

1966-74 AMERICAN MOTORS CRUISE COMMAND

American Motors

ADJUSTMENT

DESCRIPTION

System senses car speed through speedometer cable and uses engine intake manifold vacuum to regulate accelerator and automatically maintain any pre-set cruising speed between 30 and 85 MPH.

OPERATION

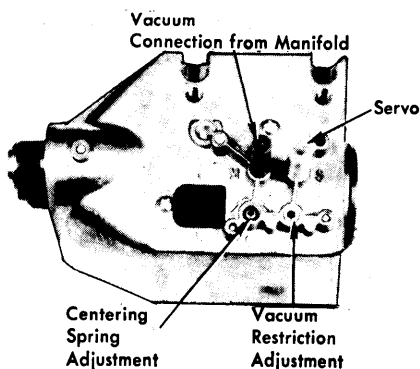
Cruise Command control is an integral part of directional switch lever and consists of two separate switches. The first is "OFF-ON" and "RES" (resume) slide switch located on the flat of directional switch lever. Second is a push button switch located at the end of directional switch lever. To engage system, move slide switch to "ON" position and accelerate to desired speed. Depress and release button on end of switch lever. System will now maintain selected speed. System will automatically disengage when brake pedal is depressed and can be re-engaged to previously selected speed by accelerating to 30 MPH and moving slide switch to "RES" position, then releasing switch. **NOTE** — When slide switch is moved to "OFF" position, pre-set speed of "RES" function is canceled and must be reset when system reactivated. A higher speed can be set by pressing on accelerator pedal until new speed is reached and then pushing control button. A lower speed can be achieved by lightly depressing brake pedal, allowing car to slow to desired speed and then depressing push button. Operation of individual components is as follows:

Regulator — Senses speed through speedometer cable located between transmission and regulator. Fly-weight type governor reacts to cable speed and engages low speed switch at approximately 30 MPH. When low speed switch is closed, driver may engage system. Regulator is serviced as an assembly.

Vacuum Servo — A neoprene bellows that receives modulator vacuum and actuates throttle to control vehicle speed.

Control Switch — An integral part of turn signal lever, when actuated it will energize either solenoid valve or coupling coil (or both), thereby controlling speed.

Release Switch — Disengages system when brake pedal is depressed.



ADJUSTMENT SCREW IDENTIFICATION

VACUUM SERVO CHAIN

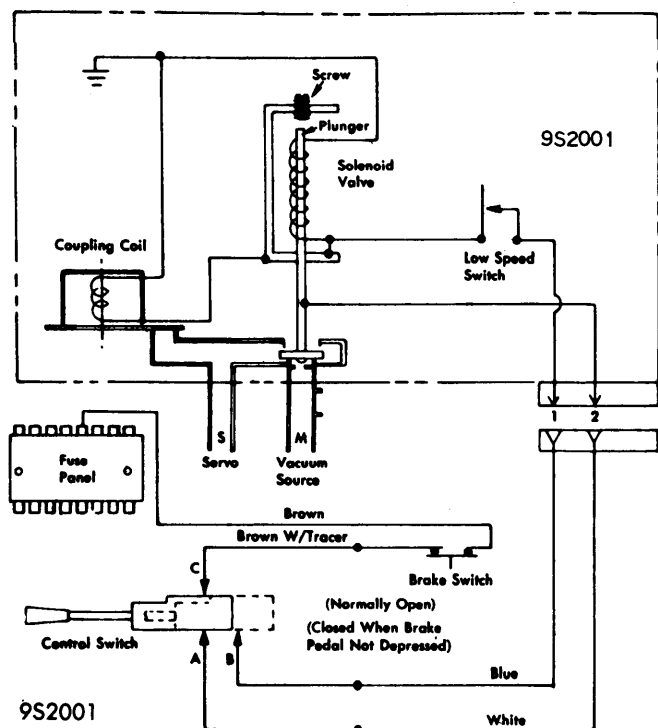
NOTE — Prior to adjusting servo chain, carburetor fast idle cam must be at curb idle position and engine at specified idle RPM. To install vacuum servo chain, insert chain in vacuum servo hook; two balls from end of spring on 2-Bbl. carburetors, four balls on 4-Bbl. carburetors. Stretch chain linkage to carburetor until chain is fully extended; clevis pin hole should align with hole in throttle lever, if not, adjust chain at servo hook (one ball at a time) until free pin fit is obtained. When properly adjusted there should be 1/4 - 1/2" deflection in chain without moving either carburetor throttle or servo. After adjusting, bend servo hook tabs together. **NOTE** — Chain must be free in hook after bending tabs.

