

AUTRONIC EYE

Cadillac (1957)
 Chevrolet (1957)
 Oldsmobile (1957)
 Pontiac (1957)

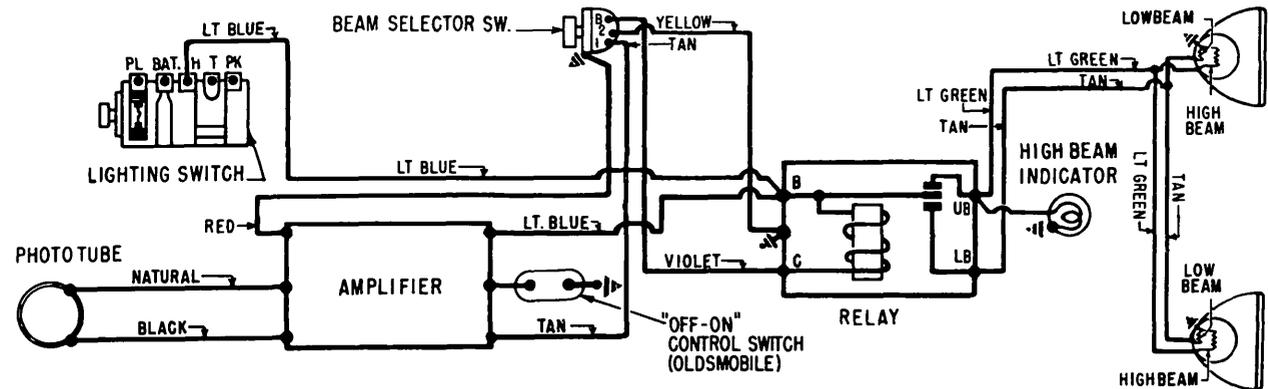
DESCRIPTION: Similar in design and operation to previous models. A combination foot operated dimmer switch and Autronic Eye "over-control" switch is used which automatically controls the headlamps when switch is in the "high" beam position. The "low" beam position provides constant low beam operation. When the foot switch is in "high" beam, or automatic position, it can be used as an override switch to manually turn on the "high" beams by applying a slight downward pressure on top of switch. On Oldsmobile models, a separate "On-off" switch located in the headlamp switch, controls the Autronic Eye in addition to the dimmer switch. On all models, the dimmer switch must be in the "high" beam position before lights will operate automatically.

TESTING & ADJUSTING: (CAUTION - The Autronic Eye unit develops 800 volts. Make sure the headlamps are OFF before removing cover from phototube unit).

► **AIMING DEVICE AE-4 INSTALLATION NOTE:** Remove cover from phototube and install the aiming device in accordance with instructions enclosed with the unit. Adjust aiming dial on the Aiming Device to the number stamped on name plate at bottom side of phototube unit (number is a single digit located directly below the serial number).

Vertical Aiming Adjustment: Position car on a level floor (level within ¼" fore and aft of car), then rock car gently to equalize springs. Install Aiming Device AE-4 (see installation note above). Adjust phototube unit aiming screw with an Allen Wrench (screw is located on bottom of phototube unit at rear edge of pedestal), until bubble in aiming device is centered in level. (NOTE - If phototube unit is aimed too low, reflections from the car's own headlamps will cause them to be held on "low" beam. Also, the phototube unit must be aimed as low as possible to provide maximum tolerance for car loading).

Horizontal Aiming Adjustment: Place two pieces of tape or chalk marks 24½" apart on a wall or screen at hood level height. With the car placed 25 feet from wall or screen, align centerline of hood with the right hand tape or chalk mark. Install Aiming Device AE-4, then aim over sights to left hand tape. If phototube unit is aimed more than 4" to right or left of left hand tape, reset phototube by loosening mounting stud nut under instrument panel. If necessary, one of the mounting holes in instrument panel may be elongated.



TYPICAL 1957 AUTRONIC EYE WIRING DIAGRAM

Hold Sensitivity Test: Install Aiming Device AE-4 (see above), then turn headlamps ON and wait at least four minutes for amplifier to stabilize. (NOTE - On Oldsmobile, it will also be necessary to turn Autronic Eye switch ON). Set foot dimmer switch to "high" beam which also places Autronic Eye in automatic position. Turn "zero corrector" on face of meter until meter pointer is on zero set line. Turn "intensity rheostat" of tester counterclockwise, then insert tester connector into cigar lighter receptacle. Operate engine at fast idle while making sensitivity tests and adjustments. Turn "tester selector switch" to DIM position (be sure to use proper DIM position for clear or tinted windshields). Turn "intensity rheostat" all the way clockwise to end of adjustment to obtain a lower beam. Turn "test selector switch" to HOLD position. Slowly turn "intensity rheostat" counterclockwise just to point where headlamps switch to "high" beam. Meter pointer should now read in the "hold sensitivity adjustment bar" on the meter scale. If not within this range, adjust as follows:

Adjustment - (NOTE - Both the HOLD and DIM adjustment controls are located on the underside of the amplifier unit and each is identified by a stamp on the amplifier cover. THE HOLD SENSITIVITY ADJUSTMENT MUST BE CORRECTLY MADE BEFORE ADJUSTING THE DIM SENSITIVITY. Turn the HOLD adjustment clockwise to the end of its travel, then rotate "intensity rheostat" all the way clockwise. Turn selector momentarily to DIM position to switch lights to lower beam, then switch back to HOLD position. (NOTE - If lights do not switch to lower beam, the DIM adjustment control must be turned clockwise to end of adjustment and then readjusted after HOLD adjustment is correct). Adjust tester "intensity rheostat" until meter pointer is in center of "hold sensi-

tivity bar". Turn the HOLD adjustment control (on amplifier) counterclockwise SLOWLY just to point where headlamps switch to upper beam. Rotate tester "intensity rheostat" clockwise to end of travel, then turn "selector switch" momentarily to DIM position and back to HOLD. (Headlamps should now be on lower beam). Recheck HOLD adjustment by turning "intensity rheostat" SLOWLY counterclockwise just to point where headlamps switch to upper beam. Meter pointer should now be aligned with the right hand edge of HOLD adjustment green bar if adjustment is correct. If not, repeat the above procedure.

Dim Sensitivity Test: Rotate tester "intensity rheostat" completely counterclockwise. Turn "selector switch" to DIM position. Headlamps should now be on upper beam. Turn "intensity rheostat" SLOWLY clockwise, stopping at the exact point where the headlamps switch to lower beam. Meter pointer should be within the "dim sensitivity adjustment" line. If not properly adjusted, proceed as follows:

Adjustment - (NOTE - Do not make this adjustment until after "Hold Sensitivity Adjustment" is made). Rotate DIM control fully counterclockwise. Momentarily turn tester OFF, then back to DIM position. Headlamps should now be on upper beam. Adjust "intensity rheostat" until meter pointer reads in the right hand edge of "dim sensitivity adjustment" line. SLOWLY rotate DIM control clockwise just to point where headlamps switch to lower beam. DO NOT GO BEYOND THIS SETTING. Turn tester "intensity rheostat" completely counterclockwise, then momentarily turn tester to OFF and back to DIM. Rotate tester "intensity rheostat" SLOWLY clockwise just to point where headlamps switch to lower beam. Meter will read within "dim sensitivity adjustment" line if adjustment is correct. If not, repeat the above adjustments. Remove tester, and Aiming Device AE-4. Replace lens, cover and screw.