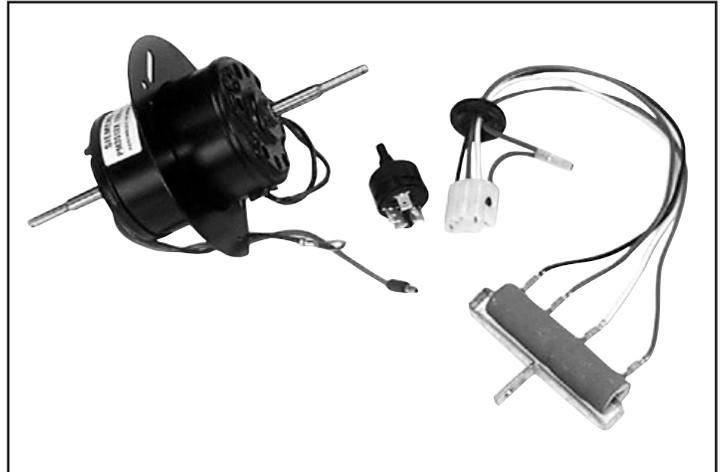


Dedicated to improving vehicle fun, safety & performance

Installation Instructions

Heater Blower Motor and Switch for 200 Series ipd #1323849K



SUGGESTED TOOLS

- Small, flat blade screwdriver
- Regular size Phillips screwdriver (#2)
- Wire cutting pliers
- Rat-tail file, die grinder, or dremel type tool

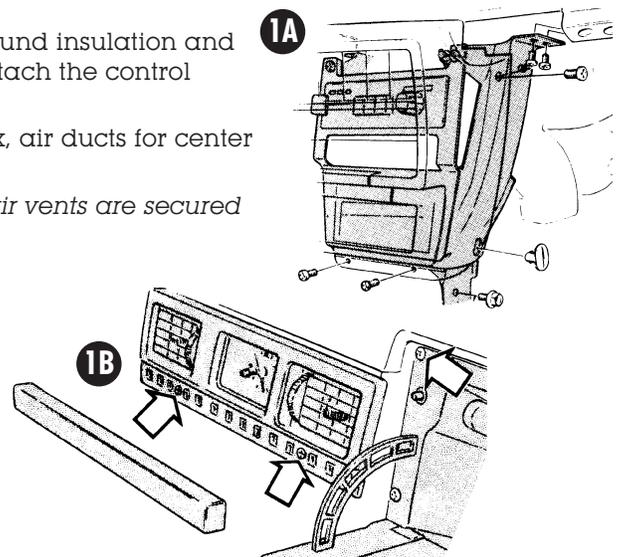
INSTALLATION

Vehicles built during 1975-80 have a field-wound fan motor. 1981-93 vehicles have a 4-speed permanent magnet motor. Only the later type of motor will be stocked as a spare part. When installing a 4-speed type motor on 1975-80 vehicles, modifications and additional parts are required (Steps 4, 5, 6).

- 1** Disconnect the battery ground cable. Remove the sound insulation and side panels on both sides. Also remove the radio. Detach the control panel and central console (A).

Remove or disconnect the center air vents, glove box, air ducts for center air vents, and cable connectors from the clock(B).

Note: A 1975-80 version is shown. From 1981-on, the air vents are secured by a screw.



INSTALLATION

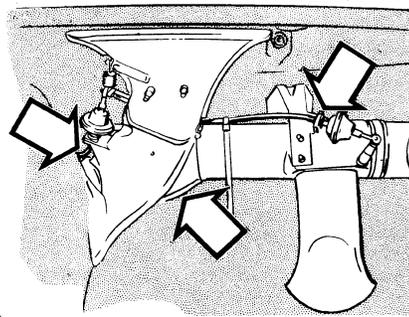
- 2** On the right-hand side, remove air ducts and disconnect the hoses to the shutter actuators (A).

Fold back the floor carpet. Remove the screw for the rear floor air duct and move the duct slightly to one side. Remove the outer fan housing and the fan wheel (B).

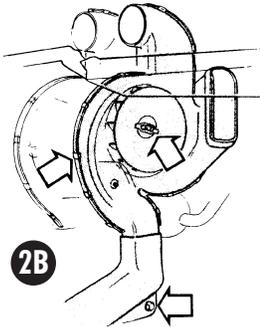
HINT: Use the small flat blade screwdriver to remove the outer fan housing clips. Use the same screwdriver to remove the fan wheel retaining clips by inserting the screwdriver into the opening in the clip and pry it up and outward, away from the fan wheel shaft.

