

1 406 PLB INSP/ACCEPT

REFERENCES:

NONE

TOOLS/TEST EQUIPMENT:

NONE

EXPENDABLES:

Hook Fastener Tape, 2 in, P/N: A-A-55126, CAGE: 58536, NIIN: 010331734, (McMurdo PLB's only)

CONSUMABLES:

Marker, Paint, P/N: 63630, CAGE: 0X226, NIIN: 012074167 (or equivalent)

A INSPECT PLB

NOTE: Previously purchased McMurdo Fastfind 406 PLB's shall remain in service as long as they are serviceable. All new PLB procurements shall be for the ACR ResQLink PLB.

1. Test PLB, (Refer to Step 2 C).

NOTE: The primary means for beacon registration and update is the NOAA beacon registration database system <https://beaconregistration.noaa.gov/rgdb/>. Contact NOAA SARSAT Beacon Registration directly at (888) 212-7283 if any issues are encountered with electronic registration.

2. Register PLB electronically (Primary method):
 - a. Log into NOAA beacon registration database system: <https://beaconregistration.noaa.gov/rgdb/>.
 - b. Follow website instructions to access block account or create new registration.
 - c. Enter the 15 digit beacon ID number.
 - d. Use the unit's information for "Owner/Operator" fields.
 - e. Use the units corresponding Sector OPCEN, or parent command 24 hour contact information for the "Emergency Contact" fields.

NOTE: Use manual registration method only if unable to register electronically.

3. Register PLB manually (Secondary method):

NOTE: Official registration forms are available at <https://beaconregistration.noaa.gov/rgdb/forms.htm>.

- a. Complete a 406 MHz EPIRB Registration form, (Refer to Figure 1).



- b. Mail or fax registration form to address or fax number listed at the top of the form.
4. Retain the registration form and registration sticker in unit files for future reference.

B ATTACH HOOK FASTENER TAPE/VELCRO STRAP

NOTE: ACR ResQLink PLB is shipped with a 1 ½ x 14 inch hook strap which attaches to the PLB.

1. For ACR ResQLink PLB:
 - a. Attach Velcro strap, with hook side exposed to the PLB, (Refer to Figure 2).
2. For McMurdo Fastfind PLB:
 - a. Cut a 2 x 2 inch length of self adhesive hook fastener tape, P/N: A-A-55126.
 - b. Attach the hook fastener tape, to the PLB battery cover ½-1 inch above the manufacturer's battery expiration date label, (Refer to Figure 3).

NOTE: The second battery expiration date is applied as a redundant safety measure.

- c. Mark the battery expiration date on the battery cover using marker, P/N: 63630.

C ACCEPTANCE

1. Assign the beacon a unit generated field number.
 - a. Mark the field number on the exterior of the PLB using marker.
2. Document acceptance inspection in the PLB maintenance log.



2 MONTHLY 406 PLB TEST

REFERENCES:

NONE

TOOLS/TEST EQUIPMENT:

Torque Screwdriver, 0-100 in-oz (if required)

EXPENDABLES:

Lanyard Securing Tag, McMurdo Fastfind, P/N: 85-758, CAGE: U0913, NIIN: 01HS24563 (If required)

Personal Locator Beacon, ACR ResQLink, P/N: 2881.52, CAGE: 18560 (If required)

Velcro Strap, ACR ResQLink PLB, P/N: 9532, CAGE: 18560 (If required)

CONSUMABLES:

Marker, Paint, P/N: 63630, CAGE: 0X226, NIIN: 012074167 (or equivalent) (If required)

A INSPECT PLB

NOTE: Steps 2 A 1. through 2 A 4. Apply to all PLB versions.

1. Inspect PLB case for the following:

NOTE: Surface scratches are acceptable. Any crack which affects the watertight integrity of the case requires that the PLB be removed from service.

- a. Cracks.
- b. Damage.

