Tait accessories

TBBA03-03 Duplexer Kit Installation Instructions



Introduction

The TBBA03-03 duplexer kit can be installed in TB7100 base stations with provision for an internal AC power supply unit. With this mechanical configuration, the electrical ground point is located on the right-hand side of the rear panel (refer to the illustration on the next page).

Contents of Kit

Pos.	Qty.	Part Number	Description
1	1	303-23055-00	Cover plate for N-type connector
2	4	352-00010-28	Hexagon nut M3, Nyloc
3	1	219-03060-00	N-type/N-type panel socket RF cable, coax
4	2	219-03061-00	N-type/BNC RF cable, coax
(5)	1	302-05288-00	Duplexer mounting bracket
6	4	345-40460-00	Torx screw M3×6
7	1	345-40470-00	Torx screw M3×8, plastic type, with washers

Installation



Warning!! The internal AC power supply unit contains voltages that may be lethal. Refer to the ratings label on the rear of the base station. Ensure that all power sources (AC and DC) are disconnected before opening the base station.

- 1. Pre-tune the duplexer to the required frequencies if this has not already been done.
- 2. Remove the screws and the cover from the TB7100 base station.
- 3. Remove the RF cable assemblies that connect between the Rx/Tx modules and the rear panel. (Four M3 nuts can be re-used if undamaged.)
- 4. Use two of the M3 nuts ② provided to mount the panel blanking plate ① provided to cover the hole labelled Rx in the chassis.

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Important: Make sure that the mounting orientation of the RF cable assembly will allow it to be routed as shown with a minimum of bending and twisting.

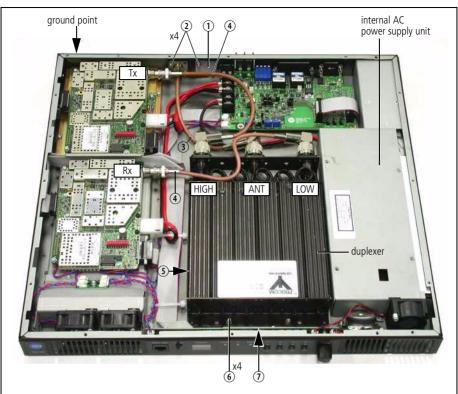
- 5. Use two of the M3 nuts ② provided to mount the antenna RF cable assembly ③ into the chassis hole labelled Tx/Ant.
- 6. Use the four countersunk Torx T10 M3×8 screws ① to fit the duplexer mounting bracket ③ to the duplexer. Fasten the screws to 4.5lb·in (0.5 N·m).
- 7. Slide the duplexer assembly into the mounting slots in the chassis and fasten the Torx T10 M3×6 screw ① at the front of the unit to 4.5 lb·in (0.5 N·m).
- 8. Connect the antenna RF cable assembly ③ to the duplexer N-type connector labelled Ant.



Important: Make sure that the mounting orientation of the RF cables will allow them to be routed as shown with a minimum of bending and twisting.

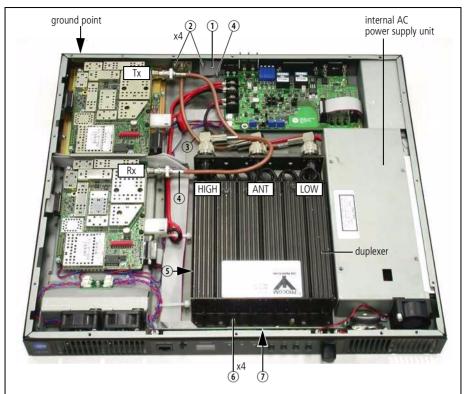
- 9. Connect the Rx and Tx modules to the duplexer using the two RF cables ④ provided. If the Tx frequency is above the Rx frequency, connect the Tx RF cable to the duplexer port labelled HIGH (as shown in Figure 1).
 - If the Rx frequency is above the Tx frequency, connect the Rx RF cable to the duplexer port labelled HIGH (as shown in Figure 2).
- 10.Mount the top cover and screws.

Figure 1 TBBA03-03 duplexer kit with transmitter connected to HIGH



- ① Cover plate for N-type connector
- ② Hexagon nut M3, Nyloc (x4)
- ③ N-type/N-type panel socket RF cable, coax
- 4 N-type/BNC RF cable, coax (x2)
- $\begin{cal}{c} \begin{cal}{c} \beg$
- 6 Torx screw M3×6 (x4)
- 7 Torx screw M3×8, plastic type, with washers

Figure 2 TBBA03-03 duplexer kit with receiver connected to HIGH



- ① Cover plate for N-type connector
- ② Hexagon nut M3, Nyloc (x4)
- ③ N-type/N-type panel socket RF cable, coax
- 4 N-type/BNC RF cable, coax (x2)
- $\begin{cal}{c} \begin{cal}{c} \beg$
- 6 Torx screw M3×6 (x4)
- 7) Torx screw M3×8, plastic type, with washers