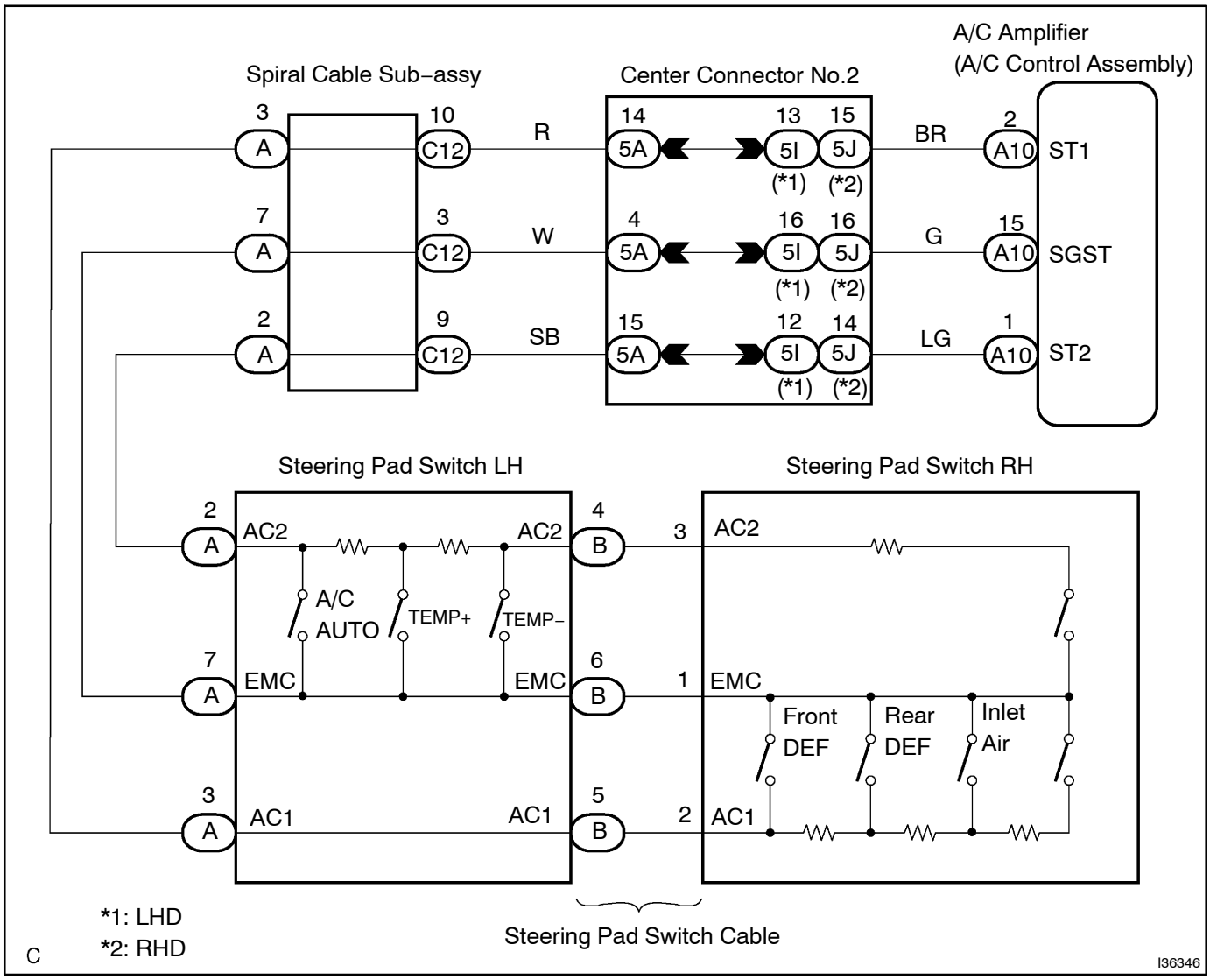
STEERING PAD SWITCH CIRCUIT

CIRCUIT DESCRIPTION

AUTO, TEMP UP (+), TEMP DOWN (–), Recirculation/Fresh, Fr. DEF and Rr. DEF switches are located on the steering pad switch.