2. Remove PLB from service as follows, if cracks or damage are noted:

NOTE: Use the NOAA beacon registration database system <https://beaconregistration.noaa.gov/rgdb/> as the primary means of registering and updating beacon status. Contact NOAA SARSAT Beacon Registration directly at (888) 212-7283 for any issues encountered with the database system.

- a. De-activate PLB by changing beacon status to "Out of Service" via beacon registration database system.
- b. Send PLB to manufacturer's authorized facility for repair.
 - (1) Re-activate repaired PLB by updating the beacon status to "Normal" via beacon registration database system.
 - (a) Document repair in PLB maintenance log.



(2) Change beacon status to "Destroyed", if PLB is not repairable via the beacon registration database system.

(a) Scrap PLB, if non-repairable.

NOTE: The only PLB authorized for new purchases is the ACR ResQLink, P/N: 2881.52.

(3) Replace PLB, P/N: 2881.52, if required.

3. Wash the exterior using fresh tap water.
4. Wipe the PLB dry using a clean, dry cloth.

B INSPECT MCMURDO FASTFIND/PLUS/MAX-G PLB

1. Inspect lanyard securing tag for cracks or damage.
 - a. Replace lanyard securing tag, P/N: 85-758, if required, (Refer to Figure 4).
2. Check battery expiration date markings on the back of the PLB battery cover.
 - a. Replace battery if expired or if it will expire within the next 60 days, (Comply with MPC Item 4).
 - b. Restore expiration date using marker, P/N: 63630, if faded or missing.
3. Check hook fastener tape installed on the battery cover for the following:
 - a. Wear.
 - b. Security of attachment.
 - c. Replace hook fastener tape, if required, (Refer to MPC Item 1, Step 1 B 2).
4. Check legibility of field number marking on the PLB exterior.
 - a. Restore field number marking using marker, if required.

C INSPECT ACR RESQLINK PLB

1. Inspect Velcro strap for the following:
 - a. Wear.
 - b. Security of attachment.
 - c. Replace Velcro strap, P/N: 9532, if required.
2. Inspect for the following:
 - a. Cracks around screws or antenna.
 - b. Inspect for loose or unstable antenna.
 - c. Remove PLB from service for repair if any of the above discrepancies are noted, (Refer to Step 2 A 2.).

D TEST PLB

1. Test PLB as follows:
 - a. Test McMurdo Fastfind/Fastfind Plus/Max-G PLB, (Refer to Figure 5).
 - b. Test ACR ResQLink PLB, (Refer to Figure 6).



U.S. COAST GUARD
MAINTENANCE PROCEDURE CARD

RESCUE AND ASSISTANCE

RSS583042.0

REV'D: 08/22/12

2. Re-test PLB if it fails self-test.
3. Remove PLB from service for repair, if it fails re-test, (Refer to Step 2 A 2.).
4. Document monthly test in PLB maintenance log.



3 BIENNIAL 406 PLB RE-REGISTRATION

REFERENCES:

NONE

TOOLS/TEST EQUIPMENT:

NONE

EXPENDABLES:

NONE

CONSUMABLES:

NONE

A RE-REGISTER PERSONAL LOCATOR BEACON (PLB)

NOTE: Use the NOAA beacon registration database system <https://beaconregistration.noaa.gov/rgdb/> as the primary means of registering and updating beacon status. Contact NOAA SARSAT Beacon Registration directly at (888) 212-7283 for any issues encountered with the database system.

1. Re-register PLB electronically (Primary method):
 - a. Log into NOAA beacon registration database system: www.beaconregistration.noaa.gov.
 - b. Tag the PLB which is due for renewal.
 - c. Click the "Update Beacon" button to verify/update information.
 - d. Update any information which is outdated or incorrect.
 - e. Select "UPDATE" after all information is verified or updated.
 - f. Click the "Renew Registration" button to complete renewal.

NOTE: Use manual registration method only if unable to register electronically.

2. Re-register PLB manually (Secondary method):

NOTE: Official registration forms are available at <https://beaconregistration.noaa.gov/rgdb/forms.htm>.

