GENERAL MOTORS CRUISE CONTROL

Oldsmobile
Cutlass & Toronado
Pontiac
LeMans & Grand Prix
Catalina & Bonneville With
VIN Engine Codes P & Z

DESCRIPTION

Components of system are an engaging switch located in turn signal lever, a regulator assembly and a vacuum servo mounted in engine compartment. System is governed directly by car speed.

OPERATION

When car is accelerated to desired speed, system is activated by depressing set-speed button in end of turn signal lever. To change setting to a new speed (higher or lower), depress and hold in set-speed button, either accelerate or decelerate to desired speed and release button. Speed will be maintained without pressure on accelerator pedal until brake pedal is depressed, ignition switch is turned "OFF", or set-speed button is held in until car speed drops below 30 MPH. System will then return to manual control and it will be necessary to repeat above procedure to again place unit in operation.

TROUBLE SHOOTING

SYSTEM DOES NOT ENGAGE

Fuse Blown, brake switch out of adjustment, no current to terminal No. 2, engaging switch inoperative, faulty regulator, faulty low speed switch.

SYSTEM DOES NOT DISENGAGE WITH BRAKE PEDAL

Improper brake release switch adjustment. Defective brake release switch. Faulty regulator.

SYSTEM RE-ENGAGES WHEN BRAKE RELEASED

Faulty engaging switch. Terminal No. 1 grounded.

CARBURETOR DOES NOT RETURN TO NORMAL IDLE

Faulty Cruise Control linkage cable. Improper accelerator linkage adjustment. Weak or disconnected throttle return spring.

PULSATING ACCELERATOR PEDAL

Speedometer cable or drive cable kinked.

SYSTEM DOES NOT CONTROL AT SELECTED SPEED

Faulty vacuum servo or vacuum hose. Faulty regulator.

SYSTEM CONTROLS SPEED 3 OR MORE MPH ABOVE SELECTED SPEED

Improper centering spring adjustment.

TESTING

VACUUM SERVO LEAK TEST

Disconnect vacuum hose at servo. Compress servo and place thumb over vacuum tube on end plate. Bellows should remain compressed, if not servo assembly is leaking and should be removed for service.

ENGAGEMENT SWITCH

Oldsmobile — **1)** Turn ignition switch to run position. Using a suitable test lamp, touch one test lamp probe to terminal No. 2 and other probe to terminal No. 3. Lamp should light. Push engagement switch button all the way in and light should go out. If light does not go out, replace switch.

2) Touch one test lamp probe to terminal No. 1 and other probe to terminal No. 3. Lamp should not light. If lamp lights, replace switch. Push engaging switch in slowly. Lamp should light when first depressed (first detent) and go out when fully depressed, if it does not, replace engagement switch.

Pontiac — Check for blown fuse, if fuse is good, turn ignition switch to "ACC" position. Using a suitable test lamp, touch one test lamp probe to blue wire at regulator and other probe to ground. If test lamp does not light, proceed with Test "A". If lamp does light, proceed with Test "B".

Test "A" — **1)** Connect test lamp from blue wire at 3-wire connector on steering column to ground. If lamp lights, check for open circuit in blue wire between connector and regulator. If lamp does not light, connect test lamp from brown wire at steering column connector to ground.

2) If lamp lights, replace engagement switch. If lamp does not light, connect test lamp from each brown wire at brake switch to ground. If lamp lights in both instances, check for open circuit in wire to steering column connector. If lamp lights for one wire only, replace brake switch. If lamp does not light in either case, check for open in wire to fuse block.

Test "B" — **1)** Connect test lamp from black wire at regulator to ground. If lamp does not light, depress engagement switch fully and proceed to Step 2. If lamp did light, disconnect 3-wire connector at steering column and connect test lamp from black wire at connector to ground. If lamp lights, replace regulator. If lamp does not light, replace engagement switch.

2) If lamp does not light or lights and does not go out at full in position, replace engagement switch. If lamp lights and goes out at full in position, insert jumper wire between brown wire and blue wire at steering column connector. Connect test lamp from black wire to ground and depress engagement switch fully.

3) If test lamp does not light or lights and goes out with switch fully depressed, replace engagement switch. If test lamp lights and stays on, hold switch button in and press brake pedal. If lamp stays on, replace brake switch. If lamp goes out, system electrically good.

ADJUSTMENTS

BRAKE RELEASE SWITCH

Oldsmobile — Insert switch into tubular clip until switch body seats on tubular clip. Pull brake pedal rearward against internal pedal stop. Switches will be moved in tubular clip providing proper switch adjustment.

GENERAL MOTORS CRUISE CONTROL (Cont.)

Pontiac — Apply brake pedal and push both stop light and brake release switches forward as far as possible. Pull pedal forcibly rearward to adjust switches.

SERVO ROD

Oldsmobile Only — With slow idle correctly adjusted, carburetor at slow idle position and ignition off, remove retainer clip from servo rod. Select a hole in rod that will provide slight clearance between clip and servo bushing when clip is installed. Clearance should not exceed width of one hole.

