

A/C-HEATER SYSTEM

1995 Chevrolet Tahoe

1995 AIR CONDITIONING & HEAT
General Motors Corp. A/C-Heater System - Manual

Chevrolet: Pickup, Tahoe
GMC: Sierra, Yukon

DESCRIPTION

The A/C system is a Cycling Clutch Orifice Tube (CCOT) type with a fixed displacement compressor and pressure cycling switch to control evaporator temperature. Electric motors are used to control mode, temperature and recirculation doors. A series of relays and a resistor are used to control blower speed. Motors and relays are controlled by control panel knobs. A/C-heater system is a blend-air system. Air entering vehicle passes through evaporator core and through, or around, heater core to provide desired temperature.

OPERATION

*** PLEASE READ THIS FIRST ***

CAUTION: When battery is disconnected, radio will go into anti-theft protection mode. Obtain radio anti-theft protection code from owner prior to servicing vehicle.

A/C-HEATER CONTROL PANEL

Temperature Control Knob

Temperature control knob (left knob) is located below radio. Temperature door is controlled by an electric actuator based on the temperature knob location. When temperature knob is in the COLD (Blue) position, air delivered by system is unheated. When temperature knob is in HOT (Red) position, all air passing through heater module is heated before it is discharged. Intermediate position of temperature knob results in a mixture of heated and unheated air to provide more moderate air temperatures.

Blower Switch

Blower switch (center knob) provides various blower speeds. Blower switch receives power through a fuse in fuse block when ignition is on. In various speed positions, circuit continues through wiring harness to blower motor resistor assembly near blower motor. There are 4-positions: LO, HI and 2 intermediate positions. Blower operates in any mode position except OFF.

Mode Selector Knob

Mode selector knob controls various actuators on HVAC system. Each actuator operates a door that routes airflow to various outlets through the system. Mode selector knob (right knob) positions are VENT, VENT/HEAT, HEAT, HEAT/DEFROST and DEFROST.

Recirculation Button

Button is located between temperature control knob and blower switch. When pressed, air is allowed to recirculate inside vehicle. This helps maximize A/C performance and fuel economy. This setting cools air faster and prevents dust from entering vehicle.

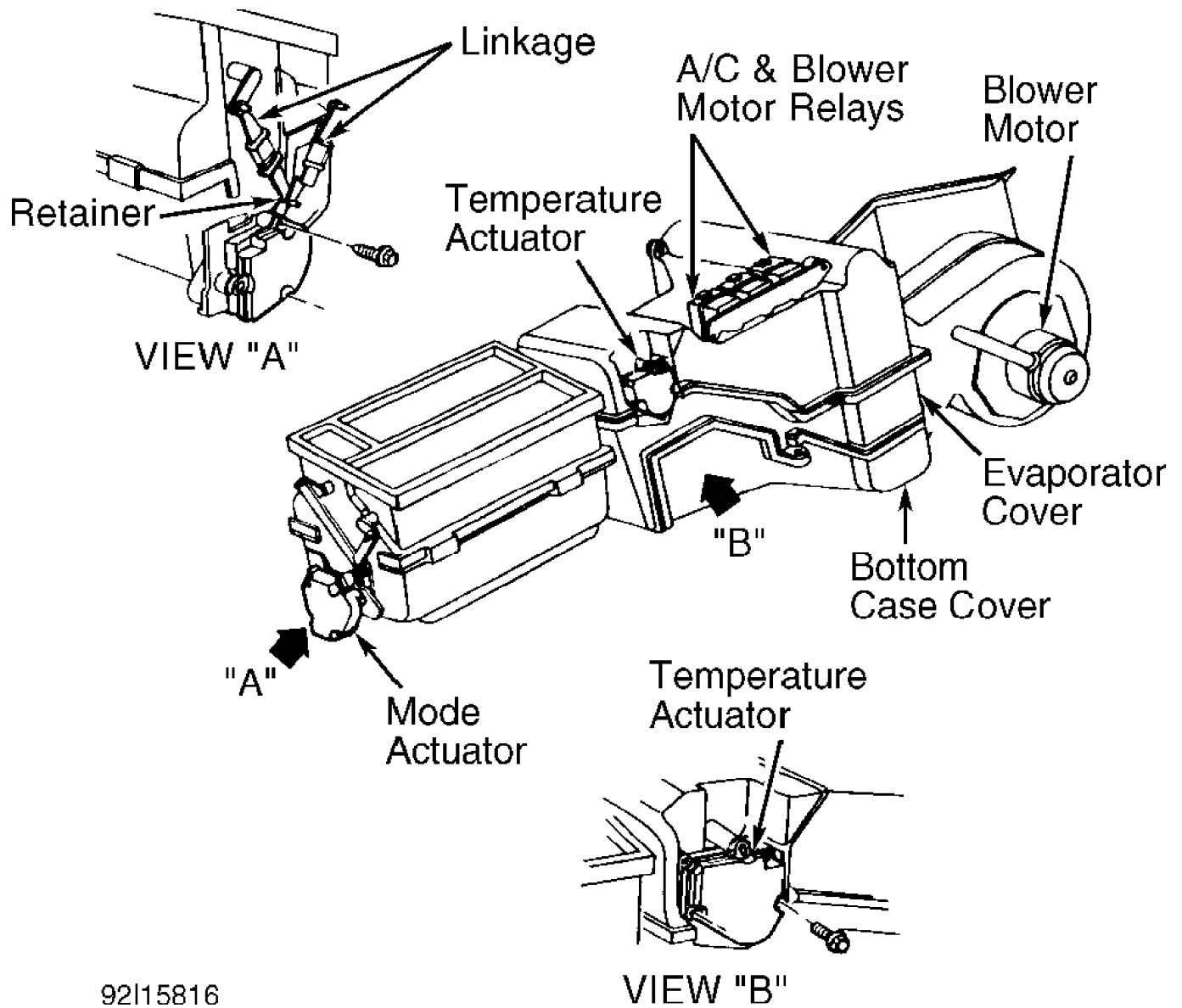
A/C Button

Button is located between blower switch and mode selector knob. Button activates A/C system. Air coming into vehicle is cooled and directed through instrument panel vents.

ADJUSTMENTS

ACTUATORS

To access actuator, remove instrument panel or glove box. Turn ignition switch to ACC position. Allow actuator to position itself. Turn ignition off, and reinstall components. See Fig. 1.



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Fig. 1: Locating Actuators & Blower Motor Relays
Courtesy of General Motors Corp.

TROUBLE SHOOTING

*** PLEASE READ THIS FIRST ***

NOTE: Before performing trouble shooting procedures, ensure A/C-heater fuse is not blown.

A/C COMPRESSOR INOPERATIVE

NOTE: To properly diagnose system, outside temperature must be greater than 60°F (16°C).

