

Service Study on 1970 Chevelle & Monte Carlo Dash Panel Replacement

First, disconnect the battery ground cable. Then, working from the front seat, remove the six dash panel pad to panel attaching screws at these six locations. Lift the edge closest to you free from the panel lip, and remove the pad.

Remove the four steering column lower cover attaching screws, and remove the cover. On cars equipped with column mounted shifter lever, remove the shift indicator cable clip screw from the column, and slide the clip and cable from the column. On cars equipped with air conditioning, remove the three screws securing the lap cooler to the dash, and disconnect the outlet.

Disconnect the parking brake hand release handle from the relay rod by releasing the connector catch and sliding the hand release rod over the relay as shown.

Using a 7/16 socket, remove the two steering column to dash panel brace attaching nuts, and lower the column several inches. Keep the shims in place on the bracket. Support the column in place firmly so that it does not move about and damage the collapsible mechanism. Allow working room between the column and the dash panel for access to a panel attaching screw directly above the column.

On cars equipped with air conditioning, remove the two center outlet to panel screws, and move the center outlet out of the working area. Use a 1/4 inch socket, remove the four heater/air conditioner control head to panel screws, and push the control head back through the panel opening. The control cables will support the unit.

There are two blind attaching screws at each side of the panel. They are located above the fresh air door operating knobs. Use a 7/16 inch socket. The screws are vertical, with the head down. The illustration shows a ratchet on the left hand side attaching screw.

There is a panel attaching screw just above the steering column, driven vertically, head down. The working area is small, but a 3/8 drive ratchet with a 7/16 inch universal socket can be used, as shown here.

There are two attaching screws at the side near the radio speakers. The left hand side screw is shown here. They are both rearward, as shown.

The two remaining attaching screws are located here in the middle of the panel. They are driven side to side and toward each other. Before removing these last two screws, support the panel at both ends.

The weight in the panel is located at the extreme ends. You should use a helper, and use care not to put stress in the middle of the panel, or damage may result. Remove the remaining two screws securing the panel to the bulkhead brace, and tilt the top of the panel toward you for access to your work area for the remaining disconnecting points.

GROUND UP

Unfasten the main wiring harness by releasing the press fasteners that secure the harness to the instrument cluster, as shown here by the small circles. Release the clip at the rear of the speedometer head, and disconnect the speedometer cable from the head. Disconnect the wiring harness plug shown in the man's hand from the printed circuit at the rear of the instrument cluster. On cars equipped with instrument cluster wire loom, disconnect the main wiring harness connector plug at the instrument cluster loom.

Disconnect the power plug at the rear of the cigar lighter, then unscrew the barrel of the lighter from the front and remove the ground wire ring. Keep the barrel with the other hardware removed and allow the wires to hang.

Remove the two screws securing wire leads at the ground strap below the instrument cluster. The screw at arrow number one holds one wire, the screw at arrow two holds two. The wires will be identified with their respective screws and locations during installation.

Disconnect the radio power and speaker connector at the rear of the radio. Disconnect the radio antenna lead connector at the rear of the radio.

Disconnect the glove box illuminating light lead at the left rear of the glove box.

Disconnect the headlight lead at the rear of the headlight switch.

Disconnect the windshield wiper/washer leads at the rear of the switch.

Support the dash panel assembly at each end as it is being removed from the vehicle. Take care not to put stress in the middle where the panel is fragile. Lift the panel over the small diameter of the steering column, and with one man at each end, remove the unit from the car.

Remove the illuminating light bulbs from the sockets at the rear of the instrument cluster. Remove the stud nuts and screws securing the printed circuit to the rear of the cluster, and remove the printed circuit. Use care not to damage the plastic circuit backing material. Lay it on a flat surface until reassembly.

Remove the headlight switch knob by releasing the spring loaded retainer, then remove the retaining collar at the front and remove the switch assembly.

Remove the screw in the clock stem and remove the stem knob. Remove five instrument cluster case to retainer attaching screws and remove the case. All the instruments in the cluster are accessible for removal now.

The instruments are secured to the instrument cluster case by screws from the rear. With the removal of the screws, any instruments can be separated from the cluster case.

When the instruments have been installed in the cluster, and the case is secured to the cluster with five screws, install the panel assembly in the vehicle. Use two men, one at each end to support the unit, and position it on the bulkhead. Support the panel in position, but do not install the attaching hardware yet as you will need working access behind the panel to perform several connections.

Attach the ground wire from the headlight switch and the internal ground wire from the main harness to the strap below the cluster with a screw. Attach the windshield wiper/washer ground wire at the strap with another screw. Position the fresh air outlet housings at each side on the ductwork at the bulkhead.

GROUND UP

Connect the radio power and speaker lead plug at the rear of the radio. Connect the radio antenna lead connector at the rear of the radio.

Connect the glove box illuminating light wire.

Connect the headlight lead at the rear of the switch. Connect the windshield wiper/washer lead at the rear of the switch.

Insert the speedometer cable in the speedometer head until the retaining clip snaps into place. Install the plug connector in the instrument cluster wire harness, make the main harness to instrument cluster harness connection.

Connect the ground wire to the front part of the cigar lighter, screw the barrel on and connect the power plug.

Raise the panel into position and install the two center attaching screws.

Install the lower side panel attaching screws at each side above the fresh air ventilator door knobs.

Install the lower panel attaching screw above the steering column.

Install the upper panel to brace attaching screws at each side near the speakers, as shown.

Position the steering column, and install the two nuts on their respective studs at the brace. Tighten the two nuts to twenty foot pounds torque.

On cars equipped with air conditioning, position the center outlet above the control head and install the two attaching screws. Position the heater/air conditioner control head, and install the four 1/4 inch head attaching screws.

Position the steering column lower cover, and install the four attaching screws. On cars equipped with air conditioning, position the lap cooler and install the three attaching screws.

Position the parking brake hand release rod on the relay lever, and install the retaining clip.

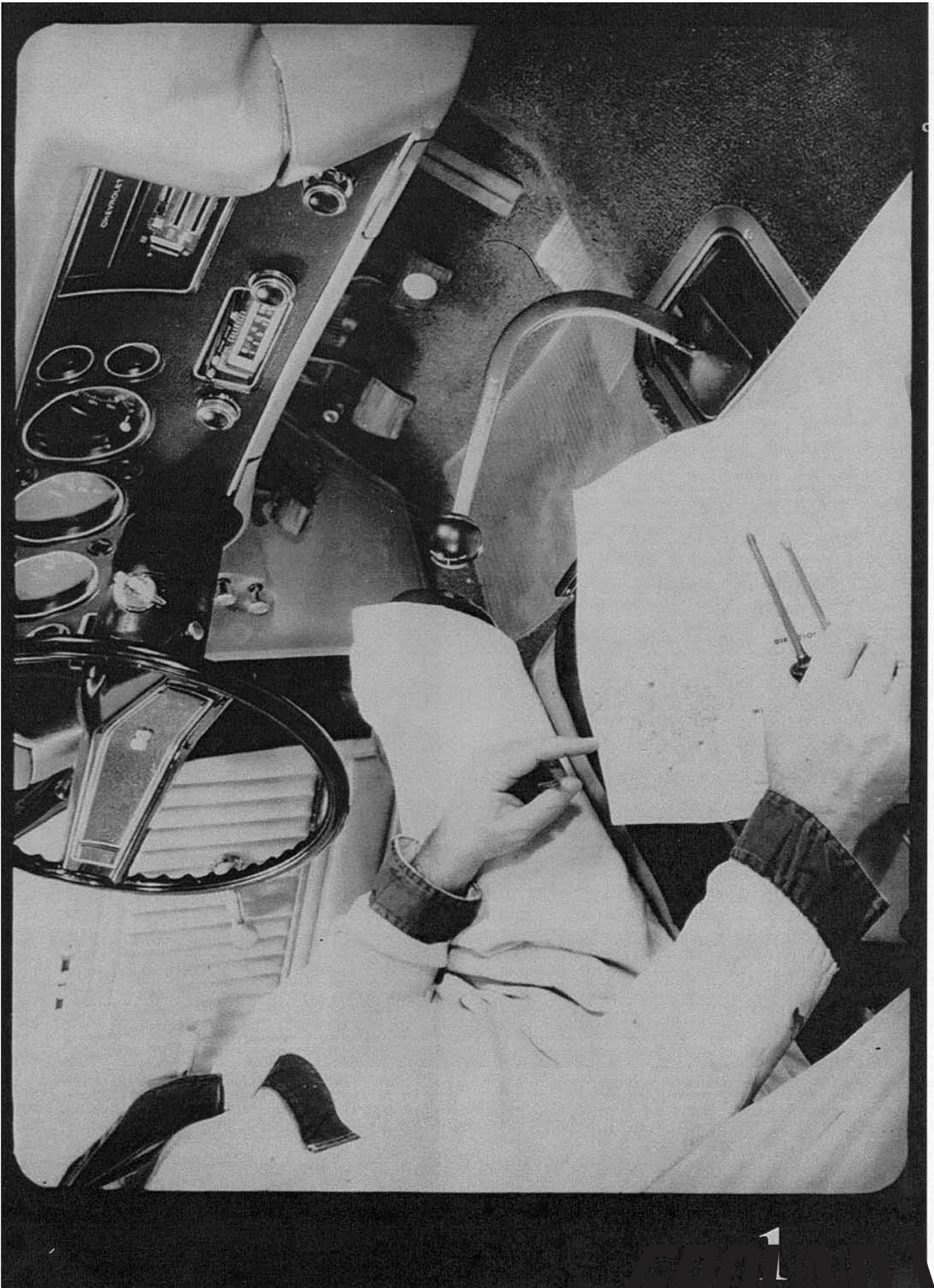
Position the dash panel pad so that the four fingers at the front are aligned with and under the braces at the windshield, as shown.

Install the six pad attaching screws at the locations shown here.

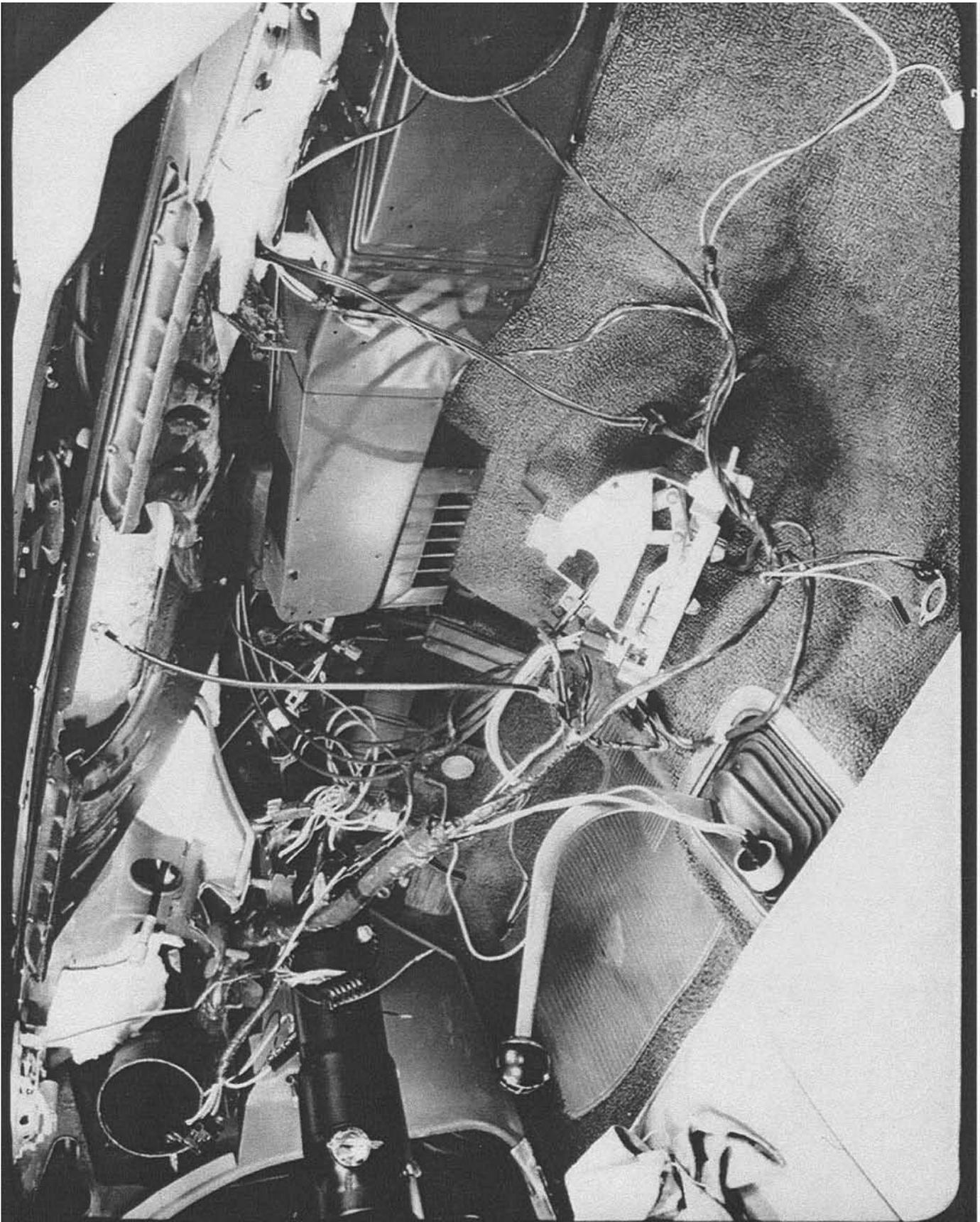
Connect the battery cable previously disconnected. Start the engine, and operate the vehicle. Operate all controls that were disconnected and connected during the operation to be sure all are operating normally.

Remember with the shop manual procedure, proper equipment, and the handbook from this presentation, you will be able to perform a quality operation totally satisfying to the most critical customer.

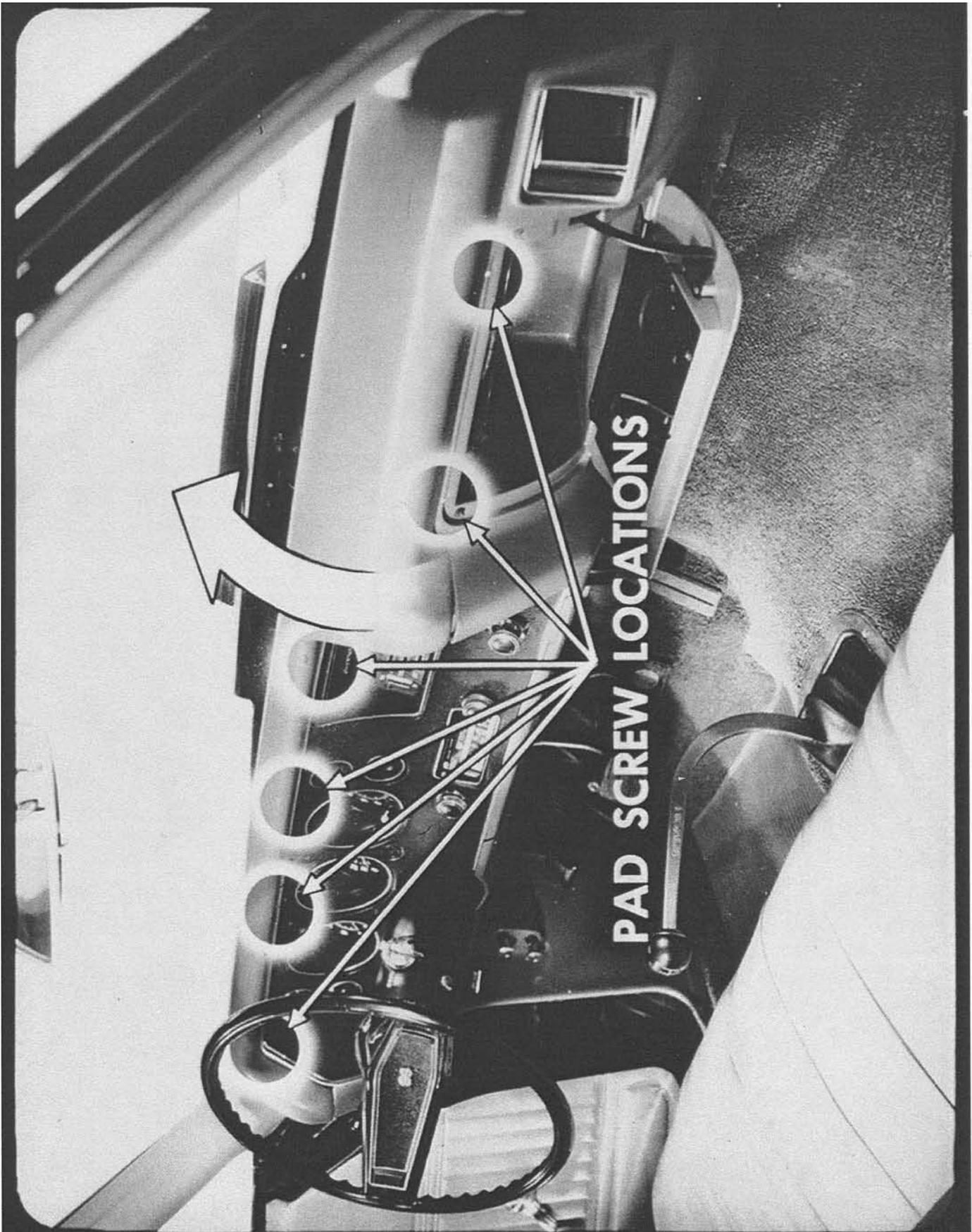
The logo for "GROUND UP" is displayed in a bold, italicized, sans-serif font. The letters are black with a white outline, giving it a three-dimensional appearance. The word "GROUND" is on the left and "UP" is on the right, both slanted to the right.



