

## PRODUCT WARRANTY

GENERAL WARRANTY. PCTEL, Inc. ("PCTEL") warrants that the PCTEL products furnished herewith (the "Products") shall be free from defects in material and workmanship for a period of two (2) years from the date of shipment by PCTEL under normal use and operation; provided, however, that MPRC and MPRD parabolic reflector antennas and Bluewave series antennas are similarly warranted for five (5) years from the date of shipment by PCTEL. PCTEL's sole and exclusive obligation under the foregoing warranty shall be, at its option, to repair or replace any defective Product that fails during the warranty period. The expense of removal and reinstallation of any item is not included in this warranty. THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE WITH RESPECT TO THE PRODUCTS. Repair or replacement in the manner provided herein shall be the sole and exclusive remedy of the buyer for breach of warranty and shall constitute fulfillment of all liabilities of PCTEL with respect to the quality and performance of the Product.

EXCEPTIONS. PCTEL DOES NOT WARRANT THAT THE OPERATION OF THE PRODUCTS IS ERROR-FREE OR THAT OPERATION WILL BE UNINTERRUPTED. IN NO EVENT SHALL PCTEL BE LIABLE FOR: (i) ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES TO THE BUYER OR ANY THIRD PARTY ARISING OUT OF THESE TERMS AND CONDITIONS OR ANY DEFECTIVE PRODUCT WHETHER THE DEFECT IS WARRANTED AGAINST OR NOT, WHETHER THE CLAIM IS BASED UPON CONTRACT, TORT, STRICT LIABILITY OR OTHERWISE, (ii) ANY AMOUNT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT, (iii) SYSTEM PERFORMANCE, INCLUDING COVERAGE; (iv) THE BUYER'S SELECTION OF PRODUCTS FOR THE BUYER'S APPLICATION; AND/OR (v) FAILURE OF PRODUCTS TO MEET GOVERNMENT OR REGULATORY REQUIREMENTS. The foregoing general warranty shall apply only if: (a) the Product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation; (b) no modification, alteration or addition has been made to the Product by persons other than PCTEL or PCTEL's authorized representatives or otherwise approved by PCTEL in writing; and (c) the Product has not been subjected to misuse, neglect or unusual physical, electrical or electromagnetic stress, or some other type of accident.

WARRANTY PROCEDURES: In the event of a warranty claim, the buyer must contact PCTEL to arrange for Product return. No Product will be accepted for replacement or repair without first obtaining a Return Material Authorization (RMA) number from PCTEL Customer Service by telephone: 630.372.6800 or by email to antenna.techsupport@pctel.com. PCTEL reserves the right to inspect all defective Products. Product returned without an RMA number will not be processed and will be returned to the buyer freight collect. The warranty period of any repaired or replaced Product shall not extend beyond its original term.

Equipment to be repaired or replaced under warranty is to be returned, freight prepaid, to the following address with the assigned RMA number displayed on the box:

PCTEL, Inc., Attention: RMA Coordinator  
471 Brighton Drive, Bloomingdale, Illinois 60108 U.S.A.



471 Brighton Drive  
Bloomingdale, IL 60108



## PCTCN CHROME NUT ANTENNAS INSTALLATION INSTRUCTIONS

© 2011 PCTEL, Inc.  
All Rights Reserved

Part #: MIS-PCTCN

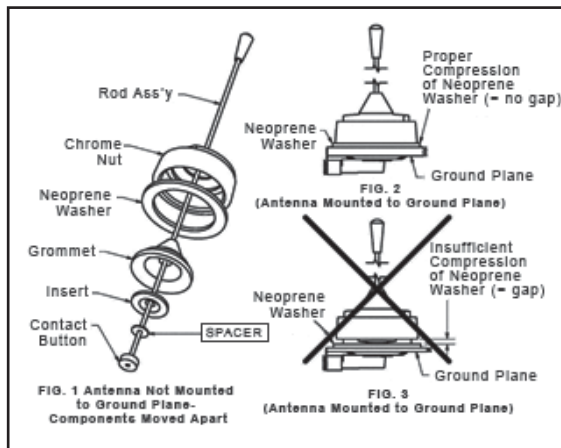
Printed in the USA

## ADDED FEATURE TO YOUR PCTCN ANTENNA

A spacer has been added to the antenna assembly to provide a positive electrical contact with a variety of PCTEL mounts (Fig 1).

The spacer allows for proper compression of the Neoprene washer at the interface of the chrome nut antenna and the ground plane (Fig. 2).

Should additional compression of the Neoprene washer be necessary (Fig. 3), the spacer (located in the cavity of the insert) may be cut across and removed, provided that electrical contact is maintained.



## INSTALLATION LOCATION

Maximum performance will be attained by locating the antenna at the center of the vehicle roof. However, satisfactory results can be attained in other locations, such as rear fender or the trunk lid.

