

**MASTER TECHNICIANS
SERVICE CONFERENCE**

65-2

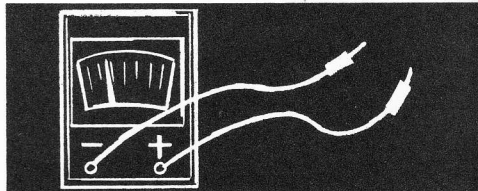
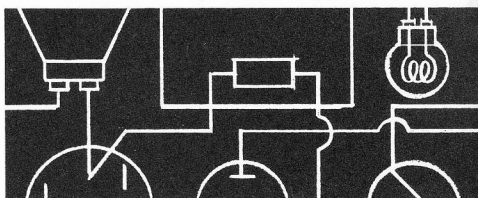
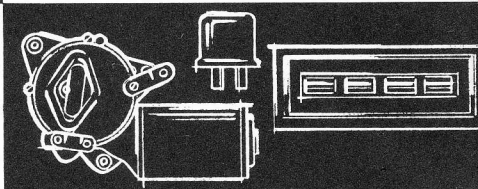
MTSC REFERENCE BOOK

ELECTRICAL

ACCESSORIES

CIRCUITS

and SERVICE



CHRYSLER
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The title of this session might sound a little misleading to some of you Technicians. Windshield wipers and turn signals are not really classified as accessories, but if we included the names of all the equipment covered in the title, we'd have to get a bigger book.

The main point is, the information in this session will be important to every Technician sooner or later. You'll find some brand-new accessories and circuits, as well as some review material on equipment carried over from previous models.

You've had a couple of months now to get acquainted with our lineup for 1965, and we're sure you agree that our cars get better every year. And, we're just as ready to agree that our customers are getting better service every year. This combination of first-rate cars and the best of service is a sure-fire formula for customer loyalty.

