

# TRANSMISSION SERVICING - AT

1995 Volvo 850

AUTOMATIC TRANSMISSION SERVICING  
Volvo

850, 940, 960

## APPLICATION

VOLVO AUTOMATIC TRANSMISSION APPLICATIONS

Vehicle Model	Transmission Model
850	AW50-42
940	AW-70
940 Turbo	AW-71
960	AW-40

## LUBRICATION

### SERVICE INTERVAL

Check fluid level every 10,000 miles.

### CHECKING FLUID LEVEL

1) Ensure vehicle is level. Apply parking brake and gear selector lever to "P" position. Start and idle engine. Move gear selector lever through all gears, while pausing 4-5 seconds for engagement at each position.

2) Return gear selector lever to "P" position. Wait 2 minutes and check fluid level with engine idling. Level should be between MIN and MAX marks.

## RECOMMENDED FLUID

FLUID SPECIFICATIONS

Application	ATF Type
850 (AW50-42)	Dexron IIE Or Mercon
940 (AW-70)	Type "F" Or "G"
940 Turbo (AW-71)	Type "F" Or "G"
960	Dexron IIE Or Mercon

## FLUID CAPACITIES

TRANSAXLE REFILL CAPACITIES

Application	Refill Qts. (L)	Dry Fill Qts. (L)
850 (AW50-42)	N/A	8.1 (7.6)
940 (AW-70)	4.1 (3.9)	7.8 (7.4)
940 Turbo (AW-71)	4.1 (3.9)	7.8 (7.4)
960 (AW-40)	5.6L (5.2)	8.2 (7.7)

## DRAINING & REFILLING

940

1) Remove drain plug and drain transmission. Disconnect filler tube and remove oil pan.

2) Remove and clean oil strainer. Install strainer. Tighten strainer bolts to 18-25 INCH lbs. (2-3 N.m). Install oil pan with new gasket. Tighten bolts to 42 INCH lbs. (5 N.m). Tighten filler tube to 65 ft. lbs. (88 N.m).

3) To flush oil cooler, disconnect fluid return pipe from transmission. Place end of pipe in container. Add about 3.5 qts. (3.4L) of fluid in transmission.

4) Start engine and let idle. Turn off engine when clean oil comes out of pipe. Connect pipe and fill transmission.

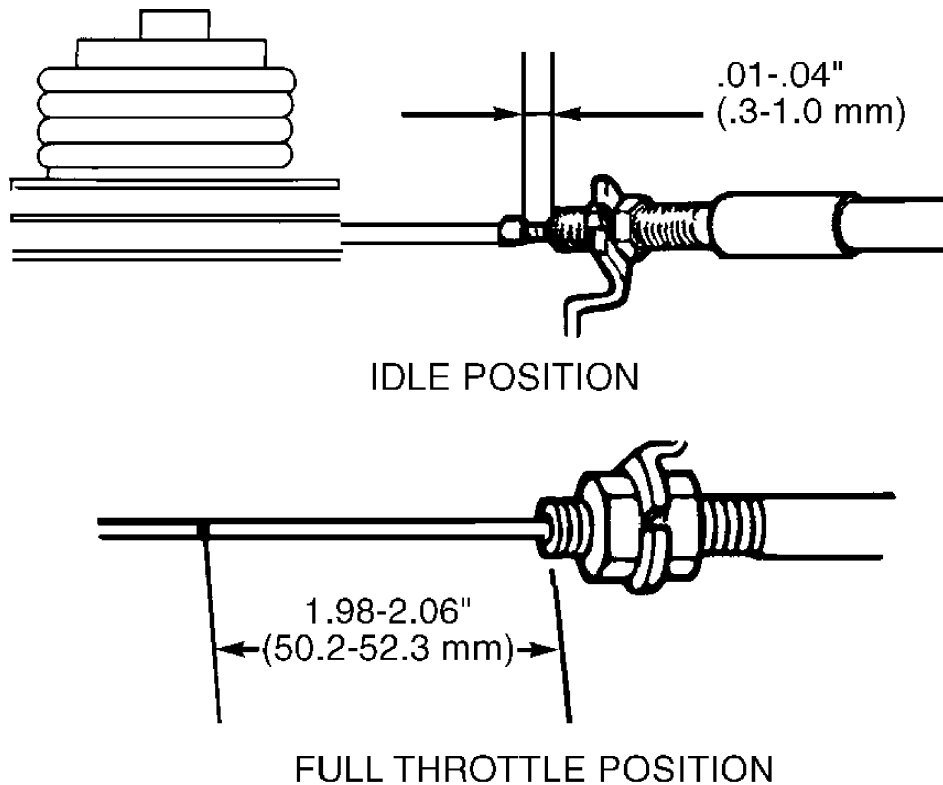
## ADJUSTMENTS

NOTE: Adjustment procedures for some models are not available.