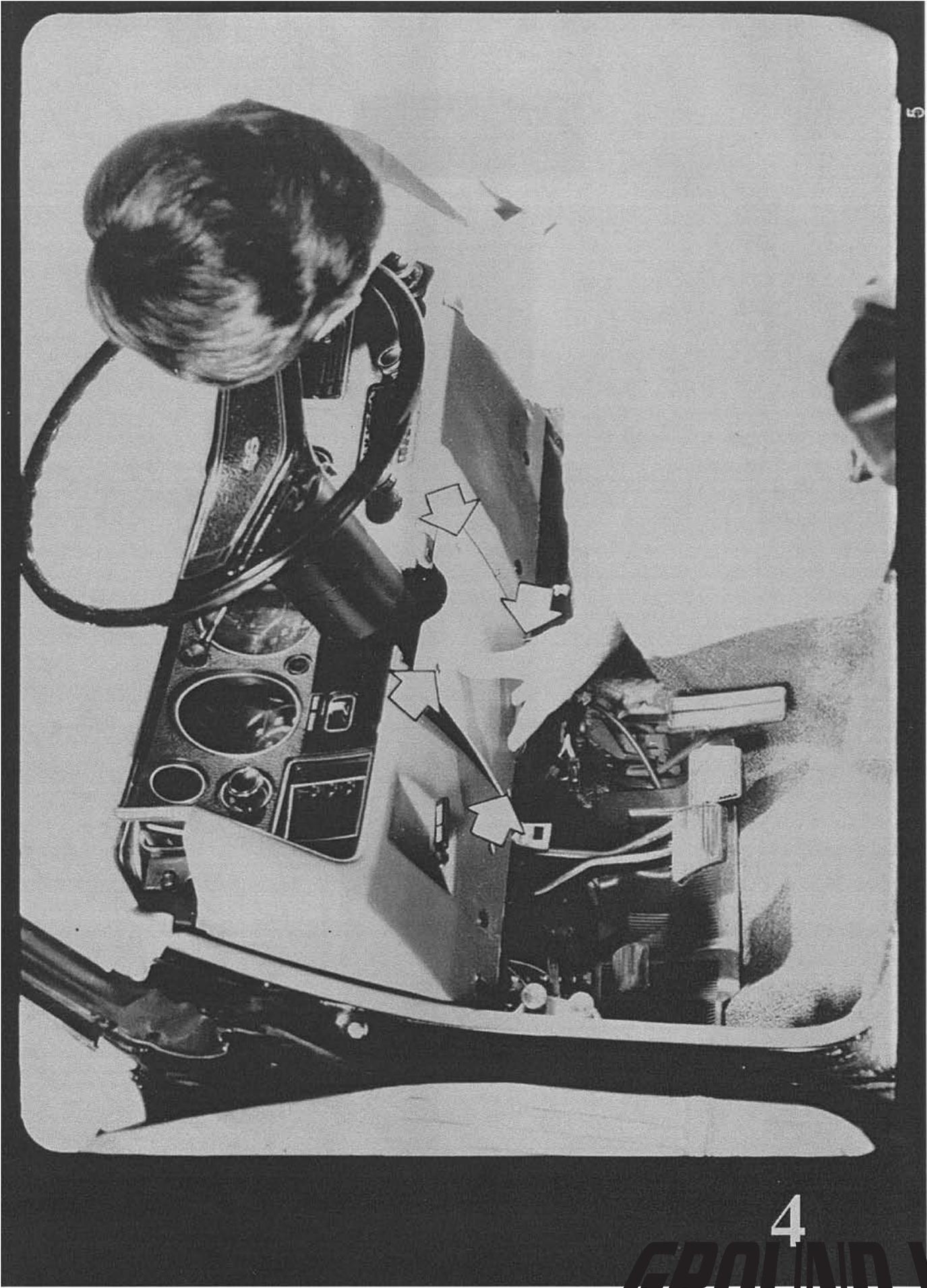
AROUND UP



GROUND² UP

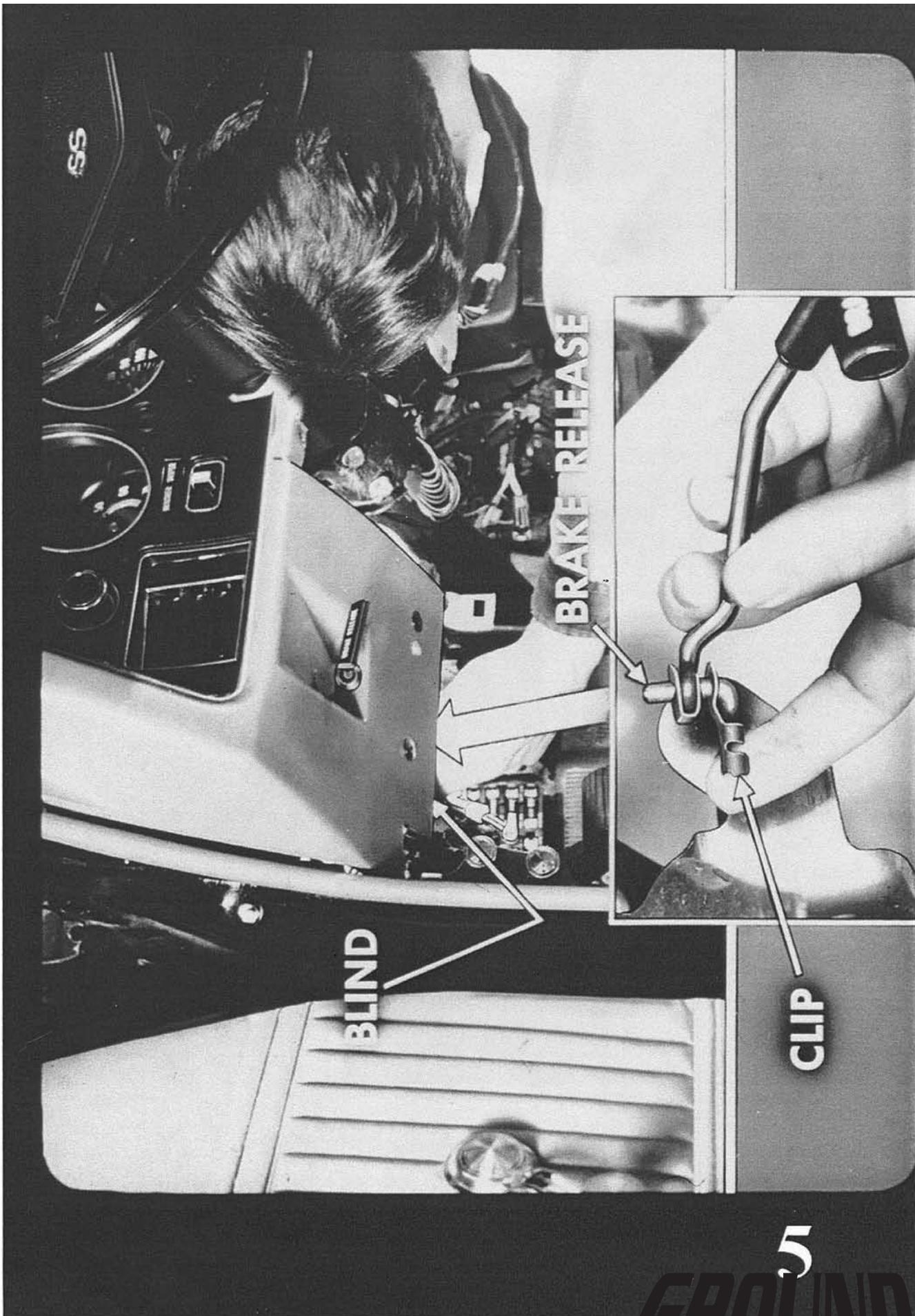


PAD SCREW LOCATIONS



5

4
GROUND UP



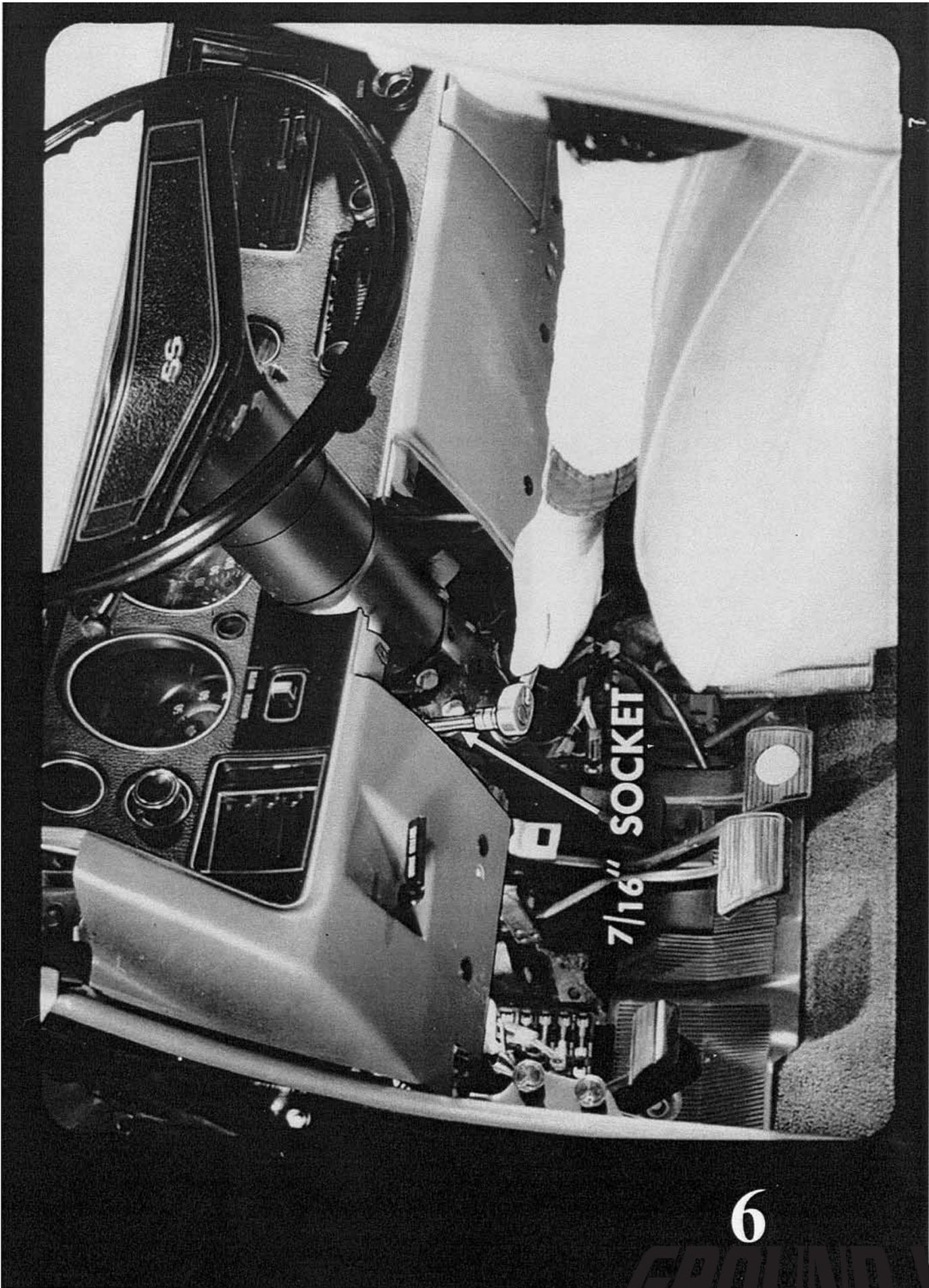
BRAKE RELEASE

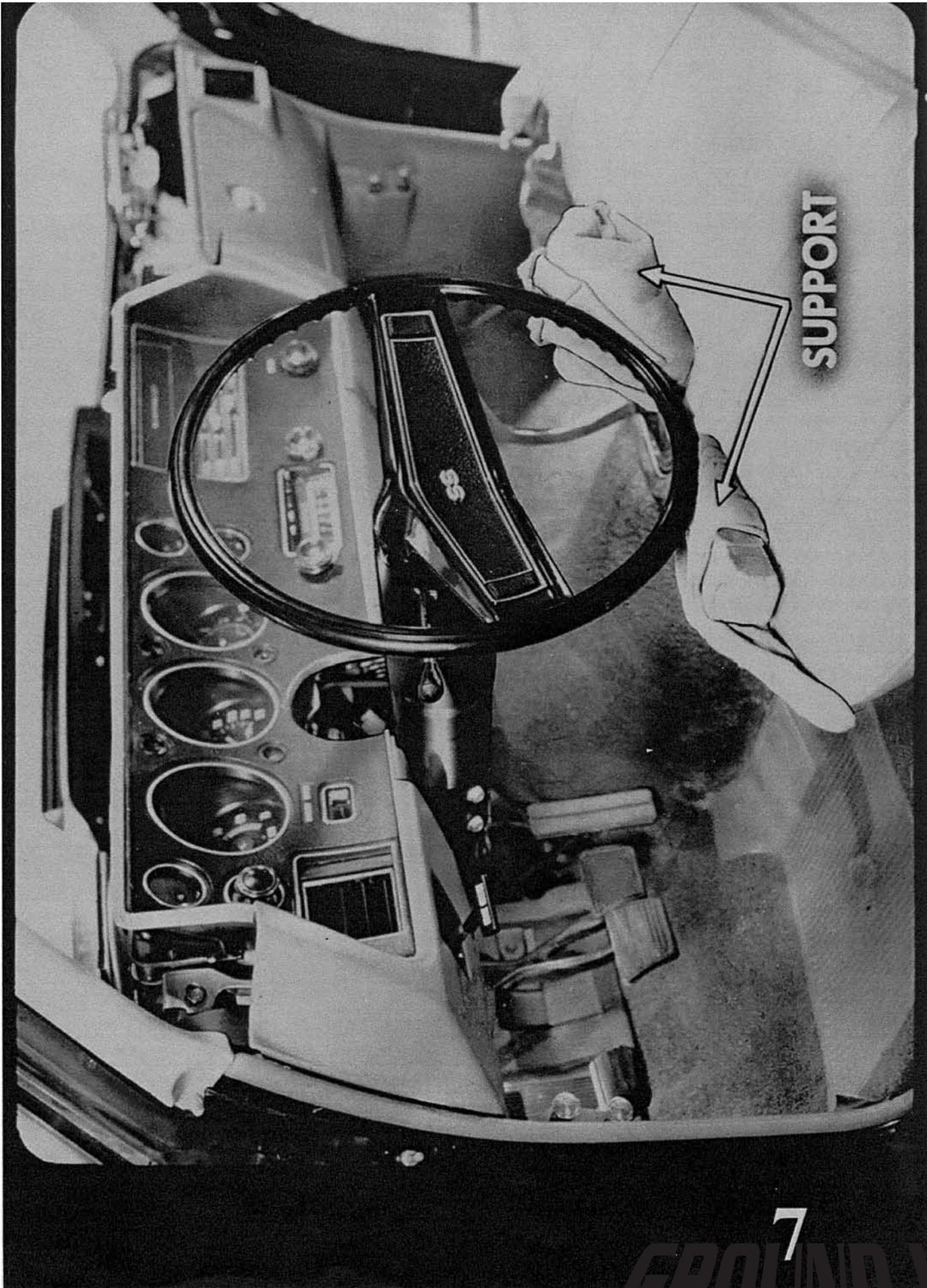
BLIND

CLIP

5

GROUND UP

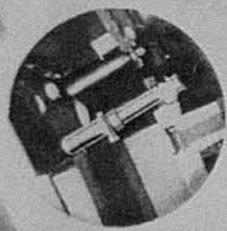


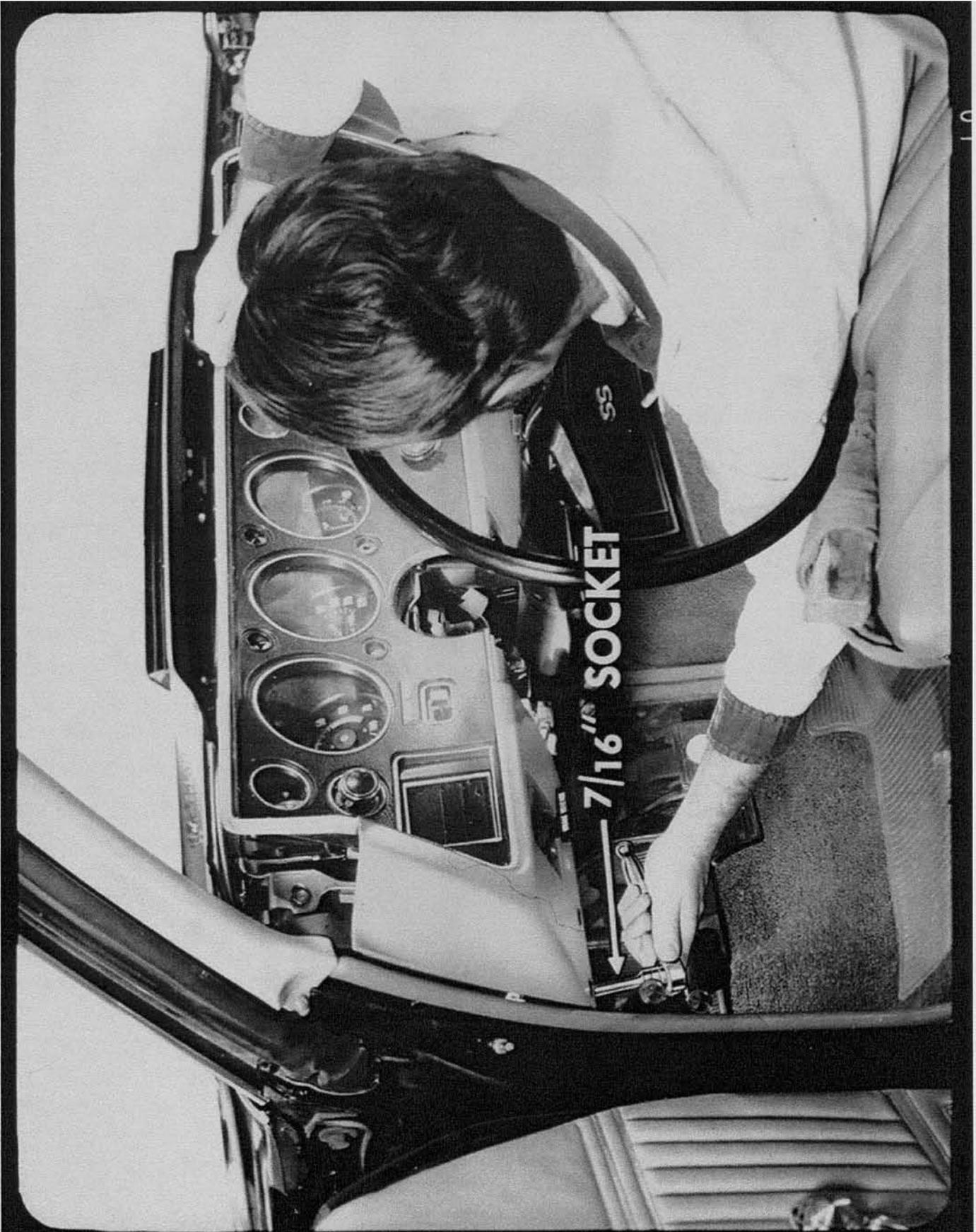


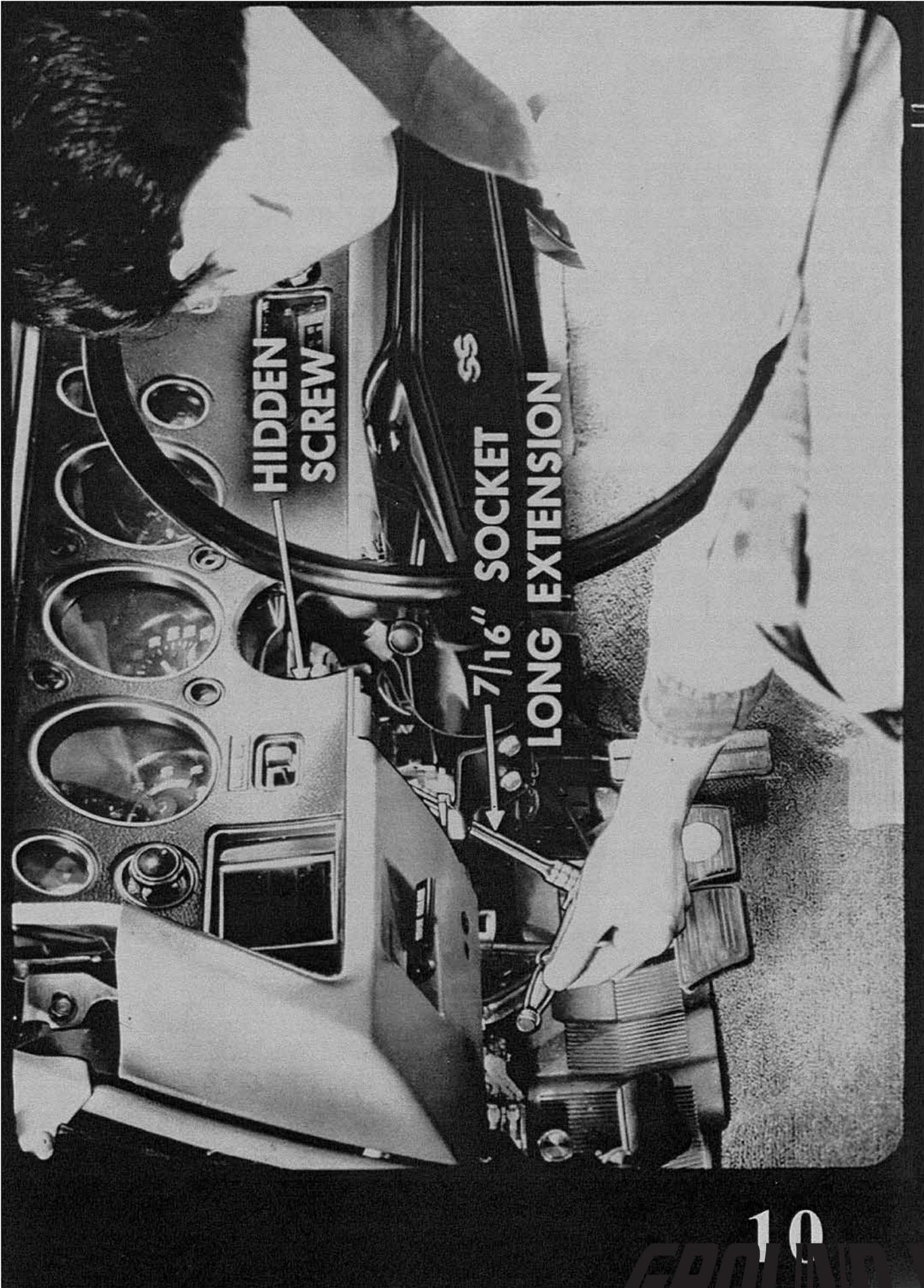