- a. Complete a 406 MHz EPIRB Registration form, (Refer to Figure 1).
 - b. Mail or fax registration form to address or fax number listed at the top of the form.
3. Retain the new registration form and sticker in unit files for future reference when received
 4. Document re-registration in PLB maintenance log.



4 5 YEAR 406 PLB BATTERY REPLACE

REFERENCES:

NONE

TOOLS/TEST EQUIPMENT:

Torque Screwdriver, 0-100 in-oz

EXPENDABLES:

Battery Replacement Kit, (selected):

McMurdo Fastfind/Plus/Max-G, P/N: 85-763-020A, CAGE: U0913, NIIN: 01HS24564

ACR ResQLink, P/N: 1103.52, CAGE: 18560

Personal Locator Beacon, ACR ResQLink, P/N: 2881.52, CAGE: 18560 (If required)

CONSUMABLES:

Alcohol, Isopropyl, P/N: NDC00574-0067-16, CAGE: 55763, NIIN: 006558366, (If required)

Marker, Paint, P/N: 63630, CAGE: 0X226, NIIN: 012074167 (or equivalent)

A REPLACE MCMURDO FASTFIND/PLUS/MAX-G PLB BATTERY

WARNING

ALWAYS HANDLE BATTERIES AWAY FROM EXCESSIVE HEAT AND OTHER HAZARDOUS CONDITIONS. DO NOT CHARGE, REMOVE, OR ATTACH BATTERIES IN AN AREA LABELED "HAZARDOUS ATMOSPHERE". DO NOT DISCARD BATTERIES IN A FIRE. FAILURE TO COMPLY MAY RESULT IN SERIOUS PERSONAL INJURY.

NOTE: Refer to Figure 7 for illustration of the battery replacement procedure.

NOTE: McMurdo battery replacement kit, P/N: 85-763-020A includes replacement battery, o-rings, and battery retaining screw.

1. Remove battery retaining screw.
2. Remove battery.
3. Remove lanyard securing tag.
4. Remove case screw o-rings.
 - a. Discard o-rings.
5. Inspect battery pins for damage.
 - a. Remove PLB from service as follows, if pin damage is noted.



- (1) De-activate PLB by changing beacon status to "Out of Service" via beacon registration database system or by calling NOAA/SARSAT at 888-212-7283.
- (2) Send PLB to manufacturer's authorized facility for repair.
 - (a) Re-activate repaired PLB by updating the beacon status to "Normal" via beacon registration database system or by calling NOAA/SARSAT at 888-212-7283.
 - 1) Document repair in PLB maintenance log.
 - (b) Change beacon status to "Destroyed", if PLB is not repairable via the beacon registration database system or by calling NOAA/SARSAT at 888-212-7283.
 - 1) Scrap PLB, if non-repairable.

NOTE: The only PLB authorized for new purchases is the ACR ResQLink, P/N: 2881.52.
 - 2) Replace PLB, P/N: 2881.52, if required.
6. Install new o-rings over battery pins.
7. Set lanyard securing tag into place.
8. Install new battery.
9. Install battery retaining screw hand tight.
 - a. Torque screws to 36 in-oz.
10. Test PLB, (Refer to MPC Item 2, Step 2 D).
11. Proceed to Step 4 B 26.

B REPLACE ACR RESQLINK PLB BATTERY

NOTE: ACR battery replacement kit, P/N: 1103.52 includes replacement battery, o-rings, case gasket, two case screws, high vacuum grease, and an applicator brush.

