

# SHIFT INTERLOCK SYSTEM

## 1997-98 AUTOMATIC TRANSMISSIONS Shift Interlock Systems

### DESCRIPTION

Transaxle/Transmission shift interlock system prevents driver from moving gearshift lever from Park unless ignition switch is in RUN position. On models equipped with shift interlock solenoid, gearshift lever cannot be moved from Park without simultaneously depressing brake pedal with ignition switch in RUN position. Shift interlock solenoid is located near steering column or center console.

### OPERATION

Models equipped with park lock cable, gearshift lever is locked in Park when ignition switch is in LOCK position. When ignition switch is turned to RUN position, gearshift lever is allowed movement to desired position. Ignition key cannot be removed until gearshift lever is returned to Park.

Models equipped with shift interlock solenoid, gearshift lever cannot be moved from Park without simultaneously depressing brake pedal with ignition switch in RUN position. When pressure is applied to brake pedal, solenoid is actuated to release gearshift lever. Brake light switch completes or interrupts circuit to mechanically lock or unlock gearshift lever in Park by energizing or de-energizing solenoid, depending upon application. See **WIRING DIAGRAMS** .

### TROUBLE SHOOTING

**NOTE:** Individual component testing procedures are not available from manufacturer. To identify model specific components within shift interlock system, component location, wire color and wire terminal identification, see **WIRING DIAGRAMS** .

### VISUAL INSPECTION

Diagnosis of shift interlock system should begin with a general visual inspection. Each model is similar in function, but may be equipped with a variety of components depending upon application. Before beginning any diagnosis, refer to appropriate wiring diagram to become familiar with the type of system being diagnosed and for use as a guide to pinpoint areas of concern. See **WIRING DIAGRAMS** .

Once familiar with system being diagnosed, check operation of the following:

- With ignition switch in LOCK position, gearshift lever should be locked in Park.
- With gearshift lever in Park, ignition switch should be allowed movement from LOCK position to any desired position and back to LOCK position. Ignition key should be removable while in LOCK position.
- With ignition switch in RUN position, gearshift lever should be allowed movement from Park. Models equipped with shift interlock solenoid require that brake pedal be depressed for this operation.
- With ignition switch in RUN position and gearshift lever in any position other than Park, ignition key is

non-removable. Ignition key is removable only when gearshift lever is returned to Park.

If shift interlock system operates as specified, system is functioning properly at this time. If system does not operate as specified, inspect mechanical functions of the following:

- Ignition switch.
- Gearshift lever assembly.
- External shift cable/linkage.
- Internal transaxle/transmission shift linkage.

Adjust or repair as necessary. See **ADJUSTMENTS** . If no mechanical problems are found, inspect all electrical components while referring to appropriate wiring diagram as a guide. See **WIRING DIAGRAMS** . Ensure all electrical harness connections are tight and free of corrosion. Check for misrouted wires and damaged components. Ensure fuses are good and appropriate circuits are properly grounded.

## **ADJUSTMENTS**

### **PARK LOCK CABLE**

**WARNING:** When battery is disconnected, vehicle computer and memory systems may lose memory data. Driveability problems may exist until computer systems have completed a relearn cycle. See **COMPUTER RELEARN PROCEDURES** article in **GENERAL INFORMATION** section before disconnecting battery.

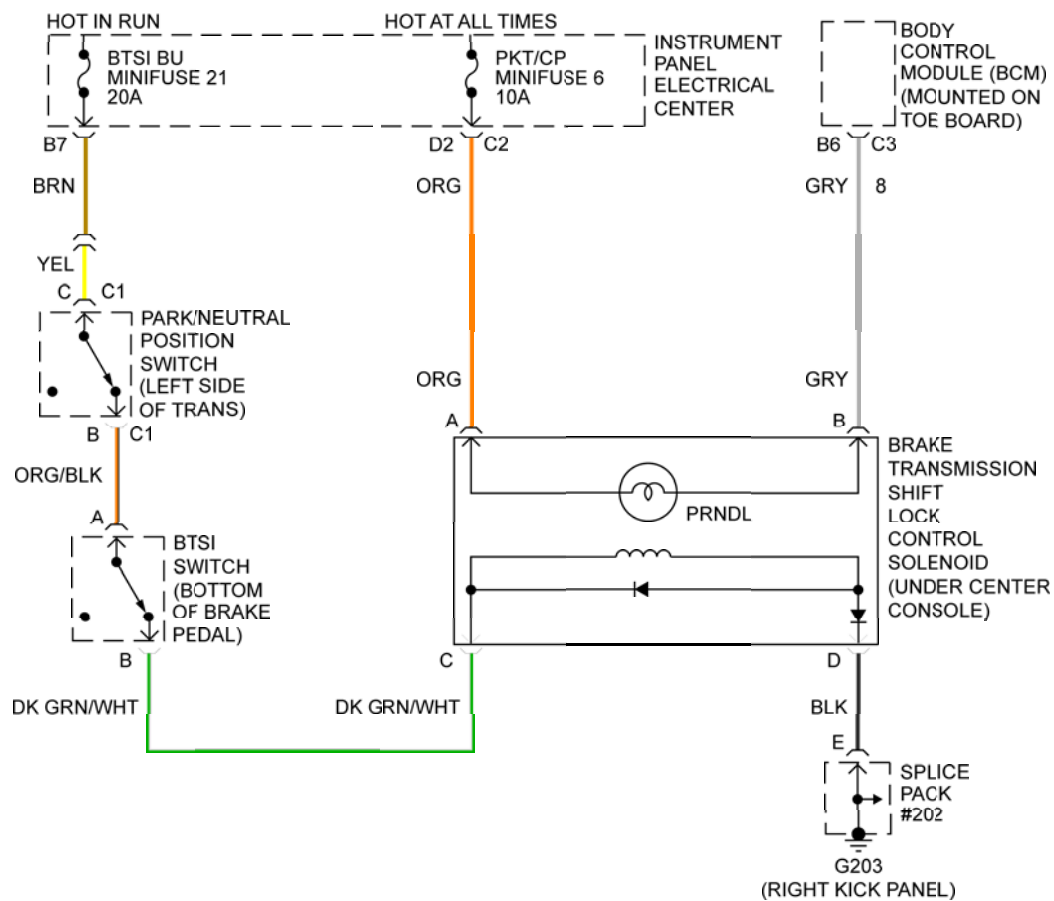
**NOTE:** Not all models are equipped with a park lock cable. Park lock cable adjustment information for some models is not available from manufacturer.

