

## TONE FILTER MODIFICATION KITS

PL-4036613-G1,2,3  
FOR  
PROGRESS LINE RECEIVERS

Modification Kits PL-4036613-G1,2,3 and 6, provide components for addition to the tone filter networks of the Progress Line receivers listed below when attenuation of Channel Guard tones is desired.

Modification Kits and their applicable Modification Instructions are as follows: PL-4036613-G1 and A-4036615 (Low Band), PL-4036613-G2 and A-4036614 (High Band), PL-4036613-G3 and A-4036616 (450-470 MC), and PL-4036613-G6 and A-4036615 (72-76 MC). Check the chart below to find the modification instruction for any specific receiver model.

Type	ER-24-A	ER-24-B	ER-25-C	ER-25-D	ER-26-B
Model	4ER24A1 4ER24A2 4ER24A11 4ER24A12	4ER24B1 4ER24B2 4ER24B11 4ER24B12 4ER24B21 4ER24B22  ER-30-B  4ER30B2	4ER25C1 4ER25C2 4ER25C3 4ER25C4 4ER25C11 4ER25C12 4ER25C13 4ER25C14 4ER25C15 4ER25C05	4ER25D1 4ER25D2 4ER25D11 4ER25D12 4ER25D13 4ER25D03	4ER26B1 4ER26B2 4ER26B3 4ER26B11 4ER26B12 4ER26B13
Modification Instructions	A-4036615	A-4036615	A-4036614	A-4036614	A-4036616

## PARTS LIST

Symbol	Description	G-E Part No.	PL-4036613			
			G1	G2	G3	G6
C396	Capacitor, fixed ceramic disc. 0.01 $\mu$ f, +80% -20%, 450 VDCW. Sim to Central Lab DA-048.	7488160-P1			1	
C397	Capacitor, Mylar dielectric, 0.033 mfd, $\pm$ 20%, 50 VDCW.	5491189-P3			1	

## PARTS LIST

Symbol	Description	G-E Part No.	PL-4036613			
			G1	G2	G3	G6
C395	Capacitor, fixed silver mica. 2200 mmf, $\pm 10\%$ , 500 VDCW. Sim to Electromotive DM20.	4029003-P116			1	
C430	Capacitor, fixed silver mica. 2200 mmf, $\pm 5\%$ , 500 VDCW. Sim to Electromotive DM20.	7147203-P16	1	1		1
C431	Capacitor, fixed ceramic disc, 0.01 $\mu$ f, $+80\%$ -20%, 450 VDCW. Sim to Centralab DA-048.	7488160-P1	1	1		1
C432	Capacitor, mylar dielectric. 0.033 mfd, $\pm 20\%$ , 50 VDCW.	5491189-P3	1	1		1
R403	Resistor, fixed composition 56 meg, $\pm 10\%$ , 1/2 w.	3R77-P563K			1	
R407	Resistor, fixed composition. 33 meg, $\pm 10\%$ , 1/2 w.	3R77-P333K			1	
R402	Resistor, fixed composition. 0.15 meg, $\pm 10\%$ , 1/2 w.	3R77-P154K			1	
R404	Resistor, fixed composition. 56 meg, $\pm 10\%$ , 1/2 w.	3R77-P563K			1	
R435	Resistor, fixed composition. 0.15 meg, $\pm 10\%$ , 1/2 w.	3R77-P154K	1	1		1
R436	Resistor, fixed composition. 56 meg, $\pm 10\%$ , 1/2 w.	3R77-P563K	1	1		1
R437	Resistor, fixed composition. 33 meg, $\pm 10\%$ , 1/2 w.	3R77-P333K	1	1		

## PARTS LIST

Symbol	Description	G-E Part No.	PL-4036613			
			G1	G2	G3	G6
R439	Resistor, fixed composition. 56 meg, $\pm 10\%$ , 1/2 w.	3R77-P563K	1	1		1
L311	Inductor, core type construction. DC res 350 ohms min., 525 ohms max.	19C301200-P1	1	1	1	1
L318	Inductor, core type construction. DC res 350 ohms min., 525 ohms max.	19C301200-P1			1	

