



Replacement Transmitter Antenna Assembly Manual for the X9303, X9503, 12X, DX7 and DX7se

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NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up-to-date product literature, visit <http://www.horizonhobby.com> and click on the support tab for this product.

⚠ WARNING: READ AND FOLLOW ALL INSTRUCTIONS

This manual contains instructions for safely replacing a transmitter antenna. This replacement antenna is a key component in a sophisticated hobby product. The instructions require basic technical knowledge and mechanical skill. The replacement should not be attempted by children or beginner hobbyists.

Do not attempt disassemble, use with incompatible components, or augment the product in any way, outside of these instructions. Failure to follow each instruction and precaution could result in a break of signal transmission, which will ultimately lead to damage to the product, property and/or personal injury.

Read ALL instructions. If after reading these instructions you are not confident in your ability to replace the antenna and perform a range check, send the antenna and transmitter, free of charge, to the Horizon Service Center where this procedure can be performed by an authorized service technician.

Horizon Service Center
4105 Fieldstone Road
Champaign, IL 61822 USA
877-504-0233

productsupport@horizonhobby.com

Note: If it is decided to submit the unit for antenna replacement, Horizon will pay the costs of shipping and labor associated with the replacement of the antenna. However the cost to repair any OTHER damage done to the product may be the responsibility of the customer, to be determined at the sole discretion of Horizon Hobby Inc.

⚠ CAUTION: Never turn the radio on when the antenna is not attached to the module. Powering up the transmitter without the antenna attached can damage the transmitter.

INTRODUCTION

The following instructions are for replacing the antenna in a X9303, X9503, 12X, DX7 or DX7se. Read them completely before beginning to replace your antenna.

Items Needed:

- New antenna assembly (JRPA164)
- 2.5mm hex driver - 12X only
- Medium Phillips head screwdriver

STEP 1

With the transmitter power switch in the "off" position, open the battery compartment. Remove the battery pack. Be careful not to damage the connector.

12X



X9303, X9503, DX7 and DX7se

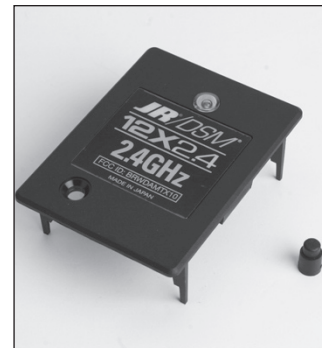


STEP 2

X9303, X9503, DX7 and DX7se - Using a Phillips screwdriver, remove the 6 screws holding the transmitter case together.



12X - Remove rear module cover. Use care to not lose the bind button extension.



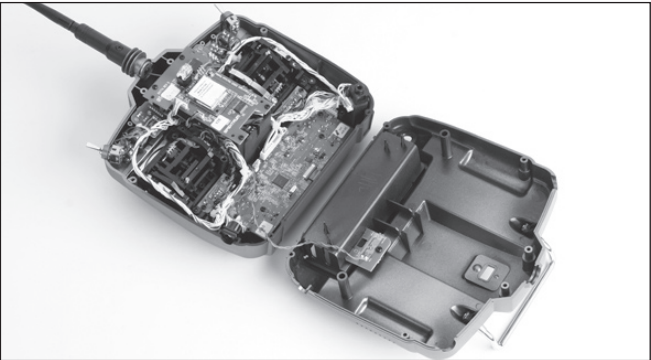
STEP 3

Carefully remove the back case half. Put it aside. Be careful not to damage the wires.

X9303 and X9503



DX7 and DX7se



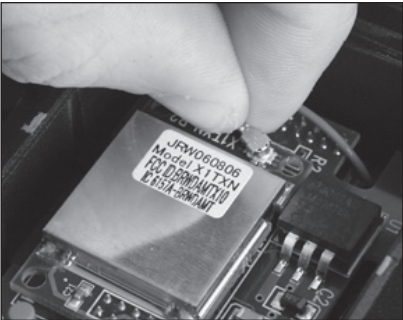
STEP 4

Disconnect the antenna wire where it connects to the RF module. Carefully grasp the wire near the connector and pull straight up while wiggling the wire. It should disconnect easily.