1) Turn ignition on. Place blower switch in HI position. Using DVOM, measure voltage at A/C-heater control module connector Light Green wire. If voltage is not present, go to next step. If battery voltage is present, go to step 3).

2) Using DVOM, check continuity of White wire between A/C-heater control module connector and ground. If continuity exists, replace A/C-heater control module. If continuity does not exist, repair open White wire between A/C-heater control module connector and ground. If wire is okay, replace water valve.

3) Using DVOM, measure voltage at A/C compressor clutch relay connector Light Green wire (located under instrument panel, on A/C-heater assembly case). If battery voltage is present, go to next step. If voltage is not present, repair open Light Green wire between A/C compressor clutch relay connector and A/C-heater control module connector.

4) Using DVOM, check continuity of Black wire between A/C compressor clutch relay connector and ground. If continuity exists, go to next step. If continuity does not exist, repair open Black wire between A/C compressor clutch relay connector and ground.

5) Check continuity of Light Blue wire between A/C compressor clutch relay connector and A/C high pressure cut-out switch connector (located at right front side of engine compartment). If continuity exists, go to next step. If continuity does not exist, repair open Light Blue wire between A/C compressor clutch relay connector and A/C high pressure cut-out switch connector.

6) Check continuity of Dark Green wire between A/C compressor clutch connector and A/C high pressure cut-out switch connector. If continuity exists, go to next step. If continuity does not exist, repair open Dark Green wire between A/C compressor clutch connector and A/C high pressure cut-out switch connector.

7) Check continuity of Black wire between A/C compressor clutch connector and ground. If continuity exists, go to next step. If continuity does not exist, repair open Black wire between A/C compressor clutch connector and ground.

8) Check continuity between A/C compressor clutch terminals. If continuity exists, replace A/C compressor clutch relay. If continuity does not exist, replace A/C compressor clutch.

BLOWER MOTOR DOES NOT OPERATE

1) Disconnect blower motor connector, located under right side of instrument panel. Turn ignition on. Set mode selector knob to VENT position. Set blower switch to HI position. Using a DVOM, measure voltage at blower motor connector Purple wire. If battery voltage is present, go to next step. If voltage is not present, go to step 3).

2) Measure voltage between Purple wire and Black wire of blower motor connector. If battery voltage is present, replace blower motor. If voltage is not present, repair open Black wire between blower motor connector and ground.

3) Set blower switch to LOW position. Connect test light from Purple wire at high blower relay connector (located under instrument panel, on top of A/C-heater assembly case) to ground. If test light does not glow, go to next step. If test light glows, repair open

Purple wire.

4) Connect test light from Dark Blue wire at high blower relay connector to ground. If test light does not glow, go to next step. If test light glows, replace high blower relay.

5) Turn ignition off. Disconnect A/C-heater control module connector. Connect test light from Brown wire at A/C-heater control module connector to ground. Turn ignition on. If test light glows, go to next step. If test light does not glow, repair open Brown wire between A/C-heater control module connector and fuse block.

6) Using a DVOM, check continuity from Black wire at A/C-heater control module connector to ground. If continuity exists, go to next step. If continuity does not exist, repair open Black wire between A/C-heater control module connector and ground.

7) Connect A/C-heater control module connector. Turn ignition on. Set blower switch to LOW position. Connect test light from Yellow wire at A/C-heater control module connector to ground. If test light glows, go to next step. If test light does not glow, replace A/C-heater control module.

8) Using a DVOM, check continuity of Yellow, Tan and Light Blue wires between A/C-heater control module connector and blower resistor connector (located under right side of instrument panel, on A/C-heater assembly case). If continuity exists, go to next step. If continuity does not exist, repair appropriate wire(s) between A/C-heater control module connector and blower resistor connector.

9) Check continuity of Purple wire between blower resistor connector and high blower relay connector. If continuity exists, replace blower resistor. If continuity does not exist, repair open Purple wire between blower resistor connector and high blower relay connector.

BLOWER MOTOR DOES NOT OPERATE IN HIGH SPEED

1) Turn ignition on. Set blower switch to HIGH position. Connect test light from Orange wire at high blower relay connector to ground. If test light glows, go to next step. If test light does not glow, repair open Orange wire between high blower relay connector and A/C-heater control module connector.

2) Connect test light from Red wire at high blower relay connector to ground. If test light glows, go to next step. If test light does not glow, repair open Red wire between high blower relay connector and underhood fuse relay center.

3) Using a DVOM, check continuity from Black wire at high blower relay connector to ground. If continuity exists, replace high blower relay. If continuity does not exist, repair open Black wire between high blower relay connector and ground.

BLOWER MOTOR OPERATES IN HIGH SPEED ONLY

1) Using a DVOM, check continuity of inoperative switch position wire between A/C-heater control module connector and blower resistor connector. Low position is Yellow wire, medium-low position (detent next to low position) is Tan wire, and medium-high position (detent next to high position) is Light Blue wire.

2) If continuity exists, replace blower resistor. If continuity does not exist, repair open circuit in appropriate wire (depending on switch position) between A/C-heater control module connector and blower resistor connector.

DISPLAY DOES NOT DIM PROPERLY

1) Turn ignition on. Ensure A/C is off. Set light switch in Park position and dimming control to full bright position. Using a DVOM, measure voltage at A/C-heater control module connector Gray

wire. If battery voltage is present, go to next step. If voltage is not present, repair open Gray wire between A/C-heater control module connector and light switch connector.

2) Connect test light from Black wire at A/C-heater control module connector to ground. If test light glows, replace A/C-heater control module. If test light does not glow, repair open Black wire between A/C-heater control module connector and ground.

A/C DOES NOT WORK

With engine running and function control switch at NORM position, check for voltage at pressure cycling switch. Check for voltage between pressure cycling switch and compressor clutch. Ground compressor clutch circuit. If clutch engages, check wide-open throttle cut-out switch and A/C compressor cut-off switch.

FRONT VENTILATION CONTROLS DO NOT OPERATE

1) Ignition switch to ON. Disconnect front mode door motor connector. Connect unpowered test light between connector cavity 10 and ground. If test light is lit, go to next step. If test light is not lit, repair open in Circuit 141 (Brown wire) between instrument panel fuse block and splice S243. See WIRING DIAGRAMS.

2) Connect self-powered test light between front mode door motor connector cavity 7 and ground. If test light is lit, go to next step. If test light is not lit, repair open in circuit 141 (Black wire) between splice S244 and ground number G105.

3) Disconnect Connector C3 at HVAC Control module. Connect unpowered test light between cavity 5 (Brown wire) and ground. If test light is lit, go to next step. If test light is not lit, repair open in circuit 141 (Brown wire) between HVAC Control module and instrument panel fuse block.

