




Astro™ System DC 30

Battery, Collar, and Antenna Replacement Instructions

This document provides the following instructions.

- Replacing the DC 30 Lithium-ion Battery
- Replacing the DC 30 Collar (page 2)
- Replacing the VHF Antenna (page 2)

These kits are intended as replacement items for the Garmin® Astro™ Dog Tracking System.


 **NOTE:** The limited warranty covering this product will not cover any replacement battery, collar, or antenna not replaced in accordance with these instructions.

Replacing the DC 30 Lithium-ion Battery

The DC 30 Battery Replacement Kit includes the following parts:

- One rechargeable lithium-ion battery
- Two battery-cover screws (M1.7 × 0.6 × 5 mm)
- Four bottom-cover mounting screws (M2.0 × 0.4 × 8 mm), stainless steel, black oxide

Tools required (not included)—one small Phillips screwdriver and a small flat-blade screwdriver.


 **NOTE:** It is not necessary to disconnect the DC 30 from the mounting plate on the collar to replace the battery.

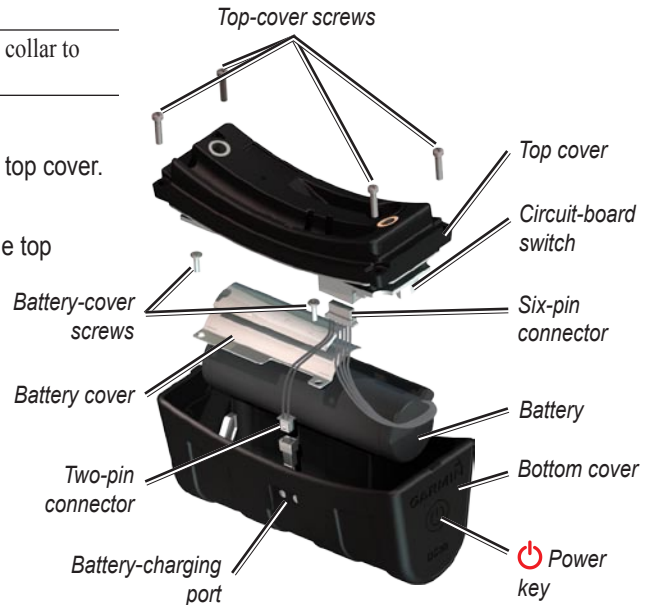
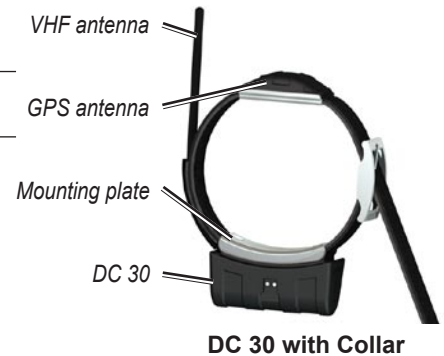
To remove the DC 30 lithium-ion battery:

1. Use a small Phillips screwdriver to remove the four top-cover screws from the top cover.
2. Separate the top cover from the bottom cover.
3. Use a small, flat-blade screwdriver to disconnect the six-pin connector from the top cover.
4. Use a small, flat-blade screwdriver to disconnect the two-pin connector from the bottom cover.
5. Use a small Phillips screwdriver to remove the two battery-cover screws.
6. Remove the battery cover and the battery from the bottom cover.

Note the orientation of the battery in the bottom-cover housing. You will install the new battery the same way. Dispose of the old battery according to local ordinances and regulations.

To replace the DC 30 lithium-ion battery:

1. Place the replacement battery in the bottom cover. Place the wired end of the battery on the same end as the  Power key on the bottom cover.
2. Attach the battery cover to the bottom cover using the two battery-cover screws.
3. Connect the replacement-battery two-pin connector to the bottom cover.
4. Connect the replacement-battery six-pin connector to the top cover by using your thumb to hold the connector against the housing, as shown in the illustration.
5. Check to ensure proper operation of the replacement battery by pressing the circuit-board switch. If the red LEDs on the bottom cover do not begin flashing, check the six-pin connector for proper connection.
6. Check the charging circuit by connecting the Astro System DC 30 battery charger to an appropriate electrical source and to the battery-charging port. If the blue LED is not on, check the two-pin connector for proper connection.
7. Firmly attach the top cover to the bottom cover using the four top-cover screws to ensure water resistivity.
8. Fully charge the DC 30 battery before using it as described in the *Astro 220 Owner's Manual*. Charging a fully depleted DC 30 battery requires 4½ hours.