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DIRECTIONAL SIGNALS

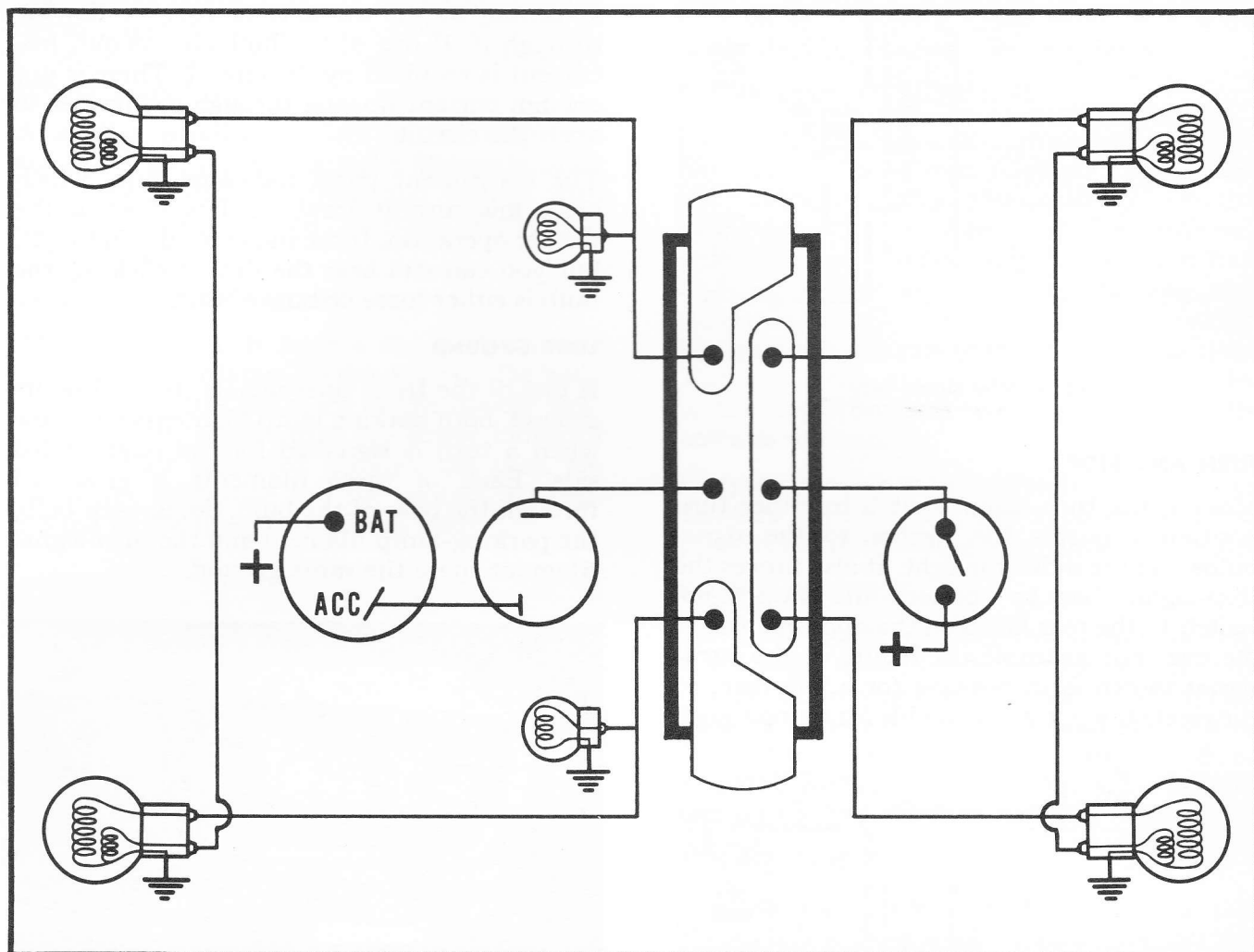


Fig. 1—Turn-signal circuit

The directional signal circuit may seem rather complex when viewed as a complete system. Adding to the complexity of the circuit is the fact that it is joined to other lighting circuits.

Tracing the circuits in sections and noting the relationships between the directional signals and the other circuits will help in gaining the understanding required for quick, correct diagnosis.

POWER SUPPLY

The source of current for the turn-signal system is the accessory terminal of the ignition switch. A single lead feeds the flasher unit, which supplies turn-signal current to the

switch. A second source of current goes into the turn-signal switch from the stoplight switch. The reason for running the stoplight circuit through the turn-signal switch will become apparent as the circuits are traced.

STOP SIGNAL ONLY

When the stop-signal switch is closed, current is fed to the center terminal under the stoplight bar in the turn-signal switch. Since the turn-signal switch is in the neutral position, the stop-signal current is relayed to both stop-turn signal filaments. The stop-signal circuit is protected by the same 20-amp. fuse that protects dome lights and the tail-lamp feed to the headlamp switch.

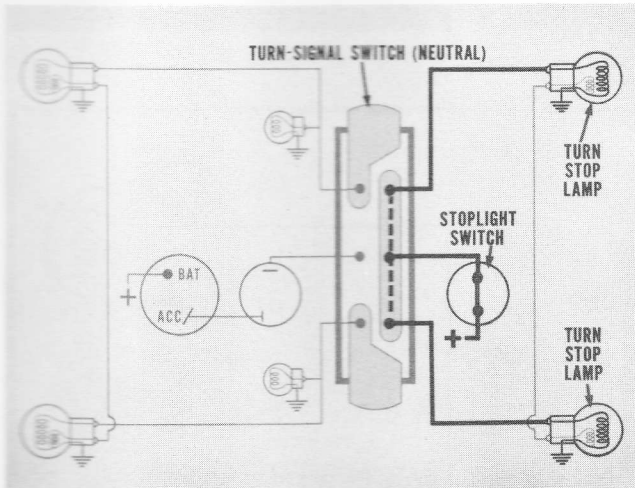


Fig. 2—Stop signal only

TURN AND STOP

Moving the turn-signal switch to either turn position connects the flasher to the signal bulbs and the indicator light. It also moves the stop-signal bar to connect the stop-signal switch to the rear lamp on the opposite side of the car. For example, in Figure 3, the turn-signal switch is in position for a left turn, so the right stop lamp is available for a stop signal.

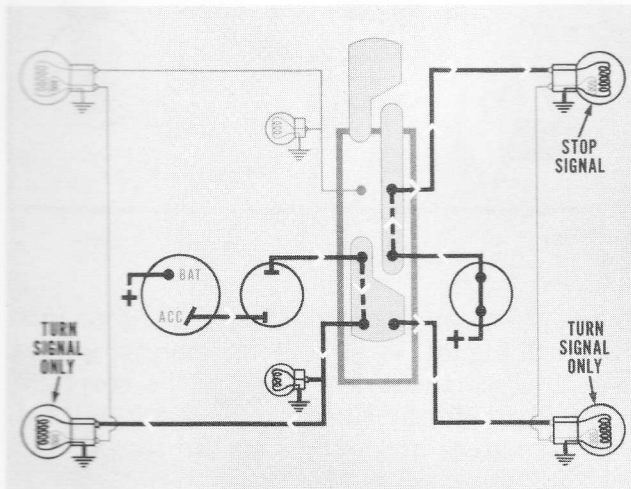


Fig. 3—Stop and turn signals

BULBS WIRED PARALLEL

In the turn-signal systems with two instrument panel indicators, each bulb is grounded individually through the case, providing a parallel circuit for each side. Thus, if one bulb should burn out, the others will still glow, but the flasher action will be slowed or stopped.