4) Connect self-powered test light between HVAC connector cavity 2 (Black wire) and ground. If test light is lit, replace HVAC control module. If test light is not lit, repair open in circuit 150 (Black wire) between HVAC Control module and ground G200.

FRONT MODE DOOR MOTOR DOES NOT OPERATE

1) Ignition switch in ON. Disconnect front mode door motor connector. Move front blower switch on HVAC to LO. Observe that front blower motor is operating. Connect a DVOM from front mode door motor connector cavity 8 to ground. Move mode control dial while observing voltmeter response. If no voltage, erratic change or fixed voltage is observed, go to next step. If smooth voltage change is observed, go to step 5).

2) Disconnect connector C3 at HVAC module. Connect an un-powered test light from connector terminal 9 (White wire) and ground. If test light is not lit, go to next step. If test light is lit, repair short to voltage on White wire between HVAC module and front mode door motor.

3) Connect a self-powered test light between HVAC connector C3, terminal 9 (White wire) and ground. If test light is not lit, go to next step. If test light is lit, repair short to ground on White wire between HVAC module and front mode door motor.

4) Connect a self-powered test light between HVAC connector C3, terminal 9 (White wire) and front door motor connector terminal 8 (White wire). If test light is lit, replace HVAC module. If test light is not lit, repair open in White wire between HVAC module and front mode door motor.

5) Connect an un-powered test light between front mode door motor terminal 10 and ground. If test light is lit, go to next step. If test light is not lit, repair open in Brown wire between Splice

S243 and front mode door motor.

6) Connect a self-powered test light between front mode door motor connector terminal 7 (Black wire) and ground. If test light is lit, replace front mode door motor. If test light is not lit, repair open in Black wire between front mode door motor and Splice S244.

FRONT TEMPERATURE DOOR MOTOR DOES NOT OPERATE

1) Ignition switch in ON. Disconnect front temperature door motor connector. Move front blower switch on HVAC to LO. Connect a DVOM from front mode door motor connector cavity 8 to ground. Move mode control dial while observing voltmeter response. If no voltage, erratic change or fixed voltage is observed, go to next step. If smooth voltage change is observed, go to step 5).

2) Disconnect connector C3 at HVAC module. Connect an un-powered test light from connector terminal 8 (Light Blue wire) and ground. If test light is not lit, go to next step. If test light is lit, repair short to voltage on Light Blue wire between HVAC module and front temperature door motor.

3) Connect a self-powered test light between HVAC connector C3, terminal 8 (Light Blue wire) and ground. If test light is not lit, go to next step. If test light is lit, repair short to ground on Light Blue wire between HVAC module and front temperature door motor.

4) Connect a self-powered test light between HVAC connector C3, terminal 8 (Light Blue wire) and front door motor connector terminal 8 (Light Blue wire). If test light is lit, replace HVAC module. If test light is not lit, repair open in White wire between HVAC module and front temperature door motor.

5) Connect an un-powered test light between front temperature door motor terminal 10 and ground. If test light is lit, go to next step. If test light is not lit, repair open in Brown wire between Splice S243 and front temperature door motor.

6) Connect a self-powered test light between front temperature door motor connector terminal 7 (Black wire) and ground. If test light is lit, replace front temperature door motor. If test light is not lit, repair open in Black wire between front temperature door motor and Splice S244.

RECIRCULATION DOOR MOTOR FAILS IN VENT POSITION

1) Ignition switch in ON. Disconnect recirculation door motor connector. Connect an un-powered test light between connector terminal 5 (Brown wire) and ground. If test light is lit go to next step. If test light is not lit, repair open in Brown wire between splice S243 and recirculation door motor.

2) Connect a powered test light between connector terminal 7 (Black wire) and ground. If test light is lit, go to next step. If test light is not lit, repair open in Black wire between recirculation door motor and splice S244.

3) Connect an un-powered test light between connector terminal 6 (Dark Green wire) and ground. Move front blower switch to LO. Confirm that front blower motor is operating. Actuate recirculation button on HVAC. If test light is not lit, go to next step. If test light is lit, replace recirculation door motor.

4) Disconnect HVAC connector C3. Connect a powered test light between terminal 4 (Dark Green wire) and recirculation door motor connector terminal 6 (Dark Green wire). If test light is lit, go to next step. If test light is not lit, repair open in Dark Green wire between HVAC module and recirculation door motor.

5) If vehicle is equipped with an auxiliary cooling fan, go to next step. If not, replace HVAC module.

6) Disconnect connector at auxiliary cooling fan A/C pressure switch. Connect a powered test light between auxiliary cooling fan A/C

pressure switch connector terminal A and recirculation door motor connector terminal 6 (Dark Green wire). If test light is lit, replace HVAC module. If test light is not lit, repair open in Dark Green wire between auxiliary cooling fan A/C pressure switch and splice S212.

NOTE: Diode D101 may be open.

RECIRCULATION DOOR MOTOR FAILS IN RECIRCULATION POSITION

1) Ignition in ON. Move front blower switch in HI. Disconnect recirculation door motor connector. If door is not in recirculation position, go to next step. If door is still in recirculation position, replace motor.

2) Disconnect HVAC connector C3. Connect a powered test light between connector C3 terminal 4 (Dark Green wire) and ground. If test light is lit, go to next step. If test light is not lit, replace HVAC module.

3) For 7.4L engine equipped vehicles with A/C, go to next step. On all other models, repair short to ground in Dark Green (circuit 1614) between HVAC module, auxiliary cooling fan A/C pressure switch, and recirculation door motor. If short is not found, check that diode D100 has not shorted.

4) Disconnect auxiliary cooling fan A/C pressure switch connector. Remove auxiliary cooling fan relay from its socket. Connect a powered test light between connector terminal A and ground. If test light is not lit, replace auxiliary cooling fan A/C pressure switch. If test light is lit, repair short to ground in Dark Green (circuit 1614) between HVAC module, auxiliary cooling fan A/C pressure switch, and recirculation door motor. If short is not found, check that diode D100 has not shorted.

FRONT MODE DOOR OPERATES WITH FRONT BLOWER SWITCH OFF

1) Ignition ON, move front blower switch in OFF. Disconnect HVAC connector C3. Connect un-powered test light between HVAC module connector terminal 3 (Dark Green wire) and ground. If test light is not lit, go to next step. If test light is lit, replace HVAC module.

2) Disconnect HVAC connector C2. Connect powered test light between connector C2 terminal D and connector C3 terminal 3. If light is lit, go to next step. If light is not lit, repair open in Dark Green wire (circuit 71) between connectors C2 and C3.

3) Connect an un-powered test light between connector C2 terminal G (Brown wire) and ground. If test light is lit, replace HVAC module. If test light is not lit, repair open in Brown wire between splice S268 and HVAC module connector C2.

