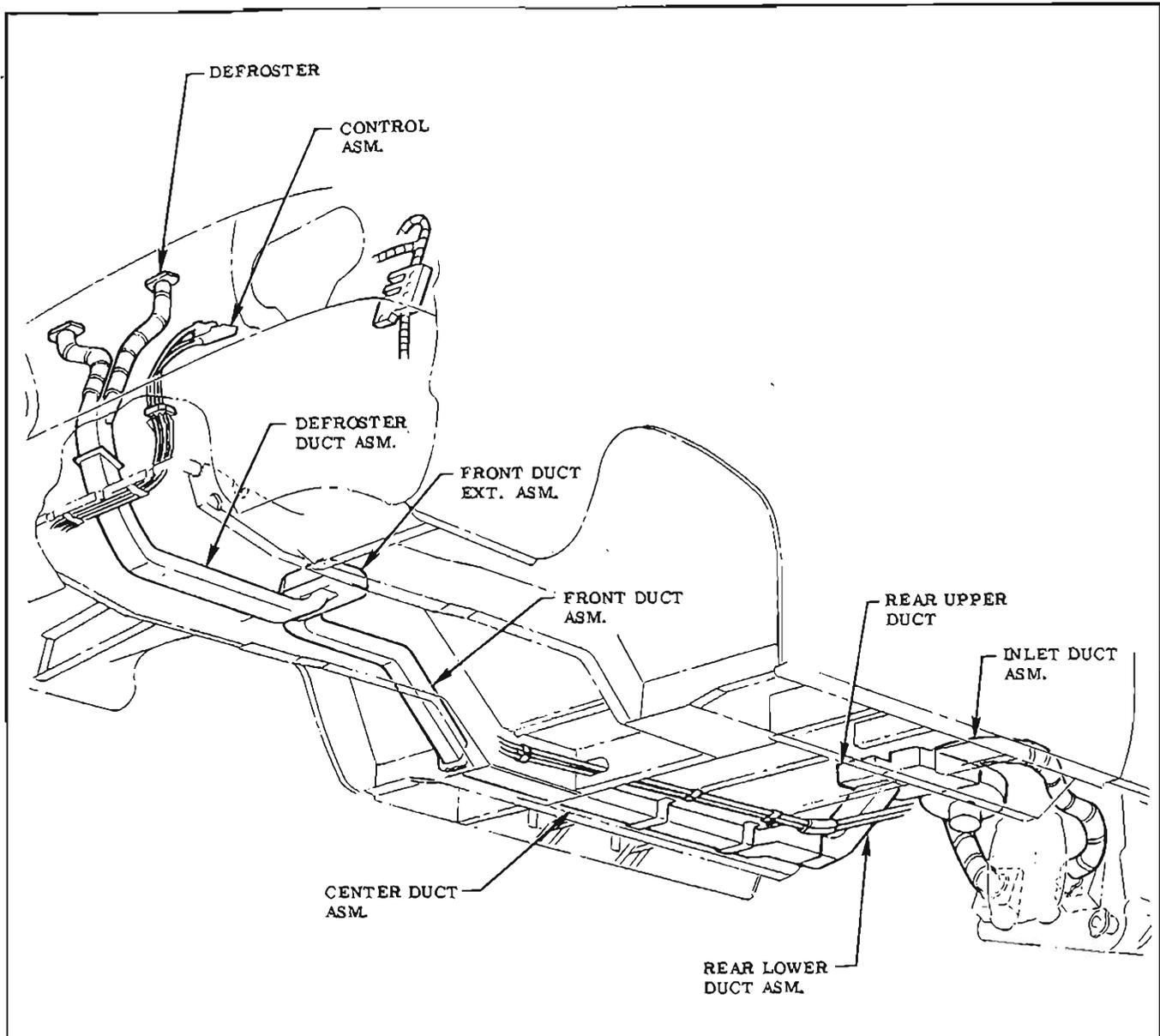


985089

CAR HEATER & DEFROSTER INSTRUCTION SHEET

LIGHT DUTY FWD./CONTROL



GENERAL MOTORS PARTS DIVISION
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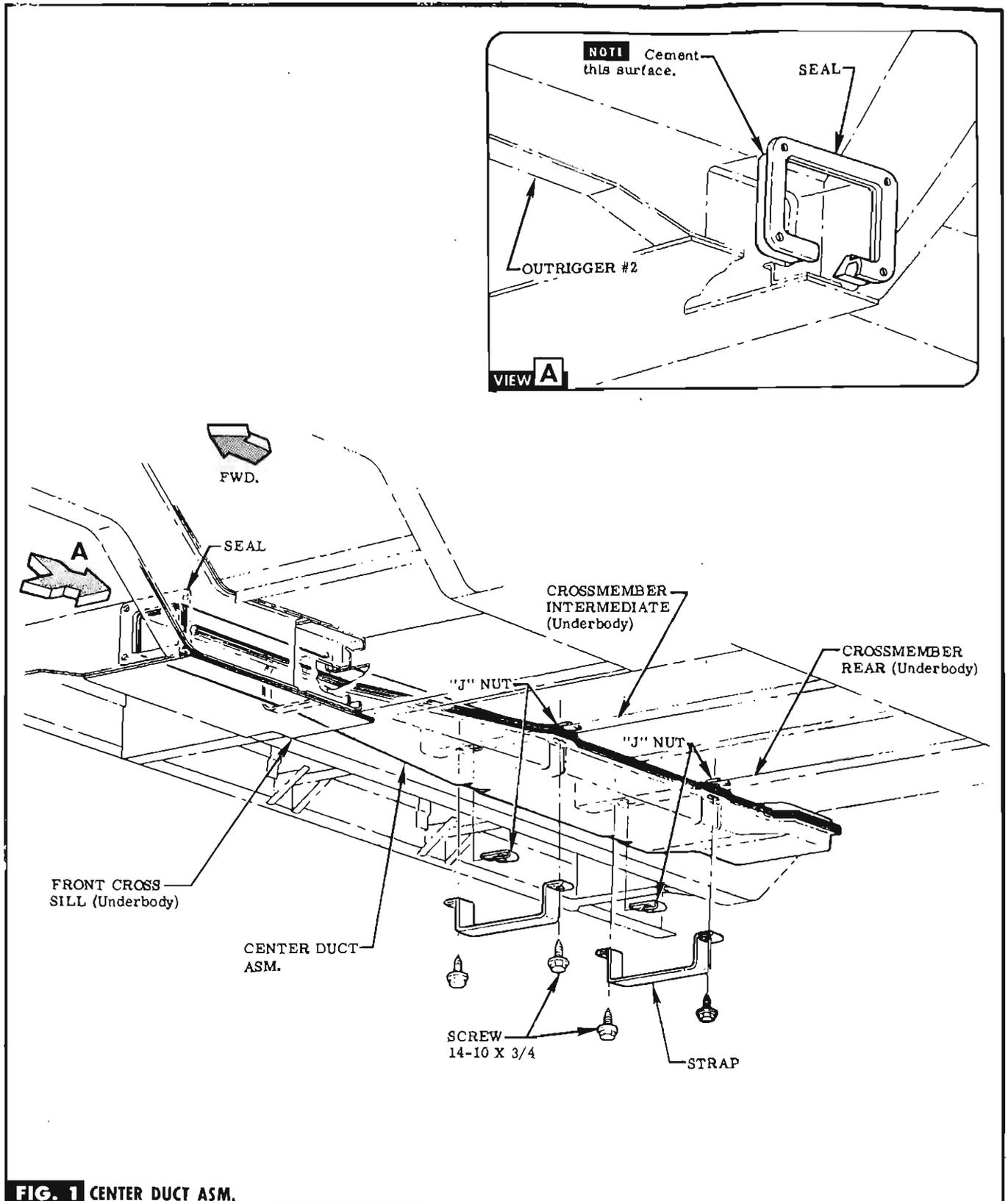


FIG. 1 CENTER DUCT ASM.

STEP 1 CEMENT SEAL TO OPENING ON REAR SIDE OF OUTRIGGER #2 & SLIP J-NUTS (IN BAG B) INTO PLACE ON INTERMEDIATE & REAR CROSSMEMBER. SEE FIG. 1 & VIEW A.

STEP 2 SLIDE CENTER DUCT ASM, FORWARD THRU OPENING IN CROSSMEMBER TO OUTRIGGER #2. INSTALL STRAPS AT NOTCHES IN CENTER DUCT WITH SCREWS PROVIDED (IN BAG B). SEE FIG. 1.

