

Technical Manual

Nano Computer



A Manual for Repair and Maintenance Technicians

CAUTION



This manual is designed to help technicians who are already experienced in workshop procedures and know how to handle tools.

Only experienced technicians should attempt to use this manual.

The tooling recommendations and procedures used in this manual must be followed carefully or damage and consequent failure of the dive computer may result.



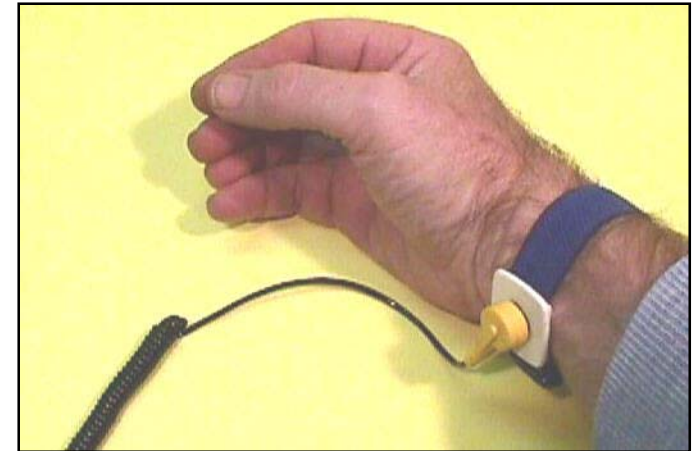
TOOLING REQUIREMENTS

- Anti static wrist strap.
- Phillip's tip screw driver No. 2.
- Torx screw driver size No. 6.
- Fine tip surgical tweezers.
- Portable test chamber.

TOOLING

An anti static wrist strap must be worn at all times when working on sensitive electrical instruments.

This type of conductive wrist strap dissipates static charges built up in the human body to ground, thereby protecting the computer. Electrostatic discharge can damage the circuits of the computer.



DISASSEMBLY

Remove the four No.6 Torx screws from the back metal cover.

Carefully lift off the cover.

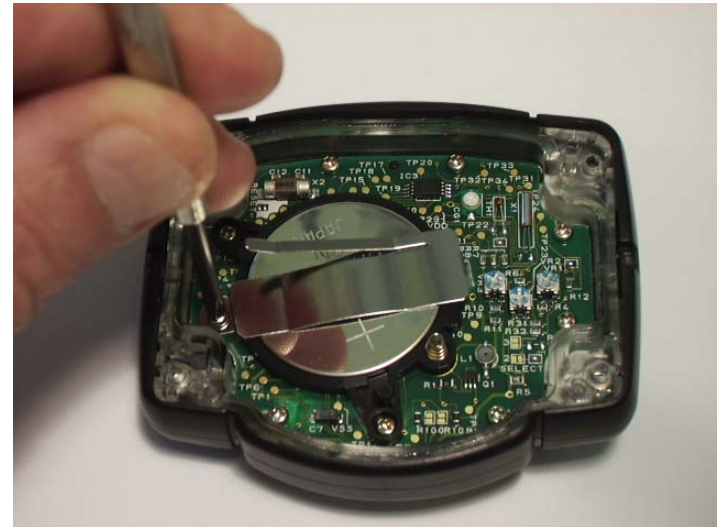
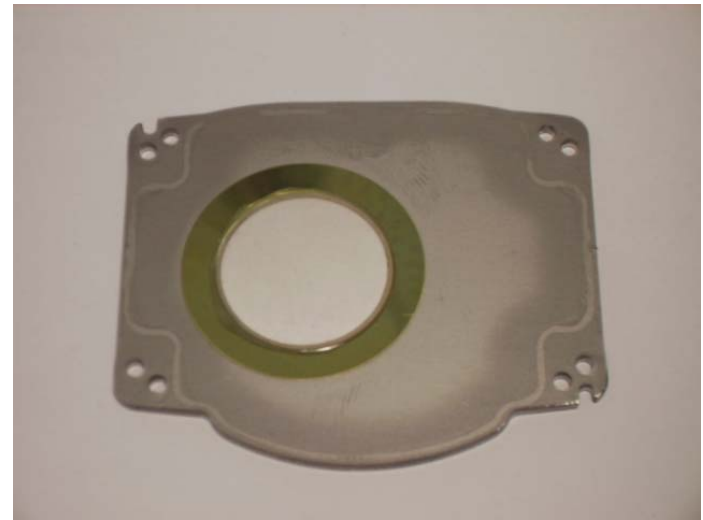


DISASSEMBLY

Caution take care not to touch the ceramic buzzer on the back plate.

Undo and remove the battery clamp screw. (Phillip's head)

Remove the battery clamp and the battery.



DISASSEMBLY

Remove and discard the body
o'ring



INSPECTION & CLEANING

The o'ring groove must be clean and free of sand or foreign matter prior to reassembly.

Clean this area carefully with a lint free cloth.

Ensure no foreign matter falls into the computer main board area.

