

SECTION B

LIGHTING SYSTEMS

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DIVISION I SPECIFICATIONS AND ADJUSTMENTS

120-9 LIGHTING SYSTEM SPECIFICATIONS

a. Lamps, Switches, Wiring

Headlamp Make and Type	Guide, Dual T-3 Sealed Beam
Headlamp Lens Diameter	5¾"
Tail, Stop, Parking, Signal Lamps, Make	Guide
Lighting Switch, Make	Delco-Remy
Wiring Circuit Type	Single Wire
Wiring Circuit Protection for Head and Front Parking Lights	Thermo Circuit Breaker
Thermo Circuit Breaker Location	In Lighting Switch
Thermo Circuit Breaker Calibration @ 75° F.	
Stay Closed Indefinitely @ Amps.....	15
Open Within 60 Seconds @ Amps.....	26

b. Fuses & Circuit Breakers (See Figure 120-9 or 10)

c. Lamp Bulbs (See Figure 120-9 or 10)

DIVISION II

DESCRIPTION AND OPERATION

120-10 HEADLIGHTS AND CONTROLS

a. Description of Lighting Switch

The switch uses a multiple push-on type connector. It is a "push-pull"

type which also incorporates a manually operated rheostat for controlling the intensity of the instrument panel lights, and a detent position which completes the dome light circuit. Three "push-pull" positions of the switch knob provide control of the exterior lights as follows: 1. *Off position* (knob all the way in) cuts off all lights controlled by the switch.

2. *Parking position* (knob pulled out to first notch) turns on the parking lights, tail lights, and license light and side marker lights. The instrument panel lights also will be turned on if the rheostat is set for these lights.

3. *Driving position* (knob pulled out to last notch) turns headlights on, while the other lights remain as in

LAMPS

WHERE USED	LAMP NO.	NO. USED	CANDLE POWER	MODEL
FRONT				
HEADLAMP - 5-3/4 DIA. TYPE 1	4001	2	37.5	ALL
HEADLAMP - 5-3/4 DIA. TYPE 2	4002-1	2	37.5-55W	ALL
HEADLAMP - 5-3/4 DIA. TYPE 2 (EXPORT)	4003	2	37.5-55W	ALL
PARK & DIR. SIGNAL LAMP	1157-1A	2	32 & 3	ALL
SIDE MARKER LAMP (OPT WITH 9427942)	193-A	2	2	ALL
SIDE MARKER LAMP (OPT WITH 9427930)	194-A	2	2	ALL
STOP LAMP	4004	1	30W	ALL
REAR				
TAIL STOP & DIR. SIGNAL LAMP	1157	4	32 & 3	ALL EXCEPT WAGON
TAIL STOP & DIR. SIGNAL LAMP	1157	2	32 & 3	WAGONS ONLY
BACK-UP LAMP (IN REAR LAMP)	1157	2	32 & 3	ALL EXCEPT WAGON
BACK-UP LAMP	1156	2	32	WAGONS ONLY
BACK-UP LAMP (OPT WITH 9421300 (IN BUMPER))	193	2	2	ALL EXCEPT WAGON
BACK-UP LAMP (OPT WITH 9427930 (IN BUMPER))	194	2	2	ALL EXCEPT WAGON
LICENSE LAMP	97	1	4	ALL
SIDE MARKER LAMP (OPT WITH 9421300)	193	2	2	ALL
SIDE MARKER LAMP (OPT WITH 9427937)	194	2	2	ALL
LUGGAGE COMPARTMENT	89	1	6	ALL
INSTRUMENT PANEL				
INDIRECT LAMP (CENTER & RIGHT SIDE OF CLUSTER)	104	2	2	ALL
INDIRECT LAMP (LEFT SIDE OF CLUSTER)	106	1	3	ALL
INDICATORS				
HEADLAMP HI BEAM	161	1	1	ALL
DIRECTIONAL SIGNAL	161	2	1	ALL
OIL PRESSURE	104	1	2	ALL
WATER TEMPERATURE	104	1	2	ALL
GENERATOR CHARGE	104	1	2	ALL
CRUISE CONTROL	181	1	3	ALL EXCEPT MANTRANS
TAPE PLAYER	2482	1	3	ALL
SERVICE ILLUMINATION				
GLOVE COMPARTMENT LAMP	1893	1	2	ALL
RADIO DIAL	1081	1	2	ALL
ASH TRAY ASSEMBLY	1445	1	5	ALL
HEATER CONTROL CLIMATE CONTROL	1893	2	2	ALL
TROUBLE LAMP	1004	1	15	ALL
TACHOMETER (IGNITION)	53	1	1	46
AUTOMATIC TRANS. DIAL (CONSOL)	53	2	1	ALL

