

**ASTRO® APX™ N50/N30 Digital Portable Radios**  
**Flexible Antenna Quick Start Guide**



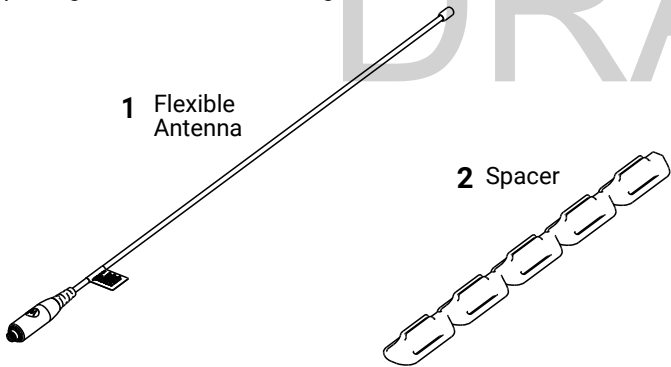
**Note:** Use only Motorola Solutions-approved batteries, wired surveillance, and **wired or wireless audio accessories** when using this antenna. Using approved wired surveillance and wireless audio accessories is important because the use of non-Motorola Solutions approved accessories may result in exposure levels, which exceed the occupational/controlled environment RF exposure limits.

**Table 1: Antenna Kit Number**

| Kit Number  | Description                             |
|-------------|-----------------------------------------|
| AN000471A01 | Flexible Whip Antenna, VHF, 136–174 MHz |

**1 Packing List**

The package contains the following items:



**Figure 1. Items in the package**

**1 What You Need**

- 1 Radio with battery pack.
- 2 Duct/surgical tape and/or straps.

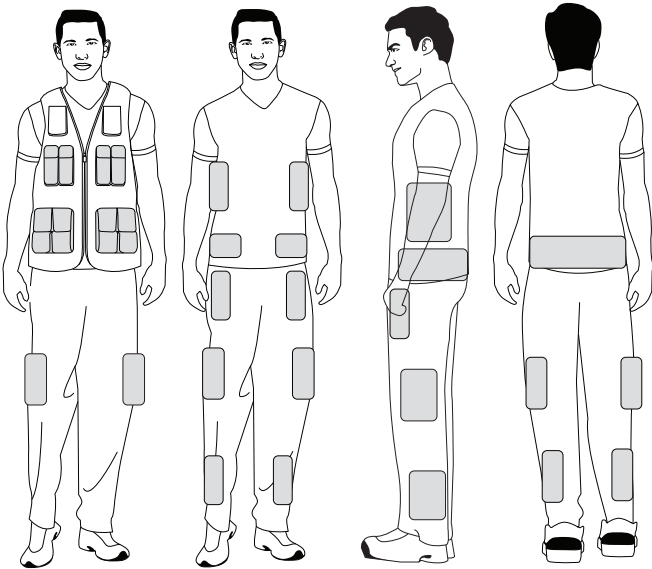
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**MN010545A01-AB**



**1 Positioning the Radio and Devices on Your Body**

Your radio is designed to operate while concealed under your outer garments. Refer to **Figure 2** for the recommended positions to place your radio.



**Figure 2. Recommended Positions for Radio and Devices**

**Note:** When using the flexible antenna, securely tape or strap only the battery side of the radio to your body.

**1 Installing the Flexible Antenna**

**Prerequisite:** Turn off the radio.

To attach the antenna to the radio, insert the antenna in the receptacle and turn clockwise.



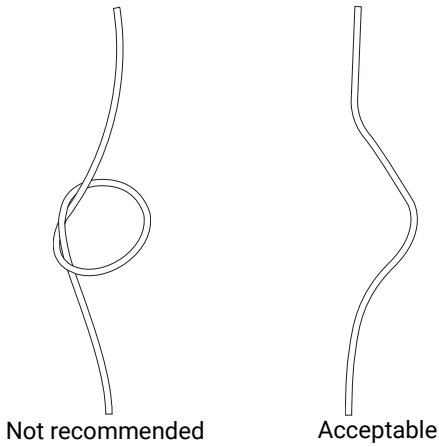
**Figure 3. Antenna Installation**

**Note:** To avoid damage to the antenna and radio, the maximum allowable tightening torque is 15 lb-f.

To remove the antenna, turn off the radio and turn the antenna counterclockwise.

