

## ALL MODELS (EXCEPT FORD MOTOR CO. SEQUENTIAL)

### DESCRIPTION & OPERATION

All direction signal systems are similar in design and operate in the same manner except that various types of indicator circuits are used. See *typical wiring diagrams below*. Power source for the flasher is usually the "IGN" or "ACC" terminal of the ignition switch so that the direction signals are operative only with the ignition turned on. A fuse or circuit breaker is connected in this power source line to protect the direction signal circuits.

► **COUGAR & THUNDERBIRD TURN SIGNAL NOTE:** For Thunderbird and Cougar "Sequential" turn signals, see "Ford Motor Co. Sequential Turn Signals" in this section.

**Single "Cross-Over" Type Indicator** - The single indicator is connected directly across or between the two front direction signals. The indicator will flash when either of the front signals is operating (circuit is fed from the operating signal lead and indicator bulb is grounded through the other signal bulb).

**Double "Parallel" Type Indicators** - Each indicator is connected in parallel with the front direction signal on the same side of the car (right indicator connected to right signal, left indicator to left signal), and each indicator bulb is grounded directly.

### SERVICING

► **FLASHER & BULB REPLACEMENT CAUTIONS:** 1) If 2 bulbs per side of car (1 front, 1 rear) flash during turn signal operation, "2 Bulb" flasher is required. If 3 bulbs per side of car (1 front, 2 rear) are used, "3 Bulb" flasher is required. Be sure to install correct type flasher according to number of bulbs in system or inoperative system, shortened bulb life, and rapid flashing rate will result. **NOTE** - Some manufacturers recommend use of "series" type flashers only. Do not use "magnetic" type.

2) Heavy duty miniature bulbs are used in many cars. These bulbs require use of heavy duty type flasher since all components of system must be compatible. All bulbs in system (including dash panel indicators) must be the same type, that is, either "standard" or "heavy duty miniature" (see table below for equivalent bulb numbers); and flasher must be the same type as the bulbs. **CAUTION** - If bulbs and flasher are intermixed, abnormal flashing rates will result, and bulb and flasher life will be shortened.

### "Standard" Bulb No.

### "Heavy Duty" Bulb No.

1034 .....	1157 (White), 1157A (Amber)
1073.....	1156
67.....	1155
57.....	1895
89.....	631

### FLASHER

Flasher located on fuse panel or behind instrument panel. Flashers cannot be repaired and defective units must be replaced.

### FUSE

See **FUSES & CIRCUIT BREAKERS** on individual car model pages, except 1973 see **FUSES & CIRCUIT BREAKER** Section.

### DIRECTION SIGNAL SWITCH

Located in housing under steering wheel or attached to steering column jacket.

### TROUBLE SHOOTING

Operate direction signals by placing switch in "right turn" and "left turn" positions successively and note operation of signal lights and indicators in each position. In normal operation, lights should flash approximately 80-100 times per minute. **NOTE** - Ignition switch must be ON. Diagnose trouble as follows:

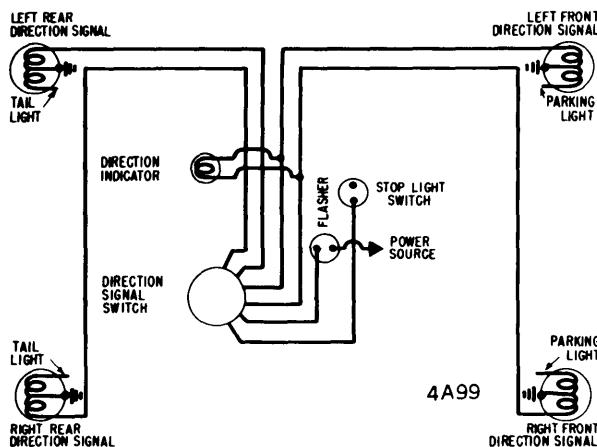
**All Signal Lights & Indicators Inoperative** - Blown fuse; faulty switch; open circuit between ignition switch and flasher or between flasher and switch; incorrect flasher or bulbs.

**One Signal Light and/or Indicator Light Stays On** - Burned out bulb (front or rear) on side affected. Wrong type flasher used.

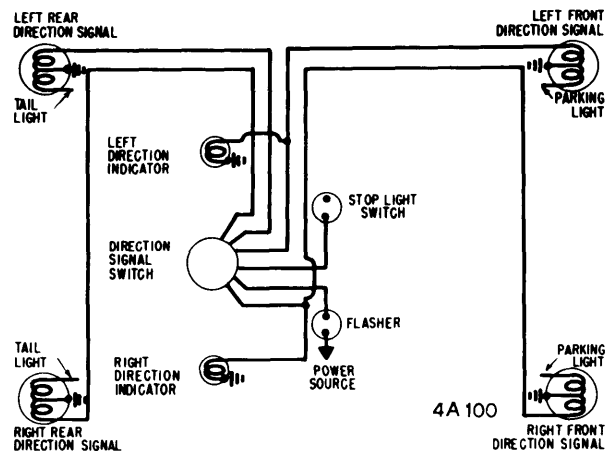
**Flashing Rate Too Fast** - High voltage or high resistance in circuit. Flasher faulty or incorrect type used. Wrong type bulbs used.

**Flashing Rate Too Slow** - Low voltage or high resistance in circuit. Flasher faulty or wrong type used. Incorrect type bulbs used.

**No Flashing On Either Side (Lights Come On & Stay On)** - Replace flasher with correct unit.



SINGLE "CROSS-OVER" TYPE INDICATOR



DOUBLE "PARALLEL" TYPE INDICATOR