

MODEL	GROUP (NUMBER)	DATE	NO.
GALLOPER	BRAKES (35)	JUNE. 26. 1998	8 35-S03-GL
SUBJECT			AREA
SHOP MANUAL CORRECTION (ABS SYSTEM)			ALL

1. DESCRIPTION

This T.S.B is issued to correct the mistake in the Galloper w/shop manual. HDPIC recommends to insert the attached 4 sheets into your Galloper w/shop manual. The inserted pages are from 35(B)-12 to 35(B)-15. HDPIC will revise the relevant pages in next publishing of Galloper w/shop manual.

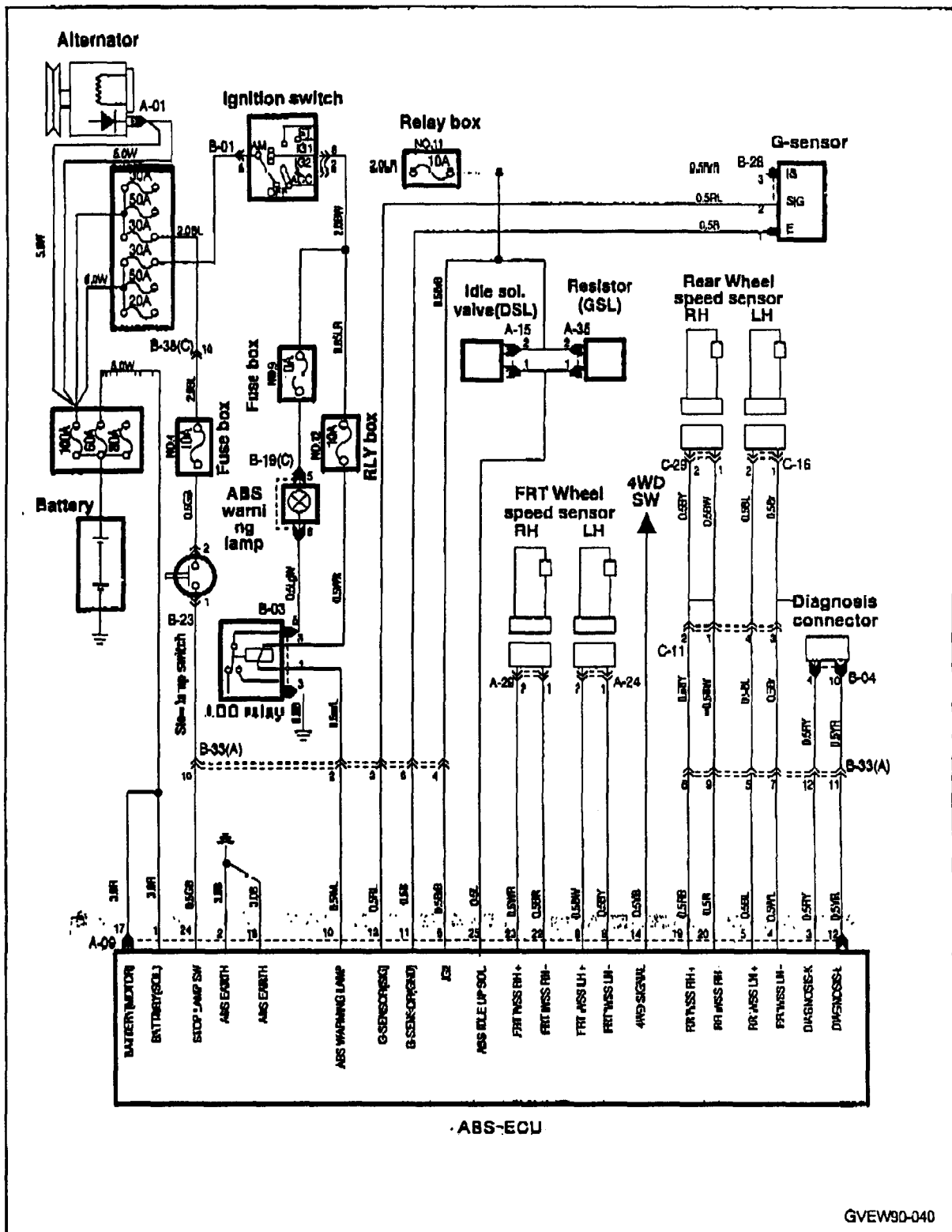
2. ATTACHMENTS

SEQ	SUBJECT	PAGE	SHEET
1	ABS Circuit Diagram	35(B)-12	1
2	ABS Connector Components	35(B)-13	1
3	Explanation of ABS Terminal and Service Data	35(B)-14,15	2

