

DATE		TMC SPECIFICATION NO. S -656	
SHEET	OF		
<i>da</i> COMPILED	<i>da</i> CHECKED	TITLE: KIT-131 GPT-40K BANDSWITCH AND TANK COIL	
<i>df</i> APPROVED	<i>DB</i>	REPLACEMENT	

KIT-131

GPT-40K BANDSWITCH AND TANK COIL REPLACEMENT

DATE <u>1/31/62</u>	TMC SPECIFICATION NO. S -656	
SHEET <u>1</u> OF <u>4</u>		
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I. EQUIPMENT AFFECTED

A. GPT-40K (Transmitting Set, Radio)

II. PURPOSE

A. To provide a more reliable radio frequency switch and tank coil assembly and to provide part of the facilities to aid in extending the frequency range of GPT-40K from 4-28 megacycles to 2-28 megacycles.

III. MATERIALS SUPPLIED

- | | | |
|----|-----------------------------|----------------------------|
| A. | One each A-2272 | Idler bearing assembly |
| B. | One each AC-138 | Counter, 2-28MC Bandswitch |
| C. | One each AS-120 | Bandswitch assembly |
| D. | One each ID-275 | Installation details |
| E. | | |
| | 1. Two each SCBP1032BN10 | Screw, machine |
| | 2. Two each FW10HBN | Washer, flat |
| | 3. Two each LWS10MRN | Washer, lock, split |
| | | } |
| | | A-2772 |
| | | Mounting |
| F. | | |
| | 1. Four each SCBP0632BN10 | Screw, machine |
| | 2. Four each LWS06MRN | Washer, lock, split |
| | 3. Four each NTH0632BN8 | Nut, hexagon |
| | | } |
| | | Counter |
| | | AC-138 |
| | | Mounting |
| G. | | |
| | 1. Twelve each SCBP1032BN10 | Screw, machine |
| | 2. Twelve each LWE10MRN | Washer, lock, external |
| | 3. Twelve each NTH1032BN12 | Nut, hexagon |
| | | } |
| | | Bandswitch |
| | | Mounting |
| H. | | |
| | 1. Two each SCBS1032BN8 | Screw, machine |
| | 2. Two each LWE10MRN | Washer, lock, external |
| | | } |
| | | Bearing Plate |
| | | Mounting |
| I. | | |
| | 1. Three each SCHH2520BS10 | Screw, machine |
| | 2. Three each LWS25MRS | Washer, lock, split |
| | 3. Three each NTH2520BS14 | Nut, hexagon |
| J. | | |
| | 1. Two each SCHH2520BS36 | Screw, machine |
| | 2. Two each FW25HBS | Washer, flat |
| | 3. Two each LWS25MRS | Washer, lock, split |
| | 4. Two each NTH2520BN14 | Nut, hexagon |
| | | } |
| | | "HF" Coil |
| | | Mounting |
| K. | | |
| | 1. One each SCBP1032BN6 | Screw, machine |
| | 2. One each FW10HBN | Washer, flat |
| | 3. One each LWS10MRN | Washer, lock, split |
| | 4. One each NTH2520BN14 | Nut, hexagon |
| | | } |
| | | "L" Sect. |
| | | Loop |
| | | Mounting |

DATE 1/31/62

SHEET 2 OF 4

TMC SPECIFICATION NO. S -656

COMPILED

CHECKED

TITLE: KIT-131 GPT-40K BANDSWITCH AND TANK COIL

APPROVED

REPLACEMENT

L.

- | | |
|---------------------------|------------------------|
| 1. Eight each SCBP0632BN6 | Screw, machine |
| 2. Eight each FW06HBN | Washer, flat |
| 3. Eight each LWS10MRN | Washer, lock, split |
| 4. Eight each NTH0632BN8 | Nut, hexagon |
| M. One each NP-362-14 | Modification nameplate |

IV. TOOLS REQUIRED

A. To be furnished by the installing activity

1. One 3/8-7/16 open end wrench
2. One seven inch screwdriver Phillips #2
3. One Seven inch screwdriver
4. One #6 Allen wrench
5. One #8 Allen wrench
6. One #10 Allen wrench