CENTERING SPRING SCREW

If system holds speed more than 3 MPH above or below selected speed, turn centering spring adjusting screw toward "S" or "F" not more than 1/32" at a time. **NOTE** — Screw must never be turned than 1/4-turn in either direction.

BRAKE RELEASE SWITCH

Disconnect brake switch connector, and connect an ohmmeter (on low scale) or test lamp to terminal of switch. Adjust switch so when brake pedal is fully released, ohmmeter should read zero resistance or test lamp should light. Ohmmeter should read high resistance or light will go out when brake pedal is depressed approximately 3/8". If switch cannot be adjusted, replace unit.



1966-69 CRUISE COMMAND WIRING DIAGRAM

Automatic Speed Controls

1966-74 AMERICAN MOTORS CRUISE COMMAND (Cont.)

TROUBLE SHOOTING & DIAGNOSIS

SYSTEM WILL NOT ENGAGE

Fuse blown. Brake release switch not adjusted. Faulty wiring or connectors. Control switch faulty. Coupling coil or modulating valve faulty. Faulty low speed switch.

SYSTEM DOES NOT DISENGAGE WHEN BRAKES APPLIED

Faulty or misadjusted control switch. Grounded wire at brake switch.

SYSTEM RE-ENGAGES WHEN BRAKES RELEASED

Faulty control switch. Wiring harness defective. Faulty modulating valve or coupling coil.

CARBURETOR DOES NOT RETURN TO NORMAL IDLE

Improper throttle chain linkage adjustment. Improper accelerator linkage adjustment. Weak or disconnected throttle return spring.

PULSATING ACCELERATOR PEDAL

Speedometer cable or drive cable defective or lack of lubrication. Accumulation of grease or oil in regulator.

SPEED 3 OR MORE MPH ABOVE OR BELOW SELECTED SPEED

Improper centering spring adjustment.

CONTINUES TO ACCELERATE WHEN SWITCH IS TURNED ON, OR AFTER PUSH BUTTON IS DEPRESSED

Defective control switch, or defective regulator.

BLOWING FUSES

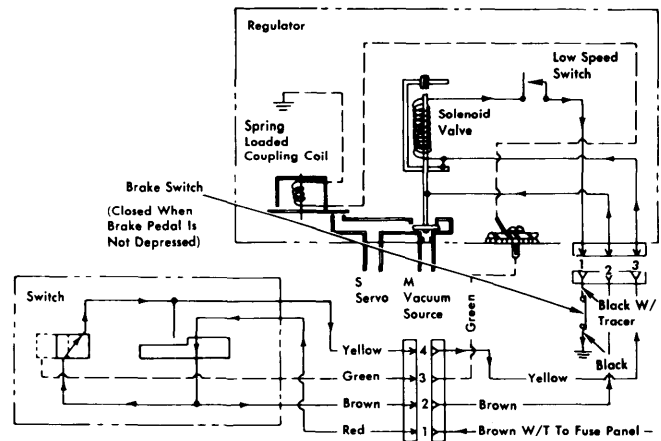
Ground in wiring. Wires connected incorrectly at steering column connector.

TESTING

NOTE — Whenever a unit is disconnected for testing, it should be reconnected before next unit is tested.

REGULATOR (1970-74)

Disconnect multiple connector and green wire at regulator, then turn ignition to accessory position. Use a suitable test



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1970-74 CRUISE COMMAND WIRING DIAGRAM

lamp to check for voltage at all wires from regulator, ensuring that control switch is in "OFF" position. Test lamp should not light. Using suitable test lamp, test remaining circuits as indicated:

Test Between Ground And:	Switch Position	Test Lamp
Brown Wire.....	ON or RES.....	Lights
Brown Wire.....	Button Depressed.....	Lights
Yellow Wire.....	ON.....	No Light
Yellow Wire.....	RES or Button Depressed.....	Lights
Green Wire.....	ON or RES.....	Lights
Green Wire.....	Button Depressed.....	No Light

CONTROL SWITCH (1970-74)

1) Separate regulator and control switch wiring harness at steering column. To test slide switch, connect red wire to test lamp and ground brown wire. With switch in "OFF" position, lamp should not light; with switch in "ON" or "RES" position, test lamp should light. With test lamp connected to red wire and yellow wire grounded, lamp should not light with switch in "OFF" or "ON" position, but should light with switch in "RES" position.

2) To check push button continuity, connect lamp between brown and green wires. With button depressed or in normal position, lamp should light. Connect lamp between brown and yellow wires, lamp should light with button depressed; but should not light with button in normal position.