Note: It may be necessary to remove the support under the glove compartment to remove the fan housing.

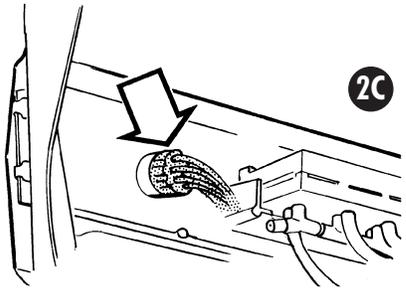
Disconnect the fan motor switch from the central console and the electrical leads from the switch (C).



2A



2B



2C

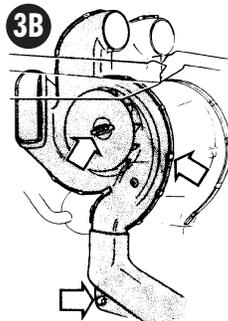
- 3** On the left-hand side, disconnect the air ducts and the hoses to the shutter actuators (A).

Fold back the carpet and remove the screw for the rear floor air duct. Move the duct slightly to one side. Then remove the outer fan housing and the fan wheel (B).

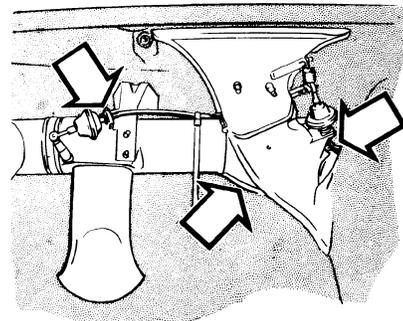
Remove or disconnect the inner fan housing, the house to the shutter actuator for the rear floor, and the fan motor and ground lead (C).

Note: A 1975-80 version is shown.

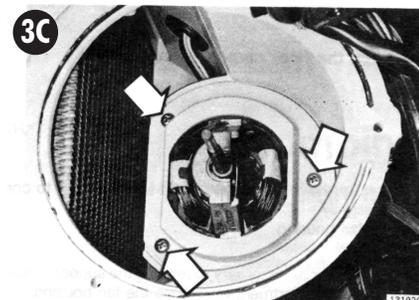
HINT: When removing the old motor, you'll be able to unplug the RED wire. However, the BLACK wire is attached to the underside of the housing and is very difficult to access. Simply cut this wire as close to the attachment point as possible. The new motor will ground in a different location. You can use the large Phillips screw on the upper left dash support or any other easily accessible ground point of your choice.



3B



3A



3C

INSTALLATION

1981-84 vehicles proceed to Step 4. For 1985-93 vehicles or previously modified vehicles proceed to Step 6.

4 Modification for 1975-80 Models

File the edges to the heater housing to obtain the correct fit for the motor (A). Grind down the three oblong sections with a machine grinder (C).

Note: Clean all surfaces thoroughly to prevent dirt from entering air ducts.

4 Modification for 1981-84 Models

Grind down the spacer tabs (B) in the housing to obtain the correct fit for the new motor. Some vehicles may also have the oblong sections (C) which will also need to be ground down.

Note: Clean as mentioned above.

HINT: This is the process that is most often overlooked. If these tabs are not completely flush, the motor will be offset and the fan blade will hit the housing. Save yourself time and frustration and grind the tabs flush.