V. PROCEDURE

- A. 1. Remove the rear door of the GPT-40K power amplifier section.
2. Remove the top and bottom shield from the rear of the GPT-40K amplifier section.
3. Remove the top shield and bottom cover from the PA tube compartment, retain hardware for reassembly.
4. Remove the window from the front of the GPT-40K PA compartment. Retain the hardware for remounting.
5. Disconnect and remove the bias supply drawer from the transmitter.
6. Disconnect the "L" section loop, item 1, Fig. 1, from the capacitor.
7. Disconnect the "HF" coil, item 2, Fig. 1.
8. Disconnect the load capacitor strap and plate, item 3, Fig. 1.
9. Remove the air duct and air baffle, items 4 and 5, Fig. 1, (on newer models only).
10. Remove the chain from the sprocket, item 6, Fig. 1. Be sure not to lose the connecting link.

DATE <u>1/31/62</u>		TMC SPECIFICATION NO. S-656
SHEET <u>3</u> OF <u>4</u>		
COMPILED	CHECKED	TITLE: <u>KIT-131 GPT-40K BANDSWITCH AND TANK COIL</u>
APPROVED		REPLACEMENT

11. Remove the Bearing Plate, item 7, Fig. 1, hold for remounting.
12. Remove the sprocket, item 6, Fig. 1, from the shaft and save it for remounting.
13. Disconnect the fanning strip, item 9, Fig. 1, from the bandswitch gear assembly.
14. Remove the screws holding the mounting plate, item 8, Fig. 1, to the deck.
15. Left out the whole bandswitch assembly discard.
16. On the front of the PA compartment remove the counter, item.1, Fig. 2, by removing the screws holding it to the front panel and loosening the coupling, item 2, Fig. 2.
17. Remove the knob from the bandswitch shaft, item 3, Fig. 2. Do not lose the key.
18. Loosen the gear and bushing, items 4 and 5, Fig. 2.
19. Loosen the sprocket, item 1, Fig. 3, and the bushing that is hidden behind the sprocket.
20. Remove the two screws, item 3, Fig. 3, then pull the shaft, item 2, Fig. 3, forward so that the idler bearing assembly, A-2272, that is supplied can be shipped over the end of the shaft and mount the idler bearing assembly as per Fig. 4.
21. Put back the bushing and tighten the sprocket, item 1, Fig. 3.
22. Tighten the bushing and gear, items 4 and 5, Fig. 2.
23. Replace the knob on the shaft, item 3, Fig. 2.
24. Mount the new counter, AC-138, in place of the old counter, item 1, Fig. 2, but do not tighten the coupling until the new bandswitch is in place.
25. Loosen the coupling and remove the drive shaft of the new bandswitch gear assembly, item 9, Fig. 1.
26. Place the new bandswitch in the transmitter.
27. Fasten the bandswitch to the deck with the hardware supplied.

DATE 1/31/62

SHEET 4 OF 4

TMC SPECIFICATION NO. S -656

COMPILED

CHECKED

TITLE: KIT-131 GPT-40K BANDSWITCH AND TANK COIL

APPROVED

REPLACEMENT

28. Slip the bearing plate and sprocket, items 6 and 7, on the bandswitch gear assembly shaft and slip the shaft into the coupling on the bandswitch gear assembly and mount the bearing plate to the frame, Fig. 1. Tighten the set screws in the coupling.
29. Align and tighten the two sprockets and then replace the chain, item 6, Fig. 1. Make sure that the chain runs under the idler gear and there is no slack in the chain.
30. Connect the load capacitor strap and plate, item 3, Fig. 1.
31. Connect the "HF" coil, item 2, Fig. 1.
32. Connect the "L" section loop, item 1, Fig. 1.
33. Remount the air duct and air baffle, items 4 and 5, Fig. 1 (on newer models only).
34. Replace the top shield and bottom cover from the PA tube compartment.
35. The bandswitch should be in the 24-28 MC position, check to make sure that it is. See Fig. 5 for 24-28 MC position.
36. Set up the counter to the 24-28 MC position and then tighten the set screws in the coupling. Check to see that the bandswitch lines up in all positions and make any adjustments if necessary.
37. Replace the top and bottom shield on the rear of the transmitter amplifier section.
38. Replace the bias supply drawer and reconnect the cables.
39. Replace the window on the frame of the transmitter PA compartment.
40. Mount the Modification nameplate NP-362-14 on the right side of the relay panel.