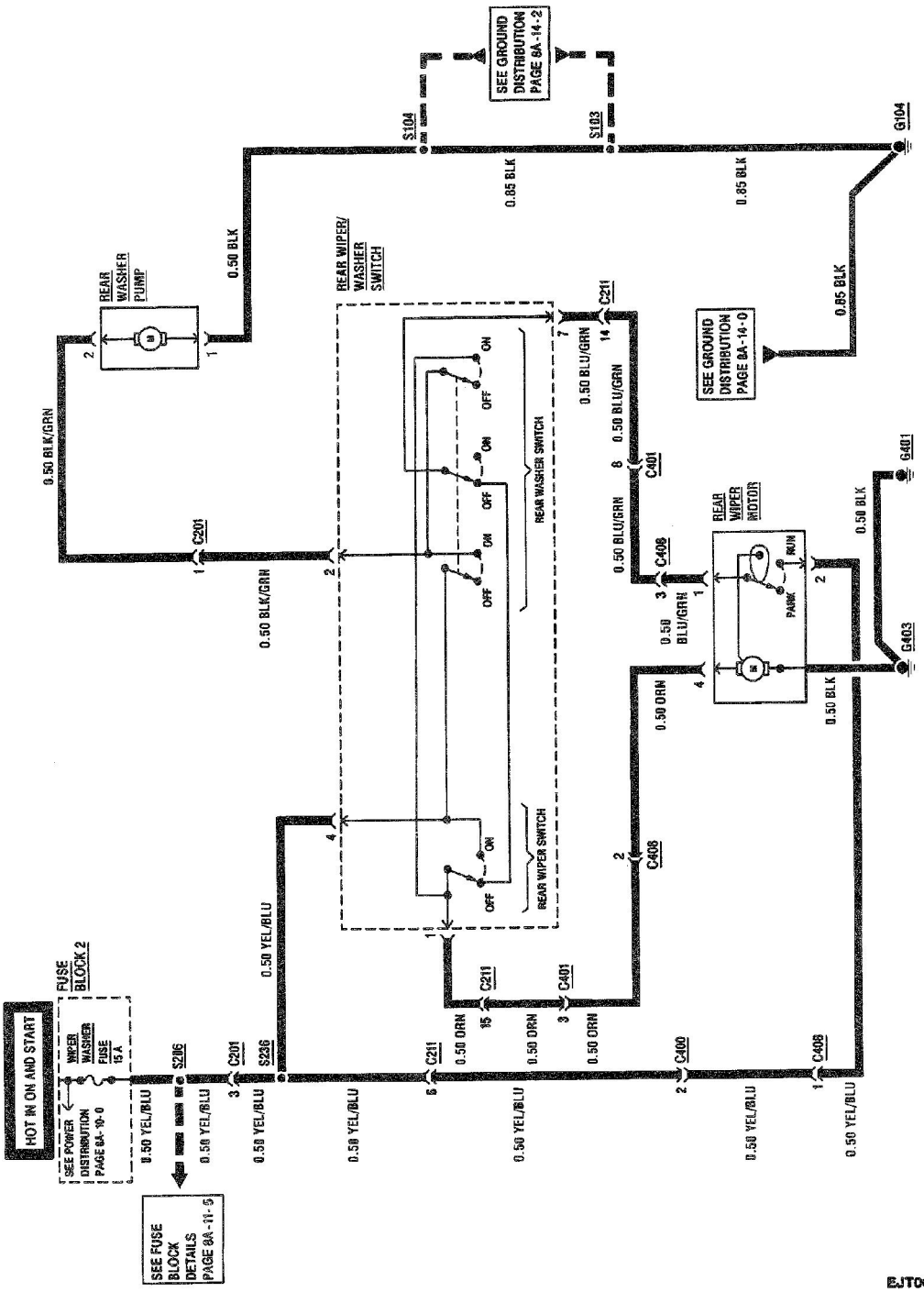
REAR WIPER/WASHER



EJT002892

COMPONENT	LOCATION	201-PG	FIG.	CONN
Fuse Block 2	Under LH I/P	06	A	
Rear Washer Pump (4-Door LSi)	RH Front Engine Compartment on Washer Fluid Reservoir	02	A	
Rear Wiper Motor (4-Door LSi)	In Center of Rear Door	13	A	202-15A1
Rear Wiper/Washer Switch (4-Door)	LH I/P, right of Steering Column			202-15B2
C201 (16 Cavities)	Main Harness to I/P Harness, LH I/P near Fuse Block 2	06	A	202-07A1
C211 (16 Cavities)	I/P Harness to Floor Harness, LH I/P, near "A" Pillar	07	A	202-09A1
C400 (10 Cavities) (4-Door)	Floor Harness to Rear Lamp Harness, behind LH Rear Wheelhousing	10	A	202-11A1
C401 (12 Cavities) (4-Door)	Floor Harness to Rear Lamp Harness, behind LH Rear Wheelhousing	10	A	202-12A1
C408 (3 Cavities) (4-Door)	Rear Lamp Harness to Rear Door Harness, behind RH Rear Wheelhousing	10	A	
G104	RH Front Inner Fender near Washer Fluid Reservoir	02	A	
G401 (4-Door LSi)	Inside Rear Door, near Rear Wiper Motor	13	A	
G403 (4-Door LSi)	Inside Rear Door, near Rear Wiper Motor	13	A	
S103	Main Harness, behind RH Headlamps			
S104	Main Harness, behind RH Headlamps			
S206	Main Harness, behind LH I/P near Fuse Block 2			
S236	I/P Harness, near I/P near Front Speaker			

TROUBLESHOOTING HINTS

1. Check the WIPER WASHER Fuse by operating front wipers.
2. Check that grounds G104, G401 and G403 are clean and tight.
3. If the Rear Washer does not operate, check that:
   - Washer reservoir is adequately filled.
   - Hoses are not pinched or kinked.
   - Hoses are properly routed.
   - Rear washer nozzle is not clogged.

WIPER/WASHER: PULSE

SYSTEM DIAGNOSIS

TEST	RESULT	ACTION
4. Turn Front Wiper/Washer Switch to "HI" position.	Wipers operate at high speed.	All systems diagnosed in this Section are functioning normally.
	Wipers do not operate.	GO to step 11.
	Wipers operate at low speed.	GO to step 13.
5. Backprobe COMBINATION SWITCH connector with a test lamp from cavity 4 to chassis ground.	Test lamp does not light.	Repair open in YEL/BLU wire between FUSE BLOCK and COMBINATION SWITCH.
	Test lamp lights.	GO to step 6.