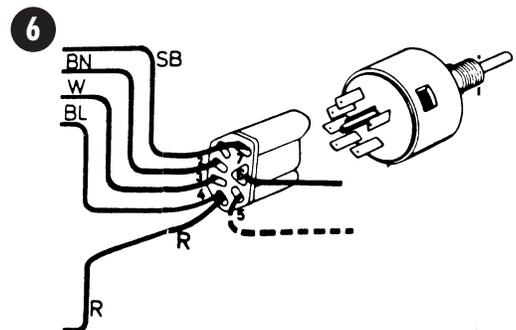
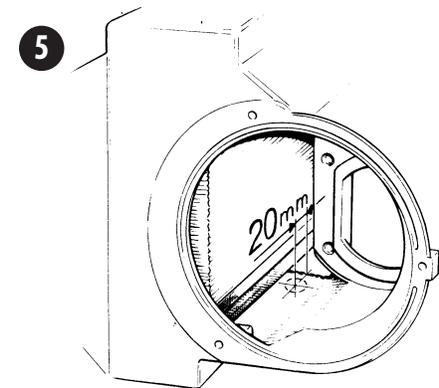
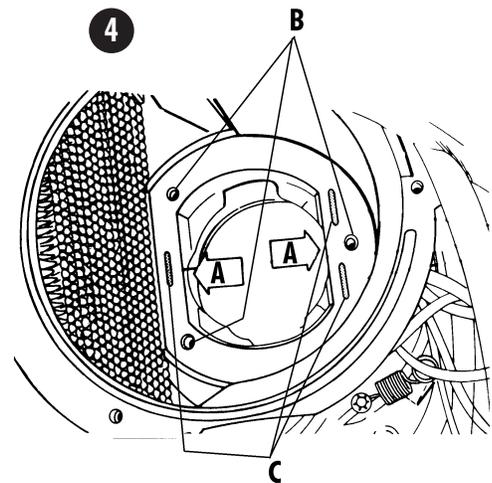
5 Drill a 16mm (5/8") hole in the bottom left side of the heater housing, 20 mm from the outer edge of the housing.

Note: Vehicles from the model year 1981-on are drilled in production.

6 Drill from the inside with 90 degree drill adapter or from underneath by using a long drill bit and holding the drill against the transmission tunnel. A clean, round hole is needed, otherwise condensation could occur if the vehicle is equipped with air conditioning. Remove all loose drilling debris.

Mark wire locations on the new switch connector. Disconnect wires from the old connector.

Do not grind off a section of the plug. Pass the wires through the existing hole in the top of the heater housing. Reconnect the wires into the plug.



INSTALLATION

- 7** *Note: In contrast to earlier motors, the new heater motor is not mounted on plastic bushings.*

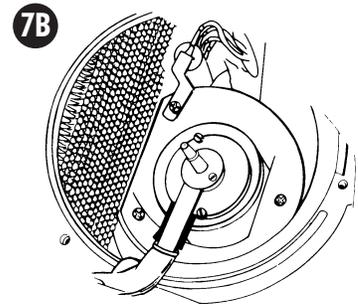
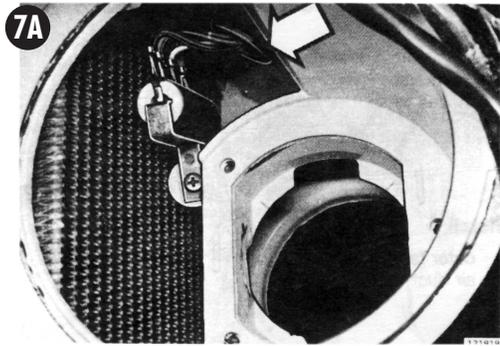
Replace resistor and pass the cables for the resistor through the upper hole in the heater housing. Fit the rubber grommet (A).

Install the motor. Secure the motor into position with three screws (B).

Note: Do not install washers.

Insert the wires and sheath through the hole in the bottom of the housing (which was drilled in step 5 for 1975-80 models).

HINT: *When installing the new motor, you'll notice that the wires exit the motor at the top. Route the wires counter-clockwise around the motor and out through the bottom of the fan housing. On 1981-newer models reuse the original rubber boot from the old motor. On 1973-80 models use silicone sealer to seal the box where the wires exit. When installing the fan wheel retaining clips to the motor shaft, be aware of the two grooves in the shaft where the clip must line up. There are also notches in the plastic fan wheel to be lined up with the clip.*

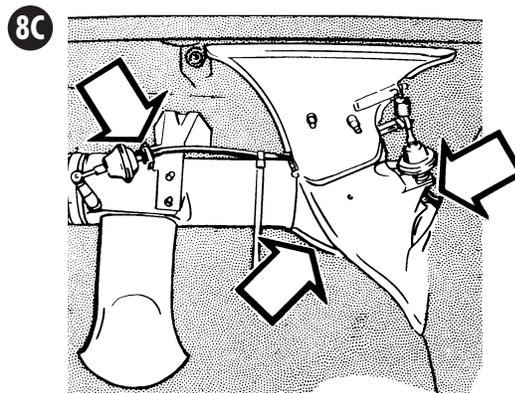
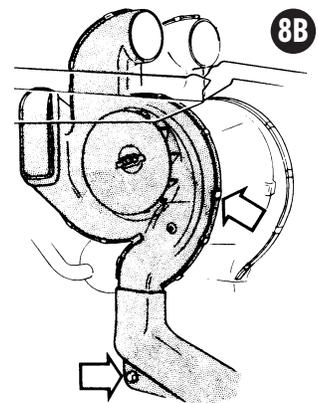
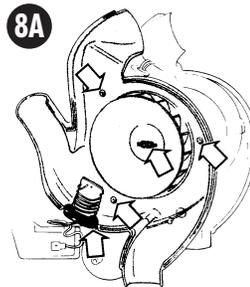


- 8** On the left side install the inner fan housing, the control valve capillary tube in the inner fan housing, and the fan wheel (A).