No adjustment is necessary. Replace park lock cable if ignition switch can be turned with gearshift lever in any position except Park, or if gearshift lever can be moved from Park with ignition switch in LOCK position.

### **SHIFT INTERLOCK SOLENOID**

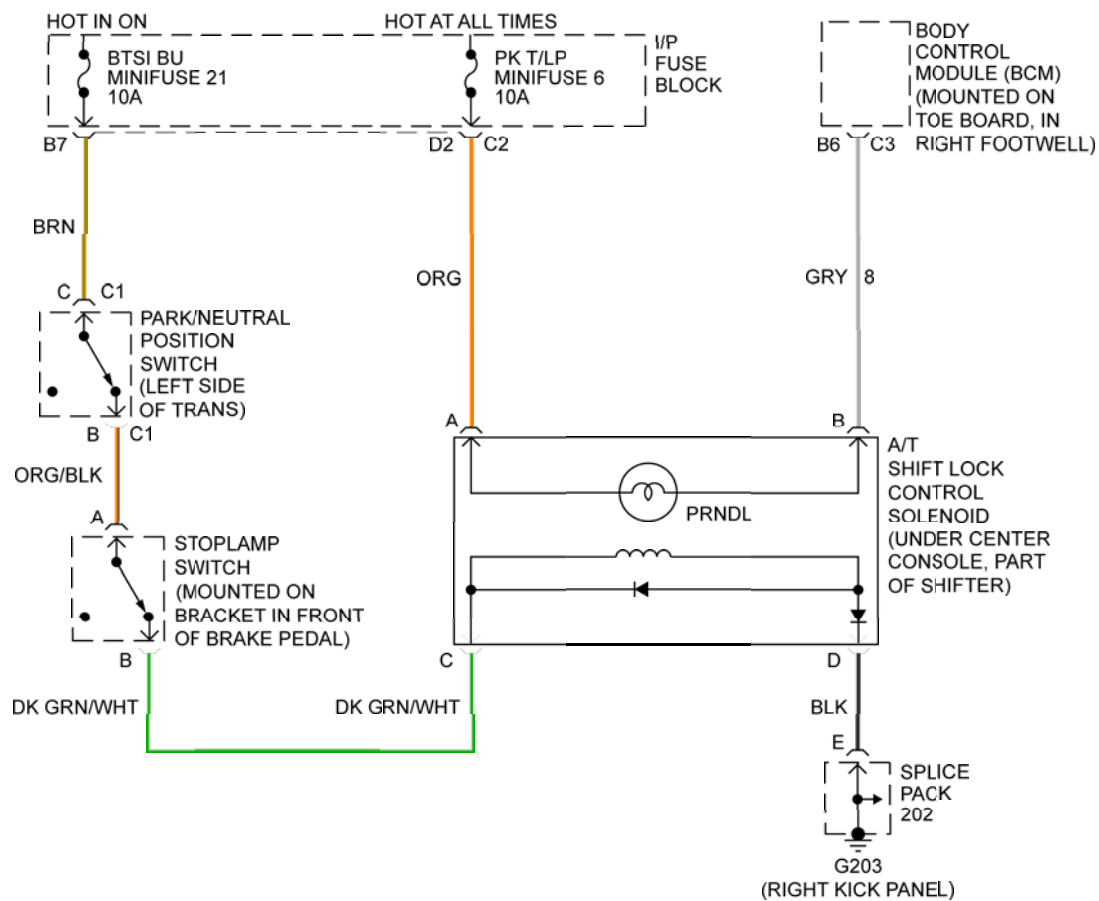
**NOTE:** Shift interlock solenoid is non-adjustable. If shift interlock system is out of adjustment, check park lock cable adjustment. See **PARK LOCK CABLE** . If adjustment is not possible, replace necessary components. Some models require that park lock cable and shift interlock solenoid be replaced as an assembly.

## **WIRING DIAGRAMS**



**Fig. 1: Wiring Diagram (Corvette) (1997)**





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(RIGHT KICK PANEL)

**Fig. 2: Wiring Diagram (Corvette) (1998)**

