

PARTS LIST

KEY	NAME OF PART	PART NUMBER
1	CABLE GUARD	0874-7642
2	COUPLING NUT	0874-6792
3	FERRULE (Perforated-Green)	5240-4028
3	FERRULE (Perforated)	5240-4027
3	FERRULE	5240-0900
4	DISK	0874-7580
5	INNER TRANSITION PIECE	0874-6367
6	OUTER TRANSITION PIECE	0874-6317
7	RETAINING RING	0874-0810
11	INSULATING BEAD	0874-0700
12	INNER CONDUCTOR	0874-0612
14	OUTER CONDUCTOR	0874-0603

SPECIFICATIONS

- FREQ RANGE: Dc to 7 GHz • MAX POWER: 200 W avg @ 1 GHz*
- MAX VOLTAGE: 1500 V (peak) • CHAR IMPEDANCE: 50 ohms

*Varies in inverse proportion to square root of frequency.

ASSEMBLY

Type 874-C8A CABLE CONNECTOR

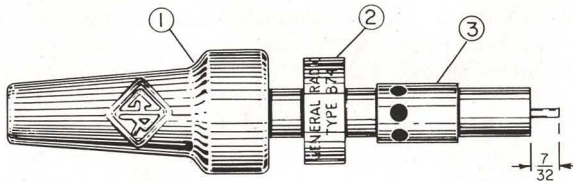
50 OHMS

APPLICABLE CABLE TYPES: (50 ohm) RG-8A/U,-9B/U,-10A/U,-87A/U,-116/U,-156/U,-165/U,-166/U,-213/U,-214/U,-215/U,-225/U,-227/U.
(Other) RG-11A/U,-12A/U,-13A/U,-63B/U,-79B/U,-89/U,-144/U,-146/U,-149/U,-216/U.

(U. S. Patent No. 2,548,457)

FORM 0874-0384-D, MARCH 1969

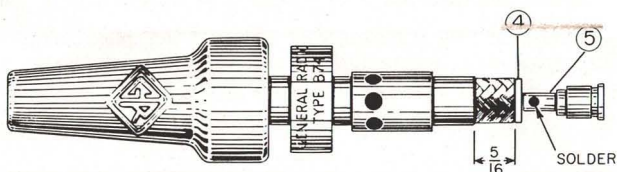
GENERAL RADIO COMPANY
WEST CONCORD, MASSACHUSETTS, U.S.A.



- A. Slide rubber cable guard (1) over end of cable, small end first; use talc if necessary.
- B. Slip coupling nut (2) over assembly, shoulder end first.
- C. Slide ferrule (3) on cable, perforated end first.

NOTE Use green ferrule on single-braid cable and plain (perforated) ferrule on double-braid cable.
Use short ferrule if plier crimp is contemplated.

- D. Carefully cut away cable jacket, braid, and dielectric to dimension shown. Do not sever any of strands in center conductor.
- E. Examine cut face of dielectric and remove any stray braid strands.

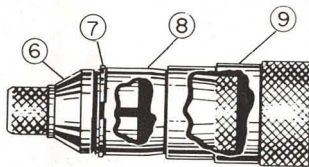


- F. Slide white Teflon heat-insulator disk (4) over cable center conductor and push back flush with dielectric, taking care not to unravel center conductor.

- G. Push center conductor into inner transition piece (5) until disk touches transition, and solder. Scrape off excess solder.

CAUTION Excessive heat will melt cable dielectric, and affect VSWR characteristics.

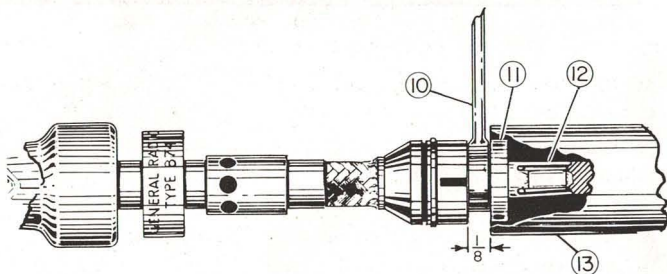
- H. Remove cable jacket to 5/16 inch and flare end of braid slightly.



- I. Install front-ring expander (8) (red) over large end of outer transition piece (6).

- J. Slide phosphor-bronze retaining ring (7) on expander and push into first groove with ring pusher (9). Remove tools.

- K. Push small end of outer transition piece over inner transition, then over cable dielectric, so that knurl slides under braid and jacket.



