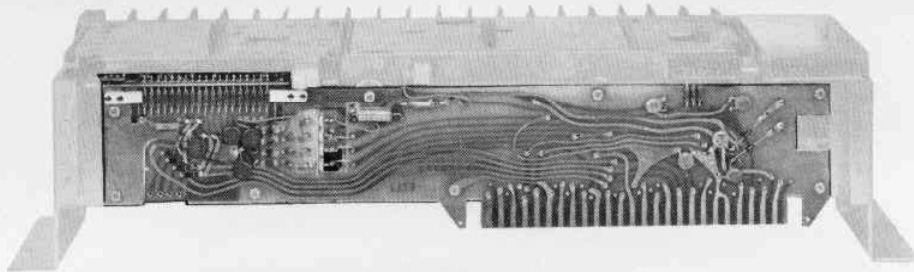


TRANSMITTER INTERCONNECT BOARD

MODEL TLN4729B

EXCITER/DRIVER INTERCONNECT BOARD

MODEL TLN4743B



AEPS-8577-O

These interconnect boards connect most of the transmitter input and output functions to the station 50-conductor intercable. Two transmitter models are available:

--TLN4729B Transmitter Interconnect Board for all intermittent duty stations and all 72-76 MHz band continuous duty stations.

--TLN4743B Exciter/Driver Interconnect Board for all continuous duty stations except 72-76 MHz band continuous duty stations.

Two interconnect board models are available to permit two station transmitter "rack up" arrangements. One puts the entire transmitter on one "shelf" in the station. This arrangement is used for all intermittent duty stations and for 72-76 MHz stations. The exciter and power control board plug directly into the interconnect board.

With the other station arrangement, the transmitter is divided into separate exciter/driver and power amplifier/power control "shelves". This allows additional power amplifier heatsink capability. In this arrangement,

only the exciter plugs directly into the interconnect board. The power control board picks up its A+, A-, and POWER CONTROL functions via separate wires from the power amplifier.

NOTE

72-76 MHz stations are continuous duty stations even though the transmitter occupies only one "shelf". RF output power is low enough so as not to require additional heat-sinking for continuous duty operation.

Filtering chokes, feedthru capacitors, and bypass capacitors are used on voltage and ground **runs** to prevent rf radiation from being conducted to the 50-conductor cable and affecting station operation. The feedthru capacitors are chassis mounted as indicated on the schematic diagram.

Filtering chokes L910 and L911 provide filtering for an optional built-in station metering kit. Capacitors C917, C918, and C919 are connected only on intermittent duty & 72-76 MHz stations. These capacitors shunt rf energy on the A+, KEYED A-, and POWER CONTROL leads to ground.



MOTOROLA INC.
Communications Division

service publications
1301 E. Algonquin Road, Schaumburg, IL 60196

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
------------------	-------------------	-------------

PARTS LIST

TLN4729B and TLN4743B

Exciter/Driver Interconnect Board

PL-3238-A

C901	21-82372C04	CAPACITOR, fixed; unl. stated
C903	21-82372C04	.05 +80-20%; 25 V
C905	23-83214C02	.05 +80-20%; 25 V
C906	21-82372C04	15 ±20%; 25 V
C908	21-82372C04	.05 +80-20%; 25 V
C910	23-82783B31	47 ±20%; 20 V
C913, 914	21-82204B06	.05 +80-20%; 25 V
C917, 918, 919	21-82187B07	100 pF ±10%; 500 V
L901 thru 904	24-80900A61	COIL, RF;
L905, 906, 907	24-83961B01	0.62 mH
L908	24-854314	coded BRN
L909	24-83961B01	choke; 33 uH
L910, 911	24-82723H01	coded BRN
		choke; 1.2 uH
R901 thru 904	6-129225	RESISTOR, fixed; ±10%; 1/4 W;
R905	6-129226	10k
		100k