LAMPS

WHERE USED	LAMP NO.	NO. USED	CANDLE POWER	MODEL
INTERIOR ILLUMINATION				
DOVE - ROOF CENTER	211	1	15	ALL
COURTESY - RT & LT SAIL PANELS	212-1	2	6	SKYLARK COUPES ONLY
COURTESY LIGHT INST. PANEL	89	2	6	ALL
COURTESY LIGHT INTERIOR	90	3	6	WAGONS ONLY
COURTESY LIGHT (CONSOL)	181	1	3	AUTO. TRANS. ONLY
FLASHER DIR. SIGNAL (OPT WITH 383637)		1		ALL EXCEPT WAGON
FLASHER DIR. SIGNAL (OPT WITH 383630)		1		WAGONS ONLY
FLASHER DIR. SIGNAL (OPT WITH 383630)		1		WAGONS ONLY
FLASHER HAZARD (OPT WITH 383790)		1		ALL
FLASHER HAZARD (OPT WITH 383794)		1		ALL

FUSES

WHERE USED	AMP.	LENGTH
CLOCK, LIGHTER, COURTESY, GLOVE BOX, DOVE & TRUNK LIGHT	20	1-1/4
TAIL LICENSE, PANEL ILL., SIDE MARKER & PARK LAMPS	20	1-1/4
STOP AND HAZARD LAMPS	20	1-1/4
INSTRUMENT LAMPS	4	5/8
WIPER	25	1-1/4
HEATER & A/C BLOWER & COMPRESSOR CLUTCH	25	1-1/4
RADIO ANTENNA, POWER WINDOW RELAY & TRANS., SOLENOID	10	1-1/4
DIRECTIONAL SIGNAL & BACK-UP CRUISE, REAR DEFROGGER	20	1-1/4
GAGES & INDICATOR LAMPS	10	1-1/4
TACHOMETER (IN LINE FUSE)	4	5/8
CARBURETOR SOLENOID (IN LINE FUSE) (L & ENGINE ONLY)	4	5/8

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Figure 120-9 Light Bulb and Fuse Chart 43-44000 Series

LAMPS

WHERE USED	LAMP NO.	NO. USED	CANDLE POWER	MODEL
INTERIOR ILLUMINATION				
DOOR - ROOF CENTER	1004	15		52-64
REAR ARM REST (CONVERTIBLE)	90	2	6	52-64-82
COURTESY LIGHT - SAIL PANEL	212-1	2	6	87-94
COURTESY LIGHT - SAIL PANEL	212-1	2	6	WILDCAT COUPE ONLY
COURTESY LIGHT - INSTRUMENT PANEL	89	2	6	ALL
CENTER CONSOLE - REAR	181	1	3	64
CENTER CONSOLE - REAR	90	1	6	94
FLASHER DIRECTIONAL SIGNAL (OPT WITH 38387)	1	1		ALL
FLASHER DIRECTIONAL SIGNAL (OPT WITH 38388)	1	1		ALL
FLASHER HAZARD (OPT WITH 194180)	1	1		ALL
FLASHER HAZARD (OPT WITH 382194)	1	1		ALL

FUSES

COLOR CODE	WHERE USED	AMP.	LENGTH
PLAIN	CLOCK, LIGHTER, COURTESY GLOVE BOX, DOME & TRUNK LIGHT	20	1-1/4
PLAIN	TAIL CORNERING, LICENSE, PANEL ILL, SIDE MARKER, PARK LAMPS & SWITCH ILL	20	1-1/4
PLAIN	STOP & HAZARD LAMPS	20	1-1/4
PLAIN	INSTRUMENT LAMPS	4	5/8
PLAIN	WIPER	25	1-1/4
PLAIN	HEATER & A/C BLOWER & COMPRESSOR CLUTCH	25	1-1/4
PLAIN	RADIO ANTENNA, POWER WINDOW RE- & TRAVIS, SOLENOID	10	1-1/4
PLAIN	DIRECTIONAL SIGNAL & BACK-UP CRUISE, REAR DEFROGGER	20	1-1/4
PLAIN	GAGES & INDICATOR LAMPS & FUEL PUMP ON 'E' SERIES ONLY	10	1-1/4
PLAIN	FUEL PUMP (IN LINE FUSE) 'E' SERIES ONLY	4	5/8

