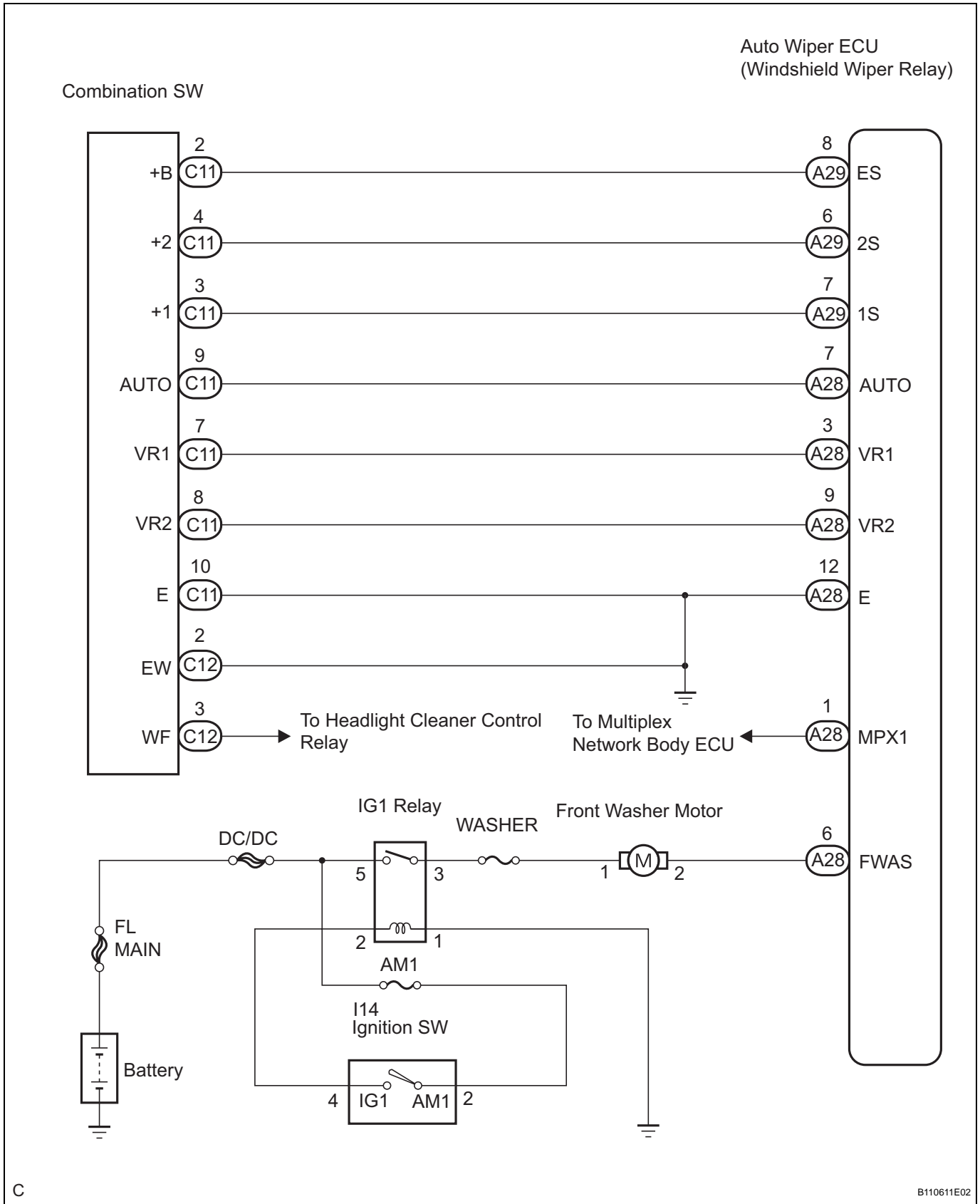


Wiper and Washer Switch Circuit

DESCRIPTION

This circuit detects the state of the wiper and washer switch and sends it to the windshield wiper relay assembly.

WIRING DIAGRAM



WW

HINT:

Start the inspection from step 1 when using the intelligent tester, and start from step 2 when not using the intelligent tester.