### THROTTLE & KICKDOWN CABLES

850

Depress accelerator pedal. With pedal depressed, distance from cable sheath to clip on cable should be approximately 1.98-2.06" (50.2-52.3 mm). See Fig. 1. Adjust distance on cable sheath if necessary.



90F02501

Fig. 1: Checking Transmission Throttle Cable  
Courtesy of Volvo Cars of North America.

### GEARSHIFT CABLE

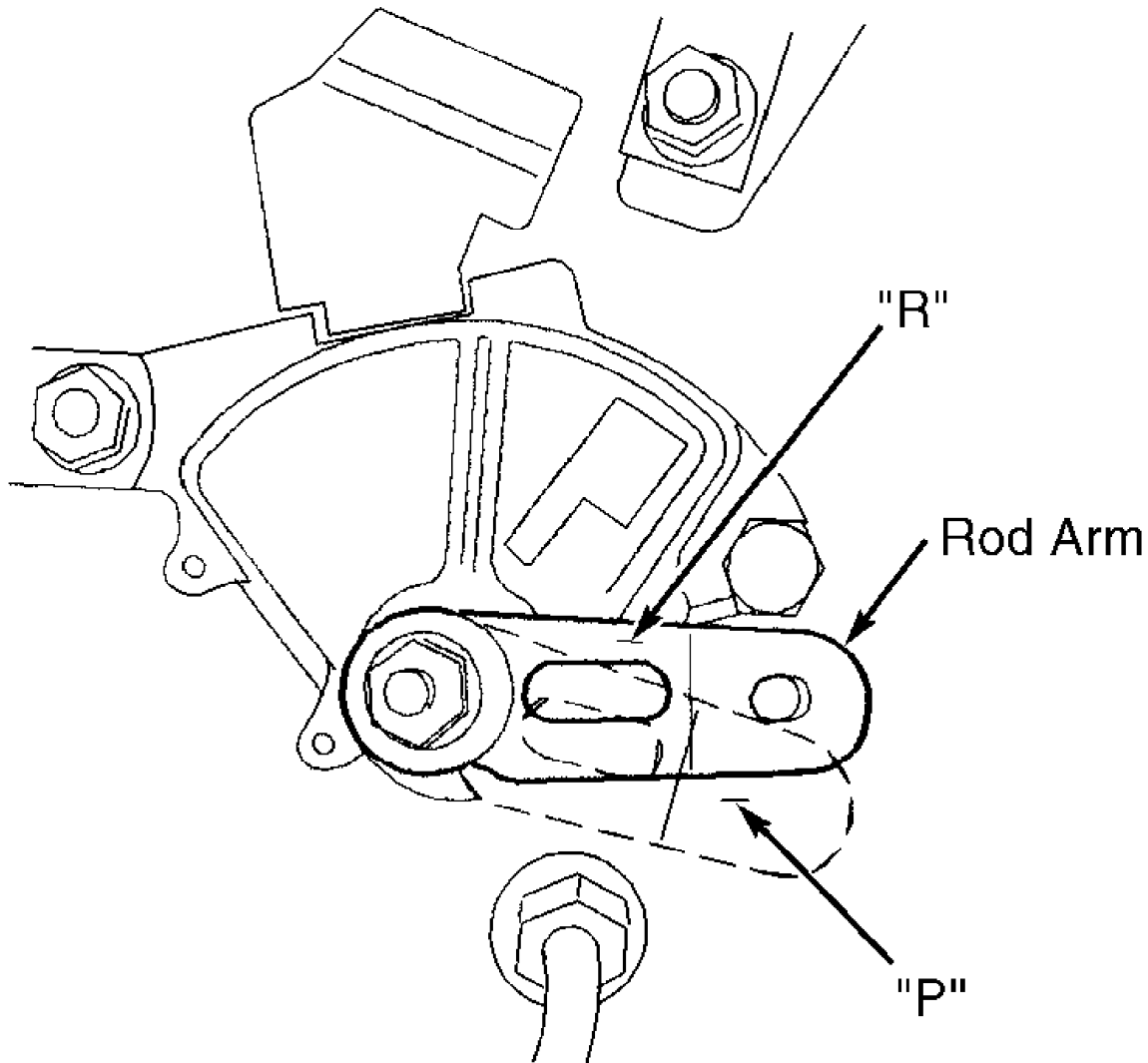
850

1) Shift gear selector lever to "R" position. Disconnect gearshift cable at transmission rod arm. Move transmission rod arm forward to "P" position. See Fig. 2.

NOTE: Do not move transmission cable to adjust selector lever position. Transmission cable position must not be altered.

2) Ensure vehicle is in Park by attempting to roll vehicle. Move transmission rod arm to "R" (next position). Apply a small amount of grease to rod arm pin. Carefully reinstall cable on transmission rod arm. Ensure gear selector does not move during installation.