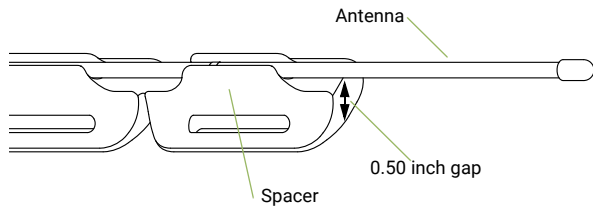


- Do not twist or coil the antenna because this will result in antenna performance degradation. See **Figure 4**.



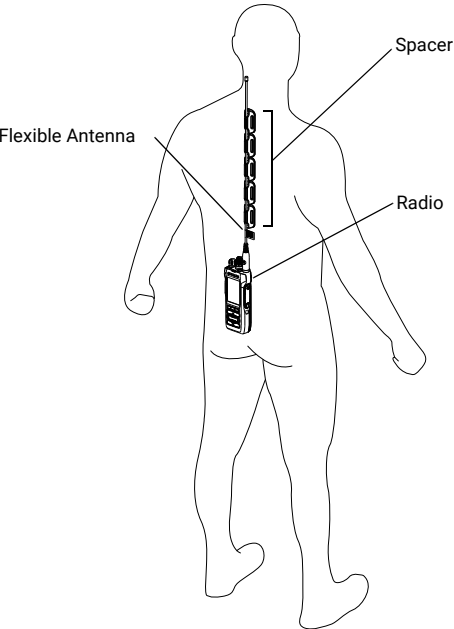
**Figure 4. Acceptable Antenna Condition**

- To comply with the RF Exposure standards and improve radio performance, use the spacers provided to maintain a distance of 0.50 in. (1.27 cm) from your body. Refer to **Figure 5**.



**Figure 5. Proper Spacing of the Antenna**

- To improve radio performance, secure the antenna as shown in **Figure 6**. Ensure that the spacer is upright when strapping the spacer to the body.

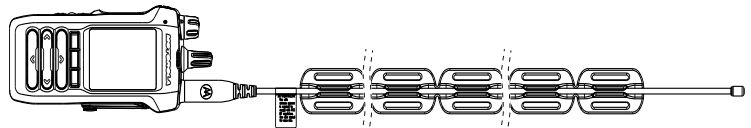


**Figure 6. Recommended Spacer Positions When Strapped to the Body**

**1 Strapping the Antenna onto Your Body**

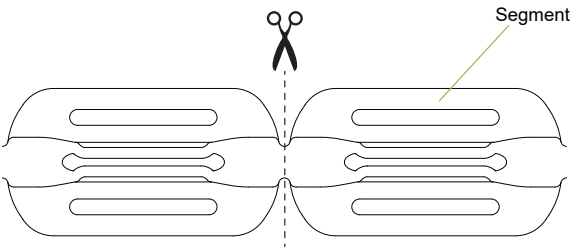
**Procedure:**

- Position the spacers along the antenna to maintain 0.5 in. (1.27 cm) from your body as shown in **Figure 7**.



**Figure 7. Recommended Location of the Spacers on the Antenna**

- The spacer can be cut into individual segments as shown in **Figure 8**.



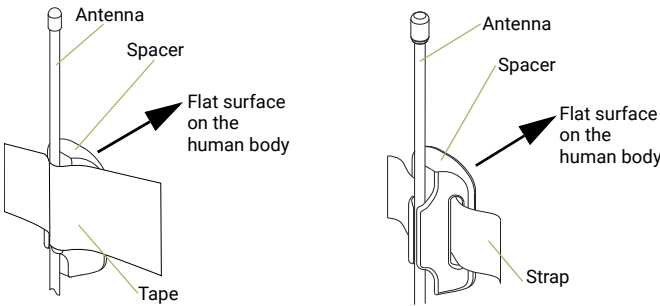
**Figure 8. Spacer Cutting Line**

**Table 2: Number of Spacer Segments for Different Antenna Bands.**

| Antenna Frequency Band | Number of spacers provided* | Number of segments |
|------------------------|-----------------------------|--------------------|
| VHF                    | 2                           | 7                  |

\*One spacer comes with five segments.

- Use surgical tape or straps to fasten the spacer to the body as shown in **Figure 9**.



**Figure 9. Fastening the Spacer with Tape or Straps**