REFRIGERANT SYSTEM DIAGNOSIS

Insufficient Cooling

NOTE: QUICK CHECK procedure may be used to check for proper refrigerant charge in A/C system, provided ambient air temperature is more than 70°F (21°C). On vehicles with Cycling Clutch Orifice Tube (CCOT) system, compressor will cycle on and off to meet system requirements. CCOT system does not use a sight glass to check refrigerant charge.

Quick Check Procedure

1) Engine must be at normal operating temperature (not on fast idle or cold enrichment). Open vehicle doors and engine hood. Select NORM A/C position. Move temperature lever to COLD position. Turn blower switch to HI position. Engine should be at normal slow idle speed.

2) While compressor is engaged, feel temperature of accumulator surface and evaporator inlet pipe. If temperature of both components is the same (slightly cooler than ambient air), system is normal. If inlet pipe is frosted or feels cooler than accumulator surface, refrigerant charge is low.

3) Add refrigerant in 4-ounce increments, allowing system to stabilize between additions, until accumulator and pipe appear to be same temperature. Add 14 more ounces of refrigerant.

Thorough Check Procedure

See CCOT System trouble shooting flow charts below.

CCOT SYSTEM TROUBLE SHOOTING FLOW CHARTS

CCOT SYSTEM INSUFFICIENT COOLING "CHART A"

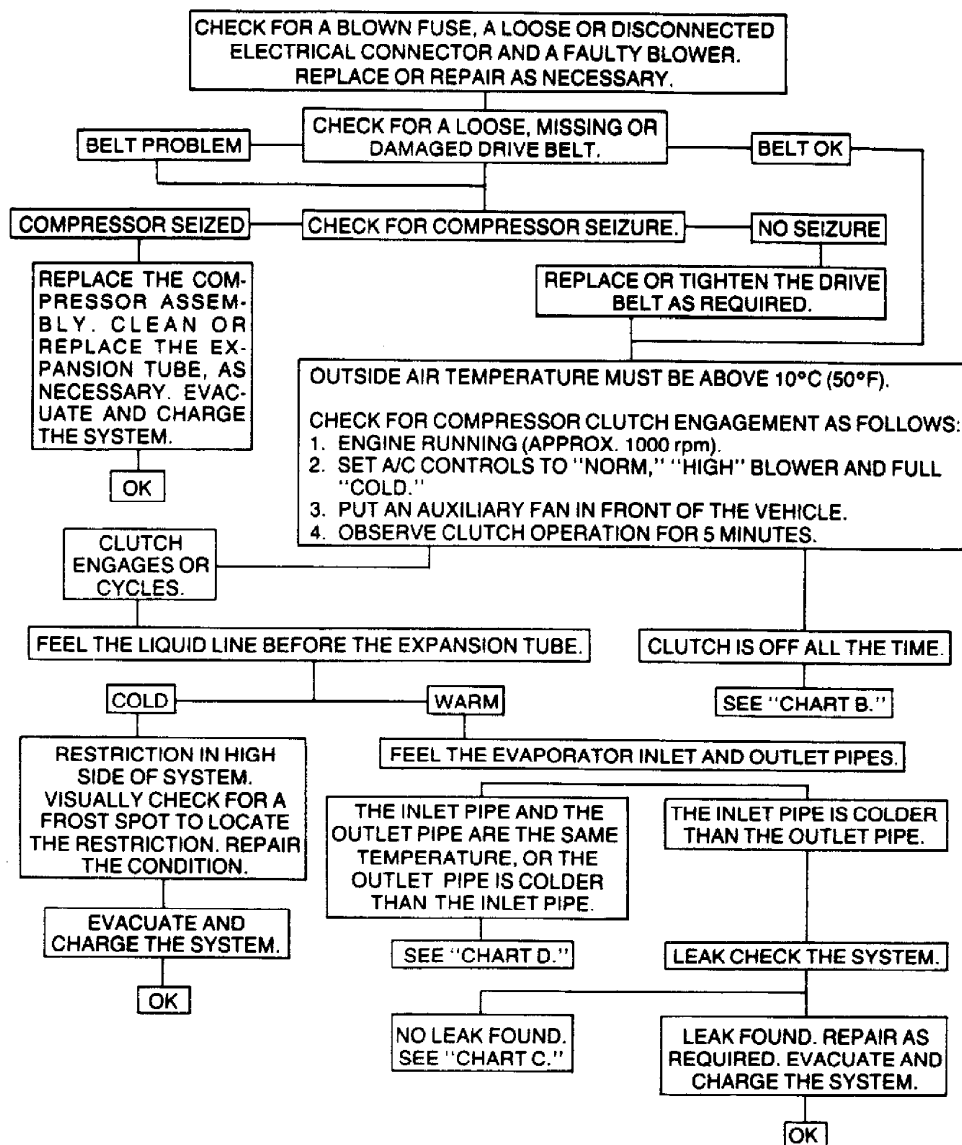


Fig. 2: CCOT System - Insufficient Cooling - Chart "A"
Courtesy of General Motors Corp.

CCOT SYSTEM INSUFFICIENT COOLING "CHART B"