TLN4728A/B Transmitter Chassis & Heat Sink Kit

TLN4729A/B Exciter Chassis & Hardware Kit

TLN4743A/B Transmitter Chassis & Heat Sink Kit

TLN4744A Exciter Chassis & Hardware Kit

TLN4745A Exciter Chassis & Hardware Kit

TLN4757A Transmitter Chassis & Heat Sink Kit

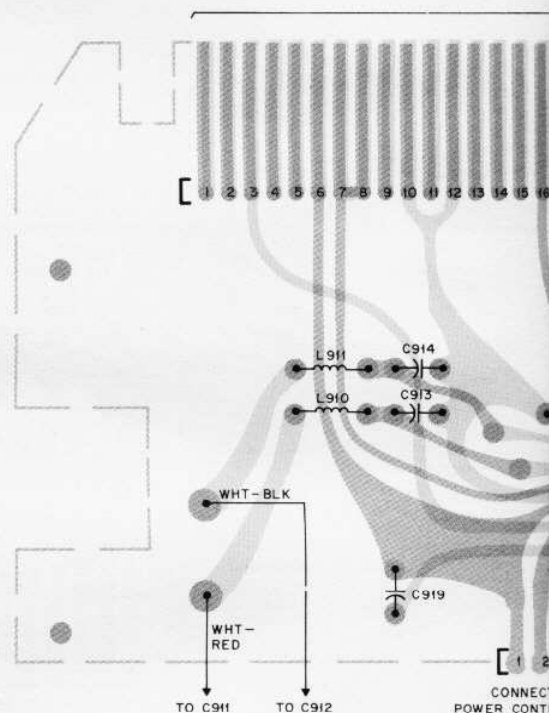
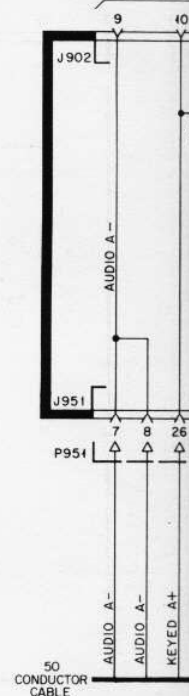
TLN4781A Transmitter Chassis & Heat Sink Kit

