- If steps 1 through 5 do not isolate problem, proceed to step 6. If checks 1 through 3 indicate owner misunderstanding, proper operation should be explained to him.
- 6. Place black cloth over photocell opening in radio speaker grille. (Remember, if car has stereo radio, the photocell is under small speaker grille on left end of upper instrument panel cover. If car is not equipped with stereo, photocell is under left side of regular front speaker grille.)
- 7. Turn regular headlight switch OFF. Rotate time delay control ring pointer to ON position so that pointer is approximately straight down.
- 8. Turn ignition on. <u>Do not start engine</u>. Car lights should turn on within from a few seconds to a maximum of 60 seconds. If they do, proceed to step 9. If lights fail to turn on, perform the following checks:
- a. Check for blown taillight fuse at fuse panel if headlights turn on but taillights fail to turn on.
- b. Turn regular light switch on. If headlights fail to turn on, car wiring is defective. If headlights turn on, check for defective wiring or connections between amplifier and light switch. Turn regular light switch off.
- c. Check for loose ground connection or loose wiring harness connection at amplifier unit. Connect jumper wire between body ground and purple wire in amplifier 10-way connector. If lights turn on, check ground path through manual-automatic switch section of turn-off time delay control.
- d. Disconnect either black wire (amplifier to photocell) from amplifier 10-way connector. If lights turn on, photocell unit is shorted and must be replaced, together with a new amplifier as a matched set.
- e. If car lights still fail to turn on after performing steps "a" through "d", amplifier is defective and must be replaced, together with a new photocell as a matched set.
- 9. Remove black cloth from photocell opening. Shine bright light (flashlight) in photocell opening in speaker grille. Car lights should turn off within 15 to 60 seconds (depending on the time delay run out). If they do, proceed to step 10. If not, perform the following checks:
- a. Check for open wire connections between amplifier and photocell. (Black and gray wires on amplifier side of 10-way connector or two black wires on car wiring side of 10-way connector.)
- b. Connect jumper wire between black and gray amplifier to photocell wires in 10-way connector

- on side of amplifier. If car lights turn off within a few seconds, photocell is disconnected, not mounted properly, or defective. If lights remain on, amplifier is defective and must be replaced, together with new photocell as a matched set.
- c. To service photocell, remove upper instrument panel cover as described in Section 12, Note 50a and check for loose connection where photocell plugs into socket, or photocell not properly mounted. If photocell is connected and secure, then photocell is defective and must be replaced, together with a new amplifier as a matched set. Install upper instrument panel cover as described in Section 12, Note 50b.
- 10. Cover photocell opening with black cloth and rotate time delay control ring pointer to maximum time delay position (extreme counterclockwise). Now wait until time delay runs out and headlights turn on. After headlights turn on, turn ignition off. Car lights should remain on for one to three minutes. If lights fail to operate as described above, perform the following checks as required:
- a. NO TIME DELAY OR INSUFFICIENT TIME DELAY -- Check for shorted wiring and defective time delay control potentiometer. If no defects are indicated, amplifier is defective and must be replaced, together with a new photocell as a matched set.
- b. EXCESSIVE TIME DELAY AFTER IGNITION TURN OFF -- Check for open wire connection or open time delay control. If all right, the amplifier is defective and must be replaced, together with a new photocell as a matched set.
- 11. If Twilight Sentinel responded to all of the above tests, the unit is functioning normally.

38. Control Switch

The procedure for removing and installing the Twilight Sentinel control switch is described in Section 12, Note 61.

39. Photocell Unit

The procedure for removing and installing the Twilight Sentinel photocell unit is described in Section 12, Note 81.

40. Amplifier Unit

The procedure for removing and installing the Twilight Sentinel amplifier unit is described in Section 12, Note 82.

TWILIGHT SENTINEL TROUBLE DIAGNOSIS

