





SYSTEM OUTLINE

THIS SYSTEM CONTROLS THE RESPECTIVE BRAKE FLUID PRESSURES ACTING ON THE BRAKE CYLINDERS OF THE RIGHT FRONT WHEEL, THE LEFT FRONT WHEEL AND THE REAR WHEELS WHEN THE BRAKES ARE APPLIED IN A PANIC STOP SO THAT THE WHEELS DO NOT LOCK. THIS RESULTS IN IMPROVED DIRECTIONAL STABILITY AND STEERABILITY DURING PANIC BRAKING.

1. INPUT SIGNALS

(1) SPEED SENSOR SIGNAL

THE SPEED OF THE WHEELS IS DETECTED AND INPUT TO **TERMINALS FL+, FR+, RL+ AND RR+** OF THE ABS ECU.

(2) STOP LIGHT SW SIGNAL

A SIGNAL IS INPUT TO **TERMINAL STP** OF THE ABS ECU WHEN THE BRAKE PEDAL DEPRESSED.

2. SYSTEM OPERATION

DURING SUDDEN BRAKING THE ABS ECU WHICH HAS SIGNALS INPUT FROM EACH OF THE SENSORS, CONTROLS CURRENT TO THE SOLENOID INSIDE THE ACTUATOR AND CAUSES THE HYDRAULIC PRESSURE ACTING ON EACH OF THE WHEEL CYLINDERS ESCAPE TO THE RESERVOIR. THE PUMP INSIDE THE ACTUATOR IS ALSO OPERATING AT THIS TIME AND IT RETURNS THE BRAKE FLUID FROM THE RESERVOIR TO THE MASTER CYLINDER, PREVENTING LOCKING OF THE VEHICLE WHEELS.

IF THE ECU JUDGES THAT THE HYDRAULIC PRESSURE ACTING ON THE WHEEL CYLINDER IS INSUFFICIENT, THE CURRENT ACTING ON THE SOLENOID IS CONTROLLED AND THE HYDRAULIC PRESSURE IS INCREASED- HOLDING OF THE HYDRAULIC PRESSURE IS ALSO CONTROLLED BY THE ECU, BY THE SAME METHOD AS ABOVE. BY REPEATED PRESSURE REDUCTION, HOLDING AND INCREASE ARE REPEATED TO MAINTAIN VEHICLE STABILITY AND TO IMPROVE STEERABILITY DURING SUDDEN BRAKING.

SERVICE HINTS

A10 (A), A11 (B) ABS ECU

(CONNECT THE ECU CONNECTOR)

(B) 8-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION AND THE DATA LINK CONNECTOR 1 **TS-E1** NOT CONNECTED

(B) 9-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION AND THE DATA LINK CONNECTOR 1 **TC-E1** NOT CONNECTED

(A) 1-GROUND :	} APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION AND THE ABS WARNING LIGHT GOES OFF
(A) 4-GROUND :	
(A) 5-GROUND :	
(A) 10-GROUND :	
(A) 11-GROUND :	
(A) 12-GROUND :	
(A) 21-GROUND :	
(A) 22-GROUND :	

(B) 2-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

(B) 12-GROUND : APPROX. 12 VOLTS WITH THE BRAKE PEDAL DEPRESSED

(DISCONNECT THE ECU CONNECTOR)

(A) 3 - (A) 14 :	} 1.0 - 2.6 K Ω
(A) 19 - (A) 20 :	

(B) 1 - (B) 7 :	} 0.8 - 2.05 K Ω
(B) 3 - (B) 10 :	

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A4	A	28 (5S-FE), 30 (7A-FE)	A17	D1	28 (5S-FE), 30 (7A-FE)
A5	B	28 (5S-FE), 30 (7A-FE)		J1	33
A6		28 (5S-FE), 30 (7A-FE)	A18	J2	33
A7		28 (5S-FE), 30 (7A-FE)		J7	33
A10	A	32	C9	B	32
A11	B	32	C10	C	32
				S7	33

