

Description and Operation

Lighting System Description

Halogen Bulbs

Caution: Halogen bulbs contain gas under pressure. Handling a bulb improperly could cause it to shatter into flying glass fragments. To help avoid personal injury:

- Turn off the lamp switch and allow the bulb to cool before changing the bulb. Leave the lamp switch off until the bulb change is complete.
- Always wear eye protection when changing a halogen bulb.
- Handle the bulb only by its base. Avoid touching the glass.
- Do not drop or scratch the bulb.
- Keep dirt and moisture off the bulb.
- Place the used bulb in the new bulb's carton and dispose of it properly.
- Keep halogen bulbs out of the reach of children

Back-up Lamps

On Chevrolet vehicles, the back-up lamps are located on the upper, innermost side of the taillamp. On Pontiac vehicles, the back-up lamps are located on the innermost side of the taillamp, next to the taillamp filler. The back-up lamps will come on when the transmission is placed into the REVERSE position. On vehicles with automatic transmissions, the back-up lamps are activated by the park/neutral position switch. On vehicles with a manual transmission, the back-up lamps are activated by the back-up lamp switch.

Daytime Running Lamps (DRL)

All vehicles are equipped with daytime running lamps (DRL). The DRL system includes a solid state module, and on Chevrolet vehicles only the system includes an automatic control ambient light sensor.

Chevrolet and Canadian Chevrolet/Pontiac

The light sensor is located on the I/P, inside of the vent grille. The light sensor triggers the DRL module to turn on the turn signal lamps when all of the following conditions apply:

- The vehicle has been started.
- The vehicle is in daylight.
- The headlamp switch is in the OFF position.

Turning the headlamps on manually overrides the DRL system. The following lights are not on when the DRL are on:

- The I/P lights
- The taillamps

The car light sensor triggers the module to turn the headlamps ON under the following conditions:

- At dusk
- If the car is started in the darkness

The light sensor will perform the following actions after sunrise, or when the vehicle is in a bright enough area:

- Turn OFF the headlamps
- Turn ON the turn signal lamps

Pontiac

The DRL system turns the turn signal lamps ON when the vehicle is started. The turn signal lamps will stay on until the headlamps are turned on manually in order to override the system.

Front Fog Lamps

On Chevrolet vehicles equipped with fog lamps, the fog lamp switch is located above the radio and to the right of the steering wheel. On Pontiac vehicles, the fog lamp switch is located below the headlamp and instrument panel dimmer switch, to the left of the steering column. Perform the following steps in order to use the fog lamps:

1. Turn on the headlamps or the parking lamps.
2. Push the right side of the fog lamp switch in order to turn on the fog lamps.
3. Push the left side of the fog lamp switch in order to turn off the fog lamps.

Do not use the fog lamps as a substitute for the headlamps.

Switching to the high-beam headlamps will turn the fog lamps off. Switching back to low-beam headlamps will turn the fog lamps on again.

Aim the fog lamps for proper illumination of the road. Inspect the fog lamp aim after the following situations:

- When a new bulb is installed
- If service repairs to the front end area may have disturbed the fog lamp mounting

Front Sidemarker Lamps

On Chevrolet vehicles, the front sidemarker lamps are part of the park and turn signal lamp. On Pontiac vehicles, the front side marker lamp on the outer sides of the front fascia. The front sidemarker lamps will come on when either of the following lamps are on:

- The headlamps
- The parking lamps

The front sidemarker lamps also have reflectors that will shine when light strikes the reflectors. The reflectors will shine whether or not the vehicle lamps are on.