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LAMPS

WHERE USED	LAMP NO.	NO. USED	CANDLE POWER	MODEL
FRONT				
HEADLAMP - 5.34 DIA. TYPE 1	4001	2	37.5W	ALL
HEADLAMP - 5.34 DIA. TYPE 2	4002-1	2	37.5-55W	ALL
HEADLAMP - 5.34 DIA. TYPE 2 (EXPORT)	4003	2	37.5-55W	ALL
PARK & TURN SIGNAL LAMP	1157NA	2	32 & 3	ALL
CORNERING LAMP	1293	2	50	ALL
SLIDE MARKER LAMP (OPT WITH 942194)	193-A	2	2	ALL
SLIDE MARKER LAMP (OPT WITH 942194)	194-A	2	2	ALL
SPARE TIRE LAMP	4004	1	30 W	52-64-82
REAR				
REAR TAIL STOP & DIR. SIG. LAMP	1157	6	32 & 3	52-64
REAR TAIL STOP & DIR. SIG. LAMP	1157	4	32 & 3	87-94
BACK-UP LAMP	1157	2	32 & 3	ALL
LICENSE LAMP	97	1	4	ALL
SLIDE MARKER LAMP (OPT WITH 942130)	193	2	2	ALL
SLIDE MARKER LAMP (OPT WITH 942194)	194	2	2	ALL
LUGGAGE COMPARTMENT	89	1	6	ALL
INSTRUMENT PANEL				
INDIRECT INSTRUMENT LAMP	194	5	2	ALL
CLOCK	1893	2	2	ALL
INSTRUMENT PANEL LOWER WIPER & LIGHTS (SEE LITE LAMP SOURCE)	181	1	3	ALL
ACCESSORY SWITCHES (SEE LITE LAMP SOURCE)	181	1	3	52-64-82
INDICATORS				
HEADLAMP HI BEAM	194	1	2	ALL
DIRECTIONAL SIGNAL	194	2	2	ALL
OIL PRESSURE	194	1	2	ALL
WATER TEMPERATURE	194	1	2	ALL
CYLINDER HEAD TEMPERATURE	257	1	2	64-82-94
GENERATOR CHARGE	194	1	2	ALL
BRAKE WARNING	194	1	2	ALL
CRUISE CONTROL	181	1	3	ALL
RADIO (STEREO INDICATOR)	21820	1	3	ALL
TAPE PLAYER	21820	1	3	ALL
SERVICE ILLUMINATION				
GLOVE COMPARTMENT LAMP	1893	1	2	ALL
RADIO DIAL	1892	1	2	ALL
ASH TRAY ASSEMBLY	1465	1	5	52-64-82
ASH TRAY ASSEMBLY	1465	2	5	94
HEATER CONTROL, CLIMATE CONTROL, AUTOMATIC CLIMATE CONTROL	1893	2	1	ALL
TROUBLE LAMP	1004	1	5	ALL
AUTOMATIC TRANS. DIAL (CONSOLE)	53	2	1	64

Figure 120-10 Light Bulb and Fuse Chart - LeSabre, Wildcat, Electra and Riviera

the parking position. The headlights will be on the upper or lower beams depending on the position of the separate dimmer switch.

In the parking and driving positions, the instrument panel lights are controlled by rotating the light switch knob. With the knob turned counterclockwise, these lights are on maximum brightness. As the knob is turned clockwise, they gradually dim until they are off at the full clockwise position of the knob.

4. *Dome light position* (knob turned fully counterclockwise) turns the dome and courtesy lights on. These lights can be turned on regardless of the in-or-out position of the switch.

b. Description of Thermo Circuit Breaker

A thermo circuit breaker is incorporated in the lighting switch assembly, to protect wiring from damage due to short circuits in the headlight circuits only.

The thermo circuit breaker consists of a bi-metal blade and set of contact points connected in series with the lighting circuits. An abnormal flow of current through the circuit breaker, such as would be caused by a short circuit in a lighting circuit, heats the bi-metal blade sufficiently to separate the points and cause them to vibrate. The vibrating blade alternately opens and closes the circuit, thus reducing the flow of current and protecting the wiring against over-heating and burning. The flickering light produced by the vibrating circuit breaker serves as a warning to the operator of vehicle that a short circuit exists.

c. Test of Lighting Switch

If the lighting switch is suspected of being faulty, the contacts can be tested by connecting a low reading voltmeter between the wire supplying current to the contact and the wire conducting current away. This must be done with the switch in a position where the contact under test is closed.

1. To check the switch contact for the headlights, pull switch knob out to last notch and also make sure dimmer switch is in upper beam position. Connect voltmeter prods between battery and headlight terminals of switch (between red and light blue wires). If voltage loss through switch contacts is over 2 volt, switch must be replaced.

2. To check the contact for the tail and front parking lights, connect voltmeter between tail lights and tail light fuse terminals (between the brown wire and the brown with white stripe wire). If voltage loss is over .1 volt, switch must be replaced.

d. Replacement of Lighting Switch

1. Disconnect battery to ground cable to avoid a possible short circuit.

2. Pull switch knob out to last notch, then depress the spring loaded latch button on switch, while pulling knob and rod assembly out of switch.

NOTE: If latch button is depressed before switch knob is pulled out, knob and rod assembly will not release.

3. Remove switch escutcheon. Remove switch from cluster assembly.

4. Unplug multiple connector from lighting switch.

5. Install switch in reverse order of above steps, making sure that switch alignment tang engages slot in cluster and ground plate before tightening escutcheon.

6. Reconnect battery ground cable.

e. Test of Light Switch Thermo Circuit Breaker

To test the thermo circuit breaker, remove lighting switch from instrument panel to avoid possible damage to adjacent instruments.

Since the current required to open the circuit breaker contacts depends somewhat on outside temperature, the circuit breaker should be tested at normal temperature (70° to 80°F.)

