

GENERAL MOTORS — CORVETTE

CAUTION — Before aiming headlights, make sure headlight door actuators have at least 20" of vacuum.

DESCRIPTION

Corvette headlight door assemblies are vacuum power operated. Headlight doors can be opened or closed by either the light switch or a vacuum control switch (manual valve) located under steering column. Components consists of vacuum tank, check valve, two relay valves, two diaphragm actuators, hoses and control switches.

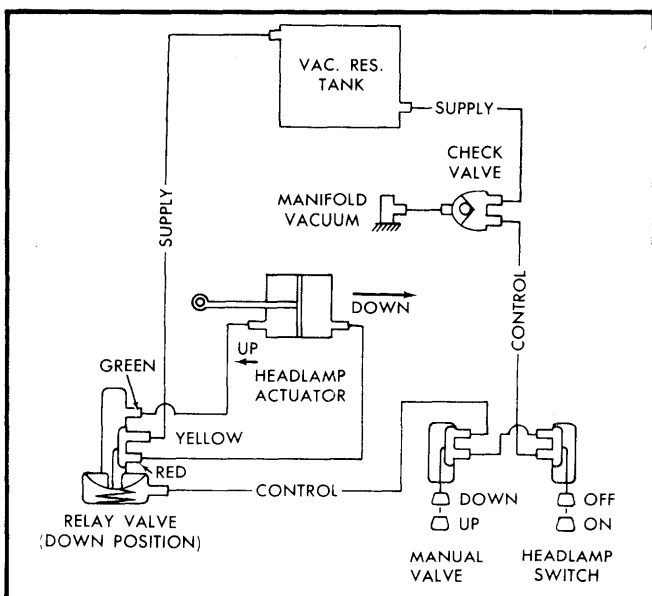


Fig. 1 Corvette Headlight Vacuum Control Circuits

OPERATION

Turning on headlight switch will automatically open headlight panel assemblies. The vacuum control manual valve is used to open headlights for service without turning on the lights. Manual valve is normally in a depressed (upward) position. With headlight switch off, vacuum is directed through switch to relay valve diaphragm and relay valve directs vacuum from reserve tank to back side of power actuator diaphragm holding headlight panels closed. When headlight switch is on, vacuum is cut off to relay valve diaphragm and spring in relay valve moves up. Vacuum is then directed to front side of actuator diaphragm moving headlight panels open. When the

manual valve is pulled down, vacuum is cut off to relay valve and causes same action as when headlight switch is pulled on. The manual valve must be pushed in before headlights can be operated by the light switch.

EMERGENCY OPERATION

In event of system failure, headlights can be opened manually from front of car by disconnecting vacuum hoses at rear of each actuator behind headlights. Then from under grille, push headlight panel assembly up until it is in a fully extended position.

NOTE — Do not attempt to close headlight panels by hand.

HEADLIGHT SYSTEM SERVICE

VACUUM HOSES

Vacuum hoses are color coded and must be reinstalled on correct fittings. Actuator to relay hoses are an exact length for each side and must not be cut. Headlight system hoses connect the following components: manifold vacuum to check valve, check valve to vacuum tank, check valve to headlight switch, headlight switch to relay valve, vacuum tank to relay valve, relay valve to closed side of actuator, relay valve to open side of actuator and manual control valve to relay valve.

SEALED BEAM REPLACEMENT & AIMING HEADLIGHTS

Headlights can be replaced in the usual manner after opening headlight panels with the manual control valve. Aim headlights only with at least 20" of vacuum in system to position headlight assemblies. Start engine and turn headlights on, wait one or two minutes before aiming headlights.

REMOVAL & INSTALLATION

HEADLIGHT DOOR REPLACEMENT

Removal — 1) Actuate door open. Remove radiator grille, headlight bezel, and apply protective tape to headlight door opening. Remove springs retaining inner and outer headlight assemblies and remove lights. Remove front screw and bushing attaching headlight housing to support assembly link.

2) Remove "J" bar from side of headlight housing extending downward. Reaching through grille opening, remove 3 cap screws retaining bearing and headlight housing assemblies to support assembly. Lift door assembly forward and out of opening.

Installation — To install headlight door, reverse removal procedure.