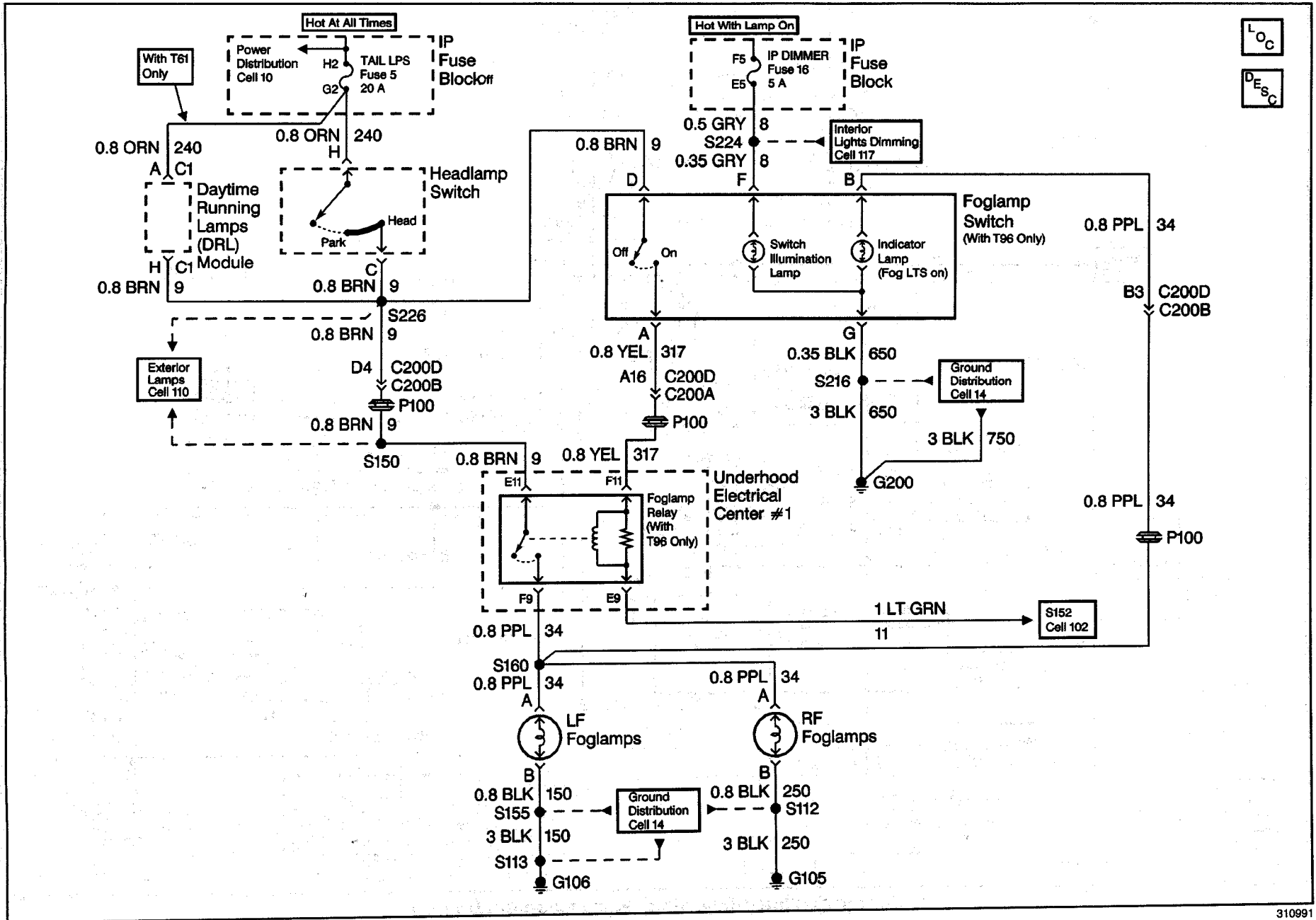
The appropriate front sidemarker lamps will flash in unison with the front turn signal lamp on the same side when one of the following situations occurs:

- The headlamps are off when a turn is signaled.
- The parking lamps are off when a turn is signaled.

