

# SERVICE NOTE



493A/495A-1

MODEL 493A/495A TRAVELING WAVE TUBE AMPLIFIERS  
Serials Below 304-00226

AIR DUCT KIT 493A-95B

Air Duct Kit, Stock No. 493A-95B, is available for 493A/495A Traveling Wave Tube (TWT) Amplifiers, serials below 304-00226. Installation of this kit will promote more efficient TWT collector cooling.

Installation requires one hole to be drilled in the chassis, air duct brackets mounted, and duct installed. No tests or adjustments are necessary after installation.

## PARTS FURNISHED IN KIT 493A-95B

Qty.	Description	Stock No.
1	Air Duct . . . . .	495A-85A
1	Bracket, fan . . . . .	489A-12S
2	Machine screw, binding head, 6-32 x 1/2 inch . . . . .	2390-0001
2	Machine screw, binding head, 6-32 x 5/16 inch . . . . .	2390-0009
1	Machine screw, round head, 6-32 x 1 inch . . . . .	2360-0013
3	Hex nut, 6-32 x 5/16 inch w/lockwasher . . . . .	2420-0001
1	Hex nut, 6-32 x 5/16 inch . . .	2420-0003
1	Spacer, brass, #6-8 x 9/16 inch . . . . .	0380-0009

## INSTALLATION PROCEDURE

1. Remove ac power cable from instrument.
2. Remove four flat head screws from top cover. Slide cover back and off instrument.
3. Repeat process of step 2 with bottom cover.

### Note

Refer to Figure 1 for the following steps.

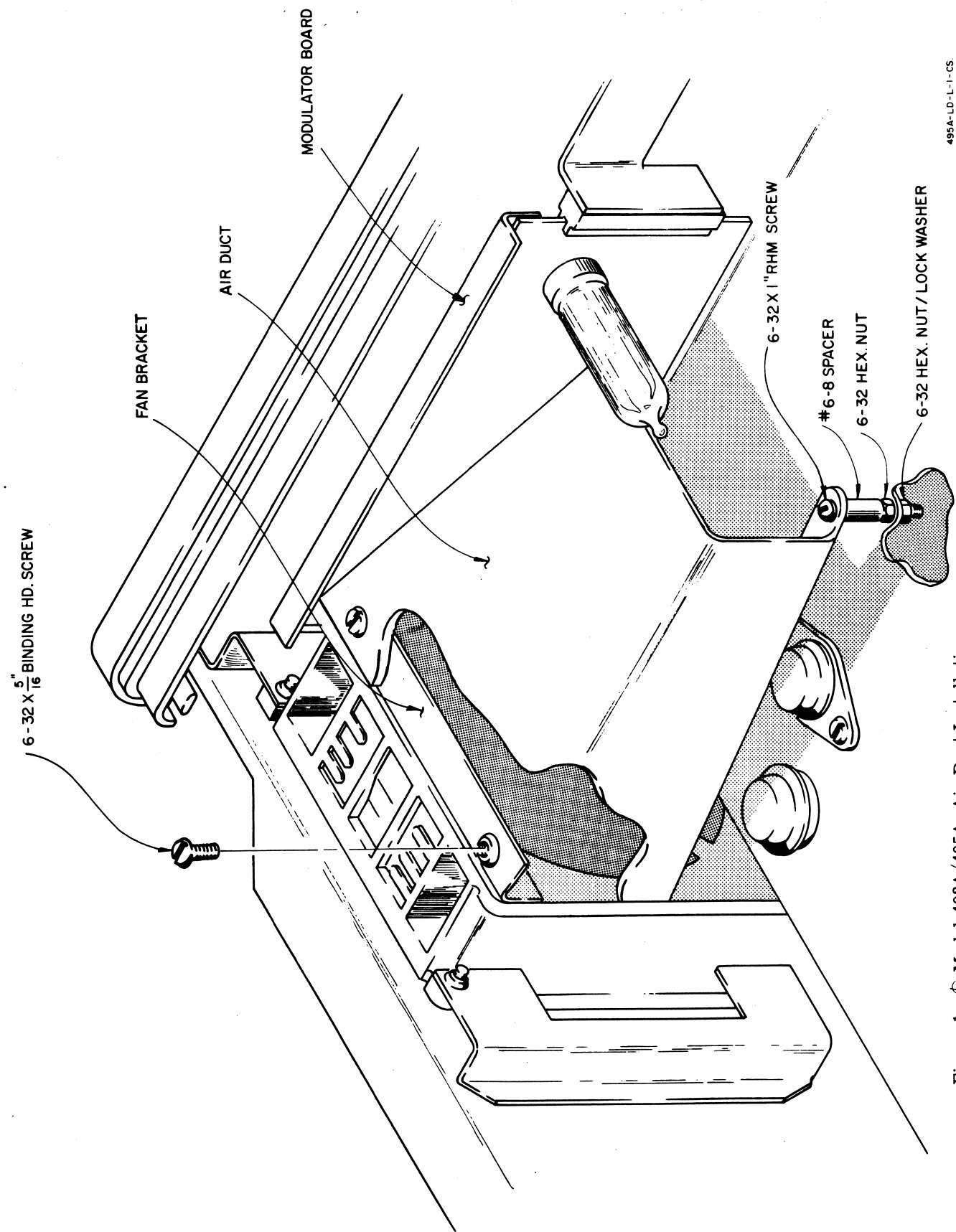
4. Install fan bracket, Stock No. 489A-12S, on fan shroud. Use 6-32 x 1/2 inch binding head screws and 6-32 nuts with lockwasher.
5. Holding air duct and spacer in position, mark position of spacer center on chassis.
6. Remove duct and spacer from instrument. Center punch and drill a #14 hole in chassis where marked.
7. Assemble 6-32 x 1 inch screw, spacer, and nut without lockwasher to duct as shown.
8. Install duct in instrument with two 6-32 x 5/16 inch binding head screws and 6/32 nut with lockwasher. Duct should not touch any components on modulator board.
9. Replace top and bottom covers.
10. Replace ac power cable and instrument is ready for use.

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COMPLETE COVERAGE IN  
ELECTRONIC MEASURING EQUIPMENT

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495A-LD-L-1-CS

Figure 1. Model 493A/495A, Air Duct Installation