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	27	R/B NO. 5 (ENGINE COMPARTMENT FRONT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
ID		
IE	20	INSTRUMENT PANEL WIRE AND INPANE J/B (LEFT KICK PANEL)
IF		
1C	22	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1J		
1K	22	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2A	26	ENGINE ROOM MAIN WIRE AND J/B. NO. 2 (ENGINE COMPARTMENT LEFT)
3B	24	INSTRUMENT PANEL WIRE AND J/B NO. 3 (BEHIND THE INSTRUMENT PANEL CENTER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	38 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
	40 (7A-FE)	
IC1	42	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IC4	42	ENGINE ROOM MAIN WIRE AND COWL WIRE (INSIDE OF R/B NO. 4)
ID1	42	INSTRUMENT PANEL WIRE AND COWL WIRE (LEFT KICK PANEL)
ID2		
IF1	42	COWL WIRE AND FLOOR WIRE (LEFT KICK PANEL)
II2	44	ENGINE WIRE AND INSTRUMENT PANEL WIRE (NEAR THE ENGINE CONTROL MODULE)
IJ1	44	ENGINE WIRE AND COWL WIRE (INSTRUMENT PANEL CENTER)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	38 (5S-FE)	FRONT SIDE OF RIGHT FENDER
	40 (7A-FE)	
ID	42	LEFT KICK PANEL

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E1	38 (5S-FE)	ENGINE ROOM MAIN WIRE	E2	40 (7A-FE)	ENGINE ROOM MAIN WIRE
	40 (7A-FE)		I1	44	COWL WIRE
E2	38 (5S-FE)		I11		

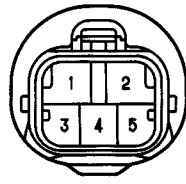


ABS

A 4 (A) GRAY



A 5 (B) GRAY



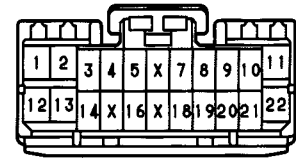
A 6 GRAY



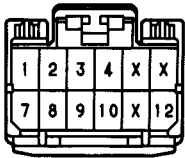
A 7 GRAY



A10 (A)



A11 (B)



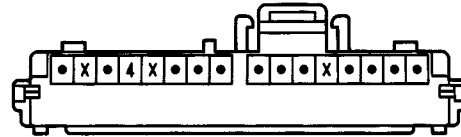
A17 GRAY



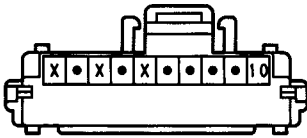
A18 GRAY



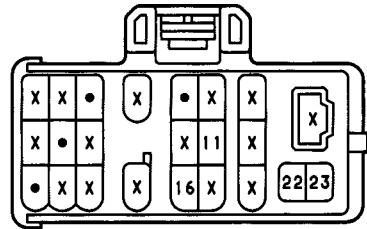
C 9 (B)



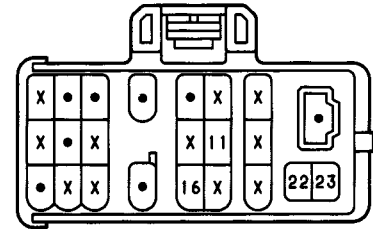
C10 (C) GRAY



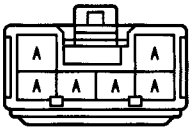
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(7A-FE) D 1 BLACK

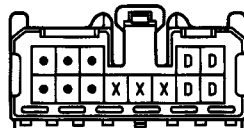


J 1



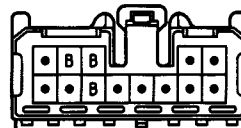
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J 2



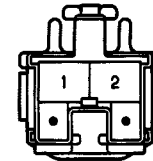
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J 7



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(W/ CRUISE CONTROL) S 7



(W/O CRUISE CONTROL) S 7