6. Backprobe COMBINATION SWITCH connector with a test lamp from cavity 16 to chassis ground. Hold Washer Switch in the "ON" position.	Test lamp does not light.	Check for an open in BLK wire between COMBINATION SWITCH and G200. If OK, replace COMBINATION SWITCH.
	Test lamp lights.	GO to step 7.
7. Turn Ignition Switch to "LOCK." Disconnect FRONT WASHER PUMP and COMBINATION SWITCH connectors. Connect a digital multimeter from cavity 16 of the COMBINATION SWITCH to cavity 2 of the FRONT WASHER PUMP connector. Measure resistance.	More than 1.0 ohm.	Repair open in BLU/BLK wire between COMBINATION SWITCH and FRONT WASHER PUMP.
	Less than 1.0 ohm.	GO to step 8.
8. Connect a digital multimeter from FRONT WASHER PUMP connector cavity 1 to chassis ground. Measure resistance.	More than 1.0 ohm.	Repair open in BLK ground wire between FRONT WASHER PUMP and G104.
	Less than 1.0 ohm.	Replace FRONT WASHER PUMP.
9. Backprobe FRONT WIPER MOTOR connector with a test lamp from cavity 1 to chassis ground. Leave Front Wiper/Washer Switch in "LO."	Test lamp does not light.	Replace FRONT WIPER MOTOR.
	Test lamp lights.	GO to step 10.
10. Disconnect COMBINATION SWITCH connector. Connect a test lamp from connector cavity 16 to chassis ground.	Test lamp lights.	Repair short to voltage in BLU/RED wire between COMBINATION SWITCH and FRONT WIPER MOTOR.
	Test lamp does not light.	Replace COMBINATION SWITCH.
11. Backprobe FRONT WIPER MOTOR connector with a test lamp from cavity 1 to chassis ground. Leave Front Wiper/Washer Switch in "HI."	Test lamp lights.	Replace FRONT WIPER MOTOR.
	Test lamp does not light.	GO to step 12.
12. Backprobe COMBINATION SWITCH with a test lamp from cavity 16 to chassis ground.	Test lamp lights.	Repair open in BLU/RED wire between COMBINATION SWITCH and FRONT WIPER MOTOR.
	Test lamp does not light.	Replace COMBINATION SWITCH.
13. Backprobe FRONT WIPER MOTOR connector with a test lamp from cavity 2 to chassis ground. Leave Front Wiper/Washer Switch in "HI."	Test lamp lights.	Replace COMBINATION SWITCH.
	Test lamp does not light.	GO to step 14.

