SERVICE TRAINING AND PUBLICATION BULLETIN

No.: OB- 9706
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Date : 2019/10/24

TRAINING	
PUBLICATION	■
INFORMATION	
ADVANCE ORDER	
OTHERS	

APPLICABLE COUNTRIES:

	ALL COUNTRIES		N. AMERICA	■	GENERAL COUNTRIES, EUROPE
	Other				

To: Service Manager

CORRECTION TO
- [x] REPAIR MANUAL
- [ ] ELECTRICAL WIRING DIAGRAM
- [ ] NEW CAR FEATURES
- [ ] BODY REPAIR MANUAL
- [ ] SERVICE DATA SHEET

The following manual has revised service information:

Pub. No.: **RM01N3E** Pub. Name: **TOYOTA RAV4 Repair Manual**

Section	Title	Paragraph
AIR CONDITIONING	AIR CONDITIONING SYSTEM (for Automatic Air Conditioning System)	B1422/22
	AIR CONDITIONING SYSTEM (for Manual Air Conditioning System)	
	COMPRESSOR AND MAGNETIC CLUTCH (for 2GR-FE)	INSPECTION

The revised pages listed above are attached.
(The corrected parts are indicated by arrows.)

Please attach the accompanying revised pages to the applicable pages in the manual above.

This Bulletin does not cause the Flat Rate Manual to be changed.

This bulletin is also available on the OASIS Global Service Information Center.
Inquiries : BM_correction_information@mta.mx.toyota.co.jp

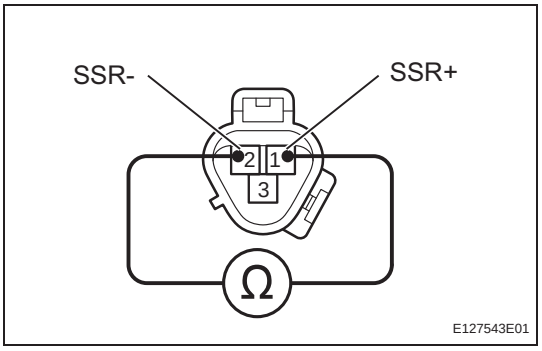
KEEP IN BINDER TOGETHER WITH SERVICE PUBLICATIONS GUIDE

TOYOTA QUALITY SERVICE

TOYOTA MOTOR CORPORATION
VEHICLE ENGINEERING DEPARTMENT
TECHNICAL SERVICE DIVISION
CUSTOMER FIRST PROMOTION GROUP

AC

2 INSPECT COMPRESSOR LOCK SENSOR



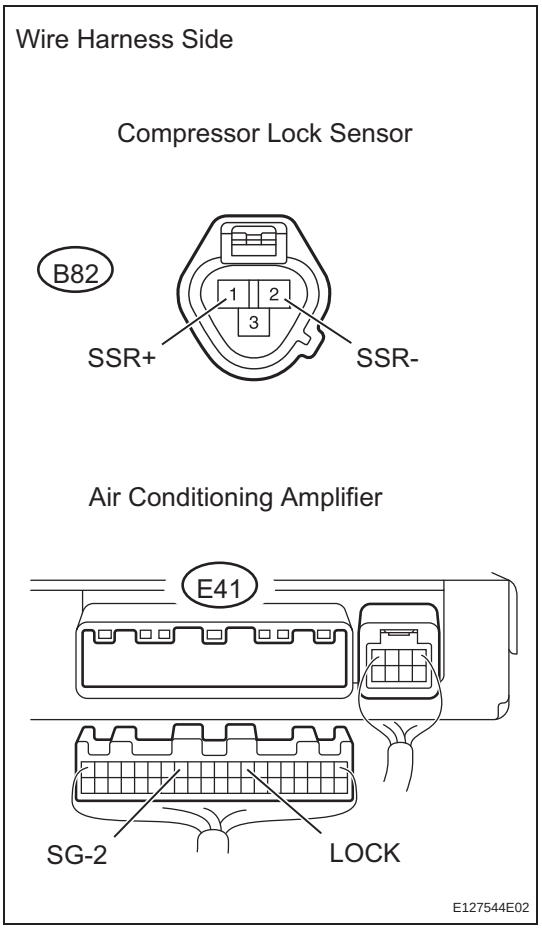
(a) Disconnect the B82 compressor lock sensor connector.
(b) Measure the resistance of the sensor.
[Corrected]
Standard resistance

