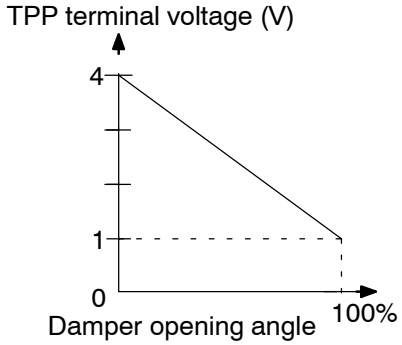
DTC	31	AIR MIX DAMPER POSITION SENSOR CIRCUIT(PASSENGER SIDE)

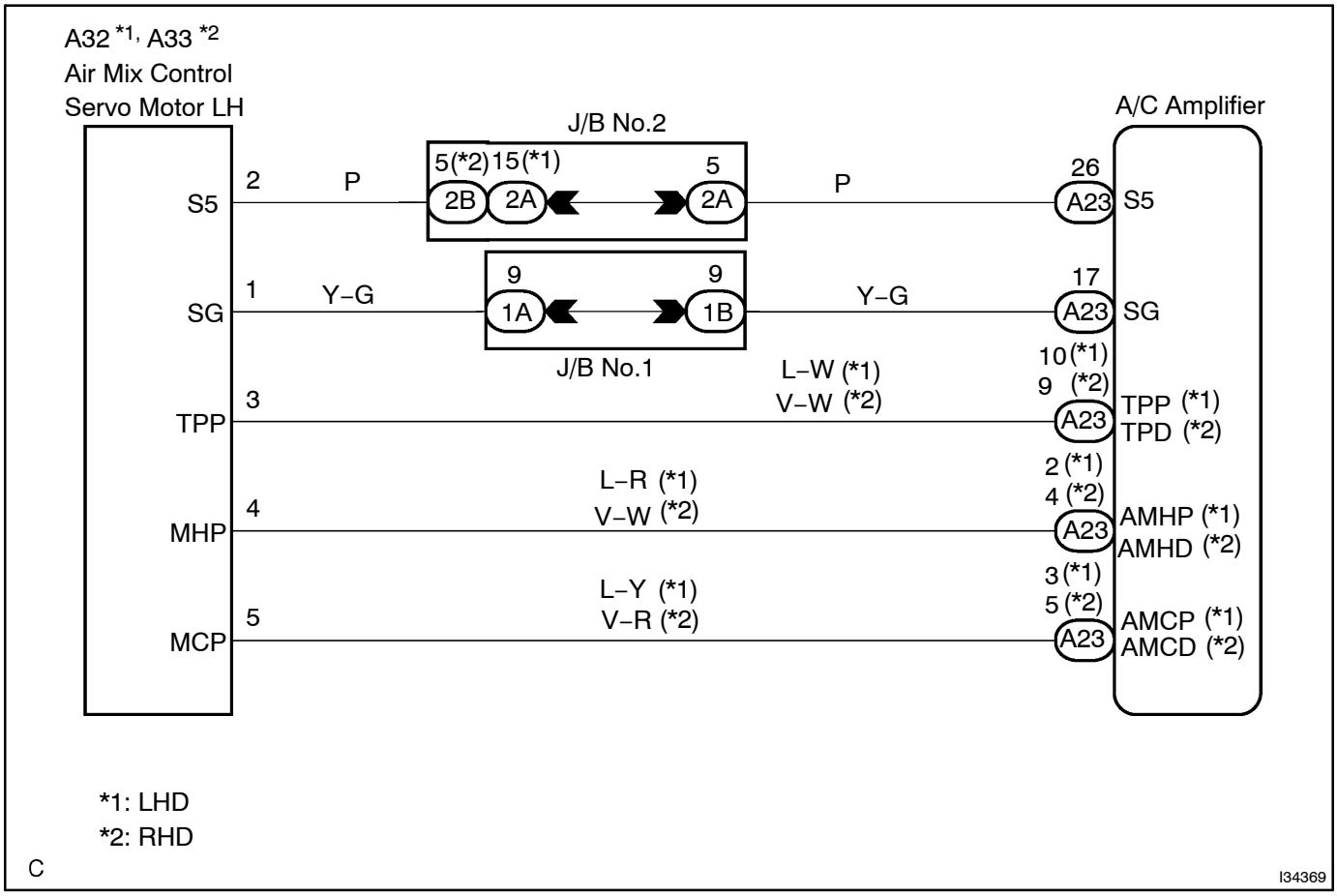
CIRCUIT DESCRIPTION



This sensor detects the position of the air mix damper and sends the appropriate signals to the A/C amplifier. The position sensor is built into the air mix damper servo sub–assy.