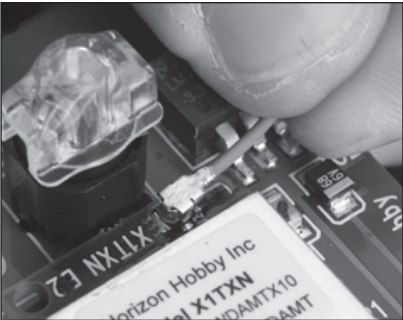
X9303 and X9503



12X

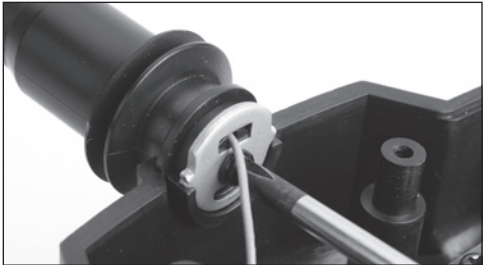


DX7 and DX7se

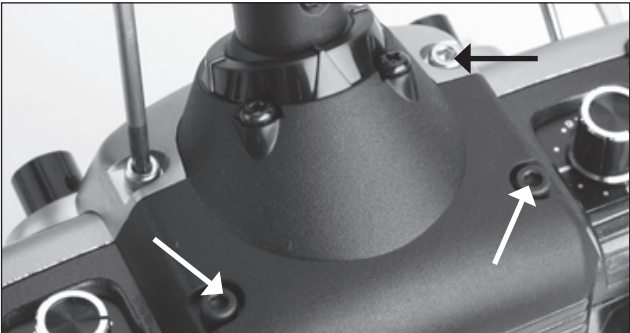


STEP 5

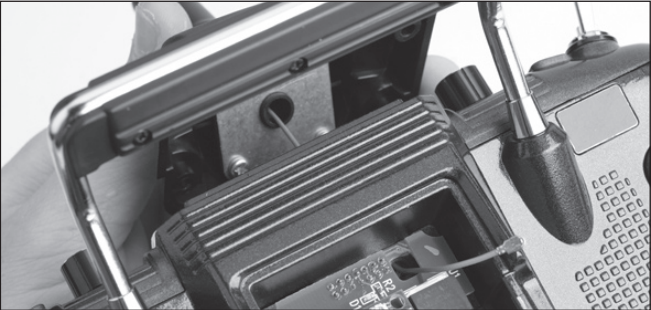
X9303, X9503, DX7 and DX7se - Unscrew and remove the Phillips head screw from the antenna base plate and the Phillips head screw from the antenna housing. Notice that of the 3 holes in the base plate, the antenna routes through the rectangular hole.



12X - Using a 2.5mm hex driver remove the 4 screws holding the transmitter top onto the case.

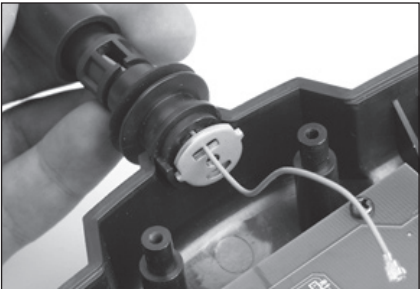


12X - Slide the top antenna mount assembly off the top of the transmitter and carefully pull the small antenna connector through the small opening in the board and then out of the top of the transmitter. Do not use too much force pulling the connector through the board.



STEP 6

X9303, X9503, DX7 and DX7se - Slide the antenna assembly out of the top of the transmitter.

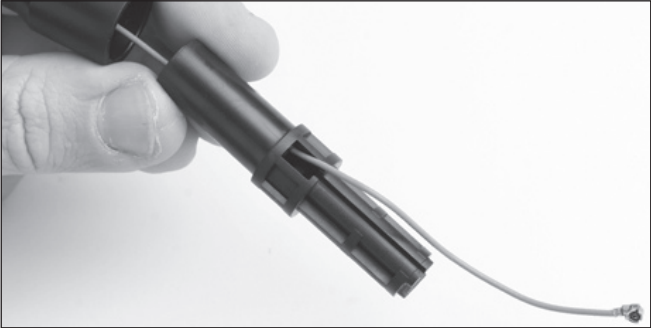


12X - Remove the Phillips head screw then slide the antenna assembly out of the top of the antenna mount assembly. Position the antenna mount pointing backwards from the 2 Phillips screws in the antenna base. This allows maximum clearance for removing the antenna or inserting a new antenna.