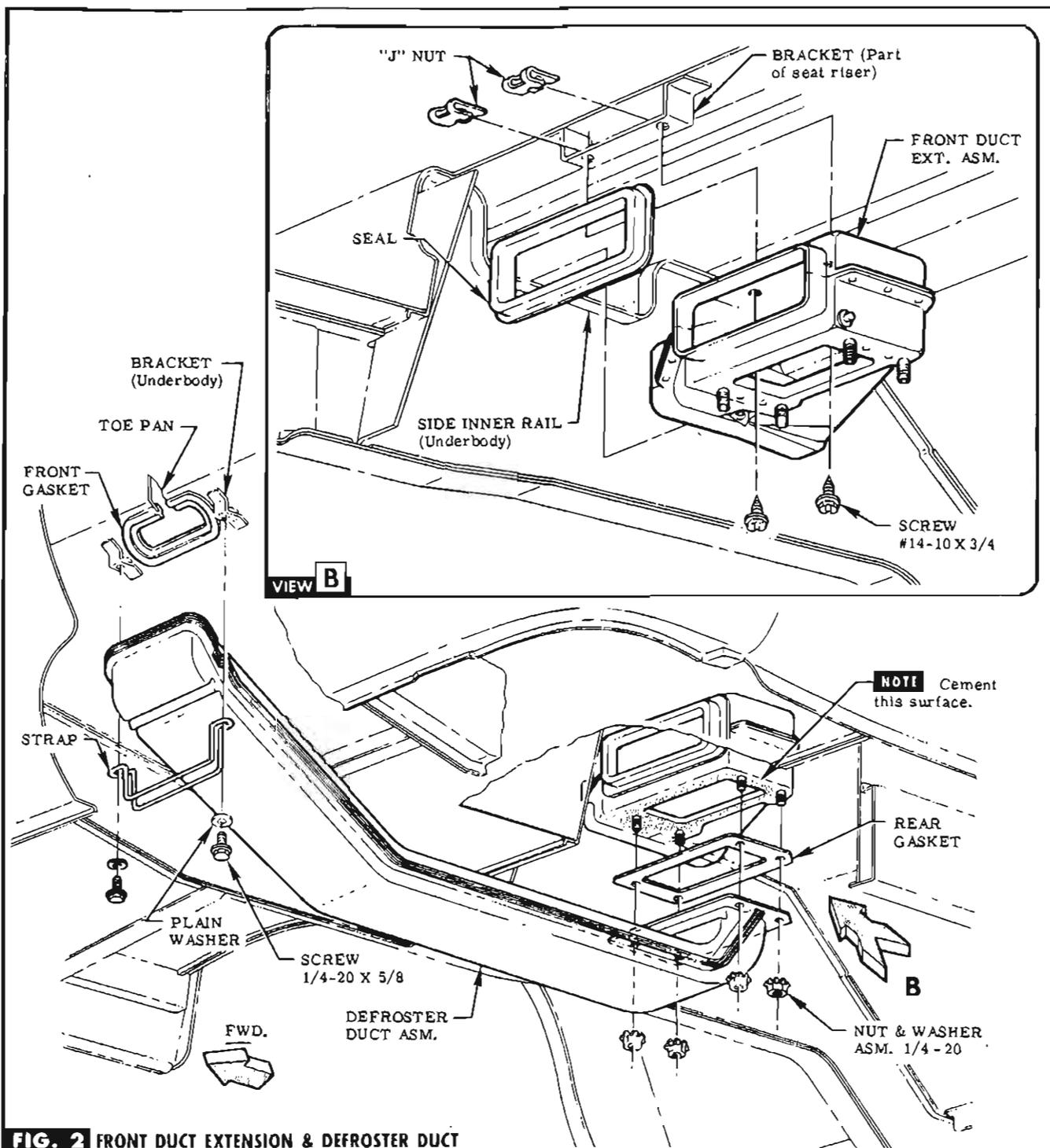


FIG. 2 FRONT DUCT EXTENSION & DEFROSTER DUCT

STEP 3 REMOVE COVER & SCREWS FROM FRONT SEAT RISER & DISCARD.

STEP 4 INSTALL J-NUTS (IN BAG B) ON BRACKET & CEMENT SEAL ON FRONT DUCT EXTENSION. SEE VIEW B.

STEP 5 SLIP FRONT DUCT EXT. ASM. THRU OPENING IN FRONT SEAT RISER & ALIGN WITH OPENING IN SIDE INNER RAIL, & SECURE WITH SCREWS (IN BAG B). SEE VIEW B.

STEP 6 CEMENT SURFACE OF FRONT DUCT EXT. ASM. &

INSTALL REAR GASKET OVER STUDS. INSTALL FRONT GASKET TO OPENING IN TOE PAN. SEE FIG. 2.

STEP 7 SLIP DEFROSTER DUCT ASM. OVER STUDS & INSTALL NUT & L. WASHER ASSEMBLY (IN BAG B). SEE FIG. 2.

STEP 8 SLIP DEFROSTER DUCT ASM. THRU OPENING IN TOE PAN. SECURE STRAP TO BRACKETS WITH SCREWS & WASHERS PROVIDED (IN BAG B). SEE FIG. 2.

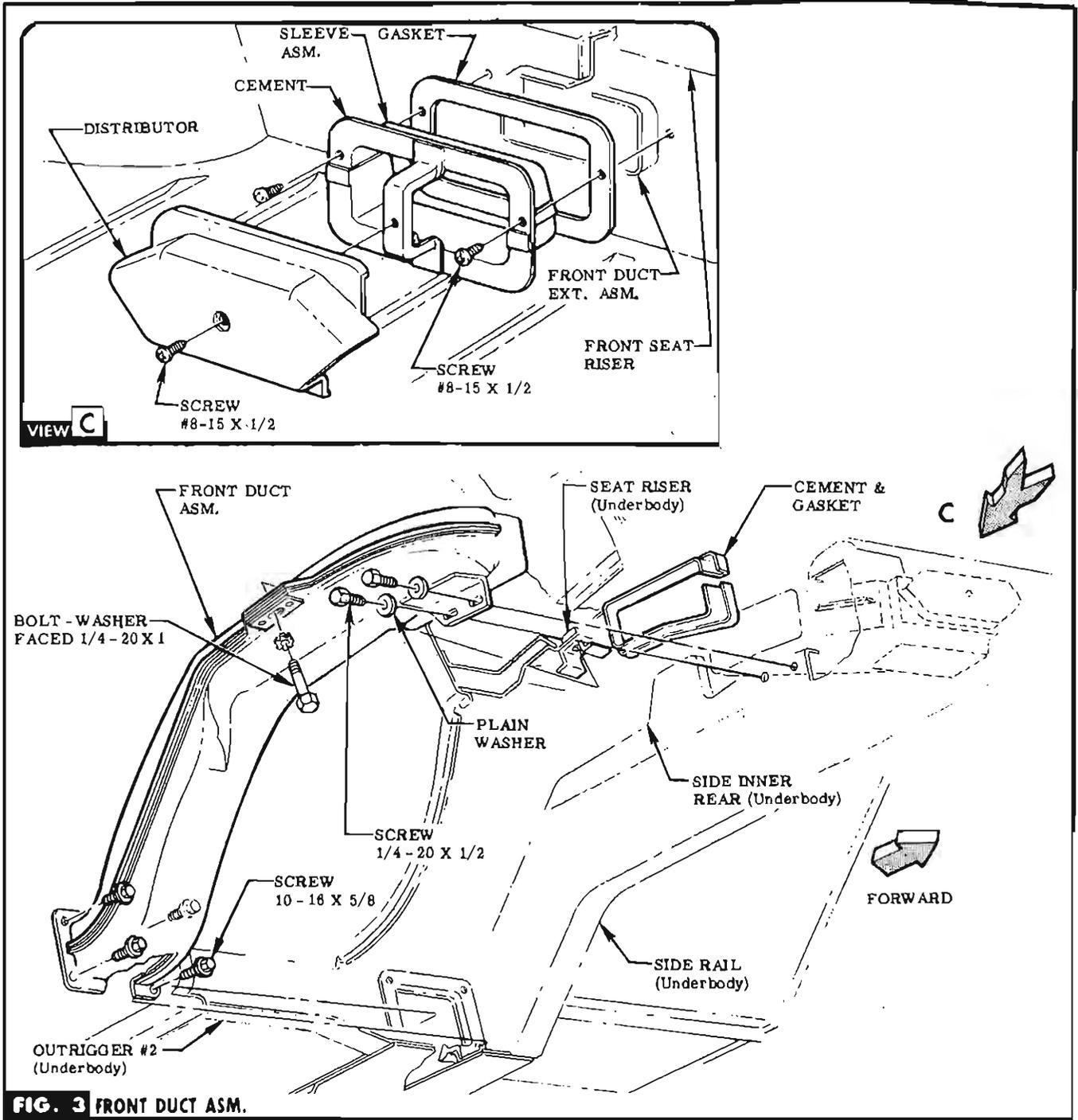


FIG. 3 FRONT DUCT ASM.