7
GROUND UP

OVERHEAD VIEW THROUGH WINDSHIELD AREA

1/4" DRIVER

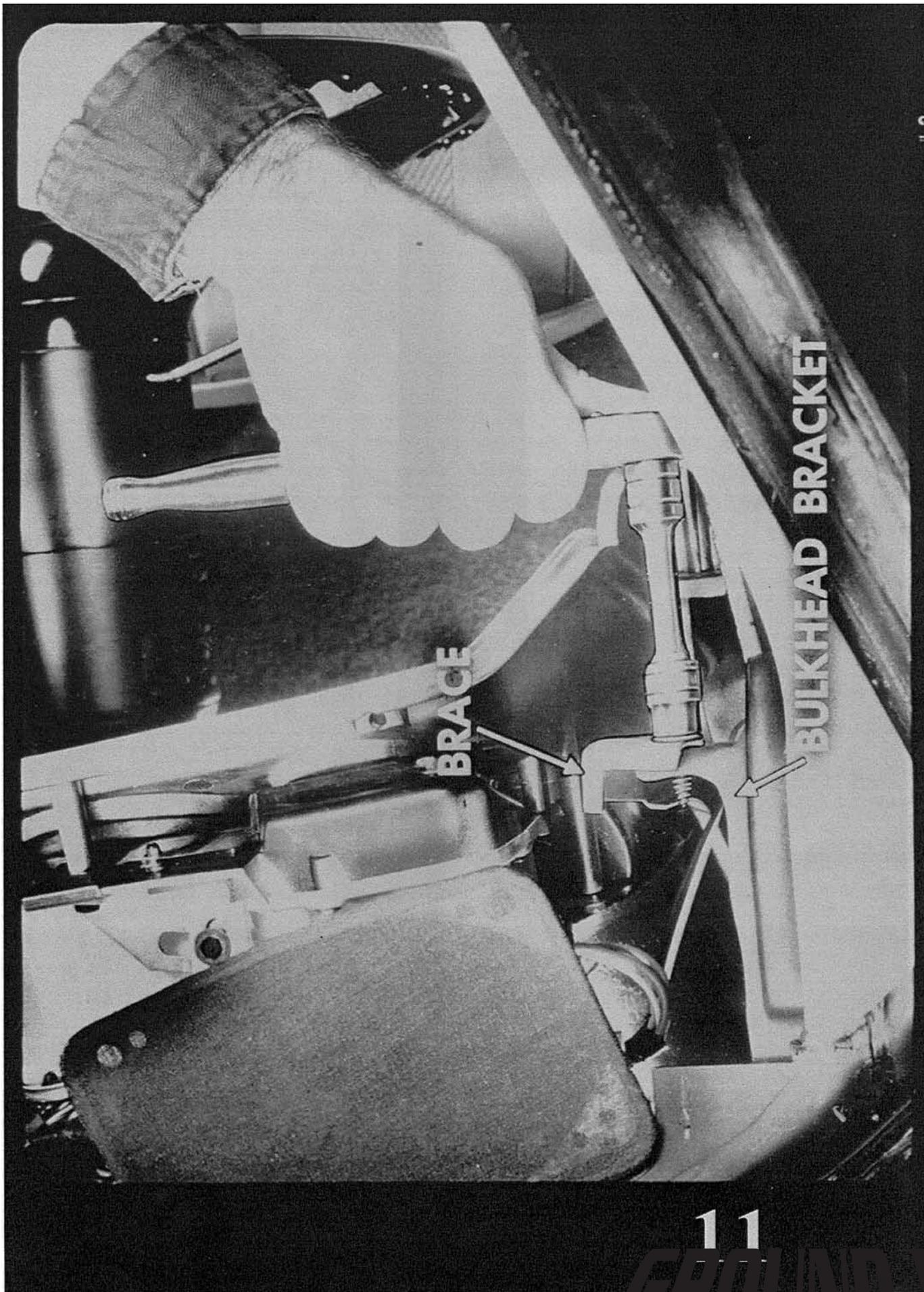






**HIDDEN
SCREW**

**7/16" SOCKET
LONG EXTENSION**

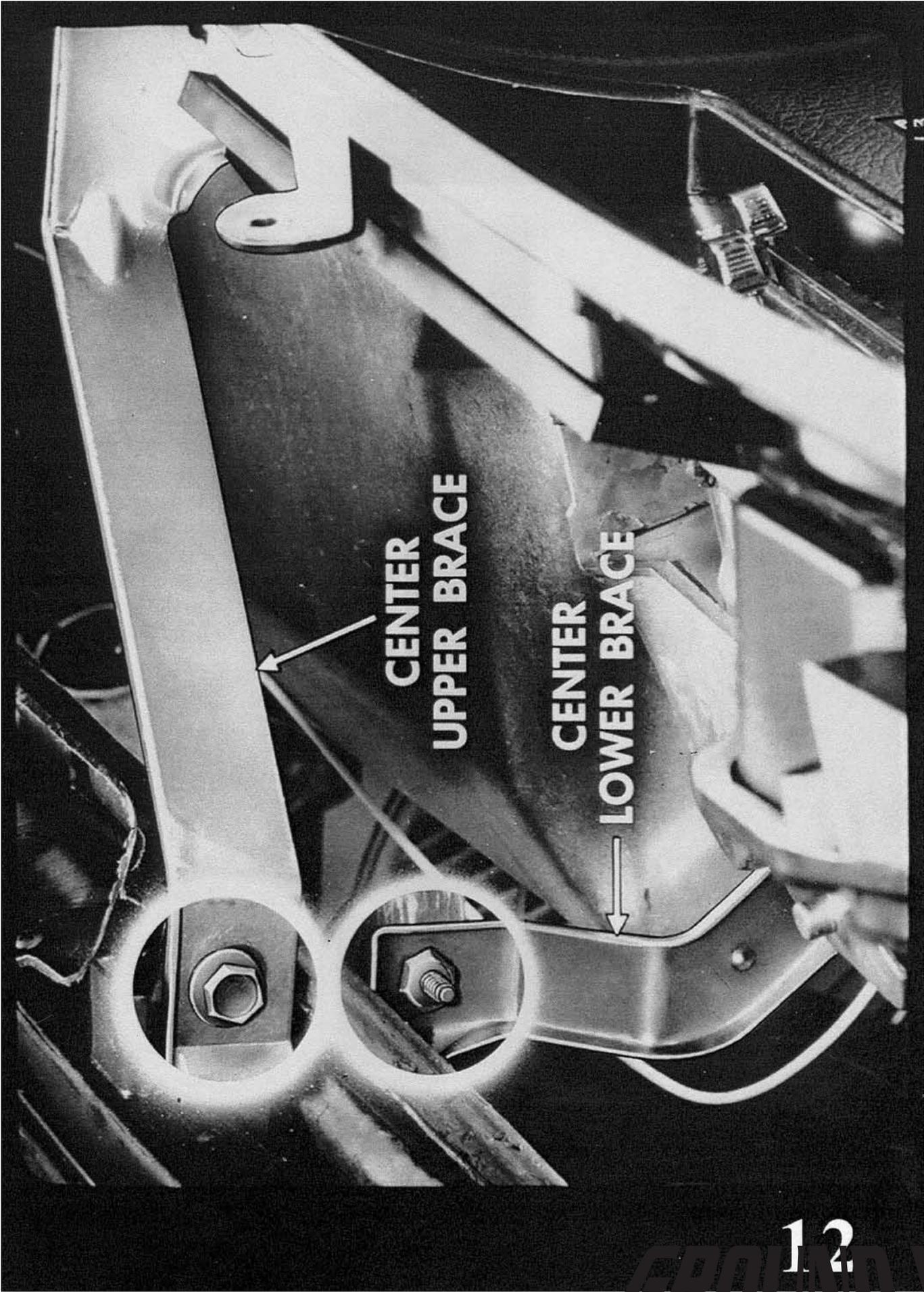


BRACE

BULKHEAD BRACKET

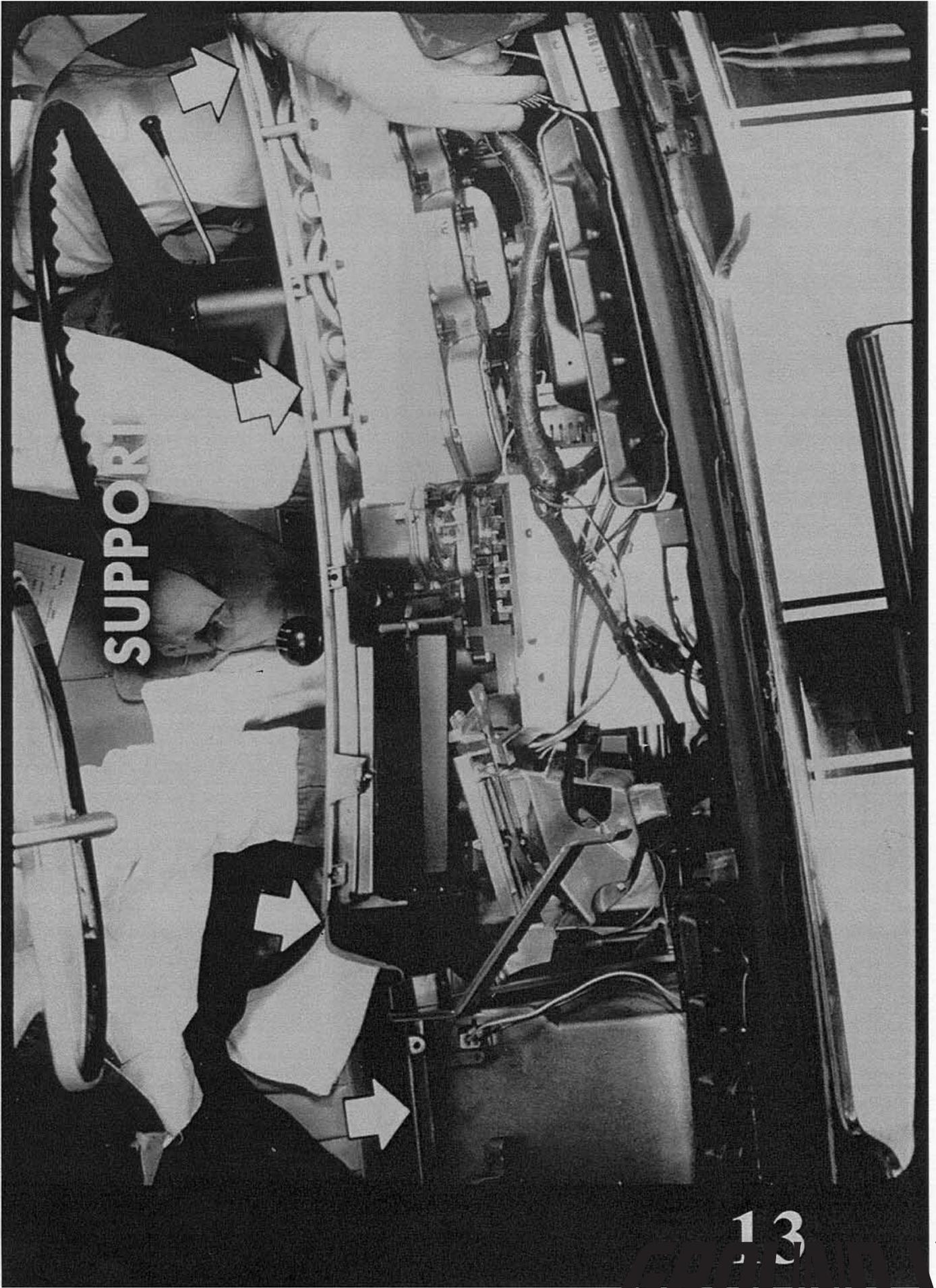
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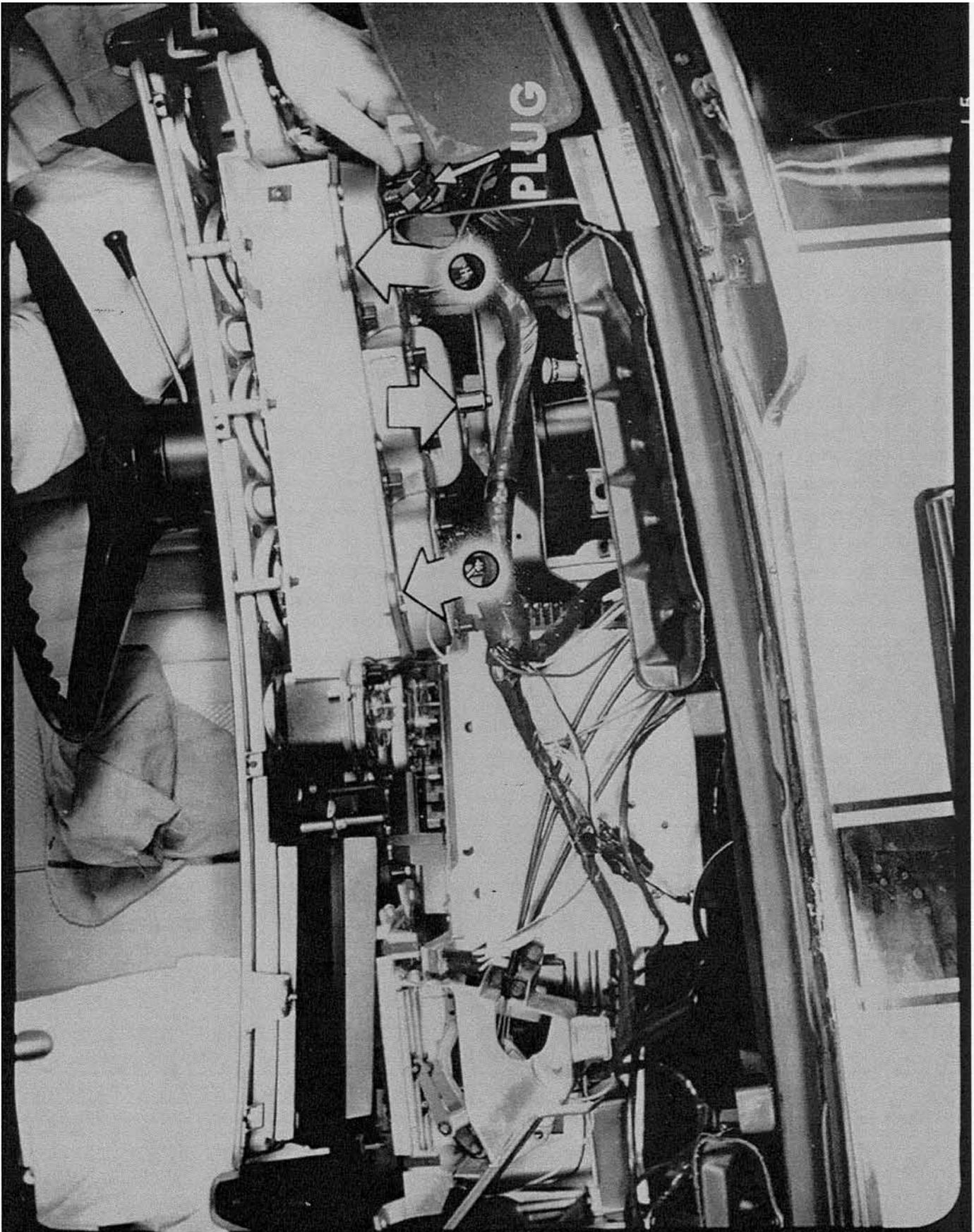
GROUND UP