Tester Connection	Condition	Specified Condition
1 (SSR+) - 2 (SSR-)	20°C (68°F)	160 to 320 Ω

NG → **REPLACE COMPRESSOR LOCK SENSOR**

OK

3 CHECK WIRE HARNESS (COMPRESSOR LOCK SENSOR - AIR CONDITIONING AMPLIFIER)



(a) Disconnect the B82 compressor lock sensor connector.
(b) Disconnect the E41 amplifier connector.
(c) Measure the resistance of the wire harness side connectors.
Standard resistance

Tester Connection	Specified Condition
B82-1 (SSR+) - E41-8 (LOCK)	Below 1 Ω
B82-2 (SSR-) - E41-13 (SG-2)	Below 1 Ω
B82-1 (SSR+) - E41-13 (SG-2)	10 kΩ or higher
E41-8 (LOCK) - Body ground	10 kΩ or higher

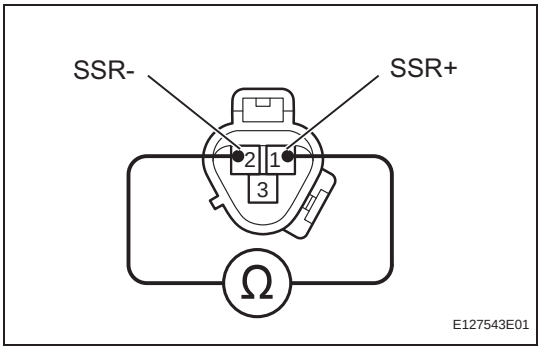
NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

REPLACE AIR CONDITIONING AMPLIFIER

AC

2 INSPECT COMPRESSOR LOCK SENSOR



(a) Disconnect the B82 compressor lock sensor connector.
(b) Measure the resistance of the sensor.
Standard resistance

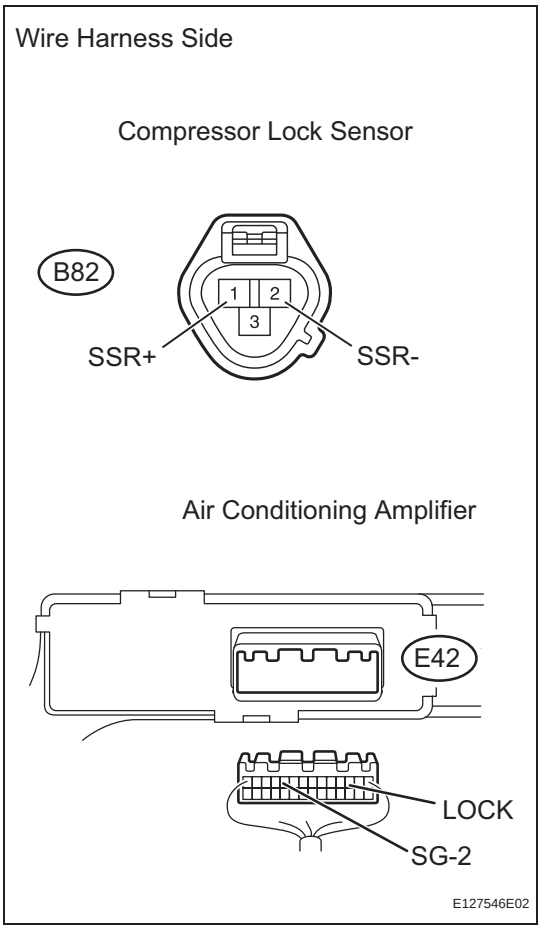
[Corrected]

Tester Connection	Condition	Specified Condition
1 (SSR+) - 2 (SSR-)	20°C (68°F)	160 to 320 Ω

NG → **REPLACE COMPRESSOR LOCK SENSOR**

OK

3 CHECK WIRE HARNESS (COMPRESSOR LOCK SENSOR - AIR CONDITIONING AMPLIFIER)



(a) Disconnect the B82 compressor lock sensor connector.
(b) Disconnect the E42 amplifier connector.
(c) Measure the resistance of the wire harness side connectors.
Standard resistance