Connect the hose to the rear floor shutter actuator.

Install the outer fan housing and the air duct for the rear floor (B).

Fold back the floor carpet and connect the air ducts as well as the hoses that go to the shutter actuators (C).



INSTALLATION

- 9** On the right side install the fan wheel, the outer fan housing, the support under the glove compartment (if you removed it), and the air duct for the rear floor (A).

Fold back the floor carpet and connect the air ducts and the hose that goes to the shutter actuators (B).

- 10** Reconnect the wires into the fan switch plug according to the marks from Step 6. Also reconnect the fan motor ground wire to the bracket (A).

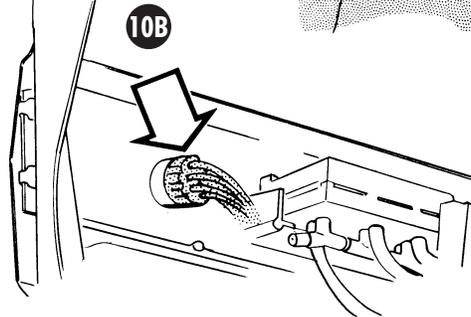
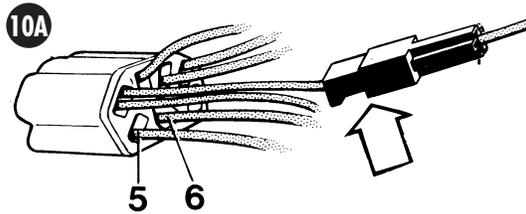
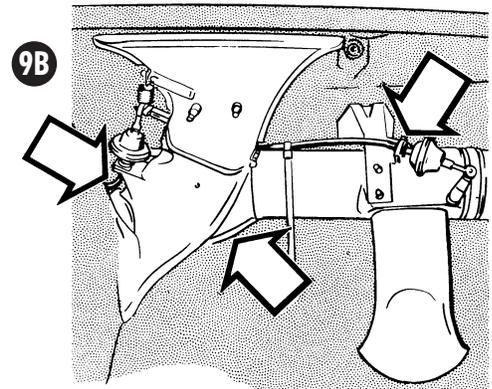
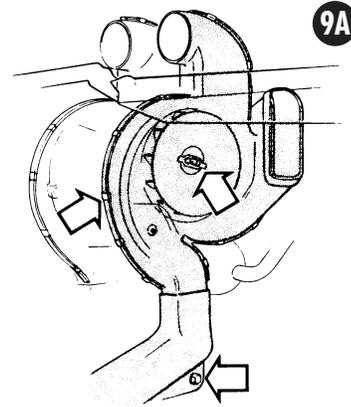
Join the connectors. Connect the connector to the switch. Fit the switch to the central console and the switch knob (B).

Connect the battery ground cable.

Now test the operation of the fan motor.

