

WARNER OVERDRIVE CONTROL

SOLENOID APPLICATIONS & OVERDRIVE OPERATION

► **CAUTION**—Before replacing governor (if overdrive does not engage, or if cut-in and cut-out speeds not correct, make certain that universal joint companion flange nut on rear end of overdrive drive-shaft is tight. Looseness of this nut will allow governor and speedometer drive gears to slip on overdrive shaft.

Solenoid: Delco-Remy or Auto-Lite types with Warner Part Nos. as follows:

Car Model	Solenoid Part No.
Ford exc. Sta. Wgn. & Conv.	①D-R. 1118132
Ford Sta. Wgn. & Conv.	②D-R. 1118138
Frazer & Kaiser	③D-R. 1118132
Hudson 1949	④D-R. 1118134
Lincoln & Mercury	①D-R. 1118132
Nash	③D-R. 1118132
Packard	③D-R. 1118132
Studebaker	③D-R. 1118132
Willys	③D-R. 1118132

①—Ford-Lincoln-Mercury No. 8M-6916 (Warner No. 3AR10B-62).

②—Special Ford No. 8A-6916 (Warner No. 3AR10E-62) for offset mounting on adapter. See *Ford Overdrive data*.

③—Warner No. 3AR10B-62.

④—Special three-terminal type not similar to other Solenoids (Warner No. AR10D-62).

► **SOLENOID REMOVAL CAUTION**—Solenoid must be disengaged from pawl for removal as follows: Take out two mounting capscrews, rotate solenoid clockwise ½-turn to disengage plunger from pawl (will align plunger flats with pawl slot), withdraw solenoid and plunger assembly.

Control Relay: All relays except 1949 Hudson are single unit type as listed below. 1949 Hudson relay is special two-unit type.

See *car wiring diagram on individual car model pages for relay connections and circuits*.

Car Model	Control Relay Part No.
Ford (all models)	Ford No. 8M-6915
Frazer & Kaiser	Auto-Lite HRT-4001A
Hudson 1949	Hudson No. 165826
Lincoln & Mercury	L-M No. 8M-6915
Nash	Auto-Lite HRT-4101
Packard	RBM, Model 3600-2
Studebaker	Auto-Lite HRT-4001
Willys	Auto-Lite HRT-4001

HRT-4001, 4001A, 4101 Specifications

Contacts Close—4.0 volts maximum. Adjust by bending lower spring hanger to change armature spring tension.

Contacts Open—6-1.0 volt. Adjust by varying height of stationary contact (these relays designed to open slowly).

Contact Gap—.015" minimum.

Air Gap—.031-.034" with contacts open. Adjust by bending armature stop.

Throttle Kick-down Switch: Switch is mounted so that switch plunger is actuated by accelerator pedal

or by throttle linkage (contacts plunger in wide open position, additional movement of pedal actuates switch by depressing plunger).

Adjustment—Loosen locknut on threaded switch stem, turn switch up or down so that accelerator pedal (or linkage) just contacts switch plunger with accelerator linkage and carburetor throttle valve in wide open position. Make certain that accelerator pedal has sufficient additional travel to actuate switch.

Lock-out Switch: Does not require adjustment. Switch contacts should be open (governor circuit broken) when overdrive locked out by pulling out button on instrument panel, and contacts should be closed

when control button pushed in for overdrive operation (except when transmission shifted into Reverse).

Overdrive Fuse: In cartridge type holder or on fuse block attached to control relay on all cars except 1949 Hudson (no fuse used on 1949 Hudson).

Fuse Capacity	
Ford, Lincoln, Mercury	30 amperes
Frazer, Kaiser, Nash	20 amperes
Hudson 1950	30 amperes
Packard	30 amperes
Studebaker, Willys	20 amperes