SYSTEM DIAGNOSIS

TEST	RESULT	ACTION
12. Backprobe REAR WIPER/WASHER SWITCH connector with a test lamp from cavity 7 to chassis ground.	Test lamp does not light.	Repair open in BLU/GRN wire between REAR WIPER MOTOR and REAR WIPER/WASHER SWITCH.
	Test lamp lights.	Replace REAR WIPER/WASHER SWITCH.
13. Release switch. Backprobe REAR WIPER/WASHER SWITCH connector with a test lamp from cavity 2 to chassis ground while pressing Rear Washer Switch.	Test lamp does not light.	Replace REAR WIPER/WASHER SWITCH.
	Test lamp lights.	GO to step 14.
14. Release switch. Backprobe REAR WASHER PUMP connector with a test lamp from cavity 2 to chassis ground while pressing Rear Washer Switch.	Test lamp does not light.	Repair open in BLK/GRN wire between REAR WIPER/WASHER SWITCH and REAR WASHER PUMP.
	Test lamp lights.	GO to step 15.
15. Disconnect REAR WASHER PUMP connector. Connect a digital multimeter from connector cavity 1 to chassis ground. Measure resistance.	More than 1.0 ohm.	Repair open in BLK ground wire between REAR WASHER PUMP and G104.
	Less than 1.0 ohm.	Replace REAR WASHER PUMP.
16. Disconnect REAR WIPER/WASHER SWITCH connector.	REAR WASHER PUMP stops.	Replace REAR WIPER/WASHER SWITCH.
	REAR WASHER PUMP continues to operate.	Repair short to voltage in BLK/GRN wire between REAR WIPER/WASHER SWITCH and REAR WASHER PUMP.

COMPONENT REPLACEMENT INFORMATION

For component replacement procedures, refer to the section listed below.

CIRCUIT OPERATION

WASHER OPERATION

Whenever the ignition switch is in the "ON" or "START" position, Battery voltage is applied through the WIPER WASHER Fuse to the REAR WIPER/WASHER SWITCH. When the Rear Washer Switch is pressed, battery voltage is applied through the closed contacts of the switch to the REAR WASHER PUMP and to the REAR WIPER MOTOR. Because the REAR WASHER PUMP is permanently grounded at G104, the pump continues to operate as long as the Rear Washer Switch is held.

REAR WIPER OPERATION

Whenever the ignition switch is in the "ON" or "START" positions, battery voltage is applied through the WIPER WASHER Fuse to the REAR WIPER/WASHER SWITCH. When the Rear Wiper Switch is pressed, battery voltage is applied through the closed contacts of the switch to the REAR WIPER MOTOR. Since the REAR WIPER MOTOR is permanently grounded at G401, the motor operates as long as the REAR WIPER/WASHER SWITCH is ON. The REAR WIPER MOTOR also incorporates a Pawl and Switch assembly which allows the motor to receive battery voltage and complete the wipe cycle in the event that the REAR WIPER/WASHER SWITCH is turned OFF when the wiper is not in the PARK (down) position.