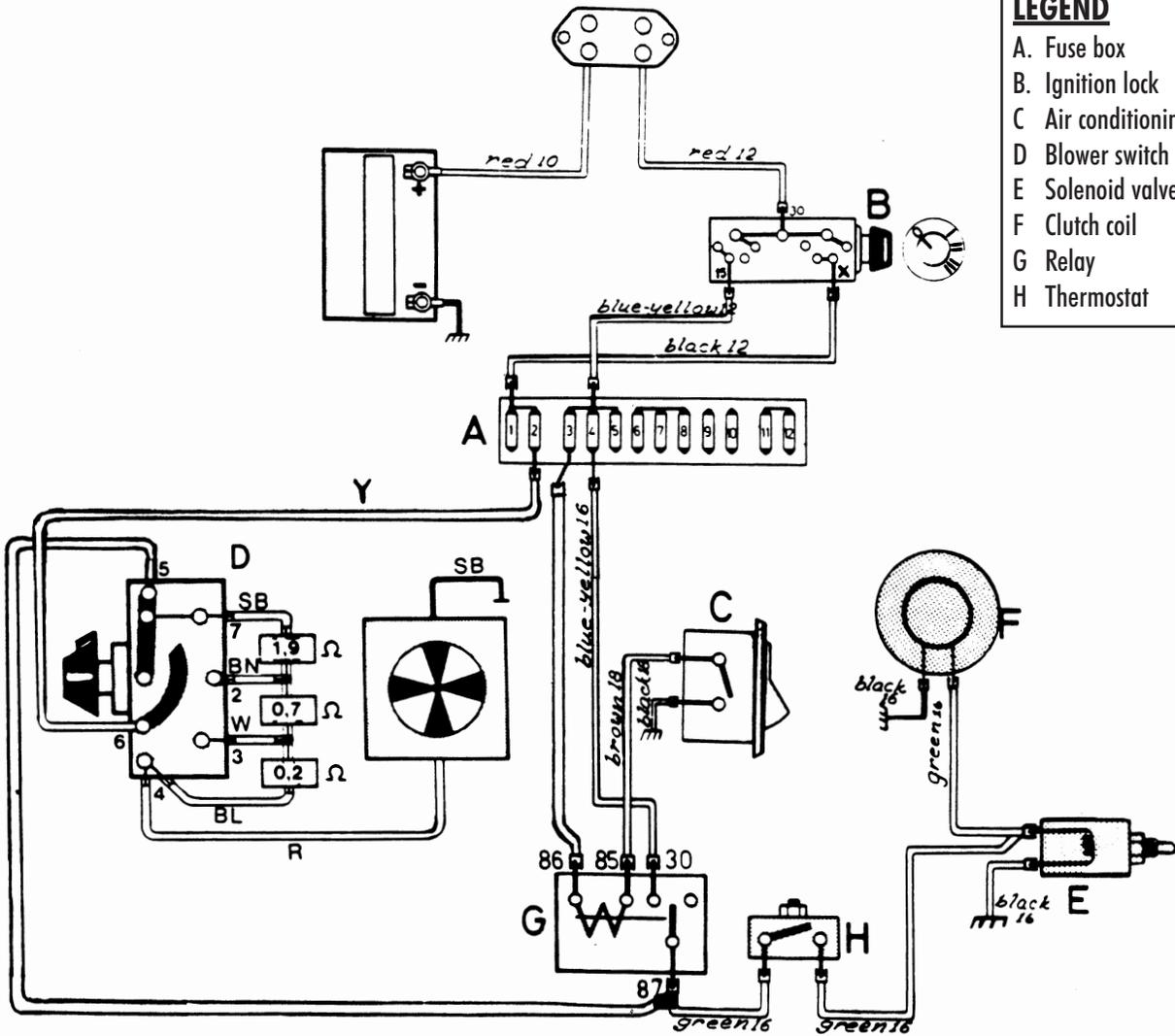
Reassemble and install the dash components in the reverse order indicated in Step 1.

HINT: Ground the new motor **BLACK WIRE** under one of the Phillips screws used to hold the center console (as shown in removal Step 1).



WIRING DIAGRAM 1973-78

LEGEND	
A.	Fuse box
B.	Ignition lock
C.	Air conditioning switch
D.	Blower switch
E.	Solenoid valve
F.	Clutch coil
G.	Relay
H.	Thermostat