1. Connect an ammeter and a carbon-pile rheostat in series with the battery terminal of lighting switch and positive terminal of a 12-volt battery, and set rheostat to provide maximum resistance. Rheostat must have capacity for 50 amperes and be adjustable down to .3 ohms.

2. With switch on, connect the headlight terminal of lighting switch and the negative post of battery.

3. Adjust rheostat to give 26 amperes. The circuit breaker should open within 60 seconds.

4. Adjust rheostat to give 15 amperes on ammeter. The circuit breaker should remain closed indefinitely at 15 amperes.

5. If circuit breaker does not operate as specified the lighting switch assembly must be replaced since internal repairs cannot be made.

f. Dual Headlamp Assembly

A dual headlamp system is standard equipment on all series and consists of two dual headlamp assemblies, one mounted on each side of the car.

Each dual headlamp includes two 5-3/4" T-3 sealed beam units mounted in a single housing enclosed by head-lamp doors. The inboard unit is used for bright lights only and has a single filament. The outboard unit is used for both bright and dim lights and has two filaments. For identification, the inboard unit is marked "1", the outboard unit is marked "2".

When the dimmer switch is in the dim or lower beam position only, the outboard unit of each dual headlamp is on. Both outboard and inboard units of each headlamp are on when the dimmer switch is in the bright or high beam position.

The T-3 sealed beam unit has three projections equally spaced around the perimeter of the lens. These projections are ground off at the

factory to provide a mounting surface for aiming devices. These aiming devices are used without having headlights on.

g. Dimmer Switch

The driver may select the upper or lower headlight beam as traffic and road conditions demand by operating the dimmer switch mounted on the toe panel in a convenient position for the left foot.

The dimmer switch opens and closes the circuits to the upper and lower lamp filaments in the sealed beam units, thereby alternately raising and lowering the headlight beams with each successive operation of the switch. Depression of switch button turns the rotary contact one position within the switch. The spring-loaded button automatically returns to the reset position when released.

The wiring connection to the dimmer switch is made by a multiple connector. The dimmer switch is mounted on the inner side of the toe pan, so the switch, connector and wiring are all inside the car.

h. Headlight Beam Indicator

Whenever the upper headlight beams are lighted, a beam indicator bulb in the instrument cluster also lights, producing a small spot of red light in front of the driver. *For safety reasons, never pass an approaching car with the beam indicator showing red.*

120-11 NEUTRAL START SWITCH AND EXTERIOR LIGHTS

NOTE: See Figure 120-9 or 10 for lamp bulb and fuse specifications.

a. Front Parking and Signal Lights

Each front parking and signal lamp contains one 32-3 CP lamp bulb which provides a 3 CP parking light and a separate 32 CP direction signal light. The pins on lamp bulb and slots in socket are offset to prevent improper installation of bulb in socket. The parking light is

controlled by the lighting switch and the circuit is protected by the "TAIL" fuse. The turn signal light is separately controlled by the signal switch and the circuit is protected by a fuse on the fuse block under the instrument panel. All front turn signal bulbs have natural amber glass (not painted) and are lighted whenever the light switch is in either the parking light or driving light position.

b. Tail, Stop, and Signal Lights

Each rear lamp assembly contains a 32-3 CP bulb which is used as a combination tail, stop and direction signal light. The tail lights are controlled by the lighting switch and the circuit is protected by a fuse on the fuse block.

The stop lights are controlled by a mechanical switch mounted on the brake pedal bracket. This spring loaded switch makes contact whenever the brake pedal is applied. When the brake pedal is released, it depresses the switch plunger to open the contacts and turn the brake lights off.

The direction signal switch is in the circuit, so the stop lights may be flashing or constant depending on the position of the switch. The stop light circuit is protected by a fuse mounted on the fuse block.

The combination tail, stop and directional signal lamp bulb sockets can be snapped out from inside the trunk compartment of sedans. Since the position of the bulb filaments is important in the rear lamps, these sockets have been provided with a tongue and groove index to insure correct positioning. To change the bulb on the station wagon it is necessary to remove the lamp lens.

c. Rear License Lights

The rear license lamp is mounted above the license plate to provide adequate lighting of the plate. The lamp contains one 4 CP lamp bulb which operates in conjunction with

the tail lights, and its circuit is also protected by the fuse on the fuse block.

The lamp bulb may be replaced by removing the lamp lens.

d. Side Marker Lights.

Four side marker lights are illuminated whenever the light switch is in either the parking light or driving light position. The side marker light circuit is protected by the "TAIL" fuse.

e. Back-Up Lamps and Switch

On 3-speed manual transmission cars, the back-up light switch is mounted on the upper side of the steering column mast jacket in approximately the same location as the combined neutral start back-up light switch on automatic transmission cars. The manual back-up light switch has a spring-loaded switch slide which is engaged by a tang turned up from the control shaft tube metal. When the transmission is shifted into reverse, this tang pushes the slide to the left, closing the back-up switch contacts; when shifted out of reverse, the spring-loaded switch slide returns to the off position. When the transmission is shifted into second gear, the control shaft tang rotates in a different location so that it misses the switch slide.