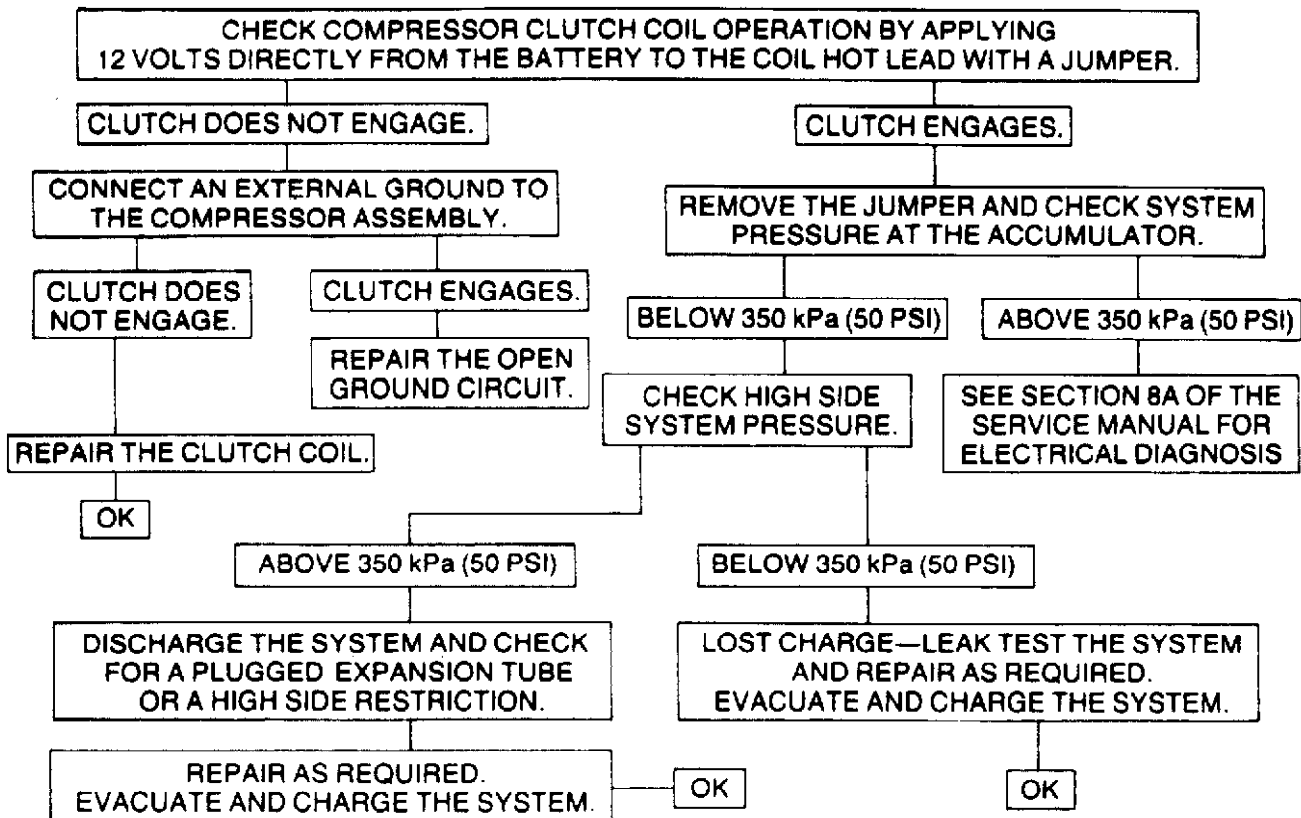


Fig. 3: CCOT System - Insufficient Cooling - Chart "B"
 Courtesy of General Motors Corp.

CCOT SYSTEM INSUFFICIENT COOLING "CHART C"

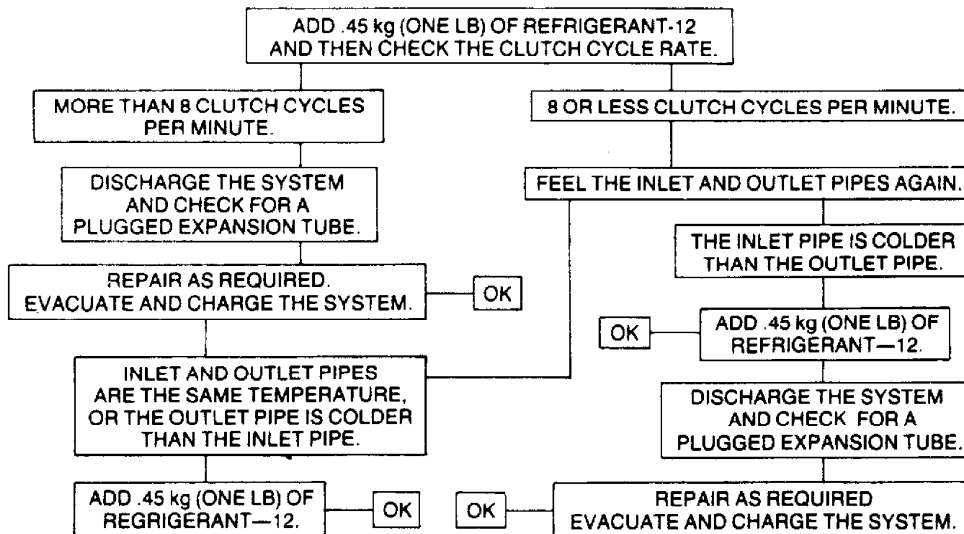


Fig. 4: CCOT System - Insufficient Cooling - Chart "C"
 Courtesy of General Motors Corp.

CCOT SYSTEM INSUFFICIENT COOLING "CHART D"

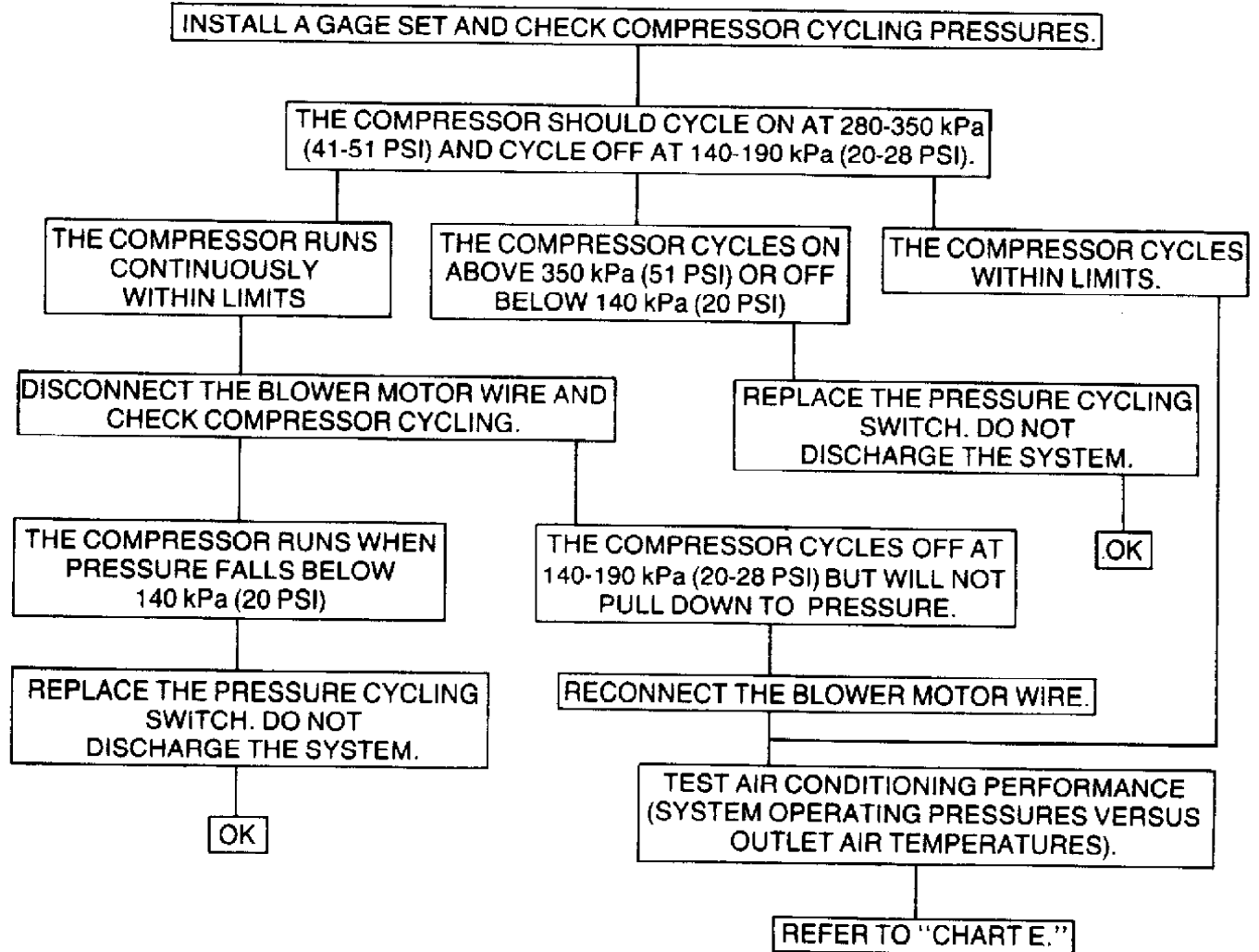


Fig. 5: CCOT System - Insufficient Cooling - Chart "D"
Courtesy of General Motors Corp.

