

Tinned Ground Kit for LMR400

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Features: The 6-gauge, 7 strand copper wire provides the most practical and effective low inductance transfer of lightning induced current from your coax to your system ground.

Construction: The pre-formed tinned copper strap and associated hardware facilitates a proper attachment to the coaxial cable, insuring that the performance of the coax is not being compromised.

Design Criteria: The tinned ground kit for LMR400 is designed to comply with MIL-STD-188-124A and has been verified by independent labs to withstand the damaging effects of lightning current in excess of 200kA.

Part #	Cable Size & Type	Length	Lug	Weight
EKS-400TT	LMR400/LMR240	3'	Unattached	1.45 lb.

INSTALLATION INSTRUCTIONS

Standard Tinned Ground Kit for Coaxial Cable Applications

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PRODUCT DESCRIPTION

The Standard Tinned Ground Kit is designed to comply with MIL-STD-188-124A and has been verified by independent labs to withstand the damaging effects of lightning current in excess of 200kA. The pre-formed tinned copper strap and associated hardware facilitates a proper attachment to the coaxial cable, insuring that the performance of the coax is not being compromised. The 6-gauge, 7 strand copper wire provides the most practical and effective low-inductance transfer of lightning induced current from your coax to your system ground. Installation of ground kits is recommended at the top and bottom of each vertical run, at 200 ft. increments and just prior to building entry.

NOTICE

Installation of this product should only be performed by trained, qualified, and experienced personnel. Installation instructions for this product should be read thoroughly before installation is performed. The manufacturer and supplier of this product disclaims any liability or responsibility for the results of improper or unsafe installation practice. This Tinned Ground kit has been designed to function around the coaxial cable outer conductor dimensions published by the cable manufacturers. The manufacturer of this Tinned Ground Kit disclaims any liability for inadequate performance resulting from dimensionally incorrect coaxial cable.

MATERIAL LIST

- (1) Pre-formed tinned copper ground strap assembly with Underterminated grounding lead*
- (2) 1/4" brass lock washers
- (2) 1/4" brass nuts
- (1) Roll 2-1/2" (63.5mm) x 24" butyl mastic
- (1) Roll 3/4" (19mm) x 20' (6.1m) Electrical T ape
- (1) Heat shrink tube*
- (1) Field-crimp 3/8" 2-hole lug*
 - (2) 3/8" x 1-1/4" slotted bolts
 - (2) 3/8" lock washers
 - (2) 3/8" nuts
 - (2) 3/8" flat washer



*Factory attached Tinned Ground Kits are supplied with 3/8" 2-hole lugs and heat-shrink tubes pre-applied.

NOTE: An additional roll of butyl mastic and electrical tape is included for all coaxial cable sizes 3" and above.

REQUIRED TOOLS

- Knife
- 7/16" Open End Wrench
- #6 Crimp tool (For unattached versions)
- Heat gun or equivalent (For unattached versions)
- 9/16" Socket Wrench
- 9/16" Open End Wrench

STEP 1

Verify that all parts are present as outlined in the Material list.



STEP 3

Install the pre-formed tinned copper strap around the exposed outer conductor.



STEP 2

Remove approximately 2" (50.8mm) of the outer jacket from a straight section of coax cable.

NOTE: The exposed outer conductor should be free from foreign debris, grease or moisture.



STEP 4

Attach and tighten using brass lock washers and nuts Provided.



STEP 5

Cut three 2" (50.8mm) pieces of butyl mastic



STEP 6

Place one of the 2" (50.8mm) butyl mastic pieces under the ground wire cable, as close to the clamp as possible.



STEP 7

Fold one of the 2" (50.8mm) pieces of butyl mastic in half and place over the riveted ground lug and brass hardware to act as a filler.

NOTE: Mold the mastic to the grounding lead to insure a proper seal.



STEP 8

Place the remaining 2" (50.8mm) piece of butyl mastic over the end of the ground lead as shown.

NOTE: Mold the mastic to the grounding lead to insure a proper seal.



STEP 9

Apply one layer of butyl mastic, overlapping the coax jacket by 1" (25.4mm) on each end of the exposed outer conductor. Overlap each wind by one-half of the width of the mastic. Cut any remaining mastic and dispose of it properly.

NOTE: All parts of the Tinned Ground kit and outer conductor should be sealed by the mastic.



STEP 10

Apply three overlapping layers of vinyl electrical tape extending 2" (50.8mm) beyond the butyl mastic. Cut the remaining tape and dispose of properly.

NOTE: Proceed to step 14 if using Tinned Ground Kit with factory attached ground lugs.



STEP 11

Cut ground lead to the desired length and remove approximately 3/4" (19.1mm) of insulation from the end.

NOTE: Once bonded to ground point, grounding lead should be as straight as possible and installed in a downward direction. (Below the ground strap)
NOTE: All bends in the ground lead should be no smaller than an 8" (203.2mm) radius.



STEP 12

Slide the appropriate #6 lug over the end of the ground lead and crimp in two places using a hand crimping tool as shown.



STEP 13

Slide the heat shrink tube over the end of the lug and use a heat gun to shrink it into position as shown.



STEP 14

Clean the grounding point thoroughly and bolt the lug into position using the appropriate hardware provided.