To check for proper operation of the back-up light switch, turn on the ignition switch, place the shift lever in reverse, and make sure the back-up lights are lit. Then place the shift lever in neutral and make sure the back-up lights are out. Next place the shift lever in second gear and make sure the lights are *not* lit. The switch mounting screw holes are slotted slightly, allowing some adjustment if necessary.

On 4-speed manual transmission cars, the back-up light switch is mounted on the side cover of the transmission. The switch is actuated by a small diameter rod connected to the reverse shift lever. Switch timing can be changed

by moving the switch slightly or by bending the rod.

On automatic transmission cars, the back-up light switch is combined with the neutral start switch. It is mounted on the mast jacket under the instrument panel. The switch is actuated by the transmission control shaft.

When the neutral start portion of the switch is correctly timed, the back-up portion is properly timed

auto-matically. Slotted mounting screw holes permit sidewise movement of the switch for proper timing.

The back-up light circuit is protected by a fuse on the fuse block.

f. Clutch Start Switch

A clutch start switch is installed in all manual transmission cars. This switch is located on the clutch pedal bracket. See Figure I20-10A.

When the clutch pedal is released, the clutch start switch is open; when the clutch pedal is depressed, the clutch start switch is closed. Since the switch is connected in series in the solenoid circuit between the ignition switch and the starter solenoid, this means that the engine cannot be started unless the clutch pedal is depressed.

The purpose of the clutch start switch is to prevent the engine from starting under conditions where such starting could cause an accident. For instance, if an engine were started with the transmission in low or reverse gear and with the clutch pedal released, the car would immediately move. If any object or person were near, damage would result.

120-12 INTERIOR LIGHTS AND CIGAR LIGHTERS

NOTE: See Figure I20-9 or 10 for lamp bulb and fuse specifications.

a. Instrument Panel Lights

The speedometer, heater-defroster controls, ventilator or air conditioner controls, transmission control dial, clock and ash tray are illuminated by lamp bulbs mounted to provide indirect lighting.

The instrument panel lights are controlled by the lighting switch as described in paragraph I20-10 and the circuits are protected by the 4 ampere fuse on the fuse block.

To replace an instrument cluster bulb, remove the socket and bulb assembly from the instrument cluster by rotating counterclockwise. Replace the bulb and reinstall the assembly by rotating it clockwise.

b. Brake Warning Light

The brake warning light functions as a check on two possible brake troubles. If the parking brake is left on while the car is driven, the brake warning light is lit; or, if hydraulic pressure becomes low in either front or rear half of the dual brake

