UtilityScan® DF Model 655: Cart and Antenna Assembly Instructions

This GSSI Cart intended for use with the Panasonic® G1 Toughpad

Mobilizing your UtilityScan® DF system on the GSSI Model 655 survey cart allows you to cover ground very conveniently. The cart can accommodate a dual frequency 300/800 MHz antenna. The 655 cart incorporates a unique antenna capsule design that protects these antennas from the elements and renders the antennas weatherproof. It also incorporates a survey wheel for high-precision distance measurements. Please read through the entire assembly manual before assembly and take a moment to compare the contents of your order with the image and list below.

**Tools Required:** Screw driver (optional)

1  Unpack System Components:
   - G1 Toughpad and power adapter/charger
   - 2.0 m communication cable
   - Foam insert
   - UtilityScan DF antenna
   - Battery mounting bracket for antenna
   - 4-Wheel cart with capsule and handle
   - G1 mounting unit, 3 thumb screws
   - Manual CD and Quick Start Guide
   - Charger for antenna batteries
   - 2 Antenna batteries
   - Transit case

2  Assemble the handle to the cart as shown to the right.

3  Connect the G1 mounting unit to the handle with the 3 thumb screws supplied. Attach the cable guide to the handle with the two screws supplied by hand or with a screwdriver.

4  Though the wheels and the capsule come already attached to the cart, you may need to detach and re-attach them. To detach or attach wheels to the cart frame line up the flat side of the “D” shaped axle rod with the corresponding flat part of the “D” shaped hole on the cart frame. Slide the rod into or out of the cart frame while keeping the button at the center of the wheel hub depressed.

5  Attach the Capsule to the Cart.

6  Remove the 4 screws between the arrows of the antenna. Attach the battery mounting bracket to the antenna, using the 4 screws, as shown (notice the location side of the large tab). Torque to 8-10 inch/pounds. Insert the DF antenna into the capsule. NOTE THE POSITION and THE DIRECTION of the antenna in the capsule.
7 Place the foam on top of the antenna as shown below. Guide the 2.0 m communication cable and the survey wheel cable through the foam, using the slots of the foam as guides. Attach the cables to the DF antenna as shown. Note the service loop of the cables to reduce the tension on the connections.

8 Guide the green communication cable through the cable guide, through the hole at the top of the handle and connect it to the G1.

9 Attach the G1 to the mounting unit.

10 If you find that the G1 is loose or that it is difficult to close the latch on the mounting unit, you may need to adjust the hex nut on the swell latch.

11 Connect the battery cable and insert the antenna battery to the battery mount on the antenna.

12 Place the cover of the capsule, starting in the back as shown. Make certain there is a service loop with the cables so that there is no tension with the cables as the capsule moves up and down during data collection. Latch the cover to the locked position.

13 Depending on site conditions and to increase the life of the capsule, you should adjust the height of the capsule by using a strap. Place a ¼ inch piece of plywood under the capsule. Loosen the straps so that the capsule sits on the plywood, and then re-tighten the straps.