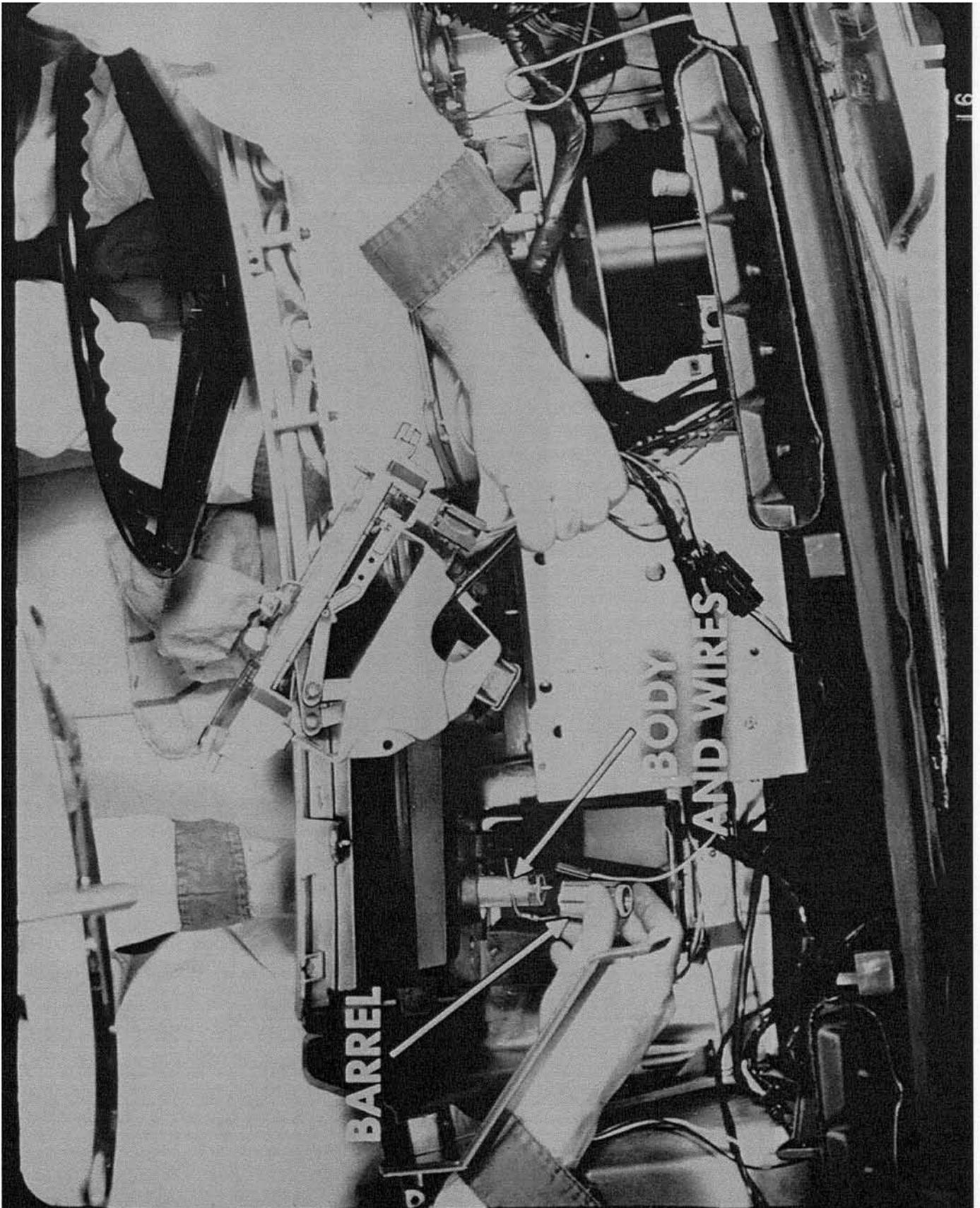


**CENTER
UPPER BRACE**

**CENTER
LOWER BRACE**







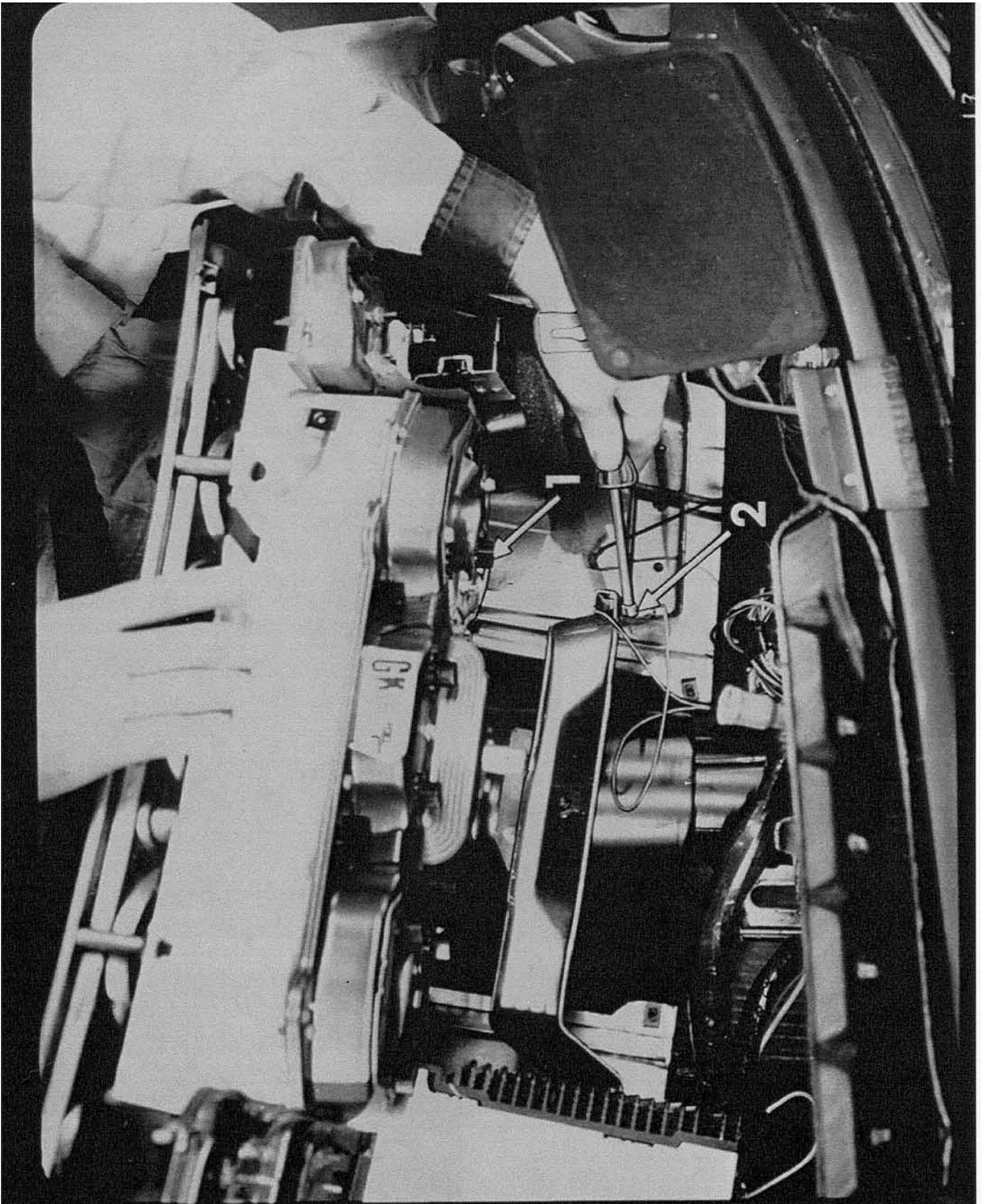
16

BARREL

BODY AND WIRES

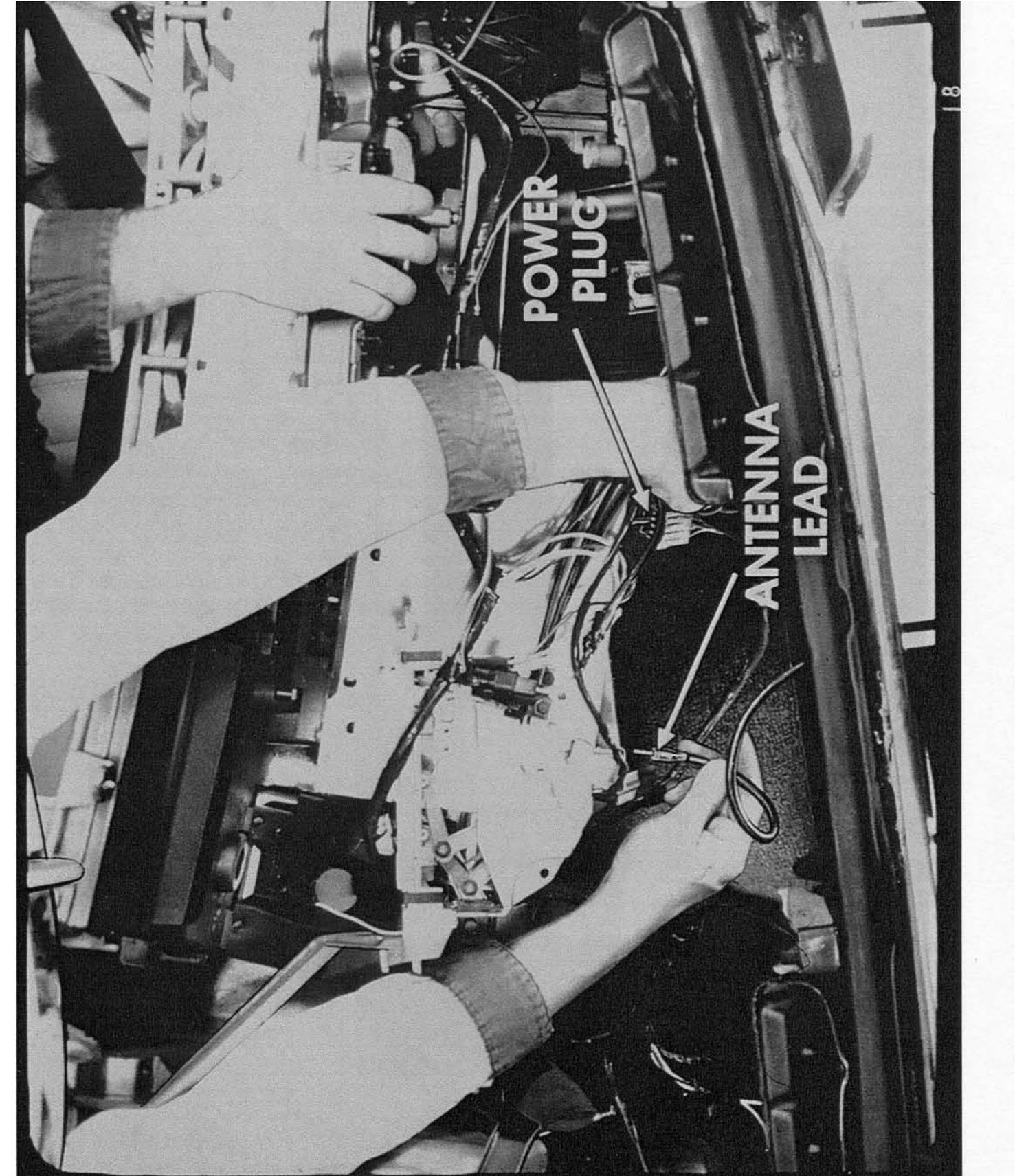
15

GROUND UP



16

GROUND UP

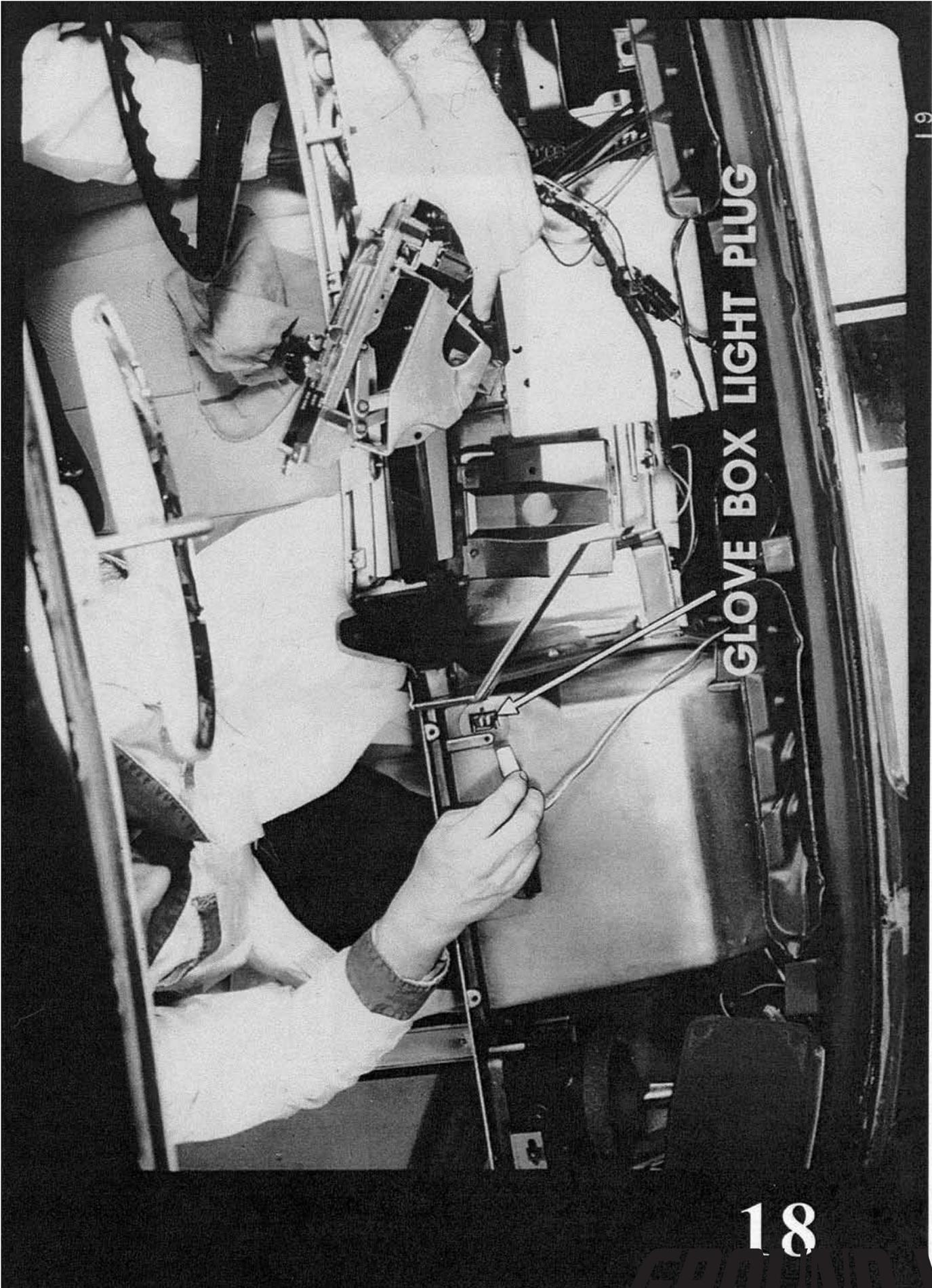


**POWER
PLUG**

**ANTENNA
LEAD**

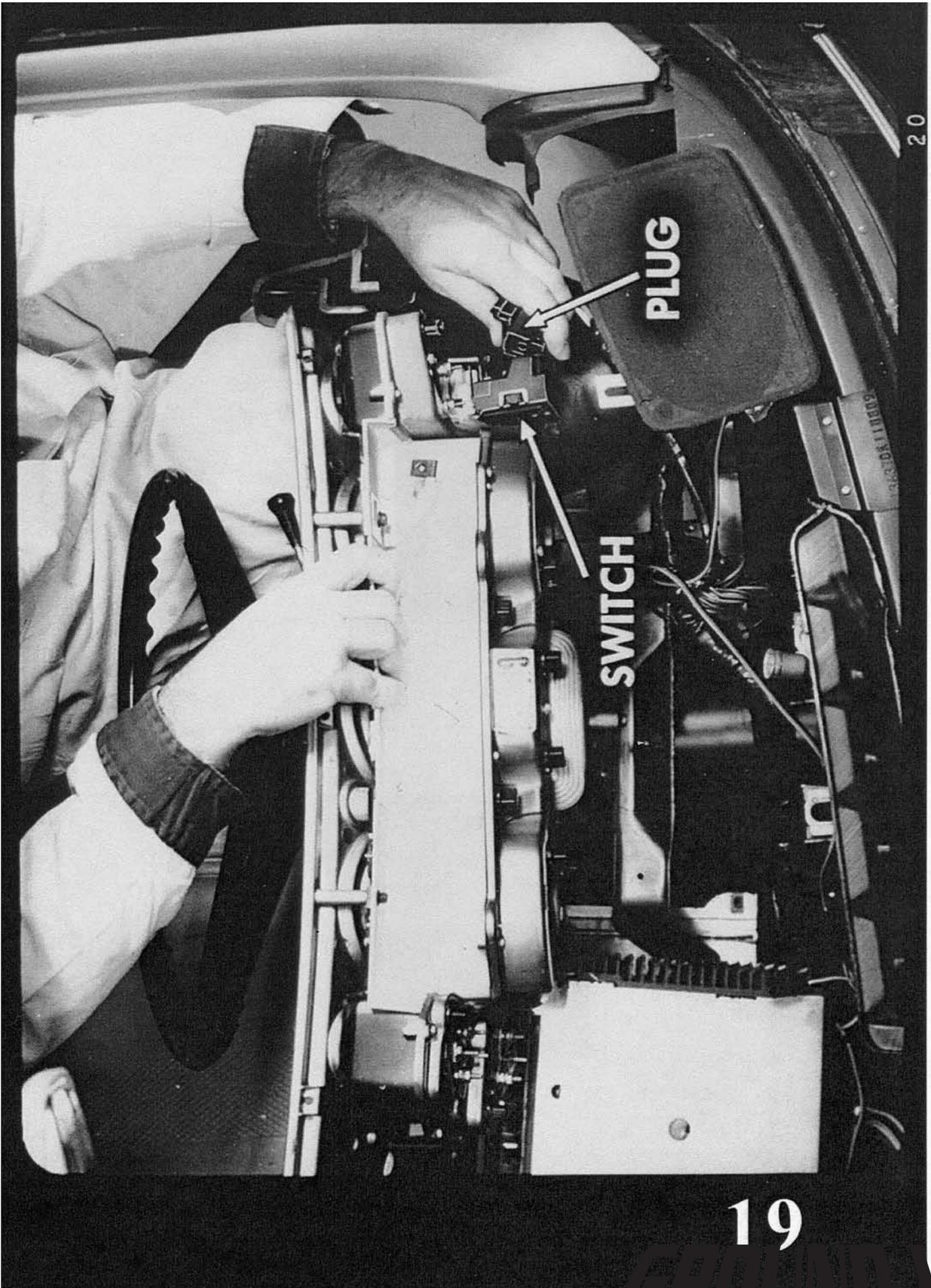
17

GROUND UP



GLOVE BOX LIGHT PLUG

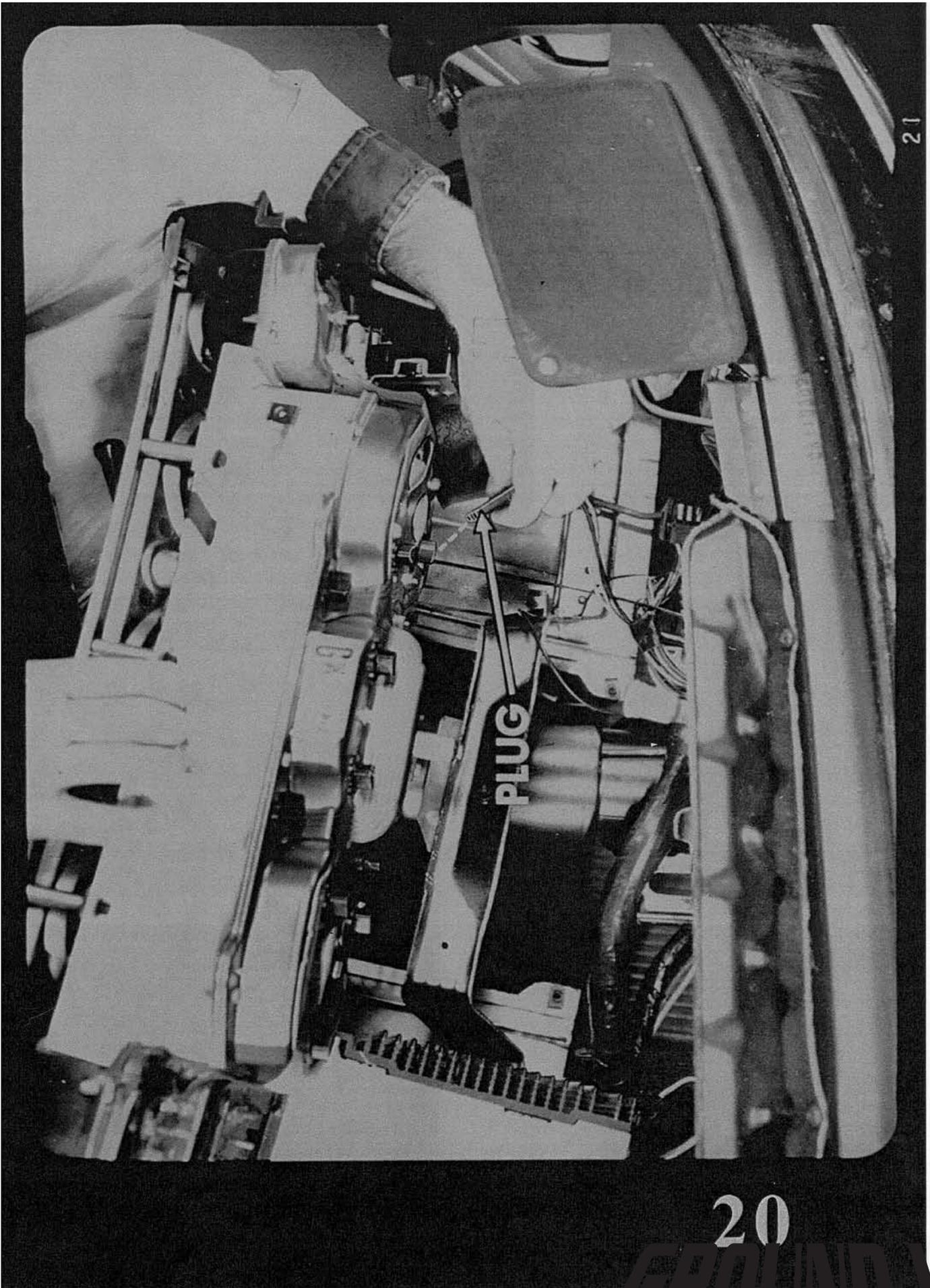
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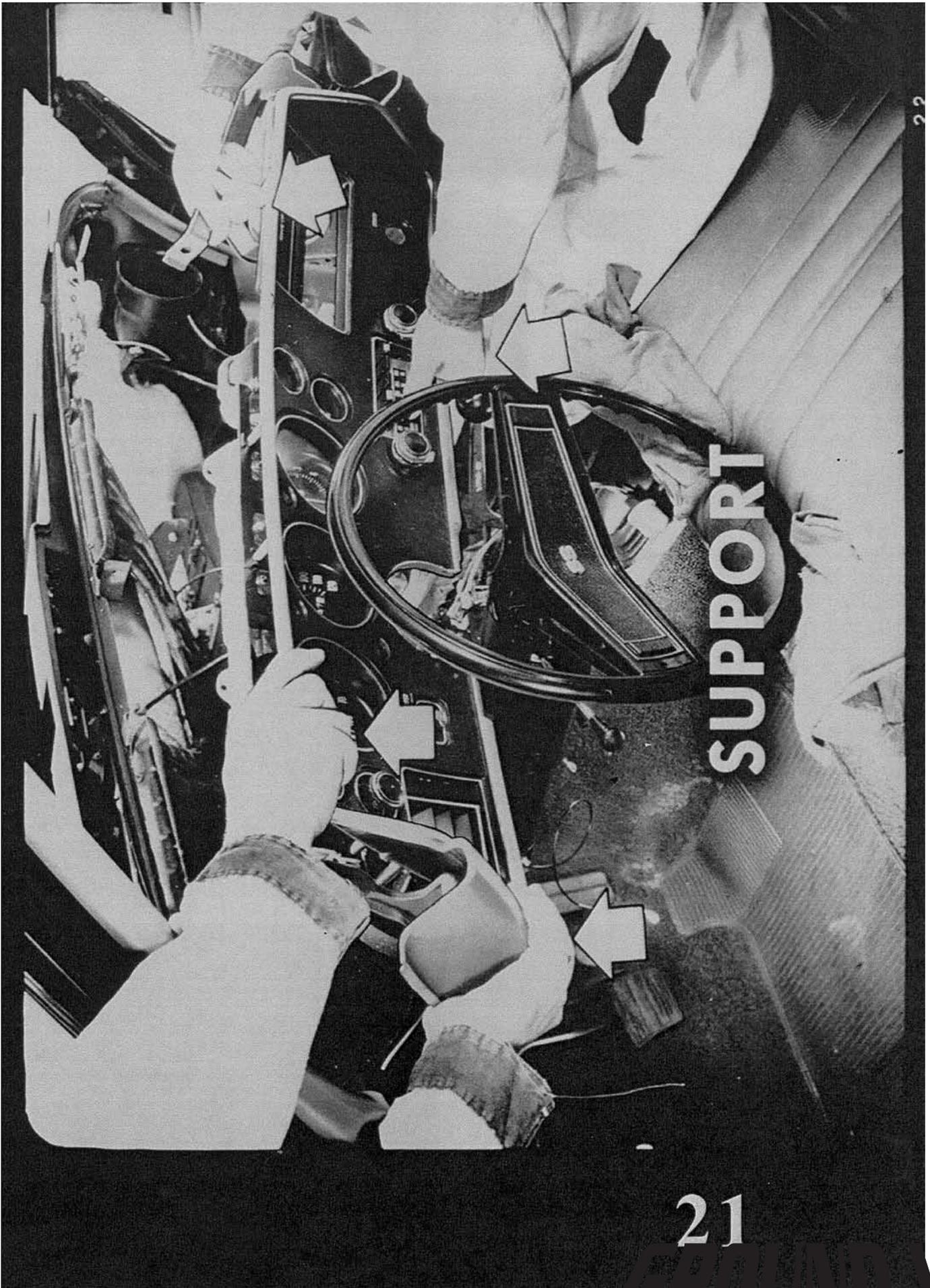