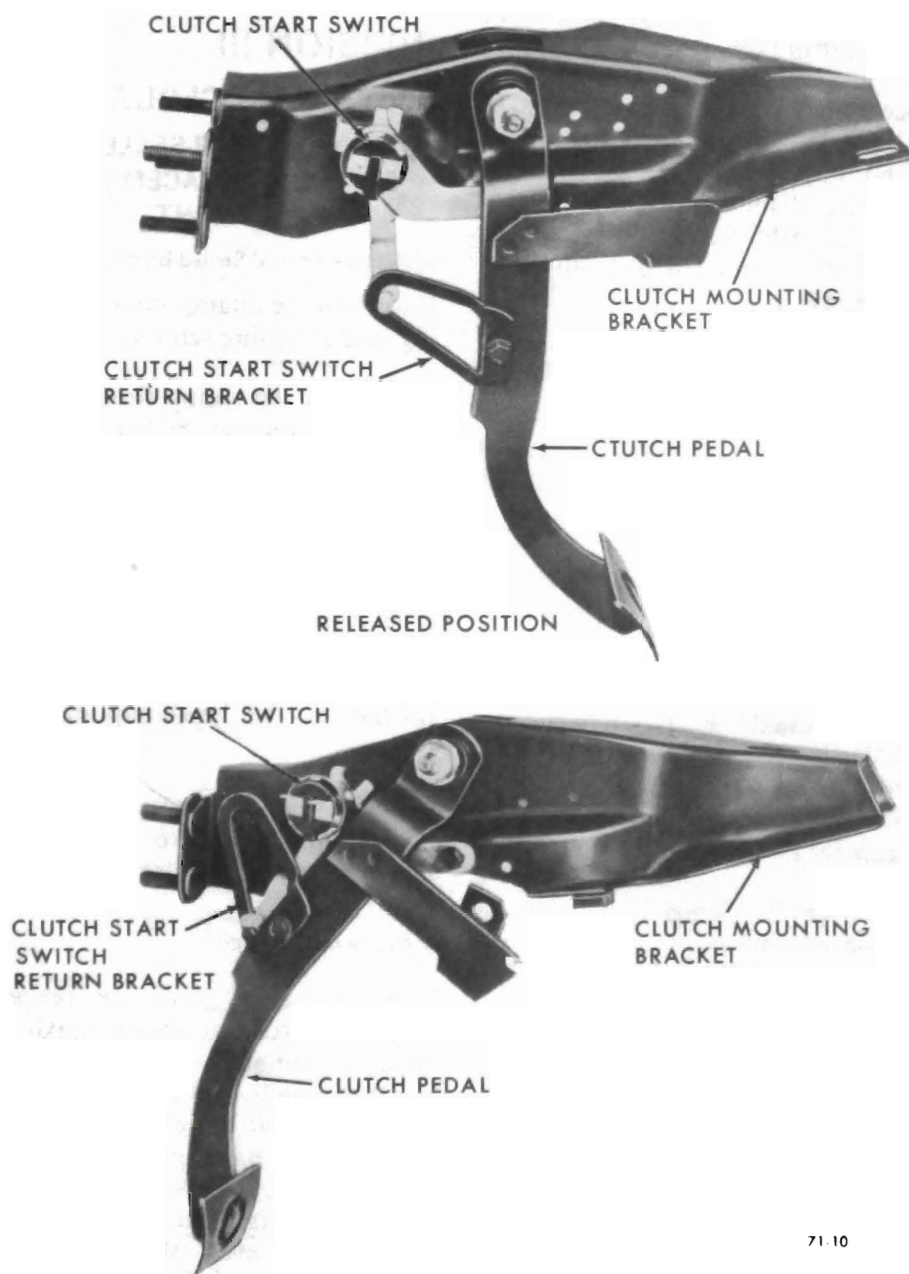


Figure I20-10A - Clutch Start Switch

system, the light will light during brake application.

1. *The parking brake warning light circuit* will light a red "BRAKE" signal light in the instrument cluster whenever the ignition switch is turned on with the parking brake applied. This circuit is grounded at a plunger type switch operated by the parking brake lever.

When the parking brake lever is in the fully released position, the switch plunger must be depressed 3/16 inch to make sure the circuit is open. Adjust by loosening the mounting screw and shifting the switch as necessary at the slotted screw hole.

2. *The brake failure warning light circuit* uses the same red "BRAKE" signal light in the instrument cluster to warn that either the front or the rear half of the dual brake system has lost hydraulic pressure and is failing to provide effective braking.

The switch to operate the brake failure warning light is in a simple spring-centered balance valve subjected to front brake line pressure on one side and rear brake line pressure on the other side. See Figure 120-11. A difference of 150 psi between these pressures, as will occur if one system fails, causes the valve to move from center and to contact an electrode which grounds the brake warning light.

To check the complete system, both hydraulically and electrically, proceed as follows:

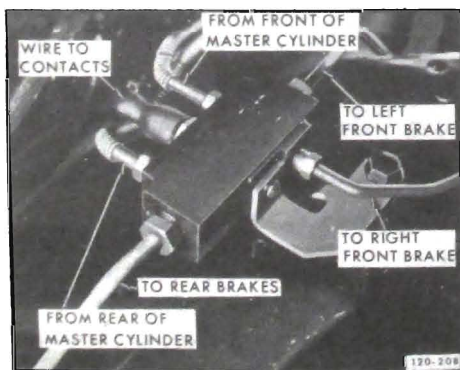


Figure 120-11 Distributor and Brake Failure Warning Switch Assembly

(a) With ignition switch on, have helper hold foot pressure on brake pedal while watching brake warning light.

(b) Hold a rag under front master cylinder fitting to catch brake fluid lost, then crack front brake line fitting. When brake warning light lights, tighten fitting before helper releases brake pedal to avoid any possibility of drawing air into the brake system.

(c) Repeat step (b) at rear master cylinder fitting to check operation of brake failure warning light from rear half of car brake system.

Since this check causes a loss of brake fluid, always check fluid level of both reservoirs after checking operation of the brake failure warning light. Add fluid as required to bring level within 1/8 inch of lip of each reservoir.

c. Direction Signal Indicator Lights

The direction signal indicator consists of a 1 or 2 CP bulb mounted at each end of the instrument cluster. See Figure 120-9 or 10.

d. Automatic Transmission Control Dial Light

The control dial in the instrument panel is illuminated by a 2 CP lamp bulb mounted in the cluster to provide indirect lighting. The light intensity is controlled by the lighting switch in the same manner as all instrument panel lights.

To replace the lamp bulb, remove the socket and bulb assembly, replace the bulb and reinstall the assembly.

e. Cigar Lighter

The cigar lighter is heated by pressing the knob in until it latches; the knob will automatically unlatch and pop out when heated to proper temperature.

The lighter is equipped with an ash guard to prevent ashes and loose

tobacco from falling on the user's clothing and to permit the lighter to be passed around without danger of burning the fingers.

f. Courtesy Lights

The two 6 CP courtesy lights are mounted, one on each side, under the instrument panel so that they illuminate the front floor area. They operate, along with the dome light, from a special courtesy light switch, from the headlight switch, or from a door jamb switch.