Losing a park-turn bulb or a stop-turn bulb will usually stop the flasher action. The flasher, which is really a circuit breaker, operates according to the amount of current flowing through it. If one of the bulbs burns out, less current is required by the circuit. There is not enough current flowing through the flasher to open the circuit.

The instrument panel indicator bulb, which has a low current draw, has less effect on the flasher operation. If the indicator doesn't light, but you can still hear the flasher clicking, the bulb is either loose or burned out.

LOST GROUND

If one of the front turn signals should lose its ground, both parking lamp filaments will glow when a turn is signalled for the ungrounded side. Each of these filaments is grounded through the base of the bulb. So, in each bulb, the parking-lamp filament and the turn-signal filament share the same ground.



Fig. 4—Lost ground—filaments glow dimly

The parking-lamp filaments, which are also wired in parallel, are connected by the parking-lamp feed wire. This feed wire serves as a new path to ground for the current being fed to the turn-signal filament. The flow is through both filaments of the ungrounded bulb, across the parking-lamp feed wire to the other parking-lamp filament and to ground. The turn-signal filament in the ungrounded bulb doesn't glow because the voltage drop is reduced by the other two filaments in series with it. The parking-lamp filaments, with lower power requirements, will light dimly.

TRY PARKING LAMPS

To check for a "no-ground" condition, turn on the parking lamps. If one of the parking lamps doesn't light, but both lamps glow dimly when a turn is signalled for that side, the bulb is not properly grounded.

A similar condition exists in the stop-turn signal circuit, but the taillight filaments must share the available current and voltage with the license plate lamps, so none of the filaments light up.

SINGLE INDICATOR SYSTEMS

All Valiant models have a single instrument panel indicator lamp. In this system, the basic circuit is exactly the same as the double indicator circuit, except that the single indicator lamp is not grounded through the case. Instead, the bulb case and the contact are connected to the front turn-signal leads.

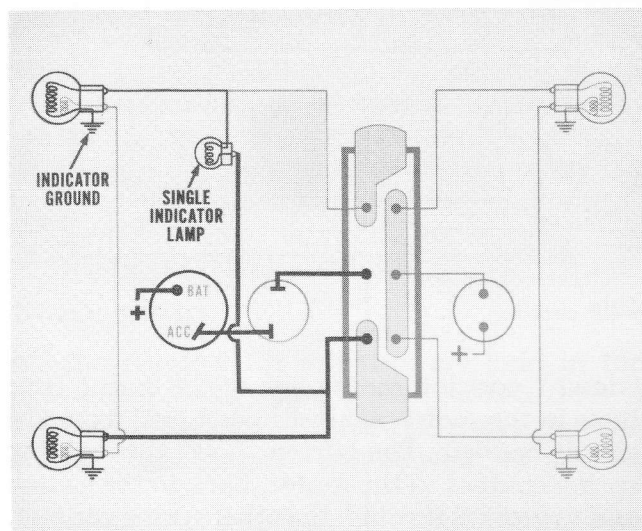


Fig. 5—Single indicator system

The single indicator is grounded through the front turn-signal filament on the side opposite the intended turn. Since the indicator reduces the voltage available to the grounding lamp, the grounding filament does not light.

FENDER-MOUNTED INDICATORS

Some 1965 models have turn-signal indicators mounted on the front fenders. The circuits and operation are identical with other double indicator systems. There are two different types of fender indicators. To replace a bulb on Dodge Monacos, remove the assembly from the car. Hold the lens in the assembly and remove the cap screw from the bottom. The lens, bulb and socket are spring-loaded in the assembly and will pop out when the screw is removed.

Chrysler models with the fender-mounted indicators have a spring-clip-type socket which pulls out of the housing from under the fender.

FLASHER DIAGNOSIS

The flasher unit has only two terminals, since it is located ahead of the selector switch in the circuit. So, a single set of points provides the flashing action for both left and right turns. If the turn signals operate in only one direction, the flasher is all right. Look for burned-out bulbs, bad grounds or loose connections.

TRY ACCESSORIES

Loss of turn signals on both sides usually means a bad flasher unit. But, before you take the time to change the flasher, try the radio, heater or air conditioner. If none of these accessories operate either, the problem is probably at the accessory feed from the ignition switch.

ELECTRIC WINDOW LIFTS

The electric window lifts available in Furies, Polaras, Custom 880's, Monacos and Chryslers are completely new for 1965. The window-lift motor is a permanent-magnet type, and is not case-grounded. The circuit is protected by a circuit breaker inside the left cowl panel.

All four windows can be controlled from a

master control switch in the left front door trim panel and by an individual switch at each window. All motor circuits are grounded through a single ground terminal in the master control switch. Each door switch has an independent power supply from the circuit breaker.

A single hot terminal supplies power to all four switches in the master switch group.