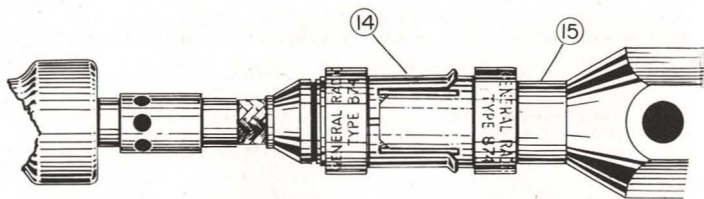
- L. Force cable through outer transition piece until hexagonal end of inner transition piece protrudes about 1/8 inch.

- M. Grip hexagonal end of inner transition piece with 1/4-inch open-end wrench (10) and hold stationary.

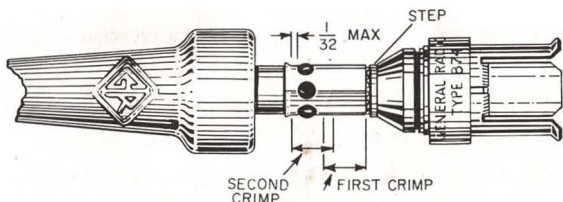
- N. Insert inner conductor (12) in insulating bead (11) and thread into inner transition piece.

- O. Insert inner conductor in inner-conductor wrench (13) so that either slot in bead engages key in wrench and tighten. Apply 4 to 6 inch-pounds torque.

NOTE: These instructions assume the user to have the full set of Type 874 tools (see over). While not indispensable, the tools assure ease of assembly, uniformity, and good appearance, as well as optimum electrical and mechanical characteristics. Ordinary pliers and wrenches may be substituted.

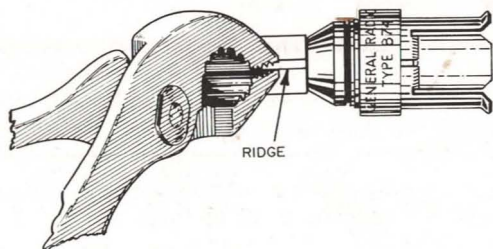


- P. Pull back cable to seat insulating bead against outer transition piece; align key slot in bead with slot in outer transition piece by rotating transition.
- Q. Squeeze braid and jacket to restore fit about cable and transition.
- R. Slide outer conductor (14) over insulating bead and outer transition piece; long key in conductor must engage slot in transition.
- S. Bring coupling nut forward and thread on outer conductor.
- T. Grip coupling nut with a 3/4 inch open-end wrench, insert outer-conductor wrench (15) in assembly, and tighten by rotating coupling nut. Tighten firmly (6 to 10 foot-pounds torque should be applied).



- U. Slide ferrule forward over braid to within 1/64 inch of step in outer transition piece; no braid should show through perforations.
- V. Crimp ferrule as indicated using special tool (874-TO8). Use 0.389-inch die for first crimp, and 0.411-inch die for second crimp, on single-braid cable. Use 0.411-inch die for both crimps on double-braid cable. To use, disengage ratchet lock by squeezing handles together, carefully position ferrule in appropriate die (corners of hex centered over perforations), and squeeze handles together until ratchet lock releases.
- W. Slide cable guard forward and seat snugly over coupling nut.

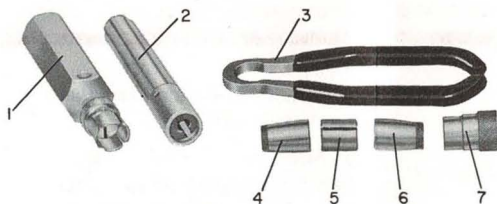
ALTERNATE CRIMPING PROCEDURE



- If special tool not available:
- A. Substitute short unperforated ferrule provided and perform steps A through T above.
 - B. Slide ferrule over braid to within 1/64 inch of step in outer transition.
 - C. Press assembly against a fixed surface. Using pliers, pinch ridge of surplus metal longitudinally on ferrule, beginning at transition end, until tight crimp is accomplished.
 - D. Slide cable guard forward and seat snugly over coupling nut.

SPECIAL TOOLS

Type 874-TOK TOOL KIT



- 1. Outer-conductor wrench(0874-2610)
- 2. Inner-conductor wrench(0874-2611)
- 3. Coupling-nut wrench(0874-6801)
- 4. Front-ring expander (red) ..(0874-6820)
- 5. Keeper for ring expanders (0874-6840)
- 6. Back-ring expander (green) (0874-6800)
- 7. Ring pusher(0874-6830)

CRIMPING TOOL Type 874-TO8



GENERAL RADIO

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