DIVISION III

SERVICE PROCEDURES

120-13 HEADLAMP SEALED BEAM UNIT REPLACEMENT AND ADJUSTMENT

a. Replacement of Sealed Beam Unit

1. Remove headlamp door by removing four retaining screws.

2. Unhook the spring from retaining ring, then remove sealed beam unit and retaining ring, being careful not to disturb the two beam adjusting screws.

3. Install new sealed beam unit by reversing removal procedure. Position lens with the "1" or "2" up. The unit has three lugs which fit into notches in the headlamp mounting ring.

CAUTION: Make sure that sealed beam unit is marked "1" for an inboard unit or "2" for an outboard unit.

b. Headlamp Aiming

The headlamps must be properly aimed in order to obtain maximum road illumination and safety that has been built into the headlighting equipment. With the Guide T-3 type sealed beam units, proper aiming is even more important because the increased range and power of this lamp make even slight variations from recommended aiming hazardous to approaching motorists. The headlamps must be checked for

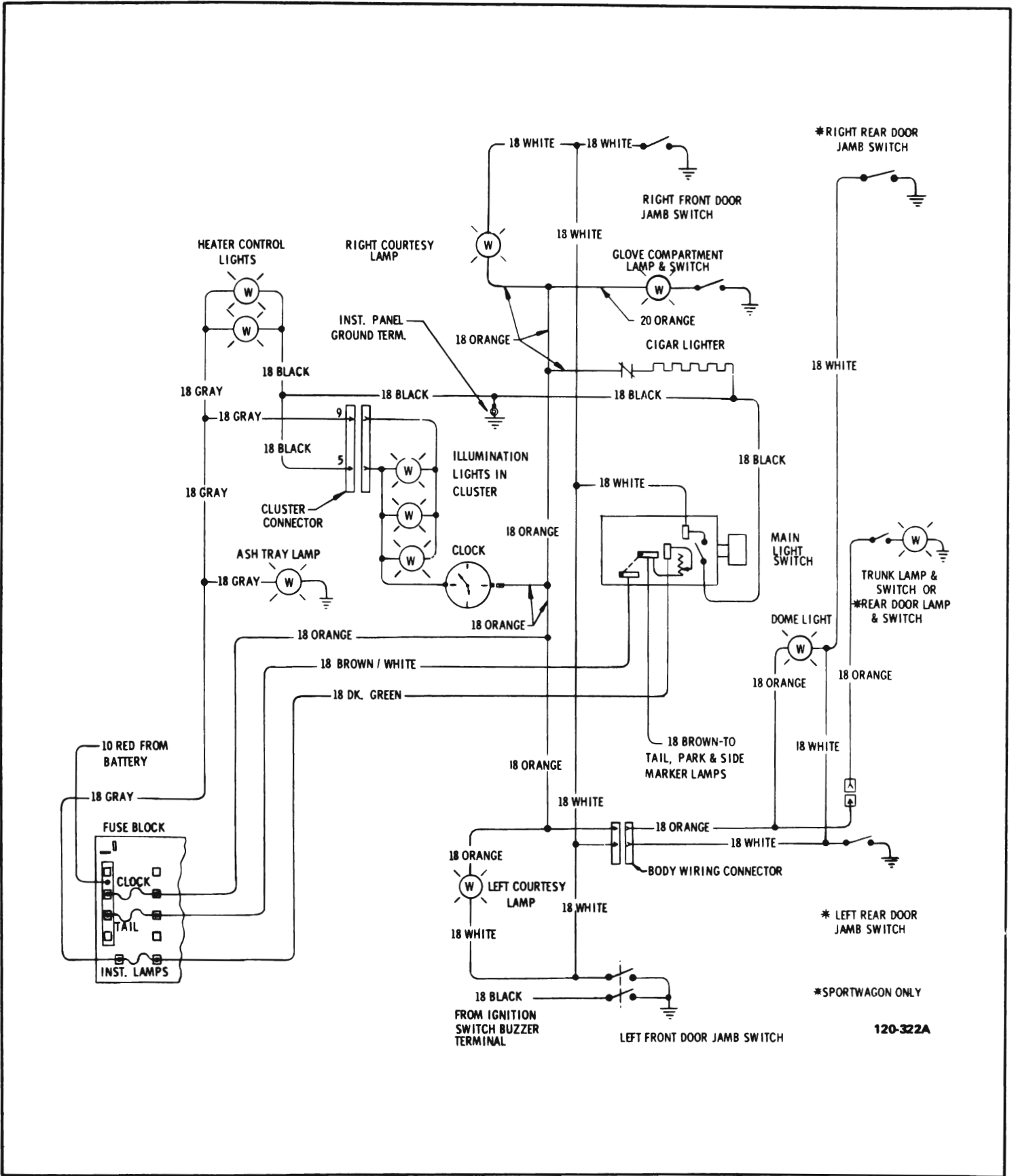