ACTUATOR CABLE

Pontiac Only — Place carburetor choke to fast idle position. Disconnect cable from carburetor and pull carburetor end of cable forward as far as it will go, while still connected to servo. If one of holes in tube at end of cable lines up with carburetor lever, install pin, washer and cotter pin. If one of the holes does not line up, move cable rearward until first available hole lines up and install pin, washer and cotter pin.

CENTERING SPRING

All Models — If Cruise Control holes speed three or more MPH above that selected, turn centering spring adjusting screws (on regulator) towards "S" 1/32 of a turn (Oldsmobile) or 1/8 of a turn (Pontiac) or less. If cruise control holds speed three or more MPH below that selected, turn centering spring adjusting screw toward "F" 1/32 of a turn (Oldsmobile) or 1/8 turn (Pontiac) or less. CAUTION — *DO NOT move adjustment screw marked "R". This is a vacuum restriction adjustment screw and is pre-set at factory.*

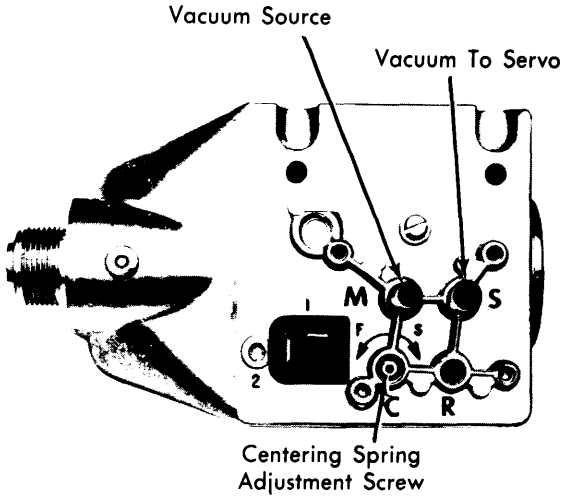

Fig. 1 Adjustment Screw Identification

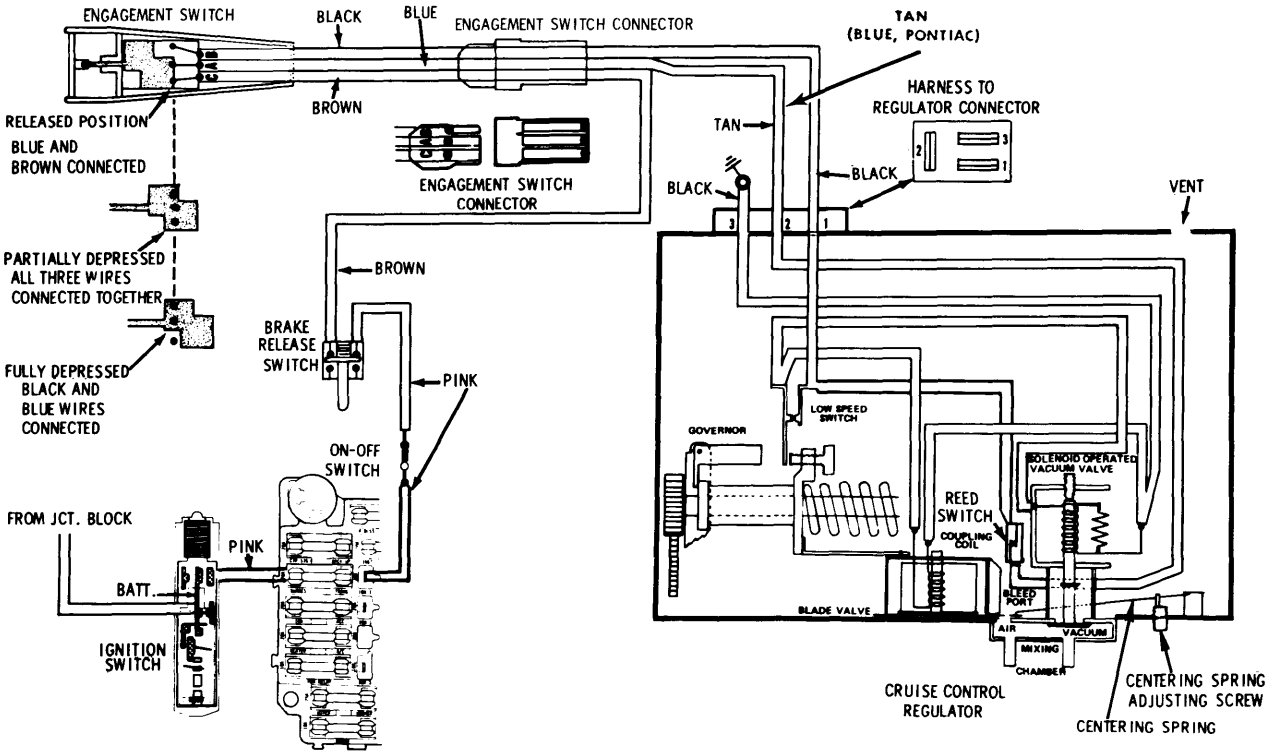

Fig. 2 Diagram of General Motors Cruise Control Electrical Circuit