1. Lay the PLB on its face on a clean working surface, (Refer to Figure 8, Detail A).
 - a. Remove Velcro strap from PLB.
 - b. Deploy the antenna to make it point straight down.
 - c. Remove the two screws from the back case of the unit.
 - (3) Discard screws.
 - d. Pull apart the front and back cases.
2. Place the front case face down on a clean area.
3. Unplug the battery connector from the electronic PC board assembly, (Refer to Figure 8, Detail B).
 - a. Discard battery IAW Federal, State, and Local regulations.
4. Inspect all brass threaded inserts and plastic areas around screws for cracks or failures.
5. Remove PLB from service as follows, if cracks or failures are noted:
 - a. De-activate PLB by changing beacon status to "Out of Service" via beacon registration database system or by calling NOAA/SARSAT at 888-212-7283.



- b. Send PLB to manufacturer's authorized facility for repair.
 - (1) Re-activate repaired PLB by updating the beacon status to "Normal" via beacon registration database system or by calling NOAA/SARSAT at 888-212-7283.
 - (a) Document repair in PLB maintenance log.
 - (2) Change beacon status to "Destroyed", if PLB is not repairable via the beacon registration database system or by calling NOAA/SARSAT at 888-212-7283.
 - (a) Scrap PLB, if non-repairable.

NOTE: The only PLB authorized for new purchases is the ACR ResQLink, P/N: 2881.52.

- (3) Replace PLB, P/N: 2881.52, if required.
6. Remove the black gasket between the front and back case.
 - a. Discard gasket.

WARNING

AVOID EYE CONTACT, SKIN CONTACT, AND INGESTION WITH ISOPROPYL ALCOHOL. KEEP AWAY FROM ALL SOURCES OF IGNITION. FAILURE TO COMPLY MAY RESULT IN PERSONAL INJURY.

7. Clean the edge of both front and back cases using isopropyl alcohol, P/N: NDC00574-0067-16, and a clean cotton towel.
8. Verify that the rubber insertion is properly in place before installing the new battery, (Refer to Figure 8, Detail C).
9. Rotate the antenna perpendicular to the unit, (Refer to Figure 9, Detail A).

NOTE: ACR battery replacement kit, P/N: 1103.52 includes replacement battery, o-rings, case gasket, two case screws, high vacuum grease, and an applicator brush.
10. Apply an even coating of high vacuum grease to the sealing surface of the front and back cases, (Refer to Figure 9, Detail B).
11. Use the label provided in the kit or an indelible marker to record the next replacement date (5 years) on the label provided on the body of the new battery.
12. Insert the new battery connector firmly into the receptacle on the electronic PC board.
13. Lay the battery down on the rubber insertion pad, close to the battery connectors on the PC board.
14. Fold the wire back and up towards the battery pack to ensure that it does not get pinched when the back and front case comes together, (Refer to Figure 10).

NOTE: ACR battery replacement kit, P/N: 1103.52 includes replacement battery, o-rings, case gasket, two case screws, high vacuum grease, and an applicator brush.
15. Insert new gasket into the sealing surface of the front cover.
16. Align the back cover, ensuring the following, (Refer to Figure 11):



NOTE: There is a "compartment" formed in the back case where the battery will "nestle" when it is closed over the front.

- a. The battery is snug inside the compartment,
- b. The copper covered ridge in the back cover is going straight into the two clips in the PC board.
- c. The battery leads are not pinched.

CAUTION

USE CAUTION TO ENSURE THAT THE GASKET HAS NOT BEEN PINCHED INSIDE OR OUTSIDE THE CASE IN ANY LOCATION, DO NOT TOUCH THE HIGH VACUUM GREASE DURING THE BELOW STEP.

17. Place the back cover back onto the front case.

WARNING

AVOID EYE AND SKIN CONTACT WITH GREASE. KEEP AWAY FROM ALL OXIDIZERS. USE IN A WELL VENTILATED AREA. WASH EXPOSED SKIN THOROUGHLY AFTER HANDLING. FAILURE TO COMPLY MAY RESULT IN PERSONAL INJURY.