CCOT SYSTEM INSUFFICIENT COOLING "CHART E"

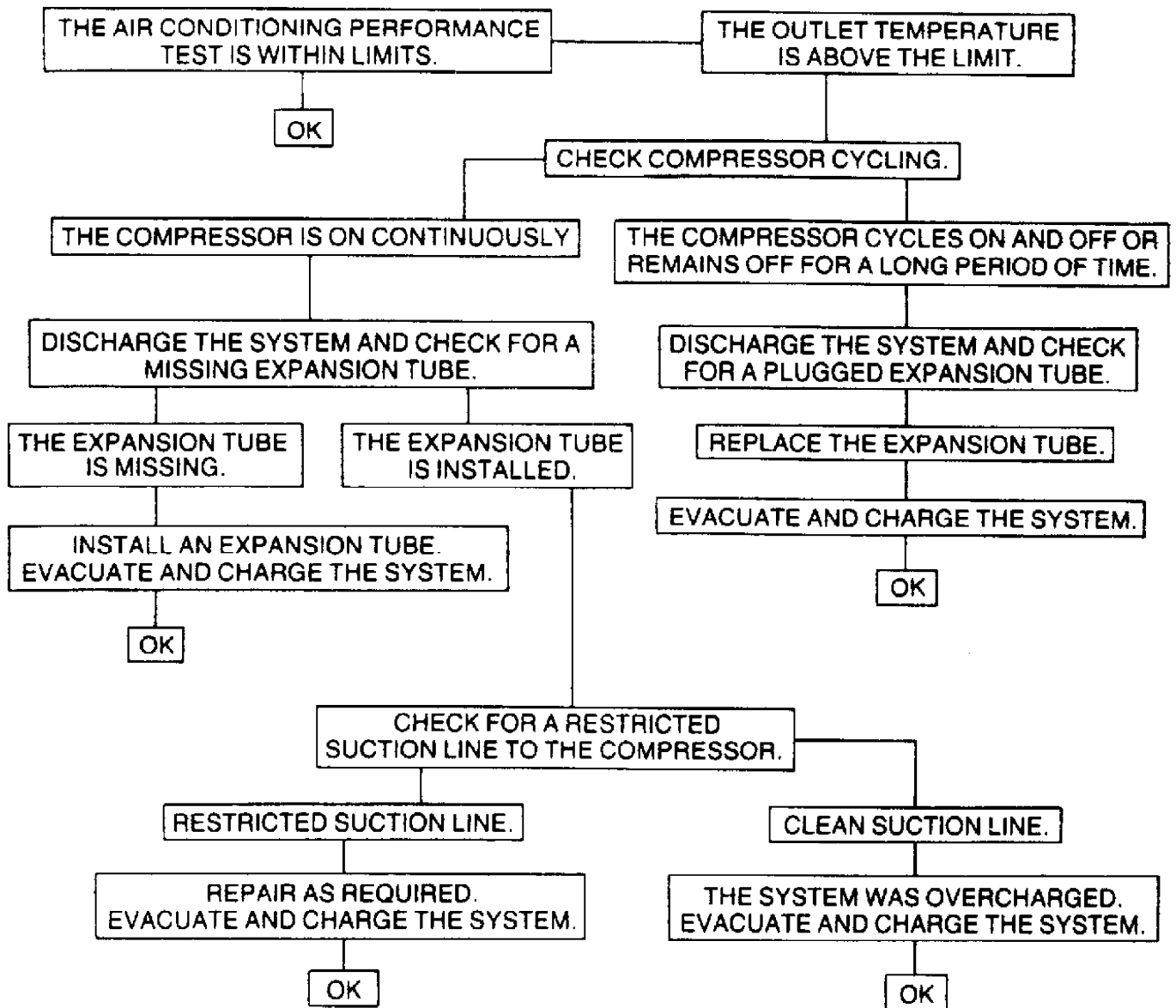


Fig. 6: CCOT System - Insufficient Cooling - Chart "E"
 Courtesy of General Motors Corp.

TESTING

A/C SYSTEM PERFORMANCE

1) Park vehicle out of direct sunlight. Open doors or windows to ventilate vehicle. Vent exhaust system, if necessary. Install manifold gauge set. Note ambient temperature and relative humidity. Close all doors and windows. Turn on A/C system. Set blower to high speed, and temperature lever to COLD position. Open vents.

2) Insert A/C Diagnostic Tester (J 21213-A) into right center

outlet. Place transmission in Park or Neutral. Start engine and allow it to run at 2000 RPM until outlet air reaches lowest temperature (approximately 3 minutes). See A/C SYSTEM SPECIFICATIONS table.

A/C SYSTEM SPECIFICATIONS TABLE (1)

Ambient Temperature °F (°C)	Low Side Pressure psi (kg/cm ²)	High Side Pressure psi (kg/cm ²)	Air Outlet Temperature °F (°C)
70 (21)	27 (1.9)	300 (21)	46 (8)
80 (27)	28 (2.0)	320 (23)	50 (10)
90 (32)	36 (2.5)	355 (25)	58 (14)
100 (38)	45 (3.2)	409 (29)	68 (20)

(1) - Specifications are with relative humidity at 60 percent

REMOVAL & INSTALLATION

ACCUMULATOR

Removal & Installation

1) Disconnect negative battery cable. Discharge A/C system using approved refrigerant recovery/recycling equipment. Disconnect electrical connectors, as necessary. Remove pressure cycling switch. Disconnect accumulator inlet and outlet lines, and cap openings. Remove accumulator bracket screws and accumulator.

2) To install, reverse removal procedure. Add 3.5 ounces of clean refrigerant oil to NEW accumulator. Lightly lubricate NEW "O" rings with clean refrigerant oil prior to installation. Evacuate, recharge and leak test system.