The resistance of the steering pad switch changes in accordance with switch operation. The air conditioner amplifier assy outputs voltage to the steering pad switch and reads voltage changes according to the resistance changes with switch operation.

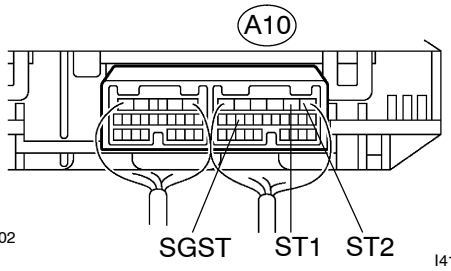
WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT AIR CONDITIONING AMPLIFIER ASSY

Air Conditioning Amplifier Connector Wire Harness View:



(a) Remove the A/C amplifier assy with connectors still connected.

(b) Measure voltage according to the value(s) in the table below.

Standard:

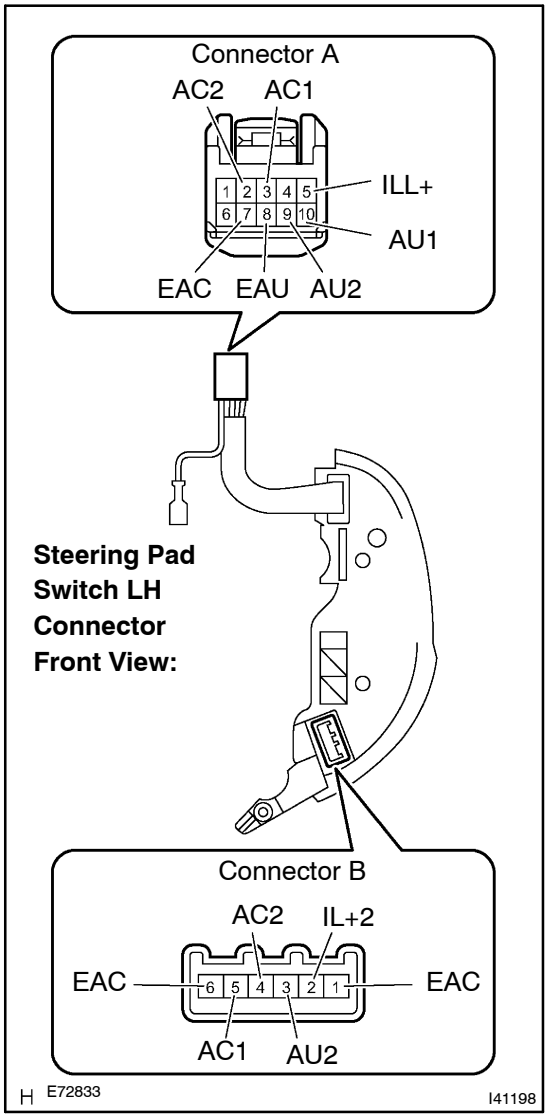
Tester connection	Condition	Specified condition
A10–2 (ST1) – A10–15 (SGST)	Power switch ON Fr. DEF switch ON	Below 0.3 V
A10–2 (ST1) – A10–15 (SGST)	Power switch ON Rr. DEF switch ON	0.8 to 1.5 V
A10–2 (ST1) – A10–15 (SGST)	Power switch ON Recirculation/ Fresh switch ON	2.0 to 2.9 V
A10–1 (ST2) – A10–15 (SGST)	Power switch ON AUTO switch ON	Below 0.3 V
A10–1 (ST2) – A10–15 (SGST)	Power switch ON TEMP+ switch ON	0.8 to 1.5 V
A10–1 (ST2) – A10–15 (SGST)	Power switch ON TEMP– switch ON	2.0 to 2.9 V

NG → **Go to step 2**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–1035)

2 INSPECT STEERING PAD SWITCH LH



(a) Remove the steering pad switch LH.