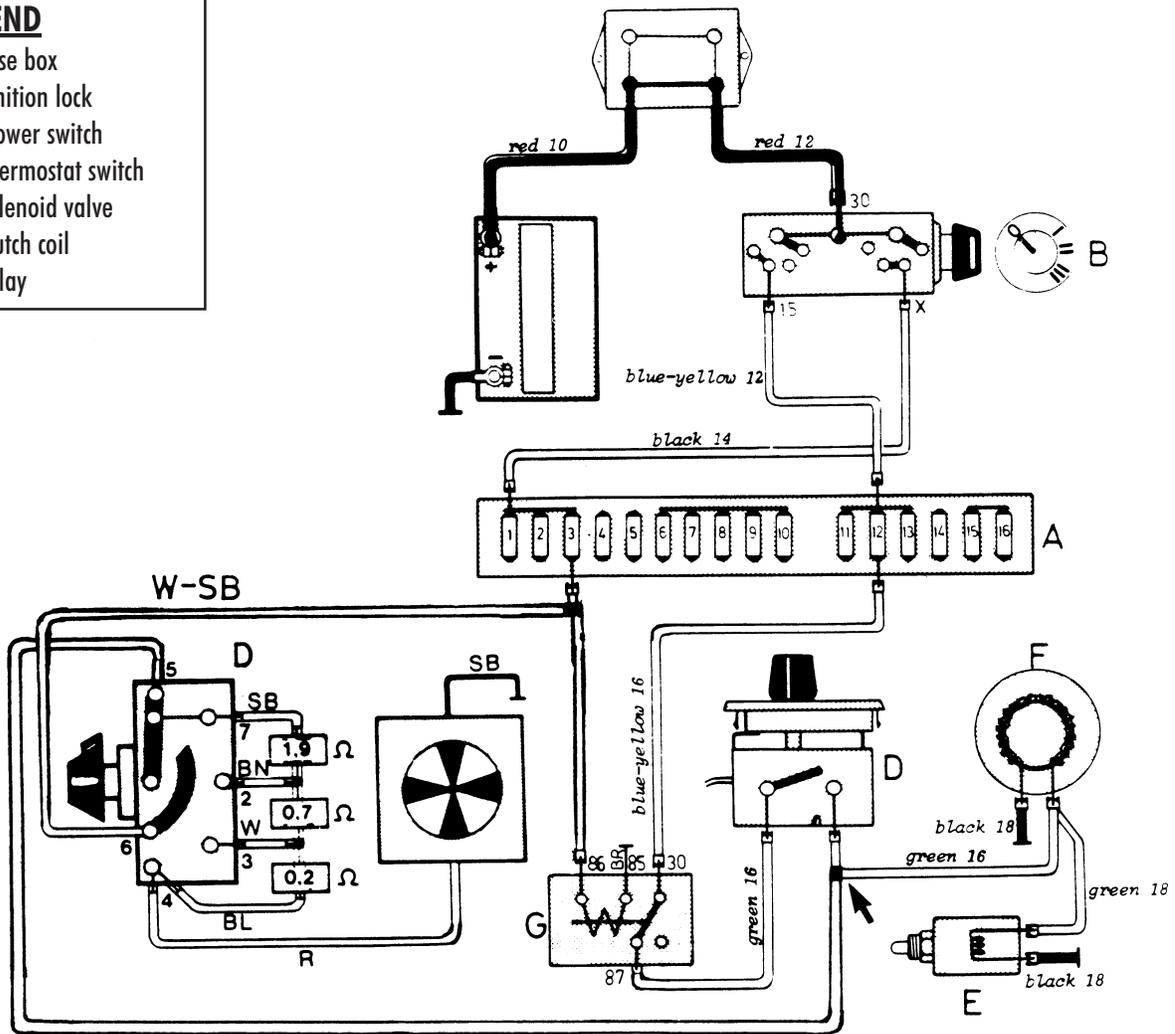


- 1 Install the yellow wire which was previously located in pin #3 of the old fan switch plug into pin #6 of the new switch plug. The opposite end of this wire is connected to fuse #2.
- 2 Use a new wire and connect it from pin #5 on the fan switch plug to terminal #87 on the AC relay.
- 3 Use a new wire and connect it from fuse #3 to terminal #86 on the AC relay.

WIRING DIAGRAM 1979

LEGEND

- A. Fuse box
- B. Ignition lock
- C. Blower switch
- D. Thermostat switch
- E. Solenoid valve
- F. Clutch coil
- G. Relay