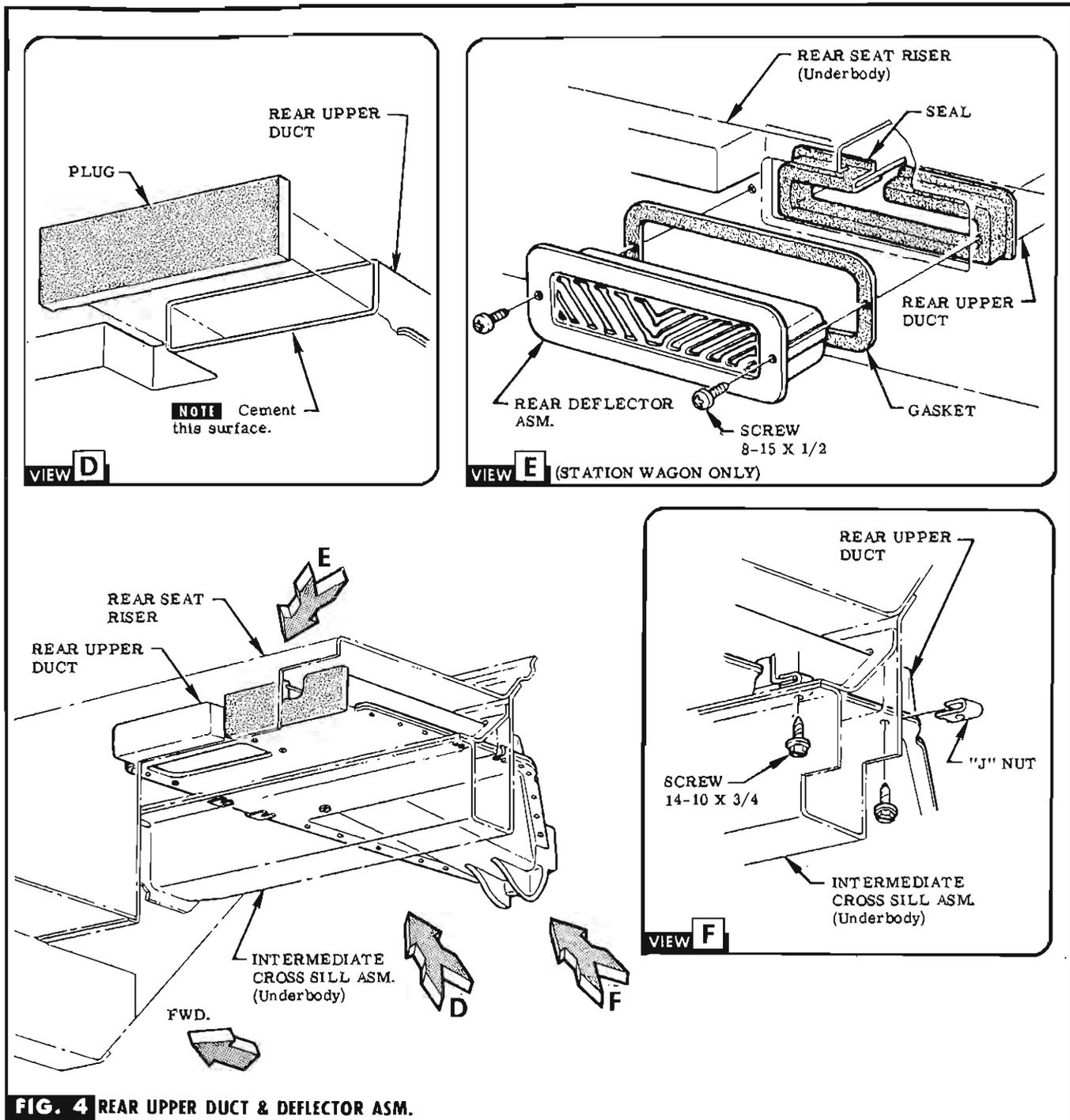
STEP 9 CEMENT GASKET TO SLEEVE & SLIDE SLEEVE THRU OPENING IN SEAT RISER & INTO FRONT DUCT EXTENSION. ATTACH WITH SCREWS PROVIDED (IN BAG A). SEE VIEW C.

STEP 10 INSTALL DISTRIBUTOR TO SLEEVE WITH SCREW (IN BAG A). SEE VIEW C.

STEP 11 CEMENT GASKET ON FRONT DUCT & SLIDE THRU

OPENING IN SIDE INNER RAIL & ATTACH WITH SCREWS & WASHERS PROVIDED (IN BAG B). SEE FIG. 3.

STEP 12 ALIGN FRONT DUCT ASM. TO OPENING IN OUTRIGGER #2 & ATTACH WITH SCREWS PROVIDED (IN BAG B). ATTACH FRONT DUCT ASM. TO SEAT RISER WITH BOLT PROVIDED (IN BAG B). SEE FIG. 3.



STEPS 13, 14 & 15 (STATION WAGON ONLY)

STEP 13 REMOVE COVER PLATE & SCREWS FROM REAR SEAT RISER & DISCARD.

STEP 14 CEMENT SEAL TO OPENING IN REAR UPPER DUCT. SEE VIEW E.

STEP 15 CEMENT GASKET ON REAR DEFLECTOR. SLIDE REAR DEFLECTOR INTO OPENING IN REAR SEAT RISER &

ATTACH WITH SCREWS (IN BAG A). SEE VIEW E.

STEP 16 (ALL EXCEPT STA. WAGON) CEMENT LIP OF REAR UPPER DUCT OPENING & PLACE PLUG OVER OPENING. SEE VIEW D.

STEP 17 ATTACH J-NUTS (IN BAG C) TO FLANGE OF REAR UPPER DUCT & SLIDE DUCT THRU OPENING IN INTERMEDIATE CROSS SILL ASM. TO ALIGN HOLES & SECURE WITH SCREWS (IN BAG B). SEE VIEW F.