20

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GROUND UP





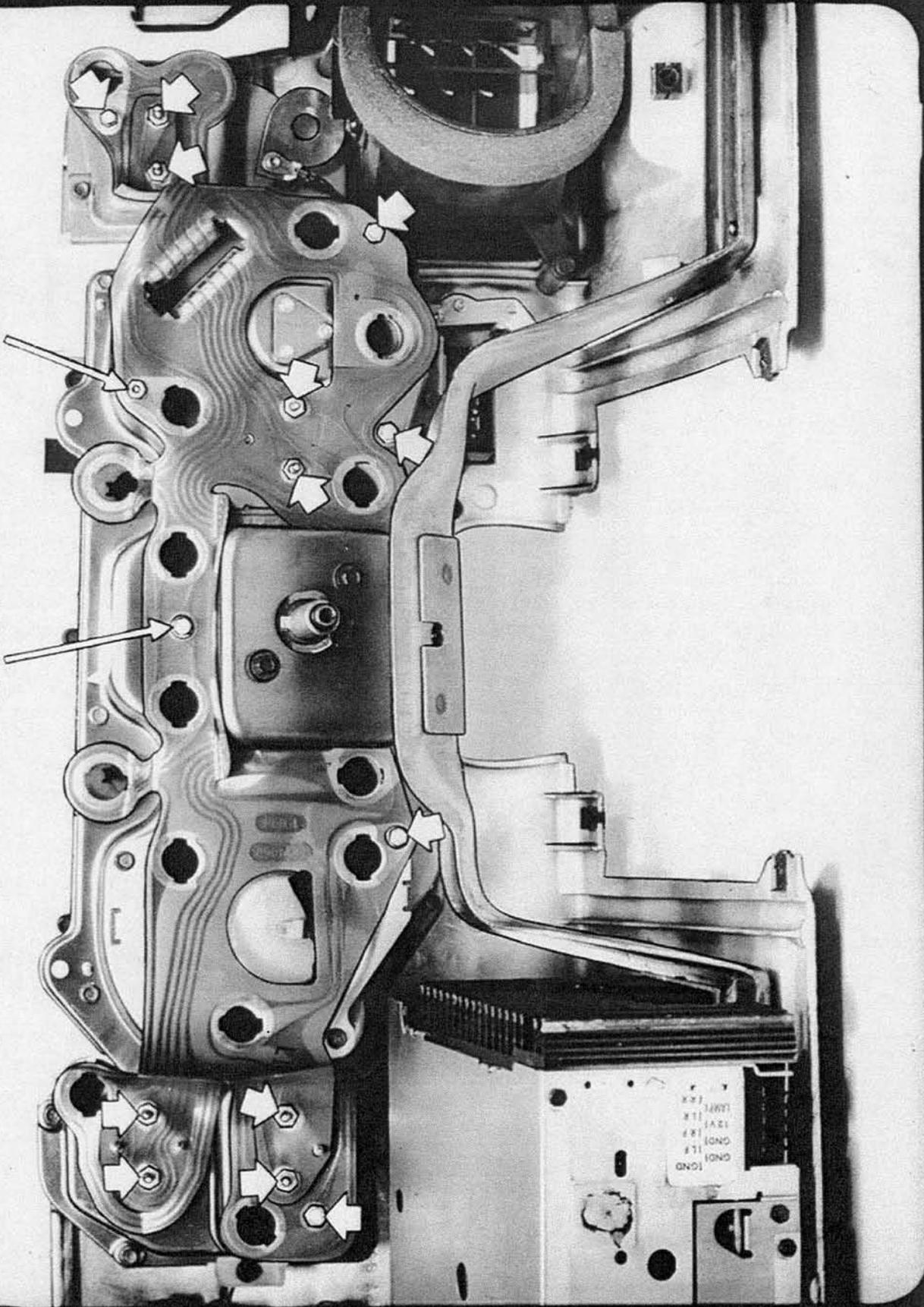
SUPPORT

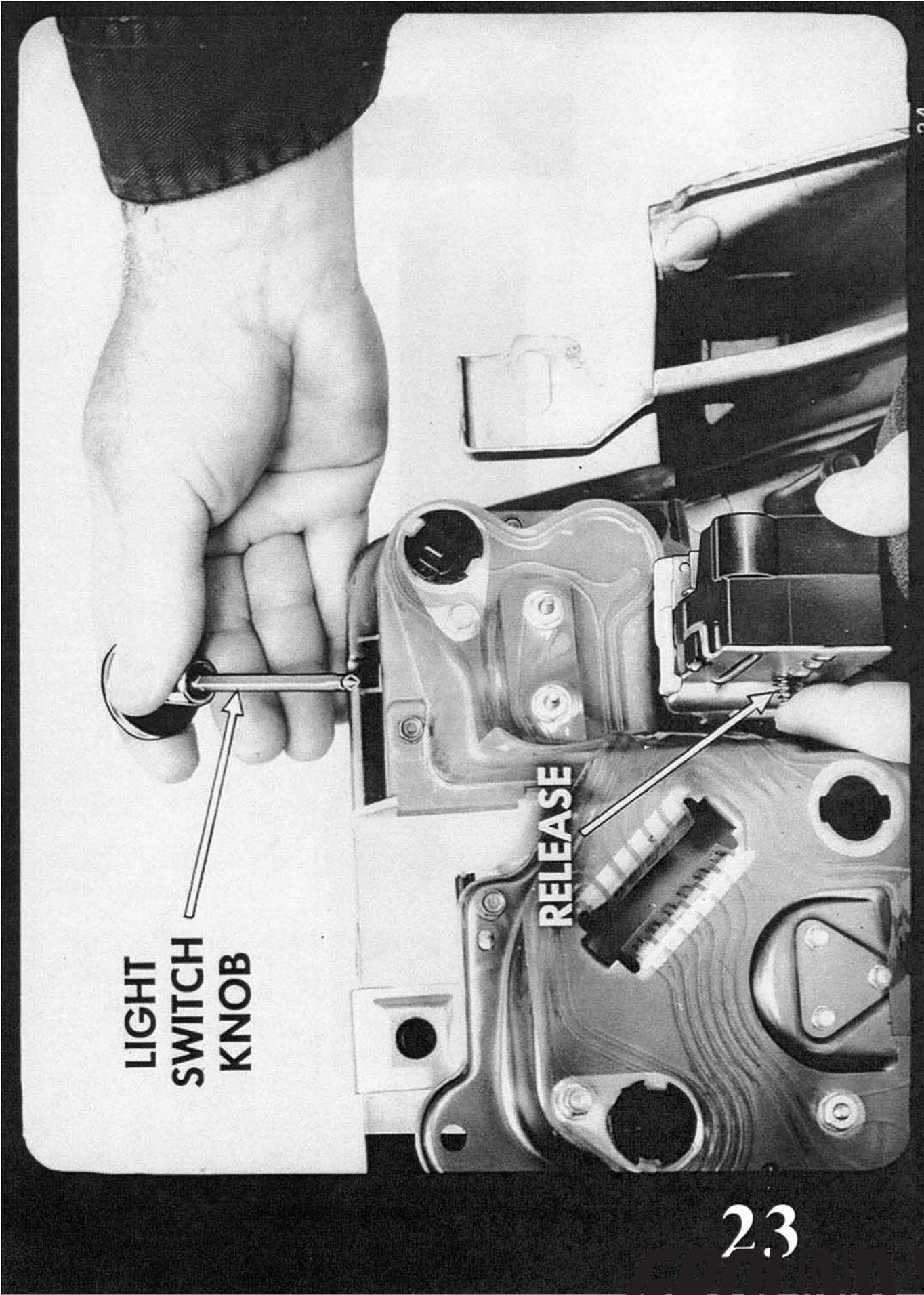
21

GROUND UP

STUD NUT

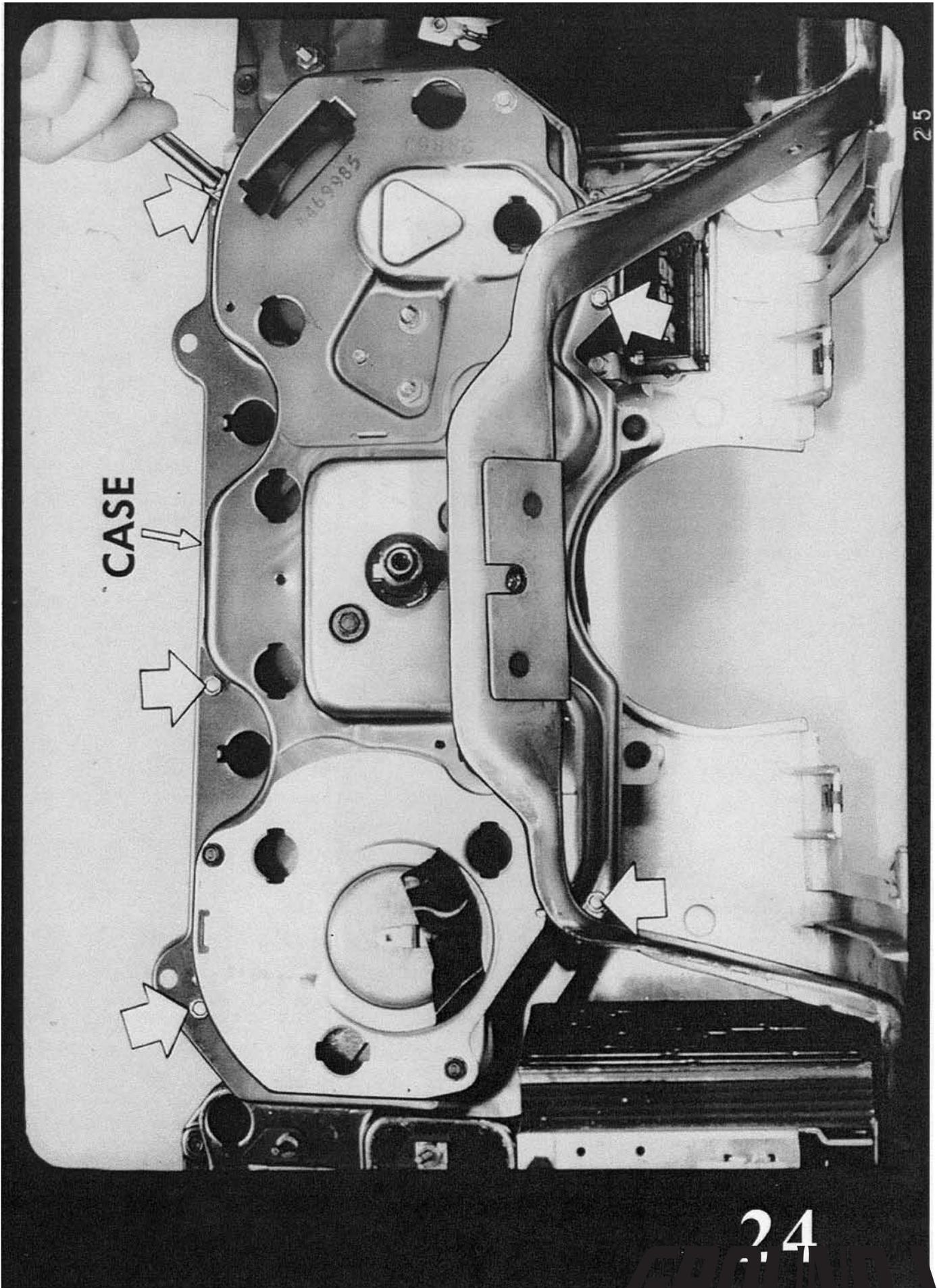
SCREW





LIGHT
SWITCH
KNOB

RELEASE

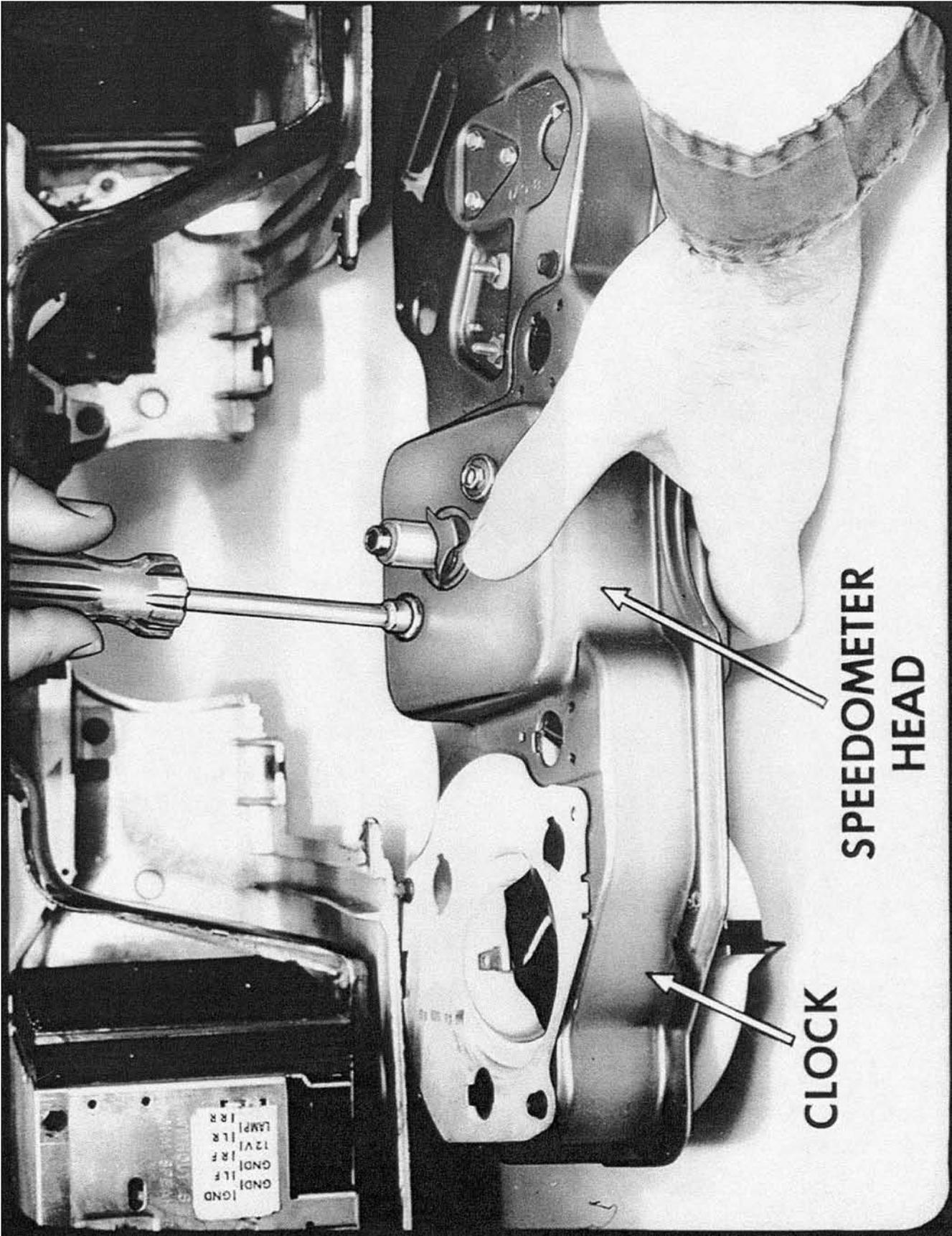


CASE

24

GROUND UP

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SPEEDOMETER