Figure I20-I2 Dome, Courtesy and Instrument Light Wiring Diagram 43-44000 Series

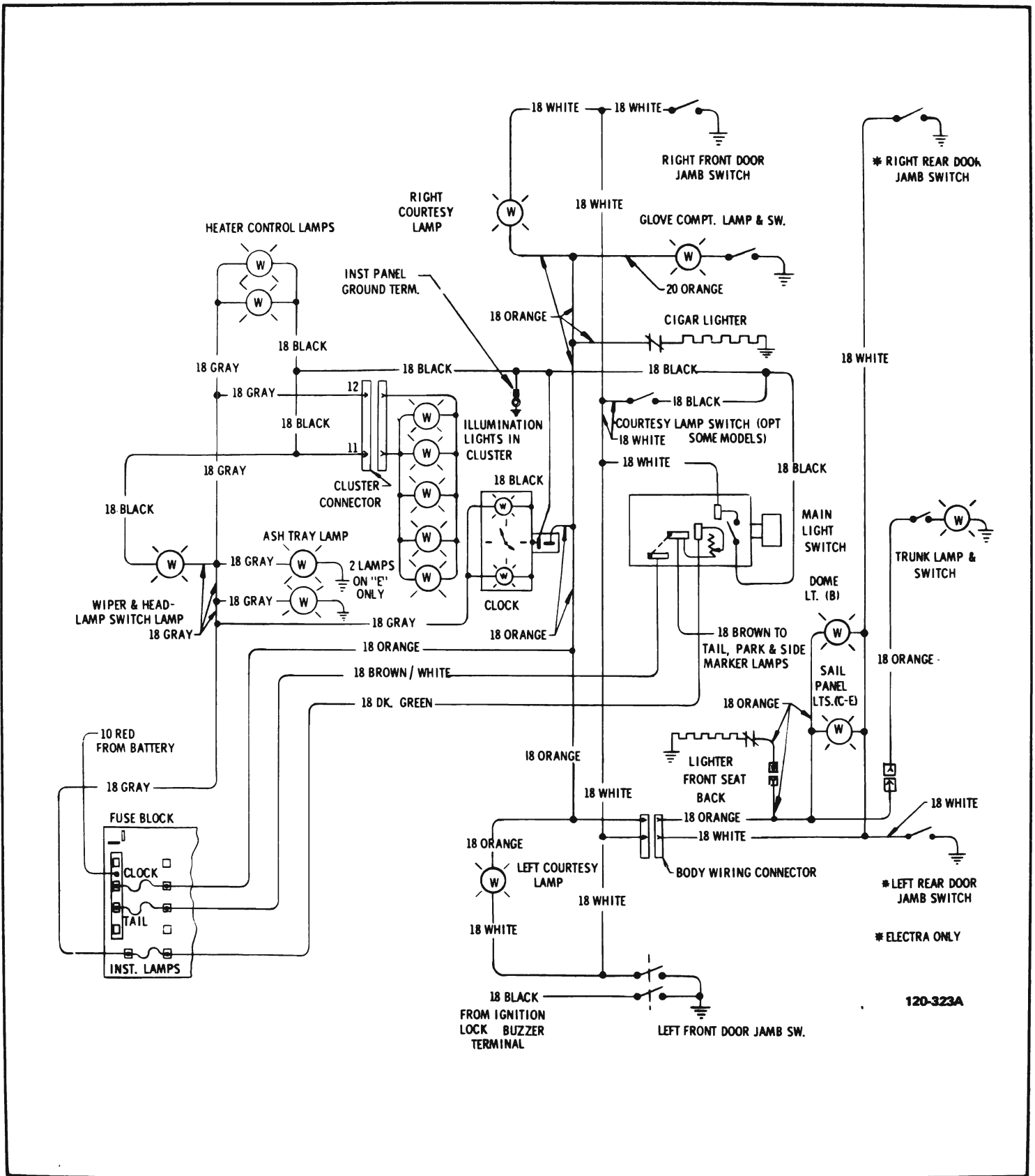


Figure I20-13 Dome, Courtesy and Instrument Light Wiring Diagram - LeSabre, Wildcat, Electra and Riviera

proper aim whenever a sealed beam unit is replaced and after any adjustment or repair of the front end sheet metal assembly.

Regardless of method used for checking headlamp aim, car must be at normal weight, that is, with gas, oil, water, and spare tire. Tires must be

uniformly inflated to specified pressure. If car will regularly carry an unusual load in rear compartment, or a trailer, these loads should be on car when headlamps are checked. Some states have special requirements for headlamp aiming adjustment and these requirements should be known and observed.

Horizontal and vertical aiming of each seal beam unit is provided by two adjusting screws which move the mounting ring in the body against the tension of the coil spring. There is no adjustment for focus since the sealed beam unit is set for proper focus during manufacturing assembly.