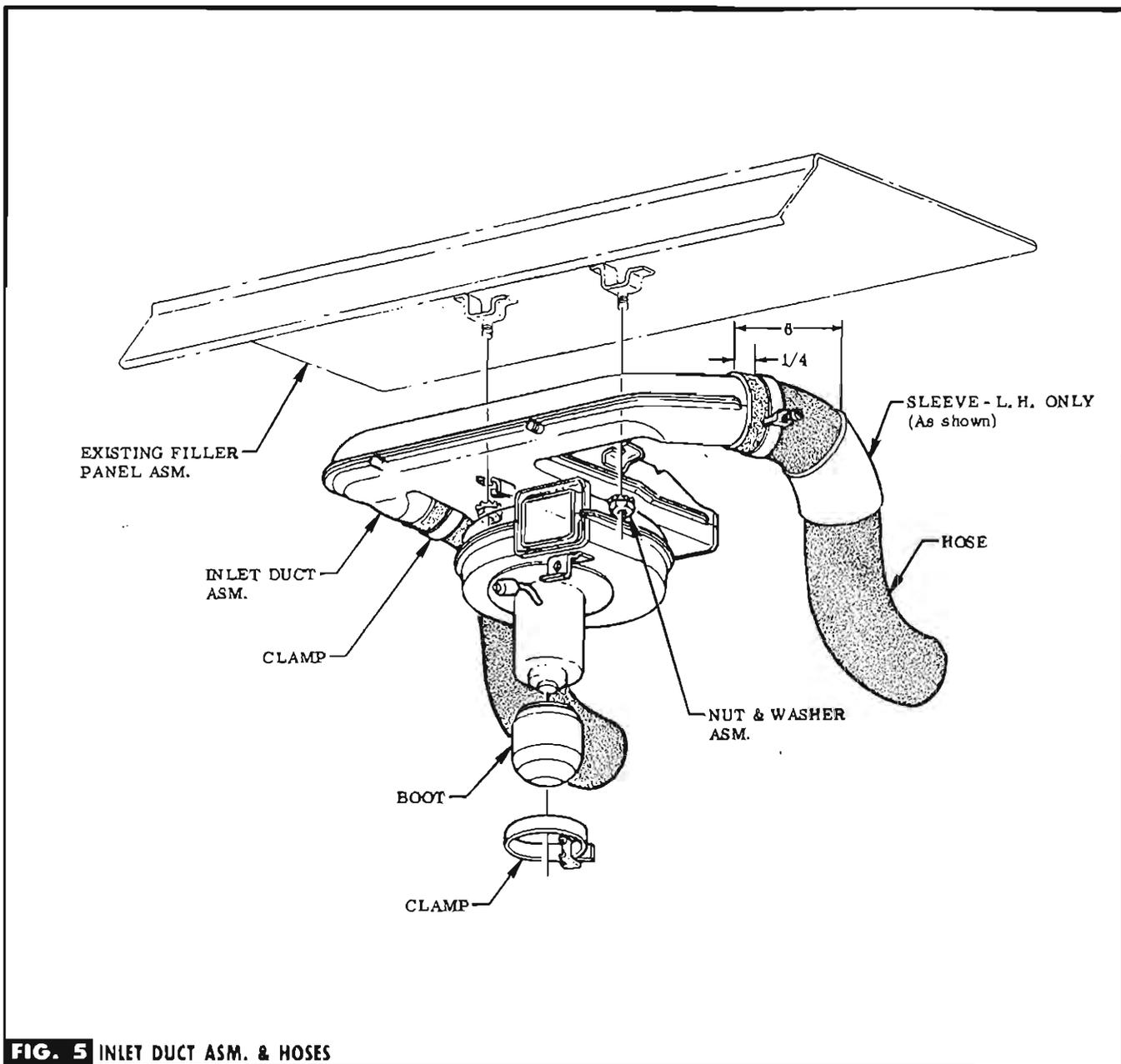


FIG. 5 INLET DUCT ASM. & HOSES

STEP 18 REMOVE FILLER PANEL ASM. & ATTACHING PARTS & RETAIN.

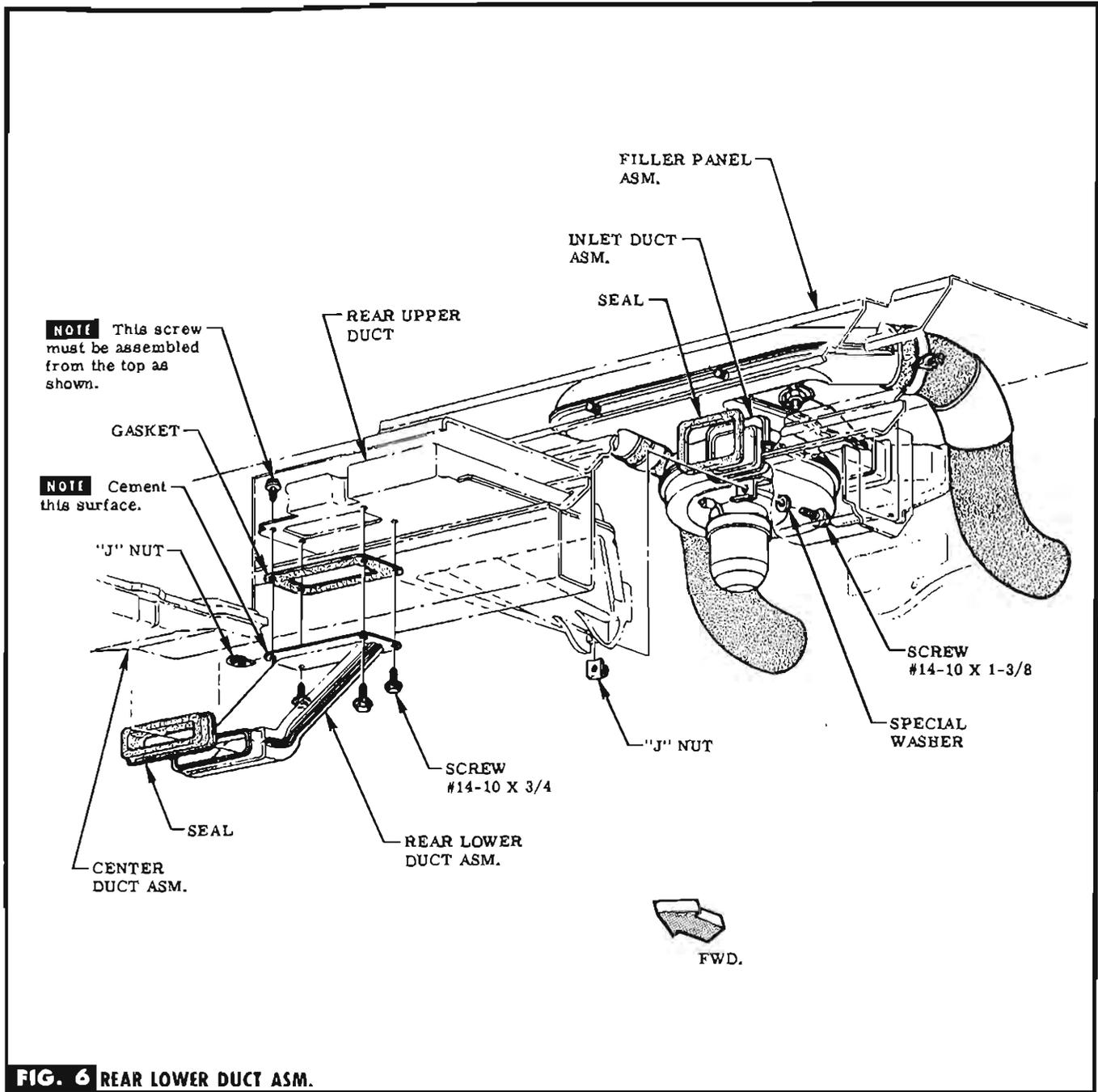
STEP 19 INSERT CLAMPS (IN BAG D) & SLEEVE (L. H. ONLY) ON HOSES & INSTALL ON INLET DUCT & TIGHTEN CLAMPS. SEE FIG. 5.

STEP 20 INSERT BOOT TO BLOWER MOTOR WITH CLAMP

(IN BAG D). SEE FIG. 5.

STEP 21 LOOSELY INSTALL NUT ASM. (IN BAG C) TO FILLER PANEL, SLIP INLET DUCT ASM. ONTO STUDS & TIGHTEN. SEE FIG. 5.

NOTE Position ends of all clamps 3/8 to 1/2 inches away from sheet metal to avoid conditions which might cause vibration noises & for service.



STEP 22 SLIP J-NUT (IN BAG C) INTO PLACE. CEMENT SEAL TO INLET DUCT. SEE FIG. 6.

STEP 23 LOWER FILLER PANEL ASM. IN PLACE & ATTACH INLET DUCT ASM. TO REAR UPPER DUCT WITH SCREW, WASHER & J-NUT (IN BAG C). SEE FIG. 6.

STEP 24 ATTACH J-NUT (IN BAG B), CEMENT GASKET &

POSITION SEAL ON REAR LOWER DUCT. SEE FIG. 6.

STEP 25 SLIDE REAR LOWER DUCT INTO CENTER DUCT, ATTACH TO REAR UPPER DUCT WITH SCREWS PROVIDED (IN BAG B). SEE FIG. 6.

NOTE One screw must be assembled from the top as shown.