STEP 7

X9303, X9503, DX7 and DX7se - Reassemble the new antenna assembly and the shaft. Route the coaxial wire through the shaft until the wire exits the rectangular opening at the base of the shaft. Align the shaft with the antenna housing until the Phillips head screw holes line up. Be careful not to pinch the antenna wire when reinserting the shaft. Then install the Phillips screw on the antenna housing.

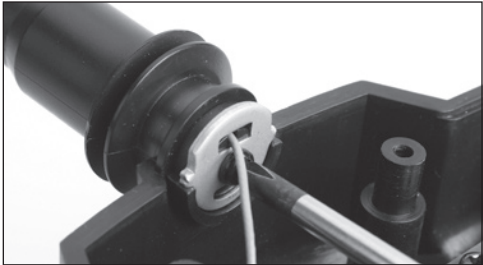


12X - Reassemble the new antenna assembly and the shaft. Routing the coaxial wire through the shaft until the coax wire exits the opening at the base of the shaft. Align housing with the antenna shaft until the Phillips head screw holes line up. Avoid pinching the antenna wire. Install the Phillips head screw.

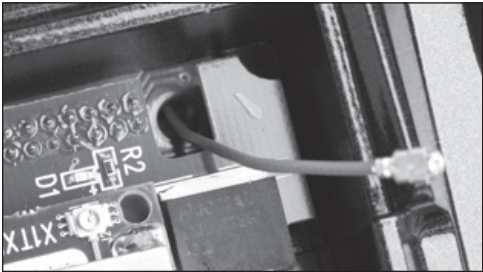


STEP 8

X9303, X9503, DX7 and DX7se - Install the antenna assembly in the transmitter. Feed the antenna wire through the rectangular opening in the metal base plate. Make sure the key is in the non-rectangular slot. Use care not to pinch the antenna wire. Fasten it in place using the Phillips screw in the center hole.

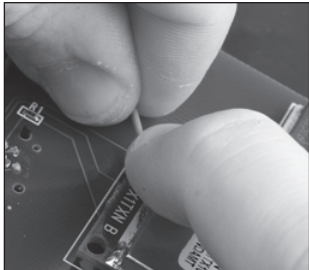


12X - Install the antenna mount assembly in the transmitter routing the coaxial antenna wire through the hole in the board to reach the RF module.



STEP 9

X9303, X9503, 12X, DX7 and DX7se - Install the antenna connector on the RF module. Precise alignment is needed so the two snap together. Carefully align the connector and press in place until it clicks. Ensure proper connection by a slight “side-to-side” movement of the antenna wire.




STEP 10

X9303, X9503, 12X, DX7 and DX7se - Confirm the installation was done correctly by checking that all wires, screws and other components are back to their original position with the new antenna installed. Check to ensure no wires are kinked or will be pinched when the transmitter is screwed back together. Reassemble the unit and perform a range check.

Range check procedures:

1. With the model resting on the ground, system powered and model secured, stand 30 paces (approx. 90 feet) away from the model.
2. Face the model with the transmitter in your normal flying position and depress and hold the bind button on the back of the transmitter. This causes reduced power output from the transmitter.
3. You should have total control of the model with the button depressed at 30 paces (90 feet).
4. If control issues exist, contact the appropriate Horizon Service Center for further assistance.

Note: If any time during or after the installation you do not feel confident about the installation please send it to the appropriate Horizon Service Center.

 WARNING: ENSURE FUTURE ANTENNA SAFETY - Do not attempt to use the antenna to bear any weight, pick up the transmitter by the antenna or alter the antenna in any way. If the transmitter antenna or related components become damaged the output strength can be severely impeded which will likely lead to a crash, injury, and property damage.