HEAD

CLOCK



SUPPORT



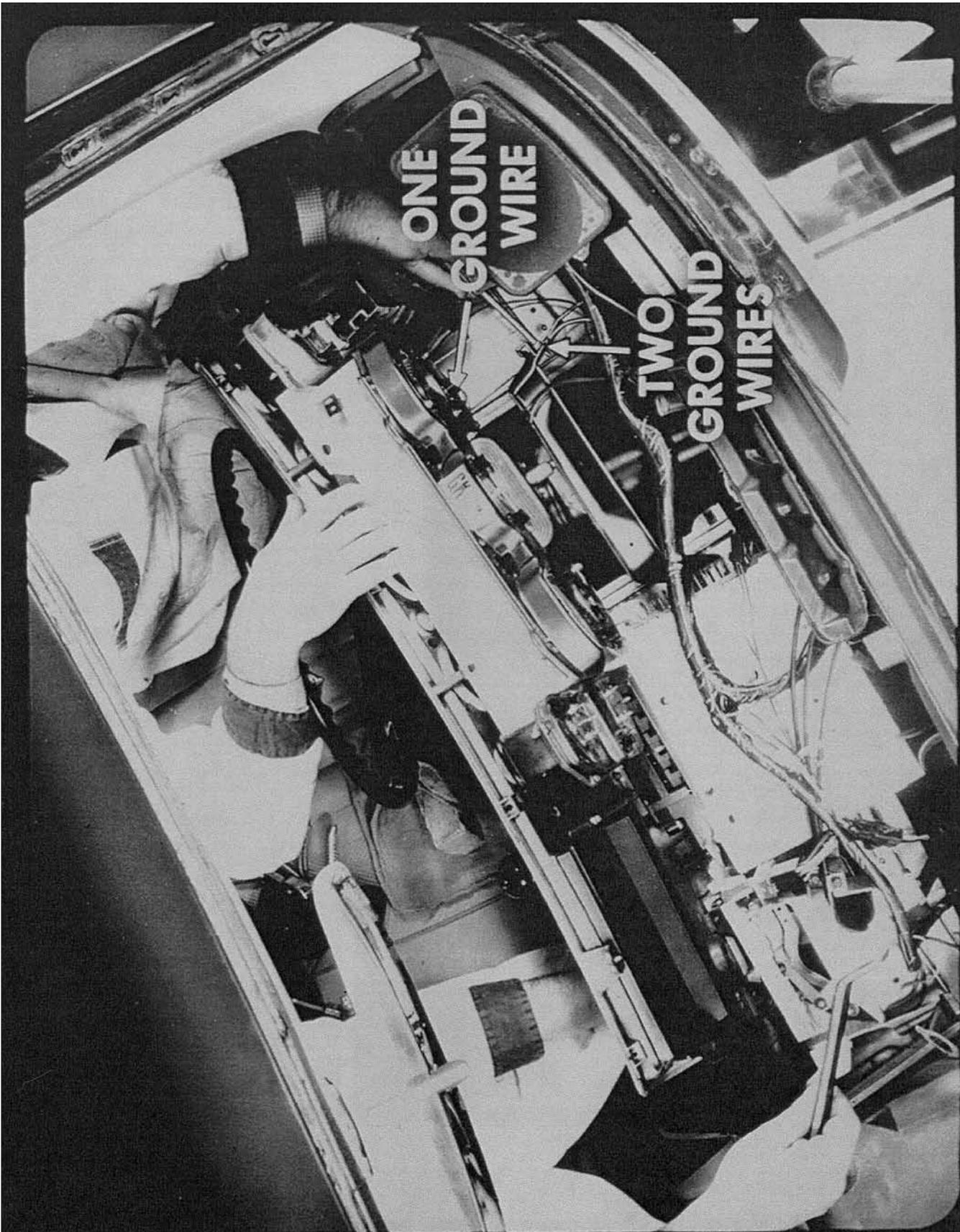
27

SUPPORT



26

UNBOUND UP



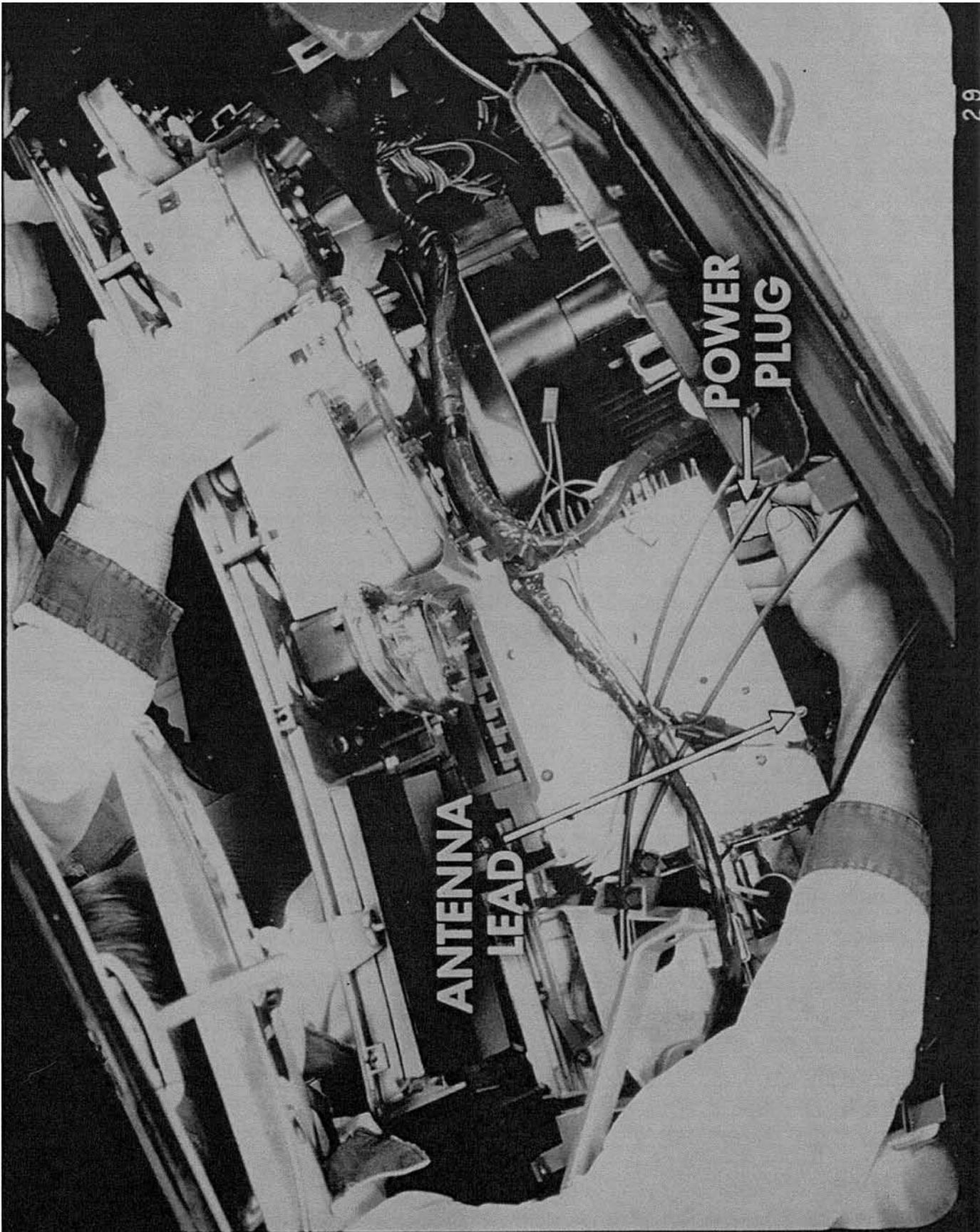
ONE
GROUND
WIRE

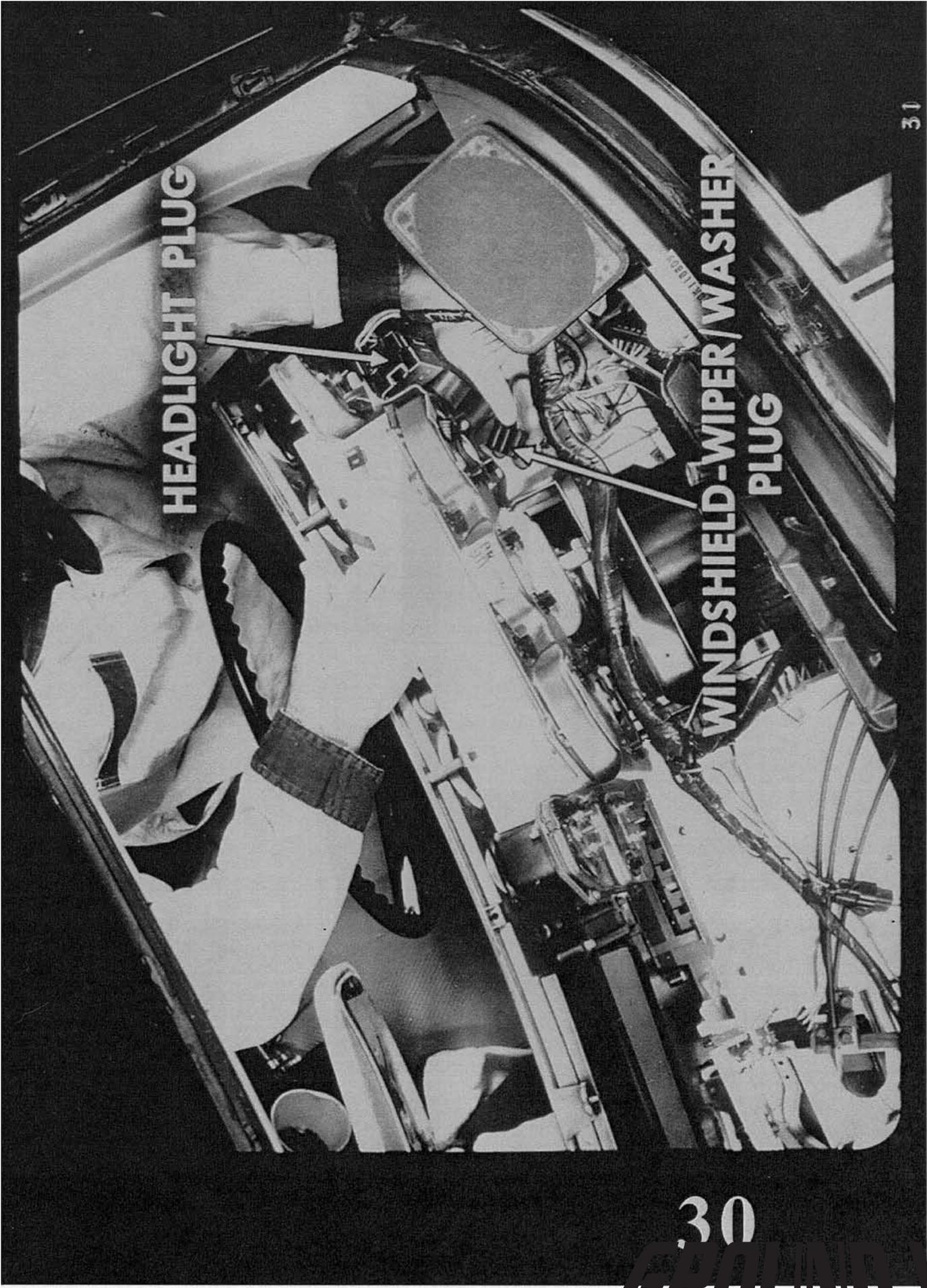
TWO
GROUND
WIRES

28

27

AROUND UP



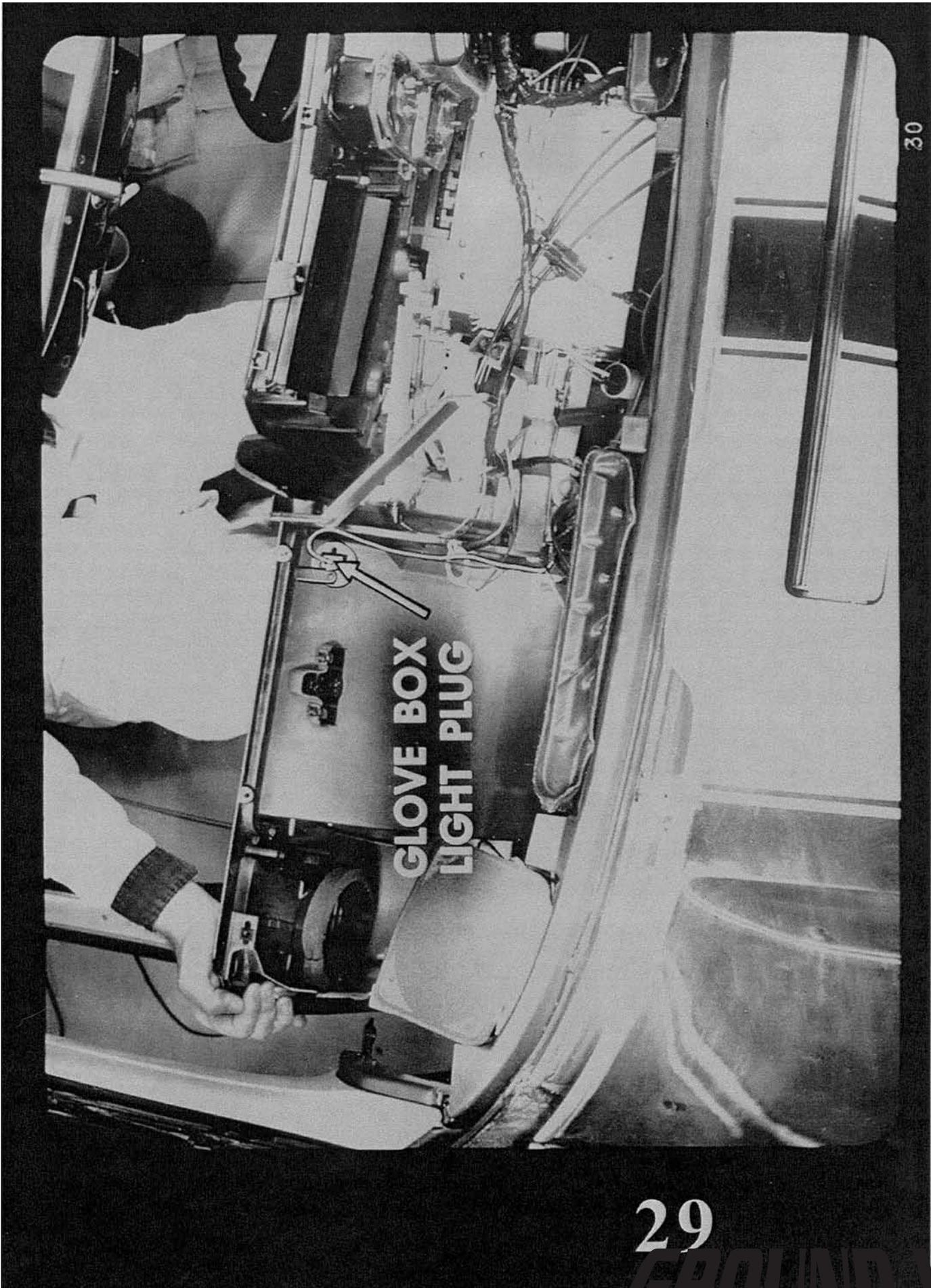


HEADLIGHT PLUG

**WINDSHIELD-WIPER/WASHER
PLUG**

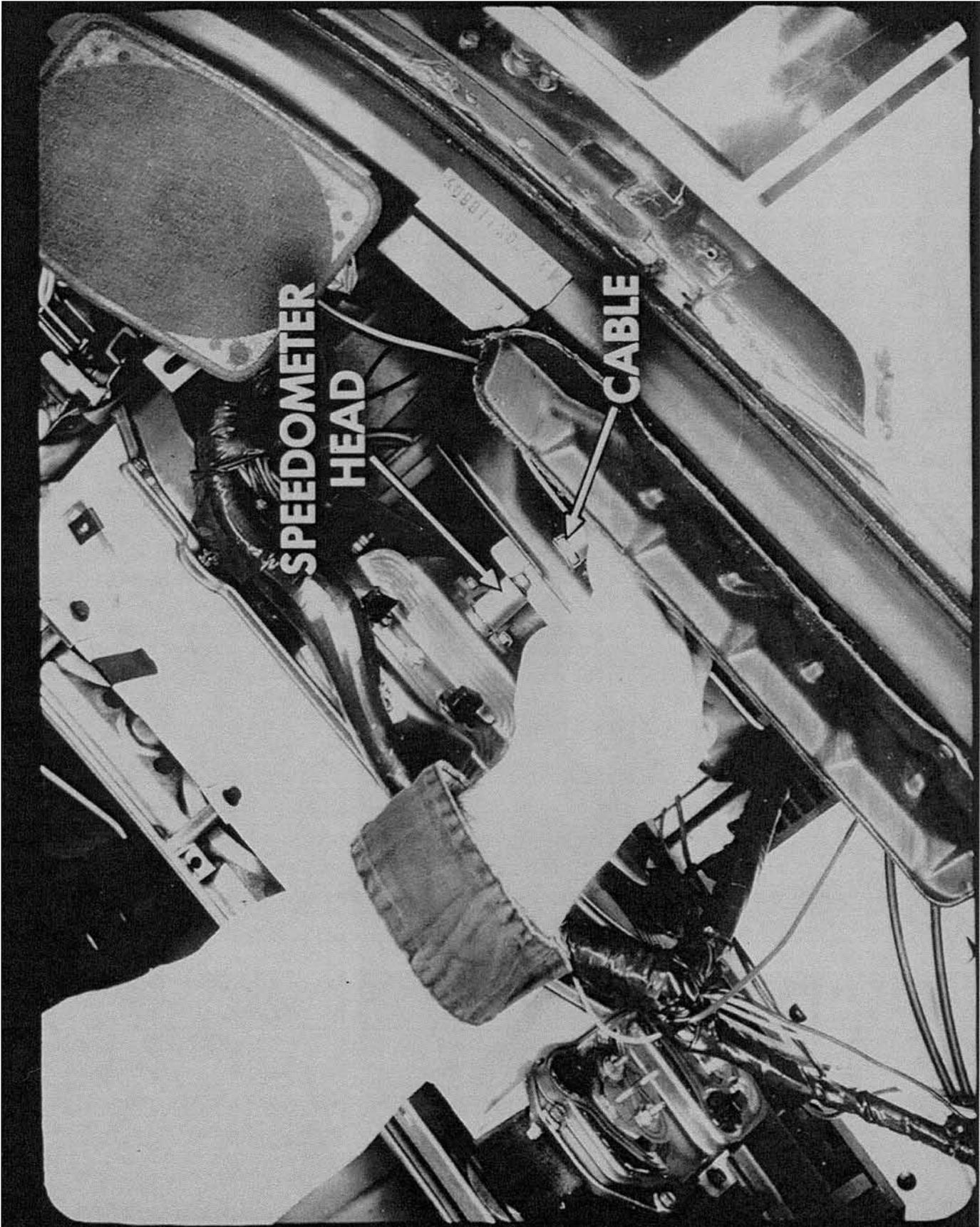
30

GROUND UP