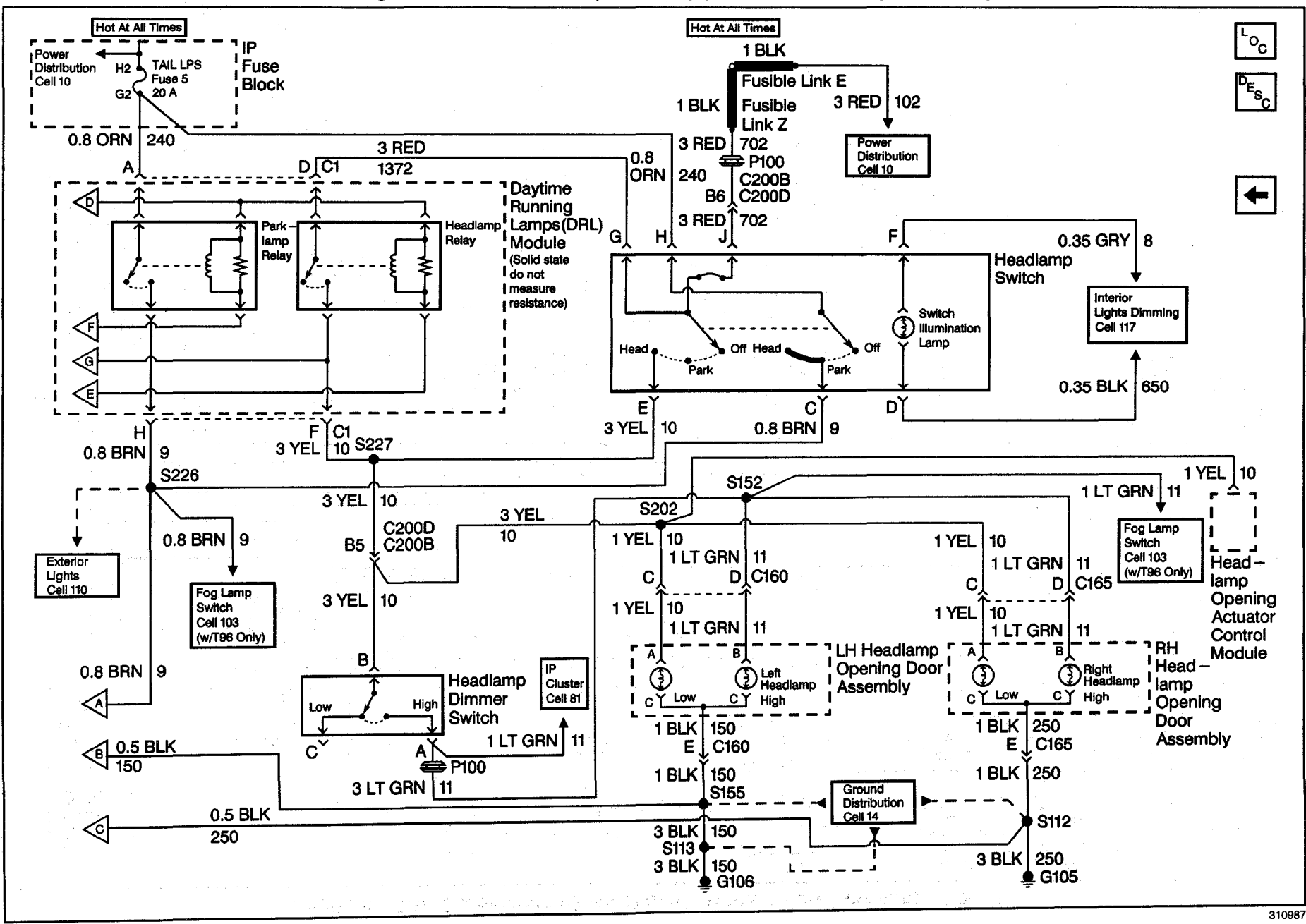
Fog Lamps Inoperative - All (Domestic)