18. Lubricate the case screw o-rings with high vacuum grease.
19. Insert screws with o-rings into back cover receptacles.
20. Hand-tighten the screws until the back cover evenly settles onto the gasket.
 - a. Torque screws to 64 in-oz.
21. Perform PLB self test, (Refer to Figure 6).
22. Remove the existing battery replacement date sticker from the following locations:
 - a. Back of the beacon case.
 - b. Inside of the folding back label

WARNING

AVOID EYE CONTACT, SKIN CONTACT, AND INGESTION WITH ISOPROPYL ALCOHOL. KEEP AWAY FROM ALL SOURCES OF IGNITION. FAILURE TO COMPLY MAY RESULT IN PERSONAL INJURY.

23. Clean the area using Isopropyl alcohol.
24. Install new battery replacement stickers.
25. Install Velcro strap, (Refer to Figure 2).
26. Document battery replacement in PLB maintenance log.





ACR RESQLINK VELCRO STRAP ATTACHMENT

Figure 2

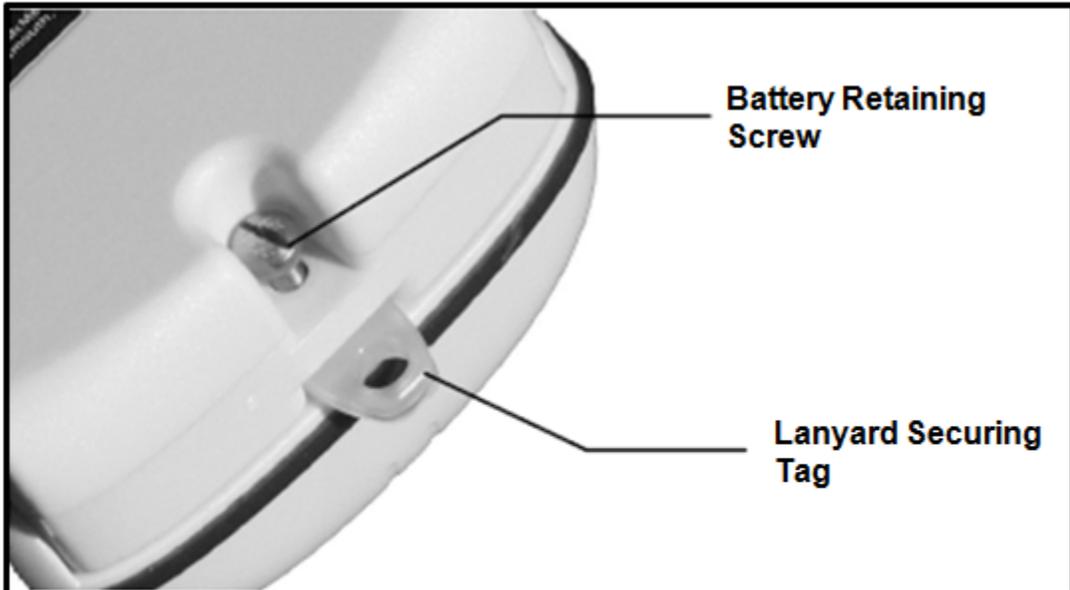




HOOK FASTENER TAPE

Figure 3



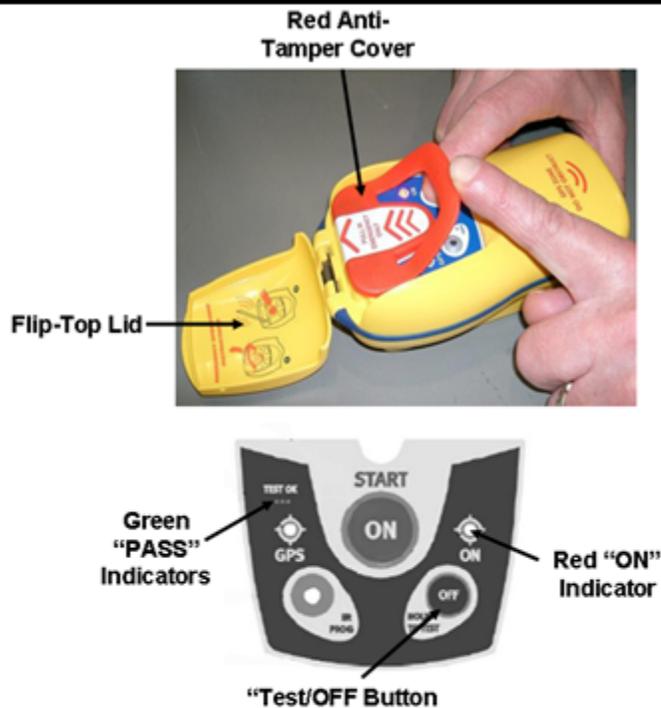


1. **Remove battery retaining screw.**
2. **Remove battery.**
3. **Discard lanyard securing tag.**
4. **Install new lanyard securing tag.**
5. **Install battery.**
6. **Install battery retaining screw.**
7. **Tighten screw to 36 in-oz.**

LANYARD SECURING TAG (FASTFIND PLB)