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

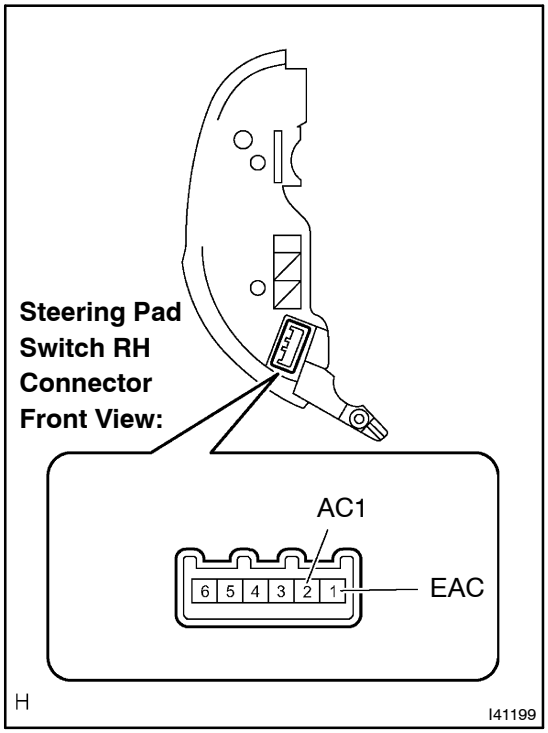
Standard:

Tester connection	Condition	Specified condition
A2 (AC2) – B5 (AC1)	Always	1,210 Ω
A7 (EAC) – B6 (EAC)	Always	Below 1 Ω
A3 (AC1) – B5 (AC1)	Always	Below 1 Ω
A2 (AC2) – A7 (EAC)	AUTO switch ON	Below 1 Ω
A2 (AC2) – A7 (EAC)	TEMP + switch ON	300 Ω
A2 (AC2) – A7 (EAC)	TEMP – switch ON	1,210 Ω

NG → **REPLACE STEERING PAD SWITCH LH**

OK

3 INSPECT STEERING PAD SWITCH RH



(a) Remove the steering pad switch RH.
(b) Measure resistance according to the value(s) in the table below.

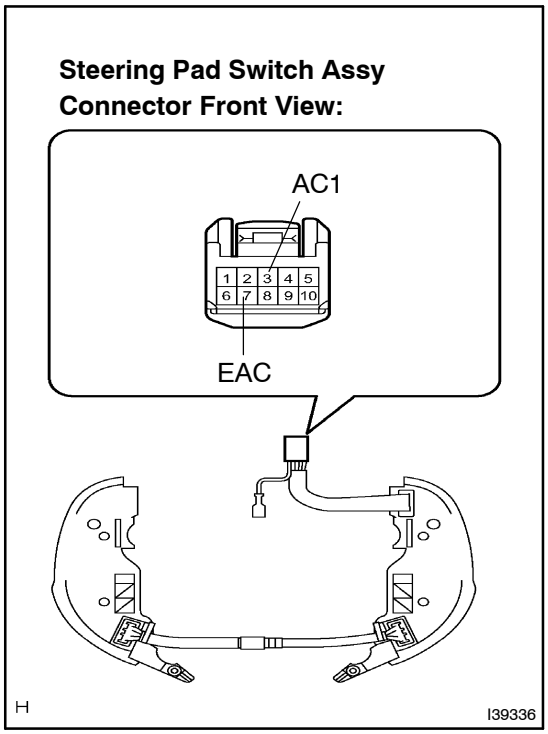
Standard:

Tester connection	Condition	Specified condition
2 (AC1) –1 (EAC)	Fr. DEF switch ON	Below 1 Ω
2 (AC1) –1 (EAC)	Rr. DEF switch ON	300 Ω
2 (AC1) –1 (EAC)	Recirculation/Freshswitch ON	1,210 Ω

NG → REPLACE STEERING PAD SWITCH RH

OK

4 INSPECT STEERING PAD SWITCH ASSY



(a) Connect the steering pad switched RH and LH to the steering pad switch cable.
(b) Measure resistance according to the value(s) in the table below.