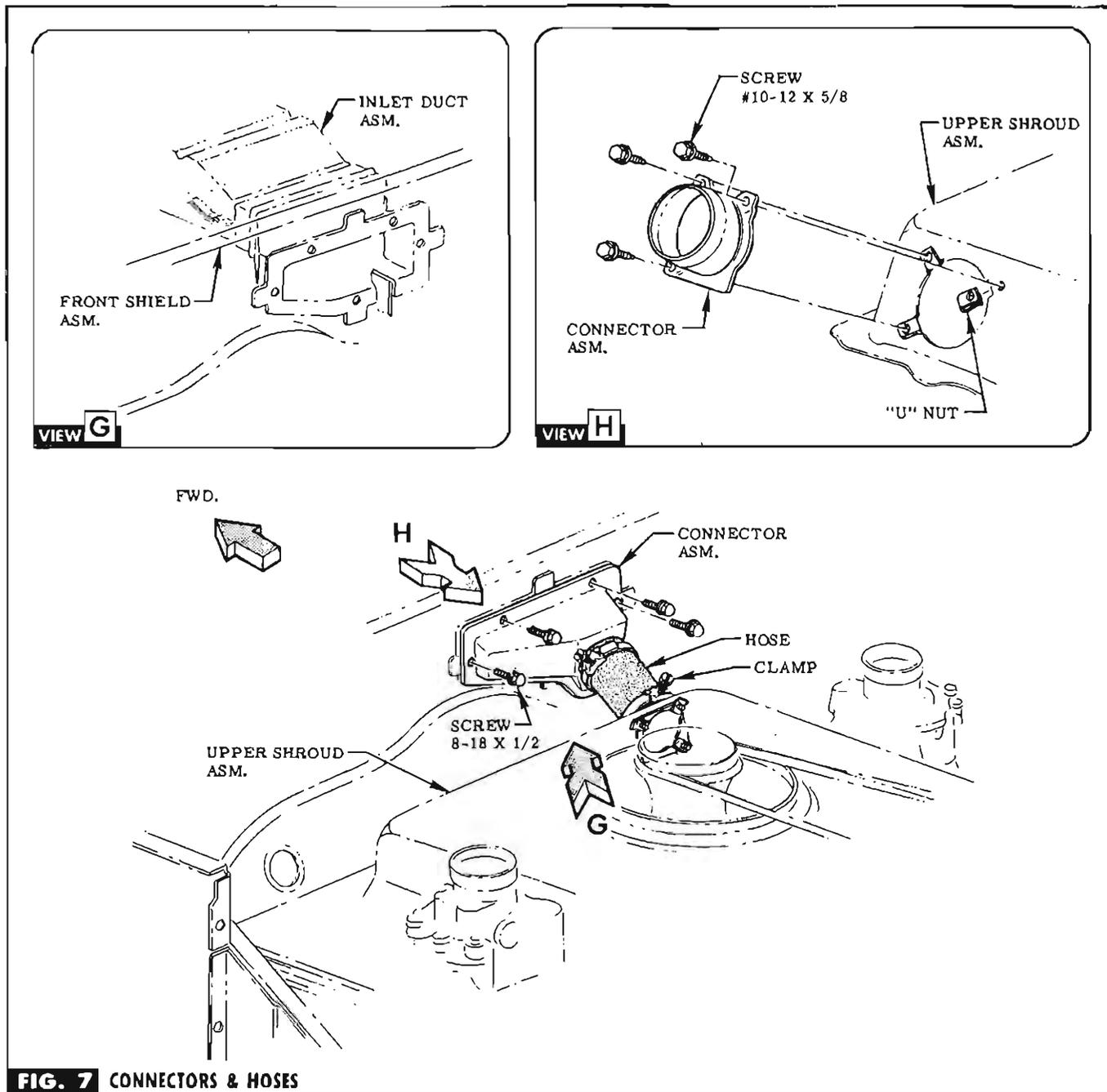


FIG. 7 CONNECTORS & HOSES

STEP 26 INSERT HAND THRU OPENING & PULL INLET DUCT THRU. INSTALL CONNECTOR WITH SCREWS PROVIDED (IN BAG D). SEE FIG. 7 & VIEW G.

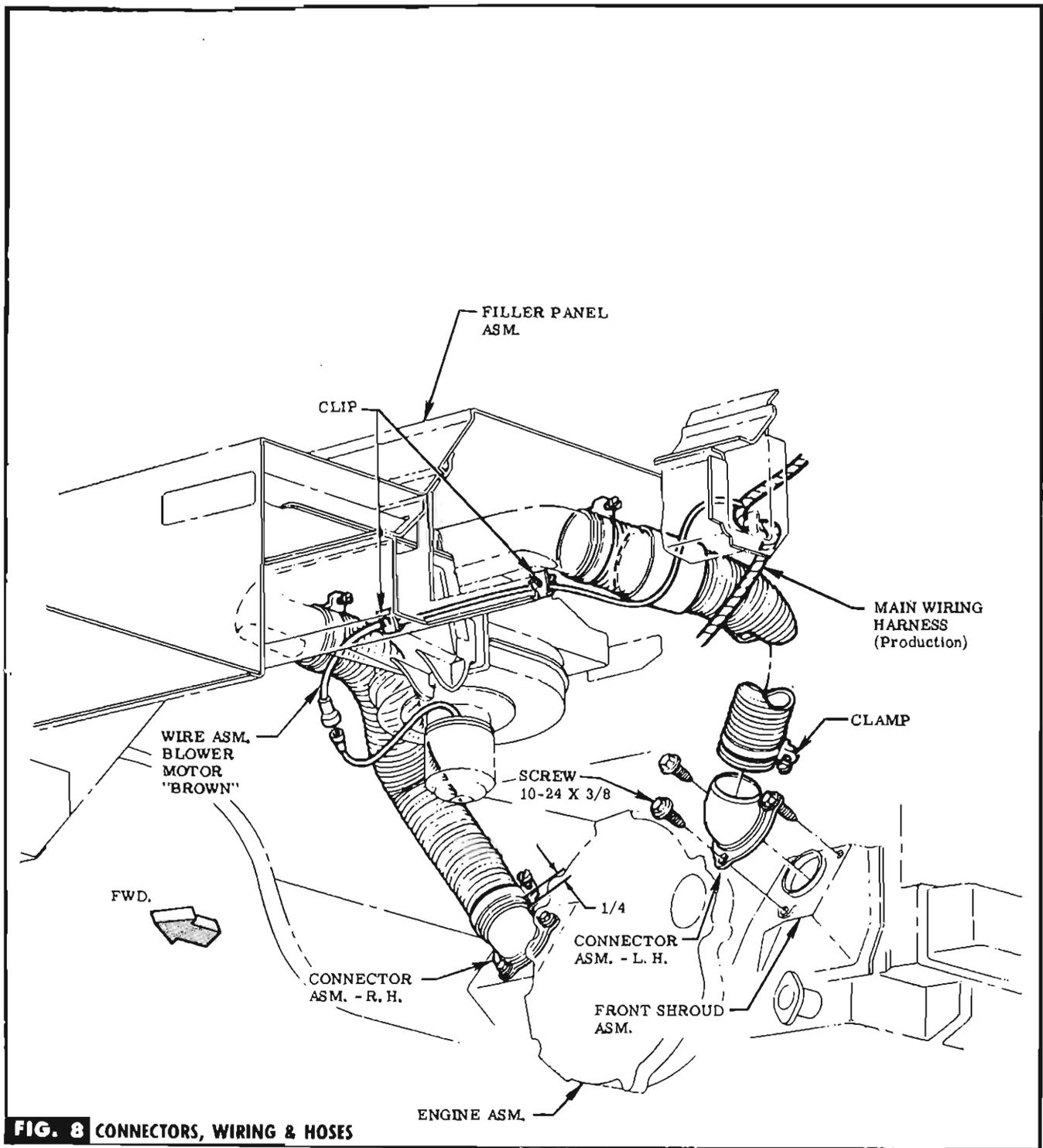
STEP 27 REMOVE COVER FROM UPPER SHROUD ASM. & DISCARD. RETAIN SCREWS.

STEP 28 SLIP J-NUTS (IN BAG D) INTO PLACE. INSTALL

CONNECTOR ASM. & SECURE WITH RETAINED SCREWS. SEE VIEW H.

STEP 29 PLACE CLAMPS ON THE HOSE & INSTALL HOSE. TIGHTEN CLAMPS. SEE FIG. 7.

NOTE Position ends of all clamps 3/8 to 1/2 inches away from sheet metal to avoid conditions which might cause vibration noises & for service.



STEP 30 REMOVE COVERS FROM FRONT SHROUD ASM. & DISCARD. RETAIN SCREWS.

STEP 31 INSTALL CONNECTORS TO FRONT SHROUD ASM. WITH PROVIDED SCREWS (IN BAG D). SEE FIG. 8.

STEP 32 SLIP CLAMPS (IN BAG D) ON HOSE. SLIDE HOSE ON CONNECTOR. POSITION & TIGHTEN CLAMPS. SEE FIG. 8.

STEP 33 INSTALL CLIPS TO INTERMEDIATE CROSS SILL ASM. & ROUTE BROWN WIRE THRU CLIPS & CONNECT TO BLOWER MOTOR LEAD. SEE FIG. 8.

NOTE Position ends of all clamps 3/8 to 1/2 inches away from sheet metal to avoid conditions which might cause vibration noises & for service.