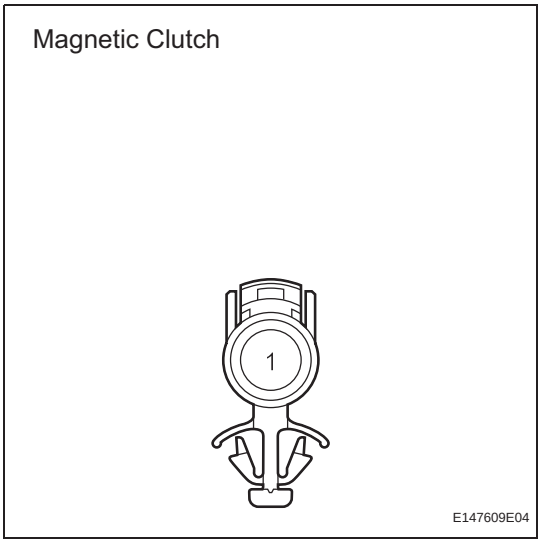
Tester Connection	Specified Condition
B82-1 (SSR+) - E42-3 (LOCK)	Below 1 Ω
B82-2 (SSR-) - E42-10 (SG-2)	Below 1 Ω
B82-1 (SSR+) - E42-10 (SG-2)	10 kΩ or higher
E42-3 (LOCK) - Body ground	10 kΩ or higher

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

OK

REPLACE AIR CONDITIONING AMPLIFIER

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2. INSPECT MAGNET CLUTCH ASSEMBLY

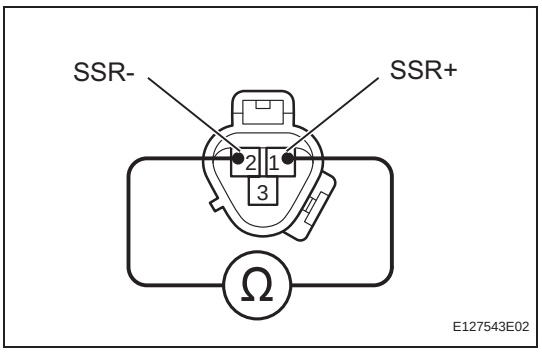
(a) Measure the resistance according to the value(s) in the table below.

Standard resistance

Tester Connection	Condition	Specified Condition
1 - Body ground	Always	3.4 to 3.8 Ω

(b) When connector terminal A1 is connected to the positive (+) battery terminal, check that the following occurs: 1) the magnetic clutch's operating sound can be heard, and 2) the magnetic clutch's hub and rotor lock.

If the result is not as specified, replace the magnetic clutch.



3. INSPECT COMPRESSOR AND MAGNETIC CLUTCH (LOCK SENSOR)

(a) Measure the resistance of the sensor. [Corrected]

Standard resistance

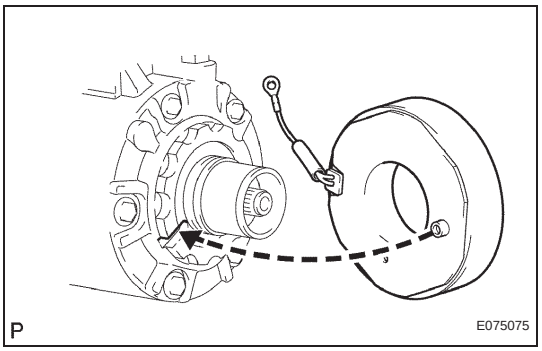
Tester Connection	Condition	Specified Condition
1(SSR+) - 2(SSR-)	20°C (68°F)	160 to 320 Ω

If the resistance is not as specified, replace the compressor and magnetic clutch.

REASSEMBLY

1. INSTALL MAGNETIC CLUTCH ASSEMBLY

(a) Install the magnetic clutch stator while aligning the protrusion on the stator with the notch on the air compressor assembly as shown in the illustration.



(b) Using a snap ring expander, install a new snap ring with the chamfered side facing up.

NOTICE:

Take care not to damage the seal cover of the bearing when installing the snap ring.

(c) Connect the connector.