ACTUATORS

Removal & Installation

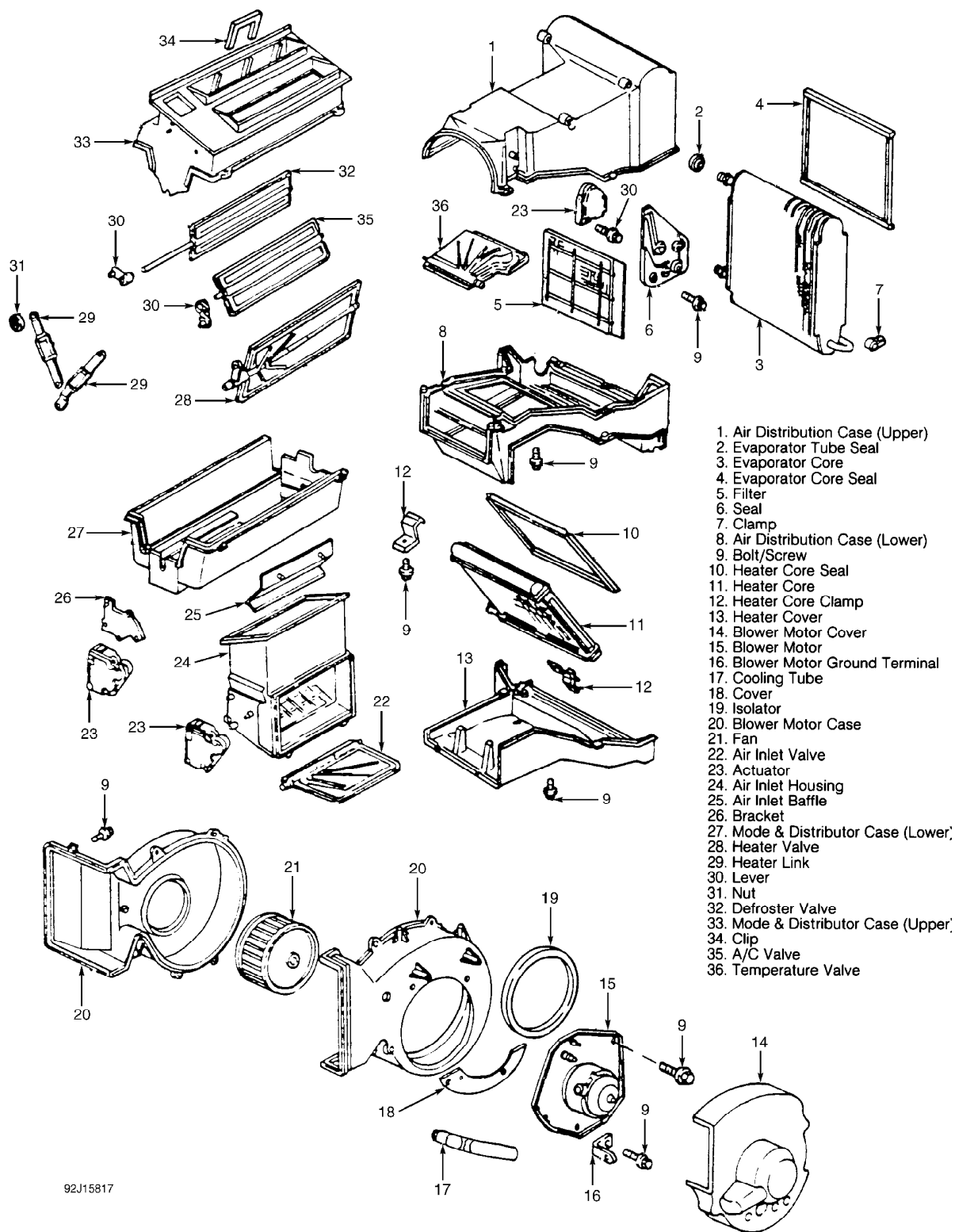
Disconnect negative battery cable. Remove glove box. Disconnect actuator electrical connectors if necessary. Remove adjuster links from control lever. Remove screws and remove actuator. See Fig. 1. To install, reverse removal procedure. Adjust actuator if necessary. See ACTUATORS under ADJUSTMENTS.

BLOWER MOTOR & FAN

Removal & Installation

1) Disconnect negative battery cable. Remove screw from right door sill trim plate. Remove right hinge pillar trim panel. Disconnect electrical connectors from Electronic Control Module (ECM), as necessary. Remove mounting bracket and ECM.

2) Disconnect blower motor electrical connectors. Remove blower motor cover. Disconnect cooling tube. See Fig. 7. Loosen courtesy light screws, and move light aside (if equipped). Remove right dash support bolt. Remove blower motor-to-case screws. Remove blower motor. Remove fan from blower motor shaft. To install, reverse removal procedure.



92J15817

Fig. 7: Exploded View Of Manual A/C-Heater Assembly
 Courtesy of General Motors Corp.

COMPRESSOR

Removal & Installation

1) Disconnect negative battery cable. Discharge A/C system using approved refrigerant recovery/recycling equipment. Remove compressor drive belt. Disconnect compressor inlet and outlet lines, and cap openings. Disconnect electrical connectors, as necessary. Remove compressor.

2) To install, reverse removal procedure. If replacing compressor, drain and measure oil from old compressor. If less than one ounce is drained, add 2 ounces to NEW compressor. If more than one ounce is drained, add that amount to NEW compressor. Evacuate, recharge and leak test system.

CONDENSER

Removal & Installation

1) Disconnect negative battery cable. Discharge A/C system using approved refrigerant recovery/recycling equipment. Remove grille. Remove radiator grille center support. Remove left grille from upper fender support. Disconnect condenser inlet and outlet lines, and cap openings.

2) Bend left grille support outward for clearance. Pull condenser forward and then lower it to remove from vehicle. To install, reverse removal procedure. Lubricate NEW "O" rings with clean refrigerant oil prior to installation. Add one ounce of clean refrigerant oil to condenser. Evacuate, recharge and leak test system.

CONTROL PANEL

Removal & Installation

Disconnect negative battery cable. Release control panel retainers using small screwdriver. Pull control panel out far enough to access back of panel. Disconnect electrical connectors at control panel, and remove control panel. To install, reverse removal procedure.

EVAPORATOR & HEATER CORE

Removal & Installation

1) Disconnect negative battery cable. Discharge A/C system using approved refrigerant recovery/recycling equipment. Drain cooling system. Remove glove box. Disconnect electrical connectors, if necessary. Remove floor air distribution duct.

2) Remove Electronic Control Module (ECM) and mounting tray. Remove trim panels. Remove blower motor cover. Remove blower motor-to-case screws, and remove blower motor. Loosen steering column bolts from instrument panel. Remove carrier and body bracket bolts supporting instrument panel (located on firewall and at each end of instrument panel).

