

## **Technical Service Information**

## CHRYSLER A500/A518 NO SHIFT TO 4TH GEAR

**COMPLAINT:** 

Before and/or after rebuild, vehicles equipped with the A500/A518 transmission may exhibit a "No 4th" gear condition. Vehicle Speed, Engine RPM, Throttle Position, Coolant Temperature, MAP sensor and overdrive cancel information have all been verified, and are correct on the scanner.

**CAUSE:** 

The cause may be, an internally grounded Park/Neutral switch, a grounded Park/Neutral switch wire, or an internally grounded Starter Relay. These can be easily detected, because the engine will start in ranges other than Park or Neutral. The center terminal of the Park/Neutral switch provides the ground for the starter solenoid circuit through the selector lever in Park and Neutral positions only. The computer moniters this ground circuit from the starter relay. If the Park/Neutral circuit is grounded while in the Drive position, the vehicle may exhibit a no 4th gear condition.

**CORRECTION:** Refer to Figure 1 for the location of the Park/Neutral switch. Disconnect the three pin harness connector from the switch, and see if the engine will start.

Note: For safety reasons, perform this test with the rear wheels off the ground.

If the engine will not start, perform the switch test as shown in Figure 1, and replace the Park/Neutral switch as necessary. If the engine does start, locate the "Starter Relay", normally found on the "Firewall" or "Fender Well", depending on the model. Check for continuity to ground on the brown with yellow tracer wire on early models, or the black with white tracer wire on late models, and repair or replace as necessary.

Note: The wire color at the center terminal of the Park/Neutral switch is normally the wire color at the Starter Relay.

If the Park/Neutral switch wire *does not* have continuity to ground, cut the wire at the starter relay and try again to start the engine. If the engine still starts, replace the relay.

