ELECT-04, Cruise Control - General Information and Repair

Introduction

Cruise control problems are fairly common in 944s. The most frequent problems include failing to engage, failing to maintain speed, and picking up a set amount of speed after engagement (typically 5-10 mph). The good news is that most cruise control problems can be solved without high dollar repairs (provided you do the repairs yourself).

The two major components in the cruise control system are the cruise control computer and the cruise control servo unit. The cruise control computer is located in the driver's footwell (LHD) above the hood release lever. The cruise control servo is mounted on the firewall in the engine bay just in front of the battery tray.

A number of cruise control problems can be caused by either the cruise control computer or the cruise control servo unit. If you are having problems and you aren't sure which unit is causing the problem, I recommend cleaning the cruise control servo first, reinstall the servo and test the system, and evaluate if further repairs are necessary. Refer to the table below to help determine which unit may be causing your problem.

Cruise Control Troubleshooter	
Symptom	**Possible Cause**
Acceleration above preset speed (normally 5-10 mph)	Servo unit
Operates intermittently	Cruise control computer or servo
Fails to engage or operate	Cruise control computer

Cleaning the Servo Unit

Tools

- Metric Socket / Wrench Set
- Phillips Screwdriver
- Small Flat Tip Screwdriver
- Spray Contact Cleaner
- Cotton Swab

Procedure

1. Disconnect the throttle cable from the servo. The cable is held in place by a clip. Remove the metal retainer off the clip and slide the clip off the ball on the servo operating arm.
2. Disconnect the servo electrical connector.
3. Remove the servo from the vehicle.

NOTE

It's a good idea to make a drawing of the servo as you disassemble it for future reference when you get ready to reassemble.

4. Remove the operating lever arm from the servo. There is a nut holding the lever arm to the servo.
5. Using a Phillips screwdriver, carefully remove the cover from the servo (small spring inside may want to pop out). A small flat tip screwdriver may be used to pry the cover off if it is stuck.
6. Inside the servo, you'll find a circuit board with two conducting strips which are contacted by a wiper arm. The most common problem with the servo is that these strips get dirty and need to be cleaned.
7. Using the spray contact cleaner and a cotton swab, carefully clean the conducting strips on the circuit board. Be careful not to rub the strips to hard as you may damage them.
8. Check the motion of the wiper arm to make sure it is making good contact with the circuit board.
9. Apply grease to the moving parts inside the servo. Ensure no grease gets on the conducting strips or wiper arm.
10. Reassemble the servo, install, and test for proper operation.

Cruise Control Computer Repairs

Tools

- Small flat tip screwdriver
- Phillips screwdriver
- Magnifying Glass / Lens
- Soldering Iron / flux core solder
- Solder Removal Tool (Solder Sucker)
- Small Wire Brush
- Alcohol
- Cleaning Swabs

Procedure

1. Locate the cruise control computer. It is the silver box above the hood release lever.
2. Disconnect the electrical connector from the cruise control computer. There are several mounting screws which hold the unit in place. Remove the screws and remove the unit from the vehicle.
3. Open the cruise control computer by bending the tabs back on the cover using a flat tip screwdriver.
4. Remove the circuit board from the unit.
5. Using the magnifying glass, inspect all the solders on the board. A good solder should have a bright shiny appearance. Poor solder joints will be dull in color and possibly have a ring around the leg of the soldered component.
6. Repair any poor / questionable solder joints. The circuit board is usually covered will some type of protective coating. You'll likely have to heat the solder joint and remove the old solder and protective coating material using a solder removal tool (solder sucker). Once the old solder is removed, clean the joint area with a small wire brush.
7. Re-solder the joint making sure the solder flows into the joint area. After the solder cools, clean residual flux from the joint using alcohol and a swab.
8. Reassemble the cruise control computer.
9. Install the computer and road test.