PUSH-TO-RESET OPTIONS 5951 and 5952 FOR MESSAGE MATE RECEIVERS

General Electric Message Mate Receivers with Selective Calling Options 5941 or 5942 may be equipped with Push-To-Reset options 5951 or 5952. The Push-To-Reset Option permits the operator to hear an alerting tone and a voice message, without pressing a Push-To-Listen switch. After the message is completed, the selective calling circuit is reactivated by pressing the RESET button on the receiver control panel.

When the Push-To-Reset Option is installed, the alerting tone is dependent on the VOLUME control setting. When going into a noisy location, set the VOLUME control for maximum.

The channel can be monitored (or the receiver battery checked) by holding down the RESET button or by turning the receiver OFF and ON. This disables the selective calling circuit and permits messages or noise to be heard. If nothing is heard, recharge or replace the battery.

FIELD INSTALLATION
(19A122241, Sh. 1 & 2, Rev. 1)

Modification Kit 19A122243-G1 provides the necessary components for adding Push-To-Reset Options 5951 or 5952 to Message Mate Selective Calling receivers. Install the kit according to the following directions.

1. Unscrew speaker mounting screws and carefully lift out speaker. Then remove all leads from Push-To-Listen switch S375.

2. Connect part of the White-Blue wire provided from the Off-Volume switch S301-5 to Push-To-Listen switch S375-2. See Fig. 1 for orientation of Terminals on switches.

Fcl 1078

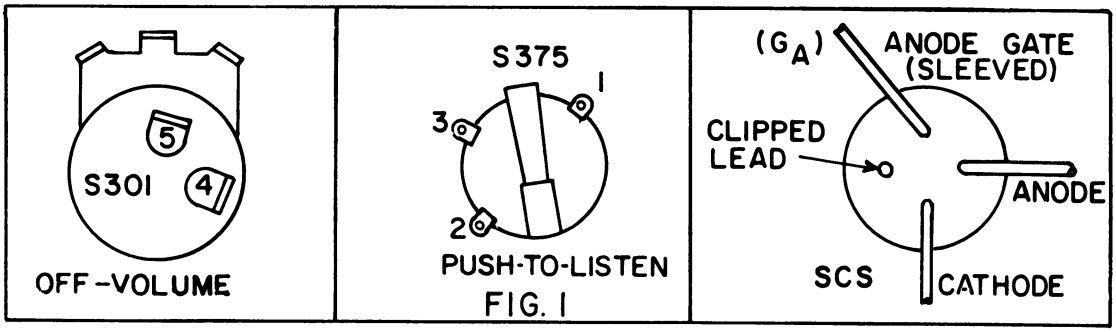
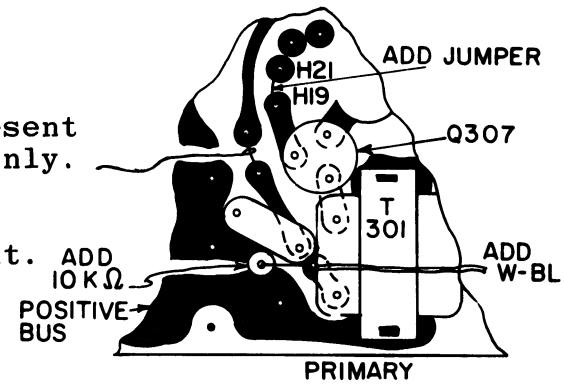


FIG. 1

3. Place the Silicon Controlled Switch (SCS) directly in front of S375 with the leads oriented upward. Connect the anode lead of the SCS provided to S375-3 and the cathode lead to S375-1. (See Fig. 1).

4. Break the negative bus pattern going to the primary of T301, (or remove jumper in later models), and connect one of the 10 k resistors provided from the primary of T301 to ground, (positive bus). (See Fig. 2).

Remove jumper present in later models only. In earlier models break pattern at approx. this point.



5. Connect a jumper from H19 to H21 (See Fig. 2).

6. Connect White-Blue wire provided from the 10 kΩ resistor and primary of T301 to S375-3.

7. Remove C379 (2200 μf capacitor) and R380 (39 kΩ resistor). Connect one end of the 2.7 kΩ resistor provided in the hole from which C379 was removed (Junction of C379 and R380).

8. Connect the negative end of the 6.8 μf capacitor provided to the minus bus, (hole from which C379 was removed), and one end of a 10 kΩ resistor provided to ground. Remove the Orange-White wire. Connect the ends of the capacitor and resistors together. (6.8 μf cap., 10 kΩ & 2.7 kΩ resistors). (See Fig. 3)

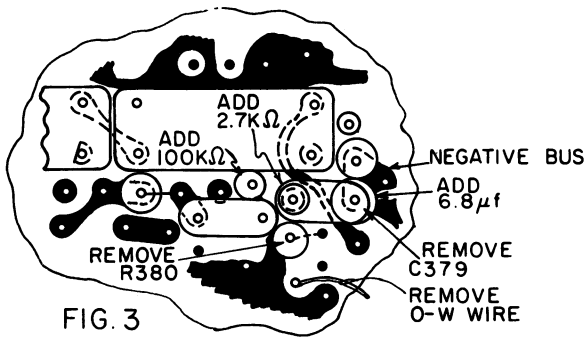


FIG. 3

9. Connect the lead from the anode gate (GA) of the SCS to the junction of the 6.8 μf capacitor, the 10 kΩ and 2.7 kΩ resistors.

