AUTOMATIC FREE-WHEELING HUB INDICATOR SYSTEM SPECIFICATIONS

GENERAL SPECIFICATIONS

Items Specifications Automatic free-wheeling hub indicator light W (SAE trade number) 1.4(74) Pulse generator Type Magnet coil type Vehicle-speed sensor Type Reed switch type Pulse generation 4 pulses/rotation

SERVICE SPECIFICATIONS

Items Specifications Standard values Pulse generator resistance Ω 215-275 Vehicle-speed sensor output voltage ٧ When OFF 4 or more When ON 0

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8-262 AUTOMATIC FREE-WHEELING HUB INDICATOR SYSTEM - Troubleshooting

TROUBLESHOOTING

AUTOMATIC FREE-WHEELING HUB INDICATOR SYSTEM CIRCUIT CIRCUIT DIAGRAM

NOSRHAA

m Main fusible link Sub fusible link ¥. Battery Ignition switch 0.85-R 100A A-18 B-72 OFF 20-BY STAR 1 lap C-66 ſτ. 8-7 84 Pulse R RW generator 1020-BY **T** 72.] P.8-70. 77. T B-30 A-16 ž 8 Multi-purpose fuse Test Ref To heater relay (Refer to P.8-102, 103,] 85-RL 9 ibri C-38 lectri arcuit ₫ C-05 -04 | | Pulse Vehicle detec 10<u>2-B</u> 2-B 2-8 circuit Locking check circuit Ď Ŵ Ŵ B Combination meter Memory circuit N N Automatic free-wheeling hub indicator control unit 37W723 **Remarks** Lines and connectors indicated by the * symbol are applicable to the 2.6-liter models. For information concerning the ground points (example: 1), refer to P.8-12, 14. (2)Wiring color code B: Black Br: Brown G: Green Gr: Gray L: Blue Y: Yellow Lo: Light green W: White P: Pink R: Red LI: Light blue O: Orange

OPERATION

- When the ignition switch is placed in the "ON" position, battery voltage will go to the automatic free-wheeling hub indicator control unit through fuse No. 3.
- When driving with the free-wheeling hub in the "LOCK" position, the pulse signal from the pulse generator and the vehicle speed signal from the vehicle speed sensor will be input into the control unit.
- When vehicle speed increases over about 5km/h (3 mph), the control unit goes on, electrical current flows to fuse No. 3, the TSB Revision

automatic free-wheeling hub indicator control unit and the ground, lighting the automatic free-wheeling_indicator light.

- When the vehicle is stopped in this situation, the pulse signal and vehicle speed signal are not input, and the contrl unit memory circuit leaves the indicator light on.
- When driving with the free-wheeling hub in the "FREE" position, the pulse signal is not input to the control unit causing the control unit to go OFF and the indicator light to go out.

PULSE GENERATOR

REMOVAL AND INSTALLATION



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INSPECTION

- Check whether or not metal particles are adhered to the pole (iron core) of the pulse generator.
- Check whether or not the installation bolts of the pulse rotor or the pulse generator are loose.
 (For detailed information concerning the pulse rotor, refer

(For detailed information concerning the pulse rotor, refer to GROUP 21 - Transfer.)



CHECKING PULSE GENERATOR RESISTANCE

Check whether or not the resistance between the terminals shown in the figure is within the standard value range.

Standard value: 215–275 Ω

If the resistance is not within the standard value range, replace the pulse generator.

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AUTOMATIC FREE-WHEELING HUB INDICATOR CONTROL UNIT REMOVAL AND INSTALLATION



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CHECKING OUTPUT VOLTAGE OF THE VEHICLE-SPEED SENSOR (REED TYPE SWITCH)

- 1. Turn the ignition key to ON.
- 2. Insert a test probe from the rear side of the conncetor of the automatic free-wheeling hub indicator control unit.
- 3. Measure the output voltage of the vehicle-speed sensor when the vehicle is moved a distance of about 0.5 m (1.6ft.).

Standard values: Vehicle-speed sensor OFF: 4V or higher Vehicle-speed sensor ON: 0V

If there is a malfunction of the vehicle-speed sensor, replace it by replacing the speedometer assembly.

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