Exterior Lights

– How the Headlights (USA) Circuit Works

Low Beams

The headlight relays receive battery voltage at all times. When you turn the headlight switch to the HEAD position with the dimmer switch in LOW, ground is applied through the BLU/RED wire to the coils of the headlight relays. The relays are then energized, applying battery voltage to the left and right high and low beam headlights through fuses 8 and 10 (in the under-hood fuse/relay box). The low beam filaments come on because they are grounded through the dimmer switch. The high beams and indicator remain off because the dimmer switch interrupts their ground path.

High Beams

The headlight relays receive battery voltage at all times. When you turn the headlight switch to the HEAD position with the dimmer switch in HIGH, ground is applied through the BLU/RED wire to the coils of the headlight relays. The relays are then energized, applying battery voltage to the left and right high and low beam headlights through fuses 8 and 10 (in the under-hood fuse/relay box). The high beam filaments and indicator come on because they are grounded through the dimmer switch. The low beams remain off because their ground path is interrupted by the dimmer switch.

Flash-to-Pass

When you hold the flash-to-pass switch in the ON position, ground is applied through the BLU/RED wire to the coils of the headlight relays. The relays are then energized, applying battery voltage to the left and right high and low beam headlights through fuses 8 and 10 (in the under-hood fuse/relay box). The high beams filaments and indicator come on because a path to ground is provided through the closed flash-to-pass switch. The low beams remain off because their ground path is interrupted by the dimmer switch.

Refer to the Service Manual (Section 22, Body Electrical) for specific tests or troubleshooting procedures.