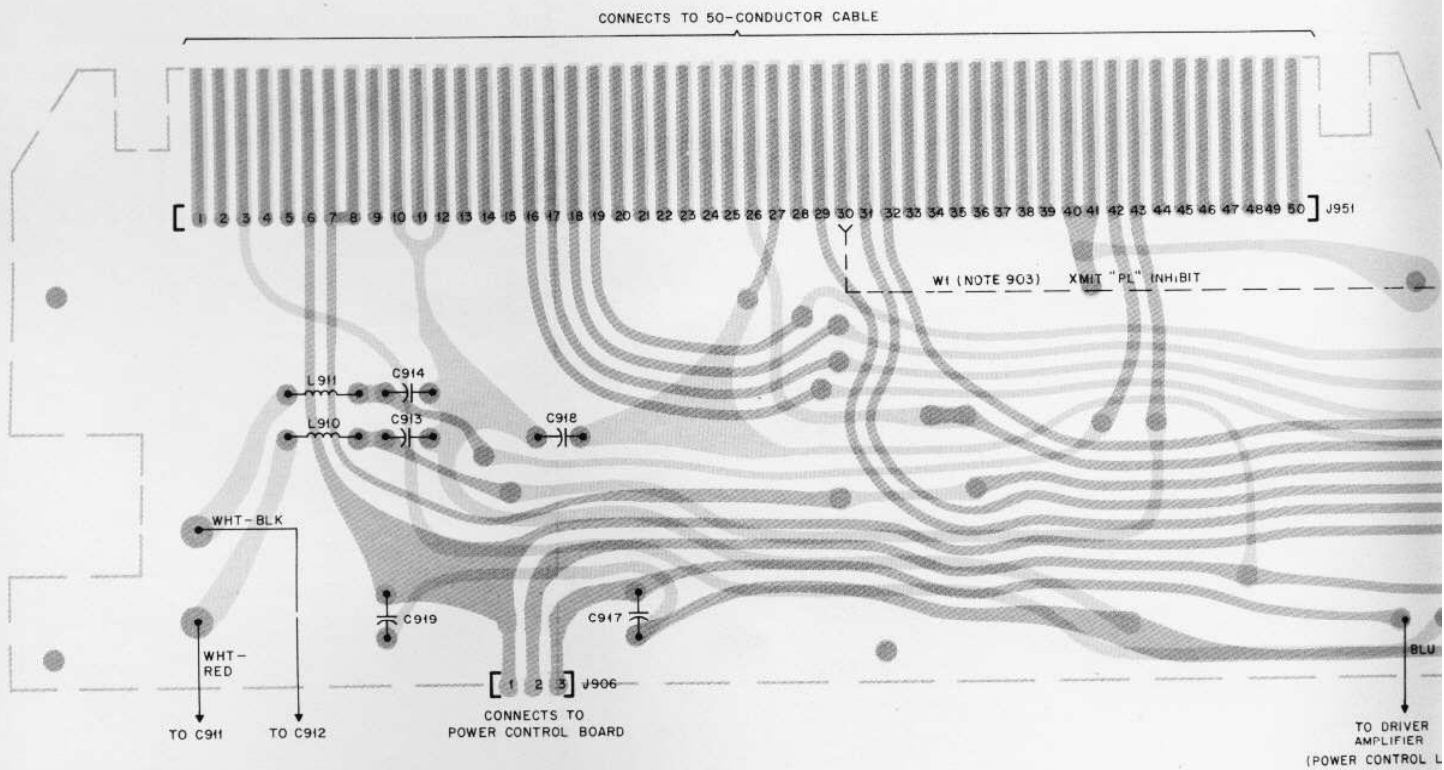
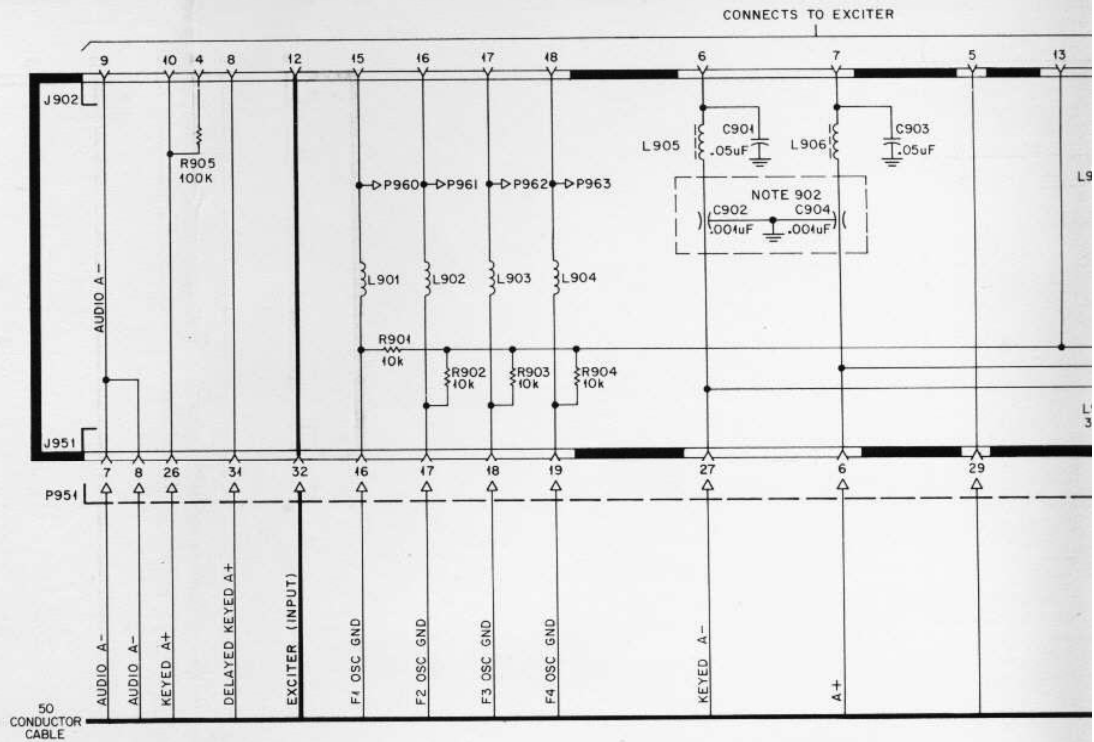
TLN5150A Transmitter Chassis & Heat Sink Kit PL-1835-B