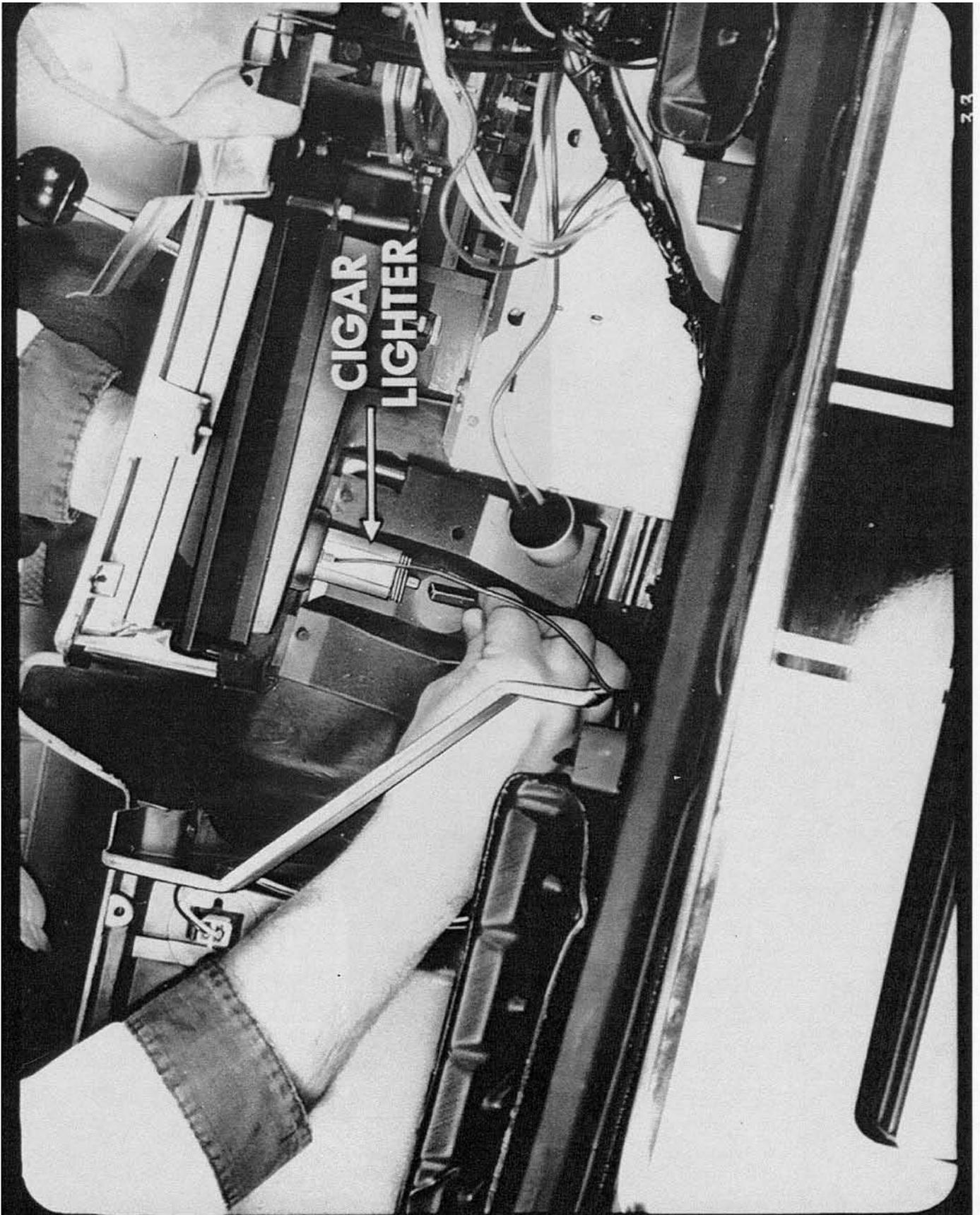
30

GLOVE BOX
LIGHT PLUG



**SPEEDOMETER
HEAD**

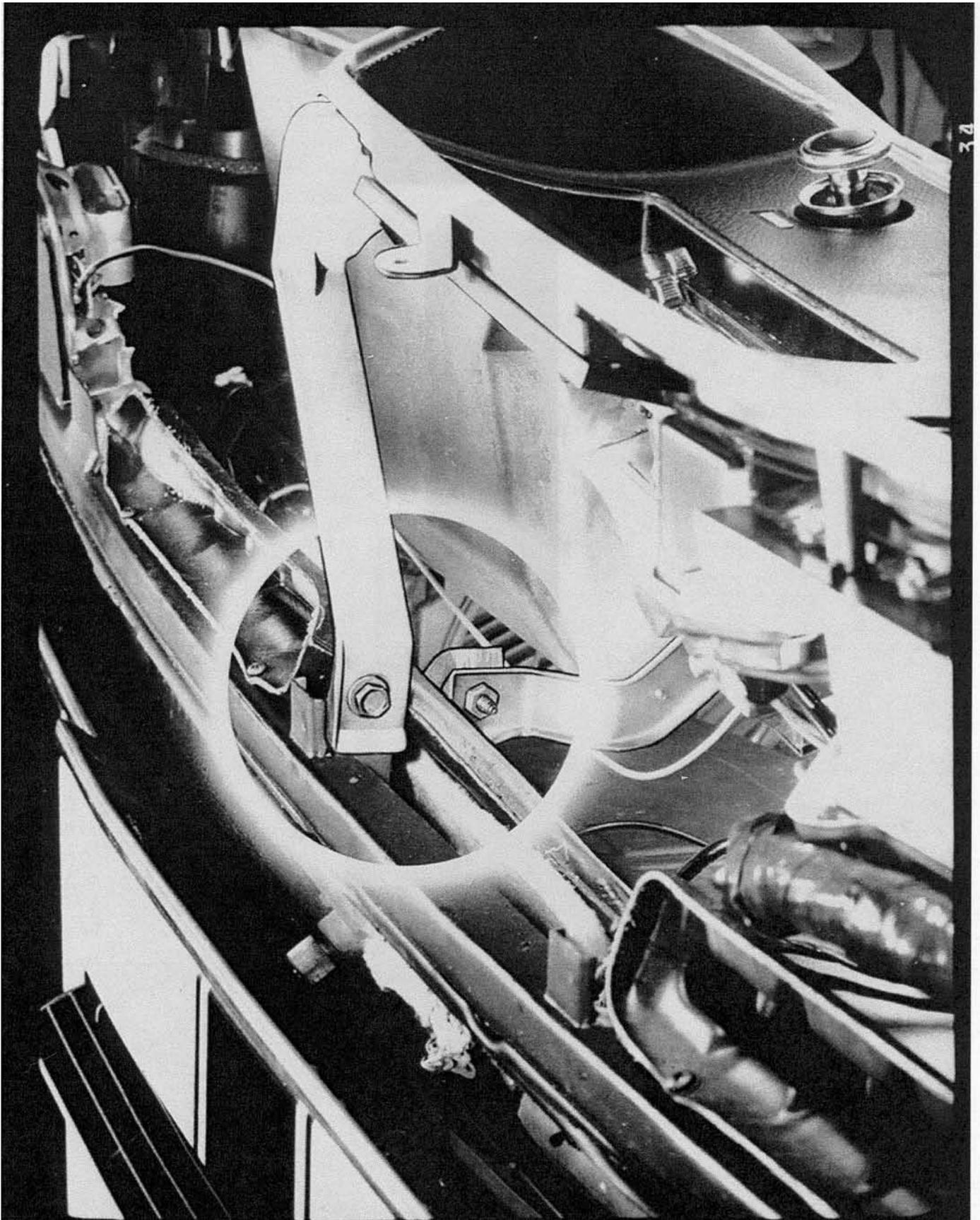
CABLE



33

32

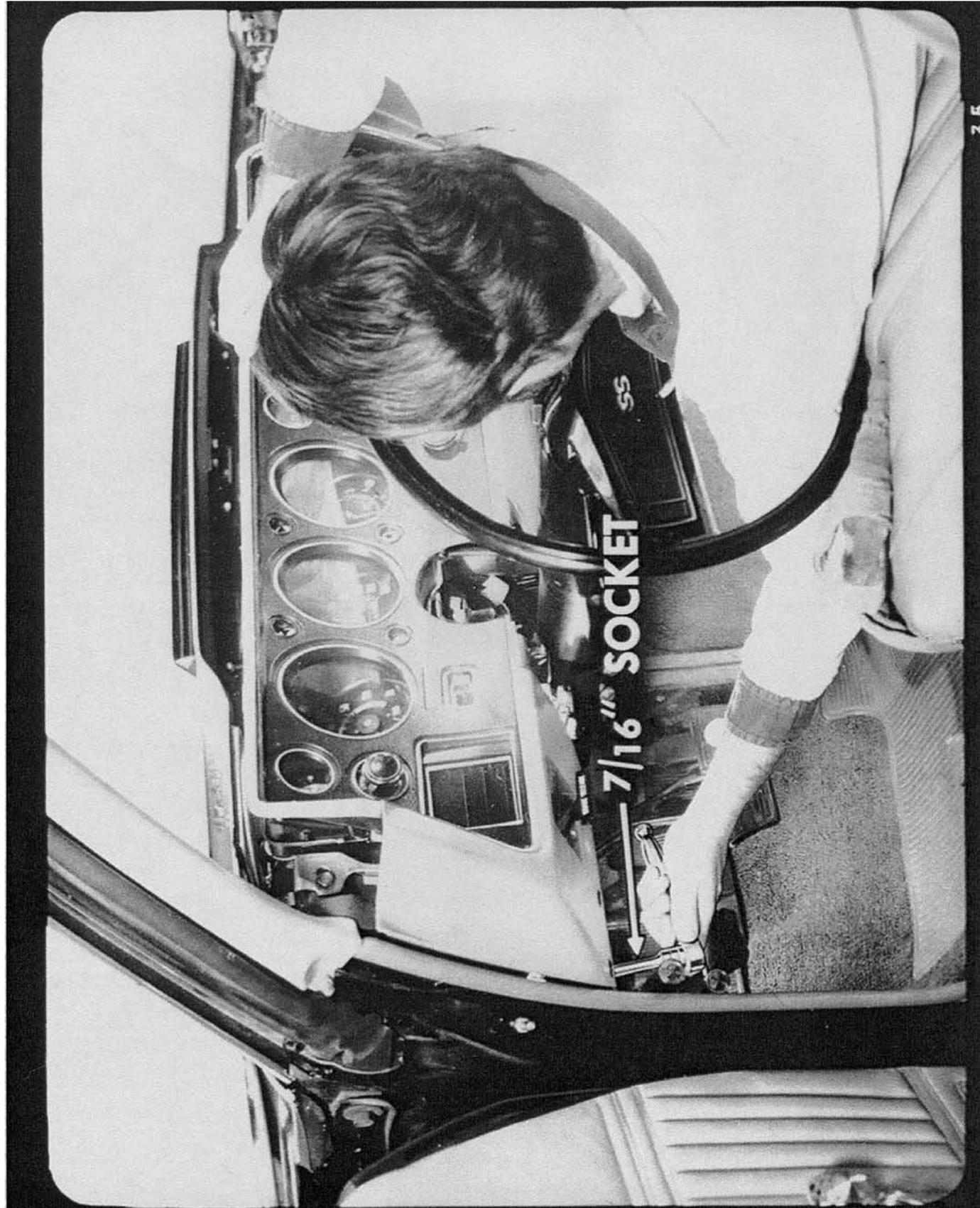
GROUND UP



33

GROUND UP

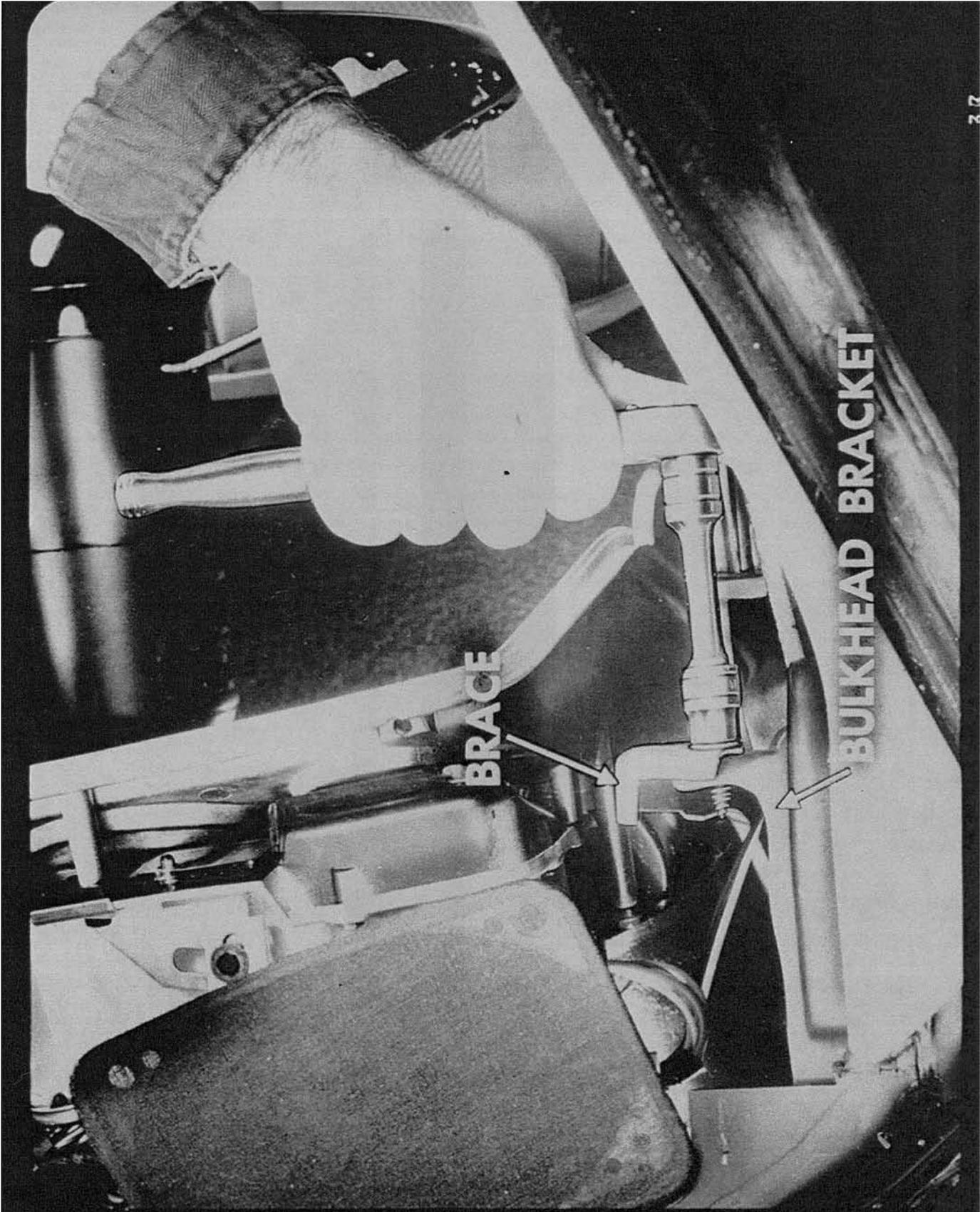
7/16" SOCKET





**HIDDEN
SCREW**

**7/16" SOCKET
LONG EXTENSION**



37

BRACE

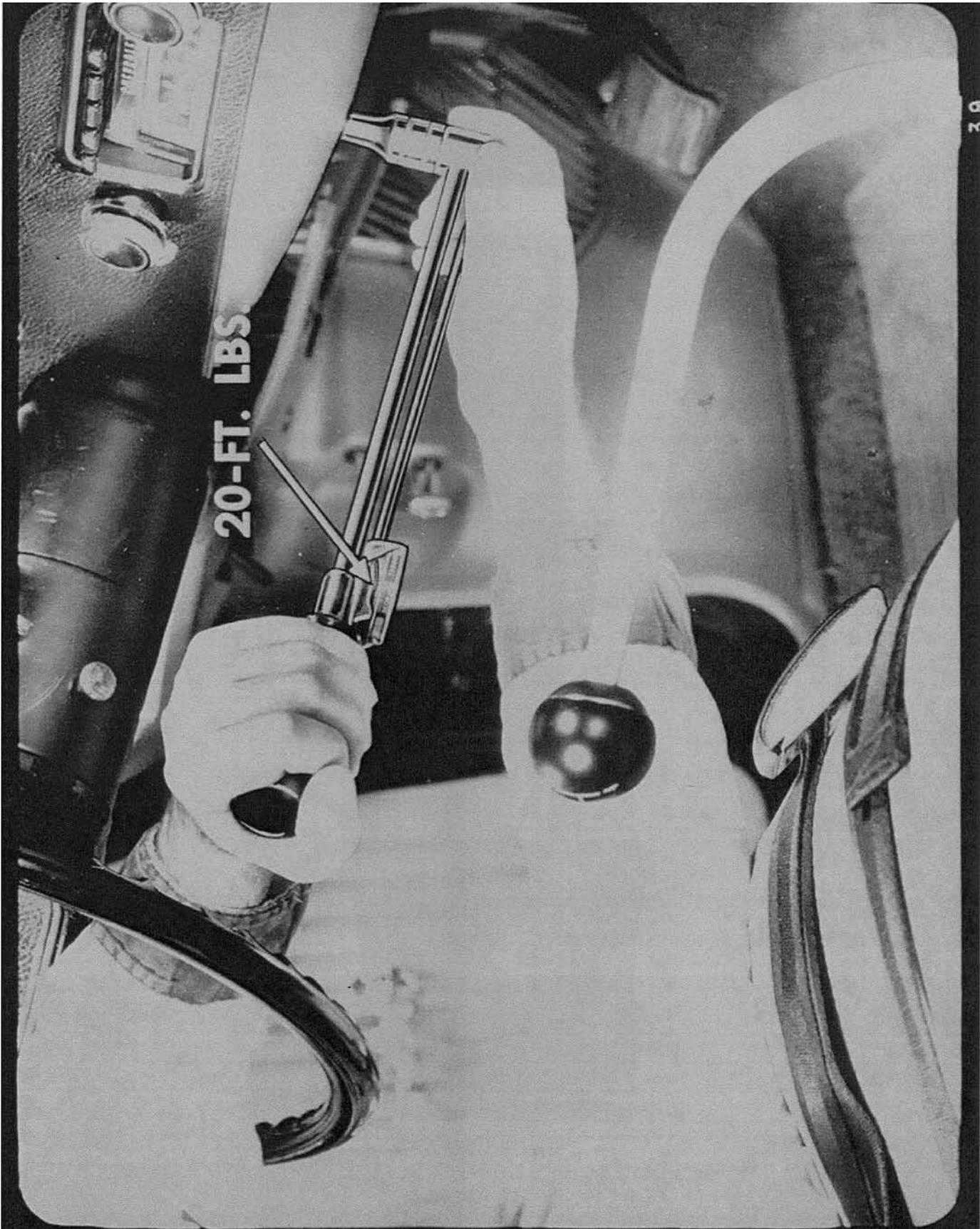