DO NOT use silicone spray as a lubricant.

DO NOT spray any components with silicone spray.

Ensure the metal back cover is clean and free of foreign material.
Take care not to handle the ceramic buzzer.

ASSEMBLY

Install a new battery, Panasonic No. CR3032 3v. (Apollo code SP90375)

Install positive side up.

Position the battery clamp over the battery



ASSEMBLY

Install the battery clamp screw and gently tighten using a Phillip's tip screw driver.



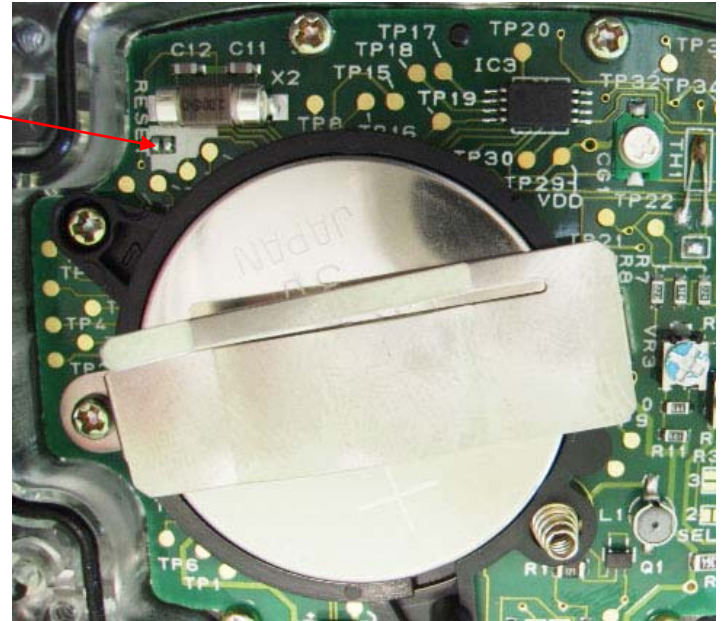
ASSEMBLY

Reset Pins

After the battery has been installed short the reset plates as shown here to activate the computer.

Fine tip tweezers can be used to short the plates

Take care NOT to short any other part of the main board.



ASSEMBLY

After shorting the reset plates the display should now be showing January 1st and 0 o'clock and 00 minutes.

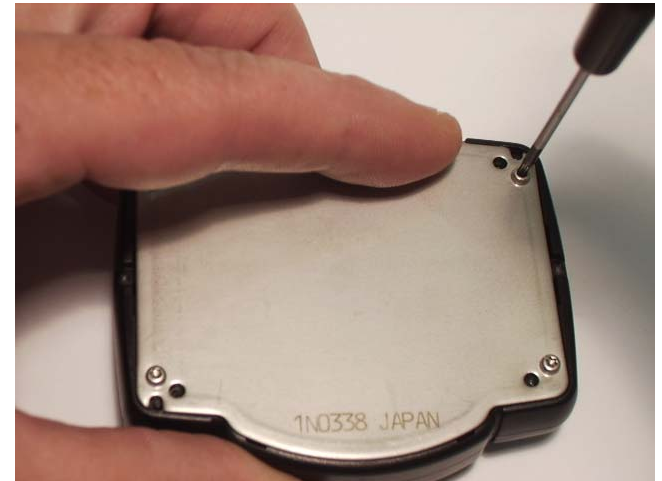
DO NOT continue to set the time etc. until after the back cover is in position.

Lightly lubricate a ***NEW*** cover o'ring (**Apollo code SP90401**) and fit to the groove.

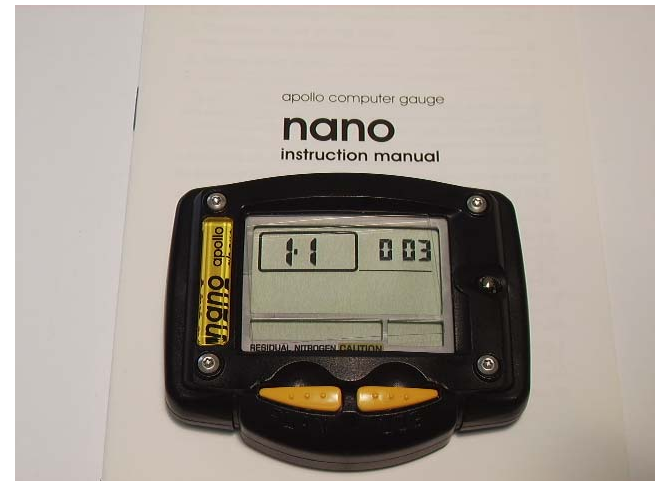


ASSEMBLY

Fit the metal back cover, install the four Torx screws and gently tighten to 3 kg/cm.



Set the date and time following the procedures laid down in the owner's handbook



ASSEMBLY



When the assembly is complete pressure test the unit in a chamber and test the functions.

CAUTION: The computer must be in water when pressurised in the chamber.