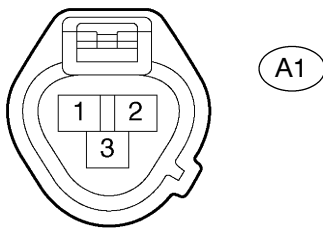
**NG****REPAIR OR REPLACE HARNESS AND CONNECTOR****OK**

7 CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - MAGNET CLUTCH ASSY) (SEE PAGE 01-32)

Air Conditioning Amplifier Connector  
Wire Harness View:



Magnet Clutch Assy Connector Wire  
Harness View:



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- (a) Remove the A/C amplifier and disconnect the connector.
- (b) Disconnect the magnet clutch connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A28-2 (AC2) - A1-3	Always	Below 1 $\Omega$
A28-2 (AC2) - Body ground	Always	10 k $\Omega$ or higher

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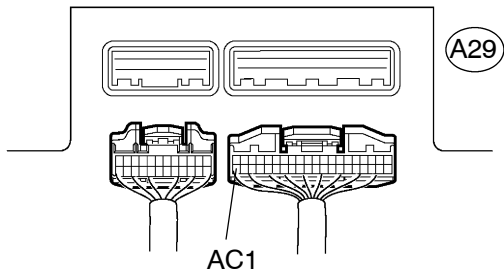
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

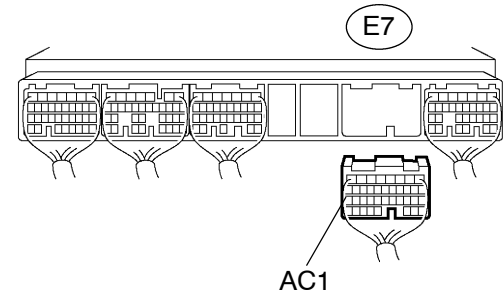
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CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER – ECM)  
(SEE PAGE 01-32)

Air Conditioning Amplifier Connector  
Wire Harness View:



ECM Connector Wire Harness View:



C 136500

- (a) Disconnect the connectors from the A/C amplifier and ECM.
- (b) Turn the ignition switch to the ON position.
- (c) Measure the resistance according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A29-40 (AC1) – E7-30 (AC1)	Always	Below 1 Ω
A29-40 (AC1) – Body ground	Always	10 kΩ or higher

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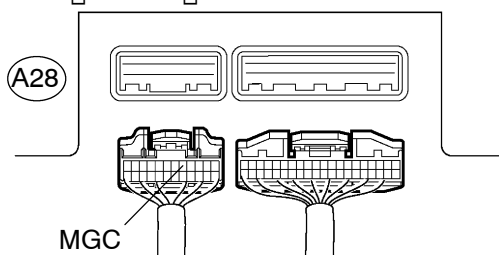
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

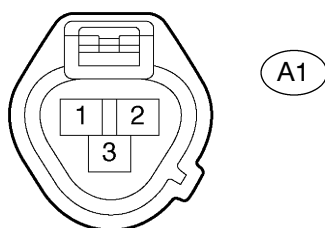
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE  
(SEE PAGE 05-862)

## 9 CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - MAGNET CLUTCH ASSY) (SEE PAGE 01-32)

### Air Conditioning Amplifier Connector Wire Harness View:



### Magnet Clutch Assy Connector Wire Harness View:



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- Remove the A/C amplifier and disconnect the connector.
- Turn the ignition switch to the ON position.
- Measure the voltage according to the value(s) in the table below.

#### Standard:

Tester connection	Condition	Specified condition
A1-3 - Body ground	Ignition switch to ON position. When terminal A28-5 (MGC) is connected to body ground with service wire	10 to 14 V
A1-3 - Body ground	Ignition switch to ON position. When terminal A28-5 (MGC) is not connected to body ground with service wire	Below 1 V

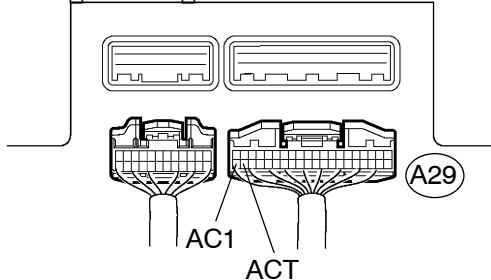
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**REPAIR OR REPLACE HARNESS AND CONNECTOR**

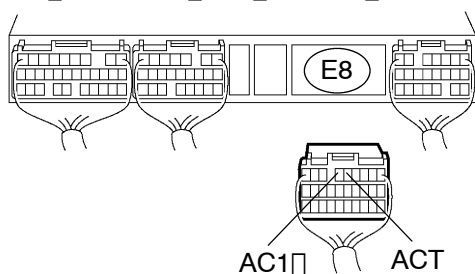
OK

## 10 CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER - ECM) (SEE PAGE 01-32)

### Air Conditioning Amplifier Connector Wire Harness View:



### ECM Connector Wire Harness View:



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- Disconnect the connectors from the A/C amplifier and ECM.
- Measure the resistance according to the value(s) in the table below.

#### Standard:

Tester connection	Condition	Specified condition
A29-40 (AC1) - E8-6 (AC1)	Always	Below 1 $\Omega$
A29-40 (AC1) - Body ground	Always	10 k $\Omega$ or higher
A29-39 (ACT) - E8-5 (ACT)	Always	Below 1 $\Omega$
A29-39 (ACT) - Body ground	Always	10 k $\Omega$ or higher

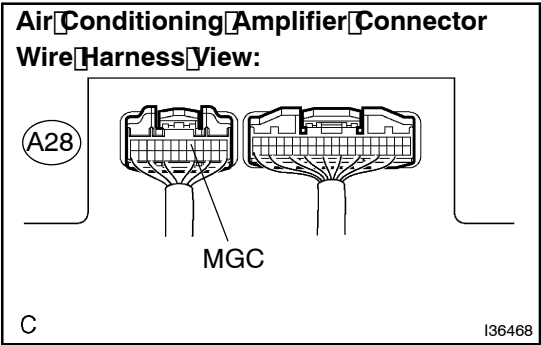
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**REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

11

INSPECT AIR CONDITIONING AMPLIFIER



- (a) Connect the connector to the A/C amplifier.
- (b) Measure the voltage according to the value(s) in the table below.

Standard:

Tester connection	Condition	Specified condition
A28-5(MGC) - Body ground	Ignition switch: ON Magnet clutch: ON	Below 1 V
A28-5(MGC) - Body ground	Ignition switch: ON Magnet clutch: OFF	10 to 14 V

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REPLACE AIR CONDITIONING AMPLIFIER  
(SEE PUB. NO. RM864E ON PAGE 55-96)

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE  
(SEE PAGE 05-862)