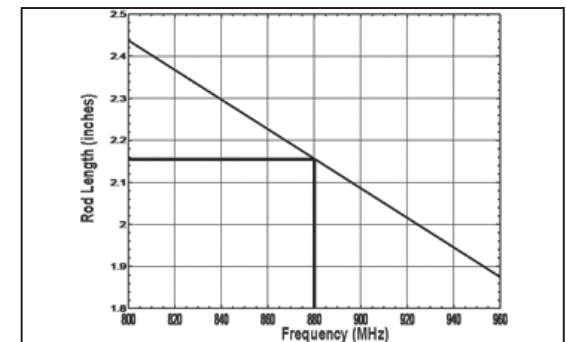
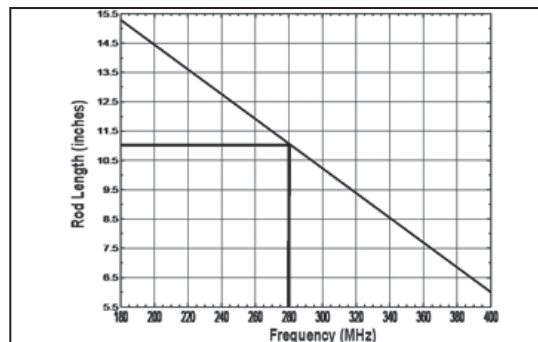
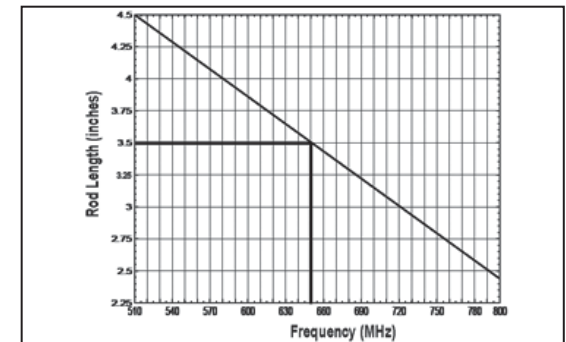
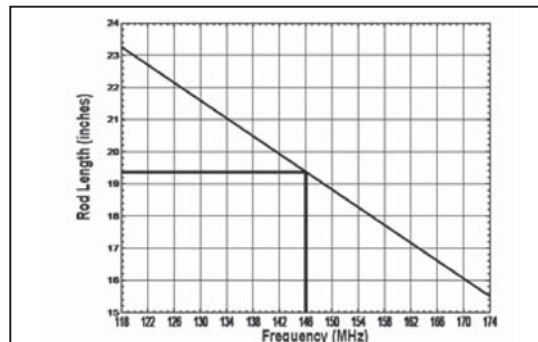
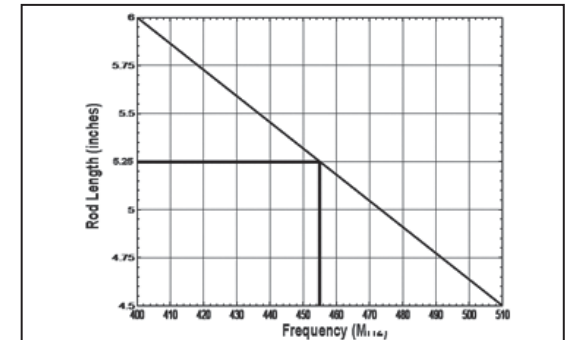
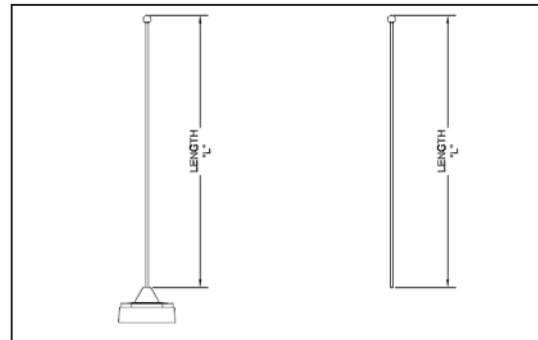
## REFLECTED POWER

Normal VSWR will be less than 1.5:1. Higher values indicate incorrect rod length or faulty mounting condition. Check rod length by moving a hand toward the base matching coil. If reflected power increases, rod is too long. If reflected power decreases to a minimum, then rises, the rod is too short.

## CUTTING THE ROD (APPLIES TO PART NUMBER PCTCNMFT ONLY; ALL OTHER MODELS ARE FACTORY TUNED)

Your PCTCNMFT antenna is supplied with a whip ready for use at the lowest frequency within the specified range. To tune the whip for other frequency ranges, remove the ball and cut the whip from the top. Cutting the whip will be easier if using the edge of a file or grinding wheel to score the rod around its circumference. Then snap off with a pair of pliers.

It is highly recommended that the rod be cut a bit longer than indicated on the chart. In this way 1:1 VSWR can be approached from the long side of the whip. In order to maximize both the performance and the appearance of your antenna, it is recommended that you treat it in the same manner you do your car. Periodic cleaning and a quality car wax may be used to help protect the finish and extend the life of the antenna.



The dark line indicates the approximate length for the rod (y-axis) to the tuned frequency (x-axis)