| Step | Action | Value(s) | Yes | No |
|------|--|----------|-------------------------------|-------------------------------|
| 1 | Was the entire fog lights system check performed? | — | Go to Step 2 | Go to Fog Lights System Check |
| 2 | 1. Turn the headlamps on. 2. Turn the foglamp switch on. 3. Turn the headlamp dimmer switch to the low beam position. 4. Use a test light to backprobe between the foglamp switch harness connector circuit 317 and ground. Did the test light illuminate? | — | Go to Step 3 | Go to Step 4 |
| 3 | Use a test light in order to backprobe between the foglamp relay connector terminal F9 and ground. Did the test light illuminate? | — | Go to Step 5 | Go to Step 6 |
| 4 | Use a test lamp to backprobe between the foglamp switch harness connector circuit 9 and ground. Did the test light illuminate? | — | Go to Step 13 | Go to Step 12 |
| 5 | Repair a poor connection or open in circuit 34. Is the repair complete? | — | Go to step 14 | — |
| 6 | Connect a test light between the foglamp relay and terminals E11 and E9. Does the test light illuminate? | — | Go to Step 7 | Go to step 8 |
| 7 | Connect a test light between the foglamp relay connector terminals F11 and E9. Does the test light illuminate? | — | Go to Step 9 | Go to Step 10 |
| 8 | Connect a test light between the foglamp relay connector terminal E11 and ground. Does the test light illuminate? | — | Go to Step 11 | Go to Step 12 |
| 9 | Replace the foglamp relay. Refer to <i>Fog Lamp Relay Replacement</i> Is the repair complete? | — | Go to Step 14 | — |
| 10 | Repair a poor connection or open in circuit 317. Is the repair complete? | — | Go to Step 14 | — |
| 11 | Repair a poor connection or open in circuit 11. Is the repair complete? | — | Go to Step 14 | — |
| 12 | Repair a poor connection or open in circuit 9. Is the repair complete? | — | Go to Step 14 | — |
| 13 | Replace the foglamp switch. Refer to <i>Fog Lamp Switch Replacement - Front (Chevrolet) Fog Lamp Switch Replacement - Front (Pontiac)</i> Is the repair complete? | — | Go to Step 14 | — |
| 14 | 1. Turn the ignition switch to the OFF position. 2. Reconnect all connectors/components removed. Have all the repairs been made? | — | Go to Fog Lights System Check | — |

Fog Lights Schematics (Pontiac Cell 103)



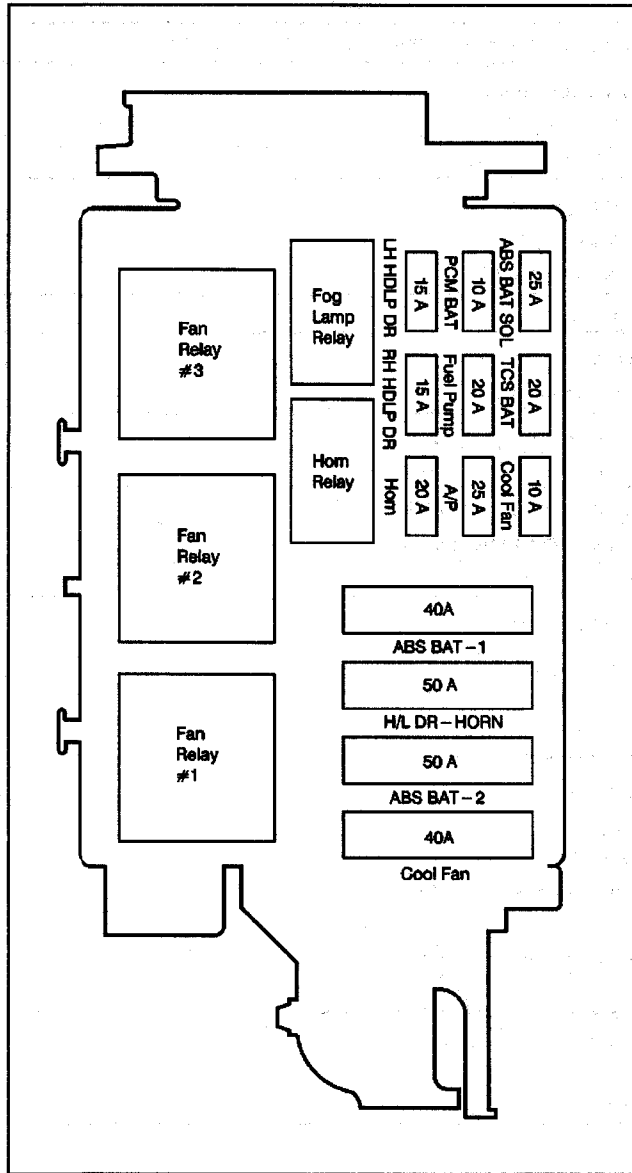
Headlights DRL Schematics (Domestic) (Pontiac: Headlamps Cell 102)