10. Replace speaker.

11. Remove Off-Volume knob. Pry out old nameplate and replace with one provided (NP 248934).

CIRCUIT ANALYSIS

When two sequential tones are received, they are detected by the ratio detector and then fed through two amplifier-limiter stages to the series-connected decoders FL375 and FL376. When the first tone is at the resonant frequency of decoder reed FL376, the reed contacts open and close at an audio rate, and a negative voltage charges R-C network C380 and R385. When the second tone is at the resonant frequency of FL375, the negative voltage from the R-C network discharges through the reed contacts into the anode gate of the silicon controlled switch (SCS), causing the SCS to conduct. This applies a negative voltage through the primary of T301 to Audio Driver Q307. When Q307 is turned on, sound is heard at the loudspeaker.

The SCS is turned off by interrupting the current flow in the circuit. This is accomplished by pressing the RESET button after the message is completed.

COMMUNICATION PRODUCTS DEPARTMENT
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PARTS LIST FOR MODIFICATION KIT 19A122243-G1

G-E Part No.	Descripton
5496267-P1	Capacitor, tantalum, 6.8 mf ±10%, 6 VDCW.
3R152-P272K	Resistor, 2700 ohms ±5%, 1/2 w.
3R152-P103K	Resistors, (2) 10,000 ohms ±5%, 1/4 w.
19A122234-G1	Switch, silicon controlled.

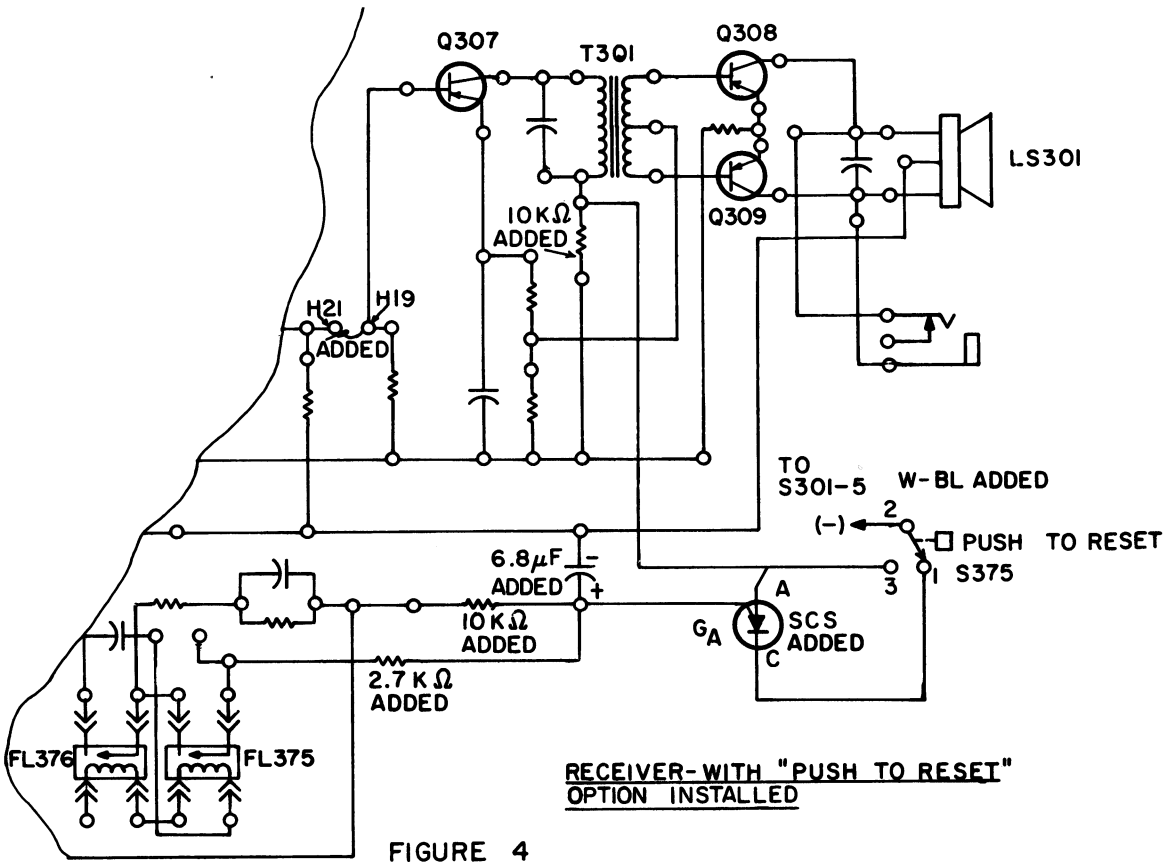

FIGURE 4

Schematic Diagram

PUSH-TO-RESET OPTIONS
MESSAGE MATE RECEIVERS

(19A122241, Sh. 3, Rev. 1)