BULKHEAD BRACKET

36

GROUND UP



COLUMN
ATTACHING
NUTS



20-FT. LBS.

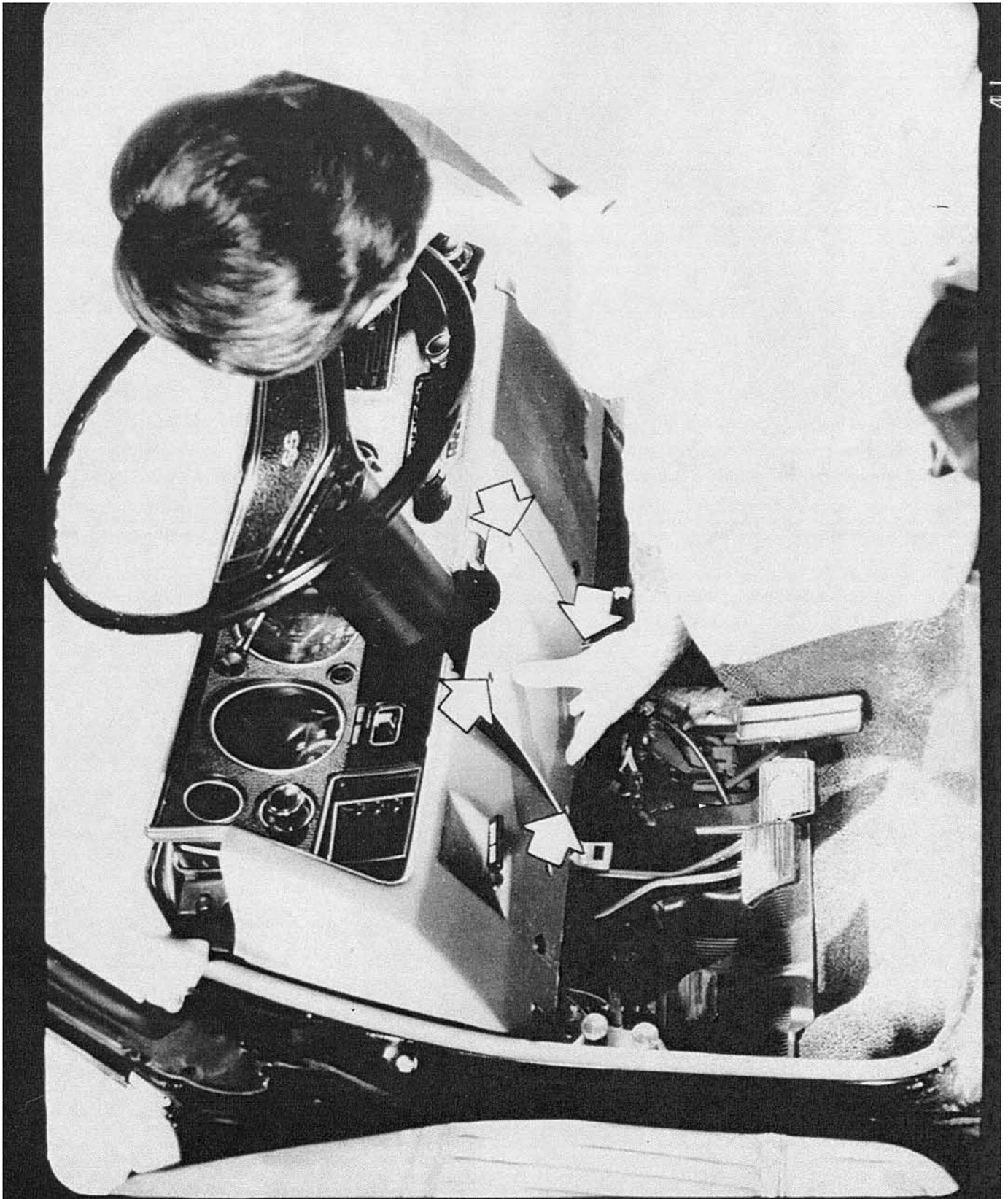
38

38

AROUND UP

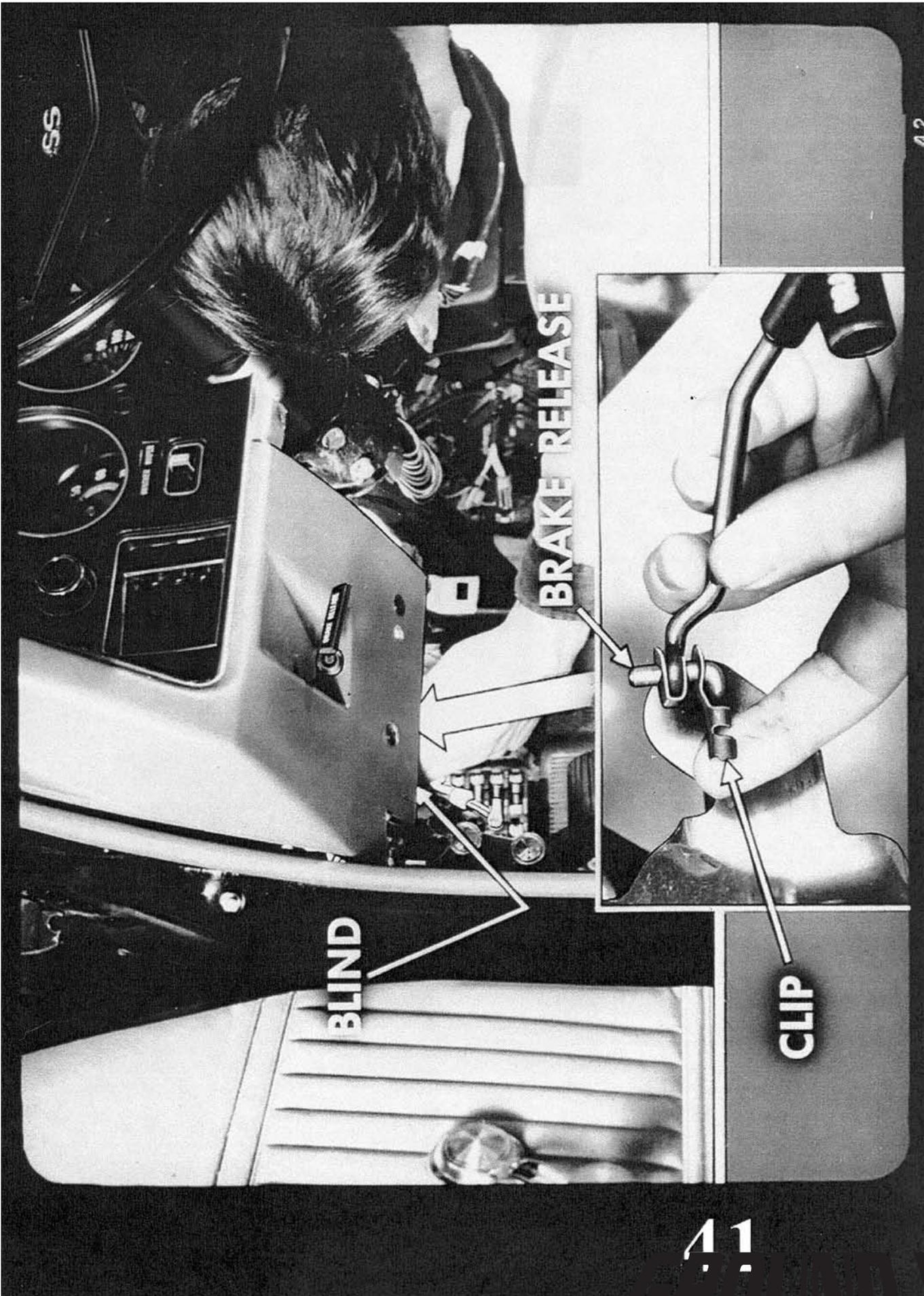
HEATER / AIR-CONDITIONER HEAD

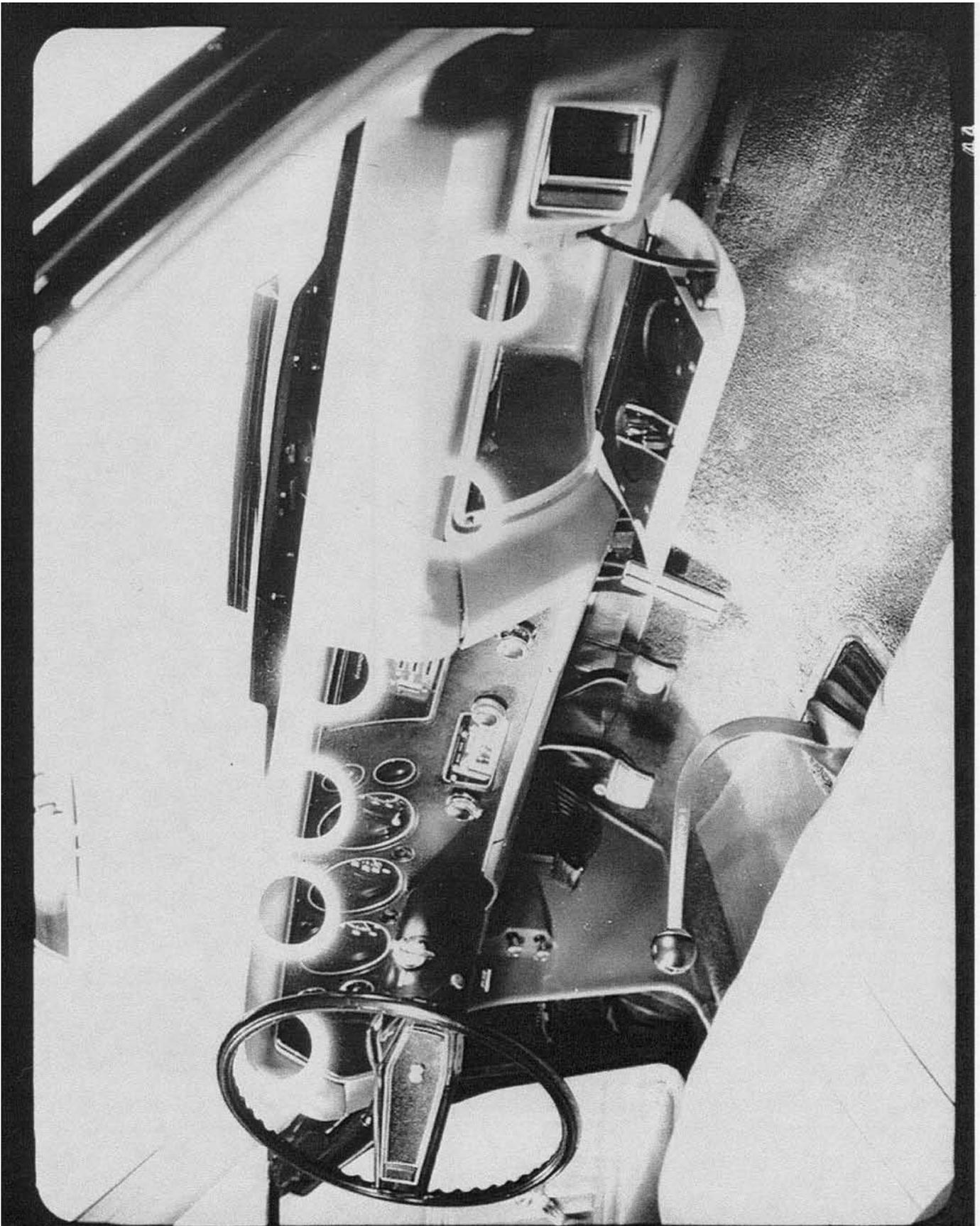
1/4" NUT
DRIVER



40

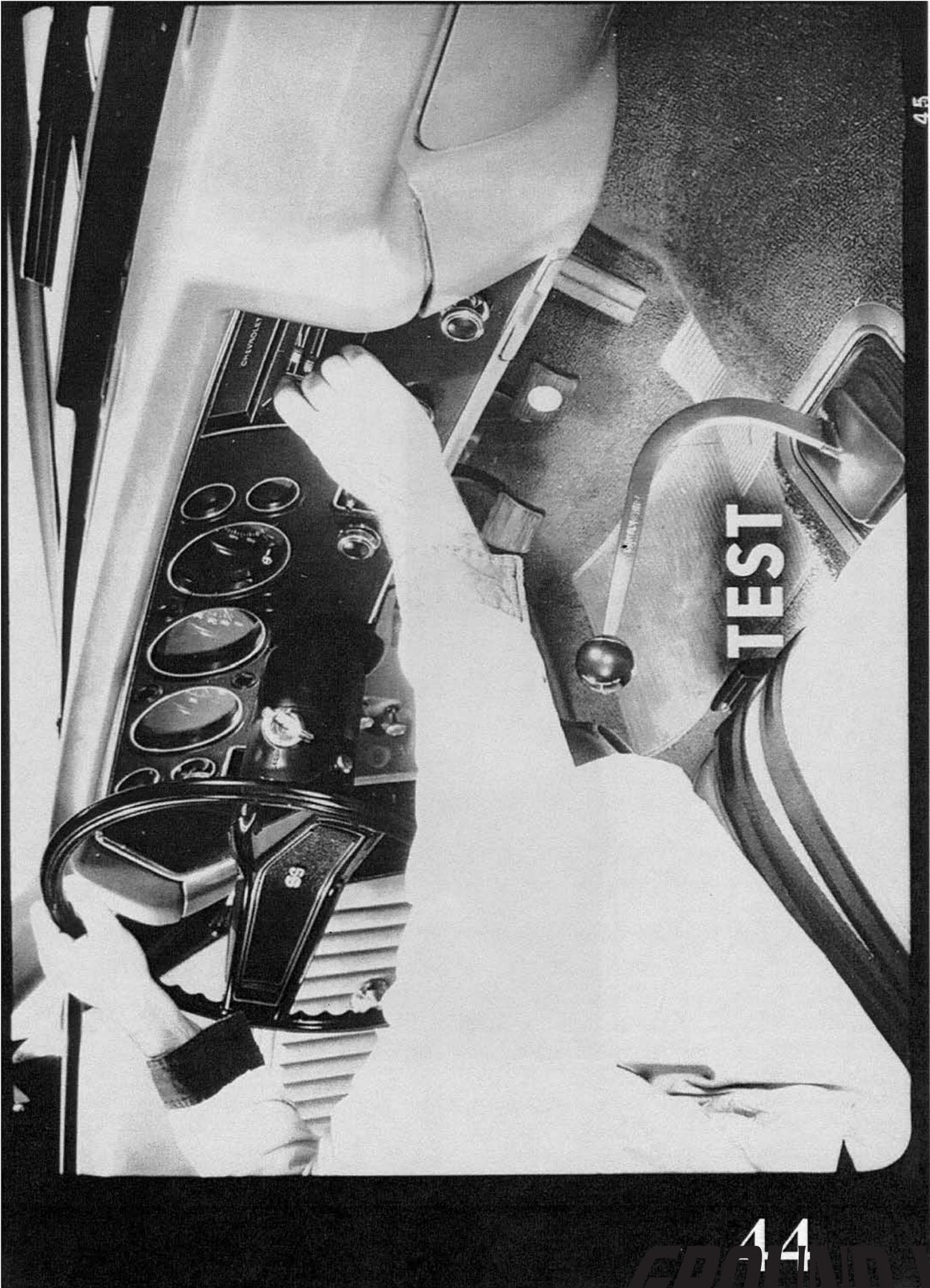
GROUND UP





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GROUND UP



TEST