

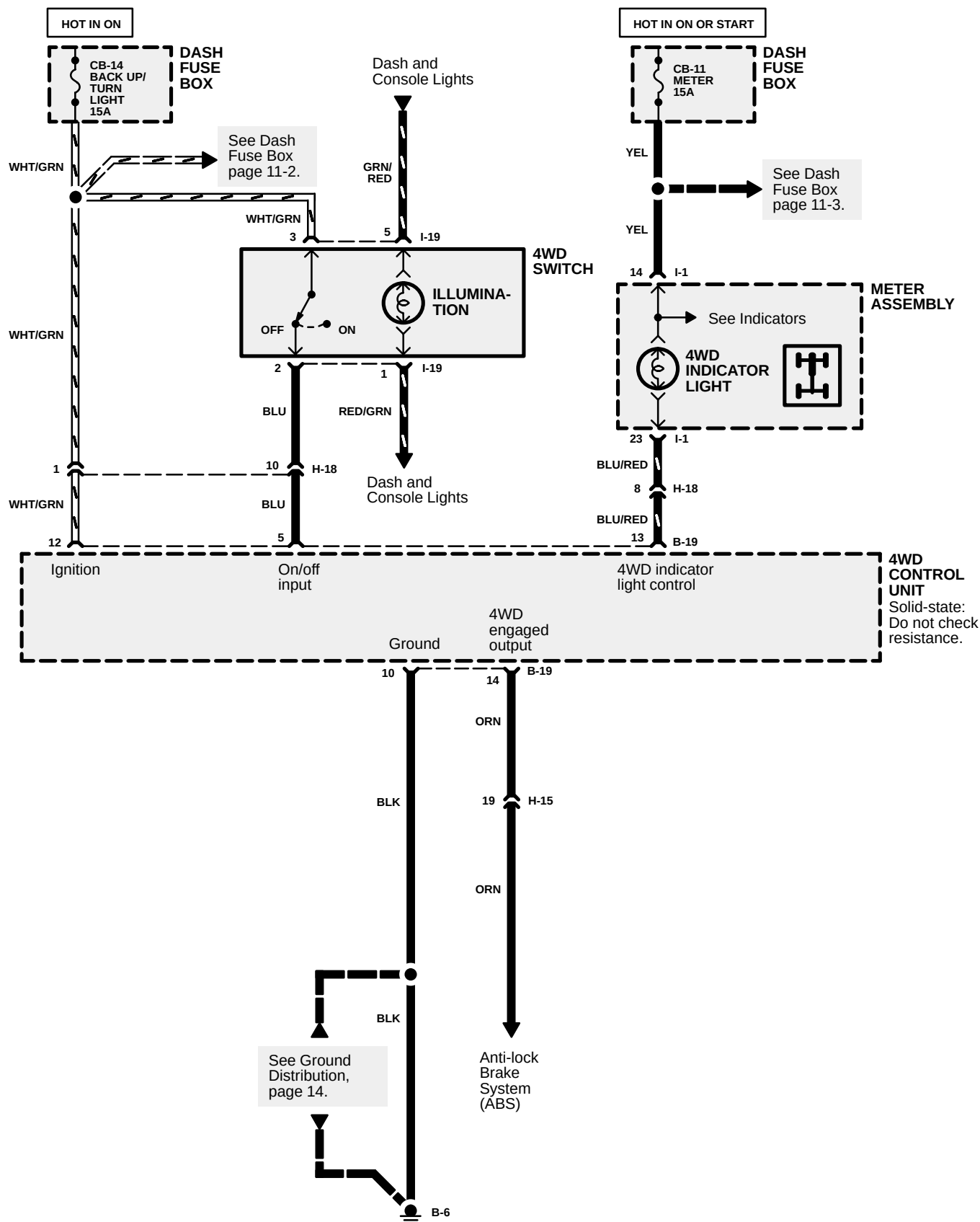
# SHIFT-ON-THE-FLY SYSTEM

## Component Index

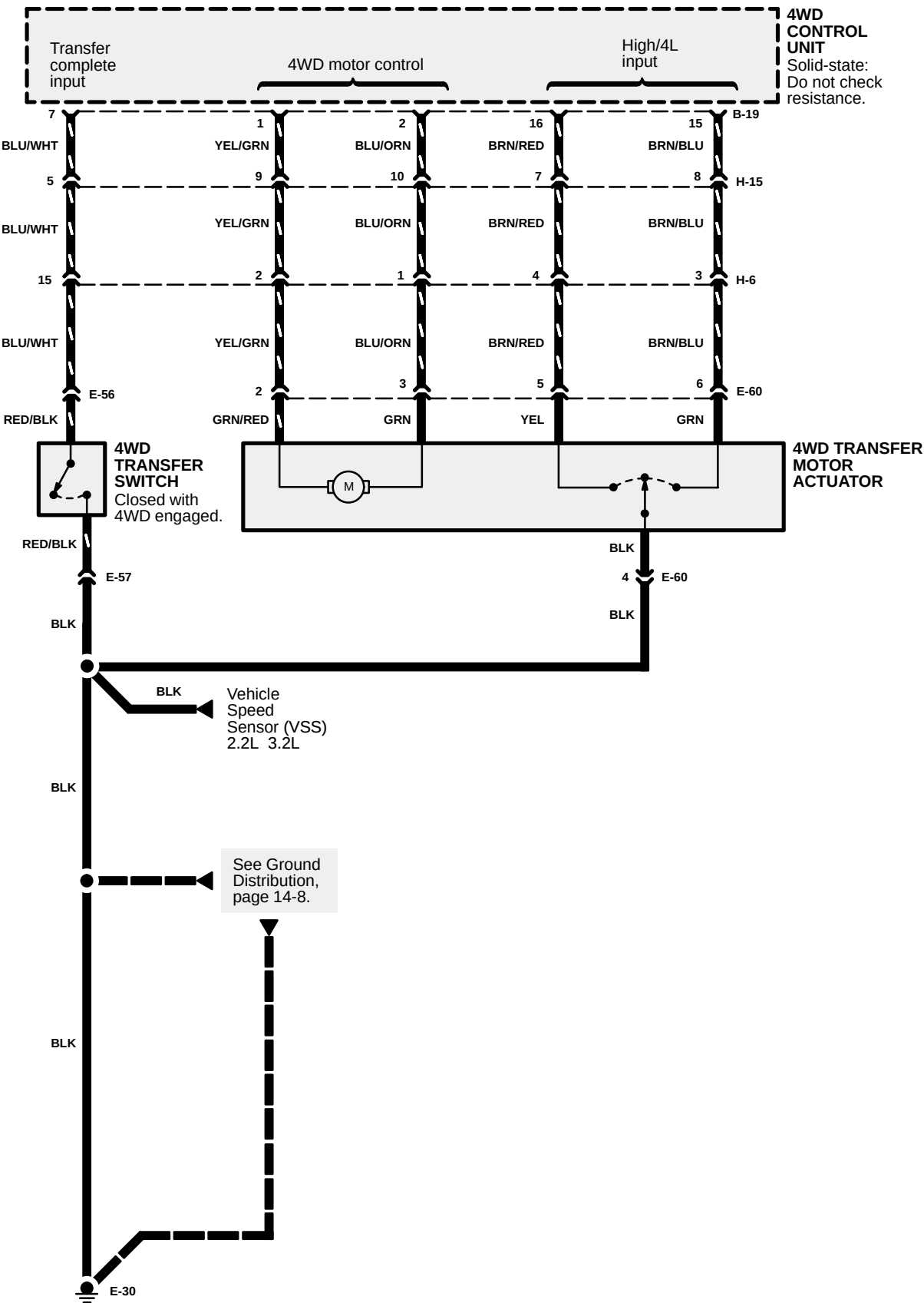
- [4WD Control Unit](#)
- [4WD Transfer Motor Actuator](#)
- [4WD Transfer Switch \(A/T\)](#)
- [Dash Fuse Box](#)
- [Front Axle Motor Actuator](#)
- [Shift-On-The-Fly Controller](#)

