CONTROL RELAY

A transmission control relay (fig. 19) is installed in apparatus box in engine compartment. Relay is two unit type and is used to energize neutral solenoid when shift lever is moved out of "N" (neutral) or when governor completes or breaks an electrical circuit as pre-determined speeds are attained.

RELAY ADJUSTMENTS

Refer to "Specifications" at end of this section for air gap and point opening dimensions and closing and opening voltage. Accomplish the following operations on each unit.

Air Gap (Fig. 19)

Disconnect wires from terminal Nos. 2 and 5 and remove cover from relay. Press armature down until points just close, then measure air gap between armature and center of core. Adjust air gap, if necessary, by loosening two screws and moving armature up or down as required.

Point Opening (Fig. 19)

With wires still disconnected from terminal Nos. 2 and 5, measure clearance between points with armature up against stop. Adjust point opening, if necessary, by bending the armature stop. Make sure openings at both points are equal and that points close simultaneously when armature is depressed. After completing adjustment, connect wires to terminal Nos. 2 and 5.

Closing and Opening Voltage (Fig. 19)

Check each unit separately by connecting an accurate reading voltmeter parallel with each operating coil circuit. Connect voltmeter from No. 3 terminal to ground for one unit and from No. 4 terminal to ground for the other unit. Also connect a variable resistance unit in series with the operating coil circuit at the same terminal to which the voltmeter is connected. Close the switch which controls the operating coil circuit of the unit being checked. Slowly decrease resistance and note voltmeter reading when points close. If not within the range listed in "Specifications," adjust by bending the armature spring post. Increase spring tension to increase closing voltage and decrease spring tension to decrease the closing voltage. After correct closing voltage adjustment is obtained, slowly increase resistance and note voltmeter reading when points open. If opening voltage is below the minimum listed in "Specifications" or if either unit fails to operate, replace the complete relay assembly.

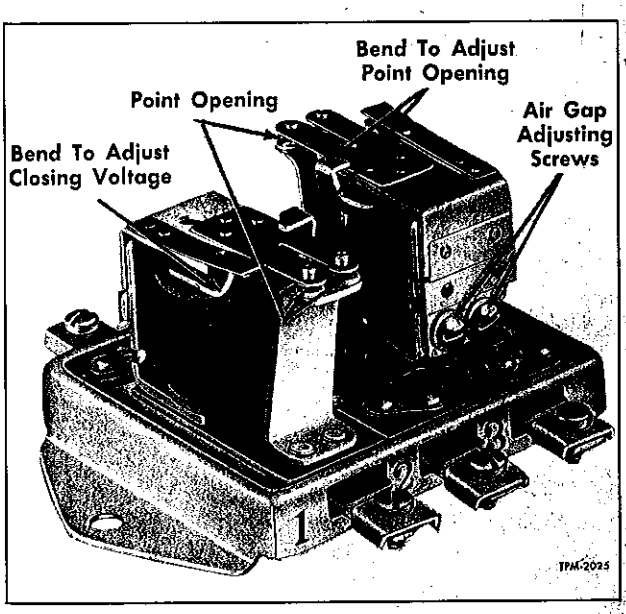

Figure 19—Transmission Control Relay

SOLENOIDS

Two solenoids are used to place control valve in neutral or direct drive positions. The solenoids are attached directly to control valve and operate spool valves within the control valve.

TESTING

Solenoids require very little attention, however, they should be tested periodically to be sure they are functioning. When energized, plunger should extend outwardly approximately 3/8" and return when solenoid is de-energized.

TRANSMISSION GOVERNOR

Transmission governor is mechanical flyball type, incorporating a snap-action, positive contact switch (fig. 20). Purpose of governor is to complete and break an electrical circuit which automatically shifts transmission into direct or hydraulic-drive at pre-determined road speeds. Mounted on transmission output end cover, governor is driven from gear on transmission output shaft. Governor, located immediately to rear of engine bulkhead, is accessible from right side of coach.

GOVERNOR EXTERNAL ADJUSTMENT

Transmission governor may be adjusted by road-testing on the coach. However, a governor tester, similar to type shown in figure 21, is recommended as the simplest and quickest means of properly adjusting governor. Following procedure should be used: