KLM Electronics Inc.

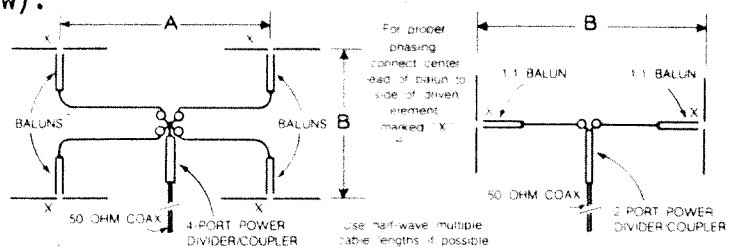
Baluns

Your KLM balun has been fully tested, both electrically and physically, before leaving the factory. To maximize the performance and efficiency of your balun, please note the following recommendations.

1. Keep the lead lengths from balun to feedpoints as short as possible. Unnecessary length can upset VSWR, bandwidth, etc. Solder lugs are a good idea too.

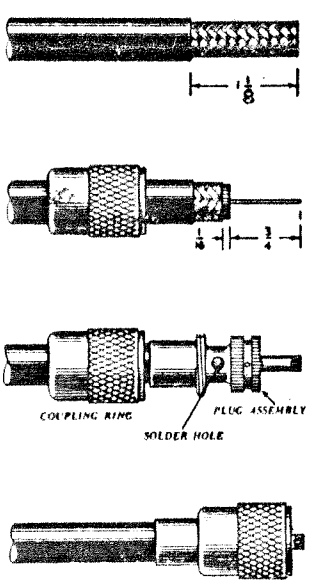
2. Be sure studs on HF balun are at least 3/8" from other antenna hardware.

3. When stacking two or more antennas, use balun stud identified with black dot(on hot side on HF or center lead (VHF/UHF) as key for proper phasing (see sketch below).



4. KLM HF/VHF BALUNS ARE NORMALLY SUPPLIED WITH SO-239 TYPE CONNECTORS. USE ONLY PL-259 CONNECTORS WITH THEM. ASSEMBLY OF PL-259 CONNECTORS (FOR TWO TYPES OF COAX) ARE SHOWN BELOW.

83-1SP (PL-259) Plug



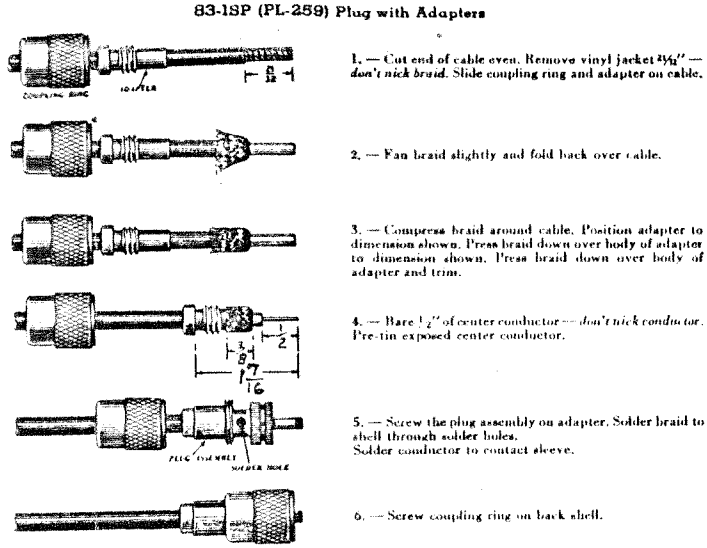
1. — Cut end of cable even. Remove vinyl jacket 1⅛" — *don't nick braid.*

2. — Bare ¾" of center conductor — *don't nick conductor.* Trim braided shield 1/16" and tin. Slide coupling ring on cable.

3. — Screw the plug assembly on cable. Solder plug assembly to braid through solder holes. Solder conductor to contact sleeve.

4. — Screw coupling ring on assembly.

83-1SP (PL-259) Plug with Adapters



1. — Cut end of cable even. Remove vinyl jacket 2½" — *don't nick braid.* Slide coupling ring and adapter on cable.

2. — Fan braid slightly and fold back over cable.

3. — Compress braid around cable. Position adapter to dimension shown. Press braid down over body of adapter to dimension shown. Press braid down over body of adapter and trim.

4. — Bare ½" of center conductor — *don't nick conductor.* Pre-tin exposed center conductor.

5. — Screw the plug assembly on adapter. Solder braid to shell through solder holes. Solder conductor to contact sleeve.

6. — Screw coupling ring on back shell.

IMPORTANT NOTE: IF YOUR BALUN IS SUPPLED WITH TYPE "N" CONNECTORS (HF/VHF OPTION - UHF STANDARD), PLEASE READ ON .....

Type "N" connectors are noted for their low loss and good weather seal characteristics, but they must be carefully mated and only to other cleaned and carefully assembled type "N" connectors.

KLM's 90 day materials and workmanship warranty does not cover type "N" center pins bent or broken during installation or field use, so please read the following application notes carefully. (See back page)

P.O. Box 816, Morgan Hill, California 95037 • (408) 779-7363

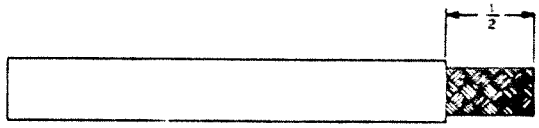
FOR BALUNS WITH TYPE "N" CONNECTORS

1. Use only type "N" connectors with your balun. Do not use PL-259 (SO239) type connectors. They will ruin it.

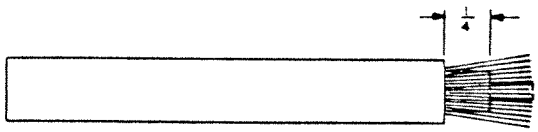
2. Carefully mate Type "N" connectors straight on. Jamming them together at angles will damage or break the center pins.

3. Carefully assemble your own type "N" connectors. See below for step-by-step details.

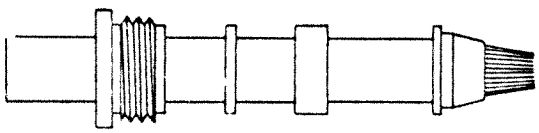
CUT END OF CABLE EVEN.



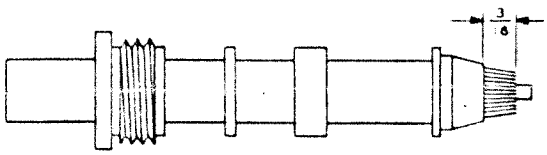
REMOVE VINYL JACKET $\frac{1}{2}$ INCH — DON'T NICK BRAID.



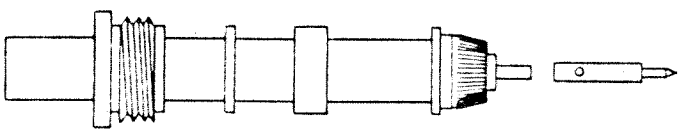
COMB OUT COPPER BRAID AS SHOWN. BARE $\frac{1}{4}$ INCH OF CENTER CONDUCTOR — DON'T NICK CONDUCTOR.



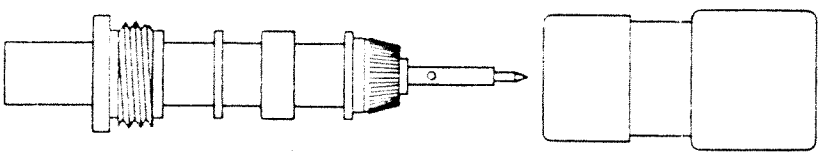
TAPER BRAID AS SHOWN. SLIDE NUT, WASHER AND GASKET ON VINYL JACKET. SLIDE CLAMP ON BRAID.



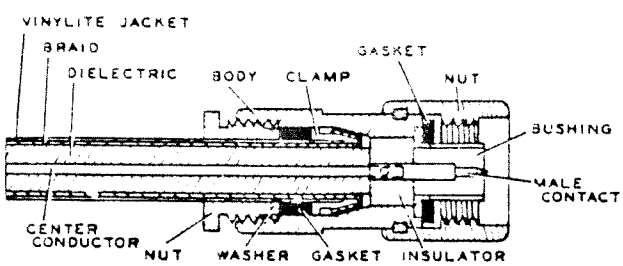
WITH CLAMP IN PLACE, TRIM BRAID AS SHOWN.



FOLD COPPER BRAID BACK ON CLAMP. TIN CENTER CONDUCTOR, USING MINIMUM AMOUNT OF HEAT.



HOLDING CONTACT WITH PLIERS, SOFT SOLDER CONTACT TO CENTER CONDUCTOR. IT IS *IMPERATIVE* THAT BACK END OF CONTACT BE FLUSH WITH POLYETHYLENE DIELECTRIC. DO NOT USE EXCESS SOLDER. WIPE CLEAN — SEE THAT END OF CABLE INSULATOR IS CLEAN AND FREE OF SOLDER, ROSIN AND FOREIGN MATERIAL.



SLIDE BODY INTO PLACE CAREFULLY SO THAT CENTER CONDUCTOR ENTERS HOLE IN INSULATOR. FACE OF CABLE DIELECTRIC MUST FIT FLUSH AGAINST INSULATOR. PROPERLY TIGHTEN BODY AND NUT WITH WRENCHES.

NOTES: 1. THIS ASSEMBLY PROCEDURE APPLIES TO TYPE "N" PLUGS. THE PROCEDURE FOR JACKS IS THE SAME EXCEPT FOR THE USE OF A FEMALE CONTACT AND A JACK BODY.

RG-8/U Cable Assembly to Connectors