COMMUNICATION PRODUCTS DEPARTMENT  
 GENERAL ELECTRIC COMPANY  
 LYNCHBURG, VIRGINIA

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- I. To modify high band receivers  
 4ER25C1, 2, 11, 12 Rev F or earlier  
 4ER25C3, 4, 13, 14 Rev E or earlier  
 4ER25D1, 2, 11, 12 Rev F or earlier, proceed as follows:

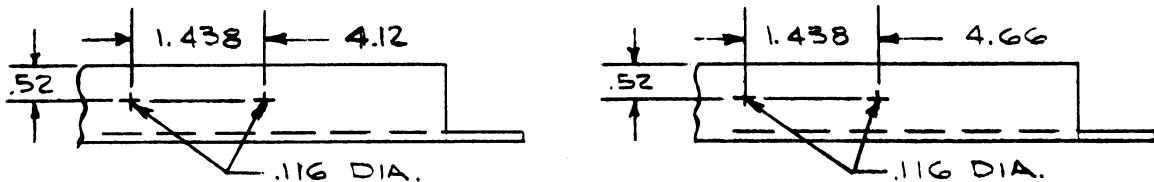
A. Remove:

1. R335 from XV309-1 to TB8-10
2. R336 & R337 from TB8-10 to TB8-15
3. C334 from XV312-6 to XV311-G1.
4. C336 from XV312-7 to TB8-15.

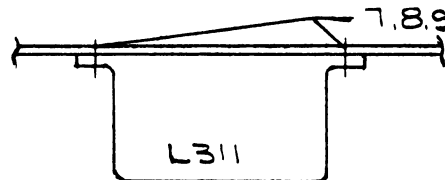
B. Drill two holes in chassis as shown below:

4ER25C1, 2, 11, 12, 05, 15  
 D1, 2, 11, 12, 03, 13

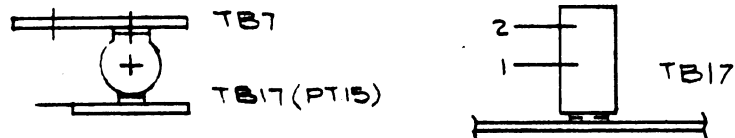
4ER25C3, 4, 13, 14



C. Mount L311 in the two holes in chassis using hardware as indicated in sketch below:



D. Mount terminal strip (Pt 15) on same screw used to mount TB-7 per sketch shown below:



E. Connect red lead from L311 to TB7-2.

F. Connect green lead from L311 to TB17-2.

G. Add the following:

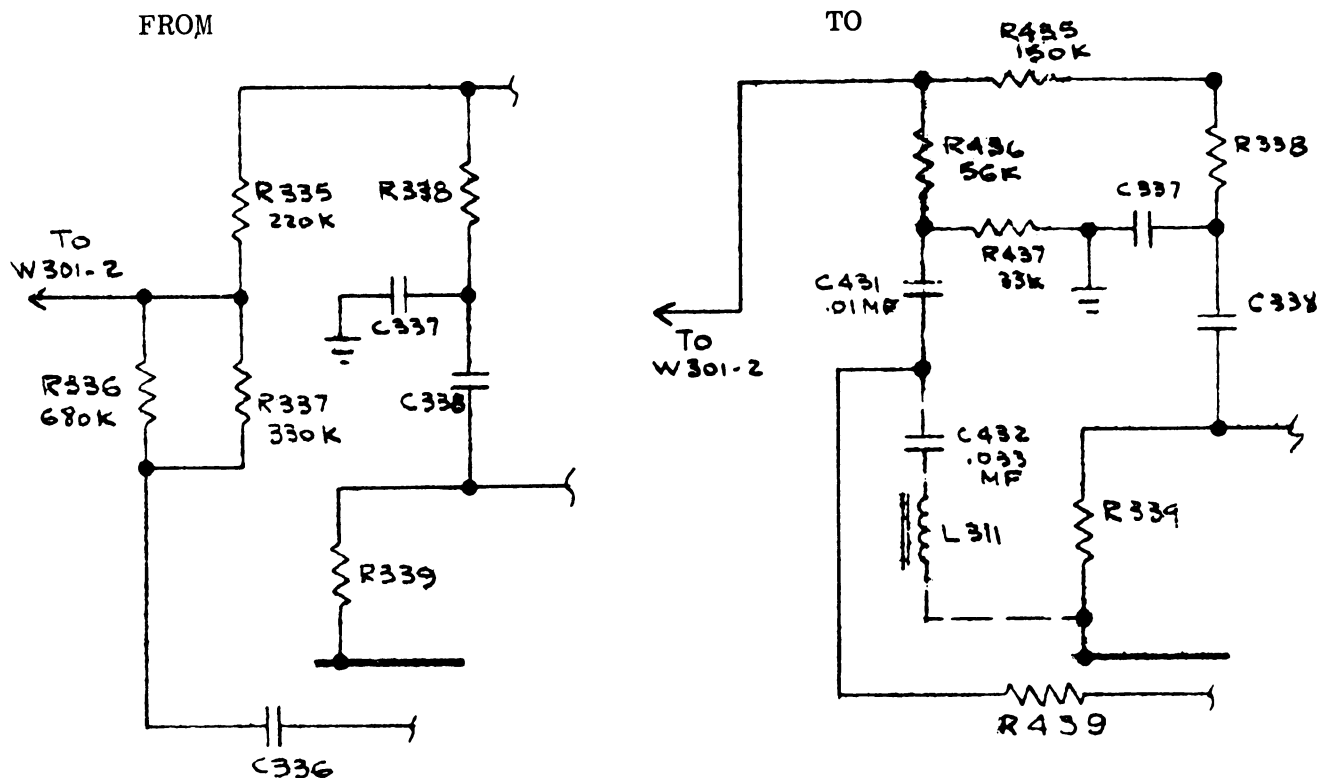
1. R435 from XV309-1 to TB8-10
2. R436 from TB8-10 to TB8-14
3. R437 from TB8-14 to TB8-3
4. C431 from TB8-14 to TB17-1
5. C432 from TB17-1 to TB17-2
6. C430 from XV312-6 to XV311-G1
7. R439 from XV312-7 to TB17-1

Modification Instructions

130 - 174 MC RECEIVER  
 MODEL 4ER25C, D

(A-4036614, Sheet 1, Rev. 3)

## I. Change Circuit



## H. To modify high band receivers

4ER25C1, 2, 11, 12	Rev J or later
4ER25C3, 4, 13, 14	Rev F or later
4ER25D1, 2, 11, 12	Rev J or later
4ER25C05, 15	Rev A or later
4ER25D03, 13	Rev A or later

1. Mount choke on inside of rec chassis in holes provided between XV305 and XV306.
2. Press leads down on chassis and connect one lead to TB17-2; the other one to TB7-2.
3. C432 (if not present) connect from TB17-1 to TB17-2.

## Modification Instructions

130 - 174 MC RECEIVER  
MODELS 4ER25C & -D

I. To modify low band receivers

4ER24A1, 2, 11, 12 Rev N or earlier

4ER24B1, 2, 11, 12 Rev J or earlier

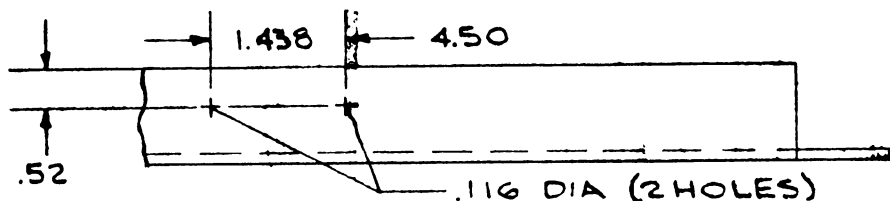
4ER24B21, 22 Rev H or earlier,

and 72-76 MC & 4ER30B2, Rev E or earlier, proceed as follows:

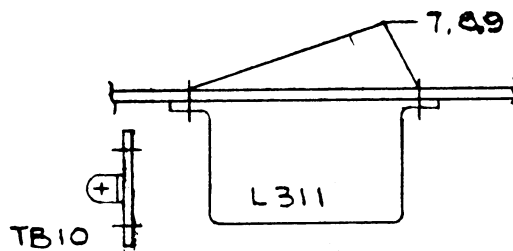
A. Remove:

1. R335 from XV309-1 to TB8-10.
2. R336 and R337 from TB8-10 to TB8-15.
3. C334 from XV312-6 to XV311-G1.
4. C336 from TB8-15 to XV312-7.

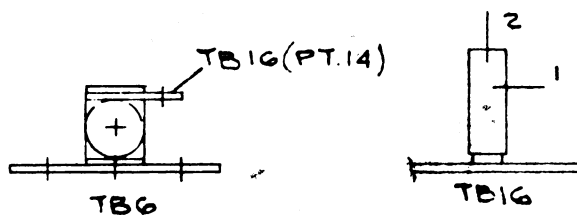
B. Drill two holes in chassis as shown below:



C. Mount L311 on side of chassis near TB-10 using hardware as indicated in sketch below:



D. Mount terminal strip (Pt 14) on same screw used to mount TB-6 per sketch shown below:



E. Connect red lead from L311 to TB6-2.

F. Connect green lead from L311 to TB16-2.

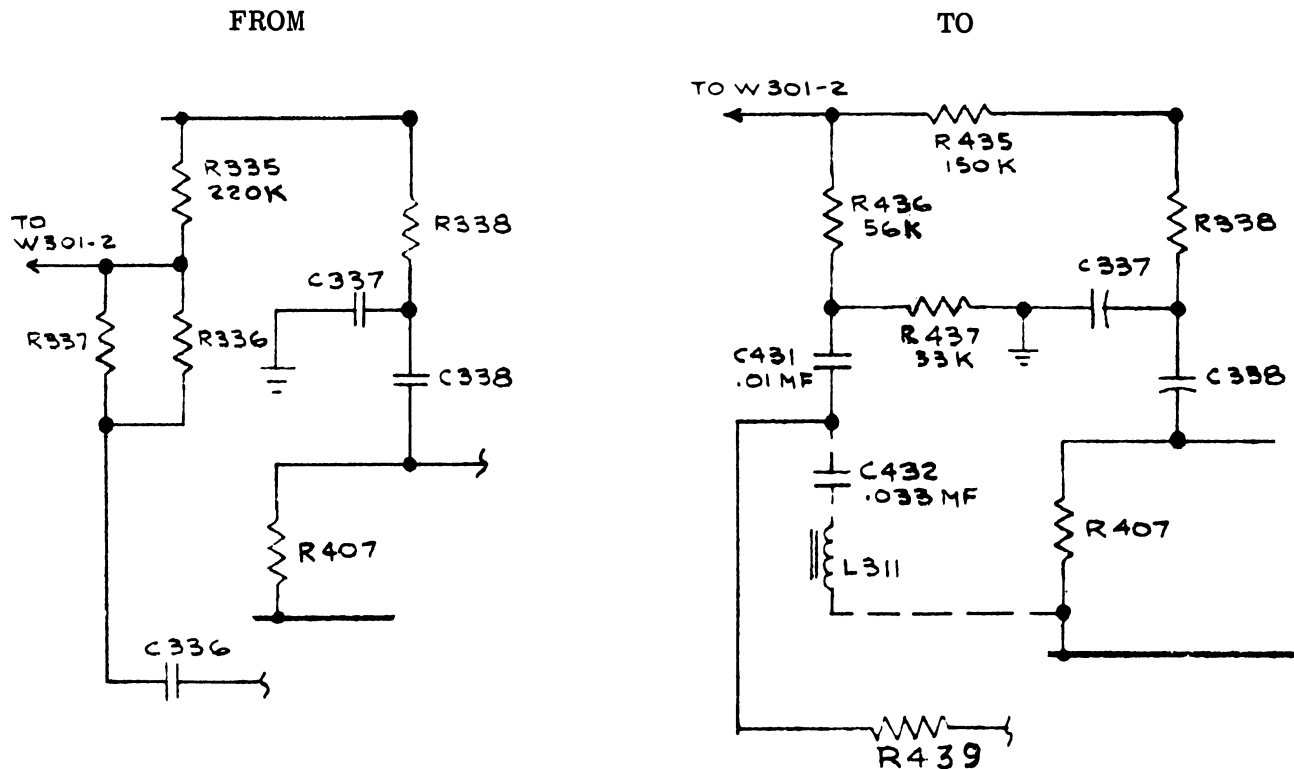
G. Add the following:

1. R435 from XV309-1 to TB8-10.
2. R436 from TB8-10 to TB8-14.
3. R437 from TB8-14 to TB8-3.
4. C431 from TB8-14 to TB16-1.
5. C432 from TB16-1 to TB16-2.
6. C430 from XV312-6 to XV311-G1
7. R439 from XV312-7 to TB16-1.

Modification Instructions

25 - 50 MC RECEIVERS  
MODELS 4ER24A & -B

## I. CHANGE CIRCUIT



### H. To modify low band receiver

4ER24A1, 2, 11, 12      Rev R or later  
 4ER24B1, 2, 11, 12      Rev L or later  
 4ER24B21, 22              Rev K or later,  
 and 72-76 MC receiver & 4ER30B2 Rev. F or later

1. Mount choke on inner side of receiver chassis in hole provided between XV305 & XV306.
2. Connect one lead to TB16-2; the other one to TB7-2.
3. C432 (if not present) connect from TB16-1 to TB16-2.

## Modification Instructions

25 - 50 MC RECEIVERS  
 MODELS 4ER24A & -B

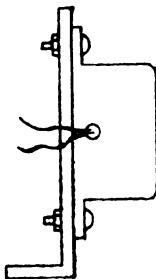


1. To modify 450-470 MC receivers,  
4ER26B1, 11 Rev H or earlier  
4ER26B2, 12 Rev G or earlier  
4ER26B3, 13 Rev E or earlier, proceed as follows:

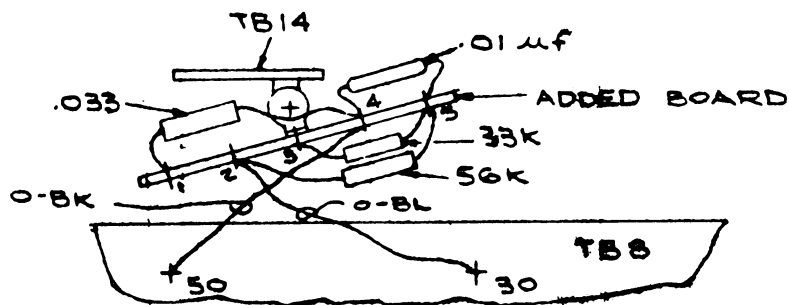
A. Remove:

1. C334 from the printed board
2. R336 from the printed board
3. R337 from the printed board
4. R335 from the printed board
5. Brown lead between holes 30 and 30 on the printed board
6. C336 from the printed board

B. 1. Mount choke on bracket as shown:



2. Remove 2-4 40 nuts and washer nearest marking "R F Plate" and "Mult; 4 Plate".
3. Mount bracket containing choke and re-assemble hardware.
4. Pass leads through hole adjacent to Z305.
5. Rotate TB-14 180°.
6. Mount added terminal board on TB-14 mounting and assemble parts as shown:



7. Connect choke leads to added board terminals 1 and 3.
- C.
1. Solder the black and orange striped wire into hole 50 on the printed board near pin T37.
  2. Solder the blue and orange striped wire into hole 30 on the printed board near pin T37.