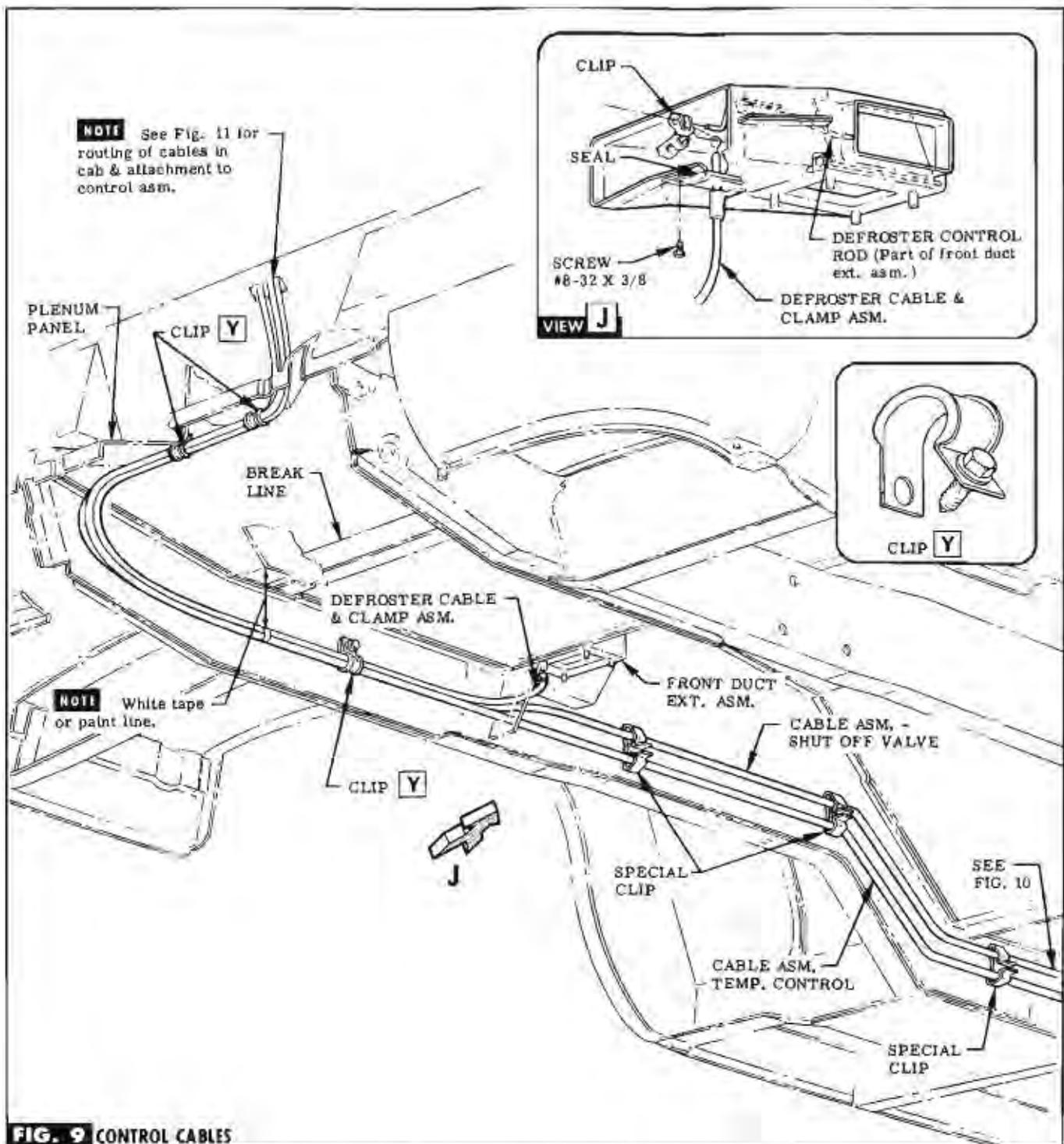


FIG. 9 CONTROL CABLES

STEP 34 ALIGN WHITE TAPE OR PAINT MARKS ON CABLES DIRECTLY BELOW FLOOR TO TOE PANEL BREAK LINE BEFORE CLIPPING TO UNDERBODY. ROUTE CABLES ALONG RIGHT SIDE RAIL THRU CLIPS (IN BAG B) ON PLENUM PANEL & THRU OPENING IN TOE PANEL. SEE FIG. 9.

STEP 35 CEMENT SEAL TO FRONT DUCT EXTENSION. SEE VIEW J.

STEP 36 SLIP DEFROSTER CABLE THRU HOLE IN FRONT DUCT EXTENSION & ATTACH WIRE LOOP TO DEFROSTER

CONTROL ROD WITH CLIP PROVIDED (IN BAG B). SEE VIEW J.

STEP 37 ATTACH DEFROSTER CABLE & CLAMP TO FRONT DUCT EXTENSION WITH SCREW (IN BAG B). SEE VIEW J.

STEP 38 CONTINUE TO ROUTE CABLES REARWARD THRU CLIPS (IN BAG B) ON RIGHT SIDE RAIL. SEE FIG. 9.

NOTE For rear installation of cables in vehicle, See Fig. 10.

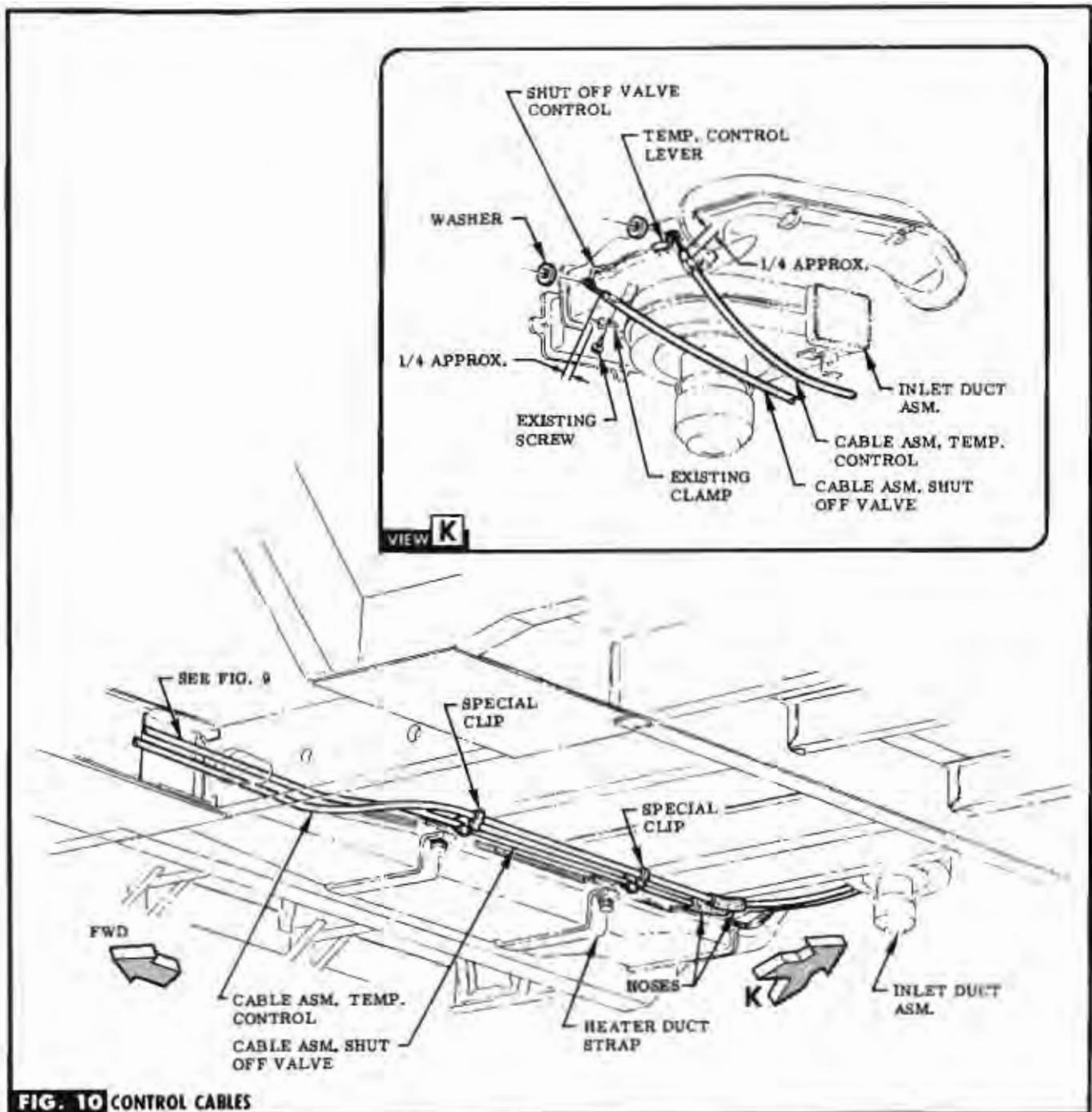


FIG. 10 CONTROL CABLES

NOTE For front installation of cables in vehicle, See Fig. 9.