3) Tilt back instrument panel. Remove coolant recovery tank. Remove heater hoses at heater core. Disconnect inlet and outlet lines at evaporator core, and cap openings. Remove accumulator. Remove A/C-heater assembly-to-firewall screws and bolts. Remove A/C-heater assembly from vehicle.

4) Remove heater core cover from A/C-heater assembly. Remove heater core and seal from A/C-heater assembly. Remove air distribution lower case. Remove evaporator core from A/C-heater assembly. See Fig. 7.

5) To install, reverse removal procedure. Add 3 ounces of clean refrigerant oil to evaporator. Lubricate NEW "O" rings with clean refrigerant oil prior to installation. Fill cooling system, and check for leaks. Evacuate, recharge and leak test A/C system.

ORIFICE TUBE

Removal & Installation

1) Discharge A/C system using approved refrigerant recovery/recycling equipment. Remove grille. Disconnect liquid line from evaporator inlet, and cap openings. Using orifice tube remover or needle-nose pliers, remove orifice tube from evaporator core inlet line.

CAUTION: If vehicle is equipped with a pressure switch mounted near orifice tube location, remove switch before heating inlet tube to prevent damage to switch.

2) If removal of orifice tube is difficult, remove as much of impacted residue as possible. Using a heat gun or hair dryer, apply heat 1/4" from dimples on inlet pipe. DO NOT overheat pipe.

3) To install, reverse removal procedure. Lubricate NEW "O" ring with clean refrigerant oil prior to installation. DO NOT soak "O" ring, as this will cause it to expand. Insert short screen end of tube into evaporator inlet line first. Evacuate, recharge and leak test system.

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. Lbs. (N.m)
A/C Compressor Bolts	
4.3L, 5.0L & 5.7L Engines	24 (33)
6.5L Engines	
Front Bolt	30 (41)
Rear Nut	17 (23)
7.4L Engines	
Front	37 (50)
Rear Brace-To-Compressor	62 (84)
Rear Brace-To-Engine	48 (65)
Refrigerant Hose Fittings	
Accumulator-To-Evaporator	30 (41)
Compressor Assembly Bolt (1)	25 (34)
Compressor-To-Accumulator	30 (41)
Compressor-To-Evaporator	24 (33)
Condenser-To-Evaporator	30 (41)
Evaporator Tube-To-Condenser	18 (24)
Evaporator Tube-To-Evaporator	18 (24)
	INCH Lbs. (N.m)
Accumulator Bracket	
Nut	25 (2.8)
Screw	17 (1.9)
Blower Motor Relay Screw	12 (1.4)
Blower Motor Resistor Screw	12 (1.4)
Blower Motor Screw	15 (1.7)
Condenser Bracket Bolt	40 (4.5)
Evaporator Case Screw	97 (11)
Pressure Cycling Switch Fitting	40 (4.5)

(1) - Use NEW sealing washers.

WIRING DIAGRAM

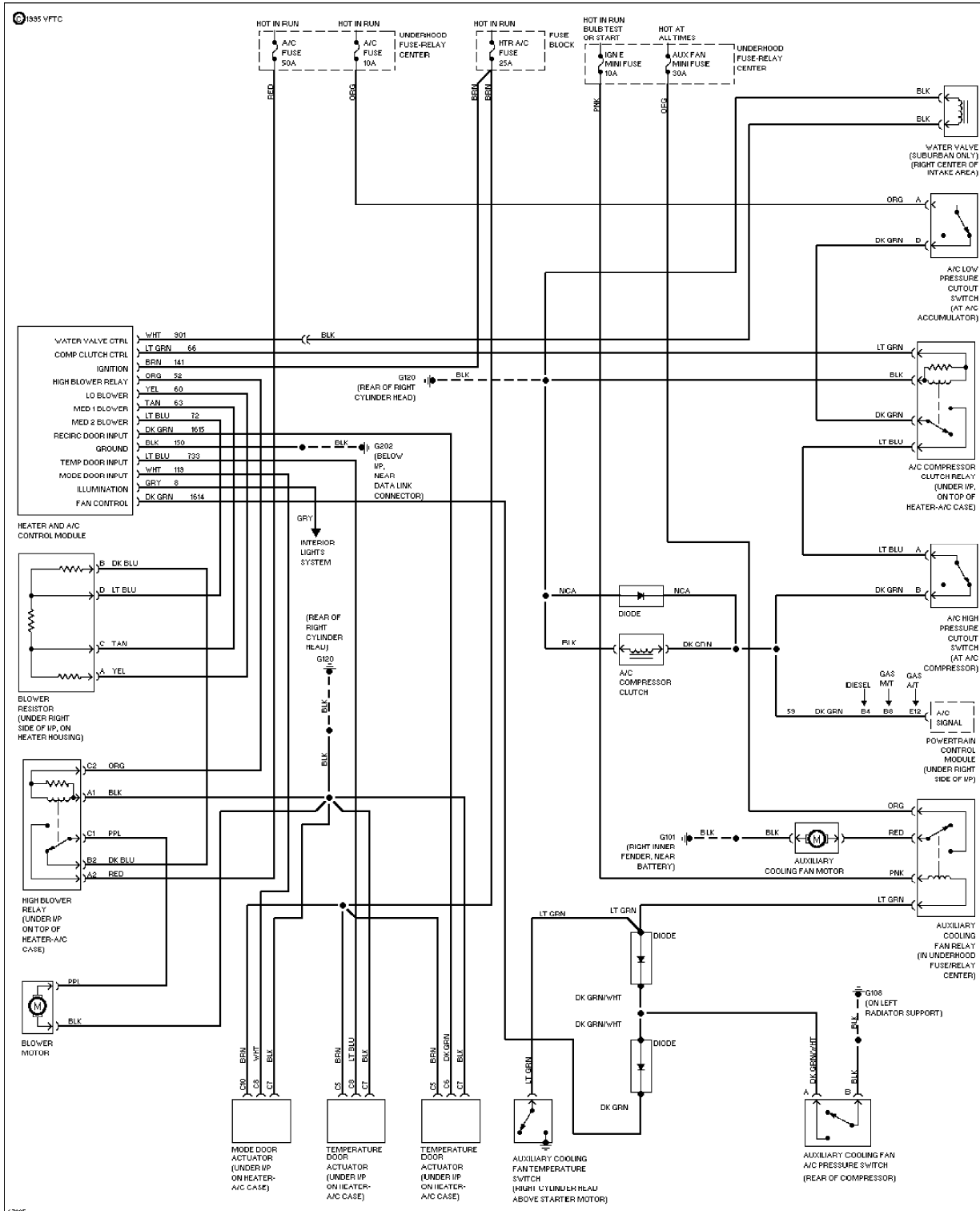


Fig. 8: Manual A/C-Heater System Wiring Diagram