C902, 904, 907, 909	21-861219	CAPACITOR, fixed;
C911, 912	21-821474	.001 uF +100-0%; 500 V
		470 pF ±20%; 500 V

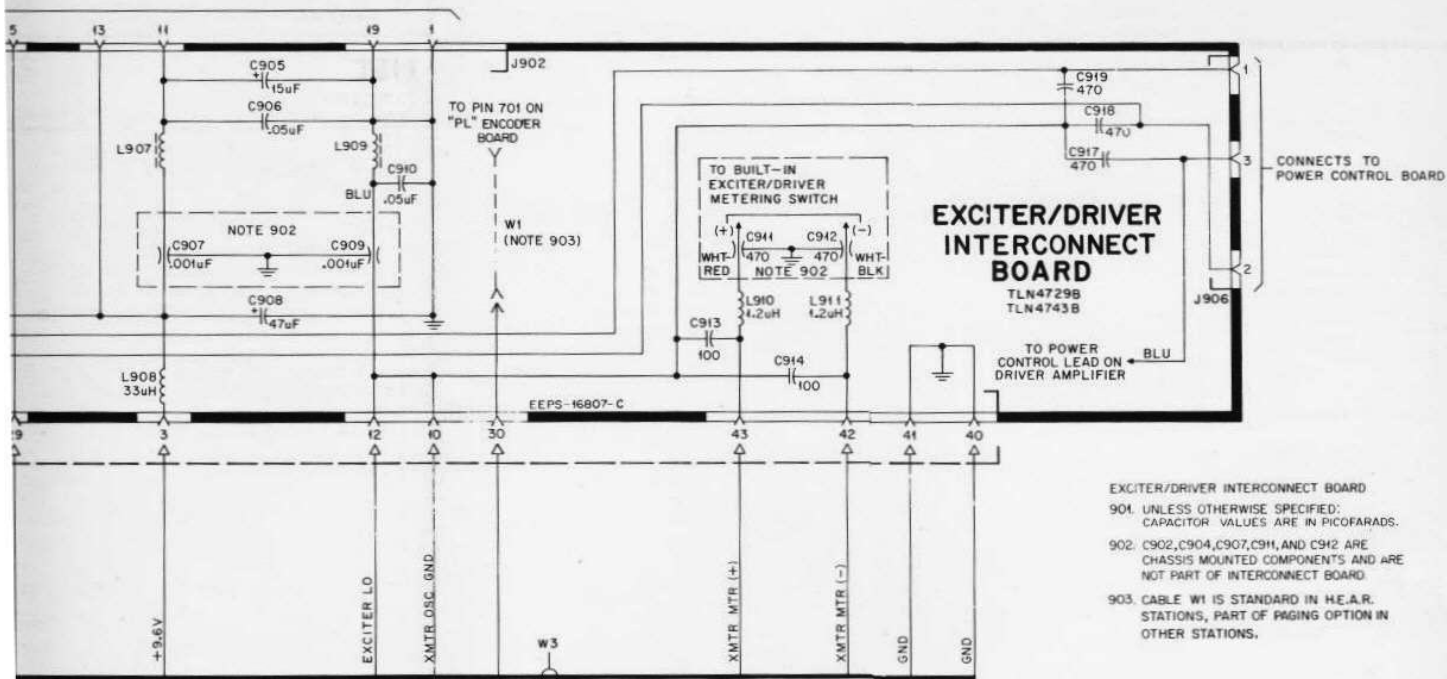
NOTE:

Additional electrical components are listed in the Power Amplifier Section; hardware is listed in the Transmitter Hardware Kits Section.