This Bulletin represents technical service information only. Without exception, all gratis repairs and Replacements are subject to the individual warranty and policy procedure of the Hyundai precision company

ABS-Troubleshooting

○ CIRCUIT DIAGRAM



GVEW90-040

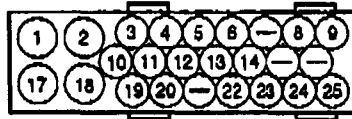
ABS-Troubleshooting

○ CONNECTOR COMPONENTS

A-01



A-09



Wiring side(female)

A-15



A-24



A-29



A-35



B-01



B-03



B-04



B-19(C)



B-23



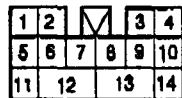
B-28



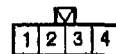
B-33(A)



B-38(C)



C-11



C-16



C-29



GVEW90-041

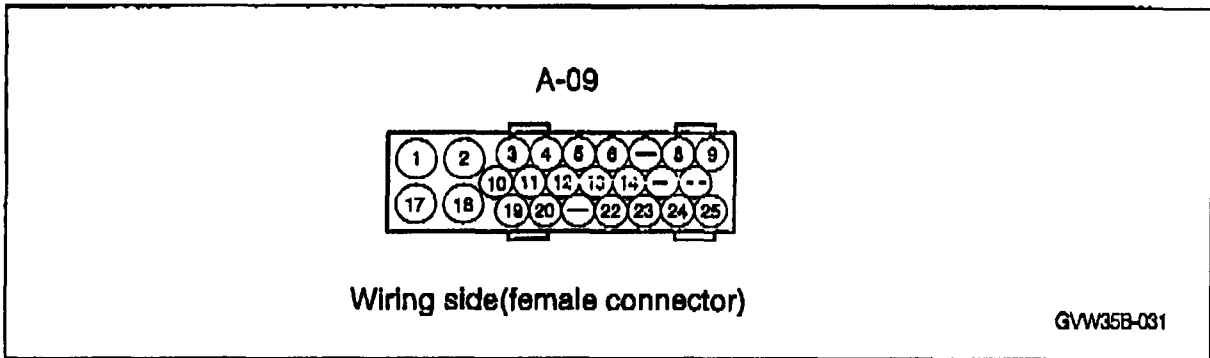
ABS - Troubleshooting

Check Input/output at the ABS-ECU

Use the multi-meter to check electrical characteristics of the ABS-ECU

[CAUTION]

When connect or disconnect of the ABS-ECU connector, turn ignition switch to OFF to prevent damage for ABS-ECU by electrical power.



TERMINAL NO	ITEMS	CONDITION		NORMAL VALUE
1	Battery power supply 1 (Solenoid valve power)	Always		System voltage
17	Battery power supply 2 (pump,motor power)	Always		System voltage
6	ABS-ECU power supply	IG switch:ON		System voltage
		IG switch:OFF		OV
2, 18	ABS-ECU ground	Always		Continuity
9-8	FL wheel speed sensor	Measure resistance		550~1650 Ω
23-22	FR wheel speed sensor			
5-4	RL wheel speed sensor	Measure voltage		120mV or more (Wheel:1~1.5rev/sec)
19-20	RR wheel speed sensor			
24	Brake lamp switch	Depress the brake pedal:ON		System voltage
		Release the brake pedal:OFF		1.2V or less
10	ABS warning lamp	IG switch: ON	Light on	System voltage
			Light off	2V or less

ABS - Troubleshooting

TERMINAL NO	ITEMS	CONDITION		NORMAL VALUE
3(K)	Self diagnostic line	When IG switch OFF, HI-scan is	Connected	Communication with scan tool
12(L)			Disconnected	
13(GS)	G-sensor	IG switch ON		2.5V(In a horizon of vehicle)
11(GSG)		IG switch OFF		OV
14	4WD switch	IG switch ON	T/F lever 2WD	System voltage
			T/F lever 4WD	1.2V or less

Service Data

The following items can be read by the HI-scan at the ABS-ECU.

Items	Check item	Unit of measurement
OA	Battery voltage	V
OE	FL wheel speed sensor	Km/h
	FR wheel speed sensor	
	RR wheel speed sensor	
	RL wheel speed sensor	
10	G-sensor	G
1E	Warning lamp	ON or OFF
1F	Drake switch	ON or OFF
21	2WD/4WD switch	ON or OFF
22	Motor and valve relay	ON or OFF
23	Motor	ON or OFF
26	FL solenoid valve(In)	ON or OFF
	FR solenoid valve(In)	
	R solenoid valve(In)	
	FL solenoid valve(Out)	
	FR solenoid valve(Out)	
	R solenoid valve(Out)	