Six-pin connector

Replacing the DC 30 Collar

To use your replacement DC 30 collar, you must remove the DC 30 from your old collar and attach it to the new collar.

The DC 30 Collar Replacement Kit includes the following parts:

- One DC 30 collar with GPS antenna and VHF antenna
- One VHF antenna-connector screw (M3.0 × 0.5 × 6 mm), stainless steel
- One VHF cover

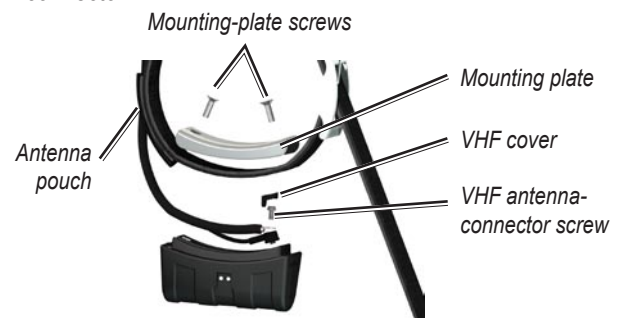
Tools required (not included)—one medium Phillips screwdriver, one small Phillips screwdriver, and one pair of needle-nose pliers.

To remove the DC 30 from your old collar:

1. Use a medium Phillips screwdriver to remove the two mounting-plate screws and the mounting plate from your old collar.
2. Use needle-nose pliers to peel back the rubber boot from the GPS-antenna MCX connector.
3. Use needle-nose pliers to gently disconnect the GPS-antenna MCX connector.
4. Remove the VHF cover from the VHF antenna-connector screw.
5. Use a small Phillips screwdriver to remove the VHF antenna-connector screw.

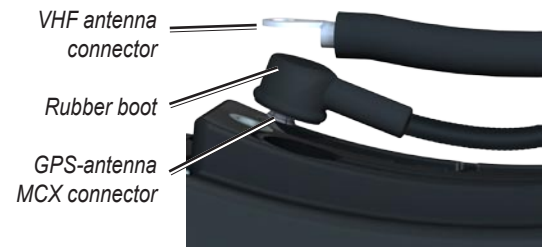
To attach the DC 30 to your new collar:

1. Attach the VHF antenna connector to the DC 30 with the VHF antenna-connector screw.
2. Place the VHF cover over the VHF antenna-connector screw.
3. Peel back the rubber boot to expose the GPS-antenna MCX connector.
4. Reconnect the GPS-antenna MCX connector by gently inserting the MCX connector into the receptacle on the DC 30.



NOTE: Forcing the MCX connector into the receptacle may damage the connector pin or the connector flanges.

5. Press the rubber boot into place around the MCX connector.
6. Connect the DC 30 to the collar using the mounting plate and the two mounting-plate screws.



Replacing the VHF Antenna

The DC 30 VHF Antenna Replacement Kit includes the following parts:

- One VHF whip antenna
- One VHF antenna-connector screw (M3.0 × 0.5 × 6 mm), stainless steel
- One VHF cover

Tools required (not included)—one medium Phillips screwdriver and one small Phillips screwdriver.

To remove your old VHF antenna (use illustrations above):

1. Use a medium Phillips screwdriver to remove the two mounting-plate screws and the mounting plate from the collar.
2. Remove the VHF cover from the VHF antenna-connector screw.
3. Use a small Phillips screwdriver to remove the VHF antenna-connector screw.
4. Remove your old VHF antenna from the antenna pouch.

To attach your new VHF antenna to the collar (use illustrations above):

1. Slide the antenna through the antenna pouch.
2. Attach the VHF antenna connector to the DC 30 with the VHF antenna-connector screw.
3. Place the VHF cover over the VHF antenna-connector screw.
4. Connect the DC 30 to the collar using the mounting plate and the two mounting-plate screws.

Please visit www.garmin.com for additional documentation and information.