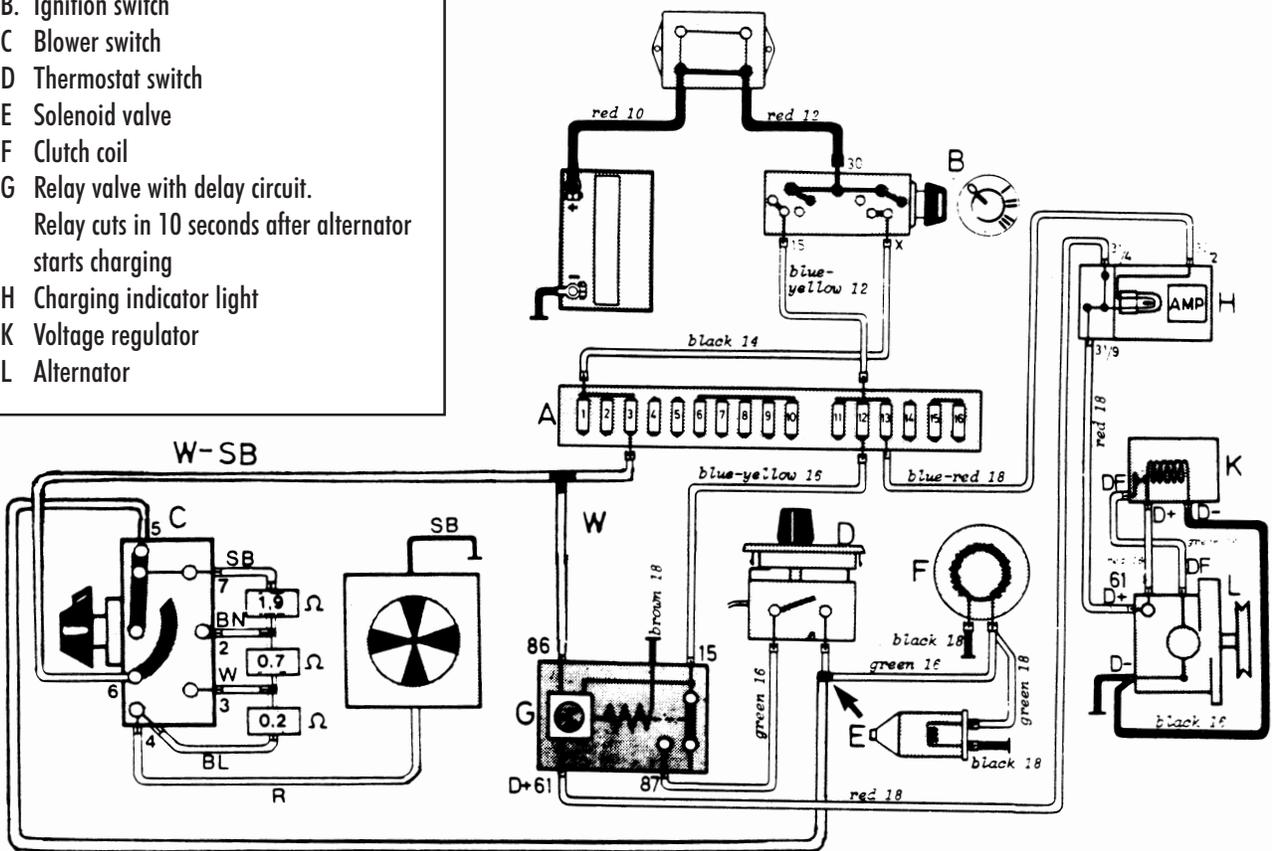


- 1 Install the white-black wire which was previously located in pin #3 of the old fan switch plug into pin #6 of the new switch plug. The opposite end of this wire is connected to fuse #3.
- 2 Use a new wire and connect it from pin #5 on the fan switch plug to the switched side of the thermostat switch. To determine which wire is the switch side of the thermostat, disconnect both wires and start the engine. Wait 15 seconds. Using a test light, determine which side is the hot side. Connect the wire from pin #5 of the fan switch to the other wire. Reconnect both wires to the thermostat.
- 3 Use the white wire from terminal #86 on the AC relay and connect it to the white-black wire now in pin #6 of the fan switch plug.

WIRING DIAGRAM 1980

LEGEND

- A. Fuse box
- B. Ignition switch
- C. Blower switch
- D. Thermostat switch
- E. Solenoid valve
- F. Clutch coil
- G. Relay valve with delay circuit.
Relay cuts in 10 seconds after alternator starts charging
- H. Charging indicator light
- K. Voltage regulator
- L. Alternator