SHOWN FROM COMP

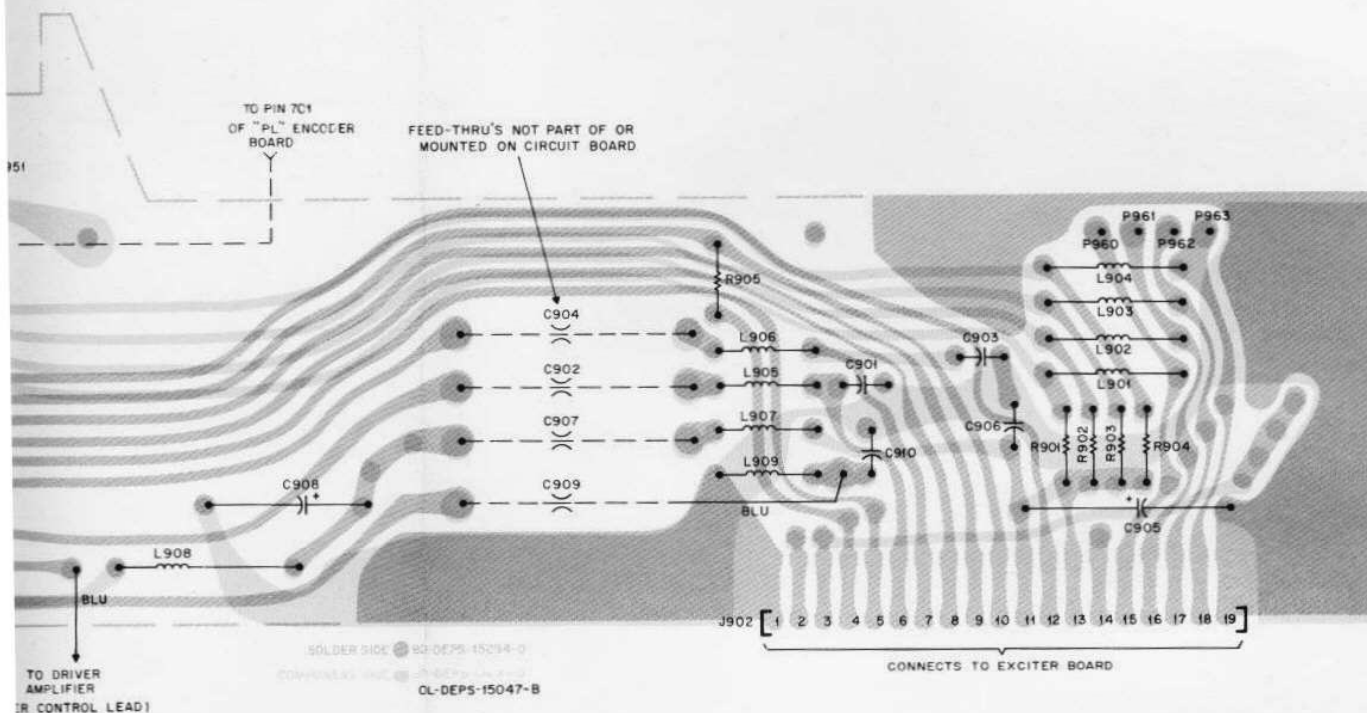


EXCITER/DRIVER INTERCONNECT BOARD

901. UNLESS OTHERWISE SPECIFIED:
CAPACITOR VALUES ARE IN PICOFARADS.

902. C902, C904, C907, C911, AND C912 ARE
CHASSIS MOUNTED COMPONENTS AND ARE
NOT PART OF INTERCONNECT BOARD.

903. CABLE W1 IS STANDARD IN H.E.A.R.
STATIONS, PART OF PAGING OPTION IN
OTHER STATIONS.



COMPONENT SIDE

TLN4729B Transmitter Interconnect Board
and TLN4743B Exciter/Driver Interconnect Board
Schematic Diagram and Circuit Board Detail
Motorola No. PEPS-16960-E
5/1/77-UP