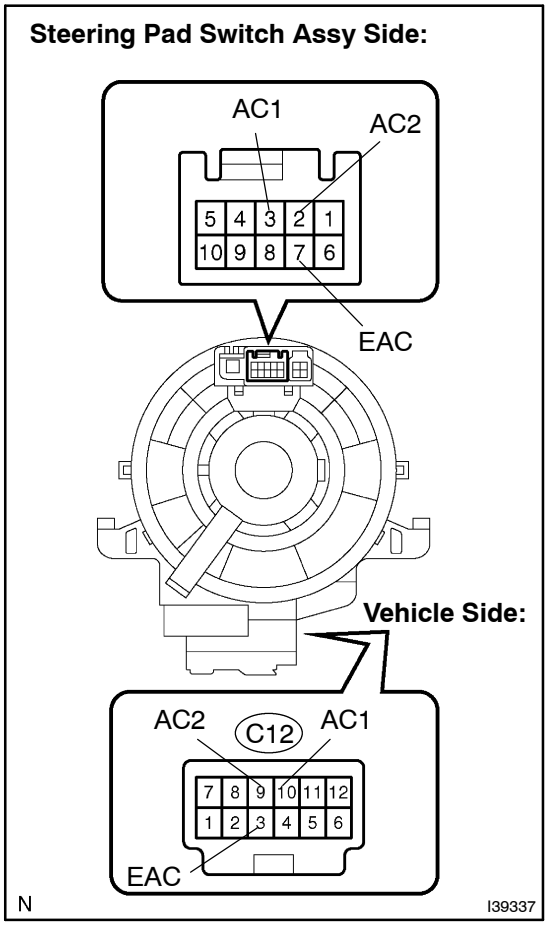
Standard:

Tester connection	Condition	Specified condition
3 (AC1) – 7 (EAC)	Fr. DEF switch ON	Below 1 Ω
3 (AC1) – 7 (EAC)	Rr. DEF switch ON	300 Ω
3 (AC1) – 7 (EAC)	Recirculation/Freshswitch ON	1,210 Ω

NG → REPLACE STEERING PAD SWITCH ASSY

OK

5 INSPECT SPIRAL CABLE SUB–ASSY



(a) Disconnect the spiral cable sub–assy connector.
(b) Measure resistance according to the value(s) in the table below.

Standard:

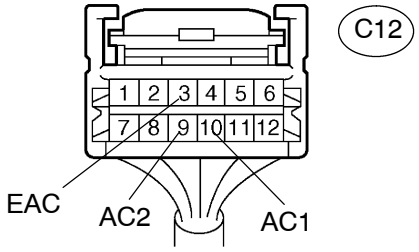
Tester connection	Condition	Specified condition
EAC (C12–3) – 7 (EAC)	Always	Below 1 Ω
AC2 (C12–9) – 2 (AC2)	Always	Below 1 Ω
AC1 (C12–10) – 3 (AC1)	Always	Below 1 Ω

NG → **REPLACE SPIRAL CABLE SUB–ASSY**

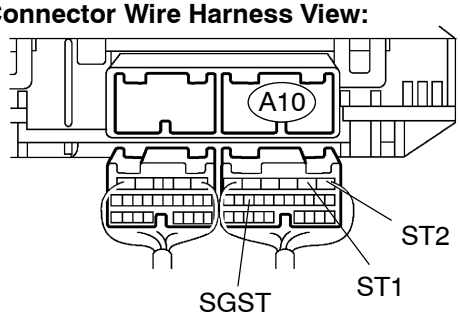
OK

6	CHECK HARNESS AND CONNECTOR(STEERING PAD SWITCH – AIR CONDITIONING AMPLIFIER) (SEE PAGE 01–46)

Steering Pad Switch Connector
Front View:



Air Conditioning Amplifier
Connector Wire Harness View:



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

Standard:

Tester connection	Condition	Specified condition
A10–2 (ST1) – C12–10 (AC1)	Always	Below 1 Ω
A10–15 (SGST) – C12–3 (EAC)	Always	Below 1 Ω
A10–1 (ST2) – C12–9 (AC2)	Always	Below 1 Ω
A10–2 (ST1) – Body ground	Always	10 kΩ or higher
A10–15 (SGST) – Body ground	Always	10 kΩ or higher
A10–1 (ST2) – Body ground	Always	10 kΩ or higher

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

OK

REPLACE AIR CONDITIONING AMPLIFIER (SEE PAGE 55–52)