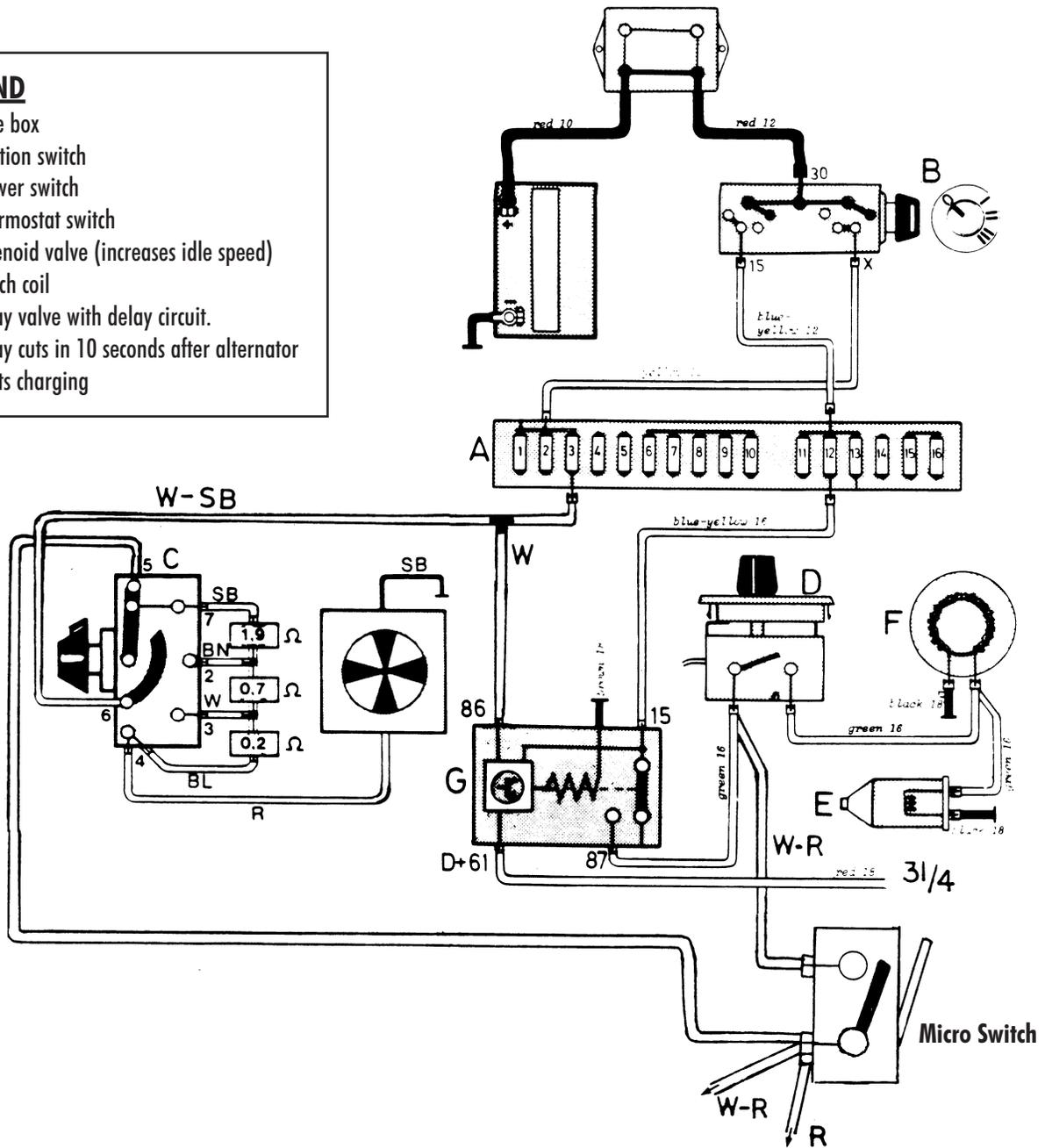


- 1 Install the white-black wire which was previously located in pin #3 of the old fan switch plug into pin #6 of the new switch plug. The opposite end of this wire is connected to fuse #3.
- 2 Use a new wire and connect it from pin #5 on the fan switch plug to the switched side of the thermostat switch. To determine which wire is the switched side of the thermostat, disconnect both sides and start the engine. Wait 15 seconds. Using a test light determine which side is the hot side. Connect the wire from pin #5 of fan switch to the other wire. Reconnect both wires to the thermostat.
- 3 Use the white wire from terminal #86 on the AC relay and connect it to the white-black wire now in pin #6 of the fan switch plug.

WIRING DIAGRAM 1981-82

LEGEND

- A. Fuse box
- B. Ignition switch
- C. Blower switch
- D. Thermostat switch
- E. Solenoid valve (increases idle speed)
- F. Clutch coil
- G. Relay valve with delay circuit.
Relay cuts in 10 seconds after alternator starts charging



- 1 Install the white-black wire which was previously located in pin #6 of the old fan switch plug into pin #6 of the new fan switch plug. The opposite end of this wire is connected to fuse #3.
- 2 Use a new wire and connect it from pin #5 on the fan switch plug to the microswitch terminal with the red and white-red wires attached.
- 3 Use the white wire from terminal #86 on the AC relay and connect it to the white-black wire now in pin #6 on the fan switch plug.

1983-93 vehicles do not require any wiring changes.