STEP 39 ROUTE CABLES THRU HOLE IN CROSSMEMBER & ATTACH TO CLIPS (IN BAG B) LEFT OF DUCT STRAPS ON INTERMEDIATE & REAR CROSSMEMBERS. SEE FIG. 10,

STEP 40 ALIGN HOSES ON CABLES ON REAR EDGE OF INTERMEDIATE CROSS SILL ASM. & CONTINUE TO INLET

DUCT, SEE FIG. 10.

STEP 41 ATTACH THE TWO CONTROL CABLES TO THE INLET DUCT WITH EXISTING CLAMPS & SCREWS. SECURE WIRE LOOPS OF CABLES TO THEIR RESPECTIVE CONTROL WITH RETAINING WASHERS PROVIDED (IN BAG A). SEE VIEW K.

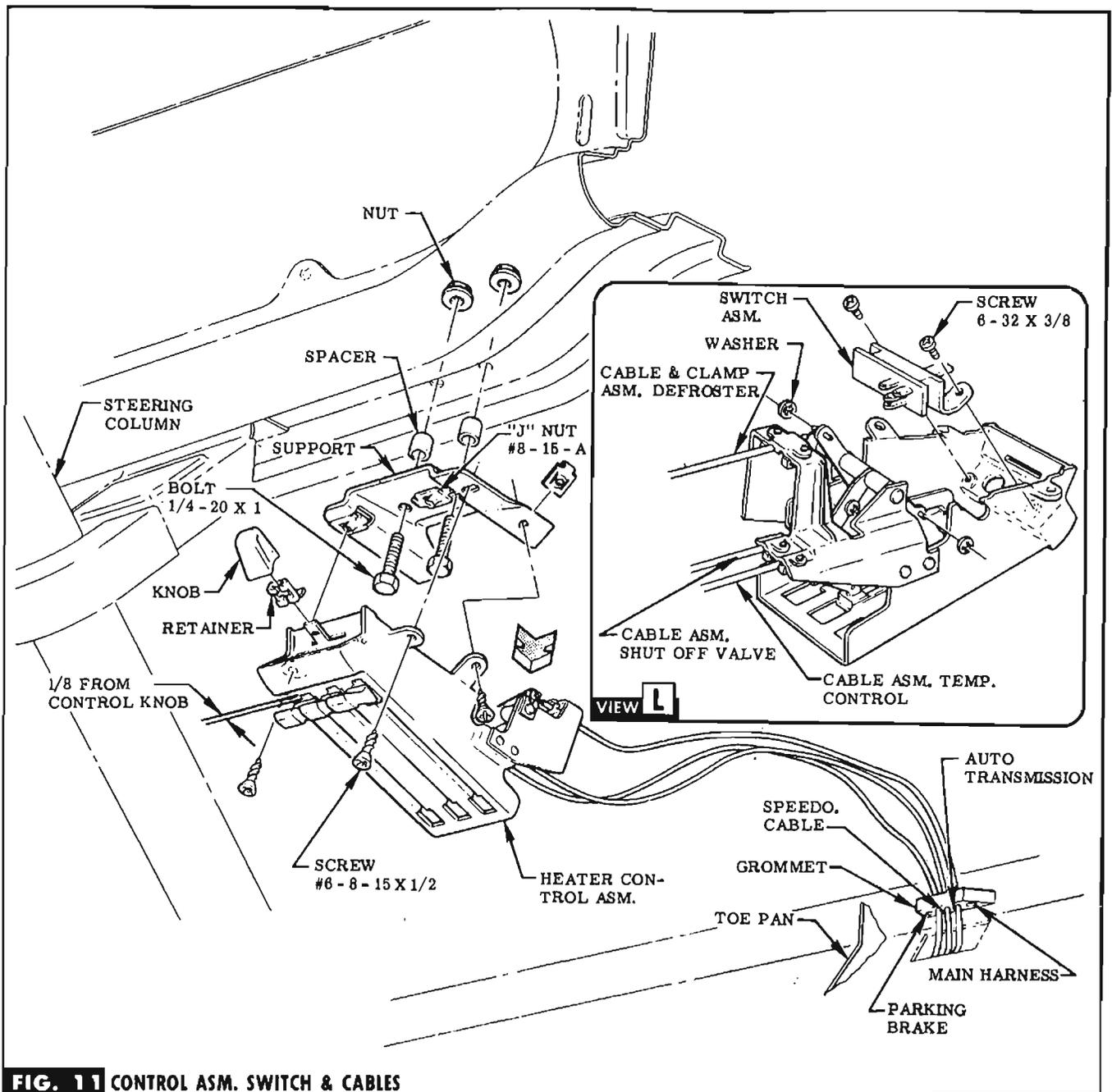


FIG. 11 CONTROL ASM. SWITCH & CABLES

STEP 42 ATTACH SWITCH ASM. TO HEATER CONTROL WITH SCREWS PROVIDED (IN BAG A). SEE VIEW L.

STEP 43 MOVE AIR, HEAT & DEFROSTER KNOBS DOWN SO THAT LEVERS ARE 1/8 INCH FROM TOP OF SLOT. THE CONTROL LEVERS ARE TO BE POSITIONED AS SHOWN WHEN MAKING THE ATTACHMENT OF EACH END OF THE CONTROL CABLES. AFTER THE UNIT IS COMPLETELY INSTALLED IN THE VEHICLE & ALL LEVERS ARE SET IN THE "OFF" OR "UP" POSITION, THE FRICTION IN THE CONTROL & CABLES IS SUFFICIENT TO HOLD THE LEVERS TO WITHIN 1/8 OF THE TOP OF THE SLOT IN THE CONTROL FACE PLATE. SEE FIG. 11.

STEP 44 ATTACH THE THREE CABLES TO THE HEATER CONTROL WITH EXISTING CLAMPS & SCREWS. SECURE WIRE LOOPS OF CABLES TO THEIR RESPECTIVE CONTROL

LEVERS WITH RETAINING WASHERS PROVIDED (IN BAG A). SEE VIEW L.

STEP 45 INSTALL KNOB (IN BAG A) ON SWITCH LEVER WITH RETAINER PROVIDED (IN BAG A). SEE FIG. 11.

STEP 46 INSTALL HEATER CONTROL SUPPORT TO INSTRUMENT PANEL WITH BOLTS, SPACERS & NUTS PROVIDED (IN BAG A). SEE FIG. 11.

STEP 47 SLIP J-NUTS (IN BAG A) IN PLACE ON SUPPORT & INSTALL HEATER CONTROL TO SUPPORT WITH SCREWS PROVIDED (IN BAG A). SEE FIG. 11.

STEP 48 ROUTE CABLES THRU HOLES IN GROMMET & TOE PANEL & PRESS GROMMET (IN BAG A) INTO POSITION. SEE FIG. 11.