Figure 4





1. Open flip-top lid.
2. Slide finger under the handle of the red anti-tamper cover to locate the TEST/OFF button.
3. Press and hold the TEST/OFF button for 10 seconds.
4. Self-Test pass is indicated by illuminated green indicator lights under "TEST OK" along with an audible alarm buzzer.
5. PLB will switch itself off after a successful self test.
6. Test fail is indicated by the three flashes of the red "ON" indicator light.

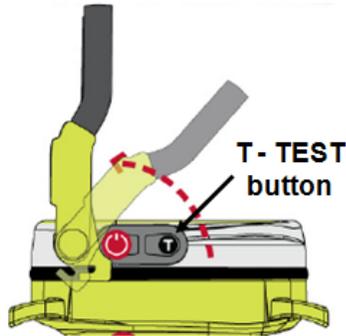
SELF-TEST (MCMURDO FASTFIND/PLUS/MAX-G)

Figure 5





1. Unclip the antenna latch from the case.



2. Move the antenna into the upright position.
 3. Depress the "TEST" button for one full second.

Light Scheme	Light Meaning
  	Self Test Passed
  	Self Test Passed (Battery: <24 Hours)
  	Self Test Fail
  	Self Test Fail (Battery: <24 Hours)
	Battery Fail

Green Light will flash followed by a Second Long Green Light flash and the strobe light. This indicates a successful Basic Self Test.

If a red LED flashes at the completion of the Self-test, the beacon has failed.

SELF-TEST (ACR RESQLINK PLB)

Figure 6

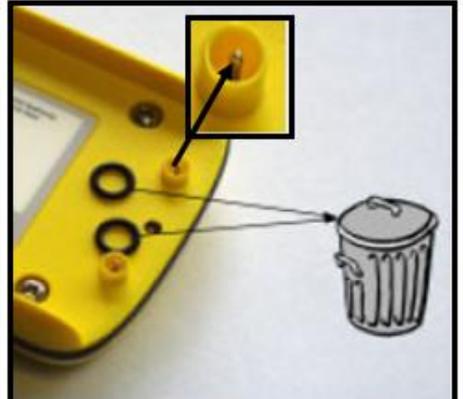




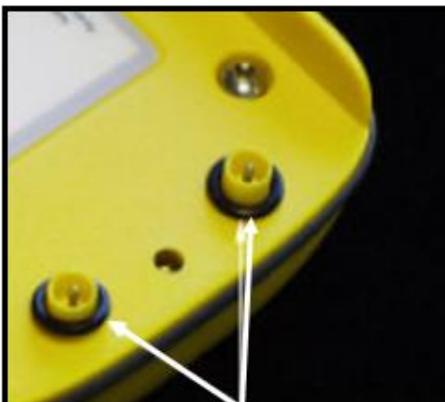
1. Remove battery retaining screw.