Modification Instructions

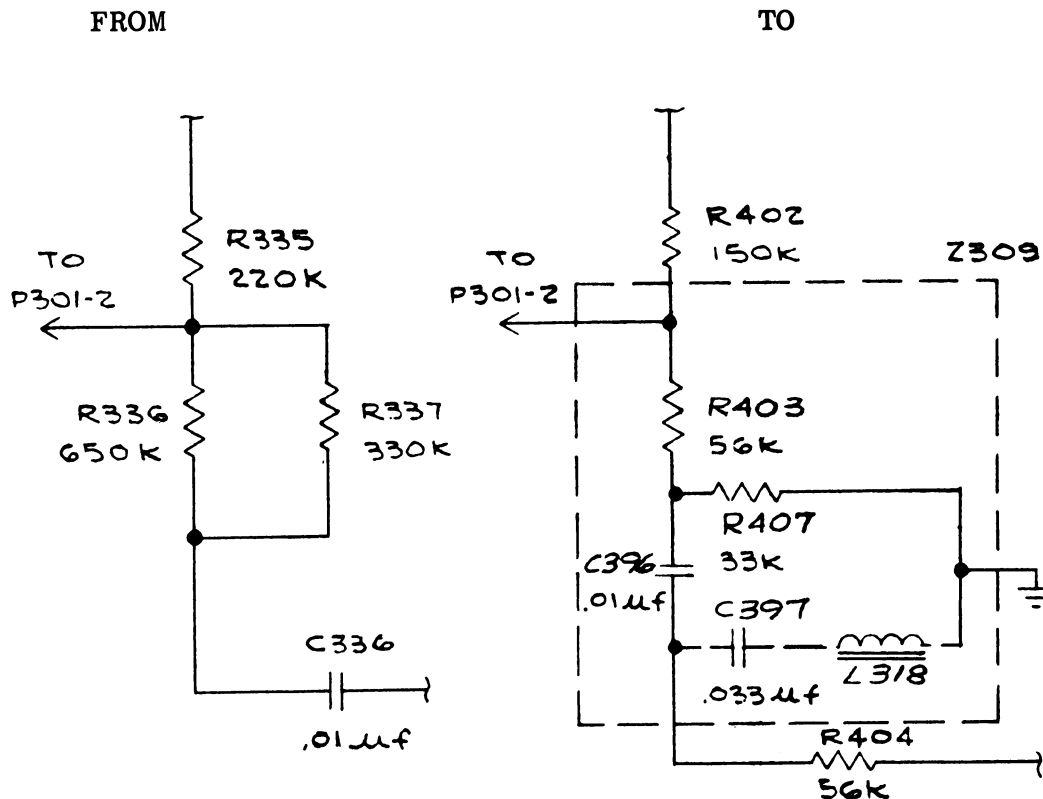
450 - 470 MC RECEIVER  
TYPE ER-26-B

(A-4036616, Sheet 1, Rev. 2)

D. Add the following:

1. C395 in place of C334 on printed wiring board.
2. R402 in place of R335 on printed wiring board.
3. R404 in place of C336 on printed wiring board.

E. Circuit Change:



F. To modify 450-470 MC Receivers.

- |             |                                     |
|-------------|-------------------------------------|
| 4ER26B1, 11 | Rev K or later                      |
| 4ER26B2, 12 | Rev J or later                      |
| 4ER26B3, 13 | Rev F or later, proceed as follows: |

1. Complete steps B1 through 4 above.
2. Connect one lead to TB17-1; the other to TB17-3.
3. C397 (if not present) connect from TB17-1 to TB17-4.

Modification Instructions

450 - 470 MC RECEIVERS  
TYPE ER-26-B