3) Move gear selector lever to "N" position. Push lever forward, but do not touch lock button. Play should be felt. Move gear selector lever to "D" position. Push selector lever backward, but do not touch lock button. Play should be felt.



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Fig. 2: Adjusting Rod Arm  
Courtesy of Volvo Cars of North America.

GEARSHIFT LINKAGE

940

1) Engine should start in Neutral or Park only. Back-up lights should only operate in Reverse. Gear selector should be vertical in Park. If gear selector is not vertical, proceed to next step.

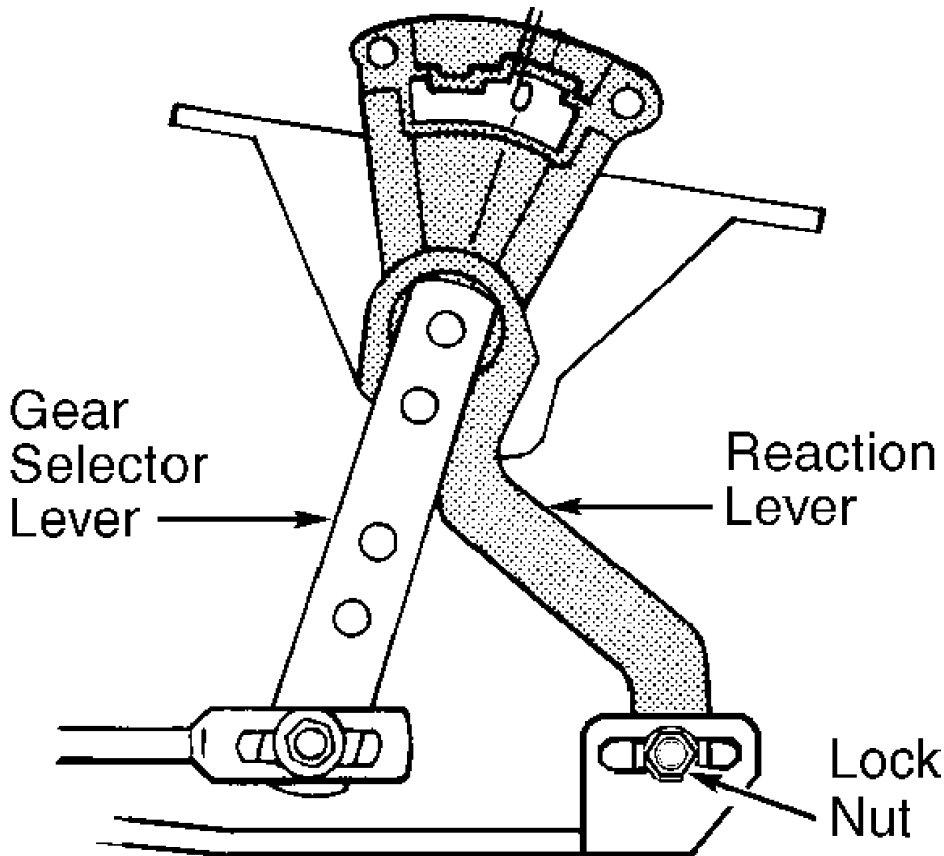
2) Place gear selector in Park. Loosen lock nuts for actuator and selector rods. See Fig. 3. Ensure transmission lever is in Park. Rotate output shaft on transmission until it locks.

