

Front Wiper and Washer without Auto Wiper System

System Outline

With the engine start/stop SW pushed to IG ON position, the current flows to TERMINAL 17 of the front wiper and washer SW, TERMINAL B of the front wiper motor and TERMINAL 2 of the front washer motor through the WIP fuse.

1. Low Speed Position

With the wiper SW turned to LO position, the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL +1 of the windshield wiper motor to TERMINAL E to GROUND and causes to the wiper motor to run at low speed.

2. High Speed Position

With the wiper SW turned to HI position, the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 8 to TERMINAL +2 of the windshield wiper motor to TERMINAL E to GROUND and causes to the wiper motor to run at high speed.

3. INT Position

With the wiper SW turned to INT position, the relay operates and the current which is connected by relay function flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 2 to GROUND. This flow of current operates the intermittent circuit and the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL +1 of the windshield wiper motor to TERMINAL E to GROUND and the functions.

The intermittent operation is controlled by the charge/discharge function of the condenser installed in the relay, and the intermittent time is controlled by a time control SW to change the charging time of the condenser.

4. Mist Position

With the wiper SW turned to MIST position, the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL +1 of the windshield wiper motor to TERMINAL E to GROUND and causes to the wiper motor to run at low speed.

5. Washer Interlocking Operation

With the washer SW pulled to on, the current flows from the WIP fuse to TERMINAL 2 of the windshield washer motor to TERMINAL 1 to TERMINAL 11 of the front wiper and washer SW to TERMINAL 2 to GROUND and causes to the washer motor to run, and the window washer jet operates. This causes the current to flow to washer continuous operation circuit in TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL +1 of the windshield wiper motor to TERMINAL E to GROUND and the washer operates continuously.

Service Hints

C16 Combination SW

17–Ground : Approx. 12 volts with the engine start/stop SW at IG ON position

7–Ground : Approx. 12 volts with the engine start/stop SW at IG ON position and the front wiper and washer SW at LO position
: Approx. 12 volts with the engine start/stop SW at IG ON position and
the front wiper and washer SW at MIST position

16–Ground : Approx. 12 volts with the engine start/stop SW at IG ON position and
unless the windshield wiper motor at STOP position

8–Ground : Approx. 12 volts with the engine start/stop SW at IG ON position and the front wiper and washer SW at HI position

2–Ground : Always continuity

W4 Windshield Wiper Motor

B–S : Closed unless windshield wiper motor at STOP position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C16	44 (LHD)	W3	41 (*1)	W4	43 (*2)
	54 (RHD)		43 (*2)		51 (*3)
J2	41 (*1)		51 (*3)		53 (*4)
	43 (*2)		53 (*4)		
	53 (*4)	W4	41 (*1)		

* 1 : LHD 1ZZ–FE, 3ZZ–FE * 2 : LHD 1CD–FTV * 3 : RHD 1ZZ–FE, 3ZZ–FE * 4 : RHD 1CD–FTV * 5 : 1ZZ–FE, 3ZZ–FE * 6 : 1CD–FTV

**: Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
CI	37 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	37 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CJ	37 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	37 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
DA	32	Instrument Panel Wire and Instrument Panel J/B (Left Side of the Instrument Panel)
DL	33	Engine Room Main Wire and Instrument Panel J/B (Left Side of the Instrument Panel)

**: Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
IA9	74 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

**: Ground Points**

Code	See Page	Ground Points Location
EC	60 (*1)	Left Side of the Suspension Tower
	62 (*2)	
	70 (*3)	
	72 (*4)	
IM	64 (LHD)	Right Kick Panel
	74 (RHD)	

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