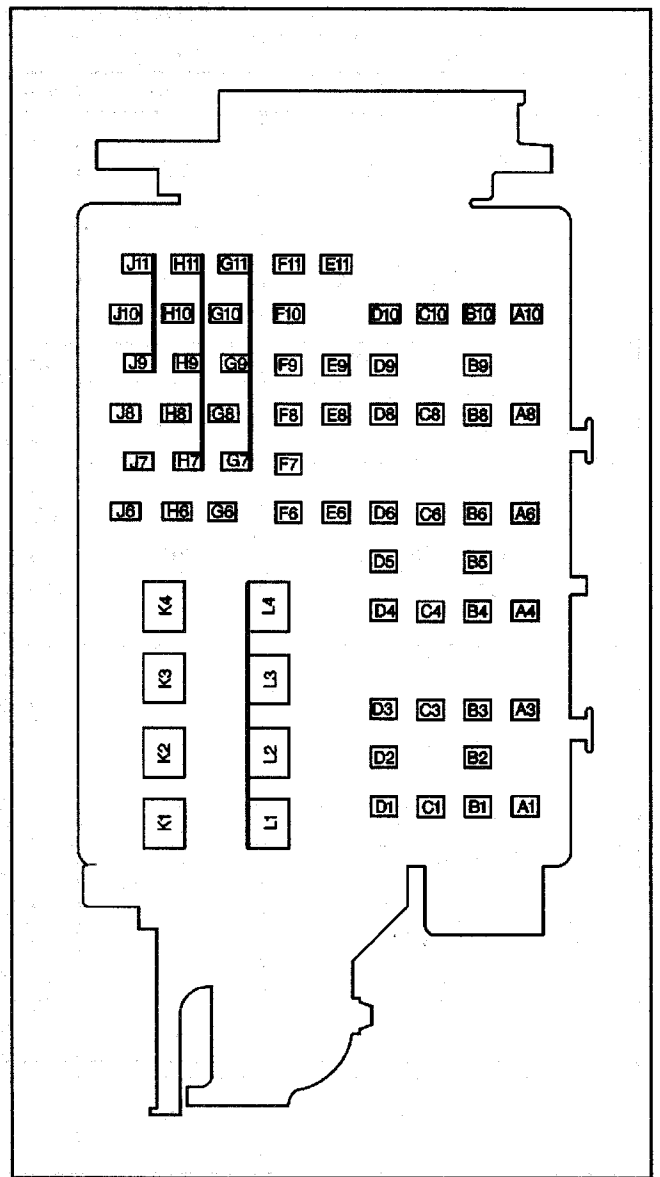
Body and Accessories

Lighting Systems 8-47

Underhood Electrical Center 1

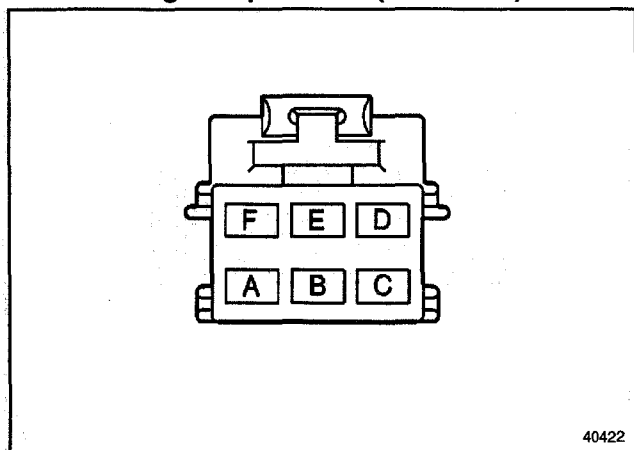


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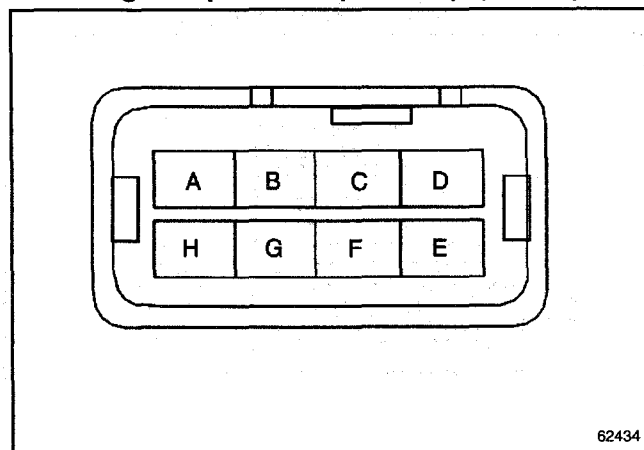
Fog Lamp Switch (Chevrolet)