3) Place gear selector in a vertical position, or slightly forward, and tighten lock nut. Push reaction lever lightly rearward until a slight resistance is felt. Tighten lock nut to 42 INCH lbs. (5 N.m).

4) Ensure free play between pin and stop in Drive and Neutral is less than or equal to play between pin and stop in "3" and "2" positions. If free play is correct, tighten lock nut to 12-17 ft. lbs. (17-23 N.m).

NOTE: If gear selector is stiff in "3" position, move reaction lever approximately 1/8" toward front and recheck operation.

5) After adjustment, ensure vehicle only starts in Neutral or Park and back-up lights come on only in Reverse.



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Fig. 3: Adjusting Shift Linkage (940)  
Courtesy of Volvo Cars of North America.

NEUTRAL SAFETY SWITCH

Neutral safety switch is located at bottom of selector lever.  
No adjustment is necessary.

### SHIFT INTERLOCK SYSTEM

Testing and adjustment information for shift interlock system  
is not available. See WIRING DIAGRAMS.

### WIRING DIAGRAMS

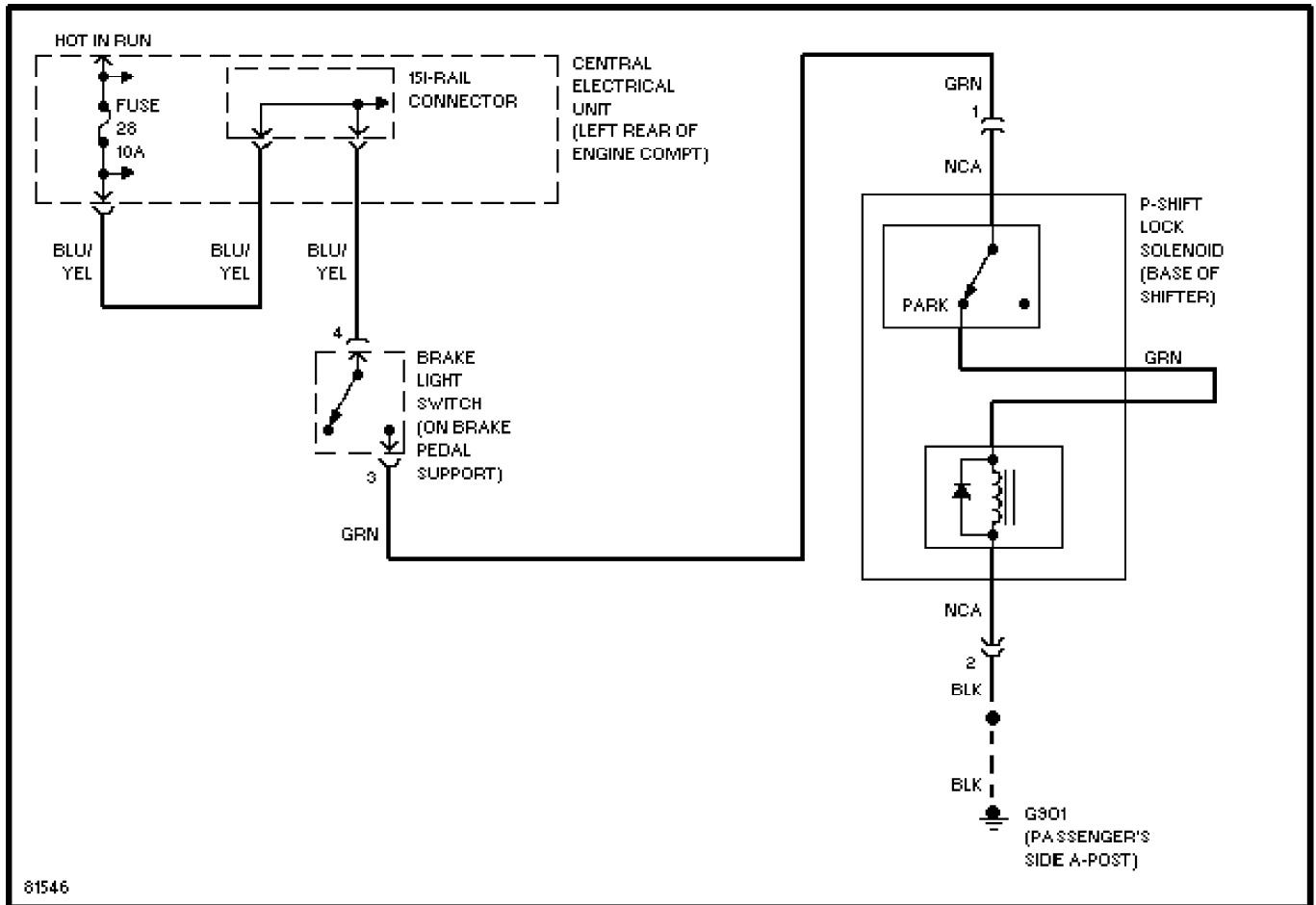


Fig. 4: Shift Interlock System Wiring Diagram (1995-96 850)

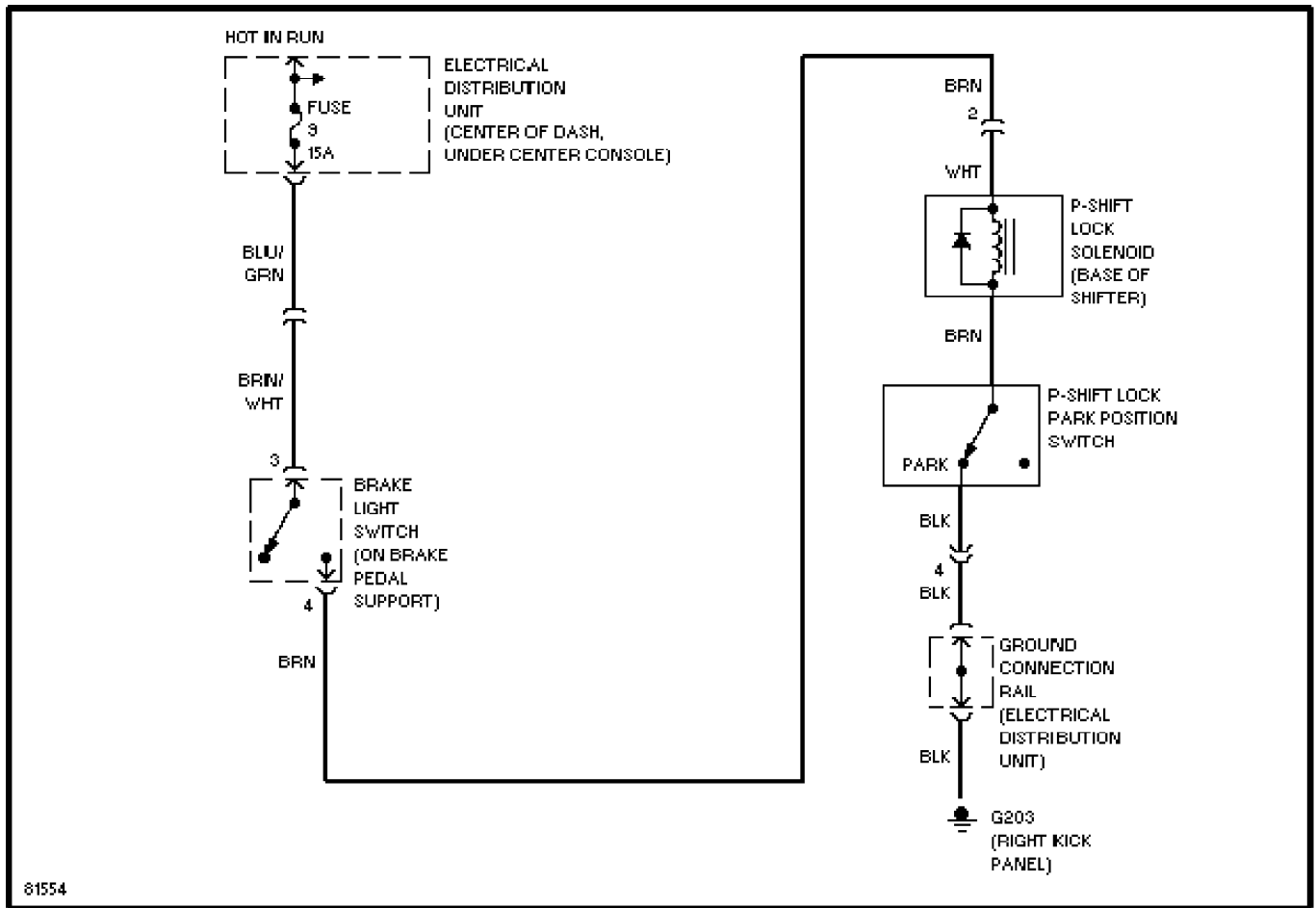


Fig. 5: Shift Interlock System Wiring Diagram (1995 940)

