

TROUBLE SHOOTING

- N.B. • Never turn the ignition switch ON when ECU-IG and IGN fuses are taken out.
- Never turn the ignition switch ON when any of the connectors for the steering control computer is disconnected. (It is OK to do so when all the connectors are disconnected.)

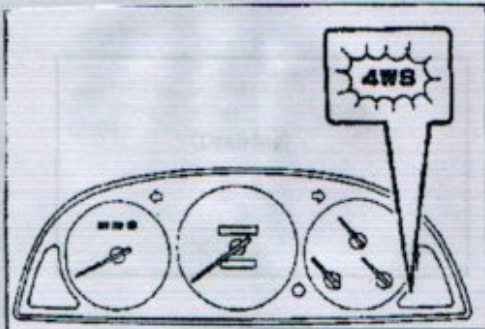
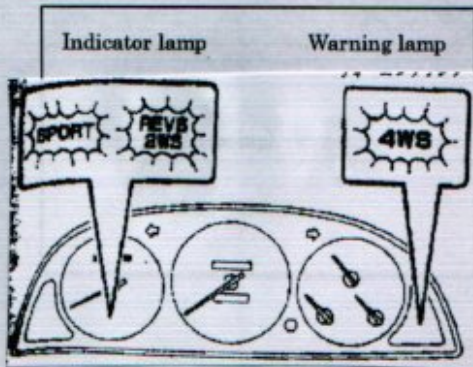
How to carry out trouble shooting

- 1 Battery voltage check
 - Standard 10 – 14 V (when engine is stopped)
- 2 Lamp check
 - (1) Check that the 4WS indicator lamp and warning lamp stay on for about 2 seconds when the ignition switch is turned ON.
- 3 Diagnosis check
- 4 Check the trouble chart

Diagnosis check

- 1 Fail safe function
 - (1) Carry out fail control check when failure occurs in the signal system of the 4WS system, and display the failure by turning the 4WS warning lamp on.

- <note> • To reset the fail safe function, turn the ignition switch OFF.
- List of control details when the fail safe function is on.



Failure position	Drive motor	Control details
Main motor <ul style="list-style-type: none"> • motor short • motor cable disconnected • motor functioning failure • relay failure 	Backup motor	Carrying out normal mode control <ul style="list-style-type: none"> • As the vehicle speed increases, it drives only in the in-phase direction. • It does not drive in the opposite phase direction.
Backup motor <ul style="list-style-type: none"> • motor cable disconnected • motor functioning failure • motor power cable disconnected 	Main motor	Carrying out normal mode control <ul style="list-style-type: none"> • As the vehicle speed increases, it drives only in the in-phase direction. • It does not drive in the opposite phase direction.
Speed sensor	Main motor	Carrying out normal mode control <ul style="list-style-type: none"> • As the vehicle speed increases, it drives only in the in-phase direction. • It does not drive in the opposite phase direction.
Steering control sensor <ul style="list-style-type: none"> • sensor cable disconnected • sensor failure 	Backup motor	Driving up to in-phase MAX, and the control stops.
Computer <ul style="list-style-type: none"> • control failure • computer power cable disconnected 	Backup motor	Driving up to in-phase MAX, and the control stops.

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Outputting the diagnosis code "32"

Disconnect backup motor connector of rear steering angle ratio converter.



Set the battery voltage to between the MB ↔ GND terminals of the backup motor connector, and check that the voltage between the VK ↔ VE terminals of the steering control computer is as follows:

Battery connection		Voltage between VK ↔ VE terminals
MB	GND	
+	-	Up
-	+	Down

→ NO

- Backup motor failure
- Wire harness failure

↓ YES

- Connect backup motor connector.
- Check the ignition switch is OFF and disconnect the computer connector. Then turn the ignition switch ON.



When a short-circuit occurs between the RLY2 ↔ GND2 terminals of the vehicle side connector of the computer, does the backup motor work ?

→ NO

- Steering control relay failure
- Wire harness failure

↓ Yes

Steering control computer failure