# SHIFT-ON-THE-FLY SYSTEM

## Circuit Schematic

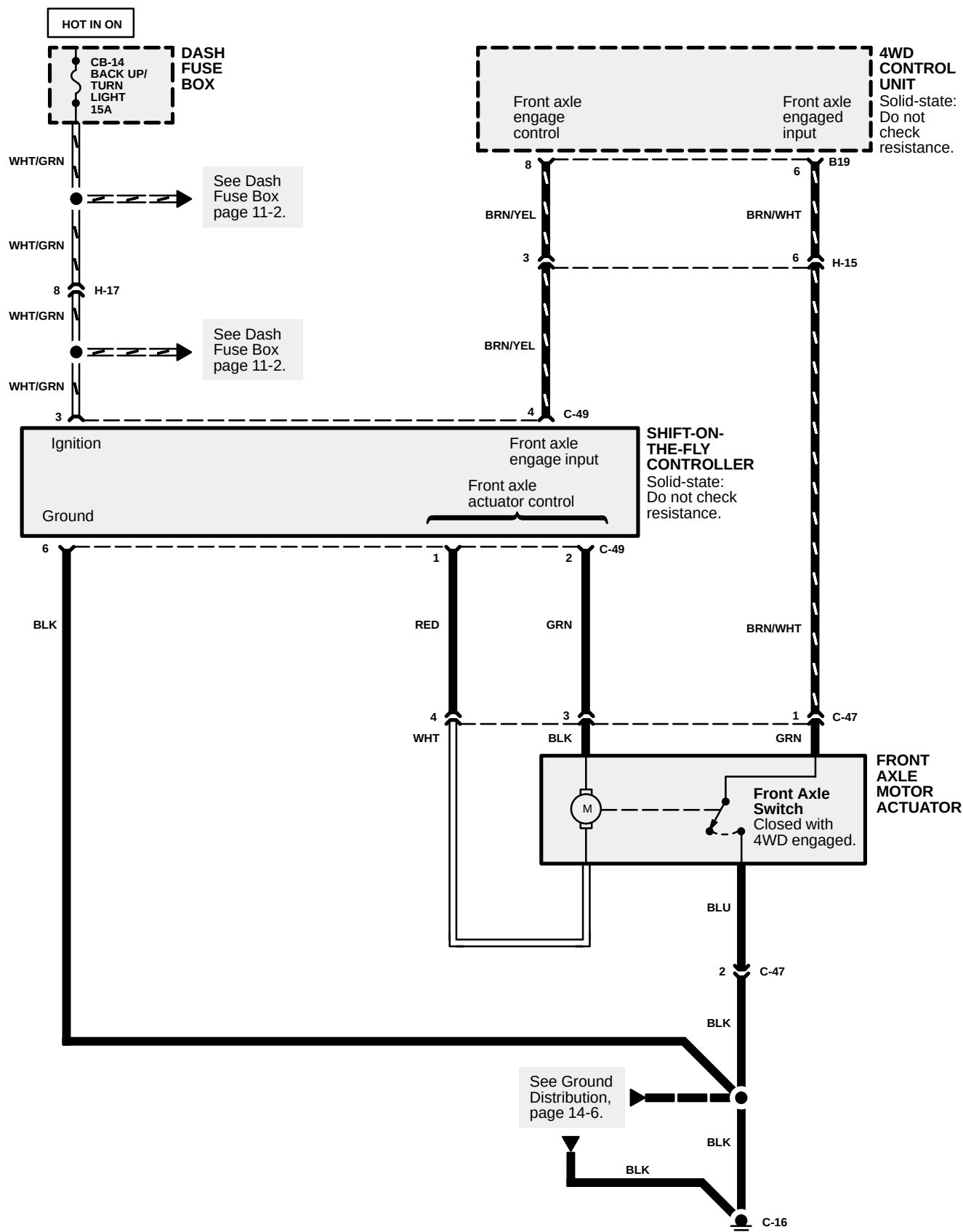


# SHIFT-ON-THE-FLY SYSTEM



# SHIFT-ON-THE-FLY SYSTEM

## Circuit Schematic



# SHIFT-ON-THE-FLY SYSTEM

## Component Location Index

(Refer to Section 201 for photographs.)

| <b>Component</b>                    | <b>Photo No.</b>                                                           |
|-------------------------------------|----------------------------------------------------------------------------|
| 4WD Control Unit . . . . .          | Below center console . . . . . 81                                          |
| 4WD Transfer Motor Actuator . . .   | Beneath center of vehicle, on transfer case . . . . . 120                  |
| 4WD Transfer Switch (A/T) . . . .   | Beneath vehicle, on right side of transfer case . . . . . 108              |
| Dash Fuse Box . . . . .             | Left side of I/P, behind panel . . . . . 58                                |
| Front Axle Motor Actuator . . . . . | Left side of front axle . . . . . 122                                      |
| Shift-On-The-Fly Controller . . . . | Right side of driver's footwell . . . . . 136                              |
| <b>Connector</b>                    |                                                                            |
| C-47 (4-GRY) . . . . .              | Lower left side of engine . . . . . 70                                     |
| E-56 (1-WHT) . . . . .              | On right side of transfer case . . . . . 107                               |
| E-57 (1-WHT) . . . . .              | On right side of transfer case . . . . . 107                               |
| E-60 (6-GRY) . . . . .              | Underneath center of vehicle, rear of transfer case . . . . . 120          |
| H-6 (16-BLU) . . . . .              | Left side of engine compartment . . . . . 27                               |
| H-15 (20-BLU) . . . . .             | Behind left kick panel . . . . . 63                                        |
| H-17 (19-BLK) . . . . .             | Behind left kick panel . . . . . 62                                        |
| H-18 (22-WHT) . . . . .             | Behind right kick panel . . . . . 80                                       |
| I-1 (30-GRN) . . . . .              | Behind left side of I/P, on top of meter assembly . . . . . 86             |
| <b>Ground</b>                       |                                                                            |
| B-6 . . . . .                       | Below center console . . . . . 81                                          |
| C-16 . . . . .                      | Left rear corner of engine compartment, on inner fender panel . . . . . 43 |
| E-30 . . . . .                      | Right side of intake manifold . . . . . 21                                 |

## Circuit Operation

With the starter switch in ON position, the 4WD control unit is powered so that, when the 4WD switch is depressed, the 4WD transfer motor actuator is activated, connecting the front wheels to the driving axle. This feature enables the shifting from 2WD to 4WD while the vehicle is in motion, but only when transfer control lever is in 4H position.