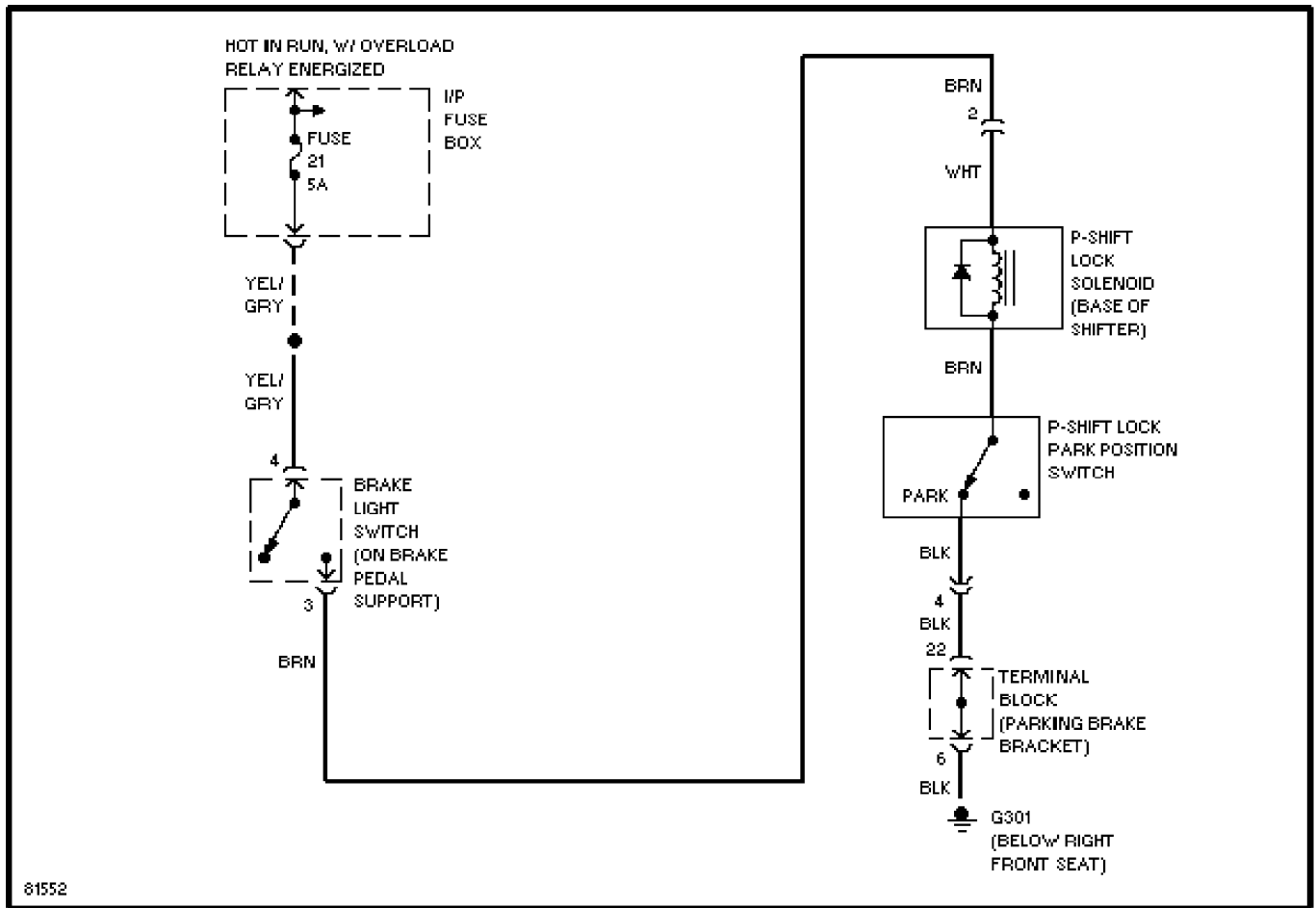


Fig. 6: Shift Interlock System Wiring Diagram (1995-96 960)