2. Remove battery and lanyard securing tag.



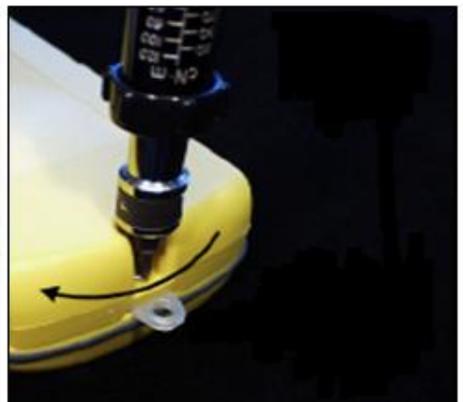
3. Remove and Discard O-rings, Check battery pins.



4. Install new O-rings.



5. Install new battery

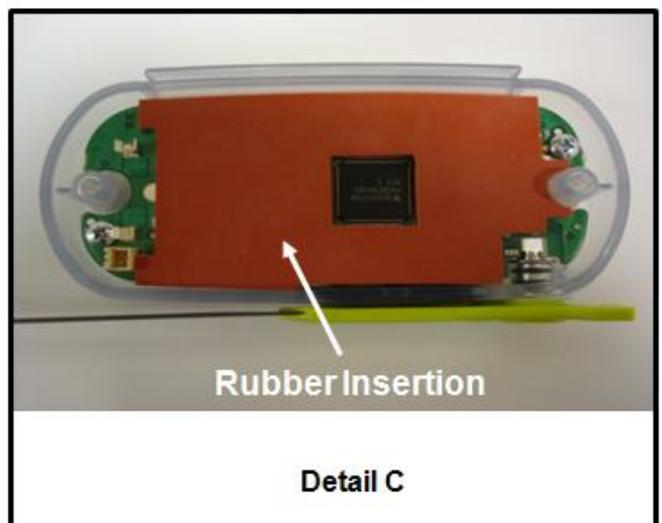
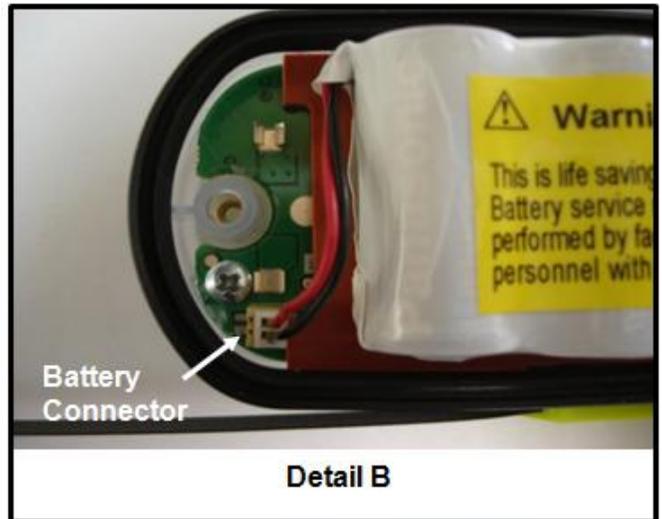
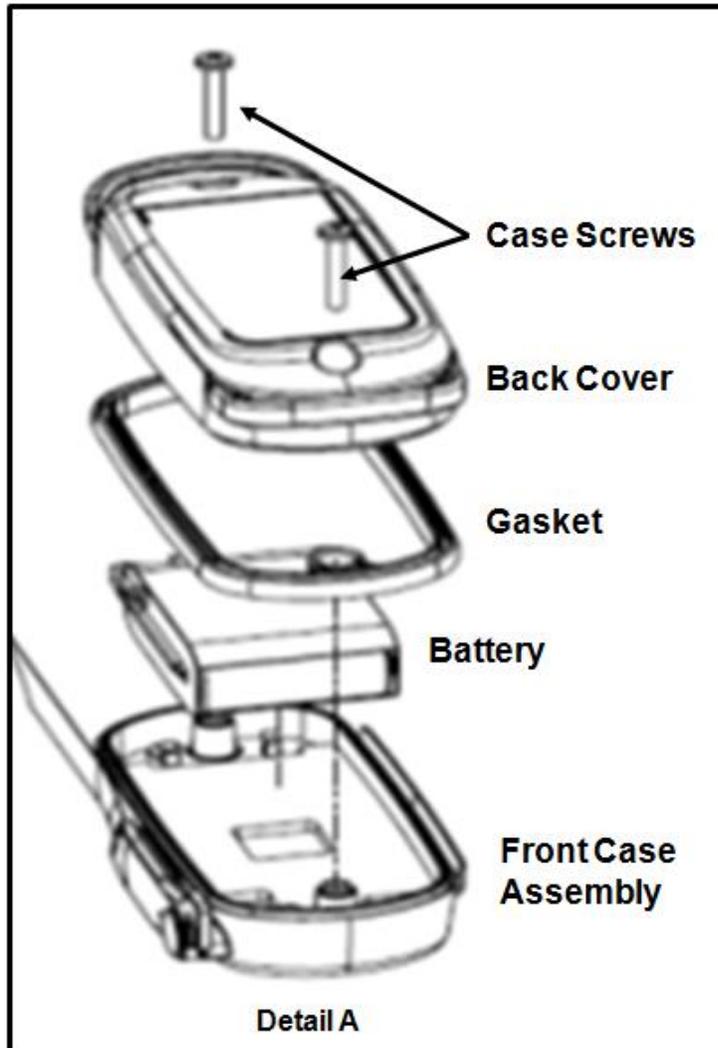