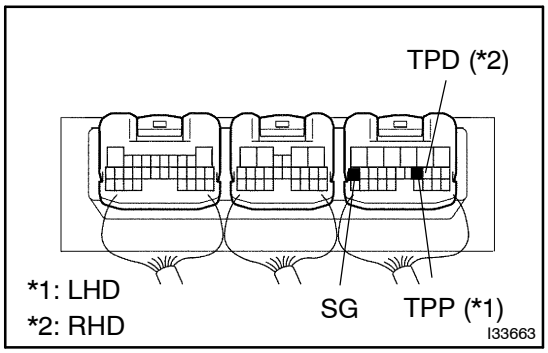
DTC No.	Detection Item	Trouble Area
31	Short to ground or power source circuit in air mix damper position sensor circuit.	• Air mix damper servo sub–assy • Harness of connector between air mix damper servo sub–assy and A/C amplifier • A/C amplifier

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT AIR CONDITIONING AMPLIFIER(TPP, SG)



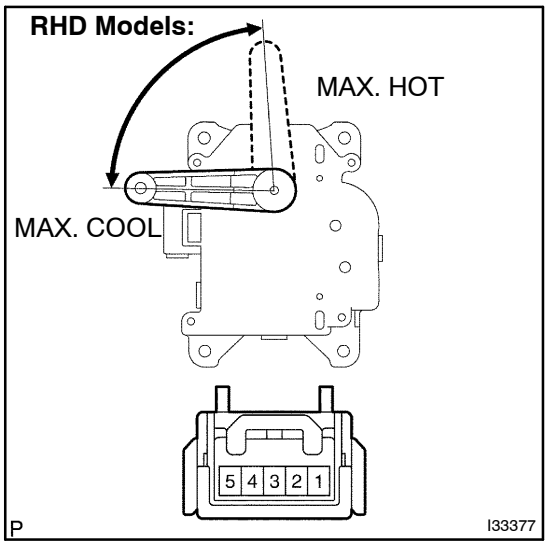
(a) Remove the A/C amplifier with being connected.
(b) Turn ignition switch ON.
(c) Change the set temperature to activate the air mix damper and measure the voltage between terminal TPP (TPD) and SG of A/C amplifier assy.
( ): RHD
Voltage:
MAX. COLD: 3.5 – 4.5 V
MAX. HOT: 0.5 – 1.8 V

HINT:
As the set temperature increases, the voltage decreases gradually without interruption.

OK	**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE**

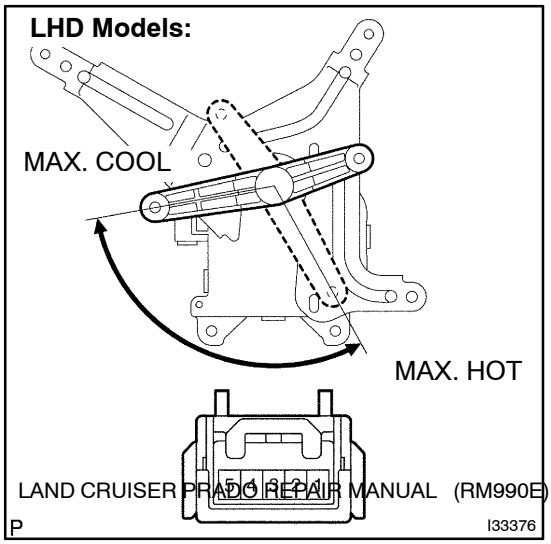
NG

2 INSPECT AIRMIX DAMPER SERVO SUB–ASSY



(a) Remove the air mix damper servo sub–assy.
(b) Measure resistance between terminal 1 and 2 of air mix damper servo sub–assy connector.
Resistance: 4.2 – 7.8 kΩ
(c) While operating air mix damper servo sub–assy as shown in the procedure on page 05–1079, measure resistance between terminal 1 and 3 of air mix damper servo sub–assy.
Resistance:
MAX. COLD: 3.4 – 6.2 kΩ
MAX. HOT: 0.8 – 1.6 kΩ

HINT:
As the air mix damper servo sub–assy moves from cool side to warm side, the resistance decreases gradually without interruption.



NG → **REPLACE AIRMIX DAMPER SERVO SUB–ASSY**

OK

3	CHECK HARNESS AND CONNECTOR(AIR MIX DAMPER POSITION SENSOR – A/C AMPLIFIER)

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

OK

4	READ OUTPUT DTC

(a) Clear the sensor check codes.
(b) At least 8.5 minutes pass after turning the IG switch to ON position, read DTC.
Standard: Normal codes are output.

OK → **SYSTEM OK**

NG

CHECK AND REPLACE AIR CONDITIONING AMPLIFIER