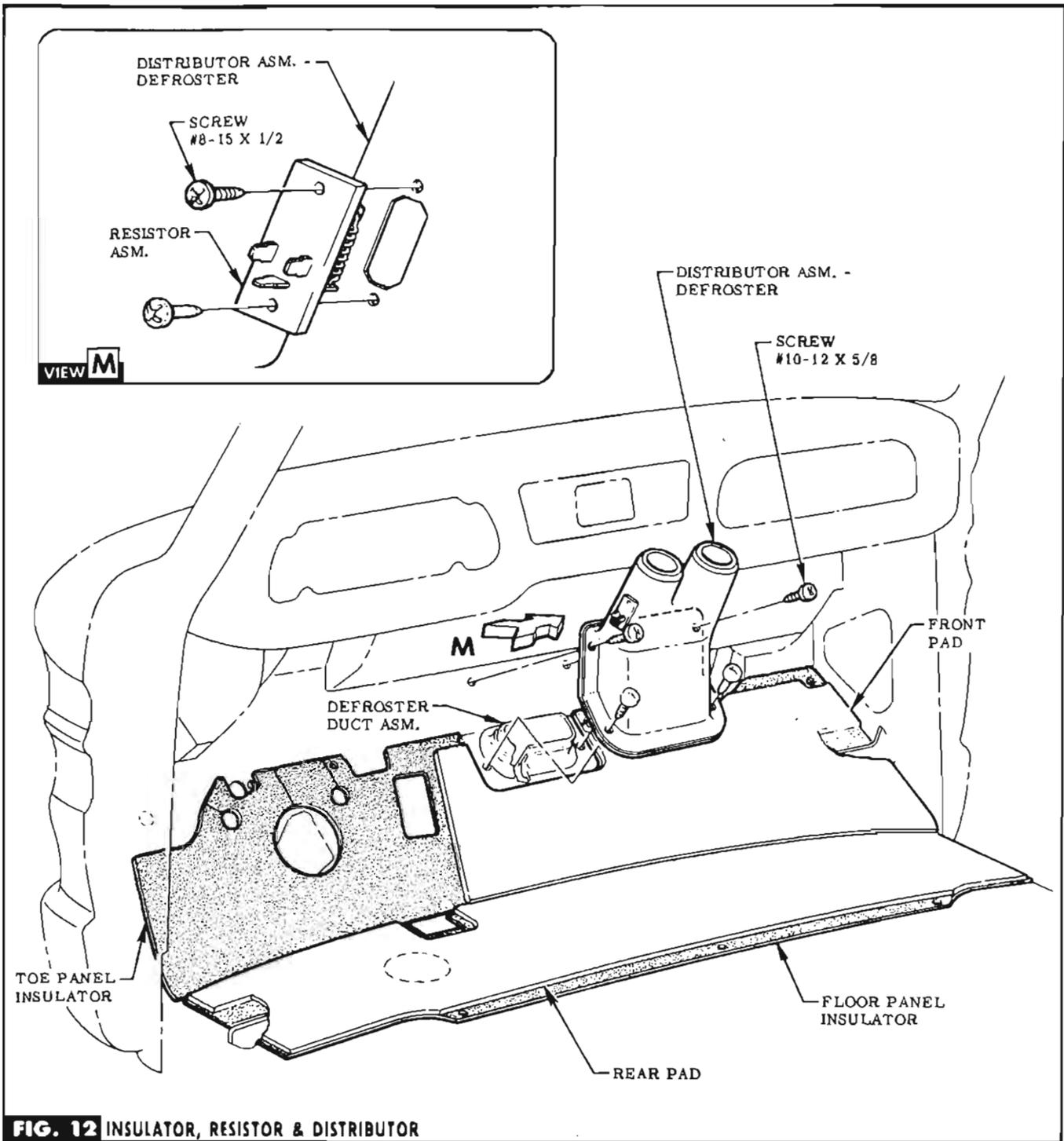


FIG. 12 INSULATOR, RESISTOR & DISTRIBUTOR

STEP 49 CEMENT TOE PANEL & FLOOR PANEL INSULATORS TO UNDERBODY. SEE FIG. 12.

STEP 50 INSTALL FRONT & REAR PAD. SEE FIG. 12.

STEP 51 ATTACH RESISTOR (IN BAG A) TO DISTRIBUTOR

WITH SCREWS PROVIDED (IN BAG A). SEE VIEW M.

STEP 52 INSTALL DISTRIBUTOR WITH SCREWS PROVIDED (IN BAG A). SEE FIG. 12.

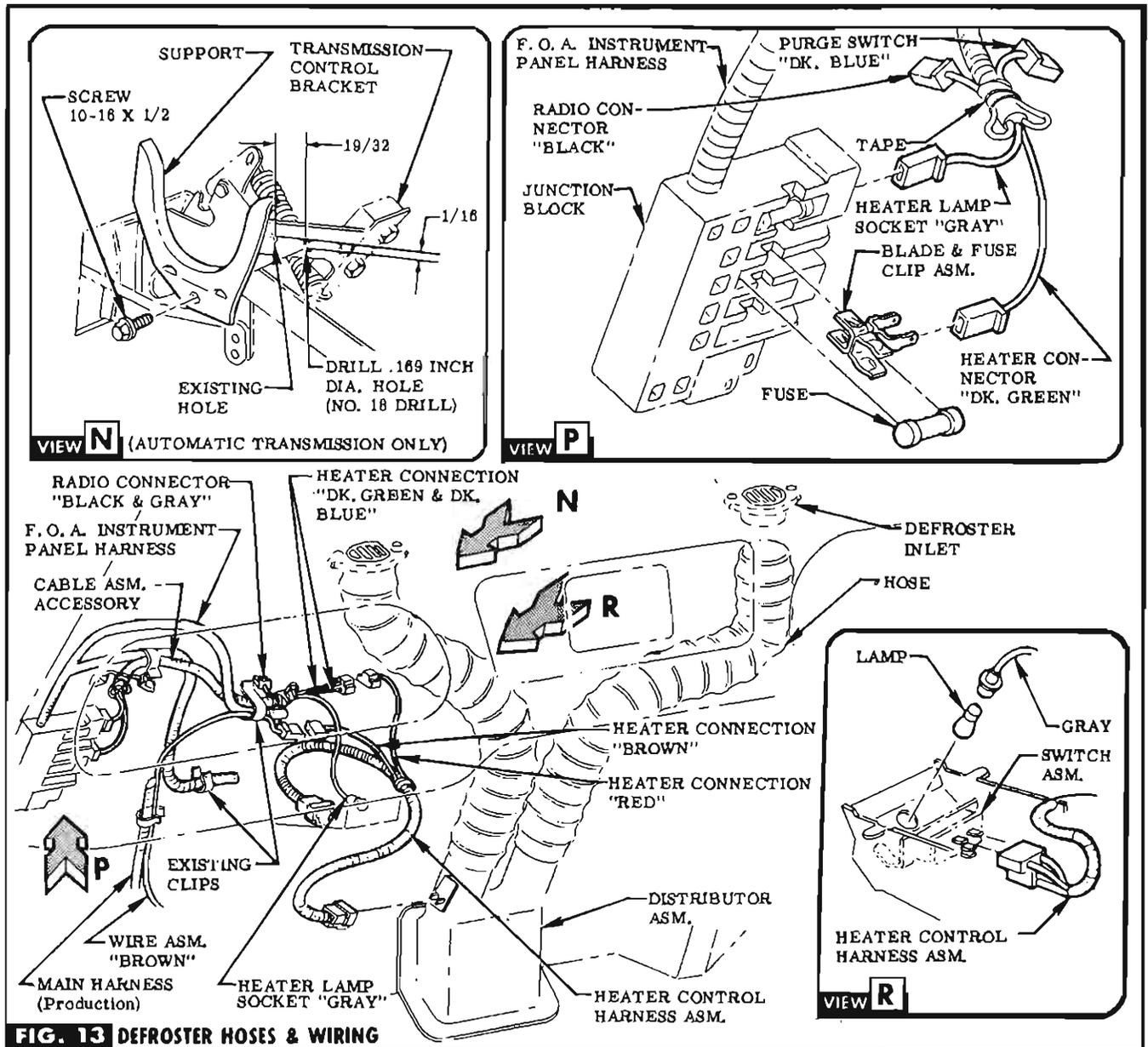


FIG. 13 DEFROSTER HOSES & WIRING

STEP 53 IF AUTOMATIC TRANSMISSION EXISTS, INSTALL HOSE SUPPORT ON TRANSMISSION CONTROL BRACKET WITH SCREW PROVIDED (IN BAG A). SEE VIEW N.

STEP 54 REMOVE INSTRUMENT PANEL COMPARTMENT. INSTALL DEFROSTER HOSES ON INLETS & DISTRIBUTOR ASM. SEE FIG. 13. REPLACE INSTRUMENT PANEL COMPARTMENT. **NOTE** If automatic transmission exists route L. H. hoses over hose support.

STEP 55 INSTALL BLADE & FUSE CLIP ASM. INTO RECEPTACLE MARKED "HEATER - B. U. LPS." ON JUNCTION BLOCK. SEE VIEW P.

STEP 56 UNTAPE DARK GREEN WIRE CONNECTOR FROM ACCESSORY HARNESS & PLUG IN FUSE CLIP ASM. PREVIOUSLY INSTALLED. SEE VIEW P.

STEP 57 IF ACCESSORY HARNESS HAS BEEN INSTALLED UNTAPE & PLUG GRAY WIRE CONNECTOR INTO BACK OF

JUNCTION BLOCK INTO RECEPTACLE MARKED "PANEL LPS." SEE VIEW P. **NOTE** If radio exists gray wire will already be connected.

STEP 58 PLUG ONE END OF CONTROL HARNESS ASM. INTO RESISTOR ASM. ON DISTRIBUTOR & OTHER END INTO SWITCH. SEE VIEW R.

STEP 59 CONNECT RED LEAD WITH DARK BLUE & GREEN WIRE CONNECTOR OF ACCESSORY HARNESS. INSERT LAMP (IN BAG A) INTO SOCKET ON GRAY WIRE & PLUG INTO CONTROL ASSEMBLY. SEE VIEW R.

STEP 60 CONNECT BROWN LEAD OF CONTROL HARNESS TO BROWN WIRE ASM. & ROUTE WIRE THRU CLIPS WITH MAIN HARNESS & CONNECT TO BLOWER MOTOR LEAD. SEE FIG. 8.

STEP 61 INSERT FUSE INTO FUSE CLIP ASM. PREVIOUSLY INSTALLED. SEE VIEW P.