6. Reset lanyard securing tag and battery retaining screw. Tighten to 36 in/oz.

MCMURDO FASTFIND/PLUS/MAX-G BATTERY REPLACEMENT

Figure 7

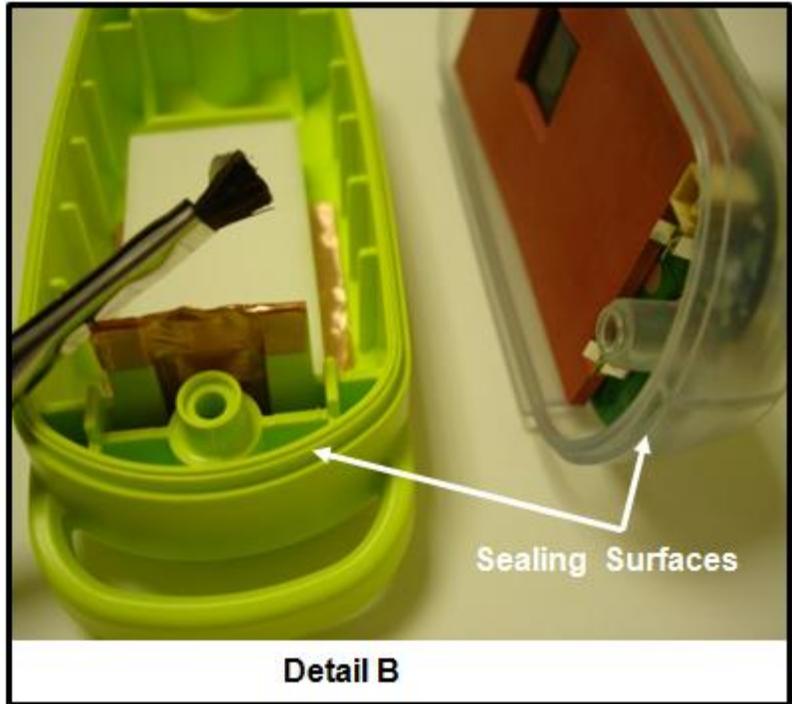




ACR RESQLINK DISASSEMBLY

Figure 8





ACR RESQLINK – GREASE APPLICATION

Figure 9





Gently fold the wire back and up towards the battery pack to ensure that it does not get pinched when the back and front case comes together

BATTERY WIRE

Figure 10





COVER INSTALLATION

Figure 11

