Tinytag

Tinytag Data Logger Service Kit Instructions

Instructions for servicing Tinytag Transit, Aquatic, XP, Extra and Instrument data loggers.

⚠ WARNINGS

- **This kit is for use with Tinytag data loggers only**
- **Observe all warnings on the battery(s) supplied**
- **All data loggers should be stopped before they are serviced**
- **Damage caused to units during or as a result of user servicing will not be covered by the warranty**

Additional Items Required

In addition to the correct service kit, you will also need the following items to service your data logger(s):

- **A computer running the Tinytag Explorer software with an appropriate communication cable or inductive pad**
- **Medium Phillips head screwdriver (TGX & TGI loggers only)**
- **Medium slotted screwdriver (XP loggers only)**
- **Cutters (XP, TGX & TGI loggers only)**

SER-9512 Tinytag Transit (TG-0050) Service Kit

For use with logger model:

TG-0050

1. Remove the data logger's lid.
2. Taking care not to touch the circuit board, remove the old battery by sliding it outwards from the centre of the unit.
3. Carefully scrape the protective insulation off the legs of the new battery.
4. Noting the correct polarity, and taking care not to place undue strain on the pins, insert the new battery until it fits snugly in the base of the case.
5. As the battery is fitted, the green LED should come on for four seconds and then go out. If it does not, remove the battery for 30 seconds and try again.
6. Connect the data logger to the computer and check Tinytag Explorer can communicate with it.
7. Refit the lid.

SER-9513 Tinytag Transit Inductive (TG-3080) Service Kit

For use with logger model:

TG-3080

1. Remove the data logger's lid and 'O' ring, and gently slide the battery out of its holder.
2. Insert the new battery, observing the correct polarity, and taking care not to touch the unit's circuit board.
3. **For data loggers below SN 251690:** The unit's green LED should come on for four seconds and then go out. If this does not happen, remove the battery for 30 seconds and try again.
   For data loggers above SN 251690: Both LEDs will flash briefly.
4. Re-fit the 'O' ring to secure the battery in its holder.
5. Place the data logger on its inductive pad and check that Tinytag Explorer can communicate with it.
6. Refit the lid.

SER-9514 Tinytag Transit 2 (TG-4080/1) Service Kit

For use with logger models:

TG-4080, TG-4081

1. Remove the data logger's lid and gently slide the battery out of its holder.
2. Wait at least one minute and then insert the new battery, observing the correct polarity, and taking care not to touch the unit's circuit board - both LEDs should flash briefly.
3. Place the data logger on its inductive pad, or plug in its communication cable, and check that Tinytag Explorer can communicate with it.
4. Refit the lid.

The battery supplied in this service kit may be of a different type and size than the one originally fitted in the logger. This smaller CR2325 battery has a reduced capacity from the previous type, and if logging intervals of less than five seconds are used continuously the battery life of the logger will be less than one year.

SER-9525 Tinytag Aquatic 2 Service Kit

For use with logger model:

TG-4100

1. Open the case by unscrewing the base (there are flats in the base to assist this).
2. Carefully remove the old battery (a screwdriver or similar may be required to lever the battery from holder, care is required to avoid damaging the unit's circuit board).

SER-9525 Tinytag Aquatic 2 Service Kit *(continued...)*

3. Wait for a minimum of five minutes and then fit the new battery, the LED in the unit's base should flash once.
4. Remove the old seal and check the two mating surfaces and channel are clean.
5. Fit the new seal, taking care to avoid wiping off the lubricating grease it is coated with.
6. Screw on the lid and tighten so the case halves meet.
7. Place the data logger on its inductive pad and check Tinytag Explorer can communicate with it.

SER-9540 Tinytag Plus XP Service Kit

For use with logger models:

TGPR-0705, TGPR-0805, TGPR-1002

1. Open the case by undoing the four bolts, starting on opposite diagonals.
2. Disconnect and remove the 12V battery pack. If fitted, cut the cable tie around the battery holder. Remove the old AA batteries. Check the battery holder contacts are clean and insert the new batteries observing the correct polarity. If a cable tie was previously fitted to the pack, fit the new one around the pack in the same way and cut off the excess tie.
3. Remove the ½ AA lithium battery from its holder. Check that the battery holder terminals are clean.
4. Reconnect the 12V battery pack and place it back into the box, routing the wires from the battery clip so as not to interfere with the assembly.
5. Insert the new ½ AA lithium battery, observing the correct polarity and being careful not to touch the circuit board, whilst watching the unit's green LED. The LED should come on for four seconds and then go out. If it does not, remove the ½ AA battery for 30 seconds and try again.
6. Connect the data logger to the computer and check Tinytag Explorer can communicate with it.
7. Remove the old seal from the lid. Check the two mating surfaces and channel are clean and insert the new seal, with the flat surface facing outward. Replace the two desiccant packs.
8. Re-fit the lid so that the foam inserts align correctly around the battery pack. Tighten the screws starting with opposite diagonals.
9. Replace the connector cap lanyard if necessary.

SER-9560 Tinytag Extra/Instrument Service Kit

For use with logger models:

TGX-3080, TGX-3020, TGX-3520, TGX-3580
TGI-3080, TGI-3140, TGI-3250

1. Open the case by removing the four screws from the base, starting on opposite diagonals.
2. Carefully remove the base and fold back the coil former, taking care not to damage the coil or its leads, to allow access to the unit's battery.
3. Remove the desiccant pack (if present), foam spacer and cable tie.
4. Remove the old battery from the unit and check that the battery holder contacts are clean.
5. Insert the new battery, observing the correct polarity, and being careful not to touch the circuit board, whilst watching the unit's LEDs in the display window.
   For data loggers below SN 251690: The unit's green LED should come on for four seconds and then go out. If this does not happen, remove the battery for 30 seconds and try again.
   For data loggers above SN 251690: Both LEDs will flash briefly.
6. Secure the battery with the cable tie provided by looping it through the slot in the underside of the unit's battery holder.
7. Remove the old 'O' ring from the base, check the two mating surfaces are clean and fit the new one.
8. If the logger was fitted with a desiccant pack when opened, replace it with the new one.
9. Fit the coil former into the recess in the base, ensuring the front edge of the coil former goes into the base first. Take care not to damage the coil or its leads.
10. Position the foam insert between the coil former and battery and re-fit the base, tightening the screws starting on opposite diagonals.
11. Place the data logger on its inductive pad and check Tinytag Explorer can

Approvals

Gemini Data Loggers (UK) Ltd. operates a Business Management System which conforms to ISO 9001 and ISO 14001.

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Disposal

- Data loggers, accessories and batteries should be disposed of at organised facilities, where available, in line with local regulations.
- In accordance with the WEEE directive Gemini Data Loggers (UK) Ltd. will take back and dispose of any equipment purchased directly. Equipment not purchased directly should be returned to the point of sale for disposal.

Further Information

If you should have any questions whilst servicing your data logger, please contact your supplier, or Gemini technical support at:

e:help@tinytag.info
t: +44(0)1243 813009
w: www.tinytag.info

Gemini
DATA LOGGERS