1 READ VALUE OF INTELLIGENT TESTER

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

Wiper:

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
WIPER LO SW	Wiper LO switch input / ON or OFF	ON: Front wiper switch is in LO position OFF: Front wiper switch is in any position other than LO	-
WIPER HI SW	Wiper HI switch input / ON or OFF	ON: Front wiper switch in HI position OFF: Front wiper switch is in any position other than HI	-
WIPER AUTO SW	Wiper AUTO switch input / ON or OFF	ON: Front wiper switch is in AUTO position OFF: Front switch is in any position other than AUTO	-

NG → **Go to step 2**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

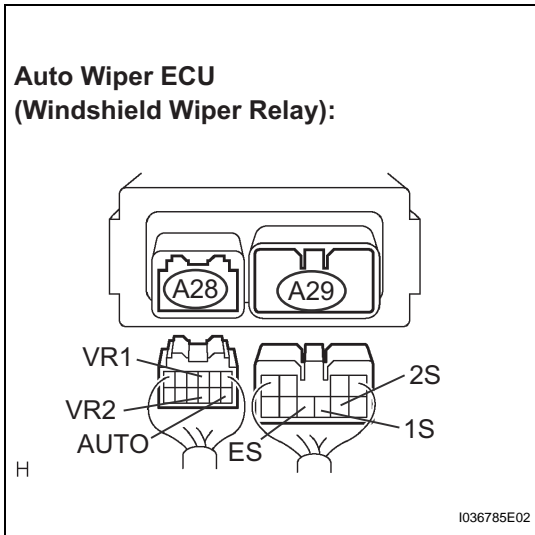
2 INSPECT WINDSHIELD WIPER SWITCH ASSEMBLY

- (a) Inspect the windshield wiper switch assembly (See page [WW-50](#)).
- HINT:
Reconnect the connector.

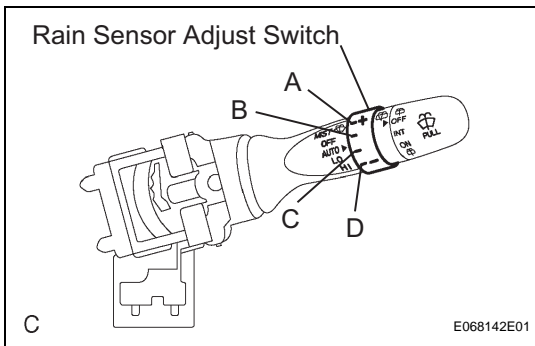
NG → **REPLACE WINDSHIELD WIPER SWITCH ASSEMBLY**

OK

3 INSPECT WINDSHIELD WIPER RELAY ASSEMBLY



(a) Disconnect the connector from the auto wiper ECU.



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

Standard resistance

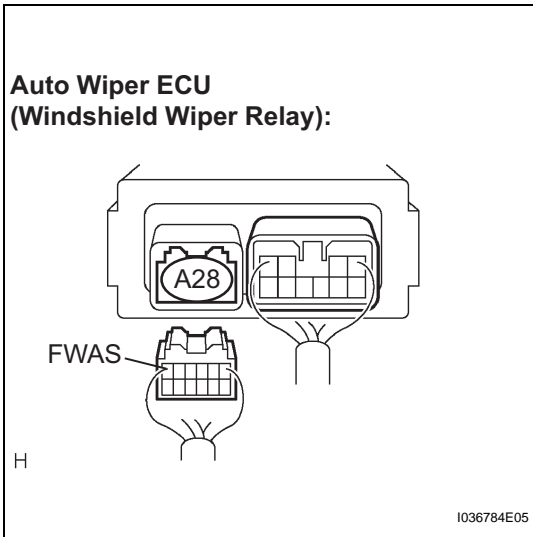
Tester Connection	Condition	Specified Condition
1S - ES	Windshield wiper switch MIST position	Below 1 Ω
AUTO - Body ground	Windshield wiper switch AUTO position	Below 1 Ω
1S - ES	Windshield wiper switch LO position	Below 1 Ω
2S - ES	Windshield wiper switch HI position	Below 1 Ω
VR2 - VR1	Rain sensor adjust switch "A" position	Below 1 Ω
VR2 - VR1	Rain sensor adjust switch "B" position	405 to 493 Ω
VR2 - VR1	Rain sensor adjust switch "C" position	1,400 to 1,700 Ω
VR2 - VR1	Rain sensor adjust switch "D" position	2,200 to 3,200 Ω

OK

NG REPAIR OR REPLACE HARNESS OR CONNECTOR



4 INSPECT WINDSHIELD WIPER RELAY ASSEMBLY



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

Standard voltage

Tester Connection	Condition	Specified Condition
FWAS - Body ground	Ignition switch ON	10 to 14 V

NG → **Go to step 5**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE

5 INSPECT WINDSHIELD WASHER MOTOR AND PUMP ASSEMBLY

(a) Inspect the front washer motor.

NG → **REPLACE WINDSHIELD WASHER MOTOR AND PUMP ASSEMBLY**

OK

REPAIR OR REPLACE HARNESS OR CONNECTOR