

Battery Replacement Procedure

NC200/NC300



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1 Introduction

The procedure for replacing the batteries on the NC200 and NC300 units is the same. Replacement battery kits are available from MH Corbin as P/N 60002101, and include a new battery assembly, a new end cap gasket, 3 new hex head end cap bolts, and battery care instructions.

NOTE: P/N 60002101 provides replacement bolts for NC200 and NC300 units manufactured after June 2012. These bolts utilize a 5/32" or 4mm allen wrench (not supplied). Units manufactured prior to this date utilize a 3/32" allen wrench. If servicing units of earlier vintage, please re-use the existing bolts for the battery replacement procedure.

It is very important to follow these battery replacement instructions carefully in order to prevent water from entering the unit and causing damage to the electronics and/or battery.

2 End Cap Removal

This procedure requires that the front end cap be removed. The front end cap is sloped and is held in place by three allen bolts. **NOTE: the front end cap does NOT have the data/charging connector!**



The allen bolts are secured with Loctite thread locker, so during removal these bolts may demonstrate extra resistance to being turned.



After removing the three bolts, the end cap can be rotated downward using the rubber padding as a hinge:



Remove the gasket between the end cap and the unit:



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3 Battery Removal

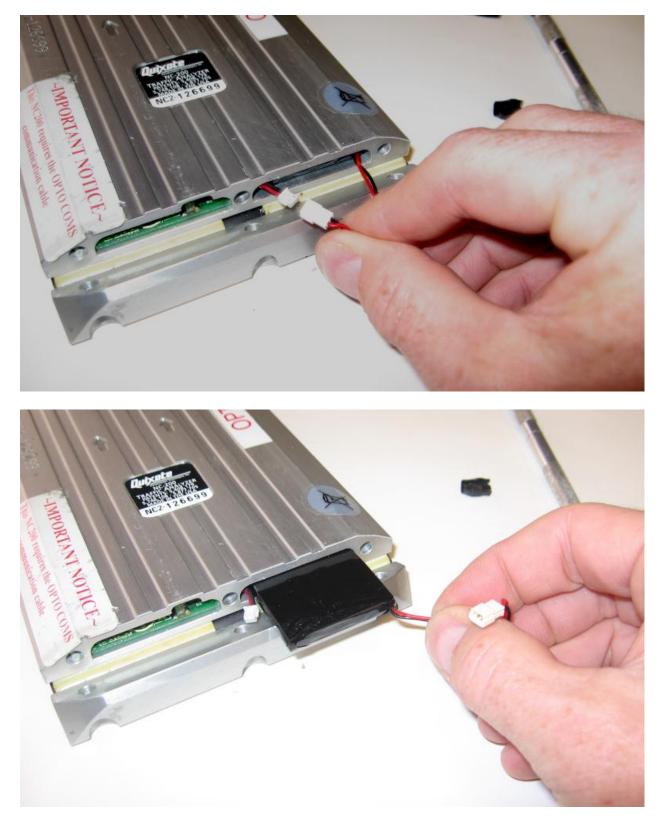
Remove the foam strip from the right side battery compartment:



Using a suitable cutting tool, remove the shrink wrap that covers the battery connector. Take care not to cut the battery wiring harness (Note that not all models will have the shrink wrap cover over the connector):







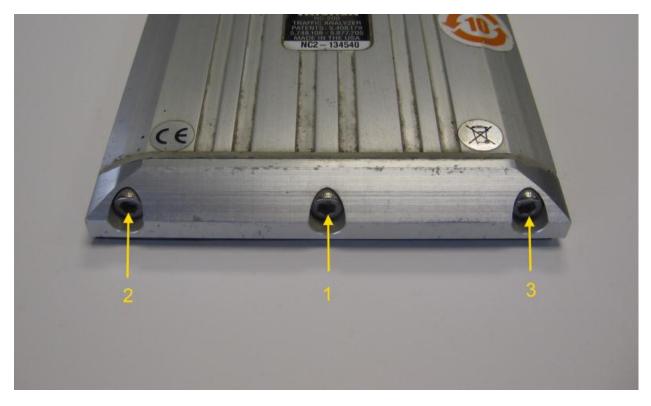
Carefully unplug the battery cable and remove the battery by gently pulling it out using the battery cable:



4 Replace Battery

Battery replacement is essentially a reversal of the above steps:

- 1. Prior to replacing the battery, it is recommended to clean the bolt holes in the case using **Loctite 7061** solvent.
- 2. After inserting the new battery and connecting the wiring harness, gently fold the connector and wiring so that it will fit into the compartment and replace the foam strip.
- 3. Discard the old gasket and use the new gasket provided in the kit.
- 4. If your unit is of the newer design, replace the allen bolts using the ones provided in the kit. Recommendations :
 - Use **Loctite 7649 primer** for the bolt holes in the case. Let primer stand 3-5 minutes before reassembly.
 - Use Loctite 2440 threadlocker on allen bolt threads
- 5. Tighten the allen bolts in the following sequence to a torque of **50 in/lbs** for newer design models (or **30 in/lbs** for older models):



IMPORTANT:

- 12 hours after reassembly, the end cap allen bolts must be re-torqued in order to accommodate gasket relaxation. Failure to perform this step can result in subsequent water intrusion and battery failure.
- Following battery replacement, it is necessary to complete a discharge and recharge cycle so the correct battery capacity can be recalculated. Performing the discharge cycle can be accomplished using the HDM software package (sold separately).