40422

| Connector Part Information | | <ul style="list-style-type: none"> • 12064762 • 6-Way M Metri-Pack 150 Series (GRY) | |
|-----------------------------------|------------|---|----------------------------|
| Pin | Wire Color | Circuit No. | Function |
| A | LT GRN | 11 | Headlight Feed Input |
| A (Europe) | BLK | 650 | Ground |
| B | BLK | 650 | Ground |
| C | GRY | 8 | Power Feed Input |
| D | — | — | Not Used |
| E | BRN | 9 | Headlight Feed Input |
| F | YEL | 317 | Fog Lamp Relay Feed Output |

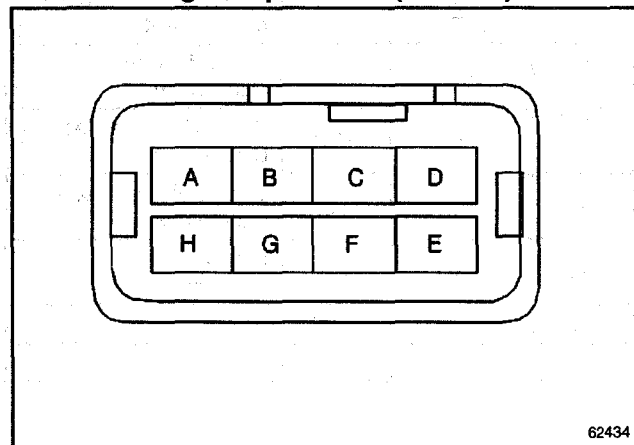
Fog Lamp Switch (Pontiac) (cont'd)



62434

| Connector Part Information | | <ul style="list-style-type: none"> • 12045688 • 8-Way M Metri-Pack 150 Series (BLK) | |
|-----------------------------------|------------|---|----------------------------|
| Pin | Wire Color | Circuit No. | Function |
| F | GRY | 8 | Instrument panel lamp feed |
| G | BLK | 650 | Ground |
| H | — | — | — |

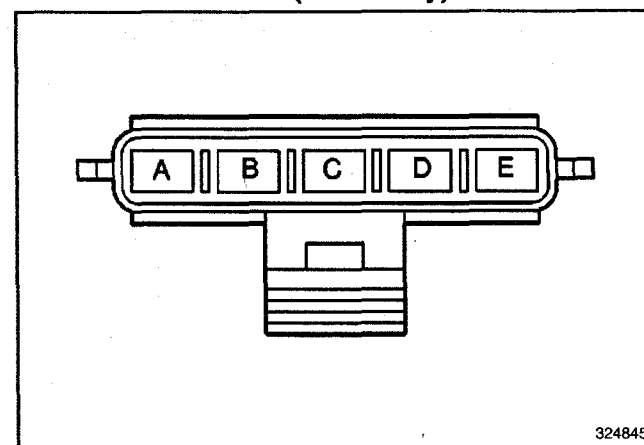
Fog Lamp Switch (Pontiac)



62434

| Connector Part Information | | <ul style="list-style-type: none"> • 12045688 • 8-Way M Metri-Pack 150 Series (BLK) | |
|-----------------------------------|------------|---|--------------------------|
| Pin | Wire Color | Circuit No. | Function |
| A | YEL | 317 | Fog lamp relay feed-coil |
| B | PPL | 34 | Fog lamp feed |
| C | — | — | — |
| D | BRN | 9 | Park lamp feed |
| E | — | — | — |

Headlamp Opening Door Actuator Control Module (Pont Only) C1



324845

| Connector Part Information | | <ul style="list-style-type: none"> • 15300030 • 5-Way F Metri-Pack 280 Series (BLK) | |
|-----------------------------------|------------|---|-----------------------------------|
| Pin | Wire Color | Circuit No. | Function |
| A | YEL | 10 | Headlamp switch output |
| B | ORN | 840 | Fuse output-battery-type III fuse |
| C | BRN | 9 | Park lamp feed |
| D | BLK | 150 | Ground |
| E | ORN | 740 | Fuse output-battery-type III fuse |